

Project: Rio Blanco County, CO
Site: ELU A18 495 Pad
Well: ELU A18 FED 21D-13 496
Wellbore: Wellbore #1
Design: Design #4
Latitude: 39.708902
Longitude: -108.103566
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 - 21D-13(0.0N, 0.0E)
Measured Depth Reference: RKB @ 8059.0usft (30')
Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3434.0	3477.7	Wasatch
6470.0	6558.0	Wasatch G
6770.0	6862.4	Fort Union
8645.0	8761.6	Ohio Creek
9220.0	9336.8	Williams Fork
12232.0	12349.5	Cameo
12956.0	13073.7	Rollins

SECTION DETAILS

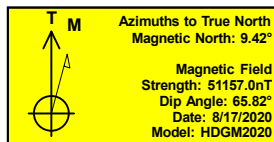
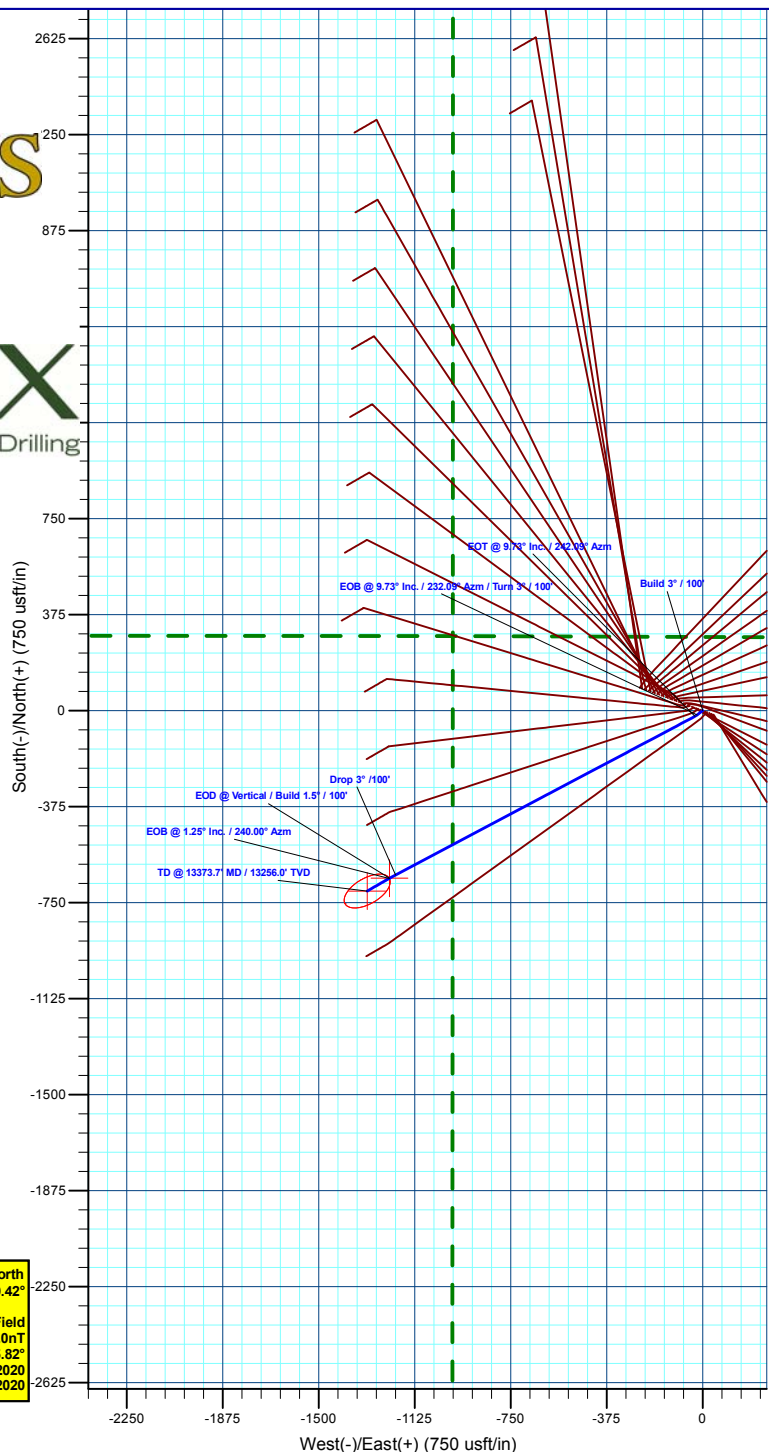
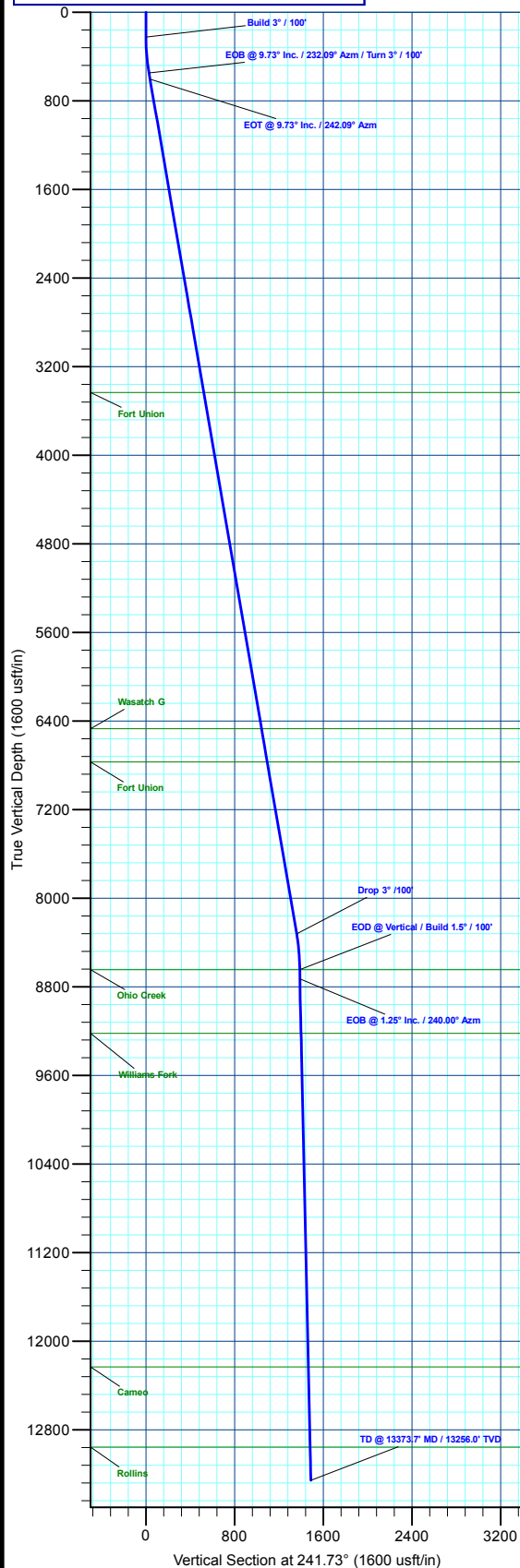
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dieg	TFace	VSec	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
225.0	0.00	0.00	225.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
549.3	9.73	232.09	547.8	-16.9	-21.7	3.00	232.09	27.1	EOB @ 9.73° Inc. / 232.09° Azm / Turn 3° / 100'
605.6	9.73	242.09	603.2	-22.0	-29.6	3.00	94.83	36.5	EOT @ 9.73° Inc. / 242.09° Azm
8437.2	9.73	242.09	8322.1	-641.9	-1199.6	0.00	0.00	1360.5	Drop 3° / 100'
8761.6	0.00	0.00	8645.0	-654.7	-1223.9	3.00	180.00	1388.0	EOD @ Vertical / Build 1.5° / 100'
8845.2	1.25	240.00	8728.6	-655.2	-1224.6	1.50	240.00	1388.9	EOB @ 1.25° Inc. / 240.00° Azm
13373.7	1.25	240.00	13256.0	-704.7	-1310.5	0.00	0.00	1487.9	TD @ 13373.7' MD / 13256.0' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
21D-13 - OHCR	8645.0	-654.7	-1223.9	14432516.37	2453883.14	39.707105	-108.107915
21D-13 - PBHL	13256.0	-704.7	-1310.5	14432463.60	2453798.20	39.706968	-108.108222

