

Project: Rio Blanco County, CO
 Site: PCU B27 197 Pad
 Well: RNPU B27 FED 15B-22 197
 Wellbore: OH
 Design: Prelim #1
 Latitude: 39.940940
 Longitude: -108.268469
 Ground Level: 6510.0
 RKB @ 6540.0usft (30')

FORMATION TOP DETAILS			
TVDPath	MDPath	Formation	
2499.0	2553.9	ORANGE_MARKER	
2642.0	2701.6	WASATCH	
5544.0	5698.5	WASATCH_G_ZONE	
6011.0	6180.7	FORT_UNION	
7516.0	7724.5	OHIO_CREEK	
8266.0	8474.6	WILLIAMS_FORK	
11150.0	11359.0	CAMEO	
11700.0	11909.1	ROLLINS	
11794.0	12003.1	COZZETTE	
12394.0	12603.2	Corcoran	

REFERENCE INFORMATION	
Co-ordinate (N/E) Reference:	Well RNPU B27 FED 15B-22 197 - Slot 15B-22, True North
Vertical (TVD) Reference:	RKB @ 6540.0usft (30')
Section (VS) Reference:	Slot - 15B-22(0.0N, 0.0E)
Measured Depth Reference:	RKB @ 6540.0usft (30')
Calculation Method:	Minimum Curvature

WELL DETAILS: RNPU B27 FED 15B-22 197					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14516261.20	2406114.70	39.940940	-108.268469
			6510.0		15B-22

