



# **Laramie Energy, LLC**

**Mesa County, CO**

**Laramie 0993-29-01**

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

**OH**

**Design #2**

## **KLX Anticollision Report**

**08 May, 2025**





# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Design #2		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD Interval 100.0usft	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum ellipse separation of 1,000.0 usft	<b>Error Surface:</b>	Pedal Curve
<b>Warning Levels Evaluated at:</b>	2.00 Sigma		

<b>Survey Tool Program</b>	<b>Date</b>	5/7/2025		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	8,587.4	Design #2 (OH)	OWSG (REV5) MWD HD	OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Laramie 0993-29-01						
Laramie 29-01 0993-20-11E - OH - Design #2	200.0	200.0	14.1	11.3	4.998	CC, ES
Laramie 29-01 0993-20-11E - OH - Design #2	400.0	398.5	20.5	14.7	3.546	SF
Laramie 29-01 0993-20-12E - OH - Design #2	200.0	200.0	10.0	7.2	3.534	CC
Laramie 29-01 0993-20-12E - OH - Design #2	400.0	398.9	13.5	6.8	2.010	Level 1, ES, SF
Laramie 29-01 0993-20-14E - OH - Design #2	200.0	200.0	10.0	7.2	3.532	CC
Laramie 29-01 0993-20-14E - OH - Design #2	500.0	501.1	13.4	5.8	1.770	Level 2, ES
Laramie 29-01 0993-20-14E - OH - Design #2	800.0	803.1	18.5	7.4	1.662	Level 2, SF
Laramie 29-01 0993-20-15E - OH - Design #2	200.0	200.0	20.0	17.2	7.073	CC, ES
Laramie 29-01 0993-20-15E - OH - Design #2	600.0	603.1	30.8	22.2	3.568	SF
Laramie 29-01 0993-20-16E - OH - Design #2	200.0	200.0	40.0	37.2	14.141	CC
Laramie 29-01 0993-20-16E - OH - Design #2	400.0	402.0	42.3	36.6	7.474	ES
Laramie 29-01 0993-20-16E - OH - Design #2	800.0	808.8	57.4	47.1	5.600	SF
Laramie 29-01 0993-20-17E - OH - Design #2	200.0	200.0	50.0	47.2	17.673	CC, ES
Laramie 29-01 0993-20-17E - OH - Design #2	700.0	706.2	72.9	63.4	7.743	SF
Laramie 29-01 0993-20-18E - OH - Design #2	200.0	200.0	70.0	67.2	24.741	CC, ES
Laramie 29-01 0993-20-18E - OH - Design #2	700.0	708.3	95.2	85.7	10.005	SF
Laramie 29-01 Fed 0993-21-11W - OH - Design #2	200.0	200.0	10.0	7.2	3.534	CC, ES
Laramie 29-01 Fed 0993-21-11W - OH - Design #2	300.0	299.6	12.0	8.2	3.201	SF
Laramie 29-01 Fed 0993-21-12W - OH - Design #2	200.0	200.0	14.1	11.3	4.998	CC, ES
Laramie 29-01 Fed 0993-21-12W - OH - Design #2	400.0	398.5	25.6	19.4	4.119	SF
Laramie 29-01 Fed 0993-21-13W - OH - Design #2	200.0	200.0	22.4	19.6	7.910	CC, ES
Laramie 29-01 Fed 0993-21-13W - OH - Design #2	400.0	398.5	32.4	26.5	5.530	SF
Laramie 29-01 Fed 0993-21-14W - OH - Design #2	200.0	200.0	31.6	28.8	11.182	CC, ES
Laramie 29-01 Fed 0993-21-14W - OH - Design #2	400.0	398.1	41.8	35.8	6.976	SF
Laramie 29-01 Fed 0993-21-15W - OH - Design #2	200.0	200.0	41.2	38.4	14.575	CC
Laramie 29-01 Fed 0993-21-15W - OH - Design #2	204.4	204.4	41.2	38.4	14.447	ES
Laramie 29-01 Fed 0993-21-15W - OH - Design #2	400.0	398.2	49.9	44.3	8.960	SF
Laramie 29-01 Fed 0993-21-16W - OH - Design #2	200.0	200.0	51.0	48.2	18.024	CC, ES
Laramie 29-01 Fed 0993-21-16W - OH - Design #2	400.0	398.5	58.3	52.8	10.533	SF
Laramie 29-01 Fed 0993-21-17W - OH - Design #2	200.0	200.0	60.8	58.0	21.500	CC
Laramie 29-01 Fed 0993-21-17W - OH - Design #2	204.4	204.4	60.8	58.0	21.313	ES
Laramie 29-01 Fed 0993-21-17W - OH - Design #2	500.0	493.3	85.2	78.2	12.097	SF
Laramie 29-01 Fed 0993-21-18W - OH - Design #2	200.0	200.0	70.7	67.9	24.990	CC
Laramie 29-01 Fed 0993-21-18W - OH - Design #2	204.4	204.4	70.7	67.8	24.730	ES
Laramie 29-01 Fed 0993-21-18W - OH - Design #2	600.0	586.9	116.0	107.2	13.201	SF

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft	
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft	
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Minor Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N/-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-1.72	14.1	-0.4	14.1					
100.0	100.0	100.0	100.0	0.8	0.8	-1.72	14.1	-0.4	14.1	12.6	8.926			
200.0	200.0	200.0	200.0	1.4	1.4	-1.72	14.1	-0.4	14.1	11.3	4.998	CC, ES		
300.0	300.0	299.4	299.3	1.8	2.5	71.41	16.2	-1.2	15.8	11.7	3.861			
400.0	399.8	398.5	398.3	3.3	4.0	79.10	22.2	-3.4	20.5	14.7	3.546	SF		
500.0	499.4	497.3	496.5	3.6	5.1	78.18	32.2	-7.0	28.0	21.4	4.209			
600.0	598.5	595.8	593.8	4.4	6.0	76.65	46.2	-12.1	36.8	29.1	4.769			
700.0	697.0	694.5	690.7	5.4	6.8	76.30	63.7	-19.2	46.2	37.6	5.417			
800.0	794.7	793.2	786.7	6.3	7.5	75.96	84.4	-29.0	55.3	46.1	6.004			
900.0	891.3	892.0	881.7	7.1	8.2	75.64	108.3	-41.6	64.0	54.1	6.450			
1,000.0	986.8	990.7	975.5	7.8	8.9	75.34	135.2	-56.8	72.3	61.6	6.753			
1,100.0	1,080.9	1,089.4	1,067.8	8.5	9.5	75.04	165.1	-74.6	80.2	68.6	6.917			
1,200.0	1,173.5	1,188.1	1,158.6	9.2	10.1	74.75	197.9	-95.1	87.6	75.0	6.954			
1,300.0	1,264.3	1,286.8	1,247.6	9.9	10.7	74.46	233.7	-118.2	94.6	80.8	6.880			
1,400.0	1,353.3	1,385.5	1,334.8	10.5	11.3	74.18	272.3	-143.7	101.0	85.9	6.715			
1,500.0	1,440.2	1,484.2	1,419.8	11.1	11.8	73.89	313.7	-171.8	106.9	90.4	6.480			
1,600.0	1,525.2	1,582.8	1,502.7	11.4	12.4	73.57	357.7	-202.3	112.5	94.4	6.230			
1,700.0	1,610.0	1,681.2	1,582.9	11.8	12.8	71.72	404.2	-235.1	119.1	99.2	5.998			
1,800.0	1,694.8	1,780.7	1,662.7	12.1	13.2	69.03	452.6	-269.5	126.6	104.8	5.814			
1,900.0	1,779.6	1,880.2	1,742.6	12.5	13.6	66.65	501.1	-304.0	134.3	110.6	5.678			
2,000.0	1,864.4	1,979.8	1,822.4	13.0	14.0	64.52	549.5	-338.4	142.2	116.7	5.578			
2,100.0	1,949.2	2,079.3	1,902.2	13.5	14.5	62.63	598.0	-372.9	150.3	123.0	5.507			
2,200.0	2,034.0	2,178.9	1,982.1	14.2	15.2	60.93	646.5	-407.4	158.6	129.5	5.457			
2,300.0	2,118.8	2,278.4	2,061.9	15.1	16.1	59.39	694.9	-441.8	166.9	136.1	5.417			
2,400.0	2,203.6	2,378.0	2,141.8	16.1	17.2	58.01	743.4	-476.3	175.4	142.9	5.390			
2,500.0	2,288.3	2,477.5	2,221.6	17.0	18.2	56.75	791.8	-510.7	184.0	149.7	5.372			
2,600.0	2,373.1	2,577.1	2,301.5	18.0	19.3	55.61	840.3	-545.2	192.6	156.7	5.361			
2,700.0	2,457.9	2,676.6	2,381.3	19.0	20.4	54.56	888.8	-579.6	201.4	163.8	5.355			
2,800.0	2,542.7	2,776.2	2,461.2	20.0	21.5	53.60	937.2	-614.1	210.1	170.9	5.353			
2,900.0	2,627.5	2,875.8	2,541.0	21.0	22.7	52.72	985.7	-648.6	219.0	178.1	5.354			
3,000.0	2,712.3	2,975.3	2,620.9	22.0	23.8	51.90	1,034.1	-683.0	227.9	185.3	5.357			
3,100.0	2,797.1	3,074.9	2,700.7	22.9	24.9	51.15	1,082.6	-717.5	236.8	192.6	5.363			
3,200.0	2,881.9	3,174.4	2,780.5	23.9	26.0	50.45	1,131.1	-751.9	245.8	200.0	5.369			
3,300.0	2,966.7	3,274.0	2,860.4	24.9	27.1	49.81	1,179.5	-786.4	254.8	207.4	5.377			
3,400.0	3,051.5	3,373.5	2,940.2	25.9	28.3	49.20	1,228.0	-820.8	263.8	214.8	5.385			
3,500.0	3,136.3	3,473.1	3,020.1	26.9	29.4	48.64	1,276.4	-855.3	272.8	222.3	5.394			
3,600.0	3,221.0	3,572.6	3,099.9	27.9	30.5	48.11	1,324.9	-889.8	281.9	229.7	5.403			
3,700.0	3,305.8	3,672.2	3,179.8	28.9	31.7	47.61	1,373.4	-924.2	291.0	237.3	5.413			
3,800.0	3,390.6	3,771.7	3,259.6	29.9	32.8	47.15	1,421.8	-958.7	300.2	244.8	5.422			
3,900.0	3,475.4	3,871.3	3,339.5	30.9	33.9	46.71	1,470.3	-993.1	309.3	252.4	5.432			
4,000.0	3,560.2	3,970.9	3,419.3	31.9	35.1	46.30	1,518.7	-1,027.6	318.5	259.9	5.442			
4,100.0	3,645.0	4,070.4	3,499.2	32.9	36.2	45.91	1,567.2	-1,062.1	327.6	267.5	5.452			
4,200.0	3,729.8	4,170.0	3,579.0	33.9	37.3	45.54	1,615.7	-1,096.5	336.8	275.1	5.461			
4,300.0	3,814.6	4,269.5	3,658.8	34.9	38.5	45.19	1,664.1	-1,131.0	346.0	282.8	5.471			
4,400.0	3,899.4	4,369.1	3,738.7	35.9	39.6	44.86	1,712.6	-1,165.4	355.2	290.4	5.480			
4,500.0	3,984.2	4,468.6	3,818.5	36.9	40.7	44.55	1,761.0	-1,199.9	364.5	298.1	5.490			
4,600.0	4,069.0	4,568.2	3,898.4	38.0	41.9	44.25	1,809.5	-1,234.3	373.7	305.7	5.499			
4,700.0	4,153.7	4,667.7	3,978.2	39.0	43.0	43.97	1,858.0	-1,268.8	382.9	313.4	5.508			
4,800.0	4,238.5	4,767.3	4,058.1	40.0	44.1	43.70	1,906.4	-1,303.3	392.2	321.1	5.516			
4,900.0	4,323.3	4,866.8	4,137.9	41.0	45.3	43.44	1,954.9	-1,337.7	401.4	328.8	5.525			
5,000.0	4,408.1	4,966.4	4,217.8	42.0	46.4	43.19	2,003.4	-1,372.2	410.7	336.5	5.533			
5,100.0	4,492.9	5,066.0	4,297.6	43.0	47.5	42.96	2,051.8	-1,406.6	420.0	344.2	5.541			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
5,200.0	4,577.7	5,165.5	4,377.4	44.0	48.7	42.73	2,100.3	-1,441.1	429.3	351.9	5.549		
5,300.0	4,662.5	5,265.1	4,457.3	45.0	49.8	42.52	2,148.7	-1,475.5	438.6	359.6	5.557		
5,400.0	4,747.3	5,364.6	4,537.1	46.0	51.0	42.31	2,197.2	-1,510.0	447.9	367.4	5.565		
5,500.0	4,832.1	5,464.2	4,617.0	47.0	52.1	42.11	2,245.7	-1,544.5	457.2	375.1	5.572		
5,600.0	4,917.4	5,563.6	4,696.8	48.0	53.2	41.96	2,294.1	-1,578.9	467.2	383.7	5.593		
5,700.0	5,004.8	5,677.8	4,789.4	48.9	54.5	41.60	2,348.5	-1,617.6	479.2	394.0	5.624		
5,800.0	5,094.2	5,797.3	4,889.7	49.7	55.7	41.26	2,401.3	-1,655.2	490.4	403.5	5.646		
5,900.0	5,185.5	5,917.6	4,994.0	50.5	56.8	40.96	2,450.2	-1,689.9	500.7	412.4	5.669		
6,000.0	5,278.5	6,038.6	5,101.9	51.1	57.8	40.69	2,494.8	-1,721.6	510.2	420.6	5.694		
6,100.0	5,373.0	6,160.3	5,213.2	51.7	58.7	40.46	2,534.9	-1,750.1	518.7	428.0	5.720		
6,200.0	5,468.9	6,282.7	5,327.6	52.2	59.5	40.25	2,570.3	-1,775.3	526.2	434.6	5.748		
6,300.0	5,565.9	6,405.6	5,444.6	52.6	60.1	40.08	2,600.8	-1,797.0	532.6	440.5	5.778		
6,400.0	5,663.9	6,529.0	5,564.0	52.9	60.6	39.94	2,626.3	-1,815.1	538.1	445.5	5.810		
6,500.0	5,762.6	6,652.8	5,685.3	53.2	61.1	39.82	2,646.5	-1,829.5	542.5	449.7	5.844		
6,600.0	5,861.9	6,776.9	5,808.0	53.4	61.4	39.72	2,661.4	-1,840.1	545.8	453.0	5.881		
6,700.0	5,961.7	6,901.2	5,931.8	53.5	61.6	39.65	2,670.9	-1,846.8	548.1	455.5	5.920		
6,800.0	6,061.6	7,025.7	6,056.1	53.6	61.7	39.60	2,674.8	-1,849.6	549.2	457.2	5.967		
6,900.0	6,161.6	7,131.2	6,161.6	53.6	61.7	-0.70	2,675.0	-1,849.7	549.3	457.4	5.979		
7,000.0	6,261.6	7,231.2	6,261.6	53.6	61.7	-0.70	2,675.0	-1,849.7	549.3	457.4	5.975		
7,100.0	6,361.6	7,331.2	6,361.6	53.6	61.7	-0.70	2,675.0	-1,849.7	549.3	457.3	5.972		
7,200.0	6,461.6	7,431.2	6,461.6	53.7	61.7	-0.70	2,675.0	-1,849.7	549.3	457.3	5.969		
7,300.0	6,561.6	7,531.2	6,561.6	53.7	61.7	-0.70	2,675.0	-1,849.7	549.3	457.2	5.965		
7,400.0	6,661.6	7,631.2	6,661.6	53.7	61.7	-0.70	2,675.0	-1,849.7	549.3	457.2	5.962		
7,500.0	6,761.6	7,731.2	6,761.6	53.7	61.8	-0.70	2,675.0	-1,849.7	549.3	457.1	5.959		
7,600.0	6,861.6	7,831.2	6,861.6	53.7	61.8	-0.70	2,675.0	-1,849.7	549.3	457.0	5.955		
7,700.0	6,961.6	7,931.2	6,961.6	53.8	61.8	-0.70	2,675.0	-1,849.7	549.3	457.0	5.952		
7,800.0	7,061.6	8,031.2	7,061.6	53.8	61.8	-0.70	2,675.0	-1,849.7	549.3	456.9	5.948		
7,900.0	7,161.6	8,131.2	7,161.6	53.8	61.8	-0.70	2,675.0	-1,849.7	549.3	456.9	5.945		
8,000.0	7,261.6	8,231.2	7,261.6	53.8	61.8	-0.70	2,675.0	-1,849.7	549.3	456.8	5.941		
8,100.0	7,361.6	8,331.2	7,361.6	53.8	61.9	-0.70	2,675.0	-1,849.7	549.3	456.8	5.938		
8,200.0	7,461.6	8,431.2	7,461.6	53.9	61.9	-0.70	2,675.0	-1,849.7	549.3	456.7	5.934		
8,300.0	7,561.6	8,531.2	7,561.6	53.9	61.9	-0.70	2,675.0	-1,849.7	549.3	456.7	5.931		
8,400.0	7,661.6	8,631.2	7,661.6	53.9	61.9	-0.70	2,675.0	-1,849.7	549.3	456.6	5.927		
8,500.0	7,761.6	8,731.2	7,761.6	53.9	61.9	-0.70	2,675.0	-1,849.7	549.3	456.6	5.924		
8,587.4	7,849.0	8,818.6	7,849.0	53.9	61.9	-0.70	2,675.0	-1,849.7	549.3	456.5	5.921		

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft	
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft	
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-46.68	6.9	-7.3	10.0					
100.0	100.0	100.0	100.0	0.8	0.8	-46.68	6.9	-7.3	10.0	8.4	6.312			
200.0	200.0	200.0	200.0	1.4	1.4	-46.68	6.9	-7.3	10.0	7.2	3.534	CC		
300.0	300.0	299.5	299.5	1.8	2.5	29.39	8.6	-8.6	11.2	7.0	2.660			
400.0	399.8	398.9	398.7	3.3	4.0	42.73	13.7	-12.5	13.5	6.8	2.010	Level 1, ES, SF		
500.0	499.4	498.1	497.3	3.6	5.1	47.74	22.2	-19.1	17.4	9.9	2.316	Level 1		
600.0	598.5	597.2	595.3	4.4	6.0	48.75	34.1	-28.2	22.0	13.4	2.548			
700.0	697.0	696.2	692.4	5.4	6.8	49.61	49.3	-39.9	26.8	17.1	2.761			
800.0	794.7	795.1	788.5	6.3	7.6	50.19	67.8	-54.1	31.6	20.9	2.959			
900.0	891.3	893.9	883.4	7.1	8.3	50.52	89.5	-70.8	36.2	24.6	3.116			
1,000.0	986.8	992.6	976.9	7.8	9.0	50.67	114.4	-90.0	40.8	28.2	3.232			
1,100.0	1,080.9	1,091.2	1,068.9	8.5	9.6	50.70	142.5	-111.6	45.2	31.5	3.306			
1,200.0	1,173.5	1,189.7	1,159.2	9.2	10.2	50.62	173.6	-135.5	49.3	34.6	3.341			
1,300.0	1,264.3	1,288.1	1,247.7	9.9	10.8	50.46	207.8	-161.8	53.3	37.4	3.343			
1,400.0	1,353.3	1,386.4	1,334.1	10.5	11.4	50.23	244.9	-190.3	57.1	39.9	3.315			
1,500.0	1,440.2	1,484.6	1,418.4	11.1	12.0	49.95	284.9	-221.0	60.6	42.1	3.263			
1,600.0	1,525.2	1,583.1	1,500.7	11.4	12.4	49.50	327.7	-254.0	64.4	44.6	3.252			
1,700.0	1,610.0	1,683.0	1,583.4	11.8	12.7	48.66	372.1	-288.1	68.8	47.6	3.242			
1,800.0	1,694.8	1,782.9	1,666.1	12.1	13.0	47.93	416.6	-322.3	73.2	50.5	3.229			
1,900.0	1,779.6	1,882.8	1,748.8	12.5	13.4	47.28	461.0	-356.4	77.6	53.5	3.215			
2,000.0	1,864.4	1,982.7	1,831.5	13.0	13.7	46.71	505.4	-390.6	82.0	56.4	3.202			
2,100.0	1,949.2	2,082.6	1,914.2	13.5	14.1	46.19	549.8	-424.7	86.4	59.3	3.189			
2,200.0	2,034.0	2,182.5	1,996.9	14.2	14.6	45.72	594.2	-458.9	90.9	62.3	3.178			
2,300.0	2,118.8	2,282.4	2,079.6	15.1	15.7	45.29	638.6	-493.0	95.3	65.2	3.165			
2,400.0	2,203.6	2,382.3	2,162.4	16.1	16.7	44.91	683.1	-527.2	99.8	68.1	3.153			
2,500.0	2,288.3	2,482.2	2,245.1	17.0	17.8	44.55	727.5	-561.3	104.2	71.1	3.142			
2,600.0	2,373.1	2,582.1	2,327.8	18.0	18.8	44.23	771.9	-595.5	108.7	74.0	3.132			
2,700.0	2,457.9	2,682.0	2,410.5	19.0	19.9	43.93	816.3	-629.6	113.2	76.9	3.122			
2,800.0	2,542.7	2,781.9	2,493.2	20.0	20.9	43.65	860.7	-663.8	117.6	79.8	3.112			
2,900.0	2,627.5	2,881.8	2,575.9	21.0	22.0	43.40	905.1	-697.9	122.1	82.7	3.103			
3,000.0	2,712.3	2,981.7	2,658.6	22.0	23.0	43.16	949.6	-732.1	126.5	85.7	3.095			
3,100.0	2,797.1	3,081.6	2,741.3	22.9	24.1	42.94	994.0	-766.2	131.0	88.6	3.087			
3,200.0	2,881.9	3,181.5	2,824.0	23.9	25.1	42.73	1,038.4	-800.4	135.5	91.5	3.079			
3,300.0	2,966.7	3,281.4	2,906.7	24.9	26.2	42.53	1,082.8	-834.5	140.0	94.4	3.072			
3,400.0	3,051.5	3,381.3	2,989.4	25.9	27.3	42.35	1,127.2	-868.7	144.4	97.3	3.065			
3,500.0	3,136.3	3,481.2	3,072.2	26.9	28.3	42.18	1,171.6	-902.8	148.9	100.2	3.059			
3,600.0	3,221.0	3,581.1	3,154.9	27.9	29.4	42.02	1,216.1	-937.0	153.4	103.1	3.052			
3,700.0	3,305.8	3,681.0	3,237.6	28.9	30.5	41.87	1,260.5	-971.1	157.9	106.0	3.046			
3,800.0	3,390.6	3,780.8	3,320.3	29.9	31.5	41.72	1,304.9	-1,005.3	162.4	109.0	3.041			
3,900.0	3,475.4	3,880.7	3,403.0	30.9	32.6	41.59	1,349.3	-1,039.4	166.8	111.9	3.035			
4,000.0	3,560.2	3,980.6	3,485.7	31.9	33.6	41.46	1,393.7	-1,073.6	171.3	114.8	3.030			
4,100.0	3,645.0	4,080.5	3,568.4	32.9	34.7	41.34	1,438.1	-1,107.7	175.8	117.7	3.025			
4,200.0	3,729.8	4,180.4	3,651.1	33.9	35.8	41.22	1,482.5	-1,141.9	180.3	120.6	3.020			
4,300.0	3,814.6	4,280.3	3,733.8	34.9	36.8	41.11	1,527.0	-1,176.0	184.8	123.5	3.016			
4,400.0	3,899.4	4,380.2	3,816.5	35.9	37.9	41.00	1,571.4	-1,210.2	189.2	126.4	3.011			
4,500.0	3,984.2	4,480.1	3,899.2	36.9	39.0	40.90	1,615.8	-1,244.3	193.7	129.3	3.007			
4,600.0	4,069.0	4,580.0	3,982.0	38.0	40.0	40.81	1,660.2	-1,278.5	198.2	132.2	3.003			
4,700.0	4,153.7	4,679.9	4,064.7	39.0	41.1	40.72	1,704.6	-1,312.6	202.7	135.1	2.999			
4,800.0	4,238.5	4,779.8	4,147.4	40.0	42.2	40.63	1,749.0	-1,346.8	207.2	138.0	2.995			
4,900.0	4,323.3	4,879.7	4,230.1	41.0	43.2	40.55	1,793.5	-1,380.9	211.7	140.9	2.992			
5,000.0	4,408.1	4,979.6	4,312.8	42.0	44.3	40.46	1,837.9	-1,415.1	216.2	143.8	2.988			
5,100.0	4,492.9	5,079.5	4,395.5	43.0	45.4	40.39	1,882.3	-1,449.2	220.7	146.7	2.985			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
5,200.0	4,577.7	5,179.4	4,478.2	44.0	46.4	40.31	1,926.7	-1,483.4	225.1	149.6	2.982		
5,300.0	4,662.5	5,279.3	4,560.9	45.0	47.5	40.24	1,971.1	-1,517.5	229.6	152.5	2.978		
5,400.0	4,747.3	5,379.2	4,643.6	46.0	48.6	40.17	2,015.5	-1,551.7	234.1	155.4	2.975		
5,500.0	4,832.1	5,479.1	4,726.3	47.0	49.6	40.11	2,060.0	-1,585.8	238.6	158.3	2.972		
5,600.0	4,917.4	5,580.7	4,810.5	48.0	50.7	39.96	2,105.0	-1,620.5	243.8	162.0	2.980		
5,700.0	5,004.8	5,689.8	4,902.8	48.9	51.8	39.65	2,151.2	-1,656.0	249.7	166.3	2.994		
5,800.0	5,094.2	5,799.3	4,998.0	49.7	52.8	39.39	2,193.9	-1,688.9	255.1	170.2	3.005		
5,900.0	5,185.5	5,909.1	5,096.0	50.5	53.7	39.15	2,233.1	-1,719.0	260.1	173.9	3.017		
6,000.0	5,278.5	6,019.1	5,196.5	51.1	54.5	38.94	2,268.6	-1,746.3	264.6	177.3	3.030		
6,100.0	5,373.0	6,129.3	5,299.2	51.7	55.2	38.76	2,300.3	-1,770.7	268.7	180.4	3.043		
6,200.0	5,468.9	6,239.8	5,404.0	52.2	55.8	38.60	2,328.1	-1,792.0	272.3	183.2	3.056		
6,300.0	5,565.9	6,350.5	5,510.5	52.6	56.4	38.46	2,352.0	-1,810.3	275.4	185.7	3.071		
6,400.0	5,663.9	6,461.3	5,618.5	52.9	56.8	38.34	2,371.7	-1,825.5	278.0	187.9	3.085		
6,500.0	5,762.6	6,572.3	5,727.7	53.2	57.1	38.25	2,387.3	-1,837.5	280.0	189.7	3.101		
6,600.0	5,861.9	6,683.3	5,837.8	53.4	57.4	38.17	2,398.7	-1,846.3	281.6	191.3	3.117		
6,700.0	5,961.7	6,794.5	5,948.6	53.5	57.5	38.11	2,405.8	-1,851.7	282.7	192.5	3.135		
6,800.0	6,061.6	6,905.7	6,059.7	53.6	57.6	38.08	2,408.7	-1,854.0	283.2	193.4	3.155		
6,900.0	6,161.6	7,007.6	6,161.6	53.6	57.6	-2.23	2,408.7	-1,854.0	283.2	193.6	3.159		
7,000.0	6,261.6	7,107.6	6,261.6	53.6	57.6	-2.23	2,408.7	-1,854.0	283.2	193.5	3.157		
7,100.0	6,361.6	7,207.6	6,361.6	53.6	57.6	-2.23	2,408.7	-1,854.0	283.2	193.5	3.155		
7,200.0	6,461.6	7,307.6	6,461.6	53.7	57.7	-2.23	2,408.7	-1,854.0	283.2	193.4	3.153		
7,300.0	6,561.6	7,407.6	6,561.6	53.7	57.7	-2.23	2,408.7	-1,854.0	283.2	193.3	3.151		
7,400.0	6,661.6	7,507.6	6,661.6	53.7	57.7	-2.23	2,408.7	-1,854.0	283.2	193.3	3.150		
7,500.0	6,761.6	7,607.6	6,761.6	53.7	57.7	-2.23	2,408.7	-1,854.0	283.2	193.2	3.148		
7,600.0	6,861.6	7,707.6	6,861.6	53.7	57.7	-2.23	2,408.7	-1,854.0	283.2	193.2	3.146		
7,700.0	6,961.6	7,807.6	6,961.6	53.8	57.7	-2.23	2,408.7	-1,854.0	283.2	193.1	3.144		
7,800.0	7,061.6	7,907.6	7,061.6	53.8	57.8	-2.23	2,408.7	-1,854.0	283.2	193.1	3.142		
7,900.0	7,161.6	8,007.6	7,161.6	53.8	57.8	-2.23	2,408.7	-1,854.0	283.2	193.0	3.140		
8,000.0	7,261.6	8,107.6	7,261.6	53.8	57.8	-2.23	2,408.7	-1,854.0	283.2	193.0	3.138		
8,100.0	7,361.6	8,207.6	7,361.6	53.8	57.8	-2.23	2,408.7	-1,854.0	283.2	192.9	3.136		
8,200.0	7,461.6	8,307.6	7,461.6	53.9	57.8	-2.23	2,408.7	-1,854.0	283.2	192.9	3.134		
8,300.0	7,561.6	8,407.6	7,561.6	53.9	57.8	-2.23	2,408.7	-1,854.0	283.2	192.8	3.132		
8,400.0	7,661.6	8,507.6	7,661.6	53.9	57.9	-2.23	2,408.7	-1,854.0	283.2	192.7	3.130		
8,500.0	7,761.6	8,607.6	7,761.6	53.9	57.9	-2.23	2,408.7	-1,854.0	283.2	192.7	3.128		
8,587.4	7,849.0	8,695.0	7,849.0	53.9	57.9	-2.23	2,408.7	-1,854.0	283.2	192.6	3.127		

