

Project: Rio Blanco County, CO
 Site: ELU O13 496 Pad
 Well: ELU O13 FED 21D-24 496
 Wellbore: Wellbore #1
 Design: Design #4
 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	4114.2	Wasatch
6299.0	6690.6	Wasatch G
6599.0	7012.7	Fort Union
8584.0	9108.9	Ohio Creek
9057.0	9582.0	Williams Fork
11768.0	12293.8	Cameo
12318.0	12843.9	Rollins

SECTION DETAILS

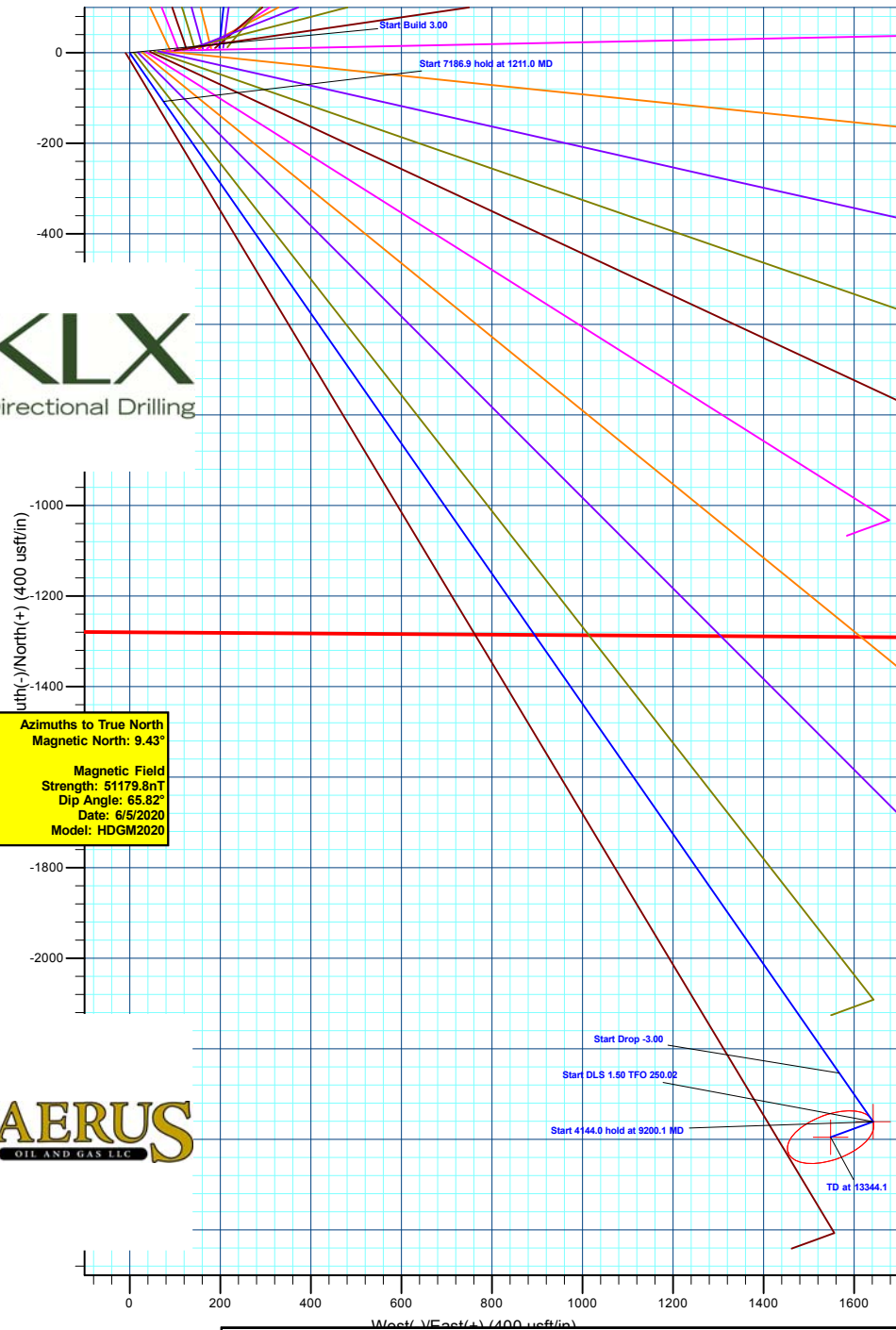
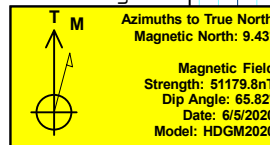
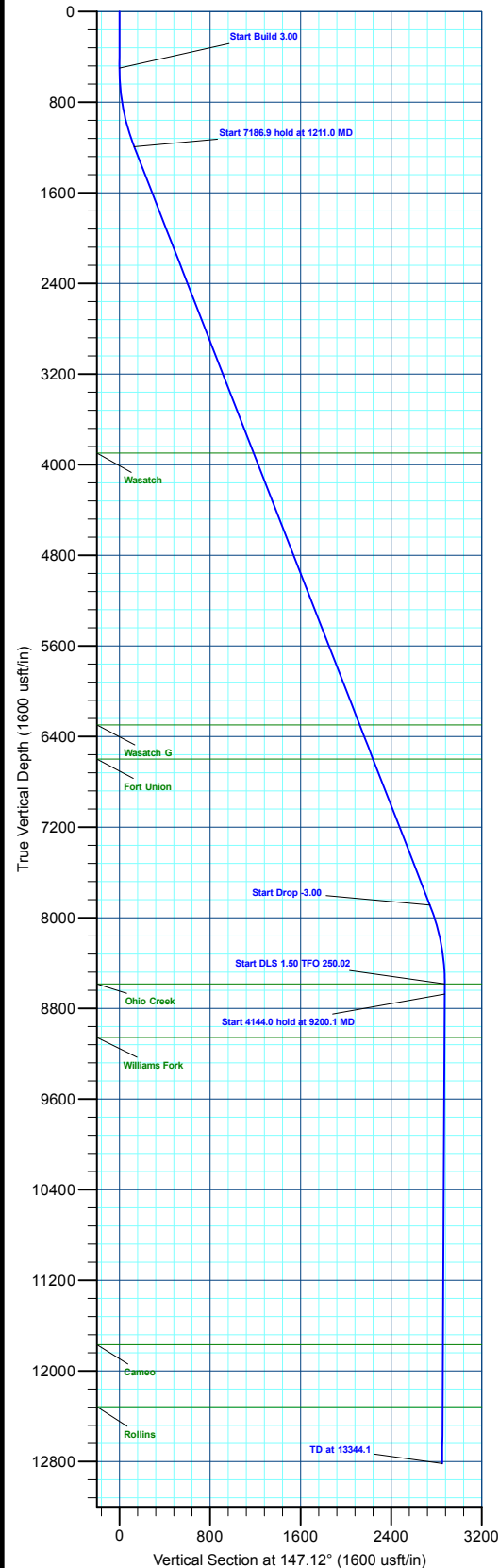
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	Start Build 3.00
1211.0	21.33	145.18	1194.7	-107.4	74.7	3.00	145.18	130.7	Start 7186.9 hold at 1211.0 MD
8397.9	21.33	145.18	7889.3	-2253.4	1567.4	0.00	0.00	2743.3	Start Drop -3.00
9108.9	0.00	0.00	8584.0	-2360.8	1642.1	3.00	180.00	2874.1	Start DLS 1.50 TFO 250.02
9200.1	1.37	250.02	8675.2	-2361.1	1641.1	1.50	250.02	2873.8	Start 4144.0 hold at 9200.1 MD
13344.1	1.37	250.02	12818.0	-2394.9	1548.1	0.00	0.00	2851.8	TD at 13344.1

