



Laramie Energy, LLC

Mesa County, CO

CCR 0994-23-02

CCR FED 0994-11-A3-HN1

OH

Plan: Permit #2

KLX Well Planning Report

05 August, 2025





Well Planning Report



Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well CCR FED 0994-11-A3-HN1
Company:	Laramie Energy, LLC	TVD Reference:	RKB=30' @ 7172.0usft (TBD)
Project:	Mesa County, CO	MD Reference:	RKB=30' @ 7172.0usft (TBD)
Site:	CCR 0994-23-02	North Reference:	True
Well:	CCR FED 0994-11-A3-HN1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Permit #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	CCR 0994-23-02				
Site Position:		Northing:	1,531,144.93 usft	Latitude:	39.268151
From:	Lat/Long	Easting:	2,335,433.61 usft	Longitude:	-107.847607
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.48 °

Well	CCR FED 0994-11-A3-HN1					
Well Position	+N/-S	-15.7 usft	Northing:	1,531,131.16 usft	Latitude:	39.268108
	+E/-W	-73.3 usft	Easting:	2,335,359.90 usft	Longitude:	-107.847866
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	7,142.0 usft

Wellbore	OH				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2024	8/20/2024	8.63	65.07	50,732.90000000

Design	Permit #2			
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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	358.20

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	
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,607.3	8.15	262.39	2,605.9	-3.8	-28.6	2.00	2.00	0.00	262.39	
10,496.1	8.15	262.39	10,415.2	-151.9	-1,136.6	0.00	0.00	0.00	0.00	
11,488.1	88.44	358.20	11,054.6	464.5	-1,244.6	9.00	8.09	9.66	95.97	
21,458.1	88.44	358.20	11,326.0	10,425.8	-1,557.6	0.00	0.00	0.00	0.00	PBHL - CCR FED C



Well Planning Report



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Project:	Mesa County, CO	MD Reference:	RKB=30' @ 7172.0usft (TBD)
Site:	CCR 0994-23-02	North Reference:	True
Well:	CCR FED 0994-11-A3-HN1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Permit #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
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
Surface Casing									
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
Build 2° / 100'									
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	2.00	262.39	2,300.0	-0.2	-1.7	-0.2	2.00	2.00	0.00
Wasatch G-Sand									
2,341.0	2.82	262.39	2,341.0	-0.5	-3.4	-0.4	2.00	2.00	0.00
2,400.0	4.00	262.39	2,399.8	-0.9	-6.9	-0.7	2.00	2.00	0.00
2,500.0	6.00	262.39	2,499.5	-2.1	-15.6	-1.6	2.00	2.00	0.00
EOB @ 8.15° Inc. / 262.39° Azm									
2,607.3	8.15	262.39	2,605.9	-3.8	-28.6	-2.9	2.00	2.00	0.00
2,700.0	8.15	262.39	2,697.7	-5.6	-41.7	-4.3	0.00	0.00	0.00
2,800.0	8.15	262.39	2,796.7	-7.4	-55.7	-5.7	0.00	0.00	0.00
2,900.0	8.15	262.39	2,895.7	-9.3	-69.8	-7.1	0.00	0.00	0.00
3,000.0	8.15	262.39	2,994.7	-11.2	-83.8	-8.6	0.00	0.00	0.00
3,100.0	8.15	262.39	3,093.7	-13.1	-97.8	-10.0	0.00	0.00	0.00
3,200.0	8.15	262.39	3,192.6	-14.9	-111.9	-11.4	0.00	0.00	0.00
3,300.0	8.15	262.39	3,291.6	-16.8	-125.9	-12.9	0.00	0.00	0.00
3,400.0	8.15	262.39	3,390.6	-18.7	-140.0	-14.3	0.00	0.00	0.00
3,500.0	8.15	262.39	3,489.6	-20.6	-154.0	-15.7	0.00	0.00	0.00
3,600.0	8.15	262.39	3,588.6	-22.5	-168.1	-17.2	0.00	0.00	0.00
3,700.0	8.15	262.39	3,687.6	-24.3	-182.1	-18.6	0.00	0.00	0.00
3,800.0	8.15	262.39	3,786.6	-26.2	-196.2	-20.0	0.00	0.00	0.00
3,900.0	8.15	262.39	3,885.6	-28.1	-210.2	-21.5	0.00	0.00	0.00
4,000.0	8.15	262.39	3,984.6	-30.0	-224.2	-22.9	0.00	0.00	0.00
4,100.0	8.15	262.39	4,083.6	-31.8	-238.3	-24.3	0.00	0.00	0.00
4,200.0	8.15	262.39	4,182.6	-33.7	-252.3	-25.8	0.00	0.00	0.00
Ohio Creek									
4,256.3	8.15	262.39	4,238.3	-34.8	-260.2	-26.6	0.00	0.00	0.00
4,300.0	8.15	262.39	4,281.6	-35.6	-266.4	-27.2	0.00	0.00	0.00
Williams Fork									
4,383.5	8.15	262.39	4,364.2	-37.2	-278.1	-28.4	0.00	0.00	0.00



