

Project: Rio Blanco County, CO
Site: ELU A18 495 Pad
Well: ELU A18 FED 21A-13 496
Wellbore: Wellbore #1
Design: Design #4
Latitude: 39.708952
Longitude: -108.103747
Ground Level: 8029.0
RKB @ 8059.0usft (30')

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 @ 8059.0usft (30')
Section (VS) Reference: Slot - 21A-13(0.0N, 0.0E)
Measured Depth Reference: RKB @ 8059.0usft (30')
Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3455.0	3487.0	Wasatch
6507.0	6571.3	Wasatch G
6807.0	6874.4	Fort Union
8677.0	8762.3	Ohio Creek
9260.0	9345.4	Williams Fork
12273.0	12359.1	Cameo
13019.0	13105.3	Rollins

SECTION DETAILS

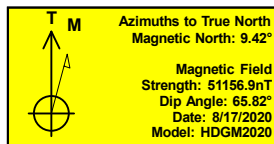
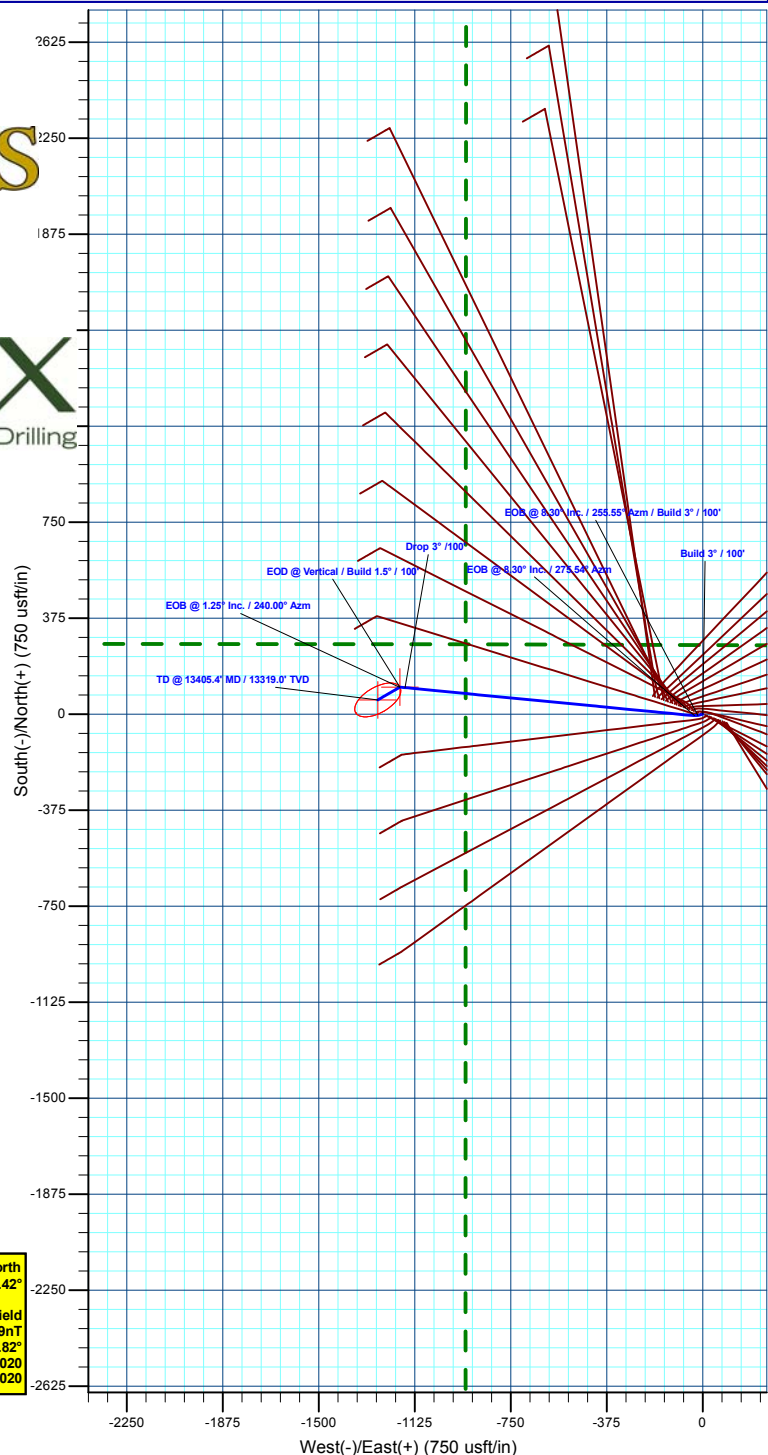
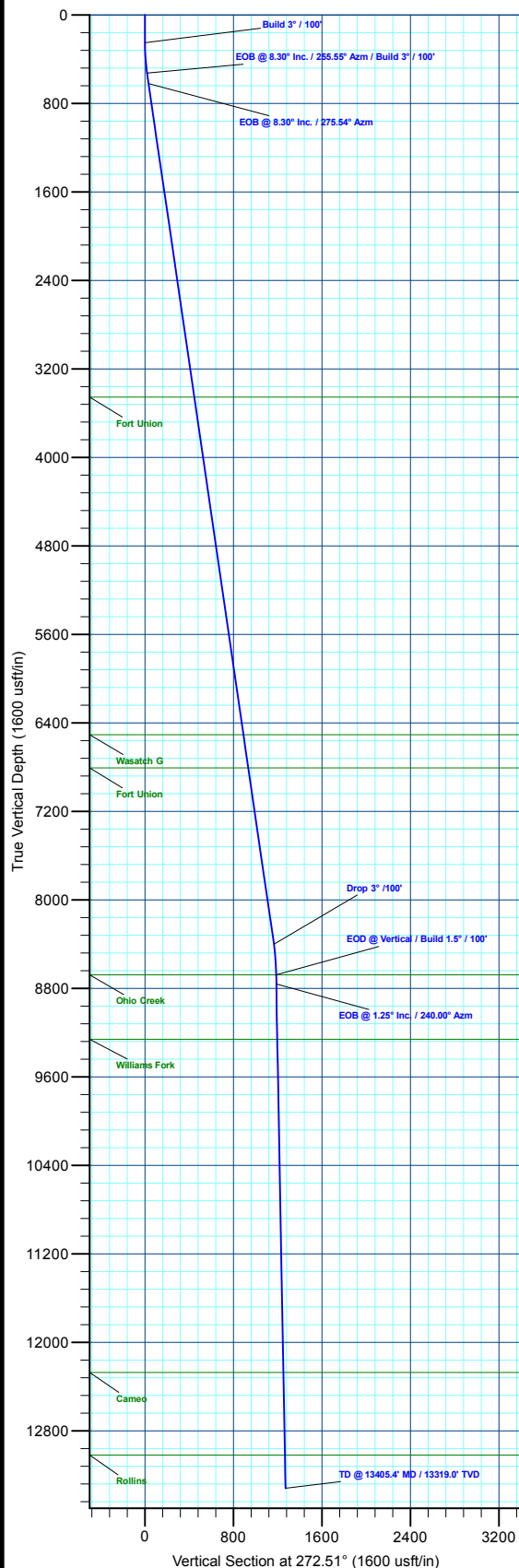
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
526.7	8.30	255.55	525.7	-5.0	-19.4	3.00	255.55	19.1	EOB @ 8.30° Inc. / 255.55° Azm / Build 3° / 100'
622.4	8.30	275.55	620.5	-6.0	-33.0	3.00	99.88	32.7	EOB @ 8.30° Inc. / 275.54° Azm
8485.6	8.30	275.55	8401.3	103.8	-1162.8	0.00	0.00	1166.3	Drop 3° / 100'
8762.3	0.00	0.00	8677.0	105.7	-1182.8	3.00	180.00	1186.3	EOD @ Vertical / Build 1.5° / 100'
8845.3	1.25	240.00	8760.0	105.3	-1183.5	1.50	240.00	1187.0	EOB @ 1.25° Inc. / 240.00° Azm
13405.4	1.25	240.00	13319.0	55.7	-1269.4	0.00	0.00	1270.6	TD @ 13405.4' MD / 13319.0' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
21A-13 - OHCR	8677.0	105.7	-1182.8	14433294.47	2453848.34	39.709242	-108.107949
21A-13 - PBHL	13319.0	55.7	-1269.4	14433241.70	2453763.40	39.709105	-108.108257

WELL DETAILS: ELU A18 FED 21A-13 496

+N/-S	+E/-W	Ground Level : 8029.0	Northing	Easting	Latitude	Longitude
0.0	0.0		14433227.00	2455033.90	39.708952	-108.103747
						21A-13



