

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

JUL 23 2019

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to enter an abandoned well. Use form 3160-3 (APD) for such proposals.*5. Lease Serial No.
NMNM134868

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
LEATHERNECK FED COM 221H9. API Well No.
30-015-45985-00-X110. Field and Pool or Exploratory Area
BURTON FLAT - WOLFCAMP EAST11. County or Parish, State
EDDY COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

MATADOR PRODUCTION COMPANY

Contact: CADE LABOLT

E-Mail: cade.labolt@matadorresources.com

3a. Address

ONE LINCOLN CENTER 5400 LBJ FREEWAY SUITE
DALLAS, TX 75240

3b. Phone No. (include area code)

972-629-2158

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 30 T20S R29E NWNW 690FNL 247FWL
32.549843 N Lat, 104.121719 W Lon

Carlsbad Field Office

OCD Artesia

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent☐ Subsequent Report☐ Final Abandonment Notice☐ Acidize☐ Alter Casing☐ Casing Repair☐ Change Plans☐ Convert to Injection☐ Deepen☐ Hydraulic Fracturing☐ New Construction☐ Plug and Abandon☐ Plug Back☐ Production (Start/Resume)☐ Reclamation☐ Recomplete☐ Temporarily Abandon☐ Water Disposal☐ Water Shut-Off☐ Well Integrity☒ Other
Change to Original A
PD

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed. The BLM has determined that the site is ready for final inspection.

BLM Bond No. NMB001079

Surety Bond No. RLB0015172

The contemplated revisions included in this downhole sundry incorporate Matador's revision to the uphole well name, SHL and pool requested on sundry EC#469617 submitted on 6/18/2019 (name changed from SHL to Leatherneck 3029 Fed Com 221H).

Please see the attached C102 to revise the BHL of Matador's Leatherneck Fed Com 221H from 100' FNL and 247' FWL of Sec. 29 T20S R29E to 330' FNL and 60' FWL of Sec. 29 T20S R29E. The BHL given represents the terminus of the well. The last perforation point will be 330' FNL and 100' FEL lying within the N2N2 of Sec. 29 T20S R29E.

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #469768 verified by the BLM Well Information System

For MATADOR PRODUCTION COMPANY, sent to the Carlsbad

Committed to AFMSS for processing by JUANA MEDRANO on 06/25/2019 (19JM0073SE)

Name (Printed/Typed) CADE LABOLT

Title ASSOCIATE LANDMAN

Signature (Electronic Submission)

Date 06/19/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ZOTA STEVENS

Title PETROLEUM ENGINEER

Date 06/26/2019

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Carlsbad

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

RWP 10-22-19

Additional data for EC transaction #469768 that would not fit on the form

32. Additional remarks, continued

Mud

Matador requests to change production hole section mud program to OBM.

Name	Hole Size	Mud Weight	Visc	Fluid Loss	Type	Mud
Surface	26"	8.40	28 NC	FW	Spud	Mud
Intermediate 1	17-1/2"	10.00	30-32 NC	Brine	Water	
Intermediate 2	12-1/4"	8.4-8.6	28-30 NC	FW		
Production	8-3/4"	8.8-9.5	45-60 NC	OBM		

Matador requests a variance for the use of a diverter along with a 2000 psi annular to be installed after running 20" surface casing.

Matador requests the option to cut off 20" SOW wellhead and run 13-3/8" SOW multi-bowl wellhead system once 1st intermediate string is run and cemented.

Matador requests the option to run a DV tool with annular packer as contingency in the intermediate 1 or 2 section on 13-3/8" or 9-5/8" casing if lost circulation is encountered. If losses occur, the DV tool with packer will be placed at least 100' above the loss zone to give the option to pump cement as either a single stage or two stage.

Example:

Assuming DV tool is set at 1500' MD but if the setting depth changes, cement volumes will be adjusted proportionately.

Stage 1:

Lead 695 1.78 13.5 Class C + Bentonite + 2% CaCL₂ + 3% NaCl + LCM

Tail 288 1.35 14.4 Class C + 5% NaCl + LCM

100% excess, TOC = 0' MD

Stage 2:

Lead 350 1.78 13.5 Class C + Bentonite + 2% CaCL₂ + 3% NaCl + LCM

100% excess, TOC = 0' MD

Matador Resources

Eddy County, NM (NAD27)

Leatherneck 3029 Fed Com (Slot 1)

#221H

OH

Plan: Prelim A

Standard Planning Report

13 June, 2019

Pro Directional Planning Report

Database:	WellPlanner1	Local Co-ordinate Reference:	Well #221H
Company:	Matador Resources	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Project:	Eddy County, NM (NAD27)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site:	Leatherneck, 3029 Fed Com (Slot 1)	North Reference:	Grid
Well:	#221H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim A		

Project: Eddy County, NM (NAD27)			
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site: Leatherneck 3029 Fed Com (Slot 1)					
Site Position:		Northing:	563,727.00 usft	Latitude:	32.549614
From:	Map	Easting:	565,421.00 usft	Longitude:	-104.121019
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.11 °

Well	#221H					
Well Position	+N/-S	-110.00 usft	Northing:	563,617.00 usft	Latitude:	32.549312
	+E/-W	30.00 usft	Easting:	565,451.00 usft	Longitude:	-104.120922
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,238.00 usft

Wellbore:	OH
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	6/6/2019	7.20	60.30	47,972.90

Design:	Prelim A
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Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	90.01

Plan Survey Tool Program		Date: 6/13/2019		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	19,628.96 Prelim A (OH)	MWD+HDGM	
			OWSG MWD + HRGM	

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,230.79	4.62	312.47	1,230.54	6.27	-6.85	2.00	2.00	0.00	312.47	
5,784.48	4.62	312.47	5,769.46	253.73	-277.15	0.00	0.00	0.00	0.00	
6,015.27	0.00	0.00	6,000.00	260.00	-284.00	2.00	-2.00	0.00	180.00	
8,912.17	0.00	0.00	8,896.90	260.00	-284.00	0.00	0.00	0.00	0.00	
9,362.17	45.00	57.40	9,302.04	350.41	-142.62	10.00	10.00	0.00	57.40	
9,896.60	90.00	90.01	9,506.00	460.23	317.64	10.00	8.42	6.10	42.14	
19,628.96	90.00	90.01	9,506.00	458.00	10,050.00	0.00	0.00	0.00	0.00	BHL (Leatherneck

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Site:	Leatherneck 3029 Fed.Com (Slot 1)	North Reference:	Grid
Well:	#221H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim A		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (%/100usft)	Build Rate (%/100usft)	Turn Rate (%/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21.50	0.00	0.00	21.50	0.00	0.00	0.00	0.00	0.00	0.00
Z (Rustler/Karst/Salt)									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
815.50	0.00	0.00	815.50	0.00	0.00	0.00	0.00	0.00	0.00
Z (Tansill/Base/Salt)									
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
916.50	0.00	0.00	916.50	0.00	0.00	0.00	0.00	0.00	0.00
Z (Yates)									
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	2.00	312.47	1,099.98	1.18	-1.29	-1.29	2.00	2.00	0.00
1,200.00	4.00	312.47	1,199.84	4.71	-5.15	-5.15	2.00	2.00	0.00
1,200.16	4.00	312.47	1,200.00	4.72	-5.16	-5.16	0.00	0.00	0.00
13 3/8"									
1,230.79	4.62	312.47	1,230.54	6.27	-6.85	-6.85	2.01	2.01	0.00
1,300.00	4.62	312.47	1,299.53	10.03	-10.96	-10.96	0.00	0.00	0.00
1,307.00	4.62	312.47	1,306.50	10.42	-11.38	-11.38	0.00	0.00	0.00
Z (Seven Rivers)									
1,352.14	4.62	312.47	1,351.50	12.87	-14.06	-14.06	0.00	0.00	0.00
Z (Capitan)									
1,400.00	4.62	312.47	1,399.20	15.47	-16.90	-16.90	0.00	0.00	0.00
1,500.00	4.62	312.47	1,498.88	20.90	-22.83	-22.84	0.00	0.00	0.00
1,600.00	4.62	312.47	1,598.55	26.34	-28.77	-28.77	0.00	0.00	0.00
1,700.00	4.62	312.47	1,698.23	31.77	-34.70	-34.71	0.00	0.00	0.00
1,800.00	4.62	312.47	1,797.90	37.21	-40.64	-40.65	0.00	0.00	0.00
1,900.00	4.62	312.47	1,897.58	42.64	-46.58	-46.58	0.00	0.00	0.00
2,000.00	4.62	312.47	1,997.26	48.07	-52.51	-52.52	0.00	0.00	0.00
2,100.00	4.62	312.47	2,096.93	53.51	-58.45	-58.46	0.00	0.00	0.00
2,200.00	4.62	312.47	2,196.61	58.94	-64.38	-64.39	0.00	0.00	0.00
2,300.00	4.62	312.47	2,296.28	64.38	-70.32	-70.33	0.00	0.00	0.00
2,400.00	4.62	312.47	2,395.96	69.81	-76.25	-76.27	0.00	0.00	0.00
2,500.00	4.62	312.47	2,495.63	75.24	-82.19	-82.20	0.00	0.00	0.00
2,600.00	4.62	312.47	2,595.31	80.68	-88.13	-88.14	0.00	0.00	0.00
2,700.00	4.62	312.47	2,694.99	86.11	-94.06	-94.08	0.00	0.00	0.00
2,800.00	4.62	312.47	2,794.66	91.55	-100.00	-100.01	0.00	0.00	0.00
2,900.00	4.62	312.47	2,894.34	96.98	-105.93	-105.95	0.00	0.00	0.00
2,929.26	4.62	312.47	2,923.50	98.57	-107.67	-107.69	0.00	0.00	0.00
Z (Cherry Canyon)									
3,000.00	4.62	312.47	2,994.01	102.41	-111.87	-111.89	0.00	0.00	0.00
3,100.00	4.62	312.47	3,093.69	107.85	-117.80	-117.82	0.00	0.00	0.00
3,106.33	4.62	312.47	3,100.00	108.19	-118.18	-118.20	0.00	0.00	0.00
9 5/8"									
3,200.00	4.62	312.47	3,193.36	113.28	-123.74	-123.76	0.00	0.00	0.00
3,300.00	4.62	312.47	3,293.04	118.72	-129.68	-129.70	0.00	0.00	0.00
3,400.00	4.62	312.47	3,392.71	124.15	-135.61	-135.63	0.00	0.00	0.00

Pro Directional

Planning Report

Database:	WellPlanner1	Local Co-ordinate Reference:	Well #221H
Company:	Matador Resources	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Project:	Eddy County, NM (NAD27)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site:	Leatherneck 3029 Fed Com (Slot 1)	North Reference:	Grid
Well:	#221H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim A		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
3,500.00	4.62	312.47	3,492.39	129.59	-141.55	-141.57	0.00	0.00	0.00	
3,600.00	4.62	312.47	3,592.07	135.02	-147.48	-147.51	0.00	0.00	0.00	
3,700.00	4.62	312.47	3,691.74	140.45	-153.42	-153.44	0.00	0.00	0.00	
3,800.00	4.62	312.47	3,791.42	145.89	-159.35	-159.38	0.00	0.00	0.00	
3,900.00	4.62	312.47	3,891.09	151.32	-165.29	-165.32	0.00	0.00	0.00	
4,000.00	4.62	312.47	3,990.77	156.76	-171.23	-171.25	0.00	0.00	0.00	
4,100.00	4.62	312.47	4,090.44	162.19	-177.16	-177.19	0.00	0.00	0.00	
4,159.25	4.62	312.47	4,149.50	165.41	-180.68	-180.71	0.00	0.00	0.00	
Z (Brushy Canyon)										
4,200.00	4.62	312.47	4,190.12	167.62	-183.10	-183.13	0.00	0.00	0.00	
4,300.00	4.62	312.47	4,289.80	173.06	-189.03	-189.06	0.00	0.00	0.00	
4,400.00	4.62	312.47	4,389.47	178.49	-194.97	-195.00	0.00	0.00	0.00	
4,500.00	4.62	312.47	4,489.15	183.93	-200.90	-200.94	0.00	0.00	0.00	
4,600.00	4.62	312.47	4,588.82	189.36	-206.84	-206.87	0.00	0.00	0.00	
4,700.00	4.62	312.47	4,688.50	194.79	-212.78	-212.81	0.00	0.00	0.00	
4,800.00	4.62	312.47	4,788.17	200.23	-218.71	-218.75	0.00	0.00	0.00	
4,900.00	4.62	312.47	4,887.85	205.66	-224.65	-224.68	0.00	0.00	0.00	
5,000.00	4.62	312.47	4,987.53	211.10	-230.58	-230.62	0.00	0.00	0.00	
5,100.00	4.62	312.47	5,087.20	216.53	-236.52	-236.56	0.00	0.00	0.00	
5,200.00	4.62	312.47	5,186.88	221.96	-242.45	-242.49	0.00	0.00	0.00	
5,300.00	4.62	312.47	5,286.55	227.40	-248.39	-248.43	0.00	0.00	0.00	
5,400.00	4.62	312.47	5,386.23	232.83	-254.33	-254.37	0.00	0.00	0.00	
5,500.00	4.62	312.47	5,485.90	238.27	-260.26	-260.30	0.00	0.00	0.00	
5,600.00	4.62	312.47	5,585.58	243.70	-266.20	-266.24	0.00	0.00	0.00	
5,607.95	4.62	312.47	5,593.50	244.13	-266.67	-266.71	0.00	0.00	0.00	
Z (Bone Spring Lime)										
5,700.00	4.62	312.47	5,685.26	249.14	-272.13	-272.18	0.00	0.00	0.00	
5,784.48	4.62	312.47	5,769.46	253.73	-277.15	-277.19	0.00	0.00	0.00	
5,800.00	4.31	312.47	5,784.93	254.54	-278.04	-278.08	2.00	-2.00	0.00	
5,853.68	3.23	312.47	5,838.50	256.92	-280.64	-280.68	2.00	-2.00	0.00	
Z (U. Avalon Shale)										
5,900.00	2.31	312.47	5,884.76	258.43	-282.29	-282.33	2.00	-2.00	0.00	
6,000.00	0.31	312.47	5,984.73	259.97	-283.97	-284.02	2.00	-2.00	0.00	
6,015.27	0.00	0.00	6,000.00	260.00	-284.00	-284.05	2.00	-2.00	0.00	
6,047.77	0.00	0.00	6,032.50	260.00	-284.00	-284.05	0.00	0.00	0.00	
Z (Avalon Carb)										
6,100.00	0.00	0.00	6,084.73	260.00	-284.00	-284.05	0.00	0.00	0.00	
6,200.00	0.00	0.00	6,184.73	260.00	-284.00	-284.05	0.00	0.00	0.00	
6,263.77	0.00	0.00	6,248.50	260.00	-284.00	-284.05	0.00	0.00	0.00	
Z (L. Avalon Shale)										
6,300.00	0.00	0.00	6,284.73	260.00	-284.00	-284.05	0.00	0.00	0.00	
6,320.77	0.00	0.00	6,305.50	260.00	-284.00	-284.05	0.00	0.00	0.00	
Z (FBSB)										
6,400.00	0.00	0.00	6,384.73	260.00	-284.00	-284.05	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,484.73	260.00	-284.00	-284.05	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,584.73	260.00	-284.00	-284.05	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,684.73	260.00	-284.00	-284.05	0.00	0.00	0.00	
6,775.77	0.00	0.00	6,760.50	260.00	-284.00	-284.05	0.00	0.00	0.00	
Z (FBSG)										
6,800.00	0.00	0.00	6,784.73	260.00	-284.00	-284.05	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,884.73	260.00	-284.00	-284.05	0.00	0.00	0.00	
7,000.00	0.00	0.00	6,984.73	260.00	-284.00	-284.05	0.00	0.00	0.00	
7,037.77	0.00	0.00	7,022.50	260.00	-284.00	-284.05	0.00	0.00	0.00	

Pro Directional Planning Report

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Design:	Prelim A		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	N/S (usft)	E/W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Z (SBSC)									
7,100.00	0.00	0.00	7,084.73	260.00	-284.00	-284.05	0.00	0.00	0.00
7,200.00	0.00	0.00	7,184.73	260.00	-284.00	-284.05	0.00	0.00	0.00
7,300.00	0.00	0.00	7,284.73	260.00	-284.00	-284.05	0.00	0.00	0.00
7,400.00	0.00	0.00	7,384.73	260.00	-284.00	-284.05	0.00	0.00	0.00
7,461.77	0.00	0.00	7,446.50	260.00	-284.00	-284.05	0.00	0.00	0.00
Z (SBSC)									
7,500.00	0.00	0.00	7,484.73	260.00	-284.00	-284.05	0.00	0.00	0.00
7,600.00	0.00	0.00	7,584.73	260.00	-284.00	-284.05	0.00	0.00	0.00
7,700.00	0.00	0.00	7,684.73	260.00	-284.00	-284.05	0.00	0.00	0.00
7,800.00	0.00	0.00	7,784.73	260.00	-284.00	-284.05	0.00	0.00	0.00
7,828.77	0.00	0.00	7,813.50	260.00	-284.00	-284.05	0.00	0.00	0.00
Z (SBSC C)									
7,844.77	0.00	0.00	7,829.50	260.00	-284.00	-284.05	0.00	0.00	0.00
Z (TBSC)									
7,900.00	0.00	0.00	7,884.73	260.00	-284.00	-284.05	0.00	0.00	0.00
8,000.00	0.00	0.00	7,984.73	260.00	-284.00	-284.05	0.00	0.00	0.00
8,100.00	0.00	0.00	8,084.73	260.00	-284.00	-284.05	0.00	0.00	0.00
8,200.00	0.00	0.00	8,184.73	260.00	-284.00	-284.05	0.00	0.00	0.00
8,300.00	0.00	0.00	8,284.73	260.00	-284.00	-284.05	0.00	0.00	0.00
8,400.00	0.00	0.00	8,384.73	260.00	-284.00	-284.05	0.00	0.00	0.00
8,500.00	0.00	0.00	8,484.73	260.00	-284.00	-284.05	0.00	0.00	0.00
8,600.00	0.00	0.00	8,584.73	260.00	-284.00	-284.05	0.00	0.00	0.00
8,690.77	0.00	0.00	8,675.50	260.00	-284.00	-284.05	0.00	0.00	0.00
Z (TBSC)									
8,700.00	0.00	0.00	8,684.73	260.00	-284.00	-284.05	0.00	0.00	0.00
8,800.00	0.00	0.00	8,784.73	260.00	-284.00	-284.05	0.00	0.00	0.00
8,900.00	0.00	0.00	8,884.73	260.00	-284.00	-284.05	0.00	0.00	0.00
8,912.17	0.00	0.00	8,896.90	260.00	-284.00	-284.05	0.00	0.00	0.00
8,950.00	3.78	57.40	8,934.70	260.67	-282.95	-282.99	10.00	10.00	0.00
9,000.00	8.78	57.40	8,984.39	263.62	-278.34	-278.39	10.00	10.00	0.00
9,050.00	13.78	57.40	9,033.41	268.89	-270.10	-270.15	10.00	10.00	0.00
9,100.00	18.78	57.40	9,081.39	276.44	-258.29	-258.34	10.00	10.00	0.00
9,141.87	22.97	57.40	9,120.50	284.48	-245.73	-245.78	10.00	10.00	0.00
Z (WFMP A)									
9,150.00	23.78	57.40	9,127.96	286.21	-243.01	-243.06	10.00	10.00	0.00
9,160.47	24.83	57.40	9,137.50	288.54	-239.38	-239.43	10.00	10.00	0.00
Z (WFMP A X Sand)									
9,200.00	28.78	57.40	9,172.78	298.14	-224.36	-224.41	10.00	10.00	0.00
9,250.00	33.78	57.40	9,215.49	312.12	-202.50	-202.55	10.00	10.00	0.00
9,251.21	33.90	57.40	9,216.50	312.49	-201.93	-201.98	10.00	10.00	0.00
Z (WFMP A Y Sand)									
9,300.00	38.78	57.40	9,255.79	328.06	-177.58	-177.63	10.00	10.00	0.00
9,350.00	43.78	57.40	9,293.35	345.83	-149.79	-149.86	10.00	10.00	0.00
9,357.18	44.50	57.40	9,298.50	348.52	-145.58	-145.64	10.00	10.00	0.00
Z (WFMP B)									
9,362.17	45.00	57.40	9,302.04	350.41	-142.62	-142.68	10.00	10.00	0.00
9,400.00	47.86	60.82	9,328.12	364.46	-119.10	-119.16	10.00	7.55	9.05
9,450.00	51.77	64.89	9,360.38	381.84	-85.11	-85.18	10.00	7.83	8.14
9,500.00	55.82	68.54	9,389.92	397.75	-48.05	-48.12	10.00	8.09	7.30
9,550.00	59.96	71.85	9,416.49	412.07	-8.22	-8.29	10.00	8.28	6.62
9,600.00	64.18	74.89	9,439.92	424.68	34.10	34.03	10.00	8.43	6.08
9,650.00	68.45	77.72	9,460.00	435.50	78.58	78.50	10.00	8.55	5.66

Pro Directional

Planning Report

Database:	WellPlanner1	Local Co-ordinate Reference:	Well #221H
Company:	Matador Resources	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Project:	Eddy County, NM (NAD27)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site:	Leatherneck 3029 Fed Com (Slot 1)	North Reference:	Grid
Well:	#221H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim A		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,700.00	72.77	80.39	9,476.60	444.43	124.87	124.79	10.00	8.64	5.34	
9,750.00	77.13	82.94	9,489.58	451.42	172.63	172.55	10.00	8.71	5.09	
9,800.00	81.51	85.40	9,498.85	456.40	221.49	221.41	10.00	8.76	4.92	
9,850.00	85.90	87.80	9,504.33	459.35	271.09	271.01	10.00	8.79	4.80	
9,896.60	90.00	90.01	9,506.00	460.23	317.64	317.56	10.00	8.80	4.75	
9,900.00	90.00	90.01	9,506.00	460.23	321.04	320.96	0.00	0.00	0.00	
10,000.00	90.00	90.01	9,506.00	460.21	421.04	420.96	0.00	0.00	0.00	
10,100.00	90.00	90.01	9,506.00	460.19	521.04	520.96	0.00	0.00	0.00	
10,200.00	90.00	90.01	9,506.00	460.16	621.04	620.96	0.00	0.00	0.00	
10,300.00	90.00	90.01	9,506.00	460.14	721.04	720.96	0.00	0.00	0.00	
10,400.00	90.00	90.01	9,506.00	460.12	821.04	820.96	0.00	0.00	0.00	
10,500.00	90.00	90.01	9,506.00	460.10	921.04	920.96	0.00	0.00	0.00	
10,600.00	90.00	90.01	9,506.00	460.07	1,021.04	1,020.96	0.00	0.00	0.00	
10,700.00	90.00	90.01	9,506.00	460.05	1,121.04	1,120.96	0.00	0.00	0.00	
10,800.00	90.00	90.01	9,506.00	460.03	1,221.04	1,220.96	0.00	0.00	0.00	
10,900.00	90.00	90.01	9,506.00	460.00	1,321.04	1,320.96	0.00	0.00	0.00	
11,000.00	90.00	90.01	9,506.00	459.98	1,421.04	1,420.96	0.00	0.00	0.00	
11,100.00	90.00	90.01	9,506.00	459.96	1,521.04	1,520.96	0.00	0.00	0.00	
11,200.00	90.00	90.01	9,506.00	459.94	1,621.04	1,620.96	0.00	0.00	0.00	
11,300.00	90.00	90.01	9,506.00	459.91	1,721.04	1,720.96	0.00	0.00	0.00	
11,400.00	90.00	90.01	9,506.00	459.89	1,821.04	1,820.96	0.00	0.00	0.00	
11,500.00	90.00	90.01	9,506.00	459.87	1,921.04	1,920.96	0.00	0.00	0.00	
11,600.00	90.00	90.01	9,506.00	459.84	2,021.04	2,020.96	0.00	0.00	0.00	
11,700.00	90.00	90.01	9,506.00	459.82	2,121.04	2,120.96	0.00	0.00	0.00	
11,800.00	90.00	90.01	9,506.00	459.80	2,221.04	2,220.96	0.00	0.00	0.00	
11,900.00	90.00	90.01	9,506.00	459.77	2,321.04	2,320.96	0.00	0.00	0.00	
12,000.00	90.00	90.01	9,506.00	459.75	2,421.04	2,420.96	0.00	0.00	0.00	
12,100.00	90.00	90.01	9,506.00	459.73	2,521.04	2,520.96	0.00	0.00	0.00	
12,200.00	90.00	90.01	9,506.00	459.71	2,621.04	2,620.96	0.00	0.00	0.00	
12,300.00	90.00	90.01	9,506.00	459.68	2,721.04	2,720.96	0.00	0.00	0.00	
12,400.00	90.00	90.01	9,506.00	459.66	2,821.04	2,820.96	0.00	0.00	0.00	
12,500.00	90.00	90.01	9,506.00	459.64	2,921.04	2,920.96	0.00	0.00	0.00	
12,600.00	90.00	90.01	9,506.00	459.61	3,021.04	3,020.96	0.00	0.00	0.00	
12,700.00	90.00	90.01	9,506.00	459.59	3,121.04	3,120.96	0.00	0.00	0.00	
12,800.00	90.00	90.01	9,506.00	459.57	3,221.04	3,220.96	0.00	0.00	0.00	
12,900.00	90.00	90.01	9,506.00	459.54	3,321.04	3,320.96	0.00	0.00	0.00	
13,000.00	90.00	90.01	9,506.00	459.52	3,421.04	3,420.96	0.00	0.00	0.00	
13,100.00	90.00	90.01	9,506.00	459.50	3,521.04	3,520.96	0.00	0.00	0.00	
13,200.00	90.00	90.01	9,506.00	459.48	3,621.04	3,620.96	0.00	0.00	0.00	
13,300.00	90.00	90.01	9,506.00	459.45	3,721.04	3,720.96	0.00	0.00	0.00	
13,400.00	90.00	90.01	9,506.00	459.43	3,821.04	3,820.96	0.00	0.00	0.00	
13,500.00	90.00	90.01	9,506.00	459.41	3,921.04	3,920.96	0.00	0.00	0.00	
13,600.00	90.00	90.01	9,506.00	459.38	4,021.04	4,020.96	0.00	0.00	0.00	
13,700.00	90.00	90.01	9,506.00	459.36	4,121.04	4,120.96	0.00	0.00	0.00	
13,800.00	90.00	90.01	9,506.00	459.34	4,221.04	4,220.96	0.00	0.00	0.00	
13,900.00	90.00	90.01	9,506.00	459.32	4,321.04	4,320.96	0.00	0.00	0.00	
14,000.00	90.00	90.01	9,506.00	459.29	4,421.04	4,420.96	0.00	0.00	0.00	
14,100.00	90.00	90.01	9,506.00	459.27	4,521.04	4,520.96	0.00	0.00	0.00	
14,200.00	90.00	90.01	9,506.00	459.25	4,621.04	4,620.96	0.00	0.00	0.00	
14,300.00	90.00	90.01	9,506.00	459.22	4,721.04	4,720.96	0.00	0.00	0.00	
14,400.00	90.00	90.01	9,506.00	459.20	4,821.04	4,820.96	0.00	0.00	0.00	
14,500.00	90.00	90.01	9,506.00	459.18	4,921.04	4,920.96	0.00	0.00	0.00	
14,600.00	90.00	90.01	9,506.00	459.15	5,021.04	5,020.96	0.00	0.00	0.00	
14,700.00	90.00	90.01	9,506.00	459.13	5,121.04	5,120.96	0.00	0.00	0.00	

Pro Directional Planning Report

Database:	WellPlanner1	Local Co-ordinate Reference:	Well #221H
Company:	Matador Resources	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Project:	Eddy County, NM (NAD27)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site:	Leatherneck 3029 Fed Com (Slot 1)	North Reference:	Grid
Well:	#221H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim A		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	N/S (usft)	E/W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,800.00	90.00	90.01	9,506.00	459.11	5,221.04	5,220.96	0.00	0.00	0.00
14,900.00	90.00	90.01	9,506.00	459.09	5,321.04	5,320.96	0.00	0.00	0.00
15,000.00	90.00	90.01	9,506.00	459.06	5,421.04	5,420.96	0.00	0.00	0.00
15,100.00	90.00	90.01	9,506.00	459.04	5,521.04	5,520.96	0.00	0.00	0.00
15,200.00	90.00	90.01	9,506.00	459.02	5,621.04	5,620.96	0.00	0.00	0.00
15,300.00	90.00	90.01	9,506.00	458.99	5,721.04	5,720.96	0.00	0.00	0.00
15,400.00	90.00	90.01	9,506.00	458.97	5,821.04	5,820.96	0.00	0.00	0.00
15,500.00	90.00	90.01	9,506.00	458.95	5,921.04	5,920.96	0.00	0.00	0.00
15,600.00	90.00	90.01	9,506.00	458.92	6,021.04	6,020.96	0.00	0.00	0.00
15,700.00	90.00	90.01	9,506.00	458.90	6,121.04	6,120.96	0.00	0.00	0.00
15,800.00	90.00	90.01	9,506.00	458.88	6,221.04	6,220.96	0.00	0.00	0.00
15,900.00	90.00	90.01	9,506.00	458.86	6,321.04	6,320.96	0.00	0.00	0.00
16,000.00	90.00	90.01	9,506.00	458.83	6,421.04	6,420.96	0.00	0.00	0.00
16,100.00	90.00	90.01	9,506.00	458.81	6,521.04	6,520.96	0.00	0.00	0.00
16,200.00	90.00	90.01	9,506.00	458.79	6,621.04	6,620.96	0.00	0.00	0.00
16,300.00	90.00	90.01	9,506.00	458.76	6,721.04	6,720.96	0.00	0.00	0.00
16,400.00	90.00	90.01	9,506.00	458.74	6,821.04	6,820.96	0.00	0.00	0.00
16,500.00	90.00	90.01	9,506.00	458.72	6,921.04	6,920.96	0.00	0.00	0.00
16,600.00	90.00	90.01	9,506.00	458.70	7,021.04	7,020.96	0.00	0.00	0.00
16,700.00	90.00	90.01	9,506.00	458.67	7,121.04	7,120.96	0.00	0.00	0.00
16,800.00	90.00	90.01	9,506.00	458.65	7,221.04	7,220.96	0.00	0.00	0.00
16,900.00	90.00	90.01	9,506.00	458.63	7,321.04	7,320.96	0.00	0.00	0.00
17,000.00	90.00	90.01	9,506.00	458.60	7,421.04	7,420.96	0.00	0.00	0.00
17,100.00	90.00	90.01	9,506.00	458.58	7,521.04	7,520.96	0.00	0.00	0.00
17,200.00	90.00	90.01	9,506.00	458.56	7,621.04	7,620.96	0.00	0.00	0.00
17,300.00	90.00	90.01	9,506.00	458.53	7,721.04	7,720.96	0.00	0.00	0.00
17,400.00	90.00	90.01	9,506.00	458.51	7,821.04	7,820.96	0.00	0.00	0.00
17,500.00	90.00	90.01	9,506.00	458.49	7,921.04	7,920.96	0.00	0.00	0.00
17,600.00	90.00	90.01	9,506.00	458.47	8,021.04	8,020.96	0.00	0.00	0.00
17,700.00	90.00	90.01	9,506.00	458.44	8,121.04	8,120.96	0.00	0.00	0.00
17,800.00	90.00	90.01	9,506.00	458.42	8,221.04	8,220.96	0.00	0.00	0.00
17,900.00	90.00	90.01	9,506.00	458.40	8,321.04	8,320.96	0.00	0.00	0.00
18,000.00	90.00	90.01	9,506.00	458.37	8,421.04	8,420.96	0.00	0.00	0.00
18,100.00	90.00	90.01	9,506.00	458.35	8,521.04	8,520.96	0.00	0.00	0.00
18,200.00	90.00	90.01	9,506.00	458.33	8,621.04	8,620.96	0.00	0.00	0.00
18,300.00	90.00	90.01	9,506.00	458.31	8,721.04	8,720.96	0.00	0.00	0.00
18,400.00	90.00	90.01	9,506.00	458.28	8,821.04	8,820.96	0.00	0.00	0.00
18,500.00	90.00	90.01	9,506.00	458.26	8,921.04	8,920.96	0.00	0.00	0.00
18,600.00	90.00	90.01	9,506.00	458.24	9,021.04	9,020.96	0.00	0.00	0.00
18,700.00	90.00	90.01	9,506.00	458.21	9,121.04	9,120.96	0.00	0.00	0.00
18,800.00	90.00	90.01	9,506.00	458.19	9,221.04	9,220.96	0.00	0.00	0.00
18,900.00	90.00	90.01	9,506.00	458.17	9,321.04	9,320.96	0.00	0.00	0.00
19,000.00	90.00	90.01	9,506.00	458.14	9,421.04	9,420.96	0.00	0.00	0.00
19,100.00	90.00	90.01	9,506.00	458.12	9,521.04	9,520.96	0.00	0.00	0.00
19,200.00	90.00	90.01	9,506.00	458.10	9,621.04	9,620.96	0.00	0.00	0.00
19,300.00	90.00	90.01	9,506.00	458.08	9,721.04	9,720.96	0.00	0.00	0.00
19,400.00	90.00	90.01	9,506.00	458.05	9,821.04	9,820.96	0.00	0.00	0.00
19,500.00	90.00	90.01	9,506.00	458.03	9,921.04	9,920.96	0.00	0.00	0.00
19,600.00	90.00	90.01	9,506.00	458.01	10,021.04	10,020.96	0.00	0.00	0.00
19,628.96	90.00	90.01	9,506.00	458.00	10,050.00	10,049.92	0.00	0.00	0.00

Pro Directional Planning Report

Database:	WellPlanner1	Local Co-ordinate Reference:	Well #221H
Company:	Matador Resources	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Project:	Eddy County, NM (NAD27)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site:	Leatherneck 3029 Fed Com (Slot 1)	North Reference:	Grid
Well:	#221H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim A		

Design Targets									
Target Name	hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	
- Shape		(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	Latitude Longitude
FPP (Leatherneck 30% - plan misses target center by 561.12usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E) - Point		0.00	0.00	0.00	510.00	-234.00	564,127.00	565,217.00	32.550715 -104.121678
BHL (Leatherneck 30% - plan hits target center - Point		0.00	0.00	9,506.00	458.00	10,050.00	564,075.00	575,501.00	32.550511 -104.088303
LPP (Leatherneck 30% - plan misses target center by 49.99usft at 19588.95usft MD (9506.00 TVD, 458.01 N, 10009.99 E) - Point		0.00	0.00	9,506.00	508.00	10,010.00	564,125.00	575,461.00	32.550649 -104.088432

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
400.00	400.00	20"	20	26	
1,200.16	1,200.00	13 3/8"	13-3/8	17-1/2	
3,106.33	3,100.00	9 5/8"	9-5/8	12-1/4	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
21.50	21.50	Z (Rustler/Karst/Salt)				
815.50	815.50	Z (Tansill/Base Salt)				
916.50	916.50	Z (Yates)				
1,307.00	1,306.50	Z (Seven Rivers)				
1,352.14	1,351.50	Z (Capitan)				
2,929.26	2,923.50	Z (Cherry Canyon)				
4,159.25	4,149.50	Z (Brushy Canyon)				
5,607.95	5,593.50	Z (Bone Spring Lime)				
5,853.68	5,838.50	Z (U. Avalon Shale				
6,047.77	6,032.50	Z (Avalon Carb)				
6,263.77	6,248.50	Z (L. Avalon Shale)				
6,320.77	6,305.50	Z (FSBC)				
6,775.77	6,760.50	Z (FBSG)				
7,037.77	7,022.50	Z (SBSC)				
7,461.77	7,446.50	Z (SBSG)				
7,828.77	7,813.50	Z (SBSG C)				
7,844.77	7,829.50	Z (TBSC)				
8,690.77	8,675.50	Z (TBSG)				
9,141.87	9,120.50	Z (WFMP A)				
9,160.47	9,137.50	Z (WFMP A X Sand)				
9,251.21	9,216.50	Z (WFMP A Y Sand)				
9,357.18	9,298.50	Z (WFMP B)				

Matador Resources

Eddy County, NM (NAD27)

Leatherneck 3029 Fed Com (Slot 1)

#221H

OH

Prelim A

Anticollision Report

13 June, 2019

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00: sigma
Reference Wellbore:	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset-TVD Reference:	Offset Datum

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

Survey Tool Program		Date: 6/13/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	19,628.96	Prelim A (OH)	MWD+HDGM	OWSG MWD + HRGM

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Leatherneck 3029 Fed Com						
#105H - OH - Prelim B	4,785.80	4,826.73	229.27	194.31	6.559 CC	
#105H - OH - Prelim B	4,800.00	4,840.03	229.29	194.25	6.543 ES	
#105H - OH - Prelim B	5,100.00	5,135.94	237.36	200.44	6.429 SF	
#106H - OH - Prelim B	1,000.00	1,001.00	521.52	514.81	77.695 CC, ES	
#106H - OH - Prelim B	19,628.96	15,622.19	4,403.92	4,153.71	17.601 SF	
#112H - OH - Prelim B	1,000.00	1,001.00	606.15	599.44	90.304 CC, ES	
#112H - OH - Prelim B	19,628.96	17,007.46	2,931.95	2,674.43	11.385 SF	
#115H - OH - Prelim B	6,594.27	6,617.97	451.32	404.11	9.562 CC	
#115H - OH - Prelim B	6,600.00	6,623.03	451.32	404.10	9.556 ES, SF	
#116H - OH - Prelim B	1,000.00	1,002.00	629.51	622.79	93.733 CC, ES	
#116H - OH - Prelim B	19,628.96	16,952.77	3,224.49	2,918.65	10.543 SF	
#125H - OH - Plan 1	7,319.98	7,352.71	356.00	303.32	6.757 CC	
#125H - OH - Plan 1	7,400.00	7,429.90	356.40	303.27	6.709 ES, SF	
#126H - OH - Plan 1	1,000.00	1,002.00	743.12	736.40	110.649 CC, ES	
#126H - OH - Plan 1	19,628.96	17,980.18	2,377.18	1,988.22	6.112 SF	
#136H - OH - Prelim B	1,000.81	1,002.92	708.44	701.71	105.392 CC	
#136H - OH - Prelim B	1,100.00	1,105.92	709.12	701.68	95.369 ES	
#136H - OH - Prelim B	19,628.96	19,262.90	1,922.64	1,456.60	4.126 SF	
#206H - OH - Prelim B	1,000.00	1,003.00	713.67	706.95	106.208 CC, ES	
#206H - OH - Prelim B	19,628.96	19,407.85	1,898.07	1,426.52	4.025 SF	
#242H - OH - Prelim B	1,000.00	1,001.00	599.98	593.27	89.385 CC, ES	
#242H - OH - Prelim B	19,628.96	20,078.53	1,395.57	942.14	3.078 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	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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

Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Leatherneck 3029 Fed Com (Slot 1)						
#111H - OH - Prelim A	2,128.27	2,119.44	140.81	126.01	9.516	CC, ES
#111H - OH - Prelim A	6,400.00	6,368.71	272.00	226.44	5.969	SF
#121H - OH - Prelim A	2,111.55	2,107.01	64.22	49.52	4.368	CC, ES
#121H - OH - Prelim A	7,300.00	7,285.98	165.12	112.84	3.158	SF
#122H - OH - Prelim A	2,038.33	2,036.46	81.13	66.95	5.721	CC
#122H - OH - Prelim A	2,100.00	2,102.07	81.29	66.64	5.552	ES
#122H - OH - Prelim A	2,700.00	2,697.46	95.46	76.58	5.056	SF
#131H - OH - Prelim A	2,054.52	2,051.52	38.81	24.51	2.715	CC
#131H - OH - Prelim A	6,000.00	6,003.48	67.24	23.85	1.550	ES
#131H - OH - Prelim A	6,100.00	6,103.78	68.01	23.89	1.542	SF
#132H - OH - Prelim A	1,786.60	1,785.55	59.01	46.65	4.775	CC
#132H - OH - Prelim A	1,900.00	1,901.42	59.71	46.52	4.529	ES
#132H - OH - Prelim A	19,628.96	19,136.94	1,378.41	924.07	3.034	SF
#135H - OH - Prelim A	1,000.00	1,000.00	30.00	23.29	4.472	CC
#135H - OH - Prelim A	1,100.00	1,100.32	30.63	23.21	4.129	ES
#135H - OH - Prelim A	19,628.96	19,235.32	685.05	287.80	1.724	SF
#205H - OH - Prelim A	800.00	800.00	42.43	37.15	8.043	CC
#205H - OH - Prelim A	8,700.00	8,704.99	94.19	31.98	1.514	ES
#205H - OH - Prelim A	19,628.96	19,405.08	612.76	176.24	1.404	Level 3, SF
#222H - OH - Prelim A	1,390.30	1,389.53	20.26	10.76	2.133	CC
#222H - OH - Prelim A	1,400.00	1,400.80	20.27	10.70	2.118	ES, SF
#241H - OH - Prelim A	9,269.32	9,251.51	168.49	102.79	2.564	CC, ES, SF

Offset Design: Leatherneck 3029 Fed Com - #105H - OH - Prelim B											Offset Site Error: 0.00 usft		
Survey Program: 0-MWD-HDCM											Offset Well Error: 0.00 usft		
Reference		Offset		Semi-Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		N/S (usft)	E/W (usft)	Centres (usft)	Ellipses (usft)			
0.00	0.00	2.00	2.00	0.00	0.00	-164.75	-510.00	-139.00	528.60				
100.00	100.00	102.00	102.00	0.13	0.14	-164.75	-510.00	-139.00	528.60	528.34	0.26	2,006.259	
200.00	200.00	202.00	202.00	0.49	0.49	-164.75	-510.00	-139.00	528.60	527.62	0.98	539.160	
300.00	300.00	302.00	302.00	0.85	0.85	-164.75	-510.00	-139.00	528.60	526.91	1.70	311.426	
400.00	400.00	402.00	402.00	1.20	1.21	-164.75	-510.00	-139.00	528.60	526.19	2.41	218.946	
500.00	500.00	502.00	502.00	1.56	1.57	-164.75	-510.00	-139.00	528.60	525.47	3.13	168.815	
600.00	600.00	602.00	602.00	1.92	1.93	-164.75	-510.00	-139.00	528.60	524.75	3.85	137.364	
700.00	700.00	702.00	702.00	2.28	2.29	-164.75	-510.00	-139.00	528.60	524.04	4.57	115.791	
800.00	800.00	802.00	802.00	2.64	2.64	-164.75	-510.00	-139.00	528.60	523.32	5.28	100.075	
900.00	900.00	902.00	902.00	3.00	3.00	-164.75	-510.00	-139.00	528.60	522.60	6.00	88.115	
1,000.00	1,000.00	1,002.00	1,002.00	3.35	3.36	-164.75	-510.00	-139.00	528.60	521.89	6.72	78.708	
1,100.00	1,099.98	1,101.98	1,101.98	3.71	3.72	-117.38	-510.00	-139.00	529.40	521.97	7.43	71.249	
1,200.00	1,199.84	1,201.84	1,201.84	4.07	4.08	-117.84	-510.00	-139.00	531.83	523.69	8.14	65.308	
1,300.00	1,299.53	1,301.53	1,301.53	4.42	4.44	-118.56	-510.00	-139.00	535.57	526.71	8.86	60.458	
1,400.00	1,399.20	1,401.20	1,401.20	4.78	4.79	-119.31	-510.00	-139.00	539.47	529.89	9.58	56.340	
1,500.00	1,498.88	1,501.05	1,501.05	5.14	5.15	-120.05	-510.00	-139.00	543.46	533.17	10.29	52.793	
1,600.00	1,598.55	1,620.76	1,620.72	5.51	5.58	-120.80	-507.57	-139.74	545.69	534.61	11.08	49.247	
1,700.00	1,698.23	1,740.73	1,740.45	5.87	6.01	-121.29	-500.33	-141.95	544.29	532.44	11.86	45.906	
1,800.00	1,797.90	1,860.56	1,859.61	6.24	6.44	-121.53	-488.33	-145.62	539.23	526.61	12.62	42.727	
1,900.00	1,897.58	1,979.83	1,977.59	6.60	6.87	-121.53	-471.66	-150.72	530.51	517.14	13.37	39.684	
2,000.00	1,997.26	2,083.50	2,079.66	6.97	7.26	-121.37	-454.35	-156.01	519.23	505.14	14.10	36.832	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
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Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #105H - OH - Prelim B														Offset Site Error:
Survey Program: 0-MWD+HDGM														Offset Well Error:
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	
2,100.00	2,096.93	2,182.84	2,177.46	7.34	7.63	-121.20	-437.64	-161.12	507.88	493.05	14.83	34.256		
2,200.00	2,196.61	2,282.18	2,275.25	7.71	8.01	-121.03	-420.94	-166.22	496.52	480.96	15.56	31.915		
2,300.00	2,296.28	2,381.52	2,373.05	8.08	8.39	-120.85	-404.24	-171.33	485.17	468.88	16.29	29.779		
2,400.00	2,395.96	2,480.86	2,470.84	8.45	8.78	-120.66	-387.54	-176.43	473.83	456.80	17.03	27.825		
2,500.00	2,495.63	2,580.21	2,568.63	8.82	9.17	-120.46	-370.83	-181.54	462.49	444.72	17.77	26.029		
2,600.00	2,595.31	2,679.55	2,666.43	9.19	9.56	-120.25	-354.13	-186.64	451.16	432.65	18.51	24.375		
2,700.00	2,694.99	2,778.89	2,764.22	9.56	9.96	-120.02	-337.43	-191.75	439.83	420.58	19.25	22.846		
2,800.00	2,794.66	2,878.23	2,862.02	9.93	10.36	-119.79	-320.73	-196.86	428.51	408.51	20.00	21.429		
2,900.00	2,894.34	2,977.57	2,959.81	10.30	10.76	-119.55	-304.02	-201.96	417.20	396.45	20.74	20.113		
3,000.00	2,994.01	3,076.91	3,057.61	10.67	11.16	-119.29	-287.32	-207.07	405.89	384.40	21.49	18.887		
3,100.00	3,093.69	3,176.26	3,155.40	11.04	11.56	-119.01	-270.62	-212.17	394.60	372.36	22.24	17.743		
3,200.00	3,193.36	3,275.60	3,253.20	11.41	11.97	-118.72	-253.91	-217.28	383.31	360.32	22.99	16.672		
3,300.00	3,293.04	3,374.94	3,350.99	11.78	12.38	-118.42	-237.21	-222.38	372.04	348.29	23.74	15.669		
3,400.00	3,392.71	3,474.28	3,448.78	12.15	12.78	-118.09	-220.51	-227.49	360.77	336.27	24.50	14.727		
3,500.00	3,492.39	3,573.62	3,546.58	12.53	13.19	-117.74	-203.81	-232.59	349.52	324.27	25.25	13.841		
3,600.00	3,592.07	3,672.97	3,644.37	12.90	13.60	-117.37	-187.10	-237.70	338.28	312.27	26.01	13.007		
3,700.00	3,691.74	3,772.31	3,742.17	13.27	14.01	-116.97	-170.40	-242.80	327.06	300.29	26.77	12.219		
3,800.00	3,791.42	3,871.65	3,839.96	13.64	14.42	-116.55	-153.70	-247.91	315.85	288.32	27.53	11.475		
3,900.00	3,891.09	3,970.99	3,937.76	14.01	14.83	-116.09	-137.00	-253.02	304.66	276.37	28.29	10.770		
4,000.00	3,990.77	4,070.33	4,035.55	14.39	15.25	-115.60	-120.29	-258.12	293.49	264.44	29.05	10.103		
4,100.00	4,090.44	4,169.67	4,133.35	14.76	15.66	-115.07	-103.59	-263.23	282.35	252.53	29.81	9.470		
4,200.00	4,190.12	4,269.02	4,231.14	15.13	16.07	-114.50	-86.89	-268.33	271.23	240.65	30.58	8.869		
4,300.00	4,289.80	4,368.36	4,328.93	15.50	16.49	-113.88	-70.19	-273.44	260.14	228.79	31.35	8.298		
4,400.00	4,389.47	4,465.68	4,424.76	15.88	16.89	-113.24	-53.96	-278.40	249.20	217.07	32.13	7.756		
4,500.00	4,489.15	4,558.87	4,516.90	16.25	17.27	-112.90	-40.61	-282.48	240.28	207.37	32.91	7.301		
4,600.00	4,588.82	4,652.47	4,609.84	16.62	17.63	-112.99	-30.09	-285.69	233.96	200.30	33.66	6.951		
4,700.00	4,688.50	4,746.25	4,703.29	16.99	17.98	-113.54	-22.47	-288.02	230.28	195.91	34.37	6.699		
4,785.80	4,774.02	4,826.73	4,783.64	17.31	18.27	-114.38	-18.26	-289.31	229.27	194.31	34.95	6.559 CC		
4,800.00	4,788.17	4,840.03	4,796.94	17.37	18.32	-114.55	-17.77	-289.46	229.29	194.25	35.05	6.543 ES		
4,900.00	4,887.85	4,933.61	4,890.49	17.74	18.63	-115.99	-16.02	-290.00	231.11	195.43	35.68	6.477		
5,000.00	4,987.53	5,034.84	4,991.69	18.11	18.96	-118.10	-16.16	-288.64	234.56	198.21	36.35	6.452		
5,100.00	5,087.20	5,135.94	5,091.40	18.48	19.25	-123.60	-18.01	-272.91	237.36	200.44	36.92	6.429 SF		
5,200.00	5,186.88	5,226.82	5,177.44	18.86	19.49	-131.83	-21.39	-244.12	243.63	206.39	37.24	6.542		
5,300.00	5,286.55	5,305.17	5,247.14	19.23	19.66	-140.82	-25.55	-208.72	259.37	222.31	37.06	6.999		
5,400.00	5,386.23	5,371.09	5,301.57	19.60	19.79	-149.07	-29.88	-171.85	288.67	252.54	36.13	7.990		
5,500.00	5,485.90	5,425.94	5,343.36	19.97	19.88	-155.92	-34.02	-136.60	332.15	297.57	34.58	9.806		
5,600.00	5,585.58	5,471.51	5,375.38	20.35	19.95	-161.34	-37.80	-104.41	387.88	355.10	32.78	11.833		
5,700.00	5,685.26	5,509.53	5,400.05	20.72	20.00	-165.57	-41.18	-75.69	453.17	422.14	31.03	14.805		
5,800.00	5,784.93	5,541.48	5,419.26	21.09	20.04	-168.96	-44.15	-50.34	525.60	496.12	29.47	17.832		
5,900.00	5,884.76	5,569.36	5,434.84	21.46	20.07	-171.96	-46.85	-27.37	602.01	573.90	28.11	21.417		
6,000.00	5,984.73	5,600.00	5,450.64	21.81	20.13	-174.81	-49.91	-1.31	680.68	653.58	27.10	25.113		
6,100.00	6,084.73	5,616.79	5,458.69	22.16	20.19	136.35	-51.63	13.32	761.54	735.65	25.89	29.411		
6,200.00	6,184.73	5,636.29	5,467.50	22.50	20.29	134.91	-53.66	30.60	845.37	820.31	25.06	33.738		
6,300.00	6,284.73	5,650.00	5,473.34	22.85	20.36	133.95	-55.11	42.92	931.54	907.25	24.29	38.346		
6,400.00	6,384.73	5,668.48	5,480.74	23.19	20.49	132.69	-57.09	59.74	1,019.57	995.73	23.84	42.772		
6,500.00	6,484.73	5,681.89	5,485.76	23.54	20.58	131.81	-58.54	72.08	1,109.15	1,085.74	23.41	47.385		
6,600.00	6,584.73	5,700.00	5,492.08	23.89	20.70	130.68	-60.52	88.94	1,200.03	1,176.84	23.19	51.738		
6,700.00	6,684.73	5,700.00	5,492.08	24.23	20.70	130.68	-60.52	88.94	1,291.90	1,269.17	22.73	56.830		
6,800.00	6,784.73	5,700.00	5,492.08	24.58	20.70	130.68	-60.52	88.94	1,384.90	1,362.51	22.39	61.856		
6,900.00	6,884.73	5,723.08	5,499.35	24.93	20.89	129.30	-63.07	110.69	1,478.17	1,455.67	22.50	65.697		
7,000.00	6,984.73	5,731.07	5,501.66	25.28	20.95	128.84	-63.96	118.29	1,572.33	1,549.91	22.42	70.136		
7,100.00	7,084.73	5,750.00	5,506.71	25.63	21.10	127.80	-66.09	136.41	1,667.20	1,644.66	22.54	73.969		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey/Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com #105H OH Prelim B														Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HOGM														Offset Well Error:	0.00 usft
Reference															
Measured Vertical Depth (usft)	Measured Vertical Depth (usft)	Measured Vertical Depth (usft)	Measured Vertical Depth (usft)	Semi-Major Axis Reference (usft)	Semi-Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
7,200.00	7,184.73	5,750.00	5,506.71	25.97	21.10	127.80	-66.09	136.41	1,762.26	1,739.82	22.44	78.541			
7,300.00	7,284.73	5,750.00	5,506.71	26.32	21.10	127.80	-66.09	136.41	1,857.84	1,835.45	22.39	82.994			
7,400.00	7,384.73	5,750.00	5,506.71	26.67	21.10	127.80	-66.09	136.41	1,953.86	1,931.49	22.37	87.324			
7,500.00	7,484.73	5,750.00	5,506.71	27.02	21.10	127.80	-66.09	136.41	2,050.26	2,027.86	22.40	91.530			
7,600.00	7,584.73	5,750.00	5,506.71	27.37	21.10	127.80	-66.09	136.41	2,146.99	2,124.54	22.46	95.613			
7,700.00	7,684.73	5,771.57	5,511.72	27.72	21.29	126.67	-68.54	157.25	2,243.50	2,220.76	22.75	98.631			
7,800.00	7,784.73	5,775.81	5,512.61	28.07	21.33	126.46	-69.02	161.36	2,340.56	2,317.68	22.88	102.302			
7,900.00	7,884.73	5,779.76	5,513.42	28.42	21.36	126.26	-69.47	165.21	2,437.82	2,414.79	23.03	105.872			
8,000.00	7,984.73	5,800.00	5,517.11	28.77	21.54	125.28	-71.80	184.97	2,535.55	2,512.22	23.33	108.681			
8,100.00	8,084.73	5,800.00	5,517.11	29.12	21.54	125.28	-71.80	184.97	2,633.05	2,609.58	23.47	112.201			
8,200.00	8,184.73	5,800.00	5,517.11	29.47	21.54	125.28	-71.80	184.97	2,730.73	2,707.11	23.62	115.614			
8,300.00	8,284.73	5,800.00	5,517.11	29.82	21.54	125.28	-71.80	184.97	2,828.57	2,804.78	23.79	118.921			
8,400.00	8,384.73	5,800.00	5,517.11	30.18	21.54	125.28	-71.80	184.97	2,926.56	2,902.59	23.96	122.125			
8,500.00	8,484.73	5,800.00	5,517.11	30.53	21.54	125.28	-71.80	184.97	3,024.67	3,000.52	24.15	125.230			
8,600.00	8,584.73	5,800.00	5,517.11	30.88	21.54	125.28	-71.80	184.97	3,122.91	3,098.56	24.35	128.238			
8,700.00	8,684.73	5,800.00	5,517.11	31.23	21.54	125.28	-71.80	184.97	3,221.26	3,196.70	24.56	131.151			
8,800.00	8,784.73	5,800.00	5,517.11	31.58	21.54	125.28	-71.80	184.97	3,319.70	3,294.92	24.78	133.974			
8,900.00	8,884.73	5,800.00	5,517.11	31.93	21.54	125.28	-71.80	184.97	3,418.24	3,393.23	25.00	136.707			
9,000.00	8,984.39	5,800.00	5,517.11	32.27	21.54	35.84	-71.80	184.97	3,516.11	3,490.89	25.22	139.429			
9,100.00	9,081.39	5,800.00	5,517.11	32.59	21.54	21.89	-71.80	184.97	3,610.55	3,585.15	25.39	142.194			
9,200.00	9,172.78	5,821.70	5,520.29	32.88	21.75	16.01	-74.30	206.28	3,698.57	3,672.91	25.65	144.171			
9,300.00	9,255.79	5,828.73	5,521.15	33.12	21.82	12.77	-75.11	213.22	3,778.59	3,752.79	25.79	146.501			
9,400.00	9,328.12	5,850.00	5,523.22	33.32	22.02	10.95	-77.58	234.24	3,848.73	3,822.75	25.98	148.122			
9,500.00	9,389.92	5,850.00	5,523.22	33.62	22.02	9.53	-77.58	234.24	3,908.00	3,881.95	26.05	150.014			
9,600.00	9,439.92	5,850.00	5,523.22	34.02	22.02	8.59	-77.58	234.24	3,955.82	3,929.70	26.12	151.423			
9,700.00	9,476.60	5,850.00	5,523.22	34.50	22.02	8.02	-77.58	234.24	3,991.18	3,964.95	26.22	152.196			
9,800.00	9,498.85	5,895.16	5,525.00	35.06	22.49	7.85	-82.85	279.04	4,012.67	3,986.12	26.55	151.139			
9,900.00	9,506.00	5,895.16	5,525.00	35.70	22.49	7.76	-82.85	279.04	4,020.08	3,993.35	26.72	150.432			
10,000.00	9,506.00	6,004.60	5,525.00	36.42	23.77	7.90	-92.50	388.04	4,021.30	3,993.91	27.40	146.789			
10,100.00	9,506.00	6,137.37	5,525.00	37.28	25.57	7.95	-95.90	520.74	4,021.63	3,993.36	28.28	142.221			
10,200.00	9,506.00	6,237.37	5,525.00	38.24	27.09	7.95	-95.95	620.74	4,021.64	3,992.55	29.09	138.259			
10,300.00	9,506.00	6,337.37	5,525.00	39.32	28.70	7.95	-96.01	720.74	4,021.64	3,991.68	29.97	134.201			
10,400.00	9,506.00	6,437.37	5,525.00	40.50	30.40	7.95	-96.06	820.74	4,021.65	3,990.74	30.91	130.103			
10,500.00	9,506.00	6,537.37	5,525.00	41.77	32.18	7.95	-96.11	920.74	4,021.65	3,989.74	31.91	126.019			
10,600.00	9,506.00	6,637.37	5,525.00	43.13	34.02	7.95	-96.17	1,020.74	4,021.66	3,988.69	32.97	121.992			
10,700.00	9,506.00	6,737.37	5,525.00	44.57	35.92	7.95	-96.22	1,120.74	4,021.66	3,987.59	34.07	118.050			
10,800.00	9,506.00	6,837.37	5,525.00	46.08	37.86	7.95	-96.28	1,220.74	4,021.66	3,986.45	35.21	114.219			
10,900.00	9,506.00	6,937.37	5,525.00	47.65	39.84	7.95	-96.33	1,320.74	4,021.67	3,985.28	36.39	110.511			
11,000.00	9,506.00	7,037.37	5,525.00	49.28	41.85	7.95	-96.38	1,420.74	4,021.67	3,984.06	37.61	106.937			
11,100.00	9,506.00	7,137.37	5,525.00	50.96	43.90	7.95	-96.44	1,520.74	4,021.68	3,982.82	38.86	103.503			
11,200.00	9,506.00	7,237.37	5,525.00	52.69	45.96	7.95	-96.49	1,620.74	4,021.68	3,981.55	40.13	100.211			
11,300.00	9,506.00	7,337.37	5,525.00	54.46	48.06	7.95	-96.54	1,720.74	4,021.68	3,980.25	41.44	97.060			
11,400.00	9,506.00	7,437.37	5,525.00	56.27	50.16	7.95	-96.60	1,820.74	4,021.69	3,978.93	42.76	94.048			
11,500.00	9,506.00	7,537.37	5,525.00	58.12	52.29	7.95	-96.65	1,920.74	4,021.69	3,977.58	44.11	91.172			
11,600.00	9,506.00	7,637.37	5,525.00	60.00	54.43	7.95	-96.70	2,020.74	4,021.70	3,976.22	45.48	88.428			
11,700.00	9,506.00	7,737.37	5,525.00	61.91	56.59	7.95	-96.76	2,120.74	4,021.70	3,974.83	46.87	85.810			
11,800.00	9,506.00	7,837.37	5,525.00	63.84	58.75	7.96	-96.81	2,220.74	4,021.71	3,973.43	48.27	83.312			
11,900.00	9,506.00	7,937.37	5,525.00	65.80	60.93	7.96	-96.86	2,320.74	4,021.71	3,972.02	49.69	80.931			
12,000.00	9,506.00	8,037.37	5,525.00	67.78	63.12	7.96	-96.92	2,420.74	4,021.71	3,970.59	51.13	78.660			
12,100.00	9,506.00	8,137.37	5,525.00	69.78	65.31	7.96	-96.97	2,520.74	4,021.72	3,969.14	52.58	76.493			
12,200.00	9,506.00	8,237.37	5,525.00	71.80	67.51	7.96	-97.02	2,620.74	4,021.72	3,967.69	54.04	74.425			
12,300.00	9,506.00	8,337.37	5,525.00	73.83	69.72	7.96	-97.08	2,720.74	4,021.73	3,966.22	55.51	72.451			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #105H - OH - Prelim B											Offset Site Error:	
Survey Program: 0-MWD-HDGM											0.00 usft	
Reference	Offset	Semi-Major Axis	Highside	Offset Wellbore Centre	Distance	Minimum	Separation	Warning				
Measured Vertical Depth (usft)	Measured Vertical Depth (usft)	Reference Offset (usft)	Toolface (°)	N/S (usft)	E/W (usft)	Between Centres (usft)	Between Ellipses (usft)	Factor				
12,400.00	9,506.00	8,437.37	5,525.00	75.89	71.94	7.96	-97.13	2,820.74	4,021.73	3,964.74	56.99	70.566
12,500.00	9,506.00	8,537.37	5,525.00	77.95	74.16	7.96	-97.18	2,920.74	4,021.74	3,963.25	58.49	68.764
12,600.00	9,506.00	8,637.37	5,525.00	80.03	76.38	7.96	-97.24	3,020.74	4,021.74	3,961.75	59.99	67.042
12,700.00	9,506.00	8,737.37	5,525.00	82.12	78.61	7.96	-97.29	3,120.74	4,021.74	3,960.24	61.50	65.395
12,800.00	9,506.00	8,837.37	5,525.00	84.23	80.85	7.96	-97.35	3,220.74	4,021.75	3,958.73	63.02	63.819
12,900.00	9,506.00	8,937.37	5,525.00	86.34	83.09	7.96	-97.40	3,320.74	4,021.75	3,957.21	64.54	62.310
13,000.00	9,506.00	9,037.37	5,525.00	88.46	85.33	7.96	-97.45	3,420.74	4,021.76	3,955.68	66.08	60.864
13,100.00	9,506.00	9,137.37	5,525.00	90.59	87.58	7.96	-97.51	3,520.74	4,021.76	3,954.14	67.62	59.478
13,200.00	9,506.00	9,237.37	5,525.00	92.74	89.83	7.96	-97.56	3,620.74	4,021.76	3,952.60	69.16	58.149
13,300.00	9,506.00	9,337.37	5,525.00	94.88	92.08	7.96	-97.61	3,720.74	4,021.77	3,951.05	70.71	56.873
13,400.00	9,506.00	9,437.37	5,525.00	97.04	94.33	7.96	-97.67	3,820.74	4,021.77	3,949.50	72.27	55.648
13,500.00	9,506.00	9,537.37	5,525.00	99.20	96.59	7.96	-97.72	3,920.74	4,021.78	3,947.94	73.83	54.470
13,600.00	9,506.00	9,637.37	5,525.00	101.37	98.85	7.96	-97.77	4,020.74	4,021.78	3,946.38	75.40	53.338
13,700.00	9,506.00	9,737.37	5,525.00	103.55	101.11	7.96	-97.83	4,120.74	4,021.79	3,944.81	76.97	52.249
13,800.00	9,506.00	9,837.37	5,525.00	105.73	103.38	7.96	-97.88	4,220.74	4,021.79	3,943.24	78.55	51.201
13,900.00	9,506.00	9,937.37	5,525.00	107.91	105.65	7.96	-97.93	4,320.74	4,021.79	3,941.67	80.13	50.192
14,000.00	9,506.00	10,037.37	5,525.00	110.11	107.91	7.96	-97.99	4,420.74	4,021.80	3,940.09	81.71	49.219
14,100.00	9,506.00	10,137.37	5,525.00	112.30	110.18	7.97	-98.04	4,520.74	4,021.80	3,938.50	83.30	48.281
14,200.00	9,506.00	10,237.37	5,525.00	114.50	112.45	7.97	-98.09	4,620.74	4,021.81	3,936.92	84.89	47.377
14,300.00	9,506.00	10,337.37	5,525.00	116.71	114.73	7.97	-98.15	4,720.74	4,021.81	3,935.33	86.48	46.503
14,400.00	9,506.00	10,437.37	5,525.00	118.92	117.00	7.97	-98.20	4,820.74	4,021.82	3,933.73	88.08	45.660
14,500.00	9,506.00	10,537.37	5,525.00	121.13	119.28	7.97	-98.25	4,920.74	4,021.82	3,932.14	89.68	44.846
14,600.00	9,506.00	10,637.37	5,525.00	123.34	121.55	7.97	-98.31	5,020.74	4,021.82	3,930.54	91.28	44.059
14,700.00	9,506.00	10,737.37	5,525.00	125.56	123.83	7.97	-98.36	5,120.74	4,021.83	3,928.94	92.89	43.297
14,800.00	9,506.00	10,837.37	5,525.00	127.79	126.11	7.97	-98.42	5,220.74	4,021.83	3,927.34	94.50	42.561
14,900.00	9,506.00	10,937.37	5,525.00	130.01	128.39	7.97	-98.47	5,320.74	4,021.84	3,925.73	96.11	41.848
15,000.00	9,506.00	11,037.37	5,525.00	132.24	130.67	7.97	-98.52	5,420.74	4,021.84	3,924.12	97.72	41.158
15,100.00	9,506.00	11,137.37	5,525.00	134.47	132.95	7.97	-98.58	5,520.74	4,021.84	3,922.51	99.33	40.489
15,200.00	9,506.00	11,237.37	5,525.00	136.70	135.24	7.97	-98.63	5,620.74	4,021.85	3,920.90	100.95	39.840
15,300.00	9,506.00	11,337.37	5,525.00	138.94	137.52	7.97	-98.68	5,720.74	4,021.85	3,919.29	102.57	39.212
15,400.00	9,506.00	11,437.37	5,525.00	141.18	139.81	7.97	-98.74	5,820.74	4,021.86	3,917.67	104.19	38.602
15,500.00	9,506.00	11,537.37	5,525.00	143.42	142.09	7.97	-98.79	5,920.74	4,021.86	3,916.05	105.81	38.010
15,600.00	9,506.00	11,637.37	5,525.00	145.66	144.38	7.97	-98.84	6,020.74	4,021.87	3,914.43	107.43	37.436
15,700.00	9,506.00	11,737.37	5,525.00	147.91	146.66	7.97	-98.90	6,120.74	4,021.87	3,912.81	109.06	36.878
15,800.00	9,506.00	11,837.37	5,525.00	150.15	148.95	7.97	-98.95	6,220.74	4,021.87	3,911.19	110.69	36.336
15,900.00	9,506.00	11,937.37	5,525.00	152.40	151.24	7.97	-99.00	6,320.74	4,021.88	3,909.56	112.31	35.809
16,000.00	9,506.00	12,037.37	5,525.00	154.65	153.53	7.97	-99.06	6,420.74	4,021.88	3,907.94	113.94	35.297
16,100.00	9,506.00	12,137.37	5,525.00	156.90	155.82	7.97	-99.11	6,520.74	4,021.89	3,906.31	115.58	34.799
16,200.00	9,506.00	12,237.37	5,525.00	159.16	158.11	7.97	-99.16	6,620.74	4,021.89	3,904.68	117.21	34.314
16,300.00	9,506.00	12,337.37	5,525.00	161.41	160.40	7.97	-99.22	6,720.74	4,021.90	3,903.05	118.84	33.842
16,400.00	9,506.00	12,437.37	5,525.00	163.67	162.69	7.98	-99.27	6,820.74	4,021.90	3,901.42	120.48	33.383
16,500.00	9,506.00	12,537.37	5,525.00	165.93	164.98	7.98	-99.32	6,920.74	4,021.90	3,899.79	122.11	32.936
16,600.00	9,506.00	12,637.37	5,525.00	168.19	167.27	7.98	-99.38	7,020.74	4,021.91	3,898.16	123.75	32.500
16,700.00	9,506.00	12,737.37	5,525.00	170.45	169.56	7.98	-99.43	7,120.74	4,021.91	3,896.52	125.39	32.075
16,800.00	9,506.00	12,837.37	5,525.00	172.71	171.86	7.98	-99.49	7,220.74	4,021.92	3,894.89	127.03	31.662
16,900.00	9,506.00	12,937.37	5,525.00	174.97	174.15	7.98	-99.54	7,320.74	4,021.92	3,893.25	128.67	31.258
17,000.00	9,506.00	13,037.37	5,525.00	177.24	176.44	7.98	-99.59	7,420.74	4,021.92	3,891.61	130.31	30.864
17,100.00	9,506.00	13,137.37	5,525.00	179.50	178.74	7.98	-99.65	7,520.74	4,021.93	3,889.98	131.95	30.480
17,200.00	9,506.00	13,237.37	5,525.00	181.77	181.03	7.98	-99.70	7,620.74	4,021.93	3,888.34	133.60	30.105
17,300.00	9,506.00	13,337.37	5,525.00	184.04	183.33	7.98	-99.75	7,720.74	4,021.94	3,886.70	135.24	29.739
17,400.00	9,506.00	13,437.37	5,525.00	186.31	185.62	7.98	-99.81	7,820.74	4,021.94	3,885.06	136.89	29.382
17,500.00	9,506.00	13,537.37	5,525.00	188.58	187.92	7.98	-99.86	7,920.74	4,021.95	3,883.41	138.53	29.033

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #105H - OH - Prelim B													Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HDGM													Offset Well Error:	0.00 usft
Reference Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
17,600.00	9,506.00	13,637.37	5,525.00	190.85	190.21	7.98	-99.91	8,020.74	4,021.95	3,881.77	140.18	28.692		
17,700.00	9,506.00	13,737.37	5,525.00	193.12	192.51	7.98	-99.97	8,120.74	4,021.95	3,880.13	141.83	28.358		
17,800.00	9,506.00	13,837.37	5,525.00	195.39	194.81	7.98	-100.02	8,220.74	4,021.96	3,878.48	143.47	28.033		
17,900.00	9,506.00	13,937.37	5,525.00	197.66	197.10	7.98	-100.07	8,320.74	4,021.96	3,876.84	145.12	27.714		
18,000.00	9,506.00	14,037.37	5,525.00	199.94	199.40	7.98	-100.13	8,420.74	4,021.97	3,875.19	146.77	27.403		
18,100.00	9,506.00	14,137.37	5,525.00	202.21	201.70	7.98	-100.18	8,520.74	4,021.97	3,873.55	148.42	27.098		
18,200.00	9,506.00	14,237.37	5,525.00	204.49	203.99	7.98	-100.23	8,620.74	4,021.98	3,871.90	150.07	26.800		
18,300.00	9,506.00	14,337.37	5,525.00	206.77	206.29	7.98	-100.29	8,720.74	4,021.98	3,870.25	151.72	26.508		
18,400.00	9,506.00	14,437.37	5,525.00	209.04	208.59	7.98	-100.34	8,820.74	4,021.98	3,868.61	153.38	26.223		
18,500.00	9,506.00	14,537.37	5,525.00	211.32	210.89	7.98	-100.39	8,920.74	4,021.99	3,866.96	155.03	25.943		
18,600.00	9,506.00	14,637.37	5,525.00	213.60	213.19	7.98	-100.45	9,020.74	4,021.99	3,865.31	156.68	25.670		
18,700.00	9,506.00	14,737.37	5,525.00	215.88	215.49	7.99	-100.50	9,120.74	4,022.00	3,863.66	158.34	25.402		
18,800.00	9,506.00	14,837.37	5,525.00	218.16	217.78	7.99	-100.56	9,220.74	4,022.00	3,862.01	159.99	25.139		
18,900.00	9,506.00	14,937.37	5,525.00	220.44	220.08	7.99	-100.61	9,320.74	4,022.00	3,860.36	161.65	24.882		
19,000.00	9,506.00	15,037.37	5,525.00	222.72	222.38	7.99	-100.66	9,420.74	4,022.01	3,858.71	163.30	24.629		
19,100.00	9,506.00	15,137.37	5,525.00	225.00	224.68	7.99	-100.72	9,520.74	4,022.01	3,857.06	164.96	24.382		
19,200.00	9,506.00	15,237.37	5,525.00	227.28	226.98	7.99	-100.77	9,620.74	4,022.02	3,855.40	166.61	24.140		
19,300.00	9,506.00	15,337.37	5,525.00	229.56	229.28	7.99	-100.82	9,720.74	4,022.02	3,853.75	168.27	23.902		
19,400.00	9,506.00	15,437.37	5,525.00	231.85	231.58	7.99	-100.88	9,820.74	4,022.03	3,852.10	169.93	23.669		
19,500.00	9,506.00	15,537.37	5,525.00	234.13	233.88	7.99	-100.93	9,920.74	4,022.03	3,850.45	171.58	23.440		
19,600.00	9,506.00	15,637.37	5,525.00	236.42	236.18	7.99	-100.98	10,020.74	4,022.03	3,848.79	173.24	23.216		
19,628.96	9,506.00	15,666.33	5,525.00	237.08	236.85	7.99	-101.00	10,049.70	4,022.04	3,848.31	173.72	23.152		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #106H - OH - Prelim B												Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HDGM												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Semi-Major Axis 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
0.00	0.00	1.00	1.00	0.00	0.00	-167.94	-510.00	-109.00	521.52	521.26	0.26	2,006.670	
100.00	100.00	101.00	101.00	0.13	0.13	-167.94	-510.00	-109.00	521.52	520.54	0.98	533.885	
200.00	200.00	201.00	201.00	0.49	0.49	-167.94	-510.00	-109.00	521.52	519.82	1.69	307.902	
300.00	300.00	301.00	301.00	0.85	0.85	-167.94	-510.00	-109.00	521.52	519.11	2.41	216.333	
400.00	400.00	401.00	401.00	1.20	1.21	-167.94	-510.00	-109.00	521.52	518.39	3.13	166.744	
500.00	500.00	501.00	501.00	1.56	1.57	-167.94	-510.00	-109.00	521.52	517.67	3.84	135.649	
600.00	600.00	601.00	601.00	1.92	1.92	-167.94	-510.00	-109.00	521.52	516.96	4.56	114.329	
700.00	700.00	701.00	701.00	2.28	2.28	-167.94	-510.00	-109.00	521.52	516.24	5.28	98.801	
800.00	800.00	801.00	801.00	2.64	2.64	-167.94	-510.00	-109.00	521.52	515.52	6.00	86.986	
900.00	900.00	901.00	901.00	3.00	3.00	-167.94	-510.00	-109.00	521.52	514.81	6.71	77.695 CC, ES	
1,000.00	1,000.00	1,001.00	1,001.00	3.35	3.36	-167.94	-510.00	-109.00	521.52	514.98	7.43	70.341	
1,100.00	1,099.98	1,100.98	1,100.98	3.71	3.72	-120.56	-510.00	-109.00	522.40	516.94	8.14	64.507	
1,200.00	1,199.84	1,200.84	1,200.84	4.07	4.07	-121.00	-510.00	-109.00	525.08	520.34	8.86	59.762	
1,300.00	1,299.53	1,300.53	1,300.53	4.42	4.43	-121.71	-510.00	-109.00	529.20	523.91	9.57	55.736	
1,400.00	1,399.20	1,400.20	1,400.20	4.78	4.79	-122.45	-510.00	-109.00	533.48	527.56	10.29	52.271	
1,500.00	1,498.88	1,499.88	1,499.88	5.14	5.15	-123.17	-510.00	-109.00	537.85	532.83	10.93	49.737	
1,600.00	1,598.55	1,599.55	1,599.55	5.51	5.51	-123.77	-511.22	-109.13	543.76	541.10	11.56	47.822	
1,700.00	1,698.23	1,699.23	1,699.23	5.87	5.87	-124.37	-514.85	-109.51	552.65	552.34	12.17	46.391	
1,800.00	1,797.90	1,798.90	1,798.90	6.24	6.24	-124.96	-520.84	-110.14	564.51	566.52	12.77	45.364	
1,900.00	1,897.58	1,898.58	1,898.58	6.60	6.60	-125.52	-529.14	-111.01	579.29	583.61	13.36	44.682	
2,000.00	1,997.26	1,998.26	1,998.26	6.97	6.97	-126.05	-539.67	-112.12	596.97	603.55	13.94	44.305	
2,100.00	2,096.93	2,097.93	2,097.93	7.34	7.34	-126.55	-552.32	-113.45	617.48	626.28	14.50	44.189	
2,200.00	2,196.61	2,197.61	2,197.61	7.71	7.71	-127.01	-566.99	-114.99	640.78	651.64	15.09	44.195	
2,300.00	2,296.28	2,297.28	2,297.28	8.08	8.08	-127.46	-584.49	-116.83	666.72	677.68	15.77	43.966	
2,400.00	2,395.96	2,396.96	2,396.96	8.45	8.45	-127.94	-605.46	-119.03	693.45	703.76	16.46	43.748	
2,500.00	2,495.63	2,496.63	2,496.63	8.82	8.82	-128.39	-626.43	-121.24	720.23	729.88	17.16	43.540	
2,600.00	2,595.31	2,596.31	2,596.31	9.19	9.19	-128.80	-647.40	-123.44	747.04	756.03	17.86	43.342	
2,700.00	2,694.99	2,695.99	2,695.99	9.56	9.56	-129.18	-668.37	-125.65	773.88	782.20	18.56	43.154	
2,800.00	2,794.66	2,795.66	2,795.66	9.93	9.93	-129.54	-689.33	-127.85	800.76	808.40	19.26	42.975	
2,900.00	2,894.34	2,895.34	2,895.34	10.30	10.30	-129.88	-710.30	-130.05	827.66	834.62	19.96	42.805	
3,000.00	2,994.01	2,995.01	2,995.01	10.67	10.67	-130.19	-731.27	-132.26	854.58	860.86	20.67	42.643	
3,100.00	3,093.69	3,094.69	3,094.69	11.04	11.04	-130.49	-752.24	-134.46	881.53	887.12	21.38	42.489	
3,200.00	3,193.36	3,194.36	3,194.36	11.41	11.41	-130.76	-773.21	-136.67	908.50	913.40	22.09	42.342	
3,300.00	3,293.04	3,294.04	3,294.04	11.78	11.78	-131.03	-794.18	-138.87	935.49	939.69	22.81	42.202	
3,400.00	3,392.71	3,393.71	3,393.71	12.15	12.15	-131.27	-815.15	-141.08	962.49	965.99	23.52	42.069	
3,500.00	3,492.39	3,493.39	3,493.39	12.53	12.53	-131.51	-836.12	-143.28	989.52	992.31	24.24	41.941	
3,600.00	3,592.07	3,593.07	3,593.07	12.90	12.90	-131.73	-857.09	-145.48	1,016.55	1,018.64	24.95	41.820	
3,700.00	3,691.74	3,692.74	3,692.74	13.27	13.27	-131.94	-878.05	-147.69	1,043.80	1,044.99	25.67	41.704	
3,800.00	3,791.42	3,792.42	3,792.42	13.64	13.64	-132.14	-899.02	-149.89	1,070.66	1,071.31	26.42	41.548	
3,900.00	3,891.09	3,892.09	3,892.09	14.01	14.01	-132.32	-919.99	-152.10	1,097.73	1,097.64	27.17	41.399	
4,000.00	3,990.77	3,991.77	3,991.77	14.39	14.39	-132.51	-940.96	-154.30	1,124.82	1,124.07	27.83	41.384	
4,100.00	4,090.44	4,091.44	4,091.44	14.76	14.76	-132.68	-961.93	-156.50	1,151.91	1,150.45	28.56	41.287	
4,200.00	4,190.12	4,191.12	4,191.12	15.13	15.13	-132.84	-982.90	-158.71	1,179.01	1,176.84	29.28	41.193	
4,300.00	4,289.80	4,290.80	4,290.80	15.50	15.50	-133.00	-1,003.87	-160.91	1,206.12	1,203.23	30.00	41.103	
4,400.00	4,389.47	4,390.47	4,390.47	15.88	15.88	-133.15	-1,024.84	-163.12	1,233.24	1,229.64	30.73	41.017	
4,500.00	4,489.15	4,490.15	4,490.15	16.25	16.25	-133.29	-1,045.81	-165.32	1,260.36	1,256.04	31.45	40.934	
4,600.00	4,588.82	4,589.82	4,589.82	16.62	16.62	-133.43	-1,066.77	-167.52	1,287.50	1,282.46	32.18	40.854	
4,700.00	4,688.50	4,689.50	4,689.50	16.99	16.99	-133.56	-1,087.74	-169.73	1,314.64	1,308.88	32.91	40.777	
4,800.00	4,788.17	4,789.17	4,789.17	17.37	17.37	-133.68	-1,108.71	-171.93	1,341.78	1,335.30	33.63	40.703	
4,900.00	4,887.85	4,888.85	4,888.85	17.74	17.74	-133.81	-1,129.68	-174.14	1,368.93	1,361.73	34.36	40.632	
5,000.00	4,987.53	4,988.53	4,988.53	18.11	18.11	-133.92	-1,150.65	-176.34	1,396.09	1,388.16	35.09	40.563	
5,100.00	5,087.20	5,088.20	5,088.20	18.48	18.48	-134.03	-1,171.62	-178.55	1,423.25				

