

Submit a Copy To Appropriate District
Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-015-54333
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name C SWEENEY STATE COM
8. Well Number 121H
9. OGRID Number 228937
10. Pool name or Wildcat RED BLUFF; BONE SPRING, SOUTH

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐	
2. Name of Operator Matador Production Company	
3. Address of Operator One Lincoln Centre, Dallas, TX 75240	
4. Well Location Unit Letter <u>A</u> : <u>1013</u> feet from the <u>NORTH</u> line and <u>790</u> feet from the <u>East</u> line Section <u>1</u> Township <u>24S</u> Range <u>28E</u> NMPM County <u>EDDY</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 2,982'	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐ TEMPORARILY ABANDON ☐ CHANGE PLANS ☒ PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐ DOWNHOLE COMMINGLE ☐ CLOSED-LOOP SYSTEM ☐ OTHER: ☐		SUBSEQUENT REPORT OF: REMEDIAL WORK ☐ ALTERING CASING ☐ COMMENCE DRILLING OPNS. ☐ P AND A ☐ CASING/CEMENT JOB ☐ OTHER: ☐	
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13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Request to move the Bottom Hole Location

FROM: 332' FNL & 2541' FEL, Section 2, Township 24S, Range 28E
TO: 555' FNL & 2543' FEL, Section 2, Township 24S, Range 28E

Supporting documents attached:

C-102
Well Plan
Anticollision Report
Casing and Cement Plan

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE: *Eileen M Kosakowski*

TITLE: Regulatory Analyst

DATE: 01/12/2023

PRINT NAME: Eileen M Kosakowski

E-mail address: eileen.kosakowski@matadorresources.com

PHONE: 832-672-4604

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____
 Conditions of Approval (if any): _____

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1625 N. French Dr., Hobbs, NM 88240
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Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
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Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources
Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

FORM C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-54333		² Pool Code 51010		³ Pool Name Red Bluff; Bone Spring, South					
⁴ Property Code 334747		⁵ Property Name C SWEENEY COM					⁶ Well Number 121H		
⁷ OGRIID No. 228937		⁸ Operator Name MATADOR PRODUCTION COMPANY					⁹ Elevation 2982'		
¹⁰ Surface Location									
UL or lot no. 1	Section 1	Township 24-S	Range 28-E	Lot Idn -	Feet from the 1013'	North/South line NORTH	Feet from the 790'	East/West line EAST	County EDDY
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. 2	Section 2	Township 24-S	Range 28-E	Lot Idn -	Feet from the 555'	North/South line NORTH	Feet from the 2543'	East/West line EAST	County EDDY
¹² Dedicated Acres 239.00		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

**NEW MEXICO EAST
NAD 1983**

<u>SURFACE LOCATION (SHL)</u>	<u>KICK OFF POINT (KOP)</u>	<u>FIRST PERF. POINT (FPP)</u>
1013' FNL - SEC. 1 790' FEL - SEC. 1 X=633596 Y=455369 LAT.: N 32.2515323 LONG.: W 104.0348957	555' FNL - SEC. 1 50' FEL - SEC. 1 X=634334 Y=455831 LAT.: N 32.2527968 LONG.: W 104.0325065	555' FNL - SEC. 1 100' FEL - SEC. 1 X=634284 Y=455831 LAT.: N 32.2527965 LONG.: W 104.0326682

LAST PERF. POINT (LPP)
BOTTOM HOLE LOCATION (BHL)

555' FNL - SEC. 2
2543' FEL - SEC. 2
X=626541 Y=455789
LAT.: N 32.2527396
LONG.: W 104.0577129

**17 OPERATOR
CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or is a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Reece Clark 1/9/24
Signature Date

Printed Name
Reece Clark
E-mail Address

**18 SURVEYOR
CERTIFICATION**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief.

11/28/2023

Date of Survey
Signature and Seal of Professional Surveyor

Certificate Number

**NEW MEXICO EAST
NAD 1927**

<u>SURFACE LOCATION (SHL)</u>	<u>KICK OFF POINT (KOP)</u>
X=592413 Y=455310 LAT.: N 32.2514105 LONG.: W 104.0346041	X=593150 Y=455772 LAT.: N 32.2526750 LONG.: W 104.0320149

<u>FIRST PERF. POINT (FPP)</u>	<u>LAST PERF. POINT (LPP)</u>
X=593100 Y=455772 LAT.: N 32.2526756 LONG.: W 104.0321756	X=583058 Y=450730 LAT.: N 32.2526182 LONG.: W 104.0577208



Matador Resources

**Eddy County, New Mexico (NAD 27)
C Sweeney & Scott King (111H - 132H)
C Sweeney Com 121H**

**Wellbore #1
Design #2**

Anticollision Report

14 December, 2023





MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Reference	Design #2
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD + Stations Interval 100.00usft
Depth Range:	Unlimited
Results Limited by:	Maximum centre distance of 2,000.00usft
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	12/14/2023		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	15,959.75	Design #2 (Wellbore #1)	MWD+HRGM	OWSG MWD + HRGM	

Summary						
Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
C Sweeney & Scott King (111H - 132H)						
C Sweeney Com 111H - Wellbore #1 - Design #2	600.00	600.00	29.95	26.11	7.797	CC
C Sweeney Com 111H - Wellbore #1 - Design #2	6,800.00	6,811.11	70.89	17.74	1.334	Level 3, ES, SF
C Sweeney Com 131H - Wellbore #1 - Design #2	1,567.47	1,560.79	106.71	95.84	9.820	CC
C Sweeney Com 131H - Wellbore #1 - Design #2	2,200.00	2,192.91	109.12	93.34	6.918	ES
C Sweeney Com 131H - Wellbore #1 - Design #2	8,050.00	8,023.07	166.33	105.75	2.745	SF
Scott King Fed Com 112H - Wellbore #1 - Design #2	600.00	601.00	42.33	38.49	11.011	CC, ES
Scott King Fed Com 112H - Wellbore #1 - Design #2	15,959.75	15,143.35	1,739.54	1,427.43	5.574	SF
Scott King Fed Com 122H - Wellbore #1 - Design #1	750.00	752.00	29.96	25.04	6.085	CC, ES
Scott King Fed Com 122H - Wellbore #1 - Design #1	15,959.75	15,964.07	1,094.95	741.03	3.094	SF
Scott King Fed Com 132H - Wellbore #1 - Design #2	600.00	599.00	113.98	110.14	29.701	CC, ES
Scott King Fed Com 132H - Wellbore #1 - Design #2	15,959.75	16,524.55	1,595.89	1,260.25	4.755	SF
C Sweeney & Scott King (Offsets)						
Ches Riddle Com 201H - Wellbore #1 - Surveys	13,661.38	8,310.63	203.38	50.96	1.334	Level 3, CC, ES, SF
Ches Riddle Com 221H - Wellbore #1 - Surveys	13,717.06	8,307.78	136.10	-17.46	0.886	Level 3, CC, ES, SF
Ches Riddle Fed Com 206H - Wellbore #1 - Surveys	13,665.10	8,273.26	1,329.52	1,176.43	8.684	CC
Ches Riddle Fed Com 206H - Wellbore #1 - Surveys	13,700.00	8,273.28	1,329.98	1,176.18	8.647	ES
Ches Riddle Fed Com 206H - Wellbore #1 - Surveys	13,800.00	8,273.32	1,336.35	1,180.97	8.601	SF
Ches Riddle Fed Com 222H - Wellbore #1 - Surveys	13,749.37	8,297.54	1,323.52	1,169.17	8.575	CC
Ches Riddle Fed Com 222H - Wellbore #1 - Surveys	13,800.00	8,297.28	1,324.49	1,169.14	8.526	ES
Ches Riddle Fed Com 222H - Wellbore #1 - Surveys	13,900.00	8,296.78	1,332.07	1,175.26	8.495	SF
General Kehoe 02-24S-28E RB #217H - Wellbore #1 - Sui	14,718.09	8,364.53	504.28	326.96	2.844	CC, ES, SF
General Kehoe 02-24S-28E RB 203H - Wellbore #1 - Sui	15,691.71	8,357.60	500.57	299.77	2.493	CC
General Kehoe 02-24S-28E RB 203H - Wellbore #1 - Sui	15,700.00	8,357.51	500.64	299.65	2.491	ES, SF
General Kehoe 02-24S-28E RB 208H - Wellbore #1 - Sui	13,859.90	8,334.09	498.82	340.39	3.149	CC, ES
General Kehoe 02-24S-28E RB 208H - Wellbore #1 - Sui	13,900.00	8,334.39	500.43	341.41	3.147	SF
General Kehoe 02-24S-28E RB 223H - Wellbore #1 - Sui	15,596.00	8,350.38	493.33	294.95	2.487	CC
General Kehoe 02-24S-28E RB 223H - Wellbore #1 - Sui	15,600.00	8,350.43	493.35	294.87	2.486	ES, SF
General Kehoe 02-24S-28E RB 223H - Wellbore #2 - Sui	15,596.00	8,350.38	493.33	294.95	2.487	CC
General Kehoe 02-24S-28E RB 223H - Wellbore #2 - Sui	15,600.00	8,350.43	493.35	294.87	2.486	ES, SF
General Kehoe 02-24S-28E RB 228H - Wellbore #1 - Sui	13,944.88	8,339.47	502.60	342.29	3.135	CC, ES, SF
Layla 35 PA #1H - Wellbore #1 - Surveys	13,675.83	8,068.58	606.27	464.87	4.288	CC
Layla 35 PA #1H - Wellbore #1 - Surveys	13,700.00	8,074.60	606.77	464.35	4.261	ES, SF
Malaga 1 Com #1 - Wellbore #1 - Surveys	11,737.78	8,254.00	105.85	-165.25	0.390	Level 3, CC, ES, SF

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	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
Harroun 6 Fed Com						
Harroun 6 Fed Com #1H - Wellbore #1 - Design #2	7,984.33	8,166.25	978.08	919.56	16.713	CC, ES
Harroun 6 Fed Com #1H - Wellbore #1 - Design #2	8,050.00	8,231.75	982.15	923.19	16.658	SF
Harroun 6 Fed Com #2H - Wellbore #1 - Design #2	8,005.29	8,212.51	744.14	683.34	12.238	CC, ES
Harroun 6 Fed Com #2H - Wellbore #1 - Design #2	8,050.00	8,257.17	745.81	684.68	12.201	SF
Malaga						
Malaga C 3 - Wellbore #1 - Surveys	11,424.77	8,290.90	1,542.76	1,246.32	5.204	CC, ES
Malaga C 3 - Wellbore #1 - Surveys	11,600.00	8,290.90	1,552.68	1,252.88	5.179	SF
Ray State Com (023H,114H,124H,134H)						
Ray State Com 023H - Wellbore #1 - Surveys	2,305.63	2,289.68	126.13	109.47	7.570	CC, ES
Ray State Com 023H - Wellbore #1 - Surveys	2,400.00	2,378.44	129.68	112.35	7.485	SF
Ray State Com 114H - Wellbore #1 - Surveys	5,533.06	5,495.30	188.57	147.62	4.605	CC
Ray State Com 114H - Wellbore #1 - Surveys	5,600.00	5,561.19	188.88	147.42	4.556	ES
Ray State Com 114H - Wellbore #1 - Surveys	5,800.00	5,758.81	193.13	150.20	4.498	SF
Ray State Com 124H - Wellbore #1 - Surveys	8,452.37	8,334.85	48.04	-3.65	0.929	Level 3, CC, ES, SF
Ray State Com 134H - Wellbore #1 - Surveys	8,647.26	8,303.62	46.60	-14.26	0.766	Level 3, CC, ES, SF
Ray State Com (113H,123H)						
Ray State Com 123H - Wellbore #1 - Surveys	10,344.61	8,032.19	812.91	741.05	11.313	CC, ES
Ray State Com 123H - Wellbore #1 - Surveys	10,500.00	8,029.02	827.61	753.38	11.149	SF
Ray State Com (204H,217H,224H)						
Ray State Com 203H - Wellbore #1 - Surveys	10,313.44	8,347.30	618.59	535.46	7.441	CC, ES
Ray State Com 203H - Wellbore #1 - Surveys	10,400.00	8,348.46	624.62	540.17	7.396	SF
Ray State Com 204H - Wellbore #1 - Surveys	3,975.00	3,925.03	168.70	147.49	7.955	CC
Ray State Com 204H - Wellbore #1 - Surveys	4,000.00	3,949.20	168.78	147.40	7.897	ES
Ray State Com 204H - Wellbore #1 - Surveys	8,536.93	8,321.53	269.73	217.98	5.213	SF
Ray State Com 217H - Wellbore #1 - Surveys	2,862.03	2,833.80	48.66	33.29	3.166	CC, ES, SF
Ray State Com 217H - Wellbore #2 - Surveys	2,862.03	2,833.80	48.66	33.29	3.166	CC, ES, SF
Ray State Com 223H - Wellbore #1 - Surveys	10,442.06	8,307.04	597.25	511.96	7.002	CC, ES
Ray State Com 223H - Wellbore #1 - Surveys	10,500.00	8,304.79	600.05	513.77	6.955	SF
Ray State Com 223H - Wellbore #2 - Surveys	10,442.06	8,307.04	597.25	511.96	7.002	CC, ES
Ray State Com 223H - Wellbore #2 - Surveys	10,500.00	8,304.79	600.05	513.77	6.955	SF
Ray State Com 224H - Wellbore #1 - Surveys	3,824.59	3,785.93	77.17	56.87	3.801	CC, ES
Ray State Com 224H - Wellbore #1 - Surveys	3,900.00	3,860.09	78.32	57.47	3.756	SF
Spud Muffin 31 30 Fed Com						
Spud Muffin 31-30 Fed Com 621H - Wellbore #1 - Surveys	7,897.74	7,911.42	613.10	554.45	10.454	CC
Spud Muffin 31-30 Fed Com 621H - Wellbore #1 - Surveys	7,900.00	7,913.87	613.10	554.43	10.451	ES
Spud Muffin 31-30 Fed Com 621H - Wellbore #1 - Surveys	7,950.00	7,968.12	614.54	555.56	10.419	SF
Spud Muffin 31-30 Fed Com (Offsets)						
Height CC 6 7 Federal Com #311H - Wellbore #1 - Surveys	8,004.32	8,237.29	851.26	782.57	12.393	CC, ES
Height CC 6 7 Federal Com #311H - Wellbore #1 - Surveys	8,075.00	8,321.15	855.02	785.77	12.347	SF
Spud Muffin 31-30 Fed Com 621H - Wellbore #1 - Surveys	7,897.74	7,911.42	613.11	553.84	10.345	CC
Spud Muffin 31-30 Fed Com 621H - Wellbore #1 - Surveys	7,900.00	7,913.87	613.11	553.83	10.342	ES
Spud Muffin 31-30 Fed Com 621H - Wellbore #1 - Surveys	7,950.00	7,968.12	614.55	554.95	10.312	SF

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - C Sweeney Com 111H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Survey Program: Reference		0-MWD+HRGM Offset		Semi Major Axis Offset		Azimuth			Offset Wellbore Centre		Rule Assigned: Distance				Offset Well Error: 0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Azimuth from North (°)	+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	124.303		-16.88	24.74	29.95						
100.00	100.00	100.00	100.00	0.13	0.13	124.303		-16.88	24.74	29.95	29.69	0.26	116.844			
200.00	200.00	200.00	200.00	0.49	0.49	124.303		-16.88	24.74	29.95	28.97	0.97	30.771			
300.00	300.00	300.00	300.00	0.85	0.85	124.303		-16.88	24.74	29.95	28.26	1.69	17.719			
400.00	400.00	400.00	400.00	1.20	1.20	124.303		-16.88	24.74	29.95	27.54	2.41	12.441			
500.00	500.00	500.00	500.00	1.56	1.56	124.303		-16.88	24.74	29.95	26.82	3.12	9.586			
600.00	600.00	600.00	600.00	1.92	1.92	124.303		-16.88	24.74	29.95	26.11	3.84	7.797	CC		
700.00	700.00	699.49	699.48	2.28	2.27	122.626		-16.50	25.78	30.61	26.06	4.55	6.725			
750.00	750.00	749.12	749.08	2.46	2.45	120.033		-15.88	27.47	31.75	26.84	4.90	6.474			
800.00	800.00	798.70	798.58	2.64	2.62	117.201		-14.97	29.97	33.33	28.08	5.25	6.345			
900.00	899.93	897.73	897.29	2.99	2.98	113.027		-12.28	37.38	37.21	31.26	5.95	6.255			
1,000.00	999.68	996.58	995.50	3.35	3.33	110.575		-8.42	47.96	41.88	35.24	6.64	6.304			
1,100.00	1,099.13	1,095.25	1,093.08	3.71	3.71	109.466		-3.43	61.70	47.23	39.89	7.34	6.433			
1,169.89	1,168.38	1,164.71	1,161.50	3.96	3.97	109.464		0.66	72.93	51.06	43.22	7.84	6.509			
1,200.00	1,198.18	1,194.79	1,191.12	4.08	4.09	109.739		2.45	77.84	52.54	44.47	8.07	6.513			
1,300.00	1,297.10	1,294.66	1,289.48	4.45	4.49	110.550		8.38	94.14	57.44	48.62	8.81	6.519			
1,400.00	1,396.03	1,394.54	1,387.84	4.83	4.89	111.233		14.31	110.44	62.34	52.78	9.57	6.518			
1,500.00	1,494.96	1,494.42	1,486.20	5.22	5.29	111.816		20.24	126.73	67.26	56.93	10.33	6.513			
1,600.00	1,593.89	1,594.30	1,584.55	5.61	5.70	112.319		26.18	143.03	72.18	61.09	11.09	6.506			
1,700.00	1,692.81	1,694.17	1,682.91	6.00	6.12	112.758		32.11	159.33	77.11	65.24	11.87	6.498			
1,800.00	1,791.74	1,794.05	1,781.27	6.39	6.53	113.145		38.04	175.63	82.04	69.40	12.64	6.489			
1,900.00	1,890.67	1,893.93	1,879.63	6.79	6.95	113.487		43.97	191.92	86.97	73.55	13.42	6.480			
2,000.00	1,989.60	1,993.80	1,977.99	7.19	7.36	113.792		49.90	208.22	91.91	77.71	14.20	6.471			
2,100.00	2,088.53	2,093.68	2,076.35	7.58	7.78	114.067		55.84	224.52	96.85	81.86	14.99	6.462			
2,200.00	2,187.45	2,193.56	2,174.71	7.98	8.20	114.314		61.77	240.82	101.79	86.01	15.77	6.453			
2,300.00	2,286.38	2,293.43	2,273.07	8.38	8.62	114.539		67.70	257.11	106.73	90.17	16.56	6.444			
2,400.00	2,385.31	2,393.31	2,371.43	8.78	9.05	114.744		73.63	273.41	111.68	94.32	17.35	6.436			
2,500.00	2,484.24	2,493.19	2,469.79	9.19	9.47	114.931		79.56	289.71	116.62	98.48	18.14	6.428			
2,600.00	2,583.16	2,593.06	2,568.15	9.59	9.89	115.103		85.49	306.01	121.57	102.63	18.93	6.420			
2,700.00	2,682.09	2,692.94	2,666.51	9.99	10.32	115.262		91.43	322.30	126.51	106.79	19.73	6.413			
2,800.00	2,781.02	2,792.82	2,764.87	10.39	10.74	115.409		97.36	338.60	131.46	110.94	20.52	6.406			
2,900.00	2,879.95	2,892.70	2,863.23	10.80	11.17	115.545		103.29	354.90	136.41	115.10	21.32	6.399			
3,000.00	2,978.88	2,992.57	2,961.59	11.20	11.59	115.671		109.22	371.20	141.36	119.25	22.11	6.393			
3,100.00	3,077.80	3,092.45	3,059.95	11.60	12.02	115.789		115.15	387.49	146.31	123.40	22.91	6.387			
3,200.00	3,176.73	3,192.33	3,158.31	12.01	12.44	115.899		121.09	403.79	151.26	127.56	23.71	6.381			
3,300.00	3,275.66	3,292.20	3,256.67	12.41	12.87	116.003		127.02	420.09	156.22	131.71	24.50	6.375			
3,400.00	3,374.59	3,392.08	3,355.03	12.82	13.30	116.100		132.95	436.39	161.17	135.87	25.30	6.370			
3,500.00	3,473.52	3,491.96	3,453.39	13.22	13.72	116.191		138.88	452.68	166.12	140.02	26.10	6.365			
3,600.00	3,572.44	3,591.83	3,551.75	13.63	14.15	116.276		144.81	468.98	171.07	144.18	26.90	6.360			
3,700.00	3,671.37	3,694.56	3,652.93	14.03	14.59	116.158		151.33	485.46	175.62	147.89	27.72	6.335			
3,800.00	3,770.30	3,800.15	3,757.00	14.44	15.03	115.377		160.86	500.50	177.36	148.83	28.54	6.216			
3,900.00	3,869.23	3,904.57	3,859.88	14.84	15.46	114.036		173.38	513.25	176.04	146.74	29.30	6.007			
4,000.00	3,968.15	4,004.46	3,958.25	15.25	15.87	112.701		186.36	524.76	173.79	143.74	30.06	5.782			
4,100.00	4,067.08	4,104.35	4,056.62	15.66	16.27	111.330		199.33	536.27	171.64	140.84	30.81	5.572			
4,200.00	4,166.01	4,204.24	4,155.00	16.06	16.68	109.925		212.31	547.78	169.59	138.05	31.55	5.376			
4,300.00	4,264.94	4,304.13	4,253.37	16.47	17.09	108.486		225.28	559.30	167.65	135.36	32.29	5.192			
4,400.00	4,363.87	4,404.02	4,351.74	16.87	17.50	107.014		238.25	570.81	165.82	132.80	33.02	5.021			
4,500.00	4,462.79	4,503.91	4,450.11	17.28	17.91	105.508		251.23	582.32	164.11	130.35	33.75	4.862			
4,600.00	4,561.72	4,603.80	4,548.48	17.69	18.32	103.971		264.20	593.83	162.51	128.03	34.48	4.713			
4,700.00	4,660.65	4,703.69	4,646.86	18.09	18.74	102.404		277.18	605.35	161.03	125.83	35.20	4.575			
4,800.00	4,759.58	4,803.58	4,745.23	18.50	19.15	100.807		290.15	616.86	159.68	123.76	35.92	4.446			
4,900.00	4,858.50	4,903.47	4,843.60	18.91	19.56	99.183		303.13	628.37	158.46	121.82	36.63	4.326			

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

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COMPASS 5000.15 Build 91E



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - C Sweeney Com 111H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Survey Program: 0-MWD+HRGM		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: Distance Between Centres		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)	Ellipses (usft)			
5,000.00	4,957.43	5,003.36	4,941.97	19.31	19.98	97.535	316.10	639.88	157.36	120.02	37.34	4.214	
5,100.00	5,056.36	5,103.25	5,040.34	19.72	20.39	95.863	329.07	651.40	156.40	118.36	38.04	4.111	
5,200.00	5,155.29	5,203.14	5,138.72	20.13	20.81	94.170	342.05	662.91	155.58	116.83	38.74	4.016	
5,300.00	5,254.22	5,303.03	5,237.09	20.53	21.22	92.459	355.02	674.42	154.89	115.45	39.44	3.927	
5,400.00	5,353.14	5,402.92	5,335.46	20.94	21.64	90.734	368.00	685.93	154.35	114.21	40.14	3.846	
5,500.00	5,452.07	5,502.80	5,433.83	21.35	22.05	88.996	380.97	697.45	153.95	113.12	40.83	3.771	
5,600.00	5,551.00	5,602.81	5,532.32	21.75	22.47	87.244	393.96	708.97	153.68	112.16	41.52	3.701	
5,700.00	5,649.93	5,706.70	5,634.95	22.16	22.89	85.825	405.98	719.64	152.18	109.95	42.23	3.603	
5,800.00	5,748.86	5,810.54	5,738.05	22.57	23.29	85.371	415.21	727.83	148.11	105.16	42.95	3.448	
5,900.00	5,847.78	5,914.08	5,841.23	22.98	23.66	85.940	421.62	733.52	141.44	97.75	43.68	3.238	
6,000.00	5,946.71	6,017.03	5,944.06	23.38	24.01	87.713	425.23	736.72	132.27	87.82	44.44	2.976	
6,100.00	6,045.64	6,118.62	6,045.64	23.79	24.34	91.023	426.12	737.51	120.95	75.66	45.29	2.671	
6,200.00	6,144.57	6,217.55	6,144.57	24.20	24.65	95.501	426.12	737.51	109.44	63.16	46.28	2.365	
6,300.00	6,243.49	6,316.48	6,243.49	24.60	24.95	100.988	426.12	737.51	98.75	51.40	47.36	2.085	
6,400.00	6,342.42	6,415.40	6,342.42	25.01	25.26	107.727	426.12	737.51	89.18	40.65	48.53	1.838	
6,500.00	6,441.35	6,514.33	6,441.35	25.42	25.57	115.940	426.12	737.51	81.13	31.34	49.79	1.629	
6,600.00	6,540.28	6,613.26	6,540.28	25.83	25.89	125.709	426.12	737.51	75.07	24.01	51.07	1.470 Level 3	
6,700.00	6,639.21	6,712.19	6,639.21	26.23	26.20	136.804	426.12	737.51	71.53	19.30	52.24	1.369 Level 3	
6,771.65	6,710.09	6,783.07	6,710.09	26.53	26.42	145.216	426.12	737.51	70.77	17.84	52.92	1.337 Level 3	
6,800.00	6,738.13	6,811.11	6,738.13	26.64	26.51	148.564	426.12	737.51	70.89	17.74	53.15	1.334 Level 3, ES, SF	
6,894.50	6,831.62	6,904.60	6,831.62	27.03	26.81	159.442	426.12	737.51	73.00	19.28	53.73	1.359 Level 3	
6,900.00	6,837.06	6,910.04	6,837.06	27.05	26.83	160.048	426.12	737.51	73.20	19.45	53.75	1.362 Level 3	
7,000.00	6,936.25	7,009.23	6,936.25	27.44	27.15	169.160	426.12	737.51	77.43	23.27	54.16	1.430 Level 3	
7,100.00	7,035.82	7,107.83	7,034.38	27.82	27.42	-179.472	425.44	729.76	82.00	27.85	54.15	1.514	
7,200.00	7,135.65	7,198.13	7,121.15	28.17	27.61	-161.120	423.31	705.34	93.49	41.12	52.37	1.785	
7,300.00	7,235.62	7,276.91	7,191.93	28.51	27.73	-144.248	420.31	671.07	121.11	72.73	48.38	2.503	
7,314.38	7,250.00	7,287.25	7,200.77	28.55	27.75	-142.243	419.84	665.73	126.54	78.82	47.71	2.652	
7,400.00	7,335.62	7,343.35	7,246.55	28.83	27.82	-132.511	417.02	633.49	166.40	122.59	43.81	3.798	
7,500.00	7,435.62	7,400.00	7,288.61	29.15	27.88	-124.808	413.72	595.74	226.40	186.20	40.20	5.632	
7,600.00	7,535.62	7,442.07	7,316.78	29.47	27.94	-120.354	411.00	564.63	296.37	259.45	36.92	8.028	
7,700.00	7,635.62	7,475.00	7,336.85	29.79	27.98	-117.491	408.72	538.63	373.25	338.88	34.37	10.859	
7,800.00	7,735.62	7,508.04	7,355.13	30.11	28.03	-115.072	406.32	511.22	454.93	422.03	32.90	13.829	
7,892.92	7,828.54	7,525.00	7,363.77	30.41	28.05	-113.981	405.05	496.68	534.09	502.73	31.36	17.030	
7,900.00	7,835.62	7,532.84	7,367.58	30.43	28.07	-113.511	404.46	489.85	540.12	508.52	31.60	17.092	
7,925.00	7,860.59	7,538.79	7,370.40	30.50	28.08	-113.229	404.00	484.63	561.37	530.06	31.30	17.932	
7,950.00	7,885.48	7,550.00	7,375.53	30.57	28.10	-112.739	403.13	474.71	582.16	550.93	31.23	18.639	
7,975.00	7,910.21	7,550.00	7,375.53	30.63	28.10	-112.963	403.13	474.71	602.34	571.71	30.63	19.667	
8,000.00	7,934.72	7,558.15	7,379.12	30.69	28.11	-112.804	402.49	467.41	622.01	591.63	30.38	20.474	
8,025.00	7,958.94	7,565.04	7,382.05	30.75	28.12	-112.793	401.95	461.20	641.10	611.04	30.07	21.322	
8,050.00	7,982.80	7,575.00	7,386.13	30.80	28.14	-112.682	401.16	452.15	659.61	629.75	29.86	22.088	
8,075.00	8,006.24	7,575.00	7,386.13	30.85	28.14	-113.224	401.16	452.15	677.51	648.22	29.29	23.133	
8,100.00	8,029.19	7,586.77	7,390.71	30.89	28.17	-113.148	400.21	441.35	694.70	665.57	29.13	23.845	
8,125.00	8,051.59	7,600.00	7,395.53	30.93	28.20	-113.054	399.14	429.08	711.33	682.32	29.01	24.517	
8,150.00	8,073.38	7,600.00	7,395.53	30.96	28.20	-113.863	399.14	429.08	727.18	698.70	28.48	25.537	
8,175.00	8,094.49	7,609.83	7,398.89	31.00	28.22	-114.138	398.33	419.87	742.37	714.12	28.25	26.278	
8,200.00	8,114.88	7,625.00	7,403.70	31.03	28.26	-114.123	397.08	405.54	756.95	728.78	28.17	26.872	
8,225.00	8,134.48	7,625.00	7,403.70	31.06	28.26	-115.289	397.08	405.54	770.63	742.93	27.70	27.824	
8,250.00	8,153.25	7,633.92	7,406.31	31.08	28.28	-115.932	396.34	397.05	783.65	756.18	27.47	28.527	
8,275.00	8,171.13	7,642.14	7,408.58	31.11	28.30	-116.763	395.65	389.18	795.93	768.69	27.24	29.214	
8,300.00	8,188.06	7,650.00	7,410.62	31.13	28.33	-117.783	394.99	381.62	807.44	780.41	27.03	29.872	
8,325.00	8,204.01	7,658.80	7,412.76	31.16	28.35	-118.891	394.24	373.11	818.18	791.33	26.85	30.468	
8,350.00	8,218.93	7,675.00	7,416.28	31.18	28.40	-119.337	392.86	357.36	828.23	801.42	26.81	30.892	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - C Sweeney Com 111H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Survey Program: 0-MWD+HRGM		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: 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)			
8,375.00	8,232.78	7,675.00	7,416.28	31.21	28.40	-121.946	392.86	357.36	837.29	810.74	26.55	31.534	
8,400.00	8,245.53	7,684.28	7,418.06	31.24	28.43	-123.748	392.07	348.29	845.65	819.19	26.46	31.963	
8,425.00	8,257.13	7,700.00	7,420.66	31.27	28.48	-124.788	390.72	332.84	853.28	826.83	26.45	32.265	
8,450.00	8,267.55	7,700.00	7,420.66	31.31	28.48	-129.075	390.72	332.84	859.93	833.60	26.33	32.661	
8,475.00	8,276.78	7,710.19	7,422.07	31.35	28.52	-132.070	389.84	322.79	865.83	839.50	26.33	32.885	
8,500.00	8,284.77	7,725.00	7,423.74	31.40	28.57	-134.373	388.56	308.13	870.97	844.60	26.37	33.028	
8,525.00	8,291.51	7,725.00	7,423.74	31.45	28.57	-142.038	388.56	308.13	875.17	848.76	26.41	33.138	
8,550.00	8,296.99	7,736.38	7,424.71	31.51	28.62	-147.196	387.57	296.83	878.56	852.06	26.51	33.146	
8,575.00	8,301.18	7,750.00	7,425.52	31.57	28.67	-152.225	386.38	283.29	881.17	854.55	26.62	33.101	
8,600.00	8,304.07	7,750.00	7,425.52	31.64	28.67	-165.995	386.38	283.29	882.88	856.06	26.82	32.917	
8,625.00	8,305.66	7,762.73	7,425.92	31.72	28.72	-173.870	385.27	270.62	883.74	856.74	27.00	32.730	
8,642.92	8,306.00	7,771.52	7,426.00	31.77	28.76	179.926	384.51	261.86	883.86	856.71	27.15	32.560	
8,656.26	8,306.00	7,777.77	7,426.00	31.82	28.78	175.000	383.96	255.64	883.83	856.56	27.27	32.415	
8,700.00	8,306.00	7,821.51	7,426.00	31.99	29.00	175.000	380.15	212.06	883.87	856.40	27.48	32.169	
8,800.00	8,306.00	7,921.38	7,426.00	32.51	29.61	175.000	371.45	112.57	884.35	856.32	28.03	31.554	
8,812.71	8,306.00	7,934.05	7,426.00	32.59	29.70	175.000	370.34	99.95	884.45	856.34	28.11	31.469	
8,900.00	8,306.00	8,021.05	7,426.00	33.20	30.37	175.000	362.76	13.28	885.19	856.51	28.68	30.868	
9,000.00	8,306.00	8,124.40	7,426.00	34.04	31.35	177.057	355.59	-89.82	885.90	856.52	29.38	30.153	
9,100.00	8,306.00	8,228.12	7,426.00	35.02	32.47	179.132	352.15	-193.47	886.23	856.10	30.13	29.409	
9,200.00	8,306.00	8,329.15	7,426.00	36.13	33.70	179.694	351.47	-294.50	886.25	855.28	30.97	28.616	
9,300.00	8,306.00	8,429.15	7,426.00	37.35	35.03	179.694	350.94	-394.49	886.25	854.37	31.87	27.804	
9,400.00	8,306.00	8,529.15	7,426.00	38.67	36.46	179.694	350.40	-494.49	886.25	853.41	32.84	26.990	
9,500.00	8,306.00	8,629.15	7,426.00	40.08	37.97	179.694	349.87	-594.49	886.25	852.39	33.85	26.180	
9,600.00	8,306.00	8,729.15	7,426.00	41.57	39.56	179.694	349.34	-694.49	886.25	851.33	34.91	25.383	
9,700.00	8,306.00	8,829.15	7,426.00	43.14	41.22	179.694	348.80	-794.49	886.25	850.22	36.02	24.603	
9,800.00	8,306.00	8,929.15	7,426.00	44.77	42.94	179.694	348.27	-894.49	886.25	849.08	37.17	23.844	
9,900.00	8,306.00	9,029.15	7,426.00	46.46	44.71	179.694	347.74	-994.49	886.25	847.89	38.35	23.108	
10,000.00	8,306.00	9,129.15	7,426.00	48.19	46.53	179.694	347.20	-1,094.48	886.25	846.68	39.57	22.397	
10,100.00	8,306.00	9,229.15	7,426.00	49.98	48.39	179.694	346.67	-1,194.48	886.25	845.43	40.82	21.713	
10,200.00	8,306.00	9,329.15	7,426.00	51.80	50.29	179.694	346.14	-1,294.48	886.25	844.16	42.09	21.056	
10,300.00	8,306.00	9,429.15	7,426.00	53.67	52.22	179.694	345.61	-1,394.48	886.25	842.86	43.39	20.425	
10,400.00	8,306.00	9,529.15	7,426.00	55.56	54.18	179.694	345.07	-1,494.48	886.25	841.53	44.71	19.821	
10,500.00	8,306.00	9,629.15	7,426.00	57.49	56.17	179.694	344.54	-1,594.48	886.25	840.19	46.06	19.243	
10,600.00	8,306.00	9,729.15	7,426.00	59.44	58.18	179.694	344.01	-1,694.48	886.25	838.83	47.42	18.690	
10,700.00	8,306.00	9,829.15	7,426.00	61.42	60.21	179.694	343.47	-1,794.47	886.25	837.45	48.80	18.162	
10,800.00	8,306.00	9,929.15	7,426.00	63.42	62.26	179.694	342.94	-1,894.47	886.25	836.05	50.19	17.656	
10,900.00	8,306.00	10,029.15	7,426.00	65.44	64.33	179.694	342.41	-1,994.47	886.25	834.64	51.61	17.174	
11,000.00	8,306.00	10,129.15	7,426.00	67.47	66.41	179.694	341.87	-2,094.47	886.25	833.22	53.03	16.712	
11,100.00	8,306.00	10,229.15	7,426.00	69.53	68.51	179.694	341.34	-2,194.47	886.24	831.78	54.47	16.271	
11,200.00	8,306.00	10,329.15	7,426.00	71.60	70.62	179.694	340.81	-2,294.47	886.24	830.33	55.92	15.850	
11,300.00	8,306.00	10,429.15	7,426.00	73.68	72.74	179.694	340.27	-2,394.47	886.24	828.87	57.38	15.446	
11,400.00	8,306.00	10,529.15	7,426.00	75.78	74.88	179.694	339.74	-2,494.46	886.24	827.40	58.84	15.061	
11,500.00	8,306.00	10,629.15	7,426.00	77.89	77.02	179.694	339.21	-2,594.46	886.24	825.92	60.32	14.691	
11,600.00	8,306.00	10,729.15	7,426.00	80.01	79.17	179.694	338.67	-2,694.46	886.24	824.43	61.81	14.338	
11,700.00	8,306.00	10,829.15	7,426.00	82.13	81.33	179.694	338.14	-2,794.46	886.24	822.94	63.31	13.999	
11,800.00	8,306.00	10,929.15	7,426.00	84.27	83.50	179.694	337.61	-2,894.46	886.24	821.44	64.81	13.675	
11,900.00	8,306.00	11,029.15	7,426.00	86.42	85.68	179.694	337.07	-2,994.46	886.24	819.93	66.32	13.364	
12,000.00	8,306.00	11,129.15	7,426.00	88.58	87.86	179.694	336.54	-3,094.46	886.24	818.41	67.83	13.065	
12,100.00	8,306.00	11,229.15	7,426.00	90.74	90.05	179.694	336.01	-3,194.45	886.24	816.89	69.36	12.778	
12,200.00	8,306.00	11,329.15	7,426.00	92.91	92.24	179.694	335.47	-3,294.45	886.24	815.36	70.88	12.503	
12,300.00	8,306.00	11,429.15	7,426.00	95.08	94.44	179.694	334.94	-3,394.45	886.24	813.83	72.42	12.238	
12,400.00	8,306.00	11,529.15	7,426.00	97.26	96.64	179.694	334.41	-3,494.45	886.24	812.29	73.95	11.984	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - C Sweeney Com 111H - Wellbore #1 - Design #2

