

Project: Rio Blanco County, CO
Site: ELU A18 495 Pad
Well: ELU A18 FED 15A-7 495
Wellbore: Wellbore #1
Design: Design #4
Latitude: 39.709079
Longitude: -108.104198
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 - 15A-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	
225.0	0.00	0.00	225.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
491.7	8.00	49.00	490.8	12.2	14.0	3.00	49.00	18.3	EOB @ 8.00° Inc. / 49.00° Azm / Build 3° / 100'
776.1	16.27	59.69	768.7	45.3	63.5	3.00	20.50	77.7	EOB @ 16.27° Inc. / 59.69° Azm
8583.0	16.27	59.69	8263.0	1149.0	1951.5	0.00	0.00	2264.7	Drop 3° / 100'
9125.3	0.00	0.00	8798.0	1187.6	2017.6	3.00	180.00	2341.1	EOD @ Vertical / Build 1.5° / 100'
9207.9	1.24	240.00	8880.6	1187.2	2016.8	1.50	240.00	2340.3	EOB @ 1.24° Inc. / 240.00° Azm
13788.4	1.24	240.00	13460.0	1137.6	1931.0	0.00	0.00	2241.2	TD @ 13788.4' MD / 13460.0' TVD

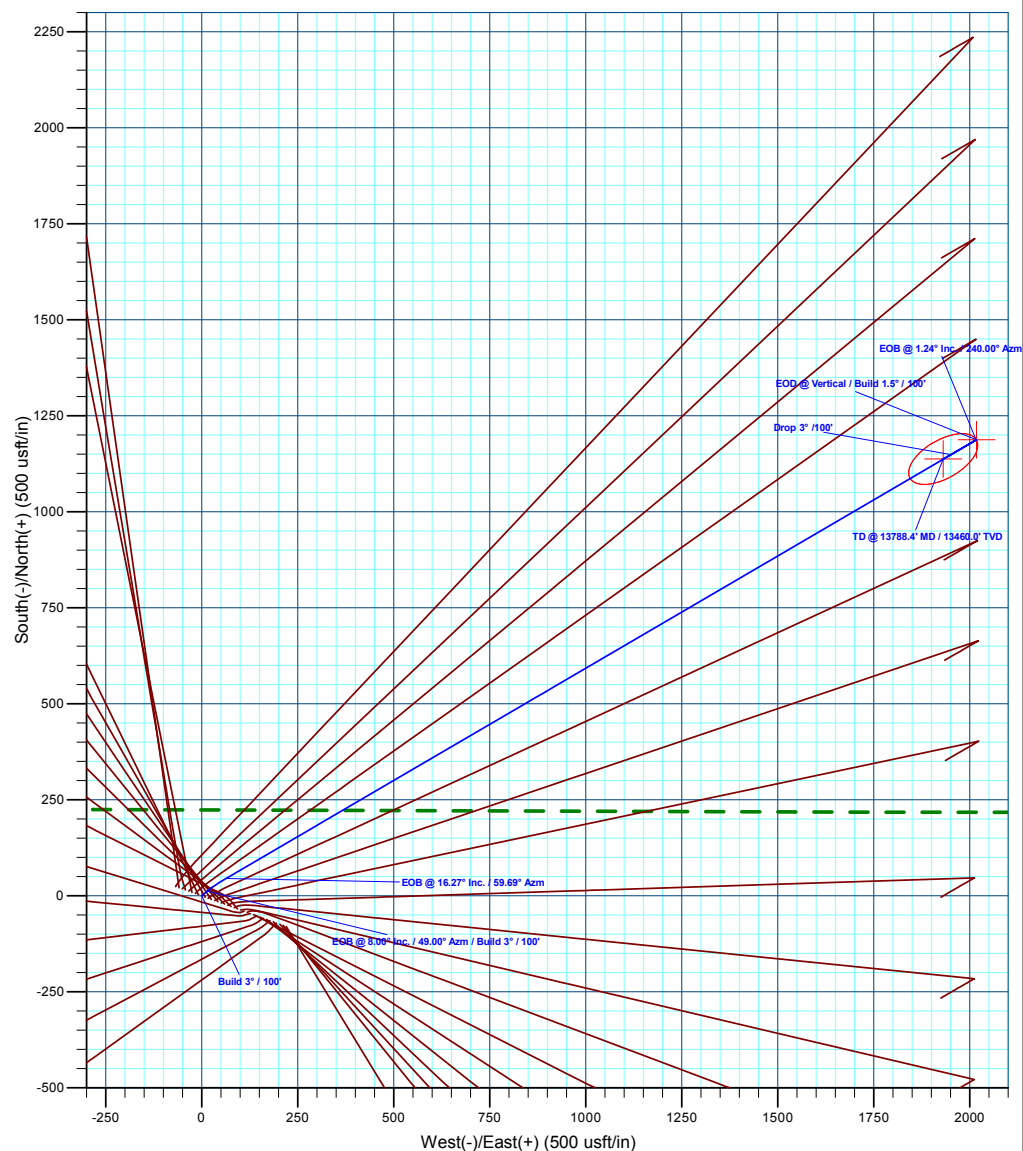
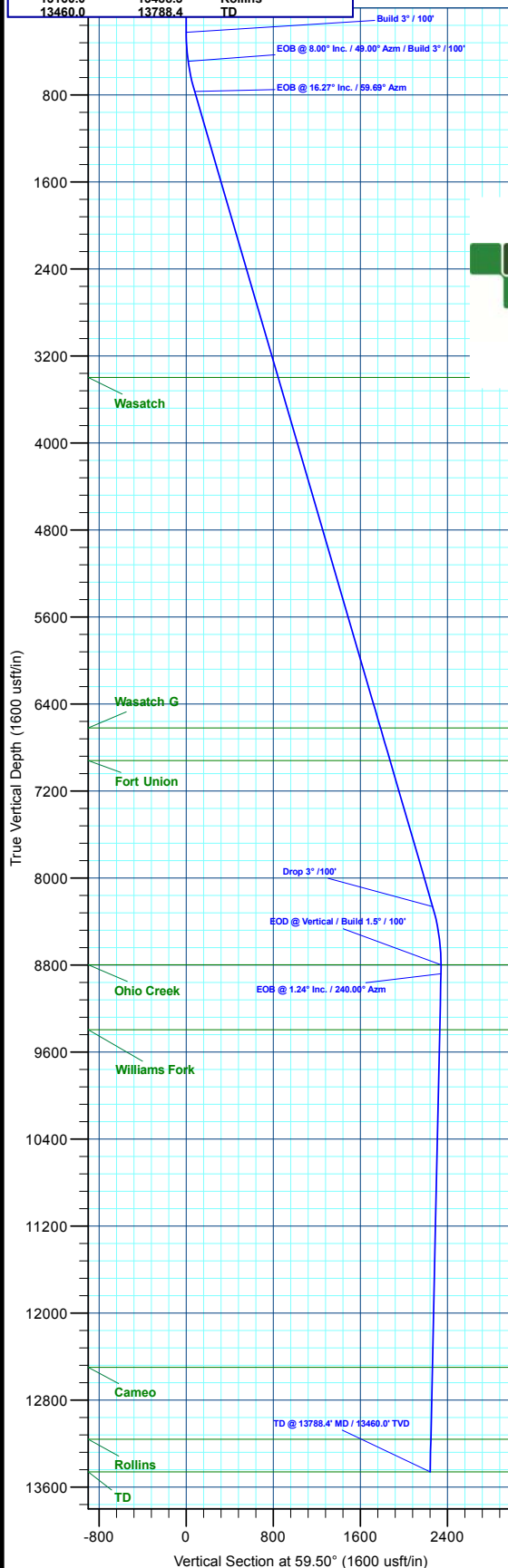
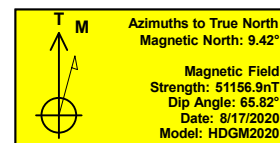
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
15A-7 - OHCR	8798.0	1187.6	2017.6	14434521.07	2456883.64	39.712337	-108.097029
15A-7 - PBHL	13460.0	1137.6	1931.0	14434468.30	2456798.70	39.712200	-108.097337

WELL DETAILS: ELU A18 FED 15A-7 495

Ground Level : 8029.0					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14433268.90	2454905.50	39.709079	-108.104198

