

Project: Rio Blanco County, CO
Site: ELU A18 495 Pad
Well: ELU A18 FED 24C-12 496
Wellbore: Wellbore #1
Design: Design #4
Latitude: 39.709053
Longitude: -108.104108
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 - 24C-12(0.0N, 0.0E)
Measured Depth Reference: RKB @ 8059.0usft (30')
Calculation Method: Minimum Curvature

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3495.0	3585.3	Wasatch
6571.0	6760.2	Wasatch G
6871.0	7069.8	Fort Union
8745.0	8993.8	Ohio Creek
9338.0	9587.0	Williams Fork
12404.0	12653.7	Cameo
13116.0	13365.8	Rollins

SECTION DETAILS

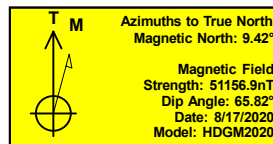
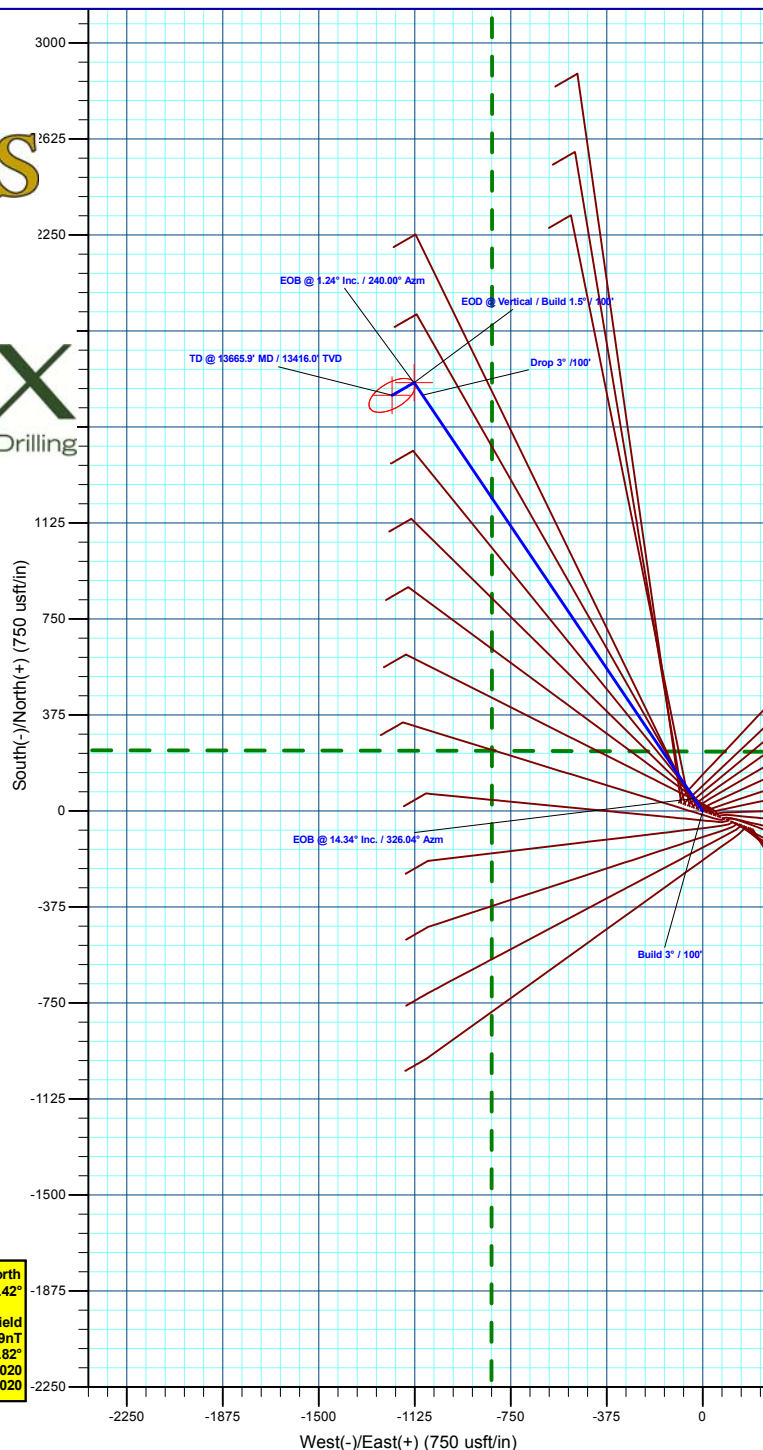
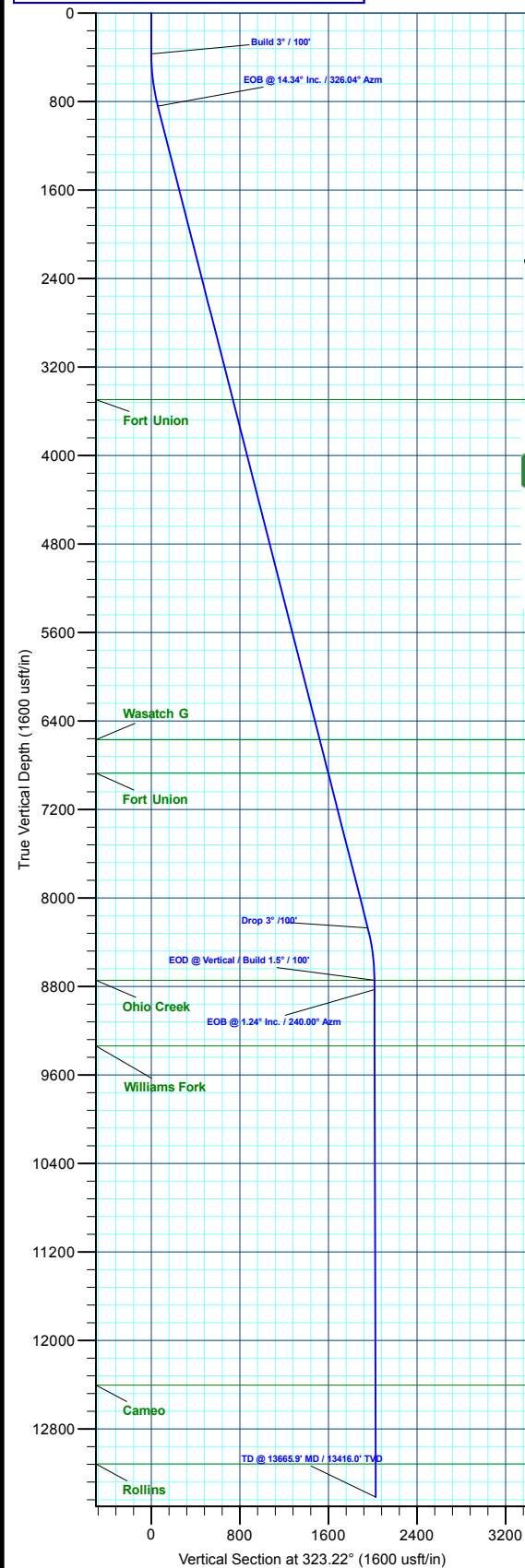
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	Build 3° / 100'
370.0	0.00	0.00	370.0	0.0	0.0	0.00	0.00	0.0	EOB @ 14.34° Inc. / 326.04° Azm
848.0	14.34	326.04	843.0	49.4	-33.2	3.00	326.04	59.4	Drop 3° / 100'
8515.9	14.34	326.04	8272.0	1624.5	-1094.0	0.00	0.00	1956.2	EOD @ Vertical / Build 1.5° / 100'
8993.8	0.00	0.00	8745.0	1673.9	-1127.3	3.00	180.00	2015.6	EOB @ 1.24° Inc. / 240.00° Azm
9076.3	1.24	240.00	8827.5	1673.4	-1128.0	1.50	240.00	2015.7	TD @ 13665.9' MD / 13416.0' TVD
13665.9	1.24	240.00	13416.0	1623.9	-1213.9	0.00	0.00	2027.4	

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
24C-12 - OHCR	8745.0	1673.9	-1127.3	14434897.07	2453750.44	39.713647	-108.108113
24C-12 - PBHL	13416.0	1623.9	-1213.9	14434844.30	2453665.50	39.713510	-108.108421

