

Matador Resources

**Eddy County, NM (NAD27)
Leatherneck 3029 Fed Com
#136H**

**OH
Prelim A**

Anticollision Report

22 May, 2019

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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	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	19,286.90	Prelim A (OH)	MWD+HDGM	OWSG MWD + HRGM

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	192.35	185.65	28.672 CC	
#105H - OH - Prelim A	1,300.00	1,300.14	193.91	185.08	21.969 ES	
#105H - OH - Prelim A	19,286.90	15,649.22	3,820.98	3,595.97	16.981 SF	
#106H - OH - Prelim A	3,169.52	3,189.48	47.16	24.69	2.098 CC	
#106H - OH - Prelim A	3,200.00	3,219.86	47.23	24.56	2.083 ES	
#106H - OH - Prelim A	3,300.00	3,319.51	48.40	25.11	2.078 SF	
#112H - OH - Prelim A	1,000.00	1,001.00	114.02	107.31	16.986 CC	
#112H - OH - Prelim A	1,100.00	1,101.02	114.49	107.07	15.428 ES	
#112H - OH - Prelim A	2,200.00	2,208.12	156.77	141.60	10.336 SF	
#115H - OH - Prelim A	1,000.00	1,001.00	85.44	78.73	12.729 CC	
#115H - OH - Prelim A	1,100.00	1,100.98	86.07	78.65	11.598 ES	
#115H - OH - Prelim A	2,100.00	2,096.98	105.74	91.25	7.297 SF	
#116H - OH - Prelim A	2,124.91	2,130.89	45.51	30.92	3.121 CC, ES	
#116H - OH - Prelim A	6,427.75	6,452.96	105.53	57.82	2.212 SF	
#125H - OH - Prelim A	1,214.46	1,214.92	27.73	19.51	3.375 CC, ES	
#125H - OH - Prelim A	1,300.00	1,300.17	28.60	19.79	3.244 SF	
#126H - OH - Prelim A	1,000.00	1,000.00	42.43	35.72	6.324 CC, ES	
#126H - OH - Prelim A	7,500.00	7,494.89	110.83	56.54	2.041 SF	
#206H - OH - Prelim A	1,000.00	1,001.00	30.00	23.29	4.469 CC	
#206H - OH - Prelim A	19,286.90	19,410.64	144.00	-21.63	0.869 Level 1, ES, SF	
#242H - OH - Prelim A	1,000.02	1,000.98	110.00	103.29	16.388 CC	
#242H - OH - Prelim A	2,200.00	2,200.69	111.38	96.22	7.346 ES	
#242H - OH - Prelim A	19,286.90	20,095.32	1,077.55	755.70	3.348 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
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		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)	Separation Factor
0.00	0.00	0.00	0.00	0.00	0.00	-8.97	190.00	-30.00	192.35		
100.00	100.00	100.00	100.00	0.13	0.13	-8.97	190.00	-30.00	192.35	192.10	0.26 750.481
200.00	200.00	200.00	200.00	0.49	0.49	-8.97	190.00	-30.00	192.35	191.38	0.97 197.641
300.00	300.00	300.00	300.00	0.85	0.85	-8.97	190.00	-30.00	192.35	190.66	1.69 113.806
400.00	400.00	400.00	400.00	1.20	1.20	-8.97	190.00	-30.00	192.35	189.95	2.41 79.910

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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	
500.00	500.00	500.00	500.00	1.56	1.56	-8.97	190.00	-30.00	192.35	189.23	3.12	61.571	
600.00	600.00	600.00	600.00	1.92	1.92	-8.97	190.00	-30.00	192.35	188.51	3.84	50.079	
700.00	700.00	700.00	700.00	2.28	2.28	-8.97	190.00	-30.00	192.35	187.80	4.56	42.202	
800.00	800.00	800.00	800.00	2.64	2.64	-8.97	190.00	-30.00	192.35	187.08	5.27	36.466	
900.00	900.00	900.00	900.00	3.00	3.00	-8.97	190.00	-30.00	192.35	186.36	5.99	32.103	
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	-8.97	190.00	-30.00	192.35	185.65	6.71	28.672 CC	
1,100.00	1,099.98	1,100.02	1,099.98	3.70	3.71	-99.48	190.00	-30.00	192.63	185.22	7.42	25.970	
1,200.00	1,199.92	1,200.08	1,199.92	4.05	4.07	-100.50	190.00	-30.00	193.24	185.12	8.12	23.797	
1,300.00	1,299.86	1,300.14	1,299.86	4.40	4.43	-101.51	190.00	-30.00	193.91	185.08	8.83	21.969 ES	
1,400.00	1,399.80	1,400.20	1,399.80	4.75	4.79	-102.52	190.00	-30.00	194.63	185.10	9.53	20.415	
1,500.00	1,499.74	1,499.74	1,499.74	5.10	5.15	-103.52	190.00	-30.00	195.42	185.18	10.24	19.081	
1,600.00	1,599.68	1,593.31	1,593.29	5.45	5.48	-104.51	191.40	-30.58	197.87	186.95	10.92	18.114	
1,700.00	1,699.61	1,686.59	1,686.45	5.80	5.81	-105.57	195.61	-32.33	203.62	192.03	11.60	17.561	
1,800.00	1,799.55	1,779.39	1,778.95	6.16	6.15	-106.66	202.57	-35.22	212.67	200.42	12.25	17.354	
1,900.00	1,899.49	1,871.59	1,870.55	6.51	6.48	-107.73	212.23	-39.22	225.00	212.10	12.90	17.442	
2,000.00	1,999.43	1,970.53	1,968.66	6.87	6.84	-108.77	224.02	-44.11	238.96	225.36	13.60	17.565	
2,100.00	2,099.37	2,069.46	2,066.76	7.22	7.20	-109.71	235.81	-49.00	252.99	238.68	14.31	17.677	
2,200.00	2,199.31	2,168.39	2,164.87	7.58	7.56	-110.54	247.60	-53.89	267.08	252.06	15.02	17.781	
2,300.00	2,299.26	2,267.19	2,262.84	7.93	7.93	-170.04	259.37	-58.78	282.33	266.61	15.72	17.956	
2,400.00	2,399.14	2,365.64	2,360.47	8.27	8.30	160.42	271.11	-63.65	299.82	283.40	16.42	18.263	
2,500.00	2,498.84	2,463.62	2,457.64	8.61	8.67	149.85	282.78	-68.49	319.54	302.44	17.10	18.683	
2,600.00	2,598.23	2,561.02	2,554.22	8.95	9.04	145.25	294.39	-73.31	341.55	323.76	17.79	19.201	
2,700.00	2,697.20	2,657.72	2,650.11	9.29	9.40	143.10	305.91	-78.09	365.91	347.44	18.47	19.812	
2,800.00	2,795.84	2,753.92	2,745.50	9.63	9.77	144.07	317.38	-82.84	391.86	372.71	19.15	20.462	
2,900.00	2,894.48	2,850.11	2,840.89	9.98	10.14	145.24	328.84	-87.60	418.01	398.17	19.83	21.076	
3,000.00	2,993.12	2,946.30	2,936.27	10.33	10.50	146.27	340.31	-92.35	444.30	423.78	20.52	21.652	
3,100.00	3,091.75	3,042.49	3,031.66	10.70	10.87	147.18	351.77	-97.11	470.71	449.50	21.21	22.194	
3,200.00	3,190.39	3,138.68	3,127.04	11.06	11.24	148.00	363.23	-101.86	497.22	475.32	21.90	22.702	
3,300.00	3,289.03	3,234.87	3,222.43	11.44	11.61	148.73	374.70	-106.62	523.82	501.22	22.60	23.181	
3,400.00	3,387.66	3,331.06	3,317.82	11.81	11.98	149.40	386.16	-111.37	550.48	527.19	23.29	23.632	
3,500.00	3,486.30	3,427.25	3,413.20	12.19	12.36	150.00	397.62	-116.13	577.22	553.22	23.99	24.057	
3,600.00	3,584.94	3,523.44	3,508.59	12.58	12.73	150.55	409.09	-120.88	604.00	579.31	24.69	24.459	
3,700.00	3,683.57	3,619.63	3,603.98	12.96	13.10	151.06	420.55	-125.64	630.84	605.44	25.40	24.839	
3,800.00	3,782.21	3,715.82	3,699.36	13.35	13.47	151.52	432.01	-130.40	657.71	631.61	26.10	25.198	
3,900.00	3,880.85	3,812.01	3,794.75	13.74	13.85	151.95	443.48	-135.15	684.62	657.81	26.81	25.538	
4,000.00	3,979.48	3,908.20	3,890.14	14.13	14.22	152.34	454.94	-139.91	711.57	684.05	27.52	25.861	
4,100.00	4,078.12	4,004.39	3,985.52	14.53	14.60	152.71	466.40	-144.66	738.54	710.32	28.22	26.167	
4,200.00	4,176.76	4,100.58	4,080.91	14.92	14.97	153.05	477.87	-149.42	765.54	736.61	28.93	26.458	
4,300.00	4,275.39	4,203.23	4,176.29	15.32	15.37	153.36	489.33	-154.17	792.56	762.89	29.67	26.714	
4,400.00	4,374.03	4,307.04	4,271.68	15.72	15.78	153.66	500.79	-158.93	819.61	789.20	30.41	26.953	
4,500.00	4,472.67	4,389.15	4,367.07	16.12	16.10	153.93	512.26	-163.68	846.67	815.60	31.07	27.251	
4,600.00	4,571.30	4,485.34	4,462.45	16.53	16.47	154.19	523.72	-168.44	873.75	841.97	31.78	27.491	
4,700.00	4,669.94	4,593.58	4,569.82	16.93	16.89	154.47	536.37	-173.69	900.66	868.07	32.58	27.642	
4,800.00	4,768.58	4,733.68	4,709.33	17.33	17.42	154.89	548.13	-178.57	924.21	890.64	33.57	27.533	
4,900.00	4,867.21	4,876.52	4,852.03	17.74	17.93	155.41	553.63	-180.85	943.14	908.65	34.49	27.342	
5,000.00	4,965.85	4,993.39	4,968.89	18.15	18.33	155.90	554.00	-180.75	958.41	923.14	35.27	27.171	
5,100.00	5,064.49	5,109.91	5,084.22	18.56	18.69	157.26	553.99	-165.55	972.26	936.26	36.00	27.004	
5,200.00	5,163.12	5,214.24	5,182.98	18.96	18.98	159.56	553.98	-132.40	985.41	948.72	36.69	26.861	
5,300.00	5,261.76	5,302.56	5,280.76	19.37	19.19	162.23	553.96	-90.72	999.86	962.54	37.32	26.792	
5,400.00	5,360.40	5,375.05	5,319.19	19.78	19.34	164.86	553.94	-47.91	1,017.58	979.70	37.88	26.862	
5,500.00	5,459.03	5,433.85	5,362.32	20.19	19.45	167.24	553.92	-7.98	1,040.03	1,001.71	38.33	27.136	
5,600.00	5,557.67	5,481.56	5,394.17	20.61	19.54	169.30	553.90	27.53	1,068.14	1,029.52	38.62	27.660	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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		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)	
5,700.00	5,656.31	5,520.55	5,417.92	21.02	19.66	171.05	553.88	58.44	1,102.30	1,063.56	38.73	28.458		
5,800.00	5,754.94	5,550.00	5,434.44	21.43	19.80	172.42	553.87	82.82	1,142.55	1,103.89	38.65	29.560		
5,900.00	5,853.58	5,579.58	5,449.75	21.85	19.96	173.81	553.86	108.12	1,188.64	1,150.16	38.48	30.887		
6,000.00	5,952.22	5,600.00	5,459.55	22.26	20.08	174.79	553.85	126.04	1,240.22	1,202.09	38.13	32.525		
6,100.00	6,050.85	5,621.53	5,469.18	22.67	20.23	175.82	553.84	145.29	1,296.79	1,259.04	37.75	34.351		
6,200.00	6,149.49	5,650.00	5,480.80	23.09	20.42	177.20	553.83	171.28	1,358.00	1,320.59	37.41	36.298		
6,300.00	6,248.13	5,650.00	5,480.80	23.50	20.42	177.20	553.83	171.28	1,423.01	1,386.26	36.75	38.724		
6,400.00	6,346.76	5,665.22	5,486.47	23.92	20.53	177.94	553.82	185.40	1,491.69	1,455.42	36.27	41.131		
6,500.00	6,445.40	5,676.36	5,490.39	24.34	20.62	178.48	553.82	195.84	1,563.52	1,527.76	35.76	43.727		
6,600.00	6,544.04	5,700.00	5,498.02	24.75	20.80	179.63	553.81	218.20	1,638.29	1,602.88	35.41	46.265		
6,700.00	6,642.68	5,700.00	5,498.02	25.17	20.80	179.63	553.81	218.20	1,715.18	1,680.34	34.84	49.234		
6,800.00	6,741.31	5,700.00	5,498.02	25.59	20.80	179.63	553.81	218.20	1,794.35	1,760.04	34.30	52.307		
6,900.00	6,839.95	5,700.00	5,498.02	26.01	20.80	179.63	553.81	218.20	1,875.51	1,841.69	33.81	55.466		
7,000.00	6,938.59	5,716.72	5,502.85	26.42	20.94	-179.55	553.80	234.20	1,958.16	1,924.61	33.55	58.372		
7,100.00	7,037.22	5,722.64	5,504.46	26.84	20.99	-179.27	553.80	239.91	2,042.37	2,009.17	33.20	61.518		
7,200.00	7,136.17	5,728.23	5,505.91	27.25	21.04	-179.05	553.79	245.31	2,126.83	2,093.97	32.87	64.709		
7,300.00	7,235.56	5,750.00	5,511.08	27.64	21.22	-178.16	553.78	266.45	2,210.98	2,178.28	32.70	67.614		
7,400.00	7,335.28	5,750.00	5,511.08	28.01	21.22	-178.25	553.78	266.45	2,294.13	2,261.81	32.32	70.976		
7,500.00	7,435.19	5,750.00	5,511.08	28.36	21.22	-178.34	553.78	266.45	2,376.70	2,344.75	31.95	74.377		
7,600.00	7,535.19	5,750.00	5,511.08	28.68	21.22	19.26	553.78	266.45	2,458.77	2,427.18	31.59	77.826		
7,700.00	7,635.19	5,750.00	5,511.08	28.98	21.22	19.26	553.78	266.45	2,541.73	2,510.46	31.27	81.287		
7,800.00	7,735.19	5,750.00	5,511.08	29.29	21.22	19.26	553.78	266.45	2,625.87	2,594.89	30.98	84.754		
7,900.00	7,835.19	5,750.00	5,511.08	29.60	21.22	19.26	553.78	266.45	2,711.09	2,680.36	30.73	88.217		
8,000.00	7,935.19	5,750.00	5,511.08	29.91	21.22	19.26	553.78	266.45	2,797.29	2,766.78	30.52	91.666		
8,100.00	8,035.19	5,750.00	5,511.08	30.22	21.22	19.26	553.78	266.45	2,884.38	2,854.05	30.33	95.092		
8,200.00	8,135.19	5,772.34	5,515.55	30.53	21.43	20.10	553.77	288.34	2,971.81	2,941.45	30.36	97.875		
8,300.00	8,235.19	5,775.45	5,516.10	30.84	21.46	20.22	553.77	291.40	3,060.32	3,030.06	30.26	101.135		
8,400.00	8,335.19	5,778.38	5,516.61	31.16	21.49	20.33	553.77	294.28	3,149.49	3,119.31	30.18	104.355		
8,500.00	8,435.19	5,800.00	5,519.89	31.47	21.69	21.14	553.76	315.65	3,239.63	3,209.36	30.27	107.030		
8,600.00	8,535.19	5,800.00	5,519.89	31.79	21.69	21.14	553.76	315.65	3,329.90	3,299.69	30.21	110.218		
8,700.00	8,634.71	5,800.00	5,519.89	32.10	21.69	-52.17	553.76	315.65	3,419.04	3,388.89	30.16	113.382		
8,800.00	8,731.26	5,800.00	5,519.89	32.39	21.69	-40.65	553.76	315.65	3,503.68	3,473.60	30.08	116.484		
8,900.00	8,821.91	5,800.00	5,519.89	32.64	21.69	-33.16	553.76	315.65	3,581.65	3,551.66	29.99	119.436		
9,000.00	8,903.91	5,800.00	5,519.89	32.84	21.69	-28.23	553.76	315.65	3,651.07	3,621.18	29.89	122.140		
9,100.00	8,974.76	5,822.28	5,522.43	32.99	21.92	-24.83	553.75	337.78	3,709.91	3,679.95	29.95	123.853		
9,200.00	9,032.31	5,850.00	5,524.38	33.10	22.20	-22.58	553.74	365.43	3,757.39	3,727.32	30.07	124.952		
9,300.00	9,074.81	5,850.00	5,524.38	33.16	22.20	-21.22	553.74	365.43	3,791.66	3,761.60	30.07	126.102		
9,400.00	9,100.97	5,850.00	5,524.38	33.30	22.20	-20.45	553.74	365.43	3,812.77	3,782.62	30.15	126.461		
9,500.00	9,110.00	5,876.53	5,525.00	33.86	22.48	-20.19	553.72	391.96	3,819.70	3,789.23	30.47	125.354		
9,557.84	9,110.13	5,920.15	5,525.00	34.30	22.98	-20.19	553.70	435.58	3,819.81	3,788.94	30.87	123.757		
9,600.00	9,110.00	5,962.32	5,525.00	34.63	23.49	-20.19	553.68	477.74	3,819.69	3,788.47	31.22	122.341		
9,700.00	9,110.00	6,062.32	5,525.00	35.53	24.79	-20.19	553.63	577.74	3,819.71	3,787.54	32.16	118.755		
9,800.00	9,110.00	6,162.32	5,525.00	36.56	26.24	-20.19	553.58	677.74	3,819.72	3,786.50	33.22	114.976		
9,900.00	9,110.00	6,262.32	5,525.00	37.70	27.79	-20.19	553.54	777.74	3,819.73	3,785.35	34.38	111.096		
10,000.00	9,110.00	6,362.32	5,525.00	38.95	29.45	-20.19	553.49	877.74	3,819.75	3,784.11	35.64	107.190		
10,100.00	9,110.00	6,462.32	5,525.00	40.28	31.19	-20.19	553.44	977.74	3,819.76	3,782.79	36.97	103.318		
10,200.00	9,110.00	6,562.32	5,525.00	41.70	33.00	-20.19	553.39	1,077.74	3,819.77	3,781.39	38.38	99.522		
10,300.00	9,110.00	6,662.32	5,525.00	43.20	34.86	-20.19	553.34	1,177.74	3,819.79	3,779.93	39.86	95.836		
10,400.00	9,110.00	6,762.32	5,525.00	44.77	36.78	-20.19	553.29	1,277.74	3,819.80	3,778.40	41.39	92.280		
10,500.00	9,110.00	6,862.32	5,525.00	46.39	38.74	-20.19	553.25	1,377.74	3,819.81	3,776.83	42.98	88.868		
10,600.00	9,110.00	6,962.32	5,525.00	48.08	40.74	-20.19	553.20	1,477.74	3,819.83	3,775.20	44.62	85.607		
10,700.00	9,110.00	7,062.32	5,525.00	49.81	42.77	-20.20	553.15	1,577.74	3,819.84	3,773.54	46.30	82.501		

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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		Highside Tooface (')	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)						
10,800.00	9,110.00	7,162.32	5,525.00	51.59	44.82	-20.20	553.10	1,677.74	3,819.85	3,771.83	48.02	79.548		
10,900.00	9,110.00	7,262.32	5,525.00	53.40	46.90	-20.20	553.05	1,777.74	3,819.87	3,770.09	49.77	76.746		
11,000.00	9,110.00	7,362.32	5,525.00	55.26	49.00	-20.20	553.00	1,877.74	3,819.88	3,768.32	51.56	74.089		
11,100.00	9,110.00	7,462.32	5,525.00	57.14	51.12	-20.20	552.96	1,977.74	3,819.89	3,766.52	53.37	71.573		
11,200.00	9,110.00	7,562.32	5,525.00	59.06	53.25	-20.20	552.91	2,077.74	3,819.90	3,764.70	55.21	69.189		
11,300.00	9,110.00	7,662.32	5,525.00	61.01	55.40	-20.20	552.86	2,177.74	3,819.92	3,762.85	57.07	66.932		
11,400.00	9,110.00	7,762.32	5,525.00	62.97	57.56	-20.20	552.81	2,277.74	3,819.93	3,760.98	58.95	64.794		
11,500.00	9,110.00	7,862.32	5,525.00	64.97	59.73	-20.20	552.76	2,377.74	3,819.94	3,759.09	60.86	62.769		
11,600.00	9,110.00	7,962.32	5,525.00	66.98	61.91	-20.20	552.71	2,477.74	3,819.96	3,757.18	62.78	60.849		
11,700.00	9,110.00	8,062.32	5,525.00	69.01	64.10	-20.20	552.67	2,577.74	3,819.97	3,755.26	64.71	59.029		
11,800.00	9,110.00	8,162.32	5,525.00	71.05	66.29	-20.20	552.62	2,677.74	3,819.98	3,753.32	66.66	57.302		
11,900.00	9,110.00	8,262.32	5,525.00	73.12	68.50	-20.20	552.57	2,777.74	3,820.00	3,751.37	68.63	55.662		
12,000.00	9,110.00	8,362.32	5,525.00	75.19	70.71	-20.20	552.52	2,877.74	3,820.01	3,749.41	70.61	54.104		
12,100.00	9,110.00	8,462.32	5,525.00	77.28	72.93	-20.20	552.47	2,977.74	3,820.02	3,747.43	72.59	52.622		
12,200.00	9,110.00	8,562.32	5,525.00	79.38	75.15	-20.20	552.42	3,077.74	3,820.04	3,745.45	74.59	51.213		
12,300.00	9,110.00	8,662.32	5,525.00	81.50	77.38	-20.20	552.38	3,177.74	3,820.05	3,743.45	76.60	49.870		
12,400.00	9,110.00	8,762.32	5,525.00	83.62	79.61	-20.20	552.33	3,277.74	3,820.06	3,741.45	78.62	48.591		
12,500.00	9,110.00	8,862.32	5,525.00	85.75	81.85	-20.21	552.28	3,377.74	3,820.08	3,739.44	80.64	47.370		
12,600.00	9,110.00	8,962.32	5,525.00	87.89	84.09	-20.21	552.23	3,477.74	3,820.09	3,737.42	82.68	46.206		
12,700.00	9,110.00	9,062.32	5,525.00	90.04	86.34	-20.21	552.18	3,577.74	3,820.10	3,735.39	84.72	45.093		
12,800.00	9,110.00	9,162.32	5,525.00	92.20	88.58	-20.21	552.13	3,677.74	3,820.12	3,733.35	86.76	44.029		
12,900.00	9,110.00	9,262.32	5,525.00	94.37	90.83	-20.21	552.09	3,777.74	3,820.13	3,731.31	88.82	43.011		
13,000.00	9,110.00	9,362.32	5,525.00	96.54	93.09	-20.21	552.04	3,877.74	3,820.14	3,729.27	90.88	42.037		
13,100.00	9,110.00	9,462.32	5,525.00	98.72	95.34	-20.21	551.99	3,977.74	3,820.16	3,727.22	92.94	41.103		
13,200.00	9,110.00	9,562.32	5,525.00	100.90	97.60	-20.21	551.94	4,077.74	3,820.17	3,725.16	95.01	40.208		
13,300.00	9,110.00	9,662.32	5,525.00	103.09	99.86	-20.21	551.89	4,177.74	3,820.18	3,723.10	97.09	39.349		
13,400.00	9,110.00	9,762.32	5,525.00	105.28	102.13	-20.21	551.84	4,277.74	3,820.20	3,721.03	99.17	38.524		
13,500.00	9,110.00	9,862.32	5,525.00	107.48	104.39	-20.21	551.80	4,377.74	3,820.21	3,718.96	101.25	37.731		
13,600.00	9,110.00	9,962.32	5,525.00	109.68	106.66	-20.21	551.75	4,477.74	3,820.22	3,716.89	103.34	36.969		
13,700.00	9,110.00	10,062.32	5,525.00	111.89	108.93	-20.21	551.70	4,577.74	3,820.24	3,714.81	105.43	36.236		
13,800.00	9,110.00	10,162.32	5,525.00	114.10	111.20	-20.21	551.65	4,677.74	3,820.25	3,712.73	107.52	35.530		
13,900.00	9,110.00	10,262.32	5,525.00	116.32	113.47	-20.21	551.60	4,777.74	3,820.26	3,710.64	109.62	34.850		
14,000.00	9,110.00	10,362.32	5,525.00	118.54	115.74	-20.21	551.55	4,877.74	3,820.28	3,708.56	111.72	34.195		
14,100.00	9,110.00	10,462.32	5,525.00	120.76	118.02	-20.21	551.51	4,977.74	3,820.29	3,706.47	113.82	33.563		
14,200.00	9,110.00	10,562.32	5,525.00	122.99	120.29	-20.21	551.46	5,077.74	3,820.30	3,704.37	115.93	32.953		
14,300.00	9,110.00	10,662.32	5,525.00	125.21	122.57	-20.21	551.41	5,177.74	3,820.32	3,702.28	118.04	32.364		
14,400.00	9,110.00	10,762.32	5,525.00	127.45	124.85	-20.22	551.36	5,277.74	3,820.33	3,700.18	120.15	31.795		
14,500.00	9,110.00	10,862.32	5,525.00	129.68	127.13	-20.22	551.31	5,377.74	3,820.34	3,698.08	122.27	31.246		
14,600.00	9,110.00	10,962.32	5,525.00	131.92	129.41	-20.22	551.26	5,477.74	3,820.36	3,695.97	124.39	30.714		
14,700.00	9,110.00	11,062.32	5,525.00	134.16	131.69	-20.22	551.22	5,577.74	3,820.37	3,693.87	126.50	30.200		
14,800.00	9,110.00	11,162.32	5,525.00	136.40	133.97	-20.22	551.17	5,677.74	3,820.38	3,691.76	128.63	29.702		
14,900.00	9,110.00	11,262.32	5,525.00	138.64	136.26	-20.22	551.12	5,777.74	3,820.40	3,689.65	130.75	29.219		
15,000.00	9,110.00	11,362.32	5,525.00	140.89	138.54	-20.22	551.07	5,877.74	3,820.41	3,687.54	132.87	28.752		
15,100.00	9,110.00	11,462.32	5,525.00	143.13	140.83	-20.22	551.02	5,977.74	3,820.42	3,685.42	135.00	28.299		
15,200.00	9,110.00	11,562.32	5,525.00	145.38	143.11	-20.22	550.97	6,077.74	3,820.44	3,683.31	137.13	27.860		
15,300.00	9,110.00	11,662.32	5,525.00	147.63	145.40	-20.22	550.93	6,177.74	3,820.45	3,681.19	139.26	27.434		
15,400.00	9,110.00	11,762.32	5,525.00	149.89	147.69	-20.22	550.88	6,277.74	3,820.46	3,679.07	141.39	27.021		
15,500.00	9,110.00	11,862.32	5,525.00	152.14	149.97	-20.22	550.83	6,377.74	3,820.48	3,676.95	143.52	26.619		
15,600.00	9,110.00	11,962.32	5,525.00	154.40	152.26	-20.22	550.78	6,477.74	3,820.49	3,674.83	145.66	26.229		
15,700.00	9,110.00	12,062.32	5,525.00	156.66	154.55	-20.22	550.73	6,577.74	3,820.50	3,672.71	147.79	25.850		
15,800.00	9,110.00	12,162.32	5,525.00	158.92	156.84	-20.22	550.68	6,677.74	3,820.52	3,670.59	149.93	25.482		
15,900.00	9,110.00	12,262.32	5,525.00	161.18	159.13	-20.22	550.64	6,777.74	3,820.53	3,668.46	152.07	25.123		

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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	
16,000.00	9,110.00	12,362.32	5,525.00	163.44	161.42	-20.22	550.59	6,877.74	3,820.54	3,666.33	154.21	24.775	
16,100.00	9,110.00	12,462.32	5,525.00	165.70	163.71	-20.22	550.54	6,977.74	3,820.56	3,664.21	156.35	24.436	
16,200.00	9,110.00	12,562.32	5,525.00	167.97	166.00	-20.23	550.49	7,077.74	3,820.57	3,662.08	158.49	24.105	
16,300.00	9,110.00	12,662.32	5,525.00	170.23	168.30	-20.23	550.44	7,177.74	3,820.58	3,659.95	160.64	23.784	
16,400.00	9,110.00	12,762.32	5,525.00	172.50	170.59	-20.23	550.39	7,277.74	3,820.60	3,657.82	162.78	23.471	
16,500.00	9,110.00	12,862.32	5,525.00	174.77	172.88	-20.23	550.35	7,377.74	3,820.61	3,655.68	164.93	23.165	
16,600.00	9,110.00	12,962.32	5,525.00	177.04	175.17	-20.23	550.30	7,477.74	3,820.62	3,653.55	167.07	22.868	
16,700.00	9,110.00	13,062.32	5,525.00	179.31	177.47	-20.23	550.25	7,577.74	3,820.64	3,651.42	169.22	22.578	
16,800.00	9,110.00	13,162.32	5,525.00	181.58	179.76	-20.23	550.20	7,677.74	3,820.65	3,649.28	171.37	22.295	
16,900.00	9,110.00	13,262.32	5,525.00	183.85	182.06	-20.23	550.15	7,777.74	3,820.66	3,647.15	173.52	22.019	
17,000.00	9,110.00	13,362.32	5,525.00	186.12	184.35	-20.23	550.10	7,877.74	3,820.68	3,645.01	175.67	21.749	
17,100.00	9,110.00	13,462.32	5,525.00	188.40	186.65	-20.23	550.06	7,977.74	3,820.69	3,642.87	177.82	21.486	
17,200.00	9,110.00	13,562.32	5,525.00	190.67	188.94	-20.23	550.01	8,077.74	3,820.70	3,640.73	179.97	21.230	
17,300.00	9,110.00	13,662.32	5,525.00	192.95	191.24	-20.23	549.96	8,177.74	3,820.72	3,638.59	182.12	20.979	
17,400.00	9,110.00	13,762.32	5,525.00	195.22	193.54	-20.23	549.91	8,277.74	3,820.73	3,636.46	184.28	20.734	
17,500.00	9,110.00	13,862.32	5,525.00	197.50	195.83	-20.23	549.86	8,377.74	3,820.74	3,634.31	186.43	20.494	
17,600.00	9,110.00	13,962.32	5,525.00	199.78	198.13	-20.23	549.81	8,477.74	3,820.76	3,632.17	188.58	20.260	
17,700.00	9,110.00	14,062.32	5,525.00	202.06	200.43	-20.23	549.77	8,577.74	3,820.77	3,630.03	190.74	20.031	
17,800.00	9,110.00	14,162.32	5,525.00	204.33	202.72	-20.23	549.72	8,677.74	3,820.78	3,627.89	192.89	19.808	
17,900.00	9,110.00	14,262.32	5,525.00	206.61	205.02	-20.23	549.67	8,777.74	3,820.80	3,625.75	195.05	19.589	
18,000.00	9,110.00	14,362.32	5,525.00	208.89	207.32	-20.23	549.62	8,877.74	3,820.81	3,623.60	197.21	19.375	
18,100.00	9,110.00	14,462.32	5,525.00	211.18	209.62	-20.24	549.57	8,977.74	3,820.82	3,621.46	199.37	19.165	
18,200.00	9,110.00	14,562.32	5,525.00	213.46	211.91	-20.24	549.52	9,077.74	3,820.84	3,619.31	201.52	18.960	
18,300.00	9,110.00	14,662.32	5,525.00	215.74	214.21	-20.24	549.48	9,177.74	3,820.85	3,617.17	203.68	18.759	
18,400.00	9,110.00	14,762.32	5,525.00	218.02	216.51	-20.24	549.43	9,277.74	3,820.86	3,615.02	205.84	18.562	
18,500.00	9,110.00	14,862.32	5,525.00	220.31	218.81	-20.24	549.38	9,377.74	3,820.88	3,612.88	208.00	18.370	
18,600.00	9,110.00	14,962.32	5,525.00	222.59	221.11	-20.24	549.33	9,477.74	3,820.89	3,610.73	210.16	18.181	
18,700.00	9,110.00	15,062.32	5,525.00	224.87	223.41	-20.24	549.28	9,577.74	3,820.90	3,608.58	212.32	17.996	
18,800.00	9,110.00	15,162.32	5,525.00	227.16	225.71	-20.24	549.23	9,677.74	3,820.92	3,606.43	214.48	17.815	
18,900.00	9,110.00	15,262.32	5,525.00	229.44	228.01	-20.24	549.19	9,777.74	3,820.93	3,604.29	216.64	17.637	
19,000.00	9,110.00	15,362.32	5,525.00	231.73	230.31	-20.24	549.14	9,877.74	3,820.94	3,602.14	218.81	17.463	
19,100.00	9,110.00	15,462.32	5,525.00	234.02	232.61	-20.24	549.09	9,977.74	3,820.96	3,599.99	220.97	17.292	
19,200.00	9,110.00	15,562.32	5,525.00	236.30	234.91	-20.24	549.04	10,077.74	3,820.97	3,597.84	223.13	17.124	
19,286.90	9,110.00	15,649.22	5,525.00	238.29	236.91	-20.24	549.00	10,164.64	3,820.98	3,595.97	225.01	16.981 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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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+HDCM														Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis		Distance		Minimum		Separation		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		
0.00	0.00	1.00	-1.00	0.00	0.00	0.00	190.00	0.00	190.00					
100.00	100.00	101.00	99.00	0.13	0.13	0.00	190.00	0.00	190.00	189.74	0.26	731.072		
200.00	200.00	201.00	199.00	0.49	0.49	0.00	190.00	0.00	190.00	189.02	0.98	194.506		
300.00	300.00	301.00	299.00	0.85	0.85	0.00	190.00	0.00	190.00	188.31	1.69	112.175		
400.00	400.00	401.00	399.00	1.20	1.21	0.00	190.00	0.00	190.00	187.59	2.41	78.815		
500.00	500.00	501.00	499.00	1.56	1.57	0.00	190.00	0.00	190.00	186.87	3.13	60.748		
600.00	600.00	601.00	599.00	1.92	1.92	0.00	190.00	0.00	190.00	186.16	3.84	49.420		
700.00	700.00	701.00	699.00	2.28	2.28	0.00	190.00	0.00	190.00	185.44	4.56	41.653		
800.00	800.00	801.00	799.00	2.64	2.64	0.00	190.00	0.00	190.00	184.72	5.28	35.995		
900.00	900.00	901.00	899.00	3.00	3.00	0.00	190.00	0.00	190.00	184.00	6.00	31.691		
1,000.00	1,000.00	1,001.00	999.00	3.35	3.36	0.00	190.00	0.00	190.00	183.29	6.71	28.306		
1,000.03	1,000.03	1,000.97	999.03	3.35	3.36	0.00	190.00	0.00	190.00	183.29	6.71	28.306		
1,100.00	1,099.98	1,101.02	1,098.98	3.70	3.72	-90.53	190.00	0.00	190.01	182.59	7.42	25.604		
1,200.00	1,199.92	1,201.08	1,198.92	4.05	4.08	-91.58	190.00	0.00	190.07	181.95	8.12	23.396		
1,300.00	1,299.86	1,301.14	1,298.86	4.40	4.43	-92.63	190.00	0.00	190.20	181.37	8.83	21.540		
1,400.00	1,399.80	1,401.20	1,398.80	4.75	4.79	-93.68	190.00	0.00	190.39	180.85	9.54	19.962		
1,500.00	1,499.74	1,498.74	1,498.74	5.10	5.14	-94.72	190.00	0.00	190.65	180.41	10.24	18.621		
1,600.00	1,599.68	1,605.53	1,605.50	5.45	5.51	-95.95	188.07	-0.19	189.19	178.24	10.95	17.279		
1,700.00	1,699.61	1,712.09	1,711.89	5.80	5.85	-97.47	182.19	-0.77	184.17	172.54	11.63	15.835		
1,800.00	1,799.55	1,818.03	1,817.38	6.16	6.20	-99.40	172.45	-1.72	175.70	163.40	12.30	14.279		
1,900.00	1,899.49	1,923.09	1,921.55	6.51	6.56	-101.90	158.96	-3.05	163.92	150.96	12.97	12.642		
2,000.00	1,999.43	2,026.98	2,024.02	6.87	6.92	-105.27	141.90	-4.72	149.08	135.46	13.62	10.946		
2,100.00	2,099.37	2,129.47	2,124.42	7.22	7.29	-110.02	121.45	-6.73	131.57	117.30	14.27	9.220		
2,200.00	2,199.31	2,228.67	2,220.93	7.58	7.66	-116.81	98.66	-8.96	112.50	97.53	14.97	7.517		
2,300.00	2,299.26	2,326.10	2,315.62	7.93	8.04	-176.28	75.83	-11.21	95.92	80.21	15.72	6.103		
2,400.00	2,399.14	2,424.23	2,411.00	8.27	8.43	-137.92	52.84	-13.46	83.20	66.70	16.49	5.045		
2,500.00	2,498.84	2,522.93	2,506.93	8.61	8.83	-117.85	29.71	-15.73	73.79	56.50	17.29	4.269		
2,600.00	2,598.23	2,622.09	2,603.30	8.95	9.24	-103.96	6.48	-18.01	66.82	48.74	18.09	3.694		
2,700.00	2,697.20	2,721.59	2,700.00	9.29	9.66	-93.68	-16.83	-20.30	61.24	42.35	18.89	3.242		
2,800.00	2,795.84	2,821.24	2,796.85	9.63	10.09	-86.82	-40.18	-22.59	56.30	36.61	19.69	2.860		
2,900.00	2,894.48	2,920.90	2,893.71	9.98	10.52	-79.17	-63.53	-24.88	52.23	31.74	20.49	2.549		
3,000.00	2,993.12	3,020.55	2,990.56	10.33	10.96	-70.41	-86.88	-27.17	49.23	27.96	21.27	2.315		
3,100.00	3,091.75	3,120.20	3,087.41	10.70	11.39	-60.78	-110.23	-29.47	47.52	25.52	22.00	2.160		
3,169.52	3,160.32	3,189.48	3,154.74	10.95	11.70	-53.81	-126.46	-31.06	47.16	24.69	22.48	2.098 CC		
3,200.00	3,190.39	3,219.86	3,184.26	11.06	11.84	-50.74	-133.58	-31.76	47.23	24.56	22.67	2.083 ES		
3,300.00	3,289.03	3,319.51	3,281.11	11.44	12.29	-40.89	-156.92	-34.05	48.40	25.11	23.29	2.078 SF		
3,400.00	3,387.66	3,419.16	3,377.97	11.81	12.73	-31.75	-180.27	-36.34	50.91	27.04	23.88	2.132		
3,500.00	3,486.30	3,518.82	3,474.82	12.19	13.19	-23.65	-203.62	-38.63	54.60	30.13	24.46	2.232		
3,600.00	3,584.94	3,618.47	3,571.67	12.58	13.64	-16.69	-226.97	-40.92	59.23	34.16	25.07	2.363		
3,700.00	3,683.57	3,718.12	3,668.52	12.96	14.10	-10.80	-250.32	-43.21	64.60	38.91	25.70	2.514		
3,800.00	3,782.21	3,817.77	3,765.38	13.35	14.56	-5.86	-273.66	-45.51	70.55	44.20	26.35	2.677		
3,900.00	3,880.85	3,917.43	3,862.23	13.74	15.02	-1.71	-297.01	-47.80	76.94	49.91	27.03	2.846		
4,000.00	3,979.48	4,017.08	3,959.08	14.13	15.48	-1.79	-320.36	-50.09	83.67	55.94	27.73	3.017		
4,100.00	4,078.12	4,116.73	4,055.93	14.53	15.94	-4.76	-343.71	-52.38	90.67	62.22	28.45	3.187		
4,200.00	4,176.76	4,216.39	4,152.78	14.92	16.41	-7.30	-367.06	-54.67	97.87	68.70	29.17	3.355		
4,300.00	4,275.39	4,316.04	4,249.64	15.32	16.87	-9.48	-390.41	-56.96	105.24	75.33	29.91	3.518		
4,400.00	4,374.03	4,415.69	4,346.49	15.72	17.34	-11.38	-413.75	-59.25	112.74	82.08	30.66	3.678		
4,500.00	4,472.67	4,515.35	4,443.34	16.12	17.81	-13.05	-437.10	-61.55	120.35	88.94	31.41	3.832		
4,600.00	4,571.30	4,615.00	4,540.19	16.53	18.28	-14.51	-460.45	-63.84	128.05	95.88	32.17	3.981		
4,700.00	4,669.94	4,714.65	4,637.05	16.93	18.75	-15.80	-483.80	-66.13	135.82	102.89	32.93	4.125		
4,800.00	4,768.58	4,814.31	4,733.90	17.33	19.22	-16.96	-507.15	-68.42	143.65	109.96	33.69	4.264		
4,900.00	4,867.21	4,913.96	4,830.75	17.74	19.69	-18.00	-530.50	-70.71	151.54	117.08	34.46	4.397		

