



# **Laramie Energy, LLC**

**Mesa County, CO**

**Laramie 0993-29-01**

**Laramie 29-01 0993-20-13E - Slot B2**

**OH**

**Plan: Design #2**

## **KLX Well Planning Report**

**08 May, 2025**





# Well Planning Report



<b>Database:</b>	KLXDirectional-AD	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Company:</b>	Laramie Energy, LLC	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Project:</b>	Mesa County, CO	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site:</b>	Laramie 0993-29-01	<b>North Reference:</b>	True
<b>Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Design #2		

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

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

<b>Well</b>	Laramie 29-01 0993-20-13E - Slot B2					
<b>Well Position</b>	<b>+N/-S</b>	-25.2 usft	<b>Northing:</b>	1,525,793.46 usft	<b>Latitude:</b>	39.254712
	<b>+E/-W</b>	12.2 usft	<b>Easting:</b>	2,353,280.18 usft	<b>Longitude:</b>	-107.784115
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	7,463.0 usft

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

<b>Design</b>	Design #2
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<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 0.0 319.08

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	
230.0	0.00	0.00	230.0	0.0	0.0	0.00	0.00	0.00	0.00	
430.0	5.00	288.00	429.7	2.7	-8.3	2.50	2.50	0.00	288.00	
1,544.9	32.02	319.70	1,478.5	247.9	-250.4	2.50	2.42	2.84	36.57	
5,531.8	32.02	319.70	4,859.0	1,859.9	-1,617.5	0.00	0.00	0.00	0.00	
6,812.4	0.00	0.00	6,074.0	2,125.7	-1,843.0	2.50	-2.50	0.00	180.00	
8,587.4	0.00	0.00	7,849.0	2,125.7	-1,843.0	0.00	0.00	0.00	0.00	PBHL - Laramie 20-



