

Project: Rio Blanco County, CO  
Site: ELU A18 495 Pad  
Well: ELU A18 FED 12B-18-495  
Wellbore: OH  
Design: Design #5  
Latitude: 39.708978  
Longitude: -108.103837  
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 - 12B-18(0.0N, 0.0E)  
Measured Depth Reference: RKB=30' @ 8059.0usft (TBD)  
Calculation Method: Minimum Curvature

## SECTION DETAILS

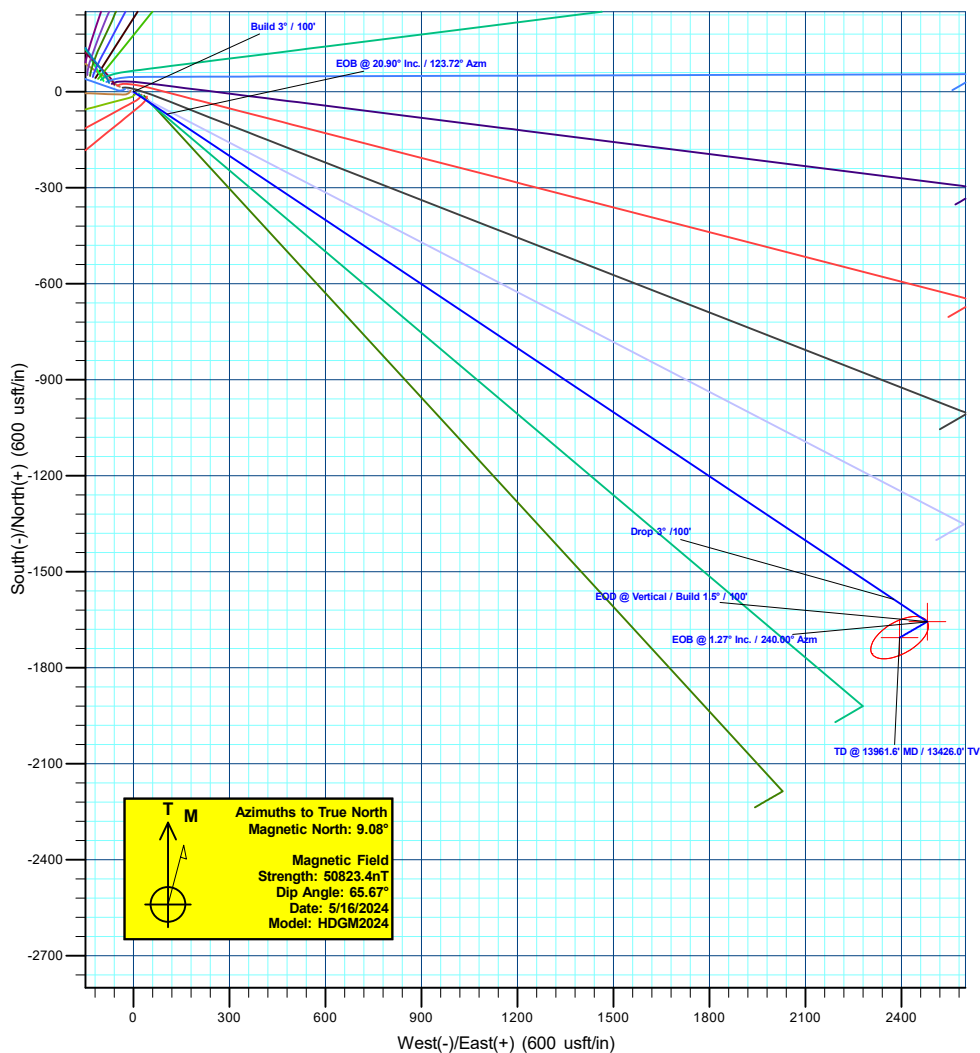
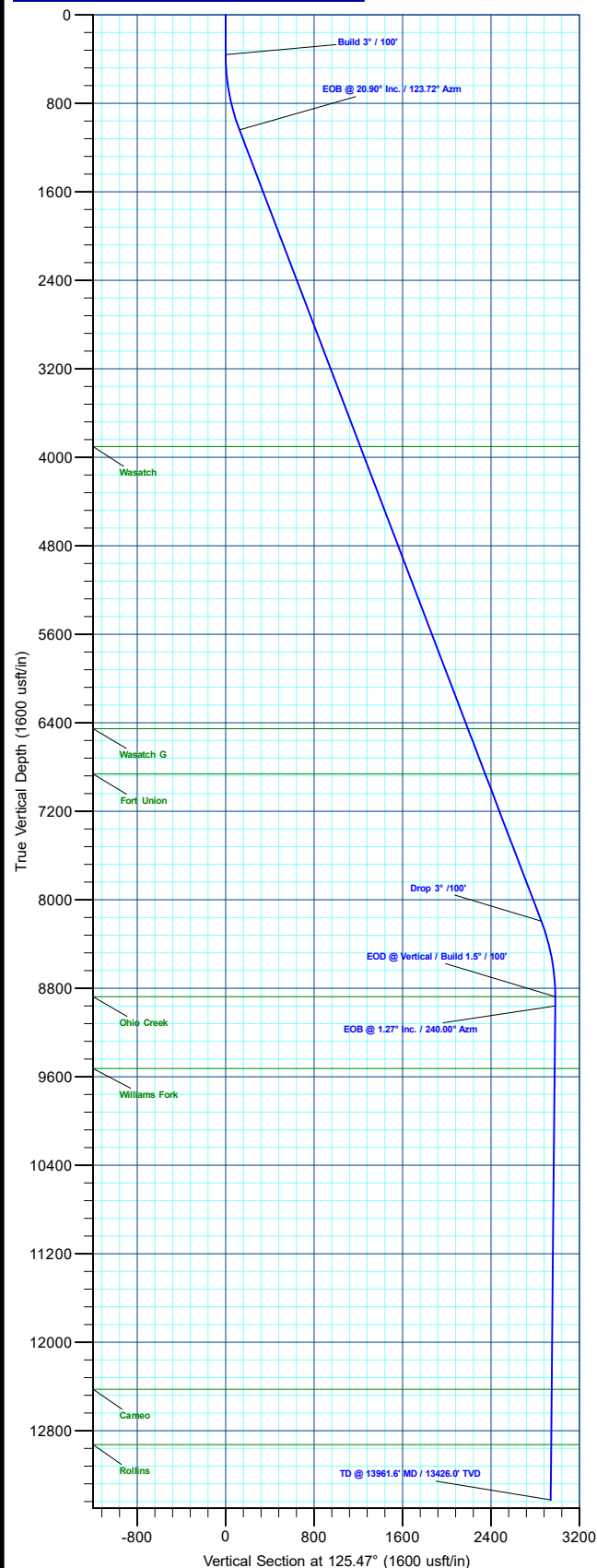
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dieg	TFace	VSec	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
360.0	0.00	0.00	360.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
1056.7	20.90	123.72	1041.3	-69.8	104.5	3.00	123.72	125.6	EOB @ 20.90° Inc. / 123.72° Azm
8713.8	20.90	123.72	8194.7	-1586.2	2376.6	0.00	0.00	2856.0	Drop 3° / 100'
9410.5	0.00	0.00	8876.0	-1656.0	2481.1	3.00	180.00	2981.6	EOD @ Vertical / Build 1.5° / 100'
8876.0	1.27	240.00	8960.7	-1656.4	2480.3	1.50	240.00	2981.2	EOB @ 1.27° Inc. / 240.00° Azm
13961.6	1.27	240.00	13426.0	-1706.0	2394.5	0.00	0.00	2940.1	TD @ 13961.6' MD / 13426.0' TVD

## DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
12B-18 - OHCR	8876.0	-1656.0	2481.1	14431660.47	2457541.54	39.704433	-108.095022
12B-18 - PBHL	13426.0	-1706.0	2394.5	14431607.70	2457456.60	39.704296	-108.095330

## WELL DETAILS: ELU A18 FED 12B-18-495

Ground Level : 8029.0							
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	12B-18	
0.0	0.0	14433235.41	2455008.22	39.708978	-108.103837		



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

Created By: Will Jircik Date: 21:01, June 09 2024



## **Caerus Oil & Gas**

**Rio Blanco County, CO**

**ELU A18 495 Pad**

**ELU A18 FED 12B-18-495 - Slot 12B-18**

**OH**

**Plan: Design #5**

## **KLX Well Planning Report**

**09 June, 2024**



<b>Database:</b>	KLXDirectional-AD	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 12B-18-495 - Slot 12B-18
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB=30' @ 8059.0usft (TBD)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB=30' @ 8059.0usft (TBD)
<b>Site:</b>	ELU A18 495 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU A18 FED 12B-18-495	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Design #5		

<b>Project</b>	Rio Blanco County, CO		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<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 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 12B-18-495 - Slot 12B-18					
Well Position	+N/-S	-55.2 usft	Northing:	14,433,235.41 usft	Latitude:	39.708978
	+E/-W	152.3 usft	Easting:	2,455,008.22 usft	Longitude:	-108.103837
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	8,029.0 usft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM2024	5/16/2024	9.08	65.67	50,823.40000000

<b>Design</b>	Design #5			
<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	125.47

<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	
360.0	0.00	0.00	360.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,056.7	20.90	123.72	1,041.3	-69.8	104.5	3.00	3.00	0.00	123.72	
8,713.8	20.90	123.72	8,194.7	-1,586.2	2,376.6	0.00	0.00	0.00	0.00	
9,410.5	0.00	0.00	8,876.0	-1,656.0	2,481.1	3.00	-3.00	0.00	180.00	12B-18 - OHCR
9,495.2	1.27	240.00	8,960.7	-1,656.4	2,480.3	1.50	1.50	-141.63	240.00	
13,961.6	1.27	240.00	13,426.0	-1,706.0	2,394.5	0.00	0.00	0.00	0.00	12B-18 - PBHL

