

Project: Rio Blanco County, CO
 Site: PCU B27 197 Pad
 Well: RNPU B27 FED 25A-22 197
 Wellbore: OH
 Design: Prelim #3
 Latitude: 39.941228
 Longitude: -108.268609
 Ground Level: 6510.0
 RKB @ 6540.0usft (30')

FORMATION TOP DETAILS

TVDPATH	MDPATH	FORMATION
2484.0	2659.5	Orange Marker
2631.0	2821.4	Wasatch
5595.0	6085.1	Wasatch G
6078.0	6617.0	Fort Union
7606.0	8244.0	Ohio Creek
8356.0	8994.2	Williams Fork
11321.0	11959.6	Cameo
11871.0	12509.7	Rollins
11946.0	12584.7	Cozzette
12546.0	13184.8	Corcoran

REFERENCE INFORMATION

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

WELL DETAILS: RNPU B27 FED 25A-22 197

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14516364.90	6510.0 2406072.40	39.941228	-108.268609

PROJECT DETAILS: Rio Blanco County, CO

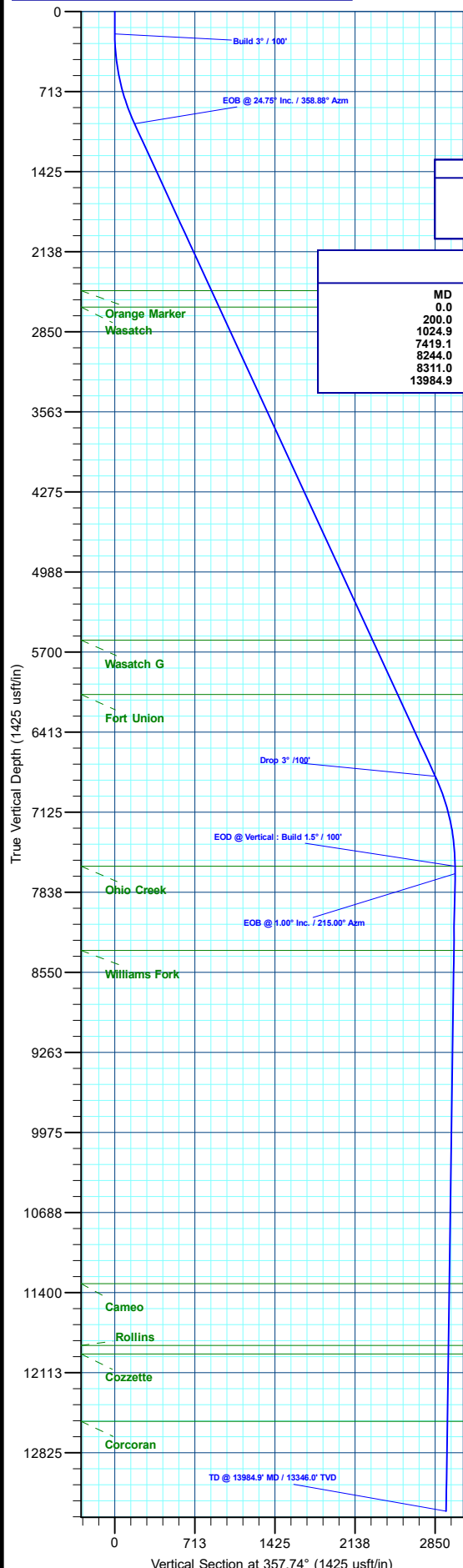
Geodetic System: Universal Transverse Mercator (US Survey Feet)
 Datum: NAD 1927 - Western US
 Ellipsoid: Clarke 1866
 Zone: Zone 12N (114 W to 108 W)
 System Datum: Mean Sea Level

