



# **Laramie Energy, LLC**

**Mesa County, CO**

**Laramie 0993-29-01**

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

**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 0993-20-14E - Slot B3
<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 0993-20-14E	<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>	5/8/2025		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	9,287.1	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	22.4	19.5	7.900	CC, ES
Laramie 29-01 0993-20-11E - OH - Design #2	500.0	496.0	35.2	27.5	4.554	SF
Laramie 29-01 0993-20-12E - OH - Design #2	200.0	200.0	20.0	17.2	7.066	CC, ES
Laramie 29-01 0993-20-12E - OH - Design #2	500.0	496.7	29.2	20.5	3.374	SF
Laramie 29-01 0993-20-13E - OH - Design #2	200.0	200.0	10.0	7.2	3.532	CC
Laramie 29-01 0993-20-13E - OH - Design #2	500.0	498.7	13.4	5.8	1.770	Level 2, ES
Laramie 29-01 0993-20-13E - OH - Design #2	800.0	796.6	18.4	7.4	1.665	Level 2, SF
Laramie 29-01 0993-20-15E - OH - Design #2	200.0	200.0	10.0	7.2	3.542	CC
Laramie 29-01 0993-20-15E - OH - Design #2	500.0	501.0	14.4	6.7	1.875	Level 2, ES
Laramie 29-01 0993-20-15E - OH - Design #2	600.0	601.6	16.0	7.5	1.873	Level 2, SF
Laramie 29-01 0993-20-16E - OH - Design #2	300.0	300.4	30.0	26.7	9.024	CC
Laramie 29-01 0993-20-16E - OH - Design #2	500.0	502.4	31.3	23.9	4.251	ES
Laramie 29-01 0993-20-16E - OH - Design #2	800.0	806.2	38.9	29.3	4.066	SF
Laramie 29-01 0993-20-17E - OH - Design #2	200.0	200.0	40.0	37.2	14.141	CC
Laramie 29-01 0993-20-17E - OH - Design #2	300.0	300.0	40.3	36.7	11.391	ES
Laramie 29-01 0993-20-17E - OH - Design #2	700.0	705.0	56.2	47.1	6.195	SF
Laramie 29-01 0993-20-18E - OH - Design #2	200.0	200.0	60.0	57.2	21.209	CC
Laramie 29-01 0993-20-18E - OH - Design #2	300.0	300.0	60.3	56.7	17.050	ES
Laramie 29-01 0993-20-18E - OH - Design #2	700.0	707.3	78.6	69.4	8.510	SF
Laramie 29-01 Fed 0993-21-11W - OH - Design #2	200.0	200.0	14.1	11.3	4.998	CC, ES
Laramie 29-01 Fed 0993-21-11W - OH - Design #2	400.0	398.5	20.4	14.9	3.676	SF
Laramie 29-01 Fed 0993-21-12W - OH - Design #2	200.0	200.0	10.0	7.2	3.537	CC, ES
Laramie 29-01 Fed 0993-21-12W - OH - Design #2	300.0	299.5	12.3	8.2	2.994	SF
Laramie 29-01 Fed 0993-21-13W - OH - Design #2	200.0	200.0	14.2	11.3	5.009	CC
Laramie 29-01 Fed 0993-21-13W - OH - Design #2	204.4	204.4	14.2	11.3	4.980	ES
Laramie 29-01 Fed 0993-21-13W - OH - Design #2	400.0	398.7	22.9	17.3	4.087	SF
Laramie 29-01 Fed 0993-21-14W - OH - Design #2	200.0	200.0	22.4	19.6	7.911	CC
Laramie 29-01 Fed 0993-21-14W - OH - Design #2	204.4	204.4	22.4	19.5	7.869	ES
Laramie 29-01 Fed 0993-21-14W - OH - Design #2	400.0	398.4	31.0	25.3	5.435	SF
Laramie 29-01 Fed 0993-21-15W - OH - Design #2	200.0	200.0	31.6	28.8	11.182	CC
Laramie 29-01 Fed 0993-21-15W - OH - Design #2	204.4	204.4	31.6	28.8	11.099	ES
Laramie 29-01 Fed 0993-21-15W - OH - Design #2	500.0	496.1	52.1	44.5	6.835	SF
Laramie 29-01 Fed 0993-21-16W - OH - Design #2	200.0	200.0	41.2	38.4	14.578	CC
Laramie 29-01 Fed 0993-21-16W - OH - Design #2	300.0	300.0	41.5	38.0	11.744	ES
Laramie 29-01 Fed 0993-21-16W - OH - Design #2	500.0	496.4	58.6	51.1	7.821	SF
Laramie 29-01 Fed 0993-21-17W - OH - Design #2	200.0	200.0	51.0	48.2	18.026	CC
Laramie 29-01 Fed 0993-21-17W - OH - Design #2	204.4	204.4	51.0	48.2	17.892	ES

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
<b>Offset Well - Wellbore - Design</b>						
Laramie 0993-29-01						
Laramie 29-01 Fed 0993-21-17W - OH - Design #2	500.0	494.3	72.2	64.5	9.318	SF
Laramie 29-01 Fed 0993-21-18W - OH - Design #2	200.0	200.0	60.8	58.0	21.500	CC
Laramie 29-01 Fed 0993-21-18W - OH - Design #2	300.0	299.5	61.2	57.8	18.191	ES
Laramie 29-01 Fed 0993-21-18W - OH - Design #2	500.0	493.9	80.7	73.0	10.454	SF

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)	Distance Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-20.15	21.0	-7.7	22.4				
100.0	100.0	100.0	100.0	0.8	0.8	-20.15	21.0	-7.7	22.4	20.8	14.109		
200.0	200.0	200.0	200.0	1.4	1.4	-20.15	21.0	-7.7	22.4	19.5	7.900	CC, ES	
300.0	300.0	299.0	298.9	1.7	2.5	50.32	23.0	-8.4	24.3	20.2	5.881		
400.0	399.9	397.7	397.5	2.8	4.0	55.83	29.0	-10.6	28.6	22.3	4.576		
500.0	499.6	496.0	495.2	4.2	5.1	64.66	38.9	-14.2	35.2	27.5	4.554	SF	
600.0	598.8	593.8	591.8	4.5	6.0	68.52	52.7	-19.2	44.7	36.4	5.372		
700.0	697.5	691.6	687.8	5.2	6.8	68.83	70.0	-26.2	55.5	46.4	6.072		
800.0	795.4	789.3	782.9	6.1	7.5	69.14	90.4	-35.9	66.6	56.7	6.706		
900.0	892.4	887.0	876.9	6.9	8.2	69.38	113.8	-48.1	77.8	67.1	7.294		
1,000.0	988.3	984.5	969.6	7.6	8.8	69.57	140.2	-63.0	88.8	77.4	7.769		
1,100.0	1,082.8	1,082.0	1,060.9	8.3	9.5	69.70	169.6	-80.5	99.6	87.4	8.123		
1,200.0	1,175.9	1,179.4	1,150.7	9.0	10.1	69.79	201.8	-100.5	110.3	97.1	8.355		
1,300.0	1,267.4	1,276.8	1,238.7	9.7	10.6	69.85	236.8	-123.0	120.6	106.4	8.468		
1,400.0	1,357.0	1,374.1	1,324.8	10.3	11.2	69.89	274.6	-147.9	130.7	115.3	8.473		
1,500.0	1,444.6	1,471.3	1,408.9	10.8	11.8	70.03	315.0	-175.3	140.5	123.8	8.414		
1,600.0	1,531.6	1,568.4	1,490.7	11.1	12.3	69.75	357.9	-205.0	151.3	133.1	8.321		
1,700.0	1,618.6	1,664.8	1,569.7	11.5	12.8	68.19	403.1	-236.8	163.7	143.9	8.268		
1,800.0	1,705.5	1,763.0	1,648.5	11.8	13.1	65.98	450.9	-270.7	177.6	156.1	8.253		
1,900.0	1,792.5	1,861.8	1,727.8	12.2	13.5	64.05	499.0	-304.9	191.7	168.5	8.256		
2,000.0	1,879.5	1,960.6	1,807.0	12.6	13.9	62.39	547.1	-339.1	206.0	181.1	8.274		
2,100.0	1,966.4	2,059.4	1,886.3	13.1	14.4	60.94	595.2	-373.3	220.5	193.9	8.298		
2,200.0	2,053.4	2,158.2	1,965.5	13.7	15.0	59.67	643.3	-407.5	235.1	206.9	8.345		
2,300.0	2,140.4	2,257.0	2,044.8	14.5	15.9	58.55	691.4	-441.7	249.8	219.9	8.379		
2,400.0	2,227.3	2,355.8	2,124.0	15.3	16.9	57.56	739.5	-475.9	264.5	233.1	8.417		
2,500.0	2,314.3	2,454.6	2,203.3	16.2	18.0	56.67	787.5	-510.1	279.4	246.3	8.456		
2,600.0	2,401.3	2,553.5	2,282.5	17.1	19.1	55.87	835.6	-544.3	294.2	259.6	8.494		
2,700.0	2,488.2	2,652.3	2,361.8	18.0	20.2	55.14	883.7	-578.5	309.2	272.9	8.531		
2,800.0	2,575.2	2,751.1	2,441.0	18.9	21.3	54.49	931.8	-612.7	324.2	286.3	8.568		
2,900.0	2,662.2	2,849.9	2,520.2	19.8	22.4	53.89	979.9	-646.9	339.2	299.8	8.603		
3,000.0	2,749.1	2,948.7	2,599.5	20.8	23.5	53.34	1,028.0	-681.1	354.3	313.2	8.636		
3,100.0	2,836.1	3,047.5	2,678.7	21.7	24.6	52.84	1,076.1	-715.3	369.4	326.7	8.668		
3,200.0	2,923.1	3,146.3	2,758.0	22.6	25.7	52.38	1,124.2	-749.5	384.5	340.3	8.699		
3,300.0	3,010.0	3,245.1	2,837.2	23.5	26.8	51.95	1,172.3	-783.7	399.6	353.8	8.728		
3,400.0	3,097.0	3,343.9	2,916.5	24.5	27.9	51.55	1,220.4	-817.9	414.8	367.4	8.756		
3,500.0	3,184.0	3,442.7	2,995.7	25.4	29.1	51.18	1,268.5	-852.1	429.9	381.0	8.783		
3,600.0	3,270.9	3,541.5	3,075.0	26.3	30.2	50.84	1,316.6	-886.3	445.1	394.6	8.808		
3,700.0	3,357.9	3,640.3	3,154.2	27.2	31.3	50.52	1,364.7	-920.5	460.3	408.2	8.832		
3,800.0	3,444.9	3,739.1	3,233.4	28.2	32.4	50.21	1,412.8	-954.7	475.5	421.8	8.855		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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
3,900.0	3,531.8	3,837.9	3,312.7	29.1	33.5	49.93	1,460.9	-988.9	490.8	435.5	8.876	
4,000.0	3,618.8	3,936.7	3,391.9	30.0	34.7	49.67	1,509.0	-1,023.1	506.0	449.1	8.897	
4,100.0	3,705.8	4,035.5	3,471.2	31.0	35.8	49.42	1,557.1	-1,057.3	521.3	462.8	8.917	
4,200.0	3,792.7	4,134.3	3,550.4	31.9	36.9	49.18	1,605.2	-1,091.5	536.5	476.5	8.936	
4,300.0	3,879.7	4,233.1	3,629.7	32.8	38.0	48.96	1,653.3	-1,125.7	551.8	490.2	8.954	
4,400.0	3,966.7	4,331.9	3,708.9	33.8	39.2	48.75	1,701.4	-1,159.9	567.1	503.9	8.971	
4,500.0	4,053.6	4,430.8	3,788.2	34.7	40.3	48.55	1,749.5	-1,194.0	582.4	517.6	8.987	
4,600.0	4,140.6	4,529.6	3,867.4	35.6	41.4	48.36	1,797.6	-1,228.2	597.7	531.3	9.003	
4,700.0	4,227.6	4,628.4	3,946.6	36.6	42.5	48.18	1,845.7	-1,262.4	613.0	545.0	9.018	
4,800.0	4,314.5	4,727.2	4,025.9	37.5	43.7	48.01	1,893.8	-1,296.6	628.3	558.7	9.032	
4,900.0	4,401.5	4,826.0	4,105.1	38.4	44.8	47.85	1,941.8	-1,330.8	643.6	572.4	9.046	
5,000.0	4,488.5	4,924.8	4,184.4	39.4	45.9	47.69	1,989.9	-1,365.0	658.9	586.1	9.059	
5,100.0	4,575.4	5,023.6	4,263.6	40.3	47.1	47.54	2,038.0	-1,399.2	674.2	599.9	9.072	
5,200.0	4,662.4	5,122.4	4,342.9	41.2	48.2	47.40	2,086.1	-1,433.4	689.5	613.6	9.084	
5,300.0	4,749.4	5,221.2	4,422.1	42.2	49.3	47.27	2,134.2	-1,467.6	704.8	627.3	9.095	
5,400.0	4,836.3	5,320.0	4,501.4	43.1	50.4	47.14	2,182.3	-1,501.8	720.2	641.1	9.107	
5,500.0	4,923.3	5,418.8	4,580.6	44.1	51.6	47.01	2,230.4	-1,536.0	735.5	654.8	9.117	
5,600.0	5,011.1	5,517.4	4,659.7	45.0	52.7	47.07	2,278.4	-1,570.2	752.0	669.8	9.149	
5,700.0	5,100.9	5,625.7	4,746.7	45.8	53.9	46.94	2,330.9	-1,607.5	771.2	687.4	9.208	
5,800.0	5,192.5	5,759.8	4,857.8	46.5	55.3	46.68	2,392.0	-1,651.0	790.0	704.3	9.223	
5,900.0	5,285.8	5,895.8	4,974.8	47.2	56.6	46.45	2,448.5	-1,691.1	807.2	719.8	9.239	
6,000.0	5,380.5	6,033.5	5,097.3	47.7	57.8	46.24	2,499.9	-1,727.6	822.7	733.9	9.261	
6,100.0	5,476.6	6,172.9	5,224.8	48.2	58.8	46.06	2,545.6	-1,760.2	836.5	746.5	9.289	
6,200.0	5,573.7	6,313.7	5,357.0	48.6	59.6	45.91	2,585.4	-1,788.4	848.4	757.4	9.322	
6,300.0	5,671.9	6,455.9	5,493.1	49.0	60.3	45.77	2,618.7	-1,812.1	858.5	766.8	9.363	
6,400.0	5,770.7	6,599.1	5,632.5	49.2	60.9	45.66	2,645.2	-1,831.0	866.5	774.4	9.410	
6,500.0	5,870.1	6,743.2	5,774.6	49.4	61.3	45.56	2,664.7	-1,844.9	872.5	780.4	9.466	
6,600.0	5,969.9	6,888.0	5,918.5	49.5	61.5	45.49	2,677.0	-1,853.6	876.5	784.6	9.531	
6,700.0	6,069.9	7,033.1	6,063.5	49.6	61.7	0.23	2,681.8	-1,857.0	878.4	787.1	9.614	
6,800.0	6,169.9	7,139.5	6,169.9	49.6	61.7	0.23	2,681.8	-1,857.0	878.5	787.2	9.621	
6,900.0	6,269.9	7,239.5	6,269.9	49.6	61.7	0.23	2,681.8	-1,857.0	878.5	787.1	9.616	
7,000.0	6,369.9	7,339.5	6,369.9	49.7	61.7	0.23	2,681.8	-1,857.0	878.5	787.1	9.611	
7,100.0	6,469.9	7,439.5	6,469.9	49.7	61.7	0.23	2,681.8	-1,857.0	878.5	787.0	9.605	
7,200.0	6,569.9	7,539.5	6,569.9	49.7	61.7	0.23	2,681.8	-1,857.0	878.5	787.0	9.600	
7,300.0	6,669.9	7,639.5	6,669.9	49.7	61.7	0.23	2,681.8	-1,857.0	878.5	786.9	9.594	
7,400.0	6,769.9	7,739.5	6,769.9	49.7	61.8	0.23	2,681.8	-1,857.0	878.5	786.9	9.588	
7,500.0	6,869.9	7,839.5	6,869.9	49.8	61.8	0.23	2,681.8	-1,857.0	878.5	786.8	9.583	
7,600.0	6,969.9	7,939.5	6,969.9	49.8	61.8	0.23	2,681.8	-1,857.0	878.5	786.8	9.577	
7,700.0	7,069.9	8,039.5	7,069.9	49.8	61.8	0.23	2,681.8	-1,857.0	878.5	786.7	9.572	
7,800.0	7,169.9	8,139.5	7,169.9	49.8	61.8	0.23	2,681.8	-1,857.0	878.5	786.7	9.566	
7,900.0	7,269.9	8,239.5	7,269.9	49.9	61.8	0.23	2,681.8	-1,857.0	878.5	786.6	9.560	
8,000.0	7,369.9	8,339.5	7,369.9	49.9	61.9	0.23	2,681.8	-1,857.0	878.5	786.6	9.555	
8,100.0	7,469.9	8,439.5	7,469.9	49.9	61.9	0.23	2,681.8	-1,857.0	878.5	786.5	9.549	
8,200.0	7,569.9	8,539.5	7,569.9	49.9	61.9	0.23	2,681.8	-1,857.0	878.5	786.4	9.543	
8,300.0	7,669.9	8,639.5	7,669.9	49.9	61.9	0.23	2,681.8	-1,857.0	878.5	786.4	9.537	
8,400.0	7,769.9	8,739.5	7,769.9	50.0	61.9	0.23	2,681.8	-1,857.0	878.5	786.3	9.532	
8,412.6	7,782.5	8,752.0	7,782.5	50.0	61.9	0.23	2,681.8	-1,857.0	878.5	786.3	9.531	
8,500.0	7,869.9	8,828.6	7,859.0	50.0	61.9	0.23	2,681.8	-1,857.0	878.6	786.1	9.501	
8,600.0	7,969.9	8,928.6	7,859.0	50.0	61.9	0.23	2,681.8	-1,857.0	885.5	791.2	9.388	
8,700.0	8,069.9	9,028.6	7,859.0	50.0	61.9	0.23	2,681.8	-1,857.0	903.5	808.3	9.494	
8,800.0	8,169.9	9,128.6	7,859.0	50.1	61.9	0.23	2,681.8	-1,857.0	931.9	836.8	9.799	
8,900.0	8,269.9	9,228.6	7,859.0	50.1	61.9	0.23	2,681.8	-1,857.0	969.8	875.6	10.286	

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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>Offset Design</b> Laramie 0993-29-01 - Laramie 29-01 0993-20-11E - OH - Design #2												<b>Offset Site Error:</b>	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												<b>Offset Well Error:</b>	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore +N/-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
9,000.0	8,369.9	8,828.6	7,859.0	50.1	61.9	0.23	2,681.8	-1,857.0	1,016.3	923.3	10.937		
9,100.0	8,469.9	8,828.6	7,859.0	50.1	61.9	0.23	2,681.8	-1,857.0	1,070.0	978.8	11.735		
9,200.0	8,569.9	8,828.6	7,859.0	50.2	61.9	0.23	2,681.8	-1,857.0	1,130.1	1,040.9	12.664		
9,287.1	8,657.0	8,828.6	7,859.0	50.2	61.9	0.23	2,681.8	-1,857.0	1,186.8	1,099.4	13.567		



Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-14E - Slot B3
<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 0993-20-14E	<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	-46.70	13.7	-14.5	20.0					
100.0	100.0	100.0	100.0	0.8	0.8	-46.70	13.7	-14.5	20.0	18.4	12.619			
200.0	200.0	200.0	200.0	1.4	1.4	-46.70	13.7	-14.5	20.0	17.2	7.066	CC, ES		
300.0	300.0	299.1	299.1	1.7	2.5	24.45	15.4	-15.9	21.9	17.8	5.344			
400.0	399.9	398.0	397.8	2.8	4.0	29.94	20.5	-19.8	25.0	18.5	3.806			
500.0	499.6	496.7	495.8	4.2	5.1	38.62	28.9	-26.2	29.2	20.5	3.374	SF		
600.0	598.8	595.0	593.1	4.5	6.0	42.99	40.6	-35.2	34.8	25.4	3.712			
700.0	697.5	693.2	689.4	5.2	6.8	43.92	55.6	-46.8	41.2	30.9	4.001			
800.0	795.4	791.2	784.6	6.1	7.6	45.18	73.8	-60.8	48.0	36.7	4.248			
900.0	892.4	888.9	878.6	6.9	8.3	46.40	95.2	-77.2	55.1	42.9	4.508			
1,000.0	988.3	986.6	971.2	7.6	8.9	47.49	119.7	-96.0	62.3	49.2	4.749			
1,100.0	1,082.8	1,084.0	1,062.3	8.3	9.6	48.46	147.2	-117.2	69.5	55.5	4.959			
1,200.0	1,175.9	1,181.3	1,151.6	9.0	10.2	49.32	177.7	-140.7	76.7	61.8	5.130			
1,300.0	1,267.4	1,278.5	1,239.1	9.7	10.8	50.07	211.2	-166.4	84.0	68.0	5.260			
1,400.0	1,357.0	1,375.5	1,324.6	10.3	11.3	50.75	247.5	-194.3	91.1	74.1	5.345			
1,500.0	1,444.6	1,472.3	1,408.0	10.8	11.9	51.47	286.6	-224.3	98.3	80.2	5.423			
1,600.0	1,531.6	1,569.0	1,489.0	11.1	12.3	51.55	328.3	-256.4	107.4	88.2	5.574			
1,700.0	1,618.6	1,668.4	1,571.3	11.5	12.6	50.96	372.5	-290.4	117.9	97.3	5.717			
1,800.0	1,705.5	1,767.9	1,653.7	11.8	13.0	50.47	416.7	-324.4	128.4	106.4	5.833			
1,900.0	1,792.5	1,867.3	1,736.0	12.2	13.3	50.05	461.0	-358.4	139.0	115.5	5.929			
2,000.0	1,879.5	1,966.7	1,818.3	12.6	13.6	49.69	505.2	-392.4	149.5	124.6	6.009			
2,100.0	1,966.4	2,066.2	1,900.7	13.1	14.0	49.38	549.4	-426.4	160.0	133.7	6.076			
2,200.0	2,053.4	2,165.6	1,983.0	13.7	14.5	49.10	593.6	-460.4	170.5	142.7	6.136			
2,300.0	2,140.4	2,265.1	2,065.3	14.5	15.5	48.86	637.8	-494.4	181.1	151.8	6.183			
2,400.0	2,227.3	2,364.5	2,147.6	15.3	16.5	48.65	682.0	-528.4	191.6	160.8	6.223			
2,500.0	2,314.3	2,463.9	2,230.0	16.2	17.6	48.45	726.2	-562.4	202.1	169.8	6.258			
2,600.0	2,401.3	2,563.4	2,312.3	17.1	18.6	48.28	770.4	-596.4	212.7	178.8	6.288			
2,700.0	2,488.2	2,662.8	2,394.6	18.0	19.7	48.12	814.6	-630.4	223.2	187.9	6.314			
2,800.0	2,575.2	2,762.3	2,477.0	18.9	20.7	47.98	858.9	-664.4	233.7	196.9	6.336			
2,900.0	2,662.2	2,861.7	2,559.3	19.8	21.8	47.85	903.1	-698.4	244.3	205.9	6.356			
3,000.0	2,749.1	2,961.2	2,641.6	20.8	22.8	47.73	947.3	-732.3	254.8	214.8	6.373			
3,100.0	2,836.1	3,060.6	2,724.0	21.7	23.9	47.62	991.5	-766.3	265.4	223.8	6.388			
3,200.0	2,923.1	3,160.0	2,806.3	22.6	24.9	47.52	1,035.7	-800.3	275.9	232.8	6.401			
3,300.0	3,010.0	3,259.5	2,888.6	23.5	26.0	47.42	1,079.9	-834.3	286.5	241.8	6.413			
3,400.0	3,097.0	3,358.9	2,971.0	24.5	27.0	47.34	1,124.1	-868.3	297.0	250.8	6.423			
3,500.0	3,184.0	3,458.4	3,053.3	25.4	28.1	47.25	1,168.3	-902.3	307.6	259.8	6.432			
3,600.0	3,270.9	3,557.8	3,135.6	26.3	29.1	47.18	1,212.6	-936.3	318.1	268.7	6.440			
3,700.0	3,357.9	3,657.2	3,217.9	27.2	30.2	47.11	1,256.8	-970.3	328.7	277.7	6.447			
3,800.0	3,444.9	3,756.7	3,300.3	28.2	31.3	47.04	1,301.0	-1,004.3	339.2	286.7	6.453			
3,900.0	3,531.8	3,856.1	3,382.6	29.1	32.3	46.98	1,345.2	-1,038.3	349.8	295.6	6.459			
4,000.0	3,618.8	3,955.6	3,464.9	30.0	33.4	46.92	1,389.4	-1,072.3	360.3	304.6	6.464			
4,100.0	3,705.8	4,055.0	3,547.3	31.0	34.4	46.86	1,433.6	-1,106.3	370.9	313.5	6.468			
4,200.0	3,792.7	4,154.4	3,629.6	31.9	35.5	46.81	1,477.8	-1,140.3	381.4	322.5	6.473			
4,300.0	3,879.7	4,253.9	3,711.9	32.8	36.6	46.76	1,522.0	-1,174.3	392.0	331.5	6.476			
4,400.0	3,966.7	4,353.3	3,794.3	33.8	37.6	46.71	1,566.3	-1,208.3	402.5	340.4	6.479			
4,500.0	4,053.6	4,452.8	3,876.6	34.7	38.7	46.67	1,610.5	-1,242.3	413.1	349.4	6.482			
4,600.0	4,140.6	4,552.2	3,958.9	35.6	39.7	46.62	1,654.7	-1,276.2	423.6	358.3	6.485			
4,700.0	4,227.6	4,651.7	4,041.2	36.6	40.8	46.58	1,698.9	-1,310.2	434.2	367.3	6.487			
4,800.0	4,314.5	4,751.1	4,123.6	37.5	41.9	46.54	1,743.1	-1,344.2	444.7	376.2	6.490			
4,900.0	4,401.5	4,850.5	4,205.9	38.4	42.9	46.51	1,787.3	-1,378.2	455.3	385.2	6.492			
5,000.0	4,488.5	4,950.0	4,288.2	39.4	44.0	46.47	1,831.5	-1,412.2	465.9	394.1	6.493			
5,100.0	4,575.4	5,049.4	4,370.6	40.3	45.0	46.44	1,875.7	-1,446.2	476.4	403.1	6.495			

