

Project: Rio Blanco County, CO
 Site: PCU B27 197 Pad
 Well: RNPU B27 FED 15A-22 197
 Wellbore: OH
 Design: Prelim #1
 Latitude: 39.940960
 Longitude: -108.268479
 Ground Level: 6510.0
 RKB @ 6540.0usft (30')

FORMATION TOP DETAILS			
TVDPath	MDPath	Formation	
2503.0	2571.9	ORANGE_MARKER	
2645.0	2719.9	WASATCH	
5553.0	5750.1	WASATCH_G_ZONE	
6023.0	6239.9	FORT_UNION	
7534.0	7799.1	OHIO_CREEK	
8284.0	8549.3	WILLIAMS_FORK	
11171.0	11436.7	CAMEO	
11721.0	11986.8	ROLLINS	
11815.0	12080.8	COZZETTE	
12415.0	12680.9	Corcoran	

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

WELL DETAILS: RNPU B27 FED 15A-22 197					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14516268.60	2406111.70	39.940960	-108.268479
		6510.0			
		15A-22			

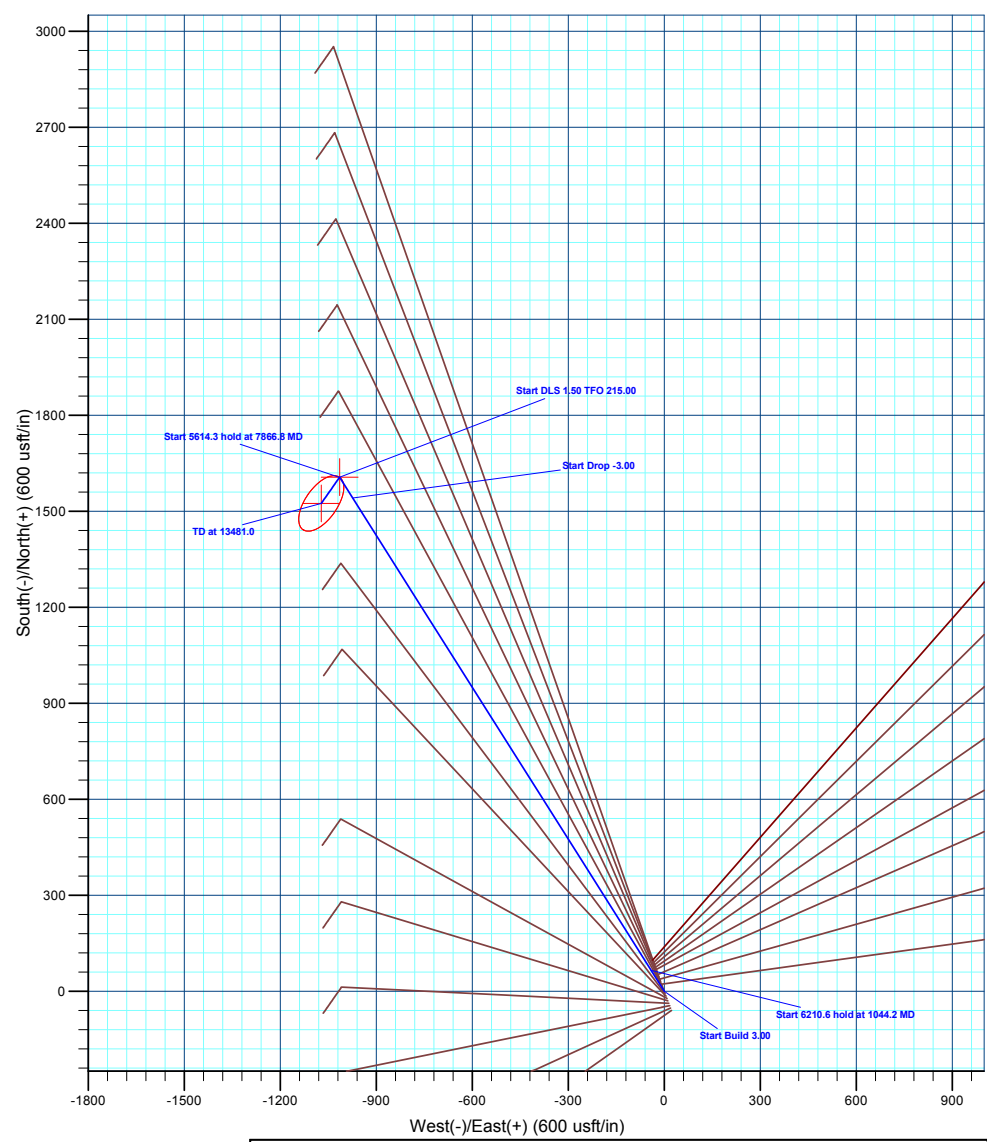
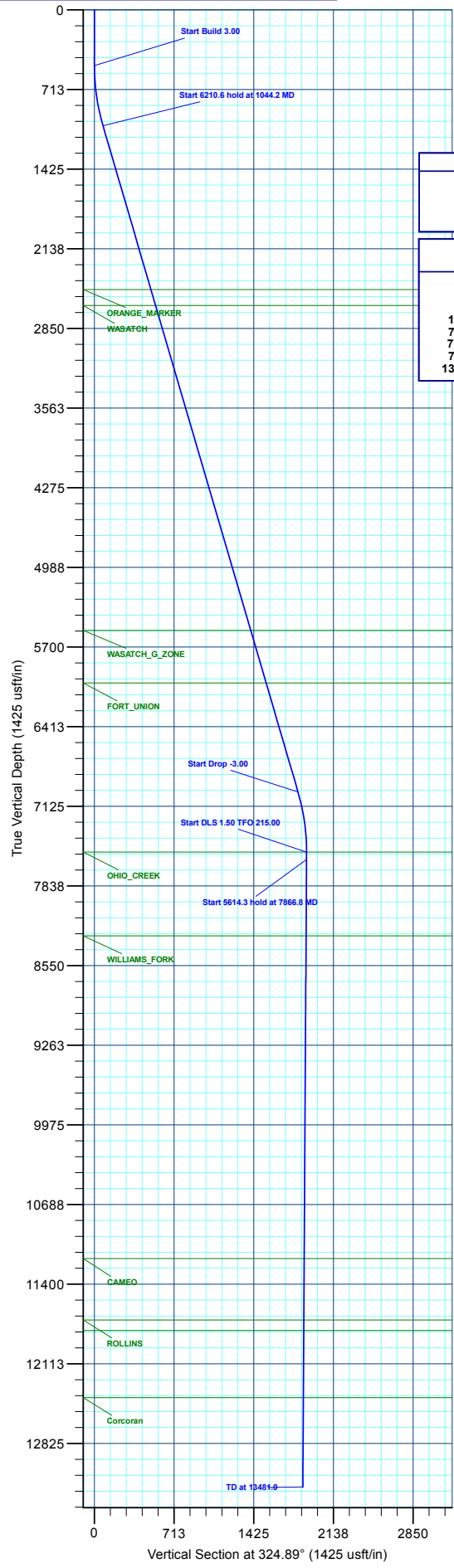
PROJECT DETAILS: Rio Blanco County, CO	
Geodetic System:	Universal Transverse Mercator (US Survey Feet)
Datum:	NAD 1927 - Western US
Ellipsoid:	Clarke 1866
Zone:	Zone 12N (114 W to 108 W)
System Datum:	Mean Sea Level