<b>Database:</b>	KLXDirectional-AD	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 12B-18-495 - Slot 12B-18
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB=30' @ 8059.0usft (TBD)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB=30' @ 8059.0usft (TBD)
<b>Site:</b>	ELU A18 495 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU A18 FED 12B-18-495	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
Build 3° / 100'									
360.0	0.00	0.00	360.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	1.20	123.72	400.0	-0.2	0.3	0.4	3.00	3.00	0.00
500.0	4.20	123.72	499.9	-2.8	4.3	5.1	3.00	3.00	0.00
600.0	7.20	123.72	599.4	-8.4	12.5	15.1	3.00	3.00	0.00
700.0	10.20	123.72	698.2	-16.8	25.1	30.2	3.00	3.00	0.00
800.0	13.20	123.72	796.1	-28.0	42.0	50.4	3.00	3.00	0.00
900.0	16.20	123.72	892.8	-42.1	63.1	75.8	3.00	3.00	0.00
1,000.0	19.20	123.72	988.1	-59.0	88.4	106.2	3.00	3.00	0.00
EOB @ 20.90° Inc. / 123.72° Azm									
1,056.7	20.90	123.72	1,041.3	-69.8	104.5	125.6	3.00	3.00	0.00
1,100.0	20.90	123.72	1,081.8	-78.3	117.4	141.1	0.00	0.00	0.00
1,200.0	20.90	123.72	1,175.2	-98.1	147.0	176.7	0.00	0.00	0.00
1,300.0	20.90	123.72	1,268.6	-117.9	176.7	212.4	0.00	0.00	0.00
1,400.0	20.90	123.72	1,362.1	-137.8	206.4	248.0	0.00	0.00	0.00
1,500.0	20.90	123.72	1,455.5	-157.6	236.1	283.7	0.00	0.00	0.00
1,600.0	20.90	123.72	1,548.9	-177.4	265.7	319.3	0.00	0.00	0.00
1,700.0	20.90	123.72	1,642.3	-197.2	295.4	355.0	0.00	0.00	0.00
1,800.0	20.90	123.72	1,735.7	-217.0	325.1	390.7	0.00	0.00	0.00
1,900.0	20.90	123.72	1,829.2	-236.8	354.8	426.3	0.00	0.00	0.00
2,000.0	20.90	123.72	1,922.6	-256.6	384.4	462.0	0.00	0.00	0.00
2,100.0	20.90	123.72	2,016.0	-276.4	414.1	497.6	0.00	0.00	0.00
2,200.0	20.90	123.72	2,109.4	-296.2	443.8	533.3	0.00	0.00	0.00
2,300.0	20.90	123.72	2,202.8	-316.0	473.4	568.9	0.00	0.00	0.00
2,400.0	20.90	123.72	2,296.3	-335.8	503.1	604.6	0.00	0.00	0.00
2,500.0	20.90	123.72	2,389.7	-355.6	532.8	640.3	0.00	0.00	0.00
2,600.0	20.90	123.72	2,483.1	-375.4	562.5	675.9	0.00	0.00	0.00
2,700.0	20.90	123.72	2,576.5	-395.2	592.1	711.6	0.00	0.00	0.00
2,800.0	20.90	123.72	2,669.9	-415.0	621.8	747.2	0.00	0.00	0.00
2,900.0	20.90	123.72	2,763.4	-434.8	651.5	782.9	0.00	0.00	0.00
3,000.0	20.90	123.72	2,856.8	-454.6	681.2	818.6	0.00	0.00	0.00
3,100.0	20.90	123.72	2,950.2	-474.4	710.8	854.2	0.00	0.00	0.00
3,200.0	20.90	123.72	3,043.6	-494.2	740.5	889.9	0.00	0.00	0.00
3,300.0	20.90	123.72	3,137.0	-514.0	770.2	925.5	0.00	0.00	0.00
3,400.0	20.90	123.72	3,230.5	-533.8	799.8	961.2	0.00	0.00	0.00
3,500.0	20.90	123.72	3,323.9	-553.6	829.5	996.8	0.00	0.00	0.00
3,600.0	20.90	123.72	3,417.3	-573.4	859.2	1,032.5	0.00	0.00	0.00
3,700.0	20.90	123.72	3,510.7	-593.2	888.9	1,068.2	0.00	0.00	0.00
3,800.0	20.90	123.72	3,604.1	-613.1	918.5	1,103.8	0.00	0.00	0.00
3,900.0	20.90	123.72	3,697.6	-632.9	948.2	1,139.5	0.00	0.00	0.00
4,000.0	20.90	123.72	3,791.0	-652.7	977.9	1,175.1	0.00	0.00	0.00
4,100.0	20.90	123.72	3,884.4	-672.5	1,007.6	1,210.8	0.00	0.00	0.00
Wasatch									
4,119.9	20.90	123.72	3,903.0	-676.4	1,013.5	1,217.9	0.00	0.00	0.00
4,200.0	20.90	123.72	3,977.8	-692.3	1,037.2	1,246.4	0.00	0.00	0.00
4,300.0	20.90	123.72	4,071.2	-712.1	1,066.9	1,282.1	0.00	0.00	0.00
4,400.0	20.90	123.72	4,164.7	-731.9	1,096.6	1,317.8	0.00	0.00	0.00
4,500.0	20.90	123.72	4,258.1	-751.7	1,126.2	1,353.4	0.00	0.00	0.00
4,600.0	20.90	123.72	4,351.5	-771.5	1,155.9	1,389.1	0.00	0.00	0.00