DESIGN TARGET DETAILS

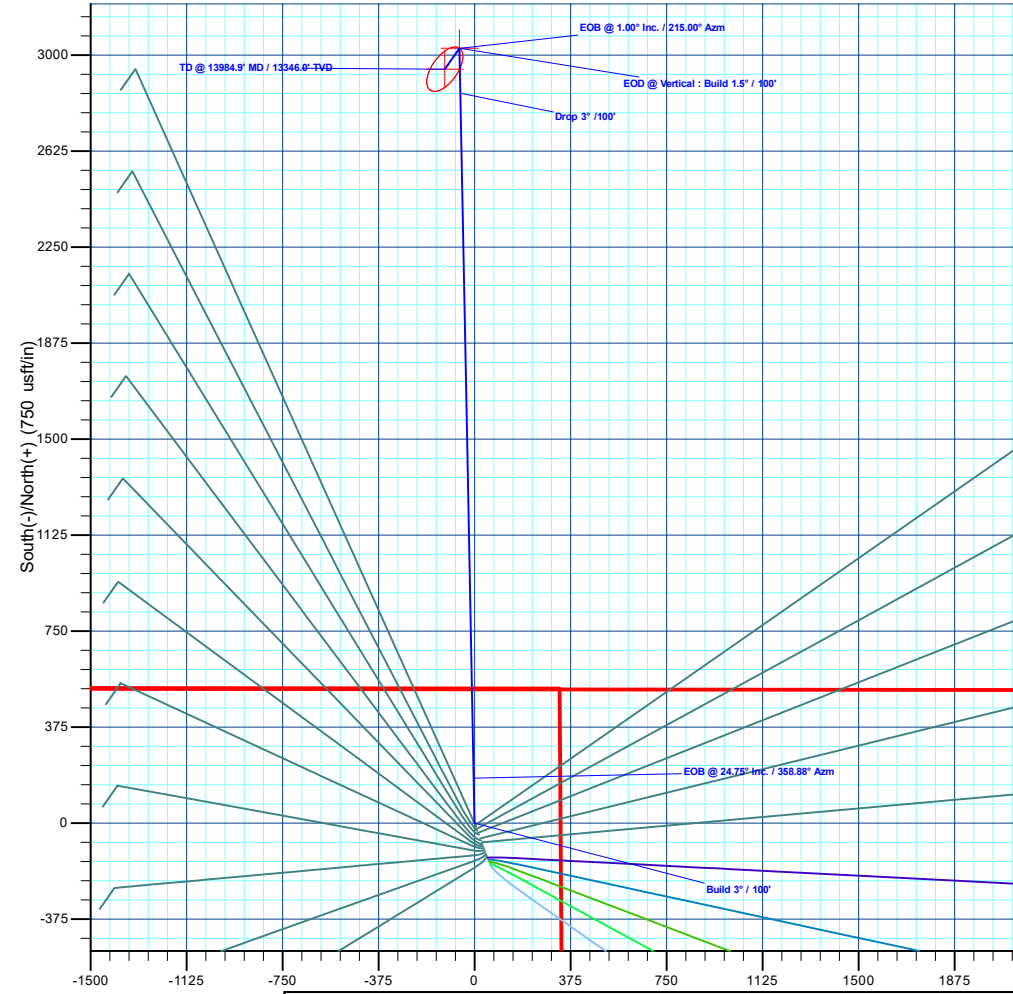
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
25A-22 - OHCR	7606.0	3027.0	-58.9	14519388.63	2405920.83	39.949535	-108.268819
25A-22 - PBHL	13346.0	2945.0	-116.3	14519305.00	2405866.00	39.949310	-108.269023

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'
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	EOB @ 24.75° Inc. / 358.88° Azm
1024.9	24.75	358.88	999.5	175.4	-3.4	3.00	358.88	175.4	Drop 3° / 100'
7419.1	24.75	358.88	6806.5	2851.6	-55.5	0.00	0.00	2851.6	EOB @ Vertical : Build 1.5° / 100'
8244.0	0.00	0.00	7606.0	3027.0	-58.9	3.00	180.00	3026.9	TD @ 13984.9' MD / 13346.0' TVD
8311.0	1.00	215.00	7672.9	3026.5	-59.3	1.50	215.00	3026.5	
13984.9	1.00	215.00	13346.0	2945.0	-116.3	0.00	0.00	2947.3	



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 #3 (RNPU B27 FED 25A-22 197/OH)

Created By: Will Jircik Date: 13:32, June 18 2025



QB Energy Operating, LLC

Rio Blanco County, CO

PCU B27 197 Pad

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

OH

Plan: Prelim #3

KLX Well Planning Report

18 June, 2025



Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well RNPU B27 FED 25A-22 197 - Slot 25A-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 25A-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #3		

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 25A-22 197 - Slot 25A-22					
Well Position	+N/-S	119.9 usft	Northing:	14,516,364.90 usft	Latitude:	39.941228
	+E/-W	-44.8 usft	Easting:	2,406,072.40 usft	Longitude:	-108.268609
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 #3			
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	357.74

