

Project: Rio Blanco County, CO  
Site: ELU A18 495 Pad  
Well: ELU A18 FED 12A-18-495  
Wellbore: OH  
Design: Design #5  
Latitude: 39.708994  
Longitude: -108.103897  
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 - 12A-18(0.0N, 0.0E)  
Measured Depth Reference: RKB=30' @ 8059.0usft (TBD)  
Calculation Method: Minimum Curvature

SECTION DETAILS

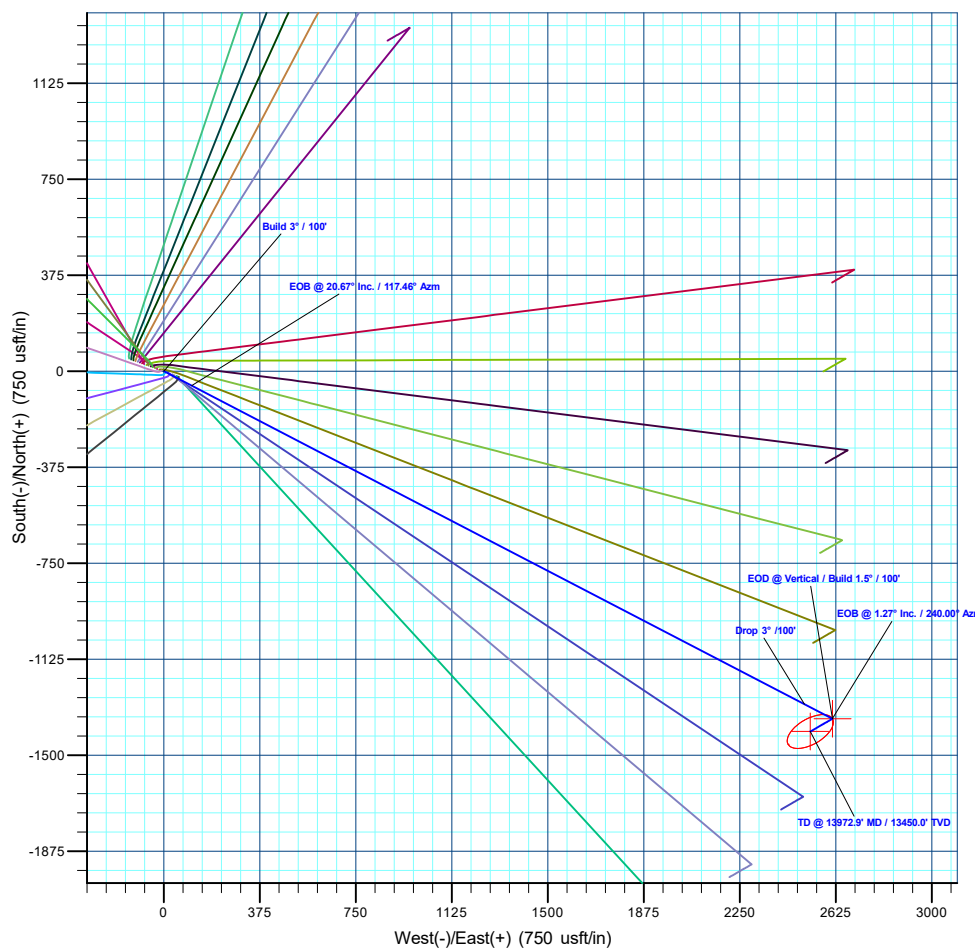
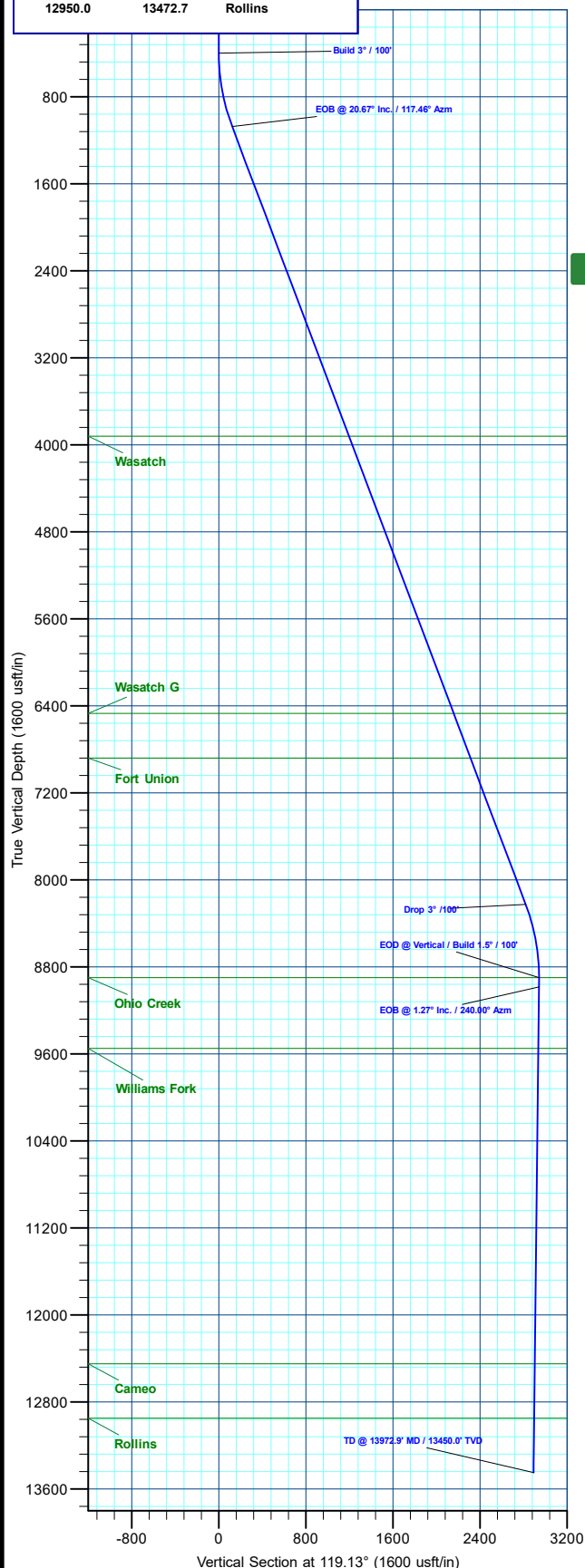
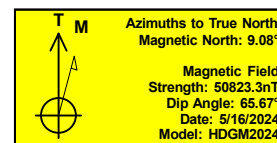
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
1089.0	20.67	117.46	1074.2	-56.7	109.1	3.00	117.46	122.9	EOB @ 20.67° Inc. / 117.46° Azm
8732.7	20.67	117.46	8225.8	-1300.7	2503.3	0.00	0.00	2819.9	Drop 3° / 100'
9421.8	0.00	0.00	8900.0	-1357.4	2612.4	3.00	180.00	2942.8	EOD @ Vertical / Build 1.5° / 100'
9506.5	1.27	240.00	8984.7	-1357.9	2611.6	1.50	240.00	2942.3	EOB @ 1.27° Inc. / 240.00° Azm
13972.9	1.27	240.00	13450.0	-1407.4	2525.8	0.00	0.00	2891.5	TD @ 13972.9' MD / 13450.0' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
12A-18 - OHCR	8900.0	-1357.4	2612.4	14431968.67	2457646.04	39.705269	-108.094616
12A-18 - PBHL	13450.0	-1407.4	2525.8	14431915.90	2457561.10	39.705132	-108.094923

