Santa Fe Main Office
Phone: (505) 476-3441
General Information
Phone: (505) 629-6116

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

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO. 30-025-53341

5. Indicate Type of Lease STATE [X] FEE [ ]

6. State Oil & Gas Lease No. VB2312002

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name: Rope State Com

1. Type of Well: Oil Well [X] Gas Well [ ] Other

8. Well Number: 502H

2. Name of Operator: Coterra Energy Operating Co.

9. OGRID Number: 215099

3. Address of Operator: 6001 Deauville Blvd, Midland, TX 79706

10. Pool name or Wildcat: Airstrip; Bone Spring

4. Well Location
Unit Letter M : 335 feet from the S line and 2523 feet from the FEL line
Section 30 Township 18S Range 35E NMPM SWSW County Lea

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3951.9

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	[ ]	PLUG AND ABANDON	[ ]	REMEDIAL WORK	[ ]	ALTERING CASING	[ ]
TEMPORARILY ABANDON	[ ]	CHANGE PLANS	[X]	COMMENCE DRILLING OPNS.	[ ]	P AND A	[ ]
PULL OR ALTER CASING	[ ]	MULTIPLE COMPL	[ ]	CASING/CEMENT JOB	[ ]		
DOWNHOLE COMMINGLE	[ ]						
CLOSED-LOOP SYSTEM	[ ]						
OTHER:	[ ]			OTHER:			[ ]

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Coterra Energy Operating Co. requests the following changes to the Rope State Com 502H:

SHL from 335 FSL 2523 FEL to 330 FSL 968 FWL
BHL from 100 FNL 2290 FEL to 2546 FSL 2242 FWL
MD from 14843' to 28444'
TVD from 9888' to 10150'
Add pool WC-025 G-06 S183518A; Bone Spring (97930) with spacing of 400 acres

Spud Date: 4/9/2026 Rig Release Date: 5/9/2026

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Shelly Bowen TITLE Sr. Regulatory Analyst DATE 3/25/2026

Type or print name Shelly Bowen E-mail address: shelly.bowen@coterra.com PHONE: 432-620-1644

For State Use Only

APPROVED BY: TITLE DATE

Conditions of Approval (if any):

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 INFORMATION

API Number 30-025-53341	Pool Code 960	Pool Name Airstrip; Bone Spring
Property Code	Property Name ROPE STATE COM	Well Number 502H
OGRID No. 215099	Operator Name COTERRA ENERGY OPERATING CO.	Ground Level Elevation 3951.8'

Surface Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal Mineral Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
M	30	18S	35E		330 SOUTH	968 WEST	32.712427°	-103.502108°	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
K	7	18S	35E		2,546 SOUTH	2,242 WEST	32.762123°	-103.498035°	LEA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
160	Defining	30-025-53341	Y	C

Order Numbers. NA - JOA Well setbacks are under Common Ownership: ☐Yes ☐No NA

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
N	30	18S	35E		100 SOUTH	2,271 WEST	32.711774°	-103.497872°	LEA

First Take Point (FTP)

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Last Take Point (LTP)

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Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation:
E2W2 Sec 30,19,18,7		3951.8

OPERATOR CERTIFICATIONS

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.

Shelly Bowen 04/082026

Signature Date

Shelly Bowen

Printed Name

shelly.bowen@coterra.com

Email Address

SURVEYOR CERTIFICATIONS

I hereby certify that the well location shown on this plat was plotted from the 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.

PAUL BUCHELE NEW MEXICO 23782 PROFESSIONAL SURVEYOR 01-19-26

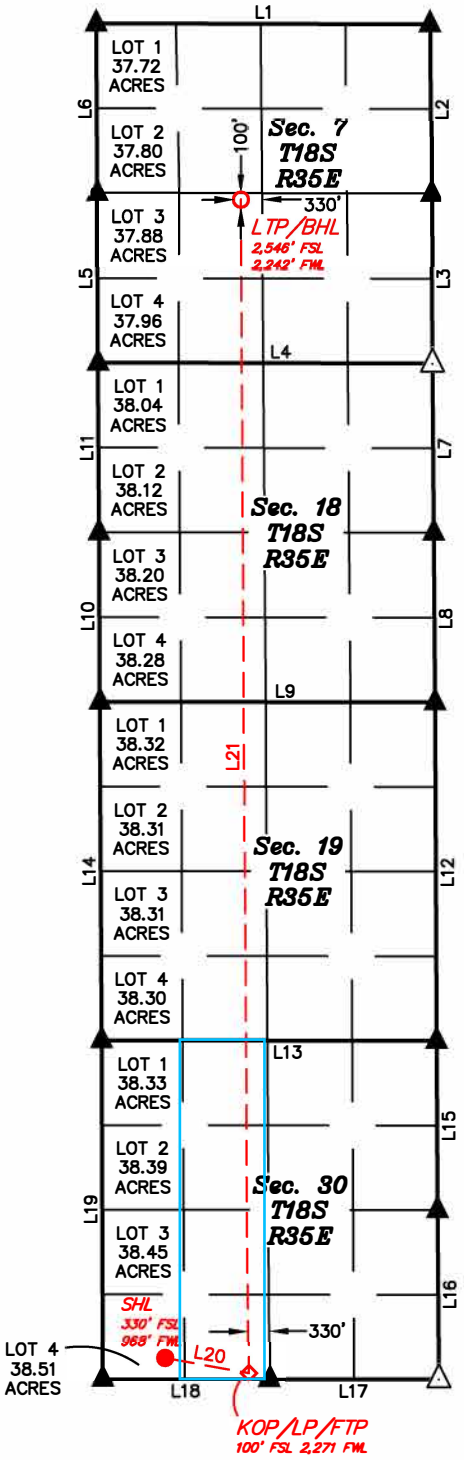
Signature and Seal of Professional Surveyor

23782 November 06, 2025

Certificate Number Date of Survey

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

Property Name	Well Number	Drawn By	Revised By
ROPE STATE COM	502H	H.S.S. 11-14-25	REV. 1 T.I.R. 01-19-26 (UPDATE BHL)



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N89°52'35"W	5215.75'
L2	N00°20'12"W	2652.85'
L3	N00°29'20"W	2644.93'
L4	N89°50'52"W	5226.42'
L5	N00°14'19"W	2646.78'
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L20	S79°51'50"E	1324.56'
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NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°42'44.74" (32.712427°)
LONGITUDE = -103°30'07.59" (-103.502108°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°42'44.29" (32.712303°)
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○ = LAST TAKE POINT/ BOTTOM HOLE LOCATION
▲ = SECTION CORNER LOCATED
△ = SECTION CORNER RE-ESTABLISHED. (Not Set on Ground.)

3000' 1500' 0' 3000'
SCALE

NOTE:
- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)
- Section breakdown information for this plat may be obtained from Uintah Engineering and Land Surveying.

Sheet 2 of 2

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 INFORMATION

API Number	Pool Code	Pool Name
30-025-53341	97930	WC-025 G-06 S183518A; Bone Spring

Property Code	Property Name	Well Number
	ROPE STATE COM	502H

OGRID No.	Operator Name	Ground Level Elevation
215099	COTERRA ENERGY OPERATING CO.	3951.8'

Surface Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal Mineral Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal

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400	Defining	30-025-53341	Y	C

Order Numbers. NA - JOA Well setbacks are under Common Ownership: ☐Yes ☐No NA

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Shelly Bowen 04/082026

Signature Date

Shelly Bowen

Printed Name

shelly.bowen@coterra.com

Email Address

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Sheet 1 of 2

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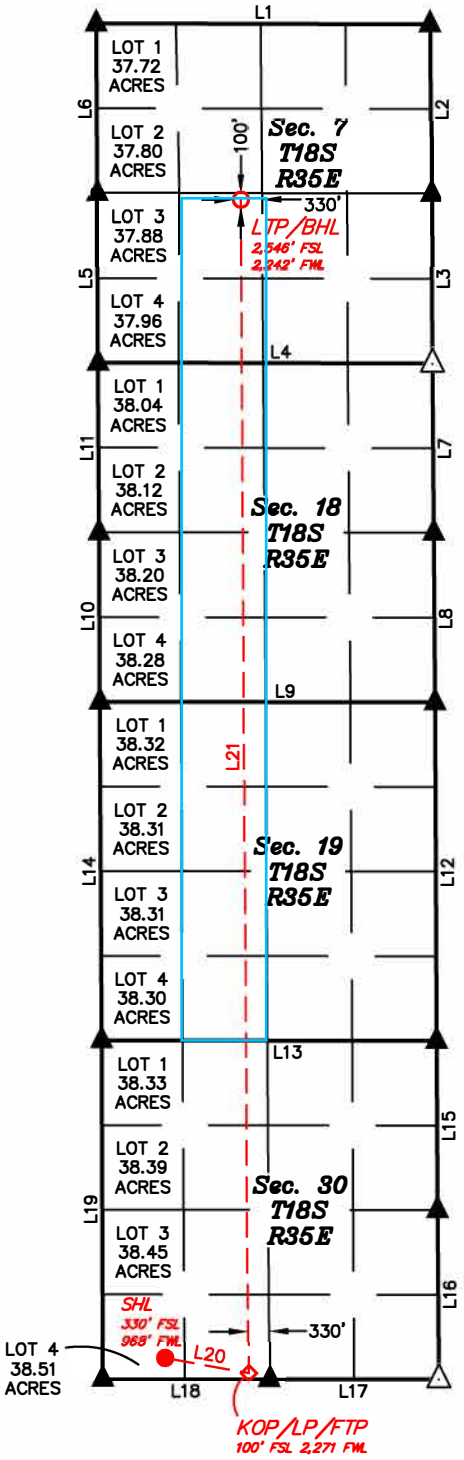

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SCALE

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- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)
- Section breakdown information for this plat may be obtained from Uintah Engineering and Land Surveying.

1. Geological Formations

TVD of target
MD at TD

Pilot Hole TD N/A
Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	1923	N/A	
Top of Salt	2201	N/A	
Base of Salt/Lamar	5793	N/A	
Top Delaware Sands/Bell Canyon	5990	N/A	
Cherry Canyon	6240	N/A	
Brushy Canyon	6640	N/A	
Basal Brushy Canyon	7414	N/A	
Bone Spring Lime	7632	N/A	
Leonard/Avalon Sand	7850	N/A	
1st Bone Spring Sand	9090	Hydrocarbons	
2nd Bone Spring Sand	9652	Hydrocarbons	
2nd Bone Spring Sand - Target	10067	Hydrocarbons	

2. Casing Program

Hole Size	Casing Depth From	Casing Depth To	Setting Depth TVD	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	2034	2034	13-3/8"	54.50	J-55	ST&C	1.28	3.11	4.64
12 1/4	0	5818	5818	9-5/8"	40.00	HCK-55	LT&C	1.22	1.27	2.41
8 1/2	0	9694	9694	7"	29.00	P-110	BT&C	1.88	2.47	5.97
8 1/2	9694	28444	7785	5-1/2"	20.00	P-110	BT&C	3.05	3.39	(16.79)
						BLM Minimum Safety Factor		1.125	1	1.6 Dry 1.8 Wet

TVD was used on all calculations.
All casing strings will be tested in accordance with 43 CFR 3172.

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	N
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	N
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	N
Is 2nd string set 100' to 600' below the base of salt?	N
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	N
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	N
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	N
Is AC Report included?	Y

3. Cementing Program

Casing	# Sks	Wt. lb/gal	Yld ft3/sack	H2O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surface	986	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	264	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate	1089	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Bentonite
	292	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Production	212	10.30	3.64	22.18		Lead: Tuned Light + LCM
	4957	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS

Casing String	TOC	% Excess
Surface	0	45
Intermediate	0	52
Production	5618	

Cimarex request the ability to perform casing integrity tests after plug bump of cement job.

4. Pressure Control Equipment

	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.

BOP installed and tested before drilling which hole?	Size	Min Required WP	Type		Tested To
12 1/4	**13 5/8**	**10M**	Annular	5M	100% of working pressure
			Blind Ram		10M
			Pipe Ram		
			Double Ram	X	
			Other		
8 1/2	**13 5/8**	**10M**	Annular	5M	100% of working pressure
			Blind Ram		10M
			Pipe Ram	X	
			Double Ram	X	
			Other		

X	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.	
X	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.	
	N	Are anchors required by manufacturer?

5. Mud Program

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0' to 2034'	Fresh Water	7.83 - 8.33	28	N/C
2034' to 5818'	Brine Water	9.80 - 10.30	30-32	N/C
5818' to 28444'	Oil Based Mud	8.50 - 9.00	50-70	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring

6. Logging and Testing Procedures

Logging, Coring and Testing	
	Will run GR/CNL fromTD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
X	No logs are planned based on well control or offset log information.
	Drill stem test?
	Coring?

Additional Logs Planned	Interval

7. Drilling Conditions

Condition	
BH Pressure at deepest TVD	3643 psi
Abnormal Temperature	No

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
X	H2S is present
X	H2S plan is attached

8. Other Facets of Operation

9. Wellhead

1. The multi-bowl wellhead will be installed by a vendor representative. A copy of the installation instructions has been sent to the BLM field office.

2. A packoff will be installed after running and cementing the production casing. This packoff will be tested to 10K psi.

BOPE Additional Information & Testing

1. After running the first string of casing, a 10M BOP/BOPE system with 5M annular will be installed. BOPs will be tested according to Onshore Order #2. BOPE will be tested to full rated pressure (10K for all BOPE except the annular, which is tested to 5K). For the low test, the system will be tested to 250 psi.

2. All BOP equipment will be tested utilizing a conventional test plug.

3. A remote kill line is included in the BOPE system

4. All casing strings will be tested per Onshore Order #2, to 0.22 psi/ft or 1,500 psi, whichever is greater, not to exceed 70% of casing burst.

5. If well conditions dictate, conventional slips will be set and BOPE will be tested to appropriate pressures based on permitted pressure requirements.

Additional Well Control Notes

1. In the event wellbore pressure encroaches to the maximum rated pressure of the annular, primary pressure control will be switched to the higher rated components (i.e., switch from annular to pipe rams) – upper pipe rams will be closed, and the annular opened in order to not exceed maximum rated pressures.

Coterra Energy

Site: Rope State Com Pad
Well: Rope State Com 502H
Wellbore: OH
Design: Plan #2
Rig:

SHL

330' FSL, 968' FWL
RKB Elevation: GE 3951.8' + KB 23' @ 3974.80usft

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	623914.67	796998.97	32.7124271	-103.5021079	

Formations

TVDPath	MDPath	Formation
1923.00	1923.69	Rustler
2009.00	2010.40	A3 Top
2107.00	2109.68	A3 Base (Tamarisk)
2201.00	2205.12	Top Salt/Salado
5793.00	5852.21	Base Salt/Lamar/CTRA_BASE_ANHYDRITE
5990.00	6052.23	Top Delaware Sands/Bell Canyon
6240.00	6306.06	Cherry Canyon
6640.00	6712.20	Brushy Canyon
7414.00	7498.06	Basal Brushy Canyon
7632.00	7719.41	Bone Spring Lime
7850.00	7940.75	Leonard/Avalon Sand
9090.00	9199.77	1st Bone Spring Sand
9652.00	9769.18	2nd Bone Spring Sand
10067.00	10534.53	2nd Bone Spring Sand Lower Target

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	0.00	Nudge, Build 2.00°/100'
2098.54	9.97	100.10	2096.02	-7.59	42.60	2.00	100.10	-8.04	Hold - 2098.54' MD/2096.03' TVD
9310.58	9.97	100.10	9199.14	-226.65	1271.96	0.00	0.00	-240.18	Start DLS 4.00 TFO -139.86
9694.24	10.00	359.39	9579.26	-199.00	1304.50	4.00	-139.86	-212.88	KOP - Start 10.00°/100' DLS
10344.24	75.00	359.39	10033.20	216.94	1300.07	10.00	0.00	203.08	75° Inc - 10344.24' MD/10033.20' TVD
10668.58	91.22	359.39	10071.99	537.85	1296.65	5.00	0.00	524.01	Hold - 10668.58' MD/10071.99' TVD
12645.01	91.22	359.39	10030.00	2513.72	1275.57	0.00	0.00	2500.00	Start DLS 2.00 TFO 0.10
12747.35	93.26	359.39	10026.00	2615.96	1274.48	2.00	0.10	2602.25	Hold - 12747.35' MD/10026.00' TVD
15399.40	93.26	359.39	9875.00	5263.57	1246.40	0.00	0.00	5250.00	Start DLS 2.00 TFO -0.01
15426.24	93.80	359.39	9873.35	5290.36	1246.12	2.00	-0.01	5276.79	Hold - 15426.24' MD/9873.35' TVD
19157.66	93.80	359.39	9626.00	9013.36	1206.62	0.00	0.00	9000.00	Start DLS 2.00 TFO 0.00
19230.23	95.25	359.39	9620.27	9085.69	1205.85	2.00	0.00	9072.34	Hold - 19230.23' MD/9620.27' TVD
20161.80	95.25	359.39	9535.00	10013.30	1196.01	0.00	0.00	10000.00	Start DLS 2.00 TFO 0.00
20263.50	97.29	359.39	9523.90	10114.38	1194.94	2.00	0.00	10101.09	Hold - 20263.50' MD/9523.90' TVD
21421.76	97.29	359.39	9377.00	11263.23	1182.75	0.00	0.00	11250.00	Start DLS 2.00 TFO 0.00
21479.72	98.45	359.39	9369.07	11320.64	1182.14	2.00	0.00	11307.41	Hold - 21479.72' MD/9369.07' TVD
22685.38	98.45	359.39	9192.00	12513.16	1169.49	0.00	0.00	12500.00	Start DLS 2.00 TFO 0.00
22774.21	100.22	359.39	9177.60	12600.80	1168.56	2.00	0.00	12587.64	Hold - 22774.21' MD/9177.59' TVD
23955.31	100.22	359.39	8968.00	13763.09	1156.23	0.00	0.00	13750.00	Start DLS 2.00 TFO 0.00
24064.92	102.41	359.39	8946.49	13870.55	1155.09	2.00	0.00	13857.47	Hold - 24064.92' MD/8946.49' TVD
25234.80	102.41	359.39	8695.00	15013.02	1142.97	0.00	0.00	15000.00	Start DLS 2.00 TFO 0.00
25466.15	107.04	359.39	8636.20	15236.70	1140.60	2.00	0.00	15223.69	Hold - 25466.15' MD/8636.20' TVD
26801.06	107.04	359.39	8245.00	16512.93	1127.06	0.00	0.00	16500.00	Start DLS 2.00 TFO -179.99
26840.92	106.24	359.39	8233.59	16551.11	1126.65	2.00	-179.99	16538.18	Hold - 26840.92' MD/8233.59' TVD
28444.58	106.24	359.39	7785.00	18090.67	1110.32	0.00	0.00	18077.82	TD - 28444.58' MD

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LTP/PBHL - 2546' FSL, 2242' FWL (RSC 502H)	7785.00	18090.67	1110.32	642005.34	798109.29	32.7621234	-103.4980346
KOP/LP/FTP (RSC 502H)	9579.26	-227.54	1304.65	623687.13	798303.62	32.7117736	-103.4978723

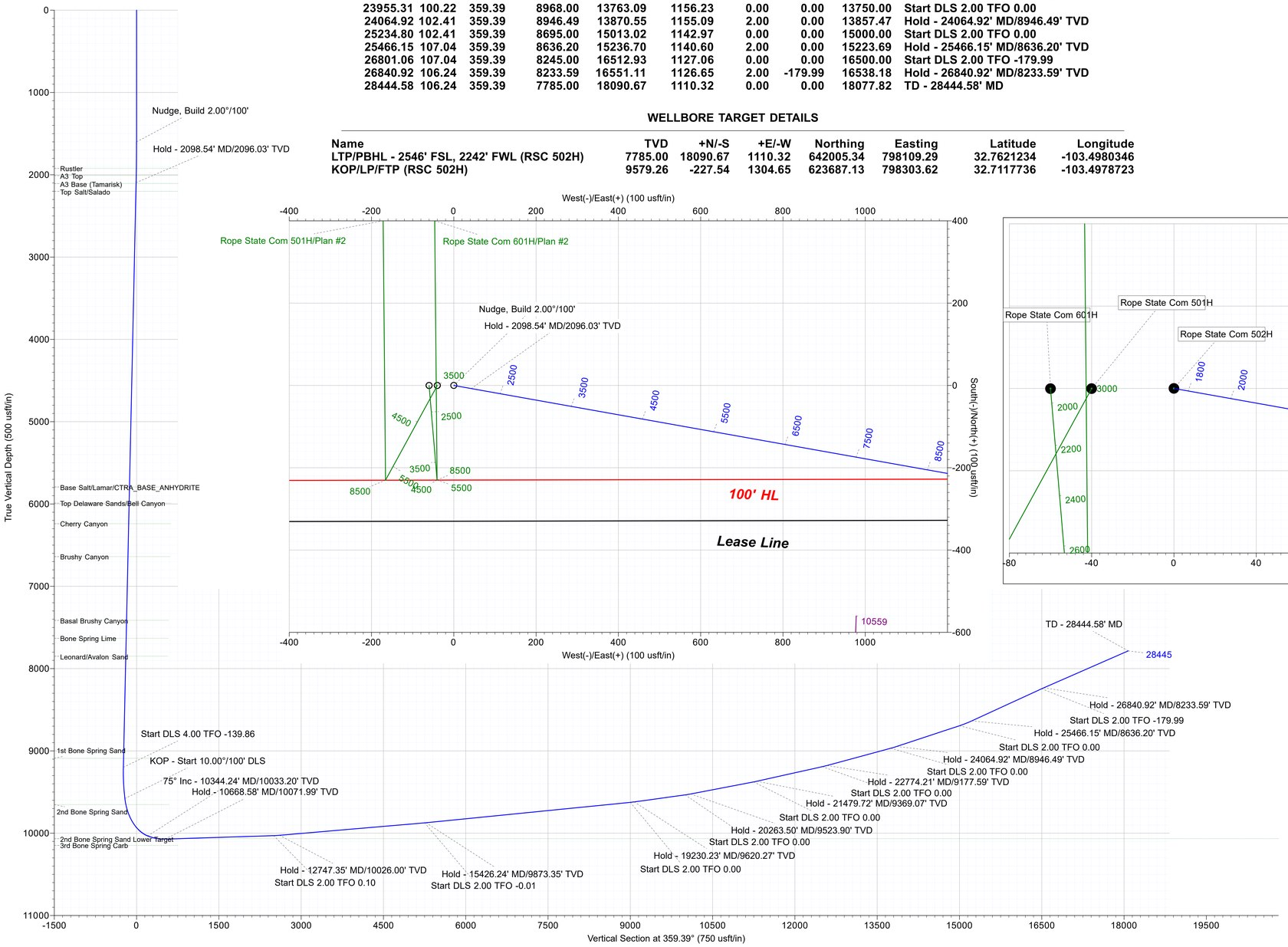
Azimuths to Grid North
True North: -0.45°
Magnetic North: 5.53°

Magnetic Field
Strength: 47291.4nT
Dip Angle: 60.42°
Date: 3/11/2026
Model: HDGM2026

To convert a Magnetic Direction to a Grid Direction, Add 5.53°

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



Coterra Energy

Lea County, NM (NAD 83)
Rope State Com Pad
Rope State Com 502H

330' FSL, 968' FWL

OH

Plan: Plan #2

Total Directional
"Driven by TOTAL performance"

Standard Plan Report

17 March, 2026

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:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Well:	Rope State Com 502H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	.Total Directional Production DB

Project Lea County, NM (NAD 83)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Rope State Com Pad

Site Position:		**Northing:**	623,928.44 usft	**Latitude:**	32.7123973
From:	Map	**Easting:**	800,123.29 usft	**Longitude:**	-103.4919504
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "		

Well Rope State Com 502H

Well Position	**+N/-S**	0.00 usft	**Northing:**	623,914.67 usft	**Latitude:**	32.7124272
	+E/-W	0.00 usft	**Easting:**	796,998.97 usft	**Longitude:**	-103.5021079
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,951.80 usft
Grid Convergence:		0.45 °				

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2026	3/11/2026	5.98	60.42	47,291.40000000

Design Plan #2

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	359.39

Survey Tool Program **Date** 3/17/2026

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	28,444.58	Plan #2 (OH)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

Total Directional

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Well:	Rope State Com 502H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	.Total Directional Production DB

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	
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,098.54	9.97	100.10	2,096.02	-7.59	42.60	2.00	2.00	0.00	100.10	
9,310.58	9.97	100.10	9,199.14	-226.65	1,271.96	0.00	0.00	0.00	0.00	
9,694.24	10.00	359.39	9,579.26	-199.00	1,304.50	4.00	0.01	-26.25	-139.86	
10,344.24	75.00	359.39	10,033.20	216.94	1,300.07	10.00	10.00	0.00	0.00	
10,668.58	91.22	359.39	10,071.99	537.85	1,296.65	5.00	5.00	0.00	0.00	
12,645.01	91.22	359.39	10,030.00	2,513.72	1,275.57	0.00	0.00	0.00	0.00	
12,747.35	93.26	359.39	10,026.00	2,615.96	1,274.48	2.00	2.00	0.00	0.10	
15,399.40	93.26	359.39	9,875.00	5,263.57	1,246.40	0.00	0.00	0.00	0.00	
15,426.24	93.80	359.39	9,873.35	5,290.36	1,246.12	2.00	2.00	0.00	-0.01	
19,157.66	93.80	359.39	9,626.00	9,013.36	1,206.62	0.00	0.00	0.00	0.00	
19,230.23	95.25	359.39	9,620.27	9,085.69	1,205.85	2.00	2.00	0.00	0.00	
20,161.80	95.25	359.39	9,535.00	10,013.30	1,196.01	0.00	0.00	0.00	0.00	
20,263.50	97.29	359.39	9,523.90	10,114.38	1,194.94	2.00	2.00	0.00	0.00	
21,421.77	97.29	359.39	9,377.00	11,263.23	1,182.75	0.00	0.00	0.00	0.00	
21,479.72	98.45	359.39	9,369.07	11,320.64	1,182.14	2.00	2.00	0.00	0.00	
22,685.39	98.45	359.39	9,192.00	12,513.16	1,169.49	0.00	0.00	0.00	0.00	
22,774.21	100.22	359.39	9,177.60	12,600.80	1,168.56	2.00	2.00	0.00	0.00	
23,955.31	100.22	359.39	8,968.00	13,763.09	1,156.23	0.00	0.00	0.00	0.00	
24,064.92	102.41	359.39	8,946.49	13,870.55	1,155.09	2.00	2.00	0.00	0.00	
25,234.80	102.41	359.39	8,695.00	15,013.02	1,142.97	0.00	0.00	0.00	0.00	
25,466.15	107.04	359.39	8,636.20	15,236.70	1,140.60	2.00	2.00	0.00	0.00	
26,801.06	107.04	359.39	8,245.00	16,512.93	1,127.06	0.00	0.00	0.00	0.00	
26,840.92	106.24	359.39	8,233.59	16,551.11	1,126.65	2.00	-2.00	0.00	-179.99	
28,444.58	106.24	359.39	7,785.00	18,090.67	1,110.32	0.00	0.00	0.00	0.00	LTP/PBHL - 2546' F

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates 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	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00

Total Directional

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Well:	Rope State Com 502H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,100.00	0.00	0.00	1,100.00	0.00	0.00	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	623,914.67	796,998.97	32.7124272	-103.5021079	0.00	0.00	0.00	0.00
Nudge, Build 2.00°/100'													
1,700.00	2.00	100.10	1,699.98	-0.31	1.72	623,914.36	797,000.69	32.7124263	-103.5021023	-0.32	2.00	2.00	0.00
1,800.00	4.00	100.10	1,799.84	-1.22	6.87	623,913.45	797,005.84	32.7124236	-103.5020856	-1.30	2.00	2.00	0.00
1,900.00	6.00	100.10	1,899.45	-2.75	15.45	623,911.92	797,014.42	32.7124193	-103.5020577	-2.92	2.00	2.00	0.00
1,923.69	6.47	100.10	1,923.00	-3.20	17.98	623,911.47	797,016.95	32.7124180	-103.5020495	-3.40	2.00	2.00	0.00
Rustler													
2,000.00	8.00	100.10	1,998.70	-4.89	27.45	623,909.78	797,026.42	32.7124131	-103.5020188	-5.18	2.00	2.00	0.00
2,010.40	8.21	100.10	2,009.00	-5.15	28.89	623,909.52	797,027.86	32.7124124	-103.5020141	-5.46	2.00	2.00	0.00
A3 Top													
2,098.54	9.97	100.10	2,096.02	-7.59	42.60	623,907.08	797,041.57	32.7124054	-103.5019696	-8.04	2.00	2.00	0.00
Hold - 2098.54' MD/2096.03' TVD													
2,100.00	9.97	100.10	2,097.47	-7.63	42.85	623,907.04	797,041.82	32.7124052	-103.5019688	-8.09	0.00	0.00	0.00
2,109.68	9.97	100.10	2,107.00	-7.93	44.50	623,906.74	797,043.47	32.7124044	-103.5019634	-8.40	0.00	0.00	0.00
A3 Base (Tamarisk)													
2,200.00	9.97	100.10	2,195.96	-10.67	59.89	623,904.00	797,058.86	32.7123965	-103.5019134	-11.31	0.00	0.00	0.00
2,205.12	9.97	100.10	2,201.00	-10.83	60.77	623,903.84	797,059.74	32.7123961	-103.5019106	-11.47	0.00	0.00	0.00
Top Salt/Salado													
2,300.00	9.97	100.10	2,294.44	-13.71	76.94	623,900.96	797,075.91	32.7123878	-103.5018581	-14.53	0.00	0.00	0.00
2,400.00	9.97	100.10	2,392.93	-16.75	93.99	623,897.92	797,092.96	32.7123791	-103.5018028	-17.75	0.00	0.00	0.00
2,500.00	9.97	100.10	2,491.42	-19.78	111.03	623,894.89	797,110.00	32.7123704	-103.5017474	-20.97	0.00	0.00	0.00
2,600.00	9.97	100.10	2,589.91	-22.82	128.08	623,891.85	797,127.05	32.7123617	-103.5016921	-24.18	0.00	0.00	0.00
2,700.00	9.97	100.10	2,688.40	-25.86	145.12	623,888.81	797,144.09	32.7123530	-103.5016367	-27.40	0.00	0.00	0.00
2,800.00	9.97	100.10	2,786.89	-28.90	162.17	623,885.77	797,161.14	32.7123442	-103.5015814	-30.62	0.00	0.00	0.00
2,900.00	9.97	100.10	2,885.38	-31.93	179.22	623,882.74	797,178.19	32.7123355	-103.5015261	-33.84	0.00	0.00	0.00
3,000.00	9.97	100.10	2,983.87	-34.97	196.26	623,879.70	797,195.23	32.7123268	-103.5014707	-37.06	0.00	0.00	0.00
3,100.00	9.97	100.10	3,082.36	-38.01	213.31	623,876.66	797,212.28	32.7123181	-103.5014154	-40.28	0.00	0.00	0.00
3,200.00	9.97	100.10	3,180.85	-41.05	230.35	623,873.62	797,229.32	32.7123094	-103.5013600	-43.50	0.00	0.00	0.00
3,300.00	9.97	100.10	3,279.34	-44.08	247.40	623,870.59	797,246.37	32.7123007	-103.5013047	-46.71	0.00	0.00	0.00
3,400.00	9.97	100.10	3,377.83	-47.12	264.44	623,867.55	797,263.41	32.7122919	-103.5012494	-49.93	0.00	0.00	0.00
3,500.00	9.97	100.10	3,476.32	-50.16	281.49	623,864.51	797,280.46	32.7122832	-103.5011940	-53.15	0.00	0.00	0.00
3,600.00	9.97	100.10	3,574.81	-53.20	298.54	623,861.47	797,297.51	32.7122745	-103.5011387	-56.37	0.00	0.00	0.00
3,700.00	9.97	100.10	3,673.30	-56.23	315.58	623,858.44	797,314.55	32.7122658	-103.5010834	-59.59	0.00	0.00	0.00
3,800.00	9.97	100.10	3,771.79	-59.27	332.63	623,855.40	797,331.60	32.7122571	-103.5010280	-62.81	0.00	0.00	0.00

Total Directional

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Well:	Rope State Com 502H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,900.00	9.97	100.10	3,870.28	-62.31	349.67	623,852.36	797,348.64	32.7122484	-103.5009727	-66.03	0.00	0.00	0.00
4,000.00	9.97	100.10	3,968.77	-65.35	366.72	623,849.32	797,365.69	32.7122397	-103.5009173	-69.25	0.00	0.00	0.00
4,100.00	9.97	100.10	4,067.26	-68.38	383.77	623,846.29	797,382.74	32.7122309	-103.5008620	-72.46	0.00	0.00	0.00
4,200.00	9.97	100.10	4,165.75	-71.42	400.81	623,843.25	797,399.78	32.7122222	-103.5008067	-75.68	0.00	0.00	0.00
4,300.00	9.97	100.10	4,264.24	-74.46	417.86	623,840.21	797,416.83	32.7122135	-103.5007513	-78.90	0.00	0.00	0.00
4,400.00	9.97	100.10	4,362.73	-77.49	434.90	623,837.18	797,433.87	32.7122048	-103.5006960	-82.12	0.00	0.00	0.00
4,500.00	9.97	100.10	4,461.22	-80.53	451.95	623,834.14	797,450.92	32.7121961	-103.5006406	-85.34	0.00	0.00	0.00
4,600.00	9.97	100.10	4,559.71	-83.57	469.00	623,831.10	797,467.97	32.7121874	-103.5005853	-88.56	0.00	0.00	0.00
4,700.00	9.97	100.10	4,658.20	-86.61	486.04	623,828.06	797,485.01	32.7121786	-103.5005300	-91.78	0.00	0.00	0.00
4,800.00	9.97	100.10	4,756.69	-89.64	503.09	623,825.03	797,502.06	32.7121699	-103.5004746	-95.00	0.00	0.00	0.00
4,900.00	9.97	100.10	4,855.18	-92.68	520.13	623,821.99	797,519.10	32.7121612	-103.5004193	-98.21	0.00	0.00	0.00
5,000.00	9.97	100.10	4,953.67	-95.72	537.18	623,818.95	797,536.15	32.7121525	-103.5003640	-101.43	0.00	0.00	0.00
5,100.00	9.97	100.10	5,052.15	-98.76	554.23	623,815.91	797,553.20	32.7121438	-103.5003086	-104.65	0.00	0.00	0.00
5,200.00	9.97	100.10	5,150.64	-101.79	571.27	623,812.88	797,570.24	32.7121351	-103.5002533	-107.87	0.00	0.00	0.00
5,300.00	9.97	100.10	5,249.13	-104.83	588.32	623,809.84	797,587.29	32.7121263	-103.5001979	-111.09	0.00	0.00	0.00
5,400.00	9.97	100.10	5,347.62	-107.87	605.36	623,806.80	797,604.33	32.7121176	-103.5001426	-114.31	0.00	0.00	0.00
5,500.00	9.97	100.10	5,446.11	-110.91	622.41	623,803.76	797,621.38	32.7121089	-103.5000873	-117.53	0.00	0.00	0.00
5,600.00	9.97	100.10	5,544.60	-113.94	639.46	623,800.73	797,638.43	32.7121002	-103.5000319	-120.74	0.00	0.00	0.00
5,700.00	9.97	100.10	5,643.09	-116.98	656.50	623,797.69	797,655.47	32.7120915	-103.4999766	-123.96	0.00	0.00	0.00
5,800.00	9.97	100.10	5,741.58	-120.02	673.55	623,794.65	797,672.52	32.7120828	-103.4999213	-127.18	0.00	0.00	0.00
5,852.21	9.97	100.10	5,793.00	-121.60	682.45	623,793.07	797,681.42	32.7120782	-103.4998924	-128.86	0.00	0.00	0.00
Base Salt/Lamar/CTRA_BASE_ANHYDRITE													
5,900.00	9.97	100.10	5,840.07	-123.06	690.59	623,791.61	797,689.56	32.7120740	-103.4998659	-130.40	0.00	0.00	0.00
6,000.00	9.97	100.10	5,938.56	-126.09	707.64	623,788.58	797,706.61	32.7120653	-103.4998106	-133.62	0.00	0.00	0.00
6,052.23	9.97	100.10	5,990.00	-127.68	716.54	623,786.99	797,715.51	32.7120608	-103.4997817	-135.30	0.00	0.00	0.00
Top Delaware Sands/Bell Canyon													
6,100.00	9.97	100.10	6,037.05	-129.13	724.69	623,785.54	797,723.66	32.7120566	-103.4997552	-136.84	0.00	0.00	0.00
6,200.00	9.97	100.10	6,135.54	-132.17	741.73	623,782.50	797,740.70	32.7120479	-103.4996999	-140.06	0.00	0.00	0.00
6,300.00	9.97	100.10	6,234.03	-135.20	758.78	623,779.47	797,757.75	32.7120392	-103.4996446	-143.28	0.00	0.00	0.00
6,306.06	9.97	100.10	6,240.00	-135.39	759.81	623,779.28	797,758.78	32.7120387	-103.4996412	-143.47	0.00	0.00	0.00
Cherry Canyon													
6,400.00	9.97	100.10	6,332.52	-138.24	775.82	623,776.43	797,774.79	32.7120305	-103.4995892	-146.49	0.00	0.00	0.00
6,500.00	9.97	100.10	6,431.01	-141.28	792.87	623,773.39	797,791.84	32.7120217	-103.4995339	-149.71	0.00	0.00	0.00
6,600.00	9.97	100.10	6,529.50	-144.32	809.92	623,770.35	797,808.89	32.7120130	-103.4994785	-152.93	0.00	0.00	0.00
6,700.00	9.97	100.10	6,627.99	-147.35	826.96	623,767.32	797,825.93	32.7120043	-103.4994232	-156.15	0.00	0.00	0.00
6,712.20	9.97	100.10	6,640.00	-147.72	829.04	623,766.95	797,828.01	32.7120033	-103.4994165	-156.54	0.00	0.00	0.00
Brushy Canyon													
6,800.00	9.97	100.10	6,726.48	-150.39	844.01	623,764.28	797,842.98	32.7119956	-103.4993679	-159.37	0.00	0.00	0.00

Total Directional

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Well:	Rope State Com 502H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,900.00	9.97	100.10	6,824.97	-153.43	861.05	623,761.24	797,860.02	32.7119869	-103.4993125	-162.59	0.00	0.00	0.00
7,000.00	9.97	100.10	6,923.46	-156.47	878.10	623,758.20	797,877.07	32.7119782	-103.4992572	-165.81	0.00	0.00	0.00
7,100.00	9.97	100.10	7,021.95	-159.50	895.15	623,755.17	797,894.12	32.7119694	-103.4992019	-169.02	0.00	0.00	0.00
7,200.00	9.97	100.10	7,120.44	-162.54	912.19	623,752.13	797,911.16	32.7119607	-103.4991465	-172.24	0.00	0.00	0.00
7,300.00	9.97	100.10	7,218.93	-165.58	929.24	623,749.09	797,928.21	32.7119520	-103.4990912	-175.46	0.00	0.00	0.00
7,400.00	9.97	100.10	7,317.42	-168.62	946.28	623,746.05	797,945.25	32.7119433	-103.4990358	-178.68	0.00	0.00	0.00
7,498.06	9.97	100.10	7,414.00	-171.59	963.00	623,743.08	797,961.97	32.7119348	-103.4989816	-181.84	0.00	0.00	0.00
Basal Brushy Canyon													
7,500.00	9.97	100.10	7,415.91	-171.65	963.33	623,743.02	797,962.30	32.7119346	-103.4989805	-181.90	0.00	0.00	0.00
7,600.00	9.97	100.10	7,514.40	-174.69	980.38	623,739.98	797,979.35	32.7119259	-103.4989252	-185.12	0.00	0.00	0.00
7,700.00	9.97	100.10	7,612.89	-177.73	997.42	623,736.94	797,996.39	32.7119171	-103.4988698	-188.34	0.00	0.00	0.00
7,719.41	9.97	100.10	7,632.00	-178.32	1,000.73	623,736.35	797,999.70	32.7119155	-103.4988591	-188.96	0.00	0.00	0.00
Bone Spring Lime													
7,800.00	9.97	100.10	7,711.38	-180.77	1,014.47	623,733.90	798,013.44	32.7119084	-103.4988145	-191.56	0.00	0.00	0.00
7,900.00	9.97	100.10	7,809.86	-183.80	1,031.51	623,730.87	798,030.48	32.7118997	-103.4987592	-194.77	0.00	0.00	0.00
7,940.75	9.97	100.10	7,850.00	-185.04	1,038.46	623,729.63	798,037.43	32.7118962	-103.4987366	-196.09	0.00	0.00	0.00
Leonard/Avalon Sand													
8,000.00	9.97	100.10	7,908.35	-186.84	1,048.56	623,727.83	798,047.53	32.7118910	-103.4987038	-197.99	0.00	0.00	0.00
8,100.00	9.97	100.10	8,006.84	-189.88	1,065.61	623,724.79	798,064.58	32.7118823	-103.4986485	-201.21	0.00	0.00	0.00
8,200.00	9.97	100.10	8,105.33	-192.91	1,082.65	623,721.76	798,081.62	32.7118736	-103.4985931	-204.43	0.00	0.00	0.00
8,300.00	9.97	100.10	8,203.82	-195.95	1,099.70	623,718.72	798,098.67	32.7118648	-103.4985378	-207.65	0.00	0.00	0.00
8,400.00	9.97	100.10	8,302.31	-198.99	1,116.74	623,715.68	798,115.71	32.7118561	-103.4984825	-210.87	0.00	0.00	0.00
8,500.00	9.97	100.10	8,400.80	-202.03	1,133.79	623,712.64	798,132.76	32.7118474	-103.4984271	-214.09	0.00	0.00	0.00
8,600.00	9.97	100.10	8,499.29	-205.06	1,150.84	623,709.61	798,149.81	32.7118387	-103.4983718	-217.30	0.00	0.00	0.00
8,700.00	9.97	100.10	8,597.78	-208.10	1,167.88	623,706.57	798,166.85	32.7118300	-103.4983164	-220.52	0.00	0.00	0.00
8,800.00	9.97	100.10	8,696.27	-211.14	1,184.93	623,703.53	798,183.90	32.7118213	-103.4982611	-223.74	0.00	0.00	0.00
8,900.00	9.97	100.10	8,794.76	-214.18	1,201.97	623,700.49	798,200.94	32.7118125	-103.4982058	-226.96	0.00	0.00	0.00
9,000.00	9.97	100.10	8,893.25	-217.21	1,219.02	623,697.46	798,217.99	32.7118038	-103.4981504	-230.18	0.00	0.00	0.00
9,100.00	9.97	100.10	8,991.74	-220.25	1,236.07	623,694.42	798,235.04	32.7117951	-103.4980951	-233.40	0.00	0.00	0.00
9,199.77	9.97	100.10	9,090.00	-223.28	1,253.07	623,691.39	798,252.04	32.7117864	-103.4980399	-236.61	0.00	0.00	0.00
1st Bone Spring Sand													
9,200.00	9.97	100.10	9,090.23	-223.29	1,253.11	623,691.38	798,252.08	32.7117864	-103.4980398	-236.62	0.00	0.00	0.00
9,300.00	9.97	100.10	9,188.72	-226.33	1,270.16	623,688.34	798,269.13	32.7117777	-103.4979844	-239.84	0.00	0.00	0.00
9,310.58	9.97	100.10	9,199.14	-226.65	1,271.96	623,688.02	798,270.93	32.7117768	-103.4979786	-240.18	0.00	0.00	0.00
Start DLS 4.00 TFO -139.86													
9,400.00	7.59	82.38	9,287.52	-227.22	1,285.44	623,687.45	798,284.41	32.7117749	-103.4979348	-240.89	4.00	-2.66	-19.82
9,500.00	6.41	50.51	9,386.81	-222.79	1,296.30	623,691.88	798,295.27	32.7117868	-103.4978993	-236.58	4.00	-1.18	-31.87
9,600.00	7.51	18.26	9,486.11	-213.04	1,302.66	623,701.63	798,301.63	32.7118135	-103.4978784	-226.89	4.00	1.10	-32.25

Total Directional

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Well:	Rope State Com 502H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,689.99	9.87	0.03	9,575.07	-199.73	1,304.50	623,714.94	798,303.47	32.7118500	-103.4978721	-213.61	4.00	2.62	-20.26
KOP/LP/FTP (RSC 502H)													
9,694.24	10.00	359.39	9,579.26	-199.00	1,304.50	623,715.67	798,303.47	32.7118520	-103.4978721	-212.88	4.00	3.05	-15.00
KOP - Start 10.00°/100' DLS													
9,700.00	10.58	359.39	9,584.93	-197.97	1,304.49	623,716.70	798,303.46	32.7118549	-103.4978721	-211.85	10.00	10.00	0.00
9,750.00	15.58	359.39	9,633.62	-186.66	1,304.37	623,728.01	798,303.34	32.7118860	-103.4978722	-200.54	10.00	10.00	0.00
9,769.18	17.49	359.39	9,652.00	-181.21	1,304.31	623,733.46	798,303.28	32.7119009	-103.4978722	-195.08	10.00	10.00	0.00
2nd Bone Spring Sand													
9,800.00	20.58	359.39	9,681.14	-171.15	1,304.20	623,743.52	798,303.17	32.7119286	-103.4978723	-185.03	10.00	10.00	0.00
9,850.00	25.58	359.39	9,727.12	-151.56	1,303.99	623,763.11	798,302.96	32.7119824	-103.4978725	-165.44	10.00	10.00	0.00
9,900.00	30.58	359.39	9,771.22	-128.04	1,303.74	623,786.63	798,302.71	32.7120471	-103.4978727	-141.91	10.00	10.00	0.00
9,950.00	35.58	359.39	9,813.11	-100.76	1,303.45	623,813.91	798,302.42	32.7121221	-103.4978730	-114.63	10.00	10.00	0.00
10,000.00	40.58	359.39	9,852.45	-69.94	1,303.13	623,844.73	798,302.10	32.7122068	-103.4978732	-83.81	10.00	10.00	0.00
10,050.00	45.58	359.39	9,888.96	-35.80	1,302.76	623,878.87	798,301.73	32.7123006	-103.4978735	-49.67	10.00	10.00	0.00
10,100.00	50.58	359.39	9,922.36	1.39	1,302.37	623,916.06	798,301.34	32.7124028	-103.4978739	-12.48	10.00	10.00	0.00
10,150.00	55.58	359.39	9,952.39	41.34	1,301.94	623,956.01	798,300.91	32.7125127	-103.4978742	27.48	10.00	10.00	0.00
10,200.00	60.58	359.39	9,978.82	83.76	1,301.49	623,998.43	798,300.46	32.7126293	-103.4978746	69.90	10.00	10.00	0.00
10,250.00	65.58	359.39	10,001.45	128.33	1,301.01	624,043.00	798,299.98	32.7127517	-103.4978750	114.47	10.00	10.00	0.00
10,300.00	70.58	359.39	10,020.12	174.69	1,300.52	624,089.36	798,299.49	32.7128792	-103.4978754	160.84	10.00	10.00	0.00
10,344.24	75.00	359.39	10,033.20	216.94	1,300.07	624,131.61	798,299.04	32.7129953	-103.4978758	203.08	10.00	10.00	0.00
75° Inc - 10344.24' MD/10033.20' TVD													
10,400.00	77.79	359.39	10,046.32	271.13	1,299.49	624,185.80	798,298.46	32.7131442	-103.4978763	257.28	5.00	5.00	0.00
10,500.00	82.79	359.39	10,063.18	369.66	1,298.44	624,284.33	798,297.41	32.7134151	-103.4978772	355.81	5.00	5.00	0.00
10,534.53	84.51	359.39	10,067.00	403.97	1,298.08	624,318.64	798,297.05	32.7135094	-103.4978775	390.13	5.00	5.00	0.00
2nd Bone Spring Sand Lower Target													
10,600.00	87.79	359.39	10,071.39	469.28	1,297.38	624,383.95	798,296.35	32.7136889	-103.4978781	455.44	5.00	5.00	0.00
10,668.58	91.22	359.39	10,071.99	537.85	1,296.65	624,452.52	798,295.62	32.7138774	-103.4978787	524.01	5.00	5.00	0.00
Hold - 10668.58' MD/10071.99' TVD													
10,700.00	91.22	359.39	10,071.32	569.26	1,296.32	624,483.93	798,295.29	32.7139637	-103.4978790	555.42	0.00	0.00	0.00
10,800.00	91.22	359.39	10,069.20	669.23	1,295.25	624,583.90	798,294.22	32.7142385	-103.4978799	655.40	0.00	0.00	0.00
10,900.00	91.22	359.39	10,067.07	769.20	1,294.18	624,683.87	798,293.15	32.7145133	-103.4978808	755.38	0.00	0.00	0.00
11,000.00	91.22	359.39	10,064.95	869.17	1,293.12	624,783.84	798,292.09	32.7147880	-103.4978817	855.36	0.00	0.00	0.00
11,100.00	91.22	359.39	10,062.82	969.14	1,292.05	624,883.81	798,291.02	32.7150628	-103.4978826	955.33	0.00	0.00	0.00
11,200.00	91.22	359.39	10,060.70	1,069.12	1,290.98	624,983.79	798,289.95	32.7153376	-103.4978835	1,055.31	0.00	0.00	0.00
11,300.00	91.22	359.39	10,058.57	1,169.09	1,289.92	625,083.76	798,288.89	32.7156124	-103.4978844	1,155.29	0.00	0.00	0.00
11,400.00	91.22	359.39	10,056.45	1,269.06	1,288.85	625,183.73	798,287.82	32.7158872	-103.4978853	1,255.27	0.00	0.00	0.00
11,500.00	91.22	359.39	10,054.33	1,369.03	1,287.78	625,283.70	798,286.75	32.7161620	-103.4978862	1,355.24	0.00	0.00	0.00
11,600.00	91.22	359.39	10,052.20	1,469.00	1,286.72	625,383.67	798,285.69	32.7164368	-103.4978872	1,455.22	0.00	0.00	0.00
11,700.00	91.22	359.39	10,050.08	1,568.97	1,285.65	625,483.64	798,284.62	32.7167115	-103.4978881	1,555.20	0.00	0.00	0.00

Total Directional

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Well:	Rope State Com 502H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,800.00	91.22	359.39	10,047.95	1,668.95	1,284.58	625,583.62	798,283.55	32.7169863	-103.4978890	1,655.17	0.00	0.00	0.00
11,900.00	91.22	359.39	10,045.83	1,768.92	1,283.52	625,683.59	798,282.49	32.7172611	-103.4978899	1,755.15	0.00	0.00	0.00
12,000.00	91.22	359.39	10,043.70	1,868.89	1,282.45	625,783.56	798,281.42	32.7175359	-103.4978908	1,855.13	0.00	0.00	0.00
12,100.00	91.22	359.39	10,041.58	1,968.86	1,281.38	625,883.53	798,280.35	32.7178107	-103.4978917	1,955.11	0.00	0.00	0.00
12,200.00	91.22	359.39	10,039.45	2,068.83	1,280.32	625,983.50	798,279.29	32.7180855	-103.4978926	2,055.08	0.00	0.00	0.00
12,300.00	91.22	359.39	10,037.33	2,168.80	1,279.25	626,083.47	798,278.22	32.7183603	-103.4978935	2,155.06	0.00	0.00	0.00
12,400.00	91.22	359.39	10,035.21	2,268.78	1,278.18	626,183.45	798,277.15	32.7186350	-103.4978944	2,255.04	0.00	0.00	0.00
12,500.00	91.22	359.39	10,033.08	2,368.75	1,277.12	626,283.42	798,276.09	32.7189098	-103.4978953	2,355.02	0.00	0.00	0.00
12,600.00	91.22	359.39	10,030.96	2,468.72	1,276.05	626,383.39	798,275.02	32.7191846	-103.4978962	2,454.99	0.00	0.00	0.00
12,645.01	91.22	359.39	10,030.00	2,513.72	1,275.57	626,428.39	798,274.54	32.7193083	-103.4978966	2,500.00	0.00	0.00	0.00
Start DLS 2.00 TFO 0.10													
12,700.00	92.32	359.39	10,028.30	2,568.68	1,274.98	626,483.35	798,273.95	32.7194594	-103.4978971	2,554.96	2.00	2.00	0.00
12,747.35	93.26	359.39	10,026.00	2,615.96	1,274.48	626,530.63	798,273.45	32.7195893	-103.4978975	2,602.25	2.00	2.00	0.00
Hold - 12747.35' MD/10026.00' TVD													
12,800.00	93.26	359.39	10,023.00	2,668.53	1,273.92	626,583.20	798,272.89	32.7197338	-103.4978980	2,654.82	0.00	0.00	0.00
12,900.00	93.26	359.39	10,017.31	2,768.36	1,272.87	626,683.03	798,271.84	32.7200082	-103.4978989	2,754.65	0.00	0.00	0.00
13,000.00	93.26	359.39	10,011.61	2,868.19	1,271.81	626,782.86	798,270.78	32.7202826	-103.4978998	2,854.49	0.00	0.00	0.00
13,100.00	93.26	359.39	10,005.92	2,968.03	1,270.75	626,882.70	798,269.72	32.7205570	-103.4979007	2,954.33	0.00	0.00	0.00
13,200.00	93.26	359.39	10,000.23	3,067.86	1,269.69	626,982.53	798,268.66	32.7208314	-103.4979015	3,054.17	0.00	0.00	0.00
13,300.00	93.26	359.39	9,994.53	3,167.69	1,268.63	627,082.36	798,267.60	32.7211058	-103.4979024	3,154.00	0.00	0.00	0.00
13,400.00	93.26	359.39	9,988.84	3,267.52	1,267.57	627,182.19	798,266.54	32.7213802	-103.4979033	3,253.84	0.00	0.00	0.00
13,500.00	93.26	359.39	9,983.15	3,367.35	1,266.51	627,282.02	798,265.48	32.7216546	-103.4979042	3,353.68	0.00	0.00	0.00
13,600.00	93.26	359.39	9,977.45	3,467.19	1,265.45	627,381.86	798,264.42	32.7219290	-103.4979051	3,453.52	0.00	0.00	0.00
13,700.00	93.26	359.39	9,971.76	3,567.02	1,264.39	627,481.69	798,263.36	32.7222034	-103.4979060	3,553.36	0.00	0.00	0.00
13,800.00	93.26	359.39	9,966.06	3,666.85	1,263.34	627,581.52	798,262.31	32.7224778	-103.4979068	3,653.19	0.00	0.00	0.00
13,900.00	93.26	359.39	9,960.37	3,766.68	1,262.28	627,681.35	798,261.25	32.7227522	-103.4979077	3,753.03	0.00	0.00	0.00
14,000.00	93.26	359.39	9,954.68	3,866.52	1,261.22	627,781.18	798,260.19	32.7230266	-103.4979086	3,852.87	0.00	0.00	0.00
14,100.00	93.26	359.39	9,948.98	3,966.35	1,260.16	627,881.02	798,259.13	32.7233010	-103.4979095	3,952.71	0.00	0.00	0.00
14,200.00	93.26	359.39	9,943.29	4,066.18	1,259.10	627,980.85	798,258.07	32.7235754	-103.4979104	4,052.54	0.00	0.00	0.00
14,300.00	93.26	359.39	9,937.60	4,166.01	1,258.04	628,080.68	798,257.01	32.7238498	-103.4979113	4,152.38	0.00	0.00	0.00
14,400.00	93.26	359.39	9,931.90	4,265.84	1,256.98	628,180.51	798,255.95	32.7241242	-103.4979121	4,252.22	0.00	0.00	0.00
14,500.00	93.26	359.39	9,926.21	4,365.68	1,255.92	628,280.35	798,254.89	32.7243986	-103.4979130	4,352.06	0.00	0.00	0.00
14,600.00	93.26	359.39	9,920.52	4,465.51	1,254.86	628,380.18	798,253.83	32.7246730	-103.4979139	4,451.90	0.00	0.00	0.00
14,700.00	93.26	359.39	9,914.82	4,565.34	1,253.81	628,480.01	798,252.78	32.7249474	-103.4979148	4,551.73	0.00	0.00	0.00
14,800.00	93.26	359.39	9,909.13	4,665.17	1,252.75	628,579.84	798,251.72	32.7252218	-103.4979157	4,651.57	0.00	0.00	0.00
14,900.00	93.26	359.39	9,903.43	4,765.00	1,251.69	628,679.67	798,250.66	32.7254962	-103.4979166	4,751.41	0.00	0.00	0.00
15,000.00	93.26	359.39	9,897.74	4,864.84	1,250.63	628,779.51	798,249.60	32.7257706	-103.4979175	4,851.25	0.00	0.00	0.00
15,100.00	93.26	359.39	9,892.05	4,964.67	1,249.57	628,879.34	798,248.54	32.7260450	-103.4979183	4,951.08	0.00	0.00	0.00

Total Directional

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Well:	Rope State Com 502H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,200.00	93.26	359.39	9,886.35	5,064.50	1,248.51	628,979.17	798,247.48	32.7263194	-103.4979192	5,050.92	0.00	0.00	0.00
15,300.00	93.26	359.39	9,880.66	5,164.33	1,247.45	629,079.00	798,246.42	32.7265938	-103.4979201	5,150.76	0.00	0.00	0.00
15,399.40	93.26	359.39	9,875.00	5,263.57	1,246.40	629,178.24	798,245.37	32.7268666	-103.4979210	5,250.00	0.00	0.00	0.00
Start DLS 2.00 TFO -0.01													
15,426.24	93.80	359.39	9,873.35	5,290.36	1,246.12	629,205.03	798,245.09	32.7269402	-103.4979212	5,276.79	2.00	2.00	0.00
Hold - 15426.24' MD/9873.35' TVD													
15,500.00	93.80	359.39	9,868.46	5,363.95	1,245.34	629,278.62	798,244.31	32.7271425	-103.4979219	5,350.39	0.00	0.00	0.00
15,600.00	93.80	359.39	9,861.83	5,463.72	1,244.28	629,378.39	798,243.25	32.7274168	-103.4979228	5,450.17	0.00	0.00	0.00
15,700.00	93.80	359.39	9,855.20	5,563.50	1,243.22	629,478.17	798,242.19	32.7276910	-103.4979236	5,549.95	0.00	0.00	0.00
15,800.00	93.80	359.39	9,848.57	5,663.27	1,242.16	629,577.94	798,241.13	32.7279652	-103.4979245	5,649.73	0.00	0.00	0.00
15,900.00	93.80	359.39	9,841.94	5,763.05	1,241.10	629,677.72	798,240.07	32.7282395	-103.4979254	5,749.51	0.00	0.00	0.00
16,000.00	93.80	359.39	9,835.31	5,862.82	1,240.04	629,777.49	798,239.01	32.7285137	-103.4979263	5,849.29	0.00	0.00	0.00
16,100.00	93.80	359.39	9,828.68	5,962.59	1,238.98	629,877.26	798,237.95	32.7287880	-103.4979272	5,949.07	0.00	0.00	0.00
16,200.00	93.80	359.39	9,822.06	6,062.37	1,237.93	629,977.04	798,236.90	32.7290622	-103.4979281	6,048.85	0.00	0.00	0.00
16,300.00	93.80	359.39	9,815.43	6,162.14	1,236.87	630,076.81	798,235.84	32.7293364	-103.4979289	6,148.63	0.00	0.00	0.00
16,400.00	93.80	359.39	9,808.80	6,261.92	1,235.81	630,176.59	798,234.78	32.7296107	-103.4979298	6,248.41	0.00	0.00	0.00
16,500.00	93.80	359.39	9,802.17	6,361.69	1,234.75	630,276.36	798,233.72	32.7298849	-103.4979307	6,348.19	0.00	0.00	0.00
16,600.00	93.80	359.39	9,795.54	6,461.47	1,233.69	630,376.14	798,232.66	32.7301592	-103.4979316	6,447.97	0.00	0.00	0.00
16,700.00	93.80	359.39	9,788.91	6,561.24	1,232.63	630,475.91	798,231.60	32.7304334	-103.4979325	6,547.75	0.00	0.00	0.00
16,800.00	93.80	359.39	9,782.28	6,661.02	1,231.58	630,575.69	798,230.55	32.7307077	-103.4979334	6,647.53	0.00	0.00	0.00
16,900.00	93.80	359.39	9,775.65	6,760.79	1,230.52	630,675.46	798,229.49	32.7309819	-103.4979343	6,747.31	0.00	0.00	0.00
17,000.00	93.80	359.39	9,769.03	6,860.56	1,229.46	630,775.23	798,228.43	32.7312561	-103.4979351	6,847.09	0.00	0.00	0.00
17,100.00	93.80	359.39	9,762.40	6,960.34	1,228.40	630,875.01	798,227.37	32.7315304	-103.4979360	6,946.87	0.00	0.00	0.00
17,200.00	93.80	359.39	9,755.77	7,060.11	1,227.34	630,974.78	798,226.31	32.7318046	-103.4979369	7,046.65	0.00	0.00	0.00
17,300.00	93.80	359.39	9,749.14	7,159.89	1,226.28	631,074.56	798,225.25	32.7320789	-103.4979378	7,146.43	0.00	0.00	0.00
17,400.00	93.80	359.39	9,742.51	7,259.66	1,225.22	631,174.33	798,224.19	32.7323531	-103.4979387	7,246.21	0.00	0.00	0.00
17,500.00	93.80	359.39	9,735.88	7,359.44	1,224.17	631,274.11	798,223.14	32.7326274	-103.4979396	7,345.99	0.00	0.00	0.00
17,600.00	93.80	359.39	9,729.25	7,459.21	1,223.11	631,373.88	798,222.08	32.7329016	-103.4979404	7,445.77	0.00	0.00	0.00
17,700.00	93.80	359.39	9,722.62	7,558.99	1,222.05	631,473.65	798,221.02	32.7331758	-103.4979413	7,545.55	0.00	0.00	0.00
17,800.00	93.80	359.39	9,716.00	7,658.76	1,220.99	631,573.43	798,219.96	32.7334501	-103.4979422	7,645.33	0.00	0.00	0.00
17,900.00	93.80	359.39	9,709.37	7,758.53	1,219.93	631,673.20	798,218.90	32.7337243	-103.4979431	7,745.11	0.00	0.00	0.00
18,000.00	93.80	359.39	9,702.74	7,858.31	1,218.87	631,772.98	798,217.84	32.7339986	-103.4979440	7,844.89	0.00	0.00	0.00
18,100.00	93.80	359.39	9,696.11	7,958.08	1,217.82	631,872.75	798,216.79	32.7342728	-103.4979449	7,944.67	0.00	0.00	0.00
18,200.00	93.80	359.39	9,689.48	8,057.86	1,216.76	631,972.53	798,215.73	32.7345470	-103.4979457	8,044.45	0.00	0.00	0.00
18,300.00	93.80	359.39	9,682.85	8,157.63	1,215.70	632,072.30	798,214.67	32.7348213	-103.4979466	8,144.23	0.00	0.00	0.00
18,400.00	93.80	359.39	9,676.22	8,257.41	1,214.64	632,172.08	798,213.61	32.7350955	-103.4979475	8,244.01	0.00	0.00	0.00
18,500.00	93.80	359.39	9,669.60	8,357.18	1,213.58	632,271.85	798,212.55	32.7353698	-103.4979484	8,343.79	0.00	0.00	0.00

Total Directional

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Well:	Rope State Com 502H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
18,600.00	93.80	359.39	9,662.97	8,456.96	1,212.52	632,371.62	798,211.49	32.7356440	-103.4979493	8,443.57	0.00	0.00	0.00
18,700.00	93.80	359.39	9,656.34	8,556.73	1,211.46	632,471.40	798,210.43	32.7359183	-103.4979502	8,543.35	0.00	0.00	0.00
18,800.00	93.80	359.39	9,649.71	8,656.50	1,210.41	632,571.17	798,209.38	32.7361925	-103.4979510	8,643.13	0.00	0.00	0.00
18,900.00	93.80	359.39	9,643.08	8,756.28	1,209.35	632,670.95	798,208.32	32.7364667	-103.4979519	8,742.91	0.00	0.00	0.00
19,000.00	93.80	359.39	9,636.45	8,856.05	1,208.29	632,770.72	798,207.26	32.7367410	-103.4979528	8,842.69	0.00	0.00	0.00
19,100.00	93.80	359.39	9,629.82	8,955.83	1,207.23	632,870.50	798,206.20	32.7370152	-103.4979537	8,942.47	0.00	0.00	0.00
19,157.66	93.80	359.39	9,626.00	9,013.36	1,206.62	632,928.03	798,205.59	32.7371734	-103.4979542	9,000.00	0.00	0.00	0.00
Start DLS 2.00 TFO 0.00													
19,200.00	94.65	359.39	9,622.88	9,055.58	1,206.17	632,970.25	798,205.14	32.7372894	-103.4979546	9,042.23	2.00	2.00	0.00
19,230.23	95.25	359.39	9,620.27	9,085.69	1,205.85	633,000.36	798,204.82	32.7373722	-103.4979548	9,072.34	2.00	2.00	0.00
Hold - 19230.23' MD/9620.27' TVD													
19,300.00	95.25	359.39	9,613.89	9,155.17	1,205.12	633,069.84	798,204.09	32.7375631	-103.4979555	9,141.82	0.00	0.00	0.00
19,400.00	95.25	359.39	9,604.73	9,254.74	1,204.06	633,169.41	798,203.03	32.7378368	-103.4979563	9,241.40	0.00	0.00	0.00
19,500.00	95.25	359.39	9,595.58	9,354.32	1,203.00	633,268.99	798,201.97	32.7381105	-103.4979572	9,340.98	0.00	0.00	0.00
19,600.00	95.25	359.39	9,586.43	9,453.89	1,201.95	633,368.56	798,200.92	32.7383842	-103.4979581	9,440.56	0.00	0.00	0.00
19,700.00	95.25	359.39	9,577.27	9,553.47	1,200.89	633,468.14	798,199.86	32.7386579	-103.4979590	9,540.14	0.00	0.00	0.00
19,800.00	95.25	359.39	9,568.12	9,653.04	1,199.83	633,567.71	798,198.80	32.7389316	-103.4979599	9,639.72	0.00	0.00	0.00
19,900.00	95.25	359.39	9,558.96	9,752.62	1,198.78	633,667.29	798,197.75	32.7392053	-103.4979608	9,739.30	0.00	0.00	0.00
20,000.00	95.25	359.39	9,549.81	9,852.19	1,197.72	633,766.86	798,196.69	32.7394790	-103.4979616	9,838.88	0.00	0.00	0.00
20,100.00	95.25	359.39	9,540.66	9,951.76	1,196.66	633,866.43	798,195.63	32.7397527	-103.4979625	9,938.46	0.00	0.00	0.00
20,161.80	95.25	359.39	9,535.00	10,013.30	1,196.01	633,927.97	798,194.98	32.7399218	-103.4979631	10,000.00	0.00	0.00	0.00
Start DLS 2.00 TFO 0.00													
20,200.00	96.02	359.39	9,531.25	10,051.31	1,195.61	633,965.98	798,194.58	32.7400263	-103.4979634	10,038.02	2.00	2.00	0.00
20,263.50	97.29	359.39	9,523.90	10,114.38	1,194.94	634,029.05	798,193.91	32.7401997	-103.4979640	10,101.09	2.00	2.00	0.00
Hold - 20263.50' MD/9523.90' TVD													
20,300.00	97.29	359.39	9,519.27	10,150.59	1,194.55	634,065.26	798,193.52	32.7402992	-103.4979643	10,137.29	0.00	0.00	0.00
20,400.00	97.29	359.39	9,506.58	10,249.77	1,193.50	634,164.44	798,192.47	32.7405718	-103.4979652	10,236.49	0.00	0.00	0.00
20,500.00	97.29	359.39	9,493.90	10,348.96	1,192.45	634,263.63	798,191.42	32.7408444	-103.4979660	10,335.68	0.00	0.00	0.00
20,600.00	97.29	359.39	9,481.22	10,448.15	1,191.40	634,362.82	798,190.37	32.7411170	-103.4979669	10,434.87	0.00	0.00	0.00
20,700.00	97.29	359.39	9,468.54	10,547.33	1,190.34	634,462.00	798,189.31	32.7413897	-103.4979678	10,534.06	0.00	0.00	0.00
20,800.00	97.29	359.39	9,455.85	10,646.52	1,189.29	634,561.19	798,188.26	32.7416623	-103.4979687	10,633.26	0.00	0.00	0.00
20,900.00	97.29	359.39	9,443.17	10,745.71	1,188.24	634,660.38	798,187.21	32.7419349	-103.4979695	10,732.45	0.00	0.00	0.00
21,000.00	97.29	359.39	9,430.49	10,844.89	1,187.19	634,759.56	798,186.16	32.7422076	-103.4979704	10,831.64	0.00	0.00	0.00
21,100.00	97.29	359.39	9,417.81	10,944.08	1,186.14	634,858.75	798,185.11	32.7424802	-103.4979713	10,930.83	0.00	0.00	0.00
21,200.00	97.29	359.39	9,405.13	11,043.27	1,185.08	634,957.94	798,184.05	32.7427528	-103.4979722	11,030.03	0.00	0.00	0.00
21,300.00	97.29	359.39	9,392.44	11,142.46	1,184.03	635,057.13	798,183.00	32.7430254	-103.4979731	11,129.22	0.00	0.00	0.00
21,400.00	97.29	359.39	9,379.76	11,241.64	1,182.98	635,156.31	798,181.95	32.7432981	-103.4979739	11,228.41	0.00	0.00	0.00
21,421.77	97.29	359.39	9,377.00	11,263.23	1,182.75	635,177.90	798,181.72	32.7433574	-103.4979741	11,250.00	0.00	0.00	0.00
Start DLS 2.00 TFO 0.00													

