

Project: Rio Blanco County, CO
 Site: ELU O13 496 Pad
 Well: ELU O13 FED 21D-24 496
 Wellbore: Wellbore #1
 Design: Design #3
 Latitude: 39.698689
 Longitude: -108.115241
 Ground Level: 8118.0
 RKB @ 8143.0usft (25')

PROJECT DETAILS: Rio Blanco County, CO
 Geodetic System: Universal Transverse Mercator (US Survey Feet)
 Datum: NAD 1927 - Western US
 Ellipsoid: Clarke 1886
 Zone: Zone 12N (114 W to 108 W)
 System Datum: Mean Sea Level

REFERENCE INFORMATION
 Vertical (TVD) Reference: RKB @ 8143.0usft (25')
 Section (VS) Reference: Slot - 21D-24(0.0N, 0.0E)
 Measured Depth Reference: RKB @ 8143.0usft (25')
 Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3899.0	4116.1	Wasatch
6299.0	6894.3	Wasatch G
6599.0	7016.6	Fort Union
8550.0	9077.2	Ohio Creek
9057.0	9584.3	Williams Fork
11972.0	12500.1	Cameo
12368.0	12896.2	Rollins

SECTION DETAILS

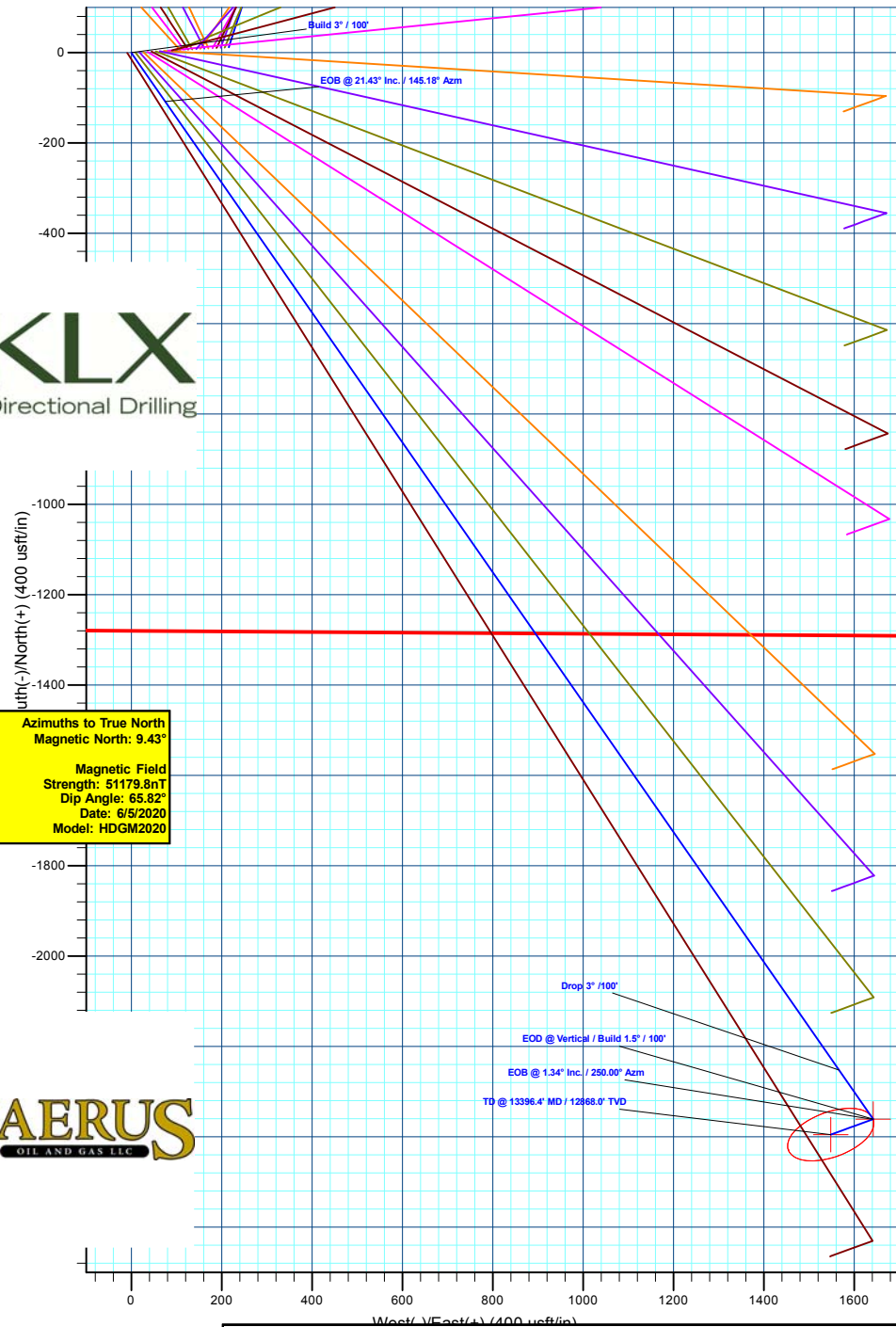
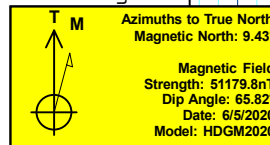
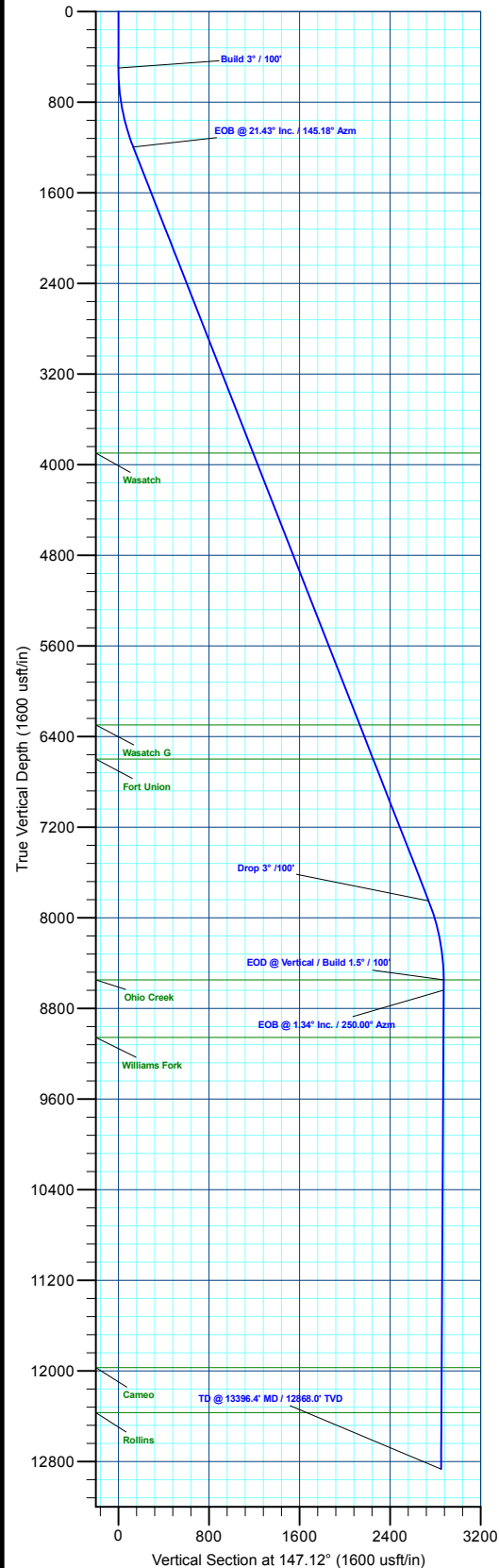
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
1214.3	21.43	145.18	1197.7	-108.4	75.4	3.00	145.18	131.9	EOB @ 21.43° Inc. / 145.18° Azm
8362.9	21.43	145.18	7852.3	-2252.4	1566.7	0.00	0.00	2742.1	Drop 3° / 100'
9077.2	0.00	0.00	8550.0	-2360.7	1642.1	3.00	180.00	2874.0	EOD @ Vertical / Build 1.5° / 100'
9166.6	1.34	250.00	8639.4	-2361.1	1641.1	1.50	250.00	2873.8	EOB @ 1.34° Inc. / 250.00° Azm
13396.4	1.34	250.00	12868.0	-2394.9	1548.1	0.00	0.00	2851.8	TD @ 13396.4' MD / 12868.0' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - 21D-24	8550.0	-2360.7	1642.1	14427078.11	2453638.12	39.692210	-108.109408
PBHL - 21D-24	12868.0	-2394.9	1548.1	14427040.90	2453545.30	39.692116	-108.109741