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

Ground Level : 8029.0							
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	12A-18	
0.0	0.0	14433240.99	2454991.11	39.708994	-108.103897		



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

Created By: Will Jircik Date: 20:55, June 09 2024



## **Caerus Oil & Gas**

**Rio Blanco County, CO**

**ELU A18 495 Pad**

**ELU A18 FED 12A-18-495 - Slot 12A-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 12A-18-495 - Slot 12A-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 12A-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 12A-18-495 - Slot 12A-18					
Well Position	+N/-S	-49.0 usft	Northing:	14,433,240.99 usft	Latitude:	39.708995
	+E/-W	135.4 usft	Easting:	2,454,991.11 usft	Longitude:	-108.103897
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	50,823.30000000

<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	119.13

<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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,089.0	20.67	117.46	1,074.2	-56.7	109.1	3.00	3.00	0.00	117.46	
8,732.7	20.67	117.46	8,225.8	-1,300.7	2,503.3	0.00	0.00	0.00	0.00	
9,421.8	0.00	0.00	8,900.0	-1,357.4	2,612.4	3.00	-3.00	0.00	180.00	12A-18 - OHCR
9,506.5	1.27	240.00	8,984.7	-1,357.9	2,611.6	1.50	1.50	-141.63	240.00	
13,972.9	1.27	240.00	13,450.0	-1,407.4	2,525.8	0.00	0.00	0.00	0.00	12A-18 - PBHL

<b>Database:</b>	KLXDirectional-AD	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 12A-18-495 - Slot 12A-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 12A-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'									
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	3.00	117.46	500.0	-1.2	2.3	2.6	3.00	3.00	0.00
600.0	6.00	117.46	599.6	-4.8	9.3	10.5	3.00	3.00	0.00
700.0	9.00	117.46	698.8	-10.8	20.9	23.5	3.00	3.00	0.00
800.0	12.00	117.46	797.1	-19.2	37.0	41.7	3.00	3.00	0.00
900.0	15.00	117.46	894.3	-30.0	57.7	65.0	3.00	3.00	0.00
1,000.0	18.00	117.46	990.2	-43.1	82.9	93.4	3.00	3.00	0.00
EOB @ 20.67° Inc. / 117.46° Azm									
1,089.0	20.67	117.46	1,074.2	-56.7	109.1	122.9	3.00	3.00	0.00
1,100.0	20.67	117.46	1,084.4	-58.5	112.5	126.8	0.00	0.00	0.00
1,200.0	20.67	117.46	1,178.0	-74.8	143.9	162.1	0.00	0.00	0.00
1,300.0	20.67	117.46	1,271.6	-91.0	175.2	197.3	0.00	0.00	0.00
