

Project: Rio Blanco County, CO
 Site: ELU O13 FED 22A-24 496 Pad
 Well: ELU O13 FED 22A-24 496
 Wellbore: Wellbore #1
 Design: Design #4
 Latitude: 39.698688
 Longitude: -108.115272
 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 - 22A-24(0.0N, 0.0E)
 Measured Depth Reference: RKB @ 8143.0usft (25')
 Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3888.0	4127.8	Wasatch
6288.0	6727.1	Wasatch G
6588.0	7052.0	Fort Union
8572.0	9159.2	Ohio Creek
9047.0	9634.4	Williams Fork
11765.0	12353.1	Cameo
12315.0	12903.3	Rollins

SECTION DETAILS

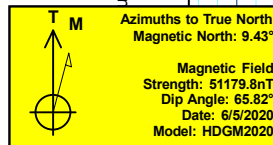
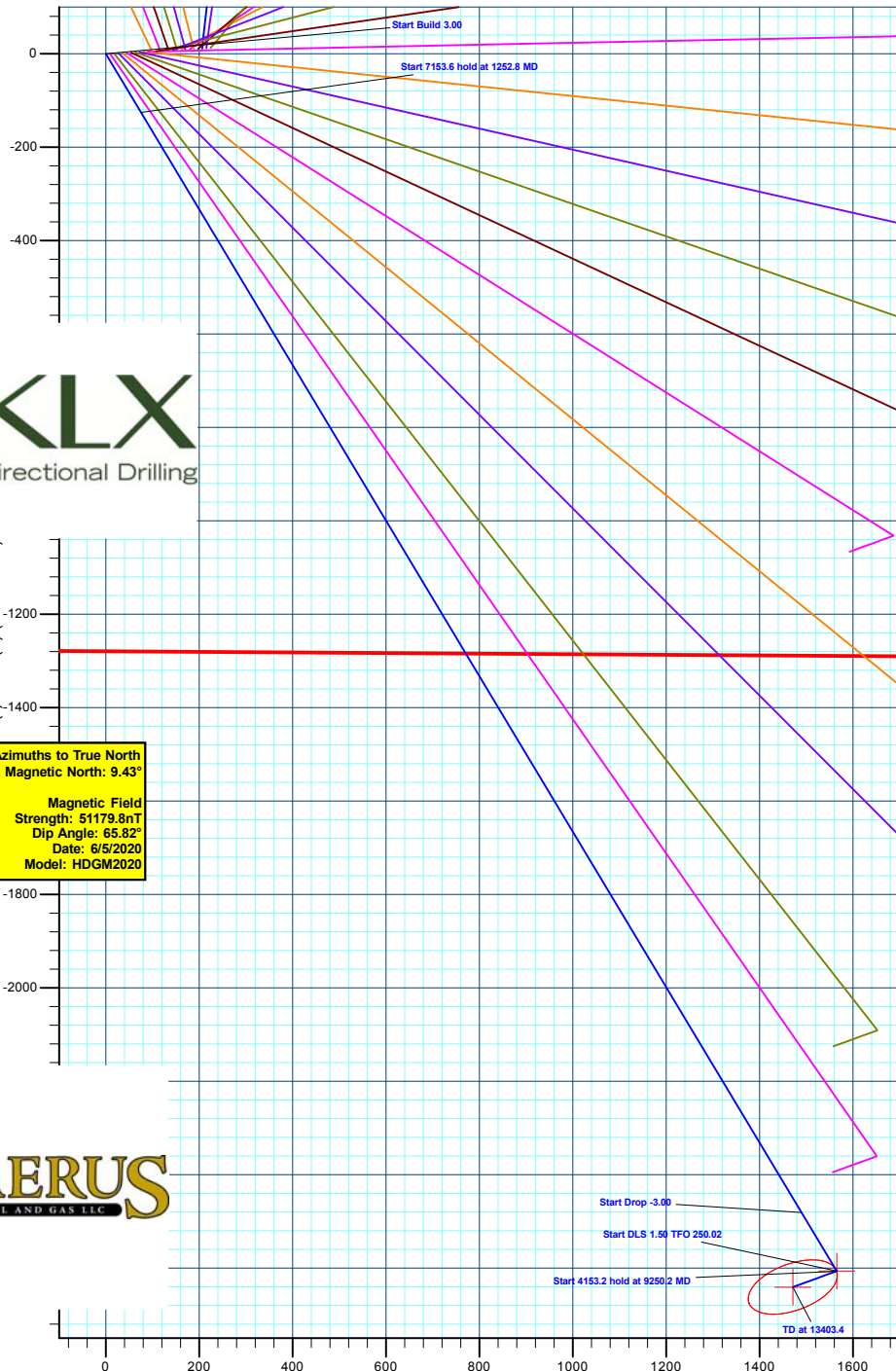
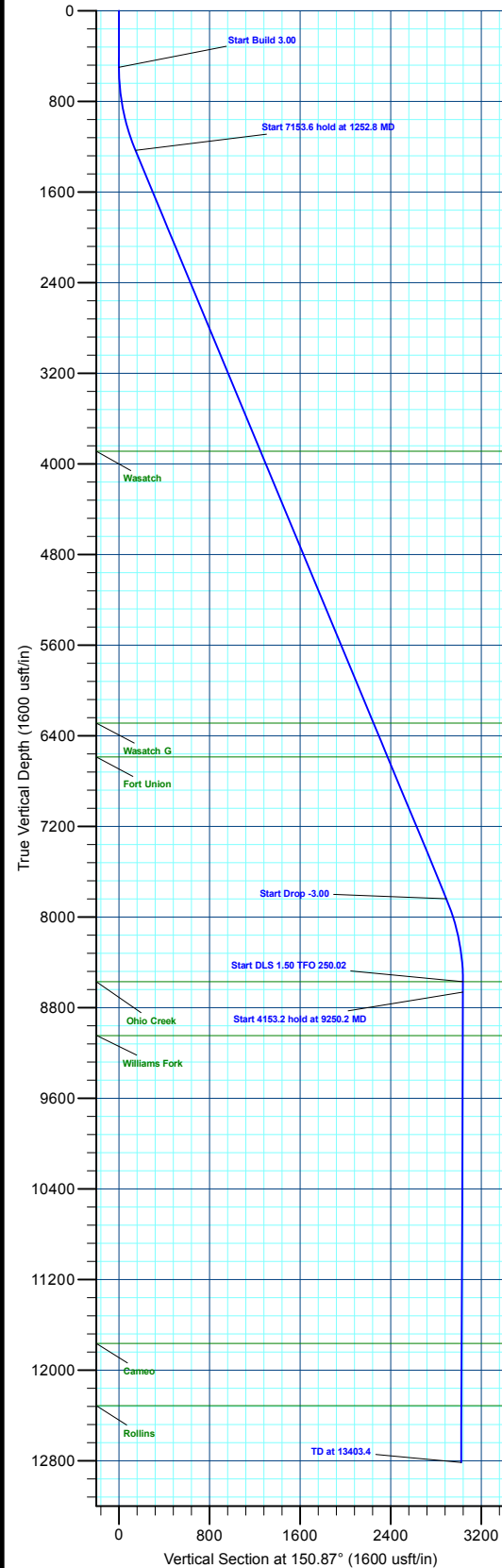
MD	Inc	Azi	TVD	+N/-S	+E/-W	Diep	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	Start Build 3.00
1252.8	22.58	149.01	1233.5	-125.5	75.4	3.00	149.01	146.4	Start 7153.6 hold at 1252.8 MD
8406.4	22.58	149.01	7838.5	-2480.7	1489.9	0.00	0.00	2892.2	Start Drop -3.00
9159.2	0.00	0.00	8572.0	-2606.2	1565.3	3.00	180.00	3038.6	Start DLS 1.50 TFO 250.02
9250.2	1.36	250.02	8663.0	-2606.6	1564.3	1.50	250.02	3038.4	Start 4153.2 hold at 9250.2 MD
13403.4	1.36	250.02	12815.0	-2640.4	1471.3	0.00	0.00	3022.7	TD at 13403.4

