

Matador Resources

**Eddy County, NM (NAD27)
Leatherneck 3029 Fed Com
#126H**

**OH
Prelim A**

Anticollision Report

22 May, 2019

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #126H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3240 + 28.5 = KB @ 3268.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com	MD Reference:	3240 + 28.5 = KB @ 3268.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#126H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Reference	Prelim A
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD Interval 100.00usft
Depth Range:	Unlimited
Results Limited by:	Maximum center-center distance of 10,000.00 u
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program **Date** 5/22/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	17,995.79	Prelim A (OH)	MWD+HDGM	OWSG MWD + HRGM

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						
Leatherneck 3029 Fed Com						
#105H - OH - Prelim A	1,000.00	1,000.00	220.00	213.29	32.793	CC, ES
#105H - OH - Prelim A	17,995.79	15,649.22	2,644.20	2,368.23	9.582	SF
#106H - OH - Prelim A	5,013.82	5,063.37	62.82	23.61	1.602	CC, ES, SF
#112H - OH - Prelim A	1,000.00	1,001.00	140.00	133.29	20.857	CC, ES
#112H - OH - Prelim A	17,995.79	17,013.47	1,136.90	831.68	3.725	SF
#115H - OH - Prelim A	1,000.00	1,001.00	110.00	103.29	16.388	CC, ES
#115H - OH - Prelim A	17,995.79	17,011.31	1,614.63	1,214.92	4.040	SF
#116H - OH - Prelim A	3,939.37	3,969.36	58.55	28.68	1.960	CC
#116H - OH - Prelim A	4,000.00	4,029.74	58.82	28.36	1.931	ES
#116H - OH - Prelim A	5,800.00	5,837.70	84.12	38.96	1.863	SF
#125H - OH - Prelim A	1,172.10	1,172.90	28.34	20.44	3.589	CC, ES
#125H - OH - Prelim A	17,995.79	17,956.12	1,322.00	847.38	2.785	SF
#136H - OH - Prelim A	1,000.00	1,000.00	42.43	35.72	6.324	CC, ES
#136H - OH - Prelim A	7,500.00	7,501.36	110.94	56.67	2.044	SF
#206H - OH - Prelim A	1,000.76	1,001.77	30.00	23.28	4.466	CC, ES
#206H - OH - Prelim A	1,100.00	1,101.42	30.98	23.58	4.187	SF
#242H - OH - Prelim A	1,000.00	1,001.00	143.18	136.47	21.330	CC, ES
#242H - OH - Prelim A	17,995.79	20,097.04	2,245.49	2,033.16	10.576	SF

Offset Design Leatherneck 3029 Fed Com - #105H - OH - Prelim A												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	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)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	0.00	220.00	0.00	220.00				
100.00	100.00	100.00	100.00	0.13	0.13	0.00	220.00	0.00	220.00	219.74	0.26	858.344	
200.00	200.00	200.00	200.00	0.49	0.49	0.00	220.00	0.00	220.00	219.03	0.97	226.047	
300.00	300.00	300.00	300.00	0.85	0.85	0.00	220.00	0.00	220.00	218.31	1.69	130.163	
400.00	400.00	400.00	400.00	1.20	1.20	0.00	220.00	0.00	220.00	217.59	2.41	91.395	
500.00	500.00	500.00	500.00	1.56	1.56	0.00	220.00	0.00	220.00	216.88	3.12	70.421	
600.00	600.00	600.00	600.00	1.92	1.92	0.00	220.00	0.00	220.00	216.16	3.84	57.276	
700.00	700.00	700.00	700.00	2.28	2.28	0.00	220.00	0.00	220.00	215.44	4.56	48.267	
800.00	800.00	800.00	800.00	2.64	2.64	0.00	220.00	0.00	220.00	214.73	5.27	41.707	
900.00	900.00	900.00	900.00	3.00	3.00	0.00	220.00	0.00	220.00	214.01	5.99	36.717	

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #105H - OH - Prelim A														Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	0.00	220.00	0.00	220.00	213.29	6.71	32.793 CC, ES			
1,100.00	1,099.98	1,100.02	1,099.98	3.70	3.71	169.08	220.00	0.00	221.71	214.30	7.41	29.927			
1,200.00	1,199.84	1,200.16	1,199.84	4.03	4.07	169.31	220.00	0.00	226.85	218.76	8.10	28.017			
1,300.00	1,299.45	1,300.55	1,299.45	4.36	4.43	169.68	220.00	0.00	235.42	226.63	8.79	26.777			
1,400.00	1,398.70	1,401.30	1,398.70	4.70	4.79	170.14	220.00	0.00	247.43	237.93	9.49	26.066			
1,500.00	1,497.64	1,497.64	1,497.64	5.06	5.14	170.68	220.00	0.00	261.77	251.59	10.18	25.715			
1,600.00	1,596.57	1,588.76	1,588.75	5.42	5.46	171.01	221.27	-0.53	277.56	266.72	10.84	25.597			
1,700.00	1,695.49	1,678.83	1,678.71	5.79	5.79	171.07	225.15	-2.14	296.18	284.69	11.50	25.763			
1,800.00	1,794.42	1,767.84	1,767.45	6.16	6.11	170.91	231.56	-4.79	317.59	305.45	12.14	26.166			
1,900.00	1,893.35	1,855.66	1,854.74	6.55	6.42	170.57	240.37	-8.45	341.74	328.98	12.76	26.772			
2,000.00	1,992.27	1,950.55	1,948.85	6.93	6.76	170.13	251.64	-13.12	367.68	354.24	13.44	27.351			
2,100.00	2,091.20	2,047.08	2,044.57	7.32	7.12	169.73	263.14	-17.90	393.68	379.54	14.14	27.845			
2,200.00	2,190.13	2,143.61	2,140.29	7.71	7.47	169.39	274.65	-22.67	419.69	404.85	14.84	28.288			
2,300.00	2,289.05	2,240.14	2,236.02	8.10	7.83	169.08	286.15	-27.44	445.71	430.18	15.54	28.688			
2,400.00	2,387.98	2,336.67	2,331.74	8.50	8.19	168.81	297.65	-32.21	471.75	455.51	16.24	29.050			
2,500.00	2,486.91	2,433.19	2,427.46	8.89	8.55	168.57	309.16	-36.99	497.79	480.85	16.94	29.380			
2,600.00	2,585.83	2,529.72	2,523.18	9.29	8.92	168.35	320.66	-41.76	523.85	506.20	17.65	29.680			
2,700.00	2,684.76	2,626.25	2,618.90	9.69	9.28	168.15	332.16	-46.53	549.91	531.55	18.36	29.956			
2,800.00	2,783.69	2,722.78	2,714.62	10.09	9.65	167.97	343.67	-51.30	575.97	556.90	19.07	30.209			
2,900.00	2,882.61	2,819.31	2,810.35	10.49	10.02	167.80	355.17	-56.07	602.04	582.26	19.78	30.442			
3,000.00	2,981.54	2,915.84	2,906.07	10.89	10.39	167.65	366.68	-60.85	628.11	607.62	20.49	30.658			
3,100.00	3,080.47	3,012.36	3,001.79	11.30	10.76	167.51	378.18	-65.62	654.19	632.99	21.20	30.857			
3,200.00	3,179.39	3,108.89	3,097.51	11.70	11.13	167.38	389.68	-70.39	680.27	658.36	21.91	31.043			
3,300.00	3,278.32	3,205.42	3,193.23	12.11	11.50	167.27	401.19	-75.16	706.35	683.73	22.63	31.216			
3,400.00	3,377.25	3,301.95	3,288.95	12.51	11.87	167.16	412.69	-79.93	732.44	709.10	23.34	31.378			
3,500.00	3,476.17	3,398.48	3,384.68	12.92	12.24	167.05	424.19	-84.71	758.53	734.47	24.06	31.529			
3,600.00	3,575.10	3,504.99	3,480.40	13.33	12.66	166.96	435.70	-89.48	784.62	759.81	24.81	31.624			
3,700.00	3,674.03	3,608.47	3,576.12	13.73	13.06	166.87	447.20	-94.25	810.71	785.16	25.55	31.726			
3,800.00	3,772.95	3,688.06	3,671.84	14.14	13.37	166.78	458.70	-99.02	836.80	810.60	26.21	31.930			
3,900.00	3,871.88	3,784.59	3,767.56	14.55	13.74	166.70	470.21	-103.80	862.90	835.97	26.93	32.048			
4,000.00	3,970.81	3,881.12	3,863.28	14.96	14.12	166.63	481.71	-108.57	889.00	861.35	27.64	32.159			
4,100.00	4,069.73	3,977.65	3,959.00	15.37	14.49	166.56	493.22	-113.34	915.10	886.73	28.36	32.265			
4,200.00	4,168.66	4,074.18	4,054.73	15.77	14.87	166.49	504.72	-118.11	941.20	912.11	29.08	32.364			
4,300.00	4,267.59	4,170.71	4,150.45	16.18	15.24	166.43	516.22	-122.88	967.30	937.50	29.80	32.459			
4,400.00	4,366.52	4,267.23	4,246.17	16.59	15.62	166.37	527.73	-127.66	993.40	962.88	30.52	32.549			
4,500.00	4,465.44	4,363.76	4,341.89	17.00	16.00	166.31	539.23	-132.43	1,019.50	988.26	31.24	32.634			
4,600.00	4,564.37	4,460.29	4,437.61	17.41	16.38	166.26	550.73	-137.20	1,045.61	1,013.64	31.96	32.715			
4,700.00	4,663.30	4,558.43	4,534.94	17.82	16.76	166.21	562.43	-142.05	1,071.71	1,039.01	32.69	32.781			
4,800.00	4,762.22	4,709.24	4,684.94	18.23	17.33	166.21	576.53	-147.90	1,095.28	1,061.51	33.77	32.436			
4,900.00	4,861.15	4,863.28	4,838.79	18.64	17.88	166.36	583.40	-150.75	1,113.96	1,079.18	34.78	32.033			
5,000.00	4,960.08	4,985.27	4,960.77	19.05	18.30	166.57	584.00	-150.93	1,128.56	1,092.97	35.59	31.711			
5,100.00	5,059.00	5,090.67	5,065.42	19.47	18.63	167.32	583.99	-139.67	1,142.44	1,106.14	36.30	31.475			
5,200.00	5,157.93	5,187.88	5,158.63	19.88	18.91	168.83	583.98	-112.46	1,156.32	1,119.37	36.95	31.291			
5,300.00	5,256.86	5,273.08	5,235.52	20.29	19.12	170.74	583.96	-75.96	1,171.46	1,133.90	37.55	31.193			
5,400.00	5,355.78	5,345.31	5,295.88	20.70	19.28	172.76	583.94	-36.36	1,189.21	1,151.12	38.08	31.226			
5,500.00	5,454.71	5,405.53	5,342.06	21.11	19.40	174.67	583.93	2.24	1,210.72	1,172.20	38.52	31.431			
5,600.00	5,553.64	5,455.46	5,377.11	21.52	19.49	176.41	583.91	37.77	1,236.80	1,197.96	38.84	31.845			
5,700.00	5,652.56	5,500.00	5,405.66	21.93	19.58	178.04	583.89	71.95	1,267.94	1,228.89	39.05	32.472			
5,800.00	5,751.49	5,531.61	5,424.27	22.35	19.71	179.25	583.88	97.49	1,304.28	1,265.20	39.08	33.377			
5,900.00	5,850.42	5,560.82	5,440.19	22.76	19.86	-179.60	583.87	121.98	1,345.81	1,306.81	39.00	34.507			
6,000.00	5,949.34	5,585.64	5,452.73	23.17	20.00	-178.61	583.86	143.40	1,392.34	1,353.52	38.82	35.870			
6,100.00	6,048.27	5,600.00	5,459.55	23.58	20.08	-178.03	583.85	156.04	1,443.60	1,405.14	38.46	37.535			

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Offset Design Leatherneck 3029 Fed Com - #105H - OH - Prelim A														Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM														Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N-S (usft)	+E-W (usft)				Between Centres (usft)	Between Ellipses (usft)	
6,200.00	6,147.20	5,625.31	5,470.80	23.99	20.25	-177.00	583.84	178.71	1,499.16	1,460.97	38.19	39.254		
6,300.00	6,246.12	5,650.00	5,480.80	24.41	20.42	-175.99	583.83	201.28	1,558.82	1,520.94	37.89	41.145		
6,400.00	6,345.05	5,650.00	5,480.80	24.82	20.42	-175.99	583.83	201.28	1,622.02	1,584.72	37.31	43.480		
6,500.00	6,443.98	5,667.86	5,487.41	25.23	20.55	-175.25	583.82	217.86	1,688.52	1,651.59	36.93	45.726		
6,600.00	6,542.90	5,678.92	5,491.26	25.64	20.64	-174.79	583.82	228.24	1,757.99	1,721.51	36.48	48.188		
6,700.00	6,641.83	5,700.00	5,498.02	26.05	20.80	-173.91	583.81	248.20	1,830.23	1,794.07	36.16	50.611		
6,800.00	6,740.76	5,700.00	5,498.02	26.47	20.80	-173.91	583.81	248.20	1,904.63	1,868.99	35.64	53.441		
6,900.00	6,839.69	5,700.00	5,498.02	26.88	20.80	-173.95	583.81	248.20	1,981.26	1,946.11	35.15	56.371		
7,000.00	6,938.93	5,700.00	5,498.02	27.28	20.80	-174.20	583.81	248.20	2,058.50	2,023.83	34.67	59.381		
7,100.00	7,038.53	5,720.19	5,503.80	27.66	20.97	-173.67	583.80	267.55	2,135.14	2,100.73	34.40	62.066		
7,200.00	7,138.38	5,726.76	5,505.53	28.01	21.02	-173.68	583.79	273.88	2,211.55	2,177.56	33.99	65.059		
7,300.00	7,238.36	5,750.00	5,511.08	28.33	21.22	-173.11	583.78	296.45	2,287.80	2,254.06	33.75	67.793		
7,400.00	7,337.90	5,750.00	5,511.08	28.62	21.22	-54.97	583.78	296.45	2,361.63	2,328.38	33.25	71.024		
7,500.00	7,434.54	5,750.00	5,511.08	28.88	21.22	-47.55	583.78	296.45	2,430.56	2,397.82	32.74	74.242		
7,600.00	7,525.32	5,750.00	5,511.08	29.10	21.22	-41.92	583.78	296.45	2,492.97	2,460.75	32.22	77.368		
7,700.00	7,607.50	5,779.32	5,516.77	29.27	21.50	-37.38	583.77	325.21	2,546.72	2,514.73	31.99	79.606		
7,800.00	7,678.57	5,800.00	5,519.89	29.39	21.69	-34.24	583.76	345.65	2,591.13	2,559.42	31.71	81.705		
7,900.00	7,736.38	5,800.00	5,519.89	29.46	21.69	-32.26	583.76	345.65	2,625.16	2,593.82	31.34	83.753		
8,000.00	7,779.17	5,850.00	5,524.38	29.49	22.20	-30.71	583.74	395.43	2,647.82	2,616.32	31.50	84.060		
8,100.00	7,805.64	5,850.00	5,524.38	29.51	22.20	-30.18	583.74	395.43	2,658.35	2,626.93	31.41	84.625		
8,200.00	7,814.99	5,876.53	5,525.00	29.76	22.48	-30.15	583.72	421.96	2,657.13	2,625.43	31.70	83.815		
8,300.00	7,815.00	5,954.03	5,525.00	30.54	23.39	-30.09	583.69	499.45	2,650.72	2,618.19	32.52	81.501		
8,400.00	7,815.00	6,053.61	5,525.00	31.52	24.68	-30.00	583.64	599.04	2,646.16	2,612.48	33.68	78.560		
8,500.00	7,815.00	6,153.45	5,525.00	32.63	26.10	-29.95	583.59	698.88	2,643.37	2,608.33	35.04	75.448		
8,600.00	7,815.00	6,253.42	5,525.00	33.87	27.65	-29.93	583.54	798.85	2,642.32	2,605.76	36.57	72.262		
8,682.39	7,815.00	6,335.82	5,525.00	34.98	29.00	-29.92	583.50	881.24	2,642.24	2,604.30	37.94	69.638		
8,700.00	7,815.00	6,353.42	5,525.00	35.22	29.30	-29.93	583.49	898.85	2,642.33	2,604.09	38.24	69.091		
8,800.00	7,815.00	6,453.42	5,525.00	36.67	31.03	-29.93	583.44	998.85	2,642.35	2,602.32	40.03	66.007		
8,900.00	7,815.00	6,553.42	5,525.00	38.20	32.83	-29.93	583.40	1,098.85	2,642.37	2,600.46	41.91	63.044		
9,000.00	7,815.00	6,653.42	5,525.00	39.81	34.70	-29.93	583.35	1,198.85	2,642.39	2,598.51	43.88	60.221		
9,100.00	7,815.00	6,753.42	5,525.00	41.48	36.61	-29.93	583.30	1,298.85	2,642.41	2,596.50	45.91	57.551		
9,200.00	7,815.00	6,853.42	5,525.00	43.21	38.57	-29.93	583.25	1,398.85	2,642.43	2,594.42	48.01	55.034		
9,300.00	7,815.00	6,953.42	5,525.00	45.00	40.56	-29.93	583.20	1,498.85	2,642.45	2,592.28	50.17	52.670		
9,400.00	7,815.00	7,053.42	5,525.00	46.82	42.58	-29.93	583.15	1,598.85	2,642.47	2,590.10	52.37	50.454		
9,500.00	7,815.00	7,153.42	5,525.00	48.69	44.64	-29.93	583.11	1,698.85	2,642.49	2,587.87	54.62	48.379		
9,600.00	7,815.00	7,253.42	5,525.00	50.60	46.71	-29.93	583.06	1,798.85	2,642.51	2,585.61	56.90	46.438		
9,700.00	7,815.00	7,353.42	5,525.00	52.53	48.81	-29.93	583.01	1,898.85	2,642.53	2,583.31	59.22	44.621		
9,800.00	7,815.00	7,453.42	5,525.00	54.50	50.93	-29.94	582.96	1,998.85	2,642.55	2,580.98	61.57	42.920		
9,900.00	7,815.00	7,553.42	5,525.00	56.49	53.06	-29.94	582.91	2,098.85	2,642.57	2,578.63	63.94	41.326		
10,000.00	7,815.00	7,653.42	5,525.00	58.51	55.20	-29.94	582.86	2,198.85	2,642.59	2,576.25	66.34	39.833		
10,100.00	7,815.00	7,753.42	5,525.00	60.54	57.36	-29.94	582.82	2,298.85	2,642.61	2,573.85	68.76	38.432		
10,200.00	7,815.00	7,853.42	5,525.00	62.60	59.53	-29.94	582.77	2,398.85	2,642.63	2,571.43	71.20	37.116		
10,300.00	7,815.00	7,953.42	5,525.00	64.67	61.71	-29.94	582.72	2,498.85	2,642.65	2,569.00	73.65	35.880		
10,400.00	7,815.00	8,053.42	5,525.00	66.76	63.90	-29.94	582.67	2,598.85	2,642.67	2,566.55	76.12	34.715		
10,500.00	7,815.00	8,153.42	5,525.00	68.86	66.10	-29.94	582.62	2,698.85	2,642.69	2,564.08	78.61	33.618		
10,600.00	7,815.00	8,253.42	5,525.00	70.97	68.30	-29.94	582.57	2,798.85	2,642.71	2,561.61	81.11	32.583		
10,700.00	7,815.00	8,353.42	5,525.00	73.10	70.51	-29.94	582.53	2,898.85	2,642.73	2,559.12	83.62	31.606		
10,800.00	7,815.00	8,453.42	5,525.00	75.24	72.73	-29.94	582.48	2,998.85	2,642.75	2,556.62	86.14	30.681		
10,900.00	7,815.00	8,553.42	5,525.00	77.38	74.95	-29.94	582.43	3,098.85	2,642.77	2,554.11	88.67	29.806		
11,000.00	7,815.00	8,653.42	5,525.00	79.54	77.18	-29.94	582.38	3,198.85	2,642.79	2,551.59	91.20	28.977		
11,100.00	7,815.00	8,753.42	5,525.00	81.70	79.41	-29.95	582.33	3,298.85	2,642.81	2,549.06	93.75	28.190		
11,200.00	7,815.00	8,853.42	5,525.00	83.87	81.65	-29.95	582.28	3,398.85	2,642.83	2,546.53	96.31	27.442		

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #105H - OH - Prelim A														Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+HDGM														Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
11,300.00	7,815.00	8,953.42	5,525.00	86.05	83.89	-29.95	582.24	3,498.85	2,642.85	2,543.99	98.87	26.731			
11,400.00	7,815.00	9,053.42	5,525.00	88.24	86.14	-29.95	582.19	3,598.85	2,642.87	2,541.44	101.43	26.055			
11,500.00	7,815.00	9,153.42	5,525.00	90.43	88.38	-29.95	582.14	3,698.85	2,642.89	2,538.88	104.01	25.410			
11,600.00	7,815.00	9,253.42	5,525.00	92.63	90.63	-29.95	582.09	3,798.85	2,642.91	2,536.32	106.59	24.796			
11,700.00	7,815.00	9,353.42	5,525.00	94.83	92.89	-29.95	582.04	3,898.85	2,642.93	2,533.76	109.17	24.209			
11,800.00	7,815.00	9,453.42	5,525.00	97.04	95.14	-29.95	581.99	3,998.85	2,642.95	2,531.19	111.76	23.648			
11,900.00	7,815.00	9,553.42	5,525.00	99.25	97.40	-29.95	581.95	4,098.85	2,642.97	2,528.62	114.36	23.112			
12,000.00	7,815.00	9,653.42	5,525.00	101.47	99.66	-29.95	581.90	4,198.85	2,642.99	2,526.04	116.95	22.598			
12,100.00	7,815.00	9,753.42	5,525.00	103.69	101.93	-29.95	581.85	4,298.85	2,643.01	2,523.46	119.56	22.107			
12,200.00	7,815.00	9,853.42	5,525.00	105.91	104.19	-29.95	581.80	4,398.85	2,643.03	2,520.87	122.16	21.635			
12,300.00	7,815.00	9,953.42	5,525.00	108.14	106.46	-29.95	581.75	4,498.85	2,643.05	2,518.28	124.77	21.183			
12,400.00	7,815.00	10,053.42	5,525.00	110.37	108.73	-29.96	581.70	4,598.85	2,643.07	2,515.69	127.38	20.749			
12,500.00	7,815.00	10,153.42	5,525.00	112.60	111.00	-29.96	581.66	4,698.85	2,643.09	2,513.09	130.00	20.331			
12,600.00	7,815.00	10,253.42	5,525.00	114.84	113.27	-29.96	581.61	4,798.85	2,643.11	2,510.49	132.62	19.930			
12,700.00	7,815.00	10,353.42	5,525.00	117.08	115.54	-29.96	581.56	4,898.85	2,643.13	2,507.89	135.24	19.544			
12,800.00	7,815.00	10,453.42	5,525.00	119.32	117.82	-29.96	581.51	4,998.85	2,643.15	2,505.29	137.86	19.172			
12,900.00	7,815.00	10,553.42	5,525.00	121.57	120.09	-29.96	581.46	5,098.85	2,643.17	2,502.68	140.49	18.814			
13,000.00	7,815.00	10,653.42	5,525.00	123.81	122.37	-29.96	581.41	5,198.85	2,643.19	2,500.07	143.12	18.468			
13,100.00	7,815.00	10,753.42	5,525.00	126.06	124.65	-29.96	581.37	5,298.85	2,643.21	2,497.46	145.75	18.135			
13,200.00	7,815.00	10,853.42	5,525.00	128.32	126.93	-29.96	581.32	5,398.85	2,643.23	2,494.85	148.38	17.814			
13,300.00	7,815.00	10,953.42	5,525.00	130.57	129.21	-29.96	581.27	5,498.85	2,643.25	2,492.24	151.02	17.503			
13,400.00	7,815.00	11,053.42	5,525.00	132.83	131.49	-29.96	581.22	5,598.85	2,643.27	2,489.62	153.66	17.203			
13,500.00	7,815.00	11,153.42	5,525.00	135.08	133.77	-29.96	581.17	5,698.85	2,643.29	2,487.00	156.29	16.912			
13,600.00	7,815.00	11,253.42	5,525.00	137.34	136.05	-29.96	581.12	5,798.85	2,643.31	2,484.38	158.93	16.632			
13,700.00	7,815.00	11,353.42	5,525.00	139.60	138.34	-29.97	581.08	5,898.85	2,643.33	2,481.76	161.58	16.360			
13,800.00	7,815.00	11,453.42	5,525.00	141.86	140.62	-29.97	581.03	5,998.85	2,643.35	2,479.14	164.22	16.096			
13,900.00	7,815.00	11,553.42	5,525.00	144.13	142.91	-29.97	580.98	6,098.85	2,643.37	2,476.51	166.86	15.841			
14,000.00	7,815.00	11,653.42	5,525.00	146.39	145.19	-29.97	580.93	6,198.85	2,643.39	2,473.88	169.51	15.594			
14,100.00	7,815.00	11,753.42	5,525.00	148.66	147.48	-29.97	580.88	6,298.85	2,643.41	2,471.26	172.16	15.355			
14,200.00	7,815.00	11,853.42	5,525.00	150.93	149.77	-29.97	580.83	6,398.85	2,643.43	2,468.63	174.81	15.122			
14,300.00	7,815.00	11,953.42	5,525.00	153.20	152.06	-29.97	580.79	6,498.85	2,643.45	2,466.00	177.46	14.896			
14,400.00	7,815.00	12,053.42	5,525.00	155.47	154.35	-29.97	580.74	6,598.85	2,643.48	2,463.37	180.11	14.677			
14,500.00	7,815.00	12,153.42	5,525.00	157.74	156.64	-29.97	580.69	6,698.85	2,643.50	2,460.73	182.76	14.464			
14,600.00	7,815.00	12,253.42	5,525.00	160.01	158.93	-29.97	580.64	6,798.85	2,643.52	2,458.10	185.42	14.257			
14,700.00	7,815.00	12,353.42	5,525.00	162.28	161.22	-29.97	580.59	6,898.85	2,643.54	2,455.47	188.07	14.056			
14,800.00	7,815.00	12,453.42	5,525.00	164.56	163.51	-29.97	580.54	6,998.85	2,643.56	2,452.83	190.73	13.861			
14,900.00	7,815.00	12,553.42	5,525.00	166.83	165.80	-29.97	580.49	7,098.85	2,643.58	2,450.19	193.38	13.670			
15,000.00	7,815.00	12,653.42	5,525.00	169.11	168.09	-29.97	580.45	7,198.85	2,643.60	2,447.56	196.04	13.485			
15,100.00	7,815.00	12,753.42	5,525.00	171.39	170.38	-29.98	580.40	7,298.85	2,643.62	2,444.92	198.70	13.305			
15,200.00	7,815.00	12,853.42	5,525.00	173.66	172.68	-29.98	580.35	7,398.85	2,643.64	2,442.28	201.36	13.129			
15,300.00	7,815.00	12,953.42	5,525.00	175.94	174.97	-29.98	580.30	7,498.85	2,643.66	2,439.64	204.02	12.958			
15,400.00	7,815.00	13,053.42	5,525.00	178.22	177.26	-29.98	580.25	7,598.85	2,643.68	2,437.00	206.68	12.791			
15,500.00	7,815.00	13,153.42	5,525.00	180.50	179.56	-29.98	580.20	7,698.85	2,643.70	2,434.36	209.34	12.629			
15,600.00	7,815.00	13,253.42	5,525.00	182.78	181.85	-29.98	580.16	7,798.85	2,643.72	2,431.71	212.00	12.470			
15,700.00	7,815.00	13,353.42	5,525.00	185.06	184.15	-29.98	580.11	7,898.85	2,643.74	2,429.07	214.67	12.316			
15,800.00	7,815.00	13,453.42	5,525.00	187.35	186.44	-29.98	580.06	7,998.85	2,643.76	2,426.43	217.33	12.165			
15,900.00	7,815.00	13,553.42	5,525.00	189.63	188.74	-29.98	580.01	8,098.85	2,643.78	2,423.78	220.00	12.017			
16,000.00	7,815.00	13,653.42	5,525.00	191.91	191.03	-29.98	579.96	8,198.85	2,643.80	2,421.14	222.66	11.874			
16,100.00	7,815.00	13,753.42	5,525.00	194.20	193.33	-29.98	579.91	8,298.85	2,643.82	2,418.49	225.33	11.733			
16,200.00	7,815.00	13,853.42	5,525.00	196.48	195.63	-29.98	579.87	8,398.85	2,643.84	2,415.84	227.99	11.596			
16,300.00	7,815.00	13,953.42	5,525.00	198.77	197.92	-29.98	579.82	8,498.85	2,643.86	2,413.20	230.66	11.462			
16,400.00	7,815.00	14,053.42	5,525.00	201.05	200.22	-29.99	579.77	8,598.85	2,643.88	2,410.55	233.33	11.331			

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #105H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
16,500.00	7,815.00	14,153.42	5,525.00	203.34	202.52	-29.99	579.72	8,698.85	2,643.90	2,407.90	236.00	11.203	
16,600.00	7,815.00	14,253.42	5,525.00	205.63	204.82	-29.99	579.67	8,798.85	2,643.92	2,405.25	238.67	11.078	
16,700.00	7,815.00	14,353.42	5,525.00	207.91	207.11	-29.99	579.62	8,898.85	2,643.94	2,402.60	241.34	10.955	
16,800.00	7,815.00	14,453.42	5,525.00	210.20	209.41	-29.99	579.58	8,998.85	2,643.96	2,399.95	244.01	10.836	
16,900.00	7,815.00	14,553.42	5,525.00	212.49	211.71	-29.99	579.53	9,098.85	2,643.98	2,397.30	246.68	10.718	
17,000.00	7,815.00	14,653.42	5,525.00	214.78	214.01	-29.99	579.48	9,198.85	2,644.00	2,394.65	249.35	10.604	
17,100.00	7,815.00	14,753.42	5,525.00	217.07	216.31	-29.99	579.43	9,298.85	2,644.02	2,392.00	252.02	10.491	
17,200.00	7,815.00	14,853.42	5,525.00	219.36	218.61	-29.99	579.38	9,398.85	2,644.04	2,389.35	254.69	10.381	
17,300.00	7,815.00	14,953.42	5,525.00	221.65	220.91	-29.99	579.33	9,498.85	2,644.06	2,386.70	257.36	10.274	
17,400.00	7,815.00	15,053.42	5,525.00	223.94	223.20	-29.99	579.29	9,598.85	2,644.08	2,384.04	260.04	10.168	
17,500.00	7,815.00	15,153.42	5,525.00	226.23	225.50	-29.99	579.24	9,698.85	2,644.10	2,381.39	262.71	10.065	
17,600.00	7,815.00	15,253.42	5,525.00	228.52	227.80	-29.99	579.19	9,798.85	2,644.12	2,378.74	265.38	9.963	
17,700.00	7,815.00	15,353.42	5,525.00	230.81	230.10	-30.00	579.14	9,898.85	2,644.14	2,376.08	268.06	9.864	
17,800.00	7,815.00	15,453.42	5,525.00	233.10	232.40	-30.00	579.09	9,998.85	2,644.16	2,373.43	270.73	9.767	
17,900.00	7,815.00	15,553.42	5,525.00	235.39	234.70	-30.00	579.04	10,098.85	2,644.18	2,370.77	273.41	9.671	
17,995.79	7,815.00	15,649.22	5,525.00	237.59	236.91	-30.00	579.00	10,194.64	2,644.20	2,368.23	275.97	9.582 SF	