WELL DETAILS: ELU O13 FED 21D-24 496

+N/-S	+E/-W	Ground Level : 8118.0	Northing	Easting	Latitude	Longitude	21D-24
0.0	0.0		14429384.80	2451920.90	39.698689	-108.115241	



Plan: Design #3 (ELU O13 FED 21D-24 496/Wellbore #1)

Created By: Will Jircik Date: 13:58, November 15 2022



Caerus Oil & Gas

Rio Blanco County, CO

ELU O13 496 Pad

ELU O13 FED 21D-24 496 - Slot 21D-24

Wellbore #1

Plan: Design #3

KLX Well Planning Report

15 November, 2022



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 21D-24 496 - Slot 21D-24
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8143.0usft (25')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8143.0usft (25')
Site:	ELU O13 496 Pad	North Reference:	True
Well:	ELU O13 FED 21D-24 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #3		

Project	Rio Blanco County, CO		
Map System:	Universal Transverse Mercator (US Survey Fee	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	ELU O13 496 Pad			
Site Position:		Northing:	14,429,398.00 usft	Latitude: 39.698712
From: Map		Easting:	2,452,071.40 usft	Longitude: -108.114705
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 1.84 °

Well	ELU O13 FED 21D-24 496 - Slot 21D-24			
Well Position	+N/-S	-8.4 usft	Northing:	14,429,384.80 usft
	+E/-W	-150.8 usft	Easting:	2,451,920.90 usft
Position Uncertainty		0.0 usft	Wellhead Elevation:	Latitude: 39.698689
				Longitude: -108.115241
				Ground Level: 8,118.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2020	6/5/2020	9.43	65.82	51,179.80000000

Design	Design #3			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	147.12

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,214.3	21.43	145.18	1,197.7	-108.4	75.4	3.00	3.00	0.00	145.18	
8,362.9	21.43	145.18	7,852.3	-2,252.4	1,566.7	0.00	0.00	0.00	0.00	
9,077.2	0.00	0.00	8,550.0	-2,360.7	1,642.1	3.00	-3.00	0.00	180.00	OHCR - 21D-24
9,166.6	1.34	250.00	8,639.4	-2,361.1	1,641.1	1.50	1.50	-123.09	250.00	
13,396.4	1.34	250.00	12,868.0	-2,394.9	1,548.1	0.00	0.00	0.00	0.00	PBHL - 21D-24