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
22A-24 - OHCR	8572.0	-2606.2	1565.3	14426829.48	2453560.33	39.691535	-108.109712
22A-24 - PBHL	12815.0	-2640.4	1471.3	14426792.30	2453467.50	39.691441	-108.110046

WELL DETAILS: ELU O13 FED 22A-24 496

+N/-S	+E/-W	Ground Level : 8118.0	Latitude	Longitude
0.0	0.0	Northing 14429384.00 Easting 2451912.00	39.698688	-108.115272



Plan: Design #4 (ELU O13 FED 22A-24 496/Wellbore #1)

Created By: Will Jircik Date: 12:17, February 28 2023



Caerus Oil & Gas

Rio Blanco County, CO

ELU O13 496 Pad

ELU O13 FED 22A-24 496 - Slot 22A-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 22A-24 496 - Slot 22A-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 22A-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 22A-24 496 - Slot 22A-24					
Well Position	+N/-S	-8.9 usft	Northing:	14,429,384.00 usft	Latitude:	39.698688
	+E/-W	-159.8 usft	Easting:	2,451,912.00 usft	Longitude:	-108.115273
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	150.87

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	
1,252.8	22.58	149.01	1,233.5	-125.5	75.4	3.00	3.00	0.00	149.01	
8,406.4	22.58	149.01	7,838.5	-2,480.7	1,489.9	0.00	0.00	0.00	0.00	
9,159.2	0.00	0.00	8,572.0	-2,606.2	1,565.3	3.00	-3.00	0.00	180.00	22A-24 - OHCR
9,250.2	1.36	250.02	8,663.0	-2,606.6	1,564.3	1.50	1.50	-120.89	250.02	
13,403.4	1.36	250.02	12,815.0	-2,640.4	1,471.3	0.00	0.00	0.00	0.00	22A-24 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 22A-24 496 - Slot 22A-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 22A-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	149.01	600.0	-2.2	1.3	2.6	3.00	3.00	0.00
700.0	6.00	149.01	699.6	-9.0	5.4	10.5	3.00	3.00	0.00
800.0	9.00	149.01	798.8	-20.2	12.1	23.5	3.00	3.00	0.00
900.0	12.00	149.01	897.1	-35.8	21.5	41.7	3.00	3.00	0.00
1,000.0	15.00	149.01	994.3	-55.8	33.5	65.0	3.00	3.00	0.00
1,100.0	18.00	149.01	1,090.2	-80.1	48.1	93.4	3.00	3.00	0.00
1,200.0	21.00	149.01	1,184.4	-108.7	65.3	126.8	3.00	3.00	0.00
Start 7153.6 hold at 1252.8 MD									
1,252.8	22.58	149.01	1,233.5	-125.5	75.4	146.4	3.00	3.00	0.00
1,300.0	22.58	149.01	1,277.0	-141.1	84.7	164.5	0.00	0.00	0.00
1,400.0	22.58	149.01	1,369.4	-174.0	104.5	202.9	0.00	0.00	0.00
1,500.0	22.58	149.01	1,461.7	-206.9	124.3	241.3	0.00	0.00	0.00
1,600.0	22.58	149.01	1,554.0	-239.9	144.1	279.6	0.00	0.00	0.00
1,700.0	22.58	149.01	1,646.4	-272.8	163.8	318.0	0.00	0.00	0.00
1,800.0	22.58	149.01	1,738.7	-305.7	183.6	356.4	0.00	0.00	0.00