Total Directional

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Well:	Rope State Com 502H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
21,479.72	98.45	359.39	9,369.07	11,320.64	1,182.14	635,235.31	798,181.11	32.7435152	-103.4979746	11,307.41	2.00	2.00	0.00
Hold - 21479.72' MD/9369.07' TVD													
21,500.00	98.45	359.39	9,366.09	11,340.69	1,181.93	635,255.36	798,180.90	32.7435703	-103.4979748	11,327.47	0.00	0.00	0.00
21,600.00	98.45	359.39	9,351.40	11,439.60	1,180.88	635,354.27	798,179.85	32.7438422	-103.4979757	11,426.38	0.00	0.00	0.00
21,700.00	98.45	359.39	9,336.72	11,538.52	1,179.83	635,453.18	798,178.80	32.7441140	-103.4979766	11,525.30	0.00	0.00	0.00
21,800.00	98.45	359.39	9,322.03	11,637.43	1,178.78	635,552.09	798,177.75	32.7443859	-103.4979774	11,624.22	0.00	0.00	0.00
21,900.00	98.45	359.39	9,307.35	11,736.34	1,177.73	635,651.00	798,176.70	32.7446578	-103.4979783	11,723.13	0.00	0.00	0.00
22,000.00	98.45	359.39	9,292.66	11,835.25	1,176.68	635,749.92	798,175.65	32.7449296	-103.4979792	11,822.05	0.00	0.00	0.00
22,100.00	98.45	359.39	9,277.97	11,934.16	1,175.63	635,848.83	798,174.60	32.7452015	-103.4979801	11,920.96	0.00	0.00	0.00
22,200.00	98.45	359.39	9,263.29	12,033.07	1,174.58	635,947.74	798,173.55	32.7454734	-103.4979809	12,019.88	0.00	0.00	0.00
22,300.00	98.45	359.39	9,248.60	12,131.98	1,173.53	636,046.65	798,172.50	32.7457452	-103.4979818	12,118.79	0.00	0.00	0.00
22,400.00	98.45	359.39	9,233.91	12,230.89	1,172.48	636,145.56	798,171.45	32.7460171	-103.4979827	12,217.71	0.00	0.00	0.00
22,500.00	98.45	359.39	9,219.23	12,329.80	1,171.44	636,244.47	798,170.41	32.7462890	-103.4979836	12,316.63	0.00	0.00	0.00
22,600.00	98.45	359.39	9,204.54	12,428.71	1,170.39	636,343.38	798,169.36	32.7465608	-103.4979844	12,415.54	0.00	0.00	0.00
22,685.39	98.45	359.39	9,192.00	12,513.16	1,169.49	636,427.83	798,168.46	32.7467930	-103.4979852	12,500.00	0.00	0.00	0.00
Start DLS 2.00 TFO 0.00													
22,700.00	98.74	359.39	9,189.82	12,527.61	1,169.34	636,442.28	798,168.31	32.7468327	-103.4979853	12,514.45	2.00	2.00	0.00
22,774.21	100.22	359.39	9,177.60	12,600.80	1,168.56	636,515.47	798,167.53	32.7470339	-103.4979860	12,587.64	2.00	2.00	0.00
Hold - 22774.21' MD/9177.59' TVD													
22,800.00	100.22	359.39	9,173.02	12,626.18	1,168.29	636,540.85	798,167.26	32.7471036	-103.4979862	12,613.03	0.00	0.00	0.00
22,900.00	100.22	359.39	9,155.27	12,724.59	1,167.25	636,639.26	798,166.22	32.7473741	-103.4979871	12,711.44	0.00	0.00	0.00
23,000.00	100.22	359.39	9,137.53	12,822.99	1,166.20	636,737.66	798,165.17	32.7476446	-103.4979879	12,809.85	0.00	0.00	0.00
23,100.00	100.22	359.39	9,119.78	12,921.40	1,165.16	636,836.07	798,164.13	32.7479151	-103.4979888	12,908.27	0.00	0.00	0.00
23,200.00	100.22	359.39	9,102.04	13,019.81	1,164.12	636,934.48	798,163.09	32.7481856	-103.4979897	13,006.68	0.00	0.00	0.00
23,300.00	100.22	359.39	9,084.29	13,118.22	1,163.07	637,032.89	798,162.04	32.7484560	-103.4979905	13,105.09	0.00	0.00	0.00
23,400.00	100.22	359.39	9,066.54	13,216.62	1,162.03	637,131.29	798,161.00	32.7487265	-103.4979914	13,203.50	0.00	0.00	0.00
23,500.00	100.22	359.39	9,048.80	13,315.03	1,160.98	637,229.70	798,159.95	32.7489970	-103.4979923	13,301.92	0.00	0.00	0.00
23,600.00	100.22	359.39	9,031.05	13,413.44	1,159.94	637,328.11	798,158.91	32.7492675	-103.4979932	13,400.33	0.00	0.00	0.00
23,700.00	100.22	359.39	9,013.31	13,511.85	1,158.90	637,426.52	798,157.87	32.7495380	-103.4979940	13,498.74	0.00	0.00	0.00
23,800.00	100.22	359.39	8,995.56	13,610.25	1,157.85	637,524.92	798,156.82	32.7498085	-103.4979949	13,597.16	0.00	0.00	0.00
23,900.00	100.22	359.39	8,977.82	13,708.66	1,156.81	637,623.33	798,155.78	32.7500789	-103.4979958	13,695.57	0.00	0.00	0.00
23,955.31	100.22	359.39	8,968.00	13,763.09	1,156.23	637,677.76	798,155.20	32.7502285	-103.4979963	13,750.00	0.00	0.00	0.00
Start DLS 2.00 TFO 0.00													
24,000.00	101.12	359.39	8,959.73	13,807.00	1,155.76	637,721.67	798,154.73	32.7503493	-103.4979966	13,793.92	2.00	2.00	0.00
24,064.92	102.41	359.39	8,946.49	13,870.55	1,155.09	637,785.22	798,154.06	32.7505239	-103.4979972	13,857.47	2.00	2.00	0.00
Hold - 24064.92' MD/8946.49' TVD													
24,100.00	102.41	359.39	8,938.95	13,904.81	1,154.73	637,819.48	798,153.70	32.7506181	-103.4979975	13,891.73	0.00	0.00	0.00
24,200.00	102.41	359.39	8,917.45	14,002.47	1,153.69	637,917.14	798,152.66	32.7508865	-103.4979984	13,989.39	0.00	0.00	0.00

Total Directional

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Well:	Rope State Com 502H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
24,300.00	102.41	359.39	8,895.96	14,100.13	1,152.65	638,014.80	798,151.62	32.7511549	-103.4979992	14,087.06	0.00	0.00	0.00
24,400.00	102.41	359.39	8,874.46	14,197.78	1,151.62	638,112.45	798,150.59	32.7514234	-103.4980001	14,184.72	0.00	0.00	0.00
24,500.00	102.41	359.39	8,852.96	14,295.44	1,150.58	638,210.11	798,149.55	32.7516918	-103.4980010	14,282.38	0.00	0.00	0.00
24,600.00	102.41	359.39	8,831.46	14,393.10	1,149.55	638,307.77	798,148.52	32.7519602	-103.4980018	14,380.04	0.00	0.00	0.00
24,700.00	102.41	359.39	8,809.97	14,490.75	1,148.51	638,405.42	798,147.48	32.7522286	-103.4980027	14,477.70	0.00	0.00	0.00
24,800.00	102.41	359.39	8,788.47	14,588.41	1,147.47	638,503.08	798,146.44	32.7524970	-103.4980036	14,575.37	0.00	0.00	0.00
24,900.00	102.41	359.39	8,766.97	14,686.07	1,146.44	638,600.74	798,145.41	32.7527655	-103.4980044	14,673.03	0.00	0.00	0.00
25,000.00	102.41	359.39	8,745.48	14,783.72	1,145.40	638,698.39	798,144.37	32.7530339	-103.4980053	14,770.69	0.00	0.00	0.00
25,100.00	102.41	359.39	8,723.98	14,881.38	1,144.37	638,796.05	798,143.34	32.7533023	-103.4980062	14,868.35	0.00	0.00	0.00
25,200.00	102.41	359.39	8,702.48	14,979.04	1,143.33	638,893.71	798,142.30	32.7535707	-103.4980070	14,966.01	0.00	0.00	0.00
25,234.80	102.41	359.39	8,695.00	15,013.02	1,142.97	638,927.69	798,141.94	32.7536641	-103.4980073	15,000.00	0.00	0.00	0.00
Start DLS 2.00 TFO 0.00													
25,300.00	103.72	359.39	8,680.26	15,076.53	1,142.30	638,991.20	798,141.27	32.7538387	-103.4980079	15,063.51	2.00	2.00	0.00
25,400.00	105.72	359.39	8,654.86	15,173.24	1,141.27	639,087.91	798,140.24	32.7541045	-103.4980087	15,160.23	2.00	2.00	0.00
25,466.15	107.04	359.39	8,636.20	15,236.70	1,140.60	639,151.37	798,139.57	32.7542789	-103.4980093	15,223.69	2.00	2.00	0.00
Hold - 25466.15' MD/8636.20' TVD													
25,500.00	107.04	359.39	8,626.28	15,269.06	1,140.25	639,183.73	798,139.22	32.7543679	-103.4980096	15,256.05	0.00	0.00	0.00
25,600.00	107.04	359.39	8,596.98	15,364.66	1,139.24	639,279.33	798,138.21	32.7546307	-103.4980104	15,351.66	0.00	0.00	0.00
25,700.00	107.04	359.39	8,567.67	15,460.27	1,138.23	639,374.94	798,137.20	32.7548934	-103.4980113	15,447.27	0.00	0.00	0.00
25,800.00	107.04	359.39	8,538.37	15,555.87	1,137.21	639,470.54	798,136.18	32.7551562	-103.4980121	15,542.88	0.00	0.00	0.00
25,900.00	107.04	359.39	8,509.06	15,651.47	1,136.20	639,566.14	798,135.17	32.7554190	-103.4980130	15,638.49	0.00	0.00	0.00
26,000.00	107.04	359.39	8,479.76	15,747.08	1,135.18	639,661.75	798,134.15	32.7556818	-103.4980138	15,734.10	0.00	0.00	0.00
26,100.00	107.04	359.39	8,450.45	15,842.68	1,134.17	639,757.35	798,133.14	32.7559445	-103.4980147	15,829.71	0.00	0.00	0.00
26,200.00	107.04	359.39	8,421.14	15,938.29	1,133.16	639,852.96	798,132.13	32.7562073	-103.4980155	15,925.32	0.00	0.00	0.00
26,300.00	107.04	359.39	8,391.84	16,033.89	1,132.14	639,948.56	798,131.11	32.7564701	-103.4980163	16,020.93	0.00	0.00	0.00
26,400.00	107.04	359.39	8,362.53	16,129.50	1,131.13	640,044.17	798,130.10	32.7567329	-103.4980172	16,116.54	0.00	0.00	0.00
26,500.00	107.04	359.39	8,333.23	16,225.10	1,130.11	640,139.77	798,129.08	32.7569957	-103.4980180	16,212.15	0.00	0.00	0.00
26,600.00	107.04	359.39	8,303.92	16,320.70	1,129.10	640,235.37	798,128.07	32.7572584	-103.4980189	16,307.76	0.00	0.00	0.00
26,700.00	107.04	359.39	8,274.62	16,416.31	1,128.08	640,330.98	798,127.05	32.7575212	-103.4980197	16,403.37	0.00	0.00	0.00
26,801.06	107.04	359.39	8,245.00	16,512.93	1,127.06	640,427.60	798,126.03	32.7577868	-103.4980206	16,500.00	0.00	0.00	0.00
Start DLS 2.00 TFO -179.99													
26,840.92	106.24	359.39	8,233.59	16,551.11	1,126.65	640,465.78	798,125.62	32.7578917	-103.4980209	16,538.18	2.00	-2.00	0.00
Hold - 26840.92' MD/8233.59' TVD													
26,900.00	106.24	359.39	8,217.06	16,607.83	1,126.05	640,522.50	798,125.02	32.7580476	-103.4980214	16,594.90	0.00	0.00	0.00
27,000.00	106.24	359.39	8,189.09	16,703.83	1,125.03	640,618.50	798,124.00	32.7583115	-103.4980223	16,690.91	0.00	0.00	0.00
27,100.00	106.24	359.39	8,161.11	16,799.84	1,124.02	640,714.51	798,122.99	32.7585754	-103.4980231	16,786.92	0.00	0.00	0.00
27,200.00	106.24	359.39	8,133.14	16,895.84	1,123.00	640,810.51	798,121.97	32.7588393	-103.4980240	16,882.93	0.00	0.00	0.00
27,300.00	106.24	359.39	8,105.17	16,991.84	1,121.98	640,906.51	798,120.95	32.7591031	-103.4980248	16,978.93	0.00	0.00	0.00

Total Directional

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Well:	Rope State Com 502H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
27,400.00	106.24	359.39	8,077.20	17,087.85	1,120.96	641,002.51	798,119.93	32.7593670	-103.4980257	17,074.94	0.00	0.00	0.00
27,500.00	106.24	359.39	8,049.22	17,183.85	1,119.94	641,098.52	798,118.91	32.7596309	-103.4980265	17,170.95	0.00	0.00	0.00
27,600.00	106.24	359.39	8,021.25	17,279.85	1,118.92	641,194.52	798,117.89	32.7598948	-103.4980274	17,266.96	0.00	0.00	0.00
27,700.00	106.24	359.39	7,993.28	17,375.85	1,117.90	641,290.52	798,116.87	32.7601586	-103.4980282	17,362.97	0.00	0.00	0.00
27,800.00	106.24	359.39	7,965.31	17,471.86	1,116.89	641,386.53	798,115.86	32.7604225	-103.4980291	17,458.97	0.00	0.00	0.00
27,900.00	106.24	359.39	7,937.33	17,567.86	1,115.87	641,482.53	798,114.84	32.7606864	-103.4980299	17,554.98	0.00	0.00	0.00
28,000.00	106.24	359.39	7,909.36	17,663.86	1,114.85	641,578.53	798,113.82	32.7609503	-103.4980308	17,650.99	0.00	0.00	0.00
28,100.00	106.24	359.39	7,881.39	17,759.86	1,113.83	641,674.53	798,112.80	32.7612141	-103.4980316	17,747.00	0.00	0.00	0.00
28,200.00	106.24	359.39	7,853.42	17,855.87	1,112.81	641,770.54	798,111.78	32.7614780	-103.4980325	17,843.01	0.00	0.00	0.00
28,300.00	106.24	359.39	7,825.44	17,951.87	1,111.79	641,866.54	798,110.76	32.7617419	-103.4980333	17,939.01	0.00	0.00	0.00
28,400.00	106.24	359.39	7,797.47	18,047.87	1,110.77	641,962.54	798,109.74	32.7620057	-103.4980342	18,035.02	0.00	0.00	0.00
28,444.58	106.24	359.39	7,785.00	18,090.67	1,110.32	642,005.34	798,109.29	32.7621234	-103.4980345	18,077.82	0.00	0.00	0.00
TD - 28444.58' MD - LTP/PBHL - 2546' FSL, 2242' FWL (RSC 502H)													

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/PBHL - 2546' FSI - plan hits target center - Point	0.00	0.00	7,785.00	18,090.67	1,110.32	642,005.34	798,109.29	32.7621234	-103.4980345
KOP/LP/FTP (RSC 5(	0.00	0.00	9,579.26	-227.54	1,304.65	623,687.13	798,303.62	32.7117736	-103.4978723
- plan misses target center by 28.12usft at 9689.99usft MD (9575.07 TVD, -199.73 N, 1304.50 E) - Point									

Total Directional

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Well:	Rope State Com 502H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	.Total Directional Production DB

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,923.69	1,923.00	Rustler			
2,010.40	2,009.00	A3 Top			
2,109.68	2,107.00	A3 Base (Tamarisk)			
2,205.12	2,201.00	Top Salt/Salado			
5,852.21	5,793.00	Base Salt/Lamar/CTRA_BASE_ANH			
6,052.23	5,990.00	Top Delaware Sands/Bell Canyon			
6,306.06	6,240.00	Cherry Canyon			
6,712.20	6,640.00	Brushy Canyon			
7,498.06	7,414.00	Basal Brushy Canyon			
7,719.41	7,632.00	Bone Spring Lime			
7,940.75	7,850.00	Leonard/Avalon Sand			
9,199.77	9,090.00	1st Bone Spring Sand			
9,769.18	9,652.00	2nd Bone Spring Sand			
10,534.53	10,067.00	2nd Bone Spring Sand Lower Target			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1600	1600	0	0	Nudge, Build 2.00°/100'
2099	2096	-8	43	Hold - 2098.54' MD/2096.03' TVD
9311	9199	-227	1272	Start DLS 4.00 TFO -139.86
9694	9579	-199	1305	KOP - Start 10.00°/100' DLS
10,344	10,033	217	1300	75° Inc - 10344.24' MD/10033.20' TVD
10,669	10,072	538	1297	Hold - 10668.58' MD/10071.99' TVD
12,645	10,030	2514	1276	Start DLS 2.00 TFO 0.10
12,747	10,026	2616	1274	Hold - 12747.35' MD/10026.00' TVD
15,399	9875	5264	1246	Start DLS 2.00 TFO -0.01
15,426	9873	5290	1246	Hold - 15426.24' MD/9873.35' TVD
19,158	9626	9013	1207	Start DLS 2.00 TFO 0.00
19,230	9620	9086	1206	Hold - 19230.23' MD/9620.27' TVD
20,162	9535	10,013	1196	Start DLS 2.00 TFO 0.00
20,263	9524	10,114	1195	Hold - 20263.50' MD/9523.90' TVD
21,422	9377	11,263	1183	Start DLS 2.00 TFO 0.00
21,480	9369	11,321	1182	Hold - 21479.72' MD/9369.07' TVD
22,685	9192	12,513	1169	Start DLS 2.00 TFO 0.00
22,774	9178	12,601	1169	Hold - 22774.21' MD/9177.59' TVD
23,955	8968	13,763	1156	Start DLS 2.00 TFO 0.00
24,065	8946	13,871	1155	Hold - 24064.92' MD/8946.49' TVD
25,235	8695	15,013	1143	Start DLS 2.00 TFO 0.00
25,466	8636	15,237	1141	Hold - 25466.15' MD/8636.20' TVD
26,801	8245	16,513	1127	Start DLS 2.00 TFO -179.99
26,841	8234	16,551	1127	Hold - 26840.92' MD/8233.59' TVD
28,445	7785	18,091	1110	TD - 28444.58' MD

Checked By: _____ Approved By: _____ Date: _____

Coterra Energy

Lea County, NM (NAD 83)
Rope State Com Pad
Rope State Com 502H

330' FSL, 968' FWL

OH
Plan #2

Total Directional
"Driven by TOTAL performance"

Anticollision Report

Minimum Magnetic Interference Warning level is 20' center to center

17 March, 2026

Total Report Version 1.70

COMPASS 5000.16 Build 97

Click here for our anticollision policy

ATTENTION
All offset data provided was gathered using available software and resources . Total Directional Services cannot guarantee the accuracy of all offset data , which should be verified for accuracy by the Operator.

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Reference	Plan #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00usft	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum centre distance of 2,313.80usft	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Well	Rope State Com 502H						
Well Position	**+N/-S**	0.00 usft	**Northing:**	623,914.67 usft	**Latitude:**	32.7124272	
	+E/-W	0.00 usft	**Easting:**	796,998.97 usft	**Longitude:**	-103.5021079	
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,951.80	usft
Grid Convergence:		0.45 °					

Survey Tool Program **Date** 3/17/2026

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	28,444.58	Plan #2 (OH)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

Expierimental: Summary Highlights: Rope State Com 502H

- At 15,406.91 MD, (O) IRONHOUSE 19 STATE COM 001H - Pilot - Pilot is 440.12 usft away with a 1.54 SF.
- At 18,446.59 MD, (O) MESA MERRITT STATE 001 P & A - Vertical - Surveys is 309.56 usft away with a 0.96 SF.
- At 22,416.48 MD, (O) SHETLAND SWD 001 - Vertical - Surveys is 305.98 usft away with a 0.78 SF.
- At 26,750.24 MD, (O) NEW MEXICO BP STATE 002 P & A - Vertical - Surveys is 564.10 usft away with a 1.35 SF.
- At 26,825.18 MD, (O) STATE AN 006 TA - Vertical - Surveys is 648.63 usft away with a 1.68 SF.
- At 27,848.32 MD, (O) OHIO STATE 005 - Verticals - Surveys is 184.14 usft away with a 0.93 SF.
- At 28,170.67 MD, (O) OHIO STATE 001 - Verticals - Surveys is 309.51 usft away with a 0.85 SF.
- At 28,199.58 MD, (O) BRIDGES STATE 180 P & A - Vertical - Surveys is 705.70 usft away with a 1.94 SF.

Offset Listing

Offset Customer - Project - Site Name / Offset Well	Ground Level	KB Height	Map Coordinates Northing	Map Coordinates Easting	Geographical Coordinates Latitude	Geographical Coordinates Longitude	Surface Uncertainty Site	Surface Uncertainty Well
- - Rope State Com Pad								
(O) AIRSTRIP 31 18 35 RN STATE COM 111H -	3,948.00	3,977.00	618,499.40	796,383.01	32.6975570	-103.5042480	0.00	0.00
(O) AIRSTRIP 31 18 35 RN STATE COM 114H -	3,931.00	3,960.00	618,609.72	800,455.74	32.6977720	-103.4910070	0.00	0.00
(O) AIRSTRIP 31 18 35 RN STATE COM 124H -	3,930.00	3,959.00	618,639.91	800,455.51	32.6978550	-103.4910070	0.00	0.00
(O) AIRSTRIP 31 18 35 RN STATE COM 131H -	3,948.00	3,977.00	618,499.27	796,413.16	32.6975560	-103.5041500	0.00	0.00
(O) AIRSTRIP 31 18 35 RN STATE COM 132H -	3,937.00	3,955.00	619,144.37	797,713.76	32.6993010	-103.4999060	0.00	0.00
(O) AIRSTRIP 31 18 35 RN STATE COM 133H -	3,940.00	3,969.00	618,487.04	799,023.98	32.6974660	-103.4956640	0.00	0.00
(O) AIRSTRIP 31 18 35 RN STATE COM 134H -	3,930.00	3,959.00	618,639.68	800,425.66	32.6978550	-103.4911040	0.00	0.00
(O) AIRSTRIP 31 18 35 RN STATE COM 201H -	3,948.00	3,977.00	618,510.02	796,391.85	32.6975860	-103.5042190	0.00	0.00
(O) AIRSTRIP STATE 001 P & A -	3,951.00	3,966.00	623,270.15	796,335.87	32.7106700	-103.5042800	0.00	0.00
(O) ALBATROSS STATE COM 001H -	3,937.00	3,954.00	628,551.33	800,248.81	32.7251000	-103.4914230	0.00	0.00
(O) ALBATROSS STATE COM 002H -	3,949.00	3,967.00	628,528.18	799,256.51	32.7250580	-103.4946500	0.00	0.00
(O) B LEE STATE 004 -	3,965.00	3,977.00	641,515.13	796,493.15	32.7608110	-103.5033040	0.00	0.00
(O) B LEE STATE 005 P & A -	3,967.00	3,985.00	640,452.00	796,173.13	32.7578960	-103.5043720	0.00	0.00

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Listing

Offset Customer - Project - Site Name / Offset Well	Ground Level	KB Height	Map Coordinates Northing	Map Coordinates Easting	Geographical Coordinates Latitude	Geographical Coordinates Longitude	Surface Uncertainty Site	Surface Uncertainty Well
- - Rope State Com Pad								
(O) B LEE STATE 006 -	3,976.00	3,993.00	641,668.68	796,262.29	32.7612380	-103.5040510	0.00	0.00
(O) BLACK JACK STATE 001 -	3,956.00	3,974.00	636,473.15	800,806.97	32.7468600	-103.4894030	0.00	0.00
(O) BLACK JACK STATE 002 -	3,964.00	3,981.00	636,492.36	798,826.94	32.7469560	-103.4958420	0.00	0.00
(O) BLACK JACK STATE 003 -	3,956.00	3,973.00	635,178.36	800,826.82	32.7433010	-103.4893720	0.00	0.00
(O) BRIDGES STATE 180 P & A -	3,970.00	3,983.00	641,762.44	797,406.13	32.7614710	-103.5003280	0.00	0.00
(O) IRONHOUSE 19 STATE COM 001H -	3,952.00	3,970.00	629,074.37	797,787.93	32.7265910	-103.4994110	0.00	0.00
(O) IRONHOUSE 19 STATE COM 002H -	3,932.00	3,950.00	629,159.32	800,614.89	32.7267630	-103.4902170	0.00	0.00
(O) IRONHOUSE 19 STATE COM 003H -	3,946.00	3,964.00	628,897.40	799,429.51	32.7260690	-103.4940780	0.00	0.00
(O) IRONHOUSE 19 STATE COM 004H -	3,954.00	3,958.00	628,819.14	797,072.11	32.7259050	-103.5017450	0.00	0.00
(O) LEA 30 STATE 001 P & A -	3,966.00	3,979.00	626,904.76	796,631.31	32.7206530	-103.5032270	0.00	0.00
(O) LEA SOUTHEAST STATE 1 P & A -	3,947.00	3,959.00	625,529.41	799,265.47	32.7168160	-103.4946980	0.00	0.00
(O) LEA ZD STATE 001 P & A -	3,971.00	3,984.00	624,591.55	796,323.07	32.7143020	-103.5042880	0.00	0.00
(O) LEO STATE #1 -	3,961.00	3,978.00	639,133.16	800,128.00	32.7541856	-103.4915424	0.00	0.00
(O) LEO STATE 006 TA -	3,963.00	3,981.00	639,316.50	798,957.11	32.7547150	-103.4953460	0.00	0.00
(O) LEO STATE 007 -	3,961.00	3,978.00	637,821.27	800,127.79	32.7505800	-103.4915770	0.00	0.00
(O) MESA MERRITT STATE 001 P & A -	3,959.00	3,976.00	632,198.92	797,903.57	32.7351760	-103.4989550	0.00	0.00
(O) NEW MEXICO BP STATE 002 P & A -	3,972.00	3,986.00	640,373.03	797,562.48	32.7576490	-103.4998550	0.00	0.00
(O) NEW MEXICO BV STATE 001 P & A -	3,945.00	3,968.00	638,963.09	800,592.51	32.7537080	-103.4900360	0.00	0.00
(O) OHIO STATE 001 -	3,969.00	3,985.00	641,739.00	797,802.59	32.7613980	-103.4990390	0.00	0.00
(O) OHIO STATE 002 -	3,969.00	3,988.00	641,112.16	797,488.72	32.7596820	-103.5000760	0.00	0.00
(O) OHIO STATE 005 -	3,969.00	3,986.00	641,383.71	797,964.95	32.7604180	-103.4985200	0.00	0.00
(O) SHETLAND SWD 001 -	3,964.00	3,976.00	636,158.39	797,865.31	32.7460590	-103.4989780	0.00	0.00
(O) STATE AN 005 -	3,977.00	3,995.00	641,777.14	798,761.78	32.7614820	-103.4959180	0.00	0.00
(O) STATE AN 006 TA -	3,966.00	3,972.00	640,457.55	798,774.37	32.7578550	-103.4959110	0.00	0.00
(O) STATE AN 007 P & A -	3,970.00	3,984.00	641,780.69	800,082.17	32.7614630	-103.4916230	0.00	0.00
(O) STATE AN 008 P & A -	3,950.00	3,970.00	639,802.75	800,761.69	32.7560120	-103.4894640	0.00	0.00
(O) STATE AN 009 P & A -	3,955.00	3,976.00	641,122.70	800,749.01	32.7596400	-103.4894710	0.00	0.00
(O) STATE AN 010 P & A -	3,966.00	3,980.00	640,460.74	800,095.13	32.7578350	-103.4916150	0.00	0.00
(O) STATE AN 012 P & A -	3,961.00	3,984.00	641,422.62	800,624.57	32.7604670	-103.4898680	0.00	0.00
Rope State Com 501H -	3,951.90	3,974.90	623,914.59	796,958.97	32.7124278	-103.5022379	0.00	0.00
Rope State Com 503H -	3,939.20	3,962.20	623,928.44	800,123.29	32.7123973	-103.4919504	0.00	0.00
Rope State Com 504H -	3,939.00	3,962.00	623,928.60	800,163.28	32.7123968	-103.4918204	0.00	0.00
Rope State Com 601H -	3,952.10	3,975.10	623,914.56	796,938.98	32.7124281	-103.5023029	0.00	0.00
Rope State Com 603H -	3,939.30	3,962.30	623,928.37	800,103.29	32.7123975	-103.4920155	0.00	0.00
Rope State Com 604H -	3,939.10	3,962.10	623,928.52	800,143.29	32.7123970	-103.4918854	0.00	0.00

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Rope State Com Pad						
(O) AIRSTRIP 31 18 35 RN STATE COM 111H - Horizonta	9,086.12	14,370.00	1,885.14	1,767.12	15.97	CC
(O) AIRSTRIP 31 18 35 RN STATE COM 111H - Horizonta	9,100.00	14,370.00	1,885.19	1,767.05	15.96	ES
(O) AIRSTRIP 31 18 35 RN STATE COM 111H - Horizonta	9,200.00	14,370.00	1,888.57	1,769.67	15.88	SF
(O) AIRSTRIP 31 18 35 RN STATE COM 114H - Horizonta						Out of range
(O) AIRSTRIP 31 18 35 RN STATE COM 124H - Horizont						Out of range
(O) AIRSTRIP 31 18 35 RN STATE COM 131H - Horizont	10,129.93	15,570.00	2,022.42	1,903.81	17.05	CC, ES, SF
(O) AIRSTRIP 31 18 35 RN STATE COM 132H - Horizont	10,000.00	15,406.00	919.51	852.68	13.76	SF
(O) AIRSTRIP 31 18 35 RN STATE COM 132H - Horizont	10,089.24	15,406.00	908.74	842.96	13.82	CC, ES
(O) AIRSTRIP 31 18 35 RN STATE COM 133H - Horizont	10,066.73	15,366.00	1,250.98	1,152.83	12.75	CC, ES
(O) AIRSTRIP 31 18 35 RN STATE COM 133H - Horizont	10,100.00	15,366.00	1,252.04	1,153.51	12.71	SF
(O) AIRSTRIP 31 18 35 RN STATE COM 134H - Horizont						Out of range
(O) AIRSTRIP 31 18 35 RN STATE COM 201H - Horizont	10,146.45	15,597.00	1,967.48	1,857.07	17.82	CC, ES, SF
(O) AIRSTRIP STATE 001 P & A - Vertical - Surveys	1,194.06	1,185.29	924.01	897.70	35.13	CC
(O) AIRSTRIP STATE 001 P & A - Vertical - Surveys	1,800.00	1,789.27	927.80	885.73	22.05	ES
(O) AIRSTRIP STATE 001 P & A - Vertical - Surveys	10,000.00	9,843.96	2,048.33	1,794.92	8.08	SF
(O) ALBATROSS STATE COM 001H - Horizontal - PROD	14,674.46	9,705.00	2,079.61	2,009.56	29.69	CC
(O) ALBATROSS STATE COM 001H - Horizontal - PROD	14,700.00	9,705.00	2,079.77	2,009.54	29.62	ES
(O) ALBATROSS STATE COM 001H - Horizontal - PROD	15,100.00	9,594.53	2,115.19	2,042.47	29.09	SF
(O) ALBATROSS STATE COM 002H - Horizontal - PROD	10,400.00	14,532.34	1,151.24	1,048.33	11.19	SF
(O) ALBATROSS STATE COM 002H - Horizontal - PROD	14,848.83	9,928.98	1,008.15	921.73	11.67	CC, ES
(O) B LEE STATE 004 - Verticals - Surveys	27,900.00	7,939.53	1,622.01	1,237.91	4.22	SF
(O) B LEE STATE 004 - Verticals - Surveys	27,951.87	7,925.02	1,621.25	1,237.33	4.22	CC, ES
(O) B LEE STATE 005 P & A - Vertical - Surveys	26,800.00	8,266.44	1,953.08	1,535.72	4.68	SF
(O) B LEE STATE 005 P & A - Vertical - Surveys	26,848.20	8,252.25	1,952.53	1,535.53	4.68	CC, ES
(O) B LEE STATE 006 - Verticals - Surveys	28,218.35	7,817.62	1,937.77	1,769.27	11.50	CC, ES
(O) B LEE STATE 006 - Verticals - Surveys	28,300.00	7,793.00	1,939.34	1,770.69	11.50	SF
(O) BLACK JACK STATE 001 - Verticals - Surveys						Out of range
(O) BLACK JACK STATE 002 - Verticals - Surveys	22,743.63	9,189.34	659.13	390.34	2.45	CC, ES, SF
(O) BLACK JACK STATE 003 - Verticals - Surveys						Out of range
(O) BRIDGES STATE 180 P & A - Vertical - Surveys	28,199.58	7,866.88	705.70	342.39	1.94	CC, ES, SF
(O) IRONHOUSE 19 STATE COM 001H - Horizontal - PR	20,069.89	14,214.00	449.64	285.25	2.74	CC, ES, SF
(O) IRONHOUSE 19 STATE COM 001H - Pilot - Pilot	15,406.91	9,865.43	440.12	154.40	1.54	CC, ES, SF
(O) IRONHOUSE 19 STATE COM 002H - Horizontal - PR						Out of range
(O) IRONHOUSE 19 STATE COM 003H - Horizontal - PR	19,927.99	14,036.00	1,003.87	844.24	6.29	CC, ES, SF
(O) IRONHOUSE 19 STATE COM 004H - Horizontal - PR	15,200.07	9,585.59	1,125.34	1,051.09	15.16	CC, ES
(O) IRONHOUSE 19 STATE COM 004H - Horizontal - PR	20,000.00	14,634.00	1,746.03	1,586.32	10.93	SF
(O) IRONHOUSE 19 STATE COM 004H - ST01 - ST01	15,249.67	9,643.00	1,083.77	1,008.36	14.37	CC, ES
(O) IRONHOUSE 19 STATE COM 004H - ST01 - ST01	15,300.00	9,654.20	1,084.75	1,009.02	14.32	SF
(O) LEA 30 STATE 001 P & A - Vertical - Surveys	13,139.50	10,010.26	1,638.08	1,367.01	6.04	CC, ES, SF
(O) LEA SOUTHEAST STATE 1 P & A - Vertical - Surveys	11,736.15	10,035.91	981.30	720.73	3.77	CC, ES, SF
(O) LEA ZD STATE 001 P & A - Vertical - Surveys	1,300.00	1,309.23	956.55	928.49	34.09	CC
(O) LEA ZD STATE 001 P & A - Vertical - Surveys	1,700.00	1,709.22	957.98	921.12	25.99	ES
(O) LEA ZD STATE 001 P & A - Vertical - Surveys	10,900.00	9,450.00	2,069.51	1,860.58	9.91	SF
(O) LEO STATE #1 - OH - OH						Out of range
(O) LEO STATE 006 TA - Verticals - Surveys	25,438.92	8,651.36	692.61	553.85	4.99	CC, ES
(O) LEO STATE 006 TA - Verticals - Surveys	25,500.00	8,632.45	695.03	555.78	4.99	SF
(O) LEO STATE 007 - Verticals - Surveys	24,239.81	8,897.66	1,991.13	1,834.58	12.72	CC, ES
(O) LEO STATE 007 - Verticals - Surveys	24,400.00	8,865.67	1,997.31	1,839.54	12.66	SF
(O) MESA MERRITT STATE 001 P & A - Vertical - Surveys	18,446.59	9,677.49	309.56	-11.55	0.96	Level 1, CC, ES, SF
(O) NEW MEXICO BP STATE 002 P & A - Vertical - Surve	26,750.24	8,281.89	564.10	145.22	1.35	Level 3, CC, ES, SF
(O) NEW MEXICO BV STATE 001 P & A - Vertical - Surve						Out of range

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Rope State Com Pad						
(O) OHIO STATE 001 - Verticals - Surveys	28,170.67	7,876.37	309.51	-54.62	0.85	Level 1, CC, ES, SF
(O) OHIO STATE 002 - Verticals - Surveys	27,805.51	7,040.00	1,161.61	952.72	5.56	CC, ES
(O) OHIO STATE 002 - Verticals - Surveys	28,000.00	7,040.00	1,177.78	963.93	5.51	SF
(O) OHIO STATE 005 - Verticals - Surveys	27,848.32	7,959.30	184.14	-13.62	0.93	Level 1, CC, ES, SF
(O) SHETLAND SWD 001 - Vertical - Surveys	22,416.48	9,240.27	305.98	-84.69	0.78	Level 1, CC, ES, SF
(O) STATE AN 005 - Verticals - Surveys	28,395.03	7,840.18	539.77	365.53	3.10	CC
(O) STATE AN 005 - Verticals - Surveys	28,400.00	7,839.15	539.79	365.47	3.10	ES, SF
(O) STATE AN 006 TA - Vertical - Surveys	26,825.18	8,242.88	648.63	261.42	1.68	CC, ES, SF
(O) STATE AN 007 P & A - Vertical - Surveys	28,188.80	7,870.17	1,970.39	1,614.81	5.54	CC, ES, SF
(O) STATE AN 008 P & A - Vertical - Surveys						Out of range
(O) STATE AN 009 P & A - Vertical - Surveys						Out of range
(O) STATE AN 010 P & A - Vertical - Surveys	26,800.00	8,258.61	1,969.39	1,576.95	5.02	ES, SF
(O) STATE AN 010 P & A - Vertical - Surveys	26,814.10	8,254.06	1,969.34	1,576.98	5.02	CC
(O) STATE AN 012 P & A - OH - Surveys						Out of range
(O) STATE AN 012 P & A - ST01 - ST01						Out of range
Rope State Com 501H - OH - Plan #2	1,600.00	1,600.10	40.00	28.69	3.54	CC, ES
Rope State Com 501H - OH - Plan #2	1,700.00	1,700.08	41.72	29.71	3.47	SF
Rope State Com 503H - OH - Plan #2	23,622.56	23,540.45	1,483.15	1,260.37	6.66	CC
Rope State Com 503H - OH - Plan #2	24,900.00	24,807.88	1,491.60	1,251.11	6.20	ES
Rope State Com 503H - OH - Plan #2	27,400.00	27,257.70	1,620.27	1,346.13	5.91	SF
Rope State Com 504H - OH - Plan #2						Out of range
Rope State Com 601H - OH - Plan #2	1,600.00	1,600.30	59.99	48.68	5.31	CC, ES
Rope State Com 601H - OH - Plan #2	28,400.00	28,827.63	1,336.55	1,040.60	4.52	SF
Rope State Com 603H - OH - Plan #2	19,291.88	19,695.21	704.87	542.68	4.35	CC
Rope State Com 603H - OH - Plan #2	22,100.00	22,501.40	720.73	519.44	3.58	ES
Rope State Com 603H - OH - Plan #2	24,000.00	24,395.36	770.89	542.98	3.38	SF
Rope State Com 604H - OH - Plan #2	9,690.58	9,576.44	2,050.23	1,981.46	29.81	CC
Rope State Com 604H - OH - Plan #2	23,200.00	23,519.55	2,070.70	1,855.45	9.62	ES
Rope State Com 604H - OH - Plan #2	27,800.00	28,050.77	2,309.58	2,031.48	8.30	SF

Offset Design: Rope State Com Pad - (O) AIRSTRIP 31 18 35 RN STATE COM 111H - Horizontal - PRODUCING - Surveys

Offset Site Error: 0.00 usft

Survey Program: 174-MWD OWSG Rev5

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,800.00	7,711.38	14,370.00	9,291.85	28.55	85.78	164.02	-417.67	-614.58	2,282.07	2,188.33	93.74	24.345	
7,900.00	7,809.86	14,370.00	9,291.85	28.93	85.78	164.02	-417.67	-614.58	2,227.24	2,131.31	95.93	23.218	
8,000.00	7,908.35	14,370.00	9,291.85	29.31	85.78	164.02	-417.67	-614.58	2,175.64	2,077.49	98.15	22.167	
8,100.00	8,006.84	14,370.00	9,291.85	29.69	85.78	164.02	-417.67	-614.58	2,127.48	2,027.09	100.39	21.193	
8,200.00	8,105.33	14,370.00	9,291.85	30.06	85.78	164.02	-417.67	-614.58	2,083.01	1,980.40	102.62	20.299	
8,300.00	8,203.82	14,370.00	9,291.85	30.44	85.78	164.02	-417.67	-614.58	2,042.48	1,937.66	104.82	19.486	
8,400.00	8,302.31	14,370.00	9,291.85	30.82	85.78	164.02	-417.67	-614.58	2,006.11	1,899.15	106.97	18.754	
8,500.00	8,400.80	14,370.00	9,291.85	31.20	85.78	164.02	-417.67	-614.58	1,974.15	1,865.11	109.04	18.105	
8,600.00	8,499.29	14,370.00	9,291.85	31.57	85.78	164.02	-417.67	-614.58	1,946.80	1,835.81	110.99	17.540	
8,700.00	8,597.78	14,370.00	9,291.85	31.95	85.78	164.02	-417.67	-614.58	1,924.27	1,811.47	112.81	17.058	
8,800.00	8,696.27	14,370.00	9,291.85	32.33	85.78	164.02	-417.67	-614.58	1,906.73	1,792.27	114.45	16.660	
8,900.00	8,794.76	14,370.00	9,291.85	32.71	85.78	164.02	-417.67	-614.58	1,894.30	1,778.40	115.90	16.344	
9,000.00	8,893.25	14,370.00	9,291.85	33.09	85.78	164.02	-417.67	-614.58	1,887.10	1,769.96	117.14	16.110	
9,086.12	8,978.07	14,370.00	9,291.85	33.41	85.78	164.02	-417.67	-614.58	1,885.14	1,767.12	118.02	15.973	CC

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) AIRSTRIP 31 18 35 RN STATE COM 111H - Horizontal - PRODUCING - Surveys

Offset Site Error: 0.00 usft

Survey Program: 174-MWD OWSG Rev5

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,100.00	8,991.74	14,370.00	9,291.85	33.46	85.78	164.02	-417.67	-614.58	1,885.19	1,767.05	118.14	15.957	ES
9,200.00	9,090.23	14,370.00	9,291.85	33.84	85.78	164.02	-417.67	-614.58	1,888.57	1,769.67	118.90	15.883	SF
9,300.00	9,188.72	14,370.00	9,291.85	34.22	85.78	164.02	-417.67	-614.58	1,897.23	1,777.81	119.42	15.887	
9,400.00	9,287.52	14,370.00	9,291.85	34.60	85.78	-178.09	-417.67	-614.58	1,909.55	1,789.86	119.68	15.955	
9,500.00	9,386.81	14,370.00	9,291.85	34.96	85.78	-145.99	-417.67	-614.58	1,923.14	1,803.46	119.67	16.070	
9,600.00	9,486.11	14,370.00	9,291.85	35.30	85.78	-113.47	-417.67	-614.58	1,937.89	1,818.48	119.41	16.229	
9,700.00	9,584.93	14,370.00	9,291.85	35.64	85.78	-94.23	-417.67	-614.58	1,953.71	1,834.82	118.89	16.433	
9,800.00	9,681.14	14,370.00	9,291.85	35.95	85.78	-92.23	-417.67	-614.58	1,973.33	1,855.19	118.15	16.702	
9,900.00	9,771.22	14,370.00	9,291.85	36.25	85.78	-89.64	-417.67	-614.58	1,998.41	1,881.20	117.21	17.050	
10,000.00	9,852.45	14,370.00	9,291.85	36.51	85.78	-86.54	-417.67	-614.58	2,028.00	1,911.86	116.14	17.461	
10,100.00	9,922.36	14,370.00	9,291.85	36.72	85.78	-83.06	-417.67	-614.58	2,061.03	1,946.03	115.00	17.922	
10,200.00	9,978.82	14,370.00	9,291.85	36.88	85.78	-79.33	-417.67	-614.58	2,096.35	1,982.52	113.83	18.416	
10,300.00	10,020.12	14,370.00	9,291.85	36.99	85.78	-75.51	-417.67	-614.58	2,132.81	2,020.13	112.68	18.929	
10,400.00	10,046.32	14,370.00	9,291.85	37.06	85.78	-72.77	-417.67	-614.58	2,169.64	2,058.08	111.56	19.448	
10,500.00	10,063.18	14,370.00	9,291.85	37.11	85.78	-70.80	-417.67	-614.58	2,207.83	2,097.37	110.46	19.987	
10,600.00	10,071.39	14,370.00	9,291.85	37.16	85.78	-68.79	-417.67	-614.58	2,247.21	2,137.84	109.37	20.546	
10,700.00	10,071.32	14,370.00	9,291.85	37.22	85.78	-67.40	-417.67	-614.58	2,287.60	2,179.30	108.30	21.122	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) AIRSTRIP 31 18 35 RN STATE COM 131H - Horizontal - PRODUCING - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-MWD OWSG Rev5

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,300.00	9,188.72	15,570.00	10,505.61	34.22	86.07	165.71	-412.11	-589.99	2,286.67	2,179.05	107.62	21.247	
9,400.00	9,287.52	15,570.00	10,505.61	34.60	86.07	-178.15	-412.11	-589.99	2,243.92	2,134.28	109.63	20.467	
9,500.00	9,386.81	15,570.00	10,505.61	34.96	86.07	-148.08	-412.11	-589.99	2,201.28	2,089.75	111.53	19.737	
9,600.00	9,486.11	15,570.00	10,505.61	35.30	86.07	-117.64	-412.11	-589.99	2,158.96	2,045.67	113.30	19.056	
9,700.00	9,584.93	15,570.00	10,505.61	35.64	86.07	-100.74	-412.11	-589.99	2,117.20	2,002.29	114.91	18.424	
9,800.00	9,681.14	15,570.00	10,505.61	35.95	86.07	-104.67	-412.11	-589.99	2,079.85	1,963.53	116.32	17.880	
9,900.00	9,771.22	15,570.00	10,505.61	36.25	86.07	-107.58	-412.11	-589.99	2,050.91	1,933.47	117.45	17.463	
10,000.00	9,852.45	15,570.00	10,505.61	36.51	86.07	-109.44	-412.11	-589.99	2,031.64	1,913.43	118.22	17.186	
10,100.00	9,922.36	15,570.00	10,505.61	36.72	86.07	-110.27	-412.11	-589.99	2,022.91	1,904.33	118.58	17.059	
10,129.93	9,940.75	15,570.00	10,505.61	36.77	86.07	-110.31	-412.11	-589.99	2,022.42	1,903.81	118.61	17.051	CC, ES, SF
10,200.00	9,978.82	15,570.00	10,505.61	36.88	86.07	-110.06	-412.11	-589.99	2,025.12	1,906.59	118.53	17.086	
10,300.00	10,020.12	15,570.00	10,505.61	36.99	86.07	-108.82	-412.11	-589.99	2,038.15	1,920.11	118.04	17.266	
10,400.00	10,046.32	15,570.00	10,505.61	37.06	86.07	-107.26	-412.11	-589.99	2,061.05	1,943.86	117.18	17.588	
10,500.00	10,063.18	15,570.00	10,505.61	37.11	86.07	-105.74	-412.11	-589.99	2,091.19	1,975.12	116.07	18.016	
10,600.00	10,071.39	15,570.00	10,505.61	37.16	86.07	-103.84	-412.11	-589.99	2,127.81	2,013.05	114.76	18.542	
10,700.00	10,071.32	15,570.00	10,505.61	37.22	86.07	-102.31	-412.11	-589.99	2,170.22	2,056.93	113.29	19.157	
10,800.00	10,069.20	15,570.00	10,505.61	37.31	86.07	-102.31	-412.11	-589.99	2,216.73	2,104.98	111.75	19.837	
10,900.00	10,067.07	15,570.00	10,505.61	37.43	86.07	-102.31	-412.11	-589.99	2,266.70	2,156.53	110.17	20.575	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) AIRSTRIP 31 18 35 RN STATE COM 132H - Horizontal - PRODUCING - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-MWD OWSG Rev5

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,400.00	8,302.31	15,406.00	10,559.20	30.82	78.01	140.62	-560.16	978.02	2,289.81	2,230.41	59.40	38.551	
8,500.00	8,400.80	15,406.00	10,559.20	31.20	78.01	140.62	-560.16	978.02	2,193.44	2,133.67	59.77	36.697	
8,600.00	8,499.29	15,406.00	10,559.20	31.57	78.01	140.62	-560.16	978.02	2,097.42	2,037.24	60.18	34.855	
8,700.00	8,597.78	15,406.00	10,559.20	31.95	78.01	140.62	-560.16	978.02	2,001.78	1,941.17	60.61	33.025	
8,800.00	8,696.27	15,406.00	10,559.20	32.33	78.01	140.62	-560.16	978.02	1,906.60	1,845.50	61.09	31.208	
8,900.00	8,794.76	15,406.00	10,559.20	32.71	78.01	140.62	-560.16	978.02	1,811.93	1,750.31	61.62	29.403	
9,000.00	8,893.25	15,406.00	10,559.20	33.09	78.01	140.62	-560.16	978.02	1,717.87	1,655.65	62.22	27.610	
9,100.00	8,991.74	15,406.00	10,559.20	33.46	78.01	140.62	-560.16	978.02	1,624.51	1,561.62	62.89	25.831	
9,200.00	9,090.23	15,406.00	10,559.20	33.84	78.01	140.62	-560.16	978.02	1,532.00	1,468.34	63.66	24.067	
9,300.00	9,188.72	15,406.00	10,559.20	34.22	78.01	140.62	-560.16	978.02	1,440.48	1,375.94	64.55	22.318	
9,400.00	9,287.52	15,406.00	10,559.20	34.60	78.01	150.62	-560.16	978.02	1,350.00	1,284.51	65.49	20.614	
9,500.00	9,386.81	15,406.00	10,559.20	34.96	78.01	174.37	-560.16	978.02	1,260.79	1,194.45	66.35	19.003	
9,600.00	9,486.11	15,406.00	10,559.20	35.30	78.01	-160.64	-560.16	978.02	1,173.63	1,106.56	67.07	17.500	
9,700.00	9,584.93	15,406.00	10,559.20	35.64	78.01	-148.14	-560.16	978.02	1,089.47	1,021.88	67.60	16.117	
9,800.00	9,681.14	15,406.00	10,559.20	35.95	78.01	-153.74	-560.16	978.02	1,014.25	946.45	67.81	14.958	
9,900.00	9,771.22	15,406.00	10,559.20	36.25	78.01	-156.78	-560.16	978.02	955.89	888.32	67.57	14.146	
10,000.00	9,852.45	15,406.00	10,559.20	36.51	78.01	-158.29	-560.16	978.02	919.51	852.68	66.83	13.758	SF
10,089.24	9,915.45	15,406.00	10,559.20	36.70	78.01	-158.69	-560.16	978.02	908.74	842.96	65.78	13.815	CC, ES
10,100.00	9,922.36	15,406.00	10,559.20	36.72	78.01	-158.68	-560.16	978.02	908.90	843.26	65.63	13.849	
10,200.00	9,978.82	15,406.00	10,559.20	36.88	78.01	-158.06	-560.16	978.02	925.26	861.11	64.15	14.423	
10,300.00	10,020.12	15,406.00	10,559.20	36.99	78.01	-156.28	-560.16	978.02	966.76	904.12	62.64	15.433	
10,400.00	10,046.32	15,406.00	10,559.20	37.06	78.01	-153.97	-560.16	978.02	1,028.31	967.00	61.31	16.773	
10,500.00	10,063.18	15,406.00	10,559.20	37.11	78.01	-151.50	-560.16	978.02	1,101.48	1,041.19	60.29	18.271	
10,600.00	10,071.39	15,406.00	10,559.20	37.16	78.01	-147.92	-560.16	978.02	1,183.08	1,123.56	59.53	19.875	
10,700.00	10,071.32	15,406.00	10,559.20	37.22	78.01	-144.54	-560.16	978.02	1,270.79	1,211.85	58.94	21.560	
10,800.00	10,069.20	15,406.00	10,559.20	37.31	78.01	-144.54	-560.16	978.02	1,360.93	1,302.37	58.56	23.240	
10,900.00	10,067.07	15,406.00	10,559.20	37.43	78.01	-144.54	-560.16	978.02	1,452.35	1,394.00	58.36	24.887	
11,000.00	10,064.95	15,406.00	10,559.20	37.58	78.01	-144.54	-560.16	978.02	1,544.84	1,486.55	58.29	26.503	
11,100.00	10,062.82	15,406.00	10,559.20	37.75	78.01	-144.54	-560.16	978.02	1,638.22	1,579.90	58.32	28.091	
11,200.00	10,060.70	15,406.00	10,559.20	37.93	78.01	-144.54	-560.16	978.02	1,732.33	1,673.92	58.41	29.656	
11,300.00	10,058.57	15,406.00	10,559.20	38.13	78.01	-144.54	-560.16	978.02	1,827.07	1,768.51	58.56	31.202	
11,400.00	10,056.45	15,406.00	10,559.20	38.35	78.01	-144.54	-560.16	978.02	1,922.34	1,863.61	58.73	32.731	
11,500.00	10,054.33	15,406.00	10,559.20	38.58	78.01	-144.54	-560.16	978.02	2,018.07	1,959.14	58.93	34.246	
11,600.00	10,052.20	15,406.00	10,559.20	38.83	78.01	-144.54	-560.16	978.02	2,114.20	2,055.06	59.14	35.751	
11,700.00	10,050.08	15,406.00	10,559.20	39.09	78.01	-144.54	-560.16	978.02	2,210.66	2,151.31	59.35	37.246	
11,800.00	10,047.95	15,406.00	10,559.20	39.36	78.01	-144.54	-560.16	978.02	2,307.43	2,247.86	59.57	38.734	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) AIRSTRIP 31 18 35 RN STATE COM 133H - Horizontal - PRODUCING - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-MWD OWSG Rev5

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,600.00	8,499.29	15,366.00	10,489.29	31.57	86.59	10.69	-557.72	2,268.60	2,309.51	2,241.18	68.33	33.798	
8,700.00	8,597.78	15,366.00	10,489.29	31.95	86.59	10.69	-557.72	2,268.60	2,216.21	2,146.83	69.38	31.942	
8,800.00	8,696.27	15,366.00	10,489.29	32.33	86.59	10.69	-557.72	2,268.60	2,123.53	2,053.00	70.53	30.110	
8,900.00	8,794.76	15,366.00	10,489.29	32.71	86.59	10.69	-557.72	2,268.60	2,031.53	1,959.76	71.77	28.305	
9,000.00	8,893.25	15,366.00	10,489.29	33.09	86.59	10.69	-557.72	2,268.60	1,940.33	1,867.19	73.14	26.529	
9,100.00	8,991.74	15,366.00	10,489.29	33.46	86.59	10.69	-557.72	2,268.60	1,850.04	1,775.40	74.64	24.786	
9,200.00	9,090.23	15,366.00	10,489.29	33.84	86.59	10.69	-557.72	2,268.60	1,760.80	1,684.50	76.30	23.078	
9,300.00	9,188.72	15,366.00	10,489.29	34.22	86.59	10.69	-557.72	2,268.60	1,672.77	1,594.64	78.13	21.409	
9,400.00	9,287.52	15,366.00	10,489.29	34.60	86.59	30.95	-557.72	2,268.60	1,587.47	1,507.25	80.22	19.789	
9,500.00	9,386.81	15,366.00	10,489.29	34.96	86.59	64.89	-557.72	2,268.60	1,507.64	1,424.98	82.66	18.239	
9,600.00	9,486.11	15,366.00	10,489.29	35.30	86.59	98.63	-557.72	2,268.60	1,434.65	1,349.18	85.46	16.787	
9,700.00	9,584.93	15,366.00	10,489.29	35.64	86.59	118.88	-557.72	2,268.60	1,369.96	1,281.35	88.61	15.460	
9,800.00	9,681.14	15,366.00	10,489.29	35.95	86.59	124.32	-557.72	2,268.60	1,316.28	1,224.44	91.84	14.332	
9,900.00	9,771.22	15,366.00	10,489.29	36.25	86.59	127.77	-557.72	2,268.60	1,277.18	1,182.41	94.76	13.478	
10,000.00	9,852.45	15,366.00	10,489.29	36.51	86.59	129.53	-557.72	2,268.60	1,255.24	1,158.16	97.08	12.930	
10,066.73	9,900.50	15,366.00	10,489.29	36.65	86.59	129.86	-557.72	2,268.60	1,250.98	1,152.83	98.15	12.745	CC, ES
10,100.00	9,922.36	15,366.00	10,489.29	36.72	86.59	129.78	-557.72	2,268.60	1,252.04	1,153.51	98.53	12.707	SF
10,200.00	9,978.82	15,366.00	10,489.29	36.88	86.59	128.54	-557.72	2,268.60	1,267.82	1,168.82	99.00	12.806	
10,300.00	10,020.12	15,366.00	10,489.29	36.99	86.59	125.68	-557.72	2,268.60	1,301.43	1,202.93	98.50	13.213	
10,400.00	10,046.32	15,366.00	10,489.29	37.06	86.59	122.45	-557.72	2,268.60	1,349.95	1,252.72	97.23	13.884	
10,500.00	10,063.18	15,366.00	10,489.29	37.11	86.59	119.37	-557.72	2,268.60	1,408.11	1,312.53	95.59	14.731	
10,600.00	10,071.39	15,366.00	10,489.29	37.16	86.59	115.48	-557.72	2,268.60	1,473.98	1,380.27	93.72	15.728	
10,700.00	10,071.32	15,366.00	10,489.29	37.22	86.59	112.30	-557.72	2,268.60	1,545.99	1,454.26	91.73	16.853	
10,800.00	10,069.20	15,366.00	10,489.29	37.31	86.59	112.30	-557.72	2,268.60	1,621.51	1,531.69	89.82	18.053	
10,900.00	10,067.07	15,366.00	10,489.29	37.43	86.59	112.30	-557.72	2,268.60	1,699.55	1,611.52	88.03	19.307	
11,000.00	10,064.95	15,366.00	10,489.29	37.58	86.59	112.30	-557.72	2,268.60	1,779.79	1,693.44	86.35	20.611	
11,100.00	10,062.82	15,366.00	10,489.29	37.75	86.59	112.30	-557.72	2,268.60	1,861.94	1,777.15	84.79	21.958	
11,200.00	10,060.70	15,366.00	10,489.29	37.93	86.59	112.30	-557.72	2,268.60	1,945.77	1,862.42	83.35	23.345	
11,300.00	10,058.57	15,366.00	10,489.29	38.13	86.59	112.30	-557.72	2,268.60	2,031.06	1,949.05	82.01	24.767	
11,400.00	10,056.45	15,366.00	10,489.29	38.35	86.59	112.30	-557.72	2,268.60	2,117.63	2,036.87	80.76	26.220	
11,500.00	10,054.33	15,366.00	10,489.29	38.58	86.59	112.30	-557.72	2,268.60	2,205.35	2,125.74	79.61	27.702	
11,600.00	10,052.20	15,366.00	10,489.29	38.83	86.59	112.30	-557.72	2,268.60	2,294.07	2,215.52	78.54	29.209	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) AIRSTRIP 31 18 35 RN STATE COM 201H - Horizontal - PRODUCING - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-MWD OWSG Rev5

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,400.00	9,287.52	15,597.00	10,874.37	34.60	84.81	174.40	-620.40	-305.25	2,281.00	2,180.02	100.98	22.588	
9,500.00	9,386.81	15,597.00	10,874.37	34.96	84.81	-156.61	-620.40	-305.25	2,221.68	2,118.76	102.92	21.587	
9,600.00	9,486.11	15,597.00	10,874.37	35.30	84.81	-127.26	-620.40	-305.25	2,163.00	2,058.24	104.76	20.648	
9,700.00	9,584.93	15,597.00	10,874.37	35.64	84.81	-111.48	-620.40	-305.25	2,105.31	1,998.84	106.47	19.773	
9,800.00	9,681.14	15,597.00	10,874.37	35.95	84.81	-117.04	-620.40	-305.25	2,053.28	1,945.29	107.99	19.013	
9,900.00	9,771.22	15,597.00	10,874.37	36.25	84.81	-121.01	-620.40	-305.25	2,012.02	1,902.80	109.22	18.422	
10,000.00	9,852.45	15,597.00	10,874.37	36.51	84.81	-123.53	-620.40	-305.25	1,983.48	1,873.42	110.05	18.023	
10,100.00	9,922.36	15,597.00	10,874.37	36.72	84.81	-124.74	-620.40	-305.25	1,969.10	1,858.68	110.42	17.833	
10,146.45	9,950.37	15,597.00	10,874.37	36.79	84.81	-124.87	-620.40	-305.25	1,967.48	1,857.07	110.41	17.819	CC, ES, SF
10,200.00	9,978.82	15,597.00	10,874.37	36.88	84.81	-124.70	-620.40	-305.25	1,969.63	1,859.36	110.28	17.861	
10,300.00	10,020.12	15,597.00	10,874.37	36.99	84.81	-123.40	-620.40	-305.25	1,985.05	1,875.42	109.63	18.106	
10,400.00	10,046.32	15,597.00	10,874.37	37.06	84.81	-121.63	-620.40	-305.25	2,013.87	1,905.31	108.56	18.550	
10,500.00	10,063.18	15,597.00	10,874.37	37.11	84.81	-119.87	-620.40	-305.25	2,051.85	1,944.60	107.24	19.133	
10,600.00	10,071.39	15,597.00	10,874.37	37.16	84.81	-117.60	-620.40	-305.25	2,097.76	1,992.02	105.74	19.839	
10,700.00	10,071.32	15,597.00	10,874.37	37.22	84.81	-115.73	-620.40	-305.25	2,150.62	2,046.51	104.12	20.656	
10,800.00	10,069.20	15,597.00	10,874.37	37.31	84.81	-115.73	-620.40	-305.25	2,207.50	2,105.02	102.47	21.542	
10,900.00	10,067.07	15,597.00	10,874.37	37.43	84.81	-115.73	-620.40	-305.25	2,267.36	2,166.51	100.84	22.484	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) AIRSTRIP STATE 001 P & A - Vertical - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	8.80	0.00	0.00	-134.19	-644.52	-663.10	924.76				
100.00	100.00	91.20	100.00	0.28	1.56	-134.19	-644.52	-663.10	924.72	922.88	1.84	502.965	
200.00	200.00	191.20	200.00	0.63	3.28	-134.19	-644.52	-663.10	924.72	920.81	3.91	236.484	
300.00	300.00	291.20	300.00	0.99	4.99	-134.19	-644.52	-663.10	924.72	918.74	5.98	154.583	
400.00	400.00	391.20	400.00	1.35	6.70	-134.19	-644.52	-663.10	924.72	916.67	8.05	114.818	
500.00	500.00	491.20	500.00	1.71	8.48	-134.19	-644.52	-663.10	924.72	914.54	10.19	90.785	
600.00	600.00	591.20	600.00	2.07	10.36	-134.19	-644.52	-663.10	924.72	912.30	12.42	74.431	
700.00	700.00	691.20	700.00	2.43	12.24	-134.19	-644.52	-663.10	924.72	910.06	14.66	63.070	
739.73	739.73	730.77	739.57	2.57	12.98	-134.17	-644.26	-663.10	924.54	908.99	15.55	59.463	
800.00	800.00	790.70	799.50	2.79	14.11	-134.18	-644.29	-663.10	924.56	907.67	16.89	54.738	
900.00	900.00	890.14	898.94	3.14	15.97	-134.18	-644.41	-663.10	924.64	905.53	19.12	48.365	
1,000.00	1,000.00	991.23	1,000.00	3.50	17.98	-134.19	-644.52	-663.10	924.72	903.24	21.48	43.052	
1,100.00	1,100.00	1,091.23	1,100.00	3.86	20.11	-134.19	-644.52	-663.10	924.72	900.76	23.97	38.584	
1,194.06	1,194.06	1,185.29	1,194.05	4.20	22.11	-134.14	-643.50	-663.10	924.01	897.70	26.31	35.125	CC
1,200.00	1,200.00	1,191.09	1,199.84	4.22	22.23	-134.14	-643.50	-663.10	924.01	897.56	26.45	34.933	
1,300.00	1,300.00	1,288.77	1,297.52	4.58	24.31	-134.15	-643.70	-663.10	924.15	895.26	28.89	31.990	
1,400.00	1,400.00	1,386.46	1,395.21	4.94	26.39	-134.17	-644.25	-663.10	924.55	893.22	31.33	29.513	
1,500.00	1,500.00	1,491.33	1,500.00	5.29	28.77	-134.19	-644.52	-663.10	924.72	890.66	34.06	27.146	
1,600.00	1,600.00	1,591.33	1,600.00	5.65	31.11	-134.19	-644.52	-663.10	924.72	887.96	36.76	25.157	
1,700.00	1,699.98	1,691.31	1,699.98	6.00	33.44	125.78	-644.52	-663.10	925.74	886.30	39.44	23.472	
1,800.00	1,799.84	1,789.27	1,797.92	6.34	35.73	126.05	-643.06	-663.10	927.80	885.73	42.07	22.055	ES
1,900.00	1,899.45	1,886.57	1,895.22	6.68	38.00	126.36	-643.53	-663.10	933.30	888.61	44.68	20.887	
2,000.00	1,998.70	1,983.55	1,992.18	7.03	40.26	126.78	-644.35	-663.10	941.17	893.88	47.29	19.902	
2,100.00	2,097.47	2,088.96	2,097.47	7.38	42.69	127.42	-644.52	-663.10	950.78	900.72	50.06	18.992	
2,200.00	2,195.96	2,187.45	2,195.96	7.73	44.94	128.23	-644.52	-663.10	961.50	908.84	52.66	18.257	
2,300.00	2,294.44	2,283.62	2,292.10	8.08	47.14	129.07	-643.19	-663.10	971.55	916.34	55.22	17.595	
2,400.00	2,392.93	2,378.65	2,387.12	8.44	49.32	129.79	-643.81	-663.10	983.07	925.32	57.74	17.024	
2,500.00	2,491.42	2,483.02	2,491.42	8.80	51.79	130.56	-644.52	-663.10	994.78	934.21	60.57	16.424	
2,600.00	2,589.91	2,581.51	2,589.91	9.16	54.23	131.30	-644.52	-663.10	1,006.22	942.85	63.36	15.880	
2,700.00	2,688.40	2,680.00	2,688.40	9.52	56.67	132.03	-644.52	-663.10	1,017.83	951.67	66.16	15.384	
2,800.00	2,786.89	2,777.41	2,785.80	9.88	59.08	132.78	-643.35	-663.10	1,028.90	959.97	68.93	14.926	
2,900.00	2,885.38	2,874.08	2,882.46	10.24	61.47	133.45	-643.67	-663.10	1,041.02	969.34	71.69	14.522	
3,000.00	2,983.87	2,970.77	2,979.14	10.61	63.87	134.09	-644.28	-663.10	1,053.46	979.02	74.44	14.152	
3,100.00	3,082.36	3,074.16	3,082.36	10.97	66.71	134.78	-644.52	-663.10	1,065.81	988.16	77.65	13.725	
3,200.00	3,180.85	3,168.97	3,177.15	11.34	69.43	135.44	-643.57	-663.10	1,077.64	996.91	80.73	13.349	
3,300.00	3,279.34	3,271.29	3,279.34	11.71	72.28	136.06	-644.52	-663.10	1,090.66	1,006.71	83.95	12.992	
3,400.00	3,377.83	3,369.78	3,377.83	12.07	74.75	136.68	-644.52	-663.10	1,103.28	1,016.50	86.78	12.714	
3,500.00	3,476.32	3,467.11	3,475.12	12.44	77.18	137.35	-642.84	-663.10	1,115.14	1,025.56	89.58	12.449	
3,600.00	3,574.81	3,560.73	3,568.73	12.81	79.53	137.89	-643.42	-663.10	1,128.34	1,036.05	92.29	12.227	
3,700.00	3,673.30	3,665.39	3,673.30	13.18	82.00	138.45	-644.52	-663.10	1,141.89	1,046.75	95.13	12.003	
3,800.00	3,771.79	3,763.26	3,771.17	13.55	83.89	139.04	-644.05	-663.10	1,154.75	1,057.36	97.39	11.857	
3,900.00	3,870.28	3,862.39	3,870.28	13.92	85.81	139.57	-644.52	-663.10	1,168.20	1,068.52	99.68	11.720	
4,000.00	3,968.77	3,960.88	3,968.77	14.29	87.72	140.11	-644.52	-663.10	1,181.52	1,079.56	101.95	11.589	
4,100.00	4,067.26	4,059.37	4,067.26	14.66	89.63	140.64	-644.52	-663.10	1,194.94	1,090.71	104.23	11.464	
4,200.00	4,165.75	4,157.47	4,165.36	15.04	91.53	141.18	-643.97	-663.10	1,208.19	1,101.69	106.50	11.345	
4,300.00	4,264.24	4,255.02	4,262.91	15.41	93.42	141.68	-644.12	-663.10	1,221.88	1,113.12	108.76	11.235	
4,400.00	4,362.73	4,352.59	4,360.48	15.78	95.31	142.16	-644.43	-663.10	1,235.73	1,124.72	111.02	11.131	
4,500.00	4,461.22	4,453.37	4,461.22	16.15	97.41	142.65	-644.52	-663.10	1,249.57	1,136.08	113.49	11.010	
4,600.00	4,559.71	4,551.86	4,559.71	16.53	99.51	143.12	-644.52	-663.10	1,263.45	1,147.50	115.96	10.896	
4,700.00	4,658.20	4,650.35	4,658.20	16.90	101.60	143.58	-644.52	-663.10	1,277.42	1,159.00	118.42	10.787	
4,800.00	4,756.69	4,747.25	4,755.08	17.27	103.66	144.07	-643.44	-663.10	1,291.00	1,170.15	120.85	10.683	
4,900.00	4,855.18	4,844.10	4,851.93	17.65	105.72	144.49	-643.86	-663.10	1,305.32	1,182.04	123.28	10.588	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) AIRSTRIP STATE 001 P & A - Vertical - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.00	4,953.67	4,945.90	4,953.67	18.02	107.89	144.92	-644.52	-663.10	1,319.80	1,193.98	125.82	10.490	
5,100.00	5,052.15	5,044.40	5,052.15	18.40	109.98	145.34	-644.52	-663.10	1,334.07	1,205.79	128.28	10.399	
5,200.00	5,150.64	5,142.89	5,150.64	18.77	112.08	145.76	-644.52	-663.10	1,348.42	1,217.67	130.75	10.313	
5,300.00	5,249.13	5,241.38	5,249.13	19.14	114.17	146.17	-644.52	-663.10	1,362.84	1,229.62	133.22	10.230	
5,400.00	5,347.62	5,338.24	5,345.97	19.52	116.23	146.60	-643.57	-663.10	1,376.95	1,241.30	135.65	10.151	
5,500.00	5,446.11	5,434.96	5,442.69	19.89	118.29	146.96	-644.03	-663.10	1,391.68	1,253.61	138.07	10.079	
5,600.00	5,544.60	5,536.93	5,544.60	20.27	120.46	147.34	-644.52	-663.10	1,406.48	1,265.86	140.62	10.002	
5,700.00	5,643.09	5,635.42	5,643.09	20.64	122.55	147.71	-644.52	-663.10	1,421.15	1,278.06	143.08	9.932	
5,800.00	5,741.58	5,733.91	5,741.58	21.02	124.65	148.08	-644.52	-663.10	1,435.88	1,290.32	145.55	9.865	
5,900.00	5,840.07	5,830.82	5,838.48	21.40	126.71	148.47	-643.58	-663.10	1,450.33	1,302.34	147.98	9.801	
6,000.00	5,938.56	5,927.56	5,935.21	21.77	128.77	148.80	-644.05	-663.10	1,465.34	1,314.93	150.41	9.742	
6,100.00	6,037.05	6,029.45	6,037.05	22.15	130.90	149.14	-644.52	-663.10	1,480.40	1,327.48	152.92	9.681	
6,200.00	6,135.54	6,127.94	6,135.54	22.52	132.90	149.48	-644.52	-663.10	1,495.35	1,340.05	155.30	9.629	
6,300.00	6,234.03	6,226.43	6,234.03	22.90	134.91	149.81	-644.52	-663.10	1,510.35	1,352.67	157.68	9.579	
6,400.00	6,332.52	6,323.79	6,331.37	23.28	136.89	150.17	-643.44	-663.10	1,525.04	1,365.01	160.03	9.530	
6,500.00	6,431.01	6,420.70	6,428.28	23.65	138.87	150.47	-643.82	-663.10	1,540.26	1,377.89	162.38	9.486	
6,600.00	6,529.50	6,521.96	6,529.50	24.03	140.93	150.77	-644.52	-663.10	1,555.63	1,390.81	164.82	9.438	
6,700.00	6,627.99	6,620.45	6,627.99	24.41	143.12	151.08	-644.52	-663.10	1,570.82	1,403.44	167.38	9.385	
6,800.00	6,726.48	6,718.40	6,725.94	24.78	145.29	151.40	-643.98	-663.10	1,585.88	1,415.96	169.92	9.333	
6,900.00	6,824.97	6,815.08	6,822.61	25.16	147.44	151.68	-644.27	-663.10	1,601.24	1,428.81	172.44	9.286	
7,000.00	6,923.46	6,915.99	6,923.46	25.54	149.72	151.96	-644.52	-663.10	1,616.63	1,441.53	175.10	9.232	
7,100.00	7,021.95	7,014.48	7,021.95	25.91	152.00	152.25	-644.52	-663.10	1,631.99	1,454.24	177.75	9.181	
7,200.00	7,120.44	7,112.89	7,120.34	26.29	154.27	152.58	-642.89	-663.10	1,646.90	1,466.50	180.40	9.129	
7,300.00	7,218.93	7,209.02	7,216.46	26.67	156.49	152.84	-643.14	-663.10	1,662.41	1,479.43	182.99	9.085	
7,400.00	7,317.42	7,305.19	7,312.61	27.04	158.71	153.08	-643.88	-663.10	1,678.10	1,492.53	185.58	9.043	
7,500.00	7,415.91	7,408.56	7,415.91	27.42	161.05	153.34	-644.52	-663.10	1,693.78	1,505.48	188.30	8.995	
7,600.00	7,514.40	7,507.05	7,514.40	27.80	163.24	153.60	-644.52	-663.10	1,709.32	1,518.46	190.86	8.956	
7,700.00	7,612.89	7,605.54	7,612.89	28.18	165.42	153.85	-644.52	-663.10	1,724.89	1,531.47	193.42	8.918	
7,800.00	7,711.38	7,702.52	7,709.86	28.55	167.57	154.13	-643.59	-663.10	1,740.24	1,544.30	195.94	8.881	
7,900.00	7,809.86	7,799.48	7,806.81	28.93	169.72	154.36	-644.07	-663.10	1,756.01	1,557.55	198.46	8.848	
8,000.00	7,908.35	7,901.10	7,908.35	29.31	172.10	154.59	-644.52	-663.10	1,771.80	1,570.58	201.22	8.805	
8,100.00	8,006.84	7,999.59	8,006.84	29.69	174.55	154.83	-644.52	-663.10	1,787.49	1,583.45	204.05	8.760	
8,200.00	8,105.33	8,098.08	8,105.33	30.06	177.01	155.06	-644.52	-663.10	1,803.22	1,596.34	206.88	8.716	
8,300.00	8,203.82	8,194.80	8,202.04	30.44	179.42	155.32	-643.36	-663.10	1,818.69	1,609.03	209.66	8.674	
8,400.00	8,302.31	8,291.44	8,298.66	30.82	181.83	155.53	-643.95	-663.10	1,834.63	1,622.18	212.44	8.636	
8,500.00	8,400.80	8,393.72	8,400.80	31.20	184.47	155.74	-644.52	-663.10	1,850.57	1,635.11	215.46	8.589	
8,600.00	8,499.29	8,491.99	8,499.05	31.57	187.11	155.99	-643.48	-663.10	1,866.17	1,647.70	218.47	8.542	
8,700.00	8,597.78	8,585.96	8,593.01	31.95	189.63	156.17	-644.02	-663.10	1,882.17	1,660.81	221.36	8.503	
8,800.00	8,696.27	8,689.32	8,696.27	32.33	192.10	156.38	-644.52	-663.10	1,898.17	1,673.95	224.21	8.466	
8,900.00	8,794.76	8,787.81	8,794.76	32.71	194.28	156.59	-644.52	-663.10	1,914.08	1,687.31	226.77	8.440	
9,000.00	8,893.25	8,886.30	8,893.25	33.09	196.47	156.79	-644.52	-663.10	1,930.02	1,700.68	229.33	8.416	
9,100.00	8,991.74	8,982.83	8,989.74	33.46	198.61	157.04	-642.63	-663.10	1,945.57	1,713.72	231.85	8.392	
9,200.00	9,090.23	9,079.15	9,086.04	33.84	200.75	157.21	-643.35	-663.10	1,961.72	1,727.36	234.36	8.371	
9,300.00	9,188.72	9,181.88	9,188.72	34.22	203.02	157.38	-644.52	-663.10	1,977.97	1,740.96	237.01	8.346	
9,400.00	9,287.52	9,280.68	9,287.52	34.60	205.12	175.49	-644.52	-663.10	1,992.73	1,753.25	239.48	8.321	
9,500.00	9,386.81	9,379.97	9,386.81	34.96	207.23	-152.51	-644.52	-663.10	2,004.27	1,762.32	241.95	8.284	
9,600.00	9,486.11	9,479.27	9,486.11	35.30	209.34	-120.42	-644.52	-663.10	2,012.56	1,768.15	244.41	8.234	
9,700.00	9,584.93	9,578.08	9,584.91	35.64	211.44	-101.95	-643.64	-663.10	2,017.43	1,770.59	246.84	8.173	
9,800.00	9,681.14	9,673.80	9,680.63	35.95	213.47	-102.09	-643.69	-663.10	2,023.26	1,774.07	249.19	8.119	
9,900.00	9,771.22	9,763.34	9,770.18	36.25	215.38	-102.17	-643.83	-663.10	2,033.35	1,781.95	251.40	8.088	
10,000.00	9,852.45	9,843.96	9,850.79	36.51	217.09	-102.00	-644.03	-663.10	2,048.33	1,794.92	253.40	8.083	SF
10,100.00	9,922.36	9,913.18	9,920.01	36.72	218.56	-101.32	-644.26	-663.10	2,068.80	1,813.67	255.12	8.109	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) AIRSTRIP STATE 001 P & A - Vertical - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,200.00	9,978.82	9,968.91	9,975.74	36.88	219.75	-99.92	-644.48	-663.10	2,095.22	1,838.71	256.52	8.168	
10,300.00	10,020.12	10,013.41	10,020.12	36.99	221.09	-97.67	-644.52	-663.10	2,127.66	1,869.64	258.02	8.246	
10,400.00	10,046.32	10,039.61	10,046.32	37.06	221.94	-95.48	-644.52	-663.10	2,165.69	1,906.70	258.99	8.362	
10,500.00	10,063.18	10,056.48	10,063.18	37.11	222.50	-93.62	-644.52	-663.10	2,208.22	1,948.61	259.61	8.506	
10,600.00	10,071.39	10,064.69	10,071.39	37.16	222.76	-91.23	-644.52	-663.10	2,254.79	1,994.87	259.92	8.675	
10,700.00	10,071.32	10,064.62	10,071.32	37.22	222.76	-89.26	-644.52	-663.10	2,304.90	2,044.97	259.93	8.867	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) ALBATROSS STATE COM 001H - Horizontal - PRODUCING - Surveys