M Azimuths to True North
 Magnetic North: 9.15°

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
15A-22 - OHCR	7534.0	1606.5	-1014.5	14517843.33	2405048.53	39.945369	-108.272096
15A-22 - PBHL	13215.0	1524.6	-1071.8	14517759.70	2404993.70	39.945144	-108.272301

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		
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	Start Build 3.00	
1044.2	16.33	327.73	1036.9	65.1	-41.1	3.00	327.73	76.9	Start 6210.6 hold at 1044.2 MD	
7254.9	16.33	327.73	6997.1	1541.4	-973.3	0.00	0.00	1820.8	Start Drop -3.00	
7799.1	0.00	0.00	7534.0	1606.5	-1014.5	3.00	180.00	1897.7	Start DLS 1.50 TFO 215.00	
7866.8	1.01	215.00	7601.6	1606.1	-1014.8	1.50	215.00	1897.5	Start 5614.3 hold at 7866.8 MD	
13481.0	1.01	215.00	13215.0	1524.6	-1071.8	0.00	0.00	1863.7	TD at 13481.0	



Plan: Prelim #1 (RNPU B27 FED 15A-22 197/OH)
 Created By: Will Jircik Date: 1:28, November 02 2022



Caerus Oil & Gas

Rio Blanco County, CO

PCU B27 197 Pad

RNPU B27 FED 15A-22 197 - Slot 15A-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 15A-22 197 - Slot 15A-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 15A-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 15A-22 197 - Slot 15A-22					
Well Position	+N/-S	22.5 usft	Northing:	14,516,268.60 usft	Latitude:	39.940960
	+E/-W	-8.4 usft	Easting:	2,406,111.70 usft	Longitude:	-108.268479
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	324.89