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
21D-24 - OHCR	8584.0	-2360.8	1642.1	14427078.08	2453638.13	39.692210	-108.109408
21D-24 - PBHL	12818.0	-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 #4 (ELU O13 FED 21D-24 496/Wellbore #1)

Created By: Will Jircik

Date: 12:15, February 28 2023



Caerus Oil & Gas

Rio Blanco County, CO

ELU O13 496 Pad

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

Wellbore #1

Plan: Design #4

KLX Well Planning Report

27 February, 2023



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 #4		

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	Latitude:	39.698689
	+E/-W	-150.8 usft	Easting:	2,451,920.90 usft	Longitude:	-108.115241
Position Uncertainty		0.0 usft	Wellhead Elevation:		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 #4			
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	
1,211.0	21.33	145.18	1,194.7	-107.4	74.7	3.00	3.00	0.00	145.18	
8,397.9	21.33	145.18	7,889.3	-2,253.4	1,567.4	0.00	0.00	0.00	0.00	
9,108.9	0.00	0.00	8,584.0	-2,360.8	1,642.1	3.00	-3.00	0.00	180.00	21D-24 - OHCR
9,200.1	1.37	250.02	8,675.2	-2,361.1	1,641.1	1.50	1.50	-120.62	250.02	
13,344.1	1.37	250.02	12,818.0	-2,394.9	1,548.1	0.00	0.00	0.00	0.00	21D-24 - PBHL

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 #4		

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
Start Build 3.00									
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
Start 7186.9 hold at 1211.0 MD									
1,211.0	21.33	145.18	1,194.7	-107.4	74.7	130.7	3.00	3.00	0.00
1,300.0	21.33	145.18	1,277.6	-134.0	93.2	163.1	0.00	0.00	0.00
1,400.0	21.33	145.18	1,370.7	-163.8	114.0	199.5	0.00	0.00	0.00
1,500.0	21.33	145.18	1,463.9	-193.7	134.7	235.8	0.00	0.00	0.00
1,600.0	21.33	145.18	1,557.0	-223.6	155.5	272.2	0.00	0.00	0.00
1,700.0	21.33	145.18	1,650.2	-253.4	176.3	308.5	0.00	0.00	0.00
1,800.0	21.33	145.18	1,743.3	-283.3	197.0	344.9	0.00	0.00	0.00
1,900.0	21.33	145.18	1,836.5	-313.1	217.8	381.2	0.00	0.00	0.00
2,000.0	21.33	145.18	1,929.6	-343.0	238.6	417.6	0.00	0.00	0.00
2,100.0	21.33	145.18	2,022.8	-372.8	259.3	453.9	0.00	0.00	0.00
2,200.0	21.33	145.18	2,115.9	-402.7	280.1	490.3	0.00	0.00	0.00
2,300.0	21.33	145.18	2,209.1	-432.6	300.9	526.6	0.00	0.00	0.00
2,400.0	21.33	145.18	2,302.2	-462.4	321.7	563.0	0.00	0.00	0.00
2,500.0	21.33	145.18	2,395.4	-492.3	342.4	599.3	0.00	0.00	0.00
2,600.0	21.33	145.18	2,488.6	-522.1	363.2	635.7	0.00	0.00	0.00
2,700.0	21.33	145.18	2,581.7	-552.0	384.0	672.0	0.00	0.00	0.00
2,800.0	21.33	145.18	2,674.9	-581.9	404.7	708.4	0.00	0.00	0.00
2,900.0	21.33	145.18	2,768.0	-611.7	425.5	744.7	0.00	0.00	0.00
3,000.0	21.33	145.18	2,861.2	-641.6	446.3	781.1	0.00	0.00	0.00
3,100.0	21.33	145.18	2,954.3	-671.4	467.1	817.4	0.00	0.00	0.00
3,200.0	21.33	145.18	3,047.5	-701.3	487.8	853.8	0.00	0.00	0.00
3,300.0	21.33	145.18	3,140.6	-731.2	508.6	890.1	0.00	0.00	0.00
3,400.0	21.33	145.18	3,233.8	-761.0	529.4	926.5	0.00	0.00	0.00
3,500.0	21.33	145.18	3,326.9	-790.9	550.1	962.8	0.00	0.00	0.00
3,600.0	21.33	145.18	3,420.1	-820.7	570.9	999.2	0.00	0.00	0.00
3,700.0	21.33	145.18	3,513.2	-850.6	591.7	1,035.6	0.00	0.00	0.00
3,800.0	21.33	145.18	3,606.4	-880.5	612.4	1,071.9	0.00	0.00	0.00
3,900.0	21.33	145.18	3,699.5	-910.3	633.2	1,108.3	0.00	0.00	0.00
4,000.0	21.33	145.18	3,792.7	-940.2	654.0	1,144.6	0.00	0.00	0.00
4,100.0	21.33	145.18	3,885.8	-970.0	674.8	1,181.0	0.00	0.00	0.00
Wasatch									
4,114.2	21.33	145.18	3,899.0	-974.3	677.7	1,186.1	0.00	0.00	0.00
4,200.0	21.33	145.18	3,979.0	-999.9	695.5	1,217.3	0.00	0.00	0.00
4,300.0	21.33	145.18	4,072.1	-1,029.8	716.3	1,253.7	0.00	0.00	0.00
4,400.0	21.33	145.18	4,165.3	-1,059.6	737.1	1,290.0	0.00	0.00	0.00
4,500.0	21.33	145.18	4,258.4	-1,089.5	757.8	1,326.4	0.00	0.00	0.00
4,600.0	21.33	145.18	4,351.6	-1,119.3	778.6	1,362.7	0.00	0.00	0.00
4,700.0	21.33	145.18	4,444.7	-1,149.2	799.4	1,399.1	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 #4		