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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	
5,000.00	4,965.85	5,013.61	4,927.60	18.15	20.16	-18.93	-553.84	-73.00	159.47	124.24	35.23	4.526	
5,100.00	5,064.49	5,110.72	5,021.89	18.56	20.62	-20.61	-576.85	-72.73	167.86	131.91	35.95	4.669	
5,200.00	5,163.12	5,202.24	5,109.37	18.96	21.04	-26.29	-599.68	-59.10	179.78	143.21	36.57	4.916	
5,300.00	5,261.76	5,285.89	5,186.23	19.37	21.41	-34.32	-621.16	-34.27	199.23	162.35	36.88	5.403	
5,400.00	5,360.40	5,359.60	5,250.16	19.78	21.71	-42.52	-640.19	-3.03	229.80	193.21	36.59	6.281	
5,500.00	5,459.03	5,423.04	5,301.49	20.19	21.97	-49.60	-656.40	30.49	272.67	236.95	35.72	7.634	
5,600.00	5,557.67	5,476.98	5,341.94	20.61	22.18	-55.24	-669.90	63.47	326.71	292.28	34.43	9.489	
5,700.00	5,656.31	5,522.62	5,373.60	21.02	22.35	-59.60	-681.03	94.39	389.85	356.81	33.04	11.801	
5,800.00	5,754.94	5,561.29	5,398.42	21.43	22.50	-62.96	-690.20	122.59	460.07	428.38	31.69	14.518	
5,900.00	5,853.58	5,600.00	5,421.30	21.85	22.66	-66.01	-699.08	152.51	535.78	505.03	30.75	17.421	
6,000.00	5,952.22	5,622.35	5,433.58	22.26	22.75	-67.63	-704.06	170.51	615.55	586.14	29.41	20.931	
6,100.00	6,050.85	5,650.00	5,447.78	22.67	22.87	-69.51	-710.05	193.46	698.64	670.01	28.63	24.401	
6,200.00	6,149.49	5,667.66	5,456.27	23.09	22.94	-70.63	-713.78	208.48	784.26	756.54	27.72	28.288	
6,300.00	6,248.13	5,686.04	5,464.62	23.50	23.03	-71.74	-717.57	224.42	871.94	844.86	27.08	32.202	
6,400.00	6,346.76	5,700.00	5,470.61	23.92	23.09	-72.54	-720.39	236.70	961.27	934.79	26.47	36.314	
6,500.00	6,445.40	5,716.52	5,477.32	24.34	23.17	-73.45	-723.65	251.44	1,051.93	1,025.84	26.09	40.314	
6,600.00	6,544.04	5,729.25	5,482.21	24.75	23.24	-74.13	-726.11	262.94	1,143.71	1,117.98	25.73	44.451	
6,700.00	6,642.68	5,750.00	5,489.62	25.17	23.35	-75.17	-730.02	281.92	1,236.54	1,210.87	25.67	48.180	
6,800.00	6,741.31	5,750.00	5,489.62	25.59	23.35	-75.17	-730.02	281.92	1,329.93	1,304.75	25.18	52.815	
6,900.00	6,839.95	5,750.00	5,489.62	26.01	23.35	-75.17	-730.02	281.92	1,424.22	1,399.41	24.80	57.421	
7,000.00	6,938.59	5,768.58	5,495.68	26.42	23.45	-76.06	-733.40	299.16	1,518.83	1,493.94	24.88	61.037	
7,100.00	7,037.22	5,776.25	5,498.02	26.84	23.49	-76.96	-734.76	306.33	1,614.05	1,589.26	24.79	65.116	
7,200.00	7,136.17	5,800.00	5,504.66	27.25	23.63	-84.29	-738.85	328.76	1,710.13	1,685.11	25.03	68.330	
7,300.00	7,235.56	5,800.00	5,504.66	27.64	23.63	-91.15	-738.85	328.76	1,806.15	1,781.28	24.87	72.629	
7,400.00	7,335.28	5,800.00	5,504.66	28.01	23.63	-98.38	-738.85	328.76	1,902.55	1,877.80	24.76	76.850	
7,500.00	7,435.19	5,800.00	5,504.66	28.36	23.63	-105.72	-738.85	328.76	1,999.19	1,974.50	24.69	80.981	
7,600.00	7,535.19	5,800.00	5,504.66	28.68	23.63	87.25	-738.85	328.76	2,095.92	2,071.27	24.65	85.016	
7,700.00	7,635.19	5,800.00	5,504.66	28.98	23.63	87.25	-738.85	328.76	2,192.90	2,168.24	24.65	88.947	
7,800.00	7,735.19	5,800.00	5,504.66	29.29	23.63	87.25	-738.85	328.76	2,290.13	2,265.45	24.68	92.778	
7,900.00	7,835.19	5,822.33	5,510.06	29.60	23.77	87.74	-742.53	350.12	2,387.06	2,362.05	25.02	95.412	
8,000.00	7,935.19	5,826.59	5,511.00	29.91	23.80	87.83	-743.21	354.21	2,484.51	2,459.38	25.14	98.844	
8,100.00	8,035.19	5,850.00	5,515.62	30.22	23.96	88.28	-746.84	376.87	2,582.52	2,557.03	25.49	101.305	
8,200.00	8,135.19	5,850.00	5,515.62	30.53	23.96	88.28	-746.84	376.87	2,680.13	2,654.55	25.59	104.753	
8,300.00	8,235.19	5,850.00	5,515.62	30.84	23.96	88.28	-746.84	376.87	2,777.92	2,752.22	25.70	108.106	
8,400.00	8,335.19	5,850.00	5,515.62	31.16	23.96	88.28	-746.84	376.87	2,875.85	2,850.03	25.82	111.366	
8,500.00	8,435.19	5,850.00	5,515.62	31.47	23.96	88.28	-746.84	376.87	2,973.93	2,947.96	25.97	114.535	
8,600.00	8,535.19	5,850.00	5,515.62	31.79	23.96	88.28	-746.84	376.87	3,072.13	3,046.01	26.12	117.613	
8,700.00	8,634.71	5,850.00	5,515.62	32.10	23.96	-0.93	-746.84	376.87	3,168.47	3,142.23	26.24	120.751	
8,800.00	8,731.26	5,850.00	5,515.62	32.39	23.96	-0.63	-746.84	376.87	3,259.23	3,232.94	26.29	123.983	
8,900.00	8,821.91	5,850.00	5,515.62	32.64	23.96	-0.49	-746.84	376.87	3,342.21	3,315.93	26.28	127.175	
9,000.00	8,903.91	5,876.17	5,519.69	32.84	24.15	-0.31	-750.65	402.44	3,414.86	3,388.41	26.45	129.128	
9,100.00	8,974.76	5,900.00	5,522.40	32.99	24.34	-0.21	-753.90	425.89	3,476.43	3,449.87	26.55	130.930	
9,200.00	9,032.31	5,900.00	5,522.40	33.10	24.34	-0.19	-753.90	425.89	3,524.87	3,498.40	26.47	133.160	
9,300.00	9,074.81	5,900.00	5,522.40	33.16	24.34	-0.18	-753.90	425.89	3,559.83	3,533.41	26.42	134.717	
9,400.00	9,100.97	5,926.88	5,524.31	33.30	24.56	-0.12	-757.30	452.48	3,579.94	3,553.34	26.60	134.593	
9,500.00	9,110.00	5,950.00	5,524.97	33.86	24.77	-0.07	-760.00	475.43	3,585.37	3,558.58	26.79	133.812	
9,600.00	9,110.00	5,955.33	5,525.00	34.63	24.82	-0.06	-760.59	480.73	3,584.00	3,557.03	26.97	132.885	
9,660.64	9,110.00	6,023.13	5,525.00	35.17	25.45	-0.01	-764.04	537.75	3,584.00	3,556.57	27.43	130.677	
9,700.00	9,110.00	6,051.83	5,525.00	35.53	25.73	-0.01	-764.08	577.11	3,584.00	3,556.34	27.66	129.583	
9,800.00	9,110.00	6,151.83	5,525.00	36.56	26.84	-0.01	-764.17	677.11	3,584.00	3,555.58	28.42	126.120	
9,900.00	9,110.00	6,251.83	5,525.00	37.70	28.12	-0.01	-764.27	777.11	3,584.00	3,554.76	29.24	122.572	
10,000.00	9,110.00	6,351.83	5,525.00	38.95	29.55	-0.01	-764.36	877.11	3,584.00	3,553.88	30.12	118.985	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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		Minimum		Separation		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			
10,100.00	9,110.00	6,451.83	5,525.00	40.28	31.09	-0.01	-764.45	977.11	3,584.00	3,552.94	31.06	115.403			
10,200.00	9,110.00	6,551.83	5,525.00	41.70	32.74	-0.01	-764.55	1,077.11	3,584.00	3,551.96	32.04	111.861			
10,300.00	9,110.00	6,651.83	5,525.00	43.20	34.47	-0.01	-764.64	1,177.11	3,584.00	3,550.93	33.07	108.387			
10,400.00	9,110.00	6,751.83	5,525.00	44.77	36.26	-0.01	-764.73	1,277.11	3,584.00	3,549.87	34.13	105.001			
10,500.00	9,110.00	6,851.83	5,525.00	46.39	38.12	-0.01	-764.83	1,377.11	3,584.00	3,548.76	35.24	101.715			
10,600.00	9,110.00	6,951.83	5,525.00	48.08	40.02	-0.01	-764.92	1,477.11	3,584.00	3,547.63	36.37	98.541			
10,700.00	9,110.00	7,051.83	5,525.00	49.81	41.97	-0.01	-765.01	1,577.11	3,584.00	3,546.46	37.54	95.483			
10,800.00	9,110.00	7,151.83	5,525.00	51.59	43.95	-0.01	-765.10	1,677.11	3,584.00	3,545.27	38.73	92.545			
10,900.00	9,110.00	7,251.83	5,525.00	53.40	45.97	-0.01	-765.20	1,777.11	3,584.00	3,544.06	39.94	89.726			
11,000.00	9,110.00	7,351.83	5,525.00	55.26	48.01	-0.01	-765.29	1,877.11	3,584.00	3,542.82	41.18	87.026			
11,100.00	9,110.00	7,451.83	5,525.00	57.14	50.07	-0.01	-765.38	1,977.11	3,584.00	3,541.56	42.44	84.443			
11,200.00	9,110.00	7,551.83	5,525.00	59.06	52.16	-0.01	-765.48	2,077.11	3,584.00	3,540.28	43.72	81.974			
11,300.00	9,110.00	7,651.83	5,525.00	61.01	54.26	-0.01	-765.57	2,177.11	3,584.00	3,538.98	45.02	79.613			
11,400.00	9,110.00	7,751.83	5,525.00	62.97	56.38	-0.01	-765.66	2,277.11	3,584.00	3,537.67	46.33	77.358			
11,500.00	9,110.00	7,851.83	5,525.00	64.97	58.52	-0.01	-765.76	2,377.11	3,584.00	3,536.34	47.66	75.204			
11,600.00	9,110.00	7,951.83	5,525.00	66.98	60.66	-0.01	-765.85	2,477.11	3,584.00	3,535.00	49.00	73.147			
11,700.00	9,110.00	8,051.83	5,525.00	69.01	62.82	-0.01	-765.94	2,577.11	3,584.00	3,533.65	50.35	71.181			
11,800.00	9,110.00	8,151.83	5,525.00	71.05	64.99	-0.01	-766.03	2,677.11	3,584.00	3,532.28	51.72	69.302			
11,900.00	9,110.00	8,251.83	5,525.00	73.12	67.17	-0.01	-766.13	2,777.10	3,584.00	3,530.91	53.09	67.507			
12,000.00	9,110.00	8,351.83	5,525.00	75.19	69.36	-0.01	-766.22	2,877.10	3,584.00	3,529.52	54.48	65.790			
12,100.00	9,110.00	8,451.83	5,525.00	77.28	71.55	-0.01	-766.31	2,977.10	3,584.00	3,528.13	55.87	64.147			
12,200.00	9,110.00	8,551.83	5,525.00	79.38	73.76	-0.01	-766.41	3,077.10	3,584.00	3,526.72	57.28	62.575			
12,300.00	9,110.00	8,651.83	5,525.00	81.50	75.97	-0.01	-766.50	3,177.10	3,584.00	3,525.31	58.69	61.070			
12,400.00	9,110.00	8,751.83	5,525.00	83.62	78.18	-0.01	-766.59	3,277.10	3,584.00	3,523.89	60.11	59.628			
12,500.00	9,110.00	8,851.83	5,525.00	85.75	80.40	-0.01	-766.69	3,377.10	3,584.00	3,522.47	61.53	58.246			
12,600.00	9,110.00	8,951.83	5,525.00	87.89	82.62	-0.01	-766.78	3,477.10	3,584.00	3,521.03	62.97	56.920			
12,700.00	9,110.00	9,051.83	5,525.00	90.04	84.85	-0.01	-766.87	3,577.10	3,584.00	3,519.60	64.40	55.649			
12,800.00	9,110.00	9,151.83	5,525.00	92.20	87.09	-0.01	-766.97	3,677.10	3,584.00	3,518.15	65.85	54.428			
12,900.00	9,110.00	9,251.83	5,525.00	94.37	89.32	-0.01	-767.06	3,777.10	3,584.00	3,516.70	67.30	53.255			
13,000.00	9,110.00	9,351.83	5,525.00	96.54	91.56	-0.01	-767.15	3,877.10	3,584.00	3,515.25	68.75	52.128			
13,100.00	9,110.00	9,451.83	5,525.00	98.72	93.81	-0.01	-767.24	3,977.10	3,584.00	3,513.79	70.21	51.044			
13,200.00	9,110.00	9,551.83	5,525.00	100.90	96.06	-0.01	-767.34	4,077.10	3,584.00	3,512.32	71.68	50.001			
13,300.00	9,110.00	9,651.83	5,525.00	103.09	98.31	-0.01	-767.43	4,177.10	3,584.00	3,510.85	73.15	48.997			
13,400.00	9,110.00	9,751.83	5,525.00	105.28	100.56	-0.01	-767.52	4,277.10	3,584.00	3,509.38	74.62	48.030			
13,500.00	9,110.00	9,851.83	5,525.00	107.48	102.81	-0.01	-767.62	4,377.10	3,584.00	3,507.90	76.10	47.098			
13,600.00	9,110.00	9,951.83	5,525.00	109.68	105.07	-0.01	-767.71	4,477.10	3,584.00	3,506.42	77.58	46.200			
13,700.00	9,110.00	10,051.83	5,525.00	111.89	107.33	-0.01	-767.80	4,577.10	3,584.00	3,504.94	79.06	45.333			
13,800.00	9,110.00	10,151.83	5,525.00	114.10	109.59	-0.01	-767.90	4,677.10	3,584.00	3,503.45	80.55	44.496			
13,900.00	9,110.00	10,251.83	5,525.00	116.32	111.86	-0.01	-767.99	4,777.10	3,584.00	3,501.96	82.04	43.688			
14,000.00	9,110.00	10,351.83	5,525.00	118.54	114.12	-0.01	-768.08	4,877.10	3,584.00	3,500.47	83.53	42.908			
14,100.00	9,110.00	10,451.83	5,525.00	120.76	116.39	-0.01	-768.17	4,977.10	3,584.00	3,498.98	85.02	42.153			
14,200.00	9,110.00	10,551.83	5,525.00	122.99	118.66	0.00	-768.27	5,077.10	3,584.00	3,497.48	86.52	41.423			
14,300.00	9,110.00	10,651.83	5,525.00	125.21	120.93	0.00	-768.36	5,177.10	3,584.00	3,495.98	88.02	40.717			
14,400.00	9,110.00	10,751.83	5,525.00	127.45	123.20	0.00	-768.45	5,277.10	3,584.00	3,494.48	89.52	40.034			
14,500.00	9,110.00	10,851.83	5,525.00	129.68	125.47	0.00	-768.55	5,377.10	3,584.00	3,492.97	91.03	39.372			
14,600.00	9,110.00	10,951.83	5,525.00	131.92	127.75	0.00	-768.64	5,477.10	3,584.00	3,491.46	92.54	38.731			
14,700.00	9,110.00	11,051.83	5,525.00	134.16	130.02	0.00	-768.73	5,577.10	3,584.00	3,489.96	94.04	38.110			
14,800.00	9,110.00	11,151.83	5,525.00	136.40	132.30	0.00	-768.83	5,677.10	3,584.00	3,488.44	95.55	37.507			
14,900.00	9,110.00	11,251.83	5,525.00	138.64	134.58	0.00	-768.92	5,777.10	3,584.00	3,486.93	97.07	36.923			
15,000.00	9,110.00	11,351.83	5,525.00	140.89	136.86	0.00	-769.01	5,877.10	3,584.00	3,485.42	98.58	36.356			
15,100.00	9,110.00	11,451.83	5,525.00	143.13	139.14	0.00	-769.10	5,977.10	3,584.00	3,483.90	100.10	35.805			
15,200.00	9,110.00	11,551.83	5,525.00	145.38	141.42	0.00	-769.20	6,077.10	3,584.00	3,482.38	101.62	35.270			

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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		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)		+N/-S (usft)	+E/-W (usft)					
15,300.00	9,110.00	11,651.83	5,525.00	147.63	143.70	0.00	-769.29	6,177.10	3,584.00	3,480.87	103.13	34.751	
15,400.00	9,110.00	11,751.83	5,525.00	149.89	145.98	0.00	-769.38	6,277.10	3,584.00	3,479.34	104.66	34.246	
15,500.00	9,110.00	11,851.83	5,525.00	152.14	148.26	0.00	-769.48	6,377.10	3,584.00	3,477.82	106.18	33.755	
15,600.00	9,110.00	11,951.83	5,525.00	154.40	150.55	0.00	-769.57	6,477.10	3,584.00	3,476.30	107.70	33.277	
15,700.00	9,110.00	12,051.83	5,525.00	156.66	152.83	0.00	-769.66	6,577.10	3,584.00	3,474.77	109.23	32.813	
15,800.00	9,110.00	12,151.83	5,525.00	158.92	155.12	0.00	-769.76	6,677.10	3,584.00	3,473.25	110.75	32.361	
15,900.00	9,110.00	12,251.83	5,525.00	161.18	157.40	0.00	-769.85	6,777.10	3,584.00	3,471.72	112.28	31.921	
16,000.00	9,110.00	12,351.83	5,525.00	163.44	159.69	0.00	-769.94	6,877.10	3,584.00	3,470.19	113.81	31.492	
16,100.00	9,110.00	12,451.83	5,525.00	165.70	161.98	0.00	-770.04	6,977.10	3,584.00	3,468.66	115.34	31.075	
16,200.00	9,110.00	12,551.83	5,525.00	167.97	164.27	0.00	-770.13	7,077.10	3,584.00	3,467.13	116.87	30.668	
16,300.00	9,110.00	12,651.83	5,525.00	170.23	166.56	0.00	-770.22	7,177.10	3,584.00	3,465.60	118.40	30.271	
16,400.00	9,110.00	12,751.83	5,525.00	172.50	168.85	0.00	-770.31	7,277.10	3,584.00	3,464.07	119.93	29.884	
16,500.00	9,110.00	12,851.83	5,525.00	174.77	171.13	0.00	-770.41	7,377.10	3,584.00	3,462.54	121.46	29.507	
16,600.00	9,110.00	12,951.83	5,525.00	177.04	173.43	0.00	-770.50	7,477.10	3,584.00	3,461.00	123.00	29.139	
16,700.00	9,110.00	13,051.83	5,525.00	179.31	175.72	0.00	-770.59	7,577.10	3,584.00	3,459.47	124.53	28.780	
16,800.00	9,110.00	13,151.83	5,525.00	181.58	178.01	0.00	-770.69	7,677.10	3,584.00	3,457.93	126.07	28.429	
16,900.00	9,110.00	13,251.83	5,525.00	183.85	180.30	0.00	-770.78	7,777.10	3,584.00	3,456.39	127.60	28.087	
17,000.00	9,110.00	13,351.83	5,525.00	186.12	182.59	0.00	-770.87	7,877.10	3,584.00	3,454.86	129.14	27.752	
17,100.00	9,110.00	13,451.83	5,525.00	188.40	184.88	0.00	-770.97	7,977.10	3,584.00	3,453.32	130.68	27.426	
17,200.00	9,110.00	13,551.83	5,525.00	190.67	187.18	0.00	-771.06	8,077.10	3,584.00	3,451.78	132.22	27.106	
17,300.00	9,110.00	13,651.83	5,525.00	192.95	189.47	0.00	-771.15	8,177.10	3,584.00	3,450.24	133.76	26.794	
17,400.00	9,110.00	13,751.83	5,525.00	195.22	191.76	0.00	-771.24	8,277.10	3,584.00	3,448.70	135.30	26.489	
17,500.00	9,110.00	13,851.83	5,525.00	197.50	194.06	0.00	-771.34	8,377.10	3,584.00	3,447.16	136.84	26.191	
17,600.00	9,110.00	13,951.83	5,525.00	199.78	196.35	0.00	-771.43	8,477.10	3,584.00	3,445.62	138.38	25.899	
17,700.00	9,110.00	14,051.83	5,525.00	202.06	198.65	0.00	-771.52	8,577.10	3,584.00	3,444.08	139.92	25.614	
17,800.00	9,110.00	14,151.83	5,525.00	204.33	200.94	0.00	-771.62	8,677.10	3,584.00	3,442.53	141.47	25.334	
17,900.00	9,110.00	14,251.83	5,525.00	206.61	203.24	0.00	-771.71	8,777.10	3,584.00	3,440.99	143.01	25.061	
18,000.00	9,110.00	14,351.83	5,525.00	208.89	205.53	0.00	-771.80	8,877.10	3,584.00	3,439.44	144.56	24.793	
18,100.00	9,110.00	14,451.83	5,525.00	211.18	207.83	0.00	-771.90	8,977.10	3,584.00	3,437.90	146.10	24.531	
18,200.00	9,110.00	14,551.83	5,525.00	213.46	210.12	0.00	-771.99	9,077.10	3,584.00	3,436.36	147.64	24.275	
18,300.00	9,110.00	14,651.83	5,525.00	215.74	212.42	0.00	-772.08	9,177.10	3,584.00	3,434.81	149.19	24.023	
18,400.00	9,110.00	14,751.83	5,525.00	218.02	214.72	0.00	-772.17	9,277.10	3,584.00	3,433.26	150.74	23.777	
18,500.00	9,110.00	14,851.83	5,525.00	220.31	217.01	0.00	-772.27	9,377.10	3,584.00	3,431.72	152.28	23.535	
18,600.00	9,110.00	14,951.83	5,525.00	222.59	219.31	0.00	-772.36	9,477.10	3,584.00	3,430.17	153.83	23.298	
18,700.00	9,110.00	15,051.83	5,525.00	224.87	221.61	0.00	-772.45	9,577.10	3,584.00	3,428.62	155.38	23.066	
18,800.00	9,110.00	15,151.83	5,525.00	227.16	223.91	0.00	-772.55	9,677.10	3,584.00	3,427.07	156.93	22.839	
18,900.00	9,110.00	15,251.83	5,525.00	229.44	226.20	0.00	-772.64	9,777.10	3,584.00	3,425.53	158.47	22.616	
19,000.00	9,110.00	15,351.83	5,525.00	231.73	228.50	0.00	-772.73	9,877.10	3,584.00	3,423.98	160.02	22.397	
19,100.00	9,110.00	15,451.83	5,525.00	234.02	230.80	0.00	-772.83	9,977.10	3,584.00	3,422.43	161.57	22.182	
19,200.00	9,110.00	15,551.83	5,525.00	236.30	233.10	0.00	-772.92	10,077.10	3,584.00	3,420.88	163.12	21.971	
19,286.90	9,110.00	15,638.73	5,525.00	238.29	235.10	0.00	-773.00	10,164.00	3,584.00	3,419.53	164.47	21.792	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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		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)						
0.00	0.00	1.00	-1.00	0.00	0.00	-15.26	110.00	-30.00	114.02					
100.00	100.00	101.00	99.00	0.13	0.13	-15.26	110.00	-30.00	114.02	113.76	0.26	438.711		
200.00	200.00	201.00	199.00	0.49	0.49	-15.26	110.00	-30.00	114.02	113.04	0.98	116.721		
300.00	300.00	301.00	299.00	0.85	0.85	-15.26	110.00	-30.00	114.02	112.32	1.69	67.316		
400.00	400.00	401.00	399.00	1.20	1.21	-15.26	110.00	-30.00	114.02	111.61	2.41	47.296		
500.00	500.00	501.00	499.00	1.56	1.57	-15.26	110.00	-30.00	114.02	110.89	3.13	36.455		
600.00	600.00	601.00	599.00	1.92	1.92	-15.26	110.00	-30.00	114.02	110.17	3.84	29.656		
700.00	700.00	701.00	699.00	2.28	2.28	-15.26	110.00	-30.00	114.02	109.46	4.56	24.995		
800.00	800.00	801.00	799.00	2.64	2.64	-15.26	110.00	-30.00	114.02	108.74	5.28	21.600		
900.00	900.00	901.00	899.00	3.00	3.00	-15.26	110.00	-30.00	114.02	108.02	6.00	19.017		
1,000.00	1,000.00	1,001.00	999.00	3.35	3.36	-15.26	110.00	-30.00	114.02	107.31	6.71	16.986 CC		
1,100.00	1,099.98	1,101.02	1,098.98	3.70	3.72	-106.09	110.00	-30.00	114.49	107.07	7.42	15.428 ES		
1,200.00	1,199.92	1,201.08	1,198.92	4.05	4.08	-107.75	110.00	-30.00	115.51	107.38	8.12	14.218		
1,300.00	1,299.86	1,301.14	1,298.86	4.40	4.43	-109.38	110.00	-30.00	116.62	107.79	8.83	13.208		
1,400.00	1,399.80	1,401.20	1,398.80	4.75	4.79	-110.98	110.00	-30.00	117.82	108.29	9.54	12.354		
1,500.00	1,499.74	1,498.74	1,498.74	5.10	5.14	-112.55	110.00	-30.00	119.12	108.88	10.24	11.636		
1,600.00	1,599.68	1,596.97	1,596.95	5.45	5.49	-114.76	110.00	-31.64	121.19	110.26	10.93	11.087		
1,700.00	1,699.61	1,705.38	1,694.47	5.80	5.86	-118.25	110.00	-36.60	125.03	113.38	11.65	10.730		
1,800.00	1,799.55	1,805.93	1,793.68	6.16	6.21	-122.29	110.00	-43.54	130.32	117.97	12.35	10.552		
1,900.00	1,899.49	1,906.48	1,892.89	6.51	6.56	-125.99	110.00	-50.48	136.21	123.16	13.05	10.436		
2,000.00	1,999.43	1,992.97	1,992.10	6.87	6.87	-129.38	110.00	-57.42	142.63	128.92	13.71	10.406		
2,100.00	2,099.37	2,107.57	2,091.31	7.22	7.27	-132.47	110.00	-64.35	149.50	135.04	14.46	10.338		
2,200.00	2,199.31	2,208.12	2,190.52	7.58	7.63	-135.28	110.00	-71.29	156.77	141.60	15.17	10.336 SF		
2,300.00	2,299.26	2,308.60	2,289.79	7.93	7.99	-163.80	110.00	-78.23	164.80	148.93	15.87	10.385		
2,400.00	2,399.14	2,409.03	2,389.12	8.27	8.35	-133.60	110.00	-85.18	173.79	157.23	16.56	10.493		
2,500.00	2,498.84	2,509.53	2,488.38	8.61	8.71	123.05	110.00	-92.12	183.62	166.36	17.26	10.641		
2,600.00	2,598.23	2,589.78	2,587.45	8.95	9.00	119.04	110.00	-99.05	194.33	176.45	17.88	10.870		
2,700.00	2,697.20	2,688.78	2,686.21	9.29	9.36	118.00	110.00	-105.95	206.14	187.57	18.57	11.099		
2,800.00	2,795.84	2,787.53	2,784.71	9.63	9.71	120.16	110.00	-112.84	218.94	199.67	19.27	11.361		
2,900.00	2,894.48	2,886.27	2,883.22	9.98	10.07	122.38	110.00	-119.73	232.11	212.14	19.97	11.621		
3,000.00	2,993.12	2,985.02	2,981.72	10.33	10.43	124.37	110.00	-126.62	245.59	224.91	20.68	11.875		
3,100.00	3,091.75	3,089.95	3,086.38	10.70	10.81	126.08	108.69	-133.98	258.37	236.95	21.43	12.059		
3,200.00	3,190.39	3,197.19	3,193.22	11.06	11.20	127.15	103.45	-141.64	268.42	246.25	22.17	12.107		
3,300.00	3,289.03	3,303.30	3,298.66	11.44	11.57	127.66	94.40	-149.33	275.59	252.69	22.90	12.034		
3,400.00	3,387.66	3,403.09	3,397.72	11.81	11.93	127.98	84.75	-156.59	281.86	258.23	23.62	11.931		
3,500.00	3,486.30	3,502.89	3,496.77	12.19	12.29	128.28	75.09	-163.86	288.13	263.78	24.35	11.833		
3,600.00	3,584.94	3,602.68	3,595.83	12.58	12.65	128.57	65.43	-171.13	294.41	269.33	25.08	11.738		
3,700.00	3,683.57	3,701.02	3,693.48	12.96	13.00	128.90	56.14	-178.11	300.80	274.99	25.81	11.653		
3,800.00	3,782.21	3,797.13	3,789.20	13.35	13.35	129.68	49.21	-183.33	308.17	281.64	26.53	11.615		
3,900.00	3,880.85	3,892.71	3,884.62	13.74	13.69	130.95	44.86	-186.60	316.83	289.59	27.24	11.631		
4,000.00	3,979.48	3,987.55	3,979.43	14.13	14.02	132.67	43.06	-187.96	326.97	299.03	27.93	11.705		
4,100.00	4,078.12	4,085.25	4,077.12	14.53	14.35	134.67	43.00	-188.00	338.38	309.75	28.63	11.818		
4,200.00	4,176.76	4,183.88	4,175.76	14.92	14.69	136.57	43.00	-188.00	350.22	320.89	29.33	11.939		
4,300.00	4,275.39	4,282.52	4,274.39	15.32	15.04	138.35	43.00	-188.00	362.42	332.39	30.04	12.066		
4,400.00	4,374.03	4,381.16	4,373.03	15.72	15.38	140.01	43.00	-188.00	374.95	344.21	30.74	12.198		
4,500.00	4,472.67	4,479.79	4,471.67	16.12	15.72	141.57	43.00	-188.00	387.77	356.33	31.44	12.333		
4,600.00	4,571.30	4,578.43	4,570.30	16.53	16.07	143.02	43.00	-188.00	400.86	368.71	32.14	12.471		
4,700.00	4,669.94	4,677.07	4,668.94	16.93	16.41	144.39	43.00	-188.00	414.19	381.34	32.85	12.609		
4,800.00	4,768.58	4,775.70	4,767.58	17.33	16.75	145.66	43.00	-188.00	427.73	394.18	33.55	12.748		
4,900.00	4,867.21	4,874.34	4,866.21	17.74	17.10	146.86	43.00	-188.00	441.47	407.22	34.26	12.887		
5,000.00	4,965.85	4,972.98	4,964.85	18.15	17.44	147.99	43.00	-188.00	455.40	420.43	34.96	13.025		
5,100.00	5,064.49	5,071.61	5,063.49	18.56	17.79	149.05	43.00	-188.00	469.48	433.81	35.67	13.163		