WELL DETAILS: ELU A18 FED 24C-12 496

+N/-S	+E/-W	Ground Level : 8029.0	Northing	Easting	Latitude	Longitude
0.0	0.0		14433260.50	2454931.20	39.709053	-108.104108
						24C-12



Plan: Design #4 (ELU A18 FED 24C-12 496/Wellbore #1)

Created By: Will Jircik

Date: 3:27, October 05 2023



Caerus Oil & Gas

Rio Blanco County, CO

ELU A18 495 Pad

ELU A18 FED 24C-12 496 - Slot 24C-12

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 24C-12 496 - Slot 24C-12
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 24C-12 496	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 24C-12 496 - Slot 24C-12					
Well Position	+N/-S	-20.2 usft	Northing:	14,433,260.50 usft	Latitude:	39.709053
	+E/-W	26.2 usft	Easting:	2,454,931.20 usft	Longitude:	-108.104108
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	323.22

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	
370.0	0.00	0.00	370.0	0.0	0.0	0.00	0.00	0.00	0.00	
848.0	14.34	326.04	843.0	49.4	-33.2	3.00	3.00	0.00	326.04	
8,515.9	14.34	326.04	8,272.0	1,624.5	-1,094.0	0.00	0.00	0.00	0.00	
8,993.8	0.00	0.00	8,745.0	1,673.9	-1,127.3	3.00	-3.00	0.00	180.00	24C-12 - OHCR
9,076.3	1.24	240.00	8,827.5	1,673.4	-1,128.0	1.50	1.50	-145.47	240.00	
13,665.9	1.24	240.00	13,416.0	1,623.9	-1,213.9	0.00	0.00	0.00	0.00	24C-12 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 24C-12 496 - Slot 24C-12
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 24C-12 496	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
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
Build 3° / 100'									
370.0	0.00	0.00	370.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.90	326.04	400.0	0.2	-0.1	0.2	3.00	3.00	0.00
500.0	3.90	326.04	499.9	3.7	-2.5	4.4	3.00	3.00	0.00
600.0	6.90	326.04	599.4	11.5	-7.7	13.8	3.00	3.00	0.00
700.0	9.90	326.04	698.4	23.6	-15.9	28.4	3.00	3.00	0.00
800.0	12.90	326.04	796.4	40.0	-26.9	48.1	3.00	3.00	0.00
EOB @ 14.34° Inc. / 326.04° Azm									
848.0	14.34	326.04	843.0	49.4	-33.2	59.4	3.00	3.00	0.00
900.0	14.34	326.04	893.4	60.0	-40.4	72.3	0.00	0.00	0.00
1,000.0	14.34	326.04	990.3	80.6	-54.3	97.0	0.00	0.00	0.00
1,100.0	14.34	326.04	1,087.2	101.1	-68.1	121.8	0.00	0.00	0.00
1,200.0	14.34	326.04	1,184.1	121.7	-81.9	146.5	0.00	0.00	0.00
1,300.0	14.34	326.04	1,280.9	142.2	-95.8	171.2	0.00	0.00	0.00
1,400.0	14.34	326.04	1,377.8	162.7	-109.6	196.0	0.00	0.00	0.00
1,500.0	14.34	326.04	1,474.7	183.3	-123.4	220.7	0.00	0.00	0.00
1,600.0	14.34	326.04	1,571.6	203.8	-137.3	245.5	0.00	0.00	0.00
1,700.0	14.34	326.04	1,668.5	224.4	-151.1	270.2	0.00	0.00	0.00
1,800.0	14.34	326.04	1,765.4	244.9	-164.9	294.9	0.00	0.00	0.00
1,900.0	14.34	326.04	1,862.3	265.5	-178.8	319.7	0.00	0.00	0.00
2,000.0	14.34	326.04	1,959.1	286.0	-192.6	344.4	0.00	0.00	0.00
2,100.0	14.34	326.04	2,056.0	306.5	-206.4	369.1	0.00	0.00	0.00
2,200.0	14.34	326.04	2,152.9	327.1	-220.3	393.9	0.00	0.00	0.00
2,300.0	14.34	326.04	2,249.8	347.6	-234.1	418.6	0.00	0.00	0.00