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #106H - OH - Prelim B														Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HDGM														Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Reference		High Side	Offset Wellbore Centre		Distance		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	N-S (usft)	E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
5,200.00	5,186.88	4,946.87	4,873.32	18.86	19.54	-134.14	-1,192.59	-180.75	1,450.42	1,414.60	35.82	40.496			
5,300.00	5,286.55	5,043.08	4,967.19	19.23	19.98	-134.25	-1,213.56	-182.95	1,477.59	1,441.04	36.55	40.432			
5,400.00	5,386.23	5,109.60	5,031.94	19.60	20.29	-134.46	-1,228.50	-180.88	1,505.69	1,468.65	37.05	40.645			
5,500.00	5,485.90	5,172.77	5,092.62	19.97	20.57	-134.93	-1,243.43	-171.86	1,535.80	1,498.31	37.50	40.957			
5,600.00	5,585.58	5,231.96	5,148.10	20.35	20.83	-135.59	-1,257.91	-157.26	1,568.11	1,530.22	37.89	41.384			
5,700.00	5,685.26	5,286.41	5,197.43	20.72	21.06	-136.37	-1,271.53	-138.72	1,602.86	1,564.64	38.22	41.940			
5,800.00	5,784.93	5,335.81	5,240.39	21.09	21.26	-137.31	-1,284.01	-117.80	1,640.25	1,601.78	38.47	42.637			
5,900.00	5,884.76	5,380.96	5,277.88	21.46	21.44	-138.72	-1,295.45	-95.42	1,678.99	1,640.34	38.65	43.444			
6,000.00	5,984.73	5,422.52	5,310.68	21.81	21.60	-140.09	-1,305.94	-72.17	1,718.32	1,679.57	38.75	44.341			
6,100.00	6,084.73	5,460.41	5,339.01	22.16	21.75	171.51	-1,315.42	-48.88	1,759.21	1,720.43	38.78	45.362			
6,200.00	6,184.73	5,500.00	5,366.86	22.50	21.90	170.63	-1,325.20	-22.51	1,803.27	1,764.47	38.80	46.473			
6,300.00	6,284.73	5,524.58	5,383.20	22.85	22.00	170.06	-1,331.19	-5.16	1,850.46	1,811.79	38.66	47.862			
6,400.00	6,384.73	5,550.00	5,399.30	23.19	22.10	169.45	-1,337.29	13.55	1,900.77	1,862.27	38.51	49.364			
6,500.00	6,484.73	5,575.90	5,414.81	23.54	22.20	168.80	-1,343.42	33.36	1,954.11	1,915.76	38.34	50.962			
6,600.00	6,584.73	5,600.00	5,428.43	23.89	22.30	168.19	-1,349.01	52.44	2,010.34	1,972.19	38.15	52.694			
6,700.00	6,684.73	5,617.26	5,437.68	24.23	22.37	167.74	-1,352.95	66.47	2,069.32	2,031.43	37.89	54.613			
6,800.00	6,784.73	5,634.96	5,446.72	24.58	22.45	167.27	-1,356.93	81.15	2,130.91	2,093.27	37.63	56.624			
6,900.00	6,884.73	5,650.00	5,454.04	24.93	22.52	166.87	-1,360.27	93.86	2,194.94	2,157.59	37.35	58.767			
7,000.00	6,984.73	5,650.00	5,454.04	25.28	22.52	166.87	-1,360.27	93.86	2,261.44	2,224.51	36.93	61.242			
7,100.00	7,084.73	5,678.82	5,467.13	25.63	22.65	166.09	-1,366.51	118.76	2,329.72	2,292.91	36.81	63.290			
7,200.00	7,184.73	5,700.00	5,475.94	25.97	22.76	165.51	-1,370.97	137.50	2,400.23	2,363.61	36.62	65.538			
7,300.00	7,284.73	5,700.00	5,475.94	26.32	22.76	165.51	-1,370.97	137.50	2,472.46	2,436.21	36.25	68.213			
7,400.00	7,384.73	5,700.00	5,475.94	26.67	22.76	165.51	-1,370.97	137.50	2,546.57	2,510.68	35.89	70.957			
7,500.00	7,484.73	5,721.75	5,484.27	27.02	22.87	164.91	-1,375.44	157.09	2,622.04	2,586.27	35.77	73.307			
7,600.00	7,584.73	5,730.48	5,487.40	27.37	22.92	164.66	-1,377.19	165.04	2,699.08	2,663.54	35.54	75.952			
7,700.00	7,684.73	5,750.00	5,493.96	27.72	23.03	164.11	-1,381.05	183.02	2,777.59	2,742.16	35.43	78.404			
7,800.00	7,784.73	5,750.00	5,493.96	28.07	23.03	164.11	-1,381.05	183.02	2,857.16	2,822.00	35.16	81.271			
7,900.00	7,884.73	5,750.00	5,493.96	28.42	23.03	164.11	-1,381.05	183.02	2,937.98	2,903.07	34.91	84.162			
8,000.00	7,984.73	5,750.00	5,493.96	28.77	23.03	164.11	-1,381.05	183.02	3,019.94	2,985.26	34.68	87.069			
8,100.00	8,084.73	5,750.00	5,493.96	29.12	23.03	164.11	-1,381.05	183.02	3,102.97	3,068.48	34.48	89.984			
8,200.00	8,184.73	5,771.45	5,500.47	29.47	23.16	163.51	-1,385.16	203.04	3,186.60	3,152.10	34.50	92.373			
8,300.00	8,284.73	5,776.83	5,501.98	29.82	23.19	163.36	-1,386.16	208.10	3,271.28	3,236.90	34.38	95.137			
8,400.00	8,384.73	5,800.00	5,507.96	30.18	23.35	162.70	-1,390.41	230.08	3,357.04	3,322.59	34.44	97.467			
8,500.00	8,484.73	5,800.00	5,507.96	30.53	23.35	162.70	-1,390.41	230.08	3,443.15	3,408.82	34.32	100.318			
8,600.00	8,584.73	5,800.00	5,507.96	30.88	23.35	162.70	-1,390.41	230.08	3,529.99	3,495.76	34.22	103.149			
8,700.00	8,684.73	5,800.00	5,507.96	31.23	23.35	162.70	-1,390.41	230.08	3,617.51	3,583.37	34.14	105.956			
8,800.00	8,784.73	5,800.00	5,507.96	31.58	23.35	162.70	-1,390.41	230.08	3,705.66	3,671.58	34.08	108.736			
8,900.00	8,884.73	5,800.00	5,507.96	31.93	23.35	162.70	-1,390.41	230.08	3,794.40	3,760.36	34.04	111.483			
9,000.00	8,984.39	5,800.00	5,507.96	32.27	23.35	87.47	-1,390.41	230.08	3,884.17	3,850.16	34.02	114.180			
9,100.00	9,081.39	5,800.00	5,507.96	32.59	23.35	67.51	-1,390.41	230.08	3,974.09	3,940.05	34.04	116.757			
9,200.00	9,172.78	5,820.63	5,512.54	32.88	23.49	51.99	-1,394.05	249.86	4,061.16	4,026.92	34.25	118.577			
9,300.00	9,255.79	5,828.93	5,514.18	33.12	23.55	41.50	-1,395.48	257.87	4,143.34	4,108.94	34.40	120.450			
9,400.00	9,328.12	5,850.00	5,517.84	33.32	23.71	34.93	-1,399.00	278.32	4,218.25	4,183.57	34.68	121.641			
9,500.00	9,389.92	5,850.00	5,517.84	33.62	23.71	30.80	-1,399.00	278.32	4,282.01	4,247.20	34.81	123.005			
9,600.00	9,439.92	5,850.00	5,517.84	34.02	23.71	28.03	-1,399.00	278.32	4,333.13	4,298.17	34.96	123.942			
9,700.00	9,476.60	5,873.36	5,521.01	34.50	23.90	26.33	-1,402.73	301.16	4,370.08	4,334.77	35.31	123.758			
9,800.00	9,498.85	5,900.00	5,523.51	35.06	24.12	25.42	-1,406.74	327.37	4,392.47	4,356.74	35.72	122.959			
9,900.00	9,506.00	5,900.00	5,523.51	35.70	24.12	25.11	-1,406.74	327.37	4,399.30	4,363.30	36.00	122.206			
9,906.76	9,506.00	5,900.00	5,523.51	35.75	24.12	25.11	-1,406.74	327.37	4,399.29	4,363.27	36.02	122.129			
10,000.00	9,506.00	5,900.00	5,523.51	36.42	24.12	25.11	-1,406.74	327.37	4,400.28	4,363.94	36.35	121.068			
10,100.00	9,506.00	6,106.77	5,525.00	37.28	26.21	25.25	-1,417.47	519.95	4,402.49	4,364.36	38.14	115.440			
10,200.00	9,506.00	6,206.77	5,525.00	38.24	27.46	25.25	-1,417.53	619.95	4,402.51	4,363.18	39.33	111.936			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #106H - OH - Prelim B												Offset Site Error:
Survey Program: 0-MWD-HDGM												0.00 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Distance	Minimum Separation	Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Toolface (°)	+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation Factor		
10,300.00	9,506.00	6,306.77	5,525.00	39.32	28.86	25.25	-1,417.59	719.95	4,402.52	4,361.89	40.63	108.355
10,400.00	9,506.00	6,406.77	5,525.00	40.50	30.39	25.25	-1,417.65	819.95	4,402.54	4,360.51	42.03	104.756
10,500.00	9,506.00	6,506.77	5,525.00	41.77	32.01	25.25	-1,417.71	919.95	4,402.55	4,359.04	43.51	101.187
10,600.00	9,506.00	6,606.77	5,525.00	43.13	33.73	25.25	-1,417.76	1,019.95	4,402.57	4,357.50	45.07	97.683
10,700.00	9,506.00	6,706.77	5,525.00	44.57	35.51	25.25	-1,417.82	1,119.95	4,402.58	4,355.88	46.70	94.272
10,800.00	9,506.00	6,806.77	5,525.00	46.08	37.35	25.25	-1,417.88	1,219.95	4,402.60	4,354.20	48.40	90.971
10,900.00	9,506.00	6,906.77	5,525.00	47.65	39.25	25.25	-1,417.94	1,319.95	4,402.61	4,352.46	50.15	87.793
11,000.00	9,506.00	7,006.77	5,525.00	49.28	41.19	25.25	-1,418.00	1,419.95	4,402.63	4,350.68	51.95	84.744
11,100.00	9,506.00	7,106.77	5,525.00	50.96	43.16	25.25	-1,418.05	1,519.95	4,402.64	4,348.84	53.80	81.830
11,200.00	9,506.00	7,206.77	5,525.00	52.69	45.17	25.25	-1,418.11	1,619.95	4,402.66	4,346.96	55.70	79.049
11,300.00	9,506.00	7,306.77	5,525.00	54.46	47.21	25.25	-1,418.17	1,719.95	4,402.67	4,345.05	57.63	76.400
11,400.00	9,506.00	7,406.77	5,525.00	56.27	49.27	25.25	-1,418.23	1,819.95	4,402.69	4,343.09	59.59	73.880
11,500.00	9,506.00	7,506.77	5,525.00	58.12	51.35	25.25	-1,418.29	1,919.95	4,402.70	4,341.11	61.59	71.484
11,600.00	9,506.00	7,606.77	5,525.00	60.00	53.45	25.25	-1,418.34	2,019.95	4,402.72	4,339.10	63.62	69.208
11,700.00	9,506.00	7,706.77	5,525.00	61.91	55.57	25.25	-1,418.40	2,119.95	4,402.73	4,337.06	65.67	67.045
11,800.00	9,506.00	7,806.77	5,525.00	63.84	57.70	25.25	-1,418.46	2,219.95	4,402.75	4,335.00	67.74	64.991
11,900.00	9,506.00	7,906.77	5,525.00	65.80	59.85	25.25	-1,418.52	2,319.95	4,402.76	4,332.92	69.84	63.039
12,000.00	9,506.00	8,006.77	5,525.00	67.78	62.01	25.25	-1,418.58	2,419.95	4,402.78	4,330.82	71.96	61.184
12,100.00	9,506.00	8,106.77	5,525.00	69.78	64.18	25.25	-1,418.63	2,519.95	4,402.79	4,328.70	74.10	59.420
12,200.00	9,506.00	8,206.77	5,525.00	71.80	66.35	25.25	-1,418.69	2,619.95	4,402.81	4,326.56	76.25	57.743
12,300.00	9,506.00	8,306.77	5,525.00	73.83	68.54	25.25	-1,418.75	2,719.95	4,402.82	4,324.40	78.42	56.146
12,400.00	9,506.00	8,406.77	5,525.00	75.89	70.73	25.26	-1,418.81	2,819.95	4,402.84	4,322.24	80.60	54.626
12,500.00	9,506.00	8,506.77	5,525.00	77.95	72.94	25.26	-1,418.87	2,919.95	4,402.85	4,320.06	82.79	53.178
12,600.00	9,506.00	8,606.77	5,525.00	80.03	75.14	25.26	-1,418.92	3,019.95	4,402.87	4,317.86	85.00	51.797
12,700.00	9,506.00	8,706.77	5,525.00	82.12	77.36	25.26	-1,418.98	3,119.95	4,402.88	4,315.66	87.22	50.479
12,800.00	9,506.00	8,806.77	5,525.00	84.23	79.58	25.26	-1,419.04	3,219.95	4,402.90	4,313.44	89.45	49.221
12,900.00	9,506.00	8,906.77	5,525.00	86.34	81.80	25.26	-1,419.10	3,319.95	4,402.91	4,311.22	91.69	48.020
13,000.00	9,506.00	9,006.77	5,525.00	88.46	84.03	25.26	-1,419.15	3,419.95	4,402.93	4,308.99	93.94	46.871
13,100.00	9,506.00	9,106.77	5,525.00	90.59	86.26	25.26	-1,419.21	3,519.95	4,402.94	4,306.75	96.19	45.771
13,200.00	9,506.00	9,206.77	5,525.00	92.74	88.50	25.26	-1,419.27	3,619.95	4,402.96	4,304.50	98.46	44.719
13,300.00	9,506.00	9,306.77	5,525.00	94.88	90.74	25.26	-1,419.33	3,719.95	4,402.97	4,302.24	100.73	43.711
13,400.00	9,506.00	9,406.77	5,525.00	97.04	92.98	25.26	-1,419.39	3,819.95	4,402.99	4,299.98	103.01	42.744
13,500.00	9,506.00	9,506.77	5,525.00	99.20	95.23	25.26	-1,419.44	3,919.95	4,403.00	4,297.71	105.29	41.816
13,600.00	9,506.00	9,606.77	5,525.00	101.37	97.48	25.26	-1,419.50	4,019.95	4,403.02	4,295.43	107.58	40.926
13,700.00	9,506.00	9,706.77	5,525.00	103.55	99.73	25.26	-1,419.56	4,119.95	4,403.03	4,293.15	109.88	40.071
13,800.00	9,506.00	9,806.77	5,525.00	105.73	101.99	25.26	-1,419.62	4,219.95	4,403.05	4,290.86	112.18	39.249
13,900.00	9,506.00	9,906.77	5,525.00	107.91	104.25	25.26	-1,419.68	4,319.95	4,403.06	4,288.57	114.49	38.458
14,000.00	9,506.00	10,006.77	5,525.00	110.11	106.51	25.26	-1,419.73	4,419.95	4,403.07	4,286.27	116.80	37.697
14,100.00	9,506.00	10,106.77	5,525.00	112.30	108.77	25.26	-1,419.79	4,519.95	4,403.09	4,283.97	119.12	36.965
14,200.00	9,506.00	10,206.77	5,525.00	114.50	111.03	25.26	-1,419.85	4,619.95	4,403.10	4,281.67	121.44	36.259
14,300.00	9,506.00	10,306.77	5,525.00	116.71	113.30	25.26	-1,419.91	4,719.95	4,403.12	4,279.36	123.76	35.578
14,400.00	9,506.00	10,406.77	5,525.00	118.92	115.56	25.26	-1,419.97	4,819.95	4,403.13	4,277.05	126.09	34.921
14,500.00	9,506.00	10,506.77	5,525.00	121.13	117.83	25.26	-1,420.02	4,919.95	4,403.15	4,274.73	128.42	34.287
14,600.00	9,506.00	10,606.77	5,525.00	123.34	120.10	25.26	-1,420.08	5,019.95	4,403.16	4,272.41	130.75	33.675
14,700.00	9,506.00	10,706.77	5,525.00	125.56	122.38	25.26	-1,420.14	5,119.95	4,403.18	4,270.09	133.09	33.084
14,800.00	9,506.00	10,806.77	5,525.00	127.79	124.65	25.26	-1,420.20	5,219.95	4,403.19	4,267.76	135.43	32.512
14,900.00	9,506.00	10,906.77	5,525.00	130.01	126.92	25.27	-1,420.26	5,319.95	4,403.21	4,265.43	137.78	31.959
15,000.00	9,506.00	11,006.77	5,525.00	132.24	129.20	25.27	-1,420.31	5,419.95	4,403.22	4,263.10	140.12	31.424
15,100.00	9,506.00	11,106.77	5,525.00	134.47	131.48	25.27	-1,420.37	5,519.95	4,403.24	4,260.77	142.47	30.906
15,200.00	9,506.00	11,206.77	5,525.00	136.70	133.75	25.27	-1,420.43	5,619.95	4,403.25	4,258.43	144.82	30.404
15,300.00	9,506.00	11,306.77	5,525.00	138.94	136.03	25.27	-1,420.49	5,719.95	4,403.27	4,256.09	147.18	29.918
15,400.00	9,506.00	11,406.77	5,525.00	141.18	138.31	25.27	-1,420.55	5,819.95	4,403.28	4,253.75	149.53	29.447

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #106H - OH - Prelim B													Offset Site Error:
Survey Program: 10-MWD-HDGM													Offset Well Error:
Reference	Offset	Semi-Major Axis	Reference	Offset	Highside	Offset Wellbore Centre	Distance	Between	Between	Minimum	Separation	Warning	
Measured Vertical	Measured Vertical	Reference	Offset	Reference	Toolface	N/S	E/W	Centres	Ellipses	Separation	Factor		
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
15,500.00	9,506.00	11,506.77	5,525.00	143.42	140.59	25.27	-1,420.60	5,919.95	4,403.30	4,251.41	151.89	28.990	
15,600.00	9,506.00	11,806.77	5,525.00	145.66	142.87	25.27	-1,420.66	6,019.95	4,403.31	4,249.06	154.25	28.547	
15,700.00	9,506.00	11,706.77	5,525.00	147.91	145.16	25.27	-1,420.72	6,119.95	4,403.33	4,246.72	156.61	28.116	
15,800.00	9,506.00	11,806.77	5,525.00	150.15	147.44	25.27	-1,420.78	6,219.95	4,403.34	4,244.37	158.98	27.698	
15,900.00	9,506.00	11,906.77	5,525.00	152.40	149.73	25.27	-1,420.84	6,319.95	4,403.36	4,242.02	161.34	27.292	
16,000.00	9,506.00	12,006.77	5,525.00	154.65	152.01	25.27	-1,420.89	6,419.95	4,403.37	4,239.66	163.71	26.897	
16,100.00	9,506.00	12,106.77	5,525.00	156.90	154.30	25.27	-1,420.95	6,519.95	4,403.39	4,237.31	166.08	26.514	
16,200.00	9,506.00	12,206.77	5,525.00	159.16	156.58	25.27	-1,421.01	6,619.95	4,403.40	4,234.95	168.45	26.141	
16,300.00	9,506.00	12,306.77	5,525.00	161.41	158.87	25.27	-1,421.07	6,719.95	4,403.42	4,232.60	170.82	25.778	
16,400.00	9,506.00	12,406.77	5,525.00	163.67	161.16	25.27	-1,421.13	6,819.95	4,403.43	4,230.24	173.20	25.425	
16,500.00	9,506.00	12,506.77	5,525.00	165.93	163.44	25.27	-1,421.18	6,919.95	4,403.45	4,227.88	175.57	25.081	
16,600.00	9,506.00	12,606.77	5,525.00	168.19	165.73	25.27	-1,421.24	7,019.95	4,403.46	4,225.52	177.95	24.746	
16,700.00	9,506.00	12,706.77	5,525.00	170.45	168.02	25.27	-1,421.30	7,119.95	4,403.48	4,223.15	180.32	24.420	
16,800.00	9,506.00	12,806.77	5,525.00	172.71	170.31	25.27	-1,421.36	7,219.95	4,403.49	4,220.79	182.70	24.102	
16,900.00	9,506.00	12,906.77	5,525.00	174.97	172.60	25.27	-1,421.42	7,319.95	4,403.51	4,218.42	185.08	23.792	
17,000.00	9,506.00	13,006.77	5,525.00	177.24	174.89	25.27	-1,421.47	7,419.95	4,403.52	4,216.06	187.46	23.490	
17,100.00	9,506.00	13,106.77	5,525.00	179.50	177.19	25.27	-1,421.53	7,519.95	4,403.54	4,213.69	189.85	23.195	
17,200.00	9,506.00	13,206.77	5,525.00	181.77	179.48	25.27	-1,421.59	7,619.95	4,403.55	4,211.32	192.23	22.908	
17,300.00	9,506.00	13,306.77	5,525.00	184.04	181.77	25.28	-1,421.65	7,719.95	4,403.57	4,208.95	194.62	22.627	
17,400.00	9,506.00	13,406.77	5,525.00	186.31	184.06	25.28	-1,421.70	7,819.95	4,403.58	4,206.58	197.00	22.353	
17,500.00	9,506.00	13,506.77	5,525.00	188.58	186.35	25.28	-1,421.76	7,919.95	4,403.60	4,204.21	199.39	22.086	
17,600.00	9,506.00	13,606.77	5,525.00	190.85	188.65	25.28	-1,421.82	8,019.95	4,403.61	4,201.84	201.77	21.824	
17,700.00	9,506.00	13,706.77	5,525.00	193.12	190.94	25.28	-1,421.88	8,119.95	4,403.63	4,199.46	204.16	21.569	
17,800.00	9,506.00	13,806.77	5,525.00	195.39	193.24	25.28	-1,421.94	8,219.95	4,403.64	4,197.09	206.55	21.320	
17,900.00	9,506.00	13,906.77	5,525.00	197.66	195.53	25.28	-1,421.99	8,319.95	4,403.66	4,194.72	208.94	21.076	
18,000.00	9,506.00	14,006.77	5,525.00	199.94	197.82	25.28	-1,422.05	8,419.95	4,403.67	4,192.34	211.33	20.838	
18,100.00	9,506.00	14,106.77	5,525.00	202.21	200.12	25.28	-1,422.11	8,519.95	4,403.69	4,189.96	213.72	20.605	
18,200.00	9,506.00	14,206.77	5,525.00	204.49	202.42	25.28	-1,422.17	8,619.95	4,403.70	4,187.59	216.12	20.377	
18,300.00	9,506.00	14,306.77	5,525.00	206.77	204.71	25.28	-1,422.23	8,719.95	4,403.72	4,185.21	218.51	20.153	
18,400.00	9,506.00	14,406.77	5,525.00	209.04	207.01	25.28	-1,422.28	8,819.95	4,403.73	4,182.83	220.90	19.935	
18,500.00	9,506.00	14,506.77	5,525.00	211.32	209.30	25.28	-1,422.34	8,919.95	4,403.75	4,180.45	223.30	19.721	
18,600.00	9,506.00	14,606.77	5,525.00	213.60	211.60	25.28	-1,422.40	9,019.95	4,403.76	4,178.07	225.69	19.512	
18,700.00	9,506.00	14,706.77	5,525.00	215.88	213.90	25.28	-1,422.46	9,119.95	4,403.78	4,175.69	228.09	19.307	
18,800.00	9,506.00	14,806.77	5,525.00	218.16	216.19	25.28	-1,422.52	9,219.95	4,403.79	4,173.31	230.49	19.107	
18,900.00	9,506.00	14,906.77	5,525.00	220.44	218.49	25.28	-1,422.57	9,319.95	4,403.81	4,170.92	232.88	18.910	
19,000.00	9,506.00	15,006.77	5,525.00	222.72	220.79	25.28	-1,422.63	9,419.95	4,403.82	4,168.54	235.28	18.717	
19,100.00	9,506.00	15,106.77	5,525.00	225.00	223.09	25.28	-1,422.69	9,519.95	4,403.84	4,166.16	237.68	18.529	
19,200.00	9,506.00	15,206.77	5,525.00	227.28	225.38	25.28	-1,422.75	9,619.95	4,403.85	4,163.77	240.08	18.343	
19,300.00	9,506.00	15,306.77	5,525.00	229.56	227.68	25.28	-1,422.81	9,719.95	4,403.87	4,161.39	242.48	18.162	
19,400.00	9,506.00	15,406.77	5,525.00	231.85	229.98	25.28	-1,422.86	9,819.95	4,403.88	4,159.01	244.88	17.984	
19,500.00	9,506.00	15,506.77	5,525.00	234.13	232.28	25.28	-1,422.92	9,919.95	4,403.90	4,156.62	247.28	17.810	
19,600.00	9,506.00	15,593.23	5,525.00	236.42	234.27	25.28	-1,422.98	10,019.95	4,403.91	4,154.40	249.51	17.650	
19,628.96	9,506.00	15,622.19	5,525.00	237.08	234.93	25.28	-1,423.00	10,048.91	4,403.92	4,153.71	250.21	17.601SF	

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com - #112H - OH - Prelim B												Offset Site Error:
Survey Program: 0-MWD-HDCM												0.00 usft
Reference	Offset	Semi Major Axis		Distance		Warning		Offset Wellbore Centre		Between Centres		Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)		N-S (usft)	E-W (usft)	Centres (usft)	Ellipses (usft)	0.00 usft
0.00	0.00	1.00	1.00	0.00	0.00	-166.74		-590.00	-139.00	606.15		
100.00	100.00	101.00	101.00	0.13	0.13	-166.74		-590.00	-139.00	606.15	605.89	0.26 2,332.323
200.00	200.00	201.00	201.00	0.49	0.49	-166.74		-590.00	-139.00	606.15	605.18	0.98 620.527
300.00	300.00	301.00	301.00	0.85	0.85	-166.74		-590.00	-139.00	606.15	604.46	1.69 357.870
400.00	400.00	401.00	401.00	1.20	1.21	-166.74		-590.00	-139.00	606.15	603.74	2.41 251.440
500.00	500.00	501.00	501.00	1.56	1.57	-166.74		-590.00	-139.00	606.15	603.02	3.13 193.804
600.00	600.00	601.00	601.00	1.92	1.92	-166.74		-590.00	-139.00	606.15	602.31	3.84 157.663
700.00	700.00	701.00	701.00	2.28	2.28	-166.74		-590.00	-139.00	606.15	601.59	4.56 132.883
800.00	800.00	801.00	801.00	2.64	2.64	-166.74		-590.00	-139.00	606.15	600.87	5.28 114.834
900.00	900.00	901.00	901.00	3.00	3.00	-166.74		-590.00	-139.00	606.15	600.16	6.00 101.102
1,000.00	1,000.00	1,001.00	1,001.00	3.35	3.36	-166.74		-590.00	-139.00	606.15	599.44	6.71 90.304 CC, ES
1,100.00	1,099.98	1,100.98	1,100.98	3.71	3.72	-119.35		-590.00	-139.00	607.01	599.58	7.43 81.733
1,200.00	1,199.84	1,200.84	1,200.84	4.07	4.07	-119.73		-590.00	-139.00	609.59	601.45	8.14 74.889
1,300.00	1,299.53	1,300.53	1,300.53	4.42	4.43	-120.35		-590.00	-139.00	613.54	604.69	8.86 69.288
1,400.00	1,399.20	1,400.20	1,400.20	4.78	4.79	-120.99		-590.00	-139.00	617.66	608.09	9.57 64.530
1,500.00	1,498.88	1,499.88	1,499.88	5.14	5.15	-121.62		-590.00	-139.00	621.85	611.56	10.29 60.433
1,600.00	1,598.55	1,599.55	1,599.55	5.51	5.48	-122.08		-590.00	-140.60	626.41	615.42	10.99 57.011
1,700.00	1,698.23	1,700.37	1,691.49	5.87	5.87	-122.25		-590.00	-145.39	631.59	619.86	11.74 53.810
1,800.00	1,797.90	1,791.48	1,791.09	6.24	6.16	-122.24		-590.00	-152.36	637.13	624.74	12.39 51.422
1,900.00	1,897.58	1,908.68	1,890.70	6.60	6.57	-122.24		-590.00	-159.32	642.66	629.49	13.17 48.815
2,000.00	1,997.26	2,008.83	1,990.30	6.97	6.92	-122.23		-590.00	-166.29	648.19	634.30	13.88 46.689
2,100.00	2,096.93	2,108.98	2,089.90	7.34	7.28	-122.23		-590.00	-173.25	653.72	639.11	14.60 44.764
2,200.00	2,196.61	2,209.14	2,189.51	7.71	7.63	-122.22		-590.00	-180.22	659.25	643.92	15.33 43.014
2,300.00	2,296.28	2,309.29	2,289.11	8.08	7.99	-122.22		-590.00	-187.18	664.78	648.73	16.05 41.417
2,400.00	2,395.96	2,409.44	2,388.71	8.45	8.35	-122.21		-590.00	-194.15	670.31	653.53	16.78 39.955
2,500.00	2,495.63	2,509.59	2,488.32	8.82	8.71	-122.21		-590.00	-201.11	675.84	658.34	17.50 38.611
2,600.00	2,595.31	2,609.75	2,587.92	9.19	9.07	-122.20		-590.00	-208.08	681.37	663.14	18.23 37.371
2,700.00	2,694.99	2,709.90	2,687.53	9.56	9.43	-122.20		-590.00	-215.04	686.90	667.94	18.96 36.225
2,800.00	2,794.66	2,789.95	2,787.13	9.93	9.72	-122.19		-590.00	-222.01	692.43	672.81	19.62 35.293
2,900.00	2,894.34	2,910.21	2,886.73	10.30	10.16	-122.19		-590.00	-228.97	697.97	677.54	20.42 34.174
3,000.00	2,994.01	2,989.64	2,986.34	10.67	10.45	-122.18		-590.00	-235.94	703.50	682.42	21.08 33.371
3,100.00	3,093.69	3,074.84	3,071.34	11.04	10.76	-122.22		-590.81	-241.52	709.92	688.17	21.74 32.651
3,200.00	3,193.36	3,157.38	3,153.72	11.41	11.05	-122.36		-593.78	-245.95	718.70	696.32	22.38 32.119
3,300.00	3,293.04	3,239.46	3,235.56	11.78	11.33	-122.60		-598.88	-249.40	729.86	706.87	22.99 31.747
3,400.00	3,392.71	3,327.93	3,323.65	12.15	11.64	-122.96		-606.53	-252.14	743.23	719.60	23.63 31.454
3,500.00	3,492.39	3,426.83	3,422.10	12.53	11.98	-123.37		-615.52	-255.01	757.05	732.72	24.33 31.115
3,600.00	3,592.07	3,525.73	3,520.55	12.90	12.32	-123.76		-624.50	-257.87	770.92	745.88	25.03 30.795
3,700.00	3,691.74	3,624.63	3,619.00	13.27	12.66	-124.13		-633.48	-260.74	784.81	759.07	25.74 30.491
3,800.00	3,791.42	3,723.53	3,717.45	13.64	13.01	-124.49		-642.46	-263.61	798.74	772.30	26.45 30.204
3,900.00	3,891.09	3,822.43	3,815.90	14.01	13.35	-124.84		-651.45	-266.48	812.70	785.55	27.15 29.931
4,000.00	3,990.77	3,921.33	3,914.35	14.39	13.70	-125.18		-660.43	-269.35	826.69	798.83	27.86 29.672
4,100.00	4,090.44	4,020.23	4,012.80	14.76	14.05	-125.51		-669.41	-272.22	840.71	812.13	28.57 29.425
4,200.00	4,190.12	4,119.13	4,111.24	15.13	14.40	-125.83		-678.40	-275.09	854.75	825.47	29.28 29.191
4,300.00	4,289.80	4,218.03	4,209.69	15.50	14.76	-126.13		-687.38	-277.96	868.81	838.82	29.99 28.968
4,400.00	4,389.47	4,316.93	4,308.14	15.88	15.11	-126.43		-696.36	-280.83	882.90	852.20	30.70 28.755
4,500.00	4,489.15	4,415.83	4,406.59	16.25	15.47	-126.72		-705.35	-283.70	897.02	865.60	31.42 28.551
4,600.00	4,588.82	4,514.73	4,505.04	16.62	15.82	-127.00		-714.33	-286.57	911.15	879.02	32.13 28.357
4,700.00	4,688.50	4,613.63	4,603.49	16.99	16.18	-127.27		-723.31	-289.43	925.31	892.46	32.85 28.171
4,800.00	4,788.17	4,712.53	4,701.94	17.37	16.54	-127.53		-732.29	-292.30	939.48	905.92	33.56 27.993
4,900.00	4,887.85	4,846.76	4,835.74	17.74	17.03	-127.90		-742.51	-295.57	952.30	917.82	34.48 27.816
5,000.00	4,987.53	4,994.10	4,982.99	18.11	17.54	-128.40		-746.95	-296.98	960.36	924.95	35.42 27.116
5,100.00	5,087.20	5,100.68	5,088.20	18.48	17.91	-128.79		-747.00	-297.00	965.43	929.27	36.15 26.704

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com #112H OH Prelim B														Offset Site Error	0.00 usft
Survey Program: 0-MWD-HDGM														Offset Well Error	0.00 usft
Reference	Offset	Semi-Major Axis	Reference	Offset	Highside	Offset Wellbore Centre	Distance	Between	Between	Minimum	Separation				
Measured Vertical	Measured Vertical	Reference	Offset	Reference	Toolface	N/S	E/W	Centres	Ellipses	Separation	Factor				
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)					
5,200.00	5,186.88	5,201.01	5,187.88	18.86	18.25	-129.16	-747.00	-297.00	970.50	933.63	36.87	26.324			
5,300.00	5,286.55	5,301.33	5,287.55	19.23	18.59	-129.53	-747.00	-297.00	975.61	938.03	37.58	25.960			
5,400.00	5,386.23	5,401.66	5,387.23	19.60	18.94	-129.89	-747.00	-297.00	980.76	942.47	38.30	25.610			
5,500.00	5,485.90	5,501.98	5,486.90	19.97	19.28	-130.25	-747.00	-297.00	985.95	946.94	39.01	25.274			
5,600.00	5,585.58	5,602.30	5,586.58	20.35	19.62	-130.60	-747.00	-297.00	991.18	951.45	39.73	24.951			
5,700.00	5,685.26	5,702.63	5,686.26	20.72	19.97	-130.95	-747.00	-297.00	996.45	956.01	40.44	24.640			
5,800.00	5,784.93	5,802.95	5,785.93	21.09	20.32	-131.31	-747.00	-297.00	1,001.72	960.56	41.16	24.340			
5,900.00	5,884.76	5,903.12	5,885.76	21.46	20.66	-131.61	-747.00	-297.00	1,005.54	963.68	41.87	24.018			
6,000.00	5,984.73	6,003.15	5,985.73	21.81	21.01	-131.73	-747.00	-297.00	1,007.06	964.49	42.57	23.657			
6,100.00	6,084.73	6,103.15	6,085.73	22.16	21.35	-179.26	-747.00	-297.00	1,007.08	963.82	43.27	23.277			
6,200.00	6,184.73	6,203.15	6,185.73	22.50	21.70	-179.26	-747.00	-297.00	1,007.08	963.12	43.96	22.908			
6,300.00	6,284.73	6,296.85	6,285.73	22.85	22.02	-179.26	-747.00	-297.00	1,007.08	962.45	44.64	22.562			
6,400.00	6,384.73	6,383.85	6,372.64	23.19	22.32	-179.42	-747.39	-294.23	1,007.53	962.26	45.27	22.255			
6,500.00	6,484.73	6,483.05	6,450.67	23.54	22.57	179.84	-749.26	-281.12	1,009.87	964.03	45.84	22.028			
6,600.00	6,584.73	6,537.32	6,521.52	23.89	22.80	178.60	-752.37	-259.27	1,014.71	968.35	46.35	21.891			
6,700.00	6,684.73	6,604.89	6,583.02	24.23	22.99	177.05	-756.30	-231.65	1,022.82	976.05	46.76	21.872			
6,800.00	6,784.73	6,665.02	6,634.66	24.58	23.14	175.36	-760.63	-201.20	1,035.07	988.02	47.05	22.001			
6,900.00	6,884.73	6,717.77	6,677.09	24.93	23.28	173.67	-765.05	-170.21	1,052.24	1,005.07	47.17	22.309			
7,000.00	6,984.73	6,763.67	6,711.54	25.28	23.42	172.05	-769.32	-140.19	1,074.88	1,027.77	47.11	22.818			
7,100.00	7,084.73	6,800.00	6,737.01	25.63	23.54	170.68	-772.97	-114.55	1,103.33	1,056.51	46.82	23.565			
7,200.00	7,184.73	6,838.07	6,761.88	25.97	23.69	169.19	-777.03	-86.03	1,137.65	1,091.21	46.45	24.494			
7,300.00	7,284.73	6,868.14	6,780.15	26.32	23.82	167.98	-780.39	-62.38	1,177.77	1,131.89	45.88	25.671			
7,400.00	7,384.73	6,900.00	6,798.11	26.67	23.96	166.66	-784.10	-36.34	1,223.43	1,178.16	45.27	27.027			
7,500.00	7,484.73	6,917.46	6,807.32	27.02	24.05	165.92	-786.19	-21.65	1,274.20	1,229.76	44.44	28.675			
7,600.00	7,584.73	6,950.00	6,823.26	27.37	24.21	164.54	-790.18	6.43	1,329.89	1,286.10	43.79	30.373			
7,700.00	7,684.73	6,950.00	6,823.26	27.72	24.21	164.54	-790.18	6.43	1,389.64	1,346.92	42.72	32.531			
7,800.00	7,784.73	6,971.85	6,833.05	28.07	24.34	163.61	-792.94	25.76	1,453.35	1,411.37	41.98	34.622			
7,900.00	7,884.73	7,000.00	6,844.56	28.42	24.50	162.40	-796.56	51.20	1,520.76	1,479.41	41.36	36.772			
8,000.00	7,984.73	7,000.00	6,844.56	28.77	24.50	162.40	-796.56	51.20	1,590.90	1,550.47	40.43	39.350			
8,100.00	8,084.73	7,000.00	6,844.56	29.12	24.50	162.40	-796.56	51.20	1,664.09	1,624.51	39.57	42.052			
8,200.00	8,184.73	7,021.37	6,852.44	29.47	24.64	161.48	-799.35	70.86	1,739.49	1,700.44	39.05	44.547			
8,300.00	8,284.73	7,031.00	6,855.75	29.82	24.70	161.07	-800.63	79.82	1,817.18	1,778.74	38.44	47.268			
8,400.00	8,384.73	7,050.00	6,861.83	30.18	24.83	160.25	-803.16	97.63	1,896.90	1,858.89	38.01	49.906			
8,500.00	8,484.73	7,050.00	6,861.83	30.53	24.83	160.25	-803.16	97.63	1,978.14	1,940.71	37.42	52.856			
8,600.00	8,584.73	7,050.00	6,861.83	30.88	24.83	160.25	-803.16	97.63	2,061.02	2,024.11	36.91	55.844			
8,700.00	8,684.73	7,050.00	6,861.83	31.23	24.83	160.25	-803.16	97.63	2,145.36	2,108.91	36.45	58.855			
8,800.00	8,784.73	7,068.49	6,867.17	31.58	24.96	159.47	-805.66	115.15	2,230.66	2,194.42	36.24	61.553			
8,900.00	8,884.73	7,074.37	6,868.75	31.93	25.00	159.22	-806.46	120.76	2,317.19	2,281.25	35.95	64.458			
9,000.00	8,984.39	7,080.84	6,870.42	32.27	25.05	85.40	-807.34	126.96	2,405.06	2,369.34	35.72	67.323			
9,100.00	9,081.39	7,100.00	6,874.95	32.59	25.19	67.10	-809.96	145.38	2,493.19	2,457.50	35.69	69.853			
9,200.00	9,172.78	7,100.00	6,874.95	32.88	25.19	52.90	-809.96	145.38	2,578.61	2,543.04	35.57	72.493			
9,300.00	9,255.79	7,100.00	6,874.95	33.12	25.19	42.73	-809.96	145.38	2,659.43	2,623.89	35.54	74.828			
9,400.00	9,328.12	7,123.08	6,879.57	33.32	25.38	36.14	-813.15	167.77	2,733.01	2,697.23	35.78	76.387			
9,500.00	9,389.92	7,150.00	6,883.81	33.62	25.59	32.00	-816.89	194.09	2,796.35	2,760.30	36.05	77.564			
9,600.00	9,439.92	7,150.00	6,883.81	34.02	25.59	29.10	-816.89	194.09	2,847.08	2,810.93	36.16	78.746			
9,700.00	9,476.60	7,150.00	6,883.81	34.50	25.59	27.27	-816.89	194.09	2,885.04	2,848.73	36.31	79.445			
9,800.00	9,498.85	7,200.00	6,888.35	35.06	26.03	26.43	-823.91	243.37	2,908.53	2,871.69	36.85	78.937			
9,900.00	9,506.00	7,200.00	6,888.35	35.70	26.03	26.12	-823.91	243.37	2,917.59	2,880.46	37.14	78.561			
10,000.00	9,506.00	7,227.16	6,889.00	36.42	26.27	26.20	-827.73	270.24	2,921.55	2,883.88	37.67	77.551			
10,100.00	9,506.00	7,350.24	6,889.00	37.28	27.56	26.45	-842.45	392.44	2,927.00	2,888.17	38.84	75.370			
10,200.00	9,506.00	7,534.40	6,889.00	38.24	29.85	26.67	-854.64	576.15	2,929.96	2,889.43	40.53	72.288			
10,300.00	9,506.00	7,678.50	6,889.00	39.32	31.91	26.70	-856.34	720.24	2,930.37	2,888.26	42.11	69.596			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com - #112H - OH - Prelim.B													Offset Site Error:
Survey Program: D-MWD-HDGM													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre N/S (usft)	E/W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,400.00	9,506.00	7,778.50	6,889.00	40.50	33.46	26.70	-856.40	820.24	2,930.39	2,886.91	43.47	67.405	
10,500.00	9,506.00	7,878.50	6,889.00	41.77	35.09	26.70	-856.46	920.24	2,930.40	2,885.47	44.94	65.211	
10,600.00	9,506.00	7,978.50	6,889.00	43.13	36.79	26.70	-856.52	1,020.24	2,930.42	2,883.93	46.49	63.038	
10,700.00	9,506.00	8,078.50	6,889.00	44.57	38.56	26.70	-856.58	1,120.24	2,930.44	2,882.32	48.11	60.906	
10,800.00	9,506.00	8,178.50	6,889.00	46.08	40.38	26.70	-856.64	1,220.24	2,930.45	2,880.64	49.81	58.831	
10,900.00	9,506.00	8,278.50	6,889.00	47.65	42.24	26.70	-856.70	1,320.24	2,930.47	2,878.90	51.57	56.821	
11,000.00	9,506.00	8,378.50	6,889.00	49.28	44.15	26.70	-856.76	1,420.24	2,930.49	2,877.09	53.39	54.886	
11,100.00	9,506.00	8,478.50	6,889.00	50.96	46.10	26.70	-856.82	1,520.24	2,930.50	2,875.24	55.26	53.028	
11,200.00	9,506.00	8,578.50	6,889.00	52.69	48.08	26.70	-856.89	1,620.24	2,930.52	2,873.34	57.18	51.250	
11,300.00	9,506.00	8,678.50	6,889.00	54.46	50.08	26.70	-856.95	1,720.24	2,930.54	2,871.40	59.14	49.551	
11,400.00	9,506.00	8,778.50	6,889.00	56.27	52.12	26.70	-857.01	1,820.24	2,930.55	2,869.41	61.14	47.932	
11,500.00	9,506.00	8,878.50	6,889.00	58.12	54.17	26.70	-857.07	1,920.24	2,930.57	2,867.40	63.17	46.389	
11,600.00	9,506.00	8,978.50	6,889.00	60.00	56.24	26.70	-857.13	2,020.24	2,930.59	2,865.35	65.24	44.920	
11,700.00	9,506.00	9,078.50	6,889.00	61.91	58.33	26.71	-857.19	2,120.24	2,930.61	2,863.27	67.33	43.524	
11,800.00	9,506.00	9,178.50	6,889.00	63.84	60.44	26.71	-857.25	2,220.24	2,930.62	2,861.17	69.45	42.195	
11,900.00	9,506.00	9,278.50	6,889.00	65.80	62.56	26.71	-857.31	2,320.24	2,930.64	2,859.04	71.60	40.931	
12,000.00	9,506.00	9,378.50	6,889.00	67.78	64.70	26.71	-857.37	2,420.24	2,930.66	2,856.89	73.77	39.729	
12,100.00	9,506.00	9,478.50	6,889.00	69.78	66.84	26.71	-857.43	2,520.24	2,930.67	2,854.72	75.95	38.586	
12,200.00	9,506.00	9,578.50	6,889.00	71.80	69.00	26.71	-857.49	2,620.24	2,930.69	2,852.53	78.16	37.497	
12,300.00	9,506.00	9,678.50	6,889.00	73.83	71.16	26.71	-857.55	2,720.24	2,930.71	2,850.33	80.38	36.461	
12,400.00	9,506.00	9,778.50	6,889.00	75.89	73.34	26.71	-857.61	2,820.24	2,930.72	2,848.11	82.62	35.473	
12,500.00	9,506.00	9,878.50	6,889.00	77.95	75.52	26.71	-857.67	2,920.24	2,930.74	2,845.87	84.87	34.532	
12,600.00	9,506.00	9,978.50	6,889.00	80.03	77.71	26.71	-857.73	3,020.24	2,930.76	2,843.62	87.14	33.634	
12,700.00	9,506.00	10,078.50	6,889.00	82.12	79.91	26.71	-857.79	3,120.24	2,930.77	2,841.36	89.41	32.778	
12,800.00	9,506.00	10,178.50	6,889.00	84.23	82.11	26.71	-857.86	3,220.24	2,930.79	2,839.09	91.70	31.960	
12,900.00	9,506.00	10,278.50	6,889.00	86.34	84.32	26.71	-857.92	3,320.24	2,930.81	2,836.81	94.00	31.178	
13,000.00	9,506.00	10,378.50	6,889.00	88.46	86.53	26.71	-857.98	3,420.24	2,930.83	2,834.51	96.31	30.430	
13,100.00	9,506.00	10,478.50	6,889.00	90.59	88.75	26.71	-858.04	3,520.24	2,930.84	2,832.21	98.63	29.715	
13,200.00	9,506.00	10,578.50	6,889.00	92.74	90.97	26.71	-858.10	3,620.24	2,930.86	2,829.90	100.96	29.030	
13,300.00	9,506.00	10,678.50	6,889.00	94.88	93.20	26.72	-858.16	3,720.24	2,930.88	2,827.58	103.30	28.374	
13,400.00	9,506.00	10,778.50	6,889.00	97.04	95.43	26.72	-858.22	3,820.24	2,930.89	2,825.25	105.64	27.744	
13,500.00	9,506.00	10,878.50	6,889.00	99.20	97.67	26.72	-858.28	3,920.24	2,930.91	2,822.92	107.99	27.141	
13,600.00	9,506.00	10,978.50	6,889.00	101.37	99.90	26.72	-858.34	4,020.24	2,930.93	2,820.58	110.35	26.561	
13,700.00	9,506.00	11,078.50	6,889.00	103.55	102.14	26.72	-858.40	4,120.24	2,930.94	2,818.23	112.71	26.005	
13,800.00	9,506.00	11,178.50	6,889.00	105.73	104.39	26.72	-858.46	4,220.24	2,930.96	2,815.88	115.08	25.469	
13,900.00	9,506.00	11,278.50	6,889.00	107.91	106.64	26.72	-858.52	4,320.24	2,930.98	2,813.53	117.45	24.955	
14,000.00	9,506.00	11,378.50	6,889.00	110.11	108.88	26.72	-858.58	4,420.24	2,930.99	2,811.16	119.83	24.459	
14,100.00	9,506.00	11,478.50	6,889.00	112.30	111.14	26.72	-858.64	4,520.24	2,931.01	2,808.80	122.22	23.982	
14,200.00	9,506.00	11,578.50	6,889.00	114.50	113.39	26.72	-858.70	4,620.24	2,931.03	2,806.42	124.60	23.523	
14,300.00	9,506.00	11,678.50	6,889.00	116.71	115.65	26.72	-858.77	4,720.24	2,931.05	2,804.05	127.00	23.080	
14,400.00	9,506.00	11,778.50	6,889.00	118.92	117.90	26.72	-858.83	4,820.24	2,931.06	2,801.67	129.39	22.652	
14,500.00	9,506.00	11,878.50	6,889.00	121.13	120.17	26.72	-858.89	4,920.24	2,931.08	2,799.28	131.79	22.240	
14,600.00	9,506.00	11,978.50	6,889.00	123.34	122.43	26.72	-858.95	5,020.24	2,931.10	2,796.90	134.20	21.841	
14,700.00	9,506.00	12,078.50	6,889.00	125.56	124.69	26.72	-859.01	5,120.24	2,931.11	2,794.51	136.61	21.456	
14,800.00	9,506.00	12,178.50	6,889.00	127.79	126.96	26.73	-859.07	5,220.24	2,931.13	2,792.11	139.02	21.084	
14,900.00	9,506.00	12,278.50	6,889.00	130.01	129.22	26.73	-859.13	5,320.24	2,931.15	2,789.71	141.43	20.725	
15,000.00	9,506.00	12,378.50	6,889.00	132.24	131.49	26.73	-859.19	5,420.24	2,931.16	2,787.31	143.85	20.376	
15,100.00	9,506.00	12,478.50	6,889.00	134.47	133.76	26.73	-859.25	5,520.24	2,931.18	2,784.91	146.27	20.039	
15,200.00	9,506.00	12,578.50	6,889.00	136.70	136.03	26.73	-859.31	5,620.24	2,931.20	2,782.50	148.69	19.713	
15,300.00	9,506.00	12,678.50	6,889.00	138.94	138.30	26.73	-859.37	5,720.24	2,931.21	2,780.09	151.12	19.397	
15,400.00	9,506.00	12,778.50	6,889.00	141.18	140.58	26.73	-859.43	5,820.24	2,931.23	2,777.68	153.55	19.090	
15,500.00	9,506.00	12,878.50	6,889.00	143.42	142.85	26.73	-859.49	5,920.24	2,931.25	2,775.27	155.98	18.793	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2:00 sigma
Reference Wellbore:	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com - #112H - OH - Prelim B													Offset Site Error:
Survey Program: O-MWD-HDGM													Offset Well Error:
Reference Measured	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi-Major Axis Reference (usft)	Semi-Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre N/S (usft)	Offset Wellbore Centre E/W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,600.00	9,506.00	12,978.50	6,889.00	145.66	145.13	26.73	-859.55	6,020.24	2,931.27	2,772.85	158.41	18.504	
15,700.00	9,506.00	13,078.50	6,889.00	147.91	147.40	26.73	-859.61	6,120.24	2,931.28	2,770.44	160.85	18.224	
15,800.00	9,506.00	13,178.50	6,889.00	150.15	149.68	26.73	-859.68	6,220.24	2,931.30	2,768.02	163.28	17.952	
15,900.00	9,506.00	13,278.50	6,889.00	152.40	151.96	26.73	-859.74	6,320.24	2,931.32	2,765.59	165.72	17.688	
16,000.00	9,506.00	13,378.50	6,889.00	154.65	154.24	26.73	-859.80	6,420.24	2,931.33	2,763.17	168.16	17.432	
16,100.00	9,506.00	13,478.50	6,889.00	156.90	156.52	26.73	-859.86	6,520.24	2,931.35	2,760.75	170.60	17.182	
16,200.00	9,506.00	13,578.50	6,889.00	159.16	158.80	26.73	-859.92	6,620.24	2,931.37	2,758.32	173.05	16.940	
16,300.00	9,506.00	13,678.50	6,889.00	161.41	161.08	26.74	-859.98	6,720.24	2,931.38	2,755.89	175.50	16.704	
16,400.00	9,506.00	13,778.50	6,889.00	163.67	163.37	26.74	-860.04	6,820.24	2,931.40	2,753.46	177.94	16.474	
16,500.00	9,506.00	13,878.50	6,889.00	165.93	165.65	26.74	-860.10	6,920.24	2,931.42	2,751.03	180.39	16.250	
16,600.00	9,506.00	13,978.50	6,889.00	168.19	167.93	26.74	-860.16	7,020.24	2,931.43	2,748.59	182.84	16.033	
16,700.00	9,506.00	14,078.50	6,889.00	170.45	170.22	26.74	-860.22	7,120.24	2,931.45	2,746.16	185.29	15.821	
16,800.00	9,506.00	14,178.50	6,889.00	172.71	172.50	26.74	-860.28	7,220.24	2,931.47	2,743.72	187.75	15.614	
16,900.00	9,506.00	14,278.50	6,889.00	174.97	174.79	26.74	-860.34	7,320.24	2,931.49	2,741.28	190.20	15.412	
17,000.00	9,506.00	14,378.50	6,889.00	177.24	177.08	26.74	-860.40	7,420.24	2,931.50	2,738.84	192.66	15.216	
17,100.00	9,506.00	14,478.50	6,889.00	179.50	179.36	26.74	-860.46	7,520.24	2,931.52	2,736.40	195.11	15.025	
17,200.00	9,506.00	14,578.50	6,889.00	181.77	181.65	26.74	-860.52	7,620.24	2,931.54	2,733.96	197.57	14.838	
17,300.00	9,506.00	14,678.50	6,889.00	184.04	183.94	26.74	-860.59	7,720.24	2,931.55	2,731.52	200.03	14.655	
17,400.00	9,506.00	14,778.50	6,889.00	186.31	186.23	26.74	-860.65	7,820.24	2,931.57	2,729.08	202.49	14.477	
17,500.00	9,506.00	14,878.50	6,889.00	188.58	188.52	26.74	-860.71	7,920.24	2,931.59	2,726.63	204.95	14.304	
17,600.00	9,506.00	14,978.50	6,889.00	190.85	190.81	26.74	-860.77	8,020.24	2,931.60	2,724.19	207.42	14.134	
17,700.00	9,506.00	15,078.50	6,889.00	193.12	193.10	26.74	-860.83	8,120.24	2,931.62	2,721.74	209.88	13.968	
17,800.00	9,506.00	15,178.50	6,889.00	195.39	195.39	26.75	-860.89	8,220.24	2,931.64	2,719.29	212.35	13.806	
17,900.00	9,506.00	15,278.50	6,889.00	197.66	197.68	26.75	-860.95	8,320.24	2,931.65	2,716.84	214.81	13.648	
18,000.00	9,506.00	15,378.50	6,889.00	199.94	199.97	26.75	-861.01	8,420.24	2,931.67	2,714.39	217.28	13.493	
18,100.00	9,506.00	15,478.50	6,889.00	202.21	202.26	26.75	-861.07	8,520.24	2,931.69	2,711.94	219.74	13.341	
18,200.00	9,506.00	15,578.50	6,889.00	204.49	204.56	26.75	-861.13	8,620.24	2,931.71	2,709.49	222.21	13.193	
18,300.00	9,506.00	15,678.50	6,889.00	206.77	206.85	26.75	-861.19	8,720.24	2,931.72	2,707.04	224.68	13.048	
18,400.00	9,506.00	15,778.50	6,889.00	209.04	209.14	26.75	-861.25	8,820.24	2,931.74	2,704.59	227.15	12.907	
18,500.00	9,506.00	15,878.50	6,889.00	211.32	211.43	26.75	-861.31	8,920.24	2,931.76	2,702.13	229.62	12.768	
18,600.00	9,506.00	15,978.50	6,889.00	213.60	213.73	26.75	-861.37	9,020.24	2,931.77	2,699.68	232.09	12.632	
18,700.00	9,506.00	16,078.50	6,889.00	215.88	216.02	26.75	-861.43	9,120.24	2,931.79	2,697.23	234.57	12.499	
18,800.00	9,506.00	16,178.50	6,889.00	218.16	218.32	26.75	-861.49	9,220.24	2,931.81	2,694.77	237.04	12.369	
18,900.00	9,506.00	16,278.50	6,889.00	220.44	220.61	26.75	-861.56	9,320.24	2,931.82	2,692.31	239.51	12.241	
19,000.00	9,506.00	16,378.50	6,889.00	222.72	222.90	26.75	-861.62	9,420.24	2,931.84	2,689.86	241.99	12.116	
19,100.00	9,506.00	16,478.50	6,889.00	225.00	225.20	26.75	-861.68	9,520.24	2,931.86	2,687.40	244.46	11.993	
19,200.00	9,506.00	16,578.50	6,889.00	227.28	227.50	26.75	-861.74	9,620.24	2,931.88	2,684.94	246.94	11.873	
19,300.00	9,506.00	16,678.50	6,889.00	229.56	229.79	26.76	-861.80	9,720.24	2,931.89	2,682.48	249.41	11.755	
19,400.00	9,506.00	16,778.50	6,889.00	231.85	232.09	26.76	-861.86	9,820.24	2,931.91	2,680.02	251.89	11.640	
19,500.00	9,506.00	16,878.50	6,889.00	234.13	234.38	26.76	-861.92	9,920.24	2,931.93	2,677.56	254.37	11.526	
19,600.00	9,506.00	16,978.50	6,889.00	236.42	236.68	26.76	-861.98	10,020.24	2,931.94	2,675.10	256.84	11.415	
19,628.96	9,506.00	17,007.46	6,889.00	237.08	237.28	26.76	-862.00	10,049.20	2,931.95	2,674.43	257.52	11.385 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	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #115H - OH - Prelim B											Offset Site Error:
Survey Program: 00-MWD-HDGM											Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Semi-Major Axis (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Distance Between Centres (usft)	Minimum Separation (usft)	Warning
0.00	0.00	3.00	3.00	0.00	0.00	-167.36	-620.00	-139.00	635.39		
100.00	100.00	103.00	103.00	0.13	0.14	-167.36	-620.00	-139.00	635.39	635.12	0.27 2,379.190
200.00	200.00	203.00	203.00	0.49	0.50	-167.36	-620.00	-139.00	635.39	634.41	0.98 645.719
300.00	300.00	303.00	303.00	0.85	0.86	-167.36	-620.00	-139.00	635.39	633.69	1.70 373.551
400.00	400.00	403.00	403.00	1.20	1.21	-167.36	-620.00	-139.00	635.39	632.97	2.42 262.787
500.00	500.00	503.00	503.00	1.56	1.57	-167.36	-620.00	-139.00	635.39	632.26	3.13 202.687
600.00	600.00	603.00	603.00	1.92	1.93	-167.36	-620.00	-139.00	635.39	631.54	3.85 164.960
700.00	700.00	703.00	703.00	2.28	2.29	-167.36	-620.00	-139.00	635.39	630.82	4.57 139.074
800.00	800.00	803.00	803.00	2.64	2.65	-167.36	-620.00	-139.00	635.39	630.10	5.29 120.210
900.00	900.00	903.00	903.00	3.00	3.01	-167.36	-620.00	-139.00	635.39	629.39	6.00 105.852
1,000.00	1,000.00	1,003.00	1,003.00	3.35	3.37	-167.36	-620.00	-139.00	635.39	628.67	6.72 94.558
1,100.00	1,099.98	1,102.98	1,102.98	3.71	3.72	-119.96	-620.00	-139.00	636.26	628.83	7.43 85.589
1,200.00	1,199.84	1,202.84	1,202.84	4.07	4.08	-120.32	-620.00	-139.00	638.89	630.74	8.15 78.420
1,300.00	1,299.53	1,302.53	1,302.53	4.42	4.44	-120.90	-620.00	-139.00	642.91	634.05	8.86 72.546
1,400.00	1,399.20	1,402.20	1,402.20	4.78	4.80	-121.51	-620.00	-139.00	647.09	637.51	9.58 67.555
1,500.00	1,498.88	1,501.88	1,501.88	5.14	5.15	-122.12	-620.00	-139.00	651.35	641.05	10.30 63.256
1,600.00	1,598.55	1,601.55	1,601.55	5.51	5.51	-122.71	-620.00	-139.00	655.67	644.65	11.02 59.518
1,700.00	1,698.23	1,701.23	1,701.23	5.87	5.87	-123.30	-620.00	-139.00	660.06	648.33	11.74 56.239
1,800.00	1,797.90	1,800.90	1,800.90	6.24	6.23	-123.88	-620.00	-139.00	664.53	652.07	12.46 53.341
1,900.00	1,897.58	1,900.58	1,900.58	6.60	6.58	-124.45	-620.00	-139.00	669.05	655.87	13.18 50.763
2,000.00	1,997.26	2,000.32	2,000.32	6.97	6.94	-125.01	-620.00	-139.00	673.65	659.75	13.90 48.455
2,100.00	2,096.93	2,126.74	2,126.70	7.34	7.39	-125.61	-617.36	-139.94	676.33	661.61	14.72 45.959
2,200.00	2,196.61	2,253.46	2,253.13	7.71	7.85	-125.99	-609.44	-142.76	675.09	659.58	15.51 43.523
2,300.00	2,296.28	2,369.88	2,368.88	8.08	8.26	-126.18	-597.77	-146.92	670.19	653.92	16.27 41.196
2,400.00	2,395.96	2,469.71	2,468.04	8.45	8.62	-126.30	-586.90	-150.79	664.53	647.54	16.99 39.105
2,500.00	2,495.63	2,569.54	2,567.20	8.82	8.98	-126.42	-576.03	-154.66	658.87	641.15	17.72 37.183
2,600.00	2,595.31	2,669.36	2,666.36	9.19	9.35	-126.55	-565.16	-158.53	653.22	634.77	18.45 35.410
2,700.00	2,694.99	2,769.19	2,765.52	9.56	9.71	-126.68	-554.29	-162.40	647.57	628.40	19.18 33.770
2,800.00	2,794.66	2,869.02	2,864.68	9.93	10.08	-126.81	-543.42	-166.27	641.93	622.02	19.91 32.249
2,900.00	2,894.34	2,968.85	2,963.84	10.30	10.45	-126.95	-532.55	-170.14	636.28	615.65	20.64 30.835
3,000.00	2,994.01	3,068.68	3,063.00	10.67	10.82	-127.09	-521.68	-174.01	630.64	609.28	21.37 29.516
3,100.00	3,093.69	3,168.51	3,162.16	11.04	11.19	-127.22	-510.81	-177.89	625.01	602.91	22.10 28.284
3,200.00	3,193.36	3,268.34	3,261.32	11.41	11.56	-127.37	-499.94	-181.76	619.38	596.55	22.83 27.131
3,300.00	3,293.04	3,368.17	3,360.48	11.78	11.94	-127.51	-489.07	-185.63	613.75	590.19	23.56 26.048
3,400.00	3,392.71	3,468.00	3,459.64	12.15	12.31	-127.66	-478.20	-189.50	608.13	583.83	24.29 25.031
3,500.00	3,492.39	3,567.83	3,558.80	12.53	12.69	-127.81	-467.33	-193.37	602.51	577.48	25.03 24.073
3,600.00	3,592.07	3,667.66	3,657.96	12.90	13.06	-127.96	-456.46	-197.24	596.89	571.13	25.76 23.170
3,700.00	3,691.74	3,767.49	3,757.12	13.27	13.44	-128.12	-445.59	-201.11	591.28	564.78	26.50 22.316
3,800.00	3,791.42	3,867.32	3,856.28	13.64	13.82	-128.27	-434.72	-204.99	585.67	558.44	27.23 21.509
3,900.00	3,891.09	3,967.15	3,955.44	14.01	14.19	-128.44	-423.85	-208.86	580.07	552.11	27.96 20.744
4,000.00	3,990.77	4,066.98	4,054.61	14.39	14.57	-128.60	-412.98	-212.73	574.47	545.77	28.70 20.018
4,100.00	4,090.44	4,166.81	4,153.77	14.76	14.95	-128.77	-402.11	-216.60	568.88	539.45	29.43 19.328
4,200.00	4,190.12	4,266.64	4,252.93	15.13	15.33	-128.94	-391.24	-220.47	563.29	533.12	30.17 18.672
4,300.00	4,289.80	4,366.47	4,352.09	15.50	15.71	-129.12	-380.37	-224.34	557.71	526.81	30.90 18.048
4,400.00	4,389.47	4,466.30	4,451.25	15.88	16.09	-129.29	-369.49	-228.21	552.13	520.50	31.64 17.452
4,500.00	4,489.15	4,566.12	4,550.41	16.25	16.47	-129.48	-358.62	-232.08	546.56	514.19	32.37 16.884
4,600.00	4,588.82	4,665.95	4,649.57	16.62	16.85	-129.66	-347.75	-235.96	540.99	507.89	33.11 16.341
4,700.00	4,688.50	4,765.78	4,748.73	16.99	17.23	-129.85	-336.88	-239.83	535.43	501.59	33.84 15.822
4,800.00	4,788.17	4,865.61	4,847.89	17.37	17.61	-130.04	-326.01	-243.70	529.88	495.30	34.58 15.325
4,900.00	4,887.85	4,965.44	4,947.05	17.74	18.00	-130.24	-315.14	-247.57	524.33	489.02	35.31 14.849
5,000.00	4,987.53	5,065.27	5,046.21	18.11	18.38	-130.44	-304.27	-251.44	518.79	482.74	36.05 14.393
5,100.00	5,087.20	5,165.10	5,145.37	18.48	18.76	-130.65	-293.40	-255.31	513.25	476.47	36.78 13.955

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0:00 usft	North Reference:	Grid
Reference Well:	#221H	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 #115H OH Prelim B													Offset Site Error:
Survey Program: 0-MWD-HDGM													Offset Well Error:
Reference	Offset	Samt Major Axis	Reference	Offset	Highside	Offset Wellbore Centre	Distance	Between	Between	Minimum	Separation	Warning	
Measured Vertical	Measured Vertical	Reference	Offset	Toolface	N/S	E/W	Centres	Ellipses	Separation	Factor			
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)		
5,200.00	5,186.88	5,264.93	5,244.53	18.86	19.14	-130.86	-282.53	-259.18	507.72	470.21	37.51	13.534	
5,300.00	5,286.55	5,364.76	5,343.69	19.23	19.53	-131.08	-271.66	-263.05	502.20	463.95	38.25	13.130	
5,400.00	5,386.23	5,464.59	5,442.85	19.60	19.91	-131.30	-260.79	-266.93	496.69	457.70	38.98	12.741	
5,500.00	5,485.90	5,564.42	5,542.01	19.97	20.29	-131.52	-249.92	-270.80	491.18	451.46	39.72	12.367	
5,600.00	5,585.58	5,664.25	5,641.17	20.35	20.67	-131.75	-239.05	-274.67	485.68	445.23	40.45	12.006	
5,700.00	5,685.26	5,764.08	5,740.33	20.72	21.06	-131.99	-228.18	-278.54	480.19	439.00	41.19	11.659	
5,800.00	5,784.93	5,863.91	5,839.49	21.09	21.44	-132.21	-217.31	-282.41	474.68	432.76	41.92	11.323	
5,900.00	5,884.76	5,954.31	5,929.36	21.46	21.78	-132.18	-208.07	-285.70	468.37	425.72	42.64	10.983	
6,000.00	5,984.73	6,040.91	6,015.68	21.81	22.11	-131.99	-201.59	-288.01	462.43	419.09	43.34	10.671	
6,100.00	6,084.73	6,127.71	6,102.37	22.16	22.42	-179.32	-197.57	-289.44	457.83	413.85	43.99	10.408	
6,200.00	6,184.73	6,214.68	6,189.32	22.50	22.73	-179.25	-196.02	-289.99	456.06	411.45	44.61	10.224	
6,237.99	6,222.73	6,251.08	6,225.73	22.63	22.85	-179.25	-196.00	-290.00	456.04	411.18	44.86	10.166	
6,300.00	6,284.73	6,313.09	6,287.73	22.85	23.07	-179.25	-196.00	-290.00	456.04	410.74	45.30	10.068	
6,400.00	6,384.73	6,421.80	6,396.18	23.19	23.42	-179.95	-195.26	-284.42	455.34	409.31	46.03	9.892	
6,500.00	6,484.73	6,528.31	6,499.66	23.54	23.75	-176.97	-192.06	-260.04	452.85	406.16	46.69	9.700	
6,594.27	6,579.00	6,617.97	6,582.00	23.87	24.00	-172.50	-187.45	-225.09	451.32	404.11	47.20	9.562 CC	
6,600.00	6,584.73	6,623.03	6,586.47	23.89	24.01	-172.20	-187.15	-222.75	451.32	404.10	47.23	9.556 ES, SF	
6,700.00	6,684.73	6,703.59	6,654.59	24.23	24.21	-166.77	-181.55	-180.23	454.79	407.26	47.52	9.570	
6,800.00	6,784.73	6,770.46	6,706.11	24.58	24.34	-161.49	-175.99	-138.03	466.97	419.64	47.33	9.866	
6,900.00	6,884.73	6,825.44	6,744.53	24.93	24.44	-156.77	-170.86	-99.06	490.26	443.78	46.48	10.548	
7,000.00	6,984.73	6,870.67	6,773.19	25.28	24.53	-152.74	-166.30	-64.38	525.35	480.36	44.99	11.677	
7,100.00	7,084.73	6,908.09	6,794.76	25.63	24.65	-149.38	-162.31	-34.07	571.53	528.40	43.13	13.252	
7,200.00	7,184.73	6,939.32	6,811.20	25.97	24.80	-146.59	-158.84	-7.75	627.31	586.20	41.12	15.257	
7,300.00	7,284.73	6,965.63	6,823.90	26.32	24.94	-144.28	-155.84	15.08	691.02	651.86	39.16	17.646	
7,400.00	7,384.73	6,988.00	6,833.87	26.67	25.07	-142.34	-153.22	34.94	761.07	723.69	37.38	20.359	
7,500.00	7,484.73	7,000.00	6,838.89	27.02	25.14	-141.31	-151.80	45.74	836.24	800.60	35.64	23.461	
7,600.00	7,584.73	7,023.84	6,848.19	27.37	25.29	-139.32	-148.93	67.51	915.26	880.76	34.50	26.527	
7,700.00	7,684.73	7,050.00	6,857.33	27.72	25.45	-137.19	-145.73	91.81	997.71	964.05	33.66	29.643	
7,800.00	7,784.73	7,050.00	6,857.33	28.07	25.45	-137.19	-145.73	91.81	1,082.36	1,049.91	32.45	33.350	
7,900.00	7,884.73	7,050.00	6,857.33	28.42	25.45	-137.19	-145.73	91.81	1,169.44	1,137.95	31.49	37.136	
8,000.00	7,984.73	7,072.53	6,864.29	28.77	25.61	-135.42	-142.94	113.04	1,257.82	1,226.70	31.13	40.409	
8,100.00	8,084.73	7,081.56	6,866.85	29.12	25.67	-134.73	-141.81	121.63	1,347.79	1,317.15	30.65	43.979	
8,200.00	8,184.73	7,100.00	6,871.64	29.47	25.81	-133.34	-139.48	139.29	1,439.05	1,408.62	30.43	47.289	
8,300.00	8,284.73	7,100.00	6,871.64	29.82	25.81	-133.34	-139.48	139.29	1,531.04	1,501.01	30.02	50.994	
8,400.00	8,384.73	7,100.00	6,871.64	30.18	25.81	-133.34	-139.48	139.29	1,623.98	1,594.26	29.72	54.648	
8,500.00	8,484.73	7,100.00	6,871.64	30.53	25.81	-133.34	-139.48	139.29	1,717.71	1,688.21	29.49	58.239	
8,600.00	8,584.73	7,100.00	6,871.64	30.88	25.81	-133.34	-139.48	139.29	1,812.11	1,782.77	29.34	61.758	
8,700.00	8,684.73	7,120.62	6,876.31	31.23	25.96	-131.84	-136.86	159.20	1,906.61	1,877.13	29.48	64.679	
8,800.00	8,784.73	7,125.37	6,877.29	31.58	26.00	-131.51	-136.26	163.81	2,001.83	1,972.36	29.47	67.923	
8,900.00	8,884.73	7,129.77	6,878.16	31.93	26.04	-131.19	-135.69	168.08	2,097.46	2,067.96	29.50	71.097	
9,000.00	8,984.39	7,150.00	6,881.72	32.27	26.19	-49.59	-133.09	187.83	2,192.83	2,163.15	29.69	73.864	
9,100.00	9,081.39	7,150.00	6,881.72	32.59	26.19	34.36	-133.09	187.83	2,284.39	2,254.75	29.64	77.068	
9,200.00	9,172.78	7,150.00	6,881.72	32.88	26.19	25.90	-133.09	187.83	2,370.35	2,340.76	29.58	80.123	
9,300.00	9,255.79	7,150.00	6,881.72	33.12	26.19	20.87	-133.09	187.83	2,448.80	2,419.26	29.54	82.908	
9,400.00	9,328.12	7,178.87	6,885.59	33.32	26.43	17.83	-129.36	216.18	2,517.32	2,487.62	29.70	84.748	
9,500.00	9,389.92	7,200.00	6,887.50	33.62	26.61	15.65	-126.61	237.05	2,575.53	2,545.73	29.79	86.446	
9,600.00	9,439.92	7,200.00	6,887.50	34.02	26.61	14.14	-126.61	237.05	2,622.07	2,592.30	29.77	88.079	
9,700.00	9,476.60	7,241.40	6,889.00	34.50	26.98	13.18	-121.21	278.06	2,656.06	2,626.08	29.97	88.623	
9,800.00	9,498.85	7,257.46	6,889.00	35.06	27.13	12.62	-119.16	293.99	2,676.47	2,646.38	30.10	88.930	
9,900.00	9,506.00	7,340.18	6,889.00	35.70	27.96	12.28	-110.01	376.19	2,681.91	2,651.40	30.51	87.899	
10,000.00	9,506.00	7,423.33	6,889.00	36.42	28.89	12.14	-103.21	459.07	2,680.17	2,649.18	30.99	86.482	
10,100.00	9,506.00	7,506.82	6,889.00	37.28	29.90	12.04	-98.80	542.43	2,679.06	2,647.49	31.56	84.878	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #115H - OH - Prelim B												Offset Site Error:
Survey Program: 0-MWD-HDGM												10.00 usft
Reference Depth	Offset Depth	Semi-Major Axis	Reference Depth	Offset Depth	Highside Toolface	Offset Wellbore Centre	Distance	Minimum Separation	Separation Factor	Warning	Offset Well Error:	
(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)			0.00 usft	
10,200.00	9,506.00	7,590.49	6,889.00	38.24	31.00	12.00	-96.82	626.08	2,678.56	2,646.33	32.23	83.109
10,224.61	9,506.00	7,625.61	6,889.00	38.51	31.48	12.00	-96.70	645.39	2,678.53	2,646.05	32.48	82.468
10,300.00	9,506.00	7,685.20	6,889.00	39.32	32.34	12.00	-96.74	720.78	2,678.53	2,645.49	33.04	81.076
10,400.00	9,506.00	7,785.20	6,889.00	40.50	33.84	12.00	-96.78	820.78	2,678.54	2,644.59	33.95	78.898
10,500.00	9,506.00	7,885.20	6,889.00	41.77	35.43	12.00	-96.83	920.78	2,678.54	2,643.61	34.93	76.683
10,600.00	9,506.00	7,985.20	6,889.00	43.13	37.09	12.00	-96.87	1,020.78	2,678.54	2,642.57	35.97	74.458
10,700.00	9,506.00	8,085.20	6,889.00	44.57	38.82	12.00	-96.92	1,120.78	2,678.55	2,641.47	37.08	72.245
10,800.00	9,506.00	8,185.20	6,889.00	46.08	40.61	12.00	-96.96	1,220.78	2,678.55	2,640.32	38.23	70.064
10,900.00	9,506.00	8,285.20	6,889.00	47.65	42.45	12.00	-97.01	1,320.78	2,678.56	2,639.13	39.43	67.928
11,000.00	9,506.00	8,385.20	6,889.00	49.28	44.33	12.00	-97.06	1,420.78	2,678.56	2,637.89	40.68	65.848
11,100.00	9,506.00	8,485.20	6,889.00	50.96	46.25	12.00	-97.10	1,520.78	2,678.57	2,636.60	41.96	63.831
11,200.00	9,506.00	8,585.20	6,889.00	52.69	48.20	12.00	-97.15	1,620.78	2,678.57	2,635.29	43.29	61.882
11,300.00	9,506.00	8,685.20	6,889.00	54.46	50.19	12.00	-97.19	1,720.78	2,678.58	2,633.94	44.64	60.004
11,400.00	9,506.00	8,785.20	6,889.00	56.27	52.20	12.00	-97.24	1,820.78	2,678.58	2,632.56	46.02	58.199
11,500.00	9,506.00	8,885.20	6,889.00	58.12	54.23	12.01	-97.28	1,920.78	2,678.59	2,631.15	47.44	56.467
11,600.00	9,506.00	8,985.20	6,889.00	60.00	56.29	12.01	-97.33	2,020.78	2,678.59	2,629.72	48.87	54.807
11,700.00	9,506.00	9,085.20	6,889.00	61.91	58.36	12.01	-97.38	2,120.78	2,678.60	2,628.26	50.33	53.217
11,800.00	9,506.00	9,185.20	6,889.00	63.84	60.45	12.01	-97.42	2,220.78	2,678.60	2,626.79	51.82	51.695
11,900.00	9,506.00	9,285.20	6,889.00	65.80	62.56	12.01	-97.47	2,320.78	2,678.61	2,625.29	53.32	50.240
12,000.00	9,506.00	9,385.20	6,889.00	67.78	64.68	12.01	-97.51	2,420.78	2,678.61	2,623.78	54.84	48.849
12,100.00	9,506.00	9,485.20	6,889.00	69.78	66.81	12.01	-97.56	2,520.78	2,678.62	2,622.24	56.37	47.518
12,200.00	9,506.00	9,585.20	6,889.00	71.80	68.96	12.01	-97.60	2,620.78	2,678.62	2,620.70	57.92	46.246
12,300.00	9,506.00	9,685.20	6,889.00	73.83	71.11	12.01	-97.65	2,720.78	2,678.62	2,619.14	59.49	45.030
12,400.00	9,506.00	9,785.20	6,889.00	75.89	73.27	12.01	-97.70	2,820.78	2,678.63	2,617.57	61.06	43.867
12,500.00	9,506.00	9,885.20	6,889.00	77.95	75.45	12.01	-97.74	2,920.78	2,678.63	2,615.98	62.65	42.754
12,600.00	9,506.00	9,985.20	6,889.00	80.03	77.63	12.01	-97.79	3,020.78	2,678.64	2,614.38	64.25	41.688
12,700.00	9,506.00	10,085.20	6,889.00	82.12	79.81	12.01	-97.83	3,120.78	2,678.64	2,612.78	65.87	40.669
12,800.00	9,506.00	10,185.20	6,889.00	84.23	82.01	12.01	-97.88	3,220.78	2,678.65	2,611.16	67.49	39.692
12,900.00	9,506.00	10,285.20	6,889.00	86.34	84.21	12.01	-97.92	3,320.78	2,678.65	2,609.54	69.12	38.756
13,000.00	9,506.00	10,385.20	6,889.00	88.46	86.41	12.01	-97.97	3,420.78	2,678.66	2,607.90	70.75	37.858
13,100.00	9,506.00	10,485.20	6,889.00	90.59	88.63	12.01	-98.02	3,520.78	2,678.66	2,606.26	72.40	36.998
13,200.00	9,506.00	10,585.20	6,889.00	92.74	90.84	12.01	-98.06	3,620.78	2,678.67	2,604.61	74.05	36.172
13,300.00	9,506.00	10,685.20	6,889.00	94.88	93.06	12.01	-98.11	3,720.78	2,678.67	2,602.96	75.71	35.378
13,400.00	9,506.00	10,785.20	6,889.00	97.04	95.29	12.01	-98.15	3,820.78	2,678.68	2,601.29	77.38	34.616
13,500.00	9,506.00	10,885.20	6,889.00	99.20	97.52	12.01	-98.20	3,920.78	2,678.68	2,599.63	79.05	33.884
13,600.00	9,506.00	10,985.20	6,889.00	101.37	99.75	12.02	-98.24	4,020.78	2,678.69	2,597.95	80.73	33.179
13,700.00	9,506.00	11,085.20	6,889.00	103.55	101.98	12.02	-98.29	4,120.78	2,678.69	2,596.27	82.42	32.501
13,800.00	9,506.00	11,185.20	6,889.00	105.73	104.22	12.02	-98.34	4,220.78	2,678.70	2,594.59	84.11	31.849
13,900.00	9,506.00	11,285.20	6,889.00	107.91	106.46	12.02	-98.38	4,320.78	2,678.70	2,592.90	85.80	31.220
14,000.00	9,506.00	11,385.20	6,889.00	110.11	108.71	12.02	-98.43	4,420.78	2,678.70	2,591.21	87.50	30.614
14,100.00	9,506.00	11,485.20	6,889.00	112.30	110.95	12.02	-98.47	4,520.78	2,678.71	2,589.51	89.20	30.030
14,200.00	9,506.00	11,585.20	6,889.00	114.50	113.20	12.02	-98.52	4,620.78	2,678.71	2,587.81	90.91	29.466
14,300.00	9,506.00	11,685.20	6,889.00	116.71	115.46	12.02	-98.56	4,720.78	2,678.72	2,586.10	92.62	28.922
14,400.00	9,506.00	11,785.20	6,889.00	118.92	117.71	12.02	-98.61	4,820.78	2,678.72	2,584.39	94.33	28.397
14,500.00	9,506.00	11,885.20	6,889.00	121.13	119.97	12.02	-98.66	4,920.78	2,678.73	2,582.68	96.05	27.889
14,600.00	9,506.00	11,985.20	6,889.00	123.34	122.23	12.02	-98.70	5,020.78	2,678.73	2,580.96	97.77	27.398
14,700.00	9,506.00	12,085.20	6,889.00	125.56	124.49	12.02	-98.75	5,120.78	2,678.74	2,579.24	99.49	26.924
14,800.00	9,506.00	12,185.20	6,889.00	127.79	126.75	12.02	-98.79	5,220.78	2,678.74	2,577.52	101.22	26.464
14,900.00	9,506.00	12,285.20	6,889.00	130.01	129.01	12.02	-98.84	5,320.78	2,678.75	2,575.80	102.95	26.020
15,000.00	9,506.00	12,385.20	6,889.00	132.24	131.28	12.02	-98.88	5,420.78	2,678.75	2,574.07	104.68	25.589
15,100.00	9,506.00	12,485.20	6,889.00	134.47	133.54	12.02	-98.93	5,520.78	2,678.76	2,572.34	106.42	25.172
15,200.00	9,506.00	12,585.20	6,889.00	136.70	135.81	12.02	-98.98	5,620.78	2,678.76	2,570.61	108.15	24.768

