

Project: Rio Blanco County, CO
Site: ELU A18 495 Pad
Well: ELU A18 FED 24D-12-496
Wellbore: OH
Design: Design #5
Latitude: 39.709053
Longitude: -108.104107
Ground Level: 8029.0
RKB=30' @ 8059.0usft (TBD)

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=30' @ 8059.0usft (TBD)
Section (VS) Reference: Slot - 24D-12(0.0N, 0.0E)
Measured Depth Reference: RKB=30' @ 8059.0usft (TBD)
Calculation Method: Minimum Curvature

SECTION DETAILS

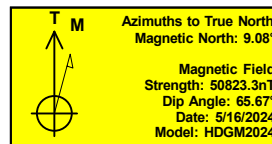
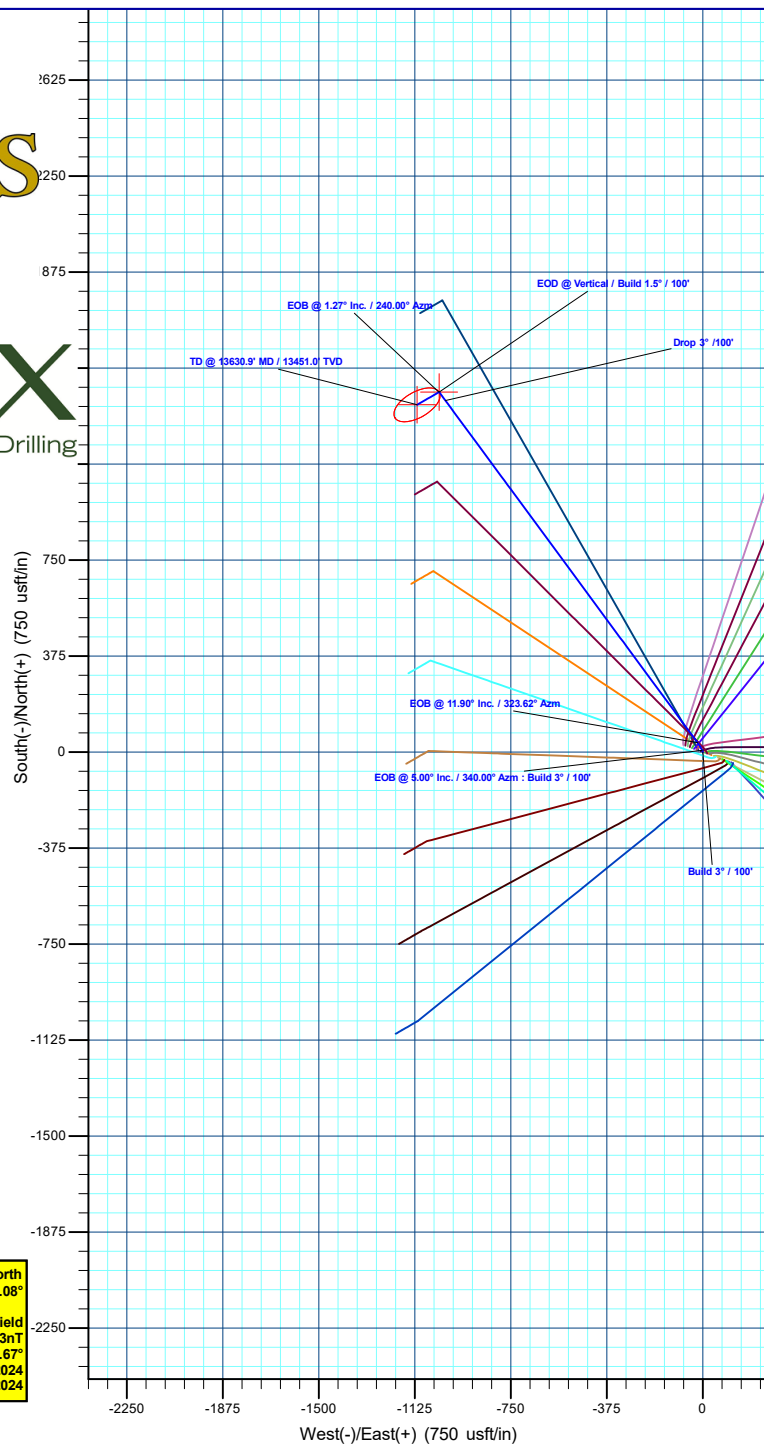
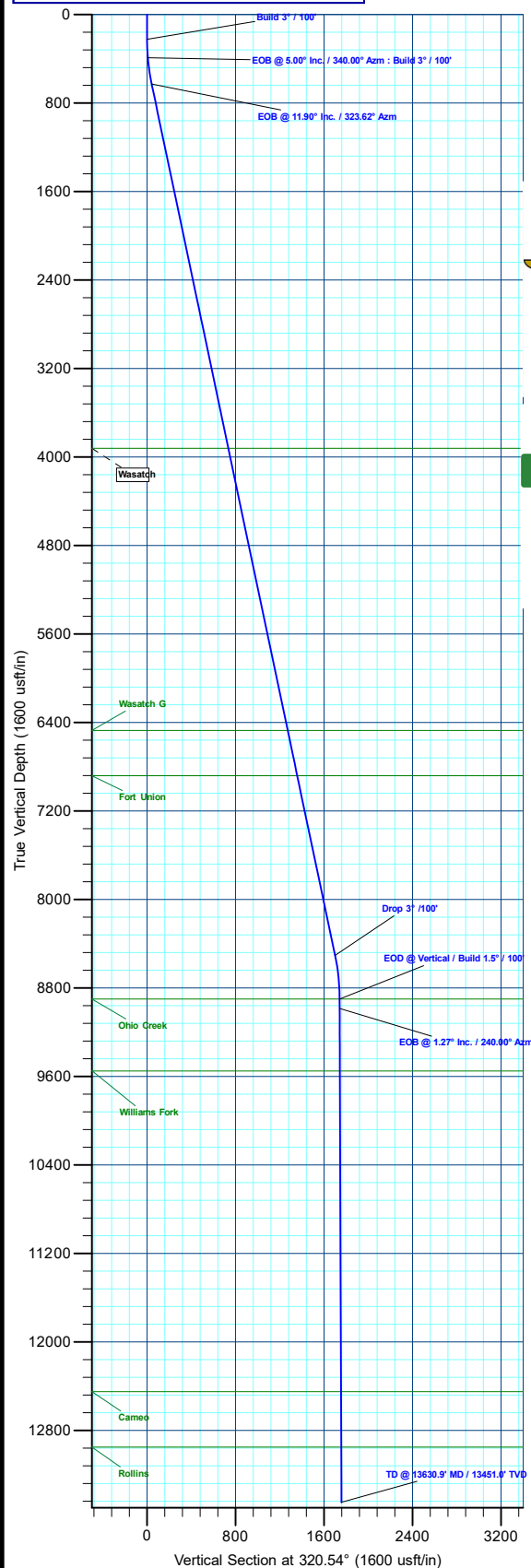
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
225.0	0.00	0.00	225.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
391.7	5.00	340.00	391.5	6.8	-2.5	3.00	340.00	6.9	EOB @ 5.00° Inc. / 340.00° Azm : Build 3° / 100'
633.0	11.90	323.62	630.1	36.8	-20.9	3.00	-27.48	41.7	EOB @ 11.90° Inc. / 323.62° Azm
8683.1	11.90	323.62	8507.2	1373.2	-1005.5	0.00	0.00	1699.3	Drop 3° / 100'
9079.8	0.00	0.00	8901.0	1406.3	-1029.9	3.00	180.00	1740.3	EOD @ Vertical / Build 1.5° / 100'
9164.5	1.27	240.00	8985.7	1405.8	-1030.7	1.50	240.00	1740.4	EOB @ 1.27° Inc. / 240.00° Azm
13630.9	1.27	240.00	13451.0	1356.3	-1116.5	0.00	0.00	1756.7	TD @ 13630.9' MD / 13451.0' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	North	East	Latitude	Longitude
24D-12 - OHCR	8901.0	1406.3	-1029.9	14434632.77	2453856.44	39.712912	-108.107767
24D-12 - PBHL	13451.0	1356.3	-1116.5	14434580.00	2453771.50	39.712775	-108.108075

