

Project: Rio Blanco County, CO  
 Site: ELU M12 496  
 Well: ELU M12 FED 14A-12 496  
 Wellbore: OH  
 Design: Design #4  
 Latitude: 39.713076  
 Longitude: -108.123111  
 Ground Level: 7985.0  
 RKB=26' @ 8011.0usft (TBD)

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=26' @ 8011.0usft (TBD)  
 Section (VS) Reference: Slot - 14A-12(0.0N, 0.0E)  
 Measured Depth Reference: RKB=26' @ 8011.0usft (TBD)  
 Calculation Method: Minimum Curvature

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
350.0	0.00	0.00	350.0	0.0	0.0	0.00	0.00	0.0	
699.9	10.50	16.09	697.9	30.7	8.9	3.00	16.09	31.9	
8408.0	10.50	16.09	8277.1	1379.9	398.0	0.00	0.00	1433.7	
8757.9	0.00	0.00	8625.0	1410.6	406.8	3.00	180.00	1465.6	
8840.8	1.24	250.01	8707.9	1410.3	406.0	1.50	250.01	1465.2	
13408.0	1.24	250.01	13274.0	1376.4	312.8	0.00	0.00	1411.5	

FORMATION TOP DETAILS

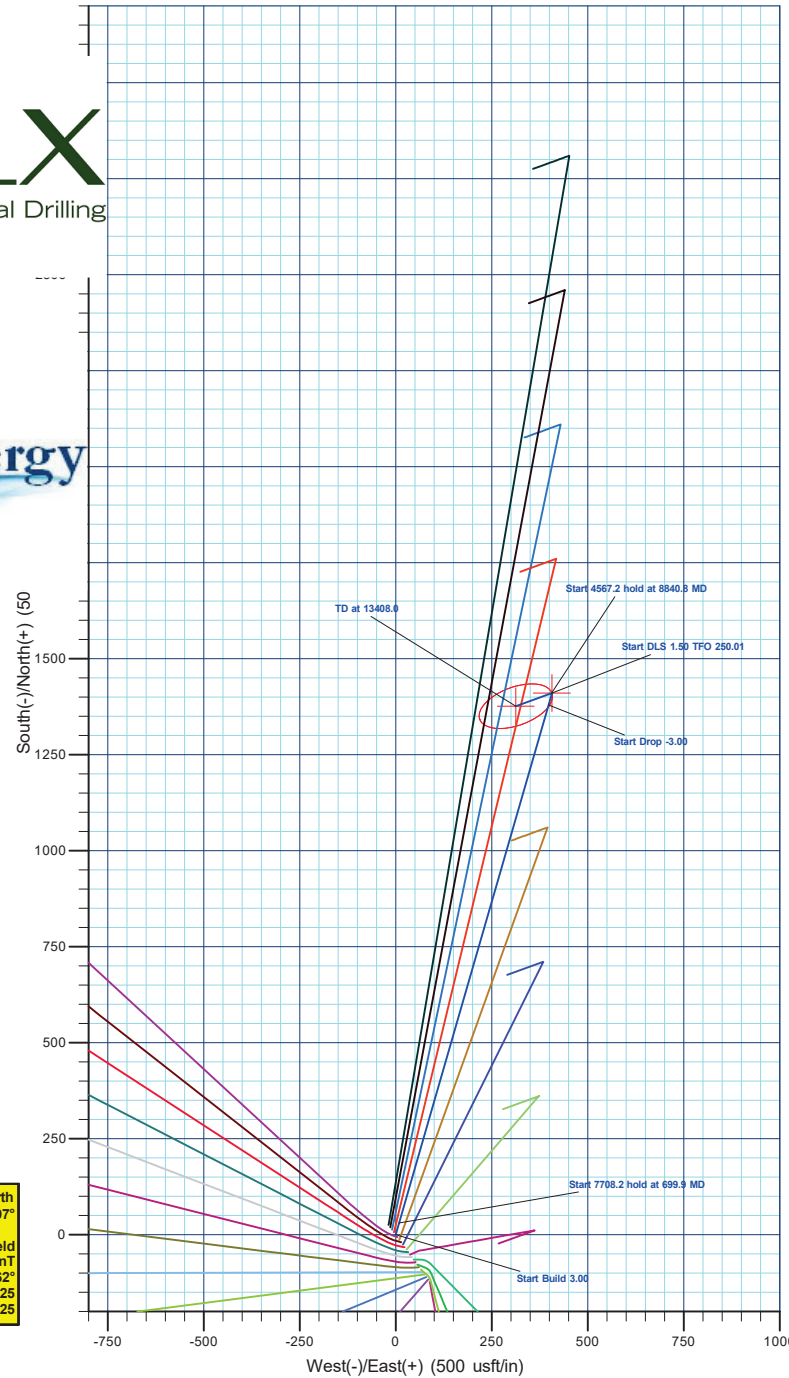
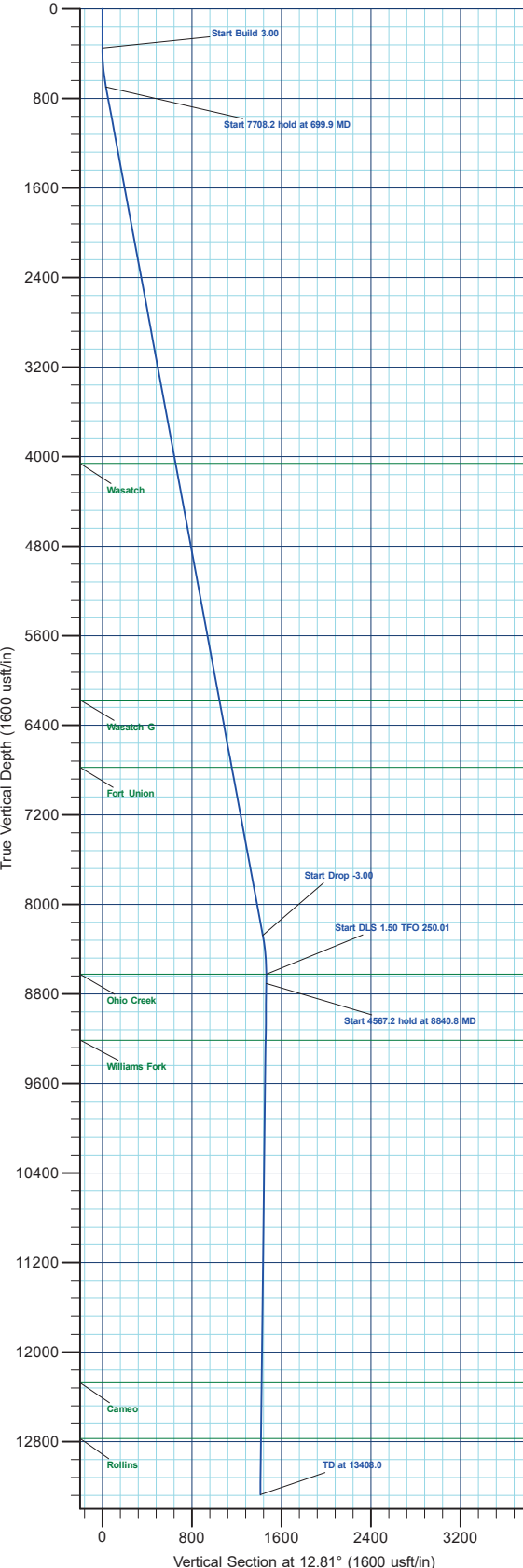
TVDPath	MDPath	Formation
4061.0	4120.2	Wasatch
6175.0	6270.2	Wasatch G
6777.0	6882.4	Fort Union
8625.0	8757.9	Ohio Creek
9215.0	9348.0	Williams Fork
12274.0	12407.7	Cameo
12774.0	12907.8	Rollins

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
14A-12 - OHCR	8625.0	1410.6	406.8	14435976.39	2449899.73	39.716947	-108.121665
14A-12 - PBHL	13274.0	1376.4	312.8	14435939.20	2449806.90	39.716853	-108.121999

WELL DETAILS: ELU M12 FED 14A-12 496

+N/-S	+E/-W	Ground Level : 7985.0	Northing	Easting	Latitude	Longitude
0.0	0.0		14434553.50	2449538.40	39.713076	-108.123111 14A-12



**T M** Azimuths to True North  
 Magnetic North: 8.97°  
 Magnetic Field Strength: 50694.0nT  
 Dip Angle: 65.62°  
 Date: 7/24/2025  
 Model: HDGM2025

Plan: Design #4 (ELU M12 FED 14A-12 496/OH)