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,024.9	24.75	358.88	999.5	175.4	-3.4	3.00	3.00	0.00	358.88	
7,419.1	24.75	358.88	6,806.5	2,851.6	-55.5	0.00	0.00	0.00	0.00	
8,244.0	0.00	0.00	7,606.0	3,027.0	-58.9	3.00	-3.00	0.00	180.00	25A-22 - OHCR
8,311.0	1.00	215.00	7,672.9	3,026.5	-59.3	1.50	1.50	-216.64	215.00	
13,984.9	1.00	215.00	13,346.0	2,945.0	-116.3	0.00	0.00	0.00	0.00	25A-22 - PBHL

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well RNPU B27 FED 25A-22 197 - Slot 25A-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 25A-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #3		

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	
Build 3° / 100'										
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	3.00	358.88	300.0	2.6	-0.1	2.6	3.00	3.00	0.00	
400.0	6.00	358.88	399.6	10.5	-0.2	10.5	3.00	3.00	0.00	
500.0	9.00	358.88	498.8	23.5	-0.5	23.5	3.00	3.00	0.00	
600.0	12.00	358.88	597.1	41.7	-0.8	41.7	3.00	3.00	0.00	
700.0	15.00	358.88	694.3	65.1	-1.3	65.1	3.00	3.00	0.00	
800.0	18.00	358.88	790.2	93.5	-1.8	93.5	3.00	3.00	0.00	
900.0	21.00	358.88	884.4	126.8	-2.5	126.8	3.00	3.00	0.00	
1,000.0	24.00	358.88	976.8	165.1	-3.2	165.1	3.00	3.00	0.00	
EOB @ 24.75° Inc. / 358.88° Azm										
1,024.9	24.75	358.88	999.5	175.4	-3.4	175.4	3.00	3.00	0.00	
1,100.0	24.75	358.88	1,067.7	206.8	-4.0	206.8	0.00	0.00	0.00	
1,200.0	24.75	358.88	1,158.5	248.6	-4.8	248.6	0.00	0.00	0.00	
1,300.0	24.75	358.88	1,249.3	290.5	-5.7	290.5	0.00	0.00	0.00	
1,400.0	24.75	358.88	1,340.1	332.4	-6.5	332.3	0.00	0.00	0.00	
1,500.0	24.75	358.88	1,431.0	374.2	-7.3	374.2	0.00	0.00	0.00	
1,600.0	24.75	358.88	1,521.8	416.1	-8.1	416.1	0.00	0.00	0.00	
1,700.0	24.75	358.88	1,612.6	457.9	-8.9	457.9	0.00	0.00	0.00	
1,800.0	24.75	358.88	1,703.4	499.8	-9.7	499.8	0.00	0.00	0.00	
1,900.0	24.75	358.88	1,794.2	541.6	-10.5	541.6	0.00	0.00	0.00	