WELL DETAILS: ELU A18 FED 24D-12-496

	Ground Level : 8029.0						
	North	East	Latitude	Longitude			
+N/-S	0.0	0.0	14433260.51	2454931.22	39.709053	-108.104107	24D-12



Plan: Design #5 (ELU A18 FED 24D-12-496/OH)

Created By: Will Jircik Date: 22:26, June 09 2024



Caerus Oil & Gas

Rio Blanco County, CO

ELU A18 495 Pad

ELU A18 FED 24D-12-496 - Slot 24D-12

OH

Plan: Design #5

KLX Well Planning Report

09 June, 2024



Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well ELU A18 FED 24D-12-496 - Slot 24D-12
Company:	Caerus Oil & Gas	TVD Reference:	RKB=30' @ 8059.0usft (TBD)
Project:	Rio Blanco County, CO	MD Reference:	RKB=30' @ 8059.0usft (TBD)
Site:	ELU A18 495 Pad	North Reference:	True
Well:	ELU A18 FED 24D-12-496	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #5		

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

Site		ELU A18 495 Pad			
Site Position:		Northing:	14,433,285.62 usft	Latitude:	39.709129
From:	Map	Easting:	2,454,854.21 usft	Longitude:	-108.104378
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.85 °

Well	ELU A18 FED 24D-12-496 - Slot 24D-12					
Well Position	+N/-S	-27.6 usft	Northing:	14,433,260.51 usft	Latitude:	39.709053
	+E/-W	76.2 usft	Easting:	2,454,931.22 usft	Longitude:	-108.104108
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	8,029.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2024	5/16/2024	9.08	65.67	50,823.30000000

Design	Design #5			
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	320.54

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	
225.0	0.00	0.00	225.0	0.0	0.0	0.00	0.00	0.00	0.00	
391.7	5.00	340.00	391.5	6.8	-2.5	3.00	3.00	0.00	340.00	
633.0	11.90	323.62	630.1	36.8	-20.9	3.00	2.86	-6.79	-27.48	
8,683.1	11.90	323.62	8,507.2	1,373.2	-1,005.5	0.00	0.00	0.00	0.00	
9,079.8	0.00	0.00	8,901.0	1,406.3	-1,029.9	3.00	-3.00	0.00	180.00	24D-12 - OHCR
9,164.5	1.27	240.00	8,985.7	1,405.8	-1,030.7	1.50	1.50	-141.63	240.00	
13,630.9	1.27	240.00	13,451.0	1,356.3	-1,116.5	0.00	0.00	0.00	0.00	24D-12 - PBHL

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well ELU A18 FED 24D-12-496 - Slot 24D-12
Company:	Caerus Oil & Gas	TVD Reference:	RKB=30' @ 8059.0usft (TBD)
Project:	Rio Blanco County, CO	MD Reference:	RKB=30' @ 8059.0usft (TBD)
Site:	ELU A18 495 Pad	North Reference:	True
Well:	ELU A18 FED 24D-12-496	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #5		