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft	
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft	
Reference Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	133.28	-6.8	7.3	10.0					
100.0	100.0	100.0	100.0	0.8	0.8	133.28	-6.8	7.3	10.0	8.4	6.307			
200.0	200.0	200.0	200.0	1.4	1.4	133.28	-6.8	7.3	10.0	7.2	3.532	CC		
300.0	300.0	300.1	300.1	1.8	1.7	-156.60	-6.8	7.0	10.7	7.3	3.109			
400.0	399.8	400.6	400.5	3.3	2.8	-160.02	-5.5	3.5	12.1	6.2	2.048	Level 1		
500.0	499.4	501.1	500.7	3.6	4.2	-169.70	-2.7	-4.1	13.4	5.8	1.770	Level 2, ES		
600.0	598.5	601.7	600.5	4.4	4.6	-169.38	1.9	-15.7	14.8	6.4	1.749	Level 2		
700.0	697.0	702.3	699.8	5.4	5.2	-165.79	9.8	-30.1	16.5	6.8	1.690	Level 2		
800.0	794.7	803.1	798.4	6.3	6.1	-161.49	21.0	-47.2	18.5	7.4	1.662	Level 2, SF		
900.0	891.3	903.9	896.1	7.1	6.9	-157.10	35.8	-67.0	20.7	8.4	1.688	Level 2		
1,000.0	986.8	1,004.7	992.8	7.8	7.7	-152.89	53.9	-89.4	23.1	9.9	1.748	Level 2		
1,100.0	1,080.9	1,105.7	1,088.2	8.5	8.4	-148.94	75.3	-114.5	25.8	11.7	1.827	Level 2		
1,200.0	1,173.5	1,206.7	1,182.1	9.2	9.1	-145.30	100.1	-142.1	28.6	13.7	1.917	Level 2		
1,300.0	1,264.3	1,307.7	1,274.4	9.9	9.7	-141.95	128.2	-172.2	31.7	15.9	2.009	Level 1		
1,400.0	1,353.3	1,408.8	1,364.8	10.5	10.3	-138.88	159.6	-204.7	35.0	18.3	2.095	Level 1		
1,500.0	1,440.2	1,509.6	1,453.0	11.1	10.8	-136.24	193.9	-239.4	38.7	21.0	2.186	Level 1		
1,600.0	1,525.2	1,609.5	1,539.8	11.4	11.1	-136.02	228.6	-274.4	44.4	25.6	2.356	Level 1		
1,700.0	1,610.0	1,709.3	1,626.6	11.8	11.5	-136.05	263.3	-309.4	50.5	30.4	2.508			
1,800.0	1,694.8	1,809.1	1,713.5	12.1	11.9	-136.07	298.0	-344.3	56.6	35.1	2.635			
1,900.0	1,779.6	1,908.9	1,800.3	12.5	12.3	-136.09	332.7	-379.3	62.7	39.8	2.743			
2,000.0	1,864.4	2,008.7	1,887.1	13.0	12.7	-136.10	367.5	-414.2	68.8	44.5	2.834			
2,100.0	1,949.2	2,108.5	1,973.9	13.5	13.2	-136.11	402.2	-449.2	74.9	49.2	2.912			
2,200.0	2,034.0	2,208.4	2,060.7	14.2	13.8	-136.12	436.9	-484.2	81.0	53.8	2.979			
2,300.0	2,118.8	2,308.2	2,147.5	15.1	14.5	-136.13	471.6	-519.1	87.1	58.4	3.037			
2,400.0	2,203.6	2,408.0	2,234.3	16.1	15.4	-136.14	506.3	-554.1	93.2	63.0	3.088			
2,500.0	2,288.3	2,507.8	2,321.1	17.0	16.3	-136.15	541.1	-589.0	99.3	67.6	3.132			
2,600.0	2,373.1	2,607.6	2,407.9	18.0	17.2	-136.15	575.8	-624.0	105.4	72.1	3.171			
2,700.0	2,457.9	2,707.4	2,494.7	19.0	18.1	-136.16	610.5	-659.0	111.5	76.7	3.206			
2,800.0	2,542.7	2,807.2	2,581.5	20.0	19.0	-136.16	645.2	-693.9	117.6	81.2	3.236			
2,900.0	2,627.5	2,907.1	2,668.3	21.0	19.9	-136.17	679.9	-728.9	123.6	85.8	3.264			
3,000.0	2,712.3	3,006.9	2,755.1	22.0	20.8	-136.17	714.7	-763.8	129.7	90.3	3.289			
3,100.0	2,797.1	3,106.7	2,841.9	22.9	21.7	-136.17	749.4	-798.8	135.8	94.8	3.311			
3,200.0	2,881.9	3,206.5	2,928.7	23.9	22.7	-136.18	784.1	-833.8	141.9	99.3	3.331			
3,300.0	2,966.7	3,306.3	3,015.5	24.9	23.6	-136.18	818.8	-868.7	148.0	103.8	3.349			
3,400.0	3,051.5	3,406.1	3,102.3	25.9	24.5	-136.18	853.5	-903.7	154.1	108.3	3.366			
3,500.0	3,136.3	3,505.9	3,189.1	26.9	25.4	-136.18	888.3	-938.7	160.2	112.8	3.381			
3,600.0	3,221.0	3,605.8	3,275.9	27.9	26.4	-136.19	923.0	-973.6	166.3	117.3	3.395			
3,700.0	3,305.8	3,705.6	3,362.8	28.9	27.3	-136.19	957.7	-1,008.6	172.4	121.8	3.408			
3,800.0	3,390.6	3,805.4	3,449.6	29.9	28.2	-136.19	992.4	-1,043.5	178.5	126.3	3.420			
3,900.0	3,475.4	3,905.2	3,536.4	30.9	29.1	-136.19	1,027.1	-1,078.5	184.6	130.8	3.431			
4,000.0	3,560.2	4,005.0	3,623.2	31.9	30.1	-136.19	1,061.9	-1,113.5	190.7	135.3	3.441			
4,100.0	3,645.0	4,104.8	3,710.0	32.9	31.0	-136.20	1,096.6	-1,148.4	196.8	139.7	3.451			
4,200.0	3,729.8	4,204.6	3,796.8	33.9	31.9	-136.20	1,131.3	-1,183.4	202.9	144.2	3.459			
4,300.0	3,814.6	4,304.5	3,883.6	34.9	32.9	-136.20	1,166.0	-1,218.3	209.0	148.7	3.468			
4,400.0	3,899.4	4,404.3	3,970.4	35.9	33.8	-136.20	1,200.7	-1,253.3	215.1	153.2	3.475			
4,500.0	3,984.2	4,504.1	4,057.2	36.9	34.7	-136.20	1,235.5	-1,288.3	221.1	157.6	3.482			
4,600.0	4,069.0	4,603.9	4,144.0	38.0	35.7	-136.20	1,270.2	-1,323.2	227.2	162.1	3.489			
4,700.0	4,153.7	4,703.7	4,230.8	39.0	36.6	-136.20	1,304.9	-1,358.2	233.3	166.6	3.495			
4,800.0	4,238.5	4,803.5	4,317.6	40.0	37.5	-136.20	1,339.6	-1,393.1	239.4	171.1	3.501			
4,900.0	4,323.3	4,903.3	4,404.4	41.0	38.5	-136.21	1,374.3	-1,428.1	245.5	175.5	3.507			
5,000.0	4,408.1	5,003.2	4,491.2	42.0	39.4	-136.21	1,409.0	-1,463.1	251.6	180.0	3.512			
5,100.0	4,492.9	5,103.0	4,578.0	43.0	40.3	-136.21	1,443.8	-1,498.0	257.7	184.4	3.517			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
5,200.0	4,577.7	5,202.8	4,664.8	44.0	41.3	-136.21	1,478.5	-1,533.0	263.8	188.9	3.522		
5,300.0	4,662.5	5,302.6	4,751.6	45.0	42.2	-136.21	1,513.2	-1,567.9	269.9	193.4	3.527		
5,400.0	4,747.3	5,402.4	4,838.4	46.0	43.1	-136.21	1,547.9	-1,602.9	276.0	197.8	3.531		
5,500.0	4,832.1	5,502.2	4,925.2	47.0	44.1	-136.21	1,582.6	-1,637.9	282.1	202.3	3.535		
5,600.0	4,917.4	5,595.1	5,006.7	48.0	44.9	-136.38	1,614.0	-1,669.5	288.5	207.3	3.550		
5,700.0	5,004.8	5,687.0	5,089.1	48.9	45.7	-136.60	1,642.8	-1,698.4	294.7	212.0	3.564		
5,800.0	5,094.2	5,778.8	5,173.0	49.7	46.4	-136.79	1,669.1	-1,725.0	300.3	216.4	3.577		
5,900.0	5,185.5	5,870.5	5,258.1	50.5	47.0	-136.97	1,693.1	-1,749.1	305.5	220.4	3.590		
6,000.0	5,278.5	5,962.1	5,344.5	51.1	47.5	-137.13	1,714.6	-1,770.7	310.2	224.1	3.603		
6,100.0	5,373.0	6,053.6	5,431.8	51.7	48.0	-137.28	1,733.6	-1,789.9	314.4	227.4	3.615		
6,200.0	5,468.9	6,145.0	5,520.2	52.2	48.4	-137.41	1,750.2	-1,806.6	318.1	230.4	3.627		
6,300.0	5,565.9	6,236.3	5,609.3	52.6	48.8	-137.53	1,764.2	-1,820.7	321.3	233.0	3.639		
6,400.0	5,663.9	6,327.5	5,699.0	52.9	49.0	-137.63	1,775.8	-1,832.3	323.9	235.2	3.651		
6,500.0	5,762.6	6,418.7	5,789.3	53.2	49.3	-137.72	1,784.8	-1,841.4	326.1	237.1	3.663		
6,600.0	5,861.9	6,509.9	5,880.0	53.4	49.4	-137.80	1,791.2	-1,847.9	327.7	238.5	3.674		
6,700.0	5,961.7	6,600.0	5,969.9	53.5	49.5	-137.86	1,795.1	-1,851.8	328.8	239.6	3.688		
6,800.0	6,061.6	6,695.1	6,065.0	53.6	49.6	-137.92	1,796.5	-1,853.2	329.4	240.2	3.692		
6,832.5	6,094.2	6,724.3	6,094.2	53.6	49.6	-137.93	1,796.5	-1,853.2	329.5	240.4	3.700		
6,900.0	6,161.6	6,791.7	6,161.6	53.6	49.6	-178.22	1,796.5	-1,853.2	329.4	240.3	3.696		
7,000.0	6,261.6	6,891.7	6,261.6	53.6	49.6	-178.22	1,796.5	-1,853.2	329.4	240.2	3.694		
7,100.0	6,361.6	6,991.7	6,361.6	53.6	49.7	-178.22	1,796.5	-1,853.2	329.4	240.2	3.692		
7,200.0	6,461.6	7,091.7	6,461.6	53.7	49.7	-178.22	1,796.5	-1,853.2	329.4	240.1	3.690		
7,300.0	6,561.6	7,191.7	6,561.6	53.7	49.7	-178.22	1,796.5	-1,853.2	329.4	240.1	3.688		
7,400.0	6,661.6	7,291.7	6,661.6	53.7	49.7	-178.22	1,796.5	-1,853.2	329.4	240.0	3.685		
7,500.0	6,761.6	7,391.7	6,761.6	53.7	49.7	-178.22	1,796.5	-1,853.2	329.4	240.0	3.683		
7,600.0	6,861.6	7,491.7	6,861.6	53.7	49.8	-178.22	1,796.5	-1,853.2	329.4	239.9	3.681		
7,700.0	6,961.6	7,591.7	6,961.6	53.8	49.8	-178.22	1,796.5	-1,853.2	329.4	239.9	3.679		
7,800.0	7,061.6	7,691.7	7,061.6	53.8	49.8	-178.22	1,796.5	-1,853.2	329.4	239.8	3.676		
7,900.0	7,161.6	7,791.7	7,161.6	53.8	49.8	-178.22	1,796.5	-1,853.2	329.4	239.8	3.674		
8,000.0	7,261.6	7,891.7	7,261.6	53.8	49.9	-178.22	1,796.5	-1,853.2	329.4	239.7	3.672		
8,100.0	7,361.6	7,991.7	7,361.6	53.8	49.9	-178.22	1,796.5	-1,853.2	329.4	239.6	3.669		
8,200.0	7,461.6	8,091.7	7,461.6	53.9	49.9	-178.22	1,796.5	-1,853.2	329.4	239.6	3.667		
8,300.0	7,561.6	8,191.7	7,561.6	53.9	49.9	-178.22	1,796.5	-1,853.2	329.4	239.5	3.665		
8,400.0	7,661.6	8,291.7	7,661.6	53.9	49.9	-178.22	1,796.5	-1,853.2	329.4	239.5	3.662		
8,500.0	7,761.6	8,391.7	7,761.6	53.9	50.0	-178.22	1,796.5	-1,853.2	329.4	239.4	3.660		
8,587.4	7,849.0	8,479.1	7,849.0	53.9	50.0	-178.22	1,796.5	-1,853.2	329.4	239.4	3.658		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	133.24	-13.7	14.6	20.0				
100.0	100.0	100.0	100.0	0.8	0.8	133.24	-13.7	14.6	20.0	18.4	12.632		
200.0	200.0	200.0	200.0	1.4	1.4	133.24	-13.7	14.6	20.0	17.2	7.073	CC, ES	
300.0	300.0	300.0	300.0	1.8	1.9	-156.00	-13.7	14.6	21.0	17.3	5.754		
400.0	399.8	400.7	400.7	3.3	2.3	-159.12	-13.4	13.1	24.5	19.1	4.542		
500.0	499.4	501.9	501.6	3.6	4.0	-167.43	-12.3	6.5	27.8	20.6	3.886		
600.0	598.5	603.1	602.1	4.4	5.2	-167.40	-10.2	-5.3	30.8	22.2	3.568	SF	
700.0	697.0	704.3	702.0	5.4	5.7	-162.84	-5.6	-20.9	34.6	25.0	3.597		
800.0	794.7	805.7	801.4	6.3	6.4	-158.06	2.3	-39.4	38.9	28.2	3.639		
900.0	891.3	907.2	900.0	7.1	7.1	-153.57	13.7	-60.7	43.9	32.2	3.756		
1,000.0	986.8	1,008.9	997.6	7.8	7.8	-149.50	28.4	-84.8	49.3	36.8	3.922		
1,100.0	1,080.9	1,110.7	1,094.1	8.5	8.4	-145.85	46.6	-111.6	55.2	41.8	4.109		
1,200.0	1,173.5	1,212.6	1,189.3	9.2	9.1	-142.59	68.1	-141.1	61.4	47.1	4.293		
1,300.0	1,264.3	1,314.7	1,282.8	9.9	9.7	-139.67	92.9	-173.3	68.0	52.7	4.461		
1,400.0	1,353.3	1,416.8	1,374.6	10.5	10.3	-137.02	121.1	-208.1	74.9	58.6	4.613		
1,500.0	1,440.2	1,516.4	1,463.2	11.1	10.6	-135.74	150.0	-243.2	83.7	66.3	4.812		
1,600.0	1,525.2	1,615.7	1,551.5	11.4	10.9	-135.97	178.9	-278.2	95.5	76.9	5.133		
1,700.0	1,610.0	1,714.9	1,639.8	11.8	11.3	-136.22	207.7	-313.2	107.6	87.7	5.413		
1,800.0	1,694.8	1,814.2	1,728.1	12.1	11.7	-136.41	236.6	-348.2	119.7	98.5	5.648		
1,900.0	1,779.6	1,913.4	1,816.4	12.5	12.1	-136.57	265.4	-383.2	131.8	109.3	5.846		
2,000.0	1,864.4	2,012.7	1,904.7	13.0	12.5	-136.70	294.3	-418.2	144.0	120.0	6.015		
2,100.0	1,949.2	2,112.0	1,993.0	13.5	13.0	-136.82	323.1	-453.2	156.1	130.7	6.161		
2,200.0	2,034.0	2,211.2	2,081.3	14.2	13.6	-136.91	352.0	-488.2	168.2	141.4	6.286		
2,300.0	2,118.8	2,310.5	2,169.6	15.1	14.2	-136.99	380.8	-523.2	180.3	152.1	6.395		
2,400.0	2,203.6	2,409.8	2,257.9	16.1	14.9	-137.07	409.7	-558.2	192.4	162.8	6.489		
2,500.0	2,288.3	2,509.0	2,346.2	17.0	15.7	-137.13	438.5	-593.2	204.5	173.4	6.572		
2,600.0	2,373.1	2,608.3	2,434.5	18.0	16.5	-137.19	467.4	-628.2	216.7	184.1	6.646		
2,700.0	2,457.9	2,707.5	2,522.8	19.0	17.3	-137.24	496.2	-663.2	228.8	194.7	6.711		
2,800.0	2,542.7	2,806.8	2,611.1	20.0	18.1	-137.28	525.1	-698.2	240.9	205.3	6.769		
2,900.0	2,627.5	2,906.1	2,699.4	21.0	19.0	-137.32	553.9	-733.2	253.0	215.9	6.820		
3,000.0	2,712.3	3,005.3	2,787.7	22.0	19.8	-137.36	582.8	-768.2	265.2	226.5	6.867		
3,100.0	2,797.1	3,104.6	2,876.0	22.9	20.6	-137.40	611.6	-803.1	277.3	237.1	6.909		
3,200.0	2,881.9	3,203.9	2,964.3	23.9	21.4	-137.43	640.5	-838.1	289.4	247.7	6.947		
3,300.0	2,966.7	3,303.1	3,052.6	24.9	22.3	-137.46	669.3	-873.1	301.5	258.3	6.982		
3,400.0	3,051.5	3,402.4	3,140.9	25.9	23.1	-137.48	698.2	-908.1	313.6	268.9	7.013		
3,500.0	3,136.3	3,501.6	3,229.2	26.9	24.0	-137.51	727.0	-943.1	325.8	279.5	7.042		
3,600.0	3,221.0	3,600.9	3,317.5	27.9	24.8	-137.53	755.9	-978.1	337.9	290.1	7.068		
3,700.0	3,305.8	3,700.2	3,405.8	28.9	25.7	-137.55	784.7	-1,013.1	350.0	300.7	7.093		
3,800.0	3,390.6	3,799.4	3,494.1	29.9	26.5	-137.57	813.5	-1,048.1	362.1	311.2	7.115		
3,900.0	3,475.4	3,898.7	3,582.4	30.9	27.3	-137.59	842.4	-1,083.1	374.2	321.8	7.136		
4,000.0	3,560.2	3,998.0	3,670.7	31.9	28.2	-137.61	871.2	-1,118.1	386.4	332.4	7.155		
4,100.0	3,645.0	4,097.2	3,759.0	32.9	29.0	-137.62	900.1	-1,153.1	398.5	342.9	7.173		
4,200.0	3,729.8	4,196.5	3,847.2	33.9	29.9	-137.64	928.9	-1,188.1	410.6	353.5	7.189		
4,300.0	3,814.6	4,295.7	3,935.5	34.9	30.7	-137.65	957.8	-1,223.1	422.7	364.1	7.205		
4,400.0	3,899.4	4,395.0	4,023.8	35.9	31.6	-137.67	986.6	-1,258.1	434.9	374.6	7.219		
4,500.0	3,984.2	4,494.3	4,112.1	36.9	32.4	-137.68	1,015.5	-1,293.1	447.0	385.2	7.233		
4,600.0	4,069.0	4,593.5	4,200.4	38.0	33.3	-137.69	1,044.3	-1,328.1	459.1	395.7	7.246		
4,700.0	4,153.7	4,692.8	4,288.7	39.0	34.2	-137.70	1,073.2	-1,363.0	471.2	406.3	7.258		
4,800.0	4,238.5	4,792.1	4,377.0	40.0	35.0	-137.72	1,102.0	-1,398.0	483.3	416.8	7.269		
4,900.0	4,323.3	4,891.3	4,465.3	41.0	35.9	-137.73	1,130.9	-1,433.0	495.5	427.4	7.279		
5,000.0	4,408.1	4,990.6	4,553.6	42.0	36.7	-137.74	1,159.7	-1,468.0	507.6	438.0	7.289		
5,100.0	4,492.9	5,089.8	4,641.9	43.0	37.6	-137.75	1,188.6	-1,503.0	519.7	448.5	7.299		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
5,200.0	4,577.7	5,189.1	4,730.2	44.0	38.4	-137.75	1,217.4	-1,538.0	531.8	459.1	7.308		
5,300.0	4,662.5	5,288.4	4,818.5	45.0	39.3	-137.76	1,246.3	-1,573.0	544.0	469.6	7.316		
5,400.0	4,747.3	5,387.6	4,906.8	46.0	40.1	-137.77	1,275.1	-1,608.0	556.1	480.1	7.324		
5,500.0	4,832.1	5,486.9	4,995.1	47.0	41.0	-137.78	1,304.0	-1,643.0	568.2	490.7	7.332		
5,600.0	4,917.4	5,575.2	5,074.1	48.0	41.7	-137.95	1,329.0	-1,673.4	580.3	501.4	7.356		
5,700.0	5,004.8	5,660.8	5,152.1	48.9	42.4	-138.17	1,351.5	-1,700.7	591.7	511.5	7.378		
5,800.0	5,094.2	5,746.2	5,231.2	49.7	43.0	-138.38	1,372.1	-1,725.6	602.2	520.8	7.398		
5,900.0	5,185.5	5,831.5	5,311.3	50.5	43.5	-138.57	1,390.7	-1,748.2	611.8	529.3	7.417		
6,000.0	5,278.5	5,916.7	5,392.3	51.1	44.0	-138.74	1,407.5	-1,768.5	620.4	537.0	7.435		
6,100.0	5,373.0	6,000.0	5,472.4	51.7	44.4	-138.89	1,421.9	-1,786.1	628.1	543.9	7.457		
6,200.0	5,468.9	6,086.8	5,556.7	52.2	44.7	-139.02	1,435.1	-1,802.0	634.9	549.9	7.472		
6,300.0	5,565.9	6,171.7	5,639.9	52.6	45.0	-139.14	1,445.9	-1,815.2	640.7	555.1	7.489		
6,400.0	5,663.9	6,256.6	5,723.6	52.9	45.3	-139.25	1,454.8	-1,826.0	645.5	559.5	7.506		
6,500.0	5,762.6	6,341.4	5,807.6	53.2	45.5	-139.34	1,461.7	-1,834.3	649.4	563.1	7.522		
6,600.0	5,861.9	6,426.1	5,892.0	53.4	45.6	-139.41	1,466.6	-1,840.3	652.3	565.8	7.537		
6,700.0	5,961.7	6,510.8	5,976.6	53.5	45.7	-139.47	1,469.6	-1,843.9	654.2	567.6	7.553		
6,800.0	6,061.6	6,595.9	6,061.6	53.6	45.7	-139.52	1,470.5	-1,845.0	655.2	568.7	7.571		
6,900.0	6,161.6	6,695.9	6,161.6	53.6	45.8	-179.82	1,470.5	-1,845.0	655.2	568.6	7.565		
7,000.0	6,261.6	6,795.9	6,261.6	53.6	45.8	-179.82	1,470.5	-1,845.0	655.2	568.6	7.560		
7,100.0	6,361.6	6,895.9	6,361.6	53.6	45.8	-179.82	1,470.5	-1,845.0	655.2	568.5	7.555		
7,200.0	6,461.6	6,995.9	6,461.6	53.7	45.9	-179.82	1,470.5	-1,845.0	655.2	568.4	7.550		
7,300.0	6,561.6	7,095.9	6,561.6	53.7	45.9	-179.82	1,470.5	-1,845.0	655.2	568.4	7.546		
7,400.0	6,661.6	7,195.9	6,661.6	53.7	45.9	-179.82	1,470.5	-1,845.0	655.2	568.3	7.541		
7,500.0	6,761.6	7,295.9	6,761.6	53.7	45.9	-179.82	1,470.5	-1,845.0	655.2	568.3	7.536		
7,600.0	6,861.6	7,395.9	6,861.6	53.7	45.9	-179.82	1,470.5	-1,845.0	655.2	568.2	7.531		
7,700.0	6,961.6	7,495.9	6,961.6	53.8	46.0	-179.82	1,470.5	-1,845.0	655.2	568.2	7.526		
7,800.0	7,061.6	7,595.9	7,061.6	53.8	46.0	-179.82	1,470.5	-1,845.0	655.2	568.1	7.521		
7,900.0	7,161.6	7,695.9	7,161.6	53.8	46.0	-179.82	1,470.5	-1,845.0	655.2	568.1	7.516		
8,000.0	7,261.6	7,795.9	7,261.6	53.8	46.0	-179.82	1,470.5	-1,845.0	655.2	568.0	7.511		
8,100.0	7,361.6	7,895.9	7,361.6	53.8	46.1	-179.82	1,470.5	-1,845.0	655.2	567.9	7.506		
8,200.0	7,461.6	7,995.9	7,461.6	53.9	46.1	-179.82	1,470.5	-1,845.0	655.2	567.9	7.502		
8,300.0	7,561.6	8,095.9	7,561.6	53.9	46.1	-179.82	1,470.5	-1,845.0	655.2	567.8	7.497		
8,400.0	7,661.6	8,195.9	7,661.6	53.9	46.2	-179.82	1,470.5	-1,845.0	655.2	567.8	7.492		
8,500.0	7,761.6	8,295.9	7,761.6	53.9	46.2	-179.82	1,470.5	-1,845.0	655.2	567.7	7.487		
8,508.5	7,770.2	8,304.4	7,770.2	53.9	46.2	-179.82	1,470.5	-1,845.0	655.2	567.7	7.486		
8,587.4	7,849.0	8,368.2	7,834.0	53.9	46.2	-179.82	1,470.5	-1,845.0	655.4	568.2	7.520		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	133.26	-27.4	29.1	40.0				
100.0	100.0	100.0	100.0	0.8	0.8	133.26	-27.4	29.1	40.0	38.4	25.255		
200.0	200.0	200.0	200.0	1.4	1.4	133.26	-27.4	29.1	40.0	37.2	14.141	CC	
300.0	300.0	300.6	300.6	1.8	1.7	-155.07	-27.4	28.8	40.7	37.3	11.846		
400.0	399.8	402.0	401.9	3.3	2.9	-154.73	-27.0	24.8	42.3	36.6	7.474	ES	
500.0	499.4	503.4	503.0	3.6	4.3	-161.63	-26.3	16.3	44.5	37.5	6.389		
600.0	598.5	604.9	603.6	4.4	4.9	-162.99	-25.1	3.4	47.9	39.9	5.989		
700.0	697.0	706.8	704.1	5.4	5.4	-160.34	-21.5	-13.1	52.2	43.2	5.773		
800.0	794.7	808.8	803.9	6.3	6.2	-156.50	-14.8	-32.9	57.4	47.1	5.600	SF	
900.0	891.3	910.9	902.9	7.1	6.9	-152.23	-4.9	-55.7	63.3	52.0	5.638		
1,000.0	986.8	1,013.0	1,000.8	7.8	7.7	-147.94	8.1	-81.7	70.0	58.0	5.802		
1,100.0	1,080.9	1,115.2	1,097.5	8.5	8.4	-143.81	24.2	-110.8	77.6	64.8	6.030		
1,200.0	1,173.5	1,217.5	1,192.6	9.2	9.1	-139.93	43.4	-142.9	86.1	72.4	6.281		
1,300.0	1,264.3	1,319.4	1,285.8	9.9	9.7	-136.38	65.5	-177.8	95.4	80.8	6.520		
1,400.0	1,353.3	1,418.6	1,375.7	10.5	10.1	-134.30	88.2	-212.9	107.3	91.6	6.834		
1,500.0	1,440.2	1,517.4	1,465.4	11.1	10.5	-133.91	110.7	-247.8	122.6	105.6	7.214		
1,600.0	1,525.2	1,615.7	1,554.6	11.4	10.8	-134.49	133.2	-282.5	140.8	122.5	7.709		
1,700.0	1,610.0	1,714.0	1,643.7	11.8	11.2	-135.00	155.6	-317.2	159.2	139.7	8.142		
1,800.0	1,694.8	1,812.3	1,732.9	12.1	11.6	-135.40	178.1	-352.0	177.7	156.8	8.508		
1,900.0	1,779.6	1,910.5	1,822.0	12.5	12.0	-135.73	200.5	-386.7	196.2	174.0	8.823		
2,000.0	1,864.4	2,008.8	1,911.2	13.0	12.4	-136.00	223.0	-421.4	214.7	191.1	9.095		
2,100.0	1,949.2	2,107.1	2,000.3	13.5	12.8	-136.23	245.4	-456.1	233.2	208.2	9.330		
2,200.0	2,034.0	2,205.3	2,089.5	14.2	13.3	-136.43	267.9	-490.9	251.7	225.3	9.537		
2,300.0	2,118.8	2,303.6	2,178.6	15.1	13.8	-136.59	290.3	-525.6	270.2	242.4	9.717		
2,400.0	2,203.6	2,401.9	2,267.8	16.1	14.4	-136.74	312.7	-560.3	288.7	259.4	9.877		
2,500.0	2,288.3	2,500.2	2,356.9	17.0	15.1	-136.87	335.2	-595.0	307.2	276.5	10.018		
2,600.0	2,373.1	2,598.4	2,446.1	18.0	15.8	-136.98	357.6	-629.8	325.7	293.6	10.144		
2,700.0	2,457.9	2,696.7	2,535.2	19.0	16.5	-137.08	380.1	-664.5	344.2	310.6	10.257		
2,800.0	2,542.7	2,795.0	2,624.4	20.0	17.2	-137.18	402.5	-699.2	362.7	327.7	10.359		
2,900.0	2,627.5	2,893.2	2,713.5	21.0	18.0	-137.26	425.0	-733.9	381.2	344.7	10.450		
3,000.0	2,712.3	2,991.5	2,802.7	22.0	18.7	-137.33	447.4	-768.7	399.7	361.8	10.533		
3,100.0	2,797.1	3,089.8	2,891.8	22.9	19.5	-137.40	469.9	-803.4	418.2	378.8	10.609		
3,200.0	2,881.9	3,188.1	2,981.0	23.9	20.2	-137.46	492.3	-838.1	436.7	395.8	10.678		
3,300.0	2,966.7	3,286.3	3,070.1	24.9	21.0	-137.52	514.7	-872.8	455.2	412.8	10.741		
3,400.0	3,051.5	3,384.6	3,159.3	25.9	21.7	-137.57	537.2	-907.5	473.7	429.9	10.799		
3,500.0	3,136.3	3,482.9	3,248.4	26.9	22.5	-137.62	559.6	-942.3	492.2	446.9	10.852		
3,600.0	3,221.0	3,581.1	3,337.6	27.9	23.3	-137.67	582.1	-977.0	510.8	463.9	10.901		
3,700.0	3,305.8	3,679.4	3,426.7	28.9	24.0	-137.71	604.5	-1,011.7	529.3	480.9	10.947		
3,800.0	3,390.6	3,777.7	3,515.9	29.9	24.8	-137.75	627.0	-1,046.4	547.8	497.9	10.989		
3,900.0	3,475.4	3,875.9	3,605.0	30.9	25.6	-137.79	649.4	-1,081.2	566.3	514.9	11.028		
4,000.0	3,560.2	3,974.2	3,694.2	31.9	26.4	-137.82	671.8	-1,115.9	584.8	531.9	11.065		
4,100.0	3,645.0	4,072.5	3,783.3	32.9	27.1	-137.85	694.3	-1,150.6	603.3	549.0	11.099		
4,200.0	3,729.8	4,170.8	3,872.5	33.9	27.9	-137.88	716.7	-1,185.3	621.8	566.0	11.131		
4,300.0	3,814.6	4,269.0	3,961.6	34.9	28.7	-137.91	739.2	-1,220.1	640.3	583.0	11.161		
4,400.0	3,899.4	4,367.3	4,050.8	35.9	29.5	-137.94	761.6	-1,254.8	658.8	600.0	11.189		
4,500.0	3,984.2	4,465.6	4,139.9	36.9	30.2	-137.97	784.1	-1,289.5	677.4	617.0	11.216		
4,600.0	4,069.0	4,563.8	4,229.1	38.0	31.0	-137.99	806.5	-1,324.2	695.9	634.0	11.241		
4,700.0	4,153.7	4,662.1	4,318.2	39.0	31.8	-138.01	828.9	-1,359.0	714.4	651.0	11.264		
4,800.0	4,238.5	4,760.4	4,407.4	40.0	32.6	-138.04	851.4	-1,393.7	732.9	668.0	11.287		
4,900.0	4,323.3	4,858.7	4,496.5	41.0	33.3	-138.06	873.8	-1,428.4	751.4	685.0	11.308		
5,000.0	4,408.1	4,956.9	4,585.7	42.0	34.1	-138.08	896.3	-1,463.1	769.9	701.9	11.328		
5,100.0	4,492.9	5,055.2	4,674.8	43.0	34.9	-138.09	918.7	-1,497.9	788.4	718.9	11.346		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design											Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard											Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning
5,200.0	4,577.7	5,153.5	4,764.0	44.0	35.7	-138.11	941.2	-1,532.6	806.9	735.9	11.364	
5,300.0	4,662.5	5,251.7	4,853.1	45.0	36.4	-138.13	963.6	-1,567.3	825.5	752.9	11.382	
5,400.0	4,747.3	5,350.0	4,942.3	46.0	37.2	-138.15	986.0	-1,602.0	844.0	769.9	11.398	
5,500.0	4,832.1	5,448.3	5,031.5	47.0	38.0	-138.16	1,008.5	-1,636.7	862.5	786.9	11.413	
5,600.0	4,917.4	5,540.0	5,114.7	48.0	38.7	-138.35	1,029.3	-1,669.0	880.4	803.4	11.435	
5,700.0	5,004.8	5,621.3	5,189.5	48.9	39.3	-138.60	1,046.6	-1,695.7	896.8	818.6	11.462	
5,800.0	5,094.2	5,700.0	5,263.0	49.7	39.8	-138.82	1,062.0	-1,719.5	911.9	832.6	11.489	
5,900.0	5,185.5	5,783.8	5,342.2	50.5	40.3	-139.03	1,076.8	-1,742.4	925.7	845.3	11.506	
6,000.0	5,278.5	5,864.9	5,419.8	51.1	40.7	-139.21	1,089.7	-1,762.3	938.2	856.8	11.527	
6,100.0	5,373.0	5,946.0	5,498.1	51.7	41.1	-139.38	1,101.0	-1,779.9	949.3	867.1	11.547	
6,200.0	5,468.9	6,027.1	5,577.1	52.2	41.4	-139.53	1,110.9	-1,795.1	959.0	876.1	11.566	
6,300.0	5,565.9	6,100.0	5,648.7	52.6	41.7	-139.66	1,118.4	-1,806.8	967.4	884.0	11.602	
6,400.0	5,663.9	6,189.1	5,736.7	52.9	41.9	-139.77	1,125.9	-1,818.5	974.3	890.3	11.600	
6,500.0	5,762.6	6,270.1	5,817.1	53.2	42.1	-139.87	1,131.2	-1,826.6	979.9	895.5	11.616	
6,600.0	5,861.9	6,351.0	5,897.7	53.4	42.2	-139.95	1,134.9	-1,832.3	984.0	899.4	11.631	
6,700.0	5,961.7	6,431.9	5,978.5	53.5	42.3	-140.02	1,137.0	-1,835.6	986.8	902.1	11.646	
6,800.0	6,061.6	6,515.0	6,061.6	53.6	42.4	-140.07	1,137.6	-1,836.5	988.1	903.3	11.656	
6,900.0	6,161.6	6,615.0	6,161.6	53.6	42.4	179.63	1,137.6	-1,836.5	988.1	903.3	11.644	
7,000.0	6,261.6	6,715.0	6,261.6	53.6	42.4	179.63	1,137.6	-1,836.5	988.1	903.2	11.636	
7,100.0	6,361.6	6,815.0	6,361.6	53.6	42.5	179.63	1,137.6	-1,836.5	988.1	903.2	11.629	
7,200.0	6,461.6	6,915.0	6,461.6	53.7	42.5	179.63	1,137.6	-1,836.5	988.1	903.1	11.621	
7,300.0	6,561.6	7,015.0	6,561.6	53.7	42.5	179.63	1,137.6	-1,836.5	988.1	903.1	11.613	
7,400.0	6,661.6	7,115.0	6,661.6	53.7	42.5	179.63	1,137.6	-1,836.5	988.1	903.0	11.606	
7,500.0	6,761.6	7,215.0	6,761.6	53.7	42.6	179.63	1,137.6	-1,836.5	988.1	902.9	11.598	
7,600.0	6,861.6	7,315.0	6,861.6	53.7	42.6	179.63	1,137.6	-1,836.5	988.1	902.9	11.590	
7,700.0	6,961.6	7,415.0	6,961.6	53.8	42.6	179.63	1,137.6	-1,836.5	988.1	902.8	11.582	
7,800.0	7,061.6	7,515.0	7,061.6	53.8	42.7	179.63	1,137.6	-1,836.5	988.1	902.8	11.575	
7,900.0	7,161.6	7,615.0	7,161.6	53.8	42.7	179.63	1,137.6	-1,836.5	988.1	902.7	11.567	
8,000.0	7,261.6	7,715.0	7,261.6	53.8	42.7	179.63	1,137.6	-1,836.5	988.1	902.7	11.559	
8,100.0	7,361.6	7,815.0	7,361.6	53.8	42.7	179.63	1,137.6	-1,836.5	988.1	902.6	11.551	
8,200.0	7,461.6	7,915.0	7,461.6	53.9	42.8	179.63	1,137.6	-1,836.5	988.1	902.5	11.543	
8,300.0	7,561.6	8,015.0	7,561.6	53.9	42.8	179.63	1,137.6	-1,836.5	988.1	902.5	11.535	
8,400.0	7,661.6	8,115.0	7,661.6	53.9	42.8	179.63	1,137.6	-1,836.5	988.1	902.4	11.527	
8,500.0	7,761.6	8,215.0	7,761.6	53.9	42.8	179.63	1,137.6	-1,836.5	988.1	902.4	11.519	
8,587.4	7,849.0	8,302.4	7,849.0	53.9	42.9	179.63	1,137.6	-1,836.5	988.1	902.3	11.513	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	133.26	-34.3	36.4	50.0				
100.0	100.0	100.0	100.0	0.8	0.8	133.26	-34.3	36.4	50.0	48.4	31.563		
200.0	200.0	200.0	200.0	1.4	1.4	133.26	-34.3	36.4	50.0	47.2	17.673	CC, ES	
300.0	300.0	300.0	300.0	1.8	1.9	-155.24	-34.3	36.4	51.0	47.3	13.981		
400.0	399.8	401.2	401.2	3.3	2.2	-156.63	-34.3	35.1	54.8	49.5	10.367		
500.0	499.4	503.0	502.8	3.6	3.6	-165.34	-34.3	29.5	59.5	53.0	9.076		
600.0	598.5	604.8	604.1	4.4	4.8	-169.01	-34.3	19.4	65.3	57.2	8.039		
700.0	697.0	706.2	704.5	5.4	5.8	-167.17	-34.3	4.8	72.9	63.4	7.743	SF	
800.0	794.7	808.5	805.0	6.3	6.1	-163.00	-33.3	-14.0	82.4	72.3	8.161		
900.0	891.3	911.2	905.1	7.1	6.7	-158.77	-29.3	-36.3	93.1	82.0	8.403		
1,000.0	986.8	1,014.1	1,004.5	7.8	7.4	-154.75	-22.4	-62.0	104.8	92.7	8.669		
1,100.0	1,080.9	1,117.1	1,102.9	8.5	8.0	-150.99	-12.4	-91.1	117.5	104.5	9.005		
1,200.0	1,173.5	1,220.4	1,200.0	9.2	8.7	-147.51	0.6	-123.5	131.3	117.3	9.382		
1,300.0	1,264.3	1,323.8	1,295.8	9.9	9.3	-144.31	16.5	-159.2	145.9	131.0	9.788		
1,400.0	1,353.3	1,422.3	1,386.1	10.5	9.6	-141.97	33.3	-194.8	162.9	147.0	10.267		
1,500.0	1,440.2	1,520.0	1,475.6	11.1	9.9	-140.76	49.9	-230.2	183.8	166.7	10.787		
1,600.0	1,525.2	1,617.1	1,564.6	11.4	10.2	-140.28	66.4	-265.3	207.7	189.6	11.468		
1,700.0	1,610.0	1,714.1	1,653.5	11.8	10.6	-139.93	82.8	-300.3	232.0	212.7	12.049		
1,800.0	1,694.8	1,811.1	1,742.5	12.1	11.0	-139.65	99.3	-335.4	256.3	235.8	12.529		
1,900.0	1,779.6	1,908.1	1,831.4	12.5	11.4	-139.42	115.8	-370.5	280.5	258.9	12.931		
2,000.0	1,864.4	2,005.1	1,920.3	13.0	11.8	-139.22	132.3	-405.6	304.8	281.9	13.269		
2,100.0	1,949.2	2,102.1	2,009.2	13.5	12.2	-139.06	148.8	-440.7	329.1	304.9	13.555		
2,200.0	2,034.0	2,199.1	2,098.1	14.2	12.7	-138.92	165.2	-475.7	353.4	327.8	13.798		
2,300.0	2,118.8	2,296.1	2,187.0	15.1	13.2	-138.79	181.7	-510.8	377.8	350.8	14.007		
2,400.0	2,203.6	2,393.1	2,276.0	16.1	13.7	-138.68	198.2	-545.9	402.1	373.7	14.186		
2,500.0	2,288.3	2,490.1	2,364.9	17.0	14.3	-138.58	214.7	-581.0	426.4	396.6	14.342		
2,600.0	2,373.1	2,587.1	2,453.8	18.0	14.9	-138.50	231.2	-616.0	450.7	419.6	14.479		
2,700.0	2,457.9	2,684.1	2,542.7	19.0	15.6	-138.42	247.6	-651.1	475.0	442.5	14.598		
2,800.0	2,542.7	2,781.1	2,631.6	20.0	16.2	-138.35	264.1	-686.2	499.3	465.3	14.703		
2,900.0	2,627.5	2,878.1	2,720.6	21.0	16.9	-138.29	280.6	-721.3	523.6	488.2	14.796		
3,000.0	2,712.3	2,975.1	2,809.5	22.0	17.6	-138.23	297.1	-756.4	547.9	511.1	14.879		
3,100.0	2,797.1	3,072.1	2,898.4	22.9	18.3	-138.18	313.6	-791.4	572.2	534.0	14.953		
3,200.0	2,881.9	3,169.1	2,987.3	23.9	19.0	-138.13	330.0	-826.5	596.5	556.8	15.019		
3,300.0	2,966.7	3,266.0	3,076.2	24.9	19.7	-138.08	346.5	-861.6	620.9	579.7	15.079		
3,400.0	3,051.5	3,363.0	3,165.2	25.9	20.4	-138.04	363.0	-896.7	645.2	602.5	15.133		
3,500.0	3,136.3	3,460.0	3,254.1	26.9	21.2	-138.00	379.5	-931.7	669.5	625.4	15.182		
3,600.0	3,221.0	3,557.0	3,343.0	27.9	21.9	-137.97	396.0	-966.8	693.8	648.2	15.227		
3,700.0	3,305.8	3,654.0	3,431.9	28.9	22.6	-137.93	412.4	-1,001.9	718.1	671.1	15.267		
3,800.0	3,390.6	3,751.0	3,520.8	29.9	23.3	-137.90	428.9	-1,037.0	742.4	693.9	15.304		
3,900.0	3,475.4	3,848.0	3,609.8	30.9	24.0	-137.87	445.4	-1,072.1	766.7	716.8	15.339		
4,000.0	3,560.2	3,945.0	3,698.7	31.9	24.7	-137.84	461.9	-1,107.1	791.1	739.6	15.370		
4,100.0	3,645.0	4,042.0	3,787.6	32.9	25.5	-137.82	478.4	-1,142.2	815.4	762.4	15.399		
4,200.0	3,729.8	4,139.0	3,876.5	33.9	26.2	-137.79	494.8	-1,177.3	839.7	785.3	15.425		
4,300.0	3,814.6	4,236.0	3,965.4	34.9	26.9	-137.77	511.3	-1,212.4	864.0	808.1	15.450		
4,400.0	3,899.4	4,333.0	4,054.4	35.9	27.6	-137.75	527.8	-1,247.4	888.3	830.9	15.473		
4,500.0	3,984.2	4,430.0	4,143.3	36.9	28.4	-137.73	544.3	-1,282.5	912.6	853.7	15.494		
4,600.0	4,069.0	4,527.0	4,232.2	38.0	29.1	-137.71	560.8	-1,317.6	937.0	876.6	15.514		
4,700.0	4,153.7	4,624.0	4,321.1	39.0	29.8	-137.69	577.2	-1,352.7	961.3	899.4	15.533		
4,800.0	4,238.5	4,721.0	4,410.0	40.0	30.5	-137.67	593.7	-1,387.8	985.6	922.2	15.550		
4,900.0	4,323.3	4,818.0	4,498.9	41.0	31.3	-137.66	610.2	-1,422.8	1,009.9	945.0	15.566		
5,000.0	4,408.1	4,915.0	4,587.9	42.0	32.0	-137.64	626.7	-1,457.9	1,034.2	967.8	15.581		
5,100.0	4,492.9	5,012.0	4,676.8	43.0	32.7	-137.63	643.2	-1,493.0	1,058.5	990.7	15.595		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
5,200.0	4,577.7	5,109.0	4,765.7	44.0	33.4	-137.61	659.6	-1,528.1	1,082.8	1,013.5	15.609		
5,300.0	4,662.5	5,206.0	4,854.6	45.0	34.2	-137.60	676.1	-1,563.1	1,107.2	1,036.3	15.621		
5,400.0	4,747.3	5,303.0	4,943.5	46.0	34.9	-137.58	692.6	-1,598.2	1,131.5	1,059.1	15.633		
5,500.0	4,832.1	5,400.0	5,032.5	47.0	35.6	-137.57	709.1	-1,633.3	1,155.8	1,081.9	15.645		
5,600.0	4,917.4	5,497.2	5,121.5	48.0	36.4	-137.80	725.6	-1,668.4	1,179.4	1,104.0	15.646		
5,700.0	5,004.8	5,577.9	5,196.0	48.9	36.9	-138.07	738.8	-1,696.6	1,200.6	1,124.0	15.666		
5,800.0	5,094.2	5,657.8	5,270.8	49.7	37.5	-138.32	750.8	-1,722.1	1,220.2	1,142.4	15.683		
5,900.0	5,185.5	5,737.7	5,346.5	50.5	37.9	-138.54	761.7	-1,745.3	1,238.0	1,159.2	15.697		