1,900.0	22.58	149.01	1,831.0	-338.6	203.4	394.8	0.00	0.00	0.00
2,000.0	22.58	149.01	1,923.4	-371.5	223.1	433.2	0.00	0.00	0.00
2,100.0	22.58	149.01	2,015.7	-404.5	242.9	471.6	0.00	0.00	0.00
2,200.0	22.58	149.01	2,108.0	-437.4	262.7	509.9	0.00	0.00	0.00
2,300.0	22.58	149.01	2,200.4	-470.3	282.5	548.3	0.00	0.00	0.00
2,400.0	22.58	149.01	2,292.7	-503.2	302.2	586.7	0.00	0.00	0.00
2,500.0	22.58	149.01	2,385.0	-536.2	322.0	625.1	0.00	0.00	0.00
2,600.0	22.58	149.01	2,477.4	-569.1	341.8	663.5	0.00	0.00	0.00
2,700.0	22.58	149.01	2,569.7	-602.0	361.6	701.9	0.00	0.00	0.00
2,800.0	22.58	149.01	2,662.0	-634.9	381.3	740.2	0.00	0.00	0.00
2,900.0	22.58	149.01	2,754.3	-667.8	401.1	778.6	0.00	0.00	0.00
3,000.0	22.58	149.01	2,846.7	-700.8	420.9	817.0	0.00	0.00	0.00
3,100.0	22.58	149.01	2,939.0	-733.7	440.6	855.4	0.00	0.00	0.00
3,200.0	22.58	149.01	3,031.3	-766.6	460.4	893.8	0.00	0.00	0.00
3,300.0	22.58	149.01	3,123.7	-799.5	480.2	932.2	0.00	0.00	0.00
3,400.0	22.58	149.01	3,216.0	-832.5	500.0	970.5	0.00	0.00	0.00
3,500.0	22.58	149.01	3,308.3	-865.4	519.7	1,008.9	0.00	0.00	0.00
3,600.0	22.58	149.01	3,400.7	-898.3	539.5	1,047.3	0.00	0.00	0.00
3,700.0	22.58	149.01	3,493.0	-931.2	559.3	1,085.7	0.00	0.00	0.00
3,800.0	22.58	149.01	3,585.3	-964.1	579.1	1,124.1	0.00	0.00	0.00
3,900.0	22.58	149.01	3,677.7	-997.1	598.8	1,162.5	0.00	0.00	0.00
4,000.0	22.58	149.01	3,770.0	-1,030.0	618.6	1,200.8	0.00	0.00	0.00
4,100.0	22.58	149.01	3,862.3	-1,062.9	638.4	1,239.2	0.00	0.00	0.00
Wasatch									
4,127.8	22.58	149.01	3,888.0	-1,072.1	643.9	1,249.9	0.00	0.00	0.00
4,200.0	22.58	149.01	3,954.7	-1,095.8	658.2	1,277.6	0.00	0.00	0.00
4,300.0	22.58	149.01	4,047.0	-1,128.8	677.9	1,316.0	0.00	0.00	0.00
4,400.0	22.58	149.01	4,139.3	-1,161.7	697.7	1,354.4	0.00	0.00	0.00
4,500.0	22.58	149.01	4,231.7	-1,194.6	717.5	1,392.8	0.00	0.00	0.00
4,600.0	22.58	149.01	4,324.0	-1,227.5	737.2	1,431.1	0.00	0.00	0.00
4,700.0	22.58	149.01	4,416.3	-1,260.4	757.0	1,469.5	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 22A-24 496 - Slot 22A-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 22A-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	22.58	149.01	4,508.7	-1,293.4	776.8	1,507.9	0.00	0.00	0.00
4,900.0	22.58	149.01	4,601.0	-1,326.3	796.6	1,546.3	0.00	0.00	0.00
5,000.0	22.58	149.01	4,693.3	-1,359.2	816.3	1,584.7	0.00	0.00	0.00
5,100.0	22.58	149.01	4,785.6	-1,392.1	836.1	1,623.1	0.00	0.00	0.00
5,200.0	22.58	149.01	4,878.0	-1,425.1	855.9	1,661.4	0.00	0.00	0.00
5,300.0	22.58	149.01	4,970.3	-1,458.0	875.7	1,699.8	0.00	0.00	0.00