Survey Program: Reference		0-MWD+HRGM Offset						Rule Assigned: Distance				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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,500.00	8,306.00	11,629.15	7,426.00	99.45	98.85	179.694	333.88	-3,594.45	886.24	810.75	75.50	11.739	
12,600.00	8,306.00	11,729.15	7,426.00	101.64	101.07	179.694	333.34	-3,694.45	886.24	809.20	77.04	11.503	
12,700.00	8,306.00	11,829.15	7,426.00	103.84	103.28	179.694	332.81	-3,794.45	886.24	807.65	78.59	11.276	
12,800.00	8,306.00	11,929.15	7,426.00	106.04	105.50	179.694	332.28	-3,894.44	886.24	806.09	80.15	11.057	
12,900.00	8,306.00	12,029.15	7,426.00	108.25	107.73	179.694	331.74	-3,994.44	886.24	804.54	81.71	10.846	
13,000.00	8,306.00	12,129.15	7,426.00	110.46	109.96	179.694	331.21	-4,094.44	886.24	802.97	83.27	10.643	
13,100.00	8,306.00	12,229.15	7,426.00	112.67	112.19	179.694	330.68	-4,194.44	886.24	801.41	84.84	10.447	
13,200.00	8,306.00	12,329.15	7,426.00	114.89	114.42	179.694	330.14	-4,294.44	886.24	799.84	86.40	10.257	
13,300.00	8,306.00	12,429.15	7,426.00	117.11	116.66	179.694	329.61	-4,394.44	886.24	798.27	87.97	10.074	
13,400.00	8,306.00	12,529.15	7,426.00	119.34	118.90	179.694	329.08	-4,494.44	886.24	796.69	89.55	9.897	
13,500.00	8,306.00	12,629.15	7,426.00	121.56	121.14	179.694	328.54	-4,594.44	886.24	795.12	91.12	9.726	
13,600.00	8,306.00	12,729.15	7,426.00	123.79	123.38	179.694	328.01	-4,694.43	886.24	793.54	92.70	9.560	
13,700.00	8,306.00	12,829.15	7,426.00	126.03	125.63	179.694	327.48	-4,794.43	886.24	791.96	94.29	9.400	
13,800.00	8,306.00	12,929.15	7,426.00	128.26	127.88	179.694	326.94	-4,894.43	886.24	790.37	95.87	9.244	
13,900.00	8,306.00	13,029.15	7,426.00	130.50	130.13	179.694	326.41	-4,994.43	886.24	788.79	97.45	9.094	
14,000.00	8,306.00	13,129.15	7,426.00	132.74	132.38	179.694	325.88	-5,094.43	886.24	787.20	99.04	8.948	
14,100.00	8,306.00	13,229.15	7,426.00	134.98	134.63	179.694	325.34	-5,194.43	886.24	785.61	100.63	8.807	
14,200.00	8,306.00	13,329.15	7,426.00	137.22	136.89	179.694	324.81	-5,294.43	886.24	784.02	102.22	8.670	
14,300.00	8,306.00	13,429.15	7,426.00	139.47	139.15	179.694	324.28	-5,394.42	886.24	782.42	103.82	8.537	
14,400.00	8,306.00	13,529.15	7,426.00	141.72	141.40	179.694	323.75	-5,494.42	886.24	780.83	105.41	8.407	
14,500.00	8,306.00	13,629.15	7,426.00	143.97	143.67	179.694	323.21	-5,594.42	886.24	779.23	107.01	8.282	
14,600.00	8,306.00	13,729.15	7,426.00	146.22	145.93	179.694	322.68	-5,694.42	886.24	777.63	108.61	8.160	
14,700.00	8,306.00	13,829.15	7,426.00	148.47	148.19	179.694	322.15	-5,794.42	886.24	776.03	110.21	8.042	
14,800.00	8,306.00	13,929.15	7,426.00	150.73	150.45	179.694	321.61	-5,894.42	886.24	774.43	111.81	7.926	
14,900.00	8,306.00	14,029.15	7,426.00	152.99	152.72	179.694	321.08	-5,994.42	886.24	772.83	113.41	7.814	
15,000.00	8,306.00	14,129.15	7,426.00	155.24	154.99	179.694	320.55	-6,094.41	886.24	771.23	115.01	7.706	
15,100.00	8,306.00	14,229.15	7,426.00	157.50	157.25	179.694	320.01	-6,194.41	886.24	769.62	116.62	7.599	
15,200.00	8,306.00	14,329.15	7,426.00	159.76	159.52	179.694	319.48	-6,294.41	886.24	768.02	118.22	7.496	
15,300.00	8,306.00	14,429.15	7,426.00	162.03	161.79	179.694	318.95	-6,394.41	886.24	766.41	119.83	7.396	
15,400.00	8,306.00	14,529.15	7,426.00	164.29	164.06	179.694	318.41	-6,494.41	886.24	764.80	121.44	7.298	
15,500.00	8,306.00	14,629.15	7,426.00	166.55	166.34	179.694	317.88	-6,594.41	886.24	763.19	123.05	7.202	
15,600.00	8,306.00	14,729.15	7,426.00	168.82	168.61	179.694	317.35	-6,694.41	886.24	761.58	124.66	7.109	
15,700.00	8,306.00	14,829.15	7,426.00	171.08	170.88	179.694	316.81	-6,794.40	886.24	759.97	126.27	7.019	
15,800.00	8,306.00	14,929.15	7,426.00	173.35	173.16	179.694	316.28	-6,894.40	886.24	758.36	127.88	6.930	
15,900.00	8,306.00	15,029.15	7,426.00	175.62	175.43	179.694	315.75	-6,994.40	886.24	756.74	129.50	6.844	
15,959.75	8,306.00	15,088.90	7,426.00	176.98	176.79	179.694	315.43	-7,054.15	886.24	755.78	130.46	6.793	

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

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COMPASS 5000.15 Build 91E



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - C Sweeney Com 131H - Wellbore #1 - Design #2														Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HRGM														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.00	0.00	0.00	0.00	0.00	0.00	124.409	-62.12	90.70	109.95						
100.00	100.00	98.00	98.00	0.13	0.13	124.409	-62.12	90.70	109.93	109.68	0.25	433.237			
200.00	200.00	198.00	198.00	0.49	0.48	124.409	-62.12	90.70	109.93	108.97	0.97	113.791			
300.00	300.00	298.00	298.00	0.85	0.84	124.409	-62.12	90.70	109.93	108.25	1.68	65.318			
400.00	400.00	398.00	398.00	1.20	1.20	124.409	-62.12	90.70	109.93	107.53	2.40	45.805			
500.00	500.00	498.00	498.00	1.56	1.55	124.409	-62.12	90.70	109.93	106.81	3.12	35.269			
600.00	600.00	598.00	598.00	1.92	1.91	124.409	-62.12	90.70	109.93	106.10	3.83	28.674			
700.00	700.00	698.00	698.00	2.28	2.27	124.409	-62.12	90.70	109.93	105.38	4.55	24.157			
750.00	750.00	748.00	748.00	2.46	2.45	124.409	-62.12	90.70	109.93	105.02	4.91	22.393			
800.00	800.00	798.00	798.00	2.64	2.63	124.622	-62.12	90.70	109.78	104.51	5.27	20.847			
900.00	899.93	896.85	896.84	2.99	2.98	125.841	-61.57	91.57	108.99	103.02	5.97	18.259			
1,000.00	999.68	995.45	995.34	3.35	3.33	127.193	-59.26	95.24	108.34	101.68	6.67	16.245			
1,100.00	1,099.13	1,094.15	1,093.73	3.71	3.68	128.627	-55.14	101.79	107.90	100.52	7.38	14.623			
1,169.89	1,168.38	1,163.47	1,162.66	3.96	3.93	129.710	-51.22	108.00	107.67	99.78	7.88	13.658			
1,200.00	1,198.18	1,193.56	1,192.57	4.08	4.04	130.280	-49.45	110.83	107.53	99.42	8.10	13.270			
1,300.00	1,297.10	1,293.50	1,291.89	4.45	4.41	132.182	-43.55	120.19	107.14	98.30	8.84	12.115			
1,400.00	1,396.03	1,393.43	1,391.21	4.83	4.78	134.095	-37.65	129.56	106.88	97.29	9.59	11.140			
1,500.00	1,494.96	1,493.37	1,490.53	5.22	5.15	136.015	-31.75	138.93	106.74	96.39	10.35	10.311			
1,567.47	1,561.70	1,560.79	1,557.54	5.48	5.40	137.312	-27.77	145.25	106.71	95.84	10.87	9.820 CC			
1,600.00	1,593.89	1,593.30	1,589.85	5.61	5.52	137.937	-25.85	148.30	106.72	95.60	11.12	9.601			
1,700.00	1,692.81	1,693.24	1,689.17	6.00	5.90	139.858	-19.96	157.67	106.82	94.93	11.88	8.988			
1,800.00	1,791.74	1,793.17	1,788.49	6.39	6.27	141.773	-14.06	167.04	107.04	94.38	12.66	8.457			
1,900.00	1,890.67	1,893.11	1,887.81	6.79	6.65	143.678	-8.16	176.40	107.38	93.95	13.43	7.994			
2,000.00	1,989.60	1,993.04	1,987.13	7.19	7.03	145.568	-2.26	185.77	107.84	93.63	14.21	7.588			
2,100.00	2,088.53	2,092.98	2,086.45	7.58	7.41	147.440	3.64	195.14	108.42	93.43	14.99	7.232			
2,200.00	2,187.45	2,192.91	2,185.77	7.98	7.79	149.290	9.54	204.51	109.12	93.34	15.77	6.918 ES			
2,300.00	2,286.38	2,292.85	2,285.09	8.38	8.17	151.115	15.43	213.88	109.92	93.37	16.55	6.640			
2,400.00	2,385.31	2,392.78	2,384.41	8.78	8.55	152.912	21.33	223.25	110.84	93.51	17.34	6.394			
2,500.00	2,484.24	2,492.72	2,483.73	9.19	8.94	154.677	27.23	232.61	111.87	93.75	18.12	6.175			
2,600.00	2,583.16	2,592.65	2,583.05	9.59	9.32	156.409	33.13	241.98	113.00	94.11	18.90	5.979			
2,700.00	2,682.09	2,692.59	2,682.37	9.99	9.70	158.105	39.03	251.35	114.24	94.56	19.68	5.805			
2,800.00	2,781.02	2,792.52	2,781.69	10.39	10.08	159.763	44.93	260.72	115.58	95.12	20.46	5.649			
2,900.00	2,879.95	2,892.46	2,881.01	10.80	10.47	161.383	50.82	270.09	117.01	95.77	21.24	5.510			
3,000.00	2,978.88	2,992.40	2,980.33	11.20	10.85	162.962	56.72	279.46	118.53	96.52	22.01	5.385			
3,100.00	3,077.80	3,092.33	3,079.65	11.60	11.23	164.501	62.62	288.82	120.14	97.35	22.79	5.273			
3,200.00	3,176.73	3,192.27	3,178.97	12.01	11.62	165.998	68.52	298.19	121.84	98.28	23.56	5.172			
3,300.00	3,275.66	3,292.20	3,278.29	12.41	12.00	167.453	74.42	307.56	123.62	99.29	24.33	5.081			
3,400.00	3,374.59	3,392.14	3,377.61	12.82	12.39	168.866	80.32	316.93	125.47	100.37	25.10	4.999			
3,500.00	3,473.52	3,492.07	3,476.93	13.22	12.77	170.238	86.21	326.30	127.40	101.54	25.87	4.926			
3,600.00	3,572.44	3,592.01	3,576.25	13.63	13.16	171.568	92.11	335.67	129.41	102.77	26.63	4.859			
3,700.00	3,671.37	3,691.94	3,675.57	14.03	13.54	172.857	98.01	345.04	131.48	104.08	27.39	4.799			
3,800.00	3,770.30	3,791.88	3,774.89	14.44	13.93	174.106	103.91	354.40	133.61	105.46	28.16	4.745			
3,900.00	3,869.23	3,891.81	3,874.21	14.84	14.31	175.315	109.81	363.77	135.81	106.89	28.92	4.696			
4,000.00	3,968.15	3,991.75	3,973.53	15.25	14.70	176.485	115.71	373.14	138.07	108.39	29.68	4.652			
4,100.00	4,067.08	4,091.68	4,072.85	15.66	15.08	177.618	121.61	382.51	140.38	109.95	30.43	4.613			
4,200.00	4,166.01	4,191.62	4,172.17	16.06	15.47	178.714	127.50	391.88	142.75	111.56	31.19	4.577			
4,300.00	4,264.94	4,291.55	4,271.49	16.47	15.85	179.773	133.40	401.25	145.16	113.22	31.94	4.544			
4,400.00	4,363.87	4,391.49	4,370.81	16.87	16.24	-179.202	139.30	410.61	147.63	114.93	32.70	4.515			
4,500.00	4,462.79	4,491.42	4,470.13	17.28	16.62	-178.211	145.20	419.98	150.14	116.69	33.45	4.489			
4,600.00	4,561.72	4,591.36	4,569.45	17.69	17.01	-177.252	151.10	429.35	152.70	118.49	34.20	4.465			
4,700.00	4,660.65	4,691.29	4,668.77	18.09	17.40	-176.325	157.00	438.72	155.29	120.34	34.95	4.443			
4,800.00	4,759.58	4,791.23	4,768.09	18.50	17.78	-175.429	162.89	448.09	157.93	122.23	35.70	4.424			

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - C Sweeney Com 131H - Wellbore #1 - Design #2													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HRGM													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	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	
4,900.00	4,858.50	4,891.16	4,867.41	18.91	18.17	-174.562	168.79	457.46	160.60	124.15	36.45	4.406		
5,000.00	4,957.43	4,991.10	4,966.73	19.31	18.55	-173.724	174.69	466.82	163.31	126.12	37.20	4.391		
5,100.00	5,056.36	5,091.03	5,066.05	19.72	18.94	-172.913	180.59	476.19	166.05	128.11	37.94	4.377		
5,200.00	5,155.29	5,190.97	5,165.37	20.13	19.33	-172.128	186.49	485.56	168.83	130.14	38.69	4.364		
5,300.00	5,254.22	5,290.90	5,264.69	20.53	19.71	-171.369	192.39	494.93	171.64	132.20	39.43	4.353		
5,400.00	5,353.14	5,390.84	5,364.01	20.94	20.10	-170.634	198.28	504.30	174.47	134.29	40.18	4.342		
5,500.00	5,452.07	5,490.77	5,463.33	21.35	20.48	-169.923	204.18	513.67	177.33	136.41	40.92	4.333		
5,600.00	5,551.00	5,590.71	5,562.65	21.75	20.87	-169.234	210.08	523.04	180.22	138.56	41.67	4.326		
5,700.00	5,649.93	5,690.64	5,661.97	22.16	21.26	-168.567	215.98	532.40	183.14	140.73	42.41	4.318		
5,800.00	5,748.86	5,790.58	5,761.29	22.57	21.64	-167.921	221.88	541.77	186.08	142.93	43.15	4.312		
5,900.00	5,847.78	5,890.51	5,860.61	22.98	22.03	-167.295	227.78	551.14	189.04	145.15	43.89	4.307		
6,000.00	5,946.71	5,990.45	5,959.93	23.38	22.41	-166.689	233.68	560.51	192.02	147.39	44.63	4.302		
6,100.00	6,045.64	6,090.38	6,059.25	23.79	22.80	-166.101	239.57	569.88	195.03	149.65	45.38	4.298		
6,200.00	6,144.57	6,190.32	6,158.57	24.20	23.19	-165.530	245.47	579.25	198.05	151.93	46.12	4.295		
6,300.00	6,243.49	6,290.25	6,257.89	24.60	23.57	-164.977	251.37	588.61	201.09	154.24	46.86	4.292		
6,400.00	6,342.42	6,390.19	6,357.21	25.01	23.96	-164.440	257.27	597.98	204.16	156.56	47.60	4.289		
6,500.00	6,441.35	6,490.12	6,456.53	25.42	24.35	-163.920	263.17	607.35	207.24	158.90	48.34	4.287		
6,600.00	6,540.28	6,590.06	6,555.85	25.83	24.73	-163.414	269.07	616.72	210.33	161.25	49.08	4.286		
6,700.00	6,639.21	6,689.99	6,655.17	26.23	25.12	-162.923	274.96	626.09	213.44	163.62	49.82	4.284		
6,800.00	6,738.13	6,789.93	6,754.49	26.64	25.51	-162.446	280.86	635.46	216.57	166.01	50.56	4.283		
6,894.50	6,831.62	6,884.36	6,848.34	27.03	25.87	-162.008	286.44	644.31	219.54	168.28	51.26	4.283		
6,900.00	6,837.06	6,889.87	6,853.81	27.05	25.89	-161.984	286.76	644.82	219.71	168.41	51.30	4.283		
7,000.00	6,936.25	6,989.85	6,953.18	27.44	26.28	-161.833	292.66	654.20	221.31	169.26	52.05	4.252		
7,100.00	7,035.82	7,089.82	7,052.54	27.82	26.67	-162.228	298.56	663.57	220.13	167.31	52.81	4.168		
7,200.00	7,135.65	7,189.67	7,151.77	28.17	27.05	-163.193	304.46	672.93	216.21	162.61	53.60	4.034		
7,300.00	7,235.62	7,289.28	7,250.76	28.51	27.44	-164.795	310.33	682.27	209.66	155.26	54.40	3.854		
7,314.38	7,250.00	7,303.57	7,264.97	28.55	27.49	-165.085	311.18	683.61	208.52	154.00	54.52	3.825		
7,400.00	7,335.62	7,388.66	7,349.54	28.83	27.82	-166.913	316.20	691.58	201.65	146.43	55.22	3.652		
7,500.00	7,435.62	7,488.05	7,448.31	29.15	28.21	-169.210	322.07	700.90	193.91	137.86	56.05	3.460		
7,600.00	7,535.62	7,587.43	7,547.09	29.47	28.59	-171.691	327.93	710.22	186.51	129.62	56.88	3.279		
7,700.00	7,635.62	7,686.82	7,645.86	29.79	28.97	-174.371	333.80	719.53	179.48	121.76	57.73	3.109		
7,800.00	7,735.62	7,784.10	7,742.61	30.11	29.35	-177.025	339.20	728.12	173.26	114.71	58.55	2.959		
7,892.92	7,828.54	7,873.74	7,832.00	30.41	29.68	-178.867	342.75	733.75	169.37	110.11	59.26	2.858		
7,900.00	7,835.62	7,880.59	7,838.83	30.43	29.70	-178.996	342.96	734.09	169.14	109.82	59.32	2.852		
7,925.00	7,860.59	7,904.71	7,862.92	30.50	29.79	-179.701	343.63	735.15	168.33	108.82	59.50	2.829		
7,950.00	7,885.48	7,928.74	7,886.93	30.57	29.87	-179.203	344.19	736.04	167.54	107.84	59.70	2.806		
7,975.00	7,910.21	7,952.63	7,910.81	30.63	29.96	-177.713	344.64	736.75	166.85	106.94	59.91	2.785		
8,000.00	7,934.72	7,976.34	7,934.51	30.69	30.04	-175.829	344.98	737.29	166.35	106.21	60.13	2.766		
8,025.00	7,958.94	8,000.00	7,958.16	30.75	30.12	-173.558	345.22	737.67	166.13	105.77	60.36	2.752		
8,026.73	7,960.60	8,001.45	7,959.61	30.75	30.13	-173.387	345.23	737.69	166.13	105.75	60.37	2.752		
8,050.00	7,982.80	8,023.07	7,981.23	30.80	30.20	-170.914	345.35	737.87	166.33	105.75	60.59	2.745 SF		
8,075.00	8,006.24	8,046.08	8,004.24	30.85	30.28	-167.918	345.38	737.93	167.10	106.28	60.81	2.748		
8,100.00	8,029.19	8,069.03	8,027.19	30.89	30.35	-164.571	345.38	737.93	168.54	107.50	61.03	2.761		
8,125.00	8,051.59	8,091.43	8,049.59	30.93	30.43	-160.904	345.38	737.93	170.82	109.58	61.24	2.789		
8,150.00	8,073.38	8,113.22	8,071.38	30.96	30.50	-156.984	345.38	737.93	174.13	112.71	61.41	2.835		
8,175.00	8,094.49	8,134.33	8,092.49	31.00	30.57	-152.891	345.38	737.93	178.63	117.07	61.56	2.902		
8,200.00	8,114.88	8,154.72	8,112.88	31.03	30.64	-148.714	345.38	737.93	184.47	122.81	61.66	2.992		
8,225.00	8,134.48	8,174.32	8,132.48	31.06	30.70	-144.541	345.38	737.93	191.75	130.02	61.73	3.106		
8,250.00	8,153.25	8,193.09	8,151.25	31.08	30.76	-140.454	345.38	737.93	200.53	138.77	61.76	3.247		
8,275.00	8,171.13	8,210.97	8,169.13	31.11	30.82	-136.521	345.38	737.93	210.84	149.08	61.76	3.414		
8,300.00	8,188.06	8,227.90	8,186.06	31.13	30.88	-132.794	345.38	737.93	222.65	160.92	61.73	3.607		
8,325.00	8,204.01	8,243.85	8,202.01	31.16	30.93	-129.307	345.38	737.93	235.91	174.23	61.68	3.825		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - C Sweeney Com 131H - Wellbore #1 - Design #2												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HRGM												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,350.00	8,218.93	8,258.77	8,216.93	31.18	30.98	126.079	345.38	737.93	250.56	188.94	61.62	4.066	
8,375.00	8,232.78	8,272.62	8,230.78	31.21	31.03	123.115	345.38	737.93	266.51	204.96	61.55	4.330	
8,400.00	8,245.53	8,285.37	8,243.53	31.24	31.07	120.409	345.38	737.93	283.65	222.17	61.48	4.614	
8,425.00	8,257.13	8,296.97	8,255.13	31.27	31.11	117.949	345.38	737.93	301.89	240.48	61.41	4.916	
8,450.00	8,267.55	8,307.39	8,265.55	31.31	31.14	115.720	345.38	737.93	321.11	259.77	61.34	5.235	
8,475.00	8,276.78	8,316.62	8,274.78	31.35	31.17	113.703	345.38	737.93	341.21	279.95	61.26	5.569	
8,500.00	8,284.77	8,324.61	8,282.77	31.40	31.20	111.880	345.38	737.93	362.09	300.89	61.19	5.917	
8,525.00	8,291.51	8,331.35	8,289.51	31.45	31.22	110.232	345.38	737.93	383.64	322.51	61.13	6.276	
8,550.00	8,296.99	8,336.83	8,294.99	31.51	31.24	108.742	345.38	737.93	405.77	344.70	61.06	6.645	
8,575.00	8,301.18	8,341.02	8,299.18	31.57	31.26	107.394	345.38	737.93	428.37	367.37	61.00	7.023	
8,600.00	8,304.07	8,343.91	8,302.07	31.64	31.27	106.173	345.38	737.93	451.37	390.43	60.94	7.407	
8,625.00	8,305.66	8,345.50	8,303.66	31.72	31.27	105.066	345.38	737.93	474.65	413.78	60.88	7.797	
8,642.92	8,306.00	8,345.84	8,304.00	31.77	31.27	104.335	345.38	737.93	491.48	430.64	60.83	8.079	
8,700.00	8,306.00	8,345.84	8,304.00	31.99	31.27	102.396	345.38	737.93	545.80	485.08	60.72	8.989	
8,800.00	8,306.00	9,319.42	8,850.00	32.51	33.90	179.695	353.63	105.50	556.03	521.47	34.56	16.087	
8,812.71	8,306.00	9,332.13	8,850.00	32.59	33.99	179.695	353.56	92.79	556.02	521.38	34.64	16.052	
8,900.00	8,306.00	9,419.42	8,850.00	33.20	34.61	179.695	353.09	5.50	556.02	520.83	35.19	15.800	
9,000.00	8,306.00	9,519.42	8,850.00	34.04	35.47	179.695	352.56	-94.50	556.02	520.12	35.90	15.490	
9,100.00	8,306.00	9,619.42	8,850.00	35.02	36.45	179.695	352.03	-194.50	556.02	519.35	36.67	15.161	
9,200.00	8,306.00	9,719.42	8,850.00	36.13	37.54	179.695	351.49	-294.50	556.02	518.50	37.52	14.819	
9,300.00	8,306.00	9,819.42	8,850.00	37.35	38.75	179.695	350.96	-394.50	556.02	517.59	38.43	14.468	
9,400.00	8,306.00	9,919.42	8,850.00	38.67	40.05	179.695	350.43	-494.49	556.02	516.62	39.40	14.113	
9,500.00	8,306.00	10,019.42	8,850.00	40.08	41.43	179.695	349.89	-594.49	556.02	515.60	40.42	13.755	
9,600.00	8,306.00	10,119.42	8,850.00	41.57	42.90	179.695	349.36	-694.49	556.02	514.52	41.50	13.399	
9,700.00	8,306.00	10,219.42	8,850.00	43.14	44.44	179.695	348.83	-794.49	556.02	513.40	42.62	13.047	
9,800.00	8,306.00	10,319.42	8,850.00	44.77	46.04	179.695	348.29	-894.49	556.02	512.24	43.78	12.700	
9,900.00	8,306.00	10,419.42	8,850.00	46.46	47.70	179.695	347.76	-994.49	556.02	511.03	44.99	12.360	
10,000.00	8,306.00	10,519.42	8,850.00	48.19	49.41	179.695	347.23	-1,094.49	556.02	509.79	46.23	12.028	
10,100.00	8,306.00	10,619.42	8,850.00	49.98	51.16	179.695	346.69	-1,194.48	556.02	508.52	47.50	11.705	
10,200.00	8,306.00	10,719.42	8,850.00	51.80	52.96	179.695	346.16	-1,294.48	556.02	507.21	48.81	11.392	
10,300.00	8,306.00	10,819.42	8,850.00	53.67	54.80	179.695	345.62	-1,394.48	556.02	505.88	50.14	11.089	
10,400.00	8,306.00	10,919.42	8,850.00	55.56	56.67	179.695	345.09	-1,494.48	556.02	504.51	51.50	10.796	
10,500.00	8,306.00	11,019.42	8,850.00	57.49	58.57	179.695	344.56	-1,594.48	556.02	503.13	52.89	10.513	
10,600.00	8,306.00	11,119.42	8,850.00	59.44	60.50	179.695	344.02	-1,694.48	556.02	501.72	54.30	10.240	
10,700.00	8,306.00	11,219.42	8,850.00	61.42	62.45	179.695	343.49	-1,794.48	556.02	500.29	55.73	9.978	
10,800.00	8,306.00	11,319.42	8,850.00	63.42	64.43	179.695	342.96	-1,894.47	556.02	498.84	57.17	9.725	
10,900.00	8,306.00	11,419.42	8,850.00	65.44	66.43	179.695	342.42	-1,994.47	556.01	497.37	58.64	9.482	
11,000.00	8,306.00	11,519.42	8,850.00	67.47	68.45	179.695	341.89	-2,094.47	556.01	495.89	60.12	9.248	
11,100.00	8,306.00	11,619.42	8,850.00	69.53	70.49	179.695	341.36	-2,194.47	556.01	494.39	61.62	9.023	
11,200.00	8,306.00	11,719.42	8,850.00	71.60	72.54	179.695	340.82	-2,294.47	556.01	492.88	63.14	8.807	
11,300.00	8,306.00	11,819.42	8,850.00	73.68	74.61	179.695	340.29	-2,394.47	556.01	491.35	64.66	8.599	
11,400.00	8,306.00	11,919.42	8,850.00	75.78	76.69	179.695	339.76	-2,494.47	556.01	489.81	66.20	8.399	
11,500.00	8,306.00	12,019.42	8,850.00	77.89	78.78	179.695	339.22	-2,594.46	556.01	488.26	67.75	8.207	
11,600.00	8,306.00	12,119.42	8,850.00	80.01	80.88	179.695	338.69	-2,694.46	556.01	486.70	69.31	8.022	
11,700.00	8,306.00	12,219.42	8,850.00	82.13	83.00	179.695	338.16	-2,794.46	556.01	485.13	70.88	7.844	
11,800.00	8,306.00	12,319.42	8,850.00	84.27	85.12	179.695	337.62	-2,894.46	556.01	483.55	72.46	7.673	
11,900.00	8,306.00	12,419.42	8,850.00	86.42	87.26	179.695	337.09	-2,994.46	556.01	481.96	74.05	7.508	
12,000.00	8,306.00	12,519.42	8,850.00	88.58	89.40	179.695	336.56	-3,094.46	556.01	480.36	75.65	7.350	
12,100.00	8,306.00	12,619.42	8,850.00	90.74	91.55	179.695	336.02	-3,194.46	556.01	478.76	77.26	7.197	
12,200.00	8,306.00	12,719.42	8,850.00	92.91	93.71	179.695	335.49	-3,294.45	556.01	477.14	78.87	7.050	
12,300.00	8,306.00	12,819.42	8,850.00	95.08	95.87	179.695	334.95	-3,394.45	556.01	475.52	80.49	6.908	
12,400.00	8,306.00	12,919.42	8,850.00	97.26	98.05	179.695	334.42	-3,494.45	556.01	473.90	82.11	6.771	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - C Sweeney Com 131H - Wellbore #1 - Design #2

Survey Program: Reference		0-MWD+HRGM Offset						Rule Assigned: Distance					Offset Well Error: 0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Reference (usft)	Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
12,500.00	8,306.00	13,019.42	8,850.00	99.45	100.22	179.695	333.89	-3,594.45	556.01	472.26	83.75	6.639		
12,600.00	8,306.00	13,119.42	8,850.00	101.64	102.41	179.695	333.35	-3,694.45	556.01	470.63	85.38	6.512		
12,700.00	8,306.00	13,219.42	8,850.00	103.84	104.59	179.695	332.82	-3,794.45	556.01	468.98	87.03	6.389		
12,800.00	8,306.00	13,319.42	8,850.00	106.04	106.79	179.695	332.29	-3,894.45	556.01	467.34	88.67	6.270		
12,900.00	8,306.00	13,419.42	8,850.00	108.25	108.98	179.695	331.75	-3,994.44	556.01	465.68	90.33	6.155		
13,000.00	8,306.00	13,519.42	8,850.00	110.46	111.19	179.695	331.22	-4,094.44	556.01	464.02	91.98	6.045		
13,100.00	8,306.00	13,619.42	8,850.00	112.67	113.39	179.695	330.69	-4,194.44	556.01	462.36	93.65	5.937		
13,200.00	8,306.00	13,719.42	8,850.00	114.89	115.60	179.695	330.15	-4,294.44	556.01	460.70	95.31	5.834		
13,300.00	8,306.00	13,819.42	8,850.00	117.11	117.82	179.695	329.62	-4,394.44	556.01	459.03	96.98	5.733		
13,400.00	8,306.00	13,919.42	8,850.00	119.34	120.03	179.695	329.09	-4,494.44	556.01	457.35	98.66	5.636		
13,500.00	8,306.00	14,019.42	8,850.00	121.56	122.25	179.695	328.55	-4,594.44	556.01	455.68	100.33	5.542		
13,600.00	8,306.00	14,119.42	8,850.00	123.79	124.48	179.695	328.02	-4,694.43	556.01	454.00	102.01	5.450		
13,700.00	8,306.00	14,219.42	8,850.00	126.03	126.70	179.695	327.49	-4,794.43	556.01	452.31	103.70	5.362		
13,800.00	8,306.00	14,319.42	8,850.00	128.26	128.93	179.695	326.95	-4,894.43	556.01	450.63	105.38	5.276		
13,900.00	8,306.00	14,419.42	8,850.00	130.50	131.16	179.695	326.42	-4,994.43	556.01	448.94	107.07	5.193		
14,000.00	8,306.00	14,519.42	8,850.00	132.74	133.40	179.695	325.88	-5,094.43	556.01	447.24	108.76	5.112		
14,100.00	8,306.00	14,619.42	8,850.00	134.98	135.63	179.695	325.35	-5,194.43	556.01	445.55	110.46	5.034		
14,200.00	8,306.00	14,719.42	8,850.00	137.22	137.87	179.695	324.82	-5,294.43	556.01	443.85	112.15	4.958		
14,300.00	8,306.00	14,819.42	8,850.00	139.47	140.11	179.695	324.28	-5,394.42	556.01	442.15	113.85	4.884		
14,400.00	8,306.00	14,919.42	8,850.00	141.72	142.36	179.695	323.75	-5,494.42	556.01	440.45	115.55	4.812		
14,500.00	8,306.00	15,019.42	8,850.00	143.97	144.60	179.695	323.22	-5,594.42	556.01	438.75	117.26	4.742		
14,600.00	8,306.00	15,119.42	8,850.00	146.22	146.85	179.695	322.68	-5,694.42	556.00	437.04	118.96	4.674		
14,700.00	8,306.00	15,219.42	8,850.00	148.47	149.10	179.695	322.15	-5,794.42	556.00	435.33	120.67	4.608		
14,800.00	8,306.00	15,319.42	8,850.00	150.73	151.35	179.695	321.62	-5,894.42	556.00	433.62	122.38	4.543		
14,900.00	8,306.00	15,419.42	8,850.00	152.99	153.60	179.695	321.08	-5,994.42	556.00	431.91	124.09	4.481		
15,000.00	8,306.00	15,519.42	8,850.00	155.24	155.85	179.695	320.55	-6,094.41	556.00	430.20	125.81	4.420		
15,100.00	8,306.00	15,619.42	8,850.00	157.50	158.11	179.695	320.02	-6,194.41	556.00	428.48	127.52	4.360		
15,200.00	8,306.00	15,719.42	8,850.00	159.76	160.36	179.695	319.48	-6,294.41	556.00	426.77	129.24	4.302		
15,300.00	8,306.00	15,819.42	8,850.00	162.03	162.62	179.695	318.95	-6,394.41	556.00	425.05	130.95	4.246		
15,400.00	8,306.00	15,919.42	8,850.00	164.29	164.88	179.695	318.42	-6,494.41	556.00	423.33	132.67	4.191		
15,500.00	8,306.00	16,019.42	8,850.00	166.55	167.14	179.695	317.88	-6,594.41	556.00	421.61	134.40	4.137		
15,600.00	8,306.00	16,119.42	8,850.00	168.82	169.40	179.695	317.35	-6,694.41	556.00	419.88	136.12	4.085		
15,700.00	8,306.00	16,219.42	8,850.00	171.08	171.67	179.695	316.81	-6,794.40	556.00	418.16	137.84	4.034		
15,800.00	8,306.00	16,319.42	8,850.00	173.35	173.93	179.695	316.28	-6,894.40	556.00	416.44	139.57	3.984		
15,900.00	8,306.00	16,419.42	8,850.00	175.62	176.20	179.695	315.75	-6,994.40	556.00	414.71	141.29	3.935		
15,959.75	8,306.00	16,479.17	8,850.00	176.98	177.55	179.695	315.43	-7,054.15	556.00	413.68	142.32	3.907		