Offset Site Error: 0.00 usft

Survey Program: 100-NS-GYRO-MS, 7863-MWD OWSG Rev5

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,600.00	10,030.96	11,507.43	9,931.43	41.95	36.73	87.67	2,816.75	3,550.98	2,303.55	2,225.08	78.47	29.356	
12,700.00	10,028.30	11,307.06	9,918.41	42.33	33.73	87.63	3,013.50	3,515.49	2,286.88	2,211.22	75.66	30.227	
12,800.00	10,023.00	11,223.00	9,914.63	42.72	32.50	87.81	3,095.86	3,499.13	2,268.46	2,193.64	74.82	30.320	
12,900.00	10,017.31	11,128.00	9,910.90	43.13	31.13	87.84	3,189.06	3,481.10	2,250.47	2,176.64	73.83	30.481	
13,000.00	10,011.61	11,051.37	9,908.20	43.54	30.05	87.86	3,264.34	3,467.07	2,233.12	2,159.93	73.19	30.513	
13,100.00	10,005.92	10,979.25	9,905.81	43.97	29.05	87.90	3,335.33	3,454.55	2,216.73	2,144.09	72.64	30.515	
13,200.00	10,000.23	10,899.28	9,903.01	44.40	27.96	87.93	3,414.20	3,441.63	2,201.53	2,129.51	72.01	30.572	
13,300.00	9,994.53	10,813.47	9,899.00	44.84	26.83	87.94	3,498.84	3,428.11	2,186.81	2,115.48	71.33	30.657	
13,400.00	9,988.84	10,736.84	9,895.70	45.29	25.85	87.96	3,574.56	3,416.77	2,173.02	2,102.19	70.83	30.681	
13,500.00	9,983.15	10,654.00	9,892.71	45.75	24.82	87.99	3,656.53	3,405.24	2,160.08	2,089.81	70.27	30.738	
13,600.00	9,977.45	10,583.65	9,889.69	46.22	23.99	88.01	3,726.23	3,396.15	2,148.18	2,078.23	69.95	30.709	
13,700.00	9,971.76	10,516.40	9,885.69	46.69	23.22	88.00	3,792.90	3,388.37	2,137.68	2,067.97	69.71	30.665	
13,800.00	9,966.06	10,448.44	9,881.14	47.18	22.47	87.97	3,860.37	3,381.56	2,128.74	2,059.24	69.50	30.631	
13,900.00	9,960.37	10,371.32	9,877.11	47.67	21.67	87.98	3,937.08	3,374.80	2,121.02	2,051.80	69.22	30.643	
14,000.00	9,954.68	10,280.75	9,874.04	48.16	20.79	88.03	4,027.32	3,367.74	2,114.19	2,045.35	68.84	30.712	
14,100.00	9,948.98	10,161.94	9,865.77	48.67	19.77	87.98	4,145.41	3,358.03	2,107.14	2,038.85	68.29	30.856	
14,200.00	9,943.29	10,088.56	9,855.85	49.18	19.22	87.81	4,217.84	3,351.73	2,099.94	2,031.62	68.32	30.738	
14,300.00	9,937.60	10,022.00	9,844.89	49.70	18.78	87.61	4,283.32	3,347.14	2,094.44	2,025.98	68.47	30.591	
14,400.00	9,931.90	9,926.00	9,817.50	50.22	18.28	87.00	4,375.03	3,341.49	2,090.50	2,021.92	68.58	30.482	
14,500.00	9,926.21	9,796.76	9,748.78	50.75	17.86	85.27	4,483.23	3,329.81	2,084.77	2,015.88	68.90	30.260	
14,600.00	9,920.52	9,737.00	9,708.38	51.29	17.74	84.22	4,526.82	3,323.77	2,080.65	2,011.11	69.54	29.919	
14,674.46	9,916.28	9,705.00	9,685.11	51.69	17.70	83.61	4,548.58	3,320.78	2,079.61	2,009.56	70.05	29.685	CC
14,700.00	9,914.82	9,705.00	9,685.11	51.83	17.70	83.61	4,548.58	3,320.78	2,079.77	2,009.54	70.23	29.615	ES
14,800.00	9,909.13	9,673.00	9,660.69	52.38	17.66	82.97	4,569.10	3,318.28	2,082.63	2,011.74	70.90	29.376	
14,900.00	9,903.43	9,641.00	9,635.08	52.93	17.63	82.29	4,588.18	3,316.30	2,089.47	2,017.92	71.55	29.203	
15,000.00	9,897.74	9,619.73	9,617.46	53.49	17.61	81.83	4,600.04	3,315.26	2,100.33	2,028.18	72.15	29.110	
15,100.00	9,892.05	9,594.53	9,596.03	54.05	17.60	81.26	4,613.27	3,314.26	2,115.19	2,042.47	72.72	29.087	SF
15,200.00	9,886.35	9,568.29	9,573.22	54.62	17.58	80.66	4,626.19	3,313.36	2,133.96	2,060.71	73.25	29.134	
15,300.00	9,880.66	9,545.00	9,552.55	55.20	17.57	80.12	4,636.91	3,312.63	2,156.57	2,082.85	73.72	29.254	
15,400.00	9,874.97	9,513.00	9,523.60	55.77	17.55	79.35	4,650.49	3,311.58	2,182.90	2,108.72	74.17	29.430	
15,500.00	9,868.46	9,489.77	9,502.21	56.36	17.55	78.64	4,659.49	3,310.73	2,212.75	2,138.20	74.54	29.684	
15,600.00	9,861.83	9,467.81	9,481.70	56.95	17.54	78.10	4,667.29	3,309.85	2,246.20	2,171.34	74.86	30.007	
15,700.00	9,855.20	9,450.00	9,464.89	57.54	17.53	77.66	4,673.13	3,309.08	2,283.17	2,208.08	75.10	30.402	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) ALBATROSS STATE COM 002H - Horizontal - PRODUCING - Surveys

Offset Site Error: 0.00 usft

Survey Program: 100-r.5 GYRO-NS, 9783-3_MWD+HRGM

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,700.00	8,597.78	14,914.00	10,471.80	31.95	78.48	-21.77	-86.98	2,382.12	2,236.29	2,161.54	74.75	29.918	
8,800.00	8,696.27	14,914.00	10,471.80	32.33	78.48	-21.77	-86.98	2,382.12	2,145.04	2,069.06	75.98	28.230	
8,900.00	8,794.76	14,914.00	10,471.80	32.71	78.48	-21.77	-86.98	2,382.12	2,054.60	1,977.29	77.32	26.574	
9,000.00	8,893.25	14,914.00	10,471.80	33.09	78.48	-21.77	-86.98	2,382.12	1,965.09	1,886.34	78.76	24.951	
9,100.00	8,991.74	14,914.00	10,471.80	33.46	78.48	-21.77	-86.98	2,382.12	1,876.64	1,796.33	80.32	23.366	
9,200.00	9,090.23	14,914.00	10,471.80	33.84	78.48	-21.77	-86.98	2,382.12	1,789.41	1,707.40	82.01	21.821	
9,300.00	9,188.72	14,914.00	10,471.80	34.22	78.48	-21.77	-86.98	2,382.12	1,703.58	1,619.74	83.84	20.319	
9,400.00	9,287.52	14,914.00	10,471.80	34.60	78.48	0.39	-86.98	2,382.12	1,620.15	1,534.27	85.88	18.865	
9,500.00	9,386.81	14,914.00	10,471.80	34.96	78.48	36.30	-86.98	2,382.12	1,540.99	1,452.78	88.21	17.469	
9,600.00	9,486.11	14,914.00	10,471.80	35.30	78.48	71.75	-86.98	2,382.12	1,467.22	1,376.38	90.83	16.153	
9,700.00	9,584.93	14,914.00	10,471.80	35.64	78.48	93.45	-86.98	2,382.12	1,400.05	1,306.34	93.72	14.939	
9,800.00	9,681.14	14,884.20	10,471.06	35.95	78.09	99.59	-57.34	2,379.16	1,338.83	1,242.53	96.30	13.903	
9,900.00	9,771.22	14,861.58	10,470.88	36.25	77.79	104.88	-34.82	2,377.12	1,284.66	1,185.78	98.87	12.993	
10,000.00	9,852.45	14,819.00	10,471.47	36.51	77.23	108.21	7.63	2,373.75	1,239.13	1,138.24	100.89	12.282	
10,100.00	9,922.36	14,785.07	10,472.60	36.72	76.79	110.82	41.47	2,371.57	1,203.15	1,100.50	102.65	11.721	
10,200.00	9,978.82	14,724.00	10,475.53	36.88	75.99	111.90	102.40	2,368.86	1,177.44	1,073.91	103.53	11.373	
10,300.00	10,020.12	14,651.48	10,479.81	36.99	75.05	112.30	174.76	2,366.78	1,161.13	1,057.40	103.73	11.193	
10,400.00	10,046.32	14,532.34	10,484.27	37.06	73.52	111.79	293.77	2,363.93	1,151.24	1,048.33	102.91	11.187	SF
10,500.00	10,063.18	14,371.56	10,479.31	37.11	71.45	110.83	454.35	2,358.66	1,142.10	1,040.64	101.46	11.257	
10,600.00	10,071.39	14,235.74	10,473.75	37.16	69.71	110.73	589.56	2,347.20	1,130.70	1,030.72	99.98	11.309	
10,700.00	10,071.32	14,121.18	10,464.58	37.22	68.25	110.81	703.25	2,336.44	1,120.03	1,021.34	98.69	11.348	
10,800.00	10,069.20	14,031.89	10,457.09	37.31	67.12	110.67	791.84	2,328.22	1,110.19	1,012.42	97.76	11.356	
10,900.00	10,067.07	13,944.29	10,450.36	37.43	66.02	110.55	878.88	2,321.04	1,101.54	1,004.66	96.87	11.371	
11,000.00	10,064.95	13,846.17	10,442.82	37.58	64.80	110.40	976.43	2,313.47	1,093.35	997.49	95.86	11.406	
11,100.00	10,062.82	13,754.50	10,437.04	37.75	63.66	110.32	1,067.63	2,306.26	1,085.52	990.59	94.93	11.435	
11,200.00	10,060.70	13,681.00	10,433.44	37.93	62.76	110.30	1,140.85	2,301.07	1,079.05	984.80	94.26	11.448	
11,300.00	10,058.57	13,586.00	10,429.13	38.13	61.60	110.26	1,235.62	2,296.02	1,074.23	980.92	93.31	11.512	
11,400.00	10,056.45	13,518.36	10,426.44	38.35	60.79	110.23	1,303.16	2,293.85	1,071.49	978.73	92.76	11.552	
11,463.36	10,055.10	13,470.51	10,425.12	38.50	60.22	110.21	1,350.99	2,293.12	1,071.06	978.73	92.34	11.599	
11,500.00	10,054.33	13,441.29	10,424.39	38.58	59.87	110.21	1,380.21	2,292.96	1,071.19	979.11	92.08	11.634	
11,600.00	10,052.20	13,349.30	10,422.04	38.83	58.78	110.16	1,472.16	2,293.51	1,072.58	981.32	91.26	11.754	
11,700.00	10,050.08	13,240.77	10,417.97	39.09	57.51	110.04	1,580.61	2,294.22	1,073.63	983.33	90.30	11.889	
11,800.00	10,047.95	13,133.47	10,414.81	39.36	56.27	109.98	1,687.87	2,293.72	1,073.92	984.56	89.36	12.018	
11,900.00	10,045.83	13,028.92	10,411.16	39.64	55.08	109.90	1,792.35	2,292.83	1,073.65	985.17	88.48	12.134	
11,998.34	10,043.74	12,935.40	10,405.82	39.93	54.02	109.72	1,885.70	2,292.77	1,073.38	985.57	87.81	12.224	
12,000.00	10,043.70	12,933.84	10,405.72	39.93	54.01	109.71	1,887.26	2,292.78	1,073.38	985.58	87.80	12.225	
12,100.00	10,041.58	12,838.85	10,399.64	40.24	52.95	109.48	1,982.06	2,293.20	1,073.39	986.22	87.17	12.314	
12,116.70	10,041.22	12,806.52	10,397.77	40.30	52.60	109.42	2,014.34	2,293.19	1,073.35	986.47	86.88	12.354	
12,200.00	10,039.45	12,691.42	10,390.94	40.56	51.34	109.24	2,129.16	2,289.65	1,070.48	984.55	85.94	12.457	
12,300.00	10,037.33	12,601.25	10,387.32	40.89	50.37	109.20	2,219.19	2,285.95	1,066.99	981.66	85.33	12.504	
12,400.00	10,035.21	12,509.82	10,383.84	41.24	49.40	109.16	2,310.51	2,283.04	1,064.44	979.69	84.74	12.561	
12,500.00	10,033.08	12,417.34	10,379.89	41.59	48.44	109.08	2,402.88	2,280.83	1,062.49	978.29	84.19	12.620	
12,600.00	10,030.96	12,329.66	10,377.33	41.95	47.55	109.05	2,490.50	2,279.30	1,061.58	977.88	83.70	12.683	
12,622.26	10,030.44	12,309.65	10,376.98	42.04	47.35	109.06	2,510.51	2,279.01	1,061.54	977.96	83.58	12.700	
12,700.00	10,028.30	12,237.81	10,376.40	42.33	46.64	109.13	2,582.34	2,278.08	1,061.86	978.72	83.14	12.771	
12,800.00	10,023.00	12,135.25	10,375.42	42.72	45.64	109.34	2,684.89	2,276.96	1,063.27	980.81	82.46	12.895	
12,900.00	10,017.31	12,032.89	10,371.42	43.13	44.68	109.43	2,787.16	2,276.37	1,064.32	982.45	81.87	13.000	
13,000.00	10,011.61	11,944.58	10,366.30	43.54	43.87	109.40	2,875.32	2,276.94	1,065.90	984.39	81.51	13.077	
13,100.00	10,005.92	11,861.45	10,361.27	43.97	43.13	109.33	2,958.27	2,278.87	1,068.96	987.72	81.25	13.157	
13,200.00	10,000.23	11,769.71	10,357.69	44.40	42.34	109.35	3,049.90	2,281.48	1,073.23	992.33	80.90	13.266	
13,300.00	9,994.53	11,651.63	10,355.75	44.84	41.37	109.53	3,167.94	2,283.57	1,077.30	996.99	80.31	13.415	
13,400.00	9,988.84	11,497.58	10,353.62	45.29	40.16	109.90	3,321.92	2,280.23	1,077.73	998.35	79.38	13.578	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) ALBATROSS STATE COM 002H - Horizontal - PRODUCING - Surveys

Offset Site Error: 0.00 usft

Survey Program: 100-r.5 GYRO-NS, 9783-3_MWD+HRGM

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,500.00	9,983.15	11,391.00	10,349.40	45.75	39.38	110.05	3,428.31	2,275.60	1,075.23	996.24	78.99	13.612	
13,600.00	9,977.45	11,296.92	10,343.20	46.22	38.72	110.05	3,522.14	2,272.45	1,072.77	993.94	78.83	13.609	
13,700.00	9,971.76	11,204.44	10,335.62	46.69	38.12	109.95	3,614.28	2,270.52	1,070.94	992.18	78.76	13.597	
13,800.00	9,966.06	11,115.00	10,328.65	47.18	37.57	109.86	3,703.44	2,269.12	1,069.77	991.01	78.76	13.583	
13,900.00	9,960.37	11,020.58	10,323.37	47.67	37.03	109.88	3,797.70	2,267.63	1,069.33	990.60	78.73	13.583	
13,948.64	9,957.60	10,967.00	10,321.13	47.91	36.75	109.92	3,851.22	2,266.66	1,069.24	990.56	78.67	13.591	
14,000.00	9,954.68	10,912.20	10,318.84	48.16	36.47	109.98	3,905.96	2,265.40	1,068.90	990.27	78.63	13.594	
14,100.00	9,948.98	10,812.82	10,315.21	48.67	36.01	110.11	4,005.24	2,262.96	1,068.29	989.66	78.63	13.586	
14,200.00	9,943.29	10,705.94	10,310.55	49.18	35.57	110.22	4,111.98	2,259.86	1,067.00	988.34	78.67	13.564	
14,300.00	9,937.60	10,614.44	10,306.64	49.70	35.24	110.30	4,203.37	2,257.62	1,066.18	987.34	78.84	13.523	
14,400.00	9,931.90	10,437.94	10,276.42	50.22	34.75	109.26	4,376.53	2,256.68	1,063.17	984.03	79.14	13.434	
14,500.00	9,926.21	10,199.71	10,156.43	50.75	34.46	103.50	4,579.84	2,259.20	1,051.40	970.52	80.87	13.000	
14,600.00	9,920.52	10,062.95	10,053.08	51.29	34.41	98.11	4,668.94	2,258.24	1,032.33	949.51	82.83	12.464	
14,700.00	9,914.82	9,999.63	9,998.61	51.83	34.40	95.15	4,701.13	2,258.69	1,017.47	933.09	84.38	12.058	
14,800.00	9,909.13	9,946.47	9,949.42	52.38	34.38	92.43	4,721.12	2,259.58	1,009.19	923.36	85.83	11.758	
14,848.83	9,906.35	9,928.98	9,932.66	52.65	34.38	91.50	4,726.11	2,259.96	1,008.15	921.73	86.42	11.665	CC, ES
14,900.00	9,903.43	9,913.81	9,917.97	52.93	34.38	90.68	4,729.89	2,260.30	1,009.33	922.37	86.96	11.607	
15,000.00	9,897.74	9,893.96	9,898.58	53.49	34.37	89.59	4,734.08	2,260.76	1,018.56	930.81	87.75	11.608	
15,100.00	9,892.05	9,878.00	9,882.86	54.05	34.37	88.71	4,736.84	2,261.19	1,037.00	948.75	88.26	11.750	
15,200.00	9,886.35	9,867.28	9,872.27	54.62	34.37	88.11	4,738.41	2,261.51	1,064.29	975.82	88.47	12.030	
15,300.00	9,880.66	9,856.96	9,862.03	55.20	34.37	87.54	4,739.75	2,261.84	1,099.82	1,011.35	88.47	12.432	
15,400.00	9,874.97	9,846.00	9,851.15	55.77	34.37	86.92	4,740.97	2,262.20	1,142.88	1,054.58	88.29	12.944	
15,500.00	9,868.46	9,837.05	9,842.25	56.36	34.37	86.14	4,741.84	2,262.49	1,192.61	1,104.64	87.97	13.558	
15,600.00	9,861.83	9,826.09	9,831.33	56.95	34.37	85.54	4,742.80	2,262.82	1,248.23	1,160.67	87.56	14.255	
15,700.00	9,855.20	9,815.00	9,820.28	57.54	34.37	84.92	4,743.63	2,263.10	1,309.03	1,221.92	87.11	15.028	
15,800.00	9,848.57	9,815.00	9,820.28	58.14	34.37	84.92	4,743.63	2,263.10	1,374.36	1,287.83	86.53	15.884	
15,900.00	9,841.94	9,802.10	9,807.41	58.74	34.37	84.20	4,744.41	2,263.37	1,443.55	1,357.50	86.05	16.776	
16,000.00	9,835.31	9,796.29	9,801.61	59.34	34.37	83.88	4,744.69	2,263.47	1,516.16	1,430.64	85.52	17.729	
16,100.00	9,828.68	9,783.00	9,788.32	59.95	34.37	83.14	4,745.16	2,263.63	1,591.75	1,506.69	85.06	18.712	
16,200.00	9,822.06	9,783.00	9,788.32	60.57	34.37	83.14	4,745.16	2,263.63	1,669.80	1,585.26	84.54	19.751	
16,300.00	9,815.43	9,783.00	9,788.32	61.18	34.37	83.14	4,745.16	2,263.63	1,750.09	1,666.04	84.05	20.822	
16,400.00	9,808.80	9,783.00	9,788.32	61.80	34.37	83.14	4,745.16	2,263.63	1,832.32	1,748.73	83.59	21.920	
16,500.00	9,802.17	9,783.00	9,788.32	62.43	34.37	83.14	4,745.16	2,263.63	1,916.24	1,833.07	83.17	23.040	
16,600.00	9,795.54	9,783.00	9,788.32	63.05	34.37	83.14	4,745.16	2,263.63	2,001.63	1,918.86	82.78	24.181	
16,700.00	9,788.91	9,758.20	9,763.53	63.68	34.32	81.77	4,745.72	2,263.85	2,088.10	2,005.59	82.51	25.307	
16,800.00	9,782.28	9,752.73	9,758.06	64.31	34.31	81.47	4,745.82	2,263.90	2,175.83	2,093.64	82.19	26.472	
16,900.00	9,775.65	9,747.48	9,752.81	64.95	34.31	81.18	4,745.90	2,263.94	2,264.56	2,182.66	81.90	27.650	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) B LEE STATE 004 - Verticals - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-2_Assumed Vertical

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
26,300.00	8,391.84	8,394.04	8,391.84	131.53	254.58	-105.98	17,600.45	-505.82	2,266.50	1,908.81	357.69	6.336	
26,400.00	8,362.53	8,364.73	8,362.53	132.26	253.69	-105.06	17,600.45	-505.82	2,200.75	1,841.16	359.60	6.120	
26,500.00	8,333.23	8,335.43	8,333.23	133.00	252.80	-104.13	17,600.45	-505.82	2,137.26	1,775.67	361.59	5.911	
26,600.00	8,303.92	8,306.12	8,303.92	133.73	251.91	-103.19	17,600.45	-505.82	2,076.23	1,712.57	363.65	5.709	
26,700.00	8,274.62	8,276.82	8,274.62	134.47	251.02	-102.25	17,600.45	-505.82	2,017.88	1,652.10	365.78	5.517	
26,800.00	8,245.31	8,247.51	8,245.31	135.21	250.13	-101.30	17,600.45	-505.82	1,962.46	1,594.51	367.95	5.333	
26,900.00	8,217.06	8,219.26	8,217.06	135.94	249.28	-99.88	17,600.45	-505.82	1,910.05	1,539.87	370.18	5.160	
27,000.00	8,189.09	8,191.29	8,189.09	136.68	248.43	-98.96	17,600.45	-505.82	1,861.08	1,488.67	372.40	4.997	
27,100.00	8,161.11	8,163.31	8,161.11	137.42	247.58	-98.03	17,600.45	-505.82	1,815.86	1,441.29	374.57	4.848	
27,200.00	8,133.14	8,135.34	8,133.14	138.16	246.73	-97.10	17,600.45	-505.82	1,774.69	1,398.05	376.64	4.712	
27,300.00	8,105.17	8,107.37	8,105.17	138.90	245.88	-96.16	17,600.45	-505.82	1,737.85	1,359.29	378.56	4.591	
27,400.00	8,077.20	8,079.40	8,077.20	139.63	245.03	-95.22	17,600.45	-505.82	1,705.63	1,325.35	380.28	4.485	
27,500.00	8,049.22	8,051.42	8,049.22	140.37	244.19	-94.28	17,600.45	-505.82	1,678.29	1,296.54	381.75	4.396	
27,600.00	8,021.25	8,023.45	8,021.25	141.11	243.34	-93.34	17,600.45	-505.82	1,656.07	1,273.16	382.91	4.325	
27,700.00	7,993.28	7,995.48	7,993.28	141.85	242.49	-92.39	17,600.45	-505.82	1,639.18	1,255.47	383.71	4.272	
27,800.00	7,965.31	7,967.51	7,965.31	142.59	241.64	-91.44	17,600.45	-505.82	1,627.79	1,243.67	384.12	4.238	
27,900.00	7,937.33	7,939.53	7,937.33	143.33	240.79	-90.49	17,600.45	-505.82	1,622.01	1,237.91	384.10	4.223	SF
27,951.87	7,922.82	7,925.02	7,922.82	143.71	240.35	-90.00	17,600.45	-505.82	1,621.25	1,237.33	383.92	4.223	CC, ES
28,000.00	7,909.36	7,911.56	7,909.36	144.07	239.94	-89.54	17,600.45	-505.82	1,621.91	1,238.27	383.64	4.228	
28,100.00	7,881.39	7,883.59	7,881.39	144.81	239.10	-88.59	17,600.45	-505.82	1,627.47	1,244.75	382.72	4.252	
28,200.00	7,853.42	7,855.62	7,853.42	145.55	238.25	-87.65	17,600.45	-505.82	1,638.66	1,257.29	381.37	4.297	
28,300.00	7,825.44	7,827.64	7,825.44	146.29	237.40	-86.70	17,600.45	-505.82	1,655.34	1,275.75	379.59	4.361	
28,400.00	7,797.47	7,799.67	7,797.47	147.03	236.55	-85.75	17,600.45	-505.82	1,677.37	1,299.92	377.44	4.444	
28,444.58	7,785.00	7,787.20	7,785.00	147.36	236.17	-85.33	17,600.45	-505.82	1,688.85	1,312.48	376.37	4.487	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) B LEE STATE 005 P & A - Vertical - Surveys — **Offset Site Error:** 0.00 usft

Survey Program: 0-3_INC-Only — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
25,600.00	8,596.98	8,618.58	8,596.98	126.38	298.09	-100.16	16,537.32	-825.83	2,288.37	1,877.11	411.27	5.564	
25,700.00	8,567.67	8,589.25	8,567.67	127.11	296.71	-99.36	16,537.32	-825.83	2,240.00	1,827.64	412.36	5.432	
25,800.00	8,538.37	8,559.88	8,538.37	127.85	295.41	-98.55	16,537.32	-825.83	2,194.72	1,781.24	413.48	5.308	
25,900.00	8,509.06	8,530.51	8,509.06	128.58	294.09	-97.75	16,537.32	-825.83	2,152.74	1,738.19	414.55	5.193	
26,000.00	8,479.76	8,501.14	8,479.76	129.32	292.68	-96.94	16,537.32	-825.83	2,114.26	1,698.81	415.45	5.089	
26,100.00	8,450.45	8,471.72	8,450.45	130.05	291.23	-96.13	16,537.32	-825.83	2,079.46	1,663.25	416.21	4.996	
26,200.00	8,421.14	8,442.38	8,421.14	130.79	289.86	-95.31	16,537.32	-825.83	2,048.53	1,631.63	416.90	4.914	
26,300.00	8,391.84	8,431.07	8,409.94	131.53	289.27	-95.00	16,536.84	-825.83	2,021.62	1,603.27	418.35	4.832	
26,400.00	8,362.53	8,390.13	8,369.04	132.26	287.51	-93.87	16,537.89	-825.83	1,999.13	1,580.91	418.22	4.780	
26,500.00	8,333.23	8,354.28	8,333.23	133.00	285.97	-92.86	16,537.32	-825.83	1,980.71	1,562.56	418.15	4.737	
26,600.00	8,303.92	8,324.97	8,303.92	133.73	284.71	-92.04	16,537.32	-825.83	1,966.90	1,548.75	418.15	4.704	
26,700.00	8,274.62	8,299.09	8,278.13	134.47	283.60	-91.32	16,537.32	-825.83	1,957.67	1,539.61	418.06	4.683	
26,800.00	8,245.31	8,266.44	8,245.51	135.21	282.20	-90.41	16,537.91	-825.83	1,953.08	1,535.72	417.36	4.680	SF
26,848.20	8,231.34	8,252.25	8,231.34	135.56	281.59	-90.00	16,537.32	-825.83	1,952.53	1,535.53	417.00	4.682	CC, ES
26,900.00	8,217.06	8,237.97	8,217.06	135.94	280.98	-89.59	16,537.32	-825.83	1,953.16	1,536.59	416.57	4.689	
27,000.00	8,189.09	8,205.88	8,185.01	136.68	279.59	-88.69	16,537.44	-825.83	1,957.96	1,542.65	415.31	4.714	
27,100.00	8,161.11	8,181.96	8,161.11	137.42	278.50	-88.02	16,537.32	-825.83	1,967.44	1,553.34	414.10	4.751	
27,200.00	8,133.14	8,153.92	8,133.14	138.16	277.19	-87.23	16,537.32	-825.83	1,981.53	1,569.16	412.37	4.805	
27,300.00	8,105.17	8,125.90	8,105.17	138.90	275.88	-86.44	16,537.32	-825.83	2,000.14	1,589.76	410.38	4.874	
27,400.00	8,077.20	8,096.99	8,076.35	139.63	274.46	-85.64	16,537.74	-825.83	2,023.02	1,614.98	408.04	4.958	
27,500.00	8,049.22	8,065.51	8,044.92	140.37	272.90	-84.76	16,537.46	-825.83	2,050.34	1,645.02	405.32	5.059	
27,600.00	8,021.25	8,039.31	8,018.78	141.11	271.56	-84.03	16,537.41	-825.83	2,081.66	1,679.02	402.64	5.170	
27,700.00	7,993.28	8,013.72	7,993.28	141.85	270.06	-83.32	16,537.32	-825.83	2,116.90	1,717.25	399.65	5.297	
27,800.00	7,965.31	7,985.64	7,965.31	142.59	268.35	-82.54	16,537.32	-825.83	2,155.81	1,759.51	396.29	5.440	
27,900.00	7,937.33	7,957.52	7,937.33	143.33	266.55	-81.77	16,537.32	-825.83	2,198.23	1,805.48	392.74	5.597	
28,000.00	7,909.36	7,928.57	7,908.51	144.07	264.60	-80.98	16,537.48	-825.83	2,243.88	1,854.92	388.96	5.769	
28,100.00	7,881.39	7,889.48	7,869.72	144.81	262.13	-79.92	16,538.14	-825.83	2,292.39	1,907.78	384.60	5.960	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) B LEE STATE 006 - Verticals - Surveys

Offset Site Error: 0.00 usft

Survey Program: 45-MWD OWSG Rev5, 1647-MWD - OWSG R1

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
26,900.00	8,217.06	8,289.88	8,268.34	135.94	24.97	-101.61	17,830.90	-820.39	2,299.38	2,154.20	145.18	15.838	
27,000.00	8,189.09	8,254.28	8,232.76	136.68	24.86	-100.64	17,831.93	-820.62	2,249.46	2,101.78	147.68	15.232	
27,100.00	8,161.11	8,225.43	8,203.91	137.42	24.77	-99.85	17,832.76	-820.80	2,202.52	2,052.28	150.24	14.660	
27,200.00	8,133.14	8,196.97	8,175.46	138.16	24.68	-99.07	17,833.52	-821.04	2,158.78	2,006.01	152.76	14.132	
27,300.00	8,105.17	8,167.00	8,145.51	138.90	24.58	-98.24	17,834.25	-821.36	2,118.45	1,963.25	155.20	13.650	
27,400.00	8,077.20	8,141.40	8,119.91	139.63	24.50	-97.53	17,834.84	-821.68	2,081.75	1,924.16	157.59	13.210	
27,500.00	8,049.22	8,113.88	8,092.41	140.37	24.42	-96.76	17,835.49	-822.05	2,048.86	1,889.03	159.83	12.819	
27,600.00	8,021.25	8,086.31	8,064.84	141.11	24.33	-95.99	17,836.16	-822.46	2,019.99	1,858.08	161.90	12.477	
27,700.00	7,993.28	8,055.68	8,034.23	141.85	24.24	-95.14	17,836.87	-822.95	1,995.28	1,831.52	163.75	12.185	
27,800.00	7,965.31	8,023.43	8,001.99	142.59	24.14	-94.23	17,837.49	-823.46	1,974.84	1,809.47	165.36	11.942	
27,900.00	7,937.33	7,995.64	7,974.21	143.33	24.05	-93.45	17,837.87	-823.91	1,958.83	1,792.06	166.77	11.746	
28,000.00	7,909.36	7,971.13	7,949.70	144.07	23.97	-92.75	17,838.06	-824.38	1,947.45	1,779.52	167.93	11.597	
28,100.00	7,881.39	7,942.98	7,921.55	144.81	23.89	-91.96	17,838.09	-824.99	1,940.81	1,772.06	168.75	11.501	
28,200.00	7,853.42	7,824.17	7,802.76	145.55	23.50	-88.58	17,837.92	-824.30	1,937.85	1,769.40	168.46	11.504	
28,218.35	7,848.28	7,817.62	7,796.22	145.68	23.47	-88.40	17,837.81	-824.12	1,937.77	1,769.27	168.51	11.500	CC, ES
28,300.00	7,825.44	7,793.00	7,771.61	146.29	23.39	-87.69	17,837.39	-823.41	1,939.34	1,770.69	168.65	11.499	SF
28,400.00	7,797.47	7,777.30	7,755.92	147.03	23.34	-87.25	17,837.11	-822.99	1,945.66	1,777.01	168.65	11.537	
28,444.58	7,785.00	7,771.07	7,749.69	147.36	23.32	-87.07	17,836.99	-822.85	1,950.06	1,781.51	168.55	11.569	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) BLACK JACK STATE 002 - Verticals - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
20,600.00	9,481.22	9,487.74	9,481.22	90.00	170.13	112.22	12,577.68	1,827.98	2,222.65	2,007.74	214.90	10.342	
20,700.00	9,468.54	9,475.06	9,468.54	90.71	169.81	111.27	12,577.68	1,827.98	2,128.12	1,912.92	215.20	9.889	
20,800.00	9,455.85	9,462.38	9,455.85	91.43	169.49	110.32	12,577.68	1,827.98	2,034.04	1,818.47	215.57	9.436	
20,900.00	9,443.17	9,449.70	9,443.17	92.14	169.17	109.35	12,577.68	1,827.98	1,940.46	1,724.42	216.04	8.982	
21,000.00	9,430.49	9,437.01	9,430.49	92.85	168.85	108.37	12,577.68	1,827.98	1,847.48	1,630.84	216.63	8.528	
21,100.00	9,417.81	9,448.83	9,442.37	93.56	169.08	109.28	12,577.41	1,827.98	1,755.08	1,537.12	217.97	8.052	
21,200.00	9,405.13	9,429.40	9,422.94	94.28	168.65	107.78	12,577.67	1,827.98	1,663.73	1,445.01	218.72	7.607	
21,300.00	9,392.44	9,410.89	9,404.43	94.99	168.24	106.32	12,577.85	1,827.98	1,573.27	1,353.58	219.69	7.161	
21,400.00	9,379.76	9,393.21	9,386.76	95.71	167.85	104.91	12,577.97	1,827.98	1,483.86	1,262.96	220.90	6.717	
21,500.00	9,366.09	9,375.07	9,368.62	96.43	167.45	105.53	12,578.04	1,827.98	1,395.85	1,173.49	222.36	6.277	
21,600.00	9,351.40	9,357.85	9,351.40	97.15	167.07	104.15	12,577.68	1,827.98	1,309.18	1,085.01	224.17	5.840	
21,700.00	9,336.72	9,343.17	9,336.72	97.87	166.75	102.95	12,577.68	1,827.98	1,224.73	998.33	226.40	5.410	
21,800.00	9,322.03	9,328.48	9,322.03	98.59	166.42	101.75	12,577.68	1,827.98	1,142.60	913.56	229.05	4.989	
21,900.00	9,307.35	9,313.80	9,307.35	99.31	166.10	100.53	12,577.68	1,827.98	1,063.34	831.16	232.18	4.580	
22,000.00	9,292.66	9,299.11	9,292.66	100.03	165.77	99.31	12,577.68	1,827.98	987.62	751.78	235.85	4.188	
22,100.00	9,277.97	9,291.14	9,284.73	100.75	165.61	98.64	12,577.77	1,827.98	916.43	676.22	240.21	3.815	
22,200.00	9,263.29	9,274.38	9,267.97	101.48	165.27	97.23	12,577.93	1,827.98	850.78	605.82	244.96	3.473	
22,300.00	9,248.60	9,258.02	9,251.61	102.20	164.94	95.84	12,578.05	1,827.98	792.02	541.86	250.15	3.166	
22,400.00	9,233.91	9,242.03	9,235.62	102.93	164.61	94.48	12,578.15	1,827.98	741.80	486.25	255.55	2.903	
22,500.00	9,219.23	9,226.42	9,220.01	103.65	164.30	93.15	12,578.21	1,827.98	701.97	441.24	260.72	2.692	
22,600.00	9,204.54	9,211.16	9,204.75	104.38	163.99	91.84	12,578.24	1,827.98	674.38	409.28	265.10	2.544	
22,700.00	9,189.82	9,196.22	9,189.82	105.10	163.68	90.57	12,577.68	1,827.98	660.54	392.46	268.08	2.464	
22,743.63	9,182.95	9,189.34	9,182.95	105.42	163.54	90.00	12,577.68	1,827.98	659.13	390.34	268.80	2.452	CC, ES, SF
22,800.00	9,173.02	9,179.42	9,173.02	105.83	163.34	89.14	12,577.68	1,827.98	661.47	392.32	269.15	2.458	
22,900.00	9,155.27	9,161.67	9,155.27	106.56	162.98	87.63	12,577.68	1,827.98	676.86	408.59	268.27	2.523	
23,000.00	9,137.53	9,143.93	9,137.53	107.29	162.62	86.11	12,577.68	1,827.98	705.78	440.03	265.75	2.656	
23,100.00	9,119.78	9,126.18	9,119.78	108.02	162.26	84.61	12,577.68	1,827.98	746.64	484.56	262.08	2.849	
23,200.00	9,102.04	9,108.43	9,102.04	108.75	161.90	83.11	12,577.68	1,827.98	797.61	539.81	257.80	3.094	
23,300.00	9,084.29	9,085.44	9,079.10	109.48	161.43	81.18	12,577.81	1,827.98	856.83	603.50	253.34	3.382	
23,400.00	9,066.54	9,067.47	9,061.13	110.21	161.08	79.69	12,577.97	1,827.98	922.71	673.74	248.97	3.706	
23,500.00	9,048.80	9,049.73	9,043.39	110.94	160.72	78.23	12,578.11	1,827.98	993.96	749.10	244.86	4.059	
23,600.00	9,031.05	9,032.19	9,025.86	111.67	160.37	76.80	12,578.23	1,827.98	1,069.52	828.44	241.08	4.436	
23,700.00	9,013.31	9,014.87	9,008.54	112.41	160.02	75.41	12,578.33	1,827.98	1,148.54	910.89	237.65	4.833	
23,800.00	8,995.56	8,997.75	8,991.42	113.14	159.68	74.05	12,578.41	1,827.98	1,230.36	995.80	234.56	5.245	
23,900.00	8,977.82	8,980.84	8,974.51	113.87	159.34	72.72	12,578.47	1,827.98	1,314.46	1,082.69	231.78	5.671	
24,000.00	8,959.73	8,963.81	8,957.48	114.61	159.00	69.96	12,578.51	1,827.98	1,400.38	1,171.11	229.28	6.108	
24,100.00	8,938.95	8,944.50	8,938.17	115.34	158.62	66.44	12,578.53	1,827.98	1,487.38	1,260.39	226.99	6.553	
24,200.00	8,917.45	8,923.77	8,917.45	116.07	158.20	64.97	12,577.68	1,827.98	1,576.29	1,351.40	224.88	7.009	
24,300.00	8,895.96	8,902.28	8,895.96	116.81	157.78	63.49	12,577.68	1,827.98	1,665.50	1,442.52	222.98	7.469	
24,400.00	8,874.46	8,880.78	8,874.46	117.55	157.35	62.05	12,577.68	1,827.98	1,755.61	1,534.37	221.25	7.935	
24,500.00	8,852.96	8,859.28	8,852.96	118.28	156.92	60.64	12,577.68	1,827.98	1,846.50	1,626.84	219.66	8.406	
24,600.00	8,831.46	8,837.78	8,831.46	119.02	156.49	59.27	12,577.68	1,827.98	1,938.04	1,719.84	218.19	8.882	
24,700.00	8,809.97	8,816.29	8,809.97	119.75	156.06	57.94	12,577.68	1,827.98	2,030.15	1,813.31	216.84	9.362	
24,800.00	8,788.47	8,794.79	8,788.47	120.49	155.63	56.65	12,577.68	1,827.98	2,122.76	1,907.17	215.58	9.847	
24,900.00	8,766.97	8,773.29	8,766.97	121.23	155.20	55.40	12,577.68	1,827.98	2,215.80	2,001.39	214.41	10.334	
25,000.00	8,745.48	8,743.46	8,737.16	121.96	154.63	53.72	12,577.82	1,827.98	2,309.11	2,095.83	213.28	10.827	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) BRIDGES STATE 180 P & A - Vertical - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
26,000.00	8,479.76	8,495.40	8,479.76	129.32	253.28	-131.20	17,847.77	407.16	2,223.27	1,906.72	316.54	7.024	
26,100.00	8,450.45	8,465.96	8,450.45	130.05	251.79	-129.89	17,847.77	407.16	2,132.82	1,816.39	316.43	6.740	
26,200.00	8,421.14	8,436.62	8,421.14	130.79	250.29	-128.52	17,847.77	407.16	2,042.84	1,726.39	316.45	6.456	
26,300.00	8,391.84	8,407.23	8,391.84	131.53	248.74	-127.10	17,847.77	407.16	1,953.39	1,636.83	316.56	6.171	
26,400.00	8,362.53	8,377.79	8,362.53	132.26	247.15	-125.63	17,847.77	407.16	1,864.56	1,547.75	316.81	5.885	
26,500.00	8,333.23	8,348.41	8,333.23	133.00	245.54	-124.10	17,847.77	407.16	1,776.43	1,459.20	317.24	5.600	
26,600.00	8,303.92	8,319.01	8,303.92	133.73	243.89	-122.51	17,847.77	407.16	1,689.12	1,371.26	317.85	5.314	
26,700.00	8,274.62	8,289.59	8,274.62	134.47	242.22	-120.86	17,847.77	407.16	1,602.75	1,284.05	318.70	5.029	
26,800.00	8,245.31	8,260.18	8,245.31	135.21	240.55	-119.16	17,847.77	407.16	1,517.49	1,197.65	319.84	4.745	
26,900.00	8,217.06	8,231.89	8,217.06	135.94	238.95	-116.31	17,847.77	407.16	1,433.26	1,111.88	321.38	4.460	
27,000.00	8,189.09	8,203.78	8,189.09	136.68	237.36	-114.53	17,847.77	407.16	1,350.53	1,027.22	323.31	4.177	
27,100.00	8,161.11	8,175.73	8,161.11	137.42	235.78	-112.70	17,847.77	407.16	1,269.66	943.98	325.68	3.898	
27,200.00	8,133.14	8,147.66	8,133.14	138.16	234.20	-110.82	17,847.77	407.16	1,191.05	862.54	328.51	3.626	
27,300.00	8,105.17	8,119.56	8,105.17	138.90	232.58	-108.89	17,847.77	407.16	1,115.16	783.38	331.78	3.361	
27,400.00	8,077.20	8,091.47	8,077.20	139.63	230.92	-106.92	17,847.77	407.16	1,042.59	707.05	335.54	3.107	
27,500.00	8,049.22	8,063.39	8,049.22	140.37	229.27	-104.90	17,847.77	407.16	974.09	634.28	339.81	2.867	
27,600.00	8,021.25	8,035.38	8,021.25	141.11	227.63	-102.85	17,847.77	407.16	910.57	566.07	344.50	2.643	
27,700.00	7,993.28	8,007.29	7,993.28	141.85	225.98	-100.76	17,847.77	407.16	853.15	503.70	349.45	2.441	
27,800.00	7,965.31	7,979.19	7,965.31	142.59	224.33	-98.64	17,847.77	407.16	803.13	448.77	354.36	2.266	
27,900.00	7,937.33	7,951.14	7,937.33	143.33	222.69	-96.50	17,847.77	407.16	761.98	403.21	358.77	2.124	
28,000.00	7,909.36	7,922.99	7,909.36	144.07	221.05	-94.34	17,847.77	407.16	731.20	369.09	362.10	2.019	
28,100.00	7,881.39	7,896.68	7,883.13	144.81	219.54	-92.31	17,847.97	407.16	712.15	348.26	363.89	1.957	
28,199.58	7,853.53	7,866.88	7,853.40	145.55	217.91	-89.99	17,847.94	407.16	705.70	342.39	363.31	1.942	CC, ES, SF
28,200.00	7,853.42	7,866.76	7,853.28	145.55	217.91	-89.98	17,847.95	407.16	705.70	342.40	363.30	1.942	
28,300.00	7,825.44	7,837.51	7,824.16	146.29	216.33	-87.72	17,848.14	407.16	712.23	351.82	360.41	1.976	
28,400.00	7,797.47	7,810.79	7,797.47	147.03	214.87	-85.63	17,847.77	407.16	731.52	376.04	355.48	2.058	
28,444.58	7,785.00	7,797.48	7,784.23	147.36	214.14	-84.62	17,848.04	407.16	743.85	391.21	352.64	2.109	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) IRONHOUSE 19 STATE COM 001H - Horizontal - PRODUCING - Surveys

Offset Site Error: 0.00 usft

Survey Program: 100-r.5 GYRO-NS, 7583-MWD OWSG Rev5

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,300.00	9,994.53	9,353.84	9,348.64	44.84	27.58	-44.05	5,284.76	739.20	2,275.84	2,212.52	63.33	35.937	
13,400.00	9,988.84	9,368.00	9,362.11	45.29	27.59	-44.80	5,289.15	739.33	2,181.47	2,118.05	63.42	34.396	
13,500.00	9,983.15	9,368.00	9,362.11	45.75	27.59	-44.80	5,289.15	739.33	2,087.32	2,023.89	63.44	32.905	
13,600.00	9,977.45	9,368.00	9,362.11	46.22	27.59	-44.80	5,289.15	739.33	1,993.74	1,930.29	63.45	31.421	
13,700.00	9,971.76	9,368.00	9,362.11	46.69	27.59	-44.80	5,289.15	739.33	1,900.82	1,837.34	63.47	29.947	
13,800.00	9,966.06	9,380.95	9,374.32	47.18	27.60	-45.51	5,293.46	739.34	1,808.48	1,744.88	63.60	28.437	
13,900.00	9,960.37	9,399.00	9,391.22	47.67	27.62	-46.53	5,299.78	739.07	1,717.00	1,653.22	63.78	26.923	
14,000.00	9,954.68	9,399.00	9,391.22	48.16	27.62	-46.53	5,299.78	739.07	1,626.16	1,562.32	63.83	25.475	
14,100.00	9,948.98	9,399.00	9,391.22	48.67	27.62	-46.53	5,299.78	739.07	1,536.45	1,472.55	63.91	24.042	
14,200.00	9,943.29	9,414.91	9,405.99	49.18	27.63	-47.46	5,305.69	738.51	1,447.79	1,383.64	64.15	22.570	
14,300.00	9,937.60	9,431.00	9,420.77	49.70	27.65	-48.45	5,311.98	737.59	1,360.60	1,296.16	64.43	21.116	
14,400.00	9,931.90	9,431.00	9,420.77	50.22	27.65	-48.45	5,311.98	737.59	1,274.92	1,210.32	64.60	19.736	
14,500.00	9,926.21	9,448.76	9,436.90	50.75	27.67	-49.58	5,319.27	736.27	1,191.13	1,126.12	65.01	18.321	
14,600.00	9,920.52	9,463.00	9,449.72	51.29	27.68	-50.51	5,325.36	735.06	1,109.59	1,044.12	65.47	16.949	
14,700.00	9,914.82	9,476.75	9,461.96	51.83	27.70	-51.43	5,331.50	733.79	1,030.78	964.77	66.01	15.615	
14,800.00	9,909.13	9,494.00	9,477.08	52.38	27.72	-52.60	5,339.62	732.06	955.34	888.62	66.72	14.318	
14,900.00	9,903.43	9,509.54	9,490.44	52.93	27.74	-53.66	5,347.39	730.48	883.97	816.42	67.55	13.086	
15,000.00	9,897.74	9,526.00	9,504.30	53.49	27.76	-54.79	5,356.13	728.90	817.54	748.99	68.55	11.926	
15,100.00	9,892.05	9,557.00	9,529.51	54.05	27.79	-56.89	5,373.97	726.32	756.80	686.84	69.97	10.816	
15,200.00	9,886.35	9,604.29	9,566.14	54.62	27.85	-60.06	5,403.76	723.81	702.10	630.26	71.84	9.773	
15,300.00	9,880.66	9,652.00	9,601.47	55.20	27.90	-63.29	5,435.76	722.00	654.01	580.09	73.91	8.849	
15,400.00	9,874.97	9,693.06	9,630.15	55.77	27.96	-66.05	5,465.10	720.51	613.89	537.92	75.97	8.080	
15,500.00	9,868.46	9,746.00	9,665.23	56.36	28.03	-69.82	5,504.69	718.59	581.87	503.58	78.29	7.432	
15,600.00	9,861.83	9,805.44	9,701.98	56.95	28.14	-73.78	5,551.33	716.20	558.65	478.03	80.62	6.929	
15,700.00	9,855.20	9,864.23	9,734.48	57.54	28.29	-77.47	5,600.21	713.24	544.79	462.14	82.65	6.592	
15,800.00	9,848.57	9,929.99	9,765.47	58.14	28.50	-81.17	5,658.01	708.77	539.85	455.43	84.42	6.395	
15,815.35	9,847.55	9,940.81	9,770.06	58.23	28.54	-81.73	5,667.77	707.93	539.77	455.09	84.67	6.375	
15,900.00	9,841.94	10,002.45	9,792.56	58.74	28.80	-84.55	5,724.86	702.52	542.19	456.25	85.94	6.309	
16,000.00	9,835.31	10,081.04	9,812.18	59.34	29.19	-87.19	5,800.44	693.97	550.11	462.85	87.27	6.304	
16,100.00	9,828.68	10,192.55	9,823.46	59.95	29.87	-89.15	5,910.34	680.91	560.54	471.48	89.06	6.294	
16,200.00	9,822.06	10,299.54	9,820.59	60.57	30.63	-89.59	6,016.95	672.46	567.29	476.71	90.58	6.263	
16,300.00	9,815.43	10,432.82	9,814.22	61.18	31.68	-89.84	6,149.87	665.70	571.30	478.74	92.56	6.172	
16,400.00	9,808.80	10,536.55	9,807.96	61.80	32.57	-89.90	6,253.39	663.82	572.05	477.95	94.11	6.079	
16,500.00	9,802.17	10,640.39	9,801.00	62.43	33.53	-89.89	6,356.99	662.64	572.13	476.43	95.71	5.978	
16,600.00	9,795.54	10,743.47	9,793.38	63.05	34.55	-89.81	6,459.79	662.14	571.56	474.22	97.35	5.872	
16,700.00	9,788.91	10,843.83	9,784.53	63.68	35.58	-89.59	6,559.76	661.88	570.77	471.80	98.97	5.767	
16,800.00	9,782.28	10,944.95	9,773.51	64.31	36.67	-89.16	6,660.28	661.85	569.79	469.18	100.61	5.663	
16,900.00	9,775.65	11,043.38	9,761.97	64.95	37.76	-88.65	6,758.02	661.85	568.84	466.60	102.24	5.564	
17,000.00	9,769.03	11,141.33	9,753.40	65.59	38.89	-88.44	6,855.59	661.31	568.39	464.42	103.96	5.467	
17,100.00	9,762.40	11,243.00	9,745.07	66.23	40.11	-88.27	6,956.92	660.76	567.91	462.12	105.79	5.368	
17,200.00	9,755.77	11,344.73	9,736.28	66.87	41.35	-88.06	7,058.27	660.62	567.06	459.42	107.64	5.268	
17,300.00	9,749.14	11,444.82	9,727.70	67.52	42.60	-87.86	7,157.99	660.63	566.07	456.56	109.50	5.169	
17,400.00	9,742.51	11,544.02	9,720.68	68.17	43.87	-87.81	7,256.93	660.50	565.15	453.74	111.41	5.073	
17,500.00	9,735.88	11,646.04	9,713.12	68.82	45.20	-87.73	7,358.68	660.39	564.23	450.85	113.38	4.976	
17,600.00	9,729.25	11,748.23	9,704.89	69.47	46.56	-87.57	7,460.53	660.82	562.81	447.45	115.37	4.878	
17,700.00	9,722.62	11,851.35	9,695.78	70.13	47.94	-87.33	7,563.25	661.73	560.98	443.61	117.37	4.780	
17,800.00	9,716.00	11,943.14	9,687.62	70.79	49.20	-87.11	7,654.67	662.24	559.49	440.28	119.21	4.693	
17,900.00	9,709.37	12,048.02	9,679.91	71.45	50.65	-87.03	7,759.27	662.14	558.57	437.25	121.32	4.604	
18,000.00	9,702.74	12,148.20	9,673.22	72.11	52.05	-87.02	7,859.21	662.65	557.01	433.62	123.39	4.514	
18,100.00	9,696.11	12,253.15	9,665.33	72.78	53.54	-86.91	7,963.86	663.74	554.96	429.44	125.52	4.421	
18,200.00	9,689.48	12,356.12	9,656.34	73.44	55.00	-86.66	8,066.43	665.53	552.28	424.68	127.60	4.328	
18,300.00	9,682.85	12,456.97	9,646.13	74.11	56.45	-86.27	8,166.73	668.12	548.89	419.26	129.63	4.234	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) IRONHOUSE 19 STATE COM 001H - Horizontal - PRODUCING - Surveys

Offset Site Error: 0.00 usft

Survey Program: 100-r.5 GYRO-NS, 7583-MWD OWSG Rev5

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,400.00	9,676.22	12,549.36	9,637.83	74.78	57.79	-86.03	8,258.73	669.38	546.61	415.04	131.57	4.154	
18,500.00	9,669.60	12,649.75	9,628.62	75.46	59.25	-85.75	8,358.69	670.30	544.82	411.18	133.64	4.077	
18,600.00	9,662.97	12,750.94	9,620.25	76.13	60.74	-85.55	8,459.52	671.30	542.91	407.15	135.76	3.999	
18,700.00	9,656.34	12,853.41	9,610.51	76.81	62.25	-85.22	8,561.52	672.76	540.67	402.80	137.87	3.922	
18,800.00	9,649.71	12,964.38	9,598.40	77.49	63.90	-84.68	8,671.79	675.58	537.50	397.46	140.04	3.838	
18,900.00	9,643.08	13,070.02	9,588.73	78.17	65.47	-84.33	8,776.88	680.41	532.12	389.95	142.17	3.743	
19,000.00	9,636.45	13,173.86	9,577.85	78.85	67.02	-83.82	8,879.99	685.89	526.22	381.99	144.23	3.648	
19,100.00	9,629.82	13,273.10	9,565.58	79.53	68.50	-83.11	8,978.29	691.80	519.90	373.71	146.19	3.556	
19,200.00	9,622.88	13,365.40	9,552.67	80.22	69.88	-82.35	9,069.55	696.79	514.39	366.34	148.05	3.474	
19,300.00	9,613.89	13,469.07	9,538.33	80.91	71.44	-81.72	9,172.09	701.85	509.19	359.13	150.06	3.393	
19,400.00	9,604.73	13,576.82	9,525.68	81.60	73.07	-81.28	9,278.90	708.29	502.62	350.45	152.16	3.303	
19,500.00	9,595.58	13,677.01	9,514.09	82.29	74.59	-80.86	9,378.20	714.99	495.34	341.13	154.22	3.212	
19,600.00	9,586.43	13,779.13	9,502.78	82.98	76.15	-80.47	9,479.44	722.11	487.74	331.45	156.29	3.121	
19,700.00	9,577.27	13,880.92	9,490.56	83.68	77.70	-79.95	9,580.20	729.80	479.75	321.44	158.31	3.030	
19,800.00	9,568.12	13,982.55	9,476.28	84.38	79.24	-79.13	9,680.44	738.45	471.23	311.03	160.20	2.941	
19,900.00	9,558.96	14,082.78	9,459.96	85.07	80.76	-78.01	9,778.91	747.60	462.66	300.70	161.95	2.857	
20,000.00	9,549.81	14,182.85	9,441.82	85.77	82.28	-76.60	9,876.82	757.47	453.97	290.42	163.55	2.776	
20,069.89	9,543.41	14,214.00	9,436.09	86.26	82.75	-76.13	9,907.28	760.58	449.64	285.25	164.39	2.735	CC, ES, SF
20,100.00	9,540.66	14,214.00	9,436.09	86.47	82.75	-76.13	9,907.28	760.58	450.64	286.66	163.99	2.748	
20,200.00	9,531.25	14,214.00	9,436.09	87.17	82.75	-75.95	9,907.28	760.58	468.02	309.34	158.68	2.949	
20,300.00	9,519.27	14,214.00	9,436.09	87.88	82.75	-75.51	9,907.28	760.58	504.43	355.25	149.18	3.381	
20,400.00	9,506.58	14,214.00	9,436.09	88.59	82.75	-75.51	9,907.28	760.58	556.50	418.40	138.09	4.030	
20,500.00	9,493.90	14,214.00	9,436.09	89.29	82.75	-75.51	9,907.28	760.58	620.43	493.04	127.39	4.870	
20,600.00	9,481.22	14,214.00	9,436.09	90.00	82.75	-75.51	9,907.28	760.58	692.94	574.94	118.00	5.872	
20,700.00	9,468.54	14,214.00	9,436.09	90.71	82.75	-75.51	9,907.28	760.58	771.63	661.49	110.14	7.006	
20,800.00	9,455.85	14,214.00	9,436.09	91.43	82.75	-75.51	9,907.28	760.58	854.78	751.07	103.71	8.242	
20,900.00	9,443.17	14,214.00	9,436.09	92.14	82.75	-75.51	9,907.28	760.58	941.22	842.73	98.49	9.557	
21,000.00	9,430.49	14,214.00	9,436.09	92.85	82.75	-75.51	9,907.28	760.58	1,030.12	935.87	94.25	10.930	
21,100.00	9,417.81	14,214.00	9,436.09	93.56	82.75	-75.51	9,907.28	760.58	1,120.88	1,030.08	90.80	12.344	
21,200.00	9,405.13	14,214.00	9,436.09	94.28	82.75	-75.51	9,907.28	760.58	1,213.10	1,125.12	87.98	13.788	
21,300.00	9,392.44	14,214.00	9,436.09	94.99	82.75	-75.51	9,907.28	760.58	1,306.47	1,220.81	85.66	15.251	
21,400.00	9,379.76	14,214.00	9,436.09	95.71	82.75	-75.51	9,907.28	760.58	1,400.75	1,317.01	83.74	16.727	
21,500.00	9,366.09	14,214.00	9,436.09	96.43	82.75	-72.15	9,907.28	760.58	1,495.69	1,413.55	82.14	18.209	
21,600.00	9,351.40	14,214.00	9,436.09	97.15	82.75	-72.15	9,907.28	760.58	1,591.17	1,510.38	80.80	19.694	
21,700.00	9,336.72	14,214.00	9,436.09	97.87	82.75	-72.15	9,907.28	760.58	1,687.18	1,607.51	79.66	21.179	
21,800.00	9,322.03	14,214.00	9,436.09	98.59	82.75	-72.15	9,907.28	760.58	1,783.62	1,704.91	78.70	22.663	
21,900.00	9,307.35	14,214.00	9,436.09	99.31	82.75	-72.15	9,907.28	760.58	1,880.43	1,802.54	77.89	24.143	
22,000.00	9,292.66	14,214.00	9,436.09	100.03	82.75	-72.15	9,907.28	760.58	1,977.56	1,900.37	77.19	25.620	
22,100.00	9,277.97	14,214.00	9,436.09	100.75	82.75	-72.15	9,907.28	760.58	2,074.96	1,998.38	76.59	27.093	
22,200.00	9,263.29	14,214.00	9,436.09	101.48	82.75	-72.15	9,907.28	760.58	2,172.60	2,096.53	76.07	28.560	
22,300.00	9,248.60	14,214.00	9,436.09	102.20	82.75	-72.15	9,907.28	760.58	2,270.45	2,194.82	75.63	30.022	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) IRONHOUSE 19 STATE COM 001H - Pilot - Pilot

Offset Site Error: 0.00 usft

Survey Program: 1966-MWD OWSG Rev5

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Rule Assigned: Minimum Separation (usft)	Separation Factor	Warning
13,200.00	10,000.23	9,903.98	9,906.72	44.40	230.52	-94.17	5,267.54	805.70	2,250.02	1,982.04	267.98	8.396	
13,300.00	9,994.53	9,902.29	9,905.03	44.84	230.52	-93.96	5,267.47	805.73	2,152.06	1,883.97	268.09	8.027	
13,400.00	9,988.84	9,900.59	9,903.34	45.29	230.52	-93.74	5,267.40	805.75	2,054.29	1,786.07	268.22	7.659	
13,500.00	9,983.15	9,898.89	9,901.63	45.75	230.51	-93.52	5,267.34	805.78	1,956.74	1,688.39	268.35	7.292	
13,600.00	9,977.45	9,897.17	9,899.92	46.22	230.51	-93.29	5,267.27	805.80	1,859.46	1,590.95	268.51	6.925	
13,700.00	9,971.76	9,895.45	9,898.21	46.69	230.51	-93.07	5,267.20	805.83	1,762.47	1,493.79	268.68	6.560	
13,800.00	9,966.06	9,893.73	9,896.48	47.18	230.51	-92.85	5,267.13	805.85	1,665.84	1,396.96	268.88	6.195	
13,900.00	9,960.37	9,891.99	9,894.74	47.67	230.51	-92.62	5,267.06	805.88	1,569.63	1,300.52	269.12	5.833	
14,000.00	9,954.68	9,890.25	9,893.00	48.16	230.51	-92.40	5,267.00	805.90	1,473.93	1,204.54	269.38	5.471	
14,100.00	9,948.98	9,888.49	9,891.25	48.67	230.51	-92.17	5,266.93	805.93	1,378.83	1,109.13	269.70	5.112	
14,200.00	9,943.29	9,886.73	9,889.49	49.18	230.51	-91.94	5,266.86	805.95	1,284.47	1,014.40	270.07	4.756	
14,300.00	9,937.60	9,884.96	9,887.72	49.70	230.51	-91.71	5,266.79	805.98	1,191.03	920.51	270.52	4.403	
14,400.00	9,931.90	9,883.19	9,885.95	50.22	230.51	-91.48	5,266.72	806.01	1,098.75	827.69	271.06	4.054	
14,500.00	9,926.21	9,881.40	9,884.16	50.75	230.51	-91.25	5,266.65	806.04	1,007.93	736.21	271.72	3.709	
14,600.00	9,920.52	9,879.90	9,882.66	51.29	230.51	-91.05	5,266.59	806.06	919.02	646.47	272.55	3.372	
14,700.00	9,914.82	9,877.88	9,880.65	51.83	230.51	-90.79	5,266.51	806.09	832.62	559.05	273.58	3.043	
14,800.00	9,909.13	9,876.14	9,878.91	52.38	230.51	-90.56	5,266.45	806.12	749.61	474.75	274.87	2.727	
14,900.00	9,903.43	9,874.39	9,877.16	52.93	230.51	-90.34	5,266.38	806.14	671.25	394.77	276.48	2.428	
15,000.00	9,897.74	9,872.64	9,875.41	53.49	230.51	-90.11	5,266.31	806.17	599.35	320.91	278.44	2.153	
15,100.00	9,892.05	9,870.88	9,873.65	54.05	230.51	-89.88	5,266.24	806.20	536.53	255.81	280.72	1.911	
15,200.00	9,886.35	9,869.11	9,871.88	54.62	230.51	-89.65	5,266.17	806.22	486.31	203.25	283.06	1.718	
15,300.00	9,880.66	9,867.33	9,870.11	55.20	230.51	-89.42	5,266.10	806.25	452.91	167.95	284.96	1.589	
15,400.00	9,874.97	9,865.55	9,868.33	55.77	230.51	-89.19	5,266.03	806.28	440.17	154.45	285.72	1.541	
15,406.91	9,874.57	9,865.43	9,868.20	55.81	230.51	-89.17	5,266.03	806.28	440.12	154.40	285.72	1.540	CC, ES, SF
15,500.00	9,868.46	9,862.96	9,865.74	56.36	230.51	-88.84	5,265.93	806.31	449.84	164.84	284.99	1.578	
15,600.00	9,861.83	9,860.24	9,863.02	56.95	230.50	-88.49	5,265.83	806.35	480.56	197.47	283.09	1.698	
15,700.00	9,855.20	9,857.51	9,860.29	57.54	230.50	-88.13	5,265.72	806.39	528.69	247.99	280.70	1.883	
15,800.00	9,848.57	9,854.76	9,857.55	58.14	230.50	-87.78	5,265.62	806.43	589.97	311.59	278.38	2.119	
15,900.00	9,841.94	9,852.01	9,854.80	58.74	230.50	-87.42	5,265.51	806.47	660.76	384.35	276.41	2.391	
16,000.00	9,835.31	9,849.25	9,852.04	59.34	230.50	-87.06	5,265.41	806.51	738.33	463.51	274.82	2.687	
16,100.00	9,828.68	9,846.48	9,849.27	59.95	230.50	-86.70	5,265.30	806.55	820.75	547.17	273.58	3.000	
16,200.00	9,822.06	9,843.69	9,846.49	60.57	230.50	-86.34	5,265.19	806.59	906.71	634.09	272.63	3.326	
16,300.00	9,815.43	9,840.90	9,843.70	61.18	230.50	-85.97	5,265.09	806.63	995.29	723.40	271.89	3.661	
16,400.00	9,808.80	9,838.09	9,840.89	61.80	230.50	-85.61	5,264.98	806.67	1,085.85	814.53	271.32	4.002	
16,500.00	9,802.17	9,835.28	9,838.08	62.43	230.50	-85.25	5,264.87	806.71	1,177.93	907.05	270.88	4.348	
16,600.00	9,795.54	9,832.45	9,835.26	63.05	230.50	-84.88	5,264.77	806.75	1,271.20	1,000.66	270.54	4.699	
16,700.00	9,788.91	9,829.62	9,832.42	63.68	230.50	-84.51	5,264.66	806.79	1,365.42	1,095.15	270.27	5.052	
16,800.00	9,782.28	9,826.77	9,829.58	64.31	230.50	-84.14	5,264.55	806.83	1,460.40	1,190.34	270.06	5.408	
16,900.00	9,775.65	9,823.91	9,826.72	64.95	230.50	-83.78	5,264.44	806.87	1,556.00	1,286.11	269.89	5.765	
17,000.00	9,769.03	9,821.04	9,823.85	65.59	230.50	-83.41	5,264.33	806.90	1,652.12	1,382.36	269.77	6.124	
17,100.00	9,762.40	9,818.16	9,820.98	66.23	230.50	-83.04	5,264.22	806.94	1,748.68	1,479.01	269.67	6.485	
17,200.00	9,755.77	9,815.27	9,818.09	66.87	230.50	-82.66	5,264.11	806.98	1,845.59	1,576.00	269.59	6.846	
17,300.00	9,749.14	9,812.36	9,815.19	67.52	230.50	-82.29	5,264.00	807.02	1,942.81	1,673.27	269.54	7.208	
17,400.00	9,742.51	9,809.45	9,812.27	68.17	230.50	-81.92	5,263.89	807.06	2,040.30	1,770.80	269.50	7.571	
17,500.00	9,735.88	9,806.52	9,809.35	68.82	230.50	-81.54	5,263.78	807.09	2,138.01	1,868.54	269.47	7.934	
17,600.00	9,729.25	9,803.59	9,806.42	69.47	230.50	-81.17	5,263.67	807.13	2,235.93	1,966.47	269.46	8.298	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) IRONHOUSE 19 STATE COM 003H - Horizontal - PRODUCING - Surveys

