



# **Laramie Energy, LLC**

**Mesa County, CO**

**Laramie 0993-29-01**

**Laramie 29-01 0993-20-17E**

**OH**

**Design #1**

## **KLX Anticollision Report**

**23 August, 2023**





Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Design #1		
<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>	8/23/2023		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	8,228.7	Design #1 (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 #1	200.0	200.0	96.1	93.6	38.902	CC, ES
Laramie 29-01 0993-20-11E - OH - Design #1	900.0	861.6	156.2	144.4	13.205	SF
Laramie 29-01 0993-20-12E - OH - Design #1	205.6	205.6	80.0	77.4	31.736	CC
Laramie 29-01 0993-20-12E - OH - Design #1	300.0	299.2	80.1	76.8	24.380	ES
Laramie 29-01 0993-20-12E - OH - Design #1	1,000.0	969.1	119.0	107.4	10.265	SF
Laramie 29-01 0993-20-13E - OH - Design #1	213.0	213.0	63.9	61.3	24.648	CC
Laramie 29-01 0993-20-13E - OH - Design #1	300.0	299.8	64.0	60.6	18.911	ES
Laramie 29-01 0993-20-13E - OH - Design #1	1,000.0	976.5	94.5	83.1	8.319	SF
Laramie 29-01 0993-20-14E - OH - Design #1	491.7	489.4	47.2	41.8	8.645	CC
Laramie 29-01 0993-20-14E - OH - Design #1	600.0	596.1	47.5	40.4	6.635	ES
Laramie 29-01 0993-20-14E - OH - Design #1	1,100.0	1,084.7	58.3	47.2	5.287	SF
Laramie 29-01 0993-20-15E - OH - Design #1	828.8	825.4	23.4	16.3	3.304	CC
Laramie 29-01 0993-20-15E - OH - Design #1	900.0	895.9	23.8	15.8	2.967	ES
Laramie 29-01 0993-20-15E - OH - Design #1	1,000.0	995.1	26.0	16.8	2.821	SF
Laramie 29-01 0993-20-16E - OH - Design #1	547.8	547.4	11.9	6.9	2.388	Level 1, CC, ES
Laramie 29-01 0993-20-16E - OH - Design #1	800.0	799.8	20.3	10.5	2.066	Level 1, SF
Laramie 29-01 0993-20-18E - OH - Design #1	468.4	468.9	14.0	9.5	3.085	CC
Laramie 29-01 0993-20-18E - OH - Design #1	500.0	500.6	14.1	9.4	3.006	ES
Laramie 29-01 0993-20-18E - OH - Design #1	900.0	901.3	21.0	11.6	2.229	Level 1, SF
Laramie 29-01 Fed 0993-21-11W - OH - Design #1	200.0	200.0	88.0	85.6	35.634	CC
Laramie 29-01 Fed 0993-21-11W - OH - Design #1	500.0	495.6	89.9	84.4	16.355	ES
Laramie 29-01 Fed 0993-21-11W - OH - Design #1	800.0	775.0	122.3	112.2	12.085	SF
Laramie 29-01 Fed 0993-21-12W - OH - Design #1	200.0	200.0	71.9	69.5	29.122	CC
Laramie 29-01 Fed 0993-21-12W - OH - Design #1	400.0	398.5	73.1	68.8	16.889	ES
Laramie 29-01 Fed 0993-21-12W - OH - Design #1	700.0	684.5	95.5	86.7	10.781	SF
Laramie 29-01 Fed 0993-21-13W - OH - Design #1	437.7	436.9	55.4	50.8	12.022	CC
Laramie 29-01 Fed 0993-21-13W - OH - Design #1	500.0	497.8	56.2	50.8	10.365	ES
Laramie 29-01 Fed 0993-21-13W - OH - Design #1	700.0	686.4	82.3	72.9	8.762	SF
Laramie 29-01 Fed 0993-21-14W - OH - Design #1	446.0	445.5	38.7	34.3	8.750	CC, ES
Laramie 29-01 Fed 0993-21-14W - OH - Design #1	600.0	594.7	49.1	41.7	6.582	SF
Laramie 29-01 Fed 0993-21-15W - OH - Design #1	422.5	422.4	22.6	18.5	5.512	CC, ES
Laramie 29-01 Fed 0993-21-15W - OH - Design #1	500.0	498.6	25.2	19.7	4.582	SF
Laramie 29-01 Fed 0993-21-16W - OH - Design #1	339.3	339.3	7.4	3.9	2.093	Level 1, CC, ES
Laramie 29-01 Fed 0993-21-16W - OH - Design #1	400.0	399.8	8.8	4.3	1.971	Level 2, SF
Laramie 29-01 Fed 0993-21-17W - OH - Design #1	200.0	200.0	8.1	5.6	3.269	CC
Laramie 29-01 Fed 0993-21-17W - OH - Design #1	300.0	299.9	8.7	5.4	2.636	ES, SF
Laramie 29-01 Fed 0993-21-18W - OH - Design #1	200.0	200.0	24.0	21.5	9.720	CC, 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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Laramie 0993-29-01						
Laramie 29-01 Fed 0993-21-18W - OH - Design #1	500.0	495.6	44.6	36.8	5.685 SF	
Piceance 29-07 Pad						
Piceance 29-01E - Wellbore #1 - Wellbore #1	4,862.1	4,972.2	719.2	661.3	12.422 CC, ES	
Piceance 29-01E - Wellbore #1 - Wellbore #1	5,000.0	5,073.0	723.7	664.8	12.305 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 Centre +N/-S (usft)	Offset Wellbore 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	-46.69	65.9	-69.9	96.1			
100.0	100.0	100.0	100.0	0.4	0.4	-46.69	65.9	-69.9	96.1	95.3	121.340	
200.0	200.0	200.0	200.0	1.2	1.2	-46.69	65.9	-69.9	96.1	93.6	38.902	CC, ES
300.0	300.0	296.9	296.9	1.7	2.4	-45.89	68.0	-70.1	97.7	93.9	25.447	
400.0	400.0	393.5	393.2	2.1	3.8	51.80	74.1	-70.7	101.8	96.5	19.207	
500.0	499.8	488.6	487.8	3.5	4.8	56.66	83.6	-72.5	107.5	100.5	15.253	
600.0	599.3	582.8	581.2	4.7	5.6	62.48	96.1	-76.7	116.1	107.6	13.667	
700.0	698.4	676.3	673.1	5.0	6.4	62.74	111.4	-83.3	127.8	118.4	13.613	
800.0	796.8	769.2	763.8	5.5	7.1	60.55	129.4	-92.2	141.3	130.7	13.332	
900.0	894.5	861.6	853.2	6.3	7.7	60.12	150.2	-103.5	156.2	144.4	13.205	SF
1,000.0	991.3	953.6	941.1	7.0	8.4	60.55	173.6	-116.9	172.2	159.4	13.437	
1,100.0	1,087.0	1,045.2	1,027.6	7.7	9.0	61.39	199.5	-132.6	189.4	175.7	13.828	
1,200.0	1,181.4	1,136.4	1,112.3	8.4	9.6	62.41	227.9	-150.3	207.5	192.9	14.258	
1,300.0	1,274.3	1,227.2	1,195.4	9.0	10.1	63.48	258.8	-170.2	226.4	211.0	14.681	
1,400.0	1,365.9	1,317.6	1,276.6	9.4	10.7	65.39	292.0	-192.1	246.6	230.4	15.227	
1,500.0	1,457.3	1,407.4	1,355.6	9.7	11.2	67.11	327.4	-215.8	269.7	252.6	15.749	
1,600.0	1,548.8	1,500.0	1,435.3	10.0	11.7	68.09	366.3	-242.4	295.7	277.4	16.209	
1,700.0	1,640.2	1,583.9	1,505.9	10.4	12.2	68.40	403.6	-268.4	324.2	304.9	16.836	
1,800.0	1,731.7	1,670.3	1,576.6	10.8	12.6	68.27	444.0	-296.8	355.2	334.8	17.427	
1,900.0	1,823.2	1,762.0	1,650.4	11.2	13.0	67.86	488.6	-328.3	388.0	366.4	17.981	
2,000.0	1,914.6	1,856.4	1,726.2	11.7	13.3	67.49	534.5	-360.9	421.0	398.1	18.437	
2,100.0	2,006.1	1,950.8	1,801.9	12.1	13.7	67.17	580.4	-393.4	453.9	429.8	18.819	
2,200.0	2,097.5	2,045.2	1,877.7	12.6	14.2	66.90	626.3	-426.0	486.9	461.5	19.157	
2,300.0	2,189.0	2,139.5	1,953.5	13.1	14.9	66.66	672.2	-458.5	519.9	493.2	19.441	
2,400.0	2,280.4	2,233.9	2,029.2	13.7	15.7	66.45	718.1	-491.1	552.9	524.8	19.681	
2,500.0	2,371.9	2,328.3	2,105.0	14.3	16.6	66.26	764.0	-523.6	585.9	556.5	19.891	
2,600.0	2,463.3	2,422.7	2,180.8	15.0	17.6	66.10	809.9	-556.2	618.9	588.1	20.074	
2,700.0	2,554.8	2,517.1	2,256.5	15.7	18.6	65.95	855.9	-588.8	651.9	619.7	20.233	
2,800.0	2,646.3	2,611.5	2,332.3	16.4	19.7	65.81	901.8	-621.3	684.9	651.3	20.373	
2,900.0	2,737.7	2,705.8	2,408.1	17.1	20.7	65.69	947.7	-653.9	718.0	682.9	20.496	
3,000.0	2,829.2	2,800.2	2,483.8	17.9	21.7	65.57	993.6	-686.4	751.0	714.5	20.605	
3,100.0	2,920.6	2,894.6	2,559.6	18.6	22.8	65.47	1,039.5	-719.0	784.0	746.1	20.702	
3,200.0	3,012.1	2,989.0	2,635.4	19.3	23.8	65.38	1,085.4	-751.5	817.0	777.7	20.787	
3,300.0	3,103.5	3,083.4	2,711.1	20.1	24.9	65.29	1,131.3	-784.1	850.1	809.3	20.864	
3,400.0	3,195.0	3,177.7	2,786.9	20.8	26.0	65.21	1,177.2	-816.6	883.1	840.9	20.932	
3,500.0	3,286.5	3,272.1	2,862.7	21.6	27.0	65.13	1,223.1	-849.2	916.1	872.5	20.994	
3,600.0	3,377.9	3,366.5	2,938.4	22.3	28.1	65.07	1,269.0	-881.7	949.1	904.1	21.049	
3,700.0	3,469.4	3,460.9	3,014.2	23.1	29.1	65.00	1,314.9	-914.3	982.2	935.6	21.099	

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



# Anticollision Report



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<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Laramie 29-01 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	
3,800.0	3,560.8	3,555.3	3,090.0	23.8	30.2	64.94	1,360.8	-946.8	1,015.2	967.2	21.145		
3,900.0	3,652.3	3,649.6	3,165.7	24.6	31.3	64.88	1,406.8	-979.4	1,048.2	998.8	21.186		
4,000.0	3,743.7	3,744.0	3,241.5	25.3	32.3	64.83	1,452.7	-1,011.9	1,081.3	1,030.3	21.223		
4,100.0	3,835.2	3,838.4	3,317.3	26.1	33.4	64.78	1,498.6	-1,044.5	1,114.3	1,061.9	21.258		
4,200.0	3,926.6	3,932.8	3,393.0	26.9	34.5	64.73	1,544.5	-1,077.0	1,147.3	1,093.5	21.289		
4,300.0	4,018.1	4,027.2	3,468.8	27.6	35.5	64.69	1,590.4	-1,109.6	1,180.4	1,125.0	21.317		
4,400.0	4,109.6	4,121.6	3,544.6	28.4	36.6	64.64	1,636.3	-1,142.1	1,213.4	1,156.6	21.343		
4,500.0	4,201.0	4,215.9	3,620.3	29.1	37.7	64.60	1,682.2	-1,174.7	1,246.5	1,188.1	21.367		
4,600.0	4,292.5	4,310.3	3,696.1	29.9	38.8	64.57	1,728.1	-1,207.2	1,279.5	1,219.7	21.390		
4,700.0	4,383.9	4,404.7	3,771.9	30.7	39.8	64.53	1,774.0	-1,239.8	1,312.5	1,251.2	21.410		
4,800.0	4,475.4	4,499.1	3,847.6	31.4	40.9	64.50	1,819.9	-1,272.4	1,345.6	1,282.8	21.429		
4,900.0	4,566.8	4,593.5	3,923.4	32.2	42.0	64.46	1,865.8	-1,304.9	1,378.6	1,314.3	21.446		
5,000.0	4,658.3	4,687.8	3,999.2	32.9	43.1	64.43	1,911.7	-1,337.5	1,411.7	1,345.9	21.462		
5,100.0	4,749.7	4,782.2	4,074.9	33.7	44.1	64.40	1,957.7	-1,370.0	1,444.7	1,377.4	21.477		
5,200.0	4,841.2	4,876.6	4,150.7	34.5	45.2	64.37	2,003.6	-1,402.6	1,477.7	1,409.0	21.491		
5,300.0	4,932.7	4,971.0	4,226.5	35.2	46.3	64.35	2,049.5	-1,435.1	1,510.8	1,440.5	21.504		
5,400.0	5,024.1	5,065.4	4,302.2	36.0	47.3	64.32	2,095.4	-1,467.7	1,543.8	1,472.1	21.516		
5,500.0	5,115.6	5,159.7	4,378.0	36.8	48.4	64.30	2,141.3	-1,500.2	1,576.9	1,503.6	21.527		
5,600.0	5,207.9	5,253.8	4,453.5	37.5	49.5	65.02	2,187.0	-1,532.6	1,610.8	1,536.1	21.567		
5,700.0	5,301.8	5,347.0	4,528.3	38.1	50.6	65.64	2,232.4	-1,564.8	1,646.5	1,570.5	21.663		
5,800.0	5,397.1	5,439.1	4,602.3	38.7	51.6	66.19	2,277.2	-1,596.6	1,683.9	1,606.7	21.815		
5,900.0	5,493.7	5,530.1	4,675.3	39.1	52.6	66.67	2,321.5	-1,628.0	1,723.0	1,644.8	22.023		
6,000.0	5,591.2	5,679.8	4,796.7	39.5	54.3	66.69	2,392.9	-1,678.6	1,763.2	1,683.1	22.011		
6,100.0	5,689.7	5,877.8	4,965.3	39.8	56.2	66.43	2,477.5	-1,738.6	1,798.7	1,716.3	21.809		
6,200.0	5,788.8	6,190.0	5,247.1	40.1	58.7	65.67	2,586.6	-1,815.9	1,827.8	1,742.4	21.406		
6,300.0	5,888.4	6,469.6	5,512.9	40.2	60.1	65.26	2,656.7	-1,865.7	1,849.3	1,762.5	21.288		
6,400.0	5,988.3	6,761.2	5,799.2	40.3	61.0	64.95	2,701.2	-1,897.2	1,862.7	1,775.4	21.328		
6,500.0	6,088.3	7,035.4	6,072.7	40.3	61.4	-0.20	2,715.6	-1,907.4	1,867.3	1,780.6	21.523		
6,600.0	6,188.3	7,151.0	6,188.3	40.4	61.4	-0.20	2,715.7	-1,907.5	1,867.4	1,780.7	21.544		
6,700.0	6,288.3	7,251.0	6,288.3	40.4	61.4	-0.20	2,715.7	-1,907.5	1,867.4	1,780.6	21.531		
6,800.0	6,388.3	7,351.0	6,388.3	40.4	61.4	-0.20	2,715.7	-1,907.5	1,867.4	1,780.6	21.517		
6,900.0	6,488.3	7,451.0	6,488.3	40.5	61.4	-0.20	2,715.7	-1,907.5	1,867.4	1,780.5	21.504		
7,000.0	6,588.3	7,551.0	6,588.3	40.5	61.4	-0.20	2,715.7	-1,907.5	1,867.4	1,780.5	21.490		
7,100.0	6,688.3	7,651.0	6,688.3	40.5	61.5	-0.20	2,715.7	-1,907.5	1,867.4	1,780.4	21.477		
7,200.0	6,788.3	7,751.0	6,788.3	40.5	61.5	-0.20	2,715.7	-1,907.5	1,867.4	1,780.4	21.463		
7,300.0	6,888.3	7,851.0	6,888.3	40.6	61.5	-0.20	2,715.7	-1,907.5	1,867.4	1,780.3	21.450		
7,400.0	6,988.3	7,951.0	6,988.3	40.6	61.5	-0.20	2,715.7	-1,907.5	1,867.4	1,780.2	21.436		
7,500.0	7,088.3	8,051.0	7,088.3	40.6	61.5	-0.20	2,715.7	-1,907.5	1,867.4	1,780.2	21.422		
7,600.0	7,188.3	8,151.0	7,188.3	40.7	61.5	-0.20	2,715.7	-1,907.5	1,867.4	1,780.1	21.408		
7,700.0	7,288.3	8,251.0	7,288.3	40.7	61.6	-0.20	2,715.7	-1,907.5	1,867.4	1,780.1	21.394		
7,800.0	7,388.3	8,351.0	7,388.3	40.7	61.6	-0.20	2,715.7	-1,907.5	1,867.4	1,780.0	21.380		
7,900.0	7,488.3	8,451.0	7,488.3	40.7	61.6	-0.20	2,715.7	-1,907.5	1,867.4	1,780.0	21.366		
8,000.0	7,588.3	8,551.0	7,588.3	40.8	61.6	-0.20	2,715.7	-1,907.5	1,867.4	1,779.9	21.352		
8,100.0	7,688.3	8,651.0	7,688.3	40.8	61.6	-0.20	2,715.7	-1,907.5	1,867.4	1,779.8	21.338		
8,200.0	7,788.3	8,751.0	7,788.3	40.8	61.6	-0.20	2,715.7	-1,907.5	1,867.4	1,779.8	21.324		
8,228.7	7,817.0	8,779.7	7,817.0	40.8	61.6	-0.20	2,715.7	-1,907.5	1,867.4	1,779.8	21.321		

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	-46.54	55.0	-58.0	80.0					
100.0	100.0	100.0	100.0	0.4	0.4	-46.54	55.0	-58.0	80.0	79.2	100.949			
200.0	200.0	200.0	200.0	1.2	1.2	-46.54	55.0	-58.0	80.0	77.5	32.365			
205.6	205.6	205.6	205.6	1.3	1.3	-46.54	55.0	-58.0	80.0	77.4	31.736	CC		
300.0	300.0	299.2	299.2	1.7	1.6	-46.58	55.0	-58.2	80.1	76.8	24.380	ES		
400.0	400.0	396.1	396.0	2.1	2.6	48.16	56.1	-61.0	82.2	77.7	18.213			
500.0	499.8	492.7	492.4	3.5	3.4	48.88	58.6	-67.7	85.3	79.2	13.980			
600.0	599.3	588.9	588.0	4.7	3.9	51.57	63.8	-77.1	89.8	82.5	12.319			
700.0	698.4	684.6	682.6	5.0	4.8	50.28	72.3	-88.5	95.8	87.6	11.716			
800.0	796.8	779.9	776.1	5.5	5.7	47.54	84.1	-102.0	102.6	93.3	10.974			
900.0	894.5	874.7	868.5	6.3	6.5	47.32	99.1	-117.5	110.3	99.7	10.428			
1,000.0	991.3	969.1	959.5	7.0	7.3	48.53	117.2	-134.9	119.0	107.4	10.265	SF		
1,100.0	1,087.0	1,063.0	1,049.0	7.7	8.0	50.53	138.4	-154.1	128.8	116.3	10.335			
1,200.0	1,181.4	1,156.6	1,136.8	8.4	8.6	52.92	162.6	-175.2	139.8	126.6	10.540			
1,300.0	1,274.3	1,249.6	1,222.8	9.0	9.3	55.47	189.7	-198.0	152.2	138.1	10.828			
1,400.0	1,365.9	1,342.2	1,307.0	9.4	9.9	58.73	219.6	-222.6	166.3	151.7	11.323			
1,500.0	1,457.3	1,434.1	1,388.8	9.7	10.4	61.48	252.1	-248.6	184.4	168.8	11.855			
1,600.0	1,548.8	1,525.0	1,468.2	10.0	11.0	63.16	287.0	-276.1	206.0	189.5	12.434			
1,700.0	1,640.2	1,614.7	1,544.6	10.4	11.5	64.02	324.0	-304.7	231.0	213.3	13.061			
1,800.0	1,731.7	1,702.9	1,618.0	10.8	12.0	64.25	362.9	-334.4	259.1	240.3	13.743			
1,900.0	1,823.2	1,797.6	1,695.6	11.2	12.3	64.20	406.2	-367.1	289.0	268.9	14.404			
2,000.0	1,914.6	1,893.0	1,773.8	11.7	12.7	64.16	449.9	-400.1	318.9	297.5	14.941			
2,100.0	2,006.1	1,988.5	1,852.0	12.1	13.0	64.13	493.5	-433.1	348.8	326.1	15.396			
2,200.0	2,097.5	2,083.9	1,930.2	12.6	13.5	64.10	537.1	-466.1	378.6	354.7	15.783			
2,300.0	2,189.0	2,179.3	2,008.4	13.1	14.1	64.08	580.8	-499.1	408.5	383.2	16.119			
2,400.0	2,280.4	2,274.7	2,086.6	13.7	14.9	64.06	624.4	-532.0	438.4	411.7	16.410			
2,500.0	2,371.9	2,370.2	2,164.8	14.3	15.9	64.04	668.1	-565.0	468.3	440.2	16.659			
2,600.0	2,463.3	2,465.6	2,243.0	15.0	16.9	64.03	711.7	-598.0	498.2	468.7	16.878			
2,700.0	2,554.8	2,561.0	2,321.2	15.7	17.9	64.01	755.3	-631.0	528.0	497.1	17.071			
2,800.0	2,646.3	2,656.5	2,399.4	16.4	18.9	64.00	799.0	-664.0	557.9	525.6	17.242			
2,900.0	2,737.7	2,751.9	2,477.6	17.1	19.9	63.99	842.6	-697.0	587.8	554.0	17.393			
3,000.0	2,829.2	2,847.3	2,555.8	17.9	20.9	63.98	886.2	-730.0	617.7	582.4	17.528			
3,100.0	2,920.6	2,942.8	2,634.0	18.6	22.0	63.97	929.9	-763.0	647.6	610.9	17.649			
3,200.0	3,012.1	3,038.2	2,712.2	19.3	23.0	63.96	973.5	-796.0	677.4	639.3	17.758			
3,300.0	3,103.5	3,133.6	2,790.4	20.1	24.0	63.95	1,017.2	-829.0	707.3	667.7	17.857			
3,400.0	3,195.0	3,229.1	2,868.6	20.8	25.0	63.95	1,060.8	-862.0	737.2	696.1	17.946			
3,500.0	3,286.5	3,324.5	2,946.8	21.6	26.1	63.94	1,104.4	-894.9	767.1	724.5	18.028			
3,600.0	3,377.9	3,419.9	3,025.0	22.3	27.1	63.94	1,148.1	-927.9	797.0	752.9	18.102			
3,700.0	3,469.4	3,515.4	3,103.2	23.1	28.1	63.93	1,191.7	-960.9	826.9	781.3	18.170			
3,800.0	3,560.8	3,610.8	3,181.4	23.8	29.2	63.93	1,235.3	-993.9	856.7	809.7	18.232			
3,900.0	3,652.3	3,706.2	3,259.5	24.6	30.2	63.92	1,279.0	-1,026.9	886.6	838.1	18.289			
4,000.0	3,743.7	3,801.6	3,337.7	25.3	31.3	63.92	1,322.6	-1,059.9	916.5	866.5	18.342			
4,100.0	3,835.2	3,897.1	3,415.9	26.1	32.3	63.91	1,366.3	-1,092.9	946.4	894.9	18.391			
4,200.0	3,926.6	3,992.5	3,494.1	26.9	33.3	63.91	1,409.9	-1,125.9	976.3	923.3	18.437			
4,300.0	4,018.1	4,087.9	3,572.3	27.6	34.4	63.90	1,453.5	-1,158.9	1,006.1	951.7	18.479			
4,400.0	4,109.6	4,183.4	3,650.5	28.4	35.4	63.90	1,497.2	-1,191.9	1,036.0	980.1	18.518			
4,500.0	4,201.0	4,278.8	3,728.7	29.1	36.5	63.90	1,540.8	-1,224.8	1,065.9	1,008.4	18.555			
4,600.0	4,292.5	4,374.2	3,806.9	29.9	37.5	63.89	1,584.4	-1,257.8	1,095.8	1,036.8	18.589			
4,700.0	4,383.9	4,469.7	3,885.1	30.7	38.5	63.89	1,628.1	-1,290.8	1,125.7	1,065.2	18.621			
4,800.0	4,475.4	4,565.1	3,963.3	31.4	39.6	63.89	1,671.7	-1,323.8	1,155.5	1,093.6	18.651			
4,900.0	4,566.8	4,660.5	4,041.5	32.2	40.6	63.89	1,715.4	-1,356.8	1,185.4	1,122.0	18.680			
5,000.0	4,658.3	4,756.0	4,119.7	32.9	41.7	63.88	1,759.0	-1,389.8	1,215.3	1,150.3	18.706			