2,000.0	24.75	358.88	1,885.0	583.5	-11.4	583.5	0.00	0.00	0.00	
2,100.0	24.75	358.88	1,975.9	625.3	-12.2	625.3	0.00	0.00	0.00	
2,200.0	24.75	358.88	2,066.7	667.2	-13.0	667.2	0.00	0.00	0.00	
2,300.0	24.75	358.88	2,157.5	709.0	-13.8	709.0	0.00	0.00	0.00	
2,400.0	24.75	358.88	2,248.3	750.9	-14.6	750.9	0.00	0.00	0.00	
2,500.0	24.75	358.88	2,339.1	792.7	-15.4	792.7	0.00	0.00	0.00	
2,600.0	24.75	358.88	2,429.9	834.6	-16.2	834.6	0.00	0.00	0.00	
Orange Marker										
2,659.5	24.75	358.88	2,484.0	859.5	-16.7	859.5	0.00	0.00	0.00	
2,700.0	24.75	358.88	2,520.8	876.5	-17.1	876.4	0.00	0.00	0.00	
2,800.0	24.75	358.88	2,611.6	918.3	-17.9	918.3	0.00	0.00	0.00	
Wasatch										
2,821.4	24.75	358.88	2,631.0	927.3	-18.1	927.2	0.00	0.00	0.00	
2,900.0	24.75	358.88	2,702.4	960.2	-18.7	960.1	0.00	0.00	0.00	
3,000.0	24.75	358.88	2,793.2	1,002.0	-19.5	1,002.0	0.00	0.00	0.00	
3,100.0	24.75	358.88	2,884.0	1,043.9	-20.3	1,043.9	0.00	0.00	0.00	
3,200.0	24.75	358.88	2,974.8	1,085.7	-21.1	1,085.7	0.00	0.00	0.00	
3,300.0	24.75	358.88	3,065.7	1,127.6	-22.0	1,127.6	0.00	0.00	0.00	
3,400.0	24.75	358.88	3,156.5	1,169.4	-22.8	1,169.4	0.00	0.00	0.00	
3,500.0	24.75	358.88	3,247.3	1,211.3	-23.6	1,211.3	0.00	0.00	0.00	
3,600.0	24.75	358.88	3,338.1	1,253.1	-24.4	1,253.1	0.00	0.00	0.00	
3,700.0	24.75	358.88	3,428.9	1,295.0	-25.2	1,295.0	0.00	0.00	0.00	
3,800.0	24.75	358.88	3,519.7	1,336.8	-26.0	1,336.8	0.00	0.00	0.00	
3,900.0	24.75	358.88	3,610.5	1,378.7	-26.8	1,378.7	0.00	0.00	0.00	
4,000.0	24.75	358.88	3,701.4	1,420.6	-27.7	1,420.5	0.00	0.00	0.00	
4,100.0	24.75	358.88	3,792.2	1,462.4	-28.5	1,462.4	0.00	0.00	0.00	
4,200.0	24.75	358.88	3,883.0	1,504.3	-29.3	1,504.2	0.00	0.00	0.00	
4,300.0	24.75	358.88	3,973.8	1,546.1	-30.1	1,546.1	0.00	0.00	0.00	
4,400.0	24.75	358.88	4,064.6	1,588.0	-30.9	1,587.9	0.00	0.00	0.00	
4,500.0	24.75	358.88	4,155.4	1,629.8	-31.7	1,629.8	0.00	0.00	0.00	

