

Project: Rio Blanco County, CO
 Site: ELU O13 496 Pad
 Well: ELU O13 FED 23A-13 496
 Wellbore: Wellbore #1
 Design: Design #3
 Latitude: 39.698718
 Longitude: -108.114570
 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 1866
 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 - 23A-13(0.0N, 0.0E)
 Measured Depth Reference: RKB @ 8143.0usft (25')
 Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4077.0	4188.2	Wasatch
6477.0	6670.3	Wasatch G
6777.0	6980.5	Fort Union
8676.0	8933.3	Ohio Creek
9228.0	9485.4	Williams Fork
12233.0	12491.3	Cameo
12407.0	12665.3	Rollins

SECTION DETAILS

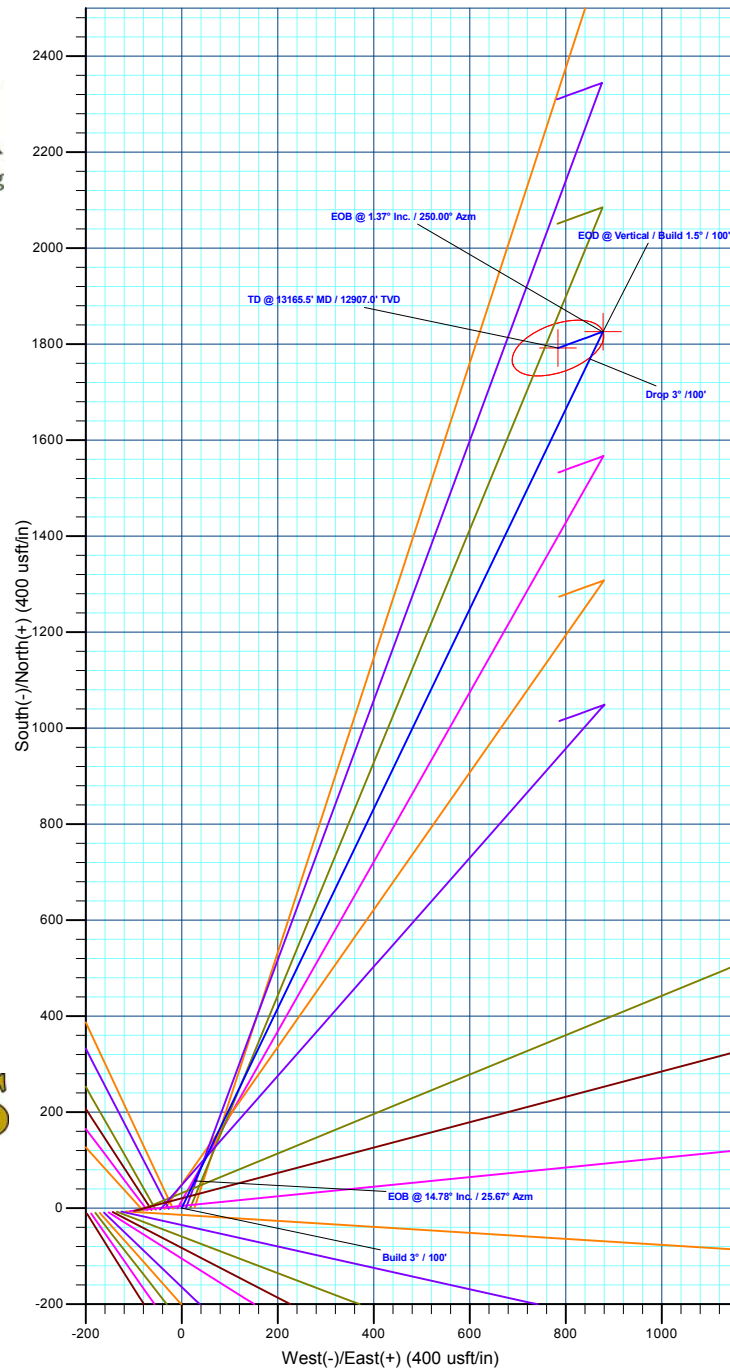
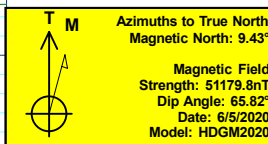
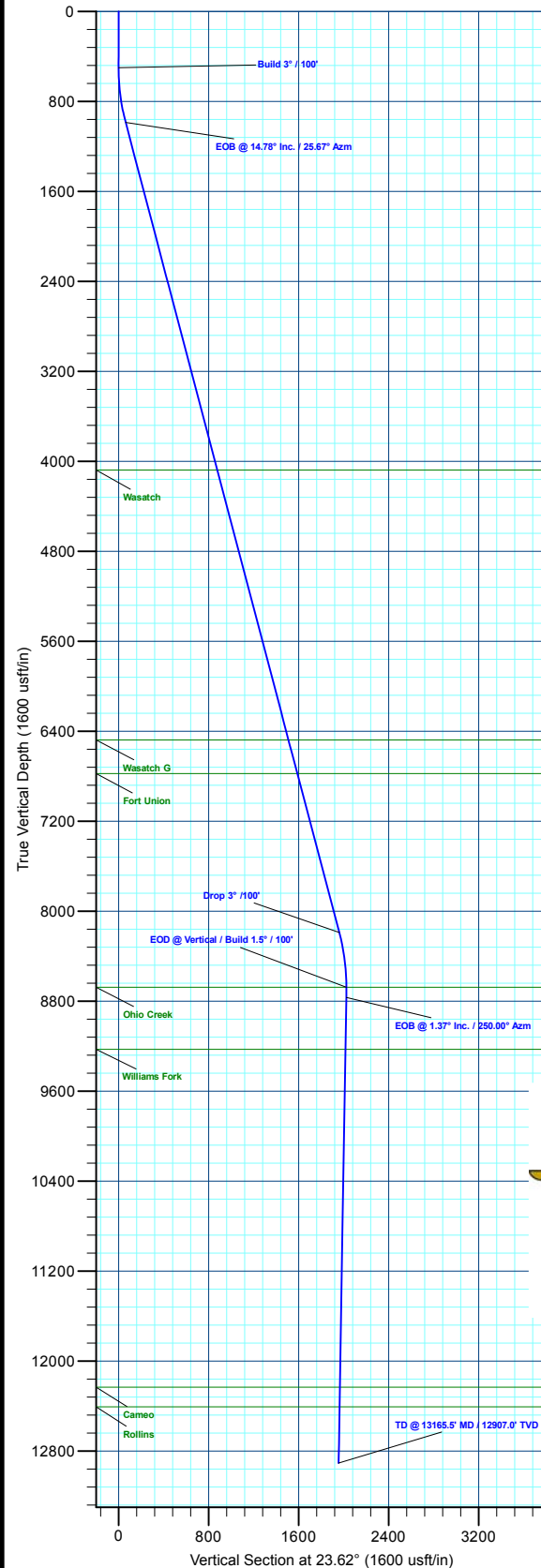
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	Build 3" / 100'
992.6	14.78	25.67	987.2	56.9	27.4	3.00	25.67	63.1	EOB @ 14.78" Inc. / 25.67" Azm
8440.7	14.78	25.67	8188.8	1769.4	850.5	0.00	0.00	1961.9	Drop 3" / 100'
8933.3	0.00	0.00	8676.0	1826.3	877.8	3.00	180.00	2025.0	EOD @ Vertical / Build 1.5" / 100'
9024.5	1.37	250.00	8767.2	1925.9	876.8	1.50	250.00	2024.3	EOB @ 1.37" Inc. / 250.00" Azm
13165.5	1.37	250.00	12907.0	1792.1	783.9	0.00	0.00	1956.0	TD @ 13165.5' MD / 12907.0' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
OHCR - 23A-13	8676.0	1826.3	877.8	14431254.91	2452927.82	39.703730	-108.111451
PBHL - 23A-13	12907.0	1792.1	783.9	14431217.70	2452835.00	39.703636	-108.111785