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

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COMPASS 5000.15 Build 91E



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - Scott King Fed Com 112H - Wellbore #1 - Design #2													Offset Site Error:
Survey Program: 0-MWD+HRGM													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	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	1.00	1.00	0.00	0.00	169.341	-41.60	7.83	42.33				
100.00	100.00	101.00	101.00	0.13	0.13	169.341	-41.60	7.83	42.33	42.07	0.26	162.885	
200.00	200.00	201.00	201.00	0.49	0.49	169.341	-41.60	7.83	42.33	41.36	0.98	43.336	
300.00	300.00	301.00	301.00	0.85	0.85	169.341	-41.60	7.83	42.33	40.64	1.69	24.993	
400.00	400.00	401.00	401.00	1.20	1.21	169.341	-41.60	7.83	42.33	39.92	2.41	17.560	
500.00	500.00	501.00	501.00	1.56	1.57	169.341	-41.60	7.83	42.33	39.20	3.13	13.535	
600.00	600.00	601.00	601.00	1.92	1.92	169.341	-41.60	7.83	42.33	38.49	3.84	11.011	CC, ES
700.00	700.00	700.00	699.99	2.28	2.27	168.697	-42.50	8.49	43.35	38.81	4.55	9.538	
750.00	750.00	749.19	749.15	2.46	2.43	167.723	-43.94	9.56	45.01	40.12	4.89	9.208	
800.00	800.00	798.39	798.28	2.64	2.60	166.904	-46.07	11.13	47.63	42.40	5.23	9.111	
900.00	899.93	896.39	895.97	2.99	2.93	167.064	-52.31	15.75	56.19	50.28	5.91	9.511	
1,000.00	999.68	993.60	992.54	3.35	3.28	168.797	-61.16	22.30	69.17	62.58	6.59	10.494	
1,100.00	1,099.13	1,089.68	1,087.58	3.71	3.63	171.178	-72.48	30.68	86.59	79.32	7.28	11.901	
1,169.89	1,168.38	1,156.00	1,152.88	3.96	3.88	172.917	-81.79	37.57	101.43	93.67	7.76	13.074	
1,200.00	1,198.18	1,184.36	1,180.72	4.08	3.99	173.580	-86.15	40.79	108.43	100.46	7.97	13.613	
1,300.00	1,297.10	1,279.10	1,273.35	4.45	4.38	174.847	-102.11	52.60	133.32	124.66	8.66	15.387	
1,400.00	1,396.03	1,375.79	1,367.76	4.83	4.78	175.519	-118.90	65.02	158.80	149.40	9.39	16.905	
1,500.00	1,494.96	1,472.48	1,462.16	5.22	5.19	176.005	-135.69	77.44	184.28	174.15	10.14	18.180	
1,600.00	1,593.89	1,569.16	1,556.56	5.61	5.61	176.373	-152.48	89.86	209.78	198.90	10.88	19.273	
1,700.00	1,692.81	1,665.85	1,650.97	6.00	6.03	176.661	-169.27	102.29	235.28	223.65	11.64	20.217	
1,800.00	1,791.74	1,762.54	1,745.37	6.39	6.46	176.893	-186.06	114.71	260.79	248.40	12.40	21.039	
1,900.00	1,890.67	1,859.22	1,839.78	6.79	6.90	177.083	-202.84	127.13	286.30	273.15	13.16	21.759	
2,000.00	1,989.60	1,955.91	1,934.18	7.19	7.33	177.242	-219.63	139.55	311.82	297.90	13.92	22.396	
2,100.00	2,088.53	2,052.60	2,028.59	7.58	7.77	177.377	-236.42	151.97	337.33	322.64	14.69	22.963	
2,200.00	2,187.45	2,149.28	2,122.99	7.98	8.21	177.494	-253.21	164.39	362.85	347.39	15.46	23.469	
2,300.00	2,286.38	2,245.97	2,217.40	8.38	8.65	177.594	-270.00	176.81	388.37	372.14	16.23	23.925	
2,400.00	2,385.31	2,342.66	2,311.80	8.78	9.09	177.683	-286.79	189.24	413.89	396.89	17.01	24.337	
2,500.00	2,484.24	2,439.34	2,406.20	9.19	9.54	177.761	-303.57	201.66	439.41	421.63	17.78	24.711	
2,600.00	2,583.16	2,536.03	2,500.61	9.59	9.98	177.830	-320.36	214.08	464.94	446.38	18.56	25.052	
2,700.00	2,682.09	2,632.72	2,595.01	9.99	10.43	177.893	-337.15	226.50	490.46	471.12	19.34	25.364	
2,800.00	2,781.02	2,729.40	2,689.42	10.39	10.88	177.949	-353.94	238.92	515.98	495.87	20.12	25.651	
2,900.00	2,879.95	2,826.09	2,783.82	10.80	11.32	178.000	-370.73	251.34	541.50	520.61	20.90	25.915	
3,000.00	2,978.88	2,922.78	2,878.23	11.20	11.77	178.046	-387.52	263.76	567.03	545.35	21.68	26.159	
3,100.00	3,077.80	3,019.47	2,972.63	11.60	12.22	178.088	-404.31	276.19	592.55	570.10	22.46	26.386	
3,200.00	3,176.73	3,116.15	3,067.04	12.01	12.67	178.127	-421.09	288.61	618.08	594.84	23.24	26.596	
3,300.00	3,275.66	3,212.84	3,161.44	12.41	13.12	178.163	-437.88	301.03	643.60	619.58	24.02	26.792	
3,400.00	3,374.59	3,309.53	3,255.84	12.82	13.57	178.196	-454.67	313.45	669.13	644.32	24.81	26.975	
3,500.00	3,473.52	3,406.21	3,350.25	13.22	14.02	178.226	-471.46	325.87	694.65	669.06	25.59	27.146	
3,600.00	3,572.44	3,502.90	3,444.65	13.63	14.47	178.255	-488.25	338.29	720.18	693.80	26.37	27.307	
3,700.00	3,671.37	3,599.59	3,539.06	14.03	14.93	178.281	-505.04	350.71	745.70	718.54	27.16	27.458	
3,800.00	3,770.30	3,696.27	3,633.46	14.44	15.38	178.306	-521.82	363.14	771.23	743.28	27.94	27.599	
3,900.00	3,869.23	3,792.96	3,727.87	14.84	15.83	178.329	-538.61	375.56	796.75	768.03	28.73	27.733	
4,000.00	3,968.15	3,889.65	3,822.27	15.25	16.28	178.350	-555.40	387.98	822.28	792.77	29.51	27.860	
4,100.00	4,067.08	3,986.33	3,916.68	15.66	16.74	178.371	-572.19	400.40	847.81	817.50	30.30	27.979	
4,200.00	4,166.01	4,083.02	4,011.08	16.06	17.19	178.390	-588.98	412.82	873.33	842.24	31.09	28.092	
4,300.00	4,264.94	4,179.71	4,105.48	16.47	17.64	178.408	-605.77	425.24	898.86	866.98	31.87	28.200	
4,400.00	4,363.87	4,276.39	4,199.89	16.87	18.09	178.425	-622.56	437.66	924.38	891.72	32.66	28.302	
4,500.00	4,462.79	4,373.08	4,294.29	17.28	18.55	178.441	-639.34	450.09	949.91	916.46	33.45	28.399	
4,600.00	4,561.72	4,469.77	4,388.70	17.69	19.00	178.457	-656.13	462.51	975.44	941.20	34.24	28.491	
4,700.00	4,660.65	4,566.45	4,483.10	18.09	19.45	178.471	-672.92	474.93	1,000.96	965.94	35.02	28.579	
4,800.00	4,759.58	4,663.14	4,577.51	18.50	19.91	178.485	-689.71	487.35	1,026.49	990.68	35.81	28.663	
4,900.00	4,858.50	4,759.83	4,671.91	18.91	20.36	178.498	-706.50	499.77	1,052.02	1,015.42	36.60	28.743	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - Scott King Fed Com 112H - Wellbore #1 - Design #2													Offset Site Error:
Survey Program: 0-MWD+HRGM													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,000.00	4,957.43	4,856.51	4,766.31	19.31	20.82	178.511	-723.29	512.19	1,077.54	1,040.15	37.39	28.820	
5,100.00	5,056.36	4,953.20	4,860.72	19.72	21.27	178.523	-740.07	524.61	1,103.07	1,064.89	38.18	28.893	
5,200.00	5,155.29	5,049.89	4,955.12	20.13	21.72	178.534	-756.86	537.04	1,128.60	1,089.63	38.97	28.963	
5,300.00	5,254.22	5,146.57	5,049.53	20.53	22.18	178.545	-773.65	549.46	1,154.12	1,114.37	39.76	29.030	
5,400.00	5,353.14	5,243.26	5,143.93	20.94	22.63	178.555	-790.44	561.88	1,179.65	1,139.11	40.55	29.095	
5,500.00	5,452.07	5,339.95	5,238.34	21.35	23.09	178.565	-807.23	574.30	1,205.18	1,163.84	41.33	29.157	
5,600.00	5,551.00	5,436.64	5,332.74	21.75	23.54	178.575	-824.02	586.72	1,230.70	1,188.58	42.12	29.216	
5,700.00	5,649.93	5,533.32	5,427.15	22.16	24.00	178.584	-840.81	599.14	1,256.23	1,213.32	42.91	29.273	
5,800.00	5,748.86	5,630.01	5,521.55	22.57	24.45	178.593	-857.59	611.56	1,281.76	1,238.05	43.70	29.328	
5,900.00	5,847.78	5,726.70	5,615.95	22.98	24.91	178.601	-874.38	623.99	1,307.29	1,262.79	44.49	29.381	
6,000.00	5,946.71	5,823.38	5,710.36	23.38	25.36	178.609	-891.17	636.41	1,332.81	1,287.53	45.28	29.432	
6,100.00	6,045.64	5,920.07	5,804.76	23.79	25.82	178.617	-907.96	648.83	1,358.34	1,312.27	46.07	29.481	
6,200.00	6,144.57	6,016.76	5,899.17	24.20	26.27	178.625	-924.75	661.25	1,383.87	1,337.00	46.86	29.529	
6,300.00	6,243.49	6,113.44	5,993.57	24.60	26.73	178.632	-941.54	673.67	1,409.39	1,361.74	47.66	29.575	
6,400.00	6,342.42	6,210.13	6,087.98	25.01	27.18	178.639	-958.32	686.09	1,434.92	1,386.47	48.45	29.619	
6,500.00	6,441.35	6,306.82	6,182.38	25.42	27.64	178.646	-975.11	698.51	1,460.45	1,411.21	49.24	29.661	
6,600.00	6,540.28	6,439.44	6,312.13	25.83	28.25	178.650	-997.17	714.83	1,485.39	1,435.10	50.30	29.533	
6,700.00	6,639.21	6,610.92	6,481.44	26.23	28.97	178.379	-1,018.92	730.92	1,506.18	1,454.64	51.54	29.222	
6,800.00	6,738.13	6,785.00	6,654.65	26.64	29.61	178.472	-1,032.62	741.06	1,522.11	1,469.45	52.66	28.904	
6,894.50	6,831.62	6,950.76	6,820.26	27.03	30.14	178.766	-1,037.79	744.89	1,532.67	1,479.09	53.58	28.604	
6,900.00	6,837.06	6,960.43	6,829.93	27.05	30.16	178.789	-1,037.85	744.93	1,533.15	1,479.52	53.63	28.587	
7,000.00	6,936.25	7,067.75	6,937.25	27.44	30.45	179.181	-1,037.90	744.97	1,540.23	1,485.88	54.35	28.341	
7,100.00	7,035.82	7,167.45	7,036.45	27.82	30.69	179.767	-1,037.95	736.81	1,545.38	1,490.38	55.00	28.096	
7,200.00	7,135.65	7,258.73	7,124.03	28.17	30.85	-179.124	-1,038.08	711.55	1,549.01	1,493.42	55.59	27.864	
7,300.00	7,235.62	7,338.08	7,195.06	28.51	30.95	-177.759	-1,038.27	676.41	1,551.99	1,495.88	56.11	27.659	
7,314.38	7,250.00	7,350.00	7,205.19	28.55	30.97	-177.526	-1,038.30	670.13	1,552.42	1,496.24	56.18	27.631	
7,400.00	7,335.62	7,404.70	7,249.54	28.83	31.01	-176.348	-1,038.47	638.15	1,556.07	1,499.51	56.56	27.514	
7,500.00	7,435.62	7,459.08	7,289.71	29.15	31.04	-175.004	-1,038.67	601.54	1,563.50	1,506.59	56.91	27.474	
7,600.00	7,535.62	7,500.00	7,317.05	29.47	31.05	-173.891	-1,038.83	571.11	1,575.07	1,517.94	57.13	27.570	
7,700.00	7,635.62	7,539.20	7,340.70	29.79	31.06	-172.753	-1,039.00	539.87	1,591.24	1,534.00	57.24	27.799	
7,800.00	7,735.62	7,568.77	7,356.81	30.11	31.06	-171.854	-1,039.13	515.07	1,612.31	1,555.12	57.19	28.192	
7,892.92	7,828.54	7,591.73	7,368.24	30.41	31.06	-171.135	-1,039.24	495.16	1,636.36	1,579.34	57.02	28.699	
7,900.00	7,835.62	7,593.35	7,369.01	30.43	31.06	-171.086	-1,039.24	493.74	1,638.35	1,581.35	57.00	28.743	
7,925.00	7,860.59	7,600.00	7,372.12	30.50	31.06	-170.911	-1,039.27	487.86	1,645.39	1,588.46	56.93	28.903	
7,950.00	7,885.48	7,600.00	7,372.12	30.57	31.06	-170.993	-1,039.27	487.86	1,652.41	1,595.61	56.80	29.090	
7,975.00	7,910.21	7,611.84	7,377.45	30.63	31.06	-170.741	-1,039.33	477.30	1,659.33	1,602.59	56.75	29.242	
8,000.00	7,934.72	7,625.00	7,383.07	30.69	31.06	-170.486	-1,039.39	465.39	1,666.21	1,609.53	56.69	29.394	
8,025.00	7,958.94	7,625.00	7,383.07	30.75	31.06	-170.705	-1,039.39	465.39	1,672.91	1,616.38	56.53	29.591	
8,050.00	7,982.80	7,632.34	7,386.06	30.80	31.06	-170.727	-1,039.43	458.69	1,679.50	1,623.08	56.42	29.765	
8,075.00	8,006.24	7,639.55	7,388.89	30.85	31.05	-170.795	-1,039.47	452.06	1,685.92	1,629.61	56.31	29.941	
8,100.00	8,029.19	7,650.00	7,392.83	30.89	31.05	-170.797	-1,039.52	442.38	1,692.16	1,635.95	56.21	30.106	
8,125.00	8,051.59	7,650.00	7,392.83	30.93	31.05	-171.190	-1,039.52	442.38	1,698.18	1,642.14	56.03	30.306	
8,150.00	8,073.38	7,662.07	7,397.11	30.96	31.05	-171.217	-1,039.58	431.10	1,703.94	1,648.00	55.94	30.460	
8,175.00	8,094.49	7,675.00	7,401.37	31.00	31.05	-171.250	-1,039.64	418.89	1,709.47	1,653.62	55.85	30.609	
8,200.00	8,114.88	7,675.00	7,401.37	31.03	31.05	-171.766	-1,039.64	418.89	1,714.69	1,659.02	55.67	30.798	
8,225.00	8,134.48	7,685.71	7,404.65	31.06	31.05	-171.950	-1,039.70	408.70	1,719.63	1,664.05	55.57	30.943	
8,250.00	8,153.25	7,700.00	7,408.67	31.08	31.04	-172.041	-1,039.77	394.98	1,724.28	1,668.78	55.50	31.070	
8,275.00	8,171.13	7,700.00	7,408.67	31.11	31.04	-172.670	-1,039.77	394.98	1,728.55	1,673.21	55.33	31.238	
8,300.00	8,188.06	7,710.22	7,411.30	31.13	31.04	-172.971	-1,039.82	385.11	1,732.49	1,677.24	55.24	31.361	
8,325.00	8,204.01	7,725.00	7,414.72	31.16	31.04	-173.139	-1,039.90	370.73	1,736.10	1,680.91	55.19	31.458	
8,350.00	8,218.93	7,725.00	7,414.72	31.18	31.04	-173.867	-1,039.90	370.73	1,739.28	1,684.23	55.05	31.593	
8,375.00	8,232.78	7,735.39	7,416.85	31.21	31.04	-174.250	-1,039.95	360.56	1,742.09	1,687.10	54.99	31.680	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - Scott King Fed Com 112H - Wellbore #1 - Design #2												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HRGM												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,400.00	8,245.53	7,750.00	7,419.48	31.24	31.04	-174.504	-1,040.03	346.19	1,744.55	1,689.58	54.97	31.739	
8,425.00	8,257.13	7,750.00	7,419.48	31.27	31.04	-175.318	-1,040.03	346.19	1,746.54	1,691.67	54.87	31.832	
8,450.00	8,267.55	7,761.04	7,421.17	31.31	31.03	-175.748	-1,040.09	335.28	1,748.14	1,693.29	54.85	31.871	
8,475.00	8,276.78	7,775.00	7,422.95	31.35	31.03	-176.090	-1,040.16	321.43	1,749.34	1,694.48	54.86	31.886	
8,500.00	8,284.77	7,775.00	7,422.95	31.40	31.03	-176.970	-1,040.16	321.43	1,750.08	1,695.27	54.82	31.926	
8,525.00	8,291.51	7,787.03	7,424.16	31.45	31.03	-177.417	-1,040.23	309.47	1,750.40	1,695.55	54.85	31.910	
8,550.00	8,296.99	7,800.00	7,425.12	31.51	31.03	-177.841	-1,040.30	296.53	1,750.31	1,695.40	54.91	31.875	
8,575.00	8,301.18	7,800.00	7,425.12	31.57	31.03	-178.766	-1,040.30	296.53	1,749.77	1,694.84	54.92	31.858	
8,600.00	8,304.07	7,813.21	7,425.74	31.64	31.03	-179.201	-1,040.37	283.34	1,748.77	1,693.75	55.02	31.784	
8,625.00	8,305.66	7,825.00	7,425.99	31.72	31.03	-179.695	-1,040.43	271.55	1,747.37	1,692.24	55.13	31.697	
8,642.92	8,306.00	7,829.04	7,426.00	31.77	31.03	179.781	-1,040.45	267.51	1,746.08	1,690.89	55.19	31.635	
8,700.00	8,306.00	7,883.67	7,426.00	31.99	31.05	179.694	-1,040.74	212.88	1,742.44	1,686.77	55.67	31.300	
8,800.00	8,306.00	7,983.60	7,426.00	32.51	31.18	179.694	-1,041.28	112.95	1,739.61	1,682.85	56.76	30.649	
8,812.71	8,306.00	7,996.31	7,426.00	32.59	31.20	179.694	-1,041.34	100.24	1,739.57	1,682.66	56.91	30.566	
8,900.00	8,306.00	8,083.60	7,426.00	33.20	31.51	179.694	-1,041.81	12.95	1,739.57	1,681.44	58.13	29.925	
9,000.00	8,306.00	8,183.60	7,426.00	34.04	32.15	179.694	-1,042.35	-87.05	1,739.57	1,679.82	59.75	29.116	
9,100.00	8,306.00	8,283.60	7,426.00	35.02	33.07	179.694	-1,042.88	-187.05	1,739.57	1,677.98	61.59	28.246	
9,200.00	8,306.00	8,383.60	7,426.00	36.13	34.19	179.694	-1,043.41	-287.05	1,739.57	1,675.94	63.63	27.338	
9,300.00	8,306.00	8,483.60	7,426.00	37.35	35.48	179.694	-1,043.95	-387.05	1,739.57	1,673.71	65.86	26.412	
9,400.00	8,306.00	8,583.60	7,426.00	38.67	36.87	179.694	-1,044.48	-487.04	1,739.57	1,671.31	68.26	25.484	
9,500.00	8,306.00	8,683.60	7,426.00	40.08	38.37	179.694	-1,045.01	-587.04	1,739.57	1,668.76	70.81	24.567	
9,600.00	8,306.00	8,783.60	7,426.00	41.57	39.95	179.694	-1,045.55	-687.04	1,739.57	1,666.07	73.49	23.670	
9,700.00	8,306.00	8,883.60	7,426.00	43.14	41.59	179.694	-1,046.08	-787.04	1,739.57	1,663.27	76.30	22.800	
9,800.00	8,306.00	8,983.60	7,426.00	44.77	43.30	179.694	-1,046.62	-887.04	1,739.57	1,660.36	79.21	21.961	
9,900.00	8,306.00	9,083.60	7,426.00	46.46	45.06	179.694	-1,047.15	-987.04	1,739.57	1,657.35	82.22	21.158	
10,000.00	8,306.00	9,183.60	7,426.00	48.19	46.87	179.694	-1,047.68	-1,087.04	1,739.56	1,654.25	85.31	20.390	
10,100.00	8,306.00	9,283.60	7,426.00	49.98	48.73	179.694	-1,048.22	-1,187.03	1,739.56	1,651.08	88.49	19.659	
10,200.00	8,306.00	9,383.60	7,426.00	51.80	50.61	179.694	-1,048.75	-1,287.03	1,739.56	1,647.84	91.73	18.964	
10,300.00	8,306.00	9,483.60	7,426.00	53.67	52.54	179.694	-1,049.29	-1,387.03	1,739.56	1,644.53	95.03	18.305	
10,400.00	8,306.00	9,583.60	7,426.00	55.56	54.49	179.694	-1,049.82	-1,487.03	1,739.56	1,641.17	98.39	17.680	
10,500.00	8,306.00	9,683.60	7,426.00	57.49	56.46	179.694	-1,050.35	-1,587.03	1,739.56	1,637.76	101.80	17.088	
10,600.00	8,306.00	9,783.60	7,426.00	59.44	58.47	179.694	-1,050.89	-1,687.03	1,739.56	1,634.31	105.26	16.527	
10,700.00	8,306.00	9,883.60	7,426.00	61.42	60.49	179.694	-1,051.42	-1,787.03	1,739.56	1,630.81	108.75	15.996	
10,800.00	8,306.00	9,983.60	7,426.00	63.42	62.53	179.694	-1,051.96	-1,887.02	1,739.56	1,627.28	112.29	15.492	
10,900.00	8,306.00	10,083.60	7,426.00	65.44	64.59	179.694	-1,052.49	-1,987.02	1,739.56	1,623.71	115.85	15.015	
11,000.00	8,306.00	10,183.60	7,426.00	67.47	66.67	179.694	-1,053.02	-2,087.02	1,739.56	1,620.11	119.45	14.563	
11,100.00	8,306.00	10,283.60	7,426.00	69.53	68.76	179.694	-1,053.56	-2,187.02	1,739.56	1,616.48	123.08	14.134	
11,200.00	8,306.00	10,383.60	7,426.00	71.60	70.86	179.694	-1,054.09	-2,287.02	1,739.56	1,612.83	126.73	13.727	
11,300.00	8,306.00	10,483.60	7,426.00	73.68	72.98	179.694	-1,054.63	-2,387.02	1,739.56	1,609.16	130.40	13.340	
11,400.00	8,306.00	10,583.60	7,426.00	75.78	75.10	179.694	-1,055.16	-2,487.02	1,739.56	1,605.46	134.10	12.972	
11,500.00	8,306.00	10,683.60	7,426.00	77.89	77.24	179.694	-1,055.69	-2,587.01	1,739.56	1,601.74	137.82	12.622	
11,600.00	8,306.00	10,783.60	7,426.00	80.01	79.39	179.694	-1,056.23	-2,687.01	1,739.56	1,598.01	141.55	12.289	
11,700.00	8,306.00	10,883.60	7,426.00	82.13	81.54	179.694	-1,056.76	-2,787.01	1,739.56	1,594.25	145.30	11.972	
11,800.00	8,306.00	10,983.60	7,426.00	84.27	83.70	179.694	-1,057.30	-2,887.01	1,739.56	1,590.49	149.07	11.669	
11,900.00	8,306.00	11,083.60	7,426.00	86.42	85.87	179.694	-1,057.83	-2,987.01	1,739.56	1,586.70	152.85	11.381	
12,000.00	8,306.00	11,183.60	7,426.00	88.58	88.05	179.694	-1,058.36	-3,087.01	1,739.56	1,582.91	156.65	11.105	
12,100.00	8,306.00	11,283.60	7,426.00	90.74	90.23	179.694	-1,058.90	-3,187.01	1,739.55	1,579.10	160.45	10.841	
12,200.00	8,306.00	11,383.60	7,426.00	92.91	92.42	179.694	-1,059.43	-3,287.00	1,739.55	1,575.28	164.27	10.589	
12,300.00	8,306.00	11,483.60	7,426.00	95.08	94.62	179.694	-1,059.97	-3,387.00	1,739.55	1,571.45	168.10	10.348	
12,400.00	8,306.00	11,583.60	7,426.00	97.26	96.82	179.694	-1,060.50	-3,487.00	1,739.55	1,567.61	171.94	10.117	
12,500.00	8,306.00	11,683.60	7,426.00	99.45	99.02	179.694	-1,061.03	-3,587.00	1,739.55	1,563.76	175.79	9.895	
12,600.00	8,306.00	11,783.60	7,426.00	101.64	101.23	179.694	-1,061.57	-3,687.00	1,739.55	1,559.90	179.65	9.683	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - Scott King Fed Com 112H - Wellbore #1 - Design #2												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HRGM												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference	Offset	Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning
				(usft)	(usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
12,700.00	8,306.00	11,883.60	7,426.00	103.84	103.44	179.694	-1,062.10	-3,787.00	1,739.55	1,556.03	183.52	9.479	
12,800.00	8,306.00	11,983.60	7,426.00	106.04	105.66	179.694	-1,062.64	-3,887.00	1,739.55	1,552.16	187.39	9.283	
12,900.00	8,306.00	12,083.60	7,426.00	108.25	107.88	179.694	-1,063.17	-3,986.99	1,739.55	1,548.28	191.27	9.095	
13,000.00	8,306.00	12,183.60	7,426.00	110.46	110.11	179.694	-1,063.70	-4,086.99	1,739.55	1,544.39	195.16	8.913	
13,100.00	8,306.00	12,283.60	7,426.00	112.67	112.33	179.694	-1,064.24	-4,186.99	1,739.55	1,540.49	199.06	8.739	
13,200.00	8,306.00	12,383.60	7,426.00	114.89	114.56	179.694	-1,064.77	-4,286.99	1,739.55	1,536.59	202.96	8.571	
13,300.00	8,306.00	12,483.60	7,426.00	117.11	116.80	179.694	-1,065.31	-4,386.99	1,739.55	1,532.69	206.86	8.409	
13,400.00	8,306.00	12,583.60	7,426.00	119.34	119.03	179.694	-1,065.84	-4,486.99	1,739.55	1,528.77	210.78	8.253	
13,500.00	8,306.00	12,683.60	7,426.00	121.56	121.27	179.694	-1,066.37	-4,586.99	1,739.55	1,524.86	214.69	8.103	
13,600.00	8,306.00	12,783.60	7,426.00	123.79	123.51	179.694	-1,066.91	-4,686.98	1,739.55	1,520.93	218.61	7.957	
13,700.00	8,306.00	12,883.60	7,426.00	126.03	125.76	179.694	-1,067.44	-4,786.98	1,739.55	1,517.01	222.54	7.817	
13,800.00	8,306.00	12,983.60	7,426.00	128.26	128.00	179.694	-1,067.98	-4,886.98	1,739.55	1,513.08	226.47	7.681	
13,900.00	8,306.00	13,083.60	7,426.00	130.50	130.25	179.694	-1,068.51	-4,986.98	1,739.55	1,509.14	230.41	7.550	
14,000.00	8,306.00	13,183.60	7,426.00	132.74	132.50	179.694	-1,069.04	-5,086.98	1,739.55	1,505.20	234.34	7.423	
14,100.00	8,306.00	13,283.60	7,426.00	134.98	134.75	179.694	-1,069.58	-5,186.98	1,739.55	1,501.26	238.29	7.300	
14,200.00	8,306.00	13,383.60	7,426.00	137.22	137.00	179.694	-1,070.11	-5,286.98	1,739.54	1,497.31	242.23	7.181	
14,300.00	8,306.00	13,483.60	7,426.00	139.47	139.26	179.694	-1,070.65	-5,386.97	1,739.54	1,493.36	246.18	7.066	
14,400.00	8,306.00	13,583.60	7,426.00	141.72	141.52	179.694	-1,071.18	-5,486.97	1,739.54	1,489.41	250.13	6.954	
14,500.00	8,306.00	13,683.60	7,426.00	143.97	143.77	179.694	-1,071.71	-5,586.97	1,739.54	1,485.45	254.09	6.846	
14,600.00	8,306.00	13,783.60	7,426.00	146.22	146.03	179.694	-1,072.25	-5,686.97	1,739.54	1,481.50	258.05	6.741	
14,700.00	8,306.00	13,883.60	7,426.00	148.47	148.29	179.694	-1,072.78	-5,786.97	1,739.54	1,477.53	262.01	6.639	
14,800.00	8,306.00	13,983.60	7,426.00	150.73	150.56	179.694	-1,073.32	-5,886.97	1,739.54	1,473.57	265.97	6.540	
14,900.00	8,306.00	14,083.60	7,426.00	152.99	152.82	179.694	-1,073.85	-5,986.97	1,739.54	1,469.60	269.94	6.444	
15,000.00	8,306.00	14,183.60	7,426.00	155.24	155.08	179.694	-1,074.38	-6,086.96	1,739.54	1,465.63	273.91	6.351	
15,100.00	8,306.00	14,283.60	7,426.00	157.50	157.35	179.694	-1,074.92	-6,186.96	1,739.54	1,461.66	277.88	6.260	
15,200.00	8,306.00	14,383.60	7,426.00	159.76	159.62	179.694	-1,075.45	-6,286.96	1,739.54	1,457.69	281.85	6.172	
15,300.00	8,306.00	14,483.60	7,426.00	162.03	161.89	179.694	-1,075.99	-6,386.96	1,739.54	1,453.71	285.83	6.086	
15,400.00	8,306.00	14,583.60	7,426.00	164.29	164.15	179.694	-1,076.52	-6,486.96	1,739.54	1,449.73	289.81	6.002	
15,500.00	8,306.00	14,683.60	7,426.00	166.55	166.42	179.694	-1,077.05	-6,586.96	1,739.54	1,445.75	293.79	5.921	
15,600.00	8,306.00	14,783.60	7,426.00	168.82	168.70	179.694	-1,077.59	-6,686.96	1,739.54	1,441.77	297.77	5.842	
15,700.00	8,306.00	14,883.60	7,426.00	171.08	170.97	179.694	-1,078.12	-6,786.95	1,739.54	1,437.79	301.75	5.765	
15,800.00	8,306.00	14,983.60	7,426.00	173.35	173.24	179.694	-1,078.66	-6,886.95	1,739.54	1,433.80	305.73	5.690	
15,900.00	8,306.00	15,083.60	7,426.00	175.62	175.51	179.694	-1,079.19	-6,986.95	1,739.54	1,429.82	309.72	5.616	
15,959.75	8,306.00	15,143.35	7,426.00	176.98	176.87	179.694	-1,079.51	-7,046.70	1,739.54	1,427.43	312.10	5.574 SF	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - Scott King Fed Com 122H - Wellbore #1 - Design #1													Offset Site Error:	0.00 usft	
Survey Program: Reference		0-MWD+HRGM Offset		Semi Major Axis			Offset Wellbore Centre			Rule Assigned: Distance				Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+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	-145.414	-24.67	-17.01	29.96						
100.00	100.00	102.00	102.00	0.13	0.14	-145.414	-24.67	-17.01	29.96	29.70	0.26	113.718			
200.00	200.00	202.00	202.00	0.49	0.49	-145.414	-24.67	-17.01	29.96	28.98	0.98	30.561			
300.00	300.00	302.00	302.00	0.85	0.85	-145.414	-24.67	-17.01	29.96	28.26	1.70	17.652			
400.00	400.00	402.00	402.00	1.20	1.21	-145.414	-24.67	-17.01	29.96	27.55	2.41	12.410			
500.00	500.00	502.00	502.00	1.56	1.57	-145.414	-24.67	-17.01	29.96	26.83	3.13	9.569			
600.00	600.00	602.00	602.00	1.92	1.93	-145.414	-24.67	-17.01	29.96	26.11	3.85	7.786			
700.00	700.00	702.00	702.00	2.28	2.29	-145.414	-24.67	-17.01	29.96	25.40	4.57	6.563			
750.00	750.00	752.00	752.00	2.46	2.47	-145.414	-24.67	-17.01	29.96	25.04	4.92	6.085 CC, ES			
800.00	800.00	802.00	802.00	2.64	2.64	-145.124	-24.67	-17.01	30.37	25.09	5.28	5.752			
900.00	899.93	901.88	901.87	2.99	2.99	-145.046	-25.40	-16.09	33.72	27.74	5.98	5.639			
1,000.00	999.68	1,001.50	1,001.38	3.35	3.33	-148.084	-28.26	-12.52	40.62	33.95	6.67	6.089			
1,100.00	1,099.13	1,100.62	1,100.17	3.71	3.67	-152.327	-33.25	-6.29	51.31	43.94	7.37	6.961			
1,169.89	1,168.38	1,169.45	1,168.58	3.96	3.91	-155.221	-37.97	-0.39	61.15	53.28	7.87	7.773			
1,200.00	1,198.18	1,198.99	1,197.89	4.08	4.01	-156.447	-40.31	2.54	65.87	57.78	8.08	8.151			
1,300.00	1,297.10	1,297.15	1,295.02	4.45	4.37	-160.650	-49.17	13.61	82.28	73.48	8.80	9.355			
1,400.00	1,396.03	1,395.60	1,392.37	4.83	4.74	-163.686	-58.31	25.02	99.15	89.63	9.52	10.412			
1,500.00	1,494.96	1,494.05	1,489.73	5.22	5.11	-165.836	-67.45	36.44	116.22	105.96	10.26	11.328			
1,600.00	1,593.89	1,592.50	1,587.09	5.61	5.49	-167.434	-76.58	47.85	133.42	122.42	11.00	12.126			
1,700.00	1,692.81	1,690.95	1,684.44	6.00	5.87	-168.668	-85.72	59.27	150.70	138.95	11.75	12.823			
1,800.00	1,791.74	1,789.39	1,781.80	6.39	6.25	-169.647	-94.86	70.69	168.03	155.53	12.51	13.437			
1,900.00	1,890.67	1,887.84	1,879.16	6.79	6.64	-170.444	-104.00	82.10	185.41	172.15	13.26	13.979			
2,000.00	1,989.60	1,986.29	1,976.51	7.19	7.03	-171.104	-113.13	93.52	202.81	188.79	14.02	14.462			
2,100.00	2,088.53	2,084.74	2,073.87	7.58	7.43	-171.659	-122.27	104.93	220.24	205.46	14.79	14.895			
2,200.00	2,187.45	2,183.19	2,171.22	7.98	7.82	-172.134	-131.41	116.35	237.69	222.14	15.55	15.283			
2,300.00	2,286.38	2,281.64	2,268.58	8.38	8.22	-172.543	-140.55	127.77	255.15	238.83	16.32	15.635			
2,400.00	2,385.31	2,380.08	2,365.94	8.78	8.61	-172.900	-149.68	139.18	272.62	255.53	17.09	15.954			
2,500.00	2,484.24	2,478.53	2,463.29	9.19	9.01	-173.214	-158.82	150.60	290.10	272.24	17.86	16.244			
2,600.00	2,583.16	2,576.98	2,560.65	9.59	9.41	-173.492	-167.96	162.01	307.59	288.96	18.63	16.510			
2,700.00	2,682.09	2,675.43	2,658.00	9.99	9.81	-173.741	-177.10	173.43	325.08	305.68	19.40	16.754			
2,800.00	2,781.02	2,773.88	2,755.36	10.39	10.21	-173.964	-186.23	184.85	342.58	322.41	20.18	16.979			
2,900.00	2,879.95	2,872.32	2,852.72	10.80	10.61	-174.165	-195.37	196.26	360.09	339.14	20.95	17.187			
3,000.00	2,978.88	2,970.77	2,950.07	11.20	11.02	-174.348	-204.51	207.68	377.60	355.87	21.73	17.379			
3,100.00	3,077.80	3,069.22	3,047.43	11.60	11.42	-174.515	-213.65	219.09	395.11	372.61	22.50	17.558			
3,200.00	3,176.73	3,167.67	3,144.78	12.01	11.82	-174.667	-222.78	230.51	412.63	389.35	23.28	17.725			
3,300.00	3,275.66	3,266.12	3,242.14	12.41	12.22	-174.807	-231.92	241.93	430.15	406.09	24.06	17.880			
3,400.00	3,374.59	3,364.56	3,339.50	12.82	12.63	-174.936	-241.06	253.34	447.67	422.83	24.84	18.026			
3,500.00	3,473.52	3,463.01	3,436.85	13.22	13.03	-175.055	-250.20	264.76	465.19	439.58	25.61	18.162			
3,600.00	3,572.44	3,561.46	3,534.21	13.63	13.44	-175.166	-259.33	276.17	482.72	456.32	26.39	18.290			
3,700.00	3,671.37	3,659.91	3,631.56	14.03	13.84	-175.269	-268.47	287.59	500.24	473.07	27.17	18.410			
3,800.00	3,770.30	3,758.36	3,728.92	14.44	14.25	-175.365	-277.61	299.01	517.77	489.82	27.95	18.524			
3,900.00	3,869.23	3,856.80	3,826.28	14.84	14.65	-175.455	-286.75	310.42	535.30	506.57	28.73	18.631			
4,000.00	3,968.15	3,955.25	3,923.63	15.25	15.06	-175.539	-295.88	321.84	552.83	523.32	29.51	18.733			
4,100.00	4,067.08	4,053.70	4,020.99	15.66	15.46	-175.617	-305.02	333.25	570.36	540.07	30.29	18.829			
4,200.00	4,166.01	4,152.15	4,118.34	16.06	15.87	-175.692	-314.16	344.67	587.90	556.83	31.07	18.920			
4,300.00	4,264.94	4,250.60	4,215.70	16.47	16.27	-175.761	-323.30	356.09	605.43	573.58	31.85	19.006			
4,400.00	4,363.87	4,349.04	4,313.06	16.87	16.68	-175.827	-332.43	367.50	622.97	590.33	32.64	19.089			
4,500.00	4,462.79	4,447.49	4,410.41	17.28	17.09	-175.890	-341.57	378.92	640.50	607.09	33.42	19.167			
4,600.00	4,561.72	4,545.94	4,507.77	17.69	17.49	-175.949	-350.71	390.33	658.04	623.84	34.20	19.242			
4,700.00	4,660.65	4,644.39	4,605.12	18.09	17.90	-176.005	-359.85	401.75	675.58	640.60	34.98	19.313			
4,800.00	4,759.58	4,742.84	4,702.48	18.50	18.30	-176.058	-368.99	413.17	693.11	657.35	35.76	19.381			
4,900.00	4,858.50	4,841.28	4,799.84	18.91	18.71	-176.108	-378.12	424.58	710.65	674.11	36.55	19.446			