WELL DETAILS: ELU A18 FED 21D-13 496

	+N/-S	+E/-W	Ground Level : 8029.0	Northing	Easting	Latitude	Longitude
	0.0	0.0		14433210.30	2455085.20	39.708902	-108.103566
21D-13							



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

Created By: Will Jircik

Date: 3:33, October 05 2023



Caerus Oil & Gas

Rio Blanco County, CO

ELU A18 495 Pad

ELU A18 FED 21D-13 496 - Slot 21D-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 21D-13 496 - Slot 21D-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 21D-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 21D-13 496 - Slot 21D-13					
Well Position	+N/-S	-75.3 usft	Northing:	14,433,210.30 usft	Latitude:	39.708902
	+E/-W	178.5 usft	Easting:	2,455,085.20 usft	Longitude:	-108.103567
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	51,157.00000000

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	241.73

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	
225.0	0.00	0.00	225.0	0.0	0.0	0.00	0.00	0.00	0.00	
549.3	9.73	232.09	547.8	-16.9	-21.7	3.00	3.00	0.00	232.09	
605.6	9.73	242.09	603.2	-22.0	-29.6	3.00	0.01	17.77	94.83	
8,437.2	9.73	242.09	8,322.1	-641.9	-1,199.6	0.00	0.00	0.00	0.00	
8,761.6	0.00	0.00	8,645.0	-654.7	-1,223.9	3.00	-3.00	0.00	180.00	21D-13 - OHCR
8,845.2	1.25	240.00	8,728.6	-655.2	-1,224.6	1.50	1.50	-143.57	240.00	
13,373.7	1.25	240.00	13,256.0	-704.7	-1,310.5	0.00	0.00	0.00	0.00	21D-13 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 21D-13 496 - Slot 21D-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 21D-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'									
225.0	0.00	0.00	225.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	2.25	232.09	300.0	-0.9	-1.2	1.5	3.00	3.00	0.00
400.0	5.25	232.09	399.8	-4.9	-6.3	7.9	3.00	3.00	0.00
500.0	8.25	232.09	499.1	-12.1	-15.6	19.5	3.00	3.00	0.00
EOB @ 9.73° Inc. / 232.09° Azm / Turn 3° / 100'									
549.3	9.73	232.09	547.8	-16.9	-21.7	27.1	3.00	3.00	0.00
EOT @ 9.73° Inc. / 242.09° Azm									
605.6	9.73	242.09	603.2	-22.0	-29.6	36.5	3.00	0.01	17.77
700.0	9.73	242.09	696.3	-29.5	-43.7	52.5	0.00	0.00	0.00
800.0	9.73	242.09	794.8	-37.4	-58.7	69.4	0.00	0.00	0.00
900.0	9.73	242.09	893.4	-45.3	-73.6	86.3	0.00	0.00	0.00
1,000.0	9.73	242.09	992.0	-53.2	-88.5	103.2	0.00	0.00	0.00
1,100.0	9.73	242.09	1,090.5	-61.2	-103.5	120.1	0.00	0.00	0.00
1,200.0	9.73	242.09	1,189.1	-69.1	-118.4	137.0	0.00	0.00	0.00
1,300.0	9.73	242.09	1,287.6	-77.0	-133.4	153.9	0.00	0.00	0.00
1,400.0	9.73	242.09	1,386.2	-84.9	-148.3	170.8	0.00	0.00	0.00
1,500.0	9.73	242.09	1,484.8	-92.8	-163.2	187.7	0.00	0.00	0.00
1,600.0	9.73	242.09	1,583.3	-100.7	-178.2	204.6	0.00	0.00	0.00
1,700.0	9.73	242.09	1,681.9	-108.6	-193.1	221.5	0.00	0.00	0.00
1,800.0	9.73	242.09	1,780.4	-116.6	-208.1	238.4	0.00	0.00	0.00
1,900.0	9.73	242.09	1,879.0	-124.5	-223.0	255.4	0.00	0.00	0.00
2,000.0	9.73	242.09	1,977.6	-132.4	-237.9	272.3	0.00	0.00	0.00
2,100.0	9.73	242.09	2,076.1	-140.3	-252.9	289.2	0.00	0.00	0.00
