

Project: Rio Blanco County, CO
 Site: PCU B27 197 Pad
 Well: RNPU B27 FED 25B-22 197
 Wellbore: OH
 Design: Prelim #4
 Latitude: 39.941207
 Longitude: -108.268599
 Ground Level: 6510.0
 RKB @ 6540.0usft (30')

FORMATION TOP DETAILS		
TVDPATH	MDPATH	FORMATION
2479.0	2658.0	Orange Marker
2626.0	2820.6	Wasatch
5584.0	6091.1	Wasatch G
6067.0	6625.1	Fort Union
7583.0	8242.2	Ohio Creek
8333.0	8992.3	Williams Fork
11306.0	11967.7	Cameo
11859.0	12517.8	Rollins
11930.0	12589.8	Cozzette
12530.0	13189.9	Corcoran

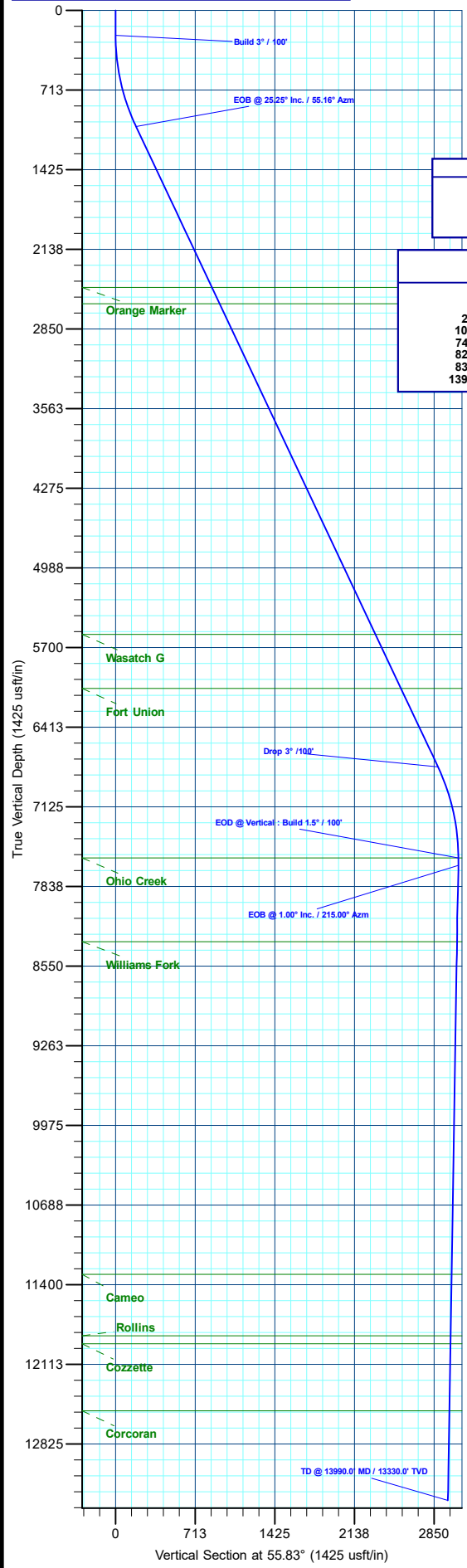
REFERENCE INFORMATION	
Co-ordinate (N/E) Reference:	Well RNPU B27 FED 25B-22 197 - Slot 25B-22, True North
Vertical (TVD) Reference:	RKB @ 6540.0usft (30')
Section (VS) Reference:	Slot - 25B-22(0.0N, 0.0E)
Measured Depth Reference:	RKB @ 6540.0usft (30')
Calculation Method:	Minimum Curvature

WELL DETAILS: RNPU B27 FED 25B-22 197					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14516357.50	6510.0 2406075.40	39.941207	-108.268599