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Wellbore:	OH		
Design:	Permit #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	8.15	262.39	4,380.5	-37.5	-280.4	-28.6	0.00	0.00	0.00	
4,500.0	8.15	262.39	4,479.5	-39.3	-294.5	-30.1	0.00	0.00	0.00	
4,600.0	8.15	262.39	4,578.5	-41.2	-308.5	-31.5	0.00	0.00	0.00	
4,700.0	8.15	262.39	4,677.5	-43.1	-322.5	-32.9	0.00	0.00	0.00	
4,800.0	8.15	262.39	4,776.5	-45.0	-336.6	-34.4	0.00	0.00	0.00	
4,900.0	8.15	262.39	4,875.5	-46.8	-350.6	-35.8	0.00	0.00	0.00	
5,000.0	8.15	262.39	4,974.5	-48.7	-364.7	-37.2	0.00	0.00	0.00	
5,100.0	8.15	262.39	5,073.5	-50.6	-378.7	-38.7	0.00	0.00	0.00	
5,200.0	8.15	262.39	5,172.5	-52.5	-392.8	-40.1	0.00	0.00	0.00	
5,300.0	8.15	262.39	5,271.5	-54.4	-406.8	-41.5	0.00	0.00	0.00	
5,400.0	8.15	262.39	5,370.5	-56.2	-420.9	-43.0	0.00	0.00	0.00	
5,500.0	8.15	262.39	5,469.4	-58.1	-434.9	-44.4	0.00	0.00	0.00	
5,600.0	8.15	262.39	5,568.4	-60.0	-448.9	-45.9	0.00	0.00	0.00	
Top of Gas										
5,677.1	8.15	262.39	5,644.7	-61.4	-459.8	-47.0	0.00	0.00	0.00	
5,700.0	8.15	262.39	5,667.4	-61.9	-463.0	-47.3	0.00	0.00	0.00	
5,800.0	8.15	262.39	5,766.4	-63.7	-477.0	-48.7	0.00	0.00	0.00	
5,900.0	8.15	262.39	5,865.4	-65.6	-491.1	-50.2	0.00	0.00	0.00	
6,000.0	8.15	262.39	5,964.4	-67.5	-505.1	-51.6	0.00	0.00	0.00	
6,100.0	8.15	262.39	6,063.4	-69.4	-519.2	-53.0	0.00	0.00	0.00	
6,200.0	8.15	262.39	6,162.4	-71.2	-533.2	-54.5	0.00	0.00	0.00	
6,300.0	8.15	262.39	6,261.4	-73.1	-547.3	-55.9	0.00	0.00	0.00	
6,400.0	8.15	262.39	6,360.4	-75.0	-561.3	-57.3	0.00	0.00	0.00	
6,500.0	8.15	262.39	6,459.4	-76.9	-575.3	-58.8	0.00	0.00	0.00	
6,600.0	8.15	262.39	6,558.3	-78.7	-589.4	-60.2	0.00	0.00	0.00	
Cameo										
6,660.6	8.15	262.39	6,618.3	-79.9	-597.9	-61.1	0.00	0.00	0.00	
6,700.0	8.15	262.39	6,657.3	-80.6	-603.4	-61.6	0.00	0.00	0.00	
6,800.0	8.15	262.39	6,756.3	-82.5	-617.5	-63.1	0.00	0.00	0.00	
6,900.0	8.15	262.39	6,855.3	-84.4	-631.5	-64.5	0.00	0.00	0.00	
7,000.0	8.15	262.39	6,954.3	-86.3	-645.6	-65.9	0.00	0.00	0.00	
Rollins										
7,070.6	8.15	262.39	7,024.2	-87.6	-655.5	-66.9	0.00	0.00	0.00	
7,100.0	8.15	262.39	7,053.3	-88.1	-659.6	-67.4	0.00	0.00	0.00	
7,200.0	8.15	262.39	7,152.3	-90.0	-673.6	-68.8	0.00	0.00	0.00	
7,300.0	8.15	262.39	7,251.3	-91.9	-687.7	-70.2	0.00	0.00	0.00	
7,400.0	8.15	262.39	7,350.3	-93.8	-701.7	-71.7	0.00	0.00	0.00	
7,500.0	8.15	262.39	7,449.3	-95.6	-715.8	-73.1	0.00	0.00	0.00	
Cozette										
7,508.8	8.15	262.39	7,458.0	-95.8	-717.0	-73.2	0.00	0.00	0.00	
7,600.0	8.15	262.39	7,548.3	-97.5	-729.8	-74.5	0.00	0.00	0.00	
Corcoran										
7,678.5	8.15	262.39	7,625.9	-99.0	-740.8	-75.7	0.00	0.00	0.00	
7,700.0	8.15	262.39	7,647.3	-99.4	-743.9	-76.0	0.00	0.00	0.00	
7,800.0	8.15	262.39	7,746.2	-101.3	-757.9	-77.4	0.00	0.00	0.00	
7,900.0	8.15	262.39	7,845.2	-103.1	-772.0	-78.8	0.00	0.00	0.00	
8,000.0	8.15	262.39	7,944.2	-105.0	-786.0	-80.3	0.00	0.00	0.00	
Upper Mancos										
8,082.4	8.15	262.39	8,025.8	-106.6	-797.6	-81.5	0.00	0.00	0.00	
8,100.0	8.15	262.39	8,043.2	-106.9	-800.0	-81.7	0.00	0.00	0.00	
8,200.0	8.15	262.39	8,142.2	-108.8	-814.1	-83.1	0.00	0.00	0.00	
Intermediate Casing										
8,286.7	8.15	262.39	8,228.0	-110.4	-826.3	-84.4	0.00	0.00	0.00	