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	4,749.7	4,851.4	4,197.9	33.7	42.7	63.88	1,802.6	-1,422.8	1,245.2	1,178.7	18.731		
5,200.0	4,841.2	4,946.8	4,276.1	34.5	43.8	63.88	1,846.3	-1,455.8	1,275.1	1,207.1	18.755		
5,300.0	4,932.7	5,042.3	4,354.3	35.2	44.8	63.88	1,889.9	-1,488.8	1,304.9	1,235.4	18.777		
5,400.0	5,024.1	5,137.7	4,432.5	36.0	45.8	63.87	1,933.6	-1,521.8	1,334.8	1,263.8	18.799		
5,500.0	5,115.6	5,233.1	4,510.7	36.8	46.9	63.88	1,977.2	-1,554.7	1,364.7	1,292.2	18.819		
5,600.0	5,207.9	5,328.2	4,588.6	37.5	47.9	64.52	2,020.7	-1,587.6	1,395.5	1,321.5	18.866		
5,700.0	5,301.8	5,422.6	4,665.9	38.1	49.0	65.05	2,063.8	-1,620.2	1,428.1	1,352.8	18.967		
5,800.0	5,397.1	5,516.0	4,742.5	38.7	50.0	65.48	2,106.5	-1,652.5	1,462.5	1,386.0	19.122		
5,900.0	5,493.7	5,676.4	4,876.1	39.1	51.6	65.48	2,177.4	-1,706.1	1,497.1	1,418.5	19.040		
6,000.0	5,591.2	5,873.6	5,048.1	39.5	53.4	65.31	2,254.1	-1,764.1	1,527.7	1,446.7	18.858		
6,100.0	5,689.7	6,079.4	5,235.8	39.8	54.9	65.13	2,321.2	-1,814.8	1,553.5	1,470.5	18.725		
6,200.0	5,788.8	6,292.9	5,437.7	40.1	56.2	64.97	2,376.4	-1,856.6	1,574.0	1,489.6	18.651		
6,300.0	5,888.4	6,512.7	5,651.3	40.2	57.0	64.81	2,417.3	-1,887.5	1,589.0	1,503.7	18.643		
6,400.0	5,988.3	6,737.1	5,873.5	40.3	57.5	64.68	2,442.1	-1,906.2	1,598.1	1,512.7	18.712		
6,500.0	6,088.3	6,952.1	6,088.3	40.3	57.7	-0.39	2,449.4	-1,911.8	1,601.1	1,516.2	18.858		
6,600.0	6,188.3	7,052.1	6,188.3	40.4	57.7	-0.39	2,449.4	-1,911.8	1,601.1	1,516.2	18.847		
6,700.0	6,288.3	7,152.1	6,288.3	40.4	57.7	-0.39	2,449.4	-1,911.8	1,601.1	1,516.1	18.835		
6,800.0	6,388.3	7,252.1	6,388.3	40.4	57.8	-0.39	2,449.4	-1,911.8	1,601.1	1,516.1	18.823		
6,900.0	6,488.3	7,352.1	6,488.3	40.5	57.8	-0.39	2,449.4	-1,911.8	1,601.1	1,516.0	18.811		
7,000.0	6,588.3	7,452.1	6,588.3	40.5	57.8	-0.39	2,449.4	-1,911.8	1,601.1	1,516.0	18.799		
7,100.0	6,688.3	7,552.1	6,688.3	40.5	57.8	-0.39	2,449.4	-1,911.8	1,601.1	1,515.9	18.787		
7,200.0	6,788.3	7,652.1	6,788.3	40.5	57.8	-0.39	2,449.4	-1,911.8	1,601.1	1,515.9	18.774		
7,300.0	6,888.3	7,752.1	6,888.3	40.6	57.8	-0.39	2,449.4	-1,911.8	1,601.1	1,515.8	18.762		
7,400.0	6,988.3	7,852.1	6,988.3	40.6	57.9	-0.39	2,449.4	-1,911.8	1,601.1	1,515.7	18.749		
7,500.0	7,088.3	7,952.1	7,088.3	40.6	57.9	-0.39	2,449.4	-1,911.8	1,601.1	1,515.7	18.737		
7,600.0	7,188.3	8,052.1	7,188.3	40.7	57.9	-0.39	2,449.4	-1,911.8	1,601.1	1,515.6	18.724		
7,700.0	7,288.3	8,152.1	7,288.3	40.7	57.9	-0.39	2,449.4	-1,911.8	1,601.1	1,515.6	18.712		
7,800.0	7,388.3	8,252.1	7,388.3	40.7	57.9	-0.39	2,449.4	-1,911.8	1,601.1	1,515.5	18.699		
7,900.0	7,488.3	8,352.1	7,488.3	40.7	58.0	-0.39	2,449.4	-1,911.8	1,601.1	1,515.5	18.687		
8,000.0	7,588.3	8,452.1	7,588.3	40.8	58.0	-0.39	2,449.4	-1,911.8	1,601.1	1,515.4	18.674		
8,100.0	7,688.3	8,552.1	7,688.3	40.8	58.0	-0.39	2,449.4	-1,911.8	1,601.1	1,515.3	18.661		
8,200.0	7,788.3	8,652.1	7,788.3	40.8	58.0	-0.39	2,449.4	-1,911.8	1,601.1	1,515.3	18.648		
8,228.7	7,817.0	8,680.8	7,817.0	40.8	58.0	-0.39	2,449.4	-1,911.8	1,601.1	1,515.3	18.646		



Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-46.68	43.9	-46.5	63.9				
100.0	100.0	100.0	100.0	0.4	0.4	-46.68	43.9	-46.5	63.9	63.1	80.721		
200.0	200.0	200.0	200.0	1.2	1.2	-46.68	43.9	-46.5	63.9	61.5	25.880		
213.0	213.0	213.0	213.0	1.3	1.3	-46.68	43.9	-46.5	63.9	61.3	24.648	CC	
300.0	300.0	299.8	299.8	1.7	1.6	-46.69	43.9	-46.5	64.0	60.6	18.911	ES	
400.0	400.0	397.3	397.2	2.1	2.5	48.14	44.6	-48.9	65.4	61.0	14.720		
500.0	499.8	494.7	494.4	3.5	4.0	49.05	46.7	-55.2	68.0	61.4	10.356		
600.0	599.3	591.9	591.0	4.7	4.6	51.03	50.1	-65.4	71.5	63.8	9.219		
700.0	698.4	688.5	686.6	5.0	5.0	49.05	56.2	-78.2	76.4	68.2	9.349		
800.0	796.8	784.9	781.3	5.5	5.7	45.95	65.6	-93.1	81.7	72.5	8.880		
900.0	894.5	880.9	874.9	6.3	6.5	45.61	78.4	-110.1	87.7	77.3	8.451		
1,000.0	991.3	976.5	967.3	7.0	7.2	46.90	94.4	-129.1	94.5	83.1	8.319	SF	
1,100.0	1,087.0	1,071.8	1,058.2	7.7	7.9	49.12	113.6	-150.1	102.3	90.1	8.380		
1,200.0	1,181.4	1,166.7	1,147.6	8.4	8.5	51.85	135.9	-173.0	111.2	98.2	8.563		
1,300.0	1,274.3	1,261.2	1,235.2	9.0	9.2	54.78	161.2	-197.7	121.3	107.6	8.824		
1,400.0	1,365.9	1,355.3	1,321.0	9.4	9.8	58.37	189.5	-224.2	133.3	118.9	9.271		
1,500.0	1,457.3	1,448.8	1,404.5	9.7	10.4	61.19	220.5	-252.3	149.1	133.9	9.772		
1,600.0	1,548.8	1,541.3	1,485.6	10.0	10.9	62.76	254.0	-281.8	168.6	152.3	10.331		
1,700.0	1,640.2	1,632.7	1,563.7	10.4	11.4	63.38	289.9	-312.6	191.5	174.1	10.994		
1,800.0	1,731.7	1,728.6	1,644.5	10.8	11.7	63.52	329.3	-346.0	216.4	197.8	11.636		
1,900.0	1,823.2	1,825.4	1,726.0	11.2	12.1	63.63	369.2	-379.7	241.4	221.5	12.154		
2,000.0	1,914.6	1,922.2	1,807.6	11.7	12.4	63.71	409.0	-413.4	266.4	245.2	12.586		
2,100.0	2,006.1	2,019.0	1,889.1	12.1	12.9	63.78	448.9	-447.2	291.4	268.9	12.949		
2,200.0	2,097.5	2,115.9	1,970.6	12.6	13.4	63.84	488.8	-480.9	316.3	292.5	13.255		
2,300.0	2,189.0	2,212.7	2,052.2	13.1	14.1	63.90	528.6	-514.6	341.3	316.1	13.525		
2,400.0	2,280.4	2,309.5	2,133.7	13.7	14.9	63.94	568.5	-548.4	366.3	339.7	13.753		
2,500.0	2,371.9	2,406.4	2,215.3	14.3	15.8	63.98	608.3	-582.1	391.3	363.2	13.950		
2,600.0	2,463.3	2,503.2	2,296.8	15.0	16.7	64.01	648.2	-615.8	416.3	386.8	14.123		
2,700.0	2,554.8	2,600.0	2,378.4	15.7	17.7	64.05	688.0	-649.5	441.2	410.3	14.275		
2,800.0	2,646.3	2,696.8	2,459.9	16.4	18.6	64.07	727.9	-683.3	466.2	433.9	14.409		
2,900.0	2,737.7	2,793.7	2,541.5	17.1	19.6	64.10	767.8	-717.0	491.2	457.4	14.528		
3,000.0	2,829.2	2,890.5	2,623.0	17.9	20.5	64.12	807.6	-750.7	516.2	480.9	14.634		
3,100.0	2,920.6	2,987.3	2,704.5	18.6	21.5	64.14	847.5	-784.5	541.2	504.4	14.729		
3,200.0	3,012.1	3,084.2	2,786.1	19.3	22.5	64.16	887.3	-818.2	566.1	527.9	14.815		
3,300.0	3,103.5	3,181.0	2,867.6	20.1	23.5	64.17	927.2	-851.9	591.1	551.4	14.893		
3,400.0	3,195.0	3,277.8	2,949.2	20.8	24.4	64.19	967.0	-885.7	616.1	574.9	14.963		
3,500.0	3,286.5	3,374.7	3,030.7	21.6	25.4	64.20	1,006.9	-919.4	641.1	598.4	15.027		
3,600.0	3,377.9	3,471.5	3,112.3	22.3	26.4	64.22	1,046.7	-953.1	666.1	621.9	15.085		
3,700.0	3,469.4	3,568.3	3,193.8	23.1	27.4	64.23	1,086.6	-986.9	691.0	645.4	15.139		
3,800.0	3,560.8	3,665.1	3,275.4	23.8	28.4	64.24	1,126.5	-1,020.6	716.0	668.9	15.188		
3,900.0	3,652.3	3,762.0	3,356.9	24.6	29.3	64.25	1,166.3	-1,054.3	741.0	692.4	15.234		
4,000.0	3,743.7	3,858.8	3,438.5	25.3	30.3	64.26	1,206.2	-1,088.1	766.0	715.8	15.275		
4,100.0	3,835.2	3,955.6	3,520.0	26.1	31.3	64.27	1,246.0	-1,121.8	791.0	739.3	15.314		
4,200.0	3,926.6	4,052.5	3,601.5	26.9	32.3	64.28	1,285.9	-1,155.5	816.0	762.8	15.350		
4,300.0	4,018.1	4,149.3	3,683.1	27.6	33.3	64.29	1,325.7	-1,189.2	840.9	786.3	15.384		
4,400.0	4,109.6	4,246.1	3,764.6	28.4	34.3	64.29	1,365.6	-1,223.0	865.9	809.7	15.415		
4,500.0	4,201.0	4,342.9	3,846.2	29.1	35.3	64.30	1,405.5	-1,256.7	890.9	833.2	15.444		
4,600.0	4,292.5	4,439.8	3,927.7	29.9	36.3	64.31	1,445.3	-1,290.4	915.9	856.7	15.472		
4,700.0	4,383.9	4,536.6	4,009.3	30.7	37.3	64.31	1,485.2	-1,324.2	940.9	880.1	15.497		
4,800.0	4,475.4	4,633.4	4,090.8	31.4	38.2	64.32	1,525.0	-1,357.9	965.8	903.6	15.521		
4,900.0	4,566.8	4,730.3	4,172.4	32.2	39.2	64.33	1,564.9	-1,391.6	990.8	927.1	15.544		
5,000.0	4,658.3	4,827.1	4,253.9	32.9	40.2	64.33	1,604.7	-1,425.4	1,015.8	950.5	15.565		

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	4,749.7	4,923.9	4,335.5	33.7	41.2	64.34	1,644.6	-1,459.1	1,040.8	974.0	15.586		
5,200.0	4,841.2	5,020.8	4,417.0	34.5	42.2	64.34	1,684.5	-1,492.8	1,065.8	997.5	15.605		
5,300.0	4,932.7	5,117.6	4,498.5	35.2	43.2	64.35	1,724.3	-1,526.6	1,090.7	1,020.9	15.623		
5,400.0	5,024.1	5,214.4	4,580.1	36.0	44.2	64.35	1,764.2	-1,560.3	1,115.7	1,044.4	15.640		
5,500.0	5,115.6	5,311.2	4,661.6	36.8	45.2	64.36	1,804.0	-1,594.0	1,140.7	1,067.8	15.656		
5,600.0	5,207.9	5,407.8	4,743.0	37.5	46.2	64.87	1,843.8	-1,627.7	1,166.6	1,092.3	15.697		
5,700.0	5,301.8	5,503.7	4,823.7	38.1	47.2	65.23	1,883.2	-1,661.1	1,194.3	1,118.7	15.788		
5,800.0	5,397.1	5,650.4	4,949.2	38.7	48.6	65.29	1,941.3	-1,710.2	1,222.2	1,144.5	15.737		
5,900.0	5,493.7	5,812.4	5,093.0	39.1	50.0	65.28	1,998.1	-1,758.2	1,246.9	1,167.2	15.654		
6,000.0	5,591.2	5,978.4	5,245.5	39.5	51.2	65.26	2,048.1	-1,800.6	1,268.2	1,186.9	15.595		
6,100.0	5,689.7	6,148.2	5,405.9	39.8	52.1	65.22	2,090.4	-1,836.4	1,286.0	1,203.3	15.561		
6,200.0	5,788.8	6,321.0	5,573.0	40.1	52.9	65.17	2,124.1	-1,864.9	1,300.0	1,216.4	15.555		
6,300.0	5,888.4	6,496.4	5,745.4	40.2	53.4	65.11	2,148.4	-1,885.4	1,310.1	1,226.0	15.576		
6,400.0	5,988.3	6,673.5	5,921.5	40.3	53.7	65.04	2,162.6	-1,897.5	1,316.2	1,232.0	15.630		
6,500.0	6,088.3	6,840.4	6,088.3	40.3	53.8	0.00	2,166.4	-1,900.7	1,318.1	1,234.2	15.712		
6,600.0	6,188.3	6,940.4	6,188.3	40.4	53.9	0.00	2,166.4	-1,900.7	1,318.1	1,234.2	15.703		
6,700.0	6,288.3	7,040.4	6,288.3	40.4	53.9	0.00	2,166.4	-1,900.7	1,318.1	1,234.1	15.693		
6,800.0	6,388.3	7,140.4	6,388.3	40.4	53.9	0.00	2,166.4	-1,900.7	1,318.1	1,234.1	15.682		
6,900.0	6,488.3	7,240.4	6,488.3	40.5	53.9	0.00	2,166.4	-1,900.7	1,318.1	1,234.0	15.672		
7,000.0	6,588.3	7,340.4	6,588.3	40.5	53.9	0.00	2,166.4	-1,900.7	1,318.1	1,233.9	15.661		
7,100.0	6,688.3	7,440.4	6,688.3	40.5	54.0	0.00	2,166.4	-1,900.7	1,318.1	1,233.9	15.651		
7,200.0	6,788.3	7,540.4	6,788.3	40.5	54.0	0.00	2,166.4	-1,900.7	1,318.1	1,233.8	15.640		
7,300.0	6,888.3	7,640.4	6,888.3	40.6	54.0	0.00	2,166.4	-1,900.7	1,318.1	1,233.8	15.630		
7,400.0	6,988.3	7,740.4	6,988.3	40.6	54.0	0.00	2,166.4	-1,900.7	1,318.1	1,233.7	15.619		
7,500.0	7,088.3	7,840.4	7,088.3	40.6	54.0	0.00	2,166.4	-1,900.7	1,318.1	1,233.7	15.609		
7,600.0	7,188.3	7,940.4	7,188.3	40.7	54.1	0.00	2,166.4	-1,900.7	1,318.1	1,233.6	15.598		
7,700.0	7,288.3	8,040.4	7,288.3	40.7	54.1	0.00	2,166.4	-1,900.7	1,318.1	1,233.5	15.587		
7,800.0	7,388.3	8,140.4	7,388.3	40.7	54.1	0.00	2,166.4	-1,900.7	1,318.1	1,233.5	15.576		
7,900.0	7,488.3	8,240.4	7,488.3	40.7	54.1	0.00	2,166.4	-1,900.7	1,318.1	1,233.4	15.566		
8,000.0	7,588.3	8,340.4	7,588.3	40.8	54.1	0.00	2,166.4	-1,900.7	1,318.1	1,233.4	15.555		
8,100.0	7,688.3	8,440.4	7,688.3	40.8	54.2	0.00	2,166.4	-1,900.7	1,318.1	1,233.3	15.544		
8,200.0	7,788.3	8,540.4	7,788.3	40.8	54.2	0.00	2,166.4	-1,900.7	1,318.1	1,233.2	15.533		
8,228.7	7,817.0	8,569.1	7,817.0	40.8	54.2	0.00	2,166.4	-1,900.7	1,318.1	1,233.2	15.531		



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	-46.73	32.8	-34.8	47.8				
100.0	100.0	100.0	100.0	0.4	0.4	-46.73	32.8	-34.8	47.8	47.0	60.384		
200.0	200.0	200.0	200.0	1.2	1.2	-46.73	32.8	-34.8	47.8	45.4	19.360		
300.0	300.0	300.0	300.0	1.7	1.7	-46.73	32.8	-34.8	47.8	44.4	13.787		
400.0	400.0	399.2	399.2	2.1	1.9	48.97	32.8	-35.4	47.4	43.5	12.001		
491.7	491.5	489.4	489.4	3.4	3.0	50.50	33.2	-39.0	47.2	41.8	8.645	CC	
500.0	499.8	497.6	497.5	3.5	3.1	50.67	33.2	-39.6	47.2	41.6	8.437		
600.0	599.3	596.1	595.6	4.7	4.4	53.03	33.9	-48.0	47.5	40.4	6.635	ES	
700.0	698.4	694.2	692.9	5.0	4.7	50.46	35.7	-60.2	48.5	41.1	6.544		
800.0	796.8	792.0	789.5	5.5	5.3	47.42	40.6	-74.8	49.8	41.6	6.022		
900.0	894.5	889.7	885.3	6.3	6.0	47.91	48.9	-91.8	51.7	42.3	5.508		
1,000.0	991.3	987.3	980.3	7.0	6.7	50.64	60.6	-111.1	54.4	44.1	5.288		
1,100.0	1,087.0	1,084.7	1,074.1	7.7	7.3	54.69	75.5	-132.7	58.3	47.2	5.287	SF	
1,200.0	1,181.4	1,181.9	1,166.6	8.4	8.0	59.35	93.7	-156.5	63.4	51.7	5.431		
1,300.0	1,274.3	1,279.0	1,257.6	9.0	8.7	64.09	115.1	-182.5	70.1	57.7	5.658		
1,400.0	1,365.9	1,375.9	1,347.1	9.4	9.3	68.95	139.6	-210.5	78.6	65.5	5.996		
1,500.0	1,457.3	1,472.5	1,434.6	9.7	9.9	71.67	167.2	-240.6	90.7	76.5	6.398		
1,600.0	1,548.8	1,568.3	1,519.8	10.0	10.5	72.19	197.6	-272.4	105.8	90.4	6.872		
1,700.0	1,640.2	1,663.5	1,602.5	10.4	10.9	71.27	230.7	-305.9	124.0	107.3	7.452		
1,800.0	1,731.7	1,761.6	1,686.8	10.8	11.2	70.11	266.0	-341.2	143.4	125.4	7.982		
1,900.0	1,823.2	1,859.6	1,771.2	11.2	11.6	69.22	301.4	-376.5	162.9	143.5	8.428		
2,000.0	1,914.6	1,957.7	1,855.6	11.7	12.0	68.52	336.7	-411.8	182.4	161.6	8.806		
2,100.0	2,006.1	2,055.7	1,940.0	12.1	12.5	67.96	372.1	-447.1	201.9	179.8	9.131		
2,200.0	2,097.5	2,153.8	2,024.3	12.6	13.0	67.49	407.4	-482.4	221.4	197.9	9.418		
2,300.0	2,189.0	2,251.9	2,108.7	13.1	13.7	67.10	442.8	-517.8	241.0	216.0	9.663		
2,400.0	2,280.4	2,349.9	2,193.1	13.7	14.5	66.77	478.1	-553.1	260.5	234.1	9.878		
2,500.0	2,371.9	2,448.0	2,277.5	14.3	15.3	66.49	513.5	-588.4	280.1	252.3	10.068		
2,600.0	2,463.3	2,546.0	2,361.8	15.0	16.2	66.24	548.8	-623.7	299.6	270.4	10.237		
2,700.0	2,554.8	2,644.1	2,446.2	15.7	17.1	66.02	584.2	-659.0	319.2	288.5	10.388		
2,800.0	2,646.3	2,742.1	2,530.6	16.4	18.0	65.83	619.5	-694.3	338.8	306.6	10.524		
2,900.0	2,737.7	2,840.2	2,615.0	17.1	18.9	65.66	654.8	-729.6	358.4	324.7	10.645		
3,000.0	2,829.2	2,938.3	2,699.3	17.9	19.8	65.51	690.2	-765.0	378.0	342.8	10.756		
3,100.0	2,920.6	3,036.3	2,783.7	18.6	20.7	65.37	725.5	-800.3	397.5	360.9	10.856		
3,200.0	3,012.1	3,134.4	2,868.1	19.3	21.6	65.24	760.9	-835.6	417.1	379.0	10.947		
3,300.0	3,103.5	3,232.4	2,952.5	20.1	22.6	65.13	796.2	-870.9	436.7	397.1	11.031		
3,400.0	3,195.0	3,330.5	3,036.8	20.8	23.5	65.03	831.6	-906.2	456.3	415.2	11.107		
3,500.0	3,286.5	3,428.6	3,121.2	21.6	24.4	64.93	866.9	-941.5	475.9	433.3	11.178		
3,600.0	3,377.9	3,526.6	3,205.6	22.3	25.4	64.84	902.3	-976.9	495.5	451.4	11.243		
3,700.0	3,469.4	3,624.7	3,290.0	23.1	26.3	64.76	937.6	-1,012.2	515.1	469.5	11.303		
3,800.0	3,560.8	3,722.7	3,374.3	23.8	27.2	64.69	973.0	-1,047.5	534.7	487.6	11.359		
3,900.0	3,652.3	3,820.8	3,458.7	24.6	28.2	64.62	1,008.3	-1,082.8	554.3	505.7	11.411		
4,000.0	3,743.7	3,918.9	3,543.1	25.3	29.1	64.55	1,043.7	-1,118.1	573.9	523.8	11.460		
4,100.0	3,835.2	4,016.9	3,627.4	26.1	30.1	64.49	1,079.0	-1,153.4	593.5	541.9	11.505		
4,200.0	3,926.6	4,115.0	3,711.8	26.9	31.0	64.43	1,114.3	-1,188.7	613.1	560.0	11.548		
4,300.0	4,018.1	4,213.0	3,796.2	27.6	31.9	64.38	1,149.7	-1,224.1	632.7	578.1	11.588		
4,400.0	4,109.6	4,311.1	3,880.6	28.4	32.9	64.33	1,185.0	-1,259.4	652.3	596.2	11.625		
4,500.0	4,201.0	4,409.1	3,964.9	29.1	33.8	64.28	1,220.4	-1,294.7	671.9	614.2	11.661		
4,600.0	4,292.5	4,507.2	4,049.3	29.9	34.8	64.24	1,255.7	-1,330.0	691.5	632.3	11.694		
4,700.0	4,383.9	4,605.3	4,133.7	30.7	35.7	64.19	1,291.1	-1,365.3	711.1	650.4	11.725		
4,800.0	4,475.4	4,703.3	4,218.1	31.4	36.7	64.15	1,326.4	-1,400.6	730.7	668.5	11.755		
4,900.0	4,566.8	4,801.4	4,302.4	32.2	37.6	64.12	1,361.8	-1,436.0	750.3	686.6	11.783		
5,000.0	4,658.3	4,899.4	4,386.8	32.9	38.6	64.08	1,397.1	-1,471.3	769.9	704.7	11.810		

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	4,749.7	4,997.5	4,471.2	33.7	39.5	64.05	1,432.5	-1,506.6	789.5	722.8	11.835	
5,200.0	4,841.2	5,095.6	4,555.6	34.5	40.5	64.01	1,467.8	-1,541.9	809.1	740.8	11.859	
5,300.0	4,932.7	5,193.6	4,639.9	35.2	41.4	63.98	1,503.2	-1,577.2	828.7	758.9	11.882	
5,400.0	5,024.1	5,291.7	4,724.3	36.0	42.4	63.95	1,538.5	-1,612.5	848.3	777.0	11.904	
5,500.0	5,115.6	5,389.7	4,808.7	36.8	43.3	63.93	1,573.8	-1,647.8	867.9	795.1	11.925	
5,600.0	5,207.9	5,487.6	4,892.9	37.5	44.3	64.24	1,609.1	-1,683.1	888.4	814.2	11.969	
5,700.0	5,301.8	5,620.3	5,008.8	38.1	45.5	64.33	1,654.8	-1,728.7	909.1	832.9	11.942	
5,800.0	5,397.1	5,756.8	5,131.8	38.7	46.6	64.40	1,696.7	-1,770.6	927.5	849.6	11.912	
5,900.0	5,493.7	5,895.2	5,259.8	39.1	47.5	64.45	1,733.8	-1,807.7	943.7	864.3	11.891	
6,000.0	5,591.2	6,035.3	5,392.4	39.5	48.3	64.48	1,765.8	-1,839.6	957.5	876.9	11.883	
6,100.0	5,689.7	6,176.7	5,528.8	39.8	49.0	64.50	1,792.2	-1,866.0	968.9	887.4	11.884	
6,200.0	5,788.8	6,319.3	5,668.4	40.1	49.5	64.49	1,812.7	-1,886.5	977.8	895.6	11.895	
6,300.0	5,888.4	6,462.9	5,810.5	40.2	49.8	64.47	1,827.2	-1,900.9	984.1	901.5	11.918	
6,400.0	5,988.3	6,607.1	5,954.2	40.3	50.0	64.42	1,835.3	-1,909.1	987.8	905.2	11.950	
6,500.0	6,088.3	6,741.2	6,088.3	40.3	50.1	-0.59	1,837.2	-1,911.0	988.9	906.4	11.990	
6,600.0	6,188.3	6,841.2	6,188.3	40.4	50.1	-0.59	1,837.2	-1,911.0	988.9	906.4	11.982	
6,700.0	6,288.3	6,941.2	6,288.3	40.4	50.1	-0.59	1,837.2	-1,911.0	988.9	906.3	11.974	
6,800.0	6,388.3	7,041.2	6,388.3	40.4	50.1	-0.59	1,837.2	-1,911.0	988.9	906.3	11.966	
6,900.0	6,488.3	7,141.2	6,488.3	40.5	50.2	-0.59	1,837.2	-1,911.0	988.9	906.2	11.958	
7,000.0	6,588.3	7,241.2	6,588.3	40.5	50.2	-0.59	1,837.2	-1,911.0	988.9	906.1	11.950	
7,100.0	6,688.3	7,341.2	6,688.3	40.5	50.2	-0.59	1,837.2	-1,911.0	988.9	906.1	11.942	
7,200.0	6,788.3	7,441.2	6,788.3	40.5	50.2	-0.59	1,837.2	-1,911.0	988.9	906.0	11.933	
7,300.0	6,888.3	7,541.2	6,888.3	40.6	50.3	-0.59	1,837.2	-1,911.0	988.9	906.0	11.925	
7,400.0	6,988.3	7,641.2	6,988.3	40.6	50.3	-0.59	1,837.2	-1,911.0	988.9	905.9	11.917	
7,500.0	7,088.3	7,741.2	7,088.3	40.6	50.3	-0.59	1,837.2	-1,911.0	988.9	905.9	11.908	
7,600.0	7,188.3	7,841.2	7,188.3	40.7	50.3	-0.59	1,837.2	-1,911.0	988.9	905.8	11.900	
7,700.0	7,288.3	7,941.2	7,288.3	40.7	50.3	-0.59	1,837.2	-1,911.0	988.9	905.7	11.891	
7,800.0	7,388.3	8,041.2	7,388.3	40.7	50.4	-0.59	1,837.2	-1,911.0	988.9	905.7	11.883	
7,900.0	7,488.3	8,141.2	7,488.3	40.7	50.4	-0.59	1,837.2	-1,911.0	988.9	905.6	11.874	
8,000.0	7,588.3	8,241.2	7,588.3	40.8	50.4	-0.59	1,837.2	-1,911.0	988.9	905.6	11.866	
8,100.0	7,688.3	8,341.2	7,688.3	40.8	50.4	-0.59	1,837.2	-1,911.0	988.9	905.5	11.857	
8,200.0	7,788.3	8,441.2	7,788.3	40.8	50.5	-0.59	1,837.2	-1,911.0	988.9	905.4	11.849	
8,228.7	7,817.0	8,470.0	7,817.0	40.8	50.5	-0.59	1,837.2	-1,911.0	988.9	905.4	11.847	