2,200.0	9.73	242.09	2,174.7	-148.2	-267.8	306.1	0.00	0.00	0.00
2,300.0	9.73	242.09	2,273.2	-156.1	-282.7	323.0	0.00	0.00	0.00
2,400.0	9.73	242.09	2,371.8	-164.0	-297.7	339.9	0.00	0.00	0.00
2,500.0	9.73	242.09	2,470.4	-172.0	-312.6	356.8	0.00	0.00	0.00
2,600.0	9.73	242.09	2,568.9	-179.9	-327.6	373.7	0.00	0.00	0.00
2,700.0	9.73	242.09	2,667.5	-187.8	-342.5	390.6	0.00	0.00	0.00
2,800.0	9.73	242.09	2,766.1	-195.7	-357.4	407.5	0.00	0.00	0.00
2,900.0	9.73	242.09	2,864.6	-203.6	-372.4	424.4	0.00	0.00	0.00
3,000.0	9.73	242.09	2,963.2	-211.5	-387.3	441.3	0.00	0.00	0.00
3,100.0	9.73	242.09	3,061.7	-219.4	-402.3	458.2	0.00	0.00	0.00
3,200.0	9.73	242.09	3,160.3	-227.4	-417.2	475.1	0.00	0.00	0.00
3,300.0	9.73	242.09	3,258.9	-235.3	-432.1	492.0	0.00	0.00	0.00
3,400.0	9.73	242.09	3,357.4	-243.2	-447.1	508.9	0.00	0.00	0.00
Wasatch									
3,477.7	9.73	242.09	3,434.0	-249.3	-458.7	522.1	0.00	0.00	0.00
3,500.0	9.73	242.09	3,456.0	-251.1	-462.0	525.8	0.00	0.00	0.00
3,600.0	9.73	242.09	3,554.5	-259.0	-477.0	542.7	0.00	0.00	0.00
3,700.0	9.73	242.09	3,653.1	-266.9	-491.9	559.6	0.00	0.00	0.00
3,800.0	9.73	242.09	3,751.7	-274.8	-506.8	576.6	0.00	0.00	0.00
3,900.0	9.73	242.09	3,850.2	-282.8	-521.8	593.5	0.00	0.00	0.00
4,000.0	9.73	242.09	3,948.8	-290.7	-536.7	610.4	0.00	0.00	0.00
4,100.0	9.73	242.09	4,047.3	-298.6	-551.6	627.3	0.00	0.00	0.00
4,200.0	9.73	242.09	4,145.9	-306.5	-566.6	644.2	0.00	0.00	0.00
4,300.0	9.73	242.09	4,244.5	-314.4	-581.5	661.1	0.00	0.00	0.00
4,400.0	9.73	242.09	4,343.0	-322.3	-596.5	678.0	0.00	0.00	0.00
4,500.0	9.73	242.09	4,441.6	-330.2	-611.4	694.9	0.00	0.00	0.00
4,600.0	9.73	242.09	4,540.1	-338.2	-626.3	711.8	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 21D-13 496 - Slot 21D-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 21D-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)
4,700.0	9.73	242.09	4,638.7	-346.1	-641.3	728.7	0.00	0.00	0.00
4,800.0	9.73	242.09	4,737.3	-354.0	-656.2	745.6	0.00	0.00	0.00
4,900.0	9.73	242.09	4,835.8	-361.9	-671.2	762.5	0.00	0.00	0.00
5,000.0	9.73	242.09	4,934.4	-369.8	-686.1	779.4	0.00	0.00	0.00
5,100.0	9.73	242.09	5,032.9	-377.7	-701.0	796.3	0.00	0.00	0.00
5,200.0	9.73	242.09	5,131.5	-385.7	-716.0	813.2	0.00	0.00	0.00
5,300.0	9.73	242.09	5,230.1	-393.6	-730.9	830.1	0.00	0.00	0.00
5,400.0	9.73	242.09	5,328.6	-401.5	-745.8	847.0	0.00	0.00	0.00
5,500.0	9.73	242.09	5,427.2	-409.4	-760.8	863.9	0.00	0.00	0.00
5,600.0	9.73	242.09	5,525.8	-417.3	-775.7	880.8	0.00	0.00	0.00
5,700.0	9.73	242.09	5,624.3	-425.2	-790.7	897.8	0.00	0.00	0.00
5,800.0	9.73	242.09	5,722.9	-433.1	-805.6	914.7	0.00	0.00	0.00
5,900.0	9.73	242.09	5,821.4	-441.1	-820.5	931.6	0.00	0.00	0.00
6,000.0	9.73	242.09	5,920.0	-449.0	-835.5	948.5	0.00	0.00	0.00
6,100.0	9.73	242.09	6,018.6	-456.9	-850.4	965.4	0.00	0.00	0.00
6,200.0	9.73	242.09	6,117.1	-464.8	-865.4	982.3	0.00	0.00	0.00
6,300.0	9.73	242.09	6,215.7	-472.7	-880.3	999.2	0.00	0.00	0.00
6,400.0	9.73	242.09	6,314.2	-480.6	-895.2	1,016.1	0.00	0.00	0.00
