

Project: Rio Blanco County, CO
Site: ELU A18 495 Pad
Well: ELU A18 FED 21D-13-496
Wellbore: OH
Design: Design #5
Latitude: 39.708936
Longitude: -108.103687
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 - 21D-13(0.0N, 0.0E)
Measured Depth Reference: RKB=30' @ 8059.0usft (TBD)
Calculation Method: Minimum Curvature

SECTION DETAILS

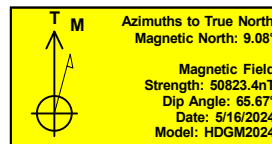
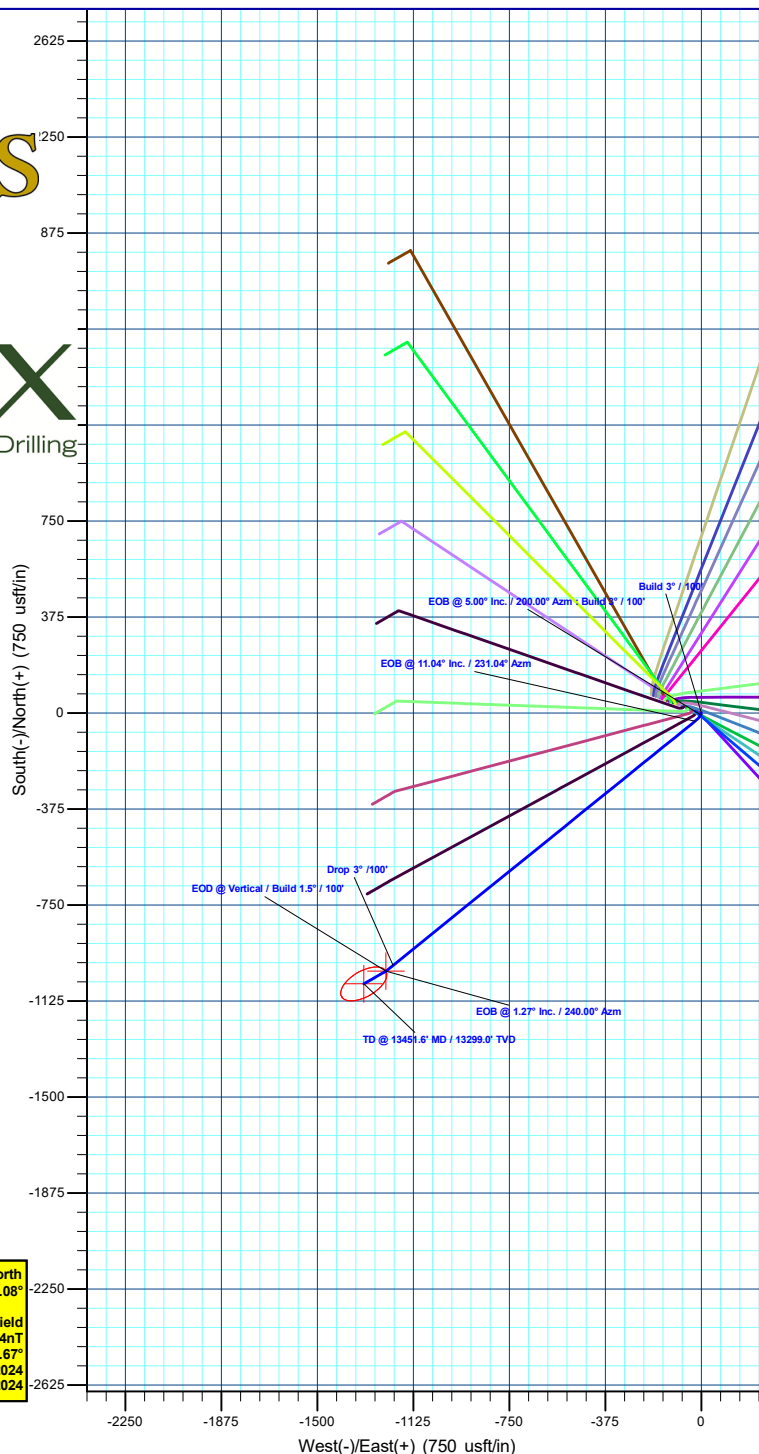
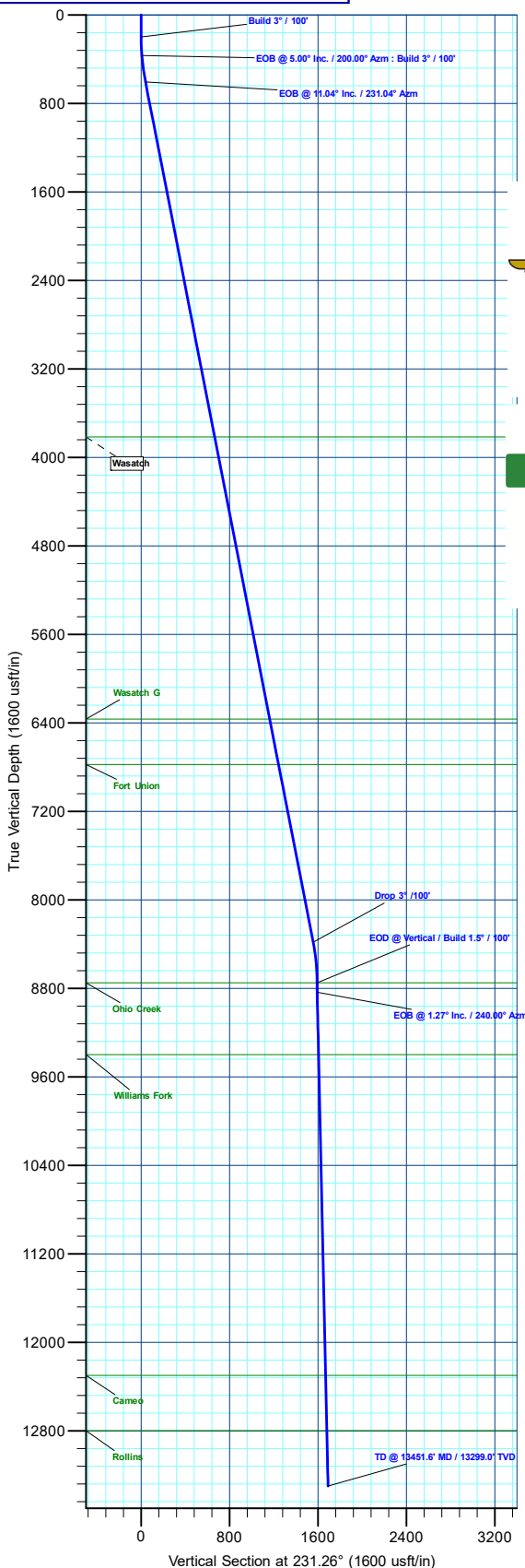
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
366.7	5.00	200.00	366.5	-6.8	-2.5	3.00	200.00	6.2	EOB @ 5.00° Inc. / 200.00° Azm : Build 3° / 100'
607.5	11.04	231.04	605.0	-31.2	-24.0	3.00	51.73	38.3	EOB @ 11.04° Inc. / 231.04° Azm
8532.5	11.04	231.04	8383.2	-985.5	-1204.2	0.00	0.00	1556.0	Drop 3° / 100'
8900.5	0.00	0.00	8749.0	-1007.7	-1231.7	3.00	180.00	1591.3	EOD @ Vertical / Build 1.5° / 100'
8985.3	1.27	240.00	8833.7	-1008.2	-1232.5	1.50	240.00	1592.2	EOB @ 1.27° Inc. / 240.00° Azm
13451.6	1.27	240.00	13299.0	-1057.7	-1318.3	0.00	0.00	1690.2	TD @ 13451.6° MD / 13299.0° TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
21D-13 - OHCR	8749.0	-1007.7	-1231.7	14432174.47	2453852.54	39.706170	-108.108062
21D-13 - PBHL	13299.0	-1057.7	-1318.3	14432121.70	2453767.60	39.706033	-108.108370

WELL DETAILS: ELU A18 FED 21D-13-496

+N/-S	+E/-W	Ground Level : 8029.0	Latitude	Longitude	21D-13
0.0	0.0	Northing 14433221.46 Easting 2455051.01	39.708936	-108.103687	



Plan: Design #5 (ELU A18 FED 21D-13-496/OH)