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #106H - OH - Prelim A											Offset Site Error: 0.00 usft		
Survey Program: 0-MWD+HDGM											Offset Well Error: 0.00 usft		
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		Separation Factor
0.00	0.00	1.00	-1.00	0.00	0.00	7.77	220.00	30.00	222.04				
100.00	100.00	101.00	99.00	0.13	0.13	7.77	220.00	30.00	222.04	221.78	0.26	854.339	
200.00	200.00	201.00	199.00	0.49	0.49	7.77	220.00	30.00	222.04	221.06	0.98	227.301	
300.00	300.00	301.00	299.00	0.85	0.85	7.77	220.00	30.00	222.04	220.34	1.69	131.089	
400.00	400.00	401.00	399.00	1.20	1.21	7.77	220.00	30.00	222.04	219.63	2.41	92.104	
500.00	500.00	501.00	499.00	1.56	1.57	7.77	220.00	30.00	222.04	218.91	3.13	70.991	
600.00	600.00	601.00	599.00	1.92	1.92	7.77	220.00	30.00	222.04	218.19	3.84	57.753	
700.00	700.00	701.00	699.00	2.28	2.28	7.77	220.00	30.00	222.04	217.47	4.56	48.676	
800.00	800.00	801.00	799.00	2.64	2.64	7.77	220.00	30.00	222.04	216.76	5.28	42.064	
900.00	900.00	901.00	899.00	3.00	3.00	7.77	220.00	30.00	222.04	216.04	6.00	37.034	
1,000.00	1,000.00	1,001.00	999.00	3.35	3.36	7.77	220.00	30.00	222.04	215.32	6.71	33.079	
1,100.00	1,099.98	1,101.02	1,098.98	3.70	3.72	176.79	220.00	30.00	223.78	216.37	7.41	30.191	
1,200.00	1,199.84	1,201.16	1,198.84	4.03	4.08	176.86	220.00	30.00	229.00	220.90	8.10	28.270	
1,300.00	1,299.45	1,301.55	1,298.45	4.36	4.44	176.97	220.00	30.00	237.71	228.91	8.80	27.026	
1,400.00	1,398.70	1,402.30	1,397.70	4.70	4.80	177.10	220.00	30.00	249.88	240.38	9.50	26.315	
1,500.00	1,497.64	1,496.64	1,496.64	5.06	5.13	177.26	220.00	30.00	264.40	254.23	10.18	25.985	
1,600.00	1,596.57	1,605.81	1,605.79	5.42	5.51	177.44	218.06	29.81	277.23	266.35	10.88	25.471	
1,700.00	1,695.49	1,716.26	1,716.05	5.79	5.87	177.64	211.88	29.20	286.26	274.68	11.58	24.730	
1,800.00	1,794.42	1,827.30	1,826.59	6.16	6.24	177.88	201.41	28.18	291.44	279.17	12.26	23.763	
1,900.00	1,893.35	1,938.62	1,936.91	6.55	6.61	178.17	186.65	26.73	292.75	279.80	12.95	22.611	
2,000.00	1,992.27	2,049.88	2,046.51	6.93	7.00	178.50	167.64	24.86	290.19	276.57	13.62	21.309	
2,100.00	2,091.20	2,160.74	2,154.90	7.32	7.40	178.91	144.50	22.59	283.78	269.50	14.28	19.875	
2,200.00	2,190.13	2,262.30	2,253.62	7.71	7.79	179.34	120.78	20.26	274.82	259.85	14.97	18.355	
2,300.00	2,289.05	2,361.87	2,350.39	8.10	8.18	179.80	97.45	17.97	265.81	250.13	15.68	16.950	
2,400.00	2,387.98	2,461.44	2,447.16	8.50	8.58	-179.72	74.12	15.68	256.83	240.43	16.40	15.662	
2,500.00	2,486.91	2,561.01	2,543.93	8.89	8.99	-179.20	50.79	13.39	247.86	230.74	17.12	14.480	
2,600.00	2,585.83	2,660.58	2,640.71	9.29	9.40	-178.64	27.46	11.10	238.92	221.07	17.84	13.390	
2,700.00	2,684.76	2,760.15	2,737.48	9.69	9.83	-178.03	4.13	8.81	229.99	211.42	18.57	12.385	
2,800.00	2,783.69	2,859.72	2,834.25	10.09	10.25	-177.38	-19.20	6.52	221.10	201.80	19.30	11.454	
2,900.00	2,882.61	2,959.29	2,931.02	10.49	10.69	-176.67	-42.53	4.23	212.24	192.20	20.04	10.591	
3,000.00	2,981.54	3,058.86	3,027.80	10.89	11.12	-175.90	-65.86	1.95	203.41	182.63	20.78	9.789	
3,100.00	3,080.47	3,158.44	3,124.57	11.30	11.56	-175.07	-89.18	-0.34	194.62	173.10	21.52	9.042	
3,200.00	3,179.39	3,258.01	3,221.34	11.70	12.01	-174.15	-112.51	-2.63	185.88	163.61	22.27	8.346	
3,300.00	3,278.32	3,357.58	3,318.11	12.11	12.46	-173.14	-135.84	-4.92	177.19	154.17	23.03	7.695	
3,400.00	3,377.25	3,457.15	3,414.88	12.51	12.91	-172.03	-159.17	-7.21	168.56	144.78	23.78	7.087	
3,500.00	3,476.17	3,556.72	3,511.66	12.92	13.36	-170.80	-182.50	-9.50	160.00	135.45	24.55	6.518	
3,600.00	3,575.10	3,656.29	3,608.43	13.33	13.81	-169.43	-205.83	-11.79	151.52	126.20	25.32	5.984	
3,700.00	3,674.03	3,755.86	3,705.20	13.73	14.27	-167.91	-229.16	-14.08	143.14	117.04	26.10	5.484	
3,800.00	3,772.95	3,855.43	3,801.97	14.14	14.73	-166.19	-252.49	-16.37	134.87	107.97	26.89	5.015	
3,900.00	3,871.88	3,955.00	3,898.75	14.55	15.19	-164.25	-275.82	-18.66	126.74	99.03	27.70	4.575	
4,000.00	3,970.81	4,054.57	3,995.52	14.96	15.65	-162.05	-299.15	-20.95	118.77	90.24	28.53	4.163	
4,100.00	4,069.73	4,154.14	4,092.29	15.37	16.12	-159.53	-322.47	-23.24	111.00	81.62	29.38	3.779	
4,200.00	4,168.66	4,253.72	4,189.06	15.77	16.58	-156.65	-345.80	-25.53	103.47	73.22	30.25	3.420	
4,300.00	4,267.59	4,353.29	4,285.84	16.18	17.05	-153.33	-369.13	-27.82	96.25	65.08	31.17	3.088	
4,400.00	4,366.52	4,452.86	4,382.61	16.59	17.51	-149.48	-392.46	-30.11	89.40	57.27	32.13	2.782	
4,500.00	4,465.44	4,552.43	4,479.38	17.00	17.98	-145.02	-415.79	-32.40	83.02	49.87	33.15	2.504	
4,600.00	4,564.37	4,652.00	4,576.15	17.41	18.45	-139.86	-439.12	-34.69	77.23	42.98	34.24	2.255	
4,700.00	4,663.30	4,751.57	4,672.92	17.82	18.92	-133.93	-462.45	-36.98	72.15	36.76	35.39	2.039	
4,800.00	4,762.22	4,851.14	4,769.70	18.23	19.39	-127.19	-485.78	-39.27	67.97	31.37	36.60	1.857	
4,900.00	4,861.15	4,950.71	4,866.47	18.64	19.86	-119.69	-509.11	-41.56	64.85	27.01	37.84	1.714	
5,000.00	4,960.08	5,050.28	4,963.24	19.05	20.33	-111.59	-532.44	-43.85	62.94	23.90	39.04	1.612	
5,013.82	4,973.75	5,063.37	4,975.96	19.11	20.40	-110.49	-535.51	-44.11	62.82	23.61	39.21	1.602 CC, ES, SF	

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #106H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	5,059.00	5,140.24	5,050.37	19.47	20.76	-103.19	-554.11	-39.90	69.05	29.26	39.79	1.735	
5,200.00	5,157.93	5,225.30	5,130.93	19.88	21.14	-96.33	-575.56	-23.41	91.63	52.19	39.44	2.323	
5,300.00	5,256.86	5,303.06	5,201.48	20.29	21.48	-92.64	-595.59	2.24	128.64	90.29	38.35	3.354	
5,400.00	5,355.78	5,371.95	5,260.44	20.70	21.76	-90.96	-613.37	33.03	177.48	140.56	36.91	4.808	
5,500.00	5,454.71	5,431.78	5,308.25	21.11	22.00	-90.26	-628.61	65.56	235.81	200.45	35.36	6.669	
5,600.00	5,553.64	5,483.14	5,346.36	21.52	22.20	-89.99	-641.42	97.50	301.70	267.89	33.81	8.924	
5,700.00	5,652.56	5,527.06	5,376.55	21.93	22.37	-89.93	-652.10	127.54	373.56	341.18	32.38	11.537	
5,800.00	5,751.49	5,564.63	5,400.47	22.35	22.52	-89.95	-660.97	155.10	450.14	419.05	31.09	14.478	
5,900.00	5,850.42	5,600.00	5,421.30	22.76	22.66	-90.02	-669.08	182.51	530.48	500.35	30.13	17.604	
6,000.00	5,949.34	5,624.66	5,434.81	23.17	22.76	-90.09	-674.57	202.40	613.77	584.79	28.97	21.184	
6,100.00	6,048.27	5,650.00	5,447.78	23.58	22.87	-90.17	-680.05	223.46	699.48	671.29	28.19	24.815	
6,200.00	6,147.20	5,669.82	5,457.28	23.99	22.95	-90.24	-684.23	240.34	787.13	759.71	27.42	28.709	
6,300.00	6,246.12	5,700.00	5,470.61	24.41	23.09	-90.36	-690.39	266.70	876.57	849.33	27.24	32.175	
6,400.00	6,345.05	5,700.00	5,470.61	24.82	23.09	-90.36	-690.39	266.70	966.97	940.81	26.16	36.967	
6,500.00	6,443.98	5,719.11	5,478.34	25.23	23.18	-90.45	-694.16	283.77	1,058.61	1,032.72	25.89	40.887	
6,600.00	6,542.90	5,732.06	5,483.25	25.64	23.25	-90.50	-696.65	295.49	1,151.20	1,125.66	25.55	45.063	
6,700.00	6,641.83	5,750.00	5,489.62	26.05	23.35	-90.58	-700.02	311.92	1,244.63	1,219.20	25.43	48.939	
6,800.00	6,740.76	5,750.00	5,489.62	26.47	23.35	-90.58	-700.02	311.92	1,338.65	1,313.70	24.94	53.668	
6,900.00	6,839.69	5,750.00	5,489.62	26.88	23.35	-91.59	-700.02	311.92	1,433.47	1,408.91	24.56	58.361	
7,000.00	6,938.93	5,772.34	5,496.84	27.28	23.47	-97.70	-704.07	332.67	1,528.33	1,503.59	24.74	61.787	
7,100.00	7,038.53	5,780.30	5,499.22	27.66	23.51	-103.80	-705.47	340.13	1,623.71	1,599.08	24.63	65.912	
7,200.00	7,138.38	5,800.00	5,504.66	28.01	23.63	-109.36	-708.85	358.76	1,719.43	1,694.63	24.80	69.338	
7,300.00	7,238.36	5,800.00	5,504.66	28.33	23.63	-115.28	-708.85	358.76	1,814.88	1,790.26	24.62	73.711	
7,400.00	7,337.90	5,800.00	5,504.66	28.62	23.63	-4.16	-708.85	358.76	1,907.89	1,883.50	24.40	78.198	
7,500.00	7,434.54	5,800.00	5,504.66	28.88	23.63	-3.07	-708.85	358.76	1,994.36	1,970.30	24.06	82.885	
7,600.00	7,525.32	5,826.27	5,510.93	29.10	23.80	-2.11	-713.16	383.90	2,071.87	2,047.83	24.03	86.205	
7,700.00	7,607.50	5,850.00	5,515.62	29.27	23.96	-1.55	-716.84	406.87	2,139.54	2,115.65	23.89	89.543	
7,800.00	7,678.57	5,850.00	5,515.62	29.39	23.96	-1.37	-716.84	406.87	2,195.79	2,172.35	23.44	93.697	
7,900.00	7,736.38	5,875.84	5,519.65	29.46	24.15	-1.05	-720.61	432.11	2,239.66	2,216.33	23.34	95.978	
8,000.00	7,779.17	5,900.00	5,522.40	29.49	24.34	-0.82	-723.90	455.89	2,270.59	2,247.31	23.28	97.549	
8,100.00	7,805.64	5,900.00	5,522.40	29.51	24.34	-0.80	-723.90	455.89	2,288.11	2,265.00	23.12	98.984	
8,200.00	7,814.99	5,950.00	5,524.97	29.76	24.77	-0.46	-730.00	505.43	2,291.71	2,268.20	23.50	97.510	
8,300.00	7,815.00	5,955.33	5,525.00	30.54	24.82	-0.48	-730.59	510.73	2,289.12	2,265.43	23.70	96.605	
8,400.00	7,815.00	6,043.13	5,525.00	31.52	25.64	-0.21	-734.07	598.40	2,289.01	2,264.56	24.45	93.609	
8,401.31	7,815.00	6,044.44	5,525.00	31.53	25.66	-0.20	-734.07	599.71	2,289.01	2,264.55	24.46	93.566	
8,500.00	7,815.00	6,142.97	5,525.00	32.63	26.73	-0.06	-734.17	698.24	2,289.00	2,263.70	25.30	90.462	
8,600.00	7,815.00	6,242.94	5,525.00	33.87	28.00	-0.01	-734.26	798.21	2,289.00	2,262.80	26.20	87.370	
8,680.63	7,815.00	6,323.57	5,525.00	34.96	29.13	-0.01	-734.33	878.84	2,289.00	2,262.04	26.96	84.912	
8,700.00	7,815.00	6,342.94	5,525.00	35.22	29.41	-0.01	-734.35	898.21	2,289.00	2,261.86	27.14	84.334	
8,800.00	7,815.00	6,442.94	5,525.00	36.67	30.95	-0.01	-734.44	998.21	2,289.00	2,260.86	28.14	81.342	
8,900.00	7,815.00	6,542.94	5,525.00	38.20	32.59	-0.01	-734.54	1,098.21	2,289.00	2,259.81	29.19	78.422	
9,000.00	7,815.00	6,642.94	5,525.00	39.81	34.31	-0.01	-734.63	1,198.21	2,289.00	2,258.72	30.28	75.593	
9,100.00	7,815.00	6,742.94	5,525.00	41.48	36.10	-0.01	-734.72	1,298.21	2,289.00	2,257.59	31.41	72.869	
9,200.00	7,815.00	6,842.94	5,525.00	43.21	37.95	-0.01	-734.82	1,398.21	2,289.00	2,256.42	32.58	70.258	
9,300.00	7,815.00	6,942.94	5,525.00	45.00	39.85	-0.01	-734.91	1,498.21	2,289.00	2,255.22	33.78	67.764	
9,400.00	7,815.00	7,042.94	5,525.00	46.82	41.80	-0.01	-735.00	1,598.21	2,289.00	2,253.99	35.01	65.387	
9,500.00	7,815.00	7,142.94	5,525.00	48.69	43.77	-0.01	-735.10	1,698.21	2,289.00	2,252.74	36.26	63.127	
9,600.00	7,815.00	7,242.94	5,525.00	50.60	45.79	-0.01	-735.19	1,798.21	2,289.00	2,251.46	37.54	60.979	
9,700.00	7,815.00	7,342.94	5,525.00	52.53	47.82	-0.01	-735.28	1,898.21	2,289.00	2,250.16	38.84	58.942	
9,800.00	7,815.00	7,442.94	5,525.00	54.50	49.89	-0.01	-735.38	1,998.21	2,289.00	2,248.85	40.15	57.009	
9,900.00	7,815.00	7,542.94	5,525.00	56.49	51.97	-0.01	-735.47	2,098.21	2,289.00	2,247.51	41.49	55.176	
10,000.00	7,815.00	7,642.94	5,525.00	58.51	54.07	-0.01	-735.56	2,198.21	2,289.00	2,246.16	42.84	53.437	

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #106H - OH - Prelim A											Offset Site Error: 0.00 usft		
Survey Program: 0-MWD+HDGM											Offset Well Error: 0.00 usft		
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		Separation Factor
10,100.00	7,815.00	7,742.94	5,525.00	60.54	56.19	-0.01	-735.65	2,298.21	2,289.00	2,244.80	44.20	51.789	
10,200.00	7,815.00	7,842.94	5,525.00	62.60	58.33	-0.01	-735.75	2,398.21	2,289.00	2,243.42	45.58	50.224	
10,300.00	7,815.00	7,942.94	5,525.00	64.67	60.47	-0.01	-735.84	2,498.21	2,289.00	2,242.04	46.96	48.739	
10,400.00	7,815.00	8,042.94	5,525.00	66.76	62.63	-0.01	-735.93	2,598.21	2,289.00	2,240.64	48.36	47.329	
10,500.00	7,815.00	8,142.94	5,525.00	68.86	64.80	-0.01	-736.03	2,698.21	2,289.00	2,239.23	49.77	45.989	
10,600.00	7,815.00	8,242.94	5,525.00	70.97	66.98	-0.01	-736.12	2,798.21	2,289.00	2,237.81	51.19	44.715	
10,700.00	7,815.00	8,342.94	5,525.00	73.10	69.16	-0.01	-736.21	2,898.21	2,289.00	2,236.38	52.62	43.502	
10,800.00	7,815.00	8,442.94	5,525.00	75.24	71.36	-0.01	-736.31	2,998.21	2,289.00	2,234.95	54.05	42.347	
10,900.00	7,815.00	8,542.94	5,525.00	77.38	73.56	-0.01	-736.40	3,098.21	2,289.00	2,233.50	55.49	41.247	
11,000.00	7,815.00	8,642.94	5,525.00	79.54	75.77	-0.01	-736.49	3,198.21	2,289.00	2,232.06	56.94	40.198	
11,100.00	7,815.00	8,742.94	5,525.00	81.70	77.98	-0.01	-736.58	3,298.21	2,289.00	2,230.60	58.40	39.197	
11,200.00	7,815.00	8,842.94	5,525.00	83.87	80.20	-0.01	-736.68	3,398.21	2,289.00	2,229.14	59.86	38.240	
11,300.00	7,815.00	8,942.94	5,525.00	86.05	82.43	-0.01	-736.77	3,498.21	2,289.00	2,227.68	61.32	37.326	
11,400.00	7,815.00	9,042.94	5,525.00	88.24	84.65	-0.01	-736.86	3,598.21	2,289.00	2,226.20	62.79	36.452	
11,500.00	7,815.00	9,142.94	5,525.00	90.43	86.89	-0.01	-736.96	3,698.21	2,289.00	2,224.73	64.27	35.615	
11,600.00	7,815.00	9,242.94	5,525.00	92.63	89.12	-0.01	-737.05	3,798.21	2,289.00	2,223.25	65.75	34.814	
11,700.00	7,815.00	9,342.94	5,525.00	94.83	91.36	-0.01	-737.14	3,898.21	2,289.00	2,221.77	67.23	34.046	
11,800.00	7,815.00	9,442.94	5,525.00	97.04	93.61	-0.01	-737.24	3,998.21	2,289.00	2,220.28	68.72	33.309	
11,900.00	7,815.00	9,542.94	5,525.00	99.25	95.86	-0.01	-737.33	4,098.21	2,289.00	2,218.79	70.21	32.602	
12,000.00	7,815.00	9,642.94	5,525.00	101.47	98.11	-0.01	-737.42	4,198.21	2,289.00	2,217.29	71.71	31.922	
12,100.00	7,815.00	9,742.94	5,525.00	103.69	100.36	-0.01	-737.52	4,298.21	2,289.00	2,215.80	73.20	31.269	
12,200.00	7,815.00	9,842.94	5,525.00	105.91	102.61	-0.01	-737.61	4,398.21	2,289.00	2,214.30	74.70	30.641	
12,300.00	7,815.00	9,942.94	5,525.00	108.14	104.87	-0.01	-737.70	4,498.21	2,289.00	2,212.79	76.21	30.037	
12,400.00	7,815.00	10,042.94	5,525.00	110.37	107.13	-0.01	-737.79	4,598.21	2,289.00	2,211.29	77.71	29.455	
12,500.00	7,815.00	10,142.94	5,525.00	112.60	109.39	-0.01	-737.89	4,698.21	2,289.00	2,209.78	79.22	28.894	
12,600.00	7,815.00	10,242.94	5,525.00	114.84	111.65	-0.01	-737.98	4,798.21	2,289.00	2,208.27	80.73	28.354	
12,700.00	7,815.00	10,342.94	5,525.00	117.08	113.92	-0.01	-738.07	4,898.21	2,289.00	2,206.76	82.24	27.832	
12,800.00	7,815.00	10,442.94	5,525.00	119.32	116.19	-0.01	-738.17	4,998.21	2,289.00	2,205.24	83.76	27.329	
12,900.00	7,815.00	10,542.94	5,525.00	121.57	118.46	-0.01	-738.26	5,098.21	2,289.00	2,203.73	85.27	26.843	
13,000.00	7,815.00	10,642.94	5,525.00	123.81	120.73	-0.01	-738.35	5,198.21	2,289.00	2,202.21	86.79	26.373	
13,100.00	7,815.00	10,742.94	5,525.00	126.06	123.00	-0.01	-738.45	5,298.21	2,289.00	2,200.69	88.31	25.919	
13,200.00	7,815.00	10,842.94	5,525.00	128.32	125.27	-0.01	-738.54	5,398.21	2,289.00	2,199.16	89.84	25.480	
13,300.00	7,815.00	10,942.94	5,525.00	130.57	127.54	-0.01	-738.63	5,498.21	2,289.00	2,197.64	91.36	25.055	
13,400.00	7,815.00	11,042.94	5,525.00	132.83	129.82	-0.01	-738.72	5,598.21	2,289.00	2,196.12	92.88	24.644	
13,500.00	7,815.00	11,142.94	5,525.00	135.08	132.10	-0.01	-738.82	5,698.21	2,289.00	2,194.59	94.41	24.245	
13,600.00	7,815.00	11,242.94	5,525.00	137.34	134.37	0.00	-738.91	5,798.21	2,289.00	2,193.06	95.94	23.859	
13,700.00	7,815.00	11,342.94	5,525.00	139.60	136.65	0.00	-739.00	5,898.21	2,289.00	2,191.53	97.47	23.485	
13,800.00	7,815.00	11,442.94	5,525.00	141.86	138.93	0.00	-739.10	5,998.21	2,289.00	2,190.00	99.00	23.122	
13,900.00	7,815.00	11,542.94	5,525.00	144.13	141.21	0.00	-739.19	6,098.21	2,289.00	2,188.47	100.53	22.769	
14,000.00	7,815.00	11,642.94	5,525.00	146.39	143.49	0.00	-739.28	6,198.21	2,289.00	2,186.94	102.06	22.427	
14,100.00	7,815.00	11,742.94	5,525.00	148.66	145.78	0.00	-739.38	6,298.21	2,289.00	2,185.40	103.60	22.095	
14,200.00	7,815.00	11,842.94	5,525.00	150.93	148.06	0.00	-739.47	6,398.21	2,289.00	2,183.87	105.13	21.773	
14,300.00	7,815.00	11,942.94	5,525.00	153.20	150.34	0.00	-739.56	6,498.21	2,289.00	2,182.33	106.67	21.459	
14,400.00	7,815.00	12,042.94	5,525.00	155.47	152.63	0.00	-739.65	6,598.21	2,289.00	2,180.80	108.20	21.154	
14,500.00	7,815.00	12,142.94	5,525.00	157.74	154.92	0.00	-739.75	6,698.21	2,289.00	2,179.26	109.74	20.858	
14,600.00	7,815.00	12,242.94	5,525.00	160.01	157.20	0.00	-739.84	6,798.21	2,289.00	2,177.72	111.28	20.570	
14,700.00	7,815.00	12,342.94	5,525.00	162.28	159.49	0.00	-739.93	6,898.21	2,289.00	2,176.18	112.82	20.289	
14,800.00	7,815.00	12,442.94	5,525.00	164.56	161.78	0.00	-740.03	6,998.21	2,289.00	2,174.64	114.36	20.016	
14,900.00	7,815.00	12,542.94	5,525.00	166.83	164.06	0.00	-740.12	7,098.21	2,289.00	2,173.10	115.90	19.749	
15,000.00	7,815.00	12,642.94	5,525.00	169.11	166.35	0.00	-740.21	7,198.21	2,289.00	2,171.56	117.44	19.490	
15,100.00	7,815.00	12,742.94	5,525.00	171.39	168.64	0.00	-740.31	7,298.21	2,289.00	2,170.01	118.99	19.237	
15,200.00	7,815.00	12,842.94	5,525.00	173.66	170.93	0.00	-740.40	7,398.21	2,289.00	2,168.47	120.53	18.991	

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #106H - OH - Prelim A											Offset Site Error: 0.00 usft		
Survey Program: 0-MWD+HDGM											Offset Well Error: 0.00 usft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,300.00	7,815.00	12,942.94	5,525.00	175.94	173.22	0.00	-740.49	7,498.21	2,289.00	2,166.93	122.07	18.751	
15,400.00	7,815.00	13,042.94	5,525.00	178.22	175.51	0.00	-740.59	7,598.21	2,289.00	2,165.38	123.62	18.517	
15,500.00	7,815.00	13,142.94	5,525.00	180.50	177.80	0.00	-740.68	7,698.21	2,289.00	2,163.84	125.16	18.288	
15,600.00	7,815.00	13,242.94	5,525.00	182.78	180.09	0.00	-740.77	7,798.21	2,289.00	2,162.29	126.71	18.065	
15,700.00	7,815.00	13,342.94	5,525.00	185.06	182.39	0.00	-740.86	7,898.21	2,289.00	2,160.74	128.26	17.847	
15,800.00	7,815.00	13,442.94	5,525.00	187.35	184.68	0.00	-740.96	7,998.21	2,289.00	2,159.20	129.80	17.634	
15,900.00	7,815.00	13,542.94	5,525.00	189.63	186.97	0.00	-741.05	8,098.21	2,289.00	2,157.65	131.35	17.427	
16,000.00	7,815.00	13,642.94	5,525.00	191.91	189.27	0.00	-741.14	8,198.21	2,289.00	2,156.10	132.90	17.224	
16,100.00	7,815.00	13,742.94	5,525.00	194.20	191.56	0.00	-741.24	8,298.21	2,289.00	2,154.55	134.45	17.025	
16,200.00	7,815.00	13,842.94	5,525.00	196.48	193.85	0.00	-741.33	8,398.21	2,289.00	2,153.00	136.00	16.831	
16,300.00	7,815.00	13,942.94	5,525.00	198.77	196.15	0.00	-741.42	8,498.21	2,289.00	2,151.45	137.55	16.642	
16,400.00	7,815.00	14,042.94	5,525.00	201.05	198.44	0.00	-741.52	8,598.21	2,289.00	2,149.90	139.10	16.456	
16,500.00	7,815.00	14,142.94	5,525.00	203.34	200.74	0.00	-741.61	8,698.21	2,289.00	2,148.35	140.65	16.275	
16,600.00	7,815.00	14,242.94	5,525.00	205.63	203.03	0.00	-741.70	8,798.21	2,289.00	2,146.80	142.20	16.097	
16,700.00	7,815.00	14,342.94	5,525.00	207.91	205.33	0.00	-741.79	8,898.21	2,289.00	2,145.25	143.75	15.924	
16,800.00	7,815.00	14,442.94	5,525.00	210.20	207.62	0.00	-741.89	8,998.21	2,289.00	2,143.70	145.30	15.754	
16,900.00	7,815.00	14,542.94	5,525.00	212.49	209.92	0.00	-741.98	9,098.21	2,289.00	2,142.15	146.85	15.587	
17,000.00	7,815.00	14,642.94	5,525.00	214.78	212.22	0.00	-742.07	9,198.21	2,289.00	2,140.60	148.40	15.424	
17,100.00	7,815.00	14,742.94	5,525.00	217.07	214.51	0.00	-742.17	9,298.21	2,289.00	2,139.04	149.96	15.264	
17,200.00	7,815.00	14,842.94	5,525.00	219.36	216.81	0.00	-742.26	9,398.21	2,289.00	2,137.49	151.51	15.108	
17,300.00	7,815.00	14,942.94	5,525.00	221.65	219.11	0.00	-742.35	9,498.21	2,289.00	2,135.94	153.06	14.955	
17,400.00	7,815.00	15,042.94	5,525.00	223.94	221.40	0.00	-742.45	9,598.21	2,289.00	2,134.38	154.62	14.804	
17,500.00	7,815.00	15,142.94	5,525.00	226.23	223.70	0.00	-742.54	9,698.21	2,289.00	2,132.83	156.17	14.657	
17,600.00	7,815.00	15,242.94	5,525.00	228.52	226.00	0.00	-742.63	9,798.21	2,289.00	2,131.28	157.72	14.513	
17,700.00	7,815.00	15,342.94	5,525.00	230.81	228.30	0.00	-742.72	9,898.21	2,289.00	2,129.72	159.28	14.371	
17,800.00	7,815.00	15,442.94	5,525.00	233.10	230.60	0.00	-742.82	9,998.21	2,289.00	2,128.17	160.83	14.232	
17,900.00	7,815.00	15,542.94	5,525.00	235.39	232.90	0.00	-742.91	10,098.21	2,289.00	2,126.61	162.39	14.096	
17,995.79	7,815.00	15,638.73	5,525.00	237.59	235.10	0.00	-743.00	10,194.00	2,289.00	2,125.12	163.88	13.968	

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #112H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	1.00	-1.00	0.00	0.00	0.00	140.00	0.00	140.00				
100.00	100.00	101.00	99.00	0.13	0.13	0.00	140.00	0.00	140.00	139.74	0.26	538.685	
200.00	200.00	201.00	199.00	0.49	0.49	0.00	140.00	0.00	140.00	139.02	0.98	143.320	
300.00	300.00	301.00	299.00	0.85	0.85	0.00	140.00	0.00	140.00	138.31	1.69	82.655	
400.00	400.00	401.00	399.00	1.20	1.21	0.00	140.00	0.00	140.00	137.59	2.41	58.074	
500.00	500.00	501.00	499.00	1.56	1.57	0.00	140.00	0.00	140.00	136.87	3.13	44.762	
600.00	600.00	601.00	599.00	1.92	1.92	0.00	140.00	0.00	140.00	136.16	3.84	36.415	
700.00	700.00	701.00	699.00	2.28	2.28	0.00	140.00	0.00	140.00	135.44	4.56	30.691	
800.00	800.00	801.00	799.00	2.64	2.64	0.00	140.00	0.00	140.00	134.72	5.28	26.523	
900.00	900.00	901.00	899.00	3.00	3.00	0.00	140.00	0.00	140.00	134.00	6.00	23.351	
1,000.00	1,000.00	1,001.00	999.00	3.35	3.36	0.00	140.00	0.00	140.00	133.29	6.71	20.857 CC, ES	
1,100.00	1,099.98	1,101.02	1,098.98	3.70	3.72	169.13	140.00	0.00	141.71	134.30	7.41	19.119	
1,200.00	1,199.84	1,201.16	1,198.84	4.03	4.08	169.50	140.00	0.00	146.86	138.76	8.10	18.129	
1,300.00	1,299.45	1,301.55	1,298.45	4.36	4.44	170.05	140.00	0.00	155.43	146.64	8.80	17.672	
1,400.00	1,398.70	1,402.30	1,397.70	4.70	4.80	170.74	140.00	0.00	167.45	157.96	9.50	17.634	
1,500.00	1,497.64	1,496.64	1,496.64	5.06	5.13	171.46	140.00	0.00	181.82	171.65	10.18	17.868	
1,600.00	1,596.57	1,595.89	1,595.88	5.42	5.48	171.63	140.00	-1.60	196.21	185.34	10.87	18.058	
1,700.00	1,695.49	1,695.12	1,694.97	5.79	5.82	170.82	140.00	-6.64	210.45	198.89	11.55	18.215	
1,800.00	1,794.42	1,805.99	1,793.62	6.16	6.21	169.64	140.00	-13.54	224.69	212.40	12.29	18.286	
1,900.00	1,893.35	1,907.11	1,892.26	6.55	6.56	168.60	140.00	-20.43	239.02	226.02	12.99	18.395	
2,000.00	1,992.27	2,008.23	1,990.90	6.93	6.92	167.67	140.00	-27.33	253.41	239.71	13.70	18.491	
2,100.00	2,091.20	2,109.35	2,089.54	7.32	7.28	166.85	140.00	-34.23	267.87	253.45	14.42	18.577	
2,200.00	2,190.13	2,189.54	2,188.18	7.71	7.56	166.11	140.00	-41.13	282.37	267.31	15.06	18.746	
2,300.00	2,289.05	2,288.42	2,286.82	8.10	7.92	165.44	140.00	-48.02	296.91	281.14	15.78	18.820	
2,400.00	2,387.98	2,387.30	2,385.46	8.50	8.27	164.83	140.00	-54.92	311.49	295.00	16.49	18.888	
2,500.00	2,486.91	2,486.18	2,484.10	8.89	8.63	164.28	140.00	-61.82	326.11	308.90	17.21	18.948	
2,600.00	2,585.83	2,585.06	2,582.74	9.29	8.98	163.78	140.00	-68.72	340.74	322.81	17.93	19.004	
2,700.00	2,684.76	2,683.94	2,681.38	9.69	9.34	163.32	140.00	-75.61	355.41	336.75	18.65	19.054	
2,800.00	2,783.69	2,782.82	2,780.02	10.09	9.70	162.89	140.00	-82.51	370.09	350.71	19.38	19.100	
2,900.00	2,882.61	2,881.70	2,878.66	10.49	10.06	162.50	140.00	-89.41	384.79	364.69	20.10	19.142	
3,000.00	2,981.54	2,980.58	2,977.29	10.89	10.42	162.13	140.00	-96.31	399.51	378.68	20.83	19.181	
3,100.00	3,080.47	3,092.11	3,088.54	11.30	10.82	161.72	138.63	-104.13	413.08	391.46	21.62	19.107	
3,200.00	3,179.39	3,208.33	3,204.30	11.70	11.23	161.22	132.67	-112.44	422.81	400.40	22.41	18.869	
3,300.00	3,278.32	3,318.73	3,313.98	12.11	11.63	160.68	122.91	-120.45	428.85	405.69	23.16	18.518	
3,400.00	3,377.25	3,418.52	3,413.03	12.51	11.98	160.18	113.25	-127.72	434.14	410.25	23.89	18.172	
3,500.00	3,476.17	3,518.31	3,512.09	12.92	12.34	159.70	103.59	-134.98	439.47	414.85	24.62	17.847	
3,600.00	3,575.10	3,618.10	3,611.14	13.33	12.70	159.22	93.94	-142.25	444.83	419.47	25.36	17.540	
3,700.00	3,674.03	3,712.31	3,704.71	13.73	13.04	158.83	85.19	-148.83	450.57	424.49	26.08	17.273	
3,800.00	3,772.95	3,802.29	3,794.34	14.14	13.37	158.71	78.91	-153.56	458.28	431.49	26.79	17.109	
3,900.00	3,871.88	3,891.93	3,883.83	14.55	13.68	158.84	74.88	-156.58	468.11	440.65	27.47	17.044	
4,000.00	3,970.81	3,981.05	3,972.93	14.96	13.99	159.21	73.10	-157.92	480.07	451.95	28.12	17.069	
4,100.00	4,069.73	4,076.86	4,068.73	15.37	14.32	159.78	73.00	-158.00	493.68	464.86	28.81	17.134	
4,200.00	4,168.66	4,175.79	4,167.66	15.77	14.67	160.35	73.00	-158.00	507.43	477.91	29.52	17.189	
4,300.00	4,267.59	4,274.71	4,266.59	16.18	15.01	160.89	73.00	-158.00	521.23	491.00	30.23	17.244	
4,400.00	4,366.52	4,373.64	4,365.52	16.59	15.35	161.40	73.00	-158.00	535.07	504.14	30.94	17.296	
4,500.00	4,465.44	4,472.57	4,464.44	17.00	15.70	161.89	73.00	-158.00	548.95	517.31	31.64	17.348	
4,600.00	4,564.37	4,571.49	4,563.37	17.41	16.04	162.35	73.00	-158.00	562.87	530.52	32.35	17.397	
4,700.00	4,663.30	4,670.42	4,662.30	17.82	16.39	162.79	73.00	-158.00	576.83	543.76	33.06	17.446	
4,800.00	4,762.22	4,769.35	4,761.22	18.23	16.73	163.21	73.00	-158.00	590.81	557.04	33.78	17.493	
4,900.00	4,861.15	4,868.28	4,860.15	18.64	17.08	163.61	73.00	-158.00	604.83	570.34	34.49	17.538	
5,000.00	4,960.08	4,967.20	4,959.08	19.05	17.42	163.99	73.00	-158.00	618.87	583.67	35.20	17.582	
5,100.00	5,059.00	5,066.13	5,058.00	19.47	17.77	164.35	73.00	-158.00	632.94	597.03	35.91	17.625	