15A-7



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

Created By: Will Jircik

Date: 20:08, October 18 2023



Caerus Oil & Gas

Rio Blanco County, CO

ELU A18 495 Pad

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

Wellbore #1

Plan: Design #4

KLX Well Planning Report

18 October, 2023



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 15A-7 495 - Slot 15A-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 15A-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 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:	14,433,279.80 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 15A-7 495 - Slot 15A-7					
Well Position	+N/-S	-10.9 usft	Northing:	14,433,268.90 usft	Latitude:	39.709079
	+E/-W	0.7 usft	Easting:	2,454,905.50 usft	Longitude:	-108.104198
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	59.50

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	
491.7	8.00	49.00	490.8	12.2	14.0	3.00	3.00	0.00	49.00	
776.1	16.27	59.69	768.7	45.3	63.5	3.00	2.91	3.76	20.50	
8,583.0	16.27	59.69	8,263.0	1,149.0	1,951.5	0.00	0.00	0.00	0.00	
9,125.3	0.00	0.00	8,798.0	1,187.6	2,017.6	3.00	-3.00	0.00	180.00	15A-7 - OHCR
9,207.9	1.24	240.00	8,880.6	1,187.2	2,016.8	1.50	1.50	-145.18	240.00	
13,788.4	1.24	240.00	13,460.0	1,137.6	1,931.0	0.00	0.00	0.00	0.00	15A-7 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 15A-7 495 - Slot 15A-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 15A-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'									
225.0	0.00	0.00	225.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	2.25	49.00	300.0	1.0	1.1	1.4	3.00	3.00	0.00
400.0	5.25	49.00	399.8	5.3	6.0	7.9	3.00	3.00	0.00
EOB @ 8.00° Inc. / 49.00° Azm / Build 3° / 100'									
491.7	8.00	49.00	490.8	12.2	14.0	18.3	3.00	3.00	0.00
500.0	8.23	49.61	499.1	13.0	14.9	19.4	3.00	2.82	7.34
600.0	11.10	54.92	597.6	23.1	28.3	36.1	3.00	2.87	5.31
700.0	14.02	58.05	695.2	35.1	46.4	57.8	3.00	2.92	3.13
EOB @ 16.27° Inc. / 59.69° Azm									
776.1	16.27	59.69	768.7	45.3	63.5	77.7	3.00	2.95	2.15
800.0	16.27	59.69	791.6	48.7	69.2	84.4	0.00	0.00	0.00
900.0	16.27	59.69	887.6	62.9	93.4	112.4	0.00	0.00	0.00
1,000.0	16.27	59.69	983.6	77.0	117.6	140.4	0.00	0.00	0.00
1,100.0	16.27	59.69	1,079.6	91.1	141.8	168.4	0.00	0.00	0.00
1,200.0	16.27	59.69	1,175.6	105.3	166.0	196.4	0.00	0.00	0.00
1,300.0	16.27	59.69	1,271.6	119.4	190.2	224.4	0.00	0.00	0.00
1,400.0	16.27	59.69	1,367.6	133.5	214.3	252.5	0.00	0.00	0.00
1,500.0	16.27	59.69	1,463.6	147.7	238.5	280.5	0.00	0.00	0.00
1,600.0	16.27	59.69	1,559.6	161.8	262.7	308.5	0.00	0.00	0.00