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Wellbore:	OH		
Design:	Permit #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)	
8,300.0	8.15	262.39	8,241.2	-110.6	-828.1	-84.6	0.00	0.00	0.00	
8,400.0	8.15	262.39	8,340.2	-112.5	-842.2	-86.0	0.00	0.00	0.00	
Top of Completed Interval - Buck Tongue										
8,472.2	8.15	262.39	8,411.6	-113.9	-852.3	-87.0	0.00	0.00	0.00	
8,500.0	8.15	262.39	8,439.2	-114.4	-856.2	-87.4	0.00	0.00	0.00	
8,600.0	8.15	262.39	8,538.2	-116.3	-870.3	-88.9	0.00	0.00	0.00	
8,700.0	8.15	262.39	8,637.2	-118.1	-884.3	-90.3	0.00	0.00	0.00	
8,800.0	8.15	262.39	8,736.2	-120.0	-898.4	-91.7	0.00	0.00	0.00	
8,900.0	8.15	262.39	8,835.1	-121.9	-912.4	-93.2	0.00	0.00	0.00	
9,000.0	8.15	262.39	8,934.1	-123.8	-926.4	-94.6	0.00	0.00	0.00	
9,100.0	8.15	262.39	9,033.1	-125.7	-940.5	-96.1	0.00	0.00	0.00	
Castlegate										
9,142.7	8.15	262.39	9,075.4	-126.5	-946.5	-96.7	0.00	0.00	0.00	
9,200.0	8.15	262.39	9,132.1	-127.5	-954.5	-97.5	0.00	0.00	0.00	
9,300.0	8.15	262.39	9,231.1	-129.4	-968.6	-98.9	0.00	0.00	0.00	
Blue Gate										
9,345.6	8.15	262.39	9,276.3	-130.3	-975.0	-99.6	0.00	0.00	0.00	
9,400.0	8.15	262.39	9,330.1	-131.3	-982.6	-100.4	0.00	0.00	0.00	
9,500.0	8.15	262.39	9,429.1	-133.2	-996.7	-101.8	0.00	0.00	0.00	
9,600.0	8.15	262.39	9,528.1	-135.0	-1,010.7	-103.2	0.00	0.00	0.00	
9,700.0	8.15	262.39	9,627.1	-136.9	-1,024.7	-104.7	0.00	0.00	0.00	
Prarie Canyon										
9,720.3	8.15	262.39	9,647.1	-137.3	-1,027.6	-104.9	0.00	0.00	0.00	
9,800.0	8.15	262.39	9,726.1	-138.8	-1,038.8	-106.1	0.00	0.00	0.00	
9,900.0	8.15	262.39	9,825.1	-140.7	-1,052.8	-107.5	0.00	0.00	0.00	
10,000.0	8.15	262.39	9,924.0	-142.5	-1,066.9	-109.0	0.00	0.00	0.00	
10,100.0	8.15	262.39	10,023.0	-144.4	-1,080.9	-110.4	0.00	0.00	0.00	
10,200.0	8.15	262.39	10,122.0	-146.3	-1,095.0	-111.8	0.00	0.00	0.00	
10,300.0	8.15	262.39	10,221.0	-148.2	-1,109.0	-113.3	0.00	0.00	0.00	
10,400.0	8.15	262.39	10,320.0	-150.0	-1,123.1	-114.7	0.00	0.00	0.00	
Build 9° / 100'										
10,496.1	8.15	262.39	10,415.2	-151.9	-1,136.6	-116.1	0.00	0.00	0.00	
10,500.0	8.12	264.85	10,419.0	-151.9	-1,137.1	-116.1	9.00	-0.75	63.42	
10,550.0	9.03	294.79	10,468.5	-150.6	-1,144.2	-114.6	9.00	1.82	59.88	
10,600.0	11.72	315.09	10,517.7	-145.3	-1,151.3	-109.1	9.00	5.38	40.60	
10,650.0	15.28	327.01	10,566.3	-136.2	-1,158.5	-99.8	9.00	7.12	23.85	
Upper Niobrara										
10,697.4	19.02	334.03	10,611.6	-124.0	-1,165.3	-87.3	9.00	7.89	14.79	
10,700.0	19.23	334.33	10,614.0	-123.3	-1,165.7	-86.6	9.00	8.12	11.82	
10,750.0	23.37	339.19	10,660.6	-106.6	-1,172.8	-69.7	9.00	8.29	9.71	
10,800.0	27.62	342.64	10,705.7	-86.2	-1,179.7	-49.1	9.00	8.50	6.89	
10,850.0	31.93	345.22	10,749.1	-62.4	-1,186.6	-25.1	9.00	8.63	5.17	
10,900.0	36.29	347.24	10,790.5	-35.1	-1,193.2	2.4	9.00	8.71	4.05	
10,950.0	40.67	348.89	10,829.6	-4.7	-1,199.6	33.0	9.00	8.77	3.28	
Tow Creek										
10,958.5	41.42	349.14	10,836.0	0.8	-1,200.7	38.5	9.00	8.79	2.94	
11,000.0	45.07	350.26	10,866.3	28.8	-1,205.8	66.6	9.00	8.81	2.71	
11,050.0	49.49	351.44	10,900.2	65.0	-1,211.6	103.0	9.00	8.83	2.35	
11,100.0	53.92	352.47	10,931.2	103.9	-1,217.1	142.0	9.00	8.85	2.06	
11,150.0	58.35	353.39	10,959.0	145.1	-1,222.2	183.4	9.00	8.87	1.84	
11,200.0	62.79	354.23	10,983.6	188.3	-1,226.9	226.8	9.00	8.88	1.67	
11,250.0	67.24	355.00	11,004.7	233.4	-1,231.1	272.0	9.00	8.89	1.54	
11,300.0	71.69	355.72	11,022.2	280.1	-1,234.9	318.8	9.00	8.90	1.45	