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

Pro Directional Anticollision Report

Company: Matorador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com
Site Error: 0.00 usft
Reference Well: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor					
							+N-S (usft)	+E-W (usft)									
5,200.00	5,163.12	5,170.25	5,162.12	18.96	18.13	150.05	43.00	-188.00	483.72	447.34	36.37	13.298					
5,300.00	5,261.76	5,268.89	5,260.76	19.37	18.48	150.99	43.00	-188.00	498.09	461.01	37.08	13.432					
5,400.00	5,360.40	5,367.52	5,359.40	19.78	18.83	151.88	43.00	-188.00	512.59	474.80	37.79	13.565					
5,500.00	5,459.03	5,466.16	5,458.03	20.19	19.17	152.72	43.00	-188.00	527.20	488.71	38.50	13.695					
5,600.00	5,557.67	5,564.80	5,556.67	20.61	19.52	153.52	43.00	-188.00	541.92	502.72	39.21	13.823					
5,700.00	5,656.31	5,663.43	5,655.31	21.02	19.87	154.27	43.00	-188.00	556.74	516.82	39.91	13.948					
5,800.00	5,754.94	5,762.07	5,753.94	21.43	20.21	154.99	43.00	-188.00	571.64	531.02	40.62	14.071					
5,900.00	5,853.58	5,860.71	5,852.58	21.85	20.56	155.66	43.00	-188.00	586.63	545.30	41.33	14.192					
6,000.00	5,952.22	5,959.34	5,951.22	22.26	20.91	156.31	43.00	-188.00	601.70	559.65	42.05	14.311					
6,100.00	6,050.85	6,057.98	6,049.85	22.67	21.26	156.92	43.00	-188.00	616.84	574.08	42.76	14.427					
6,200.00	6,149.49	6,156.62	6,148.49	23.09	21.60	157.50	43.00	-188.00	632.04	588.57	43.47	14.540					
6,300.00	6,248.13	6,255.25	6,247.13	23.50	21.95	158.06	43.00	-188.00	647.30	603.12	44.18	14.651					
6,400.00	6,346.76	6,365.24	6,357.08	23.92	22.33	158.78	42.73	-186.55	662.37	617.41	44.95	14.735					
6,500.00	6,445.40	6,495.66	6,484.99	24.34	22.75	161.42	38.40	-162.94	673.78	628.05	45.73	14.735					
6,600.00	6,544.04	6,609.19	6,589.45	24.75	23.09	165.51	30.46	-119.70	682.86	636.46	46.39	14.720					
6,700.00	6,642.68	6,701.96	6,667.05	25.17	23.37	169.97	21.32	-69.87	693.46	646.46	47.00	14.755					
6,800.00	6,741.31	6,775.57	6,722.17	25.59	23.61	174.10	12.53	-21.96	709.00	661.54	47.46	14.938					
6,900.00	6,839.95	6,833.61	6,760.96	26.01	23.83	177.66	4.74	20.47	731.79	684.15	47.64	15.360					
7,000.00	6,938.59	6,879.68	6,788.52	26.42	24.02	-179.37	-1.92	56.77	762.91	715.45	47.46	16.075					
7,100.00	7,037.22	6,916.69	6,808.45	26.84	24.20	-176.92	-7.55	87.43	802.53	755.60	46.93	17.102					
7,200.00	7,136.17	6,950.00	6,824.64	27.25	24.37	-174.78	-12.80	116.06	848.42	802.29	46.13	18.391					
7,300.00	7,235.56	6,972.47	6,834.60	27.64	24.49	-173.42	-16.44	135.87	898.84	853.81	45.03	19.961					
7,400.00	7,335.28	7,000.00	6,845.70	28.01	24.65	-171.80	-20.99	160.64	953.33	909.42	43.91	21.713					
7,500.00	7,435.19	7,012.44	6,850.32	28.36	24.73	-171.21	-23.07	172.00	1,011.26	968.75	42.51	23.790					
7,600.00	7,535.19	7,028.41	6,855.88	28.68	24.84	27.28	-25.78	186.73	1,072.39	1,031.23	41.16	26.053					
7,700.00	7,635.19	7,050.00	6,862.73	28.98	24.98	28.62	-29.47	206.87	1,138.14	1,098.16	39.99	28.464					
7,800.00	7,735.19	7,050.00	6,862.73	29.29	24.98	28.62	-29.47	206.87	1,208.17	1,169.57	38.59	31.305					
7,900.00	7,835.19	7,064.91	6,867.01	29.60	25.08	29.55	-32.05	220.92	1,281.93	1,244.36	37.57	34.124					
8,000.00	7,935.19	7,074.30	6,869.51	29.91	25.15	30.13	-33.68	229.81	1,358.87	1,322.28	36.59	37.137					
8,100.00	8,035.19	7,082.66	6,871.61	30.22	25.21	30.64	-35.14	237.77	1,438.49	1,402.75	35.73	40.259					
8,200.00	8,135.19	7,100.00	6,875.60	30.53	25.34	31.71	-38.19	254.37	1,520.49	1,485.38	35.11	43.309					
8,300.00	8,235.19	7,100.00	6,875.60	30.84	25.34	31.71	-38.19	254.37	1,604.25	1,569.87	34.38	46.668					
8,400.00	8,335.19	7,100.00	6,875.60	31.16	25.34	31.71	-38.19	254.37	1,689.77	1,656.02	33.75	50.060					
8,500.00	8,435.19	7,100.00	6,875.60	31.47	25.34	31.71	-38.19	254.37	1,776.81	1,743.57	33.23	53.463					
8,600.00	8,535.19	7,100.00	6,875.60	31.79	25.34	31.71	-38.19	254.37	1,865.14	1,832.34	32.80	56.860					
8,700.00	8,634.71	7,120.27	6,879.60	32.10	25.50	-43.89	-41.78	273.92	1,951.84	1,919.25	32.59	59.888					
8,800.00	8,731.26	7,130.13	6,881.30	32.39	25.58	-34.64	-43.53	283.47	2,033.35	2,001.12	32.23	63.096					
8,900.00	8,821.91	7,150.00	6,884.20	32.64	25.74	-28.38	-47.08	302.80	2,107.63	2,075.71	31.92	66.021					
9,000.00	8,903.91	7,150.00	6,884.20	32.84	25.74	-24.53	-47.08	302.80	2,172.96	2,141.51	31.45	69.083					
9,100.00	8,974.76	7,174.01	6,886.80	32.99	25.94	-21.63	-51.39	326.28	2,227.99	2,196.79	31.20	71.403					
9,200.00	9,032.31	7,200.00	6,888.49	33.10	26.17	-19.66	-56.07	351.78	2,271.84	2,240.83	31.01	73.270					
9,300.00	9,074.81	7,210.87	6,888.84	33.16	26.27	-18.49	-58.03	362.46	2,303.42	2,272.61	30.81	74.757					
9,400.00	9,100.97	7,248.84	6,889.00	33.30	26.63	-17.66	-64.78	399.83	2,322.24	2,291.37	30.87	75.226					
9,500.00	9,110.00	7,327.72	6,889.00	33.86	27.44	-17.20	-77.28	477.71	2,326.11	2,294.88	31.23	74.489					
9,600.00	9,110.00	7,407.67	6,889.00	34.63	28.35	-16.96	-87.75	556.97	2,322.26	2,290.55	31.70	73.250					
9,700.00	9,110.00	7,488.15	6,889.00	35.53	29.36	-16.76	-96.06	637.02	2,319.27	2,286.98	32.29	71.817					
9,800.00	9,110.00	7,569.03	6,889.00	36.56	30.46	-16.62	-102.14	717.66	2,317.13	2,284.14	32.99	70.231					
9,900.00	9,110.00	7,650.18	6,889.00	37.70	31.63	-16.53	-105.95	798.73	2,315.82	2,282.03	33.79	68.533					
10,000.00	9,110.00	7,731.49	6,889.00	38.95	32.85	-16.50	-107.47	880.02	2,315.31	2,280.63	34.68	66.758					
10,008.53	9,110.00	7,748.12	6,889.00	39.06	33.10	-16.50	-107.49	885.95	2,315.30	2,280.48	34.82	66.486					
10,100.00	9,110.00	7,828.90	6,889.00	40.28	34.39	-16.50	-107.54	977.42	2,315.31	2,279.53	35.78	64.703					
10,200.00	9,110.00	7,928.90	6,889.00	41.70	36.06	-16.50	-107.58	1,077.42	2,315.33	2,278.35	36.97	62.620					

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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		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)						
10,300.00	9,110.00	8,028.90	6,889.00	43.20	37.78	-16.50	-107.63	1,177.42	2,315.34	2,277.10	38.23	60.561		
10,400.00	9,110.00	8,128.90	6,889.00	44.77	39.57	-16.50	-107.68	1,277.42	2,315.35	2,275.80	39.55	58.542		
10,500.00	9,110.00	8,228.90	6,889.00	46.39	41.41	-16.50	-107.73	1,377.42	2,315.36	2,274.44	40.92	56.578		
10,600.00	9,110.00	8,328.90	6,889.00	48.08	43.29	-16.50	-107.78	1,477.42	2,315.37	2,273.02	42.35	54.678		
10,700.00	9,110.00	8,428.90	6,889.00	49.81	45.22	-16.50	-107.83	1,577.42	2,315.38	2,271.57	43.81	52.847		
10,800.00	9,110.00	8,528.90	6,889.00	51.59	47.18	-16.50	-107.88	1,677.42	2,315.39	2,270.07	45.32	51.089		
10,900.00	9,110.00	8,628.90	6,889.00	53.40	49.17	-16.50	-107.92	1,777.42	2,315.40	2,268.54	46.86	49.406		
11,000.00	9,110.00	8,728.90	6,889.00	55.26	51.18	-16.51	-107.97	1,877.42	2,315.41	2,266.97	48.44	47.797		
11,100.00	9,110.00	8,828.90	6,889.00	57.14	53.22	-16.51	-108.02	1,977.42	2,315.42	2,265.37	50.05	46.262		
11,200.00	9,110.00	8,928.90	6,889.00	59.06	55.28	-16.51	-108.07	2,077.42	2,315.43	2,263.75	51.68	44.799		
11,300.00	9,110.00	9,028.90	6,889.00	61.01	57.36	-16.51	-108.12	2,177.42	2,315.45	2,262.10	53.34	43.406		
11,400.00	9,110.00	9,128.90	6,889.00	62.97	59.46	-16.51	-108.17	2,277.42	2,315.46	2,260.43	55.03	42.079		
11,500.00	9,110.00	9,228.90	6,889.00	64.97	61.57	-16.51	-108.22	2,377.42	2,315.47	2,258.74	56.73	40.816		
11,600.00	9,110.00	9,328.90	6,889.00	66.98	63.69	-16.51	-108.26	2,477.42	2,315.48	2,257.03	58.45	39.614		
11,700.00	9,110.00	9,428.90	6,889.00	69.01	65.83	-16.51	-108.31	2,577.42	2,315.49	2,255.30	60.19	38.470		
11,800.00	9,110.00	9,528.90	6,889.00	71.05	67.98	-16.51	-108.36	2,677.42	2,315.50	2,253.56	61.94	37.380		
11,900.00	9,110.00	9,628.90	6,889.00	73.12	70.14	-16.51	-108.41	2,777.42	2,315.51	2,251.80	63.71	36.342		
12,000.00	9,110.00	9,728.90	6,889.00	75.19	72.31	-16.51	-108.46	2,877.42	2,315.52	2,250.02	65.50	35.353		
12,100.00	9,110.00	9,828.90	6,889.00	77.28	74.48	-16.52	-108.51	2,977.42	2,315.53	2,248.24	67.29	34.410		
12,200.00	9,110.00	9,928.90	6,889.00	79.38	76.67	-16.52	-108.56	3,077.42	2,315.54	2,246.44	69.10	33.511		
12,300.00	9,110.00	10,028.90	6,889.00	81.50	78.86	-16.52	-108.61	3,177.42	2,315.55	2,244.64	70.92	32.652		
12,400.00	9,110.00	10,128.90	6,889.00	83.62	81.06	-16.52	-108.65	3,277.42	2,315.57	2,242.82	72.74	31.832		
12,500.00	9,110.00	10,228.90	6,889.00	85.75	83.26	-16.52	-108.70	3,377.42	2,315.58	2,241.00	74.58	31.048		
12,600.00	9,110.00	10,328.90	6,889.00	87.89	85.47	-16.52	-108.75	3,477.42	2,315.59	2,239.16	76.42	30.299		
12,700.00	9,110.00	10,428.90	6,889.00	90.04	87.68	-16.52	-108.80	3,577.42	2,315.60	2,237.32	78.28	29.582		
12,800.00	9,110.00	10,528.90	6,889.00	92.20	89.90	-16.52	-108.85	3,677.42	2,315.61	2,235.47	80.14	28.896		
12,900.00	9,110.00	10,628.90	6,889.00	94.37	92.13	-16.52	-108.90	3,777.42	2,315.62	2,233.62	82.00	28.238		
13,000.00	9,110.00	10,728.90	6,889.00	96.54	94.36	-16.52	-108.95	3,877.42	2,315.63	2,231.75	83.88	27.608		
13,100.00	9,110.00	10,828.90	6,889.00	98.72	96.59	-16.52	-108.99	3,977.42	2,315.64	2,229.89	85.76	27.003		
13,200.00	9,110.00	10,928.90	6,889.00	100.90	98.82	-16.53	-109.04	4,077.42	2,315.65	2,228.01	87.64	26.422		
13,300.00	9,110.00	11,028.90	6,889.00	103.09	101.06	-16.53	-109.09	4,177.42	2,315.66	2,226.13	89.53	25.864		
13,400.00	9,110.00	11,128.90	6,889.00	105.28	103.30	-16.53	-109.14	4,277.42	2,315.67	2,224.25	91.43	25.328		
13,500.00	9,110.00	11,228.90	6,889.00	107.48	105.55	-16.53	-109.19	4,377.42	2,315.68	2,222.36	93.33	24.813		
13,600.00	9,110.00	11,328.90	6,889.00	109.68	107.79	-16.53	-109.24	4,477.42	2,315.70	2,220.47	95.23	24.317		
13,700.00	9,110.00	11,428.90	6,889.00	111.89	110.04	-16.53	-109.29	4,577.42	2,315.71	2,218.57	97.14	23.839		
13,800.00	9,110.00	11,528.90	6,889.00	114.10	112.30	-16.53	-109.33	4,677.42	2,315.72	2,216.67	99.05	23.379		
13,900.00	9,110.00	11,628.90	6,889.00	116.32	114.55	-16.53	-109.38	4,777.42	2,315.73	2,214.76	100.97	22.936		
14,000.00	9,110.00	11,728.90	6,889.00	118.54	116.81	-16.53	-109.43	4,877.42	2,315.74	2,212.85	102.88	22.508		
14,100.00	9,110.00	11,828.90	6,889.00	120.76	119.07	-16.53	-109.48	4,977.42	2,315.75	2,210.94	104.81	22.095		
14,200.00	9,110.00	11,928.90	6,889.00	122.99	121.33	-16.53	-109.53	5,077.42	2,315.76	2,209.03	106.73	21.697		
14,300.00	9,110.00	12,028.90	6,889.00	125.21	123.59	-16.54	-109.58	5,177.42	2,315.77	2,207.11	108.66	21.312		
14,400.00	9,110.00	12,128.90	6,889.00	127.45	125.85	-16.54	-109.63	5,277.42	2,315.78	2,205.19	110.59	20.940		
14,500.00	9,110.00	12,228.90	6,889.00	129.68	128.12	-16.54	-109.67	5,377.42	2,315.79	2,203.27	112.53	20.580		
14,600.00	9,110.00	12,328.90	6,889.00	131.92	130.38	-16.54	-109.72	5,477.42	2,315.80	2,201.34	114.46	20.232		
14,700.00	9,110.00	12,428.90	6,889.00	134.16	132.65	-16.54	-109.77	5,577.42	2,315.82	2,199.41	116.40	19.895		
14,800.00	9,110.00	12,528.90	6,889.00	136.40	134.92	-16.54	-109.82	5,677.42	2,315.83	2,197.48	118.35	19.568		
14,900.00	9,110.00	12,628.90	6,889.00	138.64	137.19	-16.54	-109.87	5,777.42	2,315.84	2,195.55	120.29	19.252		
15,000.00	9,110.00	12,728.90	6,889.00	140.89	139.47	-16.54	-109.92	5,877.42	2,315.85	2,193.61	122.23	18.946		
15,100.00	9,110.00	12,828.90	6,889.00	143.13	141.74	-16.54	-109.97	5,977.42	2,315.86	2,191.68	124.18	18.649		
15,200.00	9,110.00	12,928.90	6,889.00	145.38	144.01	-16.54	-110.01	6,077.42	2,315.87	2,189.74	126.13	18.361		
15,300.00	9,110.00	13,028.90	6,889.00	147.63	146.29	-16.54	-110.06	6,177.42	2,315.88	2,187.80	128.08	18.081		
15,400.00	9,110.00	13,128.90	6,889.00	149.89	148.57	-16.55	-110.11	6,277.42	2,315.89	2,185.85	130.04	17.809		

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim-A

Local Co-ordinate Reference: Well #136H
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	9,110.00	13,228.90	6,889.00	152.14	150.84	-16.55	-110.16	6,377.42	2,315.90	2,183.91	131.99	17.546	
15,600.00	9,110.00	13,328.90	6,889.00	154.40	153.12	-16.55	-110.21	6,477.42	2,315.91	2,181.96	133.95	17.290	
15,700.00	9,110.00	13,428.90	6,889.00	156.66	155.40	-16.55	-110.26	6,577.42	2,315.92	2,180.02	135.91	17.041	
15,800.00	9,110.00	13,528.90	6,889.00	158.92	157.68	-16.55	-110.31	6,677.42	2,315.94	2,178.07	137.87	16.798	
15,900.00	9,110.00	13,628.90	6,889.00	161.18	159.96	-16.55	-110.35	6,777.42	2,315.95	2,176.12	139.83	16.563	
16,000.00	9,110.00	13,728.90	6,889.00	163.44	162.24	-16.55	-110.40	6,877.42	2,315.96	2,174.17	141.79	16.334	
16,100.00	9,110.00	13,828.90	6,889.00	165.70	164.53	-16.55	-110.45	6,977.42	2,315.97	2,172.21	143.75	16.111	
16,200.00	9,110.00	13,928.90	6,889.00	167.97	166.81	-16.55	-110.50	7,077.42	2,315.98	2,170.26	145.72	15.893	
16,300.00	9,110.00	14,028.90	6,889.00	170.23	169.09	-16.55	-110.55	7,177.42	2,315.99	2,168.30	147.69	15.682	
16,400.00	9,110.00	14,128.90	6,889.00	172.50	171.38	-16.55	-110.60	7,277.42	2,316.00	2,166.35	149.65	15.476	
16,500.00	9,110.00	14,228.90	6,889.00	174.77	173.66	-16.56	-110.65	7,377.42	2,316.01	2,164.39	151.62	15.275	
16,600.00	9,110.00	14,328.90	6,889.00	177.04	175.95	-16.56	-110.70	7,477.42	2,316.02	2,162.43	153.59	15.079	
16,700.00	9,110.00	14,428.90	6,889.00	179.31	178.24	-16.56	-110.74	7,577.42	2,316.03	2,160.47	155.56	14.888	
16,800.00	9,110.00	14,528.90	6,889.00	181.58	180.52	-16.56	-110.79	7,677.42	2,316.04	2,158.51	157.53	14.702	
16,900.00	9,110.00	14,628.90	6,889.00	183.85	182.81	-16.56	-110.84	7,777.42	2,316.06	2,156.55	159.51	14.520	
17,000.00	9,110.00	14,728.90	6,889.00	186.12	185.10	-16.56	-110.89	7,877.42	2,316.07	2,154.59	161.48	14.343	
17,100.00	9,110.00	14,828.90	6,889.00	188.40	187.39	-16.56	-110.94	7,977.42	2,316.08	2,152.62	163.45	14.170	
17,200.00	9,110.00	14,928.90	6,889.00	190.67	189.68	-16.56	-110.99	8,077.42	2,316.09	2,150.66	165.43	14.000	
17,300.00	9,110.00	15,028.90	6,889.00	192.95	191.97	-16.56	-111.04	8,177.42	2,316.10	2,148.69	167.41	13.835	
17,400.00	9,110.00	15,128.90	6,889.00	195.22	194.26	-16.56	-111.08	8,277.42	2,316.11	2,146.73	169.38	13.674	
17,500.00	9,110.00	15,228.90	6,889.00	197.50	196.55	-16.56	-111.13	8,377.42	2,316.12	2,144.76	171.36	13.516	
17,600.00	9,110.00	15,328.90	6,889.00	199.78	198.84	-16.57	-111.18	8,477.42	2,316.13	2,142.79	173.34	13.362	
17,700.00	9,110.00	15,428.90	6,889.00	202.06	201.13	-16.57	-111.23	8,577.42	2,316.14	2,140.82	175.32	13.211	
17,800.00	9,110.00	15,528.90	6,889.00	204.33	203.42	-16.57	-111.28	8,677.42	2,316.15	2,138.85	177.30	13.063	
17,900.00	9,110.00	15,628.90	6,889.00	206.61	205.71	-16.57	-111.33	8,777.42	2,316.16	2,136.88	179.28	12.919	
18,000.00	9,110.00	15,728.90	6,889.00	208.89	208.01	-16.57	-111.38	8,877.42	2,316.18	2,134.91	181.26	12.778	
18,100.00	9,110.00	15,828.90	6,889.00	211.18	210.30	-16.57	-111.42	8,977.42	2,316.19	2,132.94	183.25	12.640	
18,200.00	9,110.00	15,928.90	6,889.00	213.46	212.59	-16.57	-111.47	9,077.42	2,316.20	2,130.97	185.23	12.505	
18,300.00	9,110.00	16,028.90	6,889.00	215.74	214.89	-16.57	-111.52	9,177.42	2,316.21	2,129.00	187.21	12.372	
18,400.00	9,110.00	16,128.90	6,889.00	218.02	217.18	-16.57	-111.57	9,277.42	2,316.22	2,127.02	189.20	12.242	
18,500.00	9,110.00	16,228.90	6,889.00	220.31	219.47	-16.57	-111.62	9,377.42	2,316.23	2,125.05	191.18	12.115	
18,600.00	9,110.00	16,328.90	6,889.00	222.59	221.77	-16.57	-111.67	9,477.42	2,316.24	2,123.07	193.17	11.991	
18,700.00	9,110.00	16,428.90	6,889.00	224.87	224.06	-16.58	-111.72	9,577.42	2,316.25	2,121.10	195.15	11.869	
18,800.00	9,110.00	16,528.90	6,889.00	227.16	226.36	-16.58	-111.76	9,677.42	2,316.26	2,119.12	197.14	11.749	
18,900.00	9,110.00	16,628.90	6,889.00	229.44	228.65	-16.58	-111.81	9,777.42	2,316.27	2,117.15	199.13	11.632	
19,000.00	9,110.00	16,728.90	6,889.00	231.73	230.95	-16.58	-111.86	9,877.42	2,316.28	2,115.17	201.12	11.517	
19,100.00	9,110.00	16,828.90	6,889.00	234.02	233.25	-16.58	-111.91	9,977.42	2,316.30	2,113.19	203.10	11.405	
19,200.00	9,110.00	16,928.90	6,889.00	236.30	235.54	-16.58	-111.96	10,077.42	2,316.31	2,111.21	205.09	11.294	
19,203.41	9,110.00	16,932.30	6,889.00	236.38	235.62	-16.58	-111.96	10,080.83	2,316.31	2,111.15	205.16	11.290	
19,286.90	9,110.00	17,013.47	6,889.00	238.29	237.37	-16.58	-112.00	10,162.00	2,316.32	2,109.58	206.73	11.204	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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)		+N/-S (usft)	+E/-W (usft)					
0.00	0.00	1.00	1.00	0.00	0.00	-20.56	80.00	-30.00	85.44				
100.00	100.00	101.00	101.00	0.13	0.13	-20.56	80.00	-30.00	85.44	85.18	0.26	328.752	
200.00	200.00	201.00	201.00	0.49	0.49	-20.56	80.00	-30.00	85.44	84.46	0.98	87.466	
300.00	300.00	301.00	301.00	0.85	0.85	-20.56	80.00	-30.00	85.44	83.75	1.69	50.443	
400.00	400.00	401.00	401.00	1.20	1.21	-20.56	80.00	-30.00	85.44	83.03	2.41	35.442	
500.00	500.00	501.00	501.00	1.56	1.57	-20.56	80.00	-30.00	85.44	82.31	3.13	27.318	
600.00	600.00	601.00	601.00	1.92	1.92	-20.56	80.00	-30.00	85.44	81.60	3.84	22.223	
700.00	700.00	701.00	701.00	2.28	2.28	-20.56	80.00	-30.00	85.44	80.88	4.56	18.730	
800.00	800.00	801.00	801.00	2.64	2.64	-20.56	80.00	-30.00	85.44	80.16	5.28	16.186	
900.00	900.00	901.00	901.00	3.00	3.00	-20.56	80.00	-30.00	85.44	79.44	6.00	14.251	
1,000.00	1,000.00	1,001.00	1,001.00	3.35	3.36	-20.56	80.00	-30.00	85.44	78.73	6.71	12.729 CC	
1,100.00	1,099.98	1,100.98	1,100.98	3.70	3.72	-111.63	80.00	-30.00	86.07	78.65	7.42	11.598 ES	
1,200.00	1,199.92	1,200.92	1,200.92	4.05	4.07	-113.76	80.00	-30.00	87.42	79.29	8.12	10.761	
1,300.00	1,299.86	1,300.86	1,300.86	4.40	4.43	-115.82	80.00	-30.00	88.88	80.05	8.83	10.068	
1,400.00	1,399.80	1,400.80	1,400.80	4.75	4.79	-117.81	80.00	-30.00	90.45	80.92	9.53	9.487	
1,500.00	1,499.74	1,500.74	1,500.74	5.10	5.15	-119.72	80.00	-30.00	92.14	81.89	10.24	8.995	
1,600.00	1,599.68	1,600.68	1,600.68	5.45	5.51	-121.57	80.00	-30.00	93.92	82.96	10.95	8.575	
1,700.00	1,699.61	1,700.61	1,700.61	5.80	5.87	-123.35	80.00	-30.00	95.79	84.13	11.66	8.213	
1,800.00	1,799.55	1,800.55	1,800.55	6.16	6.22	-125.06	80.00	-30.00	97.75	85.38	12.37	7.900	
1,900.00	1,899.49	1,900.49	1,900.49	6.51	6.58	-126.70	80.00	-30.00	99.80	86.71	13.09	7.626	
2,000.00	1,999.43	2,000.43	2,000.43	6.87	6.94	-128.27	80.00	-30.00	101.92	88.13	13.80	7.386	
2,100.00	2,099.37	2,099.98	2,099.96	7.22	7.29	-129.46	81.52	-30.61	105.74	91.25	14.49	7.297 SF	
2,200.00	2,199.31	2,199.23	2,193.08	7.58	7.63	-130.03	86.04	-32.44	112.79	97.62	15.17	7.436	
2,300.00	2,299.26	2,288.87	2,288.38	7.93	7.97	-171.68	93.49	-35.45	123.66	107.84	15.82	7.816	
2,400.00	2,399.14	2,387.50	2,386.49	8.27	8.33	-144.23	102.88	-39.24	137.71	121.21	16.51	8.343	
2,500.00	2,498.84	2,485.97	2,484.44	8.61	8.68	-136.07	112.27	-43.03	153.47	136.28	17.19	8.927	
2,600.00	2,598.23	2,583.90	2,581.85	8.95	9.03	-133.96	121.60	-46.79	171.26	153.38	17.87	9.581	
2,700.00	2,697.20	2,681.19	2,678.62	9.29	9.39	-134.25	130.86	-50.54	191.39	172.84	18.55	10.315	
2,800.00	2,795.84	2,778.01	2,774.93	9.63	9.74	-137.32	140.09	-54.26	213.41	194.17	19.24	11.094	
2,900.00	2,894.48	2,874.82	2,871.23	9.98	10.10	-140.11	149.31	-57.98	236.04	216.12	19.92	11.850	
3,000.00	2,993.12	2,971.63	2,967.53	10.33	10.45	-142.42	158.53	-61.71	259.12	238.51	20.61	12.575	
3,100.00	3,091.75	3,068.44	3,063.83	10.70	10.81	-144.35	167.76	-65.43	282.53	261.24	21.30	13.267	
3,200.00	3,190.39	3,165.26	3,160.13	11.06	11.16	-145.98	176.98	-69.16	306.20	284.22	21.99	13.927	
3,300.00	3,289.03	3,262.07	3,256.43	11.44	11.52	-147.38	186.21	-72.88	330.08	307.40	22.68	14.553	
3,400.00	3,387.66	3,358.88	3,352.73	11.81	11.88	-148.60	195.43	-76.60	354.11	330.74	23.38	15.148	
3,500.00	3,486.30	3,455.70	3,449.03	12.19	12.24	-149.65	204.65	-80.33	378.28	354.21	24.08	15.713	
3,600.00	3,584.94	3,552.51	3,545.33	12.58	12.60	-150.59	213.88	-84.05	402.56	377.78	24.77	16.249	
3,700.00	3,683.57	3,649.32	3,641.63	12.96	12.96	-151.41	223.10	-87.78	426.92	401.44	25.48	16.758	
3,800.00	3,782.21	3,746.13	3,737.93	13.35	13.32	-152.15	232.32	-91.50	451.36	425.18	26.18	17.241	
3,900.00	3,880.85	3,842.95	3,834.23	13.74	13.69	-152.81	241.55	-95.22	475.86	448.98	26.88	17.701	
4,000.00	3,979.48	3,939.76	3,930.53	14.13	14.05	-153.41	250.77	-98.95	500.42	472.83	27.59	18.139	
4,100.00	4,078.12	4,036.57	4,026.83	14.53	14.41	-153.95	259.99	-102.67	525.02	496.72	28.29	18.555	
4,200.00	4,176.76	4,133.38	4,123.13	14.92	14.77	-154.44	269.22	-106.39	549.66	520.66	29.00	18.952	
4,300.00	4,275.39	4,230.20	4,219.44	15.32	15.14	-154.89	278.44	-110.12	574.34	544.63	29.71	19.331	
4,400.00	4,374.03	4,327.01	4,315.74	15.72	15.50	-155.30	287.66	-113.84	599.04	568.62	30.42	19.692	
4,500.00	4,472.67	4,423.82	4,412.04	16.12	15.86	-155.68	296.89	-117.57	623.78	592.65	31.13	20.037	
4,600.00	4,571.30	4,520.64	4,508.34	16.53	16.23	-156.03	306.11	-121.29	648.54	616.69	31.84	20.367	
4,700.00	4,669.94	4,617.45	4,604.64	16.93	16.59	-156.36	315.33	-125.01	673.32	640.76	32.55	20.683	
4,800.00	4,768.58	4,714.26	4,700.94	17.33	16.96	-156.66	324.56	-128.74	698.11	664.85	33.27	20.985	
4,900.00	4,867.21	4,811.07	4,797.24	17.74	17.32	-156.94	333.78	-132.46	722.93	688.95	33.98	21.274	
5,000.00	4,965.85	4,907.89	4,893.54	18.15	17.69	-157.21	343.00	-136.19	747.76	713.07	34.70	21.552	
5,100.00	5,064.49	5,004.70	4,989.84	18.56	18.05	-157.45	352.23	-139.91	772.61	737.20	35.41	21.819	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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		Minimum		Separation		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	5,163.12	5,101.51	5,086.14	18.96	18.42	157.68	361.45	-143.63	797.46	761.34	36.13	22.075	
5,300.00	5,261.76	5,201.67	5,182.44	19.37	18.79	157.90	370.67	-147.36	822.33	785.48	36.85	22.313	
5,400.00	5,360.40	5,295.14	5,278.74	19.78	19.15	158.11	379.90	-151.08	847.21	809.65	37.56	22.557	
5,500.00	5,459.03	5,408.05	5,375.04	20.19	19.57	158.30	389.12	-154.81	872.10	833.76	38.33	22.750	
5,600.00	5,557.67	5,488.76	5,471.34	20.61	19.88	158.48	398.34	-158.53	897.00	858.00	38.99	23.004	
5,700.00	5,656.31	5,585.58	5,567.64	21.02	20.25	158.65	407.57	-162.25	921.90	882.19	39.71	23.215	
5,800.00	5,754.94	5,682.39	5,663.94	21.43	20.61	158.82	416.79	-165.98	946.82	906.39	40.43	23.419	
5,900.00	5,853.58	5,779.20	5,760.24	21.85	20.98	158.97	426.01	-169.70	971.74	930.59	41.15	23.615	
6,000.00	5,952.22	5,876.01	5,856.54	22.26	21.35	159.12	435.24	-173.42	996.66	954.79	41.87	23.805	
6,100.00	6,050.85	5,966.86	5,976.83	22.67	21.80	159.31	445.93	-177.74	1,021.03	978.28	42.76	23.879	
6,200.00	6,149.49	6,144.96	6,124.71	23.09	22.34	159.65	453.08	-180.63	1,041.32	997.55	43.77	23.789	
6,300.00	6,248.13	6,269.38	6,249.13	23.50	22.77	160.02	454.00	-181.00	1,057.41	1,012.80	44.61	23.703	
6,400.00	6,346.76	6,363.01	6,342.75	23.92	23.09	160.34	454.08	-180.38	1,072.99	1,027.68	45.30	23.685	
6,500.00	6,445.40	6,443.76	6,422.87	24.34	23.35	161.07	455.31	-171.04	1,089.79	1,043.88	45.91	23.737	
6,600.00	6,544.04	6,518.94	6,495.61	24.75	23.58	162.26	457.77	-152.38	1,108.64	1,062.18	46.46	23.861	
6,700.00	6,642.68	6,586.84	6,558.68	25.17	23.77	163.72	461.04	-127.55	1,130.22	1,083.29	46.93	24.081	
6,800.00	6,741.31	6,650.00	6,614.31	25.59	23.94	165.37	464.93	-97.96	1,155.28	1,107.96	47.32	24.414	
6,900.00	6,839.95	6,700.00	6,655.81	26.01	24.05	166.85	468.57	-70.34	1,184.40	1,136.86	47.55	24.909	
7,000.00	6,938.59	6,750.00	6,694.72	26.42	24.16	168.47	472.66	-39.24	1,218.06	1,170.36	47.70	25.537	
7,100.00	7,037.22	6,783.67	6,719.32	26.84	24.22	169.63	475.66	-16.46	1,256.37	1,208.74	47.62	26.381	
7,200.00	7,136.17	6,817.99	6,742.96	27.25	24.28	171.00	478.91	8.20	1,297.63	1,250.17	47.46	27.342	
7,300.00	7,235.56	6,850.00	6,763.64	27.64	24.34	172.27	482.10	32.43	1,340.57	1,293.38	47.19	28.409	
7,400.00	7,335.28	6,875.72	6,779.23	28.01	24.45	173.32	484.77	52.70	1,385.14	1,338.37	46.77	29.615	
7,500.00	7,435.19	6,900.00	6,793.11	28.36	24.56	174.30	487.37	72.46	1,431.30	1,385.04	46.26	30.941	
7,600.00	7,535.19	6,922.28	6,805.08	28.68	24.68	12.81	489.82	91.08	1,479.14	1,433.48	45.66	32.392	
7,700.00	7,635.19	6,950.00	6,818.95	28.98	24.82	13.81	492.95	114.88	1,530.76	1,485.66	45.10	33.942	
7,800.00	7,735.19	6,950.00	6,818.95	29.29	24.82	13.81	492.95	114.88	1,586.40	1,542.20	44.20	35.894	
7,900.00	7,835.19	6,975.26	6,830.56	29.60	24.96	14.73	495.88	137.11	1,645.67	1,602.05	43.62	37.727	
8,000.00	7,935.19	7,000.00	6,840.96	29.91	25.10	15.63	498.81	159.37	1,708.53	1,665.48	43.06	39.681	
8,100.00	8,035.19	7,000.00	6,840.96	30.22	25.10	15.63	498.81	159.37	1,774.30	1,732.07	42.23	42.017	
8,200.00	8,135.19	7,000.00	6,840.96	30.53	25.10	15.63	498.81	159.37	1,843.14	1,801.70	41.45	44.472	
8,300.00	8,235.19	7,024.28	6,850.22	30.84	25.26	16.53	501.74	181.62	1,914.18	1,873.19	41.00	46.688	
8,400.00	8,335.19	7,050.00	6,858.98	31.16	25.42	17.48	504.90	205.59	1,987.94	1,947.34	40.61	48.956	
8,500.00	8,435.19	7,050.00	6,858.98	31.47	25.42	17.48	504.90	205.59	2,063.34	2,023.36	39.97	51.616	
8,600.00	8,535.19	7,050.00	6,858.98	31.79	25.42	17.48	504.90	205.59	2,140.75	2,101.35	39.40	54.336	
8,700.00	8,634.71	7,050.00	6,858.98	32.10	25.42	-61.57	504.90	205.59	2,218.09	2,179.24	38.85	57.090	
8,800.00	8,731.26	7,072.28	6,865.68	32.39	25.58	-51.95	507.67	226.66	2,291.48	2,252.93	38.55	59.444	
8,900.00	8,821.91	7,100.00	6,872.86	32.64	25.78	-44.86	511.16	253.20	2,359.41	2,321.10	38.31	61.593	
9,000.00	8,903.91	7,100.00	6,872.86	32.84	25.78	-39.60	511.16	253.20	2,419.58	2,381.74	37.84	63.944	
9,100.00	8,974.76	7,120.84	6,877.40	32.99	25.94	-35.79	513.82	273.36	2,471.05	2,433.42	37.64	65.653	
9,200.00	9,032.31	7,150.00	6,882.51	33.10	26.17	-33.13	517.56	301.82	2,512.66	2,475.06	37.60	66.826	
9,300.00	9,074.81	7,150.00	6,882.51	33.16	26.17	-31.41	517.56	301.82	2,543.29	2,505.83	37.47	67.884	
9,400.00	9,100.97	7,179.46	6,886.18	33.30	26.41	-30.42	521.38	330.80	2,562.38	2,524.65	37.73	67.916	
9,500.00	9,110.00	7,200.00	6,887.85	33.86	26.59	-30.10	524.05	351.10	2,569.71	2,531.61	38.10	67.438	
9,600.00	9,110.00	7,219.99	6,888.77	34.63	26.76	-30.16	526.66	370.90	2,572.33	2,533.70	38.64	66.578	
9,700.00	9,110.00	7,272.33	6,889.00	35.53	27.25	-30.29	533.26	422.81	2,577.93	2,538.46	39.47	65.313	
9,800.00	9,110.00	7,456.09	6,889.00	36.56	29.27	-30.59	549.09	605.85	2,582.36	2,541.09	41.27	62.575	
9,900.00	9,110.00	7,628.02	6,889.00	37.70	31.52	-30.68	553.29	777.71	2,583.55	2,540.37	43.18	59.830	
10,000.00	9,110.00	7,728.02	6,889.00	38.95	32.98	-30.68	553.24	877.71	2,583.58	2,538.89	44.68	57.822	
10,100.00	9,110.00	7,828.02	6,889.00	40.28	34.53	-30.68	553.20	977.71	2,583.60	2,537.31	46.29	55.814	
10,200.00	9,110.00	7,928.02	6,889.00	41.70	36.16	-30.68	553.15	1,077.71	2,583.62	2,535.62	48.00	53.828	
10,300.00	9,110.00	8,028.02	6,889.00	43.20	37.86	-30.68	553.10	1,177.71	2,583.64	2,533.84	49.80	51.885	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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		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)							
10,400.00	9,110.00	8,128.02	6,889.00	44.77	39.62	-30.68	553.06	1,277.71	2,583.66	2,531.99	51.67	50.000			
10,500.00	9,110.00	8,228.02	6,889.00	46.39	41.43	-30.68	553.01	1,377.71	2,583.68	2,530.06	53.62	48.182			
10,600.00	9,110.00	8,328.02	6,889.00	48.08	43.29	-30.68	552.97	1,477.71	2,583.70	2,528.06	55.64	46.437			
10,700.00	9,110.00	8,428.02	6,889.00	49.81	45.19	-30.68	552.92	1,577.71	2,583.72	2,526.01	57.71	44.770			
10,800.00	9,110.00	8,528.02	6,889.00	51.59	47.13	-30.68	552.88	1,677.71	2,583.74	2,523.91	59.84	43.181			
10,900.00	9,110.00	8,628.02	6,889.00	53.40	49.10	-30.69	552.83	1,777.71	2,583.76	2,521.76	62.01	41.669			
11,000.00	9,110.00	8,728.02	6,889.00	55.26	51.10	-30.69	552.78	1,877.71	2,583.79	2,519.57	64.22	40.234			
11,100.00	9,110.00	8,828.02	6,889.00	57.14	53.12	-30.69	552.74	1,977.71	2,583.81	2,517.34	66.47	38.872			
11,200.00	9,110.00	8,928.02	6,889.00	59.06	55.17	-30.69	552.69	2,077.71	2,583.83	2,515.07	68.76	37.580			
11,300.00	9,110.00	9,028.02	6,889.00	61.01	57.24	-30.69	552.65	2,177.71	2,583.85	2,512.78	71.07	36.356			
11,400.00	9,110.00	9,128.02	6,889.00	62.97	59.32	-30.69	552.60	2,277.71	2,583.87	2,510.46	73.41	35.196			
11,500.00	9,110.00	9,228.02	6,889.00	64.97	61.42	-30.69	552.56	2,377.71	2,583.89	2,508.11	75.78	34.095			
11,600.00	9,110.00	9,328.02	6,889.00	66.98	63.53	-30.69	552.51	2,477.71	2,583.91	2,505.74	78.18	33.052			
11,700.00	9,110.00	9,428.02	6,889.00	69.01	65.66	-30.69	552.46	2,577.71	2,583.93	2,503.34	80.59	32.063			
11,800.00	9,110.00	9,528.02	6,889.00	71.05	67.80	-30.69	552.42	2,677.71	2,583.95	2,500.93	83.02	31.124			
11,900.00	9,110.00	9,628.02	6,889.00	73.12	69.95	-30.69	552.37	2,777.71	2,583.98	2,498.50	85.47	30.232			
12,000.00	9,110.00	9,728.02	6,889.00	75.19	72.11	-30.69	552.33	2,877.71	2,584.00	2,496.06	87.94	29.384			
12,100.00	9,110.00	9,828.02	6,889.00	77.28	74.28	-30.69	552.28	2,977.71	2,584.02	2,493.60	90.42	28.578			
12,200.00	9,110.00	9,928.02	6,889.00	79.38	76.46	-30.70	552.24	3,077.71	2,584.04	2,491.12	92.92	27.810			
12,300.00	9,110.00	10,028.02	6,889.00	81.50	78.64	-30.70	552.19	3,177.71	2,584.06	2,488.64	95.42	27.080			
12,400.00	9,110.00	10,128.02	6,889.00	83.62	80.83	-30.70	552.15	3,277.71	2,584.08	2,486.14	97.94	26.383			
12,500.00	9,110.00	10,228.02	6,889.00	85.75	83.03	-30.70	552.10	3,377.71	2,584.10	2,483.63	100.47	25.719			
12,600.00	9,110.00	10,328.02	6,889.00	87.89	85.23	-30.70	552.05	3,477.71	2,584.12	2,481.11	103.01	25.085			
12,700.00	9,110.00	10,428.02	6,889.00	90.04	87.44	-30.70	552.01	3,577.71	2,584.14	2,478.58	105.56	24.480			
12,800.00	9,110.00	10,528.02	6,889.00	92.20	89.66	-30.70	551.96	3,677.71	2,584.16	2,476.04	108.12	23.901			
12,900.00	9,110.00	10,628.02	6,889.00	94.37	91.88	-30.70	551.92	3,777.71	2,584.19	2,473.50	110.69	23.347			
13,000.00	9,110.00	10,728.02	6,889.00	96.54	94.10	-30.70	551.87	3,877.71	2,584.21	2,470.95	113.26	22.816			
13,100.00	9,110.00	10,828.02	6,889.00	98.72	96.33	-30.70	551.83	3,977.71	2,584.23	2,468.39	115.84	22.308			
13,200.00	9,110.00	10,928.02	6,889.00	100.90	98.56	-30.70	551.78	4,077.71	2,584.25	2,465.82	118.43	21.821			
13,300.00	9,110.00	11,028.02	6,889.00	103.09	100.79	-30.70	551.73	4,177.71	2,584.27	2,463.25	121.02	21.354			
13,400.00	9,110.00	11,128.02	6,889.00	105.28	103.03	-30.70	551.69	4,277.71	2,584.29	2,460.67	123.62	20.905			
13,500.00	9,110.00	11,228.02	6,889.00	107.48	105.27	-30.71	551.64	4,377.71	2,584.31	2,458.08	126.23	20.474			
13,600.00	9,110.00	11,328.02	6,889.00	109.68	107.51	-30.71	551.60	4,477.71	2,584.33	2,455.50	128.84	20.059			
13,700.00	9,110.00	11,428.02	6,889.00	111.89	109.76	-30.71	551.55	4,577.71	2,584.35	2,452.90	131.45	19.660			
13,800.00	9,110.00	11,528.01	6,889.00	114.10	112.01	-30.71	551.51	4,677.71	2,584.37	2,450.30	134.07	19.276			
13,900.00	9,110.00	11,628.01	6,889.00	116.32	114.26	-30.71	551.46	4,777.71	2,584.40	2,447.70	136.69	18.906			
14,000.00	9,110.00	11,728.01	6,889.00	118.54	116.51	-30.71	551.41	4,877.71	2,584.42	2,445.10	139.32	18.550			
14,100.00	9,110.00	11,828.01	6,889.00	120.76	118.77	-30.71	551.37	4,977.71	2,584.44	2,442.49	141.95	18.206			
14,200.00	9,110.00	11,928.01	6,889.00	122.99	121.02	-30.71	551.32	5,077.71	2,584.46	2,439.87	144.59	17.875			
14,300.00	9,110.00	12,028.01	6,889.00	125.21	123.28	-30.71	551.28	5,177.71	2,584.48	2,437.25	147.23	17.555			
14,400.00	9,110.00	12,128.01	6,889.00	127.45	125.55	-30.71	551.23	5,277.71	2,584.50	2,434.63	149.87	17.245			
14,500.00	9,110.00	12,228.01	6,889.00	129.68	127.81	-30.71	551.19	5,377.71	2,584.52	2,432.01	152.51	16.946			
14,600.00	9,110.00	12,328.01	6,889.00	131.92	130.07	-30.71	551.14	5,477.71	2,584.54	2,429.38	155.16	16.657			
14,700.00	9,110.00	12,428.01	6,889.00	134.16	132.34	-30.71	551.09	5,577.71	2,584.56	2,426.76	157.81	16.378			
14,800.00	9,110.00	12,528.01	6,889.00	136.40	134.61	-30.72	551.05	5,677.71	2,584.59	2,424.12	160.46	16.107			
14,900.00	9,110.00	12,628.01	6,889.00	138.64	136.88	-30.72	551.00	5,777.71	2,584.61	2,421.49	163.12	15.845			
15,000.00	9,110.00	12,728.01	6,889.00	140.89	139.15	-30.72	550.96	5,877.71	2,584.63	2,418.85	165.78	15.591			
15,100.00	9,110.00	12,828.01	6,889.00	143.13	141.42	-30.72	550.91	5,977.71	2,584.65	2,416.21	168.44	15.345			
15,200.00	9,110.00	12,928.01	6,889.00	145.38	143.69	-30.72	550.87	6,077.71	2,584.67	2,413.57	171.10	15.106			
15,300.00	9,110.00	13,028.01	6,889.00	147.63	145.96	-30.72	550.82	6,177.71	2,584.69	2,410.93	173.76	14.875			
15,400.00	9,110.00	13,128.01	6,889.00	149.89	148.24	-30.72	550.77	6,277.71	2,584.71	2,408.28	176.43	14.650			
15,500.00	9,110.00	13,228.01	6,889.00	152.14	150.51	-30.72	550.73	6,377.71	2,584.73	2,405.64	179.10	14.432			