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	21.33	145.18	4,537.9	-1,179.1	820.1	1,435.4	0.00	0.00	0.00
4,900.0	21.33	145.18	4,631.0	-1,208.9	840.9	1,471.8	0.00	0.00	0.00
5,000.0	21.33	145.18	4,724.2	-1,238.8	861.7	1,508.1	0.00	0.00	0.00
5,100.0	21.33	145.18	4,817.3	-1,268.6	882.5	1,544.5	0.00	0.00	0.00
5,200.0	21.33	145.18	4,910.5	-1,298.5	903.2	1,580.8	0.00	0.00	0.00
5,300.0	21.33	145.18	5,003.6	-1,328.4	924.0	1,617.2	0.00	0.00	0.00
5,400.0	21.33	145.18	5,096.8	-1,358.2	944.8	1,653.5	0.00	0.00	0.00
5,500.0	21.33	145.18	5,189.9	-1,388.1	965.5	1,689.9	0.00	0.00	0.00
5,600.0	21.33	145.18	5,283.1	-1,417.9	986.3	1,726.2	0.00	0.00	0.00
5,700.0	21.33	145.18	5,376.2	-1,447.8	1,007.1	1,762.6	0.00	0.00	0.00
5,800.0	21.33	145.18	5,469.4	-1,477.7	1,027.8	1,798.9	0.00	0.00	0.00
5,900.0	21.33	145.18	5,562.5	-1,507.5	1,048.6	1,835.3	0.00	0.00	0.00
6,000.0	21.33	145.18	5,655.7	-1,537.4	1,069.4	1,871.6	0.00	0.00	0.00
6,100.0	21.33	145.18	5,748.8	-1,567.2	1,090.2	1,908.0	0.00	0.00	0.00
6,200.0	21.33	145.18	5,842.0	-1,597.1	1,110.9	1,944.4	0.00	0.00	0.00
6,300.0	21.33	145.18	5,935.1	-1,627.0	1,131.7	1,980.7	0.00	0.00	0.00
6,400.0	21.33	145.18	6,028.3	-1,656.8	1,152.5	2,017.1	0.00	0.00	0.00
6,500.0	21.33	145.18	6,121.4	-1,686.7	1,173.2	2,053.4	0.00	0.00	0.00
6,600.0	21.33	145.18	6,214.6	-1,716.5	1,194.0	2,089.8	0.00	0.00	0.00
Wasatch G									
6,690.6	21.33	145.18	6,299.0	-1,743.6	1,212.8	2,122.7	0.00	0.00	0.00
6,700.0	21.33	145.18	6,307.7	-1,746.4	1,214.8	2,126.1	0.00	0.00	0.00
6,800.0	21.33	145.18	6,400.9	-1,776.3	1,235.5	2,162.5	0.00	0.00	0.00
6,900.0	21.33	145.18	6,494.0	-1,806.1	1,256.3	2,198.8	0.00	0.00	0.00
7,000.0	21.33	145.18	6,587.2	-1,836.0	1,277.1	2,235.2	0.00	0.00	0.00
Fort Union									
7,012.7	21.33	145.18	6,599.0	-1,839.8	1,279.7	2,239.8	0.00	0.00	0.00