Well Planning Report



Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well CCR FED 0994-11-A3-HN1
Company:	Laramie Energy, LLC	TVD Reference:	RKB=30' @ 7172.0usft (TBD)
Project:	Mesa County, CO	MD Reference:	RKB=30' @ 7172.0usft (TBD)
Site:	CCR 0994-23-02	North Reference:	True
Well:	CCR FED 0994-11-A3-HN1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Permit #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)
11,350.0	76.14	356.41	11,036.1	328.0	-1,238.2	366.8	9.00	8.90	1.37
11,400.0	80.59	357.07	11,046.2	376.9	-1,241.0	415.7	9.00	8.91	1.32
11,450.0	85.05	357.72	11,052.4	426.4	-1,243.2	465.3	9.00	8.91	1.29
Landing @ 88.44° Inc. / 358.20° Azm / 11488.1' MD / 11054.6' TVD									
11,488.1	88.44	358.20	11,054.6	464.5	-1,244.6	503.3	9.00	8.91	1.27
11,500.0	88.44	358.20	11,054.9	476.3	-1,245.0	515.2	0.00	0.00	0.00
11,600.0	88.44	358.20	11,057.6	576.3	-1,248.1	615.2	0.00	0.00	0.00
11,700.0	88.44	358.20	11,060.3	676.2	-1,251.2	715.1	0.00	0.00	0.00
11,800.0	88.44	358.20	11,063.1	776.1	-1,254.4	815.1	0.00	0.00	0.00
11,900.0	88.44	358.20	11,065.8	876.0	-1,257.5	915.1	0.00	0.00	0.00
12,000.0	88.44	358.20	11,068.5	975.9	-1,260.7	1,015.0	0.00	0.00	0.00
12,100.0	88.44	358.20	11,071.2	1,075.8	-1,263.8	1,115.0	0.00	0.00	0.00
12,200.0	88.44	358.20	11,074.0	1,175.7	-1,266.9	1,215.0	0.00	0.00	0.00
12,300.0	88.44	358.20	11,076.7	1,275.7	-1,270.1	1,314.9	0.00	0.00	0.00
12,400.0	88.44	358.20	11,079.4	1,375.6	-1,273.2	1,414.9	0.00	0.00	0.00
12,500.0	88.44	358.20	11,082.1	1,475.5	-1,276.4	1,514.8	0.00	0.00	0.00
12,600.0	88.44	358.20	11,084.8	1,575.4	-1,279.5	1,614.8	0.00	0.00	0.00
12,700.0	88.44	358.20	11,087.6	1,675.3	-1,282.6	1,714.8	0.00	0.00	0.00
12,800.0	88.44	358.20	11,090.3	1,775.2	-1,285.8	1,814.7	0.00	0.00	0.00
12,900.0	88.44	358.20	11,093.0	1,875.1	-1,288.9	1,914.7	0.00	0.00	0.00
13,000.0	88.44	358.20	11,095.7	1,975.1	-1,292.1	2,014.7	0.00	0.00	0.00
13,100.0	88.44	358.20	11,098.5	2,075.0	-1,295.2	2,114.6	0.00	0.00	0.00
13,200.0	88.44	358.20	11,101.2	2,174.9	-1,298.3	2,214.6	0.00	0.00	0.00
13,300.0	88.44	358.20	11,103.9	2,274.8	-1,301.5	2,314.5	0.00	0.00	0.00
