

Project: Rio Blanco County, CO  
 Site: ELU O13 496 Pad  
 Well: ELU O13 FED 23B-13 496  
 Wellbore: Wellbore #1  
 Design: Design #3  
 Latitude: 39.698716  
 Longitude: -108.114602  
 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 - 23B-13(0.0N, 0.0E)  
 Measured Depth Reference: RKB @ 8143.0usft (25')  
 Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4066.0	4153.8	Wasatch
6466.0	6618.1	Wasatch G
6766.0	6926.1	Fort Union
8670.0	8873.3	Ohio Creek
9218.0	9421.5	Williams Fork
12205.0	12409.3	Cameo
12406.0	12610.4	Rollins

SECTION DETAILS

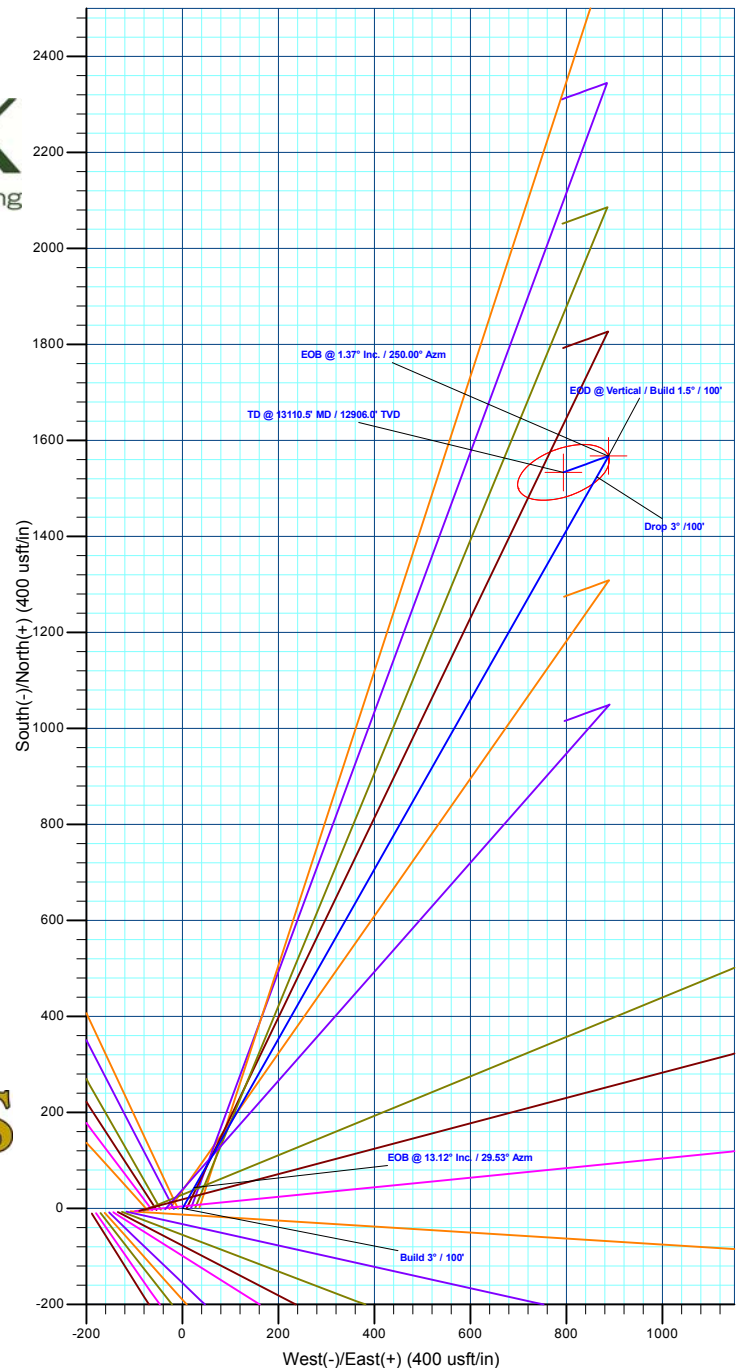
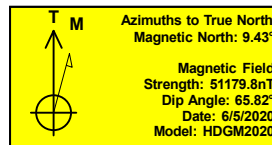
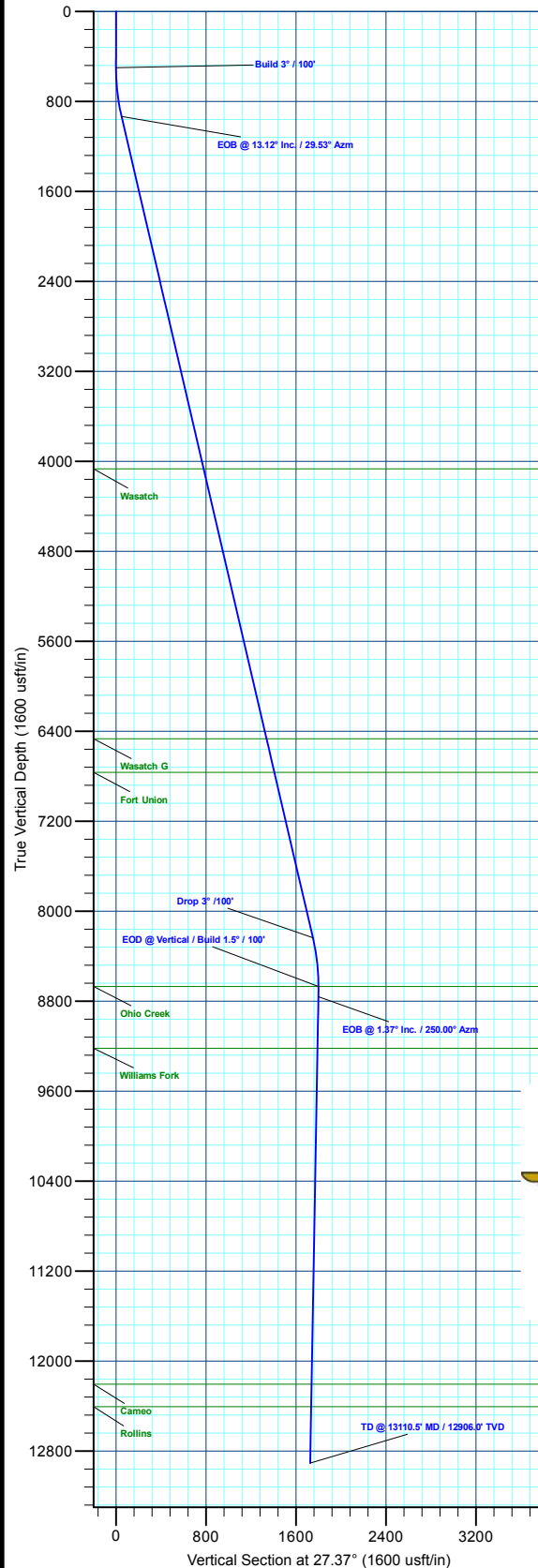
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	Build 3" / 100'
937.3	13.12	29.53	933.5	43.4	24.6	3.00	29.53	49.8	EOB @ 13.12° Inc. / 29.53° Azm
8436.0	13.12	29.53	8236.5	1524.4	863.4	0.00	0.00	1750.7	Drop 3" / 100'
8873.3	0.00	0.00	8670.0	1567.7	887.9	3.00	180.00	1800.5	EOD @ Vertical / Build 1.5" / 100'
8964.5	1.37	250.00	8761.1	1567.4	886.9	1.50	250.00	1799.7	EOB @ 1.37° Inc. / 250.00° Azm
13110.5	1.37	250.00	12906.0	1533.5	794.0	0.00	0.00	1726.9	TD @ 13110.5' MD / 12906.0' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - 23B-13	8670.0	1567.7	887.9	14430996.01	2452937.22	39.703019	-108.111448
PBHL - 23B-13	12906.0	1533.5	794.0	14430958.80	2452844.40	39.702925	-108.111781

WELL DETAILS: ELU O13 FED 23B-13 496

+N/-S	+E/-W	Ground Level : 8118.0	Latitude	Longitude	23B-13
0.0	0.0	Northing 14429400.50	Easting 2452100.20	39.698716	-108.114602