6,000.0	5,278.5	5,817.8	5,423.2	51.1	38.3	-138.75	771.4	-1,766.0	1,254.1	1,174.3	15.711		
6,100.0	5,373.0	5,900.0	5,502.7	51.7	38.7	-138.93	780.3	-1,784.8	1,268.4	1,187.7	15.718		
6,200.0	5,468.9	5,978.1	5,579.0	52.2	39.0	-139.10	787.5	-1,800.3	1,281.0	1,199.6	15.736		
6,300.0	5,565.9	6,058.4	5,657.9	52.6	39.3	-139.24	793.9	-1,813.7	1,291.7	1,209.7	15.747		
6,400.0	5,663.9	6,138.7	5,737.3	52.9	39.5	-139.37	799.0	-1,824.7	1,300.6	1,218.1	15.757		
6,500.0	5,762.6	6,219.1	5,817.1	53.2	39.7	-139.48	802.9	-1,833.1	1,307.7	1,224.8	15.764		
6,600.0	5,861.9	6,300.0	5,897.7	53.4	39.8	-139.57	805.7	-1,839.0	1,313.0	1,229.8	15.769		
6,700.0	5,961.7	6,379.8	5,977.4	53.5	39.9	-139.64	807.3	-1,842.3	1,316.5	1,233.0	15.777		
6,800.0	6,061.6	6,464.0	6,061.6	53.6	39.9	-139.69	807.6	-1,843.1	1,318.1	1,234.6	15.781		
6,900.0	6,161.6	6,564.0	6,161.6	53.6	39.9	-180.00	807.6	-1,843.1	1,318.1	1,234.5	15.770		
7,000.0	6,261.6	6,664.0	6,261.6	53.6	39.9	-180.00	807.6	-1,843.1	1,318.1	1,234.5	15.760		
7,100.0	6,361.6	6,764.0	6,361.6	53.6	40.0	-180.00	807.6	-1,843.1	1,318.1	1,234.4	15.750		
7,200.0	6,461.6	6,864.0	6,461.6	53.7	40.0	-180.00	807.6	-1,843.1	1,318.1	1,234.4	15.739		
7,300.0	6,561.6	6,964.0	6,561.6	53.7	40.0	-180.00	807.6	-1,843.1	1,318.1	1,234.3	15.728		
7,400.0	6,661.6	7,064.0	6,661.6	53.7	40.1	-180.00	807.6	-1,843.1	1,318.1	1,234.2	15.718		
7,500.0	6,761.6	7,164.0	6,761.6	53.7	40.1	-180.00	807.6	-1,843.1	1,318.1	1,234.2	15.707		
7,600.0	6,861.6	7,264.0	6,861.6	53.7	40.1	-180.00	807.6	-1,843.1	1,318.1	1,234.1	15.696		
7,700.0	6,961.6	7,364.0	6,961.6	53.8	40.1	-180.00	807.6	-1,843.1	1,318.1	1,234.1	15.686		
7,800.0	7,061.6	7,464.0	7,061.6	53.8	40.2	-180.00	807.6	-1,843.1	1,318.1	1,234.0	15.675		
7,900.0	7,161.6	7,564.0	7,161.6	53.8	40.2	-180.00	807.6	-1,843.1	1,318.1	1,234.0	15.664		
8,000.0	7,261.6	7,664.0	7,261.6	53.8	40.2	-180.00	807.6	-1,843.1	1,318.1	1,233.9	15.653		
8,100.0	7,361.6	7,764.0	7,361.6	53.8	40.3	-180.00	807.6	-1,843.1	1,318.1	1,233.8	15.642		
8,200.0	7,461.6	7,864.0	7,461.6	53.9	40.3	-180.00	807.6	-1,843.1	1,318.1	1,233.8	15.631		
8,300.0	7,561.6	7,964.0	7,561.6	53.9	40.3	-180.00	807.6	-1,843.1	1,318.1	1,233.7	15.620		
8,400.0	7,661.6	8,064.0	7,661.6	53.9	40.4	-180.00	807.6	-1,843.1	1,318.1	1,233.7	15.609		
8,500.0	7,761.6	8,164.0	7,761.6	53.9	40.4	-180.00	807.6	-1,843.1	1,318.1	1,233.6	15.598		
8,508.7	7,770.4	8,172.7	7,770.4	53.9	40.4	-180.00	807.6	-1,843.1	1,318.1	1,233.6	15.597		
8,587.4	7,849.0	8,219.4	7,817.0	53.9	40.4	-180.00	807.6	-1,843.1	1,318.5	1,234.3	15.662		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	133.26	-48.0	51.0	70.0				
100.0	100.0	100.0	100.0	0.8	0.8	133.26	-48.0	51.0	70.0	68.4	44.186		
200.0	200.0	200.0	200.0	1.4	1.4	133.26	-48.0	51.0	70.0	67.2	24.741	CC, ES	
300.0	300.0	300.0	300.0	1.8	1.9	-155.09	-48.0	51.0	71.0	67.3	19.467		
400.0	399.8	401.1	401.1	3.3	2.1	-156.46	-48.0	50.4	75.3	70.2	14.575		
500.0	499.4	503.6	503.5	3.6	3.3	-165.83	-48.0	45.8	80.8	74.5	12.773		
600.0	598.5	606.1	605.5	4.4	4.6	-170.89	-48.0	36.7	87.3	79.3	10.859		
700.0	697.0	708.3	706.9	5.4	5.6	-170.76	-48.0	23.0	95.2	85.7	10.005	SF	
800.0	794.7	811.0	808.0	6.3	5.9	-167.86	-47.6	4.9	105.0	94.6	10.173		
900.0	891.3	914.3	908.7	7.1	6.5	-164.04	-45.1	-17.4	116.1	104.8	10.317		
1,000.0	986.8	1,017.4	1,008.4	7.8	7.3	-159.87	-40.5	-43.6	128.8	116.5	10.548		
1,100.0	1,080.9	1,120.5	1,106.7	8.5	8.0	-155.63	-33.6	-73.7	143.1	130.0	10.954		
1,200.0	1,173.5	1,223.4	1,203.5	9.2	8.7	-151.49	-24.5	-107.5	159.2	145.3	11.467		
1,300.0	1,264.3	1,323.7	1,296.4	9.9	9.1	-147.75	-13.8	-143.8	177.5	162.8	12.101		
1,400.0	1,353.3	1,420.8	1,386.0	10.5	9.4	-145.16	-3.1	-179.3	199.8	184.2	12.785		
1,500.0	1,440.2	1,517.0	1,475.0	11.1	9.7	-143.56	7.5	-214.6	226.2	209.5	13.496		
1,600.0	1,525.2	1,612.5	1,563.1	11.4	10.1	-142.65	18.0	-249.6	255.8	238.0	14.384		
1,700.0	1,610.0	1,707.8	1,651.2	11.8	10.4	-141.98	28.6	-284.5	285.7	266.9	15.141		
1,800.0	1,694.8	1,803.2	1,739.3	12.1	10.8	-141.43	39.1	-319.5	315.7	295.7	15.766		
1,900.0	1,779.6	1,898.5	1,827.4	12.5	11.1	-140.98	49.6	-354.4	345.7	324.5	16.287		
2,000.0	1,864.4	1,993.9	1,915.5	13.0	11.5	-140.60	60.1	-389.4	375.8	353.3	16.726		
2,100.0	1,949.2	2,089.3	2,003.6	13.5	11.9	-140.28	70.6	-424.4	405.8	382.1	17.097		
2,200.0	2,034.0	2,184.6	2,091.7	14.2	12.4	-140.00	81.1	-459.3	435.9	410.8	17.412		
2,300.0	2,118.8	2,280.0	2,179.8	15.1	12.8	-139.76	91.6	-494.3	465.9	439.6	17.683		
2,400.0	2,203.6	2,375.3	2,267.9	16.1	13.2	-139.54	102.1	-529.2	496.0	468.3	17.916		
2,500.0	2,288.3	2,470.7	2,356.0	17.0	13.7	-139.35	112.6	-564.2	526.0	497.0	18.118		
2,600.0	2,373.1	2,566.1	2,444.1	18.0	14.2	-139.19	123.1	-599.1	556.1	525.7	18.294		
2,700.0	2,457.9	2,661.4	2,532.2	19.0	14.8	-139.03	133.6	-634.1	586.2	554.4	18.448		
2,800.0	2,542.7	2,756.8	2,620.3	20.0	15.4	-138.90	144.1	-669.0	616.3	583.1	18.584		
2,900.0	2,627.5	2,852.1	2,708.4	21.0	16.0	-138.77	154.7	-704.0	646.4	611.8	18.705		
3,000.0	2,712.3	2,947.5	2,796.5	22.0	16.7	-138.66	165.2	-738.9	676.5	640.5	18.812		
3,100.0	2,797.1	3,042.8	2,884.6	22.9	17.4	-138.56	175.7	-773.9	706.5	669.2	18.908		
3,200.0	2,881.9	3,138.2	2,972.7	23.9	18.0	-138.46	186.2	-808.8	736.6	697.8	18.994		
3,300.0	2,966.7	3,233.6	3,060.8	24.9	18.7	-138.38	196.7	-843.8	766.7	726.5	19.071		
3,400.0	3,051.5	3,328.9	3,148.9	25.9	19.4	-138.30	207.2	-878.7	796.8	755.2	19.141		
3,500.0	3,136.3	3,424.3	3,237.0	26.9	20.0	-138.22	217.7	-913.7	826.9	783.9	19.204		
3,600.0	3,221.0	3,519.6	3,325.1	27.9	20.7	-138.15	228.2	-948.7	857.0	812.5	19.262		
3,700.0	3,305.8	3,615.0	3,413.2	28.9	21.4	-138.09	238.7	-983.6	887.1	841.2	19.315		
3,800.0	3,390.6	3,710.4	3,501.3	29.9	22.1	-138.03	249.2	-1,018.6	917.2	869.8	19.363		
3,900.0	3,475.4	3,805.7	3,589.4	30.9	22.8	-137.97	259.7	-1,053.5	947.3	898.5	19.407		
4,000.0	3,560.2	3,901.1	3,677.5	31.9	23.5	-137.92	270.3	-1,088.5	977.4	927.1	19.448		
4,100.0	3,645.0	3,996.4	3,765.6	32.9	24.1	-137.87	280.8	-1,123.4	1,007.5	955.8	19.485		
4,200.0	3,729.8	4,091.8	3,853.7	33.9	24.8	-137.82	291.3	-1,158.4	1,037.6	984.4	19.520		
4,300.0	3,814.6	4,187.1	3,941.8	34.9	25.5	-137.77	301.8	-1,193.3	1,067.7	1,013.1	19.552		
4,400.0	3,899.4	4,282.5	4,029.9	35.9	26.2	-137.73	312.3	-1,228.3	1,097.8	1,041.7	19.582		
4,500.0	3,984.2	4,377.9	4,118.0	36.9	26.9	-137.69	322.8	-1,263.2	1,127.9	1,070.4	19.609		
4,600.0	4,069.0	4,473.2	4,206.1	38.0	27.6	-137.65	333.3	-1,298.2	1,158.0	1,099.0	19.635		
4,700.0	4,153.7	4,568.6	4,294.1	39.0	28.3	-137.62	343.8	-1,333.1	1,188.1	1,127.7	19.659		
4,800.0	4,238.5	4,663.9	4,382.2	40.0	28.9	-137.58	354.3	-1,368.1	1,218.2	1,156.3	19.682		
4,900.0	4,323.3	4,759.3	4,470.3	41.0	29.6	-137.55	364.8	-1,403.0	1,248.3	1,185.0	19.703		
5,000.0	4,408.1	4,854.7	4,558.4	42.0	30.3	-137.52	375.3	-1,438.0	1,278.4	1,213.6	19.723		
5,100.0	4,492.9	4,950.0	4,646.5	43.0	31.0	-137.49	385.8	-1,473.0	1,308.5	1,242.3	19.741		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design											Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard											Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning
5,200.0	4,577.7	5,045.4	4,734.6	44.0	31.7	-137.46	396.4	-1,507.9	1,338.6	1,270.9	19.759	
5,300.0	4,662.5	5,140.7	4,822.7	45.0	32.4	-137.44	406.9	-1,542.9	1,368.8	1,299.5	19.775	
5,400.0	4,747.3	5,236.1	4,910.8	46.0	33.1	-137.41	417.4	-1,577.8	1,398.9	1,328.2	19.791	
5,500.0	4,832.1	5,331.4	4,998.9	47.0	33.8	-137.39	427.9	-1,612.8	1,429.0	1,356.8	19.806	
5,600.0	4,917.4	5,427.0	5,087.2	48.0	34.4	-137.68	438.4	-1,647.8	1,458.4	1,384.7	19.811	
5,700.0	5,004.8	5,519.9	5,173.1	48.9	35.1	-137.99	448.6	-1,681.8	1,484.8	1,409.8	19.784	
5,800.0	5,094.2	5,600.0	5,247.8	49.7	35.7	-138.26	456.9	-1,709.4	1,508.9	1,432.6	19.786	
5,900.0	5,185.5	5,682.4	5,325.7	50.5	36.1	-138.50	464.7	-1,735.1	1,530.9	1,453.5	19.783	
6,000.0	5,278.5	5,764.1	5,403.8	51.1	36.6	-138.71	471.5	-1,757.9	1,550.6	1,472.3	19.782	
6,100.0	5,373.0	5,846.2	5,483.1	51.7	37.0	-138.91	477.6	-1,778.2	1,568.2	1,489.0	19.781	
6,200.0	5,468.9	5,928.5	5,563.3	52.2	37.3	-139.08	482.9	-1,795.8	1,583.6	1,503.6	19.778	
6,300.0	5,565.9	6,011.0	5,644.4	52.6	37.6	-139.24	487.4	-1,810.6	1,596.8	1,516.1	19.773	
6,400.0	5,663.9	6,100.0	5,732.4	52.9	37.8	-139.37	491.2	-1,823.4	1,607.8	1,526.4	19.752	
6,500.0	5,762.6	6,176.5	5,808.4	53.2	38.0	-139.49	493.8	-1,831.9	1,616.4	1,534.6	19.763	
6,600.0	5,861.9	6,259.4	5,891.0	53.4	38.1	-139.58	495.7	-1,838.3	1,622.8	1,540.7	19.756	
6,700.0	5,961.7	6,342.4	5,973.9	53.5	38.2	-139.66	496.7	-1,841.8	1,627.0	1,544.6	19.745	
6,800.0	6,061.6	6,430.1	6,061.6	53.6	38.3	-139.71	497.0	-1,842.5	1,628.8	1,546.2	19.723	
6,900.0	6,161.6	6,530.1	6,161.6	53.6	38.3	179.98	497.0	-1,842.5	1,628.8	1,546.1	19.703	
7,000.0	6,261.6	6,630.1	6,261.6	53.6	38.3	179.98	497.0	-1,842.5	1,628.8	1,546.1	19.689	
7,100.0	6,361.6	6,730.1	6,361.6	53.6	38.4	179.98	497.0	-1,842.5	1,628.8	1,546.0	19.676	
7,200.0	6,461.6	6,830.1	6,461.6	53.7	38.4	179.98	497.0	-1,842.5	1,628.8	1,545.9	19.663	
7,300.0	6,561.6	6,930.1	6,561.6	53.7	38.4	179.98	497.0	-1,842.5	1,628.8	1,545.9	19.649	
7,400.0	6,661.6	7,030.1	6,661.6	53.7	38.5	179.98	497.0	-1,842.5	1,628.8	1,545.8	19.636	
7,500.0	6,761.6	7,130.1	6,761.6	53.7	38.5	179.98	497.0	-1,842.5	1,628.8	1,545.8	19.623	
7,600.0	6,861.6	7,230.1	6,861.6	53.7	38.5	179.98	497.0	-1,842.5	1,628.8	1,545.7	19.609	
7,700.0	6,961.6	7,330.1	6,961.6	53.8	38.5	179.98	497.0	-1,842.5	1,628.8	1,545.7	19.595	
7,800.0	7,061.6	7,430.1	7,061.6	53.8	38.6	179.98	497.0	-1,842.5	1,628.8	1,545.6	19.582	
7,900.0	7,161.6	7,530.1	7,161.6	53.8	38.6	179.98	497.0	-1,842.5	1,628.8	1,545.5	19.568	
8,000.0	7,261.6	7,630.1	7,261.6	53.8	38.6	179.98	497.0	-1,842.5	1,628.8	1,545.5	19.554	
8,100.0	7,361.6	7,730.1	7,361.6	53.8	38.7	179.98	497.0	-1,842.5	1,628.8	1,545.4	19.541	
8,200.0	7,461.6	7,830.1	7,461.6	53.9	38.7	179.98	497.0	-1,842.5	1,628.8	1,545.4	19.527	
8,300.0	7,561.6	7,930.1	7,561.6	53.9	38.7	179.98	497.0	-1,842.5	1,628.8	1,545.3	19.513	
8,400.0	7,661.6	8,030.1	7,661.6	53.9	38.8	179.98	497.0	-1,842.5	1,628.8	1,545.2	19.499	
8,500.0	7,761.6	8,130.1	7,761.6	53.9	38.8	179.98	497.0	-1,842.5	1,628.8	1,545.2	19.485	
8,587.4	7,849.0	8,217.5	7,849.0	53.9	38.8	179.98	497.0	-1,842.5	1,628.8	1,545.1	19.473	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	43.24	7.3	6.8	10.0				
100.0	100.0	100.0	100.0	0.8	0.8	43.24	7.3	6.8	10.0	8.4	6.312		
200.0	200.0	200.0	200.0	1.4	1.4	43.24	7.3	6.8	10.0	7.2	3.534	CC, ES	
300.0	300.0	299.6	299.6	1.8	2.1	117.99	8.6	7.6	12.0	8.2	3.201	SF	
400.0	399.8	398.6	398.4	3.3	3.6	126.12	13.7	10.4	20.3	14.4	3.437		
500.0	499.4	496.5	495.8	3.6	4.8	122.61	22.3	15.3	34.6	27.4	4.812		
600.0	598.5	593.1	591.4	4.4	5.7	119.25	34.4	22.1	53.4	44.8	6.249		
700.0	697.0	688.2	684.9	5.4	6.6	117.87	49.7	30.7	76.4	66.7	7.899		
800.0	794.7	781.6	775.8	6.3	7.3	117.19	68.1	40.9	103.6	92.9	9.735		
900.0	891.3	873.0	864.0	7.1	8.0	116.75	89.1	52.7	134.9	123.3	11.674		
1,000.0	986.8	962.2	949.1	7.8	8.6	116.37	112.6	65.9	170.1	157.7	13.679		
1,100.0	1,080.9	1,049.2	1,030.9	8.5	9.2	115.99	138.3	80.3	209.2	195.9	15.715		
1,200.0	1,173.5	1,133.8	1,109.4	9.2	9.7	115.55	165.8	95.7	251.9	237.7	17.750		
1,300.0	1,264.3	1,215.9	1,184.4	9.9	10.3	115.05	194.9	112.1	298.1	283.0	19.757		
1,400.0	1,353.3	1,295.5	1,255.9	10.5	10.7	114.47	225.4	129.1	347.6	331.6	21.711		
1,500.0	1,440.2	1,372.6	1,324.0	11.1	11.2	113.81	256.9	146.8	400.3	383.3	23.585		
1,600.0	1,525.2	1,447.2	1,388.7	11.4	11.6	114.07	289.3	165.0	455.7	437.8	25.469		
1,700.0	1,610.0	1,520.1	1,450.7	11.8	12.0	114.76	322.7	183.7	512.9	494.1	27.241		
1,800.0	1,694.8	1,596.8	1,514.9	12.1	12.2	115.14	359.4	204.3	571.4	551.6	28.835		
1,900.0	1,779.6	1,677.8	1,582.4	12.5	12.5	115.44	398.4	226.2	630.1	609.1	30.088		
2,000.0	1,864.4	1,758.7	1,650.0	13.0	12.8	115.70	437.3	248.0	688.7	666.6	31.152		
2,100.0	1,949.2	1,839.7	1,717.5	13.5	13.0	115.91	476.2	269.8	747.4	724.1	32.061		
2,200.0	2,034.0	1,920.6	1,785.1	14.2	13.3	116.09	515.1	291.6	806.1	781.5	32.843		
2,300.0	2,118.8	2,001.6	1,852.6	15.1	13.6	116.25	554.0	313.4	864.8	839.0	33.518		
2,400.0	2,203.6	2,082.5	1,920.2	16.1	13.9	116.39	592.9	335.2	923.5	896.4	34.102		
2,500.0	2,288.3	2,163.5	1,987.7	17.0	14.2	116.51	631.8	357.1	982.1	953.8	34.611		
2,600.0	2,373.1	2,244.4	2,055.3	18.0	14.5	116.62	670.7	378.9	1,040.8	1,011.2	35.057		
2,700.0	2,457.9	2,325.4	2,122.8	19.0	14.9	116.71	709.6	400.7	1,099.5	1,068.5	35.450		
2,800.0	2,542.7	2,406.3	2,190.4	20.0	15.6	116.80	748.5	422.5	1,158.2	1,125.9	35.797		
2,900.0	2,627.5	2,487.3	2,257.9	21.0	16.3	116.88	787.4	444.3	1,216.9	1,183.2	36.104		
3,000.0	2,712.3	2,568.2	2,325.5	22.0	17.1	116.95	826.3	466.1	1,275.6	1,240.6	36.378		
3,100.0	2,797.1	2,649.2	2,393.0	22.9	17.8	117.01	865.2	488.0	1,334.3	1,297.9	36.623		
3,200.0	2,881.9	2,730.1	2,460.6	23.9	18.6	117.07	904.1	509.8	1,393.0	1,355.2	36.843		
3,300.0	2,966.7	2,811.1	2,528.1	24.9	19.4	117.13	943.0	531.6	1,451.8	1,412.6	37.041		
3,400.0	3,051.5	2,892.0	2,595.7	25.9	20.1	117.18	981.9	553.4	1,510.5	1,469.9	37.220		
3,500.0	3,136.3	2,972.9	2,663.2	26.9	20.9	117.22	1,020.8	575.2	1,569.2	1,527.2	37.382		
3,600.0	3,221.0	3,053.9	2,730.8	27.9	21.7	117.27	1,059.7	597.0	1,627.9	1,584.5	37.530		
3,700.0	3,305.8	3,134.8	2,798.3	28.9	22.4	117.31	1,098.6	618.9	1,686.6	1,641.8	37.664		
3,800.0	3,390.6	3,215.8	2,865.9	29.9	23.2	117.34	1,137.5	640.7	1,745.3	1,699.1	37.787		
3,900.0	3,475.4	3,296.7	2,933.4	30.9	23.9	117.38	1,176.4	662.5	1,804.0	1,756.4	37.900		
4,000.0	3,560.2	3,377.7	3,001.0	31.9	24.7	117.41	1,215.3	684.3	1,862.7	1,813.7	38.003		
4,100.0	3,645.0	3,458.6	3,068.5	32.9	25.5	117.44	1,254.2	706.1	1,921.4	1,871.0	38.099		
4,200.0	3,729.8	3,539.6	3,136.1	33.9	26.2	117.47	1,293.1	727.9	1,980.1	1,928.3	38.187		
4,300.0	3,814.6	3,620.5	3,203.6	34.9	27.0	117.50	1,332.0	749.8	2,038.8	1,985.6	38.268		
4,400.0	3,899.4	3,701.5	3,271.2	35.9	27.8	117.52	1,370.9	771.6	2,097.5	2,042.8	38.343		
4,500.0	3,984.2	3,782.4	3,338.7	36.9	28.5	117.55	1,409.8	793.4	2,156.3	2,100.1	38.413		
4,600.0	4,069.0	3,863.4	3,406.3	38.0	29.3	117.57	1,448.7	815.2	2,215.0	2,157.4	38.478		
4,700.0	4,153.7	3,944.3	3,473.8	39.0	30.1	117.59	1,487.6	837.0	2,273.7	2,214.7	38.539		
4,800.0	4,238.5	4,025.3	3,541.4	40.0	30.8	117.61	1,526.5	858.8	2,332.4	2,272.0	38.595		
4,900.0	4,323.3	4,106.2	3,608.9	41.0	31.6	117.63	1,565.4	880.7	2,391.1	2,329.2	38.648		
5,000.0	4,408.1	4,187.2	3,676.5	42.0	32.4	117.65	1,604.4	902.5	2,449.8	2,386.5	38.697		
5,100.0	4,492.9	4,268.1	3,744.0	43.0	33.1	117.67	1,643.3	924.3	2,508.5	2,443.8	38.744		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
5,200.0	4,577.7	4,349.1	3,811.6	44.0	33.9	117.69	1,682.2	946.1	2,567.2	2,501.1	38.787		
5,300.0	4,662.5	4,430.0	3,879.1	45.0	34.7	117.70	1,721.1	967.9	2,626.0	2,558.3	38.828		
5,400.0	4,747.3	4,511.0	3,946.7	46.0	35.4	117.72	1,760.0	989.7	2,684.7	2,615.6	38.866		
5,500.0	4,832.1	4,591.9	4,014.2	47.0	36.2	117.73	1,798.9	1,011.6	2,743.4	2,672.9	38.902		
5,600.0	4,917.4	4,673.1	4,082.0	48.0	37.0	118.80	1,837.9	1,033.4	2,801.7	2,729.7	38.938		
5,700.0	5,004.8	4,755.4	4,150.7	48.9	37.8	120.20	1,877.4	1,055.6	2,858.4	2,785.0	38.961		
5,800.0	5,094.2	4,838.6	4,220.1	49.7	38.6	121.43	1,917.4	1,078.1	2,913.3	2,838.5	38.976		
5,900.0	5,185.5	4,922.7	4,290.3	50.5	39.4	122.50	1,957.8	1,100.7	2,966.3	2,890.2	38.987		
6,000.0	5,278.5	5,007.3	4,360.9	51.1	40.2	123.41	1,998.5	1,123.5	3,017.3	2,940.0	38.995		
6,100.0	5,373.0	5,092.5	4,432.0	51.7	41.0	124.19	2,039.4	1,146.5	3,066.4	2,987.8	39.001		
6,200.0	5,468.9	5,177.9	4,503.3	52.2	41.8	124.85	2,080.5	1,169.5	3,113.5	3,033.6	39.007		
6,300.0	5,565.9	5,263.5	4,574.7	52.6	42.6	125.38	2,121.7	1,192.6	3,158.5	3,077.5	39.015		
6,400.0	5,663.9	5,349.1	4,646.2	52.9	43.4	125.81	2,162.8	1,215.6	3,201.5	3,119.4	39.026		
6,500.0	5,762.6	5,434.6	4,717.4	53.2	44.2	126.13	2,203.9	1,238.7	3,242.4	3,159.4	39.041		
6,600.0	5,861.9	5,519.7	4,788.5	53.4	45.0	126.36	2,244.7	1,261.6	3,281.4	3,197.4	39.063		
6,700.0	5,961.7	5,702.1	4,942.2	53.5	46.7	125.78	2,330.4	1,309.6	3,318.1	3,231.6	38.361		
6,800.0	6,061.6	6,491.9	5,677.0	53.6	51.5	122.52	2,573.4	1,445.9	3,341.4	3,246.4	35.156		
6,900.0	6,161.6	6,979.1	6,161.6	53.6	52.2	81.68	2,609.4	1,466.1	3,344.2	3,247.7	34.652		
7,000.0	6,261.6	7,079.1	6,261.6	53.6	52.2	81.68	2,609.4	1,466.1	3,344.2	3,247.7	34.641		
7,100.0	6,361.6	7,179.1	6,361.6	53.6	52.3	81.68	2,609.4	1,466.1	3,344.2	3,247.7	34.629		
7,200.0	6,461.6	7,279.1	6,461.6	53.7	52.3	81.68	2,609.4	1,466.1	3,344.2	3,247.6	34.617		
7,300.0	6,561.6	7,379.1	6,561.6	53.7	52.3	81.68	2,609.4	1,466.1	3,344.2	3,247.6	34.604		
7,400.0	6,661.6	7,479.1	6,661.6	53.7	52.3	81.68	2,609.4	1,466.1	3,344.2	3,247.6	34.592		
7,500.0	6,761.6	7,579.1	6,761.6	53.7	52.3	81.68	2,609.4	1,466.1	3,344.2	3,247.5	34.580		
7,600.0	6,861.6	7,679.1	6,861.6	53.7	52.3	81.68	2,609.4	1,466.1	3,344.2	3,247.5	34.567		
7,700.0	6,961.6	7,779.1	6,961.6	53.8	52.3	81.68	2,609.4	1,466.1	3,344.2	3,247.5	34.555		
7,800.0	7,061.6	7,879.1	7,061.6	53.8	52.4	81.68	2,609.4	1,466.1	3,344.2	3,247.4	34.542		
7,900.0	7,161.6	7,979.1	7,161.6	53.8	52.4	81.68	2,609.4	1,466.1	3,344.2	3,247.4	34.529		
8,000.0	7,261.6	8,079.1	7,261.6	53.8	52.4	81.68	2,609.4	1,466.1	3,344.2	3,247.4	34.516		
8,100.0	7,361.6	8,179.1	7,361.6	53.8	52.4	81.68	2,609.4	1,466.1	3,344.2	3,247.3	34.503		
8,200.0	7,461.6	8,279.1	7,461.6	53.9	52.4	81.68	2,609.4	1,466.1	3,344.2	3,247.3	34.490		
8,300.0	7,561.6	8,379.1	7,561.6	53.9	52.4	81.68	2,609.4	1,466.1	3,344.2	3,247.2	34.477		
8,400.0	7,661.6	8,479.1	7,661.6	53.9	52.5	81.68	2,609.4	1,466.1	3,344.2	3,247.2	34.464		
8,500.0	7,761.6	8,579.1	7,761.6	53.9	52.5	81.68	2,609.4	1,466.1	3,344.2	3,247.2	34.451		
8,587.4	7,849.0	8,666.5	7,849.0	53.9	52.5	81.68	2,609.4	1,466.1	3,344.2	3,247.1	34.440		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	88.24	0.4	14.1	14.1				
100.0	100.0	100.0	100.0	0.8	0.8	88.24	0.4	14.1	14.1	12.6	8.926		
200.0	200.0	200.0	200.0	1.4	1.4	88.24	0.4	14.1	14.1	11.3	4.998	CC, ES	
300.0	300.0	299.6	299.5	1.8	2.5	155.36	2.2	15.3	16.5	12.6	4.274		
400.0	399.8	398.5	398.2	3.3	4.0	149.15	7.5	19.0	25.6	19.4	4.119	SF	
500.0	499.4	496.2	495.3	3.6	5.1	136.84	16.3	24.9	41.2	33.8	5.572		
600.0	598.5	592.4	590.5	4.4	6.0	128.98	28.2	32.9	61.5	52.8	7.035		
700.0	697.0	687.0	683.3	5.4	6.8	125.10	43.1	43.1	86.4	76.4	8.691		
800.0	794.7	779.6	773.4	6.3	7.5	122.90	60.8	55.0	115.6	104.6	10.550		
900.0	891.3	870.0	860.5	7.1	8.1	121.49	80.9	68.7	149.0	137.1	12.529		
1,000.0	986.8	958.0	944.3	7.8	8.8	120.46	103.2	83.8	186.6	173.8	14.588		
1,100.0	1,080.9	1,043.5	1,024.6	8.5	9.3	119.59	127.5	100.3	228.2	214.5	16.692		
1,200.0	1,173.5	1,126.3	1,101.3	9.2	9.9	118.80	153.3	117.8	273.6	259.0	18.811		
1,300.0	1,264.3	1,206.4	1,174.4	9.9	10.4	118.01	180.4	136.1	322.5	307.1	20.917		
1,400.0	1,353.3	1,283.7	1,243.7	10.5	10.8	117.20	208.6	155.2	374.9	358.6	22.980		
1,500.0	1,440.2	1,358.1	1,309.5	11.1	11.3	116.33	237.5	174.9	430.5	413.3	24.955		
1,600.0	1,525.2	1,433.0	1,374.4	11.4	11.7	116.52	268.3	195.7	488.9	470.8	26.928		
1,700.0	1,610.0	1,513.4	1,444.0	11.8	12.0	117.47	301.8	218.4	547.9	528.7	28.609		
1,800.0	1,694.8	1,593.9	1,513.5	12.1	12.2	118.24	335.2	241.1	607.0	586.8	30.100		
1,900.0	1,779.6	1,674.3	1,583.1	12.5	12.5	118.88	368.7	263.8	666.1	644.8	31.384		
2,000.0	1,864.4	1,754.8	1,652.6	13.0	12.8	119.41	402.2	286.5	725.2	702.9	32.496		
2,100.0	1,949.2	1,835.2	1,722.2	13.5	13.1	119.86	435.6	309.2	784.4	761.0	33.463		
2,200.0	2,034.0	1,915.7	1,791.7	14.2	13.3	120.25	469.1	331.9	843.7	819.1	34.306		
2,300.0	2,118.8	1,996.1	1,861.3	15.1	13.6	120.59	502.6	354.6	902.9	877.1	35.042		
2,400.0	2,203.6	2,076.6	1,930.8	16.1	14.0	120.88	536.0	377.3	962.2	935.2	35.686		
2,500.0	2,288.3	2,157.0	2,000.4	17.0	14.3	121.14	569.5	399.9	1,021.5	993.3	36.254		
2,600.0	2,373.1	2,237.5	2,069.9	18.0	14.6	121.38	603.0	422.6	1,080.7	1,051.3	36.757		
2,700.0	2,457.9	2,317.9	2,139.5	19.0	14.9	121.59	636.5	445.3	1,140.0	1,109.4	37.204		
2,800.0	2,542.7	2,398.4	2,209.1	20.0	15.3	121.77	669.9	468.0	1,199.4	1,167.5	37.605		
2,900.0	2,627.5	2,478.9	2,278.6	21.0	15.7	121.94	703.4	490.7	1,258.7	1,225.5	37.968		
3,000.0	2,712.3	2,559.3	2,348.2	22.0	16.4	122.10	736.9	513.4	1,318.0	1,283.6	38.283		
3,100.0	2,797.1	2,639.8	2,417.7	22.9	17.1	122.24	770.3	536.1	1,377.3	1,341.6	38.571		
3,200.0	2,881.9	2,720.2	2,487.3	23.9	17.8	122.37	803.8	558.8	1,436.7	1,399.7	38.832		
3,300.0	2,966.7	2,800.7	2,556.8	24.9	18.5	122.49	837.3	581.5	1,496.0	1,457.7	39.068		
3,400.0	3,051.5	2,881.1	2,626.4	25.9	19.2	122.60	870.7	604.2	1,555.4	1,515.8	39.283		
3,500.0	3,136.3	2,961.6	2,695.9	26.9	19.9	122.70	904.2	626.9	1,614.7	1,573.8	39.480		
3,600.0	3,221.0	3,042.0	2,765.5	27.9	20.6	122.80	937.7	649.5	1,674.1	1,631.9	39.659		
3,700.0	3,305.8	3,122.5	2,835.0	28.9	21.3	122.89	971.1	672.2	1,733.4	1,689.9	39.824		
3,800.0	3,390.6	3,202.9	2,904.6	29.9	22.0	122.97	1,004.6	694.9	1,792.8	1,747.9	39.975		
3,900.0	3,475.4	3,283.4	2,974.1	30.9	22.7	123.05	1,038.1	717.6	1,852.1	1,806.0	40.115		
4,000.0	3,560.2	3,363.8	3,043.7	31.9	23.4	123.12	1,071.5	740.3	1,911.5	1,864.0	40.244		
4,100.0	3,645.0	3,444.3	3,113.2	32.9	24.1	123.19	1,105.0	763.0	1,970.9	1,922.0	40.363		
4,200.0	3,729.8	3,524.7	3,182.8	33.9	24.8	123.25	1,138.5	785.7	2,030.2	1,980.1	40.473		
4,300.0	3,814.6	3,605.2	3,252.3	34.9	25.5	123.32	1,172.0	808.4	2,089.6	2,038.1	40.576		
4,400.0	3,899.4	3,685.6	3,321.9	35.9	26.2	123.37	1,205.4	831.1	2,149.0	2,096.1	40.671		
4,500.0	3,984.2	3,766.1	3,391.4	36.9	26.9	123.43	1,238.9	853.8	2,208.3	2,154.1	40.760		
4,600.0	4,069.0	3,846.5	3,461.0	38.0	27.6	123.48	1,272.4	876.5	2,267.7	2,212.2	40.843		
4,700.0	4,153.7	3,927.0	3,530.5	39.0	28.3	123.53	1,305.8	899.1	2,327.1	2,270.2	40.921		
4,800.0	4,238.5	4,007.4	3,600.1	40.0	29.0	123.57	1,339.3	921.8	2,386.4	2,328.2	40.994		
4,900.0	4,323.3	4,087.9	3,669.6	41.0	29.7	123.62	1,372.8	944.5	2,445.8	2,386.3	41.062		
5,000.0	4,408.1	4,168.3	3,739.2	42.0	30.4	123.66	1,406.2	967.2	2,505.2	2,444.3	41.126		
5,100.0	4,492.9	4,248.8	3,808.7	43.0	31.1	123.70	1,439.7	989.9	2,564.6	2,502.3	41.186		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design											Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard											Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning
5,200.0	4,577.7	4,329.2	3,878.3	44.0	31.8	123.74	1,473.2	1,012.6	2,623.9	2,560.3	41.243	
5,300.0	4,662.5	4,409.7	3,947.9	45.0	32.5	123.77	1,506.6	1,035.3	2,683.3	2,618.3	41.297	
5,400.0	4,747.3	4,490.2	4,017.4	46.0	33.2	123.81	1,540.1	1,058.0	2,742.7	2,676.4	41.347	
5,500.0	4,832.1	4,570.6	4,087.0	47.0	33.9	123.84	1,573.6	1,080.7	2,802.1	2,734.4	41.395	
5,600.0	4,917.4	4,651.4	4,156.8	48.0	34.6	124.88	1,607.2	1,103.5	2,861.0	2,792.0	41.440	
5,700.0	5,004.8	4,733.5	4,227.8	48.9	35.3	126.21	1,641.4	1,126.6	2,918.0	2,847.6	41.457	
5,800.0	5,094.2	4,816.9	4,299.8	49.7	36.1	127.38	1,676.0	1,150.1	2,972.8	2,901.1	41.455	
5,900.0	5,185.5	4,901.3	4,372.8	50.5	36.8	128.38	1,711.2	1,173.9	3,025.5	2,952.5	41.440	
6,000.0	5,278.5	4,986.6	4,446.6	51.1	37.5	129.23	1,746.7	1,198.0	3,075.9	3,001.6	41.412	
6,100.0	5,373.0	5,072.8	4,521.1	51.7	38.3	129.94	1,782.5	1,222.3	3,123.9	3,048.4	41.375	
6,200.0	5,468.9	5,159.5	4,596.0	52.2	39.1	130.53	1,818.6	1,246.8	3,169.6	3,092.9	41.330	
6,300.0	5,565.9	5,246.6	4,671.4	52.6	39.8	130.99	1,854.8	1,271.3	3,212.9	3,135.0	41.278	
6,400.0	5,663.9	5,334.0	4,746.9	52.9	40.6	131.35	1,891.2	1,296.0	3,253.7	3,174.8	41.222	
6,500.0	5,762.6	5,421.5	4,822.5	53.2	41.3	131.60	1,927.6	1,320.6	3,292.2	3,212.2	41.164	
6,600.0	5,861.9	5,508.9	4,898.1	53.4	42.1	131.76	1,963.9	1,345.3	3,328.3	3,247.3	41.106	
6,700.0	5,961.7	5,596.4	5,061.6	53.5	43.7	131.16	2,039.8	1,396.7	3,361.7	3,278.3	40.288	
6,800.0	6,061.6	6,400.8	5,727.2	53.6	47.5	128.61	2,223.5	1,521.3	3,382.2	3,291.5	37.291	
6,900.0	6,161.6	6,837.0	6,161.6	53.6	48.1	87.89	2,250.3	1,539.4	3,384.7	3,292.7	36.762	
7,000.0	6,261.6	6,937.0	6,261.6	53.6	48.1	87.89	2,250.3	1,539.4	3,384.7	3,292.6	36.747	
7,100.0	6,361.6	7,037.0	6,361.6	53.6	48.1	87.89	2,250.3	1,539.4	3,384.7	3,292.6	36.733	
7,200.0	6,461.6	7,137.0	6,461.6	53.7	48.2	87.89	2,250.3	1,539.4	3,384.7	3,292.5	36.719	
7,300.0	6,561.6	7,237.0	6,561.6	53.7	48.2	87.89	2,250.3	1,539.4	3,384.7	3,292.5	36.704	
7,400.0	6,661.6	7,337.0	6,661.6	53.7	48.2	87.89	2,250.3	1,539.4	3,384.7	3,292.5	36.690	
7,500.0	6,761.6	7,437.0	6,761.6	53.7	48.2	87.89	2,250.3	1,539.4	3,384.7	3,292.4	36.675	
7,600.0	6,861.6	7,537.0	6,861.6	53.7	48.2	87.89	2,250.3	1,539.4	3,384.7	3,292.4	36.661	
7,700.0	6,961.6	7,637.0	6,961.6	53.8	48.3	87.89	2,250.3	1,539.4	3,384.7	3,292.4	36.646	
7,800.0	7,061.6	7,737.0	7,061.6	53.8	48.3	87.89	2,250.3	1,539.4	3,384.7	3,292.3	36.631	
7,900.0	7,161.6	7,837.0	7,161.6	53.8	48.3	87.89	2,250.3	1,539.4	3,384.7	3,292.3	36.616	
8,000.0	7,261.6	7,937.0	7,261.6	53.8	48.3	87.89	2,250.3	1,539.4	3,384.7	3,292.3	36.601	
8,100.0	7,361.6	8,037.0	7,361.6	53.8	48.3	87.89	2,250.3	1,539.4	3,384.7	3,292.2	36.586	
8,200.0	7,461.6	8,137.0	7,461.6	53.9	48.3	87.89	2,250.3	1,539.4	3,384.7	3,292.2	36.570	
8,300.0	7,561.6	8,237.0	7,561.6	53.9	48.4	87.89	2,250.3	1,539.4	3,384.7	3,292.1	36.555	
8,400.0	7,661.6	8,337.0	7,661.6	53.9	48.4	87.89	2,250.3	1,539.4	3,384.7	3,292.1	36.540	
8,500.0	7,761.6	8,437.0	7,761.6	53.9	48.4	87.89	2,250.3	1,539.4	3,384.7	3,292.1	36.524	
8,587.4	7,849.0	8,524.3	7,849.0	53.9	48.4	87.89	2,250.3	1,539.4	3,384.7	3,292.0	36.512	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	106.68	-6.4	21.4	22.4				
100.0	100.0	100.0	100.0	0.8	0.8	106.68	-6.4	21.4	22.4	20.8	14.127		
200.0	200.0	200.0	200.0	1.4	1.4	106.68	-6.4	21.4	22.4	19.6	7.910	CC, ES	
300.0	300.0	299.6	299.6	1.8	1.9	176.20	-5.6	22.3	24.1	20.5	6.824		
400.0	399.8	398.5	398.3	3.3	3.3	168.64	-1.8	26.1	32.4	26.5	5.530	SF	
500.0	499.4	496.0	495.4	3.6	4.6	153.15	4.8	32.9	47.8	40.6	6.695		
600.0	598.5	592.0	590.4	4.4	5.6	142.82	14.1	42.4	68.9	60.2	7.974		
700.0	697.0	685.9	682.8	5.4	6.4	137.28	25.9	54.4	95.3	85.3	9.526		
800.0	794.7	777.5	772.2	6.3	7.1	133.95	40.0	68.8	126.9	115.7	11.360		
900.0	891.3	866.5	858.2	7.1	7.8	131.73	56.0	85.2	163.2	151.0	13.373		
1,000.0	986.8	952.6	940.5	7.8	8.4	130.07	73.7	103.3	204.3	191.2	15.514		
1,100.0	1,080.9	1,035.7	1,018.9	8.5	9.0	128.72	92.9	122.8	249.9	235.8	17.744		
1,200.0	1,173.5	1,115.5	1,093.3	9.2	9.5	127.53	113.1	143.5	299.6	284.7	20.033		
1,300.0	1,264.3	1,192.0	1,163.6	9.9	10.0	126.39	134.2	165.0	353.4	337.5	22.352		
1,400.0	1,353.3	1,265.2	1,229.9	10.5	10.5	125.25	155.9	187.2	410.9	394.2	24.672		
1,500.0	1,440.2	1,335.0	1,292.1	11.1	10.9	124.08	178.0	209.7	471.9	454.4	26.978		
1,600.0	1,525.2	1,400.0	1,349.2	11.4	11.3	124.01	199.8	231.9	535.9	517.7	29.443		
1,700.0	1,610.0	1,468.8	1,408.6	11.8	11.6	124.65	224.0	256.7	601.7	582.7	31.719		
1,800.0	1,694.8	1,540.4	1,469.9	12.1	11.8	125.10	249.9	283.1	668.2	648.4	33.771		
1,900.0	1,779.6	1,615.0	1,533.8	12.5	12.0	125.48	276.8	310.6	734.7	714.0	35.494		
2,000.0	1,864.4	1,689.5	1,597.6	13.0	12.3	125.81	303.8	338.1	801.3	779.6	36.994		
2,100.0	1,949.2	1,764.1	1,661.5	13.5	12.5	126.08	330.7	365.6	867.9	845.2	38.309		
2,200.0	2,034.0	1,838.7	1,725.4	14.2	12.8	126.31	357.7	393.2	934.4	910.8	39.471		
2,300.0	2,118.8	1,913.2	1,789.2	15.1	13.1	126.52	384.6	420.7	1,001.0	976.3	40.501		
2,400.0	2,203.6	1,987.8	1,853.1	16.1	13.3	126.69	411.6	448.2	1,067.6	1,041.8	41.410		
2,500.0	2,288.3	2,062.4	1,916.9	17.0	13.6	126.85	438.5	475.7	1,134.2	1,107.3	42.215		
2,600.0	2,373.1	2,136.9	1,980.8	18.0	13.9	126.99	465.5	503.2	1,200.8	1,172.8	42.933		
2,700.0	2,457.9	2,211.5	2,044.6	19.0	14.2	127.12	492.4	530.7	1,267.4	1,238.3	43.573		
2,800.0	2,542.7	2,286.1	2,108.5	20.0	14.5	127.23	519.4	558.2	1,334.0	1,303.8	44.149		
2,900.0	2,627.5	2,360.6	2,172.3	21.0	15.1	127.33	546.3	585.7	1,400.6	1,369.3	44.711		
3,000.0	2,712.3	2,435.2	2,236.2	22.0	15.8	127.42	573.2	613.3	1,467.2	1,434.7	45.150		