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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
15,600.00	9,110.00	13,328.01	6,889.00	154.40	152.79	-30.72	550.68	6,477.71	2,584.75	2,402.99	181.77	14.220	
15,700.00	9,110.00	13,428.01	6,889.00	156.66	155.07	-30.72	550.64	6,577.71	2,584.77	2,400.34	184.44	14.014	
15,800.00	9,110.00	13,528.01	6,889.00	158.92	157.35	-30.72	550.59	6,677.71	2,584.80	2,397.68	187.11	13.814	
15,900.00	9,110.00	13,628.01	6,889.00	161.18	159.63	-30.72	550.55	6,777.71	2,584.82	2,395.03	189.79	13.619	
16,000.00	9,110.00	13,728.01	6,889.00	163.44	161.91	-30.73	550.50	6,877.71	2,584.84	2,392.37	192.47	13.430	
16,100.00	9,110.00	13,828.01	6,889.00	165.70	164.19	-30.73	550.45	6,977.71	2,584.86	2,389.72	195.14	13.246	
16,200.00	9,110.00	13,928.01	6,889.00	167.97	166.47	-30.73	550.41	7,077.71	2,584.88	2,387.06	197.82	13.067	
16,300.00	9,110.00	14,028.01	6,889.00	170.23	168.75	-30.73	550.36	7,177.71	2,584.90	2,384.40	200.50	12.892	
16,400.00	9,110.00	14,128.01	6,889.00	172.50	171.04	-30.73	550.32	7,277.71	2,584.92	2,381.73	203.19	12.722	
16,500.00	9,110.00	14,228.01	6,889.00	174.77	173.32	-30.73	550.27	7,377.71	2,584.94	2,379.07	205.87	12.556	
16,600.00	9,110.00	14,328.01	6,889.00	177.04	175.60	-30.73	550.23	7,477.71	2,584.96	2,376.41	208.56	12.395	
16,700.00	9,110.00	14,428.01	6,889.00	179.31	177.89	-30.73	550.18	7,577.71	2,584.99	2,373.74	211.24	12.237	
16,800.00	9,110.00	14,528.01	6,889.00	181.58	180.18	-30.73	550.13	7,677.71	2,585.01	2,371.08	213.93	12.083	
16,900.00	9,110.00	14,628.01	6,889.00	183.85	182.46	-30.73	550.09	7,777.71	2,585.03	2,368.41	216.62	11.934	
17,000.00	9,110.00	14,728.01	6,889.00	186.12	184.75	-30.73	550.04	7,877.71	2,585.05	2,365.74	219.31	11.787	
17,100.00	9,110.00	14,828.01	6,889.00	188.40	187.04	-30.73	550.00	7,977.71	2,585.07	2,363.07	222.00	11.645	
17,200.00	9,110.00	14,928.01	6,889.00	190.67	189.32	-30.73	549.95	8,077.71	2,585.09	2,360.40	224.69	11.505	
17,300.00	9,110.00	15,028.01	6,889.00	192.95	191.61	-30.74	549.91	8,177.71	2,585.11	2,357.73	227.38	11.369	
17,400.00	9,110.00	15,128.01	6,889.00	195.22	193.90	-30.74	549.86	8,277.71	2,585.13	2,355.06	230.08	11.236	
17,500.00	9,110.00	15,228.01	6,889.00	197.50	196.19	-30.74	549.81	8,377.71	2,585.15	2,352.38	232.77	11.106	
17,600.00	9,110.00	15,328.01	6,889.00	199.78	198.48	-30.74	549.77	8,477.71	2,585.17	2,349.71	235.47	10.979	
17,700.00	9,110.00	15,428.01	6,889.00	202.06	200.77	-30.74	549.72	8,577.71	2,585.20	2,347.03	238.16	10.855	
17,800.00	9,110.00	15,528.01	6,889.00	204.33	203.06	-30.74	549.68	8,677.71	2,585.22	2,344.36	240.86	10.733	
17,900.00	9,110.00	15,628.01	6,889.00	206.61	205.35	-30.74	549.63	8,777.71	2,585.24	2,341.68	243.56	10.614	
18,000.00	9,110.00	15,728.01	6,889.00	208.89	207.65	-30.74	549.59	8,877.71	2,585.26	2,339.00	246.26	10.498	
18,100.00	9,110.00	15,828.01	6,889.00	211.18	209.94	-30.74	549.54	8,977.71	2,585.28	2,336.32	248.96	10.385	
18,200.00	9,110.00	15,928.01	6,889.00	213.46	212.23	-30.74	549.49	9,077.71	2,585.30	2,333.65	251.66	10.273	
18,300.00	9,110.00	16,028.01	6,889.00	215.74	214.52	-30.74	549.45	9,177.71	2,585.32	2,330.97	254.36	10.164	
18,400.00	9,110.00	16,128.01	6,889.00	218.02	216.82	-30.74	549.40	9,277.71	2,585.34	2,328.29	257.06	10.057	
18,500.00	9,110.00	16,228.01	6,889.00	220.31	219.11	-30.74	549.36	9,377.71	2,585.36	2,325.60	259.76	9.953	
18,600.00	9,110.00	16,328.01	6,889.00	222.59	221.40	-30.75	549.31	9,477.71	2,585.39	2,322.92	262.46	9.850	
18,700.00	9,110.00	16,428.01	6,889.00	224.87	223.70	-30.75	549.27	9,577.71	2,585.41	2,320.24	265.17	9.750	
18,800.00	9,110.00	16,528.01	6,889.00	227.16	225.99	-30.75	549.22	9,677.71	2,585.43	2,317.56	267.87	9.652	
18,900.00	9,110.00	16,628.01	6,889.00	229.44	228.29	-30.75	549.18	9,777.71	2,585.45	2,314.87	270.58	9.555	
19,000.00	9,110.00	16,728.01	6,889.00	231.73	230.58	-30.75	549.13	9,877.71	2,585.47	2,312.19	273.28	9.461	
19,100.00	9,110.00	16,828.01	6,889.00	234.02	232.88	-30.75	549.08	9,977.71	2,585.49	2,309.50	275.99	9.368	
19,200.00	9,110.00	16,928.01	6,889.00	236.30	235.17	-30.75	549.04	10,077.71	2,585.51	2,306.82	278.69	9.277	
19,200.22	9,110.00	16,928.24	6,889.00	236.31	235.18	-30.75	549.04	10,077.93	2,585.51	2,306.81	278.70	9.277	
19,286.90	9,110.00	17,011.31	6,889.00	238.29	237.08	-30.75	549.00	10,161.00	2,585.53	2,304.53	281.00	9.201	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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							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	0.00	80.00	0.00	80.00						
100.00	100.00	100.00	100.00	0.13	0.13	0.00	80.00	0.00	80.00	79.74	0.26	312.125			
200.00	200.00	200.00	200.00	0.49	0.49	0.00	80.00	0.00	80.00	79.03	0.97	82.199			
300.00	300.00	300.00	300.00	0.85	0.85	0.00	80.00	0.00	80.00	78.31	1.69	47.332			
400.00	400.00	400.00	400.00	1.20	1.20	0.00	80.00	0.00	80.00	77.59	2.41	33.235			
500.00	500.00	500.00	500.00	1.56	1.56	0.00	80.00	0.00	80.00	76.88	3.12	25.608			
600.00	600.00	600.00	600.00	1.92	1.92	0.00	80.00	0.00	80.00	76.16	3.84	20.828			
700.00	700.00	700.00	700.00	2.28	2.28	0.00	80.00	0.00	80.00	75.44	4.56	17.552			
800.00	800.00	800.00	800.00	2.64	2.64	0.00	80.00	0.00	80.00	74.73	5.27	15.166			
900.00	900.00	900.00	900.00	3.00	3.00	0.00	80.00	0.00	80.00	74.01	5.99	13.351			
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	0.00	80.00	0.00	80.00	73.29	6.71	11.925			
1,000.02	1,000.02	1,000.02	1,000.02	3.35	3.35	0.00	80.00	0.00	80.00	73.29	6.71	11.924			
1,100.00	1,099.98	1,100.02	1,099.98	3.70	3.71	-91.25	80.00	0.00	80.02	72.60	7.42	10.788			
1,200.00	1,199.92	1,200.08	1,199.92	4.05	4.07	-93.74	80.00	0.00	80.17	72.05	8.12	9.873			
1,300.00	1,299.86	1,300.14	1,299.86	4.40	4.43	-96.22	80.00	0.00	80.47	71.65	8.83	9.118			
1,400.00	1,399.80	1,400.20	1,399.80	4.75	4.79	-98.68	80.00	0.00	80.93	71.39	9.53	8.488			
1,500.00	1,499.74	1,499.74	1,499.74	5.10	5.15	-101.10	80.00	0.00	81.53	71.29	10.24	7.960			
1,600.00	1,599.68	1,602.41	1,602.39	5.45	5.50	-103.97	78.18	-0.17	80.59	69.65	10.94	7.368			
1,700.00	1,699.61	1,704.81	1,704.64	5.80	5.83	-107.94	72.71	-0.70	76.55	64.94	11.61	6.593			
1,800.00	1,799.55	1,806.67	1,806.08	6.16	6.17	-113.70	63.68	-1.56	69.76	57.48	12.28	5.682			
1,900.00	1,899.49	1,907.72	1,906.35	6.51	6.50	-122.54	51.17	-2.76	60.96	48.01	12.95	4.708			
2,000.00	1,999.43	2,007.75	2,005.09	6.87	6.85	-136.79	35.33	-4.27	51.77	38.13	13.64	3.795			
2,100.00	2,099.37	2,106.51	2,101.99	7.22	7.20	-159.12	16.33	-6.09	45.82	31.43	14.39	3.183			
2,124.91	2,124.26	2,130.89	2,125.80	7.31	7.29	-165.85	11.13	-6.58	45.51	30.92	14.58	3.121 CC, ES			
2,200.00	2,199.31	2,203.90	2,196.86	7.58	7.57	-173.43	-5.55	-8.18	48.69	33.59	15.10	3.224			
2,300.00	2,299.26	2,301.35	2,291.58	7.93	7.94	94.15	-28.33	-10.36	60.04	44.32	15.72	3.819			
2,400.00	2,399.14	2,399.49	2,386.98	8.27	8.33	52.67	-51.28	-12.55	73.27	56.92	16.34	4.483			
2,500.00	2,498.84	2,501.80	2,482.93	8.61	8.74	34.21	-74.36	-14.76	85.35	68.35	17.00	5.020			
2,600.00	2,598.23	2,597.37	2,579.32	8.95	9.14	23.66	-97.55	-16.98	95.12	77.47	17.65	5.389			
2,700.00	2,697.20	2,703.13	2,676.04	9.29	9.58	16.52	-120.82	-19.20	102.09	83.74	18.35	5.564			
2,800.00	2,795.84	2,803.48	2,772.91	9.63	10.01	12.68	-144.12	-21.43	107.34	88.30	19.03	5.639			
2,900.00	2,894.48	2,903.82	2,869.77	9.98	10.44	9.49	-167.42	-23.66	112.92	93.20	19.73	5.725			
3,000.00	2,993.12	3,004.17	2,966.64	10.33	10.88	6.61	-190.72	-25.88	118.83	98.41	20.42	5.819			
3,100.00	3,091.75	3,095.49	3,063.51	10.70	11.28	4.00	-214.03	-28.11	125.00	103.91	21.09	5.928			
3,200.00	3,190.39	3,204.86	3,160.37	11.06	11.77	1.64	-237.33	-30.34	131.41	109.58	21.83	6.020			
3,300.00	3,289.03	3,294.80	3,257.24	11.44	12.17	-0.49	-260.63	-32.57	138.02	115.52	22.50	6.134			
3,400.00	3,387.66	3,394.45	3,354.11	11.81	12.62	-2.43	-283.93	-34.79	144.81	121.59	23.21	6.238			
3,500.00	3,486.30	3,494.11	3,450.97	12.19	13.07	-4.19	-307.23	-37.02	151.74	127.81	23.93	6.340			
3,600.00	3,584.94	3,606.24	3,547.84	12.58	13.58	-5.80	-330.54	-39.25	158.81	134.11	24.70	6.429			
3,700.00	3,683.57	3,706.58	3,644.71	12.96	14.04	-7.27	-353.84	-41.48	165.99	140.55	25.43	6.527			
3,800.00	3,782.21	3,806.93	3,741.58	13.35	14.50	-8.62	-377.14	-43.71	173.27	147.10	26.17	6.622			
3,900.00	3,880.85	3,907.27	3,838.44	13.74	14.96	-9.86	-400.44	-45.93	180.63	153.73	26.90	6.714			
4,000.00	3,979.48	4,007.62	3,935.31	14.13	15.43	-11.00	-423.74	-48.16	188.08	160.43	27.65	6.803			
4,100.00	4,078.12	4,107.96	4,032.18	14.53	15.89	-12.05	-447.05	-50.39	195.59	167.20	28.39	6.889			
4,200.00	4,176.76	4,208.30	4,129.04	14.92	16.36	-13.03	-470.35	-52.62	203.17	174.03	29.14	6.972			
4,300.00	4,275.39	4,308.65	4,225.91	15.32	16.83	-13.94	-493.65	-54.85	210.80	180.91	29.89	7.052			
4,400.00	4,374.03	4,391.01	4,322.78	15.72	17.22	-14.78	-516.95	-57.07	218.47	187.90	30.57	7.146			
4,500.00	4,472.67	4,509.34	4,419.64	16.12	17.77	-15.56	-540.25	-59.30	226.19	194.79	31.40	7.204			
4,600.00	4,571.30	4,609.68	4,516.51	16.53	18.24	-16.30	-563.56	-61.53	233.96	201.80	32.16	7.275			
4,700.00	4,669.94	4,710.03	4,613.38	16.93	18.71	-16.98	-586.86	-63.76	241.75	208.83	32.92	7.343			
4,800.00	4,768.58	4,789.63	4,710.25	17.33	19.09	-17.62	-610.16	-65.98	249.58	215.98	33.60	7.427			
4,900.00	4,867.21	4,897.33	4,815.25	17.74	19.59	-18.31	-633.96	-68.26	256.15	221.66	34.49	7.427			

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
5,000.00	4,965.85	5,007.04	4,923.06	18.15	20.07	-19.08	-654.20	-70.19	259.01	223.66	35.36	7.326	
5,100.00	5,064.49	5,116.80	5,031.61	18.56	20.52	-19.96	-670.32	-71.74	258.12	221.94	36.18	7.135	
5,200.00	5,163.12	5,226.28	5,140.42	18.96	20.94	-20.99	-682.27	-72.88	253.50	216.55	36.95	6.861	
5,300.00	5,261.76	5,335.17	5,249.03	19.37	21.33	-22.23	-690.04	-73.62	245.21	207.54	37.67	6.509	
5,400.00	5,360.40	5,443.17	5,356.96	19.78	21.69	-23.74	-693.68	-73.97	233.34	194.99	38.35	6.085	
5,500.00	5,459.03	5,545.25	5,459.03	20.19	21.99	-25.51	-694.00	-74.00	218.63	179.58	39.05	5.599	
5,600.00	5,557.67	5,643.88	5,557.67	20.61	22.28	-27.50	-694.00	-74.00	203.87	164.06	39.81	5.122	
5,700.00	5,656.31	5,742.52	5,656.31	21.02	22.56	-29.79	-694.00	-74.00	189.38	148.79	40.58	4.666	
5,800.00	5,754.94	5,841.16	5,754.94	21.43	22.85	-32.46	-694.00	-74.00	175.23	133.85	41.39	4.234	
5,900.00	5,853.58	5,939.79	5,853.58	21.85	23.14	-35.58	-694.00	-74.00	161.53	119.30	42.23	3.825	
6,000.00	5,952.22	6,038.43	5,952.22	22.26	23.44	-39.25	-694.00	-74.00	148.39	105.27	43.11	3.442	
6,100.00	6,050.85	6,137.07	6,050.85	22.67	23.73	-43.62	-694.00	-74.00	135.97	91.91	44.06	3.086	
6,200.00	6,149.49	6,235.70	6,149.49	23.09	24.03	-48.81	-694.00	-74.00	124.49	79.42	45.07	2.762	
6,300.00	6,248.13	6,334.34	6,248.13	23.50	24.32	-54.98	-694.00	-74.00	114.23	68.08	46.16	2.475	
6,400.00	6,346.76	6,429.16	6,346.76	23.92	24.61	-62.15	-694.06	-73.37	106.11	58.74	47.37	2.240	
6,427.75	6,374.14	6,452.96	6,366.68	24.04	24.68	-64.58	-694.22	-71.77	105.53	57.82	47.71	2.212 SF	
6,500.00	6,445.40	6,531.61	6,445.40	24.34	24.87	-72.01	-695.07	-63.27	109.82	61.55	48.27	2.275	
6,600.00	6,544.04	6,592.67	6,502.97	24.75	25.11	-82.22	-697.11	-42.80	130.83	82.94	47.89	2.732	
6,700.00	6,642.68	6,664.19	6,568.95	25.17	25.32	-89.83	-699.84	-15.45	168.17	121.75	46.42	3.622	
6,800.00	6,741.31	6,727.31	6,623.94	25.59	25.49	-94.71	-702.91	15.32	218.45	173.90	44.55	4.903	
6,900.00	6,839.95	6,782.16	6,668.71	26.01	25.63	-97.73	-706.06	46.80	278.48	235.83	42.65	6.529	
7,000.00	6,938.59	6,829.44	6,704.73	26.42	25.74	-99.61	-709.10	77.26	345.91	305.06	40.85	8.467	
7,100.00	7,037.22	6,870.09	6,733.60	26.84	25.84	-101.01	-711.94	105.73	419.02	379.77	39.25	10.676	
7,200.00	7,136.17	6,900.00	6,753.50	27.25	25.91	-103.93	-714.16	127.94	496.36	458.88	37.48	13.242	
7,300.00	7,235.56	6,936.26	6,776.03	27.64	25.99	-106.69	-716.98	156.21	576.62	540.05	36.56	15.770	
7,400.00	7,335.28	6,963.43	6,791.70	28.01	26.05	-109.28	-719.18	178.29	659.26	623.81	35.46	18.593	
7,500.00	7,435.19	6,987.46	6,804.68	28.36	26.11	-111.85	-721.19	198.41	743.73	709.24	34.50	21.559	
7,600.00	7,535.19	7,000.00	6,811.11	28.68	26.14	-84.09	-722.26	209.12	829.79	796.47	33.31	24.910	
7,700.00	7,635.19	7,027.69	6,824.46	28.98	26.21	-84.74	-724.67	233.26	917.26	884.30	32.97	27.825	
7,800.00	7,735.19	7,050.00	6,834.36	29.29	26.28	-85.23	-726.65	253.15	1,006.39	973.82	32.57	30.900	
7,900.00	7,835.19	7,050.00	6,834.36	29.60	26.28	-85.23	-726.65	253.15	1,096.81	1,065.18	31.63	34.675	
8,000.00	7,935.19	7,072.82	6,843.67	29.91	26.35	-85.69	-728.72	273.87	1,188.09	1,156.56	31.53	37.685	
8,100.00	8,035.19	7,100.00	6,853.67	30.22	26.44	-86.20	-731.23	299.03	1,280.68	1,249.07	31.60	40.524	
8,200.00	8,135.19	7,100.00	6,853.67	30.53	26.44	-86.20	-731.23	299.03	1,373.48	1,342.40	31.08	44.190	
8,300.00	8,235.19	7,100.00	6,853.67	30.84	26.44	-86.20	-731.23	299.03	1,467.22	1,436.54	30.68	47.818	
8,400.00	8,335.19	7,100.00	6,853.67	31.16	26.44	-86.20	-731.23	299.03	1,561.74	1,531.36	30.39	51.394	
8,500.00	8,435.19	7,123.02	6,861.19	31.47	26.53	-86.60	-733.39	320.67	1,656.29	1,625.69	30.60	54.134	
8,600.00	8,535.19	7,130.61	6,863.48	31.79	26.56	-86.72	-734.11	327.88	1,751.53	1,720.97	30.55	57.325	
8,700.00	8,634.71	7,150.00	6,868.89	32.10	26.65	-1.98	-735.96	346.40	1,844.44	1,813.80	30.64	60.198	
8,800.00	8,731.26	7,150.00	6,868.89	32.39	26.65	-1.47	-735.96	346.40	1,930.22	1,899.95	30.27	63.767	
8,900.00	8,821.91	7,150.00	6,868.89	32.64	26.65	-1.19	-735.96	346.40	2,007.71	1,977.88	29.83	67.303	
9,000.00	8,903.91	7,200.00	6,879.90	32.84	26.92	-0.83	-740.80	394.92	2,074.89	2,044.90	29.99	69.183	
9,100.00	8,974.76	7,200.00	6,879.90	32.99	26.92	-0.73	-740.80	394.92	2,130.19	2,100.72	29.47	72.272	
9,200.00	9,032.31	7,200.00	6,879.90	33.10	26.92	-0.67	-740.80	394.92	2,173.90	2,144.88	29.03	74.896	
9,300.00	9,074.81	7,250.00	6,886.62	33.16	27.25	-0.50	-745.72	444.20	2,204.01	2,174.89	29.12	75.691	
9,400.00	9,100.97	7,250.00	6,886.62	33.30	27.25	-0.49	-745.72	444.20	2,220.69	2,191.83	28.85	76.970	
9,500.00	9,110.00	7,278.26	6,888.50	33.86	27.47	-0.41	-748.52	472.25	2,223.59	2,194.66	28.93	76.859	
9,600.00	9,110.00	7,302.25	6,889.00	34.63	27.67	-0.35	-750.91	496.12	2,221.12	2,192.01	29.11	76.290	
9,644.70	9,110.00	7,329.06	6,889.00	35.03	27.90	-0.29	-753.44	522.81	2,221.03	2,191.71	29.32	75.751	
9,700.00	9,110.00	7,384.02	6,889.00	35.53	28.43	-0.18	-757.86	577.59	2,221.01	2,191.34	29.67	74.851	
9,800.00	9,110.00	7,483.74	6,889.00	36.56	29.50	-0.04	-763.20	677.16	2,221.00	2,190.64	30.36	73.151	
9,864.83	9,110.00	7,548.53	6,889.00	37.30	30.28	0.00	-764.81	741.93	2,221.00	2,190.16	30.84	72.018	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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						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		
9,900.00	9,110.00	7,583.70	6,889.00	37.70	30.71	0.01	-765.07	777.11	2,221.00	2,189.90	31.10	71.420		
10,000.00	9,110.00	7,683.70	6,889.00	38.95	32.05	0.01	-765.15	877.11	2,221.00	2,189.11	31.89	69.647		
10,100.00	9,110.00	7,783.70	6,889.00	40.28	33.50	0.01	-765.24	977.11	2,221.00	2,188.27	32.73	67.848		
10,200.00	9,110.00	7,883.70	6,889.00	41.70	35.04	0.01	-765.32	1,077.11	2,221.00	2,187.37	33.63	66.037		
10,300.00	9,110.00	7,983.70	6,889.00	43.20	36.67	0.01	-765.41	1,177.10	2,221.00	2,186.42	34.58	64.231		
10,400.00	9,110.00	8,083.70	6,889.00	44.77	38.37	0.01	-765.49	1,277.10	2,221.00	2,185.43	35.57	62.444		
10,500.00	9,110.00	8,183.70	6,889.00	46.39	40.13	0.01	-765.58	1,377.10	2,221.00	2,184.40	36.60	60.687		
10,600.00	9,110.00	8,283.70	6,889.00	48.08	41.94	0.01	-765.66	1,477.10	2,221.00	2,183.34	37.66	58.968		
10,700.00	9,110.00	8,383.70	6,889.00	49.81	43.80	0.01	-765.74	1,577.10	2,221.00	2,182.24	38.76	57.295		
10,800.00	9,110.00	8,483.70	6,889.00	51.59	45.71	0.01	-765.83	1,677.10	2,221.00	2,181.10	39.90	55.670		
10,900.00	9,110.00	8,583.70	6,889.00	53.40	47.64	0.01	-765.91	1,777.10	2,221.00	2,179.94	41.06	54.098		
11,000.00	9,110.00	8,683.70	6,889.00	55.26	49.61	0.01	-766.00	1,877.10	2,221.00	2,178.76	42.24	52.579		
11,100.00	9,110.00	8,783.70	6,889.00	57.14	51.61	0.01	-766.08	1,977.10	2,221.00	2,177.55	43.45	51.115		
11,200.00	9,110.00	8,883.70	6,889.00	59.06	53.64	0.01	-766.17	2,077.10	2,221.00	2,176.32	44.68	49.707		
11,300.00	9,110.00	8,983.70	6,889.00	61.01	55.68	0.00	-766.25	2,177.10	2,221.00	2,175.07	45.93	48.352		
11,400.00	9,110.00	9,083.70	6,889.00	62.97	57.75	0.00	-766.34	2,277.10	2,221.00	2,173.80	47.20	47.051		
11,500.00	9,110.00	9,183.70	6,889.00	64.97	59.83	0.00	-766.42	2,377.10	2,221.00	2,172.51	48.49	45.801		
11,600.00	9,110.00	9,283.70	6,889.00	66.98	61.93	0.00	-766.51	2,477.10	2,221.00	2,171.20	49.80	44.603		
11,700.00	9,110.00	9,383.70	6,889.00	69.01	64.05	0.00	-766.59	2,577.10	2,221.00	2,169.89	51.11	43.452		
11,800.00	9,110.00	9,483.70	6,889.00	71.05	66.17	0.00	-766.67	2,677.10	2,221.00	2,168.56	52.45	42.349		
11,900.00	9,110.00	9,583.70	6,889.00	73.12	68.31	0.00	-766.76	2,777.10	2,221.00	2,167.21	53.79	41.291		
12,000.00	9,110.00	9,683.70	6,889.00	75.19	70.46	0.00	-766.84	2,877.10	2,221.00	2,165.85	55.15	40.275		
12,100.00	9,110.00	9,783.70	6,889.00	77.28	72.62	0.00	-766.93	2,977.10	2,221.00	2,164.49	56.51	39.301		
12,200.00	9,110.00	9,883.70	6,889.00	79.38	74.79	0.00	-767.01	3,077.10	2,221.00	2,163.11	57.89	38.367		
12,300.00	9,110.00	9,983.70	6,889.00	81.50	76.97	0.00	-767.10	3,177.10	2,221.00	2,161.72	59.28	37.469		
12,400.00	9,110.00	10,083.70	6,889.00	83.62	79.15	0.00	-767.18	3,277.10	2,221.00	2,160.33	60.67	36.608		
12,500.00	9,110.00	10,183.70	6,889.00	85.75	81.34	0.00	-767.27	3,377.10	2,221.00	2,158.93	62.07	35.780		
12,600.00	9,110.00	10,283.70	6,889.00	87.89	83.54	0.00	-767.35	3,477.10	2,221.00	2,157.52	63.48	34.985		
12,700.00	9,110.00	10,383.70	6,889.00	90.04	85.74	0.00	-767.43	3,577.10	2,221.00	2,156.10	64.90	34.221		
12,800.00	9,110.00	10,483.70	6,889.00	92.20	87.95	0.00	-767.52	3,677.10	2,221.00	2,154.67	66.33	33.486		
12,900.00	9,110.00	10,583.70	6,889.00	94.37	90.16	0.00	-767.60	3,777.10	2,221.00	2,153.24	67.76	32.778		
13,000.00	9,110.00	10,683.70	6,889.00	96.54	92.38	0.00	-767.69	3,877.10	2,221.00	2,151.80	69.20	32.098		
13,100.00	9,110.00	10,783.70	6,889.00	98.72	94.61	0.00	-767.77	3,977.10	2,221.00	2,150.36	70.64	31.442		
13,200.00	9,110.00	10,883.70	6,889.00	100.90	96.83	0.00	-767.86	4,077.10	2,221.00	2,148.91	72.09	30.811		
13,300.00	9,110.00	10,983.70	6,889.00	103.09	99.06	0.00	-767.94	4,177.10	2,221.00	2,147.46	73.54	30.202		
13,400.00	9,110.00	11,083.70	6,889.00	105.28	101.30	0.00	-768.03	4,277.10	2,221.00	2,146.00	75.00	29.615		
13,500.00	9,110.00	11,183.70	6,889.00	107.48	103.53	0.00	-768.11	4,377.10	2,221.00	2,144.54	76.46	29.049		
13,600.00	9,110.00	11,283.70	6,889.00	109.68	105.77	0.00	-768.20	4,477.10	2,221.00	2,143.08	77.92	28.502		
13,700.00	9,110.00	11,383.70	6,889.00	111.89	108.02	0.00	-768.28	4,577.10	2,221.00	2,141.61	79.39	27.975		
13,800.00	9,110.00	11,483.70	6,889.00	114.10	110.26	0.00	-768.36	4,677.10	2,221.00	2,140.13	80.87	27.465		
13,900.00	9,110.00	11,583.70	6,889.00	116.32	112.51	0.00	-768.45	4,777.10	2,221.00	2,138.66	82.34	26.972		
14,000.00	9,110.00	11,683.70	6,889.00	118.54	114.76	0.00	-768.53	4,877.10	2,221.00	2,137.18	83.82	26.496		
14,100.00	9,110.00	11,783.70	6,889.00	120.76	117.01	0.00	-768.62	4,977.10	2,221.00	2,135.69	85.31	26.035		
14,200.00	9,110.00	11,883.70	6,889.00	122.99	119.27	0.00	-768.70	5,077.10	2,221.00	2,134.21	86.79	25.589		
14,300.00	9,110.00	11,983.70	6,889.00	125.21	121.53	0.00	-768.79	5,177.10	2,221.00	2,132.72	88.28	25.158		
14,400.00	9,110.00	12,083.70	6,889.00	127.45	123.79	0.00	-768.87	5,277.10	2,221.00	2,131.22	89.78	24.740		
14,500.00	9,110.00	12,183.70	6,889.00	129.68	126.05	0.00	-768.96	5,377.10	2,221.00	2,129.73	91.27	24.334		
14,600.00	9,110.00	12,283.70	6,889.00	131.92	128.31	0.00	-769.04	5,477.10	2,221.00	2,128.23	92.77	23.942		
14,700.00	9,110.00	12,383.70	6,889.00	134.16	130.57	0.00	-769.12	5,577.10	2,221.00	2,126.73	94.27	23.561		
14,800.00	9,110.00	12,483.70	6,889.00	136.40	132.84	0.00	-769.21	5,677.10	2,221.00	2,125.23	95.77	23.192		
14,900.00	9,110.00	12,583.70	6,889.00	138.64	135.11	0.00	-769.29	5,777.10	2,221.00	2,123.73	97.27	22.833		
15,000.00	9,110.00	12,683.70	6,889.00	140.89	137.38	0.00	-769.38	5,877.10	2,221.00	2,122.22	98.78	22.485		