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	4,662.4	5,148.9	4,452.9	41.2	46.1	46.41	1,920.0	-1,480.2	487.0	412.0	6.496	
5,300.0	4,749.4	5,248.3	4,535.2	42.2	47.2	46.37	1,964.2	-1,514.2	497.5	420.9	6.498	
5,400.0	4,836.3	5,347.7	4,617.6	43.1	48.2	46.35	2,008.4	-1,548.2	508.1	429.9	6.499	
5,500.0	4,923.3	5,447.2	4,699.9	44.1	49.3	46.32	2,052.6	-1,582.2	518.6	438.8	6.500	
5,600.0	5,011.1	5,546.5	4,782.1	45.0	50.4	46.35	2,096.7	-1,616.1	530.3	449.0	6.522	
5,700.0	5,100.9	5,664.4	4,881.0	45.8	51.6	46.17	2,147.6	-1,655.2	543.5	460.5	6.543	
5,800.0	5,192.5	5,786.3	4,986.5	46.5	52.7	45.99	2,195.9	-1,692.4	555.8	471.0	6.558	
5,900.0	5,285.8	5,909.0	5,096.0	47.2	53.7	45.84	2,240.0	-1,726.3	566.9	480.6	6.574	
6,000.0	5,380.5	6,032.6	5,209.0	47.7	54.6	45.70	2,279.6	-1,756.7	576.8	489.4	6.593	
6,100.0	5,476.6	6,156.9	5,325.2	48.2	55.4	45.58	2,314.5	-1,783.6	585.6	497.1	6.615	
6,200.0	5,573.7	6,281.9	5,444.3	48.6	56.1	45.48	2,344.5	-1,806.7	593.2	503.9	6.639	
6,300.0	5,671.9	6,407.5	5,565.9	49.0	56.6	45.39	2,369.5	-1,825.8	599.6	509.7	6.666	
6,400.0	5,770.7	6,533.5	5,689.4	49.2	57.0	45.30	2,389.1	-1,841.0	604.7	514.4	6.697	
6,500.0	5,870.1	6,659.9	5,814.5	49.4	57.3	45.23	2,403.5	-1,852.0	608.5	518.1	6.730	
6,600.0	5,969.9	6,786.6	5,940.7	49.5	57.5	45.17	2,412.3	-1,858.7	611.0	520.7	6.768	
6,700.0	6,069.9	6,913.4	6,067.5	49.6	57.6	-0.07	2,415.6	-1,861.3	612.2	522.4	6.815	
6,800.0	6,169.9	7,015.9	6,169.9	49.6	57.6	-0.08	2,415.6	-1,861.3	612.3	522.4	6.815	
6,900.0	6,269.9	7,115.9	6,269.9	49.6	57.6	-0.08	2,415.6	-1,861.3	612.3	522.4	6.811	
7,000.0	6,369.9	7,215.9	6,369.9	49.7	57.6	-0.08	2,415.6	-1,861.3	612.3	522.3	6.807	
7,100.0	6,469.9	7,315.9	6,469.9	49.7	57.7	-0.08	2,415.6	-1,861.3	612.3	522.3	6.803	
7,200.0	6,569.9	7,415.9	6,569.9	49.7	57.7	-0.08	2,415.6	-1,861.3	612.3	522.2	6.799	
7,300.0	6,669.9	7,515.9	6,669.9	49.7	57.7	-0.08	2,415.6	-1,861.3	612.3	522.1	6.795	
7,400.0	6,769.9	7,615.9	6,769.9	49.7	57.7	-0.08	2,415.6	-1,861.3	612.3	522.1	6.791	
7,500.0	6,869.9	7,715.9	6,869.9	49.8	57.7	-0.08	2,415.6	-1,861.3	612.3	522.0	6.787	
7,600.0	6,969.9	7,815.9	6,969.9	49.8	57.7	-0.08	2,415.6	-1,861.3	612.3	522.0	6.783	
7,700.0	7,069.9	7,915.9	7,069.9	49.8	57.8	-0.08	2,415.6	-1,861.3	612.3	521.9	6.779	
7,800.0	7,169.9	8,015.9	7,169.9	49.8	57.8	-0.08	2,415.6	-1,861.3	612.3	521.9	6.775	
7,900.0	7,269.9	8,115.9	7,269.9	49.9	57.8	-0.08	2,415.6	-1,861.3	612.3	521.8	6.770	
8,000.0	7,369.9	8,215.9	7,369.9	49.9	57.8	-0.08	2,415.6	-1,861.3	612.3	521.8	6.766	
8,100.0	7,469.9	8,315.9	7,469.9	49.9	57.8	-0.08	2,415.6	-1,861.3	612.3	521.7	6.762	
8,200.0	7,569.9	8,415.9	7,569.9	49.9	57.9	-0.08	2,415.6	-1,861.3	612.3	521.7	6.758	
8,300.0	7,669.9	8,515.9	7,669.9	49.9	57.9	-0.08	2,415.6	-1,861.3	612.3	521.6	6.754	
8,400.0	7,769.9	8,615.9	7,769.9	50.0	57.9	-0.08	2,415.6	-1,861.3	612.3	521.5	6.750	
8,500.0	7,869.9	8,715.9	7,869.9	50.0	57.9	-0.08	2,415.6	-1,861.3	612.3	521.5	6.745	
8,600.0	7,969.9	8,815.9	7,969.9	50.0	57.9	-0.08	2,415.6	-1,861.3	612.3	521.4	6.741	
8,700.0	8,069.9	8,915.9	8,069.9	50.0	57.9	-0.08	2,415.6	-1,861.3	612.3	521.4	6.737	
8,800.0	8,169.9	9,015.9	8,169.9	50.1	58.0	-0.08	2,415.6	-1,861.3	612.3	521.3	6.732	
8,900.0	8,269.9	9,115.9	8,269.9	50.1	58.0	-0.08	2,415.6	-1,861.3	612.3	521.3	6.728	
9,000.0	8,369.9	9,215.9	8,369.9	50.1	58.0	-0.08	2,415.6	-1,861.3	612.3	521.2	6.724	
9,100.0	8,469.9	9,315.9	8,469.9	50.1	58.0	-0.08	2,415.6	-1,861.3	612.3	521.1	6.720	
9,200.0	8,569.9	9,415.9	8,569.9	50.2	58.0	-0.08	2,415.6	-1,861.3	612.3	521.1	6.715	
9,287.1	8,657.0	9,503.0	8,657.0	50.2	58.1	-0.08	2,415.6	-1,861.3	612.3	521.0	6.712	

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	-46.72	6.8	-7.3	10.0				
100.0	100.0	100.0	100.0	0.8	0.8	-46.72	6.8	-7.3	10.0	8.4	6.307		
200.0	200.0	200.0	200.0	1.4	1.4	-46.72	6.8	-7.3	10.0	7.2	3.532 CC		
300.0	300.0	299.7	299.7	1.7	1.8	21.41	7.2	-8.3	10.7	7.3	3.111		
400.0	399.9	399.2	399.1	2.8	3.3	18.01	8.8	-13.2	12.1	6.2	2.054 Level 1		
500.0	499.6	498.7	498.1	4.2	3.6	17.47	12.2	-21.9	13.4	5.8	1.770 Level 2, ES		
600.0	598.8	598.1	596.6	4.5	4.4	20.14	19.1	-33.0	14.8	6.4	1.753 Level 2		
700.0	697.5	697.4	694.4	5.2	5.4	21.93	29.4	-46.7	16.5	6.8	1.694 Level 2		
800.0	795.4	796.6	791.3	6.1	6.2	25.10	43.2	-62.7	18.4	7.4	1.665 Level 2, SF		
900.0	892.4	895.7	887.2	6.9	7.0	28.70	60.4	-81.1	20.6	8.4	1.691 Level 2		
1,000.0	988.3	994.7	981.8	7.6	7.8	32.35	80.9	-101.8	23.0	9.9	1.750 Level 2		
1,100.0	1,082.8	1,093.7	1,075.0	8.3	8.5	35.84	104.8	-124.9	25.6	11.6	1.830 Level 2		
1,200.0	1,175.9	1,192.6	1,166.7	9.0	9.2	39.12	132.0	-150.1	28.4	13.6	1.921 Level 2		
1,300.0	1,267.4	1,291.4	1,256.6	9.7	9.8	42.17	162.4	-177.6	31.5	15.8	2.014 Level 1		
1,400.0	1,357.0	1,390.1	1,344.6	10.3	10.4	44.97	196.0	-207.1	34.7	18.2	2.101 Level 1		
1,500.0	1,444.6	1,488.8	1,430.5	10.8	11.0	47.59	232.6	-238.8	38.2	20.8	2.195 Level 1		
1,600.0	1,531.6	1,587.8	1,514.9	11.1	11.4	48.19	272.2	-272.4	43.8	25.3	2.368 Level 1		
1,700.0	1,618.6	1,687.7	1,599.5	11.5	11.7	48.16	312.5	-306.7	49.9	30.1	2.522		
1,800.0	1,705.5	1,787.5	1,684.2	11.8	12.1	48.14	352.9	-340.9	56.0	34.8	2.651		
1,900.0	1,792.5	1,887.3	1,768.8	12.2	12.5	48.12	393.2	-375.1	62.0	39.6	2.759		
2,000.0	1,879.5	1,987.1	1,853.4	12.6	12.9	48.11	433.6	-409.3	68.1	44.2	2.850		
2,100.0	1,966.4	2,086.9	1,938.1	13.1	13.4	48.10	473.9	-443.6	74.2	48.9	2.928		
2,200.0	2,053.4	2,186.7	2,022.7	13.7	14.1	48.09	514.3	-477.8	80.3	53.5	2.996		
2,300.0	2,140.4	2,286.5	2,107.3	14.5	15.0	48.08	554.7	-512.0	86.4	58.1	3.053		
2,400.0	2,227.3	2,386.4	2,192.0	15.3	15.9	48.07	595.0	-546.3	92.5	62.7	3.103		
2,500.0	2,314.3	2,486.2	2,276.6	16.2	16.9	48.06	635.4	-580.5	98.6	67.3	3.147		
2,600.0	2,401.3	2,586.0	2,361.2	17.1	17.9	48.06	675.7	-614.7	104.7	71.8	3.186		
2,700.0	2,488.2	2,685.8	2,445.9	18.0	18.9	48.05	716.1	-648.9	110.8	76.4	3.220		
2,800.0	2,575.2	2,785.6	2,530.5	18.9	19.8	48.05	756.4	-683.2	116.9	80.9	3.250		
2,900.0	2,662.2	2,885.4	2,615.1	19.8	20.8	48.04	796.8	-717.4	123.0	85.5	3.277		
3,000.0	2,749.1	2,985.2	2,699.8	20.8	21.8	48.04	837.2	-751.6	129.1	90.0	3.301		
3,100.0	2,836.1	3,085.1	2,784.4	21.7	22.8	48.04	877.5	-785.8	135.2	94.5	3.323		
3,200.0	2,923.1	3,184.9	2,869.0	22.6	23.8	48.03	917.9	-820.1	141.3	99.0	3.343		
3,300.0	3,010.0	3,284.7	2,953.7	23.5	24.8	48.03	958.2	-854.3	147.4	103.5	3.360		
3,400.0	3,097.0	3,384.5	3,038.3	24.5	25.8	48.03	998.6	-888.5	153.5	108.0	3.377		
3,500.0	3,184.0	3,484.3	3,122.9	25.4	26.8	48.02	1,038.9	-922.7	159.5	112.5	3.392		
3,600.0	3,270.9	3,584.1	3,207.6	26.3	27.8	48.02	1,079.3	-957.0	165.6	117.0	3.405		
3,700.0	3,357.9	3,683.9	3,292.2	27.2	28.8	48.02	1,119.6	-991.2	171.7	121.5	3.418		
3,800.0	3,444.9	3,783.8	3,376.8	28.2	29.8	48.02	1,160.0	-1,025.4	177.8	126.0	3.429		
3,900.0	3,531.8	3,883.6	3,461.5	29.1	30.8	48.02	1,200.4	-1,059.6	183.9	130.5	3.440		
4,000.0	3,618.8	3,983.4	3,546.1	30.0	31.8	48.01	1,240.7	-1,093.9	190.0	134.9	3.450		
4,100.0	3,705.8	4,083.2	3,630.7	31.0	32.8	48.01	1,281.1	-1,128.1	196.1	139.4	3.459		
4,200.0	3,792.7	4,183.0	3,715.4	31.9	33.8	48.01	1,321.4	-1,162.3	202.2	143.9	3.468		
4,300.0	3,879.7	4,282.8	3,800.0	32.8	34.8	48.01	1,361.8	-1,196.5	208.3	148.4	3.476		
4,400.0	3,966.7	4,382.6	3,884.6	33.8	35.8	48.01	1,402.1	-1,230.8	214.4	152.8	3.483		
4,500.0	4,053.6	4,482.4	3,969.3	34.7	36.8	48.01	1,442.5	-1,265.0	220.5	157.3	3.490		
4,600.0	4,140.6	4,582.3	4,053.9	35.6	37.8	48.01	1,482.9	-1,299.2	226.6	161.8	3.497		
4,700.0	4,227.6	4,682.1	4,138.5	36.6	38.8	48.01	1,523.2	-1,333.5	232.7	166.3	3.503		
4,800.0	4,314.5	4,781.9	4,223.2	37.5	39.8	48.00	1,563.6	-1,367.7	238.8	170.7	3.509		
4,900.0	4,401.5	4,881.7	4,307.8	38.4	40.8	48.00	1,603.9	-1,401.9	244.9	175.2	3.514		
5,000.0	4,488.5	4,981.5	4,392.4	39.4	41.8	48.00	1,644.3	-1,436.1	251.0	179.6	3.519		
5,100.0	4,575.4	5,081.3	4,477.1	40.3	42.8	48.00	1,684.6	-1,470.4	257.1	184.1	3.524		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	4,662.4	5,181.1	4,561.7	41.2	43.8	48.00	1,725.0	-1,504.6	263.1	188.6	3.529	
5,300.0	4,749.4	5,281.0	4,646.3	42.2	44.8	48.00	1,765.4	-1,538.8	269.2	193.0	3.533	
5,400.0	4,836.3	5,380.8	4,731.0	43.1	45.8	48.00	1,805.7	-1,573.0	275.3	197.5	3.537	
5,500.0	4,923.3	5,480.6	4,815.6	44.1	46.8	48.00	1,846.1	-1,607.3	281.4	202.0	3.541	
5,600.0	5,011.1	5,585.2	4,904.6	45.0	47.8	47.93	1,887.9	-1,642.8	288.2	207.1	3.553	
5,700.0	5,100.9	5,695.1	5,000.5	45.8	48.8	47.79	1,929.0	-1,677.6	295.0	212.2	3.564	
5,800.0	5,192.5	5,805.3	5,099.1	46.5	49.8	47.67	1,966.6	-1,709.4	301.1	216.9	3.574	
5,900.0	5,285.8	5,915.9	5,200.2	47.2	50.6	47.56	2,000.6	-1,738.3	306.7	221.2	3.585	
6,000.0	5,380.5	6,026.7	5,303.6	47.7	51.3	47.47	2,030.9	-1,764.0	311.7	225.0	3.596	
6,100.0	5,476.6	6,137.8	5,409.1	48.2	51.9	47.38	2,057.4	-1,786.5	316.1	228.5	3.609	
6,200.0	5,573.7	6,249.1	5,516.4	48.6	52.4	47.29	2,080.1	-1,805.7	319.9	231.6	3.621	
6,300.0	5,671.9	6,360.6	5,625.1	49.0	52.8	47.22	2,098.7	-1,821.6	323.1	234.2	3.635	
6,400.0	5,770.7	6,472.2	5,735.1	49.2	53.1	47.15	2,113.4	-1,834.0	325.6	236.4	3.649	
6,500.0	5,870.1	6,584.0	5,846.0	49.4	53.4	47.09	2,123.9	-1,842.9	327.5	238.1	3.663	
6,600.0	5,969.9	6,695.9	5,957.5	49.5	53.5	47.03	2,130.3	-1,848.3	328.8	239.4	3.679	
6,700.0	6,069.9	6,807.8	6,069.4	49.6	53.6	1.78	2,132.6	-1,850.3	329.4	240.3	3.698	
6,800.0	6,169.9	6,908.3	6,169.9	49.6	53.6	1.78	2,132.6	-1,850.3	329.4	240.3	3.696	
6,900.0	6,269.9	7,008.3	6,269.9	49.6	53.6	1.78	2,132.6	-1,850.3	329.4	240.2	3.694	
7,000.0	6,369.9	7,108.3	6,369.9	49.7	53.6	1.78	2,132.6	-1,850.3	329.4	240.2	3.692	
7,100.0	6,469.9	7,208.3	6,469.9	49.7	53.7	1.78	2,132.6	-1,850.3	329.4	240.1	3.690	
7,200.0	6,569.9	7,308.3	6,569.9	49.7	53.7	1.78	2,132.6	-1,850.3	329.4	240.1	3.687	
7,300.0	6,669.9	7,408.3	6,669.9	49.7	53.7	1.78	2,132.6	-1,850.3	329.4	240.0	3.685	
7,400.0	6,769.9	7,508.3	6,769.9	49.7	53.7	1.78	2,132.6	-1,850.3	329.4	240.0	3.683	
7,500.0	6,869.9	7,608.3	6,869.9	49.8	53.7	1.78	2,132.6	-1,850.3	329.4	239.9	3.681	
7,600.0	6,969.9	7,708.3	6,969.9	49.8	53.8	1.78	2,132.6	-1,850.3	329.4	239.9	3.678	
7,700.0	7,069.9	7,808.3	7,069.9	49.8	53.8	1.78	2,132.6	-1,850.3	329.4	239.8	3.676	
7,800.0	7,169.9	7,908.3	7,169.9	49.8	53.8	1.78	2,132.6	-1,850.3	329.4	239.7	3.674	
7,900.0	7,269.9	8,008.3	7,269.9	49.9	53.8	1.78	2,132.6	-1,850.3	329.4	239.7	3.672	
8,000.0	7,369.9	8,108.3	7,369.9	49.9	53.8	1.78	2,132.6	-1,850.3	329.4	239.6	3.669	
8,100.0	7,469.9	8,208.3	7,469.9	49.9	53.9	1.78	2,132.6	-1,850.3	329.4	239.6	3.667	
8,200.0	7,569.9	8,308.3	7,569.9	49.9	53.9	1.78	2,132.6	-1,850.3	329.4	239.5	3.665	
8,300.0	7,669.9	8,408.3	7,669.9	49.9	53.9	1.78	2,132.6	-1,850.3	329.4	239.5	3.662	
8,400.0	7,769.9	8,508.3	7,769.9	50.0	53.9	1.78	2,132.6	-1,850.3	329.4	239.4	3.660	
8,407.9	7,777.8	8,516.1	7,777.8	50.0	53.9	1.78	2,132.6	-1,850.3	329.4	239.4	3.660	
8,500.0	7,869.9	8,587.4	7,849.0	50.0	53.9	1.78	2,132.6	-1,850.3	330.1	239.0	3.626	
8,600.0	7,969.9	8,587.4	7,849.0	50.0	53.9	1.78	2,132.6	-1,850.3	350.9	259.2	3.827	
8,700.0	8,069.9	8,587.4	7,849.0	50.0	53.9	1.78	2,132.6	-1,850.3	396.6	309.0	4.529	
8,800.0	8,169.9	8,587.4	7,849.0	50.1	53.9	1.78	2,132.6	-1,850.3	459.9	378.0	5.617	
8,900.0	8,269.9	8,587.4	7,849.0	50.1	53.9	1.78	2,132.6	-1,850.3	534.5	458.0	6.992	
9,000.0	8,369.9	8,587.4	7,849.0	50.1	53.9	1.78	2,132.6	-1,850.3	616.3	544.4	8.574	
9,100.0	8,469.9	8,587.4	7,849.0	50.1	53.9	1.78	2,132.6	-1,850.3	702.9	634.7	10.303	
9,200.0	8,569.9	8,587.4	7,849.0	50.2	53.9	1.78	2,132.6	-1,850.3	792.6	727.3	12.136	
9,287.1	8,657.0	8,587.4	7,849.0	50.2	53.9	1.78	2,132.6	-1,850.3	872.6	809.3	13.793	

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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)	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	133.20	-6.9	7.3	10.0					
100.0	100.0	100.0	100.0	0.8	0.8	133.20	-6.9	7.3	10.0	8.4	6.325			
200.0	200.0	200.0	200.0	1.4	1.4	133.20	-6.9	7.3	10.0	7.2	3.542	CC		
204.4	204.4	204.4	204.4	1.4	1.4	-156.81	-6.9	7.3	10.0	7.2	3.504			
300.0	300.0	300.0	300.0	1.7	1.9	-157.39	-6.9	7.3	10.3	6.7	2.905			
400.0	399.9	400.4	400.3	2.8	2.3	-160.27	-6.6	5.8	12.5	7.5	2.498	Level 1		
500.0	499.6	501.0	500.7	4.2	4.0	-158.10	-5.5	-0.7	14.4	6.7	1.875	Level 2, ES		
600.0	598.8	601.6	600.6	4.5	5.2	-156.01	-3.4	-12.4	16.0	7.5	1.873	Level 2, SF		
700.0	697.5	702.3	700.0	5.2	5.6	-152.36	1.1	-27.9	18.0	9.0	1.999	Level 2		
800.0	795.4	803.0	798.8	6.1	6.4	-148.30	8.9	-46.1	20.5	10.5	2.052	Level 1		
900.0	892.4	903.9	896.7	6.9	7.1	-144.51	20.1	-67.2	23.2	12.3	2.138	Level 1		
1,000.0	988.3	1,004.8	993.7	7.6	7.7	-141.14	34.6	-91.0	26.2	14.5	2.241	Level 1		
1,100.0	1,082.8	1,105.8	1,089.5	8.3	8.4	-138.20	52.5	-117.5	29.3	16.8	2.345	Level 1		
1,200.0	1,175.9	1,206.8	1,183.9	9.0	9.0	-135.63	73.6	-146.7	32.6	19.2	2.437	Level 1		
1,300.0	1,267.4	1,307.9	1,276.7	9.7	9.7	-133.36	98.1	-178.4	36.0	21.7	2.512			
1,400.0	1,357.0	1,409.1	1,367.8	10.3	10.3	-131.33	125.7	-212.7	39.6	24.2	2.569			
1,500.0	1,444.6	1,509.1	1,456.7	10.8	10.6	-131.12	154.8	-247.9	44.5	28.0	2.688			
1,600.0	1,531.6	1,608.9	1,545.5	11.1	10.9	-131.69	183.8	-283.1	50.6	32.7	2.833			
1,700.0	1,618.6	1,708.7	1,634.3	11.5	11.3	-132.13	212.8	-318.3	56.6	37.4	2.953			
1,800.0	1,705.5	1,808.5	1,723.1	11.8	11.6	-132.49	241.8	-353.5	62.7	42.1	3.054			
1,900.0	1,792.5	1,908.3	1,811.9	12.2	12.0	-132.78	270.8	-388.7	68.7	46.8	3.139			
2,000.0	1,879.5	2,008.2	1,900.7	12.6	12.5	-133.03	299.8	-423.9	74.8	51.5	3.212			
2,100.0	1,966.4	2,108.0	1,989.5	13.1	13.0	-133.24	328.8	-459.1	80.8	56.1	3.274			
2,200.0	2,053.4	2,207.8	2,078.3	13.7	13.5	-133.42	357.8	-494.3	86.9	60.8	3.327			
2,300.0	2,140.4	2,307.6	2,167.0	14.5	14.2	-133.58	386.8	-529.5	92.9	65.4	3.373			
2,400.0	2,227.3	2,407.4	2,255.8	15.3	14.9	-133.72	415.8	-564.6	99.0	70.0	3.413			
2,500.0	2,314.3	2,507.2	2,344.6	16.2	15.7	-133.84	444.8	-599.8	105.0	74.6	3.448			
2,600.0	2,401.3	2,607.0	2,433.4	17.1	16.5	-133.95	473.9	-635.0	111.1	79.1	3.479			
2,700.0	2,488.2	2,706.9	2,522.2	18.0	17.3	-134.05	502.9	-670.2	117.1	83.7	3.506			
2,800.0	2,575.2	2,806.7	2,611.0	18.9	18.1	-134.14	531.9	-705.4	123.2	88.3	3.530			
2,900.0	2,662.2	2,906.5	2,699.8	19.8	19.0	-134.22	560.9	-740.6	129.2	92.9	3.552			
3,000.0	2,749.1	3,006.3	2,788.6	20.8	19.8	-134.29	589.9	-775.8	135.3	97.4	3.572			
3,100.0	2,836.1	3,106.1	2,877.4	21.7	20.6	-134.36	618.9	-811.0	141.3	102.0	3.589			
3,200.0	2,923.1	3,205.9	2,966.1	22.6	21.5	-134.42	647.9	-846.2	147.4	106.5	3.605			
3,300.0	3,010.0	3,305.8	3,054.9	23.5	22.3	-134.47	676.9	-881.3	153.5	111.1	3.619			
3,400.0	3,097.0	3,405.6	3,143.7	24.5	23.2	-134.52	705.9	-916.5	159.5	115.6	3.633			
3,500.0	3,184.0	3,505.4	3,232.5	25.4	24.0	-134.57	734.9	-951.7	165.6	120.1	3.645			
3,600.0	3,270.9	3,605.2	3,321.3	26.3	24.8	-134.62	764.0	-986.9	171.6	124.7	3.656			
3,700.0	3,357.9	3,705.0	3,410.1	27.2	25.7	-134.66	793.0	-1,022.1	177.7	129.2	3.666			
3,800.0	3,444.9	3,804.8	3,498.9	28.2	26.5	-134.70	822.0	-1,057.3	183.7	133.7	3.675			
3,900.0	3,531.8	3,904.7	3,587.7	29.1	27.4	-134.73	851.0	-1,092.5	189.8	138.3	3.684			
4,000.0	3,618.8	4,004.5	3,676.5	30.0	28.3	-134.77	880.0	-1,127.7	195.8	142.8	3.692			
4,100.0	3,705.8	4,104.3	3,765.2	31.0	29.1	-134.80	909.0	-1,162.9	201.9	147.3	3.699			
4,200.0	3,792.7	4,204.1	3,854.0	31.9	30.0	-134.83	938.0	-1,198.0	208.0	151.8	3.706			
4,300.0	3,879.7	4,303.9	3,942.8	32.8	30.8	-134.86	967.0	-1,233.2	214.0	156.4	3.712			
4,400.0	3,966.7	4,403.7	4,031.6	33.8	31.7	-134.89	996.0	-1,268.4	220.1	160.9	3.718			
4,500.0	4,053.6	4,503.6	4,120.4	34.7	32.5	-134.91	1,025.0	-1,303.6	226.1	165.4	3.724			
4,600.0	4,140.6	4,603.4	4,209.2	35.6	33.4	-134.94	1,054.0	-1,338.8	232.2	169.9	3.729			
4,700.0	4,227.6	4,703.2	4,298.0	36.6	34.2	-134.96	1,083.1	-1,374.0	238.2	174.4	3.734			
4,800.0	4,314.5	4,803.0	4,386.8	37.5	35.1	-134.98	1,112.1	-1,409.2	244.3	179.0	3.739			
4,900.0	4,401.5	4,902.8	4,475.6	38.4	36.0	-135.00	1,141.1	-1,444.4	250.4	183.5	3.743			
5,000.0	4,488.5	5,002.6	4,564.3	39.4	36.8	-135.02	1,170.1	-1,479.6	256.4	188.0	3.747			