7,100.0	21.33	145.18	6,680.3	-1,865.8	1,297.9	2,271.5	0.00	0.00	0.00
7,200.0	21.33	145.18	6,773.5	-1,895.7	1,318.6	2,307.9	0.00	0.00	0.00
7,300.0	21.33	145.18	6,866.6	-1,925.6	1,339.4	2,344.2	0.00	0.00	0.00
7,400.0	21.33	145.18	6,959.8	-1,955.4	1,360.2	2,380.6	0.00	0.00	0.00
7,500.0	21.33	145.18	7,052.9	-1,985.3	1,380.9	2,416.9	0.00	0.00	0.00
7,600.0	21.33	145.18	7,146.1	-2,015.1	1,401.7	2,453.3	0.00	0.00	0.00
7,700.0	21.33	145.18	7,239.2	-2,045.0	1,422.5	2,489.6	0.00	0.00	0.00
7,800.0	21.33	145.18	7,332.4	-2,074.8	1,443.2	2,526.0	0.00	0.00	0.00
7,900.0	21.33	145.18	7,425.5	-2,104.7	1,464.0	2,562.3	0.00	0.00	0.00
8,000.0	21.33	145.18	7,518.7	-2,134.6	1,484.8	2,598.7	0.00	0.00	0.00
8,100.0	21.33	145.18	7,611.8	-2,164.4	1,505.6	2,635.0	0.00	0.00	0.00
8,200.0	21.33	145.18	7,705.0	-2,194.3	1,526.3	2,671.4	0.00	0.00	0.00
8,300.0	21.33	145.18	7,798.1	-2,224.1	1,547.1	2,707.7	0.00	0.00	0.00
Start Drop -3.00									
8,397.9	21.33	145.18	7,889.3	-2,253.4	1,567.4	2,743.3	0.00	0.00	0.00
8,400.0	21.27	145.18	7,891.3	-2,254.0	1,567.9	2,744.1	3.00	-3.00	0.00
8,500.0	18.27	145.18	7,985.4	-2,281.8	1,587.2	2,777.9	3.00	-3.00	0.00
8,600.0	15.27	145.18	8,081.1	-2,305.4	1,603.6	2,806.7	3.00	-3.00	0.00
8,700.0	12.27	145.18	8,178.2	-2,325.0	1,617.2	2,830.5	3.00	-3.00	0.00
8,800.0	9.27	145.18	8,276.5	-2,340.3	1,627.9	2,849.2	3.00	-3.00	0.00
8,900.0	6.27	145.18	8,375.5	-2,351.4	1,635.6	2,862.7	3.00	-3.00	0.00
9,000.0	3.27	145.18	8,475.2	-2,358.2	1,640.4	2,871.0	3.00	-3.00	0.00
Start DLS 1.50 TFO 250.02 - Ohio Creek									
9,108.9	0.00	0.00	8,584.0	-2,360.8	1,642.1	2,874.1	3.00	-3.00	0.00
Start 4144.0 hold at 9200.1 MD									
9,200.1	1.37	250.02	8,675.2	-2,361.1	1,641.1	2,873.8	1.50	1.50	0.00
9,300.0	1.37	250.02	8,775.1	-2,362.0	1,638.9	2,873.3	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 #4		