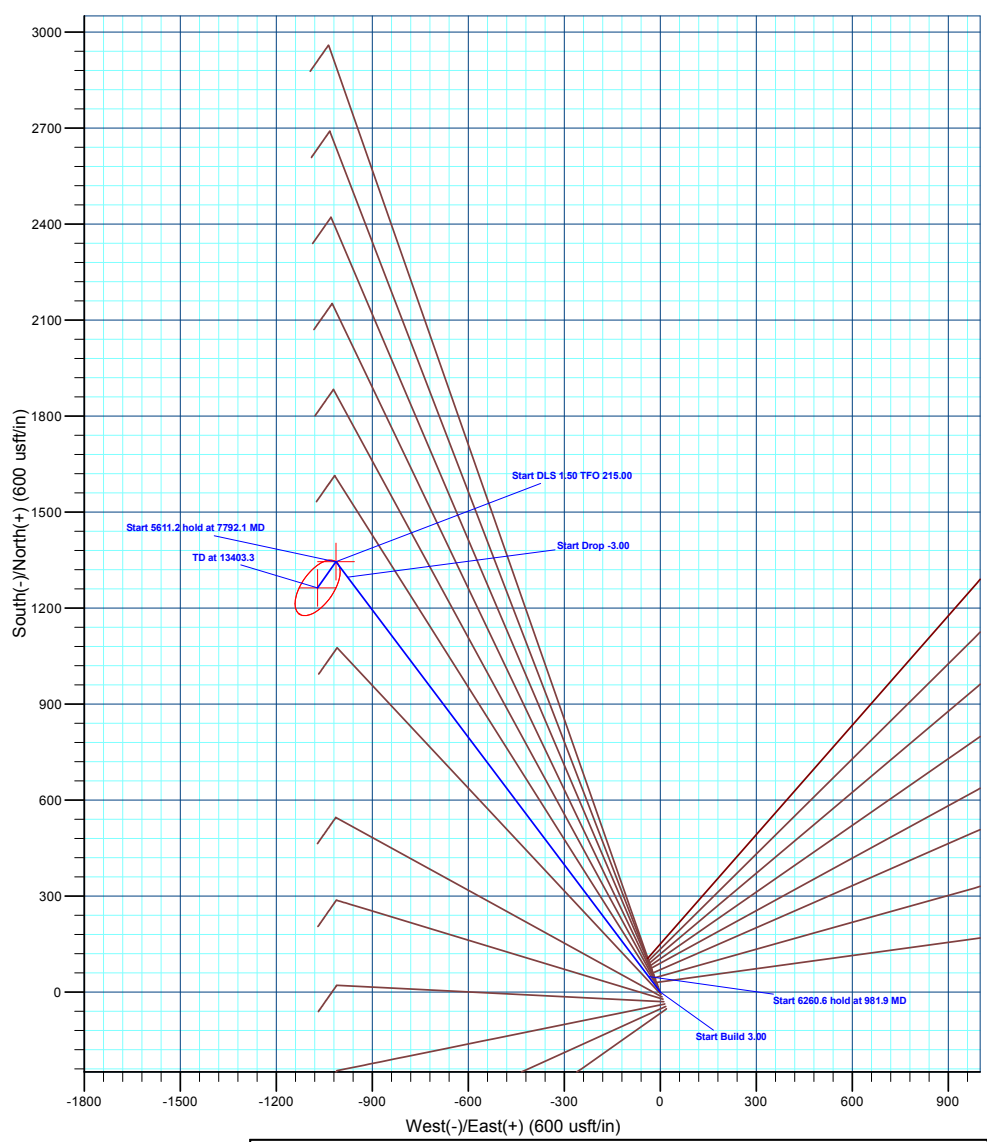
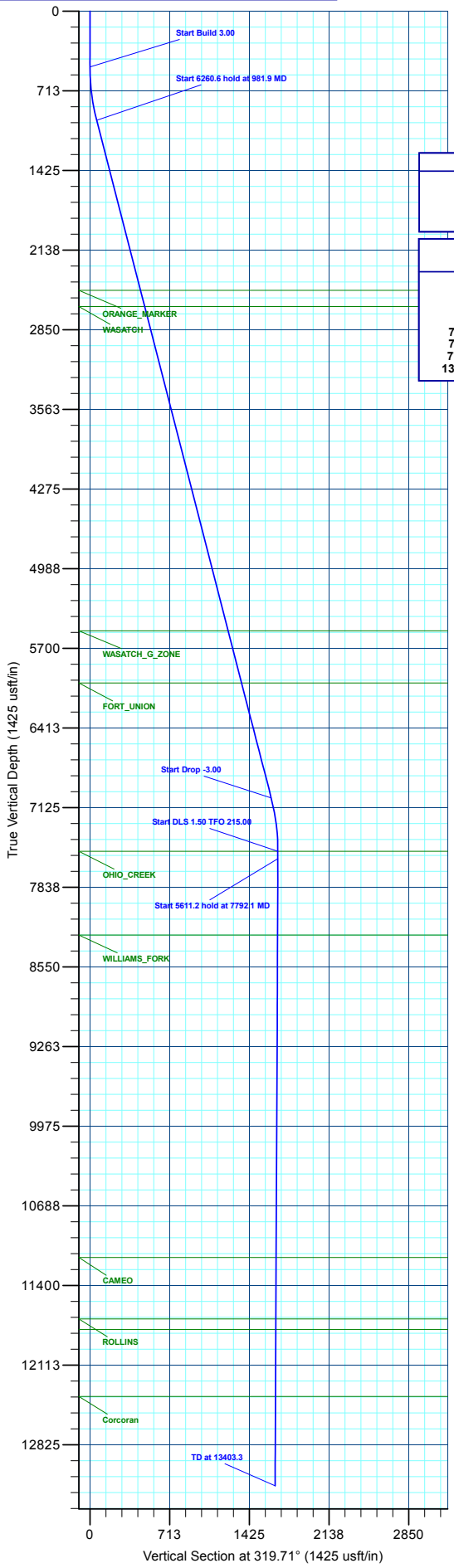
PROJECT DETAILS: Rio Blanco County, CO	
Geodetic System:	Universal Transverse Mercator (US Survey Feet)
Datum:	NAD 1927 - Western US
Ellipsoid:	Clarke 1866
Zone:	Zone 12N (114 W to 108 W)
System Datum:	Mean Sea Level