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

Pro Directional Anticollision Report

Company:	Malador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #115H - OH - Prelim B												Offset Site Error: 0.00 usft	
Survey Program: 0-MWD-HDGM												Offset Well Error: 10.00 usft	
Reference		Offset		Semi-Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		N-S (usft)	E-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
15,300.00	9,506.00	12,685.20	6,889.00	138.94	138.08	12.02	-99.02	5,720.78	2,678.77	2,568.87	109.89	24.376	
15,400.00	9,506.00	12,785.20	6,889.00	141.18	140.35	12.02	-99.07	5,820.78	2,678.77	2,567.14	111.63	23.996	
15,500.00	9,506.00	12,885.20	6,889.00	143.42	142.62	12.02	-99.11	5,920.78	2,678.78	2,565.40	113.38	23.627	
15,600.00	9,506.00	12,985.20	6,889.00	145.66	144.89	12.02	-99.16	6,020.78	2,678.78	2,563.66	115.12	23.269	
15,700.00	9,506.00	13,085.20	6,889.00	147.91	147.17	12.03	-99.20	6,120.78	2,678.78	2,561.91	116.87	22.921	
15,800.00	9,506.00	13,185.20	6,889.00	150.15	149.44	12.03	-99.25	6,220.78	2,678.79	2,560.17	118.62	22.583	
15,900.00	9,506.00	13,285.20	6,889.00	152.40	151.72	12.03	-99.30	6,320.78	2,678.79	2,558.42	120.37	22.255	
16,000.00	9,506.00	13,385.20	6,889.00	154.65	154.00	12.03	-99.34	6,420.78	2,678.80	2,556.68	122.12	21.935	
16,100.00	9,506.00	13,485.20	6,889.00	156.90	156.28	12.03	-99.39	6,520.78	2,678.80	2,554.93	123.88	21.625	
16,200.00	9,506.00	13,585.20	6,889.00	159.16	158.55	12.03	-99.43	6,620.78	2,678.81	2,553.18	125.63	21.323	
16,300.00	9,506.00	13,685.20	6,889.00	161.41	160.83	12.03	-99.48	6,720.78	2,678.81	2,551.42	127.39	21.029	
16,400.00	9,506.00	13,785.20	6,889.00	163.67	163.11	12.03	-99.52	6,820.78	2,678.82	2,549.67	129.15	20.742	
16,500.00	9,506.00	13,885.20	6,889.00	165.93	165.40	12.03	-99.57	6,920.78	2,678.82	2,547.91	130.91	20.463	
16,600.00	9,506.00	13,985.20	6,889.00	168.19	167.68	12.03	-99.62	7,020.78	2,678.83	2,546.16	132.67	20.192	
16,700.00	9,506.00	14,085.20	6,889.00	170.45	169.96	12.03	-99.66	7,120.78	2,678.83	2,544.40	134.43	19.927	
16,800.00	9,506.00	14,185.20	6,889.00	172.71	172.24	12.03	-99.71	7,220.78	2,678.84	2,542.64	136.20	19.669	
16,900.00	9,506.00	14,285.20	6,889.00	174.97	174.53	12.03	-99.75	7,320.78	2,678.84	2,540.88	137.96	19.418	
17,000.00	9,506.00	14,385.20	6,889.00	177.24	176.81	12.03	-99.80	7,420.78	2,678.85	2,539.12	139.73	19.172	
17,100.00	9,506.00	14,485.20	6,889.00	179.50	179.10	12.03	-99.84	7,520.78	2,678.85	2,537.36	141.49	18.933	
17,200.00	9,506.00	14,585.20	6,889.00	181.77	181.38	12.03	-99.89	7,620.78	2,678.86	2,535.59	143.26	18.699	
17,300.00	9,506.00	14,685.20	6,889.00	184.04	183.67	12.03	-99.93	7,720.78	2,678.86	2,533.83	145.03	18.471	
17,400.00	9,506.00	14,785.20	6,889.00	186.31	185.96	12.03	-99.98	7,820.78	2,678.86	2,532.06	146.80	18.248	
17,500.00	9,506.00	14,885.20	6,889.00	188.58	188.25	12.03	-100.03	7,920.78	2,678.87	2,530.30	148.57	18.031	
17,600.00	9,506.00	14,985.20	6,889.00	190.85	190.53	12.03	-100.07	8,020.78	2,678.87	2,528.53	150.34	17.818	
17,700.00	9,506.00	15,085.20	6,889.00	193.12	192.82	12.03	-100.12	8,120.78	2,678.88	2,526.76	152.12	17.611	
17,800.00	9,506.00	15,185.20	6,889.00	195.39	195.11	12.04	-100.16	8,220.78	2,678.88	2,524.99	153.89	17.408	
17,900.00	9,506.00	15,285.20	6,889.00	197.66	197.40	12.04	-100.21	8,320.78	2,678.89	2,523.22	155.66	17.209	
18,000.00	9,506.00	15,385.20	6,889.00	199.94	199.69	12.04	-100.25	8,420.78	2,678.89	2,521.45	157.44	17.015	
18,100.00	9,506.00	15,485.20	6,889.00	202.21	201.98	12.04	-100.30	8,520.78	2,678.90	2,519.68	159.22	16.826	
18,200.00	9,506.00	15,585.20	6,889.00	204.49	204.27	12.04	-100.35	8,620.78	2,678.90	2,517.91	160.99	16.640	
18,300.00	9,506.00	15,685.20	6,889.00	206.77	206.56	12.04	-100.39	8,720.78	2,678.91	2,516.14	162.77	16.458	
18,400.00	9,506.00	15,785.20	6,889.00	209.04	208.86	12.04	-100.44	8,820.78	2,678.91	2,514.36	164.55	16.280	
18,500.00	9,506.00	15,885.20	6,889.00	211.32	211.15	12.04	-100.48	8,920.78	2,678.92	2,512.59	166.33	16.106	
18,600.00	9,506.00	15,985.20	6,889.00	213.60	213.44	12.04	-100.53	9,020.78	2,678.92	2,510.81	168.11	15.936	
18,700.00	9,506.00	16,085.20	6,889.00	215.88	215.73	12.04	-100.57	9,120.78	2,678.93	2,509.04	169.89	15.769	
18,800.00	9,506.00	16,185.20	6,889.00	218.16	218.03	12.04	-100.62	9,220.78	2,678.93	2,507.26	171.67	15.605	
18,900.00	9,506.00	16,285.20	6,889.00	220.44	220.32	12.04	-100.67	9,320.78	2,678.94	2,505.49	173.45	15.445	
19,000.00	9,506.00	16,385.20	6,889.00	222.72	222.61	12.04	-100.71	9,420.78	2,678.94	2,503.71	175.23	15.288	
19,100.00	9,506.00	16,485.20	6,889.00	225.00	224.91	12.04	-100.76	9,520.78	2,678.95	2,501.93	177.01	15.134	
19,200.00	9,506.00	16,585.20	6,889.00	227.28	227.20	12.04	-100.80	9,620.78	2,678.95	2,500.15	178.80	14.983	
19,300.00	9,506.00	16,685.20	6,889.00	229.56	229.50	12.04	-100.85	9,720.78	2,678.95	2,498.37	180.58	14.835	
19,400.00	9,506.00	16,785.20	6,889.00	231.85	231.79	12.04	-100.89	9,820.78	2,678.96	2,496.59	182.37	14.690	
19,500.00	9,506.00	16,885.20	6,889.00	234.13	234.09	12.04	-100.94	9,920.78	2,678.96	2,494.81	184.15	14.548	
19,600.00	9,506.00	16,985.20	6,889.00	236.42	236.38	12.04	-100.99	10,020.78	2,678.97	2,493.03	185.94	14.408	
19,628.96	9,506.00	17,014.16	6,889.00	237.08	237.05	12.04	-101.00	10,049.75	2,678.97	2,492.52	186.45	14.368	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #116H - OH - Prelim B												Offset Site Error:
Survey Program: 0 MWD+HDGM												Offset Well Error:
Reference Depth (usft)	Offset Depth (usft)	Semi-Major Axis (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		
0.00	0.00	2.00	2.00	0.00	0.00	-170.03	-620.00	-109.00	629.51			
100.00	100.00	102.00	102.00	0.13	0.14	-170.03	-620.00	-109.00	629.51	629.25	0.26 2,389.236	
200.00	200.00	202.00	202.00	0.49	0.49	-170.03	-620.00	-109.00	629.51	628.53	0.98 642.080	
300.00	300.00	302.00	302.00	0.85	0.85	-170.03	-620.00	-109.00	629.51	627.81	1.70 370.874	
400.00	400.00	402.00	402.00	1.20	1.21	-170.03	-620.00	-109.00	629.51	627.09	2.41 260.741	
500.00	500.00	502.00	502.00	1.56	1.57	-170.03	-620.00	-109.00	629.51	626.38	3.13 201.041	
600.00	600.00	602.00	602.00	1.92	1.93	-170.03	-620.00	-109.00	629.51	625.66	3.85 163.586	
700.00	700.00	702.00	702.00	2.28	2.29	-170.03	-620.00	-109.00	629.51	624.94	4.57 137.895	
800.00	800.00	802.00	802.00	2.64	2.64	-170.03	-620.00	-109.00	629.51	624.23	5.28 119.178	
900.00	900.00	902.00	902.00	3.00	3.00	-170.03	-620.00	-109.00	629.51	623.51	6.00 104.935	
1,000.00	1,000.00	1,002.00	1,002.00	3.35	3.36	-170.03	-620.00	-109.00	629.51	622.79	6.72 93.733 CC, ES	
1,100.00	1,099.98	1,101.98	1,101.98	3.71	3.72	-122.62	-620.00	-109.00	630.45	623.02	7.43 84.848	
1,200.00	1,199.84	1,201.84	1,201.84	4.07	4.08	-122.97	-620.00	-109.00	633.29	625.14	8.14 77.765	
1,300.00	1,299.53	1,301.53	1,301.53	4.42	4.44	-123.54	-620.00	-109.00	637.62	628.76	8.86 71.976	
1,400.00	1,399.20	1,401.20	1,401.20	4.78	4.79	-124.14	-620.00	-109.00	642.11	632.53	9.58 67.061	
1,500.00	1,498.88	1,500.88	1,500.88	5.14	5.15	-124.73	-620.00	-109.00	646.67	636.38	10.29 62.826	
1,600.00	1,598.55	1,581.91	1,581.90	5.51	5.43	-125.20	-621.16	-109.12	652.74	641.81	10.93 59.739	
1,700.00	1,698.23	1,662.75	1,662.66	5.87	5.69	-125.67	-624.60	-109.47	661.68	650.14	11.54 57.325	
1,800.00	1,797.90	1,743.11	1,742.82	6.24	5.96	-126.13	-630.26	-110.05	673.48	661.34	12.15 55.444	
1,900.00	1,897.58	1,822.88	1,822.19	6.60	6.22	-126.57	-638.08	-110.85	688.11	675.37	12.74 54.004	
2,000.00	1,997.26	1,901.93	1,900.61	6.97	6.48	-126.99	-648.00	-111.86	705.53	692.21	13.33 52.945	
2,100.00	2,096.93	1,980.15	1,977.91	7.34	6.75	-127.38	-659.94	-113.08	725.70	711.80	13.90 52.216	
2,200.00	2,196.61	2,057.45	2,053.94	7.71	7.03	-127.75	-673.79	-114.50	748.55	734.09	14.46 51.776	
2,300.00	2,296.28	2,135.47	2,130.27	8.08	7.31	-128.10	-689.82	-116.14	774.04	759.02	15.02 51.546	
2,400.00	2,395.96	2,231.72	2,224.22	8.45	7.67	-128.50	-710.62	-118.26	800.63	784.93	15.70 50.988	
2,500.00	2,495.63	2,327.97	2,318.18	8.82	8.04	-128.87	-731.42	-120.39	827.27	810.87	16.39 50.466	
2,600.00	2,595.31	2,424.22	2,412.13	9.19	8.42	-129.22	-752.22	-122.51	853.93	836.84	17.09 49.977	
2,700.00	2,694.99	2,520.47	2,506.08	9.56	8.80	-129.55	-773.02	-124.64	880.62	862.83	17.78 49.518	
2,800.00	2,794.66	2,616.73	2,600.04	9.93	9.19	-129.86	-793.82	-126.77	907.33	888.85	18.48 49.087	
2,900.00	2,894.34	2,712.98	2,693.99	10.30	9.59	-130.16	-814.62	-128.89	934.07	914.88	19.19 48.682	
3,000.00	2,894.01	2,809.23	2,787.94	10.67	9.99	-130.43	-835.42	-131.02	960.83	940.94	19.89 48.301	
3,100.00	3,093.69	2,905.48	2,881.90	11.04	10.40	-130.69	-856.22	-133.14	987.61	967.01	20.60 47.943	
3,200.00	3,193.36	3,001.73	2,975.85	11.41	10.81	-130.94	-877.03	-135.27	1,014.41	993.10	21.31 47.604	
3,300.00	3,293.04	3,102.01	3,069.81	11.78	11.24	-131.18	-897.83	-137.40	1,041.23	1,019.19	22.04 47.252	
3,400.00	3,392.71	3,194.24	3,163.76	12.15	11.64	-131.40	-918.63	-139.52	1,068.06	1,045.32	22.73 46.982	
3,500.00	3,492.39	3,290.49	3,257.71	12.53	12.05	-131.61	-939.43	-141.65	1,094.90	1,071.45	23.45 46.695	
3,600.00	3,592.07	3,386.74	3,351.67	12.90	12.48	-131.81	-960.23	-143.77	1,121.76	1,097.59	24.16 46.424	
3,700.00	3,691.74	3,483.00	3,445.62	13.27	12.90	-132.01	-981.03	-145.90	1,148.63	1,123.75	24.88 46.166	
3,800.00	3,791.42	3,579.25	3,539.57	13.64	13.32	-132.19	-1,001.83	-148.03	1,175.51	1,149.91	25.60 45.921	
3,900.00	3,891.09	3,675.50	3,633.53	14.01	13.75	-132.37	-1,022.63	-150.15	1,202.40	1,176.08	26.32 45.688	
4,000.00	3,990.77	3,771.75	3,727.48	14.39	14.18	-132.53	-1,043.43	-152.28	1,229.30	1,202.27	27.04 45.466	
4,100.00	4,090.44	3,868.00	3,821.43	14.76	14.61	-132.69	-1,064.23	-154.41	1,256.22	1,228.46	27.76 45.254	
4,200.00	4,190.12	3,964.26	3,915.39	15.13	15.04	-132.85	-1,085.04	-156.53	1,283.14	1,254.66	28.48 45.053	
4,300.00	4,289.80	4,060.51	4,009.34	15.50	15.47	-133.00	-1,105.84	-158.66	1,310.07	1,280.86	29.20 44.860	
4,400.00	4,389.47	4,156.76	4,103.29	15.88	15.91	-133.14	-1,126.64	-160.78	1,337.00	1,307.08	29.93 44.675	
4,500.00	4,489.15	4,253.01	4,197.25	16.25	16.34	-133.27	-1,147.44	-162.91	1,363.95	1,333.30	30.65 44.499	
4,600.00	4,588.82	4,349.26	4,291.20	16.62	16.78	-133.40	-1,168.24	-165.04	1,390.90	1,359.52	31.38 44.330	
4,700.00	4,688.50	4,445.52	4,385.15	16.99	17.22	-133.53	-1,189.04	-167.16	1,417.86	1,385.75	32.10 44.168	
4,800.00	4,788.17	4,541.77	4,479.11	17.37	17.65	-133.65	-1,209.84	-169.29	1,444.82	1,411.99	32.83 44.012	
4,900.00	4,887.85	4,638.02	4,573.06	17.74	18.09	-133.77	-1,230.64	-171.41	1,471.79	1,438.23	33.55 43.863	
5,000.00	4,987.53	4,734.27	4,667.01	18.11	18.53	-133.88	-1,251.44	-173.54	1,498.76	1,464.48	34.28 43.719	
5,100.00	5,087.20	4,830.52	4,760.97	18.48	18.97	-133.99	-1,272.24	-175.67	1,525.74	1,490.73	35.01 43.581	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #116H - OH - Prelim B														Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HDGM														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Semi-Major Axis (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		
5,200.00	5,186.88	5,018.23	4,945.19	18.86	19.80	-134.22	-1,307.86	-179.31	1,550.39	1,514.06	36.33	42.675			
5,300.00	5,286.55	5,231.50	5,156.82	19.23	20.64	-134.54	-1,333.71	-181.95	1,568.07	1,530.43	37.64	41.662			
5,400.00	5,386.23	5,449.09	5,374.13	19.60	21.39	-134.94	-1,343.88	-182.99	1,578.39	1,539.64	38.76	40.727			
5,500.00	5,485.90	5,562.87	5,487.90	19.97	21.72	-135.18	-1,344.00	-183.00	1,584.15	1,544.67	39.48	40.122			
5,600.00	5,585.58	5,662.55	5,587.58	20.35	22.02	-135.38	-1,344.00	-183.00	1,589.88	1,549.70	40.18	39.573			
5,700.00	5,685.26	5,762.22	5,687.26	20.72	22.31	-135.58	-1,344.00	-183.00	1,595.63	1,554.76	40.87	39.042			
5,800.00	5,784.93	5,861.90	5,786.93	21.09	22.61	-135.80	-1,344.00	-183.00	1,601.36	1,559.80	41.56	38.527			
5,900.00	5,884.76	5,961.73	5,886.76	21.46	22.91	-136.00	-1,344.00	-183.00	1,605.51	1,563.25	42.26	37.995			
6,000.00	5,984.73	6,061.70	5,986.73	21.81	23.21	-136.08	-1,344.00	-183.00	1,607.15	1,564.21	42.94	37.427			
6,100.00	6,084.73	6,161.70	6,086.73	22.16	23.51	-136.40	-1,344.00	-183.00	1,607.18	1,563.56	43.62	36.846			
6,200.00	6,184.73	6,261.70	6,186.73	22.50	23.82	-136.40	-1,344.00	-183.00	1,607.18	1,562.88	44.30	36.282			
6,300.00	6,284.73	6,361.70	6,286.73	22.85	24.12	-136.40	-1,344.00	-183.00	1,607.18	1,562.20	44.98	35.733			
6,400.00	6,384.73	6,439.53	6,364.50	23.19	24.37	-136.32	-1,344.20	-180.96	1,607.66	1,562.06	45.60	35.256			
6,500.00	6,484.73	6,506.84	6,431.09	23.54	24.58	-135.99	-1,345.16	-171.39	1,610.07	1,563.89	46.18	34.866			
6,600.00	6,584.73	6,571.07	6,493.16	23.89	24.77	-135.41	-1,346.79	-155.08	1,614.66	1,567.94	46.72	34.559			
6,700.00	6,684.73	6,630.96	6,549.04	24.23	24.95	-134.66	-1,348.92	-133.73	1,621.78	1,574.56	47.22	34.346			
6,800.00	6,784.73	6,685.76	6,597.97	24.58	25.10	-133.81	-1,351.37	-109.21	1,631.77	1,584.12	47.66	34.240			
6,900.00	6,884.73	6,735.23	6,639.93	24.93	25.23	-132.91	-1,353.96	-83.17	1,645.03	1,597.01	48.02	34.254			
7,000.00	6,984.73	6,779.48	6,675.43	25.28	25.35	-132.00	-1,356.59	-56.90	1,661.88	1,613.56	48.32	34.397			
7,100.00	7,084.73	6,818.84	6,705.21	25.63	25.44	-131.13	-1,359.14	-31.31	1,682.57	1,634.05	48.51	34.683			
7,200.00	7,184.73	6,850.00	6,727.49	25.97	25.52	-130.40	-1,361.30	-9.64	1,707.28	1,658.69	48.59	35.135			
7,300.00	7,284.73	6,884.74	6,750.90	26.32	25.59	-129.54	-1,363.85	15.90	1,736.08	1,687.44	48.64	35.694			
7,400.00	7,384.73	6,900.00	6,760.68	26.67	25.63	-128.15	-1,365.02	27.56	1,769.09	1,720.63	48.46	36.503			
7,500.00	7,484.73	6,936.75	6,782.92	27.02	25.72	-126.18	-1,367.92	56.65	1,805.97	1,757.55	48.42	37.300			
7,600.00	7,584.73	6,950.00	6,790.48	27.37	25.75	-124.82	-1,369.00	67.49	1,846.94	1,798.83	48.11	38.386			
7,700.00	7,684.73	6,978.20	6,805.71	27.72	25.82	-123.05	-1,371.36	91.10	1,891.62	1,843.71	47.91	39.480			
7,800.00	7,784.73	7,000.00	6,816.67	28.07	25.87	-121.44	-1,373.23	109.85	1,939.99	1,892.37	47.62	40.741			
7,900.00	7,884.73	7,000.00	6,816.67	28.42	25.87	-120.44	-1,373.23	109.85	1,991.88	1,944.79	47.09	42.296			
8,000.00	7,984.73	7,026.06	6,828.83	28.77	25.95	-119.50	-1,375.52	132.79	2,046.80	1,999.99	46.81	43.723			
8,100.00	8,084.73	7,050.00	6,839.05	29.12	26.02	-118.02	-1,377.67	154.32	2,104.94	2,058.44	46.50	45.268			
8,200.00	8,184.73	7,050.00	6,839.05	29.47	26.02	-116.02	-1,377.67	154.32	2,165.72	2,119.76	45.96	47.126			
8,300.00	8,284.73	7,050.00	6,839.05	29.82	26.02	-114.02	-1,377.67	154.32	2,229.32	2,183.90	45.42	49.081			
8,400.00	8,384.73	7,071.92	6,847.62	30.18	26.10	-112.38	-1,379.67	174.40	2,295.11	2,249.99	45.12	50.869			
8,500.00	8,484.73	7,081.12	6,850.98	30.53	26.13	-111.11	-1,380.52	182.91	2,363.26	2,318.56	44.70	52.864			
8,600.00	8,584.73	7,100.00	6,857.45	30.88	26.21	-110.56	-1,382.28	200.56	2,433.58	2,389.18	44.40	54.808			
8,700.00	8,684.73	7,100.00	6,857.45	31.23	26.21	-110.56	-1,382.28	200.56	2,505.63	2,461.68	43.94	57.018			
8,800.00	8,784.73	7,100.00	6,857.45	31.58	26.21	-110.56	-1,382.28	200.56	2,579.54	2,536.02	43.51	59.281			
8,900.00	8,884.73	7,100.00	6,857.45	31.93	26.21	-110.56	-1,382.28	200.56	2,655.16	2,612.05	43.11	61.588			
9,000.00	8,984.39	7,100.00	6,857.45	32.27	26.21	-110.56	-1,382.28	200.56	2,733.26	2,690.51	42.75	63.933			
9,100.00	9,081.39	7,128.08	6,865.99	32.59	26.33	-110.56	-1,384.94	227.18	2,812.96	2,770.24	42.72	65.853			
9,200.00	9,172.78	7,150.00	6,871.73	32.88	26.44	-110.56	-1,387.04	248.23	2,892.61	2,849.92	42.69	67.760			
9,300.00	9,255.79	7,150.00	6,871.73	33.12	26.44	-110.56	-1,387.04	248.23	2,969.20	2,926.64	42.56	69.766			
9,400.00	9,328.12	7,150.00	6,871.73	33.32	26.44	-110.56	-1,387.04	248.23	3,040.78	2,998.26	42.53	71.506			
9,500.00	9,389.92	7,178.54	6,877.99	33.62	26.61	-110.56	-1,389.81	275.93	3,101.64	3,058.87	42.77	72.519			
9,600.00	9,439.92	7,200.00	6,881.79	34.02	26.75	-110.56	-1,391.91	296.95	3,150.13	3,107.14	43.00	73.263			
9,700.00	9,476.60	7,200.00	6,881.79	34.50	26.75	-110.56	-1,391.91	296.95	3,185.15	3,142.02	43.13	73.849			
9,800.00	9,498.85	7,228.42	6,885.58	35.06	26.95	-110.56	-1,394.70	324.97	3,205.76	3,162.19	43.57	73.574			
9,900.00	9,506.00	7,250.00	6,887.53	35.70	27.12	-110.56	-1,396.84	346.36	3,211.89	3,167.84	44.05	72.922			
9,925.74	9,506.00	7,250.00	6,887.53	35.88	27.12	-110.56	-1,396.84	346.36	3,211.78	3,167.63	44.15	72.747			
10,000.00	9,506.00	7,250.00	6,887.53	36.42	27.12	-110.56	-1,396.84	346.36	3,212.64	3,168.18	44.46	72.257			
10,100.00	9,506.00	7,291.01	6,889.00	37.28	27.46	-110.56	-1,400.91	387.12	3,215.71	3,170.44	45.27	71.038			
10,200.00	9,506.00	10,200.00	6,889.00	38.24	61.68	-110.56	-1,407.89	473.36	3,220.35	3,153.50	66.84	48.177			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
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Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00'usft	North Reference:	Grid
Reference Wall:	#221H	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 - #116H - OH - Prelim B													Offset Site Error:
Survey Program: 0-MWD-HDGM													Offset Well Error:
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)	Offset Wellbore Centre E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,300.00	9,506.00	7,623.81	6,889.00	39.32	31.25	35.60	-1,415.11	719.45	3,221.14	3,172.01	49.13	65.563	
10,400.00	9,506.00	7,723.81	6,889.00	40.50	32.66	35.60	-1,415.20	819.45	3,221.18	3,170.42	50.75	63.466	
10,500.00	9,506.00	7,823.81	6,889.00	41.77	34.17	35.61	-1,415.28	919.45	3,221.21	3,168.72	52.49	61.363	
10,600.00	9,506.00	7,923.81	6,889.00	43.13	35.76	35.61	-1,415.37	1,019.45	3,221.25	3,166.91	54.34	59.280	
10,700.00	9,506.00	8,023.81	6,889.00	44.57	37.43	35.61	-1,415.45	1,119.45	3,221.28	3,165.00	56.28	57.236	
10,800.00	9,506.00	8,123.81	6,889.00	46.08	39.17	35.61	-1,415.53	1,219.45	3,221.32	3,163.01	58.31	55.248	
10,900.00	9,506.00	8,223.81	6,889.00	47.65	40.96	35.61	-1,415.62	1,319.45	3,221.36	3,160.95	60.41	53.325	
11,000.00	9,506.00	8,323.81	6,889.00	49.28	42.81	35.61	-1,415.70	1,419.45	3,221.39	3,158.81	62.58	51.474	
11,100.00	9,506.00	8,423.81	6,889.00	50.96	44.70	35.61	-1,415.79	1,519.45	3,221.43	3,156.61	64.82	49.699	
11,200.00	9,506.00	8,523.81	6,889.00	52.69	46.62	35.61	-1,415.87	1,619.45	3,221.46	3,154.35	67.11	48.002	
11,300.00	9,506.00	8,623.81	6,889.00	54.46	48.58	35.61	-1,415.96	1,719.45	3,221.50	3,152.05	69.45	46.384	
11,400.00	9,506.00	8,723.81	6,889.00	56.27	50.57	35.61	-1,416.04	1,819.45	3,221.54	3,149.69	71.84	44.842	
11,500.00	9,506.00	8,823.81	6,889.00	58.12	52.58	35.61	-1,416.13	1,919.45	3,221.57	3,147.30	74.27	43.375	
11,600.00	9,506.00	8,923.81	6,889.00	60.00	54.62	35.61	-1,416.21	2,019.45	3,221.61	3,144.87	76.74	41.981	
11,700.00	9,506.00	9,023.81	6,889.00	61.91	56.68	35.62	-1,416.30	2,119.45	3,221.64	3,142.40	79.24	40.656	
11,800.00	9,506.00	9,123.81	6,889.00	63.84	58.76	35.62	-1,416.38	2,219.45	3,221.68	3,139.90	81.78	39.397	
11,900.00	9,506.00	9,223.81	6,889.00	65.80	60.85	35.62	-1,416.46	2,319.45	3,221.71	3,137.38	84.34	38.200	
12,000.00	9,506.00	9,323.81	6,889.00	67.78	62.96	35.62	-1,416.55	2,419.45	3,221.75	3,134.83	86.92	37.064	
12,100.00	9,506.00	9,423.81	6,889.00	69.78	65.09	35.62	-1,416.63	2,519.45	3,221.79	3,132.25	89.54	35.983	
12,200.00	9,506.00	9,523.81	6,889.00	71.80	67.22	35.62	-1,416.72	2,619.45	3,221.82	3,129.65	92.17	34.956	
12,300.00	9,506.00	9,623.81	6,889.00	73.83	69.37	35.62	-1,416.80	2,719.45	3,221.86	3,127.04	94.82	33.978	
12,400.00	9,506.00	9,723.81	6,889.00	75.89	71.52	35.62	-1,416.89	2,819.45	3,221.89	3,124.40	97.49	33.047	
12,500.00	9,506.00	9,823.81	6,889.00	77.95	73.69	35.62	-1,416.97	2,919.45	3,221.93	3,121.75	100.18	32.161	
12,600.00	9,506.00	9,923.81	6,889.00	80.03	75.86	35.62	-1,417.06	3,019.45	3,221.97	3,119.08	102.88	31.316	
12,700.00	9,506.00	10,023.81	6,889.00	82.12	78.04	35.62	-1,417.14	3,119.45	3,222.00	3,116.40	105.60	30.511	
12,800.00	9,506.00	10,123.81	6,889.00	84.23	80.23	35.63	-1,417.22	3,219.45	3,222.04	3,113.70	108.33	29.742	
12,900.00	9,506.00	10,223.81	6,889.00	86.34	82.43	35.63	-1,417.31	3,319.45	3,222.07	3,110.99	111.08	29.007	
13,000.00	9,506.00	10,323.81	6,889.00	88.46	84.63	35.63	-1,417.39	3,419.45	3,222.11	3,108.28	113.83	28.306	
13,100.00	9,506.00	10,423.81	6,889.00	90.59	86.84	35.63	-1,417.48	3,519.45	3,222.14	3,105.55	116.60	27.634	
13,200.00	9,506.00	10,523.81	6,889.00	92.74	89.05	35.63	-1,417.56	3,619.45	3,222.18	3,102.81	119.37	26.992	
13,300.00	9,506.00	10,623.81	6,889.00	94.88	91.27	35.63	-1,417.65	3,719.45	3,222.22	3,100.06	122.16	26.377	
13,400.00	9,506.00	10,723.81	6,889.00	97.04	93.49	35.63	-1,417.73	3,819.45	3,222.25	3,097.30	124.95	25.788	
13,500.00	9,506.00	10,823.81	6,889.00	99.20	95.71	35.63	-1,417.82	3,919.45	3,222.29	3,094.53	127.76	25.222	
13,600.00	9,506.00	10,923.81	6,889.00	101.37	97.94	35.63	-1,417.90	4,019.45	3,222.32	3,091.76	130.56	24.680	
13,700.00	9,506.00	11,023.81	6,889.00	103.55	100.18	35.63	-1,417.98	4,119.45	3,222.36	3,088.98	133.38	24.159	
13,800.00	9,506.00	11,123.81	6,889.00	105.73	102.41	35.63	-1,418.07	4,219.45	3,222.40	3,086.19	136.20	23.659	
13,900.00	9,506.00	11,223.81	6,889.00	107.91	104.65	35.64	-1,418.15	4,319.45	3,222.43	3,083.40	139.03	23.177	
14,000.00	9,506.00	11,323.81	6,889.00	110.11	106.90	35.64	-1,418.24	4,419.45	3,222.47	3,080.60	141.87	22.714	
14,100.00	9,506.00	11,423.81	6,889.00	112.30	109.14	35.64	-1,418.32	4,519.45	3,222.50	3,077.79	144.71	22.269	
14,200.00	9,506.00	11,523.81	6,889.00	114.50	111.39	35.64	-1,418.41	4,619.45	3,222.54	3,074.98	147.56	21.839	
14,300.00	9,506.00	11,623.81	6,889.00	116.71	113.64	35.64	-1,418.49	4,719.45	3,222.57	3,072.17	150.41	21.426	
14,400.00	9,506.00	11,723.81	6,889.00	118.92	115.89	35.64	-1,418.58	4,819.45	3,222.61	3,069.35	153.26	21.027	
14,500.00	9,506.00	11,823.81	6,889.00	121.13	118.15	35.64	-1,418.66	4,919.45	3,222.65	3,066.52	156.12	20.642	
14,600.00	9,506.00	11,923.81	6,889.00	123.34	120.40	35.64	-1,418.75	5,019.45	3,222.68	3,063.69	158.99	20.270	
14,700.00	9,506.00	12,023.81	6,889.00	125.56	122.66	35.64	-1,418.83	5,119.45	3,222.72	3,060.86	161.86	19.911	
14,800.00	9,506.00	12,123.81	6,889.00	127.79	124.92	35.64	-1,418.91	5,219.45	3,222.75	3,058.03	164.73	19.564	
14,900.00	9,506.00	12,223.81	6,889.00	130.01	127.18	35.64	-1,419.00	5,319.45	3,222.79	3,055.19	167.60	19.229	
15,000.00	9,506.00	12,323.81	6,889.00	132.24	129.45	35.65	-1,419.08	5,419.45	3,222.83	3,052.34	170.48	18.904	
15,100.00	9,506.00	12,423.81	6,889.00	134.47	131.71	35.65	-1,419.17	5,519.45	3,222.86	3,049.50	173.37	18.590	
15,200.00	9,506.00	12,523.81	6,889.00	136.70	133.98	35.65	-1,419.25	5,619.45	3,222.90	3,046.65	176.25	18.286	
15,300.00	9,506.00	12,623.81	6,889.00	138.94	136.25	35.65	-1,419.34	5,719.45	3,222.93	3,043.79	179.14	17.991	
15,400.00	9,506.00	12,723.81	6,889.00	141.18	138.52	35.65	-1,419.42	5,819.45	3,222.97	3,040.94	182.03	17.706	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com - #116H - OH - Prelim B													Offset Site Error:	10.00 usft
Survey Program: 0-MWD-HDGM													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi-Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/S (usft)	+E/W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
15,500.00	9,506.00	12,823.81	6,889.00	143.42	140.79	35.65	-1,419.51	5,919.45	3,223.00	3,038.08	184.93	17.429		
15,600.00	9,506.00	12,923.81	6,889.00	145.66	143.06	35.65	-1,419.59	6,019.45	3,223.04	3,035.22	187.82	17.160		
15,700.00	9,506.00	13,023.81	6,889.00	147.91	145.34	35.65	-1,419.67	6,119.45	3,223.08	3,032.35	190.72	16.899		
15,800.00	9,506.00	13,123.81	6,889.00	150.15	147.61	35.65	-1,419.76	6,219.45	3,223.11	3,029.49	193.62	16.646		
15,900.00	9,506.00	13,223.81	6,889.00	152.40	149.89	35.65	-1,419.84	6,319.45	3,223.15	3,026.62	196.53	16.401		
16,000.00	9,506.00	13,323.81	6,889.00	154.65	152.16	35.65	-1,419.93	6,419.45	3,223.18	3,023.75	199.43	16.162		
16,100.00	9,506.00	13,423.81	6,889.00	156.90	154.44	35.65	-1,420.01	6,519.45	3,223.22	3,020.88	202.34	15.930		
16,200.00	9,506.00	13,523.81	6,889.00	159.16	156.72	35.66	-1,420.10	6,619.45	3,223.26	3,018.01	205.25	15.704		
16,300.00	9,506.00	13,623.81	6,889.00	161.41	159.00	35.66	-1,420.18	6,719.45	3,223.29	3,015.13	208.16	15.485		
16,400.00	9,506.00	13,723.81	6,889.00	163.67	161.28	35.66	-1,420.27	6,819.45	3,223.33	3,012.25	211.08	15.271		
16,500.00	9,506.00	13,823.81	6,889.00	165.93	163.56	35.66	-1,420.35	6,919.45	3,223.36	3,009.37	213.99	15.063		
16,600.00	9,506.00	13,923.81	6,889.00	168.19	165.84	35.66	-1,420.44	7,019.45	3,223.40	3,006.49	216.91	14.861		
16,700.00	9,506.00	14,023.81	6,889.00	170.45	168.12	35.66	-1,420.52	7,119.45	3,223.43	3,003.61	219.83	14.664		
16,800.00	9,506.00	14,123.81	6,889.00	172.71	170.40	35.66	-1,420.60	7,219.45	3,223.47	3,000.72	222.75	14.471		
16,900.00	9,506.00	14,223.81	6,889.00	174.97	172.69	35.66	-1,420.69	7,319.45	3,223.51	2,997.84	225.67	14.284		
17,000.00	9,506.00	14,323.81	6,889.00	177.24	174.97	35.66	-1,420.77	7,419.45	3,223.54	2,994.95	228.59	14.102		
17,100.00	9,506.00	14,423.81	6,889.00	179.50	177.26	35.66	-1,420.86	7,519.45	3,223.58	2,992.06	231.52	13.924		
17,200.00	9,506.00	14,523.81	6,889.00	181.77	179.54	35.66	-1,420.94	7,619.45	3,223.61	2,989.17	234.44	13.750		
17,300.00	9,506.00	14,623.80	6,889.00	184.04	181.83	35.67	-1,421.03	7,719.45	3,223.65	2,986.28	237.37	13.581		
17,400.00	9,506.00	14,723.80	6,889.00	186.31	184.12	35.67	-1,421.11	7,819.45	3,223.69	2,983.39	240.30	13.415		
17,500.00	9,506.00	14,823.80	6,889.00	188.58	186.40	35.67	-1,421.20	7,919.45	3,223.72	2,980.49	243.23	13.254		
17,600.00	9,506.00	14,923.80	6,889.00	190.85	188.69	35.67	-1,421.28	8,019.45	3,223.76	2,977.60	246.16	13.096		
17,700.00	9,506.00	15,023.80	6,889.00	193.12	190.98	35.67	-1,421.36	8,119.45	3,223.79	2,974.70	249.09	12.942		
17,800.00	9,506.00	15,123.80	6,889.00	195.39	193.27	35.67	-1,421.45	8,219.45	3,223.83	2,971.80	252.03	12.792		
17,900.00	9,506.00	15,223.80	6,889.00	197.66	195.56	35.67	-1,421.53	8,319.45	3,223.86	2,968.91	254.96	12.645		
18,000.00	9,506.00	15,323.80	6,889.00	199.94	197.85	35.67	-1,421.62	8,419.45	3,223.90	2,966.01	257.90	12.501		
18,100.00	9,506.00	15,423.80	6,889.00	202.21	200.14	35.67	-1,421.70	8,519.45	3,223.94	2,963.10	260.83	12.360		
18,200.00	9,506.00	15,523.80	6,889.00	204.49	202.43	35.67	-1,421.79	8,619.45	3,223.97	2,960.20	263.77	12.223		
18,300.00	9,506.00	15,623.80	6,889.00	206.77	204.72	35.67	-1,421.87	8,719.45	3,224.01	2,957.30	266.71	12.088		
18,400.00	9,506.00	15,723.80	6,889.00	209.04	207.01	35.68	-1,421.96	8,819.45	3,224.04	2,954.40	269.65	11.957		
18,500.00	9,506.00	15,823.80	6,889.00	211.32	209.30	35.68	-1,422.04	8,919.45	3,224.08	2,951.49	272.59	11.828		
18,600.00	9,506.00	15,923.80	6,889.00	213.60	211.60	35.68	-1,422.13	9,019.45	3,224.12	2,948.59	275.53	11.702		
18,700.00	9,506.00	16,023.80	6,889.00	215.88	213.89	35.68	-1,422.21	9,119.45	3,224.15	2,945.68	278.47	11.578		
18,800.00	9,506.00	16,123.80	6,889.00	218.16	216.18	35.68	-1,422.29	9,219.45	3,224.19	2,942.78	281.41	11.457		
18,900.00	9,506.00	16,223.80	6,889.00	220.44	218.47	35.68	-1,422.38	9,319.45	3,224.22	2,939.87	284.36	11.339		
19,000.00	9,506.00	16,323.80	6,889.00	222.72	220.77	35.68	-1,422.46	9,419.45	3,224.26	2,936.96	287.30	11.223		
19,100.00	9,506.00	16,423.80	6,889.00	225.00	223.06	35.68	-1,422.55	9,519.45	3,224.30	2,934.05	290.25	11.109		
19,200.00	9,506.00	16,523.80	6,889.00	227.28	225.36	35.68	-1,422.63	9,619.45	3,224.33	2,931.14	293.19	10.997		
19,300.00	9,506.00	16,623.80	6,889.00	229.56	227.65	35.68	-1,422.72	9,719.45	3,224.37	2,928.23	296.14	10.888		
19,400.00	9,506.00	16,723.80	6,889.00	231.85	229.94	35.68	-1,422.80	9,819.45	3,224.40	2,925.32	299.08	10.781		
19,500.00	9,506.00	16,823.80	6,889.00	234.13	232.24	35.69	-1,422.89	9,919.45	3,224.44	2,922.41	302.03	10.676		
19,600.00	9,506.00	16,923.80	6,889.00	236.42	234.53	35.69	-1,422.97	10,019.45	3,224.47	2,919.49	304.98	10.573		
19,628.96	9,506.00	16,952.77	6,889.00	237.08	235.20	35.69	-1,422.99	10,048.41	3,224.49	2,918.65	305.83	10.543 SF		

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - Plan 1														Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HDGM														Offset Well Error:	0.00 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.00	0.00	2.00	2.00	0.00	0.00	-171.51	-730.00	-109.00	738.09						
100.00	100.00	102.00	102.00	0.13	0.14	-171.51	-730.00	-109.00	738.09	737.83	0.26	2,801.357			
200.00	200.00	202.00	202.00	0.49	0.49	-171.51	-730.00	-109.00	738.09	737.11	0.98	752.833			
300.00	300.00	302.00	302.00	0.85	0.85	-171.51	-730.00	-109.00	738.09	736.40	1.70	434.847			
400.00	400.00	402.00	402.00	1.20	1.21	-171.51	-730.00	-109.00	738.09	735.68	2.41	305.716			
500.00	500.00	502.00	502.00	1.56	1.57	-171.51	-730.00	-109.00	738.09	734.96	3.13	235.718			
600.00	600.00	602.00	602.00	1.92	1.93	-171.51	-730.00	-109.00	738.09	734.24	3.85	191.802			
700.00	700.00	702.00	702.00	2.28	2.29	-171.51	-730.00	-109.00	738.09	733.53	4.57	161.680			
800.00	800.00	802.00	802.00	2.64	2.64	-171.51	-730.00	-109.00	738.09	732.81	5.28	139.735			
900.00	900.00	902.00	902.00	3.00	3.00	-171.51	-730.00	-109.00	738.09	732.09	6.00	123.036			
1,000.00	1,000.00	1,002.00	1,002.00	3.35	3.36	-171.51	-730.00	-109.00	738.09	731.38	6.72	109.901			
1,100.00	1,099.98	1,101.98	1,101.98	3.71	3.72	-124.08	-730.00	-109.00	739.07	731.64	7.43	99.466			
1,200.00	1,199.84	1,201.84	1,201.84	4.07	4.08	-124.36	-730.00	-109.00	742.02	733.87	8.14	91.116			
1,300.00	1,299.53	1,301.53	1,301.53	4.42	4.44	-124.84	-730.00	-109.00	746.50	737.64	8.86	84.267			
1,400.00	1,399.20	1,401.20	1,401.20	4.78	4.79	-125.34	-730.00	-109.00	751.14	741.56	9.57	78.448			
1,500.00	1,498.88	1,500.88	1,500.88	5.14	5.15	-125.84	-730.00	-109.00	755.83	745.54	10.29	73.433			
1,600.00	1,598.55	1,600.55	1,600.55	5.51	5.51	-126.33	-730.00	-109.00	760.58	749.57	11.01	69.069			
1,700.00	1,698.23	1,700.23	1,700.23	5.87	5.86	-126.81	-730.00	-109.00	765.39	753.65	11.73	65.239			
1,800.00	1,797.90	1,800.10	1,799.90	6.24	6.22	-127.29	-730.00	-109.00	770.24	757.79	12.45	61.850			
1,900.00	1,897.58	1,900.42	1,899.58	6.60	6.58	-127.76	-730.00	-109.00	775.16	761.98	13.18	58.826			
2,000.00	1,997.26	1,999.26	1,999.26	6.97	6.94	-128.23	-730.00	-109.00	780.12	766.23	13.90	56.140			
2,100.00	2,096.93	2,133.26	2,133.21	7.34	7.42	-128.77	-727.02	-109.85	782.97	768.23	14.74	53.136			
2,200.00	2,196.61	2,267.80	2,267.41	7.71	7.90	-129.16	-717.97	-112.43	781.43	765.88	15.55	50.246			
2,300.00	2,296.28	2,402.03	2,400.71	8.08	8.38	-129.40	-702.92	-116.73	775.49	759.15	16.34	47.455			
2,400.00	2,395.96	2,503.36	2,501.01	8.45	8.74	-129.52	-689.07	-120.68	767.14	750.07	17.07	44.947			
2,500.00	2,495.63	2,603.00	2,599.64	8.82	9.11	-129.63	-675.45	-124.57	758.78	740.99	17.79	42.647			
2,600.00	2,595.31	2,702.64	2,698.27	9.19	9.48	-129.76	-661.83	-128.46	750.43	731.91	18.52	40.524			
2,700.00	2,694.99	2,802.27	2,796.89	9.56	9.85	-129.88	-648.21	-132.35	742.08	722.83	19.25	38.559			
2,800.00	2,794.66	2,901.91	2,895.52	9.93	10.22	-130.01	-634.59	-136.24	733.73	713.76	19.97	36.734			
2,900.00	2,894.34	3,001.55	2,994.14	10.30	10.59	-130.14	-620.97	-140.13	725.39	704.68	20.70	35.037			
3,000.00	2,994.01	3,101.19	3,092.77	10.67	10.97	-130.27	-607.35	-144.02	717.05	695.62	21.43	33.454			
3,100.00	3,093.69	3,200.82	3,191.39	11.04	11.35	-130.40	-593.73	-147.90	708.71	686.55	22.16	31.975			
3,200.00	3,193.36	3,300.46	3,290.02	11.41	11.73	-130.54	-580.11	-151.79	700.38	677.49	22.90	30.589			
3,300.00	3,293.04	3,400.10	3,388.65	11.78	12.11	-130.69	-566.49	-155.68	692.06	668.43	23.63	29.289			
3,400.00	3,392.71	3,500.26	3,487.27	12.15	12.49	-130.83	-552.86	-159.57	683.73	659.37	24.36	28.064			
3,500.00	3,492.39	3,600.62	3,585.90	12.53	12.88	-130.98	-539.24	-163.46	675.42	650.32	25.10	26.910			
3,600.00	3,592.07	3,700.99	3,684.52	12.90	13.27	-131.14	-525.62	-167.35	667.10	641.27	25.84	25.821			
3,700.00	3,691.74	3,801.35	3,783.15	13.27	13.66	-131.29	-512.00	-171.24	658.79	632.22	26.57	24.792			
3,800.00	3,791.42	3,901.71	3,881.77	13.64	14.05	-131.45	-498.38	-175.12	650.49	623.18	27.31	23.819			
3,900.00	3,891.09	4,002.07	3,980.40	14.01	14.44	-131.62	-484.76	-179.01	642.19	614.15	28.05	22.897			
4,000.00	3,990.77	4,102.44	4,079.03	14.39	14.83	-131.79	-471.14	-182.90	633.90	605.12	28.78	22.022			
4,100.00	4,090.44	4,202.80	4,177.65	14.76	15.22	-131.96	-457.52	-186.79	625.61	596.09	29.52	21.191			
4,200.00	4,190.12	4,296.84	4,276.28	15.13	15.59	-132.14	-443.90	-190.68	617.33	587.09	30.24	20.417			
4,300.00	4,289.80	4,403.52	4,374.90	15.50	16.01	-132.33	-430.28	-194.57	609.06	578.06	31.00	19.648			
4,400.00	4,389.47	4,503.88	4,473.53	15.88	16.40	-132.51	-416.66	-198.46	600.79	569.05	31.74	18.931			
4,500.00	4,489.15	4,604.25	4,572.15	16.25	16.79	-132.71	-403.04	-202.34	592.53	560.05	32.47	18.246			
4,600.00	4,588.82	4,704.61	4,670.78	16.62	17.19	-132.91	-389.41	-206.23	584.27	551.06	33.21	17.592			
4,700.00	4,688.50	4,804.97	4,769.41	16.99	17.58	-133.11	-375.79	-210.12	576.02	542.07	33.95	16.966			
4,800.00	4,788.17	4,905.33	4,868.03	17.37	17.98	-133.32	-362.17	-214.01	567.78	533.09	34.69	16.368			
4,900.00	4,887.85	5,005.70	4,966.66	17.74	18.38	-133.54	-348.55	-217.90	559.55	524.12	35.43	15.794			
5,000.00	4,987.53	5,093.94	5,065.28	18.11	18.72	-133.77	-334.93	-221.79	551.33	515.21	36.12	15.264			
5,100.00	5,087.20	5,206.42	5,163.91	18.48	19.17	-134.00	-321.31	-225.68	543.11	506.21	36.90	14.717			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed.Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - Plan 1														Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HDGM														Offset Well Error:	0.00 usft
Reference	Offset	Semi-Major Axis		Highside		Offset Wellbore Centre		Distance		Minimum	Separation	Warning			
Measured Vertical	Measured Vertical	Reference	Offset	Reference	Offset	N/S	E/W	Centres	Ellipses	Separation	Factor				
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	(usft)	(usft)	(usft)					
5,200.00	5,186.88	5,306.78	5,262.53	18.86	19.57	-134.23	-307.69	-229.57	534.91	497.26	37.64	14.211			
5,300.00	5,286.55	5,407.14	5,361.16	19.23	19.96	-134.48	-294.07	-233.45	526.71	488.33	38.38	13.724			
5,400.00	5,386.23	5,507.51	5,459.79	19.60	20.36	-134.73	-280.45	-237.34	518.52	479.41	39.12	13.256			
5,500.00	5,485.90	5,607.87	5,558.41	19.97	20.76	-134.99	-266.83	-241.23	510.35	470.49	39.85	12.805			
5,600.00	5,585.58	5,708.23	5,657.04	20.35	21.16	-135.26	-253.21	-245.12	502.18	461.59	40.59	12.372			
5,700.00	5,685.26	5,791.41	5,755.66	20.72	21.49	-135.54	-239.58	-249.01	494.03	452.76	41.26	11.972			
5,800.00	5,784.93	5,908.96	5,854.29	21.09	21.96	-135.81	-225.96	-252.90	485.85	443.79	42.07	11.550			
5,900.00	5,884.76	6,009.45	5,952.79	21.46	22.36	-135.78	-212.36	-256.78	476.09	433.28	42.80	11.123			
6,000.00	5,984.73	6,089.78	6,051.01	21.81	22.68	-135.41	-198.79	-260.65	463.83	420.38	43.46	10.673			
6,100.00	6,084.73	6,188.77	6,148.99	22.16	23.07	-135.41	-185.26	-264.52	450.02	405.84	44.18	10.187			
6,200.00	6,184.73	6,287.76	6,246.97	22.50	23.46	-135.41	-171.73	-268.38	436.19	391.30	44.90	9.715			
6,300.00	6,284.73	6,386.74	6,344.95	22.85	23.86	-135.41	-158.20	-272.24	422.40	376.78	45.62	9.259			
6,400.00	6,384.73	6,485.73	6,442.93	23.19	24.25	-135.41	-144.67	-276.11	408.63	362.28	46.34	8.817			
6,500.00	6,484.73	6,584.71	6,540.91	23.54	24.65	-135.41	-131.14	-279.97	394.89	347.82	47.07	8.390			
6,600.00	6,584.73	6,684.40	6,633.69	23.89	25.02	-135.41	-118.61	-283.54	381.51	333.71	47.81	7.980			
6,700.00	6,684.73	6,784.63	6,721.35	24.23	25.36	-135.41	-109.06	-286.27	370.69	322.15	48.54	7.637			
6,800.00	6,784.73	6,885.40	6,809.82	24.58	25.69	-135.41	-102.08	-288.27	362.84	313.61	49.23	7.370			
6,900.00	6,884.73	6,944.53	6,898.83	24.93	26.01	-135.41	-97.72	-289.51	357.97	308.08	49.88	7.176			
7,000.00	6,984.73	7,033.86	6,988.14	25.28	26.32	-135.41	-96.02	-289.99	356.08	305.58	50.49	7.052			
7,038.43	7,023.16	7,070.88	7,025.16	25.41	26.44	-135.41	-96.00	-290.00	356.05	305.30	50.75	7.016			
7,100.00	7,084.73	7,132.45	7,086.73	25.63	26.65	-135.41	-96.00	-290.00	356.05	304.87	51.18	6.957			
7,200.00	7,184.73	7,232.45	7,186.73	25.97	26.99	-135.41	-96.00	-290.00	356.05	304.17	51.88	6.863			
7,300.00	7,284.73	7,332.84	7,287.00	26.32	27.31	-135.41	-96.00	-286.66	356.01	303.45	52.56	6.773			
7,319.98	7,304.71	7,352.71	7,306.71	26.39	27.37	-135.41	-96.00	-284.17	356.00	303.32	52.68	6.757 CC			
7,400.00	7,384.73	7,429.90	7,382.15	26.67	27.60	-135.41	-96.01	-288.08	356.40	303.27	53.12	6.709 ES, SF			
7,500.00	7,484.73	7,518.49	7,465.14	27.02	27.83	-135.41	-96.03	-237.34	359.72	306.25	53.47	6.728			
7,600.00	7,584.73	7,596.08	7,533.19	27.37	28.01	-135.41	-96.04	-200.18	369.67	316.30	53.38	6.926			
7,700.00	7,684.73	7,662.31	7,586.85	27.72	28.14	-135.41	-96.06	-161.44	389.59	336.99	52.59	7.408			
7,800.00	7,784.73	7,718.08	7,628.33	28.07	28.24	-135.41	-96.08	-124.19	421.22	370.16	51.05	8.251			
7,900.00	7,884.73	7,764.85	7,660.19	28.42	28.30	-135.41	-96.10	-89.96	464.52	415.56	48.97	9.487			
8,000.00	7,984.73	7,800.00	7,682.23	28.77	28.35	-135.41	-96.11	-62.59	518.23	471.74	46.48	11.149			
8,100.00	8,084.73	7,837.36	7,703.77	29.12	28.39	-135.41	-96.12	-32.08	580.47	536.07	44.40	13.073			
8,200.00	8,184.73	7,865.59	7,718.71	29.47	28.41	-135.41	-96.14	-8.12	649.60	607.24	42.36	15.334			
8,300.00	8,284.73	7,900.00	7,735.29	29.82	28.44	-135.41	-96.15	22.02	724.28	683.33	40.95	17.688			
8,400.00	8,384.73	7,900.00	7,735.29	30.18	28.44	-135.41	-96.15	22.02	803.04	764.29	38.75	20.725			
8,500.00	8,484.73	7,928.85	7,747.78	30.53	28.47	-135.41	-96.16	48.03	884.96	847.09	37.86	23.372			
8,600.00	8,584.73	7,950.00	7,756.09	30.88	28.55	-135.41	-96.17	67.47	969.72	932.71	37.01	26.205			
8,700.00	8,684.73	7,950.00	7,756.09	31.23	28.55	-135.41	-96.17	67.47	1,056.64	1,020.80	35.84	29.485			
8,800.00	8,784.73	7,971.31	7,763.74	31.58	28.66	-135.41	-96.18	87.37	1,145.12	1,109.71	35.41	32.338			
8,900.00	8,884.73	7,982.45	7,767.44	31.93	28.72	-135.41	-96.19	97.87	1,235.12	1,200.21	34.90	35.385			
9,000.00	8,984.39	8,000.00	7,772.85	32.27	28.83	-135.41	-96.20	114.56	1,325.33	1,290.71	34.62	38.285			
9,100.00	9,081.39	8,000.00	7,772.85	32.59	28.83	-135.41	-96.20	114.56	1,412.58	1,378.56	34.02	41.523			
9,200.00	9,172.78	8,025.00	7,779.68	32.88	28.99	-135.41	-96.21	138.62	1,494.51	1,460.62	33.89	44.102			
9,300.00	9,255.79	8,050.00	7,785.45	33.12	29.15	-135.41	-96.22	162.94	1,569.63	1,535.84	33.79	46.454			
9,400.00	9,328.12	8,050.00	7,785.45	33.32	29.15	-135.41	-96.22	162.94	1,636.40	1,602.93	33.46	48.902			
9,500.00	9,389.92	8,100.00	7,793.77	33.62	29.51	-135.41	-96.24	212.22	1,692.88	1,659.16	33.72	50.208			
9,600.00	9,439.92	8,100.00	7,793.77	34.02	29.51	-135.41	-96.24	212.22	1,737.66	1,704.17	33.49	51.882			
9,700.00	9,476.60	8,130.72	7,796.75	34.50	29.74	-135.41	-96.26	242.79	1,770.56	1,736.95	33.61	52.679			
9,800.00	9,498.85	8,174.55	7,798.72	35.06	30.09	-135.41	-96.28	286.58	1,790.79	1,756.93	33.86	52.887			
9,900.00	9,506.00	8,274.30	7,802.55	35.70	31.00	-135.41	-96.33	386.25	1,795.16	1,760.71	34.45	52.113			
10,000.00	9,506.00	8,374.22	7,806.38	36.42	32.04	-135.41	-96.38	486.10	1,791.52	1,756.41	35.11	51.023			
10,100.00	9,506.00	8,474.15	7,810.21	37.28	33.20	-135.41	-96.42	585.95	1,787.88	1,751.99	35.89	49.821			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - Plan.1													Offset Site Error:
Survey Program: 0-MWD-HDGM													Offset Well Error:
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Warning					
Measured Vertical Depth (usft)	Reference Vertical Depth (usft)	Measured Vertical Depth (usft)	Reference Vertical Depth (usft)	Reference Offset (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	9,506.00	8,574.07	7,814.05	38.24	34.48	18.19	-96.47	685.81	1,784.24	1,747.48	36.76	48.535	
10,300.00	9,506.00	8,674.00	7,817.88	39.32	35.86	18.23	-96.52	785.66	1,780.60	1,742.87	37.73	47.189	
10,400.00	9,506.00	8,773.93	7,821.71	40.50	37.32	18.27	-96.57	885.51	1,776.97	1,738.17	38.79	45.805	
10,500.00	9,506.00	8,873.85	7,825.55	41.77	38.87	18.31	-96.62	985.37	1,773.33	1,733.40	39.94	44.404	
10,600.00	9,506.00	8,973.78	7,829.38	43.13	40.49	18.35	-96.66	1,085.22	1,769.70	1,728.54	41.15	43.002	
10,700.00	9,506.00	9,073.71	7,833.22	44.57	42.18	18.39	-96.71	1,185.07	1,766.07	1,723.62	42.44	41.611	
10,800.00	9,506.00	9,173.63	7,837.05	46.08	43.92	18.43	-96.76	1,284.92	1,762.43	1,718.64	43.79	40.244	
10,900.00	9,506.00	9,273.56	7,840.88	47.65	45.71	18.47	-96.81	1,384.78	1,758.80	1,713.60	45.20	38.907	
11,000.00	9,506.00	9,373.49	7,844.72	49.28	47.54	18.51	-96.86	1,484.63	1,755.17	1,708.50	46.67	37.608	
11,100.00	9,506.00	9,473.41	7,848.55	50.96	49.41	18.55	-96.91	1,584.48	1,751.54	1,703.36	48.18	36.351	
11,200.00	9,506.00	9,573.34	7,852.38	52.69	51.32	18.59	-96.95	1,684.34	1,747.91	1,698.17	49.75	35.137	
11,300.00	9,506.00	9,673.27	7,856.22	54.46	53.26	18.63	-97.00	1,784.19	1,744.28	1,692.94	51.35	33.970	
11,400.00	9,506.00	9,773.19	7,860.05	56.27	55.23	18.67	-97.05	1,884.04	1,740.66	1,687.67	52.99	32.850	
11,500.00	9,506.00	9,873.12	7,863.88	58.12	57.20	18.70	-97.09	1,983.89	1,737.03	1,683.50	54.67	31.767	
11,600.00	9,506.00	9,973.05	7,867.71	60.00	59.17	18.74	-97.14	2,083.74	1,733.41	1,679.38	56.39	30.719	
11,700.00	9,506.00	10,072.98	7,871.54	61.91	61.14	18.78	-97.18	2,183.59	1,729.79	1,675.25	58.14	29.714	
11,800.00	9,506.00	10,172.91	7,875.37	63.84	63.17	18.82	-97.23	2,283.44	1,726.17	1,671.12	59.93	28.750	
11,900.00	9,506.00	10,272.84	7,879.20	65.80	65.14	18.86	-97.28	2,383.29	1,722.55	1,667.00	61.75	27.825	
12,000.00	9,506.00	10,372.77	7,883.03	67.78	67.12	18.90	-97.33	2,483.14	1,718.93	1,662.87	63.60	26.938	
12,100.00	9,506.00	10,472.70	7,886.86	69.78	69.06	18.94	-97.38	2,582.99	1,715.31	1,658.75	65.48	26.087	
12,200.00	9,506.00	10,572.63	7,890.69	71.80	71.09	18.98	-97.43	2,682.84	1,711.69	1,654.62	67.39	25.270	
12,300.00	9,506.00	10,672.56	7,894.52	73.83	73.12	19.02	-97.47	2,782.69	1,708.07	1,650.50	69.32	24.485	
12,400.00	9,506.00	10,772.49	7,898.35	75.89	75.18	19.06	-97.52	2,882.54	1,704.45	1,646.37	71.28	23.731	
12,500.00	9,506.00	10,872.42	7,902.18	77.95	77.24	19.10	-97.57	2,982.39	1,700.83	1,642.25	73.26	23.007	
12,600.00	9,506.00	10,972.35	7,906.01	80.03	79.32	19.14	-97.62	3,082.24	1,697.21	1,638.12	75.26	22.312	
12,700.00	9,506.00	11,072.28	7,909.84	82.12	81.41	19.18	-97.67	3,182.09	1,693.59	1,634.00	77.28	21.645	
12,800.00	9,506.00	11,172.21	7,913.67	84.23	83.52	19.22	-97.72	3,281.94	1,689.97	1,629.87	79.32	21.005	
12,900.00	9,506.00	11,272.14	7,917.50	86.34	85.63	19.26	-97.76	3,381.79	1,686.35	1,625.75	81.38	20.390	
13,000.00	9,506.00	11,372.07	7,921.33	88.46	87.75	19.30	-97.81	3,481.64	1,682.73	1,621.62	83.46	19.799	
13,100.00	9,506.00	11,471.99	7,925.16	90.59	89.88	19.34	-97.86	3,581.49	1,679.11	1,617.50	85.56	19.231	
13,200.00	9,506.00	11,571.92	7,928.99	92.74	92.03	19.38	-97.91	3,681.34	1,675.49	1,613.37	87.68	18.686	
13,300.00	9,506.00	11,671.85	7,932.82	94.88	94.17	19.42	-97.96	3,781.19	1,671.87	1,609.25	89.81	18.165	
13,400.00	9,506.00	11,771.78	7,936.65	97.04	96.33	19.46	-98.00	3,881.04	1,668.25	1,605.12	91.96	17.667	
13,500.00	9,506.00	11,871.71	7,940.48	99.20	98.50	19.50	-98.05	3,980.89	1,664.63	1,601.00	94.12	17.191	
13,600.00	9,506.00	11,971.64	7,944.31	101.37	100.67	19.54	-98.10	4,080.74	1,661.01	1,596.87	96.29	16.737	
13,700.00	9,506.00	12,071.57	7,948.14	103.55	102.85	19.58	-98.15	4,180.59	1,657.39	1,592.75	98.48	16.304	
13,800.00	9,506.00	12,171.50	7,951.97	105.73	105.03	19.62	-98.20	4,280.44	1,653.77	1,588.62	100.68	15.891	
13,900.00	9,506.00	12,271.43	7,955.80	107.91	107.21	19.66	-98.25	4,380.29	1,650.15	1,584.50	102.89	15.497	
14,000.00	9,506.00	12,371.36	7,959.63	110.11	109.41	19.70	-98.29	4,480.14	1,646.53	1,580.37	105.11	15.122	
14,100.00	9,506.00	12,471.29	7,963.46	112.30	111.60	19.74	-98.34	4,580.00	1,642.91	1,576.25	107.34	14.766	
14,200.00	9,506.00	12,571.22	7,967.29	114.50	113.80	19.78	-98.39	4,679.85	1,639.29	1,572.12	109.58	14.428	
14,300.00	9,506.00	12,671.15	7,971.12	116.71	116.01	19.82	-98.44	4,779.70	1,635.67	1,568.00	111.83	14.105	
14,400.00	9,506.00	12,771.08	7,974.95	118.92	118.22	19.86	-98.49	4,879.55	1,632.05	1,563.87	114.09	13.796	
14,500.00	9,506.00	12,871.01	7,978.78	121.13	120.43	19.90	-98.54	4,979.40	1,628.43	1,559.75	116.36	13.501	
14,600.00	9,506.00	12,970.94	7,982.61	123.34	122.64	19.94	-98.58	5,079.25	1,624.81	1,555.62	118.63	13.220	
14,700.00	9,506.00	13,070.87	7,986.44	125.56	124.86	19.98	-98.63	5,179.10	1,621.19	1,551.50	120.91	12.952	
14,800.00	9,506.00	13,170.80	7,990.27	127.79	127.09	20.02	-98.68	5,278.95	1,617.57	1,547.37	123.20	12.697	
14,900.00	9,506.00	13,270.73	7,994.10	130.01	130.31	20.06	-98.73	5,378.80	1,613.95	1,543.25	125.50	12.456	
15,000.00	9,506.00	13,370.66	7,997.93	132.24	132.54	20.10	-98.78	5,478.65	1,610.33	1,539.12	127.81	12.228	
15,100.00	9,506.00	13,470.59	8,001.76	134.47	134.77	20.14	-98.83	5,578.50	1,606.71	1,535.00	130.13	12.012	
15,200.00	9,506.00	13,570.52	8,005.59	136.70	137.00	20.18	-98.87	5,678.35	1,603.09	1,530.87	132.46	11.800	
15,300.00	9,506.00	13,670.45	8,009.42	138.94	139.24	20.22	-98.92	5,778.20	1,600.00	1,527.00	134.80	11.592	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com - #125H - OH - Plan 1														Offset Site Error:
Survey Program: O-MWD-HDGM														Offset Well Error:
Reference	Offset	Semi-Major Axis	Distance	Minimum Separation	Warning									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (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		
15,400.00	9,506.00	13,746.19	7,950.38	141.18	141.95	19.71	-98.97	5,856.01	1,654.91	1,523.27	131.64	12.572		
15,500.00	9,506.00	13,846.16	7,952.64	143.42	144.21	19.73	-99.02	5,955.95	1,652.79	1,519.00	133.79	12.354		
15,600.00	9,506.00	13,946.13	7,954.90	145.66	146.47	19.76	-99.07	6,055.90	1,650.66	1,514.73	135.94	12.143		
15,700.00	9,506.00	14,046.11	7,957.16	147.91	148.74	19.79	-99.12	6,155.85	1,648.55	1,510.45	138.09	11.938		
15,800.00	9,506.00	14,146.08	7,959.42	150.15	151.00	19.82	-99.16	6,255.80	1,646.43	1,506.17	140.25	11.739		
15,900.00	9,506.00	14,246.06	7,961.68	152.40	153.27	19.84	-99.21	6,355.75	1,644.31	1,501.89	142.42	11.545		
16,000.00	9,506.00	14,346.03	7,963.94	154.65	155.54	19.87	-99.26	6,455.70	1,642.19	1,497.60	144.59	11.357		
16,100.00	9,506.00	14,446.01	7,966.20	156.90	157.81	19.90	-99.31	6,555.65	1,640.07	1,493.30	146.77	11.175		
16,200.00	9,506.00	14,545.98	7,968.47	159.16	160.08	19.93	-99.36	6,655.60	1,637.95	1,489.01	148.95	10.997		
16,300.00	9,506.00	14,645.96	7,970.73	161.41	162.35	19.96	-99.41	6,755.54	1,635.83	1,484.70	151.13	10.824		
16,400.00	9,506.00	14,745.93	7,972.99	163.67	164.62	19.98	-99.45	6,855.49	1,633.72	1,480.40	153.32	10.655		
16,500.00	9,506.00	14,843.34	7,975.09	165.93	166.84	20.01	-99.50	6,952.88	1,631.70	1,476.22	155.48	10.495		
16,600.00	9,506.00	14,943.31	7,977.19	168.19	169.11	20.04	-99.55	7,052.83	1,629.74	1,472.06	157.67	10.336		
16,700.00	9,506.00	15,043.29	7,979.28	170.45	171.39	20.06	-99.60	7,152.79	1,627.78	1,467.91	159.87	10.182		
16,800.00	9,506.00	15,143.27	7,981.37	172.71	173.67	20.09	-99.65	7,252.75	1,625.82	1,463.75	162.07	10.032		
16,900.00	9,506.00	15,243.25	7,983.47	174.97	175.94	20.11	-99.69	7,352.70	1,623.86	1,459.59	164.27	9.885		
17,000.00	9,506.00	15,343.23	7,985.56	177.24	178.22	20.14	-99.74	7,452.66	1,621.90	1,455.43	166.48	9.742		
17,100.00	9,506.00	15,443.20	7,987.65	179.50	180.50	20.17	-99.79	7,552.61	1,619.95	1,451.26	168.69	9.603		
17,200.00	9,506.00	15,543.18	7,989.75	181.77	182.78	20.19	-99.84	7,652.57	1,617.99	1,447.08	170.91	9.467		
17,300.00	9,506.00	15,643.16	7,991.84	184.04	185.06	20.22	-99.89	7,752.53	1,616.03	1,442.91	173.13	9.334		
17,400.00	9,506.00	15,743.14	7,993.93	186.31	187.34	20.25	-99.94	7,852.48	1,614.08	1,438.73	175.35	9.205		
17,500.00	9,506.00	15,843.12	7,996.03	188.58	189.62	20.27	-99.98	7,952.44	1,612.12	1,434.54	177.58	9.078		
17,600.00	9,506.00	15,943.10	7,998.12	190.85	191.90	20.30	-100.03	8,052.39	1,610.17	1,430.36	179.81	8.955		
17,700.00	9,506.00	16,043.07	8,000.22	193.12	194.19	20.33	-100.08	8,152.35	1,608.21	1,426.16	182.05	8.834		
17,800.00	9,506.00	16,143.05	8,002.31	195.39	196.47	20.35	-100.13	8,252.31	1,606.26	1,421.97	184.29	8.716		
17,900.00	9,506.00	16,243.03	8,004.40	197.66	198.76	20.38	-100.18	8,352.26	1,604.30	1,417.77	186.53	8.601		
18,000.00	9,506.00	16,343.01	8,006.50	199.94	201.04	20.41	-100.23	8,452.22	1,602.35	1,413.57	188.78	8.488		
18,100.00	9,506.00	16,442.99	8,008.59	202.21	203.32	20.43	-100.27	8,552.18	1,600.39	1,409.37	191.03	8.378		
18,200.00	9,506.00	16,542.96	8,010.68	204.49	205.61	20.46	-100.32	8,652.13	1,598.44	1,405.16	193.28	8.270		
18,300.00	9,506.00	16,642.94	8,012.78	206.77	207.90	20.49	-100.37	8,752.09	1,596.49	1,400.95	195.54	8.164		
18,400.00	9,506.00	16,742.92	8,014.87	209.04	210.18	20.51	-100.42	8,852.04	1,594.54	1,396.73	197.80	8.061		
18,500.00	9,506.00	16,842.90	8,016.97	211.32	212.47	20.54	-100.47	8,952.00	1,592.58	1,392.51	200.07	7.960		
18,600.00	9,506.00	16,942.88	8,019.06	213.60	214.76	20.57	-100.52	9,051.96	1,590.63	1,388.29	202.34	7.861		
18,700.00	9,506.00	17,042.85	8,021.15	215.88	217.05	20.60	-100.56	9,151.91	1,588.68	1,384.07	204.61	7.764		
18,800.00	9,506.00	17,142.83	8,023.25	218.16	219.33	20.62	-100.61	9,251.87	1,586.73	1,379.84	206.89	7.669		
18,900.00	9,506.00	17,242.81	8,025.34	220.44	221.62	20.65	-100.66	9,351.82	1,584.78	1,375.61	209.17	7.576		
19,000.00	9,506.00	17,342.79	8,027.43	222.72	223.91	20.68	-100.71	9,451.78	1,582.83	1,371.37	211.46	7.485		
19,100.00	9,506.00	17,442.77	8,029.53	225.00	226.20	20.71	-100.76	9,551.74	1,580.88	1,367.13	213.74	7.396		
19,200.00	9,506.00	17,542.74	8,031.62	227.28	228.49	20.73	-100.81	9,651.69	1,578.93	1,362.89	216.04	7.309		
19,300.00	9,506.00	17,642.72	8,033.71	229.56	230.78	20.76	-100.85	9,751.65	1,576.98	1,358.64	218.33	7.223		
19,400.00	9,506.00	17,742.70	8,035.81	231.85	233.07	20.79	-100.90	9,851.60	1,575.03	1,354.40	220.63	7.139		
19,500.00	9,506.00	17,842.68	8,037.90	234.13	235.36	20.82	-100.95	9,951.56	1,573.08	1,350.14	222.94	7.056		
19,600.00	9,506.00	17,942.66	8,040.00	236.42	237.65	20.85	-101.00	10,051.52	1,571.13	1,345.89	225.24	6.975		
19,628.96	9,506.00	17,943.14	8,040.01	237.08	237.67	20.85	-101.00	10,052.00	1,570.83	1,345.29	225.53	6.965		

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #126H - OH - Plan.1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD-HDGM													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre N/S (usft)	Offset Wellbore Centre E/W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	2.00	2.00	0.00	0.00	-169.22	-730.00	-139.00	743.12				
100.00	100.00	102.00	102.00	0.13	0.14	-169.22	-730.00	-139.00	743.12	742.85	0.26	2,820.421	
200.00	200.00	202.00	202.00	0.49	0.49	-169.22	-730.00	-139.00	743.12	742.14	0.98	757.957	
300.00	300.00	302.00	302.00	0.85	0.85	-169.22	-730.00	-139.00	743.12	741.42	1.70	437.806	
400.00	400.00	402.00	402.00	1.20	1.21	-169.22	-730.00	-139.00	743.12	740.70	2.41	307.797	
500.00	500.00	502.00	502.00	1.56	1.57	-169.22	-730.00	-139.00	743.12	739.98	3.13	237.322	
600.00	600.00	602.00	602.00	1.92	1.93	-169.22	-730.00	-139.00	743.12	739.27	3.85	193.108	
700.00	700.00	702.00	702.00	2.28	2.29	-169.22	-730.00	-139.00	743.12	738.55	4.57	162.781	
800.00	800.00	802.00	802.00	2.64	2.64	-169.22	-730.00	-139.00	743.12	737.83	5.28	140.686	
900.00	900.00	902.00	902.00	3.00	3.00	-169.22	-730.00	-139.00	743.12	737.12	6.00	123.873	
1,000.00	1,000.00	1,002.00	1,002.00	3.35	3.36	-169.22	-730.00	-139.00	743.12	736.40	6.72	110.649	CC, ES
1,100.00	1,099.98	1,080.95	1,080.94	3.71	3.63	-121.74	-731.11	-139.27	745.47	738.13	7.34	101.570	
1,200.00	1,199.84	1,159.99	1,159.90	4.07	3.89	-121.88	-734.34	-140.04	752.43	744.48	7.95	94.627	
1,300.00	1,299.53	1,238.45	1,238.17	4.42	4.15	-122.20	-739.64	-141.31	763.56	755.00	8.56	89.226	
1,400.00	1,399.20	1,316.37	1,315.73	4.78	4.42	-122.56	-746.97	-143.07	777.52	768.36	9.16	84.908	
1,500.00	1,498.88	1,404.29	1,403.01	5.14	4.72	-122.95	-757.29	-145.54	793.86	784.06	9.80	81.009	
1,600.00	1,598.55	1,502.72	1,500.68	5.51	5.06	-123.36	-769.13	-148.38	810.58	800.09	10.49	77.250	
1,700.00	1,698.23	1,601.15	1,598.35	5.87	5.42	-123.75	-780.96	-151.22	827.34	816.15	11.19	73.929	
1,800.00	1,797.90	1,700.42	1,696.03	6.24	5.78	-124.13	-792.80	-154.06	844.13	832.24	11.90	70.960	
1,900.00	1,897.58	1,801.99	1,793.70	6.60	6.15	-124.50	-804.63	-156.89	860.96	848.35	12.61	68.264	
2,000.00	1,997.26	1,903.56	1,891.37	6.97	6.53	-124.85	-816.47	-159.73	877.82	864.49	13.33	65.847	
2,100.00	2,096.93	2,005.14	1,989.05	7.34	6.91	-125.18	-828.31	-162.57	894.71	880.66	14.05	63.669	
2,200.00	2,196.61	2,093.29	2,086.72	7.71	7.25	-125.51	-840.14	-165.41	911.64	896.91	14.73	61.898	
2,300.00	2,296.28	2,208.28	2,184.39	8.08	7.68	-125.82	-851.98	-168.25	928.58	913.08	15.50	59.905	
2,400.00	2,395.96	2,309.85	2,282.06	8.45	8.07	-126.12	-863.82	-171.08	945.56	929.33	16.23	58.269	
2,500.00	2,495.63	2,388.58	2,379.74	8.82	8.37	-126.42	-875.65	-173.92	962.56	945.69	16.87	57.047	
2,600.00	2,595.31	2,487.01	2,477.41	9.19	8.75	-126.70	-887.49	-176.76	979.58	961.99	17.59	55.688	
2,700.00	2,694.99	2,585.43	2,575.08	9.56	9.13	-126.97	-899.32	-179.60	996.63	978.32	18.31	54.434	
2,800.00	2,794.66	2,683.86	2,672.75	9.93	9.51	-127.23	-911.16	-182.44	1,013.69	994.66	19.03	53.273	
2,900.00	2,894.34	2,782.29	2,770.43	10.30	9.90	-127.48	-923.00	-185.27	1,030.78	1,011.03	19.75	52.196	
3,000.00	2,994.01	2,880.72	2,868.10	10.67	10.28	-127.73	-934.83	-188.11	1,047.88	1,027.41	20.47	51.193	
3,100.00	3,093.69	2,979.15	2,965.77	11.04	10.66	-127.97	-946.67	-190.95	1,065.01	1,043.82	21.19	50.259	
3,200.00	3,193.36	3,077.58	3,063.45	11.41	11.05	-128.20	-958.51	-193.79	1,082.15	1,060.23	21.91	49.385	
3,300.00	3,293.04	3,176.00	3,161.12	11.78	11.43	-128.42	-970.34	-196.63	1,099.30	1,076.67	22.63	48.567	
3,400.00	3,392.71	3,274.43	3,258.79	12.15	11.82	-128.64	-982.18	-199.46	1,116.48	1,093.12	23.36	47.798	
3,500.00	3,492.39	3,372.86	3,356.46	12.53	12.21	-128.85	-994.01	-202.30	1,133.66	1,109.58	24.08	47.076	
3,600.00	3,592.07	3,471.29	3,454.14	12.90	12.59	-129.05	-1,005.85	-205.14	1,150.86	1,126.06	24.81	46.396	
3,700.00	3,691.74	3,569.72	3,551.81	13.27	12.98	-129.25	-1,017.69	-207.98	1,168.08	1,142.55	25.53	45.754	
3,800.00	3,791.42	3,668.15	3,649.48	13.64	13.37	-129.44	-1,029.52	-210.82	1,185.31	1,159.05	26.25	45.148	
3,900.00	3,891.09	3,766.57	3,747.16	14.01	13.75	-129.63	-1,041.36	-213.65	1,202.55	1,175.57	26.98	44.574	
4,000.00	3,990.77	3,865.00	3,844.83	14.39	14.14	-129.81	-1,053.20	-216.49	1,219.80	1,192.10	27.70	44.030	
4,100.00	4,090.44	3,963.43	3,942.50	14.76	14.53	-129.98	-1,065.03	-219.33	1,237.07	1,208.64	28.43	43.513	
4,200.00	4,190.12	4,061.86	4,040.17	15.13	14.92	-130.15	-1,076.87	-222.17	1,254.34	1,225.19	29.16	43.023	
4,300.00	4,289.80	4,160.29	4,137.85	15.50	15.31	-130.32	-1,088.70	-225.01	1,271.63	1,241.75	29.88	42.556	
4,400.00	4,389.47	4,258.72	4,235.52	15.88	15.70	-130.48	-1,100.54	-227.84	1,288.92	1,258.32	30.61	42.112	
4,500.00	4,489.15	4,357.14	4,333.19	16.25	16.09	-130.64	-1,112.38	-230.68	1,306.23	1,274.90	31.33	41.688	
4,600.00	4,588.82	4,455.57	4,430.87	16.62	16.48	-130.79	-1,124.21	-233.52	1,323.55	1,291.49	32.06	41.283	
4,700.00	4,688.50	4,554.00	4,528.54	16.99	16.87	-130.94	-1,136.05	-236.36	1,340.87	1,308.08	32.79	40.896	
4,800.00	4,788.17	4,652.43	4,626.21	17.37	17.26	-131.09	-1,147.89	-239.19	1,358.20	1,324.69	33.51	40.526	
4,900.00	4,887.85	4,750.86	4,723.88	17.74	17.65	-131.23	-1,159.72	-242.03	1,375.54	1,341.30	34.24	40.172	
5,000.00	4,987.53	4,849.28	4,821.56	18.11	18.04	-131.37	-1,171.56	-244.87	1,392.89	1,357.92	34.97	39.832	
5,100.00	5,087.20	4,947.71	4,919.23	18.48	18.43	-131.50	-1,183.39	-247.71	1,410.25	1,374.55	35.70	39.507	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #126H - OH - Plan 1													Offset Site Error:
Survey Program: 0-MVD-HDGM													0.00 usft
Reference	Offset	Semi-Major Axis	Reference	Offset	Highside	Offset Wellbore Centre	Distance	Between	Between	Minimum	Separation	Warning	
Measured Vertical	Measured Vertical	Reference	Offset	Toolface	N/S	E/W	Centres	Ellipses	Separation	Factor			
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)		
5,200.00	5,186.88	5,046.14	5,016.90	18.86	18.82	-131.84	-1,195.23	-250.55	1,427.62	1,391.19	36.42	39.194	
5,300.00	5,286.55	5,144.57	5,114.58	19.23	19.21	-131.76	-1,207.07	-253.38	1,444.99	1,407.83	37.15	38.894	
5,400.00	5,386.23	5,243.00	5,212.25	19.60	19.60	-131.89	-1,218.90	-256.22	1,462.37	1,424.48	37.88	38.605	
5,500.00	5,485.90	5,341.43	5,309.92	19.97	19.99	-132.01	-1,230.74	-259.06	1,479.75	1,441.14	38.61	38.327	
5,600.00	5,585.58	5,439.85	5,407.59	20.35	20.38	-132.13	-1,242.58	-261.90	1,497.14	1,457.81	39.34	38.060	
5,700.00	5,685.26	5,538.28	5,505.27	20.72	20.77	-132.25	-1,254.41	-264.74	1,514.54	1,474.47	40.07	37.802	
5,800.00	5,784.93	5,636.72	5,602.94	21.09	21.16	-132.40	-1,266.25	-267.57	1,531.92	1,491.12	40.79	37.553	
5,900.00	5,884.76	5,735.43	5,700.90	21.46	21.56	-132.69	-1,278.12	-270.42	1,547.80	1,506.28	41.52	37.280	
6,000.00	5,984.73	5,834.50	5,799.21	21.81	21.95	-132.84	-1,290.03	-273.28	1,561.34	1,519.11	42.24	36.967	
6,100.00	6,084.73	5,933.73	5,897.68	22.16	22.34	179.71	-1,301.97	-276.14	1,573.38	1,530.44	42.95	36.634	
6,200.00	6,184.73	6,032.96	5,996.15	22.50	22.74	179.82	-1,313.90	-279.00	1,585.40	1,541.74	43.66	36.312	
6,300.00	6,284.73	6,132.19	6,094.62	22.85	23.13	179.92	-1,325.83	-281.86	1,597.43	1,553.05	44.37	36.000	
6,400.00	6,384.73	6,231.43	6,193.09	23.19	23.53	-179.97	-1,337.76	-284.72	1,609.46	1,564.37	45.09	35.697	
6,500.00	6,484.73	6,330.66	6,291.56	23.54	23.92	-179.87	-1,349.70	-287.58	1,621.49	1,575.69	45.80	35.404	
6,600.00	6,584.73	6,429.89	6,390.03	23.89	24.32	-179.77	-1,361.63	-290.44	1,633.53	1,587.02	46.51	35.119	
6,700.00	6,684.73	6,529.12	6,488.50	24.23	24.71	-179.67	-1,373.56	-293.30	1,645.57	1,598.35	47.23	34.843	
6,800.00	6,784.73	6,628.36	6,586.97	24.58	25.11	-179.58	-1,385.50	-296.17	1,657.62	1,609.68	47.94	34.576	
6,900.00	6,884.73	6,728.21	6,737.83	24.93	25.70	-179.44	-1,402.31	-300.20	1,669.04	1,620.10	48.94	34.104	
7,000.00	6,984.73	7,011.91	6,969.16	25.28	26.54	-179.35	-1,413.84	-302.96	1,674.04	1,623.86	50.18	33.364	
7,100.00	7,084.73	7,129.48	7,086.73	25.63	26.90	-179.35	-1,414.00	-303.00	1,674.11	1,623.21	50.90	32.891	
7,200.00	7,184.73	7,229.48	7,186.73	25.97	27.20	-179.35	-1,414.00	-303.00	1,674.11	1,622.54	51.57	32.462	
7,300.00	7,284.73	7,330.59	7,287.82	26.32	27.51	-179.39	-1,414.00	-301.72	1,674.10	1,621.85	52.25	32.040	
7,400.00	7,384.73	7,431.04	7,386.94	26.67	27.81	-179.92	-1,414.01	-286.30	1,674.02	1,621.10	52.92	31.635	
7,403.57	7,388.30	7,434.51	7,390.30	26.69	27.82	-179.95	-1,414.02	-285.45	1,674.02	1,621.08	52.94	31.621	
7,500.00	7,484.73	7,523.55	7,474.58	27.02	28.07	179.08	-1,414.04	-256.98	1,674.30	1,620.75	53.55	31.267	
7,600.00	7,584.73	7,604.92	7,546.90	27.37	28.26	177.80	-1,414.07	-219.83	1,675.78	1,621.64	54.14	30.955	
7,700.00	7,684.73	7,674.39	7,603.95	27.72	28.40	176.45	-1,414.11	-180.28	1,679.36	1,624.69	54.67	30.717	
7,800.00	7,784.73	7,732.76	7,647.91	28.07	28.50	175.15	-1,414.14	-141.91	1,685.88	1,630.75	55.14	30.576	
7,900.00	7,884.73	7,781.55	7,681.49	28.42	28.58	173.95	-1,414.17	-106.54	1,696.01	1,640.50	55.51	30.552	
8,000.00	7,984.73	7,822.37	7,707.20	28.77	28.63	172.88	-1,414.20	-74.83	1,710.21	1,654.43	55.78	30.658	
8,100.00	8,084.73	7,850.00	7,723.29	29.12	28.67	172.12	-1,414.22	-52.38	1,728.80	1,672.90	55.89	30.929	
8,200.00	8,184.73	7,885.81	7,742.49	29.47	28.70	171.11	-1,414.24	-22.17	1,751.86	1,695.88	55.97	31.298	
8,300.00	8,284.73	7,910.64	7,754.69	29.82	28.73	170.39	-1,414.26	-0.53	1,779.49	1,723.59	55.90	31.834	
8,400.00	8,384.73	7,932.02	7,764.43	30.18	28.75	169.76	-1,414.28	18.50	1,811.62	1,755.91	55.72	32.515	
8,500.00	8,484.73	7,950.00	7,772.06	30.53	28.77	169.22	-1,414.29	34.77	1,848.14	1,792.71	55.43	33.341	
8,600.00	8,584.73	7,966.78	7,778.73	30.88	28.79	168.71	-1,414.31	50.17	1,888.87	1,833.79	55.08	34.292	
8,700.00	8,684.73	7,981.05	7,784.03	31.23	28.81	168.28	-1,414.32	63.41	1,933.62	1,878.96	54.66	35.375	
8,800.00	8,784.73	8,000.00	7,790.57	31.58	28.84	167.70	-1,414.33	81.20	1,982.20	1,927.95	54.24	36.544	
8,900.00	8,884.73	8,000.00	7,790.57	31.93	28.84	167.70	-1,414.33	81.20	2,034.29	1,980.65	53.64	37.926	
9,000.00	8,984.39	8,016.70	7,795.85	32.27	28.86	103.87	-1,414.35	97.05	2,091.38	2,038.20	53.18	39.327	
9,100.00	9,081.39	8,031.22	7,800.05	32.59	28.90	95.44	-1,414.36	110.95	2,154.55	2,101.81	52.75	40.848	
9,200.00	9,172.78	8,050.00	7,804.97	32.88	28.95	86.08	-1,414.38	129.07	2,221.26	2,168.84	52.43	42.369	
9,300.00	9,255.79	8,050.00	7,804.97	33.12	28.95	76.91	-1,414.38	129.07	2,289.28	2,237.21	52.07	43.966	
9,400.00	9,328.12	8,100.00	7,815.13	33.32	29.18	67.15	-1,414.42	178.01	2,355.39	2,303.15	52.24	45.088	
9,500.00	9,389.92	8,100.00	7,815.13	33.62	29.18	59.31	-1,414.42	178.01	2,412.74	2,360.64	52.10	46.306	
9,600.00	9,439.92	8,130.53	7,819.23	34.02	29.37	53.96	-1,414.44	208.26	2,458.83	2,406.53	52.30	47.012	
9,700.00	9,476.60	8,150.00	7,820.99	34.50	29.51	50.57	-1,414.46	227.65	2,492.73	2,440.19	52.54	47.449	
9,800.00	9,498.85	8,204.96	7,822.93	35.06	29.93	48.65	-1,414.50	272.65	2,513.63	2,460.47	53.16	47.288	
9,900.00	9,506.00	8,305.24	7,826.06	35.70	30.83	48.10	-1,414.59	372.31	2,519.23	2,464.92	54.31	46.387	
10,000.00	9,506.00	8,394.71	7,829.20	36.42	31.76	48.16	-1,414.67	472.21	2,517.17	2,461.59	55.59	45.281	
10,100.00	9,506.00	8,505.34	7,832.35	37.28	33.06	48.21	-1,414.76	572.12	2,515.13	2,457.88	57.25	43.934	
10,200.00	9,506.00	8,605.39	7,835.49	38.24	34.35	48.27	-1,414.85	672.02	2,513.08	2,454.09	58.99	42.599	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #126H - OH - Plan 1													Offset Site Error: 0.00 usft	
Survey Program: 0-MWD-HDGM													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		N/S (usft)	E/W (usft)	Between Centres (usft)	Between Ellipses (usft)				
10,300.00	9,506.00	8,705.44	7,838.63	39.32	35.75	48.32	-1,414.93	771.92	2,511.03	2,450.13	60.91	41.228		
10,400.00	9,506.00	8,805.49	7,841.77	40.50	37.23	48.38	-1,415.02	871.82	2,508.99	2,446.02	62.97	39.845		
10,500.00	9,506.00	8,905.54	7,844.91	41.77	38.80	48.43	-1,415.11	971.72	2,506.95	2,441.78	65.17	38.468		
10,600.00	9,506.00	9,005.59	7,848.06	43.13	40.43	48.49	-1,415.19	1,071.62	2,504.91	2,437.42	67.50	37.112		
10,700.00	9,506.00	9,105.64	7,851.20	44.57	42.13	48.54	-1,415.28	1,171.52	2,502.88	2,432.94	69.94	35.788		
10,800.00	9,506.00	9,194.31	7,854.34	46.08	43.69	48.60	-1,415.37	1,271.42	2,500.85	2,428.52	72.32	34.578		
10,900.00	9,506.00	9,290.27	7,857.35	47.65	45.41	48.65	-1,415.45	1,367.33	2,498.82	2,423.93	74.90	33.363		
11,000.00	9,506.00	9,379.76	7,859.44	49.28	47.05	48.68	-1,415.53	1,456.80	2,497.31	2,419.86	77.45	32.243		
11,100.00	9,506.00	9,479.74	7,861.70	50.96	48.93	48.72	-1,415.62	1,556.75	2,495.87	2,415.64	80.23	31.110		
11,200.00	9,506.00	9,579.71	7,863.97	52.69	50.84	48.76	-1,415.70	1,656.70	2,494.42	2,411.35	83.07	30.027		
11,300.00	9,506.00	9,679.68	7,866.24	54.46	52.78	48.80	-1,415.79	1,756.64	2,492.97	2,406.99	85.98	28.995		
11,400.00	9,506.00	9,779.66	7,868.50	56.27	54.75	48.85	-1,415.88	1,856.59	2,491.53	2,402.58	88.95	28.012		
11,500.00	9,506.00	9,879.63	7,870.77	58.12	56.74	48.89	-1,415.96	1,956.54	2,490.08	2,398.12	91.96	27.077		
11,600.00	9,506.00	9,979.61	7,873.04	60.00	58.76	48.93	-1,416.05	2,056.49	2,488.64	2,393.61	95.03	26.188		
11,700.00	9,506.00	10,079.58	7,875.30	61.91	60.80	48.97	-1,416.14	2,156.44	2,487.20	2,389.06	98.14	25.344		
11,800.00	9,506.00	10,179.56	7,877.57	63.84	62.85	49.01	-1,416.22	2,256.39	2,485.76	2,384.47	101.29	24.541		
11,900.00	9,506.00	10,279.53	7,879.84	65.80	64.93	49.05	-1,416.31	2,356.34	2,484.32	2,379.85	104.48	23.779		
12,000.00	9,506.00	10,379.50	7,882.11	67.78	67.02	49.09	-1,416.40	2,456.28	2,482.88	2,375.19	107.70	23.054		
12,100.00	9,506.00	10,479.48	7,884.37	69.78	69.12	49.13	-1,416.48	2,556.23	2,481.45	2,370.50	110.95	22.366		
12,200.00	9,506.00	10,579.45	7,886.64	71.80	71.23	49.17	-1,416.57	2,656.18	2,480.01	2,365.78	114.23	21.711		
12,300.00	9,506.00	10,679.43	7,888.91	73.83	73.36	49.21	-1,416.66	2,756.13	2,478.58	2,361.04	117.54	21.087		
12,400.00	9,506.00	10,779.40	7,891.17	75.89	75.50	49.25	-1,416.74	2,856.08	2,477.15	2,356.27	120.87	20.494		
12,500.00	9,506.00	10,879.38	7,893.44	77.95	77.65	49.29	-1,416.83	2,956.03	2,475.71	2,351.48	124.23	19.928		
12,600.00	9,506.00	10,979.35	7,895.71	80.03	79.80	49.33	-1,416.92	3,055.98	2,474.28	2,346.68	127.61	19.390		
12,700.00	9,506.00	11,079.32	7,897.97	82.12	81.97	49.37	-1,417.01	3,155.92	2,472.86	2,341.85	131.01	18.875		
12,800.00	9,506.00	11,179.30	7,900.24	84.23	84.14	49.41	-1,417.09	3,255.87	2,471.43	2,337.00	134.43	18.385		
12,900.00	9,506.00	11,279.27	7,902.51	86.34	86.32	49.45	-1,417.18	3,355.82	2,470.00	2,332.14	137.87	17.916		
13,000.00	9,506.00	11,379.25	7,904.77	88.46	88.50	49.49	-1,417.27	3,455.77	2,468.58	2,327.26	141.32	17.468		
13,100.00	9,506.00	11,479.22	7,907.04	90.59	90.70	49.54	-1,417.35	3,555.72	2,467.15	2,322.36	144.79	17.040		
13,200.00	9,506.00	11,579.20	7,909.31	92.74	92.89	49.58	-1,417.44	3,655.67	2,465.73	2,317.45	148.28	16.629		
13,300.00	9,506.00	11,679.17	7,911.58	94.88	95.10	49.62	-1,417.53	3,755.62	2,464.31	2,312.53	151.78	16.236		
13,400.00	9,506.00	11,779.14	7,913.84	97.04	97.30	49.66	-1,417.61	3,855.56	2,462.89	2,307.60	155.29	15.860		
13,500.00	9,506.00	11,879.12	7,916.11	99.20	99.52	49.70	-1,417.70	3,955.51	2,461.47	2,302.65	158.82	15.499		
13,600.00	9,506.00	11,979.09	7,918.38	101.37	101.73	49.74	-1,417.79	4,055.46	2,460.05	2,297.70	162.36	15.152		
13,700.00	9,506.00	12,079.07	7,920.64	103.55	103.95	49.78	-1,417.87	4,155.41	2,458.64	2,292.73	165.91	14.819		
13,800.00	9,506.00	12,179.04	7,922.91	105.73	106.18	49.82	-1,417.96	4,255.36	2,457.22	2,287.75	169.47	14.499		
13,900.00	9,506.00	12,279.02	7,925.18	107.91	108.40	49.87	-1,418.05	4,355.31	2,455.81	2,282.76	173.05	14.192		
14,000.00	9,506.00	12,378.99	7,927.44	110.11	110.64	49.91	-1,418.13	4,455.26	2,454.40	2,277.76	176.63	13.895		
14,100.00	9,506.00	12,478.96	7,929.71	112.30	112.87	49.95	-1,418.22	4,555.20	2,452.99	2,272.76	180.23	13.610		
14,200.00	9,506.00	12,578.94	7,931.98	114.50	115.11	49.99	-1,418.31	4,655.15	2,451.58	2,267.74	183.83	13.336		
14,300.00	9,506.00	12,678.91	7,934.24	116.71	117.35	50.03	-1,418.39	4,755.10	2,450.17	2,262.72	187.45	13.071		
14,400.00	9,506.00	12,778.89	7,936.51	118.92	119.59	50.07	-1,418.48	4,855.05	2,448.76	2,257.69	191.07	12.816		
14,500.00	9,506.00	12,878.86	7,938.78	121.13	121.83	50.11	-1,418.57	4,955.00	2,447.35	2,252.65	194.70	12.570		
14,600.00	9,506.00	12,978.84	7,941.04	123.34	124.08	50.16	-1,418.66	5,054.95	2,445.95	2,247.60	198.35	12.332		
14,700.00	9,506.00	13,078.81	7,943.31	125.56	126.33	50.20	-1,418.74	5,154.89	2,444.55	2,242.55	201.99	12.102		
14,800.00	9,506.00	13,178.78	7,945.58	127.79	128.58	50.24	-1,418.83	5,254.84	2,443.14	2,237.49	205.65	11.880		
14,900.00	9,506.00	13,278.76	7,947.85	130.01	130.83	50.28	-1,418.92	5,354.79	2,441.74	2,232.43	209.32	11.665		
15,000.00	9,506.00	13,378.73	7,950.11	132.24	133.09	50.32	-1,419.00	5,454.74	2,440.34	2,227.35	212.99	11.457		
15,100.00	9,506.00	13,478.71	7,952.38	134.47	135.35	50.37	-1,419.09	5,554.69	2,438.95	2,222.27	216.67	11.256		
15,200.00	9,506.00	13,578.68	7,954.65	136.70	137.60	50.41	-1,419.18	5,654.64	2,437.55	2,217.19	220.36	11.062		
15,300.00	9,506.00	13,678.66	7,956.91	138.94	139.86	50.45	-1,419.26	5,754.59	2,436.15	2,212.10	224.06	10.873		
15,400.00	9,506.00	13,778.63	7,959.18	141.18	142.13	50.49	-1,419.35	5,854.53	2,434.76	2,207.00	227.76	10.690		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #126H - OH - Plan 1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HDGM													Offset Well Error:	0.00 usft
Reference	Offset	Semi-Major Axis		Highside		Offset Wellbore Centre		Distance		Minimum	Separation	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	N-S (usft)	E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor		
15,500.00	9,506.00	13,878.60	7,961.45	143.42	144.39	50.53	-1,419.44	5,954.48	2,433.37	2,201.90	231.47	10.513		
15,600.00	9,506.00	13,978.58	7,963.71	145.66	146.65	50.58	-1,419.52	6,054.43	2,431.98	2,196.79	235.18	10.341		
15,700.00	9,506.00	14,078.55	7,965.98	147.91	148.92	50.62	-1,419.61	6,154.38	2,430.59	2,191.68	238.90	10.174		
15,800.00	9,506.00	14,178.53	7,968.25	150.15	151.19	50.66	-1,419.70	6,254.33	2,429.20	2,186.56	242.63	10.012		
15,900.00	9,506.00	14,278.50	7,970.51	152.40	153.46	50.70	-1,419.78	6,354.28	2,427.81	2,181.44	246.37	9.854		
16,000.00	9,506.00	14,378.48	7,972.78	154.65	155.73	50.75	-1,419.87	6,454.23	2,426.42	2,176.31	250.11	9.701		
16,100.00	9,506.00	14,478.45	7,975.05	156.90	158.00	50.79	-1,419.96	6,554.17	2,425.04	2,171.18	253.86	9.553		
16,200.00	9,506.00	14,578.42	7,977.31	159.16	160.27	50.83	-1,420.05	6,654.12	2,423.65	2,166.05	257.61	9.408		
16,300.00	9,506.00	14,678.40	7,979.58	161.41	162.54	50.87	-1,420.13	6,754.07	2,422.27	2,160.90	261.37	9.268		
16,400.00	9,506.00	14,778.37	7,981.85	163.67	164.81	50.92	-1,420.22	6,854.02	2,420.89	2,155.76	265.13	9.131		
16,500.00	9,506.00	14,878.35	7,984.12	165.93	167.09	50.96	-1,420.31	6,953.97	2,419.51	2,150.61	268.90	8.998		
16,600.00	9,506.00	14,978.32	7,986.38	168.19	169.36	51.00	-1,420.39	7,053.92	2,418.13	2,145.45	272.68	8.868		
16,700.00	9,506.00	15,078.30	7,988.65	170.45	171.64	51.04	-1,420.48	7,153.87	2,416.76	2,140.30	276.46	8.742		
16,800.00	9,506.00	15,178.27	7,990.92	172.71	173.92	51.09	-1,420.57	7,253.81	2,415.38	2,135.13	280.25	8.619		
16,900.00	9,506.00	15,278.24	7,993.18	174.97	176.20	51.13	-1,420.65	7,353.76	2,414.01	2,129.97	284.04	8.499		
17,000.00	9,506.00	15,378.22	7,995.45	177.24	178.48	51.17	-1,420.74	7,453.71	2,412.63	2,124.79	287.84	8.382		
17,100.00	9,506.00	15,478.19	7,997.72	179.50	180.75	51.21	-1,420.83	7,553.66	2,411.26	2,119.62	291.64	8.268		
17,200.00	9,506.00	15,578.17	7,999.98	181.77	183.04	51.26	-1,420.91	7,653.61	2,409.89	2,114.44	295.45	8.157		
17,300.00	9,506.00	15,678.14	8,002.25	184.04	185.32	51.30	-1,421.00	7,753.56	2,408.52	2,109.26	299.27	8.048		
17,400.00	9,506.00	15,778.12	8,004.52	186.31	187.60	51.34	-1,421.09	7,853.51	2,407.16	2,104.07	303.09	7.942		
17,500.00	9,506.00	15,878.09	8,006.78	188.58	189.88	51.39	-1,421.17	7,953.45	2,405.79	2,098.88	306.91	7.839		
17,600.00	9,506.00	15,978.06	8,009.05	190.85	192.16	51.43	-1,421.26	8,053.40	2,404.43	2,093.69	310.74	7.738		
17,700.00	9,506.00	16,078.04	8,011.32	193.12	194.45	51.47	-1,421.35	8,153.35	2,403.06	2,088.49	314.57	7.639		
17,800.00	9,506.00	16,178.01	8,013.59	195.39	196.73	51.52	-1,421.43	8,253.30	2,401.70	2,083.29	318.41	7.543		
17,900.00	9,506.00	16,277.99	8,015.85	197.66	199.02	51.56	-1,421.52	8,353.25	2,400.34	2,078.08	322.26	7.449		
18,000.00	9,506.00	16,377.96	8,018.12	199.94	201.30	51.60	-1,421.61	8,453.20	2,398.98	2,072.87	326.11	7.356		
18,100.00	9,506.00	16,477.94	8,020.39	202.21	203.59	51.65	-1,421.70	8,553.14	2,397.62	2,067.66	329.96	7.266		
18,200.00	9,506.00	16,577.91	8,022.65	204.49	205.87	51.69	-1,421.78	8,653.09	2,396.27	2,062.45	333.82	7.178		
18,300.00	9,506.00	16,677.88	8,024.92	206.77	208.16	51.73	-1,421.87	8,753.04	2,394.91	2,057.23	337.68	7.092		
18,400.00	9,506.00	16,777.86	8,027.19	209.04	210.45	51.78	-1,421.96	8,852.99	2,393.56	2,052.01	341.55	7.008		
18,500.00	9,506.00	16,877.83	8,029.45	211.32	212.73	51.82	-1,422.04	8,952.94	2,392.21	2,046.78	345.43	6.925		
18,600.00	9,506.00	16,977.81	8,031.72	213.60	215.02	51.86	-1,422.13	9,052.89	2,390.86	2,041.55	349.30	6.845		
18,700.00	9,506.00	17,077.78	8,033.99	215.88	217.31	51.91	-1,422.22	9,152.84	2,389.51	2,036.32	353.19	6.766		
18,800.00	9,506.00	17,177.76	8,036.25	218.16	219.60	51.95	-1,422.30	9,252.78	2,388.16	2,031.09	357.07	6.688		
18,900.00	9,506.00	17,277.73	8,038.52	220.44	221.89	52.00	-1,422.39	9,352.73	2,386.81	2,025.85	360.96	6.612		
19,000.00	9,506.00	17,377.70	8,040.79	222.72	224.18	52.04	-1,422.48	9,452.68	2,385.47	2,020.61	364.86	6.538		
19,100.00	9,506.00	17,477.68	8,043.05	225.00	226.47	52.08	-1,422.56	9,552.63	2,384.12	2,015.36	368.76	6.465		
19,200.00	9,506.00	17,577.65	8,045.32	227.28	228.76	52.13	-1,422.65	9,652.58	2,382.78	2,010.11	372.67	6.394		
19,300.00	9,506.00	17,677.63	8,047.59	229.56	231.05	52.17	-1,422.74	9,752.53	2,381.44	2,004.86	376.58	6.324		
19,400.00	9,506.00	17,777.60	8,049.86	231.85	233.34	52.22	-1,422.82	9,852.48	2,380.10	1,999.61	380.49	6.255		
19,500.00	9,506.00	17,877.58	8,052.12	234.13	235.63	52.26	-1,422.91	9,952.42	2,378.76	1,994.35	384.41	6.188		
19,600.00	9,506.00	17,977.55	8,054.39	236.42	237.92	52.30	-1,423.00	10,052.37	2,377.42	1,989.09	388.33	6.122		
19,628.96	9,506.00	17,980.18	8,054.45	237.08	237.98	52.30	-1,423.00	10,055.00	2,377.18	1,988.22	388.97	6.112 SF		