Created By: Will Jircik

Date: 22:19, June 09 2024



Caerus Oil & Gas

Rio Blanco County, CO

ELU A18 495 Pad

ELU A18 FED 21D-13-496 - Slot 21D-13

OH

Plan: Design #5

KLX Well Planning Report

09 June, 2024



Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well ELU A18 FED 21D-13-496 - Slot 21D-13
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 21D-13-496	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 21D-13-496 - Slot 21D-13				
Well Position	+N/-S	-70.5 usft	Northing:	14,433,221.46 usft	Latitude:	39.708936
	+E/-W	194.6 usft	Easting:	2,455,051.01 usft	Longitude:	-108.103687
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	50,823.40000000

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	231.26

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
366.7	5.00	200.00	366.5	-6.8	-2.5	3.00	3.00	0.00	200.00	
607.5	11.04	231.04	605.0	-31.2	-24.0	3.00	2.51	12.89	51.73	
8,532.5	11.04	231.04	8,383.2	-985.5	-1,204.2	0.00	0.00	0.00	0.00	
8,900.5	0.00	0.00	8,749.0	-1,007.7	-1,231.7	3.00	-3.00	0.00	180.00	21D-13 - OHCR
8,985.3	1.27	240.00	8,833.7	-1,008.2	-1,232.5	1.50	1.50	-141.63	240.00	
13,451.6	1.27	240.00	13,299.0	-1,057.7	-1,318.3	0.00	0.00	0.00	0.00	21D-13 - PBHL