M Azimuths to True North
 Magnetic North: 9.15°

T Magnetic Field
 Strength: 51080.6nT
 Dip Angle: 65.83°
 Date: 9/30/2022
 Model: HDGM2022

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
15B-22 - OHCR	7516.0	1345.0	-1013.4	14517574.53	2405060.63	39.944631	-108.272082
15B-22 - PBHL	13194.0	1263.1	-1070.7	14517490.90	2405005.80	39.944406	-108.272287

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	Start Build 3.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	Start 6260.6 hold at 981.9 MD	
981.9	14.46	323.00	976.8	48.3	-36.4	3.00	323.00	60.4	Start Drop -3.00	
7242.5	14.46	323.00	7039.2	1296.7	-977.0	0.00	0.00	1620.9	Start DLS 1.50 TFO 215.00	
7724.5	0.00	0.00	7516.0	1345.0	-1013.4	3.00	180.00	1681.2	Start DLS 1.50 TFO 215.00	
7792.1	1.02	215.00	7583.7	1344.5	-1013.7	1.50	215.00	1681.1	Start 5611.2 hold at 7792.1 MD	
13403.3	1.02	215.00	13194.0	1263.1	-1070.7	0.00	0.00	1655.8	TD at 13403.3	



Plan: Prelim #1 (RNPU B27 FED 15B-22 197/OH)
 Created By: Will Jircik Date: 1:31, November 02 2022



Caerus Oil & Gas

Rio Blanco County, CO

PCU B27 197 Pad

RNPU B27 FED 15B-22 197 - Slot 15B-22

OH

Plan: Prelim #1

KLX Well Planning Report

02 November, 2022



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RNPU B27 FED 15B-22 197 - Slot 15B-22
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 6540.0usft (30')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 6540.0usft (30')
Site:	PCU B27 197 Pad	North Reference:	True
Well:	RNPU B27 FED 15B-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #1		

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	PCU B27 197 Pad				
Site Position:	Northing:	14,516,246.40 usft	Latitude:	39.940899	
From: Map	Easting:	2,406,120.80 usft	Longitude:	-108.268449	
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.75 °

Well	RNPU B27 FED 15B-22 197 - Slot 15B-22					
Well Position	+N/-S	15.0 usft	Northing:	14,516,261.20 usft	Latitude:	39.940940
	+E/-W	-5.6 usft	Easting:	2,406,114.70 usft	Longitude:	-108.268470
Position Uncertainty	0.0 usft	Wellhead Elevation:		Ground Level:	6,510.0 usft	

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2022	9/30/2022	9.15	65.83	51,080.60000000

Design	Prelim #1			
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	319.71

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	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
981.9	14.46	323.00	976.8	48.3	-36.4	3.00	3.00	0.00	323.00	
7,242.5	14.46	323.00	7,039.2	1,296.7	-977.0	0.00	0.00	0.00	0.00	
7,724.5	0.00	0.00	7,516.0	1,345.0	-1,013.4	3.00	-3.00	0.00	180.00	15B-22 - OHCR
7,792.1	1.02	215.00	7,583.7	1,344.5	-1,013.7	1.50	1.50	-214.27	215.00	
13,403.3	1.02	215.00	13,194.0	1,263.1	-1,070.7	0.00	0.00	0.00	0.00	15B-22 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RNPU B27 FED 15B-22 197 - Slot 15B-22
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 6540.0usft (30')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 6540.0usft (30')
Site:	PCU B27 197 Pad	North Reference:	True
Well:	RNPU B27 FED 15B-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #1		

