

Project: Rio Blanco County, CO
Site: ELU A18 495 Pad
Well: ELU A18 FED 11D-18 495
Wellbore: Wellbore #1
Design: Design #4
Latitude: 39.708961
Longitude: -108.103777
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 - 11D-18(0.0N, 0.0E)
Measured Depth Reference: RKB @ 8059.0usft (30')
Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3345.0	3432.2	Wasatch
6552.0	6739.9	Wasatch G
8716.0	7049.3	Fort Union
9302.0	8961.9	Ohio Creek
12419.0	9548.1	Williams Fork
13157.0	12665.8	Cameo
	13403.9	Rollins

SECTION DETAILS

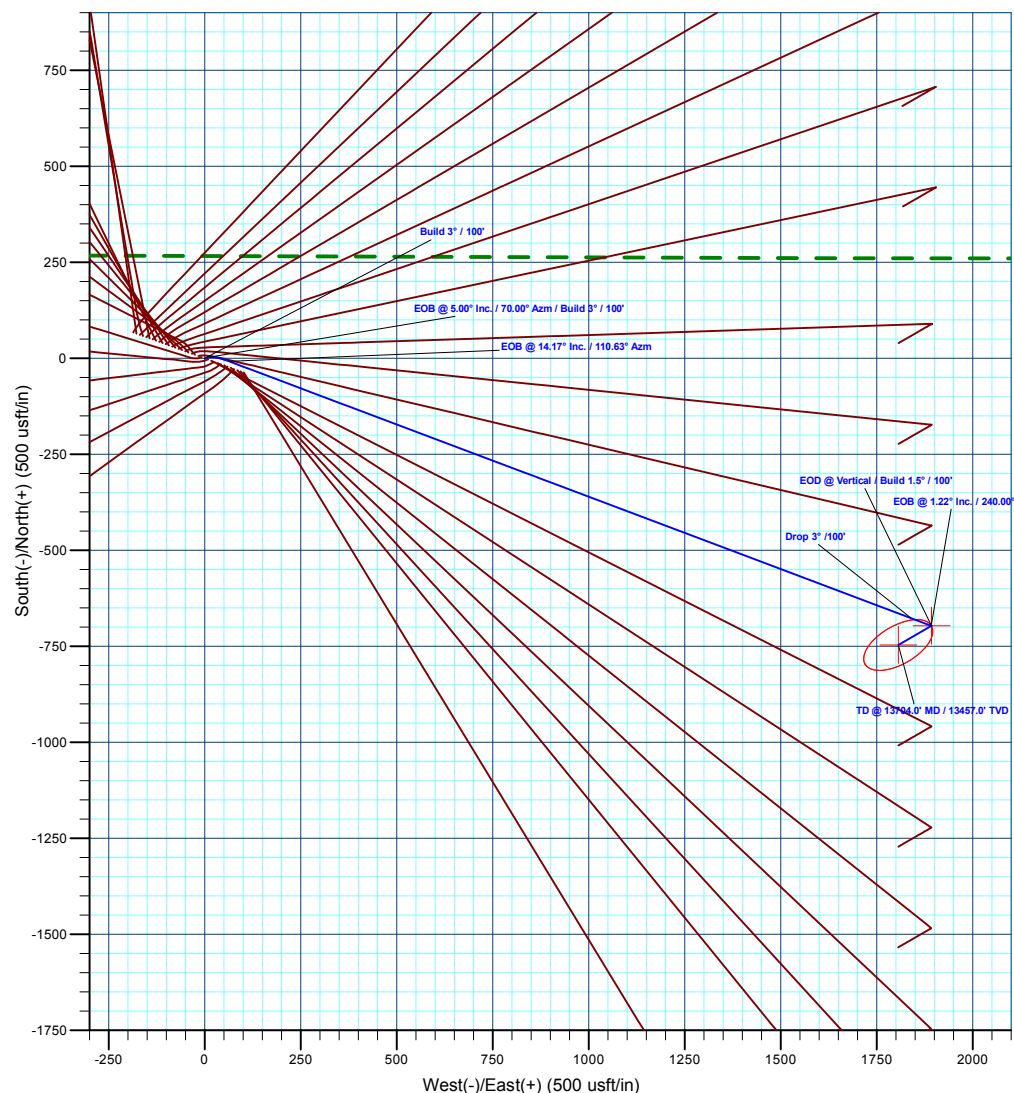
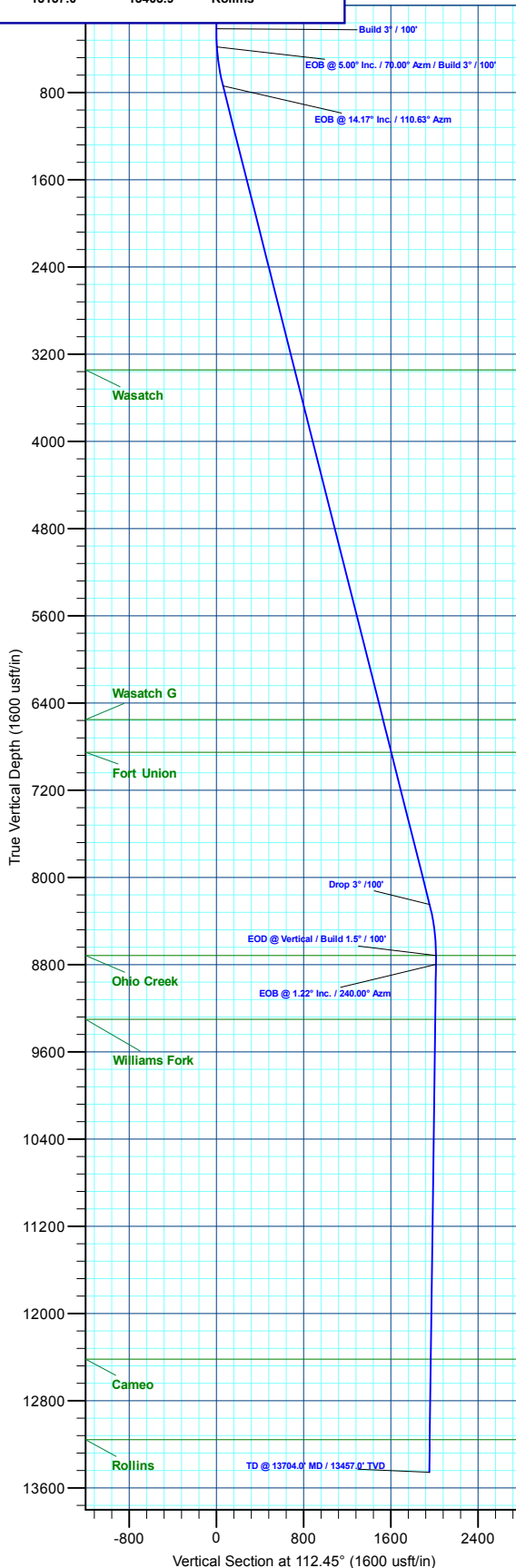
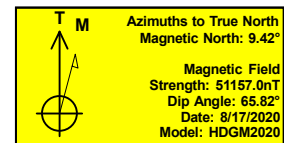
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