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #112H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,200.00	5,157.93	5,165.06	5,156.93	19.88	18.12	164.70	73.00	-158.00	647.03	610.41	36.62	17.667	
5,300.00	5,256.86	5,263.98	5,255.86	20.29	18.46	165.03	73.00	-158.00	661.15	623.81	37.34	17.708	
5,400.00	5,355.78	5,362.91	5,354.78	20.70	18.81	165.35	73.00	-158.00	675.28	637.23	38.05	17.747	
5,500.00	5,454.71	5,461.84	5,453.71	21.11	19.16	165.66	73.00	-158.00	689.44	650.67	38.76	17.785	
5,600.00	5,553.64	5,560.76	5,552.64	21.52	19.50	165.96	73.00	-158.00	703.61	664.13	39.48	17.822	
5,700.00	5,652.56	5,659.69	5,651.56	21.93	19.85	166.24	73.00	-158.00	717.81	677.61	40.19	17.858	
5,800.00	5,751.49	5,758.62	5,750.49	22.35	20.20	166.51	73.00	-158.00	732.02	691.11	40.91	17.893	
5,900.00	5,850.42	5,857.54	5,849.42	22.76	20.55	166.77	73.00	-158.00	746.24	704.61	41.63	17.928	
6,000.00	5,949.34	5,956.47	5,948.34	23.17	20.90	167.02	73.00	-158.00	760.48	718.14	42.34	17.961	
6,100.00	6,048.27	6,055.40	6,047.27	23.58	21.25	167.27	73.00	-158.00	774.73	731.67	43.06	17.993	
6,200.00	6,147.20	6,154.32	6,146.20	23.99	21.60	167.50	73.00	-158.00	789.00	745.22	43.77	18.024	
6,300.00	6,246.12	6,253.25	6,245.12	24.41	21.94	167.73	73.00	-158.00	803.28	758.78	44.49	18.055	
6,400.00	6,345.05	6,363.03	6,354.88	24.82	22.33	168.06	72.76	-156.70	817.38	772.11	45.27	18.057	
6,500.00	6,443.98	6,495.24	6,484.59	25.23	22.75	169.97	68.42	-133.07	828.39	782.31	46.08	17.977	
6,600.00	6,542.90	6,611.15	6,591.18	25.64	23.09	173.21	60.29	-88.77	837.15	790.38	46.77	17.898	
6,700.00	6,641.83	6,706.17	6,670.37	26.05	23.38	176.84	50.85	-37.32	846.80	799.41	47.39	17.868	
6,800.00	6,740.76	6,781.59	6,726.40	26.47	23.63	-179.73	41.75	12.26	860.26	812.37	47.89	17.962	
6,900.00	6,839.69	6,840.99	6,765.57	26.88	23.86	-176.75	33.70	56.13	879.58	831.40	48.18	18.257	
7,000.00	6,938.93	6,888.18	6,793.28	27.28	24.06	-174.28	26.81	93.70	903.78	855.61	48.17	18.761	
7,100.00	7,038.53	6,926.14	6,813.22	27.66	24.25	-172.28	20.98	125.45	932.33	884.49	47.84	19.487	
7,200.00	7,138.38	6,957.05	6,827.85	28.01	24.41	-170.67	16.06	152.23	965.47	918.26	47.21	20.452	
7,300.00	7,238.36	6,982.55	6,838.80	28.33	24.55	-169.39	11.91	174.88	1,003.12	956.83	46.29	21.669	
7,400.00	7,337.90	7,000.00	6,845.70	28.62	24.65	-55.85	9.01	190.64	1,042.66	997.57	45.08	23.128	
7,500.00	7,434.54	7,035.56	6,858.24	28.88	24.88	-50.97	3.01	223.37	1,079.84	1,035.85	44.00	24.543	
7,600.00	7,525.32	7,066.01	6,867.31	29.10	25.09	-47.07	-2.24	251.96	1,113.27	1,070.52	42.75	26.042	
7,700.00	7,607.50	7,100.00	6,875.60	29.27	25.34	-43.79	-8.19	284.37	1,141.60	1,100.08	41.52	27.493	
7,800.00	7,678.57	7,131.60	6,881.54	29.39	25.59	-41.31	-13.79	314.90	1,163.78	1,123.46	40.32	28.867	
7,900.00	7,736.38	7,165.97	6,886.04	29.46	25.87	-39.42	-19.94	348.40	1,179.00	1,139.74	39.27	30.025	
8,000.00	7,779.17	7,200.00	6,888.49	29.49	26.17	-38.17	-26.07	381.78	1,186.67	1,148.25	38.42	30.884	
8,100.00	7,805.64	7,249.69	6,889.00	29.51	26.64	-37.27	-34.92	430.67	1,186.19	1,148.20	37.99	31.224	
8,200.00	7,814.99	7,325.18	6,889.00	29.76	27.41	-36.88	-46.91	505.20	1,175.02	1,136.91	38.11	30.834	
8,300.00	7,815.00	7,402.62	6,889.00	30.54	28.29	-36.37	-57.16	581.96	1,159.47	1,120.92	38.55	30.074	
8,400.00	7,815.00	7,481.69	6,889.00	31.52	29.28	-35.94	-65.48	660.58	1,147.85	1,108.58	39.27	29.226	
8,500.00	7,815.00	7,561.95	6,889.00	32.63	30.36	-35.63	-71.70	740.60	1,140.05	1,099.79	40.26	28.315	
8,600.00	7,815.00	7,642.95	6,889.00	33.87	31.52	-35.46	-75.71	821.50	1,135.98	1,094.46	41.52	27.359	
8,700.00	7,815.00	7,724.25	6,889.00	35.22	32.74	-35.40	-77.42	902.78	1,134.79	1,091.78	43.01	26.384	
8,717.25	7,815.00	7,748.30	6,889.00	35.47	33.11	-35.40	-77.49	915.78	1,134.75	1,091.37	43.38	26.156	
8,800.00	7,815.00	7,820.00	6,889.00	36.67	34.25	-35.40	-77.53	998.53	1,134.77	1,089.93	44.84	25.305	
8,900.00	7,815.00	7,920.00	6,889.00	38.20	35.90	-35.40	-77.58	1,098.53	1,134.79	1,087.95	46.84	24.226	
9,000.00	7,815.00	8,020.00	6,889.00	39.81	37.63	-35.40	-77.63	1,198.53	1,134.82	1,085.88	48.94	23.188	
9,100.00	7,815.00	8,120.00	6,889.00	41.48	39.41	-35.40	-77.68	1,298.53	1,134.84	1,083.71	51.12	22.198	
9,200.00	7,815.00	8,220.00	6,889.00	43.21	41.24	-35.41	-77.73	1,398.53	1,134.86	1,081.48	53.39	21.258	
9,300.00	7,815.00	8,320.00	6,889.00	45.00	43.12	-35.41	-77.77	1,498.53	1,134.89	1,079.17	55.71	20.370	
9,400.00	7,815.00	8,420.00	6,889.00	46.82	45.05	-35.41	-77.82	1,598.53	1,134.91	1,076.81	58.10	19.533	
9,500.00	7,815.00	8,520.00	6,889.00	48.69	47.00	-35.41	-77.87	1,698.53	1,134.93	1,074.39	60.54	18.747	
9,600.00	7,815.00	8,620.00	6,889.00	50.60	48.99	-35.41	-77.92	1,798.53	1,134.96	1,071.93	63.03	18.008	
9,700.00	7,815.00	8,720.00	6,889.00	52.53	51.00	-35.41	-77.97	1,898.53	1,134.98	1,069.43	65.55	17.314	
9,800.00	7,815.00	8,820.00	6,889.00	54.50	53.04	-35.41	-78.02	1,998.53	1,135.00	1,066.89	68.11	16.663	
9,900.00	7,815.00	8,920.00	6,889.00	56.49	55.10	-35.42	-78.07	2,098.53	1,135.02	1,064.32	70.71	16.052	
10,000.00	7,815.00	9,020.00	6,889.00	58.51	57.17	-35.42	-78.11	2,198.53	1,135.05	1,061.71	73.33	15.478	
10,100.00	7,815.00	9,120.00	6,889.00	60.54	59.27	-35.42	-78.16	2,298.53	1,135.07	1,059.09	75.98	14.938	
10,200.00	7,815.00	9,220.00	6,889.00	62.60	61.38	-35.42	-78.21	2,398.53	1,135.09	1,056.44	78.66	14.431	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #126H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3240 + 28.5 = KB @ 3268.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com	MD Reference:	3240 + 28.5 = KB @ 3268.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#126H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design Leatherneck 3029 Fed Com - #112H - OH - Prelim A													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,300.00	7,815.00	9,320.00	6,889.00	64.67	63.50	-35.42	-78.26	2,498.53	1,135.12	1,053.77	81.35	13.953		
10,400.00	7,815.00	9,420.00	6,889.00	66.76	65.64	-35.42	-78.31	2,598.53	1,135.14	1,051.07	84.07	13.503		
10,500.00	7,815.00	9,520.00	6,889.00	68.86	67.79	-35.43	-78.36	2,698.53	1,135.16	1,048.37	86.80	13.078		
10,600.00	7,815.00	9,620.00	6,889.00	70.97	69.95	-35.43	-78.41	2,798.53	1,135.19	1,045.64	89.54	12.677		
10,700.00	7,815.00	9,720.00	6,889.00	73.10	72.11	-35.43	-78.45	2,898.53	1,135.21	1,042.90	92.31	12.298		
10,800.00	7,815.00	9,820.00	6,889.00	75.24	74.29	-35.43	-78.50	2,998.53	1,135.23	1,040.15	95.08	11.940		
10,900.00	7,815.00	9,920.00	6,889.00	77.38	76.47	-35.43	-78.55	3,098.53	1,135.26	1,037.39	97.87	11.600		
11,000.00	7,815.00	10,020.00	6,889.00	79.54	78.66	-35.43	-78.60	3,198.53	1,135.28	1,034.62	100.66	11.278		
11,100.00	7,815.00	10,120.00	6,889.00	81.70	80.86	-35.44	-78.65	3,298.53	1,135.30	1,031.83	103.47	10.972		
11,200.00	7,815.00	10,220.00	6,889.00	83.87	83.06	-35.44	-78.70	3,398.53	1,135.33	1,029.04	106.29	10.682		
11,300.00	7,815.00	10,320.00	6,889.00	86.05	85.27	-35.44	-78.75	3,498.53	1,135.35	1,026.23	109.11	10.405		
11,400.00	7,815.00	10,420.00	6,889.00	88.24	87.49	-35.44	-78.80	3,598.53	1,135.37	1,023.42	111.95	10.142		
11,500.00	7,815.00	10,520.00	6,889.00	90.43	89.71	-35.44	-78.84	3,698.53	1,135.40	1,020.61	114.79	9.891		
11,600.00	7,815.00	10,620.00	6,889.00	92.63	91.93	-35.44	-78.89	3,798.53	1,135.42	1,017.78	117.64	9.652		
11,700.00	7,815.00	10,720.00	6,889.00	94.83	94.16	-35.45	-78.94	3,898.53	1,135.44	1,014.95	120.49	9.423		
11,800.00	7,815.00	10,820.00	6,889.00	97.04	96.39	-35.45	-78.99	3,998.53	1,135.46	1,012.11	123.35	9.205		
11,900.00	7,815.00	10,920.00	6,889.00	99.25	98.62	-35.45	-79.04	4,098.53	1,135.49	1,009.27	126.22	8.996		
12,000.00	7,815.00	11,020.00	6,889.00	101.47	100.86	-35.45	-79.09	4,198.53	1,135.51	1,006.42	129.09	8.796		
12,100.00	7,815.00	11,120.00	6,889.00	103.69	103.10	-35.45	-79.14	4,298.53	1,135.53	1,003.57	131.97	8.605		
12,200.00	7,815.00	11,220.00	6,889.00	105.91	105.35	-35.45	-79.18	4,398.53	1,135.56	1,000.71	134.85	8.421		
12,300.00	7,815.00	11,320.00	6,889.00	108.14	107.59	-35.46	-79.23	4,498.53	1,135.58	997.85	137.73	8.245		
12,400.00	7,815.00	11,420.00	6,889.00	110.37	109.84	-35.46	-79.28	4,598.53	1,135.60	994.98	140.62	8.076		
12,500.00	7,815.00	11,520.00	6,889.00	112.60	112.10	-35.46	-79.33	4,698.53	1,135.63	992.11	143.52	7.913		
12,600.00	7,815.00	11,620.00	6,889.00	114.84	114.35	-35.46	-79.38	4,798.53	1,135.65	989.24	146.41	7.756		
12,700.00	7,815.00	11,720.00	6,889.00	117.08	116.61	-35.46	-79.43	4,898.53	1,135.67	986.36	149.31	7.606		
12,800.00	7,815.00	11,820.00	6,889.00	119.32	118.86	-35.46	-79.48	4,998.53	1,135.70	983.48	152.22	7.461		
12,900.00	7,815.00	11,920.00	6,889.00	121.57	121.12	-35.47	-79.52	5,098.53	1,135.72	980.60	155.12	7.321		
13,000.00	7,815.00	12,020.00	6,889.00	123.81	123.39	-35.47	-79.57	5,198.53	1,135.74	977.71	158.03	7.187		
13,100.00	7,815.00	12,120.00	6,889.00	126.06	125.65	-35.47	-79.62	5,298.53	1,135.77	974.82	160.95	7.057		
13,200.00	7,815.00	12,220.00	6,889.00	128.32	127.92	-35.47	-79.67	5,398.53	1,135.79	971.93	163.86	6.931		
13,300.00	7,815.00	12,320.00	6,889.00	130.57	130.18	-35.47	-79.72	5,498.53	1,135.81	969.03	166.78	6.810		
13,400.00	7,815.00	12,420.00	6,889.00	132.83	132.45	-35.47	-79.77	5,598.53	1,135.84	966.14	169.70	6.693		
13,500.00	7,815.00	12,520.00	6,889.00	135.08	134.72	-35.48	-79.82	5,698.53	1,135.86	963.24	172.62	6.580		
13,600.00	7,815.00	12,620.00	6,889.00	137.34	136.99	-35.48	-79.86	5,798.53	1,135.88	960.34	175.54	6.471		
13,700.00	7,815.00	12,720.00	6,889.00	139.60	139.26	-35.48	-79.91	5,898.53	1,135.90	957.43	178.47	6.365		
13,800.00	7,815.00	12,820.00	6,889.00	141.86	141.54	-35.48	-79.96	5,998.53	1,135.93	954.53	181.40	6.262		
13,900.00	7,815.00	12,920.00	6,889.00	144.13	143.81	-35.48	-80.01	6,098.53	1,135.95	951.62	184.33	6.163		
14,000.00	7,815.00	13,020.00	6,889.00	146.39	146.09	-35.48	-80.06	6,198.53	1,135.97	948.71	187.26	6.066		
14,100.00	7,815.00	13,120.00	6,889.00	148.66	148.36	-35.49	-80.11	6,298.53	1,136.00	945.80	190.19	5.973		
14,200.00	7,815.00	13,220.00	6,889.00	150.93	150.64	-35.49	-80.16	6,398.53	1,136.02	942.89	193.13	5.882		
14,300.00	7,815.00	13,320.00	6,889.00	153.20	152.92	-35.49	-80.20	6,498.53	1,136.04	939.98	196.07	5.794		
14,400.00	7,815.00	13,420.00	6,889.00	155.47	155.20	-35.49	-80.25	6,598.53	1,136.07	937.06	199.00	5.709		
14,500.00	7,815.00	13,520.00	6,889.00	157.74	157.48	-35.49	-80.30	6,698.53	1,136.09	934.15	201.94	5.626		
14,600.00	7,815.00	13,620.00	6,889.00	160.01	159.76	-35.49	-80.35	6,798.53	1,136.11	931.23	204.89	5.545		
14,700.00	7,815.00	13,720.00	6,889.00	162.28	162.04	-35.50	-80.40	6,898.53	1,136.14	928.31	207.83	5.467		
14,800.00	7,815.00	13,820.00	6,889.00	164.56	164.32	-35.50	-80.45	6,998.53	1,136.16	925.39	210.77	5.390		
14,900.00	7,815.00	13,920.00	6,889.00	166.83	166.61	-35.50	-80.50	7,098.53	1,136.18	922.47	213.72	5.316		
15,000.00	7,815.00	14,020.00	6,889.00	169.11	168.89	-35.50	-80.54	7,198.53	1,136.21	919.54	216.66	5.244		
15,100.00	7,815.00	14,120.00	6,889.00	171.39	171.18	-35.50	-80.59	7,298.53	1,136.23	916.62	219.61	5.174		
15,200.00	7,815.00	14,220.00	6,889.00	173.66	173.46	-35.50	-80.64	7,398.53	1,136.25	913.69	222.56	5.105		
15,300.00	7,815.00	14,320.00	6,889.00	175.94	175.75	-35.51	-80.69	7,498.53	1,136.28	910.77	225.51	5.039		
15,400.00	7,815.00	14,420.00	6,889.00	178.22	178.03	-35.51	-80.74	7,598.53	1,136.30	907.84	228.46	4.974		

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #112H - OH - Prelim A													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,500.00	7,815.00	14,520.00	6,889.00	180.50	180.32	-35.51	-80.79	7,698.53	1,136.32	904.91	231.41	4.910		
15,600.00	7,815.00	14,620.00	6,889.00	182.78	182.61	-35.51	-80.84	7,798.53	1,136.35	901.98	234.37	4.849		
15,700.00	7,815.00	14,720.00	6,889.00	185.06	184.90	-35.51	-80.89	7,898.53	1,136.37	899.05	237.32	4.788		
15,800.00	7,815.00	14,820.00	6,889.00	187.35	187.19	-35.51	-80.93	7,998.53	1,136.39	896.12	240.27	4.730		
15,900.00	7,815.00	14,920.00	6,889.00	189.63	189.47	-35.52	-80.98	8,098.53	1,136.41	893.18	243.23	4.672		
16,000.00	7,815.00	15,020.00	6,889.00	191.91	191.76	-35.52	-81.03	8,198.53	1,136.44	890.25	246.19	4.616		
16,100.00	7,815.00	15,120.00	6,889.00	194.20	194.05	-35.52	-81.08	8,298.53	1,136.46	887.32	249.14	4.561		
16,200.00	7,815.00	15,220.00	6,889.00	196.48	196.34	-35.52	-81.13	8,398.53	1,136.48	884.38	252.10	4.508		
16,300.00	7,815.00	15,320.00	6,889.00	198.77	198.64	-35.52	-81.18	8,498.53	1,136.51	881.45	255.06	4.456		
16,400.00	7,815.00	15,420.00	6,889.00	201.05	200.93	-35.52	-81.23	8,598.53	1,136.53	878.51	258.02	4.405		
16,500.00	7,815.00	15,520.00	6,889.00	203.34	203.22	-35.52	-81.27	8,698.53	1,136.55	875.57	260.98	4.355		
16,600.00	7,815.00	15,620.00	6,889.00	205.63	205.51	-35.53	-81.32	8,798.53	1,136.58	872.63	263.94	4.306		
16,700.00	7,815.00	15,720.00	6,889.00	207.91	207.80	-35.53	-81.37	8,898.53	1,136.60	869.69	266.91	4.258		
16,800.00	7,815.00	15,820.00	6,889.00	210.20	210.10	-35.53	-81.42	8,998.53	1,136.62	866.75	269.87	4.212		
16,900.00	7,815.00	15,920.00	6,889.00	212.49	212.39	-35.53	-81.47	9,098.53	1,136.65	863.81	272.83	4.166		
17,000.00	7,815.00	16,020.00	6,889.00	214.78	214.68	-35.53	-81.52	9,198.53	1,136.67	860.87	275.80	4.121		
17,100.00	7,815.00	16,120.00	6,889.00	217.07	216.98	-35.53	-81.57	9,298.53	1,136.69	857.93	278.76	4.078		
17,200.00	7,815.00	16,220.00	6,889.00	219.36	219.27	-35.54	-81.61	9,398.53	1,136.72	854.99	281.73	4.035		
17,300.00	7,815.00	16,320.00	6,889.00	221.65	221.56	-35.54	-81.66	9,498.53	1,136.74	852.05	284.69	3.993		
17,400.00	7,815.00	16,420.00	6,889.00	223.94	223.86	-35.54	-81.71	9,598.53	1,136.76	849.10	287.66	3.952		
17,500.00	7,815.00	16,520.00	6,889.00	226.23	226.15	-35.54	-81.76	9,698.53	1,136.79	846.16	290.63	3.911		
17,600.00	7,815.00	16,620.00	6,889.00	228.52	228.45	-35.54	-81.81	9,798.53	1,136.81	843.21	293.60	3.872		
17,700.00	7,815.00	16,720.00	6,889.00	230.81	230.75	-35.54	-81.86	9,898.53	1,136.83	840.27	296.56	3.833		
17,800.00	7,815.00	16,820.00	6,889.00	233.10	233.04	-35.55	-81.91	9,998.53	1,136.86	837.32	299.53	3.795		
17,900.00	7,815.00	16,920.00	6,889.00	235.39	235.34	-35.55	-81.95	10,098.53	1,136.88	834.38	302.50	3.758		
17,903.58	7,815.00	16,923.58	6,889.00	235.47	235.42	-35.55	-81.96	10,102.10	1,136.88	834.27	302.61	3.757		
17,995.79	7,815.00	17,013.47	6,889.00	237.59	237.37	-35.55	-82.00	10,192.00	1,136.90	831.68	305.22	3.725 SF		

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design												Leatherneck 3029 Fed Com - #115H - OH - Prelim A		Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+HDGM												Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis			Distance					Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		Separation Factor		
0.00	0.00	1.00	1.00	0.00	0.00	0.00	110.00	0.00	110.00						
100.00	100.00	101.00	101.00	0.13	0.13	0.00	110.00	0.00	110.00	109.74	0.26	423.252			
200.00	200.00	201.00	201.00	0.49	0.49	0.00	110.00	0.00	110.00	109.02	0.98	112.609			
300.00	300.00	301.00	301.00	0.85	0.85	0.00	110.00	0.00	110.00	108.31	1.69	64.944			
400.00	400.00	401.00	401.00	1.20	1.21	0.00	110.00	0.00	110.00	107.59	2.41	45.629			
500.00	500.00	501.00	501.00	1.56	1.57	0.00	110.00	0.00	110.00	106.87	3.13	35.170			
600.00	600.00	601.00	601.00	1.92	1.92	0.00	110.00	0.00	110.00	106.16	3.84	28.612			
700.00	700.00	701.00	701.00	2.28	2.28	0.00	110.00	0.00	110.00	105.44	4.56	24.115			
800.00	800.00	801.00	801.00	2.64	2.64	0.00	110.00	0.00	110.00	104.72	5.28	20.839			
900.00	900.00	901.00	901.00	3.00	3.00	0.00	110.00	0.00	110.00	104.00	6.00	18.347			
1,000.00	1,000.00	1,001.00	1,001.00	3.35	3.36	0.00	110.00	0.00	110.00	103.29	6.71	16.388 CC, ES			
1,100.00	1,099.98	1,100.98	1,100.98	3.70	3.72	169.17	110.00	0.00	111.71	104.30	7.41	15.072			
1,200.00	1,199.84	1,200.84	1,200.84	4.03	4.07	169.63	110.00	0.00	116.86	108.76	8.10	14.428			
1,300.00	1,299.45	1,300.45	1,300.45	4.36	4.43	170.32	110.00	0.00	125.44	116.65	8.79	14.268			
1,400.00	1,398.70	1,400.30	1,399.70	4.70	4.79	171.14	110.00	0.00	137.47	127.98	9.49	14.488			
1,500.00	1,497.64	1,501.36	1,498.64	5.06	5.15	171.97	110.00	0.00	151.86	141.67	10.19	14.899			
1,600.00	1,596.57	1,602.43	1,597.57	5.42	5.51	172.68	110.00	0.00	166.34	155.45	10.90	15.265			
1,700.00	1,695.49	1,703.51	1,696.49	5.79	5.88	173.27	110.00	0.00	180.85	169.24	11.60	15.584			
1,800.00	1,794.42	1,804.58	1,795.42	6.16	6.24	173.77	110.00	0.00	195.37	183.05	12.32	15.864			
1,900.00	1,893.35	1,905.65	1,894.35	6.55	6.60	174.20	110.00	0.00	209.90	196.87	13.03	16.111			
2,000.00	1,992.27	1,993.27	1,993.27	6.93	6.91	174.58	110.00	0.00	224.44	210.75	13.69	16.389			
2,100.00	2,091.20	2,085.85	2,085.83	7.32	7.25	174.74	111.19	-0.48	240.21	225.85	14.37	16.718			
2,200.00	2,190.13	2,177.08	2,176.96	7.71	7.57	174.58	115.07	-2.05	258.77	243.75	15.02	17.223			
2,300.00	2,289.05	2,267.23	2,266.84	8.10	7.90	174.16	121.55	-4.66	280.09	264.42	15.67	17.879			
2,400.00	2,387.98	2,361.97	2,361.10	8.50	8.23	173.58	130.45	-8.26	303.50	287.15	16.34	18.570			
2,500.00	2,486.91	2,459.12	2,457.73	8.89	8.58	173.06	139.71	-11.99	327.06	310.01	17.05	19.187			
2,600.00	2,585.83	2,556.26	2,554.36	9.29	8.93	172.61	148.96	-15.73	350.65	332.90	17.75	19.755			
2,700.00	2,684.76	2,653.40	2,650.99	9.69	9.29	172.21	158.22	-19.47	374.25	355.80	18.45	20.279			
2,800.00	2,783.69	2,750.55	2,747.62	10.09	9.64	171.86	167.47	-23.20	397.87	378.71	19.16	20.764			
2,900.00	2,882.61	2,847.69	2,844.25	10.49	10.00	171.55	176.73	-26.94	421.50	401.63	19.87	21.213			
3,000.00	2,981.54	2,944.84	2,940.88	10.89	10.35	171.28	185.98	-30.68	445.14	424.56	20.58	21.631			
3,100.00	3,080.47	3,041.98	3,037.51	11.30	10.71	171.03	195.24	-34.41	468.79	447.50	21.29	22.020			
3,200.00	3,179.39	3,139.12	3,134.14	11.70	11.07	170.81	204.49	-38.15	492.45	470.45	22.00	22.383			
3,300.00	3,278.32	3,236.27	3,230.77	12.11	11.43	170.60	213.75	-41.89	516.12	493.40	22.71	22.723			
3,400.00	3,377.25	3,333.41	3,327.40	12.51	11.79	170.42	223.00	-45.62	539.79	516.36	23.43	23.042			
3,500.00	3,476.17	3,430.56	3,424.03	12.92	12.15	170.24	232.26	-49.36	563.46	539.32	24.14	23.342			
3,600.00	3,575.10	3,527.70	3,520.66	13.33	12.51	170.09	241.51	-53.10	587.14	562.29	24.85	23.623			
3,700.00	3,674.03	3,624.84	3,617.29	13.73	12.87	169.94	250.77	-56.83	610.82	585.25	25.57	23.889			
3,800.00	3,772.95	3,721.99	3,713.91	14.14	13.23	169.81	260.02	-60.57	634.51	608.23	26.28	24.140			
3,900.00	3,871.88	3,819.13	3,810.54	14.55	13.60	169.69	269.28	-64.31	658.20	631.20	27.00	24.377			
4,000.00	3,970.81	3,916.28	3,907.17	14.96	13.96	169.57	278.53	-68.04	681.89	654.18	27.72	24.602			
4,100.00	4,069.73	4,013.42	4,003.80	15.37	14.32	169.46	287.79	-71.78	705.59	677.15	28.43	24.815			
4,200.00	4,168.66	4,110.56	4,100.43	15.77	14.69	169.36	297.04	-75.52	729.28	700.13	29.15	25.017			
4,300.00	4,267.59	4,207.71	4,197.06	16.18	15.05	169.27	306.30	-79.25	752.98	723.11	29.87	25.210			
4,400.00	4,366.52	4,304.85	4,293.69	16.59	15.42	169.18	315.55	-82.99	776.68	746.10	30.59	25.393			
4,500.00	4,465.44	4,402.00	4,390.32	17.00	15.78	169.10	324.81	-86.73	800.39	769.08	31.31	25.567			
4,600.00	4,564.37	4,499.14	4,486.95	17.41	16.15	169.02	334.06	-90.46	824.09	792.07	32.02	25.734			
4,700.00	4,663.30	4,596.28	4,583.58	17.82	16.51	168.94	343.32	-94.20	847.80	815.05	32.74	25.892			
4,800.00	4,762.22	4,706.57	4,680.21	18.23	16.93	168.87	352.57	-97.94	871.50	837.99	33.51	26.007			
4,900.00	4,861.15	4,809.43	4,776.84	18.64	17.31	168.81	361.83	-101.67	895.21	860.96	34.25	26.137			
5,000.00	4,960.08	4,887.72	4,873.47	19.05	17.61	168.74	371.08	-105.41	918.92	884.02	34.90	26.329			
5,100.00	5,059.00	4,984.86	4,970.10	19.47	17.98	168.68	380.34	-109.15	942.63	907.01	35.62	26.462			