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
Build 3° / 100'									
225.0	0.00	0.00	225.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	2.25	340.00	300.0	1.4	-0.5	1.4	3.00	3.00	0.00
EOB @ 5.00° Inc. / 340.00° Azm : Build 3° / 100'									
391.7	5.00	340.00	391.5	6.8	-2.5	6.9	3.00	3.00	0.00
400.0	5.22	338.73	399.8	7.5	-2.7	7.6	3.00	2.68	-15.21
500.0	8.02	329.20	499.1	17.8	-8.0	18.8	3.00	2.80	-9.54
600.0	10.93	324.64	597.7	31.5	-17.0	35.1	3.00	2.91	-4.56
EOB @ 11.90° Inc. / 323.62° Azm									
633.0	11.90	323.62	630.1	36.8	-20.9	41.7	3.00	2.94	-3.09
700.0	11.90	323.62	695.6	47.9	-29.1	55.5	0.00	0.00	0.00
800.0	11.90	323.62	793.5	64.5	-41.3	76.0	0.00	0.00	0.00
900.0	11.90	323.62	891.3	81.1	-53.5	96.6	0.00	0.00	0.00
1,000.0	11.90	323.62	989.2	97.7	-65.8	117.2	0.00	0.00	0.00
1,100.0	11.90	323.62	1,087.0	114.3	-78.0	137.8	0.00	0.00	0.00
1,200.0	11.90	323.62	1,184.9	130.9	-90.2	158.4	0.00	0.00	0.00
1,300.0	11.90	323.62	1,282.7	147.5	-102.5	179.0	0.00	0.00	0.00
1,400.0	11.90	323.62	1,380.6	164.1	-114.7	199.6	0.00	0.00	0.00
1,500.0	11.90	323.62	1,478.4	180.7	-126.9	220.2	0.00	0.00	0.00
1,600.0	11.90	323.62	1,576.3	197.3	-139.1	240.8	0.00	0.00	0.00
1,700.0	11.90	323.62	1,674.1	213.9	-151.4	261.4	0.00	0.00	0.00
1,800.0	11.90	323.62	1,772.0	230.5	-163.6	282.0	0.00	0.00	0.00
1,900.0	11.90	323.62	1,869.8	247.1	-175.8	302.6	0.00	0.00	0.00
2,000.0	11.90	323.62	1,967.7	263.7	-188.1	323.1	0.00	0.00	0.00
2,100.0	11.90	323.62	2,065.5	280.3	-200.3	343.7	0.00	0.00	0.00
2,200.0	11.90	323.62	2,163.4	296.9	-212.5	364.3	0.00	0.00	0.00
2,300.0	11.90	323.62	2,261.2	313.5	-224.8	384.9	0.00	0.00	0.00
2,400.0	11.90	323.62	2,359.1	330.1	-237.0	405.5	0.00	0.00	0.00
2,500.0	11.90	323.62	2,456.9	346.7	-249.2	426.1	0.00	0.00	0.00
2,600.0	11.90	323.62	2,554.8	363.3	-261.5	446.7	0.00	0.00	0.00
2,700.0	11.90	323.62	2,652.6	379.9	-273.7	467.3	0.00	0.00	0.00
2,800.0	11.90	323.62	2,750.5	396.5	-285.9	487.9	0.00	0.00	0.00
2,900.0	11.90	323.62	2,848.3	413.1	-298.2	508.5	0.00	0.00	0.00
3,000.0	11.90	323.62	2,946.2	429.7	-310.4	529.1	0.00	0.00	0.00
3,100.0	11.90	323.62	3,044.0	446.3	-322.6	549.6	0.00	0.00	0.00
3,200.0	11.90	323.62	3,141.9	462.9	-334.9	570.2	0.00	0.00	0.00
3,300.0	11.90	323.62	3,239.7	479.5	-347.1	590.8	0.00	0.00	0.00
3,400.0	11.90	323.62	3,337.6	496.1	-359.3	611.4	0.00	0.00	0.00
3,500.0	11.90	323.62	3,435.4	512.7	-371.6	632.0	0.00	0.00	0.00
3,600.0	11.90	323.62	3,533.3	529.3	-383.8	652.6	0.00	0.00	0.00
3,700.0	11.90	323.62	3,631.1	545.9	-396.0	673.2	0.00	0.00	0.00
3,800.0	11.90	323.62	3,729.0	562.6	-408.2	693.8	0.00	0.00	0.00
3,900.0	11.90	323.62	3,826.8	579.2	-420.5	714.4	0.00	0.00	0.00
Wasatch									
3,997.3	11.90	323.62	3,922.0	595.3	-432.4	734.4	0.00	0.00	0.00
4,000.0	11.90	323.62	3,924.7	595.8	-432.7	735.0	0.00	0.00	0.00
4,100.0	11.90	323.62	4,022.5	612.4	-444.9	755.6	0.00	0.00	0.00
4,200.0	11.90	323.62	4,120.4	629.0	-457.2	776.1	0.00	0.00	0.00
4,300.0	11.90	323.62	4,218.2	645.6	-469.4	796.7	0.00	0.00	0.00
4,400.0	11.90	323.62	4,316.1	662.2	-481.6	817.3	0.00	0.00	0.00
4,500.0	11.90	323.62	4,413.9	678.8	-493.9	837.9	0.00	0.00	0.00