2,400.0	14.34	326.04	2,346.7	368.2	-247.9	443.3	0.00	0.00	0.00
2,500.0	14.34	326.04	2,443.6	388.7	-261.8	468.1	0.00	0.00	0.00
2,600.0	14.34	326.04	2,540.4	409.3	-275.6	492.8	0.00	0.00	0.00
2,700.0	14.34	326.04	2,637.3	429.8	-289.5	517.6	0.00	0.00	0.00
2,800.0	14.34	326.04	2,734.2	450.3	-303.3	542.3	0.00	0.00	0.00
2,900.0	14.34	326.04	2,831.1	470.9	-317.1	567.0	0.00	0.00	0.00
3,000.0	14.34	326.04	2,928.0	491.4	-331.0	591.8	0.00	0.00	0.00
3,100.0	14.34	326.04	3,024.9	512.0	-344.8	616.5	0.00	0.00	0.00
3,200.0	14.34	326.04	3,121.8	532.5	-358.6	641.2	0.00	0.00	0.00
3,300.0	14.34	326.04	3,218.6	553.1	-372.5	666.0	0.00	0.00	0.00
3,400.0	14.34	326.04	3,315.5	573.6	-386.3	690.7	0.00	0.00	0.00
3,500.0	14.34	326.04	3,412.4	594.1	-400.1	715.4	0.00	0.00	0.00
Wasatch									
3,585.3	14.34	326.04	3,495.0	611.6	-411.9	736.5	0.00	0.00	0.00
3,600.0	14.34	326.04	3,509.3	614.7	-414.0	740.2	0.00	0.00	0.00
3,700.0	14.34	326.04	3,606.2	635.2	-427.8	764.9	0.00	0.00	0.00
3,800.0	14.34	326.04	3,703.1	655.8	-441.6	789.7	0.00	0.00	0.00
3,900.0	14.34	326.04	3,799.9	676.3	-455.5	814.4	0.00	0.00	0.00
4,000.0	14.34	326.04	3,896.8	696.8	-469.3	839.1	0.00	0.00	0.00
4,100.0	14.34	326.04	3,993.7	717.4	-483.1	863.9	0.00	0.00	0.00
4,200.0	14.34	326.04	4,090.6	737.9	-497.0	888.6	0.00	0.00	0.00
4,300.0	14.34	326.04	4,187.5	758.5	-510.8	913.3	0.00	0.00	0.00
4,400.0	14.34	326.04	4,284.4	779.0	-524.6	938.1	0.00	0.00	0.00
4,500.0	14.34	326.04	4,381.3	799.6	-538.5	962.8	0.00	0.00	0.00
4,600.0	14.34	326.04	4,478.1	820.1	-552.3	987.5	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 24C-12 496 - Slot 24C-12
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 24C-12 496	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	14.34	326.04	4,575.0	840.6	-566.1	1,012.3	0.00	0.00	0.00
4,800.0	14.34	326.04	4,671.9	861.2	-580.0	1,037.0	0.00	0.00	0.00
4,900.0	14.34	326.04	4,768.8	881.7	-593.8	1,061.8	0.00	0.00	0.00
5,000.0	14.34	326.04	4,865.7	902.3	-607.6	1,086.5	0.00	0.00	0.00
5,100.0	14.34	326.04	4,962.6	922.8	-621.5	1,111.2	0.00	0.00	0.00
5,200.0	14.34	326.04	5,059.4	943.4	-635.3	1,136.0	0.00	0.00	0.00
5,300.0	14.34	326.04	5,156.3	963.9	-649.1	1,160.7	0.00	0.00	0.00
5,400.0	14.34	326.04	5,253.2	984.4	-663.0	1,185.4	0.00	0.00	0.00
5,500.0	14.34	326.04	5,350.1	1,005.0	-676.8	1,210.2	0.00	0.00	0.00
5,600.0	14.34	326.04	5,447.0	1,025.5	-690.6	1,234.9	0.00	0.00	0.00
5,700.0	14.34	326.04	5,543.9	1,046.1	-704.5	1,259.6	0.00	0.00	0.00
5,800.0	14.34	326.04	5,640.8	1,066.6	-718.3	1,284.4	0.00	0.00	0.00
5,900.0	14.34	326.04	5,737.6	1,087.2	-732.2	1,309.1	0.00	0.00	0.00
6,000.0	14.34	326.04	5,834.5	1,107.7	-746.0	1,333.9	0.00	0.00	0.00
6,100.0	14.34	326.04	5,931.4	1,128.2	-759.8	1,358.6	0.00	0.00	0.00
6,200.0	14.34	326.04	6,028.3	1,148.8	-773.7	1,383.3	0.00	0.00	0.00
6,300.0	14.34	326.04	6,125.2	1,169.3	-787.5	1,408.1	0.00	0.00	0.00
6,400.0	14.34	326.04	6,222.1	1,189.9	-801.3	1,432.8	0.00	0.00	0.00
6,500.0	14.34	326.04	6,318.9	1,210.4	-815.2	1,457.5	0.00	0.00	0.00