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 21D-24 496 - Slot 21D-24
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8143.0usft (25')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8143.0usft (25')
Site:	ELU O13 496 Pad	North Reference:	True
Well:	ELU O13 FED 21D-24 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #3		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
Build 3° / 100'									
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	3.00	145.18	600.0	-2.1	1.5	2.6	3.00	3.00	0.00
700.0	6.00	145.18	699.6	-8.6	6.0	10.5	3.00	3.00	0.00
800.0	9.00	145.18	798.8	-19.3	13.4	23.5	3.00	3.00	0.00
900.0	12.00	145.18	897.1	-34.3	23.8	41.7	3.00	3.00	0.00
1,000.0	15.00	145.18	994.3	-53.4	37.2	65.0	3.00	3.00	0.00
1,100.0	18.00	145.18	1,090.2	-76.7	53.4	93.4	3.00	3.00	0.00
1,200.0	21.00	145.18	1,184.4	-104.1	72.4	126.8	3.00	3.00	0.00
EOB @ 21.43° Inc. / 145.18° Azm									
1,214.3	21.43	145.18	1,197.7	-108.4	75.4	131.9	3.00	3.00	0.00
1,300.0	21.43	145.18	1,277.5	-134.1	93.3	163.2	0.00	0.00	0.00
1,400.0	21.43	145.18	1,370.6	-164.1	114.1	199.8	0.00	0.00	0.00
1,500.0	21.43	145.18	1,463.7	-194.1	135.0	236.3	0.00	0.00	0.00
1,600.0	21.43	145.18	1,556.8	-224.1	155.9	272.8	0.00	0.00	0.00
1,700.0	21.43	145.18	1,649.9	-254.1	176.7	309.3	0.00	0.00	0.00
1,800.0	21.43	145.18	1,743.0	-284.0	197.6	345.8	0.00	0.00	0.00
1,900.0	21.43	145.18	1,836.1	-314.0	218.4	382.3	0.00	0.00	0.00
2,000.0	21.43	145.18	1,929.2	-344.0	239.3	418.8	0.00	0.00	0.00
2,100.0	21.43	145.18	2,022.2	-374.0	260.2	455.3	0.00	0.00	0.00
2,200.0	21.43	145.18	2,115.3	-404.0	281.0	491.9	0.00	0.00	0.00
2,300.0	21.43	145.18	2,208.4	-434.0	301.9	528.4	0.00	0.00	0.00
2,400.0	21.43	145.18	2,301.5	-464.0	322.8	564.9	0.00	0.00	0.00
2,500.0	21.43	145.18	2,394.6	-494.0	343.6	601.4	0.00	0.00	0.00
2,600.0	21.43	145.18	2,487.7	-524.0	364.5	637.9	0.00	0.00	0.00
2,700.0	21.43	145.18	2,580.8	-554.0	385.3	674.4	0.00	0.00	0.00
2,800.0	21.43	145.18	2,673.9	-584.0	406.2	710.9	0.00	0.00	0.00
2,900.0	21.43	145.18	2,766.9	-614.0	427.1	747.4	0.00	0.00	0.00
3,000.0	21.43	145.18	2,860.0	-643.9	447.9	784.0	0.00	0.00	0.00
3,100.0	21.43	145.18	2,953.1	-673.9	468.8	820.5	0.00	0.00	0.00
3,200.0	21.43	145.18	3,046.2	-703.9	489.6	857.0	0.00	0.00	0.00
3,300.0	21.43	145.18	3,139.3	-733.9	510.5	893.5	0.00	0.00	0.00
3,400.0	21.43	145.18	3,232.4	-763.9	531.4	930.0	0.00	0.00	0.00
3,500.0	21.43	145.18	3,325.5	-793.9	552.2	966.5	0.00	0.00	0.00
3,600.0	21.43	145.18	3,418.6	-823.9	573.1	1,003.0	0.00	0.00	0.00
3,700.0	21.43	145.18	3,511.6	-853.9	594.0	1,039.5	0.00	0.00	0.00
3,800.0	21.43	145.18	3,604.7	-883.9	614.8	1,076.1	0.00	0.00	0.00
3,900.0	21.43	145.18	3,697.8	-913.9	635.7	1,112.6	0.00	0.00	0.00
4,000.0	21.43	145.18	3,790.9	-943.9	656.5	1,149.1	0.00	0.00	0.00
4,100.0	21.43	145.18	3,884.0	-973.8	677.4	1,185.6	0.00	0.00	0.00