Offset Site Error: 0.00 usft

Survey Program: 100-r.5 GYRO-NS, 8272-3_MWD+HRGM

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,700.00	9,971.76	9,343.00	9,336.84	46.69	29.55	68.10	5,290.60	2,581.08	2,259.98	2,190.60	69.38	32.573	
13,800.00	9,966.06	9,359.00	9,351.30	47.18	29.56	68.63	5,297.29	2,579.61	2,183.77	2,113.86	69.90	31.240	
13,900.00	9,960.37	9,359.00	9,351.30	47.67	29.56	68.63	5,297.29	2,579.61	2,109.29	2,038.80	70.48	29.926	
14,000.00	9,954.68	9,372.23	9,363.16	48.16	29.57	69.07	5,303.05	2,578.49	2,036.85	1,965.72	71.13	28.636	
14,100.00	9,948.98	9,390.00	9,378.92	48.67	29.58	69.66	5,311.12	2,577.05	1,966.62	1,894.79	71.84	27.377	
14,200.00	9,943.29	9,390.00	9,378.92	49.18	29.58	69.66	5,311.12	2,577.05	1,898.79	1,826.16	72.63	26.142	
14,300.00	9,937.60	9,409.74	9,396.17	49.70	29.59	70.32	5,320.59	2,575.52	1,833.56	1,760.07	73.48	24.953	
14,400.00	9,931.90	9,422.00	9,406.73	50.22	29.60	70.72	5,326.75	2,574.58	1,771.27	1,696.85	74.42	23.802	
14,500.00	9,926.21	9,438.14	9,420.43	50.75	29.61	71.26	5,335.20	2,573.40	1,712.17	1,636.76	75.42	22.703	
14,600.00	9,920.52	9,453.00	9,432.84	51.29	29.62	71.74	5,343.31	2,572.38	1,656.57	1,580.08	76.49	21.657	
14,700.00	9,914.82	9,473.79	9,449.90	51.83	29.64	72.42	5,355.11	2,571.07	1,604.71	1,527.10	77.61	20.677	
14,800.00	9,909.13	9,485.00	9,458.98	52.38	29.65	72.78	5,361.66	2,570.42	1,556.92	1,478.10	78.82	19.753	
14,900.00	9,903.43	9,517.00	9,484.22	52.93	29.67	73.81	5,381.25	2,568.77	1,513.34	1,433.36	79.99	18.920	
15,000.00	9,897.74	9,548.00	9,507.64	53.49	29.70	74.78	5,401.50	2,567.31	1,474.39	1,393.22	81.18	18.162	
15,100.00	9,892.05	9,581.42	9,531.89	54.05	29.74	75.80	5,424.44	2,565.71	1,439.90	1,357.54	82.36	17.483	
15,200.00	9,886.35	9,665.91	9,591.18	54.62	29.87	78.34	5,484.38	2,560.38	1,408.70	1,325.43	83.27	16.918	
15,300.00	9,880.66	9,717.12	9,623.47	55.20	29.96	79.75	5,523.77	2,555.42	1,380.62	1,296.31	84.31	16.376	
15,400.00	9,874.97	9,756.00	9,645.49	55.77	30.04	80.74	5,555.59	2,551.55	1,356.84	1,271.45	85.39	15.890	
15,500.00	9,868.46	9,802.00	9,669.73	56.36	30.15	81.98	5,594.51	2,548.04	1,337.79	1,251.39	86.40	15.484	
15,600.00	9,861.83	9,849.61	9,692.55	56.95	30.28	83.07	5,636.18	2,545.16	1,323.14	1,235.79	87.35	15.147	
15,700.00	9,855.20	9,918.98	9,718.08	57.54	30.49	84.34	5,700.44	2,540.60	1,311.77	1,223.57	88.20	14.872	
15,800.00	9,848.57	10,007.72	9,739.56	58.14	30.81	85.51	5,786.24	2,533.89	1,302.14	1,213.10	89.04	14.625	
15,900.00	9,841.94	10,095.75	9,751.46	58.74	31.18	86.27	5,873.14	2,526.89	1,293.66	1,203.69	89.96	14.380	
16,000.00	9,835.31	10,188.86	9,754.73	59.34	31.63	86.67	5,965.88	2,519.53	1,286.16	1,195.18	90.98	14.137	
16,100.00	9,828.68	10,295.06	9,754.45	59.95	32.19	86.95	6,071.71	2,510.81	1,278.66	1,186.58	92.08	13.886	
16,200.00	9,822.06	10,409.86	9,747.22	60.57	32.89	86.95	6,185.75	2,499.97	1,270.27	1,176.96	93.31	13.614	
16,300.00	9,815.43	10,513.34	9,737.72	61.18	33.57	86.80	6,288.23	2,489.12	1,260.98	1,166.38	94.60	13.329	
16,400.00	9,808.80	10,614.30	9,728.05	61.80	34.30	86.64	6,388.15	2,478.40	1,251.60	1,155.64	95.96	13.043	
16,500.00	9,802.17	10,716.22	9,718.50	62.43	35.08	86.48	6,489.03	2,467.44	1,242.07	1,144.70	97.37	12.757	
16,600.00	9,795.54	10,784.86	9,711.44	63.05	35.63	86.34	6,556.97	2,460.78	1,233.67	1,134.94	98.73	12.495	
16,700.00	9,788.91	10,867.55	9,701.20	63.68	36.32	86.11	6,638.79	2,454.52	1,227.48	1,127.32	100.16	12.255	
16,800.00	9,782.28	10,961.88	9,688.96	64.31	37.13	85.81	6,732.08	2,447.96	1,222.02	1,120.35	101.67	12.020	
16,900.00	9,775.65	11,048.45	9,677.06	64.95	37.90	85.50	6,817.65	2,442.35	1,217.17	1,113.99	103.17	11.797	
17,000.00	9,769.03	11,136.74	9,665.93	65.59	38.71	85.24	6,905.12	2,437.96	1,213.71	1,109.01	104.70	11.592	
17,100.00	9,762.40	11,227.67	9,653.84	66.23	39.57	84.94	6,995.14	2,433.73	1,210.71	1,104.44	106.27	11.393	
17,200.00	9,755.77	11,315.22	9,644.30	66.87	40.42	84.75	7,082.13	2,431.03	1,209.04	1,101.21	107.82	11.213	
17,300.00	9,749.14	11,421.99	9,635.48	67.52	41.49	84.66	7,188.49	2,427.99	1,207.41	1,097.89	109.53	11.024	
17,400.00	9,742.51	11,539.58	9,624.91	68.17	42.70	84.51	7,305.51	2,423.52	1,204.93	1,093.58	111.34	10.822	
17,500.00	9,735.88	11,639.05	9,615.22	68.82	43.75	84.35	7,404.38	2,418.55	1,201.30	1,088.24	113.07	10.625	
17,600.00	9,729.25	11,733.87	9,607.49	69.47	44.78	84.26	7,498.80	2,414.46	1,198.21	1,083.44	114.77	10.440	
17,700.00	9,722.62	11,827.60	9,599.42	70.13	45.81	84.16	7,592.11	2,410.75	1,195.53	1,079.04	116.49	10.263	
17,800.00	9,716.00	11,930.01	9,591.16	70.79	46.95	84.08	7,694.11	2,407.06	1,193.14	1,074.85	118.29	10.087	
17,900.00	9,709.37	12,037.94	9,585.03	71.45	48.18	84.11	7,801.79	2,402.85	1,190.22	1,070.08	120.14	9.907	
18,000.00	9,702.74	12,180.16	9,578.47	72.11	49.84	84.22	7,943.59	2,394.29	1,185.03	1,062.81	122.23	9.695	
18,100.00	9,696.11	12,283.77	9,572.58	72.78	51.07	84.22	8,046.66	2,385.60	1,177.63	1,053.54	124.09	9.490	
18,200.00	9,689.48	12,374.58	9,566.32	73.44	52.17	84.18	8,136.98	2,378.51	1,170.94	1,045.02	125.91	9.299	
18,300.00	9,682.85	12,495.06	9,556.96	74.11	53.64	84.07	8,256.70	2,368.84	1,164.21	1,036.30	127.91	9.102	
18,400.00	9,676.22	12,665.56	9,547.09	74.78	55.77	84.04	8,425.50	2,347.18	1,152.20	1,022.24	129.97	8.865	
18,500.00	9,669.60	12,774.69	9,539.77	75.46	57.16	83.94	8,532.98	2,329.77	1,137.38	1,005.49	131.89	8.624	
18,600.00	9,662.97	12,874.09	9,531.75	76.13	58.44	83.78	8,630.68	2,313.36	1,122.16	988.32	133.84	8.384	
18,700.00	9,656.34	12,982.13	9,521.97	76.81	59.84	83.54	8,736.71	2,295.10	1,106.67	970.88	135.79	8.150	
18,800.00	9,649.71	13,080.60	9,512.12	77.49	61.13	83.26	8,833.16	2,277.83	1,090.65	952.88	137.77	7.916	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) IRONHOUSE 19 STATE COM 003H - Horizontal - PRODUCING - Surveys

Offset Site Error: 0.00 usft

Survey Program: 100-r.5 GYRO-NS, 8272-3_MWD+HRGM

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,900.00	9,643.08	13,148.56	9,504.99	78.17	62.03	83.05	8,899.84	2,266.81	1,076.06	936.26	139.80	7.697	
19,000.00	9,636.45	13,225.83	9,496.98	78.85	63.04	82.83	8,975.98	2,256.44	1,064.17	922.38	141.78	7.506	
19,100.00	9,629.82	13,309.02	9,489.87	79.53	64.14	82.68	9,058.29	2,246.66	1,053.81	910.07	143.74	7.331	
19,200.00	9,622.88	13,394.02	9,483.05	80.22	65.26	82.65	9,142.59	2,238.18	1,045.06	899.38	145.68	7.174	
19,300.00	9,613.89	13,490.60	9,474.11	80.91	66.53	82.63	9,238.32	2,229.07	1,036.79	889.12	147.67	7.021	
19,400.00	9,604.73	13,582.70	9,463.47	81.60	67.75	82.45	9,329.38	2,220.33	1,028.76	879.11	149.64	6.875	
19,500.00	9,595.58	13,660.97	9,454.45	82.29	68.79	82.30	9,406.89	2,214.27	1,022.42	870.90	151.52	6.748	
19,600.00	9,586.43	13,752.35	9,443.12	82.98	69.99	82.10	9,497.38	2,208.39	1,017.53	864.06	153.47	6.630	
19,700.00	9,577.27	13,855.33	9,427.85	83.68	71.36	81.73	9,598.99	2,201.60	1,012.83	857.31	155.52	6.513	
19,800.00	9,568.12	13,950.72	9,411.27	84.38	72.62	81.23	9,692.69	2,195.05	1,008.28	850.77	157.51	6.401	
19,900.00	9,558.96	14,036.00	9,394.56	85.07	73.75	80.68	9,776.12	2,189.21	1,004.26	844.86	159.40	6.300	
19,927.99	9,556.40	14,036.00	9,394.56	85.27	73.75	80.68	9,776.12	2,189.21	1,003.87	844.24	159.63	6.289	CC, ES, SF
20,000.00	9,549.81	14,036.00	9,394.56	85.77	73.75	80.68	9,776.12	2,189.21	1,006.45	846.69	159.75	6.300	
20,100.00	9,540.66	14,036.00	9,394.56	86.47	73.75	80.68	9,776.12	2,189.21	1,018.50	859.63	158.87	6.411	
20,200.00	9,531.25	14,036.00	9,394.56	87.17	73.75	80.49	9,776.12	2,189.21	1,040.03	883.17	156.86	6.630	
20,300.00	9,519.27	14,036.00	9,394.56	87.88	73.75	80.12	9,776.12	2,189.21	1,070.10	916.19	153.91	6.953	
20,400.00	9,506.58	14,036.00	9,394.56	88.59	73.75	80.12	9,776.12	2,189.21	1,108.30	958.03	150.27	7.375	
20,500.00	9,493.90	14,036.00	9,394.56	89.29	73.75	80.12	9,776.12	2,189.21	1,153.92	1,007.75	146.18	7.894	
20,600.00	9,481.22	14,036.00	9,394.56	90.00	73.75	80.12	9,776.12	2,189.21	1,206.13	1,064.28	141.86	8.503	
20,700.00	9,468.54	14,036.00	9,394.56	90.71	73.75	80.12	9,776.12	2,189.21	1,264.11	1,126.63	137.48	9.195	
20,800.00	9,455.85	14,036.00	9,394.56	91.43	73.75	80.12	9,776.12	2,189.21	1,327.10	1,193.92	133.18	9.965	
20,900.00	9,443.17	14,036.00	9,394.56	92.14	73.75	80.12	9,776.12	2,189.21	1,394.42	1,265.38	129.04	10.806	
21,000.00	9,430.49	14,036.00	9,394.56	92.85	73.75	80.12	9,776.12	2,189.21	1,465.47	1,340.34	125.13	11.711	
21,100.00	9,417.81	14,036.00	9,394.56	93.56	73.75	80.12	9,776.12	2,189.21	1,539.75	1,418.27	121.48	12.675	
21,200.00	9,405.13	14,036.00	9,394.56	94.28	73.75	80.12	9,776.12	2,189.21	1,616.80	1,498.70	118.10	13.690	
21,300.00	9,392.44	14,036.00	9,394.56	94.99	73.75	80.12	9,776.12	2,189.21	1,696.25	1,581.26	114.99	14.752	
21,400.00	9,379.76	14,036.00	9,394.56	95.71	73.75	80.12	9,776.12	2,189.21	1,777.77	1,665.64	112.13	15.855	
21,500.00	9,366.09	14,036.00	9,394.56	96.43	73.75	78.41	9,776.12	2,189.21	1,861.00	1,751.49	109.51	16.994	
21,600.00	9,351.40	14,036.00	9,394.56	97.15	73.75	78.41	9,776.12	2,189.21	1,945.71	1,838.59	107.11	18.165	
21,700.00	9,336.72	14,036.00	9,394.56	97.87	73.75	78.41	9,776.12	2,189.21	2,031.80	1,926.88	104.93	19.364	
21,800.00	9,322.03	14,036.00	9,394.56	98.59	73.75	78.41	9,776.12	2,189.21	2,119.12	2,016.19	102.93	20.587	
21,900.00	9,307.35	14,036.00	9,394.56	99.31	73.75	78.41	9,776.12	2,189.21	2,207.52	2,106.40	101.12	21.831	
22,000.00	9,292.66	14,036.00	9,394.56	100.03	73.75	78.41	9,776.12	2,189.21	2,296.87	2,197.41	99.46	23.093	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) IRONHOUSE 19 STATE COM 004H - Horizontal - PRODUCING - Surveys

Offset Site Error: 0.00 usft

Survey Program: 100-NS-GYRO-MS, 9356-MWD+HRGM

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Rule Assigned: Warning
13,200.00	10,000.23	9,513.00	9,524.00	44.40	23.89	-71.25	5,024.17	178.27	2,290.23	2,228.57	61.66	37.142	
13,300.00	9,994.53	9,513.00	9,524.00	44.84	23.89	-71.25	5,024.17	178.27	2,203.82	2,141.93	61.89	35.610	
13,400.00	9,988.84	9,513.00	9,524.00	45.29	23.89	-71.25	5,024.17	178.27	2,118.60	2,056.46	62.14	34.092	
13,500.00	9,983.15	9,513.00	9,524.00	45.75	23.89	-71.25	5,024.17	178.27	2,034.73	1,972.30	62.43	32.592	
13,600.00	9,977.45	9,525.53	9,536.19	46.22	23.90	-71.88	5,025.82	175.91	1,952.22	1,889.37	62.85	31.063	
13,700.00	9,971.76	9,527.69	9,538.30	46.69	23.90	-71.99	5,026.12	175.48	1,871.52	1,808.29	63.23	29.597	
13,800.00	9,966.06	9,529.99	9,540.53	47.18	23.90	-72.10	5,026.45	175.02	1,792.77	1,729.10	63.67	28.158	
13,900.00	9,960.37	9,532.43	9,542.89	47.67	23.90	-72.23	5,026.80	174.53	1,716.21	1,652.05	64.16	26.750	
14,000.00	9,954.68	9,544.00	9,554.06	48.16	23.90	-72.81	5,028.56	172.12	1,642.25	1,577.45	64.79	25.346	
14,100.00	9,948.98	9,544.00	9,554.06	48.67	23.90	-72.81	5,028.56	172.12	1,571.02	1,505.63	65.38	24.028	
14,200.00	9,943.29	9,544.00	9,554.06	49.18	23.90	-72.81	5,028.56	172.12	1,503.06	1,437.03	66.03	22.762	
14,300.00	9,937.60	9,544.00	9,554.06	49.70	23.90	-72.81	5,028.56	172.12	1,438.86	1,372.11	66.75	21.558	
14,400.00	9,931.90	9,544.00	9,554.06	50.22	23.90	-72.81	5,028.56	172.12	1,378.92	1,311.41	67.52	20.424	
14,500.00	9,926.21	9,544.00	9,554.06	50.75	23.90	-72.81	5,028.56	172.12	1,323.84	1,255.50	68.34	19.372	
14,600.00	9,920.52	9,544.00	9,554.06	51.29	23.90	-72.81	5,028.56	172.12	1,274.23	1,205.03	69.20	18.415	
14,700.00	9,914.82	9,558.03	9,567.54	51.83	23.91	-73.51	5,030.92	169.00	1,230.52	1,160.24	70.28	17.509	
14,800.00	9,909.13	9,562.44	9,571.75	52.38	23.91	-73.74	5,031.72	167.98	1,193.70	1,122.48	71.22	16.761	
14,900.00	9,903.43	9,575.00	9,583.70	52.93	23.91	-74.37	5,034.15	164.95	1,164.34	1,092.09	72.24	16.117	
15,000.00	9,897.74	9,575.00	9,583.70	53.49	23.91	-74.37	5,034.15	164.95	1,142.80	1,069.81	72.99	15.657	
15,100.00	9,892.05	9,575.00	9,583.70	54.05	23.91	-74.37	5,034.15	164.95	1,129.74	1,056.13	73.61	15.347	
15,200.00	9,886.35	9,585.59	9,593.70	54.62	23.92	-74.90	5,036.36	162.26	1,125.34	1,051.09	74.25	15.156	
15,200.07	9,886.35	9,585.59	9,593.70	54.62	23.92	-74.90	5,036.36	162.26	1,125.34	1,051.09	74.25	15.156	CC, ES
15,300.00	9,880.66	9,593.34	9,600.97	55.20	23.92	-75.29	5,038.08	160.22	1,129.71	1,055.04	74.67	15.130	
15,400.00	9,874.97	9,607.00	9,613.70	55.77	23.93	-75.97	5,041.32	156.47	1,142.74	1,067.75	74.99	15.239	
15,500.00	9,868.46	9,607.00	9,613.70	56.36	23.93	-75.88	5,041.32	156.47	1,163.88	1,088.95	74.93	15.533	
15,600.00	9,861.83	9,622.89	9,628.34	56.95	23.93	-76.67	5,045.42	151.86	1,192.84	1,117.89	74.95	15.916	
15,700.00	9,855.20	9,638.00	9,642.10	57.54	23.94	-77.41	5,049.64	147.23	1,229.09	1,154.28	74.81	16.429	
15,800.00	9,848.57	9,650.97	9,653.75	58.14	23.95	-78.05	5,053.50	143.06	1,271.93	1,197.40	74.53	17.066	
15,900.00	9,841.94	9,669.00	9,669.73	58.74	23.96	-78.92	5,059.23	136.97	1,320.65	1,246.41	74.24	17.789	
16,000.00	9,835.31	9,693.10	9,690.67	59.34	23.97	-80.06	5,067.49	128.38	1,374.51	1,300.54	73.98	18.581	
16,100.00	9,828.68	9,715.90	9,710.05	59.95	23.98	-81.12	5,075.88	119.77	1,432.82	1,359.16	73.66	19.452	
16,200.00	9,822.06	9,738.77	9,728.96	60.57	24.00	-82.15	5,084.85	110.54	1,495.06	1,421.73	73.33	20.388	
16,300.00	9,815.43	9,763.00	9,748.24	61.18	24.01	-83.20	5,095.02	99.98	1,560.70	1,487.67	73.03	21.372	
16,400.00	9,808.80	9,803.23	9,778.17	61.80	24.05	-84.82	5,113.60	80.60	1,629.14	1,556.17	72.97	22.326	
16,500.00	9,802.17	9,960.73	9,869.51	62.43	24.31	-89.61	5,206.79	-6.28	1,696.61	1,621.68	74.94	22.641	
16,600.00	9,795.54	10,058.33	9,903.17	63.05	24.73	-91.29	5,274.71	-67.46	1,764.36	1,688.20	76.16	23.167	
16,700.00	9,788.91	11,462.14	9,813.56	63.68	37.07	-90.82	6,551.36	-535.95	1,768.79	1,670.08	98.70	17.920	
16,800.00	9,782.28	11,566.66	9,801.27	64.31	38.02	-90.64	6,655.16	-536.66	1,768.34	1,668.03	100.31	17.629	
16,900.00	9,775.65	11,659.66	9,791.98	64.95	38.90	-90.54	6,747.70	-537.00	1,767.64	1,665.76	101.89	17.349	
16,920.47	9,774.30	11,675.58	9,790.51	65.08	39.06	-90.53	6,763.54	-537.15	1,767.62	1,665.42	102.19	17.297	
17,000.00	9,769.03	11,750.74	9,783.69	65.59	39.79	-90.47	6,838.39	-538.22	1,767.88	1,664.40	103.49	17.083	
17,100.00	9,762.40	11,857.96	9,773.34	66.23	40.87	-90.36	6,945.10	-539.32	1,767.82	1,662.59	105.23	16.800	
17,200.00	9,755.77	11,961.36	9,765.95	66.87	41.94	-90.34	7,048.23	-540.19	1,767.60	1,660.62	106.98	16.522	
17,300.00	9,749.14	12,071.95	9,758.62	67.52	43.10	-90.34	7,158.58	-540.69	1,767.00	1,658.17	108.82	16.237	
17,400.00	9,742.51	12,163.23	9,751.84	68.17	44.09	-90.32	7,249.60	-540.94	1,766.21	1,655.68	110.53	15.979	
17,500.00	9,735.88	12,258.84	9,743.81	68.82	45.14	-90.27	7,344.86	-541.68	1,765.93	1,653.64	112.29	15.727	
17,600.00	9,729.25	12,380.44	9,733.81	69.47	46.49	-90.20	7,466.06	-542.10	1,765.22	1,650.95	114.27	15.448	
17,700.00	9,722.62	12,464.00	9,727.28	70.13	47.44	-90.17	7,549.36	-542.31	1,764.39	1,648.42	115.97	15.214	
17,739.41	9,720.01	12,494.66	9,724.73	70.39	47.79	-90.15	7,579.91	-542.57	1,764.30	1,647.67	116.63	15.128	
17,800.00	9,716.00	12,543.08	9,720.55	70.79	48.36	-90.12	7,628.14	-543.25	1,764.51	1,646.87	117.64	14.999	
17,900.00	9,709.37	12,634.81	9,712.05	71.45	49.44	-90.04	7,719.46	-545.13	1,765.50	1,646.07	119.43	14.783	
18,000.00	9,702.74	12,773.98	9,699.11	72.11	51.08	-89.92	7,858.02	-546.62	1,765.49	1,643.85	121.64	14.514	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) IRONHOUSE 19 STATE COM 004H - Horizontal - PRODUCING - Surveys

Offset Site Error: 0.00 usft

Survey Program: 100-NS-GYRO-MS, 9356-MWD+HRGM

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,100.00	9,696.11	12,876.43	9,691.94	72.78	52.31	-89.91	7,960.21	-546.53	1,764.35	1,640.79	123.56	14.279	
18,200.00	9,689.48	12,976.63	9,685.00	73.44	53.51	-89.90	8,060.17	-546.38	1,763.14	1,637.67	125.47	14.052	
18,300.00	9,682.85	13,069.99	9,677.95	74.11	54.65	-89.87	8,153.26	-546.32	1,762.03	1,634.70	127.34	13.838	
18,400.00	9,676.22	13,169.13	9,670.18	74.78	55.87	-89.83	8,252.10	-546.78	1,761.44	1,632.18	129.26	13.627	
18,500.00	9,669.60	13,280.87	9,663.21	75.46	57.25	-89.85	8,363.62	-546.65	1,760.26	1,628.95	131.31	13.405	
18,600.00	9,662.97	13,374.00	9,657.21	76.13	58.41	-89.85	8,456.55	-546.48	1,759.02	1,625.81	133.21	13.205	
18,700.00	9,656.34	13,474.82	9,650.56	76.81	59.68	-89.85	8,557.15	-546.45	1,757.93	1,622.74	135.18	13.004	
18,800.00	9,649.71	13,563.00	9,644.73	77.49	60.80	-89.85	8,645.14	-546.58	1,757.03	1,619.98	137.05	12.820	
18,900.00	9,643.08	13,656.00	9,639.02	78.17	61.99	-89.87	8,737.96	-547.23	1,756.68	1,617.70	138.98	12.640	
19,000.00	9,636.45	13,761.81	9,634.00	78.85	63.35	-89.93	8,843.65	-548.05	1,756.39	1,615.34	141.04	12.453	
19,033.09	9,634.26	13,788.54	9,632.92	79.08	63.70	-89.96	8,870.35	-548.29	1,756.33	1,614.68	141.65	12.399	
19,100.00	9,629.82	13,844.00	9,630.73	79.53	64.42	-90.00	8,925.77	-549.09	1,756.57	1,613.69	142.89	12.293	
19,200.00	9,622.88	13,974.94	9,624.00	80.22	66.13	-90.09	9,056.52	-550.35	1,756.52	1,611.30	145.22	12.096	
19,300.00	9,613.89	14,091.38	9,615.54	80.91	67.64	-90.16	9,172.65	-549.36	1,754.57	1,607.18	147.39	11.905	
19,400.00	9,604.73	14,195.05	9,606.45	81.60	68.99	-90.17	9,275.91	-548.34	1,752.53	1,603.09	149.44	11.728	
19,500.00	9,595.58	14,293.02	9,597.65	82.29	70.26	-90.18	9,373.48	-547.14	1,750.25	1,598.81	151.44	11.557	
19,600.00	9,586.43	14,398.86	9,588.36	82.98	71.65	-90.19	9,478.90	-545.91	1,748.03	1,594.51	153.52	11.386	
19,700.00	9,577.27	14,497.17	9,579.07	83.68	72.94	-90.18	9,576.76	-544.53	1,745.57	1,590.03	155.54	11.223	
19,800.00	9,568.12	14,598.10	9,568.23	84.38	74.27	-90.13	9,677.10	-543.17	1,743.17	1,585.59	157.58	11.062	
19,878.24	9,560.96	14,634.00	9,564.24	84.92	74.74	-90.11	9,712.77	-542.68	1,741.78	1,583.00	158.78	10.970	
19,900.00	9,558.96	14,634.00	9,564.24	85.07	74.74	-90.11	9,712.77	-542.68	1,741.92	1,582.92	158.99	10.956	
20,000.00	9,549.81	14,634.00	9,564.24	85.77	74.74	-90.11	9,712.77	-542.68	1,746.03	1,586.32	159.71	10.932	SF
20,100.00	9,540.66	14,634.00	9,564.24	86.47	74.74	-90.11	9,712.77	-542.68	1,755.84	1,595.85	160.00	10.974	
20,200.00	9,531.25	14,634.00	9,564.24	87.17	74.74	-89.98	9,712.77	-542.68	1,771.25	1,611.39	159.86	11.080	
20,300.00	9,519.27	14,634.00	9,564.24	87.88	74.74	-89.72	9,712.77	-542.68	1,792.11	1,632.78	159.34	11.247	
20,400.00	9,506.58	14,634.00	9,564.24	88.59	74.74	-89.72	9,712.77	-542.68	1,818.24	1,659.78	158.46	11.475	
20,500.00	9,493.90	14,634.00	9,564.24	89.29	74.74	-89.72	9,712.77	-542.68	1,849.42	1,692.17	157.25	11.761	
20,600.00	9,481.22	14,634.00	9,564.24	90.00	74.74	-89.72	9,712.77	-542.68	1,885.39	1,729.62	155.76	12.104	
20,700.00	9,468.54	14,634.00	9,564.24	90.71	74.74	-89.72	9,712.77	-542.68	1,925.88	1,771.84	154.04	12.502	
20,800.00	9,455.85	14,634.00	9,564.24	91.43	74.74	-89.72	9,712.77	-542.68	1,970.62	1,818.49	152.13	12.954	
20,900.00	9,443.17	14,634.00	9,564.24	92.14	74.74	-89.72	9,712.77	-542.68	2,019.33	1,869.25	150.07	13.456	
21,000.00	9,430.49	14,634.00	9,564.24	92.85	74.74	-89.72	9,712.77	-542.68	2,071.72	1,923.81	147.91	14.006	
21,100.00	9,417.81	14,634.00	9,564.24	93.56	74.74	-89.72	9,712.77	-542.68	2,127.52	1,981.84	145.69	14.604	
21,200.00	9,405.13	14,634.00	9,564.24	94.28	74.74	-89.72	9,712.77	-542.68	2,186.48	2,043.06	143.42	15.245	
21,300.00	9,392.44	14,634.00	9,564.24	94.99	74.74	-89.72	9,712.77	-542.68	2,248.34	2,107.19	141.14	15.929	
21,400.00	9,379.76	14,634.00	9,564.24	95.71	74.74	-89.72	9,712.77	-542.68	2,312.87	2,173.99	138.88	16.654	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) IRONHOUSE 19 STATE COM 004H - ST01 - ST01

Offset Site Error: 0.00 usft

Survey Program: 100-NS-GYRO-MS, 9253-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,200.00	10,000.23	9,486.00	9,498.57	44.40	23.75	-69.47	5,026.69	211.12	2,282.38	2,220.87	61.50	37.109	
13,300.00	9,994.53	9,486.00	9,498.57	44.84	23.75	-69.47	5,026.69	211.12	2,195.49	2,133.77	61.72	35.572	
13,400.00	9,988.84	9,486.00	9,498.57	45.29	23.75	-69.47	5,026.69	211.12	2,109.77	2,047.80	61.96	34.048	
13,500.00	9,983.15	9,486.00	9,498.57	45.75	23.75	-69.47	5,026.69	211.12	2,025.35	1,963.11	62.24	32.542	
13,600.00	9,977.45	9,486.00	9,498.57	46.22	23.75	-69.47	5,026.69	211.12	1,942.42	1,879.87	62.55	31.055	
13,700.00	9,971.76	9,486.00	9,498.57	46.69	23.75	-69.47	5,026.69	211.12	1,861.16	1,798.27	62.90	29.590	
13,800.00	9,966.06	9,486.00	9,498.57	47.18	23.75	-69.47	5,026.69	211.12	1,781.82	1,718.52	63.29	28.152	
13,900.00	9,960.37	9,486.00	9,498.57	47.67	23.75	-69.47	5,026.69	211.12	1,704.64	1,640.91	63.74	26.746	
14,000.00	9,954.68	9,501.91	9,513.83	48.16	23.76	-70.24	5,031.03	210.04	1,629.55	1,565.18	64.36	25.318	
14,100.00	9,948.98	9,517.00	9,528.11	48.67	23.76	-70.97	5,035.77	208.85	1,557.58	1,492.52	65.06	23.941	
14,200.00	9,943.29	9,517.00	9,528.11	49.18	23.76	-70.97	5,035.77	208.85	1,488.46	1,422.77	65.70	22.657	
14,300.00	9,937.60	9,517.00	9,528.11	49.70	23.76	-70.97	5,035.77	208.85	1,423.02	1,356.62	66.40	21.432	
14,400.00	9,931.90	9,517.00	9,528.11	50.22	23.76	-70.97	5,035.77	208.85	1,361.77	1,294.61	67.16	20.276	
14,500.00	9,926.21	9,536.94	9,546.69	50.75	23.77	-71.94	5,042.76	207.03	1,304.86	1,236.66	68.20	19.133	
14,600.00	9,920.52	9,549.00	9,557.79	51.29	23.78	-72.52	5,047.31	205.80	1,253.23	1,184.02	69.21	18.107	
14,700.00	9,914.82	9,559.84	9,567.68	51.83	23.78	-73.05	5,051.59	204.61	1,207.37	1,137.12	70.25	17.186	
14,800.00	9,909.13	9,580.00	9,585.84	52.38	23.79	-74.02	5,059.99	202.16	1,167.96	1,096.54	71.41	16.355	
14,900.00	9,903.43	9,580.00	9,585.84	52.93	23.79	-74.02	5,059.99	202.16	1,135.51	1,063.21	72.30	15.705	
15,000.00	9,897.74	9,611.00	9,613.21	53.49	23.80	-75.51	5,073.83	197.69	1,110.55	1,037.03	73.52	15.105	
15,100.00	9,892.05	9,621.50	9,622.34	54.05	23.81	-76.01	5,078.73	195.96	1,093.55	1,019.19	74.37	14.705	
15,200.00	9,886.35	9,643.00	9,640.79	54.62	23.82	-77.04	5,089.04	192.04	1,084.91	1,009.70	75.21	14.425	
15,249.67	9,883.53	9,643.00	9,640.79	54.91	23.82	-77.04	5,089.04	192.04	1,083.77	1,008.36	75.42	14.370	CC, ES
15,300.00	9,880.66	9,654.20	9,650.27	55.20	23.82	-77.57	5,094.54	189.75	1,084.75	1,009.02	75.73	14.323	SF
15,400.00	9,874.97	9,674.00	9,666.79	55.77	23.83	-78.50	5,104.42	185.08	1,093.28	1,017.10	76.18	14.352	
15,500.00	9,868.46	9,674.00	9,666.79	56.36	23.83	-78.43	5,104.42	185.08	1,110.03	1,033.89	76.14	14.579	
15,600.00	9,861.83	9,692.35	9,681.75	56.95	23.84	-79.28	5,113.70	179.95	1,134.78	1,058.59	76.19	14.894	
15,700.00	9,855.20	9,705.00	9,691.86	57.54	23.85	-79.87	5,120.15	175.90	1,167.22	1,091.22	76.00	15.359	
15,800.00	9,848.57	9,718.12	9,702.13	58.14	23.85	-80.46	5,126.89	171.30	1,206.60	1,130.92	75.68	15.943	
15,900.00	9,841.94	9,737.00	9,716.52	58.74	23.86	-81.30	5,136.71	164.04	1,252.23	1,176.88	75.36	16.617	
16,000.00	9,835.31	9,737.00	9,716.52	59.34	23.86	-81.30	5,136.71	164.04	1,303.51	1,228.82	74.69	17.452	
16,100.00	9,828.68	9,768.00	9,738.93	59.95	23.88	-82.60	5,153.18	150.36	1,359.53	1,285.07	74.46	18.259	
16,200.00	9,822.06	9,768.00	9,738.93	60.57	23.88	-82.60	5,153.18	150.36	1,419.98	1,346.23	73.75	19.254	
16,300.00	9,815.43	9,799.00	9,759.83	61.18	23.90	-83.82	5,169.92	134.75	1,484.00	1,410.49	73.51	20.188	
16,400.00	9,808.80	9,813.45	9,769.20	61.80	23.91	-84.36	5,177.71	126.97	1,551.32	1,478.29	73.04	21.241	
16,500.00	9,802.17	9,831.00	9,780.38	62.43	23.92	-85.00	5,187.04	117.20	1,621.48	1,548.85	72.63	22.326	
16,600.00	9,795.54	9,862.00	9,799.37	63.05	23.93	-86.07	5,203.58	99.11	1,693.98	1,621.54	72.44	23.385	
16,700.00	9,788.91	9,982.92	9,860.43	63.68	24.01	-89.39	5,275.04	23.45	1,766.79	1,693.16	73.64	23.994	
16,800.00	9,782.28	10,039.16	9,880.86	64.31	24.06	-90.45	5,311.59	-14.04	1,839.08	1,765.18	73.90	24.885	
16,900.00	9,775.65	10,082.00	9,893.23	64.95	24.11	-91.07	5,339.69	-43.92	1,912.47	1,838.48	73.99	25.848	
17,000.00	9,769.03	10,224.79	9,917.83	65.59	24.37	-92.27	5,436.05	-146.00	1,985.77	1,910.06	75.71	26.228	
17,100.00	9,762.40	10,302.53	9,930.38	66.23	24.54	-92.82	5,490.05	-200.48	2,057.10	1,980.69	76.41	26.923	
17,200.00	9,755.77	10,368.00	9,940.44	66.87	24.71	-93.24	5,535.73	-246.30	2,128.25	2,051.33	76.92	27.669	
17,300.00	9,749.14	10,368.00	9,940.44	67.52	24.71	-93.24	5,535.73	-246.30	2,200.68	2,124.31	76.36	28.819	
17,400.00	9,742.51	10,368.00	9,940.44	68.17	24.71	-93.24	5,535.73	-246.30	2,275.19	2,199.36	75.83	30.003	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) LEA 30 STATE 001 P & A - Vertical - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,600.00	10,052.20	10,058.79	10,052.20	38.83	228.16	-91.14	2,990.08	-367.66	2,247.36	1,980.95	266.41	8.436	
11,700.00	10,050.08	10,056.67	10,050.08	39.09	228.11	-91.07	2,990.08	-367.66	2,180.13	1,913.50	266.63	8.177	
11,800.00	10,047.95	10,054.54	10,047.95	39.36	228.07	-90.99	2,990.08	-367.66	2,115.49	1,848.62	266.87	7.927	
11,900.00	10,045.83	10,052.42	10,045.83	39.64	228.02	-90.92	2,990.08	-367.66	2,053.68	1,786.55	267.14	7.688	
12,000.00	10,043.70	10,050.29	10,043.70	39.93	227.98	-90.85	2,990.08	-367.66	1,994.97	1,727.55	267.43	7.460	
12,100.00	10,041.58	10,048.17	10,041.58	40.24	227.93	-90.77	2,990.08	-367.66	1,939.64	1,671.90	267.74	7.244	
12,200.00	10,039.45	10,046.05	10,039.45	40.56	227.89	-90.70	2,990.08	-367.66	1,887.99	1,619.91	268.08	7.043	
12,300.00	10,037.33	10,043.92	10,037.33	40.89	227.84	-90.62	2,990.08	-367.66	1,840.32	1,571.89	268.44	6.856	
12,400.00	10,035.21	10,041.80	10,035.21	41.24	227.80	-90.55	2,990.08	-367.66	1,796.96	1,528.15	268.81	6.685	
12,500.00	10,033.08	10,039.67	10,033.08	41.59	227.75	-90.47	2,990.08	-367.66	1,758.22	1,489.03	269.19	6.531	
12,600.00	10,030.96	10,037.55	10,030.96	41.95	227.71	-90.40	2,990.08	-367.66	1,724.41	1,454.83	269.58	6.397	
12,700.00	10,028.30	10,034.90	10,028.30	42.33	227.65	-90.62	2,990.08	-367.66	1,695.83	1,425.89	269.95	6.282	
12,800.00	10,023.00	10,029.59	10,023.00	42.72	227.54	-90.67	2,990.08	-367.66	1,672.78	1,402.52	270.25	6.190	
12,900.00	10,017.31	10,023.90	10,017.31	43.13	227.42	-90.48	2,990.08	-367.66	1,655.44	1,384.90	270.54	6.119	
13,000.00	10,011.61	10,018.20	10,011.61	43.54	227.30	-90.28	2,990.08	-367.66	1,643.99	1,373.20	270.79	6.071	
13,100.00	10,005.92	10,012.51	10,005.92	43.97	227.17	-90.08	2,990.08	-367.66	1,638.55	1,367.55	271.00	6.046	
13,139.50	10,003.67	10,010.26	10,003.67	44.14	227.13	-90.00	2,990.08	-367.66	1,638.08	1,367.01	271.07	6.043	CC, ES, SF
13,200.00	10,000.23	10,006.82	10,000.23	44.40	227.05	-89.88	2,990.08	-367.66	1,639.19	1,368.03	271.16	6.045	
13,300.00	9,994.53	10,001.12	9,994.53	44.84	226.93	-89.68	2,990.08	-367.66	1,645.90	1,374.62	271.28	6.067	
13,400.00	9,988.84	9,995.43	9,988.84	45.29	226.81	-89.48	2,990.08	-367.66	1,658.60	1,387.25	271.34	6.113	
13,500.00	9,983.15	9,989.74	9,983.15	45.75	226.69	-89.28	2,990.08	-367.66	1,677.15	1,405.80	271.35	6.181	
13,600.00	9,977.45	9,984.04	9,977.45	46.22	226.57	-89.08	2,990.08	-367.66	1,701.37	1,430.06	271.31	6.271	
13,700.00	9,971.76	9,978.35	9,971.76	46.69	226.45	-88.89	2,990.08	-367.66	1,731.02	1,459.80	271.22	6.382	
13,800.00	9,966.06	9,972.66	9,966.06	47.18	226.33	-88.69	2,990.08	-367.66	1,765.83	1,494.74	271.09	6.514	
13,900.00	9,960.37	9,966.96	9,960.37	47.67	226.21	-88.49	2,990.08	-367.66	1,805.49	1,534.57	270.92	6.664	
14,000.00	9,954.68	9,961.27	9,954.68	48.16	226.09	-88.29	2,990.08	-367.66	1,849.69	1,578.98	270.71	6.833	
14,100.00	9,948.98	9,955.57	9,948.98	48.67	225.97	-88.09	2,990.08	-367.66	1,898.12	1,627.64	270.48	7.018	
14,200.00	9,943.29	9,949.88	9,943.29	49.18	225.85	-87.89	2,990.08	-367.66	1,950.47	1,680.23	270.24	7.218	
14,300.00	9,937.60	9,944.19	9,937.60	49.70	225.73	-87.69	2,990.08	-367.66	2,006.42	1,736.44	269.97	7.432	
14,400.00	9,931.90	9,938.49	9,931.90	50.22	225.60	-87.50	2,990.08	-367.66	2,065.68	1,795.98	269.70	7.659	
14,500.00	9,926.21	9,932.80	9,926.21	50.75	225.48	-87.30	2,990.08	-367.66	2,127.97	1,858.55	269.42	7.898	
14,600.00	9,920.52	9,927.11	9,920.52	51.29	225.36	-87.10	2,990.08	-367.66	2,193.05	1,923.91	269.14	8.148	
14,700.00	9,914.82	9,921.41	9,914.82	51.83	225.24	-86.90	2,990.08	-367.66	2,260.66	1,991.80	268.86	8.408	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) LEA SOUTHEAST STATE 1 P & A - Vertical - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,300.00	6,234.03	6,218.75	6,234.03	22.90	122.27	-59.74	1,614.73	2,266.51	2,309.87	2,164.72	145.16	15.913	
6,400.00	6,332.52	6,320.26	6,335.53	23.28	124.34	-60.13	1,615.59	2,266.51	2,301.76	2,154.15	147.60	15.594	
6,500.00	6,431.01	6,422.94	6,438.21	23.65	126.44	-60.51	1,615.30	2,266.51	2,292.86	2,142.79	150.07	15.278	
6,600.00	6,529.50	6,525.63	6,540.90	24.03	128.53	-60.89	1,614.75	2,266.51	2,283.88	2,131.34	152.54	14.972	
6,700.00	6,627.99	6,612.77	6,627.99	24.41	130.31	-61.23	1,614.73	2,266.51	2,275.35	2,120.65	154.71	14.707	
6,800.00	6,726.48	6,711.26	6,726.48	24.78	132.32	-61.60	1,614.73	2,266.51	2,266.97	2,109.88	157.10	14.430	
6,900.00	6,824.97	6,811.31	6,826.52	25.16	134.37	-62.01	1,615.84	2,266.51	2,259.56	2,100.04	159.52	14.165	
7,000.00	6,923.46	6,916.14	6,931.34	25.54	136.51	-62.41	1,615.56	2,266.51	2,251.18	2,089.15	162.03	13.894	
7,100.00	7,021.95	7,021.01	7,036.20	25.91	138.65	-62.82	1,614.91	2,266.51	2,242.62	2,078.08	164.54	13.630	
7,200.00	7,120.44	7,105.28	7,120.44	26.29	140.51	-63.15	1,614.73	2,266.51	2,234.47	2,067.68	166.79	13.397	
7,300.00	7,218.93	7,203.77	7,218.93	26.67	142.73	-63.54	1,614.73	2,266.51	2,226.61	2,057.22	169.39	13.145	
7,400.00	7,317.42	7,302.72	7,317.87	27.04	144.97	-63.95	1,615.55	2,266.51	2,219.51	2,047.51	172.01	12.904	
7,500.00	7,415.91	7,406.03	7,421.18	27.42	147.31	-64.37	1,615.39	2,266.51	2,211.74	2,037.02	174.72	12.659	
7,600.00	7,514.40	7,509.37	7,524.51	27.80	149.64	-64.78	1,614.94	2,266.51	2,203.86	2,026.44	177.43	12.421	
7,700.00	7,612.89	7,597.86	7,612.89	28.18	151.85	-65.14	1,614.73	2,266.51	2,196.24	2,016.22	180.03	12.199	
7,800.00	7,711.38	7,696.35	7,711.38	28.55	154.47	-65.54	1,614.73	2,266.51	2,188.93	2,005.91	183.02	11.960	
7,900.00	7,809.86	7,795.21	7,810.21	28.93	157.09	-65.98	1,616.62	2,266.51	2,183.29	1,997.26	186.02	11.737	
8,000.00	7,908.35	7,906.07	7,921.05	29.31	160.04	-66.44	1,616.22	2,266.51	2,175.91	1,986.58	189.33	11.492	
8,100.00	8,006.84	8,017.00	8,031.96	29.69	162.98	-66.89	1,615.06	2,266.51	2,168.09	1,975.45	192.64	11.255	
8,200.00	8,105.33	8,090.57	8,105.33	30.06	165.07	-67.20	1,614.73	2,266.51	2,160.81	1,965.67	195.14	11.073	
8,300.00	8,203.82	8,189.06	8,203.82	30.44	167.96	-67.61	1,614.73	2,266.51	2,154.07	1,955.67	198.40	10.857	
8,400.00	8,302.31	8,305.43	8,320.15	30.82	171.37	-68.13	1,615.74	2,266.51	2,148.38	1,946.21	202.17	10.627	
8,500.00	8,400.80	8,386.30	8,400.80	31.20	173.75	-68.46	1,614.73	2,266.51	2,140.95	1,936.00	204.95	10.446	
8,600.00	8,499.29	8,485.66	8,500.14	31.57	176.86	-68.91	1,615.86	2,266.51	2,135.53	1,927.10	208.43	10.246	
8,700.00	8,597.78	8,583.35	8,597.78	31.95	179.91	-69.32	1,614.73	2,266.51	2,128.31	1,916.44	211.87	10.046	
8,800.00	8,696.27	8,681.97	8,696.27	32.33	183.04	-69.75	1,614.73	2,266.51	2,122.17	1,906.80	215.37	9.854	
8,900.00	8,794.76	8,780.46	8,794.76	32.71	186.16	-70.18	1,614.73	2,266.51	2,116.16	1,897.29	218.87	9.669	
9,000.00	8,893.25	8,895.74	8,909.96	33.09	189.81	-70.72	1,616.69	2,266.51	2,112.04	1,889.16	222.88	9.476	
9,100.00	8,991.74	9,016.67	9,030.84	33.46	193.65	-71.23	1,614.86	2,266.51	2,104.99	1,877.94	227.05	9.271	
9,200.00	9,090.23	9,076.34	9,090.23	33.84	195.42	-71.50	1,614.73	2,266.51	2,098.88	1,869.62	229.26	9.155	
9,300.00	9,188.72	9,174.83	9,188.72	34.22	198.31	-71.94	1,614.73	2,266.51	2,093.37	1,860.84	232.53	9.003	
9,400.00	9,287.52	9,281.10	9,294.92	34.60	201.44	-54.63	1,617.03	2,266.51	2,088.97	1,852.95	236.02	8.851	
9,500.00	9,386.81	9,402.96	9,416.74	34.96	205.02	-22.85	1,615.79	2,266.51	2,079.09	1,839.15	239.93	8.665	
9,600.00	9,486.11	9,472.52	9,486.11	35.30	207.02	9.63	1,614.73	2,266.51	2,066.33	1,824.01	242.32	8.527	
9,700.00	9,584.93	9,571.35	9,584.93	35.64	209.58	28.98	1,614.73	2,266.51	2,052.16	1,806.95	245.21	8.369	
9,800.00	9,681.14	9,667.55	9,681.14	35.95	212.07	30.55	1,614.73	2,266.51	2,028.65	1,780.63	248.02	8.179	
9,900.00	9,771.22	9,768.34	9,781.89	36.25	214.68	33.42	1,616.15	2,266.51	1,992.29	1,741.38	250.91	7.940	
10,000.00	9,852.45	9,859.96	9,873.49	36.51	217.05	37.94	1,615.30	2,266.51	1,941.28	1,687.77	253.51	7.658	
10,100.00	9,922.36	9,908.95	9,922.36	36.72	218.31	43.95	1,614.73	2,266.51	1,879.48	1,624.47	255.01	7.370	
10,200.00	9,978.82	9,965.41	9,978.82	36.88	219.72	52.72	1,614.73	2,266.51	1,809.73	1,553.16	256.57	7.054	
10,300.00	10,020.12	10,006.71	10,020.12	36.99	220.75	64.15	1,614.73	2,266.51	1,734.02	1,476.32	257.70	6.729	
10,400.00	10,046.32	10,033.22	10,046.61	37.06	221.42	73.97	1,615.58	2,266.51	1,656.10	1,397.68	258.42	6.409	
10,500.00	10,063.18	10,052.48	10,065.88	37.11	221.90	81.17	1,615.56	2,266.51	1,577.79	1,318.87	258.92	6.094	
10,600.00	10,071.39	10,061.53	10,074.92	37.16	222.12	87.65	1,615.53	2,266.51	1,501.04	1,241.87	259.17	5.792	
10,700.00	10,071.32	10,061.10	10,074.49	37.22	222.11	91.47	1,615.54	2,266.51	1,426.88	1,167.71	259.17	5.506	
10,800.00	10,069.20	10,058.42	10,071.81	37.31	222.05	91.31	1,615.54	2,266.51	1,356.05	1,096.92	259.13	5.233	
10,900.00	10,067.07	10,055.79	10,069.18	37.43	221.98	91.16	1,615.55	2,266.51	1,289.08	1,029.96	259.12	4.975	
11,000.00	10,064.95	10,053.22	10,066.62	37.58	221.92	91.01	1,615.56	2,266.51	1,226.61	967.48	259.13	4.733	
11,100.00	10,062.82	10,050.71	10,064.10	37.75	221.85	90.86	1,615.56	2,266.51	1,169.37	910.18	259.19	4.512	
11,200.00	10,060.70	10,048.25	10,061.64	37.93	221.79	90.72	1,615.57	2,266.51	1,118.15	858.86	259.29	4.312	
11,300.00	10,058.57	10,045.84	10,059.24	38.13	221.73	90.58	1,615.57	2,266.51	1,073.81	814.37	259.44	4.139	
11,400.00	10,056.45	10,043.48	10,056.88	38.35	221.67	90.44	1,615.57	2,266.51	1,037.25	777.61	259.64	3.995	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) LEA SOUTHEAST STATE 1 P & A - Vertical - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,500.00	10,054.33	10,041.18	10,054.57	38.58	221.61	90.31	1,615.58	2,266.51	1,009.30	749.41	259.89	3.884	
11,600.00	10,052.20	10,038.91	10,052.31	38.83	221.56	90.18	1,615.58	2,266.51	990.69	730.53	260.17	3.808	
11,700.00	10,050.08	10,036.70	10,050.09	39.09	221.50	90.05	1,615.58	2,266.51	981.96	721.50	260.46	3.770	
11,736.15	10,049.31	10,035.91	10,049.30	39.18	221.48	90.00	1,615.58	2,266.51	981.30	720.73	260.57	3.766	CC, ES, SF
11,800.00	10,047.95	10,034.53	10,047.92	39.36	221.45	89.92	1,615.58	2,266.51	983.37	722.61	260.76	3.771	
11,900.00	10,045.83	10,032.40	10,045.79	39.64	221.39	89.79	1,615.58	2,266.51	994.88	733.85	261.03	3.811	
12,000.00	10,043.70	10,030.30	10,043.70	39.93	221.34	89.67	1,614.73	2,266.51	1,016.35	755.08	261.27	3.890	
12,100.00	10,041.58	10,028.17	10,041.58	40.24	221.29	89.55	1,614.73	2,266.51	1,046.84	785.39	261.45	4.004	
12,200.00	10,039.45	10,026.05	10,039.45	40.56	221.24	89.42	1,614.73	2,266.51	1,085.72	824.13	261.58	4.151	
12,300.00	10,037.33	10,023.92	10,037.33	40.89	221.18	89.30	1,614.73	2,266.51	1,132.11	870.44	261.67	4.326	
12,400.00	10,035.21	10,021.80	10,035.21	41.24	221.13	89.18	1,614.73	2,266.51	1,185.14	923.43	261.71	4.528	
12,500.00	10,033.08	10,019.67	10,033.08	41.59	221.08	89.05	1,614.73	2,266.51	1,243.96	982.24	261.72	4.753	
12,600.00	10,030.96	10,017.55	10,030.96	41.95	221.02	88.93	1,614.73	2,266.51	1,307.78	1,046.08	261.70	4.997	
12,700.00	10,028.30	10,014.90	10,028.30	42.33	220.96	87.72	1,614.73	2,266.51	1,375.91	1,114.26	261.65	5.259	
12,800.00	10,023.00	10,009.59	10,023.00	42.72	220.83	86.47	1,614.73	2,266.51	1,447.66	1,186.13	261.53	5.535	
12,900.00	10,017.31	10,003.90	10,017.31	43.13	220.68	86.14	1,614.73	2,266.51	1,522.56	1,261.18	261.38	5.825	
13,000.00	10,011.61	9,998.21	10,011.61	43.54	220.54	85.81	1,614.73	2,266.51	1,600.19	1,338.96	261.23	6.126	
13,100.00	10,005.92	9,992.51	10,005.92	43.97	220.40	85.48	1,614.73	2,266.51	1,680.16	1,419.09	261.07	6.436	
13,200.00	10,000.23	9,986.82	10,000.23	44.40	220.26	85.15	1,614.73	2,266.51	1,762.16	1,501.25	260.91	6.754	
13,300.00	9,994.53	9,981.13	9,994.53	44.84	220.11	84.82	1,614.73	2,266.51	1,845.92	1,585.18	260.75	7.079	
13,400.00	9,988.84	9,975.43	9,988.84	45.29	219.97	84.49	1,614.73	2,266.51	1,931.21	1,670.63	260.59	7.411	
13,500.00	9,983.15	9,969.74	9,983.15	45.75	219.83	84.16	1,614.73	2,266.51	2,017.84	1,757.41	260.43	7.748	
13,600.00	9,977.45	9,964.04	9,977.45	46.22	219.69	83.83	1,614.73	2,266.51	2,105.63	1,845.36	260.27	8.090	
13,700.00	9,971.76	9,958.35	9,971.76	46.69	219.54	83.50	1,614.73	2,266.51	2,194.46	1,934.35	260.11	8.437	
13,800.00	9,966.06	9,952.66	9,966.06	47.18	219.40	83.18	1,614.73	2,266.51	2,284.19	2,024.23	259.96	8.787	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) LEA ZD STATE 001 P & A - Vertical - Surveys — **Offset Site Error:** 0.00 usft

Survey Program: 0-3_INC-Only — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	9.20	0.00	0.00	0.16	-44.96	676.87	-675.90	956.55				
100.00	100.00	109.20	100.00	0.28	1.85	-44.96	676.87	-675.90	956.55	954.43	2.13	449.744	
200.00	200.00	209.20	200.00	0.63	3.55	-44.96	676.87	-675.90	956.55	952.37	4.18	228.825	
300.00	300.00	309.20	300.00	0.99	5.25	-44.96	676.87	-675.90	956.55	950.31	6.24	153.207	
400.00	400.00	409.20	400.00	1.35	7.05	-44.96	676.87	-675.90	956.55	948.15	8.40	113.824	
500.00	500.00	509.20	500.00	1.71	8.85	-44.96	676.87	-675.90	956.55	945.99	10.56	90.547	
600.00	600.00	609.60	600.40	2.07	10.66	-44.95	677.12	-675.90	956.73	943.99	12.73	75.146	
700.00	700.00	710.21	701.01	2.43	12.48	-44.95	677.01	-675.90	956.65	941.75	14.90	64.192	
800.00	800.00	809.21	800.00	2.79	14.27	-44.96	676.87	-675.90	956.55	939.50	17.05	56.090	
900.00	900.00	909.21	900.00	3.14	16.11	-44.96	676.87	-675.90	956.55	937.30	19.25	49.682	
1,000.00	1,000.00	1,009.75	1,000.54	3.50	17.96	-44.94	677.27	-675.90	956.83	935.37	21.46	44.581	
1,100.00	1,100.00	1,111.35	1,102.13	3.86	19.83	-44.95	677.07	-675.90	956.69	933.00	23.69	40.381	
1,200.00	1,200.00	1,209.23	1,200.00	4.22	21.63	-44.96	676.87	-675.90	956.55	930.70	25.85	36.998	
1,300.00	1,300.00	1,309.23	1,300.00	4.58	23.48	-44.96	676.87	-675.90	956.55	928.49	28.06	34.092	CC
1,400.00	1,400.00	1,409.31	1,400.08	4.94	25.33	-44.94	677.39	-675.90	956.92	926.66	30.26	31.620	
1,500.00	1,500.00	1,510.57	1,501.34	5.29	27.19	-44.94	677.29	-675.90	956.85	924.36	32.49	29.451	
1,600.00	1,600.00	1,611.83	1,602.60	5.65	29.06	-44.95	676.99	-675.90	956.64	921.92	34.72	27.556	
1,609.92	1,609.92	1,621.88	1,612.65	5.69	29.25	-145.06	676.95	-675.90	956.63	921.69	34.94	27.382	
1,700.00	1,699.98	1,709.22	1,699.98	6.00	30.86	-145.11	676.87	-675.90	957.98	921.12	36.86	25.988	ES
1,800.00	1,799.84	1,809.94	1,800.69	6.34	32.72	-145.23	677.13	-675.90	962.47	923.40	39.06	24.640	
1,900.00	1,899.45	1,908.71	1,899.45	6.68	34.54	-145.45	676.87	-675.90	969.46	928.23	41.23	23.515	
2,000.00	1,998.70	2,007.96	1,998.70	7.03	36.38	-145.74	676.87	-675.90	979.54	936.13	43.40	22.568	
2,100.00	2,097.47	2,106.72	2,097.47	7.38	38.20	-146.10	676.87	-675.90	992.54	946.97	45.58	21.778	
2,200.00	2,195.96	2,205.99	2,196.73	7.73	40.04	-146.63	677.36	-675.90	1,007.36	959.61	47.75	21.095	
2,300.00	2,294.44	2,305.74	2,296.48	8.08	41.88	-147.18	677.16	-675.90	1,021.79	971.85	49.94	20.460	
2,400.00	2,392.93	2,402.21	2,392.93	8.44	43.66	-147.69	676.87	-675.90	1,036.26	984.18	52.07	19.900	
2,500.00	2,491.42	2,500.70	2,491.42	8.80	45.48	-148.20	676.87	-675.90	1,050.99	996.75	54.24	19.376	
2,600.00	2,589.91	2,599.78	2,590.51	9.16	47.31	-148.67	677.25	-675.90	1,066.06	1,009.63	56.43	18.893	
2,700.00	2,688.40	2,699.99	2,690.71	9.52	49.16	-149.16	677.04	-675.90	1,080.81	1,022.18	58.63	18.434	
2,800.00	2,786.89	2,796.18	2,786.89	9.88	50.96	-149.62	676.87	-675.90	1,095.66	1,034.87	60.79	18.025	
2,900.00	2,885.38	2,894.67	2,885.38	10.24	52.83	-150.07	676.87	-675.90	1,110.69	1,047.68	63.01	17.628	
3,000.00	2,983.87	2,993.16	2,983.87	10.61	54.70	-150.51	676.87	-675.90	1,125.78	1,060.55	65.23	17.258	
3,100.00	3,082.36	3,092.76	3,083.47	10.97	56.58	-150.92	677.36	-675.90	1,141.24	1,073.77	67.48	16.913	
3,200.00	3,180.85	3,192.48	3,183.19	11.34	58.47	-151.35	677.12	-675.90	1,156.31	1,086.58	69.73	16.583	
3,300.00	3,279.34	3,288.66	3,279.34	11.71	60.31	-151.76	676.87	-675.90	1,171.43	1,099.50	71.93	16.287	
3,400.00	3,377.83	3,387.15	3,377.83	12.07	62.24	-152.15	676.87	-675.90	1,186.76	1,112.55	74.21	15.992	
3,500.00	3,476.32	3,485.64	3,476.32	12.44	64.16	-152.54	676.87	-675.90	1,202.15	1,125.66	76.49	15.716	
3,600.00	3,574.81	3,584.13	3,574.81	12.81	66.08	-152.91	676.87	-675.90	1,217.59	1,138.81	78.78	15.456	
3,700.00	3,673.30	3,682.62	3,673.30	13.18	68.00	-153.28	676.87	-675.90	1,233.08	1,152.01	81.06	15.212	
3,800.00	3,771.79	3,781.11	3,771.79	13.55	69.93	-153.63	676.87	-675.90	1,248.61	1,165.26	83.35	14.981	
3,900.00	3,870.28	3,879.78	3,870.45	13.92	71.85	-153.91	678.83	-675.90	1,265.34	1,179.70	85.64	14.776	
4,000.00	3,968.77	3,979.08	3,969.75	14.29	73.79	-154.25	678.75	-675.90	1,280.91	1,192.97	87.94	14.566	
4,100.00	4,067.26	4,078.40	4,069.06	14.66	75.73	-154.59	678.57	-675.90	1,296.47	1,206.22	90.24	14.366	
4,200.00	4,165.75	4,177.72	4,168.38	15.04	77.67	-154.93	678.27	-675.90	1,312.00	1,219.45	92.55	14.177	
4,300.00	4,264.24	4,277.05	4,267.71	15.41	79.61	-155.26	677.87	-675.90	1,327.52	1,232.67	94.85	13.996	
4,400.00	4,362.73	4,376.39	4,367.04	15.78	81.55	-155.59	677.36	-675.90	1,343.02	1,245.86	97.16	13.823	
4,500.00	4,461.22	4,470.64	4,461.22	16.15	83.39	-155.90	676.87	-675.90	1,358.57	1,259.20	99.37	13.672	
4,600.00	4,559.71	4,569.13	4,559.71	16.53	85.38	-156.19	676.87	-675.90	1,374.43	1,272.71	101.72	13.512	
4,700.00	4,658.20	4,667.62	4,658.20	16.90	87.36	-156.48	676.87	-675.90	1,390.32	1,286.25	104.07	13.359	
4,800.00	4,756.69	4,766.94	4,757.51	17.27	89.37	-156.73	677.72	-675.90	1,406.72	1,300.28	106.44	13.216	
4,900.00	4,855.18	4,867.35	4,857.92	17.65	91.39	-157.02	677.49	-675.90	1,422.55	1,313.72	108.83	13.071	
5,000.00	4,953.67	4,967.77	4,958.34	18.02	93.41	-157.31	677.01	-675.90	1,438.29	1,327.06	111.23	12.931	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) LEA ZD STATE 001 P & A - Vertical - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	5,052.15	5,061.64	5,052.15	18.40	95.35	-157.56	676.87	-675.90	1,454.24	1,340.71	113.53	12.809	
5,200.00	5,150.64	5,160.13	5,150.64	18.77	97.40	-157.82	676.87	-675.90	1,470.29	1,354.34	115.95	12.681	
5,300.00	5,249.13	5,262.23	5,252.73	19.14	99.53	-158.06	677.44	-675.90	1,486.67	1,368.23	118.44	12.552	
5,400.00	5,347.62	5,357.16	5,347.62	19.52	101.49	-158.32	676.87	-675.90	1,502.48	1,381.71	120.77	12.441	
5,500.00	5,446.11	5,455.65	5,446.11	19.89	103.42	-158.56	676.87	-675.90	1,518.62	1,395.54	123.07	12.339	
5,600.00	5,544.60	5,554.14	5,544.60	20.27	105.36	-158.80	676.87	-675.90	1,534.78	1,409.40	125.38	12.241	
5,700.00	5,643.09	5,653.94	5,644.39	20.64	107.32	-158.99	677.96	-675.90	1,551.52	1,423.81	127.71	12.149	
5,800.00	5,741.58	5,755.18	5,745.62	21.02	109.31	-159.24	677.62	-675.90	1,567.56	1,437.49	130.07	12.052	
5,900.00	5,840.07	5,856.45	5,846.89	21.40	111.30	-159.49	676.94	-675.90	1,583.46	1,451.02	132.43	11.957	
6,000.00	5,938.56	5,948.14	5,938.56	21.77	113.10	-159.69	676.87	-675.90	1,599.66	1,465.07	134.60	11.885	
6,100.00	6,037.05	6,046.63	6,037.05	22.15	115.04	-159.90	676.87	-675.90	1,615.94	1,479.04	136.90	11.804	
6,200.00	6,135.54	6,145.67	6,136.09	22.52	116.98	-160.10	677.39	-675.90	1,632.50	1,493.28	139.22	11.726	
6,300.00	6,234.03	6,245.62	6,236.03	22.90	118.95	-160.31	677.23	-675.90	1,648.74	1,507.19	141.55	11.647	
6,400.00	6,332.52	6,345.58	6,335.99	23.28	120.91	-160.52	676.90	-675.90	1,664.92	1,521.03	143.89	11.571	
6,500.00	6,431.01	6,440.64	6,431.01	23.65	122.78	-160.71	676.87	-675.90	1,681.26	1,535.14	146.13	11.506	
6,600.00	6,529.50	6,539.13	6,529.50	24.03	124.72	-160.91	676.87	-675.90	1,697.64	1,549.21	148.43	11.437	
6,700.00	6,627.99	6,638.78	6,629.14	24.41	126.68	-161.07	677.92	-675.90	1,714.55	1,563.78	150.76	11.372	
6,800.00	6,726.48	6,740.26	6,730.62	24.78	128.67	-161.27	677.60	-675.90	1,730.81	1,577.67	153.13	11.303	
6,900.00	6,824.97	6,841.78	6,832.13	25.16	130.67	-161.48	676.91	-675.90	1,746.92	1,591.42	155.50	11.234	
7,000.00	6,923.46	6,933.13	6,923.46	25.54	132.36	-161.64	676.87	-675.90	1,763.34	1,605.78	157.55	11.192	
7,100.00	7,021.95	7,032.45	7,022.77	25.91	134.19	-161.81	677.19	-675.90	1,779.95	1,620.20	159.76	11.142	
7,200.00	7,120.44	7,133.38	7,123.70	26.29	136.04	-161.99	676.94	-675.90	1,796.32	1,634.33	161.99	11.089	
7,300.00	7,218.93	7,228.61	7,218.93	26.67	137.80	-162.16	676.87	-675.90	1,812.78	1,648.67	164.11	11.046	
7,400.00	7,317.42	7,328.28	7,318.60	27.04	139.64	-162.32	677.14	-675.90	1,829.42	1,663.10	166.32	10.999	
7,500.00	7,415.91	7,425.60	7,415.91	27.42	141.44	-162.49	676.87	-675.90	1,845.82	1,677.33	168.49	10.955	
7,600.00	7,514.40	7,524.09	7,514.40	27.80	143.37	-162.65	676.87	-675.90	1,862.36	1,691.57	170.80	10.904	
7,700.00	7,612.89	7,623.32	7,613.63	28.18	145.32	-162.80	677.23	-675.90	1,879.08	1,705.96	173.12	10.854	
7,800.00	7,711.38	7,724.05	7,714.35	28.55	147.30	-162.96	677.01	-675.90	1,895.55	1,720.07	175.48	10.802	
7,900.00	7,809.86	7,819.59	7,809.86	28.93	149.26	-163.11	676.87	-675.90	1,912.07	1,734.27	177.80	10.754	
8,000.00	7,908.35	7,919.20	7,909.47	29.31	151.34	-163.25	677.47	-675.90	1,928.93	1,748.68	180.26	10.701	
8,100.00	8,006.84	8,023.37	8,013.63	29.69	153.52	-163.41	676.99	-675.90	1,945.34	1,762.52	182.81	10.641	
8,200.00	8,105.33	8,115.10	8,105.33	30.06	155.44	-163.55	676.87	-675.90	1,961.89	1,776.79	185.10	10.599	
8,300.00	8,203.82	8,213.59	8,203.82	30.44	157.50	-163.69	676.87	-675.90	1,978.52	1,790.99	187.53	10.550	
8,400.00	8,302.31	8,313.48	8,303.70	30.82	159.60	-163.81	677.85	-675.90	1,995.60	1,805.60	190.00	10.503	
8,500.00	8,400.80	8,415.35	8,405.57	31.20	161.73	-163.96	677.50	-675.90	2,012.10	1,819.59	192.51	10.452	
8,600.00	8,499.29	8,509.13	8,499.29	31.57	163.69	-164.10	676.87	-675.90	2,028.49	1,833.65	194.84	10.411	
8,700.00	8,597.78	8,607.62	8,597.78	31.95	165.69	-164.24	676.87	-675.90	2,045.16	1,847.95	197.22	10.370	
8,800.00	8,696.27	8,706.11	8,696.27	32.33	167.70	-164.37	676.87	-675.90	2,061.85	1,862.26	199.59	10.330	
8,900.00	8,794.76	8,804.60	8,794.76	32.71	169.70	-164.50	676.87	-675.90	2,078.55	1,876.58	201.97	10.291	
9,000.00	8,893.25	8,904.83	8,894.98	33.09	171.74	-164.59	678.23	-675.90	2,095.84	1,891.46	204.38	10.255	
9,100.00	8,991.74	9,005.76	8,995.90	33.46	173.79	-164.73	677.90	-675.90	2,112.41	1,905.60	206.81	10.214	
9,200.00	9,090.23	9,106.71	9,096.85	33.84	175.84	-164.87	677.30	-675.90	2,128.89	1,919.65	209.24	10.174	
9,300.00	9,188.72	9,198.63	9,188.72	34.22	177.69	-164.99	676.87	-675.90	2,145.44	1,933.99	211.45	10.146	
9,400.00	9,287.52	9,297.43	9,287.52	34.60	179.63	-147.40	676.87	-675.90	2,159.68	1,945.92	213.76	10.103	
9,500.00	9,386.81	9,396.72	9,386.81	34.96	181.59	-115.85	676.87	-675.90	2,167.71	1,951.63	216.08	10.032	
9,600.00	9,486.11	9,450.00	9,440.06	35.30	182.63	-83.93	676.87	-675.90	2,169.96	1,952.61	217.35	9.984	
9,700.00	9,584.93	9,450.00	9,440.06	35.64	182.63	-65.28	676.87	-675.90	2,169.85	1,952.75	217.10	9.995	
9,800.00	9,681.14	9,450.00	9,440.06	35.95	182.63	-65.50	676.87	-675.90	2,167.50	1,951.06	216.44	10.014	
9,900.00	9,771.22	9,450.00	9,440.06	36.25	182.63	-65.95	676.87	-675.90	2,162.53	1,947.10	215.43	10.038	
10,000.00	9,852.45	9,450.00	9,440.06	36.51	182.63	-66.64	676.87	-675.90	2,155.07	1,940.89	214.18	10.062	
10,100.00	9,922.36	9,450.00	9,440.06	36.72	182.63	-67.54	676.87	-675.90	2,145.32	1,932.51	212.81	10.081	
10,200.00	9,978.82	9,450.00	9,440.06	36.88	182.63	-68.64	676.87	-675.90	2,133.56	1,922.07	211.50	10.088	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) LEA ZD STATE 001 P & A - Vertical - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,300.00	10,020.12	9,450.00	9,440.06	36.99	182.63	-69.91	676.87	-675.90	2,120.11	1,909.73	210.38	10.078	
10,400.00	10,046.32	9,450.00	9,440.06	37.06	182.63	-70.89	676.87	-675.90	2,105.79	1,896.22	209.57	10.048	
10,500.00	10,063.18	9,450.00	9,440.06	37.11	182.63	-71.50	676.87	-675.90	2,093.01	1,884.01	209.00	10.014	
10,600.00	10,071.39	9,450.00	9,440.06	37.16	182.63	-72.02	676.87	-675.90	2,082.19	1,873.49	208.70	9.977	
10,700.00	10,071.32	9,450.00	9,440.06	37.22	182.63	-72.32	676.87	-675.90	2,073.57	1,864.89	208.68	9.937	
10,800.00	10,069.20	9,450.00	9,440.06	37.31	182.63	-72.32	676.87	-675.90	2,069.13	1,860.35	208.78	9.911	
10,842.03	10,068.30	9,450.00	9,440.06	37.36	182.63	-72.32	676.87	-675.90	2,068.70	1,859.86	208.84	9.906	
10,900.00	10,067.07	9,450.00	9,440.06	37.43	182.63	-72.32	676.87	-675.90	2,069.51	1,860.58	208.93	9.905	SF
11,000.00	10,064.95	9,450.00	9,440.06	37.58	182.63	-72.32	676.87	-675.90	2,074.72	1,865.57	209.15	9.920	
11,100.00	10,062.82	9,450.00	9,440.06	37.75	182.63	-72.32	676.87	-675.90	2,084.72	1,875.30	209.42	9.955	
11,200.00	10,060.70	9,450.00	9,440.06	37.93	182.63	-72.32	676.87	-675.90	2,099.44	1,889.71	209.73	10.010	
11,300.00	10,058.57	9,450.00	9,440.06	38.13	182.63	-72.32	676.87	-675.90	2,118.79	1,908.70	210.09	10.085	
11,400.00	10,056.45	9,450.00	9,440.06	38.35	182.63	-72.32	676.87	-675.90	2,142.63	1,932.15	210.48	10.180	
11,500.00	10,054.33	9,450.00	9,440.06	38.58	182.63	-72.32	676.87	-675.90	2,170.82	1,959.92	210.90	10.293	
11,600.00	10,052.20	9,450.00	9,440.06	38.83	182.63	-72.32	676.87	-675.90	2,203.19	1,991.85	211.33	10.425	
11,700.00	10,050.08	9,450.00	9,440.06	39.09	182.63	-72.32	676.87	-675.90	2,239.56	2,027.77	211.78	10.575	
11,800.00	10,047.95	9,450.00	9,440.06	39.36	182.63	-72.32	676.87	-675.90	2,279.74	2,067.50	212.24	10.741	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) LEO STATE 006 TA - Verticals - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-MWD OWSG Rev5