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)
9,400.0	1.37	250.02	8,875.0	-2,362.8	1,636.6	2,872.8	0.00	0.00	0.00
9,500.0	1.37	250.02	8,975.0	-2,363.6	1,634.4	2,872.2	0.00	0.00	0.00
Williams Fork									
9,582.0	1.37	250.02	9,057.0	-2,364.3	1,632.5	2,871.8	0.00	0.00	0.00
9,600.0	1.37	250.02	9,075.0	-2,364.4	1,632.1	2,871.7	0.00	0.00	0.00
9,700.0	1.37	250.02	9,175.0	-2,365.2	1,629.9	2,871.2	0.00	0.00	0.00
9,800.0	1.37	250.02	9,274.9	-2,366.0	1,627.6	2,870.6	0.00	0.00	0.00
9,900.0	1.37	250.02	9,374.9	-2,366.9	1,625.4	2,870.1	0.00	0.00	0.00
10,000.0	1.37	250.02	9,474.9	-2,367.7	1,623.2	2,869.6	0.00	0.00	0.00
10,100.0	1.37	250.02	9,574.8	-2,368.5	1,620.9	2,869.0	0.00	0.00	0.00
10,200.0	1.37	250.02	9,674.8	-2,369.3	1,618.7	2,868.5	0.00	0.00	0.00
10,300.0	1.37	250.02	9,774.8	-2,370.1	1,616.4	2,868.0	0.00	0.00	0.00
10,400.0	1.37	250.02	9,874.8	-2,370.9	1,614.2	2,867.4	0.00	0.00	0.00
10,500.0	1.37	250.02	9,974.7	-2,371.7	1,611.9	2,866.9	0.00	0.00	0.00
10,600.0	1.37	250.02	10,074.7	-2,372.6	1,609.7	2,866.4	0.00	0.00	0.00
10,700.0	1.37	250.02	10,174.7	-2,373.4	1,607.5	2,865.8	0.00	0.00	0.00
10,800.0	1.37	250.02	10,274.6	-2,374.2	1,605.2	2,865.3	0.00	0.00	0.00
10,900.0	1.37	250.02	10,374.6	-2,375.0	1,603.0	2,864.8	0.00	0.00	0.00
11,000.0	1.37	250.02	10,474.6	-2,375.8	1,600.7	2,864.2	0.00	0.00	0.00
11,100.0	1.37	250.02	10,574.6	-2,376.6	1,598.5	2,863.7	0.00	0.00	0.00
11,200.0	1.37	250.02	10,674.5	-2,377.5	1,596.2	2,863.2	0.00	0.00	0.00
11,300.0	1.37	250.02	10,774.5	-2,378.3	1,594.0	2,862.7	0.00	0.00	0.00
11,400.0	1.37	250.02	10,874.5	-2,379.1	1,591.8	2,862.1	0.00	0.00	0.00
11,500.0	1.37	250.02	10,974.4	-2,379.9	1,589.5	2,861.6	0.00	0.00	0.00
11,600.0	1.37	250.02	11,074.4	-2,380.7	1,587.3	2,861.1	0.00	0.00	0.00
11,700.0	1.37	250.02	11,174.4	-2,381.5	1,585.0	2,860.5	0.00	0.00	0.00
11,800.0	1.37	250.02	11,274.4	-2,382.4	1,582.8	2,860.0	0.00	0.00	0.00
11,900.0	1.37	250.02	11,374.3	-2,383.2	1,580.5	2,859.5	0.00	0.00	0.00
12,000.0	1.37	250.02	11,474.3	-2,384.0	1,578.3	2,858.9	0.00	0.00	0.00
12,100.0	1.37	250.02	11,574.3	-2,384.8	1,576.1	2,858.4	0.00	0.00	0.00
12,200.0	1.37	250.02	11,674.2	-2,385.6	1,573.8	2,857.9	0.00	0.00	0.00
Cameo									
12,293.8	1.37	250.02	11,768.0	-2,386.4	1,571.7	2,857.4	0.00	0.00	0.00
12,300.0	1.37	250.02	11,774.2	-2,386.4	1,571.6	2,857.3	0.00	0.00	0.00
12,400.0	1.37	250.02	11,874.2	-2,387.2	1,569.3	2,856.8	0.00	0.00	0.00
12,500.0	1.37	250.02	11,974.2	-2,388.1	1,567.1	2,856.3	0.00	0.00	0.00
12,600.0	1.37	250.02	12,074.1	-2,388.9	1,564.8	2,855.7	0.00	0.00	0.00
12,700.0	1.37	250.02	12,174.1	-2,389.7	1,562.6	2,855.2	0.00	0.00	0.00
12,800.0	1.37	250.02	12,274.1	-2,390.5	1,560.4	2,854.7	0.00	0.00	0.00
Rollins									
12,843.9	1.37	250.02	12,318.0	-2,390.9	1,559.4	2,854.4	0.00	0.00	0.00
12,900.0	1.37	250.02	12,374.0	-2,391.3	1,558.1	2,854.1	0.00	0.00	0.00
13,000.0	1.37	250.02	12,474.0	-2,392.1	1,555.9	2,853.6	0.00	0.00	0.00
13,100.0	1.37	250.02	12,574.0	-2,393.0	1,553.6	2,853.1	0.00	0.00	0.00
13,200.0	1.37	250.02	12,674.0	-2,393.8	1,551.4	2,852.5	0.00	0.00	0.00
13,300.0	1.37	250.02	12,773.9	-2,394.6	1,549.1	2,852.0	0.00	0.00	0.00
TD at 13344.1									
13,344.1	1.37	250.02	12,818.0	-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 #4		