215.0	0.00	0.00	215.0	0.0	0.0	0.00	0.00	0.0	EOB @ 5.00° Inc. / 70.00° Azm / Build 3° / 100'
381.7	5.00	70.00	381.5	2.5	6.8	3.00	70.00	5.4	EOB @ 14.17° Inc. / 110.63° Azm
743.9	14.17	110.63	738.6	-7.8	63.3	3.00	57.74	61.5	Drop 3° / 100'
8489.5	14.17	110.63	8248.4	-676.0	1838.3	0.00	0.00	1957.1	EOD @ Vertical / Build 1.5° / 100'
8961.9	0.00	0.00	8716.0	-696.4	1892.7	3.00	180.00	2015.2	EOB @ 1.22° Inc. / 240.00° Azm
9043.2	1.22	240.00	8797.2	-696.9	1892.0	1.50	240.00	2014.7	TD @ 13704.0' MD / 13457.0' TVD
13704.0	1.22	240.00	13457.0	-746.4	1806.1	0.00	0.00	1954.3	

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
11D-18 - OHCR	8716.0	-696.4	1892.7	14432594.87	2456939.54	39.707049	-108.097052
11D-18 - PBHL	13457.0	-746.4	1806.1	14432542.10	2456854.60	39.706912	-108.097360