Created By: Will Jircik

Date: 20:22, July 24 2025



## **QB Energy Operating, LLC**

Rio Blanco County, CO

ELU M12 496

ELU M12 FED 14A-12 496 - Slot 14A-12

OH

Plan: Design #4

## **KLX Well Planning Report**

24 July, 2025



<b>Database:</b>	KLXDirectional-AD	<b>Local Co-ordinate Reference:</b>	Well ELU M12 FED 14A-12 496 - Slot 14A-12
<b>Company:</b>	QB Energy Operating, LLC	<b>TVD Reference:</b>	RKB=26' @ 8011.0usft (TBD)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB=26' @ 8011.0usft (TBD)
<b>Site:</b>	ELU M12 496	<b>North Reference:</b>	True
<b>Well:</b>	ELU M12 FED 14A-12 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Design #4		

<b>Project</b>	Rio Blanco County, CO		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

<b>Site</b>	ELU M12 496				
<b>Site Position:</b>	<b>Northing:</b>	14,434,433.20 usft	<b>Latitude:</b>	39.712738	
<b>From:</b> Map	<b>Easting:</b>	2,449,631.30 usft	<b>Longitude:</b>	-108.122795	
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	1.84 °

<b>Well</b>	ELU M12 FED 14A-12 496 - Slot 14A-12					
<b>Well Position</b>	<b>+N/-S</b>	123.2 usft	<b>Northing:</b>	14,434,553.50 usft	<b>Latitude:</b>	39.713076
	<b>+E/-W</b>	-89.0 usft	<b>Easting:</b>	2,449,538.40 usft	<b>Longitude:</b>	-108.123111
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	7,985.0 usft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM2025	7/24/2025	8.97	65.62	50,694.00000000

<b>Design</b>	Design #4			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	12.81

<b>Plan Sections</b>										
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	
350.0	0.00	0.00	350.0	0.0	0.0	0.00	0.00	0.00	0.00	
699.9	10.50	16.09	697.9	30.7	8.9	3.00	3.00	0.00	16.09	
8,408.0	10.50	16.09	8,277.1	1,379.9	398.0	0.00	0.00	0.00	0.00	
8,757.9	0.00	0.00	8,625.0	1,410.6	406.8	3.00	-3.00	0.00	180.00	14A-12 - OHCR
8,840.8	1.24	250.01	8,707.9	1,410.3	406.0	1.50	1.50	-132.70	250.01	
13,408.0	1.24	250.01	13,274.0	1,376.4	312.8	0.00	0.00	0.00	0.00	14A-12 - PBHL