Wasatch									
4,116.1	21.43	145.18	3,899.0	-978.7	680.8	1,191.5	0.00	0.00	0.00
4,200.0	21.43	145.18	3,977.1	-1,003.8	698.3	1,222.1	0.00	0.00	0.00
4,300.0	21.43	145.18	4,070.2	-1,033.8	719.1	1,258.6	0.00	0.00	0.00
4,400.0	21.43	145.18	4,163.3	-1,063.8	740.0	1,295.1	0.00	0.00	0.00
4,500.0	21.43	145.18	4,256.3	-1,093.8	760.8	1,331.6	0.00	0.00	0.00
4,600.0	21.43	145.18	4,349.4	-1,123.8	781.7	1,368.2	0.00	0.00	0.00
4,700.0	21.43	145.18	4,442.5	-1,153.8	802.6	1,404.7	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 21D-24 496 - Slot 21D-24
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8143.0usft (25')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8143.0usft (25')
Site:	ELU O13 496 Pad	North Reference:	True
Well:	ELU O13 FED 21D-24 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #3		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,800.0	21.43	145.18	4,535.6	-1,183.8	823.4	1,441.2	0.00	0.00	0.00
4,900.0	21.43	145.18	4,628.7	-1,213.8	844.3	1,477.7	0.00	0.00	0.00
5,000.0	21.43	145.18	4,721.8	-1,243.8	865.2	1,514.2	0.00	0.00	0.00
5,100.0	21.43	145.18	4,814.9	-1,273.8	886.0	1,550.7	0.00	0.00	0.00
5,200.0	21.43	145.18	4,908.0	-1,303.8	906.9	1,587.2	0.00	0.00	0.00
5,300.0	21.43	145.18	5,001.0	-1,333.7	927.7	1,623.7	0.00	0.00	0.00
5,400.0	21.43	145.18	5,094.1	-1,363.7	948.6	1,660.3	0.00	0.00	0.00
5,500.0	21.43	145.18	5,187.2	-1,393.7	969.5	1,696.8	0.00	0.00	0.00
5,600.0	21.43	145.18	5,280.3	-1,423.7	990.3	1,733.3	0.00	0.00	0.00
5,700.0	21.43	145.18	5,373.4	-1,453.7	1,011.2	1,769.8	0.00	0.00	0.00
5,800.0	21.43	145.18	5,466.5	-1,483.7	1,032.1	1,806.3	0.00	0.00	0.00
5,900.0	21.43	145.18	5,559.6	-1,513.7	1,052.9	1,842.8	0.00	0.00	0.00
6,000.0	21.43	145.18	5,652.7	-1,543.7	1,073.8	1,879.3	0.00	0.00	0.00
6,100.0	21.43	145.18	5,745.7	-1,573.7	1,094.6	1,915.8	0.00	0.00	0.00
6,200.0	21.43	145.18	5,838.8	-1,603.7	1,115.5	1,952.4	0.00	0.00	0.00
6,300.0	21.43	145.18	5,931.9	-1,633.7	1,136.4	1,988.9	0.00	0.00	0.00
6,400.0	21.43	145.18	6,025.0	-1,663.7	1,157.2	2,025.4	0.00	0.00	0.00
6,500.0	21.43	145.18	6,118.1	-1,693.6	1,178.1	2,061.9	0.00	0.00	0.00
6,600.0	21.43	145.18	6,211.2	-1,723.6	1,198.9	2,098.4	0.00	0.00	0.00
Wasatch G									
6,694.3	21.43	145.18	6,299.0	-1,751.9	1,218.6	2,132.9	0.00	0.00	0.00
6,700.0	21.43	145.18	6,304.3	-1,753.6	1,219.8	2,134.9	0.00	0.00	0.00
6,800.0	21.43	145.18	6,397.4	-1,783.6	1,240.7	2,171.4	0.00	0.00	0.00
6,900.0	21.43	145.18	6,490.4	-1,813.6	1,261.5	2,207.9	0.00	0.00	0.00
7,000.0	21.43	145.18	6,583.5	-1,843.6	1,282.4	2,244.5	0.00	0.00	0.00
Fort Union									
7,016.6	21.43	145.18	6,599.0	-1,848.6	1,285.9	2,250.5	0.00	0.00	0.00
7,100.0	21.43	145.18	6,676.6	-1,873.6	1,303.3	2,281.0	0.00	0.00	0.00
7,200.0	21.43	145.18	6,769.7	-1,903.6	1,324.1	2,317.5	0.00	0.00	0.00
7,300.0	21.43	145.18	6,862.8	-1,933.6	1,345.0	2,354.0	0.00	0.00	0.00