1,400.0	20.67	117.46	1,365.1	-107.3	206.5	232.6	0.00	0.00	0.00
1,500.0	20.67	117.46	1,458.7	-123.6	237.8	267.9	0.00	0.00	0.00
1,600.0	20.67	117.46	1,552.3	-139.9	269.2	303.2	0.00	0.00	0.00
1,700.0	20.67	117.46	1,645.8	-156.1	300.5	338.5	0.00	0.00	0.00
1,800.0	20.67	117.46	1,739.4	-172.4	331.8	373.8	0.00	0.00	0.00
1,900.0	20.67	117.46	1,832.9	-188.7	363.1	409.0	0.00	0.00	0.00
2,000.0	20.67	117.46	1,926.5	-205.0	394.4	444.3	0.00	0.00	0.00
2,100.0	20.67	117.46	2,020.1	-221.2	425.8	479.6	0.00	0.00	0.00
2,200.0	20.67	117.46	2,113.6	-237.5	457.1	514.9	0.00	0.00	0.00
2,300.0	20.67	117.46	2,207.2	-253.8	488.4	550.2	0.00	0.00	0.00
2,400.0	20.67	117.46	2,300.8	-270.1	519.7	585.5	0.00	0.00	0.00
2,500.0	20.67	117.46	2,394.3	-286.3	551.1	620.7	0.00	0.00	0.00
2,600.0	20.67	117.46	2,487.9	-302.6	582.4	656.0	0.00	0.00	0.00
2,700.0	20.67	117.46	2,581.4	-318.9	613.7	691.3	0.00	0.00	0.00
2,800.0	20.67	117.46	2,675.0	-335.2	645.0	726.6	0.00	0.00	0.00
2,900.0	20.67	117.46	2,768.6	-351.4	676.4	761.9	0.00	0.00	0.00
3,000.0	20.67	117.46	2,862.1	-367.7	707.7	797.2	0.00	0.00	0.00
3,100.0	20.67	117.46	2,955.7	-384.0	739.0	832.5	0.00	0.00	0.00
3,200.0	20.67	117.46	3,049.3	-400.3	770.3	867.7	0.00	0.00	0.00
3,300.0	20.67	117.46	3,142.8	-416.5	801.6	903.0	0.00	0.00	0.00
3,400.0	20.67	117.46	3,236.4	-432.8	833.0	938.3	0.00	0.00	0.00
3,500.0	20.67	117.46	3,329.9	-449.1	864.3	973.6	0.00	0.00	0.00
3,600.0	20.67	117.46	3,423.5	-465.4	895.6	1,008.9	0.00	0.00	0.00
3,700.0	20.67	117.46	3,517.1	-481.6	926.9	1,044.2	0.00	0.00	0.00
3,800.0	20.67	117.46	3,610.6	-497.9	958.3	1,079.4	0.00	0.00	0.00
3,900.0	20.67	117.46	3,704.2	-514.2	989.6	1,114.7	0.00	0.00	0.00
4,000.0	20.67	117.46	3,797.8	-530.5	1,020.9	1,150.0	0.00	0.00	0.00
4,100.0	20.67	117.46	3,891.3	-546.7	1,052.2	1,185.3	0.00	0.00	0.00
Wasatch									
4,130.6	20.67	117.46	3,920.0	-551.7	1,061.8	1,196.1	0.00	0.00	0.00
4,200.0	20.67	117.46	3,984.9	-563.0	1,083.6	1,220.6	0.00	0.00	0.00
4,300.0	20.67	117.46	4,078.4	-579.3	1,114.9	1,255.9	0.00	0.00	0.00
4,400.0	20.67	117.46	4,172.0	-595.6	1,146.2	1,291.1	0.00	0.00	0.00
4,500.0	20.67	117.46	4,265.6	-611.8	1,177.5	1,326.4	0.00	0.00	0.00
4,600.0	20.67	117.46	4,359.1	-628.1	1,208.8	1,361.7	0.00	0.00	0.00
4,700.0	20.67	117.46	4,452.7	-644.4	1,240.2	1,397.0	0.00	0.00	0.00