3,100.0	2,797.1	2,509.8	2,300.0	22.9	16.5	127.51	600.2	640.8	1,533.8	1,500.2	45.571		
3,200.0	2,881.9	2,584.3	2,363.9	23.9	17.2	127.58	627.1	668.3	1,600.4	1,565.6	45.955		
3,300.0	2,966.7	2,658.9	2,427.7	24.9	17.9	127.65	654.1	695.8	1,667.0	1,631.0	46.304		
3,400.0	3,051.5	2,733.5	2,491.6	25.9	18.5	127.72	681.0	723.3	1,733.7	1,696.5	46.622		
3,500.0	3,136.3	2,808.0	2,555.4	26.9	19.2	127.78	708.0	750.8	1,800.3	1,761.9	46.913		
3,600.0	3,221.0	2,882.6	2,619.3	27.9	19.9	127.84	734.9	778.3	1,866.9	1,827.3	47.180		
3,700.0	3,305.8	2,957.2	2,683.2	28.9	20.6	127.89	761.9	805.8	1,933.5	1,892.7	47.425		
3,800.0	3,390.6	3,031.7	2,747.0	29.9	21.3	127.94	788.8	833.4	2,000.1	1,958.2	47.651		
3,900.0	3,475.4	3,106.3	2,810.9	30.9	22.0	127.99	815.8	860.9	2,066.7	2,023.6	47.859		
4,000.0	3,560.2	3,180.9	2,874.7	31.9	22.7	128.03	842.7	888.4	2,133.4	2,089.0	48.051		
4,100.0	3,645.0	3,255.4	2,938.6	32.9	23.4	128.07	869.7	915.9	2,200.0	2,154.4	48.229		
4,200.0	3,729.8	3,330.0	3,002.4	33.9	24.1	128.11	896.6	943.4	2,266.6	2,219.8	48.395		
4,300.0	3,814.6	3,404.6	3,066.3	34.9	24.8	128.14	923.6	970.9	2,333.2	2,285.2	48.549		
4,400.0	3,899.4	3,479.1	3,130.1	35.9	25.5	128.18	950.5	998.4	2,399.9	2,350.6	48.692		
4,500.0	3,984.2	3,553.7	3,194.0	36.9	26.2	128.21	977.5	1,025.9	2,466.5	2,416.0	48.825		
4,600.0	4,069.0	3,628.3	3,257.8	38.0	26.9	128.24	1,004.4	1,053.4	2,533.1	2,481.4	48.950		
4,700.0	4,153.7	3,702.9	3,321.7	39.0	27.5	128.27	1,031.4	1,081.0	2,599.7	2,546.7	49.066		
4,800.0	4,238.5	3,777.4	3,385.5	40.0	28.2	128.30	1,058.3	1,108.5	2,666.4	2,612.1	49.175		
4,900.0	4,323.3	3,852.0	3,449.4	41.0	28.9	128.32	1,085.2	1,136.0	2,733.0	2,677.5	49.278		
5,000.0	4,408.1	3,926.6	3,513.2	42.0	29.6	128.35	1,112.2	1,163.5	2,799.6	2,742.9	49.374		
5,100.0	4,492.9	4,001.1	3,577.1	43.0	30.3	128.37	1,139.1	1,191.0	2,866.2	2,808.3	49.464		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design											Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard											Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning
5,200.0	4,577.7	4,075.7	3,641.0	44.0	31.0	128.39	1,166.1	1,218.5	2,932.9	2,873.7	49.549	
5,300.0	4,662.5	4,150.3	3,704.8	45.0	31.7	128.41	1,193.0	1,246.0	2,999.5	2,939.0	49.629	
5,400.0	4,747.3	4,224.8	3,768.7	46.0	32.4	128.44	1,220.0	1,273.5	3,066.1	3,004.4	49.705	
5,500.0	4,832.1	4,299.4	3,832.5	47.0	33.1	128.46	1,246.9	1,301.1	3,132.7	3,069.8	49.776	
5,600.0	4,917.4	4,374.4	3,896.7	48.0	33.8	129.62	1,274.0	1,328.7	3,198.9	3,134.7	49.843	
5,700.0	5,004.8	4,451.0	3,962.4	48.9	34.5	131.14	1,301.7	1,357.0	3,263.0	3,197.6	49.868	
5,800.0	5,094.2	4,529.3	4,029.4	49.7	35.3	132.46	1,330.0	1,385.9	3,324.9	3,258.3	49.864	
5,900.0	5,185.5	4,609.0	4,097.6	50.5	36.0	133.61	1,358.8	1,415.3	3,384.5	3,316.6	49.840	
6,000.0	5,278.5	4,689.9	4,167.0	51.1	36.8	134.60	1,388.1	1,445.2	3,441.7	3,372.6	49.797	
6,100.0	5,373.0	4,772.1	4,237.3	51.7	37.5	135.45	1,417.8	1,475.5	3,496.5	3,426.2	49.739	
6,200.0	5,468.9	4,855.2	4,308.5	52.2	38.3	136.16	1,447.8	1,506.1	3,548.7	3,477.2	49.667	
6,300.0	5,565.9	4,939.2	4,380.4	52.6	39.1	136.75	1,478.1	1,537.1	3,598.3	3,525.7	49.584	
6,400.0	5,663.9	5,023.8	4,452.8	52.9	39.9	137.23	1,508.7	1,568.3	3,645.2	3,571.6	49.493	
6,500.0	5,762.6	5,108.9	4,525.7	53.2	40.7	137.60	1,539.5	1,599.7	3,689.5	3,614.8	49.396	
6,600.0	5,861.9	5,194.4	4,598.9	53.4	41.5	137.87	1,570.4	1,631.3	3,731.2	3,655.5	49.297	
6,700.0	5,961.7	5,280.1	4,672.3	53.5	42.3	138.06	1,601.3	1,662.9	3,770.1	3,693.5	49.200	
6,800.0	6,061.6	5,365.8	4,745.7	53.6	43.1	138.17	1,632.3	1,694.5	3,806.4	3,728.9	49.115	
6,900.0	6,161.6	5,451.4	4,819.0	53.6	43.9	97.38	1,663.3	1,726.1	3,841.2	3,763.0	49.109	
7,000.0	6,261.6	6,973.1	6,261.6	53.6	50.9	92.74	1,941.1	2,009.8	3,857.2	3,766.0	42.296	
7,100.0	6,361.6	7,073.1	6,361.6	53.6	51.0	92.74	1,941.1	2,009.8	3,857.2	3,766.0	42.279	
7,200.0	6,461.6	7,173.1	6,461.6	53.7	51.0	92.74	1,941.1	2,009.8	3,857.2	3,765.9	42.262	
7,300.0	6,561.6	7,273.1	6,561.6	53.7	51.0	92.74	1,941.1	2,009.8	3,857.2	3,765.9	42.245	
7,400.0	6,661.6	7,373.1	6,661.6	53.7	51.0	92.74	1,941.1	2,009.8	3,857.2	3,765.8	42.228	
7,500.0	6,761.6	7,473.1	6,761.6	53.7	51.0	92.74	1,941.1	2,009.8	3,857.2	3,765.8	42.211	
7,600.0	6,861.6	7,573.1	6,861.6	53.7	51.0	92.74	1,941.1	2,009.8	3,857.2	3,765.8	42.194	
7,700.0	6,961.6	7,673.1	6,961.6	53.8	51.1	92.74	1,941.1	2,009.8	3,857.2	3,765.7	42.176	
7,800.0	7,061.6	7,773.1	7,061.6	53.8	51.1	92.74	1,941.1	2,009.8	3,857.2	3,765.7	42.159	
7,900.0	7,161.6	7,873.1	7,161.6	53.8	51.1	92.74	1,941.1	2,009.8	3,857.2	3,765.7	42.141	
8,000.0	7,261.6	7,973.1	7,261.6	53.8	51.1	92.74	1,941.1	2,009.8	3,857.2	3,765.6	42.123	
8,100.0	7,361.6	8,073.1	7,361.6	53.8	51.1	92.74	1,941.1	2,009.8	3,857.2	3,765.6	42.105	
8,200.0	7,461.6	8,173.1	7,461.6	53.9	51.2	92.74	1,941.1	2,009.8	3,857.2	3,765.5	42.087	
8,300.0	7,561.6	8,273.1	7,561.6	53.9	51.2	92.74	1,941.1	2,009.8	3,857.2	3,765.5	42.069	
8,400.0	7,661.6	8,373.1	7,661.6	53.9	51.2	92.74	1,941.1	2,009.8	3,857.2	3,765.5	42.051	
8,500.0	7,761.6	8,473.1	7,761.6	53.9	51.2	92.74	1,941.1	2,009.8	3,857.2	3,765.4	42.032	
8,587.4	7,849.0	8,560.4	7,849.0	53.9	51.2	92.74	1,941.1	2,009.8	3,857.2	3,765.4	42.017	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	114.82	-13.3	28.7	31.6				
100.0	100.0	100.0	100.0	0.8	0.8	114.82	-13.3	28.7	31.6	30.1	19.970		
200.0	200.0	200.0	200.0	1.4	1.4	114.82	-13.3	28.7	31.6	28.8	11.182	CC, ES	
300.0	300.0	299.4	299.4	1.8	2.1	-175.79	-12.3	29.9	33.4	29.7	9.108		
400.0	399.8	398.1	397.9	3.3	3.6	176.68	-8.6	34.4	41.8	35.8	6.976	SF	
500.0	499.4	495.3	494.6	3.6	4.7	160.33	-2.4	41.9	57.4	50.1	7.907		
600.0	598.5	590.8	589.1	4.4	5.7	148.83	6.3	52.5	79.3	70.5	9.002		
700.0	697.0	684.1	680.8	5.4	6.5	142.36	17.1	65.7	106.8	96.6	10.442		
800.0	794.7	774.9	769.3	6.3	7.2	138.36	30.0	81.3	139.8	128.3	12.225		
900.0	891.3	862.8	854.2	7.1	7.9	135.65	44.5	98.9	177.8	165.3	14.224		
1,000.0	986.8	947.6	935.2	7.8	8.5	133.65	60.5	118.4	220.7	207.2	16.377		
1,100.0	1,080.9	1,029.1	1,012.1	8.5	9.1	132.04	77.6	139.2	268.2	253.8	18.640		
1,200.0	1,173.5	1,107.2	1,084.8	9.2	9.6	130.63	95.7	161.1	320.1	304.9	20.981		
1,300.0	1,264.3	1,181.7	1,153.3	9.9	10.0	129.32	114.4	183.8	376.1	360.0	23.368		
1,400.0	1,353.3	1,252.7	1,217.6	10.5	10.5	128.04	133.5	207.0	435.9	419.0	25.776		
1,500.0	1,440.2	1,320.0	1,277.7	11.1	10.8	126.73	152.7	230.5	499.3	481.6	28.251		
1,600.0	1,525.2	1,389.0	1,338.5	11.4	11.1	126.66	173.5	255.7	565.6	547.3	30.874		
1,700.0	1,610.0	1,463.2	1,403.6	11.8	11.3	127.51	196.0	283.0	632.4	613.3	33.100		
1,800.0	1,694.8	1,537.3	1,468.8	12.1	11.5	128.19	218.5	310.3	699.2	679.3	35.068		
1,900.0	1,779.6	1,611.4	1,533.9	12.5	11.8	128.76	240.9	337.7	766.1	745.3	36.813		
2,000.0	1,864.4	1,685.6	1,599.1	13.0	12.0	129.24	263.4	365.0	833.0	811.3	38.357		
2,100.0	1,949.2	1,759.7	1,664.2	13.5	12.3	129.64	285.9	392.3	900.0	877.3	39.725		
2,200.0	2,034.0	1,833.9	1,729.4	14.2	12.6	129.99	308.4	419.6	967.0	943.4	40.947		
2,300.0	2,118.8	1,908.0	1,794.5	15.1	12.8	130.29	330.8	446.9	1,034.0	1,009.4	42.039		
2,400.0	2,203.6	1,982.1	1,859.7	16.1	13.1	130.56	353.3	474.2	1,101.0	1,075.4	43.009		
2,500.0	2,288.3	2,056.3	1,924.9	17.0	13.4	130.80	375.8	501.6	1,168.0	1,141.4	43.878		
2,600.0	2,373.1	2,130.4	1,990.0	18.0	13.7	131.01	398.3	528.9	1,235.0	1,207.4	44.660		
2,700.0	2,457.9	2,204.5	2,055.2	19.0	14.0	131.20	420.8	556.2	1,302.0	1,273.3	45.369		
2,800.0	2,542.7	2,278.7	2,120.3	20.0	14.3	131.37	443.2	583.5	1,369.1	1,339.3	46.000		
2,900.0	2,627.5	2,352.8	2,185.5	21.0	14.7	131.52	465.7	610.8	1,436.1	1,405.3	46.567		
3,000.0	2,712.3	2,427.0	2,250.6	22.0	15.2	131.66	488.2	638.2	1,503.2	1,471.3	47.113		
3,100.0	2,797.1	2,501.1	2,315.8	22.9	15.9	131.79	510.7	665.5	1,570.2	1,537.2	47.583		
3,200.0	2,881.9	2,575.2	2,380.9	23.9	16.5	131.91	533.2	692.8	1,637.3	1,603.2	48.019		
3,300.0	2,966.7	2,649.4	2,446.1	24.9	17.1	132.02	555.6	720.1	1,704.4	1,669.2	48.415		
3,400.0	3,051.5	2,723.5	2,511.2	25.9	17.8	132.12	578.1	747.4	1,771.4	1,735.1	48.779		
3,500.0	3,136.3	2,797.7	2,576.4	26.9	18.4	132.22	600.6	774.7	1,838.5	1,801.1	49.113		
3,600.0	3,221.0	2,871.8	2,641.6	27.9	19.1	132.30	623.1	802.1	1,905.6	1,867.0	49.422		
3,700.0	3,305.8	2,945.9	2,706.7	28.9	19.7	132.38	645.5	829.4	1,972.7	1,933.0	49.706		
3,800.0	3,390.6	3,020.1	2,771.9	29.9	20.3	132.46	668.0	856.7	2,039.7	1,998.9	49.969		
3,900.0	3,475.4	3,094.2	2,837.0	30.9	21.0	132.53	690.5	884.0	2,106.8	2,064.9	50.213		
4,000.0	3,560.2	3,168.4	2,902.2	31.9	21.6	132.60	713.0	911.3	2,173.9	2,130.8	50.439		
4,100.0	3,645.0	3,242.5	2,967.3	32.9	22.2	132.66	735.5	938.6	2,241.0	2,196.7	50.649		
4,200.0	3,729.8	3,316.6	3,032.5	33.9	22.9	132.72	757.9	966.0	2,308.1	2,262.7	50.845		
4,300.0	3,814.6	3,390.8	3,097.6	34.9	23.5	132.77	780.4	993.3	2,375.2	2,328.6	51.028		
4,400.0	3,899.4	3,464.9	3,162.8	35.9	24.2	132.83	802.9	1,020.6	2,442.2	2,394.5	51.199		
4,500.0	3,984.2	3,539.1	3,227.9	36.9	24.8	132.88	825.4	1,047.9	2,509.3	2,460.5	51.358		
4,600.0	4,069.0	3,613.2	3,293.1	38.0	25.4	132.92	847.8	1,075.2	2,576.4	2,526.4	51.508		
4,700.0	4,153.7	3,687.3	3,358.3	39.0	26.1	132.97	870.3	1,102.5	2,643.5	2,592.3	51.649		
4,800.0	4,238.5	3,761.5	3,423.4	40.0	26.7	133.01	892.8	1,129.9	2,710.6	2,658.3	51.780		
4,900.0	4,323.3	3,835.6	3,488.6	41.0	27.4	133.05	915.3	1,157.2	2,777.7	2,724.2	51.905		
5,000.0	4,408.1	3,909.8	3,553.7	42.0	28.0	133.09	937.8	1,184.5	2,844.8	2,790.1	52.022		
5,100.0	4,492.9	3,983.9	3,618.9	43.0	28.7	133.13	960.2	1,211.8	2,911.9	2,856.0	52.132		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
5,200.0	4,577.7	4,058.0	3,684.0	44.0	29.3	133.16	982.7	1,239.1	2,979.0	2,921.9	52.236		
5,300.0	4,662.5	4,132.2	3,749.2	45.0	29.9	133.19	1,005.2	1,266.5	3,046.1	2,987.9	52.334		
5,400.0	4,747.3	4,206.3	3,814.3	46.0	30.6	133.23	1,027.7	1,293.8	3,113.2	3,053.8	52.427		
5,500.0	4,832.1	4,280.4	3,879.5	47.0	31.2	133.26	1,050.2	1,321.1	3,180.3	3,119.7	52.515		
5,600.0	4,917.4	4,355.1	3,945.1	48.0	31.9	134.36	1,072.8	1,348.6	3,246.8	3,185.1	52.595		
5,700.0	5,004.8	4,431.5	4,012.3	48.9	32.5	135.79	1,096.0	1,376.8	3,311.2	3,248.3	52.620		
5,800.0	5,094.2	4,509.8	4,081.1	49.7	33.2	137.03	1,119.7	1,405.6	3,373.2	3,309.1	52.603		
5,900.0	5,185.5	4,589.8	4,151.3	50.5	33.9	138.10	1,143.9	1,435.1	3,432.6	3,367.3	52.556		
6,000.0	5,278.5	4,671.2	4,222.9	51.1	34.6	139.01	1,168.6	1,465.1	3,489.5	3,423.0	52.483		
6,100.0	5,373.0	4,754.1	4,295.7	51.7	35.3	139.79	1,193.7	1,495.6	3,543.6	3,475.9	52.386		
6,200.0	5,468.9	4,838.1	4,369.5	52.2	36.1	140.43	1,219.2	1,526.6	3,595.0	3,526.2	52.268		
6,300.0	5,565.9	4,923.2	4,444.3	52.6	36.8	140.96	1,245.0	1,557.9	3,643.5	3,573.6	52.133		
6,400.0	5,663.9	5,009.1	4,519.8	52.9	37.5	141.37	1,271.1	1,589.6	3,689.2	3,618.3	51.983		
6,500.0	5,762.6	5,095.8	4,596.0	53.2	38.3	141.69	1,297.3	1,621.5	3,732.0	3,660.0	51.822		
6,600.0	5,861.9	5,183.0	4,672.7	53.4	39.1	141.92	1,323.8	1,653.6	3,771.9	3,698.9	51.654		
6,700.0	5,961.7	5,270.6	4,749.6	53.5	39.8	142.05	1,350.4	1,685.9	3,808.9	3,734.9	51.484		
6,800.0	6,061.6	5,358.4	4,826.8	53.6	40.6	142.11	1,377.0	1,718.3	3,842.9	3,768.0	51.326		
6,900.0	6,161.6	5,446.3	4,904.1	53.6	41.3	101.36	1,403.6	1,750.7	3,875.2	3,799.6	51.265		
7,000.0	6,261.6	5,534.2	4,981.4	53.6	42.0	97.46	1,429.9	1,783.0	3,907.5	3,832.9	51.204		
7,100.0	6,361.6	5,622.1	5,058.7	53.6	42.7	97.46	1,456.2	1,815.3	3,939.8	3,865.2	51.143		
7,200.0	6,461.6	5,710.0	5,136.0	53.7	43.4	97.46	1,482.5	1,847.6	3,972.1	3,897.5	51.082		
7,300.0	6,561.6	5,797.9	5,213.3	53.7	44.1	97.46	1,508.8	1,879.9	4,004.4	3,929.8	51.021		
7,400.0	6,661.6	5,885.8	5,290.6	53.7	44.8	97.46	1,535.1	1,912.2	4,036.7	3,962.1	50.960		
7,500.0	6,761.6	5,973.7	5,367.9	53.7	45.5	97.46	1,561.4	1,944.5	4,069.0	3,994.4	50.899		
7,600.0	6,861.6	6,061.6	5,445.2	53.7	46.2	97.46	1,587.7	1,976.8	4,101.3	4,026.7	50.838		
7,700.0	6,961.6	6,149.5	5,522.5	53.8	46.9	97.46	1,614.0	2,009.1	4,133.6	4,059.0	50.777		
7,800.0	7,061.6	6,237.4	5,600.0	53.8	47.6	97.46	1,640.3	2,041.4	4,165.9	4,091.3	50.716		
7,900.0	7,161.6	6,325.3	5,677.3	53.8	48.3	97.46	1,666.6	2,073.7	4,198.2	4,123.6	50.655		
8,000.0	7,261.6	6,413.2	5,754.6	53.8	49.0	97.46	1,692.9	2,106.0	4,230.5	4,155.9	50.594		
8,100.0	7,361.6	6,501.1	5,831.9	53.8	49.7	97.46	1,719.2	2,138.3	4,262.8	4,188.2	50.533		
8,200.0	7,461.6	6,589.0	5,909.2	53.9	50.4	97.46	1,745.5	2,170.6	4,295.1	4,220.5	50.472		
8,300.0	7,561.6	6,676.9	5,986.5	53.9	51.1	97.46	1,771.8	2,202.9	4,327.4	4,252.8	50.411		
8,400.0	7,661.6	6,764.8	6,063.8	53.9	51.8	97.46	1,798.1	2,235.2	4,359.7	4,285.1	50.350		
8,500.0	7,761.6	6,852.7	6,141.1	53.9	52.5	97.46	1,824.4	2,267.5	4,392.0	4,317.4	50.289		
8,587.4	7,849.0	6,940.1	6,218.5	53.9	53.2	97.46	1,850.7	2,299.8	4,424.3	4,349.7	50.228		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	119.22	-20.1	36.0	41.2				
100.0	100.0	100.0	100.0	0.8	0.8	119.22	-20.1	36.0	41.2	39.7	26.030		
200.0	200.0	200.0	200.0	1.4	1.4	119.22	-20.1	36.0	41.2	38.4	14.575	CC	
204.4	204.4	204.4	204.4	1.4	1.4	-168.78	-20.1	36.0	41.2	38.4	14.447	ES	
300.0	300.0	299.6	299.6	1.8	1.7	-169.69	-19.8	36.4	42.5	39.1	12.414		
400.0	399.8	398.2	398.1	3.3	2.9	-175.08	-17.5	40.0	49.9	44.3	8.960	SF	
500.0	499.4	495.5	495.0	3.6	4.3	169.10	-12.8	46.9	64.4	57.5	9.386		
600.0	598.5	591.0	589.7	4.4	5.3	157.11	-6.0	57.0	85.5	77.0	10.069		
700.0	697.0	684.2	681.6	5.4	6.2	149.96	2.7	70.0	112.7	102.7	11.240		
800.0	794.7	774.9	770.3	6.3	6.9	145.36	13.2	85.7	145.7	134.4	12.866		
900.0	891.3	862.5	855.2	7.1	7.6	142.17	25.2	103.6	184.2	171.7	14.778		
1,000.0	986.8	946.9	936.2	7.8	8.2	139.79	38.4	123.3	227.8	214.3	16.889		
1,100.0	1,080.9	1,027.7	1,012.9	8.5	8.8	137.87	52.7	144.5	276.3	261.9	19.146		
1,200.0	1,173.5	1,104.9	1,085.2	9.2	9.3	136.22	67.7	166.9	329.4	314.1	21.512		
1,300.0	1,264.3	1,178.3	1,153.1	9.9	9.8	134.71	83.2	190.0	386.8	370.7	23.952		
1,400.0	1,353.3	1,247.9	1,216.7	10.5	10.2	133.25	99.0	213.6	448.2	431.3	26.437		
1,500.0	1,440.2	1,315.7	1,277.7	11.1	10.6	131.81	115.4	238.0	513.4	495.6	28.926		
1,600.0	1,525.2	1,389.3	1,343.7	11.4	10.9	131.79	133.6	265.1	580.7	562.2	31.400		
1,700.0	1,610.0	1,462.7	1,409.6	11.8	11.1	132.60	151.7	292.1	648.3	629.1	33.711		
1,800.0	1,694.8	1,536.1	1,475.4	12.1	11.4	133.27	169.8	319.0	716.0	696.0	35.797		
1,900.0	1,779.6	1,609.5	1,541.2	12.5	11.6	133.82	187.9	346.0	783.7	762.9	37.672		
2,000.0	1,864.4	1,682.9	1,607.0	13.0	11.9	134.28	206.0	373.0	851.4	829.8	39.348		
2,100.0	1,949.2	1,756.3	1,672.8	13.5	12.1	134.67	224.1	400.0	919.2	896.7	40.851		
2,200.0	2,034.0	1,829.7	1,738.6	14.2	12.4	135.01	242.2	427.0	987.0	963.6	42.204		
2,300.0	2,118.8	1,903.1	1,804.5	15.1	12.7	135.31	260.3	453.9	1,054.8	1,030.5	43.424		
2,400.0	2,203.6	1,976.5	1,870.3	16.1	13.0	135.57	278.4	480.9	1,122.6	1,097.4	44.517		
2,500.0	2,288.3	2,049.9	1,936.1	17.0	13.2	135.80	296.5	507.9	1,190.4	1,164.3	45.505		
2,600.0	2,373.1	2,123.3	2,001.9	18.0	13.5	136.01	314.6	534.9	1,258.3	1,231.1	46.401		
2,700.0	2,457.9	2,196.7	2,067.7	19.0	13.8	136.19	332.7	561.9	1,326.1	1,298.0	47.216		
2,800.0	2,542.7	2,270.1	2,133.5	20.0	14.1	136.36	350.8	588.8	1,394.0	1,364.9	47.950		
2,900.0	2,627.5	2,343.5	2,199.4	21.0	14.4	136.51	368.9	615.8	1,461.8	1,431.8	48.619		
3,000.0	2,712.3	2,416.9	2,265.2	22.0	14.8	136.65	387.0	642.8	1,529.7	1,498.6	49.233		
3,100.0	2,797.1	2,490.3	2,331.0	22.9	15.1	136.78	405.1	669.8	1,597.5	1,565.5	49.797		
3,200.0	2,881.9	2,563.7	2,396.8	23.9	15.6	136.90	423.2	696.8	1,665.4	1,632.3	50.334		
3,300.0	2,966.7	2,637.1	2,462.6	24.9	16.1	137.00	441.3	723.7	1,733.3	1,699.2	50.794		
3,400.0	3,051.5	2,710.5	2,528.5	25.9	16.7	137.10	459.4	750.7	1,801.2	1,766.0	51.225		
3,500.0	3,136.3	2,783.9	2,594.3	26.9	17.3	137.19	477.5	777.7	1,869.1	1,832.9	51.627		
3,600.0	3,221.0	2,857.3	2,660.1	27.9	17.9	137.28	495.6	804.7	1,936.9	1,899.7	51.998		
3,700.0	3,305.8	2,930.7	2,725.9	28.9	18.5	137.36	513.7	831.6	2,004.8	1,966.5	52.341		
3,800.0	3,390.6	3,004.1	2,791.7	29.9	19.0	137.43	531.8	858.6	2,072.7	2,033.4	52.660		
3,900.0	3,475.4	3,077.5	2,857.5	30.9	19.6	137.50	550.0	885.6	2,140.6	2,100.2	52.957		
4,000.0	3,560.2	3,150.9	2,923.4	31.9	20.2	137.57	568.1	912.6	2,208.5	2,167.0	53.233		
4,100.0	3,645.0	3,224.3	2,989.2	32.9	20.8	137.63	586.2	939.6	2,276.4	2,233.8	53.490		
4,200.0	3,729.8	3,297.7	3,055.0	33.9	21.4	137.69	604.3	966.5	2,344.3	2,300.6	53.730		
4,300.0	3,814.6	3,371.1	3,120.8	34.9	22.0	137.74	622.4	993.5	2,412.2	2,367.5	53.955		
4,400.0	3,899.4	3,444.5	3,186.6	35.9	22.6	137.80	640.5	1,020.5	2,480.1	2,434.3	54.166		
4,500.0	3,984.2	3,517.9	3,252.4	36.9	23.2	137.84	658.6	1,047.5	2,548.0	2,501.1	54.364		
4,600.0	4,069.0	3,591.3	3,318.3	38.0	23.8	137.89	676.7	1,074.5	2,615.9	2,567.9	54.549		
4,700.0	4,153.7	3,664.7	3,384.1	39.0	24.3	137.93	694.8	1,101.4	2,683.8	2,634.7	54.724		
4,800.0	4,238.5	3,738.1	3,449.9	40.0	24.9	137.98	712.9	1,128.4	2,751.7	2,701.5	54.888		
4,900.0	4,323.3	3,811.5	3,515.7	41.0	25.5	138.02	731.0	1,155.4	2,819.6	2,768.3	55.043		
5,000.0	4,408.1	3,884.9	3,581.5	42.0	26.1	138.05	749.1	1,182.4	2,887.5	2,835.1	55.189		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
5,100.0	4,492.9	3,958.3	3,647.3	43.0	26.7	138.09	767.2	1,209.4	2,955.4	2,901.9	55.327		
5,200.0	4,577.7	4,031.7	3,713.2	44.0	27.3	138.13	785.3	1,236.3	3,023.3	2,968.8	55.458		
5,300.0	4,662.5	4,105.1	3,779.0	45.0	27.9	138.16	803.4	1,263.3	3,091.2	3,035.6	55.582		
5,400.0	4,747.3	4,178.5	3,844.8	46.0	28.5	138.19	821.5	1,290.3	3,159.1	3,102.4	55.699		
5,500.0	4,832.1	4,251.9	3,910.6	47.0	29.1	138.22	839.6	1,317.3	3,227.0	3,169.2	55.810		
5,600.0	4,917.4	4,325.8	3,976.9	48.0	29.7	139.25	857.8	1,344.4	3,294.3	3,235.4	55.910		
5,700.0	5,004.8	4,401.8	4,045.0	48.9	30.3	140.58	876.6	1,372.4	3,359.3	3,299.2	55.936		
5,800.0	5,094.2	4,479.8	4,114.9	49.7	30.9	141.73	895.8	1,401.0	3,421.7	3,360.5	55.908		
5,900.0	5,185.5	4,559.6	4,186.5	50.5	31.6	142.71	915.5	1,430.4	3,481.4	3,419.0	55.839		
6,000.0	5,278.5	4,641.2	4,259.7	51.1	32.2	143.54	935.6	1,460.4	3,538.3	3,474.8	55.735		
6,100.0	5,373.0	4,724.3	4,334.2	51.7	32.9	144.24	956.1	1,490.9	3,592.3	3,527.7	55.599		
6,200.0	5,468.9	4,808.8	4,410.0	52.2	33.6	144.82	977.0	1,522.0	3,643.4	3,577.6	55.435		
6,300.0	5,565.9	4,894.6	4,486.9	52.6	34.3	145.28	998.1	1,553.5	3,691.4	3,624.6	55.246		
6,400.0	5,663.9	4,981.5	4,564.8	52.9	35.0	145.65	1,019.5	1,585.4	3,736.4	3,668.5	55.036		
6,500.0	5,762.6	5,069.2	4,643.5	53.2	35.7	145.92	1,041.2	1,617.7	3,778.2	3,709.3	54.810		
6,600.0	5,861.9	5,157.7	4,722.9	53.4	36.4	146.10	1,063.0	1,650.2	3,817.0	3,747.0	54.571		
6,700.0	5,961.7	5,246.8	4,802.7	53.5	37.1	146.20	1,085.0	1,683.0	3,852.5	3,781.6	54.327		
6,800.0	6,061.6	5,336.3	4,883.0	53.6	37.9	146.22	1,107.0	1,715.9	3,884.9	3,813.1	54.096		
6,900.0	6,161.6	5,426.0	4,963.4	53.6	38.6	105.51	1,129.2	1,748.8	3,915.4	3,842.8	53.988		
7,000.0	6,261.6	6,776.7	6,261.6	53.6	44.1	102.13	1,299.3	2,002.5	3,933.2	3,849.6	47.031		
7,100.0	6,361.6	6,876.7	6,361.6	53.6	44.1	102.13	1,299.3	2,002.5	3,933.2	3,849.6	47.008		
7,200.0	6,461.6	6,976.7	6,461.6	53.7	44.1	102.13	1,299.3	2,002.5	3,933.2	3,849.5	46.985		
7,300.0	6,561.6	7,076.7	6,561.6	53.7	44.1	102.13	1,299.3	2,002.5	3,933.2	3,849.5	46.962		
7,400.0	6,661.6	7,176.7	6,661.6	53.7	44.2	102.13	1,299.3	2,002.5	3,933.2	3,849.4	46.938		
7,500.0	6,761.6	7,276.7	6,761.6	53.7	44.2	102.13	1,299.3	2,002.5	3,933.2	3,849.4	46.915		
7,600.0	6,861.6	7,376.7	6,861.6	53.7	44.2	102.13	1,299.3	2,002.5	3,933.2	3,849.4	46.891		
7,700.0	6,961.6	7,476.7	6,961.6	53.8	44.2	102.13	1,299.3	2,002.5	3,933.2	3,849.3	46.868		
7,800.0	7,061.6	7,576.7	7,061.6	53.8	44.3	102.13	1,299.3	2,002.5	3,933.2	3,849.3	46.844		
7,900.0	7,161.6	7,676.7	7,161.6	53.8	44.3	102.13	1,299.3	2,002.5	3,933.2	3,849.2	46.820		
8,000.0	7,261.6	7,776.7	7,261.6	53.8	44.3	102.13	1,299.3	2,002.5	3,933.2	3,849.2	46.795		
8,100.0	7,361.6	7,876.7	7,361.6	53.8	44.3	102.13	1,299.3	2,002.5	3,933.2	3,849.1	46.771		
8,200.0	7,461.6	7,976.7	7,461.6	53.9	44.4	102.13	1,299.3	2,002.5	3,933.2	3,849.1	46.747		
8,300.0	7,561.6	8,076.7	7,561.6	53.9	44.4	102.13	1,299.3	2,002.5	3,933.2	3,849.1	46.722		
8,400.0	7,661.6	8,176.7	7,661.6	53.9	44.4	102.13	1,299.3	2,002.5	3,933.2	3,849.0	46.697		
8,500.0	7,761.6	8,276.7	7,761.6	53.9	44.4	102.13	1,299.3	2,002.5	3,933.2	3,849.0	46.672		
8,587.4	7,849.0	8,364.0	7,849.0	53.9	44.5	102.13	1,299.3	2,002.5	3,933.2	3,848.9	46.652		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	121.94	-27.0	43.3	51.0				
100.0	100.0	100.0	100.0	0.8	0.8	121.94	-27.0	43.3	51.0	49.4	32.190		
200.0	200.0	200.0	200.0	1.4	1.4	121.94	-27.0	43.3	51.0	48.2	18.024	CC, ES	
300.0	300.0	300.0	300.0	1.8	1.9	-166.33	-27.0	43.3	52.0	48.4	14.216		
400.0	399.8	398.5	398.4	3.3	2.7	-169.29	-26.0	45.2	58.3	52.8	10.533	SF	
500.0	499.4	495.8	495.5	3.6	4.1	176.31	-23.2	50.7	71.5	64.7	10.558		
600.0	598.5	591.3	590.6	4.4	5.1	164.66	-18.5	59.7	91.5	83.1	10.876		
700.0	697.0	684.7	682.9	5.4	6.0	157.37	-12.3	71.9	118.0	107.9	11.785		
800.0	794.7	775.3	771.9	6.3	6.8	152.49	-4.6	87.0	150.6	139.2	13.244		
900.0	891.3	862.7	857.1	7.1	7.4	149.02	4.4	104.4	189.1	176.5	15.054		
1,000.0	986.8	946.8	938.2	7.8	8.1	146.39	14.4	123.9	233.0	219.4	17.110		
1,100.0	1,080.9	1,027.1	1,014.9	8.5	8.6	144.27	25.3	145.0	282.2	267.6	19.350		
1,200.0	1,173.5	1,100.0	1,083.9	9.2	9.1	142.43	36.1	166.2	336.3	320.9	21.831		
1,300.0	1,264.3	1,175.8	1,154.7	9.9	9.6	140.79	48.5	190.3	394.9	378.6	24.222		
1,400.0	1,353.3	1,244.1	1,217.6	10.5	10.0	139.21	60.6	213.8	457.8	440.7	26.863		
1,500.0	1,440.2	1,312.7	1,280.2	11.1	10.2	137.70	73.5	238.9	524.4	506.7	29.558		
1,600.0	1,525.2	1,385.1	1,346.0	11.4	10.5	137.56	87.2	265.7	593.2	574.8	32.273		
1,700.0	1,610.0	1,457.2	1,411.6	11.8	10.7	138.25	100.9	292.3	662.2	643.2	34.762		
1,800.0	1,694.8	1,529.3	1,477.2	12.1	10.9	138.82	114.6	319.0	731.3	711.6	37.017		
1,900.0	1,779.6	1,601.4	1,542.8	12.5	11.1	139.29	128.3	345.7	800.5	780.0	39.061		
2,000.0	1,864.4	1,673.5	1,608.4	13.0	11.4	139.68	142.0	372.3	869.6	848.3	40.900		
2,100.0	1,949.2	1,745.7	1,674.0	13.5	11.6	140.02	155.6	399.0	938.8	916.7	42.566		
2,200.0	2,034.0	1,817.8	1,739.6	14.2	11.9	140.31	169.3	425.6	1,008.0	985.1	44.078		
2,300.0	2,118.8	1,889.9	1,805.2	15.1	12.2	140.56	183.0	452.3	1,077.1	1,053.4	45.446		
2,400.0	2,203.6	1,962.0	1,870.8	16.1	12.5	140.79	196.7	479.0	1,146.3	1,121.8	46.683		
2,500.0	2,288.3	2,034.2	1,936.4	17.0	12.7	140.98	210.4	505.6	1,215.6	1,190.1	47.810		
2,600.0	2,373.1	2,106.3	2,002.0	18.0	13.0	141.16	224.1	532.3	1,284.8	1,258.5	48.839		
2,700.0	2,457.9	2,178.4	2,067.6	19.0	13.3	141.32	237.8	559.0	1,354.0	1,326.8	49.772		
2,800.0	2,542.7	2,250.5	2,133.2	20.0	13.6	141.46	251.5	585.6	1,423.2	1,395.1	50.624		
2,900.0	2,627.5	2,322.6	2,198.8	21.0	13.9	141.59	265.2	612.3	1,492.4	1,463.4	51.407		
3,000.0	2,712.3	2,394.8	2,264.4	22.0	14.2	141.71	278.8	638.9	1,561.7	1,531.7	52.127		
3,100.0	2,797.1	2,466.9	2,330.0	22.9	14.5	141.82	292.5	665.6	1,630.9	1,600.0	52.781		
3,200.0	2,881.9	2,539.0	2,395.6	23.9	14.8	141.91	306.2	692.3	1,700.2	1,668.3	53.384		
3,300.0	2,966.7	2,611.1	2,461.2	24.9	15.2	142.01	319.9	718.9	1,769.4	1,736.6	53.933		
3,400.0	3,051.5	2,683.2	2,526.8	25.9	15.7	142.09	333.6	745.6	1,838.6	1,804.9	54.462		
3,500.0	3,136.3	2,755.4	2,592.4	26.9	16.2	142.17	347.3	772.2	1,907.9	1,873.2	54.958		
3,600.0	3,221.0	2,827.5	2,658.0	27.9	16.7	142.24	361.0	798.9	1,977.1	1,941.4	55.391		
3,700.0	3,305.8	2,899.6	2,723.6	28.9	17.2	142.31	374.7	825.6	2,046.4	2,009.7	55.800		
3,800.0	3,390.6	2,971.7	2,789.2	29.9	17.8	142.37	388.3	852.2	2,115.6	2,078.0	56.185		
3,900.0	3,475.4	3,043.8	2,854.8	30.9	18.3	142.43	402.0	878.9	2,184.9	2,146.3	56.541		
4,000.0	3,560.2	3,116.0	2,920.4	31.9	18.9	142.49	415.7	905.5	2,254.1	2,214.5	56.873		
4,100.0	3,645.0	3,188.1	2,986.0	32.9	19.4	142.54	429.4	932.2	2,323.4	2,282.8	57.185		
4,200.0	3,729.8	3,260.2	3,051.6	33.9	20.0	142.59	443.1	958.9	2,392.7	2,351.0	57.476		
4,300.0	3,814.6	3,332.3	3,117.2	34.9	20.5	142.64	456.8	985.5	2,461.9	2,419.3	57.749		
4,400.0	3,899.4	3,404.5	3,182.8	35.9	21.1	142.68	470.5	1,012.2	2,531.2	2,487.5	58.005		
4,500.0	3,984.2	3,476.6	3,248.4	36.9	21.6	142.72	484.2	1,038.9	2,600.4	2,555.8	58.246		
4,600.0	4,069.0	3,548.7	3,314.0	38.0	22.1	142.76	497.9	1,065.5	2,669.7	2,624.0	58.472		
4,700.0	4,153.7	3,620.8	3,379.6	39.0	22.7	142.80	511.5	1,092.2	2,739.0	2,692.3	58.685		
4,800.0	4,238.5	3,692.9	3,445.2	40.0	23.2	142.84	525.2	1,118.8	2,808.2	2,760.5	58.886		
4,900.0	4,323.3	3,765.1	3,510.8	41.0	23.8	142.87	538.9	1,145.5	2,877.5	2,828.8	59.076		
5,000.0	4,408.1	3,837.2	3,576.3	42.0	24.3	142.90	552.6	1,172.2	2,946.7	2,897.0	59.256		
5,100.0	4,492.9	3,909.3	3,641.9	43.0	24.9	142.93	566.3	1,198.8	3,016.0	2,965.2	59.426		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
5,200.0	4,577.7	3,981.4	3,707.5	44.0	25.4	142.96	580.0	1,225.5	3,085.3	3,033.5	59.586		
5,300.0	4,662.5	4,053.5	3,773.1	45.0	26.0	142.99	593.7	1,252.1	3,154.5	3,101.7	59.739		
5,400.0	4,747.3	4,125.7	3,838.7	46.0	26.5	143.02	607.4	1,278.8	3,223.8	3,169.9	59.883		
5,500.0	4,832.1	4,197.8	3,904.3	47.0	27.1	143.05	621.0	1,305.5	3,293.0	3,238.2	60.020		
5,600.0	4,917.4	4,270.5	3,970.5	48.0	27.6	144.01	634.8	1,332.3	3,361.7	3,305.8	60.143		
5,700.0	5,004.8	4,345.4	4,038.6	48.9	28.2	145.24	649.1	1,360.0	3,427.9	3,370.9	60.172		
5,800.0	5,094.2	4,422.5	4,108.8	49.7	28.8	146.30	663.7	1,388.5	3,491.4	3,433.3	60.131		
5,900.0	5,185.5	4,501.7	4,180.8	50.5	29.4	147.20	678.7	1,417.8	3,552.0	3,492.9	60.040		
6,000.0	5,278.5	4,582.8	4,254.6	51.1	30.0	147.96	694.1	1,447.8	3,609.7	3,549.5	59.904		
6,100.0	5,373.0	4,665.7	4,330.0	51.7	30.7	148.60	709.9	1,478.5	3,664.4	3,603.0	59.727		
6,200.0	5,468.9	4,750.2	4,406.8	52.2	31.3	149.13	725.9	1,509.7	3,715.9	3,653.5	59.514		
6,300.0	5,565.9	4,836.2	4,485.0	52.6	32.0	149.55	742.2	1,541.5	3,764.3	3,700.8	59.270		
6,400.0	5,663.9	4,923.4	4,564.3	52.9	32.6	149.87	758.8	1,573.7	3,809.5	3,744.9	58.999		
6,500.0	5,762.6	5,011.7	4,644.7	53.2	33.3	150.11	775.5	1,606.3	3,851.3	3,785.7	58.706		
6,600.0	5,861.9	5,101.0	4,725.9	53.4	34.0	150.27	792.5	1,639.3	3,889.8	3,823.2	58.397		
6,700.0	5,961.7	5,191.0	4,807.8	53.5	34.7	150.35	809.6	1,672.6	3,925.0	3,857.4	58.079		
6,800.0	6,061.6	5,281.7	4,890.2	53.6	35.4	150.36	826.8	1,706.2	3,956.7	3,888.2	57.777		
6,900.0	6,161.6	5,372.6	4,973.0	53.6	36.1	109.68	844.0	1,739.8	3,986.5	3,917.3	57.632		
7,000.0	6,261.6	6,710.1	6,261.6	53.6	41.4	106.62	978.5	2,001.6	4,012.2	3,932.0	50.050		
7,100.0	6,361.6	6,810.1	6,361.6	53.6	41.4	106.62	978.5	2,001.6	4,012.2	3,931.9	50.023		
7,200.0	6,461.6	6,910.1	6,461.6	53.7	41.5	106.62	978.5	2,001.6	4,012.2	3,931.9	49.996		
7,300.0	6,561.6	7,010.1	6,561.6	53.7	41.5	106.62	978.5	2,001.6	4,012.2	3,931.9	49.969		
7,400.0	6,661.6	7,110.1	6,661.6	53.7	41.5	106.62	978.5	2,001.6	4,012.2	3,931.8	49.941		
7,500.0	6,761.6	7,210.1	6,761.6	53.7	41.5	106.62	978.5	2,001.6	4,012.2	3,931.8	49.914		
7,600.0	6,861.6	7,310.1	6,861.6	53.7	41.6	106.62	978.5	2,001.6	4,012.2	3,931.7	49.886		
7,700.0	6,961.6	7,410.1	6,961.6	53.8	41.6	106.62	978.5	2,001.6	4,012.2	3,931.7	49.858		
7,800.0	7,061.6	7,510.1	7,061.6	53.8	41.6	106.62	978.5	2,001.6	4,012.2	3,931.6	49.830		
7,900.0	7,161.6	7,610.1	7,161.6	53.8	41.7	106.62	978.5	2,001.6	4,012.2	3,931.6	49.802		
8,000.0	7,261.6	7,710.1	7,261.6	53.8	41.7	106.62	978.5	2,001.6	4,012.2	3,931.5	49.773		
8,100.0	7,361.6	7,810.1	7,361.6	53.8	41.7	106.62	978.5	2,001.6	4,012.2	3,931.5	49.745		
8,200.0	7,461.6	7,910.1	7,461.6	53.9	41.7	106.62	978.5	2,001.6	4,012.2	3,931.5	49.716		
8,300.0	7,561.6	8,010.1	7,561.6	53.9	41.8	106.62	978.5	2,001.6	4,012.2	3,931.4	49.687		
8,400.0	7,661.6	8,110.1	7,661.6	53.9	41.8	106.62	978.5	2,001.6	4,012.2	3,931.4	49.658		
8,500.0	7,761.6	8,210.1	7,761.6	53.9	41.8	106.62	978.5	2,001.6	4,012.2	3,931.3	49.629		
8,587.4	7,849.0	8,297.4	7,849.0	53.9	41.8	106.62	978.5	2,001.6	4,012.2	3,931.3	49.605		