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0:00 usft	North Reference:	Grid
Reference Well:	#221H	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 #136H -OH- Prelim B												Offset Site Error:	0:00 usft
Survey Program: 0-MWD-HDGM												Offset Well Error:	0:00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Semi-Major Axis (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	2.00	2.00	0.00	0.00	-171.15	-700.00	-109.00	708.44				
100.00	100.00	102.00	102.00	0.13	0.14	-171.15	-700.00	-109.00	708.44	708.17	0.26	2,688.796	
200.00	200.00	202.00	202.00	0.49	0.49	-171.15	-700.00	-109.00	708.44	707.46	0.98	722.584	
300.00	300.00	302.00	302.00	0.85	0.85	-171.15	-700.00	-109.00	708.44	706.74	1.70	417.374	
400.00	400.00	402.00	402.00	1.20	1.21	-171.15	-700.00	-109.00	708.44	706.02	2.41	293.432	
500.00	500.00	502.00	502.00	1.56	1.57	-171.15	-700.00	-109.00	708.44	705.30	3.13	226.247	
600.00	600.00	602.00	602.00	1.92	1.93	-171.15	-700.00	-109.00	708.44	704.59	3.85	184.096	
700.00	700.00	702.00	702.00	2.28	2.29	-171.15	-700.00	-109.00	708.44	703.87	4.57	155.184	
800.00	800.00	802.00	802.00	2.64	2.64	-171.15	-700.00	-109.00	708.44	703.15	5.28	134.121	
900.00	900.00	902.00	902.00	3.00	3.00	-171.15	-700.00	-109.00	708.44	702.44	6.00	118.092	
1,000.00	1,000.00	1,002.08	1,002.08	3.35	3.36	-171.15	-700.00	-109.00	708.44	701.72	6.72	105.484	
1,000.81	1,000.81	1,002.92	1,002.92	3.36	3.36	-123.62	-700.00	-109.00	708.44	701.71	6.72	105.392 CC	
1,100.00	1,099.98	1,105.92	1,105.89	3.71	3.73	-123.89	-700.00	-107.04	709.12	701.68	7.44	95.369 ES	
1,200.00	1,199.84	1,205.36	1,205.27	4.07	4.07	-124.47	-700.00	-103.58	711.56	703.43	8.13	87.489	
1,300.00	1,299.53	1,304.78	1,304.64	4.42	4.41	-125.25	-700.00	-100.11	715.62	706.78	8.84	80.987	
1,400.00	1,399.20	1,404.19	1,403.99	4.78	4.76	-126.04	-700.00	-96.64	719.90	710.36	9.54	75.442	
1,500.00	1,498.88	1,503.60	1,503.33	5.14	5.11	-126.82	-700.00	-93.17	724.33	714.08	10.25	70.652	
1,600.00	1,598.55	1,603.01	1,602.68	5.51	5.46	-127.60	-700.00	-89.70	728.89	717.93	10.96	66.480	
1,700.00	1,698.23	1,702.42	1,702.03	5.87	5.81	-128.36	-700.00	-86.23	733.59	721.91	11.68	62.818	
1,800.00	1,797.90	1,801.82	1,801.38	6.24	6.16	-129.12	-700.00	-82.76	738.41	726.02	12.39	59.581	
1,900.00	1,897.58	1,901.23	1,900.72	6.60	6.52	-129.87	-700.00	-79.29	743.36	730.25	13.11	56.701	
2,000.00	1,997.26	2,000.64	2,000.07	6.97	6.87	-130.60	-700.00	-75.82	748.44	734.61	13.83	54.125	
2,100.00	2,096.93	2,100.05	2,099.42	7.34	7.22	-131.33	-700.00	-72.35	753.64	739.09	14.55	51.809	
2,200.00	2,196.61	2,199.45	2,198.76	7.71	7.58	-132.04	-700.00	-68.88	758.96	743.69	15.27	49.716	
2,300.00	2,296.28	2,282.41	2,281.69	8.08	7.87	-132.57	-700.88	-66.75	765.45	749.53	15.91	48.101	
2,400.00	2,395.96	2,365.13	2,364.36	8.45	8.15	-132.98	-703.57	-66.19	774.18	757.63	16.55	46.792	
2,500.00	2,495.63	2,447.67	2,446.76	8.82	8.43	-133.26	-708.06	-67.18	785.09	767.93	17.16	45.739	
2,600.00	2,595.31	2,537.47	2,528.00	9.19	8.73	-133.42	-714.24	-69.68	798.15	780.35	17.80	44.846	
2,700.00	2,694.99	2,628.16	2,626.51	9.56	9.03	-133.53	-722.93	-73.73	812.36	793.89	18.46	43.998	
2,800.00	2,794.66	2,727.13	2,725.02	9.93	9.36	-133.64	-731.61	-77.79	826.57	807.41	19.16	43.141	
2,900.00	2,894.34	2,826.11	2,823.53	10.30	9.70	-133.74	-740.29	-81.84	840.78	820.92	19.86	42.339	
3,000.00	2,994.01	2,925.08	2,922.04	10.67	10.04	-133.84	-748.97	-85.89	854.99	834.43	20.56	41.587	
3,100.00	3,093.69	3,024.05	3,020.55	11.04	10.38	-133.94	-757.66	-89.95	869.21	847.95	21.26	40.880	
3,200.00	3,193.36	3,123.03	3,119.06	11.41	10.73	-134.03	-766.34	-94.00	883.43	861.46	21.97	40.216	
3,300.00	3,293.04	3,222.00	3,217.57	11.78	11.08	-134.12	-775.02	-98.06	897.65	874.97	22.67	39.590	
3,400.00	3,392.71	3,320.98	3,316.07	12.15	11.43	-134.21	-783.70	-102.11	911.87	888.49	23.38	39.000	
3,500.00	3,492.39	3,419.95	3,414.58	12.53	11.78	-134.29	-792.39	-106.16	926.10	902.01	24.09	38.442	
3,600.00	3,592.07	3,518.92	3,513.09	12.90	12.14	-134.38	-801.07	-110.22	940.32	915.52	24.80	37.914	
3,700.00	3,691.74	3,617.90	3,611.60	13.27	12.49	-134.46	-809.75	-114.27	954.55	929.04	25.51	37.414	
3,800.00	3,791.42	3,716.87	3,710.11	13.64	12.85	-134.53	-818.44	-118.32	968.78	942.56	26.23	36.939	
3,900.00	3,891.09	3,815.84	3,808.62	14.01	13.21	-134.61	-827.12	-122.38	983.02	956.08	26.94	36.489	
4,000.00	3,990.77	3,914.82	3,907.13	14.39	13.57	-134.68	-835.80	-126.43	997.25	969.60	27.66	36.060	
4,100.00	4,090.44	4,013.79	4,005.64	14.76	13.93	-134.75	-844.48	-130.48	1,011.49	983.12	28.37	35.652	
4,200.00	4,190.12	4,112.77	4,104.15	15.13	14.30	-134.82	-853.17	-134.54	1,025.72	996.64	29.09	35.263	
4,300.00	4,289.80	4,211.74	4,202.65	15.50	14.66	-134.89	-861.85	-138.59	1,039.96	1,010.16	29.80	34.892	
4,400.00	4,389.47	4,310.71	4,301.16	15.88	15.03	-134.96	-870.53	-142.65	1,054.20	1,023.68	30.52	34.538	
4,500.00	4,489.15	4,409.69	4,399.67	16.25	15.39	-135.02	-879.21	-146.70	1,068.44	1,037.20	31.24	34.199	
4,600.00	4,588.82	4,508.66	4,498.18	16.62	15.76	-135.08	-887.90	-150.75	1,082.69	1,050.73	31.96	33.875	
4,700.00	4,688.50	4,607.63	4,596.69	16.99	16.12	-135.14	-896.58	-154.81	1,096.93	1,064.25	32.68	33.565	
4,800.00	4,788.17	4,706.61	4,695.20	17.37	16.49	-135.20	-905.26	-158.86	1,111.18	1,077.77	33.40	33.268	
4,900.00	4,887.85	4,805.58	4,793.71	17.74	16.86	-135.26	-913.94	-162.91	1,125.42	1,091.30	34.12	32.982	
5,000.00	4,987.53	4,904.56	4,892.22	18.11	17.23	-135.31	-922.63	-166.97	1,139.67	1,104.83	34.84	32.708	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com - #136H - OH - Prelim B													Offset Site Error:
Survey Program: 0-MWD-HDGM													Offset Well Error:
Reference	Offset	Semi-Major Axis	Distance	Warning									
Measured Vertical	Measured Vertical	Reference	Offset	Highside	Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	N/S (usft)	E/W (usft)	(usft)	(usft)	(usft)			
5,100.00	5,087.20	5,003.53	4,990.73	18.48	17.60	-135.37	-931.31	-171.02	1,153.92	1,118.35	35.57	32.445	
5,200.00	5,186.88	5,102.50	5,089.23	18.86	17.97	-135.42	-939.99	-175.07	1,168.17	1,131.88	36.29	32.192	
5,300.00	5,286.55	5,201.48	5,187.74	19.23	18.34	-135.47	-948.67	-179.13	1,182.42	1,145.41	37.01	31.949	
5,400.00	5,386.23	5,300.45	5,286.25	19.60	18.71	-135.52	-957.36	-183.18	1,196.67	1,158.93	37.73	31.714	
5,500.00	5,485.90	5,400.58	5,384.76	19.97	19.08	-135.57	-966.04	-187.24	1,210.92	1,172.46	38.46	31.485	
5,600.00	5,585.58	5,501.60	5,483.27	20.35	19.46	-135.62	-974.72	-191.29	1,225.17	1,185.98	39.19	31.261	
5,700.00	5,685.26	5,602.63	5,581.78	20.72	19.84	-135.67	-983.41	-195.34	1,239.43	1,199.50	39.92	31.045	
5,800.00	5,784.93	5,703.65	5,680.29	21.09	20.22	-135.75	-992.09	-199.40	1,253.65	1,213.00	40.65	30.837	
5,900.00	5,884.76	5,804.46	5,779.02	21.46	20.60	-135.90	-1,000.79	-203.46	1,266.28	1,224.90	41.38	30.600	
6,000.00	5,984.73	5,905.02	5,877.98	21.81	20.98	-135.90	-1,009.51	-207.53	1,276.43	1,234.33	42.10	30.319	
6,100.00	6,084.73	5,994.51	5,977.05	22.16	21.32	-176.76	-1,018.24	-211.61	1,284.98	1,242.21	42.77	30.042	
6,200.00	6,184.73	6,105.96	6,076.11	22.50	21.74	176.96	-1,026.98	-215.68	1,293.53	1,250.00	43.52	29.719	
6,300.00	6,284.73	6,206.43	6,175.17	22.85	22.11	177.16	-1,035.71	-219.76	1,302.09	1,257.85	44.24	29.434	
6,400.00	6,384.73	6,306.90	6,274.23	23.19	22.49	177.36	-1,044.44	-223.84	1,310.66	1,265.71	44.95	29.158	
6,500.00	6,484.73	6,407.37	6,373.30	23.54	22.87	177.55	-1,053.17	-227.91	1,319.25	1,273.59	45.66	28.890	
6,600.00	6,584.73	6,507.84	6,472.36	23.89	23.25	177.75	-1,061.90	-231.99	1,327.86	1,281.48	46.38	28.631	
6,700.00	6,684.73	6,608.31	6,571.42	24.23	23.63	177.94	-1,070.63	-236.07	1,336.48	1,289.39	47.09	28.380	
6,800.00	6,784.73	6,708.78	6,670.48	24.58	24.01	178.12	-1,079.36	-240.14	1,345.11	1,297.31	47.81	28.137	
6,900.00	6,884.73	6,790.75	6,769.55	24.93	24.32	178.31	-1,088.10	-244.22	1,353.76	1,305.31	48.45	27.939	
7,000.00	6,984.73	6,909.72	6,868.61	25.28	24.78	178.49	-1,096.83	-248.30	1,362.43	1,313.19	49.24	27.671	
7,100.00	7,084.73	6,989.81	6,967.67	25.63	25.08	178.67	-1,105.56	-252.37	1,371.10	1,321.23	49.88	27.490	
7,200.00	7,184.73	7,089.34	7,066.73	25.97	25.46	178.85	-1,114.29	-256.45	1,379.79	1,329.20	50.59	27.274	
7,300.00	7,284.73	7,188.87	7,165.80	26.32	25.83	179.03	-1,123.02	-260.53	1,388.50	1,337.20	51.30	27.065	
7,400.00	7,384.73	7,288.40	7,264.86	26.67	26.21	179.20	-1,131.75	-264.60	1,397.21	1,345.20	52.01	26.862	
7,500.00	7,484.73	7,387.93	7,363.92	27.02	26.59	179.37	-1,140.48	-268.68	1,405.94	1,353.21	52.73	26.664	
7,600.00	7,584.73	7,487.46	7,462.99	27.37	26.97	179.54	-1,149.22	-272.75	1,414.68	1,361.24	53.44	26.472	
7,700.00	7,684.73	7,586.99	7,562.05	27.72	27.35	179.71	-1,157.95	-276.83	1,423.44	1,369.28	54.15	26.285	
7,800.00	7,784.73	7,686.52	7,661.11	28.07	27.72	179.88	-1,166.68	-280.91	1,432.20	1,377.33	54.87	26.103	
7,900.00	7,884.73	7,786.05	7,760.17	28.42	28.10	-179.96	-1,175.41	-284.98	1,440.98	1,385.40	55.58	25.926	
8,000.00	7,984.73	7,885.58	7,859.24	28.77	28.48	-179.80	-1,184.14	-289.06	1,449.77	1,393.47	56.29	25.753	
8,100.00	8,084.73	7,985.11	7,958.30	29.12	28.86	-179.64	-1,192.87	-293.14	1,458.57	1,401.56	57.01	25.585	
8,200.00	8,184.73	8,084.64	8,057.36	29.47	29.24	-179.48	-1,201.60	-297.21	1,467.38	1,409.66	57.72	25.421	
8,300.00	8,284.73	8,270.09	8,242.38	29.82	29.92	-179.29	-1,212.58	-302.34	1,473.37	1,414.50	58.46	25.031	
8,400.00	8,384.73	8,414.46	8,386.73	30.18	30.41	-179.26	-1,214.00	-303.00	1,474.12	1,414.41	59.71	24.688	
8,500.00	8,484.73	8,514.46	8,486.73	30.53	30.73	-179.26	-1,214.00	-303.00	1,474.12	1,413.73	60.39	24.408	
8,504.47	8,489.20	8,518.93	8,491.20	30.54	30.75	-179.26	-1,214.00	-303.00	1,474.12	1,413.70	60.42	24.396	
8,600.00	8,584.73	8,600.00	8,572.25	30.88	31.01	-179.30	-1,214.24	-301.94	1,474.42	1,413.39	61.04	24.157	
8,700.00	8,684.73	8,660.93	8,632.75	31.23	31.21	-179.57	-1,215.80	-295.15	1,476.83	1,415.25	61.58	23.983	
8,800.00	8,784.73	8,722.58	8,692.86	31.58	31.40	179.92	-1,218.82	-281.95	1,481.80	1,419.72	62.08	23.868	
8,900.00	8,884.73	8,780.70	8,747.90	31.93	31.58	179.22	-1,222.98	-263.80	1,489.60	1,427.08	62.52	23.825	
9,000.00	8,984.39	8,835.58	8,797.88	32.27	31.73	119.94	-1,228.02	-241.77	1,503.95	1,441.07	62.88	23.918	
9,100.00	9,081.39	8,888.40	8,843.74	32.59	31.87	116.99	-1,233.87	-216.25	1,529.78	1,466.62	63.16	24.222	
9,200.00	9,172.78	8,938.84	8,885.10	32.88	31.98	113.07	-1,240.31	-188.14	1,565.90	1,502.52	63.38	24.708	
9,300.00	9,255.79	8,986.73	8,921.88	33.12	32.09	108.15	-1,247.15	-158.26	1,610.74	1,547.17	63.57	25.339	
9,400.00	9,328.12	9,032.25	8,954.36	33.32	32.17	100.28	-1,254.27	-127.19	1,661.79	1,598.02	63.77	26.059	
9,500.00	9,389.92	9,078.02	8,984.35	33.62	32.25	91.04	-1,261.98	-93.51	1,709.65	1,645.62	64.03	26.701	
9,600.00	9,439.92	9,124.83	9,012.08	34.02	32.33	84.47	-1,270.40	-56.76	1,751.09	1,686.69	64.40	27.190	
9,700.00	9,476.60	9,172.81	9,037.21	34.50	32.42	80.02	-1,279.52	-16.94	1,785.20	1,720.29	64.91	27.502	
9,800.00	9,498.85	9,222.04	9,059.35	35.06	32.54	77.35	-1,289.33	25.91	1,811.29	1,745.69	65.59	27.613	
9,900.00	9,506.00	9,272.60	9,078.07	35.70	32.74	76.27	-1,299.81	71.67	1,828.87	1,762.43	66.45	27.524	
10,000.00	9,506.00	9,325.39	9,093.13	36.42	33.02	76.82	-1,311.10	120.98	1,843.83	1,776.38	67.45	27.335	
10,100.00	9,506.00	9,380.71	9,103.84	37.28	33.36	77.23	-1,323.21	173.85	1,861.29	1,792.70	68.59	27.136	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #136H - OH - Prelim B													Offset Site Error:	0.00usft
Survey Program: 0-MWD-HDGM													Offset Well Error:	0.00usft
Reference	Offset	Semi Major Axis		Distance		Minimum		Separation		Warning				
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre	Between	Between	Minimum	Separation			
Depth	Depth	Depth	Depth	Depth	Depth	Toolface	N/S	E/W	Centres	Ellipses	Separation			
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
10,200.00	9,506.00	9,437.64	9,109.36	38.24	33.75	77.49	-1,335.86	229.07	1,881.03	1,811.19	69.84	26.933		
10,300.00	9,506.00	9,611.49	9,110.00	39.32	35.18	77.74	-1,370.99	399.30	1,901.31	1,828.95	72.36	26.274		
10,400.00	9,506.00	9,896.06	9,110.00	40.50	38.27	77.96	-1,406.25	681.55	1,913.42	1,836.73	76.70	24.948		
10,500.00	9,506.00	10,133.95	9,110.00	41.77	41.41	78.01	-1,414.24	919.24	1,916.13	1,835.10	81.02	23.649		
10,600.00	9,506.00	10,233.94	9,110.00	43.13	42.86	78.01	-1,414.34	1,019.24	1,916.20	1,832.40	83.80	22.867		
10,700.00	9,506.00	10,333.94	9,110.00	44.57	44.38	78.01	-1,414.43	1,119.24	1,916.27	1,829.56	86.71	22.099		
10,800.00	9,506.00	10,433.94	9,110.00	46.08	45.97	78.01	-1,414.53	1,219.24	1,916.34	1,826.58	89.77	21.348		
10,900.00	9,506.00	10,533.94	9,110.00	47.65	47.61	78.01	-1,414.62	1,319.24	1,916.41	1,823.48	92.94	20.621		
11,000.00	9,506.00	10,633.94	9,110.00	49.28	49.31	78.01	-1,414.72	1,419.24	1,916.49	1,820.27	96.22	19.918		
11,100.00	9,506.00	10,733.94	9,110.00	50.96	51.05	78.01	-1,414.82	1,519.24	1,916.56	1,816.96	99.60	19.243		
11,200.00	9,506.00	10,833.94	9,110.00	52.69	52.84	78.01	-1,414.91	1,619.24	1,916.63	1,813.57	103.06	18.597		
11,300.00	9,506.00	10,933.94	9,110.00	54.46	54.67	78.02	-1,415.01	1,719.24	1,916.70	1,810.09	106.61	17.979		
11,400.00	9,506.00	11,033.94	9,110.00	56.27	56.53	78.02	-1,415.10	1,819.24	1,916.77	1,806.55	110.23	17.390		
11,500.00	9,506.00	11,133.94	9,110.00	58.12	58.43	78.02	-1,415.20	1,919.24	1,916.84	1,802.93	113.91	16.828		
11,600.00	9,506.00	11,233.94	9,110.00	60.00	60.35	78.02	-1,415.30	2,019.24	1,916.91	1,799.26	117.65	16.293		
11,700.00	9,506.00	11,333.94	9,110.00	61.91	62.30	78.02	-1,415.39	2,119.24	1,916.98	1,795.54	121.44	15.785		
11,800.00	9,506.00	11,433.94	9,110.00	63.84	64.27	78.02	-1,415.49	2,219.24	1,917.06	1,791.77	125.29	15.301		
11,900.00	9,506.00	11,533.94	9,110.00	65.80	66.27	78.02	-1,415.58	2,319.24	1,917.13	1,787.95	129.18	14.841		
12,000.00	9,506.00	11,633.94	9,110.00	67.78	68.28	78.02	-1,415.68	2,419.24	1,917.20	1,784.09	133.10	14.404		
12,100.00	9,506.00	11,733.94	9,110.00	69.78	70.32	78.02	-1,415.78	2,519.24	1,917.27	1,780.20	137.07	13.988		
12,200.00	9,506.00	11,833.94	9,110.00	71.80	72.36	78.02	-1,415.87	2,619.24	1,917.34	1,776.27	141.07	13.591		
12,300.00	9,506.00	11,933.94	9,110.00	73.83	74.43	78.02	-1,415.97	2,719.24	1,917.41	1,772.31	145.10	13.214		
12,400.00	9,506.00	12,033.94	9,110.00	75.89	76.51	78.02	-1,416.06	2,819.24	1,917.48	1,768.33	149.16	12.855		
12,500.00	9,506.00	12,133.94	9,110.00	77.95	78.60	78.02	-1,416.16	2,919.24	1,917.55	1,764.31	153.24	12.513		
12,600.00	9,506.00	12,233.94	9,110.00	80.03	80.70	78.02	-1,416.25	3,019.24	1,917.63	1,760.27	157.35	12.187		
12,700.00	9,506.00	12,333.94	9,110.00	82.12	82.82	78.02	-1,416.35	3,119.24	1,917.70	1,756.21	161.48	11.875		
12,800.00	9,506.00	12,433.94	9,110.00	84.23	84.94	78.02	-1,416.45	3,219.24	1,917.77	1,752.13	165.64	11.578		
12,900.00	9,506.00	12,533.94	9,110.00	86.34	87.07	78.02	-1,416.54	3,319.24	1,917.84	1,748.03	169.81	11.294		
13,000.00	9,506.00	12,633.94	9,110.00	88.46	89.22	78.02	-1,416.64	3,419.24	1,917.91	1,743.91	174.00	11.023		
13,100.00	9,506.00	12,733.94	9,110.00	90.59	91.37	78.02	-1,416.73	3,519.24	1,917.98	1,739.78	178.20	10.763		
13,200.00	9,506.00	12,833.94	9,110.00	92.74	93.52	78.02	-1,416.83	3,619.24	1,918.05	1,735.63	182.42	10.514		
13,300.00	9,506.00	12,933.94	9,110.00	94.88	95.69	78.02	-1,416.93	3,719.24	1,918.13	1,731.47	186.66	10.276		
13,400.00	9,506.00	13,033.94	9,110.00	97.04	97.86	78.02	-1,417.02	3,819.24	1,918.20	1,727.29	190.91	10.048		
13,500.00	9,506.00	13,133.94	9,110.00	99.20	100.04	78.03	-1,417.12	3,919.24	1,918.27	1,723.10	195.17	9.829		
13,600.00	9,506.00	13,233.94	9,110.00	101.37	102.22	78.03	-1,417.21	4,019.24	1,918.34	1,718.90	199.44	9.618		
13,700.00	9,506.00	13,333.94	9,110.00	103.55	104.41	78.03	-1,417.31	4,119.24	1,918.41	1,714.68	203.73	9.417		
13,800.00	9,506.00	13,433.94	9,110.00	105.73	106.60	78.03	-1,417.41	4,219.24	1,918.48	1,710.46	208.02	9.223		
13,900.00	9,506.00	13,533.94	9,110.00	107.91	108.80	78.03	-1,417.50	4,319.24	1,918.55	1,706.23	212.33	9.036		
14,000.00	9,506.00	13,633.94	9,110.00	110.11	111.01	78.03	-1,417.60	4,419.24	1,918.62	1,701.99	216.64	8.856		
14,100.00	9,506.00	13,733.94	9,110.00	112.30	113.21	78.03	-1,417.69	4,519.24	1,918.70	1,697.74	220.96	8.683		
14,200.00	9,506.00	13,833.94	9,110.00	114.50	115.42	78.03	-1,417.79	4,619.24	1,918.77	1,693.48	225.29	8.517		
14,300.00	9,506.00	13,933.94	9,110.00	116.71	117.64	78.03	-1,417.88	4,719.24	1,918.84	1,689.21	229.63	8.356		
14,400.00	9,506.00	14,033.94	9,110.00	118.92	119.86	78.03	-1,417.98	4,819.24	1,918.91	1,684.94	233.97	8.201		
14,500.00	9,506.00	14,133.94	9,110.00	121.13	122.08	78.03	-1,418.08	4,919.24	1,918.98	1,680.66	238.32	8.052		
14,600.00	9,506.00	14,233.94	9,110.00	123.34	124.30	78.03	-1,418.17	5,019.24	1,919.05	1,676.37	242.68	7.908		
14,700.00	9,506.00	14,333.94	9,110.00	125.56	126.53	78.03	-1,418.27	5,119.24	1,919.12	1,672.08	247.05	7.768		
14,800.00	9,506.00	14,433.94	9,110.00	127.79	128.76	78.03	-1,418.36	5,219.24	1,919.20	1,667.78	251.42	7.634		
14,900.00	9,506.00	14,533.94	9,110.00	130.01	131.00	78.03	-1,418.46	5,319.24	1,919.27	1,663.48	255.79	7.503		
15,000.00	9,506.00	14,633.94	9,110.00	132.24	133.23	78.03	-1,418.56	5,419.24	1,919.34	1,659.17	260.17	7.377		
15,100.00	9,506.00	14,733.94	9,110.00	134.47	135.47	78.03	-1,418.65	5,519.24	1,919.41	1,654.85	264.56	7.255		
15,200.00	9,506.00	14,833.94	9,110.00	136.70	137.71	78.03	-1,418.75	5,619.24	1,919.48	1,650.53	268.95	7.137		
15,300.00	9,506.00	14,933.94	9,110.00	138.94	139.96	78.03	-1,418.84	5,719.24	1,919.55	1,646.21	273.34	7.023		

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

Pro Directional

Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 - #136H - OH - Prelim B											Offset Site Error: 0.00 usft		
Survey Program: O-MWD-HDGM											Offset Well Error: 0.00 usft		
Reference		Offset		Semi-Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Vertical Depth (usft)	Vertical Depth (usft)	Measured Vertical Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		N/S (usft)	E/W (usft)	Between Centres (usft)	Between Ellipses (usft)			
15,400.00	9,506.00	15,033.94	9,110.00	141.18	142.20	78.03	-1,418.94	5,819.24	1,919.62	1,641.88	277.74	6.912	
15,500.00	9,506.00	15,133.94	9,110.00	143.42	144.45	78.03	-1,419.03	5,919.24	1,919.69	1,637.55	282.14	6.804	
15,600.00	9,506.00	15,233.94	9,110.00	145.66	146.70	78.03	-1,419.13	6,019.24	1,919.77	1,633.22	286.55	6.700	
15,700.00	9,506.00	15,333.94	9,110.00	147.91	148.95	78.04	-1,419.23	6,119.24	1,919.84	1,628.88	290.96	6.598	
15,800.00	9,506.00	15,433.94	9,110.00	150.15	151.20	78.04	-1,419.32	6,219.24	1,919.91	1,624.53	295.38	6.500	
15,900.00	9,506.00	15,533.94	9,110.00	152.40	153.46	78.04	-1,419.42	6,319.24	1,919.98	1,620.19	299.79	6.404	
16,000.00	9,506.00	15,633.94	9,110.00	154.65	155.71	78.04	-1,419.51	6,419.24	1,920.05	1,615.84	304.21	6.312	
16,100.00	9,506.00	15,733.94	9,110.00	156.90	157.97	78.04	-1,419.61	6,519.24	1,920.12	1,611.48	308.64	6.221	
16,200.00	9,506.00	15,833.94	9,110.00	159.16	160.23	78.04	-1,419.71	6,619.24	1,920.19	1,607.13	313.06	6.134	
16,300.00	9,506.00	15,933.94	9,110.00	161.41	162.49	78.04	-1,419.80	6,719.24	1,920.27	1,602.77	317.49	6.048	
16,400.00	9,506.00	16,033.94	9,110.00	163.67	164.75	78.04	-1,419.90	6,819.24	1,920.34	1,598.41	321.93	5.965	
16,500.00	9,506.00	16,133.94	9,110.00	165.93	167.01	78.04	-1,419.99	6,919.24	1,920.41	1,594.05	326.36	5.884	
16,600.00	9,506.00	16,233.94	9,110.00	168.19	169.28	78.04	-1,420.09	7,019.24	1,920.48	1,589.68	330.80	5.806	
16,700.00	9,506.00	16,333.94	9,110.00	170.45	171.54	78.04	-1,420.19	7,119.24	1,920.55	1,585.31	335.24	5.729	
16,800.00	9,506.00	16,433.94	9,110.00	172.71	173.81	78.04	-1,420.28	7,219.24	1,920.62	1,580.94	339.68	5.654	
16,900.00	9,506.00	16,533.94	9,110.00	174.97	176.08	78.04	-1,420.38	7,319.24	1,920.69	1,576.57	344.13	5.581	
17,000.00	9,506.00	16,633.94	9,110.00	177.24	178.34	78.04	-1,420.47	7,419.24	1,920.76	1,572.19	348.57	5.510	
17,100.00	9,506.00	16,733.94	9,110.00	179.50	180.61	78.04	-1,420.57	7,519.24	1,920.84	1,567.81	353.02	5.441	
17,200.00	9,506.00	16,833.94	9,110.00	181.77	182.89	78.04	-1,420.66	7,619.24	1,920.91	1,563.43	357.47	5.374	
17,300.00	9,506.00	16,933.94	9,110.00	184.04	185.16	78.04	-1,420.76	7,719.24	1,920.98	1,559.05	361.93	5.308	
17,400.00	9,506.00	17,033.94	9,110.00	186.31	187.43	78.04	-1,420.86	7,819.24	1,921.05	1,554.67	366.38	5.243	
17,500.00	9,506.00	17,133.94	9,110.00	188.58	189.70	78.04	-1,420.95	7,919.24	1,921.12	1,550.29	370.84	5.181	
17,600.00	9,506.00	17,233.94	9,110.00	190.85	191.98	78.04	-1,421.05	8,019.24	1,921.19	1,545.90	375.29	5.119	
17,700.00	9,506.00	17,333.94	9,110.00	193.12	194.25	78.04	-1,421.14	8,119.24	1,921.26	1,541.51	379.75	5.059	
17,800.00	9,506.00	17,433.94	9,110.00	195.39	196.53	78.04	-1,421.24	8,219.24	1,921.34	1,537.12	384.21	5.001	
17,900.00	9,506.00	17,533.94	9,110.00	197.66	198.80	78.05	-1,421.34	8,319.24	1,921.41	1,532.73	388.68	4.943	
18,000.00	9,506.00	17,633.94	9,110.00	199.94	201.08	78.05	-1,421.43	8,419.24	1,921.48	1,528.34	393.14	4.887	
18,100.00	9,506.00	17,733.94	9,110.00	202.21	203.36	78.05	-1,421.53	8,519.24	1,921.55	1,523.94	397.61	4.833	
18,200.00	9,506.00	17,833.94	9,110.00	204.49	205.64	78.05	-1,421.62	8,619.24	1,921.62	1,519.55	402.07	4.779	
18,300.00	9,506.00	17,933.94	9,110.00	206.77	207.92	78.05	-1,421.72	8,719.24	1,921.69	1,515.15	406.54	4.727	
18,400.00	9,506.00	18,033.94	9,110.00	209.04	210.20	78.05	-1,421.82	8,819.24	1,921.76	1,510.75	411.01	4.676	
18,500.00	9,506.00	18,133.94	9,110.00	211.32	212.48	78.05	-1,421.91	8,919.24	1,921.83	1,506.35	415.48	4.626	
18,600.00	9,506.00	18,233.94	9,110.00	213.60	214.76	78.05	-1,422.01	9,019.24	1,921.91	1,501.95	419.96	4.576	
18,700.00	9,506.00	18,333.94	9,110.00	215.88	217.04	78.05	-1,422.10	9,119.24	1,921.98	1,497.55	424.43	4.528	
18,800.00	9,506.00	18,433.94	9,110.00	218.16	219.32	78.05	-1,422.20	9,219.24	1,922.05	1,493.14	428.90	4.481	
18,900.00	9,506.00	18,533.94	9,110.00	220.44	221.61	78.05	-1,422.29	9,319.24	1,922.12	1,488.74	433.38	4.435	
19,000.00	9,506.00	18,633.94	9,110.00	222.72	223.89	78.05	-1,422.39	9,419.24	1,922.19	1,484.33	437.86	4.390	
19,100.00	9,506.00	18,733.94	9,110.00	225.00	226.17	78.05	-1,422.49	9,519.24	1,922.26	1,479.93	442.33	4.346	
19,200.00	9,506.00	18,833.94	9,110.00	227.28	228.46	78.05	-1,422.58	9,619.24	1,922.33	1,475.52	446.81	4.302	
19,300.00	9,506.00	18,933.94	9,110.00	229.56	230.74	78.05	-1,422.68	9,719.24	1,922.41	1,471.11	451.29	4.260	
19,400.00	9,506.00	19,033.94	9,110.00	231.85	233.03	78.05	-1,422.77	9,819.24	1,922.48	1,466.70	455.77	4.218	
19,500.00	9,506.00	19,133.94	9,110.00	234.13	235.31	78.05	-1,422.87	9,919.24	1,922.55	1,462.29	460.26	4.177	
19,600.00	9,506.00	19,233.94	9,110.00	236.42	237.60	78.05	-1,422.97	10,019.24	1,922.62	1,457.88	464.74	4.137	
19,628.96	9,506.00	19,262.90	9,110.00	237.08	238.26	78.05	-1,422.99	10,048.20	1,922.64	1,456.60	466.04	4.126 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	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com - #206H - OH - Prelim B												Offset Site Error:	
Survey Program: 0-MWD-HDGM												Offset Well Error:	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Semi-Major Axis (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	3.00	3.00	0.00	0.00	-168.77	-700.00	-139.00	713.67				
100.00	100.00	103.00	103.00	0.13	0.14	-168.77	-700.00	-139.00	713.67	713.40	0.27	2,672.294	
200.00	200.00	203.00	203.00	0.49	0.50	-168.77	-700.00	-139.00	713.67	712.68	0.98	725.268	
300.00	300.00	303.00	303.00	0.85	0.86	-168.77	-700.00	-139.00	713.67	711.97	1.70	419.570	
400.00	400.00	403.00	403.00	1.20	1.21	-168.77	-700.00	-139.00	713.67	711.25	2.42	295.161	
500.00	500.00	503.00	503.00	1.56	1.57	-168.77	-700.00	-139.00	713.67	710.53	3.13	227.657	
600.00	600.00	603.00	603.00	1.92	1.93	-168.77	-700.00	-139.00	713.67	709.82	3.85	185.283	
700.00	700.00	703.00	703.00	2.28	2.29	-168.77	-700.00	-139.00	713.67	709.10	4.57	156.207	
800.00	800.00	803.00	803.00	2.64	2.65	-168.77	-700.00	-139.00	713.67	708.38	5.29	135.019	
900.00	900.00	903.00	903.00	3.00	3.01	-168.77	-700.00	-139.00	713.67	707.66	6.00	118.893	
1,000.00	1,000.00	1,003.00	1,003.00	3.35	3.37	-168.77	-700.00	-139.00	713.67	706.95	6.72	106.208	CC, ES
1,100.00	1,099.98	1,085.29	1,085.28	3.71	3.65	-121.25	-700.90	-139.90	715.85	708.49	7.36	97.304	
1,200.00	1,199.84	1,182.04	1,181.97	4.07	3.97	-121.35	-703.26	-142.26	721.43	713.39	8.04	89.785	
1,300.00	1,299.53	1,281.68	1,281.55	4.42	4.31	-121.69	-705.72	-144.72	728.45	719.72	8.73	83.464	
1,400.00	1,399.20	1,381.31	1,381.12	4.78	4.65	-122.07	-708.18	-147.18	735.58	726.16	9.42	78.048	
1,500.00	1,498.88	1,480.93	1,480.68	5.14	4.99	-122.44	-710.63	-149.63	742.75	732.62	10.13	73.349	
1,600.00	1,598.55	1,580.56	1,580.25	5.51	5.33	-122.81	-713.09	-152.09	749.95	739.12	10.83	69.238	
1,700.00	1,698.23	1,680.19	1,679.82	5.87	5.68	-123.17	-715.55	-154.55	757.17	745.64	11.54	65.616	
1,800.00	1,797.90	1,779.82	1,779.38	6.24	6.03	-123.52	-718.01	-157.01	764.43	752.18	12.25	62.402	
1,900.00	1,897.58	1,879.44	1,878.95	6.60	6.38	-123.86	-720.47	-159.47	771.72	758.75	12.96	59.534	
2,000.00	1,997.26	1,979.07	1,978.52	6.97	6.73	-124.20	-722.93	-161.93	779.03	765.35	13.68	56.960	
2,100.00	2,096.93	2,078.70	2,078.08	7.34	7.08	-124.54	-725.39	-164.39	786.37	771.98	14.39	54.638	
2,200.00	2,196.61	2,178.33	2,177.65	7.71	7.43	-124.86	-727.84	-166.84	793.73	778.62	15.11	52.533	
2,300.00	2,296.28	2,277.95	2,277.22	8.08	7.79	-125.18	-730.30	-169.30	801.12	785.30	15.83	50.617	
2,400.00	2,395.96	2,377.58	2,376.78	8.45	8.14	-125.50	-732.76	-171.76	808.54	791.99	16.55	48.866	
2,500.00	2,495.63	2,477.21	2,476.35	8.82	8.50	-125.80	-735.22	-174.22	815.98	798.71	17.27	47.261	
2,600.00	2,595.31	2,559.89	2,558.96	9.19	8.79	-126.06	-737.87	-176.29	824.22	806.31	17.91	46.016	
2,700.00	2,694.99	2,636.93	2,635.84	9.56	9.07	-126.30	-742.39	-178.31	835.09	816.56	18.52	45.085	
2,800.00	2,794.66	2,713.45	2,712.05	9.93	9.34	-126.54	-748.92	-180.42	848.63	829.51	19.12	44.390	
2,900.00	2,894.34	2,789.35	2,787.44	10.30	9.62	-126.78	-757.40	-182.59	864.83	845.13	19.70	43.906	
3,000.00	2,994.01	2,878.81	2,876.06	10.67	9.95	-127.06	-769.33	-185.24	883.15	862.79	20.35	43.392	
3,100.00	3,093.69	2,976.98	2,973.29	11.04	10.31	-127.36	-782.57	-188.16	901.68	880.62	21.06	42.807	
3,200.00	3,193.36	3,075.14	3,070.51	11.41	10.67	-127.64	-795.82	-191.08	920.24	898.46	21.78	42.259	
3,300.00	3,293.04	3,173.30	3,167.73	11.78	11.04	-127.91	-809.06	-193.99	938.81	916.32	22.49	41.744	
3,400.00	3,392.71	3,271.47	3,264.95	12.15	11.41	-128.18	-822.30	-196.91	957.41	934.20	23.20	41.260	
3,500.00	3,492.39	3,369.63	3,362.17	12.53	11.79	-128.43	-835.55	-199.83	976.02	952.10	23.92	40.804	
3,600.00	3,592.07	3,467.79	3,459.40	12.90	12.16	-128.67	-848.79	-202.74	994.66	970.02	24.64	40.374	
3,700.00	3,691.74	3,565.96	3,556.62	13.27	12.54	-128.91	-862.03	-205.66	1,013.30	987.95	25.35	39.967	
3,800.00	3,791.42	3,664.12	3,653.84	13.64	12.91	-129.13	-875.28	-208.58	1,031.97	1,005.90	26.07	39.582	
3,900.00	3,891.09	3,762.28	3,751.06	14.01	13.29	-129.35	-888.52	-211.49	1,050.65	1,023.86	26.79	39.218	
4,000.00	3,990.77	3,860.45	3,848.28	14.39	13.67	-129.56	-901.76	-214.41	1,069.34	1,041.83	27.51	38.871	
4,100.00	4,090.44	3,958.61	3,945.51	14.76	14.06	-129.76	-915.01	-217.33	1,088.05	1,059.82	28.23	38.543	
4,200.00	4,190.12	4,056.77	4,042.73	15.13	14.44	-129.96	-928.25	-220.24	1,106.77	1,077.82	28.95	38.230	
4,300.00	4,289.80	4,154.93	4,139.95	15.50	14.82	-130.14	-941.49	-223.16	1,125.50	1,095.83	29.67	37.932	
4,400.00	4,389.47	4,253.10	4,237.17	15.88	15.21	-130.33	-954.74	-226.08	1,144.24	1,113.85	30.39	37.648	
4,500.00	4,489.15	4,351.26	4,334.39	16.25	15.59	-130.50	-967.98	-228.99	1,163.00	1,131.88	31.12	37.377	
4,600.00	4,588.82	4,449.42	4,431.62	16.62	15.98	-130.68	-981.22	-231.91	1,181.76	1,149.92	31.84	37.118	
4,700.00	4,688.50	4,547.59	4,528.84	16.99	16.36	-130.84	-994.47	-234.83	1,200.54	1,167.97	32.56	36.870	
4,800.00	4,788.17	4,645.75	4,626.06	17.37	16.75	-131.00	-1,007.71	-237.75	1,219.32	1,186.03	33.28	36.633	
4,900.00	4,887.85	4,743.91	4,723.28	17.74	17.14	-131.16	-1,020.95	-240.66	1,238.11	1,204.10	34.01	36.406	
5,000.00	4,987.53	4,842.08	4,820.50	18.11	17.53	-131.31	-1,034.20	-243.58	1,256.91	1,222.18	34.73	36.188	
5,100.00	5,087.20	4,940.24	4,917.73	18.48	17.92	-131.46	-1,047.44	-246.50	1,275.72	1,240.27	35.46	35.979	

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

Pro Directional

Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com - #206H - OH - Prelim B														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		Separation Factor		Warning					
Measured Vertical	Measured Vertical	Reference	Offset	Highside	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning		Depth	Depth	Depth	Depth
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)				(usft)	(usft)	(usft)	(usft)
5,200.00	5,186.88	5,038.40	5,014.95	18.86	18.31	-131.60	-1,060.68	-249.41	1,294.54	1,258.36	36.18	35.778			
5,300.00	5,286.55	5,136.57	5,112.17	19.23	18.70	-131.74	-1,073.93	-252.33	1,313.37	1,276.46	36.91	35.585			
5,400.00	5,386.23	5,234.73	5,209.39	19.60	19.09	-131.87	-1,087.17	-255.25	1,332.20	1,294.57	37.63	35.400			
5,500.00	5,485.90	5,332.89	5,306.61	19.97	19.48	-132.00	-1,100.41	-258.16	1,351.04	1,312.68	38.36	35.221			
5,600.00	5,585.58	5,431.06	5,403.84	20.35	19.87	-132.13	-1,113.66	-261.08	1,369.88	1,330.80	39.08	35.049			
5,700.00	5,685.26	5,529.22	5,501.06	20.72	20.27	-132.25	-1,126.90	-264.00	1,388.74	1,348.92	39.81	34.883			
5,800.00	5,784.93	5,627.39	5,598.29	21.09	20.66	-132.42	-1,140.15	-266.91	1,407.57	1,367.03	40.54	34.723			
5,900.00	5,884.76	5,725.86	5,695.81	21.46	21.05	-132.73	-1,153.43	-269.84	1,424.91	1,383.65	41.26	34.535			
6,000.00	5,984.73	5,824.71	5,793.72	21.81	21.45	-132.89	-1,166.77	-272.78	1,439.91	1,397.94	41.98	34.302			
6,100.00	6,084.73	5,923.75	5,891.81	22.16	21.84	-132.89	-1,180.13	-275.72	1,453.42	1,410.73	42.69	34.047			
6,200.00	6,184.73	6,022.79	5,989.90	22.50	22.24	-132.89	-1,193.49	-278.66	1,466.90	1,423.50	43.40	33.800			
6,300.00	6,284.73	6,121.84	6,087.99	22.85	22.64	-132.89	-1,206.85	-281.60	1,480.39	1,436.28	44.11	33.560			
6,400.00	6,384.73	6,220.88	6,186.08	23.19	23.04	-132.89	-1,220.21	-284.55	1,493.89	1,449.06	44.82	33.327			
6,500.00	6,484.73	6,319.92	6,284.17	23.54	23.44	-132.89	-1,233.58	-287.49	1,507.39	1,461.85	45.54	33.102			
6,600.00	6,584.73	6,418.96	6,382.27	23.89	23.83	-132.89	-1,246.94	-290.43	1,520.89	1,474.64	46.25	32.884			
6,700.00	6,684.73	6,518.00	6,480.36	24.23	24.23	-132.89	-1,260.30	-293.38	1,534.41	1,487.44	46.96	32.672			
6,800.00	6,784.73	6,617.04	6,578.45	24.58	24.63	-132.89	-1,273.66	-296.32	1,547.92	1,500.25	47.68	32.466			
6,900.00	6,884.73	6,716.08	6,679.63	24.93	25.35	-132.89	-1,287.02	-300.83	1,559.50	1,510.62	48.39	32.266			
7,000.00	6,984.73	7,013.75	6,973.64	25.28	26.11	-132.89	-1,300.88	-302.97	1,564.06	1,514.01	50.05	31.252			
7,100.00	7,084.73	7,112.84	7,087.73	25.63	26.47	-132.89	-1,304.00	-303.00	1,564.12	1,513.35	50.77	30.811			
7,200.00	7,184.73	7,212.84	7,187.73	25.97	26.78	-132.89	-1,304.00	-303.00	1,564.12	1,512.67	51.44	30.406			
7,300.00	7,284.73	7,312.84	7,287.73	26.32	27.09	-132.89	-1,304.00	-303.00	1,564.12	1,512.00	52.12	30.010			
7,400.00	7,384.73	7,412.84	7,387.73	26.67	27.41	-132.89	-1,304.00	-303.00	1,564.12	1,511.32	52.80	29.624			
7,500.00	7,484.73	7,512.84	7,487.73	27.02	27.72	-132.89	-1,304.00	-303.00	1,564.12	1,510.64	53.48	29.248			
7,600.00	7,584.73	7,612.84	7,587.73	27.37	28.04	-132.89	-1,304.00	-303.00	1,564.12	1,509.96	54.16	28.880			
7,700.00	7,684.73	7,712.84	7,687.73	27.72	28.35	-132.89	-1,304.00	-303.00	1,564.12	1,509.27	54.84	28.521			
7,800.00	7,784.73	7,812.84	7,787.73	28.07	28.67	-132.89	-1,304.00	-303.00	1,564.12	1,508.59	55.52	28.170			
7,900.00	7,884.73	7,912.84	7,887.73	28.42	28.99	-132.89	-1,304.00	-303.00	1,564.12	1,507.91	56.21	27.828			
8,000.00	7,984.73	8,012.84	7,987.73	28.77	29.31	-132.89	-1,304.00	-303.00	1,564.12	1,507.22	56.89	27.493			
8,100.00	8,084.73	8,112.84	8,087.73	29.12	29.63	-132.89	-1,304.00	-303.00	1,564.12	1,506.54	57.58	27.166			
8,200.00	8,184.73	8,212.84	8,187.73	29.47	29.95	-132.89	-1,304.00	-303.00	1,564.12	1,505.85	58.26	26.846			
8,300.00	8,284.73	8,312.84	8,287.73	29.82	30.27	-132.89	-1,304.00	-303.00	1,564.12	1,505.17	58.95	26.534			
8,400.00	8,384.73	8,412.84	8,387.73	30.18	30.59	-132.89	-1,304.00	-303.00	1,564.12	1,504.48	59.64	26.228			
8,500.00	8,484.73	8,512.84	8,487.73	30.53	30.91	-132.89	-1,304.00	-303.00	1,564.12	1,503.79	60.32	25.929			
8,600.00	8,584.73	8,612.84	8,587.73	30.88	31.24	-132.89	-1,304.00	-303.00	1,564.12	1,503.10	61.01	25.636			
8,700.00	8,684.73	8,712.84	8,658.24	31.23	31.56	-132.89	-1,304.00	-302.98	1,564.12	1,502.42	61.70	25.352			
8,800.00	8,784.73	8,812.84	8,759.65	31.58	31.80	-132.89	-1,304.75	-297.77	1,565.07	1,502.76	62.30	25.120			
8,900.00	8,884.73	8,912.84	8,828.63	31.93	32.02	-132.89	-1,306.72	-284.13	1,567.83	1,504.96	62.87	24.936			
9,000.00	8,984.39	8,937.92	8,892.74	32.27	32.22	121.30	-1,309.73	-263.26	1,576.26	1,512.87	63.39	24.866			
9,100.00	9,081.39	9,000.00	8,949.13	32.59	32.39	119.07	-1,313.42	-237.62	1,595.74	1,531.91	63.83	25.000			
9,200.00	9,172.78	9,065.21	9,004.96	32.88	32.55	115.89	-1,318.22	-204.35	1,625.48	1,561.24	64.24	25.305			
9,300.00	9,255.79	9,124.52	9,052.14	33.12	32.69	111.80	-1,323.34	-168.81	1,664.30	1,599.71	64.59	25.768			
9,400.00	9,328.12	9,181.19	9,093.53	33.32	32.80	104.63	-1,328.85	-130.52	1,709.94	1,645.02	64.93	26.336			
9,500.00	9,399.92	9,238.20	9,131.09	33.62	32.90	95.73	-1,334.97	-88.12	1,752.85	1,687.54	65.31	26.841			
9,600.00	9,439.92	9,300.00	9,166.79	34.02	33.01	89.40	-1,342.16	-38.22	1,789.75	1,723.95	65.80	27.200			
9,700.00	9,476.60	9,356.47	9,194.49	34.50	33.11	85.09	-1,349.17	10.45	1,819.72	1,753.33	66.39	27.411			
9,800.00	9,498.85	9,418.14	9,219.06	35.06	33.27	82.53	-1,357.23	66.41	1,842.09	1,774.93	67.16	27.429			
9,900.00	9,506.00	9,481.67	9,237.86	35.70	33.54	81.55	-1,365.88	126.44	1,856.36	1,788.27	68.10	27.261			
10,000.00	9,506.00	9,550.00	9,250.46	36.42	33.93	81.98	-1,375.46	192.87	1,867.77	1,798.56	69.22	26.984			
10,100.00	9,506.00	9,615.94	9,254.96	37.28	34.38	82.16	-1,384.83	257.95	1,880.92	1,810.46	70.46	26.695			
10,200.00	9,506.00	9,682.73	9,255.00	38.24	36.75	82.27	-1,411.11	523.35	1,890.96	1,817.09	73.87	25.599			

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

Pro Directional Anticollision Report

Company:	Malador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com - #206H - OH - Prelim B														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 Offset (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
10,300.00	9,506.00	10,078.89	9,255.00	39.32	38.97	82.29	-1,415.05	719.44	1,892.32	1,815.16	77.16	24.524			
10,400.00	9,506.00	10,178.89	9,255.00	40.50	40.25	82.29	-1,415.14	819.44	1,892.38	1,812.76	79.61	23.769			
10,500.00	9,506.00	10,278.89	9,255.00	41.77	41.62	82.29	-1,415.22	919.44	1,892.44	1,810.19	82.25	23.009			
10,600.00	9,506.00	10,378.89	9,255.00	43.13	43.06	82.29	-1,415.31	1,019.44	1,892.50	1,807.46	85.04	22.253			
10,700.00	9,506.00	10,478.89	9,255.00	44.57	44.58	82.29	-1,415.39	1,119.44	1,892.56	1,804.57	87.99	21.509			
10,800.00	9,506.00	10,578.89	9,255.00	46.08	46.17	82.29	-1,415.48	1,219.44	1,892.63	1,801.55	91.07	20.781			
10,900.00	9,506.00	10,678.89	9,255.00	47.65	47.81	82.29	-1,415.56	1,319.44	1,892.69	1,798.41	94.28	20.076			
11,000.00	9,506.00	10,778.89	9,255.00	49.28	49.50	82.29	-1,415.65	1,419.44	1,892.75	1,795.16	97.59	19.395			
11,100.00	9,506.00	10,878.89	9,255.00	50.96	51.25	82.29	-1,415.73	1,519.44	1,892.81	1,791.81	101.00	18.740			
11,200.00	9,506.00	10,978.89	9,255.00	52.69	53.04	82.29	-1,415.82	1,619.44	1,892.87	1,788.37	104.51	18.113			
11,300.00	9,506.00	11,078.89	9,255.00	54.46	54.86	82.29	-1,415.90	1,719.44	1,892.93	1,784.85	108.09	17.513			
11,400.00	9,506.00	11,178.89	9,255.00	56.27	56.72	82.29	-1,415.99	1,819.44	1,893.00	1,781.25	111.74	16.941			
11,500.00	9,506.00	11,278.89	9,255.00	58.12	58.61	82.29	-1,416.07	1,919.44	1,893.06	1,777.59	115.46	16.395			
11,600.00	9,506.00	11,378.89	9,255.00	60.00	60.54	82.29	-1,416.16	2,019.44	1,893.12	1,773.87	119.25	15.876			
11,700.00	9,506.00	11,478.89	9,255.00	61.91	62.48	82.29	-1,416.24	2,119.44	1,893.18	1,770.10	123.08	15.382			
11,800.00	9,506.00	11,578.89	9,255.00	63.84	64.46	82.29	-1,416.33	2,219.44	1,893.24	1,766.28	126.96	14.912			
11,900.00	9,506.00	11,678.89	9,255.00	65.80	66.45	82.29	-1,416.41	2,319.44	1,893.30	1,762.41	130.89	14.464			
12,000.00	9,506.00	11,778.89	9,255.00	67.78	68.46	82.29	-1,416.50	2,419.44	1,893.36	1,758.50	134.87	14.039			
12,100.00	9,506.00	11,878.89	9,255.00	69.78	70.49	82.29	-1,416.58	2,519.44	1,893.43	1,754.55	138.87	13.634			
12,200.00	9,506.00	11,978.89	9,255.00	71.80	72.54	82.29	-1,416.67	2,619.44	1,893.49	1,750.57	142.92	13.249			
12,300.00	9,506.00	12,078.89	9,255.00	73.83	74.60	82.29	-1,416.75	2,719.44	1,893.55	1,746.56	146.99	12.882			
12,400.00	9,506.00	12,178.89	9,255.00	75.89	76.68	82.29	-1,416.84	2,819.44	1,893.61	1,742.52	151.09	12.533			
12,500.00	9,506.00	12,278.89	9,255.00	77.95	78.77	82.29	-1,416.92	2,919.44	1,893.67	1,738.45	155.22	12.200			
12,600.00	9,506.00	12,378.89	9,255.00	80.03	80.87	82.29	-1,417.01	3,019.44	1,893.73	1,734.36	159.38	11.882			
12,700.00	9,506.00	12,478.89	9,255.00	82.12	82.99	82.29	-1,417.09	3,119.44	1,893.80	1,730.24	163.55	11.579			
12,800.00	9,506.00	12,578.89	9,255.00	84.23	85.11	82.29	-1,417.18	3,219.44	1,893.86	1,726.11	167.75	11.290			
12,900.00	9,506.00	12,678.89	9,255.00	86.34	87.24	82.29	-1,417.26	3,319.44	1,893.92	1,721.95	171.97	11.013			
13,000.00	9,506.00	12,778.89	9,255.00	88.46	89.38	82.29	-1,417.35	3,419.44	1,893.98	1,717.78	176.20	10.749			
13,100.00	9,506.00	12,878.89	9,255.00	90.59	91.53	82.29	-1,417.43	3,519.44	1,894.04	1,713.59	180.46	10.496			
13,200.00	9,506.00	12,978.89	9,255.00	92.74	93.69	82.29	-1,417.52	3,619.44	1,894.10	1,709.38	184.72	10.254			
13,300.00	9,506.00	13,078.89	9,255.00	94.88	95.85	82.29	-1,417.60	3,719.44	1,894.17	1,705.16	189.01	10.022			
13,400.00	9,506.00	13,178.89	9,255.00	97.04	98.02	82.29	-1,417.69	3,819.44	1,894.23	1,700.92	193.30	9.799			
13,500.00	9,506.00	13,278.89	9,255.00	99.20	100.20	82.29	-1,417.78	3,919.44	1,894.29	1,696.68	197.61	9.586			
13,600.00	9,506.00	13,378.89	9,255.00	101.37	102.38	82.29	-1,417.86	4,019.44	1,894.35	1,692.42	201.93	9.381			
13,700.00	9,506.00	13,478.89	9,255.00	103.55	104.57	82.29	-1,417.95	4,119.44	1,894.41	1,688.15	206.26	9.184			
13,800.00	9,506.00	13,578.89	9,255.00	105.73	106.76	82.29	-1,418.03	4,219.44	1,894.47	1,683.87	210.61	8.995			
13,900.00	9,506.00	13,678.89	9,255.00	107.91	108.96	82.30	-1,418.12	4,319.44	1,894.54	1,679.58	214.96	8.813			
14,000.00	9,506.00	13,778.89	9,255.00	110.11	111.16	82.30	-1,418.20	4,419.44	1,894.60	1,675.28	219.32	8.638			
14,100.00	9,506.00	13,878.89	9,255.00	112.30	113.37	82.30	-1,418.29	4,519.44	1,894.66	1,670.97	223.69	8.470			
14,200.00	9,506.00	13,978.89	9,255.00	114.50	115.58	82.30	-1,418.37	4,619.44	1,894.72	1,666.65	228.07	8.308			
14,300.00	9,506.00	14,078.89	9,255.00	116.71	117.79	82.30	-1,418.46	4,719.44	1,894.78	1,662.33	232.46	8.151			
14,400.00	9,506.00	14,178.89	9,255.00	118.92	120.01	82.30	-1,418.54	4,819.44	1,894.84	1,657.99	236.85	8.000			
14,500.00	9,506.00	14,278.89	9,255.00	121.13	122.23	82.30	-1,418.63	4,919.44	1,894.91	1,653.66	241.25	7.855			
14,600.00	9,506.00	14,378.89	9,255.00	123.34	124.46	82.30	-1,418.71	5,019.44	1,894.97	1,649.31	245.66	7.714			
14,700.00	9,506.00	14,478.89	9,255.00	125.56	126.68	82.30	-1,418.80	5,119.44	1,895.03	1,644.96	250.07	7.578			
14,800.00	9,506.00	14,578.89	9,255.00	127.79	128.91	82.30	-1,418.88	5,219.44	1,895.09	1,640.60	254.49	7.447			
14,900.00	9,506.00	14,678.89	9,255.00	130.01	131.15	82.30	-1,418.97	5,319.44	1,895.15	1,636.24	258.91	7.320			
15,000.00	9,506.00	14,778.89	9,255.00	132.24	133.38	82.30	-1,419.05	5,419.44	1,895.21	1,631.87	263.34	7.197			
15,100.00	9,506.00	14,878.89	9,255.00	134.47	135.62	82.30	-1,419.14	5,519.44	1,895.28	1,627.50	267.78	7.078			
15,200.00	9,506.00	14,978.89	9,255.00	136.70	137.86	82.30	-1,419.22	5,619.44	1,895.34	1,623.12	272.22	6.963			
15,300.00	9,506.00	15,078.89	9,255.00	138.94	140.10	82.30	-1,419.31	5,719.44	1,895.40	1,618.74	276.66	6.851			
15,400.00	9,506.00	15,178.89	9,255.00	141.18	142.35	82.30	-1,419.39	5,819.44	1,895.46	1,614.35	281.11	6.743			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MDI Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com #206H - OH - Prelim B													Offset Site Error:
Survey Program: 0-MWD-HDGM													Offset Well Error:
Reference	Offset	Semi-Major Axis		Reference		Highside	Offset Wellbore Centre		Distance		Minimum	Separation	Warning
Measured Vertical Depth (usft)	Measured Vertical Depth (usft)	Measured Vertical Depth (usft)	Measured Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	N/S (usft)	E/W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	
15,500.00	9,506.00	15,278.89	9,255.00	143.42	144.59	82.30	-1,419.48	5,919.44	1,895.52	1,609.96	285.56	6.638	
15,600.00	9,506.00	15,378.89	9,255.00	145.66	146.84	82.30	-1,419.56	6,019.44	1,895.58	1,605.56	290.02	6.536	
15,700.00	9,506.00	15,478.89	9,255.00	147.91	149.09	82.30	-1,419.65	6,119.44	1,895.65	1,601.16	294.48	6.437	
15,800.00	9,506.00	15,578.89	9,255.00	150.15	151.35	82.30	-1,419.73	6,219.44	1,895.71	1,596.76	298.95	6.341	
15,900.00	9,506.00	15,678.89	9,255.00	152.40	153.60	82.30	-1,419.82	6,319.44	1,895.77	1,592.35	303.41	6.248	
16,000.00	9,506.00	15,778.89	9,255.00	154.65	155.85	82.30	-1,419.90	6,419.44	1,895.83	1,587.95	307.88	6.158	
16,100.00	9,506.00	15,878.89	9,255.00	156.90	158.11	82.30	-1,419.99	6,519.44	1,895.89	1,583.53	312.36	6.070	
16,200.00	9,506.00	15,978.89	9,255.00	159.16	160.37	82.30	-1,420.07	6,619.44	1,895.95	1,579.12	316.84	5.984	
16,300.00	9,506.00	16,078.89	9,255.00	161.41	162.63	82.30	-1,420.16	6,719.44	1,896.02	1,574.70	321.32	5.901	
16,400.00	9,506.00	16,178.89	9,255.00	163.67	164.89	82.30	-1,420.24	6,819.44	1,896.08	1,570.28	325.80	5.820	
16,500.00	9,506.00	16,278.89	9,255.00	165.93	167.15	82.30	-1,420.33	6,919.44	1,896.14	1,565.85	330.28	5.741	
16,600.00	9,506.00	16,378.89	9,255.00	168.19	169.42	82.30	-1,420.42	7,019.44	1,896.20	1,561.43	334.77	5.664	
16,700.00	9,506.00	16,478.89	9,255.00	170.45	171.68	82.30	-1,420.50	7,119.44	1,896.26	1,557.00	339.26	5.589	
16,800.00	9,506.00	16,578.89	9,255.00	172.71	173.95	82.30	-1,420.59	7,219.44	1,896.32	1,552.57	343.76	5.516	
16,900.00	9,506.00	16,678.89	9,255.00	174.97	176.22	82.30	-1,420.67	7,319.44	1,896.39	1,548.13	348.25	5.445	
17,000.00	9,506.00	16,778.89	9,255.00	177.24	178.48	82.30	-1,420.76	7,419.44	1,896.45	1,543.70	352.75	5.376	
17,100.00	9,506.00	16,878.89	9,255.00	179.50	180.75	82.30	-1,420.84	7,519.44	1,896.51	1,539.26	357.25	5.309	
17,200.00	9,506.00	16,978.89	9,255.00	181.77	183.02	82.30	-1,420.93	7,619.44	1,896.57	1,534.82	361.75	5.243	
17,300.00	9,506.00	17,078.89	9,255.00	184.04	185.30	82.30	-1,421.01	7,719.44	1,896.63	1,530.38	366.25	5.178	
17,400.00	9,506.00	17,178.89	9,255.00	186.31	187.57	82.30	-1,421.10	7,819.44	1,896.69	1,525.94	370.76	5.116	
17,500.00	9,506.00	17,278.89	9,255.00	188.58	189.84	82.30	-1,421.18	7,919.44	1,896.75	1,521.49	375.26	5.054	
17,600.00	9,506.00	17,378.89	9,255.00	190.85	192.11	82.30	-1,421.27	8,019.44	1,896.82	1,517.04	379.77	4.995	
17,700.00	9,506.00	17,478.89	9,255.00	193.12	194.39	82.30	-1,421.35	8,119.44	1,896.88	1,512.60	384.28	4.936	
17,800.00	9,506.00	17,578.89	9,255.00	195.39	196.66	82.30	-1,421.44	8,219.44	1,896.94	1,508.14	388.79	4.879	
17,900.00	9,506.00	17,678.89	9,255.00	197.66	198.94	82.31	-1,421.52	8,319.44	1,897.00	1,503.69	393.31	4.823	
18,000.00	9,506.00	17,778.89	9,255.00	199.94	201.22	82.31	-1,421.61	8,419.44	1,897.06	1,499.24	397.82	4.769	
18,100.00	9,506.00	17,878.89	9,255.00	202.21	203.50	82.31	-1,421.69	8,519.44	1,897.12	1,494.78	402.34	4.715	
18,200.00	9,506.00	17,978.89	9,255.00	204.49	205.77	82.31	-1,421.78	8,619.44	1,897.19	1,490.33	406.86	4.663	
18,300.00	9,506.00	18,078.89	9,255.00	206.77	208.05	82.31	-1,421.86	8,719.44	1,897.25	1,485.87	411.38	4.612	
18,400.00	9,506.00	18,178.89	9,255.00	209.04	210.33	82.31	-1,421.95	8,819.44	1,897.31	1,481.41	415.90	4.562	
18,500.00	9,506.00	18,278.89	9,255.00	211.32	212.61	82.31	-1,422.03	8,919.44	1,897.37	1,476.95	420.42	4.513	
18,600.00	9,506.00	18,378.89	9,255.00	213.60	214.89	82.31	-1,422.12	9,019.44	1,897.43	1,472.49	424.94	4.465	
18,700.00	9,506.00	18,478.89	9,255.00	215.88	217.18	82.31	-1,422.20	9,119.44	1,897.49	1,468.03	429.47	4.418	
18,800.00	9,506.00	18,578.89	9,255.00	218.16	219.46	82.31	-1,422.29	9,219.44	1,897.56	1,463.56	433.99	4.372	
18,900.00	9,506.00	18,678.89	9,255.00	220.44	221.74	82.31	-1,422.37	9,319.44	1,897.62	1,459.10	438.52	4.327	
19,000.00	9,506.00	18,778.89	9,255.00	222.72	224.02	82.31	-1,422.46	9,419.44	1,897.68	1,454.63	443.05	4.283	
19,100.00	9,506.00	18,878.89	9,255.00	225.00	226.31	82.31	-1,422.54	9,519.44	1,897.74	1,450.16	447.58	4.240	
19,200.00	9,506.00	18,978.89	9,255.00	227.28	228.59	82.31	-1,422.63	9,619.44	1,897.80	1,445.70	452.11	4.198	
19,300.00	9,506.00	19,078.89	9,255.00	229.56	230.88	82.31	-1,422.71	9,719.44	1,897.86	1,441.23	456.64	4.156	
19,400.00	9,506.00	19,178.89	9,255.00	231.85	233.16	82.31	-1,422.80	9,819.44	1,897.93	1,436.76	461.17	4.115	
19,500.00	9,506.00	19,278.89	9,255.00	234.13	235.45	82.31	-1,422.88	9,919.44	1,897.99	1,432.29	465.70	4.076	
19,600.00	9,506.00	19,378.89	9,255.00	236.42	237.73	82.31	-1,422.97	10,019.44	1,898.05	1,427.81	470.24	4.036	
19,628.96	9,506.00	19,407.85	9,255.00	237.08	238.39	82.31	-1,422.99	10,048.40	1,898.07	1,426.52	471.55	4.025 SF	