1,700.0	16.27	59.69	1,655.6	176.0	286.9	336.5	0.00	0.00	0.00
1,800.0	16.27	59.69	1,751.6	190.1	311.1	364.5	0.00	0.00	0.00
1,900.0	16.27	59.69	1,847.6	204.2	335.3	392.5	0.00	0.00	0.00
2,000.0	16.27	59.69	1,943.6	218.4	359.4	420.5	0.00	0.00	0.00
2,100.0	16.27	59.69	2,039.6	232.5	383.6	448.6	0.00	0.00	0.00
2,200.0	16.27	59.69	2,135.6	246.6	407.8	476.6	0.00	0.00	0.00
2,300.0	16.27	59.69	2,231.6	260.8	432.0	504.6	0.00	0.00	0.00
2,400.0	16.27	59.69	2,327.5	274.9	456.2	532.6	0.00	0.00	0.00
2,500.0	16.27	59.69	2,423.5	289.1	480.4	560.6	0.00	0.00	0.00
2,600.0	16.27	59.69	2,519.5	303.2	504.6	588.6	0.00	0.00	0.00
2,700.0	16.27	59.69	2,615.5	317.3	528.7	616.6	0.00	0.00	0.00
2,800.0	16.27	59.69	2,711.5	331.5	552.9	644.7	0.00	0.00	0.00
2,900.0	16.27	59.69	2,807.5	345.6	577.1	672.7	0.00	0.00	0.00
3,000.0	16.27	59.69	2,903.5	359.7	601.3	700.7	0.00	0.00	0.00
3,100.0	16.27	59.69	2,999.5	373.9	625.5	728.7	0.00	0.00	0.00
3,200.0	16.27	59.69	3,095.5	388.0	649.7	756.7	0.00	0.00	0.00
3,300.0	16.27	59.69	3,191.5	402.2	673.9	784.7	0.00	0.00	0.00
3,400.0	16.27	59.69	3,287.5	416.3	698.0	812.7	0.00	0.00	0.00
3,500.0	16.27	59.69	3,383.5	430.4	722.2	840.7	0.00	0.00	0.00
Wasatch									
3,514.1	16.27	59.69	3,397.0	432.4	725.6	844.7	0.00	0.00	0.00
3,600.0	16.27	59.69	3,479.5	444.6	746.4	868.8	0.00	0.00	0.00
3,700.0	16.27	59.69	3,575.5	458.7	770.6	896.8	0.00	0.00	0.00
3,800.0	16.27	59.69	3,671.5	472.8	794.8	924.8	0.00	0.00	0.00
3,900.0	16.27	59.69	3,767.5	487.0	819.0	952.8	0.00	0.00	0.00
4,000.0	16.27	59.69	3,863.5	501.1	843.1	980.8	0.00	0.00	0.00
4,100.0	16.27	59.69	3,959.5	515.3	867.3	1,008.8	0.00	0.00	0.00
4,200.0	16.27	59.69	4,055.5	529.4	891.5	1,036.8	0.00	0.00	0.00
4,300.0	16.27	59.69	4,151.5	543.5	915.7	1,064.9	0.00	0.00	0.00
4,400.0	16.27	59.69	4,247.5	557.7	939.9	1,092.9	0.00	0.00	0.00
4,500.0	16.27	59.69	4,343.5	571.8	964.1	1,120.9	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 15A-7 495 - Slot 15A-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 15A-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	16.27	59.69	4,439.5	585.9	988.3	1,148.9	0.00	0.00	0.00
4,700.0	16.27	59.69	4,535.5	600.1	1,012.4	1,176.9	0.00	0.00	0.00
4,800.0	16.27	59.69	4,631.5	614.2	1,036.6	1,204.9	0.00	0.00	0.00
4,900.0	16.27	59.69	4,727.4	628.4	1,060.8	1,232.9	0.00	0.00	0.00
5,000.0	16.27	59.69	4,823.4	642.5	1,085.0	1,261.0	0.00	0.00	0.00
5,100.0	16.27	59.69	4,919.4	656.6	1,109.2	1,289.0	0.00	0.00	0.00
5,200.0	16.27	59.69	5,015.4	670.8	1,133.4	1,317.0	0.00	0.00	0.00
5,300.0	16.27	59.69	5,111.4	684.9	1,157.6	1,345.0	0.00	0.00	0.00
5,400.0	16.27	59.69	5,207.4	699.0	1,181.7	1,373.0	0.00	0.00	0.00