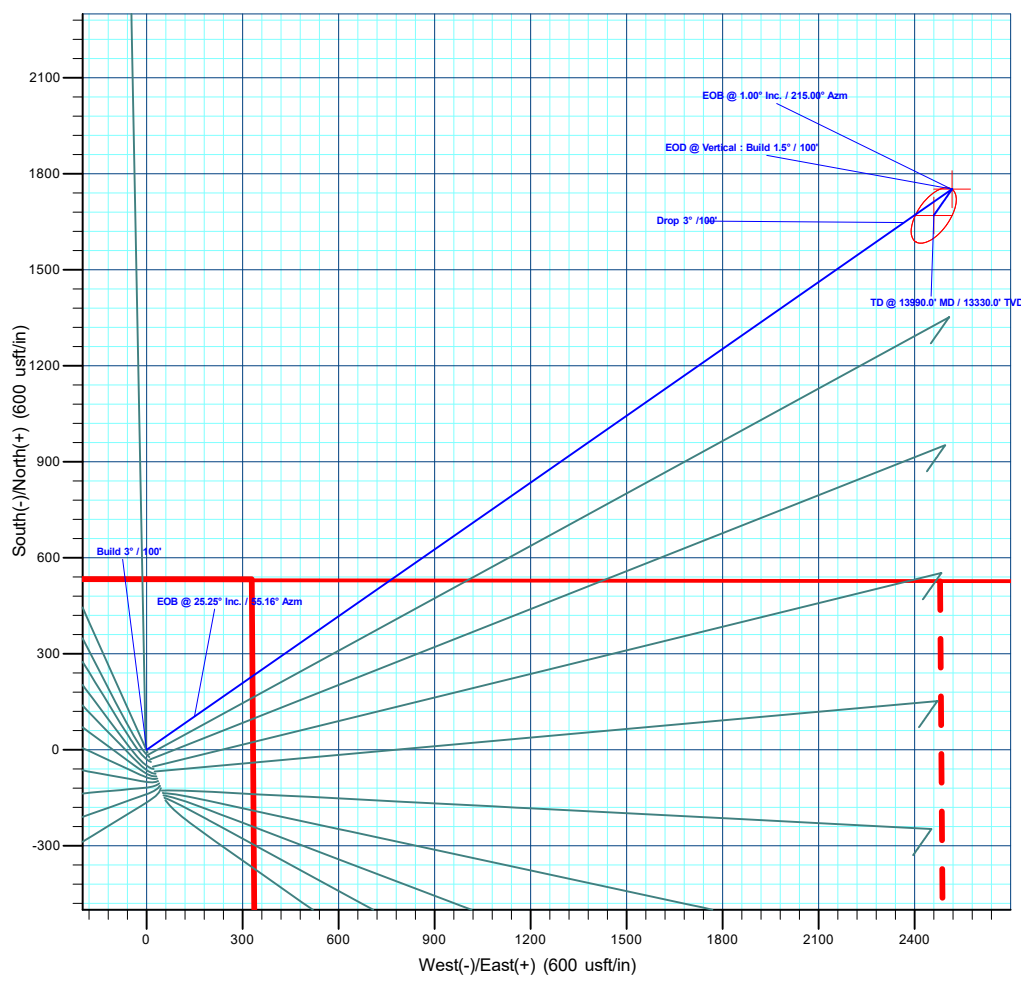
PROJECT DETAILS: Rio Blanco County, CO	
Geodetic System:	Universal Transverse Mercator (US Survey Feet)
Datum:	NAD 1927 - Western US
Ellipsoid:	Clarke 1866
Zone:	Zone 12N (114 W to 108 W)
System Datum:	Mean Sea Level

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
25B-22 - OHCR	7583.0	1751.9	2517.2	14518185.63	2408537.83	39.946015	-108.259624
25B-22 - PBHL	13330.0	1670.0	2459.9	14518102.00	2408483.00	39.945790	-108.259828