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - Scott King Fed Com 122H - Wellbore #1 - Design #1													Offset Site Error:
													0.00 usft
													Offset Well Error:
													0.00 usft
Survey Program:	Reference	Offset	Semi Major Axis	Azimuth		Offset Wellbore Centre		Rule Assigned:		Distance	Minimum	Separation	Warning
Measured	Vertical	Measured	Vertical	Reference	Offset	from North	+N/-S	+E/-W	Between	Between	Separation	Factor	
Depth	Depth	Depth	Depth	(usft)	(usft)	(°)	(usft)	(usft)	Centres	Ellipses	(usft)		
(usft)	(usft)	(usft)	(usft)						(usft)	(usft)			
5,000.00	4,957.43	4,939.73	4,897.19	19.31	19.12	-176.156	-387.26	436.00	728.19	690.86	37.33	19.508	
5,100.00	5,056.36	5,038.18	4,994.55	19.72	19.52	-176.202	-396.40	447.41	745.73	707.62	38.11	19.568	
5,200.00	5,155.29	5,136.63	5,091.91	20.13	19.93	-176.246	-405.54	458.83	763.27	724.38	38.89	19.625	
5,300.00	5,254.22	5,235.08	5,189.26	20.53	20.34	-176.287	-414.67	470.25	780.81	741.13	39.68	19.679	
5,400.00	5,353.14	5,333.53	5,286.62	20.94	20.75	-176.327	-423.81	481.66	798.35	757.89	40.46	19.732	
5,500.00	5,452.07	5,431.97	5,383.97	21.35	21.15	-176.365	-432.95	493.08	815.89	774.65	41.24	19.783	
5,600.00	5,551.00	5,530.42	5,481.33	21.75	21.56	-176.402	-442.09	504.49	833.43	791.41	42.03	19.831	
5,700.00	5,649.93	5,628.87	5,578.69	22.16	21.97	-176.437	-451.22	515.91	850.98	808.17	42.81	19.878	
5,800.00	5,748.86	5,727.32	5,676.04	22.57	22.37	-176.471	-460.36	527.33	868.52	824.92	43.59	19.923	
5,900.00	5,847.78	5,825.77	5,773.40	22.98	22.78	-176.503	-469.50	538.74	886.06	841.68	44.38	19.967	
6,000.00	5,946.71	5,924.21	5,870.75	23.38	23.19	-176.534	-478.64	550.16	903.60	858.44	45.16	20.008	
6,100.00	6,045.64	6,022.66	5,968.11	23.79	23.60	-176.564	-487.77	561.57	921.14	875.20	45.95	20.049	
6,200.00	6,144.57	6,121.11	6,065.47	24.20	24.00	-176.593	-496.91	572.99	938.69	891.96	46.73	20.088	
6,300.00	6,243.49	6,219.56	6,162.82	24.60	24.41	-176.620	-506.05	584.41	956.23	908.72	47.51	20.126	
6,400.00	6,342.42	6,318.01	6,260.18	25.01	24.82	-176.647	-515.19	595.82	973.77	925.48	48.30	20.162	
6,500.00	6,441.35	6,416.45	6,357.53	25.42	25.23	-176.673	-524.32	607.24	991.32	942.24	49.08	20.197	
6,600.00	6,540.28	6,514.90	6,454.89	25.83	25.64	-176.698	-533.46	618.66	1,008.86	959.00	49.87	20.231	
6,700.00	6,639.21	6,613.35	6,552.25	26.23	26.04	-176.722	-542.60	630.07	1,026.41	975.76	50.65	20.264	
6,800.00	6,738.13	6,711.80	6,649.60	26.64	26.45	-176.745	-551.74	641.49	1,043.95	992.51	51.44	20.296	
6,894.50	6,831.62	6,804.83	6,741.60	27.03	26.84	-176.766	-560.37	652.27	1,060.53	1,008.35	52.18	20.325	
6,900.00	6,837.06	6,810.25	6,746.96	27.05	26.86	-176.768	-560.87	652.90	1,061.49	1,009.27	52.22	20.327	
7,000.00	6,936.25	6,908.87	6,844.49	27.44	27.27	-176.781	-570.03	664.34	1,077.88	1,024.89	53.00	20.339	
7,100.00	7,035.82	7,007.72	6,942.25	27.82	27.68	-177.118	-579.20	675.80	1,092.19	1,038.44	53.76	20.317	
7,200.00	7,135.65	7,106.69	7,040.11	28.17	28.09	-177.502	-588.39	687.28	1,104.45	1,049.94	54.50	20.264	
7,300.00	7,235.62	7,205.65	7,137.97	28.51	28.50	-178.022	-597.57	698.75	1,114.68	1,059.45	55.23	20.183	
7,314.38	7,250.00	7,219.87	7,152.04	28.55	28.56	-178.108	-598.89	700.40	1,115.99	1,060.65	55.33	20.169	
7,400.00	7,335.62	7,304.54	7,235.77	28.83	28.91	-178.624	-606.75	710.22	1,123.70	1,067.76	55.94	20.088	
7,500.00	7,435.62	7,413.42	7,343.48	29.15	29.36	-179.265	-616.68	722.62	1,132.69	1,075.97	56.72	19.969	
7,600.00	7,535.62	7,545.30	7,474.53	29.47	29.87	-179.849	-625.87	734.11	1,139.62	1,081.99	57.63	19.775	
7,700.00	7,635.62	7,678.27	7,607.21	29.79	30.35	179.809	-631.32	740.91	1,143.73	1,085.25	58.48	19.558	
7,800.00	7,735.62	7,811.77	7,740.67	30.11	30.78	179.710	-632.91	742.90	1,144.92	1,085.67	59.26	19.321	
7,803.41	7,739.03	7,816.33	7,745.22	30.12	30.80	179.711	-632.89	742.88	1,144.91	1,085.63	59.28	19.313	
7,892.92	7,828.54	7,901.64	7,830.53	30.41	31.05	179.709	-632.92	742.91	1,144.94	1,085.10	59.84	19.134	
7,900.00	7,835.62	7,908.72	7,837.61	30.43	31.07	179.711	-632.92	742.83	1,144.93	1,085.05	59.88	19.120	
7,925.00	7,860.59	7,933.70	7,862.56	30.50	31.14	179.716	-632.93	741.70	1,144.84	1,084.81	60.03	19.072	
7,950.00	7,885.48	7,958.67	7,887.41	30.57	31.20	179.721	-632.94	739.27	1,144.63	1,084.47	60.16	19.025	
7,975.00	7,910.21	7,983.64	7,912.10	30.63	31.26	179.727	-632.96	735.55	1,144.31	1,084.02	60.29	18.980	
8,000.00	7,934.72	8,008.59	7,936.55	30.69	31.32	179.732	-632.99	730.54	1,143.88	1,083.46	60.41	18.935	
8,025.00	7,958.94	8,033.54	7,960.69	30.75	31.38	179.738	-633.02	724.27	1,143.33	1,082.80	60.52	18.891	
8,050.00	7,982.80	8,058.49	7,984.47	30.80	31.42	179.743	-633.06	716.74	1,142.66	1,082.04	60.63	18.847	
8,075.00	8,006.24	8,083.42	8,007.81	30.85	31.47	179.747	-633.11	707.99	1,141.89	1,081.17	60.72	18.804	
8,100.00	8,029.19	8,108.34	8,030.65	30.89	31.51	179.752	-633.16	698.03	1,141.01	1,080.20	60.82	18.762	
8,125.00	8,051.59	8,133.25	8,052.93	30.93	31.55	179.756	-633.22	686.90	1,140.03	1,079.13	60.90	18.720	
8,150.00	8,073.38	8,158.15	8,074.60	30.96	31.59	179.759	-633.29	674.63	1,138.94	1,077.96	60.98	18.677	
8,175.00	8,094.49	8,183.04	8,095.58	31.00	31.62	179.762	-633.36	661.26	1,137.75	1,076.70	61.06	18.635	
8,200.00	8,114.88	8,207.92	8,115.84	31.03	31.65	179.764	-633.44	646.81	1,136.47	1,075.34	61.13	18.592	
8,225.00	8,134.48	8,232.79	8,135.30	31.06	31.67	179.765	-633.52	631.34	1,135.09	1,073.89	61.20	18.548	
8,250.00	8,153.25	8,257.64	8,153.93	31.08	31.70	179.766	-633.61	614.88	1,133.62	1,072.36	61.27	18.503	
8,275.00	8,171.13	8,282.49	8,171.66	31.11	31.72	179.766	-633.70	597.48	1,132.07	1,070.74	61.34	18.457	
8,300.00	8,188.06	8,307.33	8,188.46	31.13	31.74	179.765	-633.80	579.19	1,130.44	1,069.03	61.41	18.409	
8,325.00	8,204.01	8,332.16	8,204.28	31.16	31.75	179.763	-633.90	560.06	1,128.73	1,067.25	61.48	18.359	
8,350.00	8,218.93	8,356.98	8,219.08	31.18	31.77	179.760	-634.00	540.14	1,126.95	1,065.39	61.56	18.306	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - Scott King Fed Com 122H - Wellbore #1 - Design #1													Offset Site Error:
Survey Program: 0-MWD+HRGM													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	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
8,375.00	8,232.78	8,381.79	8,232.82	31.21	31.79	179.757	-634.12	519.48	1,125.10	1,063.46	61.65	18.251	
8,400.00	8,245.53	8,406.60	8,245.47	31.24	31.81	179.753	-634.23	498.14	1,123.19	1,061.46	61.74	18.193	
8,425.00	8,257.13	8,431.40	8,256.99	31.27	31.82	179.748	-634.35	476.18	1,121.23	1,059.39	61.84	18.132	
8,450.00	8,267.55	8,456.19	8,267.35	31.31	31.84	179.743	-634.47	453.66	1,119.21	1,057.26	61.95	18.067	
8,475.00	8,276.78	8,480.98	8,276.52	31.35	31.86	179.737	-634.59	430.64	1,117.15	1,055.08	62.07	17.999	
8,500.00	8,284.77	8,505.77	8,284.49	31.40	31.89	179.730	-634.71	407.17	1,115.05	1,052.85	62.20	17.927	
8,525.00	8,291.51	8,530.55	8,291.23	31.45	31.91	179.724	-634.84	383.32	1,112.91	1,050.57	62.34	17.852	
8,550.00	8,296.99	8,555.34	8,296.72	31.51	31.94	179.717	-634.97	359.15	1,110.74	1,048.25	62.49	17.774	
8,575.00	8,301.18	8,580.12	8,300.95	31.57	31.98	179.711	-635.10	334.73	1,108.55	1,045.89	62.66	17.692	
8,600.00	8,304.07	8,604.91	8,303.91	31.64	32.02	179.705	-635.23	310.13	1,106.35	1,043.51	62.84	17.607	
8,625.00	8,305.66	8,629.70	8,305.59	31.72	32.06	179.699	-635.36	285.40	1,104.13	1,041.11	63.02	17.519	
8,642.92	8,306.00	8,647.47	8,306.00	31.77	32.10	179.695	-635.46	267.63	1,102.54	1,039.38	63.16	17.455	
8,700.00	8,306.00	8,704.39	8,306.00	31.99	32.25	179.694	-635.76	210.72	1,098.33	1,034.65	63.67	17.249	
8,800.00	8,306.00	8,804.32	8,306.00	32.51	32.66	179.694	-636.30	110.78	1,095.04	1,030.22	64.82	16.893	
8,812.71	8,306.00	8,817.03	8,306.00	32.59	32.73	179.694	-636.37	98.08	1,095.00	1,030.00	65.00	16.847	
8,900.00	8,306.00	8,904.32	8,306.00	33.20	33.27	179.694	-636.83	10.79	1,095.00	1,028.73	66.27	16.523	
9,000.00	8,306.00	9,004.32	8,306.00	34.04	34.07	179.694	-637.37	-89.21	1,095.00	1,027.00	68.00	16.102	
9,100.00	8,306.00	9,104.32	8,306.00	35.02	35.03	179.694	-637.90	-189.21	1,095.00	1,025.00	70.00	15.643	
9,200.00	8,306.00	9,204.32	8,306.00	36.13	36.13	179.694	-638.43	-289.21	1,095.00	1,022.77	72.23	15.160	
9,300.00	8,306.00	9,304.32	8,306.00	37.35	37.35	179.694	-638.97	-389.21	1,095.00	1,020.31	74.68	14.662	
9,400.00	8,306.00	9,404.32	8,306.00	38.67	38.67	179.694	-639.50	-489.21	1,095.00	1,017.66	77.33	14.160	
9,500.00	8,306.00	9,504.32	8,306.00	40.08	40.08	179.694	-640.03	-589.21	1,095.00	1,014.84	80.16	13.660	
9,600.00	8,306.00	9,604.32	8,306.00	41.57	41.57	179.694	-640.57	-689.20	1,095.00	1,011.85	83.15	13.170	
9,700.00	8,306.00	9,704.32	8,306.00	43.14	43.14	179.694	-641.10	-789.20	1,094.99	1,008.72	86.28	12.692	
9,800.00	8,306.00	9,804.32	8,306.00	44.77	44.77	179.694	-641.64	-889.20	1,094.99	1,005.46	89.53	12.230	
9,900.00	8,306.00	9,904.32	8,306.00	46.46	46.46	179.694	-642.17	-989.20	1,094.99	1,002.09	92.91	11.786	
10,000.00	8,306.00	10,004.32	8,306.00	48.19	48.20	179.694	-642.70	-1,089.20	1,094.99	998.61	96.38	11.361	
10,100.00	8,306.00	10,104.32	8,306.00	49.98	49.98	179.694	-643.24	-1,189.20	1,094.99	995.04	99.95	10.956	
10,200.00	8,306.00	10,204.32	8,306.00	51.80	51.81	179.694	-643.77	-1,289.20	1,094.99	991.39	103.60	10.570	
10,300.00	8,306.00	10,304.32	8,306.00	53.67	53.67	179.694	-644.31	-1,389.19	1,094.99	987.67	107.32	10.203	
10,400.00	8,306.00	10,404.32	8,306.00	55.56	55.57	179.694	-644.84	-1,489.19	1,094.99	983.88	111.11	9.855	
10,500.00	8,306.00	10,504.32	8,306.00	57.49	57.49	179.694	-645.37	-1,589.19	1,094.99	980.03	114.96	9.525	
10,600.00	8,306.00	10,604.32	8,306.00	59.44	59.45	179.694	-645.91	-1,689.19	1,094.99	976.12	118.87	9.215	
10,700.00	8,306.00	10,704.32	8,306.00	61.42	61.42	179.694	-646.44	-1,789.19	1,094.99	972.17	122.82	8.915	
10,800.00	8,306.00	10,804.32	8,306.00	63.42	63.42	179.694	-646.98	-1,889.19	1,094.99	968.17	126.82	8.634	
10,900.00	8,306.00	10,904.32	8,306.00	65.44	65.44	179.694	-647.51	-1,989.19	1,094.99	964.13	130.85	8.368	
11,000.00	8,306.00	11,004.32	8,306.00	67.47	67.48	179.694	-648.04	-2,089.18	1,094.99	960.06	134.93	8.115	
11,100.00	8,306.00	11,104.32	8,306.00	69.53	69.54	179.694	-648.58	-2,189.18	1,094.99	955.95	139.04	7.875	
11,200.00	8,306.00	11,204.32	8,306.00	71.60	71.61	179.694	-649.11	-2,289.18	1,094.98	951.81	143.18	7.648	
11,300.00	8,306.00	11,304.32	8,306.00	73.68	73.69	179.694	-649.65	-2,389.18	1,094.98	947.64	147.34	7.432	
11,400.00	8,306.00	11,404.32	8,306.00	75.78	75.79	179.694	-650.18	-2,489.18	1,094.98	943.45	151.54	7.226	
11,500.00	8,306.00	11,504.32	8,306.00	77.89	77.89	179.694	-650.71	-2,589.18	1,094.98	939.23	155.75	7.030	
11,600.00	8,306.00	11,604.32	8,306.00	80.01	80.01	179.694	-651.25	-2,689.18	1,094.98	934.99	159.99	6.844	
11,700.00	8,306.00	11,704.32	8,306.00	82.13	82.14	179.694	-651.78	-2,789.17	1,094.98	930.73	164.25	6.667	
11,800.00	8,306.00	11,804.32	8,306.00	84.27	84.28	179.694	-652.31	-2,889.17	1,094.98	926.46	168.52	6.497	
11,900.00	8,306.00	11,904.32	8,306.00	86.42	86.43	179.694	-652.85	-2,989.17	1,094.98	922.16	172.82	6.336	
12,000.00	8,306.00	12,004.32	8,306.00	88.58	88.58	179.694	-653.38	-3,089.17	1,094.98	917.85	177.13	6.182	
12,100.00	8,306.00	12,104.32	8,306.00	90.74	90.74	179.694	-653.92	-3,189.17	1,094.98	913.53	181.45	6.035	
12,200.00	8,306.00	12,204.32	8,306.00	92.91	92.91	179.694	-654.45	-3,289.17	1,094.98	909.19	185.79	5.894	
12,300.00	8,306.00	12,304.32	8,306.00	95.08	95.09	179.694	-654.98	-3,389.17	1,094.98	904.84	190.14	5.759	
12,400.00	8,306.00	12,404.32	8,306.00	97.26	97.27	179.694	-655.52	-3,489.16	1,094.98	900.47	194.50	5.630	
12,500.00	8,306.00	12,504.32	8,306.00	99.45	99.46	179.694	-656.05	-3,589.16	1,094.98	896.10	198.88	5.506	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - Scott King Fed Com 122H - Wellbore #1 - Design #1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HRGM												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)	Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N-S (usft)	+E-W (usft)					
12,600.00	8,306.00	12,604.32	8,306.00	101.64	101.65	179.694	-656.59	-3,689.16	1,094.98	891.71	203.26	5.387	
12,700.00	8,306.00	12,704.32	8,306.00	103.84	103.85	179.694	-657.12	-3,789.16	1,094.97	887.32	207.66	5.273	
12,800.00	8,306.00	12,804.32	8,306.00	106.04	106.05	179.694	-657.65	-3,889.16	1,094.97	882.91	212.06	5.164	
12,900.00	8,306.00	12,904.32	8,306.00	108.25	108.25	179.694	-658.19	-3,989.16	1,094.97	878.50	216.47	5.058	
13,000.00	8,306.00	13,004.32	8,306.00	110.46	110.46	179.694	-658.72	-4,089.16	1,094.97	874.08	220.89	4.957	
13,100.00	8,306.00	13,104.32	8,306.00	112.67	112.68	179.694	-659.26	-4,189.15	1,094.97	869.65	225.32	4.860	
13,200.00	8,306.00	13,204.32	8,306.00	114.89	114.89	179.694	-659.79	-4,289.15	1,094.97	865.22	229.76	4.766	
13,300.00	8,306.00	13,304.32	8,306.00	117.11	117.11	179.694	-660.32	-4,389.15	1,094.97	860.77	234.20	4.675	
13,400.00	8,306.00	13,404.32	8,306.00	119.34	119.34	179.694	-660.86	-4,489.15	1,094.97	856.32	238.65	4.588	
13,500.00	8,306.00	13,504.32	8,306.00	121.56	121.57	179.694	-661.39	-4,589.15	1,094.97	851.87	243.10	4.504	
13,600.00	8,306.00	13,604.32	8,306.00	123.79	123.80	179.694	-661.93	-4,689.15	1,094.97	847.41	247.56	4.423	
13,700.00	8,306.00	13,704.32	8,306.00	126.03	126.03	179.694	-662.46	-4,789.15	1,094.97	842.94	252.03	4.345	
13,800.00	8,306.00	13,804.32	8,306.00	128.26	128.26	179.694	-662.99	-4,889.15	1,094.97	838.47	256.50	4.269	
13,900.00	8,306.00	13,904.32	8,306.00	130.50	130.50	179.694	-663.53	-4,989.14	1,094.97	834.00	260.97	4.196	
14,000.00	8,306.00	14,004.32	8,306.00	132.74	132.74	179.694	-664.06	-5,089.14	1,094.97	829.52	265.45	4.125	
14,100.00	8,306.00	14,104.32	8,306.00	134.98	134.98	179.694	-664.60	-5,189.14	1,094.97	825.03	269.94	4.056	
14,200.00	8,306.00	14,204.32	8,306.00	137.22	137.23	179.694	-665.13	-5,289.14	1,094.96	820.54	274.42	3.990	
14,300.00	8,306.00	14,304.32	8,306.00	139.47	139.47	179.694	-665.66	-5,389.14	1,094.96	816.05	278.92	3.926	
14,400.00	8,306.00	14,404.32	8,306.00	141.72	141.72	179.694	-666.20	-5,489.14	1,094.96	811.55	283.41	3.863	
14,500.00	8,306.00	14,504.32	8,306.00	143.97	143.97	179.694	-666.73	-5,589.14	1,094.96	807.05	287.91	3.803	
14,600.00	8,306.00	14,604.32	8,306.00	146.22	146.22	179.694	-667.26	-5,689.13	1,094.96	802.55	292.42	3.745	
14,700.00	8,306.00	14,704.32	8,306.00	148.47	148.48	179.694	-667.80	-5,789.13	1,094.96	798.04	296.92	3.688	
14,800.00	8,306.00	14,804.32	8,306.00	150.73	150.73	179.694	-668.33	-5,889.13	1,094.96	793.53	301.43	3.633	
14,900.00	8,306.00	14,904.32	8,306.00	152.99	152.99	179.694	-668.87	-5,989.13	1,094.96	789.01	305.95	3.579	
15,000.00	8,306.00	15,004.32	8,306.00	155.24	155.24	179.694	-669.40	-6,089.13	1,094.96	784.50	310.46	3.527	
15,100.00	8,306.00	15,104.32	8,306.00	157.50	157.50	179.694	-669.93	-6,189.13	1,094.96	779.98	314.98	3.476	
15,200.00	8,306.00	15,204.32	8,306.00	159.76	159.76	179.694	-670.47	-6,289.13	1,094.96	775.46	319.50	3.427	
15,300.00	8,306.00	15,304.32	8,306.00	162.03	162.03	179.694	-671.00	-6,389.12	1,094.96	770.93	324.03	3.379	
15,400.00	8,306.00	15,404.32	8,306.00	164.29	164.29	179.694	-671.54	-6,489.12	1,094.96	766.41	328.55	3.333	
15,500.00	8,306.00	15,504.32	8,306.00	166.55	166.55	179.694	-672.07	-6,589.12	1,094.96	761.88	333.08	3.287	
15,600.00	8,306.00	15,604.32	8,306.00	168.82	168.82	179.694	-672.60	-6,689.12	1,094.96	757.35	337.61	3.243	
15,700.00	8,306.00	15,704.32	8,306.00	171.08	171.08	179.694	-673.14	-6,789.12	1,094.96	752.81	342.14	3.200	
15,800.00	8,306.00	15,804.32	8,306.00	173.35	173.35	179.694	-673.67	-6,889.12	1,094.95	748.28	346.68	3.158	
15,900.00	8,306.00	15,904.32	8,306.00	175.62	175.62	179.694	-674.21	-6,989.12	1,094.95	743.74	351.21	3.118	
15,959.75	8,306.00	15,964.07	8,306.00	176.98	176.97	179.694	-674.52	-7,048.87	1,094.95	741.03	353.93	3.094 SF	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - Scott King Fed Com 132H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Survey Program: 0-MWD+HRGM		Reference		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	139.662	-86.88	73.78	113.98	113.98			
100.00	100.00	99.00	99.00	0.13	0.13	0.13	0.13	139.662	-86.88	73.78	113.98	113.72	0.26	446.919	
200.00	200.00	199.00	199.00	0.49	0.48	0.49	0.48	139.662	-86.88	73.78	113.98	113.01	0.97	117.541	
300.00	300.00	299.00	299.00	0.85	0.84	0.85	0.84	139.662	-86.88	73.78	113.98	112.29	1.69	67.577	
400.00	400.00	399.00	399.00	1.20	1.20	1.20	1.20	139.662	-86.88	73.78	113.98	111.57	2.40	47.420	
500.00	500.00	499.00	499.00	1.56	1.56	1.56	1.56	139.662	-86.88	73.78	113.98	110.86	3.12	36.525	
600.00	600.00	599.00	599.00	1.92	1.92	1.92	1.92	139.662	-86.88	73.78	113.98	110.14	3.84	29.701 CC, ES	
700.00	700.00	696.20	696.20	2.28	2.26	2.28	2.26	139.459	-87.32	74.69	114.94	110.40	4.53	25.346	
750.00	750.00	744.39	744.35	2.46	2.42	2.46	2.42	139.129	-88.06	76.20	116.55	111.67	4.88	23.897	
800.00	800.00	792.51	792.40	2.64	2.58	2.64	2.58	138.866	-89.15	78.44	118.88	113.67	5.22	22.795	
900.00	899.93	888.51	888.12	2.99	2.92	2.99	2.92	139.141	-92.39	85.08	125.58	119.69	5.89	21.320	
1,000.00	999.68	984.05	983.07	3.35	3.26	3.35	3.26	140.337	-97.00	94.54	134.99	128.43	6.57	20.556	
1,100.00	1,099.13	1,079.74	1,077.78	3.71	3.61	3.71	3.61	142.219	-102.99	106.81	147.14	139.89	7.25	20.289	
1,169.89	1,168.38	1,148.87	1,146.09	3.96	3.88	3.96	3.88	143.940	-107.65	116.37	156.30	148.54	7.76	20.146	
1,200.00	1,198.18	1,178.64	1,175.50	4.08	3.99	4.08	3.99	144.752	-109.66	120.49	160.28	152.30	7.98	20.091	
1,300.00	1,297.10	1,277.49	1,273.17	4.45	4.37	4.45	4.37	147.179	-116.33	134.15	173.69	164.98	8.71	19.931	
1,400.00	1,396.03	1,376.33	1,370.84	4.83	4.76	4.83	4.76	149.253	-122.99	147.82	187.37	177.91	9.46	19.800	
1,500.00	1,494.96	1,475.18	1,468.51	5.22	5.15	5.22	5.15	151.041	-129.66	161.49	201.26	191.04	10.22	19.694	
1,600.00	1,593.89	1,572.22	1,564.42	5.61	5.54	5.61	5.54	152.825	-136.76	174.42	215.60	204.63	10.96	19.663	
1,700.00	1,692.81	1,667.70	1,658.83	6.00	5.92	6.00	5.92	155.117	-146.05	185.17	231.36	219.66	11.70	19.779	
1,800.00	1,791.74	1,763.26	1,753.28	6.39	6.29	6.39	6.29	157.754	-157.64	193.93	248.80	236.38	12.43	20.018	
1,900.00	1,890.67	1,860.98	1,849.84	6.79	6.68	6.79	6.68	160.173	-170.07	202.37	267.07	253.89	13.18	20.265	
2,000.00	1,989.60	1,958.71	1,946.40	7.19	7.07	7.19	7.07	162.279	-182.51	210.82	285.74	271.81	13.93	20.511	
2,100.00	2,088.53	2,056.44	2,042.97	7.58	7.46	7.58	7.46	164.124	-194.95	219.26	304.74	290.06	14.69	20.751	
2,200.00	2,187.45	2,154.16	2,139.53	7.98	7.85	7.98	7.85	165.750	-207.39	227.70	324.02	308.57	15.44	20.984	
2,300.00	2,286.38	2,251.89	2,236.09	8.38	8.24	8.38	8.24	167.192	-219.82	236.15	343.52	327.32	16.20	21.207	
2,400.00	2,385.31	2,349.62	2,332.66	8.78	8.64	8.78	8.64	168.477	-232.26	244.59	363.21	346.25	16.96	21.419	
2,500.00	2,484.24	2,447.34	2,429.22	9.19	9.03	9.19	9.03	169.630	-244.70	253.04	383.07	365.35	17.72	21.621	
2,600.00	2,583.16	2,545.07	2,525.78	9.59	9.43	9.59	9.43	170.668	-257.14	261.48	403.06	384.58	18.48	21.813	
2,700.00	2,682.09	2,642.79	2,622.35	9.99	9.83	9.99	9.83	171.607	-269.57	269.92	423.17	403.93	19.24	21.995	
2,800.00	2,781.02	2,740.52	2,718.91	10.39	10.23	10.39	10.23	172.461	-282.01	278.37	443.38	423.38	20.00	22.167	
2,900.00	2,879.95	2,838.25	2,815.47	10.80	10.63	10.80	10.63	173.240	-294.45	286.81	463.68	442.91	20.76	22.331	
3,000.00	2,978.88	2,935.97	2,912.04	11.20	11.03	11.20	11.03	173.954	-306.89	295.26	484.05	462.53	21.53	22.485	
3,100.00	3,077.80	3,033.70	3,008.60	11.60	11.43	11.60	11.43	174.609	-319.32	303.70	504.50	482.21	22.29	22.631	
3,200.00	3,176.73	3,131.43	3,105.16	12.01	11.83	12.01	11.83	175.213	-331.76	312.14	525.01	501.95	23.06	22.770	
3,300.00	3,275.66	3,229.15	3,201.72	12.41	12.24	12.41	12.24	175.772	-344.20	320.59	545.56	521.74	23.82	22.902	
3,400.00	3,374.59	3,326.88	3,298.29	12.82	12.64	12.82	12.64	176.290	-356.64	329.03	566.17	541.58	24.59	23.027	
3,500.00	3,473.52	3,424.61	3,394.85	13.22	13.04	13.22	13.04	176.771	-369.07	337.48	586.82	561.47	25.35	23.146	
3,600.00	3,572.44	3,522.33	3,491.41	13.63	13.45	13.63	13.45	177.220	-381.51	345.92	607.51	581.39	26.12	23.259	
3,700.00	3,671.37	3,620.06	3,587.98	14.03	13.85	14.03	13.85	177.639	-393.95	354.36	628.23	601.34	26.89	23.366	
3,800.00	3,770.30	3,717.79	3,684.54	14.44	14.26	14.44	14.26	178.031	-406.39	362.81	648.98	621.33	27.65	23.469	
3,900.00	3,869.23	3,815.51	3,781.10	14.84	14.66	14.84	14.66	178.399	-418.82	371.25	669.76	641.34	28.42	23.566	
4,000.00	3,968.15	3,913.24	3,877.67	15.25	15.07	15.25	15.07	178.744	-431.26	379.70	690.57	661.38	29.19	23.659	
4,100.00	4,067.08	4,010.96	3,974.23	15.66	15.47	15.66	15.47	179.069	-443.70	388.14	711.40	681.44	29.96	23.748	
4,200.00	4,166.01	4,108.69	4,070.79	16.06	15.88	16.06	15.88	179.376	-456.14	396.58	732.25	701.52	30.72	23.833	
4,300.00	4,264.94	4,206.42	4,167.36	16.47	16.29	16.47	16.29	179.666	-468.57	405.03	753.12	721.63	31.49	23.914	
4,400.00	4,363.87	4,304.14	4,263.92	16.87	16.69	16.87	16.69	179.940	-481.01	413.47	774.01	741.75	32.26	23.992	
4,500.00	4,462.79	4,401.87	4,360.48	17.28	17.10	17.28	17.10	-179.800	-493.45	421.92	794.91	761.88	33.03	24.067	
4,600.00	4,561.72	4,499.60	4,457.05	17.69	17.51	17.69	17.51	-179.554	-505.89	430.36	815.83	782.03	33.80	24.138	
4,700.00	4,660.65	4,597.32	4,553.61	18.09	17.91	18.09	17.91	-179.320	-518.32	438.80	836.77	802.20	34.57	24.207	
4,800.00	4,759.58	4,695.05	4,650.17	18.50	18.32	18.50	18.32	-179.098	-530.76	447.25	857.72	822.38	35.34	24.273	
4,900.00	4,858.50	4,792.78	4,746.74	18.91	18.73	18.91	18.73	-178.886	-543.20	455.69	878.68	842.57	36.11	24.336	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - Scott King Fed Com 132H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Survey Program: 0-MWD+HRGM		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,000.00	4,957.43	4,890.50	4,843.30	19.31	19.13	-178.684	-555.64	464.14	899.65	862.77	36.88	24.397	
5,100.00	5,056.36	4,988.23	4,939.86	19.72	19.54	-178.491	-568.07	472.58	920.63	882.98	37.65	24.455	
5,200.00	5,155.29	5,085.95	5,036.43	20.13	19.95	-178.307	-580.51	481.02	941.62	903.21	38.42	24.512	
5,300.00	5,254.22	5,183.68	5,132.99	20.53	20.36	-178.131	-592.95	489.47	962.62	923.44	39.19	24.566	
5,400.00	5,353.14	5,281.41	5,229.55	20.94	20.76	-177.962	-605.39	497.91	983.63	943.68	39.96	24.618	
5,500.00	5,452.07	5,379.13	5,326.12	21.35	21.17	-177.801	-617.82	506.36	1,004.65	963.93	40.73	24.669	
5,600.00	5,551.00	5,476.86	5,422.68	21.75	21.58	-177.646	-630.26	514.80	1,025.68	984.18	41.50	24.717	
5,700.00	5,649.93	5,574.59	5,519.24	22.16	21.99	-177.497	-642.70	523.25	1,046.71	1,004.44	42.27	24.764	
5,800.00	5,748.86	5,672.31	5,615.80	22.57	22.40	-177.355	-655.14	531.69	1,067.75	1,024.71	43.04	24.810	
5,900.00	5,847.78	5,770.04	5,712.37	22.98	22.80	-177.217	-667.57	540.13	1,088.80	1,044.99	43.81	24.854	
6,000.00	5,946.71	5,867.77	5,808.93	23.38	23.21	-177.085	-680.01	548.58	1,109.85	1,065.27	44.58	24.896	
6,100.00	6,045.64	5,965.49	5,905.49	23.79	23.62	-176.958	-692.45	557.02	1,130.90	1,085.55	45.35	24.937	
6,200.00	6,144.57	6,063.22	6,002.06	24.20	24.03	-176.836	-704.89	565.47	1,151.97	1,105.85	46.12	24.977	
6,300.00	6,243.49	6,160.94	6,098.62	24.60	24.44	-176.718	-717.32	573.91	1,173.04	1,126.14	46.89	25.015	
6,400.00	6,342.42	6,258.67	6,195.18	25.01	24.85	-176.604	-729.76	582.35	1,194.11	1,146.44	47.66	25.052	
6,500.00	6,441.35	6,356.40	6,291.75	25.42	25.25	-176.494	-742.20	590.80	1,215.19	1,166.75	48.44	25.089	
6,600.00	6,540.28	6,454.12	6,388.31	25.83	25.66	-176.388	-754.64	599.24	1,236.27	1,187.06	49.21	25.124	
6,700.00	6,639.21	6,551.85	6,484.87	26.23	26.07	-176.285	-767.07	607.69	1,257.35	1,207.37	49.98	25.158	
6,800.00	6,738.13	6,649.58	6,581.44	26.64	26.48	-176.186	-779.51	616.13	1,278.44	1,227.69	50.75	25.190	
6,894.50	6,831.62	6,741.92	6,672.69	27.03	26.87	-176.095	-791.26	624.11	1,298.37	1,246.89	51.48	25.221	
6,900.00	6,837.06	6,747.30	6,678.00	27.05	26.89	-176.090	-791.95	624.57	1,299.53	1,248.01	51.52	25.222	
7,000.00	6,936.25	6,845.29	6,774.82	27.44	27.30	-176.064	-804.42	633.04	1,319.47	1,267.18	52.29	25.235	
7,100.00	7,035.82	6,943.66	6,872.02	27.82	27.71	-176.156	-816.94	641.54	1,337.30	1,284.26	53.04	25.215	
7,200.00	7,135.65	7,042.29	6,969.48	28.17	28.12	-176.364	-829.49	650.06	1,353.01	1,299.24	53.77	25.163	
7,300.00	7,235.62	7,141.07	7,067.08	28.51	28.54	-176.683	-842.06	658.60	1,366.62	1,312.13	54.49	25.081	
7,314.38	7,250.00	7,155.28	7,081.12	28.55	28.60	-176.738	-843.87	659.82	1,368.41	1,313.82	54.59	25.067	
7,400.00	7,335.62	7,239.88	7,164.71	28.83	28.95	-177.069	-854.64	667.13	1,378.93	1,323.74	55.19	24.984	
7,500.00	7,435.62	7,338.69	7,262.35	29.15	29.36	-177.450	-867.21	675.67	1,391.29	1,335.39	55.90	24.890	
7,600.00	7,535.62	7,437.50	7,359.98	29.47	29.78	-177.824	-879.79	684.21	1,403.70	1,347.10	56.60	24.800	
7,700.00	7,635.62	7,536.31	7,457.61	29.79	30.19	-178.191	-892.36	692.75	1,416.17	1,358.86	57.31	24.713	
7,800.00	7,735.62	7,635.12	7,555.25	30.11	30.60	-178.552	-904.94	701.29	1,428.70	1,370.69	58.01	24.628	
7,892.92	7,828.54	7,726.93	7,645.96	30.41	30.99	-178.882	-916.62	709.22	1,440.39	1,381.72	58.66	24.553	
7,900.00	7,835.62	7,733.92	7,652.88	30.43	31.02	-178.909	-917.51	709.82	1,441.27	1,382.56	58.71	24.548	
7,925.00	7,860.59	7,758.52	7,677.19	30.50	31.12	-179.037	-920.64	711.95	1,444.31	1,385.43	58.88	24.530	
7,950.00	7,885.48	7,782.94	7,701.31	30.57	31.22	-179.216	-923.75	714.06	1,447.20	1,388.17	59.04	24.513	
7,975.00	7,910.21	7,807.11	7,725.20	30.63	31.32	-179.444	-926.83	716.15	1,449.96	1,390.77	59.19	24.495	
8,000.00	7,934.72	7,830.97	7,748.76	30.69	31.42	-179.722	-929.86	718.21	1,452.58	1,393.24	59.34	24.479	
8,025.00	7,958.94	7,854.44	7,771.96	30.75	31.52	-179.952	-932.85	720.24	1,455.08	1,395.60	59.48	24.462	
8,050.00	7,982.80	7,877.46	7,794.71	30.80	31.62	-179.579	-935.78	722.22	1,457.47	1,397.85	59.62	24.447	
8,075.00	8,006.24	7,899.97	7,816.95	30.85	31.71	-179.160	-938.65	724.17	1,459.77	1,400.02	59.74	24.433	
8,100.00	8,029.19	7,927.10	7,843.75	30.89	31.82	-178.680	-942.08	726.50	1,461.98	1,402.08	59.90	24.406	
8,125.00	8,051.59	7,964.75	7,881.02	30.93	31.98	-178.129	-946.54	729.53	1,463.96	1,403.83	60.13	24.346	
8,150.00	8,073.38	8,001.60	7,917.56	30.96	32.13	-177.547	-950.51	732.22	1,465.69	1,405.34	60.35	24.288	
8,175.00	8,094.49	8,037.55	7,953.26	31.00	32.27	-176.936	-954.01	734.60	1,467.20	1,406.66	60.54	24.233	
8,200.00	8,114.88	8,072.49	7,988.01	31.03	32.40	-176.295	-957.06	736.67	1,468.54	1,407.81	60.73	24.181	
8,225.00	8,134.48	8,106.34	8,021.71	31.06	32.53	-175.626	-959.67	738.45	1,469.76	1,408.86	60.90	24.132	
8,250.00	8,153.25	8,139.00	8,054.26	31.08	32.65	-174.930	-961.89	739.95	1,470.91	1,409.84	61.06	24.089	
8,275.00	8,171.13	8,170.38	8,085.55	31.11	32.77	-174.207	-963.72	741.19	1,472.02	1,410.82	61.21	24.050	
8,300.00	8,188.06	8,200.37	8,115.49	31.13	32.87	-173.457	-965.21	742.21	1,473.17	1,411.83	61.34	24.015	
8,325.00	8,204.01	8,228.88	8,143.96	31.16	32.97	-172.683	-966.39	743.00	1,474.39	1,412.92	61.47	23.986	
8,350.00	8,218.93	8,255.82	8,170.89	31.18	33.06	-171.886	-967.28	743.61	1,475.74	1,414.15	61.58	23.964	
8,375.00	8,232.78	8,281.10	8,196.15	31.21	33.15	-171.066	-967.93	744.05	1,477.26	1,415.57	61.69	23.947	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - Scott King Fed Com 132H - Wellbore #1 - Design #2													Offset Site Error:
Survey Program: 0-MWD+HRGM													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	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
8,400.00	8,245.53	8,304.62	8,219.67	31.24	33.23	170.225	-968.37	744.35	1,479.00	1,417.22	61.79	23.937	
8,425.00	8,257.13	8,326.30	8,241.34	31.27	33.29	169.366	-968.64	744.53	1,481.01	1,419.14	61.88	23.935	
8,450.00	8,267.55	8,346.04	8,261.08	31.31	33.36	168.490	-968.76	744.61	1,483.33	1,421.37	61.96	23.940	
8,475.00	8,276.78	8,363.74	8,278.78	31.35	33.41	167.599	-968.77	744.62	1,485.99	1,423.95	62.04	23.953	
8,500.00	8,284.77	8,368.73	8,283.77	31.40	33.42	166.694	-968.78	744.63	1,489.07	1,426.98	62.09	23.982	
8,525.00	8,291.51	8,375.47	8,290.51	31.45	33.44	165.779	-968.78	744.63	1,492.57	1,430.42	62.15	24.016	
8,550.00	8,296.99	8,380.95	8,295.99	31.51	33.46	164.856	-968.78	744.63	1,496.50	1,434.30	62.21	24.057	
8,575.00	8,301.18	8,385.14	8,300.18	31.57	33.47	163.929	-968.78	744.63	1,500.87	1,438.61	62.26	24.105	
8,600.00	8,304.07	8,388.03	8,303.07	31.64	33.48	163.000	-968.78	744.63	1,505.66	1,443.35	62.32	24.161	
8,625.00	8,305.66	8,389.62	8,304.66	31.72	33.48	162.074	-968.78	744.63	1,510.88	1,448.50	62.37	24.223	
8,642.92	8,306.00	8,389.96	8,305.00	31.77	33.48	161.412	-968.78	744.63	1,514.86	1,452.45	62.41	24.272	
8,700.00	8,306.00	8,389.96	8,305.00	31.99	33.48	159.338	-968.78	744.63	1,529.72	1,467.17	62.55	24.455	
8,800.00	8,306.00	8,389.96	8,305.00	32.51	33.48	155.862	-968.78	744.63	1,564.28	1,501.40	62.88	24.878	
8,812.71	8,306.00	8,389.96	8,305.00	32.59	33.48	155.437	-968.78	744.63	1,569.42	1,506.49	62.93	24.940	
8,900.00	8,306.00	9,342.54	8,850.01	33.20	34.39	175.000	-1,022.16	134.45	1,582.76	1,519.38	63.38	24.972	
9,000.00	8,306.00	9,442.21	8,850.01	34.04	34.70	175.000	-1,030.85	35.16	1,590.44	1,525.61	64.84	24.530	
9,100.00	8,306.00	9,634.68	8,850.00	35.02	36.28	178.544	-1,042.16	-156.94	1,595.68	1,528.23	67.45	23.657	
9,200.00	8,306.00	9,764.80	8,850.00	36.13	37.68	179.694	-1,043.43	-287.05	1,595.94	1,526.12	69.82	22.859	
9,300.00	8,306.00	9,864.80	8,850.00	37.35	38.89	179.694	-1,043.96	-387.05	1,595.94	1,523.85	72.09	22.138	
9,400.00	8,306.00	9,964.80	8,850.00	38.67	40.19	179.694	-1,044.50	-487.05	1,595.94	1,521.39	74.55	21.407	
9,500.00	8,306.00	10,064.80	8,850.00	40.08	41.58	179.694	-1,045.03	-587.05	1,595.94	1,518.76	77.18	20.678	
9,600.00	8,306.00	10,164.80	8,850.00	41.57	43.04	179.694	-1,045.56	-687.04	1,595.94	1,515.97	79.96	19.959	
9,700.00	8,306.00	10,264.80	8,850.00	43.14	44.57	179.694	-1,046.10	-787.04	1,595.93	1,513.05	82.88	19.256	
9,800.00	8,306.00	10,364.80	8,850.00	44.77	46.17	179.694	-1,046.63	-887.04	1,595.93	1,510.01	85.92	18.574	
9,900.00	8,306.00	10,464.80	8,850.00	46.46	47.82	179.694	-1,047.16	-987.04	1,595.93	1,506.86	89.08	17.916	
10,000.00	8,306.00	10,564.80	8,850.00	48.19	49.52	179.694	-1,047.70	-1,087.04	1,595.93	1,503.60	92.33	17.285	
10,100.00	8,306.00	10,664.80	8,850.00	49.98	51.27	179.694	-1,048.23	-1,187.04	1,595.93	1,500.26	95.67	16.682	
10,200.00	8,306.00	10,764.80	8,850.00	51.80	53.07	179.694	-1,048.77	-1,287.04	1,595.93	1,496.84	99.09	16.106	
10,300.00	8,306.00	10,864.80	8,850.00	53.67	54.89	179.694	-1,049.30	-1,387.04	1,595.93	1,493.35	102.58	15.557	
10,400.00	8,306.00	10,964.80	8,850.00	55.56	56.76	179.694	-1,049.83	-1,487.03	1,595.93	1,489.79	106.14	15.036	
10,500.00	8,306.00	11,064.80	8,850.00	57.49	58.65	179.694	-1,050.37	-1,587.03	1,595.93	1,486.17	109.76	14.540	
10,600.00	8,306.00	11,164.80	8,850.00	59.44	60.57	179.694	-1,050.90	-1,687.03	1,595.93	1,482.50	113.43	14.070	
10,700.00	8,306.00	11,264.80	8,850.00	61.42	62.52	179.694	-1,051.43	-1,787.03	1,595.93	1,478.78	117.15	13.623	
10,800.00	8,306.00	11,364.80	8,850.00	63.42	64.49	179.694	-1,051.97	-1,887.03	1,595.93	1,475.02	120.91	13.199	
10,900.00	8,306.00	11,464.80	8,850.00	65.44	66.49	179.694	-1,052.50	-1,987.03	1,595.93	1,471.21	124.71	12.797	
11,000.00	8,306.00	11,564.80	8,850.00	67.47	68.50	179.694	-1,053.04	-2,087.03	1,595.92	1,467.38	128.55	12.415	
11,100.00	8,306.00	11,664.80	8,850.00	69.53	70.53	179.694	-1,053.57	-2,187.02	1,595.92	1,463.50	132.42	12.052	
11,200.00	8,306.00	11,764.80	8,850.00	71.60	72.57	179.694	-1,054.10	-2,287.02	1,595.92	1,459.60	136.32	11.707	
11,300.00	8,306.00	11,864.80	8,850.00	73.68	74.63	179.694	-1,054.64	-2,387.02	1,595.92	1,455.67	140.25	11.379	
11,400.00	8,306.00	11,964.80	8,850.00	75.78	76.71	179.694	-1,055.17	-2,487.02	1,595.92	1,451.72	144.20	11.067	
11,500.00	8,306.00	12,064.80	8,850.00	77.89	78.80	179.694	-1,055.70	-2,587.02	1,595.92	1,447.74	148.18	10.770	
11,600.00	8,306.00	12,164.80	8,850.00	80.01	80.89	179.694	-1,056.24	-2,687.02	1,595.92	1,443.74	152.18	10.487	
11,700.00	8,306.00	12,264.80	8,850.00	82.13	83.00	179.694	-1,056.77	-2,787.02	1,595.92	1,439.72	156.20	10.217	
11,800.00	8,306.00	12,364.80	8,850.00	84.27	85.12	179.694	-1,057.31	-2,887.01	1,595.92	1,435.68	160.23	9.960	
11,900.00	8,306.00	12,464.80	8,850.00	86.42	87.25	179.694	-1,057.84	-2,987.01	1,595.92	1,431.63	164.29	9.714	
12,000.00	8,306.00	12,564.80	8,850.00	88.58	89.39	179.694	-1,058.37	-3,087.01	1,595.92	1,427.56	168.36	9.479	
12,100.00	8,306.00	12,664.80	8,850.00	90.74	91.54	179.694	-1,058.91	-3,187.01	1,595.92	1,423.47	172.44	9.255	
12,200.00	8,306.00	12,764.80	8,850.00	92.91	93.69	179.694	-1,059.44	-3,287.01	1,595.92	1,419.37	176.54	9.040	
12,300.00	8,306.00	12,864.80	8,850.00	95.08	95.85	179.694	-1,059.97	-3,387.01	1,595.91	1,415.26	180.65	8.834	
12,400.00	8,306.00	12,964.80	8,850.00	97.26	98.02	179.694	-1,060.51	-3,487.01	1,595.91	1,411.14	184.77	8.637	
12,500.00	8,306.00	13,064.80	8,850.00	99.45	100.19	179.694	-1,061.04	-3,587.00	1,595.91	1,407.00	188.91	8.448	
12,600.00	8,306.00	13,164.80	8,850.00	101.64	102.37	179.694	-1,061.58	-3,687.00	1,595.91	1,402.86	193.05	8.267	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (111H - 132H) - Scott King Fed Com 132H - Wellbore #1 - Design #2													Offset Site Error:
Survey Program: 0-MWD+HRGM													0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference	Offset	Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning
				(usft)	(usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
12,700.00	8,306.00	13,264.80	8,850.00	103.84	104.55	179.694	-1,062.11	-3,787.00	1,595.91	1,398.70	197.21	8.093	
12,800.00	8,306.00	13,364.80	8,850.00	106.04	106.74	179.694	-1,062.64	-3,887.00	1,595.91	1,394.54	201.37	7.925	
12,900.00	8,306.00	13,464.80	8,850.00	108.25	108.94	179.694	-1,063.18	-3,987.00	1,595.91	1,390.37	205.54	7.764	
13,000.00	8,306.00	13,564.80	8,850.00	110.46	111.14	179.694	-1,063.71	-4,087.00	1,595.91	1,386.19	209.72	7.610	
13,100.00	8,306.00	13,664.80	8,850.00	112.67	113.34	179.694	-1,064.25	-4,187.00	1,595.91	1,382.00	213.91	7.461	
13,200.00	8,306.00	13,764.80	8,850.00	114.89	115.54	179.694	-1,064.78	-4,286.99	1,595.91	1,377.80	218.10	7.317	
13,300.00	8,306.00	13,864.80	8,850.00	117.11	117.75	179.694	-1,065.31	-4,386.99	1,595.91	1,373.60	222.31	7.179	
13,400.00	8,306.00	13,964.80	8,850.00	119.34	119.97	179.694	-1,065.85	-4,486.99	1,595.91	1,369.39	226.51	7.046	
13,500.00	8,306.00	14,064.80	8,850.00	121.56	122.19	179.694	-1,066.38	-4,586.99	1,595.91	1,365.18	230.73	6.917	
13,600.00	8,306.00	14,164.80	8,850.00	123.79	124.41	179.694	-1,066.91	-4,686.99	1,595.90	1,360.96	234.95	6.793	
13,700.00	8,306.00	14,264.80	8,850.00	126.03	126.63	179.694	-1,067.45	-4,786.99	1,595.90	1,356.73	239.17	6.673	
13,800.00	8,306.00	14,364.80	8,850.00	128.26	128.86	179.694	-1,067.98	-4,886.99	1,595.90	1,352.50	243.40	6.557	
13,900.00	8,306.00	14,464.80	8,850.00	130.50	131.09	179.694	-1,068.52	-4,986.98	1,595.90	1,348.27	247.64	6.445	
14,000.00	8,306.00	14,564.80	8,850.00	132.74	133.32	179.694	-1,069.05	-5,086.98	1,595.90	1,344.03	251.88	6.336	
14,100.00	8,306.00	14,664.80	8,850.00	134.98	135.55	179.694	-1,069.58	-5,186.98	1,595.90	1,339.78	256.12	6.231	
14,200.00	8,306.00	14,764.80	8,850.00	137.22	137.79	179.694	-1,070.12	-5,286.98	1,595.90	1,335.53	260.37	6.129	
14,300.00	8,306.00	14,864.80	8,850.00	139.47	140.03	179.694	-1,070.65	-5,386.98	1,595.90	1,331.28	264.62	6.031	
14,400.00	8,306.00	14,964.80	8,850.00	141.72	142.27	179.694	-1,071.18	-5,486.98	1,595.90	1,327.02	268.87	5.935	
14,500.00	8,306.00	15,064.80	8,850.00	143.97	144.51	179.694	-1,071.72	-5,586.98	1,595.90	1,322.76	273.13	5.843	
14,600.00	8,306.00	15,164.80	8,850.00	146.22	146.75	179.694	-1,072.25	-5,686.97	1,595.90	1,318.50	277.40	5.753	
14,700.00	8,306.00	15,264.80	8,850.00	148.47	149.00	179.694	-1,072.79	-5,786.97	1,595.90	1,314.23	281.66	5.666	
14,800.00	8,306.00	15,364.80	8,850.00	150.73	151.25	179.694	-1,073.32	-5,886.97	1,595.89	1,309.96	285.93	5.581	
14,900.00	8,306.00	15,464.80	8,850.00	152.99	153.50	179.694	-1,073.85	-5,986.97	1,595.89	1,305.69	290.20	5.499	
15,000.00	8,306.00	15,564.80	8,850.00	155.24	155.75	179.694	-1,074.39	-6,086.97	1,595.89	1,301.41	294.48	5.419	
15,100.00	8,306.00	15,664.80	8,850.00	157.50	158.00	179.694	-1,074.92	-6,186.97	1,595.89	1,297.14	298.76	5.342	
15,200.00	8,306.00	15,764.80	8,850.00	159.76	160.26	179.694	-1,075.45	-6,286.97	1,595.89	1,292.85	303.04	5.266	
15,300.00	8,306.00	15,864.80	8,850.00	162.03	162.52	179.694	-1,075.99	-6,386.96	1,595.89	1,288.57	307.32	5.193	
15,400.00	8,306.00	15,964.80	8,850.00	164.29	164.77	179.694	-1,076.52	-6,486.96	1,595.89	1,284.29	311.61	5.122	
15,500.00	8,306.00	16,064.80	8,850.00	166.55	167.03	179.694	-1,077.06	-6,586.96	1,595.89	1,280.00	315.89	5.052	
15,600.00	8,306.00	16,164.80	8,850.00	168.82	169.29	179.694	-1,077.59	-6,686.96	1,595.89	1,275.71	320.18	4.984	
15,700.00	8,306.00	16,264.80	8,850.00	171.08	171.55	179.694	-1,078.12	-6,786.96	1,595.89	1,271.41	324.47	4.918	
15,800.00	8,306.00	16,364.80	8,850.00	173.35	173.81	179.694	-1,078.66	-6,886.96	1,595.89	1,267.12	328.77	4.854	
15,900.00	8,306.00	16,464.80	8,850.00	175.62	176.08	179.694	-1,079.19	-6,986.96	1,595.89	1,262.82	333.06	4.792	
15,959.75	8,306.00	16,524.55	8,850.00	176.98	177.43	179.694	-1,079.51	-7,046.71	1,595.89	1,260.25	335.63	4.755 SF	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (Offsets) - Ches Riddle Com 201H - Wellbore #1 - Surveys