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
15,100.00	9,110.00	12,783.70	6,889.00	143.13	139.65	0.00	-769.46	5,977.10	2,221.00	2,120.72	100.28	22.147	
15,200.00	9,110.00	12,883.70	6,889.00	145.38	141.92	0.00	-769.55	6,077.10	2,221.00	2,119.21	101.79	21.818	
15,300.00	9,110.00	12,983.70	6,889.00	147.63	144.19	0.00	-769.63	6,177.10	2,221.00	2,117.69	103.31	21.499	
15,400.00	9,110.00	13,083.70	6,889.00	149.89	146.46	0.00	-769.72	6,277.10	2,221.00	2,116.18	104.82	21.189	
15,500.00	9,110.00	13,183.70	6,889.00	152.14	148.74	0.00	-769.80	6,377.10	2,221.00	2,114.67	106.33	20.887	
15,600.00	9,110.00	13,283.70	6,889.00	154.40	151.01	0.00	-769.88	6,477.10	2,221.00	2,113.15	107.85	20.593	
15,700.00	9,110.00	13,383.70	6,889.00	156.66	153.29	0.00	-769.97	6,577.10	2,221.00	2,111.63	109.37	20.308	
15,800.00	9,110.00	13,483.70	6,889.00	158.92	155.57	0.00	-770.05	6,677.10	2,221.00	2,110.11	110.89	20.030	
15,900.00	9,110.00	13,583.70	6,889.00	161.18	157.84	0.00	-770.14	6,777.10	2,221.00	2,108.59	112.41	19.759	
16,000.00	9,110.00	13,683.70	6,889.00	163.44	160.12	0.00	-770.22	6,877.10	2,221.00	2,107.07	113.93	19.495	
16,100.00	9,110.00	13,783.70	6,889.00	165.70	162.40	0.00	-770.31	6,977.10	2,221.00	2,105.55	115.45	19.237	
16,200.00	9,110.00	13,883.70	6,889.00	167.97	164.69	0.00	-770.39	7,077.10	2,221.00	2,104.02	116.98	18.987	
16,300.00	9,110.00	13,983.70	6,889.00	170.23	166.97	0.00	-770.48	7,177.10	2,221.00	2,102.50	118.50	18.742	
16,400.00	9,110.00	14,083.70	6,889.00	172.50	169.25	0.00	-770.56	7,277.10	2,221.00	2,100.97	120.03	18.504	
16,500.00	9,110.00	14,183.70	6,889.00	174.77	171.53	0.00	-770.65	7,377.10	2,221.00	2,099.44	121.56	18.271	
16,600.00	9,110.00	14,283.70	6,889.00	177.04	173.82	0.00	-770.73	7,477.10	2,221.00	2,097.92	123.08	18.044	
16,700.00	9,110.00	14,383.70	6,889.00	179.31	176.10	0.00	-770.81	7,577.10	2,221.00	2,096.39	124.61	17.823	
16,800.00	9,110.00	14,483.70	6,889.00	181.58	178.39	0.00	-770.90	7,677.10	2,221.00	2,094.85	126.15	17.607	
16,900.00	9,110.00	14,583.70	6,889.00	183.85	180.67	0.00	-770.98	7,777.10	2,221.00	2,093.32	127.68	17.395	
17,000.00	9,110.00	14,683.70	6,889.00	186.12	182.96	0.00	-771.07	7,877.10	2,221.00	2,091.79	129.21	17.189	
17,100.00	9,110.00	14,783.70	6,889.00	188.40	185.24	0.00	-771.15	7,977.10	2,221.00	2,090.26	130.74	16.988	
17,200.00	9,110.00	14,883.70	6,889.00	190.67	187.53	0.00	-771.24	8,077.10	2,221.00	2,088.72	132.28	16.791	
17,300.00	9,110.00	14,983.70	6,889.00	192.95	189.82	0.00	-771.32	8,177.10	2,221.00	2,087.19	133.81	16.598	
17,400.00	9,110.00	15,083.70	6,889.00	195.22	192.11	0.00	-771.41	8,277.10	2,221.00	2,085.65	135.35	16.410	
17,500.00	9,110.00	15,183.70	6,889.00	197.50	194.40	0.00	-771.49	8,377.10	2,221.00	2,084.12	136.88	16.225	
17,600.00	9,110.00	15,283.70	6,889.00	199.78	196.69	0.00	-771.57	8,477.10	2,221.00	2,082.58	138.42	16.045	
17,700.00	9,110.00	15,383.70	6,889.00	202.06	198.98	0.00	-771.66	8,577.10	2,221.00	2,081.04	139.96	15.869	
17,800.00	9,110.00	15,483.70	6,889.00	204.33	201.27	0.00	-771.74	8,677.10	2,221.00	2,079.50	141.50	15.696	
17,900.00	9,110.00	15,583.70	6,889.00	206.61	203.56	0.00	-771.83	8,777.10	2,221.00	2,077.96	143.04	15.527	
18,000.00	9,110.00	15,683.70	6,889.00	208.89	205.85	0.00	-771.91	8,877.10	2,221.00	2,076.42	144.58	15.362	
18,100.00	9,110.00	15,783.70	6,889.00	211.18	208.14	0.00	-772.00	8,977.10	2,221.00	2,074.88	146.12	15.200	
18,200.00	9,110.00	15,883.70	6,889.00	213.46	210.43	0.00	-772.08	9,077.10	2,221.00	2,073.34	147.66	15.041	
18,300.00	9,110.00	15,983.70	6,889.00	215.74	212.72	0.00	-772.17	9,177.10	2,221.00	2,071.80	149.20	14.886	
18,400.00	9,110.00	16,083.70	6,889.00	218.02	215.02	0.00	-772.25	9,277.10	2,221.00	2,070.26	150.74	14.734	
18,500.00	9,110.00	16,183.70	6,889.00	220.31	217.31	0.00	-772.34	9,377.10	2,221.00	2,068.71	152.29	14.584	
18,600.00	9,110.00	16,283.70	6,889.00	222.59	219.60	0.00	-772.42	9,477.10	2,221.00	2,067.17	153.83	14.438	
18,700.00	9,110.00	16,383.70	6,889.00	224.87	221.90	0.00	-772.50	9,577.10	2,221.00	2,065.62	155.38	14.294	
18,800.00	9,110.00	16,483.70	6,889.00	227.16	224.19	0.00	-772.59	9,677.10	2,221.00	2,064.08	156.92	14.154	
18,900.00	9,110.00	16,583.70	6,889.00	229.44	226.48	0.00	-772.67	9,777.10	2,221.00	2,062.53	158.47	14.016	
19,000.00	9,110.00	16,683.70	6,889.00	231.73	228.78	0.00	-772.76	9,877.10	2,221.00	2,060.99	160.01	13.880	
19,100.00	9,110.00	16,783.70	6,889.00	234.02	231.07	0.00	-772.84	9,977.10	2,221.00	2,059.44	161.56	13.747	
19,200.00	9,110.00	16,883.70	6,889.00	236.30	233.37	0.00	-772.93	10,077.10	2,221.00	2,057.90	163.10	13.617	
19,286.90	9,110.00	16,970.60	6,889.00	238.29	235.36	0.00	-773.00	10,164.00	2,221.00	2,056.55	164.45	13.506	

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #136H
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:	#136H	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 - #125H - OH - Prelim A													Offset Site Error:
Survey Program: 0-MWD+HDGM													Offset Well Error:
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	0.00	0.00	0.00	0.00	180.00	-30.00	0.00	30.00				
100.00	100.00	100.00	100.00	0.13	0.13	180.00	-30.00	0.00	30.00	29.74	0.26	117.047	
200.00	200.00	200.00	200.00	0.49	0.49	180.00	-30.00	0.00	30.00	29.03	0.97	30.825	
300.00	300.00	300.00	300.00	0.85	0.85	180.00	-30.00	0.00	30.00	28.31	1.69	17.749	
400.00	400.00	400.00	400.00	1.20	1.20	180.00	-30.00	0.00	30.00	27.59	2.41	12.463	
500.00	500.00	500.00	500.00	1.56	1.56	180.00	-30.00	0.00	30.00	26.88	3.12	9.603	
600.00	600.00	600.00	600.00	1.92	1.92	180.00	-30.00	0.00	30.00	26.16	3.84	7.810	
700.00	700.00	700.00	700.00	2.28	2.28	180.00	-30.00	0.00	30.00	25.44	4.56	6.582	
800.00	800.00	800.00	800.00	2.64	2.64	180.00	-30.00	0.00	30.00	24.73	5.27	5.687	
900.00	900.00	900.00	900.00	3.00	3.00	180.00	-30.00	0.00	30.00	24.01	5.99	5.007	
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	180.00	-30.00	0.00	30.00	23.29	6.71	4.472	
1,100.00	1,099.98	1,100.57	1,100.55	3.70	3.71	96.16	-28.87	-1.35	29.04	21.62	7.42	3.916	
1,200.00	1,199.92	1,200.51	1,200.37	4.05	4.07	111.74	-25.78	-5.03	27.75	19.64	8.11	3.420	
1,214.46	1,214.37	1,214.92	1,214.76	4.10	4.12	114.18	-25.29	-5.61	27.73	19.51	8.22	3.375 CC, ES	
1,300.00	1,299.86	1,300.17	1,299.90	4.40	4.42	128.35	-22.42	-9.03	28.60	19.79	8.82	3.244 SF	
1,400.00	1,399.80	1,400.16	1,399.43	4.75	4.78	142.89	-19.07	-13.02	31.64	22.12	9.52	3.324	
1,500.00	1,499.74	1,500.50	1,498.95	5.10	5.14	154.31	-15.72	-17.02	36.31	26.09	10.22	3.552	
1,600.00	1,599.68	1,600.84	1,598.48	5.45	5.50	162.88	-12.37	-21.02	42.09	31.16	10.93	3.851	
1,700.00	1,699.61	1,701.18	1,698.00	5.80	5.86	169.28	-9.01	-25.01	48.57	36.93	11.63	4.174	
1,800.00	1,799.55	1,801.51	1,797.53	6.16	6.22	174.13	-5.66	-29.01	55.51	43.16	12.34	4.497	
1,900.00	1,899.49	1,901.85	1,897.05	6.51	6.58	177.89	-2.31	-33.00	62.76	49.70	13.05	4.808	
2,000.00	1,999.43	2,002.19	1,996.58	6.87	6.94	-179.15	1.04	-37.00	70.22	56.45	13.76	5.102	
2,100.00	2,099.37	2,102.53	2,096.11	7.22	7.31	-176.75	4.40	-40.99	77.83	63.36	14.47	5.377	
2,200.00	2,199.31	2,202.87	2,195.63	7.58	7.67	-174.79	7.75	-44.99	85.55	70.37	15.19	5.633	
2,300.00	2,299.26	2,303.21	2,295.15	7.93	8.03	128.93	11.10	-48.98	92.75	76.85	15.89	5.836	
2,400.00	2,399.14	2,403.66	2,394.56	8.27	8.40	103.60	14.45	-52.98	99.07	82.48	16.59	5.971	
2,500.00	2,498.84	2,495.67	2,493.76	8.61	8.73	98.14	17.79	-56.96	105.13	87.87	17.25	6.093	
2,600.00	2,598.23	2,593.33	2,591.22	8.95	9.09	99.98	22.53	-60.80	112.26	94.33	17.93	6.261	
2,700.00	2,697.20	2,689.13	2,686.63	9.29	9.44	105.79	30.40	-64.41	122.88	104.29	18.59	6.610	
2,800.00	2,795.84	2,785.58	2,782.51	9.63	9.79	114.48	40.21	-67.95	137.91	118.65	19.27	7.159	
2,900.00	2,894.48	2,882.22	2,878.58	9.98	10.15	121.70	50.06	-71.50	155.77	135.82	19.95	7.808	
3,000.00	2,993.12	2,978.86	2,974.66	10.33	10.51	127.40	59.90	-75.05	175.58	154.94	20.64	8.508	
3,100.00	3,091.75	3,075.51	3,070.73	10.70	10.86	131.94	69.75	-78.60	196.76	175.43	21.33	9.225	
3,200.00	3,190.39	3,172.15	3,166.81	11.06	11.22	135.60	79.60	-82.14	218.90	196.88	22.02	9.940	
3,300.00	3,289.03	3,268.79	3,262.88	11.44	11.58	138.58	89.44	-85.69	241.75	219.04	22.72	10.642	
3,400.00	3,387.66	3,365.43	3,358.95	11.81	11.94	141.05	99.29	-89.24	265.12	241.71	23.42	11.323	
3,500.00	3,486.30	3,462.08	3,455.03	12.19	12.31	143.12	109.13	-92.78	288.89	264.78	24.11	11.980	
3,600.00	3,584.94	3,558.72	3,551.10	12.58	12.67	144.88	118.98	-96.33	312.96	288.15	24.82	12.612	
3,700.00	3,683.57	3,655.36	3,647.18	12.96	13.03	146.39	128.82	-99.88	337.27	311.76	25.52	13.217	
3,800.00	3,782.21	3,752.00	3,743.25	13.35	13.39	147.69	138.67	-103.42	361.78	335.56	26.22	13.797	
3,900.00	3,880.85	3,848.65	3,839.32	13.74	13.76	148.83	148.52	-106.97	386.43	359.51	26.93	14.352	
4,000.00	3,979.48	3,945.29	3,935.40	14.13	14.12	149.84	158.36	-110.52	411.22	383.59	27.63	14.882	
4,100.00	4,078.12	4,041.93	4,031.47	14.53	14.49	150.73	168.21	-114.07	436.11	407.77	28.34	15.389	
4,200.00	4,176.76	4,138.57	4,127.55	14.92	14.85	151.52	178.05	-117.61	461.09	432.04	29.05	15.874	
4,300.00	4,275.39	4,235.21	4,223.62	15.32	15.22	152.23	187.90	-121.16	486.14	456.39	29.76	16.338	
4,400.00	4,374.03	4,331.86	4,319.69	15.72	15.58	152.97	197.74	-124.71	511.26	480.79	30.47	16.781	
4,500.00	4,472.67	4,428.50	4,415.77	16.12	15.95	153.46	207.59	-128.25	536.43	505.25	31.18	17.206	
4,600.00	4,571.30	4,525.14	4,511.84	16.53	16.31	153.99	217.44	-131.80	561.65	529.76	31.89	17.613	
4,700.00	4,669.94	4,621.78	4,607.92	16.93	16.68	154.47	227.28	-135.35	586.91	554.31	32.60	18.003	
4,800.00	4,768.58	4,718.43	4,703.99	17.33	17.05	154.92	237.13	-138.90	612.21	578.89	33.31	18.377	
4,900.00	4,867.21	4,815.07	4,800.06	17.74	17.41	155.33	246.97	-142.44	637.53	603.51	34.03	18.736	
5,000.00	4,965.85	4,911.71	4,896.14	18.15	17.78	155.71	256.82	-145.99	662.89	628.15	34.74	19.081	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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		
5,100.00	5,064.49	5,008.35	4,992.21	18.56	18.15	156.06	266.66	-149.54	688.27	652.82	35.46	19.412		
5,200.00	5,163.12	5,105.00	5,088.29	18.96	18.52	156.38	276.51	-153.08	713.68	677.51	36.17	19.730		
5,300.00	5,261.76	5,201.64	5,184.36	19.37	18.88	156.68	286.36	-156.63	739.10	702.21	36.89	20.037		
5,400.00	5,360.40	5,301.72	5,280.43	19.78	19.26	156.97	296.20	-160.18	764.55	726.93	37.62	20.325		
5,500.00	5,459.03	5,405.08	5,376.51	20.19	19.66	157.23	306.05	-163.72	790.00	751.65	38.36	20.595		
5,600.00	5,557.67	5,508.43	5,472.58	20.61	20.05	157.48	315.89	-167.27	815.48	776.38	39.10	20.856		
5,700.00	5,656.31	5,588.21	5,568.66	21.02	20.36	157.71	325.74	-170.82	840.97	801.21	39.76	21.153		
5,800.00	5,754.94	5,684.85	5,664.73	21.43	20.72	157.93	335.58	-174.37	866.46	825.99	40.48	21.407		
5,900.00	5,853.58	5,811.93	5,791.24	21.85	21.20	158.24	346.83	-178.42	890.76	849.34	41.42	21.508		
6,000.00	5,952.22	5,952.13	5,931.26	22.26	21.71	158.66	353.22	-180.72	910.68	868.29	42.39	21.485		
6,100.00	6,050.85	6,071.73	6,050.85	22.67	22.12	159.10	354.00	-181.00	926.61	883.41	43.20	21.450		
6,200.00	6,149.49	6,170.37	6,149.49	23.09	22.46	159.45	354.00	-181.00	942.03	898.11	43.91	21.452		
6,300.00	6,248.13	6,269.00	6,248.13	23.50	22.80	159.80	354.00	-181.00	957.48	912.85	44.63	21.454		
6,400.00	6,346.76	6,367.64	6,346.76	23.92	23.14	160.13	354.00	-181.00	972.96	927.62	45.35	21.456		
6,500.00	6,445.40	6,466.28	6,445.40	24.34	23.49	160.46	354.00	-181.00	988.48	942.42	46.06	21.459		
6,600.00	6,544.04	6,564.92	6,544.04	24.75	23.83	160.77	354.00	-181.00	1,004.03	957.25	46.78	21.463		
6,700.00	6,642.68	6,663.55	6,642.68	25.17	24.17	161.08	354.00	-181.00	1,019.60	972.10	47.50	21.466		
6,800.00	6,741.31	6,762.19	6,741.31	25.59	24.51	161.37	354.00	-181.00	1,035.20	986.99	48.22	21.470		
6,900.00	6,839.95	6,860.83	6,839.95	26.01	24.85	161.66	354.00	-181.00	1,050.83	1,001.90	48.93	21.475		
7,000.00	6,938.59	6,959.46	6,938.59	26.42	25.20	161.93	354.00	-181.00	1,066.48	1,016.83	49.65	21.480		
7,100.00	7,037.22	7,058.10	7,037.22	26.84	25.54	162.21	354.00	-181.00	1,082.15	1,031.78	50.37	21.484		
7,200.00	7,136.17	7,157.05	7,136.17	27.25	25.88	162.53	354.00	-181.00	1,095.91	1,044.83	51.09	21.452		
7,300.00	7,235.56	7,240.67	7,219.79	27.64	26.17	162.74	354.10	-180.84	1,106.60	1,054.88	51.72	21.395		
7,400.00	7,335.28	7,288.40	7,267.39	28.01	26.34	163.00	355.86	-178.14	1,117.50	1,065.38	52.12	21.441		
7,500.00	7,435.19	7,335.15	7,313.62	28.36	26.49	163.40	359.66	-172.29	1,129.73	1,077.32	52.41	21.557		
7,600.00	7,535.19	7,380.61	7,357.85	28.68	26.65	1.54	365.31	-163.58	1,143.55	1,090.99	52.57	21.754		
7,700.00	7,635.19	7,424.20	7,399.38	28.98	26.79	2.09	372.51	-152.50	1,161.46	1,108.85	52.61	22.077		
7,800.00	7,735.19	7,465.52	7,437.72	29.29	26.92	2.72	380.90	-139.57	1,184.17	1,131.63	52.53	22.541		
7,900.00	7,835.19	7,500.00	7,468.78	29.60	27.03	3.32	389.04	-127.04	1,211.71	1,159.43	52.28	23.176		
8,000.00	7,935.19	7,550.00	7,512.11	29.91	27.18	4.31	402.62	-106.14	1,244.07	1,191.90	52.17	23.846		
8,100.00	8,035.19	7,574.26	7,532.30	30.22	27.24	4.83	409.93	-94.87	1,280.95	1,229.32	51.63	24.808		
8,200.00	8,135.19	7,600.00	7,553.10	30.53	27.32	5.41	418.20	-82.14	1,322.47	1,271.41	51.06	25.900		
8,300.00	8,235.19	7,634.04	7,579.50	30.84	27.41	6.21	429.89	-64.14	1,368.27	1,317.69	50.58	27.050		
8,400.00	8,335.19	7,660.44	7,599.08	31.16	27.49	6.86	439.54	-49.28	1,418.20	1,368.23	49.97	28.380		
8,500.00	8,435.19	7,695.25	7,623.66	31.47	27.60	7.75	452.77	-28.50	1,471.90	1,422.40	49.50	29.738		
8,600.00	8,535.19	7,742.32	7,655.01	31.79	27.74	9.03	469.84	2.16	1,528.25	1,479.03	49.22	31.049		
8,700.00	8,634.71	7,786.88	7,682.56	32.10	27.90	-73.19	484.84	33.80	1,585.67	1,536.77	48.89	32.430		
8,800.00	8,731.26	7,833.13	7,708.78	32.39	28.08	-66.05	499.11	69.11	1,641.19	1,592.60	48.59	33.776		
8,900.00	8,821.91	7,880.89	7,733.15	32.64	28.30	-60.02	512.36	107.97	1,692.87	1,644.54	48.33	35.029		
9,000.00	8,903.91	7,930.00	7,755.15	32.84	28.54	-55.16	524.32	150.20	1,739.08	1,690.95	48.13	36.130		
9,100.00	8,974.76	7,980.30	7,774.30	32.99	28.82	-51.41	534.74	195.50	1,778.47	1,730.42	48.05	37.014		
9,200.00	9,032.31	8,031.60	7,790.18	33.10	29.13	-48.68	543.35	243.51	1,809.97	1,761.86	48.11	37.618		
9,300.00	9,074.81	8,083.72	7,802.38	33.16	29.48	-46.84	549.97	293.72	1,832.78	1,784.41	48.37	37.889		
9,400.00	9,100.97	8,136.41	7,810.59	33.30	29.86	-45.82	554.40	345.56	1,846.34	1,797.48	48.85	37.794		
9,500.00	9,110.00	8,189.43	7,814.60	33.86	30.26	-45.56	556.55	398.37	1,850.31	1,800.74	49.57	37.328		
9,570.81	9,110.14	8,240.03	7,815.00	34.40	30.68	-45.57	556.73	448.96	1,850.18	1,799.91	50.28	36.801		
9,600.00	9,110.00	8,269.22	7,815.00	34.63	30.93	-45.58	556.70	478.16	1,850.08	1,799.46	50.62	36.545		
9,700.00	9,110.00	8,369.22	7,815.00	35.53	31.89	-45.58	556.62	578.16	1,850.09	1,798.11	51.98	35.590		
9,800.00	9,110.00	8,469.22	7,815.00	36.56	32.97	-45.58	556.55	678.16	1,850.09	1,796.56	53.53	34.560		
9,900.00	9,110.00	8,569.22	7,815.00	37.70	34.18	-45.58	556.47	778.16	1,850.10	1,794.84	55.26	33.481		
10,000.00	9,110.00	8,669.22	7,815.00	38.95	35.49	-45.58	556.39	878.16	1,850.10	1,792.96	57.14	32.376		
10,100.00	9,110.00	8,769.22	7,815.00	40.28	36.90	-45.58	556.31	978.16	1,850.11	1,790.94	59.17	31.266		

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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:
Survey Program: 0-MWD+HDGM														Offset Well Error:
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	9,110.00	8,869.22	7,815.00	41.70	38.40	-45.58	556.23	1,078.16	1,850.12	1,788.78	61.33	30.164		
10,300.00	9,110.00	8,969.22	7,815.00	43.20	39.98	-45.58	556.15	1,178.16	1,850.12	1,786.51	63.61	29.084		
10,400.00	9,110.00	9,069.22	7,815.00	44.77	41.62	-45.58	556.07	1,278.16	1,850.13	1,784.13	66.00	28.034		
10,500.00	9,110.00	9,169.22	7,815.00	46.39	43.33	-45.58	555.99	1,378.16	1,850.13	1,781.66	68.47	27.020		
10,600.00	9,110.00	9,269.22	7,815.00	48.08	45.08	-45.58	555.91	1,478.16	1,850.14	1,779.10	71.04	26.045		
10,700.00	9,110.00	9,369.22	7,815.00	49.81	46.89	-45.58	555.83	1,578.16	1,850.14	1,776.47	73.67	25.113		
10,800.00	9,110.00	9,469.22	7,815.00	51.59	48.74	-45.58	555.75	1,678.16	1,850.15	1,773.77	76.38	24.224		
10,900.00	9,110.00	9,569.22	7,815.00	53.40	50.63	-45.58	555.67	1,778.16	1,850.15	1,771.01	79.14	23.377		
11,000.00	9,110.00	9,669.22	7,815.00	55.26	52.55	-45.58	555.59	1,878.16	1,850.16	1,768.19	81.96	22.573		
11,100.00	9,110.00	9,769.22	7,815.00	57.14	54.50	-45.58	555.51	1,978.16	1,850.16	1,765.33	84.83	21.809		
11,200.00	9,110.00	9,869.22	7,815.00	59.06	56.47	-45.58	555.43	2,078.16	1,850.17	1,762.42	87.75	21.085		
11,300.00	9,110.00	9,969.22	7,815.00	61.01	58.47	-45.58	555.35	2,178.16	1,850.17	1,759.47	90.70	20.398		
11,400.00	9,110.00	10,069.22	7,815.00	62.97	60.50	-45.58	555.27	2,278.16	1,850.18	1,756.48	93.69	19.747		
11,500.00	9,110.00	10,169.22	7,815.00	64.97	62.54	-45.58	555.19	2,378.16	1,850.18	1,753.47	96.72	19.130		
11,600.00	9,110.00	10,269.22	7,815.00	66.98	64.60	-45.58	555.11	2,478.16	1,850.19	1,750.42	99.77	18.544		
11,700.00	9,110.00	10,369.22	7,815.00	69.01	66.68	-45.58	555.03	2,578.16	1,850.19	1,747.34	102.85	17.989		
11,800.00	9,110.00	10,469.22	7,815.00	71.05	68.77	-45.58	554.95	2,678.15	1,850.20	1,744.24	105.96	17.461		
11,900.00	9,110.00	10,569.22	7,815.00	73.12	70.88	-45.58	554.87	2,778.15	1,850.21	1,741.12	109.09	16.961		
12,000.00	9,110.00	10,669.22	7,815.00	75.19	73.00	-45.58	554.79	2,878.15	1,850.21	1,737.97	112.24	16.485		
12,100.00	9,110.00	10,769.22	7,815.00	77.28	75.12	-45.58	554.72	2,978.15	1,850.22	1,734.81	115.41	16.032		
12,200.00	9,110.00	10,869.22	7,815.00	79.38	77.26	-45.58	554.64	3,078.15	1,850.22	1,731.63	118.59	15.602		
12,300.00	9,110.00	10,969.22	7,815.00	81.50	79.41	-45.58	554.56	3,178.15	1,850.23	1,728.43	121.80	15.191		
12,400.00	9,110.00	11,069.22	7,815.00	83.62	81.57	-45.58	554.48	3,278.15	1,850.23	1,725.22	125.01	14.800		
12,500.00	9,110.00	11,169.22	7,815.00	85.75	83.74	-45.58	554.40	3,378.15	1,850.24	1,721.99	128.24	14.427		
12,600.00	9,110.00	11,269.22	7,815.00	87.89	85.91	-45.58	554.32	3,478.15	1,850.24	1,718.75	131.49	14.071		
12,700.00	9,110.00	11,369.22	7,815.00	90.04	88.09	-45.58	554.24	3,578.15	1,850.25	1,715.50	134.75	13.731		
12,800.00	9,110.00	11,469.22	7,815.00	92.20	90.28	-45.58	554.16	3,678.15	1,850.25	1,712.24	138.01	13.406		
12,900.00	9,110.00	11,569.22	7,815.00	94.37	92.47	-45.58	554.08	3,778.15	1,850.26	1,708.97	141.29	13.095		
13,000.00	9,110.00	11,669.22	7,815.00	96.54	94.67	-45.58	554.00	3,878.15	1,850.26	1,705.69	144.58	12.798		
13,100.00	9,110.00	11,769.22	7,815.00	98.72	96.87	-45.58	553.92	3,978.15	1,850.27	1,702.39	147.87	12.512		
13,200.00	9,110.00	11,869.22	7,815.00	100.90	99.08	-45.58	553.84	4,078.15	1,850.27	1,699.09	151.18	12.239		
13,300.00	9,110.00	11,969.22	7,815.00	103.09	101.29	-45.58	553.76	4,178.15	1,850.28	1,695.79	154.49	11.977		
13,400.00	9,110.00	12,069.22	7,815.00	105.28	103.51	-45.58	553.68	4,278.15	1,850.28	1,692.47	157.81	11.725		
13,500.00	9,110.00	12,169.22	7,815.00	107.48	105.73	-45.58	553.60	4,378.15	1,850.29	1,689.15	161.14	11.483		
13,600.00	9,110.00	12,269.22	7,815.00	109.68	107.95	-45.58	553.52	4,478.15	1,850.29	1,685.82	164.47	11.250		
13,700.00	9,110.00	12,369.22	7,815.00	111.89	110.18	-45.58	553.44	4,578.15	1,850.30	1,682.49	167.81	11.026		
13,800.00	9,110.00	12,469.22	7,815.00	114.10	112.41	-45.58	553.36	4,678.15	1,850.31	1,679.15	171.16	10.811		
13,900.00	9,110.00	12,569.22	7,815.00	116.32	114.65	-45.58	553.28	4,778.15	1,850.31	1,675.80	174.51	10.603		
14,000.00	9,110.00	12,669.22	7,815.00	118.54	116.88	-45.58	553.20	4,878.15	1,850.32	1,672.45	177.86	10.403		
14,100.00	9,110.00	12,769.22	7,815.00	120.76	119.12	-45.58	553.12	4,978.15	1,850.32	1,669.10	181.22	10.210		
14,200.00	9,110.00	12,869.22	7,815.00	122.99	121.36	-45.58	553.04	5,078.15	1,850.33	1,665.74	184.59	10.024		
14,300.00	9,110.00	12,969.22	7,815.00	125.21	123.61	-45.58	552.96	5,178.15	1,850.33	1,662.37	187.96	9.844		
14,400.00	9,110.00	13,069.22	7,815.00	127.45	125.86	-45.58	552.89	5,278.15	1,850.34	1,659.01	191.33	9.671		
14,500.00	9,110.00	13,169.22	7,815.00	129.68	128.11	-45.58	552.81	5,378.15	1,850.34	1,655.63	194.71	9.503		
14,600.00	9,110.00	13,269.22	7,815.00	131.92	130.36	-45.58	552.73	5,478.15	1,850.35	1,652.26	198.09	9.341		
14,700.00	9,110.00	13,369.22	7,815.00	134.16	132.61	-45.58	552.65	5,578.15	1,850.35	1,648.88	201.48	9.184		
14,800.00	9,110.00	13,469.22	7,815.00	136.40	134.87	-45.58	552.57	5,678.15	1,850.36	1,645.49	204.86	9.032		
14,900.00	9,110.00	13,569.22	7,815.00	138.64	137.12	-45.58	552.49	5,778.15	1,850.36	1,642.11	208.25	8.885		
15,000.00	9,110.00	13,669.22	7,815.00	140.89	139.38	-45.58	552.41	5,878.15	1,850.37	1,638.72	211.65	8.743		
15,100.00	9,110.00	13,769.22	7,815.00	143.13	141.64	-45.58	552.33	5,978.15	1,850.37	1,635.33	215.05	8.605		
15,200.00	9,110.00	13,869.22	7,815.00	145.38	143.90	-45.58	552.25	6,078.15	1,850.38	1,631.93	218.45	8.471		
15,300.00	9,110.00	13,969.22	7,815.00	147.63	146.17	-45.58	552.17	6,178.15	1,850.38	1,628.54	221.85	8.341		