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #115H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft) +E/-W (usft)		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,200.00	5,157.93	5,082.00	5,066.73	19.88	18.34	168.63	389.59	-112.88	966.34	930.00	36.34	26.590	
5,300.00	5,256.86	5,179.15	5,163.36	20.29	18.71	168.57	398.85	-116.62	990.05	952.99	37.06	26.713	
5,400.00	5,355.78	5,276.29	5,259.99	20.70	19.08	168.52	408.10	-120.36	1,013.76	975.98	37.78	26.831	
5,500.00	5,454.71	5,373.44	5,356.62	21.11	19.44	168.47	417.36	-124.09	1,037.48	998.97	38.50	26.944	
5,600.00	5,553.64	5,470.58	5,453.25	21.52	19.81	168.42	426.61	-127.83	1,061.19	1,021.96	39.23	27.053	
5,700.00	5,652.56	5,567.72	5,549.88	21.93	20.18	168.38	435.87	-131.57	1,084.91	1,044.96	39.95	27.158	
5,800.00	5,751.49	5,664.87	5,646.51	22.35	20.55	168.34	445.12	-135.30	1,108.62	1,067.95	40.67	27.260	
5,900.00	5,850.42	5,762.01	5,743.14	22.76	20.91	168.30	454.38	-139.04	1,132.34	1,090.95	41.39	27.357	
6,000.00	5,949.34	5,859.16	5,839.77	23.17	21.28	168.26	463.63	-142.78	1,156.05	1,113.94	42.11	27.451	
6,100.00	6,048.27	5,975.51	5,955.56	23.58	21.72	168.22	474.31	-147.09	1,179.52	1,136.54	42.97	27.448	
6,200.00	6,147.20	6,135.37	6,115.13	23.99	22.30	168.29	482.83	-150.53	1,199.11	1,155.04	44.07	27.208	
6,300.00	6,246.12	6,267.38	6,247.12	24.41	22.77	168.45	484.00	-151.00	1,214.15	1,169.19	44.95	27.009	
6,400.00	6,345.05	6,359.93	6,339.67	24.82	23.08	168.60	484.06	-150.52	1,228.55	1,182.91	45.64	26.919	
6,500.00	6,443.98	6,436.24	6,415.48	25.23	23.33	169.09	485.13	-142.38	1,244.29	1,198.07	46.22	26.919	
6,600.00	6,542.90	6,508.25	6,485.43	25.64	23.55	169.95	487.34	-125.61	1,262.08	1,215.32	46.76	26.992	
6,700.00	6,641.83	6,574.30	6,547.26	26.05	23.74	171.07	490.36	-102.69	1,282.40	1,235.18	47.22	27.157	
6,800.00	6,740.76	6,633.56	6,600.15	26.47	23.90	172.31	493.84	-76.24	1,305.81	1,258.22	47.60	27.435	
6,900.00	6,839.69	6,685.97	6,644.41	26.88	24.02	173.60	497.50	-48.45	1,332.77	1,284.90	47.87	27.842	
7,000.00	6,938.93	6,732.32	6,681.28	27.28	24.12	174.90	501.16	-20.62	1,361.56	1,313.53	48.02	28.352	
7,100.00	7,038.53	6,773.37	6,711.94	27.66	24.20	176.11	504.72	6.42	1,391.34	1,343.29	48.05	28.955	
7,200.00	7,138.38	6,809.73	6,737.41	28.01	24.26	177.22	508.11	32.14	1,422.37	1,374.42	47.95	29.665	
7,300.00	7,238.36	6,850.00	6,763.64	28.33	24.34	178.48	512.10	62.43	1,454.85	1,407.06	47.79	30.442	
7,400.00	7,337.90	6,873.39	6,777.86	28.62	24.44	-68.60	514.52	80.83	1,487.73	1,440.37	47.37	31.408	
7,500.00	7,434.54	6,900.00	6,793.11	28.88	24.56	-64.91	517.37	102.46	1,519.14	1,472.25	46.90	32.393	
7,600.00	7,525.32	6,950.00	6,818.95	29.10	24.82	-61.28	522.95	144.88	1,547.67	1,501.01	46.66	33.171	
7,700.00	7,607.50	6,977.32	6,831.46	29.27	24.97	-58.68	526.12	168.95	1,572.12	1,525.94	46.18	34.042	
7,800.00	7,678.57	7,013.97	6,846.40	29.39	25.19	-56.57	530.49	202.13	1,591.75	1,545.86	45.89	34.688	
7,900.00	7,736.38	7,050.00	6,858.98	29.46	25.42	-55.11	534.90	235.59	1,605.82	1,560.08	45.73	35.112	
8,000.00	7,779.17	7,100.00	6,872.86	29.49	25.78	-54.23	541.16	283.20	1,613.95	1,568.00	45.95	35.123	
8,100.00	7,805.64	7,126.43	6,878.50	29.51	25.98	-54.07	544.53	308.80	1,615.57	1,569.37	46.20	34.967	
8,200.00	7,814.99	7,164.12	6,884.46	29.76	26.29	-54.51	549.39	345.69	1,610.93	1,564.05	46.88	34.365	
8,300.00	7,815.00	7,200.00	6,887.85	30.54	26.59	-54.69	554.05	381.10	1,606.01	1,558.23	47.78	33.614	
8,324.28	7,815.00	7,211.22	6,888.45	30.78	26.69	-54.72	555.51	392.21	1,605.82	1,557.77	48.06	33.415	
8,400.00	7,815.00	7,254.69	6,889.00	31.52	27.08	-54.75	561.13	435.31	1,607.74	1,558.74	49.00	32.813	
8,500.00	7,815.00	7,439.49	6,889.00	32.63	29.07	-54.86	578.14	619.29	1,610.75	1,559.14	51.61	31.208	
8,600.00	7,815.00	7,619.12	6,889.00	33.87	31.39	-54.88	583.29	798.81	1,611.35	1,556.79	54.56	29.533	
8,682.05	7,815.00	7,701.17	6,889.00	34.98	32.57	-54.88	583.25	880.86	1,611.22	1,554.75	56.47	28.533	
8,700.00	7,815.00	7,719.12	6,889.00	35.22	32.85	-54.88	583.25	998.81	1,611.36	1,554.46	56.90	28.319	
8,800.00	7,815.00	7,819.12	6,889.00	36.67	34.39	-54.88	583.20	998.81	1,611.40	1,552.00	59.40	27.127	
8,900.00	7,815.00	7,919.12	6,889.00	38.20	36.01	-54.88	583.15	1,098.81	1,611.43	1,549.39	62.05	25.972	
9,000.00	7,815.00	8,019.12	6,889.00	39.81	37.70	-54.88	583.11	1,198.81	1,611.47	1,546.65	64.81	24.863	
9,100.00	7,815.00	8,119.12	6,889.00	41.48	39.46	-54.88	583.06	1,298.81	1,611.50	1,543.81	67.69	23.805	
9,200.00	7,815.00	8,219.12	6,889.00	43.21	41.27	-54.88	583.02	1,398.81	1,611.54	1,540.87	70.67	22.803	
9,300.00	7,815.00	8,319.12	6,889.00	45.00	43.12	-54.89	582.97	1,498.81	1,611.57	1,537.84	73.73	21.857	
9,400.00	7,815.00	8,419.12	6,889.00	46.82	45.02	-54.89	582.93	1,598.81	1,611.61	1,534.74	76.87	20.965	
9,500.00	7,815.00	8,519.12	6,889.00	48.69	46.96	-54.89	582.88	1,698.81	1,611.64	1,531.57	80.07	20.127	
9,600.00	7,815.00	8,619.12	6,889.00	50.60	48.92	-54.89	582.83	1,798.81	1,611.68	1,528.34	83.33	19.340	
9,700.00	7,815.00	8,719.12	6,889.00	52.53	50.92	-54.89	582.79	1,898.81	1,611.71	1,525.07	86.65	18.601	
9,800.00	7,815.00	8,819.12	6,889.00	54.50	52.94	-54.89	582.74	1,998.81	1,611.75	1,521.74	90.01	17.907	
9,900.00	7,815.00	8,919.12	6,889.00	56.49	54.99	-54.89	582.70	2,098.81	1,611.78	1,518.38	93.41	17.255	
10,000.00	7,815.00	9,019.12	6,889.00	58.51	57.05	-54.89	582.65	2,198.81	1,611.82	1,514.97	96.85	16.643	
10,100.00	7,815.00	9,119.12	6,889.00	60.54	59.13	-54.89	582.61	2,298.81	1,611.85	1,511.54	100.32	16.068	

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #115H - OH - Prelim A														Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+HDGM														Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
10,200.00	7,815.00	9,219.12	6,889.00	62.60	61.23	-54.89	582.56	2,398.81	1,611.89	1,508.07	103.82	15.526			
10,300.00	7,815.00	9,319.12	6,889.00	64.67	63.34	-54.89	582.51	2,498.81	1,611.92	1,504.58	107.35	15.016			
10,400.00	7,815.00	9,419.12	6,889.00	66.76	65.47	-54.90	582.47	2,598.81	1,611.96	1,501.06	110.90	14.536			
10,500.00	7,815.00	9,519.12	6,889.00	68.86	67.61	-54.90	582.42	2,698.81	1,611.99	1,497.52	114.47	14.082			
10,600.00	7,815.00	9,619.12	6,889.00	70.97	69.76	-54.90	582.38	2,798.81	1,612.03	1,493.96	118.07	13.654			
10,700.00	7,815.00	9,719.12	6,889.00	73.10	71.92	-54.90	582.33	2,898.81	1,612.06	1,490.39	121.68	13.249			
10,800.00	7,815.00	9,819.12	6,889.00	75.24	74.09	-54.90	582.29	2,998.81	1,612.10	1,486.79	125.31	12.865			
10,900.00	7,815.00	9,919.12	6,889.00	77.38	76.26	-54.90	582.24	3,098.81	1,612.13	1,483.18	128.95	12.502			
11,000.00	7,815.00	10,019.12	6,889.00	79.54	78.45	-54.90	582.19	3,198.81	1,612.17	1,479.56	132.61	12.157			
11,100.00	7,815.00	10,119.12	6,889.00	81.70	80.64	-54.90	582.15	3,298.81	1,612.20	1,475.92	136.28	11.830			
11,200.00	7,815.00	10,219.12	6,889.00	83.87	82.83	-54.90	582.10	3,398.81	1,612.24	1,472.27	139.97	11.519			
11,300.00	7,815.00	10,319.12	6,889.00	86.05	85.04	-54.90	582.06	3,498.81	1,612.28	1,468.61	143.66	11.223			
11,400.00	7,815.00	10,419.12	6,889.00	88.24	87.25	-54.90	582.01	3,598.81	1,612.31	1,464.94	147.37	10.941			
11,500.00	7,815.00	10,519.12	6,889.00	90.43	89.46	-54.90	581.97	3,698.81	1,612.35	1,461.27	151.08	10.672			
11,600.00	7,815.00	10,619.12	6,889.00	92.63	91.68	-54.91	581.92	3,798.81	1,612.38	1,457.58	154.80	10.416			
11,700.00	7,815.00	10,719.12	6,889.00	94.83	93.90	-54.91	581.87	3,898.81	1,612.42	1,453.88	158.53	10.171			
11,800.00	7,815.00	10,819.12	6,889.00	97.04	96.13	-54.91	581.83	3,998.81	1,612.45	1,450.18	162.27	9.937			
11,900.00	7,815.00	10,919.12	6,889.00	99.25	98.36	-54.91	581.78	4,098.81	1,612.49	1,446.47	166.02	9.713			
12,000.00	7,815.00	11,019.12	6,889.00	101.47	100.59	-54.91	581.74	4,198.81	1,612.52	1,442.75	169.77	9.498			
12,100.00	7,815.00	11,119.12	6,889.00	103.69	102.83	-54.91	581.69	4,298.81	1,612.56	1,439.03	173.53	9.293			
12,200.00	7,815.00	11,219.12	6,889.00	105.91	105.07	-54.91	581.65	4,398.81	1,612.59	1,435.30	177.29	9.096			
12,300.00	7,815.00	11,319.12	6,889.00	108.14	107.31	-54.91	581.60	4,498.81	1,612.63	1,431.56	181.06	8.906			
12,400.00	7,815.00	11,419.12	6,889.00	110.37	109.56	-54.91	581.56	4,598.81	1,612.66	1,427.82	184.84	8.725			
12,500.00	7,815.00	11,519.12	6,889.00	112.60	111.81	-54.91	581.51	4,698.81	1,612.70	1,424.08	188.62	8.550			
12,600.00	7,815.00	11,619.12	6,889.00	114.84	114.06	-54.91	581.46	4,798.81	1,612.73	1,420.33	192.40	8.382			
12,700.00	7,815.00	11,719.12	6,889.00	117.08	116.31	-54.92	581.42	4,898.81	1,612.77	1,416.58	196.19	8.220			
12,800.00	7,815.00	11,819.12	6,889.00	119.32	118.57	-54.92	581.37	4,998.81	1,612.80	1,412.82	199.98	8.065			
12,900.00	7,815.00	11,919.12	6,889.00	121.57	120.82	-54.92	581.33	5,098.81	1,612.84	1,409.06	203.78	7.915			
13,000.00	7,815.00	12,019.12	6,889.00	123.81	123.08	-54.92	581.28	5,198.81	1,612.87	1,405.29	207.58	7.770			
13,100.00	7,815.00	12,119.12	6,889.00	126.06	125.34	-54.92	581.24	5,298.81	1,612.91	1,401.52	211.38	7.630			
13,200.00	7,815.00	12,219.12	6,889.00	128.32	127.61	-54.92	581.19	5,398.81	1,612.94	1,397.75	215.19	7.495			
13,300.00	7,815.00	12,319.12	6,889.00	130.57	129.87	-54.92	581.14	5,498.81	1,612.98	1,393.98	219.00	7.365			
13,400.00	7,815.00	12,419.12	6,889.00	132.83	132.14	-54.92	581.10	5,598.81	1,613.01	1,390.20	222.81	7.239			
13,500.00	7,815.00	12,519.12	6,889.00	135.08	134.40	-54.92	581.05	5,698.81	1,613.05	1,386.42	226.63	7.118			
13,600.00	7,815.00	12,619.12	6,889.00	137.34	136.67	-54.92	581.01	5,798.81	1,613.08	1,382.64	230.44	7.000			
13,700.00	7,815.00	12,719.12	6,889.00	139.60	138.94	-54.92	580.96	5,898.81	1,613.12	1,378.85	234.27	6.886			
13,800.00	7,815.00	12,819.12	6,889.00	141.86	141.21	-54.92	580.92	5,998.81	1,613.15	1,375.06	238.09	6.775			
13,900.00	7,815.00	12,919.12	6,889.00	144.13	143.49	-54.93	580.87	6,098.81	1,613.19	1,371.27	241.91	6.668			
14,000.00	7,815.00	13,019.12	6,889.00	146.39	145.76	-54.93	580.82	6,198.81	1,613.22	1,367.48	245.74	6.565			
14,100.00	7,815.00	13,119.12	6,889.00	148.66	148.04	-54.93	580.78	6,298.81	1,613.26	1,363.69	249.57	6.464			
14,200.00	7,815.00	13,219.12	6,889.00	150.93	150.31	-54.93	580.73	6,398.81	1,613.29	1,359.89	253.40	6.367			
14,300.00	7,815.00	13,319.12	6,889.00	153.20	152.59	-54.93	580.69	6,498.81	1,613.33	1,356.09	257.24	6.272			
14,400.00	7,815.00	13,419.12	6,889.00	155.47	154.87	-54.93	580.64	6,598.81	1,613.36	1,352.29	261.07	6.180			
14,500.00	7,815.00	13,519.12	6,889.00	157.74	157.14	-54.93	580.60	6,698.81	1,613.40	1,348.49	264.91	6.090			
14,600.00	7,815.00	13,619.12	6,889.00	160.01	159.42	-54.93	580.55	6,798.81	1,613.43	1,344.69	268.75	6.004			
14,700.00	7,815.00	13,719.12	6,889.00	162.28	161.70	-54.93	580.50	6,898.81	1,613.47	1,340.88	272.59	5.919			
14,800.00	7,815.00	13,819.12	6,889.00	164.56	163.99	-54.93	580.46	6,998.81	1,613.50	1,337.07	276.43	5.837			
14,900.00	7,815.00	13,919.12	6,889.00	166.83	166.27	-54.93	580.41	7,098.81	1,613.54	1,333.26	280.27	5.757			
15,000.00	7,815.00	14,019.12	6,889.00	169.11	168.55	-54.94	580.37	7,198.81	1,613.57	1,329.46	284.12	5.679			
15,100.00	7,815.00	14,119.12	6,889.00	171.39	170.83	-54.94	580.32	7,298.81	1,613.61	1,325.64	287.96	5.604			
15,200.00	7,815.00	14,219.12	6,889.00	173.66	173.12	-54.94	580.28	7,398.81	1,613.64	1,321.83	291.81	5.530			
15,300.00	7,815.00	14,319.12	6,889.00	175.94	175.40	-54.94	580.23	7,498.81	1,613.68	1,318.02	295.66	5.458			

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #115H - OH - Prelim A														Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)							
15,400.00	7,815.00	14,419.12	6,889.00	178.22	177.69	-54.94	580.18	7,598.81	1,613.71	1,314.20	299.51	5.388			
15,500.00	7,815.00	14,519.12	6,889.00	180.50	179.97	-54.94	580.14	7,698.81	1,613.75	1,310.39	303.36	5.320			
15,600.00	7,815.00	14,619.12	6,889.00	182.78	182.26	-54.94	580.09	7,798.81	1,613.78	1,306.57	307.21	5.253			
15,700.00	7,815.00	14,719.12	6,889.00	185.06	184.55	-54.94	580.05	7,898.81	1,613.82	1,302.75	311.07	5.188			
15,800.00	7,815.00	14,819.12	6,889.00	187.35	186.83	-54.94	580.00	7,998.81	1,613.85	1,298.93	314.92	5.125			
15,900.00	7,815.00	14,919.12	6,889.00	189.63	189.12	-54.94	579.96	8,098.81	1,613.89	1,295.11	318.78	5.063			
16,000.00	7,815.00	15,019.12	6,889.00	191.91	191.41	-54.94	579.91	8,198.81	1,613.92	1,291.29	322.63	5.002			
16,100.00	7,815.00	15,119.12	6,889.00	194.20	193.70	-54.94	579.86	8,298.81	1,613.96	1,287.47	326.49	4.943			
16,200.00	7,815.00	15,219.12	6,889.00	196.48	195.99	-54.95	579.82	8,398.81	1,613.99	1,283.64	330.35	4.886			
16,300.00	7,815.00	15,319.12	6,889.00	198.77	198.28	-54.95	579.77	8,498.81	1,614.03	1,279.82	334.21	4.829			
16,400.00	7,815.00	15,419.12	6,889.00	201.05	200.57	-54.95	579.73	8,598.81	1,614.06	1,275.99	338.07	4.774			
16,500.00	7,815.00	15,519.12	6,889.00	203.34	202.86	-54.95	579.68	8,698.81	1,614.10	1,272.17	341.93	4.721			
16,600.00	7,815.00	15,619.12	6,889.00	205.63	205.15	-54.95	579.64	8,798.81	1,614.13	1,268.34	345.79	4.668			
16,700.00	7,815.00	15,719.12	6,889.00	207.91	207.44	-54.95	579.59	8,898.81	1,614.17	1,264.51	349.66	4.616			
16,800.00	7,815.00	15,819.12	6,889.00	210.20	209.73	-54.95	579.54	8,998.81	1,614.20	1,260.69	353.52	4.566			
16,900.00	7,815.00	15,919.12	6,889.00	212.49	212.03	-54.95	579.50	9,098.81	1,614.24	1,256.86	357.38	4.517			
17,000.00	7,815.00	16,019.12	6,889.00	214.78	214.32	-54.95	579.45	9,198.81	1,614.27	1,253.03	361.25	4.469			
17,100.00	7,815.00	16,119.12	6,889.00	217.07	216.61	-54.95	579.41	9,298.81	1,614.31	1,249.20	365.11	4.421			
17,200.00	7,815.00	16,219.12	6,889.00	219.36	218.90	-54.95	579.36	9,398.81	1,614.34	1,245.36	368.98	4.375			
17,300.00	7,815.00	16,319.12	6,889.00	221.65	221.20	-54.96	579.32	9,498.81	1,614.38	1,241.53	372.85	4.330			
17,400.00	7,815.00	16,419.12	6,889.00	223.94	223.49	-54.96	579.27	9,598.81	1,614.41	1,237.70	376.71	4.286			
17,500.00	7,815.00	16,519.12	6,889.00	226.23	225.79	-54.96	579.22	9,698.81	1,614.45	1,233.87	380.58	4.242			
17,600.00	7,815.00	16,619.12	6,889.00	228.52	228.08	-54.96	579.18	9,798.81	1,614.48	1,230.03	384.45	4.199			
17,700.00	7,815.00	16,719.12	6,889.00	230.81	230.38	-54.96	579.13	9,898.81	1,614.52	1,226.20	388.32	4.158			
17,800.00	7,815.00	16,819.12	6,889.00	233.10	232.67	-54.96	579.09	9,998.81	1,614.55	1,222.36	392.19	4.117			
17,900.00	7,815.00	16,919.12	6,889.00	235.39	234.97	-54.96	579.04	10,098.81	1,614.59	1,218.53	396.06	4.077			
17,900.01	7,815.00	16,919.13	6,889.00	235.39	234.97	-54.96	579.04	10,098.82	1,614.59	1,218.53	396.06	4.077			
17,995.79	7,815.00	17,011.31	6,889.00	237.59	237.08	-54.96	579.00	10,191.00	1,614.63	1,214.92	399.70	4.040 SF			

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #116H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
0.00	0.00	0.00	0.00	0.00	0.00	15.26	110.00	30.00	114.02				
100.00	100.00	100.00	100.00	0.13	0.13	15.26	110.00	30.00	114.02	113.76	0.26	444.847	
200.00	200.00	200.00	200.00	0.49	0.49	15.26	110.00	30.00	114.02	113.04	0.97	117.151	
300.00	300.00	300.00	300.00	0.85	0.85	15.26	110.00	30.00	114.02	112.33	1.69	67.458	
400.00	400.00	400.00	400.00	1.20	1.20	15.26	110.00	30.00	114.02	111.61	2.41	47.366	
500.00	500.00	500.00	500.00	1.56	1.56	15.26	110.00	30.00	114.02	110.89	3.12	36.496	
600.00	600.00	600.00	600.00	1.92	1.92	15.26	110.00	30.00	114.02	110.18	3.84	29.684	
700.00	700.00	700.00	700.00	2.28	2.28	15.26	110.00	30.00	114.02	109.46	4.56	25.015	
800.00	800.00	800.00	800.00	2.64	2.64	15.26	110.00	30.00	114.02	108.74	5.27	21.615	
900.00	900.00	900.00	900.00	3.00	3.00	15.26	110.00	30.00	114.02	108.03	5.99	19.029	
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	15.26	110.00	30.00	114.02	107.31	6.71	16.995	
1,100.00	1,099.98	1,100.02	1,099.98	3.70	3.71	-175.80	110.00	30.00	115.76	108.35	7.41	15.625	
1,200.00	1,199.84	1,200.16	1,199.84	4.03	4.07	-175.98	110.00	30.00	120.98	112.88	8.10	14.941	
1,300.00	1,299.45	1,300.55	1,299.45	4.36	4.43	-176.24	110.00	30.00	129.67	120.88	8.79	14.749	
1,400.00	1,398.70	1,401.30	1,398.70	4.70	4.79	-176.54	110.00	30.00	141.84	132.34	9.49	14.943	
1,500.00	1,497.64	1,497.64	1,497.64	5.06	5.14	-176.86	110.00	30.00	156.35	146.18	10.18	15.361	
1,600.00	1,596.57	1,602.58	1,602.56	5.42	5.50	-177.05	108.17	29.83	169.24	158.36	10.87	15.564	
1,700.00	1,695.49	1,708.51	1,708.33	5.79	5.84	-177.04	102.45	29.28	178.50	166.95	11.55	15.453	
1,800.00	1,794.42	1,815.03	1,814.39	6.16	6.19	-176.84	92.77	28.35	184.10	171.88	12.23	15.056	
1,900.00	1,893.35	1,921.83	1,920.30	6.55	6.55	-176.47	79.14	27.05	186.04	173.14	12.90	14.421	
2,000.00	1,992.27	2,028.61	2,025.62	6.93	6.92	-175.90	61.59	25.37	184.30	170.73	13.56	13.589	
2,100.00	2,091.20	2,135.10	2,129.91	7.32	7.31	-175.10	40.21	23.33	178.91	164.70	14.22	12.584	
2,200.00	2,190.13	2,237.39	2,229.41	7.71	7.69	-174.08	16.62	21.07	170.55	155.65	14.90	11.447	
2,300.00	2,289.05	2,336.96	2,326.20	8.10	8.08	-172.96	-6.66	18.85	161.93	146.32	15.61	10.371	
2,400.00	2,387.98	2,436.54	2,422.99	8.50	8.48	-171.71	-29.95	16.62	153.38	137.05	16.33	9.390	
2,500.00	2,486.91	2,536.11	2,519.78	8.89	8.89	-170.32	-53.23	14.39	144.91	127.85	17.06	8.492	
2,600.00	2,585.83	2,635.69	2,616.57	9.29	9.30	-168.75	-76.51	12.17	136.54	118.74	17.80	7.670	
2,700.00	2,684.76	2,735.26	2,713.36	9.69	9.72	-166.98	-99.80	9.94	128.28	109.73	18.55	6.916	
2,800.00	2,783.69	2,834.84	2,810.15	10.09	10.15	-164.97	-123.08	7.72	120.16	100.85	19.31	6.224	
2,900.00	2,882.61	2,934.41	2,906.94	10.49	10.58	-162.68	-146.36	5.49	112.21	92.13	20.08	5.589	
3,000.00	2,981.54	3,033.99	3,003.73	10.89	11.01	-160.04	-169.65	3.26	104.46	83.60	20.86	5.007	
3,100.00	3,080.47	3,133.56	3,100.51	11.30	11.45	-156.98	-192.93	1.04	96.97	75.30	21.67	4.474	
3,200.00	3,179.39	3,233.14	3,197.30	11.70	11.90	-153.43	-216.21	-1.19	89.81	67.29	22.51	3.989	
3,300.00	3,278.32	3,332.71	3,294.09	12.11	12.34	-149.28	-239.50	-3.41	83.04	59.66	23.38	3.551	
3,400.00	3,377.25	3,432.29	3,390.88	12.51	12.79	-144.43	-262.78	-5.64	76.79	52.49	24.30	3.160	
3,500.00	3,476.17	3,531.86	3,487.67	12.92	13.24	-138.77	-286.06	-7.87	71.17	45.91	25.27	2.817	
3,600.00	3,575.10	3,631.44	3,584.46	13.33	13.70	-132.23	-309.35	-10.09	66.37	40.09	26.29	2.525	
3,700.00	3,674.03	3,731.01	3,681.25	13.73	14.15	-124.79	-332.63	-12.32	62.57	35.22	27.35	2.288	
3,800.00	3,772.95	3,830.59	3,778.04	14.14	14.61	-116.55	-355.91	-14.54	59.94	31.52	28.43	2.109	
3,900.00	3,871.88	3,930.16	3,874.83	14.55	15.07	-107.77	-379.20	-16.77	58.67	29.19	29.48	1.990	
3,939.37	3,910.83	3,969.36	3,912.93	14.71	15.25	-104.24	-388.36	-17.65	58.55	28.68	29.88	1.960 CC	
4,000.00	3,970.81	4,029.74	3,971.62	14.96	15.53	-98.82	-402.48	-19.00	58.82	28.36	30.46	1.931 ES	
4,100.00	4,069.73	4,129.31	4,068.41	15.37	15.99	-90.12	-425.76	-21.22	60.39	29.05	31.34	1.927	
4,200.00	4,168.66	4,228.89	4,165.19	15.77	16.46	-82.04	-449.04	-23.45	63.28	31.16	32.12	1.970	
4,300.00	4,267.59	4,328.46	4,261.98	16.18	16.92	-74.78	-472.33	-25.67	67.32	34.49	32.82	2.051	
4,400.00	4,366.52	4,428.04	4,358.77	16.59	17.39	-68.44	-495.61	-27.90	72.31	38.83	33.47	2.160	
4,500.00	4,465.44	4,527.61	4,455.56	17.00	17.86	-62.96	-518.89	-30.13	78.07	43.97	34.10	2.290	
4,600.00	4,564.37	4,627.19	4,552.35	17.41	18.32	-58.27	-542.18	-32.35	84.44	49.73	34.71	2.433	
4,700.00	4,663.30	4,726.76	4,649.14	17.82	18.79	-54.25	-565.46	-34.58	91.30	55.96	35.33	2.584	
4,800.00	4,762.22	4,826.82	4,746.41	18.23	19.26	-50.83	-588.79	-36.81	98.49	62.51	35.98	2.738	
4,900.00	4,861.15	4,929.19	4,846.48	18.64	19.73	-48.73	-610.26	-38.86	104.23	67.50	36.73	2.838	
5,000.00	4,960.08	5,031.91	4,947.60	19.05	20.17	-48.14	-628.22	-40.58	107.42	69.90	37.53	2.863	

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #116H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	5,059.00	5,134.73	5,049.40	19.47	20.59	-48.91	-642.56	-41.95	107.99	69.63	38.37	2.815	
5,200.00	5,157.93	5,237.38	5,151.48	19.88	20.98	-51.04	-653.25	-42.97	106.04	66.78	39.26	2.701	
5,300.00	5,256.86	5,339.60	5,253.45	20.29	21.35	-54.77	-660.27	-43.64	101.86	61.65	40.22	2.533	
5,400.00	5,355.78	5,441.12	5,354.91	20.70	21.68	-60.50	-663.65	-43.97	96.05	54.78	41.26	2.328	
5,500.00	5,454.71	5,540.92	5,454.71	21.11	21.98	-68.45	-664.00	-44.00	89.87	47.47	42.40	2.119	
5,600.00	5,553.64	5,639.85	5,553.64	21.52	22.26	-77.49	-664.00	-44.00	85.53	42.04	43.50	1.966	
5,700.00	5,652.56	5,738.78	5,652.56	21.93	22.55	-87.22	-664.00	-44.00	83.56	39.13	44.44	1.880	
5,728.07	5,680.33	5,766.54	5,680.33	22.05	22.63	-90.00	-664.00	-44.00	83.46	38.80	44.66	1.869	
5,800.00	5,751.49	5,837.70	5,751.49	22.35	22.84	-97.10	-664.00	-44.00	84.12	38.96	45.16	1.863 SF	
5,900.00	5,850.42	5,936.63	5,850.42	22.76	23.13	-106.58	-664.00	-44.00	87.16	41.49	45.67	1.909	
6,000.00	5,949.34	6,035.56	5,949.34	23.17	23.43	-115.22	-664.00	-44.00	92.44	46.41	46.02	2.008	
6,100.00	6,048.27	6,134.48	6,048.27	23.58	23.72	-122.79	-664.00	-44.00	99.60	53.28	46.32	2.150	
6,200.00	6,147.20	6,233.41	6,147.20	23.99	24.02	-129.26	-664.00	-44.00	108.26	61.66	46.61	2.323	
6,300.00	6,246.12	6,332.34	6,246.12	24.41	24.32	-134.73	-664.00	-44.00	118.11	71.18	46.93	2.517	
6,400.00	6,345.05	6,427.23	6,341.01	24.82	24.60	-138.98	-664.05	-43.46	129.31	82.13	47.19	2.740	
6,500.00	6,443.98	6,510.92	6,424.05	25.23	24.86	-139.48	-665.02	-33.78	148.70	101.60	47.10	3.157	
6,600.00	6,542.90	6,589.88	6,500.33	25.64	25.10	-137.14	-667.02	-13.70	178.08	131.33	46.75	3.809	
6,700.00	6,641.83	6,661.85	6,566.84	26.05	25.31	-133.71	-669.74	13.52	217.31	171.33	45.98	4.726	
6,800.00	6,740.76	6,725.76	6,622.63	26.47	25.48	-130.29	-672.83	44.49	265.92	221.12	44.80	5.936	
6,900.00	6,839.69	6,781.58	6,668.26	26.88	25.63	-127.49	-676.02	76.45	322.89	279.55	43.34	7.449	
7,000.00	6,938.93	6,830.11	6,705.22	27.28	25.74	-126.13	-679.14	107.71	386.01	344.27	41.75	9.246	
7,100.00	7,038.53	6,872.22	6,735.05	27.66	25.84	-125.23	-682.09	137.27	453.87	413.73	40.14	11.307	
7,200.00	7,138.38	6,900.00	6,753.50	28.01	25.91	-125.33	-684.16	157.94	525.84	487.78	38.07	13.814	
7,300.00	7,238.36	6,950.00	6,784.08	28.33	26.02	-124.27	-688.08	197.28	601.00	563.33	37.67	15.954	
7,400.00	7,337.90	6,971.06	6,795.91	28.62	26.07	-11.84	-689.81	214.61	674.20	638.48	35.71	18.878	
7,500.00	7,434.54	7,000.00	6,811.11	28.88	26.14	-9.24	-692.26	239.12	739.80	705.79	34.01	21.752	
7,600.00	7,525.32	7,037.71	6,829.00	29.10	26.24	-7.24	-695.56	272.14	796.80	764.22	32.58	24.459	
7,700.00	7,607.50	7,072.85	6,843.68	29.27	26.35	-5.87	-698.73	303.91	844.63	813.67	30.97	27.277	
7,800.00	7,678.57	7,100.00	6,853.67	29.39	26.44	-4.97	-701.23	329.03	882.89	853.78	29.11	30.332	
7,900.00	7,736.38	7,150.00	6,868.89	29.46	26.65	-3.91	-705.96	376.40	910.90	882.76	28.14	32.366	
8,000.00	7,779.17	7,181.98	6,876.42	29.49	26.82	-3.30	-709.05	407.32	928.63	901.81	26.82	34.629	
8,100.00	7,805.64	7,218.91	6,882.95	29.51	27.04	-2.72	-712.66	443.49	935.88	909.90	25.97	36.031	
8,200.00	7,814.99	7,250.00	6,886.62	29.76	27.25	-2.29	-715.72	474.20	932.60	907.13	25.47	36.610	
8,300.00	7,815.00	7,302.25	6,889.00	30.54	27.67	-1.69	-720.91	526.12	926.90	901.20	25.71	36.057	
8,400.00	7,815.00	7,375.91	6,889.00	31.52	28.35	-0.92	-727.28	599.50	926.12	899.76	26.36	35.135	
8,412.99	7,815.00	7,388.71	6,889.00	31.66	28.47	-0.81	-728.19	612.27	926.09	899.62	26.47	34.985	
8,500.00	7,815.00	7,474.96	6,889.00	32.63	29.40	-0.24	-732.87	698.39	926.01	898.78	27.22	34.014	
8,577.55	7,815.00	7,552.36	6,889.00	33.59	30.32	0.00	-734.86	775.76	926.00	898.11	27.89	33.204	
8,600.00	7,815.00	7,574.81	6,889.00	33.87	30.60	0.02	-735.04	798.21	926.00	897.93	28.07	32.988	
8,700.00	7,815.00	7,674.81	6,889.00	35.22	31.93	0.02	-735.15	898.21	926.00	897.08	28.92	32.015	
8,800.00	7,815.00	7,774.81	6,889.00	36.67	33.37	0.02	-735.23	998.21	926.00	896.17	29.83	31.040	
8,900.00	7,815.00	7,874.81	6,889.00	38.20	34.90	0.02	-735.31	1,098.21	926.00	895.21	30.79	30.070	
9,000.00	7,815.00	7,974.81	6,889.00	39.81	36.52	0.02	-735.40	1,198.21	926.00	894.19	31.81	29.115	
9,100.00	7,815.00	8,074.81	6,889.00	41.48	38.21	0.02	-735.48	1,298.21	926.00	893.14	32.86	28.181	
9,200.00	7,815.00	8,174.81	6,889.00	43.21	39.97	0.02	-735.57	1,398.21	926.00	892.05	33.95	27.272	
9,300.00	7,815.00	8,274.81	6,889.00	45.00	41.78	0.02	-735.65	1,498.21	926.00	890.92	35.08	26.394	
9,400.00	7,815.00	8,374.81	6,889.00	46.82	43.64	0.02	-735.74	1,598.21	926.00	889.75	36.25	25.547	
9,500.00	7,815.00	8,474.81	6,889.00	48.69	45.54	0.02	-735.82	1,698.21	926.00	888.56	37.44	24.733	
9,600.00	7,815.00	8,574.81	6,889.00	50.60	47.47	0.02	-735.91	1,798.21	926.00	887.34	38.66	23.953	
9,700.00	7,815.00	8,674.81	6,889.00	52.53	49.44	0.02	-735.99	1,898.21	926.00	886.10	39.90	23.206	
9,800.00	7,815.00	8,774.81	6,889.00	54.50	51.44	0.02	-736.08	1,998.21	926.00	884.83	41.17	22.493	
9,900.00	7,815.00	8,874.81	6,889.00	56.49	53.46	0.02	-736.16	2,098.21	926.00	883.54	42.46	21.811	