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well RNPU B27 FED 25A-22 197 - Slot 25A-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 25A-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #3		

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	24.75	358.88	4,246.3	1,671.7	-32.5	1,671.7	0.00	0.00	0.00
4,700.0	24.75	358.88	4,337.1	1,713.5	-33.4	1,713.5	0.00	0.00	0.00
4,800.0	24.75	358.88	4,427.9	1,755.4	-34.2	1,755.4	0.00	0.00	0.00
4,900.0	24.75	358.88	4,518.7	1,797.2	-35.0	1,797.2	0.00	0.00	0.00
5,000.0	24.75	358.88	4,609.5	1,839.1	-35.8	1,839.1	0.00	0.00	0.00
5,100.0	24.75	358.88	4,700.3	1,880.9	-36.6	1,880.9	0.00	0.00	0.00
5,200.0	24.75	358.88	4,791.2	1,922.8	-37.4	1,922.8	0.00	0.00	0.00
5,300.0	24.75	358.88	4,882.0	1,964.7	-38.2	1,964.6	0.00	0.00	0.00
5,400.0	24.75	358.88	4,972.8	2,006.5	-39.1	2,006.5	0.00	0.00	0.00
5,500.0	24.75	358.88	5,063.6	2,048.4	-39.9	2,048.3	0.00	0.00	0.00
5,600.0	24.75	358.88	5,154.4	2,090.2	-40.7	2,090.2	0.00	0.00	0.00
5,700.0	24.75	358.88	5,245.2	2,132.1	-41.5	2,132.0	0.00	0.00	0.00
5,800.0	24.75	358.88	5,336.1	2,173.9	-42.3	2,173.9	0.00	0.00	0.00
5,900.0	24.75	358.88	5,426.9	2,215.8	-43.1	2,215.7	0.00	0.00	0.00
6,000.0	24.75	358.88	5,517.7	2,257.6	-43.9	2,257.6	0.00	0.00	0.00
Wasatch G									
6,085.1	24.75	358.88	5,595.0	2,293.3	-44.6	2,293.2	0.00	0.00	0.00
6,100.0	24.75	358.88	5,608.5	2,299.5	-44.8	2,299.5	0.00	0.00	0.00
6,200.0	24.75	358.88	5,699.3	2,341.3	-45.6	2,341.3	0.00	0.00	0.00
6,300.0	24.75	358.88	5,790.1	2,383.2	-46.4	2,383.2	0.00	0.00	0.00
6,400.0	24.75	358.88	5,881.0	2,425.0	-47.2	2,425.0	0.00	0.00	0.00
6,500.0	24.75	358.88	5,971.8	2,466.9	-48.0	2,466.9	0.00	0.00	0.00
6,600.0	24.75	358.88	6,062.6	2,508.7	-48.8	2,508.7	0.00	0.00	0.00
Fort Union									
6,617.0	24.75	358.88	6,078.0	2,515.9	-49.0	2,515.8	0.00	0.00	0.00
6,700.0	24.75	358.88	6,153.4	2,550.6	-49.7	2,550.6	0.00	0.00	0.00
6,800.0	24.75	358.88	6,244.2	2,592.5	-50.5	2,592.4	0.00	0.00	0.00
6,900.0	24.75	358.88	6,335.0	2,634.3	-51.3	2,634.3	0.00	0.00	0.00
7,000.0	24.75	358.88	6,425.9	2,676.2	-52.1	2,676.1	0.00	0.00	0.00
7,100.0	24.75	358.88	6,516.7	2,718.0	-52.9	2,718.0	0.00	0.00	0.00
7,200.0	24.75	358.88	6,607.5	2,759.9	-53.7	2,759.8	0.00	0.00	0.00
7,300.0	24.75	358.88	6,698.3	2,801.7	-54.5	2,801.7	0.00	0.00	0.00
7,400.0	24.75	358.88	6,789.1	2,843.6	-55.4	2,843.5	0.00	0.00	0.00
Drop 3° /100'									
7,419.1	24.75	358.88	6,806.5	2,851.6	-55.5	2,851.6	0.00	0.00	0.00
7,500.0	22.32	358.88	6,880.6	2,883.9	-56.1	2,883.8	3.00	-3.00	0.00
7,600.0	19.32	358.88	6,974.1	2,919.4	-56.8	2,919.4	3.00	-3.00	0.00
7,700.0	16.32	358.88	7,069.3	2,950.0	-57.4	2,950.0	3.00	-3.00	0.00
7,800.0	13.32	358.88	7,165.9	2,975.6	-57.9	2,975.5	3.00	-3.00	0.00
7,900.0	10.32	358.88	7,263.8	2,996.1	-58.3	2,996.0	3.00	-3.00	0.00
8,000.0	7.32	358.88	7,362.6	3,011.4	-58.6	3,011.4	3.00	-3.00	0.00
8,100.0	4.32	358.88	7,462.1	3,021.5	-58.8	3,021.5	3.00	-3.00	0.00
8,200.0	1.32	358.88	7,562.0	3,026.4	-58.9	3,026.4	3.00	-3.00	0.00
EOD @ Vertical : Build 1.5° / 100' - Ohio Creek									
8,244.0	0.00	0.00	7,606.0	3,027.0	-58.9	3,026.9	3.00	-3.00	2.53
8,300.0	0.84	215.00	7,661.9	3,026.6	-59.2	3,026.6	1.50	1.50	-259.15
EOB @ 1.00° Inc. / 215.00° Azm									
8,311.0	1.00	215.00	7,672.9	3,026.5	-59.3	3,026.5	1.50	1.50	0.00
8,400.0	1.00	215.00	7,761.9	3,025.2	-60.2	3,025.2	0.00	0.00	0.00
8,500.0	1.00	215.00	7,861.9	3,023.8	-61.2	3,023.8	0.00	0.00	0.00
8,600.0	1.00	215.00	7,961.9	3,022.3	-62.2	3,022.4	0.00	0.00	0.00
8,700.0	1.00	215.00	8,061.9	3,020.9	-63.2	3,021.0	0.00	0.00	0.00

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well RNPU B27 FED 25A-22 197 - Slot 25A-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 25A-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #3		