WELL DETAILS: ELU O13 FED 23A-13 496

+N/-S	+E/-W	Ground Level : 8118.0	Latitude	Longitude
0.0	0.0	Northing 14429401.30 Easting 2452109.20	39.698718	-108.114570
				23A-13



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

Created By: Will Jircik Date: 14:21, November 15 2022



Caerus Oil & Gas

Rio Blanco County, CO

ELU O13 496 Pad

ELU O13 FED 23A-13 496 - Slot 23A-13

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 23A-13 496 - Slot 23A-13
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 23A-13 496	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 23A-13 496 - Slot 23A-13				
Well Position	+N/-S	2.1 usft	Northing:	14,429,401.30 usft	Latitude:	39.698718
	+E/-W	37.9 usft	Easting:	2,452,109.20 usft	Longitude:	-108.114570
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 #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	23.62

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	
992.6	14.78	25.67	987.2	56.9	27.4	3.00	3.00	0.00	25.67	
8,440.7	14.78	25.67	8,188.8	1,769.4	850.5	0.00	0.00	0.00	0.00	
8,933.3	0.00	0.00	8,676.0	1,826.3	877.8	3.00	-3.00	0.00	180.00	OHCR - 23A-13
9,024.5	1.37	250.00	8,767.2	1,825.9	876.8	1.50	1.50	-120.55	250.00	
13,165.5	1.37	250.00	12,907.0	1,792.1	783.9	0.00	0.00	0.00	0.00	PBHL - 23A-13

