

Project: Rio Blanco County, CO
 Site: ELU A18 495 Pad
 Well: ELU A18 FED 12D-18-495
 Wellbore: OH
 Design: Design #5
 Latitude: 39.708944
 Longitude: -108.103717
 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 - 12D-18(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	Dieg	TFace	Vsect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
260.0	0.00	0.00	260.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
944.7	20.54	137.45	930.2	-89.5	82.1	3.00	137.45	121.4	EOB @ 20.54° Inc. / 137.45° Azm
8662.1	20.54	137.45	8156.8	-2084.3	1913.4	0.00	0.00	2827.8	Drop 3° / 100'
9346.8	0.00	0.00	8827.0	-2173.8	1995.5	3.00	180.00	2949.2	EOD @ Vertical / Build 1.5° / 100'
9431.6	1.27	240.00	8911.7	-2174.3	1994.7	1.50	240.00	2949.0	EOB @ 1.27° Inc. / 240.00° Azm
13898.0	1.27	240.00	13377.0	-2223.8	1908.9	0.00	0.00	2930.7	TD @ 13898.0' MD / 13377.0' TVD

FORMATION TOP DETAILS

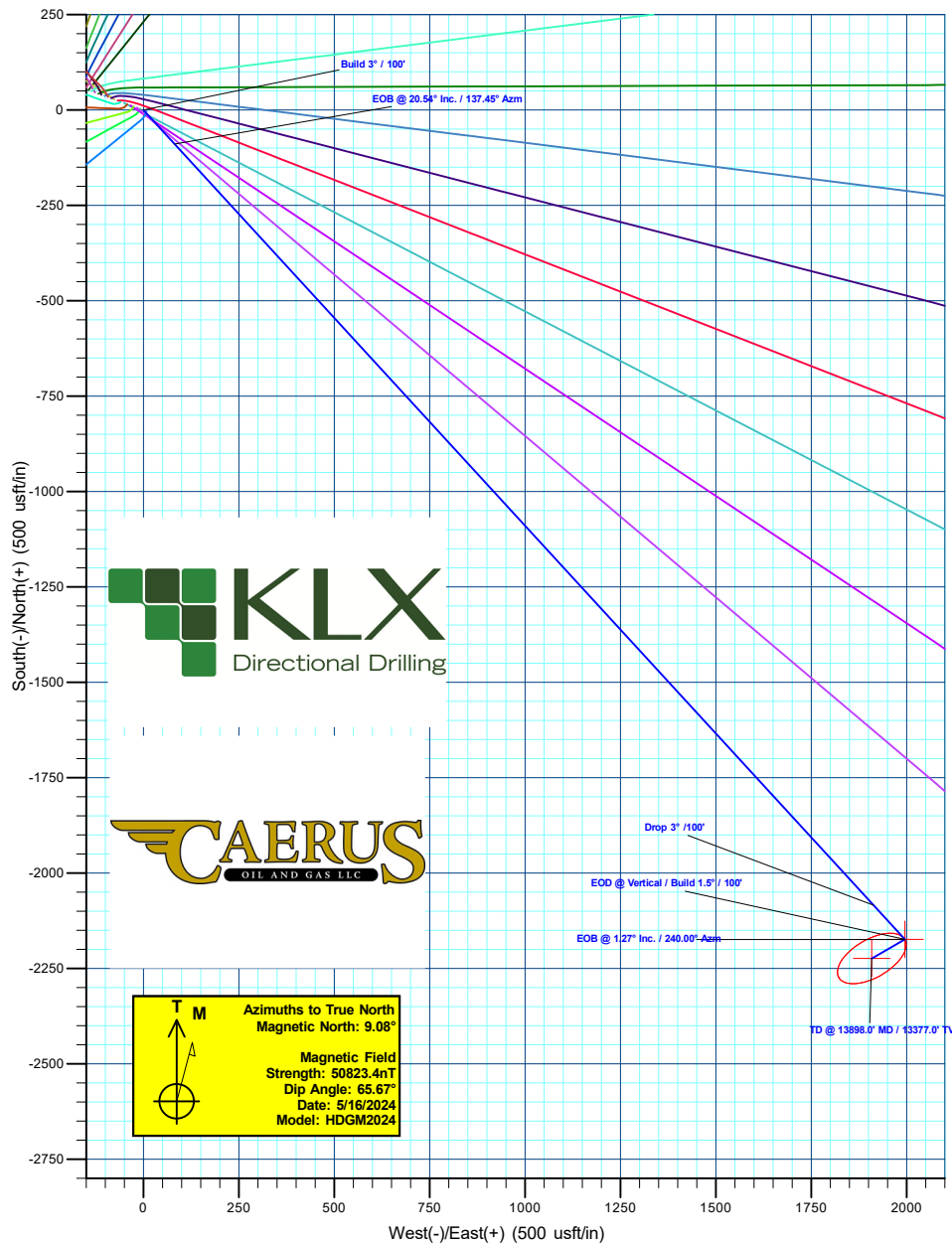
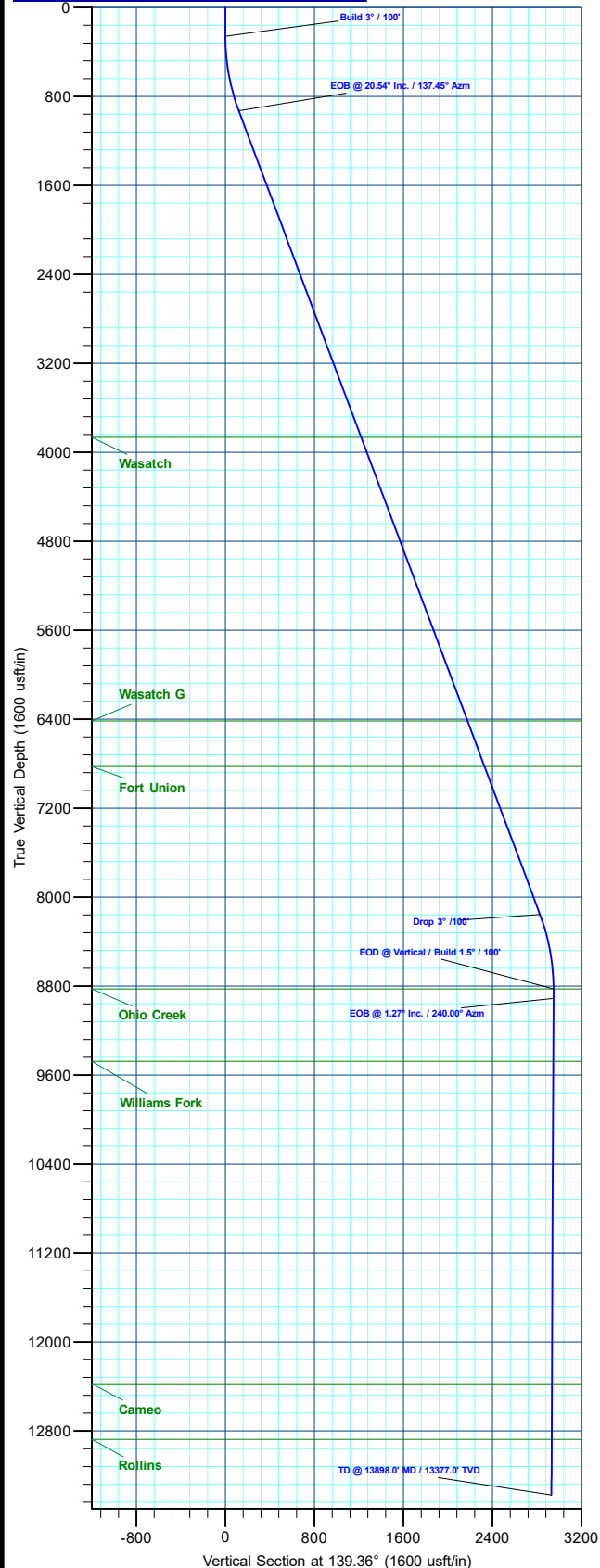
TVDPath	MDPath	Formation
3867.0	4081.0	Wasatch
6417.0	6804.1	Wasatch G
6827.0	7242.0	Fort Union
8827.0	9346.8	Ohio Creek
9477.0	9997.0	Williams Fork
12377.0	12897.7	Cameo
12877.0	13397.8	Rollins