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
23,200.00	9,102.04	9,111.23	9,090.10	108.75	13.59	118.18	15,210.15	1,841.95	2,292.86	2,229.90	62.95	36.421	
23,300.00	9,084.29	9,090.00	9,068.87	109.48	13.60	116.86	15,210.21	1,841.56	2,199.32	2,135.53	63.79	34.475	
23,400.00	9,066.54	9,085.24	9,064.12	110.21	13.60	116.55	15,210.23	1,841.47	2,106.21	2,041.39	64.83	32.490	
23,500.00	9,048.80	9,065.20	9,044.08	110.94	13.60	115.26	15,210.33	1,841.10	2,013.64	1,947.74	65.89	30.559	
23,600.00	9,031.05	9,045.25	9,024.14	111.67	13.60	113.95	15,210.41	1,840.69	1,921.61	1,854.51	67.10	28.637	
23,700.00	9,013.31	9,025.40	9,004.28	112.41	13.60	112.61	15,210.49	1,840.26	1,830.23	1,761.76	68.47	26.730	
23,800.00	8,995.56	9,005.63	8,984.53	113.14	13.60	111.25	15,210.56	1,839.81	1,739.59	1,669.56	70.03	24.840	
23,900.00	8,977.82	8,986.34	8,965.24	113.87	13.61	109.90	15,210.61	1,839.34	1,649.81	1,578.00	71.81	22.974	
24,000.00	8,959.73	8,967.34	8,946.25	114.61	13.61	110.14	15,210.65	1,838.91	1,561.12	1,487.26	73.85	21.138	
24,100.00	8,938.95	8,945.83	8,924.74	115.34	13.61	110.82	15,210.66	1,838.45	1,474.08	1,397.90	76.18	19.351	
24,200.00	8,917.45	8,923.86	8,902.77	116.07	13.62	109.28	15,210.64	1,838.02	1,388.60	1,309.76	78.84	17.613	
24,300.00	8,895.96	8,902.17	8,881.09	116.81	13.62	107.72	15,210.59	1,837.64	1,304.82	1,222.92	81.90	15.933	
24,400.00	8,874.46	8,883.35	8,862.27	117.55	13.63	106.34	15,210.55	1,837.32	1,223.13	1,137.72	85.41	14.321	
24,500.00	8,852.96	8,864.36	8,843.28	118.28	13.63	104.94	15,210.57	1,837.00	1,143.99	1,054.58	89.41	12.795	
24,600.00	8,831.46	8,844.85	8,823.78	119.02	13.63	103.47	15,210.64	1,836.66	1,067.97	974.01	93.96	11.366	
24,700.00	8,809.97	8,824.82	8,803.75	119.75	13.63	101.95	15,210.78	1,836.31	995.76	896.68	99.08	10.050	
24,800.00	8,788.47	8,805.00	8,783.93	120.49	13.63	100.42	15,210.98	1,835.95	928.23	823.46	104.77	8.860	
24,900.00	8,766.97	8,784.15	8,763.08	121.23	13.63	98.80	15,211.26	1,835.58	866.46	755.52	110.94	7.810	
25,000.00	8,745.48	8,763.33	8,742.27	121.96	13.62	97.16	15,211.62	1,835.22	811.76	694.34	117.43	6.913	
25,100.00	8,723.98	8,741.78	8,720.73	122.70	13.61	95.46	15,212.09	1,834.87	765.62	641.72	123.90	6.179	
25,200.00	8,702.48	8,719.46	8,698.43	123.44	13.61	93.69	15,212.67	1,834.51	729.62	599.73	129.88	5.617	
25,300.00	8,680.26	8,693.04	8,672.02	124.18	13.59	91.88	15,213.40	1,834.10	705.26	570.47	134.79	5.232	
25,400.00	8,654.86	8,663.19	8,642.17	124.91	13.56	89.74	15,213.92	1,833.57	693.61	555.57	138.04	5.025	
25,438.92	8,644.15	8,651.36	8,630.35	125.20	13.55	88.81	15,214.02	1,833.34	692.61	553.85	138.77	4.991	CC, ES
25,500.00	8,626.28	8,632.45	8,611.44	125.65	13.54	87.32	15,214.07	1,832.95	695.03	555.78	139.25	4.991	SF
25,600.00	8,596.98	8,602.65	8,581.65	126.38	13.53	84.96	15,213.88	1,832.27	709.41	571.01	138.40	5.126	
25,700.00	8,567.67	8,572.58	8,551.59	127.11	13.55	82.59	15,213.58	1,831.50	736.03	600.24	135.79	5.420	
25,800.00	8,538.37	8,542.79	8,521.82	127.85	13.56	80.26	15,213.24	1,830.66	773.65	641.76	131.89	5.866	
25,900.00	8,509.06	8,512.55	8,491.59	128.58	13.58	77.92	15,212.88	1,829.72	820.76	693.52	127.24	6.450	
26,000.00	8,479.76	8,481.18	8,460.25	129.32	13.60	75.53	15,212.57	1,828.67	875.79	753.46	122.33	7.159	
26,100.00	8,450.45	8,449.21	8,428.29	130.05	13.62	73.14	15,212.34	1,827.52	937.31	819.86	117.46	7.980	
26,200.00	8,421.14	8,418.90	8,398.00	130.79	13.64	70.92	15,212.21	1,826.38	1,004.14	891.35	112.78	8.903	
26,300.00	8,391.84	8,390.80	8,369.93	131.53	13.66	68.91	15,212.08	1,825.32	1,075.34	966.94	108.40	9.920	
26,400.00	8,362.53	8,362.80	8,341.94	132.26	13.68	66.95	15,211.93	1,824.28	1,150.13	1,045.73	104.41	11.016	
26,500.00	8,333.23	8,334.07	8,313.23	133.00	13.70	65.00	15,211.77	1,823.23	1,227.86	1,127.05	100.81	12.180	
26,600.00	8,303.92	8,297.86	8,277.04	133.73	13.72	62.61	15,211.71	1,821.93	1,307.90	1,210.15	97.75	13.381	
26,700.00	8,274.62	8,259.91	8,239.12	134.47	13.74	60.22	15,211.93	1,820.59	1,389.73	1,294.67	95.06	14.619	
26,800.00	8,245.31	8,224.42	8,203.66	135.21	13.76	58.07	15,212.36	1,819.36	1,473.04	1,380.40	92.64	15.901	
26,900.00	8,217.06	8,192.66	8,171.92	135.94	13.77	57.26	15,212.82	1,818.27	1,557.97	1,467.54	90.43	17.229	
27,000.00	8,189.09	8,160.86	8,140.14	136.68	13.79	55.43	15,213.34	1,817.18	1,644.10	1,555.64	88.46	18.586	
27,100.00	8,161.11	8,131.37	8,110.67	137.42	13.80	53.81	15,213.84	1,816.17	1,731.19	1,644.53	86.66	19.977	
27,200.00	8,133.14	8,103.79	8,083.12	138.16	13.82	52.34	15,214.28	1,815.21	1,819.15	1,734.14	85.00	21.401	
27,300.00	8,105.17	8,076.48	8,055.82	138.90	13.83	50.94	15,214.68	1,814.25	1,907.87	1,824.36	83.51	22.846	
27,400.00	8,077.20	8,053.00	8,032.36	139.63	13.84	49.77	15,214.99	1,813.40	1,997.26	1,915.17	82.09	24.330	
27,500.00	8,049.22	8,032.99	8,012.37	140.37	13.85	48.80	15,215.19	1,812.71	2,087.32	2,006.58	80.74	25.852	
27,600.00	8,021.25	8,015.91	7,995.29	141.11	13.86	48.00	15,215.27	1,812.18	2,178.02	2,098.55	79.47	27.408	
27,700.00	7,993.28	7,999.35	7,978.74	141.85	13.87	47.24	15,215.28	1,811.72	2,269.28	2,190.99	78.30	28.984	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) LEO STATE 007 - Verticals - Surveys

Offset Site Error: 0.00 usft

Survey Program: 305-3_INC-Only, 1741-OWSG (Rev2) MWD

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
23,100.00	9,119.78	9,075.03	9,069.44	108.02	40.65	94.28	14,062.19	3,145.86	2,286.29	2,151.78	134.51	16.997	
23,200.00	9,102.04	9,061.74	9,056.15	108.75	40.62	93.91	14,061.91	3,145.70	2,239.36	2,102.47	136.90	16.358	
23,300.00	9,084.29	9,048.38	9,042.80	109.48	40.58	93.53	14,061.63	3,145.54	2,195.89	2,056.62	139.28	15.767	
23,400.00	9,066.54	9,005.00	8,999.43	110.21	40.48	92.30	14,060.76	3,145.13	2,156.33	2,014.68	141.66	15.222	
23,500.00	9,048.80	9,005.00	8,999.43	110.94	40.48	92.30	14,060.76	3,145.13	2,120.24	1,976.30	143.93	14.731	
23,600.00	9,031.05	9,005.00	8,999.43	111.67	40.48	92.30	14,060.76	3,145.13	2,088.30	1,942.18	146.12	14.291	
23,700.00	9,013.31	8,992.55	8,986.98	112.41	40.45	91.95	14,060.52	3,145.03	2,060.70	1,912.48	148.22	13.903	
23,800.00	8,995.56	8,976.71	8,971.14	113.14	40.42	91.50	14,060.22	3,144.91	2,037.51	1,887.33	150.18	13.567	
23,900.00	8,977.82	8,960.81	8,955.24	113.87	40.38	91.05	14,059.92	3,144.78	2,018.89	1,866.91	151.99	13.283	
24,000.00	8,959.73	8,944.51	8,938.95	114.61	40.35	90.70	14,059.62	3,144.65	2,004.97	1,851.37	153.60	13.053	
24,100.00	8,938.95	8,925.44	8,919.89	115.34	40.31	90.29	14,059.27	3,144.49	1,995.84	1,840.85	154.99	12.877	
24,200.00	8,917.45	8,905.59	8,900.03	116.07	40.26	89.73	14,058.92	3,144.33	1,991.52	1,835.36	156.16	12.753	
24,239.81	8,908.89	8,897.66	8,892.11	116.37	40.24	89.51	14,058.78	3,144.26	1,991.13	1,834.58	156.56	12.718	CC, ES
24,300.00	8,895.96	8,885.66	8,880.11	116.81	40.22	89.17	14,058.57	3,144.16	1,992.01	1,834.92	157.09	12.681	
24,400.00	8,874.46	8,865.67	8,860.12	117.55	40.17	88.60	14,058.23	3,144.00	1,997.31	1,839.54	157.77	12.660	SF
24,500.00	8,852.96	8,845.60	8,840.06	118.28	40.13	88.04	14,057.89	3,143.83	2,007.39	1,849.18	158.21	12.688	
24,600.00	8,831.46	8,825.47	8,819.93	119.02	40.08	87.47	14,057.56	3,143.66	2,022.18	1,863.77	158.41	12.766	
24,700.00	8,809.97	8,805.27	8,799.73	119.75	40.04	86.90	14,057.23	3,143.49	2,041.56	1,883.19	158.37	12.891	
24,800.00	8,788.47	8,784.99	8,779.46	120.49	39.99	86.33	14,056.91	3,143.31	2,065.41	1,907.30	158.12	13.063	
24,900.00	8,766.97	8,764.65	8,759.12	121.23	39.95	85.76	14,056.60	3,143.13	2,093.58	1,935.92	157.66	13.279	
25,000.00	8,745.48	8,744.24	8,738.71	121.96	39.90	85.19	14,056.30	3,142.96	2,125.89	1,968.87	157.02	13.539	
25,100.00	8,723.98	8,723.75	8,718.23	122.70	39.86	84.61	14,055.99	3,142.77	2,162.16	2,005.94	156.22	13.841	
25,200.00	8,702.48	8,703.19	8,697.67	123.44	39.81	84.04	14,055.70	3,142.59	2,202.18	2,046.91	155.27	14.183	
25,300.00	8,680.26	8,681.82	8,676.30	124.18	39.77	82.81	14,055.40	3,142.40	2,245.69	2,091.48	154.21	14.562	
25,400.00	8,654.86	8,657.09	8,651.58	124.91	39.71	81.09	14,055.07	3,142.18	2,292.15	2,139.09	153.06	14.976	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) MESA MERRITT STATE 001 P & A - Vertical - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
16,200.00	9,822.06	9,844.89	9,840.22	60.57	251.91	-118.29	8,299.53	904.60	2,261.93	1,970.22	291.70	7.754	
16,300.00	9,815.43	9,837.10	9,832.43	61.18	251.65	-117.17	8,299.59	904.60	2,163.19	1,871.58	291.61	7.418	
16,400.00	9,808.80	9,829.34	9,824.67	61.80	251.38	-116.02	8,299.65	904.60	2,064.54	1,773.01	291.53	7.082	
16,500.00	9,802.17	9,821.62	9,816.95	62.43	251.12	-114.86	8,299.71	904.60	1,966.00	1,674.52	291.47	6.745	
16,600.00	9,795.54	9,813.93	9,809.26	63.05	250.86	-113.68	8,299.77	904.60	1,867.58	1,576.14	291.44	6.408	
16,700.00	9,788.91	9,806.27	9,801.61	63.68	250.60	-112.49	8,299.83	904.60	1,769.31	1,477.88	291.43	6.071	
16,800.00	9,782.28	9,798.64	9,793.98	64.31	250.34	-111.27	8,299.88	904.60	1,671.21	1,379.75	291.45	5.734	
16,900.00	9,775.65	9,791.04	9,786.39	64.95	250.08	-110.05	8,299.94	904.60	1,573.31	1,281.79	291.52	5.397	
17,000.00	9,769.03	9,783.48	9,778.83	65.59	249.82	-108.81	8,299.99	904.60	1,475.66	1,184.03	291.63	5.060	
17,100.00	9,762.40	9,775.95	9,771.30	66.23	249.57	-107.55	8,300.04	904.60	1,378.31	1,086.50	291.81	4.723	
17,200.00	9,755.77	9,768.44	9,763.80	66.87	249.31	-106.28	8,300.09	904.60	1,281.32	989.26	292.06	4.387	
17,300.00	9,749.14	9,760.97	9,756.34	67.52	249.06	-105.01	8,300.14	904.60	1,184.78	892.38	292.41	4.052	
17,400.00	9,742.51	9,753.54	9,748.90	68.17	248.80	-103.72	8,300.19	904.60	1,088.82	795.94	292.88	3.718	
17,500.00	9,735.88	9,746.13	9,741.49	68.82	248.55	-102.42	8,300.23	904.60	993.61	700.08	293.53	3.385	
17,600.00	9,729.25	9,738.75	9,734.12	69.47	248.30	-101.12	8,300.28	904.60	899.37	604.96	294.40	3.055	
17,700.00	9,722.62	9,731.40	9,726.77	70.13	248.05	-99.81	8,300.32	904.60	806.45	510.86	295.59	2.728	
17,800.00	9,716.00	9,724.08	9,719.46	70.79	247.80	-98.49	8,300.36	904.60	715.38	418.17	297.21	2.407	
17,900.00	9,709.37	9,716.80	9,712.18	71.45	247.55	-97.17	8,300.41	904.60	626.95	327.52	299.43	2.094	
18,000.00	9,702.74	9,709.54	9,704.92	72.11	247.31	-95.85	8,300.44	904.60	542.45	239.98	302.47	1.793	
18,100.00	9,696.11	9,702.31	9,697.70	72.78	247.06	-94.52	8,300.48	904.60	464.05	157.46	306.59	1.514	
18,200.00	9,689.48	9,695.11	9,690.50	73.44	246.82	-93.20	8,300.52	904.60	395.38	83.56	311.82	1.268	Level 3
18,300.00	9,682.85	9,687.94	9,683.33	74.11	246.57	-91.88	8,300.56	904.60	342.35	24.94	317.41	1.079	Level 2
18,400.00	9,676.22	9,680.80	9,676.20	74.78	246.33	-90.57	8,300.59	904.60	313.03	-7.98	321.00	0.975	Level 1
18,446.59	9,673.14	9,677.49	9,672.88	75.10	246.22	-89.95	8,300.61	904.60	309.56	-11.55	321.11	0.964	Level 1, CC, ES, SF
18,500.00	9,669.60	9,673.69	9,669.09	75.46	246.09	-89.25	8,300.63	904.60	314.11	-5.65	319.76	0.982	Level 1
18,600.00	9,662.97	9,666.61	9,662.01	76.13	245.85	-87.95	8,300.66	904.60	345.32	31.20	314.11	1.099	Level 2
18,700.00	9,656.34	9,659.55	9,654.96	76.81	245.61	-86.65	8,300.69	904.60	399.65	92.38	307.28	1.301	Level 3
18,800.00	9,649.71	9,652.53	9,647.93	77.49	245.37	-85.36	8,300.72	904.60	469.15	167.75	301.40	1.557	
18,900.00	9,643.08	9,645.53	9,640.94	78.17	245.13	-84.08	8,300.75	904.60	548.07	251.12	296.95	1.846	
19,000.00	9,636.45	9,638.56	9,633.97	78.85	244.89	-82.81	8,300.78	904.60	632.90	339.18	293.72	2.155	
19,100.00	9,629.82	9,631.62	9,627.03	79.53	244.66	-81.55	8,300.80	904.60	721.56	430.19	291.37	2.476	
19,200.00	9,622.88	9,624.40	9,619.82	80.22	244.41	-78.33	8,300.83	904.60	812.77	523.15	289.62	2.806	
19,300.00	9,613.89	9,615.19	9,610.61	80.91	244.10	-75.31	8,300.86	904.60	905.62	617.40	288.23	3.142	
19,400.00	9,604.73	9,605.85	9,601.28	81.60	243.78	-73.71	8,300.90	904.60	999.75	712.63	287.13	3.482	
19,500.00	9,595.58	9,596.56	9,591.98	82.29	243.46	-72.15	8,300.93	904.60	1,094.85	808.61	286.24	3.825	
19,600.00	9,586.43	9,587.30	9,582.73	82.98	243.15	-70.61	8,300.95	904.60	1,190.67	905.17	285.49	4.171	
19,700.00	9,577.27	9,578.07	9,573.51	83.68	242.83	-69.12	8,300.98	904.60	1,287.06	1,002.19	284.86	4.518	
19,800.00	9,568.12	9,568.89	9,564.32	84.38	242.52	-67.65	8,301.00	904.60	1,383.90	1,099.58	284.32	4.867	
19,900.00	9,558.96	9,559.74	9,555.18	85.07	242.21	-66.23	8,301.03	904.60	1,481.10	1,197.27	283.83	5.218	
20,000.00	9,549.81	9,550.62	9,546.07	85.77	241.90	-64.84	8,301.05	904.60	1,578.60	1,295.20	283.40	5.570	
20,100.00	9,540.66	9,541.54	9,536.99	86.47	241.59	-63.48	8,301.07	904.60	1,676.34	1,393.34	283.00	5.923	
20,200.00	9,531.25	9,532.25	9,527.70	87.17	241.27	-58.91	8,301.08	904.60	1,774.26	1,491.64	282.62	6.278	
20,300.00	9,519.27	9,520.52	9,515.97	87.88	240.88	-52.51	8,301.10	904.60	1,872.08	1,589.89	282.18	6.634	
20,400.00	9,506.58	9,508.15	9,503.61	88.59	240.45	-51.11	8,301.12	904.60	1,969.95	1,688.21	281.74	6.992	
20,500.00	9,493.90	9,495.83	9,491.30	89.29	240.04	-49.77	8,301.14	904.60	2,067.96	1,786.65	281.31	7.351	
20,600.00	9,481.22	9,483.56	9,479.03	90.00	239.62	-48.48	8,301.15	904.60	2,166.07	1,885.17	280.90	7.711	
20,700.00	9,468.54	9,471.34	9,466.81	90.71	239.20	-47.25	8,301.16	904.60	2,264.28	1,983.78	280.49	8.072	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) NEW MEXICO BP STATE 002 P & A - Vertical - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
24,500.00	8,852.96	8,877.43	8,852.96	118.28	322.02	-129.58	16,458.36	563.51	2,241.18	1,863.95	377.23	5.941	
24,600.00	8,831.46	8,855.83	8,831.46	119.02	320.62	-128.29	16,458.36	563.51	2,146.80	1,770.04	376.76	5.698	
24,700.00	8,809.97	8,834.30	8,809.97	119.75	319.17	-126.95	16,458.36	563.51	2,052.73	1,676.39	376.34	5.454	
24,800.00	8,788.47	8,830.00	8,805.67	120.49	318.89	-126.68	16,458.36	563.51	1,959.09	1,581.65	377.43	5.191	
24,900.00	8,766.97	8,830.00	8,805.67	121.23	318.89	-126.68	16,458.36	563.51	1,866.10	1,487.08	379.02	4.924	
25,000.00	8,745.48	8,769.10	8,745.48	121.96	314.81	-122.64	16,458.36	563.51	1,772.85	1,397.05	375.81	4.717	
25,100.00	8,723.98	8,805.01	8,781.36	122.70	317.21	-125.11	16,459.38	563.51	1,682.49	1,301.82	380.67	4.420	
25,200.00	8,702.48	8,725.89	8,702.48	123.44	311.92	-119.51	16,458.36	563.51	1,588.90	1,212.57	376.32	4.222	
25,300.00	8,680.26	8,703.67	8,680.26	124.18	310.43	-120.26	16,458.36	563.51	1,498.15	1,121.27	376.88	3.975	
25,400.00	8,654.86	8,678.26	8,654.86	124.91	308.73	-121.80	16,458.36	563.51	1,409.02	1,031.52	377.50	3.733	
25,500.00	8,626.28	8,649.69	8,626.28	125.65	306.82	-121.84	16,458.36	563.51	1,321.77	943.56	378.21	3.495	
25,600.00	8,596.98	8,620.26	8,596.98	126.38	304.89	-119.74	16,458.36	563.51	1,235.98	856.70	379.28	3.259	
25,700.00	8,567.67	8,590.92	8,567.67	127.11	303.05	-117.55	16,458.36	563.51	1,151.73	770.85	380.88	3.024	
25,800.00	8,538.37	8,561.49	8,538.37	127.85	301.27	-115.27	16,458.36	563.51	1,069.40	686.32	383.08	2.792	
25,900.00	8,509.06	8,532.03	8,509.06	128.58	299.47	-112.90	16,458.36	563.51	989.46	603.61	385.85	2.564	
26,000.00	8,479.76	8,502.64	8,479.76	129.32	297.67	-110.44	16,458.36	563.51	912.54	523.25	389.29	2.344	
26,100.00	8,450.45	8,473.22	8,450.45	130.05	295.90	-107.90	16,458.36	563.51	839.47	445.98	393.49	2.133	
26,200.00	8,421.14	8,443.82	8,421.14	130.79	294.20	-105.29	16,458.36	563.51	771.34	372.89	398.45	1.936	
26,300.00	8,391.84	8,414.41	8,391.84	131.53	292.48	-102.61	16,458.36	563.51	709.59	305.62	403.97	1.757	
26,400.00	8,362.53	8,385.02	8,362.53	132.26	290.70	-99.87	16,458.36	563.51	656.00	246.38	409.62	1.601	
26,500.00	8,333.23	8,356.27	8,333.93	133.00	288.91	-97.17	16,458.81	563.51	612.91	198.12	414.79	1.478	Level 3
26,600.00	8,303.92	8,331.98	8,309.88	133.73	287.39	-94.85	16,458.48	563.51	582.16	163.24	418.92	1.390	Level 3
26,700.00	8,274.62	8,296.61	8,274.62	134.47	285.13	-91.43	16,458.36	563.51	566.14	146.61	419.53	1.349	Level 3
26,750.24	8,259.89	8,281.89	8,259.89	134.84	284.19	-90.00	16,458.36	563.51	564.10	145.22	418.87	1.347	Level 3, CC, ES, SF
26,800.00	8,245.31	8,267.31	8,245.31	135.21	283.26	-88.58	16,458.36	563.51	566.10	148.72	417.38	1.356	Level 3
26,900.00	8,217.06	8,238.92	8,217.06	135.94	281.50	-85.93	16,458.36	563.51	582.06	169.96	412.10	1.412	Level 3
27,000.00	8,189.09	8,209.54	8,187.79	136.68	279.72	-83.11	16,458.73	563.51	612.69	208.34	404.35	1.515	
27,100.00	8,161.11	8,179.95	8,158.29	137.42	277.95	-80.29	16,458.61	563.51	656.21	260.98	395.23	1.660	
27,200.00	8,133.14	8,152.16	8,130.60	138.16	276.32	-77.69	16,458.65	563.51	710.05	324.13	385.92	1.840	
27,300.00	8,105.17	8,125.51	8,104.02	138.90	274.81	-75.24	16,458.55	563.51	772.19	395.18	377.01	2.048	
27,400.00	8,077.20	8,098.61	8,077.20	139.63	273.30	-72.82	16,458.36	563.51	840.83	472.08	368.76	2.280	
27,500.00	8,049.22	8,070.54	8,049.22	140.37	271.73	-70.36	16,458.36	563.51	914.30	553.06	361.24	2.531	
27,600.00	8,021.25	8,042.49	8,021.25	141.11	270.17	-67.98	16,458.36	563.51	991.63	637.13	354.50	2.797	
27,700.00	7,993.28	8,014.41	7,993.28	141.85	268.60	-65.68	16,458.36	563.51	1,071.98	723.50	348.48	3.076	
27,800.00	7,965.31	7,980.27	7,959.24	142.59	266.71	-62.99	16,458.67	563.51	1,154.47	811.59	342.87	3.367	
27,900.00	7,937.33	7,947.17	7,926.23	143.33	264.92	-60.49	16,458.66	563.51	1,239.17	901.27	337.90	3.667	
28,000.00	7,909.36	7,930.28	7,909.36	144.07	264.02	-59.25	16,458.36	563.51	1,325.60	991.57	334.02	3.969	
28,100.00	7,881.39	7,902.20	7,881.39	144.81	262.47	-57.28	16,458.36	563.51	1,413.07	1,083.00	330.07	4.281	
28,200.00	7,853.42	7,874.15	7,853.42	145.55	260.89	-55.39	16,458.36	563.51	1,501.58	1,175.16	326.42	4.600	
28,300.00	7,825.44	7,846.05	7,825.44	146.29	259.26	-53.58	16,458.36	563.51	1,590.97	1,267.95	323.02	4.925	
28,400.00	7,797.47	7,815.53	7,795.02	147.03	257.48	-51.72	16,458.65	563.51	1,680.81	1,361.06	319.75	5.257	
28,444.58	7,785.00	7,805.51	7,785.00	147.36	256.90	-51.11	16,458.36	563.51	1,721.46	1,402.96	318.50	5.405	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) OHIO STATE 001 - Verticals - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
25,800.00	8,538.37	8,556.81	8,538.37	127.85	265.74	-155.07	17,824.33	803.62	2,292.85	1,976.94	315.91	7.258	
25,900.00	8,509.06	8,527.39	8,509.06	128.58	263.45	-154.11	17,824.33	803.62	2,198.16	1,884.09	314.07	6.999	
26,000.00	8,479.76	8,497.77	8,479.76	129.32	261.14	-153.09	17,824.33	803.62	2,103.54	1,791.31	312.24	6.737	
26,100.00	8,450.45	8,468.35	8,450.45	130.05	258.83	-151.98	17,824.33	803.62	2,009.02	1,698.57	310.45	6.471	
26,200.00	8,421.14	8,438.75	8,421.14	130.79	256.52	-150.80	17,824.33	803.62	1,914.61	1,605.88	308.73	6.202	
26,300.00	8,391.84	8,409.34	8,391.84	131.53	254.25	-149.51	17,824.33	803.62	1,820.32	1,513.21	307.12	5.927	
26,400.00	8,362.53	8,379.72	8,362.53	132.26	251.97	-148.12	17,824.33	803.62	1,726.18	1,420.61	305.58	5.649	
26,500.00	8,333.23	8,350.30	8,333.23	133.00	249.71	-146.61	17,824.33	803.62	1,632.21	1,328.06	304.16	5.366	
26,600.00	8,303.92	8,320.69	8,303.92	133.73	247.45	-144.98	17,824.33	803.62	1,538.45	1,235.59	302.86	5.080	
26,700.00	8,274.62	8,291.29	8,274.62	134.47	245.23	-143.19	17,824.33	803.62	1,444.92	1,143.17	301.75	4.789	
26,800.00	8,245.31	8,261.74	8,245.31	135.21	243.06	-141.25	17,824.33	803.62	1,351.68	1,050.82	300.86	4.493	
26,900.00	8,217.06	8,233.40	8,217.06	135.94	241.11	-137.79	17,824.33	803.62	1,258.50	958.07	300.43	4.189	
27,000.00	8,189.09	8,205.22	8,189.09	136.68	239.18	-135.45	17,824.33	803.62	1,165.68	865.38	300.30	3.882	
27,100.00	8,161.11	8,177.17	8,161.11	137.42	237.35	-132.89	17,824.33	803.62	1,073.42	772.78	300.64	3.570	
27,200.00	8,133.14	8,148.99	8,133.14	138.16	235.52	-130.10	17,824.33	803.62	981.88	680.43	301.45	3.257	
27,300.00	8,105.17	8,120.98	8,105.17	138.90	233.77	-127.07	17,824.33	803.62	891.28	588.34	302.94	2.942	
27,400.00	8,077.20	8,092.96	8,077.20	139.63	232.01	-123.77	17,824.33	803.62	801.94	496.69	305.25	2.627	
27,500.00	8,049.22	8,084.00	8,068.24	140.37	231.45	-122.65	17,824.33	803.62	714.59	403.88	310.70	2.300	
27,600.00	8,021.25	8,036.74	8,021.25	141.11	228.50	-116.34	17,824.33	803.62	629.18	315.72	313.46	2.007	
27,700.00	7,993.28	8,008.66	7,993.28	141.85	226.74	-112.21	17,824.33	803.62	547.63	227.46	320.17	1.710	
27,800.00	7,965.31	7,994.00	7,978.64	142.59	225.81	-109.95	17,824.33	803.62	471.75	140.98	330.77	1.426	Level 3
27,900.00	7,937.33	7,962.00	7,946.78	143.33	223.82	-104.79	17,824.33	803.62	404.18	62.32	341.87	1.182	Level 2
28,000.00	7,909.36	7,928.11	7,913.15	144.07	221.84	-99.10	17,824.72	803.62	350.36	-3.56	353.92	0.990	Level 1
28,100.00	7,881.39	7,896.31	7,881.39	144.81	220.06	-93.50	17,824.33	803.62	316.84	-46.22	363.05	0.873	Level 1
28,170.67	7,861.62	7,876.37	7,861.58	145.33	218.95	-89.99	17,824.38	803.62	309.51	-54.62	364.13	0.850	Level 1, CC, ES, SF
28,200.00	7,853.42	7,867.42	7,852.64	145.55	218.47	-88.42	17,824.67	803.62	310.76	-52.00	362.76	0.857	Level 1
28,300.00	7,825.44	7,840.17	7,825.44	146.29	217.01	-83.59	17,824.33	803.62	333.52	-17.95	351.47	0.949	Level 1
28,400.00	7,797.47	7,806.52	7,791.93	147.03	215.23	-77.81	17,824.61	803.62	379.76	45.23	334.54	1.135	Level 2
28,444.58	7,785.00	7,795.92	7,781.34	147.36	214.69	-76.04	17,824.81	803.62	405.90	78.71	327.19	1.241	Level 2

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) OHIO STATE 002 - Verticals - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
25,900.00	8,509.06	7,040.00	7,026.80	128.58	122.54	-33.22	17,197.49	489.75	2,237.22	2,057.65	179.57	12.459	
26,000.00	8,479.76	7,040.00	7,026.80	129.32	122.54	-33.22	17,197.49	489.75	2,152.06	1,971.67	180.39	11.930	
26,100.00	8,450.45	7,040.00	7,026.80	130.05	122.54	-33.22	17,197.49	489.75	2,068.22	1,886.98	181.25	11.411	
26,200.00	8,421.14	7,040.00	7,026.80	130.79	122.54	-33.22	17,197.49	489.75	1,985.89	1,803.75	182.14	10.903	
26,300.00	8,391.84	7,040.00	7,026.80	131.53	122.54	-33.22	17,197.49	489.75	1,905.24	1,722.18	183.06	10.408	
26,400.00	8,362.53	7,040.00	7,026.80	132.26	122.54	-33.22	17,197.49	489.75	1,826.51	1,642.50	184.02	9.926	
26,500.00	8,333.23	7,040.00	7,026.80	133.00	122.54	-33.22	17,197.49	489.75	1,749.96	1,564.95	185.01	9.459	
26,600.00	8,303.92	7,040.00	7,026.80	133.73	122.54	-33.22	17,197.49	489.75	1,675.88	1,489.85	186.03	9.009	
26,700.00	8,274.62	7,040.00	7,026.80	134.47	122.54	-33.22	17,197.49	489.75	1,604.61	1,417.52	187.08	8.577	
26,800.00	8,245.31	7,040.00	7,026.80	135.21	122.54	-33.22	17,197.49	489.75	1,536.54	1,348.36	188.18	8.165	
26,900.00	8,217.06	7,040.00	7,026.80	135.94	122.54	-32.84	17,197.49	489.75	1,472.85	1,283.53	189.32	7.780	
27,000.00	8,189.09	7,040.00	7,026.80	136.68	122.54	-32.84	17,197.49	489.75	1,413.57	1,223.03	190.54	7.419	
27,100.00	8,161.11	7,040.00	7,026.80	137.42	122.54	-32.84	17,197.49	489.75	1,359.08	1,167.20	191.88	7.083	
27,200.00	8,133.14	7,040.00	7,026.80	138.16	122.54	-32.84	17,197.49	489.75	1,309.96	1,116.55	193.41	6.773	
27,300.00	8,105.17	7,040.00	7,026.80	138.90	122.54	-32.84	17,197.49	489.75	1,266.84	1,071.64	195.21	6.490	
27,400.00	8,077.20	7,040.00	7,026.80	139.63	122.54	-32.84	17,197.49	489.75	1,230.36	1,033.02	197.33	6.235	
27,500.00	8,049.22	7,040.00	7,026.80	140.37	122.54	-32.84	17,197.49	489.75	1,201.12	1,001.28	199.83	6.011	
27,600.00	8,021.25	7,040.00	7,026.80	141.11	122.54	-32.84	17,197.49	489.75	1,179.65	976.99	202.66	5.821	
27,700.00	7,993.28	7,040.00	7,026.80	141.85	122.54	-32.84	17,197.49	489.75	1,166.39	960.69	205.70	5.670	
27,800.00	7,965.31	7,040.00	7,026.80	142.59	122.54	-32.84	17,197.49	489.75	1,161.63	952.89	208.73	5.565	
27,805.51	7,963.76	7,040.00	7,026.80	142.63	122.54	-32.84	17,197.49	489.75	1,161.61	952.72	208.90	5.561	CC, ES
27,900.00	7,937.33	7,040.00	7,026.80	143.33	122.54	-32.84	17,197.49	489.75	1,165.45	953.92	211.52	5.510	
28,000.00	7,909.36	7,040.00	7,026.80	144.07	122.54	-32.84	17,197.49	489.75	1,177.78	963.93	213.85	5.507	SF
28,100.00	7,881.39	7,040.00	7,026.80	144.81	122.54	-32.84	17,197.49	489.75	1,198.36	982.80	215.56	5.559	
28,200.00	7,853.42	7,040.00	7,026.80	145.55	122.54	-32.84	17,197.49	489.75	1,226.77	1,010.20	216.57	5.665	
28,300.00	7,825.44	7,040.00	7,026.80	146.29	122.54	-32.84	17,197.49	489.75	1,262.48	1,045.61	216.87	5.821	
28,400.00	7,797.47	7,040.00	7,026.80	147.03	122.54	-32.84	17,197.49	489.75	1,304.90	1,088.36	216.54	6.026	
28,444.58	7,785.00	7,040.00	7,026.80	147.36	122.54	-32.84	17,197.49	489.75	1,325.80	1,109.60	216.21	6.132	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) OHIO STATE 005 - Verticals - Surveys

Offset Site Error: 0.00 usft

Survey Program: 197-3_INC-Only, 2196-MWD OWSG Rev5

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
25,500.00	8,626.28	8,668.00	8,654.99	125.65	55.70	-163.63	17,513.95	914.98	2,256.35	2,152.76	103.59	21.782	
25,600.00	8,596.98	8,635.77	8,622.78	126.38	55.69	-163.00	17,514.32	916.02	2,161.37	2,057.56	103.81	20.821	
25,700.00	8,567.67	8,615.50	8,602.52	127.11	55.68	-162.56	17,514.67	916.57	2,066.62	1,962.35	104.27	19.820	
25,800.00	8,538.37	8,594.62	8,581.65	127.85	55.67	-162.07	17,515.13	917.04	1,972.07	1,867.29	104.78	18.822	
25,900.00	8,509.06	8,568.80	8,555.84	128.58	55.66	-161.42	17,515.83	917.50	1,877.72	1,772.48	105.24	17.843	
26,000.00	8,479.76	8,481.00	8,468.10	129.32	55.62	-158.88	17,516.78	920.17	1,782.76	1,678.42	104.34	17.087	
26,100.00	8,450.45	8,455.75	8,442.86	130.05	55.61	-158.03	17,516.72	921.18	1,687.55	1,582.76	104.78	16.105	
26,200.00	8,421.14	8,434.79	8,421.92	130.79	55.60	-157.25	17,516.77	921.90	1,592.56	1,487.16	105.40	15.109	
26,300.00	8,391.84	8,413.18	8,400.32	131.53	55.59	-156.38	17,516.92	922.51	1,497.80	1,391.70	106.10	14.117	
26,400.00	8,362.53	8,390.90	8,378.05	132.26	55.58	-155.39	17,517.18	923.03	1,403.29	1,296.39	106.90	13.127	
26,500.00	8,333.23	8,336.04	8,323.20	133.00	55.56	-152.52	17,517.73	924.02	1,308.99	1,202.19	106.80	12.256	
26,600.00	8,303.92	8,322.49	8,309.66	133.73	55.55	-151.69	17,518.31	924.05	1,215.04	1,106.94	108.10	11.240	
26,700.00	8,274.62	8,262.69	8,249.87	134.47	55.52	-147.50	17,518.02	925.41	1,120.47	1,012.48	107.99	10.376	
26,800.00	8,245.31	8,222.02	8,209.24	135.21	55.50	-143.95	17,517.00	926.70	1,025.50	916.84	108.66	9.438	
26,900.00	8,217.06	8,198.76	8,186.00	135.94	55.49	-139.96	17,516.34	927.43	930.48	820.33	110.15	8.447	
27,000.00	8,189.09	8,175.45	8,162.70	136.68	55.49	-137.06	17,515.71	928.10	835.84	723.79	112.05	7.459	
27,100.00	8,161.11	8,155.26	8,142.52	137.42	55.48	-134.23	17,515.24	928.62	741.84	627.15	114.69	6.468	
27,200.00	8,133.14	8,135.25	8,122.52	138.16	55.47	-131.12	17,514.94	929.07	648.85	530.59	118.26	5.487	
27,300.00	8,105.17	8,113.89	8,101.17	138.90	55.46	-127.42	17,514.82	929.48	557.29	434.19	123.10	4.527	
27,400.00	8,077.20	8,091.05	8,078.33	139.63	55.45	-122.99	17,514.90	929.84	467.88	337.96	129.92	3.601	
27,500.00	8,049.22	8,063.23	8,050.52	140.37	55.43	-116.91	17,515.26	930.19	381.89	242.35	139.54	2.737	
27,600.00	8,021.25	8,030.93	8,018.21	141.11	55.40	-108.89	17,515.47	930.69	301.59	147.86	153.73	1.962	
27,700.00	7,993.28	8,000.70	7,987.99	141.85	55.38	-100.56	17,515.37	931.30	233.05	58.52	174.53	1.335	Level 3
27,800.00	7,965.31	7,972.36	7,959.67	142.59	55.36	-92.24	17,515.02	932.00	189.95	-5.21	195.15	0.973	Level 1
27,848.32	7,951.79	7,959.30	7,946.62	142.95	55.35	-88.32	17,514.78	932.36	184.14	-13.62	197.77	0.931	Level 1, CC, ES, SF
27,900.00	7,937.33	7,945.75	7,933.08	143.33	55.33	-84.26	17,514.47	932.75	190.78	-1.19	191.97	0.994	Level 1
28,000.00	7,909.36	7,920.72	7,908.07	144.07	55.31	-76.86	17,513.75	933.56	235.37	68.19	167.18	1.408	Level 3
28,100.00	7,881.39	7,897.13	7,884.51	144.81	55.30	-70.20	17,512.90	934.41	305.28	160.54	144.73	2.109	
28,200.00	7,853.42	7,874.87	7,862.28	145.55	55.28	-64.31	17,511.93	935.28	387.15	257.21	129.94	2.979	
28,300.00	7,825.44	7,853.06	7,840.52	146.29	55.26	-58.99	17,510.84	936.21	474.93	354.31	120.62	3.937	
28,400.00	7,797.47	7,826.62	7,814.13	147.03	55.21	-53.20	17,509.59	937.30	565.79	450.99	114.81	4.928	
28,444.58	7,785.00	7,814.28	7,801.81	147.36	55.18	-50.75	17,509.07	937.78	606.89	493.93	112.95	5.373	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) SHETLAND SWD 001 - Vertical - Surveys

Offset Site Error: 0.00 usft

Survey Program: 357-3_INC-Only, 9770-MWD OWSG Rev5

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
20,200.00	9,531.25	9,540.62	9,531.25	87.17	299.89	-126.95	12,243.72	866.35	2,216.99	1,873.42	343.57	6.453	
20,300.00	9,519.27	9,528.63	9,519.27	87.88	299.39	-130.99	12,243.72	866.35	2,118.71	1,775.35	343.36	6.170	
20,400.00	9,506.58	9,515.93	9,506.58	88.59	298.86	-129.62	12,243.72	866.35	2,020.61	1,677.45	343.16	5.888	
20,500.00	9,493.90	9,503.25	9,493.90	89.29	298.33	-128.19	12,243.72	866.35	1,922.62	1,579.63	342.98	5.606	
20,600.00	9,481.22	9,490.57	9,481.22	90.00	297.80	-126.71	12,243.72	866.35	1,824.76	1,481.90	342.85	5.322	
20,700.00	9,468.54	9,477.75	9,468.54	90.71	297.28	-125.16	12,243.72	866.35	1,727.05	1,384.26	342.79	5.038	
20,800.00	9,455.85	9,465.06	9,455.85	91.43	296.79	-123.56	12,243.72	866.35	1,629.52	1,286.71	342.81	4.753	
20,900.00	9,443.17	9,496.96	9,487.73	92.14	298.03	-127.47	12,243.41	866.35	1,532.55	1,187.49	345.06	4.441	
21,000.00	9,430.49	9,468.87	9,459.67	92.85	296.94	-124.06	12,244.12	866.35	1,435.84	1,091.30	344.54	4.167	
21,100.00	9,417.81	9,443.79	9,434.60	93.56	295.97	-120.75	12,244.54	866.35	1,339.31	995.06	344.24	3.891	
21,200.00	9,405.13	9,421.25	9,412.07	94.28	295.09	-117.56	12,244.75	866.35	1,243.06	898.87	344.19	3.612	
21,300.00	9,392.44	9,401.58	9,392.44	94.99	294.33	-114.60	12,243.72	866.35	1,146.17	801.71	344.46	3.327	
21,400.00	9,379.76	9,388.90	9,379.76	95.71	293.84	-112.62	12,243.72	866.35	1,050.91	705.57	345.34	3.043	
21,500.00	9,366.09	9,375.23	9,366.09	96.43	293.31	-113.51	12,243.72	866.35	956.58	610.08	346.50	2.761	
21,600.00	9,351.40	9,360.55	9,351.40	97.15	292.74	-111.18	12,243.72	866.35	863.44	515.40	348.04	2.481	
21,700.00	9,336.72	9,345.86	9,336.72	97.87	292.17	-108.78	12,243.72	866.35	771.74	421.57	350.17	2.204	
21,800.00	9,322.03	9,331.17	9,322.03	98.59	291.60	-106.31	12,243.72	866.35	682.06	328.96	353.10	1.932	
21,900.00	9,307.35	9,316.41	9,307.35	99.31	291.01	-103.77	12,243.72	866.35	595.32	238.20	357.11	1.667	
22,000.00	9,292.66	9,311.07	9,302.01	100.03	290.78	-102.84	12,243.96	866.35	513.26	150.06	363.21	1.413	Level 3
22,100.00	9,277.97	9,287.77	9,278.72	100.75	289.79	-98.69	12,244.25	866.35	437.97	68.21	369.76	1.184	Level 2
22,200.00	9,263.29	9,272.31	9,263.29	101.48	289.14	-95.86	12,243.72	866.35	373.34	-5.19	378.53	0.986	Level 1
22,300.00	9,248.60	9,257.63	9,248.60	102.20	288.51	-93.16	12,243.72	866.35	326.88	-60.14	387.02	0.845	Level 1
22,400.00	9,233.91	9,243.03	9,234.30	102.93	287.91	-90.52	12,243.86	866.35	306.41	-84.43	390.84	0.784	Level 1
22,416.48	9,231.49	9,240.27	9,231.54	103.05	287.80	-90.01	12,243.92	866.35	305.98	-84.69	390.68	0.783	Level 1, CC, ES, SF
22,500.00	9,219.23	9,226.48	9,217.76	103.65	287.24	-87.47	12,244.18	866.35	316.88	-69.47	386.35	0.820	Level 1
22,600.00	9,204.54	9,210.42	9,201.72	104.38	286.60	-84.52	12,244.46	866.35	355.52	-20.62	376.15	0.945	Level 1
22,700.00	9,189.82	9,194.81	9,186.11	105.10	285.98	-81.42	12,244.68	866.35	414.57	49.43	365.14	1.135	Level 2
22,800.00	9,173.02	9,177.70	9,169.00	105.83	285.29	-76.93	12,244.89	866.35	486.39	130.58	355.81	1.367	Level 3
22,900.00	9,155.27	9,160.20	9,151.51	106.56	284.59	-73.91	12,245.05	866.35	566.14	217.57	348.57	1.624	
23,000.00	9,137.53	9,143.19	9,134.51	107.29	283.91	-71.07	12,245.16	866.35	651.01	307.93	343.08	1.898	
23,100.00	9,119.78	9,126.66	9,117.98	108.02	283.25	-68.39	12,245.22	866.35	739.26	400.37	338.89	2.181	
23,200.00	9,102.04	9,110.58	9,101.91	108.75	282.61	-65.88	12,245.25	866.35	829.83	494.19	335.64	2.472	
23,300.00	9,084.29	9,092.93	9,084.29	109.48	281.90	-63.19	12,243.72	866.35	923.47	590.49	332.98	2.773	
23,400.00	9,066.54	9,075.18	9,066.54	110.21	281.19	-60.65	12,243.72	866.35	1,016.84	686.02	330.83	3.074	
23,500.00	9,048.80	9,057.44	9,048.80	110.94	280.48	-58.22	12,243.72	866.35	1,111.09	782.07	329.02	3.377	
23,600.00	9,031.05	9,039.69	9,031.05	111.67	279.77	-55.92	12,243.72	866.35	1,206.00	878.54	327.47	3.683	
23,700.00	9,013.31	9,021.95	9,013.31	112.41	279.06	-53.74	12,243.72	866.35	1,301.43	975.33	326.10	3.991	
23,800.00	8,995.56	9,004.20	8,995.56	113.14	278.35	-51.67	12,243.72	866.35	1,397.28	1,072.39	324.89	4.301	
23,900.00	8,977.82	8,986.46	8,977.82	113.87	277.64	-49.71	12,243.72	866.35	1,493.46	1,169.68	323.78	4.613	
24,000.00	8,959.73	8,946.50	8,937.95	114.61	276.16	-43.53	12,244.14	866.35	1,589.59	1,267.34	322.24	4.933	
24,100.00	8,938.95	8,932.26	8,923.72	115.34	275.66	-39.50	12,244.30	866.35	1,685.43	1,364.01	321.43	5.244	
24,200.00	8,917.45	8,918.17	8,909.63	116.07	275.17	-38.48	12,244.40	866.35	1,781.42	1,460.76	320.65	5.556	
24,300.00	8,895.96	8,904.47	8,895.96	116.81	274.69	-37.53	12,243.72	866.35	1,878.35	1,558.42	319.94	5.871	
24,400.00	8,874.46	8,882.98	8,874.46	117.55	273.94	-36.11	12,243.72	866.35	1,974.78	1,655.71	319.07	6.189	
24,500.00	8,852.96	8,861.48	8,852.96	118.28	273.18	-34.79	12,243.72	866.35	2,071.31	1,753.08	318.24	6.509	
24,600.00	8,831.46	8,807.87	8,799.48	119.02	271.19	-31.85	12,244.41	866.35	2,167.50	1,850.97	316.53	6.848	
24,700.00	8,809.97	8,796.05	8,787.67	119.75	270.73	-31.26	12,244.56	866.35	2,263.96	1,948.03	315.93	7.166	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) STATE AN 005 - Verticals - Surveys

Offset Site Error: 0.00 usft

Survey Program: 100-r.5 GYRO-NS, 8478-MWD OWSG Rev5

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
26,100.00	8,450.45	8,312.86	8,285.69	130.05	29.47	133.53	18,090.28	1,636.26	2,308.88	2,230.57	78.31	29.484	
26,200.00	8,421.14	8,292.44	8,265.35	130.79	29.40	132.33	18,088.66	1,636.87	2,214.07	2,135.13	78.95	28.045	
26,300.00	8,391.84	8,270.22	8,243.21	131.53	29.32	130.98	18,086.90	1,637.52	2,119.52	2,039.85	79.66	26.606	
26,400.00	8,362.53	8,248.03	8,221.10	132.26	29.24	129.58	18,085.14	1,638.17	2,025.25	1,944.76	80.49	25.161	
26,500.00	8,333.23	8,225.89	8,199.03	133.00	29.16	128.12	18,083.38	1,638.80	1,931.31	1,849.87	81.45	23.713	
26,600.00	8,303.92	8,203.78	8,177.00	133.73	29.08	126.62	18,081.61	1,639.43	1,837.75	1,755.20	82.55	22.262	
26,700.00	8,274.62	8,182.65	8,155.95	134.47	29.01	125.12	18,079.92	1,640.02	1,744.64	1,660.80	83.84	20.809	
26,800.00	8,245.31	8,161.66	8,135.04	135.21	28.93	123.58	18,078.25	1,640.61	1,652.06	1,566.73	85.34	19.359	
26,900.00	8,217.06	8,141.67	8,115.12	135.94	28.86	120.41	18,076.67	1,641.18	1,559.88	1,472.79	87.09	17.911	
27,000.00	8,189.09	8,121.90	8,095.42	136.68	28.79	118.80	18,075.11	1,641.75	1,468.38	1,379.24	89.14	16.472	
27,100.00	8,161.11	8,102.08	8,075.66	137.42	28.72	117.15	18,073.55	1,642.31	1,377.78	1,286.23	91.55	15.049	
27,200.00	8,133.14	8,081.80	8,055.46	138.16	28.65	115.41	18,071.95	1,642.90	1,288.24	1,193.87	94.38	13.650	
27,300.00	8,105.17	8,061.53	8,035.26	138.90	28.58	113.62	18,070.35	1,643.50	1,200.02	1,102.31	97.72	12.281	
27,400.00	8,077.20	8,041.31	8,015.11	139.63	28.51	111.78	18,068.75	1,644.11	1,113.43	1,011.76	101.67	10.952	
27,500.00	8,049.22	8,021.13	7,995.01	140.37	28.44	109.91	18,067.15	1,644.73	1,028.87	922.53	106.34	9.675	
27,600.00	8,021.25	8,001.01	7,974.96	141.11	28.37	108.00	18,065.55	1,645.36	946.89	835.02	111.87	8.464	
27,700.00	7,993.28	7,981.41	7,955.43	141.85	28.30	106.11	18,063.99	1,645.97	868.23	749.86	118.37	7.335	
27,800.00	7,965.31	7,961.62	7,935.72	142.59	28.23	104.16	18,062.45	1,646.59	793.89	667.93	125.96	6.303	
27,900.00	7,937.33	7,941.62	7,915.78	143.33	28.16	102.16	18,060.91	1,647.20	725.17	590.55	134.62	5.387	
28,000.00	7,909.36	7,921.39	7,895.62	144.07	28.09	100.12	18,059.37	1,647.81	663.83	519.63	144.20	4.604	
28,100.00	7,881.39	7,900.94	7,875.23	144.81	28.02	98.03	18,057.84	1,648.43	612.07	457.92	154.15	3.971	
28,200.00	7,853.42	7,880.51	7,854.87	145.55	27.94	95.93	18,056.34	1,649.04	572.48	409.02	163.46	3.502	
28,300.00	7,825.44	7,859.92	7,834.34	146.29	27.87	93.80	18,054.84	1,649.66	547.71	377.05	170.66	3.209	
28,395.03	7,798.86	7,840.18	7,814.67	146.99	27.80	91.75	18,053.42	1,650.26	539.77	365.53	174.23	3.098	CC
28,400.00	7,797.47	7,839.15	7,813.63	147.03	27.80	91.64	18,053.35	1,650.29	539.79	365.47	174.31	3.097	ES, SF
28,444.58	7,785.00	7,829.83	7,804.34	147.36	27.77	90.67	18,052.69	1,650.58	541.94	367.37	174.57	3.104	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) STATE AN 006 TA - Vertical - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
24,600.00	8,831.46	8,839.16	8,831.46	119.02	291.23	125.38	16,542.88	1,775.40	2,239.03	1,896.64	342.39	6.539	
24,700.00	8,809.97	8,817.55	8,809.97	119.75	289.88	124.13	16,542.88	1,775.40	2,145.74	1,803.78	341.96	6.275	
24,800.00	8,788.47	8,796.01	8,788.47	120.49	288.51	122.84	16,542.88	1,775.40	2,052.86	1,711.23	341.63	6.009	
24,900.00	8,766.97	8,774.40	8,766.97	121.23	287.14	121.51	16,542.88	1,775.40	1,960.44	1,619.01	341.43	5.742	
25,000.00	8,745.48	8,752.81	8,745.48	121.96	285.78	120.15	16,542.88	1,775.40	1,868.56	1,527.17	341.39	5.473	
25,100.00	8,723.98	8,731.28	8,723.98	122.70	284.48	118.74	16,542.88	1,775.40	1,777.30	1,435.70	341.59	5.203	
25,200.00	8,702.48	8,709.61	8,702.48	123.44	283.18	117.30	16,542.88	1,775.40	1,686.75	1,344.73	342.01	4.932	
25,300.00	8,680.26	8,687.33	8,680.26	124.18	281.86	118.09	16,542.88	1,775.40	1,597.19	1,254.54	342.65	4.661	
25,400.00	8,654.86	8,661.90	8,654.86	124.91	280.35	119.65	16,542.88	1,775.40	1,509.32	1,165.97	343.35	4.396	
25,500.00	8,626.28	8,633.23	8,626.28	125.65	278.55	119.79	16,542.88	1,775.40	1,423.39	1,079.31	344.08	4.137	
25,600.00	8,596.98	8,603.78	8,596.98	126.38	276.62	117.89	16,542.88	1,775.40	1,338.99	993.95	345.03	3.881	
25,700.00	8,567.67	8,574.33	8,567.67	127.11	274.66	115.92	16,542.88	1,775.40	1,256.20	909.80	346.40	3.626	
25,800.00	8,538.37	8,544.89	8,538.37	127.85	272.77	113.89	16,542.88	1,775.40	1,175.36	827.03	348.33	3.374	
25,900.00	8,509.06	8,515.42	8,509.06	128.58	270.78	111.78	16,542.88	1,775.40	1,096.90	746.17	350.73	3.127	
26,000.00	8,479.76	8,485.93	8,479.76	129.32	268.72	109.62	16,542.88	1,775.40	1,021.36	667.68	353.68	2.888	
26,100.00	8,450.45	8,456.42	8,450.45	130.05	266.64	107.39	16,542.88	1,775.40	949.45	592.15	357.30	2.657	
26,200.00	8,421.14	8,427.06	8,421.14	130.79	264.57	105.11	16,542.88	1,775.40	882.05	520.44	361.61	2.439	
26,300.00	8,391.84	8,397.50	8,391.84	131.53	262.44	102.78	16,542.88	1,775.40	820.28	453.80	366.47	2.238	
26,400.00	8,362.53	8,368.05	8,362.53	132.26	260.40	100.41	16,542.88	1,775.40	765.49	393.66	371.83	2.059	
26,500.00	8,333.23	8,338.64	8,333.23	133.00	258.40	98.00	16,542.88	1,775.40	719.29	342.03	377.26	1.907	
26,600.00	8,303.92	8,315.92	8,310.78	133.73	256.86	96.14	16,543.35	1,775.40	683.62	301.14	382.48	1.787	
26,700.00	8,274.62	8,279.69	8,274.62	134.47	254.42	93.10	16,542.88	1,775.40	659.58	273.90	385.68	1.710	
26,800.00	8,245.31	8,250.30	8,245.37	135.21	252.45	90.64	16,543.29	1,775.40	649.09	261.90	387.19	1.676	
26,825.18	8,237.98	8,242.88	8,237.98	135.39	251.96	90.00	16,542.88	1,775.40	648.63	261.42	387.20	1.675	CC, ES, SF
26,900.00	8,217.06	8,221.76	8,216.94	135.94	250.55	88.22	16,543.15	1,775.40	652.56	266.28	386.28	1.689	
27,000.00	8,189.09	8,193.74	8,189.09	136.68	248.71	85.86	16,542.88	1,775.40	669.99	287.09	382.90	1.750	
27,100.00	8,161.11	8,165.15	8,160.59	137.42	246.93	83.47	16,543.21	1,775.40	700.12	322.56	377.56	1.854	
27,200.00	8,133.14	8,135.00	8,130.58	138.16	245.07	80.98	16,543.26	1,775.40	741.59	370.80	370.79	2.000	
27,300.00	8,105.17	8,105.52	8,101.25	138.90	243.17	78.57	16,543.20	1,775.40	792.63	429.35	363.28	2.182	
27,400.00	8,077.20	8,081.06	8,076.85	139.63	241.62	76.59	16,543.01	1,775.40	851.56	495.72	355.84	2.393	
27,500.00	8,049.22	8,051.69	8,047.62	140.37	239.98	74.27	16,543.31	1,775.40	916.47	567.82	348.66	2.629	
27,600.00	8,021.25	8,025.31	8,021.25	141.11	238.54	72.21	16,542.88	1,775.40	986.97	645.04	341.93	2.886	
27,700.00	7,993.28	7,995.55	7,991.63	141.85	237.03	69.98	16,543.45	1,775.40	1,060.76	725.03	335.73	3.160	
27,800.00	7,965.31	7,969.20	7,965.31	142.59	235.69	68.02	16,542.88	1,775.40	1,138.71	808.66	330.05	3.450	
27,900.00	7,937.33	7,932.97	7,929.25	143.33	233.81	65.45	16,543.55	1,775.40	1,218.31	893.71	324.59	3.753	
28,000.00	7,909.36	7,913.05	7,909.36	144.07	232.77	64.06	16,542.88	1,775.40	1,301.13	981.19	319.94	4.067	
28,100.00	7,881.39	7,875.38	7,871.76	144.81	230.80	61.54	16,543.15	1,775.40	1,384.98	1,069.76	315.22	4.394	
28,200.00	7,853.42	7,839.00	7,835.55	145.55	228.89	59.23	16,543.33	1,775.40	1,470.41	1,159.55	310.85	4.730	
28,300.00	7,825.44	7,827.67	7,824.22	146.29	228.30	58.52	16,543.41	1,775.40	1,556.96	1,249.45	307.51	5.063	
28,400.00	7,797.47	7,800.90	7,797.47	147.03	226.92	56.89	16,542.88	1,775.40	1,645.22	1,341.24	303.98	5.412	
28,444.58	7,785.00	7,773.22	7,769.91	147.36	225.54	55.29	16,543.38	1,775.40	1,684.24	1,382.14	302.11	5.575	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) STATE AN 007 P & A - Vertical - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
27,000.00	8,189.09	8,203.33	8,189.09	136.68	224.71	99.20	17,866.02	3,083.21	2,277.08	1,934.98	342.11	6.656	
27,100.00	8,161.11	8,175.30	8,161.11	137.42	223.47	98.44	17,866.02	3,083.21	2,230.51	1,886.66	343.85	6.487	
27,200.00	8,133.14	8,147.28	8,133.14	138.16	222.25	97.68	17,866.02	3,083.21	2,187.16	1,841.58	345.58	6.329	
27,300.00	8,105.17	8,119.26	8,105.17	138.90	221.05	96.91	17,866.02	3,083.21	2,147.23	1,799.93	347.30	6.183	
27,400.00	8,077.20	8,091.22	8,077.20	139.63	219.84	96.14	17,866.02	3,083.21	2,110.92	1,761.99	348.93	6.050	
27,500.00	8,049.22	8,067.00	8,052.99	140.37	218.78	95.47	17,866.02	3,083.21	2,078.41	1,727.82	350.59	5.928	
27,600.00	8,021.25	8,035.21	8,021.25	141.11	217.46	94.59	17,866.02	3,083.21	2,049.88	1,698.00	351.88	5.826	
27,700.00	7,993.28	8,007.18	7,993.28	141.85	216.21	93.81	17,866.02	3,083.21	2,025.51	1,672.44	353.06	5.737	
27,800.00	7,965.31	7,979.13	7,965.31	142.59	214.90	93.03	17,866.02	3,083.21	2,005.44	1,651.46	353.98	5.665	
27,900.00	7,937.33	7,951.09	7,937.33	143.33	213.62	92.25	17,866.02	3,083.21	1,989.81	1,635.11	354.70	5.610	
28,000.00	7,909.36	7,924.24	7,910.53	144.07	212.45	91.51	17,866.24	3,083.21	1,978.74	1,623.48	355.25	5.570	
28,100.00	7,881.39	7,896.95	7,883.31	144.81	211.31	90.75	17,866.19	3,083.21	1,972.25	1,616.67	355.57	5.547	
28,188.80	7,856.55	7,870.17	7,856.55	145.47	210.27	90.00	17,866.02	3,083.21	1,970.39	1,614.81	355.58	5.541	CC, ES, SF
28,200.00	7,853.42	7,867.03	7,853.42	145.55	210.14	89.91	17,866.02	3,083.21	1,970.42	1,614.85	355.58	5.541	
28,300.00	7,825.44	7,837.69	7,824.10	146.29	209.01	89.09	17,866.10	3,083.21	1,973.28	1,617.97	355.30	5.554	
28,400.00	7,797.47	7,811.06	7,797.47	147.03	208.06	88.35	17,866.02	3,083.21	1,980.80	1,625.91	354.89	5.581	
28,444.58	7,785.00	7,797.59	7,784.04	147.36	207.57	87.98	17,866.22	3,083.21	1,985.61	1,631.07	354.54	5.600	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - (O) STATE AN 010 P & A - Vertical - Surveys