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #116H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)					
10,000.00	7,815.00	8,974.81	6,889.00	58.51	55.50	0.02	-736.24	2,198.21	926.00	882.24	43.76	21.161	
10,100.00	7,815.00	9,074.81	6,889.00	60.54	57.57	0.02	-736.33	2,298.21	926.00	880.92	45.08	20.541	
10,200.00	7,815.00	9,174.81	6,889.00	62.60	59.65	0.02	-736.41	2,398.21	926.00	879.58	46.42	19.949	
10,300.00	7,815.00	9,274.81	6,889.00	64.67	61.75	0.02	-736.50	2,498.21	926.00	878.23	47.77	19.385	
10,400.00	7,815.00	9,374.81	6,889.00	66.76	63.86	0.02	-736.58	2,598.21	926.00	876.87	49.13	18.847	
10,500.00	7,815.00	9,474.81	6,889.00	68.86	65.98	0.02	-736.67	2,698.21	926.00	875.49	50.51	18.333	
10,600.00	7,815.00	9,574.81	6,889.00	70.97	68.12	0.02	-736.75	2,798.21	926.00	874.10	51.90	17.843	
10,700.00	7,815.00	9,674.81	6,889.00	73.10	70.27	0.02	-736.84	2,898.21	926.00	872.71	53.29	17.376	
10,800.00	7,815.00	9,774.81	6,889.00	75.24	72.43	0.02	-736.92	2,998.21	926.00	871.30	54.70	16.929	
10,900.00	7,815.00	9,874.81	6,889.00	77.38	74.60	0.02	-737.00	3,098.21	926.00	869.89	56.11	16.502	
11,000.00	7,815.00	9,974.81	6,889.00	79.54	76.77	0.02	-737.09	3,198.21	926.00	868.46	57.54	16.094	
11,100.00	7,815.00	10,074.81	6,889.00	81.70	78.96	0.02	-737.17	3,298.21	926.00	867.03	58.97	15.704	
11,200.00	7,815.00	10,174.81	6,889.00	83.87	81.15	0.02	-737.26	3,398.21	926.00	865.60	60.40	15.330	
11,300.00	7,815.00	10,274.81	6,889.00	86.05	83.34	0.02	-737.34	3,498.21	926.00	864.15	61.85	14.972	
11,400.00	7,815.00	10,374.81	6,889.00	88.24	85.55	0.02	-737.43	3,598.21	926.00	862.70	63.30	14.629	
11,500.00	7,815.00	10,474.81	6,889.00	90.43	87.75	0.02	-737.51	3,698.21	926.00	861.25	64.75	14.300	
11,600.00	7,815.00	10,574.81	6,889.00	92.63	89.97	0.02	-737.60	3,798.21	926.00	859.79	66.21	13.985	
11,700.00	7,815.00	10,674.81	6,889.00	94.83	92.19	0.02	-737.68	3,898.21	926.00	858.32	67.68	13.682	
11,800.00	7,815.00	10,774.81	6,889.00	97.04	94.41	0.02	-737.77	3,998.21	926.00	856.85	69.15	13.391	
11,900.00	7,815.00	10,874.81	6,889.00	99.25	96.63	0.02	-737.85	4,098.21	926.00	855.38	70.62	13.112	
12,000.00	7,815.00	10,974.81	6,889.00	101.47	98.86	0.02	-737.93	4,198.21	926.00	853.90	72.10	12.843	
12,100.00	7,815.00	11,074.81	6,889.00	103.69	101.10	0.01	-738.02	4,298.21	926.00	852.42	73.58	12.584	
12,200.00	7,815.00	11,174.81	6,889.00	105.91	103.33	0.01	-738.10	4,398.21	926.00	850.93	75.07	12.335	
12,300.00	7,815.00	11,274.81	6,889.00	108.14	105.57	0.01	-738.19	4,498.21	926.00	849.44	76.56	12.096	
12,400.00	7,815.00	11,374.81	6,889.00	110.37	107.82	0.01	-738.27	4,598.21	926.00	847.95	78.05	11.864	
12,500.00	7,815.00	11,474.81	6,889.00	112.60	110.06	0.01	-738.36	4,698.21	926.00	846.46	79.54	11.641	
12,600.00	7,815.00	11,574.81	6,889.00	114.84	112.31	0.01	-738.44	4,798.21	926.00	844.96	81.04	11.426	
12,700.00	7,815.00	11,674.81	6,889.00	117.08	114.56	0.01	-738.53	4,898.21	926.00	843.46	82.54	11.219	
12,800.00	7,815.00	11,774.81	6,889.00	119.32	116.81	0.01	-738.61	4,998.21	926.00	841.95	84.05	11.018	
12,900.00	7,815.00	11,874.81	6,889.00	121.57	119.07	0.01	-738.69	5,098.21	926.00	840.45	85.55	10.824	
13,000.00	7,815.00	11,974.81	6,889.00	123.81	121.33	0.01	-738.78	5,198.21	926.00	838.94	87.06	10.637	
13,100.00	7,815.00	12,074.81	6,889.00	126.06	123.59	0.01	-738.86	5,298.21	926.00	837.43	88.57	10.455	
13,200.00	7,815.00	12,174.81	6,889.00	128.32	125.85	0.01	-738.95	5,398.21	926.00	835.92	90.08	10.280	
13,300.00	7,815.00	12,274.81	6,889.00	130.57	128.11	0.01	-739.03	5,498.21	926.00	834.41	91.59	10.110	
13,400.00	7,815.00	12,374.81	6,889.00	132.83	130.37	0.01	-739.12	5,598.21	926.00	832.89	93.11	9.945	
13,500.00	7,815.00	12,474.81	6,889.00	135.08	132.64	0.01	-739.20	5,698.21	926.00	831.37	94.63	9.786	
13,600.00	7,815.00	12,574.81	6,889.00	137.34	134.91	0.01	-739.29	5,798.21	926.00	829.86	96.15	9.631	
13,700.00	7,815.00	12,674.81	6,889.00	139.60	137.17	0.01	-739.37	5,898.21	926.00	828.33	97.67	9.481	
13,800.00	7,815.00	12,774.81	6,889.00	141.86	139.44	0.01	-739.45	5,998.21	926.00	826.81	99.19	9.336	
13,900.00	7,815.00	12,874.81	6,889.00	144.13	141.71	0.01	-739.54	6,098.21	926.00	825.29	100.71	9.195	
14,000.00	7,815.00	12,974.81	6,889.00	146.39	143.99	0.01	-739.62	6,198.21	926.00	823.76	102.24	9.057	
14,100.00	7,815.00	13,074.81	6,889.00	148.66	146.26	0.01	-739.71	6,298.21	926.00	822.24	103.76	8.924	
14,200.00	7,815.00	13,174.81	6,889.00	150.93	148.53	0.01	-739.79	6,398.21	926.00	820.71	105.29	8.795	
14,300.00	7,815.00	13,274.81	6,889.00	153.20	150.81	0.01	-739.88	6,498.21	926.00	819.18	106.82	8.669	
14,400.00	7,815.00	13,374.81	6,889.00	155.47	153.09	0.01	-739.96	6,598.21	926.00	817.65	108.35	8.546	
14,500.00	7,815.00	13,474.81	6,889.00	157.74	155.36	0.01	-740.05	6,698.21	926.00	816.12	109.88	8.427	
14,600.00	7,815.00	13,574.81	6,889.00	160.01	157.64	0.01	-740.13	6,798.21	926.00	814.59	111.41	8.312	
14,700.00	7,815.00	13,674.81	6,889.00	162.28	159.92	0.01	-740.22	6,898.21	926.00	813.06	112.94	8.199	
14,800.00	7,815.00	13,774.81	6,889.00	164.56	162.20	0.01	-740.30	6,998.21	926.00	811.52	114.48	8.089	
14,900.00	7,815.00	13,874.81	6,889.00	166.83	164.48	0.01	-740.38	7,098.21	926.00	809.99	116.01	7.982	
15,000.00	7,815.00	13,974.81	6,889.00	169.11	166.76	0.01	-740.47	7,198.21	926.00	808.45	117.55	7.877	
15,100.00	7,815.00	14,074.81	6,889.00	171.39	169.05	0.01	-740.55	7,298.21	926.00	806.91	119.09	7.776	

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #125H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	30.00	30.00				
100.00	100.00	100.00	100.00	0.13	0.13	90.00	0.00	30.00	30.00	29.74	0.26	117.047	
200.00	200.00	200.00	200.00	0.49	0.49	90.00	0.00	30.00	30.00	29.03	0.97	30.825	
300.00	300.00	300.00	300.00	0.85	0.85	90.00	0.00	30.00	30.00	28.31	1.69	17.749	
400.00	400.00	400.00	400.00	1.20	1.20	90.00	0.00	30.00	30.00	27.59	2.41	12.463	
500.00	500.00	500.00	500.00	1.56	1.56	90.00	0.00	30.00	30.00	26.88	3.12	9.603	
600.00	600.00	600.00	600.00	1.92	1.92	90.00	0.00	30.00	30.00	26.16	3.84	7.810	
700.00	700.00	700.00	700.00	2.28	2.28	90.00	0.00	30.00	30.00	25.44	4.56	6.582	
800.00	800.00	800.00	800.00	2.64	2.64	90.00	0.00	30.00	30.00	24.73	5.27	5.687	
900.00	900.00	900.00	900.00	3.00	3.00	90.00	0.00	30.00	30.00	24.01	5.99	5.007	
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	90.00	0.00	30.00	30.00	23.29	6.71	4.472	
1,100.00	1,099.98	1,100.72	1,100.70	3.70	3.71	-106.65	1.14	28.64	29.13	21.72	7.41	3.933	
1,172.10	1,172.00	1,172.90	1,172.80	3.93	3.97	-118.22	3.29	26.07	28.34	20.44	7.90	3.589 CC, ES	
1,200.00	1,199.84	1,200.66	1,200.52	4.03	4.07	-123.86	4.23	24.96	28.54	20.45	8.09	3.530	
1,300.00	1,299.45	1,300.09	1,299.64	4.36	4.42	-144.64	7.57	20.98	33.21	24.43	8.78	3.783	
1,400.00	1,398.70	1,401.28	1,398.31	4.70	4.78	-160.52	10.89	17.02	44.30	34.82	9.48	4.673	
1,500.00	1,497.64	1,502.85	1,496.61	5.06	5.15	-170.11	14.20	13.07	59.73	49.54	10.19	5.864	
1,600.00	1,596.57	1,604.43	1,594.89	5.42	5.51	-175.71	17.51	9.13	76.19	65.30	10.89	6.996	
1,700.00	1,695.49	1,706.01	1,693.18	5.79	5.88	-179.30	20.82	5.18	93.11	81.51	11.60	8.028	
1,800.00	1,794.42	1,807.59	1,791.46	6.16	6.24	-178.21	24.13	1.24	110.28	97.97	12.31	8.958	
1,900.00	1,893.35	1,909.17	1,889.75	6.55	6.61	-176.40	27.45	-2.71	127.59	114.56	13.02	9.796	
2,000.00	1,992.27	1,989.25	1,988.03	6.93	6.90	-175.02	30.76	-6.65	144.99	131.33	13.66	10.611	
2,100.00	2,091.20	2,087.67	2,086.32	7.32	7.25	-173.93	34.07	-10.60	162.47	148.09	14.37	11.304	
2,200.00	2,190.13	2,186.09	2,184.61	7.71	7.61	-173.06	37.38	-14.55	179.98	164.90	15.08	11.933	
2,300.00	2,289.05	2,284.51	2,282.89	8.10	7.97	-172.34	40.69	-18.49	197.53	181.74	15.79	12.507	
2,400.00	2,387.98	2,382.94	2,381.18	8.50	8.32	-171.74	44.00	-22.44	215.11	198.60	16.51	13.031	
2,500.00	2,486.91	2,481.36	2,479.46	8.89	8.68	-171.23	47.31	-26.38	232.70	215.48	17.22	13.512	
2,600.00	2,585.83	2,573.51	2,571.45	9.29	9.01	-170.82	51.30	-30.03	251.28	233.40	17.89	14.047	
2,700.00	2,684.76	2,662.95	2,660.58	9.69	9.34	-170.49	57.94	-33.44	272.89	254.37	18.52	14.733	
2,800.00	2,783.69	2,756.59	2,753.69	10.09	9.69	-170.20	67.26	-36.89	296.98	277.78	19.19	15.472	
2,900.00	2,882.61	2,853.58	2,850.11	10.49	10.04	-169.94	77.14	-40.45	321.31	301.40	19.90	16.143	
3,000.00	2,981.54	2,950.56	2,946.52	10.89	10.40	-169.72	87.02	-44.01	345.64	325.03	20.61	16.767	
3,100.00	3,080.47	3,047.55	3,042.94	11.30	10.76	-169.54	96.90	-47.57	369.98	348.65	21.33	17.349	
3,200.00	3,179.39	3,144.54	3,139.36	11.70	11.12	-169.37	106.78	-51.13	394.32	372.28	22.04	17.893	
3,300.00	3,278.32	3,241.52	3,235.77	12.11	11.48	-169.22	116.66	-54.69	418.67	395.92	22.75	18.402	
3,400.00	3,377.25	3,338.51	3,332.19	12.51	11.84	-169.09	126.54	-58.25	443.01	419.55	23.46	18.880	
3,500.00	3,476.17	3,435.49	3,428.60	12.92	12.21	-168.97	136.43	-61.81	467.36	443.18	24.18	19.330	
3,600.00	3,575.10	3,532.48	3,525.02	13.33	12.57	-168.87	146.31	-65.37	491.71	466.82	24.89	19.753	
3,700.00	3,674.03	3,629.47	3,621.43	13.73	12.93	-168.77	156.19	-68.93	516.07	490.46	25.61	20.152	
3,800.00	3,772.95	3,726.45	3,717.85	14.14	13.30	-168.69	166.07	-72.49	540.42	514.10	26.32	20.529	
3,900.00	3,871.88	3,823.44	3,814.27	14.55	13.66	-168.61	175.95	-76.05	564.77	537.73	27.04	20.886	
4,000.00	3,970.81	3,920.43	3,910.68	14.96	14.03	-168.53	185.83	-79.61	589.13	561.37	27.76	21.225	
4,100.00	4,069.73	4,017.41	4,007.10	15.37	14.39	-168.47	195.71	-83.17	613.49	585.01	28.47	21.545	
4,200.00	4,168.66	4,114.40	4,103.51	15.77	14.76	-168.40	205.59	-86.73	637.84	608.65	29.19	21.850	
4,300.00	4,267.59	4,211.38	4,199.93	16.18	15.13	-168.35	215.47	-90.29	662.20	632.29	29.91	22.140	
4,400.00	4,366.52	4,308.37	4,296.34	16.59	15.49	-168.29	225.35	-93.85	686.56	655.93	30.63	22.417	
4,500.00	4,465.44	4,405.36	4,392.76	17.00	15.86	-168.24	235.23	-97.40	710.92	679.57	31.35	22.680	
4,600.00	4,564.37	4,502.34	4,489.18	17.41	16.23	-168.20	245.11	-100.96	735.28	703.21	32.06	22.931	
4,700.00	4,663.30	4,600.67	4,585.59	17.82	16.60	-168.15	254.99	-104.52	759.64	726.85	32.79	23.168	
4,800.00	4,762.22	4,703.69	4,682.01	18.23	16.99	-168.11	264.87	-108.08	784.00	750.47	33.53	23.382	
4,900.00	4,861.15	4,806.70	4,778.42	18.64	17.38	-168.07	274.76	-111.64	808.36	774.09	34.27	23.587	
5,000.00	4,960.08	4,909.71	4,874.84	19.05	17.77	-168.04	284.64	-115.20	832.72	797.70	35.01	23.783	

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #125H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	5,059.00	4,987.27	4,971.26	19.47	18.07	168.00	294.52	-118.76	857.08	821.42	35.66	24.033	
5,200.00	5,157.93	5,084.26	5,067.67	19.88	18.44	167.97	304.40	-122.32	881.44	845.06	36.38	24.227	
5,300.00	5,256.86	5,181.24	5,164.09	20.29	18.81	167.94	314.28	-125.88	905.80	868.70	37.10	24.413	
5,400.00	5,355.78	5,278.23	5,260.50	20.70	19.17	167.91	324.16	-129.44	930.16	892.34	37.82	24.592	
5,500.00	5,454.71	5,375.22	5,356.92	21.11	19.54	167.89	334.04	-133.00	954.53	915.98	38.54	24.764	
5,600.00	5,553.64	5,472.20	5,453.33	21.52	19.91	167.86	343.92	-136.56	978.89	939.62	39.27	24.930	
5,700.00	5,652.56	5,569.19	5,549.75	21.93	20.28	167.84	353.80	-140.12	1,003.25	963.26	39.99	25.090	
5,800.00	5,751.49	5,666.18	5,646.17	22.35	20.65	167.81	363.68	-143.68	1,027.61	986.90	40.71	25.244	
5,900.00	5,850.42	5,791.44	5,770.81	22.76	21.13	167.80	373.56	-147.89	1,051.26	1,009.62	41.64	25.247	
6,000.00	5,949.34	5,942.50	5,921.64	23.17	21.67	167.92	382.99	-150.64	1,070.57	1,027.89	42.69	25.081	
6,100.00	6,048.27	6,069.15	6,048.27	23.58	22.11	168.10	384.00	-151.00	1,085.53	1,041.99	43.54	24.933	
6,200.00	6,147.20	6,168.07	6,147.20	23.99	22.46	168.26	384.00	-151.00	1,099.83	1,055.58	44.26	24.852	
6,300.00	6,246.12	6,267.00	6,246.12	24.41	22.80	168.41	384.00	-151.00	1,114.15	1,069.18	44.97	24.774	
6,400.00	6,345.05	6,365.93	6,345.05	24.82	23.14	168.56	384.00	-151.00	1,128.47	1,082.78	45.69	24.698	
6,500.00	6,443.98	6,464.85	6,443.98	25.23	23.48	168.71	384.00	-151.00	1,142.81	1,096.40	46.41	24.625	
6,600.00	6,542.90	6,563.78	6,542.90	25.64	23.82	168.85	384.00	-151.00	1,157.14	1,110.02	47.13	24.554	
6,700.00	6,641.83	6,662.71	6,641.83	26.05	24.17	168.99	384.00	-151.00	1,171.49	1,123.64	47.84	24.485	
6,800.00	6,740.76	6,761.63	6,740.76	26.47	24.51	169.12	384.00	-151.00	1,185.84	1,137.28	48.56	24.418	
6,900.00	6,839.69	6,860.57	6,839.69	26.88	24.85	169.26	384.00	-151.00	1,200.15	1,150.87	49.28	24.353	
7,000.00	6,938.93	6,959.80	6,938.93	27.28	25.20	169.42	384.00	-151.00	1,212.25	1,162.26	50.00	24.246	
7,100.00	7,038.53	7,059.41	7,038.53	27.66	25.54	169.52	384.00	-151.00	1,220.95	1,170.24	50.71	24.077	
7,200.00	7,138.38	7,159.26	7,138.38	28.01	25.89	169.59	384.00	-151.00	1,226.22	1,174.81	51.42	23.848	
7,300.00	7,238.36	7,241.12	7,220.25	28.33	26.18	169.62	384.11	-150.83	1,228.31	1,176.30	52.02	23.614	
7,400.00	7,337.90	7,286.79	7,265.80	28.62	26.33	-81.10	385.76	-148.29	1,230.76	1,178.41	52.36	23.507	
7,500.00	7,434.54	7,332.22	7,310.73	28.88	26.48	-80.96	389.36	-142.75	1,234.95	1,182.34	52.61	23.476	
7,600.00	7,525.32	7,377.17	7,354.54	29.10	26.64	-80.86	394.82	-134.34	1,240.88	1,188.09	52.79	23.508	
7,700.00	7,607.50	7,421.41	7,396.76	29.27	26.78	-80.78	402.00	-123.29	1,248.63	1,195.68	52.95	23.583	
7,800.00	7,678.57	7,464.69	7,436.96	29.39	26.92	-80.68	410.72	-109.86	1,258.32	1,205.16	53.15	23.673	
7,900.00	7,736.38	7,500.00	7,468.78	29.46	27.03	-80.34	419.04	-97.04	1,270.13	1,216.73	53.40	23.783	
8,000.00	7,779.17	7,550.00	7,512.11	29.49	27.18	-80.33	432.62	-76.14	1,284.12	1,230.12	54.00	23.781	
8,100.00	7,805.64	7,585.94	7,541.82	29.51	27.28	-79.82	443.62	-59.19	1,300.51	1,245.85	54.66	23.793	
8,200.00	7,814.99	7,622.26	7,570.51	29.76	27.38	-79.17	455.75	-40.51	1,319.37	1,263.85	55.52	23.763	
8,300.00	7,815.00	8,260.94	7,815.00	30.54	30.86	-90.00	586.71	499.87	1,338.02	1,277.18	60.84	21.994	
8,400.00	7,815.00	8,360.52	7,815.00	31.52	31.80	-90.00	586.63	599.45	1,328.92	1,266.16	62.76	21.173	
8,500.00	7,815.00	8,460.36	7,815.00	32.63	32.87	-90.00	586.55	699.29	1,323.30	1,258.34	64.96	20.370	
8,600.00	7,815.00	8,560.33	7,815.00	33.87	34.07	-90.00	586.47	799.26	1,321.18	1,253.76	67.41	19.598	
8,686.70	7,815.00	8,647.03	7,815.00	35.04	35.19	-90.00	586.40	885.96	1,320.99	1,251.27	69.72	18.947	
8,700.00	7,815.00	8,660.33	7,815.00	35.22	35.37	-90.00	586.39	899.26	1,321.16	1,251.08	70.08	18.852	
8,800.00	7,815.00	8,760.33	7,815.00	36.67	36.78	-90.00	586.31	999.26	1,321.17	1,248.23	72.95	18.112	
8,900.00	7,815.00	8,860.33	7,815.00	38.20	38.27	-90.00	586.23	1,099.26	1,321.18	1,245.20	75.98	17.388	
9,000.00	7,815.00	8,960.33	7,815.00	39.81	39.84	-90.00	586.15	1,199.26	1,321.19	1,242.02	79.17	16.687	
9,100.00	7,815.00	9,060.33	7,815.00	41.48	41.47	-90.00	586.07	1,299.26	1,321.20	1,238.70	82.50	16.015	
9,200.00	7,815.00	9,160.33	7,815.00	43.21	43.17	-90.00	586.00	1,399.26	1,321.21	1,235.26	85.94	15.373	
9,300.00	7,815.00	9,260.33	7,815.00	45.00	44.93	-90.00	585.92	1,499.26	1,321.22	1,231.72	89.50	14.763	
9,400.00	7,815.00	9,360.33	7,815.00	46.82	46.73	-90.00	585.84	1,599.26	1,321.23	1,228.09	93.14	14.185	
9,500.00	7,815.00	9,460.33	7,815.00	48.69	48.57	-90.00	585.76	1,699.26	1,321.23	1,224.37	96.87	13.640	
9,600.00	7,815.00	9,560.33	7,815.00	50.60	50.46	-90.00	585.68	1,799.26	1,321.24	1,220.57	100.67	13.125	
9,700.00	7,815.00	9,660.33	7,815.00	52.53	52.37	-90.00	585.60	1,899.26	1,321.25	1,216.72	104.54	12.639	
9,800.00	7,815.00	9,760.33	7,815.00	54.50	54.32	-90.00	585.52	1,999.26	1,321.26	1,212.80	108.46	12.182	
9,900.00	7,815.00	9,860.33	7,815.00	56.49	56.30	-90.00	585.44	2,099.26	1,321.27	1,208.83	112.44	11.751	
10,000.00	7,815.00	9,960.33	7,815.00	58.51	58.30	-90.00	585.36	2,199.26	1,321.28	1,204.81	116.47	11.345	
10,100.00	7,815.00	10,060.33	7,815.00	60.54	60.32	-90.00	585.28	2,299.26	1,321.29	1,200.75	120.53	10.962	

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #125H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,200.00	7,815.00	10,160.33	7,815.00	62.60	62.36	-90.00	585.20	2,399.26	1,321.30	1,196.66	124.64	10.601	
10,300.00	7,815.00	10,260.33	7,815.00	64.67	64.42	-90.00	585.12	2,499.26	1,321.31	1,192.52	128.78	10.260	
10,400.00	7,815.00	10,360.33	7,815.00	66.76	66.49	-90.00	585.04	2,599.26	1,321.32	1,188.36	132.95	9.938	
10,500.00	7,815.00	10,460.33	7,815.00	68.86	68.59	-90.00	584.96	2,699.26	1,321.32	1,184.17	137.16	9.634	
10,600.00	7,815.00	10,560.33	7,815.00	70.97	70.69	-90.00	584.88	2,799.26	1,321.33	1,179.95	141.38	9.346	
10,700.00	7,815.00	10,660.33	7,815.00	73.10	72.81	-90.00	584.80	2,899.26	1,321.34	1,175.71	145.63	9.073	
10,800.00	7,815.00	10,760.33	7,815.00	75.24	74.94	-90.00	584.72	2,999.26	1,321.35	1,171.45	149.91	8.815	
10,900.00	7,815.00	10,860.33	7,815.00	77.38	77.07	-90.00	584.64	3,099.26	1,321.36	1,167.16	154.20	8.569	
11,000.00	7,815.00	10,960.33	7,815.00	79.54	79.22	-90.00	584.56	3,199.26	1,321.37	1,162.86	158.51	8.336	
11,100.00	7,815.00	11,060.33	7,815.00	81.70	81.38	-90.00	584.48	3,299.26	1,321.38	1,158.54	162.84	8.115	
11,200.00	7,815.00	11,160.33	7,815.00	83.87	83.54	-90.00	584.40	3,399.26	1,321.39	1,154.21	167.18	7.904	
11,300.00	7,815.00	11,260.33	7,815.00	86.05	85.72	-90.00	584.32	3,499.26	1,321.40	1,149.86	171.54	7.703	
11,400.00	7,815.00	11,360.33	7,815.00	88.24	87.90	-90.00	584.24	3,599.26	1,321.41	1,145.50	175.91	7.512	
11,500.00	7,815.00	11,460.33	7,815.00	90.43	90.08	-90.00	584.17	3,699.26	1,321.41	1,141.12	180.29	7.329	
11,600.00	7,815.00	11,560.33	7,815.00	92.63	92.27	-90.00	584.09	3,799.26	1,321.42	1,136.74	184.68	7.155	
11,700.00	7,815.00	11,660.33	7,815.00	94.83	94.47	-90.00	584.01	3,899.26	1,321.43	1,132.34	189.09	6.988	
11,800.00	7,815.00	11,760.33	7,815.00	97.04	96.67	-90.00	583.93	3,999.26	1,321.44	1,127.94	193.50	6.829	
11,900.00	7,815.00	11,860.33	7,815.00	99.25	98.88	-90.00	583.85	4,099.26	1,321.45	1,123.52	197.93	6.676	
12,000.00	7,815.00	11,960.33	7,815.00	101.47	101.09	-90.00	583.77	4,199.26	1,321.46	1,119.10	202.36	6.530	
12,100.00	7,815.00	12,060.33	7,815.00	103.69	103.31	-90.00	583.69	4,299.26	1,321.47	1,114.67	206.80	6.390	
12,200.00	7,815.00	12,160.33	7,815.00	105.91	105.53	-90.00	583.61	4,399.26	1,321.48	1,110.23	211.25	6.256	
12,300.00	7,815.00	12,260.33	7,815.00	108.14	107.75	-90.00	583.53	4,499.26	1,321.49	1,105.78	215.70	6.126	
12,400.00	7,815.00	12,360.33	7,815.00	110.37	109.98	-90.00	583.45	4,599.26	1,321.49	1,101.33	220.17	6.002	
12,500.00	7,815.00	12,460.33	7,815.00	112.60	112.21	-90.00	583.37	4,699.26	1,321.50	1,096.87	224.64	5.883	
12,600.00	7,815.00	12,560.33	7,815.00	114.84	114.45	-90.00	583.29	4,799.26	1,321.51	1,092.40	229.11	5.768	
12,700.00	7,815.00	12,660.33	7,815.00	117.08	116.68	-90.00	583.21	4,899.26	1,321.52	1,087.93	233.59	5.657	
12,800.00	7,815.00	12,760.33	7,815.00	119.32	118.92	-90.00	583.13	4,999.26	1,321.53	1,083.46	238.07	5.551	
12,900.00	7,815.00	12,860.33	7,815.00	121.57	121.16	-90.00	583.05	5,099.26	1,321.54	1,078.97	242.57	5.448	
13,000.00	7,815.00	12,960.33	7,815.00	123.81	123.41	-90.00	582.97	5,199.26	1,321.55	1,074.49	247.06	5.349	
13,100.00	7,815.00	13,060.33	7,815.00	126.06	125.66	-90.00	582.89	5,299.26	1,321.56	1,070.00	251.56	5.253	
13,200.00	7,815.00	13,160.33	7,815.00	128.32	127.91	-90.00	582.81	5,399.26	1,321.57	1,065.50	256.06	5.161	
13,300.00	7,815.00	13,260.33	7,815.00	130.57	130.16	-90.00	582.73	5,499.26	1,321.58	1,061.01	260.57	5.072	
13,400.00	7,815.00	13,360.33	7,815.00	132.83	132.41	-90.00	582.65	5,599.26	1,321.58	1,056.50	265.08	4.986	
13,500.00	7,815.00	13,460.33	7,815.00	135.08	134.66	-90.00	582.57	5,699.26	1,321.59	1,052.00	269.60	4.902	
13,600.00	7,815.00	13,560.33	7,815.00	137.34	136.92	-90.00	582.49	5,799.26	1,321.60	1,047.49	274.11	4.821	
13,700.00	7,815.00	13,660.33	7,815.00	139.60	139.18	-90.00	582.41	5,899.26	1,321.61	1,042.98	278.64	4.743	
13,800.00	7,815.00	13,760.33	7,815.00	141.86	141.44	-90.00	582.34	5,999.26	1,321.62	1,038.46	283.16	4.667	
13,900.00	7,815.00	13,860.33	7,815.00	144.13	143.70	-90.00	582.26	6,099.26	1,321.63	1,033.94	287.69	4.594	
14,000.00	7,815.00	13,960.33	7,815.00	146.39	145.97	-90.00	582.18	6,199.26	1,321.64	1,029.42	292.22	4.523	
14,100.00	7,815.00	14,060.33	7,815.00	148.66	148.23	-90.00	582.10	6,299.26	1,321.65	1,024.90	296.75	4.454	
14,200.00	7,815.00	14,160.33	7,815.00	150.93	150.50	-90.00	582.02	6,399.26	1,321.66	1,020.37	301.29	4.387	
14,300.00	7,815.00	14,260.33	7,815.00	153.20	152.76	-90.00	581.94	6,499.26	1,321.67	1,015.84	305.83	4.322	
14,400.00	7,815.00	14,360.33	7,815.00	155.47	155.03	-90.00	581.86	6,599.26	1,321.67	1,011.31	310.37	4.258	
14,500.00	7,815.00	14,460.33	7,815.00	157.74	157.30	-90.00	581.78	6,699.26	1,321.68	1,006.77	314.91	4.197	
14,600.00	7,815.00	14,560.33	7,815.00	160.01	159.57	-90.00	581.70	6,799.26	1,321.69	1,002.24	319.45	4.137	
14,700.00	7,815.00	14,660.33	7,815.00	162.28	161.84	-90.00	581.62	6,899.26	1,321.70	997.70	324.00	4.079	
14,800.00	7,815.00	14,760.33	7,815.00	164.56	164.12	-90.00	581.54	6,999.26	1,321.71	993.16	328.55	4.023	
14,900.00	7,815.00	14,860.33	7,815.00	166.83	166.39	-90.00	581.46	7,099.26	1,321.72	988.62	333.10	3.968	
15,000.00	7,815.00	14,960.33	7,815.00	169.11	168.67	-90.00	581.38	7,199.26	1,321.73	984.08	337.65	3.914	
15,100.00	7,815.00	15,060.33	7,815.00	171.39	170.94	-90.00	581.30	7,299.26	1,321.74	979.53	342.21	3.862	
15,200.00	7,815.00	15,160.33	7,815.00	173.66	173.22	-90.00	581.22	7,399.26	1,321.75	974.98	346.76	3.812	
15,300.00	7,815.00	15,260.33	7,815.00	175.94	175.49	-90.00	581.14	7,499.26	1,321.76	970.44	351.32	3.762	