Survey Program: 133-MWD+HRGM, 575-MWD+HRGM											Offset Site Error:	0.00 usft
Rule Assigned:											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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,892.92	7,828.54	14,662.00	9,793.03	30.41	123.41	-65.665	643.75	445.78	1,995.77	1,936.79	58.98	33.838
7,900.00	7,835.62	14,662.00	9,793.03	30.43	123.41	-65.661	643.75	445.78	1,988.77	1,929.76	59.01	33.704
7,925.00	7,860.59	14,662.00	9,793.03	30.50	123.41	-65.569	643.75	445.78	1,963.98	1,904.88	59.10	33.233
7,950.00	7,885.48	14,662.00	9,793.03	30.57	123.41	-65.360	643.75	445.78	1,939.09	1,879.91	59.18	32.766
7,975.00	7,910.21	14,662.00	9,793.03	30.63	123.41	-65.028	643.75	445.78	1,914.18	1,854.92	59.26	32.303
8,000.00	7,934.72	14,662.00	9,793.03	30.69	123.41	-64.567	643.75	445.78	1,889.31	1,829.98	59.33	31.845
8,025.00	7,958.94	14,662.00	9,793.03	30.75	123.41	-63.969	643.75	445.78	1,864.55	1,805.16	59.39	31.394
8,050.00	7,982.80	14,662.00	9,793.03	30.80	123.41	-63.221	643.75	445.78	1,839.98	1,780.53	59.45	30.951
8,075.00	8,006.24	14,662.00	9,793.03	30.85	123.41	-62.307	643.75	445.78	1,815.67	1,756.17	59.50	30.517
8,100.00	8,029.19	14,662.00	9,793.03	30.89	123.41	-61.209	643.75	445.78	1,791.70	1,732.16	59.54	30.093
8,125.00	8,051.59	14,662.00	9,793.03	30.93	123.41	-59.901	643.75	445.78	1,768.15	1,708.58	59.58	29.679
8,150.00	8,073.38	14,662.00	9,793.03	30.96	123.41	-58.352	643.75	445.78	1,745.11	1,685.51	59.61	29.278
8,175.00	8,094.49	14,662.00	9,793.03	31.00	123.41	-56.524	643.75	445.78	1,722.66	1,663.03	59.63	28.890
8,200.00	8,114.88	14,662.00	9,793.03	31.03	123.41	-54.371	643.75	445.78	1,700.89	1,641.24	59.65	28.515
8,225.00	8,134.48	14,662.00	9,793.03	31.06	123.41	-51.834	643.75	445.78	1,679.87	1,620.21	59.66	28.156
8,250.00	8,153.25	14,662.00	9,793.03	31.08	123.41	-48.848	643.75	445.78	1,659.71	1,600.04	59.67	27.813
8,275.00	8,171.13	14,662.00	9,793.03	31.11	123.41	-45.331	643.75	445.78	1,640.49	1,580.81	59.68	27.488
8,300.00	8,188.06	14,662.00	9,793.03	31.13	123.41	-41.195	643.75	445.78	1,622.29	1,562.60	59.69	27.180
8,325.00	8,204.01	14,662.00	9,793.03	31.16	123.41	-36.352	643.75	445.78	1,605.20	1,545.51	59.69	26.892
8,350.00	8,218.93	14,662.00	9,793.03	31.18	123.41	-30.726	643.75	445.78	1,589.31	1,529.61	59.70	26.624
8,375.00	8,232.78	14,662.00	9,793.03	31.21	123.41	-24.282	643.75	445.78	1,574.69	1,514.98	59.70	26.376
8,400.00	8,245.53	14,662.00	9,793.03	31.24	123.41	-17.063	643.75	445.78	1,561.42	1,501.71	59.71	26.150
8,425.00	8,257.13	14,662.00	9,793.03	31.27	123.41	-9.221	643.75	445.78	1,549.57	1,489.85	59.72	25.947
8,450.00	8,267.55	14,662.00	9,793.03	31.31	123.41	-1.027	643.75	445.78	1,539.21	1,479.47	59.74	25.767
8,475.00	8,276.78	14,649.73	9,793.09	31.35	123.14	2.845	643.73	433.51	1,530.35	1,470.64	59.71	25.631
8,500.00	8,284.77	14,626.10	9,793.22	31.40	122.61	2.790	643.70	409.89	1,522.76	1,463.13	59.63	25.536
8,525.00	8,291.51	14,604.09	9,793.34	31.45	122.13	3.426	643.67	387.87	1,516.43	1,456.86	59.56	25.460
8,550.00	8,296.99	14,564.28	9,793.38	31.51	121.24	-1.914	643.74	348.06	1,511.27	1,451.85	59.42	25.432
8,575.00	8,301.18	14,524.30	9,792.98	31.57	120.35	-7.030	644.17	308.09	1,507.15	1,447.85	59.30	25.416
8,600.00	8,304.07	14,496.83	9,792.47	31.64	119.74	-7.807	644.68	280.62	1,504.13	1,444.91	59.22	25.398
8,625.00	8,305.66	14,477.91	9,792.15	31.72	119.32	-5.786	645.11	261.72	1,502.48	1,443.31	59.17	25.392
8,641.96	8,306.00	14,465.06	9,791.97	31.77	119.04	-4.439	645.46	248.87	1,502.16	1,443.02	59.14	25.401
8,642.92	8,306.00	14,464.33	9,791.97	31.77	119.02	-4.364	645.48	248.14	1,502.16	1,443.02	59.14	25.401
8,700.00	8,306.00	14,427.60	9,791.59	31.99	118.21	2.047	646.64	211.43	1,502.43	1,443.39	59.04	25.449
8,800.00	8,306.00	14,200.19	9,782.13	32.51	113.18	-31.622	654.33	-15.50	1,499.33	1,440.87	58.46	25.648
8,812.71	8,306.00	14,193.81	9,781.62	32.59	113.04	-30.232	654.39	-21.86	1,498.35	1,439.93	58.42	25.648
8,900.00	8,306.00	14,133.00	9,778.00	33.20	111.70	-23.880	655.74	-82.54	1,493.22	1,435.08	58.14	25.683
9,000.00	8,306.00	14,092.78	9,776.67	34.04	110.81	-7.877	657.42	-122.70	1,489.88	1,431.95	57.94	25.715
9,058.19	8,306.00	14,057.53	9,776.02	34.61	110.03	-1.316	659.37	-157.89	1,489.29	1,431.46	57.84	25.750
9,100.00	8,306.00	14,039.00	9,775.87	35.02	109.63	5.245	660.57	-176.38	1,489.45	1,431.67	57.78	25.778
9,200.00	8,306.00	13,984.80	9,776.67	36.13	108.44	17.278	664.29	-230.44	1,492.12	1,434.44	57.68	25.869
9,300.00	8,306.00	13,757.00	9,775.22	37.35	103.46	-16.779	663.96	-457.76	1,490.63	1,433.62	57.01	26.146
9,400.00	8,306.00	13,697.32	9,773.47	38.67	102.16	-6.198	660.34	-517.30	1,487.31	1,430.56	56.75	26.207
9,421.49	8,306.00	13,687.20	9,773.41	38.97	101.94	-3.041	659.92	-527.41	1,487.09	1,430.37	56.72	26.218
9,500.00	8,306.00	13,641.60	9,773.92	40.08	100.95	6.185	658.63	-572.98	1,487.60	1,431.01	56.58	26.290
9,600.00	8,306.00	13,443.18	9,773.16	41.57	96.65	-21.146	651.20	-771.17	1,487.70	1,431.70	55.99	26.569
9,700.00	8,306.00	13,338.16	9,768.90	43.14	94.38	-22.723	647.21	-876.02	1,483.28	1,427.55	55.73	26.615
9,800.00	8,306.00	13,248.51	9,763.55	44.77	92.45	-20.221	644.51	-965.46	1,477.17	1,421.62	55.55	26.591
9,900.00	8,306.00	13,189.72	9,761.96	46.46	91.19	-8.669	644.17	-1,024.22	1,474.22	1,418.74	55.49	26.569
10,000.00	8,306.00	13,073.53	9,758.81	48.19	88.69	-12.982	648.45	-1,140.27	1,472.14	1,416.69	55.46	26.545
10,100.00	8,306.00	12,982.84	9,755.56	49.98	86.74	-10.090	652.69	-1,230.80	1,469.31	1,413.82	55.49	26.477
10,200.00	8,306.00	12,910.00	9,753.98	51.80	85.19	-2.384	655.78	-1,303.56	1,467.84	1,412.29	55.55	26.425

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (Offsets) - Ches Riddle Com 201H - Wellbore #1 - Surveys													Offset Site Error:	0.00 usft
Survey Program: 133-MWD+HRGM, 575-MWD+HRGM													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	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	
10,232.17	8,306.00	12,885.22	9,753.74	52.40	84.66	-0.307	656.85	-1,328.31	1,467.74	1,412.17	55.57	26.411		
10,300.00	8,306.00	12,835.55	9,753.71	53.67	83.60	4.693	658.93	-1,377.95	1,468.16	1,412.54	55.62	26.395		
10,400.00	8,306.00	12,778.84	9,754.71	55.56	82.40	15.966	661.43	-1,434.59	1,470.72	1,414.99	55.73	26.389		
10,500.00	8,306.00	12,722.00	9,757.66	57.49	81.20	25.750	664.79	-1,491.25	1,476.61	1,420.73	55.88	26.424		
10,600.00	8,306.00	12,622.87	9,764.06	59.44	79.12	25.257	671.89	-1,589.91	1,484.15	1,428.11	56.04	26.482		
10,700.00	8,306.00	12,388.72	9,771.34	61.42	74.24	-7.029	680.27	-1,823.61	1,489.26	1,433.22	56.04	26.574		
10,800.00	8,306.00	12,218.34	9,763.28	63.42	70.73	-23.211	678.16	-1,993.73	1,484.06	1,428.06	56.00	26.499		
10,900.00	8,306.00	12,157.00	9,760.24	65.44	69.48	-14.660	676.61	-2,054.98	1,478.83	1,422.77	56.07	26.375		
11,000.00	8,306.00	12,104.63	9,759.04	67.47	68.42	-3.069	676.24	-2,107.33	1,476.51	1,420.32	56.19	26.277		
11,100.00	8,306.00	11,969.00	9,757.57	69.53	65.68	-11.700	677.61	-2,242.91	1,476.08	1,419.77	56.31	26.216		
11,182.03	8,306.00	11,933.61	9,756.79	71.23	64.98	-0.306	677.19	-2,278.29	1,474.54	1,418.11	56.43	26.131		
11,200.00	8,306.00	11,927.38	9,756.82	71.60	64.85	2.602	677.18	-2,284.52	1,474.61	1,418.15	56.46	26.118		
11,300.00	8,306.00	11,851.18	9,759.39	73.68	63.34	8.402	678.09	-2,360.65	1,477.74	1,421.11	56.63	26.096		
11,400.00	8,306.00	11,649.86	9,753.40	75.78	59.41	-16.023	676.83	-2,561.66	1,472.83	1,416.10	56.73	25.964		
11,500.00	8,306.00	11,593.00	9,752.72	77.89	58.31	-5.788	675.92	-2,618.51	1,470.77	1,413.88	56.89	25.855		
11,600.00	8,306.00	11,451.75	9,748.94	80.01	55.64	-15.809	671.81	-2,759.61	1,467.71	1,410.71	57.00	25.750		
11,700.00	8,306.00	11,313.00	9,742.48	82.13	53.08	-24.735	666.92	-2,898.10	1,462.87	1,405.73	57.14	25.601		
11,800.00	8,306.00	11,244.97	9,738.42	84.27	51.85	-17.794	663.56	-2,965.92	1,456.51	1,399.22	57.29	25.422		
11,900.00	8,306.00	11,160.80	9,735.53	86.42	50.36	-14.088	661.21	-3,050.00	1,452.70	1,395.21	57.50	25.266		
12,000.00	8,306.00	11,081.12	9,732.94	88.58	48.97	-9.017	659.69	-3,129.63	1,449.37	1,391.63	57.73	25.104		
12,100.00	8,306.00	11,003.02	9,732.08	90.74	47.64	-3.333	659.19	-3,207.72	1,448.17	1,390.16	58.01	24.964		
12,200.00	8,306.00	10,895.18	9,730.70	92.91	45.85	-5.395	657.93	-3,315.55	1,446.78	1,388.46	58.33	24.805		
12,300.00	8,306.00	8,319.11	8,310.79	95.08	27.32	-81.813	635.99	-4,757.40	1,376.46	1,316.35	60.10	22.901		
12,400.00	8,306.00	8,318.47	8,310.15	97.26	27.32	-81.150	635.99	-4,757.40	1,277.64	1,216.97	60.67	21.058		
12,500.00	8,306.00	8,317.83	8,309.51	99.45	27.32	-80.377	636.00	-4,757.41	1,179.02	1,117.63	61.39	19.204		
12,600.00	8,306.00	8,317.20	8,308.88	101.64	27.31	-79.462	636.01	-4,757.41	1,080.66	1,018.34	62.32	17.341		
12,700.00	8,306.00	8,316.57	8,308.25	103.84	27.31	-78.365	636.01	-4,757.42	982.63	919.11	63.52	15.469		
12,800.00	8,306.00	8,315.94	8,307.62	106.04	27.31	-77.025	636.02	-4,757.42	885.04	819.92	65.12	13.591		
12,900.00	8,306.00	8,315.31	8,307.00	108.25	27.31	-75.354	636.02	-4,757.42	788.05	720.78	67.28	11.714		
13,000.00	8,306.00	8,314.69	8,306.37	110.46	27.30	-73.216	636.03	-4,757.43	691.93	621.67	70.26	9.848		
13,100.00	8,306.00	8,314.07	8,305.75	112.67	27.30	-70.395	636.03	-4,757.43	597.07	522.59	74.48	8.017		
13,200.00	8,306.00	8,313.45	8,305.13	114.89	27.30	-66.521	636.04	-4,757.44	504.20	423.59	80.61	6.255		
13,300.00	8,306.00	8,312.83	8,304.52	117.11	27.30	-60.939	636.04	-4,757.44	414.67	324.90	89.77	4.619		
13,400.00	8,306.00	8,312.22	8,303.91	119.34	27.30	-52.422	636.05	-4,757.44	331.17	227.56	103.62	3.196		
13,500.00	8,306.00	8,311.61	8,303.29	121.56	27.29	-38.739	636.05	-4,757.45	259.62	135.94	123.68	2.099		
13,600.00	8,306.00	8,311.00	8,302.69	123.79	27.29	-17.099	636.06	-4,757.45	212.43	66.67	145.76	1.457	Level 3	
13,661.38	8,306.00	8,310.63	8,302.31	125.16	27.29	-0.306	636.06	-4,757.45	203.38	50.96	152.41	1.334	Level 3, CC, ES, SF	
13,700.00	8,306.00	8,310.40	8,302.08	126.03	27.29	10.447	636.06	-4,757.46	207.01	55.60	151.41	1.367	Level 3	
13,800.00	8,306.00	8,309.79	8,301.48	128.26	27.29	33.972	636.07	-4,757.46	246.13	110.82	135.31	1.819		
13,900.00	8,306.00	8,309.19	8,300.88	130.50	27.28	49.252	636.07	-4,757.46	313.53	197.55	115.98	2.703		
14,000.00	8,306.00	8,308.59	8,300.28	132.74	27.28	58.703	636.08	-4,757.47	395.00	293.46	101.54	3.890		
14,100.00	8,306.00	8,308.00	8,299.68	134.98	27.28	64.816	636.09	-4,757.47	483.47	391.85	91.62	5.277		
14,200.00	8,306.00	8,307.40	8,299.09	137.22	27.28	69.005	636.09	-4,757.47	575.73	490.96	84.77	6.791		
14,300.00	8,306.00	8,306.81	8,298.50	139.47	27.28	72.026	636.10	-4,757.48	670.22	590.30	79.92	8.386		
14,400.00	8,306.00	8,306.22	8,297.91	141.72	27.27	74.296	636.10	-4,757.48	766.10	689.72	76.38	10.031		
14,500.00	8,306.00	8,305.64	8,297.32	143.97	27.27	76.059	636.11	-4,757.49	862.92	789.20	73.72	11.705		
14,600.00	8,306.00	8,305.05	8,296.74	146.22	27.27	77.465	636.11	-4,757.49	960.39	888.70	71.69	13.397		
14,700.00	8,306.00	8,304.47	8,296.15	148.47	27.27	78.612	636.12	-4,757.49	1,058.33	988.23	70.10	15.097		
14,800.00	8,306.00	8,303.89	8,295.58	150.73	27.27	79.564	636.12	-4,757.50	1,156.63	1,087.79	68.84	16.802		
14,900.00	8,306.00	8,303.31	8,295.00	152.99	27.26	80.366	636.13	-4,757.50	1,255.19	1,187.37	67.82	18.508		
15,000.00	8,306.00	8,302.74	8,294.42	155.24	27.26	81.052	636.13	-4,757.50	1,353.96	1,286.97	66.99	20.212		
15,100.00	8,306.00	8,302.16	8,293.85	157.50	27.26	81.644	636.14	-4,757.51	1,452.90	1,386.60	66.30	21.913		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (Offsets) - Ches Riddle Com 201H - Wellbore #1 - Surveys

Survey Program: 133-MWD+HRGM, 575-MWD+HRGM												Offset Site Error:	0.00 usft
Reference:												Offset Well Error:	0.00 usft
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Semi Major Axis	Offset	Azimuth	Offset Wellbore Centre		Distance		Minimum Separation	Separation Factor	Warning
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	from North	+N-S	+E-W	Between	Between	(usft)		
						(°)	(usft)	(usft)	Centres	Ellipses			
									(usft)	(usft)			
15,200.00	8,306.00	8,301.59	8,293.28	159.76	27.26	82.161	636.15	-4,757.51	1,551.98	1,486.25	65.73	23.610	
15,300.00	8,306.00	8,301.02	8,292.71	162.03	27.26	82.616	636.15	-4,757.51	1,651.17	1,585.91	65.26	25.303	
15,400.00	8,306.00	8,300.46	8,292.14	164.29	27.25	83.019	636.16	-4,757.52	1,750.45	1,685.60	64.85	26.991	
15,500.00	8,306.00	8,299.89	8,291.58	166.55	27.25	83.379	636.16	-4,757.52	1,849.81	1,785.30	64.51	28.674	
15,600.00	8,306.00	8,299.33	8,291.02	168.82	27.25	83.702	636.17	-4,757.52	1,949.23	1,885.01	64.22	30.352	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (Offsets) - Ches Riddle Com 221H - Wellbore #1 - Surveys													Offset Site Error:
													0.00 usft
Survey Program:	Reference	Offset	Semi Major Axis	Rule Assigned:		Offset Wellbore Centre		Distance	Between	Minimum	Separation	Warning	Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)		0.00 usft
11,800.00	8,306.00	8,274.66	8,268.57	84.27	27.14	-86.236	568.79	-4,812.23	1,921.62	1,863.99	57.63	33.344	
11,900.00	8,306.00	8,276.52	8,270.43	86.42	27.14	-86.013	568.77	-4,812.27	1,821.90	1,764.17	57.74	31.555	
12,000.00	8,306.00	8,278.37	8,272.28	88.58	27.15	-85.765	568.75	-4,812.30	1,722.21	1,664.35	57.86	29.765	
12,100.00	8,306.00	8,280.20	8,274.11	90.74	27.16	-85.486	568.73	-4,812.33	1,622.56	1,564.55	58.01	27.971	
12,200.00	8,306.00	8,282.02	8,275.93	92.91	27.16	-85.170	568.72	-4,812.36	1,522.95	1,464.77	58.18	26.175	
12,300.00	8,306.00	8,283.82	8,277.73	95.08	27.17	-84.811	568.70	-4,812.39	1,423.39	1,365.00	58.39	24.375	
12,400.00	8,306.00	8,285.61	8,279.51	97.26	27.18	-84.397	568.69	-4,812.42	1,323.90	1,265.24	58.66	22.571	
12,500.00	8,306.00	8,287.38	8,281.28	99.45	27.18	-83.916	568.67	-4,812.45	1,224.49	1,165.51	58.98	20.760	
12,600.00	8,306.00	8,289.13	8,283.04	101.64	27.19	-83.350	568.65	-4,812.48	1,125.18	1,065.78	59.40	18.943	
12,700.00	8,306.00	8,290.87	8,284.78	103.84	27.19	-82.675	568.64	-4,812.51	1,026.00	966.06	59.94	17.117	
12,800.00	8,306.00	8,292.60	8,286.51	106.04	27.20	-81.855	568.62	-4,812.54	926.99	866.33	60.66	15.282	
12,900.00	8,306.00	8,294.31	8,288.22	108.25	27.21	-80.839	568.61	-4,812.57	828.21	766.57	61.64	13.436	
13,000.00	8,306.00	8,296.01	8,289.91	110.46	27.21	-79.549	568.59	-4,812.59	729.77	666.74	63.03	11.578	
13,100.00	8,306.00	8,297.69	8,291.60	112.67	27.22	-77.858	568.58	-4,812.62	631.82	566.76	65.05	9.713	
13,200.00	8,306.00	8,299.36	8,293.27	114.89	27.22	-75.549	568.56	-4,812.65	534.61	466.49	68.12	7.848	
13,300.00	8,306.00	8,301.02	8,294.92	117.11	27.23	-72.223	568.55	-4,812.68	438.66	365.65	73.01	6.008	
13,400.00	8,306.00	8,302.66	8,296.56	119.34	27.23	-67.064	568.53	-4,812.70	345.00	263.75	81.25	4.246	
13,500.00	8,306.00	8,304.29	8,298.19	121.56	27.24	-58.208	568.52	-4,812.73	256.18	160.18	95.99	2.669	
13,600.00	8,306.00	8,305.90	8,299.81	123.79	27.25	-40.997	568.51	-4,812.75	179.51	57.04	122.47	1.466 Level 3	
13,700.00	8,306.00	8,307.50	8,301.41	126.03	27.25	-7.451	568.49	-4,812.78	137.16	-14.96	152.12	0.902 Level 3	
13,717.06	8,306.00	8,307.78	8,301.68	126.41	27.25	-0.308	568.49	-4,812.78	136.10	-17.46	153.56	0.886 Level 3, CC, ES, SF	
13,800.00	8,306.00	8,309.09	8,303.00	128.26	27.26	31.048	568.48	-4,812.80	159.37	20.92	138.45	1.151 Level 3	
13,900.00	8,306.00	8,310.67	8,304.57	130.50	27.26	53.045	568.46	-4,812.83	227.99	118.19	109.80	2.076	
14,000.00	8,306.00	8,312.23	8,306.14	132.74	27.27	64.007	568.45	-4,812.85	313.93	221.86	92.07	3.410	
14,100.00	8,306.00	8,313.79	8,307.69	134.98	27.27	70.132	568.44	-4,812.88	406.36	324.41	81.94	4.959	
14,200.00	8,306.00	8,315.33	8,309.23	137.22	27.28	73.959	568.42	-4,812.90	501.69	425.86	75.82	6.616	
14,300.00	8,306.00	8,316.85	8,310.76	139.47	27.28	76.557	568.41	-4,812.93	598.54	526.64	71.90	8.325	
14,400.00	8,306.00	8,318.37	8,312.27	141.72	27.29	78.429	568.40	-4,812.95	696.28	627.04	69.24	10.055	
14,500.00	8,306.00	8,319.87	8,313.77	143.97	27.29	79.838	568.38	-4,812.97	794.58	727.20	67.38	11.793	
14,600.00	8,306.00	8,321.36	8,315.26	146.22	27.30	80.937	568.37	-4,813.00	893.26	827.24	66.02	13.530	
14,700.00	8,306.00	8,322.84	8,316.74	148.47	27.30	81.817	568.36	-4,813.02	992.19	927.19	65.01	15.263	
14,800.00	8,306.00	8,324.31	8,318.21	150.73	27.31	82.537	568.35	-4,813.04	1,091.32	1,027.09	64.23	16.991	
14,900.00	8,306.00	8,325.77	8,319.67	152.99	27.31	83.137	568.33	-4,813.06	1,190.60	1,126.97	63.63	18.712	
15,000.00	8,306.00	8,327.21	8,321.11	155.24	27.32	83.644	568.32	-4,813.09	1,289.98	1,226.83	63.16	20.426	
15,100.00	8,306.00	8,328.65	8,322.55	157.50	27.32	84.080	568.31	-4,813.11	1,389.45	1,326.67	62.78	22.133	
15,200.00	8,306.00	8,330.07	8,323.97	159.76	27.33	84.456	568.30	-4,813.13	1,488.99	1,426.52	62.48	23.833	
15,300.00	8,306.00	8,331.48	8,325.38	162.03	27.33	84.786	568.28	-4,813.15	1,588.59	1,526.36	62.23	25.527	
15,400.00	8,306.00	8,332.89	8,326.79	164.29	27.34	85.077	568.27	-4,813.17	1,688.23	1,626.20	62.03	27.215	
15,500.00	8,306.00	8,334.28	8,328.18	166.55	27.34	85.335	568.26	-4,813.19	1,787.91	1,726.04	61.87	28.897	
15,600.00	8,306.00	8,335.66	8,329.56	168.82	27.35	85.566	568.25	-4,813.21	1,887.63	1,825.88	61.74	30.573	
15,700.00	8,306.00	8,337.03	8,330.93	171.08	27.35	85.774	568.24	-4,813.23	1,987.37	1,925.73	61.64	32.243	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (Offsets) - Ches Riddle Fed Com 206H - Wellbore #1 - Surveys

Survey Program: 538-MWD+HRGM		Rule Assigned:										Offset Site Error: 0.00 usft	
Reference Offset		Offset		Semi Major Axis		Offset Wellbore Centre			Distance		Offset Well Error: 0.00 usft		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,800.00	8,306.00	14,302.69	9,803.10	32.51	115.21	-179.220	-854.57	87.05	1,996.09	1,888.89	107.20	18.620	
8,812.71	8,306.00	14,284.00	9,802.85	32.59	114.80	-178.959	-854.65	68.36	1,995.95	1,888.96	106.99	18.656	
8,900.00	8,306.00	14,193.73	9,800.97	33.20	112.81	-178.830	-855.50	-21.88	1,994.82	1,888.67	106.15	18.792	
9,000.00	8,306.00	14,064.33	9,795.14	34.04	109.97	-177.559	-857.61	-151.13	1,992.08	1,887.06	105.03	18.968	
9,100.00	8,306.00	13,959.82	9,790.26	35.02	107.68	-177.369	-858.85	-255.53	1,989.02	1,884.72	104.30	19.069	
9,200.00	8,306.00	13,840.95	9,783.18	36.13	105.07	-176.562	-860.34	-374.17	1,985.01	1,881.50	103.51	19.177	
9,300.00	8,306.00	13,748.36	9,778.59	37.35	103.05	-176.887	-860.04	-466.64	1,980.74	1,877.68	103.06	19.219	
9,400.00	8,306.00	13,679.04	9,776.18	38.67	101.54	-178.220	-859.54	-535.92	1,977.39	1,874.43	102.96	19.205	
9,500.00	8,306.00	13,614.38	9,775.97	40.08	100.13	-179.759	-858.83	-600.57	1,975.98	1,873.08	102.90	19.202	
9,600.00	8,306.00	13,498.13	9,774.06	41.57	97.61	-179.051	-858.57	-716.80	1,974.15	1,871.92	102.22	19.312	
9,666.71	8,306.00	13,460.18	9,773.60	42.62	96.78	179.694	-858.89	-754.74	1,973.66	1,871.31	102.35	19.283	
9,700.00	8,306.00	13,433.00	9,773.62	43.14	96.20	179.427	-859.22	-781.92	1,973.81	1,871.51	102.30	19.295	
9,800.00	8,306.00	13,352.22	9,774.24	44.77	94.45	178.589	-860.37	-862.69	1,974.91	1,872.73	102.18	19.327	
9,900.00	8,306.00	13,262.01	9,775.47	46.46	92.51	178.163	-861.52	-952.88	1,976.42	1,874.46	101.96	19.384	
10,000.00	8,306.00	13,170.31	9,777.53	48.19	90.55	177.801	-862.45	-1,044.55	1,978.42	1,876.69	101.73	19.448	
10,100.00	8,306.00	13,038.59	9,779.48	49.98	87.73	179.181	-864.05	-1,176.25	1,980.02	1,878.97	101.05	19.594	
10,200.00	8,306.00	12,923.12	9,777.92	51.80	85.28	179.854	-866.23	-1,291.68	1,979.87	1,879.15	100.72	19.656	
10,225.16	8,306.00	12,901.64	9,777.57	52.27	84.83	179.694	-866.71	-1,313.16	1,979.85	1,879.10	100.74	19.652	
10,300.00	8,306.00	12,823.98	9,776.42	53.67	83.19	179.815	-868.53	-1,390.79	1,979.93	1,879.28	100.65	19.672	
10,400.00	8,306.00	12,721.86	9,773.95	55.56	81.04	179.904	-871.22	-1,492.84	1,979.52	1,878.92	100.60	19.677	
10,500.00	8,306.00	12,614.24	9,772.29	57.49	78.78	-179.766	-873.29	-1,600.43	1,979.32	1,878.84	100.47	19.700	
10,600.00	8,306.00	12,508.33	9,769.30	59.44	76.58	-179.514	-875.62	-1,706.27	1,978.33	1,877.89	100.44	19.697	
10,700.00	8,306.00	12,378.99	9,765.02	61.42	73.91	-178.251	-877.29	-1,835.52	1,976.29	1,876.15	100.14	19.735	
10,800.00	8,306.00	12,311.50	9,763.48	63.42	72.52	-179.656	-877.61	-1,903.00	1,974.60	1,874.04	100.56	19.636	
10,900.00	8,306.00	12,182.70	9,762.33	65.44	69.89	-178.410	-876.78	-2,031.79	1,973.16	1,872.98	100.18	19.696	
11,000.00	8,306.00	12,075.60	9,759.60	67.47	67.73	-178.103	-875.93	-2,138.85	1,970.35	1,870.21	100.14	19.675	
11,100.00	8,306.00	11,994.09	9,758.82	69.53	66.10	-178.902	-874.83	-2,220.34	1,968.35	1,867.95	100.40	19.605	
11,200.00	8,306.00	11,902.30	9,759.15	71.60	64.28	-179.258	-872.79	-2,312.11	1,966.79	1,866.29	100.49	19.571	
11,295.32	8,306.00	11,831.00	9,761.31	73.58	62.88	179.694	-870.11	-2,383.32	1,966.19	1,865.47	100.72	19.520	
11,300.00	8,306.00	11,831.00	9,761.31	73.68	62.88	179.490	-870.11	-2,383.32	1,966.20	1,865.42	100.78	19.509	
11,400.00	8,306.00	11,740.31	9,765.64	75.78	61.11	179.073	-866.16	-2,473.82	1,966.51	1,865.74	100.77	19.515	
11,500.00	8,306.00	11,588.50	9,767.62	77.89	58.21	-178.663	-862.82	-2,625.53	1,965.52	1,865.35	100.17	19.621	
11,600.00	8,306.00	11,481.00	9,764.09	80.01	56.19	-178.338	-863.83	-2,732.96	1,963.33	1,862.94	100.39	19.556	
11,700.00	8,306.00	11,395.11	9,762.37	82.13	54.61	-178.956	-863.55	-2,818.84	1,961.29	1,860.49	100.80	19.456	
11,800.00	8,306.00	11,293.15	9,758.66	84.27	52.76	-178.876	-866.16	-2,920.69	1,959.93	1,858.72	101.21	19.366	
11,900.00	8,306.00	11,181.46	9,754.01	86.42	50.78	-178.373	-868.57	-3,032.25	1,957.91	1,856.35	101.56	19.278	
12,000.00	8,306.00	11,073.59	9,748.59	88.58	48.92	-178.039	-871.18	-3,139.95	1,955.45	1,853.42	102.03	19.165	
12,100.00	8,306.00	10,982.00	9,744.49	90.74	47.39	-178.412	-872.52	-3,231.44	1,952.77	1,850.14	102.64	19.026	
12,200.00	8,306.00	10,912.69	9,742.02	92.91	46.26	-179.753	-873.86	-3,300.69	1,951.16	1,847.71	103.45	18.861	
12,300.00	8,306.00	8,272.70	8,265.24	95.08	28.02	-134.540	-896.37	-4,752.99	1,905.55	1,807.17	98.38	19.369	
12,400.00	8,306.00	8,272.74	8,265.28	97.26	28.02	-136.719	-896.37	-4,752.99	1,835.24	1,733.17	102.06	17.981	
12,500.00	8,306.00	8,272.78	8,265.33	99.45	28.02	-139.068	-896.37	-4,752.99	1,767.79	1,661.82	105.97	16.682	
12,600.00	8,306.00	8,272.82	8,265.37	101.64	28.02	-141.598	-896.37	-4,752.99	1,703.54	1,593.46	110.09	15.474	
12,700.00	8,306.00	8,272.86	8,265.41	103.84	28.02	-144.321	-896.37	-4,752.99	1,642.88	1,528.48	114.40	14.361	
12,800.00	8,306.00	8,272.91	8,265.45	106.04	28.02	-147.246	-896.37	-4,752.99	1,586.20	1,467.33	118.87	13.344	
12,900.00	8,306.00	8,272.95	8,265.49	108.25	28.02	-150.379	-896.38	-4,752.99	1,533.95	1,410.50	123.44	12.426	
13,000.00	8,306.00	8,272.99	8,265.53	110.46	28.02	-153.722	-896.38	-4,752.99	1,486.60	1,358.53	128.07	11.608	
13,100.00	8,306.00	8,273.03	8,265.58	112.67	28.02	-157.272	-896.38	-4,752.99	1,444.63	1,311.97	132.67	10.889	
13,200.00	8,306.00	8,273.07	8,265.62	114.89	28.02	-161.019	-896.38	-4,752.99	1,408.52	1,271.39	137.13	10.271	
13,300.00	8,306.00	8,273.11	8,265.66	117.11	28.02	-164.946	-896.38	-4,752.99	1,378.74	1,237.37	141.37	9.753	
13,400.00	8,306.00	8,273.15	8,265.70	119.34	28.02	-169.026	-896.38	-4,752.99	1,355.69	1,210.44	145.25	9.333	
13,500.00	8,306.00	8,273.20	8,265.74	121.56	28.02	-173.225	-896.38	-4,752.99	1,339.73	1,191.05	148.68	9.011	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (Offsets) - Ches Riddle Fed Com 206H - Wellbore #1 - Surveys													Offset Site Error:	0.00 usft
Survey Program: 538-MWD+HRGM													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference	Offset	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,600.00	8,306.00	8,273.24	8,265.78	123.79	28.02	-177.502	-896.38	-4,752.99	1,331.11	1,179.56	151.56	8.783		
13,665.10	8,306.00	8,273.26	8,265.81	125.25	28.02	179.694	-896.38	-4,752.99	1,329.52	1,176.43	153.09	8.684 CC		
13,700.00	8,306.00	8,273.28	8,265.82	126.03	28.02	178.189	-896.38	-4,752.99	1,329.98	1,176.18	153.80	8.647 ES		
13,800.00	8,306.00	8,273.32	8,265.87	128.26	28.02	173.898	-896.39	-4,752.99	1,336.35	1,180.97	155.38	8.601 SF		
13,900.00	8,306.00	8,273.36	8,265.91	130.50	28.02	169.671	-896.39	-4,752.99	1,350.11	1,193.84	156.28	8.639		
14,000.00	8,306.00	8,273.40	8,265.95	132.74	28.02	165.551	-896.39	-4,752.99	1,371.05	1,214.53	156.52	8.760		
14,100.00	8,306.00	8,273.44	8,265.99	134.98	28.02	161.575	-896.39	-4,752.99	1,398.84	1,242.68	156.16	8.958		
14,200.00	8,306.00	8,273.48	8,266.03	137.22	28.02	157.771	-896.39	-4,752.99	1,433.09	1,277.81	155.27	9.229		
14,300.00	8,306.00	8,273.53	8,266.07	139.47	28.02	154.160	-896.39	-4,752.99	1,473.34	1,319.39	153.95	9.570		
14,400.00	8,306.00	8,273.57	8,266.11	141.72	28.02	150.754	-896.39	-4,752.99	1,519.11	1,366.84	152.27	9.976		
14,500.00	8,306.00	8,273.61	8,266.15	143.97	28.02	147.558	-896.39	-4,752.99	1,569.93	1,419.61	150.32	10.444		
14,600.00	8,306.00	8,273.65	8,266.19	146.22	28.02	144.571	-896.39	-4,752.99	1,625.32	1,477.13	148.19	10.968		
14,700.00	8,306.00	8,273.69	8,266.24	148.47	28.02	141.787	-896.39	-4,752.99	1,684.83	1,538.90	145.93	11.546		
14,800.00	8,306.00	8,273.73	8,266.28	150.73	28.02	139.200	-896.40	-4,752.99	1,748.03	1,604.44	143.60	12.173		
14,900.00	8,306.00	8,273.77	8,266.32	152.99	28.02	136.798	-896.40	-4,752.99	1,814.55	1,673.31	141.24	12.847		
15,000.00	8,306.00	8,273.81	8,266.36	155.24	28.02	134.569	-896.40	-4,752.99	1,884.03	1,745.13	138.90	13.564		
15,100.00	8,306.00	8,273.85	8,266.40	157.50	28.02	132.502	-896.40	-4,752.99	1,956.16	1,819.56	136.60	14.320		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (Offsets) - Ches Riddle Fed Com 222H - Wellbore #1 - Surveys