Plan: Design #3 (ELU O13 FED 23B-13 496/Wellbore #1)

Created By: Will Jircik Date: 14:36, November 15 2022



## **Caerus Oil & Gas**

**Rio Blanco County, CO**

**ELU O13 496 Pad**

**ELU O13 FED 23B-13 496 - Slot 23B-13**

**Wellbore #1**

**Plan: Design #3**

## **KLX Well Planning Report**

**15 November, 2022**



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU O13 FED 23B-13 496 - Slot 23B-13
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8143.0usft (25')
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB @ 8143.0usft (25')
<b>Site:</b>	ELU O13 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU O13 FED 23B-13 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #3		

<b>Project</b>	Rio Blanco County, CO		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Fee	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	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 23B-13 496 - Slot 23B-13					
Well Position	+N/-S	1.6 usft	Northing:	14,429,400.50 usft	Latitude:	39.698716
	+E/-W	28.9 usft	Easting:	2,452,100.20 usft	Longitude:	-108.114602
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	8,118.0 usft

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

<b>Design</b>	Design #3			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	27.37

<b>Plan Sections</b>										
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	
937.3	13.12	29.53	933.5	43.4	24.6	3.00	3.00	0.00	29.53	
8,436.0	13.12	29.53	8,236.5	1,524.4	863.4	0.00	0.00	0.00	0.00	
8,873.3	0.00	0.00	8,670.0	1,567.7	887.9	3.00	-3.00	0.00	180.00	OHCR - 23B-13
8,964.5	1.37	250.00	8,761.1	1,567.4	886.9	1.50	1.50	-120.70	250.00	
13,110.5	1.37	250.00	12,906.0	1,533.5	794.0	0.00	0.00	0.00	0.00	PBHL - 23B-13

