



Laramie Energy, LLC

Mesa County, CO

Currier 0993-16-07 Pad

Currier BCU 0993-16-07W - Slot A-16

OH

Plan: Design #1

KLX Well Planning Report

13 July, 2023





Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Currier BCU 0993-16-07W - Slot A-16
Company:	Laramie Energy, LLC	TVD Reference:	RKB=30' @ 7487.0usft (TBD)
Project:	Mesa County, CO	MD Reference:	RKB=30' @ 7487.0usft (TBD)
Site:	Currier 0993-16-07 Pad	North Reference:	True
Well:	Currier BCU 0993-16-07W	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #1		

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	Currier 0993-16-07 Pad				
Site Position:		Northing:	1,534,122.03 usft	Latitude:	39.277789
From:	Lat/Long	Easting:	2,356,438.51 usft	Longitude:	-107.773701
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.43 °

Well	Currier BCU 0993-16-07W - Slot A-16					
Well Position	+N/-S	86.8 usft	Northing:	1,534,206.72 usft	Latitude:	39.278027
	+E/-W	83.1 usft	Easting:	2,356,523.76 usft	Longitude:	-107.773408
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	7,457.0 usft

Wellbore	OH
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2023	7/13/2023	8.68	65.13	50,856.30000000

Design	Design #1			
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	269.41

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	
662.1	10.30	269.41	659.9	-0.4	-37.0	2.50	2.50	0.00	269.41	
5,662.9	10.30	269.41	5,580.1	-9.5	-931.3	0.00	0.00	0.00	0.00	
6,075.1	0.00	0.00	5,990.0	-9.9	-968.3	2.50	-2.50	0.00	180.00	
7,934.1	0.00	0.00	7,849.0	-9.9	-968.3	0.00	0.00	0.00	0.00	PBHL - Currier 16-C



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Site:	Currier 0993-16-07 Pad	North Reference:	True
Well:	Currier BCU 0993-16-07W	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #1		

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	269.41	300.0	0.0	-0.5	0.5	2.50	2.50	0.00
400.0	3.75	269.41	399.9	-0.1	-4.9	4.9	2.50	2.50	0.00
500.0	6.25	269.41	499.5	-0.1	-13.6	13.6	2.50	2.50	0.00
600.0	8.75	269.41	598.6	-0.3	-26.7	26.7	2.50	2.50	0.00
EOB @ 10.30° Inc. / 269.41° Azm									
662.1	10.30	269.41	659.9	-0.4	-37.0	37.0	2.50	2.50	0.00
700.0	10.30	269.41	697.2	-0.4	-43.7	43.7	0.00	0.00	0.00
800.0	10.30	269.41	795.6	-0.6	-61.6	61.6	0.00	0.00	0.00
900.0	10.30	269.41	893.9	-0.8	-79.5	79.5	0.00	0.00	0.00