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well ELU A18 FED 24D-12-496 - Slot 24D-12
Company:	Caerus Oil & Gas	TVD Reference:	RKB=30' @ 8059.0usft (TBD)
Project:	Rio Blanco County, CO	MD Reference:	RKB=30' @ 8059.0usft (TBD)
Site:	ELU A18 495 Pad	North Reference:	True
Well:	ELU A18 FED 24D-12-496	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #5		

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)
4,600.0	11.90	323.62	4,511.8	695.4	-506.1	858.5	0.00	0.00	0.00
4,700.0	11.90	323.62	4,609.6	712.0	-518.3	879.1	0.00	0.00	0.00
4,800.0	11.90	323.62	4,707.5	728.6	-530.6	899.7	0.00	0.00	0.00
4,900.0	11.90	323.62	4,805.3	745.2	-542.8	920.3	0.00	0.00	0.00
5,000.0	11.90	323.62	4,903.2	761.8	-555.0	940.9	0.00	0.00	0.00
5,100.0	11.90	323.62	5,001.0	778.4	-567.3	961.5	0.00	0.00	0.00
5,200.0	11.90	323.62	5,098.9	795.0	-579.5	982.1	0.00	0.00	0.00
5,300.0	11.90	323.62	5,196.8	811.6	-591.7	1,002.6	0.00	0.00	0.00
5,400.0	11.90	323.62	5,294.6	828.2	-604.0	1,023.2	0.00	0.00	0.00
5,500.0	11.90	323.62	5,392.5	844.8	-616.2	1,043.8	0.00	0.00	0.00
5,600.0	11.90	323.62	5,490.3	861.4	-628.4	1,064.4	0.00	0.00	0.00
5,700.0	11.90	323.62	5,588.2	878.0	-640.6	1,085.0	0.00	0.00	0.00
5,800.0	11.90	323.62	5,686.0	894.6	-652.9	1,105.6	0.00	0.00	0.00
5,900.0	11.90	323.62	5,783.9	911.2	-665.1	1,126.2	0.00	0.00	0.00
6,000.0	11.90	323.62	5,881.7	927.8	-677.3	1,146.8	0.00	0.00	0.00
6,100.0	11.90	323.62	5,979.6	944.4	-689.6	1,167.4	0.00	0.00	0.00
6,200.0	11.90	323.62	6,077.4	961.0	-701.8	1,188.0	0.00	0.00	0.00
6,300.0	11.90	323.62	6,175.3	977.6	-714.0	1,208.6	0.00	0.00	0.00
6,400.0	11.90	323.62	6,273.1	994.2	-726.3	1,229.2	0.00	0.00	0.00
6,500.0	11.90	323.62	6,371.0	1,010.8	-738.5	1,249.7	0.00	0.00	0.00
6,600.0	11.90	323.62	6,468.8	1,027.4	-750.7	1,270.3	0.00	0.00	0.00
Wasatch G									
6,603.3	11.90	323.62	6,472.0	1,027.9	-751.1	1,271.0	0.00	0.00	0.00
6,700.0	11.90	323.62	6,566.7	1,044.0	-763.0	1,290.9	0.00	0.00	0.00
6,800.0	11.90	323.62	6,664.5	1,060.6	-775.2	1,311.5	0.00	0.00	0.00
6,900.0	11.90	323.62	6,762.4	1,077.2	-787.4	1,332.1	0.00	0.00	0.00
7,000.0	11.90	323.62	6,860.2	1,093.8	-799.7	1,352.7	0.00	0.00	0.00
Fort Union									
7,022.3	11.90	323.62	6,882.0	1,097.5	-802.4	1,357.3	0.00	0.00	0.00
7,100.0	11.90	323.62	6,958.1	1,110.4	-811.9	1,373.3	0.00	0.00	0.00
7,200.0	11.90	323.62	7,055.9	1,127.0	-824.1	1,393.9	0.00	0.00	0.00
7,300.0	11.90	323.62	7,153.8	1,143.6	-836.4	1,414.5	0.00	0.00	0.00
7,400.0	11.90	323.62	7,251.6	1,160.2	-848.6	1,435.1	0.00	0.00	0.00
7,500.0	11.90	323.62	7,349.5	1,176.8	-860.8	1,455.7	0.00	0.00	0.00
7,600.0	11.90	323.62	7,447.3	1,193.4	-873.1	1,476.2	0.00	0.00	0.00
7,700.0	11.90	323.62	7,545.2	1,210.0	-885.3	1,496.8	0.00	0.00	0.00
7,800.0	11.90	323.62	7,643.0	1,226.6	-897.5	1,517.4	0.00	0.00	0.00
7,900.0	11.90	323.62	7,740.9	1,243.2	-909.7	1,538.0	0.00	0.00	0.00
8,000.0	11.90	323.62	7,838.7	1,259.8	-922.0	1,558.6	0.00	0.00	0.00
8,100.0	11.90	323.62	7,936.6	1,276.4	-934.2	1,579.2	0.00	0.00	0.00
8,200.0	11.90	323.62	8,034.4	1,293.0	-946.4	1,599.8	0.00	0.00	0.00
8,300.0	11.90	323.62	8,132.3	1,309.6	-958.7	1,620.4	0.00	0.00	0.00
8,400.0	11.90	323.62	8,230.1	1,326.2	-970.9	1,641.0	0.00	0.00	0.00
8,500.0	11.90	323.62	8,328.0	1,342.8	-983.1	1,661.6	0.00	0.00	0.00
8,600.0	11.90	323.62	8,425.8	1,359.4	-995.4	1,682.2	0.00	0.00	0.00
Drop 3° /100'									
8,683.1	11.90	323.62	8,507.2	1,373.2	-1,005.5	1,699.3	0.00	0.00	0.00
8,700.0	11.39	323.62	8,523.7	1,376.0	-1,007.6	1,702.7	3.00	-3.00	0.00
8,800.0	8.39	323.62	8,622.2	1,389.8	-1,017.8	1,719.8	3.00	-3.00	0.00
8,900.0	5.39	323.62	8,721.5	1,399.5	-1,024.9	1,731.8	3.00	-3.00	0.00
9,000.0	2.39	323.62	8,821.2	1,404.9	-1,028.9	1,738.6	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
9,079.8	0.00	0.00	8,901.0	1,406.3	-1,029.9	1,740.3	3.00	-3.00	0.00