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU O13 FED 23B-13 496 - Slot 23B-13
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8143.0usft (25')
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB @ 8143.0usft (25')
<b>Site:</b>	ELU O13 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU O13 FED 23B-13 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	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
<b>Build 3° / 100'</b>									
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	3.00	29.53	600.0	2.3	1.3	2.6	3.00	3.00	0.00
700.0	6.00	29.53	699.6	9.1	5.2	10.5	3.00	3.00	0.00
800.0	9.00	29.53	798.8	20.5	11.6	23.5	3.00	3.00	0.00
900.0	12.00	29.53	897.1	36.3	20.6	41.7	3.00	3.00	0.00
<b>EOB @ 13.12° Inc. / 29.53° Azm</b>									
937.3	13.12	29.53	933.5	43.4	24.6	49.8	3.00	3.00	0.00
1,000.0	13.12	29.53	994.6	55.8	31.6	64.0	0.00	0.00	0.00
1,100.0	13.12	29.53	1,091.9	75.5	42.8	86.7	0.00	0.00	0.00
1,200.0	13.12	29.53	1,189.3	95.3	54.0	109.4	0.00	0.00	0.00
1,300.0	13.12	29.53	1,286.7	115.0	65.1	132.1	0.00	0.00	0.00
1,400.0	13.12	29.53	1,384.1	134.8	76.3	154.8	0.00	0.00	0.00
1,500.0	13.12	29.53	1,481.5	154.5	87.5	177.4	0.00	0.00	0.00
1,600.0	13.12	29.53	1,578.9	174.3	98.7	200.1	0.00	0.00	0.00
1,700.0	13.12	29.53	1,676.3	194.0	109.9	222.8	0.00	0.00	0.00
1,800.0	13.12	29.53	1,773.7	213.8	121.1	245.5	0.00	0.00	0.00
1,900.0	13.12	29.53	1,871.1	233.5	132.3	268.2	0.00	0.00	0.00
2,000.0	13.12	29.53	1,968.5	253.3	143.4	290.8	0.00	0.00	0.00
2,100.0	13.12	29.53	2,065.8	273.0	154.6	313.5	0.00	0.00	0.00
2,200.0	13.12	29.53	2,163.2	292.8	165.8	336.2	0.00	0.00	0.00
2,300.0	13.12	29.53	2,260.6	312.5	177.0	358.9	0.00	0.00	0.00
2,400.0	13.12	29.53	2,358.0	332.3	188.2	381.6	0.00	0.00	0.00
2,500.0	13.12	29.53	2,455.4	352.0	199.4	404.3	0.00	0.00	0.00
2,600.0	13.12	29.53	2,552.8	371.8	210.6	426.9	0.00	0.00	0.00
2,700.0	13.12	29.53	2,650.2	391.5	221.7	449.6	0.00	0.00	0.00
2,800.0	13.12	29.53	2,747.6	411.3	232.9	472.3	0.00	0.00	0.00
2,900.0	13.12	29.53	2,845.0	431.0	244.1	495.0	0.00	0.00	0.00
3,000.0	13.12	29.53	2,942.4	450.8	255.3	517.7	0.00	0.00	0.00
3,100.0	13.12	29.53	3,039.7	470.5	266.5	540.3	0.00	0.00	0.00
3,200.0	13.12	29.53	3,137.1	490.3	277.7	563.0	0.00	0.00	0.00
3,300.0	13.12	29.53	3,234.5	510.0	288.9	585.7	0.00	0.00	0.00
3,400.0	13.12	29.53	3,331.9	529.8	300.0	608.4	0.00	0.00	0.00
3,500.0	13.12	29.53	3,429.3	549.5	311.2	631.1	0.00	0.00	0.00
3,600.0	13.12	29.53	3,526.7	569.3	322.4	653.8	0.00	0.00	0.00
3,700.0	13.12	29.53	3,624.1	589.0	333.6	676.4	0.00	0.00	0.00
3,800.0	13.12	29.53	3,721.5	608.8	344.8	699.1	0.00	0.00	0.00
3,900.0	13.12	29.53	3,818.9	628.5	356.0	721.8	0.00	0.00	0.00
4,000.0	13.12	29.53	3,916.3	648.3	367.2	744.5	0.00	0.00	0.00
4,100.0	13.12	29.53	4,013.6	668.0	378.3	767.2	0.00	0.00	0.00
<b>Wasatch</b>									
4,153.8	13.12	29.53	4,066.0	678.6	384.4	779.4	0.00	0.00	0.00
4,200.0	13.12	29.53	4,111.0	687.8	389.5	789.8	0.00	0.00	0.00
4,300.0	13.12	29.53	4,208.4	707.5	400.7	812.5	0.00	0.00	0.00
4,400.0	13.12	29.53	4,305.8	727.3	411.9	835.2	0.00	0.00	0.00
4,500.0	13.12	29.53	4,403.2	747.0	423.1	857.9	0.00	0.00	0.00
4,600.0	13.12	29.53	4,500.6	766.8	434.3	880.6	0.00	0.00	0.00
4,700.0	13.12	29.53	4,598.0	786.5	445.5	903.3	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU O13 FED 23B-13 496 - Slot 23B-13
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8143.0usft (25')
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB @ 8143.0usft (25')
