



Laramie Energy, LLC

Mesa County, CO

Laramie 0993-29-01

Laramie 29-01 0993-20-16E

OH

Design #2

KLX Anticollision Report

08 May, 2025





Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

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

Survey Tool Program	Date	5/8/2025		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	9,095.4	Design #2 (OH)	OWSG (REV5) MWD HD	OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Laramie 0993-29-01						
Laramie 29-01 0993-20-11E - OH - Design #2	200.0	200.0	51.0	48.2	18.024	CC, ES
Laramie 29-01 0993-20-11E - OH - Design #2	500.0	492.3	63.0	55.1	7.997	SF
Laramie 29-01 0993-20-12E - OH - Design #2	200.0	200.0	50.0	47.2	17.675	CC, ES
Laramie 29-01 0993-20-12E - OH - Design #2	600.0	589.4	67.1	57.8	7.178	SF
Laramie 29-01 0993-20-13E - OH - Design #2	200.0	200.0	40.0	37.2	14.141	CC
Laramie 29-01 0993-20-13E - OH - Design #2	400.0	397.3	42.3	36.7	7.546	ES
Laramie 29-01 0993-20-13E - OH - Design #2	800.0	788.4	56.8	46.7	5.637	SF
Laramie 29-01 0993-20-14E - OH - Design #2	297.7	297.3	29.6	26.3	8.939	CC
Laramie 29-01 0993-20-14E - OH - Design #2	500.0	497.2	31.2	23.9	4.274	ES
Laramie 29-01 0993-20-14E - OH - Design #2	800.0	792.6	38.6	29.2	4.086	SF
Laramie 29-01 0993-20-15E - OH - Design #2	545.3	543.7	17.1	10.0	2.427	Level 1, CC
Laramie 29-01 0993-20-15E - OH - Design #2	800.0	796.6	18.4	9.2	1.993	Level 2, ES
Laramie 29-01 0993-20-15E - OH - Design #2	1,000.0	995.0	20.6	9.8	1.914	Level 2, SF
Laramie 29-01 0993-20-17E - OH - Design #2	200.0	200.0	10.0	7.2	3.532	CC
Laramie 29-01 0993-20-17E - OH - Design #2	300.0	300.0	10.3	6.7	2.916	ES
Laramie 29-01 0993-20-17E - OH - Design #2	600.0	601.3	18.2	9.3	2.037	Level 1, SF
Laramie 29-01 0993-20-18E - OH - Design #2	200.0	200.0	30.0	27.2	10.600	CC
Laramie 29-01 0993-20-18E - OH - Design #2	300.0	300.0	30.3	26.7	8.594	ES
Laramie 29-01 0993-20-18E - OH - Design #2	700.0	704.4	44.5	34.8	4.590	SF
Laramie 29-01 Fed 0993-21-11W - OH - Design #2	200.0	200.0	41.2	38.4	14.577	CC
Laramie 29-01 Fed 0993-21-11W - OH - Design #2	400.0	397.8	43.2	38.2	8.579	ES
Laramie 29-01 Fed 0993-21-11W - OH - Design #2	500.0	495.1	48.8	42.1	7.326	SF
Laramie 29-01 Fed 0993-21-12W - OH - Design #2	200.0	200.0	31.6	28.8	11.182	CC
Laramie 29-01 Fed 0993-21-12W - OH - Design #2	300.0	299.3	32.5	28.8	8.725	ES
Laramie 29-01 Fed 0993-21-12W - OH - Design #2	500.0	495.2	43.6	36.4	6.103	SF
Laramie 29-01 Fed 0993-21-13W - OH - Design #2	200.0	200.0	22.4	19.5	7.903	CC
Laramie 29-01 Fed 0993-21-13W - OH - Design #2	300.0	299.7	22.8	19.4	6.738	ES
Laramie 29-01 Fed 0993-21-13W - OH - Design #2	500.0	496.2	35.3	28.2	4.962	SF
Laramie 29-01 Fed 0993-21-14W - OH - Design #2	200.0	200.0	14.1	11.3	4.998	CC, ES
Laramie 29-01 Fed 0993-21-14W - OH - Design #2	400.0	398.6	20.8	15.3	3.753	SF
Laramie 29-01 Fed 0993-21-15W - OH - Design #2	200.0	200.0	10.0	7.2	3.534	CC
Laramie 29-01 Fed 0993-21-15W - OH - Design #2	204.4	204.4	10.0	7.1	3.509	ES
Laramie 29-01 Fed 0993-21-15W - OH - Design #2	300.0	299.8	10.8	7.4	3.242	SF
Laramie 29-01 Fed 0993-21-16W - OH - Design #2	200.0	200.0	14.1	11.3	4.998	CC
Laramie 29-01 Fed 0993-21-16W - OH - Design #2	300.0	300.0	14.5	11.0	4.112	ES
Laramie 29-01 Fed 0993-21-16W - OH - Design #2	400.0	399.1	20.3	14.9	3.765	SF
Laramie 29-01 Fed 0993-21-17W - OH - Design #2	200.0	200.0	22.4	19.5	7.900	CC

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



Anticollision Report



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Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Summary						
Laramie 0993-29-01						
Laramie 29-01 Fed 0993-21-17W - OH - Design #2	204.4	204.4	22.4	19.5	7.843	ES
Laramie 29-01 Fed 0993-21-17W - OH - Design #2	400.0	398.3	30.7	25.1	5.489	SF
Laramie 29-01 Fed 0993-21-18W - OH - Design #2	200.0	200.0	31.6	28.8	11.171	CC
Laramie 29-01 Fed 0993-21-18W - OH - Design #2	300.0	299.7	32.0	28.7	9.552	ES
Laramie 29-01 Fed 0993-21-18W - OH - Design #2	500.0	495.3	53.1	45.1	6.598	SF

Offset Design											Offset Site Error:	0.0 usft
Laramie 0993-29-01 - Laramie 29-01 0993-20-11E - OH - Design #2											Offset Well Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore 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	-35.43	41.5	-29.6	51.0			
100.0	100.0	100.0	100.0	0.8	0.8	-35.43	41.5	-29.6	51.0	49.4	32.190	
200.0	200.0	200.0	200.0	1.4	1.4	-35.43	41.5	-29.6	51.0	48.2	18.024	CC, ES
300.0	300.0	297.8	297.8	1.7	2.5	50.43	43.5	-30.3	52.8	48.8	12.989	
400.0	399.9	395.4	395.2	2.9	3.9	54.93	49.4	-32.4	56.7	50.5	9.144	
500.0	499.6	492.3	491.5	4.3	5.0	62.44	59.0	-35.9	63.0	55.1	7.997	SF
600.0	598.8	588.4	586.6	4.9	5.9	69.06	72.4	-40.8	72.9	64.1	8.301	
700.0	697.4	684.2	680.6	5.4	6.7	68.55	89.2	-47.5	85.5	75.8	8.807	
800.0	795.3	779.7	773.6	6.1	7.4	68.95	108.8	-56.7	99.4	88.6	9.252	
900.0	892.4	875.0	865.5	6.9	8.1	69.65	131.4	-68.4	114.2	102.6	9.899	
1,000.0	988.4	970.1	956.1	7.6	8.7	70.40	156.7	-82.5	129.6	117.4	10.581	
1,100.0	1,083.1	1,065.1	1,045.2	8.3	9.3	71.11	184.8	-99.1	145.6	132.6	11.196	
1,200.0	1,176.5	1,159.8	1,132.7	8.9	9.9	71.77	215.6	-118.1	162.0	148.1	11.713	
1,300.0	1,268.2	1,254.4	1,218.6	9.6	10.5	72.36	249.1	-139.5	178.6	163.9	12.096	
1,400.0	1,358.9	1,348.8	1,302.6	10.1	11.1	73.72	285.0	-163.1	196.4	180.6	12.441	
1,500.0	1,449.6	1,442.6	1,384.3	10.4	11.6	74.03	323.3	-188.8	216.2	199.3	12.756	
1,600.0	1,540.3	1,535.6	1,463.3	10.8	12.1	73.47	363.7	-216.6	238.1	219.8	13.057	
1,700.0	1,631.0	1,627.4	1,539.4	11.1	12.6	72.29	405.9	-246.0	261.9	242.3	13.379	
1,800.0	1,721.8	1,720.1	1,614.1	11.5	13.0	70.68	450.5	-277.7	287.8	266.9	13.735	
1,900.0	1,812.5	1,816.2	1,691.2	11.9	13.3	69.16	497.3	-310.9	314.3	291.9	14.038	
2,000.0	1,903.2	1,912.3	1,768.3	12.3	13.7	67.88	544.1	-344.2	341.1	317.2	14.313	
2,100.0	1,993.9	2,008.4	1,845.4	12.8	14.1	66.78	590.9	-377.5	367.9	342.6	14.555	
2,200.0	2,084.6	2,104.5	1,922.4	13.3	14.6	65.83	637.7	-410.7	394.9	368.2	14.791	
2,300.0	2,175.4	2,200.6	1,999.5	13.8	15.4	65.01	684.5	-444.0	421.9	393.8	14.993	
2,400.0	2,266.1	2,296.7	2,076.6	14.4	16.3	64.28	731.2	-477.3	449.0	419.4	15.177	
2,500.0	2,356.8	2,392.8	2,153.7	15.1	17.3	63.63	778.0	-510.5	476.2	445.2	15.345	
2,600.0	2,447.5	2,488.9	2,230.8	15.8	18.4	63.06	824.8	-543.8	503.4	470.9	15.497	
2,700.0	2,538.2	2,585.0	2,307.8	16.5	19.4	62.54	871.6	-577.1	530.7	496.7	15.636	
2,800.0	2,629.0	2,681.1	2,384.9	17.2	20.5	62.08	918.4	-610.3	558.0	522.6	15.763	
2,900.0	2,719.7	2,777.2	2,462.0	18.0	21.6	61.65	965.1	-643.6	585.3	548.5	15.879	
3,000.0	2,810.4	2,873.3	2,539.1	18.8	22.6	61.27	1,011.9	-676.9	612.7	574.4	15.986	
3,100.0	2,901.1	2,969.5	2,616.2	19.5	23.7	60.92	1,058.7	-710.1	640.1	600.3	16.084	
3,200.0	2,991.8	3,065.6	2,693.2	20.3	24.8	60.59	1,105.5	-743.4	667.5	626.2	16.175	
3,300.0	3,082.5	3,161.7	2,770.3	21.1	25.9	60.30	1,152.3	-776.7	694.9	652.2	16.259	
3,400.0	3,173.3	3,257.8	2,847.4	21.9	27.0	60.02	1,199.1	-809.9	722.3	678.1	16.337	
3,500.0	3,264.0	3,353.9	2,924.5	22.6	28.0	59.77	1,245.8	-843.2	749.8	704.1	16.410	
3,600.0	3,354.7	3,450.0	3,001.6	23.4	29.1	59.53	1,292.6	-876.4	777.3	730.1	16.477	
3,700.0	3,445.4	3,546.1	3,078.6	24.2	30.2	59.31	1,339.4	-909.7	804.7	756.1	16.540	

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



Anticollision Report



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Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	3,536.1	3,642.2	3,155.7	25.0	31.3	59.10	1,386.2	-943.0	832.2	782.1	16.599		
3,900.0	3,626.9	3,738.3	3,232.8	25.8	32.4	58.91	1,433.0	-976.2	859.7	808.1	16.653		
4,000.0	3,717.6	3,834.4	3,309.9	26.6	33.5	58.73	1,479.7	-1,009.5	887.2	834.1	16.705		
4,100.0	3,808.3	3,930.5	3,387.0	27.3	34.6	58.56	1,526.5	-1,042.8	914.7	860.1	16.753		
4,200.0	3,899.0	4,026.6	3,464.0	28.1	35.7	58.40	1,573.3	-1,076.0	942.3	886.2	16.799		
4,300.0	3,989.7	4,122.7	3,541.1	28.9	36.8	58.25	1,620.1	-1,109.3	969.8	912.2	16.841		
4,400.0	4,080.5	4,218.8	3,618.2	29.7	37.9	58.10	1,666.9	-1,142.6	997.3	938.2	16.882		
4,500.0	4,171.2	4,314.9	3,695.3	30.5	39.0	57.97	1,713.7	-1,175.8	1,024.9	964.3	16.920		
4,600.0	4,261.9	4,411.0	3,772.3	31.3	40.1	57.84	1,760.4	-1,209.1	1,052.4	990.3	16.956		
4,700.0	4,352.6	4,507.2	3,849.4	32.1	41.2	57.72	1,807.2	-1,242.4	1,079.9	1,016.4	16.990		
4,800.0	4,443.3	4,603.3	3,926.5	32.9	42.3	57.60	1,854.0	-1,275.6	1,107.5	1,042.4	17.022		
4,900.0	4,534.1	4,699.4	4,003.6	33.7	43.4	57.49	1,900.8	-1,308.9	1,135.1	1,068.5	17.053		
5,000.0	4,624.8	4,795.5	4,080.7	34.5	44.5	57.39	1,947.6	-1,342.1	1,162.6	1,094.6	17.082		
5,100.0	4,715.5	4,891.6	4,157.7	35.2	45.6	57.29	1,994.3	-1,375.4	1,190.2	1,120.6	17.110		
5,200.0	4,806.2	4,987.7	4,234.8	36.0	46.7	57.19	2,041.1	-1,408.7	1,217.7	1,146.7	17.136		
5,300.0	4,896.9	5,083.8	4,311.9	36.8	47.7	57.10	2,087.9	-1,441.9	1,245.3	1,172.7	17.161		
5,400.0	4,987.6	5,179.9	4,389.0	37.6	48.8	57.02	2,134.7	-1,475.2	1,272.9	1,198.8	17.185		
5,500.0	5,078.4	5,276.0	4,466.1	38.4	49.9	56.93	2,181.5	-1,508.5	1,300.5	1,224.9	17.207		
5,600.0	5,169.8	5,371.8	4,542.9	39.2	51.0	57.36	2,228.1	-1,541.6	1,329.0	1,252.0	17.254		
5,700.0	5,263.0	5,466.7	4,619.0	39.8	52.1	57.74	2,274.3	-1,574.5	1,359.8	1,281.4	17.354		
5,800.0	5,357.6	5,560.5	4,694.2	40.4	53.2	58.03	2,320.0	-1,606.9	1,392.9	1,313.3	17.510		
5,900.0	5,453.6	5,719.5	4,824.0	40.9	54.9	57.90	2,394.8	-1,660.2	1,426.6	1,344.9	17.464		
6,000.0	5,550.7	5,911.4	4,988.6	41.3	56.8	57.62	2,475.2	-1,717.3	1,456.8	1,372.7	17.337		
6,100.0	5,648.7	6,111.3	5,168.0	41.7	58.4	57.37	2,546.7	-1,768.2	1,482.6	1,396.7	17.253		
6,200.0	5,747.5	6,318.3	5,361.3	42.0	59.7	57.14	2,607.1	-1,811.1	1,503.9	1,416.5	17.215		
6,300.0	5,846.9	6,531.5	5,566.5	42.2	60.7	56.95	2,654.2	-1,844.6	1,520.2	1,431.9	17.231		
6,400.0	5,946.7	6,749.5	5,780.8	42.3	61.3	56.78	2,686.0	-1,867.2	1,531.2	1,442.8	17.307		
6,500.0	6,046.6	6,970.5	6,001.0	42.4	61.6	56.66	2,701.2	-1,878.0	1,536.9	1,448.8	17.451		
6,600.0	6,146.6	7,116.2	6,146.6	42.4	61.7	-0.49	2,702.4	-1,878.9	1,537.4	1,449.7	17.524		
6,700.0	6,246.6	7,216.2	6,246.6	42.4	61.7	-0.49	2,702.4	-1,878.9	1,537.4	1,449.6	17.514		
6,800.0	6,346.6	7,316.2	6,346.6	42.5	61.7	-0.49	2,702.4	-1,878.9	1,537.4	1,449.6	17.503		
6,900.0	6,446.6	7,416.2	6,446.6	42.5	61.7	-0.49	2,702.4	-1,878.9	1,537.4	1,449.5	17.492		
7,000.0	6,546.6	7,516.2	6,546.6	42.5	61.7	-0.49	2,702.4	-1,878.9	1,537.4	1,449.5	17.482		
7,100.0	6,646.6	7,616.2	6,646.6	42.5	61.7	-0.49	2,702.4	-1,878.9	1,537.4	1,449.4	17.471		
7,200.0	6,746.6	7,716.2	6,746.6	42.6	61.8	-0.49	2,702.4	-1,878.9	1,537.4	1,449.4	17.460		
7,300.0	6,846.6	7,816.2	6,846.6	42.6	61.8	-0.49	2,702.4	-1,878.9	1,537.4	1,449.3	17.449		
7,400.0	6,946.6	7,916.2	6,946.6	42.6	61.8	-0.49	2,702.4	-1,878.9	1,537.4	1,449.3	17.438		
7,500.0	7,046.6	8,016.2	7,046.6	42.6	61.8	-0.49	2,702.4	-1,878.9	1,537.4	1,449.2	17.427		
7,600.0	7,146.6	8,116.2	7,146.6	42.7	61.8	-0.49	2,702.4	-1,878.9	1,537.4	1,449.1	17.416		
7,700.0	7,246.6	8,216.2	7,246.6	42.7	61.8	-0.49	2,702.4	-1,878.9	1,537.4	1,449.1	17.405		
7,800.0	7,346.6	8,316.2	7,346.6	42.7	61.9	-0.49	2,702.4	-1,878.9	1,537.4	1,449.0	17.393		
7,900.0	7,446.6	8,416.2	7,446.6	42.8	61.9	-0.49	2,702.4	-1,878.9	1,537.4	1,449.0	17.382		
8,000.0	7,546.6	8,516.2	7,546.6	42.8	61.9	-0.49	2,702.4	-1,878.9	1,537.4	1,448.9	17.371		
8,100.0	7,646.6	8,616.2	7,646.6	42.8	61.9	-0.49	2,702.4	-1,878.9	1,537.4	1,448.9	17.360		
8,200.0	7,746.6	8,716.2	7,746.6	42.8	61.9	-0.49	2,702.4	-1,878.9	1,537.4	1,448.8	17.348		
8,300.0	7,846.6	8,816.2	7,846.6	42.9	61.9	-0.49	2,702.4	-1,878.9	1,537.4	1,448.7	17.337		
8,400.0	7,946.6	8,916.2	7,946.6	42.9	61.9	-0.49	2,702.4	-1,878.9	1,539.9	1,450.3	17.178		
8,500.0	8,046.6	9,016.2	8,046.6	42.9	61.9	-0.49	2,702.4	-1,878.9	1,548.8	1,458.4	17.122		
8,600.0	8,146.6	9,116.2	8,146.6	43.0	61.9	-0.49	2,702.4	-1,878.9	1,564.1	1,473.1	17.196		
8,700.0	8,246.6	9,216.2	8,246.6	43.0	61.9	-0.49	2,702.4	-1,878.9	1,585.5	1,494.4	17.392		
8,800.0	8,346.6	9,316.2	8,346.6	43.0	61.9	-0.49	2,702.4	-1,878.9	1,612.9	1,521.8	17.706		
8,900.0	8,446.6	9,416.2	8,446.6	43.0	61.9	-0.49	2,702.4	-1,878.9	1,645.9	1,555.1	18.130		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design	Laramie 0993-29-01 - Laramie 29-01 0993-20-11E - OH - Design #2										Offset Site Error:	0.0 usft
Survey Program:	0-OWSG (REV5) MWD HDGM Standard										Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning
9,000.0	8,546.6	8,828.6	7,859.0	43.1	61.9	-0.49	2,702.4	-1,878.9	1,684.2	1,593.9	18.659	
9,096.2	8,642.8	8,828.6	7,859.0	43.1	61.9	-0.49	2,702.4	-1,878.9	1,725.7	1,635.9	19.227	



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard													Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-46.73	34.3	-36.4	50.0					
100.0	100.0	100.0	100.0	0.8	0.8	-46.73	34.3	-36.4	50.0	48.4	31.567			
200.0	200.0	200.0	200.0	1.4	1.4	-46.73	34.3	-36.4	50.0	47.2	17.675	CC, ES		
300.0	300.0	297.8	297.8	1.7	2.4	38.85	35.9	-37.7	51.8	47.8	12.753			
400.0	399.9	395.5	395.2	2.9	3.9	42.26	40.9	-41.5	55.2	48.8	8.624			
500.0	499.6	492.7	491.9	4.3	5.0	48.25	49.1	-47.8	60.0	51.7	7.199			
600.0	598.8	589.4	587.5	4.9	5.9	53.58	60.4	-56.5	67.1	57.8	7.178	SF		
700.0	697.4	685.7	682.1	5.4	6.8	52.33	74.9	-67.7	75.8	65.6	7.426			
800.0	795.3	781.7	775.5	6.1	7.5	52.74	92.5	-81.2	85.6	74.3	7.605			
900.0	892.4	877.4	867.5	6.9	8.2	53.84	113.1	-97.0	96.2	84.1	7.949			
1,000.0	988.4	972.7	958.2	7.6	8.9	55.20	136.6	-115.1	107.5	94.6	8.363			
1,100.0	1,083.1	1,067.8	1,047.2	8.3	9.5	56.62	163.0	-135.4	119.5	105.9	8.778			
1,200.0	1,176.5	1,162.6	1,134.6	8.9	10.1	58.01	192.2	-157.8	132.0	117.6	9.166			
1,300.0	1,268.2	1,257.2	1,220.1	9.6	10.7	59.33	224.2	-182.4	145.0	129.7	9.481			
1,400.0	1,358.9	1,351.4	1,303.5	10.1	11.2	61.26	258.8	-209.0	159.7	143.5	9.854			
1,500.0	1,449.6	1,444.8	1,384.5	10.4	11.7	62.06	295.8	-237.5	177.3	160.1	10.271			
1,600.0	1,540.3	1,537.3	1,462.7	10.8	12.2	61.91	334.9	-267.6	197.9	179.5	10.744			
1,700.0	1,631.0	1,633.0	1,542.0	11.1	12.5	61.25	377.4	-300.2	220.5	200.9	11.220			
1,800.0	1,721.8	1,730.4	1,622.6	11.5	12.8	60.67	420.6	-333.5	243.3	222.3	11.607			
1,900.0	1,812.5	1,827.7	1,703.2	11.9	13.2	60.19	463.9	-366.7	266.1	243.8	11.936			
2,000.0	1,903.2	1,925.0	1,783.8	12.3	13.5	59.79	507.2	-400.0	288.9	265.3	12.219			
2,100.0	1,993.9	2,022.4	1,864.4	12.8	13.8	59.44	550.5	-433.3	311.8	286.8	12.462			
2,200.0	2,084.6	2,119.7	1,945.0	13.3	14.2	59.15	593.7	-466.6	334.6	308.2	12.672			
2,300.0	2,175.4	2,217.1	2,025.6	13.8	15.0	58.89	637.0	-499.8	357.5	329.7	12.863			
2,400.0	2,266.1	2,314.4	2,106.2	14.4	16.0	58.66	680.3	-533.1	380.3	351.1	13.024			
2,500.0	2,356.8	2,411.7	2,186.8	15.1	17.0	58.46	723.6	-566.4	403.2	372.6	13.167			
2,600.0	2,447.5	2,509.1	2,267.4	15.8	18.0	58.28	766.9	-599.7	426.1	394.0	13.293			
2,700.0	2,538.2	2,606.4	2,347.9	16.5	19.1	58.11	810.1	-633.0	448.9	415.5	13.406			
2,800.0	2,629.0	2,703.8	2,428.5	17.2	20.1	57.97	853.4	-666.2	471.8	436.9	13.506			
2,900.0	2,719.7	2,801.1	2,509.1	18.0	21.1	57.84	896.7	-699.5	494.7	458.3	13.596			
3,000.0	2,810.4	2,898.5	2,589.7	18.8	22.1	57.71	940.0	-732.8	517.6	479.7	13.677			
3,100.0	2,901.1	2,995.8	2,670.3	19.5	23.2	57.60	983.3	-766.1	540.5	501.2	13.750			
3,200.0	2,991.8	3,093.1	2,750.9	20.3	24.2	57.50	1,026.5	-799.3	563.3	522.6	13.816			
3,300.0	3,082.5	3,190.5	2,831.5	21.1	25.2	57.41	1,069.8	-832.6	586.2	544.0	13.876			
3,400.0	3,173.3	3,287.8	2,912.1	21.9	26.3	57.32	1,113.1	-865.9	609.1	565.4	13.931			
3,500.0	3,264.0	3,385.2	2,992.7	22.6	27.3	57.24	1,156.4	-899.2	632.0	586.8	13.981			
3,600.0	3,354.7	3,482.5	3,073.3	23.4	28.3	57.16	1,199.7	-932.4	654.9	608.2	14.027			
3,700.0	3,445.4	3,579.8	3,153.9	24.2	29.4	57.09	1,242.9	-965.7	677.8	629.6	14.069			
3,800.0	3,536.1	3,677.2	3,234.5	25.0	30.4	57.03	1,286.2	-999.0	700.7	651.0	14.108			
3,900.0	3,626.9	3,774.5	3,315.0	25.8	31.4	56.97	1,329.5	-1,032.3	723.6	672.4	14.144			
4,000.0	3,717.6	3,871.9	3,395.6	26.6	32.5	56.91	1,372.8	-1,065.5	746.5	693.8	14.178			
4,100.0	3,808.3	3,969.2	3,476.2	27.3	33.5	56.86	1,416.0	-1,098.8	769.4	715.2	14.208			
4,200.0	3,899.0	4,066.6	3,556.8	28.1	34.6	56.81	1,459.3	-1,132.1	792.3	736.6	14.237			
4,300.0	3,989.7	4,163.9	3,637.4	28.9	35.6	56.76	1,502.6	-1,165.4	815.2	758.0	14.264			
4,400.0	4,080.5	4,261.2	3,718.0	29.7	36.6	56.71	1,545.9	-1,198.6	838.1	779.4	14.289			
4,500.0	4,171.2	4,358.6	3,798.6	30.5	37.7	56.67	1,589.2	-1,231.9	860.9	800.8	14.312			
4,600.0	4,261.9	4,455.9	3,879.2	31.3	38.7	56.63	1,632.4	-1,265.2	883.8	822.2	14.334			
4,700.0	4,352.6	4,553.3	3,959.8	32.1	39.7	56.59	1,675.7	-1,298.5	906.7	843.6	14.354			
4,800.0	4,443.3	4,650.6	4,040.4	32.9	40.8	56.55	1,719.0	-1,331.7	929.6	865.0	14.374			
4,900.0	4,534.1	4,747.9	4,121.0	33.7	41.8	56.52	1,762.3	-1,365.0	952.5	886.4	14.392			
5,000.0	4,624.8	4,845.3	4,201.6	34.5	42.9	56.48	1,805.6	-1,398.3	975.4	907.7	14.409			
5,100.0	4,715.5	4,942.6	4,282.1	35.2	43.9	56.45	1,848.8	-1,431.6	998.3	929.1	14.425			