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard													Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	123.80	-33.8	50.5	60.8					
100.0	100.0	100.0	100.0	0.8	0.8	123.80	-33.8	50.5	60.8	59.2	38.398			
200.0	200.0	200.0	200.0	1.4	1.4	123.80	-33.8	50.5	60.8	58.0	21.500	CC		
204.4	204.4	204.4	204.4	1.4	1.4	-164.20	-33.8	50.5	60.8	58.0	21.313	ES		
300.0	300.0	299.2	299.2	1.8	1.7	-164.84	-33.7	51.0	62.2	58.8	18.155			
400.0	399.8	397.0	396.9	3.3	2.9	-168.64	-32.3	55.0	70.0	64.3	12.366			
500.0	499.4	493.3	492.9	3.6	4.2	177.00	-29.5	62.7	85.2	78.2	12.097	SF		
600.0	598.5	587.6	586.4	4.4	5.3	165.57	-25.5	73.9	107.6	98.8	12.289			
700.0	697.0	679.4	676.8	5.4	6.1	158.49	-20.4	88.3	136.7	126.3	13.160			
800.0	794.7	768.0	763.6	6.3	6.9	153.80	-14.3	105.5	172.2	160.5	14.630			
900.0	891.3	853.2	846.2	7.1	7.5	150.48	-7.4	124.9	213.7	200.8	16.475			
1,000.0	986.8	934.5	924.4	7.8	8.1	147.97	0.1	146.2	260.9	246.8	18.584			
1,100.0	1,080.9	1,011.8	997.9	8.5	8.7	145.93	8.2	168.8	313.3	298.3	20.892			
1,200.0	1,173.5	1,084.9	1,066.5	9.2	9.2	144.16	16.5	192.3	370.6	354.7	23.357			
1,300.0	1,264.3	1,155.9	1,132.5	9.9	9.5	142.56	25.3	217.1	432.5	415.9	26.097			
1,400.0	1,353.3	1,228.9	1,199.8	10.5	9.7	141.18	34.7	243.5	497.8	480.6	28.864			
1,500.0	1,440.2	1,302.2	1,267.5	11.1	9.9	140.03	44.2	270.1	565.5	547.6	31.462			
1,600.0	1,525.2	1,373.4	1,333.3	11.4	10.1	140.15	53.4	296.0	635.2	616.6	34.162			
1,700.0	1,610.0	1,444.5	1,398.8	11.8	10.4	141.05	62.5	321.8	705.2	686.0	36.666			
1,800.0	1,694.8	1,515.5	1,464.4	12.1	10.6	141.79	71.7	347.5	775.3	755.4	38.950			
1,900.0	1,779.6	1,586.5	1,529.9	12.5	10.8	142.40	80.8	373.3	845.4	824.8	41.033			
2,000.0	1,864.4	1,657.5	1,595.5	13.0	11.1	142.92	90.0	399.1	915.5	894.2	42.931			
2,100.0	1,949.2	1,728.6	1,661.0	13.5	11.4	143.37	99.2	424.8	985.7	963.7	44.665			
2,200.0	2,034.0	1,799.6	1,726.6	14.2	11.6	143.76	108.3	450.6	1,056.0	1,033.1	46.251			
2,300.0	2,118.8	1,870.6	1,792.1	15.1	11.9	144.10	117.5	476.4	1,126.2	1,102.6	47.693			
2,400.0	2,203.6	1,941.6	1,857.7	16.1	12.2	144.40	126.6	502.2	1,196.5	1,172.0	49.015			
2,500.0	2,288.3	2,012.7	1,923.2	17.0	12.5	144.67	135.8	527.9	1,266.7	1,241.5	50.227			
2,600.0	2,373.1	2,083.7	1,988.8	18.0	12.8	144.91	144.9	553.7	1,337.0	1,311.0	51.338			
2,700.0	2,457.9	2,154.7	2,054.3	19.0	13.1	145.13	154.1	579.5	1,407.3	1,380.4	52.356			
2,800.0	2,542.7	2,225.7	2,119.8	20.0	13.4	145.32	163.3	605.2	1,477.6	1,449.9	53.295			
2,900.0	2,627.5	2,296.8	2,185.4	21.0	13.7	145.50	172.4	631.0	1,547.9	1,519.4	54.162			
3,000.0	2,712.3	2,367.8	2,250.9	22.0	14.0	145.66	181.6	656.8	1,618.3	1,588.8	54.958			
3,100.0	2,797.1	2,438.8	2,316.5	22.9	14.3	145.81	190.7	682.5	1,688.6	1,658.3	55.696			
3,200.0	2,881.9	2,509.8	2,382.0	23.9	14.6	145.95	199.9	708.3	1,758.9	1,727.7	56.381			
3,300.0	2,966.7	2,580.9	2,447.6	24.9	14.9	146.07	209.0	734.1	1,829.3	1,797.2	57.014			
3,400.0	3,051.5	2,651.9	2,513.1	25.9	15.3	146.19	218.2	759.8	1,899.6	1,866.6	57.601			
3,500.0	3,136.3	2,722.9	2,578.7	26.9	15.6	146.30	227.3	785.6	1,970.0	1,936.1	58.148			
3,600.0	3,221.0	2,793.9	2,644.2	27.9	16.0	146.40	236.5	811.4	2,040.3	2,005.5	58.662			
3,700.0	3,305.8	2,865.0	2,709.8	28.9	16.5	146.50	245.7	837.2	2,110.7	2,075.0	59.144			
3,800.0	3,390.6	2,936.0	2,775.3	29.9	17.0	146.58	254.8	862.9	2,181.0	2,144.4	59.591			
3,900.0	3,475.4	3,007.0	2,840.9	30.9	17.5	146.67	264.0	888.7	2,251.4	2,213.9	60.004			
4,000.0	3,560.2	3,078.0	2,906.4	31.9	18.0	146.74	273.1	914.5	2,321.7	2,283.3	60.395			
4,100.0	3,645.0	3,149.1	2,972.0	32.9	18.5	146.82	282.3	940.2	2,392.1	2,352.7	60.762			
4,200.0	3,729.8	3,220.1	3,037.5	33.9	19.0	146.89	291.4	966.0	2,462.5	2,422.2	61.106			
4,300.0	3,814.6	3,291.1	3,103.1	34.9	19.5	146.95	300.6	991.8	2,532.8	2,491.6	61.431			
4,400.0	3,899.4	3,362.1	3,168.6	35.9	20.0	147.01	309.8	1,017.5	2,603.2	2,561.0	61.736			
4,500.0	3,984.2	3,433.2	3,234.2	36.9	20.5	147.07	318.9	1,043.3	2,673.6	2,630.5	62.024			
4,600.0	4,069.0	3,504.2	3,299.7	38.0	21.0	147.13	328.1	1,069.1	2,743.9	2,699.9	62.296			
4,700.0	4,153.7	3,575.2	3,365.3	39.0	21.5	147.18	337.2	1,094.8	2,814.3	2,769.3	62.554			
4,800.0	4,238.5	3,646.2	3,430.8	40.0	22.0	147.23	346.4	1,120.6	2,884.7	2,838.7	62.797			
4,900.0	4,323.3	3,717.3	3,496.4	41.0	22.5	147.28	355.5	1,146.4	2,955.1	2,908.2	63.027			
5,000.0	4,408.1	3,788.3	3,561.9	42.0	23.0	147.32	364.7	1,172.2	3,025.4	2,977.6	63.246			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
5,100.0	4,492.9	3,859.3	3,627.5	43.0	23.5	147.37	373.9	1,197.9	3,095.8	3,047.0	63.453		
5,200.0	4,577.7	3,930.3	3,693.0	44.0	24.0	147.41	383.0	1,223.7	3,166.2	3,116.4	63.650		
5,300.0	4,662.5	4,001.4	3,758.6	45.0	24.5	147.45	392.2	1,249.5	3,236.6	3,185.9	63.837		
5,400.0	4,747.3	4,072.4	3,824.1	46.0	25.0	147.49	401.3	1,275.2	3,306.9	3,255.3	64.014		
5,500.0	4,832.1	4,143.4	3,889.7	47.0	25.5	147.52	410.5	1,301.0	3,377.3	3,324.7	64.184		
5,600.0	4,917.4	4,215.0	3,955.8	48.0	26.0	148.42	419.7	1,327.0	3,447.1	3,393.5	64.335		
5,700.0	5,004.8	4,289.1	4,024.1	48.9	26.6	149.56	429.3	1,353.9	3,514.3	3,459.7	64.373		
5,800.0	5,094.2	4,365.5	4,094.7	49.7	27.1	150.54	439.1	1,381.6	3,578.6	3,523.0	64.326		
5,900.0	5,185.5	4,444.2	4,167.3	50.5	27.7	151.37	449.3	1,410.1	3,640.0	3,583.4	64.218		
6,000.0	5,278.5	4,525.1	4,241.9	51.1	28.2	152.07	459.7	1,439.5	3,698.4	3,640.7	64.056		
6,100.0	5,373.0	4,607.8	4,318.3	51.7	28.8	152.65	470.4	1,469.5	3,753.6	3,694.8	63.844		
6,200.0	5,468.9	4,692.4	4,396.3	52.2	29.4	153.14	481.3	1,500.2	3,805.6	3,745.7	63.589		
6,300.0	5,565.9	4,778.6	4,475.9	52.6	30.0	153.52	492.4	1,531.5	3,854.2	3,793.3	63.294		
6,400.0	5,663.9	4,866.3	4,556.8	52.9	30.7	153.82	503.7	1,563.3	3,899.5	3,837.6	62.967		
6,500.0	5,762.6	4,955.3	4,638.9	53.2	31.3	154.04	515.1	1,595.6	3,941.3	3,878.4	62.612		
6,600.0	5,861.9	5,045.4	4,722.1	53.4	31.9	154.18	526.8	1,628.3	3,979.6	3,915.7	62.238		
6,700.0	5,961.7	5,136.5	4,806.2	53.5	32.6	154.26	538.5	1,661.3	4,014.4	3,949.5	61.852		
6,800.0	6,061.6	5,228.4	4,891.0	53.6	33.2	154.26	550.3	1,694.6	4,045.6	3,979.8	61.485		
6,900.0	6,161.6	5,320.6	4,976.1	53.6	33.9	113.64	562.2	1,728.1	4,074.6	4,008.2	61.309		
7,000.0	6,261.6	5,412.9	5,061.3	53.6	34.5	113.29	574.1	1,761.6	4,103.8	4,036.7	61.147		
7,100.0	6,361.6	5,505.1	5,146.5	53.6	35.1	112.94	586.1	1,795.4	4,133.0	4,065.3	60.984		
7,200.0	6,461.6	5,597.2	5,231.6	53.7	35.7	112.59	598.1	1,829.5	4,162.2	4,093.9	60.821		
7,300.0	6,561.6	5,689.3	5,316.7	53.7	36.3	112.24	610.1	1,863.7	4,191.4	4,122.0	60.658		
7,400.0	6,661.6	5,781.4	5,401.8	53.7	36.9	111.89	622.1	1,898.1	4,220.6	4,150.2	60.495		
7,500.0	6,761.6	5,873.5	5,486.9	53.7	37.5	111.54	634.1	1,932.6	4,249.8	4,178.4	60.332		
7,600.0	6,861.6	5,965.6	5,572.0	53.7	38.1	111.19	646.1	1,967.2	4,279.0	4,206.6	60.169		
7,700.0	6,961.6	6,057.7	5,657.1	53.8	38.7	110.84	658.1	1,999.9	4,308.2	4,234.8	60.006		
7,800.0	7,061.6	6,149.8	5,742.2	53.8	39.3	110.49	670.1	2,032.6	4,337.4	4,263.0	59.843		
7,900.0	7,161.6	6,241.9	5,827.3	53.8	39.9	110.14	682.1	2,065.2	4,366.6	4,291.2	59.680		
8,000.0	7,261.6	6,334.0	5,912.4	53.8	40.5	109.79	694.1	2,097.8	4,395.8	4,319.4	59.517		
8,100.0	7,361.6	6,426.1	6,000.0	53.8	41.1	109.44	706.1	2,130.4	4,425.0	4,347.6	59.354		
8,200.0	7,461.6	6,518.2	6,085.1	53.9	41.7	109.09	718.1	2,162.9	4,454.2	4,375.8	59.191		
8,300.0	7,561.6	6,610.3	6,170.2	53.9	42.3	108.74	730.1	2,195.5	4,483.4	4,404.0	59.028		
8,400.0	7,661.6	6,702.4	6,255.3	53.9	42.9	108.39	742.1	2,228.1	4,512.6	4,432.2	58.865		
8,500.0	7,761.6	6,794.5	6,340.4	53.9	43.5	108.04	754.1	2,260.6	4,541.8	4,460.4	58.702		
8,587.4	7,849.0	6,873.3	6,416.2	53.9	43.9	107.69	766.1	2,292.1	4,571.0	4,488.6	58.539		

