

Project: Rio Blanco County, CO
Site: ELU A18 495 Pad
Well: ELU A18 FED 15C-7 495
Wellbore: Wellbore #1
Design: Design #4
Latitude: 39.709045
Longitude: -108.104077
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 - 15C-7(0.0N, 0.0E)
Measured Depth Reference: RKB @ 8059.0usft (30')
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	Build 3" / 100'
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	EOB @ 5.00" Inc. / 60.00° Azm / Build 3" / 100'
416.7	5.00	60.00	416.5	3.6	6.3	3.00	60.00	7.1	EOB @ 14.64" Inc. / 71.33° Azm
743.0	14.65	71.33	737.7	24.0	57.8	3.00	16.98	62.4	Drop 3" / 100'
8555.3	14.65	71.33	8296.1	656.3	1929.0	0.00	0.00	2037.5	EOD @ Vertical / Build 1.5" / 100'
9043.5	0.00	0.00	8779.0	676.2	1987.8	3.00	180.00	2099.6	EOB @ 1.23" Inc. / 240.00° Azm
9125.7	1.23	240.00	8861.3	675.8	1987.1	1.50	240.00	2098.7	TD @ 13728.5' MD / 13463.0' TVD
13728.5	1.23	240.00	13463.0	626.2	1901.2	0.00	0.00	2001.7	