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	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	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	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
Start Build 3.00										
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
600.0	3.00	323.00	600.0	2.1	-1.6	2.6	3.00	3.00	3.00	0.00
700.0	6.00	323.00	699.6	8.4	-6.3	10.4	3.00	3.00	3.00	0.00
800.0	9.00	323.00	798.8	18.8	-14.1	23.5	3.00	3.00	3.00	0.00
900.0	12.00	323.00	897.1	33.3	-25.1	41.7	3.00	3.00	3.00	0.00
Start 6260.6 hold at 981.9 MD										
981.9	14.46	323.00	976.8	48.3	-36.4	60.4	3.00	3.00	3.00	0.00
1,000.0	14.46	323.00	994.3	51.9	-39.1	64.9	0.00	0.00	0.00	0.00
1,100.0	14.46	323.00	1,091.2	71.8	-54.1	89.8	0.00	0.00	0.00	0.00
1,200.0	14.46	323.00	1,188.0	91.8	-69.2	114.7	0.00	0.00	0.00	0.00
1,300.0	14.46	323.00	1,284.8	111.7	-84.2	139.7	0.00	0.00	0.00	0.00
1,400.0	14.46	323.00	1,381.7	131.7	-99.2	164.6	0.00	0.00	0.00	0.00
1,500.0	14.46	323.00	1,478.5	151.6	-114.2	189.5	0.00	0.00	0.00	0.00
1,600.0	14.46	323.00	1,575.3	171.6	-129.3	214.4	0.00	0.00	0.00	0.00
1,700.0	14.46	323.00	1,672.2	191.5	-144.3	239.4	0.00	0.00	0.00	0.00
1,800.0	14.46	323.00	1,769.0	211.4	-159.3	264.3	0.00	0.00	0.00	0.00
1,900.0	14.46	323.00	1,865.8	231.4	-174.3	289.2	0.00	0.00	0.00	0.00
2,000.0	14.46	323.00	1,962.7	251.3	-189.3	314.1	0.00	0.00	0.00	0.00
2,100.0	14.46	323.00	2,059.5	271.3	-204.4	339.1	0.00	0.00	0.00	0.00
2,200.0	14.46	323.00	2,156.3	291.2	-219.4	364.0	0.00	0.00	0.00	0.00
2,300.0	14.46	323.00	2,253.2	311.1	-234.4	388.9	0.00	0.00	0.00	0.00
2,400.0	14.46	323.00	2,350.0	331.1	-249.4	413.8	0.00	0.00	0.00	0.00
2,500.0	14.46	323.00	2,446.8	351.0	-264.5	438.8	0.00	0.00	0.00	0.00
ORANGE_MARKER										
2,553.9	14.46	323.00	2,499.0	361.8	-272.6	452.2	0.00	0.00	0.00	0.00
2,600.0	14.46	323.00	2,543.7	371.0	-279.5	463.7	0.00	0.00	0.00	0.00
2,700.0	14.46	323.00	2,640.5	390.9	-294.5	488.6	0.00	0.00	0.00	0.00
WASATCH										
2,701.6	14.46	323.00	2,642.0	391.2	-294.7	489.0	0.00	0.00	0.00	0.00
2,800.0	14.46	323.00	2,737.3	410.8	-309.5	513.5	0.00	0.00	0.00	0.00
2,900.0	14.46	323.00	2,834.2	430.8	-324.6	538.5	0.00	0.00	0.00	0.00
3,000.0	14.46	323.00	2,931.0	450.7	-339.6	563.4	0.00	0.00	0.00	0.00
3,100.0	14.46	323.00	3,027.8	470.7	-354.6	588.3	0.00	0.00	0.00	0.00
3,200.0	14.46	323.00	3,124.7	490.6	-369.6	613.2	0.00	0.00	0.00	0.00
3,300.0	14.46	323.00	3,221.5	510.5	-384.7	638.2	0.00	0.00	0.00	0.00
3,400.0	14.46	323.00	3,318.3	530.5	-399.7	663.1	0.00	0.00	0.00	0.00
3,500.0	14.46	323.00	3,415.2	550.4	-414.7	688.0	0.00	0.00	0.00	0.00
3,600.0	14.46	323.00	3,512.0	570.4	-429.7	712.9	0.00	0.00	0.00	0.00
3,700.0	14.46	323.00	3,608.8	590.3	-444.8	737.9	0.00	0.00	0.00	0.00
3,800.0	14.46	323.00	3,705.7	610.2	-459.8	762.8	0.00	0.00	0.00	0.00
3,900.0	14.46	323.00	3,802.5	630.2	-474.8	787.7	0.00	0.00	0.00	0.00
4,000.0	14.46	323.00	3,899.3	650.1	-489.8	812.6	0.00	0.00	0.00	0.00
4,100.0	14.46	323.00	3,996.2	670.1	-504.8	837.6	0.00	0.00	0.00	0.00
4,200.0	14.46	323.00	4,093.0	690.0	-519.9	862.5	0.00	0.00	0.00	0.00
4,300.0	14.46	323.00	4,189.8	709.9	-534.9	887.4	0.00	0.00	0.00	0.00
4,400.0	14.46	323.00	4,286.7	729.9	-549.9	912.3	0.00	0.00	0.00	0.00
4,500.0	14.46	323.00	4,383.5	749.8	-564.9	937.3	0.00	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RNPU B27 FED 15B-22 197 - Slot 15B-22
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 6540.0usft (30')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 6540.0usft (30')
Site:	PCU B27 197 Pad	North Reference:	True
Well:	RNPU B27 FED 15B-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #1		