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com - #242H - OH - Prelim B											Offset Site Error:		
Survey Program: 0-MWD-HDGM											Offset Well Error:		
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	1.00	1.00	0.00	0.00	-169.53	-590.00	-109.00	599.98				
100.00	100.00	101.00	101.00	0.13	0.13	-169.53	-590.00	-109.00	599.98	599.72	0.26	2,308.588	
200.00	200.00	201.00	201.00	0.49	0.49	-169.53	-590.00	-109.00	599.98	599.01	0.98	614.212	
300.00	300.00	301.00	301.00	0.85	0.85	-169.53	-590.00	-109.00	599.98	598.29	1.69	354.228	
400.00	400.00	401.00	401.00	1.20	1.21	-169.53	-590.00	-109.00	599.98	597.57	2.41	248.882	
500.00	500.00	501.00	501.00	1.56	1.57	-169.53	-590.00	-109.00	599.98	596.86	3.13	191.831	
600.00	600.00	601.00	601.00	1.92	1.92	-169.53	-590.00	-109.00	599.98	596.14	3.84	156.059	
700.00	700.00	701.00	701.00	2.28	2.28	-169.53	-590.00	-109.00	599.98	595.42	4.56	131.531	
800.00	800.00	801.00	801.00	2.64	2.64	-169.53	-590.00	-109.00	599.98	594.71	5.28	113.666	
900.00	900.00	901.00	901.00	3.00	3.00	-169.53	-590.00	-109.00	599.98	593.99	6.00	100.073	
1,000.00	1,000.00	1,001.00	1,001.00	3.35	3.36	-169.53	-590.00	-109.00	599.98	593.27	6.71	89.385 CC, ES	
1,100.00	1,099.98	1,100.98	1,100.98	3.71	3.72	-122.13	-590.00	-109.00	600.91	593.48	7.43	80.912	
1,200.00	1,199.84	1,200.84	1,200.84	4.07	4.07	-122.51	-590.00	-109.00	603.71	595.57	8.14	74.166	
1,300.00	1,299.53	1,300.53	1,300.53	4.42	4.43	-123.11	-590.00	-109.00	607.99	599.14	8.86	68.660	
1,400.00	1,399.20	1,400.20	1,400.20	4.78	4.79	-123.74	-590.00	-109.00	612.43	602.86	9.57	63.985	
1,500.00	1,498.88	1,499.88	1,499.88	5.14	5.15	-124.36	-590.00	-109.00	616.95	606.66	10.29	59.959	
1,600.00	1,598.55	1,602.38	1,602.36	5.51	5.51	-125.15	-590.00	-107.17	621.31	610.30	11.01	56.431	
1,700.00	1,698.23	1,701.72	1,701.64	5.87	5.85	-126.07	-590.00	-103.70	625.59	613.88	11.71	53.406	
1,800.00	1,797.90	1,801.13	1,800.99	6.24	6.19	-126.97	-590.00	-100.24	630.03	617.61	12.42	50.724	
1,900.00	1,897.58	1,900.54	1,900.33	6.60	6.53	-127.86	-590.00	-96.77	634.63	621.50	13.13	48.335	
2,000.00	1,997.26	2,000.06	1,999.68	6.97	6.88	-128.73	-590.00	-93.30	639.38	625.54	13.84	46.195	
2,100.00	2,096.93	2,100.65	2,099.03	7.34	7.23	-129.60	-590.00	-89.83	644.27	629.72	14.56	44.257	
2,200.00	2,196.61	2,201.24	2,198.37	7.71	7.59	-130.45	-590.00	-86.36	649.31	634.04	15.28	42.508	
2,300.00	2,296.28	2,301.83	2,297.72	8.08	7.94	-131.28	-590.00	-82.89	654.50	638.50	15.99	40.922	
2,400.00	2,395.96	2,402.43	2,397.07	8.45	8.30	-132.11	-590.00	-79.42	659.82	643.10	16.71	39.478	
2,500.00	2,495.63	2,503.02	2,496.42	8.82	8.65	-132.92	-590.00	-75.95	665.27	647.84	17.43	38.160	
2,600.00	2,595.31	2,603.61	2,595.76	9.19	9.01	-133.71	-590.00	-72.48	670.86	652.71	18.15	36.953	
2,700.00	2,694.99	2,704.20	2,695.11	9.56	9.36	-134.50	-590.00	-69.01	676.58	657.70	18.88	35.843	
2,800.00	2,794.66	2,804.79	2,794.46	9.93	9.72	-135.27	-590.00	-65.54	682.42	662.82	19.60	34.821	
2,900.00	2,894.34	2,905.39	2,893.81	10.30	10.08	-136.03	-590.00	-62.07	688.38	668.06	20.32	33.878	
3,000.00	2,994.01	2,994.02	2,993.15	10.67	10.40	-136.77	-590.00	-58.60	694.46	673.46	21.00	33.071	
3,100.00	3,093.69	3,083.20	3,082.30	11.04	10.71	-137.35	-590.69	-56.45	701.34	679.67	21.67	32.370	
3,200.00	3,193.36	3,171.70	3,170.77	11.41	11.00	-137.71	-592.96	-56.55	709.83	687.51	22.32	31.808	
3,300.00	3,293.04	3,260.13	3,259.08	11.78	11.30	-137.88	-596.82	-58.86	719.88	696.93	22.96	31.359	
3,400.00	3,392.71	3,348.31	3,346.97	12.15	11.59	-137.86	-602.24	-63.37	731.47	707.88	23.59	31.009	
3,500.00	3,492.39	3,446.37	3,444.57	12.53	11.91	-137.72	-609.31	-69.85	743.97	719.70	24.28	30.646	
3,600.00	3,592.07	3,545.57	3,543.29	12.90	12.24	-137.58	-616.48	-76.42	756.49	731.51	24.97	30.293	
3,700.00	3,691.74	3,644.77	3,642.01	13.27	12.57	-137.44	-623.64	-82.99	769.00	743.33	25.67	29.957	
3,800.00	3,791.42	3,743.97	3,740.73	13.64	12.91	-137.31	-630.80	-89.55	781.53	755.15	26.37	29.636	
3,900.00	3,891.09	3,843.16	3,839.45	14.01	13.24	-137.18	-637.96	-96.12	794.05	766.98	27.07	29.329	
4,000.00	3,990.77	3,942.36	3,938.17	14.39	13.58	-137.06	-645.12	-102.69	806.58	778.80	27.78	29.036	
4,100.00	4,090.44	4,041.56	4,036.89	14.76	13.93	-136.94	-652.28	-109.25	819.11	790.63	28.48	28.756	
4,200.00	4,190.12	4,140.75	4,135.61	15.13	14.27	-136.82	-659.44	-115.82	831.65	802.46	29.19	28.488	
4,300.00	4,289.80	4,239.95	4,234.33	15.50	14.62	-136.71	-666.60	-122.39	844.19	814.29	29.90	28.232	
4,400.00	4,389.47	4,339.15	4,333.05	15.88	14.97	-136.60	-673.76	-128.95	856.73	826.12	30.61	27.986	
4,500.00	4,489.15	4,438.35	4,431.77	16.25	15.32	-136.49	-680.92	-135.52	869.28	837.95	31.33	27.750	
4,600.00	4,588.82	4,537.54	4,530.49	16.62	15.67	-136.39	-688.08	-142.09	881.82	849.79	32.04	27.523	
4,700.00	4,688.50	4,636.74	4,629.21	16.99	16.03	-136.29	-695.24	-148.65	894.38	861.62	32.75	27.306	
4,800.00	4,788.17	4,735.94	4,727.93	17.37	16.38	-136.19	-702.40	-155.22	906.93	873.46	33.47	27.097	
4,900.00	4,887.85	4,835.13	4,826.65	17.74	16.74	-136.09	-709.56	-161.79	919.49	885.30	34.19	26.896	
5,000.00	4,987.53	4,934.33	4,925.37	18.11	17.10	-136.00	-716.72	-168.35	932.05	897.14	34.90	26.703	
5,100.00	5,087.20	5,033.53	5,024.09	18.48	17.46	-135.91	-723.88	-174.92	944.61	908.98	35.62	26.517	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2:00 sigma
Reference Wellbore:	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com - #242H - OH - Prelim B												Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HDGM												Offset Well Error:	0.00 usft
Reference Measured Vertical Depth (usft)	Offset Measured Vertical Depth (usft)	Semi-Major Axis Reference Depth (usft)	Offset Depth (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
5,200.00	5,186.88	5,132.72	5,122.81	18.86	17.82	-135.82	-731.04	-181.49	957.17	920.83	36.34	26.338	
5,300.00	5,286.55	5,231.92	5,221.53	19.23	18.18	-135.74	-738.20	-188.05	969.74	932.67	37.06	26.165	
5,400.00	5,386.23	5,331.12	5,320.25	19.60	18.54	-135.65	-745.36	-194.62	982.30	944.52	37.78	25.999	
5,500.00	5,485.90	5,430.32	5,418.97	19.97	18.90	-135.57	-752.52	-201.19	994.87	956.37	38.50	25.838	
5,600.00	5,585.58	5,529.51	5,517.69	20.35	19.26	-135.49	-759.68	-207.75	1,007.44	968.22	39.23	25.682	
5,700.00	5,685.26	5,628.71	5,616.41	20.72	19.63	-135.42	-766.84	-214.32	1,020.02	980.07	39.95	25.532	
5,800.00	5,784.93	5,727.91	5,715.13	21.09	19.99	-135.37	-774.01	-220.89	1,032.56	991.89	40.67	25.387	
5,900.00	5,884.76	5,827.26	5,814.00	21.46	20.36	-135.36	-781.18	-227.46	1,043.53	1,002.13	41.39	25.210	
6,000.00	5,984.73	5,926.75	5,913.01	21.81	20.72	-135.18	-788.36	-234.05	1,052.03	1,009.93	42.11	24.985	
6,100.00	6,084.73	6,026.27	6,012.05	22.16	21.09	-135.17	-795.54	-240.64	1,059.00	1,016.18	42.81	24.735	
6,200.00	6,184.73	6,125.79	6,111.10	22.50	21.46	-135.17	-802.73	-247.23	1,065.98	1,022.46	43.52	24.493	
6,300.00	6,284.73	6,225.31	6,210.14	22.85	21.83	-135.17	-809.91	-253.81	1,073.00	1,028.77	44.23	24.260	
6,400.00	6,384.73	6,324.83	6,309.18	23.19	22.20	-135.17	-817.09	-260.40	1,080.07	1,035.13	44.94	24.035	
6,500.00	6,484.73	6,424.34	6,408.22	23.54	22.57	-135.17	-824.28	-266.99	1,087.18	1,041.53	45.65	23.817	
6,600.00	6,584.73	6,523.86	6,507.26	23.89	22.94	-135.17	-831.46	-273.58	1,094.33	1,047.97	46.36	23.607	
6,700.00	6,684.73	6,623.38	6,606.30	24.23	23.31	-135.17	-838.64	-280.17	1,101.52	1,054.45	47.07	23.404	
6,800.00	6,784.73	6,722.90	6,705.34	24.58	23.68	-135.17	-845.83	-286.75	1,108.75	1,060.97	47.78	23.207	
6,900.00	6,884.73	6,821.21	6,803.22	24.93	24.17	-135.17	-853.01	-293.86	1,114.69	1,066.01	48.48	22.998	
7,000.00	6,984.73	6,921.77	6,903.81	25.28	24.67	-135.17	-860.19	-299.95	1,117.04	1,067.47	49.18	22.793	
7,100.00	7,084.73	7,103.81	7,085.73	25.63	25.03	-135.17	-867.37	-297.00	1,117.08	1,066.80	50.28	22.518	
7,200.00	7,184.73	7,203.81	7,185.73	25.97	25.37	-135.17	-874.55	-297.00	1,117.08	1,066.10	50.97	22.216	
7,300.00	7,284.73	7,303.81	7,285.73	26.32	25.71	-135.17	-881.73	-297.00	1,117.08	1,065.41	51.66	21.916	
7,400.00	7,384.73	7,403.81	7,385.73	26.67	26.05	-135.17	-888.91	-297.00	1,117.08	1,064.72	52.36	21.622	
7,500.00	7,484.73	7,503.81	7,485.73	27.02	26.39	-135.17	-896.09	-297.00	1,117.08	1,064.02	53.05	21.335	
7,600.00	7,584.73	7,603.81	7,585.73	27.37	26.73	-135.17	-903.27	-297.00	1,117.08	1,063.33	53.75	21.056	
7,700.00	7,684.73	7,703.81	7,685.73	27.72	27.07	-135.17	-910.45	-297.00	1,117.08	1,062.63	54.44	20.783	
7,800.00	7,784.73	7,803.81	7,785.73	28.07	27.41	-135.17	-917.63	-297.00	1,117.08	1,061.94	55.14	20.518	
7,900.00	7,884.73	7,903.81	7,885.73	28.42	27.75	-135.17	-924.81	-297.00	1,117.08	1,061.24	55.84	20.259	
8,000.00	7,984.73	8,003.81	7,985.73	28.77	28.09	-135.17	-931.99	-297.00	1,117.08	1,060.54	56.53	20.006	
8,100.00	8,084.73	8,103.81	8,085.73	29.12	28.44	-135.17	-939.17	-297.00	1,117.08	1,059.84	57.23	19.759	
8,200.00	8,184.73	8,203.81	8,185.73	29.47	28.78	-135.17	-946.35	-297.00	1,117.08	1,059.14	57.93	19.518	
8,300.00	8,284.73	8,303.81	8,285.73	29.82	29.12	-135.17	-953.53	-297.00	1,117.08	1,058.45	58.63	19.283	
8,400.00	8,384.73	8,403.81	8,385.73	30.18	29.47	-135.17	-960.71	-297.00	1,117.08	1,057.75	59.33	19.053	
8,500.00	8,484.73	8,503.81	8,485.73	30.53	29.81	-135.17	-967.89	-297.00	1,117.08	1,057.05	60.03	18.829	
8,600.00	8,584.73	8,603.81	8,585.73	30.88	30.15	-135.17	-975.07	-297.00	1,117.08	1,056.35	60.73	18.609	
8,700.00	8,684.73	8,703.81	8,685.73	31.23	30.50	-135.17	-982.25	-297.00	1,117.08	1,055.65	61.43	18.395	
8,800.00	8,784.73	8,803.81	8,785.73	31.58	30.84	-135.17	-989.43	-297.00	1,117.08	1,054.95	62.13	18.185	
8,900.00	8,884.73	8,903.81	8,885.73	31.93	31.19	-135.17	-996.61	-297.00	1,117.08	1,054.24	62.83	17.980	
9,000.00	8,984.39	9,003.47	8,985.39	32.27	31.53	-135.17	-1,003.79	-297.00	1,120.78	1,057.26	63.52	17.779	
9,100.00	9,081.39	9,100.47	9,082.39	32.59	31.87	-135.17	-1,010.97	-297.00	1,134.10	1,069.93	64.17	17.645	
9,200.00	9,172.78	9,208.14	9,173.78	32.88	32.24	-135.17	-1,018.15	-297.00	1,157.42	1,092.58	64.84	17.672	
9,300.00	9,255.79	9,274.87	9,256.79	33.12	32.47	-135.17	-1,025.33	-297.00	1,191.06	1,125.72	65.34	17.850	
9,400.00	9,328.12	9,347.20	9,329.12	33.32	32.72	-135.17	-1,032.51	-297.00	1,234.35	1,168.53	65.82	18.229	
9,500.00	9,389.92	9,411.96	9,393.88	33.62	32.95	-135.17	-1,039.69	-296.96	1,279.21	1,212.94	66.27	18.752	
9,600.00	9,439.92	9,530.39	9,511.31	34.02	33.34	-135.17	-1,046.87	-283.36	1,322.29	1,255.46	66.84	19.304	
9,700.00	9,476.60	9,700.00	9,657.36	34.50	33.84	-135.17	-1,054.05	-228.74	1,360.58	1,293.25	67.33	19.783	
9,800.00	9,498.85	10,044.80	9,901.87	35.06	34.88	-135.17	-1,061.23	24.50	1,387.75	1,320.30	67.45	20.208	
9,900.00	9,506.00	10,349.57	9,960.00	35.70	36.62	-135.17	-1,068.41	320.40	1,393.23	1,323.90	67.33	20.574	
10,000.00	9,506.00	10,449.57	9,960.00	36.42	37.40	-135.17	-1,075.59	420.40	1,393.26	1,322.50	67.33	20.095	
10,100.00	9,506.00	10,549.57	9,960.00	37.28	38.30	-135.17	-1,082.77	520.40	1,393.28	1,320.86	67.33	19.691	
10,200.00	9,506.00	10,649.57	9,960.00	38.24	39.32	-135.17	-1,089.95	620.40	1,393.30	1,319.00	67.33	19.239	
10,300.00	9,506.00	10,749.57	9,960.00	39.32	40.45	-135.17	-1,097.13	720.40	1,393.33	1,316.93	67.33	18.751	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com - #242H - OH - Prelim B														Offset Site Error:
Survey Program: 0-MWD-HDGM														Offset Well Error:
Reference	Offset	Semi-Major Axis	Distance	Minimum	Separation	Warning								
Measured Vertical	Measured Vertical	Reference Offset	Highside	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Factor						
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)
10,400.00	9,506.00	10,849.57	9,960.00	40.50	41.67	108.97	-857.54	820.40	1,393.35	1,314.67	78.68	17.709		
10,500.00	9,506.00	10,949.57	9,960.00	41.77	42.98	108.97	-857.59	920.40	1,393.38	1,312.24	81.14	17.173		
10,600.00	9,506.00	11,049.57	9,960.00	43.13	44.38	108.97	-857.64	1,020.40	1,393.40	1,309.65	83.76	16.637		
10,700.00	9,506.00	11,149.57	9,960.00	44.57	45.84	108.97	-857.68	1,120.40	1,393.42	1,306.91	86.52	16.106		
10,800.00	9,506.00	11,249.57	9,960.00	46.08	47.38	108.97	-857.73	1,220.40	1,393.45	1,304.04	89.41	15.585		
10,900.00	9,506.00	11,349.57	9,960.00	47.65	48.97	108.97	-857.78	1,320.40	1,393.47	1,301.05	92.42	15.077		
11,000.00	9,506.00	11,449.57	9,960.00	49.28	50.62	108.97	-857.83	1,420.40	1,393.50	1,297.95	95.54	14.585		
11,100.00	9,506.00	11,549.57	9,960.00	50.96	52.32	108.97	-857.88	1,520.40	1,393.52	1,294.76	98.76	14.110		
11,200.00	9,506.00	11,649.57	9,960.00	52.69	54.07	108.97	-857.93	1,620.40	1,393.54	1,291.48	102.06	13.654		
11,300.00	9,506.00	11,749.57	9,960.00	54.46	55.85	108.97	-857.97	1,720.40	1,393.57	1,288.12	105.45	13.215		
11,400.00	9,506.00	11,849.57	9,960.00	56.27	57.68	108.97	-858.02	1,820.40	1,393.59	1,284.68	108.91	12.796		
11,500.00	9,506.00	11,949.57	9,960.00	58.12	59.53	108.97	-858.07	1,920.40	1,393.62	1,281.18	112.43	12.395		
11,600.00	9,506.00	12,049.57	9,960.00	60.00	61.42	108.97	-858.12	2,020.40	1,393.64	1,277.62	116.02	12.012		
11,700.00	9,506.00	12,149.57	9,960.00	61.91	63.34	108.97	-858.17	2,120.40	1,393.66	1,274.01	119.66	11.647		
11,800.00	9,506.00	12,249.57	9,960.00	63.84	65.28	108.97	-858.22	2,220.40	1,393.69	1,270.34	123.34	11.299		
11,900.00	9,506.00	12,349.57	9,960.00	65.80	67.24	108.97	-858.26	2,320.40	1,393.71	1,266.64	127.08	10.967		
12,000.00	9,506.00	12,449.57	9,960.00	67.78	69.23	108.97	-858.31	2,420.40	1,393.74	1,262.88	130.85	10.651		
12,100.00	9,506.00	12,549.57	9,960.00	69.78	71.23	108.97	-858.36	2,520.40	1,393.76	1,259.10	134.66	10.350		
12,200.00	9,506.00	12,649.57	9,960.00	71.80	73.25	108.97	-858.41	2,620.40	1,393.78	1,255.27	138.51	10.063		
12,300.00	9,506.00	12,749.57	9,960.00	73.83	75.29	108.97	-858.46	2,720.40	1,393.81	1,251.42	142.39	9.789		
12,400.00	9,506.00	12,849.57	9,960.00	75.89	77.35	108.97	-858.51	2,820.40	1,393.83	1,247.53	146.30	9.527		
12,500.00	9,506.00	12,949.57	9,960.00	77.95	79.42	108.97	-858.55	2,920.40	1,393.86	1,243.62	150.24	9.278		
12,600.00	9,506.00	13,049.57	9,960.00	80.03	81.50	108.97	-858.60	3,020.40	1,393.88	1,239.68	154.20	9.039		
12,700.00	9,506.00	13,149.57	9,960.00	82.12	83.59	108.96	-858.65	3,120.40	1,393.90	1,235.72	158.18	8.812		
12,800.00	9,506.00	13,249.57	9,960.00	84.23	85.69	108.96	-858.70	3,220.40	1,393.93	1,231.74	162.19	8.594		
12,900.00	9,506.00	13,349.57	9,960.00	86.34	87.81	108.96	-858.75	3,320.40	1,393.95	1,227.74	166.22	8.386		
13,000.00	9,506.00	13,449.57	9,960.00	88.46	89.93	108.96	-858.80	3,420.40	1,393.98	1,223.72	170.26	8.187		
13,100.00	9,506.00	13,549.57	9,960.00	90.59	92.07	108.96	-858.84	3,520.40	1,394.00	1,219.68	174.32	7.997		
13,200.00	9,506.00	13,649.57	9,960.00	92.74	94.21	108.96	-858.89	3,620.40	1,394.02	1,215.62	178.40	7.814		
13,300.00	9,506.00	13,749.57	9,960.00	94.88	96.36	108.96	-858.94	3,720.40	1,394.05	1,211.55	182.49	7.639		
13,400.00	9,506.00	13,849.57	9,960.00	97.04	98.51	108.96	-858.99	3,820.40	1,394.07	1,207.47	186.60	7.471		
13,500.00	9,506.00	13,949.57	9,960.00	99.20	100.67	108.96	-859.04	3,920.40	1,394.10	1,203.38	190.72	7.310		
13,600.00	9,506.00	14,049.57	9,960.00	101.37	102.84	108.96	-859.09	4,020.40	1,394.12	1,199.27	194.85	7.155		
13,700.00	9,506.00	14,149.57	9,960.00	103.55	105.02	108.96	-859.13	4,120.40	1,394.14	1,195.15	199.00	7.006		
13,800.00	9,506.00	14,249.57	9,960.00	105.73	107.20	108.96	-859.18	4,220.40	1,394.17	1,191.02	203.15	6.863		
13,900.00	9,506.00	14,349.57	9,960.00	107.91	109.39	108.96	-859.23	4,320.40	1,394.19	1,186.88	207.32	6.725		
14,000.00	9,506.00	14,449.57	9,960.00	110.11	111.58	108.96	-859.28	4,420.40	1,394.22	1,182.73	211.49	6.592		
14,100.00	9,506.00	14,549.57	9,960.00	112.30	113.77	108.96	-859.33	4,520.40	1,394.24	1,178.57	215.67	6.465		
14,200.00	9,506.00	14,649.57	9,960.00	114.50	115.97	108.96	-859.38	4,620.40	1,394.26	1,174.40	219.86	6.341		
14,300.00	9,506.00	14,749.57	9,960.00	116.71	118.18	108.96	-859.42	4,720.40	1,394.29	1,170.22	224.06	6.223		
14,400.00	9,506.00	14,849.57	9,960.00	118.92	120.38	108.96	-859.47	4,820.40	1,394.31	1,166.04	228.27	6.108		
14,500.00	9,506.00	14,949.57	9,960.00	121.13	122.60	108.96	-859.52	4,920.40	1,394.34	1,161.85	232.49	5.998		
14,600.00	9,506.00	15,049.57	9,960.00	123.34	124.81	108.96	-859.57	5,020.40	1,394.36	1,157.65	236.71	5.891		
14,700.00	9,506.00	15,149.57	9,960.00	125.56	127.03	108.96	-859.62	5,120.40	1,394.38	1,153.45	240.93	5.787		
14,800.00	9,506.00	15,249.57	9,960.00	127.79	129.25	108.96	-859.67	5,220.40	1,394.41	1,149.24	245.17	5.688		
14,900.00	9,506.00	15,349.57	9,960.00	130.01	131.48	108.96	-859.71	5,320.40	1,394.43	1,145.02	249.41	5.591		
15,000.00	9,506.00	15,449.57	9,960.00	132.24	133.70	108.96	-859.76	5,420.40	1,394.46	1,140.80	253.65	5.497		
15,100.00	9,506.00	15,549.57	9,960.00	134.47	135.93	108.96	-859.81	5,520.40	1,394.48	1,136.58	257.90	5.407		
15,200.00	9,506.00	15,649.57	9,960.00	136.70	138.17	108.96	-859.86	5,620.40	1,394.50	1,132.35	262.16	5.319		
15,300.00	9,506.00	15,749.57	9,960.00	138.94	140.40	108.96	-859.91	5,720.40	1,394.53	1,128.11	266.42	5.234		
15,400.00	9,506.00	15,849.57	9,960.00	141.18	142.64	108.96	-859.96	5,820.40	1,394.55	1,123.87	270.68	5.152		
15,500.00	9,506.00	15,949.57	9,960.00	143.42	144.88	108.96	-860.00	5,920.40	1,394.58	1,119.62	274.95	5.072		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com - #242H - OH - Prelim B													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 Vertical	Measured Vertical	Reference	Offset	Highside	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor					
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	(usft)					
15,600.00	9,506.00	16,049.57	9,960.00	145.66	147.12	108.95	-860.05	6,020.40	1,394.60	1,115.38	279.22	4.995		
15,700.00	9,506.00	16,149.57	9,960.00	147.91	149.37	108.95	-860.10	6,120.40	1,394.62	1,111.12	283.50	4.919		
15,800.00	9,506.00	16,249.57	9,960.00	150.15	151.61	108.95	-860.15	6,220.40	1,394.65	1,106.87	287.78	4.846		
15,900.00	9,506.00	16,349.57	9,960.00	152.40	153.86	108.95	-860.20	6,320.40	1,394.67	1,102.61	292.07	4.775		
16,000.00	9,506.00	16,449.57	9,960.00	154.65	156.11	108.95	-860.25	6,420.40	1,394.70	1,098.34	296.35	4.706		
16,100.00	9,506.00	16,549.57	9,960.00	156.90	158.36	108.95	-860.29	6,520.40	1,394.72	1,094.08	300.64	4.639		
16,200.00	9,506.00	16,649.57	9,960.00	159.16	160.61	108.95	-860.34	6,620.40	1,394.74	1,089.81	304.94	4.574		
16,300.00	9,506.00	16,749.57	9,960.00	161.41	162.87	108.95	-860.39	6,720.40	1,394.77	1,085.53	309.24	4.510		
16,400.00	9,506.00	16,849.57	9,960.00	163.67	165.12	108.95	-860.44	6,820.40	1,394.79	1,081.26	313.54	4.449		
16,500.00	9,506.00	16,949.57	9,960.00	165.93	167.38	108.95	-860.49	6,920.40	1,394.82	1,076.98	317.84	4.388		
16,600.00	9,506.00	17,049.57	9,960.00	168.19	169.64	108.95	-860.53	7,020.40	1,394.84	1,072.70	322.14	4.330		
16,700.00	9,506.00	17,149.57	9,960.00	170.45	171.90	108.95	-860.58	7,120.40	1,394.86	1,068.41	326.45	4.273		
16,800.00	9,506.00	17,249.57	9,960.00	172.71	174.16	108.95	-860.63	7,220.40	1,394.89	1,064.13	330.76	4.217		
16,900.00	9,506.00	17,349.57	9,960.00	174.97	176.43	108.95	-860.68	7,320.40	1,394.91	1,059.84	335.07	4.163		
17,000.00	9,506.00	17,449.56	9,960.00	177.24	178.69	108.95	-860.73	7,420.40	1,394.94	1,055.55	339.39	4.110		
17,100.00	9,506.00	17,549.56	9,960.00	179.50	180.95	108.95	-860.78	7,520.40	1,394.96	1,051.25	343.71	4.059		
17,200.00	9,506.00	17,649.56	9,960.00	181.77	183.22	108.95	-860.82	7,620.40	1,394.98	1,046.96	348.03	4.008		
17,300.00	9,506.00	17,749.56	9,960.00	184.04	185.49	108.95	-860.87	7,720.40	1,395.01	1,042.66	352.35	3.959		
17,400.00	9,506.00	17,849.56	9,960.00	186.31	187.76	108.95	-860.92	7,820.40	1,395.03	1,038.36	356.67	3.911		
17,500.00	9,506.00	17,949.56	9,960.00	188.58	190.02	108.95	-860.97	7,920.40	1,395.06	1,034.06	360.99	3.864		
17,600.00	9,506.00	18,049.56	9,960.00	190.85	192.29	108.95	-861.02	8,020.40	1,395.08	1,029.76	365.32	3.819		
17,700.00	9,506.00	18,149.56	9,960.00	193.12	194.57	108.95	-861.07	8,120.40	1,395.10	1,025.45	369.65	3.774		
17,800.00	9,506.00	18,249.56	9,960.00	195.39	196.84	108.95	-861.11	8,220.40	1,395.13	1,021.15	373.98	3.730		
17,900.00	9,506.00	18,349.56	9,960.00	197.66	199.11	108.95	-861.16	8,320.40	1,395.15	1,016.84	378.31	3.688		
18,000.00	9,506.00	18,449.56	9,960.00	199.94	201.38	108.95	-861.21	8,420.40	1,395.18	1,012.53	382.65	3.646		
18,100.00	9,506.00	18,549.56	9,960.00	202.21	203.66	108.95	-861.26	8,520.40	1,395.20	1,008.22	386.98	3.605		
18,200.00	9,506.00	18,649.56	9,960.00	204.49	205.93	108.95	-861.31	8,620.40	1,395.22	1,003.91	391.32	3.565		
18,300.00	9,506.00	18,749.56	9,960.00	206.77	208.21	108.95	-861.36	8,720.40	1,395.25	999.59	395.66	3.526		
18,400.00	9,506.00	18,849.56	9,960.00	209.04	210.49	108.95	-861.40	8,820.40	1,395.27	995.28	400.00	3.488		
18,500.00	9,506.00	18,949.56	9,960.00	211.32	212.76	108.95	-861.45	8,920.40	1,395.30	990.96	404.34	3.451		
18,600.00	9,506.00	19,049.56	9,960.00	213.60	215.04	108.94	-861.50	9,020.40	1,395.32	986.64	408.68	3.414		
18,700.00	9,506.00	19,149.56	9,960.00	215.88	217.32	108.94	-861.55	9,120.40	1,395.34	982.32	413.02	3.378		
18,800.00	9,506.00	19,249.56	9,960.00	218.16	219.60	108.94	-861.60	9,220.40	1,395.37	978.00	417.37	3.343		
18,900.00	9,506.00	19,349.56	9,960.00	220.44	221.88	108.94	-861.65	9,320.40	1,395.39	973.68	421.71	3.309		
19,000.00	9,506.00	19,449.56	9,960.00	222.72	224.16	108.94	-861.69	9,420.40	1,395.42	969.36	426.06	3.275		
19,100.00	9,506.00	19,549.56	9,960.00	225.00	226.44	108.94	-861.74	9,520.40	1,395.44	965.03	430.41	3.242		
19,200.00	9,506.00	19,649.56	9,960.00	227.28	228.72	108.94	-861.79	9,620.40	1,395.46	960.71	434.76	3.210		
19,300.00	9,506.00	19,749.56	9,960.00	229.56	231.00	108.94	-861.84	9,720.40	1,395.49	956.38	439.11	3.178		
19,400.00	9,506.00	19,849.56	9,960.00	231.85	233.28	108.94	-861.89	9,820.40	1,395.51	952.05	443.46	3.147		
19,500.00	9,506.00	19,949.56	9,960.00	234.13	235.57	108.94	-861.94	9,920.40	1,395.54	947.73	447.81	3.116		
19,600.00	9,506.00	20,049.56	9,960.00	236.42	237.85	108.94	-861.98	10,020.40	1,395.56	943.40	452.16	3.086		
19,628.96	9,506.00	20,078.53	9,960.00	237.08	238.51	108.94	-862.00	10,049.36	1,395.57	942.14	453.42	3.078 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	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5' = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5' = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #111H - OH - Prelim A													Offset Site Error:
Survey Program: 0-MWD+HDGM													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Semi Major Axis (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-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	
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	
1,100.00	1,099.98	1,100.02	1,099.98	3.71	3.71	38.90	190.00	-30.00	190.99	183.57	7.42	25.728	
1,200.00	1,199.84	1,200.16	1,199.84	4.07	4.07	39.96	190.00	-30.00	186.95	178.81	8.14	22.972	
1,300.00	1,299.53	1,300.47	1,299.53	4.42	4.43	41.58	190.00	-30.00	180.97	172.11	8.85	20.437	
1,400.00	1,399.20	1,400.80	1,399.20	4.78	4.79	43.33	190.00	-30.00	175.02	165.45	9.57	18.284	
1,500.00	1,498.88	1,501.12	1,498.88	5.14	5.15	45.19	190.00	-30.00	169.25	158.96	10.29	16.445	
1,600.00	1,598.55	1,601.45	1,598.55	5.51	5.51	47.19	190.00	-30.00	163.67	152.65	11.01	14.861	
1,700.00	1,698.23	1,701.77	1,698.23	5.87	5.87	49.32	190.00	-30.00	158.30	146.56	11.74	13.488	
1,800.00	1,797.90	1,802.10	1,797.90	6.24	6.23	51.60	190.00	-30.00	153.16	140.70	12.46	12.292	
1,900.00	1,897.58	1,902.42	1,897.58	6.60	6.59	54.03	190.00	-30.00	148.29	135.10	13.19	11.246	
2,000.00	1,997.26	1,997.26	1,997.26	6.97	6.93	56.62	190.00	-30.00	143.70	129.81	13.89	10.344	
2,100.00	2,096.93	2,092.51	2,092.50	7.34	7.27	59.12	191.49	-30.04	140.95	126.35	14.60	9.654	
2,128.27	2,125.11	2,119.44	2,119.41	7.44	7.37	59.78	192.49	-30.06	140.81	126.01	14.80	9.516 CC, ES	
2,200.00	2,196.61	2,187.79	2,187.66	7.71	7.61	61.36	196.15	-30.14	141.70	126.40	15.29	9.265	
2,300.00	2,296.28	2,287.31	2,286.95	8.08	7.97	63.45	202.88	-30.30	144.47	128.45	16.02	9.019	
2,400.00	2,395.96	2,387.14	2,386.55	8.45	8.33	65.46	209.64	-30.46	147.44	130.69	16.75	8.804	
2,500.00	2,495.63	2,486.96	2,486.14	8.82	8.68	67.39	216.39	-30.62	150.57	133.10	17.48	8.616	
2,600.00	2,595.31	2,586.79	2,585.74	9.19	9.04	69.24	223.15	-30.78	153.88	135.67	18.21	8.453	
2,700.00	2,694.99	2,686.61	2,685.33	9.56	9.40	71.01	229.91	-30.94	157.34	138.40	18.93	8.309	
2,800.00	2,794.66	2,786.43	2,784.93	9.93	9.76	72.71	236.66	-31.10	160.94	141.27	19.67	8.184	
2,900.00	2,894.34	2,886.26	2,884.52	10.30	10.12	74.33	243.42	-31.26	164.67	144.28	20.40	8.074	
3,000.00	2,994.01	2,986.08	2,984.12	10.67	10.48	75.87	250.18	-31.42	168.54	147.41	21.13	7.977	
3,100.00	3,093.69	3,085.91	3,083.71	11.04	10.84	77.35	256.93	-31.57	172.52	150.66	21.86	7.892	
3,200.00	3,193.36	3,185.73	3,183.31	11.41	11.21	78.76	263.69	-31.73	176.60	154.01	22.59	7.817	
3,300.00	3,293.04	3,285.55	3,282.90	11.78	11.57	80.10	270.45	-31.89	180.79	157.47	23.32	7.752	
3,400.00	3,392.71	3,385.38	3,382.50	12.15	11.93	81.38	277.20	-32.05	185.08	161.02	24.06	7.694	
3,500.00	3,492.39	3,485.20	3,482.09	12.53	12.29	82.61	283.96	-32.21	189.45	164.66	24.79	7.643	
3,600.00	3,592.07	3,585.03	3,581.69	12.90	12.66	83.78	290.72	-32.37	193.91	168.39	25.52	7.598	
3,700.00	3,691.74	3,684.85	3,681.28	13.27	13.02	84.89	297.47	-32.53	198.44	172.19	26.26	7.558	
3,800.00	3,791.42	3,784.68	3,780.88	13.64	13.38	85.96	304.23	-32.69	203.05	176.06	26.99	7.523	
3,900.00	3,891.09	3,884.50	3,880.47	14.01	13.75	86.97	310.99	-32.85	207.72	180.00	27.72	7.493	
4,000.00	3,990.77	3,984.32	3,980.07	14.39	14.11	87.95	317.75	-33.01	212.45	184.00	28.46	7.466	
4,100.00	4,090.44	4,084.15	4,079.66	14.76	14.48	88.88	324.50	-33.16	217.25	188.06	29.19	7.443	
4,200.00	4,190.12	4,183.97	4,179.26	15.13	14.84	89.77	331.26	-33.32	222.10	192.17	29.92	7.422	
4,300.00	4,289.80	4,283.80	4,278.85	15.50	15.20	90.62	338.02	-33.48	226.99	196.34	30.66	7.404	
4,400.00	4,389.47	4,383.62	4,378.45	15.88	15.57	91.44	344.77	-33.64	231.94	200.55	31.39	7.389	
4,500.00	4,489.15	4,483.45	4,478.04	16.25	15.93	92.22	351.53	-33.80	236.93	204.81	32.13	7.375	
4,600.00	4,588.82	4,582.64	4,577.06	16.62	16.31	93.17	357.57	-33.94	241.32	208.43	32.89	7.358	
4,700.00	4,688.50	4,683.43	4,677.81	16.99	16.69	94.76	359.97	-34.00	243.40	209.76	33.64	7.335	
4,800.00	4,788.17	4,783.21	4,777.17	17.37	17.09	96.65	360.00	-34.00	244.22	209.81	34.41	7.097	
4,900.00	4,887.85	4,883.54	4,877.85	17.74	17.45	98.51	360.00	-34.00	245.29	210.15	35.14	6.981	
5,000.00	4,987.53	5,006.86	4,987.53	18.11	17.81	100.35	360.00	-34.00	246.61	210.75	35.86	6.876	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #1.11H - OH - Prelim A													Offset Site Error:
Survey Program: 0-MWD-HDGM													0.00usft
Reference	Offset	Semi-Major Axis	Distance	Warning									
Measured Vertical	Measured Vertical	Reference Offset	Highside	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor					
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Reference Offset (usft)	Offset (usft)	Toolface (°)	N/S (usft)	E/W (usft)	(usft)	(usft)	(usft)	(usft)	
5,100.00	5,087.20	5,107.18	5,087.20	18.48	18.16	102.17	360.00	-34.00	248.19	211.60	36.59	6.784	
5,200.00	5,186.88	5,207.51	5,186.88	18.86	18.52	103.97	360.00	-34.00	250.01	212.70	37.31	6.701	
5,300.00	5,286.55	5,307.83	5,286.55	19.23	18.87	105.74	360.00	-34.00	252.08	214.05	38.03	6.628	
5,400.00	5,386.23	5,408.16	5,386.23	19.60	19.23	107.48	360.00	-34.00	254.39	215.64	38.75	6.564	
5,500.00	5,485.90	5,508.48	5,485.90	19.97	19.59	109.19	360.00	-34.00	256.93	217.46	39.47	6.509	
5,600.00	5,585.58	5,608.81	5,585.58	20.35	19.95	110.86	360.00	-34.00	259.69	219.50	40.19	6.461	
5,700.00	5,685.26	5,709.13	5,685.26	20.72	20.30	112.50	360.00	-34.00	262.67	221.76	40.91	6.421	
5,800.00	5,784.93	5,809.45	5,784.93	21.09	20.66	114.09	360.00	-34.00	265.85	224.22	41.63	6.386	
5,900.00	5,884.76	5,909.62	5,884.76	21.46	21.02	115.26	360.00	-34.00	268.26	225.92	42.34	6.336	
6,000.00	5,984.73	6,009.65	5,984.73	21.81	21.37	115.72	360.00	-34.00	269.24	226.19	43.05	6.254	
6,100.00	6,084.73	6,109.65	6,084.73	22.16	21.73	68.20	360.00	-34.00	269.26	225.51	43.75	6.154	
6,200.00	6,184.73	6,209.65	6,184.73	22.50	22.09	68.20	360.00	-34.00	269.26	224.80	44.45	6.057	
6,300.00	6,284.73	6,290.35	6,284.73	22.85	22.37	68.20	360.00	-34.00	269.26	224.17	45.09	5.972	
6,400.00	6,384.73	6,368.71	6,363.04	23.19	22.65	68.30	360.27	-32.09	272.00	226.44	45.57	5.969 SF	
6,500.00	6,484.73	6,435.93	6,429.56	23.54	22.88	68.75	361.60	-22.76	285.68	240.17	45.51	6.277	
6,600.00	6,584.73	6,500.00	6,491.52	23.89	23.09	69.46	363.88	-6.74	310.41	265.42	44.99	6.900	
6,700.00	6,684.73	6,560.00	6,547.57	24.23	23.29	70.29	366.89	14.38	345.35	301.24	44.11	7.829	
6,800.00	6,784.73	6,614.84	6,596.60	24.58	23.47	71.12	370.34	38.66	389.46	346.48	42.97	9.063	
6,900.00	6,884.73	6,664.37	6,638.68	24.93	23.65	71.88	374.02	64.49	441.57	399.86	41.71	10.588	
7,000.00	6,984.73	6,700.00	6,667.48	25.28	23.78	72.42	376.97	85.24	500.67	460.70	39.97	12.525	
7,100.00	7,084.73	6,750.00	6,705.58	25.63	23.98	73.15	381.53	117.27	565.28	526.07	39.21	14.416	
7,200.00	7,184.73	6,783.14	6,729.22	25.97	24.12	73.61	384.80	140.26	634.87	596.95	37.93	16.739	
7,300.00	7,284.73	6,814.20	6,750.12	26.32	24.25	74.02	388.04	163.00	708.53	671.70	36.83	19.238	
7,400.00	7,384.73	6,850.00	6,772.63	26.67	24.42	74.46	391.96	190.56	785.68	749.53	36.15	21.733	
7,500.00	7,484.73	6,866.35	6,782.32	27.02	24.51	74.65	393.82	203.60	865.47	830.50	34.97	24.747	
7,600.00	7,584.73	6,900.00	6,801.06	27.37	24.68	75.03	397.75	231.26	947.95	913.37	34.58	27.410	
7,700.00	7,684.73	6,900.00	6,801.06	27.72	24.68	75.03	397.75	231.26	1,032.16	998.84	33.32	30.978	
7,800.00	7,784.73	6,925.59	6,814.19	28.07	24.83	75.30	400.85	253.00	1,118.10	1,085.12	32.99	33.896	
7,900.00	7,884.73	6,950.00	6,825.80	28.42	24.97	75.55	403.87	274.26	1,205.69	1,172.97	32.72	36.848	
8,000.00	7,984.73	6,950.00	6,825.80	28.77	24.97	75.55	403.87	274.26	1,294.41	1,262.44	31.97	40.493	
8,100.00	8,084.73	6,969.05	6,834.21	29.12	25.09	75.73	406.28	291.18	1,384.21	1,352.44	31.77	43.568	
8,200.00	8,184.73	6,981.00	6,839.20	29.47	25.17	75.84	407.81	301.93	1,475.00	1,443.50	31.50	46.826	
8,300.00	8,284.73	7,000.00	6,846.66	29.82	25.29	76.01	410.27	319.23	1,566.70	1,535.26	31.44	49.837	
8,400.00	8,384.73	7,000.00	6,846.66	30.18	25.29	76.01	410.27	319.23	1,658.96	1,627.88	31.08	53.374	
8,500.00	8,484.73	7,000.00	6,846.66	30.53	25.29	76.01	410.27	319.23	1,752.07	1,721.27	30.81	56.871	
8,600.00	8,584.73	7,019.69	6,853.77	30.88	25.43	76.18	412.86	337.41	1,845.47	1,814.56	30.91	59.706	
8,700.00	8,684.73	7,027.57	6,856.44	31.23	25.48	76.25	413.90	344.74	1,939.50	1,908.64	30.86	62.846	
8,800.00	8,784.73	7,050.00	6,863.48	31.58	25.64	76.43	416.90	365.83	2,034.24	2,003.18	31.06	65.501	
8,900.00	8,884.73	7,050.00	6,863.48	31.93	25.64	76.43	416.90	365.83	2,128.94	2,097.97	30.97	68.749	
9,000.00	8,984.39	7,050.00	6,863.48	32.27	25.64	13.03	416.90	365.83	2,221.87	2,191.02	30.85	72.026	
9,100.00	9,081.39	7,050.00	6,863.48	32.59	25.64	9.64	416.90	365.83	2,308.33	2,277.71	30.62	75.385	
9,200.00	9,172.78	7,070.78	6,869.25	32.88	25.80	7.96	419.72	385.59	2,386.02	2,355.48	30.54	78.125	
9,300.00	9,255.79	7,100.00	6,876.13	33.12	26.03	7.07	423.72	413.70	2,453.88	2,423.41	30.47	80.543	
9,400.00	9,328.12	7,100.00	6,876.13	33.32	26.03	5.53	423.72	413.70	2,509.91	2,479.86	30.04	83.541	
9,500.00	9,389.92	7,100.00	6,876.13	33.62	26.03	3.56	423.72	413.70	2,555.98	2,526.34	29.64	86.236	
9,600.00	9,439.92	7,150.00	6,884.52	34.02	26.45	2.44	430.66	462.49	2,591.06	2,561.39	29.67	87.328	
9,700.00	9,476.60	7,150.00	6,884.52	34.50	26.45	1.56	430.66	462.49	2,614.01	2,584.68	29.33	89.124	
9,800.00	9,498.85	7,150.00	6,884.52	35.06	26.45	0.98	430.66	462.49	2,625.54	2,596.44	29.10	90.238	
9,900.00	9,506.00	7,200.00	6,888.59	35.70	26.91	0.49	437.68	511.81	2,624.45	2,595.21	29.24	89.746	
10,000.00	9,506.00	7,200.00	6,888.59	36.42	26.91	0.49	437.68	511.81	2,619.08	2,589.85	29.23	89.590	
10,100.00	9,506.00	7,221.65	6,889.00	37.28	27.11	0.43	440.73	533.24	2,617.10	2,587.64	29.46	88.840	
10,200.00	9,506.00	7,310.93	6,889.00	38.24	28.03	0.20	451.24	621.89	2,617.02	2,587.03	29.99	87.271	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #111H - OH - Prelim A												Offset Site Error:	
Survey Program: 0-MWD-HDGM												0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Semi-Major Axis (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Distance Between Centres (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,201.31	9,506.00	7,312.22	6,889.00	38.26	28.04	0.19		451.36	623.17	2,617.02	2,587.02	30.00	87.247
10,300.00	9,506.00	7,410.41	6,889.00	39.32	29.18	0.05		458.06	721.13	2,617.00	2,586.39	30.61	85.489
10,400.00	9,506.00	7,510.35	6,889.00	40.50	30.45	0.01		459.78	821.04	2,617.00	2,585.70	31.30	83.610
10,415.25	9,506.00	7,525.60	6,889.00	40.69	30.66	0.01		459.78	836.29	2,617.00	2,585.59	31.41	83.308
10,500.00	9,506.00	7,610.35	6,889.00	41.77	31.85	0.01		459.76	921.04	2,617.00	2,584.95	32.05	81.654
10,600.00	9,506.00	7,710.35	6,889.00	43.13	33.34	0.01		459.74	1,021.04	2,617.00	2,584.14	32.86	79.642
10,700.00	9,506.00	7,810.35	6,889.00	44.57	34.92	0.01		459.72	1,121.04	2,617.00	2,583.28	33.72	77.599
10,800.00	9,506.00	7,910.35	6,889.00	46.08	36.58	0.01		459.70	1,221.04	2,617.00	2,582.36	34.64	75.548
10,900.00	9,506.00	8,010.35	6,889.00	47.65	38.31	0.01		459.68	1,321.04	2,617.00	2,581.40	35.60	73.506
11,000.00	9,506.00	8,110.35	6,889.00	49.28	40.09	0.01		459.66	1,421.04	2,617.00	2,580.40	36.61	71.489
11,100.00	9,506.00	8,210.35	6,889.00	50.96	41.93	0.01		459.65	1,521.04	2,617.00	2,579.35	37.65	69.508
11,200.00	9,506.00	8,310.35	6,889.00	52.69	43.81	0.01		459.63	1,621.04	2,617.00	2,578.27	38.73	67.571
11,300.00	9,506.00	8,410.35	6,889.00	54.46	45.73	0.01		459.61	1,721.04	2,617.00	2,577.16	39.84	65.686
11,400.00	9,506.00	8,510.35	6,889.00	56.27	47.69	0.01		459.59	1,821.04	2,617.00	2,576.02	40.98	63.856
11,500.00	9,506.00	8,610.35	6,889.00	58.12	49.67	0.01		459.57	1,921.04	2,617.00	2,574.85	42.15	62.086
11,600.00	9,506.00	8,710.35	6,889.00	60.00	51.68	0.01		459.55	2,021.04	2,617.00	2,573.66	43.34	60.376
11,700.00	9,506.00	8,810.35	6,889.00	61.91	53.72	0.01		459.53	2,121.04	2,617.00	2,572.44	44.56	58.728
11,800.00	9,506.00	8,910.35	6,889.00	63.84	55.78	0.01		459.51	2,221.04	2,617.00	2,571.20	45.80	57.141
11,900.00	9,506.00	9,010.35	6,889.00	65.80	57.85	0.01		459.49	2,321.04	2,617.00	2,569.95	47.06	55.615
12,000.00	9,506.00	9,110.35	6,889.00	67.78	59.95	0.01		459.47	2,421.04	2,617.00	2,568.67	48.33	54.147
12,100.00	9,506.00	9,210.35	6,889.00	69.78	62.05	0.01		459.45	2,521.04	2,617.00	2,567.38	49.62	52.738
12,200.00	9,506.00	9,310.35	6,889.00	71.80	64.18	0.01		459.43	2,621.04	2,617.00	2,566.07	50.93	51.385
12,300.00	9,506.00	9,410.35	6,889.00	73.83	66.31	0.01		459.41	2,721.04	2,617.00	2,564.75	52.25	50.086
12,400.00	9,506.00	9,510.35	6,889.00	75.89	68.46	0.01		459.39	2,821.04	2,617.00	2,563.42	53.58	48.839
12,500.00	9,506.00	9,610.35	6,889.00	77.95	70.61	0.01		459.38	2,921.04	2,617.00	2,562.07	54.93	47.642
12,600.00	9,506.00	9,710.35	6,889.00	80.03	72.78	0.01		459.36	3,021.04	2,617.00	2,560.71	56.29	46.493
12,700.00	9,506.00	9,810.35	6,889.00	82.12	74.95	0.01		459.34	3,121.04	2,617.00	2,559.35	57.66	45.390
12,800.00	9,506.00	9,910.35	6,889.00	84.23	77.14	0.01		459.32	3,221.04	2,617.00	2,557.97	59.03	44.331
12,900.00	9,506.00	10,010.35	6,889.00	86.34	79.33	0.01		459.30	3,321.04	2,617.00	2,556.58	60.42	43.313
13,000.00	9,506.00	10,110.35	6,889.00	88.46	81.52	0.01		459.28	3,421.04	2,617.00	2,555.19	61.82	42.336
13,100.00	9,506.00	10,210.35	6,889.00	90.59	83.72	0.01		459.26	3,521.04	2,617.00	2,553.78	63.22	41.396
13,200.00	9,506.00	10,310.35	6,889.00	92.74	85.93	0.01		459.24	3,621.04	2,617.00	2,552.37	64.63	40.492
13,300.00	9,506.00	10,410.35	6,889.00	94.88	88.14	0.01		459.22	3,721.04	2,617.00	2,550.95	66.05	39.623
13,400.00	9,506.00	10,510.35	6,889.00	97.04	90.36	0.01		459.20	3,821.04	2,617.00	2,549.53	67.47	38.787
13,500.00	9,506.00	10,610.35	6,889.00	99.20	92.58	0.00		459.18	3,921.04	2,617.00	2,548.10	68.90	37.981
13,600.00	9,506.00	10,710.35	6,889.00	101.37	94.81	0.00		459.16	4,021.04	2,617.00	2,546.66	70.34	37.206
13,700.00	9,506.00	10,810.35	6,889.00	103.55	97.04	0.00		459.14	4,121.04	2,617.00	2,545.22	71.78	36.459
13,800.00	9,506.00	10,910.35	6,889.00	105.73	99.27	0.00		459.12	4,221.04	2,617.00	2,543.77	73.23	35.738
13,900.00	9,506.00	11,010.35	6,889.00	107.91	101.51	0.00		459.11	4,321.04	2,617.00	2,542.32	74.68	35.043
14,000.00	9,506.00	11,110.35	6,889.00	110.11	103.75	0.00		459.09	4,421.04	2,617.00	2,540.87	76.14	34.373
14,100.00	9,506.00	11,210.35	6,889.00	112.30	105.99	0.00		459.07	4,521.04	2,617.00	2,539.41	77.60	33.726
14,200.00	9,506.00	11,310.35	6,889.00	114.50	108.24	0.00		459.05	4,621.04	2,617.00	2,537.94	79.06	33.101
14,300.00	9,506.00	11,410.35	6,889.00	116.71	110.49	0.00		459.03	4,721.04	2,617.00	2,536.47	80.53	32.498
14,400.00	9,506.00	11,510.35	6,889.00	118.92	112.74	0.00		459.01	4,821.04	2,617.00	2,535.00	82.00	31.914
14,500.00	9,506.00	11,610.35	6,889.00	121.13	114.99	0.00		458.99	4,921.04	2,617.00	2,533.52	83.48	31.350
14,600.00	9,506.00	11,710.35	6,889.00	123.34	117.25	0.00		458.97	5,021.04	2,617.00	2,532.05	84.96	30.804
14,700.00	9,506.00	11,810.35	6,889.00	125.56	119.50	0.00		458.95	5,121.04	2,617.00	2,530.56	86.44	30.276
14,800.00	9,506.00	11,910.35	6,889.00	127.79	121.76	0.00		458.93	5,221.04	2,617.00	2,529.08	87.92	29.765
14,900.00	9,506.00	12,010.35	6,889.00	130.01	124.02	0.00		458.91	5,321.04	2,617.00	2,527.59	89.41	29.269
15,000.00	9,506.00	12,110.35	6,889.00	132.24	126.29	0.00		458.89	5,421.04	2,617.00	2,526.10	90.90	28.789
15,100.00	9,506.00	12,210.35	6,889.00	134.47	128.55	0.00		458.87	5,521.04	2,617.00	2,524.61	92.39	28.324
15,200.00	9,506.00	12,310.35	6,889.00	136.70	130.82	0.00		458.85	5,621.04	2,617.00	2,523.11	93.89	27.873

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

Pro Directional

Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) #1.1H OH Prelim A														Offset Site Error:	0.00 usft
Survey Program: 0 MWD HDGM														Offset Well Error:	0.00 usft
Reference Measured Vertical Depth (usft)	Offset Measured Vertical Depth (usft)	Semi-Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre N/S (usft)	E/W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning				
15,300.00	9,506.00	12,410.35	6,889.00	138.94	133.09	0.00	458.84	5,721.04	2,617.00	2,521.61	95.39	27.435			
15,400.00	9,506.00	12,510.35	6,889.00	141.18	135.35	0.00	458.82	5,821.04	2,617.00	2,520.11	96.89	27.010			
15,500.00	9,506.00	12,610.35	6,889.00	143.42	137.62	0.00	458.80	5,921.04	2,617.00	2,518.61	98.39	26.598			
15,600.00	9,506.00	12,710.35	6,889.00	145.66	139.90	0.00	458.78	6,021.04	2,617.00	2,517.11	99.90	26.198			
15,700.00	9,506.00	12,810.35	6,889.00	147.91	142.17	0.00	458.76	6,121.04	2,617.00	2,515.60	101.40	25.808			
15,800.00	9,506.00	12,910.35	6,889.00	150.15	144.44	0.00	458.74	6,221.04	2,617.00	2,514.09	102.91	25.430			
15,900.00	9,506.00	13,010.35	6,889.00	152.40	146.72	0.00	458.72	6,321.04	2,617.00	2,512.58	104.42	25.062			
16,000.00	9,506.00	13,110.35	6,889.00	154.65	148.99	0.00	458.70	6,421.04	2,617.00	2,511.07	105.93	24.705			
16,100.00	9,506.00	13,210.35	6,889.00	156.90	151.27	0.00	458.68	6,521.04	2,617.00	2,509.56	107.44	24.357			
16,200.00	9,506.00	13,310.35	6,889.00	159.16	153.55	0.00	458.66	6,621.04	2,617.00	2,508.04	108.96	24.018			
16,300.00	9,506.00	13,410.35	6,889.00	161.41	155.83	0.00	458.64	6,721.04	2,617.00	2,506.53	110.48	23.689			
16,400.00	9,506.00	13,510.35	6,889.00	163.67	158.11	0.00	458.62	6,821.04	2,617.00	2,505.01	111.99	23.367			
16,500.00	9,506.00	13,610.35	6,889.00	165.93	160.39	0.00	458.60	6,921.04	2,617.00	2,503.49	113.51	23.055			
16,600.00	9,506.00	13,710.35	6,889.00	168.19	162.67	0.00	458.58	7,021.04	2,617.00	2,501.97	115.03	22.750			
16,700.00	9,506.00	13,810.35	6,889.00	170.45	164.95	0.00	458.57	7,121.04	2,617.00	2,500.45	116.55	22.453			
16,800.00	9,506.00	13,910.35	6,889.00	172.71	167.23	0.00	458.55	7,221.04	2,617.00	2,498.92	118.08	22.163			
16,900.00	9,506.00	14,010.35	6,889.00	174.97	169.52	0.00	458.53	7,321.04	2,617.00	2,497.40	119.60	21.881			
17,000.00	9,506.00	14,110.35	6,889.00	177.24	171.80	0.00	458.51	7,421.04	2,617.00	2,495.87	121.13	21.605			
17,100.00	9,506.00	14,210.35	6,889.00	179.50	174.09	0.00	458.49	7,521.04	2,617.00	2,494.35	122.65	21.336			
17,200.00	9,506.00	14,310.35	6,889.00	181.77	176.37	0.00	458.47	7,621.04	2,617.00	2,492.82	124.18	21.074			
17,300.00	9,506.00	14,410.35	6,889.00	184.04	178.66	0.00	458.45	7,721.04	2,617.00	2,491.29	125.71	20.818			
17,400.00	9,506.00	14,510.35	6,889.00	186.31	180.94	0.00	458.43	7,821.04	2,617.00	2,489.76	127.24	20.568			
17,500.00	9,506.00	14,610.35	6,889.00	188.58	183.23	0.00	458.41	7,921.04	2,617.00	2,488.23	128.77	20.323			
17,600.00	9,506.00	14,710.35	6,889.00	190.85	185.52	0.00	458.39	8,021.04	2,617.00	2,486.70	130.30	20.084			
17,700.00	9,506.00	14,810.35	6,889.00	193.12	187.81	0.00	458.37	8,121.04	2,617.00	2,485.17	131.83	19.851			
17,800.00	9,506.00	14,910.35	6,889.00	195.39	190.10	0.00	458.35	8,221.04	2,617.00	2,483.63	133.37	19.623			
17,900.00	9,506.00	15,010.35	6,889.00	197.66	192.39	0.00	458.33	8,321.04	2,617.00	2,482.10	134.90	19.399			
18,000.00	9,506.00	15,110.35	6,889.00	199.94	194.68	0.00	458.31	8,421.04	2,617.00	2,480.57	136.44	19.181			
18,100.00	9,506.00	15,210.35	6,889.00	202.21	196.97	0.00	458.29	8,521.04	2,617.00	2,479.03	137.97	18.968			
18,200.00	9,506.00	15,310.35	6,889.00	204.49	199.26	0.00	458.28	8,621.04	2,617.00	2,477.49	139.51	18.759			
18,300.00	9,506.00	15,410.35	6,889.00	206.77	201.55	0.00	458.26	8,721.04	2,617.00	2,475.96	141.04	18.554			
18,400.00	9,506.00	15,510.35	6,889.00	209.04	203.84	0.00	458.24	8,821.04	2,617.00	2,474.42	142.58	18.354			
18,500.00	9,506.00	15,610.35	6,889.00	211.32	206.13	0.00	458.22	8,921.04	2,617.00	2,472.88	144.12	18.158			
18,600.00	9,506.00	15,710.35	6,889.00	213.60	208.42	0.00	458.20	9,021.04	2,617.00	2,471.34	145.66	17.967			
18,700.00	9,506.00	15,810.35	6,889.00	215.88	210.72	0.00	458.18	9,121.04	2,617.00	2,469.80	147.20	17.779			
18,800.00	9,506.00	15,910.35	6,889.00	218.16	213.01	0.00	458.16	9,221.04	2,617.00	2,468.26	148.74	17.595			
18,900.00	9,506.00	16,010.35	6,889.00	220.44	215.30	0.00	458.14	9,321.04	2,617.00	2,466.72	150.28	17.414			
19,000.00	9,506.00	16,110.35	6,889.00	222.72	217.59	0.00	458.12	9,421.04	2,617.00	2,465.18	151.82	17.237			
19,100.00	9,506.00	16,210.35	6,889.00	225.00	219.89	0.00	458.10	9,521.04	2,617.00	2,463.64	153.36	17.064			
19,200.00	9,506.00	16,310.35	6,889.00	227.28	222.18	0.00	458.08	9,621.04	2,617.00	2,462.09	154.91	16.894			
19,300.00	9,506.00	16,410.35	6,889.00	229.56	224.48	0.00	458.06	9,721.04	2,617.00	2,460.55	156.45	16.727			
19,400.00	9,506.00	16,510.35	6,889.00	231.85	226.77	0.00	458.04	9,821.04	2,617.00	2,459.01	157.99	16.564			
19,500.00	9,506.00	16,610.35	6,889.00	234.13	229.07	0.00	458.02	9,921.04	2,617.00	2,457.46	159.54	16.404			
19,600.00	9,506.00	16,710.35	6,889.00	236.42	231.36	0.00	458.01	10,021.04	2,617.00	2,455.92	161.08	16.246			
19,628.96	9,506.00	16,739.31	6,889.00	237.08	232.03	0.00	458.00	10,050.00	2,617.00	2,455.47	161.53	16.201			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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

Leatherneck 3029 Fed Com (Slot 1) - #121H - OH - Prelim A											Offset Site Error:
Survey Program: 0-MWD-HDGM											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)	Ellipses (usft)	Separation Factor
0.00	0.00	0.00	0.00	0.00	0.00	-15.26	110.00	-30.00	114.02		
100.00	100.00	100.00	100.00	0.13	0.13	-15.26	110.00	-30.00	114.02	113.76	0.26 444.847
200.00	200.00	200.00	200.00	0.49	0.49	-15.26	110.00	-30.00	114.02	113.04	0.97 117.151
300.00	300.00	300.00	300.00	0.85	0.85	-15.26	110.00	-30.00	114.02	112.33	1.69 67.458
400.00	400.00	400.00	400.00	1.20	1.20	-15.26	110.00	-30.00	114.02	111.61	2.41 47.366
500.00	500.00	500.00	500.00	1.56	1.56	-15.26	110.00	-30.00	114.02	110.89	3.12 36.496
600.00	600.00	600.00	600.00	1.92	1.92	-15.26	110.00	-30.00	114.02	110.18	3.84 29.684
700.00	700.00	700.00	700.00	2.28	2.28	-15.26	110.00	-30.00	114.02	109.46	4.56 25.015
800.00	800.00	800.00	800.00	2.64	2.64	-15.26	110.00	-30.00	114.02	108.74	5.27 21.615
900.00	900.00	900.00	900.00	3.00	3.00	-15.26	110.00	-30.00	114.02	108.03	5.99 19.029
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	-15.26	110.00	-30.00	114.02	107.31	6.71 16.995
1,100.00	1,099.98	1,100.02	1,099.98	3.71	3.71	32.76	110.00	-30.00	112.55	105.12	7.42 15.161
1,200.00	1,199.84	1,200.16	1,199.84	4.07	4.07	34.31	110.00	-30.00	108.18	100.04	8.14 13.293
1,300.00	1,299.53	1,300.47	1,299.53	4.42	4.43	36.83	110.00	-30.00	101.76	92.91	8.85 11.492
1,400.00	1,399.20	1,400.80	1,399.20	4.78	4.79	39.73	110.00	-30.00	95.43	85.86	9.57 9.970
1,500.00	1,498.88	1,501.12	1,498.88	5.14	5.15	43.02	110.00	-30.00	89.38	79.09	10.29 8.685
1,600.00	1,598.55	1,601.45	1,598.55	5.51	5.51	46.78	110.00	-30.00	83.67	72.66	11.01 7.598
1,700.00	1,698.23	1,701.77	1,698.23	5.87	5.87	51.06	110.00	-30.00	78.37	66.63	11.74 6.677
1,800.00	1,797.90	1,802.10	1,797.90	6.24	6.23	55.93	110.00	-30.00	73.57	61.11	12.46 5.903
1,900.00	1,897.58	1,902.42	1,897.58	6.60	6.59	61.43	110.00	-30.00	69.37	56.18	13.19 5.259
2,000.00	1,897.26	1,997.26	1,997.26	6.97	6.93	67.57	110.00	-30.00	65.89	51.99	13.90 4.741
2,100.00	2,096.93	2,095.63	2,095.61	7.34	7.28	73.08	111.43	-30.71	64.23	49.62	14.62 4.394
2,115.55	2,108.45	2,107.01	2,106.99	7.38	7.32	73.58	111.79	-30.89	64.22	49.52	14.70 4.368 CC, ES
2,200.00	2,196.61	2,194.24	2,194.09	7.71	7.63	76.31	115.90	-32.92	65.11	49.78	15.33 4.246
2,300.00	2,296.28	2,305.94	2,293.66	8.08	8.03	77.98	122.27	-36.09	67.31	51.21	16.10 4.180
2,400.00	2,395.96	2,405.98	2,393.36	8.45	8.39	79.54	128.67	-39.26	69.57	52.74	16.83 4.134
2,500.00	2,495.63	2,493.97	2,493.06	8.82	8.71	81.00	135.07	-42.43	71.88	54.36	17.52 4.103
2,600.00	2,595.31	2,606.07	2,592.76	9.19	9.11	82.36	141.47	-45.61	74.23	55.94	18.29 4.058
2,700.00	2,694.99	2,706.11	2,692.46	9.56	9.47	83.64	147.87	-48.78	76.62	57.60	19.02 4.028
2,800.00	2,794.66	2,806.15	2,792.16	9.93	9.83	84.85	154.27	-51.96	79.04	59.29	19.75 4.002
2,900.00	2,894.34	2,906.20	2,891.87	10.30	10.19	85.98	160.67	-55.13	81.50	61.02	20.49 3.979
3,000.00	2,994.01	3,006.24	2,991.57	10.67	10.56	87.04	167.06	-58.30	83.99	62.77	21.22 3.958
3,100.00	3,093.69	3,093.72	3,091.27	11.04	10.87	88.05	173.46	-61.48	86.51	64.60	21.91 3.949
3,200.00	3,193.36	3,206.33	3,190.97	11.41	11.28	88.99	179.86	-64.65	89.05	66.36	22.69 3.925
3,300.00	3,293.04	3,306.37	3,290.67	11.78	11.65	89.89	186.26	-67.83	91.62	68.19	23.42 3.912
3,400.00	3,392.71	3,406.41	3,390.37	12.15	12.01	90.73	192.66	-71.00	94.20	70.05	24.16 3.900
3,500.00	3,492.39	3,506.45	3,490.08	12.53	12.37	91.53	199.06	-74.17	96.81	71.91	24.89 3.889
3,600.00	3,592.07	3,606.50	3,589.78	12.90	12.74	92.29	205.46	-77.35	99.43	73.80	25.63 3.880
3,700.00	3,691.74	3,706.54	3,689.48	13.27	13.10	93.01	211.86	-80.52	102.07	75.71	26.36 3.872
3,800.00	3,791.42	3,793.42	3,789.18	13.64	13.42	93.69	218.26	-83.70	104.72	77.67	27.05 3.871
3,900.00	3,891.09	3,906.63	3,888.88	14.01	13.83	94.34	224.66	-86.87	107.39	79.56	27.83 3.858
4,000.00	3,990.77	4,006.67	3,988.58	14.39	14.20	94.95	231.06	-90.04	110.07	81.50	28.57 3.853
4,100.00	4,090.44	4,106.71	4,088.29	14.76	14.57	95.54	237.46	-93.22	112.77	83.46	29.31 3.848
4,200.00	4,190.12	4,206.75	4,187.99	15.13	14.93	96.10	243.86	-96.39	115.47	85.43	30.04 3.843
4,300.00	4,289.80	4,306.80	4,287.69	15.50	15.30	96.63	250.26	-99.57	118.19	87.40	30.78 3.840
4,400.00	4,389.47	4,406.84	4,387.39	15.88	15.67	97.14	256.66	-102.74	120.91	89.39	31.52 3.836
4,500.00	4,489.15	4,493.12	4,487.09	16.25	15.98	97.63	263.05	-105.92	123.65	91.44	32.21 3.839
4,600.00	4,588.82	4,606.93	4,586.79	16.62	16.40	98.10	269.45	-109.09	126.39	93.40	32.99 3.831
4,700.00	4,688.50	4,706.97	4,686.50	16.99	16.77	98.54	275.85	-112.26	129.14	95.41	33.73 3.829
4,800.00	4,788.17	4,807.01	4,786.20	17.37	17.13	98.97	282.25	-115.44	131.90	97.43	34.47 3.827
4,900.00	4,887.85	4,892.95	4,885.90	17.74	17.45	99.38	288.65	-118.61	134.66	99.51	35.16 3.831
5,000.00	4,987.53	5,007.10	4,985.60	18.11	17.87	99.78	295.05	-121.79	137.44	101.49	35.94 3.824

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed.Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #121H - OH - Prelim A													Offset Site Error:
Survey Program: 0-MWD-HDGM													Offset Well Error:
Reference	Offset	Semi Major Axis	Distance	Warning									
Measured Vertical	Measured Vertical	Reference	Offset	Highside	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor				
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Toolface (°)	N-S (usft)	E-W (usft)	(usft)	(usft)	(usft)				
5,100.00	5,087.20	5,107.14	5,085.30	18.48	18.23	100.15	301.45	-124.96	140.22	103.53	36.68	3.822	
5,200.00	5,186.88	5,207.18	5,185.00	18.86	18.60	100.52	307.85	-128.13	143.00	105.58	37.42	3.821	
5,300.00	5,286.55	5,307.23	5,284.71	19.23	18.97	100.87	314.25	-131.31	145.79	107.63	38.16	3.821	
5,400.00	5,386.23	5,407.27	5,384.41	19.60	19.34	101.20	320.65	-134.48	148.58	109.69	38.90	3.820	
5,500.00	5,485.90	5,507.31	5,484.11	19.97	19.70	101.53	327.05	-137.66	151.38	111.75	39.64	3.819	
5,600.00	5,585.58	5,592.65	5,583.81	20.35	20.02	101.84	333.45	-140.83	154.19	113.87	40.32	3.824	
5,700.00	5,685.26	5,707.40	5,683.51	20.72	20.44	102.14	339.85	-144.00	157.00	115.89	41.11	3.819	
5,800.00	5,784.93	5,807.44	5,783.21	21.09	20.81	102.42	346.25	-147.18	159.80	117.95	41.85	3.818	
5,900.00	5,884.76	5,892.52	5,882.92	21.46	21.12	101.96	352.65	-150.35	162.13	119.60	42.53	3.812	
6,000.00	5,984.73	5,993.31	5,983.53	21.81	21.49	100.76	357.88	-152.95	163.57	120.31	43.26	3.781	
6,100.00	6,084.73	6,094.37	6,084.56	22.16	21.85	52.45	359.96	-153.98	164.00	120.03	43.97	3.730	
6,200.00	6,184.73	6,205.46	6,184.73	22.50	22.24	52.43	360.00	-154.00	164.01	119.30	44.71	3.669	
6,300.00	6,284.73	6,305.46	6,284.73	22.85	22.59	52.43	360.00	-154.00	164.01	118.61	45.41	3.612	
6,400.00	6,384.73	6,405.46	6,384.73	23.19	22.95	52.43	360.00	-154.00	164.01	117.91	46.10	3.557	
6,500.00	6,484.73	6,505.46	6,484.73	23.54	23.30	52.43	360.00	-154.00	164.01	117.21	46.80	3.504	
6,600.00	6,584.73	6,605.46	6,584.73	23.89	23.65	52.43	360.00	-154.00	164.01	116.51	47.50	3.453	
6,700.00	6,684.73	6,705.46	6,684.73	24.23	24.01	52.43	360.00	-154.00	164.01	115.81	48.20	3.402	
6,800.00	6,784.73	6,805.46	6,784.73	24.58	24.36	52.43	360.00	-154.00	164.01	115.11	48.90	3.354	
6,900.00	6,884.73	6,905.46	6,884.73	24.93	24.71	52.43	360.00	-154.00	164.01	114.41	49.61	3.306	
7,000.00	6,984.73	7,005.46	6,984.73	25.28	25.07	52.43	360.00	-154.00	164.01	113.70	50.31	3.260	
7,100.00	7,084.73	7,105.46	7,084.73	25.63	25.42	52.43	360.00	-154.00	164.01	113.00	51.01	3.215	
7,200.00	7,184.73	7,194.54	7,184.73	25.97	25.74	52.43	360.00	-154.00	164.01	112.34	51.67	3.174	
7,201.86	7,186.59	7,203.60	7,186.59	25.98	25.77	52.43	360.00	-154.00	164.01	112.30	51.71	3.172	
7,300.00	7,284.73	7,285.98	7,276.15	26.32	26.06	52.61	360.14	-152.99	165.12	112.84	52.28	3.158 SF	
7,400.00	7,384.73	7,384.60	7,354.06	26.67	26.31	54.23	361.56	-143.05	176.41	124.12	52.29	3.374	
7,500.00	7,484.73	7,439.15	7,426.03	27.02	26.55	56.91	364.28	-123.96	199.83	148.22	51.61	3.872	
7,600.00	7,584.73	7,507.69	7,489.47	27.37	26.75	59.83	367.92	-98.38	234.89	184.56	50.33	4.667	
7,700.00	7,684.73	7,569.22	7,543.43	27.72	26.91	62.45	372.07	-69.18	280.49	231.82	48.67	5.763	
7,800.00	7,784.73	7,623.55	7,588.21	28.07	27.05	64.61	376.40	-38.76	335.13	288.28	46.84	7.154	
7,900.00	7,884.73	7,671.06	7,624.84	28.42	27.18	66.32	380.66	-8.82	397.27	352.24	45.03	8.822	
8,000.00	7,984.73	7,712.43	7,654.60	28.77	27.33	67.67	384.71	19.62	465.54	422.19	43.35	10.739	
8,100.00	8,084.73	7,750.00	7,679.76	29.12	27.47	68.78	388.64	47.23	538.76	496.84	41.91	12.854	
8,200.00	8,184.73	7,779.77	7,698.37	29.47	27.59	69.57	391.91	70.22	615.97	575.48	40.50	15.210	
8,300.00	8,284.73	7,800.00	7,710.32	29.82	27.67	70.08	394.21	86.39	696.53	657.50	39.03	17.848	
8,400.00	8,384.73	7,831.23	7,727.61	30.18	27.82	70.81	397.88	112.13	779.58	741.22	38.35	20.326	
8,500.00	8,484.73	7,850.00	7,737.31	30.53	27.90	71.22	400.14	128.04	864.90	827.45	37.45	23.093	
8,600.00	8,584.73	7,871.24	7,747.65	30.88	28.01	71.65	402.75	146.41	952.02	915.17	36.85	25.834	
8,700.00	8,684.73	7,900.00	7,760.53	31.23	28.16	72.20	406.38	171.86	1,040.85	1,004.21	36.64	28.408	
8,800.00	8,784.73	7,900.00	7,760.53	31.58	28.16	72.20	406.38	171.86	1,130.58	1,094.83	35.75	31.626	
8,900.00	8,884.73	7,916.41	7,767.30	31.93	28.25	72.49	408.48	186.66	1,221.56	1,186.11	35.46	34.453	
9,000.00	8,984.39	7,930.24	7,772.67	32.27	28.33	11.44	410.28	199.28	1,310.68	1,275.61	35.07	37.374	
9,100.00	9,081.39	7,950.00	7,779.81	32.59	28.44	9.25	412.87	217.51	1,392.52	1,357.89	34.62	40.218	
9,200.00	9,172.78	7,950.00	7,779.81	32.88	28.44	7.66	412.87	217.51	1,465.87	1,432.19	33.69	43.517	
9,300.00	9,255.79	8,000.00	7,794.99	33.12	28.75	7.38	419.58	264.66	1,529.01	1,495.43	33.57	45.541	
9,400.00	9,328.12	8,000.00	7,794.99	33.32	28.75	5.75	419.58	264.66	1,581.39	1,548.79	32.60	48.511	
9,500.00	9,389.92	8,030.27	7,802.15	33.62	28.96	3.85	423.73	293.77	1,624.36	1,592.22	32.14	50.546	
9,600.00	9,439.92	8,050.00	7,805.97	34.02	29.09	2.56	426.46	312.94	1,657.57	1,625.96	31.60	52.447	
9,700.00	9,476.60	8,079.17	7,810.39	34.50	29.31	1.73	430.52	341.48	1,680.28	1,648.99	31.29	53.697	
9,800.00	9,498.85	8,100.00	7,812.65	35.06	29.46	1.16	433.43	361.98	1,692.19	1,661.13	31.06	54.477	
9,900.00	9,506.00	8,129.45	7,814.56	35.70	29.70	0.77	437.58	391.08	1,693.04	1,661.96	31.08	54.468	
10,000.00	9,506.00	8,162.21	7,815.00	36.42	29.96	0.61	442.16	423.51	1,691.10	1,659.79	31.31	54.014	
10,100.00	9,506.00	8,260.96	7,815.00	37.28	30.86	0.24	453.01	521.64	1,691.02	1,659.20	31.82	53.148	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #121H - OH - Prelim A												Offset Site Error:	
Survey Program: 0-MWD-HDGM												Offset Well Error:	
Reference Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis 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
10,200.00	9,506.00	8,360.58	7,815.00	38.24	31.89	0.05	458.80	621.08	1,691.00	1,658.62	32.38	52.218	
10,300.00	9,506.00	8,460.54	7,815.00	39.32	33.05	0.01	459.78	721.04	1,691.00	1,658.00	33.00	51.240	
10,306.44	9,506.00	8,466.98	7,815.00	39.40	33.12	0.01	459.78	727.48	1,691.00	1,657.96	33.04	51.174	
10,400.00	9,506.00	8,560.54	7,815.00	40.50	34.32	0.01	459.76	821.04	1,691.00	1,657.32	33.68	50.204	
10,500.00	9,506.00	8,660.54	7,815.00	41.77	35.69	0.01	459.74	921.04	1,691.00	1,656.58	34.42	49.126	
10,600.00	9,506.00	8,760.54	7,815.00	43.13	37.16	0.01	459.72	1,021.04	1,691.00	1,655.79	35.22	48.019	
10,700.00	9,506.00	8,860.54	7,815.00	44.57	38.71	0.01	459.70	1,121.04	1,691.00	1,654.94	36.06	46.893	
10,800.00	9,506.00	8,960.54	7,815.00	46.08	40.33	0.01	459.68	1,221.04	1,691.00	1,654.05	36.95	45.760	
10,900.00	9,506.00	9,060.54	7,815.00	47.65	42.01	0.01	459.66	1,321.04	1,691.00	1,653.11	37.89	44.628	
11,000.00	9,506.00	9,160.54	7,815.00	49.28	43.75	0.01	459.64	1,421.04	1,691.00	1,652.13	38.87	43.505	
11,100.00	9,506.00	9,260.54	7,815.00	50.96	45.54	0.01	459.62	1,521.04	1,691.00	1,651.12	39.89	42.397	
11,200.00	9,506.00	9,360.54	7,815.00	52.69	47.38	0.01	459.61	1,621.04	1,691.00	1,650.07	40.94	41.308	
11,300.00	9,506.00	9,460.54	7,815.00	54.46	49.26	0.01	459.59	1,721.04	1,691.00	1,648.98	42.02	40.243	
11,400.00	9,506.00	9,560.54	7,815.00	56.27	51.17	0.01	459.57	1,821.04	1,691.00	1,647.87	43.13	39.205	
11,500.00	9,506.00	9,660.54	7,815.00	58.12	53.11	0.01	459.55	1,921.04	1,691.00	1,646.73	44.27	38.195	
11,600.00	9,506.00	9,760.54	7,815.00	60.00	55.08	0.01	459.53	2,021.04	1,691.00	1,645.56	45.44	37.214	
11,700.00	9,506.00	9,860.54	7,815.00	61.91	57.08	0.01	459.51	2,121.04	1,691.00	1,644.37	46.63	36.265	
11,800.00	9,506.00	9,960.54	7,815.00	63.84	59.10	0.01	459.49	2,221.04	1,691.00	1,643.16	47.84	35.347	
11,900.00	9,506.00	10,060.55	7,815.00	65.80	61.14	0.01	459.47	2,321.04	1,691.00	1,641.93	49.07	34.459	
12,000.00	9,506.00	10,160.55	7,815.00	67.78	63.20	0.01	459.45	2,421.04	1,691.00	1,640.68	50.32	33.603	
12,100.00	9,506.00	10,260.55	7,815.00	69.78	65.27	0.01	459.43	2,521.04	1,691.00	1,639.41	51.59	32.778	
12,200.00	9,506.00	10,360.55	7,815.00	71.80	67.36	0.01	459.41	2,621.04	1,691.00	1,638.13	52.87	31.982	
12,300.00	9,506.00	10,460.55	7,815.00	73.83	69.47	0.01	459.40	2,721.04	1,691.00	1,636.83	54.17	31.215	
12,400.00	9,506.00	10,560.55	7,815.00	75.89	71.58	0.01	459.38	2,821.04	1,691.00	1,635.52	55.48	30.477	
12,500.00	9,506.00	10,660.55	7,815.00	77.95	73.71	0.01	459.36	2,921.04	1,691.00	1,634.19	56.81	29.766	
12,600.00	9,506.00	10,760.55	7,815.00	80.03	75.85	0.01	459.34	3,021.04	1,691.00	1,632.85	58.15	29.081	
12,700.00	9,506.00	10,860.55	7,815.00	82.12	78.00	0.01	459.32	3,121.04	1,691.00	1,631.51	59.50	28.422	
12,800.00	9,506.00	10,960.55	7,815.00	84.23	80.16	0.01	459.30	3,221.04	1,691.00	1,630.15	60.86	27.787	
12,900.00	9,506.00	11,060.55	7,815.00	86.34	82.32	0.01	459.28	3,321.04	1,691.00	1,628.78	62.22	27.176	
13,000.00	9,506.00	11,160.55	7,815.00	88.46	84.50	0.01	459.26	3,421.04	1,691.00	1,627.40	63.60	26.587	
13,100.00	9,506.00	11,260.55	7,815.00	90.59	86.68	0.01	459.24	3,521.04	1,691.00	1,626.01	64.99	26.020	
13,200.00	9,506.00	11,360.55	7,815.00	92.74	88.86	0.01	459.22	3,621.04	1,691.00	1,624.62	66.38	25.473	
13,300.00	9,506.00	11,460.55	7,815.00	94.88	91.06	0.01	459.21	3,721.04	1,691.00	1,623.22	67.79	24.946	
13,400.00	9,506.00	11,560.55	7,815.00	97.04	93.25	0.01	459.19	3,821.04	1,691.00	1,621.81	69.20	24.438	
13,500.00	9,506.00	11,660.55	7,815.00	99.20	95.46	0.01	459.17	3,921.04	1,691.00	1,620.39	70.61	23.948	
13,600.00	9,506.00	11,760.55	7,815.00	101.37	97.67	0.01	459.15	4,021.04	1,691.00	1,618.97	72.03	23.475	
13,700.00	9,506.00	11,860.55	7,815.00	103.55	99.88	0.01	459.13	4,121.04	1,691.00	1,617.54	73.46	23.019	
13,800.00	9,506.00	11,960.55	7,815.00	105.73	102.10	0.01	459.11	4,221.04	1,691.00	1,616.11	74.90	22.578	
13,900.00	9,506.00	12,060.55	7,815.00	107.91	104.32	0.01	459.09	4,321.04	1,691.00	1,614.67	76.34	22.152	
14,000.00	9,506.00	12,160.55	7,815.00	110.11	106.54	0.01	459.07	4,421.04	1,691.00	1,613.22	77.78	21.741	
14,100.00	9,506.00	12,260.55	7,815.00	112.30	108.77	0.01	459.05	4,521.04	1,691.00	1,611.77	79.23	21.343	
14,200.00	9,506.00	12,360.55	7,815.00	114.50	111.00	0.01	459.03	4,621.04	1,691.00	1,610.32	80.68	20.959	
14,300.00	9,506.00	12,460.55	7,815.00	116.71	113.24	0.01	459.01	4,721.04	1,691.00	1,608.86	82.14	20.587	
14,400.00	9,506.00	12,560.55	7,815.00	118.92	115.48	0.01	459.00	4,821.04	1,691.00	1,607.40	83.60	20.227	
14,500.00	9,506.00	12,660.55	7,815.00	121.13	117.72	0.01	458.98	4,921.04	1,691.00	1,605.93	85.07	19.879	
14,600.00	9,506.00	12,760.55	7,815.00	123.34	119.96	0.01	458.96	5,021.04	1,691.00	1,604.47	86.54	19.541	
14,700.00	9,506.00	12,860.55	7,815.00	125.56	122.20	0.01	458.94	5,121.04	1,691.00	1,602.99	88.01	19.214	
14,800.00	9,506.00	12,960.55	7,815.00	127.79	124.45	0.01	458.92	5,221.04	1,691.00	1,601.52	89.48	18.897	
14,900.00	9,506.00	13,060.55	7,815.00	130.01	126.70	0.01	458.90	5,321.04	1,691.00	1,600.04	90.96	18.590	
15,000.00	9,506.00	13,160.55	7,815.00	132.24	128.95	0.01	458.88	5,421.04	1,691.00	1,598.56	92.45	18.292	
15,100.00	9,506.00	13,260.55	7,815.00	134.47	131.21	0.01	458.86	5,521.04	1,691.00	1,597.07	93.93	18.003	
15,200.00	9,506.00	13,360.55	7,815.00	136.70	133.46	0.01	458.84	5,621.04	1,691.00	1,595.58	95.42	17.722	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #121H - 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	Reference	Offset	Highside	Offset Wellbore Centre	Distance	Between	Between	Minimum	Separation	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	(usft)	(usft)	N/S (usft)	E/W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
15,300.00	9,506.00	13,460.55	7,815.00	138.94	135.72	0.01	458.82	5,721.04	1,691.00	1,594.09	96.91	17.450	
15,400.00	9,506.00	13,560.55	7,815.00	141.18	137.98	0.01	458.81	5,821.04	1,691.00	1,592.60	98.40	17.185	
15,500.00	9,506.00	13,660.55	7,815.00	143.42	140.24	0.01	458.79	5,921.04	1,691.00	1,591.11	99.89	16.928	
15,600.00	9,506.00	13,760.55	7,815.00	145.66	142.51	0.01	458.77	6,021.04	1,691.00	1,589.61	101.39	16.678	
15,700.00	9,506.00	13,860.55	7,815.00	147.91	144.77	0.01	458.75	6,121.04	1,691.00	1,588.11	102.89	16.435	
15,800.00	9,506.00	13,960.55	7,815.00	150.15	147.03	0.01	458.73	6,221.04	1,691.00	1,586.61	104.39	16.199	
15,900.00	9,506.00	14,060.55	7,815.00	152.40	149.30	0.00	458.71	6,321.04	1,691.00	1,585.11	105.90	15.969	
16,000.00	9,506.00	14,160.55	7,815.00	154.65	151.57	0.00	458.69	6,421.04	1,691.00	1,583.60	107.40	15.745	
16,100.00	9,506.00	14,260.55	7,815.00	156.90	153.84	0.00	458.67	6,521.04	1,691.00	1,582.09	108.91	15.527	
16,200.00	9,506.00	14,360.55	7,815.00	159.16	156.11	0.00	458.65	6,621.04	1,691.00	1,580.58	110.42	15.315	
16,300.00	9,506.00	14,460.55	7,815.00	161.41	158.38	0.00	458.63	6,721.04	1,691.00	1,579.07	111.93	15.108	
16,400.00	9,506.00	14,560.55	7,815.00	163.67	160.65	0.00	458.61	6,821.04	1,691.00	1,577.56	113.44	14.907	
16,500.00	9,506.00	14,660.55	7,815.00	165.93	162.93	0.00	458.60	6,921.04	1,691.00	1,576.05	114.95	14.711	
16,600.00	9,506.00	14,760.55	7,815.00	168.19	165.20	0.00	458.58	7,021.04	1,691.00	1,574.53	116.47	14.519	
16,700.00	9,506.00	14,860.55	7,815.00	170.45	167.48	0.00	458.56	7,121.04	1,691.00	1,573.02	117.98	14.333	
16,800.00	9,506.00	14,960.55	7,815.00	172.71	169.75	0.00	458.54	7,221.04	1,691.00	1,571.50	119.50	14.151	
16,900.00	9,506.00	15,060.55	7,815.00	174.97	172.03	0.00	458.52	7,321.04	1,691.00	1,569.98	121.02	13.973	
17,000.00	9,506.00	15,160.55	7,815.00	177.24	174.31	0.00	458.50	7,421.04	1,691.00	1,568.46	122.54	13.800	
17,100.00	9,506.00	15,260.55	7,815.00	179.50	176.59	0.00	458.48	7,521.04	1,691.00	1,566.94	124.06	13.630	
17,200.00	9,506.00	15,360.55	7,815.00	181.77	178.87	0.00	458.46	7,621.04	1,691.00	1,565.42	125.58	13.465	
17,300.00	9,506.00	15,460.55	7,815.00	184.04	181.15	0.00	458.44	7,721.04	1,691.00	1,563.89	127.11	13.304	
17,400.00	9,506.00	15,560.55	7,815.00	186.31	183.43	0.00	458.42	7,821.04	1,691.00	1,562.37	128.63	13.146	
17,500.00	9,506.00	15,660.55	7,815.00	188.58	185.71	0.00	458.41	7,921.04	1,691.00	1,560.84	130.16	12.992	
17,600.00	9,506.00	15,760.55	7,815.00	190.85	187.99	0.00	458.39	8,021.04	1,691.00	1,559.31	131.69	12.841	
17,700.00	9,506.00	15,860.55	7,815.00	193.12	190.28	0.00	458.37	8,121.04	1,691.00	1,557.79	133.21	12.694	
17,800.00	9,506.00	15,960.55	7,815.00	195.39	192.56	0.00	458.35	8,221.04	1,691.00	1,556.26	134.74	12.550	
17,900.00	9,506.00	16,060.55	7,815.00	197.66	194.84	0.00	458.33	8,321.04	1,691.00	1,554.73	136.27	12.409	
18,000.00	9,506.00	16,160.55	7,815.00	199.94	197.13	0.00	458.31	8,421.04	1,691.00	1,553.20	137.80	12.271	
18,100.00	9,506.00	16,260.55	7,815.00	202.21	199.41	0.00	458.29	8,521.04	1,691.00	1,551.67	139.34	12.136	
18,200.00	9,506.00	16,360.55	7,815.00	204.49	201.70	0.00	458.27	8,621.04	1,691.00	1,550.13	140.87	12.004	
18,300.00	9,506.00	16,460.55	7,815.00	206.77	203.99	0.00	458.25	8,721.04	1,691.00	1,548.60	142.40	11.875	
18,400.00	9,506.00	16,560.55	7,815.00	209.04	206.27	0.00	458.23	8,821.04	1,691.00	1,547.07	143.93	11.748	
18,500.00	9,506.00	16,660.55	7,815.00	211.32	208.56	0.00	458.22	8,921.04	1,691.00	1,545.53	145.47	11.624	
18,600.00	9,506.00	16,760.55	7,815.00	213.60	210.85	0.00	458.20	9,021.04	1,691.00	1,544.00	147.01	11.503	
18,700.00	9,506.00	16,860.55	7,815.00	215.88	213.14	0.00	458.18	9,121.04	1,691.00	1,542.46	148.54	11.384	
18,800.00	9,506.00	16,960.55	7,815.00	218.16	215.43	0.00	458.16	9,221.04	1,691.00	1,540.92	150.08	11.267	
18,900.00	9,506.00	17,060.55	7,815.00	220.44	217.71	0.00	458.14	9,321.04	1,691.00	1,539.38	151.62	11.153	
19,000.00	9,506.00	17,160.55	7,815.00	222.72	220.00	0.00	458.12	9,421.04	1,691.00	1,537.85	153.15	11.041	
19,100.00	9,506.00	17,260.55	7,815.00	225.00	222.29	0.00	458.10	9,521.04	1,691.00	1,536.31	154.69	10.931	
19,200.00	9,506.00	17,360.55	7,815.00	227.28	224.58	0.00	458.08	9,621.04	1,691.00	1,534.77	156.23	10.824	
19,300.00	9,506.00	17,460.55	7,815.00	229.56	226.88	0.00	458.06	9,721.04	1,691.00	1,533.23	157.77	10.718	
19,400.00	9,506.00	17,560.55	7,815.00	231.85	229.17	0.00	458.04	9,821.04	1,691.00	1,531.69	159.31	10.614	
19,500.00	9,506.00	17,660.55	7,815.00	234.13	231.46	0.00	458.02	9,921.04	1,691.00	1,530.15	160.85	10.513	
19,600.00	9,506.00	17,760.55	7,815.00	236.42	233.75	0.00	458.01	10,021.04	1,691.00	1,528.60	162.40	10.413	
19,628.96	9,506.00	17,789.51	7,815.00	237.08	234.41	0.00	458.00	10,050.00	1,691.00	1,528.16	162.84	10.384	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leathérneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #122H - OH - Prelim A											Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HDGM											Offset Well Error:	0.00 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Semi-Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	E-W (usft)	Distance Between Centres (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	1.00	1.00	0.00	0.00	0.00	110.00	0.00	110.00			
100.00	100.00	101.00	101.00	0.13	0.13	0.00	110.00	0.00	110.00	109.74	0.26	423.252
200.00	200.00	201.00	201.00	0.49	0.49	0.00	110.00	0.00	110.00	109.02	0.98	112.609
300.00	300.00	301.00	301.00	0.85	0.85	0.00	110.00	0.00	110.00	108.31	1.69	64.944
400.00	400.00	401.00	401.00	1.20	1.21	0.00	110.00	0.00	110.00	107.59	2.41	45.629
500.00	500.00	501.00	501.00	1.56	1.57	0.00	110.00	0.00	110.00	106.87	3.13	35.170
600.00	600.00	601.00	601.00	1.92	1.92	0.00	110.00	0.00	110.00	106.16	3.84	28.612
700.00	700.00	701.00	701.00	2.28	2.28	0.00	110.00	0.00	110.00	105.44	4.56	24.115
800.00	800.00	801.00	801.00	2.64	2.64	0.00	110.00	0.00	110.00	104.72	5.28	20.839
900.00	900.00	901.00	901.00	3.00	3.00	0.00	110.00	0.00	110.00	104.00	6.00	18.347
1,000.00	1,000.00	1,001.00	1,001.00	3.35	3.36	0.00	110.00	0.00	110.00	103.29	6.71	16.388
1,100.00	1,099.98	1,100.98	1,100.98	3.71	3.72	48.22	110.00	0.00	108.83	101.40	7.43	14.654
1,200.00	1,199.84	1,200.84	1,200.84	4.07	4.07	50.39	110.00	0.00	105.41	97.27	8.14	12.950
1,300.00	1,299.53	1,300.53	1,300.53	4.42	4.43	53.87	110.00	0.00	100.56	91.71	8.86	11.357
1,400.00	1,399.20	1,400.20	1,400.20	4.78	4.79	57.74	110.00	0.00	96.03	86.46	9.57	10.033
1,500.00	1,498.88	1,500.12	1,499.88	5.14	5.15	61.98	110.00	0.00	91.98	81.68	10.29	8.937
1,600.00	1,598.55	1,600.45	1,599.55	5.51	5.51	66.57	110.00	0.00	88.47	77.46	11.01	8.033
1,700.00	1,698.23	1,700.77	1,699.23	5.87	5.87	71.51	110.00	0.00	85.58	73.84	11.74	7.291
1,800.00	1,797.90	1,801.10	1,798.90	6.24	6.23	76.74	110.00	0.00	83.37	70.91	12.46	6.689
1,900.00	1,897.58	1,901.42	1,898.58	6.60	6.59	82.21	110.00	0.00	81.89	68.70	13.19	6.209
2,000.00	1,897.26	2,001.74	1,998.26	6.97	6.95	87.83	110.00	0.00	81.19	67.28	13.92	5.835
2,038.33	2,035.46	2,036.46	2,036.46	7.11	7.07	90.00	110.00	0.00	81.13	66.95	14.18	5.721 CC
2,100.00	2,096.93	2,102.07	2,097.93	7.34	7.30	93.49	110.00	0.00	81.29	66.64	14.64	5.552 ES
2,200.00	2,196.61	2,202.39	2,197.61	7.71	7.66	99.08	110.00	0.00	82.17	66.81	15.37	5.348
2,300.00	2,296.28	2,302.72	2,297.28	8.08	8.02	104.50	110.00	0.00	83.82	67.74	16.09	5.210
2,400.00	2,395.96	2,403.04	2,396.96	8.45	8.38	109.68	110.00	0.00	86.20	69.39	16.81	5.128
2,500.00	2,495.63	2,496.63	2,496.63	8.82	8.72	114.53	110.00	0.00	89.24	71.73	17.50	5.098
2,600.00	2,595.31	2,597.33	2,597.32	9.19	9.06	120.05	108.35	-0.04	92.34	74.13	18.20	5.072
2,700.00	2,694.99	2,697.46	2,697.31	9.56	9.39	127.18	103.20	-0.15	95.46	76.58	18.88	5.056 SF
2,800.00	2,794.66	2,796.74	2,796.21	9.93	9.71	135.67	94.65	-0.34	99.71	80.16	19.55	5.101
2,900.00	2,894.34	2,894.95	2,893.70	10.30	10.03	145.05	82.83	-0.60	106.29	86.08	20.20	5.261
3,000.00	2,994.01	2,991.87	2,989.45	10.67	10.35	154.65	67.89	-0.93	116.32	95.47	20.84	5.581
3,100.00	3,093.69	3,088.46	3,084.46	11.04	10.68	163.62	50.41	-1.32	130.28	108.81	21.47	6.068
3,200.00	3,193.36	3,185.48	3,179.82	11.41	11.02	170.89	32.62	-1.72	147.00	124.89	22.11	6.648
3,300.00	3,293.04	3,282.49	3,275.19	11.78	11.36	176.64	14.83	-2.11	165.59	142.83	22.77	7.273
3,400.00	3,392.71	3,379.50	3,370.56	12.15	11.71	-178.78	-2.96	-2.50	185.50	162.07	23.43	7.916
3,500.00	3,492.39	3,476.52	3,465.92	12.53	12.07	-175.09	-20.75	-2.90	206.34	182.24	24.11	8.559
3,600.00	3,592.07	3,573.53	3,561.29	12.90	12.43	-172.08	-38.54	-3.29	227.86	203.07	24.79	9.192
3,700.00	3,691.74	3,670.54	3,656.66	13.27	12.79	-169.59	-56.32	-3.69	249.89	224.41	25.48	9.809
3,800.00	3,791.42	3,767.55	3,752.02	13.64	13.16	-167.50	-74.11	-4.08	272.29	246.12	26.17	10.406
3,900.00	3,891.09	3,864.57	3,847.39	14.01	13.53	-165.73	-91.90	-4.47	294.98	268.12	26.86	10.982
4,000.00	3,990.77	3,961.58	3,942.76	14.39	13.90	-164.21	-109.69	-4.87	317.91	290.35	27.56	11.535
4,100.00	4,090.44	4,058.59	4,038.13	14.76	14.28	-162.89	-127.48	-5.26	341.02	312.77	28.26	12.068
4,200.00	4,190.12	4,155.60	4,133.49	15.13	14.66	-161.74	-145.26	-5.66	364.29	335.32	28.96	12.578
4,300.00	4,289.80	4,252.62	4,228.86	15.50	15.04	-160.73	-163.05	-6.05	387.67	358.00	29.67	13.068
4,400.00	4,389.47	4,349.63	4,324.23	15.88	15.43	-159.84	-180.84	-6.45	411.16	380.78	30.37	13.537
4,500.00	4,489.15	4,446.64	4,419.59	16.25	15.82	-159.04	-198.63	-6.84	434.73	403.65	31.08	13.987
4,600.00	4,588.82	4,543.65	4,514.96	16.62	16.21	-158.32	-216.42	-7.23	458.37	426.58	31.79	14.419
4,700.00	4,688.50	4,640.67	4,610.33	16.99	16.60	-157.67	-234.20	-7.63	482.07	449.57	32.50	14.833
4,800.00	4,788.17	4,737.68	4,705.70	17.37	16.99	-157.09	-251.99	-8.02	505.83	472.62	33.21	15.231
4,900.00	4,887.85	4,834.69	4,801.06	17.74	17.39	-156.55	-269.78	-8.42	529.63	495.71	33.92	15.613
5,000.00	4,987.53	4,931.71	4,896.43	18.11	17.78	-156.07	-287.57	-8.81	553.47	518.84	34.64	15.979