7,400.0	21.43	145.18	6,955.9	-1,963.6	1,365.8	2,390.5	0.00	0.00	0.00
7,500.0	21.43	145.18	7,049.0	-1,993.6	1,386.7	2,427.0	0.00	0.00	0.00
7,600.0	21.43	145.18	7,142.1	-2,023.5	1,407.6	2,463.5	0.00	0.00	0.00
7,700.0	21.43	145.18	7,235.1	-2,053.5	1,428.4	2,500.1	0.00	0.00	0.00
7,800.0	21.43	145.18	7,328.2	-2,083.5	1,449.3	2,536.6	0.00	0.00	0.00
7,900.0	21.43	145.18	7,421.3	-2,113.5	1,470.2	2,573.1	0.00	0.00	0.00
8,000.0	21.43	145.18	7,514.4	-2,143.5	1,491.0	2,609.6	0.00	0.00	0.00
8,100.0	21.43	145.18	7,607.5	-2,173.5	1,511.9	2,646.1	0.00	0.00	0.00
8,200.0	21.43	145.18	7,700.6	-2,203.5	1,532.7	2,682.6	0.00	0.00	0.00
8,300.0	21.43	145.18	7,793.7	-2,233.5	1,553.6	2,719.1	0.00	0.00	0.00
Drop 3° /100'									
8,362.9	21.43	145.18	7,852.3	-2,252.4	1,566.7	2,742.1	0.00	0.00	0.00
8,400.0	20.32	145.18	7,886.9	-2,263.2	1,574.3	2,755.3	3.00	-3.00	0.00
8,500.0	17.32	145.18	7,981.5	-2,289.7	1,592.7	2,787.5	3.00	-3.00	0.00
8,600.0	14.32	145.18	8,077.7	-2,312.1	1,608.2	2,814.8	3.00	-3.00	0.00
8,700.0	11.32	145.18	8,175.2	-2,330.3	1,620.9	2,836.9	3.00	-3.00	0.00
8,800.0	8.32	145.18	8,273.8	-2,344.3	1,630.6	2,854.0	3.00	-3.00	0.00
8,900.0	5.32	145.18	8,373.0	-2,354.0	1,637.4	2,865.8	3.00	-3.00	0.00
9,000.0	2.32	145.18	8,472.8	-2,359.5	1,641.2	2,872.5	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
9,077.2	0.00	0.00	8,550.0	-2,360.7	1,642.1	2,874.0	3.00	-3.00	0.00
9,100.0	0.34	250.00	8,572.8	-2,360.8	1,642.1	2,874.0	1.50	1.50	0.00
EOB @ 1.34° Inc. / 250.00° Azm									
9,166.6	1.34	250.00	8,639.4	-2,361.1	1,641.1	2,873.8	1.50	1.50	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 21D-24 496 - Slot 21D-24
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8143.0usft (25')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8143.0usft (25')
Site:	ELU O13 496 Pad	North Reference:	True
Well:	ELU O13 FED 21D-24 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #3		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,200.0	1.34	250.00	8,672.8	-2,361.4	1,640.4	2,873.6	0.00	0.00	0.00
9,300.0	1.34	250.00	8,772.7	-2,362.2	1,638.2	2,873.1	0.00	0.00	0.00
9,400.0	1.34	250.00	8,872.7	-2,363.0	1,636.0	2,872.6	0.00	0.00	0.00
9,500.0	1.34	250.00	8,972.7	-2,363.8	1,633.8	2,872.1	0.00	0.00	0.00
Williams Fork									
9,584.3	1.34	250.00	9,057.0	-2,364.4	1,632.0	2,871.6	0.00	0.00	0.00
9,600.0	1.34	250.00	9,072.7	-2,364.6	1,631.6	2,871.6	0.00	0.00	0.00
9,700.0	1.34	250.00	9,172.6	-2,365.4	1,629.4	2,871.0	0.00	0.00	0.00
9,800.0	1.34	250.00	9,272.6	-2,366.2	1,627.2	2,870.5	0.00	0.00	0.00
9,900.0	1.34	250.00	9,372.6	-2,367.0	1,625.0	2,870.0	0.00	0.00	0.00
10,000.0	1.34	250.00	9,472.5	-2,367.8	1,622.8	2,869.5	0.00	0.00	0.00
10,100.0	1.34	250.00	9,572.5	-2,368.6	1,620.6	2,868.9	0.00	0.00	0.00
10,200.0	1.34	250.00	9,672.5	-2,369.4	1,618.4	2,868.4	0.00	0.00	0.00