WELL DETAILS: ELU A18 FED 11D-18 495

Ground Level : 8029.0							
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	11D-18	
0.0	0.0	14433229.80	2455025.30	39.708961	-108.103777		



Plan: Design #4 (ELU A18 FED 11D-18 495/Wellbore #1)

Created By: Will Jircik

Date: 4:24, October 05 2023



Caerus Oil & Gas

Rio Blanco County, CO

ELU A18 495 Pad

ELU A18 FED 11D-18 495 - Slot 11D-18

Wellbore #1

Plan: Design #4

KLX Well Planning Report

04 October, 2023



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 11D-18 495 - Slot 11D-18
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 11D-18 495	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 11D-18 495 - Slot 11D-18					
Well Position	+N/-S	-53.9 usft	Northing:	14,433,229.80 usft	Latitude:	39.708961
	+E/-W	119.2 usft	Easting:	2,455,025.30 usft	Longitude:	-108.103777
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	112.45

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	
215.0	0.00	0.00	215.0	0.0	0.0	0.00	0.00	0.00	0.00	
381.7	5.00	70.00	381.5	2.5	6.8	3.00	3.00	0.00	70.00	
743.9	14.17	110.63	738.6	-7.8	63.3	3.00	2.53	11.22	57.74	
8,489.5	14.17	110.63	8,248.4	-676.0	1,838.3	0.00	0.00	0.00	0.00	
8,961.9	0.00	0.00	8,716.0	-696.4	1,892.7	3.00	-3.00	0.00	180.00	11D-18 - OHCR
9,043.2	1.22	240.00	8,797.2	-696.9	1,892.0	1.50	1.50	-147.69	240.00	
13,704.0	1.22	240.00	13,457.0	-746.4	1,806.1	0.00	0.00	0.00	0.00	11D-18 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 11D-18 495 - Slot 11D-18
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 11D-18 495	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'									
215.0	0.00	0.00	215.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	2.55	70.00	300.0	0.6	1.8	1.4	3.00	3.00	0.00
EOB @ 5.00° Inc. / 70.00° Azm / Build 3° / 100'									
381.7	5.00	70.00	381.5	2.5	6.8	5.4	3.00	3.00	0.00
400.0	5.31	75.03	399.7	3.0	8.4	6.6	3.00	1.71	27.43
500.0	7.52	93.59	499.1	3.8	19.4	16.5	3.00	2.20	18.56
600.0	10.14	103.23	597.9	1.3	34.5	31.4	3.00	2.62	9.64
700.0	12.92	108.86	695.9	-4.3	53.7	51.2	3.00	2.78	5.62
EOB @ 14.17° Inc. / 110.63° Azm									
743.9	14.17	110.63	738.6	-7.8	63.3	61.5	3.00	2.85	4.04
800.0	14.17	110.63	792.9	-12.6	76.2	75.2	0.00	0.00	0.00
900.0	14.17	110.63	889.9	-21.2	99.1	99.7	0.00	0.00	0.00
1,000.0	14.17	110.63	986.9	-29.9	122.0	124.2	0.00	0.00	0.00
1,100.0	14.17	110.63	1,083.8	-38.5	144.9	148.7	0.00	0.00	0.00
1,200.0	14.17	110.63	1,180.8	-47.1	167.9	173.1	0.00	0.00	0.00
1,300.0	14.17	110.63	1,277.7	-55.7	190.8	197.6	0.00	0.00	0.00
1,400.0	14.17	110.63	1,374.7	-64.4	213.7	222.1	0.00	0.00	0.00
1,500.0	14.17	110.63	1,471.6	-73.0	236.6	246.5	0.00	0.00	0.00
1,600.0	14.17	110.63	1,568.6	-81.6	259.5	271.0	0.00	0.00	0.00
1,700.0	14.17	110.63	1,665.6	-90.2	282.4	295.5	0.00	0.00	0.00
1,800.0	14.17	110.63	1,762.5	-98.9	305.4	320.0	0.00	0.00	0.00
1,900.0	14.17	110.63	1,859.5	-107.5	328.3	344.4	0.00	0.00	0.00
2,000.0	14.17	110.63	1,956.4	-116.1	351.2	368.9	0.00	0.00	0.00
2,100.0	14.17	110.63	2,053.4	-124.8	374.1	393.4	0.00	0.00	0.00