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well ELU A18 FED 21D-13-496 - Slot 21D-13
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 21D-13-496	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
Build 3° / 100'									
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	3.00	200.00	300.0	-2.5	-0.9	2.2	3.00	3.00	0.00
EOB @ 5.00° Inc. / 200.00° Azm : Build 3° / 100'									
366.7	5.00	200.00	366.5	-6.8	-2.5	6.2	3.00	3.00	0.00
400.0	5.67	207.97	399.6	-9.6	-3.8	9.0	3.00	2.02	23.90
500.0	8.11	222.85	498.9	-19.2	-10.9	20.5	3.00	2.43	14.88
EOB @ 11.04° Inc. / 231.04° Azm									
607.5	11.04	231.04	605.0	-31.2	-24.0	38.3	3.00	2.73	7.62
700.0	11.04	231.04	695.7	-42.4	-37.8	56.0	0.00	0.00	0.00
800.0	11.04	231.04	793.9	-54.4	-52.7	75.1	0.00	0.00	0.00
900.0	11.04	231.04	892.0	-66.4	-67.6	94.3	0.00	0.00	0.00
1,000.0	11.04	231.04	990.2	-78.5	-82.5	113.5	0.00	0.00	0.00
1,100.0	11.04	231.04	1,088.3	-90.5	-97.4	132.6	0.00	0.00	0.00
1,200.0	11.04	231.04	1,186.5	-102.6	-112.3	151.8	0.00	0.00	0.00
1,300.0	11.04	231.04	1,284.6	-114.6	-127.2	170.9	0.00	0.00	0.00
1,400.0	11.04	231.04	1,382.7	-126.6	-142.0	190.1	0.00	0.00	0.00
1,500.0	11.04	231.04	1,480.9	-138.7	-156.9	209.2	0.00	0.00	0.00
1,600.0	11.04	231.04	1,579.0	-150.7	-171.8	228.4	0.00	0.00	0.00
1,700.0	11.04	231.04	1,677.2	-162.8	-186.7	247.5	0.00	0.00	0.00
1,800.0	11.04	231.04	1,775.3	-174.8	-201.6	266.7	0.00	0.00	0.00
1,900.0	11.04	231.04	1,873.5	-186.9	-216.5	285.8	0.00	0.00	0.00
2,000.0	11.04	231.04	1,971.6	-198.9	-231.4	305.0	0.00	0.00	0.00
2,100.0	11.04	231.04	2,069.8	-210.9	-246.3	324.1	0.00	0.00	0.00
2,200.0	11.04	231.04	2,167.9	-223.0	-261.2	343.3	0.00	0.00	0.00
2,300.0	11.04	231.04	2,266.1	-235.0	-276.1	362.4	0.00	0.00	0.00
2,400.0	11.04	231.04	2,364.2	-247.1	-291.0	381.6	0.00	0.00	0.00
2,500.0	11.04	231.04	2,462.4	-259.1	-305.9	400.7	0.00	0.00	0.00
2,600.0	11.04	231.04	2,560.5	-271.1	-320.7	419.9	0.00	0.00	0.00
2,700.0	11.04	231.04	2,658.7	-283.2	-335.6	439.0	0.00	0.00	0.00
2,800.0	11.04	231.04	2,756.8	-295.2	-350.5	458.2	0.00	0.00	0.00
2,900.0	11.04	231.04	2,855.0	-307.3	-365.4	477.3	0.00	0.00	0.00
3,000.0	11.04	231.04	2,953.1	-319.3	-380.3	496.5	0.00	0.00	0.00
3,100.0	11.04	231.04	3,051.3	-331.4	-395.2	515.6	0.00	0.00	0.00
3,200.0	11.04	231.04	3,149.4	-343.4	-410.1	534.8	0.00	0.00	0.00
3,300.0	11.04	231.04	3,247.6	-355.4	-425.0	553.9	0.00	0.00	0.00
3,400.0	11.04	231.04	3,345.7	-367.5	-439.9	573.1	0.00	0.00	0.00
3,500.0	11.04	231.04	3,443.9	-379.5	-454.8	592.2	0.00	0.00	0.00
3,600.0	11.04	231.04	3,542.0	-391.6	-469.7	611.4	0.00	0.00	0.00
3,700.0	11.04	231.04	3,640.2	-403.6	-484.6	630.5	0.00	0.00	0.00
3,800.0	11.04	231.04	3,738.3	-415.6	-499.4	649.7	0.00	0.00	0.00
Wasatch									
3,879.1	11.04	231.04	3,816.0	-425.2	-511.2	664.8	0.00	0.00	0.00
3,900.0	11.04	231.04	3,836.5	-427.7	-514.3	668.8	0.00	0.00	0.00
4,000.0	11.04	231.04	3,934.6	-439.7	-529.2	688.0	0.00	0.00	0.00
4,100.0	11.04	231.04	4,032.8	-451.8	-544.1	707.1	0.00	0.00	0.00
4,200.0	11.04	231.04	4,130.9	-463.8	-559.0	726.3	0.00	0.00	0.00
4,300.0	11.04	231.04	4,229.1	-475.8	-573.9	745.4	0.00	0.00	0.00
4,400.0	11.04	231.04	4,327.2	-487.9	-588.8	764.6	0.00	0.00	0.00
4,500.0	11.04	231.04	4,425.4	-499.9	-603.7	783.7	0.00	0.00	0.00
4,600.0	11.04	231.04	4,523.5	-512.0	-618.6	802.9	0.00	0.00	0.00
4,700.0	11.04	231.04	4,621.7	-524.0	-633.5	822.0	0.00	0.00	0.00