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #122H - 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	Offset	Highside	Offset Wellbore Centre	Distance	Between	Between	Minimum	Separation					
Measured Vertical Depth (usft)	Measured Vertical Depth (usft)	Reference Vertical Depth (usft)	Offset Vertical Depth (usft)	Reference Vertical Depth (usft)	Offset Vertical Depth (usft)	Toolface (°)	N/S (usft)	E/W (usft)	Centres (usft)	Ellipses (usft)	Separation Factor				
5,100.00	5,087.20	5,028.72	4,991.80	18.48	18.18	-155.62	-305.36	-9.21	577.35	542.00	35.35	16.332			
5,200.00	5,186.88	5,125.73	5,087.16	18.86	18.58	-155.20	-323.15	-9.60	601.26	565.19	36.07	16.671			
5,300.00	5,286.55	5,222.74	5,182.53	19.23	18.98	-154.82	-340.93	-9.99	625.19	588.41	36.78	16.997			
5,400.00	5,386.23	5,319.76	5,277.90	19.60	19.38	-154.47	-358.72	-10.39	649.15	611.65	37.50	17.311			
5,500.00	5,485.90	5,416.77	5,373.27	19.97	19.79	-154.14	-376.51	-10.78	673.13	634.91	38.22	17.613			
5,600.00	5,585.58	5,513.78	5,468.63	20.35	20.19	-153.84	-394.30	-11.18	697.13	658.19	38.94	17.905			
5,700.00	5,685.26	5,610.79	5,564.00	20.72	20.60	-153.55	-412.09	-11.57	721.15	681.49	39.65	18.186			
5,800.00	5,784.93	5,707.81	5,659.37	21.09	21.00	-153.32	-429.88	-11.97	745.14	704.77	40.37	18.456			
5,900.00	5,884.76	5,805.25	5,755.16	21.46	21.41	-153.19	-447.74	-12.36	767.21	726.11	41.09	18.670			
6,000.00	5,984.73	5,903.25	5,851.50	21.81	21.82	-152.94	-465.71	-12.76	786.25	744.44	41.81	18.806			
6,100.00	6,084.73	6,001.55	5,948.13	22.16	22.24	-152.99	-483.74	-13.16	803.39	760.87	42.52	18.895			
6,200.00	6,184.73	6,100.15	6,044.76	22.50	22.65	-160.45	-501.76	-13.56	820.54	777.31	43.23	18.980			
6,300.00	6,284.73	6,201.84	6,141.40	22.85	23.08	-160.90	-519.79	-13.96	837.75	793.79	43.96	19.059			
6,400.00	6,384.73	6,303.54	6,238.04	23.19	23.51	-161.33	-537.81	-14.36	855.00	810.32	44.68	19.135			
6,500.00	6,484.73	6,405.23	6,334.67	23.54	23.95	-161.74	-555.83	-14.76	872.29	826.89	45.41	19.210			
6,600.00	6,584.73	6,506.93	6,431.31	23.89	24.38	-162.13	-573.86	-15.16	889.63	843.50	46.13	19.284			
6,700.00	6,684.73	6,591.37	6,527.95	24.23	24.74	-162.51	-591.88	-15.56	907.01	860.21	46.80	19.382			
6,800.00	6,784.73	6,693.28	6,628.12	24.58	25.17	-162.89	-610.55	-15.97	924.41	876.86	47.55	19.443			
6,900.00	6,884.73	6,836.35	6,769.46	24.93	25.76	-163.32	-632.68	-16.46	939.13	890.49	48.65	19.305			
7,000.00	6,984.73	6,981.32	6,913.61	25.28	26.32	-163.60	-647.88	-16.80	949.13	899.47	49.66	19.113			
7,100.00	7,084.73	7,127.47	7,059.54	25.63	26.83	-163.74	-655.81	-16.97	954.31	903.74	50.57	18.871			
7,200.00	7,184.73	7,253.68	7,185.73	25.97	27.24	-163.77	-657.00	-17.00	955.08	903.75	51.33	18.606			
7,200.82	7,185.55	7,254.50	7,186.55	25.98	27.24	-163.77	-657.00	-17.00	955.08	903.74	51.34	18.604			
7,300.00	7,284.73	7,333.63	7,265.68	26.32	27.49	-163.74	-657.12	-16.53	955.54	903.58	51.96	18.389			
7,400.00	7,384.73	7,387.32	7,319.14	26.67	27.67	-163.50	-658.29	-11.95	960.05	907.59	52.46	18.301			
7,500.00	7,484.73	7,439.68	7,370.62	27.02	27.84	-163.02	-660.61	-2.84	969.45	916.60	52.84	18.345			
7,600.00	7,584.73	7,489.92	7,419.03	27.37	28.01	-162.34	-663.92	10.15	983.84	930.74	53.11	18.526			
7,700.00	7,684.73	7,537.47	7,463.59	27.72	28.17	-161.52	-668.01	26.19	1,003.38	950.14	53.23	18.850			
7,800.00	7,784.73	7,581.93	7,503.88	28.07	28.32	-160.60	-672.64	44.37	1,028.15	974.94	53.20	19.325			
7,900.00	7,884.73	7,623.11	7,539.81	28.42	28.46	-159.64	-677.61	63.87	1,058.20	1,005.17	53.03	19.956			
8,000.00	7,984.73	7,650.00	7,562.44	28.77	28.54	-158.97	-681.20	77.93	1,093.62	1,041.08	52.54	20.815			
8,100.00	8,084.73	7,700.00	7,602.62	29.12	28.71	-157.61	-688.54	106.74	1,133.93	1,081.60	52.33	21.668			
8,200.00	8,184.73	7,727.26	7,623.39	29.47	28.79	-156.83	-692.90	123.84	1,179.23	1,127.52	51.71	22.804			
8,300.00	8,284.73	7,750.00	7,640.06	29.82	28.87	-156.16	-696.72	138.83	1,229.23	1,178.25	50.97	24.115			
8,400.00	8,384.73	7,782.23	7,662.60	30.18	28.97	-155.18	-702.41	161.15	1,283.47	1,233.08	50.39	25.470			
8,500.00	8,484.73	7,800.00	7,674.46	30.53	29.03	-154.63	-705.68	173.97	1,341.80	1,292.23	49.57	27.071			
8,600.00	8,584.73	7,827.78	7,692.17	30.88	29.13	-153.76	-710.96	194.70	1,403.70	1,354.75	48.95	28.679			
8,700.00	8,684.73	7,850.00	7,705.58	31.23	29.21	-153.05	-715.34	211.87	1,468.97	1,420.71	48.26	30.436			
8,800.00	8,784.73	7,850.00	7,705.58	31.58	29.21	-153.05	-715.34	211.87	1,537.50	1,490.25	47.25	32.539			
8,900.00	8,884.73	7,882.26	7,723.80	31.93	29.33	-152.02	-721.91	237.67	1,608.22	1,561.37	46.85	34.325			
9,000.00	8,984.39	7,900.00	7,733.17	32.27	29.39	-151.58	-725.63	252.26	1,681.73	1,635.46	46.27	36.348			
9,100.00	9,081.39	7,900.00	7,733.17	32.59	29.39	-151.58	-725.63	252.26	1,756.48	1,710.98	45.49	38.608			
9,200.00	9,172.78	7,950.00	7,757.02	32.88	29.60	-151.38	-736.48	294.83	1,829.54	1,783.92	45.62	40.103			
9,300.00	9,255.79	7,950.00	7,757.02	33.12	29.60	-151.38	-736.48	294.83	1,898.88	1,853.75	45.13	42.079			
9,400.00	9,328.12	7,971.14	7,765.93	33.32	29.70	-151.22	-741.22	313.40	1,962.94	1,917.84	45.10	43.523			
9,500.00	9,389.92	8,000.00	7,776.95	33.62	29.84	-151.22	-747.81	339.25	2,016.73	1,971.50	45.24	44.582			
9,600.00	9,439.92	8,000.00	7,776.95	34.02	29.84	-151.22	-747.81	339.25	2,058.31	2,013.24	45.07	45.665			
9,700.00	9,476.60	8,050.00	7,792.81	34.50	30.12	-151.22	-759.51	385.18	2,087.05	2,041.42	45.63	45.743			
9,800.00	9,498.85	8,050.00	7,792.81	35.06	30.12	-151.22	-759.51	385.18	2,102.20	2,056.49	45.71	45.992			
9,900.00	9,506.00	8,080.36	7,800.40	35.70	30.31	-151.22	-766.78	413.66	2,103.95	2,057.68	46.27	45.469			
10,000.00	9,506.00	8,100.00	7,804.47	36.42	30.44	-151.22	-771.52	432.28	2,101.40	2,054.55	46.85	44.851			
10,011.52	9,506.00	8,100.00	7,804.47	36.52	30.44	-151.22	-771.52	432.28	2,101.37	2,054.46	46.91	44.796			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #122H - OH - Prelim A													Offset Site Error:
Survey Program: 10-MWD-HDGM													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	Warning
10,100.00	9,506.00	8,127.70	7,809.10	37.28	30.63	36.11	-778.27	458.74	2,102.50	2,054.85	47.65	44.125	
10,200.00	9,506.00	8,150.00	7,811.86	38.24	30.80	36.27	-783.73	480.18	2,107.28	2,058.77	48.51	43.441	
10,300.00	9,506.00	8,176.20	7,814.00	39.32	31.00	36.45	-790.18	505.48	2,115.66	2,066.15	49.51	42.731	
10,400.00	9,506.00	8,200.00	7,814.91	40.50	31.20	36.59	-796.05	528.53	2,127.60	2,077.02	50.58	42.065	
10,500.00	9,506.00	8,402.01	7,815.00	41.77	33.17	37.46	-836.52	726.35	2,140.56	2,087.40	53.16	40.266	
10,600.00	9,506.00	8,702.87	7,815.00	43.13	36.88	37.91	-857.70	1,020.41	2,144.62	2,087.95	56.67	37.844	
10,700.00	9,506.00	8,802.87	7,815.00	44.57	38.28	37.91	-857.75	1,120.41	2,144.64	2,086.08	58.56	36.623	
10,800.00	9,506.00	8,902.87	7,815.00	46.08	39.77	37.91	-857.80	1,220.41	2,144.65	2,084.10	60.55	35.421	
10,900.00	9,506.00	9,002.87	7,815.00	47.65	41.33	37.91	-857.84	1,320.41	2,144.67	2,082.04	62.63	34.246	
11,000.00	9,506.00	9,102.87	7,815.00	49.28	42.97	37.91	-857.89	1,420.41	2,144.68	2,079.90	64.78	33.105	
11,100.00	9,506.00	9,202.87	7,815.00	50.96	44.67	37.91	-857.94	1,520.41	2,144.70	2,077.68	67.02	32.003	
11,200.00	9,506.00	9,297.13	7,815.00	52.69	46.32	37.92	-857.99	1,620.41	2,144.71	2,075.47	69.24	30.973	
11,300.00	9,506.00	9,402.87	7,815.00	54.46	48.23	37.92	-858.03	1,720.41	2,144.73	2,073.06	71.67	29.925	
11,400.00	9,506.00	9,502.87	7,815.00	56.27	50.07	37.92	-858.08	1,820.41	2,144.74	2,070.66	74.08	28.952	
11,500.00	9,506.00	9,602.87	7,815.00	58.12	51.95	37.92	-858.13	1,920.41	2,144.76	2,068.22	76.54	28.022	
11,600.00	9,506.00	9,702.87	7,815.00	60.00	53.87	37.92	-858.18	2,020.41	2,144.77	2,065.73	79.04	27.135	
11,700.00	9,506.00	9,802.87	7,815.00	61.91	55.81	37.92	-858.22	2,120.41	2,144.79	2,063.20	81.59	26.289	
11,800.00	9,506.00	9,902.87	7,815.00	63.84	57.79	37.92	-858.27	2,220.41	2,144.80	2,060.64	84.17	25.483	
11,900.00	9,506.00	10,002.87	7,815.00	65.80	59.78	37.92	-858.32	2,320.41	2,144.82	2,058.04	86.78	24.716	
12,000.00	9,506.00	10,102.87	7,815.00	67.78	61.80	37.92	-858.37	2,420.41	2,144.83	2,055.41	89.42	23.985	
12,100.00	9,506.00	10,197.13	7,815.00	69.78	63.72	37.92	-858.41	2,520.41	2,144.85	2,052.83	92.02	23.310	
12,200.00	9,506.00	10,302.87	7,815.00	71.80	65.90	37.92	-858.46	2,620.41	2,144.86	2,050.07	94.79	22.627	
12,300.00	9,506.00	10,402.87	7,815.00	73.83	67.97	37.92	-858.51	2,720.41	2,144.88	2,047.37	97.51	21.996	
12,400.00	9,506.00	10,502.87	7,815.00	75.89	70.06	37.92	-858.56	2,820.41	2,144.89	2,044.64	100.25	21.395	
12,500.00	9,506.00	10,602.87	7,815.00	77.95	72.16	37.92	-858.61	2,920.41	2,144.91	2,041.89	103.01	20.822	
12,600.00	9,506.00	10,702.87	7,815.00	80.03	74.28	37.92	-858.65	3,020.41	2,144.92	2,039.13	105.79	20.275	
12,700.00	9,506.00	10,802.87	7,815.00	82.12	76.40	37.92	-858.70	3,120.41	2,144.94	2,036.35	108.59	19.753	
12,800.00	9,506.00	10,902.87	7,815.00	84.23	78.54	37.92	-858.75	3,220.41	2,144.95	2,033.55	111.40	19.254	
12,900.00	9,506.00	11,002.87	7,815.00	86.34	80.68	37.92	-858.80	3,320.41	2,144.97	2,030.74	114.23	18.778	
13,000.00	9,506.00	11,102.87	7,815.00	88.46	82.84	37.92	-858.84	3,420.41	2,144.98	2,027.92	117.07	18.323	
13,100.00	9,506.00	11,202.87	7,815.00	90.59	85.00	37.93	-858.89	3,520.41	2,145.00	2,025.08	119.92	17.887	
13,200.00	9,506.00	11,302.87	7,815.00	92.74	87.17	37.93	-858.94	3,620.41	2,145.01	2,022.23	122.78	17.470	
13,300.00	9,506.00	11,402.87	7,815.00	94.88	89.35	37.93	-858.99	3,720.41	2,145.03	2,019.37	125.66	17.071	
13,400.00	9,506.00	11,502.87	7,815.00	97.04	91.53	37.93	-859.03	3,820.41	2,145.04	2,016.50	128.54	16.688	
13,500.00	9,506.00	11,602.87	7,815.00	99.20	93.72	37.93	-859.08	3,920.41	2,145.06	2,013.63	131.43	16.320	
13,600.00	9,506.00	11,702.87	7,815.00	101.37	95.92	37.93	-859.13	4,020.41	2,145.07	2,010.74	134.34	15.968	
13,700.00	9,506.00	11,802.87	7,815.00	103.55	98.12	37.93	-859.18	4,120.41	2,145.09	2,007.84	137.25	15.629	
13,800.00	9,506.00	11,902.87	7,815.00	105.73	100.32	37.93	-859.22	4,220.41	2,145.10	2,004.94	140.17	15.304	
13,900.00	9,506.00	12,002.87	7,815.00	107.91	102.53	37.93	-859.27	4,320.41	2,145.12	2,002.03	143.09	14.991	
14,000.00	9,506.00	12,102.87	7,815.00	110.11	104.75	37.93	-859.32	4,420.41	2,145.14	1,999.11	146.02	14.690	
14,100.00	9,506.00	12,202.87	7,815.00	112.30	106.97	37.93	-859.37	4,520.41	2,145.15	1,996.19	148.96	14.401	
14,200.00	9,506.00	12,302.87	7,815.00	114.50	109.19	37.93	-859.41	4,620.41	2,145.17	1,993.26	151.91	14.121	
14,300.00	9,506.00	12,402.87	7,815.00	116.71	111.41	37.93	-859.46	4,720.41	2,145.18	1,990.32	154.86	13.852	
14,400.00	9,506.00	12,502.87	7,815.00	118.92	113.64	37.93	-859.51	4,820.41	2,145.20	1,987.38	157.82	13.593	
14,500.00	9,506.00	12,602.87	7,815.00	121.13	115.87	37.93	-859.56	4,920.41	2,145.21	1,984.43	160.78	13.343	
14,600.00	9,506.00	12,702.87	7,815.00	123.34	118.11	37.93	-859.60	5,020.41	2,145.23	1,981.48	163.74	13.101	
14,700.00	9,506.00	12,802.87	7,815.00	125.56	120.35	37.93	-859.65	5,120.41	2,145.24	1,978.53	166.71	12.868	
14,800.00	9,506.00	12,902.87	7,815.00	127.79	122.59	37.93	-859.70	5,220.41	2,145.26	1,975.57	169.69	12.642	
14,900.00	9,506.00	13,002.87	7,815.00	130.01	124.83	37.93	-859.75	5,320.41	2,145.27	1,972.60	172.67	12.424	
15,000.00	9,506.00	13,102.87	7,815.00	132.24	127.08	37.94	-859.80	5,420.41	2,145.29	1,969.64	175.65	12.213	
15,100.00	9,506.00	13,202.87	7,815.00	134.47	129.32	37.94	-859.84	5,520.41	2,145.30	1,966.66	178.64	12.009	
15,200.00	9,506.00	13,302.87	7,815.00	136.70	131.57	37.94	-859.89	5,620.41	2,145.32	1,963.69	181.63	11.812	

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

Pro Directional

Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #122H - OH - Prelim A											Offset Site Error: 0.00 usft		
Survey Program: 0-MWD-HDGM											Offset Well Error: 0.00 usft		
Reference		Offset		Semi-Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre N/S (usft)	E/W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,300.00	9,506.00	13,402.87	7,815.00	138.94	133.82	37.94	-859.94	5,720.41	2,145.33	1,960.71	184.62	11.620	
15,400.00	9,506.00	13,502.87	7,815.00	141.18	136.08	37.94	-859.99	5,820.41	2,145.35	1,957.73	187.62	11.435	
15,500.00	9,506.00	13,597.13	7,815.00	143.42	138.20	37.94	-860.03	5,920.41	2,145.36	1,954.83	190.53	11.260	
15,600.00	9,506.00	13,702.87	7,815.00	145.66	140.59	37.94	-860.08	6,020.41	2,145.38	1,951.76	193.62	11.080	
15,700.00	9,506.00	13,802.87	7,815.00	147.91	142.85	37.94	-860.13	6,120.41	2,145.39	1,948.76	196.63	10.911	
15,800.00	9,506.00	13,902.87	7,815.00	150.15	145.11	37.94	-860.18	6,220.41	2,145.41	1,945.77	199.64	10.747	
15,900.00	9,506.00	14,002.87	7,815.00	152.40	147.37	37.94	-860.22	6,320.41	2,145.42	1,942.78	202.65	10.587	
16,000.00	9,506.00	14,102.87	7,815.00	154.65	149.64	37.94	-860.27	6,420.41	2,145.44	1,939.78	205.66	10.432	
16,100.00	9,506.00	14,202.87	7,815.00	156.90	151.90	37.94	-860.32	6,520.41	2,145.45	1,936.78	208.68	10.281	
16,200.00	9,506.00	14,302.87	7,815.00	159.16	154.17	37.94	-860.37	6,620.41	2,145.47	1,933.77	211.69	10.135	
16,300.00	9,506.00	14,402.87	7,815.00	161.41	156.43	37.94	-860.41	6,720.41	2,145.48	1,930.77	214.71	9.992	
16,400.00	9,506.00	14,502.87	7,815.00	163.67	158.70	37.94	-860.46	6,820.41	2,145.50	1,927.76	217.74	9.854	
16,500.00	9,506.00	14,602.87	7,815.00	165.93	160.97	37.94	-860.51	6,920.41	2,145.51	1,924.75	220.76	9.719	
16,600.00	9,506.00	14,702.87	7,815.00	168.19	163.24	37.94	-860.56	7,020.41	2,145.53	1,921.74	223.79	9.587	
16,700.00	9,506.00	14,802.87	7,815.00	170.45	165.51	37.94	-860.60	7,120.41	2,145.54	1,918.73	226.81	9.459	
16,800.00	9,506.00	14,902.87	7,815.00	172.71	167.79	37.94	-860.65	7,220.41	2,145.56	1,915.71	229.84	9.335	
16,900.00	9,506.00	15,002.87	7,815.00	174.97	170.06	37.95	-860.70	7,320.41	2,145.57	1,912.70	232.88	9.213	
17,000.00	9,506.00	15,102.87	7,815.00	177.24	172.34	37.95	-860.75	7,420.41	2,145.59	1,909.68	235.91	9.095	
17,100.00	9,506.00	15,202.87	7,815.00	179.50	174.61	37.95	-860.79	7,520.41	2,145.60	1,906.66	238.94	8.980	
17,200.00	9,506.00	15,302.87	7,815.00	181.77	176.89	37.95	-860.84	7,620.41	2,145.62	1,903.64	241.98	8.867	
17,300.00	9,506.00	15,402.87	7,815.00	184.04	179.16	37.95	-860.89	7,720.41	2,145.63	1,900.62	245.02	8.757	
17,400.00	9,506.00	15,502.87	7,815.00	186.31	181.44	37.95	-860.94	7,820.41	2,145.65	1,897.59	248.06	8.650	
17,500.00	9,506.00	15,602.87	7,815.00	188.58	183.72	37.95	-860.98	7,920.41	2,145.66	1,894.57	251.10	8.545	
17,600.00	9,506.00	15,702.87	7,815.00	190.85	186.00	37.95	-861.03	8,020.41	2,145.68	1,891.54	254.14	8.443	
17,700.00	9,506.00	15,802.87	7,815.00	193.12	188.28	37.95	-861.08	8,120.41	2,145.70	1,888.51	257.18	8.343	
17,800.00	9,506.00	15,902.87	7,815.00	195.39	190.56	37.95	-861.13	8,220.41	2,145.71	1,885.49	260.22	8.246	
17,900.00	9,506.00	16,002.87	7,815.00	197.66	192.84	37.95	-861.18	8,320.41	2,145.73	1,882.46	263.27	8.150	
18,000.00	9,506.00	16,102.87	7,815.00	199.94	195.13	37.95	-861.22	8,420.41	2,145.74	1,879.42	266.32	8.057	
18,100.00	9,506.00	16,202.87	7,815.00	202.21	197.41	37.95	-861.27	8,520.41	2,145.76	1,876.39	269.36	7.966	
18,200.00	9,506.00	16,302.87	7,815.00	204.49	199.69	37.95	-861.32	8,620.41	2,145.77	1,873.36	272.41	7.877	
18,300.00	9,506.00	16,402.87	7,815.00	206.77	201.98	37.95	-861.37	8,720.41	2,145.79	1,870.32	275.46	7.790	
18,400.00	9,506.00	16,502.87	7,815.00	209.04	204.26	37.95	-861.41	8,820.41	2,145.80	1,867.29	278.51	7.705	
18,500.00	9,506.00	16,602.87	7,815.00	211.32	206.55	37.95	-861.46	8,920.41	2,145.82	1,864.25	281.56	7.621	
18,600.00	9,506.00	16,702.87	7,815.00	213.60	208.83	37.95	-861.51	9,020.41	2,145.83	1,861.21	284.62	7.539	
18,700.00	9,506.00	16,802.87	7,815.00	215.88	211.12	37.95	-861.56	9,120.41	2,145.85	1,858.18	287.67	7.459	
18,800.00	9,506.00	16,902.87	7,815.00	218.16	213.41	37.95	-861.60	9,220.41	2,145.86	1,855.14	290.72	7.381	
18,900.00	9,506.00	17,002.87	7,815.00	220.44	215.69	37.96	-861.65	9,320.41	2,145.88	1,852.10	293.78	7.304	
19,000.00	9,506.00	17,102.87	7,815.00	222.72	217.98	37.96	-861.70	9,420.41	2,145.89	1,849.06	296.84	7.229	
19,100.00	9,506.00	17,202.87	7,815.00	225.00	220.27	37.96	-861.75	9,520.41	2,145.91	1,846.01	299.89	7.156	
19,200.00	9,506.00	17,302.87	7,815.00	227.28	222.56	37.96	-861.79	9,620.41	2,145.92	1,842.97	302.95	7.083	
19,300.00	9,506.00	17,402.87	7,815.00	229.56	224.85	37.96	-861.84	9,720.41	2,145.94	1,839.93	306.01	7.013	
19,400.00	9,506.00	17,502.87	7,815.00	231.85	227.14	37.96	-861.89	9,820.41	2,145.95	1,836.88	309.07	6.943	
19,500.00	9,506.00	17,602.87	7,815.00	234.13	229.42	37.96	-861.94	9,920.41	2,145.97	1,833.84	312.13	6.875	
19,600.00	9,506.00	17,697.13	7,815.00	236.42	231.58	37.96	-861.98	10,020.41	2,145.98	1,830.88	315.10	6.810	
19,628.96	9,506.00	17,726.09	7,815.00	237.08	232.25	37.96	-862.00	10,049.37	2,145.99	1,830.00	315.99	6.791	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #131H - OH - Prelim A														Offset Site Error:
Survey Program: 0-MWD-HDGM														0.00 usft
Reference	Offset	Semi-Major Axis	Distance	Warning										
Measured Vertical Depth (usft)	Measured Vertical Depth (usft)	Reference Depth (usft)	Offset Depth (usft)	Reference 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			
0.00	0.00	0.00	0.00	0.00	0.00	-20.56	80.00	-30.00	85.44	85.18	0.26	333.350		
100.00	100.00	100.00	100.00	0.13	0.13	-20.56	80.00	-30.00	85.44	84.47	0.97	87.788		
200.00	200.00	200.00	200.00	0.49	0.49	-20.56	80.00	-30.00	85.44	83.75	1.69	50.550		
300.00	300.00	300.00	300.00	0.85	0.85	-20.56	80.00	-30.00	85.44	83.03	2.41	35.494		
400.00	400.00	400.00	400.00	1.20	1.20	-20.56	80.00	-30.00	85.44	82.32	3.12	27.349		
500.00	500.00	500.00	500.00	1.56	1.56	-20.56	80.00	-30.00	85.44	81.60	3.84	22.244		
600.00	600.00	600.00	600.00	2.28	2.28	-20.56	80.00	-30.00	85.44	80.88	4.56	18.745		
700.00	700.00	700.00	700.00	2.64	2.64	-20.56	80.00	-30.00	85.44	80.17	5.27	16.197		
800.00	800.00	800.00	800.00	3.00	3.00	-20.56	80.00	-30.00	85.44	79.45	5.99	14.259		
900.00	900.00	900.00	900.00	3.35	3.35	-20.56	80.00	-30.00	85.44	78.73	6.71	12.736		
1,000.00	1,000.00	1,000.00	1,000.00	3.71	3.71	27.52	80.00	-30.00	83.89	76.47	7.42	11.301		
1,100.00	1,099.98	1,100.02	1,099.98	4.07	4.07	29.32	80.00	-30.00	79.28	71.15	8.14	9.742		
1,200.00	1,199.84	1,200.16	1,199.84	4.42	4.43	32.39	80.00	-30.00	72.51	63.65	8.85	8.189		
1,300.00	1,299.53	1,300.47	1,299.53	4.78	4.79	36.14	80.00	-30.00	65.85	56.28	9.57	6.879		
1,400.00	1,399.20	1,400.80	1,399.20	5.14	5.15	40.70	80.00	-30.00	59.53	49.24	10.29	5.785		
1,500.00	1,498.88	1,501.12	1,498.88	5.51	5.51	46.30	80.00	-30.00	53.68	42.66	11.01	4.874		
1,600.00	1,598.55	1,601.45	1,598.55	5.87	5.87	53.19	80.00	-30.00	48.46	36.72	11.74	4.128		
1,700.00	1,698.23	1,701.77	1,698.23	6.24	6.23	61.57	80.00	-30.00	44.10	31.63	12.46	3.538		
1,800.00	1,797.90	1,802.10	1,797.90	6.60	6.59	71.51	80.00	-30.00	40.87	27.68	13.19	3.098		
1,900.00	1,897.58	1,902.42	1,897.58	6.97	6.93	82.74	80.00	-30.00	39.06	25.16	13.90	2.810		
2,000.00	1,997.26	1,997.26	1,997.26	7.17	7.12	88.48	80.34	-30.31	38.81	24.51	14.29	2.715 CC		
2,054.52	2,051.60	2,051.52	2,051.51	7.34	7.28	92.14	81.21	-31.10	38.93	24.31	14.62	2.663		
2,100.00	2,096.93	2,096.88	2,096.86	7.71	7.64	96.38	85.01	-34.54	39.62	24.28	15.34	2.583		
2,200.00	2,196.61	2,196.81	2,196.66	8.08	8.02	96.74	90.74	-39.74	40.37	24.29	16.09	2.510		
2,300.00	2,296.28	2,303.18	2,296.36	8.45	8.38	96.88	96.59	-45.05	41.12	24.31	16.81	2.446		
2,400.00	2,395.96	2,403.18	2,396.05	8.82	8.73	97.02	102.43	-50.35	41.87	24.33	17.54	2.387		
2,500.00	2,495.63	2,503.19	2,495.73	9.19	9.09	97.15	108.28	-55.66	42.62	24.35	18.27	2.333		
2,600.00	2,595.31	2,603.19	2,595.42	9.56	9.45	97.27	114.13	-60.96	43.37	24.37	19.00	2.283		
2,700.00	2,694.99	2,703.19	2,695.10	9.93	9.82	97.39	119.98	-66.26	44.12	24.39	19.73	2.236		
2,800.00	2,794.66	2,803.20	2,794.79	10.30	10.18	97.51	125.82	-71.57	44.86	24.40	20.46	2.193		
2,900.00	2,894.34	2,903.20	2,894.47	10.67	10.54	97.62	131.67	-76.87	45.61	24.42	21.19	2.152		
3,000.00	2,994.01	3,003.20	2,994.16	11.04	10.90	97.73	137.52	-82.18	46.36	24.43	21.93	2.114		
3,100.00	3,093.69	3,103.20	3,093.84	11.41	11.27	97.83	143.37	-87.48	47.11	24.45	22.66	2.079		
3,200.00	3,193.36	3,203.21	3,193.53	11.78	11.63	97.94	149.21	-92.79	47.86	24.46	23.40	2.046		
3,300.00	3,293.04	3,303.21	3,293.21	12.15	12.00	98.04	155.06	-98.09	48.61	24.48	24.13	2.014		
3,400.00	3,392.71	3,403.21	3,392.90	12.53	12.36	98.13	160.91	-103.39	49.36	24.49	24.87	1.985		
3,500.00	3,492.39	3,503.22	3,492.58	12.90	12.73	98.23	166.75	-108.70	50.11	24.51	25.61	1.957		
3,600.00	3,592.07	3,603.22	3,592.27	13.27	13.10	98.32	172.60	-114.00	50.86	24.52	26.34	1.931		
3,700.00	3,691.74	3,703.22	3,691.95	13.64	13.46	98.40	178.45	-119.31	51.61	24.53	27.08	1.906		
3,800.00	3,791.42	3,803.22	3,791.64	14.01	13.83	98.49	184.30	-124.61	52.36	24.54	27.82	1.882		
3,900.00	3,891.09	3,903.23	3,891.32	14.39	14.20	98.57	190.14	-129.92	53.12	24.56	28.56	1.860		
4,000.00	3,990.77	4,003.23	3,991.01	14.76	14.57	98.65	195.99	-135.22	53.87	24.57	29.30	1.839		
4,100.00	4,090.44	4,103.23	4,090.69	15.13	14.93	98.73	201.84	-140.52	54.62	24.58	30.04	1.818		
4,200.00	4,190.12	4,203.24	4,190.38	15.50	15.30	98.81	207.69	-145.83	55.37	24.59	30.78	1.799		
4,300.00	4,289.80	4,303.24	4,290.06	15.88	15.67	98.88	213.53	-151.13	56.12	24.60	31.52	1.781		
4,400.00	4,389.47	4,403.24	4,389.75	16.25	16.04	98.95	219.38	-156.44	56.87	24.61	32.26	1.763		
4,500.00	4,489.15	4,503.24	4,489.43	16.62	16.41	99.02	225.23	-161.74	57.62	24.63	33.00	1.746		
4,600.00	4,588.82	4,603.25	4,589.12	16.99	16.78	99.09	231.07	-167.05	58.37	24.64	33.74	1.730		
4,700.00	4,688.50	4,703.25	4,688.80	17.37	17.12	99.16	236.92	-172.35	59.13	24.67	34.45	1.716		
4,800.00	4,788.17	4,796.75	4,788.49	17.74	17.52	99.23	242.77	-177.66	59.88	24.66	35.22	1.700		
4,900.00	4,887.85	4,903.26	4,888.17	18.11	17.89	99.29	248.62	-182.96	60.63	24.67	35.96	1.686		
5,000.00	4,987.53	5,003.26	4,987.86											

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #131H - OH - Prelim A												Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HDGM												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis (usft)	Highside Toolface (°)	Offset Wellbore Centre N/S (usft)	Offset Wellbore Centre E/W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Warning
5,100.00	5,087.20	5,103.26	5,087.54	18.48	18.26	99.35	99.35	254.46	-188.26	61.38	24.68	36.70	1.672
5,200.00	5,186.88	5,203.26	5,187.23	18.86	18.63	99.41	99.41	260.31	-193.57	62.13	24.69	37.44	1.659
5,300.00	5,286.55	5,303.27	5,286.91	19.23	19.00	99.47	99.47	266.16	-198.87	62.88	24.70	38.18	1.647
5,400.00	5,386.23	5,403.27	5,386.60	19.60	19.37	99.53	99.53	272.01	-204.18	63.64	24.71	38.92	1.635
5,500.00	5,485.90	5,503.27	5,486.28	19.97	19.74	99.58	99.58	277.85	-209.48	64.39	24.72	39.67	1.623
5,600.00	5,585.58	5,603.28	5,585.97	20.35	20.11	99.64	99.64	283.70	-214.79	65.14	24.73	40.41	1.612
5,700.00	5,685.26	5,703.28	5,685.65	20.72	20.48	99.69	99.69	289.55	-220.09	65.89	24.74	41.15	1.601
5,800.00	5,784.93	5,803.28	5,785.34	21.09	20.85	99.71	99.71	295.39	-225.39	66.64	24.75	41.89	1.591
5,900.00	5,884.76	5,903.31	5,885.00	21.46	21.22	97.85	97.85	301.24	-230.70	67.04	24.40	42.64	1.572
6,000.00	5,984.73	6,003.48	5,984.52	21.81	21.59	93.05	93.05	307.08	-235.99	67.24	23.85	43.38	1.550 ES
6,100.00	6,084.73	6,103.78	6,083.90	22.16	21.96	38.92	38.92	312.91	-241.28	68.01	23.89	44.12	1.542 SF
6,200.00	6,184.73	6,204.10	6,183.28	22.50	22.33	32.51	32.51	318.74	-246.57	69.67	24.84	44.83	1.554
6,300.00	6,284.73	6,304.41	6,282.65	22.85	22.70	26.47	26.47	324.57	-251.86	72.15	26.63	45.53	1.585
6,400.00	6,384.73	6,404.72	6,382.03	23.19	23.08	20.88	20.88	330.40	-257.14	75.39	29.18	46.21	1.631
6,500.00	6,484.73	6,505.03	6,481.41	23.54	23.45	15.80	15.80	336.22	-262.43	79.29	32.40	46.89	1.691
6,600.00	6,584.73	6,605.34	6,580.78	23.89	23.82	11.22	11.22	342.05	-267.72	83.75	36.18	47.56	1.761
6,700.00	6,684.73	6,694.34	6,680.16	24.23	24.15	7.13	7.13	347.88	-273.01	88.69	40.49	48.19	1.840
6,800.00	6,784.73	6,794.17	6,779.67	24.58	24.52	3.48	3.48	353.72	-278.30	94.02	45.16	48.87	1.924
6,900.00	6,884.73	6,896.45	6,881.77	24.93	24.89	0.96	0.96	358.19	-282.36	98.25	48.69	49.56	1.982
7,000.00	6,984.73	6,999.04	6,984.33	25.28	25.26	0.02	0.02	359.97	-283.97	99.97	49.73	50.24	1.990
7,100.00	7,084.73	7,100.56	7,084.73	25.63	25.61	0.00	0.00	360.00	-284.00	100.00	49.06	50.94	1.963
7,200.00	7,184.73	7,200.56	7,184.73	25.97	25.96	0.00	0.00	360.00	-284.00	100.00	48.35	51.65	1.936
7,300.00	7,284.73	7,300.56	7,284.73	26.32	26.31	0.00	0.00	360.00	-284.00	100.00	47.65	52.35	1.910
7,400.00	7,384.73	7,400.56	7,384.73	26.67	26.66	0.00	0.00	360.00	-284.00	100.00	46.95	53.05	1.885
7,500.00	7,484.73	7,500.56	7,484.73	27.02	27.01	0.00	0.00	360.00	-284.00	100.00	46.24	53.76	1.860
7,600.00	7,584.73	7,600.56	7,584.73	27.37	27.36	0.00	0.00	360.00	-284.00	100.00	45.54	54.46	1.836
7,700.00	7,684.73	7,700.56	7,684.73	27.72	27.71	0.00	0.00	360.00	-284.00	100.00	44.84	55.16	1.813
7,800.00	7,784.73	7,800.56	7,784.73	28.07	28.06	0.00	0.00	360.00	-284.00	100.00	44.13	55.87	1.790
7,900.00	7,884.73	7,900.56	7,884.73	28.42	28.41	0.00	0.00	360.00	-284.00	100.00	43.43	56.57	1.768
8,000.00	7,984.73	8,000.56	7,984.73	28.77	28.77	0.00	0.00	360.00	-284.00	100.00	42.72	57.28	1.746
8,100.00	8,084.73	8,100.56	8,084.73	29.12	29.12	0.00	0.00	360.00	-284.00	100.00	42.02	57.98	1.725
8,200.00	8,184.73	8,200.56	8,184.73	29.47	29.47	0.00	0.00	360.00	-284.00	100.00	41.31	58.69	1.704
8,300.00	8,284.73	8,300.56	8,284.73	29.82	29.82	0.00	0.00	360.00	-284.00	100.00	40.61	59.39	1.684
8,400.00	8,384.73	8,400.56	8,384.73	30.18	30.17	0.00	0.00	360.00	-284.00	100.00	39.90	60.10	1.664
8,500.00	8,484.73	8,500.56	8,484.73	30.53	30.52	0.00	0.00	360.00	-284.00	100.00	39.19	60.81	1.645
8,509.45	8,494.18	8,508.89	8,494.18	30.56	30.55	0.00	0.00	360.00	-284.00	100.00	39.13	60.87	1.643
8,600.00	8,584.73	8,598.20	8,583.43	30.88	30.86	1.06	1.06	360.27	-282.14	100.29	38.76	61.53	1.630
8,700.00	8,684.73	8,692.97	8,676.83	31.23	31.16	9.50	9.50	362.44	-266.86	104.16	41.95	62.21	1.674
8,800.00	8,784.73	8,780.51	8,759.77	31.58	31.41	22.76	22.76	366.35	-239.38	118.00	55.93	62.07	1.901
8,900.00	8,884.73	8,858.12	8,829.02	31.93	31.62	35.44	35.44	371.27	-204.82	147.49	87.29	60.21	2.450
9,000.00	8,984.39	8,927.73	8,886.61	32.27	31.79	-11.70	-11.70	376.77	-166.19	186.92	129.76	57.16	3.270
9,100.00	9,081.39	8,994.00	8,936.66	32.59	31.95	-4.63	-4.63	382.88	-123.25	224.75	171.23	53.51	4.200
9,200.00	9,172.78	9,057.52	8,979.64	32.88	32.12	0.58	0.58	389.46	-76.98	259.55	210.00	49.55	5.238
9,300.00	9,255.79	9,118.77	9,015.93	33.12	32.32	4.73	4.73	396.41	-28.17	290.73	245.19	45.54	6.384
9,400.00	9,328.12	9,178.31	9,045.98	33.32	32.54	6.53	6.53	403.65	22.69	318.19	276.33	41.85	7.602
9,500.00	9,389.92	9,237.86	9,070.54	33.62	32.81	5.66	5.66	411.29	76.37	343.03	304.18	38.85	8.830
9,600.00	9,439.92	9,300.00	9,090.02	34.02	33.12	4.99	4.99	419.60	134.76	364.12	327.43	36.69	9.924
9,700.00	9,476.60	9,357.32	9,102.23	34.50	33.44	4.20	4.20	427.49	190.17	380.39	345.42	34.97	10.877
9,800.00	9,498.85	9,416.69	9,108.93	35.06	33.81	3.34	3.34	435.79	248.56	391.40	357.16	34.25	11.429
9,900.00	9,506.00	9,491.62	9,110.00	35.70	34.31	2.07	2.07	445.94	322.77	396.26	361.83	34.43	11.509
10,000.00	9,506.00	9,590.68	9,110.00	36.42	35.10	0.71	0.71	455.29	421.38	396.03	361.13	34.90	11.347
10,100.00	9,506.00	9,690.46	9,110.00	37.28	36.01	0.10	0.10	459.53	521.05	396.00	360.58	35.43	11.178

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #131H - OH - Prelim A													Offset Site Error:
Survey Program: 0-MWD+HDGM													Offset Well Error:
Reference	Offset	Semi-Major Axis		Highside		Offset Wellbore Centre		Distance		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)	Separation (usft)	Factor	
10,145.48	9,506.00	9,735.92	9,110.00	37.71	36.46	0.06	459.78	566.52	396.00	360.33	35.67	11.101	
10,200.00	9,506.00	9,809.55	9,110.00	38.24	37.24	0.06	459.77	621.04	396.00	359.98	36.03	10.992	
10,300.00	9,506.00	9,909.55	9,110.00	39.32	38.40	0.06	459.75	721.04	396.00	359.37	36.63	10.810	
10,400.00	9,506.00	10,009.55	9,110.00	40.50	39.66	0.06	459.73	821.04	396.00	358.71	37.30	10.618	
10,500.00	9,506.00	10,090.45	9,110.00	41.77	40.75	0.06	459.71	921.04	396.00	358.06	37.94	10.438	
10,600.00	9,506.00	10,209.55	9,110.00	43.13	42.44	0.05	459.70	1,021.04	396.00	357.23	38.78	10.212	
10,700.00	9,506.00	10,309.55	9,110.00	44.57	43.95	0.05	459.68	1,121.04	396.00	356.41	39.59	10.003	
10,800.00	9,506.00	10,390.45	9,110.00	46.08	45.21	0.05	459.66	1,221.04	396.00	355.64	40.36	9.811	
10,900.00	9,506.00	10,509.55	9,110.00	47.65	47.15	0.05	459.64	1,321.04	396.00	354.65	41.35	9.577	
11,000.00	9,506.00	10,590.45	9,110.00	49.28	48.51	0.05	459.62	1,421.04	396.00	353.81	42.19	9.385	
11,100.00	9,506.00	10,709.55	9,110.00	50.96	50.57	0.05	459.60	1,521.04	396.00	352.74	43.26	9.154	
11,200.00	9,506.00	10,809.55	9,110.00	52.69	52.35	0.05	459.58	1,621.04	396.00	351.73	44.27	8.945	
11,300.00	9,506.00	10,909.55	9,110.00	54.46	54.18	0.05	459.56	1,721.04	396.00	350.69	45.31	8.739	
11,400.00	9,506.00	11,009.55	9,110.00	56.27	56.03	0.05	459.55	1,821.04	396.00	349.62	46.38	8.537	
11,500.00	9,506.00	11,109.55	9,110.00	58.12	57.92	0.05	459.53	1,921.04	396.00	348.52	47.48	8.340	
11,600.00	9,506.00	11,209.55	9,110.00	60.00	59.84	0.05	459.51	2,021.04	396.00	347.39	48.61	8.147	
11,700.00	9,506.00	11,309.55	9,110.00	61.91	61.78	0.05	459.49	2,121.04	396.00	346.24	49.76	7.959	
11,800.00	9,506.00	11,409.55	9,110.00	63.84	63.75	0.05	459.47	2,221.04	396.00	345.07	50.93	7.776	
11,900.00	9,506.00	11,509.55	9,110.00	65.80	65.74	0.05	459.45	2,321.04	396.00	343.88	52.12	7.598	
12,000.00	9,506.00	11,609.55	9,110.00	67.78	67.75	0.05	459.43	2,421.04	396.00	342.67	53.33	7.425	
12,100.00	9,506.00	11,709.55	9,110.00	69.78	69.78	0.05	459.41	2,521.04	396.00	341.44	54.56	7.258	
12,200.00	9,506.00	11,809.55	9,110.00	71.80	71.83	0.04	459.40	2,621.04	396.00	340.19	55.81	7.096	
12,300.00	9,506.00	11,909.55	9,110.00	73.83	73.89	0.04	459.38	2,721.04	396.00	338.93	57.07	6.939	
12,400.00	9,506.00	12,009.55	9,110.00	75.89	75.97	0.04	459.36	2,821.04	396.00	337.65	58.35	6.787	
12,500.00	9,506.00	12,109.55	9,110.00	77.95	78.06	0.04	459.34	2,921.04	396.00	336.36	59.64	6.640	
12,600.00	9,506.00	12,209.55	9,110.00	80.03	80.16	0.04	459.32	3,021.04	396.00	335.05	60.95	6.497	
12,700.00	9,506.00	12,309.55	9,110.00	82.12	82.27	0.04	459.30	3,121.04	396.00	333.74	62.26	6.360	
12,800.00	9,506.00	12,409.55	9,110.00	84.23	84.40	0.04	459.28	3,221.04	396.00	332.41	63.59	6.227	
12,900.00	9,506.00	12,509.55	9,110.00	86.34	86.53	0.04	459.26	3,321.04	396.00	331.07	64.93	6.099	
13,000.00	9,506.00	12,609.55	9,110.00	88.46	88.67	0.04	459.25	3,421.04	396.00	329.72	66.28	5.975	
13,100.00	9,506.00	12,709.55	9,110.00	90.59	90.82	0.04	459.23	3,521.04	396.00	328.36	67.64	5.855	
13,200.00	9,506.00	12,809.55	9,110.00	92.74	92.97	0.04	459.21	3,621.04	396.00	326.99	69.01	5.738	
13,300.00	9,506.00	12,909.55	9,110.00	94.88	95.14	0.04	459.19	3,721.04	396.00	325.62	70.38	5.626	
13,400.00	9,506.00	13,009.55	9,110.00	97.04	97.31	0.04	459.17	3,821.04	396.00	324.23	71.77	5.518	
13,500.00	9,506.00	13,109.55	9,110.00	99.20	99.49	0.04	459.15	3,921.04	396.00	322.84	73.16	5.413	
13,600.00	9,506.00	13,209.55	9,110.00	101.37	101.67	0.04	459.13	4,021.04	396.00	321.44	74.56	5.311	
13,700.00	9,506.00	13,309.55	9,110.00	103.55	103.86	0.04	459.11	4,121.04	396.00	320.04	75.96	5.213	
13,800.00	9,506.00	13,409.55	9,110.00	105.73	106.05	0.04	459.09	4,221.04	396.00	318.63	77.38	5.118	
13,900.00	9,506.00	13,509.55	9,110.00	107.91	108.25	0.03	459.08	4,321.04	396.00	317.21	78.79	5.026	
14,000.00	9,506.00	13,609.55	9,110.00	110.11	110.45	0.03	459.06	4,421.04	396.00	315.78	80.22	4.937	
14,100.00	9,506.00	13,709.55	9,110.00	112.30	112.66	0.03	459.04	4,521.04	396.00	314.36	81.65	4.850	
14,200.00	9,506.00	13,809.55	9,110.00	114.50	114.87	0.03	459.02	4,621.04	396.00	312.92	83.08	4.767	
14,300.00	9,506.00	13,909.55	9,110.00	116.71	117.08	0.03	459.00	4,721.04	396.00	311.48	84.52	4.685	
14,400.00	9,506.00	14,009.55	9,110.00	118.92	119.30	0.03	458.98	4,821.04	396.00	310.04	85.96	4.607	
14,500.00	9,506.00	14,109.55	9,110.00	121.13	121.52	0.03	458.96	4,921.04	396.00	308.59	87.41	4.530	
14,600.00	9,506.00	14,209.55	9,110.00	123.34	123.75	0.03	458.94	5,021.04	396.00	307.14	88.86	4.456	
14,700.00	9,506.00	14,309.55	9,110.00	125.56	125.98	0.03	458.93	5,121.04	396.00	305.69	90.32	4.385	
14,800.00	9,506.00	14,409.55	9,110.00	127.79	128.21	0.03	458.91	5,221.04	396.00	304.23	91.78	4.315	
14,900.00	9,506.00	14,509.55	9,110.00	130.01	130.44	0.03	458.89	5,321.04	396.00	302.76	93.24	4.247	
15,000.00	9,506.00	14,609.55	9,110.00	132.24	132.68	0.03	458.87	5,421.04	396.00	301.30	94.70	4.181	
15,100.00	9,506.00	14,709.55	9,110.00	134.47	134.91	0.03	458.85	5,521.04	396.00	299.83	96.17	4.118	
15,200.00	9,506.00	14,809.55	9,110.00	136.70	137.15	0.03	458.83	5,621.04	396.00	298.35	97.65	4.055	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #131H - OH - Prelim A													Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HDGM													Offset Well Error:	0.00 usft
Reference	Vertical	Measured	Vertical	Semi-Major Axis	Offset	Highside	Offset Wellbore Centre	Distance	Between	Between	Minimum	Separation	Warning	
Depth	Depth	Depth	Depth	Reference	Offset	Toolface	N/S	E/W	Centres	Ellipses	Separation	Factor		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
15,300.00	9,506.00	14,909.55	9,110.00	138.94	139.40	0.03	458.81	5,721.04	396.00	296.88	99.12	3.995		
15,400.00	9,506.00	15,009.55	9,110.00	141.18	141.64	0.03	458.79	5,821.04	396.00	295.40	100.60	3.936		
15,500.00	9,506.00	15,109.55	9,110.00	143.42	143.89	0.02	458.78	5,921.04	396.00	293.92	102.08	3.879		
15,600.00	9,506.00	15,209.55	9,110.00	145.66	146.14	0.02	458.76	6,021.04	396.00	292.43	103.57	3.824		
15,700.00	9,506.00	15,309.55	9,110.00	147.91	148.39	0.02	458.74	6,121.04	396.00	290.95	105.05	3.770		
15,800.00	9,506.00	15,409.55	9,110.00	150.15	150.64	0.02	458.72	6,221.04	396.00	289.46	106.54	3.717		
15,900.00	9,506.00	15,509.55	9,110.00	152.40	152.90	0.02	458.70	6,321.04	396.00	287.97	108.03	3.666		
16,000.00	9,506.00	15,609.55	9,110.00	154.65	155.15	0.02	458.68	6,421.04	396.00	286.47	109.53	3.616		
16,100.00	9,506.00	15,709.55	9,110.00	156.90	157.41	0.02	458.66	6,521.04	396.00	284.98	111.02	3.567		
16,200.00	9,506.00	15,809.55	9,110.00	159.16	159.67	0.02	458.64	6,621.04	396.00	283.48	112.52	3.519		
16,300.00	9,506.00	15,909.55	9,110.00	161.41	161.93	0.02	458.63	6,721.04	396.00	281.98	114.02	3.473		
16,400.00	9,506.00	16,009.55	9,110.00	163.67	164.19	0.02	458.61	6,821.04	396.00	280.48	115.52	3.428		
16,500.00	9,506.00	16,109.55	9,110.00	165.93	166.45	0.02	458.59	6,921.04	396.00	278.98	117.02	3.384		
16,600.00	9,506.00	16,209.55	9,110.00	168.19	168.72	0.02	458.57	7,021.04	396.00	277.47	118.53	3.341		
16,700.00	9,506.00	16,309.55	9,110.00	170.45	170.98	0.02	458.55	7,121.04	396.00	275.97	120.03	3.299		
16,800.00	9,506.00	16,409.55	9,110.00	172.71	173.25	0.02	458.53	7,221.04	396.00	274.46	121.54	3.258		
16,900.00	9,506.00	16,509.55	9,110.00	174.97	175.52	0.02	458.51	7,321.04	396.00	272.95	123.05	3.218		
17,000.00	9,506.00	16,609.55	9,110.00	177.24	177.79	0.02	458.49	7,421.04	396.00	271.44	124.56	3.179		
17,100.00	9,506.00	16,709.55	9,110.00	179.50	180.06	0.02	458.48	7,521.04	396.00	269.93	126.07	3.141		
17,200.00	9,506.00	16,809.55	9,110.00	181.77	182.33	0.01	458.46	7,621.04	396.00	268.41	127.59	3.104		
17,300.00	9,506.00	16,909.55	9,110.00	184.04	184.60	0.01	458.44	7,721.04	396.00	266.90	129.10	3.067		
17,400.00	9,506.00	17,009.55	9,110.00	186.31	186.87	0.01	458.42	7,821.04	396.00	265.38	130.62	3.032		
17,500.00	9,506.00	17,109.55	9,110.00	188.58	189.14	0.01	458.40	7,921.04	396.00	263.86	132.14	2.997		
17,600.00	9,506.00	17,209.55	9,110.00	190.85	191.42	0.01	458.38	8,021.04	396.00	262.34	133.66	2.963		
17,700.00	9,506.00	17,309.55	9,110.00	193.12	193.69	0.01	458.36	8,121.04	396.00	260.82	135.18	2.930		
17,800.00	9,506.00	17,409.55	9,110.00	195.39	195.97	0.01	458.34	8,221.04	396.00	259.30	136.70	2.897		
17,900.00	9,506.00	17,509.55	9,110.00	197.66	198.25	0.01	458.32	8,321.04	396.00	257.78	138.22	2.865		
18,000.00	9,506.00	17,609.55	9,110.00	199.94	200.52	0.01	458.31	8,421.04	396.00	256.26	139.74	2.834		
18,100.00	9,506.00	17,709.55	9,110.00	202.21	202.80	0.01	458.29	8,521.04	396.00	254.73	141.27	2.803		
18,200.00	9,506.00	17,809.55	9,110.00	204.49	205.08	0.01	458.27	8,621.04	396.00	253.21	142.79	2.773		
18,300.00	9,506.00	17,909.55	9,110.00	206.77	207.36	0.01	458.25	8,721.04	396.00	251.68	144.32	2.744		
18,400.00	9,506.00	18,009.55	9,110.00	209.04	209.64	0.01	458.23	8,821.04	396.00	250.15	145.85	2.715		
18,500.00	9,506.00	18,109.55	9,110.00	211.32	211.92	0.01	458.21	8,921.04	396.00	248.63	147.37	2.687		
18,600.00	9,506.00	18,209.55	9,110.00	213.60	214.20	0.01	458.19	9,021.04	396.00	247.10	148.90	2.659		
18,700.00	9,506.00	18,309.55	9,110.00	215.88	216.48	0.01	458.17	9,121.04	396.00	245.57	150.43	2.632		
18,800.00	9,506.00	18,409.55	9,110.00	218.16	218.77	0.01	458.16	9,221.04	396.00	244.04	151.96	2.606		
18,900.00	9,506.00	18,509.55	9,110.00	220.44	221.05	0.00	458.14	9,321.04	396.00	242.50	153.50	2.580		
19,000.00	9,506.00	18,609.55	9,110.00	222.72	223.33	0.00	458.12	9,421.04	396.00	240.97	155.03	2.554		
19,100.00	9,506.00	18,709.55	9,110.00	225.00	225.62	0.00	458.10	9,521.04	396.00	239.44	156.56	2.529		
19,200.00	9,506.00	18,809.55	9,110.00	227.28	227.90	0.00	458.08	9,621.04	396.00	237.91	158.09	2.505		
19,300.00	9,506.00	18,909.55	9,110.00	229.56	230.19	0.00	458.06	9,721.04	396.00	236.37	159.63	2.481		
19,400.00	9,506.00	19,009.55	9,110.00	231.85	232.47	0.00	458.04	9,821.04	396.00	234.84	161.16	2.457		
19,500.00	9,506.00	19,090.45	9,110.00	234.13	234.32	0.00	458.02	9,921.04	396.00	233.45	162.55	2.436		
19,600.00	9,506.00	19,190.45	9,110.00	236.42	236.61	0.00	458.01	10,021.04	396.00	231.91	164.09	2.413		
19,628.96	9,506.00	19,219.41	9,110.00	237.08	237.27	0.00	458.00	10,050.00	396.00	231.47	164.53	2.407		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot.1) - #132H- OH - Prelim A											Offset Site Error:
Survey Program: 0-MWD-HDGM											Offset Well Error:
Reference	Offset	Semi Major Axis		Highside		Offset Wellbore Centre		Distance		Minimum Separation	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N-S (usft)	+E-W (usft)	Centres (usft)	Ellipses (usft)	Factor
0.00	0.00	1.00	1.00	0.00	0.00	0.00	80.00	0.00	80.00		
100.00	100.00	101.00	101.00	0.13	0.13	0.00	80.00	0.00	80.00	79.74	0.26 307.820
200.00	200.00	201.00	201.00	0.49	0.49	0.00	80.00	0.00	80.00	79.02	0.98 81.897
300.00	300.00	301.00	301.00	0.85	0.85	0.00	80.00	0.00	80.00	78.31	1.69 47.232
400.00	400.00	401.00	401.00	1.20	1.21	0.00	80.00	0.00	80.00	77.59	2.41 33.185
500.00	500.00	501.00	501.00	1.56	1.57	0.00	80.00	0.00	80.00	76.87	3.13 25.578
600.00	600.00	601.00	601.00	1.92	1.92	0.00	80.00	0.00	80.00	76.16	3.84 20.808
700.00	700.00	701.00	701.00	2.28	2.28	0.00	80.00	0.00	80.00	75.44	4.56 17.538
800.00	800.00	801.00	801.00	2.64	2.64	0.00	80.00	0.00	80.00	74.72	5.28 15.156
900.00	900.00	901.00	901.00	3.00	3.00	0.00	80.00	0.00	80.00	74.00	6.00 13.343
1,000.00	1,000.00	1,001.00	1,001.00	3.35	3.36	0.00	80.00	0.00	80.00	73.29	6.71 11.918
1,100.00	1,099.98	1,100.98	1,100.98	3.71	3.72	48.48	80.00	0.00	78.83	71.41	7.43 10.615
1,200.00	1,199.84	1,200.84	1,200.84	4.07	4.07	51.51	80.00	0.00	75.46	67.32	8.14 9.271
1,300.00	1,299.53	1,300.53	1,300.53	4.42	4.43	56.52	80.00	0.00	70.82	61.96	8.86 7.997
1,400.00	1,399.20	1,400.20	1,400.20	4.78	4.79	62.28	80.00	0.00	66.71	57.13	9.57 6.969
1,500.00	1,498.88	1,500.12	1,499.88	5.14	5.15	68.71	80.00	0.00	63.35	53.06	10.29 6.156
1,600.00	1,598.55	1,600.45	1,599.55	5.51	5.51	75.77	80.00	0.00	60.89	49.87	11.01 5.528
1,700.00	1,698.23	1,700.77	1,699.23	5.87	5.87	83.29	80.00	0.00	59.42	47.68	11.74 5.062
1,786.60	1,784.55	1,785.55	1,785.55	6.19	6.17	90.00	80.00	0.00	59.01	46.65	12.36 4.775 CC
1,800.00	1,797.90	1,801.10	1,798.90	6.24	6.23	91.04	80.00	0.00	59.02	46.55	12.46 4.736
1,900.00	1,897.58	1,901.42	1,898.58	6.60	6.59	98.76	80.00	0.00	59.71	46.52	13.18 4.529 ES
2,000.00	1,997.26	1,998.26	1,998.26	6.97	6.93	106.18	80.00	0.00	61.46	47.56	13.89 4.423
2,100.00	2,096.93	2,099.19	2,099.17	7.34	7.28	114.42	78.32	-0.34	63.20	48.60	14.59 4.330
2,200.00	2,196.61	2,199.60	2,199.44	7.71	7.60	124.81	73.18	-1.36	64.64	49.37	15.27 4.233
2,300.00	2,296.28	2,299.24	2,298.69	8.08	7.93	137.23	64.69	-3.05	67.28	51.33	15.95 4.219
2,400.00	2,395.96	2,397.86	2,396.58	8.45	8.26	150.82	52.95	-5.40	72.84	56.22	16.62 4.384
2,500.00	2,495.63	2,504.17	2,493.51	8.82	8.62	163.53	38.97	-8.18	82.48	65.17	17.31 4.765
2,600.00	2,595.31	2,606.18	2,590.45	9.19	8.97	173.34	24.91	-10.99	95.37	77.38	17.99 5.301
2,700.00	2,694.99	2,708.18	2,687.38	9.56	9.33	-179.31	10.84	-13.79	110.38	91.69	18.68 5.908
2,800.00	2,794.66	2,789.81	2,784.32	9.93	9.62	-173.75	-3.23	-16.60	126.75	107.44	19.31 6.564
2,900.00	2,894.34	2,887.80	2,881.26	10.30	9.97	-169.49	-17.30	-19.41	144.03	124.03	20.00 7.202
3,000.00	2,994.01	2,985.79	2,978.19	10.67	10.33	-166.14	-31.36	-22.21	161.92	141.22	20.70 7.824
3,100.00	3,093.69	3,083.78	3,075.13	11.04	10.69	-163.47	-45.43	-25.02	180.24	158.85	21.39 8.424
3,200.00	3,193.36	3,181.77	3,172.06	11.41	11.05	-161.29	-59.50	-27.82	198.87	176.78	22.10 9.000
3,300.00	3,293.04	3,279.77	3,269.00	11.78	11.41	-159.48	-73.57	-30.63	217.74	194.94	22.80 9.549
3,400.00	3,392.71	3,377.76	3,365.94	12.15	11.78	-157.96	-87.64	-33.44	236.78	213.27	23.51 10.072
3,500.00	3,492.39	3,475.75	3,462.87	12.53	12.15	-156.67	-101.70	-36.24	255.96	231.74	24.22 10.569
3,600.00	3,592.07	3,573.74	3,559.81	12.90	12.53	-155.55	-115.77	-39.05	275.25	250.32	24.93 11.041
3,700.00	3,691.74	3,671.73	3,656.74	13.27	12.90	-154.59	-129.84	-41.85	294.62	268.98	25.64 11.490
3,800.00	3,791.42	3,769.72	3,753.68	13.64	13.28	-153.74	-143.91	-44.66	314.07	287.71	26.36 11.917
3,900.00	3,891.09	3,867.72	3,850.62	14.01	13.66	-152.99	-157.98	-47.47	333.57	306.50	27.07 12.323
4,000.00	3,990.77	3,965.71	3,947.55	14.39	14.04	-152.32	-172.04	-50.27	353.12	325.34	27.79 12.709
4,100.00	4,090.44	4,063.70	4,044.49	14.76	14.42	-151.73	-186.11	-53.08	372.71	344.21	28.50 13.077
4,200.00	4,190.12	4,161.69	4,141.42	15.13	14.81	-151.19	-200.18	-55.88	392.34	363.12	29.22 13.427
4,300.00	4,289.80	4,259.68	4,238.36	15.50	15.19	-150.70	-214.25	-58.69	412.00	382.06	29.94 13.762
4,400.00	4,389.47	4,357.67	4,335.30	15.88	15.57	-150.26	-228.32	-61.50	431.68	401.03	30.66 14.081
4,500.00	4,489.15	4,455.67	4,432.23	16.25	15.96	-149.86	-242.38	-64.30	451.39	420.01	31.38 14.386
4,600.00	4,588.82	4,553.66	4,529.17	16.62	16.35	-149.49	-256.45	-67.11	471.12	439.02	32.10 14.678
4,700.00	4,688.50	4,651.65	4,626.10	16.99	16.74	-149.15	-270.52	-69.91	490.86	458.04	32.82 14.957
4,800.00	4,788.17	4,749.64	4,723.04	17.37	17.13	-148.84	-284.59	-72.72	510.62	477.08	33.54 15.224
4,900.00	4,887.85	4,847.63	4,819.98	17.74	17.52	-148.55	-298.66	-75.53	530.39	496.13	34.26 15.480
5,000.00	4,987.53	4,945.62	4,916.91	18.11	17.91	-148.28	-312.72	-78.33	550.18	515.19	34.99 15.726

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

Pro Directional

Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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