<b>Site:</b>	ELU O13 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU O13 FED 23B-13 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	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	13.12	29.53	4,695.4	806.3	456.6	925.9	0.00	0.00	0.00
4,900.0	13.12	29.53	4,792.8	826.0	467.8	948.6	0.00	0.00	0.00
5,000.0	13.12	29.53	4,890.2	845.8	479.0	971.3	0.00	0.00	0.00
5,100.0	13.12	29.53	4,987.5	865.5	490.2	994.0	0.00	0.00	0.00
5,200.0	13.12	29.53	5,084.9	885.3	501.4	1,016.7	0.00	0.00	0.00
5,300.0	13.12	29.53	5,182.3	905.0	512.6	1,039.3	0.00	0.00	0.00
5,400.0	13.12	29.53	5,279.7	924.8	523.8	1,062.0	0.00	0.00	0.00
5,500.0	13.12	29.53	5,377.1	944.5	534.9	1,084.7	0.00	0.00	0.00
5,600.0	13.12	29.53	5,474.5	964.3	546.1	1,107.4	0.00	0.00	0.00
5,700.0	13.12	29.53	5,571.9	984.0	557.3	1,130.1	0.00	0.00	0.00
5,800.0	13.12	29.53	5,669.3	1,003.8	568.5	1,152.8	0.00	0.00	0.00
5,900.0	13.12	29.53	5,766.7	1,023.5	579.7	1,175.4	0.00	0.00	0.00
6,000.0	13.12	29.53	5,864.1	1,043.3	590.9	1,198.1	0.00	0.00	0.00
6,100.0	13.12	29.53	5,961.4	1,063.0	602.1	1,220.8	0.00	0.00	0.00
6,200.0	13.12	29.53	6,058.8	1,082.8	613.2	1,243.5	0.00	0.00	0.00
6,300.0	13.12	29.53	6,156.2	1,102.5	624.4	1,266.2	0.00	0.00	0.00
6,400.0	13.12	29.53	6,253.6	1,122.3	635.6	1,288.8	0.00	0.00	0.00
6,500.0	13.12	29.53	6,351.0	1,142.0	646.8	1,311.5	0.00	0.00	0.00
6,600.0	13.12	29.53	6,448.4	1,161.8	658.0	1,334.2	0.00	0.00	0.00
<b>Wasatch G</b>									
6,618.1	13.12	29.53	6,466.0	1,165.3	660.0	1,338.3	0.00	0.00	0.00
6,700.0	13.12	29.53	6,545.8	1,181.5	669.2	1,356.9	0.00	0.00	0.00
6,800.0	13.12	29.53	6,643.2	1,201.3	680.4	1,379.6	0.00	0.00	0.00
6,900.0	13.12	29.53	6,740.6	1,221.0	691.5	1,402.3	0.00	0.00	0.00
<b>Fort Union</b>									
6,926.1	13.12	29.53	6,766.0	1,226.2	694.5	1,408.2	0.00	0.00	0.00
7,000.0	13.12	29.53	6,838.0	1,240.8	702.7	1,424.9	0.00	0.00	0.00
7,100.0	13.12	29.53	6,935.3	1,260.5	713.9	1,447.6	0.00	0.00	0.00
7,200.0	13.12	29.53	7,032.7	1,280.3	725.1	1,470.3	0.00	0.00	0.00
7,300.0	13.12	29.53	7,130.1	1,300.0	736.3	1,493.0	0.00	0.00	0.00
7,400.0	13.12	29.53	7,227.5	1,319.8	747.5	1,515.7	0.00	0.00	0.00
7,500.0	13.12	29.53	7,324.9	1,339.5	758.7	1,538.3	0.00	0.00	0.00
7,600.0	13.12	29.53	7,422.3	1,359.3	769.8	1,561.0	0.00	0.00	0.00
7,700.0	13.12	29.53	7,519.7	1,379.0	781.0	1,583.7	0.00	0.00	0.00
7,800.0	13.12	29.53	7,617.1	1,398.8	792.2	1,606.4	0.00	0.00	0.00
7,900.0	13.12	29.53	7,714.5	1,418.5	803.4	1,629.1	0.00	0.00	0.00
8,000.0	13.12	29.53	7,811.9	1,438.3	814.6	1,651.8	0.00	0.00	0.00
8,100.0	13.12	29.53	7,909.2	1,458.0	825.8	1,674.4	0.00	0.00	0.00
8,200.0	13.12	29.53	8,006.6	1,477.8	837.0	1,697.1	0.00	0.00	0.00
8,300.0	13.12	29.53	8,104.0	1,497.5	848.1	1,719.8	0.00	0.00	0.00
8,400.0	13.12	29.53	8,201.4	1,517.3	859.3	1,742.5	0.00	0.00	0.00
<b>Drop 3° /100'</b>									
8,436.0	13.12	29.53	8,236.5	1,524.4	863.4	1,750.7	0.00	0.00	0.00
8,500.0	11.20	29.53	8,299.0	1,536.1	870.0	1,764.1	3.00	-3.00	0.00
8,600.0	8.20	29.53	8,397.6	1,550.8	878.3	1,781.0	3.00	-3.00	0.00
8,700.0	5.20	29.53	8,496.9	1,560.9	884.1	1,792.6	3.00	-3.00	0.00
8,800.0	2.20	29.53	8,596.7	1,566.5	887.2	1,799.1	3.00	-3.00	0.00
<b>EOD @ Vertical / Build 1.5° / 100' - Ohio Creek</b>									
8,873.3	0.00	0.00	8,670.0	1,567.7	887.9	1,800.5	3.00	-3.00	0.00
8,900.0	0.40	250.00	8,696.7	1,567.7	887.8	1,800.4	1.50	1.50	0.00
<b>EOB @ 1.37° Inc. / 250.00° Azm</b>									
8,964.5	1.37	250.00	8,761.1	1,567.4	886.9	1,799.7	1.50	1.50	0.00
9,000.0	1.37	250.00	8,796.6	1,567.1	886.1	1,799.0	0.00	0.00	0.00
9,100.0	1.37	250.00	8,896.6	1,566.3	883.9	1,797.3	0.00	0.00	0.00