<b>Database:</b>	KLXDirectional-AD	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 12B-18-495 - Slot 12B-18
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB=30' @ 8059.0usft (TBD)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB=30' @ 8059.0usft (TBD)
<b>Site:</b>	ELU A18 495 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU A18 FED 12B-18-495	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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	20.90	123.72	4,444.9	-791.3	1,185.6	1,424.7	0.00	0.00	0.00
4,800.0	20.90	123.72	4,538.3	-811.1	1,215.3	1,460.4	0.00	0.00	0.00
4,900.0	20.90	123.72	4,631.8	-830.9	1,244.9	1,496.1	0.00	0.00	0.00
5,000.0	20.90	123.72	4,725.2	-850.7	1,274.6	1,531.7	0.00	0.00	0.00
5,100.0	20.90	123.72	4,818.6	-870.5	1,304.3	1,567.4	0.00	0.00	0.00
5,200.0	20.90	123.72	4,912.0	-890.3	1,334.0	1,603.0	0.00	0.00	0.00
5,300.0	20.90	123.72	5,005.5	-910.1	1,363.6	1,638.7	0.00	0.00	0.00
5,400.0	20.90	123.72	5,098.9	-929.9	1,393.3	1,674.3	0.00	0.00	0.00
5,500.0	20.90	123.72	5,192.3	-949.7	1,423.0	1,710.0	0.00	0.00	0.00
5,600.0	20.90	123.72	5,285.7	-969.5	1,452.6	1,745.7	0.00	0.00	0.00
5,700.0	20.90	123.72	5,379.1	-989.3	1,482.3	1,781.3	0.00	0.00	0.00
5,800.0	20.90	123.72	5,472.6	-1,009.1	1,512.0	1,817.0	0.00	0.00	0.00
5,900.0	20.90	123.72	5,566.0	-1,028.9	1,541.7	1,852.6	0.00	0.00	0.00
6,000.0	20.90	123.72	5,659.4	-1,048.7	1,571.3	1,888.3	0.00	0.00	0.00
6,100.0	20.90	123.72	5,752.8	-1,068.6	1,601.0	1,923.9	0.00	0.00	0.00
6,200.0	20.90	123.72	5,846.2	-1,088.4	1,630.7	1,959.6	0.00	0.00	0.00
6,300.0	20.90	123.72	5,939.7	-1,108.2	1,660.3	1,995.3	0.00	0.00	0.00
6,400.0	20.90	123.72	6,033.1	-1,128.0	1,690.0	2,030.9	0.00	0.00	0.00
6,500.0	20.90	123.72	6,126.5	-1,147.8	1,719.7	2,066.6	0.00	0.00	0.00
6,600.0	20.90	123.72	6,219.9	-1,167.6	1,749.4	2,102.2	0.00	0.00	0.00
6,700.0	20.90	123.72	6,313.3	-1,187.4	1,779.0	2,137.9	0.00	0.00	0.00
6,800.0	20.90	123.72	6,406.8	-1,207.2	1,808.7	2,173.6	0.00	0.00	0.00
<b>Wasatch G</b>									
6,849.5	20.90	123.72	6,453.0	-1,217.0	1,823.4	2,191.2	0.00	0.00	0.00
6,900.0	20.90	123.72	6,500.2	-1,227.0	1,838.4	2,209.2	0.00	0.00	0.00
7,000.0	20.90	123.72	6,593.6	-1,246.8	1,868.1	2,244.9	0.00	0.00	0.00
7,100.0	20.90	123.72	6,687.0	-1,266.6	1,897.7	2,280.5	0.00	0.00	0.00
7,200.0	20.90	123.72	6,780.4	-1,286.4	1,927.4	2,316.2	0.00	0.00	0.00
<b>Fort Union</b>									
7,288.4	20.90	123.72	6,863.0	-1,303.9	1,953.6	2,347.7	0.00	0.00	0.00
7,300.0	20.90	123.72	6,873.9	-1,306.2	1,957.1	2,351.8	0.00	0.00	0.00
7,400.0	20.90	123.72	6,967.3	-1,326.0	1,986.7	2,387.5	0.00	0.00	0.00
7,500.0	20.90	123.72	7,060.7	-1,345.8	2,016.4	2,423.2	0.00	0.00	0.00
7,600.0	20.90	123.72	7,154.1	-1,365.6	2,046.1	2,458.8	0.00	0.00	0.00
7,700.0	20.90	123.72	7,247.5	-1,385.4	2,075.8	2,494.5	0.00	0.00	0.00
7,800.0	20.90	123.72	7,341.0	-1,405.2	2,105.4	2,530.1	0.00	0.00	0.00
7,900.0	20.90	123.72	7,434.4	-1,425.0	2,135.1	2,565.8	0.00	0.00	0.00
8,000.0	20.90	123.72	7,527.8	-1,444.8	2,164.8	2,601.4	0.00	0.00	0.00
8,100.0	20.90	123.72	7,621.2	-1,464.6	2,194.5	2,637.1	0.00	0.00	0.00
8,200.0	20.90	123.72	7,714.6	-1,484.4	2,224.1	2,672.8	0.00	0.00	0.00
8,300.0	20.90	123.72	7,808.1	-1,504.2	2,253.8	2,708.4	0.00	0.00	0.00
8,400.0	20.90	123.72	7,901.5	-1,524.0	2,283.5	2,744.1	0.00	0.00	0.00
8,500.0	20.90	123.72	7,994.9	-1,543.9	2,313.1	2,779.7	0.00	0.00	0.00
8,600.0	20.90	123.72	8,088.3	-1,563.7	2,342.8	2,815.4	0.00	0.00	0.00
8,700.0	20.90	123.72	8,181.7	-1,583.5	2,372.5	2,851.0	0.00	0.00	0.00
<b>Drop 3° /100'</b>									
8,713.8	20.90	123.72	8,194.7	-1,586.2	2,376.6	2,856.0	0.00	0.00	0.00
8,800.0	18.32	123.72	8,275.8	-1,602.3	2,400.6	2,884.9	3.00	-3.00	0.00
8,900.0	15.32	123.72	8,371.5	-1,618.3	2,424.7	2,913.8	3.00	-3.00	0.00
9,000.0	12.32	123.72	8,468.6	-1,631.6	2,444.6	2,937.7	3.00	-3.00	0.00
9,100.0	9.32	123.72	8,566.8	-1,642.0	2,460.2	2,956.4	3.00	-3.00	0.00
9,200.0	6.32	123.72	8,665.9	-1,649.5	2,471.5	2,970.0	3.00	-3.00	0.00
9,300.0	3.32	123.72	8,765.5	-1,654.2	2,478.5	2,978.4	3.00	-3.00	0.00