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well ELU A18 FED 24D-12-496 - Slot 24D-12
Company:	Caerus Oil & Gas	TVD Reference:	RKB=30' @ 8059.0usft (TBD)
Project:	Rio Blanco County, CO	MD Reference:	RKB=30' @ 8059.0usft (TBD)
Site:	ELU A18 495 Pad	North Reference:	True
Well:	ELU A18 FED 24D-12-496	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #5		

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)	
9,100.0	0.30	240.00	8,921.2	1,406.2	-1,029.9	1,740.3	1.50	1.50	0.00	
EOB @ 1.27° Inc. / 240.00° Azm										
9,164.5	1.27	240.00	8,985.7	1,405.8	-1,030.7	1,740.4	1.50	1.50	0.00	
9,200.0	1.27	240.00	9,021.2	1,405.4	-1,031.4	1,740.5	0.00	0.00	0.00	
9,300.0	1.27	240.00	9,121.2	1,404.3	-1,033.3	1,740.9	0.00	0.00	0.00	
9,400.0	1.27	240.00	9,221.1	1,403.2	-1,035.2	1,741.3	0.00	0.00	0.00	
9,500.0	1.27	240.00	9,321.1	1,402.1	-1,037.1	1,741.6	0.00	0.00	0.00	
9,600.0	1.27	240.00	9,421.1	1,401.0	-1,039.1	1,742.0	0.00	0.00	0.00	
9,700.0	1.27	240.00	9,521.1	1,399.9	-1,041.0	1,742.4	0.00	0.00	0.00	
Williams Fork										
9,730.0	1.27	240.00	9,551.0	1,399.5	-1,041.6	1,742.5	0.00	0.00	0.00	
9,800.0	1.27	240.00	9,621.0	1,398.7	-1,042.9	1,742.7	0.00	0.00	0.00	
9,900.0	1.27	240.00	9,721.0	1,397.6	-1,044.8	1,743.1	0.00	0.00	0.00	
10,000.0	1.27	240.00	9,821.0	1,396.5	-1,046.7	1,743.5	0.00	0.00	0.00	
10,100.0	1.27	240.00	9,921.0	1,395.4	-1,048.7	1,743.8	0.00	0.00	0.00	
10,200.0	1.27	240.00	10,020.9	1,394.3	-1,050.6	1,744.2	0.00	0.00	0.00	
10,300.0	1.27	240.00	10,120.9	1,393.2	-1,052.5	1,744.6	0.00	0.00	0.00	
10,400.0	1.27	240.00	10,220.9	1,392.1	-1,054.4	1,744.9	0.00	0.00	0.00	
10,500.0	1.27	240.00	10,320.9	1,391.0	-1,056.4	1,745.3	0.00	0.00	0.00	
10,600.0	1.27	240.00	10,420.8	1,389.9	-1,058.3	1,745.7	0.00	0.00	0.00	
10,700.0	1.27	240.00	10,520.8	1,388.8	-1,060.2	1,746.0	0.00	0.00	0.00	
10,800.0	1.27	240.00	10,620.8	1,387.7	-1,062.1	1,746.4	0.00	0.00	0.00	
10,900.0	1.27	240.00	10,720.8	1,386.5	-1,064.0	1,746.7	0.00	0.00	0.00	