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	125.13	-40.7	57.8	70.7				
100.0	100.0	100.0	100.0	0.8	0.8	125.13	-40.7	57.8	70.7	69.1	44.631		
200.0	200.0	200.0	200.0	1.4	1.4	125.13	-40.7	57.8	70.7	67.9	24.990	CC	
204.4	204.4	204.4	204.4	1.4	1.4	-162.87	-40.7	57.8	70.7	67.8	24.730	ES	
300.0	300.0	299.5	299.5	1.8	1.7	-163.18	-40.7	57.9	71.8	68.3	20.601		
400.0	399.8	396.9	396.8	3.3	2.7	-165.86	-40.0	61.0	79.1	73.5	14.086		
500.0	499.4	492.9	492.6	3.6	4.1	-179.25	-38.5	67.9	93.9	86.8	13.332		
600.0	598.5	586.9	585.9	4.4	5.1	169.86	-36.2	78.5	116.0	107.2	13.201	SF	
700.0	697.0	678.2	676.1	5.4	6.0	163.03	-33.2	92.4	145.1	134.7	13.868		
800.0	794.7	766.3	762.6	6.3	6.7	158.45	-29.6	109.1	180.9	169.0	15.213		
900.0	891.3	850.8	844.7	7.1	7.4	155.16	-25.5	128.2	222.9	209.8	16.984		
1,000.0	986.8	931.3	922.3	7.8	8.0	152.66	-21.1	149.0	270.8	256.6	19.054		
1,100.0	1,080.9	1,007.4	995.0	8.5	8.5	150.63	-16.3	171.3	324.2	309.1	21.352		
1,200.0	1,173.5	1,079.2	1,062.8	9.2	9.0	148.87	-11.3	194.3	382.8	366.7	23.833		
1,300.0	1,264.3	1,146.6	1,125.8	9.9	9.3	147.25	-6.2	217.9	446.0	429.3	26.678		
1,400.0	1,353.3	1,220.7	1,194.6	10.5	9.5	145.87	-0.4	244.8	512.8	495.4	29.451		
1,500.0	1,440.2	1,292.6	1,261.3	11.1	9.7	144.70	5.2	270.9	582.1	563.9	32.135		
1,600.0	1,525.2	1,362.3	1,326.0	11.4	10.0	144.73	10.6	296.2	653.4	634.7	34.963		
1,700.0	1,610.0	1,431.8	1,390.5	11.8	10.2	145.54	16.0	321.4	725.0	705.7	37.608		
1,800.0	1,694.8	1,501.2	1,455.0	12.1	10.4	146.20	21.5	346.6	796.7	776.8	40.040		
1,900.0	1,779.6	1,570.7	1,519.5	12.5	10.7	146.76	26.9	371.8	868.4	847.9	42.269		
2,000.0	1,864.4	1,640.1	1,584.0	13.0	10.9	147.23	32.3	397.0	940.2	919.0	44.319		
2,100.0	1,949.2	1,709.5	1,648.5	13.5	11.2	147.64	37.7	422.2	1,012.0	990.1	46.205		
2,200.0	2,034.0	1,779.0	1,712.9	14.2	11.4	147.99	43.2	447.4	1,083.8	1,061.2	47.934		
2,300.0	2,118.8	1,848.4	1,777.4	15.1	11.7	148.29	48.6	472.6	1,155.6	1,132.3	49.523		
2,400.0	2,203.6	1,917.9	1,841.9	16.1	12.0	148.57	54.0	497.8	1,227.5	1,203.4	50.988		
2,500.0	2,288.3	1,987.3	1,906.4	17.0	12.2	148.81	59.5	523.0	1,299.3	1,274.5	52.335		
2,600.0	2,373.1	2,056.8	1,970.9	18.0	12.5	149.02	64.9	548.2	1,371.2	1,345.6	53.576		
2,700.0	2,457.9	2,126.2	2,035.4	19.0	12.8	149.22	70.3	573.4	1,443.1	1,416.7	54.723		
2,800.0	2,542.7	2,195.7	2,099.9	20.0	13.1	149.40	75.7	598.6	1,514.9	1,487.8	55.783		
2,900.0	2,627.5	2,265.1	2,164.3	21.0	13.4	149.56	81.2	623.8	1,586.8	1,558.9	56.762		
3,000.0	2,712.3	2,334.6	2,228.8	22.0	13.7	149.70	86.6	649.0	1,658.7	1,630.0	57.670		
3,100.0	2,797.1	2,404.0	2,293.3	22.9	14.0	149.84	92.0	674.2	1,730.6	1,701.0	58.515		
3,200.0	2,881.9	2,473.5	2,357.8	23.9	14.3	149.96	97.4	699.4	1,802.5	1,772.1	59.297		
3,300.0	2,966.7	2,542.9	2,422.3	24.9	14.6	150.08	102.9	724.6	1,874.4	1,843.2	60.026		
3,400.0	3,051.5	2,612.4	2,486.8	25.9	14.9	150.18	108.3	749.8	1,946.3	1,914.3	60.706		
3,500.0	3,136.3	2,681.8	2,551.2	26.9	15.2	150.28	113.7	775.0	2,018.3	1,985.4	61.340		
3,600.0	3,221.0	2,751.2	2,615.7	27.9	15.6	150.37	119.1	800.2	2,090.2	2,056.4	61.932		
3,700.0	3,305.8	2,820.7	2,680.2	28.9	15.9	150.46	124.6	825.4	2,162.1	2,127.5	62.487		
3,800.0	3,390.6	2,890.1	2,744.7	29.9	16.3	150.54	130.0	850.6	2,234.0	2,198.6	63.007		
3,900.0	3,475.4	2,959.6	2,809.2	30.9	16.7	150.61	135.4	875.8	2,305.9	2,269.6	63.492		
4,000.0	3,560.2	3,029.0	2,873.7	31.9	17.2	150.68	140.8	901.1	2,377.9	2,340.7	63.947		
4,100.0	3,645.0	3,098.5	2,938.2	32.9	17.6	150.75	146.3	926.3	2,449.8	2,411.7	64.382		
4,200.0	3,729.8	3,167.9	3,002.6	33.9	18.1	150.81	151.7	951.5	2,521.7	2,482.8	64.800		
4,300.0	3,814.6	3,237.4	3,067.1	34.9	18.6	150.87	157.1	976.7	2,593.6	2,553.8	65.172		
4,400.0	3,899.4	3,306.8	3,131.6	35.9	19.0	150.93	162.5	1,001.9	2,665.6	2,624.9	65.530		
4,500.0	3,984.2	3,376.3	3,196.1	36.9	19.5	150.98	168.0	1,027.1	2,737.5	2,695.9	65.871		
4,600.0	4,069.0	3,445.7	3,260.6	38.0	20.0	151.03	173.4	1,052.3	2,809.4	2,767.0	66.193		
4,700.0	4,153.7	3,515.2	3,325.1	39.0	20.5	151.08	178.8	1,077.5	2,881.4	2,838.0	66.497		
4,800.0	4,238.5	3,584.6	3,389.5	40.0	20.9	151.12	184.2	1,102.7	2,953.3	2,909.1	66.786		
4,900.0	4,323.3	3,654.1	3,454.0	41.0	21.4	151.17	189.7	1,127.9	3,025.2	2,980.1	67.059		
5,000.0	4,408.1	3,723.5	3,518.5	42.0	21.9	151.21	195.1	1,153.1	3,097.2	3,051.2	67.319		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
5,100.0	4,492.9	3,793.0	3,583.0	43.0	22.4	151.25	200.5	1,178.3	3,169.1	3,122.2	67.565		
5,200.0	4,577.7	3,862.4	3,647.5	44.0	22.9	151.28	205.9	1,203.5	3,241.1	3,193.2	67.800		
5,300.0	4,662.5	3,931.8	3,712.0	45.0	23.3	151.32	211.4	1,228.7	3,313.0	3,264.3	68.023		
5,400.0	4,747.3	4,001.3	3,776.5	46.0	23.8	151.35	216.8	1,253.9	3,384.9	3,335.3	68.235		
5,500.0	4,832.1	4,070.7	3,840.9	47.0	24.3	151.39	222.2	1,279.1	3,456.9	3,406.4	68.437		
5,600.0	4,917.4	4,140.8	3,906.0	48.0	24.8	152.22	227.7	1,304.5	3,528.2	3,476.8	68.618		
5,700.0	5,004.8	4,213.5	3,973.5	48.9	25.3	153.28	233.4	1,330.9	3,596.9	3,544.5	68.666		
5,800.0	5,094.2	4,288.7	4,043.3	49.7	25.8	154.18	239.2	1,358.2	3,662.7	3,609.3	68.615		
5,900.0	5,185.5	4,366.3	4,115.4	50.5	26.3	154.95	245.3	1,386.4	3,725.5	3,671.1	68.493		
6,000.0	5,278.5	4,446.3	4,189.6	51.1	26.9	155.60	251.5	1,415.4	3,785.2	3,729.8	68.308		
6,100.0	5,373.0	4,528.3	4,265.8	51.7	27.4	156.14	258.0	1,445.1	3,841.7	3,785.2	68.065		
6,200.0	5,468.9	4,612.3	4,343.8	52.2	28.0	156.58	264.5	1,475.6	3,894.8	3,837.4	67.771		
6,300.0	5,565.9	4,698.1	4,423.5	52.6	28.6	156.94	271.2	1,506.8	3,944.6	3,886.1	67.433		
6,400.0	5,663.9	4,785.6	4,504.7	52.9	29.2	157.22	278.1	1,538.5	3,990.9	3,931.4	67.056		
6,500.0	5,762.6	4,874.5	4,587.3	53.2	29.8	157.42	285.0	1,570.8	4,033.7	3,973.1	66.647		
6,600.0	5,861.9	4,964.7	4,671.1	53.4	30.4	157.56	292.0	1,603.5	4,072.8	4,011.3	66.215		
6,700.0	5,961.7	5,056.1	4,755.9	53.5	31.1	157.63	299.2	1,636.7	4,108.3	4,045.9	65.772		
6,800.0	6,061.6	5,148.4	4,841.6	53.6	31.7	157.64	306.4	1,670.2	4,140.1	4,076.8	65.350		
6,900.0	6,161.6	5,241.3	4,927.9	53.6	32.3	117.06	313.7	1,703.9	4,169.7	4,105.7	65.158		
7,000.0	6,261.6	5,334.2	5,014.1	53.6	33.0	116.75	320.9	1,737.6	4,199.3	4,134.7	64.979		
7,100.0	6,361.6	6,721.8	6,361.6	53.6	37.9	114.50	376.4	1,995.5	4,218.3	4,142.9	55.934		
7,200.0	6,461.6	6,821.8	6,461.6	53.7	37.9	114.50	376.4	1,995.5	4,218.3	4,142.8	55.899		
7,300.0	6,561.6	6,921.8	6,561.6	53.7	38.0	114.50	376.4	1,995.5	4,218.3	4,142.8	55.865		
7,400.0	6,661.6	7,021.8	6,661.6	53.7	38.0	114.50	376.4	1,995.5	4,218.3	4,142.7	55.830		
7,500.0	6,761.6	7,121.8	6,761.6	53.7	38.0	114.50	376.4	1,995.5	4,218.3	4,142.7	55.795		
7,600.0	6,861.6	7,221.8	6,861.6	53.7	38.0	114.50	376.4	1,995.5	4,218.3	4,142.6	55.759		
7,700.0	6,961.6	7,321.8	6,961.6	53.8	38.1	114.50	376.4	1,995.5	4,218.3	4,142.6	55.724		
7,800.0	7,061.6	7,421.8	7,061.6	53.8	38.1	114.50	376.4	1,995.5	4,218.3	4,142.5	55.688		
7,900.0	7,161.6	7,521.8	7,161.6	53.8	38.1	114.50	376.4	1,995.5	4,218.3	4,142.5	55.652		
8,000.0	7,261.6	7,621.8	7,261.6	53.8	38.2	114.50	376.4	1,995.5	4,218.3	4,142.4	55.616		
8,100.0	7,361.6	7,721.8	7,361.6	53.8	38.2	114.50	376.4	1,995.5	4,218.3	4,142.4	55.580		
8,200.0	7,461.6	7,821.8	7,461.6	53.9	38.2	114.50	376.4	1,995.5	4,218.3	4,142.3	55.543		
8,300.0	7,561.6	7,921.8	7,561.6	53.9	38.3	114.50	376.4	1,995.5	4,218.3	4,142.3	55.507		
8,400.0	7,661.6	8,021.8	7,661.6	53.9	38.3	114.50	376.4	1,995.5	4,218.3	4,142.2	55.470		
8,500.0	7,761.6	8,121.8	7,761.6	53.9	38.3	114.50	376.4	1,995.5	4,218.3	4,142.2	55.433		
8,587.4	7,849.0	8,209.2	7,849.0	53.9	38.3	114.50	376.4	1,995.5	4,218.3	4,142.1	55.403		

