



# **Laramie Energy, LLC**

**Mesa County, CO**

**Laramie 0993-29-01**

**Laramie 29-01 0993-20-14E - Slot B3**

**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 0993-20-14E - Slot B3
<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 0993-20-14E	<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 0993-20-14E - Slot B3					
<b>Well Position</b>	<b>+N/-S</b>	-32.1 usft	<b>Northing:</b>	1,525,786.43 usft	<b>Latitude:</b>	39.254693
	<b>+E/-W</b>	19.5 usft	<b>Easting:</b>	2,353,287.28 usft	<b>Longitude:</b>	-107.784090
<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 0.0 314.11

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	
265.0	0.00	0.00	265.0	0.0	0.0	0.00	0.00	0.00	0.00	
545.0	7.00	290.00	544.3	5.8	-16.1	2.50	2.50	0.00	290.00	
1,480.8	29.58	314.80	1,427.9	190.7	-236.6	2.50	2.41	2.65	31.43	
5,511.9	29.58	314.80	4,933.7	1,592.9	-1,648.5	0.00	0.00	0.00	0.00	
6,695.1	0.00	0.00	6,065.0	1,803.3	-1,860.5	2.50	-2.50	0.00	180.00	
9,287.1	0.00	0.00	8,657.0	1,803.3	-1,860.5	0.00	0.00	0.00	0.00	PBHL - Laramie 20-



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<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 0993-20-14E	<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
<b>KOP (Build 2.5° / 100)</b>									
265.0	0.00	0.00	265.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.88	290.00	300.0	0.1	-0.3	0.2	2.50	2.50	0.00
400.0	3.38	290.00	399.9	1.4	-3.7	3.6	2.50	2.50	0.00
500.0	5.88	290.00	499.6	4.1	-11.3	11.0	2.50	2.50	0.00
<b>EOB @ 7.00° Inc. / 290.00° Azm : Build 2.5° / 100'</b>									
545.0	7.00	290.00	544.3	5.8	-16.1	15.6	2.50	2.50	0.00
600.0	8.20	295.03	598.8	8.6	-22.8	22.4	2.50	2.19	9.15
700.0	10.50	301.15	697.5	16.4	-37.0	38.0	2.50	2.30	6.12
800.0	12.87	305.06	795.4	27.5	-53.9	57.9	2.50	2.37	3.91
900.0	15.29	307.77	892.4	42.0	-73.5	82.0	2.50	2.41	2.71
1,000.0	17.72	309.75	988.3	59.8	-95.6	110.3	2.50	2.44	1.98
1,100.0	20.17	311.26	1,082.8	80.9	-120.3	142.7	2.50	2.45	1.51
1,200.0	22.64	312.46	1,175.9	105.3	-147.4	179.1	2.50	2.46	1.20
1,300.0	25.10	313.43	1,267.4	132.8	-177.1	219.6	2.50	2.47	0.97
1,400.0	27.58	314.24	1,357.0	163.6	-209.0	264.0	2.50	2.47	0.81
<b>EOB @ 29.58° Inc. / 314.80° Azm</b>									
1,480.8	29.58	314.80	1,427.9	190.7	-236.6	302.6	2.50	2.48	0.70
<b>8 5/8"</b>									
1,500.0	29.58	314.80	1,444.6	197.4	-243.3	312.1	0.00	0.00	0.00
1,600.0	29.58	314.80	1,531.6	232.1	-278.4	361.4	0.00	0.00	0.00
1,700.0	29.58	314.80	1,618.6	266.9	-313.4	410.8	0.00	0.00	0.00
1,800.0	29.58	314.80	1,705.5	301.7	-348.4	460.2	0.00	0.00	0.00
1,900.0	29.58	314.80	1,792.5	336.5	-383.4	509.5	0.00	0.00	0.00
2,000.0	29.58	314.80	1,879.5	371.3	-418.5	558.9	0.00	0.00	0.00
2,100.0	29.58	314.80	1,966.4	406.1	-453.5	608.2	0.00	0.00	0.00
2,200.0	29.58	314.80	2,053.4	440.8	-488.5	657.6	0.00	0.00	0.00
2,300.0	29.58	314.80	2,140.4	475.6	-523.5	707.0	0.00	0.00	0.00
2,400.0	29.58	314.80	2,227.3	510.4	-558.6	756.3	0.00	0.00	0.00
2,500.0	29.58	314.80	2,314.3	545.2	-593.6	805.7	0.00	0.00	0.00
2,600.0	29.58	314.80	2,401.3	580.0	-628.6	855.0	0.00	0.00	0.00
2,700.0	29.58	314.80	2,488.2	614.8	-663.6	904.4	0.00	0.00	0.00
2,800.0	29.58	314.80	2,575.2	649.6	-698.7	953.8	0.00	0.00	0.00
2,900.0	29.58	314.80	2,662.2	684.3	-733.7	1,003.1	0.00	0.00	0.00
<b>Wasatch 'G' Sand</b>									
2,930.8	29.58	314.80	2,689.0	695.1	-744.5	1,018.3	0.00	0.00	0.00
3,000.0	29.58	314.80	2,749.1	719.1	-768.7	1,052.5	0.00	0.00	0.00
3,100.0	29.58	314.80	2,836.1	753.9	-803.7	1,101.8	0.00	0.00	0.00
3,200.0	29.58	314.80	2,923.1	788.7	-838.8	1,151.2	0.00	0.00	0.00
3,300.0	29.58	314.80	3,010.0	823.5	-873.8	1,200.6	0.00	0.00	0.00
3,400.0	29.58	314.80	3,097.0	858.3	-908.8	1,249.9	0.00	0.00	0.00
<b>Fort Union</b>									
3,485.1	29.58	314.80	3,171.0	887.9	-938.6	1,291.9	0.00	0.00	0.00
3,500.0	29.58	314.80	3,184.0	893.0	-943.8	1,299.3	0.00	0.00	0.00
3,600.0	29.58	314.80	3,270.9	927.8	-978.9	1,348.6	0.00	0.00	0.00
3,700.0	29.58	314.80	3,357.9	962.6	-1,013.9	1,398.0	0.00	0.00	0.00
3,800.0	29.58	314.80	3,444.9	997.4	-1,048.9	1,447.4	0.00	0.00	0.00
3,900.0	29.58	314.80	3,531.8	1,032.2	-1,084.0	1,496.7	0.00	0.00	0.00
4,000.0	29.58	314.80	3,618.8	1,067.0	-1,119.0	1,546.1	0.00	0.00	0.00
4,100.0	29.58	314.80	3,705.8	1,101.7	-1,154.0	1,595.4	0.00	0.00	0.00