<b>Database:</b>	KLXDirectional-AD	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 12B-18-495 - Slot 12B-18
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB=30' @ 8059.0usft (TBD)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB=30' @ 8059.0usft (TBD)
<b>Site:</b>	ELU A18 495 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU A18 FED 12B-18-495	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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)
9,400.0	0.32	123.72	8,865.5	-1,655.9	2,481.1	2,981.6	3.00	-3.00	0.00
<b>EOD @ Vertical / Build 1.5° / 100' - Ohio Creek</b>									
9,410.5	0.00	0.00	8,876.0	-1,656.0	2,481.1	2,981.6	3.00	-3.00	0.00
<b>EOB @ 1.27° Inc. / 240.00° Azm</b>									
9,495.2	1.27	240.00	8,960.7	-1,656.4	2,480.3	2,981.2	1.50	1.50	0.00
9,500.0	1.27	240.00	8,965.5	-1,656.5	2,480.2	2,981.2	0.00	0.00	0.00
9,600.0	1.27	240.00	9,065.4	-1,657.6	2,478.3	2,980.2	0.00	0.00	0.00
9,700.0	1.27	240.00	9,165.4	-1,658.7	2,476.4	2,979.3	0.00	0.00	0.00
9,800.0	1.27	240.00	9,265.4	-1,659.8	2,474.5	2,978.4	0.00	0.00	0.00
9,900.0	1.27	240.00	9,365.4	-1,660.9	2,472.5	2,977.5	0.00	0.00	0.00
10,000.0	1.27	240.00	9,465.3	-1,662.0	2,470.6	2,976.6	0.00	0.00	0.00
<b>Williams Fork</b>									
10,060.7	1.27	240.00	9,526.0	-1,662.7	2,469.4	2,976.0	0.00	0.00	0.00
10,100.0	1.27	240.00	9,565.3	-1,663.1	2,468.7	2,975.6	0.00	0.00	0.00
10,200.0	1.27	240.00	9,665.3	-1,664.2	2,466.8	2,974.7	0.00	0.00	0.00
10,300.0	1.27	240.00	9,765.3	-1,665.4	2,464.8	2,973.8	0.00	0.00	0.00
10,400.0	1.27	240.00	9,865.2	-1,666.5	2,462.9	2,972.9	0.00	0.00	0.00
10,500.0	1.27	240.00	9,965.2	-1,667.6	2,461.0	2,971.9	0.00	0.00	0.00
10,600.0	1.27	240.00	10,065.2	-1,668.7	2,459.1	2,971.0	0.00	0.00	0.00
10,700.0	1.27	240.00	10,165.2	-1,669.8	2,457.2	2,970.1	0.00	0.00	0.00
10,800.0	1.27	240.00	10,265.2	-1,670.9	2,455.2	2,969.2	0.00	0.00	0.00
10,900.0	1.27	240.00	10,365.1	-1,672.0	2,453.3	2,968.3	0.00	0.00	0.00
11,000.0	1.27	240.00	10,465.1	-1,673.1	2,451.4	2,967.3	0.00	0.00	0.00
11,100.0	1.27	240.00	10,565.1	-1,674.2	2,449.5	2,966.4	0.00	0.00	0.00