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well ELU A18 FED 21D-13-496 - Slot 21D-13
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 21D-13-496	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)
4,800.0	11.04	231.04	4,719.8	-536.1	-648.4	841.2	0.00	0.00	0.00
4,900.0	11.04	231.04	4,818.0	-548.1	-663.2	860.3	0.00	0.00	0.00
5,000.0	11.04	231.04	4,916.1	-560.1	-678.1	879.5	0.00	0.00	0.00
5,100.0	11.04	231.04	5,014.3	-572.2	-693.0	898.6	0.00	0.00	0.00
5,200.0	11.04	231.04	5,112.4	-584.2	-707.9	917.8	0.00	0.00	0.00
5,300.0	11.04	231.04	5,210.6	-596.3	-722.8	936.9	0.00	0.00	0.00
5,400.0	11.04	231.04	5,308.7	-608.3	-737.7	956.1	0.00	0.00	0.00
5,500.0	11.04	231.04	5,406.9	-620.3	-752.6	975.2	0.00	0.00	0.00
5,600.0	11.04	231.04	5,505.0	-632.4	-767.5	994.4	0.00	0.00	0.00
5,700.0	11.04	231.04	5,603.2	-644.4	-782.4	1,013.5	0.00	0.00	0.00
5,800.0	11.04	231.04	5,701.3	-656.5	-797.3	1,032.7	0.00	0.00	0.00
5,900.0	11.04	231.04	5,799.5	-668.5	-812.2	1,051.8	0.00	0.00	0.00
6,000.0	11.04	231.04	5,897.6	-680.5	-827.1	1,071.0	0.00	0.00	0.00
6,100.0	11.04	231.04	5,995.8	-692.6	-841.9	1,090.1	0.00	0.00	0.00
6,200.0	11.04	231.04	6,093.9	-704.6	-856.8	1,109.3	0.00	0.00	0.00
6,300.0	11.04	231.04	6,192.1	-716.7	-871.7	1,128.4	0.00	0.00	0.00
6,400.0	11.04	231.04	6,290.2	-728.7	-886.6	1,147.6	0.00	0.00	0.00
Wasatch G									
6,477.2	11.04	231.04	6,366.0	-738.0	-898.1	1,162.4	0.00	0.00	0.00
6,500.0	11.04	231.04	6,388.4	-740.8	-901.5	1,166.7	0.00	0.00	0.00
6,600.0	11.04	231.04	6,486.5	-752.8	-916.4	1,185.9	0.00	0.00	0.00
6,700.0	11.04	231.04	6,584.7	-764.8	-931.3	1,205.0	0.00	0.00	0.00
6,800.0	11.04	231.04	6,682.8	-776.9	-946.2	1,224.2	0.00	0.00	0.00
Fort Union									
6,895.0	11.04	231.04	6,776.0	-788.3	-960.3	1,242.4	0.00	0.00	0.00
6,900.0	11.04	231.04	6,781.0	-788.9	-961.1	1,243.3	0.00	0.00	0.00
7,000.0	11.04	231.04	6,879.1	-801.0	-976.0	1,262.5	0.00	0.00	0.00
7,100.0	11.04	231.04	6,977.3	-813.0	-990.9	1,281.6	0.00	0.00	0.00
7,200.0	11.04	231.04	7,075.4	-825.0	-1,005.8	1,300.8	0.00	0.00	0.00
7,300.0	11.04	231.04	7,173.5	-837.1	-1,020.6	1,319.9	0.00	0.00	0.00
7,400.0	11.04	231.04	7,271.7	-849.1	-1,035.5	1,339.1	0.00	0.00	0.00
7,500.0	11.04	231.04	7,369.8	-861.2	-1,050.4	1,358.2	0.00	0.00	0.00
7,600.0	11.04	231.04	7,468.0	-873.2	-1,065.3	1,377.4	0.00	0.00	0.00
7,700.0	11.04	231.04	7,566.1	-885.3	-1,080.2	1,396.5	0.00	0.00	0.00
7,800.0	11.04	231.04	7,664.3	-897.3	-1,095.1	1,415.7	0.00	0.00	0.00
7,900.0	11.04	231.04	7,762.4	-909.3	-1,110.0	1,434.8	0.00	0.00	0.00
8,000.0	11.04	231.04	7,860.6	-921.4	-1,124.9	1,454.0	0.00	0.00	0.00
8,100.0	11.04	231.04	7,958.7	-933.4	-1,139.8	1,473.1	0.00	0.00	0.00
8,200.0	11.04	231.04	8,056.9	-945.5	-1,154.7	1,492.3	0.00	0.00	0.00
8,300.0	11.04	231.04	8,155.0	-957.5	-1,169.6	1,511.4	0.00	0.00	0.00
8,400.0	11.04	231.04	8,253.2	-969.5	-1,184.4	1,530.6	0.00	0.00	0.00
8,500.0	11.04	231.04	8,351.3	-981.6	-1,199.3	1,549.7	0.00	0.00	0.00
Drop 3° / 100'									
8,532.5	11.04	231.04	8,383.2	-985.5	-1,204.2	1,556.0	0.00	0.00	0.00
8,600.0	9.02	231.04	8,449.7	-992.9	-1,213.3	1,567.7	3.00	-3.00	0.00
8,700.0	6.02	231.04	8,548.8	-1,001.1	-1,223.5	1,580.8	3.00	-3.00	0.00
8,800.0	3.02	231.04	8,648.5	-1,006.1	-1,229.6	1,588.7	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
8,900.5	0.00	0.00	8,749.0	-1,007.7	-1,231.7	1,591.3	3.00	-3.00	0.00
EOB @ 1.27° Inc. / 240.00° Azm									
8,985.3	1.27	240.00	8,833.7	-1,008.2	-1,232.5	1,592.2	1.50	1.50	0.00
9,000.0	1.27	240.00	8,848.5	-1,008.4	-1,232.8	1,592.6	0.00	0.00	0.00
9,100.0	1.27	240.00	8,948.4	-1,009.5	-1,234.7	1,594.8	0.00	0.00	0.00