13,400.0	88.44	358.20	11,106.6	2,374.7	-1,304.6	2,414.5	0.00	0.00	0.00
13,500.0	88.44	358.20	11,109.4	2,474.6	-1,307.8	2,514.5	0.00	0.00	0.00
13,600.0	88.44	358.20	11,112.1	2,574.5	-1,310.9	2,614.4	0.00	0.00	0.00
13,700.0	88.44	358.20	11,114.8	2,674.4	-1,314.0	2,714.4	0.00	0.00	0.00
13,800.0	88.44	358.20	11,117.5	2,774.4	-1,317.2	2,814.4	0.00	0.00	0.00
13,900.0	88.44	358.20	11,120.2	2,874.3	-1,320.3	2,914.3	0.00	0.00	0.00
14,000.0	88.44	358.20	11,123.0	2,974.2	-1,323.5	3,014.3	0.00	0.00	0.00
14,100.0	88.44	358.20	11,125.7	3,074.1	-1,326.6	3,114.3	0.00	0.00	0.00
14,200.0	88.44	358.20	11,128.4	3,174.0	-1,329.7	3,214.2	0.00	0.00	0.00
14,300.0	88.44	358.20	11,131.1	3,273.9	-1,332.9	3,314.2	0.00	0.00	0.00
14,400.0	88.44	358.20	11,133.9	3,373.8	-1,336.0	3,414.1	0.00	0.00	0.00
14,500.0	88.44	358.20	11,136.6	3,473.8	-1,339.2	3,514.1	0.00	0.00	0.00
14,600.0	88.44	358.20	11,139.3	3,573.7	-1,342.3	3,614.1	0.00	0.00	0.00
14,700.0	88.44	358.20	11,142.0	3,673.6	-1,345.4	3,714.0	0.00	0.00	0.00
14,800.0	88.44	358.20	11,144.7	3,773.5	-1,348.6	3,814.0	0.00	0.00	0.00
14,900.0	88.44	358.20	11,147.5	3,873.4	-1,351.7	3,914.0	0.00	0.00	0.00
15,000.0	88.44	358.20	11,150.2	3,973.3	-1,354.9	4,013.9	0.00	0.00	0.00
15,100.0	88.44	358.20	11,152.9	4,073.2	-1,358.0	4,113.9	0.00	0.00	0.00
15,200.0	88.44	358.20	11,155.6	4,173.1	-1,361.1	4,213.8	0.00	0.00	0.00
15,300.0	88.44	358.20	11,158.4	4,273.1	-1,364.3	4,313.8	0.00	0.00	0.00
15,400.0	88.44	358.20	11,161.1	4,373.0	-1,367.4	4,413.8	0.00	0.00	0.00
15,500.0	88.44	358.20	11,163.8	4,472.9	-1,370.5	4,513.7	0.00	0.00	0.00
15,600.0	88.44	358.20	11,166.5	4,572.8	-1,373.7	4,613.7	0.00	0.00	0.00
15,700.0	88.44	358.20	11,169.2	4,672.7	-1,376.8	4,713.7	0.00	0.00	0.00
15,800.0	88.44	358.20	11,172.0	4,772.6	-1,380.0	4,813.6	0.00	0.00	0.00
15,900.0	88.44	358.20	11,174.7	4,872.5	-1,383.1	4,913.6	0.00	0.00	0.00
16,000.0	88.44	358.20	11,177.4	4,972.5	-1,386.2	5,013.5	0.00	0.00	0.00
16,100.0	88.44	358.20	11,180.1	5,072.4	-1,389.4	5,113.5	0.00	0.00	0.00
16,200.0	88.44	358.20	11,182.9	5,172.3	-1,392.5	5,213.5	0.00	0.00	0.00