5,500.0	16.27	59.69	5,303.4	713.2	1,205.9	1,401.0	0.00	0.00	0.00
5,600.0	16.27	59.69	5,399.4	727.3	1,230.1	1,429.0	0.00	0.00	0.00
5,700.0	16.27	59.69	5,495.4	741.4	1,254.3	1,457.0	0.00	0.00	0.00
5,800.0	16.27	59.69	5,591.4	755.6	1,278.5	1,485.1	0.00	0.00	0.00
5,900.0	16.27	59.69	5,687.4	769.7	1,302.7	1,513.1	0.00	0.00	0.00
6,000.0	16.27	59.69	5,783.4	783.9	1,326.8	1,541.1	0.00	0.00	0.00
6,100.0	16.27	59.69	5,879.4	798.0	1,351.0	1,569.1	0.00	0.00	0.00
6,200.0	16.27	59.69	5,975.4	812.1	1,375.2	1,597.1	0.00	0.00	0.00
6,300.0	16.27	59.69	6,071.4	826.3	1,399.4	1,625.1	0.00	0.00	0.00
6,400.0	16.27	59.69	6,167.4	840.4	1,423.6	1,653.1	0.00	0.00	0.00
6,500.0	16.27	59.69	6,263.4	854.5	1,447.8	1,681.2	0.00	0.00	0.00
6,600.0	16.27	59.69	6,359.4	868.7	1,472.0	1,709.2	0.00	0.00	0.00
6,700.0	16.27	59.69	6,455.4	882.8	1,496.1	1,737.2	0.00	0.00	0.00
6,800.0	16.27	59.69	6,551.4	897.0	1,520.3	1,765.2	0.00	0.00	0.00
Wasatch G									
6,871.5	16.27	59.69	6,620.0	907.1	1,537.6	1,785.2	0.00	0.00	0.00
6,900.0	16.27	59.69	6,647.4	911.1	1,544.5	1,793.2	0.00	0.00	0.00
7,000.0	16.27	59.69	6,743.4	925.2	1,568.7	1,821.2	0.00	0.00	0.00
7,100.0	16.27	59.69	6,839.4	939.4	1,592.9	1,849.2	0.00	0.00	0.00
Fort Union									
7,184.0	16.27	59.69	6,920.0	951.2	1,613.2	1,872.8	0.00	0.00	0.00
7,200.0	16.27	59.69	6,935.4	953.5	1,617.1	1,877.3	0.00	0.00	0.00
7,300.0	16.27	59.69	7,031.4	967.6	1,641.2	1,905.3	0.00	0.00	0.00
7,400.0	16.27	59.69	7,127.3	981.8	1,665.4	1,933.3	0.00	0.00	0.00
7,500.0	16.27	59.69	7,223.3	995.9	1,689.6	1,961.3	0.00	0.00	0.00
7,600.0	16.27	59.69	7,319.3	1,010.1	1,713.8	1,989.3	0.00	0.00	0.00
7,700.0	16.27	59.69	7,415.3	1,024.2	1,738.0	2,017.3	0.00	0.00	0.00
7,800.0	16.27	59.69	7,511.3	1,038.3	1,762.2	2,045.3	0.00	0.00	0.00
7,900.0	16.27	59.69	7,607.3	1,052.5	1,786.4	2,073.3	0.00	0.00	0.00
8,000.0	16.27	59.69	7,703.3	1,066.6	1,810.5	2,101.4	0.00	0.00	0.00
8,100.0	16.27	59.69	7,799.3	1,080.7	1,834.7	2,129.4	0.00	0.00	0.00
8,200.0	16.27	59.69	7,895.3	1,094.9	1,858.9	2,157.4	0.00	0.00	0.00
8,300.0	16.27	59.69	7,991.3	1,109.0	1,883.1	2,185.4	0.00	0.00	0.00
8,400.0	16.27	59.69	8,087.3	1,123.2	1,907.3	2,213.4	0.00	0.00	0.00
8,500.0	16.27	59.69	8,183.3	1,137.3	1,931.5	2,241.4	0.00	0.00	0.00
Drop 3° /100'									
8,583.0	16.27	59.69	8,263.0	1,149.0	1,951.5	2,264.7	0.00	0.00	0.00
8,600.0	15.76	59.69	8,279.3	1,151.4	1,955.6	2,269.4	3.00	-3.00	0.00
8,700.0	12.76	59.69	8,376.2	1,163.8	1,976.9	2,294.0	3.00	-3.00	0.00
8,800.0	9.76	59.69	8,474.3	1,173.7	1,993.7	2,313.5	3.00	-3.00	0.00
8,900.0	6.76	59.69	8,573.2	1,180.9	2,006.1	2,327.9	3.00	-3.00	0.00