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<b>Site:</b>	Laramie 0993-29-01	<b>North Reference:</b>	True
<b>Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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
230.0	0.00	0.00	230.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	1.75	288.00	300.0	0.3	-1.0	0.9	2.50	2.50	0.00
400.0	4.25	288.00	399.8	1.9	-6.0	5.4	2.50	2.50	0.00
430.0	5.00	288.00	429.7	2.7	-8.3	7.5	2.50	2.50	0.00
500.0	6.49	297.27	499.4	5.4	-14.7	13.8	2.50	2.13	13.24
600.0	8.79	304.81	598.5	12.4	-26.0	26.4	2.50	2.30	7.54
700.0	11.17	309.20	697.0	22.9	-39.8	43.3	2.50	2.38	4.39
800.0	13.59	312.05	794.7	36.9	-56.0	64.6	2.50	2.42	2.85
900.0	16.04	314.05	891.3	54.4	-74.7	90.0	2.50	2.45	2.00
1,000.0	18.50	315.53	986.8	75.3	-95.7	119.6	2.50	2.46	1.48
1,100.0	20.97	316.67	1,080.9	99.6	-119.1	153.3	2.50	2.47	1.14
1,200.0	23.45	317.58	1,173.5	127.3	-144.8	191.1	2.50	2.48	0.91
1,300.0	25.93	318.33	1,264.3	158.4	-172.8	232.8	2.50	2.48	0.75
1,400.0	28.41	318.95	1,353.3	192.6	-203.0	278.5	2.50	2.48	0.62
<b>8 5/8"</b>									
1,500.0	30.90	319.48	1,440.2	230.1	-235.3	328.0	2.50	2.49	0.53
1,544.9	32.02	319.70	1,478.5	247.9	-250.4	351.4	2.50	2.49	0.48
1,600.0	32.02	319.70	1,525.2	270.2	-269.3	380.6	0.00	0.00	0.00
1,700.0	32.02	319.70	1,610.0	310.7	-303.6	433.6	0.00	0.00	0.00
1,800.0	32.02	319.70	1,694.8	351.1	-337.9	486.6	0.00	0.00	0.00
1,900.0	32.02	319.70	1,779.6	391.5	-372.2	539.6	0.00	0.00	0.00
2,000.0	32.02	319.70	1,864.4	432.0	-406.5	592.7	0.00	0.00	0.00
2,100.0	32.02	319.70	1,949.2	472.4	-440.8	645.7	0.00	0.00	0.00
2,200.0	32.02	319.70	2,034.0	512.8	-475.1	698.7	0.00	0.00	0.00
2,300.0	32.02	319.70	2,118.8	553.3	-509.4	751.7	0.00	0.00	0.00
2,400.0	32.02	319.70	2,203.6	593.7	-543.7	804.7	0.00	0.00	0.00
2,500.0	32.02	319.70	2,288.3	634.1	-577.9	857.7	0.00	0.00	0.00
2,600.0	32.02	319.70	2,373.1	674.5	-612.2	910.7	0.00	0.00	0.00
2,700.0	32.02	319.70	2,457.9	715.0	-646.5	963.7	0.00	0.00	0.00
2,800.0	32.02	319.70	2,542.7	755.4	-680.8	1,016.7	0.00	0.00	0.00
2,900.0	32.02	319.70	2,627.5	795.8	-715.1	1,069.8	0.00	0.00	0.00
<b>Wasatch 'G' Sand</b>									
2,983.1	32.02	319.70	2,698.0	829.5	-743.6	1,113.8	0.00	0.00	0.00
3,000.0	32.02	319.70	2,712.3	836.3	-749.4	1,122.8	0.00	0.00	0.00
3,100.0	32.02	319.70	2,797.1	876.7	-783.7	1,175.8	0.00	0.00	0.00
3,200.0	32.02	319.70	2,881.9	917.1	-818.0	1,228.8	0.00	0.00	0.00
3,300.0	32.02	319.70	2,966.7	957.6	-852.3	1,281.8	0.00	0.00	0.00
3,400.0	32.02	319.70	3,051.5	998.0	-886.6	1,334.8	0.00	0.00	0.00
3,500.0	32.02	319.70	3,136.3	1,038.4	-920.8	1,387.8	0.00	0.00	0.00
<b>Fort Union</b>									
3,551.6	32.02	319.70	3,180.0	1,059.3	-938.5	1,415.2	0.00	0.00	0.00
3,600.0	32.02	319.70	3,221.0	1,078.9	-955.1	1,440.8	0.00	0.00	0.00
3,700.0	32.02	319.70	3,305.8	1,119.3	-989.4	1,493.8	0.00	0.00	0.00
3,800.0	32.02	319.70	3,390.6	1,159.7	-1,023.7	1,546.9	0.00	0.00	0.00
3,900.0	32.02	319.70	3,475.4	1,200.2	-1,058.0	1,599.9	0.00	0.00	0.00
4,000.0	32.02	319.70	3,560.2	1,240.6	-1,092.3	1,652.9	0.00	0.00	0.00
4,100.0	32.02	319.70	3,645.0	1,281.0	-1,126.6	1,705.9	0.00	0.00	0.00
4,200.0	32.02	319.70	3,729.8	1,321.5	-1,160.9	1,758.9	0.00	0.00	0.00
4,300.0	32.02	319.70	3,814.6	1,361.9	-1,195.2	1,811.9	0.00	0.00	0.00
<b>Lower Wasatch</b>									
4,353.6	32.02	319.70	3,860.0	1,383.5	-1,213.5	1,840.3	0.00	0.00	0.00