Well Planning Report



Database:	KLXDirectional-AD	Local Co-ordinate Reference:	Well CCR FED 0994-11-A3-HN1
Company:	Laramie Energy, LLC	TVD Reference:	RKB=30' @ 7172.0usft (TBD)
Project:	Mesa County, CO	MD Reference:	RKB=30' @ 7172.0usft (TBD)
Site:	CCR 0994-23-02	North Reference:	True
Well:	CCR FED 0994-11-A3-HN1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Permit #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)	
16,300.0	88.44	358.20	11,185.6	5,272.2	-1,395.7	5,313.4	0.00	0.00	0.00	
16,400.0	88.44	358.20	11,188.3	5,372.1	-1,398.8	5,413.4	0.00	0.00	0.00	
16,500.0	88.44	358.20	11,191.0	5,472.0	-1,401.9	5,513.4	0.00	0.00	0.00	
16,600.0	88.44	358.20	11,193.7	5,571.9	-1,405.1	5,613.3	0.00	0.00	0.00	
16,700.0	88.44	358.20	11,196.5	5,671.9	-1,408.2	5,713.3	0.00	0.00	0.00	
16,800.0	88.44	358.20	11,199.2	5,771.8	-1,411.4	5,813.3	0.00	0.00	0.00	
16,900.0	88.44	358.20	11,201.9	5,871.7	-1,414.5	5,913.2	0.00	0.00	0.00	
17,000.0	88.44	358.20	11,204.6	5,971.6	-1,417.6	6,013.2	0.00	0.00	0.00	
17,100.0	88.44	358.20	11,207.4	6,071.5	-1,420.8	6,113.1	0.00	0.00	0.00	
17,200.0	88.44	358.20	11,210.1	6,171.4	-1,423.9	6,213.1	0.00	0.00	0.00	
17,300.0	88.44	358.20	11,212.8	6,271.3	-1,427.1	6,313.1	0.00	0.00	0.00	
17,400.0	88.44	358.20	11,215.5	6,371.2	-1,430.2	6,413.0	0.00	0.00	0.00	
17,500.0	88.44	358.20	11,218.2	6,471.2	-1,433.3	6,513.0	0.00	0.00	0.00	
17,600.0	88.44	358.20	11,221.0	6,571.1	-1,436.5	6,613.0	0.00	0.00	0.00	
17,700.0	88.44	358.20	11,223.7	6,671.0	-1,439.6	6,712.9	0.00	0.00	0.00	
17,800.0	88.44	358.20	11,226.4	6,770.9	-1,442.8	6,812.9	0.00	0.00	0.00	
17,900.0	88.44	358.20	11,229.1	6,870.8	-1,445.9	6,912.8	0.00	0.00	0.00	
18,000.0	88.44	358.20	11,231.9	6,970.7	-1,449.0	7,012.8	0.00	0.00	0.00	
18,100.0	88.44	358.20	11,234.6	7,070.6	-1,452.2	7,112.8	0.00	0.00	0.00	
18,200.0	88.44	358.20	11,237.3	7,170.6	-1,455.3	7,212.7	0.00	0.00	0.00	
18,300.0	88.44	358.20	11,240.0	7,270.5	-1,458.5	7,312.7	0.00	0.00	0.00	
18,400.0	88.44	358.20	11,242.7	7,370.4	-1,461.6	7,412.7	0.00	0.00	0.00	
18,500.0	88.44	358.20	11,245.5	7,470.3	-1,464.7	7,512.6	0.00	0.00	0.00	
18,600.0	88.44	358.20	11,248.2	7,570.2	-1,467.9	7,612.6	0.00	0.00	0.00	