Plan: Design #4 (ELU A18 FED 21A-13 496/Wellbore #1)

Created By: Will Jircik

Date: 3:40, October 05 2023



Caerus Oil & Gas

Rio Blanco County, CO

ELU A18 495 Pad

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

Wellbore #1

Plan: Design #4

KLX Well Planning Report

05 October, 2023



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 21A-13 496 - Slot 21A-13
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8059.0usft (30')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8059.0usft (30')
Site:	ELU A18 495 Pad	North Reference:	True
Well:	ELU A18 FED 21A-13 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #4		

Project	Rio Blanco County, CO		
Map System:	Universal Transverse Mercator (US Survey Fee	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:	14,433,279.80 usft	Latitude: 39.709109
From: Map		Easting:	2,454,904.40 usft	Longitude: -108.104201
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 1.85 °

Well	ELU A18 FED 21A-13 496 - Slot 21A-13					
Well Position	+N/-S	-57.0 usft	Northing:	14,433,227.00 usft	Latitude:	39.708952
	+E/-W	127.7 usft	Easting:	2,455,033.90 usft	Longitude:	-108.103747
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	8,029.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2020	8/17/2020	9.42	65.82	51,156.90000000

Design	Design #4			
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	272.51

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	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.00	0.00	
526.7	8.30	255.55	525.7	-5.0	-19.4	3.00	3.00	0.00	255.55	
622.4	8.30	275.55	620.5	-6.0	-33.0	3.00	0.00	20.88	99.88	
8,485.6	8.30	275.55	8,401.3	103.8	-1,162.8	0.00	0.00	0.00	0.00	
8,762.3	0.00	0.00	8,677.0	105.7	-1,182.8	3.00	-3.00	0.00	180.00	21A-13 - OHCR
8,845.3	1.25	240.00	8,760.0	105.3	-1,183.5	1.50	1.50	-144.55	240.00	
13,405.4	1.25	240.00	13,319.0	55.7	-1,269.4	0.00	0.00	0.00	0.00	21A-13 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 21A-13 496 - Slot 21A-13
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8059.0usft (30')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8059.0usft (30')
Site:	ELU A18 495 Pad	North Reference:	True
Well:	ELU A18 FED 21A-13 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #4		