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	4,806.2	5,040.0	4,362.7	36.0	44.9	56.42	1,892.1	-1,464.8	1,021.2	950.5	14.440		
5,300.0	4,896.9	5,137.3	4,443.3	36.8	46.0	56.39	1,935.4	-1,498.1	1,044.1	971.9	14.454		
5,400.0	4,987.6	5,234.7	4,523.9	37.6	47.0	56.36	1,978.7	-1,531.4	1,067.0	993.3	14.468		
5,500.0	5,078.4	5,332.0	4,604.5	38.4	48.1	56.34	2,022.0	-1,564.7	1,089.9	1,014.7	14.480		
5,600.0	5,169.8	5,429.1	4,684.9	39.2	49.1	56.70	2,065.1	-1,597.9	1,113.8	1,037.1	14.516		
5,700.0	5,263.0	5,525.4	4,764.6	39.8	50.1	56.98	2,107.9	-1,630.8	1,140.0	1,062.0	14.603		
5,800.0	5,357.6	5,661.0	4,878.1	40.4	51.5	56.99	2,166.8	-1,676.0	1,167.5	1,087.6	14.608		
5,900.0	5,453.6	5,823.1	5,019.1	40.9	53.0	56.89	2,230.2	-1,724.8	1,192.5	1,110.5	14.547		
6,000.0	5,550.7	5,989.5	5,169.2	41.3	54.3	56.79	2,286.9	-1,768.4	1,214.3	1,130.6	14.505		
6,100.0	5,648.7	6,159.6	5,327.7	41.7	55.4	56.69	2,335.8	-1,806.0	1,232.8	1,147.7	14.487		
6,200.0	5,747.5	6,333.0	5,493.5	42.0	56.3	56.60	2,375.9	-1,836.8	1,247.9	1,161.8	14.494		
6,300.0	5,846.9	6,509.1	5,665.4	42.2	56.9	56.51	2,406.3	-1,860.2	1,259.3	1,172.6	14.527		
6,400.0	5,946.7	6,687.3	5,841.7	42.3	57.4	56.43	2,426.4	-1,875.6	1,267.0	1,180.2	14.591		
6,500.0	6,046.6	6,866.7	6,020.7	42.4	57.6	56.36	2,435.6	-1,882.7	1,270.9	1,184.4	14.689		
6,600.0	6,146.6	6,992.6	6,146.6	42.4	57.6	-0.79	2,436.2	-1,883.1	1,271.2	1,184.9	14.723		
6,700.0	6,246.6	7,092.6	6,246.6	42.4	57.6	-0.79	2,436.2	-1,883.1	1,271.2	1,184.8	14.714		
6,800.0	6,346.6	7,192.6	6,346.6	42.5	57.6	-0.79	2,436.2	-1,883.1	1,271.2	1,184.8	14.705		
6,900.0	6,446.6	7,292.6	6,446.6	42.5	57.6	-0.79	2,436.2	-1,883.1	1,271.2	1,184.7	14.696		
7,000.0	6,546.6	7,392.6	6,546.6	42.5	57.7	-0.79	2,436.2	-1,883.1	1,271.2	1,184.7	14.686		
7,100.0	6,646.6	7,492.6	6,646.6	42.5	57.7	-0.79	2,436.2	-1,883.1	1,271.2	1,184.6	14.677		
7,200.0	6,746.6	7,592.6	6,746.6	42.6	57.7	-0.79	2,436.2	-1,883.1	1,271.2	1,184.6	14.667		
7,300.0	6,846.6	7,692.6	6,846.6	42.6	57.7	-0.79	2,436.2	-1,883.1	1,271.2	1,184.5	14.658		
7,400.0	6,946.6	7,792.6	6,946.6	42.6	57.7	-0.79	2,436.2	-1,883.1	1,271.2	1,184.5	14.648		
7,500.0	7,046.6	7,892.6	7,046.6	42.6	57.8	-0.79	2,436.2	-1,883.1	1,271.2	1,184.4	14.639		
7,600.0	7,146.6	7,992.6	7,146.6	42.7	57.8	-0.79	2,436.2	-1,883.1	1,271.2	1,184.3	14.629		
7,700.0	7,246.6	8,092.6	7,246.6	42.7	57.8	-0.79	2,436.2	-1,883.1	1,271.2	1,184.3	14.620		
7,800.0	7,346.6	8,192.6	7,346.6	42.7	57.8	-0.79	2,436.2	-1,883.1	1,271.2	1,184.2	14.610		
7,900.0	7,446.6	8,292.6	7,446.6	42.8	57.8	-0.79	2,436.2	-1,883.1	1,271.2	1,184.2	14.600		
8,000.0	7,546.6	8,392.6	7,546.6	42.8	57.8	-0.79	2,436.2	-1,883.1	1,271.2	1,184.1	14.591		
8,100.0	7,646.6	8,492.6	7,646.6	42.8	57.9	-0.79	2,436.2	-1,883.1	1,271.2	1,184.1	14.581		
8,200.0	7,746.6	8,592.6	7,746.6	42.8	57.9	-0.79	2,436.2	-1,883.1	1,271.2	1,184.0	14.571		
8,300.0	7,846.6	8,692.6	7,846.6	42.9	57.9	-0.79	2,436.2	-1,883.1	1,271.2	1,183.9	14.561		
8,400.0	7,946.6	8,792.6	7,946.6	42.9	57.9	-0.79	2,436.2	-1,883.1	1,271.2	1,183.9	14.551		
8,500.0	8,046.6	8,892.6	8,046.6	42.9	57.9	-0.79	2,436.2	-1,883.1	1,271.2	1,183.8	14.541		
8,600.0	8,146.6	8,992.6	8,146.6	43.0	58.0	-0.79	2,436.2	-1,883.1	1,271.2	1,183.8	14.532		
8,700.0	8,246.6	9,092.6	8,246.6	43.0	58.0	-0.79	2,436.2	-1,883.1	1,271.2	1,183.7	14.522		
8,800.0	8,346.6	9,192.6	8,346.6	43.0	58.0	-0.79	2,436.2	-1,883.1	1,271.2	1,183.6	14.512		
8,900.0	8,446.6	9,292.6	8,446.6	43.0	58.0	-0.79	2,436.2	-1,883.1	1,271.2	1,183.6	14.502		
9,000.0	8,546.6	9,392.6	8,546.6	43.1	58.0	-0.79	2,436.2	-1,883.1	1,271.2	1,183.5	14.492		
9,096.2	8,642.8	9,488.8	8,642.8	43.1	58.1	-0.79	2,436.2	-1,883.1	1,271.2	1,183.5	14.482		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-46.74	27.4	-29.1	40.0				
100.0	100.0	100.0	100.0	0.8	0.8	-46.74	27.4	-29.1	40.0	38.4	25.255		
200.0	200.0	200.0	200.0	1.4	1.4	-46.74	27.4	-29.1	40.0	37.2	14.141	CC	
300.0	300.0	298.9	298.9	1.7	1.8	37.93	27.7	-30.1	40.7	37.3	11.878		
400.0	399.9	397.3	397.1	2.9	3.2	38.22	29.3	-34.9	42.3	36.7	7.546	ES	
500.0	499.6	495.5	494.9	4.3	3.6	40.34	32.6	-43.4	44.4	37.5	6.408		
600.0	598.8	593.3	591.9	4.9	4.4	43.96	39.2	-54.3	47.7	39.7	6.019		
700.0	697.4	691.0	688.1	5.4	5.3	42.48	49.2	-67.6	51.9	43.0	5.822		
800.0	795.3	788.4	783.3	6.1	6.2	43.46	62.5	-83.1	56.8	46.7	5.637	SF	
900.0	892.4	885.5	877.4	6.9	6.9	45.65	79.0	-101.0	62.5	51.5	5.667		
1,000.0	988.4	982.5	970.2	7.6	7.7	48.37	98.8	-121.0	69.0	57.1	5.828		
1,100.0	1,083.1	1,079.2	1,061.5	8.3	8.4	51.25	121.7	-143.2	76.2	63.6	6.059		
1,200.0	1,176.5	1,175.8	1,151.2	8.9	9.0	54.08	147.7	-167.5	84.3	71.0	6.322		
1,300.0	1,268.2	1,272.1	1,239.1	9.6	9.7	56.78	176.8	-193.9	93.1	78.9	6.566		
1,400.0	1,358.9	1,368.1	1,325.1	10.1	10.3	59.65	208.8	-222.2	103.9	88.9	6.896		
1,500.0	1,449.6	1,463.5	1,408.7	10.4	10.9	60.76	243.5	-252.4	118.1	102.0	7.301		
1,600.0	1,540.3	1,558.6	1,490.1	10.8	11.3	60.53	280.9	-284.3	135.4	118.1	7.804		
1,700.0	1,631.0	1,656.8	1,573.4	11.1	11.6	59.98	320.6	-318.0	153.9	135.3	8.253		
1,800.0	1,721.8	1,755.1	1,656.7	11.5	12.0	59.55	360.4	-351.7	172.4	152.4	8.630		
1,900.0	1,812.5	1,853.4	1,740.1	11.9	12.3	59.20	400.1	-385.4	190.9	169.5	8.949		
2,000.0	1,903.2	1,951.7	1,823.4	12.3	12.7	58.91	439.8	-419.1	209.3	186.6	9.223		
2,100.0	1,993.9	2,049.9	1,906.7	12.8	13.2	58.68	479.6	-452.8	227.8	203.7	9.458		
2,200.0	2,084.6	2,148.2	1,990.0	13.3	13.8	58.47	519.3	-486.5	246.3	220.9	9.670		
2,300.0	2,175.4	2,246.5	2,073.4	13.8	14.6	58.30	559.0	-520.2	264.8	237.9	9.845		
2,400.0	2,266.1	2,344.7	2,156.7	14.4	15.6	58.14	598.8	-553.8	283.3	255.0	10.001		
2,500.0	2,356.8	2,443.0	2,240.0	15.1	16.5	58.01	638.5	-587.5	301.8	272.1	10.140		
2,600.0	2,447.5	2,541.3	2,323.3	15.8	17.4	57.89	678.2	-621.2	320.3	289.1	10.262		
2,700.0	2,538.2	2,639.6	2,406.7	16.5	18.4	57.79	718.0	-654.9	338.8	306.2	10.372		
2,800.0	2,629.0	2,737.8	2,490.0	17.2	19.4	57.69	757.7	-688.6	357.4	323.2	10.470		
2,900.0	2,719.7	2,836.1	2,573.3	18.0	20.3	57.61	797.4	-722.3	375.9	340.3	10.558		
3,000.0	2,810.4	2,934.4	2,656.6	18.8	21.3	57.53	837.2	-756.0	394.4	357.3	10.638		
3,100.0	2,901.1	3,032.6	2,740.0	19.5	22.3	57.46	876.9	-789.7	412.9	374.3	10.710		
3,200.0	2,991.8	3,130.9	2,823.3	20.3	23.3	57.40	916.6	-823.4	431.4	391.3	10.776		
3,300.0	3,082.5	3,229.2	2,906.6	21.1	24.2	57.34	956.4	-857.1	449.9	408.4	10.836		
3,400.0	3,173.3	3,327.5	2,989.9	21.9	25.2	57.28	996.1	-890.8	468.4	425.4	10.891		
3,500.0	3,264.0	3,425.7	3,073.3	22.6	26.2	57.23	1,035.8	-924.5	486.9	442.4	10.941		
3,600.0	3,354.7	3,524.0	3,156.6	23.4	27.2	57.19	1,075.6	-958.2	505.4	459.4	10.988		
3,700.0	3,445.4	3,622.3	3,239.9	24.2	28.2	57.14	1,115.3	-991.9	523.9	476.4	11.031		
3,800.0	3,536.1	3,720.5	3,323.2	25.0	29.1	57.10	1,155.0	-1,025.6	542.4	493.4	11.071		
3,900.0	3,626.9	3,818.8	3,406.6	25.8	30.1	57.07	1,194.7	-1,059.3	561.0	510.5	11.108		
4,000.0	3,717.6	3,917.1	3,489.9	26.6	31.1	57.03	1,234.5	-1,093.0	579.5	527.5	11.142		
4,100.0	3,808.3	4,015.4	3,573.2	27.3	32.1	57.00	1,274.2	-1,126.7	598.0	544.5	11.174		
4,200.0	3,899.0	4,113.6	3,656.5	28.1	33.1	56.97	1,313.9	-1,160.4	616.5	561.5	11.204		
4,300.0	3,989.7	4,211.9	3,739.9	28.9	34.1	56.94	1,353.7	-1,194.1	635.0	578.5	11.233		
4,400.0	4,080.5	4,310.2	3,823.2	29.7	35.0	56.91	1,393.4	-1,227.8	653.5	595.5	11.259		
4,500.0	4,171.2	4,408.4	3,906.5	30.5	36.0	56.89	1,433.1	-1,261.5	672.0	612.5	11.284		
4,600.0	4,261.9	4,506.7	3,989.8	31.3	37.0	56.86	1,472.9	-1,295.2	690.5	629.5	11.307		
4,700.0	4,352.6	4,605.0	4,073.2	32.1	38.0	56.84	1,512.6	-1,328.9	709.0	646.5	11.329		
4,800.0	4,443.3	4,703.2	4,156.5	32.9	39.0	56.82	1,552.3	-1,362.6	727.6	663.5	11.350		
4,900.0	4,534.1	4,801.5	4,239.8	33.7	40.0	56.79	1,592.1	-1,396.3	746.1	680.4	11.369		
5,000.0	4,624.8	4,899.8	4,323.1	34.5	41.0	56.77	1,631.8	-1,430.0	764.6	697.4	11.388		
5,100.0	4,715.5	4,998.1	4,406.5	35.2	42.0	56.75	1,671.5	-1,463.7	783.1	714.4	11.405		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	4,806.2	5,096.3	4,489.8	36.0	42.9	56.74	1,711.3	-1,497.4	801.6	731.4	11.422	
5,300.0	4,896.9	5,194.6	4,573.1	36.8	43.9	56.72	1,751.0	-1,531.1	820.1	748.4	11.438	
5,400.0	4,987.6	5,292.9	4,656.4	37.6	44.9	56.70	1,790.7	-1,564.8	838.6	765.4	11.453	
5,500.0	5,078.4	5,391.1	4,739.8	38.4	45.9	56.69	1,830.5	-1,598.5	857.1	782.4	11.467	
5,600.0	5,169.8	5,489.2	4,822.9	39.2	46.9	56.95	1,870.1	-1,632.1	876.6	800.4	11.502	
5,700.0	5,263.0	5,609.5	4,925.6	39.8	48.1	57.02	1,917.9	-1,672.6	897.8	819.9	11.521	
5,800.0	5,357.6	5,749.0	5,048.4	40.4	49.3	57.01	1,968.4	-1,715.4	917.3	837.5	11.497	
5,900.0	5,453.6	5,890.6	5,176.9	40.9	50.4	57.00	2,013.7	-1,753.8	934.6	853.2	11.481	
6,000.0	5,550.7	6,034.1	5,310.6	41.3	51.3	56.98	2,053.3	-1,787.5	949.6	866.9	11.477	
6,100.0	5,648.7	6,179.2	5,448.9	41.7	52.1	56.95	2,086.9	-1,815.9	962.3	878.5	11.483	
6,200.0	5,747.5	6,325.9	5,591.1	42.0	52.7	56.91	2,113.9	-1,838.9	972.5	887.9	11.502	
6,300.0	5,846.9	6,473.6	5,736.5	42.2	53.1	56.87	2,134.1	-1,856.0	980.2	895.2	11.532	
6,400.0	5,946.7	6,622.3	5,884.1	42.3	53.4	56.82	2,147.2	-1,867.0	985.4	900.2	11.575	
6,500.0	6,046.6	6,771.5	6,033.1	42.4	53.6	56.76	2,152.9	-1,871.9	988.0	903.0	11.634	
6,600.0	6,146.6	6,885.0	6,146.6	42.4	53.6	-0.37	2,153.2	-1,872.1	988.1	903.3	11.645	
6,700.0	6,246.6	6,985.0	6,246.6	42.4	53.6	-0.37	2,153.2	-1,872.1	988.1	903.2	11.637	
6,800.0	6,346.6	7,085.0	6,346.6	42.5	53.6	-0.37	2,153.2	-1,872.1	988.1	903.2	11.630	
6,900.0	6,446.6	7,185.0	6,446.6	42.5	53.7	-0.37	2,153.2	-1,872.1	988.1	903.1	11.622	
7,000.0	6,546.6	7,285.0	6,546.6	42.5	53.7	-0.37	2,153.2	-1,872.1	988.1	903.1	11.614	
7,100.0	6,646.6	7,385.0	6,646.6	42.5	53.7	-0.37	2,153.2	-1,872.1	988.1	903.0	11.607	
7,200.0	6,746.6	7,485.0	6,746.6	42.6	53.7	-0.37	2,153.2	-1,872.1	988.1	903.0	11.599	
7,300.0	6,846.6	7,585.0	6,846.6	42.6	53.7	-0.37	2,153.2	-1,872.1	988.1	902.9	11.591	
7,400.0	6,946.6	7,685.0	6,946.6	42.6	53.8	-0.37	2,153.2	-1,872.1	988.1	902.8	11.584	
7,500.0	7,046.6	7,785.0	7,046.6	42.6	53.8	-0.37	2,153.2	-1,872.1	988.1	902.8	11.576	
7,600.0	7,146.6	7,885.0	7,146.6	42.7	53.8	-0.37	2,153.2	-1,872.1	988.1	902.7	11.568	
7,700.0	7,246.6	7,985.0	7,246.6	42.7	53.8	-0.37	2,153.2	-1,872.1	988.1	902.7	11.560	
7,800.0	7,346.6	8,085.0	7,346.6	42.7	53.8	-0.37	2,153.2	-1,872.1	988.1	902.6	11.552	
7,900.0	7,446.6	8,185.0	7,446.6	42.8	53.9	-0.37	2,153.2	-1,872.1	988.1	902.5	11.544	
8,000.0	7,546.6	8,285.0	7,546.6	42.8	53.9	-0.37	2,153.2	-1,872.1	988.1	902.5	11.536	
8,100.0	7,646.6	8,385.0	7,646.6	42.8	53.9	-0.37	2,153.2	-1,872.1	988.1	902.4	11.529	
8,200.0	7,746.6	8,485.0	7,746.6	42.8	53.9	-0.37	2,153.2	-1,872.1	988.1	902.4	11.521	
8,300.0	7,846.6	8,585.0	7,846.6	42.9	53.9	-0.37	2,153.2	-1,872.1	988.1	902.3	11.513	
8,400.0	7,946.6	8,687.4	7,849.0	42.9	53.9	-0.37	2,153.2	-1,872.1	993.0	905.9	11.406	
8,500.0	8,046.6	8,587.4	7,849.0	42.9	53.9	-0.37	2,153.2	-1,872.1	1,007.7	920.1	11.504	
8,600.0	8,146.6	8,587.4	7,849.0	43.0	53.9	-0.37	2,153.2	-1,872.1	1,032.0	944.5	11.799	
8,700.0	8,246.6	8,587.4	7,849.0	43.0	53.9	-0.37	2,153.2	-1,872.1	1,065.1	978.4	12.278	
8,800.0	8,346.6	8,587.4	7,849.0	43.0	53.9	-0.37	2,153.2	-1,872.1	1,106.4	1,020.8	12.926	
8,900.0	8,446.6	8,587.4	7,849.0	43.0	53.9	-0.37	2,153.2	-1,872.1	1,154.8	1,070.7	13.729	
9,000.0	8,546.6	8,587.4	7,849.0	43.1	53.9	-0.37	2,153.2	-1,872.1	1,209.6	1,127.2	14.673	
9,096.2	8,642.8	8,587.4	7,849.0	43.1	53.9	-0.37	2,153.2	-1,872.1	1,267.5	1,186.5	15.656	