6,600.0	14.34	326.04	6,415.8	1,230.9	-829.0	1,482.3	0.00	0.00	0.00
6,700.0	14.34	326.04	6,512.7	1,251.5	-842.8	1,507.0	0.00	0.00	0.00
Wasatch G									
6,760.2	14.34	326.04	6,571.0	1,263.8	-851.1	1,521.9	0.00	0.00	0.00
6,800.0	14.34	326.04	6,609.6	1,272.0	-856.7	1,531.7	0.00	0.00	0.00
6,900.0	14.34	326.04	6,706.5	1,292.6	-870.5	1,556.5	0.00	0.00	0.00
7,000.0	14.34	326.04	6,803.4	1,313.1	-884.3	1,581.2	0.00	0.00	0.00
Fort Union									
7,069.8	14.34	326.04	6,871.0	1,327.5	-894.0	1,598.5	0.00	0.00	0.00
7,100.0	14.34	326.04	6,900.3	1,333.7	-898.2	1,606.0	0.00	0.00	0.00
7,200.0	14.34	326.04	6,997.1	1,354.2	-912.0	1,630.7	0.00	0.00	0.00
7,300.0	14.34	326.04	7,094.0	1,374.7	-925.8	1,655.4	0.00	0.00	0.00
7,400.0	14.34	326.04	7,190.9	1,395.3	-939.7	1,680.2	0.00	0.00	0.00
7,500.0	14.34	326.04	7,287.8	1,415.8	-953.5	1,704.9	0.00	0.00	0.00
7,600.0	14.34	326.04	7,384.7	1,436.4	-967.3	1,729.6	0.00	0.00	0.00
7,700.0	14.34	326.04	7,481.6	1,456.9	-981.2	1,754.4	0.00	0.00	0.00
7,800.0	14.34	326.04	7,578.4	1,477.5	-995.0	1,779.1	0.00	0.00	0.00
7,900.0	14.34	326.04	7,675.3	1,498.0	-1,008.8	1,803.8	0.00	0.00	0.00
8,000.0	14.34	326.04	7,772.2	1,518.5	-1,022.7	1,828.6	0.00	0.00	0.00
8,100.0	14.34	326.04	7,869.1	1,539.1	-1,036.5	1,853.3	0.00	0.00	0.00
8,200.0	14.34	326.04	7,966.0	1,559.6	-1,050.3	1,878.1	0.00	0.00	0.00
8,300.0	14.34	326.04	8,062.9	1,580.2	-1,064.2	1,902.8	0.00	0.00	0.00
8,400.0	14.34	326.04	8,159.8	1,600.7	-1,078.0	1,927.5	0.00	0.00	0.00
8,500.0	14.34	326.04	8,256.6	1,621.3	-1,091.8	1,952.3	0.00	0.00	0.00
Drop 3° /100'									
8,515.9	14.34	326.04	8,272.0	1,624.5	-1,094.0	1,956.2	0.00	0.00	0.00
8,600.0	11.81	326.04	8,354.0	1,640.3	-1,104.7	1,975.2	3.00	-3.00	0.00
8,700.0	8.81	326.04	8,452.3	1,655.1	-1,114.7	1,993.1	3.00	-3.00	0.00
8,800.0	5.81	326.04	8,551.5	1,665.7	-1,121.8	2,005.8	3.00	-3.00	0.00
8,900.0	2.81	326.04	8,651.2	1,671.9	-1,126.0	2,013.3	3.00	-3.00	0.00
EOD @ Vertical / Build 1.5° / 100' - Ohio Creek									
8,993.8	0.00	0.00	8,745.0	1,673.9	-1,127.3	2,015.6	3.00	-3.00	0.00
9,000.0	0.09	240.00	8,751.2	1,673.9	-1,127.3	2,015.6	1.50	1.50	0.00
EOB @ 1.24° Inc. / 240.00° Azm									
9,076.3	1.24	240.00	8,827.5	1,673.4	-1,128.0	2,015.7	1.50	1.50	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 24C-12 496 - Slot 24C-12
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 24C-12 496	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)
9,100.0	1.24	240.00	8,851.2	1,673.2	-1,128.5	2,015.8	0.00	0.00	0.00
9,200.0	1.24	240.00	8,951.1	1,672.1	-1,130.4	2,016.0	0.00	0.00	0.00
9,300.0	1.24	240.00	9,051.1	1,671.0	-1,132.2	2,016.3	0.00	0.00	0.00
9,400.0	1.24	240.00	9,151.1	1,669.9	-1,134.1	2,016.5	0.00	0.00	0.00
9,500.0	1.24	240.00	9,251.1	1,668.8	-1,136.0	2,016.8	0.00	0.00	0.00
Williams Fork									
9,587.0	1.24	240.00	9,338.0	1,667.9	-1,137.6	2,017.0	0.00	0.00	0.00
9,600.0	1.24	240.00	9,351.0	1,667.8	-1,137.8	2,017.1	0.00	0.00	0.00
9,700.0	1.24	240.00	9,451.0	1,666.7	-1,139.7	2,017.3	0.00	0.00	0.00