Offset Site Error: 0.00 usft

Survey Program: 0-3_INC-Only

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
25,600.00	8,596.98	8,610.57	8,596.98	126.38	276.57	99.80	16,546.07	3,096.16	2,285.88	1,901.10	384.78	5.941	
25,700.00	8,567.67	8,581.24	8,567.67	127.11	274.98	99.01	16,546.07	3,096.16	2,238.86	1,852.90	385.95	5.801	
25,800.00	8,538.37	8,551.83	8,538.37	127.85	273.35	98.21	16,546.07	3,096.16	2,194.99	1,807.91	387.08	5.671	
25,900.00	8,509.06	8,522.43	8,509.06	128.58	271.72	97.41	16,546.07	3,096.16	2,154.47	1,766.29	388.18	5.550	
26,000.00	8,479.76	8,493.03	8,479.76	129.32	270.06	96.61	16,546.07	3,096.16	2,117.50	1,728.31	389.19	5.441	
26,100.00	8,450.45	8,463.62	8,450.45	130.05	268.40	95.80	16,546.07	3,096.16	2,084.27	1,694.16	390.11	5.343	
26,200.00	8,421.14	8,434.22	8,421.14	130.79	266.76	94.99	16,546.07	3,096.16	2,054.94	1,664.00	390.94	5.256	
26,300.00	8,391.84	8,404.83	8,391.84	131.53	265.16	94.18	16,546.07	3,096.16	2,029.70	1,638.04	391.67	5.182	
26,400.00	8,362.53	8,375.43	8,362.53	132.26	263.57	93.37	16,546.07	3,096.16	2,008.70	1,616.47	392.23	5.121	
26,500.00	8,333.23	8,351.86	8,339.05	133.00	262.29	92.72	16,546.30	3,096.16	1,992.12	1,599.25	392.87	5.071	
26,600.00	8,303.92	8,318.91	8,306.19	133.73	260.50	91.81	16,546.32	3,096.16	1,979.96	1,587.14	392.82	5.040	
26,700.00	8,274.62	8,288.98	8,276.33	134.47	258.95	90.98	16,546.31	3,096.16	1,972.36	1,579.62	392.74	5.022	
26,800.00	8,245.31	8,258.61	8,246.06	135.21	257.43	90.14	16,546.29	3,096.16	1,969.39	1,576.95	392.44	5.018	ES, SF
26,814.10	8,241.19	8,254.06	8,241.51	135.31	257.21	90.01	16,546.38	3,096.16	1,969.34	1,576.98	392.37	5.019	CC
26,900.00	8,217.06	8,229.59	8,217.06	135.94	256.02	89.33	16,546.07	3,096.16	1,971.07	1,579.12	391.95	5.029	
27,000.00	8,189.09	8,201.54	8,189.09	136.68	254.62	88.55	16,546.07	3,096.16	1,977.43	1,586.23	391.20	5.055	
27,100.00	8,161.11	8,173.48	8,161.11	137.42	253.18	87.77	16,546.07	3,096.16	1,988.40	1,598.29	390.12	5.097	
27,200.00	8,133.14	8,142.71	8,130.44	138.16	251.56	86.91	16,546.43	3,096.16	2,003.86	1,615.27	388.60	5.157	
27,300.00	8,105.17	8,108.67	8,096.50	138.90	249.78	85.97	16,546.32	3,096.16	2,023.85	1,637.17	386.67	5.234	
27,400.00	8,077.20	8,089.35	8,077.20	139.63	248.79	85.43	16,546.07	3,096.16	2,048.15	1,662.97	385.18	5.317	
27,500.00	8,049.22	8,060.79	8,048.71	140.37	247.33	84.64	16,546.36	3,096.16	2,076.50	1,693.43	383.06	5.421	
27,600.00	8,021.25	8,024.33	8,012.40	141.11	245.44	83.64	16,546.57	3,096.16	2,108.85	1,728.48	380.37	5.544	
27,700.00	7,993.28	8,005.18	7,993.28	141.85	244.43	83.11	16,546.07	3,096.16	2,145.24	1,767.00	378.23	5.672	
27,800.00	7,965.31	7,971.74	7,959.91	142.59	242.68	82.20	16,546.33	3,096.16	2,184.98	1,809.66	375.33	5.822	
27,900.00	7,937.33	7,942.09	7,930.34	143.33	241.14	81.39	16,546.34	3,096.16	2,228.25	1,855.78	372.47	5.982	
28,000.00	7,909.36	7,913.55	7,901.86	144.07	239.69	80.61	16,546.28	3,096.16	2,274.78	1,905.21	369.58	6.155	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 501H - OH - Plan #2 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+MS — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.10	0.00	0.00	0.00	-90.11	-0.08	-40.00	40.00				
100.00	100.00	100.10	100.00	0.28	0.28	-90.11	-0.08	-40.00	40.00	39.45	0.55	72.411	
200.00	200.00	200.10	200.00	0.63	0.63	-90.11	-0.08	-40.00	40.00	38.73	1.27	31.512	
300.00	300.00	300.10	300.00	0.99	0.99	-90.11	-0.08	-40.00	40.00	38.01	1.99	20.138	
400.00	400.00	400.10	400.00	1.35	1.35	-90.11	-0.08	-40.00	40.00	37.30	2.70	14.797	
500.00	500.00	500.10	500.00	1.71	1.71	-90.11	-0.08	-40.00	40.00	36.58	3.42	11.695	
600.00	600.00	600.10	600.00	2.07	2.07	-90.11	-0.08	-40.00	40.00	35.86	4.14	9.669	
700.00	700.00	700.10	700.00	2.43	2.43	-90.11	-0.08	-40.00	40.00	35.15	4.85	8.241	
800.00	800.00	800.10	800.00	2.79	2.79	-90.11	-0.08	-40.00	40.00	34.43	5.57	7.180	
900.00	900.00	900.10	900.00	3.14	3.14	-90.11	-0.08	-40.00	40.00	33.71	6.29	6.361	
1,000.00	1,000.00	1,000.10	1,000.00	3.50	3.50	-90.11	-0.08	-40.00	40.00	33.00	7.00	5.710	
1,100.00	1,100.00	1,100.10	1,100.00	3.86	3.86	-90.11	-0.08	-40.00	40.00	32.28	7.72	5.180	
1,200.00	1,200.00	1,200.10	1,200.00	4.22	4.22	-90.11	-0.08	-40.00	40.00	31.56	8.44	4.740	
1,300.00	1,300.00	1,300.10	1,300.00	4.58	4.58	-90.11	-0.08	-40.00	40.00	30.84	9.16	4.369	
1,400.00	1,400.00	1,400.10	1,400.00	4.94	4.94	-90.11	-0.08	-40.00	40.00	30.13	9.87	4.052	
1,500.00	1,500.00	1,500.10	1,500.00	5.29	5.29	-90.11	-0.08	-40.00	40.00	29.41	10.59	3.777	
1,600.00	1,600.00	1,600.10	1,600.00	5.65	5.65	-90.11	-0.08	-40.00	40.00	28.69	11.31	3.538	CC, ES
1,700.00	1,699.98	1,700.08	1,699.98	6.00	6.01	170.20	-0.08	-40.00	41.72	29.71	12.01	3.473	SF
1,800.00	1,799.84	1,799.94	1,799.84	6.34	6.37	171.27	-0.08	-40.00	46.88	34.17	12.71	3.689	
1,900.00	1,899.45	1,899.55	1,899.45	6.68	6.73	172.62	-0.08	-40.00	55.51	42.11	13.41	4.140	
2,000.00	1,998.70	1,998.80	1,998.70	7.03	7.08	173.92	-0.08	-40.00	67.62	53.51	14.11	4.793	
2,100.00	2,097.47	2,097.57	2,097.47	7.38	7.44	175.03	-0.08	-40.00	83.19	68.38	14.81	5.618	
2,200.00	2,195.96	2,196.06	2,195.96	7.73	7.79	175.89	-0.08	-40.00	100.45	84.95	15.50	6.480	
2,300.00	2,294.44	2,294.54	2,294.44	8.08	8.14	176.49	-0.08	-40.00	117.73	101.53	16.20	7.267	
2,400.00	2,392.93	2,393.03	2,392.93	8.44	8.50	176.94	-0.08	-40.00	135.02	118.12	16.90	7.989	
2,500.00	2,491.42	2,491.52	2,491.42	8.80	8.85	177.29	-0.08	-40.00	152.31	134.71	17.60	8.653	
2,600.00	2,589.91	2,590.01	2,589.91	9.16	9.20	177.57	-0.08	-40.00	169.61	151.30	18.31	9.264	
2,700.00	2,688.40	2,688.50	2,688.40	9.52	9.56	177.79	-0.08	-40.00	186.91	167.90	19.01	9.830	
2,800.00	2,786.89	2,786.99	2,786.89	9.88	9.91	177.98	-0.08	-40.00	204.21	184.49	19.72	10.355	
2,900.00	2,885.38	2,885.48	2,885.38	10.24	10.26	178.14	-0.08	-40.00	221.52	201.09	20.43	10.843	
3,000.00	2,983.87	2,983.97	2,983.87	10.61	10.61	178.27	-0.08	-40.00	238.82	217.68	21.14	11.297	
3,100.00	3,082.36	3,082.46	3,082.36	10.97	10.97	178.39	-0.08	-40.00	256.13	234.28	21.85	11.721	
3,200.00	3,180.85	3,180.95	3,180.85	11.34	11.32	178.49	-0.08	-40.00	273.44	250.87	22.56	12.118	
3,300.00	3,279.34	3,279.44	3,279.34	11.71	11.67	178.58	-0.08	-40.00	290.75	267.47	23.28	12.490	
3,400.00	3,377.83	3,377.93	3,377.83	12.07	12.03	178.66	-0.08	-40.00	308.06	284.07	23.99	12.840	
3,500.00	3,476.32	3,476.42	3,476.32	12.44	12.38	178.73	-0.08	-40.00	325.37	300.66	24.71	13.169	
3,600.00	3,574.81	3,571.98	3,571.88	12.81	12.71	178.65	-0.87	-40.43	343.00	317.61	25.39	13.508	
3,700.00	3,673.30	3,666.17	3,665.97	13.18	13.02	178.12	-4.31	-42.31	361.72	335.67	26.05	13.885	
3,800.00	3,771.79	3,759.65	3,759.19	13.55	13.33	177.20	-10.40	-45.64	381.62	354.93	26.70	14.295	
3,900.00	3,870.28	3,852.35	3,851.37	13.92	13.63	175.97	-19.07	-50.38	402.83	375.50	27.33	14.738	
4,000.00	3,968.77	3,949.44	3,947.72	14.29	13.95	174.62	-29.45	-56.06	424.82	396.82	28.01	15.167	
4,100.00	4,067.26	4,046.52	4,044.08	14.66	14.27	173.41	-39.83	-61.74	447.02	418.33	28.69	15.583	
4,200.00	4,165.75	4,143.60	4,140.44	15.04	14.59	172.30	-50.21	-67.42	469.39	440.02	29.37	15.983	
4,300.00	4,264.24	4,240.69	4,236.80	15.41	14.91	171.30	-60.59	-73.09	491.91	461.86	30.05	16.369	
4,400.00	4,362.73	4,337.77	4,333.16	15.78	15.24	170.39	-70.98	-78.77	514.57	483.83	30.74	16.741	
4,500.00	4,461.22	4,434.85	4,429.52	16.15	15.56	169.55	-81.36	-84.45	537.34	505.91	31.43	17.099	
4,600.00	4,559.71	4,531.94	4,525.88	16.53	15.89	168.78	-91.74	-90.13	560.21	528.09	32.12	17.444	
4,700.00	4,658.20	4,629.02	4,622.24	16.90	16.22	168.07	-102.12	-95.81	583.16	550.36	32.81	17.776	
4,800.00	4,756.69	4,726.10	4,718.60	17.27	16.55	167.41	-112.50	-101.48	606.20	572.70	33.50	18.095	
4,900.00	4,855.18	4,823.19	4,814.96	17.65	16.88	166.80	-122.88	-107.16	629.31	595.11	34.20	18.403	
5,000.00	4,953.67	4,920.27	4,911.32	18.02	17.21	166.24	-133.27	-112.84	652.48	617.59	34.89	18.699	
5,100.00	5,052.15	5,017.35	5,007.68	18.40	17.55	165.71	-143.65	-118.52	675.71	640.11	35.59	18.985	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 501H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Rule Assigned: Warning
5,200.00	5,150.64	5,114.43	5,104.04	18.77	17.88	165.22	-154.03	-124.19	698.98	662.69	36.29	19.260	
5,300.00	5,249.13	5,211.52	5,200.40	19.14	18.22	164.76	-164.41	-129.87	722.30	685.31	36.99	19.525	
5,400.00	5,347.62	5,308.60	5,296.76	19.52	18.56	164.33	-174.79	-135.55	745.67	707.97	37.70	19.781	
5,500.00	5,446.11	5,405.68	5,393.12	19.89	18.89	163.92	-185.18	-141.23	769.07	730.67	38.40	20.028	
5,600.00	5,544.60	5,502.77	5,489.47	20.27	19.23	163.54	-195.56	-146.91	792.51	753.40	39.10	20.266	
5,700.00	5,643.09	5,599.85	5,585.83	20.64	19.57	163.18	-205.94	-152.58	815.97	776.16	39.81	20.496	
5,800.00	5,741.58	5,706.11	5,691.36	21.02	19.94	162.84	-216.86	-158.56	839.22	798.63	40.59	20.675	
5,900.00	5,840.07	5,824.15	5,808.99	21.40	20.35	162.71	-225.42	-163.24	860.51	819.05	41.45	20.759	
6,000.00	5,938.56	5,943.36	5,928.09	21.77	20.77	162.85	-229.74	-165.60	879.43	837.13	42.30	20.791	
6,100.00	6,037.05	6,052.33	6,037.05	22.15	21.15	163.18	-230.27	-165.89	896.30	853.23	43.07	20.809	
6,200.00	6,135.54	6,150.82	6,135.54	22.52	21.50	163.49	-230.27	-165.89	912.91	869.12	43.79	20.847	
6,300.00	6,234.03	6,249.31	6,234.03	22.90	21.84	163.79	-230.27	-165.89	929.54	885.03	44.51	20.885	
6,400.00	6,332.52	6,347.80	6,332.52	23.28	22.19	164.09	-230.27	-165.89	946.20	900.97	45.23	20.922	
6,500.00	6,431.01	6,446.29	6,431.01	23.65	22.53	164.37	-230.27	-165.89	962.88	916.94	45.94	20.958	
6,600.00	6,529.50	6,544.78	6,529.50	24.03	22.88	164.64	-230.27	-165.89	979.58	932.92	46.66	20.993	
6,700.00	6,627.99	6,643.27	6,627.99	24.41	23.23	164.90	-230.27	-165.89	996.31	948.93	47.38	21.028	
6,800.00	6,726.48	6,741.76	6,726.48	24.78	23.57	165.16	-230.27	-165.89	1,013.05	964.95	48.10	21.062	
6,900.00	6,824.97	6,840.25	6,824.97	25.16	23.92	165.41	-230.27	-165.89	1,029.81	981.00	48.82	21.095	
7,000.00	6,923.46	6,938.73	6,923.46	25.54	24.27	165.64	-230.27	-165.89	1,046.60	997.06	49.54	21.127	
7,100.00	7,021.95	7,037.22	7,021.95	25.91	24.62	165.88	-230.27	-165.89	1,063.39	1,013.14	50.26	21.159	
7,200.00	7,120.44	7,135.71	7,120.44	26.29	24.96	166.10	-230.27	-165.89	1,080.21	1,029.23	50.98	21.190	
7,300.00	7,218.93	7,234.20	7,218.93	26.67	25.31	166.32	-230.27	-165.89	1,097.04	1,045.34	51.70	21.220	
7,400.00	7,317.42	7,332.69	7,317.42	27.04	25.66	166.53	-230.27	-165.89	1,113.88	1,061.46	52.42	21.250	
7,500.00	7,415.91	7,431.18	7,415.91	27.42	26.01	166.73	-230.27	-165.89	1,130.74	1,077.60	53.14	21.279	
7,600.00	7,514.40	7,529.67	7,514.40	27.80	26.36	166.93	-230.27	-165.89	1,147.61	1,093.75	53.86	21.307	
7,700.00	7,612.89	7,628.16	7,612.89	28.18	26.70	167.12	-230.27	-165.89	1,164.50	1,109.92	54.58	21.335	
7,800.00	7,711.38	7,726.65	7,711.38	28.55	27.05	167.31	-230.27	-165.89	1,181.40	1,126.09	55.30	21.362	
7,900.00	7,809.86	7,825.14	7,809.86	28.93	27.40	167.49	-230.27	-165.89	1,198.30	1,142.28	56.03	21.389	
8,000.00	7,908.35	7,923.63	7,908.35	29.31	27.75	167.67	-230.27	-165.89	1,215.23	1,158.48	56.75	21.415	
8,100.00	8,006.84	8,022.12	8,006.84	29.69	28.10	167.84	-230.27	-165.89	1,232.16	1,174.69	57.47	21.440	
8,200.00	8,105.33	8,120.61	8,105.33	30.06	28.45	168.01	-230.27	-165.89	1,249.10	1,190.91	58.19	21.465	
8,300.00	8,203.82	8,219.10	8,203.82	30.44	28.80	168.17	-230.27	-165.89	1,266.05	1,207.14	58.91	21.490	
8,400.00	8,302.31	8,317.59	8,302.31	30.82	29.15	168.33	-230.27	-165.89	1,283.01	1,223.38	59.64	21.514	
8,500.00	8,400.80	8,416.08	8,400.80	31.20	29.49	168.48	-230.27	-165.89	1,299.99	1,239.63	60.36	21.537	
8,600.00	8,499.29	8,514.57	8,499.29	31.57	29.84	168.63	-230.27	-165.89	1,316.97	1,255.88	61.08	21.560	
8,700.00	8,597.78	8,613.06	8,597.78	31.95	30.19	168.78	-230.27	-165.89	1,333.96	1,272.15	61.81	21.583	
8,800.00	8,696.27	8,711.55	8,696.27	32.33	30.54	168.92	-230.27	-165.89	1,350.95	1,288.42	62.53	21.605	
8,900.00	8,794.76	8,810.04	8,794.76	32.71	30.89	169.06	-230.27	-165.89	1,367.96	1,304.70	63.25	21.626	
9,000.00	8,893.25	8,908.53	8,893.25	33.09	31.24	169.20	-230.27	-165.89	1,384.97	1,320.99	63.98	21.648	
9,100.00	8,991.74	9,007.02	8,991.74	33.46	31.59	169.33	-230.27	-165.89	1,401.99	1,337.29	64.70	21.668	
9,200.00	9,090.23	9,105.51	9,090.23	33.84	31.94	169.46	-230.27	-165.89	1,419.02	1,353.59	65.43	21.689	
9,300.00	9,188.72	9,204.00	9,188.72	34.22	32.29	169.59	-230.27	-165.89	1,436.05	1,369.90	66.15	21.709	
9,400.00	9,287.52	9,302.80	9,287.52	34.60	32.64	-172.43	-230.27	-165.89	1,451.33	1,384.46	66.87	21.703	
9,500.00	9,386.81	9,402.09	9,386.81	34.96	33.00	-140.63	-230.27	-165.89	1,462.21	1,394.62	67.59	21.635	
9,600.00	9,486.11	9,501.45	9,486.17	35.30	33.35	-108.77	-230.20	-165.89	1,468.65	1,400.36	68.28	21.508	
9,700.00	9,584.93	9,602.52	9,586.57	35.64	33.70	-90.25	-219.78	-165.99	1,470.64	1,401.67	68.97	21.324	
9,800.00	9,681.14	9,703.97	9,683.94	35.95	34.03	-90.22	-191.76	-166.24	1,470.59	1,400.98	69.61	21.125	
9,900.00	9,771.22	9,805.25	9,774.71	36.25	34.33	-90.18	-147.13	-166.64	1,470.52	1,400.31	70.21	20.944	
10,000.00	9,852.45	9,906.32	9,856.05	36.51	34.60	-90.14	-87.36	-167.19	1,470.42	1,399.67	70.75	20.783	
10,100.00	9,922.36	10,007.14	9,925.48	36.72	34.83	-90.10	-14.45	-167.85	1,470.30	1,399.08	71.22	20.645	
10,200.00	9,978.82	10,107.69	9,980.95	36.88	35.03	-90.05	69.26	-168.61	1,470.17	1,398.56	71.61	20.529	
10,300.00	10,020.12	10,207.96	10,020.87	36.99	35.18	-90.00	161.10	-169.44	1,470.03	1,398.10	71.93	20.437	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 501H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,400.00	10,046.32	10,307.98	10,045.96	37.06	35.30	-89.97	257.87	-170.32	1,469.87	1,397.70	72.17	20.366	
10,500.00	10,063.18	10,407.92	10,062.00	37.11	35.41	-89.94	356.47	-171.21	1,469.72	1,397.33	72.39	20.302	
10,600.00	10,071.39	10,507.78	10,069.39	37.16	35.50	-89.92	456.03	-172.12	1,469.56	1,396.97	72.59	20.246	
10,700.00	10,071.32	10,607.70	10,069.57	37.22	35.59	-89.93	555.93	-173.02	1,469.40	1,396.63	72.77	20.192	
10,800.00	10,069.20	10,707.69	10,069.00	37.31	35.69	-89.99	655.92	-173.93	1,469.24	1,396.24	72.99	20.128	
10,900.00	10,067.07	10,807.68	10,068.43	37.43	35.81	-90.05	755.90	-174.83	1,469.08	1,395.83	73.25	20.057	
11,000.00	10,064.95	10,907.67	10,067.86	37.58	35.95	-90.12	855.88	-175.74	1,468.92	1,395.39	73.53	19.977	
11,100.00	10,062.82	11,007.65	10,067.28	37.75	36.10	-90.18	955.86	-176.65	1,468.76	1,394.91	73.85	19.889	
11,200.00	10,060.70	11,107.64	10,066.71	37.93	36.26	-90.24	1,055.84	-177.55	1,468.61	1,394.41	74.20	19.794	
11,300.00	10,058.57	11,207.63	10,066.14	38.13	36.45	-90.30	1,155.83	-178.46	1,468.45	1,393.88	74.57	19.691	
11,400.00	10,056.45	11,307.62	10,065.57	38.35	36.65	-90.36	1,255.81	-179.36	1,468.30	1,393.32	74.98	19.582	
11,500.00	10,054.33	11,407.61	10,065.00	38.58	36.86	-90.42	1,355.79	-180.27	1,468.15	1,392.73	75.42	19.467	
11,600.00	10,052.20	11,507.59	10,064.43	38.83	37.09	-90.48	1,455.77	-181.18	1,468.00	1,392.12	75.89	19.345	
11,700.00	10,050.08	11,607.58	10,063.86	39.09	37.33	-90.54	1,555.75	-182.08	1,467.86	1,391.47	76.38	19.217	
11,800.00	10,047.95	11,707.57	10,063.29	39.36	37.58	-90.60	1,655.74	-182.99	1,467.71	1,390.81	76.90	19.085	
11,900.00	10,045.83	11,807.56	10,062.72	39.64	37.86	-90.66	1,755.72	-183.89	1,467.57	1,390.11	77.46	18.947	
12,000.00	10,043.70	11,907.54	10,062.14	39.93	38.14	-90.72	1,855.70	-184.80	1,467.42	1,389.39	78.03	18.805	
12,100.00	10,041.58	12,007.53	10,061.57	40.24	38.44	-90.78	1,955.68	-185.71	1,467.28	1,388.65	78.64	18.659	
12,200.00	10,039.45	12,107.52	10,061.00	40.56	38.75	-90.84	2,055.66	-186.61	1,467.15	1,387.88	79.27	18.509	
12,300.00	10,037.33	12,207.51	10,060.43	40.89	39.07	-90.90	2,155.65	-187.52	1,467.01	1,387.09	79.92	18.355	
12,400.00	10,035.21	12,307.56	10,059.85	41.24	39.41	-90.96	2,255.69	-188.42	1,466.87	1,386.27	80.60	18.199	
12,500.00	10,033.08	12,408.43	10,057.25	41.59	39.76	-90.95	2,356.52	-189.34	1,466.70	1,385.40	81.31	18.039	
12,600.00	10,030.96	12,508.47	10,052.65	41.95	40.13	-90.85	2,456.45	-190.24	1,466.50	1,384.48	82.03	17.878	
12,700.00	10,028.30	12,608.45	10,048.04	42.33	40.52	-90.78	2,556.32	-191.15	1,466.31	1,383.54	82.77	17.715	
12,800.00	10,023.00	12,708.44	10,043.42	42.72	40.91	-90.80	2,656.20	-192.05	1,466.17	1,382.61	83.56	17.547	
12,900.00	10,017.31	12,808.44	10,038.81	43.13	41.32	-90.85	2,756.09	-192.95	1,466.03	1,381.66	84.37	17.377	
13,000.00	10,011.61	12,908.43	10,034.20	43.54	41.73	-90.89	2,855.97	-193.86	1,465.89	1,380.69	85.20	17.205	
13,100.00	10,005.92	13,008.43	10,029.58	43.97	42.15	-90.93	2,955.85	-194.76	1,465.75	1,379.70	86.05	17.033	
13,200.00	10,000.23	13,108.42	10,024.97	44.40	42.59	-90.97	3,055.74	-195.67	1,465.61	1,378.69	86.92	16.861	
13,300.00	9,994.53	13,208.41	10,020.36	44.84	43.03	-91.02	3,155.62	-196.57	1,465.48	1,377.66	87.81	16.689	
13,400.00	9,988.84	13,308.41	10,015.75	45.29	43.49	-91.06	3,255.50	-197.47	1,465.34	1,376.62	88.72	16.516	
13,500.00	9,983.15	13,408.40	10,011.13	45.75	43.95	-91.10	3,355.39	-198.38	1,465.21	1,375.56	89.65	16.344	
13,600.00	9,977.45	13,508.40	10,006.52	46.22	44.42	-91.14	3,455.27	-199.28	1,465.07	1,374.48	90.59	16.173	
13,700.00	9,971.76	13,608.39	10,001.91	46.69	44.90	-91.19	3,555.15	-200.19	1,464.94	1,373.39	91.55	16.002	
13,800.00	9,966.06	13,708.84	9,996.74	47.18	45.39	-91.21	3,655.47	-201.09	1,464.80	1,372.27	92.52	15.832	
13,900.00	9,960.37	13,808.84	9,990.62	47.67	45.89	-91.19	3,755.27	-202.00	1,464.63	1,371.12	93.51	15.663	
14,000.00	9,954.68	13,908.84	9,984.51	48.16	46.39	-91.17	3,855.08	-202.90	1,464.47	1,369.96	94.51	15.495	
14,100.00	9,948.98	14,008.84	9,978.39	48.67	46.90	-91.16	3,954.89	-203.81	1,464.31	1,368.78	95.53	15.329	
14,200.00	9,943.29	14,108.84	9,972.27	49.18	47.42	-91.14	4,054.70	-204.71	1,464.14	1,367.59	96.56	15.164	
14,300.00	9,937.60	14,208.84	9,966.15	49.70	47.95	-91.12	4,154.50	-205.61	1,463.98	1,366.38	97.60	15.000	
14,400.00	9,931.90	14,308.84	9,960.04	50.22	48.49	-91.11	4,254.31	-206.52	1,463.82	1,365.16	98.65	14.838	
14,500.00	9,926.21	14,408.84	9,953.92	50.75	49.03	-91.09	4,354.12	-207.42	1,463.65	1,363.93	99.72	14.677	
14,600.00	9,920.52	14,508.83	9,947.80	51.29	49.57	-91.08	4,453.93	-208.33	1,463.49	1,362.69	100.80	14.518	
14,700.00	9,914.82	14,608.83	9,941.68	51.83	50.12	-91.06	4,553.74	-209.23	1,463.33	1,361.43	101.89	14.361	
14,800.00	9,909.13	14,708.83	9,935.57	52.38	50.68	-91.04	4,653.54	-210.13	1,463.17	1,360.17	103.00	14.206	
14,900.00	9,903.43	14,808.83	9,929.45	52.93	51.24	-91.03	4,753.35	-211.04	1,463.00	1,358.89	104.11	14.052	
15,000.00	9,897.74	14,908.83	9,923.33	53.49	51.81	-91.01	4,853.16	-211.94	1,462.84	1,357.60	105.24	13.900	
15,100.00	9,892.05	15,008.83	9,917.21	54.05	52.39	-90.99	4,952.97	-212.85	1,462.68	1,356.31	106.37	13.750	
15,200.00	9,886.35	15,108.83	9,911.10	54.62	52.96	-90.98	5,052.77	-213.75	1,462.52	1,355.00	107.52	13.602	
15,300.00	9,880.66	15,208.83	9,904.98	55.20	53.55	-90.96	5,152.58	-214.66	1,462.36	1,353.68	108.68	13.456	
15,400.00	9,874.97	15,308.83	9,898.86	55.77	54.14	-90.94	5,252.39	-215.56	1,462.20	1,352.35	109.84	13.312	
15,500.00	9,868.46	15,408.82	9,892.74	56.36	54.73	-90.96	5,352.20	-216.46	1,462.05	1,351.03	111.02	13.169	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 501H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,600.00	9,861.83	15,508.82	9,886.63	56.95	55.33	-90.98	5,452.00	-217.37	1,461.90	1,349.69	112.21	13.028	
15,700.00	9,855.20	15,608.82	9,880.51	57.54	55.93	-91.00	5,551.81	-218.27	1,461.76	1,348.35	113.41	12.889	
15,800.00	9,848.57	15,708.82	9,874.39	58.14	56.53	-91.02	5,651.62	-219.18	1,461.61	1,346.99	114.62	12.752	
15,900.00	9,841.94	15,808.82	9,868.27	58.74	57.14	-91.04	5,751.42	-220.08	1,461.46	1,345.63	115.83	12.617	
16,000.00	9,835.31	15,908.82	9,862.15	59.34	57.75	-91.06	5,851.23	-220.98	1,461.32	1,344.26	117.06	12.484	
16,100.00	9,828.68	16,008.82	9,856.04	59.95	58.37	-91.08	5,951.04	-221.89	1,461.17	1,342.89	118.29	12.353	
16,200.00	9,822.06	16,108.81	9,849.92	60.57	58.99	-91.10	6,050.85	-222.79	1,461.03	1,341.50	119.52	12.224	
16,300.00	9,815.43	16,208.81	9,843.80	61.18	59.62	-91.12	6,150.65	-223.70	1,460.88	1,340.11	120.77	12.096	
16,400.00	9,808.80	16,308.81	9,837.68	61.80	60.24	-91.14	6,250.46	-224.60	1,460.74	1,338.72	122.02	11.971	
16,500.00	9,802.17	16,408.81	9,831.57	62.43	60.87	-91.16	6,350.27	-225.50	1,460.59	1,337.31	123.28	11.848	
16,600.00	9,795.54	16,508.81	9,825.45	63.05	61.51	-91.18	6,450.07	-226.41	1,460.45	1,335.90	124.54	11.726	
16,700.00	9,788.91	16,608.81	9,819.33	63.68	62.15	-91.20	6,549.88	-227.31	1,460.31	1,334.49	125.82	11.607	
16,800.00	9,782.28	16,708.81	9,813.21	64.31	62.79	-91.22	6,649.69	-228.22	1,460.16	1,333.07	127.09	11.489	
16,900.00	9,775.65	16,808.80	9,807.10	64.95	63.43	-91.24	6,749.50	-229.12	1,460.02	1,331.64	128.38	11.373	
17,000.00	9,769.03	16,908.80	9,800.98	65.59	64.07	-91.26	6,849.30	-230.02	1,459.87	1,330.21	129.67	11.259	
17,100.00	9,762.40	17,008.80	9,794.86	66.23	64.72	-91.28	6,949.11	-230.93	1,459.73	1,328.77	130.96	11.146	
17,200.00	9,755.77	17,108.80	9,788.74	66.87	65.37	-91.30	7,048.92	-231.83	1,459.59	1,327.33	132.26	11.036	
17,300.00	9,749.14	17,208.80	9,782.63	67.52	66.03	-91.32	7,148.72	-232.74	1,459.44	1,325.88	133.57	10.927	
17,400.00	9,742.51	17,308.80	9,776.51	68.17	66.68	-91.34	7,248.53	-233.64	1,459.30	1,324.43	134.88	10.820	
17,500.00	9,735.88	17,408.80	9,770.39	68.82	67.34	-91.36	7,348.34	-234.54	1,459.16	1,322.97	136.19	10.714	
17,600.00	9,729.25	17,508.79	9,764.27	69.47	68.00	-91.38	7,448.15	-235.45	1,459.02	1,321.51	137.51	10.610	
17,700.00	9,722.62	17,608.79	9,758.16	70.13	68.67	-91.40	7,547.95	-236.35	1,458.87	1,320.04	138.84	10.508	
17,800.00	9,716.00	17,708.79	9,752.04	70.79	69.33	-91.42	7,647.76	-237.26	1,458.73	1,318.57	140.16	10.407	
17,900.00	9,709.37	17,808.79	9,745.92	71.45	70.00	-91.44	7,747.57	-238.16	1,458.59	1,317.09	141.50	10.308	
18,000.00	9,702.74	17,908.79	9,739.80	72.11	70.67	-91.46	7,847.38	-239.06	1,458.45	1,315.61	142.84	10.211	
18,100.00	9,696.11	18,008.79	9,733.69	72.78	71.34	-91.49	7,947.18	-239.97	1,458.31	1,314.13	144.18	10.115	
18,200.00	9,689.48	18,108.79	9,727.57	73.44	72.02	-91.51	8,046.99	-240.87	1,458.17	1,312.64	145.52	10.020	
18,300.00	9,682.85	18,208.78	9,721.45	74.11	72.69	-91.53	8,146.80	-241.78	1,458.02	1,311.15	146.87	9.927	
18,400.00	9,676.22	18,308.78	9,715.33	74.78	73.37	-91.55	8,246.60	-242.68	1,457.88	1,309.66	148.23	9.835	
18,500.00	9,669.60	18,408.78	9,709.22	75.46	74.05	-91.57	8,346.41	-243.58	1,457.74	1,308.16	149.58	9.745	
18,600.00	9,662.97	18,508.78	9,703.10	76.13	74.73	-91.59	8,446.22	-244.49	1,457.60	1,306.66	150.95	9.656	
18,700.00	9,656.34	18,609.46	9,696.53	76.81	75.42	-91.59	8,546.68	-245.40	1,457.45	1,305.14	152.31	9.569	
18,800.00	9,649.71	18,710.07	9,687.44	77.49	76.11	-91.50	8,646.87	-246.30	1,457.23	1,303.56	153.67	9.483	
18,900.00	9,643.08	18,810.03	9,678.05	78.17	76.80	-91.39	8,746.38	-247.21	1,457.01	1,301.98	155.02	9.399	
19,000.00	9,636.45	18,909.99	9,668.66	78.85	77.49	-91.28	8,845.90	-248.11	1,456.79	1,300.41	156.38	9.316	
19,100.00	9,629.82	19,009.95	9,659.27	79.53	78.19	-91.17	8,945.41	-249.01	1,456.58	1,298.84	157.74	9.234	
19,200.00	9,622.88	19,109.92	9,649.88	80.22	78.88	-91.07	9,044.93	-249.91	1,456.37	1,297.27	159.10	9.154	
19,300.00	9,613.89	19,209.92	9,640.48	80.91	79.58	-91.06	9,144.49	-250.81	1,456.21	1,295.72	160.49	9.074	
19,400.00	9,604.73	19,309.92	9,631.09	81.60	80.28	-91.05	9,244.04	-251.72	1,456.05	1,294.18	161.88	8.995	
19,500.00	9,595.58	19,409.92	9,621.69	82.29	80.97	-91.04	9,343.59	-252.62	1,455.89	1,292.63	163.27	8.917	
19,600.00	9,586.43	19,509.92	9,612.30	82.98	81.68	-91.03	9,443.15	-253.52	1,455.73	1,291.07	164.66	8.841	
19,700.00	9,577.27	19,609.92	9,602.90	83.68	82.38	-91.02	9,542.70	-254.42	1,455.58	1,289.52	166.06	8.765	
19,800.00	9,568.12	19,709.92	9,593.51	84.38	83.08	-91.01	9,642.25	-255.32	1,455.42	1,287.96	167.46	8.691	
19,900.00	9,558.96	19,809.91	9,584.11	85.07	83.78	-91.00	9,741.81	-256.23	1,455.26	1,286.40	168.86	8.618	
20,000.00	9,549.81	19,909.91	9,574.72	85.77	84.49	-90.99	9,841.36	-257.13	1,455.10	1,284.84	170.26	8.546	
20,100.00	9,540.66	20,009.91	9,565.32	86.47	85.20	-90.98	9,940.91	-258.03	1,454.94	1,283.27	171.67	8.475	
20,200.00	9,531.25	20,110.28	9,555.57	87.17	85.91	-90.97	10,040.80	-258.93	1,454.78	1,281.70	173.08	8.405	
20,300.00	9,519.27	20,210.85	9,543.09	87.88	86.62	-90.96	10,140.58	-259.84	1,454.62	1,280.12	174.50	8.336	
20,400.00	9,506.58	20,310.85	9,529.94	88.59	87.33	-90.94	10,239.71	-260.74	1,454.46	1,278.54	175.92	8.268	
20,500.00	9,493.90	20,410.84	9,516.78	89.29	88.05	-90.92	10,338.83	-261.63	1,454.30	1,276.96	177.34	8.201	
20,600.00	9,481.22	20,510.84	9,503.63	90.00	88.76	-90.90	10,437.96	-262.53	1,454.14	1,275.38	178.76	8.135	
20,700.00	9,468.54	20,610.84	9,490.47	90.71	89.48	-90.88	10,537.08	-263.43	1,453.97	1,273.79	180.18	8.070	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 501H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
20,800.00	9,455.85	20,710.84	9,477.31	91.43	90.19	-90.86	10,636.21	-264.33	1,453.81	1,272.21	181.61	8.005	
20,900.00	9,443.17	20,810.84	9,464.16	92.14	90.91	-90.85	10,735.33	-265.22	1,453.65	1,270.62	183.03	7.942	
21,000.00	9,430.49	20,910.84	9,451.00	92.85	91.63	-90.83	10,834.46	-266.12	1,453.49	1,269.03	184.46	7.880	
21,100.00	9,417.81	21,010.84	9,437.85	93.56	92.35	-90.81	10,933.59	-267.02	1,453.33	1,267.44	185.89	7.818	
21,200.00	9,405.13	21,110.84	9,424.69	94.28	93.07	-90.79	11,032.71	-267.91	1,453.17	1,265.84	187.32	7.758	
21,300.00	9,392.44	21,210.83	9,411.54	94.99	93.79	-90.77	11,131.84	-268.81	1,453.01	1,264.25	188.76	7.698	
21,400.00	9,379.76	21,310.83	9,398.38	95.71	94.51	-90.75	11,230.96	-269.71	1,452.85	1,262.65	190.19	7.639	
21,500.00	9,366.09	21,410.83	9,385.22	96.43	95.23	-90.77	11,330.08	-270.61	1,452.70	1,261.06	191.64	7.580	
21,600.00	9,351.40	21,510.82	9,372.07	97.15	95.96	-90.84	11,429.20	-271.50	1,452.57	1,259.48	193.09	7.523	
21,700.00	9,336.72	21,611.04	9,358.72	97.87	96.68	-90.89	11,528.53	-272.40	1,452.43	1,257.89	194.55	7.466	
21,800.00	9,322.03	21,711.71	9,342.69	98.59	97.41	-90.84	11,627.90	-273.30	1,452.26	1,256.27	195.99	7.410	
21,900.00	9,307.35	21,811.68	9,325.38	99.31	98.14	-90.74	11,726.35	-274.20	1,452.07	1,254.65	197.42	7.355	
22,000.00	9,292.66	21,911.64	9,308.07	100.03	98.87	-90.63	11,824.80	-275.09	1,451.89	1,253.04	198.85	7.301	
22,100.00	9,277.97	22,011.61	9,290.76	100.75	99.59	-90.53	11,923.25	-275.98	1,451.71	1,251.43	200.28	7.248	
22,200.00	9,263.29	22,111.57	9,273.45	101.48	100.32	-90.42	12,021.70	-276.87	1,451.53	1,249.82	201.72	7.196	
22,300.00	9,248.60	22,211.53	9,256.14	102.20	101.05	-90.32	12,120.16	-277.76	1,451.36	1,248.21	203.15	7.144	
22,400.00	9,233.91	22,311.50	9,238.83	102.93	101.78	-90.21	12,218.61	-278.65	1,451.20	1,246.61	204.59	7.093	
22,500.00	9,219.23	22,411.46	9,221.52	103.65	102.51	-90.11	12,317.06	-279.55	1,451.04	1,245.02	206.02	7.043	
22,600.00	9,204.54	22,511.43	9,204.21	104.38	103.24	-90.00	12,415.51	-280.44	1,450.88	1,243.43	207.46	6.994	
22,700.00	9,189.82	22,611.39	9,186.90	105.10	103.97	-89.90	12,513.96	-281.33	1,450.73	1,241.84	208.90	6.945	
22,800.00	9,173.02	22,711.39	9,169.59	105.83	104.70	-89.88	12,612.44	-282.22	1,450.58	1,240.23	210.35	6.896	
22,900.00	9,155.27	22,811.39	9,152.27	106.56	105.44	-89.90	12,710.92	-283.11	1,450.43	1,238.61	211.82	6.848	
23,000.00	9,137.53	22,911.39	9,134.96	107.29	106.17	-89.91	12,809.41	-284.01	1,450.28	1,236.99	213.28	6.800	
23,100.00	9,119.78	23,011.38	9,117.64	108.02	106.90	-89.93	12,907.89	-284.90	1,450.12	1,235.37	214.75	6.753	
23,200.00	9,102.04	23,111.38	9,100.33	108.75	107.64	-89.95	13,006.38	-285.79	1,449.97	1,233.75	216.22	6.706	
23,300.00	9,084.29	23,211.38	9,083.01	109.48	108.37	-89.96	13,104.86	-286.68	1,449.82	1,232.13	217.69	6.660	
23,400.00	9,066.54	23,311.38	9,065.69	110.21	109.11	-89.98	13,203.34	-287.57	1,449.66	1,230.51	219.16	6.615	
23,500.00	9,048.80	23,411.38	9,048.38	110.94	109.84	-90.00	13,301.83	-288.47	1,449.51	1,228.88	220.63	6.570	
23,600.00	9,031.05	23,511.38	9,031.06	111.67	110.58	-90.02	13,400.31	-289.36	1,449.36	1,227.26	222.10	6.526	
23,700.00	9,013.31	23,611.38	9,013.75	112.41	111.31	-90.03	13,498.80	-290.25	1,449.21	1,225.64	223.57	6.482	
23,800.00	8,995.56	23,711.38	8,996.43	113.14	112.05	-90.05	13,597.28	-291.14	1,449.05	1,224.01	225.04	6.439	
23,900.00	8,977.82	23,811.38	8,979.12	113.87	112.78	-90.07	13,695.77	-292.04	1,448.90	1,222.38	226.52	6.396	
24,000.00	8,959.73	23,911.40	8,961.42	114.61	113.52	-90.09	13,794.21	-292.93	1,448.75	1,220.76	227.99	6.354	
24,100.00	8,938.95	24,011.46	8,940.78	115.34	114.26	-90.09	13,892.11	-293.81	1,448.60	1,219.13	229.46	6.313	
24,200.00	8,917.45	24,111.46	8,916.99	116.07	115.00	-90.00	13,989.23	-294.69	1,448.44	1,217.53	230.92	6.273	
24,300.00	8,895.96	24,211.42	8,892.59	116.81	115.73	-89.88	14,086.16	-295.57	1,448.30	1,215.93	232.37	6.233	
24,400.00	8,874.46	24,311.37	8,868.18	117.55	116.47	-89.76	14,183.08	-296.45	1,448.16	1,214.34	233.81	6.194	
24,500.00	8,852.96	24,411.33	8,843.78	118.28	117.21	-89.64	14,280.01	-297.33	1,448.02	1,212.76	235.26	6.155	
24,600.00	8,831.46	24,511.28	8,819.37	119.02	117.94	-89.53	14,376.93	-298.21	1,447.89	1,211.18	236.72	6.117	
24,700.00	8,809.97	24,611.24	8,794.97	119.75	118.68	-89.41	14,473.86	-299.08	1,447.77	1,209.61	238.17	6.079	
24,800.00	8,788.47	24,711.19	8,770.56	120.49	119.42	-89.29	14,570.79	-299.96	1,447.66	1,208.04	239.62	6.042	
24,900.00	8,766.97	24,811.15	8,746.15	121.23	120.16	-89.17	14,667.71	-300.84	1,447.55	1,206.48	241.07	6.005	
25,000.00	8,745.48	24,910.96	8,721.74	121.96	120.90	-89.05	14,764.48	-301.72	1,447.44	1,204.92	242.52	5.968	
25,100.00	8,723.98	25,009.89	8,695.37	122.70	121.62	-88.84	14,859.82	-302.58	1,447.39	1,203.45	243.94	5.933	
25,105.91	8,722.71	25,015.72	8,693.71	122.74	121.67	-88.82	14,865.42	-302.63	1,447.39	1,203.37	244.03	5.931	
25,200.00	8,702.48	25,108.33	8,665.88	123.44	122.35	-88.50	14,953.74	-303.43	1,447.45	1,202.12	245.33	5.900	
25,300.00	8,680.26	25,207.47	8,633.89	124.18	123.07	-88.09	15,047.57	-304.28	1,447.61	1,200.90	246.71	5.868	
25,400.00	8,654.86	25,307.20	8,601.62	124.91	123.81	-87.80	15,141.93	-305.14	1,447.73	1,199.61	248.12	5.835	
25,500.00	8,626.28	25,407.12	8,569.30	125.65	124.54	-87.64	15,236.47	-305.99	1,447.74	1,198.19	249.55	5.801	
25,600.00	8,596.98	25,507.07	8,536.96	126.38	125.27	-87.52	15,331.04	-306.85	1,447.73	1,196.74	250.99	5.768	
25,700.00	8,567.67	25,607.01	8,504.62	127.11	126.00	-87.39	15,425.61	-307.71	1,447.72	1,195.29	252.43	5.735	
25,707.94	8,565.35	25,614.95	8,502.06	127.17	126.06	-87.38	15,433.12	-307.77	1,447.72	1,195.18	252.54	5.733	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 501H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
25,800.00	8,538.37	25,706.96	8,472.29	127.85	126.74	-87.26	15,520.18	-308.56	1,447.72	1,193.86	253.87	5.703	
25,900.00	8,509.06	25,806.91	8,439.95	128.58	127.47	-87.14	15,614.75	-309.42	1,447.73	1,192.42	255.31	5.671	
26,000.00	8,479.76	25,906.86	8,407.61	129.32	128.20	-87.01	15,709.32	-310.28	1,447.75	1,191.00	256.75	5.639	
26,100.00	8,450.45	26,006.81	8,375.28	130.05	128.94	-86.88	15,803.89	-311.13	1,447.78	1,189.58	258.19	5.607	
26,200.00	8,421.14	26,106.76	8,342.94	130.79	129.67	-86.76	15,898.46	-311.99	1,447.81	1,188.17	259.63	5.576	
26,300.00	8,391.84	26,206.71	8,310.60	131.53	130.41	-86.63	15,993.03	-312.85	1,447.85	1,186.77	261.07	5.546	
26,400.00	8,362.53	26,306.65	8,278.26	132.26	131.14	-86.50	16,087.59	-313.70	1,447.89	1,185.38	262.52	5.515	
26,500.00	8,333.23	26,406.60	8,245.93	133.00	131.87	-86.37	16,182.16	-314.56	1,447.94	1,183.99	263.96	5.486	
26,600.00	8,303.92	26,506.55	8,213.59	133.73	132.61	-86.25	16,276.73	-315.42	1,448.00	1,182.60	265.40	5.456	
26,700.00	8,274.62	26,606.50	8,181.25	134.47	133.34	-86.12	16,371.30	-316.27	1,448.07	1,181.23	266.84	5.427	
26,800.00	8,245.31	26,706.45	8,148.92	135.21	134.08	-85.99	16,465.87	-317.13	1,448.14	1,179.86	268.28	5.398	
26,900.00	8,217.06	26,804.19	8,116.63	135.94	134.79	-85.80	16,558.12	-317.96	1,448.36	1,178.67	269.69	5.371	
27,000.00	8,189.09	26,903.97	8,082.43	136.68	135.52	-85.54	16,651.85	-318.81	1,448.71	1,177.62	271.09	5.344	
27,100.00	8,161.11	27,003.75	8,048.23	137.42	136.26	-85.28	16,745.58	-319.66	1,449.10	1,176.60	272.50	5.318	
27,200.00	8,133.14	27,103.53	8,014.03	138.16	136.99	-85.02	16,839.31	-320.51	1,449.52	1,175.60	273.91	5.292	
27,300.00	8,105.17	27,203.31	7,979.83	138.90	137.72	-84.76	16,933.05	-321.36	1,449.96	1,174.64	275.32	5.266	
27,400.00	8,077.20	27,303.09	7,945.63	139.63	138.45	-84.50	17,026.78	-322.21	1,450.44	1,173.71	276.73	5.241	
27,500.00	8,049.22	27,402.87	7,911.44	140.37	139.18	-84.24	17,120.51	-323.06	1,450.94	1,172.81	278.14	5.217	
27,600.00	8,021.25	27,502.65	7,877.24	141.11	139.91	-83.98	17,214.24	-323.90	1,451.48	1,171.93	279.55	5.192	
27,700.00	7,993.28	27,606.18	7,842.50	141.85	140.67	-83.74	17,311.77	-324.79	1,451.96	1,170.96	281.01	5.167	
27,800.00	7,965.31	27,710.11	7,810.80	142.59	141.44	-83.63	17,410.73	-325.68	1,452.11	1,169.60	282.51	5.140	
27,900.00	7,937.33	27,810.09	7,781.11	143.33	142.18	-83.56	17,506.20	-326.55	1,452.16	1,168.19	283.97	5.114	
28,000.00	7,909.36	27,910.07	7,751.42	144.07	142.92	-83.49	17,601.67	-327.41	1,452.22	1,166.78	285.43	5.088	
28,100.00	7,881.39	28,010.06	7,721.73	144.81	143.66	-83.41	17,697.14	-328.28	1,452.27	1,165.38	286.90	5.062	
28,200.00	7,853.42	28,110.04	7,692.05	145.55	144.40	-83.34	17,792.61	-329.14	1,452.34	1,163.98	288.36	5.037	
28,300.00	7,825.44	28,210.03	7,662.36	146.29	145.14	-83.27	17,888.09	-330.01	1,452.40	1,162.58	289.82	5.011	
28,400.00	7,797.47	28,310.01	7,632.67	147.03	145.88	-83.20	17,983.56	-330.88	1,452.46	1,161.18	291.28	4.986	
28,444.58	7,785.00	28,354.58	7,619.43	147.36	146.21	-83.17	18,026.12	-331.26	1,452.49	1,160.56	291.94	4.975	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 503H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Rule Assigned:

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	5,052.15	5,247.90	5,242.72	18.40	18.56	-8.16	-186.18	2,843.66	2,299.01	2,262.48	36.54	62.925	
5,200.00	5,150.64	5,344.59	5,338.88	18.77	18.91	-8.06	-192.04	2,835.43	2,273.76	2,236.51	37.25	61.039	
5,300.00	5,249.13	5,441.27	5,435.03	19.14	19.26	-7.96	-197.90	2,827.20	2,248.52	2,210.55	37.97	59.223	
5,400.00	5,347.62	5,537.95	5,531.19	19.52	19.61	-7.85	-203.76	2,818.98	2,223.28	2,184.60	38.68	57.473	
5,500.00	5,446.11	5,634.64	5,627.34	19.89	19.97	-7.75	-209.62	2,810.75	2,198.05	2,158.65	39.40	55.787	
5,600.00	5,544.60	5,731.10	5,723.27	20.27	20.32	-7.64	-215.47	2,802.54	2,172.82	2,132.71	40.12	54.162	
5,700.00	5,643.09	5,800.00	5,791.88	20.64	20.57	-7.57	-219.17	2,797.35	2,148.44	2,107.66	40.78	52.683	
5,800.00	5,741.58	5,853.39	5,845.13	21.02	20.76	-7.54	-221.38	2,794.25	2,125.65	2,084.24	41.40	51.339	
5,900.00	5,840.07	5,900.00	5,891.68	21.40	20.93	-7.53	-222.83	2,792.21	2,104.61	2,062.61	42.00	50.110	
6,000.00	5,938.56	5,977.52	5,969.15	21.77	21.20	-7.54	-224.28	2,790.18	2,085.07	2,042.41	42.66	48.872	
6,100.00	6,037.05	6,045.42	6,037.05	22.15	21.44	-7.57	-224.57	2,789.77	2,067.29	2,023.99	43.29	47.750	
6,200.00	6,135.54	6,143.91	6,135.54	22.52	21.77	-7.63	-224.57	2,789.77	2,050.12	2,006.12	44.00	46.594	
6,300.00	6,234.03	6,242.40	6,234.03	22.90	22.11	-7.70	-224.57	2,789.77	2,032.96	1,988.25	44.71	45.473	
6,400.00	6,332.52	6,340.89	6,332.52	23.28	22.44	-7.76	-224.57	2,789.77	2,015.80	1,970.38	45.41	44.387	
6,500.00	6,431.01	6,439.38	6,431.01	23.65	22.78	-7.83	-224.57	2,789.77	1,998.64	1,952.51	46.12	43.334	
6,600.00	6,529.50	6,537.87	6,529.50	24.03	23.12	-7.90	-224.57	2,789.77	1,981.48	1,934.65	46.83	42.311	
6,700.00	6,627.99	6,636.36	6,627.99	24.41	23.45	-7.97	-224.57	2,789.77	1,964.33	1,916.79	47.54	41.319	
6,800.00	6,726.48	6,734.85	6,726.48	24.78	23.79	-8.04	-224.57	2,789.77	1,947.18	1,898.93	48.25	40.356	
6,900.00	6,824.97	6,833.34	6,824.97	25.16	24.13	-8.11	-224.57	2,789.77	1,930.03	1,881.07	48.96	39.420	
7,000.00	6,923.46	6,931.83	6,923.46	25.54	24.47	-8.19	-224.57	2,789.77	1,912.88	1,863.21	49.67	38.510	
7,100.00	7,021.95	7,030.32	7,021.95	25.91	24.81	-8.26	-224.57	2,789.77	1,895.74	1,845.36	50.38	37.626	
7,200.00	7,120.44	7,128.81	7,120.44	26.29	25.15	-8.34	-224.57	2,789.77	1,878.60	1,827.51	51.10	36.766	
7,300.00	7,218.93	7,227.30	7,218.93	26.67	25.49	-8.41	-224.57	2,789.77	1,861.47	1,809.66	51.81	35.929	
7,400.00	7,317.42	7,325.79	7,317.42	27.04	25.83	-8.49	-224.57	2,789.77	1,844.34	1,791.81	52.52	35.115	
7,500.00	7,415.91	7,424.28	7,415.91	27.42	26.17	-8.57	-224.57	2,789.77	1,827.21	1,773.97	53.24	34.322	
7,600.00	7,514.40	7,522.77	7,514.40	27.80	26.51	-8.65	-224.57	2,789.77	1,810.08	1,756.13	53.95	33.550	
7,700.00	7,612.89	7,621.26	7,612.89	28.18	26.85	-8.74	-224.57	2,789.77	1,792.96	1,738.29	54.67	32.798	
7,800.00	7,711.38	7,719.75	7,711.38	28.55	27.19	-8.82	-224.57	2,789.77	1,775.84	1,720.46	55.38	32.066	
7,900.00	7,809.86	7,818.23	7,809.86	28.93	27.54	-8.91	-224.57	2,789.77	1,758.73	1,702.63	56.10	31.352	
8,000.00	7,908.35	7,916.72	7,908.35	29.31	27.88	-9.00	-224.57	2,789.77	1,741.62	1,684.81	56.81	30.655	
8,100.00	8,006.84	8,015.21	8,006.84	29.69	28.22	-9.09	-224.57	2,789.77	1,724.51	1,666.98	57.53	29.976	
8,200.00	8,105.33	8,113.70	8,105.33	30.06	28.56	-9.18	-224.57	2,789.77	1,707.41	1,649.17	58.25	29.313	
8,300.00	8,203.82	8,212.19	8,203.82	30.44	28.91	-9.27	-224.57	2,789.77	1,690.31	1,631.35	58.96	28.667	
8,400.00	8,302.31	8,310.68	8,302.31	30.82	29.25	-9.37	-224.57	2,789.77	1,673.22	1,613.54	59.68	28.036	
8,500.00	8,400.80	8,409.17	8,400.80	31.20	29.59	-9.46	-224.57	2,789.77	1,656.13	1,595.73	60.40	27.420	
8,600.00	8,499.29	8,507.66	8,499.29	31.57	29.94	-9.56	-224.57	2,789.77	1,639.05	1,577.93	61.12	26.818	
8,700.00	8,597.78	8,606.15	8,597.78	31.95	30.28	-9.66	-224.57	2,789.77	1,621.97	1,560.14	61.84	26.230	
8,800.00	8,696.27	8,704.64	8,696.27	32.33	30.63	-9.77	-224.57	2,789.77	1,604.90	1,542.34	62.56	25.655	
8,900.00	8,794.76	8,803.13	8,794.76	32.71	30.97	-9.87	-224.57	2,789.77	1,587.83	1,524.56	63.28	25.094	
9,000.00	8,893.25	8,901.62	8,893.25	33.09	31.32	-9.98	-224.57	2,789.77	1,570.77	1,506.77	64.00	24.545	
9,100.00	8,991.74	9,000.11	8,991.74	33.46	31.66	-10.09	-224.57	2,789.77	1,553.71	1,489.00	64.72	24.008	
9,200.00	9,090.23	9,098.60	9,090.23	33.84	32.01	-10.21	-224.57	2,789.77	1,536.66	1,471.22	65.44	23.483	
9,300.00	9,188.72	9,197.09	9,188.72	34.22	32.35	-10.32	-224.57	2,789.77	1,519.61	1,453.46	66.16	22.970	
9,400.00	9,287.52	9,295.89	9,287.52	34.60	32.70	7.59	-224.57	2,789.77	1,504.33	1,437.46	66.87	22.495	
9,500.00	9,386.81	9,395.18	9,386.81	34.96	33.05	39.73	-224.57	2,789.77	1,493.47	1,425.89	67.58	22.099	
9,600.00	9,486.11	9,494.59	9,486.22	35.30	33.39	72.33	-224.57	2,789.77	1,487.16	1,418.89	68.27	21.784	
9,700.00	9,584.93	9,600.14	9,591.13	35.64	33.76	91.27	-214.44	2,789.66	1,485.28	1,416.33	68.95	21.543	
9,800.00	9,681.14	9,706.20	9,692.89	35.95	34.10	91.23	-185.09	2,789.34	1,485.25	1,415.66	69.59	21.343	
9,900.00	9,771.22	9,811.96	9,787.26	36.25	34.41	91.16	-137.66	2,788.83	1,485.20	1,415.01	70.19	21.160	
10,000.00	9,852.45	9,917.23	9,870.95	36.51	34.68	91.05	-74.05	2,788.14	1,485.14	1,414.41	70.73	20.998	
10,100.00	9,922.36	10,021.83	9,941.21	36.72	34.90	90.90	3.23	2,787.30	1,485.06	1,413.86	71.20	20.857	
10,200.00	9,978.82	10,125.61	9,995.90	36.88	35.08	90.73	91.26	2,786.35	1,484.98	1,413.38	71.60	20.739	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 503H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,300.00	10,020.12	10,228.46	10,033.58	36.99	35.23	90.54	186.81	2,785.32	1,484.91	1,412.98	71.93	20.644	
10,400.00	10,046.32	10,329.60	10,056.68	37.06	35.34	90.40	285.22	2,784.25	1,484.86	1,412.68	72.18	20.571	
10,500.00	10,063.18	10,430.33	10,070.89	37.11	35.45	90.30	384.91	2,783.18	1,484.83	1,412.42	72.41	20.506	
10,600.00	10,071.39	10,530.82	10,076.29	37.16	35.54	90.19	485.22	2,782.10	1,484.81	1,412.19	72.62	20.447	
10,700.00	10,071.32	10,631.03	10,072.91	37.22	35.65	90.06	585.33	2,781.02	1,484.79	1,411.96	72.83	20.387	
10,758.57	10,070.08	10,689.50	10,068.19	37.27	35.72	89.93	643.61	2,780.39	1,484.79	1,411.81	72.98	20.345	
10,800.00	10,069.20	10,730.86	10,064.85	37.31	35.78	89.83	684.83	2,779.95	1,484.79	1,411.70	73.09	20.314	
10,900.00	10,067.07	10,830.68	10,056.78	37.43	35.93	89.60	784.32	2,778.88	1,484.81	1,411.42	73.39	20.232	
11,000.00	10,064.95	10,930.50	10,048.71	37.58	36.10	89.37	883.81	2,777.81	1,484.86	1,411.14	73.71	20.143	
11,100.00	10,062.82	11,030.32	10,040.63	37.75	36.28	89.14	983.30	2,776.74	1,484.93	1,410.86	74.07	20.047	
11,200.00	10,060.70	11,130.14	10,032.56	37.93	36.48	88.91	1,082.79	2,775.68	1,485.02	1,410.56	74.46	19.944	
11,300.00	10,058.57	11,229.97	10,024.49	38.13	36.69	88.68	1,182.28	2,774.61	1,485.14	1,410.26	74.88	19.834	
11,400.00	10,056.45	11,329.79	10,016.42	38.35	36.92	88.45	1,281.76	2,773.54	1,485.28	1,409.95	75.33	19.718	
11,500.00	10,054.33	11,429.61	10,008.35	38.58	37.16	88.22	1,381.25	2,772.47	1,485.45	1,409.64	75.80	19.596	
11,600.00	10,052.20	11,529.43	10,000.28	38.83	37.42	87.99	1,480.74	2,771.40	1,485.64	1,409.33	76.31	19.468	
11,700.00	10,050.08	11,629.25	9,992.21	39.09	37.69	87.76	1,580.23	2,770.33	1,485.85	1,409.01	76.85	19.336	
11,800.00	10,047.95	11,729.08	9,984.13	39.36	37.98	87.54	1,679.72	2,769.26	1,486.09	1,408.68	77.41	19.198	
11,900.00	10,045.83	11,828.90	9,976.06	39.64	38.28	87.31	1,779.21	2,768.19	1,486.35	1,408.35	78.00	19.057	
12,000.00	10,043.70	11,928.72	9,967.99	39.93	38.59	87.08	1,878.70	2,767.12	1,486.63	1,408.02	78.61	18.912	
12,100.00	10,041.58	12,028.54	9,959.92	40.24	38.91	86.85	1,978.19	2,766.05	1,486.94	1,407.69	79.25	18.763	
12,200.00	10,039.45	12,128.36	9,951.85	40.56	39.25	86.62	2,077.68	2,764.98	1,487.28	1,407.36	79.92	18.610	
12,300.00	10,037.33	12,228.19	9,943.78	40.89	39.59	86.39	2,177.17	2,763.92	1,487.63	1,407.03	80.61	18.456	
12,400.00	10,035.21	12,328.01	9,935.71	41.24	39.96	86.16	2,276.66	2,762.85	1,488.01	1,406.69	81.32	18.298	
12,500.00	10,033.08	12,427.83	9,927.63	41.59	40.33	85.93	2,376.15	2,761.78	1,488.42	1,406.36	82.06	18.139	
12,600.00	10,030.96	12,527.65	9,919.56	41.95	40.71	85.70	2,475.64	2,760.71	1,488.85	1,406.03	82.82	17.978	
12,700.00	10,028.30	12,627.50	9,911.49	42.33	41.10	85.49	2,575.15	2,759.64	1,489.26	1,405.66	83.60	17.815	
12,800.00	10,023.00	12,727.46	9,903.41	42.72	41.51	85.38	2,674.78	2,758.57	1,489.47	1,405.06	84.40	17.647	
12,900.00	10,017.31	12,827.43	9,895.32	43.13	41.92	85.29	2,774.42	2,757.50	1,489.65	1,404.42	85.23	17.478	
13,000.00	10,011.61	12,927.40	9,887.24	43.54	42.35	85.20	2,874.06	2,756.43	1,489.83	1,403.75	86.08	17.308	
13,100.00	10,005.92	13,027.37	9,879.16	43.97	42.78	85.11	2,973.69	2,755.36	1,490.02	1,403.08	86.95	17.137	
13,200.00	10,000.23	13,127.35	9,871.07	44.40	43.23	85.01	3,073.33	2,754.29	1,490.21	1,402.38	87.83	16.967	
13,300.00	9,994.53	13,227.32	9,862.99	44.84	43.68	84.92	3,172.97	2,753.22	1,490.41	1,401.67	88.74	16.796	
13,400.00	9,988.84	13,327.29	9,854.91	45.29	44.14	84.83	3,272.61	2,752.14	1,490.61	1,400.95	89.66	16.625	
13,500.00	9,983.15	13,427.26	9,846.82	45.75	44.61	84.74	3,372.25	2,751.07	1,490.82	1,400.22	90.60	16.455	
13,600.00	9,977.45	13,527.23	9,838.74	46.22	45.09	84.65	3,471.88	2,750.00	1,491.02	1,399.47	91.56	16.285	
13,700.00	9,971.76	13,627.20	9,830.66	46.69	45.58	84.55	3,571.52	2,748.93	1,491.24	1,398.71	92.53	16.117	
13,800.00	9,966.06	13,727.17	9,822.57	47.18	46.07	84.46	3,671.16	2,747.86	1,491.45	1,397.93	93.52	15.949	
13,900.00	9,960.37	13,827.14	9,814.49	47.67	46.57	84.37	3,770.80	2,746.79	1,491.67	1,397.15	94.52	15.782	
14,000.00	9,954.68	13,927.12	9,806.41	48.16	47.08	84.28	3,870.44	2,745.72	1,491.89	1,396.36	95.54	15.616	
14,100.00	9,948.98	14,027.09	9,798.32	48.67	47.60	84.19	3,970.08	2,744.65	1,492.12	1,395.55	96.57	15.451	
14,200.00	9,943.29	14,127.06	9,790.24	49.18	48.12	84.10	4,069.71	2,743.58	1,492.35	1,394.74	97.62	15.288	
14,300.00	9,937.60	14,227.03	9,782.16	49.70	48.65	84.00	4,169.35	2,742.51	1,492.59	1,393.91	98.68	15.126	
14,400.00	9,931.90	14,327.00	9,774.07	50.22	49.19	83.91	4,268.99	2,741.44	1,492.83	1,393.08	99.75	14.966	
14,500.00	9,926.21	14,426.97	9,765.99	50.75	49.73	83.82	4,368.63	2,740.37	1,493.07	1,392.24	100.83	14.807	
14,600.00	9,920.52	14,526.94	9,757.91	51.29	50.28	83.73	4,468.27	2,739.30	1,493.31	1,391.39	101.93	14.650	
14,700.00	9,914.82	14,626.91	9,749.82	51.83	50.83	83.64	4,567.90	2,738.23	1,493.56	1,390.53	103.04	14.495	
14,800.00	9,909.13	14,726.89	9,741.74	52.38	51.39	83.55	4,667.54	2,737.16	1,493.82	1,389.66	104.16	14.342	
14,900.00	9,903.43	14,826.86	9,733.65	52.93	51.95	83.46	4,767.18	2,736.09	1,494.08	1,388.79	105.29	14.190	
15,000.00	9,897.74	14,926.83	9,725.57	53.49	52.52	83.36	4,866.82	2,735.01	1,494.34	1,387.91	106.43	14.040	
15,100.00	9,892.05	15,026.80	9,717.49	54.05	53.10	83.27	4,966.46	2,733.94	1,494.60	1,387.02	107.58	13.893	
15,200.00	9,886.35	15,126.77	9,709.40	54.62	53.68	83.18	5,066.10	2,732.87	1,494.87	1,386.13	108.74	13.747	
15,300.00	9,880.66	15,226.74	9,701.32	55.20	54.26	83.09	5,165.73	2,731.80	1,495.15	1,385.23	109.92	13.603	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 503H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,400.00	9,874.97	15,326.71	9,693.24	55.77	54.85	83.00	5,265.37	2,730.73	1,495.42	1,384.32	111.10	13.460	
15,500.00	9,868.46	15,426.70	9,685.15	56.36	55.45	82.94	5,365.03	2,729.66	1,495.60	1,383.32	112.29	13.320	
15,600.00	9,861.83	15,526.69	9,677.07	56.95	56.04	82.88	5,464.68	2,728.59	1,495.77	1,382.28	113.48	13.180	
15,700.00	9,855.20	15,626.68	9,668.98	57.54	56.65	82.83	5,564.34	2,727.52	1,495.94	1,381.25	114.69	13.043	
15,800.00	9,848.57	15,726.67	9,660.90	58.14	57.25	82.77	5,663.99	2,726.45	1,496.11	1,380.20	115.91	12.908	
15,900.00	9,841.94	15,826.66	9,652.81	58.74	57.86	82.72	5,763.65	2,725.38	1,496.28	1,379.15	117.13	12.775	
16,000.00	9,835.31	15,926.65	9,644.73	59.34	58.48	82.66	5,863.31	2,724.31	1,496.45	1,378.09	118.36	12.643	
16,100.00	9,828.68	16,026.64	9,636.64	59.95	59.09	82.60	5,962.96	2,723.24	1,496.62	1,377.03	119.60	12.514	
16,200.00	9,822.06	16,126.63	9,628.56	60.57	59.71	82.55	6,062.62	2,722.17	1,496.80	1,375.96	120.84	12.386	
16,300.00	9,815.43	16,226.61	9,620.47	61.18	60.34	82.49	6,162.28	2,721.09	1,496.98	1,374.88	122.10	12.261	
16,400.00	9,808.80	16,326.60	9,612.39	61.80	60.97	82.44	6,261.93	2,720.02	1,497.15	1,373.80	123.35	12.137	
16,500.00	9,802.17	16,426.59	9,604.30	62.43	61.60	82.38	6,361.59	2,718.95	1,497.33	1,372.71	124.62	12.015	
16,600.00	9,795.54	16,526.58	9,596.22	63.05	62.23	82.33	6,461.24	2,717.88	1,497.51	1,371.62	125.89	11.895	
16,700.00	9,788.91	16,626.57	9,588.13	63.68	62.87	82.27	6,560.90	2,716.81	1,497.70	1,370.53	127.17	11.777	
16,800.00	9,782.28	16,726.56	9,580.05	64.31	63.51	82.22	6,660.56	2,715.74	1,497.88	1,369.43	128.45	11.661	
16,900.00	9,775.65	16,826.55	9,571.96	64.95	64.15	82.16	6,760.21	2,714.67	1,498.07	1,368.32	129.74	11.546	
17,000.00	9,769.03	16,926.54	9,563.88	65.59	64.80	82.11	6,859.87	2,713.60	1,498.25	1,367.21	131.04	11.434	
17,100.00	9,762.40	17,026.53	9,555.79	66.23	65.45	82.05	6,959.52	2,712.53	1,498.44	1,366.10	132.34	11.323	
17,200.00	9,755.77	17,126.52	9,547.71	66.87	66.10	81.99	7,059.18	2,711.46	1,498.63	1,364.98	133.65	11.213	
17,300.00	9,749.14	17,226.51	9,539.62	67.52	66.75	81.94	7,158.84	2,710.39	1,498.82	1,363.86	134.96	11.106	
17,400.00	9,742.51	17,326.50	9,531.54	68.17	67.41	81.88	7,258.49	2,709.32	1,499.01	1,362.74	136.27	11.000	
17,500.00	9,735.88	17,426.49	9,523.45	68.82	68.07	81.83	7,358.15	2,708.24	1,499.21	1,361.61	137.60	10.896	
17,600.00	9,729.25	17,526.48	9,515.37	69.47	68.73	81.77	7,457.81	2,707.17	1,499.40	1,360.48	138.92	10.793	
17,700.00	9,722.62	17,626.47	9,507.29	70.13	69.39	81.72	7,557.46	2,706.10	1,499.60	1,359.34	140.25	10.692	
17,800.00	9,716.00	17,726.45	9,499.20	70.79	70.06	81.66	7,657.12	2,705.03	1,499.79	1,358.21	141.59	10.593	
17,900.00	9,709.37	17,826.44	9,491.12	71.45	70.73	81.61	7,756.77	2,703.96	1,499.99	1,357.07	142.93	10.495	
18,000.00	9,702.74	17,926.43	9,483.03	72.11	71.40	81.55	7,856.43	2,702.89	1,500.19	1,355.92	144.27	10.398	
18,100.00	9,696.11	18,026.42	9,474.95	72.78	72.07	81.50	7,956.09	2,701.82	1,500.40	1,354.78	145.62	10.304	
18,200.00	9,689.48	18,126.41	9,466.86	73.44	72.74	81.44	8,055.74	2,700.75	1,500.60	1,353.63	146.97	10.210	
18,300.00	9,682.85	18,226.40	9,458.78	74.11	73.42	81.39	8,155.40	2,699.68	1,500.80	1,352.48	148.33	10.118	
18,400.00	9,676.22	18,326.39	9,450.69	74.78	74.10	81.33	8,255.05	2,698.61	1,501.01	1,351.32	149.69	10.028	
18,500.00	9,669.60	18,426.38	9,442.61	75.46	74.77	81.28	8,354.71	2,697.54	1,501.22	1,350.17	151.05	9.939	
18,600.00	9,662.97	18,526.37	9,434.52	76.13	75.46	81.22	8,454.37	2,696.46	1,501.43	1,349.01	152.42	9.851	
18,700.00	9,656.34	18,626.36	9,426.44	76.81	76.14	81.17	8,554.02	2,695.39	1,501.64	1,347.85	153.79	9.764	
18,800.00	9,649.71	18,726.35	9,418.35	77.49	76.82	81.11	8,653.68	2,694.32	1,501.85	1,346.69	155.16	9.679	
18,900.00	9,643.08	18,826.34	9,410.27	78.17	77.51	81.06	8,753.34	2,693.25	1,502.06	1,345.52	156.54	9.596	
19,000.00	9,636.45	18,926.33	9,402.18	78.85	78.20	81.00	8,852.99	2,692.18	1,502.27	1,344.36	157.92	9.513	
19,100.00	9,629.82	19,026.32	9,394.10	79.53	78.89	80.95	8,952.65	2,691.11	1,502.49	1,343.19	159.30	9.432	
19,200.00	9,622.88	19,126.31	9,386.01	80.22	79.58	80.90	9,052.31	2,690.04	1,502.66	1,341.97	160.68	9.352	
19,300.00	9,613.89	19,226.30	9,377.93	80.91	80.27	80.94	9,151.97	2,688.97	1,502.50	1,340.43	162.07	9.271	
19,400.00	9,604.73	19,326.30	9,369.84	81.60	80.96	80.98	9,251.63	2,687.90	1,502.32	1,338.86	163.45	9.191	
19,500.00	9,595.58	19,426.29	9,361.76	82.29	81.66	81.02	9,351.29	2,686.83	1,502.14	1,337.29	164.84	9.112	
19,600.00	9,586.43	19,526.29	9,353.67	82.98	82.35	81.06	9,450.95	2,685.76	1,501.96	1,335.72	166.24	9.035	
19,700.00	9,577.27	19,626.28	9,345.58	83.68	83.05	81.10	9,550.61	2,684.69	1,501.78	1,334.15	167.63	8.959	
19,800.00	9,568.12	19,726.28	9,337.50	84.38	83.75	81.14	9,650.28	2,683.61	1,501.60	1,332.57	169.03	8.884	
19,900.00	9,558.96	19,826.27	9,329.41	85.07	84.45	81.18	9,749.94	2,682.54	1,501.42	1,331.00	170.43	8.810	
20,000.00	9,549.81	19,926.26	9,321.33	85.77	85.15	81.22	9,849.60	2,681.47	1,501.24	1,329.42	171.83	8.737	
20,100.00	9,540.66	20,026.26	9,313.24	86.47	85.85	81.26	9,949.26	2,680.40	1,501.07	1,327.84	173.23	8.665	
20,200.00	9,531.25	20,126.25	9,305.16	87.17	86.56	81.31	10,048.92	2,679.33	1,500.85	1,326.22	174.64	8.594	
20,300.00	9,519.27	20,226.17	9,297.08	87.88	87.26	81.46	10,148.50	2,678.26	1,500.25	1,324.22	176.03	8.523	
20,400.00	9,506.58	20,326.06	9,289.00	88.59	87.97	81.64	10,248.06	2,677.19	1,499.56	1,322.13	177.43	8.451	
20,500.00	9,493.90	20,425.96	9,280.92	89.29	88.67	81.81	10,347.62	2,676.12	1,498.88	1,320.05	178.83	8.381	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 503H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
20,600.00	9,481.22	20,525.85	9,272.85	90.00	89.38	81.99	10,447.18	2,675.05	1,498.22	1,317.98	180.23	8.313	
20,700.00	9,468.54	20,625.74	9,264.77	90.71	90.09	82.16	10,546.74	2,673.98	1,497.56	1,315.93	181.64	8.245	
20,800.00	9,455.85	20,725.63	9,256.69	91.43	90.80	82.34	10,646.31	2,672.91	1,496.93	1,313.89	183.04	8.178	
20,900.00	9,443.17	20,825.53	9,248.62	92.14	91.51	82.51	10,745.87	2,671.84	1,496.30	1,311.86	184.45	8.112	
21,000.00	9,430.49	20,925.42	9,240.54	92.85	92.22	82.69	10,845.43	2,670.77	1,495.70	1,309.84	185.86	8.048	
21,100.00	9,417.81	21,025.31	9,232.46	93.56	92.93	82.86	10,944.99	2,669.70	1,495.10	1,307.83	187.27	7.984	
21,200.00	9,405.13	21,125.21	9,224.38	94.28	93.65	83.04	11,044.55	2,668.63	1,494.52	1,305.84	188.68	7.921	
21,300.00	9,392.44	21,225.10	9,216.31	94.99	94.36	83.21	11,144.11	2,667.56	1,493.95	1,303.86	190.09	7.859	
21,400.00	9,379.76	21,324.99	9,208.23	95.71	95.07	83.39	11,243.67	2,666.49	1,493.40	1,301.90	191.50	7.798	
21,500.00	9,366.09	21,424.83	9,200.16	96.43	95.79	83.61	11,343.17	2,665.42	1,492.75	1,299.84	192.91	7.738	
21,600.00	9,351.40	21,524.61	9,192.09	97.15	96.51	83.86	11,442.62	2,664.36	1,492.01	1,297.69	194.32	7.678	
21,700.00	9,336.72	21,624.39	9,184.02	97.87	97.22	84.12	11,542.07	2,663.29	1,491.30	1,295.57	195.72	7.619	
21,800.00	9,322.03	21,724.17	9,175.95	98.59	97.94	84.37	11,641.51	2,662.22	1,490.62	1,293.48	197.13	7.561	
21,900.00	9,307.35	21,823.95	9,167.89	99.31	98.66	84.62	11,740.96	2,661.15	1,489.97	1,291.42	198.54	7.505	
22,000.00	9,292.66	21,923.73	9,159.82	100.03	99.38	84.88	11,840.41	2,660.08	1,489.34	1,289.39	199.95	7.448	
22,100.00	9,277.97	22,023.51	9,151.75	100.75	100.10	85.13	11,939.85	2,659.01	1,488.75	1,287.39	201.36	7.393	
22,200.00	9,263.29	22,123.29	9,143.68	101.48	100.82	85.39	12,039.30	2,657.94	1,488.19	1,285.41	202.78	7.339	
22,300.00	9,248.60	22,223.07	9,135.61	102.20	101.54	85.64	12,138.75	2,656.87	1,487.65	1,283.46	204.19	7.286	
22,400.00	9,233.91	22,322.85	9,127.55	102.93	102.26	85.90	12,238.20	2,655.81	1,487.15	1,281.55	205.60	7.233	
22,500.00	9,219.23	22,422.63	9,119.48	103.65	102.98	86.15	12,337.64	2,654.74	1,486.67	1,279.66	207.02	7.181	
22,600.00	9,204.54	22,522.41	9,111.41	104.38	103.71	86.40	12,437.09	2,653.67	1,486.23	1,277.79	208.43	7.130	
22,700.00	9,189.82	22,622.18	9,103.34	105.10	104.43	86.66	12,536.53	2,652.60	1,485.81	1,275.96	209.85	7.080	
22,800.00	9,173.02	22,721.79	9,095.29	105.83	105.15	87.01	12,635.81	2,651.53	1,485.31	1,274.06	211.25	7.031	
22,900.00	9,155.27	22,821.32	9,087.24	106.56	105.88	87.38	12,735.01	2,650.47	1,484.82	1,272.16	212.65	6.982	
23,000.00	9,137.53	22,920.84	9,079.19	107.29	106.60	87.75	12,834.20	2,649.40	1,484.39	1,270.33	214.05	6.935	
23,100.00	9,119.78	23,020.37	9,071.15	108.02	107.32	88.13	12,933.39	2,648.34	1,484.02	1,268.57	215.45	6.888	
23,200.00	9,102.04	23,119.89	9,063.10	108.75	108.05	88.50	13,032.59	2,647.27	1,483.72	1,266.87	216.86	6.842	
23,300.00	9,084.29	23,219.42	9,055.05	109.48	108.78	88.87	13,131.78	2,646.20	1,483.48	1,265.23	218.26	6.797	
23,400.00	9,066.54	23,318.95	9,047.00	110.21	109.50	89.25	13,230.98	2,645.14	1,483.31	1,263.65	219.66	6.753	
23,500.00	9,048.80	23,418.47	9,038.96	110.94	110.23	89.62	13,330.17	2,644.07	1,483.20	1,262.14	221.06	6.709	
23,600.00	9,031.05	23,518.00	9,030.91	111.67	110.96	90.00	13,429.36	2,643.01	1,483.15	1,260.69	222.46	6.667	
23,622.56	9,027.05	23,540.45	9,029.09	111.84	111.12	90.08	13,451.74	2,642.77	1,483.15	1,260.37	222.78	6.657	CC
23,700.00	9,013.31	23,617.52	9,022.86	112.41	111.68	90.37	13,528.56	2,641.94	1,483.17	1,259.30	223.87	6.625	
23,800.00	8,995.56	23,717.05	9,014.81	113.14	112.41	90.74	13,627.75	2,640.88	1,483.25	1,257.98	225.27	6.584	
23,900.00	8,977.82	23,816.57	9,006.77	113.87	113.14	91.12	13,726.94	2,639.81	1,483.40	1,256.72	226.68	6.544	
24,000.00	8,959.73	23,916.06	8,998.72	114.61	113.87	91.50	13,826.10	2,638.74	1,483.62	1,255.54	228.08	6.505	
24,100.00	8,938.95	24,015.24	8,990.70	115.34	114.60	91.99	13,924.95	2,637.68	1,483.99	1,254.53	229.46	6.467	
24,200.00	8,917.45	24,114.32	8,982.69	116.07	115.32	92.51	14,023.70	2,636.62	1,484.52	1,253.68	230.84	6.431	
24,300.00	8,895.96	24,213.40	8,974.68	116.81	116.05	93.02	14,122.45	2,635.56	1,485.16	1,252.94	232.22	6.396	
24,400.00	8,874.46	24,312.48	8,966.67	117.55	116.78	93.54	14,221.20	2,634.50	1,485.93	1,252.33	233.60	6.361	
24,500.00	8,852.96	24,411.56	8,958.66	118.28	117.51	94.05	14,319.95	2,633.44	1,486.82	1,251.84	234.97	6.328	
24,600.00	8,831.46	24,510.64	8,950.65	119.02	118.24	94.57	14,418.70	2,632.38	1,487.83	1,251.48	236.35	6.295	
24,700.00	8,809.97	24,609.72	8,942.64	119.75	118.97	95.08	14,517.45	2,631.32	1,488.97	1,251.23	237.73	6.263	
24,800.00	8,788.47	24,708.80	8,934.62	120.49	119.70	95.60	14,616.20	2,630.25	1,490.22	1,251.11	239.11	6.232	
24,900.00	8,766.97	24,807.88	8,926.61	121.23	120.43	96.11	14,714.95	2,629.19	1,491.60	1,251.11	240.50	6.202	ES
25,000.00	8,745.48	24,906.96	8,918.60	121.96	121.16	96.62	14,813.70	2,628.13	1,493.10	1,251.23	241.88	6.173	
25,100.00	8,723.98	25,006.04	8,910.59	122.70	121.89	97.13	14,912.45	2,627.07	1,494.72	1,251.47	243.26	6.145	
25,200.00	8,702.48	25,105.12	8,902.58	123.44	122.62	97.64	15,011.20	2,626.01	1,496.47	1,251.82	244.64	6.117	
25,300.00	8,680.26	25,204.10	8,894.58	124.18	123.35	98.15	15,109.85	2,624.95	1,498.43	1,252.41	246.02	6.091	
25,400.00	8,654.86	25,302.55	8,886.61	124.91	124.08	98.75	15,207.97	2,623.90	1,501.03	1,253.66	247.37	6.068	
25,500.00	8,626.28	25,400.37	8,878.70	125.65	124.80	99.47	15,305.47	2,622.85	1,504.37	1,255.67	248.69	6.049	
25,600.00	8,596.98	25,498.04	8,870.81	126.38	125.52	100.26	15,402.81	2,621.80	1,508.12	1,258.11	250.01	6.032	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 503H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Rule Assigned: Minimum Separation (usft)	Separation Factor	Warning
25,700.00	8,567.67	25,595.71	8,862.91	127.11	126.25	101.04	15,500.15	2,620.76	1,512.17	1,260.83	251.33	6.017	
25,800.00	8,538.37	25,693.37	8,855.01	127.85	126.97	101.82	15,597.49	2,619.71	1,516.51	1,263.85	252.65	6.002	
25,900.00	8,509.06	25,791.04	8,847.12	128.58	127.69	102.59	15,694.83	2,618.66	1,521.14	1,267.16	253.98	5.989	
26,000.00	8,479.76	25,888.70	8,839.22	129.32	128.42	103.36	15,792.17	2,617.62	1,526.06	1,270.76	255.30	5.977	
26,100.00	8,450.45	25,986.37	8,831.32	130.05	129.14	104.13	15,889.51	2,616.57	1,531.27	1,274.64	256.63	5.967	
26,200.00	8,421.14	26,084.04	8,823.43	130.79	129.87	104.89	15,986.85	2,615.53	1,536.75	1,278.80	257.95	5.957	
26,300.00	8,391.84	26,181.70	8,815.53	131.53	130.59	105.64	16,084.19	2,614.48	1,542.52	1,283.24	259.28	5.949	
26,400.00	8,362.53	26,279.37	8,807.63	132.26	131.32	106.39	16,181.53	2,613.43	1,548.56	1,287.95	260.62	5.942	
26,500.00	8,333.23	26,377.03	8,799.73	133.00	132.04	107.14	16,278.87	2,612.39	1,554.88	1,292.93	261.95	5.936	
26,600.00	8,303.92	26,474.70	8,791.84	133.73	132.77	107.87	16,376.22	2,611.34	1,561.47	1,298.18	263.29	5.931	
26,700.00	8,274.62	26,572.37	8,783.94	134.47	133.49	108.60	16,473.56	2,610.30	1,568.32	1,303.70	264.62	5.927	
26,800.00	8,245.31	26,670.03	8,776.04	135.21	134.22	109.33	16,570.90	2,609.25	1,575.44	1,309.47	265.97	5.923	
26,900.00	8,217.06	26,767.93	8,768.13	135.94	134.95	110.07	16,668.47	2,608.20	1,582.44	1,315.12	267.32	5.920	
27,000.00	8,189.09	26,865.88	8,760.21	136.68	135.68	110.74	16,766.09	2,607.15	1,589.57	1,320.89	268.68	5.916	
27,100.00	8,161.11	26,963.84	8,752.29	137.42	136.41	111.40	16,863.72	2,606.10	1,596.92	1,326.88	270.04	5.914	
27,200.00	8,133.14	27,061.79	8,744.37	138.16	137.14	112.06	16,961.35	2,605.05	1,604.49	1,333.09	271.40	5.912	
27,300.00	8,105.17	27,159.75	8,736.45	138.90	137.87	112.71	17,058.98	2,604.01	1,612.27	1,339.51	272.77	5.911	
27,400.00	8,077.20	27,257.70	8,728.53	139.63	138.60	113.35	17,156.61	2,602.96	1,620.27	1,346.13	274.13	5.910	SF
27,500.00	8,049.22	27,355.66	8,720.60	140.37	139.33	113.99	17,254.24	2,601.91	1,628.47	1,352.97	275.51	5.911	
27,600.00	8,021.25	27,453.62	8,712.68	141.11	140.06	114.63	17,351.87	2,600.86	1,636.89	1,360.01	276.88	5.912	
27,700.00	7,993.28	27,551.57	8,704.76	141.85	140.79	115.25	17,449.50	2,599.81	1,645.50	1,367.24	278.26	5.914	
27,800.00	7,965.31	27,649.53	8,696.84	142.59	141.52	115.87	17,547.13	2,598.76	1,654.32	1,374.68	279.64	5.916	
27,900.00	7,937.33	27,747.48	8,688.92	143.33	142.25	116.48	17,644.76	2,597.71	1,663.33	1,382.31	281.02	5.919	
28,000.00	7,909.36	27,845.44	8,681.00	144.07	142.98	117.09	17,742.39	2,596.66	1,672.53	1,390.13	282.41	5.922	
28,100.00	7,881.39	27,943.39	8,673.08	144.81	143.71	117.69	17,840.01	2,595.61	1,681.93	1,398.13	283.80	5.927	
28,200.00	7,853.42	28,041.35	8,665.16	145.55	144.45	118.29	17,937.64	2,594.56	1,691.51	1,406.32	285.19	5.931	
28,300.00	7,825.44	28,139.30	8,657.24	146.29	145.18	118.87	18,035.27	2,593.51	1,701.28	1,414.69	286.58	5.936	
28,400.00	7,797.47	28,197.49	8,652.54	147.03	145.61	119.22	18,093.27	2,592.89	1,711.69	1,424.07	287.62	5.951	
28,444.58	7,785.00	28,197.49	8,652.54	147.36	145.61	119.22	18,093.27	2,592.89	1,717.74	1,430.05	287.69	5.971	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 601H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.30	0.00	0.00	0.00	-90.11	-0.11	-59.99	59.99				
100.00	100.00	100.30	100.00	0.28	0.28	-90.11	-0.11	-59.99	59.99	59.44	0.55	108.457	
200.00	200.00	200.30	200.00	0.63	0.64	-90.11	-0.11	-59.99	59.99	58.72	1.27	47.234	
300.00	300.00	300.30	300.00	0.99	0.99	-90.11	-0.11	-59.99	59.99	58.00	1.99	30.191	
400.00	400.00	400.30	400.00	1.35	1.35	-90.11	-0.11	-59.99	59.99	57.29	2.70	22.186	
500.00	500.00	500.30	500.00	1.71	1.71	-90.11	-0.11	-59.99	59.99	56.57	3.42	17.536	
600.00	600.00	600.30	600.00	2.07	2.07	-90.11	-0.11	-59.99	59.99	55.85	4.14	14.498	
700.00	700.00	700.30	700.00	2.43	2.43	-90.11	-0.11	-59.99	59.99	55.14	4.85	12.357	
800.00	800.00	800.30	800.00	2.79	2.79	-90.11	-0.11	-59.99	59.99	54.42	5.57	10.767	
900.00	900.00	900.30	900.00	3.14	3.14	-90.11	-0.11	-59.99	59.99	53.70	6.29	9.539	
1,000.00	1,000.00	1,000.30	1,000.00	3.50	3.50	-90.11	-0.11	-59.99	59.99	52.98	7.01	8.563	
1,100.00	1,100.00	1,100.30	1,100.00	3.86	3.86	-90.11	-0.11	-59.99	59.99	52.27	7.72	7.768	
1,200.00	1,200.00	1,200.30	1,200.00	4.22	4.22	-90.11	-0.11	-59.99	59.99	51.55	8.44	7.108	
1,300.00	1,300.00	1,300.30	1,300.00	4.58	4.58	-90.11	-0.11	-59.99	59.99	50.83	9.16	6.552	
1,400.00	1,400.00	1,400.30	1,400.00	4.94	4.94	-90.11	-0.11	-59.99	59.99	50.12	9.87	6.076	
1,500.00	1,500.00	1,500.30	1,500.00	5.29	5.30	-90.11	-0.11	-59.99	59.99	49.40	10.59	5.665	
1,600.00	1,600.00	1,600.30	1,600.00	5.65	5.65	-90.11	-0.11	-59.99	59.99	48.68	11.31	5.305	CC, ES
1,700.00	1,699.98	1,700.28	1,699.98	6.00	6.01	170.07	-0.11	-59.99	61.71	49.69	12.01	5.137	
1,800.00	1,799.84	1,800.14	1,799.84	6.34	6.37	170.83	-0.11	-59.99	66.87	54.16	12.71	5.261	
1,900.00	1,899.45	1,900.02	1,899.70	6.68	6.71	170.54	-1.85	-59.84	75.30	61.91	13.39	5.623	
2,000.00	1,998.70	1,999.52	1,999.06	7.03	7.03	168.38	-7.03	-59.41	86.88	72.82	14.06	6.181	
2,100.00	2,097.47	2,098.37	2,097.53	7.38	7.36	165.21	-15.58	-58.68	101.84	87.12	14.73	6.916	
2,200.00	2,195.96	2,196.68	2,195.16	7.73	7.68	161.69	-27.06	-57.72	118.75	103.36	15.39	7.716	
2,300.00	2,294.44	2,294.98	2,292.73	8.08	8.01	158.85	-38.99	-56.71	136.03	119.97	16.06	8.469	
2,400.00	2,392.93	2,393.28	2,390.30	8.44	8.34	156.65	-50.93	-55.70	153.56	136.82	16.74	9.174	
2,500.00	2,491.42	2,491.58	2,487.87	8.80	8.67	154.91	-62.86	-54.70	171.27	153.85	17.42	9.831	
2,600.00	2,589.91	2,589.88	2,585.43	9.16	9.00	153.49	-74.80	-53.69	189.10	171.00	18.11	10.443	
2,700.00	2,688.40	2,688.18	2,683.00	9.52	9.34	152.31	-86.73	-52.68	207.03	188.23	18.80	11.013	
2,800.00	2,786.89	2,786.48	2,780.57	9.88	9.68	151.33	-98.67	-51.67	225.03	205.53	19.49	11.544	
2,900.00	2,885.38	2,884.78	2,878.13	10.24	10.02	150.49	-110.60	-50.67	243.08	222.89	20.19	12.039	
3,000.00	2,983.87	2,983.08	2,975.70	10.61	10.36	149.76	-122.54	-49.66	261.17	240.28	20.89	12.501	
3,100.00	3,082.36	3,081.38	3,073.27	10.97	10.70	149.13	-134.47	-48.65	279.30	257.71	21.60	12.933	
3,200.00	3,180.85	3,179.67	3,170.83	11.34	11.05	148.58	-146.41	-47.65	297.46	275.16	22.30	13.338	
3,300.00	3,279.34	3,277.97	3,268.40	11.71	11.39	148.09	-158.34	-46.64	315.65	292.64	23.01	13.718	
3,400.00	3,377.83	3,376.27	3,365.97	12.07	11.74	147.65	-170.28	-45.63	333.85	310.13	23.72	14.075	
3,500.00	3,476.32	3,474.57	3,463.53	12.44	12.09	147.26	-182.21	-44.63	352.07	327.64	24.43	14.410	
3,600.00	3,574.81	3,572.87	3,561.10	12.81	12.44	146.91	-194.15	-43.62	370.30	345.16	25.15	14.726	
3,700.00	3,673.30	3,671.17	3,658.67	13.18	12.79	146.59	-206.08	-42.61	388.55	362.69	25.86	15.025	
3,800.00	3,771.79	3,773.00	3,759.86	13.55	13.15	146.44	-217.35	-41.66	406.48	379.88	26.60	15.280	
3,900.00	3,870.28	3,876.16	3,862.72	13.92	13.52	146.77	-225.19	-41.00	423.34	395.99	27.35	15.480	
4,000.00	3,968.77	3,979.42	3,965.89	14.29	13.88	147.54	-229.33	-40.65	439.15	411.06	28.09	15.634	
4,100.00	4,067.26	4,080.80	4,067.26	14.66	14.24	148.66	-230.04	-40.59	454.11	425.29	28.81	15.761	
4,200.00	4,165.75	4,179.29	4,165.75	15.04	14.57	149.75	-230.04	-40.59	469.04	439.52	29.52	15.890	
4,300.00	4,264.24	4,277.78	4,264.24	15.41	14.91	150.78	-230.04	-40.59	484.13	453.91	30.22	16.018	
4,400.00	4,362.73	4,376.27	4,362.73	15.78	15.25	151.75	-230.04	-40.59	499.36	468.43	30.93	16.144	
4,500.00	4,461.22	4,474.76	4,461.22	16.15	15.59	152.66	-230.04	-40.59	514.73	483.09	31.64	16.269	
4,600.00	4,559.71	4,573.25	4,559.71	16.53	15.93	153.51	-230.04	-40.59	530.22	497.87	32.35	16.391	
4,700.00	4,658.20	4,671.74	4,658.20	16.90	16.28	154.32	-230.04	-40.59	545.82	512.76	33.06	16.511	
4,800.00	4,756.69	4,770.22	4,756.69	17.27	16.62	155.09	-230.04	-40.59	561.51	527.75	33.77	16.629	
4,900.00	4,855.18	4,868.71	4,855.18	17.65	16.96	155.81	-230.04	-40.59	577.30	542.83	34.48	16.744	
5,000.00	4,953.67	4,967.20	4,953.67	18.02	17.30	156.49	-230.04	-40.59	593.18	557.99	35.19	16.857	
5,100.00	5,052.15	5,065.69	5,052.15	18.40	17.65	157.14	-230.04	-40.59	609.13	573.23	35.90	16.967	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 601H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.00	5,150.64	5,164.18	5,150.64	18.77	17.99	157.75	-230.04	-40.59	625.16	588.54	36.61	17.074	
5,300.00	5,249.13	5,262.67	5,249.13	19.14	18.33	158.34	-230.04	-40.59	641.25	603.92	37.33	17.179	
5,400.00	5,347.62	5,361.16	5,347.62	19.52	18.68	158.90	-230.04	-40.59	657.41	619.36	38.04	17.281	
5,500.00	5,446.11	5,459.65	5,446.11	19.89	19.02	159.42	-230.04	-40.59	673.62	634.86	38.76	17.381	
5,600.00	5,544.60	5,558.14	5,544.60	20.27	19.37	159.93	-230.04	-40.59	689.89	650.41	39.47	17.478	
5,700.00	5,643.09	5,656.63	5,643.09	20.64	19.71	160.41	-230.04	-40.59	706.20	666.01	40.19	17.573	
5,800.00	5,741.58	5,755.12	5,741.58	21.02	20.06	160.87	-230.04	-40.59	722.56	681.66	40.90	17.665	
5,900.00	5,840.07	5,853.61	5,840.07	21.40	20.40	161.31	-230.04	-40.59	738.97	697.35	41.62	17.756	
6,000.00	5,938.56	5,952.10	5,938.56	21.77	20.75	161.73	-230.04	-40.59	755.42	713.08	42.34	17.844	
6,100.00	6,037.05	6,050.59	6,037.05	22.15	21.09	162.13	-230.04	-40.59	771.90	728.85	43.05	17.929	
6,200.00	6,135.54	6,149.08	6,135.54	22.52	21.44	162.52	-230.04	-40.59	788.42	744.65	43.77	18.013	
6,300.00	6,234.03	6,247.57	6,234.03	22.90	21.79	162.89	-230.04	-40.59	804.97	760.49	44.49	18.094	
6,400.00	6,332.52	6,346.06	6,332.52	23.28	22.13	163.24	-230.04	-40.59	821.56	776.35	45.21	18.174	
6,500.00	6,431.01	6,444.55	6,431.01	23.65	22.48	163.58	-230.04	-40.59	838.17	792.25	45.92	18.251	
6,600.00	6,529.50	6,543.04	6,529.50	24.03	22.83	163.91	-230.04	-40.59	854.82	808.17	46.64	18.326	
6,700.00	6,627.99	6,641.53	6,627.99	24.41	23.18	164.23	-230.04	-40.59	871.48	824.12	47.36	18.400	
6,800.00	6,726.48	6,740.02	6,726.48	24.78	23.52	164.53	-230.04	-40.59	888.18	840.09	48.08	18.472	
6,900.00	6,824.97	6,838.51	6,824.97	25.16	23.87	164.82	-230.04	-40.59	904.89	856.09	48.80	18.542	
7,000.00	6,923.46	6,937.00	6,923.46	25.54	24.22	165.10	-230.04	-40.59	921.63	872.11	49.52	18.610	
7,100.00	7,021.95	7,035.49	7,021.95	25.91	24.57	165.37	-230.04	-40.59	938.39	888.15	50.24	18.677	
7,200.00	7,120.44	7,133.98	7,120.44	26.29	24.92	165.64	-230.04	-40.59	955.17	904.21	50.96	18.742	
7,300.00	7,218.93	7,232.47	7,218.93	26.67	25.26	165.89	-230.04	-40.59	971.97	920.28	51.68	18.806	
7,400.00	7,317.42	7,330.96	7,317.42	27.04	25.61	166.13	-230.04	-40.59	988.78	936.38	52.40	18.868	
7,500.00	7,415.91	7,429.45	7,415.91	27.42	25.96	166.37	-230.04	-40.59	1,005.62	952.49	53.13	18.929	
7,600.00	7,514.40	7,527.93	7,514.40	27.80	26.31	166.60	-230.04	-40.59	1,022.46	968.62	53.85	18.988	
7,700.00	7,612.89	7,626.42	7,612.89	28.18	26.66	166.82	-230.04	-40.59	1,039.33	984.76	54.57	19.046	
7,800.00	7,711.38	7,724.91	7,711.38	28.55	27.01	167.03	-230.04	-40.59	1,056.21	1,000.92	55.29	19.103	
7,900.00	7,809.86	7,823.40	7,809.86	28.93	27.36	167.24	-230.04	-40.59	1,073.10	1,017.09	56.01	19.158	
8,000.00	7,908.35	7,921.89	7,908.35	29.31	27.71	167.44	-230.04	-40.59	1,090.01	1,033.27	56.74	19.212	
8,100.00	8,006.84	8,020.38	8,006.84	29.69	28.06	167.64	-230.04	-40.59	1,106.92	1,049.47	57.46	19.265	
8,200.00	8,105.33	8,118.87	8,105.33	30.06	28.41	167.83	-230.04	-40.59	1,123.85	1,065.67	58.18	19.316	
8,300.00	8,203.82	8,217.36	8,203.82	30.44	28.76	168.01	-230.04	-40.59	1,140.80	1,081.89	58.90	19.367	
8,400.00	8,302.31	8,315.85	8,302.31	30.82	29.10	168.19	-230.04	-40.59	1,157.75	1,098.12	59.63	19.416	
8,500.00	8,400.80	8,414.34	8,400.80	31.20	29.45	168.36	-230.04	-40.59	1,174.71	1,114.36	60.35	19.465	
8,600.00	8,499.29	8,512.83	8,499.29	31.57	29.80	168.53	-230.04	-40.59	1,191.69	1,130.61	61.07	19.512	
8,700.00	8,597.78	8,611.32	8,597.78	31.95	30.15	168.69	-230.04	-40.59	1,208.67	1,146.87	61.80	19.558	
8,800.00	8,696.27	8,709.81	8,696.27	32.33	30.50	168.85	-230.04	-40.59	1,225.66	1,163.14	62.52	19.604	
8,900.00	8,794.76	8,808.30	8,794.76	32.71	30.85	169.00	-230.04	-40.59	1,242.66	1,179.42	63.25	19.648	
9,000.00	8,893.25	8,906.79	8,893.25	33.09	31.20	169.15	-230.04	-40.59	1,259.67	1,195.70	63.97	19.692	
9,100.00	8,991.74	9,005.28	8,991.74	33.46	31.55	169.30	-230.04	-40.59	1,276.69	1,212.00	64.69	19.734	
9,200.00	9,090.23	9,103.77	9,090.23	33.84	31.91	169.44	-230.04	-40.59	1,293.72	1,228.30	65.42	19.776	
9,300.00	9,188.72	9,202.26	9,188.72	34.22	32.26	169.58	-230.04	-40.59	1,310.75	1,244.61	66.14	19.817	
9,400.00	9,287.52	9,301.06	9,287.52	34.60	32.61	-172.43	-230.04	-40.59	1,326.03	1,259.17	66.87	19.831	
9,500.00	9,386.81	9,400.35	9,386.81	34.96	32.96	-140.64	-230.04	-40.59	1,336.91	1,269.33	67.58	19.783	
9,600.00	9,486.11	9,499.65	9,486.11	35.30	33.31	-108.83	-230.04	-40.59	1,343.35	1,275.08	68.28	19.675	
9,700.00	9,584.93	9,598.47	9,584.93	35.64	33.67	-90.74	-230.04	-40.59	1,345.46	1,276.50	68.96	19.510	
9,800.00	9,681.14	9,694.68	9,681.14	35.95	34.01	-91.78	-230.04	-40.59	1,346.08	1,276.46	69.62	19.334	
9,900.00	9,771.22	9,784.76	9,771.22	36.25	34.33	-93.21	-230.04	-40.59	1,348.20	1,277.95	70.25	19.191	
10,000.00	9,852.45	9,865.99	9,852.45	36.51	34.62	-94.71	-230.04	-40.59	1,353.22	1,282.39	70.83	19.105	
10,100.00	9,922.36	9,941.91	9,928.37	36.72	34.89	-96.04	-229.82	-40.59	1,362.73	1,291.35	71.38	19.090	
10,200.00	9,978.82	10,063.22	10,048.38	36.88	35.31	-98.44	-213.73	-40.74	1,376.56	1,304.42	72.14	19.083	
10,300.00	10,020.12	10,233.98	10,205.85	36.99	35.84	-101.68	-149.34	-41.32	1,392.85	1,320.08	72.78	19.139	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 601H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,400.00	10,046.32	10,504.80	10,397.81	37.06	36.50	-106.16	38.10	-43.02	1,407.20	1,334.32	72.87	19.310	
10,500.00	10,063.18	10,761.08	10,485.01	37.11	36.86	-107.67	277.33	-45.19	1,411.32	1,338.44	72.88	19.366	
10,600.00	10,071.39	10,921.40	10,503.83	37.16	37.02	-107.85	436.41	-46.64	1,412.26	1,339.15	73.11	19.317	
10,700.00	10,071.32	11,054.15	10,503.42	37.22	37.15	-107.83	569.10	-47.84	1,411.90	1,338.50	73.40	19.235	
10,800.00	10,069.20	11,154.14	10,500.64	37.31	37.26	-107.81	669.06	-48.74	1,411.55	1,337.84	73.70	19.152	
10,900.00	10,067.07	11,254.14	10,497.86	37.43	37.38	-107.78	769.01	-49.65	1,411.19	1,337.16	74.03	19.063	
11,000.00	10,064.95	11,354.14	10,495.07	37.58	37.52	-107.76	868.97	-50.56	1,410.84	1,336.45	74.39	18.966	
11,100.00	10,062.82	11,454.14	10,492.29	37.75	37.67	-107.74	968.92	-51.46	1,410.48	1,335.71	74.77	18.863	
11,200.00	10,060.70	11,554.13	10,489.51	37.93	37.84	-107.71	1,068.88	-52.37	1,410.13	1,334.94	75.19	18.754	
11,300.00	10,058.57	11,654.13	10,486.73	38.13	38.02	-107.69	1,168.83	-53.27	1,409.78	1,334.14	75.64	18.638	
11,400.00	10,056.45	11,754.13	10,483.95	38.35	38.22	-107.67	1,268.79	-54.18	1,409.43	1,333.31	76.11	18.517	
11,500.00	10,054.33	11,854.13	10,481.17	38.58	38.43	-107.64	1,368.74	-55.08	1,409.07	1,332.46	76.62	18.391	
11,600.00	10,052.20	11,954.12	10,478.39	38.83	38.66	-107.62	1,468.70	-55.99	1,408.72	1,331.57	77.15	18.260	
11,700.00	10,050.08	12,054.12	10,475.61	39.09	38.90	-107.60	1,568.65	-56.89	1,408.37	1,330.66	77.70	18.125	
11,800.00	10,047.95	12,154.12	10,472.83	39.36	39.16	-107.57	1,668.61	-57.80	1,408.02	1,329.73	78.29	17.985	
11,900.00	10,045.83	12,254.12	10,470.05	39.64	39.42	-107.55	1,768.56	-58.70	1,407.66	1,328.77	78.90	17.841	
12,000.00	10,043.70	12,354.12	10,467.27	39.93	39.71	-107.52	1,868.52	-59.61	1,407.31	1,327.78	79.53	17.695	
12,100.00	10,041.58	12,454.11	10,464.49	40.24	40.00	-107.50	1,968.47	-60.52	1,406.96	1,326.77	80.19	17.545	
12,200.00	10,039.45	12,554.11	10,461.71	40.56	40.31	-107.48	2,068.43	-61.42	1,406.61	1,325.74	80.88	17.392	
12,300.00	10,037.33	12,654.11	10,458.92	40.89	40.62	-107.45	2,168.38	-62.33	1,406.26	1,324.68	81.58	17.237	
12,400.00	10,035.21	12,754.11	10,456.14	41.24	40.96	-107.43	2,268.34	-63.23	1,405.91	1,323.60	82.31	17.080	
12,500.00	10,033.08	12,854.10	10,453.36	41.59	41.30	-107.41	2,368.29	-64.14	1,405.56	1,322.50	83.06	16.921	
12,600.00	10,030.96	12,954.10	10,450.58	41.95	41.65	-107.38	2,468.25	-65.04	1,405.21	1,321.37	83.84	16.761	
12,700.00	10,028.30	13,065.80	10,446.36	42.33	42.07	-107.34	2,579.85	-66.05	1,404.73	1,320.03	84.70	16.584	
12,800.00	10,023.00	13,171.96	10,439.19	42.72	42.48	-107.29	2,685.77	-67.01	1,404.15	1,318.57	85.58	16.408	
12,900.00	10,017.31	13,271.95	10,432.15	43.13	42.88	-107.24	2,785.51	-67.92	1,403.60	1,317.16	86.43	16.239	
13,000.00	10,011.61	13,371.95	10,425.11	43.54	43.29	-107.19	2,885.25	-68.82	1,403.05	1,315.74	87.31	16.069	
13,100.00	10,005.92	13,471.94	10,418.06	43.97	43.71	-107.14	2,984.99	-69.72	1,402.50	1,314.30	88.21	15.900	
13,200.00	10,000.23	13,571.93	10,411.02	44.40	44.14	-107.09	3,084.72	-70.63	1,401.96	1,312.84	89.12	15.731	
13,300.00	9,994.53	13,671.92	10,403.98	44.84	44.58	-107.03	3,184.46	-71.53	1,401.41	1,311.36	90.05	15.563	
13,400.00	9,988.84	13,771.91	10,396.93	45.29	45.03	-106.98	3,284.20	-72.44	1,400.87	1,309.87	91.00	15.395	
13,500.00	9,983.15	13,871.90	10,389.89	45.75	45.48	-106.93	3,383.94	-73.34	1,400.33	1,308.37	91.96	15.228	
13,600.00	9,977.45	13,971.89	10,382.85	46.22	45.95	-106.88	3,483.68	-74.24	1,399.79	1,306.85	92.94	15.062	
13,700.00	9,971.76	14,078.64	10,374.22	46.69	46.45	-106.78	3,590.07	-75.21	1,398.94	1,304.96	93.98	14.886	
13,800.00	9,966.06	14,178.59	10,365.52	47.18	46.94	-106.67	3,689.64	-76.11	1,397.92	1,302.93	94.99	14.716	
13,900.00	9,960.37	14,278.55	10,356.81	47.67	47.43	-106.55	3,789.21	-77.01	1,396.91	1,300.89	96.02	14.548	
14,000.00	9,954.68	14,378.50	10,348.11	48.16	47.93	-106.43	3,888.78	-77.91	1,395.90	1,298.85	97.06	14.382	
14,100.00	9,948.98	14,478.46	10,339.41	48.67	48.44	-106.32	3,988.35	-78.81	1,394.90	1,296.79	98.11	14.218	
14,200.00	9,943.29	14,578.41	10,330.70	49.18	48.95	-106.20	4,087.92	-79.71	1,393.91	1,294.73	99.18	14.055	
14,300.00	9,937.60	14,678.37	10,322.00	49.70	49.47	-106.08	4,187.49	-80.61	1,392.92	1,292.67	100.25	13.894	
14,400.00	9,931.90	14,778.32	10,313.30	50.22	50.00	-105.96	4,287.07	-81.51	1,391.94	1,290.60	101.34	13.736	
14,500.00	9,926.21	14,878.27	10,304.60	50.75	50.54	-105.85	4,386.64	-82.42	1,390.96	1,288.52	102.44	13.579	
14,600.00	9,920.52	14,978.23	10,295.89	51.29	51.07	-105.73	4,486.21	-83.32	1,389.99	1,286.44	103.54	13.424	
14,700.00	9,914.82	15,081.77	10,286.15	51.83	51.64	-105.58	4,589.29	-84.25	1,388.83	1,284.14	104.69	13.266	
14,800.00	9,909.13	15,181.69	10,276.49	52.38	52.19	-105.42	4,688.73	-85.15	1,387.62	1,281.79	105.82	13.113	
14,900.00	9,903.43	15,281.61	10,266.83	52.93	52.75	-105.26	4,788.18	-86.05	1,386.41	1,279.45	106.96	12.962	
15,000.00	9,897.74	15,381.53	10,257.17	53.49	53.32	-105.11	4,887.63	-86.95	1,385.22	1,277.11	108.11	12.813	
15,100.00	9,892.05	15,481.46	10,247.51	54.05	53.88	-104.95	4,987.08	-87.85	1,384.04	1,274.77	109.27	12.667	
15,200.00	9,886.35	15,581.38	10,237.85	54.62	54.46	-104.79	5,086.53	-88.76	1,382.86	1,272.43	110.43	12.522	
15,300.00	9,880.66	15,681.30	10,228.19	55.20	55.04	-104.63	5,185.98	-89.66	1,381.70	1,270.10	111.60	12.380	
15,400.00	9,874.97	15,781.22	10,218.53	55.77	55.62	-104.47	5,285.42	-90.56	1,380.55	1,267.77	112.79	12.241	
15,500.00	9,868.46	15,881.17	10,208.86	56.36	56.21	-104.35	5,384.90	-91.46	1,379.61	1,265.64	113.98	12.104	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 601H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,600.00	9,861.83	15,981.12	10,199.20	56.95	56.80	-104.23	5,484.38	-92.36	1,378.71	1,263.54	115.17	11.971	
15,700.00	9,855.20	16,072.20	10,191.39	57.54	57.34	-104.16	5,575.12	-93.18	1,378.09	1,261.78	116.30	11.849	
15,800.00	9,848.57	16,170.23	10,185.01	58.14	57.92	-104.17	5,672.94	-94.07	1,377.97	1,260.47	117.50	11.728	
15,900.00	9,841.94	16,270.23	10,178.55	58.74	58.52	-104.18	5,772.73	-94.97	1,377.86	1,259.14	118.72	11.606	
16,000.00	9,835.31	16,370.23	10,172.09	59.34	59.13	-104.18	5,872.52	-95.88	1,377.75	1,257.80	119.95	11.486	
16,100.00	9,828.68	16,470.23	10,165.63	59.95	59.73	-104.19	5,972.30	-96.78	1,377.64	1,256.46	121.18	11.368	
16,200.00	9,822.06	16,570.23	10,159.17	60.57	60.34	-104.20	6,072.09	-97.68	1,377.53	1,255.10	122.43	11.252	
16,300.00	9,815.43	16,670.23	10,152.72	61.18	60.96	-104.21	6,171.88	-98.59	1,377.42	1,253.75	123.68	11.137	
16,400.00	9,808.80	16,770.23	10,146.26	61.80	61.57	-104.22	6,271.66	-99.49	1,377.32	1,252.38	124.93	11.024	
16,500.00	9,802.17	16,870.23	10,139.80	62.43	62.19	-104.23	6,371.45	-100.39	1,377.21	1,251.01	126.20	10.913	
16,600.00	9,795.54	16,970.23	10,133.34	63.05	62.82	-104.24	6,471.24	-101.30	1,377.10	1,249.63	127.47	10.804	
16,700.00	9,788.91	17,070.23	10,126.88	63.68	63.44	-104.24	6,571.02	-102.20	1,376.99	1,248.25	128.74	10.696	
16,800.00	9,782.28	17,170.23	10,120.43	64.31	64.07	-104.25	6,670.81	-103.11	1,376.88	1,246.86	130.02	10.590	
16,900.00	9,775.65	17,270.23	10,113.97	64.95	64.71	-104.26	6,770.60	-104.01	1,376.78	1,245.47	131.31	10.485	
17,000.00	9,769.03	17,370.23	10,107.51	65.59	65.34	-104.27	6,870.38	-104.91	1,376.67	1,244.07	132.60	10.382	
17,100.00	9,762.40	17,470.23	10,101.05	66.23	65.98	-104.28	6,970.17	-105.82	1,376.56	1,242.66	133.90	10.280	
17,200.00	9,755.77	17,570.23	10,094.59	66.87	66.62	-104.29	7,069.96	-106.72	1,376.45	1,241.25	135.20	10.181	
17,300.00	9,749.14	17,670.23	10,088.13	67.52	67.27	-104.30	7,169.75	-107.63	1,376.34	1,239.83	136.51	10.082	
17,400.00	9,742.51	17,770.23	10,081.68	68.17	67.92	-104.30	7,269.53	-108.53	1,376.24	1,238.41	137.82	9.985	
17,500.00	9,735.88	17,870.23	10,075.22	68.82	68.57	-104.31	7,369.32	-109.43	1,376.13	1,236.99	139.14	9.890	
17,600.00	9,729.25	17,970.23	10,068.76	69.47	69.22	-104.32	7,469.11	-110.34	1,376.02	1,235.56	140.46	9.796	
17,700.00	9,722.62	18,070.23	10,062.30	70.13	69.87	-104.33	7,568.89	-111.24	1,375.91	1,234.12	141.79	9.704	
17,800.00	9,716.00	18,170.23	10,055.84	70.79	70.53	-104.34	7,668.68	-112.14	1,375.81	1,232.68	143.12	9.613	
17,900.00	9,709.37	18,270.23	10,049.38	71.45	71.19	-104.35	7,768.47	-113.05	1,375.70	1,231.24	144.46	9.523	
18,000.00	9,702.74	18,370.23	10,042.93	72.11	71.85	-104.35	7,868.25	-113.95	1,375.59	1,229.79	145.80	9.435	
18,100.00	9,696.11	18,470.23	10,036.47	72.78	72.51	-104.36	7,968.04	-114.86	1,375.48	1,228.34	147.14	9.348	
18,200.00	9,689.48	18,570.23	10,030.01	73.44	73.18	-104.37	8,067.83	-115.76	1,375.38	1,226.89	148.49	9.262	
18,300.00	9,682.85	18,670.23	10,023.55	74.11	73.85	-104.38	8,167.61	-116.66	1,375.27	1,225.43	149.84	9.178	
18,400.00	9,676.22	18,770.23	10,017.09	74.78	74.52	-104.39	8,267.40	-117.57	1,375.16	1,223.96	151.20	9.095	
18,500.00	9,669.60	18,870.23	10,010.64	75.46	75.19	-104.40	8,367.19	-118.47	1,375.05	1,222.50	152.56	9.013	
18,600.00	9,662.97	18,970.23	10,004.18	76.13	75.86	-104.41	8,466.97	-119.38	1,374.95	1,221.03	153.92	8.933	
18,700.00	9,656.34	19,070.23	9,997.72	76.81	76.54	-104.41	8,566.76	-120.28	1,374.84	1,219.55	155.28	8.854	
18,800.00	9,649.71	19,170.23	9,991.26	77.49	77.22	-104.42	8,666.55	-121.18	1,374.73	1,218.08	156.65	8.776	
18,900.00	9,643.08	19,270.22	9,984.80	78.17	77.90	-104.43	8,766.34	-122.09	1,374.62	1,216.60	158.03	8.699	
19,000.00	9,636.45	19,370.22	9,978.34	78.85	78.58	-104.44	8,866.12	-122.99	1,374.52	1,215.11	159.40	8.623	
19,100.00	9,629.82	19,470.22	9,971.89	79.53	79.26	-104.45	8,965.91	-123.89	1,374.41	1,213.63	160.78	8.548	
19,200.00	9,622.88	19,578.43	9,963.94	80.22	80.00	-104.44	9,073.82	-124.87	1,374.17	1,211.92	162.25	8.470	
19,300.00	9,613.89	19,678.43	9,955.09	80.91	80.69	-104.44	9,173.42	-125.77	1,374.05	1,210.42	163.63	8.397	
19,400.00	9,604.73	19,778.43	9,946.25	81.60	81.38	-104.46	9,273.02	-126.68	1,373.98	1,208.95	165.03	8.326	
19,500.00	9,595.58	19,878.43	9,937.40	82.29	82.07	-104.47	9,372.63	-127.58	1,373.91	1,207.48	166.43	8.255	
19,600.00	9,586.43	19,978.43	9,928.55	82.98	82.76	-104.49	9,472.23	-128.48	1,373.83	1,206.01	167.82	8.186	
19,700.00	9,577.27	20,078.43	9,919.70	83.68	83.46	-104.50	9,571.83	-129.38	1,373.76	1,204.54	169.23	8.118	
19,800.00	9,568.12	20,178.43	9,910.85	84.38	84.15	-104.51	9,671.43	-130.29	1,373.69	1,203.06	170.63	8.051	
19,900.00	9,558.96	20,278.43	9,902.01	85.07	84.85	-104.53	9,771.04	-131.19	1,373.62	1,201.58	172.04	7.984	
20,000.00	9,549.81	20,378.43	9,893.16	85.77	85.55	-104.54	9,870.64	-132.09	1,373.54	1,200.10	173.45	7.919	
20,100.00	9,540.66	20,478.43	9,884.31	86.47	86.25	-104.56	9,970.24	-132.99	1,373.47	1,198.61	174.86	7.855	
20,200.00	9,531.25	20,588.07	9,873.50	87.17	87.02	-104.54	10,079.35	-133.98	1,373.22	1,196.85	176.36	7.786	
20,300.00	9,519.27	20,692.59	9,860.22	87.88	87.76	-104.52	10,183.02	-134.92	1,372.88	1,195.06	177.82	7.721	
20,400.00	9,506.58	20,792.59	9,847.29	88.59	88.46	-104.51	10,282.17	-135.82	1,372.67	1,193.43	179.24	7.658	
20,500.00	9,493.90	20,892.59	9,834.35	89.29	89.17	-104.50	10,381.33	-136.72	1,372.46	1,191.79	180.67	7.597	
20,600.00	9,481.22	20,992.59	9,821.42	90.00	89.88	-104.49	10,480.48	-137.62	1,372.25	1,190.15	182.09	7.536	
20,700.00	9,468.54	21,092.59	9,808.48	90.71	90.59	-104.48	10,579.64	-138.52	1,372.03	1,188.51	183.52	7.476	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 601H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
20,800.00	9,455.85	21,192.59	9,795.55	91.43	91.30	-104.47	10,678.79	-139.41	1,371.82	1,186.87	184.95	7.417	
20,900.00	9,443.17	21,292.59	9,782.61	92.14	92.02	-104.46	10,777.95	-140.31	1,371.61	1,185.23	186.38	7.359	
21,000.00	9,430.49	21,392.59	9,769.68	92.85	92.73	-104.45	10,877.10	-141.21	1,371.40	1,183.58	187.81	7.302	
21,100.00	9,417.81	21,492.59	9,756.74	93.56	93.44	-104.45	10,976.26	-142.11	1,371.18	1,181.94	189.25	7.245	
21,200.00	9,405.13	21,602.19	9,741.29	94.28	94.23	-104.38	11,084.75	-143.09	1,370.69	1,179.92	190.76	7.185	
21,300.00	9,392.44	21,702.14	9,725.58	94.99	94.94	-104.26	11,183.46	-143.98	1,369.78	1,177.59	192.19	7.127	
21,400.00	9,379.76	21,802.09	9,709.88	95.71	95.66	-104.14	11,282.16	-144.88	1,368.88	1,175.26	193.61	7.070	
21,500.00	9,366.09	21,902.07	9,694.16	96.43	96.38	-104.06	11,380.89	-145.77	1,368.22	1,173.18	195.04	7.015	
21,600.00	9,351.40	22,002.06	9,678.45	97.15	97.10	-104.02	11,479.64	-146.66	1,367.82	1,171.34	196.48	6.961	
21,700.00	9,336.72	22,102.06	9,662.73	97.87	97.82	-103.98	11,578.39	-147.56	1,367.42	1,169.49	197.93	6.909	
21,800.00	9,322.03	22,202.05	9,647.01	98.59	98.54	-103.94	11,677.14	-148.45	1,367.02	1,167.65	199.37	6.857	
21,900.00	9,307.35	22,302.04	9,631.30	99.31	99.26	-103.90	11,775.88	-149.35	1,366.62	1,165.80	200.81	6.805	
22,000.00	9,292.66	22,402.04	9,615.58	100.03	99.99	-103.86	11,874.63	-150.24	1,366.22	1,163.96	202.26	6.755	
22,100.00	9,277.97	22,502.03	9,599.87	100.75	100.71	-103.82	11,973.38	-151.13	1,365.82	1,162.11	203.70	6.705	
22,200.00	9,263.29	22,611.39	9,581.50	101.48	101.50	-103.73	12,081.18	-152.11	1,365.17	1,159.95	205.22	6.652	
22,300.00	9,248.60	22,714.49	9,561.49	102.20	102.25	-103.53	12,182.31	-153.03	1,363.89	1,157.22	206.67	6.599	
22,400.00	9,233.91	22,814.37	9,541.97	102.93	102.97	-103.33	12,280.26	-153.91	1,362.59	1,154.50	208.10	6.548	
22,500.00	9,219.23	22,914.25	9,522.44	103.65	103.70	-103.13	12,378.21	-154.80	1,361.32	1,151.79	209.53	6.497	
22,600.00	9,204.54	23,014.13	9,502.92	104.38	104.43	-102.92	12,476.16	-155.69	1,360.06	1,149.10	210.96	6.447	
22,700.00	9,189.82	23,114.01	9,483.40	105.10	105.15	-102.73	12,574.11	-156.58	1,358.82	1,146.44	212.39	6.398	
22,800.00	9,173.02	23,213.97	9,463.87	105.83	105.88	-102.63	12,672.13	-157.46	1,358.06	1,144.23	213.83	6.351	
22,900.00	9,155.27	23,313.95	9,444.33	106.56	106.61	-102.55	12,770.18	-158.35	1,357.51	1,142.23	215.28	6.306	
23,000.00	9,137.53	23,413.93	9,424.79	107.29	107.34	-102.48	12,868.23	-159.24	1,356.97	1,140.24	216.73	6.261	
23,100.00	9,119.78	23,513.92	9,405.25	108.02	108.07	-102.41	12,966.28	-160.13	1,356.43	1,138.24	218.18	6.217	
23,200.00	9,102.04	23,613.90	9,385.71	108.75	108.80	-102.33	13,064.34	-161.02	1,355.89	1,136.25	219.64	6.173	
23,300.00	9,084.29	23,713.88	9,366.17	109.48	109.53	-102.26	13,162.39	-161.91	1,355.35	1,134.26	221.09	6.130	
23,400.00	9,066.54	23,813.87	9,346.62	110.21	110.26	-102.18	13,260.44	-162.79	1,354.81	1,132.26	222.55	6.088	
23,500.00	9,048.80	23,913.85	9,327.08	110.94	110.99	-102.11	13,358.49	-163.68	1,354.28	1,130.28	224.00	6.046	
23,600.00	9,031.05	24,013.83	9,307.54	111.67	111.73	-102.03	13,456.54	-164.57	1,353.75	1,128.29	225.46	6.004	
23,700.00	9,013.31	24,113.82	9,288.00	112.41	112.46	-101.96	13,554.59	-165.46	1,353.22	1,126.30	226.92	5.963	
23,800.00	8,995.56	24,213.80	9,268.46	113.14	113.19	-101.89	13,652.64	-166.35	1,352.69	1,124.32	228.37	5.923	
23,900.00	8,977.82	24,313.78	9,248.92	113.87	113.93	-101.81	13,750.69	-167.24	1,352.17	1,122.33	229.83	5.883	
24,000.00	8,959.73	24,413.77	9,229.38	114.61	114.66	-101.75	13,848.75	-168.12	1,351.72	1,120.42	231.29	5.844	
24,044.11	8,951.01	24,457.88	9,220.76	114.93	114.98	-101.76	13,892.01	-168.52	1,351.67	1,119.73	231.94	5.828	
24,100.00	8,938.95	24,513.76	9,209.84	115.34	115.39	-101.81	13,946.81	-169.01	1,351.82	1,119.05	232.77	5.807	
24,200.00	8,917.45	24,613.74	9,190.30	116.07	116.13	-101.89	14,044.85	-169.90	1,352.09	1,117.83	234.26	5.772	
24,300.00	8,895.96	24,713.72	9,170.76	116.81	116.86	-101.97	14,142.90	-170.79	1,352.35	1,116.61	235.74	5.737	
24,400.00	8,874.46	24,813.70	9,151.22	117.55	117.60	-102.06	14,240.95	-171.68	1,352.62	1,115.39	237.23	5.702	
24,500.00	8,852.96	24,913.68	9,131.68	118.28	118.33	-102.14	14,339.00	-172.57	1,352.89	1,114.17	238.72	5.667	
24,600.00	8,831.46	25,013.66	9,112.14	119.02	119.07	-102.23	14,437.04	-173.45	1,353.16	1,112.96	240.20	5.633	
24,700.00	8,809.97	25,117.70	9,091.52	119.75	119.84	-102.30	14,539.02	-174.38	1,353.38	1,111.66	241.72	5.599	
24,800.00	8,788.47	25,228.85	9,066.16	120.49	120.65	-102.24	14,647.23	-175.36	1,352.94	1,109.69	243.25	5.562	
24,900.00	8,766.97	25,333.33	9,039.09	121.23	121.42	-102.05	14,748.13	-176.27	1,351.84	1,107.12	244.72	5.524	
25,000.00	8,745.48	25,433.21	9,012.87	121.96	122.16	-101.84	14,844.50	-177.14	1,350.68	1,104.51	246.16	5.487	
25,100.00	8,723.98	25,533.09	8,986.65	122.70	122.89	-101.64	14,940.88	-178.02	1,349.53	1,101.92	247.61	5.450	
25,200.00	8,702.48	25,632.97	8,960.43	123.44	123.63	-101.44	15,037.25	-178.89	1,348.40	1,099.35	249.05	5.414	
25,300.00	8,680.26	25,732.88	8,934.21	124.18	124.36	-101.28	15,133.65	-179.76	1,347.44	1,096.94	250.50	5.379	
25,396.71	8,655.75	25,829.57	8,908.82	124.89	125.07	-101.25	15,226.95	-180.60	1,347.12	1,095.20	251.92	5.347	
25,400.00	8,654.86	25,832.87	8,907.96	124.91	125.10	-101.25	15,230.13	-180.63	1,347.12	1,095.15	251.97	5.346	
25,500.00	8,626.28	25,932.84	8,881.72	125.65	125.83	-101.35	15,326.59	-181.51	1,347.44	1,093.99	253.46	5.316	
25,600.00	8,596.98	26,032.79	8,855.48	126.38	126.57	-101.48	15,423.03	-182.38	1,347.93	1,092.98	254.95	5.287	
25,700.00	8,567.67	26,134.90	8,828.58	127.11	127.32	-101.62	15,521.54	-183.27	1,348.40	1,091.95	256.45	5.258	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 601H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
25,800.00	8,538.37	26,242.71	8,797.61	127.85	128.11	-101.65	15,624.79	-184.21	1,348.37	1,090.42	257.95	5.227	
25,900.00	8,509.06	26,342.71	8,767.82	128.58	128.85	-101.63	15,720.25	-185.07	1,348.12	1,088.70	259.42	5.197	
26,000.00	8,479.76	26,442.71	8,738.04	129.32	129.58	-101.61	15,815.71	-185.94	1,347.88	1,086.99	260.89	5.166	
26,100.00	8,450.45	26,542.71	8,708.25	130.05	130.32	-101.59	15,911.16	-186.80	1,347.63	1,085.27	262.36	5.137	
26,200.00	8,421.14	26,642.71	8,678.46	130.79	131.05	-101.57	16,006.62	-187.67	1,347.39	1,083.56	263.83	5.107	
26,300.00	8,391.84	26,742.71	8,648.68	131.53	131.79	-101.55	16,102.07	-188.53	1,347.14	1,081.84	265.30	5.078	
26,400.00	8,362.53	26,842.71	8,618.89	132.26	132.53	-101.53	16,197.53	-189.40	1,346.89	1,080.13	266.77	5.049	
26,500.00	8,333.23	26,942.70	8,589.10	133.00	133.26	-101.51	16,292.98	-190.26	1,346.65	1,078.41	268.24	5.020	
26,600.00	8,303.92	27,042.70	8,559.32	133.73	134.00	-101.49	16,388.44	-191.12	1,346.40	1,076.70	269.71	4.992	
26,700.00	8,274.62	27,142.70	8,529.53	134.47	134.73	-101.47	16,483.89	-191.99	1,346.16	1,074.98	271.18	4.964	
26,800.00	8,245.31	27,251.27	8,495.77	135.21	135.53	-101.38	16,587.07	-192.92	1,345.65	1,072.99	272.66	4.935	
26,900.00	8,217.06	27,351.77	8,462.55	135.94	136.27	-101.16	16,681.91	-193.78	1,344.51	1,070.41	274.10	4.905	
27,000.00	8,189.09	27,451.62	8,429.52	136.68	137.00	-100.94	16,776.15	-194.64	1,343.34	1,067.80	275.54	4.875	
27,100.00	8,161.11	27,551.48	8,396.50	137.42	137.73	-100.72	16,870.38	-195.49	1,342.19	1,065.21	276.98	4.846	
27,200.00	8,133.14	27,651.34	8,363.48	138.16	138.46	-100.50	16,964.61	-196.34	1,341.06	1,062.64	278.42	4.817	
27,300.00	8,105.17	27,751.19	8,330.46	138.90	139.19	-100.27	17,058.85	-197.20	1,339.95	1,060.09	279.86	4.788	
27,400.00	8,077.20	27,851.05	8,297.43	139.63	139.93	-100.05	17,153.08	-198.05	1,338.86	1,057.56	281.30	4.760	
27,500.00	8,049.22	27,950.91	8,264.41	140.37	140.66	-99.82	17,247.32	-198.90	1,337.79	1,055.05	282.74	4.732	
27,600.00	8,021.25	28,043.68	8,235.09	141.11	141.34	-99.68	17,335.33	-199.70	1,337.00	1,052.84	284.16	4.705	
27,700.00	7,993.28	28,137.28	8,208.38	141.85	142.03	-99.65	17,425.02	-200.51	1,336.75	1,051.15	285.61	4.680	
27,800.00	7,965.31	28,237.27	8,181.05	142.59	142.77	-99.68	17,521.21	-201.38	1,336.72	1,049.63	287.09	4.656	
27,900.00	7,937.33	28,337.27	8,153.72	143.33	143.51	-99.71	17,617.40	-202.26	1,336.68	1,048.11	288.58	4.632	
28,000.00	7,909.36	28,437.27	8,126.39	144.07	144.25	-99.74	17,713.58	-203.13	1,336.65	1,046.59	290.06	4.608	
28,100.00	7,881.39	28,537.27	8,099.06	144.81	144.99	-99.77	17,809.77	-204.00	1,336.62	1,045.07	291.55	4.585	
28,200.00	7,853.42	28,637.26	8,071.73	145.55	145.73	-99.80	17,905.96	-204.87	1,336.58	1,043.55	293.04	4.561	
28,300.00	7,825.44	28,737.26	8,044.40	146.29	146.47	-99.83	18,002.14	-205.74	1,336.55	1,042.03	294.52	4.538	
28,389.65	7,800.37	28,826.91	8,019.90	146.95	147.14	-99.86	18,088.37	-206.52	1,336.52	1,040.67	295.86	4.517	
28,400.00	7,797.47	28,827.63	8,019.70	147.03	147.14	-99.86	18,089.07	-206.53	1,336.55	1,040.60	295.95	4.516	SF
28,444.58	7,785.00	28,827.63	8,019.70	147.36	147.14	-99.86	18,089.07	-206.53	1,337.60	1,041.42	296.18	4.516	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 603H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,400.00	4,362.73	4,690.65	4,675.60	15.78	16.76	-10.62	-73.11	2,711.00	2,297.50	2,265.51	31.99	71.812	
4,500.00	4,461.22	4,785.95	4,769.97	16.15	17.11	-10.63	-75.97	2,698.03	2,267.21	2,234.50	32.70	69.330	
4,600.00	4,559.71	4,881.25	4,864.35	16.53	17.46	-10.63	-78.83	2,685.06	2,236.91	2,203.50	33.41	66.951	
4,700.00	4,658.20	4,976.55	4,958.72	16.90	17.81	-10.64	-81.70	2,672.10	2,206.62	2,172.50	34.12	64.671	
4,800.00	4,756.69	5,071.85	5,053.09	17.27	18.16	-10.65	-84.56	2,659.13	2,176.33	2,141.49	34.83	62.483	
4,900.00	4,855.18	5,167.15	5,147.46	17.65	18.51	-10.65	-87.42	2,646.16	2,146.03	2,110.49	35.54	60.381	
5,000.00	4,953.67	5,262.45	5,241.83	18.02	18.86	-10.66	-90.28	2,633.20	2,115.74	2,079.49	36.25	58.361	
5,100.00	5,052.15	5,357.75	5,336.20	18.40	19.22	-10.67	-93.14	2,620.23	2,085.44	2,048.48	36.96	56.417	
5,200.00	5,150.64	5,453.06	5,430.57	18.77	19.57	-10.68	-96.01	2,607.26	2,055.15	2,017.47	37.68	54.547	
5,300.00	5,249.13	5,548.36	5,524.94	19.14	19.92	-10.68	-98.87	2,594.30	2,024.86	1,986.47	38.39	52.745	
5,400.00	5,347.62	5,643.66	5,619.31	19.52	20.27	-10.69	-101.73	2,581.33	1,994.56	1,955.46	39.10	51.009	
5,500.00	5,446.11	5,738.96	5,713.69	19.89	20.62	-10.70	-104.59	2,568.36	1,964.27	1,924.46	39.82	49.334	
5,600.00	5,544.60	5,834.26	5,808.06	20.27	20.98	-10.71	-107.45	2,555.39	1,933.98	1,893.45	40.53	47.718	
5,700.00	5,643.09	5,929.56	5,902.43	20.64	21.33	-10.72	-110.31	2,542.43	1,903.68	1,862.44	41.24	46.157	
5,800.00	5,741.58	6,024.86	5,996.80	21.02	21.68	-10.73	-113.18	2,529.46	1,873.39	1,831.43	41.96	44.649	
5,900.00	5,840.07	6,120.16	6,091.17	21.40	22.04	-10.74	-116.04	2,516.49	1,843.10	1,800.42	42.67	43.191	
6,000.00	5,938.56	6,215.46	6,185.54	21.77	22.39	-10.75	-118.90	2,503.53	1,812.80	1,769.42	43.39	41.781	
6,100.00	6,037.05	6,310.76	6,279.91	22.15	22.74	-10.76	-121.76	2,490.56	1,782.51	1,738.41	44.10	40.416	
6,200.00	6,135.54	6,406.06	6,374.28	22.52	23.09	-10.77	-124.62	2,477.59	1,752.22	1,707.40	44.82	39.095	
6,300.00	6,234.03	6,501.36	6,468.65	22.90	23.45	-10.78	-127.49	2,464.63	1,721.92	1,676.39	45.54	37.815	
6,400.00	6,332.52	6,596.66	6,563.03	23.28	23.80	-10.79	-130.35	2,451.66	1,691.63	1,645.38	46.25	36.574	
6,500.00	6,431.01	6,691.97	6,657.40	23.65	24.15	-10.80	-133.21	2,438.69	1,661.34	1,614.37	46.97	35.371	
6,600.00	6,529.50	6,787.27	6,751.77	24.03	24.51	-10.81	-136.07	2,425.73	1,631.05	1,583.36	47.69	34.204	
6,700.00	6,627.99	6,882.57	6,846.14	24.41	24.86	-10.82	-138.93	2,412.76	1,600.75	1,552.35	48.40	33.071	
6,800.00	6,726.48	6,977.87	6,940.51	24.78	25.21	-10.84	-141.80	2,399.79	1,570.46	1,521.34	49.12	31.971	
6,900.00	6,824.97	7,073.17	7,034.88	25.16	25.57	-10.85	-144.66	2,386.82	1,540.17	1,490.33	49.84	30.903	
7,000.00	6,923.46	7,168.47	7,129.25	25.54	25.92	-10.86	-147.52	2,373.86	1,509.87	1,459.32	50.56	29.865	
7,100.00	7,021.95	7,263.77	7,223.62	25.91	26.27	-10.88	-150.38	2,360.89	1,479.58	1,428.31	51.28	28.856	
7,200.00	7,120.44	7,359.07	7,317.99	26.29	26.63	-10.89	-153.24	2,347.92	1,449.29	1,397.30	51.99	27.874	
7,300.00	7,218.93	7,454.37	7,412.36	26.67	26.98	-10.91	-156.11	2,334.96	1,419.00	1,366.28	52.71	26.920	
7,400.00	7,317.42	7,549.67	7,506.74	27.04	27.34	-10.93	-158.97	2,321.99	1,388.71	1,335.27	53.43	25.990	
7,500.00	7,415.91	7,644.97	7,601.11	27.42	27.69	-10.94	-161.83	2,309.02	1,358.41	1,304.26	54.15	25.086	
7,600.00	7,514.40	7,740.27	7,695.48	27.80	28.04	-10.96	-164.69	2,296.06	1,328.12	1,273.25	54.87	24.205	
7,700.00	7,612.89	7,835.57	7,789.85	28.18	28.40	-10.98	-167.55	2,283.09	1,297.83	1,242.24	55.59	23.346	
7,800.00	7,711.38	7,930.87	7,884.22	28.55	28.75	-11.00	-170.42	2,270.12	1,267.54	1,211.23	56.31	22.510	
7,900.00	7,809.86	8,026.18	7,978.59	28.93	29.11	-11.02	-173.28	2,257.16	1,237.25	1,180.21	57.03	21.694	
8,000.00	7,908.35	8,121.48	8,072.96	29.31	29.46	-11.04	-176.14	2,244.19	1,206.95	1,149.20	57.75	20.899	
8,100.00	8,006.84	8,216.78	8,167.33	29.69	29.81	-11.06	-179.00	2,231.22	1,176.66	1,118.19	58.47	20.123	
8,200.00	8,105.33	8,312.08	8,261.70	30.06	30.17	-11.09	-181.86	2,218.25	1,146.37	1,087.18	59.19	19.366	
8,300.00	8,203.82	8,407.38	8,356.08	30.44	30.52	-11.11	-184.72	2,205.29	1,116.08	1,056.17	59.91	18.628	
8,400.00	8,302.31	8,502.68	8,450.45	30.82	30.88	-11.14	-187.59	2,192.32	1,085.79	1,025.15	60.64	17.907	
8,500.00	8,400.80	8,597.98	8,544.82	31.20	31.23	-11.17	-190.45	2,179.35	1,055.50	994.14	61.36	17.202	
8,600.00	8,499.29	8,693.28	8,639.19	31.57	31.58	-11.20	-193.31	2,166.39	1,025.21	963.13	62.08	16.514	
8,700.00	8,597.78	8,788.58	8,733.56	31.95	31.94	-11.23	-196.17	2,153.42	994.92	932.12	62.80	15.842	
8,800.00	8,696.27	8,883.88	8,827.93	32.33	32.29	-11.26	-199.03	2,140.45	964.63	901.10	63.52	15.185	
8,900.00	8,794.76	8,979.18	8,922.30	32.71	32.65	-11.30	-201.90	2,127.49	934.34	870.09	64.25	14.543	
9,000.00	8,893.25	9,074.48	9,016.67	33.09	33.00	-11.34	-204.76	2,114.52	904.05	839.08	64.97	13.915	
9,100.00	8,991.74	9,169.78	9,111.04	33.46	33.36	-11.38	-207.62	2,101.55	873.76	808.07	65.69	13.301	
9,200.00	9,090.23	9,265.09	9,205.42	33.84	33.71	-11.42	-210.48	2,088.59	843.47	777.06	66.42	12.700	
9,300.00	9,188.72	9,360.39	9,299.79	34.22	34.07	-11.47	-213.34	2,075.62	813.19	746.05	67.14	12.112	
9,400.00	9,287.52	9,456.17	9,394.64	34.60	34.42	7.00	-216.22	2,062.59	784.57	716.71	67.86	11.561	
9,500.00	9,386.81	9,552.88	9,490.40	34.96	34.78	39.95	-219.12	2,049.43	760.23	691.65	68.58	11.086	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 603H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,600.00	9,486.11	9,650.05	9,586.63	35.30	35.14	73.57	-222.04	2,036.21	740.46	671.18	69.28	10.689	
9,700.00	9,584.93	9,742.12	9,677.80	35.64	35.49	94.05	-224.73	2,023.74	725.72	655.72	69.99	10.368	
9,800.00	9,681.14	9,816.26	9,751.46	35.95	35.76	96.58	-224.76	2,015.37	716.65	645.88	70.76	10.127	
9,888.08	9,760.89	9,879.96	9,814.89	36.21	35.99	98.87	-222.38	2,010.08	713.82	642.47	71.35	10.004	
9,900.00	9,771.22	9,888.42	9,823.32	36.25	36.02	99.17	-221.90	2,009.51	713.88	642.45	71.43	9.995	
10,000.00	9,852.45	9,957.30	9,891.90	36.51	36.25	101.50	-216.51	2,006.02	719.10	647.11	71.98	9.990	
10,100.00	9,922.36	10,021.53	9,955.69	36.72	36.47	103.20	-209.17	2,004.63	733.91	661.47	72.44	10.131	
10,200.00	9,978.82	10,138.94	10,070.10	36.88	36.85	107.04	-183.71	2,004.31	757.52	684.95	72.57	10.438	
10,300.00	10,020.12	10,318.09	10,228.63	36.99	37.37	112.58	-101.84	2,003.43	783.60	712.05	71.55	10.952	
10,400.00	10,046.32	10,580.95	10,398.14	37.06	37.87	118.66	96.03	2,001.29	804.33	735.57	68.76	11.697	
10,500.00	10,063.18	10,800.87	10,463.92	37.11	38.07	120.16	304.94	1,999.03	809.69	742.02	67.67	11.966	
10,600.00	10,071.39	10,956.26	10,481.07	37.16	38.17	120.37	459.26	1,997.36	811.11	743.42	67.69	11.982	
10,700.00	10,071.32	11,111.74	10,477.19	37.22	38.30	120.16	614.56	1,995.69	809.88	741.73	68.15	11.883	
10,800.00	10,069.20	11,210.29	10,468.35	37.31	38.43	119.74	712.70	1,994.64	806.45	737.85	68.60	11.756	
10,900.00	10,067.07	11,310.05	10,459.40	37.43	38.58	119.32	812.06	1,993.57	803.06	733.98	69.07	11.626	
11,000.00	10,064.95	11,409.82	10,450.44	37.58	38.76	118.89	911.42	1,992.50	799.71	730.12	69.59	11.493	
11,100.00	10,062.82	11,509.58	10,441.49	37.75	38.95	118.46	1,010.77	1,991.44	796.41	726.28	70.13	11.357	
11,200.00	10,060.70	11,609.35	10,432.54	37.93	39.16	118.02	1,110.13	1,990.37	793.15	722.46	70.70	11.219	
11,300.00	10,058.57	11,709.11	10,423.59	38.13	39.38	117.59	1,209.49	1,989.30	789.94	718.65	71.30	11.080	
11,400.00	10,056.45	11,808.88	10,414.64	38.35	39.61	117.15	1,308.84	1,988.23	786.78	714.86	71.92	10.939	
11,500.00	10,054.33	11,908.64	10,405.68	38.58	39.86	116.70	1,408.20	1,987.17	783.66	711.08	72.58	10.798	
11,600.00	10,052.20	12,008.41	10,396.73	38.83	40.13	116.25	1,507.56	1,986.10	780.59	707.33	73.26	10.655	
11,700.00	10,050.08	12,108.17	10,387.78	39.09	40.40	115.80	1,606.91	1,985.03	777.57	703.61	73.97	10.513	
11,800.00	10,047.95	12,207.94	10,378.83	39.36	40.69	115.34	1,706.27	1,983.97	774.60	699.90	74.70	10.370	
11,900.00	10,045.83	12,307.70	10,369.88	39.64	40.99	114.89	1,805.63	1,982.90	771.68	696.23	75.45	10.227	
12,000.00	10,043.70	12,407.46	10,360.92	39.93	41.30	114.42	1,904.98	1,981.83	768.81	692.58	76.23	10.085	
12,100.00	10,041.58	12,507.23	10,351.97	40.24	41.62	113.96	2,004.34	1,980.76	765.99	688.95	77.03	9.943	
12,200.00	10,039.45	12,606.99	10,343.02	40.56	41.95	113.49	2,103.70	1,979.70	763.22	685.36	77.86	9.803	
12,300.00	10,037.33	12,706.76	10,334.07	40.89	42.30	113.02	2,203.05	1,978.63	760.50	681.80	78.70	9.663	
12,400.00	10,035.21	12,806.52	10,325.12	41.24	42.66	112.54	2,302.41	1,977.56	757.83	678.26	79.57	9.524	
12,500.00	10,033.08	12,906.29	10,316.16	41.59	43.02	112.06	2,401.77	1,976.49	755.22	674.77	80.45	9.387	
12,600.00	10,030.96	13,006.05	10,307.21	41.95	43.40	111.58	2,501.12	1,975.43	752.66	671.30	81.36	9.251	
12,700.00	10,028.30	13,105.85	10,298.26	42.33	43.78	111.15	2,600.51	1,974.36	750.34	668.08	82.27	9.121	
12,800.00	10,023.00	13,205.78	10,289.29	42.72	44.18	110.90	2,700.03	1,973.29	749.01	665.86	83.15	9.008	
12,900.00	10,017.31	13,305.73	10,280.32	43.13	44.59	110.67	2,799.57	1,972.22	747.83	663.79	84.04	8.899	
13,000.00	10,011.61	13,405.67	10,271.35	43.54	45.00	110.43	2,899.11	1,971.15	746.66	661.71	84.95	8.789	
13,100.00	10,005.92	13,505.62	10,262.39	43.97	45.43	110.20	2,998.65	1,970.08	745.51	659.63	85.88	8.681	
13,200.00	10,000.23	13,605.57	10,253.42	44.40	45.86	109.96	3,098.18	1,969.01	744.37	657.54	86.83	8.573	
13,300.00	9,994.53	13,705.51	10,244.45	44.84	46.31	109.72	3,197.72	1,967.94	743.24	655.44	87.79	8.466	
13,400.00	9,988.84	13,805.46	10,235.48	45.29	46.76	109.48	3,297.26	1,966.87	742.12	653.35	88.77	8.360	
13,500.00	9,983.15	13,905.40	10,226.51	45.75	47.21	109.24	3,396.79	1,965.81	741.02	651.25	89.77	8.255	
13,600.00	9,977.45	14,005.35	10,217.55	46.22	47.68	109.00	3,496.33	1,964.74	739.93	649.15	90.78	8.151	
13,700.00	9,971.76	14,105.30	10,208.58	46.69	48.16	108.76	3,595.87	1,963.67	738.85	647.04	91.81	8.048	
13,800.00	9,966.06	14,205.24	10,199.61	47.18	48.64	108.52	3,695.40	1,962.60	737.78	644.94	92.85	7.946	
13,900.00	9,960.37	14,305.19	10,190.64	47.67	49.13	108.28	3,794.94	1,961.53	736.73	642.83	93.90	7.846	
14,000.00	9,954.68	14,405.13	10,181.67	48.16	49.62	108.04	3,894.48	1,960.46	735.69	640.73	94.97	7.747	
14,100.00	9,948.98	14,505.08	10,172.70	48.67	50.13	107.79	3,994.02	1,959.39	734.67	638.62	96.05	7.649	
14,200.00	9,943.29	14,605.02	10,163.74	49.18	50.64	107.55	4,093.55	1,958.32	733.66	636.52	97.14	7.553	
14,300.00	9,937.60	14,704.97	10,154.77	49.70	51.15	107.31	4,193.09	1,957.25	732.66	634.42	98.24	7.458	
14,400.00	9,931.90	14,804.92	10,145.80	50.22	51.67	107.06	4,292.63	1,956.18	731.68	632.32	99.36	7.364	
14,500.00	9,926.21	14,904.86	10,136.83	50.75	52.20	106.81	4,392.16	1,955.11	730.70	630.22	100.48	7.272	
14,600.00	9,920.52	15,004.81	10,127.86	51.29	52.74	106.57	4,491.70	1,954.04	729.75	628.13	101.62	7.181	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 603H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,700.00	9,914.82	15,104.75	10,118.89	51.83	53.28	106.32	4,591.24	1,952.97	728.80	626.03	102.77	7.092	
14,800.00	9,909.13	15,204.70	10,109.93	52.38	53.82	106.07	4,690.77	1,951.91	727.87	623.95	103.93	7.004	
14,900.00	9,903.43	15,304.65	10,100.96	52.93	54.37	105.82	4,790.31	1,950.84	726.96	621.86	105.09	6.917	
15,000.00	9,897.74	15,404.59	10,091.99	53.49	54.93	105.57	4,889.85	1,949.77	726.05	619.78	106.27	6.832	
15,100.00	9,892.05	15,504.54	10,083.02	54.05	55.49	105.33	4,989.39	1,948.70	725.16	617.71	107.45	6.749	
15,200.00	9,886.35	15,604.48	10,074.05	54.62	56.06	105.07	5,088.92	1,947.63	724.29	615.64	108.65	6.666	
15,300.00	9,880.66	15,704.43	10,065.09	55.20	56.63	104.82	5,188.46	1,946.56	723.43	613.58	109.85	6.586	
15,400.00	9,874.97	15,804.38	10,056.12	55.77	57.20	104.57	5,288.00	1,945.49	722.58	611.52	111.06	6.506	
15,500.00	9,868.46	15,904.35	10,047.15	56.36	57.78	104.39	5,387.56	1,944.42	721.95	609.68	112.27	6.431	
15,600.00	9,861.83	16,004.32	10,038.18	56.95	58.37	104.21	5,487.12	1,943.35	721.35	607.87	113.48	6.356	
15,700.00	9,855.20	16,104.29	10,029.21	57.54	58.95	104.02	5,586.68	1,942.28	720.77	606.06	114.71	6.284	
15,800.00	9,848.57	16,204.26	10,020.23	58.14	59.55	103.84	5,686.25	1,941.21	720.19	604.25	115.94	6.212	
15,900.00	9,841.94	16,304.23	10,011.26	58.74	60.14	103.66	5,785.81	1,940.14	719.62	602.44	117.18	6.141	
16,000.00	9,835.31	16,404.21	10,002.29	59.34	60.74	103.48	5,885.37	1,939.07	719.05	600.63	118.42	6.072	
16,100.00	9,828.68	16,504.18	9,993.32	59.95	61.35	103.30	5,984.94	1,938.00	718.49	598.82	119.67	6.004	
16,200.00	9,822.06	16,604.15	9,984.35	60.57	61.96	103.12	6,084.50	1,936.93	717.94	597.01	120.93	5.937	
16,300.00	9,815.43	16,704.12	9,975.38	61.18	62.57	102.93	6,184.06	1,935.86	717.40	595.20	122.20	5.871	
16,400.00	9,808.80	16,804.10	9,966.41	61.80	63.18	102.75	6,283.63	1,934.79	716.86	593.40	123.47	5.806	
16,500.00	9,802.17	16,904.07	9,957.44	62.43	63.80	102.57	6,383.19	1,933.73	716.34	591.59	124.74	5.742	
16,600.00	9,795.54	17,004.04	9,948.47	63.05	64.42	102.38	6,482.75	1,932.66	715.81	589.79	126.03	5.680	
16,700.00	9,788.91	17,104.01	9,939.50	63.68	65.05	102.20	6,582.32	1,931.59	715.30	587.99	127.31	5.618	
16,800.00	9,782.28	17,203.99	9,930.53	64.31	65.68	102.02	6,681.88	1,930.52	714.79	586.19	128.61	5.558	
16,900.00	9,775.65	17,303.96	9,921.56	64.95	66.31	101.83	6,781.44	1,929.45	714.30	584.39	129.91	5.499	
17,000.00	9,769.03	17,403.93	9,912.59	65.59	66.94	101.65	6,881.01	1,928.38	713.80	582.59	131.21	5.440	
17,100.00	9,762.40	17,503.90	9,903.62	66.23	67.58	101.46	6,980.57	1,927.31	713.32	580.80	132.52	5.383	
17,200.00	9,755.77	17,603.88	9,894.65	66.87	68.22	101.28	7,080.13	1,926.24	712.84	579.01	133.83	5.326	
17,300.00	9,749.14	17,703.85	9,885.68	67.52	68.86	101.09	7,179.70	1,925.17	712.37	577.22	135.15	5.271	
17,400.00	9,742.51	17,803.82	9,876.71	68.17	69.50	100.91	7,279.26	1,924.10	711.91	575.44	136.47	5.216	
17,500.00	9,735.88	17,903.79	9,867.73	68.82	70.15	100.72	7,378.82	1,923.03	711.46	573.66	137.80	5.163	
17,600.00	9,729.25	18,003.76	9,858.76	69.47	70.80	100.54	7,478.39	1,921.96	711.01	571.88	139.13	5.110	
17,700.00	9,722.62	18,103.74	9,849.79	70.13	71.45	100.35	7,577.95	1,920.89	710.57	570.10	140.47	5.059	
17,800.00	9,716.00	18,203.71	9,840.82	70.79	72.11	100.16	7,677.51	1,919.82	710.14	568.33	141.81	5.008	
17,900.00	9,709.37	18,303.68	9,831.85	71.45	72.76	99.98	7,777.08	1,918.75	709.72	566.56	143.15	4.958	
18,000.00	9,702.74	18,403.65	9,822.88	72.11	73.42	99.79	7,876.64	1,917.68	709.30	564.80	144.50	4.909	
18,100.00	9,696.11	18,503.63	9,813.91	72.78	74.08	99.60	7,976.20	1,916.61	708.89	563.04	145.85	4.860	
18,200.00	9,689.48	18,603.60	9,804.94	73.44	74.75	99.42	8,075.77	1,915.54	708.49	561.28	147.20	4.813	
18,300.00	9,682.85	18,703.57	9,795.97	74.11	75.41	99.23	8,175.33	1,914.47	708.09	559.53	148.56	4.766	
18,400.00	9,676.22	18,803.54	9,787.00	74.78	76.08	99.04	8,274.89	1,913.40	707.71	557.78	149.92	4.720	
18,500.00	9,669.60	18,903.52	9,778.03	75.46	76.75	98.85	8,374.46	1,912.33	707.33	556.04	151.29	4.675	
18,600.00	9,662.97	19,003.49	9,769.06	76.13	77.42	98.66	8,474.02	1,911.27	706.96	554.30	152.66	4.631	
18,700.00	9,656.34	19,103.46	9,760.09	76.81	78.09	98.48	8,573.58	1,910.20	706.59	552.57	154.03	4.587	
18,800.00	9,649.71	19,203.43	9,751.12	77.49	78.77	98.29	8,673.15	1,909.13	706.24	550.84	155.40	4.545	
18,900.00	9,643.08	19,303.41	9,742.15	78.17	79.44	98.10	8,772.71	1,908.06	705.89	549.11	156.78	4.502	
19,000.00	9,636.45	19,403.38	9,733.18	78.85	80.12	97.91	8,872.27	1,906.99	705.55	547.39	158.16	4.461	
19,100.00	9,629.82	19,503.35	9,724.20	79.53	80.80	97.72	8,971.84	1,905.92	705.22	545.67	159.54	4.420	
19,200.00	9,622.88	19,603.33	9,715.23	80.22	81.48	97.56	9,071.41	1,904.85	704.93	544.01	160.92	4.381	
19,291.88	9,614.99	19,695.21	9,706.99	80.85	82.11	97.53	9,162.91	1,903.87	704.87	542.68	162.19	4.346	CC
19,300.00	9,613.89	19,703.33	9,706.26	80.91	82.16	97.56	9,171.00	1,903.78	704.92	542.62	162.30	4.343	
19,400.00	9,604.73	19,803.33	9,697.29	81.60	82.85	97.58	9,270.59	1,902.71	704.93	541.26	163.68	4.307	
19,500.00	9,595.58	19,903.33	9,688.31	82.29	83.53	97.59	9,370.18	1,901.64	704.94	539.89	165.06	4.271	
19,600.00	9,586.43	20,003.33	9,679.34	82.98	84.22	97.61	9,469.77	1,900.57	704.95	538.51	166.44	4.235	
19,700.00	9,577.27	20,103.33	9,670.37	83.68	84.91	97.62	9,569.36	1,899.50	704.96	537.14	167.83	4.201	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 603H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,800.00	9,568.12	20,203.33	9,661.40	84.38	85.60	97.63	9,668.95	1,898.43	704.98	535.76	169.22	4.166	
19,900.00	9,558.96	20,303.33	9,652.42	85.07	86.29	97.65	9,768.54	1,897.36	704.99	534.38	170.61	4.132	
20,000.00	9,549.81	20,403.33	9,643.45	85.77	86.98	97.66	9,868.13	1,896.29	705.00	533.00	172.00	4.099	
20,100.00	9,540.66	20,503.33	9,634.48	86.47	87.68	97.68	9,967.72	1,895.22	705.01	531.61	173.40	4.066	
20,101.36	9,540.53	20,504.69	9,634.35	86.48	87.69	97.68	9,969.08	1,895.21	705.01	531.59	173.42	4.065	
20,200.00	9,531.25	20,603.32	9,625.50	87.17	88.37	97.71	10,067.31	1,894.15	705.05	530.26	174.80	4.034	
20,300.00	9,519.27	20,703.28	9,616.53	87.88	89.07	97.95	10,166.85	1,893.08	705.45	529.27	176.18	4.004	
20,400.00	9,506.58	20,803.21	9,607.57	88.59	89.77	98.25	10,266.37	1,892.01	705.97	528.40	177.56	3.976	
20,500.00	9,493.90	20,903.14	9,598.60	89.29	90.47	98.55	10,365.90	1,890.94	706.50	527.55	178.95	3.948	
20,600.00	9,481.22	21,003.07	9,589.63	90.00	91.17	98.85	10,465.42	1,889.87	707.05	526.71	180.34	3.921	
20,700.00	9,468.54	21,103.00	9,580.67	90.71	91.87	99.15	10,564.94	1,888.80	707.62	525.89	181.73	3.894	
20,800.00	9,455.85	21,202.93	9,571.70	91.43	92.57	99.45	10,664.46	1,887.74	708.21	525.09	183.12	3.867	
20,900.00	9,443.17	21,302.86	9,562.73	92.14	93.27	99.74	10,763.98	1,886.67	708.82	524.31	184.51	3.842	
21,000.00	9,430.49	21,402.79	9,553.77	92.85	93.97	100.04	10,863.50	1,885.60	709.45	523.54	185.91	3.816	
21,100.00	9,417.81	21,502.72	9,544.80	93.56	94.68	100.34	10,963.03	1,884.53	710.10	522.79	187.31	3.791	
21,200.00	9,405.13	21,602.65	9,535.83	94.28	95.39	100.63	11,062.55	1,883.46	710.76	522.06	188.71	3.766	
21,300.00	9,392.44	21,702.58	9,526.87	94.99	96.09	100.93	11,162.07	1,882.39	711.45	521.34	190.11	3.742	
21,400.00	9,379.76	21,802.51	9,517.90	95.71	96.80	101.22	11,261.59	1,881.32	712.15	520.64	191.51	3.719	
21,500.00	9,366.09	21,902.40	9,508.94	96.43	97.51	101.59	11,361.07	1,880.25	713.08	520.17	192.91	3.696	
21,600.00	9,351.40	22,002.23	9,499.98	97.15	98.22	102.04	11,460.49	1,879.18	714.24	519.94	194.30	3.676	
21,700.00	9,336.72	22,102.06	9,491.02	97.87	98.93	102.49	11,559.92	1,878.12	715.45	519.76	195.70	3.656	
21,800.00	9,322.03	22,201.90	9,482.06	98.59	99.64	102.94	11,659.34	1,877.05	716.71	519.61	197.09	3.636	
21,900.00	9,307.35	22,301.73	9,473.10	99.31	100.35	103.38	11,758.77	1,875.98	718.01	519.51	198.49	3.617	
22,000.00	9,292.66	22,401.57	9,464.15	100.03	101.06	103.83	11,858.20	1,874.91	719.35	519.46	199.89	3.599	
22,100.00	9,277.97	22,501.40	9,455.19	100.75	101.78	104.27	11,957.62	1,873.84	720.73	519.44	201.29	3.581	ES
22,200.00	9,263.29	22,601.24	9,446.23	101.48	102.49	104.71	12,057.05	1,872.78	722.16	519.47	202.69	3.563	
22,300.00	9,248.60	22,701.07	9,437.27	102.20	103.21	105.15	12,156.47	1,871.71	723.63	519.54	204.10	3.546	
22,400.00	9,233.91	22,800.91	9,428.31	102.93	103.92	105.59	12,255.90	1,870.64	725.15	519.65	205.50	3.529	
22,500.00	9,219.23	22,900.74	9,419.35	103.65	104.64	106.03	12,355.33	1,869.57	726.70	519.80	206.91	3.512	
22,600.00	9,204.54	23,000.57	9,410.40	104.38	105.36	106.46	12,454.75	1,868.50	728.30	519.99	208.32	3.496	
22,700.00	9,189.82	23,100.41	9,401.44	105.10	106.07	106.89	12,554.18	1,867.44	729.95	520.23	209.73	3.481	
22,800.00	9,173.02	23,200.09	9,392.49	105.83	106.79	107.45	12,653.45	1,866.37	732.27	521.15	211.12	3.469	
22,900.00	9,155.27	23,299.70	9,383.56	106.56	107.51	108.11	12,752.65	1,865.30	734.97	522.46	212.51	3.459	
23,000.00	9,137.53	23,399.31	9,374.62	107.29	108.23	108.76	12,851.85	1,864.24	737.77	523.86	213.90	3.449	
23,100.00	9,119.78	23,498.92	9,365.68	108.02	108.95	109.40	12,951.06	1,863.17	740.65	525.36	215.29	3.440	
23,200.00	9,102.04	23,598.52	9,356.74	108.75	109.67	110.04	13,050.26	1,862.11	743.64	526.95	216.69	3.432	
23,300.00	9,084.29	23,698.13	9,347.80	109.48	110.39	110.68	13,149.46	1,861.04	746.71	528.63	218.08	3.424	
23,400.00	9,066.54	23,797.74	9,338.87	110.21	111.11	111.31	13,248.66	1,859.98	749.88	530.40	219.48	3.417	
23,500.00	9,048.80	23,897.35	9,329.93	110.94	111.83	111.93	13,347.86	1,858.91	753.14	532.25	220.88	3.410	
23,600.00	9,031.05	23,996.96	9,320.99	111.67	112.55	112.55	13,447.06	1,857.84	756.48	534.20	222.28	3.403	
23,700.00	9,013.31	24,096.57	9,312.05	112.41	113.28	113.17	13,546.26	1,856.78	759.92	536.23	223.69	3.397	
23,800.00	8,995.56	24,196.17	9,303.11	113.14	114.00	113.78	13,645.46	1,855.71	763.44	538.35	225.09	3.392	
23,900.00	8,977.82	24,295.78	9,294.18	113.87	114.72	114.38	13,744.66	1,854.65	767.05	540.55	226.50	3.386	
24,000.00	8,959.73	24,395.36	9,285.24	114.61	115.45	114.97	13,843.83	1,853.58	770.89	542.98	227.91	3.382	SF
24,100.00	8,938.95	24,494.64	9,276.33	115.34	116.17	115.70	13,942.71	1,852.52	776.00	546.71	229.30	3.384	
24,200.00	8,917.45	24,593.84	9,267.43	116.07	116.89	116.53	14,041.50	1,851.46	781.59	550.91	230.68	3.388	
24,300.00	8,895.96	24,693.04	9,258.53	116.81	117.62	117.35	14,140.29	1,850.40	787.35	555.28	232.07	3.393	
24,400.00	8,874.46	24,792.23	9,249.63	117.55	118.34	118.16	14,239.08	1,849.34	793.26	559.81	233.46	3.398	
24,500.00	8,852.96	24,891.43	9,240.73	118.28	119.06	118.95	14,337.87	1,848.28	799.34	564.48	234.85	3.404	
24,600.00	8,831.46	24,990.63	9,231.83	119.02	119.79	119.74	14,436.66	1,847.21	805.56	569.31	236.25	3.410	
24,700.00	8,809.97	25,089.82	9,222.93	119.75	120.51	120.51	14,535.45	1,846.15	811.93	574.29	237.65	3.417	
24,800.00	8,788.47	25,189.02	9,214.02	120.49	121.24	121.27	14,634.25	1,845.09	818.45	579.40	239.05	3.424	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 603H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
24,900.00	8,766.97	25,288.22	9,205.12	121.23	121.97	122.01	14,733.04	1,844.03	825.12	584.66	240.46	3.431	
25,000.00	8,745.48	25,387.42	9,196.22	121.96	122.69	122.75	14,831.83	1,842.97	831.92	590.05	241.86	3.440	
25,100.00	8,723.98	25,486.61	9,187.32	122.70	123.42	123.47	14,930.62	1,841.91	838.85	595.58	243.28	3.448	
25,200.00	8,702.48	25,585.81	9,178.42	123.44	124.15	124.18	15,029.41	1,840.85	845.92	601.23	244.69	3.457	
25,300.00	8,680.26	25,684.91	9,169.53	124.18	124.88	124.84	15,128.10	1,839.79	853.54	607.44	246.10	3.468	
25,400.00	8,654.86	25,783.51	9,160.68	124.91	125.60	125.58	15,226.30	1,838.73	863.21	615.71	247.50	3.488	
25,500.00	8,626.28	25,881.52	9,151.89	125.65	126.32	126.50	15,323.91	1,837.68	875.03	626.16	248.87	3.516	
25,600.00	8,596.98	25,979.37	9,143.11	126.38	127.04	127.55	15,421.36	1,836.64	887.60	637.36	250.24	3.547	
25,700.00	8,567.67	26,077.22	9,134.33	127.11	127.76	128.58	15,518.81	1,835.59	900.47	648.85	251.62	3.579	
25,800.00	8,538.37	26,175.08	9,125.55	127.85	128.48	129.58	15,616.27	1,834.54	913.62	660.62	253.00	3.611	
25,900.00	8,509.06	26,272.93	9,116.76	128.58	129.20	130.55	15,713.72	1,833.50	927.04	672.65	254.39	3.644	
26,000.00	8,479.76	26,370.78	9,107.98	129.32	129.92	131.49	15,811.17	1,832.45	940.72	684.95	255.78	3.678	
26,100.00	8,450.45	26,468.64	9,099.20	130.05	130.64	132.41	15,908.63	1,831.40	954.65	697.48	257.17	3.712	
26,200.00	8,421.14	26,566.49	9,090.42	130.79	131.36	133.30	16,006.08	1,830.36	968.82	710.25	258.57	3.747	
26,300.00	8,391.84	26,664.34	9,081.64	131.53	132.09	134.16	16,103.53	1,829.31	983.22	723.24	259.98	3.782	
26,400.00	8,362.53	26,762.20	9,072.86	132.26	132.81	135.00	16,200.98	1,828.26	997.83	736.45	261.39	3.817	
26,500.00	8,333.23	26,860.05	9,064.08	133.00	133.53	135.82	16,298.44	1,827.21	1,012.66	749.85	262.80	3.853	
26,600.00	8,303.92	26,957.90	9,055.30	133.73	134.25	136.61	16,395.89	1,826.17	1,027.68	763.46	264.22	3.889	
26,700.00	8,274.62	27,055.76	9,046.52	134.47	134.98	137.38	16,493.34	1,825.12	1,042.89	777.25	265.64	3.926	
26,800.00	8,245.31	27,153.61	9,037.74	135.21	135.70	138.13	16,590.80	1,824.07	1,058.29	791.22	267.07	3.963	
26,900.00	8,217.06	27,251.68	9,028.94	135.94	136.43	138.90	16,688.47	1,823.02	1,073.04	804.54	268.50	3.996	
27,000.00	8,189.09	27,349.81	9,020.14	136.68	137.15	139.56	16,786.20	1,821.98	1,087.73	817.79	269.94	4.029	
27,100.00	8,161.11	27,447.95	9,011.33	137.42	137.88	140.21	16,883.93	1,820.93	1,102.55	831.17	271.39	4.063	
27,200.00	8,133.14	27,546.08	9,002.52	138.16	138.61	140.84	16,981.66	1,819.88	1,117.51	844.68	272.83	4.096	
27,300.00	8,105.17	27,644.21	8,993.72	138.90	139.33	141.45	17,079.39	1,818.83	1,132.60	858.32	274.28	4.129	
27,400.00	8,077.20	27,742.34	8,984.91	139.63	140.06	142.04	17,177.12	1,817.78	1,147.81	872.08	275.73	4.163	
27,500.00	8,049.22	27,840.47	8,976.11	140.37	140.79	142.62	17,274.84	1,816.73	1,163.14	885.96	277.18	4.196	
27,600.00	8,021.25	27,938.60	8,967.30	141.11	141.52	143.19	17,372.57	1,815.68	1,178.59	899.95	278.64	4.230	
27,700.00	7,993.28	28,036.73	8,958.50	141.85	142.25	143.74	17,470.30	1,814.63	1,194.15	914.05	280.10	4.263	
27,800.00	7,965.31	28,134.86	8,949.69	142.59	142.98	144.27	17,568.03	1,813.58	1,209.81	928.26	281.56	4.297	
27,900.00	7,937.33	28,232.99	8,940.89	143.33	143.71	144.79	17,665.76	1,812.53	1,225.58	942.56	283.02	4.330	
28,000.00	7,909.36	28,331.12	8,932.08	144.07	144.43	145.30	17,763.49	1,811.48	1,241.44	956.96	284.48	4.364	
28,100.00	7,881.39	28,429.25	8,923.28	144.81	145.16	145.80	17,861.22	1,810.43	1,257.40	971.45	285.95	4.397	
28,200.00	7,853.42	28,527.38	8,914.47	145.55	145.89	146.29	17,958.95	1,809.38	1,273.45	986.03	287.41	4.431	
28,300.00	7,825.44	28,625.51	8,905.67	146.29	146.62	146.76	18,056.68	1,808.33	1,289.58	1,000.70	288.88	4.464	
28,400.00	7,797.47	28,660.79	8,902.50	147.03	146.89	146.92	18,091.81	1,807.95	1,307.32	1,018.03	289.28	4.519	
28,444.58	7,785.00	28,660.79	8,902.50	147.36	146.89	146.92	18,091.81	1,807.95	1,317.38	1,028.54	288.85	4.561	