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	
1,044.2	16.33	327.73	1,036.9	65.1	-41.1	3.00	3.00	0.00	327.73	
7,254.9	16.33	327.73	6,997.1	1,541.4	-973.3	0.00	0.00	0.00	0.00	
7,799.1	0.00	0.00	7,534.0	1,606.5	-1,014.5	3.00	-3.00	0.00	180.00	15A-22 - OHCR
7,866.8	1.01	215.00	7,601.6	1,606.1	-1,014.8	1.50	1.50	-214.39	215.00	
13,481.0	1.01	215.00	13,215.0	1,524.6	-1,071.8	0.00	0.00	0.00	0.00	15A-22 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RNPU B27 FED 15A-22 197 - Slot 15A-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 15A-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	327.73	600.0	2.2	-1.4	2.6	3.00	3.00	0.00	0.00
700.0	6.00	327.73	699.6	8.8	-5.6	10.4	3.00	3.00	0.00	0.00
800.0	9.00	327.73	798.8	19.9	-12.6	23.5	3.00	3.00	0.00	0.00
900.0	12.00	327.73	897.1	35.3	-22.3	41.7	3.00	3.00	0.00	0.00
1,000.0	15.00	327.73	994.3	55.0	-34.7	65.0	3.00	3.00	0.00	0.00
Start 6210.6 hold at 1044.2 MD										
1,044.2	16.33	327.73	1,036.9	65.1	-41.1	76.9	3.00	3.00	0.00	0.00
1,100.0	16.33	327.73	1,090.4	78.4	-49.5	92.6	0.00	0.00	0.00	0.00
1,200.0	16.33	327.73	1,186.4	102.1	-64.5	120.7	0.00	0.00	0.00	0.00
1,300.0	16.33	327.73	1,282.3	125.9	-79.5	148.7	0.00	0.00	0.00	0.00
1,400.0	16.33	327.73	1,378.3	149.7	-94.5	176.8	0.00	0.00	0.00	0.00
1,500.0	16.33	327.73	1,474.3	173.5	-109.5	204.9	0.00	0.00	0.00	0.00
1,600.0	16.33	327.73	1,570.3	197.2	-124.5	233.0	0.00	0.00	0.00	0.00
1,700.0	16.33	327.73	1,666.2	221.0	-139.6	261.1	0.00	0.00	0.00	0.00
1,800.0	16.33	327.73	1,762.2	244.8	-154.6	289.1	0.00	0.00	0.00	0.00
1,900.0	16.33	327.73	1,858.2	268.5	-169.6	317.2	0.00	0.00	0.00	0.00
2,000.0	16.33	327.73	1,954.1	292.3	-184.6	345.3	0.00	0.00	0.00	0.00
2,100.0	16.33	327.73	2,050.1	316.1	-199.6	373.4	0.00	0.00	0.00	0.00
2,200.0	16.33	327.73	2,146.1	339.9	-214.6	401.4	0.00	0.00	0.00	0.00
2,300.0	16.33	327.73	2,242.0	363.6	-229.6	429.5	0.00	0.00	0.00	0.00
2,400.0	16.33	327.73	2,338.0	387.4	-244.6	457.6	0.00	0.00	0.00	0.00
2,500.0	16.33	327.73	2,434.0	411.2	-259.6	485.7	0.00	0.00	0.00	0.00
ORANGE_MARKER										
2,571.9	16.33	327.73	2,503.0	428.3	-270.4	505.9	0.00	0.00	0.00	0.00
2,600.0	16.33	327.73	2,529.9	434.9	-274.6	513.8	0.00	0.00	0.00	0.00
2,700.0	16.33	327.73	2,625.9	458.7	-289.7	541.8	0.00	0.00	0.00	0.00
WASATCH										
2,719.9	16.33	327.73	2,645.0	463.4	-292.6	547.4	0.00	0.00	0.00	0.00