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
12D-18 - OHCR	8827.0	-2173.8	1995.5	14431116.07	2457107.14	39.702978	-108.096627
12D-18 - PBHL	13377.0	-2223.8	1908.9	14431063.30	2457022.20	39.702841	-108.096935

WELL DETAILS: ELU A18 FED 12D-18-495

Ground Level : 8029.0							
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	12D-18	
0.0	0.0	14433224.25	2455042.45	39.708944	-108.103717		



KLX
 Directional Drilling

CAERUS
 OIL AND GAS LLC

T M
 Azimuths to True North
 Magnetic North: 9.08°
 Magnetic Field
 Strength: 50823.4nT
 Dip Angle: 65.67°
 Date: 5/16/2024
 Model: HDGM2024

Plan: Design #5 (ELU A18 FED 12D-18-495/OH)

Created By: Will Jircik

Date: 21:10, June 09 2024



Caerus Oil & Gas

Rio Blanco County, CO

ELU A18 495 Pad

ELU A18 FED 12D-18-495 - Slot 12D-18

OH

Plan: Design #5

KLX Well Planning Report

09 June, 2024



Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well ELU A18 FED 12D-18-495 - Slot 12D-18
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 12D-18-495	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 12D-18-495 - Slot 12D-18					
Well Position	+N/-S	-67.4 usft	Northing:	14,433,224.25 usft	Latitude:	39.708944
	+E/-W	186.2 usft	Easting:	2,455,042.45 usft	Longitude:	-108.103717
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	50,823.4000000

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	139.36

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	
260.0	0.00	0.00	260.0	0.0	0.0	0.00	0.00	0.00	0.00	
944.7	20.54	137.45	930.2	-89.5	82.1	3.00	3.00	0.00	137.45	
8,662.1	20.54	137.45	8,156.8	-2,084.3	1,913.4	0.00	0.00	0.00	0.00	
9,346.8	0.00	0.00	8,827.0	-2,173.8	1,995.5	3.00	-3.00	0.00	180.00	12D-18 - OHCR
9,431.6	1.27	240.00	8,911.7	-2,174.3	1,994.7	1.50	1.50	-141.63	240.00	
13,898.0	1.27	240.00	13,377.0	-2,223.8	1,908.9	0.00	0.00	0.00	0.00	12D-18 - PBHL