Design Targets

Target Name

- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
21D-24 - OHCR	0.00	0.00	8,584.0	-2,360.8	1,642.1	14,427,078.08	2,453,638.13	39.692210	-108.109408
- plan hits target center									
- Point									
21D-24 - PBHL	0.00	0.00	12,818.0	-2,394.9	1,548.1	14,427,040.90	2,453,545.30	39.692116	-108.109742
- plan hits target center									
- Ellipse (radii L100.0 W50.0 on 250.00 azi)									

Formations

Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(usft)	(usft)			(°)	(°)
4,114.2	3,899.0	Wasatch			
6,690.6	6,299.0	Wasatch G			
7,012.7	6,599.0	Fort Union			
9,108.9	8,584.0	Ohio Creek			
9,582.0	9,057.0	Williams Fork			
12,293.8	11,768.0	Cameo			
12,843.9	12,318.0	Rollins			

Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S	+E/-W	
(usft)	(usft)	(usft)	(usft)	
500.0	500.0	0.0	0.0	Start Build 3.00
1,211.0	1,194.7	-107.4	74.7	Start 7186.9 hold at 1211.0 MD
8,397.9	7,889.3	-2,253.4	1,567.4	Start Drop -3.00
9,108.9	8,584.0	-2,360.8	1,642.1	Start DLS 1.50 TFO 250.02
9,200.1	8,675.2	-2,361.1	1,641.1	Start 4144.0 hold at 9200.1 MD
13,344.1	12,818.0	-2,394.9	1,548.1	TD at 13344.1