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well ELU A18 FED 21D-13-496 - Slot 21D-13
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 21D-13-496	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)
9,200.0	1.27	240.00	9,048.4	-1,010.6	-1,236.6	1,596.9	0.00	0.00	0.00
9,300.0	1.27	240.00	9,148.4	-1,011.7	-1,238.5	1,599.1	0.00	0.00	0.00
9,400.0	1.27	240.00	9,248.4	-1,012.8	-1,240.4	1,601.3	0.00	0.00	0.00
9,500.0	1.27	240.00	9,348.3	-1,013.9	-1,242.4	1,603.5	0.00	0.00	0.00
Williams Fork									
9,550.7	1.27	240.00	9,399.0	-1,014.5	-1,243.3	1,604.6	0.00	0.00	0.00
9,600.0	1.27	240.00	9,448.3	-1,015.0	-1,244.3	1,605.7	0.00	0.00	0.00
9,700.0	1.27	240.00	9,548.3	-1,016.1	-1,246.2	1,607.9	0.00	0.00	0.00
9,800.0	1.27	240.00	9,648.3	-1,017.2	-1,248.1	1,610.1	0.00	0.00	0.00
9,900.0	1.27	240.00	9,748.2	-1,018.3	-1,250.1	1,612.3	0.00	0.00	0.00
10,000.0	1.27	240.00	9,848.2	-1,019.4	-1,252.0	1,614.5	0.00	0.00	0.00
10,100.0	1.27	240.00	9,948.2	-1,020.6	-1,253.9	1,616.7	0.00	0.00	0.00
10,200.0	1.27	240.00	10,048.2	-1,021.7	-1,255.8	1,618.9	0.00	0.00	0.00
10,300.0	1.27	240.00	10,148.1	-1,022.8	-1,257.7	1,621.1	0.00	0.00	0.00
10,400.0	1.27	240.00	10,248.1	-1,023.9	-1,259.7	1,623.3	0.00	0.00	0.00
10,500.0	1.27	240.00	10,348.1	-1,025.0	-1,261.6	1,625.4	0.00	0.00	0.00
10,600.0	1.27	240.00	10,448.1	-1,026.1	-1,263.5	1,627.6	0.00	0.00	0.00
10,700.0	1.27	240.00	10,548.0	-1,027.2	-1,265.4	1,629.8	0.00	0.00	0.00
10,800.0	1.27	240.00	10,648.0	-1,028.3	-1,267.3	1,632.0	0.00	0.00	0.00
10,900.0	1.27	240.00	10,748.0	-1,029.4	-1,269.3	1,634.2	0.00	0.00	0.00
11,000.0	1.27	240.00	10,848.0	-1,030.5	-1,271.2	1,636.4	0.00	0.00	0.00
11,100.0	1.27	240.00	10,947.9	-1,031.6	-1,273.1	1,638.6	0.00	0.00	0.00
11,200.0	1.27	240.00	11,047.9	-1,032.8	-1,275.0	1,640.8	0.00	0.00	0.00
11,300.0	1.27	240.00	11,147.9	-1,033.9	-1,276.9	1,643.0	0.00	0.00	0.00
11,400.0	1.27	240.00	11,247.9	-1,035.0	-1,278.9	1,645.2	0.00	0.00	0.00
11,500.0	1.27	240.00	11,347.8	-1,036.1	-1,280.8	1,647.4	0.00	0.00	0.00
11,600.0	1.27	240.00	11,447.8	-1,037.2	-1,282.7	1,649.6	0.00	0.00	0.00
11,700.0	1.27	240.00	11,547.8	-1,038.3	-1,284.6	1,651.8	0.00	0.00	0.00
11,800.0	1.27	240.00	11,647.8	-1,039.4	-1,286.5	1,653.9	0.00	0.00	0.00
11,900.0	1.27	240.00	11,747.7	-1,040.5	-1,288.5	1,656.1	0.00	0.00	0.00
12,000.0	1.27	240.00	11,847.7	-1,041.6	-1,290.4	1,658.3	0.00	0.00	0.00
12,100.0	1.27	240.00	11,947.7	-1,042.7	-1,292.3	1,660.5	0.00	0.00	0.00
12,200.0	1.27	240.00	12,047.7	-1,043.8	-1,294.2	1,662.7	0.00	0.00	0.00
12,300.0	1.27	240.00	12,147.6	-1,044.9	-1,296.2	1,664.9	0.00	0.00	0.00
12,400.0	1.27	240.00	12,247.6	-1,046.1	-1,298.1	1,667.1	0.00	0.00	0.00
Cameo									
12,451.4	1.27	240.00	12,299.0	-1,046.6	-1,299.1	1,668.2	0.00	0.00	0.00
12,500.0	1.27	240.00	12,347.6	-1,047.2	-1,300.0	1,669.3	0.00	0.00	0.00
12,600.0	1.27	240.00	12,447.6	-1,048.3	-1,301.9	1,671.5	0.00	0.00	0.00
12,700.0	1.27	240.00	12,547.5	-1,049.4	-1,303.8	1,673.7	0.00	0.00	0.00
12,800.0	1.27	240.00	12,647.5	-1,050.5	-1,305.8	1,675.9	0.00	0.00	0.00
12,900.0	1.27	240.00	12,747.5	-1,051.6	-1,307.7	1,678.1	0.00	0.00	0.00
Rollins									
12,951.5	1.27	240.00	12,799.0	-1,052.2	-1,308.7	1,679.2	0.00	0.00	0.00
13,000.0	1.27	240.00	12,847.5	-1,052.7	-1,309.6	1,680.3	0.00	0.00	0.00
13,100.0	1.27	240.00	12,947.4	-1,053.8	-1,311.5	1,682.4	0.00	0.00	0.00
13,200.0	1.27	240.00	13,047.4	-1,054.9	-1,313.4	1,684.6	0.00	0.00	0.00
13,300.0	1.27	240.00	13,147.4	-1,056.0	-1,315.4	1,686.8	0.00	0.00	0.00
13,400.0	1.27	240.00	13,247.4	-1,057.1	-1,317.3	1,689.0	0.00	0.00	0.00
TD @ 13451.6' MD / 13299.0' TVD									
13,451.6	1.27	240.00	13,299.0	-1,057.7	-1,318.3	1,690.2	0.00	0.00	0.00