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 23A-13 496 - Slot 23A-13
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 23A-13 496	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	25.67	600.0	2.4	1.1	2.6	3.00	3.00	0.00
700.0	6.00	25.67	699.6	9.4	4.5	10.5	3.00	3.00	0.00
800.0	9.00	25.67	798.8	21.2	10.2	23.5	3.00	3.00	0.00
900.0	12.00	25.67	897.1	37.6	18.1	41.7	3.00	3.00	0.00
EOB @ 14.78° Inc. / 25.67° Azm									
992.6	14.78	25.67	987.2	56.9	27.4	63.1	3.00	3.00	0.00
1,000.0	14.78	25.67	994.3	58.6	28.2	65.0	0.00	0.00	0.00
1,100.0	14.78	25.67	1,091.0	81.6	39.2	90.5	0.00	0.00	0.00
1,200.0	14.78	25.67	1,187.7	104.6	50.3	116.0	0.00	0.00	0.00
1,300.0	14.78	25.67	1,284.4	127.6	61.3	141.5	0.00	0.00	0.00
1,400.0	14.78	25.67	1,381.1	150.6	72.4	167.0	0.00	0.00	0.00
1,500.0	14.78	25.67	1,477.8	173.6	83.4	192.5	0.00	0.00	0.00
1,600.0	14.78	25.67	1,574.5	196.6	94.5	218.0	0.00	0.00	0.00
1,700.0	14.78	25.67	1,671.2	219.6	105.5	243.5	0.00	0.00	0.00
1,800.0	14.78	25.67	1,767.8	242.6	116.6	269.0	0.00	0.00	0.00
1,900.0	14.78	25.67	1,864.5	265.6	127.6	294.5	0.00	0.00	0.00
2,000.0	14.78	25.67	1,961.2	288.6	138.7	320.0	0.00	0.00	0.00
2,100.0	14.78	25.67	2,057.9	311.5	149.8	345.4	0.00	0.00	0.00
2,200.0	14.78	25.67	2,154.6	334.5	160.8	370.9	0.00	0.00	0.00
2,300.0	14.78	25.67	2,251.3	357.5	171.9	396.4	0.00	0.00	0.00
2,400.0	14.78	25.67	2,348.0	380.5	182.9	421.9	0.00	0.00	0.00
2,500.0	14.78	25.67	2,444.7	403.5	194.0	447.4	0.00	0.00	0.00
2,600.0	14.78	25.67	2,541.4	426.5	205.0	472.9	0.00	0.00	0.00
2,700.0	14.78	25.67	2,638.1	449.5	216.1	498.4	0.00	0.00	0.00
2,800.0	14.78	25.67	2,734.8	472.5	227.1	523.9	0.00	0.00	0.00
2,900.0	14.78	25.67	2,831.5	495.5	238.2	549.4	0.00	0.00	0.00
3,000.0	14.78	25.67	2,928.1	518.5	249.2	574.9	0.00	0.00	0.00
3,100.0	14.78	25.67	3,024.8	541.5	260.3	600.4	0.00	0.00	0.00
3,200.0	14.78	25.67	3,121.5	564.5	271.3	625.9	0.00	0.00	0.00
3,300.0	14.78	25.67	3,218.2	587.4	282.4	651.4	0.00	0.00	0.00
3,400.0	14.78	25.67	3,314.9	610.4	293.4	676.9	0.00	0.00	0.00
3,500.0	14.78	25.67	3,411.6	633.4	304.5	702.4	0.00	0.00	0.00
3,600.0	14.78	25.67	3,508.3	656.4	315.5	727.8	0.00	0.00	0.00
3,700.0	14.78	25.67	3,605.0	679.4	326.6	753.3	0.00	0.00	0.00
3,800.0	14.78	25.67	3,701.7	702.4	337.6	778.8	0.00	0.00	0.00
3,900.0	14.78	25.67	3,798.4	725.4	348.7	804.3	0.00	0.00	0.00
4,000.0	14.78	25.67	3,895.1	748.4	359.7	829.8	0.00	0.00	0.00
4,100.0	14.78	25.67	3,991.8	771.4	370.8	855.3	0.00	0.00	0.00
Wasatch									
4,188.2	14.78	25.67	4,077.0	791.6	380.5	877.8	0.00	0.00	0.00
4,200.0	14.78	25.67	4,088.4	794.4	381.8	880.8	0.00	0.00	0.00
4,300.0	14.78	25.67	4,185.1	817.4	392.9	906.3	0.00	0.00	0.00
4,400.0	14.78	25.67	4,281.8	840.4	403.9	931.8	0.00	0.00	0.00