Survey Program:		152-MWD+HRGM, 584-MWD+HRGM						Rule Assigned:				Offset Well Error:		0.00 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance		Offset		Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
12,300.00	8,306.00	8,304.16	8,297.70	95.08	27.40	-132.709	-891.29	-4,837.25	1,962.74	1,866.81	95.92	20.462		
12,400.00	8,306.00	8,303.74	8,297.28	97.26	27.39	-134.753	-891.29	-4,837.25	1,890.10	1,790.63	99.47	19.003		
12,500.00	8,306.00	8,303.32	8,296.86	99.45	27.39	-136.958	-891.29	-4,837.25	1,820.05	1,716.81	103.24	17.629		
12,600.00	8,306.00	8,302.89	8,296.43	101.64	27.39	-139.336	-891.28	-4,837.26	1,752.92	1,645.68	107.24	16.346		
12,700.00	8,306.00	8,302.45	8,295.99	103.84	27.39	-141.898	-891.28	-4,837.26	1,689.04	1,577.59	111.45	15.155		
12,800.00	8,306.00	8,302.01	8,295.55	106.04	27.39	-144.655	-891.28	-4,837.26	1,628.80	1,512.94	115.86	14.059		
12,900.00	8,306.00	8,301.56	8,295.10	108.25	27.39	-147.617	-891.27	-4,837.26	1,572.62	1,452.20	120.41	13.060		
13,000.00	8,306.00	8,301.11	8,294.65	110.46	27.39	-150.789	-891.27	-4,837.26	1,520.94	1,395.87	125.07	12.160		
13,100.00	8,306.00	8,300.66	8,294.20	112.67	27.38	-154.172	-891.26	-4,837.27	1,474.24	1,344.47	129.77	11.360		
13,200.00	8,306.00	8,300.19	8,293.73	114.89	27.38	-157.764	-891.26	-4,837.27	1,433.01	1,298.59	134.42	10.661		
13,300.00	8,306.00	8,299.72	8,293.26	117.11	27.38	-161.553	-891.26	-4,837.27	1,397.73	1,258.81	138.92	10.061		
13,400.00	8,306.00	8,299.25	8,292.79	119.34	27.38	-165.519	-891.25	-4,837.27	1,368.86	1,225.70	143.16	9.562		
13,500.00	8,306.00	8,298.77	8,292.31	121.56	27.38	-169.636	-891.25	-4,837.28	1,346.81	1,199.78	147.03	9.160		
13,600.00	8,306.00	8,298.28	8,291.82	123.79	27.38	-173.867	-891.25	-4,837.28	1,331.93	1,181.52	150.41	8.855		
13,700.00	8,306.00	8,297.79	8,291.33	126.03	27.37	-178.170	-891.24	-4,837.28	1,324.45	1,171.24	153.21	8.645		
13,749.37	8,306.00	8,297.54	8,291.08	127.13	27.37	-179.694	-891.24	-4,837.28	1,323.52	1,169.17	154.35	8.575 CC		
13,800.00	8,306.00	8,297.28	8,290.83	128.26	27.37	-177.503	-891.24	-4,837.28	1,324.49	1,169.14	155.35	8.526 ES		
13,900.00	8,306.00	8,296.78	8,290.32	130.50	27.37	-173.201	-891.24	-4,837.29	1,332.07	1,175.26	156.81	8.495 SF		
14,000.00	8,306.00	8,296.26	8,289.80	132.74	27.37	-168.971	-891.23	-4,837.29	1,347.05	1,189.48	157.57	8.549		
14,100.00	8,306.00	8,295.74	8,289.28	134.98	27.37	-164.855	-891.23	-4,837.29	1,369.18	1,211.52	157.66	8.684		
14,200.00	8,306.00	8,295.21	8,288.75	137.22	27.36	-160.891	-891.22	-4,837.30	1,398.14	1,240.98	157.16	8.896		
14,300.00	8,306.00	8,294.68	8,288.22	139.47	27.36	-157.104	-891.22	-4,837.30	1,433.49	1,277.36	156.13	9.181		
14,400.00	8,306.00	8,294.14	8,287.68	141.72	27.36	-153.515	-891.22	-4,837.30	1,474.80	1,320.13	154.67	9.535		
14,500.00	8,306.00	8,293.58	8,287.13	143.97	27.36	-150.134	-891.21	-4,837.31	1,521.56	1,368.70	152.87	9.954		
14,600.00	8,306.00	8,293.03	8,286.57	146.22	27.36	-146.964	-891.21	-4,837.31	1,573.30	1,422.49	150.81	10.433		
14,700.00	8,306.00	8,292.46	8,286.00	148.47	27.36	-144.005	-891.20	-4,837.31	1,629.54	1,480.97	148.57	10.968		
14,800.00	8,306.00	8,291.89	8,285.43	150.73	27.35	-141.250	-891.20	-4,837.31	1,689.83	1,543.61	146.22	11.557		
14,900.00	8,306.00	8,291.30	8,284.84	152.99	27.35	-138.690	-891.20	-4,837.32	1,753.75	1,609.94	143.81	12.195		
15,000.00	8,306.00	8,290.71	8,284.25	155.24	27.35	-136.315	-891.19	-4,837.32	1,820.92	1,679.54	141.38	12.879		
15,100.00	8,306.00	8,290.11	8,283.65	157.50	27.35	-134.112	-891.19	-4,837.32	1,891.00	1,752.02	138.98	13.606		
15,200.00	8,306.00	8,289.50	8,283.04	159.76	27.34	-132.069	-891.18	-4,837.33	1,963.67	1,827.04	136.62	14.373		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (Offsets) - General Kehoe 02-24S-28E RB #217H - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 119-GYRO-NS, 672-MWD+HRGM												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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,800.00	8,306.00	8,357.56	8,321.32	106.04	28.60	-75.575	931.36	-5,815.73	1,983.25	1,915.77	67.49	29.387	
12,900.00	8,306.00	8,357.91	8,321.67	108.25	28.60	-74.803	931.36	-5,815.73	1,886.71	1,817.94	68.77	27.435	
13,000.00	8,306.00	8,358.26	8,322.02	110.46	28.60	-73.947	931.36	-5,815.74	1,790.55	1,720.31	70.24	25.491	
13,100.00	8,306.00	8,358.61	8,322.37	112.67	28.60	-72.995	931.35	-5,815.74	1,694.83	1,622.89	71.94	23.559	
13,200.00	8,306.00	8,358.96	8,322.72	114.89	28.60	-71.930	931.35	-5,815.74	1,599.64	1,525.74	73.90	21.645	
13,300.00	8,306.00	8,359.31	8,323.07	117.11	28.60	-70.729	931.35	-5,815.74	1,505.07	1,428.89	76.18	19.757	
13,400.00	8,306.00	8,359.67	8,323.43	119.34	28.61	-69.369	931.34	-5,815.74	1,411.25	1,332.41	78.83	17.902	
13,500.00	8,306.00	8,360.03	8,323.79	121.56	28.61	-67.816	931.34	-5,815.74	1,318.33	1,236.40	81.93	16.091	
13,600.00	8,306.00	8,360.39	8,324.15	123.79	28.61	-66.029	931.33	-5,815.74	1,226.54	1,140.97	85.57	14.334	
13,700.00	8,306.00	8,360.75	8,324.51	126.03	28.61	-63.955	931.33	-5,815.74	1,136.12	1,046.28	89.85	12.645	
13,800.00	8,306.00	8,361.11	8,324.87	128.26	28.61	-61.527	931.33	-5,815.75	1,047.46	952.56	94.90	11.038	
13,900.00	8,306.00	8,361.47	8,325.24	130.50	28.61	-58.656	931.32	-5,815.75	961.01	860.14	100.88	9.527	
14,000.00	8,306.00	8,361.84	8,325.60	132.74	28.61	-55.227	931.32	-5,815.75	877.46	769.51	107.95	8.128	
14,100.00	8,306.00	8,362.21	8,325.97	134.98	28.61	-51.096	931.31	-5,815.75	797.70	681.41	116.29	6.860	
14,200.00	8,306.00	8,362.58	8,326.34	137.22	28.61	-46.080	931.31	-5,815.75	722.98	596.98	126.00	5.738	
14,300.00	8,306.00	8,362.95	8,326.71	139.47	28.62	-39.968	931.31	-5,815.75	655.05	518.01	137.04	4.780	
14,400.00	8,306.00	8,363.33	8,327.09	141.72	28.62	-32.549	931.30	-5,815.75	596.21	447.22	149.00	4.001	
14,500.00	8,306.00	8,363.70	8,327.47	143.97	28.62	-23.694	931.30	-5,815.76	549.41	388.55	160.86	3.415	
14,600.00	8,306.00	8,364.08	8,327.84	146.22	28.62	-13.486	931.29	-5,815.76	517.92	347.08	170.83	3.032	
14,700.00	8,306.00	8,364.46	8,328.22	148.47	28.62	-2.360	931.29	-5,815.76	504.60	327.81	176.79	2.854	
14,718.09	8,306.00	8,364.53	8,328.29	148.88	28.62	-0.306	931.29	-5,815.76	504.28	326.96	177.31	2.844 CC, ES, SF	
14,800.00	8,306.00	8,364.85	8,328.61	150.73	28.62	8.921	931.29	-5,815.76	510.89	333.52	177.37	2.880	
14,900.00	8,306.00	8,365.23	8,328.99	152.99	28.62	19.531	931.28	-5,815.76	536.09	363.22	172.87	3.101	
15,000.00	8,306.00	8,365.62	8,329.38	155.24	28.62	28.903	931.28	-5,815.76	577.73	412.74	164.99	3.502	
15,100.00	8,306.00	8,366.01	8,329.77	157.50	28.63	36.834	931.27	-5,815.76	632.58	476.93	155.65	4.064	
15,200.00	8,306.00	8,366.40	8,330.16	159.76	28.63	43.397	931.27	-5,815.77	697.52	551.28	146.24	4.770	
15,300.00	8,306.00	8,366.79	8,330.55	162.03	28.63	48.785	931.27	-5,815.77	770.01	632.51	137.50	5.600	
15,400.00	8,306.00	8,367.19	8,330.95	164.29	28.63	53.213	931.26	-5,815.77	848.11	718.40	129.71	6.539	
15,500.00	8,306.00	8,367.58	8,331.34	166.55	28.63	56.877	931.26	-5,815.77	930.42	807.50	122.92	7.569	
15,600.00	8,306.00	8,367.98	8,331.74	168.82	28.63	59.936	931.25	-5,815.77	1,015.90	898.86	117.04	8.680	
15,700.00	8,306.00	8,368.38	8,332.15	171.08	28.63	62.513	931.25	-5,815.77	1,103.83	991.85	111.97	9.858	
15,800.00	8,306.00	8,368.79	8,332.55	173.35	28.63	64.706	931.25	-5,815.78	1,193.66	1,086.06	107.60	11.094	
15,900.00	8,306.00	8,369.20	8,332.96	175.62	28.64	66.590	931.24	-5,815.78	1,284.99	1,181.19	103.80	12.379	
15,959.75	8,306.00	8,369.44	8,333.20	176.98	28.64	67.593	931.24	-5,815.78	1,340.15	1,238.37	101.78	13.167	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (Offsets) - General Kehoe 02-24S-28E RB 203H - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 119-MWD+HRGM												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference	Offset	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,800.00	8,306.00	8,375.05	8,350.79	128.26	30.15	-75.497	921.94	-6,789.18	1,956.73	1,883.50	73.23	26.719	
13,900.00	8,306.00	8,374.26	8,349.99	130.50	30.15	-74.709	921.95	-6,789.19	1,860.24	1,785.36	74.88	24.843	
14,000.00	8,306.00	8,373.46	8,349.19	132.74	30.15	-73.835	921.97	-6,789.20	1,764.14	1,687.38	76.76	22.983	
14,100.00	8,306.00	8,372.64	8,348.37	134.98	30.14	-72.861	921.99	-6,789.20	1,668.49	1,589.59	78.91	21.145	
14,200.00	8,306.00	8,371.81	8,347.54	137.22	30.14	-71.769	922.00	-6,789.21	1,573.39	1,492.01	81.38	19.334	
14,300.00	8,306.00	8,370.96	8,346.70	139.47	30.14	-70.536	922.02	-6,789.22	1,478.93	1,394.71	84.23	17.559	
14,400.00	8,306.00	8,370.11	8,345.84	141.72	30.14	-69.136	922.04	-6,789.23	1,385.25	1,297.73	87.52	15.827	
14,500.00	8,306.00	8,369.23	8,344.97	143.97	30.13	-67.534	922.06	-6,789.24	1,292.52	1,201.16	91.36	14.148	
14,600.00	8,306.00	8,368.35	8,344.08	146.22	30.13	-65.686	922.08	-6,789.24	1,200.95	1,105.12	95.83	12.532	
14,700.00	8,306.00	8,367.45	8,343.18	148.47	30.13	-63.536	922.10	-6,789.25	1,110.84	1,009.77	101.07	10.990	
14,800.00	8,306.00	8,366.53	8,342.26	150.73	30.13	-61.010	922.11	-6,789.26	1,022.57	915.32	107.24	9.535	
14,900.00	8,306.00	8,365.59	8,341.33	152.99	30.12	-58.014	922.13	-6,789.27	936.65	822.14	114.51	8.179	
15,000.00	8,306.00	8,364.65	8,340.38	155.24	30.12	-54.425	922.15	-6,789.28	853.81	730.72	123.09	6.937	
15,100.00	8,306.00	8,363.68	8,339.42	157.50	30.12	-50.086	922.17	-6,789.29	775.02	641.88	133.15	5.821	
15,200.00	8,306.00	8,362.70	8,338.43	159.76	30.11	-44.804	922.19	-6,789.30	701.66	556.87	144.79	4.846	
15,300.00	8,306.00	8,361.70	8,337.43	162.03	30.11	-38.359	922.21	-6,789.31	635.61	477.71	157.89	4.026	
15,400.00	8,306.00	8,360.68	8,336.42	164.29	30.11	-30.544	922.24	-6,789.32	579.36	407.52	171.84	3.372	
15,500.00	8,306.00	8,359.64	8,335.38	166.55	30.10	-21.266	922.26	-6,789.33	536.02	350.81	185.21	2.894	
15,600.00	8,306.00	8,358.59	8,334.32	168.82	30.10	-10.691	922.28	-6,789.35	508.90	313.17	195.73	2.600	
15,691.71	8,306.00	8,357.60	8,333.34	170.90	30.10	-0.306	922.30	-6,789.36	500.57	299.77	200.80	2.493 CC	
15,700.00	8,306.00	8,357.51	8,333.25	171.08	30.10	0.642	922.30	-6,789.36	500.64	299.65	200.99	2.491 ES, SF	
15,800.00	8,306.00	8,356.42	8,332.15	173.35	30.09	11.900	922.32	-6,789.37	512.15	312.33	199.82	2.563	
15,900.00	8,306.00	8,355.30	8,331.04	175.62	30.09	22.286	922.35	-6,789.38	542.17	349.05	193.11	2.807	
15,959.75	8,306.00	8,354.62	8,330.36	176.98	30.09	27.860	922.36	-6,789.39	567.81	380.43	187.37	3.030	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (Offsets) - General Kehoe 02-24S-28E RB 208H - Wellbore #1 - Surveys

Survey Program: 125-MWD+HRGM		Rule Assigned:										Offset Site Error: 0.00 usft	
Reference Offset		Offset		Semi Major Axis		Offset Wellbore Centre		Distance		Offset Well Error: 0.00 usft			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,000.00	8,306.00	8,318.25	8,308.74	88.58	29.00	-75.285	930.70	-4,957.43	1,925.57	1,859.93	65.65	29.333	
12,100.00	8,306.00	8,319.26	8,309.74	90.74	29.01	-74.474	930.66	-4,957.44	1,829.18	1,762.49	66.69	27.430	
12,200.00	8,306.00	8,320.25	8,310.73	92.91	29.01	-73.574	930.63	-4,957.45	1,733.18	1,665.29	67.90	25.527	
12,300.00	8,306.00	8,321.21	8,311.70	95.08	29.01	-72.567	930.59	-4,957.46	1,637.67	1,568.36	69.31	23.628	
12,400.00	8,306.00	8,322.16	8,312.64	97.26	29.02	-71.437	930.55	-4,957.46	1,542.73	1,471.76	70.97	21.738	
12,500.00	8,306.00	8,323.09	8,313.57	99.45	29.02	-70.159	930.52	-4,957.47	1,448.46	1,375.54	72.92	19.864	
12,600.00	8,306.00	8,324.01	8,314.48	101.64	29.02	-68.704	930.48	-4,957.48	1,355.02	1,279.80	75.22	18.015	
12,700.00	8,306.00	8,324.90	8,315.38	103.84	29.03	-67.035	930.45	-4,957.49	1,262.58	1,184.65	77.94	16.200	
12,800.00	8,306.00	8,325.78	8,316.26	106.04	29.03	-65.103	930.42	-4,957.49	1,171.39	1,090.22	81.17	14.432	
12,900.00	8,306.00	8,326.64	8,317.12	108.25	29.03	-62.849	930.38	-4,957.50	1,081.75	996.73	85.02	12.724	
13,000.00	8,306.00	8,327.48	8,317.96	110.46	29.04	-60.192	930.35	-4,957.51	994.09	904.47	89.62	11.093	
13,100.00	8,306.00	8,328.31	8,318.79	112.67	29.04	-57.029	930.32	-4,957.51	908.98	813.87	95.11	9.557	
13,200.00	8,306.00	8,329.06	8,319.54	114.89	29.04	-53.228	930.29	-4,957.52	827.20	725.55	101.66	8.137	
13,300.00	8,306.00	8,329.85	8,320.32	117.11	29.04	-48.617	930.26	-4,957.52	749.86	640.46	109.40	6.854	
13,400.00	8,306.00	8,330.62	8,321.10	119.34	29.05	-42.992	930.24	-4,957.53	678.47	560.06	118.41	5.730	
13,500.00	8,306.00	8,331.39	8,321.87	121.56	29.05	-36.129	930.21	-4,957.54	615.10	486.60	128.50	4.787	
13,600.00	8,306.00	8,332.15	8,322.63	123.79	29.05	-27.839	930.18	-4,957.54	562.47	423.38	139.09	4.044	
13,700.00	8,306.00	8,332.91	8,323.38	126.03	29.05	-18.089	930.15	-4,957.55	523.82	374.92	148.90	3.518	
13,800.00	8,306.00	8,333.65	8,324.12	128.26	29.06	-7.158	930.12	-4,957.55	502.41	346.30	156.10	3.218	
13,859.90	8,306.00	8,334.09	8,324.56	129.60	29.06	-0.307	930.11	-4,957.56	498.82	340.39	158.43	3.149	CC, ES
13,900.00	8,306.00	8,334.39	8,324.86	130.50	29.06	4.293	930.09	-4,957.56	500.43	341.41	159.02	3.147	SF
14,000.00	8,306.00	8,335.12	8,325.59	132.74	29.06	15.392	930.07	-4,957.56	518.12	360.92	157.20	3.296	
14,100.00	8,306.00	8,335.84	8,326.31	134.98	29.06	25.414	930.04	-4,957.57	553.60	401.90	151.69	3.649	
14,200.00	8,306.00	8,336.55	8,327.02	137.22	29.07	34.002	930.01	-4,957.57	603.73	459.52	144.21	4.187	
14,300.00	8,306.00	8,337.26	8,327.73	139.47	29.07	41.140	929.99	-4,957.58	665.21	529.01	136.20	4.884	
14,400.00	8,306.00	8,337.96	8,328.43	141.72	29.07	46.995	929.96	-4,957.58	735.20	606.66	128.54	5.720	
14,500.00	8,306.00	8,338.65	8,329.12	143.97	29.07	51.792	929.94	-4,957.59	811.50	689.87	121.63	6.672	
14,600.00	8,306.00	8,339.34	8,329.81	146.22	29.08	55.741	929.91	-4,957.59	892.49	776.93	115.56	7.723	
14,700.00	8,306.00	8,340.02	8,330.49	148.47	29.08	59.021	929.89	-4,957.60	977.01	866.71	110.31	8.857	
14,800.00	8,306.00	8,340.69	8,331.16	150.73	29.08	61.770	929.86	-4,957.60	1,064.22	958.44	105.78	10.061	
14,900.00	8,306.00	8,341.36	8,331.82	152.99	29.08	64.098	929.84	-4,957.61	1,153.50	1,051.62	101.88	11.322	
15,000.00	8,306.00	8,342.01	8,332.48	155.24	29.08	66.089	929.81	-4,957.61	1,244.42	1,145.91	98.51	12.632	
15,100.00	8,306.00	8,342.67	8,333.13	157.50	29.09	67.807	929.79	-4,957.62	1,336.63	1,241.04	95.60	13.982	
15,200.00	8,306.00	8,343.31	8,333.78	159.76	29.09	69.302	929.76	-4,957.62	1,429.89	1,336.84	93.06	15.366	
15,300.00	8,306.00	8,343.95	8,334.42	162.03	29.09	70.613	929.74	-4,957.63	1,524.01	1,433.17	90.84	16.777	
15,400.00	8,306.00	8,344.59	8,335.05	164.29	29.09	71.771	929.72	-4,957.63	1,618.83	1,529.94	88.89	18.212	
15,500.00	8,306.00	8,345.22	8,335.68	166.55	29.10	72.800	929.69	-4,957.63	1,714.24	1,627.07	87.17	19.666	
15,600.00	8,306.00	8,345.84	8,336.30	168.82	29.10	73.721	929.67	-4,957.64	1,810.14	1,724.50	85.64	21.136	
15,700.00	8,306.00	8,346.45	8,336.92	171.08	29.10	74.549	929.65	-4,957.64	1,906.47	1,822.18	84.29	22.619	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (Offsets) - General Kehoe 02-24S-28E RB 223H - Wellbore #1 - Surveys OH													Offset Site Error:	0.00 usft
Survey Program: 119-MWD+HRGM													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference	Offset	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,700.00	8,306.00	8,314.45	8,289.90	126.03	29.66	-75.714	915.81	-6,693.07	1,958.93	1,886.99	71.94	27.230		
13,800.00	8,306.00	8,317.14	8,292.59	128.26	29.66	-74.939	915.81	-6,693.12	1,862.34	1,788.80	73.53	25.326		
13,900.00	8,306.00	8,319.76	8,295.21	130.50	29.67	-74.080	915.80	-6,693.16	1,766.12	1,690.77	75.35	23.438		
14,000.00	8,306.00	8,322.40	8,297.85	132.74	29.68	-73.122	915.79	-6,693.21	1,670.35	1,592.91	77.44	21.570		
14,100.00	8,306.00	8,324.88	8,300.33	134.98	29.69	-72.048	915.79	-6,693.25	1,575.10	1,495.27	79.83	19.730		
14,200.00	8,306.00	8,327.23	8,302.68	137.22	29.70	-70.836	915.78	-6,693.29	1,480.48	1,397.88	82.59	17.925		
14,300.00	8,306.00	8,329.46	8,304.91	139.47	29.71	-69.459	915.77	-6,693.32	1,386.60	1,300.81	85.79	16.163		
14,400.00	8,306.00	8,331.57	8,307.02	141.72	29.71	-67.883	915.76	-6,693.35	1,293.65	1,204.14	89.51	14.453		
14,500.00	8,306.00	8,333.57	8,309.02	143.97	29.72	-66.065	915.75	-6,693.38	1,201.82	1,107.97	93.85	12.805		
14,600.00	8,306.00	8,335.48	8,310.93	146.22	29.73	-63.949	915.75	-6,693.41	1,111.40	1,012.45	98.95	11.232		
14,700.00	8,306.00	8,337.30	8,312.75	148.47	29.73	-61.462	915.74	-6,693.43	1,022.77	917.81	104.96	9.745		
14,800.00	8,306.00	8,339.03	8,314.48	150.73	29.74	-58.510	915.73	-6,693.46	936.42	824.37	112.05	8.357		
14,900.00	8,306.00	8,340.68	8,316.13	152.99	29.74	-54.970	915.72	-6,693.48	853.06	732.63	120.43	7.083		
15,000.00	8,306.00	8,342.26	8,317.71	155.24	29.75	-50.684	915.71	-6,693.50	773.65	643.35	130.29	5.938		
15,100.00	8,306.00	8,343.77	8,319.22	157.50	29.76	-45.455	915.71	-6,693.52	699.54	557.77	141.76	4.935		
15,200.00	8,306.00	8,345.22	8,320.66	159.76	29.76	-39.055	915.70	-6,693.54	632.59	477.84	154.74	4.088		
15,300.00	8,306.00	8,346.60	8,322.05	162.03	29.76	-31.265	915.69	-6,693.55	575.30	406.64	168.66	3.411		
15,400.00	8,306.00	8,347.93	8,323.38	164.29	29.77	-21.971	915.68	-6,693.57	530.83	348.68	182.15	2.914		
15,500.00	8,306.00	8,349.21	8,324.65	166.55	29.77	-11.316	915.68	-6,693.59	502.58	309.65	192.93	2.605		
15,596.00	8,306.00	8,350.38	8,325.83	168.73	29.78	-0.306	915.67	-6,693.60	493.33	294.95	198.38	2.487 CC		
15,600.00	8,306.00	8,350.43	8,325.88	168.82	29.78	0.159	915.67	-6,693.60	493.35	294.87	198.48	2.486 ES, SF		
15,700.00	8,306.00	8,351.61	8,327.06	171.08	29.78	11.597	915.66	-6,693.61	504.17	306.66	197.51	2.553		
15,800.00	8,306.00	8,352.74	8,328.19	173.35	29.79	22.158	915.66	-6,693.63	533.84	342.96	190.88	2.797		
15,900.00	8,306.00	8,353.83	8,329.28	175.62	29.79	31.334	915.65	-6,693.64	579.47	398.61	180.85	3.204		
15,959.75	8,306.00	8,354.47	8,329.91	176.98	29.79	36.095	915.65	-6,693.64	612.92	438.74	174.18	3.519		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (Offsets) - General Kehoe 02-24S-28E RB 223H - Wellbore #2 - Surveys SDTRK													Offset Site Error:	0.00 usft
Survey Program: 119-MWD+HRGM, 11164-MWD+HRGM													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Reference (usft)	Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: Distance Between		Minimum Separation (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)				
13,700.00	8,306.00	8,314.45	8,289.90	126.03	29.66	-75.714	915.81	-6,693.07	1,958.93	1,886.99	71.94	27.230		
13,800.00	8,306.00	8,317.14	8,292.59	128.26	29.66	-74.939	915.81	-6,693.12	1,862.34	1,788.80	73.53	25.326		
13,900.00	8,306.00	8,319.76	8,295.21	130.50	29.67	-74.080	915.80	-6,693.16	1,766.12	1,690.77	75.35	23.438		
14,000.00	8,306.00	8,322.40	8,297.85	132.74	29.68	-73.122	915.79	-6,693.21	1,670.35	1,592.91	77.44	21.570		
14,100.00	8,306.00	8,324.88	8,300.33	134.98	29.69	-72.048	915.79	-6,693.25	1,575.10	1,495.27	79.83	19.730		
14,200.00	8,306.00	8,327.23	8,302.68	137.22	29.70	-70.836	915.78	-6,693.29	1,480.48	1,397.88	82.59	17.925		
14,300.00	8,306.00	8,329.46	8,304.91	139.47	29.71	-69.459	915.77	-6,693.32	1,386.60	1,300.81	85.79	16.163		
14,400.00	8,306.00	8,331.57	8,307.02	141.72	29.71	-67.883	915.76	-6,693.35	1,293.65	1,204.14	89.51	14.453		
14,500.00	8,306.00	8,333.57	8,309.02	143.97	29.72	-66.065	915.75	-6,693.38	1,201.82	1,107.97	93.85	12.805		
14,600.00	8,306.00	8,335.48	8,310.93	146.22	29.73	-63.949	915.75	-6,693.41	1,111.40	1,012.45	98.95	11.232		
14,700.00	8,306.00	8,337.30	8,312.75	148.47	29.73	-61.462	915.74	-6,693.43	1,022.77	917.81	104.96	9.745		
14,800.00	8,306.00	8,339.03	8,314.48	150.73	29.74	-58.510	915.73	-6,693.46	936.42	824.37	112.05	8.357		
14,900.00	8,306.00	8,340.68	8,316.13	152.99	29.74	-54.970	915.72	-6,693.48	853.06	732.63	120.43	7.083		
15,000.00	8,306.00	8,342.26	8,317.71	155.24	29.75	-50.684	915.71	-6,693.50	773.65	643.35	130.29	5.938		
15,100.00	8,306.00	8,343.77	8,319.22	157.50	29.76	-45.455	915.71	-6,693.52	699.54	557.77	141.76	4.935		
15,200.00	8,306.00	8,345.22	8,320.66	159.76	29.76	-39.055	915.70	-6,693.54	632.59	477.84	154.74	4.088		
15,300.00	8,306.00	8,346.60	8,322.05	162.03	29.76	-31.265	915.69	-6,693.55	575.30	406.64	168.66	3.411		
15,400.00	8,306.00	8,347.93	8,323.38	164.29	29.77	-21.971	915.68	-6,693.57	530.83	348.68	182.15	2.914		
15,500.00	8,306.00	8,349.21	8,324.65	166.55	29.77	-11.316	915.68	-6,693.59	502.58	309.65	192.93	2.605		
15,596.00	8,306.00	8,350.38	8,325.83	168.73	29.78	-0.306	915.67	-6,693.60	493.33	294.95	198.38	2.487 CC		
15,600.00	8,306.00	8,350.43	8,325.88	168.82	29.78	0.159	915.67	-6,693.60	493.35	294.87	198.48	2.486 ES, SF		
15,700.00	8,306.00	8,351.61	8,327.06	171.08	29.78	11.597	915.66	-6,693.61	504.17	306.66	197.51	2.553		
15,800.00	8,306.00	8,352.74	8,328.19	173.35	29.79	22.158	915.66	-6,693.63	533.84	342.96	190.88	2.797		
15,900.00	8,306.00	8,353.83	8,329.28	175.62	29.79	31.334	915.65	-6,693.64	579.47	398.61	180.85	3.204		
15,959.75	8,306.00	8,354.47	8,329.91	176.98	29.79	36.095	915.65	-6,693.64	612.92	438.74	174.18	3.519		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (Offsets) - General Kehoe 02-24S-28E RB 228H - Wellbore #1 - Surveys													Offset Site Error:
													0.00 usft
Survey Program:	Reference	Offset	Semi Major Axis	Offset	Reference	Offset	Azimuth	Offset Wellbore Centre	Distance	Rule Assigned:	Minimum	Separation	Warning
Measured	Vertical	Measured	Vertical	Reference	Offset	Offset	from North	+N/-S	+E/-W	Between	Between	Separation	
Depth	Depth	Depth	Depth				(°)	(usft)	(usft)	Centres	Ellipses	(usft)	Factor
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)					(usft)	(usft)		
12,100.00	8,306.00	8,334.10	8,323.79	90.74	29.11	-75.075		933.48	-5,042.54	1,912.11	1,845.85	66.26	28.857
12,200.00	8,306.00	8,334.41	8,324.09	92.91	29.11	-74.247		933.47	-5,042.54	1,815.81	1,748.45	67.36	26.955
12,300.00	8,306.00	8,334.71	8,324.40	95.08	29.11	-73.326		933.46	-5,042.54	1,719.94	1,651.30	68.65	25.055
12,400.00	8,306.00	8,335.01	8,324.70	97.26	29.11	-72.296		933.44	-5,042.54	1,624.57	1,554.43	70.14	23.161
12,500.00	8,306.00	8,335.31	8,325.00	99.45	29.11	-71.138		933.43	-5,042.54	1,529.79	1,457.90	71.90	21.278
12,600.00	8,306.00	8,335.61	8,325.29	101.64	29.11	-69.828		933.42	-5,042.54	1,435.72	1,361.77	73.95	19.414
12,700.00	8,306.00	8,335.90	8,325.59	103.84	29.11	-68.335		933.40	-5,042.54	1,342.50	1,266.12	76.38	17.577
12,800.00	8,306.00	8,336.20	8,325.88	106.04	29.11	-66.621		933.39	-5,042.54	1,250.34	1,171.09	79.25	15.778
12,900.00	8,306.00	8,336.49	8,326.18	108.25	29.11	-64.636		933.37	-5,042.54	1,159.47	1,076.82	82.65	14.029
13,000.00	8,306.00	8,336.78	8,326.47	110.46	29.11	-62.316		933.36	-5,042.55	1,070.23	983.53	86.70	12.345
13,100.00	8,306.00	8,337.07	8,326.76	112.67	29.12	-59.580		933.35	-5,042.55	983.07	891.54	91.52	10.741
13,200.00	8,306.00	8,337.36	8,327.05	114.89	29.12	-56.320		933.33	-5,042.55	898.58	801.30	97.28	9.237
13,300.00	8,306.00	8,337.65	8,327.33	117.11	29.12	-52.399		933.32	-5,042.55	817.60	713.48	104.12	7.853
13,400.00	8,306.00	8,337.93	8,327.62	119.34	29.12	-47.644		933.31	-5,042.55	741.28	629.10	112.18	6.608
13,500.00	8,306.00	8,338.22	8,327.90	121.56	29.12	-41.847		933.30	-5,042.55	671.21	549.73	121.48	5.525
13,600.00	8,306.00	8,338.50	8,328.19	123.79	29.12	-34.790		933.28	-5,042.55	609.54	477.74	131.81	4.625
13,700.00	8,306.00	8,338.78	8,328.47	126.03	29.12	-26.305		933.27	-5,042.55	559.08	416.63	142.45	3.925
13,800.00	8,306.00	8,339.06	8,328.75	128.26	29.12	-16.402		933.26	-5,042.55	523.06	371.02	152.04	3.440
13,900.00	8,306.00	8,339.34	8,329.02	130.50	29.12	-5.414		933.24	-5,042.55	504.60	345.89	158.71	3.179
13,944.88	8,306.00	8,339.47	8,329.15	131.50	29.12	-0.307		933.24	-5,042.55	502.60	342.29	160.30	3.135 CC, ES, SF
14,000.00	8,306.00	8,339.62	8,329.30	132.74	29.12	5.959		933.23	-5,042.55	505.61	344.69	160.92	3.142
14,100.00	8,306.00	8,339.89	8,329.58	134.98	29.12	16.864		933.22	-5,042.55	525.99	367.54	158.45	3.320
14,200.00	8,306.00	8,340.17	8,329.85	137.22	29.13	26.632		933.21	-5,042.55	563.64	411.12	152.52	3.695
14,300.00	8,306.00	8,340.44	8,330.12	139.47	29.13	34.969		933.19	-5,042.55	615.40	470.57	144.83	4.249
14,400.00	8,306.00	8,340.71	8,330.40	141.72	29.13	41.889		933.18	-5,042.56	678.04	541.28	136.76	4.958
14,500.00	8,306.00	8,340.98	8,330.67	143.97	29.13	47.571		933.17	-5,042.56	748.84	619.74	129.10	5.801
14,600.00	8,306.00	8,341.25	8,330.94	146.22	29.13	52.233		933.16	-5,042.56	825.70	703.50	122.21	6.757
14,700.00	8,306.00	8,341.52	8,331.20	148.47	29.13	56.079		933.14	-5,042.56	907.09	790.92	116.16	7.809
14,800.00	8,306.00	8,341.79	8,331.47	150.73	29.13	59.281		933.13	-5,042.56	991.88	880.95	110.93	8.942
14,900.00	8,306.00	8,342.05	8,331.73	152.99	29.13	61.970		933.12	-5,042.56	1,079.28	972.87	106.41	10.143
15,000.00	8,306.00	8,342.32	8,332.00	155.24	29.13	64.253		933.11	-5,042.56	1,168.71	1,066.19	102.52	11.400
15,100.00	8,306.00	8,342.58	8,332.26	157.50	29.13	66.208		933.09	-5,042.56	1,259.72	1,160.57	99.15	12.706
15,200.00	8,306.00	8,342.84	8,332.52	159.76	29.13	67.898		933.08	-5,042.56	1,352.01	1,255.78	96.22	14.051
15,300.00	8,306.00	8,343.10	8,332.78	162.03	29.14	69.370		933.07	-5,042.56	1,445.32	1,351.64	93.67	15.429
15,400.00	8,306.00	8,343.36	8,333.04	164.29	29.14	70.664		933.06	-5,042.56	1,539.47	1,448.03	91.44	16.835
15,500.00	8,306.00	8,343.62	8,333.30	166.55	29.14	71.808		933.05	-5,042.56	1,634.32	1,544.84	89.48	18.265
15,600.00	8,306.00	8,343.87	8,333.55	168.82	29.14	72.825		933.03	-5,042.56	1,729.74	1,642.00	87.75	19.713
15,700.00	8,306.00	8,344.13	8,333.81	171.08	29.14	73.737		933.02	-5,042.56	1,825.66	1,739.45	86.21	21.178
15,800.00	8,306.00	8,344.38	8,334.06	173.35	29.14	74.557		933.01	-5,042.56	1,921.99	1,837.16	84.84	22.655

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (Offsets) - Layla 35 PA #1H - Wellbore #1 - Surveys

