



Laramie Energy, LLC

Mesa County, CO

Laramie 0993-29-01

Laramie 29-01 Fed 0993-21-17W - Slot A8

OH

Plan: Design #2

KLX Well Planning Report

08 May, 2025





Well Planning Report



Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well Laramie 29-01 Fed 0993-21-17W - Slot A8
Company:	Laramie Energy, LLC	TVD Reference:	RKB=30'; @ 7493.0usft (TBD)
Project:	Mesa County, CO	MD Reference:	RKB=30'; @ 7493.0usft (TBD)
Site:	Laramie 0993-29-01	North Reference:	True
Well:	Laramie 29-01 Fed 0993-21-17W	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #2		

Project	Mesa County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	Laramie 0993-29-01		
Site Position:		Northing:	1,525,818.99 usft
From:	Map	Easting:	2,353,268.64 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	39.254781
		Longitude:	-107.784158
		Grid Convergence:	-1.44 °

Well	Laramie 29-01 Fed 0993-21-17W - Slot A8		
Well Position	+N/-S	-59.1 usft	Northing:
	+E/-W	62.7 usft	Easting:
Position Uncertainty		0.0 usft	Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2025	8/7/2023	8.67	65.10	50,830.00000000

Design	Design #2				
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	70.44	

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	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,155.9	22.65	70.44	1,132.5	59.2	166.5	2.50	2.50	0.00	70.44	
5,598.5	22.65	70.44	5,232.5	631.9	1,778.4	0.00	0.00	0.00	0.00	
6,504.3	0.00	0.00	6,115.0	691.1	1,944.9	2.50	-2.50	0.00	180.00	
9,096.3	0.00	0.00	8,707.0	691.1	1,944.9	0.00	0.00	0.00	0.00	PBHL - Laramie Fe



Well Planning Report



Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well Laramie 29-01 Fed 0993-21-17W - Slot A8
Company:	Laramie Energy, LLC	TVD Reference:	RKB=30'; @ 7493.0usft (TBD)
Project:	Mesa County, CO	MD Reference:	RKB=30'; @ 7493.0usft (TBD)
Site:	Laramie 0993-29-01	North Reference:	True
Well:	Laramie 29-01 Fed 0993-21-17W	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #2		

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
KOP (Build 2.5° / 100)									
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	1.25	70.44	300.0	0.2	0.5	0.5	2.50	2.50	0.00
400.0	3.75	70.44	399.9	1.6	4.6	4.9	2.50	2.50	0.00
500.0	6.25	70.44	499.5	4.6	12.8	13.6	2.50	2.50	0.00
600.0	8.75	70.44	598.6	8.9	25.1	26.7	2.50	2.50	0.00
700.0	11.25	70.44	697.1	14.7	41.5	44.0	2.50	2.50	0.00
800.0	13.75	70.44	794.7	22.0	61.9	65.7	2.50	2.50	0.00
900.0	16.25	70.44	891.3	30.7	86.3	91.6	2.50	2.50	0.00
1,000.0	18.75	70.44	986.7	40.7	114.6	121.6	2.50	2.50	0.00
1,100.0	21.25	70.44	1,080.6	52.2	146.8	155.8	2.50	2.50	0.00
EOB @ 22.65° Inc. / 70.44° Azm									
1,155.9	22.65	70.44	1,132.5	59.2	166.5	176.7	2.50	2.50	0.00
1,200.0	22.65	70.44	1,173.2	64.9	182.5	193.7	0.00	0.00	0.00
1,300.0	22.65	70.44	1,265.5	77.7	218.8	232.2	0.00	0.00	0.00
1,400.0	22.65	70.44	1,357.8	90.6	255.1	270.7	0.00	0.00	0.00
8 5/8"									
1,500.0	22.65	70.44	1,450.1	103.5	291.4	309.2	0.00	0.00	0.00
1,600.0	22.65	70.44	1,542.4	116.4	327.6	347.7	0.00	0.00	0.00
1,700.0	22.65	70.44	1,634.6	129.3	363.9	386.2	0.00	0.00	0.00
1,800.0	22.65	70.44	1,726.9	142.2	400.2	424.7	0.00	0.00	0.00
1,900.0	22.65	70.44	1,819.2	155.1	436.5	463.2	0.00	0.00	0.00
2,000.0	22.65	70.44	1,911.5	168.0	472.8	501.7	0.00	0.00	0.00
2,100.0	22.65	70.44	2,003.8	180.9	509.1	540.2	0.00	0.00	0.00
2,200.0	22.65	70.44	2,096.1	193.8	545.3	578.7	0.00	0.00	0.00
2,300.0	22.65	70.44	2,188.4	206.7	581.6	617.2	0.00	0.00	0.00
2,400.0	22.65	70.44	2,280.7	219.6	617.9	655.8	0.00	0.00	0.00
2,500.0	22.65	70.44	2,373.0	232.4	654.2	694.3	0.00	0.00	0.00
2,600.0	22.65	70.44	2,465.3	245.3	690.5	732.8	0.00	0.00	0.00
2,700.0	22.65	70.44	2,557.5	258.2	726.8	771.3	0.00	0.00	0.00
2,800.0	22.65	70.44	2,649.8	271.1	763.0	809.8	0.00	0.00	0.00
Wasatch 'G' Sand									
2,896.6	22.65	70.44	2,739.0	283.6	798.1	847.0	0.00	0.00	0.00
2,900.0	22.65	70.44	2,742.1	284.0	799.3	848.3	0.00	0.00	0.00
3,000.0	22.65	70.44	2,834.4	296.9	835.6	886.8	0.00	0.00	0.00
3,100.0	22.65	70.44	2,926.7	309.8	871.9	925.3	0.00	0.00	0.00
3,200.0	22.65	70.44	3,019.0	322.7	908.2	963.8	0.00	0.00	0.00
3,300.0	22.65	70.44	3,111.3	335.6	944.4	1,002.3	0.00	0.00	0.00
3,400.0	22.65	70.44	3,203.6	348.5	980.7	1,040.8	0.00	0.00	0.00
Fort Union									
3,418.9	22.65	70.44	3,221.0	350.9	987.6	1,048.1	0.00	0.00	0.00
3,500.0	22.65	70.44	3,295.9	361.4	1,017.0	1,079.3	0.00	0.00	0.00
3,600.0	22.65	70.44	3,388.1	374.3	1,053.3	1,117.8	0.00	0.00	0.00
3,700.0	22.65	70.44	3,480.4	387.2	1,089.6	1,156.3	0.00	0.00	0.00
3,800.0	22.65	70.44	3,572.7	400.0	1,125.9	1,194.8	0.00	0.00	0.00
3,900.0	22.65	70.44	3,665.0	412.9	1,162.1	1,233.3	0.00	0.00	0.00
4,000.0	22.65	70.44	3,757.3	425.8	1,198.4	1,271.8	0.00	0.00	0.00
4,100.0	22.65	70.44	3,849.6	438.7	1,234.7	1,310.3	0.00	0.00	0.00
Lower Wasatch									