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	-46.75	20.6	-21.9	30.0				
100.0	100.0	100.0	100.0	0.8	0.8	-46.75	20.6	-21.9	30.0	28.4	18.948		
200.0	200.0	200.0	200.0	1.4	1.4	-46.75	20.6	-21.9	30.0	27.2	10.610		
297.7	297.7	297.3	297.3	1.7	1.7	39.07	20.6	-22.1	29.6	26.3	8.939	CC	
300.0	300.0	299.6	299.6	1.7	1.7	38.46	20.7	-22.1	30.0	26.7	9.035		
400.0	399.9	398.4	398.3	2.9	2.8	40.29	21.9	-25.5	30.3	25.1	5.835		
500.0	499.6	497.2	496.8	4.3	4.2	43.82	24.6	-32.9	31.2	23.9	4.274	ES	
600.0	598.8	595.8	594.7	4.9	4.5	46.93	29.0	-44.1	33.1	25.3	4.262		
700.0	697.4	694.3	691.8	5.4	5.2	45.12	36.4	-58.0	35.6	27.2	4.249		
800.0	795.3	792.6	788.2	6.1	6.0	45.96	47.1	-74.5	38.6	29.2	4.086	SF	
900.0	892.4	890.8	883.5	6.9	6.8	48.16	61.1	-93.4	42.2	31.9	4.086		
1,000.0	988.4	988.9	977.7	7.6	7.5	50.96	78.2	-114.9	46.4	35.3	4.187		
1,100.0	1,083.1	1,086.9	1,070.5	8.3	8.2	53.96	98.5	-138.8	51.2	39.4	4.339		
1,200.0	1,176.5	1,184.7	1,161.8	8.9	8.9	56.93	121.9	-165.0	56.5	44.0	4.509		
1,300.0	1,268.2	1,282.5	1,251.5	9.6	9.6	59.75	148.4	-193.6	62.4	49.0	4.660		
1,400.0	1,358.9	1,380.1	1,339.3	10.1	10.2	62.26	177.8	-224.4	70.1	55.7	4.872		
1,500.0	1,449.6	1,477.2	1,424.8	10.4	10.7	62.22	210.0	-257.2	80.9	65.3	5.185		
1,600.0	1,540.3	1,576.4	1,511.1	10.8	11.0	61.21	244.5	-291.9	93.3	76.4	5.510		
1,700.0	1,631.0	1,675.6	1,597.3	11.1	11.4	60.44	279.0	-326.7	105.7	87.5	5.782		
1,800.0	1,721.8	1,774.8	1,683.6	11.5	11.7	59.83	313.5	-361.4	118.2	98.5	6.012		
1,900.0	1,812.5	1,874.0	1,769.9	11.9	12.1	59.34	348.0	-396.2	130.6	109.6	6.210		
2,000.0	1,903.2	1,973.2	1,856.2	12.3	12.5	58.94	382.5	-430.9	143.1	120.7	6.379		
2,100.0	1,993.9	2,072.4	1,942.5	12.8	13.0	58.59	417.0	-465.7	155.6	131.7	6.526		
2,200.0	2,084.6	2,171.7	2,028.8	13.3	13.5	58.30	451.6	-500.4	168.0	142.8	6.654		
2,300.0	2,175.4	2,270.9	2,115.0	13.8	14.2	58.05	486.1	-535.2	180.5	153.8	6.767		
2,400.0	2,266.1	2,370.1	2,201.3	14.4	15.1	57.84	520.6	-569.9	193.0	164.9	6.865		
2,500.0	2,356.8	2,469.3	2,287.6	15.1	15.9	57.64	555.1	-604.7	205.5	175.9	6.952		
2,600.0	2,447.5	2,568.5	2,373.9	15.8	16.8	57.47	589.6	-639.5	218.0	187.0	7.030		
2,700.0	2,538.2	2,667.7	2,460.2	16.5	17.7	57.32	624.1	-674.2	230.5	198.0	7.099		
2,800.0	2,629.0	2,767.0	2,546.5	17.2	18.6	57.19	658.6	-709.0	243.0	209.0	7.162		
2,900.0	2,719.7	2,866.2	2,632.8	18.0	19.5	57.06	693.1	-743.7	255.4	220.1	7.218		
3,000.0	2,810.4	2,965.4	2,719.0	18.8	20.4	56.95	727.6	-778.5	267.9	231.1	7.269		
3,100.0	2,901.1	3,064.6	2,805.3	19.5	21.4	56.85	762.2	-813.2	280.4	242.1	7.316		
3,200.0	2,991.8	3,163.8	2,891.6	20.3	22.3	56.76	796.7	-848.0	292.9	253.1	7.358		
3,300.0	3,082.5	3,263.0	2,977.9	21.1	23.2	56.68	831.2	-882.7	305.4	264.1	7.397		
3,400.0	3,173.3	3,362.3	3,064.2	21.9	24.1	56.60	865.7	-917.5	317.9	275.1	7.433		
3,500.0	3,264.0	3,461.5	3,150.5	22.6	25.0	56.52	900.2	-952.2	330.4	286.1	7.465		
3,600.0	3,354.7	3,560.7	3,236.8	23.4	25.9	56.46	934.7	-987.0	342.9	297.1	7.496		
3,700.0	3,445.4	3,659.9	3,323.0	24.2	26.9	56.40	969.2	-1,021.7	355.4	308.2	7.524		
3,800.0	3,536.1	3,759.1	3,409.3	25.0	27.8	56.34	1,003.7	-1,056.5	367.9	319.2	7.550		
3,900.0	3,626.9	3,858.3	3,495.6	25.8	28.7	56.28	1,038.3	-1,091.2	380.4	330.2	7.574		
4,000.0	3,717.6	3,957.5	3,581.9	26.6	29.6	56.23	1,072.8	-1,126.0	392.9	341.2	7.597		
4,100.0	3,808.3	4,056.8	3,668.2	27.3	30.6	56.18	1,107.3	-1,160.7	405.4	352.2	7.618		
4,200.0	3,899.0	4,156.0	3,754.5	28.1	31.5	56.14	1,141.8	-1,195.5	417.9	363.2	7.638		
4,300.0	3,989.7	4,255.2	3,840.7	28.9	32.4	56.10	1,176.3	-1,230.2	430.4	374.2	7.657		
4,400.0	4,080.5	4,354.4	3,927.0	29.7	33.3	56.06	1,210.8	-1,265.0	442.9	385.2	7.674		
4,500.0	4,171.2	4,453.6	4,013.3	30.5	34.3	56.02	1,245.3	-1,299.7	455.4	396.1	7.691		
4,600.0	4,261.9	4,552.8	4,099.6	31.3	35.2	55.98	1,279.8	-1,334.5	467.9	407.1	7.706		
4,700.0	4,352.6	4,652.1	4,185.9	32.1	36.1	55.95	1,314.3	-1,369.2	480.4	418.1	7.721		
4,800.0	4,443.3	4,751.3	4,272.2	32.9	37.0	55.92	1,348.9	-1,404.0	492.9	429.1	7.735		
4,900.0	4,534.1	4,850.5	4,358.5	33.7	38.0	55.89	1,383.4	-1,438.7	505.3	440.1	7.748		
5,000.0	4,624.8	4,949.7	4,444.7	34.5	38.9	55.86	1,417.9	-1,473.5	517.8	451.1	7.760		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	4,715.5	5,048.9	4,531.0	35.2	39.8	55.83	1,452.4	-1,508.2	530.3	462.1	7.772		
5,200.0	4,806.2	5,148.1	4,617.3	36.0	40.8	55.80	1,486.9	-1,543.0	542.8	473.1	7.783		
5,300.0	4,896.9	5,247.3	4,703.6	36.8	41.7	55.78	1,521.4	-1,577.7	555.3	484.1	7.794		
5,400.0	4,987.6	5,346.6	4,789.9	37.6	42.6	55.76	1,555.9	-1,612.5	567.8	495.1	7.804		
5,500.0	5,078.4	5,445.8	4,876.2	38.4	43.6	55.73	1,590.4	-1,647.2	580.3	506.1	7.813		
5,600.0	5,169.8	5,522.2	4,968.9	39.2	44.5	55.82	1,627.2	-1,684.3	593.7	517.8	7.827		
5,700.0	5,263.0	5,674.0	5,077.3	39.8	45.6	55.83	1,666.3	-1,723.6	606.5	529.0	7.821		
5,800.0	5,357.6	5,796.6	5,189.3	40.4	46.5	55.84	1,701.4	-1,759.0	618.1	539.0	7.816		
5,900.0	5,453.6	5,920.0	5,304.6	40.9	47.3	55.84	1,732.4	-1,790.2	628.2	547.9	7.817		
6,000.0	5,550.7	6,044.1	5,422.8	41.3	48.0	55.83	1,759.2	-1,817.2	637.0	555.6	7.823		
6,100.0	5,648.7	6,168.9	5,543.4	41.7	48.5	55.82	1,781.5	-1,839.7	644.4	562.1	7.832		
6,200.0	5,747.5	6,294.1	5,666.1	42.0	48.9	55.79	1,799.3	-1,857.5	650.3	567.4	7.846		
6,300.0	5,846.9	6,419.8	5,790.3	42.2	49.3	55.77	1,812.3	-1,870.6	654.7	571.4	7.864		
6,400.0	5,946.7	6,545.7	5,915.8	42.3	49.5	55.73	1,820.5	-1,878.9	657.6	574.2	7.887		
6,500.0	6,046.6	6,671.9	6,041.8	42.4	49.6	55.68	1,823.8	-1,882.3	659.0	575.8	7.917		
6,600.0	6,146.6	6,776.7	6,146.6	42.4	49.6	-1.45	1,823.9	-1,882.3	659.1	575.8	7.915		
6,700.0	6,246.6	6,876.7	6,246.6	42.4	49.6	-1.45	1,823.9	-1,882.3	659.1	575.7	7.909		
6,800.0	6,346.6	6,976.7	6,346.6	42.5	49.6	-1.45	1,823.9	-1,882.3	659.1	575.7	7.903		
6,900.0	6,446.6	7,076.7	6,446.6	42.5	49.7	-1.45	1,823.9	-1,882.3	659.1	575.6	7.898		
7,000.0	6,546.6	7,176.7	6,546.6	42.5	49.7	-1.45	1,823.9	-1,882.3	659.1	575.6	7.893		
7,100.0	6,646.6	7,276.7	6,646.6	42.5	49.7	-1.45	1,823.9	-1,882.3	659.1	575.5	7.887		
7,200.0	6,746.6	7,376.7	6,746.6	42.6	49.7	-1.45	1,823.9	-1,882.3	659.1	575.5	7.882		
7,300.0	6,846.6	7,476.7	6,846.6	42.6	49.8	-1.45	1,823.9	-1,882.3	659.1	575.4	7.876		
7,400.0	6,946.6	7,576.7	6,946.6	42.6	49.8	-1.45	1,823.9	-1,882.3	659.1	575.3	7.871		
7,500.0	7,046.6	7,676.7	7,046.6	42.6	49.8	-1.45	1,823.9	-1,882.3	659.1	575.3	7.865		
7,600.0	7,146.6	7,776.7	7,146.6	42.7	49.8	-1.45	1,823.9	-1,882.3	659.1	575.2	7.860		
7,700.0	7,246.6	7,876.7	7,246.6	42.7	49.8	-1.45	1,823.9	-1,882.3	659.1	575.2	7.854		
7,800.0	7,346.6	7,976.7	7,346.6	42.7	49.9	-1.45	1,823.9	-1,882.3	659.1	575.1	7.849		
7,900.0	7,446.6	8,076.7	7,446.6	42.8	49.9	-1.45	1,823.9	-1,882.3	659.1	575.0	7.843		
8,000.0	7,546.6	8,176.7	7,546.6	42.8	49.9	-1.45	1,823.9	-1,882.3	659.1	575.0	7.838		
8,100.0	7,646.6	8,276.7	7,646.6	42.8	49.9	-1.45	1,823.9	-1,882.3	659.1	574.9	7.832		
8,200.0	7,746.6	8,376.7	7,746.6	42.8	50.0	-1.45	1,823.9	-1,882.3	659.1	574.9	7.826		
8,300.0	7,846.6	8,476.7	7,846.6	42.9	50.0	-1.45	1,823.9	-1,882.3	659.1	574.8	7.821		
8,400.0	7,946.6	8,576.7	7,946.6	42.9	50.0	-1.45	1,823.9	-1,882.3	659.1	574.7	7.815		
8,500.0	8,046.6	8,676.7	8,046.6	42.9	50.0	-1.45	1,823.9	-1,882.3	659.1	574.7	7.810		
8,600.0	8,146.6	8,776.7	8,146.6	43.0	50.1	-1.45	1,823.9	-1,882.3	659.1	574.6	7.804		
8,700.0	8,246.6	8,876.7	8,246.6	43.0	50.1	-1.45	1,823.9	-1,882.3	659.1	574.6	7.798		
8,800.0	8,346.6	8,976.7	8,346.6	43.0	50.1	-1.45	1,823.9	-1,882.3	659.1	574.5	7.792		
8,900.0	8,446.6	9,076.7	8,446.6	43.0	50.1	-1.45	1,823.9	-1,882.3	659.1	574.4	7.787		
9,000.0	8,546.6	9,176.7	8,546.6	43.1	50.2	-1.45	1,823.9	-1,882.3	659.1	574.4	7.781		
9,096.2	8,642.8	9,272.9	8,642.8	43.1	50.2	-1.45	1,823.9	-1,882.3	659.1	574.3	7.776		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	13.7	-14.6	20.0					
100.0	100.0	100.0	100.0	0.8	0.8	-46.72	13.7	-14.6	20.0	18.4	12.623			
200.0	200.0	200.0	200.0	1.4	1.4	-46.72	13.7	-14.6	20.0	17.2	7.068			
300.0	300.0	300.0	300.0	1.7	1.9	38.91	13.7	-14.6	19.7	16.2	5.602			
400.0	399.9	399.4	399.4	2.9	2.3	44.18	14.0	-16.0	18.0	13.3	3.825			
500.0	499.6	498.7	498.5	4.3	4.0	49.77	15.1	-22.3	17.1	10.6	2.606			
545.3	544.6	543.7	543.2	4.6	4.6	50.73	15.9	-26.9	17.1	10.0	2.427	Level 1, CC		
600.0	598.8	598.1	597.1	4.9	5.2	52.17	17.1	-33.7	17.3	9.8	2.311	Level 1		
700.0	697.4	697.3	695.1	5.4	5.6	47.68	21.3	-48.9	17.7	9.6	2.178	Level 1		
800.0	795.3	796.6	792.4	6.1	6.3	47.07	28.9	-66.7	18.4	9.2	1.993	Level 2, ES		
900.0	892.4	895.8	888.9	6.9	7.0	48.92	39.6	-87.3	19.3	9.2	1.915	Level 2		
1,000.0	988.4	995.0	984.3	7.6	7.7	52.27	53.6	-110.4	20.6	9.8	1.914	Level 2, SF		
1,100.0	1,083.1	1,094.2	1,078.6	8.3	8.3	56.39	70.8	-136.2	22.3	10.9	1.963	Level 2		
1,200.0	1,176.5	1,193.3	1,171.4	8.9	9.0	60.77	91.2	-164.5	24.5	12.5	2.038	Level 1		
1,300.0	1,268.2	1,292.5	1,262.6	9.6	9.6	65.03	114.7	-195.3	27.2	14.3	2.115	Level 1		
1,400.0	1,358.9	1,391.5	1,352.1	10.1	10.2	67.08	141.2	-228.4	31.4	17.5	2.252	Level 1		
1,500.0	1,449.6	1,491.1	1,440.8	10.4	10.5	65.09	170.1	-263.5	37.7	22.4	2.466	Level 1		
1,600.0	1,540.3	1,590.9	1,529.5	10.8	10.8	63.56	199.1	-298.7	44.1	27.4	2.647			
1,700.0	1,631.0	1,690.7	1,618.3	11.1	11.2	62.42	228.1	-333.8	50.5	32.5	2.801			
1,800.0	1,721.8	1,790.5	1,707.1	11.5	11.6	61.53	257.1	-369.0	56.9	37.5	2.933			
1,900.0	1,812.5	1,890.3	1,795.8	11.9	12.0	60.82	286.1	-404.2	63.3	42.5	3.046			
2,000.0	1,903.2	1,990.1	1,884.6	12.3	12.4	60.25	315.1	-439.4	69.7	47.6	3.144			
2,100.0	1,993.9	2,089.9	1,973.4	12.8	12.9	59.77	344.1	-474.6	76.2	52.6	3.230			
2,200.0	2,084.6	2,189.7	2,062.1	13.3	13.4	59.36	373.1	-509.7	82.6	57.6	3.306			
2,300.0	2,175.4	2,289.5	2,150.9	13.8	14.1	59.02	402.1	-544.9	89.1	62.7	3.371			
2,400.0	2,266.1	2,389.2	2,239.7	14.4	14.8	58.72	431.1	-580.1	95.5	67.7	3.430			
2,500.0	2,356.8	2,489.0	2,328.4	15.1	15.6	58.46	460.1	-615.3	102.0	72.7	3.482			
2,600.0	2,447.5	2,588.8	2,417.2	15.8	16.3	58.23	489.1	-650.5	108.4	77.7	3.529			
2,700.0	2,538.2	2,688.6	2,506.0	16.5	17.2	58.02	518.1	-685.6	114.9	82.7	3.571			
2,800.0	2,629.0	2,788.4	2,594.7	17.2	18.0	57.84	547.1	-720.8	121.3	87.7	3.609			
2,900.0	2,719.7	2,888.2	2,683.5	18.0	18.8	57.68	576.1	-756.0	127.8	92.7	3.644			
3,000.0	2,810.4	2,988.0	2,772.3	18.8	19.6	57.53	605.1	-791.2	134.3	97.7	3.675			
3,100.0	2,901.1	3,087.8	2,861.0	19.5	20.5	57.39	634.1	-826.4	140.7	102.7	3.704			
3,200.0	2,991.8	3,187.6	2,949.8	20.3	21.3	57.27	663.1	-861.5	147.2	107.7	3.731			
3,300.0	3,082.5	3,287.4	3,038.6	21.1	22.2	57.16	692.1	-896.7	153.6	112.7	3.755			
3,400.0	3,173.3	3,387.1	3,127.3	21.9	23.0	57.05	721.1	-931.9	160.1	117.7	3.777			
3,500.0	3,264.0	3,486.9	3,216.1	22.6	23.8	56.96	750.1	-967.1	166.6	122.7	3.798			
3,600.0	3,354.7	3,586.7	3,304.9	23.4	24.7	56.87	779.1	-1,002.3	173.0	127.7	3.817			
3,700.0	3,445.4	3,686.5	3,393.6	24.2	25.5	56.79	808.1	-1,037.4	179.5	132.7	3.835			
3,800.0	3,536.1	3,786.3	3,482.4	25.0	26.4	56.71	837.2	-1,072.6	186.0	137.7	3.851			
3,900.0	3,626.9	3,886.1	3,571.2	25.8	27.2	56.64	866.2	-1,107.8	192.4	142.7	3.867			
4,000.0	3,717.6	3,985.9	3,659.9	26.6	28.1	56.57	895.2	-1,143.0	198.9	147.6	3.881			
4,100.0	3,808.3	4,085.7	3,748.7	27.3	28.9	56.51	924.2	-1,178.2	205.3	152.6	3.895			
4,200.0	3,899.0	4,185.5	3,837.5	28.1	29.8	56.45	953.2	-1,213.3	211.8	157.6	3.908			
4,300.0	3,989.7	4,285.3	3,926.2	28.9	30.7	56.40	982.2	-1,248.5	218.3	162.6	3.920			
4,400.0	4,080.5	4,385.1	4,015.0	29.7	31.5	56.35	1,011.2	-1,283.7	224.7	167.6	3.931			
4,500.0	4,171.2	4,484.8	4,103.8	30.5	32.4	56.30	1,040.2	-1,318.9	231.2	172.6	3.942			
4,600.0	4,261.9	4,584.6	4,192.5	31.3	33.2	56.25	1,069.2	-1,354.1	237.7	177.5	3.952			
4,700.0	4,352.6	4,684.4	4,281.3	32.1	34.1	56.21	1,098.2	-1,389.2	244.1	182.5	3.961			
4,800.0	4,443.3	4,784.2	4,370.1	32.9	34.9	56.17	1,127.2	-1,424.4	250.6	187.5	3.971			
4,900.0	4,534.1	4,884.0	4,458.8	33.7	35.8	56.13	1,156.2	-1,459.6	257.1	192.5	3.979			
5,000.0	4,624.8	4,983.8	4,547.6	34.5	36.7	56.09	1,185.2	-1,494.8	263.5	197.4	3.987			

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	4,715.5	5,083.6	4,636.3	35.2	37.5	56.05	1,214.2	-1,530.0	270.0	202.4	3.995	
5,200.0	4,806.2	5,183.4	4,725.1	36.0	38.4	56.02	1,243.2	-1,565.1	276.5	207.4	4.002	
5,300.0	4,896.9	5,283.2	4,813.9	36.8	39.2	55.99	1,272.2	-1,600.3	282.9	212.4	4.009	
5,400.0	4,987.6	5,383.0	4,902.6	37.6	40.1	55.96	1,301.2	-1,635.5	289.4	217.3	4.016	
5,500.0	5,078.4	5,482.8	4,991.4	38.4	41.0	55.93	1,330.2	-1,670.7	295.9	222.3	4.022	
5,600.0	5,169.8	5,589.6	5,087.1	39.2	41.8	55.93	1,360.4	-1,707.3	302.5	227.3	4.026	
5,700.0	5,263.0	5,698.8	5,187.1	39.8	42.7	55.92	1,388.3	-1,741.2	308.5	231.9	4.027	
5,800.0	5,357.6	5,808.3	5,289.3	40.4	43.4	55.91	1,413.3	-1,771.4	313.9	236.0	4.030	
5,900.0	5,453.6	5,918.0	5,393.5	40.9	44.0	55.89	1,435.1	-1,798.0	318.7	239.7	4.034	
6,000.0	5,550.7	6,027.9	5,499.4	41.3	44.5	55.87	1,453.8	-1,820.6	322.8	242.8	4.038	
6,100.0	5,648.7	6,138.0	5,606.8	41.7	44.9	55.84	1,469.3	-1,839.4	326.2	245.5	4.044	
6,200.0	5,747.5	6,248.2	5,715.3	42.0	45.3	55.81	1,481.4	-1,854.2	328.9	247.7	4.051	
6,300.0	5,846.9	6,358.6	5,824.8	42.2	45.5	55.77	1,490.3	-1,864.9	331.0	249.4	4.059	
6,400.0	5,946.7	6,469.0	5,934.9	42.3	45.6	55.72	1,495.8	-1,871.6	332.3	250.6	4.068	
6,500.0	6,046.6	6,579.5	6,045.3	42.4	45.7	55.67	1,497.9	-1,874.1	333.0	251.3	4.079	
6,600.0	6,146.6	6,680.9	6,146.6	42.4	45.8	-1.46	1,497.9	-1,874.2	333.0	251.3	4.075	
6,700.0	6,246.6	6,780.9	6,246.6	42.4	45.8	-1.46	1,497.9	-1,874.2	333.0	251.2	4.072	
6,800.0	6,346.6	6,880.9	6,346.6	42.5	45.8	-1.46	1,497.9	-1,874.2	333.0	251.2	4.069	
6,900.0	6,446.6	6,980.9	6,446.6	42.5	45.8	-1.46	1,497.9	-1,874.2	333.0	251.1	4.067	
7,000.0	6,546.6	7,080.9	6,546.6	42.5	45.9	-1.46	1,497.9	-1,874.2	333.0	251.1	4.064	
7,100.0	6,646.6	7,180.9	6,646.6	42.5	45.9	-1.46	1,497.9	-1,874.2	333.0	251.0	4.061	
7,200.0	6,746.6	7,280.9	6,746.6	42.6	45.9	-1.46	1,497.9	-1,874.2	333.0	250.9	4.058	
7,300.0	6,846.6	7,380.9	6,846.6	42.6	45.9	-1.46	1,497.9	-1,874.2	333.0	250.9	4.055	
7,400.0	6,946.6	7,480.9	6,946.6	42.6	46.0	-1.46	1,497.9	-1,874.2	333.0	250.8	4.052	
7,500.0	7,046.6	7,580.9	7,046.6	42.6	46.0	-1.46	1,497.9	-1,874.2	333.0	250.8	4.049	
7,600.0	7,146.6	7,680.9	7,146.6	42.7	46.0	-1.46	1,497.9	-1,874.2	333.0	250.7	4.046	
7,700.0	7,246.6	7,780.9	7,246.6	42.7	46.0	-1.46	1,497.9	-1,874.2	333.0	250.6	4.043	
7,800.0	7,346.6	7,880.9	7,346.6	42.7	46.1	-1.46	1,497.9	-1,874.2	333.0	250.6	4.040	
7,900.0	7,446.6	7,980.9	7,446.6	42.8	46.1	-1.46	1,497.9	-1,874.2	333.0	250.5	4.037	
8,000.0	7,546.6	8,080.9	7,546.6	42.8	46.1	-1.46	1,497.9	-1,874.2	333.0	250.5	4.034	
8,100.0	7,646.6	8,180.9	7,646.6	42.8	46.1	-1.46	1,497.9	-1,874.2	333.0	250.4	4.031	
8,200.0	7,746.6	8,280.9	7,746.6	42.8	46.2	-1.46	1,497.9	-1,874.2	333.0	250.3	4.028	
8,211.9	7,758.5	8,292.7	7,758.5	42.8	46.2	-1.46	1,497.9	-1,874.2	333.0	250.3	4.028	
8,300.0	7,846.6	8,368.2	7,834.0	42.9	46.2	-1.46	1,497.9	-1,874.2	333.2	250.1	4.008	
8,400.0	7,946.6	8,368.2	7,834.0	42.9	46.2	-1.46	1,497.9	-1,874.2	351.5	268.2	4.221	
8,500.0	8,046.6	8,368.2	7,834.0	42.9	46.2	-1.46	1,497.9	-1,874.2	395.1	316.0	4.994	
8,600.0	8,146.6	8,368.2	7,834.0	43.0	46.2	-1.46	1,497.9	-1,874.2	456.8	383.2	6.210	
8,700.0	8,246.6	8,368.2	7,834.0	43.0	46.2	-1.46	1,497.9	-1,874.2	530.2	461.9	7.760	
8,800.0	8,346.6	8,368.2	7,834.0	43.0	46.2	-1.46	1,497.9	-1,874.2	611.3	547.3	9.553	
8,900.0	8,446.6	8,368.2	7,834.0	43.0	46.2	-1.46	1,497.9	-1,874.2	697.3	636.7	11.517	
9,000.0	8,546.6	8,368.2	7,834.0	43.1	46.2	-1.46	1,497.9	-1,874.2	786.6	728.7	13.600	
9,096.2	8,642.8	8,368.2	7,834.0	43.1	46.2	-1.46	1,497.9	-1,874.2	874.7	818.5	15.584	