2,200.0	14.17	110.63	2,150.3	-133.4	397.0	417.9	0.00	0.00	0.00
2,300.0	14.17	110.63	2,247.3	-142.0	419.9	442.3	0.00	0.00	0.00
2,400.0	14.17	110.63	2,344.2	-150.6	442.8	466.8	0.00	0.00	0.00
2,500.0	14.17	110.63	2,441.2	-159.3	465.8	491.3	0.00	0.00	0.00
2,600.0	14.17	110.63	2,538.2	-167.9	488.7	515.8	0.00	0.00	0.00
2,700.0	14.17	110.63	2,635.1	-176.5	511.6	540.2	0.00	0.00	0.00
2,800.0	14.17	110.63	2,732.1	-185.1	534.5	564.7	0.00	0.00	0.00
2,900.0	14.17	110.63	2,829.0	-193.8	557.4	589.2	0.00	0.00	0.00
3,000.0	14.17	110.63	2,926.0	-202.4	580.3	613.7	0.00	0.00	0.00
3,100.0	14.17	110.63	3,022.9	-211.0	603.3	638.1	0.00	0.00	0.00
3,200.0	14.17	110.63	3,119.9	-219.7	626.2	662.6	0.00	0.00	0.00
3,300.0	14.17	110.63	3,216.8	-228.3	649.1	687.1	0.00	0.00	0.00
3,400.0	14.17	110.63	3,313.8	-236.9	672.0	711.5	0.00	0.00	0.00
Wasatch									
3,432.2	14.17	110.63	3,345.0	-239.7	679.4	719.4	0.00	0.00	0.00
3,500.0	14.17	110.63	3,410.8	-245.5	694.9	736.0	0.00	0.00	0.00
3,600.0	14.17	110.63	3,507.7	-254.2	717.8	760.5	0.00	0.00	0.00
3,700.0	14.17	110.63	3,604.7	-262.8	740.8	785.0	0.00	0.00	0.00
3,800.0	14.17	110.63	3,701.6	-271.4	763.7	809.4	0.00	0.00	0.00
3,900.0	14.17	110.63	3,798.6	-280.0	786.6	833.9	0.00	0.00	0.00
4,000.0	14.17	110.63	3,895.5	-288.7	809.5	858.4	0.00	0.00	0.00
4,100.0	14.17	110.63	3,992.5	-297.3	832.4	882.9	0.00	0.00	0.00
4,200.0	14.17	110.63	4,089.4	-305.9	855.3	907.3	0.00	0.00	0.00
4,300.0	14.17	110.63	4,186.4	-314.5	878.3	931.8	0.00	0.00	0.00
4,400.0	14.17	110.63	4,283.4	-323.2	901.2	956.3	0.00	0.00	0.00
4,500.0	14.17	110.63	4,380.3	-331.8	924.1	980.8	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 11D-18 495 - Slot 11D-18
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 11D-18 495	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	14.17	110.63	4,477.3	-340.4	947.0	1,005.2	0.00	0.00	0.00
4,700.0	14.17	110.63	4,574.2	-349.1	969.9	1,029.7	0.00	0.00	0.00
4,800.0	14.17	110.63	4,671.2	-357.7	992.8	1,054.2	0.00	0.00	0.00
4,900.0	14.17	110.63	4,768.1	-366.3	1,015.8	1,078.6	0.00	0.00	0.00
5,000.0	14.17	110.63	4,865.1	-374.9	1,038.7	1,103.1	0.00	0.00	0.00
5,100.0	14.17	110.63	4,962.1	-383.6	1,061.6	1,127.6	0.00	0.00	0.00
5,200.0	14.17	110.63	5,059.0	-392.2	1,084.5	1,152.1	0.00	0.00	0.00
5,300.0	14.17	110.63	5,156.0	-400.8	1,107.4	1,176.5	0.00	0.00	0.00
5,400.0	14.17	110.63	5,252.9	-409.4	1,130.3	1,201.0	0.00	0.00	0.00
5,500.0	14.17	110.63	5,349.9	-418.1	1,153.2	1,225.5	0.00	0.00	0.00
5,600.0	14.17	110.63	5,446.8	-426.7	1,176.2	1,250.0	0.00	0.00	0.00
5,700.0	14.17	110.63	5,543.8	-435.3	1,199.1	1,274.4	0.00	0.00	0.00
5,800.0	14.17	110.63	5,640.7	-443.9	1,222.0	1,298.9	0.00	0.00	0.00
5,900.0	14.17	110.63	5,737.7	-452.6	1,244.9	1,323.4	0.00	0.00	0.00
6,000.0	14.17	110.63	5,834.7	-461.2	1,267.8	1,347.9	0.00	0.00	0.00
6,100.0	14.17	110.63	5,931.6	-469.8	1,290.7	1,372.3	0.00	0.00	0.00
6,200.0	14.17	110.63	6,028.6	-478.5	1,313.7	1,396.8	0.00	0.00	0.00
6,300.0	14.17	110.63	6,125.5	-487.1	1,336.6	1,421.3	0.00	0.00	0.00
6,400.0	14.17	110.63	6,222.5	-495.7	1,359.5	1,445.8	0.00	0.00	0.00