<b>Database:</b>	KLXDirectional-AD	<b>Local Co-ordinate Reference:</b>	Well ELU M12 FED 14A-12 496 - Slot 14A-12
<b>Company:</b>	QB Energy Operating, LLC	<b>TVD Reference:</b>	RKB=26' @ 8011.0usft (TBD)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB=26' @ 8011.0usft (TBD)
<b>Site:</b>	ELU M12 496	<b>North Reference:</b>	True
<b>Well:</b>	ELU M12 FED 14A-12 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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
350.0	0.00	0.00	350.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	1.50	16.09	400.0	0.6	0.2	0.7	3.00	3.00	0.00
500.0	4.50	16.09	499.8	5.7	1.6	5.9	3.00	3.00	0.00
600.0	7.50	16.09	599.3	15.7	4.5	16.3	3.00	3.00	0.00
699.9	10.50	16.09	697.9	30.7	8.9	31.9	3.00	3.00	0.00
800.0	10.50	16.09	796.4	48.2	13.9	50.1	0.00	0.00	0.00
900.0	10.50	16.09	894.7	65.7	19.0	68.3	0.00	0.00	0.00
1,000.0	10.50	16.09	993.0	83.2	24.0	86.5	0.00	0.00	0.00
1,100.0	10.50	16.09	1,091.4	100.7	29.1	104.7	0.00	0.00	0.00
1,200.0	10.50	16.09	1,189.7	118.2	34.1	122.9	0.00	0.00	0.00
1,300.0	10.50	16.09	1,288.0	135.7	39.1	141.0	0.00	0.00	0.00
1,400.0	10.50	16.09	1,386.3	153.2	44.2	159.2	0.00	0.00	0.00
1,500.0	10.50	16.09	1,484.7	170.8	49.2	177.4	0.00	0.00	0.00
1,600.0	10.50	16.09	1,583.0	188.3	54.3	195.6	0.00	0.00	0.00
1,700.0	10.50	16.09	1,681.3	205.8	59.3	213.8	0.00	0.00	0.00
1,800.0	10.50	16.09	1,779.6	223.3	64.4	232.0	0.00	0.00	0.00
1,900.0	10.50	16.09	1,878.0	240.8	69.4	250.2	0.00	0.00	0.00
2,000.0	10.50	16.09	1,976.3	258.3	74.5	268.4	0.00	0.00	0.00
2,100.0	10.50	16.09	2,074.6	275.8	79.5	286.5	0.00	0.00	0.00
2,200.0	10.50	16.09	2,172.9	293.3	84.6	304.7	0.00	0.00	0.00
2,300.0	10.50	16.09	2,271.3	310.8	89.6	322.9	0.00	0.00	0.00
2,400.0	10.50	16.09	2,369.6	328.3	94.7	341.1	0.00	0.00	0.00
2,500.0	10.50	16.09	2,467.9	345.8	99.7	359.3	0.00	0.00	0.00
2,600.0	10.50	16.09	2,566.3	363.3	104.8	377.5	0.00	0.00	0.00
2,700.0	10.50	16.09	2,664.6	380.8	109.8	395.7	0.00	0.00	0.00
2,800.0	10.50	16.09	2,762.9	398.3	114.9	413.8	0.00	0.00	0.00
2,900.0	10.50	16.09	2,861.2	415.8	119.9	432.0	0.00	0.00	0.00
3,000.0	10.50	16.09	2,959.6	433.3	125.0	450.2	0.00	0.00	0.00
3,100.0	10.50	16.09	3,057.9	450.8	130.0	468.4	0.00	0.00	0.00
3,200.0	10.50	16.09	3,156.2	468.3	135.1	486.6	0.00	0.00	0.00
3,300.0	10.50	16.09	3,254.5	485.8	140.1	504.8	0.00	0.00	0.00
3,400.0	10.50	16.09	3,352.9	503.3	145.2	523.0	0.00	0.00	0.00
3,500.0	10.50	16.09	3,451.2	520.8	150.2	541.1	0.00	0.00	0.00
3,600.0	10.50	16.09	3,549.5	538.3	155.3	559.3	0.00	0.00	0.00
3,700.0	10.50	16.09	3,647.8	555.8	160.3	577.5	0.00	0.00	0.00
3,800.0	10.50	16.09	3,746.2	573.3	165.3	595.7	0.00	0.00	0.00
3,900.0	10.50	16.09	3,844.5	590.8	170.4	613.9	0.00	0.00	0.00
4,000.0	10.50	16.09	3,942.8	608.3	175.4	632.1	0.00	0.00	0.00
4,100.0	10.50	16.09	4,041.2	625.8	180.5	650.3	0.00	0.00	0.00
<b>Wasatch</b>									
4,120.2	10.50	16.09	4,061.0	629.4	181.5	653.9	0.00	0.00	0.00
4,200.0	10.50	16.09	4,139.5	643.3	185.5	668.5	0.00	0.00	0.00
4,300.0	10.50	16.09	4,237.8	660.8	190.6	686.6	0.00	0.00	0.00
4,400.0	10.50	16.09	4,336.1	678.3	195.6	704.8	0.00	0.00	0.00
4,500.0	10.50	16.09	4,434.5	695.8	200.7	723.0	0.00	0.00	0.00
4,600.0	10.50	16.09	4,532.8	713.3	205.7	741.2	0.00	0.00	0.00
4,700.0	10.50	16.09	4,631.1	730.8	210.8	759.4	0.00	0.00	0.00
4,800.0	10.50	16.09	4,729.4	748.3	215.8	777.6	0.00	0.00	0.00
4,900.0	10.50	16.09	4,827.8	765.9	220.9	795.8	0.00	0.00	0.00
5,000.0	10.50	16.09	4,926.1	783.4	225.9	813.9	0.00	0.00	0.00