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<b>Wellbore:</b>	OH		
<b>Design:</b>	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)
4,400.0	32.02	319.70	3,899.4	1,402.3	-1,229.5	1,864.9	0.00	0.00	0.00
4,500.0	32.02	319.70	3,984.2	1,442.7	-1,263.7	1,917.9	0.00	0.00	0.00
4,600.0	32.02	319.70	4,069.0	1,483.2	-1,298.0	1,970.9	0.00	0.00	0.00
4,700.0	32.02	319.70	4,153.7	1,523.6	-1,332.3	2,024.0	0.00	0.00	0.00
4,800.0	32.02	319.70	4,238.5	1,564.0	-1,366.6	2,077.0	0.00	0.00	0.00
4,900.0	32.02	319.70	4,323.3	1,604.5	-1,400.9	2,130.0	0.00	0.00	0.00
5,000.0	32.02	319.70	4,408.1	1,644.9	-1,435.2	2,183.0	0.00	0.00	0.00
5,100.0	32.02	319.70	4,492.9	1,685.3	-1,469.5	2,236.0	0.00	0.00	0.00
5,200.0	32.02	319.70	4,577.7	1,725.8	-1,503.8	2,289.0	0.00	0.00	0.00
<b>Ohio Creek</b>									
5,277.0	32.02	319.70	4,643.0	1,756.9	-1,530.2	2,329.8	0.00	0.00	0.00
5,300.0	32.02	319.70	4,662.5	1,766.2	-1,538.1	2,342.0	0.00	0.00	0.00
5,400.0	32.02	319.70	4,747.3	1,806.6	-1,572.4	2,395.0	0.00	0.00	0.00
5,500.0	32.02	319.70	4,832.1	1,847.1	-1,606.6	2,448.0	0.00	0.00	0.00
5,531.8	32.02	319.70	4,859.0	1,859.9	-1,617.5	2,464.9	0.00	0.00	0.00
5,600.0	30.31	319.70	4,917.4	1,886.8	-1,640.4	2,500.2	2.50	-2.50	0.00
5,700.0	27.81	319.70	5,004.8	1,923.9	-1,671.8	2,548.8	2.50	-2.50	0.00
<b>Williams Fork</b>									
5,751.9	26.51	319.70	5,051.0	1,942.0	-1,687.1	2,572.5	2.50	-2.50	0.00
5,800.0	25.31	319.70	5,094.2	1,958.0	-1,700.7	2,593.5	2.50	-2.50	0.00
5,900.0	22.81	319.70	5,185.5	1,989.1	-1,727.1	2,634.2	2.50	-2.50	0.00
6,000.0	20.31	319.70	5,278.5	2,017.1	-1,750.8	2,671.0	2.50	-2.50	0.00
6,100.0	17.81	319.70	5,373.0	2,042.0	-1,772.0	2,703.6	2.50	-2.50	0.00
6,200.0	15.31	319.70	5,468.9	2,063.7	-1,790.4	2,732.1	2.50	-2.50	0.00
6,300.0	12.81	319.70	5,565.9	2,082.2	-1,806.1	2,756.4	2.50	-2.50	0.00
6,400.0	10.31	319.70	5,663.9	2,097.5	-1,819.1	2,776.4	2.50	-2.50	0.00
6,500.0	7.81	319.70	5,762.6	2,109.5	-1,829.2	2,792.2	2.50	-2.50	0.00
6,600.0	5.31	319.70	5,861.9	2,118.2	-1,836.6	2,803.6	2.50	-2.50	0.00
6,700.0	2.81	319.70	5,961.7	2,123.6	-1,841.2	2,810.7	2.50	-2.50	0.00
6,800.0	0.31	319.70	6,061.6	2,125.7	-1,843.0	2,813.4	2.50	-2.50	0.00
<b>TOG</b>									
6,812.4	0.00	0.00	6,074.0	2,125.7	-1,843.0	2,813.4	2.50	-2.50	0.00
6,900.0	0.00	0.00	6,161.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
7,000.0	0.00	0.00	6,261.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
7,100.0	0.00	0.00	6,361.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
7,200.0	0.00	0.00	6,461.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
7,300.0	0.00	0.00	6,561.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
7,400.0	0.00	0.00	6,661.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
7,500.0	0.00	0.00	6,761.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
7,600.0	0.00	0.00	6,861.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
7,700.0	0.00	0.00	6,961.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
7,800.0	0.00	0.00	7,061.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
7,900.0	0.00	0.00	7,161.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
8,000.0	0.00	0.00	7,261.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
<b>Cameo</b>									
8,011.4	0.00	0.00	7,273.0	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
8,100.0	0.00	0.00	7,361.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
8,200.0	0.00	0.00	7,461.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
8,300.0	0.00	0.00	7,561.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
<b>Rollins</b>									
8,337.4	0.00	0.00	7,599.0	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
8,400.0	0.00	0.00	7,661.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00
8,500.0	0.00	0.00	7,761.6	2,125.7	-1,843.0	2,813.4	0.00	0.00	0.00



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<b>Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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)	
8,587.4	0.00	0.00	7,849.0	2,125.7	-1,843.0	2,813.4	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	
- hit/miss target - Shape PBHL - Laramie 20-13 - plan hits target center - Circle (radius 50.0)	0.00	0.00	7,849.0	2,125.7	-1,843.0	1,527,964.87	2,351,491.22	39.260548	-107.790624	

Casing Points						
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")		
1,500.0	1,440.2	8 5/8"	8-5/8	11		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,983.1	2,698.0	Wasatch 'G' Sand				
3,551.6	3,180.0	Fort Union				
4,353.6	3,860.0	Lower Wasatch				
5,277.0	4,643.0	Ohio Creek				
5,751.9	5,051.0	Williams Fork				
6,812.4	6,074.0	TOG				
8,011.4	7,273.0	Cameo				
8,337.4	7,599.0	Rollins				