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'									
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	1.50	255.55	300.0	-0.2	-0.6	0.6	3.00	3.00	0.00
400.0	4.50	255.55	399.8	-1.5	-5.7	5.6	3.00	3.00	0.00
500.0	7.50	255.55	499.3	-4.1	-15.8	15.6	3.00	3.00	0.00
EOB @ 8.30° Inc. / 255.55° Azm / Build 3° / 100'									
526.7	8.30	255.55	525.7	-5.0	-19.4	19.1	3.00	3.00	0.00
600.0	8.21	270.90	598.3	-6.2	-29.7	29.4	3.00	-0.12	20.94
EOB @ 8.30° Inc. / 275.54° Azm									
622.4	8.30	275.55	620.5	-6.0	-33.0	32.7	3.00	0.40	20.71
700.0	8.30	275.55	697.2	-5.0	-44.1	43.8	0.00	0.00	0.00
800.0	8.30	275.55	796.2	-3.6	-58.5	58.3	0.00	0.00	0.00
900.0	8.30	275.55	895.1	-2.2	-72.8	72.7	0.00	0.00	0.00
1,000.0	8.30	275.55	994.1	-0.8	-87.2	87.1	0.00	0.00	0.00
1,100.0	8.30	275.55	1,093.0	0.6	-101.6	101.5	0.00	0.00	0.00
1,200.0	8.30	275.55	1,192.0	2.0	-115.9	115.9	0.00	0.00	0.00
1,300.0	8.30	275.55	1,291.0	3.4	-130.3	130.3	0.00	0.00	0.00
1,400.0	8.30	275.55	1,389.9	4.8	-144.7	144.8	0.00	0.00	0.00
1,500.0	8.30	275.55	1,488.9	6.2	-159.1	159.2	0.00	0.00	0.00
1,600.0	8.30	275.55	1,587.8	7.6	-173.4	173.6	0.00	0.00	0.00
1,700.0	8.30	275.55	1,686.8	9.0	-187.8	188.0	0.00	0.00	0.00
1,800.0	8.30	275.55	1,785.7	10.4	-202.2	202.4	0.00	0.00	0.00
1,900.0	8.30	275.55	1,884.7	11.8	-216.5	216.8	0.00	0.00	0.00
2,000.0	8.30	275.55	1,983.6	13.2	-230.9	231.3	0.00	0.00	0.00
2,100.0	8.30	275.55	2,082.6	14.6	-245.3	245.7	0.00	0.00	0.00
2,200.0	8.30	275.55	2,181.5	16.0	-259.6	260.1	0.00	0.00	0.00
2,300.0	8.30	275.55	2,280.5	17.4	-274.0	274.5	0.00	0.00	0.00
2,400.0	8.30	275.55	2,379.4	18.8	-288.4	288.9	0.00	0.00	0.00
2,500.0	8.30	275.55	2,478.4	20.2	-302.7	303.3	0.00	0.00	0.00
2,600.0	8.30	275.55	2,577.3	21.6	-317.1	317.8	0.00	0.00	0.00
2,700.0	8.30	275.55	2,676.3	23.0	-331.5	332.2	0.00	0.00	0.00
2,800.0	8.30	275.55	2,775.2	24.4	-345.9	346.6	0.00	0.00	0.00
2,900.0	8.30	275.55	2,874.2	25.8	-360.2	361.0	0.00	0.00	0.00
3,000.0	8.30	275.55	2,973.1	27.2	-374.6	375.4	0.00	0.00	0.00
3,100.0	8.30	275.55	3,072.1	28.6	-389.0	389.8	0.00	0.00	0.00
3,200.0	8.30	275.55	3,171.0	30.0	-403.3	404.3	0.00	0.00	0.00
3,300.0	8.30	275.55	3,270.0	31.4	-417.7	418.7	0.00	0.00	0.00
3,400.0	8.30	275.55	3,369.0	32.8	-432.1	433.1	0.00	0.00	0.00
Wasatch									
3,487.0	8.30	275.55	3,455.0	34.0	-444.6	445.6	0.00	0.00	0.00
3,500.0	8.30	275.55	3,467.9	34.2	-446.4	447.5	0.00	0.00	0.00
3,600.0	8.30	275.55	3,566.9	35.5	-460.8	461.9	0.00	0.00	0.00
3,700.0	8.30	275.55	3,665.8	36.9	-475.2	476.3	0.00	0.00	0.00
3,800.0	8.30	275.55	3,764.8	38.3	-489.5	490.8	0.00	0.00	0.00
3,900.0	8.30	275.55	3,863.7	39.7	-503.9	505.2	0.00	0.00	0.00
4,000.0	8.30	275.55	3,962.7	41.1	-518.3	519.6	0.00	0.00	0.00
4,100.0	8.30	275.55	4,061.6	42.5	-532.7	534.0	0.00	0.00	0.00
4,200.0	8.30	275.55	4,160.6	43.9	-547.0	548.4	0.00	0.00	0.00
4,300.0	8.30	275.55	4,259.5	45.3	-561.4	562.8	0.00	0.00	0.00
4,400.0	8.30	275.55	4,358.5	46.7	-575.8	577.3	0.00	0.00	0.00
4,500.0	8.30	275.55	4,457.4	48.1	-590.1	591.7	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 21A-13 496 - Slot 21A-13
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8059.0usft (30')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8059.0usft (30')
Site:	ELU A18 495 Pad	North Reference:	True
Well:	ELU A18 FED 21A-13 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #4		