9,800.0	1.24	240.00	9,551.0	1,665.6	-1,141.6	2,017.6	0.00	0.00	0.00
9,900.0	1.24	240.00	9,651.0	1,664.5	-1,143.4	2,017.8	0.00	0.00	0.00
10,000.0	1.24	240.00	9,750.9	1,663.4	-1,145.3	2,018.1	0.00	0.00	0.00
10,100.0	1.24	240.00	9,850.9	1,662.4	-1,147.2	2,018.3	0.00	0.00	0.00
10,200.0	1.24	240.00	9,950.9	1,661.3	-1,149.1	2,018.6	0.00	0.00	0.00
10,300.0	1.24	240.00	10,050.9	1,660.2	-1,150.9	2,018.8	0.00	0.00	0.00
10,400.0	1.24	240.00	10,150.9	1,659.1	-1,152.8	2,019.1	0.00	0.00	0.00
10,500.0	1.24	240.00	10,250.8	1,658.0	-1,154.7	2,019.3	0.00	0.00	0.00
10,600.0	1.24	240.00	10,350.8	1,657.0	-1,156.5	2,019.6	0.00	0.00	0.00
10,700.0	1.24	240.00	10,450.8	1,655.9	-1,158.4	2,019.9	0.00	0.00	0.00
10,800.0	1.24	240.00	10,550.8	1,654.8	-1,160.3	2,020.1	0.00	0.00	0.00
10,900.0	1.24	240.00	10,650.7	1,653.7	-1,162.1	2,020.4	0.00	0.00	0.00
11,000.0	1.24	240.00	10,750.7	1,652.6	-1,164.0	2,020.6	0.00	0.00	0.00
11,100.0	1.24	240.00	10,850.7	1,651.6	-1,165.9	2,020.9	0.00	0.00	0.00
11,200.0	1.24	240.00	10,950.7	1,650.5	-1,167.8	2,021.1	0.00	0.00	0.00
11,300.0	1.24	240.00	11,050.6	1,649.4	-1,169.6	2,021.4	0.00	0.00	0.00
11,400.0	1.24	240.00	11,150.6	1,648.3	-1,171.5	2,021.6	0.00	0.00	0.00
11,500.0	1.24	240.00	11,250.6	1,647.2	-1,173.4	2,021.9	0.00	0.00	0.00
11,600.0	1.24	240.00	11,350.6	1,646.2	-1,175.2	2,022.1	0.00	0.00	0.00
11,700.0	1.24	240.00	11,450.5	1,645.1	-1,177.1	2,022.4	0.00	0.00	0.00
11,800.0	1.24	240.00	11,550.5	1,644.0	-1,179.0	2,022.7	0.00	0.00	0.00
11,900.0	1.24	240.00	11,650.5	1,642.9	-1,180.9	2,022.9	0.00	0.00	0.00
12,000.0	1.24	240.00	11,750.5	1,641.8	-1,182.7	2,023.2	0.00	0.00	0.00
12,100.0	1.24	240.00	11,850.5	1,640.8	-1,184.6	2,023.4	0.00	0.00	0.00
12,200.0	1.24	240.00	11,950.4	1,639.7	-1,186.5	2,023.7	0.00	0.00	0.00
12,300.0	1.24	240.00	12,050.4	1,638.6	-1,188.3	2,023.9	0.00	0.00	0.00
12,400.0	1.24	240.00	12,150.4	1,637.5	-1,190.2	2,024.2	0.00	0.00	0.00
12,500.0	1.24	240.00	12,250.4	1,636.4	-1,192.1	2,024.4	0.00	0.00	0.00
12,600.0	1.24	240.00	12,350.3	1,635.4	-1,193.9	2,024.7	0.00	0.00	0.00
Cameo									
12,653.7	1.24	240.00	12,404.0	1,634.8	-1,194.9	2,024.8	0.00	0.00	0.00
12,700.0	1.24	240.00	12,450.3	1,634.3	-1,195.8	2,025.0	0.00	0.00	0.00
12,800.0	1.24	240.00	12,550.3	1,633.2	-1,197.7	2,025.2	0.00	0.00	0.00
12,900.0	1.24	240.00	12,650.3	1,632.1	-1,199.6	2,025.5	0.00	0.00	0.00
13,000.0	1.24	240.00	12,750.2	1,631.1	-1,201.4	2,025.7	0.00	0.00	0.00
13,100.0	1.24	240.00	12,850.2	1,630.0	-1,203.3	2,026.0	0.00	0.00	0.00
13,200.0	1.24	240.00	12,950.2	1,628.9	-1,205.2	2,026.2	0.00	0.00	0.00
13,300.0	1.24	240.00	13,050.2	1,627.8	-1,207.0	2,026.5	0.00	0.00	0.00
Rollins									
13,365.8	1.24	240.00	13,116.0	1,627.1	-1,208.3	2,026.7	0.00	0.00	0.00
13,400.0	1.24	240.00	13,150.2	1,626.7	-1,208.9	2,026.7	0.00	0.00	0.00
13,500.0	1.24	240.00	13,250.1	1,625.7	-1,210.8	2,027.0	0.00	0.00	0.00
13,600.0	1.24	240.00	13,350.1	1,624.6	-1,212.6	2,027.2	0.00	0.00	0.00
TD @ 13665.9' MD / 13416.0' TVD									