11,200.0	1.27	240.00	10,665.1	-1,675.3	2,447.6	2,965.5	0.00	0.00	0.00
11,300.0	1.27	240.00	10,765.0	-1,676.4	2,445.6	2,964.6	0.00	0.00	0.00
11,400.0	1.27	240.00	10,865.0	-1,677.6	2,443.7	2,963.7	0.00	0.00	0.00
11,500.0	1.27	240.00	10,965.0	-1,678.7	2,441.8	2,962.7	0.00	0.00	0.00
11,600.0	1.27	240.00	11,065.0	-1,679.8	2,439.9	2,961.8	0.00	0.00	0.00
11,700.0	1.27	240.00	11,164.9	-1,680.9	2,438.0	2,960.9	0.00	0.00	0.00
11,800.0	1.27	240.00	11,264.9	-1,682.0	2,436.0	2,960.0	0.00	0.00	0.00
11,900.0	1.27	240.00	11,364.9	-1,683.1	2,434.1	2,959.1	0.00	0.00	0.00
12,000.0	1.27	240.00	11,464.9	-1,684.2	2,432.2	2,958.1	0.00	0.00	0.00
12,100.0	1.27	240.00	11,564.8	-1,685.3	2,430.3	2,957.2	0.00	0.00	0.00
12,200.0	1.27	240.00	11,664.8	-1,686.4	2,428.4	2,956.3	0.00	0.00	0.00
12,300.0	1.27	240.00	11,764.8	-1,687.5	2,426.4	2,955.4	0.00	0.00	0.00
12,400.0	1.27	240.00	11,864.8	-1,688.6	2,424.5	2,954.5	0.00	0.00	0.00
12,500.0	1.27	240.00	11,964.7	-1,689.8	2,422.6	2,953.5	0.00	0.00	0.00
12,600.0	1.27	240.00	12,064.7	-1,690.9	2,420.7	2,952.6	0.00	0.00	0.00
12,700.0	1.27	240.00	12,164.7	-1,692.0	2,418.7	2,951.7	0.00	0.00	0.00
12,800.0	1.27	240.00	12,264.7	-1,693.1	2,416.8	2,950.8	0.00	0.00	0.00
12,900.0	1.27	240.00	12,364.6	-1,694.2	2,414.9	2,949.8	0.00	0.00	0.00
<b>Cameo</b>									
12,961.4	1.27	240.00	12,426.0	-1,694.9	2,413.7	2,949.3	0.00	0.00	0.00
13,000.0	1.27	240.00	12,464.6	-1,695.3	2,413.0	2,948.9	0.00	0.00	0.00
13,100.0	1.27	240.00	12,564.6	-1,696.4	2,411.1	2,948.0	0.00	0.00	0.00
13,200.0	1.27	240.00	12,664.6	-1,697.5	2,409.1	2,947.1	0.00	0.00	0.00
13,300.0	1.27	240.00	12,764.5	-1,698.6	2,407.2	2,946.2	0.00	0.00	0.00
13,400.0	1.27	240.00	12,864.5	-1,699.7	2,405.3	2,945.2	0.00	0.00	0.00
<b>Rollins</b>									
13,461.5	1.27	240.00	12,926.0	-1,700.4	2,404.1	2,944.7	0.00	0.00	0.00
13,500.0	1.27	240.00	12,964.5	-1,700.8	2,403.4	2,944.3	0.00	0.00	0.00
13,600.0	1.27	240.00	13,064.5	-1,702.0	2,401.5	2,943.4	0.00	0.00	0.00
13,700.0	1.27	240.00	13,164.4	-1,703.1	2,399.5	2,942.5	0.00	0.00	0.00