6,500.0	9.73	242.09	6,412.8	-488.5	-910.2	1,033.0	0.00	0.00	0.00
Wasatch G									
6,558.0	9.73	242.09	6,470.0	-493.1	-918.8	1,042.8	0.00	0.00	0.00
6,600.0	9.73	242.09	6,511.4	-496.5	-925.1	1,049.9	0.00	0.00	0.00
6,700.0	9.73	242.09	6,609.9	-504.4	-940.0	1,066.8	0.00	0.00	0.00
6,800.0	9.73	242.09	6,708.5	-512.3	-955.0	1,083.7	0.00	0.00	0.00
Fort Union									
6,862.4	9.73	242.09	6,770.0	-517.2	-964.3	1,094.3	0.00	0.00	0.00
6,900.0	9.73	242.09	6,807.0	-520.2	-969.9	1,100.6	0.00	0.00	0.00
7,000.0	9.73	242.09	6,905.6	-528.1	-984.9	1,117.5	0.00	0.00	0.00
7,100.0	9.73	242.09	7,004.2	-536.0	-999.8	1,134.4	0.00	0.00	0.00
7,200.0	9.73	242.09	7,102.7	-543.9	-1,014.7	1,151.3	0.00	0.00	0.00
7,300.0	9.73	242.09	7,201.3	-551.9	-1,029.7	1,168.2	0.00	0.00	0.00
7,400.0	9.73	242.09	7,299.8	-559.8	-1,044.6	1,185.1	0.00	0.00	0.00
7,500.0	9.73	242.09	7,398.4	-567.7	-1,059.6	1,202.0	0.00	0.00	0.00
7,600.0	9.73	242.09	7,497.0	-575.6	-1,074.5	1,219.0	0.00	0.00	0.00
7,700.0	9.73	242.09	7,595.5	-583.5	-1,089.4	1,235.9	0.00	0.00	0.00
7,800.0	9.73	242.09	7,694.1	-591.4	-1,104.4	1,252.8	0.00	0.00	0.00
7,900.0	9.73	242.09	7,792.6	-599.3	-1,119.3	1,269.7	0.00	0.00	0.00
8,000.0	9.73	242.09	7,891.2	-607.3	-1,134.2	1,286.6	0.00	0.00	0.00
8,100.0	9.73	242.09	7,989.8	-615.2	-1,149.2	1,303.5	0.00	0.00	0.00
8,200.0	9.73	242.09	8,088.3	-623.1	-1,164.1	1,320.4	0.00	0.00	0.00
8,300.0	9.73	242.09	8,186.9	-631.0	-1,179.1	1,337.3	0.00	0.00	0.00
8,400.0	9.73	242.09	8,285.4	-638.9	-1,194.0	1,354.2	0.00	0.00	0.00
Drop 3° /100'									
8,437.2	9.73	242.09	8,322.1	-641.9	-1,199.6	1,360.5	0.00	0.00	0.00
8,500.0	7.85	242.09	8,384.2	-646.4	-1,208.0	1,370.1	3.00	-3.00	0.00
8,600.0	4.85	242.09	8,483.5	-651.5	-1,217.8	1,381.1	3.00	-3.00	0.00
8,700.0	1.85	242.09	8,583.4	-654.3	-1,223.0	1,387.0	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
8,761.6	0.00	0.00	8,645.0	-654.7	-1,223.9	1,388.0	3.00	-3.00	0.00
8,800.0	0.58	240.00	8,683.4	-654.8	-1,224.0	1,388.2	1.50	1.50	0.00
EOB @ 1.25° Inc. / 240.00° Azm									
8,845.2	1.25	240.00	8,728.6	-655.2	-1,224.6	1,388.9	1.50	1.50	0.00
8,900.0	1.25	240.00	8,783.3	-655.8	-1,225.7	1,390.1	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 21D-13 496 - Slot 21D-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 21D-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)
9,000.0	1.25	240.00	8,883.3	-656.9	-1,227.6	1,392.3	0.00	0.00	0.00
9,100.0	1.25	240.00	8,983.3	-658.0	-1,229.5	1,394.5	0.00	0.00	0.00
9,200.0	1.25	240.00	9,083.3	-659.1	-1,231.4	1,396.6	0.00	0.00	0.00
9,300.0	1.25	240.00	9,183.2	-660.2	-1,233.3	1,398.8	0.00	0.00	0.00
Williams Fork									
9,336.8	1.25	240.00	9,220.0	-660.6	-1,234.0	1,399.6	0.00	0.00	0.00
9,400.0	1.25	240.00	9,283.2	-661.3	-1,235.2	1,401.0	0.00	0.00	0.00
9,500.0	1.25	240.00	9,383.2	-662.3	-1,237.0	1,403.2	0.00	0.00	0.00
9,600.0	1.25	240.00	9,483.2	-663.4	-1,238.9	1,405.4	0.00	0.00	0.00
9,700.0	1.25	240.00	9,583.1	-664.5	-1,240.8	1,407.6	0.00	0.00	0.00