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'	
225.0	0.00	0.00	225.0	0.0	0.0	0.00	0.00	0.0	EOB @ 25.25° Inc. / 55.16° Azm	
1066.7	25.25	55.16	1039.7	104.2	149.8	3.00	55.16	182.5	Drop 3° / 100'	
7400.5	25.25	55.16	6768.3	1647.6	2367.5	0.00	0.00	2884.2	EOB @ Vertical : Build 1.5° / 100'	
8242.2	0.00	0.00	7583.0	1751.9	2517.2	3.00	180.00	3066.7	EOB @ 1.00° Inc. / 215.00° Azm	
8309.0	1.00	215.00	7649.8	1751.4	2516.9	1.50	215.00	3066.1	EOB @ 1.00° Inc. / 215.00° Azm	
13990.0	1.00	215.00	13330.0	1670.0	2459.9	0.00	0.00	2973.2	TD @ 13990.0' MD / 13330.0' TVD	



T M
 Azimuths to True North
 Magnetic North: 9.15°
 Magnetic Field
 Strength: 51080.6nT
 Dip Angle: 65.83°
 Date: 9/30/2022
 Model: HDGM2022



Plan: Prelim #4 (RNPU B27 FED 25B-22 197/OH)
 Created By: Will Jircik Date: 13:37, June 18 2025



QB Energy Operating, LLC

Rio Blanco County, CO

PCU B27 197 Pad

RNPU B27 FED 25B-22 197 - Slot 25B-22

OH

Plan: Prelim #4

KLX Well Planning Report

18 June, 2025



Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well RNPU B27 FED 25B-22 197 - Slot 25B-22
Company:	QB Energy Operating, LLC	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 25B-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #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	PCU B27 197 Pad				
Site Position:		Northing:	14,516,246.39 usft	Latitude:	39.940899
From:	Map	Easting:	2,406,120.81 usft	Longitude:	-108.268449
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.75 °

Well	RNPU B27 FED 25B-22 197 - Slot 25B-22					
Well Position	+N/-S	112.5 usft	Northing:	14,516,357.50 usft	Latitude:	39.941207
	+E/-W	-42.0 usft	Easting:	2,406,075.40 usft	Longitude:	-108.268599
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 #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	55.83

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	
1,066.7	25.25	55.16	1,039.7	104.2	149.8	3.00	3.00	0.00	55.16	
7,400.5	25.25	55.16	6,768.3	1,647.6	2,367.5	0.00	0.00	0.00	0.00	
8,242.2	0.00	0.00	7,583.0	1,751.9	2,517.2	3.00	-3.00	0.00	180.00	25B-22 - OHCR
8,309.0	1.00	215.00	7,649.8	1,751.4	2,516.9	1.50	1.50	-216.91	215.00	
13,990.0	1.00	215.00	13,330.0	1,670.0	2,459.9	0.00	0.00	0.00	0.00	25B-22 - PBHL