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	133.28	-6.8	7.3	10.0				
100.0	100.0	100.0	100.0	0.8	0.8	133.28	-6.8	7.3	10.0	8.4	6.307		
200.0	200.0	200.0	200.0	1.4	1.4	133.28	-6.8	7.3	10.0	7.2	3.532	CC	
204.4	204.4	204.4	204.4	1.4	1.4	-141.73	-6.8	7.3	10.0	7.1	3.494		
300.0	300.0	300.0	300.0	1.7	1.9	-142.93	-6.8	7.3	10.3	6.7	2.916	ES	
400.0	399.9	400.3	400.3	2.9	2.2	-149.96	-6.8	6.0	12.6	7.7	2.592		
500.0	499.6	500.7	500.6	4.3	3.6	-153.72	-6.8	0.5	15.3	8.0	2.107	Level 1	
600.0	598.8	601.3	600.7	4.9	4.8	-157.18	-6.8	-9.4	18.2	9.3	2.037	Level 1, SF	
700.0	697.4	702.0	700.3	5.4	5.8	-160.09	-6.8	-23.7	21.6	11.7	2.176	Level 1	
800.0	795.3	802.8	799.4	6.1	6.0	-156.51	-6.0	-42.0	25.8	15.5	2.503		
900.0	892.4	903.9	898.1	6.9	6.6	-153.29	-2.3	-63.8	30.5	19.4	2.750		
1,000.0	988.4	1,005.1	995.9	7.6	7.3	-150.56	4.3	-88.8	35.6	23.5	2.954		
1,100.0	1,083.1	1,106.6	1,092.8	8.3	8.0	-148.18	13.9	-117.1	40.8	27.8	3.140		
1,200.0	1,176.5	1,208.2	1,188.6	8.9	8.6	-146.08	26.3	-148.7	46.3	32.3	3.312		
1,300.0	1,268.2	1,310.0	1,283.1	9.6	9.2	-144.18	41.6	-183.4	51.9	36.9	3.458		
1,400.0	1,358.9	1,410.2	1,374.9	10.1	9.5	-141.47	58.6	-219.6	57.4	41.7	3.652		
1,500.0	1,449.6	1,510.0	1,466.4	10.4	9.9	-139.15	75.6	-255.7	62.8	46.4	3.817		
1,600.0	1,540.3	1,609.8	1,557.9	10.8	10.2	-137.21	92.5	-291.8	68.4	51.0	3.941		
1,700.0	1,631.0	1,709.6	1,649.4	11.1	10.6	-135.55	109.5	-327.9	74.0	55.6	4.032		
1,800.0	1,721.8	1,809.4	1,741.0	11.5	11.0	-134.13	126.5	-364.0	79.7	60.2	4.099		
1,900.0	1,812.5	1,909.3	1,832.5	11.9	11.4	-132.90	143.4	-400.1	85.4	64.8	4.148		
2,000.0	1,903.2	2,009.1	1,924.0	12.3	11.8	-131.83	160.4	-436.2	91.1	69.3	4.181		
2,100.0	1,993.9	2,108.9	2,015.5	12.8	12.3	-130.88	177.3	-472.3	96.9	73.9	4.205		
2,200.0	2,084.6	2,208.7	2,107.0	13.3	12.7	-130.04	194.3	-508.4	102.7	78.4	4.221		
2,300.0	2,175.4	2,308.5	2,198.5	13.8	13.3	-129.29	211.3	-544.5	108.5	82.9	4.232		
2,400.0	2,266.1	2,408.4	2,290.0	14.4	13.8	-128.62	228.2	-580.6	114.3	87.4	4.238		
2,500.0	2,356.8	2,508.2	2,381.5	15.1	14.4	-128.01	245.2	-616.7	120.2	91.9	4.241		
2,600.0	2,447.5	2,608.0	2,473.0	15.8	15.1	-127.46	262.1	-652.8	126.1	96.3	4.242		
2,700.0	2,538.2	2,707.8	2,564.5	16.5	15.7	-126.95	279.1	-688.9	131.9	100.8	4.241		
2,800.0	2,629.0	2,807.6	2,656.0	17.2	16.4	-126.49	296.1	-725.0	137.8	105.3	4.239		
2,900.0	2,719.7	2,907.5	2,747.5	18.0	17.1	-126.07	313.0	-761.1	143.7	109.8	4.236		
3,000.0	2,810.4	3,007.3	2,839.0	18.8	17.9	-125.68	330.0	-797.1	149.6	114.3	4.233		
3,100.0	2,901.1	3,107.1	2,930.5	19.5	18.6	-125.32	346.9	-833.2	155.5	118.7	4.229		
3,200.0	2,991.8	3,206.9	3,022.0	20.3	19.3	-124.99	363.9	-869.3	161.4	123.2	4.225		
3,300.0	3,082.5	3,306.8	3,113.6	21.1	20.0	-124.68	380.9	-905.4	167.3	127.7	4.220		
3,400.0	3,173.3	3,406.6	3,205.1	21.9	20.8	-124.39	397.8	-941.5	173.2	132.1	4.215		
3,500.0	3,264.0	3,506.4	3,296.6	22.6	21.5	-124.12	414.8	-977.6	179.2	136.6	4.211		
3,600.0	3,354.7	3,606.2	3,388.1	23.4	22.2	-123.87	431.7	-1,013.7	185.1	141.1	4.206		
3,700.0	3,445.4	3,706.0	3,479.6	24.2	23.0	-123.63	448.7	-1,049.8	191.0	145.6	4.201		
3,800.0	3,536.1	3,805.9	3,571.1	25.0	23.7	-123.41	465.7	-1,085.9	197.0	150.0	4.197		
3,900.0	3,626.9	3,905.7	3,662.6	25.8	24.5	-123.20	482.6	-1,122.0	202.9	154.5	4.192		
4,000.0	3,717.6	4,005.5	3,754.1	26.6	25.2	-123.01	499.6	-1,158.1	208.8	159.0	4.188		
4,100.0	3,808.3	4,105.3	3,845.6	27.3	25.9	-122.82	516.5	-1,194.2	214.8	163.4	4.184		
4,200.0	3,899.0	4,205.1	3,937.1	28.1	26.7	-122.64	533.5	-1,230.3	220.7	167.9	4.179		
4,300.0	3,989.7	4,305.0	4,028.6	28.9	27.4	-122.48	550.5	-1,266.4	226.7	172.4	4.175		
4,400.0	4,080.5	4,404.8	4,120.1	29.7	28.2	-122.32	567.4	-1,302.5	232.6	176.8	4.171		
4,500.0	4,171.2	4,504.6	4,211.6	30.5	28.9	-122.17	584.4	-1,338.6	238.5	181.3	4.167		
4,600.0	4,261.9	4,604.4	4,303.1	31.3	29.7	-122.02	601.3	-1,374.7	244.5	185.8	4.164		
4,700.0	4,352.6	4,704.2	4,394.7	32.1	30.4	-121.89	618.3	-1,410.8	250.4	190.2	4.160		
4,800.0	4,443.3	4,804.1	4,486.2	32.9	31.2	-121.76	635.2	-1,446.9	256.4	194.7	4.157		
4,900.0	4,534.1	4,903.9	4,577.7	33.7	31.9	-121.63	652.2	-1,483.0	262.4	199.2	4.153		
5,000.0	4,624.8	5,003.7	4,669.2	34.5	32.7	-121.51	669.2	-1,519.1	268.3	203.7	4.150		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	4,715.5	5,103.5	4,760.7	35.2	33.4	-121.40	686.1	-1,555.2	274.3	208.1	4.147		
5,200.0	4,806.2	5,203.4	4,852.2	36.0	34.2	-121.29	703.1	-1,591.3	280.2	212.6	4.143		
5,300.0	4,896.9	5,303.2	4,943.7	36.8	34.9	-121.19	720.0	-1,627.4	286.2	217.1	4.140		
5,400.0	4,987.6	5,403.0	5,035.2	37.6	35.7	-121.09	737.0	-1,663.5	292.1	221.5	4.137		
5,500.0	5,078.4	5,502.4	5,126.3	38.4	36.4	-120.99	753.9	-1,699.4	298.1	226.0	4.135		
5,600.0	5,169.8	5,600.0	5,216.6	39.2	37.1	-121.08	769.7	-1,733.0	304.0	230.5	4.136		
5,700.0	5,263.0	5,692.3	5,303.3	39.8	37.7	-121.17	783.1	-1,761.5	309.2	234.5	4.140		
5,800.0	5,357.6	5,787.0	5,393.6	40.4	38.2	-121.26	795.2	-1,787.5	314.0	238.2	4.142		
5,900.0	5,453.6	5,881.6	5,484.9	40.9	38.6	-121.34	805.8	-1,810.0	318.1	241.3	4.145		
6,000.0	5,550.7	5,976.2	5,577.1	41.3	39.0	-121.42	814.8	-1,829.1	321.6	244.1	4.148		
6,100.0	5,648.7	6,070.8	5,670.0	41.7	39.3	-121.50	822.1	-1,844.7	324.5	246.3	4.151		
6,200.0	5,747.5	6,165.3	5,763.6	42.0	39.6	-121.56	827.8	-1,856.9	326.8	248.1	4.154		
6,300.0	5,846.9	6,259.8	5,857.6	42.2	39.7	-121.63	831.9	-1,865.5	328.5	249.5	4.157		
6,400.0	5,946.7	6,354.3	5,951.9	42.3	39.8	-121.69	834.3	-1,870.6	329.6	250.3	4.159		
6,500.0	6,046.6	6,449.0	6,046.6	42.4	39.9	-121.74	835.1	-1,872.2	330.0	250.7	4.160		
6,600.0	6,146.6	6,549.0	6,146.6	42.4	39.9	-178.87	835.1	-1,872.2	330.0	250.6	4.156		
6,700.0	6,246.6	6,649.0	6,246.6	42.4	39.9	-178.87	835.1	-1,872.2	330.0	250.6	4.153		
6,800.0	6,346.6	6,749.0	6,346.6	42.5	40.0	-178.87	835.1	-1,872.2	330.0	250.5	4.150		
6,900.0	6,446.6	6,849.0	6,446.6	42.5	40.0	-178.87	835.1	-1,872.2	330.0	250.5	4.147		
7,000.0	6,546.6	6,949.0	6,546.6	42.5	40.0	-178.87	835.1	-1,872.2	330.0	250.4	4.144		
7,100.0	6,646.6	7,049.0	6,646.6	42.5	40.1	-178.87	835.1	-1,872.2	330.0	250.3	4.140		
7,200.0	6,746.6	7,149.0	6,746.6	42.6	40.1	-178.87	835.1	-1,872.2	330.0	250.3	4.137		
7,300.0	6,846.6	7,249.0	6,846.6	42.6	40.1	-178.87	835.1	-1,872.2	330.0	250.2	4.134		
7,400.0	6,946.6	7,349.0	6,946.6	42.6	40.1	-178.87	835.1	-1,872.2	330.0	250.2	4.131		
7,500.0	7,046.6	7,449.0	7,046.6	42.6	40.2	-178.87	835.1	-1,872.2	330.0	250.1	4.128		
7,600.0	7,146.6	7,549.0	7,146.6	42.7	40.2	-178.87	835.1	-1,872.2	330.0	250.0	4.125		
7,700.0	7,246.6	7,649.0	7,246.6	42.7	40.2	-178.87	835.1	-1,872.2	330.0	250.0	4.122		
7,800.0	7,346.6	7,749.0	7,346.6	42.7	40.3	-178.87	835.1	-1,872.2	330.0	249.9	4.119		
7,900.0	7,446.6	7,849.0	7,446.6	42.8	40.3	-178.87	835.1	-1,872.2	330.0	249.9	4.116		
8,000.0	7,546.6	7,949.0	7,546.6	42.8	40.3	-178.87	835.1	-1,872.2	330.0	249.8	4.112		
8,100.0	7,646.6	8,049.0	7,646.6	42.8	40.3	-178.87	835.1	-1,872.2	330.0	249.7	4.109		
8,200.0	7,746.6	8,149.0	7,746.6	42.8	40.4	-178.87	835.1	-1,872.2	330.0	249.7	4.106		
8,202.6	7,749.2	8,151.6	7,749.2	42.8	40.4	-178.87	835.1	-1,872.2	330.0	249.7	4.106		
8,300.0	7,846.6	8,219.4	7,817.0	42.9	40.4	-178.87	835.1	-1,872.2	331.4	252.0	4.175		
8,400.0	7,946.6	8,219.4	7,817.0	42.9	40.4	-178.87	835.1	-1,872.2	354.6	281.8	4.869		
8,500.0	8,046.6	8,219.4	7,817.0	42.9	40.4	-178.87	835.1	-1,872.2	402.1	337.7	6.245		
8,600.0	8,146.6	8,219.4	7,817.0	43.0	40.4	-178.87	835.1	-1,872.2	466.5	409.6	8.211		
8,700.0	8,246.6	8,219.4	7,817.0	43.0	40.4	-178.87	835.1	-1,872.2	541.8	490.7	10.616		
8,800.0	8,346.6	8,219.4	7,817.0	43.0	40.4	-178.87	835.1	-1,872.2	624.0	577.1	13.300		
8,900.0	8,446.6	8,219.4	7,817.0	43.0	40.4	-178.87	835.1	-1,872.2	710.9	666.8	16.124		
9,000.0	8,546.6	8,219.4	7,817.0	43.1	40.4	-178.87	835.1	-1,872.2	800.8	758.6	18.992		
9,096.2	8,642.8	8,219.4	7,817.0	43.1	40.4	-178.87	835.1	-1,872.2	889.3	848.4	21.735		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	133.28	-20.6	21.8	30.0				
100.0	100.0	100.0	100.0	0.8	0.8	133.28	-20.6	21.8	30.0	28.4	18.930		
200.0	200.0	200.0	200.0	1.4	1.4	133.28	-20.6	21.8	30.0	27.2	10.600	CC	
204.4	204.4	204.4	204.4	1.4	1.4	-141.73	-20.6	21.8	30.0	27.1	10.487		
300.0	300.0	300.0	300.0	1.7	1.9	-142.13	-20.6	21.8	30.3	26.7	8.594	ES	
400.0	399.9	400.5	400.5	2.9	2.1	-145.64	-20.6	21.3	33.0	28.3	7.067		
500.0	499.6	501.6	501.5	4.3	3.2	-148.59	-20.6	16.8	36.5	29.7	5.380		
600.0	598.8	602.9	602.4	4.9	4.5	-152.57	-20.6	7.9	40.2	31.7	4.739		
700.0	697.4	704.4	702.9	5.4	5.5	-159.28	-20.6	-5.5	44.5	34.8	4.590	SF	
800.0	795.3	806.0	803.1	6.1	5.9	-160.02	-20.2	-23.3	49.5	39.1	4.742		
900.0	892.4	908.0	902.7	6.9	6.4	-158.54	-17.9	-45.1	55.0	43.7	4.849		
1,000.0	988.4	1,010.1	1,001.4	7.6	7.2	-155.91	-13.5	-70.8	61.1	48.8	4.956		
1,100.0	1,083.1	1,112.4	1,099.0	8.3	7.9	-152.64	-6.8	-100.3	67.8	54.6	5.144		
1,200.0	1,176.5	1,214.7	1,195.3	8.9	8.6	-149.05	2.0	-133.6	75.4	61.4	5.399		
1,300.0	1,268.2	1,315.9	1,289.1	9.6	9.1	-145.53	12.8	-170.0	84.2	69.5	5.731		
1,400.0	1,358.9	1,415.2	1,380.9	10.1	9.4	-142.19	23.7	-206.4	94.9	79.6	6.187		
1,500.0	1,449.6	1,514.4	1,472.6	10.4	9.7	-139.47	34.7	-242.8	105.9	89.8	6.592		
1,600.0	1,540.3	1,613.7	1,564.3	10.8	10.1	-137.27	45.6	-279.2	117.1	100.2	6.909		
1,700.0	1,631.0	1,713.0	1,656.0	11.1	10.4	-135.45	56.5	-315.6	128.5	110.5	7.157		
1,800.0	1,721.8	1,812.3	1,747.7	11.5	10.8	-133.93	67.5	-352.0	139.9	120.9	7.349		
1,900.0	1,812.5	1,911.6	1,839.5	11.9	11.2	-132.64	78.4	-388.4	151.5	131.3	7.500		
2,000.0	1,903.2	2,010.8	1,931.2	12.3	11.6	-131.53	89.4	-424.7	163.1	141.6	7.618		
2,100.0	1,993.9	2,110.1	2,022.9	12.8	12.0	-130.57	100.3	-461.1	174.7	152.0	7.712		
2,200.0	2,084.6	2,209.4	2,114.6	13.3	12.5	-129.73	111.2	-497.5	186.4	162.5	7.787		
2,300.0	2,175.4	2,308.7	2,206.3	13.8	12.9	-128.99	122.2	-533.9	198.1	172.9	7.847		
2,400.0	2,266.1	2,408.0	2,298.1	14.4	13.4	-128.33	133.1	-570.3	209.9	183.3	7.896		
2,500.0	2,356.8	2,507.2	2,389.8	15.1	13.9	-127.75	144.1	-606.7	221.7	193.7	7.936		
2,600.0	2,447.5	2,606.5	2,481.5	15.8	14.4	-127.22	155.0	-643.1	233.5	204.2	7.969		
2,700.0	2,538.2	2,705.8	2,573.2	16.5	15.1	-126.74	165.9	-679.5	245.3	214.6	7.997		
2,800.0	2,629.0	2,805.1	2,664.9	17.2	15.7	-126.31	176.9	-715.9	257.1	225.1	8.020		
2,900.0	2,719.7	2,904.4	2,756.7	18.0	16.4	-125.91	187.8	-752.3	269.0	235.5	8.039		
3,000.0	2,810.4	3,003.6	2,848.4	18.8	17.1	-125.55	198.8	-788.7	280.8	246.0	8.056		
3,100.0	2,901.1	3,102.9	2,940.1	19.5	17.8	-125.22	209.7	-825.0	292.7	256.4	8.070		
3,200.0	2,991.8	3,202.2	3,031.8	20.3	18.5	-124.91	220.7	-861.4	304.6	266.9	8.082		
3,300.0	3,082.5	3,301.5	3,123.5	21.1	19.2	-124.63	231.6	-897.8	316.5	277.4	8.092		
3,400.0	3,173.3	3,400.7	3,215.2	21.9	19.9	-124.36	242.5	-934.2	328.4	287.8	8.101		
3,500.0	3,264.0	3,500.0	3,307.0	22.6	20.6	-124.12	253.5	-970.6	340.3	298.3	8.109		
3,600.0	3,354.7	3,599.3	3,398.7	23.4	21.3	-123.89	264.4	-1,007.0	352.2	308.8	8.115		
3,700.0	3,445.4	3,698.6	3,490.4	24.2	22.0	-123.68	275.4	-1,043.4	364.1	319.3	8.121		
3,800.0	3,536.1	3,797.9	3,582.1	25.0	22.7	-123.48	286.3	-1,079.8	376.0	329.7	8.126		
3,900.0	3,626.9	3,897.1	3,673.8	25.8	23.4	-123.29	297.2	-1,116.2	387.9	340.2	8.130		
4,000.0	3,717.6	3,996.4	3,765.6	26.6	24.1	-123.11	308.2	-1,152.6	399.9	350.7	8.134		
4,100.0	3,808.3	4,095.7	3,857.3	27.3	24.9	-122.95	319.1	-1,188.9	411.8	361.2	8.138		
4,200.0	3,899.0	4,195.0	3,949.0	28.1	25.6	-122.79	330.1	-1,225.3	423.7	371.7	8.141		
4,300.0	3,989.7	4,294.3	4,040.7	28.9	26.3	-122.64	341.0	-1,261.7	435.7	382.2	8.143		
4,400.0	4,080.5	4,393.5	4,132.4	29.7	27.0	-122.50	351.9	-1,298.1	447.6	392.6	8.146		
4,500.0	4,171.2	4,492.8	4,224.2	30.5	27.7	-122.37	362.9	-1,334.5	459.5	403.1	8.148		
4,600.0	4,261.9	4,592.1	4,315.9	31.3	28.4	-122.24	373.8	-1,370.9	471.5	413.6	8.150		
4,700.0	4,352.6	4,691.4	4,407.6	32.1	29.1	-122.12	384.8	-1,407.3	483.4	424.1	8.151		
4,800.0	4,443.3	4,790.7	4,499.3	32.9	29.9	-122.01	395.7	-1,443.7	495.4	434.6	8.153		
4,900.0	4,534.1	4,889.9	4,591.0	33.7	30.6	-121.90	406.6	-1,480.1	507.3	445.1	8.154		
5,000.0	4,624.8	4,989.2	4,682.8	34.5	31.3	-121.79	417.6	-1,516.5	519.3	455.6	8.155		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	4,715.5	5,088.5	4,774.5	35.2	32.0	-121.69	428.5	-1,552.9	531.2	466.1	8.156	
5,200.0	4,806.2	5,187.8	4,866.2	36.0	32.7	-121.60	439.5	-1,589.2	543.2	476.6	8.157	
5,300.0	4,896.9	5,287.1	4,957.9	36.8	33.4	-121.51	450.4	-1,625.6	555.1	487.1	8.158	
5,400.0	4,987.6	5,386.3	5,049.6	37.6	34.2	-121.42	461.3	-1,662.0	567.1	497.6	8.159	
5,500.0	5,078.4	5,485.6	5,141.3	38.4	34.9	-121.34	472.3	-1,698.4	579.0	508.1	8.159	
5,600.0	5,169.8	5,579.4	5,228.5	39.2	35.5	-121.47	482.3	-1,731.6	590.4	518.1	8.166	
5,700.0	5,263.0	5,672.1	5,315.9	39.8	36.1	-121.60	491.1	-1,761.1	600.7	527.2	8.171	
5,800.0	5,357.6	5,764.8	5,404.5	40.4	36.6	-121.73	499.0	-1,787.3	609.8	535.2	8.176	
5,900.0	5,453.6	5,857.5	5,494.1	40.9	37.0	-121.84	505.8	-1,809.9	617.8	542.3	8.181	
6,000.0	5,550.7	5,950.3	5,584.7	41.3	37.4	-121.95	511.6	-1,829.1	624.6	548.3	8.186	
6,100.0	5,648.7	6,043.1	5,676.0	41.7	37.7	-122.05	516.3	-1,844.7	630.2	553.2	8.190	
6,200.0	5,747.5	6,135.9	5,768.0	42.0	37.9	-122.13	519.9	-1,856.8	634.6	557.2	8.193	
6,300.0	5,846.9	6,228.7	5,860.3	42.2	38.1	-122.21	522.5	-1,865.4	637.8	560.0	8.195	
6,400.0	5,946.7	6,321.4	5,953.0	42.3	38.2	-122.28	524.0	-1,870.3	639.9	561.8	8.194	
6,500.0	6,046.6	6,415.1	6,046.6	42.4	38.2	-122.34	524.4	-1,871.7	640.7	562.4	8.187	
6,600.0	6,146.6	6,515.1	6,146.6	42.4	38.3	-179.46	524.4	-1,871.7	640.7	562.3	8.174	
6,700.0	6,246.6	6,615.1	6,246.6	42.4	38.3	-179.46	524.4	-1,871.7	640.7	562.2	8.168	
6,800.0	6,346.6	6,715.1	6,346.6	42.5	38.4	-179.46	524.4	-1,871.7	640.7	562.2	8.162	
6,900.0	6,446.6	6,815.1	6,446.6	42.5	38.4	-179.46	524.4	-1,871.7	640.7	562.1	8.156	
7,000.0	6,546.6	6,915.1	6,546.6	42.5	38.4	-179.46	524.4	-1,871.7	640.7	562.1	8.150	
7,100.0	6,646.6	7,015.1	6,646.6	42.5	38.4	-179.46	524.4	-1,871.7	640.7	562.0	8.144	
7,200.0	6,746.6	7,115.1	6,746.6	42.6	38.5	-179.46	524.4	-1,871.7	640.7	562.0	8.138	
7,300.0	6,846.6	7,215.1	6,846.6	42.6	38.5	-179.46	524.4	-1,871.7	640.7	561.9	8.132	
7,400.0	6,946.6	7,315.1	6,946.6	42.6	38.5	-179.46	524.4	-1,871.7	640.7	561.8	8.125	
7,500.0	7,046.6	7,415.1	7,046.6	42.6	38.6	-179.46	524.4	-1,871.7	640.7	561.8	8.119	
7,600.0	7,146.6	7,515.1	7,146.6	42.7	38.6	-179.46	524.4	-1,871.7	640.7	561.7	8.113	
7,700.0	7,246.6	7,615.1	7,246.6	42.7	38.6	-179.46	524.4	-1,871.7	640.7	561.7	8.107	
7,800.0	7,346.6	7,715.1	7,346.6	42.7	38.7	-179.46	524.4	-1,871.7	640.7	561.6	8.100	
7,900.0	7,446.6	7,815.1	7,446.6	42.8	38.7	-179.46	524.4	-1,871.7	640.7	561.5	8.094	
8,000.0	7,546.6	7,915.1	7,546.6	42.8	38.7	-179.46	524.4	-1,871.7	640.7	561.5	8.088	
8,100.0	7,646.6	8,015.1	7,646.6	42.8	38.8	-179.46	524.4	-1,871.7	640.7	561.4	8.082	
8,200.0	7,746.6	8,115.1	7,746.6	42.8	38.8	-179.46	524.4	-1,871.7	640.7	561.3	8.075	
8,300.0	7,846.6	8,215.1	7,846.6	42.9	38.8	-179.46	524.4	-1,871.7	640.7	561.3	8.069	
8,400.0	7,946.6	8,315.1	7,946.6	42.9	38.8	-179.46	524.4	-1,871.7	640.7	561.2	8.062	
8,500.0	8,046.6	8,415.1	8,046.6	42.9	38.9	-179.46	524.4	-1,871.7	640.7	561.2	8.056	
8,600.0	8,146.6	8,515.1	8,146.6	43.0	38.9	-179.46	524.4	-1,871.7	640.7	561.1	8.050	
8,700.0	8,246.6	8,615.1	8,246.6	43.0	38.9	-179.46	524.4	-1,871.7	640.7	561.0	8.043	
8,800.0	8,346.6	8,715.1	8,346.6	43.0	39.0	-179.46	524.4	-1,871.7	640.7	561.0	8.037	
8,900.0	8,446.6	8,815.1	8,446.6	43.0	39.0	-179.46	524.4	-1,871.7	640.7	560.9	8.030	
9,000.0	8,546.6	8,915.1	8,546.6	43.1	39.0	-179.46	524.4	-1,871.7	640.7	560.8	8.024	
9,009.2	8,555.9	8,924.4	8,555.9	43.1	39.0	-179.46	524.4	-1,871.7	640.7	560.8	8.023	
9,096.2	8,642.8	8,994.5	8,626.0	43.1	39.1	-179.46	524.4	-1,871.7	640.9	561.2	8.044	

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	-32.71	34.7	-22.3	41.2				
100.0	100.0	100.0	100.0	0.8	0.8	-32.71	34.7	-22.3	41.2	39.7	26.034		
200.0	200.0	200.0	200.0	1.4	1.4	-32.71	34.7	-22.3	41.2	38.4	14.577	CC	
300.0	300.0	299.2	299.2	1.7	2.1	54.53	36.1	-21.5	41.8	38.3	11.810		
400.0	399.9	397.8	397.6	2.9	3.6	65.30	41.1	-18.7	43.2	38.2	8.579	ES	
500.0	499.6	495.1	494.4	4.3	4.7	82.74	49.6	-13.9	48.8	42.1	7.326	SF	
600.0	598.8	590.5	588.8	4.9	5.7	98.11	61.5	-7.3	62.6	54.3	7.558		
700.0	697.4	683.6	680.3	5.4	6.5	102.98	76.3	1.1	84.1	74.1	8.387		
800.0	795.3	774.4	768.9	6.1	7.2	106.61	94.0	10.9	111.7	100.2	9.696		
900.0	892.4	862.7	854.1	6.9	7.9	109.08	114.0	22.2	144.8	132.2	11.476		
1,000.0	988.4	948.2	935.8	7.6	8.5	110.70	136.1	34.6	182.8	169.3	13.498		
1,100.0	1,083.1	1,030.9	1,013.8	8.3	9.1	111.71	160.0	48.0	225.4	210.9	15.645		
1,200.0	1,176.5	1,110.6	1,088.0	8.9	9.6	112.28	185.4	62.2	272.1	256.8	17.868		
1,300.0	1,268.2	1,187.2	1,158.3	9.6	10.1	112.49	211.9	77.1	322.7	306.6	20.111		
1,400.0	1,358.9	1,261.2	1,225.3	10.1	10.5	114.58	239.4	92.5	376.6	359.8	22.417		
1,500.0	1,449.6	1,333.1	1,289.3	10.4	11.0	116.07	267.9	108.5	432.9	415.4	24.702		
1,600.0	1,540.3	1,400.0	1,347.9	10.8	11.4	117.00	296.0	124.2	491.5	473.3	27.011		
1,700.0	1,631.0	1,470.4	1,408.5	11.1	11.8	117.62	327.2	141.7	552.0	533.0	29.071		
1,800.0	1,721.8	1,535.7	1,463.8	11.5	12.1	117.95	357.5	158.7	614.2	594.6	31.262		
1,900.0	1,812.5	1,609.4	1,525.3	11.9	12.3	118.16	392.9	178.6	677.8	657.4	33.190		
2,000.0	1,903.2	1,686.5	1,589.7	12.3	12.5	118.33	430.0	199.4	741.4	720.1	34.819		
2,100.0	1,993.9	1,763.7	1,654.1	12.8	12.8	118.48	467.1	220.2	805.0	782.8	36.265		
2,200.0	2,084.6	1,840.9	1,718.5	13.3	13.1	118.60	504.1	241.0	868.6	845.4	37.555		
2,300.0	2,175.4	1,918.0	1,782.9	13.8	13.3	118.71	541.2	261.8	932.2	908.1	38.708		
2,400.0	2,266.1	1,995.2	1,847.3	14.4	13.6	118.80	578.3	282.6	995.8	970.7	39.741		
2,500.0	2,356.8	2,072.3	1,911.7	15.1	13.9	118.88	615.4	303.4	1,059.4	1,033.3	40.669		
2,600.0	2,447.5	2,149.5	1,976.0	15.8	14.2	118.96	652.5	324.1	1,123.0	1,095.9	41.506		
2,700.0	2,538.2	2,226.6	2,040.4	16.5	14.5	119.02	689.5	344.9	1,186.6	1,158.5	42.265		
2,800.0	2,629.0	2,303.8	2,104.8	17.2	14.8	119.08	726.6	365.7	1,250.2	1,221.1	42.939		
2,900.0	2,719.7	2,381.0	2,169.2	18.0	15.3	119.13	763.7	386.5	1,313.8	1,283.6	43.529		
3,000.0	2,810.4	2,458.1	2,233.6	18.8	16.1	119.18	800.8	407.3	1,377.4	1,346.2	44.109		
3,100.0	2,901.1	2,535.3	2,298.0	19.5	16.8	119.23	837.9	428.1	1,441.0	1,408.7	44.625		
3,200.0	2,991.8	2,612.4	2,362.4	20.3	17.5	119.27	875.0	448.9	1,504.6	1,471.3	45.095		
3,300.0	3,082.5	2,689.6	2,426.8	21.1	18.2	119.30	912.0	469.7	1,568.2	1,533.8	45.523		
3,400.0	3,173.3	2,766.7	2,491.1	21.9	19.0	119.34	949.1	490.5	1,631.8	1,596.3	45.915		
3,500.0	3,264.0	2,843.9	2,555.5	22.6	19.7	119.37	986.2	511.3	1,695.5	1,658.8	46.277		
3,600.0	3,354.7	2,921.1	2,619.9	23.4	20.4	119.40	1,023.3	532.1	1,759.1	1,721.3	46.611		
3,700.0	3,445.4	2,998.2	2,684.3	24.2	21.1	119.43	1,060.4	552.9	1,822.7	1,783.8	46.920		
3,800.0	3,536.1	3,075.4	2,748.7	25.0	21.9	119.45	1,097.4	573.7	1,886.3	1,846.3	47.204		
3,900.0	3,626.9	3,152.5	2,813.1	25.8	22.6	119.47	1,134.5	594.5	1,949.9	1,908.8	47.468		
4,000.0	3,717.6	3,229.7	2,877.5	26.6	23.3	119.50	1,171.6	615.3	2,013.5	1,971.3	47.713		
4,100.0	3,808.3	3,306.8	2,941.9	27.3	24.0	119.52	1,208.7	636.1	2,077.1	2,033.8	47.942		
4,200.0	3,899.0	3,384.0	3,006.2	28.1	24.8	119.54	1,245.8	656.9	2,140.7	2,096.3	48.155		
4,300.0	3,989.7	3,461.2	3,070.6	28.9	25.5	119.56	1,282.9	677.7	2,204.3	2,158.8	48.353		
4,400.0	4,080.5	3,538.3	3,135.0	29.7	26.2	119.57	1,319.9	698.5	2,268.0	2,221.2	48.539		
4,500.0	4,171.2	3,615.5	3,199.4	30.5	27.0	119.59	1,357.0	719.3	2,331.6	2,283.7	48.713		
4,600.0	4,261.9	3,692.6	3,263.8	31.3	27.7	119.61	1,394.1	740.1	2,395.2	2,346.2	48.876		
4,700.0	4,352.6	3,769.8	3,328.2	32.1	28.4	119.62	1,431.2	760.8	2,458.8	2,408.6	49.029		
4,800.0	4,443.3	3,846.9	3,392.6	32.9	29.1	119.63	1,468.3	781.6	2,522.4	2,471.1	49.173		
4,900.0	4,534.1	3,924.1	3,457.0	33.7	29.9	119.65	1,505.3	802.4	2,586.0	2,533.6	49.308		
5,000.0	4,624.8	4,001.3	3,521.4	34.5	30.6	119.66	1,542.4	823.2	2,649.6	2,596.0	49.436		
5,100.0	4,715.5	4,078.4	3,585.7	35.2	31.3	119.67	1,579.5	844.0	2,713.2	2,658.5	49.557		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	4,806.2	4,155.6	3,650.1	36.0	32.1	119.68	1,616.6	864.8	2,776.9	2,720.9	49.670	
5,300.0	4,896.9	4,232.7	3,714.5	36.8	32.8	119.69	1,653.7	885.6	2,840.5	2,783.4	49.778	
5,400.0	4,987.6	4,309.9	3,778.9	37.6	33.5	119.71	1,690.8	906.4	2,904.1	2,845.9	49.880	
5,500.0	5,078.4	4,387.1	3,843.3	38.4	34.3	119.72	1,727.8	927.2	2,967.7	2,908.3	49.975	
5,600.0	5,169.8	4,464.8	3,908.2	39.2	35.0	121.28	1,765.2	948.2	3,030.6	2,970.1	50.065	
5,700.0	5,263.0	4,543.8	3,974.1	39.8	35.8	122.81	1,803.1	969.4	3,091.7	3,030.1	50.141	
5,800.0	5,357.6	4,623.8	4,040.9	40.4	36.5	124.15	1,841.6	991.0	3,151.0	3,088.2	50.213	
5,900.0	5,453.6	4,704.9	4,108.5	40.9	37.3	125.32	1,880.6	1,012.9	3,208.3	3,144.5	50.286	
6,000.0	5,550.7	4,786.7	4,176.8	41.3	38.1	126.34	1,919.9	1,034.9	3,263.5	3,198.7	50.359	
6,100.0	5,648.7	4,869.2	4,245.7	41.7	38.9	127.21	1,959.6	1,057.2	3,316.7	3,251.0	50.434	
6,200.0	5,747.5	4,952.2	4,314.9	42.0	39.6	127.96	1,999.5	1,079.5	3,367.8	3,301.1	50.512	
6,300.0	5,846.9	5,035.5	4,384.4	42.2	40.4	128.58	2,039.5	1,102.0	3,416.7	3,349.2	50.598	
6,400.0	5,946.7	5,119.0	4,454.1	42.3	41.2	129.10	2,079.6	1,124.5	3,463.5	3,395.2	50.692	
6,500.0	6,046.6	5,202.5	4,523.8	42.4	42.0	129.51	2,119.7	1,147.0	3,508.1	3,439.1	50.848	
6,600.0	6,146.6	5,286.0	4,593.4	42.4	42.8	71.85	2,159.9	1,169.5	3,551.7	3,482.1	51.027	
6,700.0	6,246.6	5,369.4	4,663.1	42.4	43.6	71.30	2,200.0	1,192.0	3,595.5	3,525.3	51.212	
6,800.0	6,346.6	7,164.1	6,346.6	42.5	52.2	65.98	2,636.8	1,437.0	3,615.7	3,532.3	43.317	
6,900.0	6,446.6	7,264.1	6,446.6	42.5	52.3	65.98	2,636.8	1,437.0	3,615.7	3,532.2	43.294	
7,000.0	6,546.6	7,364.1	6,546.6	42.5	52.3	65.98	2,636.8	1,437.0	3,615.7	3,532.2	43.272	
7,100.0	6,646.6	7,464.1	6,646.6	42.5	52.3	65.98	2,636.8	1,437.0	3,615.7	3,532.1	43.249	
7,200.0	6,746.6	7,564.1	6,746.6	42.6	52.3	65.98	2,636.8	1,437.0	3,615.7	3,532.1	43.226	
7,300.0	6,846.6	7,664.1	6,846.6	42.6	52.3	65.98	2,636.8	1,437.0	3,615.7	3,532.0	43.203	
7,400.0	6,946.6	7,764.1	6,946.6	42.6	52.3	65.98	2,636.8	1,437.0	3,615.7	3,532.0	43.180	
7,500.0	7,046.6	7,864.1	7,046.6	42.6	52.4	65.98	2,636.8	1,437.0	3,615.7	3,532.0	43.157	
7,600.0	7,146.6	7,964.1	7,146.6	42.7	52.4	65.98	2,636.8	1,437.0	3,615.7	3,531.9	43.134	
7,700.0	7,246.6	8,064.1	7,246.6	42.7	52.4	65.98	2,636.8	1,437.0	3,615.7	3,531.9	43.110	
7,800.0	7,346.6	8,164.1	7,346.6	42.7	52.4	65.98	2,636.8	1,437.0	3,615.7	3,531.8	43.086	
7,900.0	7,446.6	8,264.1	7,446.6	42.8	52.4	65.98	2,636.8	1,437.0	3,615.7	3,531.8	43.063	
8,000.0	7,546.6	8,364.1	7,546.6	42.8	52.4	65.98	2,636.8	1,437.0	3,615.7	3,531.7	43.039	
8,100.0	7,646.6	8,464.1	7,646.6	42.8	52.5	65.98	2,636.8	1,437.0	3,615.7	3,531.7	43.015	
8,200.0	7,746.6	8,564.1	7,746.6	42.8	52.5	65.98	2,636.8	1,437.0	3,615.7	3,531.6	42.991	
8,300.0	7,846.6	8,664.1	7,846.6	42.9	52.5	65.98	2,636.8	1,437.0	3,615.7	3,531.6	42.967	
8,400.0	7,946.6	8,764.1	7,946.6	42.9	52.5	65.98	2,636.8	1,437.0	3,615.7	3,531.5	42.942	
8,500.0	8,046.6	8,864.1	8,046.6	42.9	52.5	65.98	2,636.8	1,437.0	3,615.7	3,531.5	42.918	
8,600.0	8,146.6	8,964.1	8,146.6	43.0	52.6	65.98	2,636.8	1,437.0	3,615.7	3,531.4	42.893	
8,700.0	8,246.6	9,064.1	8,246.6	43.0	52.6	65.98	2,636.8	1,437.0	3,615.7	3,531.4	42.868	
8,800.0	8,346.6	9,164.1	8,346.6	43.0	52.6	65.98	2,636.8	1,437.0	3,615.7	3,531.3	42.844	
8,900.0	8,446.6	9,264.1	8,446.6	43.0	52.6	65.98	2,636.8	1,437.0	3,615.7	3,531.3	42.819	
9,000.0	8,546.6	9,364.1	8,546.6	43.1	52.6	65.98	2,636.8	1,437.0	3,615.7	3,531.2	42.794	
9,096.2	8,642.8	9,460.3	8,642.8	43.1	52.6	65.98	2,636.8	1,437.0	3,615.7	3,531.2	42.770	