Leatherneck 3029 Fed Com (Slot 1) - #132H - OH - Prelim A														Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HDGM														Offset Well Error:	0.00 usft
Reference Depth (usft)	Vertical Depth (usft)	Offset Depth (usft)	Vertical Depth (usft)	Semi-Major Axis (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	E-W (usft)	Distance Centres (usft)	Distance Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
5,100.00	5,087.20	5,043.62	5,013.85	18.48	18.30	-148.03	-326.79	-81.14	569.97	534.27	35.71	15.962			
5,200.00	5,186.88	5,141.61	5,110.78	18.86	18.69	-147.79	-340.86	-83.94	589.78	553.35	36.43	16.188			
5,300.00	5,286.55	5,239.60	5,207.72	19.23	19.08	-147.58	-354.93	-86.75	609.59	572.44	37.16	16.406			
5,400.00	5,386.23	5,337.59	5,304.66	19.60	19.48	-147.37	-369.00	-89.56	629.42	591.54	37.88	16.616			
5,500.00	5,485.90	5,435.58	5,401.59	19.97	19.87	-147.18	-383.06	-92.36	649.25	610.64	38.61	16.817			
5,600.00	5,585.58	5,533.57	5,498.53	20.35	20.26	-147.00	-397.13	-95.17	669.08	629.75	39.33	17.012			
5,700.00	5,685.26	5,631.57	5,595.47	20.72	20.66	-146.83	-411.20	-97.97	688.92	648.87	40.06	17.199			
5,800.00	5,784.93	5,729.56	5,692.41	21.09	21.05	-146.70	-425.27	-100.78	708.74	667.95	40.78	17.379			
5,900.00	5,884.76	5,827.88	5,789.66	21.46	21.45	-146.65	-439.38	-103.59	726.72	685.21	41.51	17.509			
6,000.00	5,984.73	5,926.60	5,887.32	21.81	21.85	-146.42	-453.55	-106.42	741.84	699.62	42.22	17.570			
6,100.00	6,084.73	6,025.52	5,985.17	22.16	22.25	-146.50	-467.76	-109.25	755.17	712.23	42.94	17.589			
6,200.00	6,184.73	6,124.44	6,083.03	22.50	22.65	-146.95	-481.96	-112.09	768.51	724.86	43.65	17.607			
6,300.00	6,284.73	6,223.36	6,180.89	22.85	23.05	-147.40	-496.16	-114.92	781.89	737.53	44.36	17.626			
6,400.00	6,384.73	6,322.29	6,278.74	23.19	23.45	-147.82	-510.36	-117.75	795.32	750.25	45.07	17.645			
6,500.00	6,484.73	6,421.21	6,376.60	23.54	23.85	-148.23	-524.56	-120.58	808.80	763.01	45.79	17.664			
6,600.00	6,584.73	6,520.13	6,474.46	23.89	24.25	-148.63	-538.76	-123.42	822.31	775.81	46.50	17.684			
6,700.00	6,684.73	6,619.06	6,572.32	24.23	24.66	-149.02	-552.97	-126.25	835.86	788.64	47.21	17.703			
6,800.00	6,784.73	6,717.98	6,670.17	24.58	25.06	-149.39	-567.17	-129.08	849.45	801.52	47.93	17.723			
6,900.00	6,884.73	6,816.90	6,768.03	24.93	25.46	-149.75	-581.37	-131.91	863.07	814.42	48.64	17.743			
7,000.00	6,984.73	6,915.82	6,865.89	25.28	25.85	-150.10	-595.57	-134.75	876.72	827.36	49.36	17.762			
7,100.00	7,084.73	7,014.75	6,963.74	25.63	26.27	-150.44	-609.77	-137.58	890.41	840.33	50.07	17.782			
7,200.00	7,184.73	7,113.67	7,061.60	25.97	26.67	-150.77	-623.97	-140.41	904.12	853.33	50.79	17.802			
7,300.00	7,284.73	7,246.86	7,193.66	26.32	27.20	-151.15	-640.89	-143.79	916.37	864.60	51.77	17.701			
7,400.00	7,384.73	7,389.66	7,335.96	26.67	27.73	-151.40	-652.39	-146.08	924.10	871.36	52.73	17.524			
7,500.00	7,484.73	7,533.27	7,479.48	27.02	28.23	-151.50	-656.93	-146.99	927.13	873.54	53.59	17.299			
7,600.00	7,584.73	7,639.52	7,585.73	27.37	28.58	-151.50	-657.00	-147.00	927.18	872.89	54.29	17.078			
7,700.00	7,684.73	7,739.52	7,685.73	27.72	28.88	-151.50	-657.00	-147.00	927.18	872.21	54.97	16.867			
7,800.00	7,784.73	7,839.52	7,785.73	28.07	29.19	-151.50	-657.00	-147.00	927.18	871.53	55.65	16.660			
7,900.00	7,884.73	7,939.52	7,885.73	28.42	29.50	-151.50	-657.00	-147.00	927.18	870.84	56.33	16.458			
8,000.00	7,984.73	8,039.52	7,985.73	28.77	29.81	-151.50	-657.00	-147.00	927.18	870.16	57.02	16.261			
8,100.00	8,084.73	8,139.52	8,085.73	29.12	30.13	-151.50	-657.00	-147.00	927.18	869.48	57.70	16.068			
8,200.00	8,184.73	8,239.52	8,185.73	29.47	30.45	-151.50	-657.00	-147.00	927.18	868.79	58.39	15.880			
8,300.00	8,284.73	8,339.52	8,285.73	29.82	30.76	-151.50	-657.00	-147.00	927.18	868.11	59.07	15.696			
8,400.00	8,384.73	8,439.52	8,385.73	30.18	31.08	-151.50	-657.00	-147.00	927.18	867.42	59.76	15.515			
8,500.00	8,484.73	8,539.52	8,485.73	30.53	31.40	-151.50	-657.00	-147.00	927.18	866.73	60.45	15.339			
8,505.09	8,489.82	8,544.61	8,490.82	30.55	31.42	-151.50	-657.00	-147.00	927.18	866.70	60.48	15.330			
8,600.00	8,584.73	8,620.73	8,566.93	30.88	31.66	-151.46	-657.19	-146.24	927.67	866.59	61.08	15.187			
8,700.00	8,684.73	8,681.45	8,627.29	31.23	31.86	-151.10	-658.77	-140.07	931.81	870.20	61.60	15.126			
8,800.00	8,784.73	8,740.20	8,684.73	31.58	32.05	-150.41	-661.78	-128.24	940.29	878.27	62.02	15.162			
8,900.00	8,884.73	8,800.00	8,741.60	31.93	32.24	-149.39	-666.33	-110.41	953.41	891.07	62.34	15.295			
9,000.00	8,984.39	8,850.00	8,787.46	32.27	32.39	-109.33	-671.23	-91.16	973.74	911.30	62.44	15.595			
9,100.00	9,081.39	8,900.00	8,831.43	32.59	32.53	-105.66	-677.11	-68.11	1,004.19	941.76	62.43	16.084			
9,200.00	9,172.78	8,950.00	8,873.15	32.88	32.66	-101.23	-683.91	-41.44	1,043.20	980.80	62.40	16.718			
9,300.00	9,255.79	9,000.00	8,912.31	33.12	32.79	-96.21	-691.58	-11.34	1,089.02	1,026.61	62.41	17.449			
9,400.00	9,328.12	9,038.61	8,940.61	33.32	32.89	-88.93	-698.06	14.10	1,139.14	1,076.75	62.39	18.258			
9,500.00	9,389.92	9,082.61	8,970.63	33.62	32.99	-80.92	-706.01	45.27	1,184.75	1,122.20	62.56	18.939			
9,600.00	9,439.92	9,127.55	8,998.64	34.02	33.10	-75.49	-714.68	79.30	1,223.03	1,160.14	62.89	19.448			
9,700.00	9,476.60	9,173.54	9,024.37	34.50	33.21	-72.06	-724.09	116.22	1,253.37	1,189.96	63.42	19.764			
9,800.00	9,498.85	9,220.68	9,047.48	35.06	33.33	-70.27	-734.24	156.02	1,275.36	1,211.20	64.17	19.876			
9,900.00	9,506.00	9,269.06	9,067.61	35.70	33.48	-69.97	-745.10	198.63	1,288.75	1,223.62	65.13	19.786			
10,000.00	9,506.00	9,319.79	9,084.66	36.42	33.66	-70.86	-756.90	244.92	1,300.29	1,234.02	66.26	19.623			
10,100.00	9,506.00	9,373.44	9,098.01	37.28	33.91	-71.61	-769.73	295.24	1,315.65	1,248.15	67.51	19.489			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #132H - OH - Prelim A												Offset Site Error: 0.00 usft	
Survey Program: 0-MWD-HDGM												Offset Well Error: 0.00 usft	
Reference		Offset		Semi-Major Axis		Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset				Between Centres (usft)	Between Ellipses (usft)			
10,200.00	9,506.00	9,429.25	9,106.69	38.24	34.23	72.16	-783.34	348.65	1,334.45	1,265.61	68.83	19.386	
10,300.00	9,506.00	9,490.83	9,110.00	39.32	34.63	72.49	-798.52	408.21	1,356.36	1,286.09	70.27	19.302	
10,400.00	9,506.00	9,778.11	9,110.00	40.50	37.21	73.12	-848.31	690.87	1,373.52	1,299.24	74.28	18.491	
10,500.00	9,506.00	10,007.98	9,110.00	41.77	39.86	73.23	-857.71	920.42	1,376.31	1,298.23	78.08	17.626	
10,600.00	9,506.00	10,107.98	9,110.00	43.13	41.15	73.23	-857.76	1,020.42	1,376.34	1,295.65	80.68	17.059	
10,700.00	9,506.00	10,207.98	9,110.00	44.57	42.54	73.24	-857.81	1,120.42	1,376.36	1,292.92	83.44	16.496	
10,800.00	9,506.00	10,307.98	9,110.00	46.08	44.00	73.24	-857.86	1,220.42	1,376.38	1,290.05	86.33	15.943	
10,900.00	9,506.00	10,407.98	9,110.00	47.65	45.54	73.24	-857.90	1,320.42	1,376.40	1,287.05	89.35	15.404	
11,000.00	9,506.00	10,507.98	9,110.00	49.28	47.14	73.24	-857.95	1,420.42	1,376.43	1,283.94	92.49	14.882	
11,100.00	9,506.00	10,607.98	9,110.00	50.96	48.80	73.24	-858.00	1,520.42	1,376.45	1,280.72	95.73	14.378	
11,200.00	9,506.00	10,707.98	9,110.00	52.69	50.51	73.24	-858.04	1,620.42	1,376.47	1,277.41	99.07	13.895	
11,300.00	9,506.00	10,807.98	9,110.00	54.46	52.26	73.24	-858.09	1,720.42	1,376.50	1,274.01	102.48	13.431	
11,400.00	9,506.00	10,907.98	9,110.00	56.27	54.06	73.24	-858.14	1,820.42	1,376.52	1,270.54	105.98	12.989	
11,500.00	9,506.00	11,007.98	9,110.00	58.12	55.90	73.24	-858.18	1,920.42	1,376.54	1,267.00	109.54	12.567	
11,600.00	9,506.00	11,107.98	9,110.00	60.00	57.76	73.24	-858.23	2,020.42	1,376.56	1,263.40	113.16	12.164	
11,700.00	9,506.00	11,207.98	9,110.00	61.91	59.67	73.24	-858.28	2,120.42	1,376.59	1,259.74	116.85	11.781	
11,800.00	9,506.00	11,307.98	9,110.00	63.84	61.59	73.24	-858.32	2,220.42	1,376.61	1,256.03	120.58	11.417	
11,900.00	9,506.00	11,407.98	9,110.00	65.80	63.55	73.24	-858.37	2,320.42	1,376.63	1,252.28	124.36	11.070	
12,000.00	9,506.00	11,507.98	9,110.00	67.78	65.53	73.24	-858.42	2,420.42	1,376.66	1,248.48	128.18	10.740	
12,100.00	9,506.00	11,607.98	9,110.00	69.78	67.52	73.24	-858.47	2,520.42	1,376.68	1,244.64	132.04	10.426	
12,200.00	9,506.00	11,707.98	9,110.00	71.80	69.54	73.24	-858.51	2,620.42	1,376.70	1,240.77	135.94	10.128	
12,300.00	9,506.00	11,807.98	9,110.00	73.83	71.58	73.24	-858.56	2,720.42	1,376.73	1,236.86	139.86	9.843	
12,400.00	9,506.00	11,907.98	9,110.00	75.89	73.63	73.24	-858.61	2,820.42	1,376.75	1,232.93	143.82	9.573	
12,500.00	9,506.00	12,007.98	9,110.00	77.95	75.69	73.24	-858.65	2,920.42	1,376.77	1,228.96	147.81	9.315	
12,600.00	9,506.00	12,107.98	9,110.00	80.03	77.77	73.24	-858.70	3,020.42	1,376.79	1,224.97	151.82	9.069	
12,700.00	9,506.00	12,207.98	9,110.00	82.12	79.87	73.24	-858.75	3,120.42	1,376.82	1,220.96	155.85	8.834	
12,800.00	9,506.00	12,307.98	9,110.00	84.23	81.97	73.24	-858.79	3,220.42	1,376.84	1,216.93	159.91	8.610	
12,900.00	9,506.00	12,407.98	9,110.00	86.34	84.09	73.24	-858.84	3,320.42	1,376.86	1,212.88	163.99	8.396	
13,000.00	9,506.00	12,507.98	9,110.00	88.46	86.21	73.24	-858.89	3,420.42	1,376.89	1,208.80	168.08	8.192	
13,100.00	9,506.00	12,607.98	9,110.00	90.59	88.34	73.24	-858.93	3,520.42	1,376.91	1,204.72	172.19	7.996	
13,200.00	9,506.00	12,707.98	9,110.00	92.74	90.49	73.24	-858.98	3,620.42	1,376.93	1,200.61	176.32	7.809	
13,300.00	9,506.00	12,807.98	9,110.00	94.88	92.64	73.24	-859.03	3,720.42	1,376.95	1,196.49	180.46	7.630	
13,400.00	9,506.00	12,907.98	9,110.00	97.04	94.79	73.24	-859.08	3,820.42	1,376.98	1,192.36	184.62	7.458	
13,500.00	9,506.00	13,007.98	9,110.00	99.20	96.96	73.24	-859.12	3,920.42	1,377.00	1,188.21	188.79	7.294	
13,600.00	9,506.00	13,107.98	9,110.00	101.37	99.13	73.24	-859.17	4,020.42	1,377.02	1,184.05	192.97	7.136	
13,700.00	9,506.00	13,207.98	9,110.00	103.55	101.31	73.24	-859.22	4,120.42	1,377.05	1,179.88	197.17	6.984	
13,800.00	9,506.00	13,307.98	9,110.00	105.73	103.49	73.24	-859.26	4,220.42	1,377.07	1,175.70	201.37	6.838	
13,900.00	9,506.00	13,407.98	9,110.00	107.91	105.68	73.24	-859.31	4,320.42	1,377.09	1,171.51	205.58	6.698	
14,000.00	9,506.00	13,507.98	9,110.00	110.11	107.87	73.24	-859.36	4,420.42	1,377.12	1,167.31	209.81	6.564	
14,100.00	9,506.00	13,607.98	9,110.00	112.30	110.07	73.24	-859.40	4,520.42	1,377.14	1,163.10	214.04	6.434	
14,200.00	9,506.00	13,707.98	9,110.00	114.50	112.28	73.25	-859.45	4,620.42	1,377.16	1,158.88	218.28	6.309	
14,300.00	9,506.00	13,807.98	9,110.00	116.71	114.48	73.25	-859.50	4,720.42	1,377.18	1,154.65	222.53	6.189	
14,400.00	9,506.00	13,907.98	9,110.00	118.92	116.69	73.25	-859.54	4,820.42	1,377.21	1,150.42	226.79	6.073	
14,500.00	9,506.00	14,007.98	9,110.00	121.13	118.91	73.25	-859.59	4,920.42	1,377.23	1,146.18	231.05	5.961	
14,600.00	9,506.00	14,107.98	9,110.00	123.34	121.13	73.25	-859.64	5,020.42	1,377.25	1,141.93	235.32	5.853	
14,700.00	9,506.00	14,207.98	9,110.00	125.56	123.35	73.25	-859.69	5,120.42	1,377.28	1,137.68	239.59	5.748	
14,800.00	9,506.00	14,307.98	9,110.00	127.79	125.57	73.25	-859.73	5,220.42	1,377.30	1,133.42	243.88	5.648	
14,900.00	9,506.00	14,407.98	9,110.00	130.01	127.80	73.25	-859.78	5,320.42	1,377.32	1,129.16	248.16	5.550	
15,000.00	9,506.00	14,507.98	9,110.00	132.24	130.03	73.25	-859.83	5,420.42	1,377.34	1,124.89	252.46	5.456	
15,100.00	9,506.00	14,607.98	9,110.00	134.47	132.26	73.25	-859.87	5,520.42	1,377.37	1,120.61	256.75	5.365	
15,200.00	9,506.00	14,707.98	9,110.00	136.70	134.50	73.25	-859.92	5,620.42	1,377.39	1,116.33	261.06	5.276	
15,300.00	9,506.00	14,807.98	9,110.00	138.94	136.74	73.25	-859.97	5,720.42	1,377.41	1,112.05	265.36	5.191	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed.Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot.1) - #132H - OH - Prelim A													Offset Site Error:
Survey Program: 0-MWD-HDGM													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Offset Depth (usft)	Vertical Depth (usft)	Semi-Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	E-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,400.00	9,506.00	14,907.98	9,110.00	141.18	138.98	73.25	-860.01	5,820.42	1,377.44	1,107.76	269.68	5.108	
15,500.00	9,506.00	15,007.98	9,110.00	143.42	141.22	73.25	-860.06	5,920.42	1,377.46	1,103.47	273.99	5.027	
15,600.00	9,506.00	15,107.98	9,110.00	145.66	143.47	73.25	-860.11	6,020.42	1,377.48	1,099.17	278.31	4.949	
15,700.00	9,506.00	15,207.98	9,110.00	147.91	145.71	73.25	-860.15	6,120.42	1,377.51	1,094.87	282.64	4.874	
15,800.00	9,506.00	15,307.98	9,110.00	150.15	147.96	73.25	-860.20	6,220.42	1,377.53	1,090.56	286.96	4.800	
15,900.00	9,506.00	15,407.98	9,110.00	152.40	150.21	73.25	-860.25	6,320.42	1,377.55	1,086.26	291.29	4.729	
16,000.00	9,506.00	15,507.98	9,110.00	154.65	152.46	73.25	-860.30	6,420.42	1,377.57	1,081.95	295.63	4.660	
16,100.00	9,506.00	15,607.98	9,110.00	156.90	154.72	73.25	-860.34	6,520.42	1,377.60	1,077.63	299.97	4.593	
16,200.00	9,506.00	15,707.98	9,110.00	159.16	156.97	73.25	-860.39	6,620.42	1,377.62	1,073.31	304.31	4.527	
16,300.00	9,506.00	15,807.98	9,110.00	161.41	159.23	73.25	-860.44	6,720.42	1,377.64	1,068.99	308.65	4.463	
16,400.00	9,506.00	15,907.98	9,110.00	163.67	161.49	73.25	-860.48	6,820.42	1,377.67	1,064.67	313.00	4.402	
16,500.00	9,506.00	16,007.98	9,110.00	165.93	163.75	73.25	-860.53	6,920.42	1,377.69	1,060.34	317.34	4.341	
16,600.00	9,506.00	16,107.98	9,110.00	168.19	166.01	73.25	-860.58	7,020.42	1,377.71	1,056.02	321.70	4.283	
16,700.00	9,506.00	16,207.98	9,110.00	170.45	168.27	73.25	-860.62	7,120.42	1,377.73	1,051.68	326.05	4.226	
16,800.00	9,506.00	16,307.98	9,110.00	172.71	170.54	73.25	-860.67	7,220.42	1,377.76	1,047.35	330.41	4.170	
16,900.00	9,506.00	16,407.98	9,110.00	174.97	172.80	73.25	-860.72	7,320.42	1,377.78	1,043.02	334.76	4.116	
17,000.00	9,506.00	16,507.98	9,110.00	177.24	175.07	73.25	-860.76	7,420.42	1,377.80	1,038.68	339.13	4.063	
17,100.00	9,506.00	16,607.98	9,110.00	179.50	177.33	73.25	-860.81	7,520.42	1,377.83	1,034.34	343.49	4.011	
17,200.00	9,506.00	16,707.98	9,110.00	181.77	179.60	73.25	-860.86	7,620.42	1,377.85	1,030.00	347.85	3.961	
17,300.00	9,506.00	16,807.98	9,110.00	184.04	181.87	73.25	-860.91	7,720.42	1,377.87	1,025.65	352.22	3.912	
17,400.00	9,506.00	16,907.98	9,110.00	186.31	184.14	73.25	-860.95	7,820.42	1,377.90	1,021.31	356.59	3.864	
17,500.00	9,506.00	17,007.98	9,110.00	188.58	186.41	73.25	-861.00	7,920.42	1,377.92	1,016.96	360.96	3.817	
17,600.00	9,506.00	17,107.98	9,110.00	190.85	188.69	73.26	-861.05	8,020.42	1,377.94	1,012.61	365.33	3.772	
17,700.00	9,506.00	17,207.98	9,110.00	193.12	190.96	73.26	-861.09	8,120.42	1,377.96	1,008.26	369.70	3.727	
17,800.00	9,506.00	17,307.98	9,110.00	195.39	193.23	73.26	-861.14	8,220.42	1,377.99	1,003.91	374.08	3.684	
17,900.00	9,506.00	17,407.98	9,110.00	197.66	195.51	73.26	-861.19	8,320.42	1,378.01	999.55	378.46	3.641	
18,000.00	9,506.00	17,507.98	9,110.00	199.94	197.78	73.26	-861.23	8,420.42	1,378.03	995.20	382.84	3.600	
18,100.00	9,506.00	17,607.98	9,110.00	202.21	200.06	73.26	-861.28	8,520.42	1,378.06	990.84	387.22	3.559	
18,200.00	9,506.00	17,707.98	9,110.00	204.49	202.34	73.26	-861.33	8,620.42	1,378.08	986.48	391.60	3.519	
18,300.00	9,506.00	17,807.98	9,110.00	206.77	204.61	73.26	-861.37	8,720.42	1,378.10	982.12	395.98	3.480	
18,400.00	9,506.00	17,907.98	9,110.00	209.04	206.89	73.26	-861.42	8,820.42	1,378.12	977.76	400.36	3.442	
18,500.00	9,506.00	18,007.98	9,110.00	211.32	209.17	73.26	-861.47	8,920.42	1,378.15	973.40	404.75	3.405	
18,600.00	9,506.00	18,107.98	9,110.00	213.60	211.45	73.26	-861.52	9,020.42	1,378.17	969.03	409.14	3.368	
18,700.00	9,506.00	18,207.98	9,110.00	215.88	213.73	73.26	-861.56	9,120.42	1,378.19	964.67	413.52	3.333	
18,800.00	9,506.00	18,307.98	9,110.00	218.16	216.01	73.26	-861.61	9,220.42	1,378.22	960.30	417.91	3.298	
18,900.00	9,506.00	18,407.98	9,110.00	220.44	218.29	73.26	-861.66	9,320.42	1,378.24	955.94	422.30	3.264	
19,000.00	9,506.00	18,507.98	9,110.00	222.72	220.58	73.26	-861.70	9,420.42	1,378.26	951.57	426.69	3.230	
19,100.00	9,506.00	18,607.98	9,110.00	225.00	222.86	73.26	-861.75	9,520.42	1,378.29	947.20	431.09	3.197	
19,200.00	9,506.00	18,707.98	9,110.00	227.28	225.14	73.26	-861.80	9,620.42	1,378.31	942.83	435.48	3.165	
19,300.00	9,506.00	18,807.98	9,110.00	229.56	227.42	73.26	-861.84	9,720.42	1,378.33	938.46	439.87	3.133	
19,400.00	9,506.00	18,907.98	9,110.00	231.85	229.71	73.26	-861.89	9,820.42	1,378.35	934.08	444.27	3.103	
19,500.00	9,506.00	19,007.98	9,110.00	234.13	231.99	73.26	-861.94	9,920.42	1,378.38	929.71	448.67	3.072	
19,600.00	9,506.00	19,107.98	9,110.00	236.42	234.28	73.26	-861.98	10,020.42	1,378.40	925.34	453.06	3.042	
19,628.96	9,506.00	19,136.94	9,110.00	237.08	234.94	73.26	-862.00	10,049.38	1,378.41	924.07	454.34	3.034 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	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0'00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #135H - OH - Prelim A														Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HDGM														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Semi Major Axis (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	E-W (usft)	Distance 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 CC		
1,100.00	1,099.98	1,100.32	1,100.30	3.71	3.71	-131.76		-29.45	-1.67	30.63	23.21	7.42	4.129 ES		
1,200.00	1,199.84	1,200.62	1,200.45	4.07	4.06	-129.79		-27.79	-6.67	32.55	24.42	8.12	4.006		
1,300.00	1,299.53	1,300.84	1,300.29	4.42	4.42	-125.93		-25.04	-14.98	35.31	26.48	8.84	3.996		
1,400.00	1,399.20	1,400.74	1,399.62	4.78	4.77	-119.98		-21.69	-25.11	38.06	28.50	9.56	3.982		
1,500.00	1,498.88	1,500.63	1,498.94	5.14	5.14	-114.86		-18.33	-35.24	41.15	30.87	10.28	4.002		
1,600.00	1,598.55	1,600.52	1,598.25	5.51	5.51	-110.49		-14.98	-45.37	44.53	33.52	11.01	4.044		
1,700.00	1,698.23	1,700.41	1,697.57	5.87	5.87	-106.76		-11.63	-55.50	48.13	36.39	11.74	4.099		
1,800.00	1,797.90	1,800.30	1,796.89	6.24	6.25	-103.55		-8.27	-65.63	51.90	39.43	12.48	4.160		
1,900.00	1,897.58	1,900.19	1,896.21	6.60	6.62	-100.79		-4.92	-75.76	55.82	42.61	13.21	4.225		
2,000.00	1,997.26	2,000.08	1,995.53	6.97	6.99	-98.40		-1.57	-85.89	59.85	45.90	13.95	4.291		
2,100.00	2,096.93	2,100.03	2,094.84	7.34	7.37	-96.30		1.79	-96.02	63.96	49.28	14.68	4.356		
2,200.00	2,196.61	2,200.14	2,194.16	7.71	7.75	-94.47		5.14	-106.15	68.16	52.73	15.42	4.419		
2,300.00	2,296.28	2,300.25	2,293.48	8.08	8.13	-92.85		8.49	-116.28	72.41	56.25	16.16	4.480		
2,400.00	2,395.96	2,400.36	2,392.80	8.45	8.51	-91.41		11.85	-126.42	76.72	59.81	16.90	4.538		
2,500.00	2,495.63	2,500.47	2,492.12	8.82	8.89	-90.12		15.20	-136.55	81.07	63.42	17.64	4.594		
2,600.00	2,595.31	2,600.58	2,591.43	9.19	9.27	-88.96		18.55	-146.68	85.45	67.07	18.39	4.648		
2,700.00	2,694.99	2,700.69	2,690.75	9.56	9.65	-87.92		21.91	-156.81	89.87	70.74	19.13	4.698		
2,800.00	2,794.66	2,800.80	2,790.07	9.93	10.03	-86.98		25.26	-166.94	94.32	74.45	19.87	4.747		
2,900.00	2,894.34	2,900.91	2,889.39	10.30	10.41	-86.12		28.62	-177.07	98.79	78.17	20.61	4.793		
3,000.00	2,994.01	3,001.02	2,988.71	10.67	10.79	-85.33		31.97	-187.20	103.27	81.92	21.36	4.836		
3,100.00	3,093.69	3,101.13	3,088.03	11.04	11.18	-84.61		35.32	-197.33	107.78	85.68	22.10	4.877		
3,200.00	3,193.36	3,201.24	3,187.34	11.41	11.56	-83.95		38.68	-207.46	112.30	89.46	22.84	4.917		
3,300.00	3,293.04	3,298.65	3,286.66	11.78	11.93	-83.34		42.03	-217.59	116.84	93.26	23.57	4.956		
3,400.00	3,392.71	3,398.54	3,385.98	12.15	12.32	-82.78		45.38	-227.72	121.38	97.07	24.32	4.992		
3,500.00	3,492.39	3,498.43	3,485.30	12.53	12.70	-82.25		48.74	-237.85	125.94	100.88	25.06	5.026		
3,600.00	3,592.07	3,601.68	3,584.62	12.90	13.09	-81.77		52.09	-247.98	130.51	104.70	25.82	5.056		
3,700.00	3,691.74	3,701.80	3,683.93	13.27	13.48	-81.31		55.44	-258.11	135.09	108.53	26.56	5.086		
3,800.00	3,791.42	3,801.91	3,783.25	13.64	13.86	-80.89		58.80	-268.24	139.67	112.37	27.30	5.116		
3,900.00	3,891.09	3,899.09	3,883.70	14.01	14.24	-80.58		62.10	-278.22	144.11	116.07	28.04	5.139		
4,000.00	3,990.77	4,001.90	3,986.21	14.39	14.62	-81.25		64.53	-285.55	146.96	118.15	28.81	5.102		
4,100.00	4,090.44	4,104.59	4,088.82	14.76	14.98	-81.11		65.79	-289.38	147.94	118.38	29.56	5.005		
4,200.00	4,190.12	4,205.90	4,190.12	15.13	15.33	-86.04		66.00	-290.00	147.50	117.19	30.31	4.867		
4,300.00	4,289.80	4,305.57	4,289.80	15.50	15.67	-89.15		66.00	-290.00	147.16	116.11	31.05	4.740		
4,327.10	4,316.81	4,332.58	4,316.81	15.60	15.76	-90.00		66.00	-290.00	147.14	115.90	31.25	4.709		
4,400.00	4,389.47	4,405.25	4,389.47	15.88	16.01	-92.28		66.00	-290.00	147.26	115.48	31.78	4.633		
4,500.00	4,489.15	4,504.93	4,489.15	16.25	16.35	-95.38		66.00	-290.00	147.80	115.28	32.52	4.545		
4,600.00	4,588.82	4,604.60	4,588.82	16.62	16.69	-98.46		66.00	-290.00	148.77	115.52	33.25	4.474		
4,700.00	4,688.50	4,704.28	4,688.50	16.99	17.03	-101.49		66.00	-290.00	150.17	116.19	33.98	4.420		
4,800.00	4,788.17	4,803.95	4,788.17	17.37	17.37	-104.46		66.00	-290.00	151.98	117.28	34.70	4.380		
4,900.00	4,887.85	4,903.63	4,887.85	17.74	17.71	-107.34		66.00	-290.00	154.20	118.78	35.42	4.353		
5,000.00	4,987.53	5,003.30	4,987.53	18.11	18.06	-110.14		66.00	-290.00	156.79	120.66	36.14	4.339		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #135H - OH - Prelim A													Offset Site Error:
Survey Program: 0-MWD+HDGM													Offset Well Error:
Reference	Offset	Semi-Major Axis		Distance		Minimum Separation		Warning					
Measured Vertical	Measured Vertical	Reference	Offset	Highside	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor				
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Toolface (°)	N/S (usft)	E/W (usft)	(usft)	(usft)	(usft)				
5,100.00	5,087.20	5,102.98	5,087.20	18.48	18.40	-112.85	66.00	-290.00	159.75	122.90	36.85	4.335	
5,200.00	5,186.88	5,202.65	5,186.88	18.86	18.74	-115.45	66.00	-290.00	163.05	125.49	37.56	4.341	
5,300.00	5,286.55	5,302.33	5,286.55	19.23	19.09	-117.94	66.00	-290.00	166.68	128.41	38.26	4.356	
5,400.00	5,386.23	5,402.01	5,386.23	19.60	19.43	-120.32	66.00	-290.00	170.60	131.64	38.97	4.378	
5,500.00	5,485.90	5,501.68	5,485.90	19.97	19.78	-122.59	66.00	-290.00	174.82	135.15	39.67	4.407	
5,600.00	5,585.58	5,601.36	5,585.58	20.35	20.13	-124.76	66.00	-290.00	179.29	138.92	40.37	4.441	
5,700.00	5,685.26	5,701.03	5,685.26	20.72	20.47	-126.81	66.00	-290.00	184.00	142.94	41.07	4.480	
5,800.00	5,784.93	5,800.71	5,784.93	21.09	20.82	-128.76	66.00	-290.00	188.92	147.15	41.77	4.523	
5,900.00	5,884.76	5,900.54	5,884.76	21.46	21.17	-130.16	66.00	-290.00	192.59	150.12	42.47	4.535	
6,000.00	5,984.73	6,000.51	5,984.73	21.81	21.51	-130.69	66.00	-290.00	194.07	150.90	43.16	4.496	
6,100.00	6,084.73	6,100.51	6,084.73	22.16	21.86	-178.23	66.00	-290.00	194.09	150.23	43.86	4.425	
6,200.00	6,184.73	6,200.51	6,184.73	22.50	22.21	-178.23	66.00	-290.00	194.09	149.54	44.56	4.356	
6,300.00	6,284.73	6,300.51	6,284.73	22.85	22.56	-178.23	66.00	-290.00	194.09	148.84	45.25	4.289	
6,400.00	6,384.73	6,400.51	6,384.73	23.19	22.91	-178.23	66.00	-290.00	194.09	148.14	45.95	4.224	
6,500.00	6,484.73	6,500.51	6,484.73	23.54	23.26	-178.23	66.00	-290.00	194.09	147.44	46.65	4.160	
6,600.00	6,584.73	6,600.51	6,584.73	23.89	23.61	-178.23	66.00	-290.00	194.09	146.74	47.35	4.099	
6,700.00	6,684.73	6,700.51	6,684.73	24.23	23.96	-178.23	66.00	-290.00	194.09	146.04	48.05	4.039	
6,800.00	6,784.73	6,800.51	6,784.73	24.58	24.31	-178.23	66.00	-290.00	194.09	145.34	48.75	3.981	
6,900.00	6,884.73	6,900.51	6,884.73	24.93	24.66	-178.23	66.00	-290.00	194.09	144.64	49.45	3.925	
7,000.00	6,984.73	7,000.51	6,984.73	25.28	25.01	-178.23	66.00	-290.00	194.09	143.94	50.15	3.870	
7,100.00	7,084.73	7,100.51	7,084.73	25.63	25.37	-178.23	66.00	-290.00	194.09	143.24	50.85	3.817	
7,200.00	7,184.73	7,200.51	7,184.73	25.97	25.72	-178.23	66.00	-290.00	194.09	142.54	51.56	3.765	
7,300.00	7,284.73	7,300.51	7,284.73	26.32	26.07	-178.23	66.00	-290.00	194.09	141.83	52.26	3.714	
7,400.00	7,384.73	7,400.51	7,384.73	26.67	26.42	-178.23	66.00	-290.00	194.09	141.13	52.96	3.665	
7,500.00	7,484.73	7,500.51	7,484.73	27.02	26.77	-178.23	66.00	-290.00	194.09	140.43	53.66	3.617	
7,600.00	7,584.73	7,600.51	7,584.73	27.37	27.12	-178.23	66.00	-290.00	194.09	139.72	54.37	3.570	
7,700.00	7,684.73	7,700.51	7,684.73	27.72	27.48	-178.23	66.00	-290.00	194.09	139.02	55.07	3.524	
7,800.00	7,784.73	7,800.51	7,784.73	28.07	27.83	-178.23	66.00	-290.00	194.09	138.32	55.78	3.480	
7,900.00	7,884.73	7,900.51	7,884.73	28.42	28.18	-178.23	66.00	-290.00	194.09	137.61	56.48	3.436	
8,000.00	7,984.73	8,000.51	7,984.73	28.77	28.53	-178.23	66.00	-290.00	194.09	136.91	57.19	3.394	
8,100.00	8,084.73	8,100.51	8,084.73	29.12	28.89	-178.23	66.00	-290.00	194.09	136.20	57.89	3.353	
8,200.00	8,184.73	8,200.51	8,184.73	29.47	29.24	-178.23	66.00	-290.00	194.09	135.50	58.60	3.312	
8,300.00	8,284.73	8,300.51	8,284.73	29.82	29.59	-178.23	66.00	-290.00	194.09	134.79	59.30	3.273	
8,400.00	8,384.73	8,400.51	8,384.73	30.18	29.95	-178.23	66.00	-290.00	194.09	134.08	60.01	3.234	
8,500.00	8,484.73	8,500.51	8,484.73	30.53	30.30	-178.23	66.00	-290.00	194.09	133.38	60.71	3.197	
8,507.59	8,492.32	8,508.10	8,492.32	30.55	30.33	-178.23	66.00	-290.00	194.09	133.32	60.77	3.194	
8,600.00	8,584.73	8,597.69	8,581.86	30.88	30.64	-178.74	65.63	-288.28	194.44	133.06	61.38	3.168	
8,700.00	8,684.73	8,689.41	8,672.34	31.23	30.92	-177.15	62.60	-274.16	198.03	136.19	61.84	3.202	
8,800.00	8,784.73	8,774.55	8,753.28	31.58	31.17	-170.09	57.12	-248.57	208.34	146.54	61.80	3.371	
8,900.00	8,884.73	8,850.55	8,821.55	31.93	31.39	-162.06	50.15	-216.05	229.45	168.66	60.80	3.774	
9,000.00	8,984.39	8,918.53	8,878.42	32.27	31.57	-94.66	42.35	-179.70	264.42	205.50	58.92	4.488	
9,100.00	9,081.39	8,981.68	8,926.96	32.59	31.75	85.70	33.90	-140.25	310.82	253.83	56.98	5.454	
9,200.00	9,172.78	9,040.36	8,967.84	32.88	31.93	78.19	25.08	-99.12	363.66	308.22	55.44	6.560	
9,300.00	9,255.79	9,100.00	9,004.76	33.12	32.12	71.99	15.27	-53.36	419.86	365.12	54.74	7.670	
9,400.00	9,328.12	9,150.00	9,031.82	33.32	32.30	65.63	6.46	-12.27	476.84	422.49	54.34	8.774	
9,500.00	9,389.92	9,200.00	9,055.12	33.62	32.51	59.57	-2.81	30.97	528.00	473.67	54.33	9.719	
9,600.00	9,439.92	9,250.00	9,074.47	34.02	32.73	55.56	-12.47	76.03	571.32	516.71	54.61	10.462	
9,700.00	9,476.60	9,300.00	9,089.74	34.50	32.98	53.07	-22.45	122.57	606.33	551.13	55.21	10.983	
9,800.00	9,498.85	9,361.47	9,102.73	35.06	33.32	52.01	-35.03	181.28	632.48	576.18	56.30	11.234	
9,900.00	9,506.00	9,418.48	9,108.97	35.70	33.67	51.94	-46.91	236.68	649.57	592.03	57.55	11.288	
10,000.00	9,506.00	9,507.86	9,110.00	36.42	34.28	52.98	-64.86	324.21	664.75	605.63	59.12	11.244	
10,100.00	9,506.00	9,645.95	9,110.00	37.28	35.45	54.01	-84.98	460.79	676.50	615.34	61.16	11.061	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #135H - OH - Prelim A													Offset Site Error:
Survey Program: 0-MWD-HDGM													0.00 usft
Reference Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(ft)	(ft)	N-S (usft)	E-W (usft)	(usft)	(usft)	(usft)	
10,200.00	9,506.00	9,786.27	9,110.00	38.24	36.86	54.51		-95.26	600.71	682.44	619.13	63.31	10.779
10,300.00	9,506.00	9,906.35	9,110.00	39.32	38.23	54.57		-96.56	720.77	683.18	617.84	65.33	10.457
10,400.00	9,506.00	10,006.35	9,110.00	40.50	39.48	54.58		-96.61	820.77	683.20	615.87	67.33	10.147
10,500.00	9,506.00	10,106.35	9,110.00	41.77	40.83	54.58		-96.65	920.77	683.22	613.73	69.49	9.832
10,600.00	9,506.00	10,206.35	9,110.00	43.13	42.26	54.58		-96.70	1,020.77	683.24	611.45	71.79	9.517
10,700.00	9,506.00	10,306.35	9,110.00	44.57	43.77	54.58		-96.75	1,120.77	683.26	609.04	74.22	9.206
10,800.00	9,506.00	10,406.35	9,110.00	46.08	45.34	54.58		-96.80	1,220.77	683.28	606.51	76.77	8.901
10,900.00	9,506.00	10,506.35	9,110.00	47.65	46.97	54.58		-96.84	1,320.77	683.30	603.88	79.42	8.603
11,000.00	9,506.00	10,606.35	9,110.00	49.28	48.66	54.58		-96.89	1,420.77	683.32	601.15	82.17	8.316
11,100.00	9,506.00	10,706.35	9,110.00	50.96	50.40	54.58		-96.94	1,520.77	683.34	598.33	85.01	8.038
11,200.00	9,506.00	10,806.35	9,110.00	52.69	52.18	54.59		-96.99	1,620.77	683.36	595.43	87.93	7.772
11,300.00	9,506.00	10,906.35	9,110.00	54.46	54.01	54.59		-97.03	1,720.77	683.38	592.46	90.91	7.517
11,400.00	9,506.00	11,006.35	9,110.00	56.27	55.86	54.59		-97.08	1,820.77	683.40	589.43	93.97	7.273
11,500.00	9,506.00	11,106.35	9,110.00	58.12	57.76	54.59		-97.13	1,920.77	683.42	586.34	97.08	7.040
11,600.00	9,506.00	11,206.35	9,110.00	60.00	59.68	54.59		-97.18	2,020.77	683.44	583.20	100.24	6.818
11,700.00	9,506.00	11,306.35	9,110.00	61.91	61.62	54.59		-97.22	2,120.77	683.46	580.01	103.45	6.607
11,800.00	9,506.00	11,406.35	9,110.00	63.84	63.59	54.59		-97.27	2,220.77	683.48	576.78	106.70	6.405
11,900.00	9,506.00	11,506.35	9,110.00	65.80	65.59	54.59		-97.32	2,320.77	683.50	573.50	110.00	6.214
12,000.00	9,506.00	11,606.35	9,110.00	67.78	67.60	54.59		-97.37	2,420.77	683.52	570.19	113.33	6.031
12,100.00	9,506.00	11,706.35	9,110.00	69.78	69.63	54.60		-97.41	2,520.77	683.54	566.85	116.69	5.858
12,200.00	9,506.00	11,806.35	9,110.00	71.80	71.68	54.60		-97.46	2,620.77	683.56	563.47	120.09	5.692
12,300.00	9,506.00	11,906.35	9,110.00	73.83	73.75	54.60		-97.51	2,720.77	683.58	560.07	123.51	5.535
12,400.00	9,506.00	12,006.35	9,110.00	75.89	75.82	54.60		-97.56	2,820.77	683.60	556.64	126.96	5.385
12,500.00	9,506.00	12,106.35	9,110.00	77.95	77.92	54.60		-97.60	2,920.77	683.62	553.19	130.43	5.241
12,600.00	9,506.00	12,206.35	9,110.00	80.03	80.02	54.60		-97.65	3,020.77	683.64	549.72	133.92	5.105
12,700.00	9,506.00	12,306.35	9,110.00	82.12	82.13	54.60		-97.70	3,120.77	683.66	546.23	137.43	4.974
12,800.00	9,506.00	12,406.35	9,110.00	84.23	84.26	54.60		-97.75	3,220.77	683.68	542.71	140.97	4.850
12,900.00	9,506.00	12,506.35	9,110.00	86.34	86.39	54.61		-97.80	3,320.77	683.70	539.18	144.52	4.731
13,000.00	9,506.00	12,606.35	9,110.00	88.46	88.53	54.61		-97.84	3,420.77	683.72	535.64	148.08	4.617
13,100.00	9,506.00	12,706.35	9,110.00	90.59	90.68	54.61		-97.89	3,520.77	683.74	532.08	151.66	4.508
13,200.00	9,506.00	12,806.35	9,110.00	92.74	92.84	54.61		-97.94	3,620.77	683.76	528.50	155.26	4.404
13,300.00	9,506.00	12,906.35	9,110.00	94.88	95.01	54.61		-97.99	3,720.77	683.78	524.92	158.86	4.304
13,400.00	9,506.00	13,006.35	9,110.00	97.04	97.18	54.61		-98.03	3,820.77	683.80	521.32	162.48	4.208
13,500.00	9,506.00	13,106.35	9,110.00	99.20	99.36	54.61		-98.08	3,920.77	683.82	517.71	166.11	4.117
13,600.00	9,506.00	13,206.35	9,110.00	101.37	101.54	54.61		-98.13	4,020.77	683.84	514.09	169.75	4.028
13,700.00	9,506.00	13,306.35	9,110.00	103.55	103.73	54.62		-98.18	4,120.77	683.86	510.46	173.41	3.944
13,800.00	9,506.00	13,406.35	9,110.00	105.73	105.93	54.62		-98.22	4,220.77	683.88	506.81	177.07	3.862
13,900.00	9,506.00	13,506.35	9,110.00	107.91	108.13	54.62		-98.27	4,320.77	683.90	503.17	180.74	3.784
14,000.00	9,506.00	13,606.35	9,110.00	110.11	110.33	54.62		-98.32	4,420.77	683.92	499.51	184.41	3.709
14,100.00	9,506.00	13,706.35	9,110.00	112.30	112.54	54.62		-98.37	4,520.77	683.94	495.84	188.10	3.636
14,200.00	9,506.00	13,806.35	9,110.00	114.50	114.75	54.62		-98.41	4,620.77	683.96	492.17	191.79	3.566
14,300.00	9,506.00	13,906.35	9,110.00	116.71	116.97	54.62		-98.46	4,720.77	683.98	488.49	195.49	3.499
14,400.00	9,506.00	14,006.35	9,110.00	118.92	119.19	54.62		-98.51	4,820.77	684.00	484.80	199.20	3.434
14,500.00	9,506.00	14,106.35	9,110.00	121.13	121.41	54.62		-98.56	4,920.77	684.02	481.11	202.91	3.371
14,600.00	9,506.00	14,206.35	9,110.00	123.34	123.63	54.63		-98.60	5,020.77	684.04	477.41	206.63	3.310
14,700.00	9,506.00	14,306.35	9,110.00	125.56	125.86	54.63		-98.65	5,120.77	684.06	473.71	210.35	3.252
14,800.00	9,506.00	14,406.35	9,110.00	127.79	128.09	54.63		-98.70	5,220.77	684.08	470.00	214.08	3.195
14,900.00	9,506.00	14,506.35	9,110.00	130.01	130.33	54.63		-98.75	5,320.77	684.10	466.29	217.82	3.141
15,000.00	9,506.00	14,606.35	9,110.00	132.24	132.57	54.63		-98.80	5,420.77	684.12	462.57	221.56	3.088
15,100.00	9,506.00	14,706.35	9,110.00	134.47	134.80	54.63		-98.84	5,520.77	684.14	458.84	225.30	3.037
15,200.00	9,506.00	14,806.35	9,110.00	136.70	137.05	54.63		-98.89	5,620.77	684.16	455.12	229.05	2.987
15,300.00	9,506.00	14,906.35	9,110.00	138.94	139.29	54.63		-98.94	5,720.77	684.18	451.38	232.80	2.939

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #135H - OH - Prelim A													Offset Site Error:
Survey Program: 0-MWD-HDGM													Offset Well Error:
Reference	Offset	Semi-Major Axis											
Measured Vertical	Measured Vertical	Reference	Offset	Highside	Offset Wellbore Centre	Between	Between	Minimum	Separation				
Depth	Depth	Depth	Depth	Toolface	N-S	E-W	Centres	Ellipses	Separation	Factor			
(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)				
15,400.00	9,506.00	15,006.35	9,110.00	141.18	141.54	54.64	-98.99	5,820.77	684.20	447.65	236.55	2.892	
15,500.00	9,506.00	15,106.35	9,110.00	143.42	143.78	54.64	-99.03	5,920.77	684.22	443.91	240.31	2.847	
15,600.00	9,506.00	15,206.35	9,110.00	145.66	146.03	54.64	-99.08	6,020.77	684.24	440.16	244.08	2.803	
15,700.00	9,506.00	15,306.35	9,110.00	147.91	148.28	54.64	-99.13	6,120.77	684.26	436.42	247.84	2.761	
15,800.00	9,506.00	15,406.35	9,110.00	150.15	150.54	54.64	-99.18	6,220.77	684.28	432.67	251.61	2.720	
15,900.00	9,506.00	15,506.35	9,110.00	152.40	152.79	54.64	-99.22	6,320.77	684.30	428.92	255.39	2.679	
16,000.00	9,506.00	15,606.35	9,110.00	154.65	155.05	54.64	-99.27	6,420.77	684.32	425.16	259.16	2.641	
16,100.00	9,506.00	15,706.35	9,110.00	156.90	157.31	54.64	-99.32	6,520.77	684.34	421.40	262.94	2.603	
16,200.00	9,506.00	15,806.35	9,110.00	159.16	159.57	54.64	-99.37	6,620.77	684.36	417.64	266.72	2.566	
16,300.00	9,506.00	15,906.35	9,110.00	161.41	161.83	54.65	-99.41	6,720.77	684.38	413.88	270.51	2.530	
16,400.00	9,506.00	16,006.35	9,110.00	163.67	164.09	54.65	-99.46	6,820.77	684.40	410.11	274.29	2.495	
16,500.00	9,506.00	16,106.35	9,110.00	165.93	166.35	54.65	-99.51	6,920.77	684.42	406.34	278.08	2.461	
16,600.00	9,506.00	16,206.35	9,110.00	168.19	168.62	54.65	-99.56	7,020.77	684.44	402.57	281.88	2.428	
16,700.00	9,506.00	16,306.35	9,110.00	170.45	170.88	54.65	-99.60	7,120.77	684.46	398.79	285.67	2.396	
16,800.00	9,506.00	16,406.35	9,110.00	172.71	173.15	54.65	-99.65	7,220.77	684.48	395.02	289.46	2.365	
16,900.00	9,506.00	16,506.35	9,110.00	174.97	175.42	54.65	-99.70	7,320.77	684.50	391.24	293.26	2.334	
17,000.00	9,506.00	16,606.35	9,110.00	177.24	177.69	54.65	-99.75	7,420.77	684.52	387.46	297.06	2.304	
17,100.00	9,506.00	16,706.35	9,110.00	179.50	179.96	54.66	-99.79	7,520.77	684.54	383.68	300.87	2.275	
17,200.00	9,506.00	16,806.35	9,110.00	181.77	182.23	54.66	-99.84	7,620.77	684.56	379.89	304.67	2.247	
17,300.00	9,506.00	16,906.35	9,110.00	184.04	184.50	54.66	-99.89	7,720.77	684.58	376.11	308.47	2.219	
17,400.00	9,506.00	17,006.35	9,110.00	186.31	186.78	54.66	-99.94	7,820.77	684.60	372.32	312.28	2.192	
17,500.00	9,506.00	17,106.35	9,110.00	188.58	189.05	54.66	-99.99	7,920.77	684.62	368.53	316.09	2.166	
17,600.00	9,506.00	17,206.35	9,110.00	190.85	191.32	54.66	-100.03	8,020.77	684.64	364.74	319.90	2.140	
17,700.00	9,506.00	17,306.35	9,110.00	193.12	193.60	54.66	-100.08	8,120.77	684.66	360.95	323.71	2.115	
17,800.00	9,506.00	17,406.35	9,110.00	195.39	195.88	54.66	-100.13	8,220.77	684.68	357.16	327.53	2.090	
17,900.00	9,506.00	17,506.35	9,110.00	197.66	198.15	54.67	-100.18	8,320.77	684.70	353.36	331.34	2.066	
18,000.00	9,506.00	17,606.35	9,110.00	199.94	200.43	54.67	-100.22	8,420.77	684.72	349.56	335.16	2.043	
18,100.00	9,506.00	17,706.35	9,110.00	202.21	202.71	54.67	-100.27	8,520.77	684.74	345.77	338.98	2.020	
18,200.00	9,506.00	17,806.35	9,110.00	204.49	204.99	54.67	-100.32	8,620.77	684.76	341.97	342.80	1.998	
18,300.00	9,506.00	17,906.35	9,110.00	206.77	207.27	54.67	-100.37	8,720.77	684.78	338.17	346.62	1.976	
18,400.00	9,506.00	18,006.35	9,110.00	209.04	209.55	54.67	-100.41	8,820.77	684.80	334.36	350.44	1.954	
18,500.00	9,506.00	18,106.35	9,110.00	211.32	211.83	54.67	-100.46	8,920.77	684.82	330.56	354.26	1.933	
18,600.00	9,506.00	18,206.35	9,110.00	213.60	214.11	54.67	-100.51	9,020.77	684.84	326.76	358.09	1.913	
18,700.00	9,506.00	18,306.35	9,110.00	215.88	216.39	54.67	-100.56	9,120.77	684.87	322.95	361.91	1.892	
18,800.00	9,506.00	18,406.35	9,110.00	218.16	218.68	54.68	-100.60	9,220.77	684.89	319.15	365.74	1.873	
18,900.00	9,506.00	18,506.35	9,110.00	220.44	220.96	54.68	-100.65	9,320.77	684.91	315.34	369.57	1.853	
19,000.00	9,506.00	18,606.35	9,110.00	222.72	223.24	54.68	-100.70	9,420.77	684.93	311.53	373.40	1.834	
19,100.00	9,506.00	18,706.35	9,110.00	225.00	225.53	54.68	-100.75	9,520.77	684.95	307.72	377.23	1.816	
19,200.00	9,506.00	18,806.35	9,110.00	227.28	227.81	54.68	-100.79	9,620.77	684.97	303.91	381.06	1.798	
19,300.00	9,506.00	18,906.35	9,110.00	229.56	230.10	54.68	-100.84	9,720.77	684.99	300.10	384.89	1.780	
19,400.00	9,506.00	19,006.35	9,110.00	231.85	232.38	54.68	-100.89	9,820.77	685.01	296.28	388.72	1.762	
19,500.00	9,506.00	19,106.35	9,110.00	234.13	234.67	54.68	-100.94	9,920.77	685.03	292.47	392.56	1.745	
19,600.00	9,506.00	19,206.35	9,110.00	236.42	236.96	54.69	-100.99	10,020.77	685.05	288.66	396.39	1.728	
19,628.96	9,506.00	19,235.32	9,110.00	237.08	237.33	54.69	-101.00	10,049.73	685.05	287.80	397.25	1.724 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	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #205H - OH - Prelim A												Offset Site Error: 0.00 usft	
Survey Program: 0-MWD-HDGM												Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Highside Toolface	Offset Wellbore Centre		Distance		Minimum Separation	Separation Factor	Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset		N-S	E-W	Between Centres	Between Ellipses			
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
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 CC	
900.00	900.00	899.75	899.73	3.00	2.99	-132.69	-28.95	-31.39	42.70	36.72	5.99	7.132	
1,000.00	1,000.00	999.27	999.11	3.35	3.35	-126.02	-25.83	-35.53	43.94	37.24	6.70	6.561	
1,100.00	1,099.98	1,098.46	1,097.92	3.71	3.70	-70.36	-20.65	-42.40	46.60	39.19	7.40	6.295	
1,200.00	1,199.84	1,197.63	1,196.36	4.07	4.06	-63.52	-13.47	-51.93	50.31	42.21	8.10	6.208	
1,300.00	1,299.53	1,302.51	1,295.37	4.42	4.45	-59.21	-5.63	-62.33	53.86	45.03	8.84	6.096	
1,400.00	1,399.20	1,402.64	1,394.39	4.78	4.83	-55.60	2.21	-72.73	57.59	48.03	9.56	6.027	
1,500.00	1,498.88	1,502.78	1,493.40	5.14	5.21	-52.43	10.06	-83.14	61.51	51.24	10.28	5.985	
1,600.00	1,598.55	1,602.91	1,592.42	5.51	5.59	-49.66	17.90	-93.54	65.61	54.60	11.00	5.963	
1,700.00	1,698.23	1,703.04	1,691.43	5.87	5.98	-47.21	25.74	-103.94	69.83	58.10	11.73	5.955	
1,800.00	1,797.90	1,803.17	1,790.45	6.24	6.36	-45.05	33.58	-114.34	74.17	61.72	12.45	5.956	
1,900.00	1,897.58	1,903.30	1,889.46	6.60	6.75	-43.13	41.42	-124.75	78.60	65.42	13.18	5.964	
2,000.00	1,997.26	2,003.43	1,988.48	6.97	7.14	-41.41	49.27	-135.15	83.11	69.21	13.91	5.977	
2,100.00	2,096.93	2,103.56	2,087.49	7.34	7.53	-39.88	57.11	-145.55	87.69	73.06	14.63	5.992	
2,200.00	2,196.61	2,203.69	2,186.51	7.71	7.92	-38.49	64.95	-155.96	92.32	76.96	15.36	6.010	
2,300.00	2,296.28	2,296.18	2,285.53	8.08	8.28	-37.24	72.79	-166.36	97.01	80.95	16.06	6.040	
2,400.00	2,395.96	2,403.96	2,384.54	8.45	8.71	-36.11	80.64	-176.76	101.73	84.91	16.82	6.049	
2,500.00	2,495.63	2,504.09	2,483.56	8.82	9.10	-35.07	88.48	-187.16	106.49	88.94	17.55	6.069	
2,600.00	2,595.31	2,604.22	2,582.57	9.19	9.50	-34.13	96.32	-197.57	111.29	93.01	18.28	6.089	
2,700.00	2,694.99	2,704.35	2,681.59	9.56	9.89	-33.26	104.16	-207.97	116.11	97.10	19.01	6.109	
2,800.00	2,794.66	2,804.48	2,780.60	9.93	10.28	-32.46	112.00	-218.37	120.95	101.21	19.74	6.128	
2,900.00	2,894.34	2,904.61	2,879.62	10.30	10.68	-31.73	119.85	-228.78	125.82	105.35	20.47	6.147	
3,000.00	2,994.01	3,004.74	2,978.63	10.67	11.08	-31.05	127.69	-239.18	130.70	109.51	21.20	6.166	
3,100.00	3,093.69	3,104.87	3,077.65	11.04	11.47	-30.41	135.53	-249.58	135.61	113.68	21.93	6.184	
3,200.00	3,193.36	3,205.00	3,176.67	11.41	11.87	-29.83	143.37	-259.99	140.52	117.87	22.66	6.202	
3,300.00	3,293.04	3,294.87	3,275.68	11.78	12.22	-29.28	151.22	-270.39	145.46	122.11	23.35	6.229	
3,400.00	3,392.71	3,399.72	3,379.86	12.15	12.63	-29.03	158.32	-279.81	148.74	124.62	24.12	6.166	
3,500.00	3,492.39	3,504.71	3,484.54	12.53	13.02	-29.38	163.12	-286.18	148.68	123.81	24.87	5.978	
3,600.00	3,592.07	3,609.52	3,589.27	12.90	13.39	-30.35	165.61	-289.49	145.29	119.70	25.59	5.677	
3,700.00	3,691.74	3,712.00	3,691.74	13.27	13.74	-31.96	166.00	-290.00	138.95	112.65	26.30	5.283	
3,800.00	3,791.42	3,811.68	3,791.42	13.64	14.07	-33.81	166.00	-290.00	132.19	105.15	27.03	4.890	
3,900.00	3,891.09	3,911.35	3,891.09	14.01	14.41	-35.85	166.00	-290.00	125.57	97.81	27.76	4.523	
4,000.00	3,990.77	4,011.03	3,990.77	14.39	14.74	-38.11	166.00	-290.00	119.13	90.64	28.50	4.181	
4,100.00	4,090.44	4,110.70	4,090.44	14.76	15.08	-40.63	166.00	-290.00	112.90	83.67	29.24	3.862	
4,200.00	4,190.12	4,210.38	4,190.12	15.13	15.42	-43.44	166.00	-290.00	106.92	76.93	29.98	3.566	
4,300.00	4,289.80	4,310.05	4,289.80	15.50	15.76	-46.57	166.00	-290.00	101.21	70.48	30.74	3.293	
4,400.00	4,389.47	4,409.73	4,389.47	15.88	16.10	-50.05	166.00	-290.00	95.85	64.35	31.50	3.043	
4,500.00	4,489.15	4,509.40	4,489.15	16.25	16.44	-53.94	166.00	-290.00	90.88	58.61	32.27	2.816	
4,600.00	4,588.82	4,609.08	4,588.82	16.62	16.78	-58.25	166.00	-290.00	86.38	53.34	33.04	2.614	
4,700.00	4,688.50	4,708.76	4,688.50	16.99	17.12	-63.00	166.00	-290.00	82.42	48.59	33.82	2.437	
4,800.00	4,788.17	4,808.43	4,788.17	17.37	17.47	-68.19	166.00	-290.00	79.08	44.47	34.61	2.285	
4,900.00	4,887.85	4,908.11	4,887.85	17.74	17.81	-73.78	166.00	-290.00	76.45	41.05	35.39	2.160	
5,000.00	4,987.53	5,007.78	4,987.53	18.11	18.15	-79.70	166.00	-290.00	74.59	38.42	36.17	2.062	
5,100.00	5,087.20	5,107.46	5,087.20	18.48	18.50	-85.86	166.00	-290.00	73.58	36.64	36.94	1.992	

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

Pro Directional

Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com (Slot 1) - #205H - OH - Prelim A														Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HDGM														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre N/S (usft)	E/W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
5,166.19	5,153.17	5,173.43	5,153.17	18.73	18.73	-90.00	166.00	-290.00	73.38	35.95	37.44	1.960			
5,200.00	5,186.88	5,207.13	5,186.88	18.86	18.84	-92.12	166.00	-290.00	73.43	35.75	37.69	1.949			
5,300.00	5,286.55	5,306.81	5,286.55	19.23	19.19	-98.32	166.00	-290.00	74.17	35.75	38.42	1.931			
5,400.00	5,386.23	5,406.49	5,386.23	19.60	19.54	-104.34	166.00	-290.00	75.76	36.63	39.13	1.936			
5,500.00	5,485.90	5,506.16	5,485.90	19.97	19.88	-110.05	166.00	-290.00	78.15	38.32	39.82	1.962			
5,600.00	5,585.58	5,605.84	5,585.58	20.35	20.23	-115.37	166.00	-290.00	81.27	40.76	40.50	2.006			
5,700.00	5,685.26	5,705.51	5,685.26	20.72	20.58	-120.26	166.00	-290.00	85.03	43.86	41.18	2.065			
5,800.00	5,784.93	5,805.19	5,784.93	21.09	20.92	-124.70	166.00	-290.00	89.35	47.50	41.85	2.135			
5,900.00	5,884.76	5,905.02	5,884.76	21.46	21.27	-127.68	166.00	-290.00	92.76	50.23	42.52	2.181			
6,000.00	5,984.73	6,004.99	5,984.73	21.81	21.62	-128.80	166.00	-290.00	94.17	50.95	43.21	2.179			
6,100.00	6,084.73	6,104.99	6,084.73	22.16	21.97	-176.35	166.00	-290.00	94.19	50.28	43.91	2.145			
6,200.00	6,184.73	6,204.99	6,184.73	22.50	22.32	-176.35	166.00	-290.00	94.19	49.58	44.61	2.111			
6,300.00	6,284.73	6,304.99	6,284.73	22.85	22.67	-176.35	166.00	-290.00	94.19	48.88	45.31	2.079			
6,400.00	6,384.73	6,404.99	6,384.73	23.19	23.02	-176.35	166.00	-290.00	94.19	48.18	46.01	2.047			
6,500.00	6,484.73	6,504.99	6,484.73	23.54	23.37	-176.35	166.00	-290.00	94.19	47.48	46.71	2.017			
6,600.00	6,584.73	6,604.99	6,584.73	23.89	23.72	-176.35	166.00	-290.00	94.19	46.78	47.41	1.987			
6,700.00	6,684.73	6,704.99	6,684.73	24.23	24.07	-176.35	166.00	-290.00	94.19	46.08	48.11	1.958			
6,800.00	6,784.73	6,804.99	6,784.73	24.58	24.42	-176.35	166.00	-290.00	94.19	45.38	48.81	1.930			
6,900.00	6,884.73	6,904.99	6,884.73	24.93	24.77	-176.35	166.00	-290.00	94.19	44.68	49.51	1.902			
7,000.00	6,984.73	7,004.99	6,984.73	25.28	25.13	-176.35	166.00	-290.00	94.19	43.97	50.22	1.876			
7,100.00	7,084.73	7,104.99	7,084.73	25.63	25.48	-176.35	166.00	-290.00	94.19	43.27	50.92	1.850			
7,200.00	7,184.73	7,204.99	7,184.73	25.97	25.83	-176.35	166.00	-290.00	94.19	42.57	51.62	1.825			
7,300.00	7,284.73	7,304.99	7,284.73	26.32	26.18	-176.35	166.00	-290.00	94.19	41.86	52.33	1.800			
7,400.00	7,384.73	7,404.99	7,384.73	26.67	26.54	-176.35	166.00	-290.00	94.19	41.16	53.03	1.776			
7,500.00	7,484.73	7,504.99	7,484.73	27.02	26.89	-176.35	166.00	-290.00	94.19	40.46	53.73	1.753			
7,600.00	7,584.73	7,604.99	7,584.73	27.37	27.24	-176.35	166.00	-290.00	94.19	39.75	54.44	1.730			
7,700.00	7,684.73	7,704.99	7,684.73	27.72	27.59	-176.35	166.00	-290.00	94.19	39.05	55.14	1.708			
7,800.00	7,784.73	7,804.99	7,784.73	28.07	27.95	-176.35	166.00	-290.00	94.19	38.34	55.85	1.687			
7,900.00	7,884.73	7,904.99	7,884.73	28.42	28.30	-176.35	166.00	-290.00	94.19	37.64	56.56	1.665			
8,000.00	7,984.73	8,004.99	7,984.73	28.77	28.65	-176.35	166.00	-290.00	94.19	36.93	57.26	1.645			
8,100.00	8,084.73	8,104.99	8,084.73	29.12	29.01	-176.35	166.00	-290.00	94.19	36.22	57.97	1.625			
8,200.00	8,184.73	8,204.99	8,184.73	29.47	29.36	-176.35	166.00	-290.00	94.19	35.52	58.67	1.605			
8,300.00	8,284.73	8,304.99	8,284.73	29.82	29.71	-176.35	166.00	-290.00	94.19	34.81	59.38	1.586			
8,400.00	8,384.73	8,404.99	8,384.73	30.18	30.07	-176.35	166.00	-290.00	94.19	34.10	60.09	1.568			
8,500.00	8,484.73	8,504.99	8,484.73	30.53	30.42	-176.35	166.00	-290.00	94.19	33.40	60.79	1.549			
8,600.00	8,584.73	8,604.99	8,584.73	30.88	30.77	-176.35	166.00	-290.00	94.19	32.69	61.50	1.532			
8,700.00	8,684.73	8,704.99	8,684.73	31.23	31.13	-176.35	166.00	-290.00	94.19	31.98	62.21	1.514 ES			
8,800.00	8,784.73	8,804.11	8,779.38	31.58	31.44	178.85	163.48	-282.06	96.69	34.01	62.67	1.543			
8,900.00	8,884.73	8,890.22	8,866.61	31.93	31.70	167.38	156.76	-260.89	107.33	44.97	62.36	1.721			
9,000.00	8,984.39	8,973.09	8,942.87	32.27	31.94	97.16	147.01	-230.13	132.84	72.00	60.84	2.183			
9,100.00	9,081.39	9,050.00	9,008.79	32.59	32.15	88.61	135.07	-192.48	172.01	112.90	59.11	2.910			
9,200.00	9,172.78	9,119.53	9,063.36	32.88	32.34	82.91	122.06	-151.48	219.74	162.09	57.65	3.812			
9,300.00	9,255.79	9,183.29	9,108.50	33.12	32.52	78.47	108.45	-108.59	273.28	216.34	56.94	4.800			
9,400.00	9,328.12	9,241.91	9,145.35	33.32	32.71	73.24	94.68	-65.17	330.30	273.34	56.96	5.799			
9,500.00	9,389.92	9,300.00	9,177.08	33.62	32.91	67.64	79.98	-18.83	383.58	326.18	57.39	6.683			
9,600.00	9,439.92	9,359.27	9,204.22	34.02	33.15	63.92	64.06	31.37	430.82	372.66	58.16	7.408			
9,700.00	9,476.60	9,420.00	9,226.24	34.50	33.42	61.65	46.95	85.29	471.42	412.19	59.23	7.959			
9,800.00	9,498.85	9,482.57	9,242.53	35.06	33.74	60.58	28.69	142.84	504.79	444.22	60.58	8.333			
9,900.00	9,506.00	9,550.00	9,252.61	35.70	34.13	60.71	8.55	206.36	530.45	468.28	62.17	8.532			
10,000.00	9,506.00	9,623.68	9,255.00	36.42	34.60	62.09	-13.60	276.56	555.31	491.54	63.77	8.708			
10,100.00	9,506.00	9,755.35	9,255.00	37.28	35.62	63.70	-47.63	403.72	578.49	512.55	65.94	8.773			
10,200.00	9,506.00	9,891.33	9,255.00	38.24	36.89	64.81	-73.50	537.19	595.68	527.33	68.35	8.715			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #205H - 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	Reference	Offset	Highside	Offset Wellbore Centre	Distance	Minimum	Separation	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	
10,300.00	9,506.00	10,030.42	9,255.00	39.32	38.41	65.48	-90.07	675.26	606.49	535.51	70.98	8.544	
10,400.00	9,506.00	10,171.20	9,255.00	40.50	40.14	65.73	-96.56	815.86	610.67	536.96	73.71	8.285	
10,500.00	9,506.00	10,276.12	9,255.00	41.77	41.53	65.73	-96.69	920.78	610.74	534.59	76.16	8.019	
10,600.00	9,506.00	10,376.12	9,255.00	43.13	42.94	65.73	-96.73	1,020.78	610.77	532.06	78.71	7.760	
10,700.00	9,506.00	10,476.12	9,255.00	44.57	44.42	65.74	-96.78	1,120.78	610.79	529.39	81.40	7.504	
10,800.00	9,506.00	10,576.12	9,255.00	46.08	45.98	65.74	-96.83	1,220.78	610.81	526.59	84.22	7.253	
10,900.00	9,506.00	10,676.12	9,255.00	47.65	47.59	65.74	-96.87	1,320.78	610.83	523.68	87.15	7.009	
11,000.00	9,506.00	10,776.12	9,255.00	49.28	49.26	65.74	-96.92	1,420.78	610.85	520.66	90.20	6.772	
11,100.00	9,506.00	10,876.12	9,255.00	50.96	50.98	65.74	-96.97	1,520.78	610.88	517.54	93.33	6.545	
11,200.00	9,506.00	10,976.12	9,255.00	52.69	52.75	65.74	-97.02	1,620.78	610.90	514.34	96.56	6.327	
11,300.00	9,506.00	11,076.12	9,255.00	54.46	54.55	65.74	-97.06	1,720.78	610.92	511.06	99.86	6.118	
11,400.00	9,506.00	11,176.12	9,255.00	56.27	56.40	65.74	-97.11	1,820.78	610.94	507.72	103.23	5.918	
11,500.00	9,506.00	11,276.12	9,255.00	58.12	58.27	65.74	-97.16	1,920.78	610.97	504.30	106.66	5.728	
11,600.00	9,506.00	11,376.12	9,255.00	60.00	60.18	65.74	-97.21	2,020.78	610.99	500.84	110.15	5.547	
11,700.00	9,506.00	11,476.12	9,255.00	61.91	62.11	65.74	-97.25	2,120.78	611.01	497.31	113.69	5.374	
11,800.00	9,506.00	11,576.12	9,255.00	63.84	64.07	65.75	-97.30	2,220.78	611.03	493.75	117.29	5.210	
11,900.00	9,506.00	11,676.12	9,255.00	65.80	66.06	65.75	-97.35	2,320.78	611.05	490.13	120.92	5.053	
12,000.00	9,506.00	11,776.12	9,255.00	67.78	68.06	65.75	-97.39	2,420.78	611.08	486.48	124.59	4.905	
12,100.00	9,506.00	11,876.12	9,255.00	69.78	70.08	65.75	-97.44	2,520.78	611.10	482.80	128.30	4.763	
12,200.00	9,506.00	11,976.12	9,255.00	71.80	72.12	65.75	-97.49	2,620.78	611.12	479.08	132.04	4.628	
12,300.00	9,506.00	12,076.12	9,255.00	73.83	74.17	65.75	-97.54	2,720.78	611.14	475.33	135.82	4.500	
12,400.00	9,506.00	12,176.12	9,255.00	75.89	76.24	65.75	-97.58	2,820.78	611.16	471.55	139.62	4.377	
12,500.00	9,506.00	12,276.12	9,255.00	77.95	78.32	65.75	-97.63	2,920.78	611.19	467.74	143.44	4.261	
12,600.00	9,506.00	12,376.12	9,255.00	80.03	80.42	65.75	-97.68	3,020.78	611.21	463.92	147.29	4.150	
12,700.00	9,506.00	12,476.12	9,255.00	82.12	82.52	65.75	-97.73	3,120.78	611.23	460.07	151.17	4.043	
12,800.00	9,506.00	12,576.12	9,255.00	84.23	84.64	65.76	-97.77	3,220.78	611.25	456.20	155.06	3.942	
12,900.00	9,506.00	12,676.12	9,255.00	86.34	86.77	65.76	-97.82	3,320.78	611.28	452.31	158.97	3.845	
13,000.00	9,506.00	12,776.12	9,255.00	88.46	88.90	65.76	-97.87	3,420.78	611.30	448.40	162.90	3.753	
13,100.00	9,506.00	12,876.12	9,255.00	90.59	91.05	65.76	-97.91	3,520.78	611.32	444.48	166.84	3.664	
13,200.00	9,506.00	12,976.12	9,255.00	92.74	93.20	65.76	-97.96	3,620.78	611.34	440.54	170.80	3.579	
13,300.00	9,506.00	13,076.12	9,255.00	94.88	95.36	65.76	-98.01	3,720.78	611.36	436.59	174.77	3.498	
13,400.00	9,506.00	13,176.12	9,255.00	97.04	97.53	65.76	-98.06	3,820.78	611.39	432.63	178.76	3.420	
13,500.00	9,506.00	13,276.12	9,255.00	99.20	99.70	65.76	-98.10	3,920.78	611.41	428.65	182.76	3.345	
13,600.00	9,506.00	13,376.12	9,255.00	101.37	101.88	65.76	-98.15	4,020.78	611.43	424.66	186.77	3.274	
13,700.00	9,506.00	13,476.12	9,255.00	103.55	104.06	65.76	-98.20	4,120.78	611.45	420.66	190.79	3.205	
13,800.00	9,506.00	13,576.12	9,255.00	105.73	106.25	65.76	-98.24	4,220.78	611.47	416.66	194.82	3.139	
13,900.00	9,506.00	13,676.12	9,255.00	107.91	108.45	65.77	-98.29	4,320.77	611.50	412.64	198.86	3.075	
14,000.00	9,506.00	13,776.12	9,255.00	110.11	110.65	65.77	-98.34	4,420.77	611.52	408.61	202.91	3.014	
14,100.00	9,506.00	13,876.12	9,255.00	112.30	112.85	65.77	-98.39	4,520.77	611.54	404.57	206.97	2.955	
14,200.00	9,506.00	13,976.12	9,255.00	114.50	115.06	65.77	-98.43	4,620.77	611.56	400.53	211.03	2.898	
14,300.00	9,506.00	14,076.12	9,255.00	116.71	117.27	65.77	-98.48	4,720.77	611.58	396.48	215.10	2.843	
14,400.00	9,506.00	14,176.12	9,255.00	118.92	119.48	65.77	-98.53	4,820.77	611.61	392.42	219.18	2.790	
14,500.00	9,506.00	14,276.12	9,255.00	121.13	121.70	65.77	-98.58	4,920.77	611.63	388.36	223.27	2.739	
14,600.00	9,506.00	14,376.12	9,255.00	123.34	123.92	65.77	-98.62	5,020.77	611.65	384.29	227.36	2.690	
14,700.00	9,506.00	14,476.12	9,255.00	125.56	126.15	65.77	-98.67	5,120.77	611.67	380.21	231.46	2.643	
14,800.00	9,506.00	14,576.12	9,255.00	127.79	128.38	65.77	-98.72	5,220.77	611.70	376.13	235.57	2.597	
14,900.00	9,506.00	14,676.12	9,255.00	130.01	130.61	65.77	-98.76	5,320.77	611.72	372.04	239.68	2.552	
15,000.00	9,506.00	14,776.12	9,255.00	132.24	132.84	65.78	-98.81	5,420.77	611.74	367.95	243.79	2.509	
15,100.00	9,506.00	14,876.12	9,255.00	134.47	135.08	65.78	-98.86	5,520.77	611.76	363.85	247.91	2.468	
15,200.00	9,506.00	14,976.12	9,255.00	136.70	137.32	65.78	-98.91	5,620.77	611.78	359.75	252.04	2.427	
15,300.00	9,506.00	15,076.12	9,255.00	138.94	139.56	65.78	-98.95	5,720.77	611.81	355.64	256.17	2.388	
15,400.00	9,506.00	15,176.12	9,255.00	141.18	141.80	65.78	-99.00	5,820.77	611.83	351.53	260.30	2.350	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

Offset Design: Leatherneck 3029 Fed Com (Slot 1) - #205H - OH - Prelim A													Offset Site Error:
Survey Program: 0-MWD-HDGM													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Depth (usft)	Offset Depth (usft)	Semi-Major Axis (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Warning
15,500.00	9,506.00	15,276.12	9,255.00	143.42	144.05	65.78		-99.05	5,920.77	611.85	347.41	264.44	2.314
15,600.00	9,506.00	15,376.12	9,255.00	145.66	146.29	65.78		-99.10	6,020.77	611.87	343.29	268.58	2.278
15,700.00	9,506.00	15,476.12	9,255.00	147.91	148.54	65.78		-99.14	6,120.77	611.89	339.17	272.72	2.244
15,800.00	9,506.00	15,576.12	9,255.00	150.15	150.79	65.78		-99.19	6,220.77	611.92	335.05	276.87	2.210
15,900.00	9,506.00	15,676.12	9,255.00	152.40	153.05	65.78		-99.24	6,320.77	611.94	330.92	281.02	2.178
16,000.00	9,506.00	15,776.12	9,255.00	154.65	155.30	65.79		-99.28	6,420.77	611.96	326.78	285.18	2.146
16,100.00	9,506.00	15,876.12	9,255.00	156.90	157.56	65.79		-99.33	6,520.77	611.98	322.65	289.33	2.115
16,200.00	9,506.00	15,976.12	9,255.00	159.16	159.81	65.79		-99.38	6,620.77	612.01	318.51	293.50	2.085
16,300.00	9,506.00	16,076.12	9,255.00	161.41	162.07	65.79		-99.43	6,720.77	612.03	314.37	297.66	2.056
16,400.00	9,506.00	16,176.12	9,255.00	163.67	164.33	65.79		-99.47	6,820.77	612.05	310.22	301.83	2.028
16,500.00	9,506.00	16,276.12	9,255.00	165.93	166.59	65.79		-99.52	6,920.77	612.07	306.08	305.99	2.000
16,600.00	9,506.00	16,376.12	9,255.00	168.19	168.86	65.79		-99.57	7,020.77	612.09	301.93	310.17	1.973
16,700.00	9,506.00	16,476.12	9,255.00	170.45	171.12	65.79		-99.62	7,120.77	612.12	297.78	314.34	1.947
16,800.00	9,506.00	16,576.12	9,255.00	172.71	173.39	65.79		-99.66	7,220.77	612.14	293.62	318.51	1.922
16,900.00	9,506.00	16,676.12	9,255.00	174.97	175.65	65.79		-99.71	7,320.77	612.16	289.47	322.69	1.897
17,000.00	9,506.00	16,776.12	9,255.00	177.24	177.92	65.79		-99.76	7,420.77	612.18	285.31	326.87	1.873
17,100.00	9,506.00	16,876.12	9,255.00	179.50	180.19	65.80		-99.80	7,520.77	612.20	281.15	331.06	1.849
17,200.00	9,506.00	16,976.12	9,255.00	181.77	182.46	65.80		-99.85	7,620.77	612.23	276.99	335.24	1.826
17,300.00	9,506.00	17,076.12	9,255.00	184.04	184.73	65.80		-99.90	7,720.77	612.25	272.82	339.43	1.804
17,400.00	9,506.00	17,176.12	9,255.00	186.31	187.00	65.80		-99.95	7,820.77	612.27	268.66	343.61	1.782
17,500.00	9,506.00	17,276.12	9,255.00	188.58	189.27	65.80		-99.99	7,920.77	612.29	264.49	347.80	1.760
17,600.00	9,506.00	17,376.12	9,255.00	190.85	191.54	65.80		-100.04	8,020.77	612.32	260.32	352.00	1.740
17,700.00	9,506.00	17,476.12	9,255.00	193.12	193.82	65.80		-100.09	8,120.77	612.34	256.15	356.19	1.719
17,800.00	9,506.00	17,576.12	9,255.00	195.39	196.09	65.80		-100.13	8,220.77	612.36	251.98	360.38	1.699
17,900.00	9,506.00	17,676.12	9,255.00	197.66	198.37	65.80		-100.18	8,320.77	612.38	247.80	364.58	1.680
18,000.00	9,506.00	17,776.12	9,255.00	199.94	200.65	65.80		-100.23	8,420.77	612.40	243.63	368.78	1.661
18,100.00	9,506.00	17,876.12	9,255.00	202.21	202.92	65.80		-100.28	8,520.77	612.43	239.45	372.98	1.642
18,200.00	9,506.00	17,976.12	9,255.00	204.49	205.20	65.81		-100.32	8,620.77	612.45	235.27	377.18	1.624
18,300.00	9,506.00	18,076.12	9,255.00	206.77	207.48	65.81		-100.37	8,720.77	612.47	231.09	381.38	1.606
18,400.00	9,506.00	18,176.12	9,255.00	209.04	209.76	65.81		-100.42	8,820.77	612.49	226.91	385.58	1.588
18,500.00	9,506.00	18,276.12	9,255.00	211.32	212.04	65.81		-100.47	8,920.77	612.51	222.73	389.79	1.571
18,600.00	9,506.00	18,376.12	9,255.00	213.60	214.32	65.81		-100.51	9,020.77	612.54	218.54	393.99	1.555
18,700.00	9,506.00	18,476.12	9,255.00	215.88	216.60	65.81		-100.56	9,120.77	612.56	214.36	398.20	1.538
18,800.00	9,506.00	18,576.12	9,255.00	218.16	218.88	65.81		-100.61	9,220.77	612.58	210.17	402.41	1.522
18,900.00	9,506.00	18,676.12	9,255.00	220.44	221.16	65.81		-100.65	9,320.77	612.60	205.99	406.62	1.507
19,000.00	9,506.00	18,776.12	9,255.00	222.72	223.45	65.81		-100.70	9,420.77	612.63	201.80	410.83	1.491 Level 3
19,100.00	9,506.00	18,876.12	9,255.00	225.00	225.73	65.81		-100.75	9,520.77	612.65	197.61	415.04	1.476 Level 3
19,200.00	9,506.00	18,976.12	9,255.00	227.28	228.01	65.82		-100.80	9,620.77	612.67	193.42	419.25	1.461 Level 3
19,300.00	9,506.00	19,076.12	9,255.00	229.56	230.30	65.82		-100.84	9,720.77	612.69	189.23	423.46	1.447 Level 3
19,400.00	9,506.00	19,176.12	9,255.00	231.85	232.58	65.82		-100.89	9,820.77	612.71	185.04	427.68	1.433 Level 3
19,500.00	9,506.00	19,276.12	9,255.00	234.13	234.87	65.82		-100.94	9,920.77	612.74	180.84	431.89	1.419 Level 3
19,600.00	9,506.00	19,376.12	9,255.00	236.42	236.52	65.82		-100.99	10,020.77	612.76	177.23	435.52	1.407 Level 3
19,628.96	9,506.00	19,405.08	9,255.00	237.08	236.94	65.82		-101.00	10,049.74	612.76	176.24	436.52	1.404 Level 3, 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	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #221H - OH - Prelim A												Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HDGM												Offset Well Error:	0.00 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Offset (usft)	Semi Major Axis 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	-90.00	0.00	-30.00	30.00				
100.00	100.00	100.00	100.00	0.13	0.13	-90.00	0.00	-30.00	30.00	29.74	0.26	117.047	
200.00	200.00	200.00	200.00	0.49	0.49	-90.00	0.00	-30.00	30.00	29.03	0.97	30.825	
300.00	300.00	300.00	300.00	0.85	0.85	-90.00	0.00	-30.00	30.00	28.31	1.69	17.749	
400.00	400.00	400.00	400.00	1.20	1.20	-90.00	0.00	-30.00	30.00	27.59	2.41	12.463	
500.00	500.00	500.00	500.00	1.56	1.56	-90.00	0.00	-30.00	30.00	26.88	3.12	9.603	
600.00	600.00	600.00	600.00	1.92	1.92	-90.00	0.00	-30.00	30.00	26.16	3.84	7.810	
700.00	700.00	700.00	700.00	2.28	2.28	-90.00	0.00	-30.00	30.00	25.44	4.56	6.582	
800.00	800.00	800.00	800.00	2.64	2.64	-90.00	0.00	-30.00	30.00	24.73	5.27	5.687	
900.00	900.00	900.00	900.00	3.00	3.00	-90.00	0.00	-30.00	30.00	24.01	5.99	5.007	
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	-90.00	0.00	-30.00	30.00	23.29	6.71	4.472	
1,100.00	1,099.98	1,100.02	1,099.98	3.71	3.71	-44.84	0.00	-30.00	28.74	21.31	7.42	3.871	
1,200.00	1,199.84	1,200.16	1,199.84	4.07	4.07	-53.28	0.00	-30.00	25.30	17.16	8.14	3.109	
1,300.00	1,299.53	1,300.47	1,299.53	4.42	4.43	-70.33	0.00	-30.00	21.52	12.67	8.85	2.431	
1,390.30	1,389.53	1,389.53	1,389.53	4.75	4.75	-90.00	0.00	-30.00	20.26	10.76	9.50	2.133 CC	
1,400.00	1,399.20	1,400.80	1,399.20	4.78	4.79	-92.20	0.00	-30.00	20.27	10.70	9.57	2.118 ES, SF	
1,500.00	1,498.88	1,501.12	1,498.88	5.14	5.15	-113.48	0.00	-30.00	22.10	11.80	10.30	2.146	
1,600.00	1,598.55	1,601.45	1,598.55	5.51	5.51	-129.70	0.00	-30.00	26.37	15.35	11.01	2.394	
1,700.00	1,698.23	1,701.77	1,698.23	5.87	5.87	-140.80	0.00	-30.00	32.12	20.39	11.73	2.738	
1,800.00	1,797.90	1,802.10	1,797.90	6.24	6.23	-148.35	0.00	-30.00	38.70	26.25	12.45	3.109	
1,900.00	1,897.58	1,902.42	1,897.58	6.60	6.59	-153.64	0.00	-30.00	45.75	32.58	13.16	3.475	
2,000.00	1,997.26	1,997.26	1,997.26	6.97	6.93	-157.50	0.00	-30.00	53.08	39.22	13.86	3.830	
2,100.00	2,096.93	2,095.64	2,095.62	7.34	7.27	-159.21	-1.46	-30.64	61.61	47.06	14.55	4.235	
2,200.00	2,196.61	2,193.60	2,193.45	7.71	7.59	-158.39	-5.99	-32.63	72.34	57.13	15.22	4.754	
2,300.00	2,296.28	2,290.93	2,290.43	8.08	7.91	-156.09	-13.51	-35.94	85.34	69.46	15.88	5.375	
2,400.00	2,395.96	2,389.47	2,388.41	8.45	8.23	-153.48	-23.08	-40.15	99.94	83.38	16.56	6.035	
2,500.00	2,495.63	2,488.30	2,486.68	8.82	8.57	-151.52	-32.71	-44.39	114.73	97.48	17.25	6.650	
2,600.00	2,595.31	2,587.14	2,584.96	9.19	8.90	-150.01	-42.34	-48.62	129.62	111.67	17.95	7.222	
2,700.00	2,694.99	2,685.97	2,683.23	9.56	9.25	-148.81	-51.97	-52.86	144.58	125.93	18.65	7.753	
2,800.00	2,794.66	2,784.80	2,781.50	9.93	9.59	-147.84	-61.60	-57.10	159.58	140.24	19.35	8.248	
2,900.00	2,894.34	2,883.64	2,879.78	10.30	9.94	-147.03	-71.23	-61.33	174.63	154.58	20.05	8.709	
3,000.00	2,994.01	2,982.47	2,978.05	10.67	10.29	-146.35	-80.86	-65.57	189.71	168.95	20.76	9.139	
3,100.00	3,093.69	3,081.31	3,076.32	11.04	10.64	-145.77	-90.49	-69.80	204.80	183.34	21.47	9.540	
3,200.00	3,193.36	3,180.14	3,174.59	11.41	11.00	-145.27	-100.12	-74.04	219.92	197.74	22.18	9.917	
3,300.00	3,293.04	3,278.98	3,272.87	11.78	11.35	-144.84	-109.75	-78.28	235.05	212.16	22.89	10.270	
3,400.00	3,392.71	3,377.81	3,371.14	12.15	11.71	-144.45	-119.38	-82.51	250.19	226.59	23.60	10.601	
3,500.00	3,492.39	3,476.64	3,469.41	12.53	12.07	-144.11	-129.01	-86.75	265.34	241.02	24.31	10.913	
3,600.00	3,592.07	3,575.48	3,567.68	12.90	12.44	-143.81	-138.64	-90.98	280.49	255.47	25.03	11.207	
3,700.00	3,691.74	3,674.31	3,665.96	13.27	12.80	-143.54	-148.27	-95.22	295.66	269.91	25.74	11.484	
3,800.00	3,791.42	3,773.15	3,764.23	13.64	13.16	-143.30	-157.90	-99.46	310.83	284.37	26.46	11.747	
3,900.00	3,891.09	3,871.98	3,862.50	14.01	13.53	-143.07	-167.53	-103.69	326.00	298.83	27.18	11.995	
4,000.00	3,990.77	3,970.82	3,960.78	14.39	13.90	-142.87	-177.16	-107.93	341.19	313.29	27.90	12.230	
4,100.00	4,090.44	4,069.65	4,059.05	14.76	14.26	-142.69	-186.79	-112.16	356.37	327.75	28.62	12.453	
4,200.00	4,190.12	4,168.48	4,157.32	15.13	14.63	-142.52	-196.42	-116.40	371.56	342.22	29.34	12.665	
4,300.00	4,289.80	4,267.32	4,255.59	15.50	15.00	-142.36	-206.05	-120.64	386.75	356.69	30.06	12.867	
4,400.00	4,389.47	4,366.15	4,353.87	15.88	15.37	-142.22	-215.68	-124.87	401.94	371.16	30.78	13.059	
4,500.00	4,489.15	4,464.99	4,452.14	16.25	15.74	-142.08	-225.31	-129.11	417.13	385.63	31.50	13.242	
4,600.00	4,588.82	4,563.82	4,550.41	16.62	16.12	-141.96	-234.94	-133.34	432.33	400.11	32.22	13.417	
4,700.00	4,688.50	4,662.66	4,648.68	16.99	16.49	-141.84	-244.57	-137.58	447.53	414.59	32.95	13.584	
4,800.00	4,788.17	4,761.49	4,746.96	17.37	16.86	-141.73	-254.20	-141.82	462.73	429.06	33.67	13.744	
4,900.00	4,887.85	4,860.32	4,845.23	17.74	17.23	-141.63	-263.83	-146.05	477.93	443.54	34.39	13.897	
5,000.00	4,987.53	4,959.16	4,943.50	18.11	17.61	-141.53	-273.46	-150.29	493.14	458.02	35.12	14.043	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #222H - 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 Vertical	Measured Vertical	Reference	Offset	Highside	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor				
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Toolface (°)	N/S (usft)	E/W (usft)	(usft)	(usft)	(usft)				
5,100.00	5,087.20	5,057.99	5,041.77	18.48	17.98	-141.44	-283.09	-154.52	508.34	472.50	35.84	14.183	
5,200.00	5,186.88	5,156.83	5,140.05	18.86	18.36	-141.36	-292.73	-158.76	523.55	486.98	36.57	14.318	
5,300.00	5,286.55	5,255.66	5,238.32	19.23	18.73	-141.28	-302.36	-163.00	538.76	501.47	37.29	14.447	
5,400.00	5,386.23	5,354.50	5,336.59	19.60	19.11	-141.21	-311.99	-167.23	553.96	515.95	38.02	14.572	
5,500.00	5,485.90	5,453.33	5,434.87	19.97	19.48	-141.13	-321.62	-171.47	569.17	530.43	38.74	14.691	
5,600.00	5,585.58	5,552.16	5,533.14	20.35	19.86	-141.07	-331.25	-175.70	584.38	544.91	39.47	14.806	
5,700.00	5,685.26	5,651.00	5,631.41	20.72	20.24	-141.00	-340.88	-179.94	599.59	559.40	40.19	14.917	
5,800.00	5,784.93	5,749.84	5,729.69	21.09	20.62	-140.97	-350.51	-184.18	614.77	573.85	40.92	15.023	
5,900.00	5,884.76	5,848.90	5,828.19	21.46	20.99	-140.95	-360.16	-188.42	628.23	586.58	41.64	15.085	
6,000.00	5,984.73	5,948.22	5,926.95	21.81	21.37	-140.70	-369.84	-192.68	639.01	596.65	42.36	15.085	
6,100.00	6,084.73	6,047.65	6,025.81	22.16	21.75	172.25	-379.53	-196.94	648.11	605.04	43.07	15.047	
6,200.00	6,184.73	6,147.09	6,124.68	22.50	22.13	172.73	-389.21	-201.20	657.22	613.44	43.78	15.011	
6,300.00	6,284.73	6,246.52	6,223.55	22.85	22.51	173.20	-398.90	-205.46	666.38	621.89	44.49	14.977	
6,400.00	6,384.73	6,345.95	6,322.41	23.19	22.90	173.66	-408.59	-209.73	675.58	630.38	45.21	14.945	
6,500.00	6,484.73	6,445.38	6,421.28	23.54	23.28	174.11	-418.28	-213.99	684.83	638.91	45.92	14.914	
6,600.00	6,584.73	6,544.81	6,520.15	23.89	23.66	174.54	-427.97	-218.25	694.11	647.49	46.63	14.886	
6,700.00	6,684.73	6,644.25	6,619.02	24.23	24.04	174.96	-437.66	-222.51	703.44	656.10	47.34	14.859	
6,800.00	6,784.73	6,743.68	6,717.88	24.58	24.42	175.37	-447.35	-226.77	712.80	664.75	48.05	14.834	
6,900.00	6,884.73	6,843.11	6,816.75	24.93	24.80	175.78	-457.03	-231.03	722.19	673.43	48.76	14.810	
7,000.00	6,984.73	6,942.54	6,915.62	25.28	25.19	176.17	-466.72	-235.30	731.62	682.15	49.48	14.787	
7,100.00	7,084.73	7,041.97	7,014.48	25.63	25.57	176.55	-476.41	-239.56	741.09	690.90	50.19	14.766	
7,200.00	7,184.73	7,141.40	7,113.35	25.97	25.95	176.92	-486.10	-243.82	750.58	699.68	50.90	14.746	
7,300.00	7,284.73	7,240.84	7,212.22	26.32	26.33	177.28	-495.79	-248.08	760.11	708.49	51.61	14.727	
7,400.00	7,384.73	7,340.27	7,311.08	26.67	26.72	177.63	-505.48	-252.34	769.66	717.33	52.33	14.709	
7,500.00	7,484.73	7,439.70	7,409.95	27.02	27.10	177.98	-515.16	-256.60	779.25	726.20	53.04	14.692	
7,600.00	7,584.73	7,539.13	7,508.82	27.37	27.48	178.31	-524.85	-260.87	788.86	735.10	53.75	14.675	
7,700.00	7,684.73	7,638.56	7,607.68	27.72	27.87	178.64	-534.54	-265.13	798.49	744.02	54.47	14.660	
7,800.00	7,784.73	7,738.00	7,706.55	28.07	28.25	178.96	-544.23	-269.39	808.15	752.97	55.18	14.646	
7,900.00	7,884.73	7,837.43	7,805.42	28.42	28.63	179.27	-553.92	-273.65	817.84	761.95	55.89	14.632	
8,000.00	7,984.73	7,936.86	7,904.28	28.77	29.02	179.58	-563.61	-277.91	827.55	770.94	56.61	14.619	
8,100.00	8,084.73	8,036.29	8,003.15	29.12	29.40	179.87	-573.30	-282.17	837.28	779.96	57.32	14.607	
8,200.00	8,184.73	8,135.72	8,102.02	29.47	29.78	-179.83	-582.98	-286.44	847.04	789.00	58.04	14.595	
8,300.00	8,284.73	8,237.38	8,203.10	29.82	30.17	-179.54	-592.88	-290.79	856.80	798.04	58.77	14.580	
8,400.00	8,384.73	8,335.14	8,300.41	30.18	30.69	-179.26	-602.93	-295.21	866.14	804.41	59.73	14.468	
8,500.00	8,484.73	8,435.64	8,400.83	30.53	31.18	-179.14	-606.93	-296.97	867.05	806.46	60.59	14.310	
8,600.00	8,584.73	8,536.15	8,501.14	30.88	31.52	-179.14	-607.00	-297.00	867.10	805.81	61.29	14.148	
8,700.00	8,684.73	8,636.55	8,601.14	31.23	31.84	-179.14	-607.00	-297.00	867.10	805.12	61.97	13.991	
8,800.00	8,784.73	8,736.55	8,701.14	31.58	32.16	-179.14	-607.00	-297.00	867.10	804.44	62.66	13.838	
8,900.00	8,884.73	8,836.55	8,801.14	31.93	32.47	-179.14	-607.00	-297.00	867.11	803.78	63.33	13.691	
9,000.00	8,984.39	8,936.16	8,901.27	32.27	32.65	122.96	-608.59	-295.10	873.87	810.06	63.81	13.694	
9,100.00	9,081.39	9,033.16	9,001.27	32.59	32.81	121.40	-612.90	-289.97	885.42	831.30	64.12	13.964	
9,200.00	9,172.78	9,124.55	9,092.49	32.88	32.97	118.69	-619.41	-282.21	900.78	866.48	64.30	14.476	
9,300.00	9,255.79	9,207.56	9,175.98	33.12	33.10	114.52	-626.06	-274.28	918.40	914.06	64.33	15.208	
9,400.00	9,328.12	9,280.00	9,248.64	33.32	33.27	107.10	-637.59	-260.55	1,035.51	970.93	64.58	16.035	
9,500.00	9,389.92	9,341.84	9,310.60	33.62	33.36	96.96	-645.35	-251.30	1,092.96	1,028.31	64.65	16.906	
9,600.00	9,439.92	9,391.84	9,360.60	34.02	33.47	89.35	-655.31	-239.43	1,147.82	1,082.93	64.89	17.690	
9,700.00	9,476.60	9,428.60	9,397.40	34.50	33.60	83.91	-668.23	-224.03	1,199.28	1,133.95	65.33	18.357	
9,800.00	9,498.85	9,450.85	9,419.85	35.06	33.67	79.48	-676.43	-214.26	1,246.53	1,180.79	65.74	18.962	
9,900.00	9,506.00	9,458.00	9,427.00	35.70	33.76	76.80	-687.13	-201.51	1,289.16	1,222.84	66.33	19.437	
10,000.00	9,506.00	10,044.05	9,506.00	36.42	36.88	90.00	-857.03	420.36	1,317.24	1,245.10	72.15	18.258	
10,100.00	9,506.00	10,144.05	9,506.00	37.28	37.73	90.00	-857.08	520.36	1,317.27	1,243.39	73.88	17.830	

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 (Slot 1)
Site Error: 0.00 usft
Reference Well: #221H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim A