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well ELU A18 FED 12D-18-495 - Slot 12D-18
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 12D-18-495	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	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	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	0.00
Build 3° / 100'										
260.0	0.00	0.00	260.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
300.0	1.20	137.45	300.0	-0.3	0.3	0.4	3.00	3.00	0.00	0.00
400.0	4.20	137.45	399.9	-3.8	3.5	5.1	3.00	3.00	0.00	0.00
500.0	7.20	137.45	499.4	-11.1	10.2	15.1	3.00	3.00	0.00	0.00
600.0	10.20	137.45	598.2	-22.2	20.4	30.2	3.00	3.00	0.00	0.00
700.0	13.20	137.45	696.1	-37.2	34.1	50.4	3.00	3.00	0.00	0.00
800.0	16.20	137.45	792.8	-55.9	51.3	75.8	3.00	3.00	0.00	0.00
900.0	19.20	137.45	888.1	-78.3	71.8	106.2	3.00	3.00	0.00	0.00
EOB @ 20.54° Inc. / 137.45° Azm										
944.7	20.54	137.45	930.2	-89.5	82.1	121.4	3.00	3.00	0.00	0.00
1,000.0	20.54	137.45	981.9	-103.7	95.2	140.8	0.00	0.00	0.00	0.00
1,100.0	20.54	137.45	1,075.6	-129.6	119.0	175.8	0.00	0.00	0.00	0.00
1,200.0	20.54	137.45	1,169.2	-155.4	142.7	210.9	0.00	0.00	0.00	0.00
1,300.0	20.54	137.45	1,262.8	-181.3	166.4	246.0	0.00	0.00	0.00	0.00
1,400.0	20.54	137.45	1,356.5	-207.1	190.2	281.0	0.00	0.00	0.00	0.00
1,500.0	20.54	137.45	1,450.1	-233.0	213.9	316.1	0.00	0.00	0.00	0.00
1,600.0	20.54	137.45	1,543.8	-258.8	237.6	351.2	0.00	0.00	0.00	0.00
1,700.0	20.54	137.45	1,637.4	-284.7	261.3	386.2	0.00	0.00	0.00	0.00
1,800.0	20.54	137.45	1,731.0	-310.5	285.1	421.3	0.00	0.00	0.00	0.00
1,900.0	20.54	137.45	1,824.7	-336.4	308.8	456.4	0.00	0.00	0.00	0.00
2,000.0	20.54	137.45	1,918.3	-362.2	332.5	491.4	0.00	0.00	0.00	0.00
2,100.0	20.54	137.45	2,012.0	-388.1	356.3	526.5	0.00	0.00	0.00	0.00
2,200.0	20.54	137.45	2,105.6	-413.9	380.0	561.6	0.00	0.00	0.00	0.00
2,300.0	20.54	137.45	2,199.3	-439.8	403.7	596.7	0.00	0.00	0.00	0.00
2,400.0	20.54	137.45	2,292.9	-465.6	427.4	631.7	0.00	0.00	0.00	0.00
2,500.0	20.54	137.45	2,386.5	-491.5	451.2	666.8	0.00	0.00	0.00	0.00
2,600.0	20.54	137.45	2,480.2	-517.3	474.9	701.9	0.00	0.00	0.00	0.00
2,700.0	20.54	137.45	2,573.8	-543.2	498.6	736.9	0.00	0.00	0.00	0.00
2,800.0	20.54	137.45	2,667.5	-569.0	522.4	772.0	0.00	0.00	0.00	0.00
2,900.0	20.54	137.45	2,761.1	-594.9	546.1	807.1	0.00	0.00	0.00	0.00
3,000.0	20.54	137.45	2,854.7	-620.7	569.8	842.1	0.00	0.00	0.00	0.00
3,100.0	20.54	137.45	2,948.4	-646.6	593.5	877.2	0.00	0.00	0.00	0.00
3,200.0	20.54	137.45	3,042.0	-672.4	617.3	912.3	0.00	0.00	0.00	0.00
3,300.0	20.54	137.45	3,135.7	-698.3	641.0	947.4	0.00	0.00	0.00	0.00
3,400.0	20.54	137.45	3,229.3	-724.1	664.7	982.4	0.00	0.00	0.00	0.00
3,500.0	20.54	137.45	3,323.0	-750.0	688.5	1,017.5	0.00	0.00	0.00	0.00
3,600.0	20.54	137.45	3,416.6	-775.8	712.2	1,052.6	0.00	0.00	0.00	0.00
3,700.0	20.54	137.45	3,510.2	-801.7	735.9	1,087.6	0.00	0.00	0.00	0.00
3,800.0	20.54	137.45	3,603.9	-827.5	759.6	1,122.7	0.00	0.00	0.00	0.00
3,900.0	20.54	137.45	3,697.5	-853.4	783.4	1,157.8	0.00	0.00	0.00	0.00
4,000.0	20.54	137.45	3,791.2	-879.2	807.1	1,192.8	0.00	0.00	0.00	0.00
Wasatch										
4,081.0	20.54	137.45	3,867.0	-900.2	826.3	1,221.2	0.00	0.00	0.00	0.00
4,100.0	20.54	137.45	3,884.8	-905.1	830.8	1,227.9	0.00	0.00	0.00	0.00
4,200.0	20.54	137.45	3,978.4	-930.9	854.6	1,263.0	0.00	0.00	0.00	0.00
4,300.0	20.54	137.45	4,072.1	-956.8	878.3	1,298.0	0.00	0.00	0.00	0.00
4,400.0	20.54	137.45	4,165.7	-982.6	902.0	1,333.1	0.00	0.00	0.00	0.00
4,500.0	20.54	137.45	4,259.4	-1,008.5	925.8	1,368.2	0.00	0.00	0.00	0.00
4,600.0	20.54	137.45	4,353.0	-1,034.3	949.5	1,403.3	0.00	0.00	0.00	0.00