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #125H - OH - Prelim A											Offset Site Error: 0.00 usft		
Survey Program: 0-MWD+HDGM											Offset Well Error: 0.00 usft		
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance					Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		Separation Factor
15,400.00	7,815.00	15,360.33	7,815.00	178.22	177.77	-90.00	581.06	7,599.26	1,321.76	965.89	355.88	3.714	
15,500.00	7,815.00	15,460.33	7,815.00	180.50	180.05	-90.00	580.98	7,699.26	1,321.77	961.33	360.44	3.667	
15,600.00	7,815.00	15,560.33	7,815.00	182.78	182.33	-90.00	580.90	7,799.26	1,321.78	956.78	365.00	3.621	
15,700.00	7,815.00	15,660.33	7,815.00	185.06	184.61	-90.00	580.82	7,899.26	1,321.79	952.23	369.57	3.577	
15,800.00	7,815.00	15,760.33	7,815.00	187.35	186.89	-90.00	580.74	7,999.26	1,321.80	947.67	374.13	3.533	
15,900.00	7,815.00	15,860.33	7,815.00	189.63	189.18	-90.00	580.66	8,099.26	1,321.81	943.11	378.70	3.490	
16,000.00	7,815.00	15,960.33	7,815.00	191.91	191.46	-90.00	580.58	8,199.26	1,321.82	938.55	383.26	3.449	
16,100.00	7,815.00	16,060.33	7,815.00	194.20	193.74	-90.00	580.51	8,299.26	1,321.83	934.00	387.83	3.408	
16,200.00	7,815.00	16,160.33	7,815.00	196.48	196.02	-90.00	580.43	8,399.26	1,321.84	929.43	392.40	3.369	
16,300.00	7,815.00	16,260.33	7,815.00	198.77	198.31	-90.00	580.35	8,499.26	1,321.84	924.87	396.97	3.330	
16,400.00	7,815.00	16,360.33	7,815.00	201.05	200.59	-90.00	580.27	8,599.26	1,321.85	920.31	401.54	3.292	
16,500.00	7,815.00	16,460.33	7,815.00	203.34	202.88	-90.00	580.19	8,699.26	1,321.86	915.75	406.12	3.255	
16,600.00	7,815.00	16,560.33	7,815.00	205.63	205.16	-90.00	580.11	8,799.26	1,321.87	911.18	410.69	3.219	
16,700.00	7,815.00	16,660.33	7,815.00	207.91	207.45	-90.00	580.03	8,899.26	1,321.88	906.62	415.26	3.183	
16,800.00	7,815.00	16,760.33	7,815.00	210.20	209.74	-90.00	579.95	8,999.26	1,321.89	902.05	419.84	3.149	
16,900.00	7,815.00	16,860.33	7,815.00	212.49	212.03	-90.00	579.87	9,099.26	1,321.90	897.48	424.42	3.115	
17,000.00	7,815.00	16,960.33	7,815.00	214.78	214.31	-90.00	579.79	9,199.26	1,321.91	892.91	428.99	3.081	
17,100.00	7,815.00	17,060.33	7,815.00	217.07	216.60	-90.00	579.71	9,299.26	1,321.92	888.34	433.57	3.049	
17,200.00	7,815.00	17,160.33	7,815.00	219.36	218.89	-90.00	579.63	9,399.26	1,321.93	883.77	438.15	3.017	
17,300.00	7,815.00	17,260.33	7,815.00	221.65	221.18	-90.00	579.55	9,499.26	1,321.93	879.20	442.73	2.986	
17,400.00	7,815.00	17,360.33	7,815.00	223.94	223.47	-90.00	579.47	9,599.26	1,321.94	874.63	447.31	2.955	
17,500.00	7,815.00	17,460.33	7,815.00	226.23	225.76	-90.00	579.39	9,699.26	1,321.95	870.06	451.89	2.925	
17,600.00	7,815.00	17,560.33	7,815.00	228.52	228.05	-90.00	579.31	9,799.26	1,321.96	865.49	456.48	2.896	
17,700.00	7,815.00	17,660.33	7,815.00	230.81	230.34	-90.00	579.23	9,899.26	1,321.97	860.91	461.06	2.867	
17,800.00	7,815.00	17,760.33	7,815.00	233.10	232.63	-90.00	579.15	9,999.26	1,321.98	856.34	465.64	2.839	
17,900.00	7,815.00	17,860.33	7,815.00	235.39	234.92	-90.00	579.07	10,099.26	1,321.99	851.76	470.23	2.811	
17,995.79	7,815.00	17,956.12	7,815.00	237.59	237.12	-90.00	579.00	10,195.05	1,322.00	847.38	474.62	2.785 SF	

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #136H - OH - Prelim A														Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+HDGM														Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
0.00	0.00	0.00	0.00	0.00	0.00	45.00	30.00	30.00	42.43						
100.00	100.00	100.00	100.00	0.13	0.13	45.00	30.00	30.00	42.43	42.17	0.26	165.529			
200.00	200.00	200.00	200.00	0.49	0.49	45.00	30.00	30.00	42.43	41.45	0.97	43.592			
300.00	300.00	300.00	300.00	0.85	0.85	45.00	30.00	30.00	42.43	40.74	1.69	25.102			
400.00	400.00	400.00	400.00	1.20	1.20	45.00	30.00	30.00	42.43	40.02	2.41	17.625			
500.00	500.00	500.00	500.00	1.56	1.56	45.00	30.00	30.00	42.43	39.30	3.12	13.580			
600.00	600.00	600.00	600.00	1.92	1.92	45.00	30.00	30.00	42.43	38.59	3.84	11.046			
700.00	700.00	700.00	700.00	2.28	2.28	45.00	30.00	30.00	42.43	37.87	4.56	9.308			
800.00	800.00	800.00	800.00	2.64	2.64	45.00	30.00	30.00	42.43	37.15	5.27	8.043			
900.00	900.00	900.00	900.00	3.00	3.00	45.00	30.00	30.00	42.43	36.43	5.99	7.081			
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	45.00	30.00	30.00	42.43	35.72	6.71	6.324 CC, ES			
1,100.00	1,099.98	1,101.12	1,098.86	3.70	3.71	-145.66	30.00	31.71	45.09	37.69	7.40	6.092			
1,200.00	1,199.84	1,201.36	1,198.56	4.03	4.05	-146.14	30.00	35.19	51.90	43.82	8.08	6.426			
1,300.00	1,299.45	1,301.86	1,298.00	4.36	4.40	-148.25	30.00	38.66	61.63	52.87	8.76	7.036			
1,400.00	1,398.70	1,402.75	1,397.05	4.70	4.76	-151.09	30.00	42.12	74.46	65.01	9.45	7.877			
1,500.00	1,497.64	1,503.97	1,495.76	5.06	5.11	-153.84	30.00	45.57	89.53	79.38	10.15	8.820			
1,600.00	1,596.57	1,605.20	1,594.47	5.42	5.47	-155.84	30.00	49.01	104.81	93.96	10.85	9.659			
1,700.00	1,695.49	1,706.44	1,693.18	5.79	5.83	-157.33	30.00	52.46	120.18	108.63	11.56	10.400			
1,800.00	1,794.42	1,807.67	1,791.89	6.16	6.18	-158.48	30.00	55.91	135.62	123.35	12.26	11.058			
1,900.00	1,893.35	1,908.90	1,890.60	6.55	6.54	-159.39	30.00	59.35	151.09	138.12	12.98	11.644			
2,000.00	1,992.27	1,989.87	1,989.31	6.93	6.83	-160.14	30.00	62.80	166.60	152.98	13.62	12.233			
2,100.00	2,091.20	2,088.64	2,088.02	7.32	7.18	-160.75	30.00	66.25	182.13	167.81	14.33	12.713			
2,200.00	2,190.13	2,187.41	2,186.73	7.71	7.54	-161.27	30.00	69.70	197.68	182.64	15.04	13.147			
2,300.00	2,289.05	2,293.02	2,292.28	8.10	7.91	-161.74	28.69	72.68	211.86	196.09	15.78	13.428			
2,400.00	2,387.98	2,400.62	2,399.76	8.50	8.28	-162.15	23.86	73.83	222.38	205.88	16.50	13.475			
2,500.00	2,486.91	2,508.92	2,507.72	8.89	8.64	-162.51	15.41	73.06	229.15	211.94	17.21	13.314			
2,600.00	2,585.83	2,617.63	2,615.71	9.29	9.01	-162.86	3.32	70.33	232.15	214.25	17.90	12.968			
2,700.00	2,684.76	2,725.37	2,722.23	9.69	9.37	-163.21	-12.18	65.71	231.39	212.81	18.58	12.456			
2,800.00	2,783.69	2,825.34	2,820.84	10.09	9.72	-163.54	-27.86	60.72	229.16	209.87	19.28	11.883			
2,900.00	2,882.61	2,925.31	2,919.44	10.49	10.07	-163.88	-43.53	55.73	226.93	206.94	19.99	11.350			
3,000.00	2,981.54	3,025.27	3,018.04	10.89	10.43	-164.22	-59.21	50.74	224.72	204.01	20.71	10.852			
3,100.00	3,080.47	3,125.24	3,116.65	11.30	10.79	-164.57	-74.88	45.75	222.52	201.09	21.42	10.388			
3,200.00	3,179.39	3,225.20	3,215.25	11.70	11.16	-164.92	-90.56	40.76	220.32	198.18	22.14	9.951			
3,300.00	3,278.32	3,325.17	3,313.85	12.11	11.53	-165.29	-106.23	35.78	218.13	195.27	22.86	9.543			
3,400.00	3,377.25	3,425.14	3,412.46	12.51	11.91	-165.66	-121.91	30.79	215.95	192.37	23.58	9.158			
3,500.00	3,476.17	3,525.10	3,511.06	12.92	12.29	-166.04	-137.59	25.80	213.78	189.48	24.30	8.797			
3,600.00	3,575.10	3,625.07	3,609.66	13.33	12.67	-166.42	-153.26	20.81	211.62	186.59	25.03	8.456			
3,700.00	3,674.03	3,725.04	3,708.27	13.73	13.06	-166.82	-168.94	15.82	209.47	183.72	25.75	8.135			
3,800.00	3,772.95	3,825.00	3,806.87	14.14	13.45	-167.22	-184.61	10.83	207.33	180.85	26.48	7.831			
3,900.00	3,871.88	3,924.97	3,905.47	14.55	13.84	-167.63	-200.29	5.85	205.20	177.99	27.20	7.543			
4,000.00	3,970.81	4,024.94	4,004.08	14.96	14.23	-168.05	-215.96	0.86	203.08	175.15	27.93	7.271			
4,100.00	4,069.73	4,124.90	4,102.68	15.37	14.63	-168.48	-231.64	-4.13	200.97	172.31	28.66	7.013			
4,200.00	4,168.66	4,224.87	4,201.29	15.77	15.02	-168.92	-247.31	-9.12	198.87	169.48	29.39	6.767			
4,300.00	4,267.59	4,324.83	4,299.89	16.18	15.42	-169.36	-262.99	-14.11	196.78	166.67	30.12	6.534			
4,400.00	4,366.52	4,424.80	4,398.49	16.59	15.82	-169.82	-278.67	-19.10	194.71	163.87	30.85	6.312			
4,500.00	4,465.44	4,524.77	4,497.10	17.00	16.22	-170.29	-294.34	-24.09	192.65	161.07	31.58	6.101			
4,600.00	4,564.37	4,624.73	4,595.70	17.41	16.63	-170.76	-310.02	-29.07	190.60	158.29	32.31	5.899			
4,700.00	4,663.30	4,724.70	4,694.30	17.82	17.03	-171.25	-325.69	-34.06	188.57	155.53	33.04	5.707			
4,800.00	4,762.22	4,824.67	4,792.91	18.23	17.43	-171.74	-341.37	-39.05	186.55	152.78	33.77	5.524			
4,900.00	4,861.15	4,924.63	4,891.51	18.64	17.84	-172.25	-357.04	-44.04	184.54	150.04	34.51	5.348			
5,000.00	4,960.08	5,024.60	4,990.11	19.05	18.25	-172.77	-372.72	-49.03	182.55	147.31	35.24	5.180			
5,100.00	5,059.00	5,124.57	5,088.72	19.47	18.66	-173.30	-388.39	-54.02	180.58	144.60	35.97	5.020			

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design - Leatherneck 3029 Fed Com - #136H - OH - Prelim A														Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM														Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.00	5,157.93	5,224.53	5,187.32	19.88	19.06	-173.84	-404.07	-59.01	178.62	141.91	36.71	4.866		
5,300.00	5,256.86	5,324.50	5,285.92	20.29	19.47	-174.40	-419.75	-63.99	176.67	139.23	37.44	4.718		
5,400.00	5,355.78	5,424.46	5,384.53	20.70	19.88	-174.96	-435.42	-68.98	174.75	136.57	38.18	4.577		
5,500.00	5,454.71	5,524.43	5,483.13	21.11	20.30	-175.54	-451.10	-73.97	172.84	133.92	38.92	4.441		
5,600.00	5,553.64	5,624.40	5,581.74	21.52	20.71	-176.13	-466.77	-78.96	170.95	131.29	39.65	4.311		
5,700.00	5,652.56	5,724.36	5,680.34	21.93	21.12	-176.74	-482.45	-83.95	169.07	128.68	40.39	4.186		
5,800.00	5,751.49	5,824.33	5,778.94	22.35	21.53	-177.36	-498.12	-88.94	167.22	126.09	41.13	4.066		
5,900.00	5,850.42	5,924.30	5,877.55	22.76	21.95	-177.99	-513.80	-93.92	165.39	123.52	41.87	3.950		
6,000.00	5,949.34	6,024.26	5,976.15	23.17	22.36	-178.63	-529.47	-98.91	163.57	120.96	42.61	3.839		
6,100.00	6,048.27	6,124.23	6,074.75	23.58	22.77	-179.29	-545.15	-103.90	161.78	118.43	43.35	3.732		
6,200.00	6,147.20	6,224.20	6,173.36	23.99	23.19	-179.97	-560.83	-108.89	160.01	115.91	44.10	3.629		
6,300.00	6,246.12	6,324.16	6,271.96	24.41	23.61	179.34	-576.50	-113.88	158.26	113.42	44.84	3.529		
6,400.00	6,345.05	6,424.13	6,370.56	24.82	24.02	178.63	-592.18	-118.87	156.54	110.95	45.59	3.434		
6,500.00	6,443.98	6,524.09	6,469.17	25.23	24.44	177.91	-607.85	-123.86	154.84	108.50	46.34	3.342		
6,600.00	6,542.90	6,624.06	6,567.77	25.64	24.85	177.18	-623.53	-128.84	153.17	106.08	47.09	3.253		
6,700.00	6,641.83	6,724.03	6,666.37	26.05	25.27	176.42	-639.20	-133.83	151.52	103.68	47.84	3.167		
6,800.00	6,740.76	6,823.99	6,764.98	26.47	25.69	175.65	-654.88	-138.82	149.90	101.30	48.59	3.085		
6,900.00	6,839.69	6,923.96	6,863.58	26.88	26.11	174.87	-670.55	-143.81	148.26	98.91	49.35	3.004		
7,000.00	6,938.93	7,023.85	6,962.11	27.28	26.52	173.96	-686.22	-148.79	144.39	94.28	50.11	2.882		
7,100.00	7,038.53	7,122.11	7,059.05	27.66	26.93	172.85	-701.47	-153.65	137.27	86.39	50.88	2.698		
7,200.00	7,138.38	7,217.45	7,153.49	28.01	27.32	171.72	-713.96	-157.62	129.23	77.59	51.63	2.503		
7,300.00	7,238.36	7,313.05	7,248.57	28.33	27.69	170.60	-723.47	-160.65	121.01	68.68	52.33	2.312		
7,400.00	7,337.90	7,408.41	7,343.67	28.62	28.04	-85.85	-729.93	-162.71	113.28	60.19	53.08	2.134		
7,474.88	7,410.70	7,478.37	7,413.57	28.82	28.29	-95.06	-732.76	-163.60	110.51	56.60	53.91	2.050		
7,500.00	7,434.54	7,501.36	7,436.55	28.88	28.37	-98.90	-733.33	-163.79	110.94	56.67	54.28	2.044 SF		
7,600.00	7,525.32	7,609.86	7,525.32	29.10	28.71	-115.38	-734.00	-164.00	124.06	67.98	56.09	2.212		
7,700.00	7,607.50	7,672.31	7,607.50	29.27	28.90	-129.41	-734.00	-164.00	159.25	101.72	57.53	2.768		
7,800.00	7,678.57	7,743.39	7,678.57	29.39	29.12	-137.94	-734.00	-164.00	215.84	157.51	58.33	3.700		
7,900.00	7,736.38	7,801.20	7,736.38	29.46	29.30	-141.19	-734.00	-164.00	289.09	230.39	58.70	4.925		
8,000.00	7,779.17	7,843.99	7,779.17	29.49	29.43	-138.85	-734.00	-164.00	374.23	315.36	58.87	6.357		
8,100.00	7,805.64	7,870.45	7,805.64	29.51	29.51	-126.90	-734.00	-164.00	467.21	408.28	58.93	7.928		
8,200.00	7,814.99	7,879.80	7,814.99	29.76	29.54	-91.87	-734.00	-164.00	564.38	505.47	58.91	9.580		
8,300.00	7,815.00	7,879.81	7,815.00	30.54	29.54	-90.00	-734.00	-164.00	663.03	604.17	58.87	11.263		
8,400.00	7,815.00	7,879.81	7,815.00	31.52	29.54	-90.00	-734.00	-164.00	762.44	703.60	58.84	12.957		
8,500.00	7,815.00	7,879.81	7,815.00	32.63	29.54	-90.00	-734.00	-164.00	862.24	803.41	58.83	14.655		
8,600.00	7,815.00	7,879.81	7,815.00	33.87	29.54	-90.00	-734.00	-164.00	962.21	903.37	58.84	16.354		
8,700.00	7,815.00	7,879.81	7,815.00	35.22	29.54	90.08	-734.00	-164.00	1,062.21	1,003.36	58.85	18.051		
8,800.00	7,815.00	7,879.81	7,815.00	36.67	29.54	90.09	-734.00	-164.00	1,162.21	1,103.35	58.86	19.747		
8,900.00	7,815.00	7,879.81	7,815.00	38.20	29.54	90.10	-734.00	-164.00	1,262.21	1,203.34	58.87	21.442		
9,000.00	7,815.00	10,308.89	9,110.00	39.81	43.34	179.99	-735.18	1,198.21	1,295.00	1,258.46	36.54	35.436		
9,100.00	7,815.00	10,408.89	9,110.00	41.48	44.91	179.99	-735.27	1,298.21	1,295.00	1,257.50	37.50	34.534		
9,200.00	7,815.00	10,508.89	9,110.00	43.21	46.54	179.99	-735.36	1,398.21	1,295.00	1,256.51	38.49	33.642		
9,300.00	7,815.00	10,608.89	9,110.00	45.00	48.23	179.99	-735.44	1,498.21	1,295.00	1,255.47	39.53	32.763		
9,400.00	7,815.00	10,708.89	9,110.00	46.82	49.97	179.99	-735.53	1,598.21	1,295.00	1,254.41	40.59	31.903		
9,500.00	7,815.00	10,808.89	9,110.00	48.69	51.75	179.99	-735.62	1,698.21	1,295.00	1,253.31	41.69	31.062		
9,600.00	7,815.00	10,908.89	9,110.00	50.60	53.57	179.99	-735.70	1,798.21	1,295.00	1,252.18	42.82	30.245		
9,700.00	7,815.00	11,008.89	9,110.00	52.53	55.43	179.99	-735.79	1,898.21	1,295.00	1,251.03	43.97	29.451		
9,800.00	7,815.00	11,108.89	9,110.00	54.50	57.32	179.99	-735.88	1,998.21	1,295.00	1,249.85	45.15	28.682		
9,900.00	7,815.00	11,208.89	9,110.00	56.49	59.23	179.99	-735.97	2,098.21	1,295.00	1,248.65	46.35	27.938		
10,000.00	7,815.00	11,308.89	9,110.00	58.51	61.18	179.99	-736.05	2,198.21	1,295.00	1,247.42	47.58	27.220		
10,100.00	7,815.00	11,408.89	9,110.00	60.54	63.15	179.99	-736.14	2,298.21	1,295.00	1,246.18	48.82	26.526		
10,200.00	7,815.00	11,508.89	9,110.00	62.60	65.14	179.99	-736.23	2,398.21	1,295.00	1,244.92	50.08	25.858		

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #136H - OH - Prelim A														Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+HDGM														Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
10,300.00	7,815.00	11,608.89	9,110.00	64.67	67.16	179.99	-736.31	2,498.21	1,295.00	1,243.64	51.36	25.215			
10,400.00	7,815.00	11,708.89	9,110.00	66.76	69.19	179.99	-736.40	2,598.21	1,295.00	1,242.35	52.65	24.595			
10,500.00	7,815.00	11,808.89	9,110.00	68.86	71.24	179.99	-736.49	2,698.21	1,295.00	1,241.04	53.96	23.999			
10,600.00	7,815.00	11,908.89	9,110.00	70.97	73.30	179.99	-736.57	2,798.21	1,295.00	1,239.72	55.28	23.425			
10,700.00	7,815.00	12,008.89	9,110.00	73.10	75.38	179.99	-736.66	2,898.21	1,295.00	1,238.38	56.62	22.873			
10,800.00	7,815.00	12,108.89	9,110.00	75.24	77.47	179.99	-736.75	2,998.21	1,295.00	1,237.04	57.96	22.342			
10,900.00	7,815.00	12,208.89	9,110.00	77.38	79.57	179.99	-736.83	3,098.21	1,295.00	1,235.68	59.32	21.831			
11,000.00	7,815.00	12,308.89	9,110.00	79.54	81.69	179.99	-736.92	3,198.21	1,295.00	1,234.31	60.69	21.339			
11,100.00	7,815.00	12,408.89	9,110.00	81.70	83.81	179.99	-737.01	3,298.21	1,295.00	1,232.94	62.06	20.865			
11,200.00	7,815.00	12,508.89	9,110.00	83.87	85.94	180.00	-737.10	3,398.21	1,295.00	1,231.55	63.45	20.410			
11,300.00	7,815.00	12,608.89	9,110.00	86.05	88.09	180.00	-737.18	3,498.21	1,295.00	1,230.16	64.84	19.971			
11,400.00	7,815.00	12,708.89	9,110.00	88.24	90.24	180.00	-737.27	3,598.21	1,295.00	1,228.75	66.25	19.548			
11,500.00	7,815.00	12,808.89	9,110.00	90.43	92.39	180.00	-737.36	3,698.21	1,295.00	1,227.35	67.65	19.141			
11,600.00	7,815.00	12,908.89	9,110.00	92.63	94.56	180.00	-737.44	3,798.21	1,295.00	1,225.93	69.07	18.749			
11,700.00	7,815.00	13,008.89	9,110.00	94.83	96.73	180.00	-737.53	3,898.21	1,295.00	1,224.51	70.49	18.371			
11,800.00	7,815.00	13,108.89	9,110.00	97.04	98.91	180.00	-737.62	3,998.21	1,295.00	1,223.08	71.92	18.006			
11,900.00	7,815.00	13,208.89	9,110.00	99.25	101.09	180.00	-737.70	4,098.21	1,295.00	1,221.64	73.36	17.654			
12,000.00	7,815.00	13,308.89	9,110.00	101.47	103.28	180.00	-737.79	4,198.21	1,295.00	1,220.20	74.80	17.314			
12,100.00	7,815.00	13,408.89	9,110.00	103.69	105.48	180.00	-737.88	4,298.21	1,295.00	1,218.76	76.24	16.986			
12,200.00	7,815.00	13,508.89	9,110.00	105.91	107.68	180.00	-737.96	4,398.21	1,295.00	1,217.31	77.69	16.669			
12,300.00	7,815.00	13,608.89	9,110.00	108.14	109.88	180.00	-738.05	4,498.21	1,295.00	1,215.86	79.14	16.362			
12,400.00	7,815.00	13,708.89	9,110.00	110.37	112.09	180.00	-738.14	4,598.21	1,295.00	1,214.40	80.60	16.066			
12,500.00	7,815.00	13,808.89	9,110.00	112.60	114.30	180.00	-738.22	4,698.21	1,295.00	1,212.93	82.07	15.780			
12,600.00	7,815.00	13,908.90	9,110.00	114.84	116.52	180.00	-738.31	4,798.21	1,295.00	1,211.47	83.53	15.503			
12,700.00	7,815.00	14,008.90	9,110.00	117.08	118.74	180.00	-738.40	4,898.21	1,295.00	1,210.00	85.00	15.235			
12,800.00	7,815.00	14,108.90	9,110.00	119.32	120.96	180.00	-738.49	4,998.21	1,295.00	1,208.52	86.48	14.975			
12,900.00	7,815.00	14,208.90	9,110.00	121.57	123.18	180.00	-738.57	5,098.21	1,295.00	1,207.05	87.95	14.724			
13,000.00	7,815.00	14,308.90	9,110.00	123.81	125.41	180.00	-738.66	5,198.21	1,295.00	1,205.57	89.43	14.480			
13,100.00	7,815.00	14,408.90	9,110.00	126.06	127.64	180.00	-738.75	5,298.21	1,295.00	1,204.08	90.92	14.244			
13,200.00	7,815.00	14,508.90	9,110.00	128.32	129.88	180.00	-738.83	5,398.21	1,295.00	1,202.60	92.40	14.015			
13,300.00	7,815.00	14,608.90	9,110.00	130.57	132.12	180.00	-738.92	5,498.21	1,295.00	1,201.11	93.89	13.793			
13,400.00	7,815.00	14,708.90	9,110.00	132.83	134.35	180.00	-739.01	5,598.21	1,295.00	1,199.62	95.38	13.577			
13,500.00	7,815.00	14,808.90	9,110.00	135.08	136.60	180.00	-739.09	5,698.21	1,295.00	1,198.12	96.88	13.368			
13,600.00	7,815.00	14,908.90	9,110.00	137.34	138.84	180.00	-739.18	5,798.21	1,295.00	1,196.63	98.37	13.164			
13,700.00	7,815.00	15,008.90	9,110.00	139.60	141.09	180.00	-739.27	5,898.21	1,295.00	1,195.13	99.87	12.967			
13,800.00	7,815.00	15,108.90	9,110.00	141.86	143.33	180.00	-739.35	5,998.21	1,295.00	1,193.63	101.37	12.775			
13,900.00	7,815.00	15,208.90	9,110.00	144.13	145.58	180.00	-739.44	6,098.21	1,295.00	1,192.13	102.87	12.588			
14,000.00	7,815.00	15,308.90	9,110.00	146.39	147.83	180.00	-739.53	6,198.21	1,295.00	1,190.62	104.38	12.407			
14,100.00	7,815.00	15,408.90	9,110.00	148.66	150.09	180.00	-739.61	6,298.21	1,295.00	1,189.12	105.88	12.230			
14,200.00	7,815.00	15,508.90	9,110.00	150.93	152.34	180.00	-739.70	6,398.21	1,295.00	1,187.61	107.39	12.059			
14,300.00	7,815.00	15,608.90	9,110.00	153.20	154.60	180.00	-739.79	6,498.21	1,295.00	1,186.10	108.90	11.892			
14,400.00	7,815.00	15,708.90	9,110.00	155.47	156.86	180.00	-739.88	6,598.21	1,295.00	1,184.59	110.41	11.729			
14,500.00	7,815.00	15,808.90	9,110.00	157.74	159.12	180.00	-739.96	6,698.21	1,295.00	1,183.07	111.93	11.570			
14,600.00	7,815.00	15,908.90	9,110.00	160.01	161.38	180.00	-740.05	6,798.21	1,295.00	1,181.56	113.44	11.416			
14,700.00	7,815.00	16,008.90	9,110.00	162.28	163.64	180.00	-740.14	6,898.21	1,295.00	1,180.04	114.96	11.265			
14,800.00	7,815.00	16,108.90	9,110.00	164.56	165.90	180.00	-740.22	6,998.21	1,295.00	1,178.53	116.47	11.118			
14,900.00	7,815.00	16,208.90	9,110.00	166.83	168.17	180.00	-740.31	7,098.21	1,295.00	1,177.01	117.99	10.975			
15,000.00	7,815.00	16,308.90	9,110.00	169.11	170.43	180.00	-740.40	7,198.21	1,295.00	1,175.49	119.51	10.836			
15,100.00	7,815.00	16,408.90	9,110.00	171.39	172.70	180.00	-740.48	7,298.21	1,295.00	1,173.97	121.03	10.699			
15,200.00	7,815.00	16,508.90	9,110.00	173.66	174.97	180.00	-740.57	7,398.21	1,295.00	1,172.44	122.56	10.566			
15,300.00	7,815.00	16,608.90	9,110.00	175.94	177.24	180.00	-740.66	7,498.21	1,295.00	1,170.92	124.08	10.437			
15,400.00	7,815.00	16,708.90	9,110.00	178.22	179.51	180.00	-740.74	7,598.21	1,295.00	1,169.39	125.61	10.310			

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #136H - OH - Prelim A														Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM														Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,500.00	7,815.00	16,808.90	9,110.00	180.50	181.78	180.00	-740.83	7,698.21	1,295.00	1,167.87	127.13	10.186		
15,600.00	7,815.00	16,908.90	9,110.00	182.78	184.05	180.00	-740.92	7,798.21	1,295.00	1,166.34	128.66	10.065		
15,700.00	7,815.00	17,008.90	9,110.00	185.06	186.32	180.00	-741.01	7,898.21	1,295.00	1,164.81	130.19	9.947		
15,800.00	7,815.00	17,108.90	9,110.00	187.35	188.60	180.00	-741.09	7,998.21	1,295.00	1,163.28	131.72	9.832		
15,900.00	7,815.00	17,208.90	9,110.00	189.63	190.87	180.00	-741.18	8,098.21	1,295.00	1,161.75	133.25	9.719		
16,000.00	7,815.00	17,308.90	9,110.00	191.91	193.15	180.00	-741.27	8,198.21	1,295.00	1,160.22	134.78	9.608		
16,100.00	7,815.00	17,408.90	9,110.00	194.20	195.43	180.00	-741.35	8,298.21	1,295.00	1,158.69	136.31	9.500		
16,200.00	7,815.00	17,508.90	9,110.00	196.48	197.70	180.00	-741.44	8,398.21	1,295.00	1,157.16	137.84	9.395		
16,300.00	7,815.00	17,608.90	9,110.00	198.77	199.98	180.00	-741.53	8,498.21	1,295.00	1,155.62	139.38	9.291		
16,400.00	7,815.00	17,708.90	9,110.00	201.05	202.26	180.00	-741.61	8,598.21	1,295.00	1,154.09	140.91	9.190		
16,500.00	7,815.00	17,808.90	9,110.00	203.34	204.54	180.00	-741.70	8,698.21	1,295.00	1,152.56	142.44	9.091		
16,600.00	7,815.00	17,908.90	9,110.00	205.63	206.82	180.00	-741.79	8,798.21	1,295.00	1,151.02	143.98	8.994		
16,700.00	7,815.00	18,008.90	9,110.00	207.91	209.10	180.00	-741.87	8,898.21	1,295.00	1,149.48	145.52	8.899		
16,800.00	7,815.00	18,108.90	9,110.00	210.20	211.38	180.00	-741.96	8,998.21	1,295.00	1,147.95	147.05	8.806		
16,900.00	7,815.00	18,208.90	9,110.00	212.49	213.66	180.00	-742.05	9,098.21	1,295.00	1,146.41	148.59	8.715		
17,000.00	7,815.00	18,308.90	9,110.00	214.78	215.94	180.00	-742.13	9,198.21	1,295.00	1,144.87	150.13	8.626		
17,100.00	7,815.00	18,408.90	9,110.00	217.07	218.23	180.00	-742.22	9,298.21	1,295.00	1,143.33	151.67	8.538		
17,200.00	7,815.00	18,508.90	9,110.00	219.36	220.51	180.00	-742.31	9,398.21	1,295.00	1,141.79	153.21	8.452		
17,300.00	7,815.00	18,608.90	9,110.00	221.65	222.79	180.00	-742.40	9,498.21	1,295.00	1,140.25	154.75	8.368		
17,400.00	7,815.00	18,708.90	9,110.00	223.94	225.08	180.00	-742.48	9,598.21	1,295.00	1,138.71	156.29	8.286		
17,500.00	7,815.00	18,808.90	9,110.00	226.23	227.36	180.00	-742.57	9,698.21	1,295.00	1,137.17	157.83	8.205		
17,600.00	7,815.00	18,908.90	9,110.00	228.52	229.65	180.00	-742.66	9,798.21	1,295.00	1,135.63	159.37	8.126		
17,700.00	7,815.00	19,008.90	9,110.00	230.81	231.93	180.00	-742.74	9,898.21	1,295.00	1,134.08	160.92	8.048		
17,800.00	7,815.00	19,108.90	9,110.00	233.10	234.22	180.00	-742.83	9,998.21	1,295.00	1,132.54	162.46	7.971		
17,900.00	7,815.00	19,191.11	9,110.00	235.39	236.10	180.00	-742.92	10,098.21	1,295.00	1,131.13	163.87	7.903		
17,995.79	7,815.00	19,286.90	9,110.00	237.59	238.29	-180.00	-743.00	10,194.00	1,295.00	1,129.65	165.35	7.832		