Survey Program: Reference		100-GYRO-NS, 7750-MWD+HRGM						Rule Assigned:				Offset Well Error:		0.00 usft
Offset		Semi Major Axis		Offset		Offset Wellbore Centre		Distance		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
11,800.00	8,306.00	7,956.00	7,945.52	84.27	26.92	-74.790	948.27	-4,754.73	1,959.82	1,898.12	61.69	31.766		
11,900.00	8,306.00	7,956.00	7,945.52	86.42	26.92	-73.953	948.27	-4,754.73	1,865.34	1,802.72	62.62	29.790		
12,000.00	8,306.00	7,956.00	7,945.52	88.58	26.92	-73.023	948.27	-4,754.73	1,771.47	1,707.77	63.70	27.812		
12,100.00	8,306.00	7,956.00	7,945.52	90.74	26.92	-71.985	948.27	-4,754.73	1,678.30	1,613.34	64.96	25.837		
12,200.00	8,306.00	7,956.00	7,945.52	92.91	26.92	-70.820	948.27	-4,754.73	1,585.97	1,519.53	66.44	23.872		
12,300.00	8,306.00	7,967.37	7,956.41	95.08	26.92	-69.421	951.11	-4,756.33	1,494.50	1,426.15	68.35	21.864		
12,400.00	8,306.00	7,972.57	7,961.37	97.26	26.92	-67.879	952.45	-4,757.10	1,404.19	1,333.68	70.50	19.916		
12,500.00	8,306.00	7,988.00	7,976.03	99.45	26.92	-66.030	956.64	-4,759.52	1,315.32	1,242.08	73.24	17.958		
12,600.00	8,306.00	7,988.00	7,976.03	101.64	26.92	-64.040	956.64	-4,759.52	1,227.89	1,151.77	76.13	16.130		
12,700.00	8,306.00	7,988.00	7,976.03	103.84	26.92	-61.725	956.64	-4,759.52	1,142.53	1,063.02	79.51	14.370		
12,800.00	8,306.00	7,997.81	7,985.29	106.04	26.93	-58.915	959.47	-4,761.13	1,059.63	975.88	83.75	12.653		
12,900.00	8,306.00	8,005.28	7,992.29	108.25	26.93	-55.624	961.72	-4,762.37	979.81	891.17	88.64	11.053		
13,000.00	8,306.00	8,020.00	8,006.02	110.46	26.93	-51.637	966.44	-4,764.84	903.94	809.32	94.62	9.553		
13,100.00	8,306.00	8,020.00	8,006.02	112.67	26.93	-47.035	966.44	-4,764.84	832.89	732.04	100.85	8.259		
13,200.00	8,306.00	8,020.00	8,006.02	114.89	26.93	-41.488	966.44	-4,764.84	768.32	660.54	107.78	7.129		
13,300.00	8,306.00	8,035.37	8,020.20	117.11	26.94	-34.745	971.73	-4,767.52	711.60	595.48	116.13	6.128		
13,400.00	8,306.00	8,051.00	8,034.44	119.34	26.94	-26.878	977.47	-4,770.41	665.15	540.38	124.77	5.331		
13,500.00	8,306.00	8,051.00	8,034.44	121.56	26.94	-17.875	977.47	-4,770.41	630.82	498.98	131.83	4.785		
13,600.00	8,306.00	8,061.42	8,043.84	123.79	26.94	-8.033	981.51	-4,772.40	610.91	472.75	138.16	4.422		
13,675.83	8,306.00	8,068.58	8,050.26	125.49	26.95	-0.306	984.37	-4,773.77	606.27	464.87	141.40	4.288	CC	
13,700.00	8,306.00	8,074.60	8,055.62	126.03	26.95	2.072	986.84	-4,774.93	606.77	464.35	142.42	4.261	ES, SF	
13,800.00	8,306.00	8,080.49	8,060.85	128.26	26.95	12.044	989.31	-4,776.08	618.63	475.30	143.33	4.316		
13,900.00	8,306.00	8,083.00	8,063.07	130.50	26.95	21.344	990.38	-4,776.56	645.75	504.36	141.39	4.567		
14,000.00	8,306.00	8,099.96	8,077.98	132.74	26.96	29.077	997.79	-4,779.76	686.08	547.32	138.76	4.944		
14,100.00	8,306.00	8,115.00	8,091.11	134.98	26.97	35.694	1,004.63	-4,782.41	737.76	602.97	134.79	5.473		
14,200.00	8,306.00	8,115.00	8,091.11	137.22	26.97	41.724	1,004.63	-4,782.41	798.38	669.14	129.24	6.177		
14,300.00	8,306.00	8,131.93	8,105.71	139.47	26.97	46.257	1,012.65	-4,785.44	866.14	741.23	124.90	6.935		
14,400.00	8,306.00	8,147.00	8,118.49	141.72	26.98	50.075	1,020.06	-4,788.39	939.37	818.72	120.65	7.786		
14,500.00	8,306.00	8,159.83	8,129.21	143.97	26.99	53.339	1,026.61	-4,791.04	1,016.90	900.29	116.61	8.721		
14,600.00	8,306.00	8,172.37	8,139.52	146.22	27.00	56.103	1,033.24	-4,793.70	1,097.84	984.89	112.95	9.719		
14,700.00	8,306.00	8,188.22	8,152.29	148.47	27.01	58.360	1,041.94	-4,797.18	1,181.46	1,071.56	109.90	10.751		
14,800.00	8,306.00	8,210.00	8,169.33	150.73	27.02	60.117	1,054.49	-4,802.32	1,267.12	1,159.56	107.56	11.780		
14,900.00	8,306.00	8,222.94	8,179.18	152.99	27.03	61.860	1,062.25	-4,805.52	1,354.43	1,249.39	105.04	12.895		
15,000.00	8,306.00	8,242.00	8,193.32	155.24	27.05	63.213	1,074.11	-4,810.29	1,443.18	1,340.01	103.17	13.989		
15,100.00	8,306.00	8,251.85	8,200.45	157.50	27.06	64.630	1,080.44	-4,812.78	1,533.05	1,432.02	101.04	15.173		
15,200.00	8,306.00	8,273.00	8,215.33	159.76	27.08	65.597	1,094.43	-4,818.25	1,623.88	1,524.11	99.77	16.276		
15,300.00	8,306.00	8,305.00	8,236.61	162.03	27.12	66.164	1,116.59	-4,827.16	1,715.22	1,615.90	99.33	17.268		
15,400.00	8,306.00	8,326.35	8,249.91	164.29	27.15	66.901	1,132.05	-4,833.48	1,807.04	1,708.57	98.46	18.352		
15,500.00	8,306.00	8,337.00	8,256.27	166.55	27.17	67.812	1,139.99	-4,836.64	1,899.48	1,802.34	97.14	19.553		
15,600.00	8,306.00	8,351.41	8,264.66	168.82	27.20	68.548	1,150.91	-4,840.85	1,992.47	1,896.29	96.18	20.717		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: C Sweeney & Scott King (Offsets) - Malaga 1 Com #1 - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 196-INC-ONLY												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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,800.00	8,306.00	8,253.89	8,251.61	44.77	188.19	-93.433	337.14	-2,832.23	1,940.67	1,722.52	218.15	8.896	
9,900.00	8,306.00	8,253.90	8,251.62	46.46	188.19	-93.602	337.14	-2,832.23	1,840.82	1,622.65	218.18	8.437	
10,000.00	8,306.00	8,253.90	8,251.62	48.19	188.19	-93.792	337.14	-2,832.23	1,741.00	1,522.78	218.21	7.978	
10,100.00	8,306.00	8,253.91	8,251.63	49.98	188.19	-94.004	337.14	-2,832.23	1,641.20	1,422.94	218.26	7.520	
10,200.00	8,306.00	8,253.91	8,251.64	51.80	188.19	-94.244	337.14	-2,832.23	1,541.42	1,323.11	218.31	7.061	
10,300.00	8,306.00	8,253.92	8,251.64	53.67	188.19	-94.516	337.14	-2,832.23	1,441.67	1,223.30	218.37	6.602	
10,400.00	8,306.00	8,253.93	8,251.65	55.56	188.19	-94.830	337.14	-2,832.23	1,341.96	1,123.51	218.45	6.143	
10,500.00	8,306.00	8,253.93	8,251.65	57.49	188.19	-95.194	337.14	-2,832.23	1,242.30	1,023.75	218.54	5.684	
10,600.00	8,306.00	8,253.94	8,251.66	59.44	188.19	-95.621	337.14	-2,832.23	1,142.69	924.03	218.66	5.226	
10,700.00	8,306.00	8,253.94	8,251.66	61.42	188.19	-96.130	337.14	-2,832.23	1,043.16	824.35	218.81	4.767	
10,800.00	8,306.00	8,253.95	8,251.67	63.42	188.19	-96.746	337.14	-2,832.23	943.73	724.72	219.01	4.309	
10,900.00	8,306.00	8,253.95	8,251.68	65.44	188.19	-97.507	337.14	-2,832.23	844.44	625.15	219.28	3.851	
11,000.00	8,306.00	8,253.96	8,251.68	67.47	188.19	-98.470	337.14	-2,832.23	745.33	525.67	219.67	3.393	
11,100.00	8,306.00	8,253.97	8,251.69	69.53	188.19	-99.729	337.14	-2,832.23	646.50	426.27	220.23	2.936	
11,200.00	8,306.00	8,253.97	8,251.69	71.60	188.19	-101.440	337.14	-2,832.23	548.10	326.98	221.11	2.479	
11,300.00	8,306.00	8,253.98	8,251.70	73.68	188.19	-103.898	337.14	-2,832.23	450.39	227.81	222.59	2.023	
11,400.00	8,306.00	8,253.98	8,251.71	75.78	188.19	-107.704	337.14	-2,832.23	353.97	128.70	225.27	1.571	
11,500.00	8,306.00	8,253.99	8,251.71	77.89	188.19	-114.301	337.14	-2,832.23	260.27	29.55	230.72	1.128	Level 3
11,600.00	8,306.00	8,254.00	8,251.72	80.01	188.19	-127.838	337.14	-2,832.23	173.74	-69.31	243.05	0.715	Level 3
11,700.00	8,306.00	8,254.00	8,251.72	82.13	188.19	-160.663	337.14	-2,832.23	112.39	-154.06	266.45	0.422	Level 3
11,737.78	8,306.00	8,254.00	8,251.73	82.94	188.19	-179.692	337.14	-2,832.23	105.85	-165.25	271.09	0.390	Level 3, CC, ES, SF
11,800.00	8,306.00	8,254.01	8,251.73	84.27	188.19	-149.243	337.14	-2,832.23	122.78	-139.21	261.99	0.469	Level 3
11,900.00	8,306.00	8,254.01	8,251.74	86.42	188.19	-122.816	337.14	-2,832.23	193.70	-47.45	241.15	0.803	Level 3
12,000.00	8,306.00	8,254.02	8,251.74	88.58	188.19	-111.674	337.14	-2,832.23	282.78	51.74	231.04	1.224	Level 3
12,100.00	8,306.00	8,254.03	8,251.75	90.74	188.19	-105.982	337.14	-2,832.23	377.37	151.05	226.32	1.667	
12,200.00	8,306.00	8,254.03	8,251.75	92.91	188.19	-102.591	337.14	-2,832.23	474.19	250.34	223.85	2.118	
12,300.00	8,306.00	8,254.04	8,251.76	95.08	188.19	-100.355	337.14	-2,832.23	572.10	349.67	222.43	2.572	
12,400.00	8,306.00	8,254.04	8,251.77	97.26	188.19	-98.774	337.14	-2,832.23	670.63	449.08	221.55	3.027	
12,500.00	8,306.00	8,254.05	8,251.77	99.45	188.19	-97.599	337.14	-2,832.23	769.54	548.57	220.97	3.483	
12,600.00	8,306.00	8,254.06	8,251.78	101.64	188.19	-96.692	337.14	-2,832.23	868.69	648.12	220.57	3.938	
12,700.00	8,306.00	8,254.06	8,251.78	103.84	188.19	-95.971	337.14	-2,832.23	968.03	747.73	220.30	4.394	
12,800.00	8,306.00	8,254.07	8,251.79	106.04	188.19	-95.384	337.14	-2,832.23	1,067.48	847.39	220.10	4.850	
12,900.00	8,306.00	8,254.07	8,251.79	108.25	188.19	-94.897	337.14	-2,832.23	1,167.03	947.08	219.95	5.306	
13,000.00	8,306.00	8,254.08	8,251.80	110.46	188.19	-94.487	337.14	-2,832.23	1,266.65	1,046.80	219.85	5.762	
13,100.00	8,306.00	8,254.08	8,251.81	112.67	188.19	-94.137	337.14	-2,832.23	1,366.33	1,146.56	219.77	6.217	
13,200.00	8,306.00	8,254.09	8,251.81	114.89	188.19	-93.834	337.14	-2,832.23	1,466.05	1,246.33	219.72	6.672	
13,300.00	8,306.00	8,254.10	8,251.82	117.11	188.19	-93.570	337.14	-2,832.23	1,565.80	1,346.12	219.68	7.128	
13,400.00	8,306.00	8,254.10	8,251.82	119.34	188.19	-93.337	337.14	-2,832.23	1,665.59	1,445.93	219.66	7.583	
13,500.00	8,306.00	8,254.11	8,251.83	121.56	188.20	-93.131	337.14	-2,832.23	1,765.40	1,545.75	219.64	8.038	
13,600.00	8,306.00	8,254.11	8,251.84	123.79	188.20	-92.947	337.14	-2,832.23	1,865.23	1,645.59	219.64	8.492	
13,700.00	8,306.00	8,254.12	8,251.84	126.03	188.20	-92.781	337.14	-2,832.23	1,965.07	1,745.43	219.64	8.947	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Harroun 6 Fed Com - Harroun 6 Fed Com #1H - Wellbore #1 - Design #2													Offset Site Error:	0.00 usft
Survey Program: 0-													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	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	
4,400.00	4,363.87	4,745.25	4,712.42	16.87	17.82	68.148	1,016.61	2,232.95	1,995.98	1,963.94	32.04	62.298		
4,500.00	4,462.79	4,839.79	4,805.06	17.28	18.25	68.040	1,016.50	2,214.11	1,963.61	1,930.85	32.76	59.942		
4,600.00	4,561.72	4,934.33	4,897.71	17.69	18.67	67.928	1,016.39	2,195.26	1,931.24	1,897.77	33.48	57.686		
4,700.00	4,660.65	5,028.88	4,990.36	18.09	19.10	67.813	1,016.29	2,176.42	1,898.89	1,864.69	34.20	55.524		
4,800.00	4,759.58	5,123.42	5,083.00	18.50	19.53	67.693	1,016.18	2,157.58	1,866.53	1,831.61	34.92	53.450		
4,900.00	4,858.50	5,217.96	5,175.65	18.91	19.96	67.569	1,016.08	2,138.74	1,834.19	1,798.55	35.64	51.459		
5,000.00	4,957.43	5,312.50	5,268.30	19.31	20.40	67.441	1,015.97	2,119.89	1,801.86	1,765.49	36.37	49.546		
5,100.00	5,056.36	5,407.05	5,360.94	19.72	20.83	67.308	1,015.86	2,101.05	1,769.53	1,732.44	37.09	47.707		
5,200.00	5,155.29	5,501.59	5,453.59	20.13	21.27	67.170	1,015.76	2,082.21	1,737.22	1,699.40	37.82	45.937		
5,300.00	5,254.22	5,596.13	5,546.24	20.53	21.70	67.026	1,015.65	2,063.36	1,704.91	1,666.37	38.54	44.233		
5,400.00	5,353.14	5,690.68	5,638.88	20.94	22.14	66.878	1,015.54	2,044.52	1,672.62	1,633.35	39.27	42.591		
5,500.00	5,452.07	5,785.22	5,731.53	21.35	22.58	66.723	1,015.44	2,025.68	1,640.34	1,600.34	40.00	41.009		
5,600.00	5,551.00	5,879.76	5,824.17	21.75	23.01	66.562	1,015.33	2,006.84	1,608.06	1,567.34	40.73	39.482		
5,700.00	5,649.93	5,974.31	5,918.82	22.16	23.45	66.395	1,015.22	1,987.99	1,575.81	1,534.35	41.46	38.009		
5,800.00	5,748.86	6,068.85	6,009.47	22.57	23.89	66.221	1,015.12	1,969.15	1,543.56	1,501.37	42.19	36.586		
5,900.00	5,847.78	6,163.39	6,102.11	22.98	24.33	66.039	1,015.01	1,950.31	1,511.33	1,468.41	42.92	35.211		
6,000.00	5,946.71	6,257.94	6,194.76	23.38	24.77	65.849	1,014.90	1,931.47	1,479.12	1,435.46	43.66	33.881		
6,100.00	6,045.64	6,352.48	6,287.41	23.79	25.21	65.651	1,014.80	1,912.62	1,446.92	1,402.53	44.39	32.595		
6,200.00	6,144.57	6,447.02	6,380.05	24.20	25.66	65.444	1,014.69	1,893.78	1,414.74	1,369.61	45.13	31.351		
6,300.00	6,243.49	6,541.57	6,472.70	24.60	26.10	65.228	1,014.58	1,874.94	1,382.58	1,336.71	45.86	30.146		
6,400.00	6,342.42	6,636.11	6,565.35	25.01	26.54	65.001	1,014.48	1,856.10	1,350.44	1,303.83	46.60	28.979		
6,500.00	6,441.35	6,730.65	6,657.99	25.42	26.99	64.763	1,014.37	1,837.25	1,318.32	1,270.97	47.34	27.847		
6,600.00	6,540.28	6,825.20	6,750.64	25.83	27.43	64.513	1,014.26	1,818.41	1,286.22	1,238.14	48.08	26.751		
6,700.00	6,639.21	6,919.74	6,843.28	26.23	27.87	64.250	1,014.16	1,799.57	1,254.15	1,205.32	48.82	25.687		
6,800.00	6,738.13	7,014.28	6,935.93	26.64	28.32	63.974	1,014.05	1,780.73	1,222.10	1,172.53	49.57	24.655		
6,894.50	6,831.62	7,103.62	7,023.48	27.03	28.74	63.699	1,013.95	1,762.92	1,191.85	1,141.57	50.27	23.707		
6,900.00	6,837.06	7,108.83	7,028.58	27.05	28.76	63.683	1,013.94	1,761.88	1,190.09	1,139.78	50.31	23.653		
7,000.00	6,936.25	7,203.94	7,121.78	27.44	29.21	63.360	1,013.84	1,742.93	1,159.93	1,108.87	51.06	22.716		
7,100.00	7,035.82	7,300.00	7,215.91	27.82	29.67	62.990	1,013.73	1,723.78	1,133.12	1,081.31	51.81	21.869		
7,200.00	7,135.65	7,396.88	7,310.85	28.17	30.12	62.576	1,013.62	1,704.47	1,109.71	1,057.14	52.57	21.109		
7,300.00	7,235.62	7,494.48	7,406.49	28.51	30.58	62.118	1,013.51	1,685.02	1,089.74	1,036.42	53.33	20.435		
7,314.38	7,250.00	7,508.56	7,420.30	28.55	30.65	62.049	1,013.49	1,682.21	1,087.16	1,033.72	53.43	20.346		
7,400.00	7,335.62	7,592.46	7,502.51	28.83	31.05	61.628	1,013.40	1,665.49	1,072.00	1,017.92	54.08	19.822		
7,500.00	7,435.62	7,690.46	7,598.54	29.15	31.51	61.121	1,013.29	1,645.96	1,054.37	999.53	54.84	19.227		
7,600.00	7,535.62	7,788.45	7,694.57	29.47	31.98	60.597	1,013.18	1,626.43	1,036.83	981.23	55.60	18.648		
7,700.00	7,635.62	7,886.45	7,790.60	29.79	32.44	60.055	1,013.07	1,606.90	1,019.37	963.01	56.37	18.085		
7,800.00	7,735.62	7,984.44	7,886.62	30.11	32.90	59.495	1,012.96	1,587.37	1,002.01	944.87	57.14	17.537		
7,892.92	7,828.54	8,075.49	7,975.85	30.41	33.34	58.956	1,012.85	1,569.22	985.96	928.10	57.86	17.041		
7,900.00	7,835.62	8,082.44	7,982.66	30.43	33.37	58.916	1,012.85	1,567.84	984.79	926.88	57.91	17.005		
7,925.00	7,860.59	8,107.12	8,006.85	30.50	33.49	58.793	1,012.82	1,562.92	981.40	923.30	58.10	16.892		
7,950.00	7,885.48	8,131.97	8,031.20	30.57	33.60	58.702	1,012.79	1,557.97	979.19	920.91	58.28	16.802		
7,975.00	7,910.21	8,156.93	8,055.65	30.63	33.72	58.644	1,012.76	1,552.99	978.16	919.70	58.46	16.733		
7,984.33	7,919.39	8,166.25	8,064.79	30.66	33.77	58.631	1,012.75	1,551.14	978.08	919.56	58.52	16.713 CC, ES		
8,000.00	7,934.72	8,181.92	8,080.15	30.69	33.84	58.620	1,012.73	1,548.01	978.31	919.68	58.63	16.686		
8,025.00	7,958.94	8,206.88	8,104.61	30.75	33.96	58.629	1,012.71	1,543.04	979.64	920.84	58.80	16.661		
8,050.00	7,982.80	8,231.75	8,128.97	30.80	34.08	58.671	1,012.68	1,538.08	982.15	923.19	58.96	16.658 SF		
8,075.00	8,006.24	8,256.44	8,153.17	30.85	34.20	58.745	1,012.65	1,533.16	985.82	926.71	59.12	16.676		
8,100.00	8,029.19	8,280.89	8,177.13	30.89	34.31	58.852	1,012.62	1,528.29	990.66	931.40	59.26	16.716		
8,125.00	8,051.59	8,305.05	8,200.80	30.93	34.43	58.989	1,012.60	1,523.47	996.66	937.25	59.41	16.777		
8,150.00	8,073.38	8,328.83	8,224.11	30.96	34.54	59.156	1,012.57	1,518.73	1,003.79	944.25	59.54	16.858		
8,175.00	8,094.49	8,352.18	8,246.99	31.00	34.65	59.350	1,012.54	1,514.08	1,012.05	952.38	59.67	16.960		
8,200.00	8,114.88	8,375.03	8,269.38	31.03	34.76	59.571	1,012.52	1,509.53	1,021.41	961.62	59.79	17.083		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Harroun 6 Fed Com - Harroun 6 Fed Com #1H - Wellbore #1 - Design #2

Survey Program: 0-												Offset Site Error:	0.00 usft
Rule Assigned:												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	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
8,225.00	8,134.48	8,397.32	8,291.22	31.06	34.87	59.815	1,012.49	1,505.08	1,031.87	971.96	59.91	17.225	
8,250.00	8,153.25	8,418.99	8,312.45	31.08	34.97	60.081	1,012.47	1,500.76	1,043.38	983.37	60.01	17.386	
8,275.00	8,171.13	8,439.97	8,333.02	31.11	35.07	60.367	1,012.44	1,496.58	1,055.94	995.83	60.11	17.566	
8,300.00	8,188.06	8,460.22	8,352.86	31.13	35.16	60.670	1,012.42	1,492.55	1,069.50	1,009.30	60.21	17.764	
8,325.00	8,204.01	8,479.67	8,371.92	31.16	35.26	60.988	1,012.40	1,488.67	1,084.05	1,023.76	60.29	17.980	
8,350.00	8,218.93	8,498.27	8,390.15	31.18	35.35	61.319	1,012.38	1,484.96	1,099.54	1,039.16	60.37	18.213	
8,375.00	8,232.78	8,515.98	8,407.50	31.21	35.43	61.661	1,012.36	1,481.43	1,115.93	1,055.49	60.44	18.462	
8,400.00	8,245.53	8,532.74	8,423.92	31.24	35.51	62.011	1,012.34	1,478.09	1,133.19	1,072.68	60.51	18.727	
8,425.00	8,257.13	8,548.50	8,439.37	31.27	35.58	62.367	1,012.32	1,474.95	1,151.28	1,090.71	60.57	19.007	
8,450.00	8,267.55	8,563.23	8,453.80	31.31	35.65	62.728	1,012.30	1,472.02	1,170.14	1,109.52	60.62	19.302	
8,475.00	8,276.78	8,576.88	8,467.18	31.35	35.72	63.091	1,012.29	1,469.30	1,189.73	1,129.06	60.67	19.609	
8,500.00	8,284.77	8,589.41	8,479.46	31.40	35.78	63.456	1,012.28	1,466.80	1,210.01	1,149.29	60.71	19.929	
8,525.00	8,291.51	8,600.80	8,490.62	31.45	35.83	63.819	1,012.26	1,464.53	1,230.91	1,170.15	60.75	20.261	
8,550.00	8,296.99	8,611.00	8,500.62	31.51	35.88	64.180	1,012.25	1,462.50	1,252.37	1,191.59	60.78	20.604	
8,575.00	8,301.18	8,620.00	8,509.44	31.57	35.92	64.538	1,012.24	1,460.70	1,274.36	1,213.55	60.81	20.956	
8,600.00	8,304.07	8,627.77	8,517.05	31.64	35.96	64.891	1,012.23	1,459.15	1,296.79	1,235.96	60.83	21.318	
8,625.00	8,305.66	8,634.28	8,523.43	31.72	35.99	65.239	1,012.22	1,457.86	1,319.62	1,258.78	60.85	21.687	
8,642.92	8,306.00	8,638.17	8,527.24	31.77	36.01	65.484	1,012.22	1,457.08	1,336.19	1,275.33	60.86	21.956	
8,700.00	8,306.00	8,649.51	8,538.35	31.99	36.06	66.263	1,012.21	1,454.82	1,389.06	1,328.18	60.88	22.815	
8,800.00	8,306.00	8,669.43	8,557.87	32.51	36.16	67.647	1,012.19	1,450.85	1,480.91	1,419.96	60.95	24.299	
8,812.71	8,306.00	8,671.96	8,560.35	32.59	36.17	67.824	1,012.18	1,450.35	1,492.50	1,431.55	60.95	24.486	
8,900.00	8,306.00	8,689.36	8,577.40	33.20	36.25	68.983	1,012.16	1,446.88	1,572.42	1,511.39	61.03	25.766	
9,000.00	8,306.00	8,709.29	8,596.93	34.04	36.35	70.173	1,012.14	1,442.91	1,664.66	1,603.53	61.12	27.234	
9,100.00	8,306.00	8,729.22	8,616.46	35.02	36.44	71.238	1,012.12	1,438.93	1,757.52	1,696.29	61.23	28.704	
9,200.00	8,306.00	8,749.15	8,635.99	36.13	36.54	72.197	1,012.10	1,434.96	1,850.91	1,789.56	61.34	30.174	
9,300.00	8,306.00	8,769.08	8,655.53	37.35	36.63	73.064	1,012.07	1,430.99	1,944.75	1,883.29	61.46	31.644	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Harroun 6 Fed Com - Harroun 6 Fed Com #2H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Survey Program: 0-		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: 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)			
4,200.00	4,166.01	4,643.19	4,600.18	16.06	17.69	67.022	1,016.88	2,150.12	1,966.99	1,936.25	30.74	63.982	
4,300.00	4,264.94	4,735.95	4,689.98	16.47	18.15	66.840	1,016.75	2,126.89	1,930.13	1,898.67	31.46	61.346	
4,400.00	4,363.87	4,828.71	4,779.79	16.87	18.61	66.651	1,016.63	2,103.66	1,893.29	1,861.10	32.18	58.826	
4,500.00	4,462.79	4,921.47	4,869.59	17.28	19.07	66.454	1,016.50	2,080.43	1,856.46	1,823.56	32.91	56.413	
4,600.00	4,561.72	5,014.23	4,959.40	17.69	19.54	66.250	1,016.37	2,057.20	1,819.66	1,786.03	33.63	54.102	
4,700.00	4,660.65	5,106.99	5,049.20	18.09	20.00	66.037	1,016.25	2,033.97	1,782.88	1,748.52	34.36	51.886	
4,800.00	4,759.58	5,199.75	5,139.01	18.50	20.47	65.815	1,016.12	2,010.74	1,746.13	1,711.04	35.09	49.760	
4,900.00	4,858.50	5,292.51	5,228.81	18.91	20.94	65.584	1,015.99	1,987.51	1,709.40	1,673.58	35.82	47.718	
5,000.00	4,957.43	5,385.27	5,318.62	19.31	21.41	65.343	1,015.87	1,964.29	1,672.70	1,636.15	36.56	45.756	
5,100.00	5,056.36	5,478.03	5,408.42	19.72	21.89	65.090	1,015.74	1,941.06	1,636.03	1,598.74	37.29	43.870	
5,200.00	5,155.29	5,570.79	5,498.23	20.13	22.36	64.827	1,015.61	1,917.83	1,599.39	1,561.36	38.03	42.055	
5,300.00	5,254.22	5,663.55	5,588.03	20.53	22.84	64.551	1,015.49	1,894.60	1,562.79	1,524.02	38.77	40.308	
5,400.00	5,353.14	5,756.31	5,677.84	20.94	23.32	64.262	1,015.36	1,871.37	1,526.22	1,486.71	39.51	38.625	
5,500.00	5,452.07	5,849.07	5,767.64	21.35	23.79	63.959	1,015.24	1,848.14	1,489.69	1,449.43	40.26	37.002	
5,600.00	5,551.00	5,941.84	5,857.45	21.75	24.28	63.640	1,015.11	1,824.91	1,453.21	1,412.20	41.01	35.438	
5,700.00	5,649.93	6,034.60	5,947.25	22.16	24.76	63.306	1,014.98	1,801.68	1,416.76	1,375.01	41.76	33.928	
5,800.00	5,748.86	6,127.36	6,037.05	22.57	25.24	62.953	1,014.86	1,778.45	1,380.37	1,337.86	42.51	32.470	
5,900.00	5,847.78	6,220.12	6,126.86	22.98	25.72	62.582	1,014.73	1,755.23	1,344.03	1,300.76	43.27	31.062	
6,000.00	5,946.71	6,312.88	6,216.66	23.38	26.21	62.191	1,014.60	1,732.00	1,307.75	1,263.72	44.03	29.701	
6,100.00	6,045.64	6,405.64	6,306.47	23.79	26.69	61.777	1,014.48	1,708.77	1,271.53	1,226.73	44.79	28.386	
6,200.00	6,144.57	6,498.40	6,396.27	24.20	27.18	61.339	1,014.35	1,685.54	1,235.37	1,189.81	45.56	27.113	
6,300.00	6,243.49	6,591.16	6,486.08	24.60	27.67	60.875	1,014.22	1,662.31	1,199.30	1,152.96	46.34	25.882	
6,400.00	6,342.42	6,683.92	6,575.88	25.01	28.15	60.382	1,014.10	1,639.08	1,163.30	1,116.18	47.12	24.690	
6,500.00	6,441.35	6,776.68	6,665.69	25.42	28.64	59.859	1,013.97	1,615.85	1,127.39	1,079.49	47.90	23.536	
6,600.00	6,540.28	6,869.44	6,755.49	25.83	29.13	59.301	1,013.85	1,592.62	1,091.57	1,042.88	48.69	22.419	
6,700.00	6,639.21	6,962.20	6,845.30	26.23	29.62	58.706	1,013.72	1,569.39	1,055.87	1,006.38	49.49	21.336	
6,800.00	6,738.13	7,054.96	6,935.10	26.64	30.11	58.069	1,013.59	1,546.16	1,020.28	969.99	50.29	20.287	
6,894.50	6,831.62	7,142.62	7,019.97	27.03	30.58	57.426	1,013.47	1,524.21	986.77	935.71	51.06	19.325	
6,900.00	6,837.06	7,147.73	7,024.91	27.05	30.60	57.387	1,013.47	1,522.94	984.83	933.72	51.11	19.270	
7,000.00	6,936.25	7,241.13	7,115.34	27.44	31.10	56.646	1,013.34	1,499.54	951.33	899.41	51.93	18.320	
7,100.00	7,035.82	7,335.63	7,206.83	27.82	31.60	55.840	1,013.21	1,475.88	921.32	868.55	52.77	17.460	
7,200.00	7,135.65	7,431.09	7,299.25	28.17	32.11	54.973	1,013.08	1,451.97	894.85	841.23	53.62	16.689	
7,300.00	7,235.62	7,527.41	7,392.50	28.51	32.62	54.050	1,012.95	1,427.85	871.97	817.49	54.48	16.005	
7,314.38	7,250.00	7,541.33	7,405.97	28.55	32.69	53.913	1,012.93	1,424.37	868.98	814.37	54.60	15.914	
7,400.00	7,335.62	7,624.22	7,486.22	28.83	33.13	53.079	1,012.82	1,403.61	851.48	796.13	55.35	15.384	
7,500.00	7,435.62	7,721.03	7,579.95	29.15	33.65	52.062	1,012.68	1,379.37	831.28	775.05	56.23	14.783	
7,600.00	7,535.62	7,817.85	7,673.68	29.47	34.17	50.995	1,012.55	1,355.12	811.35	754.22	57.13	14.202	
7,700.00	7,635.62	7,914.66	7,767.41	29.79	34.68	49.877	1,012.42	1,330.88	791.71	733.66	58.04	13.640	
7,800.00	7,735.62	8,011.47	7,861.14	30.11	35.20	48.703	1,012.29	1,306.64	772.38	713.41	58.97	13.097	
7,892.92	7,828.54	8,101.43	7,948.23	30.41	35.68	47.561	1,012.17	1,284.11	754.72	694.87	59.85	12.610	
7,900.00	7,835.62	8,108.30	7,954.88	30.43	35.72	47.474	1,012.16	1,282.39	753.43	693.51	59.92	12.574	
7,925.00	7,860.59	8,132.74	7,978.54	30.50	35.85	47.203	1,012.12	1,276.27	749.54	689.40	60.15	12.462	
7,950.00	7,885.48	8,157.41	8,002.43	30.57	35.98	46.987	1,012.09	1,270.09	746.70	686.34	60.36	12.370	
7,975.00	7,910.21	8,182.26	8,026.49	30.63	36.11	46.830	1,012.06	1,263.87	744.91	684.34	60.57	12.298	
8,000.00	7,934.72	8,207.22	8,050.64	30.69	36.25	46.733	1,012.02	1,257.62	744.17	683.40	60.77	12.246	
8,005.29	7,939.88	8,212.51	8,055.77	30.70	36.28	46.720	1,012.02	1,256.29	744.14	683.34	60.81	12.238 CC, ES	
8,025.00	7,958.94	8,232.21	8,074.84	30.75	36.38	46.697	1,011.99	1,251.36	744.47	683.52	60.95	12.214	
8,050.00	7,982.80	8,257.17	8,099.00	30.80	36.52	46.722	1,011.95	1,245.11	745.81	684.68	61.13	12.201 SF	
8,075.00	8,006.24	8,282.03	8,123.07	30.85	36.65	46.807	1,011.92	1,238.89	748.20	686.91	61.29	12.208	
8,100.00	8,029.19	8,300.00	8,140.47	30.89	36.74	47.041	1,011.90	1,234.39	751.65	690.17	61.48	12.227	
8,125.00	8,051.59	8,326.22	8,165.89	30.93	36.88	47.226	1,011.86	1,227.96	756.20	694.60	61.60	12.276	
8,150.00	8,073.38	8,347.17	8,186.24	30.96	36.99	47.536	1,011.83	1,222.95	761.89	700.15	61.74	12.341	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Harroun 6 Fed Com - Harroun 6 Fed Com #2H - Wellbore #1 - Design #2

Survey Program: 0-										Rule Assigned:		Offset Site Error:	0.00 usft
Reference										Distance		Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,175.00	8,094.49	8,367.72	8,206.21	31.00	37.10	47.902	1,011.81	1,218.14	768.70	706.84	61.86	12.426	
8,200.00	8,114.88	8,387.79	8,225.75	31.03	37.20	48.320	1,011.78	1,213.55	776.62	714.65	61.97	12.531	
8,225.00	8,134.48	8,407.32	8,244.78	31.06	37.30	48.785	1,011.76	1,209.18	785.64	723.57	62.07	12.657	
8,250.00	8,153.25	8,426.23	8,263.23	31.08	37.39	49.293	1,011.74	1,205.04	795.73	733.58	62.16	12.802	
8,275.00	8,171.13	8,444.46	8,281.04	31.11	37.48	49.838	1,011.71	1,201.13	806.89	744.66	62.23	12.967	
8,300.00	8,188.06	8,461.96	8,298.15	31.13	37.57	50.414	1,011.69	1,197.47	819.08	756.79	62.29	13.149	
8,325.00	8,204.01	8,478.67	8,314.51	31.16	37.65	51.017	1,011.68	1,194.04	832.29	769.95	62.34	13.350	
8,350.00	8,218.93	8,500.00	8,335.41	31.18	37.76	51.595	1,011.65	1,189.77	846.49	784.13	62.37	13.573	
8,375.00	8,232.78	8,509.54	8,344.76	31.21	37.80	52.281	1,011.64	1,187.89	861.60	799.18	62.42	13.803	
8,400.00	8,245.53	8,523.61	8,358.57	31.24	37.87	52.931	1,011.63	1,185.17	877.64	815.20	62.45	14.055	
8,425.00	8,257.13	8,536.72	8,371.44	31.27	37.93	53.588	1,011.61	1,182.69	894.55	832.08	62.46	14.321	
8,450.00	8,267.55	8,548.85	8,383.35	31.31	37.99	54.247	1,011.60	1,180.42	912.27	849.79	62.48	14.602	
8,475.00	8,276.78	8,559.96	8,394.27	31.35	38.04	54.905	1,011.59	1,178.39	930.76	868.28	62.48	14.896	
8,500.00	8,284.77	8,570.03	8,404.18	31.40	38.08	55.557	1,011.58	1,176.56	949.97	887.49	62.49	15.203	
8,525.00	8,291.51	8,579.05	8,413.05	31.45	38.13	56.201	1,011.57	1,174.95	969.84	907.36	62.48	15.522	
8,550.00	8,296.99	8,587.00	8,420.88	31.51	38.16	56.834	1,011.56	1,173.55	990.31	927.84	62.47	15.851	
8,575.00	8,301.18	8,600.00	8,433.68	31.57	38.22	57.422	1,011.55	1,171.30	1,011.35	948.90	62.45	16.195	
8,600.00	8,304.07	8,600.00	8,433.68	31.64	38.22	58.059	1,011.55	1,171.30	1,032.81	970.36	62.45	16.539	
8,625.00	8,305.66	8,600.00	8,433.68	31.72	38.22	58.670	1,011.55	1,171.30	1,054.72	992.28	62.44	16.893	
8,642.92	8,306.00	8,600.00	8,433.68	31.77	38.22	59.094	1,011.55	1,171.30	1,070.65	1,008.22	62.42	17.151	
8,700.00	8,306.00	8,614.81	8,448.28	31.99	38.29	60.337	1,011.54	1,168.78	1,121.47	1,059.11	62.36	17.983	
8,800.00	8,306.00	8,627.90	8,461.19	32.51	38.35	62.494	1,011.53	1,166.60	1,210.08	1,147.77	62.31	19.420	
8,812.71	8,306.00	8,629.53	8,462.80	32.59	38.35	62.762	1,011.53	1,166.34	1,221.29	1,158.99	62.30	19.602	
8,900.00	8,306.00	8,640.49	8,473.60	33.20	38.40	64.490	1,011.52	1,164.55	1,298.87	1,236.57	62.30	20.850	
9,000.00	8,306.00	8,652.58	8,485.54	34.04	38.46	66.231	1,011.51	1,162.62	1,389.02	1,326.70	62.32	22.290	
9,100.00	8,306.00	8,664.22	8,497.03	35.02	38.51	67.760	1,011.50	1,160.80	1,480.31	1,417.95	62.36	23.739	
9,200.00	8,306.00	8,675.42	8,508.10	36.13	38.56	69.112	1,011.49	1,159.07	1,572.55	1,510.13	62.41	25.196	
9,300.00	8,306.00	8,700.00	8,532.41	37.35	38.66	70.290	1,011.47	1,155.41	1,665.66	1,603.18	62.48	26.660	
9,400.00	8,306.00	8,700.00	8,532.41	38.67	38.66	71.383	1,011.47	1,155.41	1,759.29	1,696.74	62.55	28.126	
9,500.00	8,306.00	8,700.00	8,532.41	40.08	38.66	72.363	1,011.47	1,155.41	1,853.59	1,790.96	62.62	29.599	
9,600.00	8,306.00	8,700.00	8,532.41	41.57	38.66	73.246	1,011.47	1,155.41	1,948.45	1,885.76	62.69	31.080	

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

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COMPASS 5000.15 Build 91E



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Malaga - Malaga C 3 - Wellbore #1 - Surveys