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well ELU A18 FED 24C-12 496 - Slot 24C-12
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 24C-12 496	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)
13,665.9	1.24	240.00	13,416.0	1,623.9	-1,213.9	2,027.4	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
24C-12 - OHCR - hit/miss target - Shape - plan hits target center - Point	0.00	0.00	8,745.0	1,673.9	-1,127.3	14,434,897.07	2,453,750.45	39.713647	-108.108113
24C-12 - PBHL - plan hits target center - Ellipse (radii L100.0 W50.0 on 240.00 azi)	0.00	0.00	13,416.0	1,623.9	-1,213.9	14,434,844.30	2,453,665.50	39.713510	-108.108421

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,585.3	3,495.0	Wasatch				
6,760.2	6,571.0	Wasatch G				
7,069.8	6,871.0	Fort Union				
8,993.8	8,745.0	Ohio Creek				
9,587.0	9,338.0	Williams Fork				
12,653.7	12,404.0	Cameo				
13,365.8	13,116.0	Rollins				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
370.0	370.0	0.0	0.0	Build 3° / 100'
848.0	843.0	49.4	-33.2	EOB @ 14.34° Inc. / 326.04° Azm
8,515.9	8,272.0	1,624.5	-1,094.0	Drop 3° / 100'
8,993.8	8,745.0	1,673.9	-1,127.3	EOD @ Vertical / Build 1.5° / 100'
9,076.3	8,827.5	1,673.4	-1,128.0	EOB @ 1.24° Inc. / 240.00° Azm
13,665.9	13,416.0	1,623.9	-1,213.9	TD @ 13665.9' MD / 13416.0' TVD