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well ELU A18 FED 12D-18-495 - Slot 12D-18
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 12D-18-495	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)	
4,700.0	20.54	137.45	4,446.7	-1,060.2	973.2	1,438.3	0.00	0.00	0.00	
4,800.0	20.54	137.45	4,540.3	-1,086.0	996.9	1,473.4	0.00	0.00	0.00	
4,900.0	20.54	137.45	4,633.9	-1,111.9	1,020.7	1,508.5	0.00	0.00	0.00	
5,000.0	20.54	137.45	4,727.6	-1,137.7	1,044.4	1,543.5	0.00	0.00	0.00	
5,100.0	20.54	137.45	4,821.2	-1,163.6	1,068.1	1,578.6	0.00	0.00	0.00	
5,200.0	20.54	137.45	4,914.9	-1,189.4	1,091.9	1,613.7	0.00	0.00	0.00	
5,300.0	20.54	137.45	5,008.5	-1,215.3	1,115.6	1,648.7	0.00	0.00	0.00	
5,400.0	20.54	137.45	5,102.1	-1,241.1	1,139.3	1,683.8	0.00	0.00	0.00	
5,500.0	20.54	137.45	5,195.8	-1,267.0	1,163.0	1,718.9	0.00	0.00	0.00	
5,600.0	20.54	137.45	5,289.4	-1,292.8	1,186.8	1,754.0	0.00	0.00	0.00	
5,700.0	20.54	137.45	5,383.1	-1,318.6	1,210.5	1,789.0	0.00	0.00	0.00	
5,800.0	20.54	137.45	5,476.7	-1,344.5	1,234.2	1,824.1	0.00	0.00	0.00	
5,900.0	20.54	137.45	5,570.4	-1,370.3	1,258.0	1,859.2	0.00	0.00	0.00	
6,000.0	20.54	137.45	5,664.0	-1,396.2	1,281.7	1,894.2	0.00	0.00	0.00	
6,100.0	20.54	137.45	5,757.6	-1,422.0	1,305.4	1,929.3	0.00	0.00	0.00	
6,200.0	20.54	137.45	5,851.3	-1,447.9	1,329.1	1,964.4	0.00	0.00	0.00	
6,300.0	20.54	137.45	5,944.9	-1,473.7	1,352.9	1,999.4	0.00	0.00	0.00	
6,400.0	20.54	137.45	6,038.6	-1,499.6	1,376.6	2,034.5	0.00	0.00	0.00	
6,500.0	20.54	137.45	6,132.2	-1,525.4	1,400.3	2,069.6	0.00	0.00	0.00	
6,600.0	20.54	137.45	6,225.8	-1,551.3	1,424.1	2,104.6	0.00	0.00	0.00	
6,700.0	20.54	137.45	6,319.5	-1,577.1	1,447.8	2,139.7	0.00	0.00	0.00	
6,800.0	20.54	137.45	6,413.1	-1,603.0	1,471.5	2,174.8	0.00	0.00	0.00	
Wasatch G										
6,804.1	20.54	137.45	6,417.0	-1,604.1	1,472.5	2,176.2	0.00	0.00	0.00	
6,900.0	20.54	137.45	6,506.8	-1,628.8	1,495.2	2,209.9	0.00	0.00	0.00	