<b>Database:</b>	KLXDirectional-AD	<b>Local Co-ordinate Reference:</b>	Well ELU M12 FED 14A-12 496 - Slot 14A-12
<b>Company:</b>	QB Energy Operating, LLC	<b>TVD Reference:</b>	RKB=26' @ 8011.0usft (TBD)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB=26' @ 8011.0usft (TBD)
<b>Site:</b>	ELU M12 496	<b>North Reference:</b>	True
<b>Well:</b>	ELU M12 FED 14A-12 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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)	
5,100.0	10.50	16.09	5,024.4	800.9	231.0	832.1	0.00	0.00	0.00	
5,200.0	10.50	16.09	5,122.8	818.4	236.0	850.3	0.00	0.00	0.00	
5,300.0	10.50	16.09	5,221.1	835.9	241.1	868.5	0.00	0.00	0.00	
5,400.0	10.50	16.09	5,319.4	853.4	246.1	886.7	0.00	0.00	0.00	
5,500.0	10.50	16.09	5,417.7	870.9	251.2	904.9	0.00	0.00	0.00	
5,600.0	10.50	16.09	5,516.1	888.4	256.2	923.1	0.00	0.00	0.00	
5,700.0	10.50	16.09	5,614.4	905.9	261.3	941.2	0.00	0.00	0.00	
5,800.0	10.50	16.09	5,712.7	923.4	266.3	959.4	0.00	0.00	0.00	
5,900.0	10.50	16.09	5,811.0	940.9	271.4	977.6	0.00	0.00	0.00	
6,000.0	10.50	16.09	5,909.4	958.4	276.4	995.8	0.00	0.00	0.00	
6,100.0	10.50	16.09	6,007.7	975.9	281.4	1,014.0	0.00	0.00	0.00	
6,200.0	10.50	16.09	6,106.0	993.4	286.5	1,032.2	0.00	0.00	0.00	
<b>Wasatch G</b>										
6,270.2	10.50	16.09	6,175.0	1,005.7	290.0	1,044.9	0.00	0.00	0.00	
6,300.0	10.50	16.09	6,204.3	1,010.9	291.5	1,050.4	0.00	0.00	0.00	
6,400.0	10.50	16.09	6,302.7	1,028.4	296.6	1,068.6	0.00	0.00	0.00	
6,500.0	10.50	16.09	6,401.0	1,045.9	301.6	1,086.7	0.00	0.00	0.00	
6,600.0	10.50	16.09	6,499.3	1,063.4	306.7	1,104.9	0.00	0.00	0.00	
6,700.0	10.50	16.09	6,597.7	1,080.9	311.7	1,123.1	0.00	0.00	0.00	
6,800.0	10.50	16.09	6,696.0	1,098.4	316.8	1,141.3	0.00	0.00	0.00	
<b>Fort Union</b>										
6,882.4	10.50	16.09	6,777.0	1,112.8	320.9	1,156.3	0.00	0.00	0.00	
6,900.0	10.50	16.09	6,794.3	1,115.9	321.8	1,159.5	0.00	0.00	0.00	
7,000.0	10.50	16.09	6,892.6	1,133.4	326.9	1,177.7	0.00	0.00	0.00	
7,100.0	10.50	16.09	6,991.0	1,150.9	331.9	1,195.9	0.00	0.00	0.00	
7,200.0	10.50	16.09	7,089.3	1,168.4	337.0	1,214.0	0.00	0.00	0.00	
7,300.0	10.50	16.09	7,187.6	1,185.9	342.0	1,232.2	0.00	0.00	0.00	
7,400.0	10.50	16.09	7,285.9	1,203.4	347.1	1,250.4	0.00	0.00	0.00	
7,500.0	10.50	16.09	7,384.3	1,220.9	352.1	1,268.6	0.00	0.00	0.00	
7,600.0	10.50	16.09	7,482.6	1,238.4	357.2	1,286.8	0.00	0.00	0.00	
7,700.0	10.50	16.09	7,580.9	1,255.9	362.2	1,305.0	0.00	0.00	0.00	
7,800.0	10.50	16.09	7,679.2	1,273.4	367.3	1,323.2	0.00	0.00	0.00	
7,900.0	10.50	16.09	7,777.6	1,290.9	372.3	1,341.3	0.00	0.00	0.00	
8,000.0	10.50	16.09	7,875.9	1,308.4	377.4	1,359.5	0.00	0.00	0.00	
8,100.0	10.50	16.09	7,974.2	1,325.9	382.4	1,377.7	0.00	0.00	0.00	
8,200.0	10.50	16.09	8,072.6	1,343.4	387.5	1,395.9	0.00	0.00	0.00	
8,300.0	10.50	16.09	8,170.9	1,361.0	392.5	1,414.1	0.00	0.00	0.00	
8,408.0	10.50	16.09	8,277.1	1,379.9	398.0	1,433.7	0.00	0.00	0.00	
8,500.0	7.74	16.09	8,367.9	1,393.9	402.0	1,448.3	3.00	-3.00	0.00	
8,600.0	4.74	16.09	8,467.3	1,404.3	405.0	1,459.1	3.00	-3.00	0.00	
8,700.0	1.74	16.09	8,567.1	1,409.7	406.6	1,464.8	3.00	-3.00	0.00	
<b>Ohio Creek</b>										
8,757.9	0.00	0.00	8,625.0	1,410.6	406.8	1,465.6	3.00	-3.00	0.00	
8,800.0	0.63	250.01	8,667.1	1,410.5	406.6	1,465.5	1.50	1.50	0.00	
8,840.8	1.24	250.01	8,707.9	1,410.3	406.0	1,465.2	1.50	1.50	0.00	
8,900.0	1.24	250.01	8,767.1	1,409.8	404.8	1,464.5	0.00	0.00	0.00	
9,000.0	1.24	250.01	8,867.1	1,409.1	402.7	1,463.3	0.00	0.00	0.00	
9,100.0	1.24	250.01	8,967.1	1,408.3	400.7	1,462.1	0.00	0.00	0.00	
9,200.0	1.24	250.01	9,067.0	1,407.6	398.6	1,460.9	0.00	0.00	0.00	
9,300.0	1.24	250.01	9,167.0	1,406.8	396.6	1,459.8	0.00	0.00	0.00	
<b>Williams Fork</b>										
9,348.0	1.24	250.01	9,215.0	1,406.5	395.6	1,459.2	0.00	0.00	0.00	
9,400.0	1.24	250.01	9,267.0	1,406.1	394.6	1,458.6	0.00	0.00	0.00	