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	8.30	275.55	4,556.4	49.5	-604.5	606.1	0.00	0.00	0.00
4,700.0	8.30	275.55	4,655.3	50.9	-618.9	620.5	0.00	0.00	0.00
4,800.0	8.30	275.55	4,754.3	52.3	-633.2	634.9	0.00	0.00	0.00
4,900.0	8.30	275.55	4,853.2	53.7	-647.6	649.3	0.00	0.00	0.00
5,000.0	8.30	275.55	4,952.2	55.1	-662.0	663.8	0.00	0.00	0.00
5,100.0	8.30	275.55	5,051.1	56.5	-676.4	678.2	0.00	0.00	0.00
5,200.0	8.30	275.55	5,150.1	57.9	-690.7	692.6	0.00	0.00	0.00
5,300.0	8.30	275.55	5,249.0	59.3	-705.1	707.0	0.00	0.00	0.00
5,400.0	8.30	275.55	5,348.0	60.7	-719.5	721.4	0.00	0.00	0.00
5,500.0	8.30	275.55	5,446.9	62.1	-733.8	735.8	0.00	0.00	0.00
5,600.0	8.30	275.55	5,545.9	63.5	-748.2	750.3	0.00	0.00	0.00
5,700.0	8.30	275.55	5,644.9	64.9	-762.6	764.7	0.00	0.00	0.00
5,800.0	8.30	275.55	5,743.8	66.3	-776.9	779.1	0.00	0.00	0.00
5,900.0	8.30	275.55	5,842.8	67.7	-791.3	793.5	0.00	0.00	0.00
6,000.0	8.30	275.55	5,941.7	69.1	-805.7	807.9	0.00	0.00	0.00
6,100.0	8.30	275.55	6,040.7	70.5	-820.0	822.3	0.00	0.00	0.00
6,200.0	8.30	275.55	6,139.6	71.9	-834.4	836.8	0.00	0.00	0.00
6,300.0	8.30	275.55	6,238.6	73.3	-848.8	851.2	0.00	0.00	0.00
6,400.0	8.30	275.55	6,337.5	74.7	-863.2	865.6	0.00	0.00	0.00
6,500.0	8.30	275.55	6,436.5	76.1	-877.5	880.0	0.00	0.00	0.00
Wasatch G									
6,571.3	8.30	275.55	6,507.0	77.1	-887.8	890.3	0.00	0.00	0.00
6,600.0	8.30	275.55	6,535.4	77.5	-891.9	894.4	0.00	0.00	0.00
6,700.0	8.30	275.55	6,634.4	78.9	-906.3	908.8	0.00	0.00	0.00
6,800.0	8.30	275.55	6,733.3	80.3	-920.6	923.3	0.00	0.00	0.00
Fort Union									
6,874.4	8.30	275.55	6,807.0	81.3	-931.3	934.0	0.00	0.00	0.00
6,900.0	8.30	275.55	6,832.3	81.7	-935.0	937.7	0.00	0.00	0.00
7,000.0	8.30	275.55	6,931.2	83.0	-949.4	952.1	0.00	0.00	0.00
7,100.0	8.30	275.55	7,030.2	84.4	-963.7	966.5	0.00	0.00	0.00
7,200.0	8.30	275.55	7,129.1	85.8	-978.1	980.9	0.00	0.00	0.00
7,300.0	8.30	275.55	7,228.1	87.2	-992.5	995.4	0.00	0.00	0.00
7,400.0	8.30	275.55	7,327.0	88.6	-1,006.8	1,009.8	0.00	0.00	0.00
7,500.0	8.30	275.55	7,426.0	90.0	-1,021.2	1,024.2	0.00	0.00	0.00
7,600.0	8.30	275.55	7,524.9	91.4	-1,035.6	1,038.6	0.00	0.00	0.00
7,700.0	8.30	275.55	7,623.9	92.8	-1,050.0	1,053.0	0.00	0.00	0.00
7,800.0	8.30	275.55	7,722.9	94.2	-1,064.3	1,067.4	0.00	0.00	0.00
7,900.0	8.30	275.55	7,821.8	95.6	-1,078.7	1,081.9	0.00	0.00	0.00
8,000.0	8.30	275.55	7,920.8	97.0	-1,093.1	1,096.3	0.00	0.00	0.00
8,100.0	8.30	275.55	8,019.7	98.4	-1,107.4	1,110.7	0.00	0.00	0.00
8,200.0	8.30	275.55	8,118.7	99.8	-1,121.8	1,125.1	0.00	0.00	0.00
8,300.0	8.30	275.55	8,217.6	101.2	-1,136.2	1,139.5	0.00	0.00	0.00
8,400.0	8.30	275.55	8,316.6	102.6	-1,150.5	1,153.9	0.00	0.00	0.00
Drop 3° /100'									
8,485.6	8.30	275.55	8,401.3	103.8	-1,162.8	1,166.3	0.00	0.00	0.00
8,500.0	7.87	275.55	8,415.5	104.0	-1,164.9	1,168.3	3.00	-3.00	0.00
8,600.0	4.87	275.55	8,514.9	105.1	-1,175.9	1,179.4	3.00	-3.00	0.00
8,700.0	1.87	275.55	8,614.7	105.6	-1,181.7	1,185.2	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
8,762.3	0.00	0.00	8,677.0	105.7	-1,182.8	1,186.3	3.00	-3.00	0.00
8,800.0	0.57	240.00	8,714.7	105.6	-1,182.9	1,186.4	1.50	1.50	0.00
EOB @ 1.25° Inc. / 240.00° Azm									
8,845.3	1.25	240.00	8,760.0	105.3	-1,183.5	1,187.0	1.50	1.50	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 21A-13 496 - Slot 21A-13
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8059.0usft (30')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8059.0usft (30')
Site:	ELU A18 495 Pad	North Reference:	True
Well:	ELU A18 FED 21A-13 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #4		