4,500.0	14.78	25.67	4,378.5	863.3	415.0	957.3	0.00	0.00	0.00
4,600.0	14.78	25.67	4,475.2	886.3	426.0	982.8	0.00	0.00	0.00
4,700.0	14.78	25.67	4,571.9	909.3	437.1	1,008.3	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 23A-13 496 - Slot 23A-13
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 23A-13 496	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	14.78	25.67	4,668.6	932.3	448.1	1,033.8	0.00	0.00	0.00
4,900.0	14.78	25.67	4,765.3	955.3	459.2	1,059.3	0.00	0.00	0.00
5,000.0	14.78	25.67	4,862.0	978.3	470.2	1,084.8	0.00	0.00	0.00
5,100.0	14.78	25.67	4,958.7	1,001.3	481.3	1,110.2	0.00	0.00	0.00
5,200.0	14.78	25.67	5,055.4	1,024.3	492.3	1,135.7	0.00	0.00	0.00
5,300.0	14.78	25.67	5,152.0	1,047.3	503.4	1,161.2	0.00	0.00	0.00
5,400.0	14.78	25.67	5,248.7	1,070.3	514.4	1,186.7	0.00	0.00	0.00
5,500.0	14.78	25.67	5,345.4	1,093.3	525.5	1,212.2	0.00	0.00	0.00
5,600.0	14.78	25.67	5,442.1	1,116.2	536.5	1,237.7	0.00	0.00	0.00
5,700.0	14.78	25.67	5,538.8	1,139.2	547.6	1,263.2	0.00	0.00	0.00
5,800.0	14.78	25.67	5,635.5	1,162.2	558.6	1,288.7	0.00	0.00	0.00
5,900.0	14.78	25.67	5,732.2	1,185.2	569.7	1,314.2	0.00	0.00	0.00
6,000.0	14.78	25.67	5,828.9	1,208.2	580.7	1,339.7	0.00	0.00	0.00
6,100.0	14.78	25.67	5,925.6	1,231.2	591.8	1,365.2	0.00	0.00	0.00
6,200.0	14.78	25.67	6,022.3	1,254.2	602.9	1,390.7	0.00	0.00	0.00
6,300.0	14.78	25.67	6,119.0	1,277.2	613.9	1,416.2	0.00	0.00	0.00
6,400.0	14.78	25.67	6,215.7	1,300.2	625.0	1,441.7	0.00	0.00	0.00
6,500.0	14.78	25.67	6,312.3	1,323.2	636.0	1,467.2	0.00	0.00	0.00
6,600.0	14.78	25.67	6,409.0	1,346.2	647.1	1,492.6	0.00	0.00	0.00
Wasatch G									
6,670.3	14.78	25.67	6,477.0	1,362.3	654.8	1,510.6	0.00	0.00	0.00
6,700.0	14.78	25.67	6,505.7	1,369.2	658.1	1,518.1	0.00	0.00	0.00
6,800.0	14.78	25.67	6,602.4	1,392.1	669.2	1,543.6	0.00	0.00	0.00
6,900.0	14.78	25.67	6,699.1	1,415.1	680.2	1,569.1	0.00	0.00	0.00
Fort Union									
6,980.5	14.78	25.67	6,777.0	1,433.7	689.1	1,589.7	0.00	0.00	0.00
7,000.0	14.78	25.67	6,795.8	1,438.1	691.3	1,594.6	0.00	0.00	0.00
7,100.0	14.78	25.67	6,892.5	1,461.1	702.3	1,620.1	0.00	0.00	0.00
7,200.0	14.78	25.67	6,989.2	1,484.1	713.4	1,645.6	0.00	0.00	0.00
7,300.0	14.78	25.67	7,085.9	1,507.1	724.4	1,671.1	0.00	0.00	0.00
7,400.0	14.78	25.67	7,182.6	1,530.1	735.5	1,696.6	0.00	0.00	0.00
7,500.0	14.78	25.67	7,279.3	1,553.1	746.5	1,722.1	0.00	0.00	0.00
7,600.0	14.78	25.67	7,376.0	1,576.1	757.6	1,747.6	0.00	0.00	0.00
7,700.0	14.78	25.67	7,472.6	1,599.1	768.6	1,773.1	0.00	0.00	0.00
7,800.0	14.78	25.67	7,569.3	1,622.1	779.7	1,798.6	0.00	0.00	0.00
7,900.0	14.78	25.67	7,666.0	1,645.1	790.7	1,824.1	0.00	0.00	0.00