<b>Database:</b>	KLXDirectional-AD	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 12A-18-495 - Slot 12A-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 12A-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)
4,800.0	20.67	117.46	4,546.3	-660.7	1,271.5	1,432.3	0.00	0.00	0.00
4,900.0	20.67	117.46	4,639.8	-676.9	1,302.8	1,467.6	0.00	0.00	0.00
5,000.0	20.67	117.46	4,733.4	-693.2	1,334.1	1,502.8	0.00	0.00	0.00
5,100.0	20.67	117.46	4,826.9	-709.5	1,365.5	1,538.1	0.00	0.00	0.00
5,200.0	20.67	117.46	4,920.5	-725.8	1,396.8	1,573.4	0.00	0.00	0.00
5,300.0	20.67	117.46	5,014.1	-742.0	1,428.1	1,608.7	0.00	0.00	0.00
5,400.0	20.67	117.46	5,107.6	-758.3	1,459.4	1,644.0	0.00	0.00	0.00
5,500.0	20.67	117.46	5,201.2	-774.6	1,490.8	1,679.3	0.00	0.00	0.00
5,600.0	20.67	117.46	5,294.8	-790.9	1,522.1	1,714.6	0.00	0.00	0.00
5,700.0	20.67	117.46	5,388.3	-807.1	1,553.4	1,749.8	0.00	0.00	0.00
5,800.0	20.67	117.46	5,481.9	-823.4	1,584.7	1,785.1	0.00	0.00	0.00
5,900.0	20.67	117.46	5,575.5	-839.7	1,616.0	1,820.4	0.00	0.00	0.00
6,000.0	20.67	117.46	5,669.0	-856.0	1,647.4	1,855.7	0.00	0.00	0.00
6,100.0	20.67	117.46	5,762.6	-872.2	1,678.7	1,891.0	0.00	0.00	0.00
6,200.0	20.67	117.46	5,856.1	-888.5	1,710.0	1,926.3	0.00	0.00	0.00
6,300.0	20.67	117.46	5,949.7	-904.8	1,741.3	1,961.5	0.00	0.00	0.00
6,400.0	20.67	117.46	6,043.3	-921.1	1,772.7	1,996.8	0.00	0.00	0.00
6,500.0	20.67	117.46	6,136.8	-937.4	1,804.0	2,032.1	0.00	0.00	0.00
6,600.0	20.67	117.46	6,230.4	-953.6	1,835.3	2,067.4	0.00	0.00	0.00
6,700.0	20.67	117.46	6,324.0	-969.9	1,866.6	2,102.7	0.00	0.00	0.00
6,800.0	20.67	117.46	6,417.5	-986.2	1,898.0	2,138.0	0.00	0.00	0.00
<b>Wasatch G</b>									
6,856.1	20.67	117.46	6,470.0	-995.3	1,915.5	2,157.8	0.00	0.00	0.00
6,900.0	20.67	117.46	6,511.1	-1,002.5	1,929.3	2,173.2	0.00	0.00	0.00
7,000.0	20.67	117.46	6,604.6	-1,018.7	1,960.6	2,208.5	0.00	0.00	0.00
7,100.0	20.67	117.46	6,698.2	-1,035.0	1,991.9	2,243.8	0.00	0.00	0.00
7,200.0	20.67	117.46	6,791.8	-1,051.3	2,023.2	2,279.1	0.00	0.00	0.00
<b>Fort Union</b>									
7,294.3	20.67	117.46	6,880.0	-1,066.6	2,052.8	2,312.4	0.00	0.00	0.00
7,300.0	20.67	117.46	6,885.3	-1,067.6	2,054.6	2,314.4	0.00	0.00	0.00
7,400.0	20.67	117.46	6,978.9	-1,083.8	2,085.9	2,349.7	0.00	0.00	0.00
7,500.0	20.67	117.46	7,072.5	-1,100.1	2,117.2	2,385.0	0.00	0.00	0.00
7,600.0	20.67	117.46	7,166.0	-1,116.4	2,148.5	2,420.2	0.00	0.00	0.00
7,700.0	20.67	117.46	7,259.6	-1,132.7	2,179.9	2,455.5	0.00	0.00	0.00
7,800.0	20.67	117.46	7,353.1	-1,148.9	2,211.2	2,490.8	0.00	0.00	0.00
7,900.0	20.67	117.46	7,446.7	-1,165.2	2,242.5	2,526.1	0.00	0.00	0.00
8,000.0	20.67	117.46	7,540.3	-1,181.5	2,273.8	2,561.4	0.00	0.00	0.00
8,100.0	20.67	117.46	7,633.8	-1,197.8	2,305.2	2,596.7	0.00	0.00	0.00
8,200.0	20.67	117.46	7,727.4	-1,214.0	2,336.5	2,631.9	0.00	0.00	0.00
8,300.0	20.67	117.46	7,821.0	-1,230.3	2,367.8	2,667.2	0.00	0.00	0.00
8,400.0	20.67	117.46	7,914.5	-1,246.6	2,399.1	2,702.5	0.00	0.00	0.00
8,500.0	20.67	117.46	8,008.1	-1,262.9	2,430.4	2,737.8	0.00	0.00	0.00
8,600.0	20.67	117.46	8,101.6	-1,279.1	2,461.8	2,773.1	0.00	0.00	0.00
8,700.0	20.67	117.46	8,195.2	-1,295.4	2,493.1	2,808.4	0.00	0.00	0.00
<b>Drop 3° /100'</b>									
8,732.7	20.67	117.46	8,225.8	-1,300.7	2,503.3	2,819.9	0.00	0.00	0.00
8,800.0	18.65	117.46	8,289.2	-1,311.2	2,523.4	2,842.5	3.00	-3.00	0.00
8,900.0	15.65	117.46	8,384.7	-1,324.8	2,549.6	2,872.0	3.00	-3.00	0.00
9,000.0	12.65	117.46	8,481.7	-1,336.0	2,571.3	2,896.4	3.00	-3.00	0.00
9,100.0	9.65	117.46	8,579.8	-1,345.0	2,588.5	2,915.8	3.00	-3.00	0.00
9,200.0	6.65	117.46	8,678.7	-1,351.5	2,601.0	2,930.0	3.00	-3.00	0.00
9,300.0	3.65	117.46	8,778.3	-1,355.6	2,609.0	2,938.9	3.00	-3.00	0.00
9,400.0	0.65	117.46	8,878.2	-1,357.4	2,612.3	2,942.7	3.00	-3.00	0.00