6,500.0	14.17	110.63	6,319.4	-504.3	1,382.4	1,470.2	0.00	0.00	0.00
6,600.0	14.17	110.63	6,416.4	-513.0	1,405.3	1,494.7	0.00	0.00	0.00
6,700.0	14.17	110.63	6,513.3	-521.6	1,428.2	1,519.2	0.00	0.00	0.00
Wasatch G									
6,739.9	14.17	110.63	6,552.0	-525.0	1,437.4	1,528.9	0.00	0.00	0.00
6,800.0	14.17	110.63	6,610.3	-530.2	1,451.2	1,543.6	0.00	0.00	0.00
6,900.0	14.17	110.63	6,707.3	-538.8	1,474.1	1,568.1	0.00	0.00	0.00
7,000.0	14.17	110.63	6,804.2	-547.5	1,497.0	1,592.6	0.00	0.00	0.00
Fort Union									
7,049.3	14.17	110.63	6,852.0	-551.7	1,508.3	1,604.7	0.00	0.00	0.00
7,100.0	14.17	110.63	6,901.2	-556.1	1,519.9	1,617.1	0.00	0.00	0.00
7,200.0	14.17	110.63	6,998.1	-564.7	1,542.8	1,641.5	0.00	0.00	0.00
7,300.0	14.17	110.63	7,095.1	-573.3	1,565.7	1,666.0	0.00	0.00	0.00
7,400.0	14.17	110.63	7,192.0	-582.0	1,588.7	1,690.5	0.00	0.00	0.00
7,500.0	14.17	110.63	7,289.0	-590.6	1,611.6	1,715.0	0.00	0.00	0.00
7,600.0	14.17	110.63	7,385.9	-599.2	1,634.5	1,739.4	0.00	0.00	0.00
7,700.0	14.17	110.63	7,482.9	-607.9	1,657.4	1,763.9	0.00	0.00	0.00
7,800.0	14.17	110.63	7,579.9	-616.5	1,680.3	1,788.4	0.00	0.00	0.00
7,900.0	14.17	110.63	7,676.8	-625.1	1,703.2	1,812.9	0.00	0.00	0.00
8,000.0	14.17	110.63	7,773.8	-633.7	1,726.1	1,837.3	0.00	0.00	0.00
8,100.0	14.17	110.63	7,870.7	-642.4	1,749.1	1,861.8	0.00	0.00	0.00
8,200.0	14.17	110.63	7,967.7	-651.0	1,772.0	1,886.3	0.00	0.00	0.00
8,300.0	14.17	110.63	8,064.6	-659.6	1,794.9	1,910.8	0.00	0.00	0.00
8,400.0	14.17	110.63	8,161.6	-668.2	1,817.8	1,935.2	0.00	0.00	0.00
Drop 3° /100'									
8,489.5	14.17	110.63	8,248.4	-676.0	1,838.3	1,957.1	0.00	0.00	0.00
8,500.0	13.86	110.63	8,258.6	-676.9	1,840.7	1,959.7	3.00	-3.00	0.00
8,600.0	10.86	110.63	8,356.2	-684.4	1,860.7	1,981.1	3.00	-3.00	0.00
8,700.0	7.86	110.63	8,454.9	-690.1	1,875.9	1,997.3	3.00	-3.00	0.00
8,800.0	4.86	110.63	8,554.3	-694.0	1,886.3	2,008.4	3.00	-3.00	0.00
8,900.0	1.86	110.63	8,654.1	-696.1	1,891.8	2,014.2	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
8,961.9	0.00	0.00	8,716.0	-696.4	1,892.7	2,015.2	3.00	-3.00	0.00
9,000.0	0.57	240.00	8,754.1	-696.5	1,892.6	2,015.1	1.50	1.50	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 11D-18 495 - Slot 11D-18
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 11D-18 495	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)
EOB @ 1.22° Inc. / 240.00° Azm									
9,043.2	1.22	240.00	8,797.2	-696.9	1,892.0	2,014.7	1.50	1.50	0.00
9,100.0	1.22	240.00	8,854.0	-697.5	1,890.9	2,014.0	0.00	0.00	0.00
9,200.0	1.22	240.00	8,954.0	-698.5	1,889.1	2,012.7	0.00	0.00	0.00
9,300.0	1.22	240.00	9,054.0	-699.6	1,887.3	2,011.4	0.00	0.00	0.00
9,400.0	1.22	240.00	9,154.0	-700.7	1,885.4	2,010.1	0.00	0.00	0.00
9,500.0	1.22	240.00	9,254.0	-701.7	1,883.6	2,008.8	0.00	0.00	0.00
Williams Fork									
9,548.1	1.22	240.00	9,302.0	-702.2	1,882.7	2,008.2	0.00	0.00	0.00
9,600.0	1.22	240.00	9,353.9	-702.8	1,881.7	2,007.5	0.00	0.00	0.00
9,700.0	1.22	240.00	9,453.9	-703.9	1,879.9	2,006.2	0.00	0.00	0.00
9,800.0	1.22	240.00	9,553.9	-704.9	1,878.0	2,004.9	0.00	0.00	0.00