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)	
8,800.0	1.00	215.00	8,161.9	3,019.5	-64.2	3,019.6	0.00	0.00	0.00	
8,900.0	1.00	215.00	8,261.9	3,018.0	-65.2	3,018.2	0.00	0.00	0.00	
Williams Fork										
8,994.2	1.00	215.00	8,356.0	3,016.7	-66.1	3,016.9	0.00	0.00	0.00	
9,000.0	1.00	215.00	8,361.8	3,016.6	-66.2	3,016.8	0.00	0.00	0.00	
9,100.0	1.00	215.00	8,461.8	3,015.1	-67.2	3,015.5	0.00	0.00	0.00	
9,200.0	1.00	215.00	8,561.8	3,013.7	-68.2	3,014.1	0.00	0.00	0.00	
9,300.0	1.00	215.00	8,661.8	3,012.3	-69.2	3,012.7	0.00	0.00	0.00	
9,400.0	1.00	215.00	8,761.8	3,010.8	-70.2	3,011.3	0.00	0.00	0.00	
9,500.0	1.00	215.00	8,861.8	3,009.4	-71.2	3,009.9	0.00	0.00	0.00	
9,600.0	1.00	215.00	8,961.7	3,008.0	-72.2	3,008.5	0.00	0.00	0.00	
9,700.0	1.00	215.00	9,061.7	3,006.5	-73.2	3,007.1	0.00	0.00	0.00	
9,800.0	1.00	215.00	9,161.7	3,005.1	-74.2	3,005.7	0.00	0.00	0.00	
9,900.0	1.00	215.00	9,261.7	3,003.7	-75.2	3,004.3	0.00	0.00	0.00	
10,000.0	1.00	215.00	9,361.7	3,002.2	-76.2	3,002.9	0.00	0.00	0.00	
10,100.0	1.00	215.00	9,461.7	3,000.8	-77.2	3,001.5	0.00	0.00	0.00	
10,200.0	1.00	215.00	9,561.7	2,999.4	-78.2	3,000.1	0.00	0.00	0.00	
10,300.0	1.00	215.00	9,661.6	2,997.9	-79.3	2,998.7	0.00	0.00	0.00	
10,400.0	1.00	215.00	9,761.6	2,996.5	-80.3	2,997.3	0.00	0.00	0.00	
10,500.0	1.00	215.00	9,861.6	2,995.1	-81.3	2,995.9	0.00	0.00	0.00	
10,600.0	1.00	215.00	9,961.6	2,993.6	-82.3	2,994.5	0.00	0.00	0.00	
10,700.0	1.00	215.00	10,061.6	2,992.2	-83.3	2,993.1	0.00	0.00	0.00	
10,800.0	1.00	215.00	10,161.6	2,990.8	-84.3	2,991.7	0.00	0.00	0.00	
10,900.0	1.00	215.00	10,261.5	2,989.3	-85.3	2,990.4	0.00	0.00	0.00	
11,000.0	1.00	215.00	10,361.5	2,987.9	-86.3	2,989.0	0.00	0.00	0.00	
11,100.0	1.00	215.00	10,461.5	2,986.4	-87.3	2,987.6	0.00	0.00	0.00	
11,200.0	1.00	215.00	10,561.5	2,985.0	-88.3	2,986.2	0.00	0.00	0.00	
11,300.0	1.00	215.00	10,661.5	2,983.6	-89.3	2,984.8	0.00	0.00	0.00	
11,400.0	1.00	215.00	10,761.5	2,982.1	-90.3	2,983.4	0.00	0.00	0.00	
11,500.0	1.00	215.00	10,861.5	2,980.7	-91.3	2,982.0	0.00	0.00	0.00	
11,600.0	1.00	215.00	10,961.4	2,979.3	-92.3	2,980.6	0.00	0.00	0.00	
11,700.0	1.00	215.00	11,061.4	2,977.8	-93.3	2,979.2	0.00	0.00	0.00	
11,800.0	1.00	215.00	11,161.4	2,976.4	-94.3	2,977.8	0.00	0.00	0.00	
11,900.0	1.00	215.00	11,261.4	2,975.0	-95.3	2,976.4	0.00	0.00	0.00	
Cameo										
11,959.6	1.00	215.00	11,321.0	2,974.1	-95.9	2,975.6	0.00	0.00	0.00	
12,000.0	1.00	215.00	11,361.4	2,973.5	-96.3	2,975.0	0.00	0.00	0.00	
12,100.0	1.00	215.00	11,461.4	2,972.1	-97.3	2,973.6	0.00	0.00	0.00	
12,200.0	1.00	215.00	11,561.3	2,970.7	-98.3	2,972.2	0.00	0.00	0.00	
12,300.0	1.00	215.00	11,661.3	2,969.2	-99.4	2,970.8	0.00	0.00	0.00	
12,400.0	1.00	215.00	11,761.3	2,967.8	-100.4	2,969.4	0.00	0.00	0.00	
12,500.0	1.00	215.00	11,861.3	2,966.4	-101.4	2,968.0	0.00	0.00	0.00	
Rollins										
12,509.7	1.00	215.00	11,871.0	2,966.2	-101.5	2,967.9	0.00	0.00	0.00	
Cozette										
12,584.7	1.00	215.00	11,946.0	2,965.1	-102.2	2,966.9	0.00	0.00	0.00	
12,600.0	1.00	215.00	11,961.3	2,964.9	-102.4	2,966.6	0.00	0.00	0.00	
12,700.0	1.00	215.00	12,061.3	2,963.5	-103.4	2,965.3	0.00	0.00	0.00	
12,800.0	1.00	215.00	12,161.3	2,962.0	-104.4	2,963.9	0.00	0.00	0.00	
12,900.0	1.00	215.00	12,261.2	2,960.6	-105.4	2,962.5	0.00	0.00	0.00	
13,000.0	1.00	215.00	12,361.2	2,959.2	-106.4	2,961.1	0.00	0.00	0.00	
13,100.0	1.00	215.00	12,461.2	2,957.7	-107.4	2,959.7	0.00	0.00	0.00	