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	4,575.4	5,102.5	4,653.1	40.3	37.7	-135.04	1,199.1	-1,514.7	262.5	192.5	3.751	
5,200.0	4,662.4	5,202.3	4,741.9	41.2	38.5	-135.06	1,228.1	-1,549.9	268.5	197.0	3.755	
5,300.0	4,749.4	5,302.1	4,830.7	42.2	39.4	-135.08	1,257.1	-1,585.1	274.6	201.5	3.758	
5,400.0	4,836.3	5,401.9	4,919.5	43.1	40.3	-135.09	1,286.1	-1,620.3	280.6	206.0	3.761	
5,500.0	4,923.3	5,501.7	5,008.3	44.1	41.1	-135.11	1,315.1	-1,655.5	286.7	210.5	3.764	
5,600.0	5,011.1	5,594.3	5,091.4	45.0	41.9	-135.25	1,341.1	-1,686.9	292.8	215.2	3.773	
5,700.0	5,100.9	5,686.4	5,175.6	45.8	42.6	-135.40	1,364.7	-1,715.7	298.4	219.4	3.780	
5,800.0	5,192.5	5,778.4	5,261.2	46.5	43.2	-135.54	1,386.2	-1,741.7	303.4	223.3	3.786	
5,900.0	5,285.8	5,870.3	5,348.0	47.2	43.7	-135.66	1,405.4	-1,765.0	308.0	226.8	3.793	
6,000.0	5,380.5	5,962.1	5,435.8	47.7	44.2	-135.77	1,422.4	-1,785.7	312.1	230.0	3.800	
6,100.0	5,476.6	6,053.9	5,524.6	48.2	44.6	-135.87	1,437.2	-1,803.5	315.7	232.8	3.807	
6,200.0	5,573.7	6,145.5	5,614.2	48.6	44.9	-135.96	1,449.6	-1,818.7	318.8	235.2	3.814	
6,300.0	5,671.9	6,237.1	5,704.3	49.0	45.2	-136.04	1,459.8	-1,831.0	321.3	237.2	3.822	
6,400.0	5,770.7	6,328.7	5,795.1	49.2	45.4	-136.10	1,467.7	-1,840.5	323.3	238.9	3.829	
6,500.0	5,870.1	6,420.2	5,886.2	49.4	45.6	-136.16	1,473.2	-1,847.3	324.8	240.1	3.836	
6,600.0	5,969.9	6,511.7	5,977.5	49.5	45.7	-136.21	1,476.4	-1,851.2	325.7	241.0	3.844	
6,700.0	6,069.9	6,604.1	6,069.9	49.6	45.7	178.56	1,477.4	-1,852.3	326.1	241.4	3.853	
6,800.0	6,169.9	6,704.1	6,169.9	49.6	45.8	178.56	1,477.4	-1,852.3	326.1	241.4	3.849	
6,900.0	6,269.9	6,804.1	6,269.9	49.6	45.8	178.56	1,477.4	-1,852.3	326.1	241.3	3.846	
7,000.0	6,369.9	6,904.1	6,369.9	49.7	45.8	178.56	1,477.4	-1,852.3	326.1	241.2	3.844	
7,100.0	6,469.9	7,004.1	6,469.9	49.7	45.9	178.56	1,477.4	-1,852.3	326.1	241.2	3.841	
7,200.0	6,569.9	7,104.1	6,569.9	49.7	45.9	178.56	1,477.4	-1,852.3	326.1	241.1	3.839	
7,300.0	6,669.9	7,204.1	6,669.9	49.7	45.9	178.56	1,477.4	-1,852.3	326.1	241.1	3.836	
7,400.0	6,769.9	7,304.1	6,769.9	49.7	45.9	178.56	1,477.4	-1,852.3	326.1	241.0	3.833	
7,500.0	6,869.9	7,404.1	6,869.9	49.8	46.0	178.56	1,477.4	-1,852.3	326.1	241.0	3.831	
7,600.0	6,969.9	7,504.1	6,969.9	49.8	46.0	178.56	1,477.4	-1,852.3	326.1	240.9	3.828	
7,700.0	7,069.9	7,604.1	7,069.9	49.8	46.0	178.56	1,477.4	-1,852.3	326.1	240.8	3.826	
7,800.0	7,169.9	7,704.1	7,169.9	49.8	46.0	178.56	1,477.4	-1,852.3	326.1	240.8	3.823	
7,900.0	7,269.9	7,804.1	7,269.9	49.9	46.1	178.56	1,477.4	-1,852.3	326.1	240.7	3.820	
8,000.0	7,369.9	7,904.1	7,369.9	49.9	46.1	178.56	1,477.4	-1,852.3	326.1	240.7	3.818	
8,100.0	7,469.9	8,004.1	7,469.9	49.9	46.1	178.56	1,477.4	-1,852.3	326.1	240.6	3.815	
8,200.0	7,569.9	8,104.1	7,569.9	49.9	46.1	178.56	1,477.4	-1,852.3	326.1	240.5	3.813	
8,300.0	7,669.9	8,204.1	7,669.9	49.9	46.2	178.56	1,477.4	-1,852.3	326.1	240.5	3.810	
8,400.0	7,769.9	8,304.1	7,769.9	50.0	46.2	178.56	1,477.4	-1,852.3	326.1	240.4	3.807	
8,410.0	7,779.9	8,314.1	7,779.9	50.0	46.2	178.56	1,477.4	-1,852.3	326.1	240.4	3.807	
8,500.0	7,869.9	8,368.2	7,834.0	50.0	46.2	178.56	1,477.4	-1,852.3	328.0	244.5	3.926	
8,600.0	7,969.9	8,368.2	7,834.0	50.0	46.2	178.56	1,477.4	-1,852.3	353.3	278.7	4.741	
8,700.0	8,069.9	8,368.2	7,834.0	50.0	46.2	178.56	1,477.4	-1,852.3	402.5	338.2	6.261	
8,800.0	8,169.9	8,368.2	7,834.0	50.1	46.2	178.56	1,477.4	-1,852.3	468.1	412.4	8.398	
8,900.0	8,269.9	8,368.2	7,834.0	50.1	46.2	178.56	1,477.4	-1,852.3	544.4	494.8	10.972	
9,000.0	8,369.9	8,368.2	7,834.0	50.1	46.2	178.56	1,477.4	-1,852.3	627.3	581.8	13.783	
9,100.0	8,469.9	8,368.2	7,834.0	50.1	46.2	178.56	1,477.4	-1,852.3	714.6	671.7	16.663	
9,200.0	8,569.9	8,368.2	7,834.0	50.2	46.2	178.56	1,477.4	-1,852.3	804.9	763.6	19.507	
9,287.1	8,657.0	8,368.2	7,834.0	50.2	46.2	178.56	1,477.4	-1,852.3	885.2	844.9	21.917	