7,000.0	20.54	137.45	6,600.4	-1,654.7	1,519.0	2,244.9	0.00	0.00	0.00	
7,100.0	20.54	137.45	6,694.1	-1,680.5	1,542.7	2,280.0	0.00	0.00	0.00	
7,200.0	20.54	137.45	6,787.7	-1,706.4	1,566.4	2,315.1	0.00	0.00	0.00	
Fort Union										
7,242.0	20.54	137.45	6,827.0	-1,717.2	1,576.4	2,329.8	0.00	0.00	0.00	
7,300.0	20.54	137.45	6,881.3	-1,732.2	1,590.2	2,350.1	0.00	0.00	0.00	
7,400.0	20.54	137.45	6,975.0	-1,758.1	1,613.9	2,385.2	0.00	0.00	0.00	
7,500.0	20.54	137.45	7,068.6	-1,783.9	1,637.6	2,420.3	0.00	0.00	0.00	
7,600.0	20.54	137.45	7,162.3	-1,809.8	1,661.4	2,455.3	0.00	0.00	0.00	
7,700.0	20.54	137.45	7,255.9	-1,835.6	1,685.1	2,490.4	0.00	0.00	0.00	
7,800.0	20.54	137.45	7,349.5	-1,861.5	1,708.8	2,525.5	0.00	0.00	0.00	
7,900.0	20.54	137.45	7,443.2	-1,887.3	1,732.5	2,560.5	0.00	0.00	0.00	
8,000.0	20.54	137.45	7,536.8	-1,913.2	1,756.3	2,595.6	0.00	0.00	0.00	
8,100.0	20.54	137.45	7,630.5	-1,939.0	1,780.0	2,630.7	0.00	0.00	0.00	
8,200.0	20.54	137.45	7,724.1	-1,964.9	1,803.7	2,665.8	0.00	0.00	0.00	
8,300.0	20.54	137.45	7,817.8	-1,990.7	1,827.5	2,700.8	0.00	0.00	0.00	
8,400.0	20.54	137.45	7,911.4	-2,016.6	1,851.2	2,735.9	0.00	0.00	0.00	
8,500.0	20.54	137.45	8,005.0	-2,042.4	1,874.9	2,771.0	0.00	0.00	0.00	
8,600.0	20.54	137.45	8,098.7	-2,068.3	1,898.6	2,806.0	0.00	0.00	0.00	
Drop 3° /100'										
8,662.1	20.54	137.45	8,156.8	-2,084.3	1,913.4	2,827.8	0.00	0.00	0.00	
8,700.0	19.41	137.45	8,192.4	-2,093.9	1,922.1	2,840.8	3.00	-3.00	0.00	
8,800.0	16.41	137.45	8,287.6	-2,116.5	1,942.9	2,871.5	3.00	-3.00	0.00	
8,900.0	13.41	137.45	8,384.2	-2,135.5	1,960.3	2,897.2	3.00	-3.00	0.00	
9,000.0	10.41	137.45	8,482.1	-2,150.6	1,974.3	2,917.8	3.00	-3.00	0.00	
9,100.0	7.41	137.45	8,580.8	-2,162.1	1,984.7	2,933.3	3.00	-3.00	0.00	
9,200.0	4.41	137.45	8,680.3	-2,169.6	1,991.7	2,943.6	3.00	-3.00	0.00	
9,300.0	1.41	137.45	8,780.2	-2,173.4	1,995.1	2,948.6	3.00	-3.00	0.00	