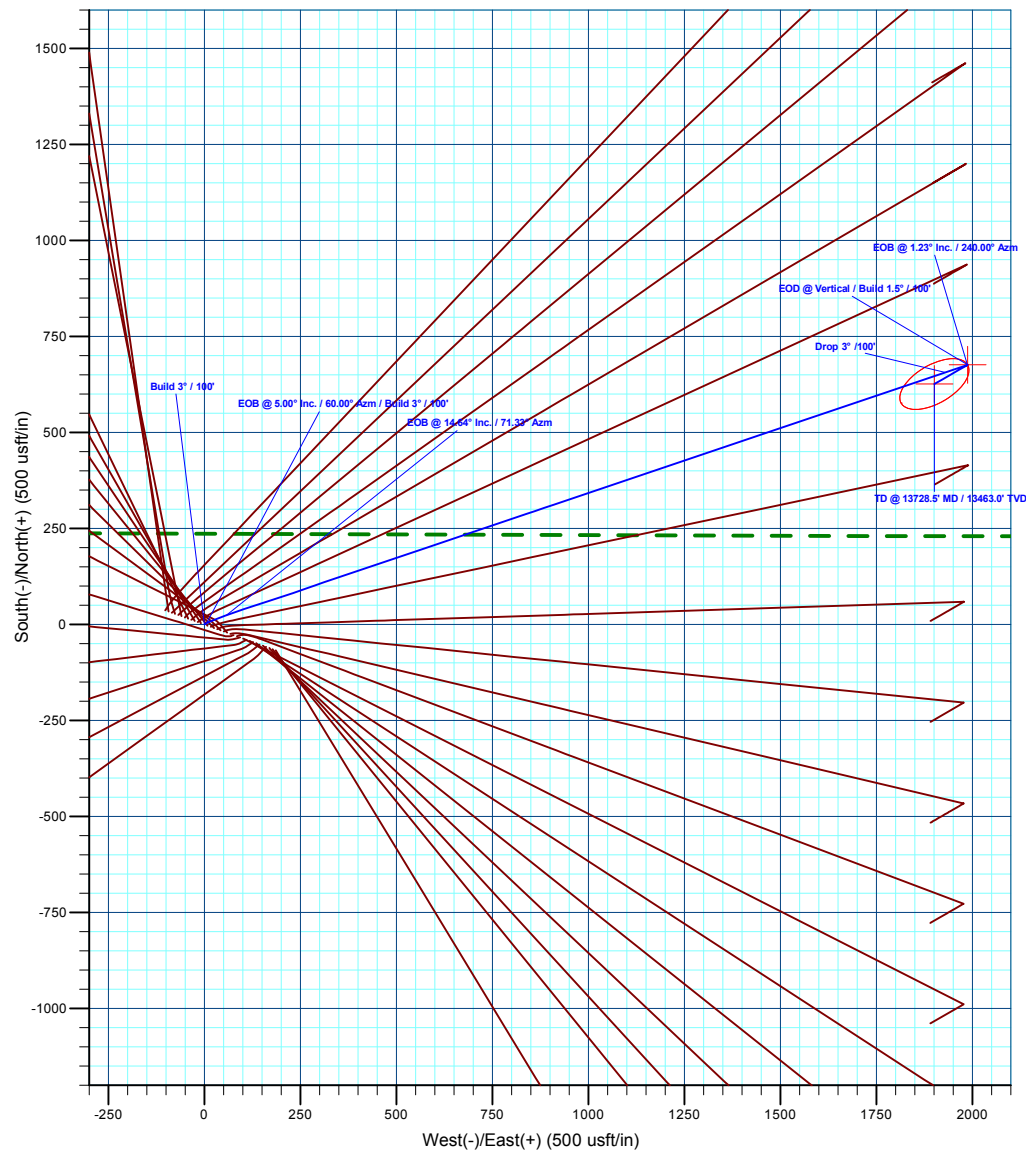
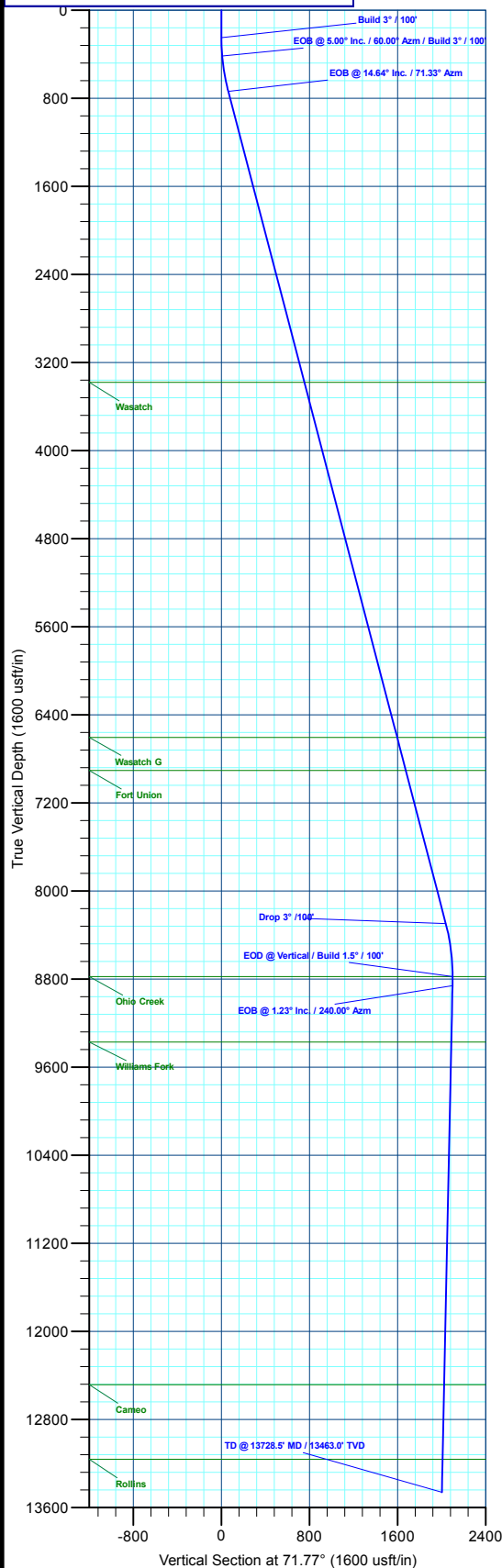
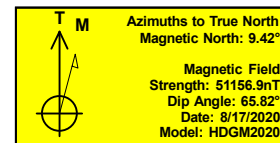
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
15C-7 - OHCR	8779.0	676.2	1987.8	14433997.77	2456904.74	39.710900	-108.097015
15C-7 - PBHL	13463.0	626.2	1901.2	14433945.00	2456819.80	39.710763	-108.097322

WELL DETAILS: ELU A18 FED 15C-7 495

Ground Level : 8029.0		Latitude		Longitude	
+N/-S	+E/-W	Northing	Easting		
0.0	0.0	14433257.70	2454939.80	39.709045	-108.104077