8,000.0	14.78	25.67	7,762.7	1,668.0	801.8	1,849.6	0.00	0.00	0.00
8,100.0	14.78	25.67	7,859.4	1,691.0	812.8	1,875.0	0.00	0.00	0.00
8,200.0	14.78	25.67	7,956.1	1,714.0	823.9	1,900.5	0.00	0.00	0.00
8,300.0	14.78	25.67	8,052.8	1,737.0	834.9	1,926.0	0.00	0.00	0.00
8,400.0	14.78	25.67	8,149.5	1,760.0	846.0	1,951.5	0.00	0.00	0.00
Drop 3° /100'									
8,440.7	14.78	25.67	8,188.8	1,769.4	850.5	1,961.9	0.00	0.00	0.00
8,500.0	13.00	25.67	8,246.4	1,782.2	856.6	1,976.1	3.00	-3.00	0.00
8,600.0	10.00	25.67	8,344.4	1,800.2	865.3	1,996.0	3.00	-3.00	0.00
8,700.0	7.00	25.67	8,443.3	1,813.5	871.7	2,010.8	3.00	-3.00	0.00
8,800.0	4.00	25.67	8,542.8	1,822.1	875.8	2,020.4	3.00	-3.00	0.00
8,900.0	1.00	25.67	8,642.7	1,826.0	877.7	2,024.7	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
8,933.3	0.00	0.00	8,676.0	1,826.3	877.8	2,025.0	3.00	-3.00	0.00
9,000.0	1.00	250.00	8,742.7	1,826.1	877.3	2,024.6	1.50	1.50	0.00
EOB @ 1.37° Inc. / 250.00° Azm									
9,024.5	1.37	250.00	8,767.2	1,825.9	876.8	2,024.3	1.50	1.50	0.00
9,100.0	1.37	250.00	8,842.7	1,825.3	875.1	2,023.0	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 23A-13 496 - Slot 23A-13
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 23A-13 496	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	1.37	250.00	8,942.6	1,824.5	872.9	2,021.4	0.00	0.00	0.00
9,300.0	1.37	250.00	9,042.6	1,823.7	870.6	2,019.7	0.00	0.00	0.00
9,400.0	1.37	250.00	9,142.6	1,822.9	868.4	2,018.1	0.00	0.00	0.00
Williams Fork									
9,485.4	1.37	250.00	9,228.0	1,822.2	866.5	2,016.7	0.00	0.00	0.00
9,500.0	1.37	250.00	9,242.6	1,822.0	866.1	2,016.4	0.00	0.00	0.00
9,600.0	1.37	250.00	9,342.5	1,821.2	863.9	2,014.8	0.00	0.00	0.00
9,700.0	1.37	250.00	9,442.5	1,820.4	861.7	2,013.2	0.00	0.00	0.00
9,800.0	1.37	250.00	9,542.5	1,819.6	859.4	2,011.5	0.00	0.00	0.00
9,900.0	1.37	250.00	9,642.4	1,818.8	857.2	2,009.9	0.00	0.00	0.00
10,000.0	1.37	250.00	9,742.4	1,818.0	854.9	2,008.2	0.00	0.00	0.00
10,100.0	1.37	250.00	9,842.4	1,817.1	852.7	2,006.6	0.00	0.00	0.00
10,200.0	1.37	250.00	9,942.4	1,816.3	850.4	2,004.9	0.00	0.00	0.00
10,300.0	1.37	250.00	10,042.3	1,815.5	848.2	2,003.3	0.00	0.00	0.00
10,400.0	1.37	250.00	10,142.3	1,814.7	845.9	2,001.6	0.00	0.00	0.00
10,500.0	1.37	250.00	10,242.3	1,813.9	843.7	2,000.0	0.00	0.00	0.00
10,600.0	1.37	250.00	10,342.2	1,813.1	841.5	1,998.3	0.00	0.00	0.00
10,700.0	1.37	250.00	10,442.2	1,812.2	839.2	1,996.7	0.00	0.00	0.00
10,800.0	1.37	250.00	10,542.2	1,811.4	837.0	1,995.0	0.00	0.00	0.00
10,900.0	1.37	250.00	10,642.2	1,810.6	834.7	1,993.4	0.00	0.00	0.00
11,000.0	1.37	250.00	10,742.1	1,809.8	832.5	1,991.7	0.00	0.00	0.00
11,100.0	1.37	250.00	10,842.1	1,809.0	830.2	1,990.1	0.00	0.00	0.00