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	133.25	-20.6	21.9	30.0				
100.0	100.0	100.0	100.0	0.8	0.8	133.25	-20.6	21.9	30.0	28.4	18.948		
200.0	200.0	200.0	200.0	1.4	1.4	133.25	-20.6	21.9	30.0	27.2	10.610		
291.9	291.9	292.2	292.2	1.6	1.6	-156.97	-20.5	21.6	30.4	27.2	9.268		
300.0	300.0	300.4	300.4	1.7	1.7	-156.53	-20.5	21.5	30.0	26.7	9.024	CC	
400.0	399.9	401.4	401.3	2.8	2.9	-154.64	-20.2	17.5	30.3	25.1	5.800		
500.0	499.6	502.4	502.0	4.2	4.3	-150.99	-19.5	9.1	31.3	23.9	4.251	ES	
600.0	598.8	603.4	602.2	4.5	4.9	-150.51	-18.3	-3.7	33.1	25.4	4.261		
700.0	697.5	704.8	702.1	5.2	5.4	-150.00	-14.7	-20.1	35.8	27.3	4.231		
800.0	795.4	806.2	801.4	6.1	6.2	-147.43	-8.1	-39.6	38.9	29.3	4.066	SF	
900.0	892.4	907.7	899.8	6.9	6.9	-143.94	1.6	-62.2	42.6	32.1	4.071		
1,000.0	988.3	1,009.2	997.2	7.6	7.6	-140.13	14.4	-88.0	46.9	35.6	4.174		
1,100.0	1,082.8	1,110.7	1,093.2	8.3	8.3	-136.32	30.3	-116.7	51.8	39.8	4.323		
1,200.0	1,175.9	1,212.2	1,187.8	9.0	9.0	-132.68	49.2	-148.5	57.3	44.5	4.487		
1,300.0	1,267.4	1,313.7	1,280.6	9.7	9.7	-129.29	71.1	-183.1	63.4	49.8	4.635		
1,400.0	1,357.0	1,413.3	1,371.0	10.3	10.1	-127.79	93.8	-218.3	71.7	56.9	4.839		
1,500.0	1,444.6	1,512.6	1,461.1	10.8	10.4	-128.60	116.5	-253.4	83.1	67.0	5.147		
1,600.0	1,531.6	1,611.9	1,551.1	11.1	10.8	-129.56	139.2	-288.4	95.5	78.0	5.462		
1,700.0	1,618.6	1,711.1	1,641.1	11.5	11.2	-130.30	161.8	-323.5	108.0	89.1	5.729		
1,800.0	1,705.5	1,810.3	1,731.1	11.8	11.5	-130.88	184.5	-358.5	120.4	100.2	5.957		
1,900.0	1,792.5	1,909.5	1,821.1	12.2	12.0	-131.36	207.1	-393.6	132.9	111.3	6.153		
2,000.0	1,879.5	2,008.7	1,911.1	12.6	12.4	-131.75	229.8	-428.7	145.3	122.3	6.323		
2,100.0	1,966.4	2,107.9	2,001.1	13.1	12.8	-132.08	252.5	-463.7	157.8	133.4	6.469		
2,200.0	2,053.4	2,207.1	2,091.1	13.7	13.3	-132.36	275.1	-498.8	170.3	144.5	6.599		
2,300.0	2,140.4	2,306.4	2,181.1	14.5	13.8	-132.61	297.8	-533.8	182.8	155.5	6.712		
2,400.0	2,227.3	2,405.6	2,271.1	15.3	14.4	-132.82	320.4	-568.9	195.2	166.6	6.812		
2,500.0	2,314.3	2,504.8	2,361.1	16.2	15.1	-133.01	343.1	-604.0	207.7	177.6	6.900		
2,600.0	2,401.3	2,604.0	2,451.2	17.1	15.8	-133.17	365.8	-639.0	220.2	188.7	6.980		
2,700.0	2,488.2	2,703.2	2,541.2	18.0	16.5	-133.32	388.4	-674.1	232.7	199.7	7.051		
2,800.0	2,575.2	2,802.4	2,631.2	18.9	17.3	-133.46	411.1	-709.1	245.2	210.7	7.115		
2,900.0	2,662.2	2,901.7	2,721.2	19.8	18.0	-133.58	433.7	-744.2	257.7	221.7	7.173		
3,000.0	2,749.1	3,000.9	2,811.2	20.8	18.8	-133.69	456.4	-779.2	270.2	232.8	7.225		
3,100.0	2,836.1	3,100.1	2,901.2	21.7	19.5	-133.78	479.1	-814.3	282.6	243.8	7.273		
3,200.0	2,923.1	3,199.3	2,991.2	22.6	20.3	-133.88	501.7	-849.4	295.1	254.8	7.317		
3,300.0	3,010.0	3,298.5	3,081.2	23.5	21.1	-133.96	524.4	-884.4	307.6	265.8	7.357		
3,400.0	3,097.0	3,397.7	3,171.2	24.5	21.8	-134.04	547.0	-919.5	320.1	276.8	7.394		
3,500.0	3,184.0	3,497.0	3,261.2	25.4	22.6	-134.11	569.7	-954.5	332.6	287.8	7.428		
3,600.0	3,270.9	3,596.2	3,351.2	26.3	23.4	-134.17	592.3	-989.6	345.1	298.9	7.460		
3,700.0	3,357.9	3,695.4	3,441.2	27.2	24.2	-134.24	615.0	-1,024.6	357.6	309.9	7.489		
3,800.0	3,444.9	3,794.6	3,531.2	28.2	25.0	-134.29	637.7	-1,059.7	370.1	320.9	7.516		
3,900.0	3,531.8	3,893.8	3,621.2	29.1	25.7	-134.35	660.3	-1,094.8	382.6	331.9	7.541		
4,000.0	3,618.8	3,993.0	3,711.3	30.0	26.5	-134.40	683.0	-1,129.8	395.1	342.9	7.565		
4,100.0	3,705.8	4,092.2	3,801.3	31.0	27.3	-134.44	705.6	-1,164.9	407.6	353.9	7.587		
4,200.0	3,792.7	4,191.5	3,891.3	31.9	28.1	-134.49	728.3	-1,199.9	420.1	364.9	7.608		
4,300.0	3,879.7	4,290.7	3,981.3	32.8	28.9	-134.53	751.0	-1,235.0	432.6	375.9	7.627		
4,400.0	3,966.7	4,389.9	4,071.3	33.8	29.6	-134.57	773.6	-1,270.0	445.1	386.9	7.645		
4,500.0	4,053.6	4,489.1	4,161.3	34.7	30.4	-134.61	796.3	-1,305.1	457.6	397.9	7.662		
4,600.0	4,140.6	4,588.3	4,251.3	35.6	31.2	-134.64	818.9	-1,340.2	470.1	408.9	7.679		
4,700.0	4,227.6	4,687.5	4,341.3	36.6	32.0	-134.68	841.6	-1,375.2	482.6	419.9	7.694		
4,800.0	4,314.5	4,786.8	4,431.3	37.5	32.8	-134.71	864.3	-1,410.3	495.1	430.9	7.708		
4,900.0	4,401.5	4,886.0	4,521.3	38.4	33.5	-134.74	886.9	-1,445.3	507.6	441.8	7.722		
5,000.0	4,488.5	4,985.2	4,611.3	39.4	34.3	-134.77	909.6	-1,480.4	520.1	452.8	7.735		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	4,575.4	5,084.4	4,701.3	40.3	35.1	-134.79	932.2	-1,515.4	532.6	463.8	7.748		
5,200.0	4,662.4	5,183.6	4,791.3	41.2	35.9	-134.82	954.9	-1,550.5	545.1	474.8	7.759		
5,300.0	4,749.4	5,282.8	4,881.4	42.2	36.7	-134.85	977.5	-1,585.6	557.6	485.8	7.770		
5,400.0	4,836.3	5,382.0	4,971.4	43.1	37.5	-134.87	1,000.2	-1,620.6	570.1	496.8	7.781		
5,500.0	4,923.3	5,481.3	5,061.4	44.1	38.3	-134.89	1,022.9	-1,655.7	582.6	507.8	7.791		
5,600.0	5,011.1	5,571.4	5,143.5	45.0	38.9	-135.07	1,043.0	-1,686.8	594.4	518.3	7.806		
5,700.0	5,100.9	5,658.0	5,223.7	45.8	39.6	-135.24	1,060.8	-1,714.4	605.3	527.9	7.819		
5,800.0	5,192.5	5,744.6	5,305.0	46.5	40.1	-135.40	1,076.9	-1,739.3	615.2	536.6	7.830		
5,900.0	5,285.8	5,831.0	5,387.2	47.2	40.6	-135.55	1,091.3	-1,761.6	624.1	544.5	7.841		
6,000.0	5,380.5	5,917.4	5,470.4	47.7	41.0	-135.68	1,104.0	-1,781.2	632.0	551.6	7.853		
6,100.0	5,476.6	6,000.0	5,550.7	48.2	41.3	-135.80	1,114.6	-1,797.6	639.0	557.8	7.870		
6,200.0	5,573.7	6,089.9	5,638.8	48.6	41.7	-135.91	1,124.3	-1,812.6	644.9	563.0	7.875		
6,300.0	5,671.9	6,176.1	5,723.9	49.0	41.9	-136.00	1,131.8	-1,824.2	649.8	567.4	7.886		
6,400.0	5,770.7	6,262.3	5,809.3	49.2	42.1	-136.08	1,137.6	-1,833.2	653.7	570.9	7.896		
6,500.0	5,870.1	6,348.4	5,895.1	49.4	42.2	-136.15	1,141.6	-1,839.4	656.5	573.5	7.906		
6,600.0	5,969.9	6,434.5	5,981.1	49.5	42.3	-136.21	1,143.9	-1,842.9	658.3	575.2	7.916		
6,700.0	6,069.9	6,523.3	6,069.9	49.6	42.4	178.55	1,144.5	-1,843.8	659.1	575.9	7.923		
6,800.0	6,169.9	6,623.3	6,169.9	49.6	42.4	178.55	1,144.5	-1,843.8	659.1	575.8	7.913		
6,900.0	6,269.9	6,723.3	6,269.9	49.6	42.4	178.55	1,144.5	-1,843.8	659.1	575.7	7.908		
7,000.0	6,369.9	6,823.3	6,369.9	49.7	42.5	178.55	1,144.5	-1,843.8	659.1	575.7	7.902		
7,100.0	6,469.9	6,923.3	6,469.9	49.7	42.5	178.55	1,144.5	-1,843.8	659.1	575.6	7.897		
7,200.0	6,569.9	7,023.3	6,569.9	49.7	42.5	178.55	1,144.5	-1,843.8	659.1	575.6	7.891		
7,300.0	6,669.9	7,123.3	6,669.9	49.7	42.5	178.55	1,144.5	-1,843.8	659.1	575.5	7.886		
7,400.0	6,769.9	7,223.3	6,769.9	49.7	42.6	178.55	1,144.5	-1,843.8	659.1	575.4	7.881		
7,500.0	6,869.9	7,323.3	6,869.9	49.8	42.6	178.55	1,144.5	-1,843.8	659.1	575.4	7.875		
7,600.0	6,969.9	7,423.3	6,969.9	49.8	42.6	178.55	1,144.5	-1,843.8	659.1	575.3	7.870		
7,700.0	7,069.9	7,523.3	7,069.9	49.8	42.7	178.55	1,144.5	-1,843.8	659.1	575.3	7.864		
7,800.0	7,169.9	7,623.3	7,169.9	49.8	42.7	178.55	1,144.5	-1,843.8	659.1	575.2	7.859		
7,900.0	7,269.9	7,723.3	7,269.9	49.9	42.7	178.55	1,144.5	-1,843.8	659.1	575.2	7.853		
8,000.0	7,369.9	7,823.3	7,369.9	49.9	42.7	178.55	1,144.5	-1,843.8	659.1	575.1	7.848		
8,100.0	7,469.9	7,923.3	7,469.9	49.9	42.8	178.55	1,144.5	-1,843.8	659.1	575.0	7.842		
8,200.0	7,569.9	8,023.3	7,569.9	49.9	42.8	178.55	1,144.5	-1,843.8	659.1	575.0	7.836		
8,300.0	7,669.9	8,123.3	7,669.9	49.9	42.8	178.55	1,144.5	-1,843.8	659.1	574.9	7.831		
8,400.0	7,769.9	8,223.3	7,769.9	50.0	42.8	178.55	1,144.5	-1,843.8	659.1	574.9	7.825		
8,500.0	7,869.9	8,323.3	7,869.9	50.0	42.9	178.55	1,144.5	-1,843.8	659.1	574.8	7.820		
8,600.0	7,969.9	8,423.3	7,969.9	50.0	42.9	178.55	1,144.5	-1,843.8	659.1	574.7	7.814		
8,700.0	8,069.9	8,523.3	8,069.9	50.0	42.9	178.55	1,144.5	-1,843.8	659.1	574.7	7.808		
8,800.0	8,169.9	8,623.3	8,169.9	50.1	43.0	178.55	1,144.5	-1,843.8	659.1	574.6	7.803		
8,900.0	8,269.9	8,723.3	8,269.9	50.1	43.0	178.55	1,144.5	-1,843.8	659.1	574.5	7.797		
9,000.0	8,369.9	8,823.3	8,369.9	50.1	43.0	178.55	1,144.5	-1,843.8	659.1	574.5	7.791		
9,100.0	8,469.9	8,923.3	8,469.9	50.1	43.0	178.55	1,144.5	-1,843.8	659.1	574.4	7.785		
9,200.0	8,569.9	9,023.3	8,569.9	50.2	43.1	178.55	1,144.5	-1,843.8	659.1	574.4	7.780		
9,208.9	8,578.8	9,032.1	8,578.8	50.2	43.1	178.55	1,144.5	-1,843.8	659.1	574.4	7.779		
9,287.1	8,657.0	9,096.2	8,642.8	50.2	43.1	178.55	1,144.5	-1,843.8	659.2	574.8	7.807		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	
204.4	204.4	204.4	204.4	1.4	1.4	-156.75	-27.4	29.1	40.0	37.1	13.988		
300.0	300.0	300.0	300.0	1.7	1.9	-156.89	-27.4	29.1	40.3	36.7	11.391	ES	
400.0	399.9	401.0	401.0	2.8	2.2	-157.69	-27.4	27.9	42.8	37.9	8.756		
500.0	499.6	502.4	502.2	4.2	3.6	-156.83	-27.4	22.3	46.1	39.0	6.501		
600.0	598.8	603.8	603.1	4.5	4.8	-159.19	-27.4	12.2	50.4	42.3	6.202		
700.0	697.5	705.0	703.3	5.2	5.8	-159.62	-27.4	-2.3	56.2	47.1	6.195	SF	
800.0	795.4	806.9	803.4	6.1	6.1	-156.60	-26.5	-21.0	63.7	54.0	6.579		
900.0	892.4	909.2	903.2	6.9	6.7	-153.16	-22.6	-43.1	72.1	61.5	6.799		
1,000.0	988.3	1,011.6	1,002.1	7.6	7.3	-149.73	-15.7	-68.7	81.4	69.8	7.022		
1,100.0	1,082.8	1,114.2	1,100.1	8.3	8.0	-146.45	-5.9	-97.5	91.4	78.8	7.294		
1,200.0	1,175.9	1,217.0	1,196.8	9.0	8.7	-143.36	6.9	-129.7	102.1	88.6	7.593		
1,300.0	1,267.4	1,319.9	1,292.2	9.7	9.3	-140.48	22.7	-165.1	113.5	99.1	7.907		
1,400.0	1,357.0	1,419.1	1,383.2	10.3	9.6	-138.47	39.6	-201.0	127.0	111.7	8.287		
1,500.0	1,444.6	1,517.6	1,473.4	10.8	9.9	-137.72	56.3	-236.6	144.1	127.7	8.784		
1,600.0	1,531.6	1,615.9	1,563.6	11.1	10.2	-137.19	73.0	-272.1	162.4	144.9	9.280		
1,700.0	1,618.6	1,714.2	1,653.7	11.5	10.6	-136.76	89.7	-307.7	180.7	162.1	9.683		
1,800.0	1,705.5	1,812.5	1,743.8	11.8	11.0	-136.42	106.4	-343.2	199.1	179.2	10.012		
1,900.0	1,792.5	1,910.8	1,833.9	12.2	11.4	-136.13	123.1	-378.8	217.4	196.3	10.283		
2,000.0	1,879.5	2,009.1	1,924.0	12.6	11.8	-135.89	139.8	-414.3	235.7	213.3	10.507		
2,100.0	1,966.4	2,107.4	2,014.1	13.1	12.3	-135.68	156.5	-449.9	254.1	230.3	10.695		
2,200.0	2,053.4	2,205.7	2,104.2	13.7	12.7	-135.50	173.2	-485.4	272.4	247.3	10.852		
2,300.0	2,140.4	2,304.0	2,194.3	14.5	13.2	-135.34	189.9	-521.0	290.8	264.3	10.985		
2,400.0	2,227.3	2,402.3	2,284.5	15.3	13.8	-135.20	206.6	-556.5	309.1	281.3	11.098		
2,500.0	2,314.3	2,500.6	2,374.6	16.2	14.4	-135.08	223.3	-592.1	327.5	298.2	11.196		
2,600.0	2,401.3	2,598.9	2,464.7	17.1	15.0	-134.97	240.0	-627.6	345.8	315.2	11.280		
2,700.0	2,488.2	2,697.2	2,554.8	18.0	15.7	-134.87	256.7	-663.2	364.2	332.1	11.353		
2,800.0	2,575.2	2,795.5	2,644.9	18.9	16.3	-134.78	273.4	-698.7	382.5	349.0	11.417		
2,900.0	2,662.2	2,893.8	2,735.0	19.8	17.0	-134.70	290.1	-734.3	400.9	365.9	11.473		
3,000.0	2,749.1	2,992.1	2,825.1	20.8	17.7	-134.63	306.8	-769.8	419.2	382.8	11.522		
3,100.0	2,836.1	3,090.4	2,915.2	21.7	18.5	-134.56	323.5	-805.3	437.6	399.8	11.566		
3,200.0	2,923.1	3,188.7	3,005.4	22.6	19.2	-134.50	340.2	-840.9	455.9	416.7	11.605		
3,300.0	3,010.0	3,287.0	3,095.5	23.5	19.9	-134.44	356.9	-876.4	474.3	433.6	11.640		
3,400.0	3,097.0	3,385.3	3,185.6	24.5	20.6	-134.38	373.6	-912.0	492.7	450.4	11.671		
3,500.0	3,184.0	3,483.6	3,275.7	25.4	21.3	-134.34	390.3	-947.5	511.0	467.3	11.699		
3,600.0	3,270.9	3,581.9	3,365.8	26.3	22.1	-134.29	407.0	-983.1	529.4	484.2	11.724		
3,700.0	3,357.9	3,680.2	3,455.9	27.2	22.8	-134.25	423.7	-1,018.6	547.7	501.1	11.747		
3,800.0	3,444.9	3,778.5	3,546.0	28.2	23.5	-134.21	440.4	-1,054.2	566.1	518.0	11.768		
3,900.0	3,531.8	3,876.8	3,636.1	29.1	24.2	-134.17	457.1	-1,089.7	584.4	534.9	11.787		
4,000.0	3,618.8	3,975.1	3,726.3	30.0	25.0	-134.13	473.8	-1,125.3	602.8	551.7	11.804		
4,100.0	3,705.8	4,073.4	3,816.4	31.0	25.7	-134.10	490.5	-1,160.8	621.2	568.6	11.820		
4,200.0	3,792.7	4,171.7	3,906.5	31.9	26.4	-134.07	507.2	-1,196.4	639.5	585.5	11.835		
4,300.0	3,879.7	4,270.0	3,996.6	32.8	27.2	-134.04	523.9	-1,231.9	657.9	602.4	11.848		
4,400.0	3,966.7	4,368.3	4,086.7	33.8	27.9	-134.01	540.6	-1,267.5	676.2	619.2	11.861		
4,500.0	4,053.6	4,466.6	4,176.8	34.7	28.6	-133.98	557.3	-1,303.0	694.6	636.1	11.872		
4,600.0	4,140.6	4,564.9	4,266.9	35.6	29.4	-133.96	574.0	-1,338.6	713.0	653.0	11.883		
4,700.0	4,227.6	4,663.2	4,357.0	36.6	30.1	-133.94	590.8	-1,374.1	731.3	669.8	11.893		
4,800.0	4,314.5	4,761.5	4,447.1	37.5	30.8	-133.91	607.5	-1,409.7	749.7	686.7	11.902		
4,900.0	4,401.5	4,859.8	4,537.3	38.4	31.6	-133.89	624.2	-1,445.2	768.0	703.6	11.910		
5,000.0	4,488.5	4,958.1	4,627.4	39.4	32.3	-133.87	640.9	-1,480.8	786.4	720.4	11.918		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	4,575.4	5,056.4	4,717.5	40.3	33.1	-133.85	657.6	-1,516.3	804.8	737.3	11.926		
5,200.0	4,662.4	5,154.7	4,807.6	41.2	33.8	-133.83	674.3	-1,551.9	823.1	754.1	11.933		
5,300.0	4,749.4	5,253.0	4,897.7	42.2	34.5	-133.81	691.0	-1,587.4	841.5	771.0	11.939		
5,400.0	4,836.3	5,351.3	4,987.8	43.1	35.3	-133.80	707.7	-1,623.0	859.8	787.9	11.945		
5,500.0	4,923.3	5,449.6	5,077.9	44.1	36.0	-133.78	724.4	-1,658.5	878.2	804.7	11.951		
5,600.0	5,011.1	5,541.4	5,162.2	45.0	36.7	-133.99	739.8	-1,691.4	895.6	820.7	11.959		
5,700.0	5,100.9	5,625.6	5,240.5	45.8	37.3	-134.20	753.0	-1,719.4	911.4	835.2	11.970		
5,800.0	5,192.5	5,709.8	5,319.9	46.5	37.8	-134.39	764.9	-1,744.7	925.7	848.4	11.978		
5,900.0	5,285.8	5,800.0	5,406.1	47.2	38.3	-134.56	776.2	-1,768.9	938.7	860.3	11.975		
6,000.0	5,380.5	5,878.2	5,481.6	47.7	38.6	-134.73	784.9	-1,787.4	950.1	870.9	11.998		
6,100.0	5,476.6	5,962.4	5,563.6	48.2	39.0	-134.87	793.0	-1,804.7	960.1	880.2	12.007		
6,200.0	5,573.7	6,046.7	5,646.3	48.6	39.2	-134.99	799.9	-1,819.2	968.7	888.1	12.015		
6,300.0	5,671.9	6,130.9	5,729.5	49.0	39.5	-135.10	805.4	-1,831.0	975.7	894.6	12.023		
6,400.0	5,770.7	6,215.2	5,813.2	49.2	39.7	-135.20	809.6	-1,840.0	981.3	899.7	12.029		
6,500.0	5,870.1	6,300.0	5,897.7	49.4	39.8	-135.28	812.6	-1,846.2	985.4	903.5	12.033		
6,600.0	5,969.9	6,383.7	5,981.3	49.5	39.9	-135.34	814.1	-1,849.6	987.9	905.9	12.040		
6,700.0	6,069.9	6,472.3	6,069.9	49.6	39.9	179.41	814.5	-1,850.4	988.9	906.8	12.044		
6,800.0	6,169.9	6,572.3	6,169.9	49.6	39.9	179.41	814.5	-1,850.4	988.9	906.7	12.033		
6,900.0	6,269.9	6,672.3	6,269.9	49.6	39.9	179.41	814.5	-1,850.4	988.9	906.7	12.025		
7,000.0	6,369.9	6,772.3	6,369.9	49.7	40.0	179.41	814.5	-1,850.4	988.9	906.6	12.016		
7,100.0	6,469.9	6,872.3	6,469.9	49.7	40.0	179.41	814.5	-1,850.4	988.9	906.5	12.008		
7,200.0	6,569.9	6,972.3	6,569.9	49.7	40.0	179.41	814.5	-1,850.4	988.9	906.5	12.000		
7,300.0	6,669.9	7,072.3	6,669.9	49.7	40.1	179.41	814.5	-1,850.4	988.9	906.4	11.991		
7,400.0	6,769.9	7,172.3	6,769.9	49.7	40.1	179.41	814.5	-1,850.4	988.9	906.4	11.983		
7,500.0	6,869.9	7,272.3	6,869.9	49.8	40.1	179.41	814.5	-1,850.4	988.9	906.3	11.974		
7,600.0	6,969.9	7,372.3	6,969.9	49.8	40.1	179.41	814.5	-1,850.4	988.9	906.3	11.966		
7,700.0	7,069.9	7,472.3	7,069.9	49.8	40.2	179.41	814.5	-1,850.4	988.9	906.2	11.957		
7,800.0	7,169.9	7,572.3	7,169.9	49.8	40.2	179.41	814.5	-1,850.4	988.9	906.1	11.949		
7,900.0	7,269.9	7,672.3	7,269.9	49.9	40.2	179.41	814.5	-1,850.4	988.9	906.1	11.940		
8,000.0	7,369.9	7,772.3	7,369.9	49.9	40.3	179.41	814.5	-1,850.4	988.9	906.0	11.932		
8,100.0	7,469.9	7,872.3	7,469.9	49.9	40.3	179.41	814.5	-1,850.4	988.9	906.0	11.923		
8,200.0	7,569.9	7,972.3	7,569.9	49.9	40.3	179.41	814.5	-1,850.4	988.9	905.9	11.914		
8,300.0	7,669.9	8,072.3	7,669.9	49.9	40.4	179.41	814.5	-1,850.4	988.9	905.8	11.906		
8,400.0	7,769.9	8,172.3	7,769.9	50.0	40.4	179.41	814.5	-1,850.4	988.9	905.8	11.897		
8,410.0	7,779.9	8,182.3	7,779.9	50.0	40.4	179.41	814.5	-1,850.4	988.9	905.8	11.896		
8,500.0	7,869.9	8,219.4	7,817.0	50.0	40.4	179.41	814.5	-1,850.4	990.3	907.9	12.018		
8,600.0	7,969.9	8,219.4	7,817.0	50.0	40.4	179.41	814.5	-1,850.4	1,000.7	920.1	12.428		
8,700.0	8,069.9	8,219.4	7,817.0	50.0	40.4	179.41	814.5	-1,850.4	1,020.7	942.6	13.070		
8,800.0	8,169.9	8,219.4	7,817.0	50.1	40.4	179.41	814.5	-1,850.4	1,050.0	974.7	13.945		
8,900.0	8,269.9	8,219.4	7,817.0	50.1	40.4	179.41	814.5	-1,850.4	1,087.7	1,015.4	15.048		
9,000.0	8,369.9	8,219.4	7,817.0	50.1	40.4	179.41	814.5	-1,850.4	1,133.0	1,063.8	16.374		
9,100.0	8,469.9	8,219.4	7,817.0	50.1	40.4	179.41	814.5	-1,850.4	1,185.0	1,118.8	17.912		
9,200.0	8,569.9	8,219.4	7,817.0	50.2	40.4	179.41	814.5	-1,850.4	1,242.9	1,179.6	19.644		
9,287.1	8,657.0	8,219.4	7,817.0	50.2	40.4	179.41	814.5	-1,850.4	1,297.5	1,236.6	21.299		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	-41.1	43.7	60.0				
100.0	100.0	100.0	100.0	0.8	0.8	133.26	-41.1	43.7	60.0	58.4	37.879		
200.0	200.0	200.0	200.0	1.4	1.4	133.26	-41.1	43.7	60.0	57.2	21.209	CC	
204.4	204.4	204.4	204.4	1.4	1.4	-156.74	-41.1	43.7	60.0	57.1	20.979		
300.0	300.0	300.0	300.0	1.7	1.9	-156.84	-41.1	43.7	60.3	56.7	17.050	ES	
400.0	399.9	401.0	401.0	2.8	2.1	-157.79	-41.1	43.1	63.3	58.5	13.262		
500.0	499.6	503.0	502.9	4.2	3.2	-157.81	-41.1	38.6	67.4	60.5	9.782		
600.0	598.8	605.2	604.7	4.5	4.6	-161.46	-41.1	29.5	72.4	64.3	8.965		
700.0	697.5	707.3	705.8	5.2	5.6	-163.83	-41.1	15.9	78.6	69.4	8.510	SF	
800.0	795.4	809.7	806.6	6.1	5.9	-162.35	-40.8	-2.2	86.4	76.4	8.633		
900.0	892.4	912.6	907.1	6.9	6.5	-159.41	-38.3	-24.3	95.3	84.4	8.734		
1,000.0	988.3	1,015.5	1,006.5	7.6	7.2	-155.80	-33.7	-50.4	105.5	93.6	8.906		
1,100.0	1,082.8	1,118.3	1,104.7	8.3	8.0	-151.92	-26.9	-80.3	117.0	104.4	9.237		
1,200.0	1,175.9	1,221.1	1,201.3	9.0	8.6	-148.00	-17.9	-114.0	130.1	116.7	9.669		
1,300.0	1,267.4	1,321.9	1,294.7	9.7	9.1	-144.39	-7.1	-150.3	145.1	130.9	10.214		
1,400.0	1,357.0	1,419.8	1,385.1	10.3	9.4	-142.03	3.7	-186.2	164.0	148.8	10.810		
1,500.0	1,444.6	1,517.0	1,475.0	10.8	9.7	-140.74	14.4	-221.9	186.7	170.5	11.529		
1,600.0	1,531.6	1,614.0	1,564.6	11.1	10.1	-139.74	25.1	-257.4	210.7	193.5	12.232		
1,700.0	1,618.6	1,711.1	1,654.2	11.5	10.4	-138.95	35.8	-293.0	234.8	216.5	12.803		
1,800.0	1,705.5	1,808.1	1,743.9	11.8	10.8	-138.30	46.5	-328.6	258.9	239.4	13.269		
1,900.0	1,792.5	1,905.1	1,833.5	12.2	11.2	-137.76	57.1	-364.1	283.0	262.3	13.652		
2,000.0	1,879.5	2,002.1	1,923.1	12.6	11.6	-137.31	67.8	-399.7	307.1	285.2	13.969		
2,100.0	1,966.4	2,099.1	2,012.7	13.1	12.0	-136.93	78.5	-435.2	331.3	308.0	14.233		
2,200.0	2,053.4	2,196.1	2,102.4	13.7	12.4	-136.59	89.2	-470.8	355.5	330.9	14.455		
2,300.0	2,140.4	2,293.2	2,192.0	14.5	12.8	-136.30	99.9	-506.4	379.6	353.7	14.643		
2,400.0	2,227.3	2,390.2	2,281.6	15.3	13.3	-136.05	110.6	-541.9	403.8	376.5	14.803		
2,500.0	2,314.3	2,487.2	2,371.3	16.2	13.8	-135.82	121.3	-577.5	428.0	399.4	14.941		
2,600.0	2,401.3	2,584.2	2,460.9	17.1	14.3	-135.61	132.0	-613.0	452.2	422.2	15.060		
2,700.0	2,488.2	2,681.2	2,550.5	18.0	14.9	-135.43	142.7	-648.6	476.4	445.0	15.164		
2,800.0	2,575.2	2,778.2	2,640.1	18.9	15.5	-135.27	153.4	-684.2	500.6	467.8	15.254		
2,900.0	2,662.2	2,875.3	2,729.8	19.8	16.2	-135.12	164.1	-719.7	524.8	490.6	15.334		
3,000.0	2,749.1	2,972.3	2,819.4	20.8	16.9	-134.98	174.7	-755.3	549.1	513.4	15.404		
3,100.0	2,836.1	3,069.3	2,909.0	21.7	17.5	-134.86	185.4	-790.9	573.3	536.2	15.466		
3,200.0	2,923.1	3,166.3	2,998.7	22.6	18.2	-134.74	196.1	-826.4	597.5	559.0	15.522		
3,300.0	3,010.0	3,263.3	3,088.3	23.5	18.9	-134.64	206.8	-862.0	621.7	581.8	15.572		
3,400.0	3,097.0	3,360.3	3,177.9	24.5	19.6	-134.54	217.5	-897.5	645.9	604.6	15.617		
3,500.0	3,184.0	3,457.4	3,267.5	25.4	20.3	-134.45	228.2	-933.1	670.2	627.4	15.657		
3,600.0	3,270.9	3,554.4	3,357.2	26.3	21.0	-134.36	238.9	-968.7	694.4	650.1	15.694		
3,700.0	3,357.9	3,651.4	3,446.8	27.2	21.7	-134.28	249.6	-1,004.2	718.6	672.9	15.727		
3,800.0	3,444.9	3,748.4	3,536.4	28.2	22.4	-134.21	260.3	-1,039.8	742.8	695.7	15.757		
3,900.0	3,531.8	3,845.4	3,626.1	29.1	23.1	-134.14	271.0	-1,075.3	767.1	718.5	15.785		
4,000.0	3,618.8	3,942.4	3,715.7	30.0	23.8	-134.08	281.7	-1,110.9	791.3	741.2	15.810		
4,100.0	3,705.8	4,039.5	3,805.3	31.0	24.5	-134.02	292.4	-1,146.5	815.5	764.0	15.834		
4,200.0	3,792.7	4,136.5	3,894.9	31.9	25.1	-133.96	303.0	-1,182.0	839.8	786.8	15.855		
4,300.0	3,879.7	4,233.5	3,984.6	32.8	25.8	-133.91	313.7	-1,217.6	864.0	809.6	15.875		
4,400.0	3,966.7	4,330.5	4,074.2	33.8	26.5	-133.85	324.4	-1,253.2	888.2	832.3	15.893		
4,500.0	4,053.6	4,427.5	4,163.8	34.7	27.2	-133.81	335.1	-1,288.7	912.5	855.1	15.910		
4,600.0	4,140.6	4,524.5	4,253.5	35.6	27.9	-133.76	345.8	-1,324.3	936.7	877.9	15.926		
4,700.0	4,227.6	4,621.6	4,343.1	36.6	28.6	-133.72	356.5	-1,359.8	960.9	900.6	15.940		
4,800.0	4,314.5	4,718.6	4,432.7	37.5	29.3	-133.67	367.2	-1,395.4	985.2	923.4	15.954		
4,900.0	4,401.5	4,815.6	4,522.3	38.4	30.0	-133.63	377.9	-1,431.0	1,009.4	946.2	15.967		
5,000.0	4,488.5	4,912.6	4,612.0	39.4	30.7	-133.60	388.6	-1,466.5	1,033.6	968.9	15.979		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	4,575.4	5,009.6	4,701.6	40.3	31.4	-133.56	399.3	-1,502.1	1,057.9	991.7	15.990		
5,200.0	4,662.4	5,106.6	4,791.2	41.2	32.1	-133.53	410.0	-1,537.6	1,082.1	1,014.5	16.000		
5,300.0	4,749.4	5,203.7	4,880.9	42.2	32.8	-133.49	420.6	-1,573.2	1,106.3	1,037.2	16.010		
5,400.0	4,836.3	5,300.7	4,970.5	43.1	33.5	-133.46	431.3	-1,608.8	1,130.6	1,060.0	16.020		
5,500.0	4,923.3	5,397.7	5,060.1	44.1	34.2	-133.43	442.0	-1,644.3	1,154.8	1,082.8	16.028		
5,600.0	5,011.1	5,495.0	5,150.0	45.0	34.9	-133.72	452.8	-1,680.0	1,177.9	1,104.4	16.020		
5,700.0	5,100.9	5,580.3	5,229.3	45.8	35.5	-133.95	461.8	-1,710.1	1,198.6	1,123.8	16.022		
5,800.0	5,192.5	5,664.9	5,309.1	46.5	36.0	-134.17	469.9	-1,737.1	1,217.4	1,141.4	16.024		
5,900.0	5,285.8	5,749.8	5,390.0	47.2	36.5	-134.36	477.2	-1,761.4	1,234.3	1,157.3	16.026		
6,000.0	5,380.5	5,834.8	5,472.1	47.7	36.9	-134.54	483.7	-1,782.8	1,249.3	1,171.4	16.027		
6,100.0	5,476.6	5,920.0	5,555.0	48.2	37.3	-134.70	489.2	-1,801.3	1,262.4	1,183.6	16.028		
6,200.0	5,573.7	6,000.0	5,633.6	48.6	37.5	-134.84	493.7	-1,816.1	1,273.6	1,194.2	16.039		
6,300.0	5,671.9	6,090.8	5,723.3	49.0	37.8	-134.96	497.7	-1,829.5	1,282.7	1,202.7	16.026		
6,400.0	5,770.7	6,176.4	5,808.2	49.2	38.0	-135.07	500.6	-1,839.1	1,289.9	1,209.4	16.025		
6,500.0	5,870.1	6,262.0	5,893.6	49.4	38.1	-135.15	502.6	-1,845.7	1,295.2	1,214.3	16.021		
6,600.0	5,969.9	6,347.6	5,979.1	49.5	38.2	-135.23	503.6	-1,849.2	1,298.4	1,217.3	16.014		
6,700.0	6,069.9	6,438.4	6,069.9	49.6	38.3	179.53	503.8	-1,849.8	1,299.6	1,218.3	15.998		
6,800.0	6,169.9	6,538.4	6,169.9	49.6	38.3	179.53	503.8	-1,849.8	1,299.6	1,218.2	15.978		
6,900.0	6,269.9	6,638.4	6,269.9	49.6	38.3	179.53	503.8	-1,849.8	1,299.6	1,218.2	15.967		
7,000.0	6,369.9	6,738.4	6,369.9	49.7	38.4	179.53	503.8	-1,849.8	1,299.6	1,218.1	15.956		
7,100.0	6,469.9	6,838.4	6,469.9	49.7	38.4	179.53	503.8	-1,849.8	1,299.6	1,218.1	15.945		
7,200.0	6,569.9	6,938.4	6,569.9	49.7	38.4	179.53	503.8	-1,849.8	1,299.6	1,218.0	15.934		
7,300.0	6,669.9	7,038.4	6,669.9	49.7	38.5	179.53	503.8	-1,849.8	1,299.6	1,218.0	15.923		
7,400.0	6,769.9	7,138.4	6,769.9	49.7	38.5	179.53	503.8	-1,849.8	1,299.6	1,217.9	15.911		
7,500.0	6,869.9	7,238.4	6,869.9	49.8	38.5	179.53	503.8	-1,849.8	1,299.6	1,217.8	15.900		
7,600.0	6,969.9	7,338.4	6,969.9	49.8	38.5	179.53	503.8	-1,849.8	1,299.6	1,217.8	15.889		
7,700.0	7,069.9	7,438.4	7,069.9	49.8	38.6	179.53	503.8	-1,849.8	1,299.6	1,217.7	15.877		
7,800.0	7,169.9	7,538.4	7,169.9	49.8	38.6	179.53	503.8	-1,849.8	1,299.6	1,217.7	15.866		
7,900.0	7,269.9	7,638.4	7,269.9	49.9	38.6	179.53	503.8	-1,849.8	1,299.6	1,217.6	15.854		
8,000.0	7,369.9	7,738.4	7,369.9	49.9	38.7	179.53	503.8	-1,849.8	1,299.6	1,217.5	15.843		
8,100.0	7,469.9	7,838.4	7,469.9	49.9	38.7	179.53	503.8	-1,849.8	1,299.6	1,217.5	15.831		
8,200.0	7,569.9	7,938.4	7,569.9	49.9	38.7	179.53	503.8	-1,849.8	1,299.6	1,217.4	15.820		
8,300.0	7,669.9	8,038.4	7,669.9	49.9	38.8	179.53	503.8	-1,849.8	1,299.6	1,217.4	15.808		
8,400.0	7,769.9	8,138.4	7,769.9	50.0	38.8	179.53	503.8	-1,849.8	1,299.6	1,217.3	15.796		
8,500.0	7,869.9	8,238.4	7,869.9	50.0	38.8	179.53	503.8	-1,849.8	1,299.6	1,217.2	15.785		
8,600.0	7,969.9	8,338.4	7,969.9	50.0	38.9	179.53	503.8	-1,849.8	1,299.6	1,217.2	15.773		
8,700.0	8,069.9	8,438.4	8,069.9	50.0	38.9	179.53	503.8	-1,849.8	1,299.6	1,217.1	15.761		
8,800.0	8,169.9	8,538.4	8,169.9	50.1	38.9	179.53	503.8	-1,849.8	1,299.6	1,217.1	15.749		
8,900.0	8,269.9	8,638.4	8,269.9	50.1	38.9	179.53	503.8	-1,849.8	1,299.6	1,217.0	15.738		
9,000.0	8,369.9	8,738.4	8,369.9	50.1	39.0	179.53	503.8	-1,849.8	1,299.6	1,216.9	15.726		
9,100.0	8,469.9	8,838.4	8,469.9	50.1	39.0	179.53	503.8	-1,849.8	1,299.6	1,216.9	15.714		
9,200.0	8,569.9	8,938.4	8,569.9	50.2	39.0	179.53	503.8	-1,849.8	1,299.6	1,216.8	15.702		
9,208.7	8,578.6	8,947.1	8,578.6	50.2	39.0	179.53	503.8	-1,849.8	1,299.6	1,216.8	15.701		
9,287.1	8,657.0	8,994.5	8,626.0	50.2	39.1	179.53	503.8	-1,849.8	1,299.6	1,217.4	15.752		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	-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	299.5	299.5	1.7	2.1	72.16	15.5	0.3	15.4	11.7	4.165		
400.0	399.9	398.5	398.3	2.8	3.6	89.52	20.5	3.2	20.4	14.9	3.676	SF	
500.0	499.6	496.4	495.7	4.2	4.8	106.86	29.2	8.0	31.9	24.6	4.370		
600.0	598.8	592.7	591.0	4.5	5.7	112.61	41.2	14.8	50.3	41.7	5.878		
700.0	697.5	687.4	684.0	5.2	6.5	113.10	56.4	23.3	73.7	63.9	7.532		
800.0	795.4	780.0	774.3	6.1	7.3	113.55	74.6	33.5	101.5	90.6	9.352		
900.0	892.4	870.5	861.6	6.9	8.0	113.86	95.4	45.1	133.7	121.9	11.335		
1,000.0	988.3	958.7	945.8	7.6	8.6	114.01	118.5	58.1	169.9	157.2	13.399		
1,100.0	1,082.8	1,044.5	1,026.5	8.3	9.2	114.00	143.6	72.2	210.1	196.6	15.511		
1,200.0	1,175.9	1,127.6	1,103.7	9.0	9.7	113.85	170.5	87.3	254.1	239.7	17.639		
1,300.0	1,267.4	1,208.1	1,177.3	9.7	10.2	113.57	198.9	103.2	301.7	286.4	19.755		
1,400.0	1,357.0	1,285.9	1,247.3	10.3	10.7	113.15	228.4	119.7	352.6	336.5	21.832		
1,500.0	1,444.6	1,360.9	1,313.8	10.8	11.1	113.01	258.8	136.8	406.7	389.7	23.906		
1,600.0	1,531.6	1,433.9	1,377.2	11.1	11.5	114.15	290.2	154.4	463.1	445.2	25.898		
1,700.0	1,618.6	1,505.1	1,438.0	11.5	11.9	114.82	322.5	172.5	521.3	502.6	27.787		
1,800.0	1,705.5	1,577.9	1,499.1	11.8	12.2	115.18	357.2	192.0	581.1	561.5	29.621		
1,900.0	1,792.5	1,657.8	1,565.7	12.2	12.4	115.46	395.6	213.5	641.3	620.6	31.066		
2,000.0	1,879.5	1,737.6	1,632.3	12.6	12.7	115.68	434.0	235.0	701.4	679.7	32.308		
2,100.0	1,966.4	1,817.5	1,699.0	13.1	13.0	115.88	472.3	256.5	761.6	738.8	33.381		
2,200.0	2,053.4	1,897.3	1,765.6	13.7	13.3	116.04	510.7	278.0	821.8	797.8	34.313		
2,300.0	2,140.4	1,977.2	1,832.2	14.5	13.5	116.18	549.1	299.6	882.0	856.8	35.125		
2,400.0	2,227.3	2,057.0	1,898.9	15.3	13.8	116.31	587.5	321.1	942.1	915.8	35.837		
2,500.0	2,314.3	2,136.9	1,965.5	16.2	14.1	116.42	625.8	342.6	1,002.3	974.8	36.464		
2,600.0	2,401.3	2,216.7	2,032.1	17.1	14.4	116.51	664.2	364.1	1,062.5	1,033.8	37.018		
2,700.0	2,488.2	2,296.6	2,098.8	18.0	14.8	116.60	702.6	385.7	1,122.7	1,092.7	37.506		
2,800.0	2,575.2	2,376.4	2,165.4	18.9	15.3	116.68	741.0	407.2	1,182.9	1,151.7	37.932		
2,900.0	2,662.2	2,456.3	2,232.1	19.8	16.0	116.75	779.3	428.7	1,243.0	1,210.6	38.327		
3,000.0	2,749.1	2,536.1	2,298.7	20.8	16.8	116.81	817.7	450.2	1,303.2	1,269.5	38.677		
3,100.0	2,836.1	2,616.0	2,365.3	21.7	17.5	116.87	856.1	471.7	1,363.4	1,328.5	38.991		
3,200.0	2,923.1	2,695.8	2,432.0	22.6	18.3	116.92	894.5	493.3	1,423.6	1,387.4	39.274		
3,300.0	3,010.0	2,775.7	2,498.6	23.5	19.0	116.97	932.8	514.8	1,483.8	1,446.3	39.530		
3,400.0	3,097.0	2,855.5	2,565.2	24.5	19.8	117.01	971.2	536.3	1,544.0	1,505.2	39.762		
3,500.0	3,184.0	2,935.4	2,631.9	25.4	20.5	117.06	1,009.6	557.8	1,604.2	1,564.1	39.974		
3,600.0	3,270.9	3,015.2	2,698.5	26.3	21.3	117.09	1,048.0	579.3	1,664.4	1,622.9	40.167		
3,700.0	3,357.9	3,095.1	2,765.1	27.2	22.0	117.13	1,086.3	600.9	1,724.6	1,681.8	40.344		
3,800.0	3,444.9	3,174.9	2,831.8	28.2	22.8	117.16	1,124.7	622.4	1,784.8	1,740.7	40.506		
3,900.0	3,531.8	3,254.8	2,898.4	29.1	23.5	117.19	1,163.1	643.9	1,845.0	1,799.6	40.655		
4,000.0	3,618.8	3,334.6	2,965.0	30.0	24.3	117.22	1,201.5	665.4	1,905.2	1,858.4	40.792		
4,100.0	3,705.8	3,414.5	3,031.7	31.0	25.1	117.25	1,239.8	686.9	1,965.3	1,917.3	40.919		
4,200.0	3,792.7	3,494.3	3,098.3	31.9	25.8	117.28	1,278.2	708.5	2,025.5	1,976.2	41.037		
4,300.0	3,879.7	3,574.2	3,164.9	32.8	26.6	117.30	1,316.6	730.0	2,085.7	2,035.0	41.146		
4,400.0	3,966.7	3,654.0	3,231.6	33.8	27.3	117.32	1,355.0	751.5	2,145.9	2,093.9	41.247		
4,500.0	4,053.6	3,733.9	3,298.2	34.7	28.1	117.35	1,393.4	773.0	2,206.1	2,152.8	41.341		
4,600.0	4,140.6	3,813.7	3,364.9	35.6	28.8	117.37	1,431.7	794.6	2,266.3	2,211.6	41.429		
4,700.0	4,227.6	3,893.6	3,431.5	36.6	29.6	117.39	1,470.1	816.1	2,326.5	2,270.5	41.511		
4,800.0	4,314.5	3,973.4	3,498.1	37.5	30.3	117.40	1,508.5	837.6	2,386.7	2,329.3	41.588		
4,900.0	4,401.5	4,053.3	3,564.8	38.4	31.1	117.42	1,546.9	859.1	2,446.9	2,388.2	41.660		
5,000.0	4,488.5	4,133.1	3,631.4	39.4	31.9	117.44	1,585.2	880.6	2,507.1	2,447.0	41.727		
5,100.0	4,575.4	4,213.0	3,698.0	40.3	32.6	117.45	1,623.6	902.2	2,567.3	2,505.9	41.791		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	4,662.4	4,292.8	3,764.7	41.2	33.4	117.47	1,662.0	923.7	2,627.5	2,564.7	41.850		
5,300.0	4,749.4	4,372.7	3,831.3	42.2	34.1	117.48	1,700.4	945.2	2,687.7	2,623.5	41.906		
5,400.0	4,836.3	4,452.5	3,897.9	43.1	34.9	117.50	1,738.7	966.7	2,747.9	2,682.4	41.959		
5,500.0	4,923.3	4,532.4	3,964.6	44.1	35.7	117.51	1,777.1	988.2	2,808.1	2,741.2	42.009		
5,600.0	5,011.1	4,612.7	4,031.6	45.0	36.4	118.92	1,815.7	1,009.9	2,867.6	2,799.4	42.055		
5,700.0	5,100.9	4,694.1	4,099.5	45.8	37.2	120.35	1,854.8	1,031.8	2,925.5	2,856.0	42.091		
5,800.0	5,192.5	4,776.5	4,168.3	46.5	38.0	121.60	1,894.4	1,054.0	2,981.6	2,910.8	42.124		
5,900.0	5,285.8	4,859.6	4,237.6	47.2	38.8	122.70	1,934.4	1,076.4	3,035.8	2,963.8	42.156		
6,000.0	5,380.5	4,943.4	4,307.6	47.7	39.6	123.64	1,974.6	1,099.0	3,088.0	3,014.8	42.188		
6,100.0	5,476.6	5,027.6	4,377.9	48.2	40.4	124.45	2,015.1	1,121.7	3,138.3	3,064.0	42.220		
6,200.0	5,573.7	5,112.2	4,448.4	48.6	41.2	125.13	2,055.8	1,144.5	3,186.6	3,111.2	42.255		
6,300.0	5,671.9	5,196.9	4,519.1	49.0	42.0	125.69	2,096.5	1,167.3	3,232.9	3,156.5	42.294		
6,400.0	5,770.7	5,281.6	4,589.8	49.2	42.8	126.14	2,137.2	1,190.2	3,277.1	3,199.7	42.339		
6,500.0	5,870.1	5,366.2	4,660.4	49.4	43.6	126.49	2,177.8	1,213.0	3,319.3	3,241.0	42.391		
6,600.0	5,969.9	5,450.4	4,730.6	49.5	44.4	126.76	2,218.3	1,235.7	3,359.5	3,280.4	42.454		
6,700.0	6,069.9	5,534.1	4,800.5	49.6	45.2	81.70	2,258.5	1,258.2	3,397.8	3,317.9	42.557		
6,800.0	6,169.9	6,987.4	6,169.9	49.6	52.2	76.24	2,616.2	1,458.8	3,417.4	3,325.4	37.139		
6,900.0	6,269.9	7,087.4	6,269.9	49.6	52.2	76.24	2,616.2	1,458.8	3,417.4	3,325.3	37.125		
7,000.0	6,369.9	7,187.4	6,369.9	49.7	52.3	76.24	2,616.2	1,458.8	3,417.4	3,325.3	37.110		
7,100.0	6,469.9	7,287.4	6,469.9	49.7	52.3	76.24	2,616.2	1,458.8	3,417.4	3,325.3	37.095		
7,200.0	6,569.9	7,387.4	6,569.9	49.7	52.3	76.24	2,616.2	1,458.8	3,417.4	3,325.2	37.080		
7,300.0	6,669.9	7,487.4	6,669.9	49.7	52.3	76.24	2,616.2	1,458.8	3,417.4	3,325.2	37.065		
7,400.0	6,769.9	7,587.4	6,769.9	49.7	52.3	76.24	2,616.2	1,458.8	3,417.4	3,325.2	37.050		
7,500.0	6,869.9	7,687.4	6,869.9	49.8	52.3	76.24	2,616.2	1,458.8	3,417.4	3,325.1	37.034		
7,600.0	6,969.9	7,787.4	6,969.9	49.8	52.3	76.24	2,616.2	1,458.8	3,417.4	3,325.1	37.019		
7,700.0	7,069.9	7,887.4	7,069.9	49.8	52.4	76.24	2,616.2	1,458.8	3,417.4	3,325.0	37.004		
7,800.0	7,169.9	7,987.4	7,169.9	49.8	52.4	76.24	2,616.2	1,458.8	3,417.4	3,325.0	36.988		
7,900.0	7,269.9	8,087.4	7,269.9	49.9	52.4	76.24	2,616.2	1,458.8	3,417.4	3,325.0	36.972		
8,000.0	7,369.9	8,187.4	7,369.9	49.9	52.4	76.24	2,616.2	1,458.8	3,417.4	3,324.9	36.957		
8,100.0	7,469.9	8,287.4	7,469.9	49.9	52.4	76.24	2,616.2	1,458.8	3,417.4	3,324.9	36.941		
8,200.0	7,569.9	8,387.4	7,569.9	49.9	52.5	76.24	2,616.2	1,458.8	3,417.4	3,324.8	36.925		
8,300.0	7,669.9	8,487.4	7,669.9	49.9	52.5	76.24	2,616.2	1,458.8	3,417.4	3,324.8	36.909		
8,400.0	7,769.9	8,587.4	7,769.9	50.0	52.5	76.24	2,616.2	1,458.8	3,417.4	3,324.8	36.893		
8,500.0	7,869.9	8,687.4	7,869.9	50.0	52.5	76.24	2,616.2	1,458.8	3,417.4	3,324.7	36.877		
8,600.0	7,969.9	8,787.4	7,969.9	50.0	52.5	76.24	2,616.2	1,458.8	3,417.4	3,324.7	36.860		
8,700.0	8,069.9	8,887.4	8,069.9	50.0	52.5	76.24	2,616.2	1,458.8	3,417.4	3,324.6	36.844		
8,800.0	8,169.9	8,987.4	8,169.9	50.1	52.6	76.24	2,616.2	1,458.8	3,417.4	3,324.6	36.827		
8,900.0	8,269.9	9,087.4	8,269.9	50.1	52.6	76.24	2,616.2	1,458.8	3,417.4	3,324.6	36.811		
9,000.0	8,369.9	9,187.4	8,369.9	50.1	52.6	76.24	2,616.2	1,458.8	3,417.4	3,324.5	36.794		
9,100.0	8,469.9	9,287.4	8,469.9	50.1	52.6	76.24	2,616.2	1,458.8	3,417.4	3,324.5	36.777		
9,200.0	8,569.9	9,387.4	8,569.9	50.2	52.6	76.24	2,616.2	1,458.8	3,417.4	3,324.4	36.760		
9,287.1	8,657.0	9,474.5	8,657.0	50.2	52.6	76.24	2,616.2	1,458.8	3,417.4	3,324.4	36.747		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	43.28	7.3	6.9	10.0				
100.0	100.0	100.0	100.0	0.8	0.8	43.28	7.3	6.9	10.0	8.4	6.316		
200.0	200.0	200.0	200.0	1.4	1.4	43.28	7.3	6.9	10.0	7.2	3.537	CC, ES	
300.0	300.0	299.5	299.5	1.7	2.5	112.78	9.1	8.1	12.3	8.2	2.994	SF	
400.0	399.9	398.5	398.2	2.8	4.0	119.49	14.4	11.7	20.3	14.2	3.331		
500.0	499.6	496.3	495.4	4.2	5.1	125.97	23.1	17.6	34.8	26.9	4.414		
600.0	598.8	592.3	590.4	4.5	6.0	125.09	35.0	25.7	55.8	46.8	6.218		
700.0	697.5	686.4	682.7	5.2	6.8	122.06	49.8	35.7	81.4	71.3	8.049		
800.0	795.4	778.3	772.2	6.1	7.5	120.47	67.4	47.6	111.5	100.3	9.963		
900.0	892.4	867.9	858.5	6.9	8.1	119.51	87.3	61.1	146.0	133.8	12.021		
1,000.0	988.3	954.9	941.3	7.6	8.7	118.80	109.3	76.0	184.7	171.6	14.159		
1,100.0	1,082.8	1,039.2	1,020.6	8.3	9.3	118.19	133.0	92.1	227.4	213.5	16.351		
1,200.0	1,175.9	1,120.7	1,096.1	9.0	9.8	117.59	158.3	109.2	274.0	259.2	18.568		
1,300.0	1,267.4	1,200.0	1,168.6	9.7	10.3	116.97	185.0	127.4	324.3	308.7	20.763		
1,400.0	1,357.0	1,274.8	1,235.8	10.3	10.8	116.25	212.1	145.7	378.0	361.5	22.973		
1,500.0	1,444.6	1,347.4	1,300.0	10.8	11.2	115.88	240.1	164.7	435.0	417.7	25.155		
1,600.0	1,531.6	1,419.3	1,362.6	11.1	11.6	116.96	269.5	184.6	494.2	476.1	27.244		
1,700.0	1,618.6	1,499.1	1,431.6	11.5	11.9	117.83	302.6	207.1	554.2	535.1	29.045		
1,800.0	1,705.5	1,578.9	1,500.6	11.8	12.2	118.53	335.8	229.6	614.2	594.2	30.683		
1,900.0	1,792.5	1,658.6	1,569.5	12.2	12.5	119.11	369.0	252.1	674.3	653.3	32.116		
2,000.0	1,879.5	1,738.4	1,638.5	12.6	12.7	119.59	402.2	274.6	734.4	712.4	33.371		
2,100.0	1,966.4	1,818.2	1,707.5	13.1	13.0	120.00	435.4	297.1	794.6	771.5	34.471		
2,200.0	2,053.4	1,898.0	1,776.4	13.7	13.3	120.35	468.6	319.6	854.7	830.6	35.438		
2,300.0	2,140.4	1,977.7	1,845.4	14.5	13.6	120.66	501.8	342.1	914.9	889.7	36.288		
2,400.0	2,227.3	2,057.5	1,914.4	15.3	13.9	120.92	535.0	364.6	975.1	948.8	37.040		
2,500.0	2,314.3	2,137.3	1,983.3	16.2	14.2	121.16	568.1	387.1	1,035.3	1,007.8	37.708		
2,600.0	2,401.3	2,217.1	2,052.3	17.1	14.5	121.37	601.3	409.6	1,095.5	1,066.9	38.302		
2,700.0	2,488.2	2,296.8	2,121.3	18.0	14.8	121.56	634.5	432.1	1,155.7	1,126.0	38.833		
2,800.0	2,575.2	2,376.6	2,190.2	18.9	15.2	121.73	667.7	454.6	1,216.0	1,185.0	39.308		
2,900.0	2,662.2	2,456.4	2,259.2	19.8	15.6	121.89	700.9	477.1	1,276.2	1,244.1	39.733		
3,000.0	2,749.1	2,536.2	2,328.2	20.8	16.3	122.03	734.1	499.6	1,336.4	1,303.1	40.120		
3,100.0	2,836.1	2,616.0	2,397.1	21.7	16.9	122.15	767.3	522.1	1,396.7	1,362.2	40.469		
3,200.0	2,923.1	2,695.7	2,466.1	22.6	17.6	122.27	800.5	544.6	1,456.9	1,421.2	40.786		
3,300.0	3,010.0	2,775.5	2,535.1	23.5	18.3	122.38	833.7	567.1	1,517.2	1,480.3	41.073		
3,400.0	3,097.0	2,855.3	2,604.0	24.5	19.0	122.48	866.8	589.6	1,577.5	1,539.3	41.336		
3,500.0	3,184.0	2,935.1	2,673.0	25.4	19.7	122.57	900.0	612.1	1,637.7	1,598.3	41.576		
3,600.0	3,270.9	3,014.8	2,742.0	26.3	20.4	122.66	933.2	634.6	1,698.0	1,657.4	41.797		
3,700.0	3,357.9	3,094.6	2,810.9	27.2	21.1	122.74	966.4	657.1	1,758.3	1,716.4	41.999		
3,800.0	3,444.9	3,174.4	2,879.9	28.2	21.8	122.81	999.6	679.6	1,818.5	1,775.4	42.186		
3,900.0	3,531.8	3,254.2	2,948.9	29.1	22.5	122.88	1,032.8	702.1	1,878.8	1,834.4	42.358		
4,000.0	3,618.8	3,333.9	3,017.8	30.0	23.1	122.95	1,066.0	724.6	1,939.1	1,893.5	42.517		
4,100.0	3,705.8	3,413.7	3,086.8	31.0	23.8	123.01	1,099.2	747.1	1,999.3	1,952.5	42.665		
4,200.0	3,792.7	3,493.5	3,155.8	31.9	24.5	123.07	1,132.3	769.6	2,059.6	2,011.5	42.802		
4,300.0	3,879.7	3,573.3	3,224.7	32.8	25.2	123.13	1,165.5	792.1	2,119.9	2,070.5	42.930		
4,400.0	3,966.7	3,653.0	3,293.7	33.8	25.9	123.18	1,198.7	814.6	2,180.2	2,129.5	43.049		
4,500.0	4,053.6	3,732.8	3,362.7	34.7	26.6	123.23	1,231.9	837.1	2,240.4	2,188.5	43.160		
4,600.0	4,140.6	3,812.6	3,431.6	35.6	27.3	123.27	1,265.1	859.6	2,300.7	2,247.5	43.264		
4,700.0	4,227.6	3,892.4	3,500.6	36.6	28.0	123.32	1,298.3	882.1	2,361.0	2,306.6	43.361		
4,800.0	4,314.5	3,972.1	3,569.6	37.5	28.7	123.36	1,331.5	904.6	2,421.3	2,365.6	43.452		
4,900.0	4,401.5	4,051.9	3,638.5	38.4	29.4	123.40	1,364.7	927.1	2,481.6	2,424.6	43.538		
5,000.0	4,488.5	4,131.7	3,707.5	39.4	30.1	123.44	1,397.8	949.6	2,541.9	2,483.6	43.618		
5,100.0	4,575.4	4,211.5	3,776.5	40.3	30.8	123.47	1,431.0	972.1	2,602.1	2,542.6	43.694		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	4,662.4	4,291.2	3,845.4	41.2	31.5	123.51	1,464.2	994.6	2,662.4	2,601.6	43.765		
5,300.0	4,749.4	4,371.0	3,914.4	42.2	32.2	123.54	1,497.4	1,017.1	2,722.7	2,660.6	43.833		
5,400.0	4,836.3	4,450.8	3,983.4	43.1	32.9	123.57	1,530.6	1,039.6	2,783.0	2,719.6	43.896		
5,500.0	4,923.3	4,530.6	4,052.4	44.1	33.6	123.60	1,563.8	1,062.1	2,843.3	2,778.6	43.956		
5,600.0	5,011.1	4,610.9	4,121.8	45.0	34.3	124.94	1,597.2	1,084.8	2,902.8	2,836.8	44.007		
5,700.0	5,100.9	4,692.6	4,192.4	45.8	35.0	126.28	1,631.2	1,107.8	2,960.3	2,893.1	44.033		
5,800.0	5,192.5	4,775.6	4,264.1	46.5	35.7	127.44	1,665.7	1,131.2	3,015.7	2,947.2	44.044		
5,900.0	5,285.8	4,859.5	4,336.7	47.2	36.4	128.45	1,700.6	1,154.9	3,068.9	2,999.2	44.044		
6,000.0	5,380.5	4,944.4	4,410.1	47.7	37.2	129.30	1,736.0	1,178.8	3,119.8	3,049.0	44.034		
6,100.0	5,476.6	5,030.1	4,484.2	48.2	37.9	130.02	1,771.6	1,203.0	3,168.5	3,096.5	44.016		
6,200.0	5,573.7	5,116.3	4,558.7	48.6	38.7	130.60	1,807.4	1,227.3	3,214.7	3,141.6	43.993		
6,300.0	5,671.9	5,202.9	4,633.6	49.0	39.4	131.07	1,843.5	1,251.7	3,258.6	3,184.5	43.966		
6,400.0	5,770.7	5,289.7	4,708.7	49.2	40.2	131.43	1,879.6	1,276.2	3,300.1	3,225.0	43.937		
6,500.0	5,870.1	5,376.7	4,783.8	49.4	41.0	131.69	1,915.8	1,300.7	3,339.2	3,263.1	43.908		
6,600.0	5,969.9	5,463.5	4,858.9	49.5	41.7	131.86	1,951.9	1,325.2	3,375.9	3,299.0	43.885		
6,700.0	6,069.9	5,550.1	4,933.8	49.6	42.5	86.71	1,987.9	1,349.7	3,410.3	3,332.6	43.908		
6,800.0	6,169.9	6,845.2	6,169.9	49.6	48.1	82.38	2,257.1	1,532.2	3,422.9	3,334.7	38.811		
6,900.0	6,269.9	6,945.2	6,269.9	49.6	48.1	82.38	2,257.1	1,532.2	3,422.9	3,334.6	38.794		
7,000.0	6,369.9	7,045.2	6,369.9	49.7	48.1	82.38	2,257.1	1,532.2	3,422.9	3,334.6	38.777		
7,100.0	6,469.9	7,145.2	6,469.9	49.7	48.2	82.38	2,257.1	1,532.2	3,422.9	3,334.6	38.760		
7,200.0	6,569.9	7,245.2	6,569.9	49.7	48.2	82.38	2,257.1	1,532.2	3,422.9	3,334.5	38.743		
7,300.0	6,669.9	7,345.2	6,669.9	49.7	48.2	82.38	2,257.1	1,532.2	3,422.9	3,334.5	38.726		
7,400.0	6,769.9	7,445.2	6,769.9	49.7	48.2	82.38	2,257.1	1,532.2	3,422.9	3,334.4	38.708		
7,500.0	6,869.9	7,545.2	6,869.9	49.8	48.2	82.38	2,257.1	1,532.2	3,422.9	3,334.4	38.691		
7,600.0	6,969.9	7,645.2	6,969.9	49.8	48.3	82.38	2,257.1	1,532.2	3,422.9	3,334.4	38.674		
7,700.0	7,069.9	7,745.2	7,069.9	49.8	48.3	82.38	2,257.1	1,532.2	3,422.9	3,334.3	38.656		
7,800.0	7,169.9	7,845.2	7,169.9	49.8	48.3	82.38	2,257.1	1,532.2	3,422.9	3,334.3	38.638		
7,900.0	7,269.9	7,945.2	7,269.9	49.9	48.3	82.38	2,257.1	1,532.2	3,422.9	3,334.2	38.621		
8,000.0	7,369.9	8,045.2	7,369.9	49.9	48.3	82.38	2,257.1	1,532.2	3,422.9	3,334.2	38.603		
8,100.0	7,469.9	8,145.2	7,469.9	49.9	48.4	82.38	2,257.1	1,532.2	3,422.9	3,334.2	38.585		
8,200.0	7,569.9	8,245.2	7,569.9	49.9	48.4	82.38	2,257.1	1,532.2	3,422.9	3,334.1	38.567		
8,300.0	7,669.9	8,345.2	7,669.9	49.9	48.4	82.38	2,257.1	1,532.2	3,422.9	3,334.1	38.548		
8,400.0	7,769.9	8,445.2	7,769.9	50.0	48.4	82.38	2,257.1	1,532.2	3,422.9	3,334.0	38.530		
8,500.0	7,869.9	8,545.2	7,869.9	50.0	48.4	82.38	2,257.1	1,532.2	3,422.9	3,334.0	38.513		
8,600.0	7,969.9	8,561.3	7,886.0	50.0	48.4	82.38	2,257.1	1,532.2	3,423.9	3,335.0	38.508		
8,700.0	8,069.9	8,561.3	7,886.0	50.0	48.4	82.38	2,257.1	1,532.2	3,427.8	3,338.9	38.558		
8,800.0	8,169.9	8,561.3	7,886.0	50.1	48.4	82.38	2,257.1	1,532.2	3,434.6	3,345.8	38.666		
8,900.0	8,269.9	8,561.3	7,886.0	50.1	48.4	82.38	2,257.1	1,532.2	3,444.3	3,355.6	38.832		
9,000.0	8,369.9	8,561.3	7,886.0	50.1	48.4	82.38	2,257.1	1,532.2	3,456.9	3,368.4	39.055		
9,100.0	8,469.9	8,561.3	7,886.0	50.1	48.4	82.38	2,257.1	1,532.2	3,472.3	3,384.0	39.334		
9,200.0	8,569.9	8,561.3	7,886.0	50.2	48.4	82.38	2,257.1	1,532.2	3,490.5	3,402.5	39.669		
9,287.1	8,657.0	8,561.3	7,886.0	50.2	48.4	82.38	2,257.1	1,532.2	3,508.6	3,420.9	40.006		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	88.28	0.4	14.2	14.2					
100.0	100.0	100.0	100.0	0.8	0.8	88.28	0.4	14.2	14.2	12.6	8.945			
200.0	200.0	200.0	200.0	1.4	1.4	88.28	0.4	14.2	14.2	11.3	5.009	CC		
204.4	204.4	204.4	204.4	1.4	1.4	158.28	0.4	14.2	14.2	11.3	4.980	ES		
300.0	300.0	299.6	299.6	1.7	1.9	155.55	1.3	15.0	15.3	11.9	4.437			
400.0	399.9	398.7	398.5	2.8	3.3	150.63	5.0	18.9	22.9	17.3	4.087	SF		
500.0	499.6	496.5	495.8	4.2	4.6	148.01	11.7	25.6	37.9	30.1	4.831			
600.0	598.8	592.3	590.7	4.5	5.6	141.97	21.0	35.1	59.8	50.8	6.669			
700.0	697.5	686.0	682.9	5.2	6.4	136.12	32.8	47.2	87.0	76.8	8.550			
800.0	795.4	777.2	771.8	6.1	7.1	132.83	46.7	61.5	119.3	108.0	10.492			
900.0	892.4	865.6	857.2	6.9	7.8	130.73	62.7	77.7	156.6	144.2	12.603			
1,000.0	988.3	950.9	938.8	7.6	8.4	129.21	80.2	95.6	198.6	185.2	14.831			
1,100.0	1,082.8	1,033.0	1,016.4	8.3	9.0	127.98	99.1	114.9	245.0	230.8	17.146			
1,200.0	1,175.9	1,111.7	1,089.8	9.0	9.5	126.88	119.0	135.2	295.8	280.6	19.525			
1,300.0	1,267.4	1,187.0	1,159.0	9.7	10.0	125.82	139.6	156.3	350.6	334.6	21.941			
1,400.0	1,357.0	1,258.7	1,224.0	10.3	10.4	124.75	160.8	177.9	409.2	392.4	24.370			
1,500.0	1,444.6	1,327.0	1,285.0	10.8	10.8	124.07	182.3	199.8	471.3	453.7	26.879			
1,600.0	1,531.6	1,392.7	1,342.8	11.1	11.2	124.98	204.1	222.1	535.6	517.4	29.366			
1,700.0	1,618.6	1,456.3	1,397.9	11.5	11.5	125.54	226.4	244.8	601.6	582.7	31.860			
1,800.0	1,705.5	1,528.1	1,459.4	11.8	11.7	125.95	252.3	271.3	668.6	649.0	34.018			
1,900.0	1,792.5	1,602.2	1,522.9	12.2	12.0	126.29	279.1	298.6	735.7	715.2	35.886			
2,000.0	1,879.5	1,676.3	1,586.3	12.6	12.2	126.57	305.8	326.0	802.7	781.4	37.522			
2,100.0	1,966.4	1,750.4	1,649.8	13.1	12.5	126.82	332.6	353.3	869.8	847.5	38.977			
2,200.0	2,053.4	1,824.6	1,713.3	13.7	12.7	127.02	359.4	380.7	936.9	913.7	40.274			
2,300.0	2,140.4	1,898.7	1,776.7	14.5	13.0	127.20	386.2	408.0	1,004.0	979.8	41.431			
2,400.0	2,227.3	1,972.8	1,840.2	15.3	13.3	127.36	413.0	435.4	1,071.1	1,045.9	42.456			
2,500.0	2,314.3	2,046.9	1,903.7	16.2	13.6	127.50	439.8	462.7	1,138.2	1,112.0	43.375			
2,600.0	2,401.3	2,121.0	1,967.1	17.1	13.8	127.62	466.6	490.1	1,205.3	1,178.0	44.202			
2,700.0	2,488.2	2,195.1	2,030.6	18.0	14.1	127.73	493.3	517.4	1,272.4	1,244.1	44.947			
2,800.0	2,575.2	2,269.3	2,094.1	18.9	14.4	127.83	520.1	544.8	1,339.5	1,310.2	45.604			
2,900.0	2,662.2	2,343.4	2,157.6	19.8	14.9	127.92	546.9	572.1	1,406.6	1,376.2	46.240			
3,000.0	2,749.1	2,417.5	2,221.0	20.8	15.6	128.00	573.7	599.4	1,473.8	1,442.2	46.771			
3,100.0	2,836.1	2,491.6	2,284.5	21.7	16.3	128.08	600.5	626.8	1,540.9	1,508.3	47.269			
3,200.0	2,923.1	2,565.7	2,348.0	22.6	17.0	128.15	627.3	654.1	1,608.0	1,574.3	47.723			
3,300.0	3,010.0	2,639.9	2,411.4	23.5	17.7	128.21	654.1	681.5	1,675.1	1,640.3	48.137			
3,400.0	3,097.0	2,714.0	2,474.9	24.5	18.4	128.27	680.8	708.8	1,742.2	1,706.3	48.516			
3,500.0	3,184.0	2,788.1	2,538.4	25.4	19.0	128.32	707.6	736.2	1,809.3	1,772.3	48.864			
3,600.0	3,270.9	2,862.2	2,601.8	26.3	19.7	128.37	734.4	763.5	1,876.5	1,838.3	49.184			
3,700.0	3,357.9	2,936.3	2,665.3	27.2	20.4	128.42	761.2	790.9	1,943.6	1,904.3	49.479			
3,800.0	3,444.9	3,010.4	2,728.8	28.2	21.1	128.46	788.0	818.2	2,010.7	1,970.3	49.751			
3,900.0	3,531.8	3,084.6	2,792.2	29.1	21.8	128.50	814.8	845.6	2,077.8	2,036.3	50.003			
4,000.0	3,618.8	3,158.7	2,855.7	30.0	22.5	128.54	841.5	872.9	2,144.9	2,102.2	50.236			
4,100.0	3,705.8	3,232.8	2,919.2	31.0	23.2	128.57	868.3	900.3	2,212.1	2,168.2	50.453			
4,200.0	3,792.7	3,306.9	2,982.6	31.9	23.9	128.61	895.1	927.6	2,279.2	2,234.2	50.655			
4,300.0	3,879.7	3,381.0	3,046.1	32.8	24.5	128.64	921.9	955.0	2,346.3	2,300.2	50.842			
4,400.0	3,966.7	3,455.2	3,109.6	33.8	25.2	128.67	948.7	982.3	2,413.4	2,366.1	51.018			
4,500.0	4,053.6	3,529.3	3,173.0	34.7	25.9	128.70	975.5	1,009.6	2,480.6	2,432.1	51.181			
4,600.0	4,140.6	3,603.4	3,236.5	35.6	26.6	128.72	1,002.3	1,037.0	2,547.7	2,498.1	51.335			
4,700.0	4,227.6	3,677.5	3,300.0	36.6	27.3	128.75	1,029.0	1,064.3	2,614.8	2,564.0	51.478			
4,800.0	4,314.5	3,751.6	3,363.5	37.5	28.0	128.77	1,055.8	1,091.7	2,681.9	2,630.0	51.613			
4,900.0	4,401.5	3,825.7	3,426.9	38.4	28.7	128.80	1,082.6	1,119.0	2,749.1	2,695.9	51.739			
5,000.0	4,488.5	3,899.9	3,490.4	39.4	29.4	128.82	1,109.4	1,146.4	2,816.2	2,761.9	51.859			