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well RNPU B27 FED 25B-22 197 - Slot 25B-22
Company:	QB Energy Operating, LLC	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 25B-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #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	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
Build 3° / 100'										
225.0	0.00	0.00	225.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
300.0	2.25	55.16	300.0	0.8	1.2	1.5	3.00	3.00	0.00	0.00
400.0	5.25	55.16	399.8	4.6	6.6	8.0	3.00	3.00	0.00	0.00
500.0	8.25	55.16	499.1	11.3	16.2	19.8	3.00	3.00	0.00	0.00
600.0	11.25	55.16	597.6	21.0	30.1	36.7	3.00	3.00	0.00	0.00
700.0	14.25	55.16	695.1	33.6	48.2	58.8	3.00	3.00	0.00	0.00
800.0	17.25	55.16	791.4	49.1	70.5	85.9	3.00	3.00	0.00	0.00
900.0	20.25	55.16	886.0	67.4	96.9	118.0	3.00	3.00	0.00	0.00
1,000.0	23.25	55.16	978.9	88.6	127.3	155.1	3.00	3.00	0.00	0.00
EOB @ 25.25° Inc. / 55.16° Azm										
1,066.7	25.25	55.16	1,039.7	104.2	149.8	182.5	3.00	3.00	0.00	0.00
1,100.0	25.25	55.16	1,069.8	112.4	161.4	196.7	0.00	0.00	0.00	0.00
1,200.0	25.25	55.16	1,160.3	136.7	196.5	239.3	0.00	0.00	0.00	0.00
1,300.0	25.25	55.16	1,250.7	161.1	231.5	282.0	0.00	0.00	0.00	0.00
1,400.0	25.25	55.16	1,341.2	185.5	266.5	324.6	0.00	0.00	0.00	0.00
1,500.0	25.25	55.16	1,431.6	209.8	301.5	367.3	0.00	0.00	0.00	0.00
1,600.0	25.25	55.16	1,522.1	234.2	336.5	410.0	0.00	0.00	0.00	0.00
1,700.0	25.25	55.16	1,612.5	258.6	371.5	452.6	0.00	0.00	0.00	0.00
1,800.0	25.25	55.16	1,702.9	282.9	406.5	495.3	0.00	0.00	0.00	0.00
1,900.0	25.25	55.16	1,793.4	307.3	441.6	537.9	0.00	0.00	0.00	0.00
2,000.0	25.25	55.16	1,883.8	331.7	476.6	580.6	0.00	0.00	0.00	0.00
2,100.0	25.25	55.16	1,974.3	356.0	511.6	623.2	0.00	0.00	0.00	0.00
2,200.0	25.25	55.16	2,064.7	380.4	546.6	665.9	0.00	0.00	0.00	0.00
2,300.0	25.25	55.16	2,155.2	404.8	581.6	708.5	0.00	0.00	0.00	0.00
2,400.0	25.25	55.16	2,245.6	429.1	616.6	751.2	0.00	0.00	0.00	0.00
2,500.0	25.25	55.16	2,336.1	453.5	651.6	793.9	0.00	0.00	0.00	0.00
2,600.0	25.25	55.16	2,426.5	477.9	686.6	836.5	0.00	0.00	0.00	0.00
Orange Marker										
2,658.0	25.25	55.16	2,479.0	492.0	707.0	861.3	0.00	0.00	0.00	0.00
2,700.0	25.25	55.16	2,517.0	502.2	721.7	879.2	0.00	0.00	0.00	0.00
2,800.0	25.25	55.16	2,607.4	526.6	756.7	921.8	0.00	0.00	0.00	0.00
Wasatch										
2,820.6	25.25	55.16	2,626.0	531.6	763.9	930.6	0.00	0.00	0.00	0.00
2,900.0	25.25	55.16	2,697.8	551.0	791.7	964.5	0.00	0.00	0.00	0.00
3,000.0	25.25	55.16	2,788.3	575.3	826.7	1,007.1	0.00	0.00	0.00	0.00
3,100.0	25.25	55.16	2,878.7	599.7	861.7	1,049.8	0.00	0.00	0.00	0.00
3,200.0	25.25	55.16	2,969.2	624.1	896.7	1,092.4	0.00	0.00	0.00	0.00
3,300.0	25.25	55.16	3,059.6	648.4	931.7	1,135.1	0.00	0.00	0.00	0.00
3,400.0	25.25	55.16	3,150.1	672.8	966.8	1,177.8	0.00	0.00	0.00	0.00
3,500.0	25.25	55.16	3,240.5	697.2	1,001.8	1,220.4	0.00	0.00	0.00	0.00
3,600.0	25.25	55.16	3,331.0	721.6	1,036.8	1,263.1	0.00	0.00	0.00	0.00
3,700.0	25.25	55.16	3,421.4	745.9	1,071.8	1,305.7	0.00	0.00	0.00	0.00
3,800.0	25.25	55.16	3,511.8	770.3	1,106.8	1,348.4	0.00	0.00	0.00	0.00
3,900.0	25.25	55.16	3,602.3	794.7	1,141.8	1,391.0	0.00	0.00	0.00	0.00
4,000.0	25.25	55.16	3,692.7	819.0	1,176.8	1,433.7	0.00	0.00	0.00	0.00
4,100.0	25.25	55.16	3,783.2	843.4	1,211.9	1,476.3	0.00	0.00	0.00	0.00
4,200.0	25.25	55.16	3,873.6	867.8	1,246.9	1,519.0	0.00	0.00	0.00	0.00
4,300.0	25.25	55.16	3,964.1	892.1	1,281.9	1,561.7	0.00	0.00	0.00	0.00
4,400.0	25.25	55.16	4,054.5	916.5	1,316.9	1,604.3	0.00	0.00	0.00	0.00