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	-46.73	21.9	-23.2	31.9				
100.0	100.0	100.0	100.0	0.4	0.4	-46.73	21.9	-23.2	31.9	31.1	40.253		
200.0	200.0	200.0	200.0	1.2	1.2	-46.73	21.9	-23.2	31.9	29.4	12.905		
300.0	300.0	300.0	300.0	1.7	1.7	-46.73	21.9	-23.2	31.9	28.4	9.191		
400.0	400.0	400.0	400.0	2.1	2.1	49.97	21.9	-23.2	31.1	26.9	7.512		
500.0	499.8	499.3	499.3	3.5	2.4	56.51	21.7	-24.4	28.5	23.5	5.652		
600.0	599.3	598.6	598.5	4.7	3.7	64.51	21.3	-29.8	26.4	20.4	4.452		
700.0	698.4	697.9	697.3	5.0	4.2	67.57	20.6	-39.3	24.6	18.7	4.162		
800.0	796.8	796.9	795.4	5.5	4.6	70.80	22.4	-51.9	23.4	16.7	3.491		
828.8	825.0	825.4	823.6	5.8	4.8	72.70	23.5	-56.1	23.4	16.3	3.304	CC	
900.0	894.5	895.9	893.1	6.3	5.3	78.52	27.4	-67.4	23.8	15.8	2.967	ES	
1,000.0	991.3	995.1	990.2	7.0	6.1	87.67	35.5	-85.6	26.0	16.8	2.821	SF	
1,100.0	1,087.0	1,094.3	1,086.5	7.7	6.8	95.82	46.9	-106.6	30.1	19.6	2.885		
1,200.0	1,181.4	1,193.6	1,181.8	8.4	7.5	102.02	61.5	-130.3	35.7	24.0	3.052		
1,300.0	1,274.3	1,293.0	1,276.0	9.0	8.2	106.35	79.2	-156.6	42.7	29.6	3.274		
1,400.0	1,365.9	1,392.4	1,368.8	9.4	8.9	109.24	100.0	-185.6	50.6	36.4	3.565		
1,500.0	1,457.3	1,491.8	1,460.0	9.7	9.5	107.91	124.0	-217.2	59.1	44.0	3.916		
1,600.0	1,548.8	1,590.9	1,549.1	10.0	10.1	103.32	150.9	-251.1	68.1	52.3	4.300		
1,700.0	1,640.2	1,689.7	1,636.2	10.4	10.5	97.02	180.4	-287.2	78.5	61.9	4.711		
1,800.0	1,731.7	1,788.7	1,723.1	10.8	10.8	91.75	210.5	-323.8	90.0	72.2	5.058		
1,900.0	1,823.2	1,887.8	1,810.1	11.2	11.2	87.68	240.7	-360.4	102.0	82.9	5.346		
2,000.0	1,914.6	1,986.8	1,897.0	11.7	11.6	84.48	270.8	-397.0	114.4	94.0	5.594		
2,100.0	2,006.1	2,085.8	1,984.0	12.1	12.0	81.91	301.0	-433.6	127.1	105.2	5.811		
2,200.0	2,097.5	2,184.9	2,070.9	12.6	12.5	79.80	331.1	-470.2	140.0	116.7	6.002		
2,300.0	2,189.0	2,283.9	2,157.9	13.1	13.1	78.06	361.3	-506.8	153.1	128.3	6.180		
2,400.0	2,280.4	2,383.0	2,244.9	13.7	13.8	76.59	391.4	-543.4	166.3	140.0	6.334		
2,500.0	2,371.9	2,482.0	2,331.8	14.3	14.6	75.33	421.6	-580.0	179.5	151.8	6.475		
2,600.0	2,463.3	2,581.1	2,418.8	15.0	15.4	74.25	451.7	-616.6	192.9	163.7	6.603		
2,700.0	2,554.8	2,680.1	2,505.7	15.7	16.2	73.31	481.9	-653.2	206.3	175.6	6.720		
2,800.0	2,646.3	2,779.2	2,592.7	16.4	17.1	72.49	512.0	-689.8	219.7	187.5	6.828		
2,900.0	2,737.7	2,878.2	2,679.6	17.1	17.9	71.76	542.1	-726.4	233.2	199.6	6.927		
3,000.0	2,829.2	2,977.2	2,766.6	17.9	18.8	71.10	572.3	-763.0	246.7	211.6	7.018		
3,100.0	2,920.6	3,076.3	2,853.6	18.6	19.7	70.52	602.4	-799.6	260.3	223.6	7.102		
3,200.0	3,012.1	3,175.3	2,940.5	19.3	20.5	70.00	632.6	-836.2	273.9	235.7	7.180		
3,300.0	3,103.5	3,274.4	3,027.5	20.1	21.4	69.52	662.7	-872.8	287.5	247.8	7.252		
3,400.0	3,195.0	3,373.4	3,114.4	20.8	22.3	69.09	692.9	-909.4	301.1	260.0	7.320		
3,500.0	3,286.5	3,472.5	3,201.4	21.6	23.2	68.69	723.0	-946.0	314.7	272.1	7.382		
3,600.0	3,377.9	3,571.5	3,288.3	22.3	24.1	68.33	753.2	-982.5	328.4	284.2	7.441		
3,700.0	3,469.4	3,670.6	3,375.3	23.1	24.9	68.00	783.3	-1,019.1	342.0	296.4	7.496		
3,800.0	3,560.8	3,769.6	3,462.3	23.8	25.8	67.69	813.5	-1,055.7	355.7	308.6	7.548		
3,900.0	3,652.3	3,868.6	3,549.2	24.6	26.7	67.40	843.6	-1,092.3	369.4	320.7	7.597		
4,000.0	3,743.7	3,967.7	3,636.2	25.3	27.6	67.14	873.8	-1,128.9	383.0	332.9	7.642		
4,100.0	3,835.2	4,066.7	3,723.1	26.1	28.5	66.89	903.9	-1,165.5	396.7	345.1	7.685		
4,200.0	3,926.6	4,165.8	3,810.1	26.9	29.4	66.66	934.1	-1,202.1	410.4	357.3	7.726		
4,300.0	4,018.1	4,264.8	3,897.0	27.6	30.3	66.45	964.2	-1,238.7	424.1	369.5	7.765		
4,400.0	4,109.6	4,363.9	3,984.0	28.4	31.2	66.24	994.4	-1,275.3	437.8	381.7	7.801		
4,500.0	4,201.0	4,462.9	4,070.9	29.1	32.1	66.05	1,024.5	-1,311.9	451.6	393.9	7.836		
4,600.0	4,292.5	4,562.0	4,157.9	29.9	33.0	65.88	1,054.7	-1,348.5	465.3	406.1	7.869		
4,700.0	4,383.9	4,661.0	4,244.9	30.7	33.9	65.71	1,084.8	-1,385.1	479.0	418.4	7.900		
4,800.0	4,475.4	4,760.0	4,331.8	31.4	34.8	65.55	1,115.0	-1,421.7	492.7	430.6	7.930		
4,900.0	4,566.8	4,859.1	4,418.8	32.2	35.7	65.40	1,145.1	-1,458.3	506.4	442.8	7.958		
5,000.0	4,658.3	4,958.1	4,505.7	32.9	36.6	65.26	1,175.3	-1,494.9	520.2	455.0	7.985		

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



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	4,749.7	5,057.2	4,592.7	33.7	37.5	65.12	1,205.4	-1,531.5	533.9	467.3	8.011		
5,200.0	4,841.2	5,156.2	4,679.6	34.5	38.4	64.99	1,235.5	-1,568.1	547.7	479.5	8.035		
5,300.0	4,932.7	5,255.3	4,766.6	35.2	39.3	64.87	1,265.7	-1,604.7	561.4	491.7	8.059		
5,400.0	5,024.1	5,354.3	4,853.6	36.0	40.2	64.76	1,295.8	-1,641.3	575.1	504.0	8.082		
5,500.0	5,115.6	5,453.4	4,940.5	36.8	41.1	64.65	1,326.0	-1,677.9	588.9	516.2	8.104		
5,600.0	5,207.9	5,566.9	5,041.0	37.5	42.1	64.75	1,359.6	-1,718.7	602.7	528.3	8.106		
5,700.0	5,301.8	5,685.8	5,148.9	38.1	43.0	64.81	1,391.4	-1,757.3	615.2	539.2	8.098		
5,800.0	5,397.1	5,805.5	5,259.9	38.7	43.9	64.86	1,419.8	-1,791.8	626.3	549.0	8.094		
5,900.0	5,493.7	5,925.9	5,373.8	39.1	44.5	64.90	1,444.6	-1,821.9	636.1	557.5	8.095		
6,000.0	5,591.2	6,046.9	5,490.1	39.5	45.1	64.92	1,465.6	-1,847.4	644.3	564.8	8.099		
6,100.0	5,689.7	6,168.4	5,608.6	39.8	45.6	64.92	1,482.8	-1,868.3	651.1	570.8	8.107		
6,200.0	5,788.8	6,290.3	5,728.7	40.1	46.0	64.91	1,496.0	-1,884.3	656.4	575.5	8.117		
6,300.0	5,888.4	6,412.6	5,850.1	40.2	46.2	64.88	1,505.1	-1,895.4	660.1	578.9	8.130		
6,400.0	5,988.3	6,535.0	5,972.3	40.3	46.3	64.84	1,510.2	-1,901.5	662.3	581.0	8.147		
6,500.0	6,088.3	6,651.0	6,088.3	40.3	46.4	-0.17	1,511.2	-1,902.8	662.9	581.7	8.163		
6,600.0	6,188.3	6,751.0	6,188.3	40.4	46.4	-0.17	1,511.2	-1,902.8	662.9	581.6	8.158		
6,700.0	6,288.3	6,851.0	6,288.3	40.4	46.4	-0.17	1,511.2	-1,902.8	662.9	581.6	8.152		
6,800.0	6,388.3	6,951.0	6,388.3	40.4	46.5	-0.17	1,511.2	-1,902.8	662.9	581.5	8.147		
6,900.0	6,488.3	7,051.0	6,488.3	40.5	46.5	-0.17	1,511.2	-1,902.8	662.9	581.5	8.141		
7,000.0	6,588.3	7,151.0	6,588.3	40.5	46.5	-0.17	1,511.2	-1,902.8	662.9	581.4	8.135		
7,100.0	6,688.3	7,251.0	6,688.3	40.5	46.5	-0.17	1,511.2	-1,902.8	662.9	581.3	8.129		
7,200.0	6,788.3	7,351.0	6,788.3	40.5	46.6	-0.17	1,511.2	-1,902.8	662.9	581.3	8.123		
7,300.0	6,888.3	7,451.0	6,888.3	40.6	46.6	-0.17	1,511.2	-1,902.8	662.9	581.2	8.118		
7,400.0	6,988.3	7,551.0	6,988.3	40.6	46.6	-0.17	1,511.2	-1,902.8	662.9	581.2	8.112		
7,500.0	7,088.3	7,651.0	7,088.3	40.6	46.6	-0.17	1,511.2	-1,902.8	662.9	581.1	8.106		
7,600.0	7,188.3	7,751.0	7,188.3	40.7	46.7	-0.17	1,511.2	-1,902.8	662.9	581.0	8.100		
7,700.0	7,288.3	7,851.0	7,288.3	40.7	46.7	-0.17	1,511.2	-1,902.8	662.9	581.0	8.094		
7,800.0	7,388.3	7,951.0	7,388.3	40.7	46.7	-0.17	1,511.2	-1,902.8	662.9	580.9	8.088		
7,900.0	7,488.3	8,051.0	7,488.3	40.7	46.7	-0.17	1,511.2	-1,902.8	662.9	580.9	8.082		
8,000.0	7,588.3	8,151.0	7,588.3	40.8	46.8	-0.17	1,511.2	-1,902.8	662.9	580.8	8.076		
8,100.0	7,688.3	8,251.0	7,688.3	40.8	46.8	-0.17	1,511.2	-1,902.8	662.9	580.7	8.070		
8,200.0	7,788.3	8,351.0	7,788.3	40.8	46.8	-0.17	1,511.2	-1,902.8	662.9	580.7	8.064		
8,228.7	7,817.0	8,379.7	7,817.0	40.8	46.8	-0.17	1,511.2	-1,902.8	662.9	580.7	8.063		

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	10.9	-11.6	15.9				
100.0	100.0	100.0	100.0	0.4	0.4	-46.72	10.9	-11.6	15.9	15.2	20.131		
200.0	200.0	200.0	200.0	1.2	1.2	-46.72	10.9	-11.6	15.9	13.5	6.454		
300.0	300.0	300.0	300.0	1.7	1.7	-46.72	10.9	-11.6	15.9	12.5	4.596		
400.0	400.0	400.0	400.0	2.1	2.1	51.76	10.9	-11.6	15.2	11.0	3.668		
500.0	499.8	499.8	499.8	3.5	2.5	71.76	10.9	-11.6	12.5	7.7	2.572		
547.8	547.4	547.4	547.4	4.1	2.7	88.65	10.9	-12.1	11.9	6.9	2.388	Level 1, CC, ES	
600.0	599.3	599.5	599.5	4.7	3.1	107.03	10.9	-13.8	12.6	7.1	2.288	Level 1	
700.0	698.4	699.5	699.2	5.0	4.4	126.60	10.9	-20.3	16.6	9.1	2.223	Level 1	
800.0	796.8	799.8	799.0	5.5	5.4	136.78	10.9	-31.2	20.3	10.5	2.066	Level 1, SF	
900.0	894.5	900.0	898.1	6.3	5.7	146.30	11.9	-46.0	24.3	12.8	2.109	Level 1	
1,000.0	991.3	1,000.4	996.7	7.0	6.2	152.21	15.9	-64.0	29.7	16.7	2.273	Level 1	
1,100.0	1,087.0	1,101.0	1,094.8	7.7	6.9	155.40	23.0	-85.1	36.1	21.5	2.478	Level 1	
1,200.0	1,181.4	1,201.9	1,192.3	8.4	7.6	156.89	33.2	-109.3	43.0	27.0	2.694		
1,300.0	1,274.3	1,303.1	1,288.8	9.0	8.2	157.33	46.5	-136.5	50.3	33.0	2.907		
1,400.0	1,365.9	1,404.7	1,384.3	9.4	8.9	157.47	62.9	-166.8	57.3	39.1	3.137		
1,500.0	1,457.3	1,506.5	1,478.5	9.7	9.5	155.42	82.4	-200.2	61.4	42.2	3.204		
1,600.0	1,548.8	1,608.2	1,570.9	10.0	10.1	150.65	104.9	-236.3	62.5	42.6	3.140		
1,697.1	1,637.6	1,705.5	1,657.9	10.4	10.4	143.95	128.5	-272.9	62.2	41.8	3.055		
1,700.0	1,640.2	1,708.4	1,660.5	10.4	10.4	143.75	129.2	-274.0	62.2	41.8	3.053		
1,800.0	1,731.7	1,808.1	1,749.6	10.8	10.8	136.79	153.6	-311.5	62.6	41.8	3.000		
1,900.0	1,823.2	1,907.8	1,838.7	11.2	11.1	130.03	177.9	-349.0	64.0	42.5	2.979		
2,000.0	1,914.6	2,007.5	1,927.9	11.7	11.5	123.65	202.2	-386.6	66.3	44.0	2.978		
2,100.0	2,006.1	2,107.3	2,017.0	12.1	11.9	117.75	226.5	-424.1	69.3	46.1	2.990		
2,200.0	2,097.5	2,207.0	2,106.1	12.6	12.4	112.39	250.8	-461.7	73.0	48.8	3.011		
2,300.0	2,189.0	2,306.7	2,195.2	13.1	12.9	107.58	275.1	-499.2	77.3	51.8	3.039		
2,400.0	2,280.4	2,406.4	2,284.3	13.7	13.4	103.30	299.4	-536.7	82.0	55.3	3.071		
2,500.0	2,371.9	2,506.1	2,373.4	14.3	14.1	99.51	323.7	-574.3	87.2	59.1	3.106		
2,600.0	2,463.3	2,605.8	2,462.6	15.0	14.8	96.15	348.0	-611.8	92.7	63.2	3.144		
2,700.0	2,554.8	2,705.5	2,551.7	15.7	15.5	93.17	372.3	-649.3	98.5	67.5	3.184		
2,800.0	2,646.3	2,805.2	2,640.8	16.4	16.3	90.53	396.6	-686.9	104.5	72.1	3.226		
2,900.0	2,737.7	2,904.9	2,729.9	17.1	17.1	88.19	420.9	-724.4	110.7	76.8	3.268		
3,000.0	2,829.2	3,004.6	2,819.0	17.9	17.9	86.09	445.2	-762.0	117.1	81.7	3.311		
3,100.0	2,920.6	3,104.3	2,908.2	18.6	18.7	84.22	469.5	-799.5	123.6	86.8	3.354		
3,200.0	3,012.1	3,204.1	2,997.3	19.3	19.5	82.53	493.8	-837.0	130.2	91.9	3.397		
3,300.0	3,103.5	3,303.8	3,086.4	20.1	20.3	81.01	518.1	-874.6	137.0	97.1	3.438		
3,400.0	3,195.0	3,403.5	3,175.5	20.8	21.2	79.63	542.4	-912.1	143.8	102.5	3.479		
3,500.0	3,286.5	3,503.2	3,264.6	21.6	22.0	78.37	566.7	-949.7	150.7	107.9	3.519		
3,600.0	3,377.9	3,602.9	3,353.8	22.3	22.8	77.23	591.0	-987.2	157.7	113.4	3.558		
3,700.0	3,469.4	3,702.6	3,442.9	23.1	23.7	76.18	615.3	-1,024.7	164.7	118.9	3.596		
3,800.0	3,560.8	3,802.3	3,532.0	23.8	24.5	75.22	639.6	-1,062.3	171.8	124.5	3.633		
3,900.0	3,652.3	3,902.0	3,621.1	24.6	25.3	74.34	663.9	-1,099.8	178.9	130.1	3.668		
4,000.0	3,743.7	4,001.7	3,710.2	25.3	26.2	73.52	688.2	-1,137.4	186.1	135.8	3.702		
4,100.0	3,835.2	4,101.4	3,799.3	26.1	27.0	72.76	712.5	-1,174.9	193.3	141.5	3.735		
4,200.0	3,926.6	4,201.2	3,888.5	26.9	27.9	72.06	736.9	-1,212.4	200.5	147.3	3.767		
4,300.0	4,018.1	4,300.9	3,977.6	27.6	28.7	71.41	761.2	-1,250.0	207.7	153.0	3.798		
4,400.0	4,109.6	4,400.6	4,066.7	28.4	29.5	70.80	785.5	-1,287.5	215.0	158.8	3.827		
4,500.0	4,201.0	4,500.3	4,155.8	29.1	30.4	70.23	809.8	-1,325.1	222.3	164.7	3.856		
4,600.0	4,292.5	4,600.0	4,244.9	29.9	31.2	69.70	834.1	-1,362.6	229.6	170.5	3.883		
4,700.0	4,383.9	4,699.7	4,334.1	30.7	32.1	69.20	858.4	-1,400.1	237.0	176.4	3.910		
4,800.0	4,475.4	4,799.4	4,423.2	31.4	32.9	68.73	882.7	-1,437.7	244.3	182.3	3.936		
4,900.0	4,566.8	4,899.1	4,512.3	32.2	33.8	68.29	907.0	-1,475.2	251.7	188.2	3.960		

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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
5,000.0	4,658.3	4,998.8	4,601.4	32.9	34.6	67.87	931.3	-1,512.8	259.1	194.1	3.984	
5,100.0	4,749.7	5,098.5	4,690.5	33.7	35.5	67.48	955.6	-1,550.3	266.5	200.0	4.007	
5,200.0	4,841.2	5,198.2	4,779.6	34.5	36.3	67.11	979.9	-1,587.8	273.9	205.9	4.030	
5,300.0	4,932.7	5,298.0	4,868.8	35.2	37.2	66.75	1,004.2	-1,625.4	281.3	211.9	4.051	
5,400.0	5,024.1	5,397.7	4,957.9	36.0	38.0	66.42	1,028.5	-1,662.9	288.8	217.8	4.072	
5,500.0	5,115.6	5,499.4	5,048.9	36.8	38.9	66.13	1,053.2	-1,701.0	296.1	223.7	4.089	
5,600.0	5,207.9	5,606.4	5,146.2	37.5	39.7	66.17	1,077.4	-1,738.4	302.6	228.6	4.090	
5,700.0	5,301.8	5,713.6	5,245.7	38.1	40.5	66.21	1,099.1	-1,771.9	308.4	233.0	4.092	
5,800.0	5,397.1	5,821.0	5,347.1	38.7	41.1	66.23	1,118.3	-1,801.6	313.5	236.9	4.094	
5,900.0	5,493.7	5,928.7	5,450.3	39.1	41.6	66.24	1,134.9	-1,827.3	318.0	240.4	4.097	
6,000.0	5,591.2	6,036.4	5,554.9	39.5	42.1	66.24	1,148.9	-1,848.9	321.8	243.3	4.101	
6,100.0	5,689.7	6,144.4	5,660.8	39.8	42.5	66.23	1,160.2	-1,866.4	324.8	245.7	4.106	
6,200.0	5,788.8	6,252.4	5,767.7	40.1	42.7	66.21	1,168.8	-1,879.7	327.2	247.6	4.111	
6,300.0	5,888.4	6,360.5	5,875.2	40.2	42.9	66.18	1,174.7	-1,888.7	328.9	249.0	4.116	
6,400.0	5,988.3	6,468.7	5,983.2	40.3	43.0	66.14	1,177.8	-1,893.5	329.8	249.8	4.121	
6,500.0	6,088.3	6,573.7	6,088.3	40.3	43.1	1.13	1,178.3	-1,894.3	330.0	250.0	4.124	
6,600.0	6,188.3	6,673.7	6,188.3	40.4	43.1	1.13	1,178.3	-1,894.3	330.0	250.0	4.122	
6,700.0	6,288.3	6,773.7	6,288.3	40.4	43.1	1.13	1,178.3	-1,894.3	330.0	249.9	4.119	
6,800.0	6,388.3	6,873.7	6,388.3	40.4	43.1	1.13	1,178.3	-1,894.3	330.0	249.9	4.116	
6,900.0	6,488.3	6,973.7	6,488.3	40.5	43.2	1.13	1,178.3	-1,894.3	330.0	249.8	4.113	
7,000.0	6,588.3	7,073.7	6,588.3	40.5	43.2	1.13	1,178.3	-1,894.3	330.0	249.7	4.110	
7,100.0	6,688.3	7,173.7	6,688.3	40.5	43.2	1.13	1,178.3	-1,894.3	330.0	249.7	4.107	
7,200.0	6,788.3	7,273.7	6,788.3	40.5	43.2	1.13	1,178.3	-1,894.3	330.0	249.6	4.104	
7,300.0	6,888.3	7,373.7	6,888.3	40.6	43.3	1.13	1,178.3	-1,894.3	330.0	249.6	4.101	
7,400.0	6,988.3	7,473.7	6,988.3	40.6	43.3	1.13	1,178.3	-1,894.3	330.0	249.5	4.098	
7,500.0	7,088.3	7,573.7	7,088.3	40.6	43.3	1.13	1,178.3	-1,894.3	330.0	249.4	4.095	
7,600.0	7,188.3	7,673.7	7,188.3	40.7	43.4	1.13	1,178.3	-1,894.3	330.0	249.4	4.092	
7,700.0	7,288.3	7,773.7	7,288.3	40.7	43.4	1.13	1,178.3	-1,894.3	330.0	249.3	4.089	
7,800.0	7,388.3	7,873.7	7,388.3	40.7	43.4	1.13	1,178.3	-1,894.3	330.0	249.3	4.086	
7,900.0	7,488.3	7,973.7	7,488.3	40.7	43.4	1.13	1,178.3	-1,894.3	330.0	249.2	4.082	
8,000.0	7,588.3	8,073.7	7,588.3	40.8	43.5	1.13	1,178.3	-1,894.3	330.0	249.1	4.079	
8,100.0	7,688.3	8,173.7	7,688.3	40.8	43.5	1.13	1,178.3	-1,894.3	330.0	249.1	4.076	
8,200.0	7,788.3	8,273.7	7,788.3	40.8	43.5	1.13	1,178.3	-1,894.3	330.0	249.0	4.073	
8,228.7	7,817.0	8,302.4	7,817.0	40.8	43.5	1.13	1,178.3	-1,894.3	330.0	249.0	4.072	