18,700.0	88.44	358.20	11,250.9	7,670.1	-1,471.0	7,712.5	0.00	0.00	0.00	
18,800.0	88.44	358.20	11,253.6	7,770.0	-1,474.2	7,812.5	0.00	0.00	0.00	
18,900.0	88.44	358.20	11,256.4	7,870.0	-1,477.3	7,912.5	0.00	0.00	0.00	
19,000.0	88.44	358.20	11,259.1	7,969.9	-1,480.4	8,012.4	0.00	0.00	0.00	
19,100.0	88.44	358.20	11,261.8	8,069.8	-1,483.6	8,112.4	0.00	0.00	0.00	
19,200.0	88.44	358.20	11,264.5	8,169.7	-1,486.7	8,212.4	0.00	0.00	0.00	
19,300.0	88.44	358.20	11,267.2	8,269.6	-1,489.9	8,312.3	0.00	0.00	0.00	
19,400.0	88.44	358.20	11,270.0	8,369.5	-1,493.0	8,412.3	0.00	0.00	0.00	
19,500.0	88.44	358.20	11,272.7	8,469.4	-1,496.1	8,512.3	0.00	0.00	0.00	
19,600.0	88.44	358.20	11,275.4	8,569.3	-1,499.3	8,612.2	0.00	0.00	0.00	
19,700.0	88.44	358.20	11,278.1	8,669.3	-1,502.4	8,712.2	0.00	0.00	0.00	
19,800.0	88.44	358.20	11,280.9	8,769.2	-1,505.6	8,812.1	0.00	0.00	0.00	
19,900.0	88.44	358.20	11,283.6	8,869.1	-1,508.7	8,912.1	0.00	0.00	0.00	
20,000.0	88.44	358.20	11,286.3	8,969.0	-1,511.8	9,012.1	0.00	0.00	0.00	
20,100.0	88.44	358.20	11,289.0	9,068.9	-1,515.0	9,112.0	0.00	0.00	0.00	
20,200.0	88.44	358.20	11,291.7	9,168.8	-1,518.1	9,212.0	0.00	0.00	0.00	
20,300.0	88.44	358.20	11,294.5	9,268.7	-1,521.3	9,312.0	0.00	0.00	0.00	
20,400.0	88.44	358.20	11,297.2	9,368.7	-1,524.4	9,411.9	0.00	0.00	0.00	
20,500.0	88.44	358.20	11,299.9	9,468.6	-1,527.5	9,511.9	0.00	0.00	0.00	
20,600.0	88.44	358.20	11,302.6	9,568.5	-1,530.7	9,611.8	0.00	0.00	0.00	
20,700.0	88.44	358.20	11,305.4	9,668.4	-1,533.8	9,711.8	0.00	0.00	0.00	
20,800.0	88.44	358.20	11,308.1	9,768.3	-1,537.0	9,811.8	0.00	0.00	0.00	
20,900.0	88.44	358.20	11,310.8	9,868.2	-1,540.1	9,911.7	0.00	0.00	0.00	
21,000.0	88.44	358.20	11,313.5	9,968.1	-1,543.2	10,011.7	0.00	0.00	0.00	
21,100.0	88.44	358.20	11,316.3	10,068.1	-1,546.4	10,111.7	0.00	0.00	0.00	
21,200.0	88.44	358.20	11,319.0	10,168.0	-1,549.5	10,211.6	0.00	0.00	0.00	
21,300.0	88.44	358.20	11,321.7	10,267.9	-1,552.7	10,311.6	0.00	0.00	0.00	
21,400.0	88.44	358.20	11,324.4	10,367.8	-1,555.8	10,411.5	0.00	0.00	0.00	
TD @ 21458.1' MD / 11326.0' TVD										
21,458.1	88.44	358.20	11,326.0	10,425.8	-1,557.6	10,469.6	0.00	0.00	0.00	