Local Co-ordinate Reference: Well #221H
TVD Reference: 3238 + 28.5 = KB @ 3266.50usft (Patt 809)
MD Reference: 3238 + 28.5 = KB @ 3266.50usft (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 (Slot 1) - #222H - OH - Prelim A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD-HDGM													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,200.00	9,506.00	10,244.05	9,506.00	38.24	38.70	90.00	-857.13	620.36	1,317.30	1,241.44	75.86	17.366	
10,300.00	9,506.00	10,344.05	9,506.00	39.32	39.79	90.00	-857.19	720.36	1,317.33	1,239.27	78.06	16.877	
10,400.00	9,506.00	10,444.05	9,506.00	40.50	40.98	90.00	-857.24	820.36	1,317.36	1,236.90	80.46	16.373	
10,500.00	9,506.00	10,544.05	9,506.00	41.77	42.27	90.00	-857.29	920.36	1,317.39	1,234.33	83.05	15.862	
10,600.00	9,506.00	10,644.05	9,506.00	43.13	43.64	90.00	-857.34	1,020.36	1,317.41	1,231.60	85.82	15.352	
10,700.00	9,506.00	10,744.05	9,506.00	44.57	45.09	90.00	-857.39	1,120.36	1,317.44	1,228.71	88.73	14.847	
10,800.00	9,506.00	10,844.05	9,506.00	46.08	46.61	90.00	-857.44	1,220.36	1,317.47	1,225.68	91.79	14.353	
10,900.00	9,506.00	10,944.05	9,506.00	47.65	48.19	90.00	-857.50	1,320.36	1,317.50	1,222.53	94.97	13.872	
11,000.00	9,506.00	11,044.05	9,506.00	49.28	49.83	90.00	-857.55	1,420.36	1,317.53	1,219.26	98.27	13.407	
11,100.00	9,506.00	11,144.05	9,506.00	50.96	51.52	90.00	-857.60	1,520.36	1,317.56	1,215.89	101.67	12.959	
11,200.00	9,506.00	11,244.05	9,506.00	52.69	53.26	90.00	-857.65	1,620.36	1,317.59	1,212.42	105.16	12.529	
11,300.00	9,506.00	11,344.05	9,506.00	54.46	55.04	90.00	-857.70	1,720.36	1,317.61	1,208.88	108.74	12.117	
11,400.00	9,506.00	11,444.05	9,506.00	56.27	56.85	90.00	-857.75	1,820.36	1,317.64	1,205.25	112.39	11.724	
11,500.00	9,506.00	11,544.05	9,506.00	58.12	58.71	90.00	-857.81	1,920.36	1,317.67	1,201.56	116.11	11.348	
11,600.00	9,506.00	11,644.05	9,506.00	60.00	60.59	90.00	-857.86	2,020.36	1,317.70	1,197.80	119.90	10.990	
11,700.00	9,506.00	11,744.05	9,506.00	61.91	62.50	90.00	-857.91	2,120.36	1,317.73	1,193.99	123.74	10.649	
11,800.00	9,506.00	11,844.05	9,506.00	63.84	64.44	90.00	-857.96	2,220.36	1,317.76	1,190.13	127.63	10.325	
11,900.00	9,506.00	11,944.05	9,506.00	65.80	66.40	90.00	-858.01	2,320.36	1,317.79	1,186.22	131.57	10.016	
12,000.00	9,506.00	12,044.05	9,506.00	67.78	68.38	90.00	-858.06	2,420.36	1,317.81	1,182.27	135.55	9.722	
12,100.00	9,506.00	12,144.05	9,506.00	69.78	70.39	90.00	-858.11	2,520.36	1,317.84	1,178.27	139.57	9.442	
12,200.00	9,506.00	12,244.05	9,506.00	71.80	72.41	90.00	-858.17	2,620.36	1,317.87	1,174.24	143.63	9.176	
12,300.00	9,506.00	12,344.05	9,506.00	73.83	74.45	90.00	-858.22	2,720.36	1,317.90	1,170.18	147.72	8.922	
12,400.00	9,506.00	12,444.05	9,506.00	75.89	76.50	90.00	-858.27	2,820.36	1,317.93	1,166.09	151.84	8.680	
12,500.00	9,506.00	12,544.05	9,506.00	77.95	78.57	90.00	-858.32	2,920.36	1,317.96	1,161.97	155.98	8.449	
12,600.00	9,506.00	12,644.05	9,506.00	80.03	80.65	90.00	-858.37	3,020.36	1,317.99	1,157.83	160.16	8.229	
12,700.00	9,506.00	12,744.05	9,506.00	82.12	82.74	90.00	-858.42	3,120.36	1,318.02	1,153.66	164.36	8.019	
12,800.00	9,506.00	12,844.05	9,506.00	84.23	84.84	90.00	-858.48	3,220.36	1,318.04	1,149.47	168.58	7.819	
12,900.00	9,506.00	12,944.05	9,506.00	86.34	86.96	90.00	-858.53	3,320.36	1,318.07	1,145.26	172.82	7.627	
13,000.00	9,506.00	13,044.05	9,506.00	88.46	89.08	90.00	-858.58	3,420.36	1,318.10	1,141.03	177.07	7.444	
13,100.00	9,506.00	13,144.05	9,506.00	90.59	91.22	90.00	-858.63	3,520.36	1,318.13	1,136.78	181.35	7.268	
13,200.00	9,506.00	13,244.05	9,506.00	92.74	93.36	90.00	-858.68	3,620.36	1,318.16	1,132.52	185.64	7.101	
13,300.00	9,506.00	13,344.05	9,506.00	94.88	95.51	90.00	-858.73	3,720.36	1,318.19	1,128.24	189.95	6.940	
13,400.00	9,506.00	13,444.05	9,506.00	97.04	97.66	90.00	-858.79	3,820.36	1,318.22	1,123.94	194.27	6.785	
13,500.00	9,506.00	13,544.05	9,506.00	99.20	99.83	90.00	-858.84	3,920.36	1,318.24	1,119.64	198.61	6.637	
13,600.00	9,506.00	13,644.05	9,506.00	101.37	102.00	90.00	-858.89	4,020.36	1,318.27	1,115.32	202.96	6.495	
13,700.00	9,506.00	13,744.05	9,506.00	103.55	104.17	90.00	-858.94	4,120.36	1,318.30	1,110.99	207.32	6.359	
13,800.00	9,506.00	13,844.05	9,506.00	105.73	106.35	90.00	-858.99	4,220.36	1,318.33	1,106.64	211.69	6.228	
13,900.00	9,506.00	13,944.05	9,506.00	107.91	108.54	90.00	-859.04	4,320.36	1,318.36	1,102.29	216.07	6.102	
14,000.00	9,506.00	14,044.05	9,506.00	110.11	110.73	90.00	-859.09	4,420.36	1,318.39	1,097.93	220.46	5.980	
14,100.00	9,506.00	14,144.05	9,506.00	112.30	112.93	90.00	-859.15	4,520.36	1,318.42	1,093.56	224.86	5.863	
14,200.00	9,506.00	14,244.05	9,506.00	114.50	115.13	90.00	-859.20	4,620.36	1,318.44	1,089.18	229.26	5.751	
14,300.00	9,506.00	14,344.05	9,506.00	116.71	117.33	90.00	-859.25	4,720.36	1,318.47	1,084.79	233.68	5.642	
14,400.00	9,506.00	14,444.05	9,506.00	118.92	119.54	90.00	-859.30	4,820.36	1,318.50	1,080.40	238.10	5.537	
14,500.00	9,506.00	14,544.05	9,506.00	121.13	121.75	90.00	-859.35	4,920.36	1,318.53	1,075.99	242.54	5.436	
14,600.00	9,506.00	14,644.05	9,506.00	123.34	123.97	90.00	-859.40	5,020.36	1,318.56	1,071.58	246.97	5.339	
14,700.00	9,506.00	14,744.05	9,506.00	125.56	126.19	90.00	-859.46	5,120.36	1,318.59	1,067.17	251.42	5.245	
14,800.00	9,506.00	14,844.05	9,506.00	127.79	128.41	90.00	-859.51	5,220.36	1,318.62	1,062.75	255.87	5.153	
14,900.00	9,506.00	14,944.05	9,506.00	130.01	130.64	90.00	-859.56	5,320.36	1,318.64	1,058.32	260.33	5.065	
15,000.00	9,506.00	15,044.05	9,506.00	132.24	132.87	90.00	-859.61	5,420.36	1,318.67	1,053.89	264.79	4.980	
15,100.00	9,506.00	15,144.05	9,506.00	134.47	135.10	90.00	-859.66	5,520.36	1,318.70	1,049.45	269.25	4.898	
15,200.00	9,506.00	15,244.05	9,506.00	136.70	137.33	90.00	-859.71	5,620.36	1,318.73	1,045.00	273.73	4.818	
15,300.00	9,506.00	15,344.05	9,506.00	138.94	139.57	90.00	-859.77	5,720.36	1,318.76	1,040.56	278.20	4.740	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #221H - OH - Prelim A														Offset Site Error:
Survey Program: 0-MWD-HDGM														Offset Well Error:
Reference	Offset	Semi-Major Axis	Highside	Offset Wellbore Centre	Distance	Minimum	Separation							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Offset (usft)	Toolface (°)	N/S (usft)	E/W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
15,400.00	9,506.00	15,444.05	9,506.00	141.18	141.80	90.00	-859.82	5,820.36	1,318.79	1,036.10	282.68	4.665		
15,500.00	9,506.00	15,544.05	9,506.00	143.42	144.05	90.00	-859.87	5,920.36	1,318.82	1,031.65	287.17	4.592		
15,600.00	9,506.00	15,644.05	9,506.00	145.66	146.29	90.00	-859.92	6,020.36	1,318.85	1,027.18	291.66	4.522		
15,700.00	9,506.00	15,744.05	9,506.00	147.91	148.53	90.00	-859.97	6,120.36	1,318.87	1,022.72	296.15	4.453		
15,800.00	9,506.00	15,844.05	9,506.00	150.15	150.78	90.00	-860.02	6,220.36	1,318.90	1,018.25	300.65	4.387		
15,900.00	9,506.00	15,944.05	9,506.00	152.40	153.03	90.00	-860.07	6,320.36	1,318.93	1,013.78	305.15	4.322		
16,000.00	9,506.00	16,044.05	9,506.00	154.65	155.28	90.00	-860.13	6,420.36	1,318.96	1,009.30	309.66	4.259		
16,100.00	9,506.00	16,144.05	9,506.00	156.90	157.53	90.00	-860.18	6,520.36	1,318.99	1,004.82	314.16	4.198		
16,200.00	9,506.00	16,244.05	9,506.00	159.16	159.78	90.00	-860.23	6,620.36	1,319.02	1,000.34	318.68	4.139		
16,300.00	9,506.00	16,344.05	9,506.00	161.41	162.04	90.00	-860.28	6,720.36	1,319.05	995.86	323.19	4.081		
16,400.00	9,506.00	16,444.05	9,506.00	163.67	164.30	90.00	-860.33	6,820.36	1,319.07	991.37	327.71	4.025		
16,500.00	9,506.00	16,544.05	9,506.00	165.93	166.55	90.00	-860.38	6,920.36	1,319.10	986.88	332.23	3.970		
16,600.00	9,506.00	16,644.05	9,506.00	168.19	168.81	90.00	-860.44	7,020.36	1,319.13	982.38	336.75	3.917		
16,700.00	9,506.00	16,744.05	9,506.00	170.45	171.07	90.00	-860.49	7,120.36	1,319.16	977.89	341.27	3.865		
16,800.00	9,506.00	16,844.05	9,506.00	172.71	173.34	90.00	-860.54	7,220.36	1,319.19	973.39	345.80	3.815		
16,900.00	9,506.00	16,944.05	9,506.00	174.97	175.60	90.00	-860.59	7,320.36	1,319.22	968.89	350.33	3.766		
17,000.00	9,506.00	17,044.05	9,506.00	177.24	177.86	90.00	-860.64	7,420.36	1,319.25	964.38	354.86	3.718		
17,100.00	9,506.00	17,144.05	9,506.00	179.50	180.13	90.00	-860.69	7,520.36	1,319.27	959.88	359.40	3.671		
17,200.00	9,506.00	17,244.05	9,506.00	181.77	182.40	90.00	-860.75	7,620.36	1,319.30	955.37	363.93	3.625		
17,300.00	9,506.00	17,344.05	9,506.00	184.04	184.66	90.00	-860.80	7,720.36	1,319.33	950.86	368.47	3.581		
17,400.00	9,506.00	17,444.05	9,506.00	186.31	186.93	90.00	-860.85	7,820.36	1,319.36	946.35	373.01	3.537		
17,500.00	9,506.00	17,544.05	9,506.00	188.58	189.20	90.00	-860.90	7,920.36	1,319.39	941.84	377.55	3.495		
17,600.00	9,506.00	17,644.05	9,506.00	190.85	191.47	90.00	-860.95	8,020.36	1,319.42	937.32	382.10	3.453		
17,700.00	9,506.00	17,744.05	9,506.00	193.12	193.74	90.00	-861.00	8,120.36	1,319.45	932.80	386.64	3.413		
17,800.00	9,506.00	17,844.05	9,506.00	195.39	196.02	90.00	-861.05	8,220.36	1,319.47	928.28	391.19	3.373		
17,900.00	9,506.00	17,944.05	9,506.00	197.66	198.29	90.00	-861.11	8,320.36	1,319.50	923.76	395.74	3.334		
18,000.00	9,506.00	18,044.05	9,506.00	199.94	200.56	90.00	-861.16	8,420.36	1,319.53	919.24	400.29	3.296		
18,100.00	9,506.00	18,144.05	9,506.00	202.21	202.84	90.00	-861.21	8,520.36	1,319.56	914.72	404.84	3.259		
18,200.00	9,506.00	18,244.05	9,506.00	204.49	205.11	90.00	-861.26	8,620.36	1,319.59	910.19	409.40	3.223		
18,300.00	9,506.00	18,344.05	9,506.00	206.77	207.39	90.00	-861.31	8,720.36	1,319.62	905.67	413.95	3.188		
18,400.00	9,506.00	18,444.05	9,506.00	209.04	209.67	90.00	-861.36	8,820.36	1,319.65	901.14	418.51	3.153		
18,500.00	9,506.00	18,544.05	9,506.00	211.32	211.94	90.00	-861.42	8,920.36	1,319.68	896.61	423.06	3.119		
18,600.00	9,506.00	18,644.05	9,506.00	213.60	214.22	90.00	-861.47	9,020.36	1,319.70	892.08	427.62	3.086		
18,700.00	9,506.00	18,744.05	9,506.00	215.88	216.50	90.00	-861.52	9,120.36	1,319.73	887.55	432.18	3.054		
18,800.00	9,506.00	18,844.05	9,506.00	218.16	218.78	90.00	-861.57	9,220.36	1,319.76	883.02	436.74	3.022		
18,900.00	9,506.00	18,944.05	9,506.00	220.44	221.06	90.00	-861.62	9,320.36	1,319.79	878.48	441.31	2.991		
19,000.00	9,506.00	19,044.05	9,506.00	222.72	223.34	90.00	-861.67	9,420.36	1,319.82	873.95	445.87	2.960		
19,100.00	9,506.00	19,144.05	9,506.00	225.00	225.62	90.00	-861.73	9,520.36	1,319.85	869.41	450.44	2.930		
19,200.00	9,506.00	19,244.05	9,506.00	227.28	227.91	90.00	-861.78	9,620.36	1,319.88	864.87	455.00	2.901		
19,300.00	9,506.00	19,344.05	9,506.00	229.56	230.19	90.00	-861.83	9,720.36	1,319.90	860.34	459.57	2.872		
19,400.00	9,506.00	19,444.05	9,506.00	231.85	232.47	90.00	-861.88	9,820.36	1,319.93	855.80	464.14	2.844		
19,500.00	9,506.00	19,544.05	9,506.00	234.13	234.75	90.00	-861.93	9,920.36	1,319.96	851.26	468.71	2.816		
19,600.00	9,506.00	19,644.05	9,506.00	236.42	237.04	90.00	-861.98	10,020.36	1,319.99	846.72	473.27	2.789		
19,628.96	9,506.00	19,673.01	9,506.00	237.08	237.70	90.00	-862.00	10,049.32	1,320.00	845.40	474.60	2.781		

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #241H - OH - Prelim A												Offset Site Error:	0.00 usft
Survey Program: 0-MWD-HDGM												Offset Well Error:	0.00 usft
Measured Vertical Depth (usft)	Reference Vertical Depth (usft)	Measured Vertical Depth (usft)	Reference Vertical Depth (usft)	Semi Major Axis (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre N-S (usft)	Offset Wellbore Centre E-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	0.00	190.00	0.00	190.00				
100.00	100.00	100.00	100.00	0.13	0.13	0.00	190.00	0.00	190.00	189.74	0.26	741.297	
200.00	200.00	200.00	200.00	0.49	0.49	0.00	190.00	0.00	190.00	189.03	0.97	195.222	
300.00	300.00	300.00	300.00	0.85	0.85	0.00	190.00	0.00	190.00	188.31	1.69	112.413	
400.00	400.00	400.00	400.00	1.20	1.20	0.00	190.00	0.00	190.00	187.59	2.41	78.932	
500.00	500.00	500.00	500.00	1.56	1.56	0.00	190.00	0.00	190.00	186.88	3.12	60.818	
600.00	600.00	600.00	600.00	1.92	1.92	0.00	190.00	0.00	190.00	186.16	3.84	49.466	
700.00	700.00	700.00	700.00	2.28	2.28	0.00	190.00	0.00	190.00	185.44	4.56	41.685	
800.00	800.00	800.00	800.00	2.64	2.64	0.00	190.00	0.00	190.00	184.73	5.27	36.020	
900.00	900.00	900.00	900.00	3.00	3.00	0.00	190.00	0.00	190.00	184.01	5.99	31.710	
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	0.00	190.00	0.00	190.00	183.29	6.71	28.321	
1,100.00	1,099.98	1,095.63	1,095.61	3.71	3.69	47.55	191.10	-1.16	189.97	182.57	7.40	25.658	
1,200.00	1,199.84	1,191.27	1,191.12	4.07	4.04	47.62	194.40	-4.63	189.89	181.79	8.09	23.462	
1,207.22	1,207.04	1,198.17	1,198.02	4.09	4.06	47.62	194.72	-4.97	189.88	181.74	8.14	23.318	
1,300.00	1,299.53	1,286.90	1,286.42	4.42	4.38	47.55	199.89	-10.40	190.31	181.52	8.78	21.666	
1,400.00	1,399.20	1,386.16	1,385.13	4.78	4.74	47.05	207.07	-17.95	192.12	182.62	9.50	20.228	
1,500.00	1,498.88	1,486.12	1,484.54	5.14	5.10	46.55	214.33	-25.59	193.98	183.76	10.22	18.980	
1,600.00	1,598.55	1,586.09	1,583.95	5.51	5.47	46.06	221.59	-33.23	195.85	184.90	10.95	17.893	
1,700.00	1,698.23	1,686.06	1,683.36	5.87	5.84	45.58	228.85	-40.86	197.73	186.06	11.67	16.939	
1,800.00	1,797.90	1,786.03	1,782.78	6.24	6.21	45.11	236.11	-48.50	199.63	187.23	12.40	16.096	
1,900.00	1,897.58	1,886.00	1,882.19	6.60	6.58	44.64	243.37	-56.14	201.55	188.41	13.13	15.346	
2,000.00	1,997.26	1,985.97	1,981.60	6.97	6.96	44.19	250.63	-63.77	203.47	189.61	13.87	14.675	
2,100.00	2,096.93	2,085.94	2,081.01	7.34	7.33	43.74	257.89	-71.41	205.41	190.81	14.60	14.071	
2,200.00	2,196.61	2,185.90	2,180.42	7.71	7.71	43.30	265.15	-79.04	207.36	192.03	15.33	13.525	
2,300.00	2,296.28	2,285.87	2,279.83	8.08	8.08	42.87	272.41	-86.68	209.32	193.26	16.07	13.029	
2,400.00	2,395.96	2,385.84	2,379.25	8.45	8.46	42.45	279.67	-94.32	211.30	194.49	16.80	12.577	
2,500.00	2,495.63	2,485.81	2,478.66	8.82	8.84	42.04	286.93	-101.95	213.28	195.74	17.54	12.163	
2,600.00	2,595.31	2,585.78	2,578.07	9.19	9.22	41.63	294.19	-109.59	215.28	197.01	18.27	11.782	
2,700.00	2,694.99	2,685.75	2,677.48	9.56	9.60	41.23	301.45	-117.23	217.28	198.28	19.01	11.432	
2,800.00	2,794.66	2,785.72	2,776.89	9.93	9.98	40.84	308.71	-124.86	219.30	199.56	19.74	11.108	
2,900.00	2,894.34	2,885.68	2,876.30	10.30	10.36	40.46	315.97	-132.50	221.33	200.85	20.48	10.808	
3,000.00	2,994.01	2,985.65	2,975.72	10.67	10.74	40.08	323.23	-140.13	223.36	202.15	21.21	10.529	
3,100.00	3,093.69	3,085.62	3,075.13	11.04	11.12	39.71	330.49	-147.77	225.41	203.46	21.95	10.269	
3,200.00	3,193.36	3,185.59	3,174.54	11.41	11.50	39.34	337.75	-155.41	227.47	204.78	22.69	10.027	
3,300.00	3,293.04	3,285.56	3,273.95	11.78	11.88	38.99	345.01	-163.04	229.53	206.11	23.42	9.800	
3,400.00	3,392.71	3,385.53	3,373.36	12.15	12.26	38.64	352.27	-170.68	231.60	207.45	24.16	9.587	
3,500.00	3,492.39	3,485.50	3,472.77	12.53	12.64	38.29	359.53	-178.32	233.69	208.79	24.89	9.388	
3,600.00	3,592.07	3,585.46	3,572.19	12.90	13.02	37.95	366.79	-185.95	235.78	210.15	25.63	9.200	
3,700.00	3,691.74	3,685.43	3,671.60	13.27	13.41	37.62	374.05	-193.59	237.88	211.51	26.36	9.023	
3,800.00	3,791.42	3,785.40	3,771.01	13.64	13.79	37.29	381.31	-201.22	239.98	212.88	27.10	8.856	
3,900.00	3,891.09	3,885.37	3,870.42	14.01	14.17	36.97	388.57	-208.86	242.10	214.26	27.84	8.698	
4,000.00	3,990.77	3,985.34	3,969.83	14.39	14.55	36.66	395.82	-216.50	244.22	215.65	28.57	8.548	
4,100.00	4,090.44	4,085.31	4,069.24	14.76	14.94	36.34	403.08	-224.13	246.35	217.04	29.31	8.406	
4,200.00	4,190.12	4,185.27	4,168.66	15.13	15.32	36.04	410.34	-231.77	248.48	218.44	30.04	8.272	
4,300.00	4,289.80	4,285.24	4,268.07	15.50	15.70	35.74	417.60	-239.41	250.62	219.85	30.78	8.144	
4,400.00	4,389.47	4,385.21	4,367.48	15.88	16.08	35.45	424.86	-247.04	252.77	221.26	31.51	8.022	
4,500.00	4,489.15	4,485.18	4,466.89	16.25	16.47	35.16	432.12	-254.68	254.93	222.68	32.25	7.906	
4,600.00	4,588.82	4,585.15	4,566.30	16.62	16.85	34.87	439.38	-262.31	257.09	224.11	32.98	7.795	
4,700.00	4,688.50	4,685.12	4,665.71	16.99	17.23	34.59	446.64	-269.95	259.26	225.55	33.71	7.690	
4,800.00	4,788.17	4,790.64	4,770.74	17.37	17.63	34.41	453.67	-277.34	260.72	226.24	34.48	7.561	
4,900.00	4,887.85	4,898.82	4,878.71	17.74	18.03	34.70	458.23	-282.14	259.19	223.95	35.23	7.356	
5,000.00	4,987.53	5,006.68	4,986.54	18.11	18.41	35.50	459.98	-283.98	254.55	218.59	35.96	7.079	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #241H - 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	Between	Between	Minimum	Separation						
Measured Vertical	Measured Vertical	Reference	Offset	Highside	Offset Wellbore Centre	Between	Between	Centres	Ellipses	Separation	Factor	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Toolface (°)	N-S (usft)	E-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor			
5,100.00	5,087.20	5,107.35	5,087.20	18.48	18.75	36.58	460.00	-284.00	248.06	211.37	36.69	6.762	
5,200.00	5,186.88	5,207.02	5,186.88	18.86	19.09	37.72	460.00	-284.00	241.63	204.22	37.42	6.458	
5,300.00	5,286.55	5,306.70	5,286.55	19.23	19.43	38.91	460.00	-284.00	235.31	197.16	38.15	6.168	
5,400.00	5,386.23	5,406.37	5,386.23	19.60	19.77	40.18	460.00	-284.00	229.10	190.21	38.89	5.892	
5,500.00	5,485.90	5,506.05	5,485.90	19.97	20.11	41.51	460.00	-284.00	223.00	183.38	39.62	5.628	
5,600.00	5,585.58	5,605.73	5,585.58	20.35	20.45	42.91	460.00	-284.00	217.03	176.67	40.36	5.377	
5,700.00	5,685.26	5,705.40	5,685.26	20.72	20.80	44.40	460.00	-284.00	211.20	170.10	41.10	5.138	
5,800.00	5,784.93	5,805.08	5,784.93	21.09	21.14	45.94	460.00	-284.00	205.55	163.70	41.84	4.912	
5,900.00	5,884.76	5,904.91	5,884.76	21.46	21.48	47.06	460.00	-284.00	201.57	159.00	42.57	4.735	
6,000.00	5,984.73	6,004.88	5,984.73	21.81	21.83	47.52	460.00	-284.00	200.03	156.74	43.29	4.621	
6,079.84	6,064.57	6,084.72	6,064.57	22.09	22.10	47.57	460.00	-284.00	199.85	156.01	43.84	4.558	
6,100.00	6,084.73	6,104.88	6,084.73	22.16	22.17	0.00	460.00	-284.00	200.00	156.02	43.98	4.547	
6,200.00	6,184.73	6,204.88	6,184.73	22.50	22.52	0.00	460.00	-284.00	200.00	155.32	44.68	4.476	
6,300.00	6,284.73	6,304.88	6,284.73	22.85	22.87	0.00	460.00	-284.00	200.00	154.62	45.38	4.408	
6,400.00	6,384.73	6,404.88	6,384.73	23.19	23.21	0.00	460.00	-284.00	200.00	153.93	46.07	4.341	
6,500.00	6,484.73	6,504.88	6,484.73	23.54	23.56	0.00	460.00	-284.00	200.00	153.23	46.77	4.276	
6,600.00	6,584.73	6,604.88	6,584.73	23.89	23.91	0.00	460.00	-284.00	200.00	152.53	47.47	4.213	
6,700.00	6,684.73	6,704.88	6,684.73	24.23	24.25	0.00	460.00	-284.00	200.00	151.83	48.17	4.152	
6,800.00	6,784.73	6,804.88	6,784.73	24.58	24.60	0.00	460.00	-284.00	200.00	151.13	48.87	4.092	
6,900.00	6,884.73	6,904.88	6,884.73	24.93	24.95	0.00	460.00	-284.00	200.00	150.43	49.57	4.034	
7,000.00	6,984.73	7,004.88	6,984.73	25.28	25.30	0.00	460.00	-284.00	200.00	149.73	50.27	3.978	
7,100.00	7,084.73	7,104.88	7,084.73	25.63	25.65	0.00	460.00	-284.00	200.00	149.02	50.98	3.923	
7,200.00	7,184.73	7,204.88	7,184.73	25.97	26.00	0.00	460.00	-284.00	200.00	148.32	51.68	3.870	
7,300.00	7,284.73	7,304.88	7,284.73	26.32	26.35	0.00	460.00	-284.00	200.00	147.62	52.38	3.818	
7,400.00	7,384.73	7,404.88	7,384.73	26.67	26.70	0.00	460.00	-284.00	200.00	146.92	53.08	3.768	
7,500.00	7,484.73	7,504.88	7,484.73	27.02	27.05	0.00	460.00	-284.00	200.00	146.21	53.79	3.718	
7,600.00	7,584.73	7,604.88	7,584.73	27.37	27.40	0.00	460.00	-284.00	200.00	145.51	54.49	3.670	
7,700.00	7,684.73	7,704.88	7,684.73	27.72	27.75	0.00	460.00	-284.00	200.00	144.81	55.19	3.624	
7,800.00	7,784.73	7,804.88	7,784.73	28.07	28.10	0.00	460.00	-284.00	200.00	144.10	55.90	3.578	
7,900.00	7,884.73	7,904.88	7,884.73	28.42	28.45	0.00	460.00	-284.00	200.00	143.40	56.60	3.533	
8,000.00	7,984.73	8,004.88	7,984.73	28.77	28.80	0.00	460.00	-284.00	200.00	142.69	57.31	3.490	
8,100.00	8,084.73	8,104.88	8,084.73	29.12	29.15	0.00	460.00	-284.00	200.00	141.99	58.01	3.448	
8,200.00	8,184.73	8,204.88	8,184.73	29.47	29.50	0.00	460.00	-284.00	200.00	141.28	58.72	3.406	
8,300.00	8,284.73	8,304.88	8,284.73	29.82	29.85	0.00	460.00	-284.00	200.00	140.58	59.42	3.366	
8,400.00	8,384.73	8,404.88	8,384.73	30.18	30.21	0.00	460.00	-284.00	200.00	139.87	60.13	3.326	
8,500.00	8,484.73	8,504.88	8,484.73	30.53	30.56	0.00	460.00	-284.00	200.00	139.17	60.83	3.288	
8,600.00	8,584.73	8,604.88	8,584.73	30.88	30.91	0.00	460.00	-284.00	200.00	138.46	61.54	3.250	
8,700.00	8,684.73	8,704.88	8,684.73	31.23	31.26	0.00	460.00	-284.00	200.00	137.75	62.25	3.213	
8,800.00	8,784.73	8,804.88	8,784.73	31.58	31.61	0.00	460.00	-284.00	200.00	137.05	62.95	3.177	
8,900.00	8,884.73	8,904.88	8,884.73	31.93	31.97	0.00	460.00	-284.00	200.00	136.34	63.66	3.142	
9,000.00	8,984.39	9,004.53	8,984.39	32.27	32.32	-59.35	460.00	-284.00	196.46	132.13	64.33	3.054	
9,100.00	9,081.39	9,101.53	9,081.39	32.59	32.66	-66.54	460.00	-284.00	185.35	120.43	64.92	2.855	
9,200.00	9,172.78	9,202.08	9,172.78	32.88	33.03	-79.12	460.00	-284.00	172.50	107.05	65.45	2.636	
9,269.32	9,231.36	9,251.51	9,231.36	33.04	33.19	-90.00	460.00	-284.00	168.49	102.79	65.70	2.564 CC, ES, SF	
9,300.00	9,255.79	9,275.93	9,255.79	33.12	33.27	-94.91	460.00	-284.00	169.51	103.67	65.84	2.575	
9,400.00	9,328.12	9,348.27	9,328.12	33.32	33.53	-111.75	460.00	-284.00	190.58	124.21	66.37	2.871	
9,500.00	9,389.92	9,412.08	9,389.92	33.62	33.75	-127.89	460.00	-283.98	244.01	177.11	66.89	3.648	
9,600.00	9,439.92	9,524.40	9,503.44	34.02	34.12	-147.95	460.00	-272.05	314.66	248.49	66.17	4.755	
9,700.00	9,476.60	9,693.44	9,661.54	34.50	34.60	-165.34	459.99	-213.97	386.33	324.78	61.55	6.277	
9,800.00	9,498.85	9,996.13	9,877.61	35.06	35.43	-176.93	459.95	-7.04	442.39	395.93	46.46	9.522	
9,900.00	9,506.00	10,339.27	9,960.00	35.70	37.14	179.96	459.88	321.04	454.00	417.00	37.00	12.270	
10,000.00	9,506.00	10,439.27	9,960.00	36.42	37.86	179.96	459.86	421.04	454.00	416.61	37.39	12.142	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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 (Slot 1) - #241H - 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	Offset Wellbore Centre	Distance	Minimum	Separation	Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Toolface (°)	N-S (usft)	E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor		
10,100.00	9,506.00	10,539.27	9,960.00	37.28	38.71	179.96	459.84	521.04	454.00	416.16	37.84	11.997	
10,200.00	9,506.00	10,639.27	9,960.00	38.24	39.67	179.96	459.82	621.04	454.00	415.65	38.35	11.838	
10,300.00	9,506.00	10,739.27	9,960.00	39.32	40.73	179.96	459.81	721.04	454.00	415.08	38.92	11.666	
10,400.00	9,506.00	10,839.27	9,960.00	40.50	41.90	179.96	459.79	821.04	454.00	414.46	39.54	11.483	
10,500.00	9,506.00	10,939.27	9,960.00	41.77	43.16	179.96	459.77	921.04	454.00	413.79	40.21	11.291	
10,600.00	9,506.00	11,039.27	9,960.00	43.13	44.51	179.96	459.75	1,021.04	454.00	413.07	40.93	11.092	
10,700.00	9,506.00	11,139.27	9,960.00	44.57	45.93	179.96	459.73	1,121.04	454.00	412.30	41.70	10.888	
10,800.00	9,506.00	11,239.27	9,960.00	46.08	47.42	179.96	459.71	1,221.04	454.00	411.49	42.51	10.680	
10,900.00	9,506.00	11,339.27	9,960.00	47.65	48.97	179.96	459.69	1,321.04	454.00	410.64	43.36	10.470	
11,000.00	9,506.00	11,439.27	9,960.00	49.28	50.58	179.96	459.67	1,421.04	454.00	409.74	44.25	10.259	
11,100.00	9,506.00	11,539.27	9,960.00	50.96	52.25	179.96	459.65	1,521.04	454.00	408.82	45.18	10.048	
11,200.00	9,506.00	11,639.27	9,960.00	52.69	53.96	179.96	459.63	1,621.04	454.00	407.85	46.15	9.838	
11,300.00	9,506.00	11,739.27	9,960.00	54.46	55.71	179.96	459.61	1,721.04	454.00	406.85	47.14	9.630	
11,400.00	9,506.00	11,839.27	9,960.00	56.27	57.51	179.96	459.59	1,821.04	454.00	405.83	48.17	9.425	
11,500.00	9,506.00	11,939.27	9,960.00	58.12	59.34	179.96	459.57	1,921.04	454.00	404.77	49.23	9.223	
11,600.00	9,506.00	12,039.27	9,960.00	60.00	61.20	179.96	459.55	2,021.04	454.00	403.69	50.31	9.024	
11,700.00	9,506.00	12,139.27	9,960.00	61.91	63.09	179.96	459.53	2,121.04	454.00	402.58	51.42	8.830	
11,800.00	9,506.00	12,239.27	9,960.00	63.84	65.01	179.96	459.52	2,221.04	454.00	401.45	52.55	8.640	
11,900.00	9,506.00	12,339.27	9,960.00	65.80	66.95	179.96	459.50	2,321.04	454.00	400.30	53.70	8.454	
12,000.00	9,506.00	12,439.27	9,960.00	67.78	68.92	179.97	459.48	2,421.04	454.00	399.12	54.87	8.273	
12,100.00	9,506.00	12,539.27	9,960.00	69.78	70.90	179.97	459.46	2,521.04	454.00	397.93	56.07	8.097	
12,200.00	9,506.00	12,639.27	9,960.00	71.80	72.91	179.97	459.44	2,621.04	454.00	396.72	57.28	7.926	
12,300.00	9,506.00	12,739.27	9,960.00	73.83	74.93	179.97	459.42	2,721.04	454.00	395.49	58.51	7.760	
12,400.00	9,506.00	12,839.27	9,960.00	75.89	76.97	179.97	459.40	2,821.04	454.00	394.25	59.75	7.598	
12,500.00	9,506.00	12,939.27	9,960.00	77.95	79.02	179.97	459.38	2,921.04	454.00	392.99	61.01	7.441	
12,600.00	9,506.00	13,039.27	9,960.00	80.03	81.09	179.97	459.36	3,021.04	454.00	391.71	62.28	7.289	
12,700.00	9,506.00	13,139.27	9,960.00	82.12	83.17	179.97	459.34	3,121.04	454.00	390.43	63.57	7.142	
12,800.00	9,506.00	13,239.27	9,960.00	84.23	85.26	179.97	459.32	3,221.04	454.00	389.13	64.87	6.999	
12,900.00	9,506.00	13,339.27	9,960.00	86.34	87.37	179.97	459.30	3,321.04	454.00	387.82	66.18	6.860	
13,000.00	9,506.00	13,439.27	9,960.00	88.46	89.48	179.97	459.28	3,421.04	454.00	386.50	67.50	6.726	
13,100.00	9,506.00	13,539.27	9,960.00	90.59	91.60	179.97	459.26	3,521.04	454.00	385.16	68.83	6.596	
13,200.00	9,506.00	13,639.27	9,960.00	92.74	93.73	179.97	459.24	3,621.04	454.00	383.82	70.18	6.469	
13,300.00	9,506.00	13,739.27	9,960.00	94.88	95.87	179.97	459.22	3,721.04	454.00	382.47	71.53	6.347	
13,400.00	9,506.00	13,839.27	9,960.00	97.04	98.02	179.97	459.21	3,821.04	454.00	381.11	72.89	6.229	
13,500.00	9,506.00	13,939.27	9,960.00	99.20	100.17	179.97	459.19	3,921.04	454.00	379.74	74.26	6.114	
13,600.00	9,506.00	14,039.27	9,960.00	101.37	102.33	179.97	459.17	4,021.04	454.00	378.37	75.63	6.003	
13,700.00	9,506.00	14,139.27	9,960.00	103.55	104.50	179.97	459.15	4,121.04	454.00	376.98	77.02	5.895	
13,800.00	9,506.00	14,239.27	9,960.00	105.73	106.68	179.97	459.13	4,221.04	454.00	375.59	78.41	5.790	
13,900.00	9,506.00	14,339.27	9,960.00	107.91	108.85	179.97	459.11	4,321.04	454.00	374.20	79.80	5.689	
14,000.00	9,506.00	14,439.27	9,960.00	110.11	111.04	179.97	459.09	4,421.04	454.00	372.79	81.21	5.591	
14,100.00	9,506.00	14,539.27	9,960.00	112.30	113.23	179.97	459.07	4,521.04	454.00	371.38	82.62	5.495	
14,200.00	9,506.00	14,639.27	9,960.00	114.50	115.42	179.98	459.05	4,621.04	454.00	369.97	84.03	5.403	
14,300.00	9,506.00	14,739.27	9,960.00	116.71	117.62	179.98	459.03	4,721.04	454.00	368.55	85.45	5.313	
14,400.00	9,506.00	14,839.27	9,960.00	118.92	119.82	179.98	459.01	4,821.04	454.00	367.12	86.88	5.226	
14,500.00	9,506.00	14,939.27	9,960.00	121.13	122.03	179.98	458.99	4,921.04	454.00	365.69	88.31	5.141	
14,600.00	9,506.00	15,039.27	9,960.00	123.34	124.24	179.98	458.97	5,021.04	454.00	364.26	89.74	5.059	
14,700.00	9,506.00	15,139.27	9,960.00	125.56	126.45	179.98	458.95	5,121.04	454.00	362.82	91.18	4.979	
14,800.00	9,506.00	15,239.27	9,960.00	127.79	128.67	179.98	458.93	5,221.04	454.00	361.37	92.63	4.901	
14,900.00	9,506.00	15,339.27	9,960.00	130.01	130.89	179.98	458.92	5,321.04	454.00	359.93	94.07	4.826	
15,000.00	9,506.00	15,439.27	9,960.00	132.24	133.11	179.98	458.90	5,421.04	454.00	358.47	95.53	4.753	
15,100.00	9,506.00	15,539.27	9,960.00	134.47	135.34	179.98	458.88	5,521.04	454.00	357.02	96.98	4.681	
15,200.00	9,506.00	15,639.27	9,960.00	136.70	137.57	179.98	458.86	5,621.04	454.00	355.56	98.44	4.612	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	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

Leatherneck 3029 Fed Com (Slot 1) - #241H - 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		Offset Wellbore Centre		Distance		Minimum Separation		Warning			
Measured Vertical Depth (usft)	Measured Vertical Depth (usft)	Reference (usft)	Offset (usft)	Reference (usft)	Offset (usft)	Toolface (°)	N-S (usft)	E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Separation Factor			
15,300.00	9,506.00	15,739.27	9,960.00	138.94	139.80	179.98	458.84	5,721.04	454.00	354.10	99.90	4.544			
15,400.00	9,506.00	15,839.27	9,960.00	141.18	142.03	179.98	458.82	5,821.04	454.00	352.63	101.37	4.479			
15,500.00	9,506.00	15,939.27	9,960.00	143.42	144.27	179.98	458.80	5,921.04	454.00	351.16	102.84	4.415			
15,600.00	9,506.00	16,039.27	9,960.00	145.66	146.51	179.98	458.78	6,021.04	454.00	349.69	104.31	4.353			
15,700.00	9,506.00	16,139.27	9,960.00	147.91	148.75	179.98	458.76	6,121.04	454.00	348.22	105.78	4.292			
15,800.00	9,506.00	16,239.27	9,960.00	150.15	150.99	179.98	458.74	6,221.04	454.00	346.74	107.26	4.233			
15,900.00	9,506.00	16,339.27	9,960.00	152.40	153.23	179.98	458.72	6,321.04	454.00	345.26	108.74	4.175			
16,000.00	9,506.00	16,439.27	9,960.00	154.65	155.48	179.98	458.70	6,421.04	454.00	343.78	110.22	4.119			
16,100.00	9,506.00	16,539.27	9,960.00	156.90	157.73	179.98	458.68	6,521.04	454.00	342.30	111.70	4.064			
16,200.00	9,506.00	16,639.27	9,960.00	159.16	159.98	179.98	458.66	6,621.04	454.00	340.81	113.19	4.011			
16,300.00	9,506.00	16,739.27	9,960.00	161.41	162.23	179.98	458.64	6,721.04	454.00	339.32	114.68	3.959			
16,400.00	9,506.00	16,839.27	9,960.00	163.67	164.48	179.99	458.62	6,821.04	454.00	337.83	116.17	3.908			
16,500.00	9,506.00	16,939.27	9,960.00	165.93	166.74	179.99	458.61	6,921.04	454.00	336.34	117.66	3.858			
16,600.00	9,506.00	17,039.27	9,960.00	168.19	168.99	179.99	458.59	7,021.04	454.00	334.84	119.16	3.810			
16,700.00	9,506.00	17,139.27	9,960.00	170.45	171.25	179.99	458.57	7,121.04	454.00	333.34	120.65	3.763			
16,800.00	9,506.00	17,239.27	9,960.00	172.71	173.51	179.99	458.55	7,221.04	454.00	331.85	122.15	3.717			
16,900.00	9,506.00	17,339.27	9,960.00	174.97	175.77	179.99	458.53	7,321.04	454.00	330.35	123.65	3.672			
17,000.00	9,506.00	17,439.27	9,960.00	177.24	178.03	179.99	458.51	7,421.04	454.00	328.84	125.16	3.627			
17,100.00	9,506.00	17,539.27	9,960.00	179.50	180.29	179.99	458.49	7,521.04	454.00	327.34	126.66	3.584			
17,200.00	9,506.00	17,639.27	9,960.00	181.77	182.56	179.99	458.47	7,621.04	454.00	325.83	128.17	3.542			
17,300.00	9,506.00	17,739.27	9,960.00	184.04	184.82	179.99	458.45	7,721.04	454.00	324.33	129.67	3.501			
17,400.00	9,506.00	17,839.27	9,960.00	186.31	187.09	179.99	458.43	7,821.04	454.00	322.82	131.18	3.461			
17,500.00	9,506.00	17,939.27	9,960.00	188.58	189.36	179.99	458.41	7,921.04	454.00	321.31	132.69	3.421			
17,600.00	9,506.00	18,039.27	9,960.00	190.85	191.62	179.99	458.39	8,021.04	454.00	319.80	134.20	3.383			
17,700.00	9,506.00	18,139.27	9,960.00	193.12	193.89	179.99	458.37	8,121.04	454.00	318.29	135.71	3.345			
17,800.00	9,506.00	18,239.27	9,960.00	195.39	196.16	179.99	458.35	8,221.04	454.00	316.77	137.23	3.308			
17,900.00	9,506.00	18,339.27	9,960.00	197.66	198.43	179.99	458.33	8,321.04	454.00	315.26	138.74	3.272			
18,000.00	9,506.00	18,439.27	9,960.00	199.94	200.70	179.99	458.32	8,421.04	454.00	313.74	140.26	3.237			
18,100.00	9,506.00	18,539.27	9,960.00	202.21	202.98	179.99	458.30	8,521.04	454.00	312.22	141.78	3.202			
18,200.00	9,506.00	18,639.27	9,960.00	204.49	205.25	179.99	458.28	8,621.04	454.00	310.70	143.30	3.168			
18,300.00	9,506.00	18,739.27	9,960.00	206.77	207.52	179.99	458.26	8,721.04	454.00	309.19	144.81	3.135			
18,400.00	9,506.00	18,839.27	9,960.00	209.04	209.80	179.99	458.24	8,821.04	454.00	307.66	146.34	3.102			
18,500.00	9,506.00	18,939.27	9,960.00	211.32	212.08	179.99	458.22	8,921.04	454.00	306.14	147.86	3.071			
18,600.00	9,506.00	19,039.27	9,960.00	213.60	214.35	180.00	458.20	9,021.04	454.00	304.62	149.38	3.039			
18,700.00	9,506.00	19,139.27	9,960.00	215.88	216.63	180.00	458.18	9,121.04	454.00	303.10	150.90	3.009			
18,800.00	9,506.00	19,239.27	9,960.00	218.16	218.91	180.00	458.16	9,221.04	454.00	301.57	152.43	2.978			
18,900.00	9,506.00	19,339.27	9,960.00	220.44	221.18	180.00	458.14	9,321.04	454.00	300.05	153.95	2.949			
19,000.00	9,506.00	19,439.27	9,960.00	222.72	223.46	180.00	458.12	9,421.04	454.00	298.52	155.48	2.920			
19,100.00	9,506.00	19,539.27	9,960.00	225.00	225.74	180.00	458.10	9,521.04	454.00	296.99	157.01	2.892			
19,200.00	9,506.00	19,639.27	9,960.00	227.28	228.02	180.00	458.08	9,621.04	454.00	295.47	158.53	2.864			
19,300.00	9,506.00	19,739.27	9,960.00	229.56	230.30	180.00	458.06	9,721.04	454.00	293.94	160.06	2.836			
19,400.00	9,506.00	19,839.27	9,960.00	231.85	232.58	180.00	458.04	9,821.04	454.00	292.41	161.59	2.810			
19,500.00	9,506.00	19,939.27	9,960.00	234.13	234.87	180.00	458.02	9,921.04	454.00	290.88	163.12	2.783			
19,600.00	9,506.00	20,039.27	9,960.00	236.42	237.15	180.00	458.01	10,021.04	454.00	289.35	164.65	2.757			
19,628.96	9,506.00	20,068.23	9,960.00	237.08	237.81	-180.00	458.00	10,050.00	454.00	288.90	165.10	2.750			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #221H
Project:	Eddy County, NM (NAD27)	TVD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Reference Site:	Leatherneck 3029 Fed Com (Slot 1)	MD Reference:	3238 + 28.5 = KB @ 3266.50usft (Patt 809)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	#221H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	WellPlanner1
Reference Design:	Prelim A	Offset TVD Reference:	Offset Datum

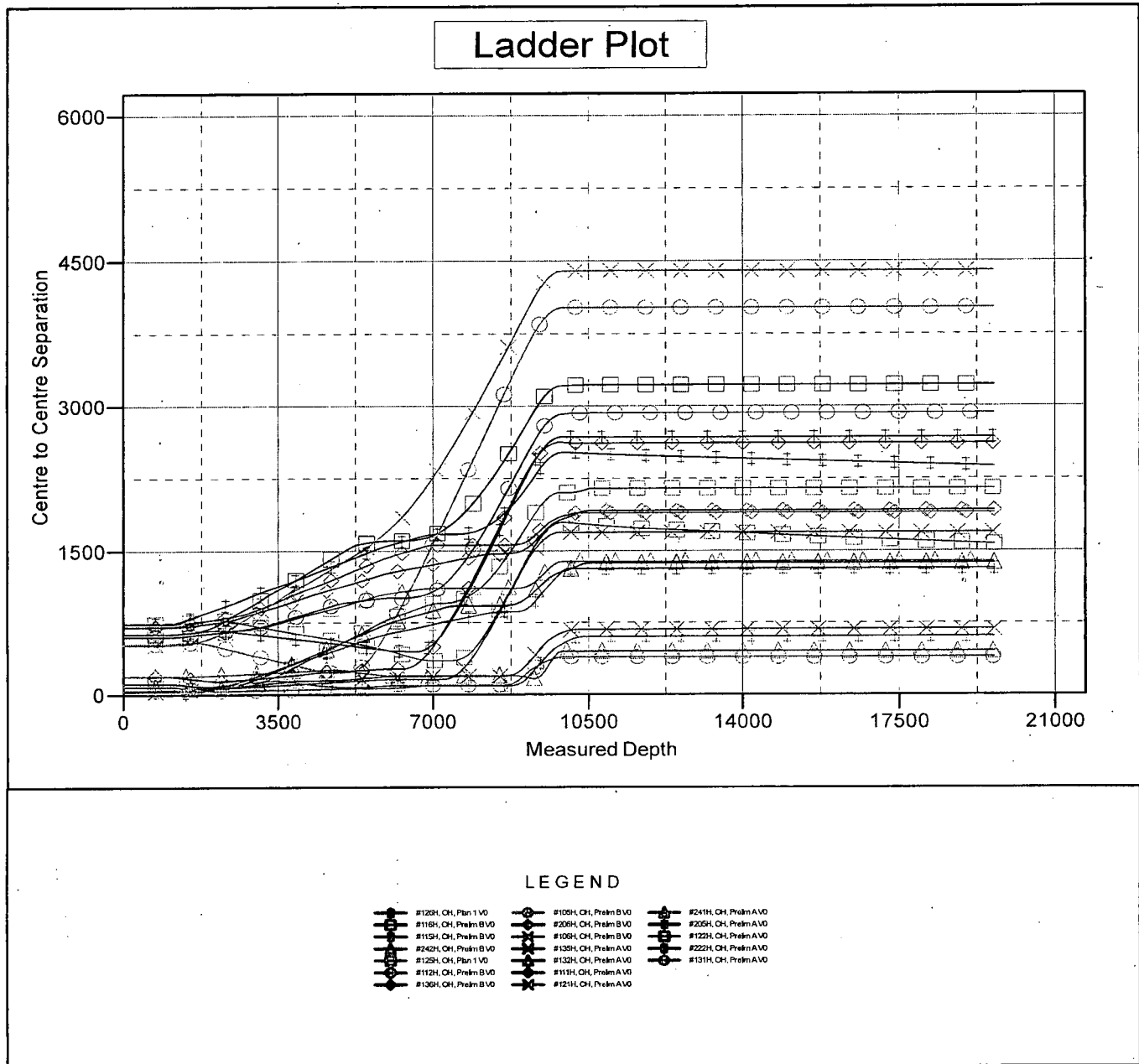
Reference Depths are relative to 3238 + 28.5 = KB @ 3266.50usft (Pat Coordinates are relative to: #221H)

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°



Pro Directional Anticollision Report

Company: Matador Resources
Project: Eddy County, NM (NAD27)
Reference Site: Leatherneck 3029 Fed Com (Slot 1)
Site Error: 0.00 usft
Reference Well: #221H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Prelim-A

Local Co-ordinate Reference: Well #221H
TVD Reference: 3238 + 28.5 = KB @ 3266.50usft (Patt 809)
MD Reference: 3238 + 28.5 = KB @ 3266.50usft (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 3238 + 28.5 = KB @ 3266.50usft (Pat Coordinates are relative to: #221H)

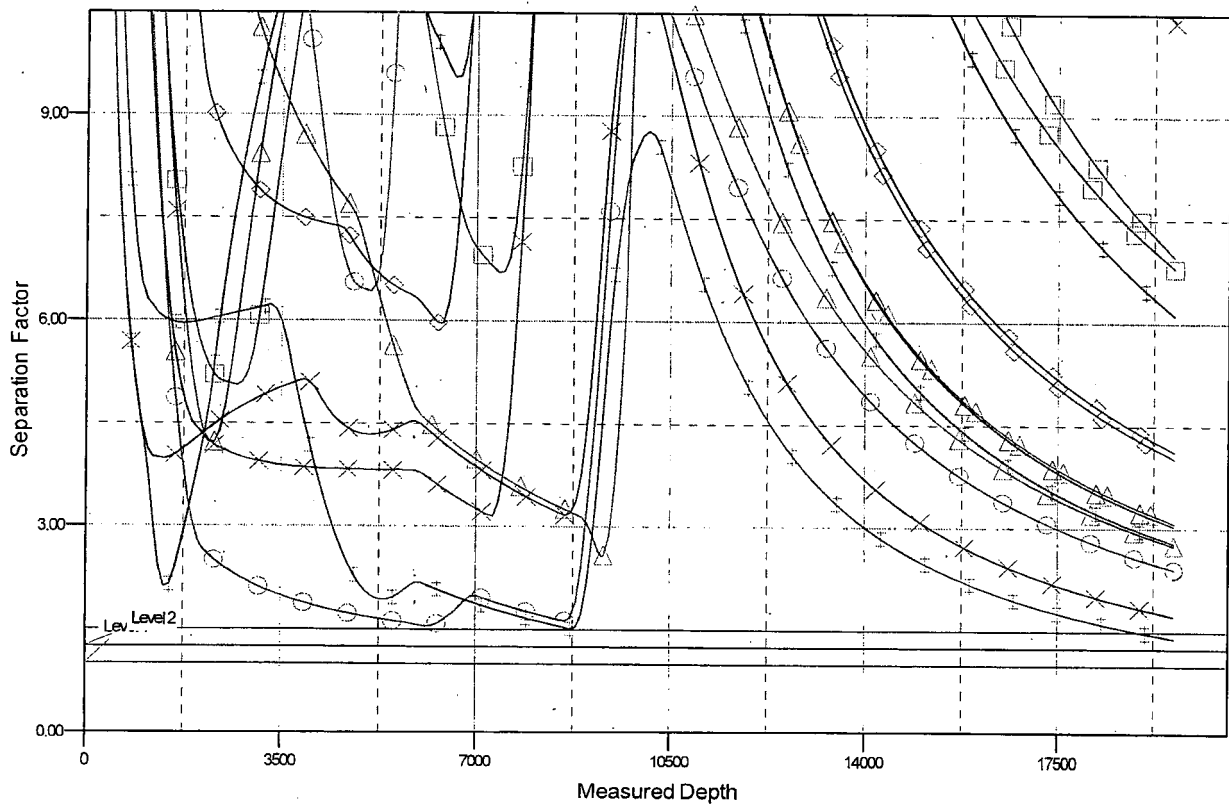
Offset Depths are relative to Offset Datum

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°

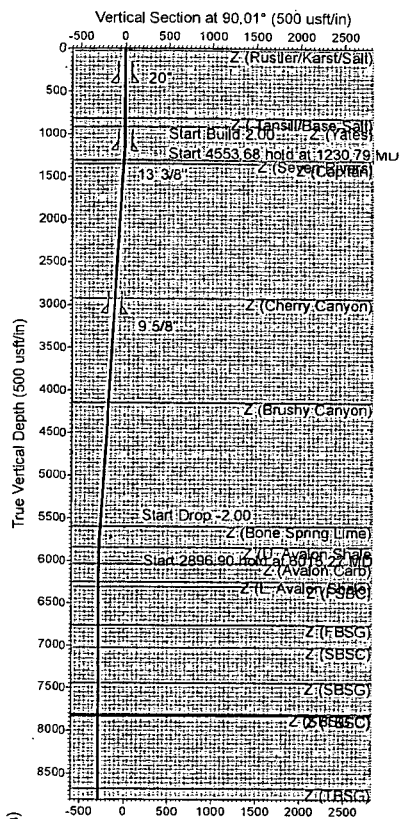
Separation Factor Plot



LEGEND

#125H, OH, Prelim 1VO	#105H, OH, Prelim BVO	#241H, OH, Prelim AVO
#116H, OH, Prelim BVO	#208H, OH, Prelim BVO	#205H, OH, Prelim AVO
#115H, OH, Prelim BVO	#108H, OH, Prelim BVO	#122H, OH, Prelim AVO
#242H, OH, Prelim BVO	#135H, OH, Prelim AVO	#222H, OH, Prelim AVO
#125H, OH, Prelim 1VO	#132H, OH, Prelim AVO	#131H, OH, Prelim AVO
#112H, OH, Prelim BVO	#111H, OH, Prelim AVO	
#136H, OH, Prelim BVO	#121H, OH, Prelim AVO	

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



Matador Resources
dy County, NM (NAD27)
neck 3029 Fed Com (Slot 1)
#221H
Prelim A
Patt 809



RKB Elevation: 3238.285 KB @ 3266.50usf (Patt 809)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	563617.00	585451.00	32.549312	-104.120922	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Diep	Vsect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00
3	1230.79	4.62	312.47	1230.54	6.27	-6.85	2.00	-6.85
4	5784.48	4.62	312.47	5769.46	253.73	-277.15	0.00	-277.19
5	6015.27	0.00	0.00	6000.00	250.00	-284.00	2.00	-284.05
6	8912.17	0.00	0.00	8896.90	290.00	-284.00	0.00	-284.05
7	9362.17	45.00	57.40	9302.04	350.41	-142.62	10.00	-142.68
8	9896.60	90.00	90.01	9506.00	450.23	-317.64	10.00	-317.56
9	19628.98	90.00	90.01	9506.00	458.00	-10050.00	0.00	-10049.92

Targets

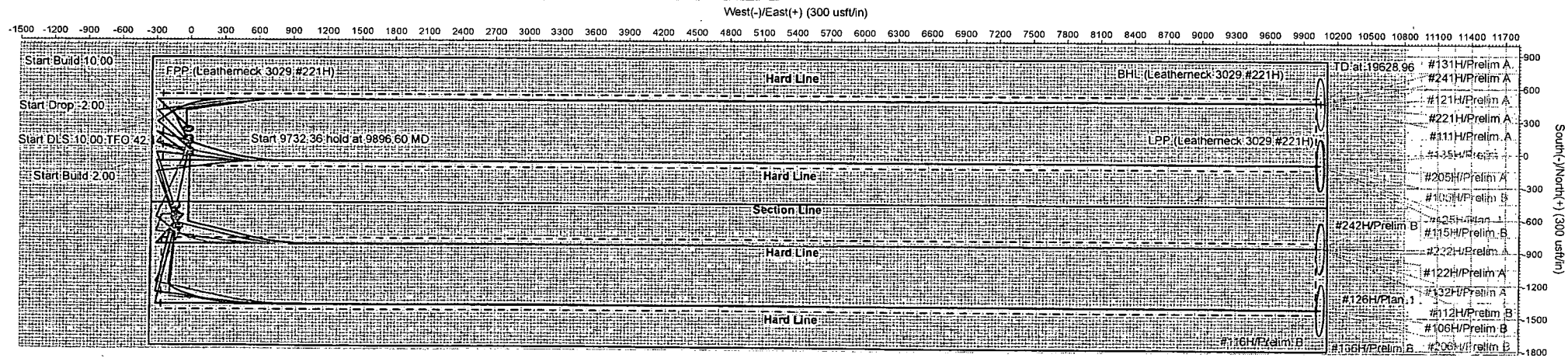
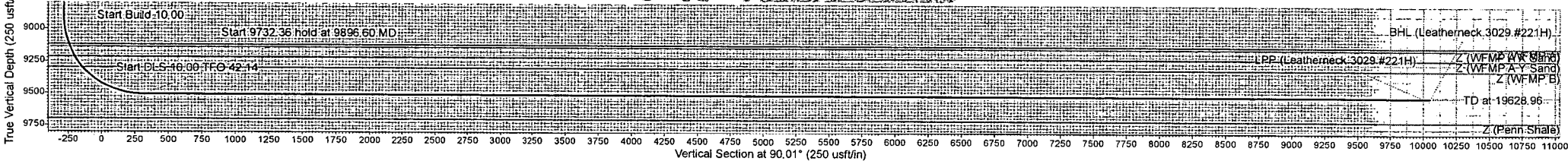
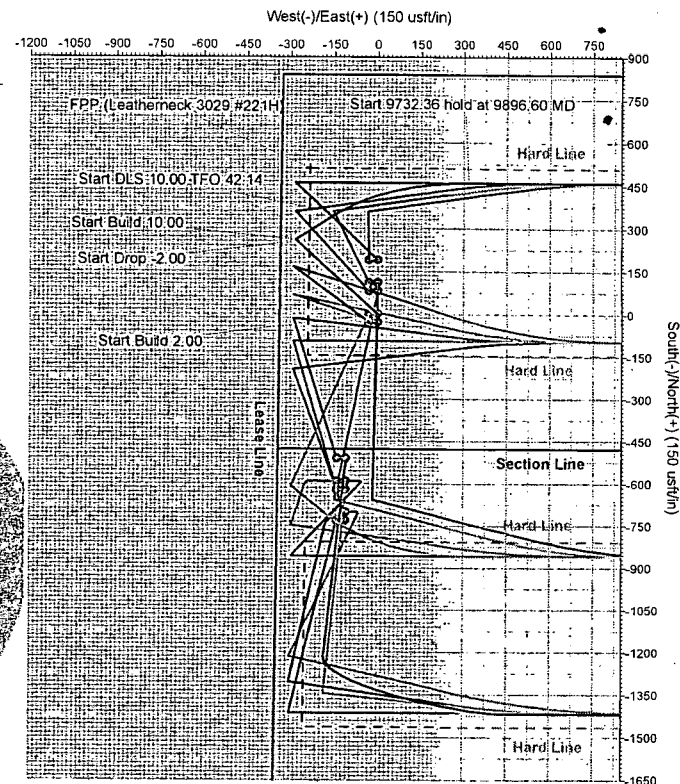
Name	TVD	+N/-S	+E/-W	Northing	Easting
FPP (Leatherneck 3029 #221H)	0.00	510.00	-234.00	564127.00	585217.00
BHL (Leatherneck 3029 #221H)	9506.00	458.00	10050.00	564075.00	575501.00
LPP (Leatherneck 3029 #221H)	9506.00	508.00	10010.00	564125.00	575461.00



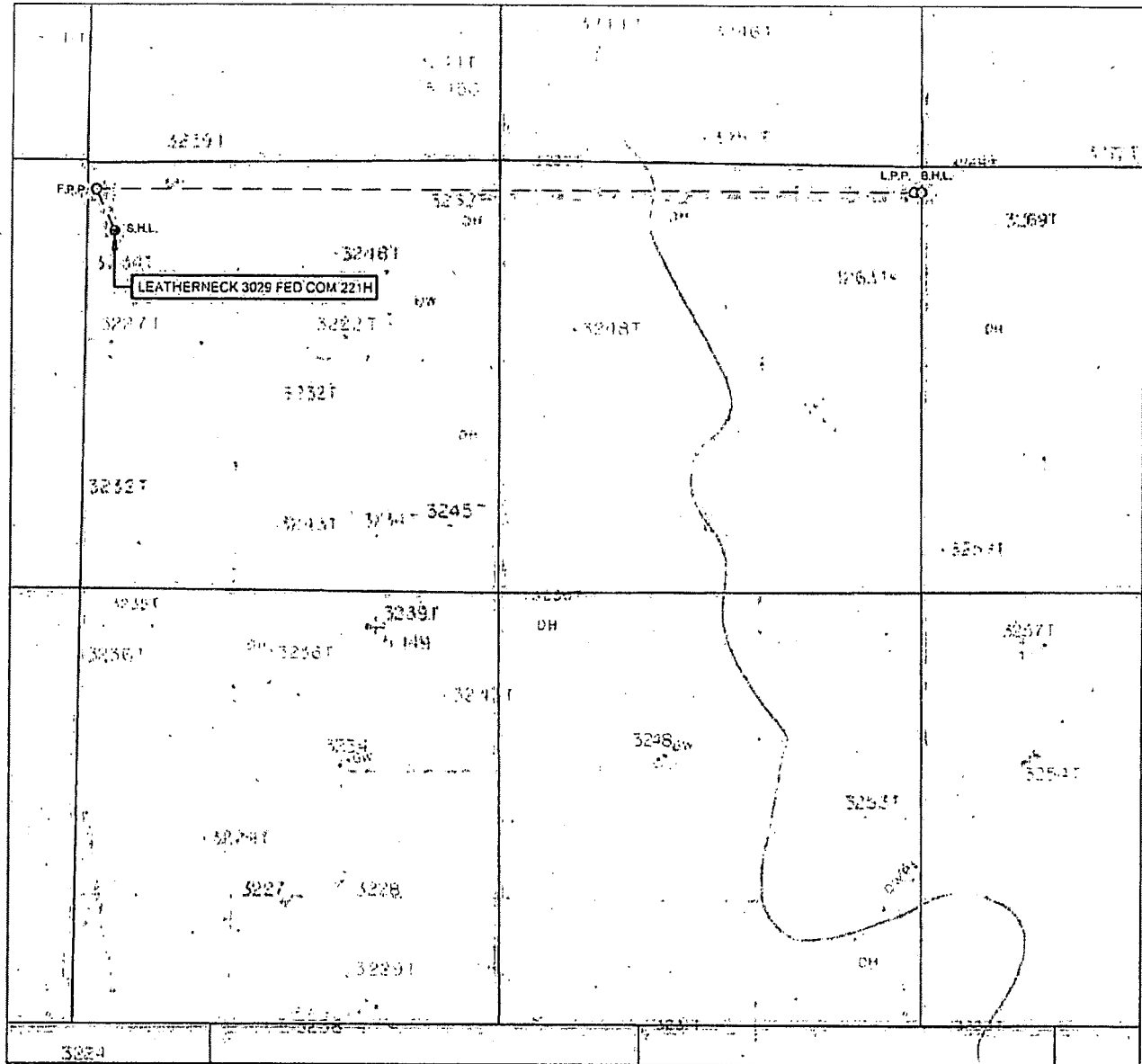
Azimuths to Grid North
True North: -0.11°
Magnetic North: 7.09°
Magnetic Field
Strength: 47972.5nT
Dip Angle: 60.30°
Date: 6/6/2019
Model: HDGM

US State Plane 1927 (Exact solution)
NAD 1927 (NADCON CONUS)
(Clarke 1866)
New Mexico East 3001
Mean Sea Level

Azimuth Corrections
Total Magnetic Corr. (M to G) = 7.09°



LOCATION & ELEVATION VERIFICATION MAP



LEASE NAME & WELL NO.: LEATHERNECK 3029 FED COM 221H

SECTION 30 TWP 20-S RGE 29-E SURVEY N.M.P.M.
 COUNTY EDDY STATE NM ELEVATION 3238'
 DESCRIPTION 840' FNL & 339' FWL

LATITUDE N 32.5494303 LONGITUDE W 104.1214261



SCALE: 1" = 2000'
 0' 1000' 2000'

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY, THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

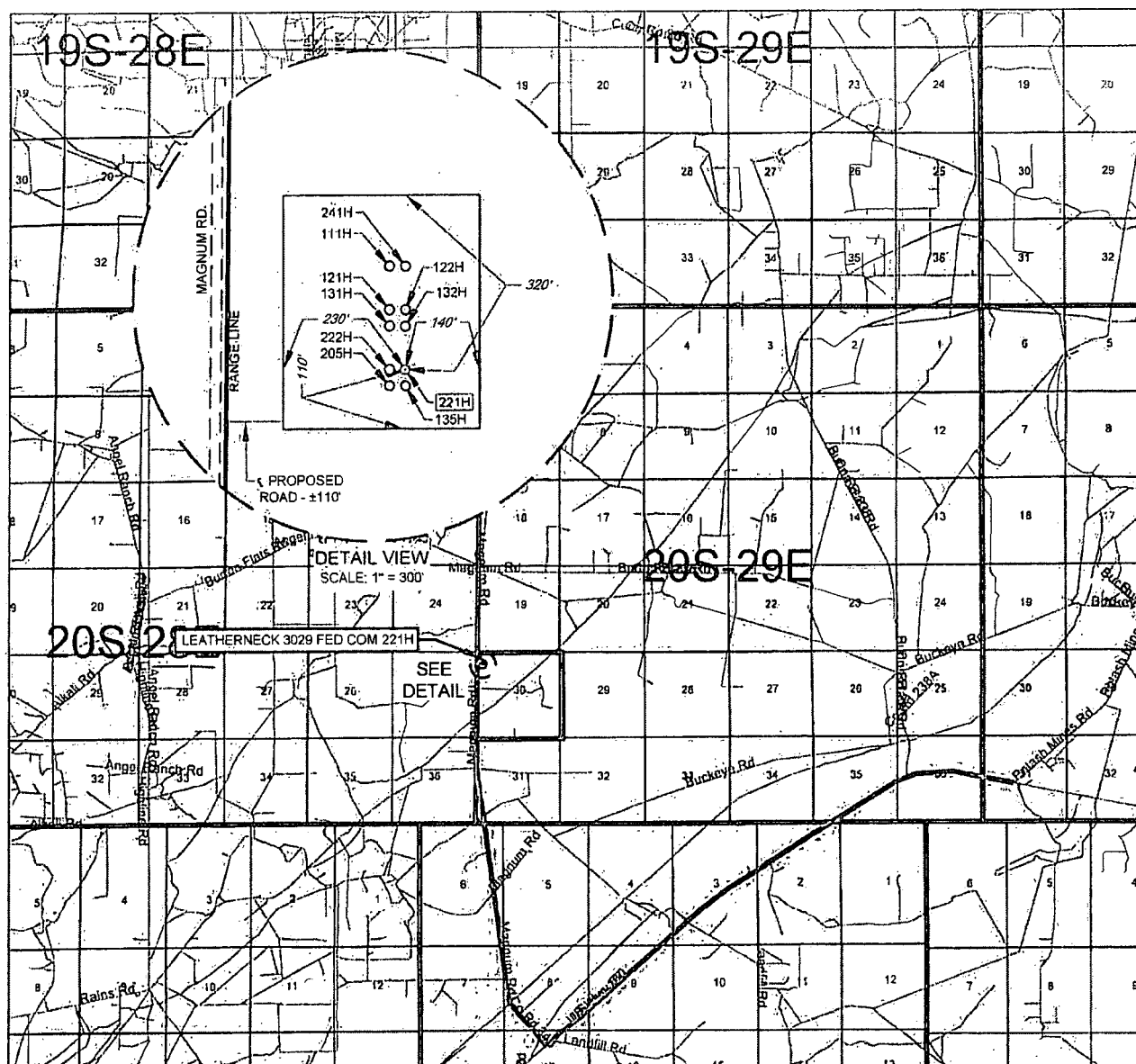
ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET.



TOPOGRAPHIC
 LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140
 TELEPHONE: (817) 744-7512 • FAX: (817) 744-7554
 2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
 TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX: (432) 682-1743
 WWW.TOPOGRAPHIC.COM

VICINITY MAP



LEASE NAME & WELL NO.: LEATHERNECK 3029 FED COM 221H

SECTION 30 TWP 20-S RGE 29-E SURVEY N.M.P.M.

COUNTY EDDY STATE NM

DESCRIPTION 840' FNL & 339' FWL

DISTANCE & DIRECTION

FROM INT. OF NM-360 & US-180/US-62 GO WEST ON US-180/US-62 ±6.8
MILES, THENCE NORTH (RIGHT) ON MAGNUM RD. ±4.8 MILES, THENCE
EAST (RIGHT) ON PROPOSED RD. ±110 FEET TO A POINT ±249 FEET
SOUTHWEST OF THE LOCATION.

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET.



SCALE: 1" = 10000'
0' 5000' 10000'



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

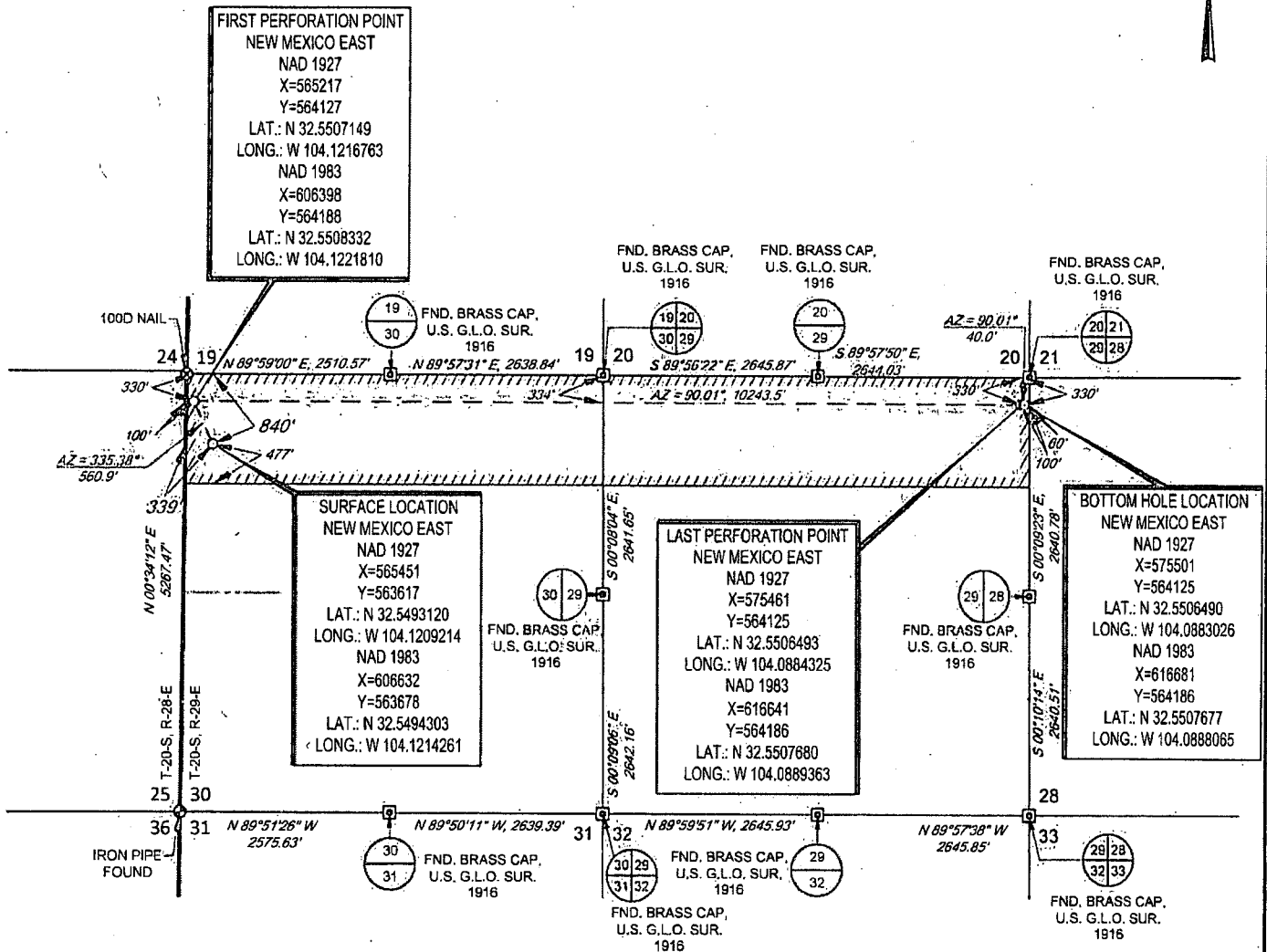
1400 EVERMAN PARKWAY, Ste. 148 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX: (817) 744-7554
2803 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX: (432) 682-1743
WWW.TOPOGRAPHIC.COM

SCALE: 1" = 2000'

0' 1000' 2000'



SECTION 30, TOWNSHIP 20-S, RANGE 29-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: LEATHERNECK 3029 FED COM 221H

SECTION 30 TWP 20-S RGE 29-E SURVEY N.M.P.M.

COUNTY EDDY STATE NM

DESCRIPTION 840' FNL & 339' FWL

DISTANCE & DIRECTION

FROM INT. OF NM-360 & US-180/US-62 GO WEST ON US-180/US-62 ±6.8 MILES, THENCE NORTH (RIGHT) ON MAGNUM RD. ±4.8 MILES, THENCE EAST (RIGHT) ON PROPOSED RD. ±110 FEET TO A POINT ±249 FEET SOUTHWEST OF THE LOCATION.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

AS OF THE DATE OF SURVEY, ALL ABOVE GROUND APPURTENANCES WITHIN 300' OF THE STAKED LOCATION ARE SHOWN HEREON.



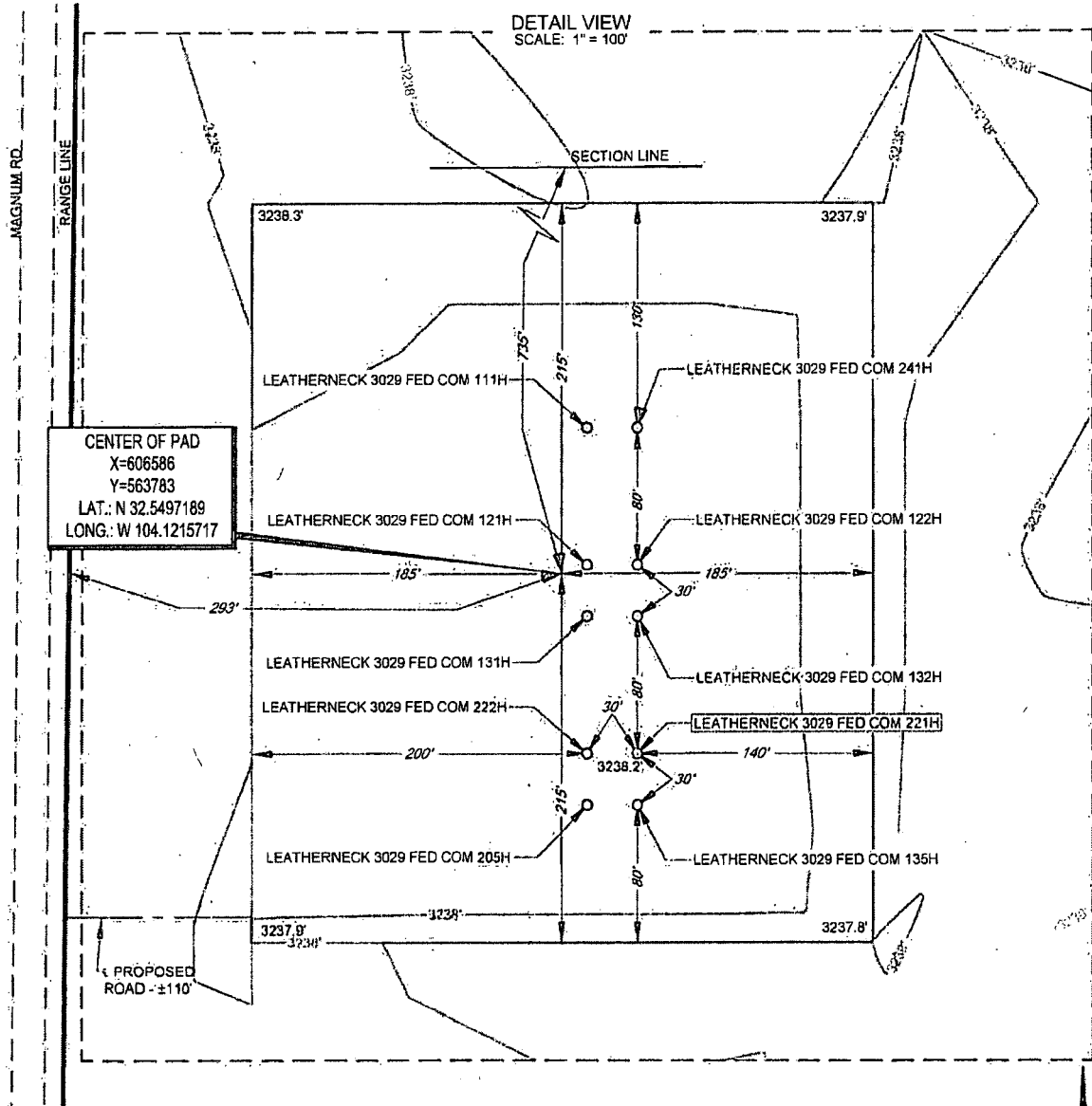
Angel M. Baeza, License No. 25116
MAY 7, 2019

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

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SECTION 30, TOWNSHIP 20-S, RANGE 29-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



LEGEND

- RANGE LINE
- SECTION LINE
- PROPOSED ROAD
- == ROAD WAY

LEASE NAME & WELL NO.: LEATHERNECK 3029 FED COM 221H

221H LATITUDE: N 32.5494303 221H LONGITUDE: W 104.1214261

CENTER OF PAD IS 735' FNL & 293' FWL

SCALE: 1" = 100'

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE; THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

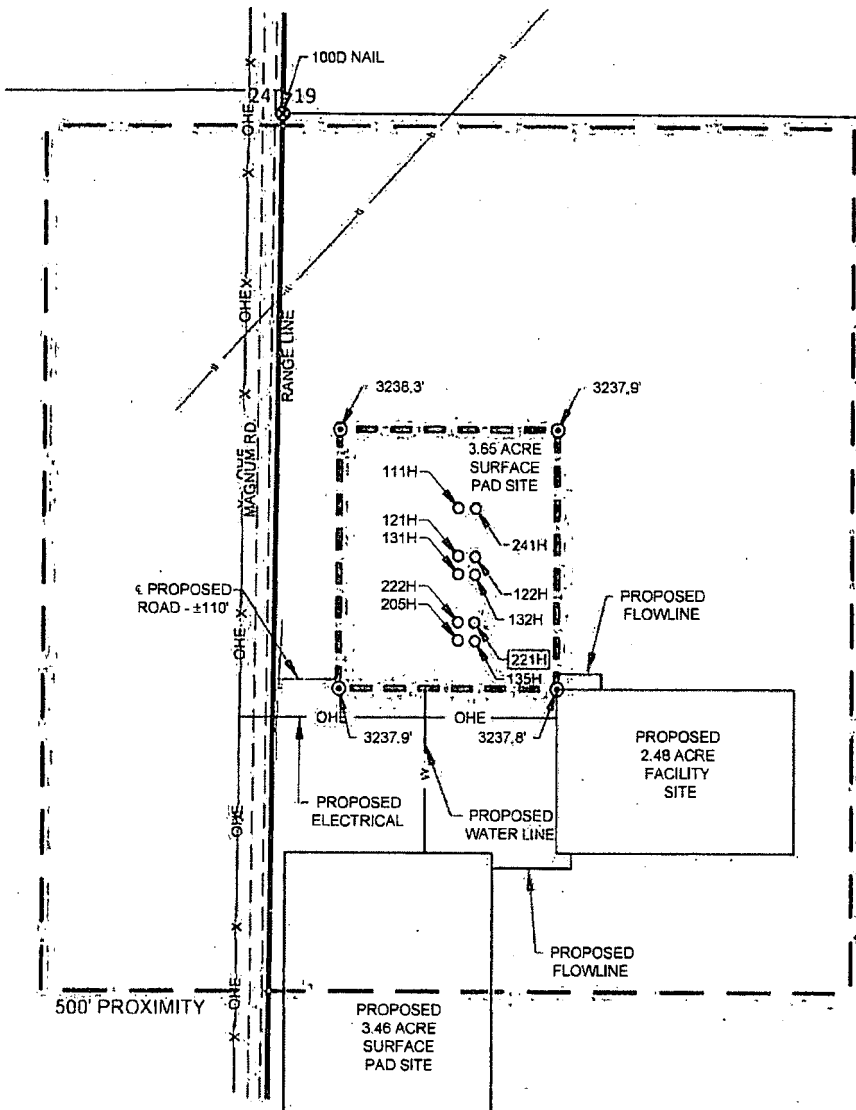
1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
2803 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1853 • FAX (432) 682-1743
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ORIGINAL DOCUMENT SIZE: 8.5" X 11"

SCALE: 1" = 300'

0' 150' 300'

SECTION 30 TOWNSHIP 20-S, RANGE 29-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



LEGEND

- PROPOSED SITE
- 500' PROXIMITY
- TRACT BORDER
- PROPOSED ROAD
- SECTION LINE
- RANGE LINE
- SIXTEENTH SECTION LINE
- OHE OVERHEAD ELECTRIC
- EXISTING PIPELINE
- FENCE LINE
- ROAD WAY
- PROPOSED GAS
- PROPOSED ELECTRIC
- PROPOSED FLOWLINE
- PROPOSED WATER
- IRON ROD SET
- NAIL FOUND



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

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WWW.TOPOGRAPHIC.COM



Angel M. Baeza, License No. 25116

MAY 7, 2019

LEATHERNECK 3029 FED COM 221H PROXIMITY MAP	REVISION:		NOTES: 1. ORIGINAL DOCUMENT SIZE: 8.5" X 11" 2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET. 3. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY MATADOR PRODUCTION COMPANY. ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY. 4. ADJOINER INFORMATION SHOWN FOR INFORMATIONAL PURPOSES ONLY.
	GLH	05/16/17	
DATE: 04/14/17	EAH	09/05/17	
	EAH	05/02/19	
FILE: LQ_LEATHERNECK_3029_FED_COM_221H_REV3			
DRAWN BY: MML			
SHEET: 7 OF 7			

PECOS DISTRICT

DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: LEASE NO.: WELL NAME & NO.: SURFACE HOLE FOOTAGE: BOTTOM HOLE FOOTAGE: LOCATION: COUNTY:	MATADOR PRODUCTION COMPANY NMNM134868 LEATHERNECK FED COM WELLS Section 30, T. 20 S., R 29 E., NMPM Eddy County, New Mexico
--	--

COA

All previous COAs still apply expect the following:

H2S	☒ Yes	☐ No	
Potash	☒ None	☐ Secretary	☐ R-111-P
Cave/Karst Potential	☐ Low	☐ Medium	☒ High
Variance	☐ None	☒ Flex Hose	☐ Other
Wellhead	☐ Conventional	☒ Multibowl	☐ Both
Other	☐ 4 String Area	☒ Capitan Reef	☐ WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☐ COM	☐ Unit

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **CHERRY CANYON** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

1. The **20** inch surface casing shall be set at approximately **400** feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to

- include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **13-3/8** inch 1st intermediate casing is:

Option 1 (Single Stage):

Cement to surface. If cement does not circulate see B.1.a, c-d above.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

Option 2: Operator shall contact BLM before starting contingency plan.

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool: Cement to surface. If cement does not circulate, contact the appropriate BLM office.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

- ❖ In High Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- ❖ **Special Capitan Reef requirements.** If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
(Use this for 3 string wells in the Capitan Reef, if 4 string well ensure FW based mud used across the capitan interval)
 - Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
 - Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per

shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

3. The minimum required fill of cement behind the 9-5/8 inch 2nd intermediate casing is:

Option 1 (Single Stage):

- Cement should tie-back at least **50 ft** above the Capitan Reef (**top of Reef is 1225 ft**) into previous casing string. Operator shall provide method of verification.

Option 2: Operator shall contact BLM before starting contingency plan.

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
 - b. Second stage above DV tool: Cement should tie-back at least **50 ft** above the Capitan Reef (**top of Reef is 1225 ft**) into previous casing string. Operator shall provide method of verification.
4. The minimum required fill of cement behind the 5-1/2 inch production casing is:
- Cement should tie-back **50 ft** above the Capitan Reef (**top of Reef is 1225 ft**) into the previous casing. Operator shall provide method of verification.

ZS 060719