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft	
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft	
Reference Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-28.31	27.9	-15.0	31.6					
100.0	100.0	100.0	100.0	0.8	0.8	-28.31	27.9	-15.0	31.6	30.1	19.970			
200.0	200.0	200.0	200.0	1.4	1.4	-28.31	27.9	-15.0	31.6	28.8	11.182	CC		
300.0	300.0	299.3	299.3	1.7	2.5	60.55	29.6	-13.8	32.5	28.8	8.725	ES		
400.0	399.9	398.0	397.7	2.9	4.0	75.04	34.9	-10.2	35.1	29.8	6.578			
500.0	499.6	495.2	494.4	4.3	5.1	95.13	43.6	-4.3	43.6	36.4	6.103	SF		
600.0	598.8	590.3	588.4	4.9	6.0	109.66	55.3	3.6	61.2	52.2	6.833			
700.0	697.4	683.0	679.5	5.4	6.7	112.46	69.8	13.5	86.2	75.6	8.160			
800.0	795.3	773.2	767.3	6.1	7.4	114.31	86.9	25.0	116.9	104.9	9.788			
900.0	892.4	860.7	851.6	6.9	8.1	115.47	106.1	38.1	152.8	139.8	11.762			
1,000.0	988.4	945.1	932.1	7.6	8.7	116.15	127.2	52.4	193.5	179.6	13.927			
1,100.0	1,083.1	1,026.5	1,008.7	8.3	9.2	116.47	149.9	67.7	238.7	224.0	16.195			
1,200.0	1,176.5	1,100.0	1,077.0	8.9	9.7	116.33	172.2	82.9	288.1	272.7	18.660			
1,300.0	1,268.2	1,179.4	1,149.9	9.6	10.2	116.30	198.4	100.7	341.4	325.0	20.889			
1,400.0	1,358.9	1,251.4	1,214.9	10.1	10.6	118.14	224.0	118.0	397.9	380.8	23.319			
1,500.0	1,449.6	1,321.1	1,277.0	10.4	11.0	119.49	250.3	135.8	456.8	439.0	25.719			
1,600.0	1,540.3	1,388.7	1,336.1	10.8	11.5	120.36	277.3	154.1	517.7	499.2	28.019			
1,700.0	1,631.0	1,463.4	1,400.7	11.1	11.8	121.01	308.3	175.2	580.0	560.8	30.109			
1,800.0	1,721.8	1,541.3	1,468.1	11.5	12.1	121.56	340.8	197.1	642.5	622.4	32.003			
1,900.0	1,812.5	1,619.3	1,535.5	11.9	12.3	122.01	373.2	219.1	705.0	684.1	33.746			
2,000.0	1,903.2	1,697.2	1,602.9	12.3	12.6	122.38	405.6	241.1	767.5	745.8	35.307			
2,100.0	1,993.9	1,775.2	1,670.3	12.8	12.8	122.71	438.1	263.1	830.0	807.4	36.706			
2,200.0	2,084.6	1,853.2	1,737.7	13.3	13.1	122.98	470.5	285.1	892.6	869.1	37.963			
2,300.0	2,175.4	1,931.1	1,805.1	13.8	13.4	123.22	502.9	307.1	955.1	930.7	39.094			
2,400.0	2,266.1	2,009.1	1,872.5	14.4	13.7	123.43	535.4	329.1	1,017.7	992.3	40.114			
2,500.0	2,356.8	2,087.1	1,939.9	15.1	14.0	123.62	567.8	351.1	1,080.2	1,053.9	41.033			
2,600.0	2,447.5	2,165.0	2,007.3	15.8	14.3	123.78	600.2	373.1	1,142.8	1,115.5	41.866			
2,700.0	2,538.2	2,243.0	2,074.7	16.5	14.6	123.93	632.7	395.0	1,205.4	1,177.1	42.622			
2,800.0	2,629.0	2,320.9	2,142.1	17.2	14.9	124.06	665.1	417.0	1,268.0	1,238.7	43.310			
2,900.0	2,719.7	2,398.9	2,209.5	18.0	15.3	124.19	697.5	439.0	1,330.6	1,300.3	43.929			
3,000.0	2,810.4	2,476.9	2,276.9	18.8	15.7	124.30	730.0	461.0	1,393.2	1,361.8	44.478			
3,100.0	2,901.1	2,554.8	2,344.3	19.5	16.4	124.40	762.4	483.0	1,455.8	1,423.4	45.014			
3,200.0	2,991.8	2,632.8	2,411.7	20.3	17.1	124.49	794.8	505.0	1,518.4	1,485.0	45.495			
3,300.0	3,082.5	2,710.8	2,479.1	21.1	17.8	124.57	827.3	527.0	1,581.0	1,546.5	45.936			
3,400.0	3,173.3	2,788.7	2,546.5	21.9	18.4	124.65	859.7	549.0	1,643.6	1,608.1	46.340			
3,500.0	3,264.0	2,866.7	2,613.9	22.6	19.1	124.73	892.1	571.0	1,706.2	1,669.6	46.713			
3,600.0	3,354.7	2,944.6	2,681.3	23.4	19.8	124.79	924.6	592.9	1,768.8	1,731.2	47.058			
3,700.0	3,445.4	3,022.6	2,748.7	24.2	20.4	124.86	957.0	614.9	1,831.4	1,792.7	47.378			
3,800.0	3,536.1	3,100.6	2,816.1	25.0	21.1	124.92	989.4	636.9	1,894.0	1,854.2	47.675			
3,900.0	3,626.9	3,178.5	2,883.5	25.8	21.8	124.97	1,021.9	658.9	1,956.6	1,915.8	47.949			
4,000.0	3,717.6	3,256.5	2,950.9	26.6	22.5	125.02	1,054.3	680.9	2,019.2	1,977.3	48.206			
4,100.0	3,808.3	3,334.5	3,018.3	27.3	23.1	125.07	1,086.7	702.9	2,081.8	2,038.8	48.445			
4,200.0	3,899.0	3,412.4	3,085.7	28.1	23.8	125.12	1,119.2	724.9	2,144.4	2,100.3	48.669			
4,300.0	3,989.7	3,490.4	3,153.1	28.9	24.5	125.16	1,151.6	746.9	2,207.0	2,161.9	48.877			
4,400.0	4,080.5	3,568.3	3,220.5	29.7	25.2	125.20	1,184.0	768.9	2,269.6	2,223.4	49.073			
4,500.0	4,171.2	3,646.3	3,287.9	30.5	25.9	125.24	1,216.5	790.8	2,332.2	2,284.9	49.256			
4,600.0	4,261.9	3,724.3	3,355.3	31.3	26.5	125.28	1,248.9	812.8	2,394.9	2,346.4	49.429			
4,700.0	4,352.6	3,802.2	3,422.7	32.1	27.2	125.31	1,281.3	834.8	2,457.5	2,407.9	49.591			
4,800.0	4,443.3	3,880.2	3,490.1	32.9	27.9	125.35	1,313.8	856.8	2,520.1	2,469.4	49.744			
4,900.0	4,534.1	3,958.2	3,557.5	33.7	28.6	125.38	1,346.2	878.8	2,582.7	2,530.9	49.888			
5,000.0	4,624.8	4,036.1	3,624.9	34.5	29.3	125.41	1,378.6	900.8	2,645.3	2,592.4	50.024			
5,100.0	4,715.5	4,114.1	3,692.3	35.2	29.9	125.44	1,411.1	922.8	2,707.9	2,653.9	50.152			

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	4,806.2	4,192.0	3,759.7	36.0	30.6	125.46	1,443.5	944.8	2,770.5	2,715.4	50.274	
5,300.0	4,896.9	4,270.0	3,827.1	36.8	31.3	125.49	1,476.0	966.8	2,833.2	2,776.9	50.388	
5,400.0	4,987.6	4,348.0	3,894.5	37.6	32.0	125.51	1,508.4	988.7	2,895.8	2,838.4	50.497	
5,500.0	5,078.4	4,425.9	3,961.9	38.4	32.7	125.54	1,540.8	1,010.7	2,958.4	2,899.9	50.599	
5,600.0	5,169.8	4,504.6	4,029.9	39.2	33.3	126.98	1,573.5	1,032.9	3,020.2	2,960.6	50.689	
5,700.0	5,263.0	4,584.7	4,099.1	39.8	34.0	128.35	1,606.9	1,055.5	3,079.9	3,019.2	50.747	
5,800.0	5,357.6	4,666.1	4,169.6	40.4	34.7	129.55	1,640.7	1,078.5	3,137.4	3,075.6	50.789	
5,900.0	5,453.6	4,748.8	4,241.0	40.9	35.5	130.59	1,675.1	1,101.8	3,192.6	3,129.8	50.821	
6,000.0	5,550.7	4,832.5	4,313.3	41.3	36.2	131.47	1,709.9	1,125.4	3,245.5	3,181.7	50.842	
6,100.0	5,648.7	4,917.0	4,386.4	41.7	36.9	132.22	1,745.1	1,149.2	3,296.0	3,231.2	50.857	
6,200.0	5,747.5	5,002.3	4,460.1	42.0	37.7	132.84	1,780.6	1,173.3	3,344.1	3,278.4	50.867	
6,300.0	5,846.9	5,088.0	4,534.3	42.2	38.4	133.34	1,816.3	1,197.5	3,389.7	3,323.1	50.875	
6,400.0	5,946.7	5,174.2	4,608.8	42.3	39.2	133.73	1,852.1	1,221.8	3,432.8	3,365.3	50.886	
6,500.0	6,046.6	5,260.6	4,683.5	42.4	39.9	134.02	1,888.1	1,246.1	3,473.4	3,405.2	50.965	
6,600.0	6,146.6	5,347.1	4,758.2	42.4	40.7	76.40	1,924.0	1,270.5	3,512.8	3,444.0	51.075	
6,700.0	6,246.6	5,433.5	4,833.0	42.4	41.5	75.88	1,960.0	1,294.9	3,552.4	3,483.0	51.191	
6,800.0	6,346.6	7,022.0	6,346.6	42.5	48.1	71.76	2,277.7	1,510.3	3,554.6	3,473.9	44.015	
6,900.0	6,446.6	7,122.0	6,446.6	42.5	48.2	71.76	2,277.7	1,510.3	3,554.6	3,473.8	43.990	
7,000.0	6,546.6	7,222.0	6,546.6	42.5	48.2	71.76	2,277.7	1,510.3	3,554.6	3,473.8	43.966	
7,100.0	6,646.6	7,322.0	6,646.6	42.5	48.2	71.76	2,277.7	1,510.3	3,554.6	3,473.7	43.942	
7,200.0	6,746.6	7,422.0	6,746.6	42.6	48.2	71.76	2,277.7	1,510.3	3,554.6	3,473.7	43.917	
7,300.0	6,846.6	7,522.0	6,846.6	42.6	48.2	71.76	2,277.7	1,510.3	3,554.6	3,473.6	43.893	
7,400.0	6,946.6	7,622.0	6,946.6	42.6	48.2	71.76	2,277.7	1,510.3	3,554.6	3,473.6	43.868	
7,500.0	7,046.6	7,722.0	7,046.6	42.6	48.3	71.76	2,277.7	1,510.3	3,554.6	3,473.5	43.843	
7,600.0	7,146.6	7,822.0	7,146.6	42.7	48.3	71.76	2,277.7	1,510.3	3,554.6	3,473.5	43.818	
7,700.0	7,246.6	7,922.0	7,246.6	42.7	48.3	71.76	2,277.7	1,510.3	3,554.6	3,473.5	43.793	
7,800.0	7,346.6	8,022.0	7,346.6	42.7	48.3	71.76	2,277.7	1,510.3	3,554.6	3,473.4	43.767	
7,900.0	7,446.6	8,122.0	7,446.6	42.8	48.3	71.76	2,277.7	1,510.3	3,554.6	3,473.4	43.742	
8,000.0	7,546.6	8,222.0	7,546.6	42.8	48.4	71.76	2,277.7	1,510.3	3,554.6	3,473.3	43.716	
8,100.0	7,646.6	8,322.0	7,646.6	42.8	48.4	71.76	2,277.7	1,510.3	3,554.6	3,473.3	43.691	
8,200.0	7,746.6	8,422.0	7,746.6	42.8	48.4	71.76	2,277.7	1,510.3	3,554.6	3,473.2	43.665	
8,300.0	7,846.6	8,522.0	7,846.6	42.9	48.4	71.76	2,277.7	1,510.3	3,554.6	3,473.2	43.640	
8,310.0	7,856.6	8,532.0	7,856.6	42.9	48.4	71.76	2,277.7	1,510.3	3,554.6	3,473.2	43.637	
8,400.0	7,946.6	8,561.3	7,886.0	42.9	48.4	71.76	2,277.7	1,510.3	3,555.1	3,473.6	43.595	
8,500.0	8,046.6	8,561.3	7,886.0	42.9	48.4	71.76	2,277.7	1,510.3	3,558.3	3,476.6	43.586	
8,600.0	8,146.6	8,561.3	7,886.0	43.0	48.4	71.76	2,277.7	1,510.3	3,564.2	3,482.5	43.637	
8,700.0	8,246.6	8,561.3	7,886.0	43.0	48.4	71.76	2,277.7	1,510.3	3,572.9	3,491.2	43.749	
8,800.0	8,346.6	8,561.3	7,886.0	43.0	48.4	71.76	2,277.7	1,510.3	3,584.3	3,502.7	43.920	
8,900.0	8,446.6	8,561.3	7,886.0	43.0	48.4	71.76	2,277.7	1,510.3	3,598.6	3,517.1	44.149	
9,000.0	8,546.6	8,561.3	7,886.0	43.1	48.4	71.76	2,277.7	1,510.3	3,615.5	3,534.1	44.437	
9,096.2	8,642.8	8,561.3	7,886.0	43.1	48.4	71.76	2,277.7	1,510.3	3,634.3	3,553.2	44.812	