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well RNPU B27 FED 25A-22 197 - Slot 25A-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 25A-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #3		

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)	
Corcoran										
13,184.8	1.00	215.00	12,546.0	2,956.5	-108.2	2,958.5	0.00	0.00	0.00	
13,200.0	1.00	215.00	12,561.2	2,956.3	-108.4	2,958.3	0.00	0.00	0.00	
13,300.0	1.00	215.00	12,661.2	2,954.9	-109.4	2,956.9	0.00	0.00	0.00	
13,400.0	1.00	215.00	12,761.2	2,953.4	-110.4	2,955.5	0.00	0.00	0.00	
13,500.0	1.00	215.00	12,861.2	2,952.0	-111.4	2,954.1	0.00	0.00	0.00	
13,600.0	1.00	215.00	12,961.1	2,950.6	-112.4	2,952.7	0.00	0.00	0.00	
13,700.0	1.00	215.00	13,061.1	2,949.1	-113.4	2,951.3	0.00	0.00	0.00	
13,800.0	1.00	215.00	13,161.1	2,947.7	-114.4	2,949.9	0.00	0.00	0.00	
13,900.0	1.00	215.00	13,261.1	2,946.3	-115.4	2,948.5	0.00	0.00	0.00	
TD @ 13984.9' MD / 13346.0' TVD										
13,984.9	1.00	215.00	13,346.0	2,945.0	-116.3	2,947.3	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	
25A-22 - OHCR - hit/miss target - Shape - plan hits target center - Point	0.00	0.00	7,606.0	3,027.0	-58.9	14,519,388.63	2,405,920.83	39.949535	-108.268819	
25A-22 - PBHL - plan hits target center - Ellipse (radii L100.0 W50.0 on 215.00 azi)	0.00	0.00	13,346.0	2,945.0	-116.3	14,519,305.00	2,405,866.00	39.949310	-108.269024	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,659.5	2,484.0	Orange Marker				
2,821.4	2,631.0	Wasatch				
6,085.1	5,595.0	Wasatch G				
6,617.0	6,078.0	Fort Union				
8,244.0	7,606.0	Ohio Creek				
8,994.2	8,356.0	Williams Fork				
11,959.6	11,321.0	Cameo				
12,509.7	11,871.0	Rollins				
12,584.7	11,946.0	Cozzette				
13,184.8	12,546.0	Corcoran				

Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well RNPU B27 FED 25A-22 197 - Slot 25A-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 25A-22 197	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim #3		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
200.0	200.0	0.0	0.0	Build 3° / 100'
1,024.9	999.5	175.4	-3.4	EOB @ 24.75° Inc. / 358.88° Azm
7,419.1	6,806.5	2,851.6	-55.5	Drop 3° / 100'
8,244.0	7,606.0	3,027.0	-58.9	EOD @ Vertical : Build 1.5° / 100'
8,311.0	7,672.9	3,026.5	-59.3	EOB @ 1.00° Inc. / 215.00° Azm
13,984.9	13,346.0	2,945.0	-116.3	TD @ 13984.9' MD / 13346.0' TVD