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	4,575.4	3,974.0	3,553.9	40.3	30.1	128.84	1,136.2	1,173.7	2,883.3	2,827.8	51.970		
5,200.0	4,662.4	4,048.1	3,617.3	41.2	30.8	128.86	1,163.0	1,201.1	2,950.4	2,893.8	52.076		
5,300.0	4,749.4	4,122.2	3,680.8	42.2	31.5	128.88	1,189.8	1,228.4	3,017.6	2,959.7	52.176		
5,400.0	4,836.3	4,196.3	3,744.3	43.1	32.2	128.90	1,216.5	1,255.8	3,084.7	3,025.7	52.270		
5,500.0	4,923.3	4,270.5	3,807.7	44.1	32.8	128.91	1,243.3	1,283.1	3,151.8	3,091.6	52.359		
5,600.0	5,011.1	4,345.3	3,871.8	45.0	33.5	130.40	1,270.4	1,310.7	3,218.1	3,156.8	52.433		
5,700.0	5,100.9	4,421.8	3,937.4	45.8	34.3	131.88	1,298.0	1,339.0	3,282.3	3,219.8	52.465		
5,800.0	5,192.5	4,500.0	4,004.3	46.5	35.0	133.18	1,326.3	1,367.8	3,344.3	3,280.6	52.472		
5,900.0	5,285.8	4,579.6	4,072.5	47.2	35.7	134.30	1,355.0	1,397.2	3,403.9	3,339.0	52.459		
6,000.0	5,380.5	4,660.5	4,141.8	47.7	36.5	135.27	1,384.3	1,427.0	3,461.1	3,395.0	52.429		
6,100.0	5,476.6	4,742.6	4,212.0	48.2	37.3	136.09	1,413.9	1,457.3	3,515.7	3,448.6	52.384		
6,200.0	5,573.7	4,825.6	4,283.1	48.6	38.0	136.78	1,444.0	1,487.9	3,567.8	3,499.7	52.327		
6,300.0	5,671.9	4,909.5	4,355.0	49.0	38.8	137.35	1,474.3	1,518.9	3,617.3	3,548.1	52.261		
6,400.0	5,770.7	4,994.1	4,427.4	49.2	39.6	137.81	1,504.8	1,550.1	3,664.2	3,594.0	52.188		
6,500.0	5,870.1	5,079.1	4,500.2	49.4	40.4	138.16	1,535.6	1,581.5	3,708.3	3,637.2	52.112		
6,600.0	5,969.9	5,164.5	4,573.3	49.5	41.2	138.42	1,566.4	1,613.0	3,749.8	3,677.8	52.039		
6,700.0	6,069.9	5,250.1	4,646.6	49.6	42.0	93.36	1,597.4	1,644.6	3,788.6	3,715.8	52.032		
6,800.0	6,169.9	5,335.7	4,720.0	49.6	42.8	92.83	1,628.3	1,676.2	3,826.3	3,752.8	52.049		
6,900.0	6,269.9	5,421.4	4,793.3	49.6	43.6	92.31	1,659.2	1,707.7	3,864.4	3,790.2	52.088		
7,000.0	6,369.9	5,508.3	4,866.6	49.7	51.0	87.86	1,947.9	2,002.5	3,865.7	3,778.4	44.275		
7,100.0	6,469.9	5,595.2	4,940.0	49.7	51.0	87.86	1,947.9	2,002.5	3,865.7	3,778.3	44.256		
7,200.0	6,569.9	5,681.9	5,012.7	49.7	51.0	87.86	1,947.9	2,002.5	3,865.7	3,778.3	44.236		
7,300.0	6,669.9	5,768.6	5,085.4	49.7	51.0	87.86	1,947.9	2,002.5	3,865.7	3,778.3	44.216		
7,400.0	6,769.9	5,855.3	5,158.1	49.7	51.0	87.86	1,947.9	2,002.5	3,865.7	3,778.2	44.196		
7,500.0	6,869.9	5,941.9	5,230.8	49.8	51.1	87.86	1,947.9	2,002.5	3,865.7	3,778.2	44.175		
7,600.0	6,969.9	6,028.6	5,303.5	49.8	51.1	87.86	1,947.9	2,002.5	3,865.7	3,778.1	44.155		
7,700.0	7,069.9	6,115.3	5,376.2	49.8	51.1	87.86	1,947.9	2,002.5	3,865.7	3,778.1	44.135		
7,800.0	7,169.9	6,201.9	5,448.9	49.8	51.1	87.86	1,947.9	2,002.5	3,865.7	3,778.1	44.114		
7,900.0	7,269.9	6,288.6	5,521.6	49.9	51.1	87.86	1,947.9	2,002.5	3,865.7	3,778.0	44.093		
8,000.0	7,369.9	6,375.3	5,594.3	49.9	51.2	87.86	1,947.9	2,002.5	3,865.7	3,778.0	44.072		
8,100.0	7,469.9	6,461.9	5,667.0	49.9	51.2	87.86	1,947.9	2,002.5	3,865.7	3,777.9	44.052		
8,200.0	7,569.9	6,548.6	5,739.7	49.9	51.2	87.86	1,947.9	2,002.5	3,865.7	3,777.9	44.030		
8,300.0	7,669.9	6,635.3	5,812.4	49.9	51.2	87.86	1,947.9	2,002.5	3,865.7	3,777.8	44.009		
8,400.0	7,769.9	6,721.9	5,885.1	50.0	51.2	87.86	1,947.9	2,002.5	3,865.7	3,777.8	43.988		
8,500.0	7,869.9	6,808.6	5,957.8	50.0	51.3	87.86	1,947.9	2,002.5	3,865.7	3,777.8	43.966		
8,600.0	7,969.9	6,895.3	6,030.5	50.0	51.3	87.86	1,947.9	2,002.5	3,865.7	3,777.7	43.945		
8,700.0	8,069.9	6,981.9	6,103.2	50.0	51.3	87.86	1,947.9	2,002.5	3,865.7	3,777.7	43.923		
8,800.0	8,169.9	7,068.6	6,175.9	50.1	51.3	87.86	1,947.9	2,002.5	3,865.7	3,777.6	43.901		
8,900.0	8,269.9	7,155.3	6,248.6	50.1	51.3	87.86	1,947.9	2,002.5	3,865.7	3,777.6	43.879		
9,000.0	8,369.9	7,241.9	6,321.3	50.1	51.4	87.86	1,947.9	2,002.5	3,865.7	3,777.5	43.857		
9,100.0	8,469.9	7,328.6	6,394.0	50.1	51.4	87.86	1,947.9	2,002.5	3,865.7	3,777.5	43.835		
9,200.0	8,569.9	7,415.3	6,466.7	50.2	51.4	87.86	1,947.9	2,002.5	3,865.7	3,777.5	43.813		
9,287.1	8,657.0	7,501.9	6,539.4	50.2	51.4	87.86	1,947.9	2,002.5	3,865.7	3,777.4	43.795		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	106.70	-6.4	21.4	22.4				
100.0	100.0	100.0	100.0	0.8	0.8	106.70	-6.4	21.4	22.4	20.8	14.129		
200.0	200.0	200.0	200.0	1.4	1.4	106.70	-6.4	21.4	22.4	19.6	7.911	CC	
204.4	204.4	204.4	204.4	1.4	1.4	176.70	-6.4	21.4	22.4	19.5	7.869	ES	
300.0	300.0	299.5	299.5	1.7	2.1	173.59	-5.4	22.6	23.6	20.0	6.587		
400.0	399.9	398.4	398.2	2.8	3.6	165.73	-1.8	27.1	31.0	25.3	5.435	SF	
500.0	499.6	495.9	495.2	4.2	4.8	159.24	4.5	34.7	46.2	38.2	5.755		
600.0	598.8	591.3	589.6	4.5	5.7	150.38	13.2	45.2	68.8	59.6	7.510		
700.0	697.5	684.4	681.2	5.2	6.5	142.73	24.0	58.4	97.1	86.7	9.346		
800.0	795.4	774.9	769.3	6.1	7.2	138.31	36.8	74.0	130.9	119.3	11.256		
900.0	892.4	862.3	853.7	6.9	7.9	135.46	51.3	91.6	169.8	157.1	13.363		
1,000.0	988.3	946.4	934.1	7.6	8.5	133.42	67.1	110.8	213.5	199.9	15.607		
1,100.0	1,082.8	1,027.1	1,010.2	8.3	9.0	131.81	84.0	131.4	262.0	247.4	17.957		
1,200.0	1,175.9	1,100.0	1,078.2	9.0	9.5	130.37	100.8	151.8	314.8	299.4	20.503		
1,300.0	1,267.4	1,177.6	1,149.5	9.7	10.0	129.14	120.1	175.2	371.7	355.5	22.868		
1,400.0	1,357.0	1,247.2	1,212.7	10.3	10.4	127.87	138.8	197.9	432.5	415.5	25.380		
1,500.0	1,444.6	1,313.1	1,271.6	10.8	10.8	127.02	157.6	220.7	496.9	479.1	28.039		
1,600.0	1,531.6	1,380.4	1,330.9	11.1	11.0	127.92	177.7	245.2	563.4	545.1	30.771		
1,700.0	1,618.6	1,454.4	1,395.9	11.5	11.3	128.67	200.2	272.5	630.3	611.3	33.094		
1,800.0	1,705.5	1,528.5	1,461.0	11.8	11.5	129.29	222.6	299.8	697.3	677.5	35.171		
1,900.0	1,792.5	1,602.6	1,526.1	12.2	11.7	129.79	245.1	327.1	764.3	743.7	37.026		
2,000.0	1,879.5	1,676.6	1,591.2	12.6	12.0	130.21	267.6	354.4	831.4	809.9	38.675		
2,100.0	1,966.4	1,750.7	1,656.3	13.1	12.3	130.57	290.0	381.7	898.4	876.1	40.153		
2,200.0	2,053.4	1,824.8	1,721.4	13.7	12.5	130.88	312.5	409.0	965.5	942.2	41.480		
2,300.0	2,140.4	1,898.8	1,786.5	14.5	12.8	131.15	334.9	436.3	1,032.6	1,008.4	42.672		
2,400.0	2,227.3	1,972.9	1,851.6	15.3	13.1	131.39	357.4	463.6	1,099.7	1,074.6	43.736		
2,500.0	2,314.3	2,047.0	1,916.7	16.2	13.4	131.60	379.8	490.9	1,166.8	1,140.7	44.697		
2,600.0	2,401.3	2,121.0	1,981.8	17.1	13.7	131.79	402.3	518.2	1,233.9	1,206.9	45.566		
2,700.0	2,488.2	2,195.1	2,046.9	18.0	14.0	131.95	424.7	545.4	1,301.1	1,273.0	46.354		
2,800.0	2,575.2	2,269.2	2,112.0	18.9	14.3	132.10	447.2	572.7	1,368.2	1,339.1	47.061		
2,900.0	2,662.2	2,343.2	2,177.0	19.8	14.6	132.24	469.7	600.0	1,435.4	1,405.3	47.698		
3,000.0	2,749.1	2,417.3	2,242.1	20.8	15.2	132.37	492.1	627.3	1,502.5	1,471.4	48.308		
3,100.0	2,836.1	2,491.4	2,307.2	21.7	15.8	132.48	514.6	654.6	1,569.6	1,537.5	48.845		
3,200.0	2,923.1	2,565.4	2,372.3	22.6	16.4	132.59	537.0	681.9	1,636.8	1,603.6	49.338		
3,300.0	3,010.0	2,639.5	2,437.4	23.5	17.1	132.68	559.5	709.2	1,703.9	1,669.7	49.789		
3,400.0	3,097.0	2,713.6	2,502.5	24.5	17.7	132.77	581.9	736.5	1,771.1	1,735.8	50.205		
3,500.0	3,184.0	2,787.7	2,567.6	25.4	18.3	132.85	604.4	763.8	1,838.3	1,801.9	50.588		
3,600.0	3,270.9	2,861.7	2,632.7	26.3	19.0	132.93	626.9	791.1	1,905.4	1,868.0	50.942		
3,700.0	3,357.9	2,935.8	2,697.8	27.2	19.6	133.00	649.3	818.4	1,972.6	1,934.1	51.269		
3,800.0	3,444.9	3,009.9	2,762.9	28.2	20.2	133.07	671.8	845.6	2,039.7	2,000.2	51.572		
3,900.0	3,531.8	3,083.9	2,828.0	29.1	20.9	133.13	694.2	872.9	2,106.9	2,066.3	51.853		
4,000.0	3,618.8	3,158.0	2,893.1	30.0	21.5	133.19	716.7	900.2	2,174.1	2,132.4	52.115		
4,100.0	3,705.8	3,232.1	2,958.2	31.0	22.2	133.25	739.1	927.5	2,241.2	2,198.4	52.358		
4,200.0	3,792.7	3,306.1	3,023.2	31.9	22.8	133.30	761.6	954.8	2,308.4	2,264.5	52.586		
4,300.0	3,879.7	3,380.2	3,088.3	32.8	23.4	133.35	784.1	982.1	2,375.6	2,330.6	52.798		
4,400.0	3,966.7	3,454.3	3,153.4	33.8	24.1	133.39	806.5	1,009.4	2,442.8	2,396.7	52.997		
4,500.0	4,053.6	3,528.3	3,218.5	34.7	24.7	133.44	829.0	1,036.7	2,509.9	2,462.7	53.183		
4,600.0	4,140.6	3,602.4	3,283.6	35.6	25.4	133.48	851.4	1,064.0	2,577.1	2,528.8	53.358		
4,700.0	4,227.6	3,676.5	3,348.7	36.6	26.0	133.52	873.9	1,091.3	2,644.3	2,594.9	53.522		
4,800.0	4,314.5	3,750.5	3,413.8	37.5	26.6	133.56	896.3	1,118.6	2,711.4	2,660.9	53.677		
4,900.0	4,401.5	3,824.6	3,478.9	38.4	27.3	133.59	918.8	1,145.9	2,778.6	2,727.0	53.822		
5,000.0	4,488.5	3,898.7	3,544.0	39.4	27.9	133.63	941.2	1,173.1	2,845.8	2,793.0	53.959		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	4,575.4	3,972.7	3,609.1	40.3	28.6	133.66	963.7	1,200.4	2,913.0	2,859.1	54.089		
5,200.0	4,662.4	4,046.8	3,674.2	41.2	29.2	133.69	986.2	1,227.7	2,980.1	2,925.2	54.211		
5,300.0	4,749.4	4,120.9	3,739.3	42.2	29.8	133.72	1,008.6	1,255.0	3,047.3	2,991.2	54.327		
5,400.0	4,836.3	4,194.9	3,804.4	43.1	30.5	133.75	1,031.1	1,282.3	3,114.5	3,057.3	54.436		
5,500.0	4,923.3	4,269.0	3,869.4	44.1	31.1	133.78	1,053.5	1,309.6	3,181.7	3,123.3	54.540		
5,600.0	5,011.1	4,343.9	3,935.2	45.0	31.8	135.16	1,076.2	1,337.2	3,248.0	3,188.5	54.623		
5,700.0	5,100.9	4,420.7	4,002.7	45.8	32.4	136.54	1,099.5	1,365.5	3,311.9	3,251.3	54.648		
5,800.0	5,192.5	4,499.3	4,071.8	46.5	33.1	137.73	1,123.3	1,394.4	3,373.4	3,311.7	54.636		
5,900.0	5,285.8	4,579.5	4,142.3	47.2	33.8	138.76	1,147.7	1,424.0	3,432.4	3,369.5	54.596		
6,000.0	5,380.5	4,661.2	4,214.1	47.7	34.5	139.63	1,172.5	1,454.1	3,488.7	3,424.7	54.529		
6,100.0	5,476.6	4,744.3	4,287.2	48.2	35.2	140.36	1,197.6	1,484.7	3,542.3	3,477.2	54.440		
6,200.0	5,573.7	4,828.6	4,361.2	48.6	36.0	140.97	1,223.2	1,515.8	3,593.0	3,526.9	54.332		
6,300.0	5,671.9	4,913.9	4,436.2	49.0	36.7	141.47	1,249.1	1,547.2	3,641.0	3,573.8	54.207		
6,400.0	5,770.7	5,000.1	4,511.9	49.2	37.5	141.86	1,275.2	1,579.0	3,686.0	3,617.9	54.070		
6,500.0	5,870.1	5,086.9	4,588.2	49.4	38.2	142.15	1,301.5	1,611.0	3,728.2	3,659.0	53.925		
6,600.0	5,969.9	5,174.3	4,665.0	49.5	39.0	142.35	1,328.0	1,643.2	3,767.4	3,697.3	53.779		
6,700.0	6,069.9	5,262.1	4,742.2	49.6	39.7	97.23	1,354.6	1,675.5	3,803.6	3,732.8	53.709		
6,800.0	6,169.9	5,350.0	4,819.4	49.6	40.5	96.75	1,381.3	1,707.9	3,838.7	3,767.1	53.672		
6,900.0	6,269.9	5,437.8	4,896.6	49.6	41.3	96.27	1,408.0	1,740.0	3,873.8	3,801.5	53.635		
7,000.0	6,369.9	5,525.7	4,973.8	49.7	42.1	95.79	1,434.7	1,771.1	3,908.9	3,836.0	53.598		
7,100.0	6,469.9	5,613.6	5,050.8	49.7	42.9	95.31	1,461.4	1,802.2	3,944.0	3,870.5	53.561		
7,200.0	6,569.9	5,701.5	5,127.8	49.7	43.7	94.83	1,488.1	1,833.3	3,979.1	3,905.0	53.524		
7,300.0	6,669.9	5,789.4	5,204.8	49.7	44.5	94.35	1,514.8	1,864.4	4,014.2	3,939.5	53.487		
7,400.0	6,769.9	5,877.3	5,281.8	49.7	45.3	93.87	1,541.5	1,895.5	4,049.3	3,974.0	53.450		
7,500.0	6,869.9	5,965.2	5,358.8	49.8	46.1	93.39	1,568.2	1,926.6	4,084.4	4,008.5	53.413		
7,600.0	6,969.9	6,053.1	5,435.8	49.8	46.9	92.91	1,594.9	1,957.7	4,119.5	4,043.0	53.376		
7,700.0	7,069.9	6,141.0	5,512.8	49.8	47.7	92.43	1,621.6	1,988.8	4,154.6	4,077.5	53.339		
7,800.0	7,169.9	6,228.9	5,589.8	49.8	48.5	91.95	1,648.3	2,019.9	4,189.7	4,112.0	53.302		
7,900.0	7,269.9	6,316.8	5,666.8	49.9	49.3	91.47	1,675.0	2,051.0	4,224.8	4,146.5	53.265		
8,000.0	7,369.9	6,404.7	5,743.8	49.9	50.1	90.99	1,701.7	2,082.1	4,259.9	4,181.0	53.228		
8,100.0	7,469.9	6,492.6	5,820.8	49.9	50.9	90.51	1,728.4	2,113.2	4,295.0	4,215.5	53.191		
8,200.0	7,569.9	6,580.5	5,897.8	49.9	51.7	90.03	1,755.1	2,144.3	4,330.1	4,250.0	53.154		
8,300.0	7,669.9	6,668.4	5,974.8	49.9	52.5	89.55	1,781.8	2,175.4	4,365.2	4,284.5	53.117		
8,400.0	7,769.9	6,756.3	6,051.8	50.0	53.3	89.07	1,808.5	2,206.5	4,400.3	4,319.0	53.080		
8,500.0	7,869.9	6,844.2	6,128.8	50.0	54.1	88.59	1,835.2	2,237.6	4,435.4	4,353.5	53.043		
8,600.0	7,969.9	6,932.1	6,205.8	50.0	54.9	88.11	1,861.9	2,268.7	4,470.5	4,388.0	53.006		
8,700.0	8,069.9	7,019.0	6,282.8	50.0	55.7	87.63	1,888.6	2,299.8	4,505.6	4,422.5	52.969		
8,800.0	8,169.9	7,106.9	6,359.8	50.1	56.5	87.15	1,915.3	2,330.9	4,540.7	4,457.0	52.932		
8,900.0	8,269.9	7,194.8	6,436.8	50.1	57.3	86.67	1,942.0	2,362.0	4,575.8	4,491.5	52.895		
9,000.0	8,369.9	7,282.7	6,513.8	50.1	58.1	86.19	1,968.7	2,393.1	4,610.9	4,526.0	52.858		
9,100.0	8,469.9	7,370.6	6,590.8	50.1	58.9	85.71	1,995.4	2,424.2	4,646.0	4,560.5	52.821		
9,200.0	8,569.9	7,458.5	6,667.8	50.2	59.7	85.23	2,022.1	2,455.3	4,681.1	4,595.0	52.784		
9,287.1	8,657.0	7,546.4	6,744.8	50.2	60.5	84.75	2,048.8	2,486.4	4,716.2	4,629.5	52.747		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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		
204.4	204.4	204.4	204.4	1.4	1.4	-175.18	-13.3	28.7	31.6	28.8	11.099	ES		
300.0	300.0	299.6	299.6	1.7	1.7	-176.03	-13.0	29.2	32.2	28.9	9.753			
400.0	399.9	398.5	398.4	2.8	3.0	178.17	-10.6	32.7	38.4	33.2	7.379			
500.0	499.6	496.1	495.6	4.2	4.3	171.03	-5.9	39.7	52.1	44.5	6.835	SF		
600.0	598.8	591.7	590.4	4.5	5.3	160.58	0.9	49.8	73.5	64.6	8.313			
700.0	697.5	684.9	682.3	5.2	6.2	151.55	9.6	62.9	101.3	91.1	9.962			
800.0	795.4	775.3	770.7	6.1	6.9	146.12	20.1	78.5	134.9	123.4	11.736			
900.0	892.4	862.6	855.3	6.9	7.6	142.55	32.1	96.3	174.1	161.4	13.763			
1,000.0	988.3	946.4	935.7	7.6	8.2	139.99	45.2	115.9	218.4	204.7	15.970			
1,100.0	1,082.8	1,026.6	1,011.8	8.3	8.8	137.99	59.3	136.9	267.7	253.1	18.315			
1,200.0	1,175.9	1,100.0	1,080.6	9.0	9.3	136.27	73.5	158.1	321.6	306.2	20.848			
1,300.0	1,267.4	1,175.4	1,150.4	9.7	9.8	134.76	89.4	181.7	379.9	363.6	23.296			
1,400.0	1,357.0	1,243.8	1,213.0	10.3	10.2	133.29	104.9	204.9	442.2	425.1	25.878			
1,500.0	1,444.6	1,309.6	1,272.3	10.8	10.6	132.29	120.8	228.5	508.1	490.4	28.582			
1,600.0	1,531.6	1,383.3	1,338.4	11.1	10.9	133.20	139.0	255.6	575.4	556.9	31.111			
1,700.0	1,618.6	1,457.0	1,404.4	11.5	11.1	133.92	157.1	282.7	642.8	623.6	33.470			
1,800.0	1,705.5	1,530.7	1,470.5	11.8	11.4	134.50	175.3	309.8	710.2	690.3	35.628			
1,900.0	1,792.5	1,604.4	1,536.6	12.2	11.6	134.98	193.5	336.9	777.7	757.0	37.579			
2,000.0	1,879.5	1,678.1	1,602.7	12.6	11.9	135.39	211.7	363.9	845.1	823.6	39.331			
2,100.0	1,966.4	1,751.8	1,668.7	13.1	12.1	135.73	229.8	391.0	912.6	890.3	40.913			
2,200.0	2,053.4	1,825.4	1,734.8	13.7	12.4	136.03	248.0	418.1	980.1	957.0	42.345			
2,300.0	2,140.4	1,899.1	1,800.9	14.5	12.7	136.29	266.2	445.2	1,047.6	1,023.6	43.641			
2,400.0	2,227.3	1,972.8	1,867.0	15.3	12.9	136.52	284.3	472.3	1,115.2	1,090.3	44.807			
2,500.0	2,314.3	2,046.5	1,933.0	16.2	13.2	136.72	302.5	499.4	1,182.7	1,156.9	45.867			
2,600.0	2,401.3	2,120.2	1,999.1	17.1	13.5	136.90	320.7	526.5	1,250.3	1,223.6	46.833			
2,700.0	2,488.2	2,193.9	2,065.2	18.0	13.8	137.06	338.9	553.5	1,317.8	1,290.2	47.712			
2,800.0	2,575.2	2,267.6	2,131.3	18.9	14.1	137.21	357.0	580.6	1,385.4	1,356.8	48.509			
2,900.0	2,662.2	2,341.3	2,197.3	19.8	14.4	137.34	375.2	607.7	1,452.9	1,423.4	49.238			
3,000.0	2,749.1	2,414.9	2,263.4	20.8	14.7	137.46	393.4	634.8	1,520.5	1,490.0	49.908			
3,100.0	2,836.1	2,488.6	2,329.5	21.7	15.1	137.57	411.6	661.9	1,588.1	1,556.6	50.524			
3,200.0	2,923.1	2,562.3	2,395.6	22.6	15.5	137.67	429.7	689.0	1,655.6	1,623.2	51.105			
3,300.0	3,010.0	2,636.0	2,461.6	23.5	16.1	137.77	447.9	716.0	1,723.2	1,689.8	51.616			
3,400.0	3,097.0	2,709.7	2,527.7	24.5	16.7	137.85	466.1	743.1	1,790.8	1,756.4	52.093			
3,500.0	3,184.0	2,783.4	2,593.8	25.4	17.3	137.93	484.3	770.2	1,858.3	1,823.0	52.537			
3,600.0	3,270.9	2,857.1	2,659.9	26.3	17.9	138.01	502.4	797.3	1,925.9	1,889.5	52.947			
3,700.0	3,357.9	2,930.8	2,725.9	27.2	18.5	138.08	520.6	824.4	1,993.5	1,956.1	53.328			
3,800.0	3,444.9	3,004.4	2,792.0	28.2	19.0	138.14	538.8	851.5	2,061.1	2,022.7	53.683			
3,900.0	3,531.8	3,078.1	2,858.1	29.1	19.6	138.20	557.0	878.6	2,128.7	2,089.3	54.013			
4,000.0	3,618.8	3,151.8	2,924.2	30.0	20.2	138.26	575.1	905.6	2,196.3	2,155.8	54.320			
4,100.0	3,705.8	3,225.5	2,990.2	31.0	20.8	138.31	593.3	932.7	2,263.8	2,222.4	54.608			
4,200.0	3,792.7	3,299.2	3,056.3	31.9	21.4	138.36	611.5	959.8	2,331.4	2,288.9	54.876			
4,300.0	3,879.7	3,372.9	3,122.4	32.8	22.0	138.41	629.6	986.9	2,399.0	2,355.5	55.128			
4,400.0	3,966.7	3,446.6	3,188.5	33.8	22.6	138.46	647.8	1,014.0	2,466.6	2,422.0	55.364			
4,500.0	4,053.6	3,520.3	3,254.5	34.7	23.2	138.50	666.0	1,041.1	2,534.2	2,488.6	55.586			
4,600.0	4,140.6	3,593.9	3,320.6	35.6	23.8	138.54	684.2	1,068.2	2,601.8	2,555.1	55.795			
4,700.0	4,227.6	3,667.6	3,386.7	36.6	24.4	138.58	702.3	1,095.2	2,669.4	2,621.7	55.991			
4,800.0	4,314.5	3,741.3	3,452.8	37.5	25.0	138.62	720.5	1,122.3	2,737.0	2,688.2	56.176			
4,900.0	4,401.5	3,815.0	3,518.8	38.4	25.6	138.65	738.7	1,149.4	2,804.6	2,754.8	56.350			
5,000.0	4,488.5	3,888.7	3,584.9	39.4	26.2	138.68	756.9	1,176.5	2,872.1	2,821.3	56.515			