9,000.0	3.76	59.69	8,672.8	1,185.5	2,014.0	2,337.0	3.00	-3.00	0.00
9,100.0	0.76	59.69	8,772.7	1,187.5	2,017.4	2,341.0	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 15A-7 495 - Slot 15A-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 15A-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)
9,125.3	0.00	0.00	8,798.0	1,187.6	2,017.6	2,341.1	3.00	-3.00	0.00
EOB @ 1.24° Inc. / 240.00° Azm									
9,207.9	1.24	240.00	8,880.6	1,187.2	2,016.8	2,340.3	1.50	1.50	0.00
9,300.0	1.24	240.00	8,972.7	1,186.2	2,015.1	2,338.3	0.00	0.00	0.00
9,400.0	1.24	240.00	9,072.7	1,185.1	2,013.2	2,336.1	0.00	0.00	0.00
9,500.0	1.24	240.00	9,172.6	1,184.0	2,011.3	2,333.9	0.00	0.00	0.00
9,600.0	1.24	240.00	9,272.6	1,182.9	2,009.4	2,331.8	0.00	0.00	0.00
9,700.0	1.24	240.00	9,372.6	1,181.8	2,007.6	2,329.6	0.00	0.00	0.00
Williams Fork									
9,722.4	1.24	240.00	9,395.0	1,181.6	2,007.1	2,329.1	0.00	0.00	0.00
9,800.0	1.24	240.00	9,472.6	1,180.8	2,005.7	2,327.4	0.00	0.00	0.00
9,900.0	1.24	240.00	9,572.6	1,179.7	2,003.8	2,325.3	0.00	0.00	0.00
10,000.0	1.24	240.00	9,672.5	1,178.6	2,001.9	2,323.1	0.00	0.00	0.00
10,100.0	1.24	240.00	9,772.5	1,177.5	2,000.1	2,321.0	0.00	0.00	0.00
10,200.0	1.24	240.00	9,872.5	1,176.4	1,998.2	2,318.8	0.00	0.00	0.00
10,300.0	1.24	240.00	9,972.5	1,175.4	1,996.3	2,316.6	0.00	0.00	0.00
10,400.0	1.24	240.00	10,072.4	1,174.3	1,994.4	2,314.5	0.00	0.00	0.00
10,500.0	1.24	240.00	10,172.4	1,173.2	1,992.6	2,312.3	0.00	0.00	0.00
10,600.0	1.24	240.00	10,272.4	1,172.1	1,990.7	2,310.1	0.00	0.00	0.00
10,700.0	1.24	240.00	10,372.4	1,171.0	1,988.8	2,308.0	0.00	0.00	0.00
10,800.0	1.24	240.00	10,472.3	1,169.9	1,987.0	2,305.8	0.00	0.00	0.00
10,900.0	1.24	240.00	10,572.3	1,168.9	1,985.1	2,303.6	0.00	0.00	0.00
11,000.0	1.24	240.00	10,672.3	1,167.8	1,983.2	2,301.5	0.00	0.00	0.00
11,100.0	1.24	240.00	10,772.3	1,166.7	1,981.3	2,299.3	0.00	0.00	0.00
11,200.0	1.24	240.00	10,872.3	1,165.6	1,979.5	2,297.2	0.00	0.00	0.00
11,300.0	1.24	240.00	10,972.2	1,164.5	1,977.6	2,295.0	0.00	0.00	0.00
11,400.0	1.24	240.00	11,072.2	1,163.5	1,975.7	2,292.8	0.00	0.00	0.00
11,500.0	1.24	240.00	11,172.2	1,162.4	1,973.8	2,290.7	0.00	0.00	0.00
11,600.0	1.24	240.00	11,272.2	1,161.3	1,972.0	2,288.5	0.00	0.00	0.00
11,700.0	1.24	240.00	11,372.1	1,160.2	1,970.1	2,286.3	0.00	0.00	0.00
11,800.0	1.24	240.00	11,472.1	1,159.1	1,968.2	2,284.2	0.00	0.00	0.00
11,900.0	1.24	240.00	11,572.1	1,158.0	1,966.3	2,282.0	0.00	0.00	0.00
12,000.0	1.24	240.00	11,672.1	1,157.0	1,964.5	2,279.8	0.00	0.00	0.00
12,100.0	1.24	240.00	11,772.0	1,155.9	1,962.6	2,277.7	0.00	0.00	0.00