<b>Database:</b>	KLXDirectional-AD	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 12A-18-495 - Slot 12A-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 12A-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)
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
9,421.8	0.00	0.00	8,900.0	-1,357.4	2,612.4	2,942.8	3.00	-3.00	0.00
EOB @ 1.27° Inc. / 240.00° Azm									
9,506.5	1.27	240.00	8,984.7	-1,357.9	2,611.6	2,942.3	1.50	1.50	0.00
9,600.0	1.27	240.00	9,078.2	-1,358.9	2,609.8	2,941.3	0.00	0.00	0.00
9,700.0	1.27	240.00	9,178.2	-1,360.0	2,607.9	2,940.1	0.00	0.00	0.00
9,800.0	1.27	240.00	9,278.2	-1,361.2	2,606.0	2,939.0	0.00	0.00	0.00
9,900.0	1.27	240.00	9,378.1	-1,362.3	2,604.1	2,937.8	0.00	0.00	0.00
10,000.0	1.27	240.00	9,478.1	-1,363.4	2,602.1	2,936.7	0.00	0.00	0.00
Williams Fork									
10,071.9	1.27	240.00	9,550.0	-1,364.2	2,600.8	2,935.9	0.00	0.00	0.00
10,100.0	1.27	240.00	9,578.1	-1,364.5	2,600.2	2,935.6	0.00	0.00	0.00
10,200.0	1.27	240.00	9,678.1	-1,365.6	2,598.3	2,934.4	0.00	0.00	0.00
10,300.0	1.27	240.00	9,778.0	-1,366.7	2,596.4	2,933.3	0.00	0.00	0.00
10,400.0	1.27	240.00	9,878.0	-1,367.8	2,594.5	2,932.2	0.00	0.00	0.00
10,500.0	1.27	240.00	9,978.0	-1,368.9	2,592.5	2,931.0	0.00	0.00	0.00
10,600.0	1.27	240.00	10,078.0	-1,370.0	2,590.6	2,929.9	0.00	0.00	0.00
10,700.0	1.27	240.00	10,177.9	-1,371.1	2,588.7	2,928.7	0.00	0.00	0.00
10,800.0	1.27	240.00	10,277.9	-1,372.2	2,586.8	2,927.6	0.00	0.00	0.00
10,900.0	1.27	240.00	10,377.9	-1,373.3	2,584.9	2,926.5	0.00	0.00	0.00
11,000.0	1.27	240.00	10,477.9	-1,374.5	2,582.9	2,925.3	0.00	0.00	0.00
11,100.0	1.27	240.00	10,577.9	-1,375.6	2,581.0	2,924.2	0.00	0.00	0.00
11,200.0	1.27	240.00	10,677.8	-1,376.7	2,579.1	2,923.0	0.00	0.00	0.00
11,300.0	1.27	240.00	10,777.8	-1,377.8	2,577.2	2,921.9	0.00	0.00	0.00
11,400.0	1.27	240.00	10,877.8	-1,378.9	2,575.3	2,920.8	0.00	0.00	0.00
11,500.0	1.27	240.00	10,977.8	-1,380.0	2,573.3	2,919.6	0.00	0.00	0.00
11,600.0	1.27	240.00	11,077.7	-1,381.1	2,571.4	2,918.5	0.00	0.00	0.00
11,700.0	1.27	240.00	11,177.7	-1,382.2	2,569.5	2,917.4	0.00	0.00	0.00
11,800.0	1.27	240.00	11,277.7	-1,383.3	2,567.6	2,916.2	0.00	0.00	0.00
11,900.0	1.27	240.00	11,377.7	-1,384.4	2,565.7	2,915.1	0.00	0.00	0.00
12,000.0	1.27	240.00	11,477.6	-1,385.5	2,563.7	2,913.9	0.00	0.00	0.00
12,100.0	1.27	240.00	11,577.6	-1,386.7	2,561.8	2,912.8	0.00	0.00	0.00
12,200.0	1.27	240.00	11,677.6	-1,387.8	2,559.9	2,911.7	0.00	0.00	0.00
12,300.0	1.27	240.00	11,777.6	-1,388.9	2,558.0	2,910.5	0.00	0.00	0.00
12,400.0	1.27	240.00	11,877.5	-1,390.0	2,556.1	2,909.4	0.00	0.00	0.00
12,500.0	1.27	240.00	11,977.5	-1,391.1	2,554.1	2,908.3	0.00	0.00	0.00
12,600.0	1.27	240.00	12,077.5	-1,392.2	2,552.2	2,907.1	0.00	0.00	0.00
12,700.0	1.27	240.00	12,177.5	-1,393.3	2,550.3	2,906.0	0.00	0.00	0.00
12,800.0	1.27	240.00	12,277.4	-1,394.4	2,548.4	2,904.8	0.00	0.00	0.00
12,900.0	1.27	240.00	12,377.4	-1,395.5	2,546.4	2,903.7	0.00	0.00	0.00
Cameo									
12,972.6	1.27	240.00	12,450.0	-1,396.3	2,545.1	2,902.9	0.00	0.00	0.00
13,000.0	1.27	240.00	12,477.4	-1,396.6	2,544.5	2,902.6	0.00	0.00	0.00
13,100.0	1.27	240.00	12,577.4	-1,397.7	2,542.6	2,901.4	0.00	0.00	0.00
13,200.0	1.27	240.00	12,677.3	-1,398.9	2,540.7	2,900.3	0.00	0.00	0.00
13,300.0	1.27	240.00	12,777.3	-1,400.0	2,538.8	2,899.1	0.00	0.00	0.00
13,400.0	1.27	240.00	12,877.3	-1,401.1	2,536.8	2,898.0	0.00	0.00	0.00
Rollins									
13,472.7	1.27	240.00	12,950.0	-1,401.9	2,535.4	2,897.2	0.00	0.00	0.00
13,500.0	1.27	240.00	12,977.3	-1,402.2	2,534.9	2,896.9	0.00	0.00	0.00
13,600.0	1.27	240.00	13,077.2	-1,403.3	2,533.0	2,895.7	0.00	0.00	0.00
13,700.0	1.27	240.00	13,177.2	-1,404.4	2,531.1	2,894.6	0.00	0.00	0.00
13,800.0	1.27	240.00	13,277.2	-1,405.5	2,529.2	2,893.5	0.00	0.00	0.00
13,900.0	1.27	240.00	13,377.2	-1,406.6	2,527.2	2,892.3	0.00	0.00	0.00