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	4,575.4	3,962.4	3,651.0	40.3	26.7	138.71	775.0	1,203.6	2,939.7	2,887.9	56.671		
5,200.0	4,662.4	4,036.1	3,717.1	41.2	27.3	138.75	793.2	1,230.7	3,007.3	2,954.4	56.818		
5,300.0	4,749.4	4,109.8	3,783.1	42.2	27.9	138.77	811.4	1,257.8	3,074.9	3,020.9	56.958		
5,400.0	4,836.3	4,183.4	3,849.2	43.1	28.5	138.80	829.6	1,284.8	3,142.5	3,087.5	57.091		
5,500.0	4,923.3	4,257.1	3,915.3	44.1	29.1	138.83	847.7	1,311.9	3,210.1	3,154.0	57.216		
5,600.0	5,011.1	4,331.7	3,982.1	45.0	29.7	140.10	866.1	1,339.3	3,276.8	3,219.6	57.315		
5,700.0	5,100.9	4,408.3	4,050.9	45.8	30.3	141.36	885.0	1,367.5	3,340.9	3,282.6	57.335		
5,800.0	5,192.5	4,487.0	4,121.4	46.5	31.0	142.44	904.4	1,396.4	3,402.4	3,343.0	57.308		
5,900.0	5,285.8	4,567.5	4,193.6	47.2	31.6	143.37	924.3	1,426.0	3,461.1	3,400.6	57.241		
6,000.0	5,380.5	4,649.7	4,267.3	47.7	32.3	144.15	944.6	1,456.2	3,517.0	3,455.4	57.140		
6,100.0	5,476.6	4,733.4	4,342.4	48.2	33.0	144.80	965.2	1,487.0	3,570.0	3,507.3	57.008		
6,200.0	5,573.7	4,818.5	4,418.7	48.6	33.7	145.34	986.2	1,518.3	3,619.9	3,556.3	56.848		
6,300.0	5,671.9	4,904.8	4,496.1	49.0	34.4	145.76	1,007.5	1,550.0	3,666.9	3,602.1	56.665		
6,400.0	5,770.7	4,992.1	4,574.4	49.2	35.1	146.09	1,029.0	1,582.1	3,710.7	3,645.0	56.464		
6,500.0	5,870.1	5,080.4	4,653.5	49.4	35.8	146.32	1,050.8	1,614.5	3,751.3	3,684.6	56.250		
6,600.0	5,969.9	5,169.3	4,733.2	49.5	36.5	146.47	1,072.7	1,647.2	3,788.8	3,721.2	56.031		
6,700.0	6,069.9	5,258.8	4,813.5	49.6	37.2	101.32	1,094.8	1,680.1	3,823.1	3,754.7	55.903		
6,800.0	6,169.9	5,348.4	4,893.9	49.6	37.9	100.87	1,116.9	1,713.1	3,856.1	3,787.0	55.819		
6,900.0	6,269.9	5,438.9	4,974.9	49.6	38.6	97.35	1,139.2	1,746.2	3,887.6	3,818.9	55.735		
7,000.0	6,369.9	5,529.4	5,056.9	49.7	39.3	97.35	1,161.3	1,779.3	3,918.7	3,850.9	55.651		
7,100.0	6,469.9	5,620.9	5,139.9	49.7	40.0	97.35	1,183.4	1,812.4	3,949.8	3,882.8	55.567		
7,200.0	6,569.9	5,712.4	5,223.9	49.7	40.7	97.35	1,205.5	1,845.5	3,980.9	3,914.9	55.483		
7,300.0	6,669.9	5,804.9	5,308.9	49.7	41.4	97.35	1,227.6	1,878.6	4,012.0	3,947.0	55.400		
7,400.0	6,769.9	5,897.4	5,394.9	49.7	42.1	97.35	1,249.7	1,911.7	4,043.1	3,979.1	55.316		
7,500.0	6,869.9	5,990.9	5,481.9	49.8	42.8	97.35	1,271.8	1,944.8	4,074.2	4,011.2	55.232		
7,600.0	6,969.9	6,083.4	5,569.9	49.8	43.5	97.35	1,293.9	1,977.9	4,105.3	4,043.3	55.148		
7,700.0	7,069.9	6,176.9	5,657.9	49.8	44.2	97.35	1,316.0	2,011.0	4,136.4	4,075.4	55.064		
7,800.0	7,169.9	6,270.4	5,745.9	49.8	44.9	97.35	1,338.1	2,044.1	4,167.5	4,107.5	54.980		
7,900.0	7,269.9	6,363.9	5,833.9	49.9	45.6	97.35	1,360.2	2,077.2	4,198.6	4,139.6	54.896		
8,000.0	7,369.9	6,457.4	5,921.9	49.9	46.3	97.35	1,382.3	2,110.3	4,229.7	4,171.7	54.812		
8,100.0	7,469.9	6,550.9	6,009.9	49.9	47.0	97.35	1,404.4	2,143.4	4,260.8	4,203.8	54.728		
8,200.0	7,569.9	6,644.4	6,097.9	49.9	47.7	97.35	1,426.5	2,176.5	4,291.9	4,235.9	54.644		
8,300.0	7,669.9	6,737.9	6,185.9	49.9	48.4	97.35	1,448.6	2,209.6	4,323.0	4,268.0	54.560		
8,400.0	7,769.9	6,831.4	6,273.9	50.0	49.1	97.35	1,470.7	2,242.7	4,354.1	4,300.1	54.476		
8,500.0	7,869.9	6,924.9	6,361.9	50.0	49.8	97.35	1,492.8	2,275.8	4,385.2	4,332.2	54.392		
8,600.0	7,969.9	7,018.4	6,449.9	50.0	50.5	97.35	1,514.9	2,308.9	4,416.3	4,364.3	54.308		
8,700.0	8,069.9	7,111.9	6,537.9	50.0	51.2	97.35	1,537.0	2,342.0	4,447.4	4,396.4	54.224		
8,800.0	8,169.9	7,205.4	6,625.9	50.1	51.9	97.35	1,559.1	2,375.1	4,478.5	4,428.5	54.140		
8,900.0	8,269.9	7,298.9	6,713.9	50.1	52.6	97.35	1,581.2	2,408.2	4,509.6	4,460.6	54.056		
9,000.0	8,369.9	7,392.4	6,801.9	50.1	53.3	97.35	1,603.3	2,441.3	4,540.7	4,492.7	53.972		
9,100.0	8,469.9	7,485.9	6,889.9	50.1	54.0	97.35	1,625.4	2,474.4	4,571.8	4,524.8	53.888		
9,200.0	8,569.9	7,579.4	6,977.9	50.2	54.7	97.35	1,647.5	2,507.5	4,602.9	4,556.9	53.804		
9,287.1	8,657.0	7,672.0	7,065.0	50.2	55.4	97.35	1,669.6	2,540.6	4,634.0	4,589.0	53.720		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	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	26.035		
200.0	200.0	200.0	200.0	1.4	1.4	119.22	-20.1	36.0	41.2	38.4	14.578	CC	
204.4	204.4	204.4	204.4	1.4	1.4	-170.78	-20.1	36.0	41.2	38.4	14.420		
300.0	300.0	300.0	300.0	1.7	1.9	-170.84	-20.1	36.0	41.5	38.0	11.744	ES	
400.0	399.9	398.8	398.7	2.8	2.7	-173.74	-19.2	37.9	46.4	41.3	9.061		
500.0	499.6	496.4	496.2	4.2	4.1	-179.57	-16.3	43.5	58.6	51.1	7.821	SF	
600.0	598.8	592.2	591.4	4.5	5.1	169.80	-11.6	52.5	78.3	69.6	8.987		
700.0	697.5	685.6	683.8	5.2	6.0	160.13	-5.4	64.8	105.0	94.9	10.402		
800.0	795.4	776.2	772.7	6.1	6.8	154.07	2.4	79.8	138.0	126.5	12.002		
900.0	892.4	863.4	857.8	6.9	7.4	149.99	11.3	97.3	176.9	164.2	13.920		
1,000.0	988.3	947.1	938.6	7.6	8.1	147.04	21.3	116.7	221.5	207.7	16.066		
1,100.0	1,082.8	1,027.0	1,014.8	8.3	8.6	144.74	32.1	137.7	271.2	256.5	18.387		
1,200.0	1,175.9	1,100.0	1,083.9	9.0	9.1	142.80	43.0	159.0	325.9	310.4	20.922		
1,300.0	1,267.4	1,174.3	1,153.3	9.7	9.6	141.10	55.1	182.6	385.2	368.8	23.415		
1,400.0	1,357.0	1,241.7	1,215.4	10.3	10.0	139.48	67.0	205.7	448.8	431.6	26.138		
1,500.0	1,444.6	1,308.9	1,276.7	10.8	10.2	138.37	79.6	230.3	516.1	498.3	29.048		
1,600.0	1,531.6	1,381.7	1,342.9	11.1	10.5	139.13	93.4	257.2	584.5	566.1	31.806		
1,700.0	1,618.6	1,454.5	1,409.1	11.5	10.7	139.73	107.2	284.1	652.9	633.9	34.323		
1,800.0	1,705.5	1,527.2	1,475.3	11.8	10.9	140.21	121.0	311.0	721.4	701.7	36.618		
1,900.0	1,792.5	1,600.0	1,541.4	12.2	11.1	140.61	134.8	337.9	789.9	769.5	38.707		
2,000.0	1,879.5	1,672.7	1,607.6	12.6	11.4	140.95	148.7	364.7	858.4	837.3	40.595		
2,100.0	1,966.4	1,745.5	1,673.8	13.1	11.6	141.23	162.5	391.6	926.9	905.0	42.313		
2,200.0	2,053.4	1,818.2	1,740.0	13.7	11.9	141.48	176.3	418.5	995.5	972.8	43.877		
2,300.0	2,140.4	1,891.0	1,806.1	14.5	12.2	141.70	190.1	445.4	1,064.0	1,040.5	45.298		
2,400.0	2,227.3	1,963.7	1,872.3	15.3	12.5	141.89	203.9	472.3	1,132.6	1,108.3	46.588		
2,500.0	2,314.3	2,036.5	1,938.5	16.2	12.7	142.05	217.7	499.2	1,201.1	1,176.0	47.767		
2,600.0	2,401.3	2,109.3	2,004.7	17.1	13.0	142.20	231.5	526.1	1,269.7	1,243.7	48.845		
2,700.0	2,488.2	2,182.0	2,070.9	18.0	13.3	142.34	245.3	553.0	1,338.3	1,311.4	49.827		
2,800.0	2,575.2	2,254.8	2,137.0	18.9	13.6	142.46	259.1	579.9	1,406.8	1,379.1	50.727		
2,900.0	2,662.2	2,327.5	2,203.2	19.8	13.9	142.57	272.9	606.8	1,475.4	1,446.8	51.554		
3,000.0	2,749.1	2,400.3	2,269.4	20.8	14.2	142.67	286.7	633.7	1,544.0	1,514.5	52.317		
3,100.0	2,836.1	2,473.0	2,335.6	21.7	14.6	142.76	300.5	660.6	1,612.6	1,582.2	53.013		
3,200.0	2,923.1	2,545.8	2,401.7	22.6	14.9	142.85	314.4	687.5	1,681.2	1,649.8	53.655		
3,300.0	3,010.0	2,618.6	2,467.9	23.5	15.2	142.92	328.2	714.4	1,749.7	1,717.5	54.236		
3,400.0	3,097.0	2,691.3	2,534.1	24.5	15.7	143.00	342.0	741.3	1,818.3	1,785.1	54.809		
3,500.0	3,184.0	2,764.1	2,600.3	25.4	16.2	143.06	355.8	768.2	1,886.9	1,852.8	55.331		
3,600.0	3,270.9	2,836.8	2,666.5	26.3	16.8	143.13	369.6	795.1	1,955.5	1,920.4	55.800		
3,700.0	3,357.9	2,909.6	2,732.6	27.2	17.3	143.18	383.4	822.0	2,024.1	1,988.1	56.240		
3,800.0	3,444.9	2,982.3	2,798.8	28.2	17.9	143.24	397.2	848.9	2,092.7	2,055.7	56.652		
3,900.0	3,531.8	3,055.1	2,865.0	29.1	18.4	143.29	411.0	875.8	2,161.3	2,123.4	57.037		
4,000.0	3,618.8	3,127.8	2,931.2	30.0	19.0	143.33	424.8	902.7	2,229.9	2,191.0	57.396		
4,100.0	3,705.8	3,200.6	2,997.3	31.0	19.5	143.38	438.6	929.6	2,298.4	2,258.6	57.731		
4,200.0	3,792.7	3,273.4	3,063.5	31.9	20.1	143.42	452.4	956.5	2,367.0	2,326.3	58.047		
4,300.0	3,879.7	3,346.1	3,129.7	32.8	20.6	143.46	466.3	983.4	2,435.6	2,393.9	58.342		
4,400.0	3,966.7	3,418.9	3,195.9	33.8	21.2	143.50	480.1	1,010.2	2,504.2	2,461.5	58.620		
4,500.0	4,053.6	3,491.6	3,262.0	34.7	21.7	143.53	493.9	1,037.1	2,572.8	2,529.1	58.881		
4,600.0	4,140.6	3,564.4	3,328.2	35.6	22.3	143.57	507.7	1,064.0	2,641.4	2,596.7	59.127		
4,700.0	4,227.6	3,637.1	3,394.4	36.6	22.8	143.60	521.5	1,090.9	2,710.0	2,664.4	59.358		
4,800.0	4,314.5	3,709.9	3,460.6	37.5	23.4	143.63	535.3	1,117.8	2,778.6	2,732.0	59.577		
4,900.0	4,401.5	3,782.7	3,526.8	38.4	23.9	143.66	549.1	1,144.7	2,847.2	2,799.6	59.784		
5,000.0	4,488.5	3,855.4	3,592.9	39.4	24.5	143.69	562.9	1,171.6	2,915.8	2,867.2	59.979		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	4,575.4	3,928.2	3,659.1	40.3	25.0	143.71	576.7	1,198.5	2,984.4	2,934.8	60.164		
5,200.0	4,662.4	4,000.9	3,725.3	41.2	25.6	143.74	590.5	1,225.4	3,053.0	3,002.4	60.340		
5,300.0	4,749.4	4,073.7	3,791.5	42.2	26.1	143.76	604.3	1,252.3	3,121.6	3,070.0	60.506		
5,400.0	4,836.3	4,146.4	3,857.6	43.1	26.7	143.79	618.1	1,279.2	3,190.2	3,137.6	60.664		
5,500.0	4,923.3	4,219.2	3,923.8	44.1	27.2	143.81	632.0	1,306.1	3,258.8	3,205.2	60.814		
5,600.0	5,011.1	4,292.9	3,990.8	45.0	27.8	144.98	645.9	1,333.3	3,326.4	3,271.8	60.929		
5,700.0	5,100.9	4,368.9	4,060.0	45.8	28.4	146.13	660.4	1,361.4	3,391.3	3,335.7	60.945		
5,800.0	5,192.5	4,447.1	4,131.1	46.5	29.0	147.11	675.2	1,390.3	3,453.4	3,396.7	60.901		
5,900.0	5,285.8	4,527.3	4,204.0	47.2	29.6	147.94	690.4	1,420.0	3,512.7	3,454.9	60.807		
6,000.0	5,380.5	4,609.3	4,278.7	47.7	30.2	148.65	706.0	1,450.3	3,568.9	3,510.1	60.669		
6,100.0	5,476.6	4,693.1	4,354.9	48.2	30.9	149.23	721.9	1,481.3	3,622.1	3,562.2	60.491		
6,200.0	5,573.7	4,778.5	4,432.5	48.6	31.5	149.70	738.1	1,512.9	3,672.1	3,611.2	60.279		
6,300.0	5,671.9	4,865.3	4,511.5	49.0	32.2	150.07	754.6	1,544.9	3,718.9	3,656.9	60.037		
6,400.0	5,770.7	4,953.2	4,591.5	49.2	32.9	150.36	771.3	1,577.5	3,762.4	3,699.4	59.771		
6,500.0	5,870.1	5,042.3	4,672.5	49.4	33.5	150.55	788.2	1,610.4	3,802.5	3,738.6	59.487		
6,600.0	5,969.9	5,132.3	4,754.3	49.5	34.2	150.67	805.3	1,643.6	3,839.3	3,774.4	59.196		
6,700.0	6,069.9	5,222.9	4,836.8	49.6	34.9	105.50	822.5	1,677.2	3,872.7	3,807.0	59.015		
6,800.0	6,169.9	5,313.9	4,919.5	49.6	35.6	105.10	839.7	1,710.8	3,904.6	3,838.3	58.893		
6,900.0	6,269.9	5,404.9	5,002.3	49.6	36.3	104.71	857.0	1,744.4	3,936.7	3,869.8	58.799		
7,000.0	6,369.9	5,495.9	5,085.1	49.7	37.0	104.32	874.3	1,778.0	3,968.8	3,901.3	58.711		
7,100.0	6,469.9	5,587.9	5,167.9	49.7	37.7	103.93	891.6	1,811.6	3,999.9	3,932.0	58.629		
7,200.0	6,569.9	5,680.9	5,250.7	49.7	38.4	103.54	908.9	1,845.2	4,030.0	3,962.5	58.551		
7,300.0	6,669.9	5,773.9	5,333.5	49.7	39.1	103.15	926.2	1,878.8	4,059.1	3,983.0	58.479		
7,400.0	6,769.9	5,866.9	5,416.3	49.7	39.8	102.76	943.5	1,912.4	4,087.2	3,999.0	58.411		
7,500.0	6,869.9	5,960.9	5,499.1	49.8	40.5	102.37	960.8	1,945.9	4,114.3	4,011.0	58.347		
7,600.0	6,969.9	6,053.9	5,581.9	49.8	41.2	101.98	978.1	1,979.5	4,140.4	4,023.0	58.287		
7,700.0	7,069.9	6,146.9	5,664.7	49.8	41.9	101.59	995.4	1,994.4	4,165.5	4,033.0	58.231		
7,800.0	7,169.9	6,240.9	5,747.5	49.8	42.6	101.20	1,012.7	1,999.4	4,189.6	4,042.0	58.179		
7,900.0	7,269.9	6,333.9	5,830.3	49.9	43.3	100.81	1,030.0	1,999.4	4,212.7	4,048.0	58.131		
8,000.0	7,369.9	6,426.9	5,913.1	49.9	44.0	100.42	1,047.3	1,999.4	4,234.8	4,051.0	58.087		
8,100.0	7,469.9	6,519.9	5,995.9	49.9	44.7	100.03	1,064.6	1,999.4	4,255.9	4,051.0	58.047		
8,200.0	7,569.9	6,612.9	6,078.7	49.9	45.4	99.64	1,081.9	1,999.4	4,276.0	4,048.0	58.011		
8,300.0	7,669.9	6,705.9	6,161.5	49.9	46.1	99.25	1,100.0	1,999.4	4,295.1	4,042.0	57.979		
8,400.0	7,769.9	6,798.9	6,244.3	50.0	46.8	98.86	1,118.1	1,999.4	4,313.2	4,033.0	57.951		
8,500.0	7,869.9	6,891.9	6,327.1	50.0	47.5	98.47	1,136.2	1,999.4	4,330.3	4,021.0	57.927		
8,600.0	7,969.9	6,984.9	6,409.9	50.0	48.2	98.08	1,154.3	1,999.4	4,346.4	4,006.0	57.907		
8,700.0	8,069.9	7,077.9	6,492.7	50.0	48.9	97.69	1,172.4	1,999.4	4,361.5	3,988.0	57.891		
8,800.0	8,169.9	7,170.9	6,575.5	50.1	49.6	97.30	1,190.5	1,999.4	4,375.6	3,966.0	57.879		
8,900.0	8,269.9	7,263.9	6,658.3	50.1	50.3	96.91	1,208.6	1,999.4	4,388.7	3,940.0	57.871		
9,000.0	8,369.9	7,356.9	6,741.1	50.1	51.0	96.52	1,226.7	1,999.4	4,400.8	3,910.0	57.867		
9,100.0	8,469.9	7,449.9	6,823.9	50.1	51.7	96.13	1,244.8	1,999.4	4,412.9	3,876.0	57.867		
9,200.0	8,569.9	7,542.9	6,906.7	50.2	52.4	95.74	1,262.9	1,999.4	4,424.0	3,838.0	57.871		
9,287.1	8,657.0	7,635.9	6,989.5	50.2	53.1	95.35	1,281.0	1,999.4	4,434.1	3,795.0	57.879		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	121.95	-27.0	43.3	51.0				
100.0	100.0	100.0	100.0	0.8	0.8	121.95	-27.0	43.3	51.0	49.4	32.194		
200.0	200.0	200.0	200.0	1.4	1.4	121.95	-27.0	43.3	51.0	48.2	18.026	CC	
204.4	204.4	204.4	204.4	1.4	1.4	-168.05	-27.0	43.3	51.0	48.2	17.892	ES	
300.0	300.0	299.3	299.3	1.7	1.7	-168.57	-26.8	43.8	51.6	48.3	15.627		
400.0	399.9	397.5	397.4	2.8	2.9	-172.50	-25.4	47.7	58.1	52.8	11.034		
500.0	499.6	494.3	493.8	4.2	4.3	-178.16	-22.6	55.5	72.2	64.5	9.318	SF	
600.0	598.8	588.8	587.6	4.5	5.3	171.67	-18.6	66.8	94.3	85.3	10.438		
700.0	697.5	680.7	678.2	5.2	6.1	162.23	-13.5	81.3	123.5	113.1	11.834		
800.0	795.4	769.4	765.0	6.1	6.9	156.28	-7.4	98.5	159.3	147.4	13.430		
900.0	892.4	854.5	847.5	6.9	7.5	152.26	-0.5	118.0	201.2	188.1	15.372		
1,000.0	988.3	935.7	925.5	7.6	8.1	149.34	7.1	139.2	248.7	234.5	17.560		
1,100.0	1,082.8	1,012.6	998.6	8.3	8.7	147.05	15.1	161.7	301.6	286.5	19.938		
1,200.0	1,175.9	1,085.2	1,066.9	9.0	9.2	145.13	23.4	185.1	359.4	343.4	22.470		
1,300.0	1,267.4	1,155.9	1,132.5	9.7	9.5	143.42	32.2	209.8	421.9	405.2	25.273		
1,400.0	1,357.0	1,228.1	1,199.1	10.3	9.7	141.96	41.5	236.0	487.7	470.4	28.122		
1,500.0	1,444.6	1,300.9	1,266.3	10.8	9.9	141.19	50.9	262.4	555.9	537.9	30.927		
1,600.0	1,531.6	1,372.9	1,332.8	11.1	10.1	142.15	60.2	288.5	624.9	606.3	33.651		
1,700.0	1,618.6	1,444.9	1,399.3	11.5	10.4	142.93	69.4	314.7	693.9	674.7	36.153		
1,800.0	1,705.5	1,517.0	1,465.7	11.8	10.6	143.57	78.7	340.8	763.0	743.2	38.448		
1,900.0	1,792.5	1,589.0	1,532.2	12.2	10.9	144.10	88.0	366.9	832.2	811.7	40.545		
2,000.0	1,879.5	1,661.1	1,598.7	12.6	11.1	144.55	97.3	393.1	901.4	880.1	42.460		
2,100.0	1,966.4	1,733.1	1,665.2	13.1	11.4	144.93	106.6	419.2	970.6	948.6	44.214		
2,200.0	2,053.4	1,805.1	1,731.7	13.7	11.7	145.27	115.9	445.3	1,039.8	1,017.1	45.821		
2,300.0	2,140.4	1,877.2	1,798.2	14.5	11.9	145.56	125.2	471.5	1,109.1	1,085.6	47.287		
2,400.0	2,227.3	1,949.2	1,864.6	15.3	12.2	145.82	134.5	497.6	1,178.3	1,154.1	48.632		
2,500.0	2,314.3	2,021.3	1,931.1	16.2	12.5	146.05	143.7	523.8	1,247.6	1,222.6	49.868		
2,600.0	2,401.3	2,093.3	1,997.6	17.1	12.8	146.26	153.0	549.9	1,316.9	1,291.0	51.004		
2,700.0	2,488.2	2,165.3	2,064.1	18.0	13.1	146.44	162.3	576.0	1,386.1	1,359.5	52.046		
2,800.0	2,575.2	2,237.4	2,130.6	18.9	13.4	146.61	171.6	602.2	1,455.4	1,428.0	53.007		
2,900.0	2,662.2	2,309.4	2,197.1	19.8	13.7	146.76	180.9	628.3	1,524.7	1,496.4	53.897		
3,000.0	2,749.1	2,381.4	2,263.5	20.8	14.0	146.90	190.2	654.4	1,594.0	1,564.9	54.716		
3,100.0	2,836.1	2,453.5	2,330.0	21.7	14.4	147.03	199.5	680.6	1,663.4	1,633.4	55.474		
3,200.0	2,923.1	2,525.5	2,396.5	22.6	14.7	147.15	208.7	706.7	1,732.7	1,701.8	56.179		
3,300.0	3,010.0	2,597.6	2,463.0	23.5	15.0	147.25	218.0	732.9	1,802.0	1,770.3	56.835		
3,400.0	3,097.0	2,669.6	2,529.5	24.5	15.3	147.35	227.3	759.0	1,871.3	1,838.7	57.440		
3,500.0	3,184.0	2,741.6	2,596.0	25.4	15.7	147.45	236.6	785.1	1,940.6	1,907.2	58.004		
3,600.0	3,270.9	2,813.7	2,662.4	26.3	16.2	147.54	245.9	811.3	2,009.9	1,975.6	58.529		
3,700.0	3,357.9	2,885.7	2,728.9	27.2	16.7	147.62	255.2	837.4	2,079.3	2,044.1	59.037		
3,800.0	3,444.9	2,957.7	2,795.4	28.2	17.2	147.69	264.5	863.5	2,148.6	2,112.5	59.498		
3,900.0	3,531.8	3,029.8	2,861.9	29.1	17.7	147.76	273.8	889.7	2,217.9	2,180.9	59.928		
4,000.0	3,618.8	3,101.8	2,928.4	30.0	18.2	147.83	283.0	915.8	2,287.3	2,249.4	60.332		
4,100.0	3,705.8	3,173.9	2,994.9	31.0	18.7	147.89	292.3	941.9	2,356.6	2,317.8	60.714		
4,200.0	3,792.7	3,245.9	3,061.3	31.9	19.2	147.95	301.6	968.1	2,425.9	2,386.2	61.072		
4,300.0	3,879.7	3,317.9	3,127.8	32.8	19.7	148.01	310.9	994.2	2,495.3	2,454.6	61.409		
4,400.0	3,966.7	3,390.0	3,194.3	33.8	20.2	148.06	320.2	1,020.4	2,564.6	2,523.1	61.727		
4,500.0	4,053.6	3,462.0	3,260.8	34.7	20.7	148.11	329.5	1,046.5	2,633.9	2,591.5	62.027		
4,600.0	4,140.6	3,534.0	3,327.3	35.6	21.2	148.16	338.8	1,072.6	2,703.3	2,659.9	62.311		
4,700.0	4,227.6	3,606.1	3,393.8	36.6	21.7	148.20	348.1	1,098.8	2,772.6	2,728.3	62.579		
4,800.0	4,314.5	3,678.1	3,460.2	37.5	22.2	148.25	357.3	1,124.9	2,842.0	2,796.7	62.832		
4,900.0	4,401.5	3,750.2	3,526.7	38.4	22.7	148.29	366.6	1,151.0	2,911.3	2,865.2	63.073		
5,000.0	4,488.5	3,822.2	3,593.2	39.4	23.3	148.33	375.9	1,177.2	2,980.7	2,933.6	63.301		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	4,575.4	3,894.2	3,659.7	40.3	23.8	148.36	385.2	1,203.3	3,050.0	3,002.0	63.517		
5,200.0	4,662.4	3,966.3	3,726.2	41.2	24.3	148.40	394.5	1,229.5	3,119.3	3,070.4	63.722		
5,300.0	4,749.4	4,038.3	3,792.7	42.2	24.8	148.43	403.8	1,255.6	3,188.7	3,138.8	63.918		
5,400.0	4,836.3	4,110.3	3,859.1	43.1	25.3	148.47	413.1	1,281.7	3,258.0	3,207.2	64.104		
5,500.0	4,923.3	4,182.4	3,925.6	44.1	25.8	148.50	422.4	1,307.9	3,327.4	3,275.6	64.281		
5,600.0	5,011.1	4,255.4	3,993.0	45.0	26.3	149.56	431.8	1,334.4	3,395.7	3,343.0	64.416		
5,700.0	5,100.9	4,330.9	4,062.7	45.8	26.9	150.60	441.5	1,361.8	3,461.2	3,407.5	64.431		
5,800.0	5,192.5	4,408.8	4,134.6	46.5	27.4	151.49	451.5	1,390.0	3,523.8	3,469.0	64.373		
5,900.0	5,285.8	4,488.9	4,208.5	47.2	28.0	152.24	461.9	1,419.1	3,583.4	3,527.6	64.256		
6,000.0	5,380.5	4,571.0	4,284.3	47.7	28.6	152.88	472.5	1,448.9	3,639.8	3,583.0	64.086		
6,100.0	5,476.6	4,655.0	4,361.8	48.2	29.2	153.40	483.3	1,479.4	3,693.0	3,635.2	63.868		
6,200.0	5,573.7	4,740.8	4,441.0	48.6	29.8	153.82	494.3	1,510.5	3,742.9	3,684.1	63.608		
6,300.0	5,671.9	4,828.1	4,521.6	49.0	30.4	154.15	505.6	1,542.2	3,789.5	3,729.6	63.311		
6,400.0	5,770.7	4,916.9	4,603.5	49.2	31.0	154.40	517.0	1,574.3	3,832.6	3,771.7	62.985		
6,500.0	5,870.1	5,006.8	4,686.5	49.4	31.7	154.58	528.6	1,607.0	3,872.1	3,810.3	62.637		
6,600.0	5,969.9	5,097.9	4,770.5	49.5	32.3	154.68	540.4	1,640.0	3,908.2	3,845.4	62.279		
6,700.0	6,069.9	5,189.8	4,855.4	49.6	33.0	109.50	552.2	1,673.4	3,940.6	3,877.1	62.050		
6,800.0	6,169.9	5,282.1	4,940.6	49.6	33.6	109.16	564.1	1,706.9	3,971.5	3,907.3	61.897		
6,900.0	6,269.9	5,374.4	5,025.7	49.6	34.3	108.82	576.0	1,740.4	4,002.5	3,937.7	61.774		
7,000.0	6,369.9	5,466.7	5,109.9	49.7	35.0	108.49	587.9	1,774.4	4,032.5	3,968.0	61.651		
7,100.0	6,469.9	5,559.0	5,195.2	49.7	35.7	108.16	599.8	1,808.4	4,062.5	3,998.3	61.528		
7,200.0	6,569.9	5,651.3	5,280.5	49.7	36.4	107.82	611.7	1,842.4	4,092.5	4,028.6	61.405		
7,300.0	6,669.9	5,743.6	5,365.8	49.7	37.1	107.49	623.6	1,876.4	4,122.5	4,058.9	61.282		
7,400.0	6,769.9	5,835.9	5,451.1	49.7	37.8	107.16	635.5	1,910.4	4,152.5	4,089.2	61.159		
7,500.0	6,869.9	5,928.2	5,536.4	49.8	38.5	106.82	647.4	1,944.4	4,182.5	4,119.5	61.036		
7,600.0	6,969.9	6,020.5	5,621.7	49.8	39.2	106.49	659.3	1,978.4	4,212.5	4,149.8	60.913		
7,700.0	7,069.9	6,112.8	5,707.0	49.8	39.9	106.16	671.2	2,012.4	4,242.5	4,180.1	60.790		
7,800.0	7,169.9	6,205.1	5,792.3	49.8	40.6	105.82	683.1	2,046.4	4,272.5	4,210.4	60.667		
7,900.0	7,269.9	6,297.4	5,877.6	49.9	41.3	105.49	695.0	2,080.4	4,302.5	4,240.7	60.544		
8,000.0	7,369.9	6,389.7	5,962.9	49.9	42.0	105.16	706.9	2,114.4	4,332.5	4,271.0	60.421		
8,100.0	7,469.9	6,482.0	6,048.2	49.9	42.7	104.82	718.8	2,148.4	4,362.5	4,301.3	60.298		
8,200.0	7,569.9	6,574.3	6,133.5	49.9	43.4	104.49	730.7	2,182.4	4,392.5	4,331.6	60.175		
8,300.0	7,669.9	6,666.6	6,218.8	49.9	44.1	104.16	742.6	2,216.4	4,422.5	4,361.9	60.052		
8,400.0	7,769.9	6,758.9	6,304.1	50.0	44.8	103.82	754.5	2,250.4	4,452.5	4,392.2	59.929		
8,500.0	7,869.9	6,851.2	6,389.4	50.0	45.5	103.49	766.4	2,284.4	4,482.5	4,422.5	59.806		
8,600.0	7,969.9	6,943.5	6,474.7	50.0	46.2	103.16	778.3	2,318.4	4,512.5	4,452.8	59.683		
8,700.0	8,069.9	7,035.8	6,560.0	50.0	46.9	102.82	790.2	2,352.4	4,542.5	4,483.1	59.560		
8,800.0	8,169.9	7,128.1	6,645.3	50.1	47.6	102.49	802.1	2,386.4	4,572.5	4,513.4	59.437		
8,900.0	8,269.9	7,220.4	6,730.6	50.1	48.3	102.16	814.0	2,420.4	4,602.5	4,543.7	59.314		
9,000.0	8,369.9	7,312.7	6,815.9	50.1	49.0	101.82	825.9	2,454.4	4,632.5	4,574.0	59.191		
9,100.0	8,469.9	7,405.0	6,901.2	50.1	49.7	101.49	837.8	2,488.4	4,662.5	4,604.3	59.068		
9,200.0	8,569.9	7,497.3	6,986.5	50.2	50.4	101.16	849.7	2,522.4	4,692.5	4,634.6	58.945		
9,287.1	8,657.0	7,584.4	7,071.8	50.2	51.1	100.82	861.6	2,556.4	4,722.5	4,664.9	58.822		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	
200.4	200.4	200.4	200.4	1.4	1.4	123.80	-33.8	50.5	60.8	58.0	21.480		
300.0	300.0	299.5	299.5	1.7	1.7	-166.34	-33.8	50.7	61.2	57.8	18.191	ES	
400.0	399.9	397.4	397.3	2.8	2.7	-168.97	-33.2	53.7	67.1	61.9	12.882		
500.0	499.6	493.9	493.6	4.2	4.1	-173.53	-31.6	60.8	80.7	73.0	10.454	SF	
600.0	598.8	588.2	587.3	4.5	5.1	176.85	-29.3	71.4	102.2	93.2	11.326		
700.0	697.5	679.8	677.7	5.2	6.0	167.54	-26.3	85.4	131.2	120.7	12.534		
800.0	795.4	768.1	764.4	6.1	6.8	161.56	-22.7	102.2	167.0	155.0	13.992		
900.0	892.4	852.7	846.6	6.9	7.4	157.47	-18.6	121.4	209.1	195.9	15.846		
1,000.0	988.3	933.2	924.2	7.6	8.0	154.48	-14.1	142.3	257.2	242.9	17.984		
1,100.0	1,082.8	1,009.2	996.8	8.3	8.6	152.14	-9.3	164.5	310.9	295.6	20.341		
1,200.0	1,175.9	1,080.8	1,064.3	9.0	9.0	150.17	-4.3	187.6	369.8	353.6	22.878		
1,300.0	1,267.4	1,147.8	1,126.8	9.7	9.3	148.41	0.7	211.0	433.4	416.6	25.788		
1,400.0	1,357.0	1,221.8	1,195.5	10.3	9.5	146.94	6.5	237.9	500.5	483.0	28.614		
1,500.0	1,444.6	1,293.3	1,262.0	10.8	9.7	146.11	12.1	263.9	570.0	551.9	31.495		
1,600.0	1,531.6	1,364.1	1,327.7	11.1	10.0	146.96	17.6	289.6	640.4	621.8	34.329		
1,700.0	1,618.6	1,434.9	1,393.4	11.5	10.2	147.64	23.1	315.2	710.8	691.6	36.948		
1,800.0	1,705.5	1,505.6	1,459.1	11.8	10.4	148.21	28.7	340.9	781.3	761.5	39.365		
1,900.0	1,792.5	1,576.4	1,524.8	12.2	10.7	148.67	34.2	366.6	851.8	831.3	41.583		
2,000.0	1,879.5	1,647.1	1,590.5	12.6	10.9	149.07	39.7	392.3	922.3	901.2	43.625		
2,100.0	1,966.4	1,717.9	1,656.2	13.1	11.2	149.41	45.3	418.0	992.9	971.1	45.506		
2,200.0	2,053.4	1,788.7	1,721.9	13.7	11.5	149.71	50.8	443.6	1,063.5	1,040.9	47.235		
2,300.0	2,140.4	1,859.4	1,787.6	14.5	11.7	149.97	56.3	469.3	1,134.0	1,110.8	48.824		
2,400.0	2,227.3	1,930.2	1,853.3	15.3	12.0	150.20	61.8	495.0	1,204.6	1,180.7	50.290		
2,500.0	2,314.3	2,000.9	1,919.0	16.2	12.3	150.40	67.4	520.7	1,275.2	1,250.5	51.643		
2,600.0	2,401.3	2,071.7	1,984.7	17.1	12.6	150.58	72.9	546.3	1,345.8	1,320.4	52.887		
2,700.0	2,488.2	2,142.4	2,050.4	18.0	12.9	150.75	78.4	572.0	1,416.4	1,390.2	54.039		
2,800.0	2,575.2	2,213.2	2,116.1	18.9	13.2	150.89	83.9	597.7	1,487.0	1,460.0	55.106		
2,900.0	2,662.2	2,284.0	2,181.8	19.8	13.5	151.03	89.5	623.4	1,557.6	1,529.9	56.093		
3,000.0	2,749.1	2,354.7	2,247.5	20.8	13.8	151.15	95.0	649.1	1,628.3	1,599.7	57.007		
3,100.0	2,836.1	2,425.5	2,313.2	21.7	14.1	151.27	100.5	674.7	1,698.9	1,669.5	57.858		
3,200.0	2,923.1	2,496.2	2,378.9	22.6	14.4	151.37	106.1	700.4	1,769.5	1,739.3	58.650		
3,300.0	3,010.0	2,567.0	2,444.6	23.5	14.7	151.47	111.6	726.1	1,840.1	1,809.2	59.385		
3,400.0	3,097.0	2,637.8	2,510.3	24.5	15.0	151.56	117.1	751.8	1,910.8	1,879.0	60.072		
3,500.0	3,184.0	2,708.5	2,576.1	25.4	15.4	151.64	122.6	777.5	1,981.4	1,948.8	60.715		
3,600.0	3,270.9	2,779.3	2,641.8	26.3	15.7	151.71	128.2	803.1	2,052.0	2,018.6	61.314		
3,700.0	3,357.9	2,850.0	2,707.5	27.2	16.1	151.79	133.7	828.8	2,122.7	2,088.4	61.875		
3,800.0	3,444.9	2,920.8	2,773.2	28.2	16.5	151.85	139.2	854.5	2,193.3	2,158.2	62.402		
3,900.0	3,531.8	2,991.6	2,838.9	29.1	16.9	151.92	144.8	880.2	2,264.0	2,228.0	62.897		
4,000.0	3,618.8	3,062.3	2,904.6	30.0	17.4	151.98	150.3	905.9	2,334.6	2,297.8	63.357		
4,100.0	3,705.8	3,133.1	2,970.3	31.0	17.9	152.03	155.8	931.5	2,405.3	2,367.6	63.804		
4,200.0	3,792.7	3,203.8	3,036.0	31.9	18.3	152.08	161.3	957.2	2,475.9	2,437.3	64.211		
4,300.0	3,879.7	3,274.6	3,101.7	32.8	18.8	152.13	166.9	982.9	2,546.5	2,507.1	64.600		
4,400.0	3,966.7	3,345.3	3,167.4	33.8	19.3	152.18	172.4	1,008.6	2,617.2	2,576.9	64.966		
4,500.0	4,053.6	3,416.1	3,233.1	34.7	19.8	152.23	177.9	1,034.2	2,687.8	2,646.7	65.312		
4,600.0	4,140.6	3,486.9	3,298.8	35.6	20.3	152.27	183.4	1,059.9	2,758.5	2,716.5	65.639		
4,700.0	4,227.6	3,557.6	3,364.5	36.6	20.8	152.31	189.0	1,085.6	2,829.1	2,786.2	65.949		
4,800.0	4,314.5	3,628.4	3,430.2	37.5	21.2	152.35	194.5	1,111.3	2,899.8	2,856.0	66.243		
4,900.0	4,401.5	3,699.1	3,495.9	38.4	21.7	152.38	200.0	1,137.0	2,970.4	2,925.8	66.522		
5,000.0	4,488.5	3,769.9	3,561.6	39.4	22.2	152.42	205.6	1,162.6	3,041.1	2,995.5	66.786		