15C-7



Plan: Design #4 (ELU A18 FED 15C-7 495/Wellbore #1)

Created By: Will Jircik

Date: 9:06, October 23 2023



Caerus Oil & Gas

Rio Blanco County, CO

ELU A18 495 Pad

ELU A18 FED 15C-7 495 - Slot 15C-7

Wellbore #1

Plan: Design #4

KLX Well Planning Report

23 October, 2023



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 15C-7 495 - Slot 15C-7
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 15C-7 495	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 15C-7 495 - Slot 15C-7					
Well Position	+N/-S	-23.2 usft	Northing:	14,433,257.70 usft	Latitude:	39.709045
	+E/-W	34.7 usft	Easting:	2,454,939.80 usft	Longitude:	-108.104078
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	71.77	

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	
416.7	5.00	60.00	416.5	3.6	6.3	3.00	3.00	0.00	60.00	
743.0	14.65	71.33	737.7	24.0	57.8	3.00	2.96	3.47	16.98	
8,555.3	14.65	71.33	8,296.1	656.3	1,929.0	0.00	0.00	0.00	0.00	
9,043.5	0.00	0.00	8,779.0	676.2	1,987.8	3.00	-3.00	0.00	180.00	15C-7 - OHCR
9,125.7	1.23	240.00	8,861.3	675.8	1,987.1	1.50	1.50	-145.88	240.00	
13,728.5	1.23	240.00	13,463.0	626.2	1,901.2	0.00	0.00	0.00	0.00	15C-7 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 15C-7 495 - Slot 15C-7
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 15C-7 495	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'									
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	1.50	60.00	300.0	0.3	0.6	0.6	3.00	3.00	0.00
400.0	4.50	60.00	399.8	2.9	5.1	5.8	3.00	3.00	0.00
EOB @ 5.00° Inc. / 60.00° Azm / Build 3° / 100'									
416.7	5.00	60.00	416.5	3.6	6.3	7.1	3.00	3.00	0.00
500.0	7.43	65.66	499.3	7.7	14.3	16.0	3.00	2.91	6.79
600.0	10.38	68.93	598.1	13.6	28.6	31.5	3.00	2.96	3.28
700.0	13.36	70.77	695.9	20.6	48.0	52.0	3.00	2.98	1.83
EOB @ 14.64° Inc. / 71.33° Azm									
743.0	14.65	71.33	737.7	24.0	57.8	62.4	3.00	2.98	1.31
800.0	14.65	71.33	792.8	28.6	71.5	76.8	0.00	0.00	0.00
900.0	14.65	71.33	889.5	36.7	95.4	102.1	0.00	0.00	0.00
1,000.0	14.65	71.33	986.3	44.8	119.4	127.4	0.00	0.00	0.00
1,100.0	14.65	71.33	1,083.1	52.9	143.3	152.7	0.00	0.00	0.00
1,200.0	14.65	71.33	1,179.8	61.0	167.3	178.0	0.00	0.00	0.00
1,300.0	14.65	71.33	1,276.6	69.1	191.2	203.2	0.00	0.00	0.00
1,400.0	14.65	71.33	1,373.3	77.2	215.2	228.5	0.00	0.00	0.00
1,500.0	14.65	71.33	1,470.1	85.3	239.1	253.8	0.00	0.00	0.00
1,600.0	14.65	71.33	1,566.8	93.4	263.1	279.1	0.00	0.00	0.00
1,700.0	14.65	71.33	1,663.6	101.5	287.0	304.4	0.00	0.00	0.00
1,800.0	14.65	71.33	1,760.3	109.6	311.0	329.7	0.00	0.00	0.00
1,900.0	14.65	71.33	1,857.1	117.7	334.9	354.9	0.00	0.00	0.00
2,000.0	14.65	71.33	1,953.8	125.7	358.9	380.2	0.00	0.00	0.00
2,100.0	14.65	71.33	2,050.6	133.8	382.8	405.5	0.00	0.00	0.00
2,200.0	14.65	71.33	2,147.3	141.9	406.8	430.8	0.00	0.00	0.00
2,300.0	14.65	71.33	2,244.1	150.0	430.8	456.1	0.00	0.00	0.00