<b>Database:</b>	KLXDirectional-AD	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 12B-18-495 - Slot 12B-18
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	RKB=30' @ 8059.0usft (TBD)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB=30' @ 8059.0usft (TBD)
<b>Site:</b>	ELU A18 495 Pad	<b>North Reference:</b>	True
<b>Well:</b>	ELU A18 FED 12B-18-495	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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	13,264.4	-1,704.2	2,397.6	2,941.6	0.00	0.00	0.00
13,900.0	1.27	240.00	13,364.4	-1,705.3	2,395.7	2,940.6	0.00	0.00	0.00
TD @ 13961.6' MD / 13426.0' TVD									
13,961.6	1.27	240.00	13,426.0	-1,706.0	2,394.5	2,940.1	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
12B-18 - OHCR - hit/miss target - Shape	0.00	0.00	8,876.0	-1,656.0	2,481.1	14,431,660.47	2,457,541.55	39.704433	-108.095023
12B-18 - PBHL - plan hits target center - Ellipse (radii L100.0 W50.0 on 240.00 azi)	0.00	0.00	13,426.0	-1,706.0	2,394.5	14,431,607.70	2,457,456.60	39.704296	-108.095330

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,119.9	3,903.0	Wasatch				
6,849.5	6,453.0	Wasatch G				
7,288.4	6,863.0	Fort Union				
9,410.5	8,876.0	Ohio Creek				
10,060.7	9,526.0	Williams Fork				
12,961.4	12,426.0	Cameo				
13,461.5	12,926.0	Rollins				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
360.0	360.0	0.0	0.0	Build 3° / 100'
1,056.7	1,041.3	-69.8	104.5	EOB @ 20.90° Inc. / 123.72° Azm
8,713.8	8,194.7	-1,586.2	2,376.6	Drop 3° / 100'
9,410.5	8,876.0	-1,656.0	2,481.1	EOD @ Vertical / Build 1.5° / 100'
9,495.2	8,960.7	-1,656.4	2,480.3	EOB @ 1.27° Inc. / 240.00° Azm
13,961.6	13,426.0	-1,706.0	2,394.5	TD @ 13961.6' MD / 13426.0' TVD