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)
8,900.0	1.25	240.00	8,814.7	104.7	-1,184.6	1,188.0	0.00	0.00	0.00
9,000.0	1.25	240.00	8,914.7	103.6	-1,186.5	1,189.9	0.00	0.00	0.00
9,100.0	1.25	240.00	9,014.6	102.5	-1,188.3	1,191.7	0.00	0.00	0.00
9,200.0	1.25	240.00	9,114.6	101.4	-1,190.2	1,193.5	0.00	0.00	0.00
9,300.0	1.25	240.00	9,214.6	100.3	-1,192.1	1,195.4	0.00	0.00	0.00
Williams Fork									
9,345.4	1.25	240.00	9,260.0	99.9	-1,193.0	1,196.2	0.00	0.00	0.00
9,400.0	1.25	240.00	9,314.6	99.3	-1,194.0	1,197.2	0.00	0.00	0.00
9,500.0	1.25	240.00	9,414.5	98.2	-1,195.9	1,199.0	0.00	0.00	0.00
9,600.0	1.25	240.00	9,514.5	97.1	-1,197.7	1,200.8	0.00	0.00	0.00
9,700.0	1.25	240.00	9,614.5	96.0	-1,199.6	1,202.7	0.00	0.00	0.00
9,800.0	1.25	240.00	9,714.5	94.9	-1,201.5	1,204.5	0.00	0.00	0.00
9,900.0	1.25	240.00	9,814.4	93.8	-1,203.4	1,206.3	0.00	0.00	0.00
10,000.0	1.25	240.00	9,914.4	92.7	-1,205.3	1,208.2	0.00	0.00	0.00
10,100.0	1.25	240.00	10,014.4	91.7	-1,207.2	1,210.0	0.00	0.00	0.00
10,200.0	1.25	240.00	10,114.4	90.6	-1,209.0	1,211.8	0.00	0.00	0.00
10,300.0	1.25	240.00	10,214.4	89.5	-1,210.9	1,213.7	0.00	0.00	0.00
10,400.0	1.25	240.00	10,314.3	88.4	-1,212.8	1,215.5	0.00	0.00	0.00
10,500.0	1.25	240.00	10,414.3	87.3	-1,214.7	1,217.3	0.00	0.00	0.00
10,600.0	1.25	240.00	10,514.3	86.2	-1,216.6	1,219.2	0.00	0.00	0.00
10,700.0	1.25	240.00	10,614.3	85.1	-1,218.4	1,221.0	0.00	0.00	0.00
10,800.0	1.25	240.00	10,714.2	84.0	-1,220.3	1,222.8	0.00	0.00	0.00
10,900.0	1.25	240.00	10,814.2	83.0	-1,222.2	1,224.7	0.00	0.00	0.00
11,000.0	1.25	240.00	10,914.2	81.9	-1,224.1	1,226.5	0.00	0.00	0.00
11,100.0	1.25	240.00	11,014.2	80.8	-1,226.0	1,228.3	0.00	0.00	0.00
11,200.0	1.25	240.00	11,114.1	79.7	-1,227.9	1,230.2	0.00	0.00	0.00
11,300.0	1.25	240.00	11,214.1	78.6	-1,229.7	1,232.0	0.00	0.00	0.00
11,400.0	1.25	240.00	11,314.1	77.5	-1,231.6	1,233.8	0.00	0.00	0.00
11,500.0	1.25	240.00	11,414.1	76.4	-1,233.5	1,235.7	0.00	0.00	0.00
11,600.0	1.25	240.00	11,514.0	75.4	-1,235.4	1,237.5	0.00	0.00	0.00
11,700.0	1.25	240.00	11,614.0	74.3	-1,237.3	1,239.3	0.00	0.00	0.00
11,800.0	1.25	240.00	11,714.0	73.2	-1,239.1	1,241.2	0.00	0.00	0.00
11,900.0	1.25	240.00	11,814.0	72.1	-1,241.0	1,243.0	0.00	0.00	0.00
12,000.0	1.25	240.00	11,914.0	71.0	-1,242.9	1,244.8	0.00	0.00	0.00
12,100.0	1.25	240.00	12,013.9	69.9	-1,244.8	1,246.7	0.00	0.00	0.00
12,200.0	1.25	240.00	12,113.9	68.8	-1,246.7	1,248.5	0.00	0.00	0.00
12,300.0	1.25	240.00	12,213.9	67.8	-1,248.6	1,250.3	0.00	0.00	0.00
Cameo									
12,359.1	1.25	240.00	12,273.0	67.1	-1,249.7	1,251.4	0.00	0.00	0.00
12,400.0	1.25	240.00	12,313.9	66.7	-1,250.4	1,252.2	0.00	0.00	0.00
12,500.0	1.25	240.00	12,413.8	65.6	-1,252.3	1,254.0	0.00	0.00	0.00
12,600.0	1.25	240.00	12,513.8	64.5	-1,254.2	1,255.8	0.00	0.00	0.00
12,700.0	1.25	240.00	12,613.8	63.4	-1,256.1	1,257.7	0.00	0.00	0.00
12,800.0	1.25	240.00	12,713.8	62.3	-1,258.0	1,259.5	0.00	0.00	0.00
12,900.0	1.25	240.00	12,813.7	61.2	-1,259.9	1,261.3	0.00	0.00	0.00
13,000.0	1.25	240.00	12,913.7	60.1	-1,261.7	1,263.2	0.00	0.00	0.00
13,100.0	1.25	240.00	13,013.7	59.1	-1,263.6	1,265.0	0.00	0.00	0.00
Rollins									
13,105.3	1.25	240.00	13,019.0	59.0	-1,263.7	1,265.1	0.00	0.00	0.00
13,200.0	1.25	240.00	13,113.7	58.0	-1,265.5	1,266.8	0.00	0.00	0.00
13,300.0	1.25	240.00	13,213.6	56.9	-1,267.4	1,268.7	0.00	0.00	0.00
TD @ 13405.4' MD / 13319.0' TVD									
13,405.4	1.25	240.00	13,319.0	55.7	-1,269.4	1,270.6	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 21A-13 496 - Slot 21A-13
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 8059.0usft (30')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 8059.0usft (30')
Site:	ELU A18 495 Pad	North Reference:	True
Well:	ELU A18 FED 21A-13 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #4		