<b>Database:</b>	KLXDirectional-AD	<b>Local Co-ordinate Reference:</b>	Well ELU M12 FED 14A-12 496 - Slot 14A-12
<b>Company:</b>	QB Energy Operating, LLC	<b>TVD Reference:</b>	RKB=26' @ 8011.0usft (TBD)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB=26' @ 8011.0usft (TBD)
<b>Site:</b>	ELU M12 496	<b>North Reference:</b>	True
<b>Well:</b>	ELU M12 FED 14A-12 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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)	
9,500.0	1.24	250.01	9,367.0	1,405.4	392.5	1,457.4	0.00	0.00	0.00	
9,600.0	1.24	250.01	9,466.9	1,404.6	390.5	1,456.2	0.00	0.00	0.00	
9,700.0	1.24	250.01	9,566.9	1,403.9	388.4	1,455.1	0.00	0.00	0.00	
9,800.0	1.24	250.01	9,666.9	1,403.1	386.4	1,453.9	0.00	0.00	0.00	
9,900.0	1.24	250.01	9,766.9	1,402.4	384.4	1,452.7	0.00	0.00	0.00	
10,000.0	1.24	250.01	9,866.8	1,401.7	382.3	1,451.5	0.00	0.00	0.00	
10,100.0	1.24	250.01	9,966.8	1,400.9	380.3	1,450.4	0.00	0.00	0.00	
10,200.0	1.24	250.01	10,066.8	1,400.2	378.2	1,449.2	0.00	0.00	0.00	
10,300.0	1.24	250.01	10,166.8	1,399.4	376.2	1,448.0	0.00	0.00	0.00	
10,400.0	1.24	250.01	10,266.7	1,398.7	374.2	1,446.8	0.00	0.00	0.00	
10,500.0	1.24	250.01	10,366.7	1,397.9	372.1	1,445.7	0.00	0.00	0.00	
10,600.0	1.24	250.01	10,466.7	1,397.2	370.1	1,444.5	0.00	0.00	0.00	
10,700.0	1.24	250.01	10,566.7	1,396.5	368.1	1,443.3	0.00	0.00	0.00	
10,800.0	1.24	250.01	10,666.7	1,395.7	366.0	1,442.1	0.00	0.00	0.00	
10,900.0	1.24	250.01	10,766.6	1,395.0	364.0	1,441.0	0.00	0.00	0.00	
11,000.0	1.24	250.01	10,866.6	1,394.2	361.9	1,439.8	0.00	0.00	0.00	
11,100.0	1.24	250.01	10,966.6	1,393.5	359.9	1,438.6	0.00	0.00	0.00	
11,200.0	1.24	250.01	11,066.6	1,392.7	357.9	1,437.4	0.00	0.00	0.00	
11,300.0	1.24	250.01	11,166.5	1,392.0	355.8	1,436.2	0.00	0.00	0.00	
11,400.0	1.24	250.01	11,266.5	1,391.3	353.8	1,435.1	0.00	0.00	0.00	
11,500.0	1.24	250.01	11,366.5	1,390.5	351.7	1,433.9	0.00	0.00	0.00	
11,600.0	1.24	250.01	11,466.5	1,389.8	349.7	1,432.7	0.00	0.00	0.00	
11,700.0	1.24	250.01	11,566.4	1,389.0	347.7	1,431.5	0.00	0.00	0.00	
11,800.0	1.24	250.01	11,666.4	1,388.3	345.6	1,430.4	0.00	0.00	0.00	
11,900.0	1.24	250.01	11,766.4	1,387.6	343.6	1,429.2	0.00	0.00	0.00	
12,000.0	1.24	250.01	11,866.4	1,386.8	341.5	1,428.0	0.00	0.00	0.00	
12,100.0	1.24	250.01	11,966.3	1,386.1	339.5	1,426.8	0.00	0.00	0.00	
12,200.0	1.24	250.01	12,066.3	1,385.3	337.5	1,425.7	0.00	0.00	0.00	
12,300.0	1.24	250.01	12,166.3	1,384.6	335.4	1,424.5	0.00	0.00	0.00	
12,400.0	1.24	250.01	12,266.3	1,383.8	333.4	1,423.3	0.00	0.00	0.00	
<b>Cameo</b>										
12,407.7	1.24	250.01	12,274.0	1,383.8	333.2	1,423.2	0.00	0.00	0.00	
12,500.0	1.24	250.01	12,366.3	1,383.1	331.3	1,422.1	0.00	0.00	0.00	
12,600.0	1.24	250.01	12,466.2	1,382.4	329.3	1,421.0	0.00	0.00	0.00	
12,700.0	1.24	250.01	12,566.2	1,381.6	327.3	1,419.8	0.00	0.00	0.00	
12,800.0	1.24	250.01	12,666.2	1,380.9	325.2	1,418.6	0.00	0.00	0.00	
12,900.0	1.24	250.01	12,766.2	1,380.1	323.2	1,417.4	0.00	0.00	0.00	
<b>Rollins</b>										
12,907.8	1.24	250.01	12,774.0	1,380.1	323.0	1,417.4	0.00	0.00	0.00	
13,000.0	1.24	250.01	12,866.1	1,379.4	321.2	1,416.3	0.00	0.00	0.00	
13,100.0	1.24	250.01	12,966.1	1,378.7	319.1	1,415.1	0.00	0.00	0.00	
13,200.0	1.24	250.01	13,066.1	1,377.9	317.1	1,413.9	0.00	0.00	0.00	
13,300.0	1.24	250.01	13,166.1	1,377.2	315.0	1,412.7	0.00	0.00	0.00	
13,408.0	1.24	250.01	13,274.0	1,376.4	312.8	1,411.5	0.00	0.00	0.00	