5,400.0	22.58	149.01	5,062.6	-1,490.9	895.4	1,738.2	0.00	0.00	0.00
5,500.0	22.58	149.01	5,155.0	-1,523.8	915.2	1,776.6	0.00	0.00	0.00
5,600.0	22.58	149.01	5,247.3	-1,556.7	935.0	1,815.0	0.00	0.00	0.00
5,700.0	22.58	149.01	5,339.6	-1,589.7	954.7	1,853.4	0.00	0.00	0.00
5,800.0	22.58	149.01	5,432.0	-1,622.6	974.5	1,891.7	0.00	0.00	0.00
5,900.0	22.58	149.01	5,524.3	-1,655.5	994.3	1,930.1	0.00	0.00	0.00
6,000.0	22.58	149.01	5,616.6	-1,688.4	1,014.1	1,968.5	0.00	0.00	0.00
6,100.0	22.58	149.01	5,709.0	-1,721.4	1,033.8	2,006.9	0.00	0.00	0.00
6,200.0	22.58	149.01	5,801.3	-1,754.3	1,053.6	2,045.3	0.00	0.00	0.00
6,300.0	22.58	149.01	5,893.6	-1,787.2	1,073.4	2,083.7	0.00	0.00	0.00
6,400.0	22.58	149.01	5,986.0	-1,820.1	1,093.2	2,122.0	0.00	0.00	0.00
6,500.0	22.58	149.01	6,078.3	-1,853.0	1,112.9	2,160.4	0.00	0.00	0.00
6,600.0	22.58	149.01	6,170.6	-1,886.0	1,132.7	2,198.8	0.00	0.00	0.00
6,700.0	22.58	149.01	6,263.0	-1,918.9	1,152.5	2,237.2	0.00	0.00	0.00
Wasatch G									
6,727.1	22.58	149.01	6,288.0	-1,927.8	1,157.8	2,247.6	0.00	0.00	0.00
6,800.0	22.58	149.01	6,355.3	-1,951.8	1,172.2	2,275.6	0.00	0.00	0.00
6,900.0	22.58	149.01	6,447.6	-1,984.7	1,192.0	2,314.0	0.00	0.00	0.00
7,000.0	22.58	149.01	6,540.0	-2,017.6	1,211.8	2,352.3	0.00	0.00	0.00
Fort Union									
7,052.0	22.58	149.01	6,588.0	-2,034.8	1,222.1	2,372.3	0.00	0.00	0.00
7,100.0	22.58	149.01	6,632.3	-2,050.6	1,231.6	2,390.7	0.00	0.00	0.00
7,200.0	22.58	149.01	6,724.6	-2,083.5	1,251.3	2,429.1	0.00	0.00	0.00
7,300.0	22.58	149.01	6,816.9	-2,116.4	1,271.1	2,467.5	0.00	0.00	0.00
7,400.0	22.58	149.01	6,909.3	-2,149.3	1,290.9	2,505.9	0.00	0.00	0.00
7,500.0	22.58	149.01	7,001.6	-2,182.3	1,310.7	2,544.3	0.00	0.00	0.00
7,600.0	22.58	149.01	7,093.9	-2,215.2	1,330.4	2,582.6	0.00	0.00	0.00
7,700.0	22.58	149.01	7,186.3	-2,248.1	1,350.2	2,621.0	0.00	0.00	0.00
7,800.0	22.58	149.01	7,278.6	-2,281.0	1,370.0	2,659.4	0.00	0.00	0.00
7,900.0	22.58	149.01	7,370.9	-2,313.9	1,389.7	2,697.8	0.00	0.00	0.00
8,000.0	22.58	149.01	7,463.3	-2,346.9	1,409.5	2,736.2	0.00	0.00	0.00
8,100.0	22.58	149.01	7,555.6	-2,379.8	1,429.3	2,774.6	0.00	0.00	0.00
8,200.0	22.58	149.01	7,647.9	-2,412.7	1,449.1	2,812.9	0.00	0.00	0.00
8,300.0	22.58	149.01	7,740.3	-2,445.6	1,468.8	2,851.3	0.00	0.00	0.00
Start Drop -3.00									
8,406.4	22.58	149.01	7,838.5	-2,480.7	1,489.9	2,892.2	0.00	0.00	0.00
8,500.0	19.78	149.01	7,925.8	-2,509.7	1,507.3	2,926.0	3.00	-3.00	0.00
8,600.0	16.78	149.01	8,020.7	-2,536.5	1,523.4	2,957.3	3.00	-3.00	0.00
8,700.0	13.78	149.01	8,117.2	-2,559.1	1,537.0	2,983.6	3.00	-3.00	0.00