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well ELU A18 FED 12D-18-495 - Slot 12D-18
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 12D-18-495	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)	
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek										
9,346.8	0.00	0.00	8,827.0	-2,173.8	1,995.5	2,949.2	3.00	-3.00	0.00	
9,400.0	0.80	240.00	8,880.2	-2,174.0	1,995.2	2,949.1	1.50	1.50	0.00	
EOB @ 1.27° Inc. / 240.00° Azm										
9,431.6	1.27	240.00	8,911.7	-2,174.3	1,994.7	2,949.0	1.50	1.50	0.00	
9,500.0	1.27	240.00	8,980.1	-2,175.0	1,993.4	2,948.7	0.00	0.00	0.00	
9,600.0	1.27	240.00	9,080.1	-2,176.1	1,991.5	2,948.3	0.00	0.00	0.00	
9,700.0	1.27	240.00	9,180.1	-2,177.2	1,989.5	2,947.9	0.00	0.00	0.00	
9,800.0	1.27	240.00	9,280.1	-2,178.3	1,987.6	2,947.5	0.00	0.00	0.00	
9,900.0	1.27	240.00	9,380.0	-2,179.5	1,985.7	2,947.1	0.00	0.00	0.00	
Williams Fork										
9,997.0	1.27	240.00	9,477.0	-2,180.5	1,983.8	2,946.7	0.00	0.00	0.00	
10,000.0	1.27	240.00	9,480.0	-2,180.6	1,983.8	2,946.7	0.00	0.00	0.00	
10,100.0	1.27	240.00	9,580.0	-2,181.7	1,981.9	2,946.3	0.00	0.00	0.00	
10,200.0	1.27	240.00	9,680.0	-2,182.8	1,979.9	2,945.9	0.00	0.00	0.00	
10,300.0	1.27	240.00	9,779.9	-2,183.9	1,978.0	2,945.5	0.00	0.00	0.00	
10,400.0	1.27	240.00	9,879.9	-2,185.0	1,976.1	2,945.0	0.00	0.00	0.00	
10,500.0	1.27	240.00	9,979.9	-2,186.1	1,974.2	2,944.6	0.00	0.00	0.00	
10,600.0	1.27	240.00	10,079.9	-2,187.2	1,972.2	2,944.2	0.00	0.00	0.00	
10,700.0	1.27	240.00	10,179.8	-2,188.3	1,970.3	2,943.8	0.00	0.00	0.00	
10,800.0	1.27	240.00	10,279.8	-2,189.4	1,968.4	2,943.4	0.00	0.00	0.00	
10,900.0	1.27	240.00	10,379.8	-2,190.5	1,966.5	2,943.0	0.00	0.00	0.00	
11,000.0	1.27	240.00	10,479.8	-2,191.6	1,964.6	2,942.6	0.00	0.00	0.00	
11,100.0	1.27	240.00	10,579.7	-2,192.8	1,962.6	2,942.2	0.00	0.00	0.00	
11,200.0	1.27	240.00	10,679.7	-2,193.9	1,960.7	2,941.8	0.00	0.00	0.00	
11,300.0	1.27	240.00	10,779.7	-2,195.0	1,958.8	2,941.4	0.00	0.00	0.00	
11,400.0	1.27	240.00	10,879.7	-2,196.1	1,956.9	2,941.0	0.00	0.00	0.00	
11,500.0	1.27	240.00	10,979.6	-2,197.2	1,955.0	2,940.5	0.00	0.00	0.00	
11,600.0	1.27	240.00	11,079.6	-2,198.3	1,953.0	2,940.1	0.00	0.00	0.00	
11,700.0	1.27	240.00	11,179.6	-2,199.4	1,951.1	2,939.7	0.00	0.00	0.00	
11,800.0	1.27	240.00	11,279.6	-2,200.5	1,949.2	2,939.3	0.00	0.00	0.00	
11,900.0	1.27	240.00	11,379.5	-2,201.6	1,947.3	2,938.9	0.00	0.00	0.00	
12,000.0	1.27	240.00	11,479.5	-2,202.7	1,945.4	2,938.5	0.00	0.00	0.00	
12,100.0	1.27	240.00	11,579.5	-2,203.8	1,943.4	2,938.1	0.00	0.00	0.00	
12,200.0	1.27	240.00	11,679.5	-2,205.0	1,941.5	2,937.7	0.00	0.00	0.00	
12,300.0	1.27	240.00	11,779.4	-2,206.1	1,939.6	2,937.3	0.00	0.00	0.00	
12,400.0	1.27	240.00	11,879.4	-2,207.2	1,937.7	2,936.9	0.00	0.00	0.00	
12,500.0	1.27	240.00	11,979.4	-2,208.3	1,935.8	2,936.4	0.00	0.00	0.00	
12,600.0	1.27	240.00	12,079.4	-2,209.4	1,933.8	2,936.0	0.00	0.00	0.00	
12,700.0	1.27	240.00	12,179.3	-2,210.5	1,931.9	2,935.6	0.00	0.00	0.00	
12,800.0	1.27	240.00	12,279.3	-2,211.6	1,930.0	2,935.2	0.00	0.00	0.00	
Cameo										
12,897.7	1.27	240.00	12,377.0	-2,212.7	1,928.1	2,934.8	0.00	0.00	0.00	
12,900.0	1.27	240.00	12,379.3	-2,212.7	1,928.1	2,934.8	0.00	0.00	0.00	
13,000.0	1.27	240.00	12,479.3	-2,213.8	1,926.1	2,934.4	0.00	0.00	0.00	
13,100.0	1.27	240.00	12,579.2	-2,214.9	1,924.2	2,934.0	0.00	0.00	0.00	
13,200.0	1.27	240.00	12,679.2	-2,216.0	1,922.3	2,933.6	0.00	0.00	0.00	
13,300.0	1.27	240.00	12,779.2	-2,217.2	1,920.4	2,933.2	0.00	0.00	0.00	
Rollins										
13,397.8	1.27	240.00	12,877.0	-2,218.2	1,918.5	2,932.8	0.00	0.00	0.00	
13,400.0	1.27	240.00	12,879.2	-2,218.3	1,918.5	2,932.8	0.00	0.00	0.00	
13,500.0	1.27	240.00	12,979.1	-2,219.4	1,916.5	2,932.3	0.00	0.00	0.00	
13,600.0	1.27	240.00	13,079.1	-2,220.5	1,914.6	2,931.9	0.00	0.00	0.00	
13,700.0	1.27	240.00	13,179.1	-2,221.6	1,912.7	2,931.5	0.00	0.00	0.00	