<b>Database:</b>	KLXDirectional-AD	<b>Local Co-ordinate Reference:</b>	Well ELU A18 FED 12A-18-495 - Slot 12A-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 12A-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)
TD @ 13972.9' MD / 13450.0' TVD									
13,972.9	1.27	240.00	13,450.0	-1,407.4	2,525.8	2,891.5	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
12A-18 - OHCR - plan hits target center - Point	0.00	0.00	8,900.0	-1,357.4	2,612.4	14,431,968.67	2,457,646.05	39.705269	-108.094616
12A-18 - PBHL - plan hits target center - Ellipse (radii L100.0 W50.0 on 240.00 azi)	0.00	0.00	13,450.0	-1,407.4	2,525.8	14,431,915.90	2,457,561.10	39.705132	-108.094924

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,130.6	3,920.0	Wasatch				
6,856.1	6,470.0	Wasatch G				
7,294.3	6,880.0	Fort Union				
9,421.8	8,900.0	Ohio Creek				
10,071.9	9,550.0	Williams Fork				
12,972.6	12,450.0	Cameo				
13,472.7	12,950.0	Rollins				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
400.0	400.0	0.0	0.0	Build 3° / 100'
1,089.0	1,074.2	-56.7	109.1	EOB @ 20.67° Inc. / 117.46° Azm
8,732.7	8,225.8	-1,300.7	2,503.3	Drop 3° / 100'
9,421.8	8,900.0	-1,357.4	2,612.4	EOD @ Vertical / Build 1.5° / 100'
9,506.5	8,984.7	-1,357.9	2,611.6	EOB @ 1.27° Inc. / 240.00° Azm
13,972.9	13,450.0	-1,407.4	2,525.8	TD @ 13972.9' MD / 13450.0' TVD