Well Planning Report



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Company:	Laramie Energy, LLC	TVD Reference:	RKB=30' @ 7172.0usft (TBD)
Project:	Mesa County, CO	MD Reference:	RKB=30' @ 7172.0usft (TBD)
Site:	CCR 0994-23-02	North Reference:	True
Well:	CCR FED 0994-11-A3-HN1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Permit #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)

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
LP(plat) - CCR FED 0	- plan misses target center by 242.1usft at 11000.0usft MD (10866.3 TVD, 28.8 N, -1205.8 E)	0.00	0.00	11,039.0	-139.8	-1,224.8	1,531,023.03	2,334,131.94	39.267724	-107.852192
	- Point									
PBHL - CCR FED 0994-23-02	- plan hits target center	0.00	0.00	11,326.0	10,425.8	-1,557.6	1,541,593.76	2,334,072.21	39.296733	-107.853370
	- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,500.0	1,500.0	Surface Casing			
8,286.7	8,228.0	Intermediate Casing			

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,341.0	2,341.0	Wasatch G-Sand		1.56	358.20
4,256.3	4,238.3	Ohio Creek		1.56	358.20
4,383.5	4,364.2	Williams Fork		1.56	358.20
5,677.1	5,644.7	Top of Gas		1.56	358.20
6,660.6	6,618.3	Cameo		1.56	358.20
7,070.6	7,024.2	Rollins		1.56	358.20
7,508.8	7,458.0	Cozzette		1.56	358.20
7,678.5	7,625.9	Corcoran		1.56	358.20
8,082.4	8,025.8	Upper Mancos		1.56	358.20
8,472.2	8,411.6	Top of Completed Interval		1.56	358.20
8,472.2	8,411.6	Buck Tongue		1.56	358.20
9,142.7	9,075.4	Castlegate		1.56	358.20
9,345.6	9,276.3	Blue Gate		1.56	358.20
9,720.3	9,647.1	Prarie Canyon		1.56	358.20
10,697.4	10,611.6	Upper Niobrara		1.56	358.20
10,958.5	10,836.0	Tow Creek		1.56	358.20



Well Planning Report



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Company:	Laramie Energy, LLC	TVD Reference:	RKB=30' @ 7172.0usft (TBD)
Project:	Mesa County, CO	MD Reference:	RKB=30' @ 7172.0usft (TBD)
Site:	CCR 0994-23-02	North Reference:	True
Well:	CCR FED 0994-11-A3-HN1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Permit #2		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,200.0	2,200.0	0.0	0.0	Build 2° / 100'
2,607.3	2,605.9	-3.8	-28.6	EOB @ 8.15° Inc. / 262.39° Azm
10,496.1	10,415.2	-151.9	-1,136.6	Build 9° / 100'
11,488.1	11,054.6	464.5	-1,244.6	Landing @ 88.44° Inc. / 358.20° Azm / 11488.1' MD / 11054.6' TVD
21,458.1	11,326.0	10,425.8	-1,557.6	TD @ 21458.1' MD / 11326.0' TVD