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	14.46	323.00	4,480.3	769.8	-580.0	962.2	0.00	0.00	0.00
4,700.0	14.46	323.00	4,577.2	789.7	-595.0	987.1	0.00	0.00	0.00
4,800.0	14.46	323.00	4,674.0	809.6	-610.0	1,012.0	0.00	0.00	0.00
4,900.0	14.46	323.00	4,770.8	829.6	-625.0	1,037.0	0.00	0.00	0.00
5,000.0	14.46	323.00	4,867.7	849.5	-640.1	1,061.9	0.00	0.00	0.00
5,100.0	14.46	323.00	4,964.5	869.5	-655.1	1,086.8	0.00	0.00	0.00
5,200.0	14.46	323.00	5,061.3	889.4	-670.1	1,111.7	0.00	0.00	0.00
5,300.0	14.46	323.00	5,158.2	909.3	-685.1	1,136.7	0.00	0.00	0.00
5,400.0	14.46	323.00	5,255.0	929.3	-700.2	1,161.6	0.00	0.00	0.00
5,500.0	14.46	323.00	5,351.8	949.2	-715.2	1,186.5	0.00	0.00	0.00
5,600.0	14.46	323.00	5,448.7	969.2	-730.2	1,211.4	0.00	0.00	0.00
WASATCH_G_ZONE									
5,698.5	14.46	323.00	5,544.0	988.8	-745.0	1,236.0	0.00	0.00	0.00
5,700.0	14.46	323.00	5,545.5	989.1	-745.2	1,236.4	0.00	0.00	0.00
5,800.0	14.46	323.00	5,642.3	1,009.0	-760.2	1,261.3	0.00	0.00	0.00
5,900.0	14.46	323.00	5,739.2	1,029.0	-775.3	1,286.2	0.00	0.00	0.00
6,000.0	14.46	323.00	5,836.0	1,048.9	-790.3	1,311.1	0.00	0.00	0.00
6,100.0	14.46	323.00	5,932.8	1,068.9	-805.3	1,336.1	0.00	0.00	0.00
FORT_UNION									
6,180.7	14.46	323.00	6,011.0	1,085.0	-817.4	1,356.2	0.00	0.00	0.00
6,200.0	14.46	323.00	6,029.7	1,088.8	-820.3	1,361.0	0.00	0.00	0.00
6,300.0	14.46	323.00	6,126.5	1,108.7	-835.4	1,385.9	0.00	0.00	0.00
6,400.0	14.46	323.00	6,223.3	1,128.7	-850.4	1,410.8	0.00	0.00	0.00
6,500.0	14.46	323.00	6,320.2	1,148.6	-865.4	1,435.8	0.00	0.00	0.00
6,600.0	14.46	323.00	6,417.0	1,168.6	-880.4	1,460.7	0.00	0.00	0.00
6,700.0	14.46	323.00	6,513.8	1,188.5	-895.5	1,485.6	0.00	0.00	0.00
6,800.0	14.46	323.00	6,610.7	1,208.4	-910.5	1,510.6	0.00	0.00	0.00
6,900.0	14.46	323.00	6,707.5	1,228.4	-925.5	1,535.5	0.00	0.00	0.00
7,000.0	14.46	323.00	6,804.3	1,248.3	-940.5	1,560.4	0.00	0.00	0.00
7,100.0	14.46	323.00	6,901.2	1,268.3	-955.6	1,585.3	0.00	0.00	0.00
7,200.0	14.46	323.00	6,998.0	1,288.2	-970.6	1,610.3	0.00	0.00	0.00
Start Drop -3.00									
7,242.5	14.46	323.00	7,039.2	1,296.7	-977.0	1,620.9	0.00	0.00	0.00
7,300.0	12.73	323.00	7,095.0	1,307.5	-985.1	1,634.3	3.00	-3.00	0.00
7,400.0	9.73	323.00	7,193.1	1,323.0	-996.8	1,653.8	3.00	-3.00	0.00
7,500.0	6.73	323.00	7,292.1	1,334.5	-1,005.4	1,668.1	3.00	-3.00	0.00
7,600.0	3.73	323.00	7,391.6	1,341.7	-1,010.9	1,677.2	3.00	-3.00	0.00
7,700.0	0.73	323.00	7,491.5	1,344.9	-1,013.3	1,681.1	3.00	-3.00	0.00
Start DLS 1.50 TFO 215.00 - OHIO_CREEK									
7,724.5	0.00	0.00	7,516.0	1,345.0	-1,013.4	1,681.2	3.00	-3.00	0.00
Start 5611.2 hold at 7792.1 MD									
7,792.1	1.02	215.00	7,583.7	1,344.5	-1,013.7	1,681.1	1.50	1.50	0.00
7,800.0	1.02	215.00	7,591.5	1,344.4	-1,013.8	1,681.0	0.00	0.00	0.00
7,900.0	1.02	215.00	7,691.5	1,342.9	-1,014.8	1,680.6	0.00	0.00	0.00
8,000.0	1.02	215.00	7,791.5	1,341.5	-1,015.8	1,680.1	0.00	0.00	0.00
8,100.0	1.02	215.00	7,891.5	1,340.0	-1,016.8	1,679.7	0.00	0.00	0.00
8,200.0	1.02	215.00	7,991.5	1,338.6	-1,017.9	1,679.2	0.00	0.00	0.00
8,300.0	1.02	215.00	8,091.5	1,337.1	-1,018.9	1,678.8	0.00	0.00	0.00
8,400.0	1.02	215.00	8,191.4	1,335.7	-1,019.9	1,678.3	0.00	0.00	0.00
WILLIAMS_FORK									
8,474.6	1.02	215.00	8,266.0	1,334.6	-1,020.6	1,678.0	0.00	0.00	0.00
8,500.0	1.02	215.00	8,291.4	1,334.2	-1,020.9	1,677.9	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RNPU B27 FED 15B-22 197 - Slot 15B-22
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 6540.0usft (30')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 6540.0usft (30')
Site:	PCU B27 197 Pad	North Reference:	True
Well:	RNPU B27 FED 15B-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #1		