Well Planning Report



Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well Laramie 29-01 Fed 0993-21-17W - Slot A8
Company:	Laramie Energy, LLC	TVD Reference:	RKB=30'; @ 7493.0usft (TBD)
Project:	Mesa County, CO	MD Reference:	RKB=30'; @ 7493.0usft (TBD)
Site:	Laramie 0993-29-01	North Reference:	True
Well:	Laramie 29-01 Fed 0993-21-17W	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #2		

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)
4,155.7	22.65	70.44	3,901.0	445.9	1,254.9	1,331.8	0.00	0.00	0.00
4,200.0	22.65	70.44	3,941.9	451.6	1,271.0	1,348.8	0.00	0.00	0.00
4,300.0	22.65	70.44	4,034.2	464.5	1,307.3	1,387.3	0.00	0.00	0.00
4,400.0	22.65	70.44	4,126.5	477.4	1,343.5	1,425.8	0.00	0.00	0.00
4,500.0	22.65	70.44	4,218.8	490.3	1,379.8	1,464.3	0.00	0.00	0.00
4,600.0	22.65	70.44	4,311.0	503.2	1,416.1	1,502.9	0.00	0.00	0.00
4,700.0	22.65	70.44	4,403.3	516.1	1,452.4	1,541.4	0.00	0.00	0.00
4,800.0	22.65	70.44	4,495.6	529.0	1,488.7	1,579.9	0.00	0.00	0.00
4,900.0	22.65	70.44	4,587.9	541.9	1,525.0	1,618.4	0.00	0.00	0.00
5,000.0	22.65	70.44	4,680.2	554.7	1,561.2	1,656.9	0.00	0.00	0.00
Ohio Creek									
5,004.1	22.65	70.44	4,684.0	555.3	1,562.7	1,658.5	0.00	0.00	0.00
5,100.0	22.65	70.44	4,772.5	567.6	1,597.5	1,695.4	0.00	0.00	0.00
5,200.0	22.65	70.44	4,864.8	580.5	1,633.8	1,733.9	0.00	0.00	0.00
5,300.0	22.65	70.44	4,957.1	593.4	1,670.1	1,772.4	0.00	0.00	0.00
5,400.0	22.65	70.44	5,049.4	606.3	1,706.4	1,810.9	0.00	0.00	0.00
Williams Fork									
5,446.2	22.65	70.44	5,092.0	612.3	1,723.1	1,828.7	0.00	0.00	0.00
5,500.0	22.65	70.44	5,141.7	619.2	1,742.7	1,849.4	0.00	0.00	0.00
Drop 2.5° /100'									
5,598.5	22.65	70.44	5,232.5	631.9	1,778.4	1,887.3	0.00	0.00	0.00
5,600.0	22.61	70.44	5,233.9	632.1	1,778.9	1,887.9	2.50	-2.50	0.00
5,700.0	20.11	70.44	5,327.1	644.3	1,813.2	1,924.3	2.50	-2.50	0.00
5,800.0	17.61	70.44	5,421.7	655.1	1,843.7	1,956.6	2.50	-2.50	0.00
5,900.0	15.11	70.44	5,517.6	664.5	1,870.2	1,984.8	2.50	-2.50	0.00
6,000.0	12.61	70.44	5,614.7	672.6	1,892.8	2,008.7	2.50	-2.50	0.00
6,100.0	10.11	70.44	5,712.8	679.2	1,911.4	2,028.4	2.50	-2.50	0.00
6,200.0	7.61	70.44	5,811.6	684.3	1,925.9	2,043.8	2.50	-2.50	0.00
6,300.0	5.11	70.44	5,910.9	688.0	1,936.3	2,054.9	2.50	-2.50	0.00
6,400.0	2.61	70.44	6,010.7	690.3	1,942.6	2,061.6	2.50	-2.50	0.00
EOD @ Vertical - TOG									
6,504.3	0.00	0.00	6,115.0	691.1	1,944.9	2,064.0	2.50	-2.50	-67.51
6,600.0	0.00	0.00	6,210.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,310.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,410.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,510.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
7,000.0	0.00	0.00	6,610.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
7,100.0	0.00	0.00	6,710.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
7,200.0	0.00	0.00	6,810.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
7,300.0	0.00	0.00	6,910.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,010.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,110.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,210.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,310.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
Cameo									
7,703.3	0.00	0.00	7,314.0	691.1	1,944.9	2,064.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,410.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,510.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
8,000.0	0.00	0.00	7,610.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
Rollins									
8,029.3	0.00	0.00	7,640.0	691.1	1,944.9	2,064.0	0.00	0.00	0.00
8,100.0	0.00	0.00	7,710.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00