<b>Database:</b>	KLXDirectional-AD	<b>Local Co-ordinate Reference:</b>	Well ELU M12 FED 14A-12 496 - Slot 14A-12
<b>Company:</b>	QB Energy Operating, LLC	<b>TVD Reference:</b>	RKB=26' @ 8011.0usft (TBD)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	RKB=26' @ 8011.0usft (TBD)
<b>Site:</b>	ELU M12 496	<b>North Reference:</b>	True
<b>Well:</b>	ELU M12 FED 14A-12 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Design #4		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
14A-12 - OHCR - plan hits target center - Point	0.00	0.00	8,625.0	1,410.6	406.8	14,435,976.39	2,449,899.73	39.716947	-108.121665
14A-12 - PBHL - plan hits target center - Ellipse (radii L100.0 W50.0 on 250.00 azi)	0.00	0.00	13,274.0	1,376.4	312.8	14,435,939.20	2,449,806.90	39.716854	-108.121999

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,120.2	4,061.0	Wasatch				
6,270.2	6,175.0	Wasatch G				
6,882.4	6,777.0	Fort Union				
8,757.9	8,625.0	Ohio Creek				
9,348.0	9,215.0	Williams Fork				
12,407.7	12,274.0	Cameo				
12,907.8	12,774.0	Rollins				