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well RNPU B27 FED 25B-22 197 - Slot 25B-22
Company:	QB Energy Operating, LLC	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 25B-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #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)
4,500.0	25.25	55.16	4,145.0	940.9	1,351.9	1,647.0	0.00	0.00	0.00
4,600.0	25.25	55.16	4,235.4	965.2	1,386.9	1,689.6	0.00	0.00	0.00
4,700.0	25.25	55.16	4,325.8	989.6	1,421.9	1,732.3	0.00	0.00	0.00
4,800.0	25.25	55.16	4,416.3	1,014.0	1,456.9	1,774.9	0.00	0.00	0.00
4,900.0	25.25	55.16	4,506.7	1,038.3	1,492.0	1,817.6	0.00	0.00	0.00
5,000.0	25.25	55.16	4,597.2	1,062.7	1,527.0	1,860.2	0.00	0.00	0.00
5,100.0	25.25	55.16	4,687.6	1,087.1	1,562.0	1,902.9	0.00	0.00	0.00
5,200.0	25.25	55.16	4,778.1	1,111.4	1,597.0	1,945.6	0.00	0.00	0.00
5,300.0	25.25	55.16	4,868.5	1,135.8	1,632.0	1,988.2	0.00	0.00	0.00
5,400.0	25.25	55.16	4,959.0	1,160.2	1,667.0	2,030.9	0.00	0.00	0.00
5,500.0	25.25	55.16	5,049.4	1,184.5	1,702.0	2,073.5	0.00	0.00	0.00
5,600.0	25.25	55.16	5,139.9	1,208.9	1,737.1	2,116.2	0.00	0.00	0.00
5,700.0	25.25	55.16	5,230.3	1,233.3	1,772.1	2,158.8	0.00	0.00	0.00
5,800.0	25.25	55.16	5,320.7	1,257.6	1,807.1	2,201.5	0.00	0.00	0.00
5,900.0	25.25	55.16	5,411.2	1,282.0	1,842.1	2,244.1	0.00	0.00	0.00
6,000.0	25.25	55.16	5,501.6	1,306.4	1,877.1	2,286.8	0.00	0.00	0.00
Wasatch G									
6,091.1	25.25	55.16	5,584.0	1,328.6	1,909.0	2,325.6	0.00	0.00	0.00
6,100.0	25.25	55.16	5,592.1	1,330.7	1,912.1	2,329.5	0.00	0.00	0.00
6,200.0	25.25	55.16	5,682.5	1,355.1	1,947.1	2,372.1	0.00	0.00	0.00
6,300.0	25.25	55.16	5,773.0	1,379.5	1,982.1	2,414.8	0.00	0.00	0.00
6,400.0	25.25	55.16	5,863.4	1,403.8	2,017.2	2,457.4	0.00	0.00	0.00
6,500.0	25.25	55.16	5,953.9	1,428.2	2,052.2	2,500.1	0.00	0.00	0.00