# Well Planning Report



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<b>Well:</b>	Laramie 29-01 0993-20-14E	<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)	
4,200.0	29.58	314.80	3,792.7	1,136.5	-1,189.0	1,644.8	0.00	0.00	0.00	
<b>Lower Wasatch</b>										
4,267.0	29.58	314.80	3,851.0	1,159.8	-1,212.5	1,677.9	0.00	0.00	0.00	
4,300.0	29.58	314.80	3,879.7	1,171.3	-1,224.1	1,694.2	0.00	0.00	0.00	
4,400.0	29.58	314.80	3,966.7	1,206.1	-1,259.1	1,743.5	0.00	0.00	0.00	
4,500.0	29.58	314.80	4,053.6	1,240.9	-1,294.1	1,792.9	0.00	0.00	0.00	
4,600.0	29.58	314.80	4,140.6	1,275.7	-1,329.1	1,842.2	0.00	0.00	0.00	
4,700.0	29.58	314.80	4,227.6	1,310.4	-1,364.2	1,891.6	0.00	0.00	0.00	
4,800.0	29.58	314.80	4,314.5	1,345.2	-1,399.2	1,941.0	0.00	0.00	0.00	
4,900.0	29.58	314.80	4,401.5	1,380.0	-1,434.2	1,990.3	0.00	0.00	0.00	
5,000.0	29.58	314.80	4,488.5	1,414.8	-1,469.2	2,039.7	0.00	0.00	0.00	
5,100.0	29.58	314.80	4,575.4	1,449.6	-1,504.3	2,089.0	0.00	0.00	0.00	
<b>Ohio Creek</b>										
5,167.3	29.58	314.80	4,634.0	1,473.0	-1,527.8	2,122.3	0.00	0.00	0.00	
5,200.0	29.58	314.80	4,662.4	1,484.4	-1,539.3	2,138.4	0.00	0.00	0.00	
5,300.0	29.58	314.80	4,749.4	1,519.2	-1,574.3	2,187.8	0.00	0.00	0.00	
5,400.0	29.58	314.80	4,836.3	1,553.9	-1,609.3	2,237.1	0.00	0.00	0.00	
5,500.0	29.58	314.80	4,923.3	1,588.7	-1,644.4	2,286.5	0.00	0.00	0.00	
<b>Drop 2.5° /100'</b>										
5,511.9	29.58	314.80	4,933.7	1,592.9	-1,648.5	2,292.4	0.00	0.00	0.00	
5,600.0	27.38	314.80	5,011.1	1,622.5	-1,678.3	2,334.4	2.50	-2.50	0.00	
<b>Williams Fork</b>										
5,634.7	26.51	314.80	5,042.0	1,633.5	-1,689.5	2,350.1	2.50	-2.50	0.00	
5,700.0	24.88	314.80	5,100.9	1,653.5	-1,709.6	2,378.4	2.50	-2.50	0.00	
5,800.0	22.38	314.80	5,192.5	1,681.7	-1,738.0	2,418.5	2.50	-2.50	0.00	
5,900.0	19.88	314.80	5,285.8	1,707.1	-1,763.6	2,454.5	2.50	-2.50	0.00	
6,000.0	17.38	314.80	5,380.5	1,729.6	-1,786.3	2,486.4	2.50	-2.50	0.00	
6,100.0	14.88	314.80	5,476.6	1,749.2	-1,806.0	2,514.2	2.50	-2.50	0.00	
6,200.0	12.38	314.80	5,573.7	1,765.8	-1,822.7	2,537.8	2.50	-2.50	0.00	
6,300.0	9.88	314.80	5,671.9	1,779.4	-1,836.4	2,557.1	2.50	-2.50	0.00	
6,400.0	7.38	314.80	5,770.7	1,790.0	-1,847.0	2,572.1	2.50	-2.50	0.00	
6,500.0	4.88	314.80	5,870.1	1,797.5	-1,854.6	2,582.7	2.50	-2.50	0.00	
6,600.0	2.38	314.80	5,969.9	1,802.0	-1,859.1	2,589.1	2.50	-2.50	0.00	
<b>EOD @ Vertical - TOG</b>										
6,695.1	0.00	0.00	6,065.0	1,803.3	-1,860.5	2,591.0	2.50	-2.50	47.53	
6,700.0	0.00	0.00	6,069.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	
6,800.0	0.00	0.00	6,169.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	
6,900.0	0.00	0.00	6,269.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	
7,000.0	0.00	0.00	6,369.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	
7,100.0	0.00	0.00	6,469.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	
7,200.0	0.00	0.00	6,569.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	
7,300.0	0.00	0.00	6,669.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	
7,400.0	0.00	0.00	6,769.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	
7,500.0	0.00	0.00	6,869.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	
7,600.0	0.00	0.00	6,969.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,069.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,169.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	
<b>Cameo</b>										
7,894.1	0.00	0.00	7,264.0	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,269.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,369.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	
8,100.0	0.00	0.00	7,469.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	
8,200.0	0.00	0.00	7,569.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00	