9,800.0	1.25	240.00	9,683.1	-665.6	-1,242.7	1,409.8	0.00	0.00	0.00
9,900.0	1.25	240.00	9,783.1	-666.7	-1,244.6	1,412.0	0.00	0.00	0.00
10,000.0	1.25	240.00	9,883.1	-667.8	-1,246.5	1,414.1	0.00	0.00	0.00
10,100.0	1.25	240.00	9,983.0	-668.9	-1,248.4	1,416.3	0.00	0.00	0.00
10,200.0	1.25	240.00	10,083.0	-670.0	-1,250.3	1,418.5	0.00	0.00	0.00
10,300.0	1.25	240.00	10,183.0	-671.1	-1,252.2	1,420.7	0.00	0.00	0.00
10,400.0	1.25	240.00	10,283.0	-672.2	-1,254.1	1,422.9	0.00	0.00	0.00
10,500.0	1.25	240.00	10,383.0	-673.3	-1,256.0	1,425.1	0.00	0.00	0.00
10,600.0	1.25	240.00	10,482.9	-674.4	-1,257.9	1,427.3	0.00	0.00	0.00
10,700.0	1.25	240.00	10,582.9	-675.5	-1,259.8	1,429.5	0.00	0.00	0.00
10,800.0	1.25	240.00	10,682.9	-676.6	-1,261.7	1,431.6	0.00	0.00	0.00
10,900.0	1.25	240.00	10,782.9	-677.7	-1,263.6	1,433.8	0.00	0.00	0.00
11,000.0	1.25	240.00	10,882.8	-678.8	-1,265.5	1,436.0	0.00	0.00	0.00
11,100.0	1.25	240.00	10,982.8	-679.9	-1,267.4	1,438.2	0.00	0.00	0.00
11,200.0	1.25	240.00	11,082.8	-680.9	-1,269.3	1,440.4	0.00	0.00	0.00
11,300.0	1.25	240.00	11,182.8	-682.0	-1,271.2	1,442.6	0.00	0.00	0.00
11,400.0	1.25	240.00	11,282.7	-683.1	-1,273.1	1,444.8	0.00	0.00	0.00
11,500.0	1.25	240.00	11,382.7	-684.2	-1,274.9	1,446.9	0.00	0.00	0.00
11,600.0	1.25	240.00	11,482.7	-685.3	-1,276.8	1,449.1	0.00	0.00	0.00
11,700.0	1.25	240.00	11,582.7	-686.4	-1,278.7	1,451.3	0.00	0.00	0.00
11,800.0	1.25	240.00	11,682.6	-687.5	-1,280.6	1,453.5	0.00	0.00	0.00
11,900.0	1.25	240.00	11,782.6	-688.6	-1,282.5	1,455.7	0.00	0.00	0.00
12,000.0	1.25	240.00	11,882.6	-689.7	-1,284.4	1,457.9	0.00	0.00	0.00
12,100.0	1.25	240.00	11,982.6	-690.8	-1,286.3	1,460.1	0.00	0.00	0.00
12,200.0	1.25	240.00	12,082.5	-691.9	-1,288.2	1,462.3	0.00	0.00	0.00
12,300.0	1.25	240.00	12,182.5	-693.0	-1,290.1	1,464.4	0.00	0.00	0.00
Cameo									
12,349.5	1.25	240.00	12,232.0	-693.5	-1,291.0	1,465.5	0.00	0.00	0.00
12,400.0	1.25	240.00	12,282.5	-694.1	-1,292.0	1,466.6	0.00	0.00	0.00
12,500.0	1.25	240.00	12,382.5	-695.2	-1,293.9	1,468.8	0.00	0.00	0.00
12,600.0	1.25	240.00	12,482.4	-696.3	-1,295.8	1,471.0	0.00	0.00	0.00
12,700.0	1.25	240.00	12,582.4	-697.4	-1,297.7	1,473.2	0.00	0.00	0.00
12,800.0	1.25	240.00	12,682.4	-698.5	-1,299.6	1,475.4	0.00	0.00	0.00
12,900.0	1.25	240.00	12,782.4	-699.5	-1,301.5	1,477.6	0.00	0.00	0.00
13,000.0	1.25	240.00	12,882.4	-700.6	-1,303.4	1,479.8	0.00	0.00	0.00
Rollins									
13,073.7	1.25	240.00	12,956.0	-701.4	-1,304.8	1,481.4	0.00	0.00	0.00
13,100.0	1.25	240.00	12,982.3	-701.7	-1,305.3	1,481.9	0.00	0.00	0.00
13,200.0	1.25	240.00	13,082.3	-702.8	-1,307.2	1,484.1	0.00	0.00	0.00
13,300.0	1.25	240.00	13,182.3	-703.9	-1,309.1	1,486.3	0.00	0.00	0.00
TD @ 13373.7' MD / 13256.0' TVD									
13,373.7	1.25	240.00	13,256.0	-704.7	-1,310.5	1,487.9	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 21D-13 496 - Slot 21D-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 21D-13 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #4		