6,600.0	25.25	55.16	6,044.3	1,452.6	2,087.2	2,542.7	0.00	0.00	0.00
Fort Union									
6,625.1	25.25	55.16	6,067.0	1,458.7	2,096.0	2,553.4	0.00	0.00	0.00
6,700.0	25.25	55.16	6,134.7	1,477.0	2,122.2	2,585.4	0.00	0.00	0.00
6,800.0	25.25	55.16	6,225.2	1,501.3	2,157.2	2,628.0	0.00	0.00	0.00
6,900.0	25.25	55.16	6,315.6	1,525.7	2,192.2	2,670.7	0.00	0.00	0.00
7,000.0	25.25	55.16	6,406.1	1,550.1	2,227.2	2,713.4	0.00	0.00	0.00
7,100.0	25.25	55.16	6,496.5	1,574.4	2,262.3	2,756.0	0.00	0.00	0.00
7,200.0	25.25	55.16	6,587.0	1,598.8	2,297.3	2,798.7	0.00	0.00	0.00
7,300.0	25.25	55.16	6,677.4	1,623.2	2,332.3	2,841.3	0.00	0.00	0.00
Drop 3° /100'									
7,400.5	25.25	55.16	6,768.3	1,647.6	2,367.5	2,884.2	0.00	0.00	0.00
7,500.0	22.27	55.16	6,859.4	1,670.5	2,400.4	2,924.3	3.00	-3.00	0.00
7,600.0	19.27	55.16	6,952.9	1,690.8	2,429.5	2,959.7	3.00	-3.00	0.00
7,700.0	16.27	55.16	7,048.1	1,708.2	2,454.5	2,990.2	3.00	-3.00	0.00
7,800.0	13.27	55.16	7,144.8	1,722.8	2,475.4	3,015.7	3.00	-3.00	0.00
7,900.0	10.27	55.16	7,242.7	1,734.4	2,492.2	3,036.1	3.00	-3.00	0.00
8,000.0	7.27	55.16	7,341.5	1,743.1	2,504.7	3,051.3	3.00	-3.00	0.00
8,100.0	4.27	55.16	7,441.0	1,748.9	2,512.9	3,061.4	3.00	-3.00	0.00
8,200.0	1.27	55.16	7,540.8	1,751.6	2,516.9	3,066.2	3.00	-3.00	0.00
EOD @ Vertical : Build 1.5° / 100' - Ohio Creek									
8,242.2	0.00	0.00	7,583.0	1,751.9	2,517.2	3,066.7	3.00	-3.00	0.00
EOB @ 1.00° Inc. / 215.00° Azm									
8,309.0	1.00	215.00	7,649.8	1,751.4	2,516.9	3,066.1	1.50	1.50	0.00
8,400.0	1.00	215.00	7,740.8	1,750.1	2,516.0	3,064.6	0.00	0.00	0.00
8,500.0	1.00	215.00	7,840.8	1,748.7	2,515.0	3,063.0	0.00	0.00	0.00
8,600.0	1.00	215.00	7,940.8	1,747.2	2,514.0	3,061.3	0.00	0.00	0.00
8,700.0	1.00	215.00	8,040.8	1,745.8	2,513.0	3,059.7	0.00	0.00	0.00
8,800.0	1.00	215.00	8,140.8	1,744.4	2,512.0	3,058.1	0.00	0.00	0.00