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	133.23	-10.9	11.6	15.9				
100.0	100.0	100.0	100.0	0.4	0.4	133.23	-10.9	11.6	15.9	15.2	20.131		
200.0	200.0	200.0	200.0	1.2	1.2	133.23	-10.9	11.6	15.9	13.5	6.454		
300.0	300.0	300.2	300.2	1.7	1.5	134.88	-11.0	11.1	15.6	12.4	4.855		
400.0	400.0	400.4	400.3	2.1	2.9	-119.11	-11.9	6.8	14.3	10.3	3.551		
468.4	468.3	468.9	468.6	3.0	3.8	-109.82	-13.1	1.4	14.0	9.5	3.085	CC	
500.0	499.8	500.6	500.1	3.5	4.3	-105.37	-13.8	-1.8	14.1	9.4	3.006	ES	
600.0	599.3	600.5	599.1	4.7	5.3	-91.97	-16.5	-14.5	15.2	10.0	2.917		
700.0	698.4	700.8	698.0	5.0	5.6	-87.30	-18.8	-31.4	16.6	10.5	2.742		
800.0	796.8	801.1	796.1	5.5	6.3	-85.91	-18.6	-51.8	18.5	10.7	2.365	Level 1	
900.0	894.5	901.3	893.4	6.3	6.9	-83.55	-16.1	-75.7	21.0	11.6	2.229	Level 1, SF	
1,000.0	991.3	1,001.4	989.5	7.0	7.6	-81.21	-11.2	-103.2	24.2	13.4	2.249	Level 1	
1,100.0	1,087.0	1,101.4	1,084.3	7.7	8.3	-79.25	-3.8	-134.1	27.8	15.9	2.333	Level 1	
1,200.0	1,181.4	1,201.3	1,177.7	8.4	8.9	-77.72	5.8	-168.3	31.9	18.8	2.435	Level 1	
1,300.0	1,274.3	1,301.2	1,270.1	9.0	9.2	-79.14	17.0	-204.6	36.4	22.4	2.598		
1,400.0	1,365.9	1,401.0	1,362.4	9.4	9.5	-84.51	28.1	-240.9	41.2	26.6	2.837		
1,500.0	1,457.3	1,500.8	1,454.7	9.7	9.9	-88.75	39.3	-277.2	46.2	31.0	3.024		
1,600.0	1,548.8	1,600.6	1,547.0	10.0	10.3	-92.14	50.4	-313.6	51.5	35.3	3.166		
1,700.0	1,640.2	1,700.5	1,639.3	10.4	10.6	-94.90	61.6	-349.9	57.0	39.6	3.275		
1,800.0	1,731.7	1,800.3	1,731.6	10.8	11.1	-97.16	72.7	-386.2	62.5	43.9	3.362		
1,900.0	1,823.2	1,900.1	1,824.0	11.2	11.5	-99.06	83.9	-422.5	68.2	48.3	3.432		
2,000.0	1,914.6	1,999.9	1,916.3	11.7	11.9	-100.66	95.0	-458.8	73.9	52.7	3.491		
2,100.0	2,006.1	2,099.7	2,008.6	12.1	12.4	-102.04	106.2	-495.1	79.6	57.1	3.540		
2,200.0	2,097.5	2,199.5	2,100.9	12.6	12.9	-103.23	117.3	-531.4	85.4	61.6	3.582		
2,300.0	2,189.0	2,299.4	2,193.2	13.1	13.4	-104.27	128.5	-567.7	91.2	66.0	3.619		
2,400.0	2,280.4	2,399.2	2,285.5	13.7	13.9	-105.18	139.6	-604.0	97.1	70.5	3.651		
2,500.0	2,371.9	2,499.0	2,377.8	14.3	14.5	-105.99	150.8	-640.3	102.9	75.0	3.680		
2,600.0	2,463.3	2,598.8	2,470.1	15.0	15.1	-106.71	161.9	-676.7	108.8	79.4	3.706		
2,700.0	2,554.8	2,698.6	2,562.4	15.7	15.7	-107.36	173.1	-713.0	114.7	83.9	3.729		
2,800.0	2,646.3	2,798.5	2,654.7	16.4	16.4	-107.94	184.2	-749.3	120.6	88.5	3.750		
2,900.0	2,737.7	2,898.3	2,747.0	17.1	17.1	-108.47	195.4	-785.6	126.5	93.0	3.770		
3,000.0	2,829.2	2,998.1	2,839.3	17.9	17.7	-108.95	206.5	-821.9	132.5	97.5	3.787		
3,100.0	2,920.6	3,097.9	2,931.7	18.6	18.4	-109.40	217.7	-858.2	138.4	102.0	3.803		
3,200.0	3,012.1	3,197.7	3,024.0	19.3	19.1	-109.80	228.8	-894.5	144.4	106.6	3.818		
3,300.0	3,103.5	3,297.5	3,116.3	20.1	19.8	-110.17	240.0	-930.8	150.3	111.1	3.832		
3,400.0	3,195.0	3,397.4	3,208.6	20.8	20.5	-110.52	251.1	-967.1	156.3	115.6	3.845		
3,500.0	3,286.5	3,497.2	3,300.9	21.6	21.2	-110.84	262.3	-1,003.4	162.2	120.2	3.857		
3,600.0	3,377.9	3,597.0	3,393.2	22.3	21.9	-111.13	273.4	-1,039.8	168.2	124.7	3.869		
3,700.0	3,469.4	3,696.8	3,485.5	23.1	22.6	-111.41	284.6	-1,076.1	174.2	129.3	3.879		
3,800.0	3,560.8	3,796.6	3,577.8	23.8	23.3	-111.66	295.7	-1,112.4	180.2	133.8	3.889		
3,900.0	3,652.3	3,896.5	3,670.1	24.6	24.0	-111.91	306.9	-1,148.7	186.2	138.4	3.898		
4,000.0	3,743.7	3,996.3	3,762.4	25.3	24.7	-112.13	318.0	-1,185.0	192.1	143.0	3.907		
4,100.0	3,835.2	4,096.1	3,854.7	26.1	25.4	-112.34	329.2	-1,221.3	198.1	147.5	3.915		
4,200.0	3,926.6	4,195.9	3,947.1	26.9	26.1	-112.54	340.3	-1,257.6	204.1	152.1	3.923		
4,300.0	4,018.1	4,295.7	4,039.4	27.6	26.8	-112.73	351.5	-1,293.9	210.1	156.7	3.931		
4,400.0	4,109.6	4,395.5	4,131.7	28.4	27.5	-112.91	362.6	-1,330.2	216.1	161.2	3.938		
4,500.0	4,201.0	4,495.4	4,224.0	29.1	28.2	-113.08	373.8	-1,366.5	222.1	165.8	3.944		
4,600.0	4,292.5	4,595.2	4,316.3	29.9	28.9	-113.24	384.9	-1,402.9	228.1	170.4	3.951		
4,700.0	4,383.9	4,695.0	4,408.6	30.7	29.6	-113.39	396.1	-1,439.2	234.1	174.9	3.957		
4,800.0	4,475.4	4,794.8	4,500.9	31.4	30.3	-113.53	407.2	-1,475.5	240.1	179.5	3.962		
4,900.0	4,566.8	4,894.6	4,593.2	32.2	31.1	-113.67	418.4	-1,511.8	246.1	184.1	3.968		
5,000.0	4,658.3	4,994.4	4,685.5	32.9	31.8	-113.80	429.5	-1,548.1	252.1	188.7	3.973		

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	4,749.7	5,094.3	4,777.8	33.7	32.5	-113.93	440.7	-1,584.4	258.1	193.2	3.978	
5,200.0	4,841.2	5,194.1	4,870.1	34.5	33.2	-114.04	451.8	-1,620.7	264.1	197.8	3.983	
5,300.0	4,932.7	5,293.9	4,962.4	35.2	33.9	-114.16	463.0	-1,657.0	270.1	202.4	3.987	
5,400.0	5,024.1	5,393.7	5,054.8	36.0	34.6	-114.27	474.1	-1,693.3	276.1	207.0	3.992	
5,500.0	5,115.6	5,493.5	5,147.1	36.8	35.3	-114.37	485.3	-1,729.6	282.2	211.5	3.996	
5,600.0	5,207.9	5,590.4	5,237.2	37.5	36.0	-114.48	495.7	-1,763.6	287.7	215.7	3.998	
5,700.0	5,301.8	5,686.7	5,328.2	38.1	36.6	-114.57	505.0	-1,793.8	292.6	219.5	3.999	
5,800.0	5,397.1	5,783.0	5,420.4	38.7	37.1	-114.66	513.1	-1,820.3	297.0	222.8	4.001	
5,900.0	5,493.7	5,879.3	5,513.6	39.1	37.5	-114.74	520.1	-1,843.1	300.8	225.6	4.004	
6,000.0	5,591.2	5,975.5	5,607.8	39.5	37.9	-114.82	525.9	-1,862.1	303.9	228.1	4.006	
6,100.0	5,689.7	6,071.7	5,702.7	39.8	38.1	-114.90	530.6	-1,877.3	306.5	230.0	4.009	
6,200.0	5,788.8	6,167.9	5,798.1	40.1	38.4	-114.97	534.1	-1,888.7	308.5	231.5	4.011	
6,300.0	5,888.4	6,264.1	5,894.0	40.2	38.5	-115.04	536.4	-1,896.2	309.8	232.6	4.012	
6,400.0	5,988.3	6,360.3	5,990.0	40.3	38.6	-115.10	537.5	-1,899.9	310.5	233.1	4.011	
6,500.0	6,088.3	6,458.5	6,088.3	40.3	38.7	179.90	537.7	-1,900.3	310.7	233.2	4.008	
6,600.0	6,188.3	6,558.5	6,188.3	40.4	38.7	179.90	537.7	-1,900.3	310.7	233.1	4.005	
6,700.0	6,288.3	6,658.5	6,288.3	40.4	38.7	179.90	537.7	-1,900.3	310.7	233.0	4.002	
6,800.0	6,388.3	6,758.5	6,388.3	40.4	38.8	179.90	537.7	-1,900.3	310.7	233.0	3.999	
6,900.0	6,488.3	6,858.5	6,488.3	40.5	38.8	179.90	537.7	-1,900.3	310.7	232.9	3.996	
7,000.0	6,588.3	6,958.5	6,588.3	40.5	38.8	179.90	537.7	-1,900.3	310.7	232.9	3.993	
7,100.0	6,688.3	7,058.5	6,688.3	40.5	38.9	179.90	537.7	-1,900.3	310.7	232.8	3.990	
7,200.0	6,788.3	7,158.5	6,788.3	40.5	38.9	179.90	537.7	-1,900.3	310.7	232.8	3.987	
7,300.0	6,888.3	7,258.5	6,888.3	40.6	38.9	179.90	537.7	-1,900.3	310.7	232.7	3.984	
7,400.0	6,988.3	7,358.5	6,988.3	40.6	38.9	179.90	537.7	-1,900.3	310.7	232.6	3.981	
7,500.0	7,088.3	7,458.5	7,088.3	40.6	39.0	179.90	537.7	-1,900.3	310.7	232.6	3.978	
7,600.0	7,188.3	7,558.5	7,188.3	40.7	39.0	179.90	537.7	-1,900.3	310.7	232.5	3.975	
7,700.0	7,288.3	7,658.5	7,288.3	40.7	39.0	179.90	537.7	-1,900.3	310.7	232.5	3.972	
7,800.0	7,388.3	7,758.5	7,388.3	40.7	39.1	179.90	537.7	-1,900.3	310.7	232.4	3.968	
7,900.0	7,488.3	7,858.5	7,488.3	40.7	39.1	179.90	537.7	-1,900.3	310.7	232.3	3.965	
8,000.0	7,588.3	7,958.5	7,588.3	40.8	39.1	179.90	537.7	-1,900.3	310.7	232.3	3.962	
8,100.0	7,688.3	8,058.5	7,688.3	40.8	39.2	179.90	537.7	-1,900.3	310.7	232.2	3.959	
8,200.0	7,788.3	8,158.5	7,788.3	40.8	39.2	179.90	537.7	-1,900.3	310.7	232.1	3.956	
8,228.7	7,817.0	8,187.2	7,817.0	40.8	39.2	179.90	537.7	-1,900.3	310.7	232.1	3.955	

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	-46.62	60.5	-64.0	88.0				
100.0	100.0	100.0	100.0	0.4	0.4	-46.62	60.5	-64.0	88.0	87.2	111.144		
200.0	200.0	200.0	200.0	1.2	1.2	-46.62	60.5	-64.0	88.0	85.6	35.634	CC	
300.0	300.0	299.3	299.3	1.7	1.7	-45.87	61.5	-63.4	88.3	85.1	27.059		
400.0	400.0	398.0	397.9	2.1	3.3	53.03	66.1	-60.8	89.1	85.0	21.717		
500.0	499.8	495.6	495.0	3.5	4.5	61.44	74.3	-56.1	89.9	84.4	16.355	ES	
600.0	599.3	591.3	589.7	4.7	5.5	73.64	85.9	-49.6	93.9	87.0	13.654		
700.0	698.4	684.4	681.3	5.0	6.3	81.59	100.4	-41.3	104.5	96.3	12.720		
800.0	796.8	775.0	769.7	5.5	7.1	86.65	117.5	-31.5	122.3	112.2	12.085	SF	
900.0	894.5	862.8	854.6	6.3	7.8	92.00	137.1	-20.4	147.4	135.6	12.434		
1,000.0	991.3	947.6	935.7	7.0	8.4	96.54	158.7	-8.2	179.4	166.3	13.648		
1,100.0	1,087.0	1,029.2	1,012.8	7.7	8.9	100.03	181.9	5.0	217.6	203.4	15.331		
1,200.0	1,181.4	1,107.6	1,086.0	8.4	9.5	102.59	206.4	19.0	261.2	246.1	17.278		
1,300.0	1,274.3	1,182.7	1,155.1	9.0	9.9	104.37	231.9	33.5	309.8	293.8	19.398		
1,400.0	1,365.9	1,254.6	1,220.3	9.4	10.4	107.13	258.1	48.4	362.7	346.0	21.717		
1,500.0	1,457.3	1,324.1	1,282.4	9.7	10.8	109.99	285.2	63.8	419.1	401.7	24.067		
1,600.0	1,548.8	1,391.3	1,341.6	10.0	11.2	112.07	312.9	79.5	478.4	460.3	26.424		
1,700.0	1,640.2	1,456.1	1,397.8	10.4	11.6	113.59	341.1	95.6	540.1	521.3	28.766		
1,800.0	1,731.7	1,518.7	1,451.1	10.8	11.9	114.70	369.6	111.7	604.0	584.6	31.129		
1,900.0	1,823.2	1,583.0	1,505.0	11.2	12.1	115.55	400.1	129.1	669.7	649.7	33.491		
2,000.0	1,914.6	1,657.5	1,567.1	11.7	12.4	116.36	435.8	149.4	736.0	715.2	35.444		
2,100.0	2,006.1	1,732.0	1,629.3	12.1	12.6	117.03	471.5	169.7	802.3	780.8	37.204		
2,200.0	2,097.5	1,806.6	1,691.5	12.6	12.9	117.60	507.2	190.0	868.7	846.3	38.789		
2,300.0	2,189.0	1,881.1	1,753.6	13.1	13.1	118.09	542.9	210.3	935.2	911.9	40.222		
2,400.0	2,280.4	1,955.6	1,815.8	13.7	13.4	118.52	578.6	230.6	1,001.7	977.5	41.520		
2,500.0	2,371.9	2,030.1	1,878.0	14.3	13.7	118.89	614.3	250.9	1,068.2	1,043.1	42.696		
2,600.0	2,463.3	2,104.6	1,940.1	15.0	13.9	119.22	650.1	271.2	1,134.7	1,108.8	43.762		
2,700.0	2,554.8	2,179.1	2,002.3	15.7	14.2	119.51	685.8	291.5	1,201.2	1,174.4	44.734		
2,800.0	2,646.3	2,253.6	2,064.4	16.4	14.5	119.77	721.5	311.8	1,267.8	1,240.0	45.630		
2,900.0	2,737.7	2,328.1	2,126.6	17.1	14.8	120.01	757.2	332.1	1,334.4	1,305.6	46.422		
3,000.0	2,829.2	2,402.7	2,188.8	17.9	15.4	120.22	792.9	352.5	1,400.9	1,371.2	47.158		
3,100.0	2,920.6	2,477.2	2,250.9	18.6	16.1	120.41	828.6	372.8	1,467.5	1,436.9	47.828		
3,200.0	3,012.1	2,551.7	2,313.1	19.3	16.8	120.59	864.4	393.1	1,534.1	1,502.5	48.450		
3,300.0	3,103.5	2,626.2	2,375.3	20.1	17.5	120.75	900.1	413.4	1,600.8	1,568.1	49.024		
3,400.0	3,195.0	2,700.7	2,437.4	20.8	18.2	120.90	935.8	433.7	1,667.4	1,633.7	49.554		
3,500.0	3,286.5	2,775.2	2,499.6	21.6	18.9	121.04	971.5	454.0	1,734.0	1,699.3	50.038		
3,600.0	3,377.9	2,849.7	2,561.7	22.3	19.6	121.17	1,007.2	474.3	1,800.6	1,765.0	50.488		
3,700.0	3,469.4	2,924.2	2,623.9	23.1	20.3	121.29	1,042.9	494.6	1,867.3	1,830.6	50.906		
3,800.0	3,560.8	2,998.8	2,686.1	23.8	21.0	121.40	1,078.7	514.9	1,933.9	1,896.2	51.294		
3,900.0	3,652.3	3,073.3	2,748.2	24.6	21.7	121.50	1,114.4	535.2	2,000.5	1,961.8	51.653		
4,000.0	3,743.7	3,147.8	2,810.4	25.3	22.4	121.60	1,150.1	555.5	2,067.2	2,027.4	51.988		
4,100.0	3,835.2	3,222.3	2,872.5	26.1	23.2	121.69	1,185.8	575.8	2,133.8	2,093.0	52.302		
4,200.0	3,926.6	3,296.8	2,934.7	26.9	23.9	121.78	1,221.5	596.1	2,200.5	2,158.6	52.595		
4,300.0	4,018.1	3,371.3	2,996.9	27.6	24.6	121.86	1,257.2	616.4	2,267.1	2,224.2	52.868		
4,400.0	4,109.6	3,445.8	3,059.0	28.4	25.3	121.93	1,293.0	636.7	2,333.8	2,289.8	53.125		
4,500.0	4,201.0	3,520.3	3,121.2	29.1	26.0	122.00	1,328.7	657.0	2,400.4	2,355.4	53.366		
4,600.0	4,292.5	3,594.9	3,183.4	29.9	26.7	122.07	1,364.4	677.4	2,467.1	2,421.1	53.592		
4,700.0	4,383.9	3,669.4	3,245.5	30.7	27.4	122.13	1,400.1	697.7	2,533.7	2,486.7	53.805		
4,800.0	4,475.4	3,743.9	3,307.7	31.4	28.1	122.20	1,435.8	718.0	2,600.4	2,552.3	54.005		
4,900.0	4,566.8	3,818.4	3,369.8	32.2	28.8	122.25	1,471.5	738.3	2,667.1	2,617.9	54.194		
5,000.0	4,658.3	3,892.9	3,432.0	32.9	29.5	122.31	1,507.2	758.6	2,733.7	2,683.5	54.373		
5,100.0	4,749.7	3,967.4	3,494.2	33.7	30.2	122.36	1,543.0	778.9	2,800.4	2,749.1	54.541		

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



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	4,841.2	4,041.9	3,556.3	34.5	30.9	122.41	1,578.7	799.2	2,867.1	2,814.7	54.701	
5,300.0	4,932.7	4,116.4	3,618.5	35.2	31.6	122.46	1,614.4	819.5	2,933.7	2,880.3	54.852	
5,400.0	5,024.1	4,191.0	3,680.7	36.0	32.3	122.50	1,650.1	839.8	3,000.4	2,945.9	54.995	
5,500.0	5,115.6	4,265.5	3,742.8	36.8	33.1	122.56	1,685.8	860.1	3,067.1	3,011.4	55.131	
5,600.0	5,207.9	4,340.8	3,805.7	37.5	33.8	124.37	1,721.9	880.6	3,132.8	3,076.1	55.251	
5,700.0	5,301.8	4,417.6	3,869.7	38.1	34.5	125.98	1,758.8	901.6	3,196.7	3,139.0	55.347	
5,800.0	5,397.1	4,495.8	3,935.0	38.7	35.2	127.40	1,796.2	922.9	3,258.6	3,199.9	55.435	
5,900.0	5,493.7	4,575.2	4,001.2	39.1	36.0	128.64	1,834.3	944.5	3,318.5	3,258.7	55.516	
6,000.0	5,591.2	4,655.6	4,068.3	39.5	36.8	129.72	1,872.9	966.4	3,376.2	3,315.4	55.593	
6,100.0	5,689.7	4,737.0	4,136.2	39.8	37.5	130.64	1,911.8	988.6	3,431.6	3,370.0	55.667	
6,200.0	5,788.8	4,819.1	4,204.7	40.1	38.3	131.44	1,951.2	1,011.0	3,484.8	3,422.3	55.740	
6,300.0	5,888.4	4,901.8	4,273.7	40.2	39.1	132.10	1,990.8	1,033.5	3,535.6	3,472.3	55.816	
6,400.0	5,988.3	4,984.9	4,343.0	40.3	39.9	132.65	2,030.7	1,056.2	3,584.1	3,520.0	55.902	
6,500.0	6,088.3	5,068.3	4,412.6	40.3	40.7	67.70	2,070.7	1,078.9	3,630.6	3,565.8	56.087	
6,600.0	6,188.3	5,151.7	4,482.2	40.4	41.5	67.20	2,110.6	1,101.6	3,676.8	3,611.5	56.280	
6,700.0	6,288.3	5,235.2	4,551.8	40.4	42.3	66.71	2,150.6	1,124.4	3,723.4	3,657.4	56.472	
6,800.0	6,388.3	7,205.0	6,388.3	40.4	52.2	61.43	2,650.1	1,408.3	3,767.9	3,687.7	46.980	
6,900.0	6,488.3	7,305.0	6,488.3	40.5	52.2	61.43	2,650.1	1,408.3	3,767.9	3,687.6	46.953	
7,000.0	6,588.3	7,405.0	6,588.3	40.5	52.2	61.43	2,650.1	1,408.3	3,767.9	3,687.6	46.926	
7,100.0	6,688.3	7,505.0	6,688.3	40.5	52.3	61.43	2,650.1	1,408.3	3,767.9	3,687.5	46.899	
7,200.0	6,788.3	7,605.0	6,788.3	40.5	52.3	61.43	2,650.1	1,408.3	3,767.9	3,687.5	46.872	
7,300.0	6,888.3	7,705.0	6,888.3	40.6	52.3	61.43	2,650.1	1,408.3	3,767.9	3,687.5	46.844	
7,400.0	6,988.3	7,805.0	6,988.3	40.6	52.3	61.43	2,650.1	1,408.3	3,767.9	3,687.4	46.817	
7,500.0	7,088.3	7,905.0	7,088.3	40.6	52.3	61.43	2,650.1	1,408.3	3,767.9	3,687.4	46.789	
7,600.0	7,188.3	8,005.0	7,188.3	40.7	52.3	61.43	2,650.1	1,408.3	3,767.9	3,687.3	46.761	
7,700.0	7,288.3	8,105.0	7,288.3	40.7	52.4	61.43	2,650.1	1,408.3	3,767.9	3,687.3	46.733	
7,800.0	7,388.3	8,205.0	7,388.3	40.7	52.4	61.43	2,650.1	1,408.3	3,767.9	3,687.2	46.704	
7,900.0	7,488.3	8,305.0	7,488.3	40.7	52.4	61.43	2,650.1	1,408.3	3,767.9	3,687.2	46.676	
8,000.0	7,588.3	8,405.0	7,588.3	40.8	52.4	61.43	2,650.1	1,408.3	3,767.9	3,687.1	46.647	
8,100.0	7,688.3	8,505.0	7,688.3	40.8	52.4	61.43	2,650.1	1,408.3	3,767.9	3,687.1	46.619	
8,200.0	7,788.3	8,605.0	7,788.3	40.8	52.4	61.43	2,650.1	1,408.3	3,767.9	3,687.0	46.590	
8,228.7	7,817.0	8,633.7	7,817.0	40.8	52.4	61.43	2,650.1	1,408.3	3,767.9	3,687.0	46.584	



Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	-46.69	49.3	-52.4	71.9					
100.0	100.0	100.0	100.0	0.4	0.4	-46.69	49.3	-52.4	71.9	71.2	90.835			
200.0	200.0	200.0	200.0	1.2	1.2	-46.69	49.3	-52.4	71.9	69.5	29.122	CC		
300.0	300.0	299.5	299.4	1.7	2.4	-45.00	51.1	-51.1	72.3	68.8	20.642			
400.0	400.0	398.5	398.2	2.1	3.9	55.67	56.4	-47.5	73.1	68.8	16.889	ES		
500.0	499.8	496.2	495.3	3.5	5.0	66.83	65.1	-41.6	74.5	68.8	13.042			
600.0	599.3	591.7	589.8	4.7	5.9	81.95	76.9	-33.5	80.7	73.5	11.188			
700.0	698.4	684.5	680.9	5.0	6.7	91.52	91.5	-23.5	95.5	86.7	10.781	SF		
800.0	796.8	774.6	768.6	5.5	7.4	96.64	108.5	-11.9	118.3	107.4	10.908			
900.0	894.5	861.6	852.4	6.3	8.1	101.16	127.6	1.2	148.4	135.9	11.879			
1,000.0	991.3	945.4	932.3	7.0	8.6	104.62	148.5	15.5	185.0	171.3	13.515			
1,100.0	1,087.0	1,025.8	1,008.0	7.7	9.2	107.09	170.8	30.8	227.4	212.8	15.507			
1,200.0	1,181.4	1,100.0	1,077.0	8.4	9.7	108.61	193.3	46.2	275.0	259.5	17.768			
1,300.0	1,274.3	1,175.9	1,146.7	9.0	10.1	109.82	218.3	63.2	327.2	310.8	20.021			
1,400.0	1,365.9	1,245.8	1,209.9	9.4	10.6	112.06	242.9	80.1	383.5	366.4	22.531			
1,500.0	1,457.3	1,313.2	1,270.0	9.7	11.0	114.57	268.1	97.4	442.9	425.2	25.040			
1,600.0	1,548.8	1,378.3	1,327.0	10.0	11.4	116.39	293.8	115.0	505.0	486.6	27.503			
1,700.0	1,640.2	1,448.6	1,387.9	10.4	11.7	117.88	322.9	134.8	569.0	549.9	29.828			
1,800.0	1,731.7	1,524.4	1,453.5	10.8	12.0	119.16	354.3	156.3	633.4	613.6	31.941			
1,900.0	1,823.2	1,600.1	1,519.0	11.2	12.2	120.22	385.7	177.8	698.0	677.4	33.939			
2,000.0	1,914.6	1,675.9	1,584.5	11.7	12.5	121.09	417.1	199.3	762.7	741.3	35.752			
2,100.0	2,006.1	1,751.7	1,650.0	12.1	12.7	121.83	448.5	220.8	827.4	805.3	37.401			
2,200.0	2,097.5	1,827.5	1,715.6	12.6	13.0	122.47	479.9	242.3	892.3	869.3	38.899			
2,300.0	2,189.0	1,903.3	1,781.1	13.1	13.3	123.02	511.3	263.8	957.2	933.4	40.260			
2,400.0	2,280.4	1,979.1	1,846.6	13.7	13.6	123.50	542.8	285.3	1,022.1	997.5	41.499			
2,500.0	2,371.9	2,054.8	1,912.2	14.3	13.8	123.92	574.2	306.8	1,087.1	1,061.6	42.627			
2,600.0	2,463.3	2,130.6	1,977.7	15.0	14.1	124.29	605.6	328.3	1,152.1	1,125.7	43.656			
2,700.0	2,554.8	2,206.4	2,043.2	15.7	14.4	124.63	637.0	349.8	1,217.1	1,189.8	44.595			
2,800.0	2,646.3	2,282.2	2,108.7	16.4	14.7	124.93	668.4	371.3	1,282.2	1,254.0	45.456			
2,900.0	2,737.7	2,358.0	2,174.3	17.1	15.0	125.20	699.8	392.8	1,347.3	1,318.1	46.254			
3,000.0	2,829.2	2,433.7	2,239.8	17.9	15.4	125.45	731.2	414.3	1,412.4	1,382.3	46.951			
3,100.0	2,920.6	2,509.5	2,305.3	18.6	16.0	125.68	762.6	435.8	1,477.5	1,446.4	47.627			
3,200.0	3,012.1	2,585.3	2,370.9	19.3	16.7	125.88	794.0	457.3	1,542.6	1,510.6	48.240			
3,300.0	3,103.5	2,661.1	2,436.4	20.1	17.3	126.07	825.5	478.8	1,607.7	1,574.8	48.806			
3,400.0	3,195.0	2,736.9	2,501.9	20.8	18.0	126.25	856.9	500.3	1,672.8	1,638.9	49.331			
3,500.0	3,286.5	2,812.6	2,567.4	21.6	18.6	126.41	888.3	521.8	1,738.0	1,703.1	49.818			
3,600.0	3,377.9	2,888.4	2,633.0	22.3	19.3	126.56	919.7	543.3	1,803.1	1,767.3	50.268			
3,700.0	3,469.4	2,964.2	2,698.5	23.1	19.9	126.70	951.1	564.8	1,868.3	1,831.4	50.687			
3,800.0	3,560.8	3,040.0	2,764.0	23.8	20.6	126.83	982.5	586.2	1,933.5	1,895.6	51.077			
3,900.0	3,652.3	3,115.8	2,829.6	24.6	21.2	126.95	1,013.9	607.7	1,998.6	1,959.8	51.441			
4,000.0	3,743.7	3,191.5	2,895.1	25.3	21.9	127.07	1,045.3	629.2	2,063.8	2,024.0	51.781			
4,100.0	3,835.2	3,267.3	2,960.6	26.1	22.6	127.17	1,076.7	650.7	2,129.0	2,088.1	52.098			
4,200.0	3,926.6	3,343.1	3,026.1	26.9	23.2	127.28	1,108.2	672.2	2,194.2	2,152.3	52.396			
4,300.0	4,018.1	3,418.9	3,091.7	27.6	23.9	127.37	1,139.6	693.7	2,259.4	2,216.5	52.675			
4,400.0	4,109.6	3,494.7	3,157.2	28.4	24.5	127.46	1,171.0	715.2	2,324.6	2,280.6	52.938			
4,500.0	4,201.0	3,570.4	3,222.7	29.1	25.2	127.55	1,202.4	736.7	2,389.8	2,344.8	53.184			
4,600.0	4,292.5	3,646.2	3,288.3	29.9	25.8	127.63	1,233.8	758.2	2,454.9	2,409.0	53.416			
4,700.0	4,383.9	3,722.0	3,353.8	30.7	26.5	127.70	1,265.2	779.7	2,520.1	2,473.2	53.635			
4,800.0	4,475.4	3,797.8	3,419.3	31.4	27.2	127.77	1,296.6	801.2	2,585.4	2,537.3	53.842			
4,900.0	4,566.8	3,873.6	3,484.8	32.2	27.8	127.84	1,328.0	822.7	2,650.6	2,601.5	54.037			
5,000.0	4,658.3	3,949.3	3,550.4	32.9	28.5	127.91	1,359.4	844.2	2,715.8	2,665.7	54.221			
5,100.0	4,749.7	4,025.1	3,615.9	33.7	29.1	127.97	1,390.9	865.7	2,781.0	2,729.8	54.396			

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	4,841.2	4,100.9	3,681.4	34.5	29.8	128.03	1,422.3	887.2	2,846.2	2,794.0	54.562		
5,300.0	4,932.7	4,176.7	3,747.0	35.2	30.5	128.09	1,453.7	908.7	2,911.4	2,858.2	54.719		
5,400.0	5,024.1	4,252.5	3,812.5	36.0	31.1	128.14	1,485.1	930.2	2,976.6	2,922.4	54.868		
5,500.0	5,115.6	4,328.2	3,878.0	36.8	31.8	128.20	1,516.5	951.7	3,041.8	2,986.5	55.010		
5,600.0	5,207.9	4,404.9	3,944.3	37.5	32.5	129.84	1,548.3	973.4	3,106.0	3,049.6	55.126		
5,700.0	5,301.8	4,483.3	4,012.1	38.1	33.1	131.27	1,580.8	995.7	3,168.0	3,110.6	55.200		
5,800.0	5,397.1	4,563.3	4,081.3	38.7	33.8	132.51	1,613.9	1,018.4	3,227.7	3,169.3	55.255		
5,900.0	5,493.7	4,644.6	4,151.6	39.1	34.6	133.59	1,647.6	1,041.4	3,285.0	3,225.6	55.292		
6,000.0	5,591.2	4,727.3	4,223.0	39.5	35.3	134.51	1,681.9	1,064.9	3,339.9	3,279.6	55.314		
6,100.0	5,689.7	4,810.9	4,295.4	39.8	36.0	135.29	1,716.6	1,088.6	3,392.3	3,331.0	55.324		
6,200.0	5,788.8	4,895.6	4,368.6	40.1	36.7	135.94	1,751.7	1,112.6	3,442.1	3,379.9	55.325		
6,300.0	5,888.4	4,981.0	4,442.4	40.2	37.5	136.47	1,787.1	1,136.8	3,489.3	3,426.2	55.322		
6,400.0	5,988.3	5,067.0	4,516.8	40.3	38.2	136.88	1,822.7	1,161.2	3,533.8	3,470.0	55.323		
6,500.0	6,088.3	5,153.4	4,591.5	40.3	39.0	71.88	1,858.5	1,185.7	3,576.0	3,511.5	55.438		
6,600.0	6,188.3	5,239.9	4,666.3	40.4	39.8	71.42	1,894.4	1,210.3	3,618.0	3,552.9	55.565		
6,700.0	6,288.3	5,326.3	4,741.1	40.4	40.5	70.96	1,930.2	1,234.8	3,660.1	3,594.4	55.692		
6,800.0	6,388.3	7,062.7	6,388.3	40.4	48.1	66.90	2,291.0	1,481.7	3,677.3	3,599.4	47.205		
6,900.0	6,488.3	7,162.7	6,488.3	40.5	48.1	66.90	2,291.0	1,481.7	3,677.3	3,599.4	47.177		
7,000.0	6,588.3	7,262.7	6,588.3	40.5	48.2	66.90	2,291.0	1,481.7	3,677.3	3,599.3	47.149		
7,100.0	6,688.3	7,362.7	6,688.3	40.5	48.2	66.90	2,291.0	1,481.7	3,677.3	3,599.3	47.120		
7,200.0	6,788.3	7,462.7	6,788.3	40.5	48.2	66.90	2,291.0	1,481.7	3,677.3	3,599.2	47.091		
7,300.0	6,888.3	7,562.7	6,888.3	40.6	48.2	66.90	2,291.0	1,481.7	3,677.3	3,599.2	47.062		
7,400.0	6,988.3	7,662.7	6,988.3	40.6	48.2	66.90	2,291.0	1,481.7	3,677.3	3,599.1	47.033		
7,500.0	7,088.3	7,762.7	7,088.3	40.6	48.3	66.90	2,291.0	1,481.7	3,677.3	3,599.1	47.004		
7,600.0	7,188.3	7,862.7	7,188.3	40.7	48.3	66.90	2,291.0	1,481.7	3,677.3	3,599.0	46.975		
7,700.0	7,288.3	7,962.7	7,288.3	40.7	48.3	66.90	2,291.0	1,481.7	3,677.3	3,599.0	46.945		
7,800.0	7,388.3	8,062.7	7,388.3	40.7	48.3	66.90	2,291.0	1,481.7	3,677.3	3,598.9	46.916		
7,900.0	7,488.3	8,162.7	7,488.3	40.7	48.3	66.90	2,291.0	1,481.7	3,677.3	3,598.9	46.886		
8,000.0	7,588.3	8,262.7	7,588.3	40.8	48.4	66.90	2,291.0	1,481.7	3,677.3	3,598.8	46.856		
8,100.0	7,688.3	8,362.7	7,688.3	40.8	48.4	66.90	2,291.0	1,481.7	3,677.3	3,598.8	46.826		
8,200.0	7,788.3	8,462.7	7,788.3	40.8	48.4	66.90	2,291.0	1,481.7	3,677.3	3,598.7	46.795		
8,228.7	7,817.0	8,491.4	7,817.0	40.8	48.4	66.90	2,291.0	1,481.7	3,677.3	3,598.7	46.789		



Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	-46.83	38.2	-40.8	55.9				
100.0	100.0	100.0	100.0	0.4	0.4	-46.83	38.2	-40.8	55.9	55.1	70.580		
200.0	200.0	200.0	200.0	1.2	1.2	-46.83	38.2	-40.8	55.9	53.4	22.628		
300.0	300.0	300.0	300.0	1.7	2.3	-44.59	39.8	-39.2	55.9	52.4	16.181		
400.0	400.0	399.6	399.4	2.1	3.9	58.11	44.3	-34.6	55.5	51.4	13.355		
437.7	437.7	436.9	436.4	2.6	4.3	63.08	46.8	-32.0	55.4	50.8	12.022	CC	
500.0	499.8	497.8	497.0	3.5	5.0	73.63	51.7	-26.9	56.2	50.8	10.365	ES	
600.0	599.3	593.6	591.7	4.7	5.9	93.94	61.8	-16.6	63.7	56.5	8.808		
700.0	698.4	686.4	682.8	5.0	6.7	106.26	74.2	-4.0	82.3	72.9	8.762	SF	
800.0	796.8	776.1	770.0	5.5	7.4	111.61	88.5	10.8	110.0	98.6	9.619		
900.0	894.5	862.3	853.1	6.3	8.1	115.30	104.6	27.3	145.2	132.2	11.166		
1,000.0	991.3	944.9	931.8	7.0	8.6	117.67	122.0	45.1	187.0	172.8	13.202		
1,100.0	1,087.0	1,023.5	1,005.9	7.7	9.2	119.12	140.4	64.0	234.5	219.4	15.508		
1,200.0	1,181.4	1,100.0	1,077.0	8.4	9.7	120.01	160.1	84.1	287.1	271.1	17.925		
1,300.0	1,274.3	1,168.6	1,140.0	9.0	10.1	120.20	179.0	103.6	344.3	327.6	20.563		
1,400.0	1,365.9	1,235.3	1,200.4	9.4	10.5	121.89	198.8	123.8	405.6	388.2	23.368		
1,500.0	1,457.3	1,300.0	1,258.2	9.7	10.9	124.06	219.0	144.6	469.6	451.7	26.142		
1,600.0	1,548.8	1,360.7	1,311.7	10.0	11.2	125.58	239.1	165.2	536.0	517.4	28.933		
1,700.0	1,640.2	1,419.7	1,362.9	10.4	11.5	126.71	259.6	186.1	604.3	585.3	31.757		
1,800.0	1,731.7	1,486.7	1,420.5	10.8	11.7	127.70	283.6	210.8	674.0	654.4	34.416		
1,900.0	1,823.2	1,557.8	1,481.5	11.2	12.0	128.56	309.1	236.9	743.9	723.7	36.747		
2,000.0	1,914.6	1,628.9	1,542.5	11.7	12.2	129.27	334.6	263.1	813.9	792.9	38.883		
2,100.0	2,006.1	1,700.1	1,603.5	12.1	12.4	129.87	360.1	289.2	883.9	862.2	40.837		
2,200.0	2,097.5	1,771.2	1,664.5	12.6	12.7	130.38	385.6	315.4	953.9	931.6	42.622		
2,300.0	2,189.0	1,842.3	1,725.5	13.1	12.9	130.83	411.1	341.6	1,024.0	1,000.9	44.258		
2,400.0	2,280.4	1,913.4	1,786.5	13.7	13.2	131.21	436.7	367.7	1,094.2	1,070.2	45.757		
2,500.0	2,371.9	1,984.5	1,847.5	14.3	13.4	131.55	462.2	393.9	1,164.3	1,139.6	47.131		
2,600.0	2,463.3	2,055.6	1,908.5	15.0	13.7	131.85	487.7	420.0	1,234.5	1,208.9	48.393		
2,700.0	2,554.8	2,126.8	1,969.5	15.7	14.0	132.12	513.2	446.2	1,304.6	1,278.3	49.554		
2,800.0	2,646.3	2,197.9	2,030.5	16.4	14.3	132.36	538.7	472.4	1,374.8	1,347.7	50.617		
2,900.0	2,737.7	2,269.0	2,091.6	17.1	14.6	132.58	564.2	498.5	1,445.0	1,417.0	51.627		
3,000.0	2,829.2	2,340.1	2,152.6	17.9	15.1	132.78	589.7	524.7	1,515.2	1,486.4	52.487		
3,100.0	2,920.6	2,411.2	2,213.6	18.6	15.8	132.96	615.3	550.9	1,585.4	1,555.7	53.341		
3,200.0	3,012.1	2,482.3	2,274.6	19.3	16.4	133.13	640.8	577.0	1,655.7	1,625.1	54.115		
3,300.0	3,103.5	2,553.5	2,335.6	20.1	17.1	133.28	666.3	603.2	1,725.9	1,694.4	54.834		
3,400.0	3,195.0	2,624.6	2,396.6	20.8	17.7	133.42	691.8	629.3	1,796.1	1,763.8	55.503		
3,500.0	3,286.5	2,695.7	2,457.6	21.6	18.4	133.55	717.3	655.5	1,866.4	1,833.1	56.125		
3,600.0	3,377.9	2,766.8	2,518.6	22.3	19.0	133.67	742.8	681.7	1,936.6	1,902.5	56.701		
3,700.0	3,469.4	2,837.9	2,579.6	23.1	19.7	133.78	768.3	707.8	2,006.9	1,971.8	57.240		
3,800.0	3,560.8	2,909.0	2,640.6	23.8	20.3	133.88	793.9	734.0	2,077.1	2,041.1	57.744		
3,900.0	3,652.3	2,980.2	2,701.6	24.6	21.0	133.98	819.4	760.1	2,147.4	2,110.5	58.214		
4,000.0	3,743.7	3,051.3	2,762.7	25.3	21.6	134.07	844.9	786.3	2,217.6	2,179.8	58.653		
4,100.0	3,835.2	3,122.4	2,823.7	26.1	22.3	134.16	870.4	812.5	2,287.9	2,249.2	59.067		
4,200.0	3,926.6	3,193.5	2,884.7	26.9	22.9	134.24	895.9	838.6	2,358.2	2,318.5	59.455		
4,300.0	4,018.1	3,264.6	2,945.7	27.6	23.6	134.31	921.4	864.8	2,428.4	2,387.8	59.818		
4,400.0	4,109.6	3,335.7	3,006.7	28.4	24.3	134.39	946.9	891.0	2,498.7	2,457.2	60.161		
4,500.0	4,201.0	3,406.9	3,067.7	29.1	24.9	134.45	972.5	917.1	2,569.0	2,526.5	60.484		
4,600.0	4,292.5	3,478.0	3,128.7	29.9	25.6	134.52	998.0	943.3	2,639.2	2,595.8	60.788		
4,700.0	4,383.9	3,549.1	3,189.7	30.7	26.2	134.58	1,023.5	969.4	2,709.5	2,665.1	61.075		
4,800.0	4,475.4	3,620.2	3,250.7	31.4	26.9	134.64	1,049.0	995.6	2,779.8	2,734.5	61.347		
4,900.0	4,566.8	3,691.3	3,311.7	32.2	27.6	134.69	1,074.5	1,021.8	2,850.1	2,803.8	61.604		
5,000.0	4,658.3	3,762.4	3,372.7	32.9	28.2	134.74	1,100.0	1,047.9	2,920.3	2,873.1	61.847		

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	4,749.7	3,833.6	3,433.8	33.7	28.9	134.79	1,125.5	1,074.1	2,990.6	2,942.4	62.077		
5,200.0	4,841.2	3,904.7	3,494.8	34.5	29.5	134.84	1,151.1	1,100.2	3,060.9	3,011.8	62.296		
5,300.0	4,932.7	3,975.8	3,555.8	35.2	30.2	134.88	1,176.6	1,126.4	3,131.2	3,081.1	62.503		
5,400.0	5,024.1	4,046.9	3,616.8	36.0	30.9	134.93	1,202.1	1,152.6	3,201.5	3,150.4	62.700		
5,500.0	5,115.6	4,118.0	3,677.8	36.8	31.5	134.98	1,227.6	1,178.7	3,271.7	3,219.7	62.888		
5,600.0	5,207.9	4,190.2	3,739.8	37.5	32.2	136.65	1,253.5	1,205.3	3,340.9	3,287.9	63.035		
5,700.0	5,301.8	4,264.6	3,803.5	38.1	32.9	138.11	1,280.2	1,232.6	3,407.7	3,353.7	63.111		
5,800.0	5,397.1	4,340.8	3,869.0	38.7	33.6	139.37	1,307.6	1,260.7	3,472.1	3,417.1	63.151		
5,900.0	5,493.7	4,418.9	3,935.9	39.1	34.3	140.45	1,335.6	1,289.4	3,533.9	3,478.0	63.160		
6,000.0	5,591.2	4,498.7	4,004.4	39.5	35.1	141.38	1,364.2	1,318.8	3,593.1	3,536.2	63.141		
6,100.0	5,689.7	4,580.0	4,074.1	39.8	35.8	142.17	1,393.3	1,348.7	3,649.6	3,591.7	63.098		
6,200.0	5,788.8	4,662.6	4,145.0	40.1	36.6	142.83	1,423.0	1,379.1	3,703.2	3,644.5	63.036		
6,300.0	5,888.4	4,746.4	4,216.9	40.2	37.4	143.37	1,453.1	1,409.9	3,754.0	3,694.4	62.963		
6,400.0	5,988.3	4,831.3	4,289.7	40.3	38.1	143.80	1,483.5	1,441.1	3,801.8	3,741.4	62.890		
6,500.0	6,088.3	4,917.0	4,363.2	40.3	38.9	78.83	1,514.3	1,472.6	3,847.0	3,786.0	62.981		
6,600.0	6,188.3	5,002.8	4,436.8	40.4	39.7	78.44	1,545.0	1,504.2	3,892.0	3,830.3	63.092		
6,700.0	6,288.3	5,088.6	4,510.4	40.4	40.5	78.05	1,575.8	1,535.8	3,937.0	3,874.8	63.201		
6,800.0	6,388.3	5,174.3	4,584.0	40.4	41.3	77.67	1,606.6	1,567.3	3,982.3	3,919.4	63.311		
6,900.0	6,488.3	7,196.3	6,488.3	40.5	51.0	73.61	1,981.8	1,952.0	4,016.1	3,938.9	52.016		
7,000.0	6,588.3	7,296.3	6,588.3	40.5	51.0	73.61	1,981.8	1,952.0	4,016.1	3,938.9	51.985		
7,100.0	6,688.3	7,396.3	6,688.3	40.5	51.0	73.61	1,981.8	1,952.0	4,016.1	3,938.8	51.953		
7,200.0	6,788.3	7,496.3	6,788.3	40.5	51.0	73.61	1,981.8	1,952.0	4,016.1	3,938.8	51.922		
7,300.0	6,888.3	7,596.3	6,888.3	40.6	51.0	73.61	1,981.8	1,952.0	4,016.1	3,938.7	51.890		
7,400.0	6,988.3	7,696.3	6,988.3	40.6	51.1	73.61	1,981.8	1,952.0	4,016.1	3,938.7	51.858		
7,500.0	7,088.3	7,796.3	7,088.3	40.6	51.1	73.61	1,981.8	1,952.0	4,016.1	3,938.6	51.826		
7,600.0	7,188.3	7,896.3	7,188.3	40.7	51.1	73.61	1,981.8	1,952.0	4,016.1	3,938.6	51.793		
7,700.0	7,288.3	7,996.3	7,288.3	40.7	51.1	73.61	1,981.8	1,952.0	4,016.1	3,938.5	51.761		
7,800.0	7,388.3	8,096.3	7,388.3	40.7	51.1	73.61	1,981.8	1,952.0	4,016.1	3,938.5	51.728		
7,900.0	7,488.3	8,196.3	7,488.3	40.7	51.2	73.61	1,981.8	1,952.0	4,016.1	3,938.4	51.695		
8,000.0	7,588.3	8,296.3	7,588.3	40.8	51.2	73.61	1,981.8	1,952.0	4,016.1	3,938.4	51.662		
8,100.0	7,688.3	8,396.3	7,688.3	40.8	51.2	73.61	1,981.8	1,952.0	4,016.1	3,938.3	51.629		
8,200.0	7,788.3	8,496.3	7,788.3	40.8	51.2	73.61	1,981.8	1,952.0	4,016.1	3,938.3	51.595		
8,228.7	7,817.0	8,525.1	7,817.0	40.8	51.2	73.61	1,981.8	1,952.0	4,016.1	3,938.3	51.589		

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	-46.88	27.3	-29.2	40.0					
100.0	100.0	100.0	100.0	0.4	0.4	-46.88	27.3	-29.2	40.0	39.2	50.449			
200.0	200.0	200.0	200.0	1.2	1.2	-46.88	27.3	-29.2	40.0	37.5	16.174			
300.0	300.0	300.1	300.1	1.7	1.7	-45.12	28.1	-28.2	39.8	36.6	12.261			
400.0	400.0	400.0	399.8	2.1	3.3	59.27	31.6	-24.0	39.0	35.1	9.951			
446.0	445.9	445.5	445.1	2.7	3.9	67.56	34.0	-21.0	38.7	34.3	8.750	CC, ES		
500.0	499.8	498.5	497.8	3.5	4.5	80.26	37.7	-16.6	39.6	34.4	7.687			
600.0	599.3	594.7	593.1	4.7	5.5	106.16	46.2	-6.2	49.1	41.7	6.582	SF		
700.0	698.4	687.9	684.8	5.0	6.4	119.38	56.9	6.8	71.1	61.4	7.263			
800.0	796.8	777.9	772.6	5.5	7.1	123.42	69.5	22.1	101.9	90.3	8.759			
900.0	894.5	864.4	856.1	6.3	7.8	125.59	83.6	39.3	139.7	126.6	10.681			
1,000.0	991.3	947.0	935.1	7.0	8.4	126.72	99.0	57.9	183.5	169.3	12.937			
1,100.0	1,087.0	1,025.5	1,009.3	7.7	8.9	127.22	115.2	77.7	232.9	217.8	15.394			
1,200.0	1,181.4	1,100.0	1,078.9	8.4	9.4	127.29	132.2	98.3	287.3	271.3	17.977			
1,300.0	1,274.3	1,169.8	1,143.3	9.0	9.8	127.02	149.3	119.1	346.3	329.5	20.678			
1,400.0	1,365.9	1,235.8	1,203.4	9.4	10.3	128.27	166.7	140.2	409.3	391.9	23.612			
1,500.0	1,457.3	1,300.0	1,261.0	9.7	10.7	130.09	184.6	162.0	474.8	456.9	26.494			
1,600.0	1,548.8	1,359.7	1,313.9	10.0	10.9	131.34	202.2	183.4	542.4	524.1	29.575			
1,700.0	1,640.2	1,430.0	1,375.6	10.4	11.1	132.46	223.5	209.3	611.3	592.4	32.330			
1,800.0	1,731.7	1,502.0	1,438.9	10.8	11.3	133.38	245.4	235.9	680.3	660.8	34.836			
1,900.0	1,823.2	1,574.0	1,502.1	11.2	11.6	134.13	267.3	262.5	749.4	729.2	37.121			
2,000.0	1,914.6	1,645.9	1,565.3	11.7	11.8	134.76	289.1	289.0	818.5	797.6	39.219			
2,100.0	2,006.1	1,717.9	1,628.5	12.1	12.1	135.29	311.0	315.6	887.7	866.1	41.145			
2,200.0	2,097.5	1,789.9	1,691.8	12.6	12.3	135.74	332.9	342.2	956.9	934.6	42.909			
2,300.0	2,189.0	1,861.9	1,755.0	13.1	12.6	136.13	354.8	368.8	1,026.1	1,003.1	44.524			
2,400.0	2,280.4	1,933.9	1,818.2	13.7	12.9	136.47	376.6	395.4	1,095.4	1,071.6	46.009			
2,500.0	2,371.9	2,005.9	1,881.4	14.3	13.2	136.78	398.5	421.9	1,164.6	1,140.1	47.372			
2,600.0	2,463.3	2,077.9	1,944.7	15.0	13.4	137.04	420.4	448.5	1,233.9	1,208.6	48.624			
2,700.0	2,554.8	2,149.9	2,007.9	15.7	13.7	137.28	442.3	475.1	1,303.2	1,277.1	49.778			
2,800.0	2,646.3	2,221.9	2,071.1	16.4	14.0	137.50	464.1	501.7	1,372.6	1,345.6	50.842			
2,900.0	2,737.7	2,293.9	2,134.3	17.1	14.3	137.70	486.0	528.3	1,441.9	1,414.1	51.821			
3,000.0	2,829.2	2,365.8	2,197.6	17.9	14.7	137.87	507.9	554.9	1,511.2	1,482.5	52.729			
3,100.0	2,920.6	2,437.8	2,260.8	18.6	15.2	138.03	529.7	581.4	1,580.5	1,551.0	53.559			
3,200.0	3,012.1	2,509.8	2,324.0	19.3	15.9	138.18	551.6	608.0	1,649.9	1,619.5	54.343			
3,300.0	3,103.5	2,581.8	2,387.2	20.1	16.5	138.32	573.5	634.6	1,719.2	1,688.0	55.064			
3,400.0	3,195.0	2,653.8	2,450.5	20.8	17.1	138.44	595.4	661.2	1,788.6	1,756.5	55.735			
3,500.0	3,286.5	2,725.8	2,513.7	21.6	17.7	138.56	617.2	687.8	1,857.9	1,825.0	56.361			
3,600.0	3,377.9	2,797.8	2,576.9	22.3	18.3	138.67	639.1	714.3	1,927.3	1,893.5	56.946			
3,700.0	3,469.4	2,869.8	2,640.1	23.1	19.0	138.77	661.0	740.9	1,996.7	1,961.9	57.489			
3,800.0	3,560.8	2,941.8	2,703.4	23.8	19.6	138.86	682.9	767.5	2,066.0	2,030.4	57.998			
3,900.0	3,652.3	3,013.7	2,766.6	24.6	20.2	138.95	704.7	794.1	2,135.4	2,098.9	58.476			
4,000.0	3,743.7	3,085.7	2,829.8	25.3	20.8	139.03	726.6	820.7	2,204.8	2,167.4	58.923			
4,100.0	3,835.2	3,157.7	2,893.0	26.1	21.4	139.11	748.5	847.3	2,274.2	2,235.8	59.342			
4,200.0	3,926.6	3,229.7	2,956.3	26.9	22.1	139.18	770.4	873.8	2,343.5	2,304.3	59.736			
4,300.0	4,018.1	3,301.7	3,019.5	27.6	22.7	139.25	792.2	900.4	2,412.9	2,372.8	60.108			
4,400.0	4,109.6	3,373.7	3,082.7	28.4	23.3	139.31	814.1	927.0	2,482.3	2,441.2	60.457			
4,500.0	4,201.0	3,445.7	3,145.9	29.1	23.9	139.37	836.0	953.6	2,551.7	2,509.7	60.787			
4,600.0	4,292.5	3,517.7	3,209.2	29.9	24.6	139.43	857.8	980.2	2,621.1	2,578.2	61.098			
4,700.0	4,383.9	3,589.7	3,272.4	30.7	25.2	139.49	879.7	1,006.8	2,690.4	2,646.6	61.393			
4,800.0	4,475.4	3,661.7	3,335.6	31.4	25.8	139.54	901.6	1,033.3	2,759.8	2,715.1	61.671			
4,900.0	4,566.8	3,733.6	3,398.8	32.2	26.4	139.59	923.5	1,059.9	2,829.2	2,783.5	61.934			
5,000.0	4,658.3	3,805.6	3,462.1	32.9	27.1	139.64	945.3	1,086.5	2,898.6	2,852.0	62.185			