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<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8143.0usft (25')
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB @ 8143.0usft (25')
<b>Site:</b>	ELU O13 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU O13 FED 23B-13 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	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	1.37	250.00	8,996.6	1,565.5	881.6	1,795.5	0.00	0.00	0.00
9,300.0	1.37	250.00	9,096.6	1,564.6	879.4	1,793.8	0.00	0.00	0.00
9,400.0	1.37	250.00	9,196.5	1,563.8	877.1	1,792.0	0.00	0.00	0.00
<b>Williams Fork</b>									
9,421.5	1.37	250.00	9,218.0	1,563.6	876.7	1,791.6	0.00	0.00	0.00
9,500.0	1.37	250.00	9,296.5	1,563.0	874.9	1,790.3	0.00	0.00	0.00
9,600.0	1.37	250.00	9,396.5	1,562.2	872.7	1,788.5	0.00	0.00	0.00
9,700.0	1.37	250.00	9,496.4	1,561.4	870.4	1,786.8	0.00	0.00	0.00
9,800.0	1.37	250.00	9,596.4	1,560.6	868.2	1,785.0	0.00	0.00	0.00
9,900.0	1.37	250.00	9,696.4	1,559.7	865.9	1,783.2	0.00	0.00	0.00
10,000.0	1.37	250.00	9,796.4	1,558.9	863.7	1,781.5	0.00	0.00	0.00
10,100.0	1.37	250.00	9,896.3	1,558.1	861.5	1,779.7	0.00	0.00	0.00
10,200.0	1.37	250.00	9,996.3	1,557.3	859.2	1,778.0	0.00	0.00	0.00
10,300.0	1.37	250.00	10,096.3	1,556.5	857.0	1,776.2	0.00	0.00	0.00
10,400.0	1.37	250.00	10,196.2	1,555.7	854.7	1,774.5	0.00	0.00	0.00
10,500.0	1.37	250.00	10,296.2	1,554.8	852.5	1,772.7	0.00	0.00	0.00
10,600.0	1.37	250.00	10,396.2	1,554.0	850.2	1,771.0	0.00	0.00	0.00
10,700.0	1.37	250.00	10,496.2	1,553.2	848.0	1,769.2	0.00	0.00	0.00
10,800.0	1.37	250.00	10,596.1	1,552.4	845.8	1,767.4	0.00	0.00	0.00
10,900.0	1.37	250.00	10,696.1	1,551.6	843.5	1,765.7	0.00	0.00	0.00
11,000.0	1.37	250.00	10,796.1	1,550.8	841.3	1,763.9	0.00	0.00	0.00
11,100.0	1.37	250.00	10,896.0	1,550.0	839.0	1,762.2	0.00	0.00	0.00
11,200.0	1.37	250.00	10,996.0	1,549.1	836.8	1,760.4	0.00	0.00	0.00
11,300.0	1.37	250.00	11,096.0	1,548.3	834.5	1,758.7	0.00	0.00	0.00
11,400.0	1.37	250.00	11,196.0	1,547.5	832.3	1,756.9	0.00	0.00	0.00
11,500.0	1.37	250.00	11,295.9	1,546.7	830.1	1,755.2	0.00	0.00	0.00
11,600.0	1.37	250.00	11,395.9	1,545.9	827.8	1,753.4	0.00	0.00	0.00
11,700.0	1.37	250.00	11,495.9	1,545.1	825.6	1,751.6	0.00	0.00	0.00
11,800.0	1.37	250.00	11,595.8	1,544.2	823.3	1,749.9	0.00	0.00	0.00
11,900.0	1.37	250.00	11,695.8	1,543.4	821.1	1,748.1	0.00	0.00	0.00
12,000.0	1.37	250.00	11,795.8	1,542.6	818.9	1,746.4	0.00	0.00	0.00
12,100.0	1.37	250.00	11,895.8	1,541.8	816.6	1,744.6	0.00	0.00	0.00
12,200.0	1.37	250.00	11,995.7	1,541.0	814.4	1,742.9	0.00	0.00	0.00
12,300.0	1.37	250.00	12,095.7	1,540.2	812.1	1,741.1	0.00	0.00	0.00
12,400.0	1.37	250.00	12,195.7	1,539.3	809.9	1,739.4	0.00	0.00	0.00
<b>Cameo</b>									
12,409.3	1.37	250.00	12,205.0	1,539.3	809.7	1,739.2	0.00	0.00	0.00
12,500.0	1.37	250.00	12,295.6	1,538.5	807.6	1,737.6	0.00	0.00	0.00
12,600.0	1.37	250.00	12,395.6	1,537.7	805.4	1,735.8	0.00	0.00	0.00
<b>Rollins</b>									
12,610.4	1.37	250.00	12,406.0	1,537.6	805.2	1,735.7	0.00	0.00	0.00
12,700.0	1.37	250.00	12,495.6	1,536.9	803.2	1,734.1	0.00	0.00	0.00
12,800.0	1.37	250.00	12,595.6	1,536.1	800.9	1,732.3	0.00	0.00	0.00
12,900.0	1.37	250.00	12,695.5	1,535.3	798.7	1,730.6	0.00	0.00	0.00
13,000.0	1.37	250.00	12,795.5	1,534.4	796.4	1,728.8	0.00	0.00	0.00
13,100.0	1.37	250.00	12,895.5	1,533.6	794.2	1,727.1	0.00	0.00	0.00
<b>TD @ 13110.5' MD / 12906.0' TVD</b>									
13,110.5	1.37	250.00	12,906.0	1,533.5	794.0	1,726.9	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ELU O13 FED 23B-13 496 - Slot 23B-13
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB @ 8143.0usft (25')
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB @ 8143.0usft (25')
<b>Site:</b>	ELU O13 496 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU O13 FED 23B-13 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #3		