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well ELU A18 FED 21D-13-496 - Slot 21D-13
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 21D-13-496	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #5		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
21D-13 - OHCR	0.00	0.00	8,749.0	-1,007.7	-1,231.7	14,432,174.47	2,453,852.55	39.706170	-108.108063
- plan hits target center									
- Point									
21D-13 - PBHL	0.00	0.00	13,299.0	-1,057.7	-1,318.3	14,432,121.70	2,453,767.60	39.706033	-108.108370
- 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 (°)	
3,879.1	3,816.0	Wasatch				
6,477.2	6,366.0	Wasatch G				
6,895.0	6,776.0	Fort Union				
8,900.5	8,749.0	Ohio Creek				
9,550.7	9,399.0	Williams Fork				
12,451.4	12,299.0	Cameo				
12,951.5	12,799.0	Rollins				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
200.0	200.0	0.0	0.0	Build 3° / 100'
366.7	366.5	-6.8	-2.5	EOB @ 5.00° Inc. / 200.00° Azm : Build 3° / 100'
607.5	605.0	-31.2	-24.0	EOB @ 11.04° Inc. / 231.04° Azm
8,532.5	8,383.2	-985.5	-1,204.2	Drop 3° /100'
8,900.5	8,749.0	-1,007.7	-1,231.7	EOD @ Vertical / Build 1.5° / 100'
8,985.3	8,833.7	-1,008.2	-1,232.5	EOB @ 1.27° Inc. / 240.00° Azm
13,451.6	13,299.0	-1,057.7	-1,318.3	TD @ 13451.6' MD / 13299.0' TVD