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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		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	9,110.00	14,069.22	7,815.00	149.89	148.43	-45.58	552.09	6,278.15	1,850.39	1,625.14	225.25	8.215	
15,500.00	9,110.00	14,169.22	7,815.00	152.14	150.70	-45.59	552.01	6,378.15	1,850.40	1,621.74	228.66	8.092	
15,600.00	9,110.00	14,269.22	7,815.00	154.40	152.96	-45.59	551.93	6,478.15	1,850.40	1,618.33	232.07	7.973	
15,700.00	9,110.00	14,369.22	7,815.00	156.66	155.23	-45.59	551.85	6,578.15	1,850.41	1,614.93	235.48	7.858	
15,800.00	9,110.00	14,469.22	7,815.00	158.92	157.50	-45.59	551.77	6,678.15	1,850.41	1,611.52	238.89	7.746	
15,900.00	9,110.00	14,569.22	7,815.00	161.18	159.77	-45.59	551.69	6,778.15	1,850.42	1,608.11	242.31	7.637	
16,000.00	9,110.00	14,669.22	7,815.00	163.44	162.05	-45.59	551.61	6,878.15	1,850.42	1,604.69	245.73	7.530	
16,100.00	9,110.00	14,769.22	7,815.00	165.70	164.32	-45.59	551.53	6,978.15	1,850.43	1,601.28	249.15	7.427	
16,200.00	9,110.00	14,869.22	7,815.00	167.97	166.59	-45.59	551.45	7,078.15	1,850.43	1,597.86	252.57	7.326	
16,300.00	9,110.00	14,969.22	7,815.00	170.23	168.87	-45.59	551.37	7,178.15	1,850.44	1,594.45	255.99	7.229	
16,400.00	9,110.00	15,069.22	7,815.00	172.50	171.14	-45.59	551.29	7,278.15	1,850.44	1,591.03	259.42	7.133	
16,500.00	9,110.00	15,169.22	7,815.00	174.77	173.42	-45.59	551.21	7,378.15	1,850.45	1,587.61	262.84	7.040	
16,600.00	9,110.00	15,269.22	7,815.00	177.04	175.70	-45.59	551.13	7,478.15	1,850.45	1,584.18	266.27	6.950	
16,700.00	9,110.00	15,369.22	7,815.00	179.31	177.98	-45.59	551.06	7,578.15	1,850.46	1,580.76	269.70	6.861	
16,800.00	9,110.00	15,469.22	7,815.00	181.58	180.25	-45.59	550.98	7,678.15	1,850.46	1,577.33	273.13	6.775	
16,900.00	9,110.00	15,569.22	7,815.00	183.85	182.53	-45.59	550.90	7,778.15	1,850.47	1,573.91	276.56	6.691	
17,000.00	9,110.00	15,669.22	7,815.00	186.12	184.82	-45.59	550.82	7,878.15	1,850.47	1,570.48	279.99	6.609	
17,100.00	9,110.00	15,769.22	7,815.00	188.40	187.10	-45.59	550.74	7,978.15	1,850.48	1,567.05	283.43	6.529	
17,200.00	9,110.00	15,869.22	7,815.00	190.67	189.38	-45.59	550.66	8,078.15	1,850.48	1,563.62	286.86	6.451	
17,300.00	9,110.00	15,969.22	7,815.00	192.95	191.66	-45.59	550.58	8,178.15	1,850.49	1,560.19	290.30	6.374	
17,400.00	9,110.00	16,069.22	7,815.00	195.22	193.94	-45.59	550.50	8,278.15	1,850.50	1,556.76	293.74	6.300	
17,500.00	9,110.00	16,169.22	7,815.00	197.50	196.23	-45.59	550.42	8,378.15	1,850.50	1,553.32	297.18	6.227	
17,600.00	9,110.00	16,269.22	7,815.00	199.78	198.51	-45.59	550.34	8,478.15	1,850.51	1,549.89	300.62	6.156	
17,700.00	9,110.00	16,369.22	7,815.00	202.06	200.80	-45.59	550.26	8,578.15	1,850.51	1,546.45	304.06	6.086	
17,800.00	9,110.00	16,469.22	7,815.00	204.33	203.08	-45.59	550.18	8,678.15	1,850.52	1,543.02	307.50	6.018	
17,900.00	9,110.00	16,569.22	7,815.00	206.61	205.37	-45.59	550.10	8,778.15	1,850.52	1,539.58	310.94	5.951	
18,000.00	9,110.00	16,669.22	7,815.00	208.89	207.65	-45.59	550.02	8,878.15	1,850.53	1,536.14	314.39	5.886	
18,100.00	9,110.00	16,769.22	7,815.00	211.18	209.94	-45.59	549.94	8,978.15	1,850.53	1,532.70	317.83	5.822	
18,200.00	9,110.00	16,869.22	7,815.00	213.46	212.23	-45.59	549.86	9,078.15	1,850.54	1,529.26	321.28	5.760	
18,300.00	9,110.00	16,969.22	7,815.00	215.74	214.52	-45.59	549.78	9,178.15	1,850.54	1,525.82	324.72	5.699	
18,400.00	9,110.00	17,069.22	7,815.00	218.02	216.80	-45.59	549.70	9,278.15	1,850.55	1,522.38	328.17	5.639	
18,500.00	9,110.00	17,169.22	7,815.00	220.31	219.09	-45.59	549.62	9,378.15	1,850.55	1,518.93	331.62	5.580	
18,600.00	9,110.00	17,269.22	7,815.00	222.59	221.38	-45.59	549.54	9,478.15	1,850.56	1,515.49	335.07	5.523	
18,700.00	9,110.00	17,369.22	7,815.00	224.87	223.67	-45.59	549.46	9,578.15	1,850.56	1,512.05	338.52	5.467	
18,800.00	9,110.00	17,469.22	7,815.00	227.16	225.96	-45.59	549.38	9,678.15	1,850.57	1,508.60	341.97	5.412	
18,900.00	9,110.00	17,569.22	7,815.00	229.44	228.25	-45.59	549.30	9,778.15	1,850.57	1,505.15	345.42	5.357	
19,000.00	9,110.00	17,669.22	7,815.00	231.73	230.54	-45.59	549.23	9,878.15	1,850.58	1,501.71	348.87	5.304	
19,100.00	9,110.00	17,769.22	7,815.00	234.02	232.83	-45.59	549.15	9,978.15	1,850.59	1,498.26	352.32	5.253	
19,200.00	9,110.00	17,869.22	7,815.00	236.30	235.13	-45.59	549.07	10,078.15	1,850.59	1,494.81	355.78	5.202	
19,286.90	9,110.00	17,956.12	7,815.00	238.29	237.12	-45.59	549.00	10,165.05	1,850.59	1,491.82	358.78	5.158	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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 - #126H - 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	0.00	0.00	0.00	0.00	-135.00	-30.00	-30.00	42.43				
100.00	100.00	100.00	100.00	0.13	0.13	-135.00	-30.00	-30.00	42.43	42.17	0.26	165.529	
200.00	200.00	200.00	200.00	0.49	0.49	-135.00	-30.00	-30.00	42.43	41.45	0.97	43.592	
300.00	300.00	300.00	300.00	0.85	0.85	-135.00	-30.00	-30.00	42.43	40.74	1.69	25.102	
400.00	400.00	400.00	400.00	1.20	1.20	-135.00	-30.00	-30.00	42.43	40.02	2.41	17.625	
500.00	500.00	500.00	500.00	1.56	1.56	-135.00	-30.00	-30.00	42.43	39.30	3.12	13.580	
600.00	600.00	600.00	600.00	1.92	1.92	-135.00	-30.00	-30.00	42.43	38.59	3.84	11.046	
700.00	700.00	700.00	700.00	2.28	2.28	-135.00	-30.00	-30.00	42.43	37.87	4.56	9.308	
800.00	800.00	800.00	800.00	2.64	2.64	-135.00	-30.00	-30.00	42.43	37.15	5.27	8.043	
900.00	900.00	900.00	900.00	3.00	3.00	-135.00	-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	-135.00	-30.00	-30.00	42.43	35.72	6.71	6.324 CC, ES	
1,100.00	1,099.98	1,098.72	1,098.70	3.70	3.69	135.30	-31.67	-30.32	45.09	37.70	7.39	6.098	
1,200.00	1,199.92	1,197.11	1,196.96	4.05	4.02	134.80	-36.65	-31.29	51.83	43.78	8.05	6.435	
1,300.00	1,299.86	1,295.00	1,294.48	4.40	4.34	132.68	-44.90	-32.89	61.46	52.74	8.71	7.053	
1,400.00	1,399.80	1,392.16	1,390.94	4.75	4.67	129.85	-56.31	-35.11	74.09	64.72	9.37	7.909	
1,500.00	1,499.74	1,490.30	1,488.04	5.10	5.02	127.08	-70.25	-37.82	89.09	79.05	10.04	8.873	
1,600.00	1,599.68	1,589.07	1,585.75	5.45	5.38	125.06	-84.42	-40.57	104.37	93.64	10.73	9.728	
1,700.00	1,699.61	1,687.84	1,683.46	5.80	5.74	123.56	-98.58	-43.33	119.74	108.31	11.42	10.481	
1,800.00	1,799.55	1,786.61	1,781.17	6.16	6.11	122.41	-112.75	-46.08	135.17	123.05	12.12	11.150	
1,900.00	1,899.49	1,885.38	1,878.88	6.51	6.49	121.49	-126.92	-48.83	150.65	137.82	12.82	11.747	
2,000.00	1,999.43	1,984.15	1,976.59	6.87	6.87	120.74	-141.08	-51.59	166.15	152.63	13.53	12.281	
2,100.00	2,099.37	2,082.92	2,074.30	7.22	7.25	120.12	-155.25	-54.34	181.68	167.45	14.24	12.761	
2,200.00	2,199.31	2,181.68	2,172.01	7.58	7.64	119.59	-169.42	-57.09	197.23	182.29	14.95	13.196	
2,300.00	2,299.26	2,280.70	2,269.96	7.93	8.02	60.36	-183.62	-59.85	211.09	195.44	15.65	13.487	
2,400.00	2,399.14	2,380.14	2,368.34	8.27	8.42	30.63	-197.88	-62.62	221.49	205.14	16.35	13.547	
2,500.00	2,498.84	2,479.89	2,467.01	8.61	8.81	19.46	-212.19	-65.40	228.43	211.38	17.05	13.398	
2,600.00	2,598.23	2,579.82	2,565.87	8.95	9.21	13.93	-226.52	-68.19	231.89	214.14	17.75	13.063	
2,700.00	2,697.20	2,679.80	2,664.78	9.29	9.61	10.60	-240.86	-70.97	231.86	213.41	18.46	12.563	
2,800.00	2,795.84	2,779.77	2,763.67	9.63	10.01	9.96	-255.20	-73.76	229.66	210.50	19.16	11.985	
2,900.00	2,894.48	2,879.74	2,862.57	9.98	10.41	9.63	-269.54	-76.55	227.44	207.57	19.87	11.445	
3,000.00	2,993.12	2,979.70	2,961.46	10.33	10.81	9.28	-283.88	-79.33	225.22	204.64	20.58	10.942	
3,100.00	3,091.75	3,079.67	3,060.35	10.70	11.22	8.94	-298.22	-82.12	223.02	201.72	21.30	10.471	
3,200.00	3,190.39	3,179.64	3,159.25	11.06	11.62	8.58	-312.56	-84.90	220.82	198.80	22.01	10.031	
3,300.00	3,289.03	3,279.60	3,258.14	11.44	12.03	8.22	-326.89	-87.69	218.63	195.89	22.73	9.617	
3,400.00	3,387.66	3,379.57	3,357.03	11.81	12.43	7.85	-341.23	-90.48	216.45	192.99	23.45	9.229	
3,500.00	3,486.30	3,479.53	3,455.93	12.19	12.84	7.47	-355.57	-93.26	214.27	190.10	24.17	8.864	
3,600.00	3,584.94	3,579.50	3,554.82	12.58	13.24	7.09	-369.91	-96.05	212.11	187.21	24.90	8.519	
3,700.00	3,683.57	3,679.47	3,653.72	12.96	13.65	6.70	-384.25	-98.83	209.96	184.33	25.62	8.194	
3,800.00	3,782.21	3,779.43	3,752.61	13.35	14.06	6.30	-398.58	-101.62	207.81	181.47	26.35	7.888	
3,900.00	3,880.85	3,879.40	3,851.50	13.74	14.46	5.89	-412.92	-104.41	205.68	178.61	27.07	7.597	
4,000.00	3,979.48	3,979.37	3,950.40	14.13	14.87	5.47	-427.26	-107.19	203.56	175.76	27.80	7.322	
4,100.00	4,078.12	4,079.33	4,049.29	14.53	15.28	5.04	-441.60	-109.98	201.45	172.92	28.53	7.061	
4,200.00	4,176.76	4,179.30	4,148.18	14.92	15.69	4.61	-455.94	-112.77	199.35	170.09	29.26	6.814	
4,300.00	4,275.39	4,279.27	4,247.08	15.32	16.10	4.16	-470.28	-115.55	197.26	167.27	29.99	6.578	
4,400.00	4,374.03	4,379.23	4,345.97	15.72	16.51	3.71	-484.61	-118.34	195.18	164.47	30.72	6.355	
4,500.00	4,472.67	4,479.20	4,444.86	16.12	16.92	3.25	-498.95	-121.12	193.12	161.67	31.45	6.141	
4,600.00	4,571.30	4,579.16	4,543.76	16.53	17.33	2.77	-513.29	-123.91	191.07	158.89	32.18	5.938	
4,700.00	4,669.94	4,679.13	4,642.65	16.93	17.74	2.29	-527.63	-126.70	189.03	156.12	32.91	5.744	
4,800.00	4,768.58	4,779.10	4,741.54	17.33	18.15	1.79	-541.97	-129.48	187.01	153.37	33.64	5.559	
4,900.00	4,867.21	4,879.06	4,840.44	17.74	18.56	1.29	-556.31	-132.27	185.00	150.63	34.37	5.382	
5,000.00	4,965.85	4,979.03	4,939.33	18.15	18.97	0.77	-570.64	-135.05	183.00	147.90	35.11	5.213	
5,100.00	5,064.49	5,079.00	5,038.22	18.56	19.38	0.24	-584.98	-137.84	181.03	145.19	35.84	5.051	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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 - #126H - 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)					
5,200.00	5,163.12	5,178.96	5,137.12	18.96	19.79	-0.30	-599.32	-140.63	179.06	142.49	36.57	4.896	
5,300.00	5,261.76	5,278.93	5,236.01	19.37	20.20	-0.85	-613.66	-143.41	177.11	139.81	37.31	4.747	
5,400.00	5,360.40	5,378.90	5,334.90	19.78	20.61	-1.41	-628.00	-146.20	175.18	137.14	38.04	4.605	
5,500.00	5,459.03	5,478.86	5,433.80	20.19	21.02	-1.99	-642.34	-148.98	173.27	134.49	38.78	4.468	
5,600.00	5,557.67	5,578.83	5,532.69	20.61	21.43	-2.57	-656.67	-151.77	171.38	131.86	39.52	4.337	
5,700.00	5,656.31	5,678.79	5,631.59	21.02	21.85	-3.18	-671.01	-154.56	169.50	129.24	40.25	4.211	
5,800.00	5,754.94	5,778.76	5,730.48	21.43	22.26	-3.79	-685.35	-157.34	167.64	126.65	40.99	4.090	
5,900.00	5,853.58	5,878.73	5,829.37	21.85	22.67	-4.42	-699.69	-160.13	165.80	124.07	41.73	3.973	
6,000.00	5,952.22	5,978.69	5,928.27	22.26	23.08	-5.06	-714.03	-162.92	163.98	121.51	42.47	3.861	
6,100.00	6,050.85	6,078.66	6,027.16	22.67	23.49	-5.72	-728.37	-165.70	162.19	118.97	43.21	3.753	
6,200.00	6,149.49	6,178.63	6,126.05	23.09	23.90	-6.39	-742.70	-168.49	160.41	116.46	43.96	3.649	
6,300.00	6,248.13	6,278.59	6,224.95	23.50	24.32	-7.08	-757.04	-171.27	158.66	113.96	44.70	3.549	
6,400.00	6,346.76	6,378.56	6,323.84	23.92	24.73	-7.78	-771.38	-174.06	156.93	111.49	45.45	3.453	
6,500.00	6,445.40	6,478.53	6,422.73	24.34	25.14	-8.50	-785.72	-176.85	155.23	109.03	46.19	3.360	
6,600.00	6,544.04	6,578.49	6,521.63	24.75	25.55	-9.23	-800.06	-179.63	153.55	106.60	46.94	3.271	
6,700.00	6,642.68	6,678.46	6,620.52	25.17	25.97	-9.98	-814.40	-182.42	151.89	104.20	47.69	3.185	
6,800.00	6,741.31	6,778.42	6,719.41	25.59	26.38	-10.75	-828.73	-185.20	150.27	101.82	48.45	3.102	
6,900.00	6,839.95	6,878.39	6,818.31	26.01	26.79	-11.53	-843.07	-187.99	148.66	99.46	49.20	3.021	
7,000.00	6,938.59	6,983.42	6,922.44	26.42	27.21	-12.44	-856.45	-190.59	146.45	96.45	50.00	2.909	
7,100.00	7,037.22	7,088.33	7,026.89	26.84	27.61	-13.57	-866.06	-192.46	138.65	87.91	50.74	2.733	
7,200.00	7,136.17	7,192.80	7,131.18	27.25	27.99	-14.78	-871.89	-193.59	130.26	78.84	51.42	2.533	
7,300.00	7,235.56	7,296.92	7,235.28	27.64	28.32	-15.97	-873.99	-194.00	121.70	69.67	52.03	2.339	
7,400.00	7,335.28	7,398.98	7,336.90	28.01	28.62	-20.93	-872.89	-186.17	113.59	60.80	52.79	2.152	
7,478.37	7,413.57	7,474.88	7,410.70	28.29	28.82	-30.58	-870.42	-168.87	110.51	56.60	53.91	2.050	
7,500.00	7,435.19	7,494.89	7,429.72	28.36	28.87	-33.93	-869.55	-162.71	110.83	56.54	54.29	2.041 SF	
7,600.00	7,535.19	7,581.07	7,508.71	28.68	29.06	147.09	-864.72	-128.81	122.86	67.43	55.43	2.216	
7,700.00	7,635.19	7,655.62	7,572.26	28.98	29.20	132.57	-859.24	-90.31	154.21	100.03	54.18	2.846	
7,800.00	7,735.19	7,718.65	7,621.67	29.29	29.29	122.22	-853.74	-51.62	203.01	151.78	51.23	3.963	
7,900.00	7,835.19	7,771.45	7,659.55	29.60	29.36	115.31	-848.56	-15.23	264.49	216.46	48.03	5.507	
8,000.00	7,935.19	7,815.61	7,688.52	29.91	29.40	110.66	-843.86	17.75	334.75	289.55	45.20	7.406	
8,100.00	8,035.19	7,850.00	7,709.26	30.22	29.43	107.65	-840.00	44.90	411.20	368.54	42.66	9.639	
8,200.00	8,135.19	7,883.98	7,728.09	30.53	29.45	105.10	-836.01	72.90	492.08	451.14	40.94	12.020	
8,300.00	8,235.19	7,910.63	7,741.67	30.84	29.47	103.36	-832.78	95.59	576.33	536.93	39.40	14.627	
8,400.00	8,335.19	7,933.49	7,752.46	31.16	29.47	102.03	-829.95	115.55	663.13	624.96	38.17	17.372	
8,500.00	8,435.19	7,950.00	7,759.75	31.47	29.48	101.14	-827.86	130.21	751.94	714.88	37.06	20.291	
8,600.00	8,535.19	7,970.48	7,768.19	31.79	29.49	100.13	-825.23	148.69	842.30	805.90	36.40	23.142	
8,700.00	8,634.71	8,000.00	7,779.17	32.10	29.49	6.48	-821.37	175.81	930.52	894.52	36.00	25.848	
8,800.00	8,731.26	8,000.00	7,779.17	32.39	29.49	5.10	-821.37	175.81	1,011.23	976.70	34.53	29.284	
8,900.00	8,821.91	8,033.89	7,790.02	32.64	29.50	3.77	-816.84	207.59	1,083.37	1,049.47	33.91	31.952	
9,000.00	8,903.91	8,050.00	7,794.51	32.84	29.50	3.10	-814.67	222.91	1,146.30	1,113.46	32.85	34.900	
9,100.00	8,974.76	8,100.00	7,805.64	32.99	29.51	2.34	-807.80	271.15	1,198.89	1,166.43	32.46	36.934	
9,200.00	9,032.31	8,116.21	7,808.33	33.10	29.51	2.04	-805.55	286.98	1,240.27	1,208.67	31.61	39.242	
9,300.00	9,074.81	8,150.00	7,812.48	33.16	29.55	1.69	-800.82	320.17	1,270.47	1,239.27	31.20	40.723	
9,400.00	9,100.97	8,175.79	7,814.32	33.30	29.63	1.47	-797.20	345.63	1,288.86	1,257.90	30.96	41.624	
9,500.00	9,110.00	8,211.49	7,815.00	33.86	29.84	1.22	-792.18	380.97	1,295.30	1,264.23	31.07	41.695	
9,600.00	9,110.00	8,309.99	7,815.00	34.63	30.64	0.69	-780.25	478.74	1,295.10	1,263.65	31.45	41.184	
9,700.00	9,110.00	8,409.22	7,815.00	35.53	31.62	0.31	-771.63	577.59	1,295.02	1,263.09	31.93	40.555	
9,800.00	9,110.00	8,508.93	7,815.00	36.56	32.74	0.07	-766.43	677.16	1,295.00	1,262.48	32.52	39.824	
9,872.31	9,110.00	8,581.20	7,815.00	37.39	33.64	0.00	-764.82	749.41	1,295.00	1,261.99	33.01	39.234	
9,900.00	9,110.00	8,608.89	7,815.00	37.70	33.99	-0.01	-764.69	777.11	1,295.00	1,261.80	33.20	39.006	
10,000.00	9,110.00	8,708.89	7,815.00	38.95	35.35	-0.01	-764.78	877.11	1,295.00	1,261.04	33.96	38.132	
10,100.00	9,110.00	8,808.89	7,815.00	40.28	36.81	-0.01	-764.87	977.11	1,295.00	1,260.23	34.77	37.240	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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 - #126H - OH - Prelim A		Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+HDGM												Offset Well Error: 0.00 usft			
Reference				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)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
10,200.00	9,110.00	8,908.89	7,815.00	41.70	38.35	-0.01	-764.95	1,077.11	1,295.00	1,259.36	35.64	36.337			
10,300.00	9,110.00	9,008.89	7,815.00	43.20	39.96	-0.01	-765.04	1,177.11	1,295.00	1,258.45	36.55	35.431			
10,400.00	9,110.00	9,108.89	7,815.00	44.77	41.64	-0.01	-765.13	1,277.11	1,295.00	1,257.50	37.50	34.529			
10,500.00	9,110.00	9,208.89	7,815.00	46.39	43.37	-0.01	-765.22	1,377.10	1,295.00	1,256.50	38.50	33.637			
10,600.00	9,110.00	9,308.89	7,815.00	48.08	45.16	-0.01	-765.31	1,477.10	1,295.00	1,255.47	39.53	32.759			
10,700.00	9,110.00	9,408.89	7,815.00	49.81	46.99	-0.01	-765.40	1,577.10	1,295.00	1,254.40	40.60	31.898			
10,800.00	9,110.00	9,508.89	7,815.00	51.59	48.86	-0.01	-765.49	1,677.10	1,295.00	1,253.30	41.70	31.058			
10,900.00	9,110.00	9,608.89	7,815.00	53.40	50.77	-0.01	-765.57	1,777.10	1,295.00	1,252.18	42.82	30.241			
11,000.00	9,110.00	9,708.89	7,815.00	55.26	52.71	-0.01	-765.66	1,877.10	1,295.00	1,251.02	43.98	29.447			
11,100.00	9,110.00	9,808.89	7,815.00	57.14	54.68	-0.01	-765.75	1,977.10	1,295.00	1,249.84	45.16	28.679			
11,200.00	9,110.00	9,908.89	7,815.00	59.06	56.67	-0.01	-765.84	2,077.10	1,295.00	1,248.64	46.36	27.935			
11,300.00	9,110.00	10,008.89	7,815.00	61.01	58.69	-0.01	-765.93	2,177.10	1,295.00	1,247.42	47.58	27.217			
11,400.00	9,110.00	10,108.89	7,815.00	62.97	60.73	-0.01	-766.02	2,277.10	1,295.00	1,246.18	48.82	26.524			
11,500.00	9,110.00	10,208.89	7,815.00	64.97	62.78	-0.01	-766.11	2,377.10	1,295.00	1,244.92	50.08	25.856			
11,600.00	9,110.00	10,308.89	7,815.00	66.98	64.86	-0.01	-766.19	2,477.10	1,295.00	1,243.64	51.36	25.213			
11,700.00	9,110.00	10,408.89	7,815.00	69.01	66.94	-0.01	-766.28	2,577.10	1,295.00	1,242.34	52.66	24.593			
11,800.00	9,110.00	10,508.89	7,815.00	71.05	69.05	-0.01	-766.37	2,677.10	1,295.00	1,241.04	53.96	23.997			
11,900.00	9,110.00	10,608.89	7,815.00	73.12	71.16	-0.01	-766.46	2,777.10	1,295.00	1,239.71	55.29	23.424			
12,000.00	9,110.00	10,708.89	7,815.00	75.19	73.29	-0.01	-766.55	2,877.10	1,295.00	1,238.38	56.62	22.872			
12,100.00	9,110.00	10,808.89	7,815.00	77.28	75.43	-0.01	-766.64	2,977.10	1,295.00	1,237.03	57.97	22.340			
12,200.00	9,110.00	10,908.89	7,815.00	79.38	77.57	-0.01	-766.73	3,077.10	1,295.00	1,235.68	59.32	21.829			
12,300.00	9,110.00	11,008.89	7,815.00	81.50	79.73	-0.01	-766.81	3,177.10	1,295.00	1,234.31	60.69	21.338			
12,400.00	9,110.00	11,108.89	7,815.00	83.62	81.90	-0.01	-766.90	3,277.10	1,295.00	1,232.93	62.07	20.864			
12,500.00	9,110.00	11,208.89	7,815.00	85.75	84.07	0.00	-766.99	3,377.10	1,295.00	1,231.55	63.45	20.409			
12,600.00	9,110.00	11,308.89	7,815.00	87.89	86.25	0.00	-767.08	3,477.10	1,295.00	1,230.15	64.85	19.970			
12,700.00	9,110.00	11,408.89	7,815.00	90.04	88.43	0.00	-767.17	3,577.10	1,295.00	1,228.75	66.25	19.548			
12,800.00	9,110.00	11,508.89	7,815.00	92.20	90.63	0.00	-767.26	3,677.10	1,295.00	1,227.34	67.66	19.141			
12,900.00	9,110.00	11,608.89	7,815.00	94.37	92.82	0.00	-767.34	3,777.10	1,295.00	1,225.93	69.07	18.748			
13,000.00	9,110.00	11,708.89	7,815.00	96.54	95.03	0.00	-767.43	3,877.10	1,295.00	1,224.50	70.50	18.370			
13,100.00	9,110.00	11,808.89	7,815.00	98.72	97.23	0.00	-767.52	3,977.10	1,295.00	1,223.08	71.92	18.005			
13,200.00	9,110.00	11,908.89	7,815.00	100.90	99.45	0.00	-767.61	4,077.10	1,295.00	1,221.64	73.36	17.653			
13,300.00	9,110.00	12,008.89	7,815.00	103.09	101.66	0.00	-767.70	4,177.10	1,295.00	1,220.20	74.80	17.313			
13,400.00	9,110.00	12,108.89	7,815.00	105.28	103.88	0.00	-767.79	4,277.10	1,295.00	1,218.76	76.24	16.985			
13,500.00	9,110.00	12,208.89	7,815.00	107.48	106.11	0.00	-767.88	4,377.10	1,295.00	1,217.31	77.69	16.668			
13,600.00	9,110.00	12,308.89	7,815.00	109.68	108.34	0.00	-767.96	4,477.10	1,295.00	1,215.85	79.15	16.362			
13,700.00	9,110.00	12,408.89	7,815.00	111.89	110.57	0.00	-768.05	4,577.10	1,295.00	1,214.40	80.60	16.066			
13,800.00	9,110.00	12,508.89	7,815.00	114.10	112.80	0.00	-768.14	4,677.10	1,295.00	1,212.93	82.07	15.780			
13,900.00	9,110.00	12,608.89	7,815.00	116.32	115.04	0.00	-768.23	4,777.10	1,295.00	1,211.47	83.53	15.503			
14,000.00	9,110.00	12,708.89	7,815.00	118.54	117.28	0.00	-768.32	4,877.10	1,295.00	1,210.00	85.00	15.235			
14,100.00	9,110.00	12,808.89	7,815.00	120.76	119.52	0.00	-768.41	4,977.10	1,295.00	1,208.52	86.48	14.975			
14,200.00	9,110.00	12,908.89	7,815.00	122.99	121.77	0.00	-768.50	5,077.10	1,295.00	1,207.05	87.95	14.724			
14,300.00	9,110.00	13,008.89	7,815.00	125.21	124.01	0.00	-768.58	5,177.10	1,295.00	1,205.57	89.43	14.480			
14,400.00	9,110.00	13,108.89	7,815.00	127.45	126.26	0.00	-768.67	5,277.10	1,295.00	1,204.08	90.92	14.244			
14,500.00	9,110.00	13,208.89	7,815.00	129.68	128.52	0.00	-768.76	5,377.10	1,295.00	1,202.60	92.40	14.015			
14,600.00	9,110.00	13,308.89	7,815.00	131.92	130.77	0.00	-768.85	5,477.10	1,295.00	1,201.11	93.89	13.792			
14,700.00	9,110.00	13,408.89	7,815.00	134.16	133.03	0.00	-768.94	5,577.10	1,295.00	1,199.62	95.38	13.577			
14,800.00	9,110.00	13,508.90	7,815.00	136.40	135.28	0.00	-769.03	5,677.10	1,295.00	1,198.12	96.88	13.368			
14,900.00	9,110.00	13,608.90	7,815.00	138.64	137.54	0.00	-769.12	5,777.10	1,295.00	1,196.63	98.37	13.164			
15,000.00	9,110.00	13,708.90	7,815.00	140.89	139.80	0.00	-769.20	5,877.10	1,295.00	1,195.13	99.87	12.967			
15,100.00	9,110.00	13,808.90	7,815.00	143.13	142.07	0.00	-769.29	5,977.10	1,295.00	1,193.63	101.37	12.775			
15,200.00	9,110.00	13,908.90	7,815.00	145.38	144.33	0.00	-769.38	6,077.10	1,295.00	1,192.13	102.87	12.588			
15,300.00	9,110.00	14,008.90	7,815.00	147.63	146.59	0.00	-769.47	6,177.10	1,295.00	1,190.62	104.38	12.407			