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well ELU A18 FED 12D-18-495 - Slot 12D-18
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 12D-18-495	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)	
13,800.0	1.27	240.00	13,279.1	-2,222.7	1,910.8	2,931.1	0.00	0.00	0.00	
TD @ 13898.0' MD / 13377.0' TVD										
13,898.0	1.27	240.00	13,377.0	-2,223.8	1,908.9	2,930.7	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	Longitude	
12D-18 - OHCR - hit/miss target - Shape - Point	0.00	0.00	8,827.0	-2,173.8	1,995.5	14,431,116.07	2,457,107.15	39.702978	-108.096628	
12D-18 - PBHL - plan hits target center - Ellipse (radii L100.0 W50.0 on 240.00 azi)	0.00	0.00	13,377.0	-2,223.8	1,908.9	14,431,063.30	2,457,022.20	39.702841	-108.096935	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,081.0	3,867.0	Wasatch				
6,804.1	6,417.0	Wasatch G				
7,242.0	6,827.0	Fort Union				
9,346.8	8,827.0	Ohio Creek				
9,997.0	9,477.0	Williams Fork				
12,897.7	12,377.0	Cameo				
13,397.8	12,877.0	Rollins				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
260.0	260.0	0.0	0.0	Build 3° / 100'	
944.7	930.2	-89.5	82.1	EOB @ 20.54° Inc. / 137.45° Azm	
8,662.1	8,156.8	-2,084.3	1,913.4	Drop 3° / 100'	
9,346.8	8,827.0	-2,173.8	1,995.5	EOD @ Vertical / Build 1.5° / 100'	
9,431.6	8,911.7	-2,174.3	1,994.7	EOB @ 1.27° Inc. / 240.00° Azm	
13,898.0	13,377.0	-2,223.8	1,908.9	TD @ 13898.0' MD / 13377.0' TVD	