8,800.0	10.78	149.01	8,214.9	-2,577.4	1,547.9	3,004.9	3.00	-3.00	0.00
8,900.0	7.78	149.01	8,313.6	-2,591.2	1,556.2	3,021.0	3.00	-3.00	0.00
9,000.0	4.78	149.01	8,412.9	-2,600.5	1,561.9	3,031.9	3.00	-3.00	0.00
9,100.0	1.78	149.01	8,512.8	-2,605.4	1,564.8	3,037.6	3.00	-3.00	0.00
Start DLS 1.50 TFO 250.02 - Ohio Creek									
9,159.2	0.00	0.00	8,572.0	-2,606.2	1,565.3	3,038.6	3.00	-3.00	0.00
9,200.0	0.61	250.02	8,612.8	-2,606.3	1,565.1	3,038.5	1.50	1.50	0.00
Start 4153.2 hold at 9250.2 MD									
9,250.2	1.36	250.02	8,663.0	-2,606.6	1,564.3	3,038.4	1.50	1.50	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 22A-24 496 - Slot 22A-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 22A-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)
9,300.0	1.36	250.02	8,712.7	-2,607.0	1,563.2	3,038.2	0.00	0.00	0.00
9,400.0	1.36	250.02	8,812.7	-2,607.8	1,560.9	3,037.8	0.00	0.00	0.00
9,500.0	1.36	250.02	8,912.7	-2,608.6	1,558.7	3,037.4	0.00	0.00	0.00
9,600.0	1.36	250.02	9,012.7	-2,609.4	1,556.4	3,037.1	0.00	0.00	0.00
Williams Fork									
9,634.4	1.36	250.02	9,047.0	-2,609.7	1,555.7	3,036.9	0.00	0.00	0.00
9,700.0	1.36	250.02	9,112.6	-2,610.3	1,554.2	3,036.7	0.00	0.00	0.00
9,800.0	1.36	250.02	9,212.6	-2,611.1	1,552.0	3,036.3	0.00	0.00	0.00
9,900.0	1.36	250.02	9,312.6	-2,611.9	1,549.7	3,035.9	0.00	0.00	0.00
10,000.0	1.36	250.02	9,412.5	-2,612.7	1,547.5	3,035.5	0.00	0.00	0.00
10,100.0	1.36	250.02	9,512.5	-2,613.5	1,545.3	3,035.2	0.00	0.00	0.00
10,200.0	1.36	250.02	9,612.5	-2,614.3	1,543.0	3,034.8	0.00	0.00	0.00
10,300.0	1.36	250.02	9,712.5	-2,615.1	1,540.8	3,034.4	0.00	0.00	0.00
10,400.0	1.36	250.02	9,812.4	-2,616.0	1,538.5	3,034.0	0.00	0.00	0.00
10,500.0	1.36	250.02	9,912.4	-2,616.8	1,536.3	3,033.7	0.00	0.00	0.00
10,600.0	1.36	250.02	10,012.4	-2,617.6	1,534.1	3,033.3	0.00	0.00	0.00
10,700.0	1.36	250.02	10,112.3	-2,618.4	1,531.8	3,032.9	0.00	0.00	0.00
10,800.0	1.36	250.02	10,212.3	-2,619.2	1,529.6	3,032.5	0.00	0.00	0.00
10,900.0	1.36	250.02	10,312.3	-2,620.0	1,527.3	3,032.1	0.00	0.00	0.00
11,000.0	1.36	250.02	10,412.3	-2,620.8	1,525.1	3,031.8	0.00	0.00	0.00
11,100.0	1.36	250.02	10,512.2	-2,621.7	1,522.9	3,031.4	0.00	0.00	0.00
11,200.0	1.36	250.02	10,612.2	-2,622.5	1,520.6	3,031.0	0.00	0.00	0.00
11,300.0	1.36	250.02	10,712.2	-2,623.3	1,518.4	3,030.6	0.00	0.00	0.00
11,400.0	1.36	250.02	10,812.1	-2,624.1	1,516.2	3,030.2	0.00	0.00	0.00
11,500.0	1.36	250.02	10,912.1	-2,624.9	1,513.9	3,029.9	0.00	0.00	0.00
11,600.0	1.36	250.02	11,012.1	-2,625.7	1,511.7	3,029.5	0.00	0.00	0.00