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	4,749.7	3,877.6	3,525.3	33.7	27.7	139.68	967.2	1,113.1	2,968.0	2,920.4	62.421		
5,200.0	4,841.2	3,949.6	3,588.5	34.5	28.3	139.72	989.1	1,139.7	3,037.4	2,988.9	62.646		
5,300.0	4,932.7	4,021.6	3,651.7	35.2	28.9	139.76	1,011.0	1,166.2	3,106.8	3,057.3	62.860		
5,400.0	5,024.1	4,093.6	3,715.0	36.0	29.6	139.80	1,032.8	1,192.8	3,176.2	3,125.8	63.064		
5,500.0	5,115.6	4,165.6	3,778.2	36.8	30.2	139.85	1,054.7	1,219.4	3,245.5	3,194.2	63.257		
5,600.0	5,207.9	4,238.7	3,842.5	37.5	30.8	141.33	1,076.9	1,246.4	3,313.7	3,261.4	63.401		
5,700.0	5,301.8	4,314.1	3,908.7	38.1	31.5	142.61	1,099.8	1,274.3	3,379.3	3,326.1	63.456		
5,800.0	5,397.1	4,391.6	3,976.7	38.7	32.1	143.71	1,123.4	1,302.9	3,442.3	3,388.1	63.466		
5,900.0	5,493.7	4,471.0	4,046.5	39.1	32.8	144.65	1,147.5	1,332.2	3,502.5	3,447.3	63.434		
6,000.0	5,591.2	4,552.3	4,117.8	39.5	33.5	145.45	1,172.2	1,362.2	3,559.9	3,503.7	63.367		
6,100.0	5,689.7	4,635.1	4,190.6	39.8	34.3	146.11	1,197.4	1,392.8	3,614.3	3,557.2	63.270		
6,200.0	5,788.8	4,719.4	4,264.6	40.1	35.0	146.66	1,223.0	1,423.9	3,665.7	3,607.7	63.147		
6,300.0	5,888.4	4,805.1	4,339.8	40.2	35.7	147.10	1,249.0	1,455.5	3,714.1	3,655.1	63.008		
6,400.0	5,988.3	4,891.9	4,416.1	40.3	36.5	147.44	1,275.4	1,487.6	3,759.3	3,699.5	62.866		
6,500.0	6,088.3	4,979.6	4,493.1	40.3	37.3	82.45	1,302.0	1,520.0	3,801.6	3,741.2	62.908		
6,600.0	6,188.3	5,067.4	4,570.2	40.4	38.0	82.08	1,328.7	1,552.4	3,843.7	3,782.6	62.975		
6,700.0	6,288.3	5,155.2	4,647.4	40.4	38.8	81.72	1,355.4	1,584.8	3,885.8	3,824.2	63.041		
6,800.0	6,388.3	5,243.0	4,724.5	40.4	39.6	81.37	1,382.1	1,617.3	3,928.1	3,865.9	63.108		
6,900.0	6,488.3	5,330.8	4,801.6	40.5	40.4	81.02	1,408.8	1,650.0	3,971.2	3,907.0	63.175		
7,000.0	6,588.3	5,418.6	4,878.7	40.5	41.2	80.67	1,435.5	1,682.7	4,014.3	3,948.1	63.242		
7,100.0	6,688.3	5,506.4	4,955.8	40.5	42.0	80.32	1,462.2	1,715.4	4,057.4	3,989.2	63.309		
7,200.0	6,788.3	5,594.2	5,033.0	40.5	42.8	80.00	1,488.9	1,748.1	4,100.5	4,030.3	63.376		
7,300.0	6,888.3	5,682.0	5,109.2	40.6	43.6	79.65	1,515.6	1,780.8	4,143.6	4,071.4	63.443		
7,400.0	6,988.3	5,769.8	5,185.4	40.6	44.4	79.30	1,542.3	1,813.5	4,186.7	4,112.5	63.510		
7,500.0	7,088.3	5,857.6	5,261.6	40.6	45.2	79.00	1,569.0	1,846.2	4,229.8	4,153.6	63.577		
7,600.0	7,188.3	5,945.4	5,337.8	40.7	46.0	78.70	1,595.7	1,878.9	4,272.9	4,194.7	63.644		
7,700.0	7,288.3	6,033.2	5,414.0	40.7	46.8	78.40	1,622.4	1,911.6	4,316.0	4,235.8	63.711		
7,800.0	7,388.3	6,121.0	5,490.2	40.7	47.6	78.10	1,649.1	1,944.3	4,359.1	4,276.9	63.778		
7,900.0	7,488.3	6,208.8	5,566.4	40.7	48.4	77.80	1,675.8	1,977.0	4,402.2	4,318.0	63.845		
8,000.0	7,588.3	6,296.6	5,642.6	40.8	49.2	77.50	1,702.5	2,009.7	4,445.3	4,359.1	63.912		
8,100.0	7,688.3	6,384.4	5,718.8	40.8	50.0	77.20	1,729.2	2,042.4	4,488.4	4,400.2	63.979		
8,200.0	7,788.3	6,472.2	5,795.0	40.8	50.8	77.00	1,755.9	2,075.1	4,531.5	4,441.3	64.046		
8,228.7	7,817.0	6,482.3	5,817.0	40.8	50.8	77.00	1,755.9	2,075.1	4,531.5	4,441.3	64.046		



Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	-46.49	16.4	-17.3	23.8				
100.0	100.0	100.0	100.0	0.4	0.4	-46.49	16.4	-17.3	23.8	23.0	30.058		
200.0	200.0	200.0	200.0	1.2	1.2	-46.49	16.4	-17.3	23.8	21.3	9.637		
300.0	300.0	300.1	300.1	1.7	1.6	-44.63	16.8	-16.6	23.7	20.4	7.369		
400.0	400.0	400.0	399.9	2.1	3.0	64.81	19.5	-12.6	22.7	18.8	5.878		
422.5	422.5	422.4	422.2	2.4	3.3	70.98	20.4	-11.3	22.6	18.5	5.512	CC, ES	
500.0	499.8	498.6	498.1	3.5	4.4	98.03	24.5	-5.2	25.2	19.7	4.582	SF	
600.0	599.3	595.0	593.6	4.7	5.4	127.44	31.7	5.5	40.2	31.6	4.672		
700.0	698.4	688.3	685.5	5.0	6.2	136.37	40.8	19.0	66.7	56.3	6.372		
800.0	796.8	778.3	773.4	5.5	7.0	136.66	51.6	34.9	100.6	88.6	8.425		
900.0	894.5	864.7	857.0	6.3	7.6	136.37	63.7	52.9	140.6	127.4	10.630		
1,000.0	991.3	947.0	935.8	7.0	8.2	135.88	76.9	72.4	186.4	172.1	13.041		
1,100.0	1,087.0	1,025.1	1,009.8	7.7	8.8	135.27	90.9	93.1	237.6	222.4	15.602		
1,200.0	1,181.4	1,100.0	1,080.0	8.4	9.3	134.59	105.6	114.9	293.8	277.7	18.243		
1,300.0	1,274.3	1,167.9	1,142.8	9.0	9.7	133.70	120.0	136.3	354.5	337.7	21.055		
1,400.0	1,365.9	1,232.9	1,202.1	9.4	10.1	134.50	134.8	158.2	419.2	401.9	24.139		
1,500.0	1,457.3	1,296.4	1,259.4	9.7	10.4	135.98	150.2	181.0	486.3	468.4	27.233		
1,600.0	1,548.8	1,369.3	1,324.8	10.0	10.7	137.26	168.1	207.7	554.2	535.8	30.108		
1,700.0	1,640.2	1,442.1	1,390.2	10.4	10.9	138.26	186.1	234.3	622.3	603.3	32.760		
1,800.0	1,731.7	1,515.0	1,455.6	10.8	11.1	139.07	204.1	261.0	690.4	670.8	35.200		
1,900.0	1,823.2	1,587.9	1,520.9	11.2	11.4	139.73	222.1	287.7	758.6	738.3	37.444		
2,000.0	1,914.6	1,660.8	1,586.3	11.7	11.6	140.28	240.1	314.3	826.9	805.9	39.504		
2,100.0	2,006.1	1,733.6	1,651.7	12.1	11.9	140.75	258.1	341.0	895.1	873.5	41.398		
2,200.0	2,097.5	1,806.5	1,717.1	12.6	12.1	141.15	276.1	367.7	963.4	941.1	43.141		
2,300.0	2,189.0	1,879.4	1,782.5	13.1	12.4	141.50	294.1	394.4	1,031.8	1,008.7	44.739		
2,400.0	2,280.4	1,952.3	1,847.9	13.7	12.7	141.81	312.1	421.0	1,100.1	1,076.3	46.209		
2,500.0	2,371.9	2,025.1	1,913.3	14.3	13.0	142.08	330.1	447.7	1,168.5	1,143.9	47.563		
2,600.0	2,463.3	2,098.0	1,978.7	15.0	13.3	142.32	348.1	474.4	1,236.9	1,211.5	48.812		
2,700.0	2,554.8	2,170.9	2,044.1	15.7	13.6	142.54	366.1	501.0	1,305.3	1,279.1	49.962		
2,800.0	2,646.3	2,243.8	2,109.5	16.4	13.9	142.73	384.1	527.7	1,373.7	1,346.7	51.025		
2,900.0	2,737.7	2,316.6	2,174.8	17.1	14.2	142.91	402.0	554.4	1,442.1	1,414.3	52.010		
3,000.0	2,829.2	2,389.5	2,240.2	17.9	14.5	143.07	420.0	581.0	1,510.5	1,481.9	52.921		
3,100.0	2,920.6	2,462.4	2,305.6	18.6	14.8	143.21	438.0	607.7	1,578.9	1,549.5	53.769		
3,200.0	3,012.1	2,535.3	2,371.0	19.3	15.3	143.35	456.0	634.4	1,647.3	1,617.1	54.543		
3,300.0	3,103.5	2,608.2	2,436.4	20.1	15.9	143.47	474.0	661.1	1,715.7	1,684.7	55.281		
3,400.0	3,195.0	2,681.0	2,501.8	20.8	16.5	143.58	492.0	687.7	1,784.2	1,752.3	55.961		
3,500.0	3,286.5	2,753.9	2,567.2	21.6	17.0	143.69	510.0	714.4	1,852.6	1,819.9	56.595		
3,600.0	3,377.9	2,826.8	2,632.6	22.3	17.6	143.79	528.0	741.1	1,921.0	1,887.5	57.189		
3,700.0	3,469.4	2,899.7	2,698.0	23.1	18.2	143.88	546.0	767.7	1,989.5	1,955.0	57.745		
3,800.0	3,560.8	2,972.5	2,763.4	23.8	18.8	143.96	564.0	794.4	2,057.9	2,022.6	58.263		
3,900.0	3,652.3	3,045.4	2,828.7	24.6	19.4	144.04	582.0	821.1	2,126.4	2,090.2	58.750		
4,000.0	3,743.7	3,118.3	2,894.1	25.3	20.0	144.12	600.0	847.7	2,194.8	2,157.7	59.209		
4,100.0	3,835.2	3,191.2	2,959.5	26.1	20.5	144.19	618.0	874.4	2,263.3	2,225.3	59.639		
4,200.0	3,926.6	3,264.0	3,024.9	26.9	21.1	144.25	636.0	901.1	2,331.7	2,292.9	60.044		
4,300.0	4,018.1	3,336.9	3,090.3	27.6	21.7	144.32	653.9	927.7	2,400.2	2,360.4	60.425		
4,400.0	4,109.6	3,409.8	3,155.7	28.4	22.3	144.38	671.9	954.4	2,468.6	2,428.0	60.786		
4,500.0	4,201.0	3,482.7	3,221.1	29.1	22.9	144.43	689.9	981.1	2,537.1	2,495.6	61.126		
4,600.0	4,292.5	3,555.5	3,286.5	29.9	23.5	144.48	707.9	1,007.8	2,605.5	2,563.1	61.447		
4,700.0	4,383.9	3,628.4	3,351.9	30.7	24.0	144.53	725.9	1,034.4	2,674.0	2,630.7	61.751		
4,800.0	4,475.4	3,701.3	3,417.3	31.4	24.6	144.58	743.9	1,061.1	2,742.4	2,698.2	62.040		
4,900.0	4,566.8	3,774.2	3,482.6	32.2	25.2	144.63	761.9	1,087.8	2,810.9	2,765.8	62.313		
5,000.0	4,658.3	3,847.0	3,548.0	32.9	25.8	144.67	779.9	1,114.4	2,879.4	2,833.3	62.572		

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	4,749.7	3,919.9	3,613.4	33.7	26.4	144.71	797.9	1,141.1	2,947.8	2,900.9	62.818		
5,200.0	4,841.2	3,992.8	3,678.8	34.5	27.0	144.75	815.9	1,167.8	3,016.3	2,968.4	63.052		
5,300.0	4,932.7	4,065.7	3,744.2	35.2	27.6	144.79	833.9	1,194.4	3,084.7	3,036.0	63.275		
5,400.0	5,024.1	4,138.5	3,809.6	36.0	28.1	144.82	851.9	1,221.1	3,153.2	3,103.5	63.487		
5,500.0	5,115.6	4,211.4	3,875.0	36.8	28.7	144.87	869.9	1,247.8	3,221.7	3,171.1	63.689		
5,600.0	5,207.9	4,285.5	3,941.5	37.5	29.3	146.15	888.2	1,274.9	3,288.8	3,237.3	63.831		
5,700.0	5,301.8	4,362.0	4,010.1	38.1	29.9	147.25	907.0	1,302.9	3,353.2	3,300.7	63.866		
5,800.0	5,397.1	4,440.6	4,080.7	38.7	30.6	148.20	926.5	1,331.7	3,414.7	3,361.3	63.846		
5,900.0	5,493.7	4,521.4	4,153.1	39.1	31.2	148.99	946.4	1,361.2	3,473.3	3,418.9	63.777		
6,000.0	5,591.2	4,604.0	4,227.2	39.5	31.9	149.66	966.8	1,391.4	3,528.9	3,473.5	63.664		
6,100.0	5,689.7	4,688.3	4,302.9	39.8	32.6	150.22	987.6	1,422.3	3,581.3	3,524.9	63.514		
6,200.0	5,788.8	4,774.3	4,380.0	40.1	33.3	150.66	1,008.8	1,453.8	3,630.5	3,573.2	63.332		
6,300.0	5,888.4	4,861.6	4,458.4	40.2	34.0	151.01	1,030.4	1,485.7	3,676.4	3,618.2	63.129		
6,400.0	5,988.3	4,950.2	4,537.9	40.3	34.7	151.27	1,052.3	1,518.2	3,719.0	3,659.9	62.920		
6,500.0	6,088.3	5,039.8	4,618.3	40.3	35.4	86.25	1,074.4	1,550.9	3,758.6	3,698.8	62.918		
6,600.0	6,188.3	5,129.5	4,698.8	40.4	36.1	85.93	1,096.5	1,583.8	3,797.7	3,737.4	62.946		
6,700.0	6,288.3	5,219.2	4,779.3	40.4	36.9	85.60	1,118.7	1,616.6	3,837.0	3,776.1	62.972		
6,800.0	6,388.3	5,309.0	4,859.8	40.4	37.6	85.29	1,140.8	1,649.4	3,876.4	3,814.9	63.000		
6,900.0	6,488.3	7,001.7	6,488.3	40.5	44.1	82.71	1,340.0	1,944.7	3,876.9	3,803.7	53.031		
7,000.0	6,588.3	7,101.7	6,588.3	40.5	44.1	82.71	1,340.0	1,944.7	3,876.9	3,803.7	52.996		
7,100.0	6,688.3	7,201.7	6,688.3	40.5	44.1	82.71	1,340.0	1,944.7	3,876.9	3,803.6	52.961		
7,200.0	6,788.3	7,301.7	6,788.3	40.5	44.1	82.71	1,340.0	1,944.7	3,876.9	3,803.6	52.925		
7,300.0	6,888.3	7,401.7	6,888.3	40.6	44.2	82.71	1,340.0	1,944.7	3,876.9	3,803.6	52.889		
7,400.0	6,988.3	7,501.7	6,988.3	40.6	44.2	82.71	1,340.0	1,944.7	3,876.9	3,803.5	52.853		
7,500.0	7,088.3	7,601.7	7,088.3	40.6	44.2	82.71	1,340.0	1,944.7	3,876.9	3,803.5	52.817		
7,600.0	7,188.3	7,701.7	7,188.3	40.7	44.2	82.71	1,340.0	1,944.7	3,876.9	3,803.4	52.781		
7,700.0	7,288.3	7,801.7	7,288.3	40.7	44.3	82.71	1,340.0	1,944.7	3,876.9	3,803.3	52.744		
7,800.0	7,388.3	7,901.7	7,388.3	40.7	44.3	82.71	1,340.0	1,944.7	3,876.9	3,803.3	52.708		
7,900.0	7,488.3	8,001.7	7,488.3	40.7	44.3	82.71	1,340.0	1,944.7	3,876.9	3,803.2	52.671		
8,000.0	7,588.3	8,101.7	7,588.3	40.8	44.3	82.71	1,340.0	1,944.7	3,876.9	3,803.2	52.634		
8,100.0	7,688.3	8,201.7	7,688.3	40.8	44.4	82.71	1,340.0	1,944.7	3,876.9	3,803.1	52.596		
8,200.0	7,788.3	8,301.7	7,788.3	40.8	44.4	82.71	1,340.0	1,944.7	3,876.9	3,803.1	52.559		
8,228.7	7,817.0	8,330.4	7,817.0	40.8	44.4	82.71	1,340.0	1,944.7	3,876.9	3,803.1	52.551		



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design											Laramie 0993-29-01 - Laramie 29-01 Fed 0993-21-16W - OH - Design #1		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)	Offset 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	-45.98	5.5	-5.7	7.9					
100.0	100.0	100.0	100.0	0.4	0.4	-45.98	5.5	-5.7	7.9	7.1	9.936			
200.0	200.0	200.0	200.0	1.2	1.2	-45.98	5.5	-5.7	7.9	5.4	3.186			
300.0	300.0	300.1	300.0	1.7	1.7	-37.12	6.0	-4.6	7.6	4.3	2.331	Level 1		
339.3	339.3	339.3	339.3	1.9	2.3	72.07	6.8	-3.1	7.4	3.9	2.093	Level 1, CC, ES		
400.0	400.0	399.8	399.6	2.1	3.3	104.56	8.5	0.2	8.8	4.3	1.971	Level 2, SF		
500.0	499.8	498.1	497.4	3.5	4.5	143.30	13.0	8.8	20.7	13.1	2.739			
600.0	599.3	594.0	592.5	4.7	5.5	155.33	19.1	20.6	43.0	33.1	4.345			
700.0	698.4	686.8	683.7	5.0	6.4	154.16	26.9	35.5	73.5	62.4	6.640			
800.0	796.8	776.1	770.8	5.5	7.1	139.84	35.9	52.8	110.2	97.9	8.989			
900.0	894.5	861.5	853.3	6.3	7.7	146.52	46.0	72.2	152.7	139.3	11.345			
1,000.0	991.3	942.6	931.0	7.0	8.3	144.39	56.9	93.2	200.9	186.4	13.846			
1,100.0	1,087.0	1,019.3	1,003.5	7.7	8.9	142.70	68.3	115.2	254.4	239.0	16.478			
1,200.0	1,181.4	1,091.4	1,070.9	8.4	9.3	141.23	80.1	137.9	312.9	296.6	19.222			
1,300.0	1,274.3	1,158.7	1,133.1	9.0	9.7	139.84	92.0	160.8	375.9	358.9	22.139			
1,400.0	1,365.9	1,227.6	1,196.1	9.4	10.0	140.37	104.9	185.6	442.6	425.1	25.348			
1,500.0	1,457.3	1,301.0	1,263.1	9.7	10.2	141.83	118.7	212.2	509.9	491.9	28.374			
1,600.0	1,548.8	1,374.5	1,330.1	10.0	10.4	142.96	132.6	238.8	577.3	558.8	31.158			
1,700.0	1,640.2	1,447.9	1,397.2	10.4	10.7	143.85	146.4	265.4	644.8	625.7	33.735			
1,800.0	1,731.7	1,521.3	1,464.2	10.8	10.9	144.57	160.2	292.0	712.4	692.7	36.115			
1,900.0	1,823.2	1,594.8	1,531.2	11.2	11.2	145.17	174.1	318.6	780.0	759.7	38.310			
2,000.0	1,914.6	1,668.2	1,598.3	11.7	11.4	145.68	187.9	345.2	847.7	826.7	40.327			
2,100.0	2,006.1	1,741.6	1,665.3	12.1	11.7	146.11	201.7	371.8	915.4	893.7	42.187			
2,200.0	2,097.5	1,815.1	1,732.3	12.6	12.0	146.48	215.6	398.4	983.1	960.7	43.901			
2,300.0	2,189.0	1,888.5	1,799.4	13.1	12.3	146.80	229.4	425.0	1,050.9	1,027.8	45.479			
2,400.0	2,280.4	1,961.9	1,866.4	13.7	12.6	147.09	243.2	451.6	1,118.6	1,094.8	46.933			
2,500.0	2,371.9	2,035.4	1,933.4	14.3	12.9	147.34	257.0	478.2	1,186.4	1,161.8	48.276			
2,600.0	2,463.3	2,108.8	2,000.4	15.0	13.2	147.56	270.9	504.8	1,254.2	1,228.9	49.517			
2,700.0	2,554.8	2,182.2	2,067.5	15.7	13.5	147.76	284.7	531.4	1,322.0	1,295.9	50.664			
2,800.0	2,646.3	2,255.7	2,134.5	16.4	13.8	147.95	298.5	558.0	1,389.8	1,362.9	51.726			
2,900.0	2,737.7	2,329.1	2,201.5	17.1	14.1	148.11	312.4	584.6	1,457.6	1,430.0	52.711			
3,000.0	2,829.2	2,402.5	2,268.6	17.9	14.4	148.26	326.2	611.2	1,525.4	1,497.0	53.628			
3,100.0	2,920.6	2,476.0	2,335.6	18.6	14.7	148.40	340.0	637.8	1,593.3	1,564.0	54.477			
3,200.0	3,012.1	2,549.4	2,402.6	19.3	15.1	148.52	353.9	664.4	1,661.1	1,631.0	55.268			
3,300.0	3,103.5	2,622.8	2,469.7	20.1	15.5	148.64	367.7	691.0	1,728.9	1,698.0	56.007			
3,400.0	3,195.0	2,696.3	2,536.7	20.8	16.0	148.75	381.5	717.6	1,796.8	1,765.1	56.698			
3,500.0	3,286.5	2,769.7	2,603.7	21.6	16.5	148.85	395.4	744.2	1,864.6	1,832.1	57.341			
3,600.0	3,377.9	2,843.1	2,670.8	22.3	17.1	148.94	409.2	770.8	1,932.4	1,899.1	57.944			
3,700.0	3,469.4	2,916.6	2,737.8	23.1	17.6	149.03	423.0	797.4	2,000.3	1,966.1	58.510			
3,800.0	3,560.8	2,990.0	2,804.8	23.8	18.1	149.11	436.9	824.0	2,068.1	2,033.1	59.040			
3,900.0	3,652.3	3,063.4	2,871.9	24.6	18.7	149.19	450.7	850.6	2,136.0	2,100.1	59.538			
4,000.0	3,743.7	3,136.9	2,938.9	25.3	19.2	149.26	464.5	877.2	2,203.8	2,167.1	60.007			
4,100.0	3,835.2	3,210.3	3,005.9	26.1	19.8	149.32	478.4	903.8	2,271.7	2,234.1	60.449			
4,200.0	3,926.6	3,283.7	3,073.0	26.9	20.3	149.39	492.2	930.4	2,339.5	2,301.1	60.865			
4,300.0	4,018.1	3,357.1	3,140.0	27.6	20.9	149.45	506.0	957.0	2,407.4	2,368.1	61.258			
4,400.0	4,109.6	3,430.6	3,207.0	28.4	21.4	149.50	519.9	983.6	2,475.2	2,435.1	61.629			
4,500.0	4,201.0	3,504.0	3,274.1	29.1	22.0	149.56	533.7	1,010.2	2,543.1	2,502.1	61.981			
4,600.0	4,292.5	3,577.4	3,341.1	29.9	22.5	149.61	547.5	1,036.8	2,611.0	2,569.1	62.313			
4,700.0	4,383.9	3,650.9	3,408.1	30.7	23.1	149.65	561.3	1,063.4	2,678.8	2,636.0	62.628			
4,800.0	4,475.4	3,724.3	3,475.2	31.4	23.6	149.70	575.2	1,090.0	2,746.7	2,703.0	62.926			
4,900.0	4,566.8	3,797.7	3,542.2	32.2	24.2	149.74	589.0	1,116.6	2,814.5	2,770.0	63.210			
5,000.0	4,658.3	3,871.2	3,609.2	32.9	24.7	149.78	602.8	1,143.2	2,882.4	2,837.0	63.479			