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	-20.14	21.0	-7.7	22.4				
100.0	100.0	100.0	100.0	0.8	0.8	-20.14	21.0	-7.7	22.4	20.8	14.115		
200.0	200.0	200.0	200.0	1.4	1.4	-20.14	21.0	-7.7	22.4	19.5	7.903	CC	
300.0	300.0	299.7	299.7	1.7	1.9	68.44	21.8	-6.8	22.8	19.4	6.738	ES	
400.0	399.9	398.7	398.5	2.9	3.3	87.66	25.6	-3.0	25.3	20.5	5.234		
500.0	499.6	496.2	495.6	4.3	4.6	111.85	32.2	3.8	35.3	28.2	4.962	SF	
600.0	598.8	591.5	589.9	4.9	5.6	125.73	41.5	13.2	55.5	46.3	6.037		
700.0	697.4	684.1	681.1	5.4	6.4	126.72	53.1	25.0	83.0	72.3	7.747		
800.0	795.3	773.9	768.7	6.1	7.1	127.07	66.8	39.0	116.4	104.4	9.633		
900.0	892.4	860.5	852.4	6.9	7.8	127.10	82.3	54.8	155.3	142.1	11.780		
1,000.0	988.4	943.7	932.0	7.6	8.4	126.93	99.2	72.1	199.3	185.1	14.094		
1,100.0	1,083.1	1,023.2	1,007.2	8.3	8.9	126.58	117.3	90.6	248.0	233.0	16.519		
1,200.0	1,176.5	1,100.0	1,078.9	8.9	9.4	126.10	136.5	110.2	301.3	285.4	19.003		
1,300.0	1,268.2	1,171.0	1,144.4	9.6	9.9	125.41	155.7	129.8	358.7	342.1	21.576		
1,400.0	1,358.9	1,239.8	1,206.9	10.1	10.3	126.97	175.6	150.2	419.4	402.1	24.243		
1,500.0	1,449.6	1,300.0	1,261.0	10.4	10.7	128.04	194.2	169.1	482.4	464.6	27.110		
1,600.0	1,540.3	1,370.1	1,323.0	10.8	11.1	128.88	217.0	192.4	547.2	528.6	29.511		
1,700.0	1,631.0	1,431.7	1,376.7	11.1	11.4	129.36	238.2	214.0	613.7	594.6	32.127		
1,800.0	1,721.8	1,496.4	1,432.2	11.5	11.6	129.67	261.4	237.7	681.8	662.1	34.646		
1,900.0	1,812.5	1,569.3	1,494.7	11.9	11.9	129.94	287.7	264.6	750.2	729.8	36.775		
2,000.0	1,903.2	1,642.2	1,557.1	12.3	12.1	130.16	314.1	291.5	818.6	797.5	38.701		
2,100.0	1,993.9	1,715.1	1,619.5	12.8	12.3	130.35	340.4	318.4	887.1	865.1	40.444		
2,200.0	2,084.6	1,788.0	1,681.9	13.3	12.6	130.51	366.8	345.3	955.5	932.8	42.022		
2,300.0	2,175.4	1,860.9	1,744.4	13.8	12.9	130.65	393.1	372.2	1,023.9	1,000.4	43.452		
2,400.0	2,266.1	1,933.8	1,806.8	14.4	13.1	130.77	419.5	399.1	1,092.4	1,067.9	44.752		
2,500.0	2,356.8	2,006.7	1,869.2	15.1	13.4	130.88	445.8	426.0	1,160.8	1,135.5	45.936		
2,600.0	2,447.5	2,079.6	1,931.6	15.8	13.7	130.98	472.1	452.9	1,229.2	1,203.1	47.011		
2,700.0	2,538.2	2,152.5	1,994.1	16.5	14.0	131.06	498.5	479.8	1,297.7	1,270.6	47.994		
2,800.0	2,629.0	2,225.4	2,056.5	17.2	14.2	131.14	524.8	506.7	1,366.1	1,338.2	48.898		
2,900.0	2,719.7	2,298.3	2,118.9	18.0	14.6	131.21	551.2	533.6	1,434.5	1,405.7	49.714		
3,000.0	2,810.4	2,371.2	2,181.3	18.8	15.2	131.28	577.5	560.5	1,503.0	1,473.2	50.453		
3,100.0	2,901.1	2,444.1	2,243.8	19.5	15.9	131.33	603.9	587.4	1,571.4	1,540.7	51.156		
3,200.0	2,991.8	2,517.0	2,306.2	20.3	16.5	131.39	630.2	614.3	1,639.9	1,608.2	51.795		
3,300.0	3,082.5	2,589.9	2,368.6	21.1	17.2	131.44	656.6	641.2	1,708.3	1,675.7	52.384		
3,400.0	3,173.3	2,662.8	2,431.0	21.9	17.9	131.48	682.9	668.1	1,776.8	1,743.2	52.926		
3,500.0	3,264.0	2,735.7	2,493.5	22.6	18.6	131.52	709.2	695.0	1,845.2	1,810.7	53.429		
3,600.0	3,354.7	2,808.6	2,555.9	23.4	19.2	131.56	735.6	721.9	1,913.6	1,878.1	53.896		
3,700.0	3,445.4	2,881.5	2,618.3	24.2	19.9	131.60	761.9	748.8	1,982.1	1,945.6	54.329		
3,800.0	3,536.1	2,954.4	2,680.7	25.0	20.6	131.63	788.3	775.7	2,050.5	2,013.1	54.731		
3,900.0	3,626.9	3,027.3	2,743.2	25.8	21.3	131.66	814.6	802.6	2,119.0	2,080.5	55.106		
4,000.0	3,717.6	3,100.2	2,805.6	26.6	21.9	131.69	841.0	829.5	2,187.4	2,148.0	55.457		
4,100.0	3,808.3	3,173.1	2,868.0	27.3	22.6	131.72	867.3	856.4	2,255.9	2,215.4	55.784		
4,200.0	3,899.0	3,246.0	2,930.4	28.1	23.3	131.75	893.7	883.3	2,324.3	2,282.9	56.089		
4,300.0	3,989.7	3,318.9	2,992.9	28.9	24.0	131.77	920.0	910.2	2,392.8	2,350.3	56.376		
4,400.0	4,080.5	3,391.8	3,055.3	29.7	24.6	131.80	946.3	937.0	2,461.2	2,417.8	56.646		
4,500.0	4,171.2	3,464.7	3,117.7	30.5	25.3	131.82	972.7	963.9	2,529.7	2,485.2	56.898		
4,600.0	4,261.9	3,537.6	3,180.2	31.3	26.0	131.84	999.0	990.8	2,598.1	2,552.6	57.135		
4,700.0	4,352.6	3,610.5	3,242.6	32.1	26.7	131.86	1,025.4	1,017.7	2,666.6	2,620.1	57.359		
4,800.0	4,443.3	3,683.4	3,305.0	32.9	27.4	131.88	1,051.7	1,044.6	2,735.0	2,687.5	57.570		
4,900.0	4,534.1	3,756.3	3,367.4	33.7	28.0	131.89	1,078.1	1,071.5	2,803.5	2,754.9	57.769		
5,000.0	4,624.8	3,829.2	3,429.9	34.5	28.7	131.91	1,104.4	1,098.4	2,871.9	2,822.3	57.957		
5,100.0	4,715.5	3,902.1	3,492.3	35.2	29.4	131.93	1,130.8	1,125.3	2,940.3	2,889.8	58.135		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	4,806.2	3,975.0	3,554.7	36.0	30.1	131.94	1,157.1	1,152.2	3,008.8	2,957.2	58.303		
5,300.0	4,896.9	4,047.9	3,617.1	36.8	30.8	131.96	1,183.4	1,179.1	3,077.2	3,024.6	58.463		
5,400.0	4,987.6	4,120.8	3,679.6	37.6	31.4	131.97	1,209.8	1,206.0	3,145.7	3,092.0	58.614		
5,500.0	5,078.4	4,193.7	3,742.0	38.4	32.1	131.99	1,236.1	1,232.9	3,214.1	3,159.4	58.756		
5,600.0	5,169.8	4,267.4	3,805.1	39.2	32.8	133.51	1,262.8	1,260.1	3,281.7	3,225.9	58.875		
5,700.0	5,263.0	4,343.0	3,869.9	39.8	33.5	134.96	1,290.1	1,288.0	3,347.0	3,290.2	58.939		
5,800.0	5,357.6	4,420.4	3,936.1	40.4	34.2	136.22	1,318.1	1,316.6	3,409.9	3,352.1	58.972		
5,900.0	5,453.6	4,499.4	4,003.8	40.9	35.0	137.31	1,346.6	1,345.7	3,470.4	3,411.6	58.982		
6,000.0	5,550.7	4,579.8	4,072.6	41.3	35.7	138.25	1,375.7	1,375.4	3,528.4	3,468.5	58.971		
6,100.0	5,648.7	4,661.5	4,142.6	41.7	36.5	139.04	1,405.2	1,405.5	3,583.7	3,522.9	58.943		
6,200.0	5,747.5	4,744.4	4,213.6	42.0	37.3	139.70	1,435.2	1,436.1	3,636.3	3,574.6	58.902		
6,300.0	5,846.9	4,828.2	4,285.4	42.2	38.1	140.25	1,465.5	1,467.0	3,686.2	3,623.6	58.852		
6,400.0	5,946.7	4,912.9	4,357.9	42.3	38.9	140.68	1,496.1	1,498.3	3,733.3	3,669.8	58.800		
6,500.0	6,046.6	4,998.2	4,430.9	42.4	39.6	141.02	1,526.9	1,529.8	3,777.6	3,713.4	58.845		
6,600.0	6,146.6	5,083.9	4,504.3	42.4	40.5	83.46	1,557.8	1,561.4	3,820.5	3,755.7	58.942		
6,700.0	6,246.6	5,169.5	4,577.6	42.4	41.3	83.02	1,588.8	1,592.9	3,863.6	3,798.2	59.043		
6,800.0	6,346.6	5,255.1	4,650.9	42.5	42.1	82.58	1,619.7	1,624.5	3,906.9	3,840.8	59.146		
6,900.0	6,446.6	7,158.0	6,446.6	42.5	51.0	78.20	1,968.5	1,980.6	3,929.3	3,849.4	49.136		
7,000.0	6,546.6	7,258.0	6,546.6	42.5	51.0	78.20	1,968.5	1,980.6	3,929.3	3,849.3	49.109		
7,100.0	6,646.6	7,358.0	6,646.6	42.5	51.0	78.20	1,968.5	1,980.6	3,929.3	3,849.3	49.081		
7,200.0	6,746.6	7,458.0	6,746.6	42.6	51.0	78.20	1,968.5	1,980.6	3,929.3	3,849.2	49.054		
7,300.0	6,846.6	7,558.0	6,846.6	42.6	51.0	78.20	1,968.5	1,980.6	3,929.3	3,849.2	49.026		
7,400.0	6,946.6	7,658.0	6,946.6	42.6	51.1	78.20	1,968.5	1,980.6	3,929.3	3,849.2	48.998		
7,500.0	7,046.6	7,758.0	7,046.6	42.6	51.1	78.20	1,968.5	1,980.6	3,929.3	3,849.1	48.970		
7,600.0	7,146.6	7,858.0	7,146.6	42.7	51.1	78.20	1,968.5	1,980.6	3,929.3	3,849.1	48.942		
7,700.0	7,246.6	7,958.0	7,246.6	42.7	51.1	78.20	1,968.5	1,980.6	3,929.3	3,849.0	48.913		
7,800.0	7,346.6	8,058.0	7,346.6	42.7	51.1	78.20	1,968.5	1,980.6	3,929.3	3,849.0	48.885		
7,900.0	7,446.6	8,158.0	7,446.6	42.8	51.2	78.20	1,968.5	1,980.6	3,929.3	3,848.9	48.856		
8,000.0	7,546.6	8,258.0	7,546.6	42.8	51.2	78.20	1,968.5	1,980.6	3,929.3	3,848.9	48.827		
8,100.0	7,646.6	8,358.0	7,646.6	42.8	51.2	78.20	1,968.5	1,980.6	3,929.3	3,848.8	48.798		
8,200.0	7,746.6	8,458.0	7,746.6	42.8	51.2	78.20	1,968.5	1,980.6	3,929.3	3,848.8	48.769		
8,300.0	7,846.6	8,558.0	7,846.6	42.9	51.2	78.20	1,968.5	1,980.6	3,929.3	3,848.7	48.740		
8,400.0	7,946.6	8,658.0	7,946.6	42.9	51.3	78.20	1,968.5	1,980.6	3,929.3	3,848.7	48.711		
8,500.0	8,046.6	8,758.0	8,046.6	42.9	51.3	78.20	1,968.5	1,980.6	3,929.3	3,848.6	48.681		
8,600.0	8,146.6	8,858.0	8,146.6	43.0	51.3	78.20	1,968.5	1,980.6	3,929.3	3,848.6	48.652		
8,700.0	8,246.6	8,958.0	8,246.6	43.0	51.3	78.20	1,968.5	1,980.6	3,929.3	3,848.5	48.622		
8,800.0	8,346.6	9,058.0	8,346.6	43.0	51.4	78.20	1,968.5	1,980.6	3,929.3	3,848.5	48.592		
8,900.0	8,446.6	9,158.0	8,446.6	43.0	51.4	78.20	1,968.5	1,980.6	3,929.3	3,848.4	48.562		
9,000.0	8,546.6	9,258.0	8,546.6	43.1	51.4	78.20	1,968.5	1,980.6	3,929.3	3,848.4	48.531		
9,096.2	8,642.8	9,354.2	8,642.8	43.1	51.4	78.20	1,968.5	1,980.6	3,929.3	3,848.3	48.503		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft	
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft	
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-1.72	14.1	-0.4	14.1					
100.0	100.0	100.0	100.0	0.8	0.8	-1.72	14.1	-0.4	14.1	12.6	8.926			
200.0	200.0	200.0	200.0	1.4	1.4	-1.72	14.1	-0.4	14.1	11.3	4.998	CC, ES		
300.0	300.0	299.6	299.6	1.7	2.1	89.25	15.1	0.8	15.1	11.5	4.211			
400.0	399.9	398.6	398.4	2.9	3.6	112.01	18.8	5.2	20.8	15.3	3.753	SF		
500.0	499.6	496.0	495.3	4.3	4.8	130.91	25.1	12.9	35.2	27.1	4.372			
600.0	598.8	590.9	589.3	4.9	5.7	138.61	33.7	23.3	58.5	48.7	5.978			
700.0	697.4	683.1	679.9	5.4	6.5	135.98	44.4	36.4	88.4	77.3	7.981			
800.0	795.3	772.3	766.8	6.1	7.2	134.28	57.0	51.6	123.9	111.5	10.017			
900.0	892.4	858.1	849.7	6.9	7.9	133.06	71.1	68.8	164.7	151.3	12.252			
1,000.0	988.4	940.2	928.2	7.6	8.5	132.06	86.4	87.4	210.6	196.2	14.633			
1,100.0	1,083.1	1,018.5	1,002.1	8.3	9.0	131.14	102.7	107.2	261.4	246.1	17.121			
1,200.0	1,176.5	1,092.8	1,071.5	8.9	9.5	130.21	119.7	127.8	316.7	300.6	19.699			
1,300.0	1,268.2	1,163.2	1,136.3	9.6	9.9	129.23	137.0	148.9	376.2	359.3	22.317			
1,400.0	1,358.9	1,230.1	1,197.2	10.1	10.3	130.58	154.6	170.3	438.9	421.4	25.074			
1,500.0	1,449.6	1,300.0	1,259.9	10.4	10.8	131.68	174.3	194.2	503.8	485.6	27.671			
1,600.0	1,540.3	1,356.8	1,310.2	10.8	11.0	132.28	191.2	214.7	570.4	551.9	30.745			
1,700.0	1,631.0	1,430.5	1,374.9	11.1	11.2	132.87	213.5	241.8	637.9	618.7	33.240			
1,800.0	1,721.8	1,504.1	1,439.6	11.5	11.4	133.34	235.8	269.0	705.5	685.6	35.509			
1,900.0	1,812.5	1,577.7	1,504.3	11.9	11.7	133.73	258.1	296.1	773.0	752.5	37.558			
2,000.0	1,903.2	1,651.4	1,569.0	12.3	11.9	134.05	280.5	323.2	840.6	819.3	39.423			
2,100.0	1,993.9	1,725.0	1,633.7	12.8	12.2	134.33	302.8	350.4	908.2	886.1	41.121			
2,200.0	2,084.6	1,798.6	1,698.4	13.3	12.4	134.57	325.1	377.5	975.8	953.0	42.668			
2,300.0	2,175.4	1,872.3	1,763.1	13.8	12.7	134.78	347.4	404.6	1,043.4	1,019.8	44.070			
2,400.0	2,266.1	1,945.9	1,827.8	14.4	13.0	134.96	369.8	431.8	1,111.1	1,086.6	45.351			
2,500.0	2,356.8	2,019.5	1,892.5	15.1	13.3	135.12	392.1	458.9	1,178.7	1,153.3	46.521			
2,600.0	2,447.5	2,093.1	1,957.3	15.8	13.6	135.27	414.4	486.0	1,246.3	1,220.1	47.590			
2,700.0	2,538.2	2,166.8	2,022.0	16.5	13.9	135.40	436.7	513.1	1,313.9	1,286.9	48.567			
2,800.0	2,629.0	2,240.4	2,086.7	17.2	14.2	135.51	459.0	540.3	1,381.6	1,353.6	49.464			
2,900.0	2,719.7	2,314.0	2,151.4	18.0	14.5	135.62	481.4	567.4	1,449.2	1,420.4	50.289			
3,000.0	2,810.4	2,387.7	2,216.1	18.8	14.9	135.72	503.7	594.5	1,516.9	1,487.1	51.045			
3,100.0	2,901.1	2,461.3	2,280.8	19.5	15.5	135.81	526.0	621.7	1,584.5	1,553.9	51.742			
3,200.0	2,991.8	2,534.9	2,345.5	20.3	16.2	135.89	548.3	648.8	1,652.1	1,620.6	52.388			
3,300.0	3,082.5	2,608.6	2,410.2	21.1	16.8	135.96	570.7	675.9	1,719.8	1,687.3	52.985			
3,400.0	3,173.3	2,682.2	2,474.9	21.9	17.4	136.03	593.0	703.0	1,787.4	1,754.1	53.537			
3,500.0	3,264.0	2,755.8	2,539.6	22.6	18.1	136.09	615.3	730.2	1,855.1	1,820.8	54.049			
3,600.0	3,354.7	2,829.4	2,604.3	23.4	18.7	136.15	637.6	757.3	1,922.7	1,887.5	54.526			
3,700.0	3,445.4	2,903.1	2,669.0	24.2	19.3	136.21	660.0	784.4	1,990.4	1,954.2	54.970			
3,800.0	3,536.1	2,976.7	2,733.7	25.0	20.0	136.26	682.3	811.6	2,058.0	2,020.9	55.383			
3,900.0	3,626.9	3,050.3	2,798.4	25.8	20.6	136.31	704.6	838.7	2,125.7	2,087.6	55.768			
4,000.0	3,717.6	3,124.0	2,863.2	26.6	21.2	136.36	726.9	865.8	2,193.3	2,154.3	56.129			
4,100.0	3,808.3	3,197.6	2,927.9	27.3	21.9	136.40	749.3	893.0	2,261.0	2,221.0	56.468			
4,200.0	3,899.0	3,271.2	2,992.6	28.1	22.5	136.44	771.6	920.1	2,328.7	2,287.7	56.784			
4,300.0	3,989.7	3,344.8	3,057.3	28.9	23.1	136.48	793.9	947.2	2,396.3	2,354.3	57.081			
4,400.0	4,080.5	3,418.5	3,122.0	29.7	23.8	136.51	816.2	974.3	2,464.0	2,421.0	57.361			
4,500.0	4,171.2	3,492.1	3,186.7	30.5	24.4	136.55	838.5	1,001.5	2,531.6	2,487.7	57.624			
4,600.0	4,261.9	3,565.7	3,251.4	31.3	25.0	136.58	860.9	1,028.6	2,599.3	2,554.4	57.872			
4,700.0	4,352.6	3,639.4	3,316.1	32.1	25.7	136.61	883.2	1,055.7	2,666.9	2,621.0	58.106			
4,800.0	4,443.3	3,713.0	3,380.8	32.9	26.3	136.64	905.5	1,082.9	2,734.6	2,687.7	58.326			
4,900.0	4,534.1	3,786.6	3,445.5	33.7	26.9	136.67	927.8	1,110.0	2,802.3	2,754.4	58.535			
5,000.0	4,624.8	3,860.3	3,510.2	34.5	27.6	136.69	950.2	1,137.1	2,869.9	2,821.1	58.732			
5,100.0	4,715.5	3,933.9	3,574.9	35.2	28.2	136.72	972.5	1,164.3	2,937.6	2,887.7	58.919			

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	4,806.2	4,007.5	3,639.6	36.0	28.9	136.74	994.8	1,191.4	3,005.2	2,954.4	59.096		
5,300.0	4,896.9	4,081.1	3,704.3	36.8	29.5	136.76	1,017.1	1,218.5	3,072.9	3,021.0	59.264		
5,400.0	4,987.6	4,154.8	3,769.0	37.6	30.1	136.79	1,039.5	1,245.6	3,140.6	3,087.7	59.424		
5,500.0	5,078.4	4,228.4	3,833.8	38.4	30.8	136.81	1,061.8	1,272.8	3,208.2	3,154.4	59.574		
5,600.0	5,169.8	4,302.9	3,899.3	39.2	31.4	138.18	1,084.4	1,300.2	3,274.9	3,220.0	59.694		
5,700.0	5,263.0	4,379.5	3,966.6	39.8	32.1	139.49	1,107.6	1,328.5	3,339.1	3,283.2	59.742		
5,800.0	5,357.6	4,458.0	4,035.5	40.4	32.8	140.61	1,131.4	1,357.4	3,400.7	3,343.8	59.748		
5,900.0	5,453.6	4,538.3	4,106.1	40.9	33.5	141.57	1,155.7	1,386.9	3,459.7	3,401.8	59.722		
6,000.0	5,550.7	4,620.1	4,178.0	41.3	34.2	142.39	1,180.6	1,417.1	3,515.9	3,457.0	59.666		
6,100.0	5,648.7	4,703.4	4,251.2	41.7	34.9	143.07	1,205.8	1,447.8	3,569.3	3,509.4	59.586		
6,200.0	5,747.5	4,788.0	4,325.6	42.0	35.6	143.63	1,231.5	1,479.0	3,619.7	3,558.9	59.485		
6,300.0	5,846.9	4,873.8	4,400.9	42.2	36.4	144.08	1,257.5	1,510.6	3,667.2	3,605.4	59.370		
6,400.0	5,946.7	4,960.5	4,477.1	42.3	37.1	144.43	1,283.7	1,542.5	3,711.7	3,649.0	59.248		
6,500.0	6,046.6	5,048.0	4,554.0	42.4	37.9	144.69	1,310.3	1,574.8	3,753.1	3,689.7	59.233		
6,600.0	6,146.6	5,135.9	4,631.3	42.4	38.6	87.17	1,336.9	1,607.1	3,792.9	3,729.0	59.282		
6,700.0	6,246.6	5,223.8	4,708.5	42.4	39.4	86.76	1,363.6	1,639.5	3,833.0	3,768.4	59.334		
6,800.0	6,346.6	5,311.7	4,785.7	42.5	40.2	86.36	1,390.2	1,671.9	3,873.2	3,808.0	59.389		
6,900.0	6,446.6	7,051.5	6,446.6	42.5	47.5	82.85	1,648.0	1,985.2	3,881.0	3,803.4	49.975		
7,000.0	6,546.6	7,151.5	6,546.6	42.5	47.5	82.85	1,648.0	1,985.2	3,881.0	3,803.3	49.946		
7,100.0	6,646.6	7,251.5	6,646.6	42.5	47.5	82.85	1,648.0	1,985.2	3,881.0	3,803.3	49.916		
7,200.0	6,746.6	7,351.5	6,746.6	42.6	47.6	82.85	1,648.0	1,985.2	3,881.0	3,803.2	49.887		
7,300.0	6,846.6	7,451.5	6,846.6	42.6	47.6	82.85	1,648.0	1,985.2	3,881.0	3,803.2	49.857		
7,400.0	6,946.6	7,551.5	6,946.6	42.6	47.6	82.85	1,648.0	1,985.2	3,881.0	3,803.2	49.827		
7,500.0	7,046.6	7,651.5	7,046.6	42.6	47.6	82.85	1,648.0	1,985.2	3,881.0	3,803.1	49.797		
7,600.0	7,146.6	7,751.5	7,146.6	42.7	47.6	82.85	1,648.0	1,985.2	3,881.0	3,803.1	49.767		
7,700.0	7,246.6	7,851.5	7,246.6	42.7	47.7	82.85	1,648.0	1,985.2	3,881.0	3,803.0	49.736		
7,800.0	7,346.6	7,951.5	7,346.6	42.7	47.7	82.85	1,648.0	1,985.2	3,881.0	3,803.0	49.706		
7,900.0	7,446.6	8,051.5	7,446.6	42.8	47.7	82.85	1,648.0	1,985.2	3,881.0	3,802.9	49.675		
8,000.0	7,546.6	8,151.5	7,546.6	42.8	47.7	82.85	1,648.0	1,985.2	3,881.0	3,802.9	49.644		
8,100.0	7,646.6	8,251.5	7,646.6	42.8	47.8	82.85	1,648.0	1,985.2	3,881.0	3,802.8	49.613		
8,200.0	7,746.6	8,351.5	7,746.6	42.8	47.8	82.85	1,648.0	1,985.2	3,881.0	3,802.8	49.581		
8,300.0	7,846.6	8,451.5	7,846.6	42.9	47.8	82.85	1,648.0	1,985.2	3,881.0	3,802.7	49.550		
8,310.0	7,856.6	8,461.5	7,856.6	42.9	47.8	82.85	1,648.0	1,985.2	3,881.0	3,802.7	49.547		
8,400.0	7,946.6	8,494.9	7,890.0	42.9	47.8	82.85	1,648.0	1,985.2	3,881.5	3,803.1	49.513		
8,500.0	8,046.6	8,494.9	7,890.0	42.9	47.8	82.85	1,648.0	1,985.2	3,884.2	3,805.8	49.516		
8,600.0	8,146.6	8,494.9	7,890.0	43.0	47.8	82.85	1,648.0	1,985.2	3,889.5	3,811.1	49.576		
8,700.0	8,246.6	8,494.9	7,890.0	43.0	47.8	82.85	1,648.0	1,985.2	3,897.4	3,819.0	49.694		
8,800.0	8,346.6	8,494.9	7,890.0	43.0	47.8	82.85	1,648.0	1,985.2	3,907.8	3,829.5	49.869		
8,900.0	8,446.6	8,494.9	7,890.0	43.0	47.8	82.85	1,648.0	1,985.2	3,920.8	3,842.5	50.100		
9,000.0	8,546.6	8,494.9	7,890.0	43.1	47.8	82.85	1,648.0	1,985.2	3,936.2	3,858.1	50.386		
9,096.2	8,642.8	8,494.9	7,890.0	43.1	47.8	82.85	1,648.0	1,985.2	3,953.4	3,875.5	50.775		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	43.24	7.3	6.8	10.0				
100.0	100.0	100.0	100.0	0.8	0.8	43.24	7.3	6.8	10.0	8.4	6.312		
200.0	200.0	200.0	200.0	1.4	1.4	43.24	7.3	6.8	10.0	7.2	3.534	CC	
204.4	204.4	204.4	204.4	1.4	1.4	128.24	7.3	6.8	10.0	7.1	3.509	ES	
300.0	300.0	299.8	299.8	1.7	1.7	130.32	7.6	7.3	10.8	7.4	3.242	SF	
400.0	399.9	398.9	398.7	2.9	3.0	142.39	10.0	10.9	18.0	12.4	3.252		
500.0	499.6	496.5	496.0	4.3	4.3	150.46	14.7	17.8	33.4	25.3	4.124		
600.0	598.8	591.8	590.5	4.9	5.3	152.10	21.5	28.0	57.0	47.3	5.865		
700.0	697.4	684.3	681.7	5.4	6.2	146.38	30.1	40.9	87.0	76.1	7.956		
800.0	795.3	773.7	769.2	6.1	6.9	142.97	40.5	56.3	122.8	110.5	10.028		
900.0	892.4	859.6	852.4	6.9	7.6	140.70	52.2	73.8	164.0	150.7	12.277		
1,000.0	988.4	941.7	931.2	7.6	8.2	138.99	65.0	92.9	210.6	196.2	14.673		
1,100.0	1,083.1	1,019.7	1,005.3	8.3	8.7	137.58	78.6	113.2	262.2	246.9	17.187		
1,200.0	1,176.5	1,093.6	1,074.7	8.9	9.2	136.28	92.8	134.3	318.5	302.4	19.803		
1,300.0	1,268.2	1,163.3	1,139.3	9.6	9.7	135.02	107.3	156.0	379.1	362.3	22.471		
1,400.0	1,358.9	1,229.4	1,199.8	10.1	10.1	136.12	122.1	178.0	443.1	425.6	25.305		
1,500.0	1,449.6	1,300.9	1,264.5	10.4	10.5	137.04	139.2	203.4	509.1	490.9	27.904		
1,600.0	1,540.3	1,365.4	1,322.3	10.8	10.8	137.62	155.1	227.1	576.1	557.4	30.745		
1,700.0	1,631.0	1,439.4	1,388.6	11.1	11.1	138.17	173.3	254.3	643.3	623.9	33.162		
1,800.0	1,721.8	1,513.4	1,455.0	11.5	11.3	138.60	191.6	281.5	710.4	690.4	35.434		
1,900.0	1,812.5	1,587.4	1,521.3	11.9	11.5	138.97	209.8	308.7	777.6	756.9	37.510		
2,000.0	1,903.2	1,661.3	1,587.7	12.3	11.8	139.27	228.1	335.9	844.8	823.3	39.405		
2,100.0	1,993.9	1,735.3	1,654.0	12.8	12.1	139.53	246.3	363.1	912.0	889.8	41.140		
2,200.0	2,084.6	1,809.3	1,720.4	13.3	12.3	139.76	264.6	390.3	979.2	956.3	42.728		
2,300.0	2,175.4	1,883.3	1,786.7	13.8	12.6	139.95	282.8	417.5	1,046.4	1,022.7	44.178		
2,400.0	2,266.1	1,957.3	1,853.1	14.4	12.9	140.12	301.1	444.7	1,113.6	1,089.2	45.506		
2,500.0	2,356.8	2,031.3	1,919.4	15.1	13.2	140.28	319.3	471.9	1,180.9	1,155.6	46.724		
2,600.0	2,447.5	2,105.3	1,985.8	15.8	13.5	140.41	337.6	499.1	1,248.1	1,222.0	47.844		
2,700.0	2,538.2	2,179.3	2,052.1	16.5	13.8	140.54	355.8	526.3	1,315.4	1,288.4	48.870		
2,800.0	2,629.0	2,253.3	2,118.5	17.2	14.1	140.65	374.1	553.5	1,382.6	1,354.8	49.815		
2,900.0	2,719.7	2,327.3	2,184.8	18.0	14.4	140.75	392.3	580.7	1,449.8	1,421.2	50.687		
3,000.0	2,810.4	2,401.3	2,251.2	18.8	14.7	140.84	410.6	607.9	1,517.1	1,487.6	51.493		
3,100.0	2,901.1	2,475.3	2,317.5	19.5	15.0	140.92	428.8	635.1	1,584.3	1,554.0	52.235		
3,200.0	2,991.8	2,549.2	2,383.8	20.3	15.5	141.00	447.1	662.3	1,651.6	1,620.4	52.926		
3,300.0	3,082.5	2,623.2	2,450.2	21.1	16.0	141.07	465.3	689.5	1,718.8	1,686.8	53.566		
3,400.0	3,173.3	2,697.2	2,516.5	21.9	16.6	141.13	483.6	716.7	1,786.1	1,753.1	54.159		
3,500.0	3,264.0	2,771.2	2,582.9	22.6	17.2	141.19	501.8	743.9	1,853.3	1,819.5	54.711		
3,600.0	3,354.7	2,845.2	2,649.2	23.4	17.8	141.25	520.1	771.1	1,920.6	1,885.8	55.225		
3,700.0	3,445.4	2,919.2	2,715.6	24.2	18.4	141.30	538.3	798.3	1,987.9	1,952.2	55.706		
3,800.0	3,536.1	2,993.2	2,781.9	25.0	19.0	141.35	556.6	825.5	2,055.1	2,018.5	56.154		
3,900.0	3,626.9	3,067.2	2,848.3	25.8	19.5	141.40	574.8	852.7	2,122.4	2,084.9	56.574		
4,000.0	3,717.6	3,141.2	2,914.6	26.6	20.1	141.44	593.1	879.9	2,189.6	2,151.2	56.967		
4,100.0	3,808.3	3,215.2	2,981.0	27.3	20.7	141.48	611.3	907.1	2,256.9	2,217.5	57.336		
4,200.0	3,899.0	3,289.2	3,047.3	28.1	21.3	141.52	629.6	934.3	2,324.2	2,283.9	57.683		
4,300.0	3,989.7	3,363.2	3,113.7	28.9	21.9	141.56	647.8	961.5	2,391.4	2,350.2	58.008		
4,400.0	4,080.5	3,437.2	3,180.0	29.7	22.5	141.59	666.1	988.7	2,458.7	2,416.5	58.315		
4,500.0	4,171.2	3,511.1	3,246.4	30.5	23.1	141.62	684.3	1,015.9	2,525.9	2,482.8	58.604		
4,600.0	4,261.9	3,585.1	3,312.7	31.3	23.7	141.65	702.6	1,043.1	2,593.2	2,549.2	58.877		
4,700.0	4,352.6	3,659.1	3,379.1	32.1	24.3	141.68	720.8	1,070.3	2,660.5	2,615.5	59.135		
4,800.0	4,443.3	3,733.1	3,445.4	32.9	24.9	141.71	739.1	1,097.5	2,727.7	2,681.8	59.379		
4,900.0	4,534.1	3,807.1	3,511.8	33.7	25.5	141.74	757.3	1,124.6	2,795.0	2,748.1	59.609		
5,000.0	4,624.8	3,881.1	3,578.1	34.5	26.1	141.76	775.6	1,151.8	2,862.2	2,814.4	59.828		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	4,715.5	3,955.1	3,644.5	35.2	26.7	141.79	793.8	1,179.0	2,929.5	2,880.7	60.035		
5,200.0	4,806.2	4,029.1	3,710.8	36.0	27.3	141.81	812.1	1,206.2	2,996.8	2,947.0	60.231		
5,300.0	4,896.9	4,103.1	3,777.2	36.8	27.9	141.83	830.3	1,233.4	3,064.0	3,013.3	60.418		
5,400.0	4,987.6	4,177.1	3,843.5	37.6	28.5	141.85	848.6	1,260.6	3,131.3	3,079.6	60.596		
5,500.0	5,078.4	4,251.1	3,909.9	38.4	29.1	141.87	866.8	1,287.8	3,198.6	3,145.9	60.763		
5,600.0	5,169.8	4,326.0	3,977.1	39.2	29.7	143.10	885.3	1,315.4	3,264.7	3,211.1	60.892		
5,700.0	5,263.0	4,403.2	4,046.3	39.8	30.3	144.25	904.3	1,343.7	3,328.3	3,273.7	60.929		
5,800.0	5,357.6	4,482.4	4,117.3	40.4	30.9	145.23	923.9	1,372.9	3,389.0	3,333.4	60.914		
5,900.0	5,453.6	4,563.5	4,190.0	40.9	31.6	146.07	943.9	1,402.7	3,446.9	3,390.3	60.856		
6,000.0	5,550.7	4,646.4	4,264.4	41.3	32.3	146.77	964.3	1,433.1	3,501.9	3,444.2	60.760		
6,100.0	5,648.7	4,730.9	4,340.1	41.7	33.0	147.35	985.1	1,464.2	3,553.8	3,495.1	60.631		
6,200.0	5,747.5	4,816.8	4,417.2	42.0	33.6	147.82	1,006.3	1,495.8	3,602.5	3,543.0	60.475		
6,300.0	5,846.9	4,904.0	4,495.3	42.2	34.4	148.19	1,027.8	1,527.8	3,648.1	3,587.6	60.298		
6,400.0	5,946.7	4,992.3	4,574.5	42.3	35.1	148.47	1,049.6	1,560.3	3,690.5	3,629.1	60.110		
6,500.0	6,046.6	5,081.5	4,654.5	42.4	35.8	148.65	1,071.6	1,593.1	3,729.6	3,667.5	60.040		
6,600.0	6,146.6	5,171.2	4,734.9	42.4	36.5	91.17	1,093.7	1,626.0	3,767.0	3,704.2	60.050		
6,700.0	6,246.6	5,260.8	4,815.3	42.4	37.2	90.80	1,115.9	1,659.0	3,804.5	3,741.2	60.063		
6,800.0	6,346.6	5,350.5	4,895.7	42.5	38.0	90.44	1,138.0	1,692.0	3,842.2	3,778.3	60.079		
6,900.0	6,446.6	5,440.2	4,976.1	42.5	38.7	87.59	1,160.1	1,724.9	3,880.0	3,815.4	50.095		
7,000.0	6,546.6	5,530.0	5,056.5	42.5	39.4	87.59	1,182.2	1,757.7	3,917.7	3,852.5	50.111		
7,100.0	6,646.6	5,619.8	5,142.9	42.5	40.1	87.59	1,204.3	1,790.5	3,955.4	3,889.6	50.127		
7,200.0	6,746.6	5,709.6	5,229.3	42.5	40.8	87.59	1,226.4	1,823.3	3,993.1	3,926.7	50.143		
7,300.0	6,846.6	5,799.4	5,315.7	42.5	41.5	87.59	1,248.5	1,856.1	4,030.8	3,963.8	50.159		
7,400.0	6,946.6	5,889.2	5,402.1	42.5	42.2	87.59	1,270.6	1,888.9	4,068.5	3,999.9	50.175		
7,500.0	7,046.6	5,979.0	5,488.5	42.5	42.9	87.59	1,292.7	1,921.7	4,106.2	4,036.0	50.191		
7,600.0	7,146.6	6,068.8	5,574.9	42.5	43.6	87.59	1,314.8	1,954.5	4,143.9	4,072.1	50.207		
7,700.0	7,246.6	6,158.6	5,661.3	42.5	44.3	87.59	1,336.9	1,987.3	4,181.6	4,108.2	50.223		
7,800.0	7,346.6	6,248.4	5,747.7	42.5	45.0	87.59	1,359.0	2,020.1	4,219.3	4,144.3	50.239		
7,900.0	7,446.6	6,338.2	5,834.1	42.5	45.7	87.59	1,381.1	2,052.9	4,257.0	4,180.4	50.255		
8,000.0	7,546.6	6,428.0	5,920.5	42.5	46.4	87.59	1,403.2	2,085.7	4,294.7	4,216.5	50.271		
8,100.0	7,646.6	6,517.8	6,006.9	42.5	47.1	87.59	1,425.3	2,118.5	4,332.4	4,252.6	50.287		
8,200.0	7,746.6	6,607.6	6,093.3	42.5	47.8	87.59	1,447.4	2,151.3	4,370.1	4,288.7	50.303		
8,300.0	7,846.6	6,697.4	6,179.7	42.5	48.5	87.59	1,469.5	2,184.1	4,407.8	4,324.8	50.319		
8,400.0	7,946.6	6,787.2	6,266.1	42.5	49.2	87.59	1,491.6	2,216.9	4,445.5	4,360.9	50.335		
8,500.0	8,046.6	6,877.0	6,352.5	42.5	49.9	87.59	1,513.7	2,249.7	4,483.2	4,397.0	50.351		
8,600.0	8,146.6	6,966.8	6,438.9	42.5	50.6	87.59	1,535.8	2,282.5	4,520.9	4,433.1	50.367		
8,700.0	8,246.6	7,056.6	6,525.3	42.5	51.3	87.59	1,557.9	2,315.3	4,558.6	4,469.2	50.383		
8,800.0	8,346.6	7,146.4	6,611.7	42.5	52.0	87.59	1,580.0	2,348.1	4,596.3	4,505.3	50.399		
8,900.0	8,446.6	7,236.2	6,698.1	42.5	52.7	87.59	1,602.1	2,380.9	4,634.0	4,541.4	50.415		
9,000.0	8,546.6	7,326.0	6,784.5	42.5	53.4	87.59	1,624.2	2,413.7	4,671.7	4,577.5	50.431		
9,096.2	8,642.8	7,411.8	6,870.9	42.5	54.1	87.59	1,646.3	2,446.5	4,709.4	4,613.6	50.447		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft	
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft	
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	88.24	0.4	14.1	14.1					
100.0	100.0	100.0	100.0	0.8	0.8	88.24	0.4	14.1	14.1	12.6	8.926			
200.0	200.0	200.0	200.0	1.4	1.4	88.24	0.4	14.1	14.1	11.3	4.998	CC		
204.4	204.4	204.4	204.4	1.4	1.4	173.24	0.4	14.1	14.1	11.3	4.945			
300.0	300.0	300.0	300.0	1.7	1.9	173.40	0.4	14.1	14.5	11.0	4.112	ES		
400.0	399.9	399.1	399.1	2.9	2.7	172.03	1.4	16.0	20.3	14.9	3.765	SF		
500.0	499.6	497.1	496.8	4.3	4.1	169.49	4.3	21.7	34.4	26.4	4.267			
600.0	598.8	592.8	592.0	4.9	5.1	165.57	9.0	30.7	56.6	46.9	5.847			
700.0	697.4	685.8	683.9	5.4	6.0	157.02	15.2	42.9	85.6	74.8	7.866			
800.0	795.3	775.6	772.2	6.1	6.8	152.05	22.9	57.9	120.8	108.6	9.887			
900.0	892.4	861.8	856.2	6.9	7.4	148.82	31.7	75.1	161.8	148.4	12.095			
1,000.0	988.4	944.1	935.6	7.6	8.0	146.49	41.5	94.1	208.5	194.0	14.467			
1,100.0	1,083.1	1,022.1	1,010.2	8.3	8.6	144.64	52.0	114.5	260.4	245.0	16.977			
1,200.0	1,176.5	1,100.0	1,083.9	8.9	9.1	143.11	63.6	137.1	317.3	301.0	19.498			
1,300.0	1,268.2	1,165.0	1,144.6	9.6	9.5	141.54	74.1	157.6	378.8	361.8	22.311			
1,400.0	1,358.9	1,230.5	1,205.1	10.1	9.9	142.39	85.5	179.9	443.6	426.1	25.266			
1,500.0	1,449.6	1,295.5	1,264.5	10.4	10.2	143.05	97.6	203.4	510.4	492.3	28.309			
1,600.0	1,540.3	1,369.3	1,331.6	10.8	10.4	143.60	111.6	230.7	577.8	559.2	31.070			
1,700.0	1,631.0	1,443.1	1,398.7	11.1	10.6	144.04	125.6	258.0	645.2	626.0	33.616			
1,800.0	1,721.8	1,516.9	1,465.9	11.5	10.9	144.39	139.6	285.3	712.6	692.8	35.960			
1,900.0	1,812.5	1,590.7	1,533.0	11.9	11.1	144.68	153.6	312.5	780.0	759.6	38.111			
2,000.0	1,903.2	1,664.4	1,600.1	12.3	11.4	144.92	167.6	339.8	847.5	826.3	40.080			
2,100.0	1,993.9	1,738.2	1,667.2	12.8	11.6	145.13	181.7	367.1	914.9	893.1	41.888			
2,200.0	2,084.6	1,812.0	1,734.3	13.3	11.9	145.31	195.7	394.4	982.4	959.8	43.550			
2,300.0	2,175.4	1,885.8	1,801.4	13.8	12.2	145.47	209.7	421.7	1,049.8	1,026.5	45.072			
2,400.0	2,266.1	1,959.6	1,868.5	14.4	12.4	145.61	223.7	448.9	1,117.3	1,093.3	46.469			
2,500.0	2,356.8	2,033.4	1,935.7	15.1	12.7	145.73	237.7	476.2	1,184.8	1,160.0	47.755			
2,600.0	2,447.5	2,107.2	2,002.8	15.8	13.0	145.84	251.7	503.5	1,252.2	1,226.7	48.940			
2,700.0	2,538.2	2,181.0	2,069.9	16.5	13.3	145.94	265.7	530.8	1,319.7	1,293.3	50.030			
2,800.0	2,629.0	2,254.7	2,137.0	17.2	13.6	146.03	279.7	558.0	1,387.2	1,360.0	51.035			
2,900.0	2,719.7	2,328.5	2,204.1	18.0	13.9	146.11	293.7	585.3	1,454.7	1,426.7	51.965			
3,000.0	2,810.4	2,402.3	2,271.2	18.8	14.2	146.18	307.7	612.6	1,522.1	1,493.3	52.827			
3,100.0	2,901.1	2,476.1	2,338.4	19.5	14.6	146.25	321.7	639.9	1,589.6	1,560.0	53.623			
3,200.0	2,991.8	2,549.9	2,405.5	20.3	14.9	146.31	335.7	667.1	1,657.1	1,626.6	54.361			
3,300.0	3,082.5	2,623.7	2,472.6	21.1	15.3	146.37	349.7	694.4	1,724.6	1,693.3	55.040			
3,400.0	3,173.3	2,697.5	2,539.7	21.9	15.8	146.42	363.7	721.7	1,792.1	1,759.9	55.692			
3,500.0	3,264.0	2,771.3	2,606.8	22.6	16.3	146.47	377.7	749.0	1,859.6	1,826.5	56.291			
3,600.0	3,354.7	2,845.0	2,673.9	23.4	16.8	146.51	391.7	776.3	1,927.0	1,893.1	56.845			
3,700.0	3,445.4	2,918.8	2,741.0	24.2	17.4	146.55	405.7	803.5	1,994.5	1,959.8	57.364			
3,800.0	3,536.1	2,992.6	2,808.2	25.0	17.9	146.59	419.7	830.8	2,062.0	2,026.4	57.851			
3,900.0	3,626.9	3,066.4	2,875.3	25.8	18.5	146.63	433.7	858.1	2,129.5	2,093.0	58.307			
4,000.0	3,717.6	3,140.2	2,942.4	26.6	19.1	146.67	447.7	885.4	2,197.0	2,159.6	58.734			
4,100.0	3,808.3	3,214.0	3,009.5	27.3	19.6	146.70	461.7	912.6	2,264.5	2,226.2	59.136			
4,200.0	3,899.0	3,287.8	3,076.6	28.1	20.2	146.73	475.7	939.9	2,332.0	2,292.8	59.514			
4,300.0	3,989.7	3,361.6	3,143.7	28.9	20.7	146.76	489.8	967.2	2,399.5	2,359.4	59.870			
4,400.0	4,080.5	3,435.3	3,210.9	29.7	21.3	146.79	503.8	994.5	2,466.9	2,426.0	60.205			
4,500.0	4,171.2	3,509.1	3,278.0	30.5	21.8	146.81	517.8	1,021.8	2,534.4	2,492.6	60.521			
4,600.0	4,261.9	3,582.9	3,345.1	31.3	22.4	146.84	531.8	1,049.0	2,601.9	2,559.1	60.820			
4,700.0	4,352.6	3,656.7	3,412.2	32.1	23.0	146.86	545.8	1,076.3	2,669.4	2,625.7	61.103			
4,800.0	4,443.3	3,730.5	3,479.3	32.9	23.5	146.88	559.8	1,103.6	2,736.9	2,692.3	61.370			
4,900.0	4,534.1	3,804.3	3,546.4	33.7	24.1	146.90	573.8	1,130.9	2,804.4	2,758.9	61.624			
5,000.0	4,624.8	3,878.1	3,613.5	34.5	24.7	146.92	587.8	1,158.1	2,871.9	2,825.5	61.864			