10,300.0	1.34	250.00	9,772.5	-2,370.2	1,616.2	2,867.9	0.00	0.00	0.00
10,400.0	1.34	250.00	9,872.4	-2,371.0	1,614.0	2,867.4	0.00	0.00	0.00
10,500.0	1.34	250.00	9,972.4	-2,371.8	1,611.8	2,866.9	0.00	0.00	0.00
10,600.0	1.34	250.00	10,072.4	-2,372.6	1,609.6	2,866.3	0.00	0.00	0.00
10,700.0	1.34	250.00	10,172.4	-2,373.4	1,607.4	2,865.8	0.00	0.00	0.00
10,800.0	1.34	250.00	10,272.3	-2,374.2	1,605.2	2,865.3	0.00	0.00	0.00
10,900.0	1.34	250.00	10,372.3	-2,375.0	1,603.0	2,864.8	0.00	0.00	0.00
11,000.0	1.34	250.00	10,472.3	-2,375.8	1,600.8	2,864.3	0.00	0.00	0.00
11,100.0	1.34	250.00	10,572.2	-2,376.6	1,598.6	2,863.7	0.00	0.00	0.00
11,200.0	1.34	250.00	10,672.2	-2,377.4	1,596.4	2,863.2	0.00	0.00	0.00
11,300.0	1.34	250.00	10,772.2	-2,378.2	1,594.2	2,862.7	0.00	0.00	0.00
11,400.0	1.34	250.00	10,872.2	-2,379.0	1,592.0	2,862.2	0.00	0.00	0.00
11,500.0	1.34	250.00	10,972.1	-2,379.8	1,589.8	2,861.6	0.00	0.00	0.00
11,600.0	1.34	250.00	11,072.1	-2,380.6	1,587.6	2,861.1	0.00	0.00	0.00
11,700.0	1.34	250.00	11,172.1	-2,381.4	1,585.4	2,860.6	0.00	0.00	0.00
11,800.0	1.34	250.00	11,272.1	-2,382.2	1,583.2	2,860.1	0.00	0.00	0.00
11,900.0	1.34	250.00	11,372.0	-2,383.0	1,581.0	2,859.6	0.00	0.00	0.00
12,000.0	1.34	250.00	11,472.0	-2,383.8	1,578.8	2,859.0	0.00	0.00	0.00
12,100.0	1.34	250.00	11,572.0	-2,384.6	1,576.6	2,858.5	0.00	0.00	0.00
12,200.0	1.34	250.00	11,671.9	-2,385.4	1,574.5	2,858.0	0.00	0.00	0.00
12,300.0	1.34	250.00	11,771.9	-2,386.2	1,572.3	2,857.5	0.00	0.00	0.00
12,400.0	1.34	250.00	11,871.9	-2,387.0	1,570.1	2,857.0	0.00	0.00	0.00
12,500.0	1.34	250.00	11,971.9	-2,387.8	1,567.9	2,856.4	0.00	0.00	0.00
Cameo									
12,500.1	1.34	250.00	11,972.0	-2,387.8	1,567.9	2,856.4	0.00	0.00	0.00
12,600.0	1.34	250.00	12,071.8	-2,388.6	1,565.7	2,855.9	0.00	0.00	0.00
12,700.0	1.34	250.00	12,171.8	-2,389.4	1,563.5	2,855.4	0.00	0.00	0.00
12,800.0	1.34	250.00	12,271.8	-2,390.2	1,561.3	2,854.9	0.00	0.00	0.00
Rollins									
12,896.2	1.34	250.00	12,368.0	-2,390.9	1,559.1	2,854.4	0.00	0.00	0.00
12,900.0	1.34	250.00	12,371.8	-2,391.0	1,559.1	2,854.3	0.00	0.00	0.00
13,000.0	1.34	250.00	12,471.7	-2,391.8	1,556.9	2,853.8	0.00	0.00	0.00
13,100.0	1.34	250.00	12,571.7	-2,392.6	1,554.7	2,853.3	0.00	0.00	0.00
13,200.0	1.34	250.00	12,671.7	-2,393.4	1,552.5	2,852.8	0.00	0.00	0.00
13,300.0	1.34	250.00	12,771.6	-2,394.2	1,550.3	2,852.3	0.00	0.00	0.00
TD @ 13396.4' MD / 12868.0' TVD									
13,396.4	1.34	250.00	12,868.0	-2,394.9	1,548.1	2,851.8	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 21D-24 496 - Slot 21D-24
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8143.0usft (25')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8143.0usft (25')
Site:	ELU O13 496 Pad	North Reference:	True
Well:	ELU O13 FED 21D-24 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #3		