11,000.0	1.27	240.00	10,820.7	1,385.4	-1,066.0	1,747.1	0.00	0.00	0.00	
11,100.0	1.27	240.00	10,920.7	1,384.3	-1,067.9	1,747.5	0.00	0.00	0.00	
11,200.0	1.27	240.00	11,020.7	1,383.2	-1,069.8	1,747.8	0.00	0.00	0.00	
11,300.0	1.27	240.00	11,120.7	1,382.1	-1,071.7	1,748.2	0.00	0.00	0.00	
11,400.0	1.27	240.00	11,220.6	1,381.0	-1,073.6	1,748.6	0.00	0.00	0.00	
11,500.0	1.27	240.00	11,320.6	1,379.9	-1,075.6	1,748.9	0.00	0.00	0.00	
11,600.0	1.27	240.00	11,420.6	1,378.8	-1,077.5	1,749.3	0.00	0.00	0.00	
11,700.0	1.27	240.00	11,520.6	1,377.7	-1,079.4	1,749.7	0.00	0.00	0.00	
11,800.0	1.27	240.00	11,620.5	1,376.6	-1,081.3	1,750.0	0.00	0.00	0.00	
11,900.0	1.27	240.00	11,720.5	1,375.5	-1,083.2	1,750.4	0.00	0.00	0.00	
12,000.0	1.27	240.00	11,820.5	1,374.4	-1,085.2	1,750.8	0.00	0.00	0.00	
12,100.0	1.27	240.00	11,920.5	1,373.2	-1,087.1	1,751.1	0.00	0.00	0.00	
12,200.0	1.27	240.00	12,020.4	1,372.1	-1,089.0	1,751.5	0.00	0.00	0.00	
12,300.0	1.27	240.00	12,120.4	1,371.0	-1,090.9	1,751.8	0.00	0.00	0.00	
12,400.0	1.27	240.00	12,220.4	1,369.9	-1,092.8	1,752.2	0.00	0.00	0.00	
12,500.0	1.27	240.00	12,320.4	1,368.8	-1,094.8	1,752.6	0.00	0.00	0.00	
12,600.0	1.27	240.00	12,420.3	1,367.7	-1,096.7	1,752.9	0.00	0.00	0.00	
Cameo										
12,630.7	1.27	240.00	12,451.0	1,367.4	-1,097.3	1,753.1	0.00	0.00	0.00	
12,700.0	1.27	240.00	12,520.3	1,366.6	-1,098.6	1,753.3	0.00	0.00	0.00	
12,800.0	1.27	240.00	12,620.3	1,365.5	-1,100.5	1,753.7	0.00	0.00	0.00	
12,900.0	1.27	240.00	12,720.3	1,364.4	-1,102.5	1,754.0	0.00	0.00	0.00	
13,000.0	1.27	240.00	12,820.2	1,363.3	-1,104.4	1,754.4	0.00	0.00	0.00	
13,100.0	1.27	240.00	12,920.2	1,362.2	-1,106.3	1,754.8	0.00	0.00	0.00	
Rollins										
13,130.8	1.27	240.00	12,951.0	1,361.8	-1,106.9	1,754.9	0.00	0.00	0.00	
13,200.0	1.27	240.00	13,020.2	1,361.0	-1,108.2	1,755.1	0.00	0.00	0.00	
13,300.0	1.27	240.00	13,120.2	1,359.9	-1,110.1	1,755.5	0.00	0.00	0.00	
13,400.0	1.27	240.00	13,220.1	1,358.8	-1,112.1	1,755.9	0.00	0.00	0.00	
13,500.0	1.27	240.00	13,320.1	1,357.7	-1,114.0	1,756.2	0.00	0.00	0.00	