Well Planning Report



Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well Laramie 29-01 Fed 0993-21-17W - Slot A8
Company:	Laramie Energy, LLC	TVD Reference:	RKB=30'; @ 7493.0usft (TBD)
Project:	Mesa County, CO	MD Reference:	RKB=30'; @ 7493.0usft (TBD)
Site:	Laramie 0993-29-01	North Reference:	True
Well:	Laramie 29-01 Fed 0993-21-17W	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #2		

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)
8,200.0	0.00	0.00	7,810.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
8,300.0	0.00	0.00	7,910.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,010.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,110.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
Cozzette									
8,573.3	0.00	0.00	8,184.0	691.1	1,944.9	2,064.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,210.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,310.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
Corcoran									
8,746.3	0.00	0.00	8,357.0	691.1	1,944.9	2,064.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,410.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,510.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
9,000.0	0.00	0.00	8,610.7	691.1	1,944.9	2,064.0	0.00	0.00	0.00
TD @ 9096.3' MD / 8707.0' TVD									
9,096.3	0.00	0.00	8,707.0	691.1	1,944.9	2,064.0	0.00	0.00	0.00

Design Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
PBHL - Laramie Fed 2	0.00	0.00	8,707.0	691.1	1,944.9	1,526,400.32	2,355,291.51	39.256516	-107.777068
- plan hits target center									
- Circle (radius 50.0)									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,500.0	1,450.1	8 5/8"	8-5/8	11

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,896.6	2,739.0	Wasatch 'G' Sand			
3,418.9	3,221.0	Fort Union			
4,155.7	3,901.0	Lower Wasatch			
5,004.1	4,684.0	Ohio Creek			
5,446.2	5,092.0	Williams Fork			
6,504.3	6,115.0	TOG			
7,703.3	7,314.0	Cameo			
8,029.3	7,640.0	Rollins			
8,573.3	8,184.0	Cozzette			
8,746.3	8,357.0	Corcoran			



Well Planning Report



Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well Laramie 29-01 Fed 0993-21-17W - Slot A8
Company:	Laramie Energy, LLC	TVD Reference:	RKB=30'; @ 7493.0usft (TBD)
Project:	Mesa County, CO	MD Reference:	RKB=30'; @ 7493.0usft (TBD)
Site:	Laramie 0993-29-01	North Reference:	True
Well:	Laramie 29-01 Fed 0993-21-17W	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #2		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
250.0	250.0	0.0	0.0	KOP (Build 2.5° / 100)
1,155.9	1,132.5	59.2	166.5	EOB @ 22.65° Inc. / 70.44° Azm
5,598.5	5,232.5	631.9	1,778.4	Drop 2.5° / 100'
6,504.3	6,115.0	691.1	1,944.9	EOD @ Vertical
9,096.3	8,707.0	691.1	1,944.9	TD @ 9096.3' MD / 8707.0' TVD