12,200.0	1.24	240.00	11,872.0	1,154.8	1,960.7	2,275.5	0.00	0.00	0.00
12,300.0	1.24	240.00	11,972.0	1,153.7	1,958.8	2,273.4	0.00	0.00	0.00
12,400.0	1.24	240.00	12,072.0	1,152.6	1,957.0	2,271.2	0.00	0.00	0.00
12,500.0	1.24	240.00	12,171.9	1,151.6	1,955.1	2,269.0	0.00	0.00	0.00
12,600.0	1.24	240.00	12,271.9	1,150.5	1,953.2	2,266.9	0.00	0.00	0.00
12,700.0	1.24	240.00	12,371.9	1,149.4	1,951.4	2,264.7	0.00	0.00	0.00
12,800.0	1.24	240.00	12,471.9	1,148.3	1,949.5	2,262.5	0.00	0.00	0.00
Cameo									
12,827.1	1.24	240.00	12,499.0	1,148.0	1,949.0	2,261.9	0.00	0.00	0.00
12,900.0	1.24	240.00	12,571.9	1,147.2	1,947.6	2,260.4	0.00	0.00	0.00
13,000.0	1.24	240.00	12,671.8	1,146.1	1,945.7	2,258.2	0.00	0.00	0.00
13,100.0	1.24	240.00	12,771.8	1,145.1	1,943.9	2,256.0	0.00	0.00	0.00
13,200.0	1.24	240.00	12,871.8	1,144.0	1,942.0	2,253.9	0.00	0.00	0.00
13,300.0	1.24	240.00	12,971.8	1,142.9	1,940.1	2,251.7	0.00	0.00	0.00
13,400.0	1.24	240.00	13,071.7	1,141.8	1,938.2	2,249.6	0.00	0.00	0.00
Rollins									
13,488.3	1.24	240.00	13,160.0	1,140.9	1,936.6	2,247.6	0.00	0.00	0.00
13,500.0	1.24	240.00	13,171.7	1,140.7	1,936.4	2,247.4	0.00	0.00	0.00
13,600.0	1.24	240.00	13,271.7	1,139.7	1,934.5	2,245.2	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 15A-7 495 - Slot 15A-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 15A-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)	
13,700.0	1.24	240.00	13,371.7	1,138.6	1,932.6	2,243.1	0.00	0.00	0.00	
TD @ 13788.4' MD / 13460.0' TVD - TD										
13,788.4	1.24	240.00	13,460.0	1,137.6	1,931.0	2,241.2	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	
15A-7 - OHCR	0.00	0.00	8,798.0	1,187.6	2,017.6	14,434,521.07	2,456,883.65	39.712338	-108.097030	
- plan hits target center										
- Point										
15A-7 - PBHL	0.00	0.00	13,460.0	1,137.6	1,931.0	14,434,468.30	2,456,798.70	39.712200	-108.097337	
- 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 (°)	
3,514.1	3,397.0	Wasatch				
6,871.5	6,620.0	Wasatch G				
7,184.0	6,920.0	Fort Union				
9,125.3	8,798.0	Ohio Creek				
9,722.4	9,395.0	Williams Fork				
12,827.1	12,499.0	Cameo				
13,488.3	13,160.0	Rollins				
13,788.4	13,460.0	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
225.0	225.0	0.0	0.0	Build 3° / 100'	
491.7	490.8	12.2	14.0	EOB @ 8.00° Inc. / 49.00° Azm / Build 3° / 100'	
776.1	768.7	45.3	63.5	EOB @ 16.27° Inc. / 59.69° Azm	
8,583.0	8,263.0	1,149.0	1,951.5	Drop 3° / 100'	
9,125.3	8,798.0	1,187.6	2,017.6	EOD @ Vertical / Build 1.5° / 100'	
9,207.9	8,880.6	1,187.2	2,016.8	EOB @ 1.24° Inc. / 240.00° Azm	
13,788.4	13,460.0	1,137.6	1,931.0	TD @ 13788.4' MD / 13460.0' TVD	