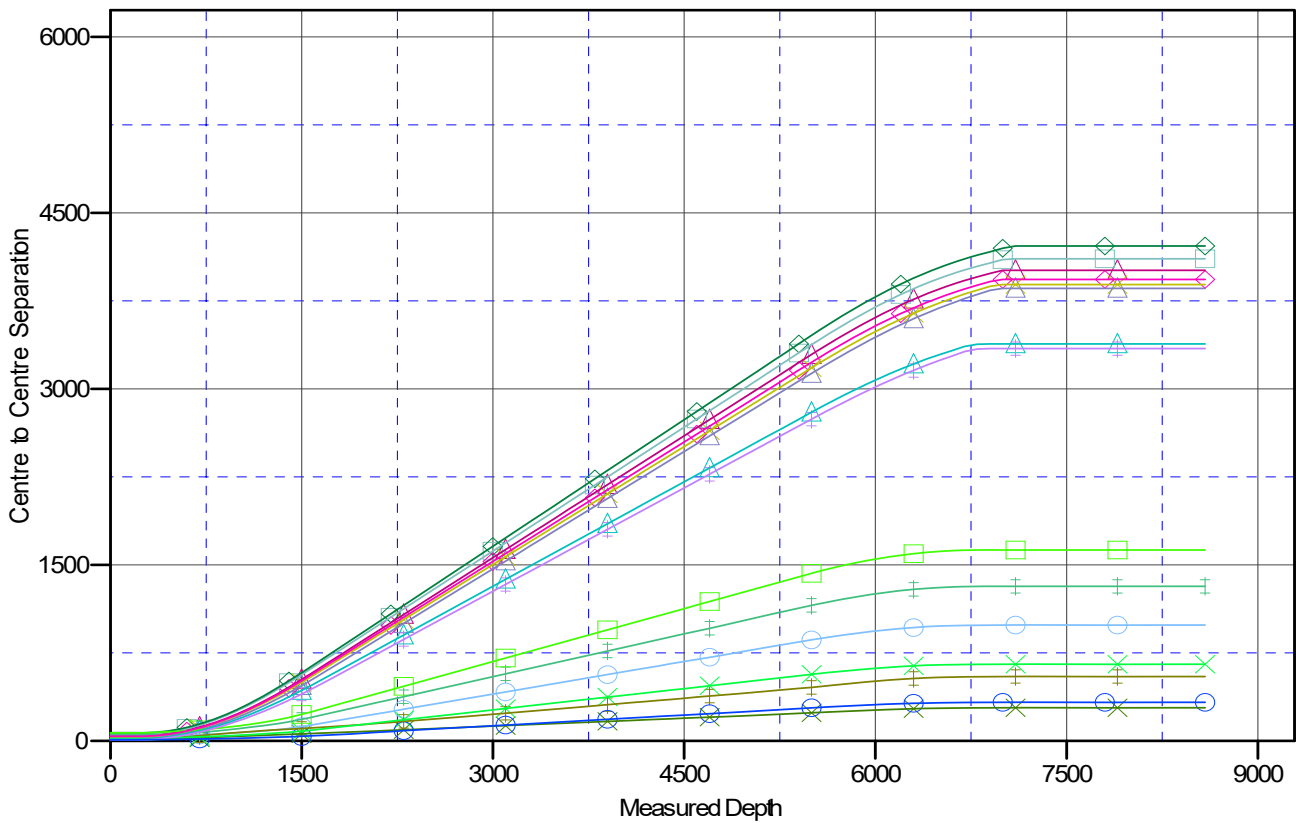
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to RKB=30' @ 7493.0usft (TBD)      Coordinates are relative to: Laramie 29-01 0993-20-13E - Slot B2  
 Offset Depths are relative to Offset Datum      Coordinate System is US State Plane 1983, Colorado Central Zone  
 Central Meridian is -105.500000      Grid Convergence at Surface is: -1.44°