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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 - #126H - 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 +N/-S (usft)	Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,400.00	9,110.00	14,108.90	7,815.00	149.89	148.86	0.00	-769.56	6,277.10	1,295.00	1,189.12	105.88	12.230	
15,500.00	9,110.00	14,208.90	7,815.00	152.14	151.13	0.00	-769.65	6,377.10	1,295.00	1,187.61	107.39	12.059	
15,600.00	9,110.00	14,308.90	7,815.00	154.40	153.40	0.00	-769.74	6,477.10	1,295.00	1,186.10	108.90	11.891	
15,700.00	9,110.00	14,408.90	7,815.00	156.66	155.67	0.00	-769.82	6,577.10	1,295.00	1,184.59	110.41	11.729	
15,800.00	9,110.00	14,508.90	7,815.00	158.92	157.94	0.00	-769.91	6,677.10	1,295.00	1,183.07	111.93	11.570	
15,900.00	9,110.00	14,608.90	7,815.00	161.18	160.21	0.00	-770.00	6,777.10	1,295.00	1,181.56	113.44	11.416	
16,000.00	9,110.00	14,708.90	7,815.00	163.44	162.49	0.00	-770.09	6,877.10	1,295.00	1,180.04	114.96	11.265	
16,100.00	9,110.00	14,808.90	7,815.00	165.70	164.76	0.00	-770.18	6,977.10	1,295.00	1,178.52	116.48	11.118	
16,200.00	9,110.00	14,908.90	7,815.00	167.97	167.03	0.00	-770.27	7,077.10	1,295.00	1,177.01	117.99	10.975	
16,300.00	9,110.00	15,008.90	7,815.00	170.23	169.31	0.00	-770.36	7,177.10	1,295.00	1,175.49	119.51	10.836	
16,400.00	9,110.00	15,108.90	7,815.00	172.50	171.59	0.00	-770.44	7,277.10	1,295.00	1,173.96	121.04	10.699	
16,500.00	9,110.00	15,208.90	7,815.00	174.77	173.87	0.00	-770.53	7,377.10	1,295.00	1,172.44	122.56	10.566	
16,600.00	9,110.00	15,308.90	7,815.00	177.04	176.14	0.00	-770.62	7,477.10	1,295.00	1,170.92	124.08	10.437	
16,700.00	9,110.00	15,408.90	7,815.00	179.31	178.42	0.00	-770.71	7,577.10	1,295.00	1,169.39	125.61	10.310	
16,800.00	9,110.00	15,508.90	7,815.00	181.58	180.70	0.00	-770.80	7,677.10	1,295.00	1,167.87	127.13	10.186	
16,900.00	9,110.00	15,608.90	7,815.00	183.85	182.99	0.00	-770.89	7,777.10	1,295.00	1,166.34	128.66	10.065	
17,000.00	9,110.00	15,708.90	7,815.00	186.12	185.27	0.00	-770.98	7,877.10	1,295.00	1,164.81	130.19	9.947	
17,100.00	9,110.00	15,808.90	7,815.00	188.40	187.55	0.00	-771.06	7,977.10	1,295.00	1,163.28	131.72	9.832	
17,200.00	9,110.00	15,908.90	7,815.00	190.67	189.83	0.00	-771.15	8,077.10	1,295.00	1,161.75	133.25	9.719	
17,300.00	9,110.00	16,008.90	7,815.00	192.95	192.12	0.00	-771.24	8,177.10	1,295.00	1,160.22	134.78	9.608	
17,400.00	9,110.00	16,108.90	7,815.00	195.22	194.40	0.00	-771.33	8,277.10	1,295.00	1,158.69	136.31	9.500	
17,500.00	9,110.00	16,208.90	7,815.00	197.50	196.68	0.00	-771.42	8,377.10	1,295.00	1,157.16	137.84	9.395	
17,600.00	9,110.00	16,308.90	7,815.00	199.78	198.97	0.00	-771.51	8,477.10	1,295.00	1,155.62	139.38	9.291	
17,700.00	9,110.00	16,408.90	7,815.00	202.06	201.26	0.00	-771.59	8,577.10	1,295.00	1,154.09	140.91	9.190	
17,800.00	9,110.00	16,508.90	7,815.00	204.33	203.54	0.00	-771.68	8,677.10	1,295.00	1,152.55	142.45	9.091	
17,900.00	9,110.00	16,608.90	7,815.00	206.61	205.83	0.00	-771.77	8,777.10	1,295.00	1,151.02	143.98	8.994	
18,000.00	9,110.00	16,708.90	7,815.00	208.89	208.12	0.00	-771.86	8,877.10	1,295.00	1,149.48	145.52	8.899	
18,100.00	9,110.00	16,808.90	7,815.00	211.18	210.40	0.00	-771.95	8,977.10	1,295.00	1,147.95	147.05	8.806	
18,200.00	9,110.00	16,908.90	7,815.00	213.46	212.69	0.00	-772.04	9,077.10	1,295.00	1,146.41	148.59	8.715	
18,300.00	9,110.00	17,008.90	7,815.00	215.74	214.98	0.00	-772.13	9,177.10	1,295.00	1,144.87	150.13	8.626	
18,400.00	9,110.00	17,108.90	7,815.00	218.02	217.27	0.00	-772.21	9,277.10	1,295.00	1,143.33	151.67	8.538	
18,500.00	9,110.00	17,208.90	7,815.00	220.31	219.56	0.00	-772.30	9,377.10	1,295.00	1,141.79	153.21	8.452	
18,600.00	9,110.00	17,308.90	7,815.00	222.59	221.85	0.00	-772.39	9,477.10	1,295.00	1,140.25	154.75	8.368	
18,700.00	9,110.00	17,408.90	7,815.00	224.87	224.14	0.00	-772.48	9,577.10	1,295.00	1,138.71	156.29	8.286	
18,800.00	9,110.00	17,508.90	7,815.00	227.16	226.43	0.00	-772.57	9,677.10	1,295.00	1,137.17	157.83	8.205	
18,900.00	9,110.00	17,608.90	7,815.00	229.44	228.72	0.00	-772.66	9,777.10	1,295.00	1,135.62	159.38	8.125	
19,000.00	9,110.00	17,708.90	7,815.00	231.73	231.01	0.00	-772.75	9,877.10	1,295.00	1,134.08	160.92	8.048	
19,100.00	9,110.00	17,808.90	7,815.00	234.02	233.30	0.00	-772.83	9,977.10	1,295.00	1,132.54	162.46	7.971	
19,200.00	9,110.00	17,908.90	7,815.00	236.30	235.60	0.00	-772.92	10,077.10	1,295.00	1,131.00	164.00	7.896	
19,286.90	9,110.00	17,995.79	7,815.00	238.29	237.59	0.00	-773.00	10,164.00	1,295.00	1,129.65	165.35	7.832	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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		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)					
0.00	0.00	1.00	1.00	0.00	0.00	-90.00	0.00	-30.00	30.00				
100.00	100.00	101.00	101.00	0.13	0.13	-90.00	0.00	-30.00	30.00	29.74	0.26	115.432	
200.00	200.00	201.00	201.00	0.49	0.49	-90.00	0.00	-30.00	30.00	29.02	0.98	30.711	
300.00	300.00	301.00	301.00	0.85	0.85	-90.00	0.00	-30.00	30.00	28.31	1.69	17.712	
400.00	400.00	401.00	401.00	1.20	1.21	-90.00	0.00	-30.00	30.00	27.59	2.41	12.444	
500.00	500.00	501.00	501.00	1.56	1.57	-90.00	0.00	-30.00	30.00	26.87	3.13	9.592	
600.00	600.00	601.00	601.00	1.92	1.92	-90.00	0.00	-30.00	30.00	26.16	3.84	7.803	
700.00	700.00	701.00	701.00	2.28	2.28	-90.00	0.00	-30.00	30.00	25.44	4.56	6.577	
800.00	800.00	801.00	801.00	2.64	2.64	-90.00	0.00	-30.00	30.00	24.72	5.28	5.683	
900.00	900.00	901.00	901.00	3.00	3.00	-90.00	0.00	-30.00	30.00	24.00	6.00	5.004	
1,000.00	1,000.00	1,001.00	1,001.00	3.35	3.36	-90.00	0.00	-30.00	30.00	23.29	6.71	4.469 CC	
1,100.00	1,099.98	1,100.07	1,099.91	3.70	3.70	178.73	-0.74	-31.58	33.35	25.95	7.40	4.505	
1,200.00	1,199.92	1,200.30	1,199.62	4.05	4.04	176.83	-2.21	-34.74	40.05	31.97	8.08	4.955	
1,300.00	1,299.86	1,299.47	1,299.33	4.40	4.38	175.48	-3.68	-37.89	46.79	38.02	8.77	5.337	
1,400.00	1,399.80	1,400.76	1,399.04	4.75	4.73	174.47	-5.15	-41.05	53.54	44.08	9.46	5.659	
1,500.00	1,499.74	1,500.99	1,498.74	5.10	5.07	173.68	-6.62	-44.20	60.30	50.15	10.15	5.939	
1,600.00	1,599.68	1,601.23	1,598.45	5.45	5.42	173.05	-8.09	-47.36	67.08	56.23	10.85	6.181	
1,700.00	1,699.61	1,701.46	1,698.16	5.80	5.78	172.54	-9.57	-50.51	73.86	62.31	11.55	6.393	
1,800.00	1,799.55	1,801.69	1,797.86	6.16	6.13	172.12	-11.04	-53.67	80.65	68.39	12.26	6.580	
1,900.00	1,899.49	1,901.92	1,897.57	6.51	6.48	171.76	-12.51	-56.82	87.44	74.48	12.96	6.746	
2,000.00	1,999.43	2,002.16	1,997.28	6.87	6.84	171.45	-13.98	-59.98	94.23	80.56	13.67	6.895	
2,100.00	2,099.37	2,102.39	2,096.98	7.22	7.19	171.18	-15.45	-63.14	101.03	86.65	14.37	7.028	
2,200.00	2,199.31	2,202.62	2,196.69	7.58	7.55	170.95	-16.92	-66.29	107.82	92.74	15.08	7.149	
2,300.00	2,299.26	2,302.80	2,296.46	7.93	7.91	170.72	-18.40	-69.45	113.58	97.80	15.79	7.195	
2,400.00	2,399.14	2,402.94	2,396.25	8.27	8.26	170.49	-19.87	-72.61	117.31	100.83	16.48	7.118	
2,500.00	2,498.84	2,496.84	2,495.96	8.61	8.60	170.26	-21.34	-75.76	119.26	102.11	17.15	6.953	
2,600.00	2,598.23	2,596.90	2,595.94	8.95	8.96	170.03	-24.41	-78.73	119.68	101.83	17.85	6.705	
2,700.00	2,697.20	2,697.26	2,696.05	9.29	9.31	169.80	-30.97	-81.28	118.48	99.93	18.55	6.387	
2,800.00	2,795.84	2,802.29	2,795.97	9.63	9.68	169.57	-40.94	-83.41	116.12	96.84	19.27	6.025	
2,900.00	2,894.48	2,902.45	2,895.19	9.98	10.04	169.34	-51.91	-85.39	113.76	93.77	19.98	5.692	
3,000.00	2,993.12	3,002.60	2,994.41	10.33	10.40	169.11	-62.88	-87.36	111.63	90.92	20.71	5.391	
3,100.00	3,091.75	3,102.76	3,093.62	10.70	10.76	168.88	-73.86	-89.34	109.75	88.32	21.43	5.120	
3,200.00	3,190.39	3,202.92	3,192.84	11.06	11.12	168.65	-84.83	-91.32	108.13	85.96	22.17	4.878	
3,300.00	3,289.03	3,303.08	3,292.06	11.44	11.49	168.42	-95.80	-93.30	106.78	83.88	22.91	4.662	
3,400.00	3,387.66	3,403.24	3,391.28	11.81	11.85	168.19	-106.77	-95.28	105.72	82.07	23.65	4.471	
3,500.00	3,486.30	3,503.39	3,490.49	12.19	12.22	167.96	-117.75	-97.26	104.94	80.55	24.39	4.303	
3,600.00	3,584.94	3,603.55	3,589.71	12.58	12.59	167.73	-128.72	-99.24	104.46	79.33	25.13	4.156	
3,700.00	3,683.57	3,703.71	3,688.93	12.96	12.97	167.50	-139.69	-101.22	104.28	78.40	25.88	4.030	
3,800.00	3,782.21	3,803.87	3,788.15	13.35	13.34	167.27	-150.66	-103.20	104.41	77.79	26.62	3.922	
3,900.00	3,880.85	3,904.02	3,887.36	13.74	13.71	167.04	-161.64	-105.18	104.83	77.47	27.36	3.832	
4,000.00	3,979.48	4,004.18	3,986.58	14.13	14.09	166.81	-172.61	-107.16	105.55	77.46	28.10	3.757	
4,100.00	4,078.12	4,104.34	4,085.80	14.53	14.47	166.58	-183.58	-109.14	106.57	77.74	28.83	3.696	
4,200.00	4,176.76	4,204.50	4,185.02	14.92	14.84	166.35	-194.55	-111.12	107.87	78.31	29.56	3.649	
4,300.00	4,275.39	4,304.66	4,284.23	15.32	15.22	166.12	-205.53	-113.10	109.44	79.15	30.29	3.613	
4,400.00	4,374.03	4,404.81	4,383.45	15.72	15.60	165.89	-216.50	-115.08	111.27	80.26	31.01	3.588	
4,500.00	4,472.67	4,504.97	4,482.67	16.12	15.98	165.66	-227.47	-117.06	113.36	81.63	31.73	3.573	
4,600.00	4,571.30	4,605.13	4,581.89	16.53	16.36	165.43	-238.44	-119.03	115.68	83.23	32.45	3.565	
4,700.00	4,669.94	4,705.29	4,681.10	16.93	16.74	165.20	-249.42	-121.01	118.22	85.05	33.16	3.565	
4,800.00	4,768.58	4,805.45	4,780.32	17.33	17.12	164.97	-260.39	-122.99	120.96	87.09	33.88	3.571	
4,900.00	4,867.21	4,894.40	4,879.54	17.74	17.46	164.74	-271.36	-124.97	123.91	89.36	34.55	3.587	
5,000.00	4,965.85	5,005.76	4,978.76	18.15	17.89	164.51	-282.33	-126.95	127.03	91.73	35.30	3.599	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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
5,100.00	5,064.49	5,105.92	5,077.97	18.56	18.27	141.69	-293.31	-128.93	130.32	94.31	36.01	3.619	
5,200.00	5,163.12	5,206.08	5,177.19	18.96	18.65	143.62	-304.28	-130.91	133.77	97.05	36.72	3.643	
5,300.00	5,261.76	5,306.24	5,276.41	19.37	19.04	145.45	-315.25	-132.89	137.35	99.93	37.43	3.670	
5,400.00	5,360.40	5,406.39	5,375.63	19.78	19.42	147.18	-326.22	-134.87	141.08	102.94	38.14	3.699	
5,500.00	5,459.03	5,506.55	5,474.84	20.19	19.81	148.82	-337.19	-136.85	144.92	106.07	38.85	3.731	
5,600.00	5,557.67	5,593.29	5,574.06	20.61	20.14	150.38	-348.17	-138.83	148.88	109.37	39.51	3.768	
5,700.00	5,656.31	5,706.87	5,673.28	21.02	20.58	151.85	-359.14	-140.81	152.94	112.67	40.27	3.798	
5,800.00	5,754.94	5,807.03	5,772.50	21.43	20.96	153.25	-370.11	-142.79	157.09	116.11	40.98	3.833	
5,900.00	5,853.58	5,892.82	5,871.71	21.85	21.29	154.58	-381.08	-144.77	161.34	119.70	41.64	3.874	
6,000.00	5,952.22	6,007.34	5,970.93	22.26	21.73	155.83	-392.06	-146.75	165.67	123.26	42.41	3.906	
6,100.00	6,050.85	6,107.50	6,070.15	22.67	22.12	157.02	-403.03	-148.73	170.07	126.94	43.13	3.943	
6,200.00	6,149.49	6,207.66	6,169.37	23.09	22.51	158.16	-414.00	-150.71	174.54	130.70	43.84	3.981	
6,300.00	6,248.13	6,307.82	6,268.58	23.50	22.89	159.23	-424.97	-152.68	179.08	134.52	44.56	4.019	
6,400.00	6,346.76	6,392.03	6,367.80	23.92	23.22	160.25	-435.95	-154.66	183.68	138.45	45.22	4.062	
6,500.00	6,445.40	6,508.13	6,467.02	24.34	23.67	161.22	-446.92	-156.64	188.33	142.33	46.00	4.094	
6,600.00	6,544.04	6,608.29	6,566.24	24.75	24.06	162.15	-457.89	-158.62	193.03	146.31	46.72	4.131	
6,700.00	6,642.68	6,708.45	6,665.45	25.17	24.44	163.03	-468.86	-160.60	197.79	150.34	47.45	4.169	
6,800.00	6,741.31	6,808.61	6,764.67	25.59	24.83	163.86	-479.84	-162.58	202.58	154.41	48.17	4.206	
6,900.00	6,839.95	6,908.76	6,863.89	26.01	25.22	164.66	-490.81	-164.56	207.42	158.52	48.89	4.242	
7,000.00	6,938.59	7,008.92	6,963.11	26.42	25.61	165.43	-501.78	-166.54	212.29	162.68	49.62	4.278	
7,100.00	7,037.22	7,109.08	7,062.33	26.84	26.00	166.16	-512.75	-168.52	217.19	166.85	50.35	4.314	
7,200.00	7,136.17	7,209.15	7,161.63	27.25	26.38	166.75	-523.74	-170.50	220.14	169.07	51.07	4.310	
7,300.00	7,235.56	7,309.17	7,260.99	27.64	26.77	167.10	-534.72	-172.48	219.71	167.92	51.80	4.242	
7,400.00	7,335.28	7,409.25	7,360.28	28.01	27.16	167.25	-545.70	-174.46	215.88	163.37	52.52	4.111	
7,500.00	7,435.19	7,509.51	7,459.39	28.36	27.55	167.17	-556.66	-176.44	208.66	155.42	53.24	3.919	
7,600.00	7,535.19	7,589.94	7,558.22	28.68	27.86	4.54	-567.59	-178.41	198.25	144.38	53.87	3.680	
7,700.00	7,635.19	7,689.31	7,656.97	28.98	28.25	4.20	-578.52	-180.38	187.14	132.58	54.56	3.430	
7,800.00	7,735.19	7,788.68	7,755.72	29.29	28.63	3.82	-589.44	-182.35	176.04	120.78	55.26	3.186	
7,900.00	7,835.19	7,888.06	7,854.48	29.60	29.02	3.38	-600.36	-184.32	164.95	108.99	55.95	2.948	
8,000.00	7,935.19	7,987.43	7,953.23	29.91	29.41	2.89	-611.28	-186.29	153.86	97.21	56.65	2.716	
8,100.00	8,035.19	8,086.81	8,051.98	30.22	29.79	2.32	-622.20	-188.26	142.79	85.44	57.36	2.490	
8,200.00	8,135.19	8,186.18	8,150.74	30.53	30.18	1.65	-633.12	-190.23	131.74	73.68	58.06	2.269	
8,300.00	8,235.19	8,282.76	8,246.79	30.84	30.55	0.94	-642.97	-192.01	121.51	62.74	58.77	2.068	
8,400.00	8,335.19	8,378.61	8,342.39	31.16	30.91	0.39	-649.73	-193.23	114.44	55.00	59.44	1.925	
8,500.00	8,435.19	8,474.82	8,438.53	31.47	31.25	0.06	-653.35	-193.88	110.67	50.62	60.05	1.843	
8,592.10	8,527.29	8,564.59	8,528.29	31.76	31.55	0.01	-654.00	-194.00	110.00	49.41	60.59	1.815	
8,600.00	8,535.19	8,572.49	8,536.19	31.79	31.57	0.01	-654.00	-194.00	110.00	49.36	60.64	1.814	
8,600.02	8,535.20	8,572.50	8,536.20	31.79	31.57	0.00	-654.00	-194.00	110.00	49.36	60.64	1.814	
8,700.00	8,634.71	8,672.01	8,635.71	32.10	31.89	-94.34	-654.00	-194.00	110.33	48.91	61.42	1.796	
8,800.00	8,731.26	8,773.12	8,736.74	32.39	32.21	-105.83	-654.37	-191.41	114.13	51.56	62.58	1.824	
8,900.00	8,821.91	8,861.20	8,842.71	32.64	32.54	-117.68	-657.28	-171.25	120.89	57.49	63.39	1.907	
9,000.00	8,903.91	8,994.65	8,947.76	32.84	32.86	-128.41	-663.32	-129.32	129.02	66.42	62.60	2.061	
9,100.00	8,974.76	9,113.53	9,046.63	32.99	33.15	-138.04	-672.68	-64.37	137.17	77.62	59.55	2.303	
9,200.00	9,032.31	9,237.50	9,133.02	33.10	33.39	-146.73	-685.31	23.30	144.01	89.71	54.31	2.652	
9,300.00	9,074.81	9,365.73	9,200.21	33.16	33.62	-154.68	-700.85	131.10	148.39	100.70	47.69	3.111	
9,400.00	9,100.97	9,496.86	9,242.17	33.30	34.05	-162.13	-718.52	253.76	149.44	108.07	41.37	3.613	
9,500.00	9,110.00	9,626.33	9,255.00	33.86	34.85	-169.13	-736.85	381.01	146.68	108.97	37.72	3.889	
9,600.00	9,110.00	9,724.84	9,255.00	34.63	35.62	-173.80	-748.95	478.77	144.86	108.51	36.34	3.986	
9,700.00	9,110.00	9,824.07	9,255.00	35.53	36.53	-177.24	-757.73	577.60	144.17	108.38	35.79	4.028	
9,800.00	9,110.00	9,923.78	9,255.00	36.56	37.54	-179.34	-763.10	677.17	144.01	108.16	35.85	4.017	
9,871.60	9,110.00	9,995.34	9,255.00	37.38	38.33	180.00	-764.82	748.71	144.00	107.84	36.16	3.982	
9,900.00	9,110.00	10,023.74	9,255.00	37.70	38.66	179.94	-765.01	777.10	144.00	107.68	36.32	3.964	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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:
Survey Program: 0-MWD+HDGM													Offset Well Error:
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
10,000.00	9,110.00	10,123.74	9,255.00	38.95	39.88	179.94	-765.09	877.10	144.00	107.00	37.00	3.892	
10,100.00	9,110.00	10,223.74	9,255.00	40.28	41.19	179.94	-765.18	977.10	144.00	106.27	37.73	3.817	
10,200.00	9,110.00	10,323.74	9,255.00	41.70	42.58	179.94	-765.26	1,077.10	144.00	105.50	38.50	3.740	
10,300.00	9,110.00	10,423.74	9,255.00	43.20	44.05	179.94	-765.35	1,177.10	144.00	104.67	39.33	3.662	
10,400.00	9,110.00	10,523.74	9,255.00	44.77	45.59	179.94	-765.43	1,277.10	144.00	103.80	40.20	3.582	
10,500.00	9,110.00	10,623.74	9,255.00	46.39	47.20	179.94	-765.52	1,377.10	144.00	102.89	41.11	3.503	
10,600.00	9,110.00	10,723.74	9,255.00	48.08	48.86	179.94	-765.60	1,477.10	144.00	101.94	42.06	3.424	
10,700.00	9,110.00	10,823.74	9,255.00	49.81	50.57	179.94	-765.69	1,577.10	144.00	100.96	43.04	3.346	
10,800.00	9,110.00	10,923.74	9,255.00	51.59	52.33	179.94	-765.77	1,677.10	144.00	99.94	44.06	3.268	
10,900.00	9,110.00	11,023.74	9,255.00	53.40	54.13	179.94	-765.86	1,777.10	144.00	98.89	45.11	3.192	
11,000.00	9,110.00	11,123.74	9,255.00	55.26	55.96	179.94	-765.94	1,877.10	144.00	97.81	46.19	3.117	
11,100.00	9,110.00	11,223.74	9,255.00	57.14	57.83	179.94	-766.03	1,977.10	144.00	96.70	47.30	3.044	
11,200.00	9,110.00	11,323.74	9,255.00	59.06	59.73	179.94	-766.11	2,077.10	144.00	95.57	48.43	2.973	
11,300.00	9,110.00	11,423.74	9,255.00	61.01	61.66	179.94	-766.20	2,177.10	144.00	94.41	49.59	2.904	
11,400.00	9,110.00	11,523.74	9,255.00	62.97	63.61	179.95	-766.28	2,277.10	144.00	93.23	50.77	2.836	
11,500.00	9,110.00	11,623.74	9,255.00	64.97	65.59	179.95	-766.37	2,377.10	144.00	92.03	51.97	2.771	
11,600.00	9,110.00	11,723.74	9,255.00	66.98	67.59	179.95	-766.45	2,477.10	144.00	90.81	53.19	2.707	
11,700.00	9,110.00	11,823.74	9,255.00	69.01	69.61	179.95	-766.54	2,577.10	144.00	89.57	54.43	2.646	
11,800.00	9,110.00	11,923.74	9,255.00	71.05	71.64	179.95	-766.62	2,677.10	144.00	88.32	55.68	2.586	
11,900.00	9,110.00	12,023.74	9,255.00	73.12	73.69	179.95	-766.71	2,777.10	144.00	87.05	56.95	2.529	
12,000.00	9,110.00	12,123.74	9,255.00	75.19	75.76	179.95	-766.79	2,877.10	144.00	85.77	58.23	2.473	
12,100.00	9,110.00	12,223.74	9,255.00	77.28	77.84	179.95	-766.88	2,977.10	144.00	84.47	59.53	2.419	
12,200.00	9,110.00	12,323.74	9,255.00	79.38	79.93	179.95	-766.97	3,077.10	144.00	83.16	60.84	2.367	
12,300.00	9,110.00	12,423.74	9,255.00	81.50	82.03	179.95	-767.05	3,177.10	144.00	81.83	62.17	2.316	
12,400.00	9,110.00	12,523.74	9,255.00	83.62	84.15	179.95	-767.14	3,277.10	144.00	80.50	63.50	2.268	
12,500.00	9,110.00	12,623.74	9,255.00	85.75	86.27	179.95	-767.22	3,377.10	144.00	79.16	64.84	2.221	
12,600.00	9,110.00	12,723.74	9,255.00	87.89	88.40	179.95	-767.31	3,477.10	144.00	77.80	66.20	2.175	
12,700.00	9,110.00	12,823.74	9,255.00	90.04	90.55	179.95	-767.39	3,577.10	144.00	76.44	67.56	2.131	
12,800.00	9,110.00	12,923.74	9,255.00	92.20	92.70	179.96	-767.48	3,677.10	144.00	75.07	68.93	2.089	
12,900.00	9,110.00	13,023.74	9,255.00	94.37	94.85	179.96	-767.56	3,777.10	144.00	73.68	70.32	2.048	
13,000.00	9,110.00	13,123.74	9,255.00	96.54	97.02	179.96	-767.65	3,877.10	144.00	72.30	71.70	2.008	
13,100.00	9,110.00	13,223.74	9,255.00	98.72	99.19	179.96	-767.73	3,977.10	144.00	70.90	73.10	1.970	
13,200.00	9,110.00	13,323.74	9,255.00	100.90	101.37	179.96	-767.82	4,077.10	144.00	69.50	74.50	1.933	
13,300.00	9,110.00	13,423.74	9,255.00	103.09	103.55	179.96	-767.90	4,177.10	144.00	68.09	75.91	1.897	
13,400.00	9,110.00	13,523.74	9,255.00	105.28	105.74	179.96	-767.99	4,277.10	144.00	66.67	77.33	1.862	
13,500.00	9,110.00	13,623.74	9,255.00	107.48	107.93	179.96	-768.07	4,377.10	144.00	65.25	78.75	1.829	
13,600.00	9,110.00	13,723.74	9,255.00	109.68	110.13	179.96	-768.16	4,477.10	144.00	63.82	80.18	1.796	
13,700.00	9,110.00	13,823.74	9,255.00	111.89	112.33	179.96	-768.24	4,577.10	144.00	62.39	81.61	1.765	
13,800.00	9,110.00	13,923.74	9,255.00	114.10	114.54	179.96	-768.33	4,677.10	144.00	60.95	83.05	1.734	
13,900.00	9,110.00	14,023.74	9,255.00	116.32	116.75	179.96	-768.41	4,777.10	144.00	59.51	84.49	1.704	
14,000.00	9,110.00	14,123.74	9,255.00	118.54	118.96	179.96	-768.50	4,877.10	144.00	58.07	85.93	1.676	
14,100.00	9,110.00	14,223.74	9,255.00	120.76	121.18	179.96	-768.58	4,977.10	144.00	56.62	87.38	1.648	
14,200.00	9,110.00	14,323.74	9,255.00	122.99	123.40	179.96	-768.67	5,077.10	144.00	55.16	88.84	1.621	
14,300.00	9,110.00	14,423.74	9,255.00	125.21	125.62	179.97	-768.75	5,177.10	144.00	53.70	90.30	1.595	
14,400.00	9,110.00	14,523.74	9,255.00	127.45	127.85	179.97	-768.84	5,277.10	144.00	52.24	91.76	1.569	
14,500.00	9,110.00	14,623.74	9,255.00	129.68	130.08	179.97	-768.92	5,377.10	144.00	50.78	93.22	1.545	
14,600.00	9,110.00	14,723.74	9,255.00	131.92	132.31	179.97	-769.01	5,477.10	144.00	49.31	94.69	1.521	
14,700.00	9,110.00	14,823.74	9,255.00	134.16	134.55	179.97	-769.09	5,577.10	144.00	47.83	96.17	1.497 Level 3	
14,800.00	9,110.00	14,923.74	9,255.00	136.40	136.79	179.97	-769.18	5,677.10	144.00	46.36	97.64	1.475 Level 3	
14,900.00	9,110.00	15,023.74	9,255.00	138.64	139.03	179.97	-769.26	5,777.10	144.00	44.88	99.12	1.453 Level 3	
15,000.00	9,110.00	15,123.74	9,255.00	140.89	141.27	179.97	-769.35	5,877.10	144.00	43.40	100.60	1.431 Level 3	
15,100.00	9,110.00	15,223.74	9,255.00	143.13	143.51	179.97	-769.43	5,977.10	144.00	41.92	102.08	1.411 Level 3	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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		
15,200.00	9,110.00	15,323.74	9,255.00	145.38	145.76	179.97	-769.52	6,077.10	144.00	40.43	103.57	1.390	Level 3	
15,300.00	9,110.00	15,423.74	9,255.00	147.63	148.01	179.97	-769.60	6,177.10	144.00	38.94	105.06	1.371	Level 3	
15,400.00	9,110.00	15,523.74	9,255.00	149.89	150.26	179.97	-769.69	6,277.10	144.00	37.45	106.55	1.351	Level 3	
15,500.00	9,110.00	15,623.74	9,255.00	152.14	152.51	179.97	-769.78	6,377.10	144.00	35.96	108.04	1.333	Level 3	
15,600.00	9,110.00	15,723.74	9,255.00	154.40	154.76	179.97	-769.86	6,477.10	144.00	34.46	109.54	1.315	Level 3	
15,700.00	9,110.00	15,823.74	9,255.00	156.66	157.02	179.98	-769.95	6,577.10	144.00	32.97	111.03	1.297	Level 3	
15,800.00	9,110.00	15,923.74	9,255.00	158.92	159.27	179.98	-770.03	6,677.10	144.00	31.47	112.53	1.280	Level 3	
15,900.00	9,110.00	16,023.74	9,255.00	161.18	161.53	179.98	-770.12	6,777.10	144.00	29.96	114.04	1.263	Level 3	
16,000.00	9,110.00	16,123.74	9,255.00	163.44	163.79	179.98	-770.20	6,877.10	144.00	28.46	115.54	1.246	Level 2	
16,100.00	9,110.00	16,223.74	9,255.00	165.70	166.05	179.98	-770.29	6,977.10	144.00	26.96	117.04	1.230	Level 2	
16,200.00	9,110.00	16,323.74	9,255.00	167.97	168.32	179.98	-770.37	7,077.10	144.00	25.45	118.55	1.215	Level 2	
16,300.00	9,110.00	16,423.74	9,255.00	170.23	170.58	179.98	-770.46	7,177.10	144.00	23.94	120.06	1.199	Level 2	
16,400.00	9,110.00	16,523.74	9,255.00	172.50	172.84	179.98	-770.54	7,277.10	144.00	22.43	121.57	1.185	Level 2	
16,500.00	9,110.00	16,623.74	9,255.00	174.77	175.11	179.98	-770.63	7,377.10	144.00	20.92	123.08	1.170	Level 2	
16,600.00	9,110.00	16,723.74	9,255.00	177.04	177.38	179.98	-770.71	7,477.10	144.00	19.41	124.59	1.156	Level 2	
16,700.00	9,110.00	16,823.74	9,255.00	179.31	179.64	179.98	-770.80	7,577.10	144.00	17.90	126.10	1.142	Level 2	
16,800.00	9,110.00	16,923.74	9,255.00	181.58	181.91	179.98	-770.88	7,677.10	144.00	16.38	127.62	1.128	Level 2	
16,900.00	9,110.00	17,023.74	9,255.00	183.85	184.18	179.98	-770.97	7,777.10	144.00	14.86	129.14	1.115	Level 2	
17,000.00	9,110.00	17,123.74	9,255.00	186.12	186.45	179.98	-771.05	7,877.10	144.00	13.35	130.65	1.102	Level 2	
17,077.68	9,110.00	17,201.42	9,255.00	187.89	188.22	179.98	-771.12	7,954.78	144.00	12.17	131.83	1.092	Level 2	
17,100.00	9,110.00	17,223.74	9,255.00	188.40	188.73	179.98	-771.14	7,977.10	144.00	11.83	132.17	1.089	Level 2	
17,200.00	9,110.00	17,323.74	9,255.00	190.67	191.00	179.99	-771.22	8,077.10	144.00	10.31	133.69	1.077	Level 2	
17,300.00	9,110.00	17,423.74	9,255.00	192.95	193.27	179.99	-771.31	8,177.10	144.00	8.79	135.21	1.065	Level 2	
17,400.00	9,110.00	17,523.74	9,255.00	195.22	195.55	179.99	-771.39	8,277.10	144.00	7.26	136.74	1.053	Level 2	
17,500.00	9,110.00	17,623.74	9,255.00	197.50	197.82	179.99	-771.48	8,377.10	144.00	5.74	138.26	1.042	Level 2	
17,600.00	9,110.00	17,723.74	9,255.00	199.78	200.10	179.99	-771.56	8,477.10	144.00	4.21	139.79	1.030	Level 2	
17,700.00	9,110.00	17,823.74	9,255.00	202.06	202.37	179.99	-771.65	8,577.10	144.00	2.69	141.31	1.019	Level 2	
17,800.00	9,110.00	17,923.74	9,255.00	204.33	204.65	179.99	-771.73	8,677.10	144.00	1.16	142.84	1.008	Level 2	
17,900.00	9,110.00	18,023.74	9,255.00	206.61	206.93	179.99	-771.82	8,777.10	144.00	-0.36	144.36	0.997	Level 1	
18,000.00	9,110.00	18,123.74	9,255.00	208.89	209.21	179.99	-771.90	8,877.10	144.00	-1.89	145.89	0.987	Level 1	
18,100.00	9,110.00	18,223.74	9,255.00	211.18	211.49	179.99	-771.99	8,977.10	144.00	-3.42	147.42	0.977	Level 1	
18,200.00	9,110.00	18,323.74	9,255.00	213.46	213.77	179.99	-772.07	9,077.10	144.00	-4.95	148.95	0.967	Level 1	
18,300.00	9,110.00	18,423.74	9,255.00	215.74	216.05	179.99	-772.16	9,177.10	144.00	-6.48	150.48	0.957	Level 1	
18,400.00	9,110.00	18,523.74	9,255.00	218.02	218.33	179.99	-772.24	9,277.10	144.00	-8.01	152.01	0.947	Level 1	
18,500.00	9,110.00	18,623.74	9,255.00	220.31	220.61	179.99	-772.33	9,377.10	144.00	-9.55	153.55	0.938	Level 1	
18,600.00	9,110.00	18,723.74	9,255.00	222.59	222.89	180.00	-772.42	9,477.10	144.00	-11.08	155.08	0.929	Level 1	
18,700.00	9,110.00	18,823.74	9,255.00	224.87	225.18	180.00	-772.50	9,577.10	144.00	-12.61	156.61	0.919	Level 1	
18,800.00	9,110.00	18,923.74	9,255.00	227.16	227.46	180.00	-772.59	9,677.10	144.00	-14.15	158.15	0.911	Level 1	
18,900.00	9,110.00	19,023.74	9,255.00	229.44	229.74	180.00	-772.67	9,777.10	144.00	-15.68	159.68	0.902	Level 1	
19,000.00	9,110.00	19,123.74	9,255.00	231.73	232.03	180.00	-772.76	9,877.10	144.00	-17.22	161.22	0.893	Level 1	
19,100.00	9,110.00	19,223.74	9,255.00	234.02	234.31	180.00	-772.84	9,977.10	144.00	-18.76	162.76	0.885	Level 1	
19,200.00	9,110.00	19,323.74	9,255.00	236.30	236.60	180.00	-772.93	10,077.10	144.00	-20.29	164.29	0.876	Level 1	
19,286.90	9,110.00	19,410.64	9,255.00	238.29	238.59	-180.00	-773.00	10,164.00	144.00	-21.63	165.63	0.869	Level 1, 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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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 Tooface (")	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	0.00	110.00	0.00	110.00				
100.00	100.00	101.00	99.00	0.13	0.13	0.00	110.00	0.00	110.00	109.74	0.26	423.252	
200.00	200.00	201.00	199.00	0.49	0.49	0.00	110.00	0.00	110.00	109.02	0.98	112.609	
300.00	300.00	301.00	299.00	0.85	0.85	0.00	110.00	0.00	110.00	108.31	1.69	64.944	
400.00	400.00	401.00	399.00	1.20	1.21	0.00	110.00	0.00	110.00	107.59	2.41	45.629	
500.00	500.00	501.00	499.00	1.56	1.57	0.00	110.00	0.00	110.00	106.87	3.13	35.170	
600.00	600.00	601.00	599.00	-1.92	1.92	0.00	110.00	0.00	110.00	106.16	3.84	28.612	
700.00	700.00	701.00	699.00	2.28	2.28	0.00	110.00	0.00	110.00	105.44	4.56	24.115	
800.00	800.00	801.00	799.00	2.64	2.64	0.00	110.00	0.00	110.00	104.72	5.28	20.839	
900.00	900.00	901.00	899.00	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	999.00	3.35	3.36	0.00	110.00	0.00	110.00	103.29	6.71	16.388	
1,000.02	1,000.02	1,000.98	999.02	3.35	3.36	0.00	110.00	0.00	110.00	103.29	6.71	16.388	CC
1,100.00	1,099.98	1,101.02	1,098.98	3.70	3.72	-90.91	110.00	0.00	110.01	102.59	7.42	14.825	
1,200.00	1,199.92	1,201.08	1,198.92	4.05	4.08	-92.72	110.00	0.00	110.12	102.00	8.12	13.555	
1,300.00	1,299.86	1,301.14	1,298.86	4.40	4.43	-94.53	110.00	0.00	110.35	101.52	8.83	12.497	
1,400.00	1,399.80	1,401.20	1,398.80	4.75	4.79	-96.33	110.00	0.00	110.68	101.14	9.54	11.604	
1,500.00	1,499.74	1,498.74	1,498.74	5.10	5.14	-98.12	110.00	0.00	111.12	100.88	10.24	10.853	
1,600.00	1,599.68	1,599.30	1,599.28	5.45	5.49	-99.03	110.00	1.72	111.38	100.44	10.94	10.179	
1,700.00	1,699.61	1,700.69	1,699.22	5.80	5.84	-99.03	110.00	5.21	111.38	99.74	11.64	9.566	
1,800.00	1,799.55	1,800.69	1,799.16	6.16	6.19	-99.03	110.00	8.70	111.38	99.04	12.34	9.024	
1,900.00	1,899.49	1,900.69	1,899.10	6.51	6.54	-99.03	110.00	12.19	111.38	98.34	13.05	8.538	
2,000.00	1,999.43	2,000.69	1,999.04	6.87	6.88	-99.03	110.00	15.68	111.38	97.63	13.75	8.101	
2,000.40	1,999.83	2,000.29	1,999.44	6.87	6.88	-99.03	110.00	15.69	111.38	97.63	13.75	8.101	
2,100.00	2,099.37	2,100.69	2,098.98	7.22	7.23	-99.03	110.00	19.17	111.38	96.93	14.46	7.705	
2,178.84	2,178.16	2,178.14	2,177.77	7.51	7.51	-99.03	110.00	21.92	111.38	96.37	15.01	7.421	
2,200.00	2,199.31	2,200.69	2,198.92	7.58	7.58	-99.03	110.00	22.66	111.38	96.22	15.16	7.346	ES
2,300.00	2,299.26	2,300.71	2,298.84	7.93	7.94	-157.30	110.00	26.15	112.76	96.89	15.86	7.107	
2,400.00	2,399.14	2,400.86	2,398.64	8.27	8.29	174.82	110.00	29.63	116.97	100.41	16.56	7.064	
2,500.00	2,498.84	2,501.24	2,498.19	8.61	8.64	166.23	110.00	33.11	124.17	106.92	17.25	7.198	
2,600.00	2,598.23	2,601.99	2,597.39	8.95	9.00	163.74	110.00	36.58	134.54	116.60	17.94	7.498	
2,700.00	2,697.20	2,703.22	2,696.09	9.29	9.36	163.64	110.00	40.02	148.26	129.62	18.64	7.955	
2,800.00	2,795.84	2,804.81	2,794.44	9.63	9.72	166.17	110.00	43.46	164.28	144.95	19.33	8.497	
2,900.00	2,894.48	2,906.41	2,892.78	9.98	10.08	168.51	110.00	46.89	180.66	160.63	20.03	9.019	
3,000.00	2,993.12	2,991.99	2,991.13	10.33	10.39	170.47	110.00	50.33	197.29	176.62	20.67	9.543	
3,100.00	3,091.75	3,094.88	3,093.98	10.70	10.75	171.86	109.23	52.58	213.16	191.79	21.38	9.972	
3,200.00	3,190.39	3,199.08	3,198.13	11.06	11.09	172.36	106.56	51.62	226.82	204.76	22.06	10.281	
3,300.00	3,289.03	3,303.91	3,302.77	11.44	11.44	172.09	101.96	47.35	238.15	215.41	22.74	10.473	
3,400.00	3,387.66	3,405.03	3,403.51	11.81	11.77	171.36	96.14	40.85	247.75	224.33	23.42	10.580	
3,500.00	3,486.30	3,504.52	3,502.62	12.19	12.10	170.67	90.34	34.31	257.29	233.19	24.10	10.677	
3,600.00	3,584.94	3,604.02	3,601.74	12.58	12.44	170.03	84.54	27.78	266.87	242.09	24.78	10.767	
3,700.00	3,683.57	3,703.52	3,700.85	12.96	12.77	169.44	78.74	21.24	276.48	251.00	25.47	10.853	
3,800.00	3,782.21	3,803.02	3,799.96	13.35	13.11	168.88	72.94	14.71	286.11	259.95	26.17	10.934	
3,900.00	3,880.85	3,902.52	3,899.08	13.74	13.45	168.36	67.14	8.17	295.77	268.91	26.86	11.010	
4,000.00	3,979.48	4,002.01	3,998.19	14.13	13.79	167.87	61.33	1.63	305.46	277.89	27.56	11.082	
4,100.00	4,078.12	4,101.51	4,097.30	14.53	14.13	167.42	55.53	-4.90	315.16	286.90	28.26	11.151	
4,200.00	4,176.76	4,201.01	4,196.42	14.92	14.48	166.99	49.73	-11.44	324.88	295.91	28.97	11.215	
4,300.00	4,275.39	4,300.51	4,295.53	15.32	14.83	166.58	43.93	-17.97	334.62	304.95	29.67	11.277	
4,400.00	4,374.03	4,400.00	4,394.64	15.72	15.18	166.20	38.13	-24.51	344.38	313.99	30.38	11.335	
4,500.00	4,472.67	4,500.50	4,493.75	16.12	15.53	165.84	32.33	-31.04	354.15	323.05	31.10	11.388	
4,600.00	4,571.30	4,601.00	4,592.87	16.53	15.89	165.50	26.52	-37.58	363.93	332.11	31.81	11.439	
4,700.00	4,669.94	4,701.50	4,691.98	16.93	16.24	165.18	20.72	-44.12	373.72	341.19	32.53	11.488	
4,800.00	4,768.58	4,802.01	4,791.09	17.33	16.60	164.87	14.92	-50.65	383.53	350.28	33.25	11.534	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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		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)					
4,900.00	4,867.21	4,897.49	4,890.21	17.74	16.94	164.58	9.12	-57.19	393.34	359.39	33.96	11.584	
5,000.00	4,965.85	5,003.01	4,989.32	18.15	17.32	164.30	3.32	-63.72	403.17	368.47	34.70	11.620	
5,100.00	5,064.49	5,103.51	5,088.43	18.56	17.68	164.04	-2.48	-70.26	413.00	377.58	35.42	11.660	
5,200.00	5,163.12	5,204.02	5,187.55	18.96	18.04	163.79	-8.29	-76.79	422.84	386.70	36.15	11.698	
5,300.00	5,261.76	5,304.52	5,286.66	19.37	18.41	163.55	-14.09	-83.33	432.70	395.82	36.87	11.734	
5,400.00	5,360.40	5,405.02	5,385.77	19.78	18.77	163.32	-19.89	-89.87	442.55	404.95	37.60	11.769	
5,500.00	5,459.03	5,505.52	5,484.89	20.19	19.14	163.10	-25.69	-96.40	452.42	414.08	38.33	11.802	
5,600.00	5,557.67	5,606.02	5,584.00	20.61	19.50	162.89	-31.49	-102.94	462.29	423.22	39.06	11.834	
5,700.00	5,656.31	5,693.47	5,683.11	21.02	19.82	162.69	-37.29	-109.47	472.16	432.41	39.75	11.878	
5,800.00	5,754.94	5,807.03	5,782.23	21.43	20.23	162.49	-43.10	-116.01	482.05	441.52	40.53	11.894	
5,900.00	5,853.58	5,907.53	5,881.34	21.85	20.60	162.31	-48.90	-122.55	491.93	450.67	41.26	11.922	
6,000.00	5,952.22	5,991.97	5,980.45	22.26	20.91	162.13	-54.70	-129.08	501.82	459.88	41.94	11.965	
6,100.00	6,050.85	6,108.54	6,079.56	22.67	21.33	161.96	-60.50	-135.62	511.72	468.99	42.74	11.974	
6,200.00	6,149.49	6,209.04	6,178.68	23.09	21.70	161.79	-66.30	-142.15	521.62	478.15	43.47	11.999	
6,300.00	6,248.13	6,309.54	6,277.79	23.50	22.07	161.64	-72.10	-148.69	531.53	487.32	44.21	12.023	
6,400.00	6,346.76	6,389.96	6,376.90	23.92	22.37	161.48	-77.91	-155.22	541.44	496.56	44.88	12.065	
6,500.00	6,445.40	6,489.45	6,476.02	24.34	22.73	161.34	-83.71	-161.76	551.35	505.74	45.61	12.088	
6,600.00	6,544.04	6,588.95	6,575.13	24.75	23.10	161.19	-89.51	-168.30	561.27	514.92	46.35	12.110	
6,700.00	6,642.68	6,688.45	6,674.24	25.17	23.47	161.06	-95.31	-174.83	571.18	524.10	47.09	12.131	
6,800.00	6,741.31	6,785.04	6,770.46	25.59	23.82	160.93	-100.89	-181.11	581.17	533.36	47.81	12.156	
6,900.00	6,839.95	6,872.75	6,857.99	26.01	24.14	160.97	-104.66	-185.37	592.58	544.10	48.48	12.224	
7,000.00	6,938.59	6,959.96	6,945.14	26.42	24.45	161.20	-106.65	-187.61	605.96	556.84	49.12	12.336	
7,100.00	7,037.22	7,051.04	7,036.22	26.84	24.77	161.62	-107.00	-188.00	621.17	571.40	49.77	12.480	
7,200.00	7,136.17	7,149.99	7,135.17	27.25	25.10	162.12	-107.00	-188.00	634.90	584.42	50.47	12.579	
7,300.00	7,235.56	7,249.38	7,234.56	27.64	25.44	162.48	-107.00	-188.00	645.35	594.18	51.17	12.612	
7,400.00	7,335.28	7,349.10	7,334.28	28.01	25.78	162.72	-107.00	-188.00	652.50	600.63	51.87	12.580	
7,500.00	7,435.19	7,449.01	7,434.19	28.36	26.12	162.85	-107.00	-188.00	656.33	603.76	52.56	12.487	
7,600.00	7,535.19	7,549.01	7,534.19	28.68	26.47	0.52	-107.00	-188.00	657.03	603.79	53.24	12.341	
7,700.00	7,635.19	7,649.01	7,634.19	28.98	26.81	0.52	-107.00	-188.00	657.03	603.11	53.91	12.187	
7,800.00	7,735.19	7,749.01	7,734.19	29.29	27.15	0.52	-107.00	-188.00	657.03	602.44	54.59	12.037	
7,900.00	7,835.19	7,849.01	7,834.19	29.60	27.50	0.52	-107.00	-188.00	657.03	601.77	55.26	11.890	
8,000.00	7,935.19	7,949.01	7,934.19	29.91	27.84	0.52	-107.00	-188.00	657.03	601.09	55.93	11.746	
8,100.00	8,035.19	8,049.01	8,034.19	30.22	28.18	0.52	-107.00	-188.00	657.03	600.42	56.61	11.606	
8,200.00	8,135.19	8,149.01	8,134.19	30.53	28.53	0.52	-107.00	-188.00	657.03	599.74	57.29	11.469	
8,300.00	8,235.19	8,249.01	8,234.19	30.84	28.87	0.52	-107.00	-188.00	657.03	599.06	57.97	11.335	
8,400.00	8,335.19	8,349.01	8,334.19	31.16	29.22	0.52	-107.00	-188.00	657.03	598.38	58.64	11.203	
8,500.00	8,435.19	8,449.01	8,434.19	31.47	29.56	0.52	-107.00	-188.00	657.03	597.70	59.32	11.075	
8,600.00	8,535.19	8,549.01	8,534.19	31.79	29.91	0.52	-107.00	-188.00	657.03	597.02	60.01	10.949	
8,679.68	8,614.62	8,628.44	8,613.62	32.04	30.18	-90.00	-107.00	-188.00	657.00	596.45	60.55	10.850	
8,700.00	8,634.71	8,648.53	8,633.71	32.10	30.25	-90.25	-107.00	-188.00	657.01	596.32	60.69	10.825	
8,800.00	8,731.26	8,745.08	8,730.26	32.39	30.59	-92.34	-107.00	-188.00	657.62	596.24	61.38	10.714	
8,900.00	8,821.91	8,835.73	8,820.91	32.64	30.90	-95.31	-107.00	-188.00	660.77	598.72	62.05	10.649	
9,000.00	8,903.91	8,917.73	8,902.91	32.84	31.19	-98.47	-107.00	-188.00	669.25	606.54	62.71	10.673	
9,100.00	8,974.76	8,988.58	8,973.76	32.99	31.43	-100.99	-107.00	-188.00	686.14	622.80	63.34	10.833	
9,200.00	9,032.31	9,046.13	9,031.31	33.10	31.63	-102.07	-107.00	-188.00	713.97	650.04	63.92	11.169	
9,300.00	9,074.81	9,088.63	9,073.81	33.16	31.78	-100.99	-107.00	-188.00	753.94	689.50	64.44	11.700	
9,400.00	9,100.97	9,114.79	9,099.97	33.30	31.87	-97.15	-107.00	-188.00	805.61	740.77	64.84	12.424	
9,500.00	9,110.00	9,123.81	9,109.00	33.86	31.90	-90.16	-107.00	-188.00	866.97	801.86	65.12	13.314	
9,600.00	9,110.00	9,123.82	9,109.00	34.63	31.90	-90.00	-107.00	-188.00	935.30	870.00	65.30	14.323	
9,700.00	9,110.00	9,123.82	9,109.00	35.53	31.90	-90.00	-107.00	-188.00	1,008.92	943.46	65.46	15.414	
9,800.00	9,110.00	10,608.43	9,972.57	36.56	38.83	-142.72	-107.42	678.57	1,085.29	1,028.58	56.71	19.138	
9,900.00	9,110.00	10,708.43	9,972.44	37.70	39.90	-142.72	-107.47	778.57	1,085.21	1,027.09	58.12	18.673	