Well Planning Report



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<b>Well:</b>	Laramie 29-01 0993-20-14E	<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)
<b>Rollins</b>									
8,220.1	0.00	0.00	7,590.0	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00
8,300.0	0.00	0.00	7,669.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00
8,400.0	0.00	0.00	7,769.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00
8,500.0	0.00	0.00	7,869.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00
8,600.0	0.00	0.00	7,969.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,069.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00
<b>Cozzette</b>									
8,764.1	0.00	0.00	8,134.0	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,169.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,269.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00
<b>Corcoran</b>									
8,937.1	0.00	0.00	8,307.0	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00
9,000.0	0.00	0.00	8,369.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00
9,100.0	0.00	0.00	8,469.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00
9,200.0	0.00	0.00	8,569.9	1,803.3	-1,860.5	2,591.0	0.00	0.00	0.00
<b>TD @ 9287.1' MD / 8657.0' TVD</b>									
9,287.1	0.00	0.00	8,657.0	1,803.3	-1,860.5	2,591.0	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
PBHL - Laramie 20-14	0.00	0.00	8,657.0	1,803.3	-1,860.5	1,527,635.98	2,351,472.73	39.259644	-107.790660
- hit/miss target									
- Shape									
- plan hits target center									
- Circle (radius 50.0)									

Casing Points						
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")		
1,500.0	1,444.6	8 5/8"	8-5/8	11		



<b>Database:</b>	KLXDirectional-AD	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-14E - Slot B3
<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 0993-20-14E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Design #2		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,930.8	2,689.0	Wasatch 'G' Sand			
3,485.1	3,171.0	Fort Union			
4,267.0	3,851.0	Lower Wasatch			
5,167.3	4,634.0	Ohio Creek			
5,634.7	5,042.0	Williams Fork			
6,695.1	6,065.0	TOG			
7,894.1	7,264.0	Cameo			
8,220.1	7,590.0	Rollins			
8,764.1	8,134.0	Cozzette			
8,937.1	8,307.0	Corcoran			

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
265.0	265.0	0.0	0.0	KOP (Build 2.5° / 100)
545.0	544.3	5.8	-16.1	EOB @ 7.00° Inc. / 290.00° Azm : Build 2.5° / 100'
1,480.8	1,427.9	190.7	-236.6	EOB @ 29.58° Inc. / 314.80° Azm
5,511.9	4,933.7	1,592.9	-1,648.5	Drop 2.5° / 100'
6,695.1	6,065.0	1,803.3	-1,860.5	EOD @ Vertical
9,287.1	8,657.0	1,803.3	-1,860.5	TD @ 9287.1' MD / 8657.0' TVD