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
OHCR - 21D-24 - plan hits target center - Point	0.00	0.00	8,550.0	-2,360.7	1,642.1	14,427,078.11	2,453,638.12	39.692210	-108.109408
PBHL - 21D-24 - plan hits target center - Ellipse (radii L100.0 W50.0 on 250.00 azi)	0.00	0.00	12,868.0	-2,394.9	1,548.1	14,427,040.90	2,453,545.30	39.692116	-108.109742

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,116.1	3,899.0	Wasatch			
6,694.3	6,299.0	Wasatch G			
7,016.6	6,599.0	Fort Union			
9,077.2	8,550.0	Ohio Creek			
9,584.3	9,057.0	Williams Fork			
12,500.1	11,972.0	Cameo			
12,896.2	12,368.0	Rollins			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
500.0	500.0	0.0	0.0	Build 3° / 100'
1,214.3	1,197.7	-108.4	75.4	EOB @ 21.43° Inc. / 145.18° Azm
8,362.9	7,852.3	-2,252.4	1,566.7	Drop 3° / 100'
9,077.2	8,550.0	-2,360.7	1,642.1	EOD @ Vertical / Build 1.5° / 100'
9,166.6	8,639.4	-2,361.1	1,641.1	EOB @ 1.34° Inc. / 250.00° Azm
13,396.4	12,868.0	-2,394.9	1,548.1	TD @ 13396.4' MD / 12868.0' TVD