1,000.0	10.30	269.41	992.3	-1.0	-97.4	97.4	0.00	0.00	0.00
1,100.0	10.30	269.41	1,090.7	-1.2	-115.3	115.3	0.00	0.00	0.00
1,200.0	10.30	269.41	1,189.1	-1.4	-133.2	133.2	0.00	0.00	0.00
1,300.0	10.30	269.41	1,287.5	-1.5	-151.0	151.0	0.00	0.00	0.00
1,400.0	10.30	269.41	1,385.9	-1.7	-168.9	168.9	0.00	0.00	0.00
8 5/8"									
1,500.0	10.30	269.41	1,484.3	-1.9	-186.8	186.8	0.00	0.00	0.00
1,600.0	10.30	269.41	1,582.7	-2.1	-204.7	204.7	0.00	0.00	0.00
1,700.0	10.30	269.41	1,681.0	-2.3	-222.6	222.6	0.00	0.00	0.00
1,800.0	10.30	269.41	1,779.4	-2.5	-240.5	240.5	0.00	0.00	0.00
1,900.0	10.30	269.41	1,877.8	-2.6	-258.3	258.4	0.00	0.00	0.00
2,000.0	10.30	269.41	1,976.2	-2.8	-276.2	276.2	0.00	0.00	0.00
2,100.0	10.30	269.41	2,074.6	-3.0	-294.1	294.1	0.00	0.00	0.00
2,200.0	10.30	269.41	2,173.0	-3.2	-312.0	312.0	0.00	0.00	0.00
2,300.0	10.30	269.41	2,271.4	-3.4	-329.9	329.9	0.00	0.00	0.00
2,400.0	10.30	269.41	2,369.8	-3.6	-347.8	347.8	0.00	0.00	0.00
2,500.0	10.30	269.41	2,468.1	-3.7	-365.7	365.7	0.00	0.00	0.00
2,600.0	10.30	269.41	2,566.5	-3.9	-383.5	383.6	0.00	0.00	0.00
2,700.0	10.30	269.41	2,664.9	-4.1	-401.4	401.4	0.00	0.00	0.00
2,800.0	10.30	269.41	2,763.3	-4.3	-419.3	419.3	0.00	0.00	0.00
Wasatch 'G' Sand									
2,804.8	10.30	269.41	2,768.0	-4.3	-420.2	420.2	0.00	0.00	0.00
2,900.0	10.30	269.41	2,861.7	-4.5	-437.2	437.2	0.00	0.00	0.00
3,000.0	10.30	269.41	2,960.1	-4.7	-455.1	455.1	0.00	0.00	0.00
3,100.0	10.30	269.41	3,058.5	-4.8	-473.0	473.0	0.00	0.00	0.00
3,200.0	10.30	269.41	3,156.9	-5.0	-490.8	490.9	0.00	0.00	0.00
Fort Union									
3,261.1	10.30	269.41	3,217.0	-5.1	-501.8	501.8	0.00	0.00	0.00
3,300.0	10.30	269.41	3,255.2	-5.2	-508.7	508.8	0.00	0.00	0.00
3,400.0	10.30	269.41	3,353.6	-5.4	-526.6	526.6	0.00	0.00	0.00
3,500.0	10.30	269.41	3,452.0	-5.6	-544.5	544.5	0.00	0.00	0.00
3,600.0	10.30	269.41	3,550.4	-5.8	-562.4	562.4	0.00	0.00	0.00
3,700.0	10.30	269.41	3,648.8	-5.9	-580.3	580.3	0.00	0.00	0.00
3,800.0	10.30	269.41	3,747.2	-6.1	-598.2	598.2	0.00	0.00	0.00
3,900.0	10.30	269.41	3,845.6	-6.3	-616.0	616.1	0.00	0.00	0.00
4,000.0	10.30	269.41	3,944.0	-6.5	-633.9	634.0	0.00	0.00	0.00
4,100.0	10.30	269.41	4,042.3	-6.7	-651.8	651.8	0.00	0.00	0.00
4,200.0	10.30	269.41	4,140.7	-6.9	-669.7	669.7	0.00	0.00	0.00
Lower Wasatch									