2,800.0	16.33	327.73	2,721.9	482.5	-304.7	569.9	0.00	0.00	0.00	0.00
2,900.0	16.33	327.73	2,817.8	506.2	-319.7	598.0	0.00	0.00	0.00	0.00
3,000.0	16.33	327.73	2,913.8	530.0	-334.7	626.1	0.00	0.00	0.00	0.00
3,100.0	16.33	327.73	3,009.8	553.8	-349.7	654.1	0.00	0.00	0.00	0.00
3,200.0	16.33	327.73	3,105.7	577.6	-364.7	682.2	0.00	0.00	0.00	0.00
3,300.0	16.33	327.73	3,201.7	601.3	-379.7	710.3	0.00	0.00	0.00	0.00
3,400.0	16.33	327.73	3,297.7	625.1	-394.7	738.4	0.00	0.00	0.00	0.00
3,500.0	16.33	327.73	3,393.6	648.9	-409.7	766.5	0.00	0.00	0.00	0.00
3,600.0	16.33	327.73	3,489.6	672.6	-424.7	794.5	0.00	0.00	0.00	0.00
3,700.0	16.33	327.73	3,585.6	696.4	-439.7	822.6	0.00	0.00	0.00	0.00
3,800.0	16.33	327.73	3,681.5	720.2	-454.8	850.7	0.00	0.00	0.00	0.00
3,900.0	16.33	327.73	3,777.5	743.9	-469.8	878.8	0.00	0.00	0.00	0.00
4,000.0	16.33	327.73	3,873.5	767.7	-484.8	906.9	0.00	0.00	0.00	0.00
4,100.0	16.33	327.73	3,969.4	791.5	-499.8	934.9	0.00	0.00	0.00	0.00
4,200.0	16.33	327.73	4,065.4	815.3	-514.8	963.0	0.00	0.00	0.00	0.00
4,300.0	16.33	327.73	4,161.4	839.0	-529.8	991.1	0.00	0.00	0.00	0.00
4,400.0	16.33	327.73	4,257.3	862.8	-544.8	1,019.2	0.00	0.00	0.00	0.00
4,500.0	16.33	327.73	4,353.3	886.6	-559.8	1,047.2	0.00	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RNPU B27 FED 15A-22 197 - Slot 15A-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 15A-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	16.33	327.73	4,449.3	910.3	-574.8	1,075.3	0.00	0.00	0.00	
4,700.0	16.33	327.73	4,545.2	934.1	-589.8	1,103.4	0.00	0.00	0.00	
4,800.0	16.33	327.73	4,641.2	957.9	-604.9	1,131.5	0.00	0.00	0.00	
4,900.0	16.33	327.73	4,737.2	981.7	-619.9	1,159.6	0.00	0.00	0.00	
5,000.0	16.33	327.73	4,833.1	1,005.4	-634.9	1,187.6	0.00	0.00	0.00	
5,100.0	16.33	327.73	4,929.1	1,029.2	-649.9	1,215.7	0.00	0.00	0.00	
5,200.0	16.33	327.73	5,025.1	1,053.0	-664.9	1,243.8	0.00	0.00	0.00	
5,300.0	16.33	327.73	5,121.0	1,076.7	-679.9	1,271.9	0.00	0.00	0.00	
5,400.0	16.33	327.73	5,217.0	1,100.5	-694.9	1,299.9	0.00	0.00	0.00	
5,500.0	16.33	327.73	5,313.0	1,124.3	-709.9	1,328.0	0.00	0.00	0.00	
5,600.0	16.33	327.73	5,408.9	1,148.0	-724.9	1,356.1	0.00	0.00	0.00	
5,700.0	16.33	327.73	5,504.9	1,171.8	-739.9	1,384.2	0.00	0.00	0.00	
WASATCH_G_ZONE										
5,750.1	16.33	327.73	5,553.0	1,183.7	-747.5	1,398.3	0.00	0.00	0.00	
5,800.0	16.33	327.73	5,600.9	1,195.6	-755.0	1,412.3	0.00	0.00	0.00	