2,400.0	14.65	71.33	2,340.8	158.1	454.7	481.3	0.00	0.00	0.00
2,500.0	14.65	71.33	2,437.6	166.2	478.7	506.6	0.00	0.00	0.00
2,600.0	14.65	71.33	2,534.3	174.3	502.6	531.9	0.00	0.00	0.00
2,700.0	14.65	71.33	2,631.1	182.4	526.6	557.2	0.00	0.00	0.00
2,800.0	14.65	71.33	2,727.8	190.5	550.5	582.5	0.00	0.00	0.00
2,900.0	14.65	71.33	2,824.6	198.6	574.5	607.8	0.00	0.00	0.00
3,000.0	14.65	71.33	2,921.3	206.7	598.4	633.0	0.00	0.00	0.00
3,100.0	14.65	71.33	3,018.1	214.8	622.4	658.3	0.00	0.00	0.00
3,200.0	14.65	71.33	3,114.8	222.9	646.3	683.6	0.00	0.00	0.00
3,300.0	14.65	71.33	3,211.6	231.0	670.3	708.9	0.00	0.00	0.00
3,400.0	14.65	71.33	3,308.3	239.1	694.2	734.2	0.00	0.00	0.00
Wasatch									
3,476.1	14.65	71.33	3,382.0	245.2	712.5	753.4	0.00	0.00	0.00
3,500.0	14.65	71.33	3,405.1	247.2	718.2	759.5	0.00	0.00	0.00
3,600.0	14.65	71.33	3,501.8	255.3	742.1	784.7	0.00	0.00	0.00
3,700.0	14.65	71.33	3,598.6	263.3	766.1	810.0	0.00	0.00	0.00
3,800.0	14.65	71.33	3,695.3	271.4	790.0	835.3	0.00	0.00	0.00
3,900.0	14.65	71.33	3,792.1	279.5	814.0	860.6	0.00	0.00	0.00
4,000.0	14.65	71.33	3,888.8	287.6	837.9	885.9	0.00	0.00	0.00
4,100.0	14.65	71.33	3,985.6	295.7	861.9	911.1	0.00	0.00	0.00
4,200.0	14.65	71.33	4,082.3	303.8	885.8	936.4	0.00	0.00	0.00
4,300.0	14.65	71.33	4,179.1	311.9	909.8	961.7	0.00	0.00	0.00
4,400.0	14.65	71.33	4,275.8	320.0	933.8	987.0	0.00	0.00	0.00
4,500.0	14.65	71.33	4,372.6	328.1	957.7	1,012.3	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 15C-7 495 - Slot 15C-7
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 15C-7 495	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	14.65	71.33	4,469.3	336.2	981.7	1,037.6	0.00	0.00	0.00
4,700.0	14.65	71.33	4,566.1	344.3	1,005.6	1,062.8	0.00	0.00	0.00
4,800.0	14.65	71.33	4,662.8	352.4	1,029.6	1,088.1	0.00	0.00	0.00
4,900.0	14.65	71.33	4,759.6	360.5	1,053.5	1,113.4	0.00	0.00	0.00
5,000.0	14.65	71.33	4,856.3	368.6	1,077.5	1,138.7	0.00	0.00	0.00
5,100.0	14.65	71.33	4,953.1	376.7	1,101.4	1,164.0	0.00	0.00	0.00
5,200.0	14.65	71.33	5,049.8	384.8	1,125.4	1,189.3	0.00	0.00	0.00
5,300.0	14.65	71.33	5,146.6	392.9	1,149.3	1,214.5	0.00	0.00	0.00
5,400.0	14.65	71.33	5,243.3	400.9	1,173.3	1,239.8	0.00	0.00	0.00
5,500.0	14.65	71.33	5,340.1	409.0	1,197.2	1,265.1	0.00	0.00	0.00
5,600.0	14.65	71.33	5,436.8	417.1	1,221.2	1,290.4	0.00	0.00	0.00
5,700.0	14.65	71.33	5,533.6	425.2	1,245.1	1,315.7	0.00	0.00	0.00
5,800.0	14.65	71.33	5,630.4	433.3	1,269.1	1,340.9	0.00	0.00	0.00
5,900.0	14.65	71.33	5,727.1	441.4	1,293.0	1,366.2	0.00	0.00	0.00
6,000.0	14.65	71.33	5,823.9	449.5	1,317.0	1,391.5	0.00	0.00	0.00
6,100.0	14.65	71.33	5,920.6	457.6	1,340.9	1,416.8	0.00	0.00	0.00
6,200.0	14.65	71.33	6,017.4	465.7	1,364.9	1,442.1	0.00	0.00	0.00
6,300.0	14.65	71.33	6,114.1	473.8	1,388.8	1,467.4	0.00	0.00	0.00
6,400.0	14.65	71.33	6,210.9	481.9	1,412.8	1,492.6	0.00	0.00	0.00