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well ELU A18 FED 24D-12-496 - Slot 24D-12
Company:	Caerus Oil & Gas	TVD Reference:	RKB=30' @ 8059.0usft (TBD)
Project:	Rio Blanco County, CO	MD Reference:	RKB=30' @ 8059.0usft (TBD)
Site:	ELU A18 495 Pad	North Reference:	True
Well:	ELU A18 FED 24D-12-496	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #5		

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)	
13,600.0	1.27	240.00	13,420.1	1,356.6	-1,115.9	1,756.6	0.00	0.00	0.00	
TD @ 13630.9' MD / 13451.0' TVD										
13,630.9	1.27	240.00	13,451.0	1,356.3	-1,116.5	1,756.7	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude		
24D-12 - OHCR	0.00	0.00	8,901.0	1,406.3	-1,029.9	14,434,632.77	2,453,856.45	39.712913		
- hit/miss target										
- Shape										
- Point										
24D-12 - PBHL	0.00	0.00	13,451.0	1,356.3	-1,116.5	14,434,580.00	2,453,771.50	39.712775		
- plan hits target center										
- Ellipse (radii L100.0 W50.0 on 240.00 azi)										

Formations							
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)		
3,997.3	3,922.0	Wasatch					
6,603.3	6,472.0	Wasatch G					
7,022.3	6,882.0	Fort Union					
9,079.8	8,901.0	Ohio Creek					
9,730.0	9,551.0	Williams Fork					
12,630.7	12,451.0	Cameo					
13,130.8	12,951.0	Rollins					

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
225.0	225.0	0.0	0.0	Build 3° / 100'	
391.7	391.5	6.8	-2.5	EOB @ 5.00° Inc. / 340.00° Azm : Build 3° / 100'	
633.0	630.1	36.8	-20.9	EOB @ 11.90° Inc. / 323.62° Azm	
8,683.1	8,507.2	1,373.2	-1,005.5	Drop 3° / 100'	
9,079.8	8,901.0	1,406.3	-1,029.9	EOD @ Vertical / Build 1.5° / 100'	
9,164.5	8,985.7	1,405.8	-1,030.7	EOB @ 1.27° Inc. / 240.00° Azm	
13,630.9	13,451.0	1,356.3	-1,116.5	TD @ 13630.9' MD / 13451.0' TVD	