5,900.0	16.33	327.73	5,696.8	1,219.4	-770.0	1,440.3	0.00	0.00	0.00	
6,000.0	16.33	327.73	5,792.8	1,243.1	-785.0	1,468.4	0.00	0.00	0.00	
6,100.0	16.33	327.73	5,888.8	1,266.9	-800.0	1,496.5	0.00	0.00	0.00	
6,200.0	16.33	327.73	5,984.7	1,290.7	-815.0	1,524.6	0.00	0.00	0.00	
FORT_UNION										
6,239.9	16.33	327.73	6,023.0	1,300.1	-821.0	1,535.8	0.00	0.00	0.00	
6,300.0	16.33	327.73	6,080.7	1,314.4	-830.0	1,552.7	0.00	0.00	0.00	
6,400.0	16.33	327.73	6,176.7	1,338.2	-845.0	1,580.7	0.00	0.00	0.00	
6,500.0	16.33	327.73	6,272.6	1,362.0	-860.0	1,608.8	0.00	0.00	0.00	
6,600.0	16.33	327.73	6,368.6	1,385.7	-875.0	1,636.9	0.00	0.00	0.00	
6,700.0	16.33	327.73	6,464.6	1,409.5	-890.0	1,665.0	0.00	0.00	0.00	
6,800.0	16.33	327.73	6,560.5	1,433.3	-905.1	1,693.0	0.00	0.00	0.00	
6,900.0	16.33	327.73	6,656.5	1,457.1	-920.1	1,721.1	0.00	0.00	0.00	
7,000.0	16.33	327.73	6,752.5	1,480.8	-935.1	1,749.2	0.00	0.00	0.00	
7,100.0	16.33	327.73	6,848.4	1,504.6	-950.1	1,777.3	0.00	0.00	0.00	
7,200.0	16.33	327.73	6,944.4	1,528.4	-965.1	1,805.4	0.00	0.00	0.00	
Start Drop -3.00										
7,254.9	16.33	327.73	6,997.1	1,541.4	-973.3	1,820.8	0.00	0.00	0.00	
7,300.0	14.97	327.73	7,040.5	1,551.7	-979.8	1,832.9	3.00	-3.00	0.00	
7,400.0	11.97	327.73	7,137.8	1,571.4	-992.3	1,856.2	3.00	-3.00	0.00	
7,500.0	8.97	327.73	7,236.1	1,586.8	-1,002.0	1,874.3	3.00	-3.00	0.00	
7,600.0	5.97	327.73	7,335.2	1,597.8	-1,008.9	1,887.3	3.00	-3.00	0.00	
7,700.0	2.97	327.73	7,434.9	1,604.4	-1,013.1	1,895.1	3.00	-3.00	0.00	
Start DLS 1.50 TFO 215.00 - OHIO_CREEK										
7,799.1	0.00	0.00	7,534.0	1,606.5	-1,014.5	1,897.7	3.00	-3.00	0.00	
Start 5614.3 hold at 7866.8 MD										
7,866.8	1.01	215.00	7,601.6	1,606.1	-1,014.8	1,897.5	1.50	1.50	0.00	
7,900.0	1.01	215.00	7,634.8	1,605.6	-1,015.1	1,897.3	0.00	0.00	0.00	
8,000.0	1.01	215.00	7,734.8	1,604.1	-1,016.2	1,896.7	0.00	0.00	0.00	
8,100.0	1.01	215.00	7,834.8	1,602.7	-1,017.2	1,896.1	0.00	0.00	0.00	
8,200.0	1.01	215.00	7,934.8	1,601.2	-1,018.2	1,895.5	0.00	0.00	0.00	
8,300.0	1.01	215.00	8,034.8	1,599.8	-1,019.2	1,894.9	0.00	0.00	0.00	
8,400.0	1.01	215.00	8,134.8	1,598.3	-1,020.2	1,894.3	0.00	0.00	0.00	
8,500.0	1.01	215.00	8,234.8	1,596.9	-1,021.2	1,893.7	0.00	0.00	0.00	
WILLIAMS_FORK										
8,549.3	1.01	215.00	8,284.0	1,596.2	-1,021.7	1,893.4	0.00	0.00	0.00	
8,600.0	1.01	215.00	8,334.7	1,595.4	-1,022.2	1,893.1	0.00	0.00	0.00	