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Well:	Currier BCU 0993-16-07W	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #1		

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)
4,254.1	10.30	269.41	4,194.0	-7.0	-679.4	679.4	0.00	0.00	0.00
4,300.0	10.30	269.41	4,239.1	-7.0	-687.6	687.6	0.00	0.00	0.00
4,400.0	10.30	269.41	4,337.5	-7.2	-705.5	705.5	0.00	0.00	0.00
4,500.0	10.30	269.41	4,435.9	-7.4	-723.3	723.4	0.00	0.00	0.00
4,600.0	10.30	269.41	4,534.3	-7.6	-741.2	741.3	0.00	0.00	0.00
4,700.0	10.30	269.41	4,632.7	-7.8	-759.1	759.2	0.00	0.00	0.00
4,800.0	10.30	269.41	4,731.1	-8.0	-777.0	777.0	0.00	0.00	0.00
4,900.0	10.30	269.41	4,829.4	-8.1	-794.9	794.9	0.00	0.00	0.00
Ohio Creek									
4,992.0	10.30	269.41	4,920.0	-8.3	-811.3	811.4	0.00	0.00	0.00
5,000.0	10.30	269.41	4,927.8	-8.3	-812.8	812.8	0.00	0.00	0.00
5,100.0	10.30	269.41	5,026.2	-8.5	-830.7	830.7	0.00	0.00	0.00
5,200.0	10.30	269.41	5,124.6	-8.7	-848.5	848.6	0.00	0.00	0.00
Williams Fork									
5,201.4	10.30	269.41	5,126.0	-8.7	-848.8	848.8	0.00	0.00	0.00
5,300.0	10.30	269.41	5,223.0	-8.9	-866.4	866.5	0.00	0.00	0.00
5,400.0	10.30	269.41	5,321.4	-9.1	-884.3	884.4	0.00	0.00	0.00
5,500.0	10.30	269.41	5,419.8	-9.2	-902.2	902.2	0.00	0.00	0.00
5,600.0	10.30	269.41	5,518.2	-9.4	-920.1	920.1	0.00	0.00	0.00
Drop 2.5° /100'									
5,662.9	10.30	269.41	5,580.1	-9.5	-931.3	931.4	0.00	0.00	0.00
5,700.0	9.38	269.41	5,616.6	-9.6	-937.7	937.7	2.50	-2.50	0.00
5,800.0	6.88	269.41	5,715.6	-9.8	-951.8	951.8	2.50	-2.50	0.00
5,900.0	4.38	269.41	5,815.1	-9.9	-961.6	961.7	2.50	-2.50	0.00
6,000.0	1.88	269.41	5,914.9	-9.9	-967.1	967.1	2.50	-2.50	0.00
EOD @ Vertical - TOG									
6,075.1	0.00	0.00	5,990.0	-9.9	-968.3	968.3	2.50	-2.50	0.00
6,100.0	0.00	0.00	6,014.9	-9.9	-968.3	968.3	0.00	0.00	0.00
6,200.0	0.00	0.00	6,114.9	-9.9	-968.3	968.3	0.00	0.00	0.00
6,300.0	0.00	0.00	6,214.9	-9.9	-968.3	968.3	0.00	0.00	0.00
6,400.0	0.00	0.00	6,314.9	-9.9	-968.3	968.3	0.00	0.00	0.00
6,500.0	0.00	0.00	6,414.9	-9.9	-968.3	968.3	0.00	0.00	0.00
6,600.0	0.00	0.00	6,514.9	-9.9	-968.3	968.3	0.00	0.00	0.00
6,700.0	0.00	0.00	6,614.9	-9.9	-968.3	968.3	0.00	0.00	0.00
6,800.0	0.00	0.00	6,714.9	-9.9	-968.3	968.3	0.00	0.00	0.00
6,900.0	0.00	0.00	6,814.9	-9.9	-968.3	968.3	0.00	0.00	0.00
7,000.0	0.00	0.00	6,914.9	-9.9	-968.3	968.3	0.00	0.00	0.00
7,100.0	0.00	0.00	7,014.9	-9.9	-968.3	968.3	0.00	0.00	0.00
7,200.0	0.00	0.00	7,114.9	-9.9	-968.3	968.3	0.00	0.00	0.00
Cameo									
7,258.1	0.00	0.00	7,173.0	-9.9	-968.3	968.3	0.00	0.00	0.00
7,300.0	0.00	0.00	7,214.9	-9.9	-968.3	968.3	0.00	0.00	0.00
7,400.0	0.00	0.00	7,314.9	-9.9	-968.3	968.3	0.00	0.00	0.00
7,500.0	0.00	0.00	7,414.9	-9.9	-968.3	968.3	0.00	0.00	0.00
7,600.0	0.00	0.00	7,514.9	-9.9	-968.3	968.3	0.00	0.00	0.00
7,700.0	0.00	0.00	7,614.9	-9.9	-968.3	968.3	0.00	0.00	0.00
Rollins									
7,734.1	0.00	0.00	7,649.0	-9.9	-968.3	968.3	0.00	0.00	0.00
7,800.0	0.00	0.00	7,714.9	-9.9	-968.3	968.3	0.00	0.00	0.00
7,900.0	0.00	0.00	7,814.9	-9.9	-968.3	968.3	0.00	0.00	0.00
TD @ 7934.1' MD / 7849.0' TVD									
7,934.1	0.00	0.00	7,849.0	-9.9	-968.3	968.3	0.00	0.00	0.00



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Project:	Mesa County, CO	MD Reference:	RKB=30' @ 7487.0usft (TBD)
Site:	Currier 0993-16-07 Pad	North Reference:	True
Well:	Currier BCU 0993-16-07W	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #1		

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
PBHL - Currier 16-07v - plan hits target center - Circle (radius 50.0)	0.00	0.00	7,849.0	-9.9	-968.3	1,534,221.02	2,355,555.53	39.278000	-107.776828

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,500.0	1,484.3	8 5/8"	8-5/8	11

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,804.8	2,768.0	Wasatch 'G' Sand			
3,261.1	3,217.0	Fort Union			
4,254.1	4,194.0	Lower Wasatch			
4,992.0	4,920.0	Ohio Creek			
5,201.4	5,126.0	Williams Fork			
6,075.1	5,990.0	TOG			
7,258.1	7,173.0	Cameo			
7,734.1	7,649.0	Rollins			

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)
662.1	659.9	-0.4	-37.0	EOB @ 10.30° Inc. / 269.41° Azm
5,662.9	5,580.1	-9.5	-931.3	Drop 2.5° / 100'
6,075.1	5,990.0	-9.9	-968.3	EOD @ Vertical
7,934.1	7,849.0	-9.9	-968.3	TD @ 7934.1' MD / 7849.0' TVD