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)
8,600.0	1.02	215.00	8,391.4	1,332.8	-1,021.9	1,677.4	0.00	0.00	0.00
8,700.0	1.02	215.00	8,491.4	1,331.3	-1,022.9	1,677.0	0.00	0.00	0.00
8,800.0	1.02	215.00	8,591.4	1,329.9	-1,024.0	1,676.5	0.00	0.00	0.00
8,900.0	1.02	215.00	8,691.4	1,328.4	-1,025.0	1,676.1	0.00	0.00	0.00
9,000.0	1.02	215.00	8,791.4	1,327.0	-1,026.0	1,675.6	0.00	0.00	0.00
9,100.0	1.02	215.00	8,891.3	1,325.5	-1,027.0	1,675.2	0.00	0.00	0.00
9,200.0	1.02	215.00	8,991.3	1,324.1	-1,028.0	1,674.7	0.00	0.00	0.00
9,300.0	1.02	215.00	9,091.3	1,322.6	-1,029.0	1,674.3	0.00	0.00	0.00
9,400.0	1.02	215.00	9,191.3	1,321.2	-1,030.0	1,673.8	0.00	0.00	0.00
9,500.0	1.02	215.00	9,291.3	1,319.7	-1,031.1	1,673.4	0.00	0.00	0.00
9,600.0	1.02	215.00	9,391.3	1,318.3	-1,032.1	1,673.0	0.00	0.00	0.00
9,700.0	1.02	215.00	9,491.2	1,316.8	-1,033.1	1,672.5	0.00	0.00	0.00
9,800.0	1.02	215.00	9,591.2	1,315.4	-1,034.1	1,672.1	0.00	0.00	0.00
9,900.0	1.02	215.00	9,691.2	1,313.9	-1,035.1	1,671.6	0.00	0.00	0.00
10,000.0	1.02	215.00	9,791.2	1,312.5	-1,036.1	1,671.2	0.00	0.00	0.00
10,100.0	1.02	215.00	9,891.2	1,311.0	-1,037.2	1,670.7	0.00	0.00	0.00
10,200.0	1.02	215.00	9,991.2	1,309.6	-1,038.2	1,670.3	0.00	0.00	0.00
10,300.0	1.02	215.00	10,091.1	1,308.1	-1,039.2	1,669.8	0.00	0.00	0.00
10,400.0	1.02	215.00	10,191.1	1,306.7	-1,040.2	1,669.4	0.00	0.00	0.00
10,500.0	1.02	215.00	10,291.1	1,305.2	-1,041.2	1,668.9	0.00	0.00	0.00
10,600.0	1.02	215.00	10,391.1	1,303.8	-1,042.2	1,668.5	0.00	0.00	0.00
10,700.0	1.02	215.00	10,491.1	1,302.3	-1,043.3	1,668.0	0.00	0.00	0.00
10,800.0	1.02	215.00	10,591.1	1,300.9	-1,044.3	1,667.6	0.00	0.00	0.00
10,900.0	1.02	215.00	10,691.1	1,299.4	-1,045.3	1,667.1	0.00	0.00	0.00
11,000.0	1.02	215.00	10,791.0	1,297.9	-1,046.3	1,666.7	0.00	0.00	0.00
11,100.0	1.02	215.00	10,891.0	1,296.5	-1,047.3	1,666.2	0.00	0.00	0.00
11,200.0	1.02	215.00	10,991.0	1,295.0	-1,048.3	1,665.8	0.00	0.00	0.00