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	4,715.5	3,951.9	3,680.7	35.2	25.2	146.94	601.8	1,185.4	2,939.4	2,892.0	62.092		
5,200.0	4,806.2	4,025.6	3,747.8	36.0	25.8	146.96	615.8	1,212.7	3,006.9	2,958.6	62.308		
5,300.0	4,896.9	4,099.4	3,814.9	36.8	26.3	146.98	629.8	1,240.0	3,074.3	3,025.2	62.514		
5,400.0	4,987.6	4,173.2	3,882.0	37.6	26.9	146.99	643.8	1,267.2	3,141.8	3,091.7	62.710		
5,500.0	5,078.4	4,247.0	3,949.1	38.4	27.5	147.01	657.8	1,294.5	3,209.3	3,158.3	62.894		
5,600.0	5,169.8	4,321.8	4,017.2	39.2	28.0	148.09	672.0	1,322.2	3,275.7	3,223.7	63.032		
5,700.0	5,263.0	4,399.0	4,087.4	39.8	28.6	149.10	686.6	1,350.7	3,339.2	3,286.2	63.058		
5,800.0	5,357.6	4,478.4	4,159.6	40.4	29.2	149.96	701.7	1,380.1	3,399.8	3,345.8	63.018		
5,900.0	5,453.6	4,559.8	4,233.7	40.9	29.8	150.69	717.2	1,410.2	3,457.4	3,402.4	62.926		
6,000.0	5,550.7	4,643.2	4,309.5	41.3	30.5	151.29	733.0	1,441.0	3,511.8	3,455.9	62.788		
6,100.0	5,648.7	4,728.3	4,386.9	41.7	31.1	151.79	749.1	1,472.4	3,563.0	3,506.1	62.609		
6,200.0	5,747.5	4,815.0	4,465.7	42.0	31.8	152.18	765.6	1,504.5	3,610.9	3,553.1	62.395		
6,300.0	5,846.9	4,903.1	4,545.9	42.2	32.5	152.49	782.3	1,537.1	3,655.5	3,596.7	62.156		
6,400.0	5,946.7	4,992.4	4,627.1	42.3	33.1	152.71	799.3	1,570.1	3,696.6	3,636.9	61.902		
6,500.0	6,046.6	5,082.9	4,709.4	42.4	33.8	152.85	816.4	1,603.5	3,734.3	3,673.9	61.782		
6,600.0	6,146.6	5,173.8	4,792.1	42.4	34.5	95.40	833.7	1,637.1	3,770.2	3,709.1	61.759		
6,700.0	6,246.6	5,264.8	4,874.9	42.4	35.2	95.08	851.0	1,670.8	3,806.2	3,744.5	61.741		
6,800.0	6,346.6	6,795.0	6,346.6	42.5	41.4	92.37	1,005.9	1,972.5	3,841.5	3,768.5	52.647		
6,900.0	6,446.6	6,895.0	6,446.6	42.5	41.5	92.37	1,005.9	1,972.5	3,841.5	3,768.5	52.613		
7,000.0	6,546.6	6,995.0	6,546.6	42.5	41.5	92.37	1,005.9	1,972.5	3,841.5	3,768.4	52.578		
7,100.0	6,646.6	7,095.0	6,646.6	42.5	41.5	92.37	1,005.9	1,972.5	3,841.5	3,768.4	52.543		
7,200.0	6,746.6	7,195.0	6,746.6	42.6	41.5	92.37	1,005.9	1,972.5	3,841.5	3,768.3	52.508		
7,300.0	6,846.6	7,295.0	6,846.6	42.6	41.6	92.37	1,005.9	1,972.5	3,841.5	3,768.3	52.472		
7,400.0	6,946.6	7,395.0	6,946.6	42.6	41.6	92.37	1,005.9	1,972.5	3,841.5	3,768.2	52.437		
7,500.0	7,046.6	7,495.0	7,046.6	42.6	41.6	92.37	1,005.9	1,972.5	3,841.5	3,768.2	52.401		
7,600.0	7,146.6	7,595.0	7,146.6	42.7	41.6	92.37	1,005.9	1,972.5	3,841.5	3,768.1	52.365		
7,700.0	7,246.6	7,695.0	7,246.6	42.7	41.7	92.37	1,005.9	1,972.5	3,841.5	3,768.1	52.329		
7,800.0	7,346.6	7,795.0	7,346.6	42.7	41.7	92.37	1,005.9	1,972.5	3,841.5	3,768.0	52.292		
7,900.0	7,446.6	7,895.0	7,446.6	42.8	41.7	92.37	1,005.9	1,972.5	3,841.5	3,768.0	52.256		
8,000.0	7,546.6	7,995.0	7,546.6	42.8	41.8	92.37	1,005.9	1,972.5	3,841.5	3,767.9	52.219		
8,100.0	7,646.6	8,095.0	7,646.6	42.8	41.8	92.37	1,005.9	1,972.5	3,841.5	3,767.9	52.182		
8,200.0	7,746.6	8,195.0	7,746.6	42.8	41.8	92.37	1,005.9	1,972.5	3,841.5	3,767.8	52.145		
8,300.0	7,846.6	8,295.0	7,846.6	42.9	41.8	92.37	1,005.9	1,972.5	3,841.5	3,767.8	52.108		
8,310.0	7,856.6	8,305.0	7,856.6	42.9	41.8	92.37	1,005.9	1,972.5	3,841.5	3,767.8	52.105		
8,400.0	7,946.6	8,339.4	7,891.0	42.9	41.8	92.37	1,005.9	1,972.5	3,841.9	3,768.1	52.094		
8,500.0	8,046.6	8,339.4	7,891.0	42.9	41.8	92.37	1,005.9	1,972.5	3,844.6	3,770.9	52.141		
8,600.0	8,146.6	8,339.4	7,891.0	43.0	41.8	92.37	1,005.9	1,972.5	3,850.0	3,776.3	52.250		
8,700.0	8,246.6	8,339.4	7,891.0	43.0	41.8	92.37	1,005.9	1,972.5	3,857.9	3,784.3	52.421		
8,800.0	8,346.6	8,339.4	7,891.0	43.0	41.8	92.37	1,005.9	1,972.5	3,868.4	3,794.9	52.653		
8,900.0	8,446.6	8,339.4	7,891.0	43.0	41.8	92.37	1,005.9	1,972.5	3,881.5	3,808.1	52.945		
9,000.0	8,546.6	8,339.4	7,891.0	43.1	41.8	92.37	1,005.9	1,972.5	3,897.0	3,823.9	53.297		
9,096.2	8,642.8	8,339.4	7,891.0	43.1	41.8	92.37	1,005.9	1,972.5	3,914.4	3,841.6	53.774		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	106.70	-6.4	21.4	22.4				
100.0	100.0	100.0	100.0	0.8	0.8	106.70	-6.4	21.4	22.4	20.8	14.109		
200.0	200.0	200.0	200.0	1.4	1.4	106.70	-6.4	21.4	22.4	19.5	7.900	CC	
204.4	204.4	204.4	204.4	1.4	1.4	-168.30	-6.4	21.4	22.4	19.5	7.843	ES	
300.0	300.0	299.6	299.6	1.7	1.7	-169.25	-6.2	21.9	23.1	19.8	6.998		
400.0	399.9	398.3	398.2	2.9	2.9	-175.22	-4.8	25.9	30.7	25.1	5.489	SF	
500.0	499.6	495.5	495.0	4.3	4.3	178.84	-2.0	33.8	46.6	38.4	5.646		
600.0	598.8	590.1	588.9	4.9	5.3	172.81	2.0	45.1	70.9	61.0	7.161		
700.0	697.4	681.8	679.2	5.4	6.1	162.84	7.2	59.6	102.3	91.2	9.206		
800.0	795.3	769.9	765.5	6.1	6.9	156.96	13.2	76.7	140.1	127.7	11.246		
900.0	892.4	854.2	847.2	6.9	7.5	153.15	20.1	96.0	184.0	170.3	13.487		
1,000.0	988.4	934.1	924.0	7.6	8.1	150.43	27.5	116.9	233.4	218.8	15.903		
1,100.0	1,083.1	1,009.6	995.8	8.3	8.7	148.31	35.3	138.9	288.3	272.7	18.468		
1,200.0	1,176.5	1,080.4	1,062.3	8.9	9.1	146.50	43.4	161.6	348.1	331.6	21.169		
1,300.0	1,268.2	1,146.5	1,123.8	9.6	9.4	144.84	51.5	184.5	412.5	395.4	24.133		
1,400.0	1,358.9	1,218.8	1,190.5	10.1	9.7	145.80	60.9	210.7	479.6	461.9	27.199		
1,500.0	1,449.6	1,292.6	1,258.7	10.4	9.9	146.69	70.4	237.5	546.7	528.6	30.112		
1,600.0	1,540.3	1,366.5	1,326.8	10.8	10.1	147.39	79.9	264.3	613.9	595.2	32.791		
1,700.0	1,631.0	1,440.3	1,395.0	11.1	10.3	147.95	89.4	291.1	681.2	661.9	35.266		
1,800.0	1,721.8	1,514.2	1,463.2	11.5	10.6	148.42	98.9	317.9	748.5	728.6	37.548		
1,900.0	1,812.5	1,588.0	1,531.3	11.9	10.9	148.80	108.5	344.7	815.8	795.2	39.647		
2,000.0	1,903.2	1,661.9	1,599.5	12.3	11.1	149.13	118.0	371.5	883.2	861.9	41.575		
2,100.0	1,993.9	1,735.7	1,667.6	12.8	11.4	149.41	127.5	398.3	950.5	928.6	43.352		
2,200.0	2,084.6	1,809.6	1,735.8	13.3	11.7	149.65	137.0	425.1	1,017.9	995.2	44.989		
2,300.0	2,175.4	1,883.4	1,803.9	13.8	12.0	149.86	146.5	451.9	1,085.2	1,061.9	46.493		
2,400.0	2,266.1	1,957.3	1,872.1	14.4	12.3	150.05	156.1	478.7	1,152.6	1,128.5	47.879		
2,500.0	2,356.8	2,031.1	1,940.2	15.1	12.6	150.22	165.6	505.5	1,220.0	1,195.2	49.160		
2,600.0	2,447.5	2,105.0	2,008.4	15.8	12.9	150.37	175.1	532.3	1,287.4	1,261.8	50.344		
2,700.0	2,538.2	2,178.8	2,076.5	16.5	13.2	150.50	184.6	559.1	1,354.7	1,328.4	51.435		
2,800.0	2,629.0	2,252.7	2,144.7	17.2	13.5	150.63	194.1	585.9	1,422.1	1,395.0	52.447		
2,900.0	2,719.7	2,326.5	2,212.9	18.0	13.8	150.74	203.7	612.7	1,489.5	1,461.6	53.385		
3,000.0	2,810.4	2,400.4	2,281.0	18.8	14.1	150.84	213.2	639.4	1,556.9	1,528.2	54.258		
3,100.0	2,901.1	2,474.2	2,349.2	19.5	14.4	150.93	222.7	666.2	1,624.3	1,594.8	55.066		
3,200.0	2,991.8	2,548.1	2,417.3	20.3	14.8	151.02	232.2	693.0	1,691.7	1,661.4	55.819		
3,300.0	3,082.5	2,621.9	2,485.5	21.1	15.1	151.10	241.7	719.8	1,759.1	1,728.0	56.522		
3,400.0	3,173.3	2,695.8	2,553.6	21.9	15.5	151.17	251.3	746.6	1,826.5	1,794.6	57.179		
3,500.0	3,264.0	2,769.6	2,621.8	22.6	15.9	151.24	260.8	773.4	1,893.9	1,861.2	57.789		
3,600.0	3,354.7	2,843.5	2,689.9	23.4	16.4	151.30	270.3	800.2	1,961.4	1,927.7	58.361		
3,700.0	3,445.4	2,917.3	2,758.1	24.2	16.9	151.36	279.8	827.0	2,028.8	1,994.3	58.905		
3,800.0	3,536.1	2,991.2	2,826.2	25.0	17.4	151.42	289.3	853.8	2,096.2	2,060.9	59.408		
3,900.0	3,626.9	3,065.0	2,894.4	25.8	17.9	151.47	298.9	880.6	2,163.6	2,127.5	59.882		
4,000.0	3,717.6	3,138.8	2,962.6	26.6	18.4	151.52	308.4	907.4	2,231.0	2,194.0	60.327		
4,100.0	3,808.3	3,212.7	3,030.7	27.3	18.9	151.56	317.9	934.2	2,298.4	2,260.6	60.746		
4,200.0	3,899.0	3,286.5	3,098.9	28.1	19.5	151.61	327.4	961.0	2,365.8	2,327.1	61.142		
4,300.0	3,989.7	3,360.4	3,167.0	28.9	20.0	151.65	336.9	987.8	2,433.2	2,393.7	61.515		
4,400.0	4,080.5	3,434.2	3,235.2	29.7	20.5	151.69	346.5	1,014.6	2,500.7	2,460.2	61.867		
4,500.0	4,171.2	3,508.1	3,303.3	30.5	21.0	151.72	356.0	1,041.4	2,568.1	2,526.8	62.201		
4,600.0	4,261.9	3,581.9	3,371.5	31.3	21.6	151.76	365.5	1,068.1	2,635.5	2,593.3	62.516		
4,700.0	4,352.6	3,655.8	3,439.6	32.1	22.1	151.79	375.0	1,094.9	2,702.9	2,659.9	62.815		
4,800.0	4,443.3	3,729.6	3,507.8	32.9	22.6	151.82	384.5	1,121.7	2,770.3	2,726.4	63.098		
4,900.0	4,534.1	3,803.5	3,575.9	33.7	23.1	151.85	394.1	1,148.5	2,837.7	2,793.0	63.368		
5,000.0	4,624.8	3,877.3	3,644.1	34.5	23.6	151.88	403.6	1,175.3	2,905.2	2,859.5	63.623		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	4,715.5	3,951.2	3,712.3	35.2	24.2	151.91	413.1	1,202.1	2,972.6	2,926.0	63.866			
5,200.0	4,806.2	4,025.0	3,780.4	36.0	24.7	151.94	422.6	1,228.9	3,040.0	2,992.6	64.097			
5,300.0	4,896.9	4,098.9	3,848.6	36.8	25.2	151.96	432.2	1,255.7	3,107.4	3,059.1	64.317			
5,400.0	4,987.6	4,172.7	3,916.7	37.6	25.7	151.98	441.7	1,282.5	3,174.8	3,125.6	64.527			
5,500.0	5,078.4	4,246.6	3,984.9	38.4	26.3	152.01	451.2	1,309.3	3,242.3	3,192.2	64.725			
5,600.0	5,169.8	4,321.5	4,054.0	39.2	26.8	152.04	460.9	1,336.5	3,308.5	3,257.5	64.869			
5,700.0	5,263.0	4,398.9	4,125.5	39.8	27.3	153.82	470.8	1,364.6	3,371.7	3,319.8	64.881			
5,800.0	5,357.6	4,478.7	4,199.1	40.4	27.9	154.56	481.1	1,393.5	3,431.9	3,379.0	64.818			
5,900.0	5,453.6	4,560.7	4,274.7	40.9	28.5	155.18	491.7	1,423.2	3,488.9	3,435.0	64.694			
6,000.0	5,550.7	4,644.6	4,352.2	41.3	29.1	155.69	502.5	1,453.7	3,542.6	3,487.7	64.515			
6,100.0	5,648.7	4,730.5	4,431.5	41.7	29.7	156.11	513.6	1,484.9	3,592.9	3,537.0	64.289			
6,200.0	5,747.5	4,818.1	4,512.3	42.0	30.3	156.44	524.9	1,516.6	3,639.8	3,583.0	64.023			
6,300.0	5,846.9	4,907.2	4,594.6	42.2	31.0	156.69	536.4	1,549.0	3,683.2	3,625.4	63.726			
6,400.0	5,946.7	4,997.7	4,678.1	42.3	31.6	156.87	548.0	1,581.8	3,722.9	3,664.2	63.410			
6,500.0	6,046.6	5,089.4	4,762.8	42.4	32.2	156.98	559.9	1,615.1	3,759.0	3,699.6	63.244			
6,600.0	6,146.6	5,181.7	4,847.9	42.4	32.9	99.58	571.8	1,648.6	3,793.2	3,733.2	63.191			
6,700.0	6,246.6	5,274.0	4,933.1	42.4	33.6	99.31	583.7	1,682.1	3,827.5	3,766.9	63.146			
6,800.0	6,346.6	5,366.3	5,018.3	42.5	34.2	99.04	595.5	1,715.6	3,861.9	3,800.7	63.101			
6,900.0	6,446.6	5,458.6	5,103.5	42.5	34.9	98.77	607.3	1,749.1	3,896.3	3,834.9	63.056			
7,000.0	6,546.6	5,546.6	5,188.7	42.5	35.6	98.50	619.1	1,782.6	3,930.7	3,869.1	63.011			
7,100.0	6,646.6	5,634.6	5,273.9	42.5	36.3	98.23	630.9	1,816.1	3,965.1	3,903.5	62.966			
7,200.0	6,746.6	5,727.0	5,359.1	42.6	37.0	97.96	642.7	1,849.6	4,000.0	3,937.9	62.921			
7,300.0	6,846.6	5,819.1	5,444.3	42.6	37.7	97.69	654.5	1,883.1	4,035.4	3,972.3	62.876			
7,400.0	6,946.6	5,911.2	5,529.5	42.6	38.4	97.42	666.3	1,916.6	4,070.8	3,999.7	62.831			
7,500.0	7,046.6	6,003.3	5,614.7	42.6	39.1	97.15	678.1	1,950.1	4,106.2	4,027.1	62.786			
7,600.0	7,146.6	6,095.4	5,700.0	42.7	39.8	96.88	689.9	1,983.6	4,141.6	4,054.5	62.741			
7,700.0	7,246.6	6,187.5	5,785.2	42.7	40.5	96.61	701.7	2,017.1	4,177.0	4,081.9	62.696			
7,800.0	7,346.6	6,279.6	5,870.4	42.7	41.2	96.34	713.5	2,050.6	4,212.4	4,109.3	62.651			
7,900.0	7,446.6	6,371.7	5,955.6	42.8	41.9	96.07	725.3	2,084.1	4,247.8	4,136.7	62.606			
8,000.0	7,546.6	6,463.8	6,040.8	42.8	42.6	95.80	737.1	2,117.6	4,283.2	4,164.1	62.561			
8,100.0	7,646.6	6,555.9	6,126.0	42.8	43.3	95.53	748.9	2,151.1	4,318.6	4,191.5	62.516			
8,200.0	7,746.6	6,648.0	6,211.2	42.8	44.0	95.26	760.7	2,184.6	4,354.0	4,218.9	62.471			
8,300.0	7,846.6	6,740.1	6,296.4	42.9	44.7	94.99	772.5	2,218.1	4,389.4	4,246.3	62.426			
8,400.0	7,946.6	6,832.2	6,381.6	42.9	45.4	94.72	784.3	2,251.6	4,424.8	4,273.7	62.381			
8,500.0	8,046.6	6,924.3	6,466.8	42.9	46.1	94.45	796.1	2,285.1	4,460.2	4,301.1	62.336			
8,600.0	8,146.6	7,016.4	6,552.0	43.0	46.8	94.18	807.9	2,318.6	4,495.6	4,328.5	62.291			
8,700.0	8,246.6	7,108.5	6,637.2	43.0	47.5	93.91	819.7	2,352.1	4,531.0	4,355.9	62.246			
8,800.0	8,346.6	7,200.6	6,722.4	43.0	48.2	93.64	831.5	2,385.6	4,566.4	4,383.3	62.201			
8,900.0	8,446.6	7,292.7	6,807.6	43.0	48.9	93.37	843.3	2,419.1	4,601.8	4,410.7	62.156			
9,000.0	8,546.6	7,384.8	6,892.8	43.1	49.6	93.10	855.1	2,452.6	4,637.2	4,438.1	62.111			
9,096.2	8,642.8	7,476.9	6,978.0	43.1	50.3	92.83	866.9	2,486.1	4,672.6	4,465.5	62.066			