9,900.0	1.22	240.00	9,653.9	-706.0	1,876.2	2,003.6	0.00	0.00	0.00
10,000.0	1.22	240.00	9,753.8	-707.1	1,874.4	2,002.3	0.00	0.00	0.00
10,100.0	1.22	240.00	9,853.8	-708.1	1,872.5	2,001.0	0.00	0.00	0.00
10,200.0	1.22	240.00	9,953.8	-709.2	1,870.7	1,999.7	0.00	0.00	0.00
10,300.0	1.22	240.00	10,053.8	-710.2	1,868.8	1,998.4	0.00	0.00	0.00
10,400.0	1.22	240.00	10,153.8	-711.3	1,867.0	1,997.1	0.00	0.00	0.00
10,500.0	1.22	240.00	10,253.7	-712.4	1,865.1	1,995.8	0.00	0.00	0.00
10,600.0	1.22	240.00	10,353.7	-713.4	1,863.3	1,994.5	0.00	0.00	0.00
10,700.0	1.22	240.00	10,453.7	-714.5	1,861.5	1,993.2	0.00	0.00	0.00
10,800.0	1.22	240.00	10,553.7	-715.6	1,859.6	1,991.9	0.00	0.00	0.00
10,900.0	1.22	240.00	10,653.6	-716.6	1,857.8	1,990.6	0.00	0.00	0.00
11,000.0	1.22	240.00	10,753.6	-717.7	1,855.9	1,989.3	0.00	0.00	0.00
11,100.0	1.22	240.00	10,853.6	-718.7	1,854.1	1,988.0	0.00	0.00	0.00
11,200.0	1.22	240.00	10,953.6	-719.8	1,852.3	1,986.8	0.00	0.00	0.00
11,300.0	1.22	240.00	11,053.5	-720.9	1,850.4	1,985.5	0.00	0.00	0.00
11,400.0	1.22	240.00	11,153.5	-721.9	1,848.6	1,984.2	0.00	0.00	0.00
11,500.0	1.22	240.00	11,253.5	-723.0	1,846.7	1,982.9	0.00	0.00	0.00
11,600.0	1.22	240.00	11,353.5	-724.1	1,844.9	1,981.6	0.00	0.00	0.00
11,700.0	1.22	240.00	11,453.5	-725.1	1,843.0	1,980.3	0.00	0.00	0.00
11,800.0	1.22	240.00	11,553.4	-726.2	1,841.2	1,979.0	0.00	0.00	0.00
11,900.0	1.22	240.00	11,653.4	-727.3	1,839.4	1,977.7	0.00	0.00	0.00
12,000.0	1.22	240.00	11,753.4	-728.3	1,837.5	1,976.4	0.00	0.00	0.00
12,100.0	1.22	240.00	11,853.4	-729.4	1,835.7	1,975.1	0.00	0.00	0.00
12,200.0	1.22	240.00	11,953.3	-730.4	1,833.8	1,973.8	0.00	0.00	0.00
12,300.0	1.22	240.00	12,053.3	-731.5	1,832.0	1,972.5	0.00	0.00	0.00
12,400.0	1.22	240.00	12,153.3	-732.6	1,830.1	1,971.2	0.00	0.00	0.00
12,500.0	1.22	240.00	12,253.3	-733.6	1,828.3	1,969.9	0.00	0.00	0.00
12,600.0	1.22	240.00	12,353.3	-734.7	1,826.5	1,968.6	0.00	0.00	0.00
Cameo									
12,665.8	1.22	240.00	12,419.0	-735.4	1,825.3	1,967.8	0.00	0.00	0.00
12,700.0	1.22	240.00	12,453.2	-735.8	1,824.6	1,967.3	0.00	0.00	0.00
12,800.0	1.22	240.00	12,553.2	-736.8	1,822.8	1,966.0	0.00	0.00	0.00
12,900.0	1.22	240.00	12,653.2	-737.9	1,820.9	1,964.7	0.00	0.00	0.00
13,000.0	1.22	240.00	12,753.2	-739.0	1,819.1	1,963.4	0.00	0.00	0.00
13,100.0	1.22	240.00	12,853.1	-740.0	1,817.3	1,962.1	0.00	0.00	0.00
13,200.0	1.22	240.00	12,953.1	-741.1	1,815.4	1,960.8	0.00	0.00	0.00
13,300.0	1.22	240.00	13,053.1	-742.1	1,813.6	1,959.5	0.00	0.00	0.00
13,400.0	1.22	240.00	13,153.1	-743.2	1,811.7	1,958.2	0.00	0.00	0.00
Rollins									
13,403.9	1.22	240.00	13,157.0	-743.3	1,811.7	1,958.2	0.00	0.00	0.00
13,500.0	1.22	240.00	13,253.1	-744.3	1,809.9	1,956.9	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 11D-18 495 - Slot 11D-18
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 11D-18 495	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)	
13,600.0	1.22	240.00	13,353.0	-745.3	1,808.0	1,955.6	0.00	0.00	0.00	
TD @ 13704.0' MD / 13457.0' TVD										
13,704.0	1.22	240.00	13,457.0	-746.4	1,806.1	1,954.3	0.00	0.00	0.00	