11,700.0	1.36	250.02	11,112.1	-2,626.5	1,509.4	3,029.1	0.00	0.00	0.00
11,800.0	1.36	250.02	11,212.0	-2,627.4	1,507.2	3,028.7	0.00	0.00	0.00
11,900.0	1.36	250.02	11,312.0	-2,628.2	1,505.0	3,028.4	0.00	0.00	0.00
12,000.0	1.36	250.02	11,412.0	-2,629.0	1,502.7	3,028.0	0.00	0.00	0.00
12,100.0	1.36	250.02	11,511.9	-2,629.8	1,500.5	3,027.6	0.00	0.00	0.00
12,200.0	1.36	250.02	11,611.9	-2,630.6	1,498.2	3,027.2	0.00	0.00	0.00
12,300.0	1.36	250.02	11,711.9	-2,631.4	1,496.0	3,026.8	0.00	0.00	0.00
Cameo									
12,353.1	1.36	250.02	11,765.0	-2,631.9	1,494.8	3,026.6	0.00	0.00	0.00
12,400.0	1.36	250.02	11,811.9	-2,632.2	1,493.8	3,026.5	0.00	0.00	0.00
12,500.0	1.36	250.02	11,911.8	-2,633.0	1,491.5	3,026.1	0.00	0.00	0.00
12,600.0	1.36	250.02	12,011.8	-2,633.9	1,489.3	3,025.7	0.00	0.00	0.00
12,700.0	1.36	250.02	12,111.8	-2,634.7	1,487.1	3,025.3	0.00	0.00	0.00
12,800.0	1.36	250.02	12,211.7	-2,635.5	1,484.8	3,024.9	0.00	0.00	0.00
12,900.0	1.36	250.02	12,311.7	-2,636.3	1,482.6	3,024.6	0.00	0.00	0.00
Rollins									
12,903.3	1.36	250.02	12,315.0	-2,636.3	1,482.5	3,024.6	0.00	0.00	0.00
13,000.0	1.36	250.02	12,411.7	-2,637.1	1,480.3	3,024.2	0.00	0.00	0.00
13,100.0	1.36	250.02	12,511.7	-2,637.9	1,478.1	3,023.8	0.00	0.00	0.00
13,200.0	1.36	250.02	12,611.6	-2,638.7	1,475.9	3,023.4	0.00	0.00	0.00
13,300.0	1.36	250.02	12,711.6	-2,639.6	1,473.6	3,023.1	0.00	0.00	0.00
TD at 13403.4									
13,403.4	1.36	250.02	12,815.0	-2,640.4	1,471.3	3,022.7	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 22A-24 496 - Slot 22A-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 22A-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)		
22A-24 - OHCR	0.00	0.00	8,572.0	-2,606.2	1,565.3	14,426,829.48	2,453,560.33	39.691535	-108.109712
- plan hits target center									
- Point									
22A-24 - PBHL	0.00	0.00	12,815.0	-2,640.4	1,471.3	14,426,792.30	2,453,467.50	39.691441	-108.110046
- 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)			(°)	(°)
4,127.8	3,888.0	Wasatch			
6,727.1	6,288.0	Wasatch G			
7,052.0	6,588.0	Fort Union			
9,159.2	8,572.0	Ohio Creek			
9,634.4	9,047.0	Williams Fork			
12,353.1	11,765.0	Cameo			
12,903.3	12,315.0	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
1,252.8	1,233.5	-125.5	75.4	Start 7153.6 hold at 1252.8 MD
8,406.4	7,838.5	-2,480.7	1,489.9	Start Drop -3.00
9,159.2	8,572.0	-2,606.2	1,565.3	Start DLS 1.50 TFO 250.02
9,250.2	8,663.0	-2,606.6	1,564.3	Start 4153.2 hold at 9250.2 MD
13,403.4	12,815.0	-2,640.4	1,471.3	TD at 13403.4