#### Design Targets

##### Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
OHCR - 23B-13	0.00	0.00	8,670.0	1,567.7	887.9	14,430,996.01	2,452,937.22	39.703019	-108.111448
- plan hits target center									
- Point									
PBHL - 23B-13	0.00	0.00	12,906.0	1,533.5	794.0	14,430,958.80	2,452,844.40	39.702925	-108.111782
- plan hits target center									
- Ellipse (radii L100.0 W50.0 on 250.00 azi)									

#### Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,153.8	4,066.0	Wasatch			
6,618.1	6,466.0	Wasatch G			
6,926.1	6,766.0	Fort Union			
8,873.3	8,670.0	Ohio Creek			
9,421.5	9,218.0	Williams Fork			
12,409.3	12,205.0	Cameo			
12,610.4	12,406.0	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'
937.3	933.5	43.4	24.6	EOB @ 13.12° Inc. / 29.53° Azm
8,436.0	8,236.5	1,524.4	863.4	Drop 3° / 100'
8,873.3	8,670.0	1,567.7	887.9	EOD @ Vertical / Build 1.5° / 100'
8,964.5	8,761.1	1,567.4	886.9	EOB @ 1.37° Inc. / 250.00° Azm
13,110.5	12,906.0	1,533.5	794.0	TD @ 13110.5' MD / 12906.0' TVD