### Ladder Plot



### LEGEND

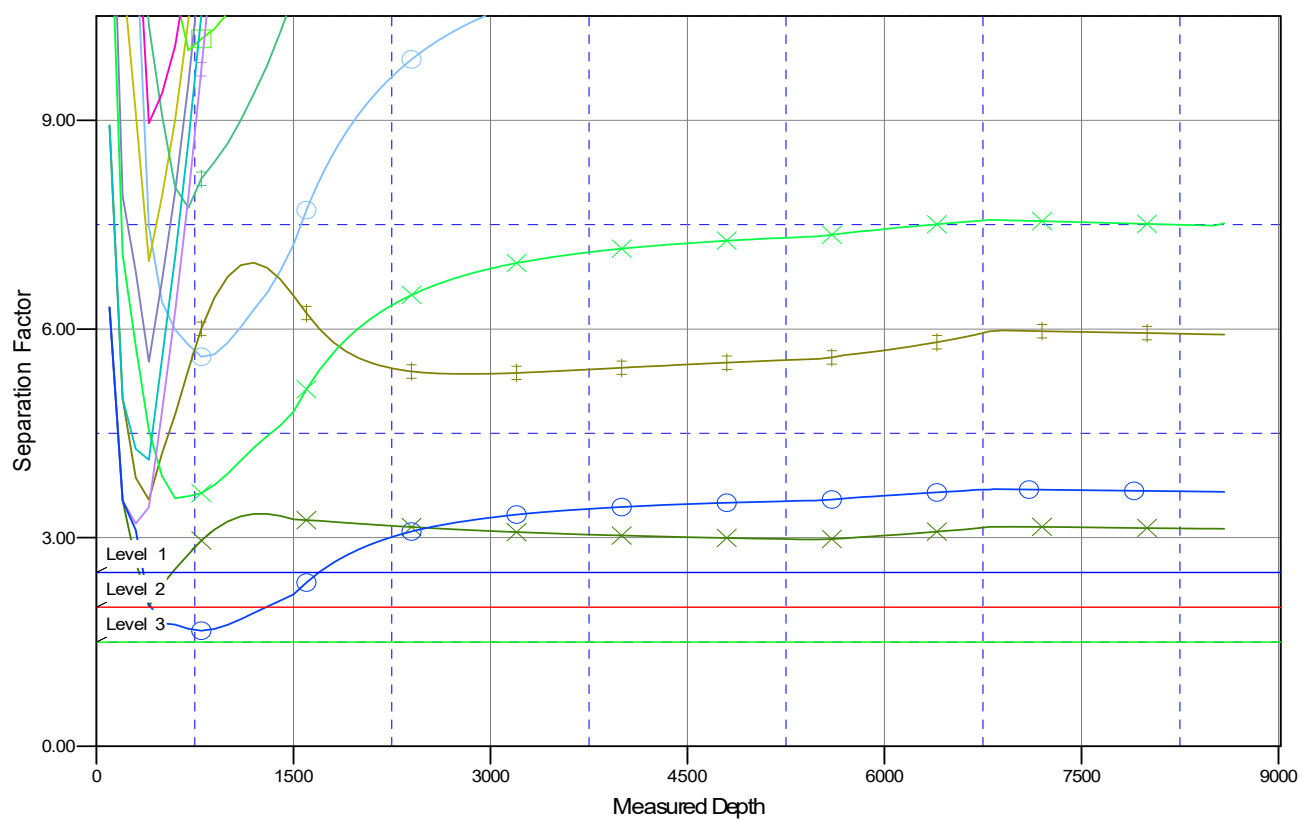
- ✕ Laramie 29-01 0993-20-12E, OH, Design #2 V0
- ◆ Laramie 29-01 Fed 0993-21-18W, OH, Design #2 V0
- ◻ Laramie 29-01 0993-20-18E, OH, Design #2 V0
- ▲ Laramie 29-01 Fed 0993-21-16W, OH, Design #2 V0
- ✕ Laramie 29-01 Fed 0993-21-14W, OH, Design #2 V0
- ▲ Laramie 29-01 Fed 0993-21-12W, OH, Design #2 V0
- ◻ Laramie 29-01 Fed 0993-21-17W, OH, Design #2 V0
- ▲ Laramie 29-01 Fed 0993-21-13W, OH, Design #2 V0
- ✕ Laramie 29-01 Fed 0993-21-11W, OH, Design #2 V0
- Laramie 29-01 0993-20-16E, OH, Design #2 V0
- ✕ Laramie 29-01 0993-20-17E, OH, Design #2 V0
- Laramie 29-01 0993-20-14E, OH, Design #2 V0
- ✕ Laramie 29-01 0993-20-11E, OH, Design #2 V0
- ✕ Laramie 29-01 0993-20-15E, OH, Design #2 V0
- ◆ Laramie 29-01 Fed 0993-21-15W, OH, Design #2 V0



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-13E - Slot B2
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-13E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OH	<b>Database:</b>	KLXDirectional-AD
<b>Reference Design:</b>	Design #2	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to RKB=30' @ 7493.0usft (TBD)      Coordinates are relative to: Laramie 29-01 0993-20-13E - Slot B2  
 Offset Depths are relative to Offset Datum      Coordinate System is US State Plane 1983, Colorado Central Zone  
 Central Meridian is -105.500000      Grid Convergence at Surface is: -1.44°

### Separation Factor Plot



### LEGEND

- ✖ Laramie 29-01 0993-20-12E, OH, Design #2 V0
- ◆ Laramie 29-01 Fed 0993-21-18W, OH, Design #2 V0
- ◻ Laramie 29-01 0993-20-18E, OH, Design #2 V0
- ▲ Laramie 29-01 Fed 0993-21-16W, OH, Design #2 V0
- ✖ Laramie 29-01 Fed 0993-21-14W, OH, Design #2 V0
- ▲ Laramie 29-01 Fed 0993-21-12W, OH, Design #2 V0
- ◻ Laramie 29-01 Fed 0993-21-17W, OH, Design #2 V0
- ▲ Laramie 29-01 Fed 0993-21-13W, OH, Design #2 V0
- ✖ Laramie 29-01 Fed 0993-21-11W, OH, Design #2 V0
- Laramie 29-01 0993-20-16E, OH, Design #2 V0
- ✖ Laramie 29-01 0993-20-17E, OH, Design #2 V0
- Laramie 29-01 0993-20-14E, OH, Design #2 V0
- ✖ Laramie 29-01 0993-20-11E, OH, Design #2 V0
- ✖ Laramie 29-01 0993-20-15E, OH, Design #2 V0
- ✖ Laramie 29-01 Fed 0993-21-15W, OH, Design #2 V0