Design Targets										
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
11D-18 - OHCR	- plan hits target center	0.00	0.00	8,716.0	-696.4	1,892.7	14,432,594.87	2,456,939.55	39.707049	-108.097053
	- Point									
11D-18 - PBHL	- plan hits target center	0.00	0.00	13,457.0	-746.4	1,806.1	14,432,542.10	2,456,854.60	39.706912	-108.097360
	- Ellipse (radii L100.0 W50.0 on 240.00 azi)									

Formations							
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)		
3,432.2	3,345.0	Wasatch					
6,739.9	6,552.0	Wasatch G					
7,049.3	6,852.0	Fort Union					
8,961.9	8,716.0	Ohio Creek					
9,548.1	9,302.0	Williams Fork					
12,665.8	12,419.0	Cameo					
13,403.9	13,157.0	Rollins					

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
215.0	215.0	0.0	0.0	Build 3° / 100'	
381.7	381.5	2.5	6.8	EOB @ 5.00° Inc. / 70.00° Azm / Build 3° / 100'	
743.9	738.6	-7.8	63.3	EOB @ 14.17° Inc. / 110.63° Azm	
8,489.5	8,248.4	-676.0	1,838.3	Drop 3° / 100'	
8,961.9	8,716.0	-696.4	1,892.7	EOD @ Vertical / Build 1.5° / 100'	
9,043.2	8,797.2	-696.9	1,892.0	EOB @ 1.22° Inc. / 240.00° Azm	
13,704.0	13,457.0	-746.4	1,806.1	TD @ 13704.0' MD / 13457.0' TVD	