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RNPU B27 FED 15A-22 197 - Slot 15A-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 15A-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)
8,700.0	1.01	215.00	8,434.7	1,594.0	-1,023.3	1,892.5	0.00	0.00	0.00
8,800.0	1.01	215.00	8,534.7	1,592.5	-1,024.3	1,891.9	0.00	0.00	0.00
8,900.0	1.01	215.00	8,634.7	1,591.1	-1,025.3	1,891.3	0.00	0.00	0.00
9,000.0	1.01	215.00	8,734.7	1,589.6	-1,026.3	1,890.7	0.00	0.00	0.00
9,100.0	1.01	215.00	8,834.7	1,588.2	-1,027.3	1,890.1	0.00	0.00	0.00
9,200.0	1.01	215.00	8,934.6	1,586.7	-1,028.3	1,889.5	0.00	0.00	0.00
9,300.0	1.01	215.00	9,034.6	1,585.3	-1,029.4	1,888.9	0.00	0.00	0.00
9,400.0	1.01	215.00	9,134.6	1,583.8	-1,030.4	1,888.3	0.00	0.00	0.00
9,500.0	1.01	215.00	9,234.6	1,582.4	-1,031.4	1,887.7	0.00	0.00	0.00
9,600.0	1.01	215.00	9,334.6	1,580.9	-1,032.4	1,887.1	0.00	0.00	0.00
9,700.0	1.01	215.00	9,434.6	1,579.5	-1,033.4	1,886.5	0.00	0.00	0.00
9,800.0	1.01	215.00	9,534.5	1,578.0	-1,034.4	1,885.9	0.00	0.00	0.00
9,900.0	1.01	215.00	9,634.5	1,576.6	-1,035.5	1,885.2	0.00	0.00	0.00
10,000.0	1.01	215.00	9,734.5	1,575.1	-1,036.5	1,884.6	0.00	0.00	0.00
10,100.0	1.01	215.00	9,834.5	1,573.7	-1,037.5	1,884.0	0.00	0.00	0.00
10,200.0	1.01	215.00	9,934.5	1,572.2	-1,038.5	1,883.4	0.00	0.00	0.00
10,300.0	1.01	215.00	10,034.5	1,570.8	-1,039.5	1,882.8	0.00	0.00	0.00
10,400.0	1.01	215.00	10,134.5	1,569.3	-1,040.5	1,882.2	0.00	0.00	0.00
10,500.0	1.01	215.00	10,234.4	1,567.9	-1,041.5	1,881.6	0.00	0.00	0.00
10,600.0	1.01	215.00	10,334.4	1,566.4	-1,042.6	1,881.0	0.00	0.00	0.00
10,700.0	1.01	215.00	10,434.4	1,565.0	-1,043.6	1,880.4	0.00	0.00	0.00
10,800.0	1.01	215.00	10,534.4	1,563.5	-1,044.6	1,879.8	0.00	0.00	0.00
10,900.0	1.01	215.00	10,634.4	1,562.1	-1,045.6	1,879.2	0.00	0.00	0.00
11,000.0	1.01	215.00	10,734.4	1,560.6	-1,046.6	1,878.6	0.00	0.00	0.00
11,100.0	1.01	215.00	10,834.3	1,559.2	-1,047.6	1,878.0	0.00	0.00	0.00
11,200.0	1.01	215.00	10,934.3	1,557.7	-1,048.7	1,877.4	0.00	0.00	0.00
11,300.0	1.01	215.00	11,034.3	1,556.3	-1,049.7	1,876.8	0.00	0.00	0.00
11,400.0	1.01	215.00	11,134.3	1,554.8	-1,050.7	1,876.2	0.00	0.00	0.00
CAMEO									
11,436.7	1.01	215.00	11,171.0	1,554.3	-1,051.1	1,876.0	0.00	0.00	0.00
11,500.0	1.01	215.00	11,234.3	1,553.4	-1,051.7	1,875.6	0.00	0.00	0.00
11,600.0	1.01	215.00	11,334.3	1,551.9	-1,052.7	1,875.0	0.00	0.00	0.00
11,700.0	1.01	215.00	11,434.3	1,550.5	-1,053.7	1,874.4	0.00	0.00	0.00
11,800.0	1.01	215.00	11,534.2	1,549.0	-1,054.7	1,873.8	0.00	0.00	0.00
11,900.0	1.01	215.00	11,634.2	1,547.6	-1,055.8	1,873.2	0.00	0.00	0.00
ROLLINS									