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 604H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,000.00	7,908.35	7,909.18	7,908.35	29.31	27.72	-9.33	-223.42	3,354.70	2,306.43	2,249.74	56.69	40.686	
8,100.00	8,006.84	8,007.67	8,006.84	29.69	28.06	-9.40	-223.42	3,354.70	2,289.34	2,231.93	57.41	39.879	
8,200.00	8,105.33	8,106.16	8,105.33	30.06	28.40	-9.47	-223.42	3,354.70	2,272.25	2,214.13	58.13	39.092	
8,300.00	8,203.82	8,204.65	8,203.82	30.44	28.75	-9.55	-223.42	3,354.70	2,255.17	2,196.32	58.84	38.324	
8,400.00	8,302.31	8,303.14	8,302.31	30.82	29.09	-9.62	-223.42	3,354.70	2,238.09	2,178.53	59.56	37.574	
8,500.00	8,400.80	8,401.63	8,400.80	31.20	29.44	-9.70	-223.42	3,354.70	2,221.01	2,160.73	60.28	36.842	
8,600.00	8,499.29	8,500.12	8,499.29	31.57	29.78	-9.77	-223.42	3,354.70	2,203.94	2,142.94	61.00	36.128	
8,700.00	8,597.78	8,598.61	8,597.78	31.95	30.13	-9.85	-223.42	3,354.70	2,186.87	2,125.15	61.72	35.430	
8,800.00	8,696.27	8,697.10	8,696.27	32.33	30.47	-9.93	-223.42	3,354.70	2,169.81	2,107.36	62.45	34.747	
8,900.00	8,794.76	8,795.59	8,794.76	32.71	30.82	-10.01	-223.42	3,354.70	2,152.75	2,089.58	63.17	34.081	
9,000.00	8,893.25	8,894.08	8,893.25	33.09	31.17	-10.09	-223.42	3,354.70	2,135.69	2,071.80	63.89	33.429	
9,100.00	8,991.74	8,992.57	8,991.74	33.46	31.51	-10.17	-223.42	3,354.70	2,118.64	2,054.03	64.61	32.792	
9,200.00	9,090.23	9,091.06	9,090.23	33.84	31.86	-10.25	-223.42	3,354.70	2,101.59	2,036.26	65.33	32.168	
9,300.00	9,188.72	9,189.55	9,188.72	34.22	32.20	-10.34	-223.42	3,354.70	2,084.54	2,018.49	66.05	31.559	
9,400.00	9,287.52	9,288.35	9,287.52	34.60	32.55	7.58	-223.42	3,354.70	2,069.26	2,002.49	66.77	30.990	
9,500.00	9,386.81	9,387.64	9,386.81	34.96	32.90	39.68	-223.42	3,354.70	2,058.40	1,990.92	67.48	30.504	
9,600.00	9,486.11	9,486.94	9,486.11	35.30	33.25	72.18	-223.42	3,354.70	2,052.07	1,983.90	68.17	30.103	
9,690.58	9,575.61	9,576.44	9,575.61	35.60	33.57	90.00	-223.42	3,354.70	2,050.23	1,981.46	68.77	29.811	CC
9,700.00	9,584.93	9,585.76	9,584.93	35.64	33.60	91.30	-223.42	3,354.70	2,050.37	1,981.53	68.84	29.786	
9,800.00	9,681.14	9,681.96	9,681.14	35.95	33.94	91.94	-223.42	3,354.70	2,051.16	1,981.68	69.48	29.523	
9,900.00	9,771.22	9,772.05	9,771.22	36.25	34.26	92.82	-223.42	3,354.70	2,053.17	1,983.10	70.07	29.302	
10,000.00	9,852.45	9,853.28	9,852.45	36.51	34.54	93.72	-223.42	3,354.70	2,057.31	1,986.71	70.60	29.140	
10,100.00	9,922.36	9,972.27	9,970.65	36.72	34.96	95.20	-211.72	3,354.57	2,063.81	1,992.70	71.10	29.026	
10,200.00	9,978.82	10,124.89	10,114.33	36.88	35.44	96.93	-161.61	3,354.03	2,071.59	2,000.11	71.49	28.979	
10,300.00	10,020.12	10,327.98	10,275.64	36.99	35.97	98.86	-39.99	3,352.72	2,079.15	2,007.52	71.64	29.023	
10,400.00	10,046.32	10,592.21	10,405.08	37.06	36.44	100.31	187.67	3,350.25	2,083.57	2,011.94	71.64	29.084	
10,500.00	10,063.18	10,747.70	10,436.99	37.11	36.62	100.43	339.72	3,348.61	2,084.18	2,012.37	71.81	29.025	
10,600.00	10,071.39	10,896.69	10,447.90	37.16	36.76	100.40	488.19	3,347.01	2,084.01	2,012.00	72.00	28.943	
10,700.00	10,071.32	11,030.80	10,441.56	37.22	36.91	100.25	622.09	3,345.57	2,083.10	2,010.84	72.26	28.827	
10,800.00	10,069.20	11,130.61	10,433.28	37.31	37.04	100.09	721.54	3,344.50	2,082.00	2,009.48	72.52	28.711	
10,900.00	10,067.07	11,230.42	10,425.00	37.43	37.20	99.92	821.00	3,343.43	2,080.92	2,008.11	72.80	28.583	
11,000.00	10,064.95	11,330.23	10,416.73	37.58	37.36	99.75	920.46	3,342.36	2,079.85	2,006.73	73.12	28.444	
11,100.00	10,062.82	11,430.04	10,408.45	37.75	37.55	99.59	1,019.92	3,341.29	2,078.81	2,005.33	73.47	28.293	
11,200.00	10,060.70	11,529.85	10,400.18	37.93	37.75	99.42	1,119.38	3,340.22	2,077.78	2,003.92	73.86	28.133	
11,300.00	10,058.57	11,629.66	10,391.90	38.13	37.96	99.25	1,218.84	3,339.16	2,076.77	2,002.50	74.27	27.963	
11,400.00	10,056.45	11,729.47	10,383.62	38.35	38.19	99.08	1,318.30	3,338.09	2,075.77	2,001.06	74.71	27.783	
11,500.00	10,054.33	11,829.28	10,375.35	38.58	38.43	98.92	1,417.76	3,337.02	2,074.80	1,999.61	75.19	27.595	
11,600.00	10,052.20	11,929.08	10,367.07	38.83	38.68	98.75	1,517.22	3,335.95	2,073.84	1,998.15	75.69	27.399	
11,700.00	10,050.08	12,028.89	10,358.79	39.09	38.95	98.58	1,616.68	3,334.88	2,072.90	1,996.68	76.22	27.195	
11,800.00	10,047.95	12,128.70	10,350.52	39.36	39.23	98.41	1,716.14	3,333.81	2,071.98	1,995.20	76.78	26.984	
11,900.00	10,045.83	12,228.51	10,342.24	39.64	39.53	98.24	1,815.60	3,332.74	2,071.08	1,993.71	77.37	26.768	
12,000.00	10,043.70	12,328.32	10,333.96	39.93	39.83	98.07	1,915.06	3,331.67	2,070.19	1,992.21	77.99	26.545	
12,100.00	10,041.58	12,428.13	10,325.69	40.24	40.15	97.90	2,014.52	3,330.61	2,069.33	1,990.70	78.63	26.317	
12,200.00	10,039.45	12,527.94	10,317.41	40.56	40.49	97.73	2,113.98	3,329.54	2,068.48	1,989.18	79.30	26.085	
12,300.00	10,037.33	12,627.75	10,309.13	40.89	40.83	97.57	2,213.44	3,328.47	2,067.65	1,987.66	79.99	25.849	
12,400.00	10,035.21	12,727.56	10,300.86	41.24	41.18	97.40	2,312.90	3,327.40	2,066.83	1,986.13	80.71	25.609	
12,500.00	10,033.08	12,827.37	10,292.58	41.59	41.55	97.23	2,412.36	3,326.33	2,066.04	1,984.59	81.45	25.367	
12,600.00	10,030.96	12,927.18	10,284.30	41.95	41.93	97.06	2,511.82	3,325.26	2,065.26	1,983.05	82.21	25.121	
12,700.00	10,028.30	13,027.02	10,276.02	42.33	42.32	96.91	2,611.31	3,324.19	2,064.57	1,981.57	82.99	24.876	
12,800.00	10,023.00	13,126.97	10,267.74	42.72	42.72	96.83	2,710.91	3,323.12	2,064.20	1,980.41	83.79	24.636	
12,900.00	10,017.31	13,226.94	10,259.45	43.13	43.12	96.76	2,810.53	3,322.05	2,063.87	1,979.27	84.60	24.395	
13,000.00	10,011.61	13,326.90	10,251.16	43.54	43.54	96.69	2,910.15	3,320.98	2,063.56	1,978.12	85.44	24.153	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 604H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,100.00	10,005.92	13,426.87	10,242.87	43.97	43.97	96.62	3,009.76	3,319.91	2,063.24	1,976.95	86.29	23.910	
13,200.00	10,000.23	13,526.83	10,234.58	44.40	44.41	96.54	3,109.38	3,318.84	2,062.93	1,975.76	87.17	23.666	
13,300.00	9,994.53	13,626.80	10,226.29	44.84	44.86	96.47	3,208.99	3,317.77	2,062.62	1,974.56	88.06	23.423	
13,400.00	9,988.84	13,726.77	10,218.00	45.29	45.31	96.40	3,308.61	3,316.70	2,062.31	1,973.34	88.97	23.179	
13,500.00	9,983.15	13,826.73	10,209.71	45.75	45.77	96.33	3,408.23	3,315.63	2,062.01	1,972.11	89.90	22.936	
13,600.00	9,977.45	13,926.70	10,201.42	46.22	46.25	96.26	3,507.84	3,314.56	2,061.71	1,970.86	90.85	22.694	
13,700.00	9,971.76	14,026.66	10,193.13	46.69	46.73	96.18	3,607.46	3,313.49	2,061.41	1,969.60	91.81	22.453	
13,800.00	9,966.06	14,126.63	10,184.84	47.18	47.21	96.11	3,707.07	3,312.42	2,061.12	1,968.33	92.79	22.213	
13,900.00	9,960.37	14,226.60	10,176.55	47.67	47.71	96.04	3,806.69	3,311.35	2,060.83	1,967.05	93.78	21.974	
14,000.00	9,954.68	14,326.56	10,168.26	48.16	48.21	95.97	3,906.31	3,310.28	2,060.55	1,965.75	94.79	21.737	
14,100.00	9,948.98	14,426.53	10,159.97	48.67	48.72	95.90	4,005.92	3,309.21	2,060.26	1,964.44	95.82	21.502	
14,200.00	9,943.29	14,526.49	10,151.68	49.18	49.24	95.82	4,105.54	3,308.14	2,059.98	1,963.13	96.86	21.268	
14,300.00	9,937.60	14,626.46	10,143.39	49.70	49.76	95.75	4,205.15	3,307.07	2,059.71	1,961.80	97.91	21.037	
14,400.00	9,931.90	14,726.43	10,135.10	50.22	50.29	95.68	4,304.77	3,306.00	2,059.43	1,960.46	98.98	20.808	
14,500.00	9,926.21	14,826.39	10,126.81	50.75	50.82	95.61	4,404.39	3,304.93	2,059.16	1,959.11	100.05	20.581	
14,600.00	9,920.52	14,926.36	10,118.52	51.29	51.36	95.54	4,504.00	3,303.86	2,058.90	1,957.75	101.14	20.356	
14,700.00	9,914.82	15,026.33	10,110.23	51.83	51.91	95.46	4,603.62	3,302.79	2,058.63	1,956.39	102.25	20.134	
14,800.00	9,909.13	15,126.29	10,101.94	52.38	52.46	95.39	4,703.23	3,301.72	2,058.37	1,955.01	103.36	19.914	
14,900.00	9,903.43	15,226.26	10,093.66	52.93	53.02	95.32	4,802.85	3,300.65	2,058.12	1,953.63	104.49	19.697	
15,000.00	9,897.74	15,326.22	10,085.37	53.49	53.58	95.25	4,902.47	3,299.57	2,057.86	1,952.24	105.62	19.483	
15,100.00	9,892.05	15,426.19	10,077.08	54.05	54.15	95.18	5,002.08	3,298.50	2,057.61	1,950.84	106.77	19.271	
15,200.00	9,886.35	15,526.16	10,068.79	54.62	54.73	95.10	5,101.70	3,297.43	2,057.36	1,949.44	107.93	19.062	
15,300.00	9,880.66	15,626.12	10,060.50	55.20	55.30	95.03	5,201.31	3,296.36	2,057.12	1,948.03	109.09	18.856	
15,400.00	9,874.97	15,726.09	10,052.21	55.77	55.89	94.96	5,300.93	3,295.29	2,056.88	1,946.61	110.27	18.653	
15,500.00	9,868.46	15,826.07	10,043.92	56.36	56.47	94.91	5,400.56	3,294.22	2,056.71	1,945.26	111.45	18.454	
15,600.00	9,861.83	15,926.06	10,035.63	56.95	57.07	94.86	5,500.20	3,293.15	2,056.56	1,943.91	112.64	18.257	
15,700.00	9,855.20	16,026.04	10,027.33	57.54	57.66	94.82	5,599.84	3,292.08	2,056.40	1,942.56	113.84	18.064	
15,800.00	9,848.57	16,126.03	10,019.04	58.14	58.26	94.77	5,699.47	3,291.01	2,056.25	1,941.20	115.05	17.873	
15,900.00	9,841.94	16,226.02	10,010.75	58.74	58.87	94.73	5,799.11	3,289.94	2,056.10	1,939.83	116.27	17.685	
16,000.00	9,835.31	16,326.00	10,002.46	59.34	59.47	94.68	5,898.74	3,288.87	2,055.95	1,938.46	117.49	17.499	
16,100.00	9,828.68	16,425.99	9,994.17	59.95	60.08	94.63	5,998.38	3,287.80	2,055.80	1,937.08	118.72	17.316	
16,200.00	9,822.06	16,525.97	9,985.88	60.57	60.70	94.59	6,098.02	3,286.73	2,055.65	1,935.69	119.96	17.136	
16,300.00	9,815.43	16,625.96	9,977.59	61.18	61.32	94.54	6,197.65	3,285.66	2,055.50	1,934.30	121.20	16.959	
16,400.00	9,808.80	16,725.95	9,969.30	61.80	61.94	94.49	6,297.29	3,284.59	2,055.36	1,932.90	122.46	16.784	
16,500.00	9,802.17	16,825.93	9,961.00	62.43	62.57	94.45	6,396.92	3,283.52	2,055.22	1,931.50	123.72	16.612	
16,600.00	9,795.54	16,925.92	9,952.71	63.05	63.19	94.40	6,496.56	3,282.45	2,055.07	1,930.09	124.98	16.443	
16,700.00	9,788.91	17,025.90	9,944.42	63.68	63.83	94.36	6,596.20	3,281.38	2,054.93	1,928.68	126.25	16.276	
16,800.00	9,782.28	17,125.89	9,936.13	64.31	64.46	94.31	6,695.83	3,280.31	2,054.79	1,927.26	127.53	16.112	
16,900.00	9,775.65	17,225.88	9,927.84	64.95	65.10	94.26	6,795.47	3,279.23	2,054.66	1,925.84	128.82	15.950	
17,000.00	9,769.03	17,325.86	9,919.55	65.59	65.74	94.22	6,895.10	3,278.16	2,054.52	1,924.41	130.11	15.791	
17,100.00	9,762.40	17,425.85	9,911.26	66.23	66.38	94.17	6,994.74	3,277.09	2,054.38	1,922.98	131.40	15.634	
17,200.00	9,755.77	17,525.83	9,902.97	66.87	67.03	94.12	7,094.38	3,276.02	2,054.25	1,921.54	132.71	15.480	
17,300.00	9,749.14	17,625.82	9,894.67	67.52	67.68	94.08	7,194.01	3,274.95	2,054.12	1,920.10	134.01	15.328	
17,400.00	9,742.51	17,725.81	9,886.38	68.17	68.33	94.03	7,293.65	3,273.88	2,053.98	1,918.66	135.32	15.178	
17,500.00	9,735.88	17,825.79	9,878.09	68.82	68.98	93.98	7,393.28	3,272.81	2,053.85	1,917.21	136.64	15.031	
17,600.00	9,729.25	17,925.78	9,869.80	69.47	69.64	93.94	7,492.92	3,271.74	2,053.73	1,915.76	137.96	14.886	
17,700.00	9,722.62	18,025.77	9,861.51	70.13	70.30	93.89	7,592.56	3,270.67	2,053.60	1,914.31	139.29	14.743	
17,800.00	9,716.00	18,125.75	9,853.22	70.79	70.96	93.84	7,692.19	3,269.60	2,053.47	1,912.85	140.62	14.603	
17,900.00	9,709.37	18,225.74	9,844.93	71.45	71.62	93.80	7,791.83	3,268.53	2,053.35	1,911.39	141.96	14.465	
18,000.00	9,702.74	18,325.72	9,836.64	72.11	72.28	93.75	7,891.46	3,267.46	2,053.22	1,909.93	143.30	14.329	
18,100.00	9,696.11	18,425.71	9,828.34	72.78	72.95	93.71	7,991.10	3,266.39	2,053.10	1,908.46	144.64	14.195	
18,200.00	9,689.48	18,525.70	9,820.05	73.44	73.62	93.66	8,090.73	3,265.32	2,052.98	1,906.99	145.99	14.063	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 604H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,300.00	9,682.85	18,625.68	9,811.76	74.11	74.29	93.61	8,190.37	3,264.25	2,052.86	1,905.52	147.34	13.933	
18,400.00	9,676.22	18,725.67	9,803.47	74.78	74.96	93.57	8,290.01	3,263.18	2,052.74	1,904.05	148.70	13.805	
18,500.00	9,669.60	18,825.65	9,795.18	75.46	75.64	93.52	8,389.64	3,262.11	2,052.63	1,902.57	150.06	13.679	
18,600.00	9,662.97	18,925.64	9,786.89	76.13	76.32	93.47	8,489.28	3,261.03	2,052.51	1,901.09	151.42	13.555	
18,700.00	9,656.34	19,025.63	9,778.60	76.81	76.99	93.43	8,588.91	3,259.96	2,052.40	1,899.61	152.79	13.433	
18,800.00	9,649.71	19,125.61	9,770.31	77.49	77.67	93.38	8,688.55	3,258.89	2,052.28	1,898.13	154.16	13.313	
18,900.00	9,643.08	19,225.60	9,762.02	78.17	78.36	93.33	8,788.19	3,257.82	2,052.17	1,896.64	155.53	13.195	
19,000.00	9,636.45	19,325.58	9,753.72	78.85	79.04	93.29	8,887.82	3,256.75	2,052.06	1,895.15	156.91	13.078	
19,100.00	9,629.82	19,425.57	9,745.43	79.53	79.72	93.24	8,987.46	3,255.68	2,051.95	1,893.66	158.29	12.963	
19,200.00	9,622.88	19,525.56	9,737.14	80.22	80.41	93.20	9,087.10	3,254.61	2,051.86	1,892.19	159.67	12.851	
19,240.81	9,619.49	19,566.37	9,733.76	80.50	80.69	93.20	9,127.76	3,254.17	2,051.86	1,891.63	160.23	12.805	
19,300.00	9,613.89	19,625.56	9,728.85	80.91	81.10	93.22	9,186.75	3,253.54	2,051.89	1,890.85	161.04	12.741	
19,400.00	9,604.73	19,725.55	9,720.56	81.60	81.79	93.25	9,286.39	3,252.47	2,051.93	1,889.51	162.42	12.634	
19,500.00	9,595.58	19,825.55	9,712.26	82.29	82.48	93.27	9,386.04	3,251.40	2,051.96	1,888.16	163.80	12.527	
19,600.00	9,586.43	19,925.55	9,703.97	82.98	83.17	93.30	9,485.68	3,250.33	2,052.00	1,886.82	165.18	12.423	
19,700.00	9,577.27	20,025.54	9,695.68	83.68	83.87	93.32	9,585.33	3,249.26	2,052.04	1,885.47	166.56	12.320	
19,800.00	9,568.12	20,125.54	9,687.39	84.38	84.56	93.34	9,684.98	3,248.19	2,052.07	1,884.12	167.95	12.218	
19,900.00	9,558.96	20,225.53	9,679.10	85.07	85.26	93.37	9,784.62	3,247.12	2,052.11	1,882.77	169.34	12.118	
20,000.00	9,549.81	20,325.53	9,670.80	85.77	85.95	93.39	9,884.27	3,246.05	2,052.15	1,881.42	170.73	12.020	
20,100.00	9,540.66	20,425.53	9,662.51	86.47	86.65	93.42	9,983.91	3,244.97	2,052.18	1,880.06	172.12	11.923	
20,200.00	9,531.25	20,525.52	9,654.22	87.17	87.35	93.45	10,083.56	3,243.90	2,052.24	1,878.72	173.52	11.827	
20,300.00	9,519.27	20,625.45	9,645.93	87.88	88.05	93.55	10,183.14	3,242.83	2,052.45	1,877.55	174.90	11.735	
20,400.00	9,506.58	20,725.35	9,637.65	88.59	88.76	93.67	10,282.69	3,241.76	2,052.72	1,876.44	176.28	11.645	
20,500.00	9,493.90	20,825.25	9,629.37	89.29	89.46	93.79	10,382.24	3,240.69	2,052.99	1,875.33	177.66	11.556	
20,600.00	9,481.22	20,925.16	9,621.08	90.00	90.16	93.92	10,481.79	3,239.62	2,053.27	1,874.23	179.04	11.468	
20,700.00	9,468.54	21,025.06	9,612.80	90.71	90.87	94.04	10,581.35	3,238.56	2,053.57	1,873.14	180.43	11.382	
20,800.00	9,455.85	21,124.96	9,604.51	91.43	91.57	94.16	10,680.90	3,237.49	2,053.87	1,872.05	181.81	11.297	
20,900.00	9,443.17	21,224.86	9,596.23	92.14	92.28	94.28	10,780.45	3,236.42	2,054.18	1,870.98	183.20	11.213	
21,000.00	9,430.49	21,324.77	9,587.94	92.85	92.99	94.41	10,880.00	3,235.35	2,054.50	1,869.91	184.59	11.130	
21,100.00	9,417.81	21,424.67	9,579.66	93.56	93.70	94.53	10,979.56	3,234.28	2,054.83	1,868.85	185.99	11.048	
21,200.00	9,405.13	21,524.57	9,571.38	94.28	94.41	94.65	11,079.11	3,233.21	2,055.17	1,867.79	187.38	10.968	
21,300.00	9,392.44	21,624.47	9,563.09	94.99	95.12	94.78	11,178.66	3,232.14	2,055.52	1,866.74	188.78	10.889	
21,400.00	9,379.76	21,724.38	9,554.81	95.71	95.83	94.90	11,278.22	3,231.07	2,055.88	1,865.70	190.18	10.810	
21,500.00	9,366.09	21,824.23	9,546.53	96.43	96.54	95.04	11,377.72	3,230.00	2,056.34	1,864.77	191.57	10.734	
21,600.00	9,351.40	21,924.02	9,538.25	97.15	97.26	95.22	11,477.16	3,228.93	2,056.90	1,863.94	192.96	10.660	
21,700.00	9,336.72	22,023.81	9,529.98	97.87	97.97	95.40	11,576.60	3,227.86	2,057.48	1,863.14	194.35	10.587	
21,800.00	9,322.03	22,123.61	9,521.70	98.59	98.69	95.58	11,676.05	3,226.79	2,058.08	1,862.35	195.74	10.515	
21,900.00	9,307.35	22,223.40	9,513.43	99.31	99.40	95.75	11,775.49	3,225.72	2,058.71	1,861.58	197.13	10.443	
22,000.00	9,292.66	22,323.19	9,505.15	100.03	100.12	95.93	11,874.93	3,224.66	2,059.35	1,860.83	198.52	10.373	
22,100.00	9,277.97	22,422.98	9,496.88	100.75	100.83	96.11	11,974.38	3,223.59	2,060.01	1,860.09	199.92	10.304	
22,200.00	9,263.29	22,522.78	9,488.60	101.48	101.55	96.29	12,073.82	3,222.52	2,060.70	1,859.38	201.32	10.236	
22,300.00	9,248.60	22,622.57	9,480.33	102.20	102.27	96.46	12,173.26	3,221.45	2,061.40	1,858.68	202.71	10.169	
22,400.00	9,233.91	22,722.36	9,472.05	102.93	102.99	96.64	12,272.71	3,220.38	2,062.12	1,858.01	204.11	10.103	
22,500.00	9,219.23	22,822.16	9,463.78	103.65	103.71	96.82	12,372.15	3,219.31	2,062.86	1,857.35	205.51	10.038	
22,600.00	9,204.54	22,921.95	9,455.50	104.38	104.43	97.00	12,471.59	3,218.24	2,063.62	1,856.71	206.92	9.973	
22,700.00	9,189.82	23,021.74	9,447.23	105.10	105.15	97.17	12,571.03	3,217.18	2,064.41	1,856.09	208.32	9.910	
22,800.00	9,173.02	23,121.37	9,438.96	105.83	105.87	97.39	12,670.31	3,216.11	2,065.49	1,855.78	209.71	9.849	
22,900.00	9,155.27	23,220.91	9,430.71	106.56	106.59	97.65	12,769.51	3,215.04	2,066.72	1,855.63	211.09	9.791	
23,000.00	9,137.53	23,320.46	9,422.45	107.29	107.31	97.91	12,868.71	3,213.98	2,068.01	1,855.53	212.48	9.733	
23,100.00	9,119.78	23,420.00	9,414.20	108.02	108.04	98.17	12,967.91	3,212.91	2,069.33	1,855.47	213.86	9.676	
23,200.00	9,102.04	23,519.55	9,405.94	108.75	108.76	98.43	13,067.10	3,211.85	2,070.70	1,855.45	215.25	9.620	ES
23,300.00	9,084.29	23,619.10	9,397.69	109.48	109.48	98.69	13,166.30	3,210.78	2,072.11	1,855.47	216.64	9.565	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Offset Design: Rope State Com Pad - Rope State Com 604H - OH - Plan #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
23,400.00	9,066.54	23,718.64	9,389.44	110.21	110.21	98.95	13,265.50	3,209.71	2,073.56	1,855.53	218.03	9.510	
23,500.00	9,048.80	23,818.19	9,381.18	110.94	110.93	99.21	13,364.69	3,208.65	2,075.06	1,855.64	219.42	9.457	
23,600.00	9,031.05	23,917.73	9,372.93	111.67	111.66	99.47	13,463.89	3,207.58	2,076.60	1,855.79	220.81	9.404	
23,700.00	9,013.31	24,017.28	9,364.67	112.41	112.38	99.73	13,563.09	3,206.52	2,078.18	1,855.97	222.21	9.352	
23,800.00	8,995.56	24,116.82	9,356.42	113.14	113.11	99.98	13,662.28	3,205.45	2,079.80	1,856.20	223.60	9.301	
23,900.00	8,977.82	24,216.37	9,348.16	113.87	113.84	100.24	13,761.48	3,204.38	2,081.47	1,856.47	225.00	9.251	
24,000.00	8,959.73	24,315.88	9,339.91	114.61	114.56	100.49	13,860.64	3,203.32	2,083.24	1,856.85	226.39	9.202	
24,100.00	8,938.95	24,415.08	9,331.68	115.34	115.29	100.80	13,959.50	3,202.26	2,085.57	1,857.81	227.77	9.157	
24,200.00	8,917.45	24,514.19	9,323.47	116.07	116.01	101.16	14,058.26	3,201.20	2,088.12	1,858.98	229.14	9.113	
24,300.00	8,895.96	24,613.30	9,315.25	116.81	116.74	101.51	14,157.02	3,200.13	2,090.75	1,860.24	230.51	9.070	
24,400.00	8,874.46	24,712.40	9,307.03	117.55	117.46	101.86	14,255.78	3,199.07	2,093.45	1,861.58	231.88	9.028	
24,500.00	8,852.96	24,811.51	9,298.81	118.28	118.19	102.22	14,354.54	3,198.01	2,096.24	1,862.99	233.25	8.987	
24,600.00	8,831.46	24,910.62	9,290.59	119.02	118.92	102.57	14,453.30	3,196.95	2,099.12	1,864.49	234.63	8.947	
24,700.00	8,809.97	25,009.73	9,282.37	119.75	119.65	102.92	14,552.06	3,195.89	2,102.07	1,866.06	236.00	8.907	
24,800.00	8,788.47	25,108.84	9,274.16	120.49	120.37	103.27	14,650.82	3,194.83	2,105.10	1,867.72	237.38	8.868	
24,900.00	8,766.97	25,207.95	9,265.94	121.23	121.10	103.62	14,749.59	3,193.77	2,108.21	1,869.45	238.76	8.830	
25,000.00	8,745.48	25,307.05	9,257.72	121.96	121.83	103.97	14,848.35	3,192.71	2,111.40	1,871.26	240.14	8.792	
25,100.00	8,723.98	25,406.16	9,249.50	122.70	122.56	104.32	14,947.11	3,191.64	2,114.67	1,873.15	241.52	8.756	
25,200.00	8,702.48	25,505.27	9,241.28	123.44	123.29	104.66	15,045.87	3,190.58	2,118.02	1,875.12	242.91	8.720	
25,300.00	8,680.26	25,604.27	9,233.07	124.18	124.02	104.98	15,144.53	3,189.52	2,121.64	1,877.36	244.28	8.685	
25,400.00	8,654.86	25,702.76	9,224.90	124.91	124.74	105.34	15,242.67	3,188.47	2,126.22	1,880.58	245.64	8.656	
25,500.00	8,626.28	25,800.63	9,216.79	125.65	125.47	105.79	15,340.19	3,187.42	2,131.82	1,884.85	246.96	8.632	
25,600.00	8,596.98	25,898.34	9,208.69	126.38	126.19	106.33	15,437.56	3,186.37	2,137.82	1,889.53	248.29	8.610	
25,700.00	8,567.67	25,996.05	9,200.58	127.11	126.91	106.86	15,534.93	3,185.33	2,144.01	1,894.40	249.61	8.589	
25,800.00	8,538.37	26,093.76	9,192.48	127.85	127.63	107.39	15,632.30	3,184.28	2,150.40	1,899.46	250.94	8.569	
25,900.00	8,509.06	26,191.47	9,184.38	128.58	128.35	107.92	15,729.67	3,183.24	2,156.97	1,904.70	252.27	8.550	
26,000.00	8,479.76	26,289.18	9,176.28	129.32	129.07	108.45	15,827.04	3,182.19	2,163.74	1,910.14	253.60	8.532	
26,100.00	8,450.45	26,386.89	9,168.17	130.05	129.80	108.97	15,924.40	3,181.14	2,170.69	1,915.76	254.93	8.515	
26,200.00	8,421.14	26,484.60	9,160.07	130.79	130.52	109.49	16,021.77	3,180.10	2,177.83	1,921.56	256.27	8.498	
26,300.00	8,391.84	26,582.31	9,151.97	131.53	131.24	110.00	16,119.14	3,179.05	2,185.16	1,927.55	257.61	8.482	
26,400.00	8,362.53	26,680.02	9,143.87	132.26	131.97	110.51	16,216.51	3,178.00	2,192.66	1,933.71	258.95	8.467	
26,500.00	8,333.23	26,777.73	9,135.76	133.00	132.69	111.02	16,313.88	3,176.96	2,200.35	1,940.05	260.30	8.453	
26,600.00	8,303.92	26,875.44	9,127.66	133.73	133.42	111.53	16,411.25	3,175.91	2,208.21	1,946.57	261.64	8.440	
26,700.00	8,274.62	26,973.15	9,119.56	134.47	134.14	112.03	16,508.61	3,174.87	2,216.25	1,953.26	262.99	8.427	
26,800.00	8,245.31	27,070.86	9,111.46	135.21	134.87	112.53	16,605.98	3,173.82	2,224.46	1,960.12	264.34	8.415	
26,900.00	8,217.06	27,168.80	9,103.34	135.94	135.59	113.06	16,703.58	3,172.77	2,232.42	1,966.72	265.70	8.402	
27,000.00	8,189.09	27,266.80	9,095.21	136.68	136.32	113.52	16,801.23	3,171.72	2,240.42	1,973.35	267.07	8.389	
27,100.00	8,161.11	27,364.80	9,087.08	137.42	137.05	113.98	16,898.88	3,170.67	2,248.56	1,980.12	268.44	8.376	
27,200.00	8,133.14	27,462.79	9,078.96	138.16	137.78	114.43	16,996.54	3,169.62	2,256.85	1,987.04	269.81	8.364	
27,300.00	8,105.17	27,560.79	9,070.83	138.90	138.51	114.88	17,094.19	3,168.57	2,265.29	1,994.10	271.19	8.353	
27,400.00	8,077.20	27,658.79	9,062.70	139.63	139.24	115.33	17,191.84	3,167.52	2,273.87	2,001.30	272.57	8.342	
27,500.00	8,049.22	27,756.78	9,054.58	140.37	139.96	115.77	17,289.50	3,166.48	2,282.59	2,008.64	273.95	8.332	
27,600.00	8,021.25	27,854.78	9,046.45	141.11	140.69	116.22	17,387.15	3,165.43	2,291.45	2,016.12	275.33	8.323	
27,700.00	7,993.28	27,952.78	9,038.33	141.85	141.42	116.65	17,484.81	3,164.38	2,300.44	2,023.73	276.71	8.313	
27,800.00	7,965.31	28,050.77	9,030.20	142.59	142.15	117.09	17,582.46	3,163.33	2,309.58	2,031.48	278.10	8.305	SF

Total Directional

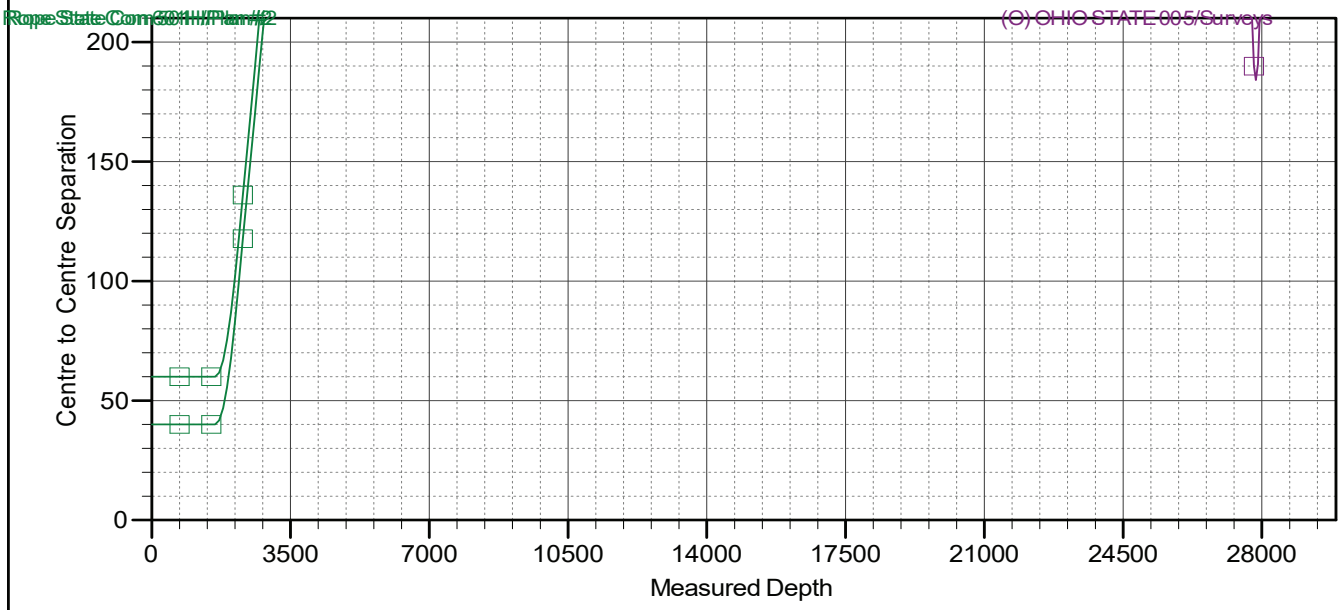
Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to GE 3951.8' + KB 23' @ 3974.80usft
Offset Depths are relative to Offset Datum
Central Meridian is -104.3333333

Coordinates are relative to: Rope State Com 502H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.45°

Ladder Plot



LEGEND

STATE 002 P & A, Vertical, Surveys V0
RN STATE COM 133H, Horizontal - PRODUCING, Surveys V0
OH, Plan #2 V0
RN STATE COM 111H, Horizontal - PRODUCING, Surveys V0
ticals, Surveys V0
80 P & A, Vertical, Surveys V0
Verticals, Surveys V0
OH, Plan #2 V0
A, Vertical, Surveys V0
OH, Plan #2 V0
P & A, Vertical, Surveys V0
A, Vertical, Surveys V0
TATE 001 P & A, Vertical, Surveys V0
(O) AIRSTRIP STATE 001 P & A, Vertical, Surveys V0
Rope State Com 501H, OH, Plan #2 V0
(O) AIRSTRIP 31 18 35 RN STATE COM 131H, Horizontal - PRODUCING, Surveys V0
(O) IRONHOUSE 19 STATE COM 001H, Horizontal - PRODUCING, Surveys V0
(O) IRONHOUSE 19 STATE COM 001H, Pilot, Pilot V0
(O) OHIO STATE 005, Verticals, Surveys V0
(O) AIRSTRIP 31 18 35 RN STATE COM 132H, Horizontal - PRODUCING, Surveys V0
Rope State Com 604H, OH, Plan #2 V0
(O) SHETLAND SWD 001, Vertical, Surveys V0
(O) LEO STATE 006 TA, Verticals, Surveys V0
(O) LEASOUTHEAST STATE 1 P & A, Vertical, Surveys V0
(O) LEAZD STATE 001 P & A, Vertical, Surveys V0
(O) IRONHOUSE 19 STATE COM 004H, Horizontal - PRODUCING, Surveys V0
(O) IRONHOUSE 19 STATE COM 004H, ST01, ST01 V
(O) STATE AN 006 TA, Vertical, Surveys V0
(O) ALBATROSS STATE COM 002H, Horizontal - PRO
(O) B LEE STATE 006, Verticals, Surveys V0
(O) BLACK JACK STATE 002, Verticals, Surveys V0
(O) ALBATROSS STATE COM 001H, Horizontal - PRO
(O) B LEE STATE 004, Verticals, Surveys V0
(O) OHIO STATE 002, Verticals, Surveys V0
(O) AIRSTRIP 31 18 35 RN STATE COM 201H, Horizo
(O) B LEE STATE 005 P & A, Vertical, Surveys V0
(O) LEO STATE 007, Verticals, Surveys V0
(O) IRONHOUSE 19 STATE COM 003H, Horizontal - P

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Total Directional

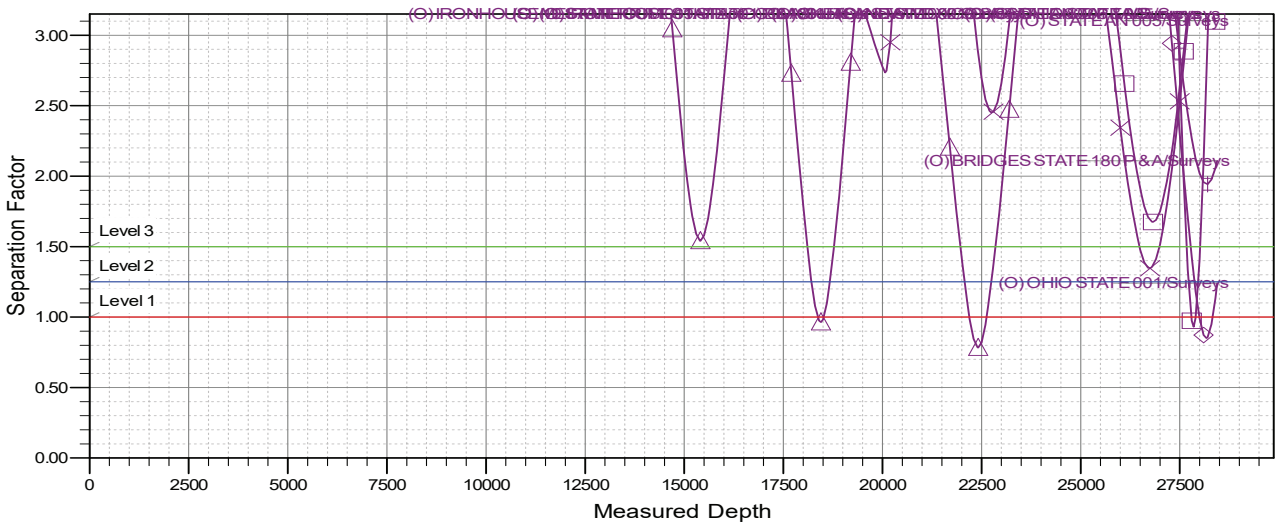
Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Rope State Com 502H
Project:	Lea County, NM (NAD 83)	**TVD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Reference Site:	Rope State Com Pad	**MD Reference:**	GE 3951.8' + KB 23' @ 3974.80usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Rope State Com 502H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to GE 3951.8' + KB 23' @ 3974.80usft
Offset Depths are relative to Offset Datum
Central Meridian is -104.3333333

Coordinates are relative to: Rope State Com 502H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.45°

Separation Factor Plot



LEGEND

STATE 002 P &A, Vertical, Surveys V0
RN STATE COM 133H, Horizontal - PRODUCING, Surveys V0
OH, Plan #2 V0
RN STATE COM 111H, Horizontal - PRODUCING, Surveys V0
ticals, Surveys V0
80 P &A, Vertical, Surveys V0
Verticals, Surveys V0
OH, Plan #2 V0
A, Vertical, Surveys V0
OH, Plan #2 V0
P &A, Vertical, Surveys V0
A, Vertical, Surveys V0
TATE 001 P &A, Vertical, Surveys V0

(O) AIRSTRIP STATE 001 P & A, Vertical, Surveys V0
Rope State Com 501H, OH, Plan #2 V0
(O) AIRSTRIP 31 18 35 RN STATE COM 131H, Horizontal - PRODUCING, Surveys V0
(O) IRONHOUSE 19 STATE COM 001H, Horizontal - PRODUCING, Surveys V0
(O) IRONHOUSE 19 STATE COM 001H, Pilot, Pilot V0
(O) OHIO STATE 005, Verticals, Surveys V0
(O) AIRSTRIP 31 18 35 RN STATE COM 132H, Horizontal - PRODUCING, Surveys V0
Rope State Com 604H, OH, Plan #2 V0
(O) SHETLAND SWD 001, Vertical, Surveys V0
(O) LEO STATE 006 TA, Verticals, Surveys V0
(O) LEASOUTHEAST STATE 1 P & A, Vertical, Surveys V0
(O) LEAZD STATE 001 P & A, Vertical, Surveys V0
(O) IRONHOUSE 19 STATE COM 004H, Horizontal - PRODUCING, Surveys V0

(O) IRONHOUSE 19 STATE COM 004H, ST01, ST01 V
(O) STATE AN 006 TA, Vertical, Surveys V0
(O) ALBATROSS STATE COM 002H, Horizontal - PRO
(O) B LEE STATE 006, Verticals, Surveys V0
(O) BLACK JACK STATE 002, Verticals, Surveys V0
(O) ALBATROSS STATE COM 001H, Horizontal - PRO
(O) B LEE STATE 004, Verticals, Surveys V0
(O) OHIO STATE 002, Verticals, Surveys V0
(O) AIRSTRIP 31 18 35 RN STATE COM 201H, Horizo
(O) B LEE STATE 005 P & A, Vertical, Surveys V0
(O) LEO STATE 007, Verticals, Surveys V0
(O) IRONHOUSE 19 STATE COM 003H, Horizontal - P

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

CONDITIONS

Operator:	OGRID:
Coterra Energy Operating Co. 6001 Deauville Blvd Midland, TX 79706	215099
	Action Number: 572985
	Action Type: [C-103A] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
matthew.gomez	No additives containing PFAS chemicals will be added to the drilling fluids or completion fluids used during drilling, completions, or recompletions operations.	4/9/2026
matthew.gomez	If cement does not circulate to surface on any string, a Cement Bond Log (CBL) is required for that string of casing. If strata isolation is not achieved, remediation will be required before further operations may commence.	4/9/2026
matthew.gomez	All conducted logs must be submitted to the OCD.	4/9/2026
matthew.gomez	Cement must be in place for at least eight hours AND achieve a minimum compressive strength of 500 PSI before performing any further operations on the well.	4/9/2026
matthew.gomez	All previous COA's still apply.	4/9/2026