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
21A-13 - OHCR - plan hits target center - Point	0.00	0.00	8,677.0	105.7	-1,182.8	14,433,294.47	2,453,848.35	39.709242	-108.107949
21A-13 - PBHL - plan hits target center - Ellipse (radii L100.0 W50.0 on 240.00 azi)	0.00	0.00	13,319.0	55.7	-1,269.4	14,433,241.70	2,453,763.40	39.709105	-108.108257

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,487.0	3,455.0	Wasatch			
6,571.3	6,507.0	Wasatch G			
6,874.4	6,807.0	Fort Union			
8,762.3	8,677.0	Ohio Creek			
9,345.4	9,260.0	Williams Fork			
12,359.1	12,273.0	Cameo			
13,105.3	13,019.0	Rollins			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
250.0	250.0	0.0	0.0	Build 3° / 100'
526.7	525.7	-5.0	-19.4	EOB @ 8.30° Inc. / 255.55° Azm / Build 3° / 100'
622.4	620.5	-6.0	-33.0	EOB @ 8.30° Inc. / 275.54° Azm
8,485.6	8,401.3	103.8	-1,162.8	Drop 3° / 100'
8,762.3	8,677.0	105.7	-1,182.8	EOD @ Vertical / Build 1.5° / 100'
8,845.3	8,760.0	105.3	-1,183.5	EOB @ 1.25° Inc. / 240.00° Azm
13,405.4	13,319.0	55.7	-1,269.4	TD @ 13405.4' MD / 13319.0' TVD