11,986.8	1.01	215.00	11,721.0	1,546.3	-1,056.6	1,872.7	0.00	0.00	0.00
12,000.0	1.01	215.00	11,734.2	1,546.1	-1,056.8	1,872.6	0.00	0.00	0.00
COZZETTE									
12,080.8	1.01	215.00	11,815.0	1,544.9	-1,057.6	1,872.1	0.00	0.00	0.00
12,100.0	1.01	215.00	11,834.2	1,544.7	-1,057.8	1,872.0	0.00	0.00	0.00
12,200.0	1.01	215.00	11,934.2	1,543.2	-1,058.8	1,871.4	0.00	0.00	0.00
12,300.0	1.01	215.00	12,034.2	1,541.8	-1,059.8	1,870.8	0.00	0.00	0.00
12,400.0	1.01	215.00	12,134.1	1,540.3	-1,060.8	1,870.2	0.00	0.00	0.00
12,500.0	1.01	215.00	12,234.1	1,538.9	-1,061.9	1,869.6	0.00	0.00	0.00
12,600.0	1.01	215.00	12,334.1	1,537.4	-1,062.9	1,869.0	0.00	0.00	0.00
Corcoran									
12,680.9	1.01	215.00	12,415.0	1,536.2	-1,063.7	1,868.5	0.00	0.00	0.00
12,700.0	1.01	215.00	12,434.1	1,536.0	-1,063.9	1,868.4	0.00	0.00	0.00
12,800.0	1.01	215.00	12,534.1	1,534.5	-1,064.9	1,867.8	0.00	0.00	0.00
12,900.0	1.01	215.00	12,634.1	1,533.1	-1,065.9	1,867.2	0.00	0.00	0.00
13,000.0	1.01	215.00	12,734.0	1,531.6	-1,066.9	1,866.6	0.00	0.00	0.00
13,100.0	1.01	215.00	12,834.0	1,530.2	-1,068.0	1,866.0	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RNPU B27 FED 15A-22 197 - Slot 15A-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 15A-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)	
13,200.0	1.01	215.00	12,934.0	1,528.7	-1,069.0	1,865.4	0.00	0.00	0.00	
13,300.0	1.01	215.00	13,034.0	1,527.3	-1,070.0	1,864.8	0.00	0.00	0.00	
13,400.0	1.01	215.00	13,134.0	1,525.8	-1,071.0	1,864.2	0.00	0.00	0.00	
TD at 13481.0										
13,481.0	1.01	215.00	13,215.0	1,524.6	-1,071.8	1,863.7	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	
15A-22 - OHCR - hit/miss target - Shape - Point	0.00	0.00	7,534.0	1,606.5	-1,014.5	14,517,843.33	2,405,048.53	39.945369	-108.272096	
15A-22 - PBHL - plan hits target center - Ellipse (radii L100.0 W50.0 on 215.00 azi)	0.00	0.00	13,215.0	1,524.6	-1,071.8	14,517,759.70	2,404,993.70	39.945144	-108.272301	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,571.9	2,503.0	ORANGE_MARKER				
2,719.9	2,645.0	WASATCH				
5,750.1	5,553.0	WASATCH_G_ZONE				
6,239.9	6,023.0	FORT_UNION				
7,799.1	7,534.0	OHIO_CREEK				
8,549.3	8,284.0	WILLIAMS_FORK				
11,436.7	11,171.0	CAMEO				
11,986.8	11,721.0	ROLLINS				
12,080.8	11,815.0	COZZETTE				
12,680.9	12,415.0	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	
1,044.2	1,036.9	65.1	-41.1	Start 6210.6 hold at 1044.2 MD	
7,254.9	6,997.1	1,541.4	-973.3	Start Drop -3.00	
7,799.1	7,534.0	1,606.5	-1,014.5	Start DLS 1.50 TFO 215.00	
7,866.8	7,601.6	1,606.1	-1,014.8	Start 5614.3 hold at 7866.8 MD	
13,481.0	13,215.0	1,524.6	-1,071.8	TD at 13481.0	