6,500.0	14.65	71.33	6,307.6	490.0	1,436.7	1,517.9	0.00	0.00	0.00
6,600.0	14.65	71.33	6,404.4	498.1	1,460.7	1,543.2	0.00	0.00	0.00
6,700.0	14.65	71.33	6,501.1	506.2	1,484.7	1,568.5	0.00	0.00	0.00
6,800.0	14.65	71.33	6,597.9	514.3	1,508.6	1,593.8	0.00	0.00	0.00
Wasatch G									
6,809.4	14.65	71.33	6,607.0	515.0	1,510.9	1,596.2	0.00	0.00	0.00
6,900.0	14.65	71.33	6,694.6	522.4	1,532.6	1,619.0	0.00	0.00	0.00
7,000.0	14.65	71.33	6,791.4	530.5	1,556.5	1,644.3	0.00	0.00	0.00
7,100.0	14.65	71.33	6,888.1	538.5	1,580.5	1,669.6	0.00	0.00	0.00
Fort Union									
7,119.5	14.65	71.33	6,907.0	540.1	1,585.1	1,674.5	0.00	0.00	0.00
7,200.0	14.65	71.33	6,984.9	546.6	1,604.4	1,694.9	0.00	0.00	0.00
7,300.0	14.65	71.33	7,081.6	554.7	1,628.4	1,720.2	0.00	0.00	0.00
7,400.0	14.65	71.33	7,178.4	562.8	1,652.3	1,745.5	0.00	0.00	0.00
7,500.0	14.65	71.33	7,275.1	570.9	1,676.3	1,770.7	0.00	0.00	0.00
7,600.0	14.65	71.33	7,371.9	579.0	1,700.2	1,796.0	0.00	0.00	0.00
7,700.0	14.65	71.33	7,468.6	587.1	1,724.2	1,821.3	0.00	0.00	0.00
7,800.0	14.65	71.33	7,565.4	595.2	1,748.1	1,846.6	0.00	0.00	0.00
7,900.0	14.65	71.33	7,662.1	603.3	1,772.1	1,871.9	0.00	0.00	0.00
8,000.0	14.65	71.33	7,758.9	611.4	1,796.0	1,897.2	0.00	0.00	0.00
8,100.0	14.65	71.33	7,855.6	619.5	1,820.0	1,922.4	0.00	0.00	0.00
8,200.0	14.65	71.33	7,952.4	627.6	1,843.9	1,947.7	0.00	0.00	0.00
8,300.0	14.65	71.33	8,049.1	635.7	1,867.9	1,973.0	0.00	0.00	0.00
8,400.0	14.65	71.33	8,145.9	643.8	1,891.8	1,998.3	0.00	0.00	0.00
8,500.0	14.65	71.33	8,242.6	651.9	1,915.8	2,023.6	0.00	0.00	0.00
Drop 3° /100'									
8,555.3	14.65	71.33	8,296.1	656.3	1,929.0	2,037.5	0.00	0.00	0.00
8,600.0	13.30	71.33	8,339.5	659.8	1,939.3	2,048.3	3.00	-3.00	0.00
8,700.0	10.30	71.33	8,437.4	666.3	1,958.6	2,068.8	3.00	-3.00	0.00
8,800.0	7.30	71.33	8,536.2	671.2	1,973.1	2,084.1	3.00	-3.00	0.00
8,900.0	4.30	71.33	8,635.7	674.5	1,982.7	2,094.2	3.00	-3.00	0.00
9,000.0	1.30	71.33	8,735.5	676.0	1,987.4	2,099.1	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
9,043.5	0.00	0.00	8,779.0	676.2	1,987.8	2,099.6	3.00	-3.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 15C-7 495 - Slot 15C-7
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 15C-7 495	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)	
9,100.0	0.85	240.00	8,835.5	676.0	1,987.5	2,099.2	1.50	1.50	0.00	
EOB @ 1.23° Inc. / 240.00° Azm										
9,125.7	1.23	240.00	8,861.3	675.8	1,987.1	2,098.7	1.50	1.50	0.00	
9,200.0	1.23	240.00	8,935.5	675.0	1,985.7	2,097.2	0.00	0.00	0.00	
9,300.0	1.23	240.00	9,035.5	673.9	1,983.8	2,095.1	0.00	0.00	0.00	
9,400.0	1.23	240.00	9,135.5	672.8	1,981.9	2,092.9	0.00	0.00	0.00	
9,500.0	1.23	240.00	9,235.4	671.7	1,980.1	2,090.8	0.00	0.00	0.00	
9,600.0	1.23	240.00	9,335.4	670.7	1,978.2	2,088.7	0.00	0.00	0.00	
Williams Fork										
9,637.6	1.23	240.00	9,373.0	670.3	1,977.5	2,087.9	0.00	0.00	0.00	