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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		Offset Wellbore Centre		Between Centres		Minimum Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
10,000.00	9,110.00	10,808.43	9,972.30	38.95	41.08	-142.71	-107.52	878.57	1,085.12	1,025.47	59.66	18.189			
10,100.00	9,110.00	10,908.43	9,972.17	40.28	42.34	-142.70	-107.56	978.57	1,085.04	1,023.73	61.31	17.698			
10,200.00	9,110.00	11,008.43	9,972.04	41.70	43.70	-142.70	-107.61	1,078.57	1,084.96	1,021.90	63.06	17.204			
10,300.00	9,110.00	11,108.43	9,971.91	43.20	45.13	-142.69	-107.66	1,178.57	1,084.88	1,019.96	64.92	16.712			
10,400.00	9,110.00	11,208.43	9,971.77	44.77	46.63	-142.69	-107.71	1,278.57	1,084.80	1,017.94	66.86	16.225			
10,500.00	9,110.00	11,308.43	9,971.64	46.39	48.19	-142.68	-107.76	1,378.57	1,084.71	1,015.83	68.88	15.747			
10,600.00	9,110.00	11,408.43	9,971.51	48.08	49.81	-142.68	-107.81	1,478.57	1,084.63	1,013.65	70.98	15.280			
10,700.00	9,110.00	11,508.43	9,971.38	49.81	51.48	-142.67	-107.85	1,578.57	1,084.55	1,011.40	73.15	14.827			
10,800.00	9,110.00	11,608.43	9,971.24	51.59	53.21	-142.66	-107.90	1,678.57	1,084.47	1,009.09	75.38	14.387			
10,900.00	9,110.00	11,708.43	9,971.11	53.40	54.98	-142.66	-107.95	1,778.56	1,084.39	1,006.72	77.66	13.962			
11,000.00	9,110.00	11,808.43	9,970.98	55.26	56.78	-142.65	-108.00	1,878.56	1,084.30	1,004.30	80.00	13.553			
11,100.00	9,110.00	11,908.43	9,970.85	57.14	58.62	-142.65	-108.05	1,978.56	1,084.22	1,001.83	82.39	13.159			
11,200.00	9,110.00	12,008.43	9,970.71	59.06	60.49	-142.64	-108.09	2,078.56	1,084.14	999.32	84.82	12.781			
11,300.00	9,110.00	12,108.43	9,970.58	61.01	62.39	-142.63	-108.14	2,178.56	1,084.06	996.76	87.29	12.418			
11,400.00	9,110.00	12,208.43	9,970.45	62.97	64.32	-142.63	-108.19	2,278.56	1,083.98	994.17	89.80	12.071			
11,500.00	9,110.00	12,308.43	9,970.32	64.97	66.27	-142.62	-108.24	2,378.56	1,083.89	991.55	92.35	11.737			
11,600.00	9,110.00	12,408.43	9,970.18	66.98	68.24	-142.62	-108.29	2,478.56	1,083.81	988.89	94.92	11.418			
11,700.00	9,110.00	12,508.43	9,970.05	69.01	70.24	-142.61	-108.34	2,578.56	1,083.73	986.21	97.52	11.112			
11,800.00	9,110.00	12,608.43	9,969.92	71.05	72.25	-142.60	-108.38	2,678.56	1,083.65	983.49	100.16	10.820			
11,900.00	9,110.00	12,708.43	9,969.79	73.12	74.28	-142.60	-108.43	2,778.56	1,083.57	980.76	102.81	10.539			
12,000.00	9,110.00	12,808.43	9,969.65	75.19	76.33	-142.59	-108.48	2,878.56	1,083.48	978.00	105.49	10.271			
12,100.00	9,110.00	12,908.43	9,969.52	77.28	78.39	-142.59	-108.53	2,978.56	1,083.40	975.21	108.19	10.014			
12,200.00	9,110.00	13,008.43	9,969.39	79.38	80.46	-142.58	-108.58	3,078.56	1,083.32	972.41	110.91	9.768			
12,300.00	9,110.00	13,108.43	9,969.26	81.50	82.55	-142.58	-108.63	3,178.56	1,083.24	969.59	113.65	9.532			
12,400.00	9,110.00	13,208.43	9,969.12	83.62	84.65	-142.57	-108.67	3,278.56	1,083.16	966.76	116.40	9.305			
12,500.00	9,110.00	13,308.43	9,968.99	85.75	86.76	-142.56	-108.72	3,378.56	1,083.08	963.90	119.17	9.088			
12,600.00	9,110.00	13,408.43	9,968.86	87.89	88.88	-142.56	-108.77	3,478.56	1,082.99	961.03	121.96	8.880			
12,700.00	9,110.00	13,508.43	9,968.73	90.04	91.00	-142.55	-108.82	3,578.56	1,082.91	958.15	124.76	8.680			
12,800.00	9,110.00	13,608.43	9,968.59	92.20	93.14	-142.55	-108.87	3,678.56	1,082.83	955.26	127.58	8.488			
12,900.00	9,110.00	13,708.43	9,968.46	94.37	95.29	-142.54	-108.92	3,778.56	1,082.75	952.35	130.40	8.303			
13,000.00	9,110.00	13,808.43	9,968.33	96.54	97.44	-142.53	-108.96	3,878.56	1,082.67	949.43	133.24	8.126			
13,100.00	9,110.00	13,908.43	9,968.20	98.72	99.60	-142.53	-109.01	3,978.56	1,082.59	946.50	136.09	7.955			
13,200.00	9,110.00	14,008.43	9,968.06	100.90	101.76	-142.52	-109.06	4,078.56	1,082.50	943.56	138.95	7.791			
13,300.00	9,110.00	14,108.43	9,967.93	103.09	103.94	-142.52	-109.11	4,178.56	1,082.42	940.61	141.82	7.633			
13,400.00	9,110.00	14,208.43	9,967.80	105.28	106.11	-142.51	-109.16	4,278.56	1,082.34	937.65	144.69	7.480			
13,500.00	9,110.00	14,308.43	9,967.67	107.48	108.30	-142.50	-109.21	4,378.56	1,082.26	934.68	147.58	7.333			
13,600.00	9,110.00	14,408.43	9,967.53	109.68	110.48	-142.50	-109.25	4,478.56	1,082.18	931.70	150.48	7.192			
13,700.00	9,110.00	14,508.43	9,967.40	111.89	112.68	-142.49	-109.30	4,578.56	1,082.09	928.72	153.38	7.055			
13,800.00	9,110.00	14,608.43	9,967.27	114.10	114.88	-142.49	-109.35	4,678.56	1,082.01	925.72	156.29	6.923			
13,900.00	9,110.00	14,708.43	9,967.14	116.32	117.08	-142.48	-109.40	4,778.56	1,081.93	922.73	159.21	6.796			
14,000.00	9,110.00	14,808.43	9,967.00	118.54	119.28	-142.48	-109.45	4,878.56	1,081.85	919.72	162.13	6.673			
14,100.00	9,110.00	14,908.43	9,966.87	120.76	121.49	-142.47	-109.50	4,978.56	1,081.77	916.71	165.06	6.554			
14,200.00	9,110.00	15,008.43	9,966.74	122.99	123.71	-142.46	-109.54	5,078.56	1,081.69	913.69	168.00	6.439			
14,300.00	9,110.00	15,108.42	9,966.61	125.21	125.92	-142.46	-109.59	5,178.56	1,081.61	910.67	170.94	6.327			
14,400.00	9,110.00	15,208.42	9,966.47	127.45	128.14	-142.45	-109.64	5,278.56	1,081.52	907.64	173.89	6.220			
14,500.00	9,110.00	15,308.42	9,966.34	129.68	130.37	-142.45	-109.69	5,378.56	1,081.44	904.60	176.84	6.115			
14,600.00	9,110.00	15,408.42	9,966.21	131.92	132.59	-142.44	-109.74	5,478.56	1,081.36	901.56	179.80	6.014			
14,700.00	9,110.00	15,508.42	9,966.08	134.16	134.82	-142.43	-109.79	5,578.56	1,081.28	898.52	182.76	5.916			
14,800.00	9,110.00	15,608.42	9,965.94	136.40	137.05	-142.43	-109.83	5,678.56	1,081.20	895.47	185.73	5.821			
14,900.00	9,110.00	15,708.42	9,965.81	138.64	139.29	-142.42	-109.88	5,778.56	1,081.12	892.41	188.70	5.729			
15,000.00	9,110.00	15,808.42	9,965.68	140.89	141.52	-142.42	-109.93	5,878.56	1,081.03	889.36	191.68	5.640			
15,100.00	9,110.00	15,908.42	9,965.54	143.13	143.76	-142.41	-109.98	5,978.56	1,080.95	886.30	194.66	5.553			

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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			
15,200.00	9,110.00	16,008.42	9,965.41	145.38	146.00	-142.40	-110.03	6,078.56	1,080.87	883.23	197.64	5.469			
15,300.00	9,110.00	16,108.42	9,965.28	147.63	148.24	-142.40	-110.08	6,178.56	1,080.79	880.16	200.63	5.387			
15,400.00	9,110.00	16,208.42	9,965.15	149.89	150.49	-142.39	-110.12	6,278.56	1,080.71	877.09	203.62	5.307			
15,500.00	9,110.00	16,308.42	9,965.01	152.14	152.74	-142.39	-110.17	6,378.56	1,080.63	874.01	206.62	5.230			
15,600.00	9,110.00	16,408.42	9,964.88	154.40	154.98	-142.38	-110.22	6,478.56	1,080.55	870.93	209.62	5.155			
15,700.00	9,110.00	16,508.42	9,964.75	156.66	157.23	-142.37	-110.27	6,578.56	1,080.46	867.85	212.62	5.082			
15,800.00	9,110.00	16,608.42	9,964.62	158.92	159.49	-142.37	-110.32	6,678.56	1,080.38	864.76	215.62	5.011			
15,900.00	9,110.00	16,708.42	9,964.48	161.18	161.74	-142.36	-110.37	6,778.56	1,080.30	861.67	218.63	4.941			
16,000.00	9,110.00	16,808.42	9,964.35	163.44	164.00	-142.36	-110.41	6,878.55	1,080.22	858.58	221.64	4.874			
16,100.00	9,110.00	16,908.42	9,964.22	165.70	166.25	-142.35	-110.46	6,978.55	1,080.14	855.48	224.66	4.808			
16,200.00	9,110.00	17,008.42	9,964.09	167.97	168.51	-142.35	-110.51	7,078.55	1,080.06	852.38	227.67	4.744			
16,300.00	9,110.00	17,108.42	9,963.95	170.23	170.77	-142.34	-110.56	7,178.55	1,079.98	849.28	230.69	4.681			
16,400.00	9,110.00	17,208.42	9,963.82	172.50	173.03	-142.33	-110.61	7,278.55	1,079.89	846.18	233.72	4.621			
16,500.00	9,110.00	17,308.42	9,963.69	174.77	175.29	-142.33	-110.66	7,378.55	1,079.81	843.07	236.74	4.561			
16,600.00	9,110.00	17,408.42	9,963.56	177.04	177.55	-142.32	-110.70	7,478.55	1,079.73	839.96	239.77	4.503			
16,700.00	9,110.00	17,508.42	9,963.42	179.31	179.82	-142.32	-110.75	7,578.55	1,079.65	836.85	242.80	4.447			
16,800.00	9,110.00	17,608.42	9,963.29	181.58	182.08	-142.31	-110.80	7,678.55	1,079.57	833.74	245.83	4.392			
16,900.00	9,110.00	17,708.42	9,963.16	183.85	184.35	-142.30	-110.85	7,778.55	1,079.49	830.62	248.86	4.338			
17,000.00	9,110.00	17,808.42	9,963.03	186.12	186.62	-142.30	-110.90	7,878.55	1,079.41	827.51	251.90	4.285			
17,100.00	9,110.00	17,908.42	9,962.89	188.40	188.89	-142.29	-110.95	7,978.55	1,079.32	824.39	254.94	4.234			
17,200.00	9,110.00	18,008.42	9,962.76	190.67	191.16	-142.29	-110.99	8,078.55	1,079.24	821.26	257.98	4.183			
17,300.00	9,110.00	18,108.42	9,962.63	192.95	193.43	-142.28	-111.04	8,178.55	1,079.16	818.14	261.02	4.134			
17,400.00	9,110.00	18,208.42	9,962.50	195.22	195.70	-142.27	-111.09	8,278.55	1,079.08	815.01	264.07	4.086			
17,500.00	9,110.00	18,308.42	9,962.36	197.50	197.97	-142.27	-111.14	8,378.55	1,079.00	811.89	267.11	4.039			
17,600.00	9,110.00	18,408.42	9,962.23	199.78	200.24	-142.26	-111.19	8,478.55	1,078.92	808.76	270.16	3.994			
17,700.00	9,110.00	18,508.42	9,962.10	202.06	202.52	-142.26	-111.24	8,578.55	1,078.84	805.62	273.21	3.949			
17,800.00	9,110.00	18,608.42	9,961.97	204.33	204.79	-142.25	-111.28	8,678.55	1,078.76	802.49	276.27	3.905			
17,900.00	9,110.00	18,708.42	9,961.83	206.61	207.07	-142.24	-111.33	8,778.55	1,078.67	799.36	279.32	3.862			
18,000.00	9,110.00	18,808.42	9,961.70	208.89	209.34	-142.24	-111.38	8,878.55	1,078.59	796.22	282.38	3.820			
18,100.00	9,110.00	18,908.42	9,961.57	211.18	211.62	-142.23	-111.43	8,978.55	1,078.51	793.08	285.43	3.779			
18,200.00	9,110.00	19,008.42	9,961.44	213.46	213.90	-142.23	-111.48	9,078.55	1,078.43	789.94	288.49	3.738			
18,300.00	9,110.00	19,108.42	9,961.30	215.74	216.18	-142.22	-111.52	9,178.55	1,078.35	786.80	291.55	3.699			
18,400.00	9,110.00	19,208.42	9,961.17	218.02	218.45	-142.21	-111.57	9,278.55	1,078.27	783.65	294.62	3.660			
18,500.00	9,110.00	19,308.42	9,961.04	220.31	220.73	-142.21	-111.62	9,378.55	1,078.19	780.51	297.68	3.622			
18,600.00	9,110.00	19,408.42	9,960.91	222.59	223.01	-142.20	-111.67	9,478.55	1,078.11	777.36	300.75	3.585			
18,700.00	9,110.00	19,508.42	9,960.77	224.87	225.29	-142.20	-111.72	9,578.55	1,078.03	774.21	303.81	3.548			
18,800.00	9,110.00	19,608.42	9,960.64	227.16	227.57	-142.19	-111.77	9,678.55	1,077.94	771.06	306.88	3.513			
18,900.00	9,110.00	19,708.42	9,960.51	229.44	229.86	-142.19	-111.81	9,778.55	1,077.86	767.91	309.95	3.478			
19,000.00	9,110.00	19,808.42	9,960.38	231.73	232.14	-142.18	-111.86	9,878.55	1,077.78	764.76	313.02	3.443			
19,100.00	9,110.00	19,908.42	9,960.24	234.02	234.42	-142.17	-111.91	9,978.55	1,077.70	761.60	316.10	3.409			
19,200.00	9,110.00	20,008.42	9,960.11	236.30	236.70	-142.17	-111.96	10,078.55	1,077.62	758.45	319.17	3.376			
19,286.90	9,110.00	20,095.32	9,960.00	238.29	238.69	-142.16	-112.00	10,165.45	1,077.55	755.70	321.85	3.348 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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

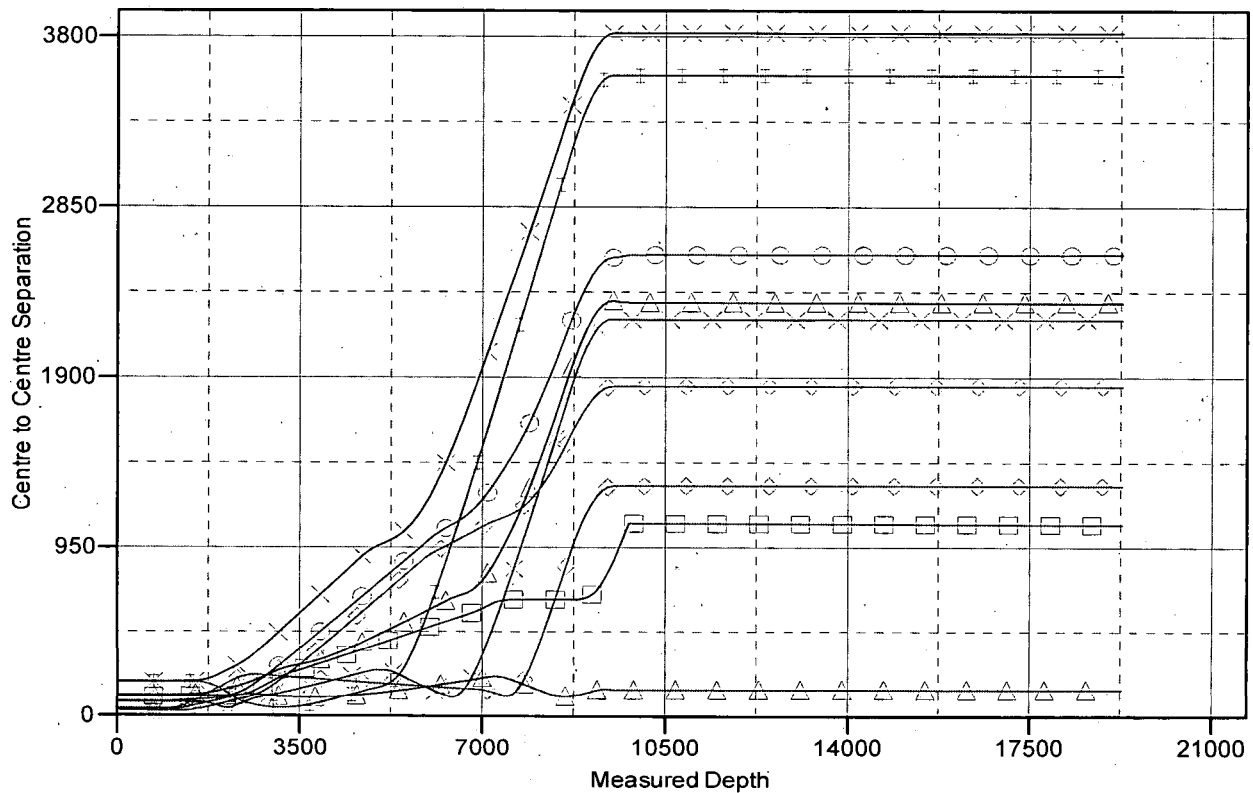
Local Co-ordinate Reference: Well #136H
TVD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
MD Reference: 3240 + 28.5 = KB @ 3268.50usft (Patt 809)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: WellPlanner1
Offset TVD Reference: Offset Datum

Reference Depths are relative to 3240 + 28.5 = KB @ 3268.50usft (Pat Coordinates are relative to: #136H)

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

#120H, OH, Prelim A VO #242H, OH, Prelim A VO #105H, OH, Prelim A VO
 #110H, OH, Prelim A VO #125H, OH, Prelim A VO #200H, OH, Prelim A VO
 #115H, OH, Prelim A VO #112H, OH, Prelim A VO #100H, OH, Prelim A VO

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: #136H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #136H
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: #136H)

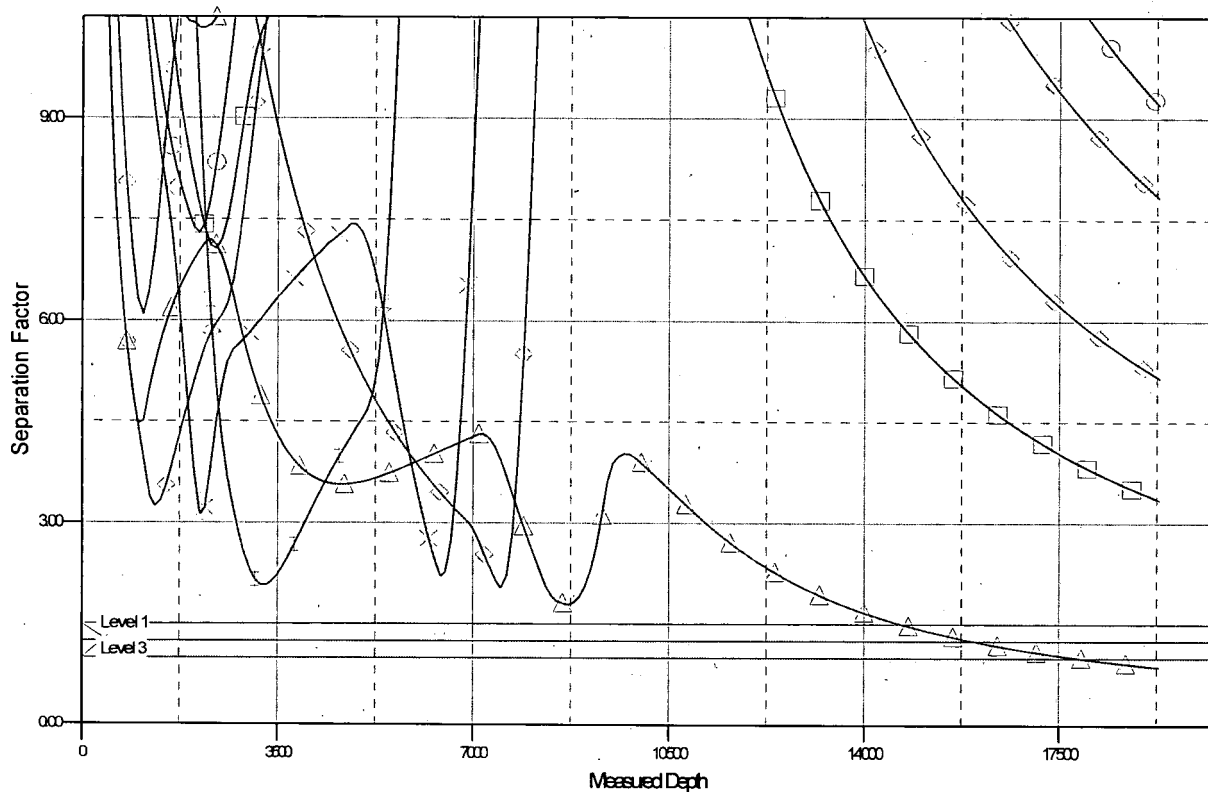
Offset Depths are relative to Offset Datum

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

 #125H, OH, Prelim A VO
  #242H, OH, Prelim A VO
  #105H, OH, Prelim A VO
 #115H, OH, Prelim A VO
 #125H, OH, Prelim A VO
 #203H, OH, Prelim A VO
 #112H, OH, Prelim A VO
 #109H, OH, Prelim A VO