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #126H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3240 + 28.5 = KB @ 3268.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com	MD Reference:	3240 + 28.5 = KB @ 3268.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#126H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design Leatherneck 3029 Fed Com - #206H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	1.00	1.00	0.00	0.00	0.00	30.00	0.00	30.00				
100.00	100.00	101.00	101.00	0.13	0.13	0.00	30.00	0.00	30.00	29.74	0.26	115.432	
200.00	200.00	201.00	201.00	0.49	0.49	0.00	30.00	0.00	30.00	29.02	0.98	30.711	
300.00	300.00	301.00	301.00	0.85	0.85	0.00	30.00	0.00	30.00	28.31	1.69	17.712	
400.00	400.00	401.00	401.00	1.20	1.21	0.00	30.00	0.00	30.00	27.59	2.41	12.444	
500.00	500.00	501.00	501.00	1.56	1.57	0.00	30.00	0.00	30.00	26.87	3.13	9.592	
600.00	600.00	601.00	601.00	1.92	1.92	0.00	30.00	0.00	30.00	26.16	3.84	7.803	
700.00	700.00	701.00	701.00	2.28	2.28	0.00	30.00	0.00	30.00	25.44	4.56	6.577	
800.00	800.00	801.00	801.00	2.64	2.64	0.00	30.00	0.00	30.00	24.72	5.28	5.683	
900.00	900.00	901.00	901.00	3.00	3.00	0.00	30.00	0.00	30.00	24.00	6.00	5.004	
1,000.00	1,000.00	1,001.00	1,001.00	3.35	3.36	0.00	30.00	0.00	30.00	23.29	6.71	4.469	
1,000.76	1,000.76	1,001.77	1,001.77	3.36	3.36	169.00	30.00	0.00	30.00	23.28	6.72	4.466 CC, ES	
1,100.00	1,099.98	1,101.42	1,101.40	3.70	3.71	166.61	29.24	-1.63	30.98	23.58	7.40	4.187 SF	
1,200.00	1,199.84	1,201.32	1,201.24	4.03	4.04	163.28	27.77	-4.79	34.79	26.73	8.07	4.313	
1,300.00	1,299.45	1,301.05	1,300.91	4.36	4.38	162.17	26.30	-7.94	42.00	33.25	8.74	4.804	
1,400.00	1,398.70	1,400.49	1,400.29	4.70	4.73	162.57	24.83	-11.09	52.52	43.09	9.42	5.572	
1,500.00	1,497.64	1,500.33	1,499.40	5.06	5.07	163.48	23.37	-14.22	65.30	55.19	10.11	6.457	
1,600.00	1,596.57	1,601.17	1,598.51	5.42	5.42	164.11	21.91	-17.36	78.17	67.36	10.81	7.231	
1,700.00	1,695.49	1,702.00	1,697.62	5.79	5.78	164.57	20.44	-20.50	91.04	79.53	11.51	7.909	
1,800.00	1,794.42	1,802.83	1,796.72	6.16	6.13	164.91	18.98	-23.63	103.91	91.69	12.21	8.507	
1,900.00	1,893.35	1,903.67	1,895.83	6.55	6.49	165.18	17.52	-26.77	116.78	103.86	12.92	9.037	
2,000.00	1,992.27	2,004.50	1,994.93	6.93	6.85	165.40	16.05	-29.91	129.66	116.03	13.63	9.510	
2,100.00	2,091.20	2,105.34	2,094.04	7.32	7.20	165.57	14.59	-33.04	142.54	128.19	14.35	9.934	
2,200.00	2,190.13	2,206.17	2,193.14	7.71	7.56	165.72	13.13	-36.18	155.42	140.36	15.07	10.317	
2,300.00	2,289.05	2,307.00	2,292.25	8.10	7.92	165.84	11.67	-39.32	168.31	152.52	15.78	10.664	
2,400.00	2,387.98	2,407.84	2,391.36	8.50	8.28	165.95	10.20	-42.45	181.19	164.69	16.50	10.979	
2,500.00	2,486.91	2,491.33	2,490.46	8.89	8.58	166.04	8.74	-45.59	194.07	176.91	17.16	11.308	
2,600.00	2,585.83	2,597.42	2,596.45	9.29	8.96	166.16	5.56	-48.75	205.45	187.54	17.91	11.474	
2,700.00	2,684.76	2,704.96	2,703.71	9.69	9.34	166.35	-1.62	-51.46	213.13	194.50	18.63	11.438	
2,800.00	2,783.69	2,810.19	2,808.36	10.09	9.71	166.60	-12.31	-53.65	217.29	197.94	19.35	11.231	
2,900.00	2,882.61	2,910.12	2,907.68	10.49	10.07	166.85	-23.29	-55.63	220.64	200.57	20.06	10.997	
3,000.00	2,981.54	3,010.06	3,006.99	10.89	10.42	167.09	-34.28	-57.62	223.99	203.21	20.78	10.779	
3,100.00	3,080.47	3,110.00	3,106.31	11.30	10.78	167.32	-45.26	-59.60	227.34	205.84	21.50	10.574	
3,200.00	3,179.39	3,209.94	3,205.62	11.70	11.15	167.55	-56.24	-61.58	230.70	208.48	22.22	10.383	
3,300.00	3,278.32	3,309.88	3,304.94	12.11	11.51	167.77	-67.23	-63.56	234.06	211.12	22.94	10.203	
3,400.00	3,377.25	3,409.82	3,404.25	12.51	11.88	167.98	-78.21	-65.54	237.42	213.76	23.66	10.033	
3,500.00	3,476.17	3,509.76	3,503.57	12.92	12.25	168.19	-89.19	-67.52	240.79	216.40	24.39	9.874	
3,600.00	3,575.10	3,609.70	3,602.88	13.33	12.62	168.39	-100.18	-69.50	244.16	219.05	25.11	9.723	
3,700.00	3,674.03	3,709.64	3,702.19	13.73	12.99	168.58	-111.16	-71.48	247.54	221.70	25.84	9.580	
3,800.00	3,772.95	3,809.58	3,801.51	14.14	13.36	168.77	-122.14	-73.47	250.91	224.35	26.56	9.446	
3,900.00	3,871.88	3,909.52	3,900.82	14.55	13.73	168.96	-133.12	-75.45	254.29	227.00	27.29	9.318	
4,000.00	3,970.81	4,009.46	4,000.14	14.96	14.11	169.14	-144.11	-77.43	257.68	229.66	28.02	9.197	
4,100.00	4,069.73	4,109.40	4,099.45	15.37	14.48	169.32	-155.09	-79.41	261.06	232.31	28.75	9.082	
4,200.00	4,168.66	4,209.34	4,198.77	15.77	14.86	169.49	-166.07	-81.39	264.45	234.97	29.47	8.972	
4,300.00	4,267.59	4,309.28	4,298.08	16.18	15.24	169.65	-177.06	-83.37	267.84	237.63	30.20	8.868	
4,400.00	4,366.52	4,409.22	4,397.40	16.59	15.62	169.82	-188.04	-85.35	271.23	240.29	30.93	8.768	
4,500.00	4,465.44	4,509.16	4,496.71	17.00	16.00	169.98	-199.02	-87.34	274.62	242.96	31.66	8.673	
4,600.00	4,564.37	4,609.10	4,596.02	17.41	16.38	170.13	-210.01	-89.32	278.02	245.62	32.39	8.582	
4,700.00	4,663.30	4,709.04	4,695.34	17.82	16.76	170.28	-220.99	-91.30	281.41	248.29	33.13	8.496	
4,800.00	4,762.22	4,808.98	4,794.65	18.23	17.14	170.43	-231.97	-93.28	284.81	250.96	33.86	8.412	
4,900.00	4,861.15	4,908.92	4,893.97	18.64	17.52	170.58	-242.96	-95.26	288.22	253.63	34.59	8.333	
5,000.00	4,960.08	5,008.85	4,993.28	19.05	17.90	170.72	-253.94	-97.24	291.62	256.30	35.32	8.257	

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #206H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N-S (usft)	+E-W (usft)					
5,100.00	5,059.00	5,108.79	5,092.60	19.47	18.28	170.85	-264.92	-99.22	295.02	258.97	36.05	8.183	
5,200.00	5,157.93	5,208.73	5,191.91	19.88	18.66	170.99	-275.91	-101.20	298.43	261.65	36.78	8.113	
5,300.00	5,256.86	5,308.67	5,291.23	20.29	19.05	171.12	-286.89	-103.19	301.84	264.32	37.52	8.045	
5,400.00	5,355.78	5,408.61	5,390.54	20.70	19.43	171.25	-297.87	-105.17	305.25	267.00	38.25	7.980	
5,500.00	5,454.71	5,508.55	5,489.85	21.11	19.81	171.37	-308.85	-107.15	308.66	269.68	38.98	7.918	
5,600.00	5,553.64	5,608.49	5,589.17	21.52	20.20	171.50	-319.84	-109.13	312.07	272.36	39.72	7.858	
5,700.00	5,652.56	5,708.43	5,688.48	21.93	20.58	171.62	-330.82	-111.11	315.49	275.04	40.45	7.800	
5,800.00	5,751.49	5,808.37	5,787.80	22.35	20.97	171.73	-341.80	-113.09	318.90	277.72	41.18	7.743	
5,900.00	5,850.42	5,908.31	5,887.11	22.76	21.35	171.85	-352.79	-115.07	322.32	280.40	41.92	7.689	
6,000.00	5,949.34	6,008.25	5,986.43	23.17	21.74	171.96	-363.77	-117.06	325.74	283.09	42.65	7.637	
6,100.00	6,048.27	6,108.19	6,085.74	23.58	22.12	172.07	-374.75	-119.04	329.16	285.77	43.39	7.587	
6,200.00	6,147.20	6,208.13	6,185.06	23.99	22.51	172.18	-385.74	-121.02	332.58	288.46	44.12	7.538	
6,300.00	6,246.12	6,308.07	6,284.37	24.41	22.89	172.29	-396.72	-123.00	336.00	291.14	44.85	7.491	
6,400.00	6,345.05	6,408.01	6,383.68	24.82	23.28	172.39	-407.70	-124.98	339.42	293.83	45.59	7.445	
6,500.00	6,443.98	6,507.95	6,483.00	25.23	23.67	172.49	-418.69	-126.96	342.84	296.52	46.32	7.401	
6,600.00	6,542.90	6,607.89	6,582.31	25.64	24.05	172.59	-429.67	-128.94	346.27	299.21	47.06	7.358	
6,700.00	6,641.83	6,707.83	6,681.63	26.05	24.44	172.69	-440.65	-130.92	349.70	301.90	47.79	7.317	
6,800.00	6,740.76	6,807.77	6,780.94	26.47	24.83	172.79	-451.64	-132.91	353.12	304.59	48.53	7.276	
6,900.00	6,839.69	6,907.71	6,880.26	26.88	25.21	172.88	-462.62	-134.89	356.50	307.24	49.26	7.236	
7,000.00	6,938.63	7,007.70	6,979.62	27.28	25.60	172.93	-473.61	-136.87	359.93	309.94	50.00	7.193	
7,100.00	7,038.53	7,107.66	7,078.96	27.66	25.99	172.90	-484.59	-138.85	363.30	312.67	50.72	7.153	
7,200.00	7,138.38	7,207.49	7,178.16	28.01	26.38	172.79	-495.56	-140.83	366.67	315.40	51.44	7.113	
7,300.00	7,238.36	7,307.05	7,277.10	28.33	26.76	172.60	-506.51	-142.80	370.00	318.14	52.15	7.073	
7,400.00	7,337.90	7,405.69	7,375.13	28.62	27.15	172.41	-517.35	-144.76	373.72	320.94	52.85	7.033	
7,500.00	7,434.54	7,500.83	7,469.68	28.88	27.52	172.22	-527.80	-146.65	377.44	323.76	53.58	6.993	
7,600.00	7,525.32	7,589.59	7,557.88	29.10	27.86	172.03	-537.56	-148.41	381.16	326.58	54.31	6.953	
7,649.05	7,566.87	7,629.96	7,597.99	29.18	28.02	172.03	-541.99	-149.21	381.63	326.75	54.88	6.947	
7,700.00	7,607.50	7,669.26	7,637.05	29.27	28.17	172.03	-546.31	-149.99	382.10	326.92	55.40	6.941	
7,800.00	7,678.57	7,737.43	7,704.79	29.39	28.43	172.03	-553.80	-151.34	382.78	327.34	55.84	6.935	
7,900.00	7,736.38	7,792.02	7,759.03	29.46	28.65	172.03	-559.80	-152.42	383.50	327.80	56.28	6.929	
8,000.00	7,779.17	7,831.37	7,798.14	29.49	28.80	172.03	-564.13	-153.20	384.26	328.26	56.71	6.923	
8,100.00	7,805.64	7,854.29	7,820.92	29.51	28.89	172.03	-566.65	-153.65	385.00	328.72	57.15	6.917	
8,200.00	7,814.99	7,860.08	7,826.68	29.76	28.91	172.03	-567.28	-153.77	385.72	329.18	57.59	6.911	
8,300.00	7,815.00	7,856.76	7,823.37	30.54	28.90	172.03	-566.92	-153.70	386.44	329.64	58.03	6.905	
8,400.00	7,815.00	7,853.79	7,820.42	31.52	28.89	172.03	-566.59	-153.64	387.16	330.10	58.47	6.899	
8,500.00	7,815.00	7,851.20	7,817.85	32.63	28.88	172.03	-566.31	-153.59	387.88	330.56	58.91	6.893	
8,600.00	7,815.00	7,849.00	7,815.66	33.87	28.87	172.03	-566.06	-153.55	388.60	331.02	59.35	6.887	
8,700.00	7,815.00	7,847.02	7,813.70	35.22	28.86	172.03	-565.85	-153.51	389.32	331.48	59.79	6.881	
8,800.00	7,815.00	7,845.05	7,811.74	36.67	28.85	172.03	-565.63	-153.47	390.04	331.94	60.23	6.875	
8,900.00	7,815.00	7,843.08	7,809.78	38.20	28.85	172.03	-565.41	-153.43	390.76	332.40	60.67	6.869	
9,000.00	7,815.00	7,841.10	7,807.82	39.81	28.84	172.03	-565.20	-153.39	391.48	332.86	61.11	6.863	
9,100.00	7,815.00	10,514.85	9,255.00	41.48	45.45	179.99	-735.42	1,298.21	1,439.00	1,401.50	37.50	38.370	
9,200.00	7,815.00	10,614.85	9,255.00	43.21	47.05	179.99	-735.51	1,398.21	1,439.00	1,400.52	38.48	37.398	
9,300.00	7,815.00	10,714.85	9,255.00	45.00	48.71	179.99	-735.59	1,498.21	1,439.00	1,399.51	39.49	36.439	
9,400.00	7,815.00	10,814.85	9,255.00	46.82	50.41	179.99	-735.68	1,598.21	1,439.00	1,398.46	40.54	35.497	
9,500.00	7,815.00	10,914.85	9,255.00	48.69	52.17	179.99	-735.77	1,698.21	1,439.00	1,397.38	41.62	34.576	
9,600.00	7,815.00	11,014.85	9,255.00	50.60	53.96	179.99	-735.85	1,798.21	1,439.00	1,396.27	42.73	33.677	
9,700.00	7,815.00	11,114.85	9,255.00	52.53	55.80	179.99	-735.94	1,898.21	1,439.00	1,395.13	43.87	32.803	
9,800.00	7,815.00	11,214.85	9,255.00	54.50	57.66	179.99	-736.02	1,998.21	1,439.00	1,393.97	45.03	31.955	
9,900.00	7,815.00	11,314.85	9,255.00	56.49	59.56	179.99	-736.11	2,098.21	1,439.00	1,392.78	46.22	31.134	
10,000.00	7,815.00	11,414.85	9,255.00	58.51	61.49	179.99	-736.19	2,198.21	1,439.00	1,391.57	47.43	30.340	
10,100.00	7,815.00	11,514.85	9,255.00	60.54	63.44	179.99	-736.28	2,298.21	1,439.00	1,390.34	48.66	29.573	

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #206H - OH - Prelim A													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,200.00	7,815.00	11,614.85	9,255.00	62.60	65.41	179.99	-736.36	2,398.21	1,439.00	1,389.09	49.91	28.833		
10,300.00	7,815.00	11,714.85	9,255.00	64.67	67.41	179.99	-736.45	2,498.21	1,439.00	1,387.82	51.18	28.119		
10,400.00	7,815.00	11,814.85	9,255.00	66.76	69.43	179.99	-736.53	2,598.21	1,439.00	1,386.54	52.46	27.431		
10,500.00	7,815.00	11,914.85	9,255.00	68.86	71.46	179.99	-736.62	2,698.21	1,439.00	1,385.24	53.76	26.769		
10,600.00	7,815.00	12,014.85	9,255.00	70.97	73.51	179.99	-736.70	2,798.21	1,439.00	1,383.93	55.07	26.131		
10,700.00	7,815.00	12,114.85	9,255.00	73.10	75.57	179.99	-736.79	2,898.21	1,439.00	1,382.61	56.39	25.517		
10,800.00	7,815.00	12,214.85	9,255.00	75.24	77.65	179.99	-736.87	2,998.21	1,439.00	1,381.27	57.73	24.926		
10,900.00	7,815.00	12,314.85	9,255.00	77.38	79.74	179.99	-736.96	3,098.21	1,439.00	1,379.92	59.08	24.357		
11,000.00	7,815.00	12,414.85	9,255.00	79.54	81.84	179.99	-737.04	3,198.21	1,439.00	1,378.56	60.44	23.810		
11,100.00	7,815.00	12,514.85	9,255.00	81.70	83.96	179.99	-737.13	3,298.21	1,439.00	1,377.19	61.81	23.282		
11,200.00	7,815.00	12,614.85	9,255.00	83.87	86.08	179.99	-737.21	3,398.21	1,439.00	1,375.82	63.18	22.774		
11,300.00	7,815.00	12,714.85	9,255.00	86.05	88.21	179.99	-737.30	3,498.21	1,439.00	1,374.43	64.57	22.285		
11,400.00	7,815.00	12,814.85	9,255.00	88.24	90.35	179.99	-737.38	3,598.21	1,439.00	1,373.03	65.97	21.814		
11,500.00	7,815.00	12,914.85	9,255.00	90.43	92.50	179.99	-737.47	3,698.21	1,439.00	1,371.63	67.37	21.360		
11,600.00	7,815.00	13,014.85	9,255.00	92.63	94.66	179.99	-737.55	3,798.21	1,439.00	1,370.22	68.78	20.922		
11,700.00	7,815.00	13,114.85	9,255.00	94.83	96.82	179.99	-737.64	3,898.21	1,439.00	1,368.80	70.20	20.500		
11,800.00	7,815.00	13,214.85	9,255.00	97.04	98.99	179.99	-737.72	3,998.21	1,439.00	1,367.38	71.62	20.092		
11,900.00	7,815.00	13,314.85	9,255.00	99.25	101.17	179.99	-737.81	4,098.21	1,439.00	1,365.95	73.05	19.699		
12,000.00	7,815.00	13,414.85	9,255.00	101.47	103.35	179.99	-737.89	4,198.21	1,439.00	1,364.52	74.48	19.320		
12,100.00	7,815.00	13,514.85	9,255.00	103.69	105.54	179.99	-737.98	4,298.21	1,439.00	1,363.08	75.92	18.954		
12,200.00	7,815.00	13,614.85	9,255.00	105.91	107.73	179.99	-738.06	4,398.21	1,439.00	1,361.63	77.37	18.600		
12,300.00	7,815.00	13,714.85	9,255.00	108.14	109.93	179.99	-738.15	4,498.21	1,439.00	1,360.18	78.82	18.258		
12,400.00	7,815.00	13,814.85	9,255.00	110.37	112.13	179.99	-738.23	4,598.21	1,439.00	1,358.73	80.27	17.927		
12,500.00	7,815.00	13,914.85	9,255.00	112.60	114.34	179.99	-738.32	4,698.21	1,439.00	1,357.27	81.73	17.607		
12,600.00	7,815.00	14,014.85	9,255.00	114.84	116.55	179.99	-738.41	4,798.21	1,439.00	1,355.81	83.19	17.297		
12,700.00	7,815.00	14,114.85	9,255.00	117.08	118.76	179.99	-738.49	4,898.21	1,439.00	1,354.34	84.66	16.998		
12,800.00	7,815.00	14,214.85	9,255.00	119.32	120.98	179.99	-738.58	4,998.21	1,439.00	1,352.87	86.13	16.708		
12,900.00	7,815.00	14,314.85	9,255.00	121.57	123.20	179.99	-738.66	5,098.21	1,439.00	1,351.40	87.60	16.427		
13,000.00	7,815.00	14,414.85	9,255.00	123.81	125.43	179.99	-738.75	5,198.21	1,439.00	1,349.92	89.08	16.154		
13,100.00	7,815.00	14,514.85	9,255.00	126.06	127.65	179.99	-738.83	5,298.21	1,439.00	1,348.44	90.56	15.890		
13,200.00	7,815.00	14,614.85	9,255.00	128.32	129.88	179.99	-738.92	5,398.21	1,439.00	1,346.96	92.04	15.634		
13,300.00	7,815.00	14,714.85	9,255.00	130.57	132.11	179.99	-739.00	5,498.21	1,439.00	1,345.47	93.53	15.386		
13,400.00	7,815.00	14,814.85	9,255.00	132.83	134.35	179.99	-739.09	5,598.21	1,439.00	1,343.99	95.01	15.145		
13,500.00	7,815.00	14,914.85	9,255.00	135.08	136.59	179.99	-739.17	5,698.21	1,439.00	1,342.50	96.50	14.911		
13,600.00	7,815.00	15,014.85	9,255.00	137.34	138.83	179.99	-739.26	5,798.21	1,439.00	1,341.00	98.00	14.684		
13,700.00	7,815.00	15,114.85	9,255.00	139.60	141.07	179.99	-739.34	5,898.21	1,439.00	1,339.51	99.49	14.463		
13,800.00	7,815.00	15,214.85	9,255.00	141.86	143.31	179.99	-739.43	5,998.21	1,439.00	1,338.01	100.99	14.249		
13,900.00	7,815.00	15,314.85	9,255.00	144.13	145.56	179.99	-739.51	6,098.21	1,439.00	1,336.51	102.49	14.040		
14,000.00	7,815.00	15,414.85	9,255.00	146.39	147.81	179.99	-739.60	6,198.21	1,439.00	1,335.01	103.99	13.837		
14,100.00	7,815.00	15,514.85	9,255.00	148.66	150.06	179.99	-739.68	6,298.21	1,439.00	1,333.50	105.50	13.640		
14,200.00	7,815.00	15,614.85	9,255.00	150.93	152.31	179.99	-739.77	6,398.21	1,439.00	1,332.00	107.00	13.448		
14,300.00	7,815.00	15,714.85	9,255.00	153.20	154.56	180.00	-739.85	6,498.21	1,439.00	1,330.49	108.51	13.261		
14,400.00	7,815.00	15,814.85	9,255.00	155.47	156.82	180.00	-739.94	6,598.21	1,439.00	1,328.98	110.02	13.079		
14,500.00	7,815.00	15,914.85	9,255.00	157.74	159.07	180.00	-740.02	6,698.21	1,439.00	1,327.47	111.53	12.902		
14,600.00	7,815.00	16,014.85	9,255.00	160.01	161.33	180.00	-740.11	6,798.21	1,439.00	1,325.96	113.04	12.730		
14,700.00	7,815.00	16,114.85	9,255.00	162.28	163.59	180.00	-740.19	6,898.21	1,439.00	1,324.44	114.56	12.561		
14,800.00	7,815.00	16,214.85	9,255.00	164.56	165.85	180.00	-740.28	6,998.21	1,439.00	1,322.93	116.07	12.397		
14,900.00	7,815.00	16,314.85	9,255.00	166.83	168.11	180.00	-740.36	7,098.21	1,439.00	1,321.41	117.59	12.237		
15,000.00	7,815.00	16,414.85	9,255.00	169.11	170.38	180.00	-740.45	7,198.21	1,439.00	1,319.89	119.11	12.081		
15,100.00	7,815.00	16,514.85	9,255.00	171.39	172.64	180.00	-740.53	7,298.21	1,439.00	1,318.37	120.63	11.929		
15,200.00	7,815.00	16,614.85	9,255.00	173.66	174.91	180.00	-740.62	7,398.21	1,439.00	1,316.85	122.15	11.781		
15,300.00	7,815.00	16,714.85	9,255.00	175.94	177.17	180.00	-740.70	7,498.21	1,439.00	1,315.33	123.67	11.636		

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #206H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,400.00	7,815.00	16,814.85	9,255.00	178.22	179.44	180.00	-740.79	7,598.21	1,439.00	1,313.80	125.20	11.494	
15,500.00	7,815.00	16,914.85	9,255.00	180.50	181.71	180.00	-740.87	7,698.21	1,439.00	1,312.28	126.72	11.356	
15,600.00	7,815.00	17,014.85	9,255.00	182.78	183.98	180.00	-740.96	7,798.21	1,439.00	1,310.75	128.25	11.221	
15,700.00	7,815.00	17,114.85	9,255.00	185.06	186.25	180.00	-741.04	7,898.21	1,439.00	1,309.23	129.77	11.089	
15,800.00	7,815.00	17,214.85	9,255.00	187.35	188.52	180.00	-741.13	7,998.21	1,439.00	1,307.70	131.30	10.960	
15,900.00	7,815.00	17,314.85	9,255.00	189.63	190.80	180.00	-741.22	8,098.21	1,439.00	1,306.17	132.83	10.834	
16,000.00	7,815.00	17,414.85	9,255.00	191.91	193.07	180.00	-741.30	8,198.21	1,439.00	1,304.64	134.36	10.710	
16,100.00	7,815.00	17,514.85	9,255.00	194.20	195.34	180.00	-741.39	8,298.21	1,439.00	1,303.11	135.89	10.590	
16,200.00	7,815.00	17,614.85	9,255.00	196.48	197.62	180.00	-741.47	8,398.21	1,439.00	1,301.58	137.42	10.472	
16,300.00	7,815.00	17,714.85	9,255.00	198.77	199.90	180.00	-741.56	8,498.21	1,439.00	1,300.05	138.95	10.356	
16,400.00	7,815.00	17,814.85	9,255.00	201.05	202.17	180.00	-741.64	8,598.21	1,439.00	1,298.52	140.48	10.243	
16,500.00	7,815.00	17,914.85	9,255.00	203.34	204.45	180.00	-741.73	8,698.21	1,439.00	1,296.98	142.02	10.132	
16,600.00	7,815.00	18,014.85	9,255.00	205.63	206.73	180.00	-741.81	8,798.21	1,439.00	1,295.45	143.55	10.024	
16,700.00	7,815.00	18,114.85	9,255.00	207.91	209.01	180.00	-741.90	8,898.21	1,439.00	1,293.91	145.09	9.918	
16,800.00	7,815.00	18,214.85	9,255.00	210.20	211.29	180.00	-741.98	8,998.21	1,439.00	1,292.38	146.62	9.814	
16,900.00	7,815.00	18,314.85	9,255.00	212.49	213.57	180.00	-742.07	9,098.21	1,439.00	1,290.84	148.16	9.712	
17,000.00	7,815.00	18,414.85	9,255.00	214.78	215.85	180.00	-742.15	9,198.21	1,439.00	1,289.30	149.70	9.613	
17,100.00	7,815.00	18,514.85	9,255.00	217.07	218.13	180.00	-742.24	9,298.21	1,439.00	1,287.76	151.24	9.515	
17,200.00	7,815.00	18,614.85	9,255.00	219.36	220.41	180.00	-742.32	9,398.21	1,439.00	1,286.22	152.78	9.419	
17,300.00	7,815.00	18,714.85	9,255.00	221.65	222.69	180.00	-742.41	9,498.21	1,439.00	1,284.69	154.31	9.325	
17,400.00	7,815.00	18,814.85	9,255.00	223.94	224.97	180.00	-742.49	9,598.21	1,439.00	1,283.15	155.85	9.233	
17,500.00	7,815.00	18,914.85	9,255.00	226.23	227.26	180.00	-742.58	9,698.21	1,439.00	1,281.60	157.40	9.143	
17,600.00	7,815.00	19,014.85	9,255.00	228.52	229.54	180.00	-742.66	9,798.21	1,439.00	1,280.06	158.94	9.054	
17,700.00	7,815.00	19,114.85	9,255.00	230.81	231.83	180.00	-742.75	9,898.21	1,439.00	1,278.52	160.48	8.967	
17,800.00	7,815.00	19,214.85	9,255.00	233.10	234.11	180.00	-742.83	9,998.21	1,439.00	1,276.98	162.02	8.882	
17,900.00	7,815.00	19,314.85	9,255.00	235.39	236.40	180.00	-742.92	10,098.21	1,439.00	1,275.44	163.56	8.798	
17,995.79	7,815.00	19,410.64	9,255.00	237.59	238.59	-180.00	-743.00	10,194.00	1,439.00	1,273.96	165.04	8.719	