11,300.0	1.02	215.00	11,091.0	1,293.6	-1,049.4	1,665.3	0.00	0.00	0.00
CAMEO									
11,359.0	1.02	215.00	11,150.0	1,292.7	-1,050.0	1,665.0	0.00	0.00	0.00
11,400.0	1.02	215.00	11,191.0	1,292.1	-1,050.4	1,664.9	0.00	0.00	0.00
11,500.0	1.02	215.00	11,291.0	1,290.7	-1,051.4	1,664.4	0.00	0.00	0.00
11,600.0	1.02	215.00	11,390.9	1,289.2	-1,052.4	1,664.0	0.00	0.00	0.00
11,700.0	1.02	215.00	11,490.9	1,287.8	-1,053.4	1,663.5	0.00	0.00	0.00
11,800.0	1.02	215.00	11,590.9	1,286.3	-1,054.4	1,663.1	0.00	0.00	0.00
11,900.0	1.02	215.00	11,690.9	1,284.9	-1,055.5	1,662.6	0.00	0.00	0.00
ROLLINS									
11,909.1	1.02	215.00	11,700.0	1,284.8	-1,055.5	1,662.6	0.00	0.00	0.00
12,000.0	1.02	215.00	11,790.9	1,283.4	-1,056.5	1,662.2	0.00	0.00	0.00
COZZETTE									
12,003.1	1.02	215.00	11,794.0	1,283.4	-1,056.5	1,662.1	0.00	0.00	0.00
12,100.0	1.02	215.00	11,890.9	1,282.0	-1,057.5	1,661.7	0.00	0.00	0.00
12,200.0	1.02	215.00	11,990.9	1,280.5	-1,058.5	1,661.3	0.00	0.00	0.00
12,300.0	1.02	215.00	12,090.8	1,279.1	-1,059.5	1,660.8	0.00	0.00	0.00
12,400.0	1.02	215.00	12,190.8	1,277.6	-1,060.5	1,660.4	0.00	0.00	0.00
12,500.0	1.02	215.00	12,290.8	1,276.2	-1,061.6	1,659.9	0.00	0.00	0.00
12,600.0	1.02	215.00	12,390.8	1,274.7	-1,062.6	1,659.5	0.00	0.00	0.00
Corcoran									
12,603.2	1.02	215.00	12,394.0	1,274.7	-1,062.6	1,659.4	0.00	0.00	0.00
12,700.0	1.02	215.00	12,490.8	1,273.3	-1,063.6	1,659.0	0.00	0.00	0.00
12,800.0	1.02	215.00	12,590.8	1,271.8	-1,064.6	1,658.6	0.00	0.00	0.00
12,900.0	1.02	215.00	12,690.7	1,270.4	-1,065.6	1,658.1	0.00	0.00	0.00
13,000.0	1.02	215.00	12,790.7	1,268.9	-1,066.6	1,657.7	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RNPU B27 FED 15B-22 197 - Slot 15B-22
Company:	Caerus Oil & Gas	TVD Reference:	RKB @ 6540.0usft (30')
Project:	Rio Blanco County, CO	MD Reference:	RKB @ 6540.0usft (30')
Site:	PCU B27 197 Pad	North Reference:	True
Well:	RNPU B27 FED 15B-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #1		