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 0993-20-14E - Slot B3
<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 0993-20-14E	<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	4,575.4	3,840.7	3,627.3	40.3	22.7	152.45	211.1	1,188.3	3,111.7	3,065.3	67.038		
5,200.0	4,662.4	3,911.4	3,693.0	41.2	23.2	152.48	216.6	1,214.0	3,182.4	3,135.1	67.277		
5,300.0	4,749.4	3,982.2	3,758.7	42.2	23.7	152.51	222.1	1,239.7	3,253.0	3,204.8	67.504		
5,400.0	4,836.3	4,052.9	3,824.4	43.1	24.2	152.54	227.7	1,265.4	3,323.7	3,274.6	67.721		
5,500.0	4,923.3	4,123.7	3,890.1	44.1	24.6	152.57	233.2	1,291.0	3,394.3	3,344.4	67.927		
5,600.0	5,011.1	4,195.5	3,956.8	45.0	25.1	153.54	238.8	1,317.1	3,463.9	3,413.0	68.085		
5,700.0	5,100.9	4,270.0	4,025.9	45.8	25.7	154.49	244.6	1,344.1	3,530.7	3,478.8	68.103		
5,800.0	5,192.5	4,346.9	4,097.4	46.5	26.2	155.29	250.6	1,372.0	3,594.4	3,541.6	68.036		
5,900.0	5,285.8	4,426.2	4,171.0	47.2	26.7	155.97	256.8	1,400.8	3,655.1	3,601.2	67.901		
6,000.0	5,380.5	4,507.7	4,246.7	47.7	27.3	156.54	263.2	1,430.4	3,712.5	3,657.7	67.704		
6,100.0	5,476.6	4,591.3	4,324.3	48.2	27.9	157.01	269.7	1,460.7	3,766.7	3,710.8	67.452		
6,200.0	5,573.7	4,676.8	4,403.7	48.6	28.4	157.40	276.4	1,491.7	3,817.4	3,760.6	67.151		
6,300.0	5,671.9	4,764.0	4,484.6	49.0	29.0	157.70	283.2	1,523.4	3,864.7	3,806.9	66.808		
6,400.0	5,770.7	4,852.7	4,567.0	49.2	29.7	157.92	290.1	1,555.6	3,908.5	3,849.6	66.432		
6,500.0	5,870.1	4,942.9	4,650.8	49.4	30.3	158.08	297.2	1,588.3	3,948.6	3,888.8	66.029		
6,600.0	5,969.9	5,034.3	4,735.6	49.5	30.9	158.18	304.3	1,621.5	3,985.1	3,924.3	65.616		
6,700.0	6,069.9	5,126.7	4,821.4	49.6	31.5	112.99	311.6	1,655.0	4,017.8	3,956.3	65.351		
6,800.0	6,169.9	5,219.5	4,907.7	49.6	32.2	112.70	318.8	1,688.7	4,048.9	3,986.8	65.181		
6,900.0	6,269.9	5,312.4	4,993.9	49.6	32.8	112.41	326.1	1,722.4	4,080.2	4,017.4	65.044		
7,000.0	6,369.9	5,405.1	5,080.1	49.7	33.4	112.15	333.3	1,756.1	4,111.3	4,047.9	64.907		
7,100.0	6,469.9	5,497.8	5,166.3	49.7	33.9	111.25	333.3	1,789.8	4,142.3	4,078.8	64.770		
7,200.0	6,569.9	5,590.1	5,252.5	49.7	34.0	110.25	333.3	1,823.5	4,173.3	4,109.7	64.633		
7,300.0	6,669.9	5,682.4	5,338.7	49.7	34.0	110.25	333.3	1,857.2	4,204.3	4,140.6	64.496		
7,400.0	6,769.9	5,774.7	5,424.9	49.7	34.0	110.25	333.3	1,890.9	4,235.3	4,171.5	64.359		
7,500.0	6,869.9	5,867.0	5,511.1	49.8	34.0	110.25	333.3	1,924.6	4,266.3	4,202.4	64.222		
7,600.0	6,969.9	5,959.3	5,597.3	49.8	34.1	110.25	333.3	1,958.3	4,297.3	4,233.3	64.085		
7,700.0	7,069.9	6,051.6	5,683.5	49.8	34.1	110.25	333.3	1,992.0	4,328.3	4,264.3	63.948		
7,800.0	7,169.9	6,143.9	5,769.7	49.8	34.1	110.25	333.3	2,025.7	4,359.3	4,295.3	63.811		
7,900.0	7,269.9	6,236.2	5,855.9	49.9	34.2	110.25	333.3	2,059.4	4,390.3	4,326.3	63.674		
8,000.0	7,369.9	6,328.5	5,942.1	49.9	34.2	110.25	333.3	2,093.1	4,421.3	4,357.3	63.537		
8,100.0	7,469.9	6,420.8	6,028.3	49.9	34.2	110.25	333.3	2,126.8	4,452.3	4,388.3	63.400		
8,200.0	7,569.9	6,513.1	6,114.5	49.9	34.3	110.25	333.3	2,160.5	4,483.3	4,419.3	63.263		
8,300.0	7,669.9	6,605.4	6,200.7	49.9	34.3	110.25	333.3	2,194.2	4,514.3	4,450.3	63.126		
8,400.0	7,769.9	6,697.7	6,286.9	50.0	34.3	110.25	333.3	2,227.9	4,545.3	4,481.3	62.989		
8,500.0	7,869.9	6,790.0	6,373.1	50.0	34.3	110.25	333.3	2,261.6	4,576.3	4,512.3	62.852		
8,600.0	7,969.9	6,882.3	6,459.3	50.0	34.3	110.25	333.3	2,295.3	4,607.3	4,543.3	62.715		
8,700.0	8,069.9	6,974.6	6,545.5	50.0	34.3	110.25	333.3	2,329.0	4,638.3	4,574.3	62.578		
8,800.0	8,169.9	7,066.9	6,631.7	50.1	34.3	110.25	333.3	2,362.7	4,669.3	4,605.3	62.441		
8,900.0	8,269.9	7,159.2	6,717.9	50.1	34.3	110.25	333.3	2,396.4	4,700.3	4,636.3	62.304		
9,000.0	8,369.9	7,251.5	6,804.1	50.1	34.3	110.25	333.3	2,430.1	4,731.3	4,667.3	62.167		
9,100.0	8,469.9	7,343.8	6,890.3	50.1	34.3	110.25	333.3	2,463.8	4,762.3	4,698.3	62.030		
9,200.0	8,569.9	7,436.1	6,976.5	50.2	34.3	110.25	333.3	2,497.5	4,793.3	4,729.3	61.893		
9,287.1	8,657.0	7,528.4	7,062.7	50.2	34.3	110.25	333.3	2,531.2	4,824.3	4,760.3	61.756		