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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)	Distance Between Ellipses (usft)	Separation Factor	Warning	
5,100.0	4,749.7	3,944.6	3,676.3	33.7	25.3	149.82	616.7	1,169.8	2,950.3	2,904.0	63.736		
5,200.0	4,841.2	4,018.0	3,743.3	34.5	25.8	149.86	630.5	1,196.4	3,018.1	2,971.0	63.979		
5,300.0	4,932.7	4,091.5	3,810.3	35.2	26.4	149.90	644.3	1,223.0	3,086.0	3,037.9	64.212		
5,400.0	5,024.1	4,164.9	3,877.4	36.0	26.9	149.93	658.2	1,249.6	3,153.9	3,104.9	64.433		
5,500.0	5,115.6	4,238.3	3,944.4	36.8	27.4	149.97	672.0	1,276.2	3,221.7	3,171.9	64.644		
5,600.0	5,207.9	4,313.1	4,012.6	37.5	28.0	151.07	686.1	1,303.3	3,288.2	3,237.4	64.786		
5,700.0	5,301.8	4,390.3	4,083.1	38.1	28.6	152.01	700.6	1,331.3	3,351.7	3,300.0	64.801		
5,800.0	5,397.1	4,469.8	4,155.6	38.7	29.2	152.81	715.6	1,360.1	3,412.2	3,359.5	64.753		
5,900.0	5,493.7	4,551.4	4,230.2	39.1	29.8	153.48	731.0	1,389.6	3,469.6	3,416.0	64.647		
6,000.0	5,591.2	4,635.1	4,306.6	39.5	30.4	154.03	746.7	1,419.9	3,523.8	3,469.2	64.490		
6,100.0	5,689.7	4,720.6	4,384.6	39.8	31.1	154.49	762.8	1,450.9	3,574.7	3,519.1	64.289		
6,200.0	5,788.8	4,807.8	4,464.2	40.1	31.7	154.85	779.3	1,482.5	3,622.1	3,565.6	64.051		
6,300.0	5,888.4	4,896.5	4,545.2	40.2	32.4	155.13	796.0	1,514.6	3,666.1	3,608.6	63.787		
6,400.0	5,988.3	4,986.5	4,627.4	40.3	33.0	155.33	812.9	1,547.3	3,706.6	3,648.2	63.515		
6,500.0	6,088.3	5,077.7	4,710.6	40.3	33.7	90.30	830.1	1,580.3	3,743.9	3,684.9	63.474		
6,600.0	6,188.3	5,169.0	4,793.9	40.4	34.4	90.02	847.3	1,613.4	3,780.7	3,721.2	63.470		
6,700.0	6,288.3	5,260.2	4,877.2	40.4	35.1	89.74	864.5	1,646.4	3,817.6	3,757.5	63.464		
6,800.0	6,388.3	5,351.4	4,960.5	40.4	35.8	89.46	881.7	1,679.5	3,854.5	3,793.8	63.458		
6,900.0	6,488.3	5,442.6	5,043.8	40.5	36.5	89.18	898.9	1,712.6	3,891.4	3,830.1	63.452		
7,000.0	6,588.3	5,533.8	5,127.1	40.5	37.2	88.90	916.1	1,745.7	3,928.3	3,866.4	63.446		
7,100.0	6,688.3	5,625.0	5,210.4	40.5	37.9	88.62	933.3	1,778.8	3,965.2	3,902.7	63.440		
7,200.0	6,788.3	5,716.2	5,293.7	40.5	38.6	88.34	950.5	1,811.9	4,002.1	3,939.0	63.434		
7,300.0	6,888.3	5,807.4	5,377.0	40.6	39.3	88.06	967.7	1,845.0	4,039.0	3,975.3	63.428		
7,400.0	6,988.3	5,898.6	5,460.3	40.6	40.0	87.78	984.9	1,878.1	4,075.9	3,977.5	63.422		
7,500.0	7,088.3	5,989.8	5,543.6	40.6	40.7	87.50	1,002.1	1,911.2	4,112.8	3,979.7	63.416		
7,600.0	7,188.3	6,081.0	5,626.9	40.7	41.4	87.22	1,019.3	1,944.3	4,149.7	3,981.9	63.410		
7,700.0	7,288.3	6,172.2	5,710.2	40.7	42.1	86.94	1,036.5	1,977.4	4,186.6	3,984.1	63.404		
7,800.0	7,388.3	6,263.4	5,793.5	40.7	42.8	86.66	1,053.7	2,010.5	4,223.5	3,986.3	63.398		
7,900.0	7,488.3	6,354.6	5,876.8	40.7	43.5	86.38	1,070.9	2,043.6	4,260.4	3,988.5	63.392		
8,000.0	7,588.3	6,445.8	5,960.1	40.8	44.2	86.10	1,088.1	2,076.7	4,297.3	3,990.7	63.386		
8,100.0	7,688.3	6,537.0	6,043.4	40.8	44.9	85.82	1,105.3	2,109.8	4,334.2	3,992.9	63.380		
8,200.0	7,788.3	6,628.2	6,126.7	40.8	45.6	85.54	1,122.5	2,142.9	4,371.1	3,995.1	63.374		
8,228.7	7,817.0	6,257.1	7,817.0	40.8	41.6	87.46	1,019.2	1,943.9	3,848.5	3,776.5	53.441		



Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	132.56	-5.5	5.9	8.1				
100.0	100.0	100.0	100.0	0.4	0.4	132.56	-5.5	5.9	8.1	7.3	10.196		
200.0	200.0	200.0	200.0	1.2	1.2	132.56	-5.5	5.9	8.1	5.6	3.269	CC	
300.0	300.0	299.9	299.8	1.7	1.7	125.40	-5.0	7.1	8.7	5.4	2.636	ES, SF	
400.0	400.0	399.3	399.1	2.1	3.3	-161.97	-3.2	12.2	13.8	8.8	2.744		
500.0	499.8	497.3	496.7	3.5	4.5	-176.30	0.1	21.1	28.0	20.2	3.577		
600.0	599.3	593.0	591.4	4.7	5.5	178.05	4.6	33.6	51.1	41.0	5.083		
700.0	698.4	685.3	682.3	5.0	6.3	169.69	10.3	49.2	82.2	71.0	7.374		
800.0	796.8	774.1	768.9	5.5	7.1	161.48	16.9	67.5	119.9	107.6	9.742		
900.0	894.5	858.8	850.8	6.3	7.7	156.45	24.3	87.8	163.7	150.2	12.108		
1,000.0	991.3	939.1	927.6	7.0	8.3	153.06	32.3	109.7	213.3	198.7	14.617		
1,100.0	1,087.0	1,014.8	999.2	7.7	8.8	150.55	40.6	132.5	268.3	252.8	17.264		
1,200.0	1,181.4	1,085.5	1,065.4	8.4	9.3	148.50	49.2	156.0	328.4	312.0	20.040		
1,300.0	1,274.3	1,156.2	1,130.9	9.0	9.5	146.80	58.3	181.0	393.0	376.0	23.089		
1,400.0	1,365.9	1,230.0	1,199.1	9.4	9.8	147.14	67.9	207.5	459.9	442.4	26.280		
1,500.0	1,457.3	1,303.6	1,267.2	9.7	10.0	148.33	77.5	233.9	527.2	509.2	29.271		
1,600.0	1,548.8	1,377.3	1,335.2	10.0	10.2	149.25	87.2	260.3	594.5	575.9	32.032		
1,700.0	1,640.2	1,450.9	1,403.3	10.4	10.5	149.99	96.8	286.7	661.9	642.8	34.590		
1,800.0	1,731.7	1,524.5	1,471.4	10.8	10.7	150.59	106.4	313.1	729.3	709.6	36.956		
1,900.0	1,823.2	1,598.2	1,539.4	11.2	11.0	151.09	116.0	339.5	796.8	776.5	39.143		
2,000.0	1,914.6	1,671.8	1,607.5	11.7	11.2	151.51	125.6	365.9	864.3	843.3	41.155		
2,100.0	2,006.1	1,745.5	1,675.6	12.1	11.5	151.87	135.2	392.3	931.8	910.2	43.014		
2,200.0	2,097.5	1,819.1	1,743.6	12.6	11.8	152.18	144.8	418.7	999.4	977.1	44.731		
2,300.0	2,189.0	1,892.7	1,811.7	13.1	12.1	152.45	154.4	445.1	1,067.0	1,043.9	46.316		
2,400.0	2,280.4	1,966.4	1,879.8	13.7	12.4	152.69	164.0	471.5	1,134.5	1,110.8	47.779		
2,500.0	2,371.9	2,040.0	1,947.8	14.3	12.7	152.91	173.7	497.9	1,202.1	1,177.6	49.133		
2,600.0	2,463.3	2,113.6	2,015.9	15.0	13.0	153.10	183.3	524.3	1,269.7	1,244.5	50.388		
2,700.0	2,554.8	2,187.3	2,084.0	15.7	13.3	153.27	192.9	550.7	1,337.3	1,311.4	51.550		
2,800.0	2,646.3	2,260.9	2,152.1	16.4	13.6	153.42	202.5	577.1	1,404.9	1,378.2	52.627		
2,900.0	2,737.7	2,334.5	2,220.1	17.1	13.9	153.56	212.1	603.5	1,472.5	1,445.1	53.630		
3,000.0	2,829.2	2,408.2	2,288.2	17.9	14.3	153.69	221.7	629.9	1,540.1	1,511.9	54.563		
3,100.0	2,920.6	2,481.8	2,356.3	18.6	14.6	153.81	231.3	656.2	1,607.7	1,578.7	55.431		
3,200.0	3,012.1	2,555.5	2,424.3	19.3	14.9	153.92	240.9	682.6	1,675.4	1,645.6	56.240		
3,300.0	3,103.5	2,629.1	2,492.4	20.1	15.2	154.02	250.5	709.0	1,743.0	1,712.4	56.997		
3,400.0	3,195.0	2,702.7	2,560.5	20.8	15.6	154.11	260.2	735.4	1,810.6	1,779.2	57.706		
3,500.0	3,286.5	2,776.4	2,628.5	21.6	16.0	154.19	269.8	761.8	1,878.2	1,846.1	58.367		
3,600.0	3,377.9	2,850.0	2,696.6	22.3	16.5	154.27	279.4	788.2	1,945.9	1,912.9	58.983		
3,700.0	3,469.4	2,923.6	2,764.7	23.1	16.9	154.35	289.0	814.6	2,013.5	1,979.7	59.573		
3,800.0	3,560.8	2,997.3	2,832.7	23.8	17.5	154.42	298.6	841.0	2,081.1	2,046.5	60.120		
3,900.0	3,652.3	3,070.9	2,900.8	24.6	18.0	154.48	308.2	867.4	2,148.8	2,113.3	60.635		
4,000.0	3,743.7	3,144.5	2,968.9	25.3	18.5	154.54	317.8	893.8	2,216.4	2,180.1	61.121		
4,100.0	3,835.2	3,218.2	3,036.9	26.1	19.0	154.60	327.4	920.2	2,284.0	2,247.0	61.579		
4,200.0	3,926.6	3,291.8	3,105.0	26.9	19.5	154.66	337.0	946.6	2,351.7	2,313.8	62.011		
4,300.0	4,018.1	3,365.5	3,173.1	27.6	20.0	154.71	346.7	973.0	2,419.3	2,380.6	62.419		
4,400.0	4,109.6	3,439.1	3,241.1	28.4	20.5	154.76	356.3	999.4	2,487.0	2,447.4	62.805		
4,500.0	4,201.0	3,512.7	3,309.2	29.1	21.0	154.80	365.9	1,025.8	2,554.6	2,514.2	63.171		
4,600.0	4,292.5	3,586.4	3,377.3	29.9	21.6	154.84	375.5	1,052.2	2,622.2	2,581.0	63.518		
4,700.0	4,383.9	3,660.0	3,445.3	30.7	22.1	154.89	385.1	1,078.6	2,689.9	2,647.8	63.847		
4,800.0	4,475.4	3,733.6	3,513.4	31.4	22.6	154.93	394.7	1,105.0	2,757.5	2,714.6	64.159		
4,900.0	4,566.8	3,807.3	3,581.5	32.2	23.1	154.96	404.3	1,131.4	2,825.2	2,781.4	64.456		
5,000.0	4,658.3	3,880.9	3,649.5	32.9	23.6	155.00	413.9	1,157.8	2,892.8	2,848.1	64.738		
5,100.0	4,749.7	3,954.5	3,717.6	33.7	24.1	155.03	423.6	1,184.2	2,960.5	2,914.9	65.007		

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	4,841.2	4,028.2	3,785.7	34.5	24.7	155.06	433.2	1,210.6	3,028.1	2,981.7	65.262	
5,300.0	4,932.7	4,101.8	3,853.7	35.2	25.2	155.10	442.8	1,237.0	3,095.8	3,048.5	65.506	
5,400.0	5,024.1	4,175.5	3,921.8	36.0	25.7	155.13	452.4	1,263.4	3,163.4	3,115.3	65.739	
5,500.0	5,115.6	4,249.1	3,989.9	36.8	26.2	155.16	462.0	1,289.8	3,231.1	3,182.1	65.961	
5,600.0	5,207.9	4,324.1	4,059.2	37.5	26.7	156.08	471.8	1,316.6	3,297.2	3,247.3	66.104	
5,700.0	5,301.8	4,401.6	4,130.9	38.1	27.3	156.85	481.9	1,344.4	3,360.3	3,309.5	66.102	
5,800.0	5,397.1	4,481.6	4,204.8	38.7	27.8	157.51	492.3	1,373.1	3,420.3	3,368.5	66.027	
5,900.0	5,493.7	4,563.8	4,280.8	39.1	28.4	158.06	503.1	1,402.6	3,477.0	3,424.2	65.887	
6,000.0	5,591.2	4,648.1	4,358.7	39.5	29.0	158.52	514.1	1,432.8	3,530.3	3,476.5	65.690	
6,100.0	5,689.7	4,734.4	4,438.5	39.8	29.6	158.88	525.3	1,463.7	3,580.1	3,525.4	65.441	
6,200.0	5,788.8	4,822.5	4,519.9	40.1	30.2	159.17	536.8	1,495.3	3,626.4	3,570.8	65.152	
6,300.0	5,888.4	4,912.1	4,602.8	40.2	30.9	159.39	548.5	1,527.4	3,669.1	3,612.5	64.832	
6,400.0	5,988.3	5,003.3	4,687.0	40.3	31.5	159.54	560.4	1,560.1	3,708.1	3,650.6	64.504	
6,500.0	6,088.3	5,095.5	4,772.3	40.3	32.1	94.51	572.5	1,593.2	3,743.8	3,685.7	64.432	
6,600.0	6,188.3	5,188.0	4,857.7	40.4	32.8	94.28	584.5	1,626.3	3,779.0	3,720.3	64.404	
6,700.0	6,288.3	5,280.4	4,943.2	40.4	33.4	94.04	596.6	1,659.4	3,814.2	3,755.0	64.373	
6,800.0	6,388.3	6,772.6	6,388.3	40.4	39.0	92.24	697.9	1,937.7	3,841.5	3,771.7	55.078	
6,900.0	6,488.3	6,872.6	6,488.3	40.5	39.0	92.24	697.9	1,937.7	3,841.5	3,771.7	55.039	
7,000.0	6,588.3	6,972.6	6,588.3	40.5	39.0	92.24	697.9	1,937.7	3,841.5	3,771.6	54.999	
7,100.0	6,688.3	7,072.6	6,688.3	40.5	39.1	92.24	697.9	1,937.7	3,841.5	3,771.6	54.959	
7,200.0	6,788.3	7,172.6	6,788.3	40.5	39.1	92.24	697.9	1,937.7	3,841.5	3,771.5	54.920	
7,300.0	6,888.3	7,272.6	6,888.3	40.6	39.1	92.24	697.9	1,937.7	3,841.5	3,771.5	54.880	
7,400.0	6,988.3	7,372.6	6,988.3	40.6	39.2	92.24	697.9	1,937.7	3,841.5	3,771.4	54.839	
7,500.0	7,088.3	7,472.6	7,088.3	40.6	39.2	92.24	697.9	1,937.7	3,841.5	3,771.4	54.799	
7,600.0	7,188.3	7,572.6	7,188.3	40.7	39.2	92.24	697.9	1,937.7	3,841.5	3,771.3	54.758	
7,700.0	7,288.3	7,672.6	7,288.3	40.7	39.2	92.24	697.9	1,937.7	3,841.5	3,771.3	54.717	
7,800.0	7,388.3	7,772.6	7,388.3	40.7	39.3	92.24	697.9	1,937.7	3,841.5	3,771.2	54.676	
7,900.0	7,488.3	7,872.6	7,488.3	40.7	39.3	92.24	697.9	1,937.7	3,841.5	3,771.1	54.635	
8,000.0	7,588.3	7,972.6	7,588.3	40.8	39.3	92.24	697.9	1,937.7	3,841.5	3,771.1	54.593	
8,100.0	7,688.3	8,072.6	7,688.3	40.8	39.4	92.24	697.9	1,937.7	3,841.5	3,771.0	54.552	
8,200.0	7,788.3	8,172.6	7,788.3	40.8	39.4	92.24	697.9	1,937.7	3,841.5	3,771.0	54.510	
8,228.7	7,817.0	8,201.3	7,817.0	40.8	39.4	92.24	697.9	1,937.7	3,841.5	3,771.0	54.501	

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	133.02	-16.4	17.6	24.0				
100.0	100.0	100.0	100.0	0.4	0.4	133.02	-16.4	17.6	24.0	23.2	30.318		
200.0	200.0	200.0	200.0	1.2	1.2	133.02	-16.4	17.6	24.0	21.5	9.720	CC, ES	
300.0	300.0	299.4	299.3	1.7	2.3	128.98	-15.9	19.7	25.3	21.7	7.086		
400.0	400.0	398.2	398.0	2.1	3.8	-146.98	-14.5	25.9	30.8	25.6	5.898		
500.0	499.8	495.6	494.8	3.5	5.0	-159.58	-12.2	36.1	44.6	36.8	5.685	SF	
600.0	599.3	590.4	588.5	4.7	5.9	-168.11	-9.1	49.9	67.6	57.5	6.653		
700.0	698.4	681.8	678.3	5.0	6.6	-179.08	-5.3	66.8	99.2	87.9	8.750		
800.0	796.8	769.5	763.6	5.5	7.3	170.81	-0.9	86.2	138.1	125.5	11.026		
900.0	894.5	852.9	844.1	6.3	8.0	164.52	4.0	107.7	183.3	169.6	13.339		
1,000.0	991.3	931.8	919.4	7.0	8.5	160.27	9.1	130.5	234.6	219.8	15.824		
1,100.0	1,087.0	1,005.7	989.2	7.7	9.0	157.15	14.5	154.3	291.4	275.7	18.491		
1,200.0	1,181.4	1,078.1	1,056.9	8.4	9.2	154.73	20.2	179.5	353.3	336.9	21.528		
1,300.0	1,274.3	1,153.9	1,127.5	9.0	9.4	152.89	26.2	206.4	418.2	401.1	24.446		
1,400.0	1,365.9	1,227.7	1,196.3	9.4	9.7	152.98	32.1	232.5	485.3	467.7	27.586		
1,500.0	1,457.3	1,301.4	1,264.9	9.7	9.9	153.93	38.0	258.5	552.7	534.6	30.533		
1,600.0	1,548.8	1,375.0	1,333.5	10.0	10.1	154.68	43.9	284.6	620.1	601.5	33.257		
1,700.0	1,640.2	1,448.6	1,402.1	10.4	10.4	155.28	49.8	310.7	687.6	668.4	35.783		
1,800.0	1,731.7	1,522.2	1,470.6	10.8	10.6	155.78	55.7	336.7	755.2	735.3	38.123		
1,900.0	1,823.2	1,595.8	1,539.2	11.2	10.9	156.20	61.6	362.8	822.7	802.3	40.286		
2,000.0	1,914.6	1,669.4	1,607.8	11.7	11.2	156.55	67.4	388.9	890.3	869.2	42.281		
2,100.0	2,006.1	1,743.0	1,676.4	12.1	11.5	156.85	73.3	414.9	957.9	936.2	44.127		
2,200.0	2,097.5	1,816.7	1,745.0	12.6	11.7	157.11	79.2	441.0	1,025.5	1,003.1	45.835		
2,300.0	2,189.0	1,890.3	1,813.6	13.1	12.0	157.34	85.1	467.0	1,093.1	1,070.0	47.414		
2,400.0	2,280.4	1,963.9	1,882.2	13.7	12.3	157.55	91.0	493.1	1,160.7	1,136.9	48.874		
2,500.0	2,371.9	2,037.5	1,958.8	14.3	12.6	157.73	96.9	519.2	1,228.3	1,203.9	50.228		
2,600.0	2,463.3	2,111.1	2,019.4	15.0	12.9	157.89	102.7	545.2	1,296.0	1,270.8	51.484		
2,700.0	2,554.8	2,184.7	2,088.0	15.7	13.2	158.03	108.6	571.3	1,363.6	1,337.7	52.650		
2,800.0	2,646.3	2,258.3	2,156.6	16.4	13.6	158.17	114.5	597.3	1,431.2	1,404.6	53.732		
2,900.0	2,737.7	2,331.9	2,225.2	17.1	13.9	158.29	120.4	623.4	1,498.9	1,471.5	54.741		
3,000.0	2,829.2	2,405.6	2,293.8	17.9	14.2	158.40	126.3	649.5	1,566.5	1,538.4	55.682		
3,100.0	2,920.6	2,479.2	2,362.4	18.6	14.5	158.50	132.2	675.5	1,634.2	1,605.3	56.557		
3,200.0	3,012.1	2,552.8	2,431.0	19.3	14.9	158.59	138.0	701.6	1,701.8	1,672.2	57.376		
3,300.0	3,103.5	2,626.4	2,499.6	20.1	15.2	158.68	143.9	727.7	1,769.5	1,739.1	58.142		
3,400.0	3,195.0	2,700.0	2,568.2	20.8	15.5	158.76	149.8	753.7	1,837.1	1,805.9	58.860		
3,500.0	3,286.5	2,773.6	2,636.7	21.6	15.9	158.83	155.7	779.8	1,904.8	1,872.8	59.531		
3,600.0	3,377.9	2,847.2	2,705.3	22.3	16.3	158.90	161.6	805.8	1,972.5	1,939.7	60.162		
3,700.0	3,469.4	2,920.9	2,773.9	23.1	16.7	158.96	167.5	831.9	2,040.1	2,006.6	60.756		
3,800.0	3,560.8	2,994.5	2,842.5	23.8	17.1	159.02	173.3	858.0	2,107.8	2,073.4	61.315		
3,900.0	3,652.3	3,068.1	2,911.1	24.6	17.6	159.08	179.2	884.0	2,175.5	2,140.3	61.839		
4,000.0	3,743.7	3,141.7	2,979.7	25.3	18.1	159.13	185.1	910.1	2,243.1	2,207.1	62.330		
4,100.0	3,835.2	3,215.3	3,048.3	26.1	18.5	159.18	191.0	936.1	2,310.8	2,274.0	62.805		
4,200.0	3,926.6	3,288.9	3,116.9	26.9	19.0	159.23	196.9	962.2	2,378.5	2,340.9	63.247		
4,300.0	4,018.1	3,362.5	3,185.5	27.6	19.5	159.27	202.8	988.3	2,446.1	2,407.7	63.664		
4,400.0	4,109.6	3,436.2	3,254.1	28.4	20.0	159.32	208.6	1,014.3	2,513.8	2,474.6	64.060		
4,500.0	4,201.0	3,509.8	3,322.7	29.1	20.5	159.36	214.5	1,040.4	2,581.5	2,541.4	64.435		
4,600.0	4,292.5	3,583.4	3,391.3	29.9	21.0	159.39	220.4	1,066.4	2,649.1	2,608.3	64.791		
4,700.0	4,383.9	3,657.0	3,459.9	30.7	21.5	159.43	226.3	1,092.5	2,716.8	2,675.1	65.129		
4,800.0	4,475.4	3,730.6	3,528.5	31.4	22.0	159.46	232.2	1,118.6	2,784.5	2,741.9	65.450		
4,900.0	4,566.8	3,804.2	3,597.1	32.2	22.5	159.50	238.1	1,144.6	2,852.2	2,808.8	65.756		
5,000.0	4,658.3	3,877.8	3,665.7	32.9	23.0	159.53	243.9	1,170.7	2,919.8	2,875.6	66.046		
5,100.0	4,749.7	3,951.4	3,734.3	33.7	23.4	159.56	249.8	1,196.8	2,987.5	2,942.5	66.323		