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design											Leatherneck 3029 Fed Com - #242H - OH - Prelim A		Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	1.00	-1.00	0.00	0.00	12.09	140.00	30.00	143.18					
100.00	100.00	101.00	99.00	0.13	0.13	12.09	140.00	30.00	143.18	142.92	0.26	550.914		
200.00	200.00	201.00	199.00	0.49	0.49	12.09	140.00	30.00	143.18	142.20	0.98	146.574		
300.00	300.00	301.00	299.00	0.85	0.85	12.09	140.00	30.00	143.18	141.48	1.69	84.532		
400.00	400.00	401.00	399.00	1.20	1.21	12.09	140.00	30.00	143.18	140.77	2.41	59.392		
500.00	500.00	501.00	499.00	1.56	1.57	12.09	140.00	30.00	143.18	140.05	3.13	45.778		
600.00	600.00	601.00	599.00	1.92	1.92	12.09	140.00	30.00	143.18	139.33	3.84	37.241		
700.00	700.00	701.00	699.00	2.28	2.28	12.09	140.00	30.00	143.18	138.62	4.56	31.388		
800.00	800.00	801.00	799.00	2.64	2.64	12.09	140.00	30.00	143.18	137.90	5.28	27.125		
900.00	900.00	901.00	899.00	3.00	3.00	12.09	140.00	30.00	143.18	137.18	6.00	23.881		
1,000.00	1,000.00	1,001.00	999.00	3.35	3.36	12.09	140.00	30.00	143.18	136.47	6.71	21.330 CC, ES		
1,100.00	1,099.98	1,101.02	1,098.98	3.70	3.72	-178.91	140.00	30.00	144.92	137.51	7.41	19.552		
1,200.00	1,199.84	1,201.16	1,198.84	4.03	4.08	-178.95	140.00	30.00	150.16	142.05	8.10	18.536		
1,300.00	1,299.45	1,301.55	1,298.45	4.36	4.44	-179.00	140.00	30.00	158.87	150.07	8.80	18.063		
1,400.00	1,398.70	1,402.30	1,397.70	4.70	4.80	-179.07	140.00	30.00	171.05	161.56	9.50	18.014		
1,500.00	1,497.64	1,496.64	1,496.64	5.06	5.13	-179.14	140.00	30.00	185.59	175.42	10.18	18.240		
1,600.00	1,596.57	1,605.90	1,594.08	5.42	5.52	-178.77	140.00	31.54	200.53	189.63	10.90	18.400		
1,700.00	1,695.49	1,707.13	1,692.79	5.79	5.86	-177.95	140.00	34.99	215.89	204.30	11.59	18.626		
1,800.00	1,794.42	1,808.36	1,791.50	6.16	6.21	-177.24	140.00	38.43	231.29	219.00	12.29	18.822		
1,900.00	1,893.35	1,909.59	1,890.21	6.55	6.57	-176.61	140.00	41.88	246.72	233.73	12.99	18.993		
2,000.00	1,992.27	1,989.18	1,988.92	6.93	6.84	-176.06	140.00	45.33	262.17	248.55	13.62	19.250		
2,100.00	2,091.20	2,087.95	2,087.63	7.32	7.19	-175.57	140.00	48.77	277.64	263.33	14.32	19.391		
2,200.00	2,190.13	2,186.72	2,186.34	7.71	7.54	-175.14	140.00	52.22	293.14	278.12	15.02	19.516		
2,300.00	2,289.05	2,285.49	2,285.05	8.10	7.88	-174.74	140.00	55.67	308.64	292.92	15.72	19.628		
2,400.00	2,387.98	2,384.25	2,383.76	8.50	8.23	-174.39	140.00	59.12	324.16	307.73	16.43	19.728		
2,500.00	2,486.91	2,483.02	2,482.47	8.89	8.58	-174.06	140.00	62.56	339.69	322.55	17.14	19.819		
2,600.00	2,585.83	2,581.79	2,581.17	9.29	8.93	-173.77	140.00	66.01	355.23	337.39	17.85	19.902		
2,700.00	2,684.76	2,680.56	2,679.88	9.69	9.28	-173.50	140.00	69.46	370.78	352.22	18.56	19.977		
2,800.00	2,783.69	2,779.33	2,778.59	10.09	9.63	-173.25	140.00	72.90	386.34	367.07	19.27	20.046		
2,900.00	2,882.61	2,878.10	2,877.30	10.49	9.98	-173.02	140.00	76.35	401.90	381.92	19.99	20.109		
3,000.00	2,981.54	2,976.87	2,976.01	10.89	10.33	-172.81	140.00	79.80	417.47	396.77	20.70	20.167		
3,100.00	3,080.47	3,085.15	3,084.25	11.30	10.71	-172.70	139.38	82.50	432.22	410.77	21.46	20.142		
3,200.00	3,179.39	3,197.21	3,196.27	11.70	11.09	-172.96	136.62	81.67	444.18	421.97	22.21	20.000		
3,300.00	3,278.32	3,309.78	3,308.63	12.11	11.46	-173.59	131.64	77.01	453.25	430.31	22.94	19.758		
3,400.00	3,377.25	3,412.21	3,410.66	12.51	11.80	-174.36	125.72	70.38	460.39	436.75	23.64	19.473		
3,500.00	3,476.17	3,511.77	3,509.84	12.92	12.13	-175.11	119.92	63.84	467.53	443.19	24.34	19.208		
3,600.00	3,575.10	3,611.34	3,609.02	13.33	12.46	-175.82	114.11	57.30	474.75	449.71	25.04	18.959		
3,700.00	3,674.03	3,710.90	3,708.20	13.73	12.80	-176.52	108.31	50.76	482.04	456.30	25.74	18.725		
3,800.00	3,772.95	3,810.46	3,807.38	14.14	13.13	-177.20	102.50	44.22	489.41	462.96	26.45	18.504		
3,900.00	3,871.88	3,910.03	3,906.56	14.55	13.47	-177.86	96.70	37.68	496.83	469.68	27.15	18.296		
4,000.00	3,970.81	4,009.59	4,005.74	14.96	13.81	-178.49	90.89	31.14	504.32	476.46	27.86	18.100		
4,100.00	4,069.73	4,109.15	4,104.92	15.37	14.16	-179.11	85.09	24.60	511.88	483.30	28.57	17.915		
4,200.00	4,168.66	4,208.72	4,204.09	15.77	14.50	-179.71	79.28	18.06	519.48	490.20	29.28	17.739		
4,300.00	4,267.59	4,308.28	4,303.27	16.18	14.85	-179.70	73.48	11.52	527.15	497.15	30.00	17.573		
4,400.00	4,366.52	4,407.85	4,402.45	16.59	15.20	-179.14	67.67	4.98	534.87	504.15	30.71	17.415		
4,500.00	4,465.44	4,507.41	4,501.63	17.00	15.55	-178.59	61.86	-1.56	542.63	511.20	31.43	17.265		
4,600.00	4,564.37	4,606.97	4,600.81	17.41	15.91	-178.05	56.06	-8.10	550.45	518.30	32.15	17.123		
4,700.00	4,663.30	4,706.54	4,699.99	17.82	16.26	-177.53	50.25	-14.64	558.31	525.45	32.87	16.987		
4,800.00	4,762.22	4,806.10	4,799.17	18.23	16.62	-177.03	44.45	-21.18	566.22	532.63	33.59	16.858		
4,900.00	4,861.15	4,905.67	4,898.35	18.64	16.97	-176.54	38.64	-27.72	574.17	539.86	34.31	16.735		
5,000.00	4,960.08	5,005.23	4,997.53	19.05	17.33	-176.06	32.84	-34.26	582.16	547.13	35.03	16.618		
5,100.00	5,059.00	5,104.79	5,096.71	19.47	17.69	-175.59	27.03	-40.80	590.19	554.44	35.76	16.506		

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #242H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,200.00	5,157.93	5,204.36	5,195.89	19.88	18.05	175.14	21.23	-47.34	598.26	561.78	36.48	16.399	
5,300.00	5,256.86	5,303.92	5,295.06	20.29	18.40	174.70	15.42	-53.88	606.36	569.16	37.21	16.297	
5,400.00	5,355.78	5,403.48	5,394.24	20.70	18.77	174.27	9.61	-60.42	614.50	576.57	37.93	16.199	
5,500.00	5,454.71	5,503.05	5,493.42	21.11	19.13	173.85	3.81	-66.97	622.68	584.01	38.66	16.105	
5,600.00	5,553.64	5,602.61	5,592.60	21.52	19.49	173.45	-2.00	-73.51	630.88	591.49	39.39	16.015	
5,700.00	5,652.56	5,702.18	5,691.78	21.93	19.85	173.05	-7.80	-80.05	639.12	598.99	40.12	15.929	
5,800.00	5,751.49	5,801.74	5,790.96	22.35	20.21	172.66	-13.61	-86.59	647.38	606.53	40.85	15.846	
5,900.00	5,850.42	5,901.30	5,890.14	22.76	20.58	172.29	-19.41	-93.13	655.67	614.09	41.59	15.767	
6,000.00	5,949.34	6,000.87	5,989.32	23.17	20.94	171.92	-25.22	-99.67	664.00	621.68	42.32	15.691	
6,100.00	6,048.27	6,100.43	6,088.50	23.58	21.30	171.56	-31.02	-106.21	672.34	629.29	43.05	15.617	
6,200.00	6,147.20	6,200.01	6,187.68	23.99	21.67	171.21	-36.83	-112.75	680.72	636.93	43.79	15.546	
6,300.00	6,246.12	6,300.44	6,286.85	24.41	22.04	170.87	-42.63	-119.29	689.11	644.59	44.52	15.477	
6,400.00	6,345.05	6,400.88	6,386.03	24.82	22.41	170.54	-48.44	-125.83	697.54	652.27	45.26	15.411	
6,500.00	6,443.98	6,501.31	6,485.21	25.23	22.78	170.21	-54.25	-132.37	705.98	659.98	46.00	15.346	
6,600.00	6,542.90	6,601.75	6,584.39	25.64	23.15	169.89	-60.05	-138.91	714.45	667.70	46.74	15.285	
6,700.00	6,641.83	6,702.19	6,683.57	26.05	23.52	169.59	-65.86	-145.45	722.93	675.45	47.48	15.225	
6,800.00	6,740.76	6,792.34	6,777.75	26.47	23.85	169.31	-71.27	-151.54	731.56	683.38	48.18	15.183	
6,900.00	6,839.69	6,877.22	6,862.46	26.88	24.16	169.18	-74.81	-155.53	741.71	692.87	48.83	15.189	
7,000.00	6,938.93	6,961.99	6,947.17	27.28	24.46	169.21	-76.68	-157.64	751.60	702.14	49.46	15.197	
7,100.00	7,038.53	7,052.35	7,037.53	27.66	24.77	169.33	-77.00	-158.00	759.91	709.81	50.10	15.168	
7,200.00	7,138.38	7,152.20	7,137.38	28.01	25.11	169.42	-77.00	-158.00	765.18	714.39	50.79	15.064	
7,300.00	7,238.36	7,252.18	7,237.36	28.33	25.45	169.45	-77.00	-158.00	767.02	715.55	51.47	14.902	
7,400.00	7,337.90	7,351.72	7,336.90	28.62	25.79	-82.16	-77.00	-158.00	765.86	713.73	52.14	14.689	
7,500.00	7,434.54	7,448.36	7,433.54	28.88	26.12	-84.28	-77.00	-158.00	762.78	709.99	52.79	14.448	
7,600.00	7,525.32	7,539.14	7,524.32	29.10	26.43	-87.44	-77.00	-158.00	759.51	706.08	53.43	14.215	
7,671.41	7,585.04	7,601.14	7,584.04	29.22	26.65	-90.00	-77.00	-158.00	758.50	704.62	53.89	14.076	
7,700.00	7,607.50	7,621.32	7,606.50	29.27	26.71	-91.03	-77.00	-158.00	758.71	704.65	54.05	14.036	
7,800.00	7,678.57	7,707.61	7,677.57	29.39	27.01	-94.29	-77.00	-158.00	763.57	708.85	54.73	13.953	
7,900.00	7,736.38	7,750.20	7,735.38	29.46	27.16	-96.44	-77.00	-158.00	777.16	721.87	55.29	14.056	
8,000.00	7,779.17	7,807.01	7,778.17	29.49	27.35	-96.79	-77.00	-158.00	801.67	745.74	55.93	14.332	
8,100.00	7,805.64	7,819.46	7,804.64	29.51	27.39	-94.83	-77.00	-158.00	837.82	781.40	56.42	14.851	
8,200.00	7,814.99	7,828.81	7,813.99	29.76	27.43	-90.22	-77.00	-158.00	884.64	827.81	56.83	15.566	
8,300.00	7,815.00	7,828.82	7,814.00	30.54	27.43	-90.00	-77.00	-158.00	941.32	884.17	57.15	16.470	
8,400.00	7,815.00	7,828.82	7,814.00	31.52	27.43	-90.00	-77.00	-158.00	1,007.34	949.91	57.43	17.541	
8,500.00	7,815.00	7,828.82	7,814.00	32.63	27.43	-90.00	-77.00	-158.00	1,080.93	1,023.27	57.66	18.748	
8,600.00	7,815.00	7,828.82	7,814.00	33.87	27.43	-90.00	-77.00	-158.00	1,160.57	1,102.72	57.84	20.065	
8,700.00	7,815.00	7,828.82	7,814.00	35.22	27.43	-90.00	-77.00	-158.00	1,244.28	1,186.29	57.99	21.457	
8,800.00	7,815.00	7,828.82	7,814.00	36.67	27.43	-90.00	-77.00	-158.00	1,330.26	1,272.15	58.11	22.890	
8,900.00	7,815.00	7,828.82	7,814.00	38.20	27.43	-90.00	-77.00	-158.00	1,418.08	1,359.86	58.22	24.357	
9,000.00	7,815.00	7,828.82	7,814.00	39.81	27.43	-90.00	-77.00	-158.00	1,507.42	1,449.11	58.31	25.850	
9,100.00	7,815.00	7,828.82	7,814.00	41.48	27.43	-90.00	-77.00	-158.00	1,598.02	1,539.63	58.39	27.366	
9,200.00	7,815.00	7,828.82	7,814.00	43.21	27.43	-90.00	-77.00	-158.00	1,689.68	1,631.22	58.47	28.901	
9,300.00	7,815.00	7,828.82	7,814.00	45.00	27.43	-90.00	-77.00	-158.00	1,782.24	1,723.71	58.53	30.451	
9,400.00	7,815.00	7,828.82	7,814.00	46.82	27.43	-90.00	-77.00	-158.00	1,875.57	1,816.98	58.59	32.014	
9,500.00	7,815.00	7,828.82	7,814.00	48.69	27.43	-90.00	-77.00	-158.00	1,969.55	1,910.91	58.64	33.588	
9,600.00	7,815.00	7,828.82	7,814.00	50.60	27.43	-90.00	-77.00	-158.00	2,064.09	2,005.40	58.69	35.171	
9,700.00	7,815.00	7,828.82	7,814.00	52.53	27.43	-90.00	-77.00	-158.00	2,159.13	2,100.39	58.73	36.762	
9,800.00	7,815.00	7,828.82	7,814.00	54.50	27.43	-90.00	-77.00	-158.00	2,254.59	2,195.82	58.77	38.360	
9,900.00	7,815.00	12,001.25	9,970.72	56.49	60.35	-163.04	-78.09	2,101.39	2,254.79	2,196.03	58.76	38.372	
10,000.00	7,815.00	12,101.25	9,970.59	58.51	62.25	-163.04	-78.14	2,201.39	2,254.68	2,194.34	60.34	37.368	
10,100.00	7,815.00	12,201.25	9,970.46	60.54	64.18	-163.04	-78.19	2,301.39	2,254.56	2,192.63	61.94	36.400	
10,200.00	7,815.00	12,301.25	9,970.33	62.60	66.13	-163.03	-78.24	2,401.39	2,254.45	2,190.89	63.56	35.468	

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

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Offset Design Leatherneck 3029 Fed Com - #242H - OH - Prelim A														Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+HDGM														Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
10,300.00	7,815.00	12,401.25	9,970.19	64.67	68.10	-163.03	-78.28	2,501.39	2,254.33	2,189.12	65.21	34.571			
10,400.00	7,815.00	12,501.25	9,970.06	66.76	70.09	-163.03	-78.33	2,601.39	2,254.22	2,187.34	66.87	33.708			
10,500.00	7,815.00	12,601.25	9,969.93	68.86	72.11	-163.03	-78.38	2,701.39	2,254.10	2,185.54	68.56	32.878			
10,600.00	7,815.00	12,701.25	9,969.80	70.97	74.14	-163.03	-78.43	2,801.38	2,253.99	2,183.73	70.26	32.080			
10,700.00	7,815.00	12,801.25	9,969.66	73.10	76.18	-163.02	-78.48	2,901.38	2,253.87	2,181.89	71.98	31.313			
10,800.00	7,815.00	12,901.25	9,969.53	75.24	78.24	-163.02	-78.53	3,001.38	2,253.76	2,180.05	73.71	30.575			
10,900.00	7,815.00	13,001.25	9,969.40	77.38	80.31	-163.02	-78.57	3,101.38	2,253.64	2,178.18	75.46	29.866			
11,000.00	7,815.00	13,101.25	9,969.27	79.54	82.40	-163.02	-78.62	3,201.38	2,253.53	2,176.31	77.22	29.183			
11,100.00	7,815.00	13,201.25	9,969.13	81.70	84.50	-163.02	-78.67	3,301.38	2,253.41	2,174.42	78.99	28.527			
11,200.00	7,815.00	13,301.25	9,969.00	83.87	86.61	-163.01	-78.72	3,401.38	2,253.30	2,172.52	80.78	27.896			
11,300.00	7,815.00	13,401.25	9,968.87	86.05	88.72	-163.01	-78.77	3,501.38	2,253.18	2,170.61	82.57	27.288			
11,400.00	7,815.00	13,501.25	9,968.74	88.24	90.85	-163.01	-78.82	3,601.38	2,253.07	2,168.69	84.37	26.703			
11,500.00	7,815.00	13,601.25	9,968.60	90.43	92.99	-163.01	-78.86	3,701.38	2,252.95	2,166.76	86.19	26.140			
11,600.00	7,815.00	13,701.25	9,968.47	92.63	95.13	-163.01	-78.91	3,801.38	2,252.84	2,164.83	88.01	25.597			
11,700.00	7,815.00	13,801.25	9,968.34	94.83	97.28	-163.00	-78.96	3,901.38	2,252.72	2,162.88	89.84	25.074			
11,800.00	7,815.00	13,901.25	9,968.21	97.04	99.44	-163.00	-79.01	4,001.38	2,252.61	2,160.93	91.68	24.570			
11,900.00	7,815.00	14,001.25	9,968.07	99.25	101.61	-163.00	-79.06	4,101.38	2,252.49	2,158.96	93.53	24.083			
12,000.00	7,815.00	14,101.25	9,967.94	101.47	103.78	-163.00	-79.11	4,201.38	2,252.38	2,157.00	95.38	23.614			
12,100.00	7,815.00	14,201.25	9,967.81	103.69	105.96	-163.00	-79.15	4,301.38	2,252.26	2,155.02	97.24	23.161			
12,200.00	7,815.00	14,301.25	9,967.67	105.91	108.14	-162.99	-79.20	4,401.38	2,252.15	2,153.04	99.11	22.724			
12,300.00	7,815.00	14,401.25	9,967.54	108.14	110.33	-162.99	-79.25	4,501.38	2,252.03	2,151.05	100.98	22.302			
12,400.00	7,815.00	14,501.25	9,967.41	110.37	112.52	-162.99	-79.30	4,601.38	2,251.92	2,149.06	102.86	21.893			
12,500.00	7,815.00	14,601.25	9,967.28	112.60	114.72	-162.99	-79.35	4,701.38	2,251.80	2,147.06	104.74	21.499			
12,600.00	7,815.00	14,701.25	9,967.14	114.84	116.92	-162.99	-79.40	4,801.38	2,251.69	2,145.06	106.63	21.117			
12,700.00	7,815.00	14,801.25	9,967.01	117.08	119.12	-162.98	-79.44	4,901.38	2,251.57	2,143.05	108.52	20.747			
12,800.00	7,815.00	14,901.25	9,966.88	119.32	121.33	-162.98	-79.49	5,001.38	2,251.46	2,141.04	110.42	20.390			
12,900.00	7,815.00	15,001.25	9,966.75	121.57	123.55	-162.98	-79.54	5,101.38	2,251.34	2,139.02	112.32	20.043			
13,000.00	7,815.00	15,101.25	9,966.61	123.81	125.76	-162.98	-79.59	5,201.38	2,251.23	2,137.00	114.23	19.708			
13,100.00	7,815.00	15,201.25	9,966.48	126.06	127.98	-162.98	-79.64	5,301.38	2,251.11	2,134.97	116.14	19.383			
13,200.00	7,815.00	15,301.25	9,966.35	128.32	130.21	-162.97	-79.69	5,401.38	2,251.00	2,132.95	118.05	19.068			
13,300.00	7,815.00	15,401.25	9,966.22	130.57	132.43	-162.97	-79.73	5,501.38	2,250.88	2,130.91	119.97	18.762			
13,400.00	7,815.00	15,501.25	9,966.08	132.83	134.66	-162.97	-79.78	5,601.38	2,250.77	2,128.88	121.89	18.465			
13,500.00	7,815.00	15,601.25	9,965.95	135.08	136.89	-162.97	-79.83	5,701.38	2,250.65	2,126.84	123.82	18.177			
13,600.00	7,815.00	15,701.25	9,965.82	137.34	139.13	-162.97	-79.88	5,801.38	2,250.54	2,124.80	125.74	17.898			
13,700.00	7,815.00	15,801.25	9,965.69	139.60	141.36	-162.97	-79.93	5,901.38	2,250.42	2,122.75	127.67	17.626			
13,800.00	7,815.00	15,901.25	9,965.55	141.86	143.60	-162.96	-79.98	6,001.38	2,250.31	2,120.70	129.61	17.363			
13,900.00	7,815.00	16,001.25	9,965.42	144.13	145.84	-162.96	-80.02	6,101.38	2,250.19	2,118.65	131.54	17.106			
14,000.00	7,815.00	16,101.25	9,965.29	146.39	148.08	-162.96	-80.07	6,201.38	2,250.08	2,116.60	133.48	16.857			
14,100.00	7,815.00	16,201.25	9,965.16	148.66	150.33	-162.96	-80.12	6,301.38	2,249.96	2,114.54	135.42	16.615			
14,200.00	7,815.00	16,301.25	9,965.02	150.93	152.57	-162.96	-80.17	6,401.38	2,249.85	2,112.48	137.37	16.379			
14,300.00	7,815.00	16,401.25	9,964.89	153.20	154.82	-162.95	-80.22	6,501.38	2,249.73	2,110.42	139.31	16.149			
14,400.00	7,815.00	16,501.25	9,964.76	155.47	157.07	-162.95	-80.27	6,601.38	2,249.62	2,108.36	141.26	15.925			
14,500.00	7,815.00	16,601.25	9,964.63	157.74	159.32	-162.95	-80.31	6,701.38	2,249.50	2,106.29	143.21	15.708			
14,600.00	7,815.00	16,701.25	9,964.49	160.01	161.58	-162.95	-80.36	6,801.38	2,249.39	2,104.23	145.16	15.496			
14,700.00	7,815.00	16,801.25	9,964.36	162.28	163.83	-162.95	-80.41	6,901.38	2,249.27	2,102.16	147.12	15.289			
14,800.00	7,815.00	16,901.25	9,964.23	164.56	166.09	-162.94	-80.46	7,001.38	2,249.16	2,100.09	149.07	15.088			
14,900.00	7,815.00	17,001.25	9,964.10	166.83	168.35	-162.94	-80.51	7,101.38	2,249.04	2,098.01	151.03	14.891			
15,000.00	7,815.00	17,101.25	9,963.96	169.11	170.61	-162.94	-80.56	7,201.38	2,248.93	2,095.94	152.99	14.700			
15,100.00	7,815.00	17,201.24	9,963.83	171.39	172.87	-162.94	-80.60	7,301.38	2,248.81	2,093.86	154.95	14.513			
15,200.00	7,815.00	17,301.24	9,963.70	173.66	175.13	-162.94	-80.65	7,401.38	2,248.70	2,091.78	156.92	14.331			
15,300.00	7,815.00	17,401.24	9,963.57	175.94	177.39	-162.93	-80.70	7,501.38	2,248.58	2,089.70	158.88	14.153			
15,400.00	7,815.00	17,501.24	9,963.43	178.22	179.66	-162.93	-80.75	7,601.38	2,248.47	2,087.62	160.85	13.979			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #126H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3240 + 28.5 = KB @ 3268.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com	MD Reference:	3240 + 28.5 = KB @ 3268.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#126H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com - #242H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,500.00	7,815.00	17,601.24	9,963.30	180.50	181.92	-162.93	-80.80	7,701.38	2,248.35	2,085.54	162.82	13.809	
15,600.00	7,815.00	17,701.24	9,963.17	182.78	184.19	-162.93	-80.85	7,801.38	2,248.24	2,083.45	164.79	13.643	
15,700.00	7,815.00	17,801.24	9,963.04	185.06	186.46	-162.93	-80.89	7,901.38	2,248.12	2,081.37	166.76	13.481	
15,800.00	7,815.00	17,901.24	9,962.90	187.35	188.72	-162.92	-80.94	8,001.37	2,248.01	2,079.28	168.73	13.323	
15,900.00	7,815.00	18,001.24	9,962.77	189.63	190.99	-162.92	-80.99	8,101.37	2,247.90	2,077.19	170.70	13.168	
16,000.00	7,815.00	18,101.24	9,962.64	191.91	193.26	-162.92	-81.04	8,201.37	2,247.78	2,075.10	172.68	13.017	
16,100.00	7,815.00	18,201.24	9,962.51	194.20	195.53	-162.92	-81.09	8,301.37	2,247.67	2,073.01	174.66	12.869	
16,200.00	7,815.00	18,301.24	9,962.37	196.48	197.81	-162.92	-81.13	8,401.37	2,247.55	2,070.92	176.63	12.724	
16,300.00	7,815.00	18,401.24	9,962.24	198.77	200.08	-162.91	-81.18	8,501.37	2,247.44	2,068.82	178.61	12.583	
16,400.00	7,815.00	18,501.24	9,962.11	201.05	202.35	-162.91	-81.23	8,601.37	2,247.32	2,066.73	180.59	12.444	
16,500.00	7,815.00	18,601.24	9,961.98	203.34	204.63	-162.91	-81.28	8,701.37	2,247.21	2,064.63	182.57	12.308	
16,600.00	7,815.00	18,701.24	9,961.84	205.63	206.90	-162.91	-81.33	8,801.37	2,247.09	2,062.53	184.56	12.176	
16,700.00	7,815.00	18,801.24	9,961.71	207.91	209.18	-162.91	-81.38	8,901.37	2,246.98	2,060.44	186.54	12.046	
16,800.00	7,815.00	18,901.24	9,961.58	210.20	211.46	-162.90	-81.42	9,001.37	2,246.86	2,058.34	188.52	11.918	
16,900.00	7,815.00	19,001.24	9,961.45	212.49	213.73	-162.90	-81.47	9,101.37	2,246.75	2,056.24	190.51	11.793	
17,000.00	7,815.00	19,101.24	9,961.31	214.78	216.01	-162.90	-81.52	9,201.37	2,246.63	2,054.13	192.50	11.671	
17,100.00	7,815.00	19,201.24	9,961.18	217.07	218.29	-162.90	-81.57	9,301.37	2,246.52	2,052.03	194.48	11.551	
17,200.00	7,815.00	19,301.24	9,961.05	219.36	220.57	-162.90	-81.62	9,401.37	2,246.40	2,049.93	196.47	11.434	
17,300.00	7,815.00	19,401.24	9,960.92	221.65	222.85	-162.89	-81.67	9,501.37	2,246.29	2,047.82	198.46	11.318	
17,400.00	7,815.00	19,501.24	9,960.78	223.94	225.13	-162.89	-81.71	9,601.37	2,246.17	2,045.72	200.45	11.206	
17,500.00	7,815.00	19,601.24	9,960.65	226.23	227.41	-162.89	-81.76	9,701.37	2,246.06	2,043.61	202.44	11.095	
17,600.00	7,815.00	19,701.24	9,960.52	228.52	229.69	-162.89	-81.81	9,801.37	2,245.94	2,041.51	204.44	10.986	
17,700.00	7,815.00	19,801.24	9,960.39	230.81	231.97	-162.89	-81.86	9,901.37	2,245.83	2,039.40	206.43	10.879	
17,800.00	7,815.00	19,901.24	9,960.25	233.10	234.26	-162.88	-81.91	10,001.37	2,245.71	2,037.29	208.42	10.775	
17,900.00	7,815.00	20,001.24	9,960.12	235.39	236.54	-162.88	-81.96	10,101.37	2,245.60	2,035.18	210.42	10.672	
17,995.79	7,815.00	20,097.04	9,959.99	237.59	238.73	-162.88	-82.00	10,197.16	2,245.49	2,033.16	212.33	10.576 SF	

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: $3240 + 28.5 = \text{KB @ } 3268.50\text{usft (Patt 809)}$
MD Reference: $3240 + 28.5 = \text{KB @ } 3268.50\text{usft (Patt 809)}$
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Reference Depths are relative to $3240 + 28.5 = \text{KB @ } 3268.50\text{usft}$ (Pat Coordinates are relative to: #126H)

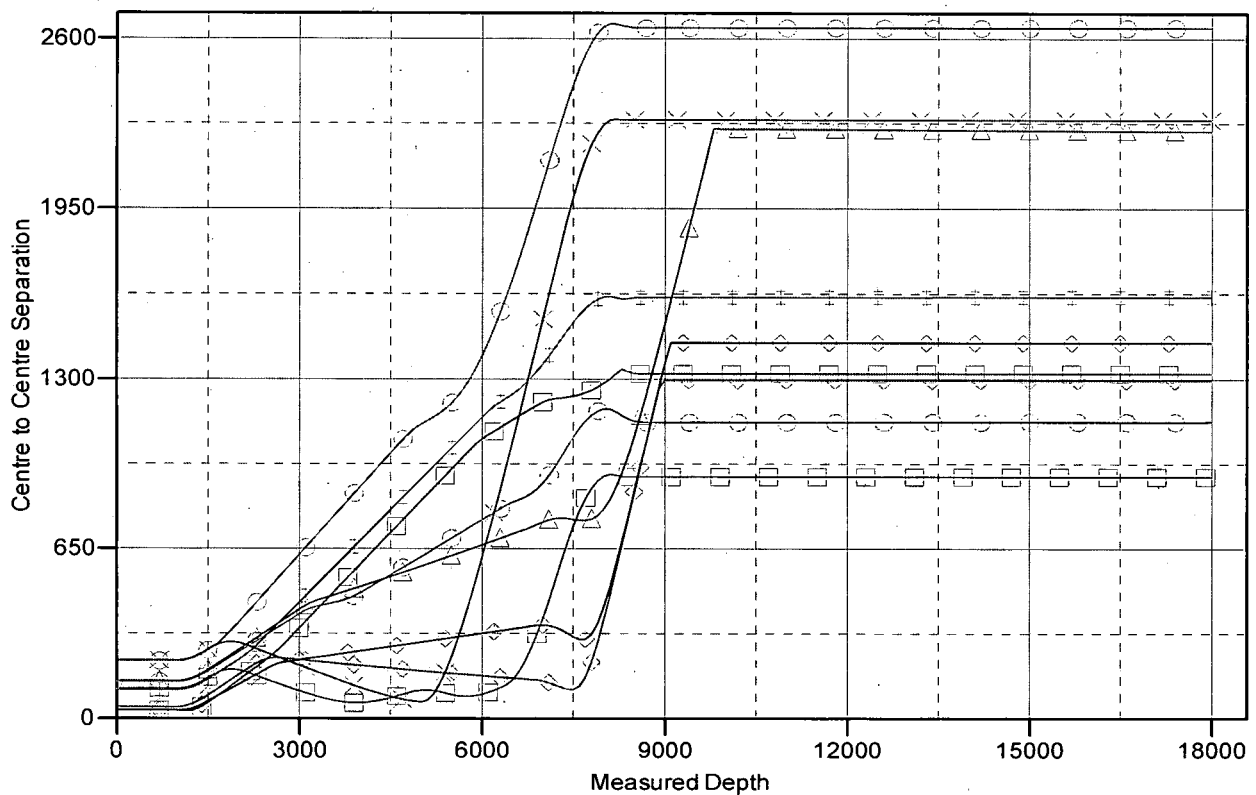
Offset Depths are relative to-Offset Datum

Central Meridian is -104.333334

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

Grid Convergence at Surface is: 0.11°

Ladder Plot



LEGEND

#110H, OH, Prelim A V0 #125H, OH, Prelim A V0 #105H, OH, Prelim A V0
 #115H, OH, Prelim A V0 #112H, OH, Prelim A V0 #208H, OH, Prelim A V0
 #130H, OH, Prelim A V0 #108H, OH, Prelim A V0

Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #126H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #126H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Reference Depths are relative to 3240 + 28.5 = KB @ 3268.50usft (Pat Coordinates are relative to: #126H)

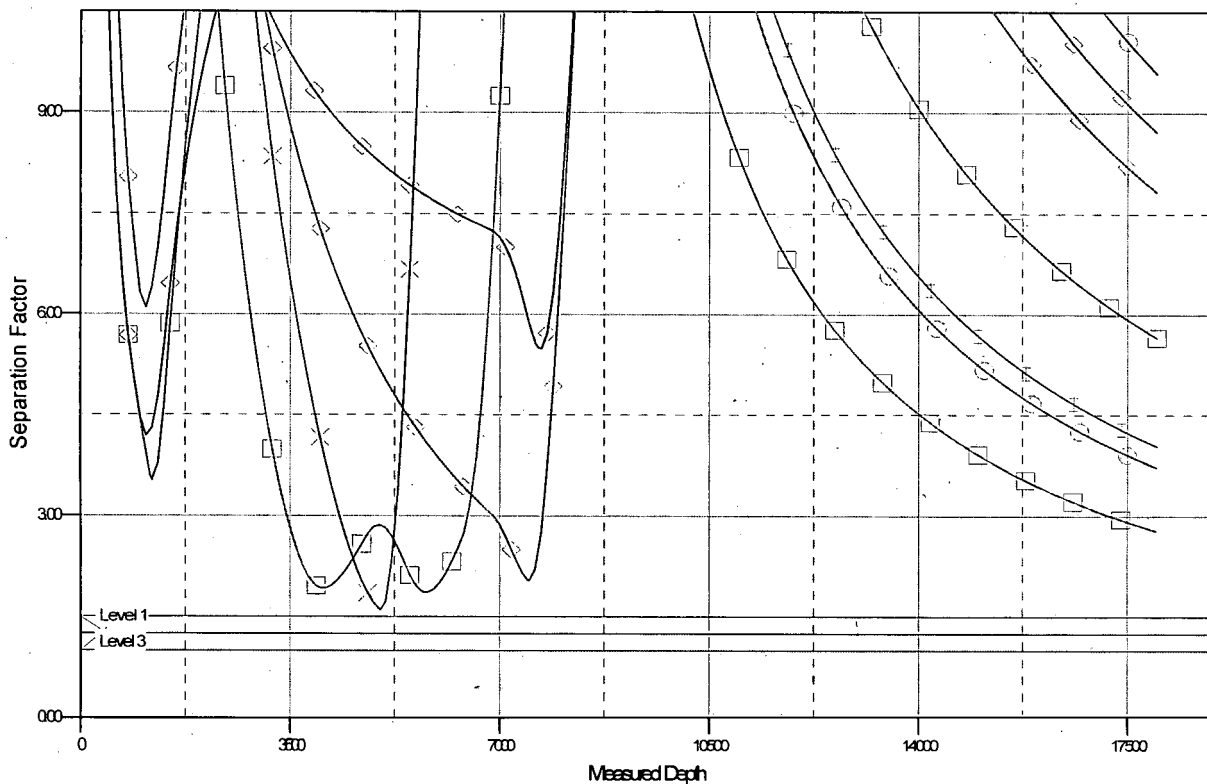
Offset Depths are relative to Offset Datum

Central Meridian is -104.333334

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

Grid Convergence at Surface is: 0.11°

Separation Factor Plot



LEGEND

#118H, OH, Prelim A VO	#125H, OH, Prelim A VO	#105H, OH, Prelim A VO
#115H, OH, Prelim A VO	#112H, OH, Prelim A VO	#208H, OH, Prelim A VO
#242H, OH, Prelim A VO	#136H, OH, Prelim A VO	#109H, OH, Prelim A VO