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well RNPU B27 FED 25B-22 197 - Slot 25B-22
Company:	QB Energy Operating, LLC	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 25B-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #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)	
8,900.0	1.00	215.00	8,240.7	1,742.9	2,511.0	3,056.4	0.00	0.00	0.00	
Williams Fork										
8,992.3	1.00	215.00	8,333.0	1,741.6	2,510.1	3,054.9	0.00	0.00	0.00	
9,000.0	1.00	215.00	8,340.7	1,741.5	2,510.0	3,054.8	0.00	0.00	0.00	
9,100.0	1.00	215.00	8,440.7	1,740.1	2,509.0	3,053.2	0.00	0.00	0.00	
9,200.0	1.00	215.00	8,540.7	1,738.6	2,508.0	3,051.5	0.00	0.00	0.00	
9,300.0	1.00	215.00	8,640.7	1,737.2	2,507.0	3,049.9	0.00	0.00	0.00	
9,400.0	1.00	215.00	8,740.7	1,735.8	2,506.0	3,048.3	0.00	0.00	0.00	
9,500.0	1.00	215.00	8,840.6	1,734.3	2,505.0	3,046.6	0.00	0.00	0.00	
9,600.0	1.00	215.00	8,940.6	1,732.9	2,504.0	3,045.0	0.00	0.00	0.00	
9,700.0	1.00	215.00	9,040.6	1,731.5	2,502.9	3,043.4	0.00	0.00	0.00	
9,800.0	1.00	215.00	9,140.6	1,730.0	2,501.9	3,041.7	0.00	0.00	0.00	
9,900.0	1.00	215.00	9,240.6	1,728.6	2,500.9	3,040.1	0.00	0.00	0.00	
10,000.0	1.00	215.00	9,340.6	1,727.2	2,499.9	3,038.4	0.00	0.00	0.00	
10,100.0	1.00	215.00	9,440.6	1,725.7	2,498.9	3,036.8	0.00	0.00	0.00	
10,200.0	1.00	215.00	9,540.5	1,724.3	2,497.9	3,035.2	0.00	0.00	0.00	
10,300.0	1.00	215.00	9,640.5	1,722.9	2,496.9	3,033.5	0.00	0.00	0.00	
10,400.0	1.00	215.00	9,740.5	1,721.4	2,495.9	3,031.9	0.00	0.00	0.00	
10,500.0	1.00	215.00	9,840.5	1,720.0	2,494.9	3,030.3	0.00	0.00	0.00	
10,600.0	1.00	215.00	9,940.5	1,718.6	2,493.9	3,028.6	0.00	0.00	0.00	
10,700.0	1.00	215.00	10,040.5	1,717.1	2,492.9	3,027.0	0.00	0.00	0.00	
10,800.0	1.00	215.00	10,140.4	1,715.7	2,491.9	3,025.4	0.00	0.00	0.00	
10,900.0	1.00	215.00	10,240.4	1,714.3	2,490.9	3,023.7	0.00	0.00	0.00	
11,000.0	1.00	215.00	10,340.4	1,712.8	2,489.9	3,022.1	0.00	0.00	0.00	
11,100.0	1.00	215.00	10,440.4	1,711.4	2,488.9	3,020.5	0.00	0.00	0.00	
11,200.0	1.00	215.00	10,540.4	1,710.0	2,487.9	3,018.8	0.00	0.00	0.00	
11,300.0	1.00	215.00	10,640.4	1,708.5	2,486.9	3,017.2	0.00	0.00	0.00	
11,400.0	1.00	215.00	10,740.4	1,707.1	2,485.9	3,015.5	0.00	0.00	0.00	
11,500.0	1.00	215.00	10,840.3	1,705.7	2,484.9	3,013.9	0.00	0.00	0.00	
11,600.0	1.00	215.00	10,940.3	1,704.2	2,483.9	3,012.3	0.00	0.00	0.00	
11,700.0	1.00	215.00	11,040.3	1,702.8	2,482.9	3,010.6	0.00	0.00	0.00	
11,800.0	1.00	215.00	11,140.3	1,701.4	2,481.9	3,009.0	0.00	0.00	0.00	
11,900.0	1.00	215.00	11,240.3	1,699.9	2,480.9	3,007.4	0.00	0.00	0.00	
Cameo										
11,967.7	1.00	215.00	11,308.0	1,699.0	2,480.2	3,006.3	0.00	0.00	0.00	
12,000.0	1.00	215.00	11,340.3	1,698.5	2,479.9	3,005.7	0.00	0.00	0.00	
12,100.0	1.00	215.00	11,440.2	1,697.1	2,478.9	3,004.1	0.00	0.00	0.00	
12,200.0	1.00	215.00	11,540.2	1,695.6	2,477.9	3,002.5	0.00	0.00	0.00	
12,300.0	1.00	215.00	11,640.2	1,694.2	2,476.8	3,000.8	0.00	0.00	0.00	
12,400.0	1.00	215.00	11,740.2	1,692.8	2,475.8	2,999.2	0.00	0.00	0.00	
12,500.0	1.00	215.00	11,840.2	1,691.3	2,474.8	2,997.6	0.00	0.00	0.00	
Rollins										
12,517.8	1.00	215.00	11,858.0	1,691.1	2,474.7	2,997.3	0.00	0.00	0.00	
Cozette										
12,589.8	1.00	215.00	11,930.0	1,690.0	2,473.9	2,996.1	0.00	0.00	0.00	
12,600.0	1.00	215.00	11,940.2	1,689.9	2,473.8	2,995.9	0.00	0.00	0.00	
12,700.0	1.00	215.00	12,040.2	1,688.5	2,472.8	2,994.3	0.00	0.00	0.00	
12,800.0	1.00	215.00	12,140.1	1,687.0	2,471.8	2,992.6	0.00	0.00	0.00	
12,900.0	1.00	215.00	12,240.1	1,685.6	2,470.8	2,991.0	0.00	0.00	0.00	
13,000.0	1.00	215.00	12,340.1	1,684.2	2,469.8	2,989.4	0.00	0.00	0.00	
13,100.0	1.00	215.00	12,440.1	1,682.7	2,468.8	2,987.7	0.00	0.00	0.00	
Corcoran										