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<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	4,841.2	4,025.1	3,802.8	34.5	23.9	159.58	255.7	1,222.8	3,055.2	3,009.3	66.587		
5,300.0	4,932.7	4,098.7	3,871.4	35.2	24.4	159.61	261.6	1,248.9	3,122.9	3,076.1	66.838		
5,400.0	5,024.1	4,172.3	3,940.0	36.0	24.9	159.64	267.5	1,274.9	3,190.5	3,143.0	67.078		
5,500.0	5,115.6	4,245.9	4,008.6	36.8	25.4	159.67	273.4	1,301.0	3,258.2	3,209.8	67.307		
5,600.0	5,207.9	4,320.9	4,078.5	37.5	25.9	160.43	279.4	1,327.6	3,324.3	3,275.1	67.450		
5,700.0	5,301.8	4,398.5	4,150.9	38.1	26.4	161.07	285.6	1,355.0	3,387.3	3,337.1	67.433		
5,800.0	5,397.1	4,478.7	4,225.5	38.7	27.0	161.61	292.0	1,383.4	3,447.1	3,395.9	67.337		
5,900.0	5,493.7	4,561.2	4,302.4	39.1	27.5	162.06	298.6	1,412.6	3,503.4	3,451.3	67.170		
6,000.0	5,591.2	4,645.9	4,381.3	39.5	28.1	162.43	305.3	1,442.6	3,556.3	3,503.2	66.940		
6,100.0	5,689.7	4,732.6	4,462.1	39.8	28.7	162.73	312.3	1,473.3	3,605.7	3,551.6	66.655		
6,200.0	5,788.8	4,821.1	4,544.6	40.1	29.3	162.96	319.3	1,504.6	3,651.4	3,596.3	66.325		
6,300.0	5,888.4	4,911.4	4,628.7	40.2	29.9	163.14	326.6	1,536.6	3,693.3	3,637.3	65.963		
6,400.0	5,988.3	5,003.2	4,714.3	40.3	30.5	163.26	333.9	1,569.1	3,731.5	3,674.6	65.591		
6,500.0	6,088.3	5,096.2	4,800.9	40.3	31.1	98.24	341.3	1,602.0	3,766.2	3,708.7	65.498		
6,600.0	6,188.3	5,189.3	4,887.7	40.4	31.7	98.04	348.8	1,635.0	3,800.4	3,742.4	65.454		
6,700.0	6,288.3	5,282.5	4,974.6	40.4	32.4	97.85	356.2	1,668.0	3,834.7	3,776.0	65.407		
6,800.0	6,388.3	6,738.3	6,388.3	40.4	37.5	96.41	417.1	1,937.7	3,862.7	3,793.8	56.100		
6,900.0	6,488.3	6,838.3	6,488.3	40.5	37.6	96.41	417.1	1,937.7	3,862.7	3,793.8	56.060		
7,000.0	6,588.3	6,938.3	6,588.3	40.5	37.6	96.41	417.1	1,937.7	3,862.7	3,793.7	56.019		
7,100.0	6,688.3	7,038.3	6,688.3	40.5	37.6	96.41	417.1	1,937.7	3,862.7	3,793.7	55.978		
7,200.0	6,788.3	7,138.3	6,788.3	40.5	37.6	96.41	417.1	1,937.7	3,862.7	3,793.6	55.937		
7,300.0	6,888.3	7,238.3	6,888.3	40.6	37.7	96.41	417.1	1,937.7	3,862.7	3,793.6	55.896		
7,400.0	6,988.3	7,338.3	6,988.3	40.6	37.7	96.41	417.1	1,937.7	3,862.7	3,793.5	55.854		
7,500.0	7,088.3	7,438.3	7,088.3	40.6	37.7	96.41	417.1	1,937.7	3,862.7	3,793.5	55.812		
7,600.0	7,188.3	7,538.3	7,188.3	40.7	37.8	96.41	417.1	1,937.7	3,862.7	3,793.4	55.770		
7,700.0	7,288.3	7,638.3	7,288.3	40.7	37.8	96.41	417.1	1,937.7	3,862.7	3,793.4	55.728		
7,800.0	7,388.3	7,738.3	7,388.3	40.7	37.8	96.41	417.1	1,937.7	3,862.7	3,793.3	55.686		
7,900.0	7,488.3	7,838.3	7,488.3	40.7	37.8	96.41	417.1	1,937.7	3,862.7	3,793.3	55.643		
8,000.0	7,588.3	7,938.3	7,588.3	40.8	37.9	96.41	417.1	1,937.7	3,862.7	3,793.2	55.600		
8,100.0	7,688.3	8,038.3	7,688.3	40.8	37.9	96.41	417.1	1,937.7	3,862.7	3,793.2	55.557		
8,200.0	7,788.3	8,138.3	7,788.3	40.8	37.9	96.41	417.1	1,937.7	3,862.7	3,793.1	55.514		
8,228.7	7,817.0	8,167.0	7,817.0	40.8	37.9	96.41	417.1	1,937.7	3,862.7	3,793.1	55.505		



Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Piceance 29-07 Pad - Piceance 29-01E - Wellbore #1 - Wellbore #1												Offset Well Error:	0.0 usft
Survey Program: 141-MWD *DNU*													
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	57.1	57.1	0.0	0.3	-120.98	-1,300.7	-2,166.2	2,526.8				
100.0	100.0	888.5	871.9	0.4	7.9	-119.49	-1,182.0	-2,089.8	2,512.1	2,504.0	309.867		
200.0	200.0	1,007.3	983.6	1.2	8.3	-119.01	-1,147.3	-2,069.4	2,482.3	2,473.2	271.972		
300.0	300.0	1,079.0	1,050.9	1.7	8.5	-118.70	-1,126.0	-2,057.0	2,452.5	2,442.6	250.090		
400.0	400.0	1,152.1	1,119.8	2.1	8.8	-23.62	-1,104.6	-2,045.1	2,422.6	2,412.3	233.378		
500.0	499.8	1,228.2	1,191.7	3.5	9.1	-23.66	-1,082.6	-2,033.1	2,389.8	2,378.0	202.045		
600.0	599.3	1,303.0	1,262.6	4.7	9.4	-23.79	-1,061.8	-2,021.8	2,354.4	2,341.2	178.668		
700.0	698.4	1,371.0	1,327.3	5.0	9.6	-30.17	-1,043.3	-2,012.0	2,316.4	2,302.7	168.500		
800.0	796.8	1,480.2	1,431.1	5.5	10.1	-38.60	-1,013.5	-1,996.1	2,276.7	2,262.1	155.388		
900.0	894.5	1,564.8	1,511.5	6.3	10.4	-44.74	-990.1	-1,983.4	2,235.0	2,219.4	143.513		
1,000.0	991.3	1,635.9	1,579.1	7.0	10.7	-49.51	-970.7	-1,973.2	2,192.4	2,176.1	133.828		
1,100.0	1,087.0	1,795.4	1,730.7	7.7	11.4	-53.72	-927.8	-1,948.7	2,148.3	2,130.8	122.667		
1,200.0	1,181.4	1,870.0	1,801.4	8.4	11.7	-57.33	-907.5	-1,936.0	2,101.1	2,082.8	114.568		
1,300.0	1,274.3	2,017.4	1,940.1	9.0	12.5	-61.11	-865.7	-1,908.7	2,050.8	2,031.3	105.555		
1,400.0	1,365.9	2,086.9	2,005.4	9.4	12.8	-62.72	-845.7	-1,895.5	1,999.8	1,979.6	99.313		
1,500.0	1,457.3	2,155.7	2,070.2	9.7	13.1	-63.25	-826.4	-1,882.9	1,949.6	1,928.7	93.361		
1,600.0	1,548.8	2,262.0	2,170.2	10.0	13.6	-64.10	-796.2	-1,863.1	1,899.2	1,877.4	87.168		
1,700.0	1,640.2	2,324.2	2,228.7	10.4	13.9	-64.62	-778.7	-1,851.6	1,849.3	1,826.6	81.740		
1,800.0	1,731.7	2,447.9	2,344.9	10.8	14.5	-65.71	-743.3	-1,828.4	1,799.3	1,775.6	75.968		
1,900.0	1,823.2	2,518.6	2,411.1	11.2	14.9	-66.36	-722.4	-1,815.0	1,748.8	1,724.2	71.064		
2,000.0	1,914.6	2,585.4	2,473.9	11.7	15.2	-67.00	-703.1	-1,802.6	1,699.3	1,673.8	66.546		
2,100.0	2,006.1	2,650.4	2,535.2	12.1	15.5	-67.67	-685.1	-1,790.9	1,651.0	1,624.5	62.329		
2,200.0	2,097.5	2,718.0	2,599.3	12.6	15.8	-68.42	-667.0	-1,779.2	1,604.1	1,576.6	58.376		
2,300.0	2,189.0	2,819.3	2,695.3	13.1	16.3	-69.57	-639.6	-1,762.0	1,557.7	1,529.1	54.569		
2,400.0	2,280.4	2,876.0	2,749.0	13.7	16.6	-70.24	-624.2	-1,752.8	1,511.9	1,482.3	51.125		
2,500.0	2,371.9	2,978.2	2,846.2	14.3	17.2	-71.51	-596.9	-1,736.6	1,467.4	1,436.7	47.799		
2,600.0	2,463.3	3,060.9	2,924.4	15.0	17.6	-72.59	-573.9	-1,722.8	1,422.0	1,390.2	44.722		
2,700.0	2,554.8	3,165.7	3,023.7	15.7	18.1	-74.05	-545.1	-1,705.4	1,377.4	1,344.5	41.856		
2,800.0	2,646.3	3,249.4	3,102.6	16.4	18.5	-75.31	-521.4	-1,690.4	1,332.0	1,298.0	39.143		
2,900.0	2,737.7	3,324.4	3,173.4	17.1	18.9	-76.51	-500.7	-1,677.4	1,287.9	1,252.7	36.625		
3,000.0	2,829.2	3,422.0	3,265.8	17.9	19.3	-78.16	-473.8	-1,660.7	1,244.9	1,208.5	34.279		
3,100.0	2,920.6	3,519.7	3,357.3	18.6	19.9	-79.85	-444.4	-1,643.9	1,200.6	1,163.1	32.022		
3,200.0	3,012.1	3,594.0	3,427.2	19.3	20.2	-81.22	-422.1	-1,631.4	1,157.6	1,118.9	29.910		
3,300.0	3,103.5	3,670.2	3,499.0	20.1	20.6	-82.71	-399.9	-1,618.8	1,116.2	1,076.3	27.967		
3,400.0	3,195.0	3,746.4	3,571.0	20.8	21.0	-84.31	-378.2	-1,606.5	1,076.4	1,035.3	26.168		
3,500.0	3,286.5	3,844.3	3,663.5	21.6	21.4	-86.51	-350.6	-1,590.2	1,037.7	995.4	24.518		
3,600.0	3,377.9	3,920.0	3,735.0	22.3	21.8	-88.35	-329.3	-1,577.3	1,000.0	956.4	22.944		
3,700.0	3,469.4	3,994.1	3,805.1	23.1	22.1	-90.23	-308.9	-1,565.2	964.5	919.7	21.502		
3,800.0	3,560.8	4,083.4	3,890.0	23.8	22.6	-92.64	-285.0	-1,551.0	931.4	885.3	20.204		
3,900.0	3,652.3	4,175.2	3,976.8	24.6	23.0	-95.30	-259.5	-1,535.3	898.8	851.5	18.985		
4,000.0	3,743.7	4,263.9	4,060.8	25.3	23.5	-98.03	-235.1	-1,520.2	868.4	819.8	17.871		
4,100.0	3,835.2	4,354.6	4,146.2	26.1	23.9	-100.96	-208.9	-1,504.7	839.0	789.2	16.840		
4,200.0	3,926.6	4,436.3	4,223.3	26.9	24.4	-103.74	-185.8	-1,490.9	812.5	761.5	15.911		
4,300.0	4,018.1	4,533.4	4,314.5	27.6	24.9	-107.25	-157.3	-1,473.7	787.6	735.3	15.080		
4,400.0	4,109.6	4,610.6	4,387.0	28.4	25.2	-110.18	-134.7	-1,460.0	765.7	712.2	14.331		
4,500.0	4,201.0	4,689.7	4,461.6	29.1	25.6	-113.27	-112.1	-1,446.3	747.6	693.1	13.706		
4,600.0	4,292.5	4,766.3	4,534.1	29.9	26.0	-116.31	-90.8	-1,433.8	733.8	678.2	13.197		
4,700.0	4,383.9	4,841.8	4,605.9	30.7	26.4	-119.33	-70.7	-1,422.0	724.5	667.9	12.808		
4,800.0	4,475.4	4,920.2	4,680.7	31.4	26.8	-122.52	-50.9	-1,409.6	720.0	662.5	12.539		
4,862.1	4,532.2	4,972.2	4,730.5	31.9	27.0	-124.63	-37.9	-1,401.5	719.2	661.3	12.422	CC, ES	
4,900.0	4,566.8	5,001.6	4,758.6	32.2	27.2	-125.82	-30.7	-1,397.0	719.5	661.4	12.369		
5,000.0	4,658.3	5,073.0	4,827.2	32.9	27.5	-128.65	-13.9	-1,386.7	723.7	664.8	12.305	SF	

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



# Anticollision Report



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

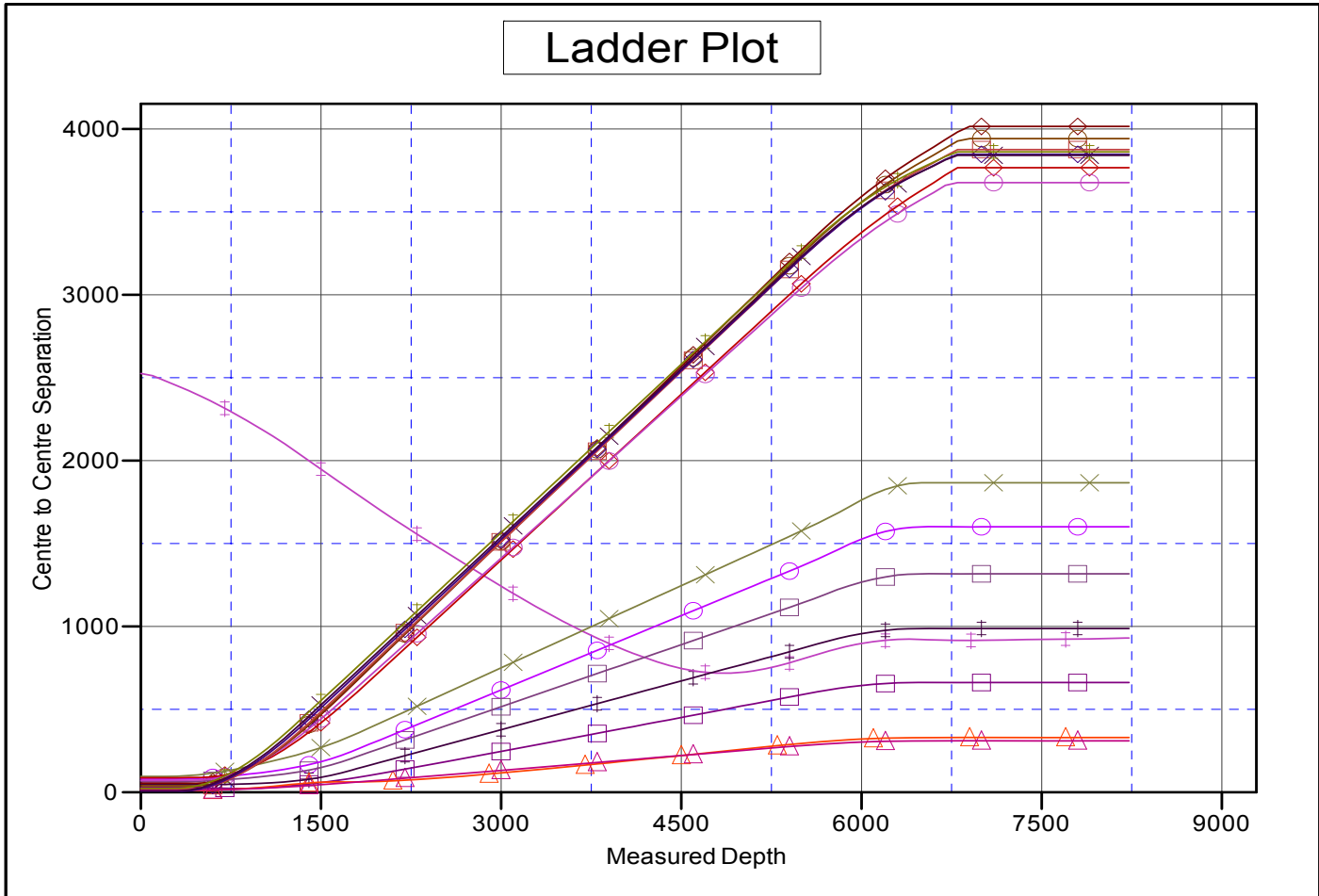
Offset Design												Offset Site Error:	0.0 usft
Survey Program: 141-MWD *DNU*												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
5,100.0	4,749.7	5,152.6	4,904.1	33.7	27.9	-131.72	3.5	-1,375.6	732.4	673.0	12.334		
5,200.0	4,841.2	5,236.9	4,985.7	34.5	28.3	-134.89	20.9	-1,363.7	745.4	685.5	12.442		
5,300.0	4,932.7	5,324.7	5,070.7	35.2	28.8	-138.11	39.1	-1,351.3	761.3	700.9	12.602		
5,400.0	5,024.1	5,406.4	5,150.0	36.0	29.2	-140.91	55.5	-1,340.7	780.2	719.3	12.822		
5,500.0	5,115.6	5,484.9	5,226.8	36.8	29.5	-143.39	69.7	-1,331.8	802.4	741.2	13.105		
5,600.0	5,207.9	5,570.1	5,310.3	37.5	30.0	-146.12	83.5	-1,323.0	825.9	764.2	13.388		
5,700.0	5,301.8	5,664.4	5,402.9	38.1	30.4	-148.76	99.2	-1,313.5	846.9	784.7	13.602		
5,800.0	5,397.1	5,746.6	5,483.8	38.7	30.8	-150.74	111.5	-1,306.0	866.4	803.7	13.818		
5,900.0	5,493.7	5,840.7	5,576.7	39.1	31.2	-152.61	124.0	-1,298.6	883.7	820.4	13.968		
6,000.0	5,591.2	5,932.0	5,667.2	39.5	31.6	-154.09	134.9	-1,292.5	898.1	834.3	14.083		
6,100.0	5,689.7	6,025.4	5,759.9	39.8	32.0	-155.30	144.5	-1,287.3	909.6	845.3	14.150		
6,200.0	5,788.8	6,120.2	5,854.2	40.1	32.4	-156.28	153.2	-1,282.8	917.8	853.1	14.168		
6,300.0	5,888.4	6,214.6	5,948.3	40.2	32.7	-157.01	160.5	-1,279.2	922.8	857.5	14.145		
6,400.0	5,988.3	6,310.4	6,043.9	40.3	33.1	-157.50	166.4	-1,276.5	924.3	858.7	14.078		
6,500.0	6,088.3	6,411.1	6,144.4	40.3	33.4	-137.19	171.9	-1,274.1	922.4	856.6	14.007		
6,600.0	6,188.3	6,510.9	6,244.1	40.4	33.8	136.92	176.7	-1,272.7	919.8	853.8	13.939		
6,700.0	6,288.3	6,601.3	6,334.4	40.4	34.0	136.76	179.7	-1,272.2	917.8	851.9	13.910		
6,800.0	6,388.3	6,691.0	6,424.0	40.4	34.3	136.60	182.0	-1,270.8	917.1	851.1	13.907		
6,900.0	6,488.3	6,789.5	6,522.6	40.5	34.6	136.45	183.9	-1,269.3	916.7	850.7	13.888		
6,912.9	6,501.2	6,801.2	6,534.2	40.5	34.6	136.44	184.1	-1,269.1	916.7	850.7	13.890		
7,000.0	6,588.3	6,880.6	6,613.5	40.5	34.8	136.29	185.5	-1,267.1	917.1	851.2	13.908		
7,100.0	6,688.3	6,977.1	6,710.0	40.5	35.0	136.09	186.8	-1,264.1	918.2	852.3	13.925		
7,200.0	6,788.3	7,079.2	6,812.1	40.5	35.3	135.94	187.7	-1,261.6	919.3	853.3	13.926		
7,300.0	6,888.3	7,177.9	6,910.8	40.6	35.4	135.84	188.0	-1,259.7	920.4	854.4	13.941		
7,400.0	6,988.3	7,278.0	7,010.8	40.6	35.6	135.78	188.0	-1,258.2	921.5	855.5	13.953		
7,500.0	7,088.3	7,379.8	7,112.6	40.6	35.7	135.73	187.7	-1,256.8	922.7	856.6	13.964		
7,600.0	7,188.3	7,481.5	7,214.4	40.7	35.7	135.72	187.3	-1,256.2	923.4	857.3	13.968		
7,700.0	7,288.3	7,584.2	7,317.0	40.7	35.6	135.75	186.4	-1,256.0	924.1	858.0	13.969		
7,800.0	7,388.3	7,680.0	7,412.9	40.7	35.4	135.80	185.5	-1,256.3	924.6	858.5	13.986		
7,900.0	7,488.3	7,774.0	7,506.9	40.7	35.3	135.91	183.4	-1,256.7	925.9	859.9	14.021		
8,000.0	7,588.3	7,872.5	7,605.2	40.8	35.1	136.02	180.9	-1,256.8	927.6	861.6	14.052		
8,100.0	7,688.3	7,975.1	7,707.9	40.8	34.9	136.12	178.6	-1,256.8	929.2	863.2	14.070		
8,200.0	7,788.3	8,078.8	7,811.5	40.8	34.7	136.23	176.4	-1,257.3	930.5	864.4	14.077		
8,228.7	7,817.0	8,109.6	7,842.3	40.8	34.6	136.27	175.8	-1,257.5	930.7	864.6	14.076		

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 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to RKB=30' @ 7493.0usft (TBD)      Coordinates are relative to: Laramie 29-01 0993-20-17E - Slot A-13  
 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°



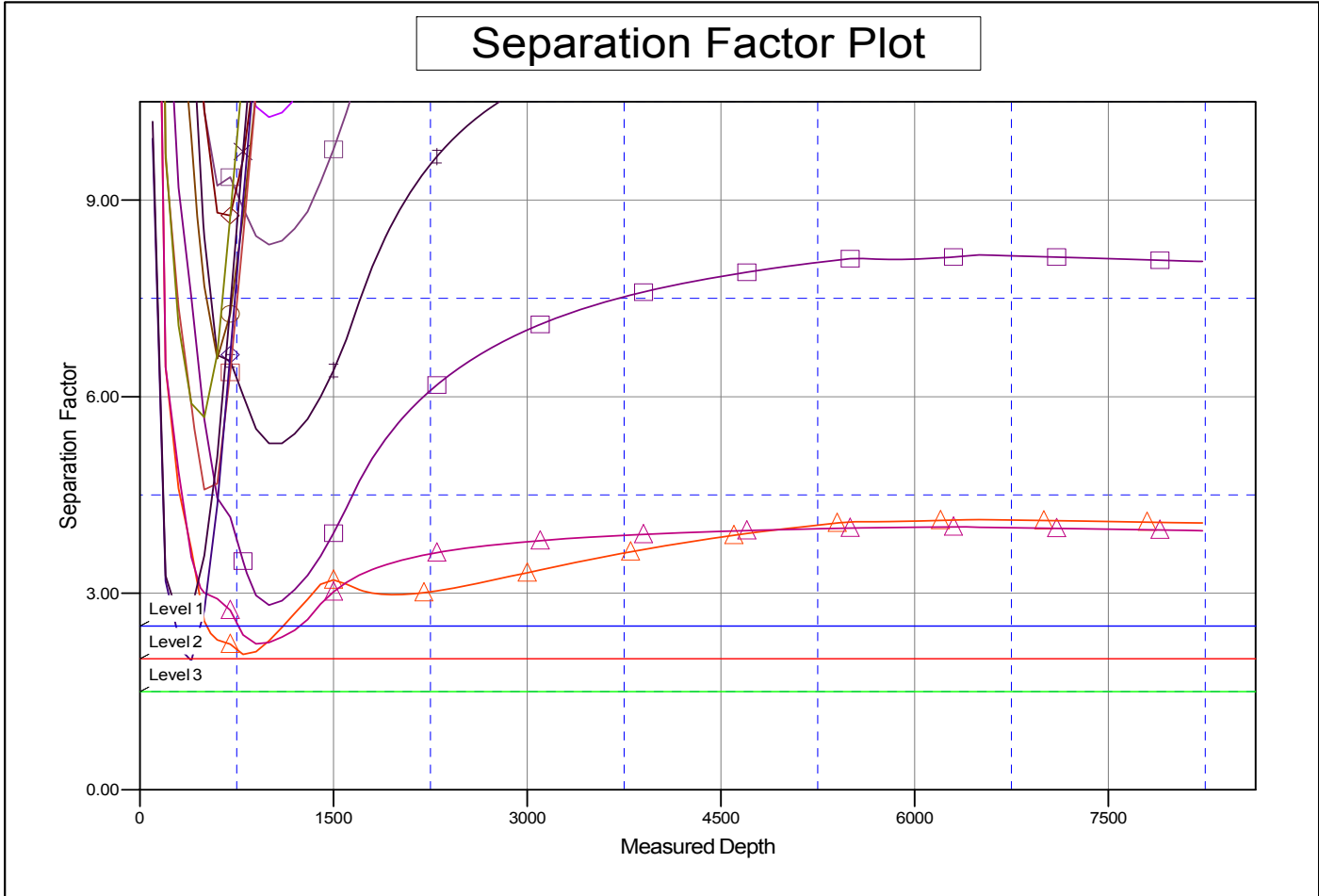
LEGEND

- 29-01E, Wellbore #1, Wellbore #1 V0
- 29-01 0993-20-11E, OH, Design #1 V0
- 29-01 0993-20-12E, OH, Design #1 V0
- 29-01 0993-20-13E, OH, Design #1 V0
- 29-01 0993-20-14E, OH, Design #1 V0
- 29-01 0993-20-15E, OH, Design #1 V0
- Laramie 29-01 0993-20-16E, OH, Design #1 V0
- Laramie 29-01 0993-20-18E, OH, Design #1 V0
- Laramie 29-01 Fed 0993-21-11W, OH, Design #1 V0
- Laramie 29-01 Fed 0993-21-12W, OH, Design #1 V0
- Laramie 29-01 Fed 0993-21-13W, OH, Design #1 V0
- Laramie 29-01 Fed 0993-21-14W, OH, Design #1 V0
- Laramie 29-01 Fed 0993-21-15W, OH,
- Laramie 29-01 Fed 0993-21-16W, OH,
- Laramie 29-01 Fed 0993-21-17W, OH,
- Laramie 29-01 Fed 0993-21-18W, OH,



<b>Company:</b>	Laramie Energy, LLC	<b>Local Co-ordinate Reference:</b>	Well Laramie 29-01 0993-20-17E - Slot A-13
<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 0993-20-17E	<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>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Design #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to RKB=30' @ 7493.0usft (TBD)      Coordinates are relative to: Laramie 29-01 0993-20-17E - Slot A-13  
 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°



LEGEND

- 29-01E, Wellbore #1, Wellbore #1 V0
- 29-01 0993-20-11E, OH, Design #1 V0
- 29-01 0993-20-12E, OH, Design #1 V0
- 29-01 0993-20-13E, OH, Design #1 V0
- 29-01 0993-20-14E, OH, Design #1 V0
- 29-01 0993-20-15E, OH, Design #1 V0
- Laramie 29-01 0993-20-16E, OH, Design #1 V0
- Laramie 29-01 0993-20-18E, OH, Design #1 V0
- Laramie 29-01 Fed 0993-21-11W, OH, Design #1 V0
- Laramie 29-01 Fed 0993-21-12W, OH, Design #1 V0
- Laramie 29-01 Fed 0993-21-13W, OH, Design #1 V0
- Laramie 29-01 Fed 0993-21-14W, OH, Design #1 V0
- Laramie 29-01 Fed 0993-21-15W, OH,
- Laramie 29-01 Fed 0993-21-16W, OH,
- Laramie 29-01 Fed 0993-21-17W, OH,
- Laramie 29-01 Fed 0993-21-18W, OH,