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-OWSG (REV5) MWD HDGM Standard												Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore +N-S (usft)	Centre +E-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	114.83	-13.3	28.7	31.6				
100.0	100.0	100.0	100.0	0.8	0.8	114.83	-13.3	28.7	31.6	30.0	19.951		
200.0	200.0	200.0	200.0	1.4	1.4	114.83	-13.3	28.7	31.6	28.8	11.171	CC	
204.4	204.4	204.4	204.4	1.4	1.4	-160.17	-13.3	28.7	31.6	28.8	9.552	ES	
300.0	300.0	299.7	299.7	1.7	1.7	-160.52	-13.2	28.8	32.0	28.7	11.627		
400.0	399.9	398.2	398.2	2.9	2.7	-165.24	-12.6	31.9	38.5	33.1	7.178		
500.0	499.6	495.3	495.0	4.3	4.1	-171.62	-11.0	39.0	53.1	45.1	6.598	SF	
600.0	598.8	589.9	589.0	4.9	5.2	-178.79	-8.7	49.8	76.3	66.5	7.807		
700.0	697.4	681.6	679.4	5.4	6.0	170.24	-5.7	63.8	107.0	96.0	9.694		
800.0	795.3	769.6	765.8	6.1	6.8	163.66	-2.1	80.7	144.6	132.1	11.627		
900.0	892.4	853.7	847.5	6.9	7.4	159.38	2.0	99.7	188.5	174.8	13.799		
1,000.0	988.4	933.3	924.3	7.6	8.0	156.35	6.5	120.5	238.3	223.5	16.172		
1,100.0	1,083.1	1,008.2	995.8	8.3	8.5	154.01	11.2	142.4	293.7	278.0	18.718		
1,200.0	1,176.5	1,078.3	1,062.0	8.9	9.0	152.06	16.1	164.9	354.2	337.7	21.420		
1,300.0	1,268.2	1,146.6	1,125.8	9.6	9.3	150.35	21.2	188.8	419.6	402.3	24.341		
1,400.0	1,358.9	1,216.2	1,190.4	10.1	9.5	151.12	26.6	214.0	487.4	469.7	27.510		
1,500.0	1,449.6	1,289.4	1,258.3	10.4	9.7	151.88	32.3	240.6	555.4	537.2	30.474		
1,600.0	1,540.3	1,362.6	1,326.3	10.8	10.0	152.47	38.1	267.1	623.4	604.6	33.215		
1,700.0	1,631.0	1,435.8	1,394.3	11.1	10.2	152.95	43.8	293.7	691.4	672.0	35.754		
1,800.0	1,721.8	1,509.0	1,462.2	11.5	10.4	153.34	49.5	320.3	759.4	739.5	38.104		
1,900.0	1,812.5	1,582.2	1,530.2	11.9	10.7	153.67	55.2	346.8	827.5	806.9	40.271		
2,000.0	1,903.2	1,655.4	1,598.2	12.3	11.0	153.95	60.9	373.4	895.5	874.4	42.272		
2,100.0	1,993.9	1,728.6	1,666.1	12.8	11.2	154.18	66.7	400.0	963.6	941.8	44.122		
2,200.0	2,084.6	1,801.8	1,734.1	13.3	11.5	154.39	72.4	426.5	1,031.7	1,009.2	45.832		
2,300.0	2,175.4	1,875.0	1,802.1	13.8	11.8	154.57	78.1	453.1	1,099.8	1,076.6	47.407		
2,400.0	2,266.1	1,948.2	1,870.0	14.4	12.1	154.73	83.8	479.7	1,167.9	1,144.0	48.864		
2,500.0	2,356.8	2,021.4	1,938.0	15.1	12.4	154.88	89.5	506.2	1,236.0	1,211.4	50.214		
2,600.0	2,447.5	2,094.6	2,006.0	15.8	12.7	155.01	95.2	532.8	1,304.1	1,278.7	51.465		
2,700.0	2,538.2	2,167.8	2,073.9	16.5	13.0	155.12	101.0	559.3	1,372.2	1,346.1	52.622		
2,800.0	2,629.0	2,241.0	2,141.9	17.2	13.3	155.23	106.7	585.9	1,440.3	1,413.5	53.697		
2,900.0	2,719.7	2,314.2	2,209.9	18.0	13.6	155.32	112.4	612.5	1,508.4	1,480.8	54.698		
3,000.0	2,810.4	2,387.3	2,277.8	18.8	13.9	155.41	118.1	639.0	1,576.5	1,548.2	55.628		
3,100.0	2,901.1	2,460.5	2,345.8	19.5	14.2	155.49	123.8	665.6	1,644.6	1,615.5	56.493		
3,200.0	2,991.8	2,533.7	2,413.8	20.3	14.6	155.56	129.6	692.2	1,712.7	1,682.8	57.301		
3,300.0	3,082.5	2,606.9	2,481.7	21.1	14.9	155.63	135.3	718.7	1,780.9	1,750.2	58.057		
3,400.0	3,173.3	2,680.1	2,549.7	21.9	15.2	155.69	141.0	745.3	1,849.0	1,817.5	58.762		
3,500.0	3,264.0	2,753.3	2,617.7	22.6	15.6	155.75	146.7	771.9	1,917.1	1,884.8	59.422		
3,600.0	3,354.7	2,826.5	2,685.6	23.4	15.9	155.80	152.4	798.4	1,985.2	1,952.1	60.041		
3,700.0	3,445.4	2,899.7	2,753.6	24.2	16.3	155.85	158.1	825.0	2,053.3	2,019.5	60.624		
3,800.0	3,536.1	2,972.9	2,821.6	25.0	16.8	155.90	163.9	851.6	2,121.4	2,086.8	61.168		
3,900.0	3,626.9	3,046.1	2,889.5	25.8	17.3	155.95	169.6	878.1	2,189.6	2,154.1	61.680		
4,000.0	3,717.6	3,119.3	2,957.5	26.6	17.8	155.99	175.3	904.7	2,257.7	2,221.4	62.167		
4,100.0	3,808.3	3,192.5	3,025.5	27.3	18.3	156.03	181.0	931.2	2,325.8	2,288.7	62.626		
4,200.0	3,899.0	3,265.7	3,093.4	28.1	18.8	156.06	186.7	957.8	2,393.9	2,356.0	63.054		
4,300.0	3,989.7	3,338.9	3,161.4	28.9	19.3	156.10	192.5	984.4	2,462.1	2,423.3	63.460		
4,400.0	4,080.5	3,412.1	3,229.4	29.7	19.8	156.13	198.2	1,010.9	2,530.2	2,490.6	63.844		
4,500.0	4,171.2	3,485.3	3,297.3	30.5	20.3	156.16	203.9	1,037.5	2,598.3	2,557.8	64.208		
4,600.0	4,261.9	3,558.5	3,365.3	31.3	20.8	156.19	209.6	1,064.1	2,666.4	2,625.1	64.553		
4,700.0	4,352.6	3,631.7	3,433.3	32.1	21.3	156.22	215.3	1,090.6	2,734.6	2,692.4	64.880		
4,800.0	4,443.3	3,704.9	3,501.2	32.9	21.8	156.25	221.0	1,117.2	2,802.7	2,759.7	65.190		
4,900.0	4,534.1	3,778.1	3,569.2	33.7	22.3	156.27	226.8	1,143.8	2,870.8	2,827.0	65.484		
5,000.0	4,624.8	3,851.3	3,637.2	34.5	22.8	156.30	232.5	1,170.3	2,938.9	2,894.3	65.765		

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



Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	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	4,715.5	3,924.5	3,705.1	35.2	23.3	156.32	238.2	1,196.9	3,007.1	2,961.5	66.031		
5,200.0	4,806.2	3,997.7	3,773.1	36.0	23.8	156.34	243.9	1,223.4	3,075.2	3,028.8	66.285		
5,300.0	4,896.9	4,070.9	3,841.1	36.8	24.3	156.37	249.6	1,250.0	3,143.3	3,096.1	66.527		
5,400.0	4,987.6	4,144.1	3,909.0	37.6	24.8	156.39	255.4	1,276.6	3,211.5	3,163.4	66.757		
5,500.0	5,078.4	4,217.3	3,977.0	38.4	25.3	156.41	261.1	1,303.1	3,279.6	3,230.6	66.975		
5,600.0	5,169.8	4,291.6	4,046.0	39.2	25.8	157.22	266.9	1,330.1	3,346.5	3,296.6	67.131		
5,700.0	5,263.0	4,368.6	4,117.5	39.8	26.3	157.97	272.9	1,358.0	3,410.3	3,359.5	67.138		
5,800.0	5,357.6	4,448.0	4,191.2	40.4	26.9	158.61	279.1	1,386.9	3,471.0	3,419.2	67.060		
5,900.0	5,453.6	4,529.7	4,267.1	40.9	27.4	159.14	285.5	1,416.5	3,528.4	3,475.7	66.914		
6,000.0	5,550.7	4,613.6	4,345.0	41.3	28.0	159.59	292.0	1,446.9	3,582.4	3,528.7	66.706		
6,100.0	5,648.7	4,699.5	4,424.7	41.7	28.6	159.94	298.7	1,478.1	3,633.0	3,578.3	66.445		
6,200.0	5,747.5	4,787.2	4,506.2	42.0	29.2	160.23	305.6	1,509.9	3,680.0	3,624.4	66.138		
6,300.0	5,846.9	4,876.6	4,589.2	42.2	29.8	160.44	312.6	1,542.4	3,723.4	3,666.8	65.797		
6,400.0	5,946.7	4,967.4	4,673.6	42.3	30.4	160.59	319.7	1,575.4	3,763.1	3,705.6	65.435		
6,500.0	6,046.6	5,059.6	4,759.2	42.4	31.1	160.68	326.9	1,608.8	3,799.0	3,740.7	65.235		
6,600.0	6,146.6	5,152.5	4,845.4	42.4	31.7	103.32	334.1	1,642.5	3,832.9	3,774.1	65.168		
6,700.0	6,246.6	5,245.4	4,931.6	42.4	32.4	103.09	341.4	1,676.2	3,866.9	3,807.5	65.110		
6,800.0	6,346.6	5,338.2	5,017.8	42.5	33.0	102.86	348.6	1,709.9	3,900.9	3,840.9	65.052		
6,900.0	6,446.6	5,431.0	5,104.0	42.5	33.7	101.24	355.8	1,743.6	3,934.9	3,874.3	64.994		
7,000.0	6,546.6	5,523.8	5,190.2	42.5	34.0	101.24	363.0	1,777.3	3,968.9	3,907.7	64.936		
7,100.0	6,646.6	5,616.6	5,276.4	42.5	34.0	101.24	370.2	1,811.0	3,966.9	3,836.6	65.579		
7,200.0	6,746.6	5,709.4	5,362.6	42.6	34.0	101.24	377.4	1,844.7	3,966.9	3,836.5	65.539		
7,300.0	6,846.6	5,802.2	5,448.8	42.6	34.0	101.24	384.6	1,878.4	3,966.9	3,836.5	65.499		
7,400.0	6,946.6	5,895.0	5,535.0	42.6	34.1	101.24	391.8	1,912.1	3,966.9	3,836.4	65.459		
7,500.0	7,046.6	5,987.8	5,621.2	42.6	34.1	101.24	400.0	1,945.8	3,966.9	3,836.4	65.419		
7,600.0	7,146.6	6,080.6	5,707.4	42.7	34.1	101.24	408.2	1,979.5	3,966.9	3,836.3	65.378		
7,700.0	7,246.6	6,173.4	5,793.6	42.7	34.2	101.24	416.4	2,013.2	3,966.9	3,836.3	65.337		
7,800.0	7,346.6	6,266.2	5,879.8	42.7	34.2	101.24	424.6	2,046.9	3,966.9	3,836.2	65.296		
7,900.0	7,446.6	6,359.0	5,966.0	42.8	34.2	101.24	432.8	2,080.6	3,966.9	3,836.2	65.255		
8,000.0	7,546.6	6,451.8	6,052.2	42.8	34.3	101.24	441.0	2,114.3	3,966.9	3,836.1	65.214		
8,100.0	7,646.6	6,544.6	6,138.4	42.8	34.3	101.24	449.2	2,148.0	3,966.9	3,836.1	65.172		
8,200.0	7,746.6	6,637.4	6,224.6	42.8	34.3	101.24	457.4	2,181.7	3,966.9	3,836.0	65.130		
8,300.0	7,846.6	6,730.2	6,310.8	42.9	34.3	101.24	465.6	2,215.4	3,966.9	3,836.0	65.089		
8,310.0	7,856.6	6,740.2	6,320.8	42.9	34.3	101.24	466.6	2,218.4	3,966.9	3,835.9	65.086		
8,400.0	7,946.6	6,823.0	6,397.0	42.9	34.3	101.24	474.8	2,252.1	3,966.9	3,836.4	65.090		
8,500.0	8,046.6	6,915.8	6,483.2	42.9	34.3	101.24	483.0	2,285.8	3,910.0	3,839.1	65.167		
8,600.0	8,146.6	7,008.6	6,569.4	43.0	34.3	101.24	491.2	2,319.5	3,915.3	3,844.5	65.307		
8,700.0	8,246.6	7,101.4	6,655.6	43.0	34.3	101.24	499.4	2,353.2	3,923.1	3,852.4	65.511		
8,800.0	8,346.6	7,194.2	6,741.8	43.0	34.3	101.24	507.6	2,386.9	3,933.5	3,862.9	65.777		
8,900.0	8,446.6	7,287.0	6,828.0	43.0	34.3	101.24	515.8	2,420.6	3,946.3	3,876.0	66.105		
9,000.0	8,546.6	7,379.8	6,914.2	43.1	34.3	101.24	524.0	2,454.3	3,961.7	3,891.5	66.494		
9,096.2	8,642.8	7,471.6	7,000.4	43.1	34.3	101.24	532.2	2,488.0	3,978.7	3,909.0	67.027		

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

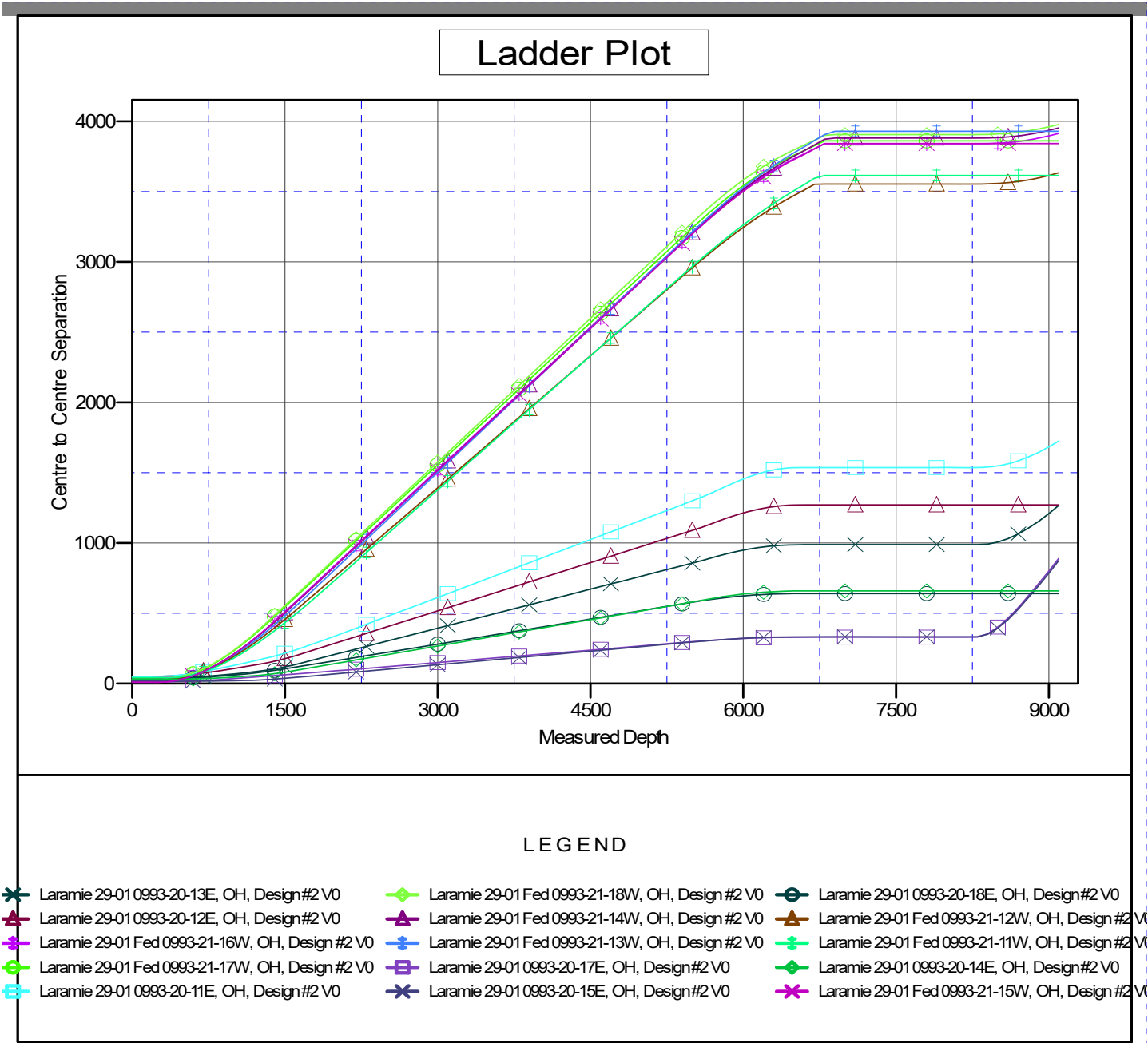


Anticollision Report



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB=30' @ 7493.0usft (TBD) Coordinates are relative to: Laramie 29-01 0993-20-16E - Slot B6
 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°



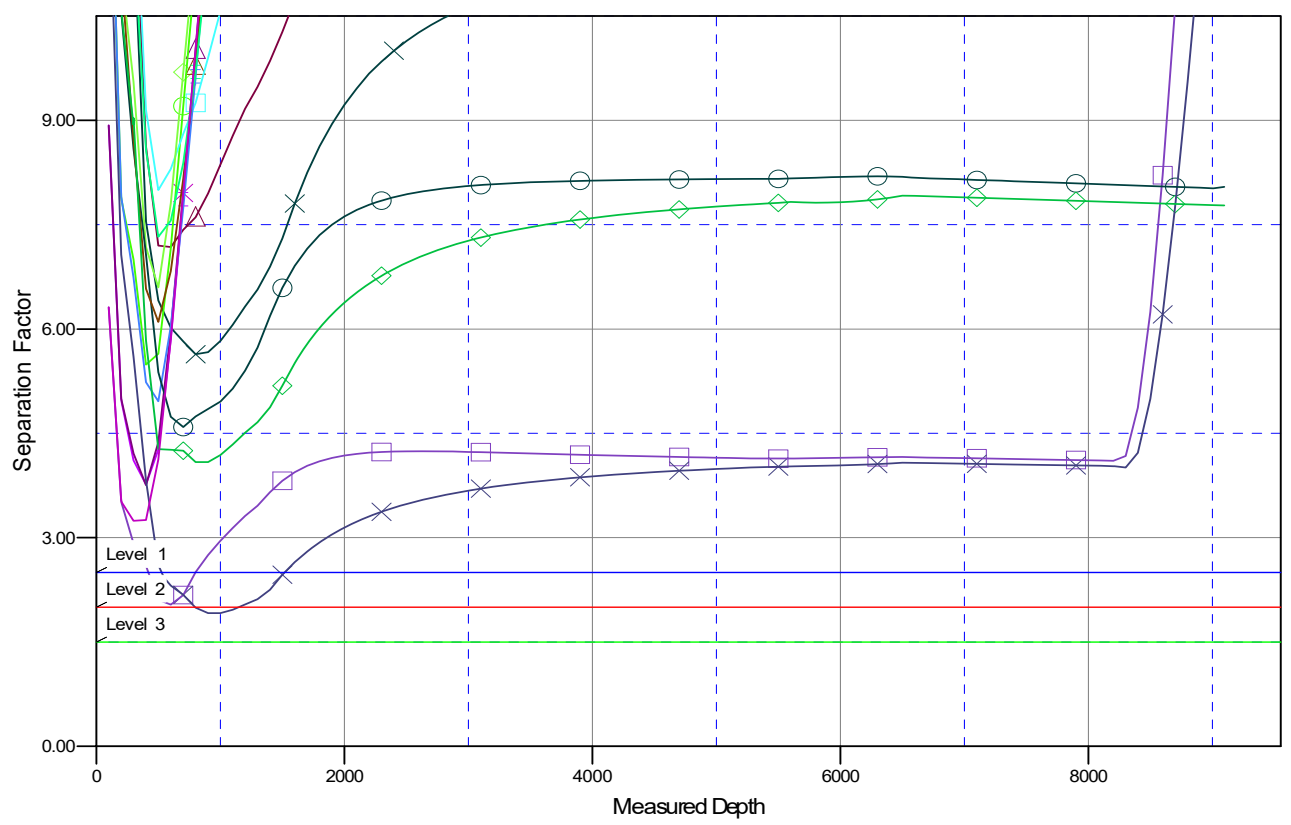
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company:	Laramie Energy, LLC	Local Co-ordinate Reference:	Well Laramie 29-01 0993-20-16E - Slot B6
Project:	Mesa County, CO	TVD Reference:	RKB=30' @ 7493.0usft (TBD)
Reference Site:	Laramie 0993-29-01	MD Reference:	RKB=30' @ 7493.0usft (TBD)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Laramie 29-01 0993-20-16E	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	KLXDirectional-AD
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB=30' @ 7493.0usft (TBD) Coordinates are relative to: Laramie 29-01 0993-20-16E - Slot B6
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Central Zone
 Central Meridian is -105.500000 Grid Convergence at Surface is: -1.44°

Separation Factor Plot



LEGEND

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