9,700.0	1.23	240.00	9,435.4	669.6	1,976.3	2,086.6	0.00	0.00	0.00	
9,800.0	1.23	240.00	9,535.4	668.5	1,974.5	2,084.5	0.00	0.00	0.00	
9,900.0	1.23	240.00	9,635.3	667.4	1,972.6	2,082.4	0.00	0.00	0.00	
10,000.0	1.23	240.00	9,735.3	666.4	1,970.8	2,080.3	0.00	0.00	0.00	
10,100.0	1.23	240.00	9,835.3	665.3	1,968.9	2,078.2	0.00	0.00	0.00	
10,200.0	1.23	240.00	9,935.3	664.2	1,967.0	2,076.1	0.00	0.00	0.00	
10,300.0	1.23	240.00	10,035.3	663.1	1,965.2	2,074.0	0.00	0.00	0.00	
10,400.0	1.23	240.00	10,135.2	662.0	1,963.3	2,071.9	0.00	0.00	0.00	
10,500.0	1.23	240.00	10,235.2	661.0	1,961.4	2,069.8	0.00	0.00	0.00	
10,600.0	1.23	240.00	10,335.2	659.9	1,959.6	2,067.6	0.00	0.00	0.00	
10,700.0	1.23	240.00	10,435.2	658.8	1,957.7	2,065.5	0.00	0.00	0.00	
10,800.0	1.23	240.00	10,535.1	657.7	1,955.8	2,063.4	0.00	0.00	0.00	
10,900.0	1.23	240.00	10,635.1	656.7	1,954.0	2,061.3	0.00	0.00	0.00	
11,000.0	1.23	240.00	10,735.1	655.6	1,952.1	2,059.2	0.00	0.00	0.00	
11,100.0	1.23	240.00	10,835.1	654.5	1,950.2	2,057.1	0.00	0.00	0.00	
11,200.0	1.23	240.00	10,935.0	653.4	1,948.4	2,055.0	0.00	0.00	0.00	
11,300.0	1.23	240.00	11,035.0	652.4	1,946.5	2,052.9	0.00	0.00	0.00	
11,400.0	1.23	240.00	11,135.0	651.3	1,944.6	2,050.8	0.00	0.00	0.00	
11,500.0	1.23	240.00	11,235.0	650.2	1,942.8	2,048.7	0.00	0.00	0.00	
11,600.0	1.23	240.00	11,335.0	649.1	1,940.9	2,046.6	0.00	0.00	0.00	
11,700.0	1.23	240.00	11,434.9	648.0	1,939.1	2,044.5	0.00	0.00	0.00	
11,800.0	1.23	240.00	11,534.9	647.0	1,937.2	2,042.3	0.00	0.00	0.00	
11,900.0	1.23	240.00	11,634.9	645.9	1,935.3	2,040.2	0.00	0.00	0.00	
12,000.0	1.23	240.00	11,734.9	644.8	1,933.5	2,038.1	0.00	0.00	0.00	
12,100.0	1.23	240.00	11,834.8	643.7	1,931.6	2,036.0	0.00	0.00	0.00	
12,200.0	1.23	240.00	11,934.8	642.7	1,929.7	2,033.9	0.00	0.00	0.00	
12,300.0	1.23	240.00	12,034.8	641.6	1,927.9	2,031.8	0.00	0.00	0.00	
12,400.0	1.23	240.00	12,134.8	640.5	1,926.0	2,029.7	0.00	0.00	0.00	
12,500.0	1.23	240.00	12,234.7	639.4	1,924.1	2,027.6	0.00	0.00	0.00	
12,600.0	1.23	240.00	12,334.7	638.4	1,922.3	2,025.5	0.00	0.00	0.00	
12,700.0	1.23	240.00	12,434.7	637.3	1,920.4	2,023.4	0.00	0.00	0.00	
Cameo										
12,751.3	1.23	240.00	12,486.0	636.7	1,919.4	2,022.3	0.00	0.00	0.00	
12,800.0	1.23	240.00	12,534.7	636.2	1,918.5	2,021.3	0.00	0.00	0.00	
12,900.0	1.23	240.00	12,634.7	635.1	1,916.7	2,019.2	0.00	0.00	0.00	
13,000.0	1.23	240.00	12,734.6	634.1	1,914.8	2,017.1	0.00	0.00	0.00	
13,100.0	1.23	240.00	12,834.6	633.0	1,912.9	2,014.9	0.00	0.00	0.00	
13,200.0	1.23	240.00	12,934.6	631.9	1,911.1	2,012.8	0.00	0.00	0.00	
13,300.0	1.23	240.00	13,034.6	630.8	1,909.2	2,010.7	0.00	0.00	0.00	
13,400.0	1.23	240.00	13,134.5	629.7	1,907.3	2,008.6	0.00	0.00	0.00	
Rollins										
13,428.5	1.23	240.00	13,163.0	629.4	1,906.8	2,008.0	0.00	0.00	0.00	
13,500.0	1.23	240.00	13,234.5	628.7	1,905.5	2,006.5	0.00	0.00	0.00	