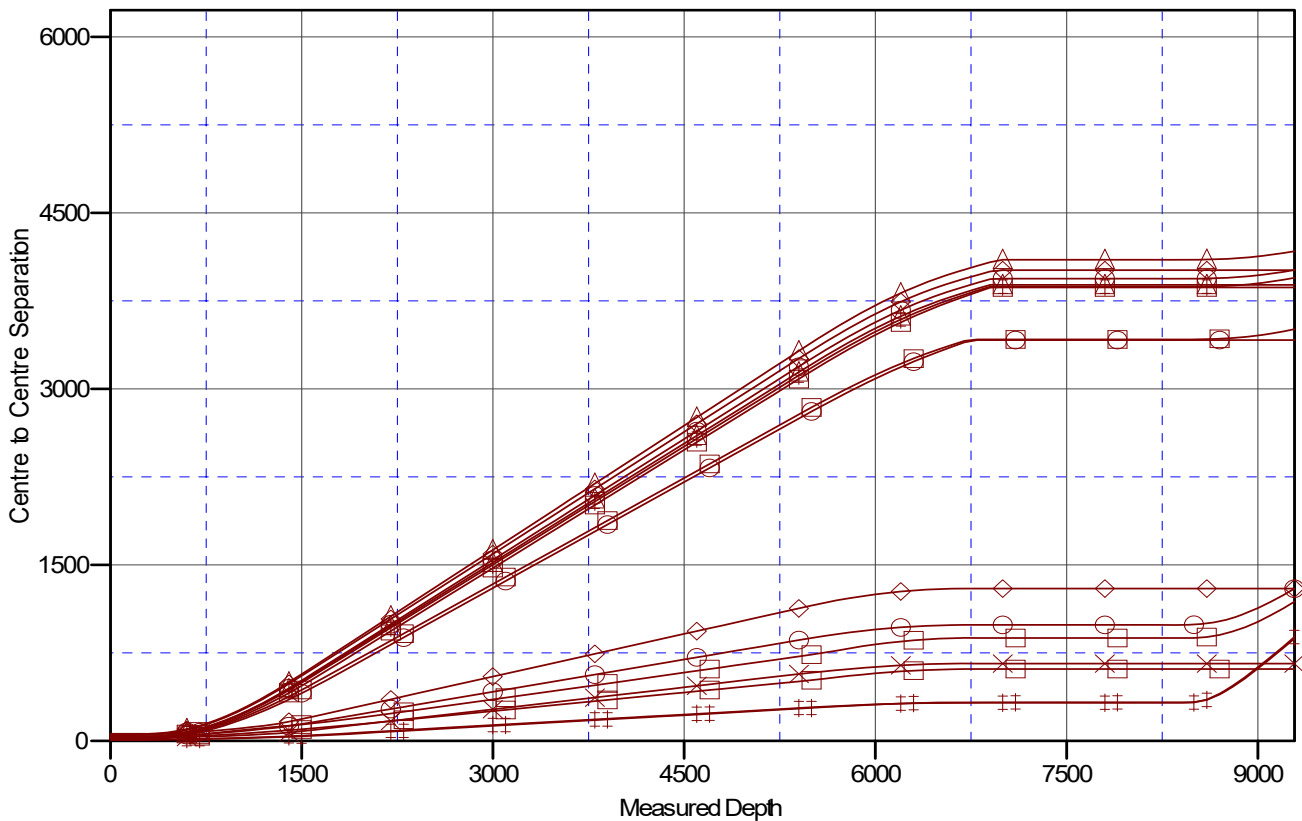
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-14E - Slot B3
<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 0993-20-14E	<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 0993-20-14E - Slot B3  
 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 0993-20-13E, 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 0993-20-12E, OH, Design#2 V0
- Laramie 29-01 Fed 0993-21-14W, 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 0993-21-13W, 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 0993-20-17E, 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 Fed 0993-21-18W, OH, Design#2 V0
- Laramie 29-01 Fed 0993-21-15W, OH, Design#2 V0

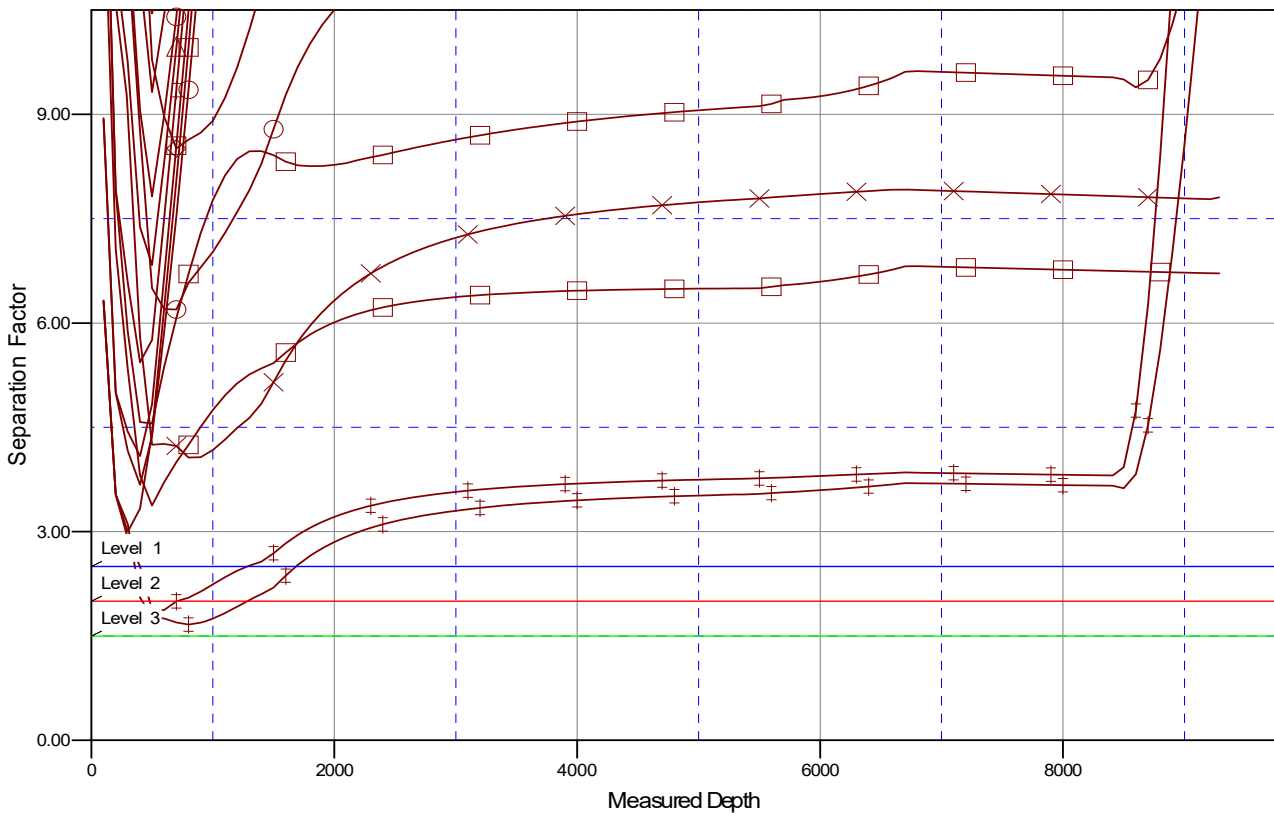


<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-14E - Slot B3
<b>Project:</b>	Mesa County, CO	<b>TVD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Reference Site:</b>	Laramie 0993-29-01	<b>MD Reference:</b>	RKB=30' @ 7493.0usft (TBD)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-14E	<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)  
 Offset Depths are relative to Offset Datum  
 Central Meridian is -105.500000

Coordinates are relative to: Laramie 29-01 0993-20-14E - Slot B3  
 Coordinate System is US State Plane 1983, Colorado Central Zone  
 Grid Convergence at Surface is: -1.44°

### Separation Factor Plot



### LEGEND

- Laramie 29-01 0993-20-13E, 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 0993-20-12E, OH, Design#2 V0
- Laramie 29-01 Fed 0993-21-14W, 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 0993-21-13W, 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 0993-20-17E, 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 Fed 0993-21-18W, OH, Design#2 V0
- Laramie 29-01 Fed 0993-21-15W, OH, Design#2 V0