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well RNPU B27 FED 25B-22 197 - Slot 25B-22
Company:	QB Energy Operating, LLC	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 25B-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #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)	
13,189.9	1.00	215.00	12,530.0	1,681.4	2,467.9	2,986.3	0.00	0.00	0.00	
13,200.0	1.00	215.00	12,540.1	1,681.3	2,467.8	2,986.1	0.00	0.00	0.00	
13,300.0	1.00	215.00	12,640.1	1,679.9	2,466.8	2,984.5	0.00	0.00	0.00	
13,400.0	1.00	215.00	12,740.0	1,678.4	2,465.8	2,982.8	0.00	0.00	0.00	
13,500.0	1.00	215.00	12,840.0	1,677.0	2,464.8	2,981.2	0.00	0.00	0.00	
13,600.0	1.00	215.00	12,940.0	1,675.6	2,463.8	2,979.6	0.00	0.00	0.00	
13,700.0	1.00	215.00	13,040.0	1,674.1	2,462.8	2,977.9	0.00	0.00	0.00	
13,800.0	1.00	215.00	13,140.0	1,672.7	2,461.8	2,976.3	0.00	0.00	0.00	
13,900.0	1.00	215.00	13,240.0	1,671.3	2,460.8	2,974.7	0.00	0.00	0.00	
TD @ 13990.0' MD / 13330.0' TVD										
13,990.0	1.00	215.00	13,330.0	1,670.0	2,459.9	2,973.2	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	
25B-22 - OHCR - hit/miss target - Shape - plan hits target center - Point	0.00	0.00	7,583.0	1,751.9	2,517.2	14,518,185.63	2,408,537.83	39.946015	-108.259624	
25B-22 - PBHL - plan hits target center - Ellipse (radii L100.0 W50.0 on 215.00 azi)	0.00	0.00	13,330.0	1,670.0	2,459.9	14,518,102.00	2,408,483.00	39.945790	-108.259828	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,658.0	2,479.0	Orange Marker				
2,820.6	2,626.0	Wasatch				
6,091.1	5,584.0	Wasatch G				
6,625.1	6,067.0	Fort Union				
8,242.2	7,583.0	Ohio Creek				
8,992.3	8,333.0	Williams Fork				
11,967.7	11,308.0	Cameo				
12,517.8	11,858.0	Rollins				
12,589.8	11,930.0	Cozzette				
13,189.9	12,530.0	Corcoran				

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well RNPU B27 FED 25B-22 197 - Slot 25B-22
Company:	QB Energy Operating, LLC	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 25B-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #4		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
225.0	225.0	0.0	0.0	Build 3° / 100'
1,066.7	1,039.7	104.2	149.8	EOB @ 25.25° Inc. / 55.16° Azm
7,400.5	6,768.3	1,647.6	2,367.5	Drop 3° / 100'
8,242.2	7,583.0	1,751.9	2,517.2	EOD @ Vertical : Build 1.5° / 100'
8,309.0	7,649.8	1,751.4	2,516.9	EOB @ 1.00° Inc. / 215.00° Azm
13,990.0	13,330.0	1,670.0	2,459.9	TD @ 13990.0' MD / 13330.0' TVD