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	8,645.0	-654.7	-1,223.9	14,432,516.37	2,453,883.15	39.707105	-108.107915
- plan hits target center									
- Point									
21D-13 - PBHL	0.00	0.00	13,256.0	-704.7	-1,310.5	14,432,463.60	2,453,798.20	39.706968	-108.108223
- 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 (°)	
3,477.7	3,434.0	Wasatch				
6,558.0	6,470.0	Wasatch G				
6,862.4	6,770.0	Fort Union				
8,761.6	8,645.0	Ohio Creek				
9,336.8	9,220.0	Williams Fork				
12,349.5	12,232.0	Cameo				
13,073.7	12,956.0	Rollins				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
225.0	225.0	0.0	0.0	Build 3° / 100'
549.3	547.8	-16.9	-21.7	EOB @ 9.73° Inc. / 232.09° Azm / Turn 3° / 100'
605.6	603.2	-22.0	-29.6	EOT @ 9.73° Inc. / 242.09° Azm
8,437.2	8,322.1	-641.9	-1,199.6	Drop 3° / 100'
8,761.6	8,645.0	-654.7	-1,223.9	EOD @ Vertical / Build 1.5° / 100'
8,845.2	8,728.6	-655.2	-1,224.6	EOB @ 1.25° Inc. / 240.00° Azm
13,373.7	13,256.0	-704.7	-1,310.5	TD @ 13373.7' MD / 13256.0' TVD