11,200.0	1.37	250.00	10,942.1	1,808.2	828.0	1,988.4	0.00	0.00	0.00
11,300.0	1.37	250.00	11,042.0	1,807.3	825.7	1,986.8	0.00	0.00	0.00
11,400.0	1.37	250.00	11,142.0	1,806.5	823.5	1,985.1	0.00	0.00	0.00
11,500.0	1.37	250.00	11,242.0	1,805.7	821.3	1,983.5	0.00	0.00	0.00
11,600.0	1.37	250.00	11,342.0	1,804.9	819.0	1,981.8	0.00	0.00	0.00
11,700.0	1.37	250.00	11,441.9	1,804.1	816.8	1,980.2	0.00	0.00	0.00
11,800.0	1.37	250.00	11,541.9	1,803.3	814.5	1,978.5	0.00	0.00	0.00
11,900.0	1.37	250.00	11,641.9	1,802.4	812.3	1,976.9	0.00	0.00	0.00
12,000.0	1.37	250.00	11,741.8	1,801.6	810.0	1,975.2	0.00	0.00	0.00
12,100.0	1.37	250.00	11,841.8	1,800.8	807.8	1,973.6	0.00	0.00	0.00
12,200.0	1.37	250.00	11,941.8	1,800.0	805.5	1,972.0	0.00	0.00	0.00
12,300.0	1.37	250.00	12,041.8	1,799.2	803.3	1,970.3	0.00	0.00	0.00
12,400.0	1.37	250.00	12,141.7	1,798.4	801.1	1,968.7	0.00	0.00	0.00
Cameo									
12,491.3	1.37	250.00	12,233.0	1,797.6	799.0	1,967.2	0.00	0.00	0.00
12,500.0	1.37	250.00	12,241.7	1,797.5	798.8	1,967.0	0.00	0.00	0.00
12,600.0	1.37	250.00	12,341.7	1,796.7	796.6	1,965.4	0.00	0.00	0.00
Rollins									
12,665.3	1.37	250.00	12,407.0	1,796.2	795.1	1,964.3	0.00	0.00	0.00
12,700.0	1.37	250.00	12,441.6	1,795.9	794.3	1,963.7	0.00	0.00	0.00
12,800.0	1.37	250.00	12,541.6	1,795.1	792.1	1,962.1	0.00	0.00	0.00
12,900.0	1.37	250.00	12,641.6	1,794.3	789.8	1,960.4	0.00	0.00	0.00
13,000.0	1.37	250.00	12,741.6	1,793.5	787.6	1,958.8	0.00	0.00	0.00
13,100.0	1.37	250.00	12,841.5	1,792.6	785.3	1,957.1	0.00	0.00	0.00
TD @ 13165.5' MD / 12907.0' TVD									
13,165.5	1.37	250.00	12,907.0	1,792.1	783.9	1,956.0	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU O13 FED 23A-13 496 - Slot 23A-13
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 23A-13 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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 - 23A-13	0.00	0.00	8,676.0	1,826.3	877.8	14,431,254.91	2,452,927.82	39.703730	-108.111452
- plan hits target center									
- Point									
PBHL - 23A-13	0.00	0.00	12,907.0	1,792.1	783.9	14,431,217.70	2,452,835.00	39.703636	-108.111785
- 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 (°)
4,188.2	4,077.0	Wasatch			
6,670.3	6,477.0	Wasatch G			
6,980.5	6,777.0	Fort Union			
8,933.3	8,676.0	Ohio Creek			
9,485.4	9,228.0	Williams Fork			
12,491.3	12,233.0	Cameo			
12,665.3	12,407.0	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'
992.6	987.2	56.9	27.4	EOB @ 14.78° Inc. / 25.67° Azm
8,440.7	8,188.8	1,769.4	850.5	Drop 3° / 100'
8,933.3	8,676.0	1,826.3	877.8	EOD @ Vertical / Build 1.5° / 100'
9,024.5	8,767.2	1,825.9	876.8	EOB @ 1.37° Inc. / 250.00° Azm
13,165.5	12,907.0	1,792.1	783.9	TD @ 13165.5' MD / 12907.0' TVD