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 15C-7 495 - Slot 15C-7
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 15C-7 495	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	1.23	240.00	13,334.5	627.6	1,903.6	2,004.4	0.00	0.00	0.00	
13,700.0	1.23	240.00	13,434.5	626.5	1,901.8	2,002.3	0.00	0.00	0.00	
TD @ 13728.5' MD / 13463.0' TVD										
13,728.5	1.23	240.00	13,463.0	626.2	1,901.2	2,001.7	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
15C-7 - OHCR - hit/miss target - Shape - Point	0.00	0.00	8,779.0	676.2	1,987.8	14,433,997.77	2,456,904.75	39.710900	-108.097015	
15C-7 - PBHL - plan hits target center - Ellipse (radii L100.0 W50.0 on 240.00 azi)	0.00	0.00	13,463.0	626.2	1,901.2	14,433,945.00	2,456,819.80	39.710763	-108.097323	

Formations							
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)		
3,476.1	3,382.0	Wasatch					
6,809.4	6,607.0	Wasatch G					
7,119.5	6,907.0	Fort Union					
9,043.5	8,779.0	Ohio Creek					
9,637.6	9,373.0	Williams Fork					
12,751.3	12,486.0	Cameo					
13,428.5	13,163.0	Rollins					

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
250.0	250.0	0.0	0.0	Build 3° / 100'	
416.7	416.5	3.6	6.3	EOB @ 5.00° Inc. / 60.00° Azm / Build 3° / 100'	
743.0	737.7	24.0	57.8	EOB @ 14.64° Inc. / 71.33° Azm	
8,555.3	8,296.1	656.3	1,929.0	Drop 3° / 100'	
9,043.5	8,779.0	676.2	1,987.8	EOD @ Vertical / Build 1.5° / 100'	
9,125.7	8,861.3	675.8	1,987.1	EOB @ 1.23° Inc. / 240.00° Azm	
13,728.5	13,463.0	626.2	1,901.2	TD @ 13728.5' MD / 13463.0' TVD	