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)	
13,100.0	1.02	215.00	12,890.7	1,267.5	-1,067.6	1,657.2	0.00	0.00	0.00	
13,200.0	1.02	215.00	12,990.7	1,266.0	-1,068.7	1,656.8	0.00	0.00	0.00	
13,300.0	1.02	215.00	13,090.7	1,264.6	-1,069.7	1,656.3	0.00	0.00	0.00	
TD at 13403.3										
13,403.3	1.02	215.00	13,194.0	1,263.1	-1,070.7	1,655.8	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	
15B-22 - OHCR - hit/miss target - Shape - Point	0.00	0.00	7,516.0	1,345.0	-1,013.4	14,517,574.53	2,405,060.63	39.944631	-108.272083	
15B-22 - PBHL - plan hits target center - Ellipse (radii L100.0 W50.0 on 215.00 azi)	0.00	0.00	13,194.0	1,263.1	-1,070.7	14,517,490.90	2,405,005.80	39.944406	-108.272287	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,553.9	2,499.0	ORANGE_MARKER				
2,701.6	2,642.0	WASATCH				
5,698.5	5,544.0	WASATCH_G_ZONE				
6,180.7	6,011.0	FORT_UNION				
7,724.5	7,516.0	OHIO_CREEK				
8,474.6	8,266.0	WILLIAMS_FORK				
11,359.0	11,150.0	CAMEO				
11,909.1	11,700.0	ROLLINS				
12,003.1	11,794.0	COZZETTE				
12,603.2	12,394.0	Corcoran				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
500.0	500.0	0.0	0.0	Start Build 3.00	
981.9	976.8	48.3	-36.4	Start 6260.6 hold at 981.9 MD	
7,242.5	7,039.2	1,296.7	-977.0	Start Drop -3.00	
7,724.5	7,516.0	1,345.0	-1,013.4	Start DLS 1.50 TFO 215.00	
7,792.1	7,583.7	1,344.5	-1,013.7	Start 5611.2 hold at 7792.1 MD	
13,403.3	13,194.0	1,263.1	-1,070.7	TD at 13403.3	