Survey Program: Reference	384-INC-ONLY							Rule Assigned:				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)	Azimuth from North (°)	Offset Wellbore Centre		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
								+N/-S (usft)	+E/-W (usft)					
10,200.00	8,306.00		8,290.90	8,286.50	51.80	220.14	-38.752	1,987.39	-2,528.04	1,969.81	1,705.21	264.61	7.444	
10,300.00	8,306.00		8,290.90	8,286.50	53.67	220.14	-36.401	1,987.39	-2,528.04	1,909.24	1,642.48	266.76	7.157	
10,400.00	8,306.00		8,290.90	8,286.50	55.56	220.14	-33.900	1,987.39	-2,528.04	1,852.10	1,583.01	269.09	6.883	
10,500.00	8,306.00		8,290.90	8,286.50	57.49	220.14	-31.246	1,987.39	-2,528.04	1,798.70	1,527.12	271.57	6.623	
10,600.00	8,306.00		8,290.90	8,286.50	59.44	220.14	-28.435	1,987.39	-2,528.04	1,749.39	1,475.18	274.20	6.380	
10,700.00	8,306.00		8,290.90	8,286.50	61.42	220.14	-25.470	1,987.39	-2,528.04	1,704.52	1,427.58	276.95	6.155	
10,800.00	8,306.00		8,290.90	8,286.50	63.42	220.14	-22.353	1,987.39	-2,528.04	1,664.47	1,384.69	279.77	5.949	
10,900.00	8,306.00		8,290.90	8,286.50	65.44	220.14	-19.092	1,987.39	-2,528.04	1,629.57	1,346.93	282.64	5.765	
11,000.00	8,306.00		8,290.90	8,286.50	67.47	220.14	-15.700	1,987.39	-2,528.04	1,600.17	1,314.66	285.51	5.605	
11,100.00	8,306.00		8,290.90	8,286.50	69.53	220.14	-12.194	1,987.39	-2,528.04	1,576.57	1,288.26	288.32	5.468	
11,200.00	8,306.00		8,290.90	8,286.50	71.60	220.14	-8.595	1,987.39	-2,528.04	1,559.05	1,268.03	291.02	5.357	
11,300.00	8,306.00		8,290.90	8,286.50	73.68	220.14	-4.930	1,987.39	-2,528.04	1,547.80	1,254.24	293.56	5.272	
11,400.00	8,306.00		8,290.90	8,286.50	75.78	220.14	-1.226	1,987.39	-2,528.04	1,542.96	1,247.06	295.90	5.215	
11,424.77	8,306.00		8,290.90	8,286.50	76.30	220.14	-0.306	1,987.39	-2,528.04	1,542.76	1,246.32	296.44	5.204 CC, ES	
11,500.00	8,306.00		8,290.90	8,286.50	77.89	220.14	2.486	1,987.39	-2,528.04	1,544.60	1,246.61	297.99	5.183	
11,600.00	8,306.00		8,290.90	8,286.50	80.01	220.14	6.174	1,987.39	-2,528.04	1,552.68	1,252.88	299.80	5.179 SF	
11,700.00	8,306.00		8,290.90	8,286.50	82.13	220.14	9.809	1,987.39	-2,528.04	1,567.12	1,265.80	301.32	5.201	
11,800.00	8,306.00		8,290.90	8,286.50	84.27	220.14	13.364	1,987.39	-2,528.04	1,587.74	1,285.20	302.54	5.248	
11,900.00	8,306.00		8,290.90	8,286.50	86.42	220.14	16.815	1,987.39	-2,528.04	1,614.30	1,310.83	303.47	5.319	
12,000.00	8,306.00		8,290.90	8,286.50	88.58	220.14	20.142	1,987.39	-2,528.04	1,646.51	1,342.39	304.12	5.414	
12,100.00	8,306.00		8,290.90	8,286.50	90.74	220.14	23.332	1,987.39	-2,528.04	1,684.06	1,379.54	304.52	5.530	
12,200.00	8,306.00		8,290.90	8,286.50	92.91	220.14	26.373	1,987.39	-2,528.04	1,726.59	1,421.90	304.69	5.667	
12,300.00	8,306.00		8,290.90	8,286.50	95.08	220.14	29.261	1,987.39	-2,528.04	1,773.74	1,469.08	304.66	5.822	
12,400.00	8,306.00		8,290.90	8,286.50	97.26	220.14	31.992	1,987.39	-2,528.04	1,825.16	1,520.69	304.46	5.995	
12,500.00	8,306.00		8,290.90	8,286.50	99.45	220.14	34.568	1,987.39	-2,528.04	1,880.49	1,576.36	304.13	6.183	
12,600.00	8,306.00		8,290.90	8,286.50	101.64	220.14	36.993	1,987.39	-2,528.04	1,939.40	1,635.72	303.68	6.386	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (023H,114H,124H,134H) - Ray State Com 023H - Wellbore #1 - Surveys														Offset Site Error:	0.00 usft
Survey Program: 200-MWD+HRGM														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.00	0.00	0.00	0.00	0.00	0.00	71.573	130.90	392.88	414.29						
100.00	100.00	88.19	88.19	0.13	0.14	71.582	130.83	392.88	414.09	413.83	0.26	1,569.987			
200.00	200.00	188.41	188.41	0.49	0.29	71.614	130.59	392.88	414.02	413.24	0.78	533.316			
276.59	276.59	264.59	264.59	0.76	0.54	71.644	130.37	392.91	413.97	412.67	1.30	318.777			
300.00	300.00	287.84	287.84	0.85	0.62	71.651	130.32	392.93	413.98	412.51	1.47	282.513			
400.00	400.00	386.48	386.48	1.20	0.97	71.683	130.16	393.16	414.15	411.97	2.17	190.419			
500.00	500.00	486.27	486.26	1.56	1.32	71.760	129.80	393.86	414.70	411.82	2.89	143.669			
600.00	600.00	597.57	597.55	1.92	1.71	71.561	130.88	392.55	413.91	410.28	3.63	114.165			
700.00	700.00	709.02	708.72	2.28	2.09	70.699	135.35	386.48	410.02	405.66	4.36	93.969			
750.00	750.00	762.02	761.50	2.46	2.27	70.151	138.05	382.44	407.27	402.55	4.73	86.163			
800.00	800.00	813.21	812.44	2.64	2.45	69.597	140.80	378.22	403.90	398.81	5.08	79.431			
900.00	899.93	915.23	913.91	2.99	2.82	68.505	146.36	369.21	394.20	388.39	5.80	67.927			
1,000.00	999.68	1,017.48	1,015.52	3.35	3.20	67.396	152.07	359.26	380.47	373.94	6.53	58.258			
1,100.00	1,099.13	1,118.57	1,115.85	3.71	3.58	66.221	157.95	348.36	362.66	355.40	7.26	49.950			
1,169.89	1,168.38	1,187.63	1,184.36	3.96	3.84	65.416	161.81	340.62	347.96	340.19	7.77	44.796			
1,200.00	1,198.18	1,217.05	1,213.55	4.08	3.96	65.071	163.40	337.29	341.24	333.26	7.99	42.733			
1,300.00	1,297.10	1,316.17	1,311.88	4.45	4.34	63.786	168.75	325.96	318.94	310.23	8.71	36.633			
1,400.00	1,396.03	1,419.18	1,413.80	4.83	4.74	61.986	174.75	312.32	295.44	286.00	9.44	31.285			
1,500.00	1,494.96	1,519.05	1,512.17	5.22	5.15	59.499	181.46	296.43	270.38	260.20	10.18	26.550			
1,600.00	1,593.89	1,614.31	1,605.86	5.61	5.54	56.493	188.27	280.60	245.57	234.64	10.93	22.461			
1,700.00	1,692.81	1,708.86	1,698.75	6.00	5.94	52.629	196.14	264.84	222.23	210.53	11.70	18.993			
1,800.00	1,791.74	1,807.04	1,795.21	6.39	6.35	47.702	204.38	248.47	200.24	187.75	12.49	16.034			
1,900.00	1,890.67	1,905.48	1,891.82	6.79	6.77	41.641	211.17	230.90	178.21	164.92	13.29	13.405			
2,000.00	1,989.60	2,000.26	1,984.84	7.19	7.18	34.289	217.16	213.76	158.08	143.95	14.13	11.189			
2,100.00	2,088.53	2,095.91	2,078.70	7.58	7.59	24.888	223.91	196.59	142.10	127.12	14.98	9.484			
2,200.00	2,187.45	2,190.69	2,171.80	7.98	8.00	13.814	230.10	179.95	130.58	114.75	15.83	8.248			
2,300.00	2,286.38	2,284.42	2,263.95	8.38	8.40	1.664	237.34	164.43	126.14	109.52	16.62	7.590			
2,305.63	2,291.95	2,289.68	2,269.12	8.41	8.43	0.952	237.80	163.54	126.13	109.47	16.66	7.570 CC, ES			
2,400.00	2,385.31	2,378.44	2,356.04	8.78	8.82	-11.297	246.04	147.60	129.68	112.35	17.32	7.485 SF			
2,500.00	2,484.24	2,475.33	2,450.42	9.19	9.26	-24.436	254.56	127.42	140.34	122.36	17.99	7.803			
2,600.00	2,583.16	2,570.42	2,543.24	9.59	9.69	-35.547	261.11	107.85	155.47	136.88	18.58	8.365			
2,700.00	2,682.09	2,667.19	2,637.93	9.99	10.13	-43.845	269.12	89.55	175.07	155.85	19.23	9.106			
2,800.00	2,781.02	2,766.55	2,735.54	10.39	10.56	-50.091	277.07	72.82	195.74	175.81	19.93	9.823			
2,900.00	2,879.95	2,859.59	2,827.07	10.80	10.96	-54.942	284.40	57.85	217.54	196.99	20.55	10.584			
3,000.00	2,978.88	2,952.58	2,918.24	11.20	11.38	-58.837	292.85	41.60	242.33	221.14	21.20	11.432			
3,100.00	3,077.80	3,048.38	3,012.07	11.60	11.80	-61.953	302.01	24.60	268.46	246.56	21.90	12.259			
3,200.00	3,176.73	3,145.04	3,106.81	12.01	12.23	-64.494	311.18	7.75	294.90	272.28	22.62	13.036			
3,300.00	3,275.66	3,240.95	3,200.87	12.41	12.66	-66.637	320.07	-8.81	321.59	298.25	23.34	13.777			
3,400.00	3,374.59	3,337.65	3,295.71	12.82	13.09	-68.453	328.95	-25.42	348.52	324.45	24.08	14.476			
3,500.00	3,473.52	3,433.51	3,389.78	13.22	13.51	-70.039	337.50	-41.78	375.55	350.75	24.80	15.142			
3,600.00	3,572.44	3,520.08	3,474.55	13.63	13.91	-71.477	345.34	-57.42	403.81	378.39	25.42	15.887			
3,700.00	3,671.37	3,616.08	3,568.30	14.03	14.35	-72.736	354.15	-76.19	433.67	407.51	26.16	16.578			
3,800.00	3,770.30	3,718.24	3,668.30	14.44	14.81	-73.902	362.48	-95.30	462.63	435.66	26.97	17.153			
3,900.00	3,869.23	3,805.30	3,753.54	14.84	15.20	-74.975	369.58	-111.49	491.67	464.06	27.61	17.810			
4,000.00	3,968.15	3,897.13	3,843.15	15.25	15.63	-75.817	378.25	-129.62	522.23	493.92	28.30	18.451			
4,100.00	4,067.08	3,993.81	3,937.46	15.66	16.08	-76.525	387.55	-148.73	552.94	523.88	29.06	19.026			
4,200.00	4,166.01	4,092.86	4,034.21	16.06	16.54	-77.169	396.74	-167.85	583.21	553.37	29.85	19.540			
4,300.00	4,264.94	4,195.26	4,134.45	16.47	17.00	-77.756	405.80	-186.75	612.67	582.01	30.66	19.981			
4,400.00	4,363.87	4,295.00	4,232.35	16.87	17.45	-78.351	413.79	-204.06	640.94	609.50	31.44	20.383			
4,500.00	4,462.79	4,382.41	4,318.10	17.28	17.84	-78.956	420.71	-219.50	669.59	637.49	32.10	20.860			
4,600.00	4,561.72	4,471.23	4,404.97	17.69	18.24	-79.471	428.39	-236.36	699.68	666.90	32.77	21.349			
4,700.00	4,660.65	4,567.89	4,499.40	18.09	18.69	-79.880	437.24	-254.98	730.17	696.64	33.53	21.775			

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (023H,114H,124H,134H) - Ray State Com 023H - Wellbore #1 - Surveys

Survey Program:		200-MWD+HRGM						Rule Assigned:				Offset Well Error:		0.00 usft		
Reference	Offset	Semi Major Axis		Azimuth		Offset Wellbore Centre		Distance				Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
4,800.00	4,759.58	4,666.69	4,596.01	18.50	19.14	-80.235	446.34	-273.61	760.31	726.00	34.31	22.158				
4,900.00	4,858.50	4,763.35	4,690.58	18.91	19.58	-80.583	455.05	-291.54	790.16	755.09	35.07	22.531				
5,000.00	4,957.43	4,865.76	4,790.91	19.31	20.05	-80.905	463.87	-310.12	819.57	783.69	35.88	22.841				
5,100.00	5,056.36	4,967.44	4,890.76	19.72	20.50	-81.246	471.87	-327.54	847.91	811.23	36.68	23.116				
5,200.00	5,155.29	5,044.00	4,965.78	20.13	20.84	-81.657	477.97	-341.53	877.39	840.15	37.24	23.559				
5,300.00	5,254.22	5,136.14	5,055.84	20.53	21.27	-81.990	485.48	-359.50	908.12	870.16	37.96	23.926				
5,400.00	5,353.14	5,247.85	5,165.26	20.94	21.78	-82.291	493.58	-380.53	938.11	899.26	38.85	24.144				
5,500.00	5,452.07	5,359.71	5,275.25	21.35	22.27	-82.643	500.23	-399.75	966.36	926.62	39.74	24.319				
5,600.00	5,551.00	5,460.84	5,374.93	21.75	22.70	-83.042	505.34	-416.06	993.52	953.00	40.52	24.522				
5,700.00	5,649.93	5,558.06	5,470.77	22.16	23.11	-83.444	509.91	-431.70	1,020.66	979.40	41.26	24.736				
5,800.00	5,748.86	5,660.25	5,571.58	22.57	23.54	-83.817	514.69	-447.69	1,047.42	1,005.38	42.05	24.911				
5,900.00	5,847.78	5,766.84	5,676.86	22.98	23.99	-84.164	519.58	-463.64	1,073.56	1,030.69	42.86	25.047				
6,000.00	5,946.71	5,867.90	5,776.81	23.38	24.40	-84.526	523.69	-478.00	1,098.94	1,055.31	43.63	25.188				
6,100.00	6,045.64	5,899.00	5,807.58	23.79	24.53	-84.979	524.84	-482.36	1,126.10	1,082.28	43.82	25.699				
6,200.00	6,144.57	5,949.74	5,857.19	24.20	24.78	-85.250	529.70	-491.60	1,157.27	1,113.15	44.13	26.226				
6,300.00	6,243.49	5,992.00	5,897.08	24.60	24.98	-85.330	538.33	-502.46	1,194.60	1,150.31	44.29	26.971				
6,400.00	6,342.42	5,992.00	5,897.08	25.01	24.98	-85.789	538.33	-502.46	1,236.57	1,192.72	43.84	28.205				
6,500.00	6,441.35	6,051.21	5,949.92	25.42	25.35	-85.353	557.92	-520.37	1,281.86	1,237.70	44.16	29.025				
6,600.00	6,540.28	6,086.00	5,978.90	25.83	25.57	-85.094	573.63	-531.47	1,331.12	1,287.02	44.09	30.189				
6,700.00	6,639.21	6,086.00	5,978.90	26.23	25.57	-85.531	573.63	-531.47	1,384.86	1,341.41	43.45	31.874				
6,800.00	6,738.13	6,141.59	6,021.32	26.64	25.95	-84.627	604.22	-550.14	1,440.41	1,396.74	43.67	32.983				
6,894.50	6,831.62	6,180.00	6,047.51	27.03	26.21	-83.988	628.81	-563.71	1,497.10	1,453.47	43.63	34.311				
6,900.00	6,837.06	6,180.00	6,047.51	27.05	26.21	-84.012	628.81	-563.71	1,500.44	1,456.84	43.60	34.417				
7,000.00	6,936.25	6,211.00	6,067.15	27.44	26.43	-83.487	650.28	-574.38	1,561.93	1,518.54	43.39	35.999				
7,100.00	7,035.82	6,563.32	6,247.92	27.82	28.52	-71.971	945.87	-616.57	1,615.21	1,567.94	47.27	34.168				
7,200.00	7,135.65	6,593.33	6,261.75	28.17	28.68	-71.133	972.50	-616.14	1,668.03	1,621.02	47.01	35.485				
7,300.00	7,235.62	6,624.19	6,275.75	28.51	28.85	-70.165	1,000.00	-615.85	1,722.50	1,675.79	46.71	36.877				
7,314.38	7,250.00	6,628.45	6,277.66	28.55	28.88	-70.023	1,003.81	-615.82	1,730.47	1,683.80	46.66	37.086				
7,400.00	7,335.62	6,658.58	6,291.09	28.83	29.05	-69.019	1,030.78	-615.70	1,779.13	1,732.69	46.44	38.312				
7,500.00	7,435.62	6,764.40	6,341.21	29.15	29.70	-65.665	1,123.96	-616.04	1,837.68	1,790.57	47.11	39.008				
7,600.00	7,535.62	6,746.00	6,332.09	29.47	29.59	-66.227	1,107.98	-615.90	1,898.82	1,852.62	46.20	41.098				
7,700.00	7,635.62	6,746.00	6,332.09	29.79	29.59	-66.227	1,107.98	-615.90	1,963.12	1,917.58	45.54	43.110				

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (023H,114H,124H,134H) - Ray State Com 114H - Wellbore #1 - Surveys														Offset Site Error:	0.00 usft
Survey Program: 200-MWD+HRGM														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning		
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
0.00	0.00	0.00	0.00	0.00	0.00	74.733	113.98	417.60	433.07						
100.00	100.00	87.22	87.22	0.13	0.13	74.725	114.04	417.56	432.85	432.59	0.26	1,650.871			
200.00	200.00	187.48	187.48	0.49	0.29	74.695	114.23	417.42	432.77	431.99	0.77	558.608			
300.00	300.00	287.56	287.56	0.85	0.62	74.660	114.45	417.23	432.65	431.18	1.47	295.224			
400.00	400.00	387.59	387.59	1.20	0.98	74.644	114.54	417.07	432.51	430.33	2.18	198.252			
490.65	490.65	477.65	477.65	1.53	1.30	74.630	114.61	416.93	432.39	429.56	2.83	152.876			
500.00	500.00	486.11	486.11	1.56	1.33	74.625	114.64	416.93	432.40	429.51	2.89	149.528			
600.00	600.00	575.96	575.93	1.92	1.65	74.368	116.83	417.55	433.72	430.16	3.57	121.583			
700.00	700.00	663.38	663.04	2.28	1.97	73.554	123.77	419.30	437.85	433.61	4.23	103.427			
750.00	750.00	712.12	711.44	2.46	2.14	72.904	129.33	420.48	440.66	436.08	4.59	96.055			
800.00	800.00	760.88	759.81	2.64	2.32	72.202	135.47	421.59	443.23	438.29	4.94	89.712			
900.00	899.93	859.83	857.89	2.99	2.68	70.857	148.28	423.93	446.28	440.62	5.66	78.913			
1,000.00	999.68	961.91	959.11	3.35	3.07	69.603	161.34	426.11	445.92	439.53	6.39	69.771			
1,100.00	1,099.13	1,065.01	1,061.33	3.71	3.47	68.375	174.69	427.47	441.67	434.53	7.14	61.877			
1,169.89	1,168.38	1,137.20	1,132.91	3.96	3.74	67.526	184.07	427.84	436.28	428.62	7.66	56.921			
1,200.00	1,198.18	1,168.30	1,163.75	4.08	3.86	67.166	188.05	427.87	433.49	425.60	7.89	54.927			
1,300.00	1,297.10	1,268.15	1,262.83	4.45	4.25	66.019	200.48	427.76	424.02	415.39	8.63	49.136			
1,400.00	1,396.03	1,367.99	1,361.96	4.83	4.63	64.905	212.34	427.89	414.69	405.32	9.37	44.269			
1,500.00	1,494.96	1,468.99	1,462.33	5.22	5.02	63.813	223.64	428.01	405.21	395.10	10.11	40.079			
1,600.00	1,593.89	1,570.88	1,563.65	5.61	5.41	62.730	234.32	427.87	395.33	384.47	10.86	36.418			
1,700.00	1,692.81	1,667.88	1,660.18	6.00	5.77	61.749	243.95	428.00	385.55	373.97	11.58	33.293			
1,800.00	1,791.74	1,769.44	1,761.26	6.39	6.16	60.714	253.72	428.34	375.93	363.61	12.32	30.509			
1,900.00	1,890.67	1,876.07	1,867.50	6.79	6.55	59.656	262.71	427.74	365.07	351.99	13.08	27.918			
2,000.00	1,989.60	1,979.66	1,970.83	7.19	6.94	58.677	269.89	425.84	352.45	338.64	13.82	25.511			
2,100.00	2,088.53	2,077.55	2,068.41	7.58	7.30	57.561	277.18	423.41	339.68	325.14	14.54	23.360			
2,200.00	2,187.45	2,173.10	2,163.69	7.98	7.65	56.467	284.21	421.70	327.58	312.32	15.26	21.465			
2,300.00	2,286.38	2,264.32	2,254.67	8.38	7.99	55.547	290.90	422.01	317.35	301.39	15.97	19.875			
2,400.00	2,385.31	2,354.28	2,344.19	8.78	8.32	54.531	299.35	424.48	310.34	293.68	16.66	18.627			
2,500.00	2,484.24	2,453.60	2,442.88	9.19	8.70	53.476	309.42	429.26	305.56	288.17	17.39	17.572			
2,600.00	2,583.16	2,559.16	2,548.06	9.59	9.09	52.734	317.02	433.80	298.66	280.52	18.14	16.464			
2,700.00	2,682.09	2,658.33	2,646.85	9.99	9.45	51.781	324.93	437.25	291.68	272.81	18.87	15.459			
2,800.00	2,781.02	2,758.30	2,746.42	10.39	9.83	50.600	333.48	440.06	284.63	265.03	19.60	14.521			
2,900.00	2,879.95	2,855.03	2,842.67	10.80	10.19	49.154	342.81	442.26	278.03	257.70	20.33	13.679			
3,000.00	2,978.88	2,951.26	2,938.25	11.20	10.56	47.438	353.70	444.77	272.98	251.93	21.05	12.968			
3,100.00	3,077.80	3,051.32	3,037.56	11.60	10.95	45.552	365.62	447.66	268.83	247.04	21.79	12.335			
3,200.00	3,176.73	3,151.55	3,137.09	12.01	11.34	43.645	377.08	450.35	264.48	241.94	22.54	11.734			
3,300.00	3,275.66	3,253.00	3,237.86	12.41	11.73	41.588	388.62	452.56	260.06	236.77	23.29	11.165			
3,400.00	3,374.59	3,354.13	3,338.38	12.82	12.12	39.432	399.62	454.14	255.20	231.15	24.05	10.613			
3,500.00	3,473.52	3,454.25	3,437.93	13.22	12.50	37.208	410.17	455.44	250.27	225.47	24.80	10.093			
3,600.00	3,572.44	3,555.44	3,538.61	13.63	12.88	34.904	420.29	456.46	245.12	219.57	25.55	9.592			
3,700.00	3,671.37	3,653.62	3,636.23	14.03	13.26	32.253	430.73	456.43	240.36	214.05	26.31	9.136			
3,800.00	3,770.30	3,752.70	3,734.65	14.44	13.64	29.234	442.08	455.67	236.50	209.42	27.08	8.735			
3,900.00	3,869.23	3,853.53	3,834.86	14.84	14.03	26.095	453.26	454.71	232.90	205.04	27.85	8.361			
4,000.00	3,968.15	3,951.99	3,932.77	15.25	14.40	22.919	463.61	453.60	229.41	200.78	28.63	8.013			
4,100.00	4,067.08	4,047.00	4,027.08	15.66	14.77	19.627	475.10	452.80	228.22	198.82	29.39	7.764			
4,105.38	4,072.40	4,052.23	4,032.26	15.68	14.79	19.446	475.77	452.77	228.22	198.78	29.43	7.753			
4,200.00	4,166.01	4,146.14	4,125.37	16.06	15.16	16.271	487.98	452.30	228.77	198.58	30.19	7.579			
4,300.00	4,264.94	4,244.49	4,223.96	16.47	15.55	12.848	500.41	451.33	229.16	198.16	31.01	7.391			
4,400.00	4,363.87	4,353.86	4,331.74	16.87	15.95	9.311	511.37	449.51	228.53	196.68	31.84	7.177			
4,500.00	4,462.79	4,459.26	4,436.81	17.28	16.34	5.608	519.12	446.67	225.59	192.92	32.67	6.905			
4,600.00	4,561.72	4,561.83	4,539.19	17.69	16.71	1.783	524.42	443.54	221.42	187.93	33.49	6.612			
4,700.00	4,660.65	4,660.74	4,637.97	18.09	17.05	-2.125	528.65	440.60	217.37	183.06	34.31	6.336			

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (023H,114H,124H,134H) - Ray State Com 114H - Wellbore #1 - Surveys													Offset Site Error:	0.00 usft
Survey Program: Reference		200-MWD+HRGM Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned: Distance				Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,800.00	4,759.58	4,762.47	4,739.58	18.50	17.41	-6.142	532.47	437.78	213.84	178.70	35.13	6.086		
4,900.00	4,858.50	4,867.95	4,845.04	18.91	17.76	-10.067	534.01	436.12	208.92	172.99	35.93	5.815		
5,000.00	4,957.43	4,968.98	4,946.06	19.31	18.09	-14.067	533.41	435.33	202.87	166.15	36.72	5.525		
5,100.00	5,056.36	5,066.30	5,043.37	19.72	18.40	-18.341	532.57	434.44	197.65	160.12	37.53	5.266		
5,200.00	5,155.29	5,162.93	5,139.99	20.13	18.72	-22.387	533.56	434.37	194.97	156.62	38.35	5.084		
5,300.00	5,254.22	5,265.32	5,242.37	20.53	19.06	-26.215	534.31	435.59	192.48	153.35	39.14	4.918		
5,400.00	5,353.14	5,364.87	5,341.92	20.94	19.38	-30.296	533.89	436.84	189.87	149.95	39.92	4.756		
5,500.00	5,452.07	5,462.79	5,439.83	21.35	19.70	-34.519	533.72	437.71	188.64	147.95	40.69	4.636		
5,533.06	5,484.78	5,495.30	5,472.34	21.48	19.81	-35.942	533.71	437.89	188.57	147.62	40.95	4.605 CC		
5,600.00	5,551.00	5,561.19	5,538.23	21.75	20.03	-38.860	533.70	438.10	188.88	147.42	41.46	4.556 ES		
5,700.00	5,649.93	5,659.89	5,636.93	22.16	20.36	-43.237	533.70	438.14	190.44	148.24	42.20	4.512		
5,800.00	5,748.86	5,758.81	5,735.86	22.57	20.69	-47.526	533.70	438.14	193.13	150.20	42.93	4.498 SF		
5,900.00	5,847.78	5,857.61	5,834.65	22.98	21.02	-51.683	533.69	438.11	196.89	153.25	43.64	4.512		
6,000.00	5,946.71	5,956.65	5,933.69	23.38	21.34	-55.706	533.59	437.96	201.69	157.37	44.32	4.551		
6,100.00	6,045.64	6,055.40	6,032.44	23.79	21.66	-59.594	533.24	437.72	207.38	162.40	44.98	4.611		
6,200.00	6,144.57	6,153.40	6,130.44	24.20	21.98	-63.350	532.70	437.11	214.22	168.60	45.62	4.696		
6,300.00	6,243.49	6,251.18	6,228.21	24.60	22.30	-66.931	532.08	435.98	222.37	176.12	46.25	4.808		
6,400.00	6,342.42	6,349.70	6,326.72	25.01	22.62	-70.305	531.33	434.50	231.62	184.74	46.88	4.941		
6,500.00	6,441.35	6,448.10	6,425.10	25.42	22.95	-73.375	530.75	433.00	241.68	194.17	47.51	5.087		
6,600.00	6,540.28	6,545.68	6,522.67	25.83	23.28	-76.070	530.74	431.41	252.61	204.47	48.14	5.248		
6,700.00	6,639.21	6,643.00	6,619.97	26.23	23.61	-78.608	530.49	429.40	264.42	215.67	48.76	5.423		
6,800.00	6,738.13	6,740.36	6,717.29	26.64	23.93	-80.997	529.96	426.89	277.17	227.80	49.37	5.614		
6,894.50	6,831.62	6,833.19	6,810.07	27.03	24.25	-82.900	530.33	423.99	290.24	240.25	49.99	5.806		
6,900.00	6,837.06	6,838.77	6,815.64	27.05	24.27	-82.969	530.54	423.85	290.99	240.96	50.03	5.816		
7,000.00	6,936.25	6,944.26	6,920.73	27.44	24.66	-83.004	539.05	422.38	302.83	251.99	50.84	5.957		
7,100.00	7,035.82	7,063.53	7,035.06	27.82	25.15	-78.099	570.52	431.14	306.19	254.28	51.91	5.898		
7,200.00	7,135.65	7,147.29	7,109.82	28.17	25.53	-71.892	606.71	441.63	309.16	256.42	52.74	5.861		
7,300.00	7,235.62	7,220.33	7,173.61	28.51	25.88	-65.827	641.65	448.19	320.42	267.36	53.06	6.039		
7,314.38	7,250.00	7,232.52	7,184.13	28.55	25.94	-64.763	647.74	449.13	322.71	269.59	53.12	6.075		
7,400.00	7,335.62	7,301.35	7,242.01	28.83	26.28	-58.515	684.40	455.60	339.79	286.55	53.24	6.382		
7,500.00	7,435.62	7,350.77	7,280.89	29.15	26.54	-53.780	714.41	460.75	370.71	318.84	51.86	7.148		
7,600.00	7,535.62	7,399.00	7,314.87	29.47	26.80	-49.010	748.30	465.18	415.86	365.80	50.06	8.307		
7,700.00	7,635.62	7,428.05	7,333.58	29.79	26.97	-46.223	770.41	467.42	472.28	424.89	47.38	9.967		
7,800.00	7,735.62	7,462.38	7,354.47	30.11	27.16	-43.141	797.56	469.49	537.30	491.98	45.32	11.855		
7,892.92	7,828.54	7,493.00	7,371.93	30.41	27.34	-40.601	822.68	470.81	603.50	559.77	43.73	13.800		
7,900.00	7,835.62	7,493.00	7,371.93	30.43	27.34	-40.595	822.68	470.81	608.71	565.19	43.51	13.989		
7,925.00	7,860.59	7,493.00	7,371.93	30.50	27.34	-40.477	822.68	470.81	627.04	584.29	42.75	14.667		
7,950.00	7,885.48	7,493.00	7,371.93	30.57	27.34	-40.209	822.68	470.81	645.28	603.28	42.00	15.363		
7,975.00	7,910.21	7,518.17	7,385.62	30.63	27.49	-37.869	843.79	471.58	662.64	620.22	42.41	15.624		
8,000.00	7,934.72	7,526.11	7,389.85	30.69	27.54	-36.728	850.51	471.78	680.05	638.00	42.04	16.175		
8,025.00	7,958.94	7,533.73	7,393.87	30.75	27.58	-35.477	856.98	471.95	697.16	655.48	41.67	16.729		
8,050.00	7,982.80	7,541.02	7,397.67	30.80	27.63	-34.112	863.19	472.09	713.95	672.65	41.31	17.284		
8,075.00	8,006.24	7,547.98	7,401.28	30.85	27.67	-32.630	869.15	472.22	730.43	689.48	40.95	17.839		
8,100.00	8,029.19	7,554.61	7,404.67	30.89	27.71	-31.030	874.83	472.32	746.57	705.98	40.60	18.390		
8,125.00	8,051.59	7,560.89	7,407.87	30.93	27.75	-29.309	880.24	472.40	762.37	722.12	40.26	18.937		
8,150.00	8,073.38	7,566.84	7,410.87	30.96	27.78	-27.465	885.38	472.46	777.83	737.89	39.94	19.477		
8,175.00	8,094.49	7,588.00	7,421.35	31.00	27.91	-24.728	903.76	472.60	793.17	752.89	40.28	19.693		
8,200.00	8,114.88	7,588.00	7,421.35	31.03	27.91	-22.930	903.76	472.60	807.75	767.97	39.78	20.308		
8,225.00	8,134.48	7,588.00	7,421.35	31.06	27.91	-20.963	903.76	472.60	822.01	782.69	39.32	20.907		
8,250.00	8,153.25	7,588.00	7,421.35	31.08	27.91	-18.825	903.76	472.60	835.93	797.03	38.90	21.487		
8,275.00	8,171.13	7,588.00	7,421.35	31.11	27.91	-16.522	903.76	472.60	849.50	810.96	38.54	22.042		
8,300.00	8,188.06	7,588.00	7,421.35	31.13	27.91	-14.058	903.76	472.60	862.69	824.46	38.23	22.568		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (023H,114H,124H,134H) - Ray State Com 114H - Wellbore #1 - Surveys													Offset Site Error:	0.00 usft
Survey Program: 200-MWD+HRGM													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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
8,325.00	8,204.01	7,588.00	7,421.35	31.16	27.91	-11.444	903.76	472.60	875.48	837.51	37.97	23.060		
8,350.00	8,218.93	7,588.00	7,421.35	31.18	27.91	-8.694	903.76	472.60	887.86	850.10	37.76	23.514		
8,375.00	8,232.78	7,588.00	7,421.35	31.21	27.91	-5.824	903.76	472.60	899.81	862.20	37.61	23.927		
8,400.00	8,245.53	7,588.00	7,421.35	31.24	27.91	-2.856	903.76	472.60	911.32	873.81	37.51	24.295		
8,425.00	8,257.13	7,588.00	7,421.35	31.27	27.91	0.186	903.76	472.60	922.37	884.90	37.47	24.616		
8,450.00	8,267.55	7,588.00	7,421.35	31.31	27.91	3.274	903.76	472.60	932.95	895.46	37.49	24.887		
8,475.00	8,276.78	7,588.00	7,421.35	31.35	27.91	6.380	903.76	472.60	943.04	905.48	37.56	25.109		
8,500.00	8,284.77	7,588.00	7,421.35	31.40	27.91	9.476	903.76	472.60	952.64	914.95	37.68	25.279		
8,525.00	8,291.51	7,588.00	7,421.35	31.45	27.91	12.534	903.76	472.60	961.73	923.86	37.86	25.400		
8,550.00	8,296.99	7,588.00	7,421.35	31.51	27.91	15.528	903.76	472.60	970.30	932.20	38.09	25.471		
8,575.00	8,301.18	7,588.00	7,421.35	31.57	27.91	18.437	903.76	472.60	978.34	939.96	38.38	25.494		
8,600.00	8,304.07	7,588.00	7,421.35	31.64	27.91	21.241	903.76	472.60	985.85	947.14	38.70	25.472		
8,625.00	8,305.66	7,588.00	7,421.35	31.72	27.91	23.927	903.76	472.60	992.81	953.74	39.08	25.407		
8,642.92	8,306.00	7,588.00	7,421.35	31.77	27.91	25.772	903.76	472.60	997.46	958.09	39.37	25.336		
8,700.00	8,306.00	7,588.00	7,421.35	31.99	27.91	31.251	903.76	472.60	1,012.98	972.61	40.37	25.091		
8,800.00	8,306.00	7,588.00	7,421.35	32.51	27.91	39.562	903.76	472.60	1,045.47	1,003.25	42.22	24.761		
8,812.71	8,306.00	7,588.00	7,421.35	32.59	27.91	40.514	903.76	472.60	1,050.05	1,007.59	42.46	24.730		
8,900.00	8,306.00	7,588.00	7,421.35	33.20	27.91	46.383	903.76	472.60	1,084.92	1,040.80	44.12	24.591		
9,000.00	8,306.00	7,588.00	7,421.35	34.04	27.91	51.835	903.76	472.60	1,131.84	1,085.84	46.00	24.605		
9,100.00	8,306.00	7,588.00	7,421.35	35.02	27.91	56.217	903.76	472.60	1,185.35	1,137.58	47.78	24.810		
9,200.00	8,306.00	7,588.00	7,421.35	36.13	27.91	59.776	903.76	472.60	1,244.62	1,195.21	49.41	25.191		
9,300.00	8,306.00	7,588.00	7,421.35	37.35	27.91	62.704	903.76	472.60	1,308.85	1,257.98	50.87	25.731		
9,400.00	8,306.00	7,588.00	7,421.35	38.67	27.91	65.143	903.76	472.60	1,377.35	1,325.19	52.16	26.407		
9,500.00	8,306.00	7,588.00	7,421.35	40.08	27.91	67.199	903.76	472.60	1,449.52	1,396.22	53.29	27.199		
9,600.00	8,306.00	7,588.00	7,421.35	41.57	27.91	68.952	903.76	472.60	1,524.83	1,470.55	54.28	28.091		
9,700.00	8,306.00	7,588.00	7,421.35	43.14	27.91	70.460	903.76	472.60	1,602.84	1,547.70	55.14	29.066		
9,800.00	8,306.00	7,588.00	7,421.35	44.77	27.91	71.771	903.76	472.60	1,683.19	1,627.29	55.90	30.113		
9,900.00	8,306.00	7,588.00	7,421.35	46.46	27.91	72.920	903.76	472.60	1,765.54	1,708.99	56.55	31.220		
10,000.00	8,306.00	7,588.00	7,421.35	48.19	27.91	73.933	903.76	472.60	1,849.63	1,792.51	57.13	32.379		
10,100.00	8,306.00	7,588.00	7,421.35	49.98	27.91	74.834	903.76	472.60	1,935.24	1,877.61	57.63	33.581		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (023H,114H,124H,134H) - Ray State Com 124H - Wellbore #1 - Surveys													Offset Site Error:
													0.00 usft
Survey Program:	Reference	Offset	Semi Major Axis		Azimuth		Offset Wellbore Centre		Rule Assigned:		Distance		Offset Well Error:
Measured	Vertical	Measured	Vertical	Reference	Offset	from North	+N/-S	+E/-W	Between	Between	Minimum	Separation	Warning
Depth	Depth	Depth	Depth	(usft)	(usft)	(°)	(usft)	(usft)	Centres	Ellipses	Separation	Factor	
(usft)	(usft)	(usft)	(usft)						(usft)	(usft)	(usft)		
0.00	0.00	0.00	0.00	0.00	0.00	77.433	89.31	400.60	410.61				
100.00	100.00	93.34	93.34	0.13	0.15	77.429	89.20	400.00	409.86	409.59	0.28	1,484.285	
200.00	200.00	199.37	199.34	0.49	0.31	77.417	88.81	397.87	407.82	407.02	0.80	511.367	
300.00	300.00	302.09	302.02	0.85	0.68	77.436	87.98	394.77	404.69	403.17	1.52	265.647	
400.00	400.00	400.93	400.80	1.20	1.04	77.521	86.66	391.57	401.25	399.02	2.23	179.532	
500.00	500.00	498.91	498.73	1.56	1.39	77.659	85.11	389.00	398.34	395.40	2.94	135.304	
600.00	600.00	598.41	598.19	1.92	1.75	77.829	83.41	386.73	395.76	392.10	3.66	108.154	
700.00	700.00	701.92	701.65	2.28	2.12	78.022	81.50	384.15	392.94	388.55	4.39	89.517	
750.00	750.00	755.52	755.20	2.46	2.32	78.119	80.42	382.23	390.97	386.21	4.76	82.113	
800.00	800.00	809.31	808.92	2.64	2.51	78.229	79.31	379.77	388.13	382.99	5.13	75.616	
900.00	899.93	912.07	911.50	2.99	2.89	78.527	77.47	373.92	378.99	373.13	5.86	64.717	
1,000.00	999.68	1,010.82	1,010.06	3.35	3.25	78.972	76.18	367.93	366.42	359.85	6.57	55.791	
1,100.00	1,099.13	1,110.24	1,109.29	3.71	3.62	79.747	74.48	361.93	350.68	343.40	7.28	48.152	
1,169.89	1,168.38	1,174.82	1,173.75	3.96	3.85	80.409	73.81	358.30	338.24	330.47	7.77	43.545	
1,200.00	1,198.18	1,202.44	1,201.34	4.08	3.95	80.685	73.85	356.93	332.82	324.84	7.98	41.731	
1,300.00	1,297.10	1,291.86	1,290.68	4.45	4.27	81.404	75.67	353.77	316.54	307.89	8.64	36.618	
1,400.00	1,396.03	1,381.00	1,379.74	4.83	4.57	81.923	79.33	353.22	303.43	294.13	9.30	32.618	
1,500.00	1,494.96	1,477.81	1,476.43	5.22	4.89	82.347	83.95	354.52	292.37	282.39	9.99	29.274	
1,600.00	1,593.89	1,579.40	1,577.90	5.61	5.22	82.751	88.84	355.71	281.17	270.47	10.70	26.283	
1,700.00	1,692.81	1,677.75	1,676.13	6.00	5.56	83.235	93.46	356.59	269.70	258.29	11.40	23.656	
1,800.00	1,791.74	1,773.27	1,771.53	6.39	5.88	83.809	97.99	358.61	259.45	247.35	12.09	21.451	
1,900.00	1,890.67	1,875.98	1,874.10	6.79	6.23	84.385	102.73	360.77	249.20	236.38	12.82	19.437	
2,000.00	1,989.60	1,976.71	1,974.74	7.19	6.58	85.105	106.95	361.46	237.54	224.00	13.54	17.539	
2,100.00	2,088.53	2,071.67	2,069.58	7.58	6.90	85.888	111.30	363.28	227.18	212.93	14.25	15.944	
2,200.00	2,187.45	2,169.37	2,167.17	7.98	7.24	86.980	114.83	366.47	218.15	203.19	14.96	14.580	
2,300.00	2,286.38	2,264.98	2,262.67	8.38	7.56	88.654	116.61	370.46	210.07	194.40	15.67	13.407	
2,400.00	2,385.31	2,357.54	2,354.90	8.78	7.88	89.982	120.08	377.36	205.41	189.06	16.35	12.564	
2,500.00	2,484.24	2,455.35	2,452.09	9.19	8.22	90.867	125.28	387.01	203.26	186.20	17.06	11.913	
2,600.00	2,583.16	2,556.01	2,552.16	9.59	8.57	91.792	130.42	396.65	200.88	183.08	17.80	11.284	
2,700.00	2,682.09	2,658.05	2,653.47	9.99	8.94	92.147	137.60	406.41	198.49	179.93	18.55	10.698	
2,800.00	2,781.02	2,762.38	2,757.03	10.39	9.31	91.726	147.51	414.19	193.90	174.58	19.32	10.038	
2,900.00	2,879.95	2,862.51	2,856.42	10.80	9.68	91.118	158.01	420.31	187.96	167.90	20.05	9.373	
3,000.00	2,978.88	2,965.36	2,958.54	11.20	10.05	90.401	168.73	426.25	181.70	160.90	20.80	8.735	
3,100.00	3,077.80	3,071.97	3,064.71	11.60	10.44	90.207	177.71	429.19	172.45	150.90	21.55	8.002	
3,200.00	3,176.73	3,173.48	3,166.04	12.01	10.80	90.964	183.97	429.07	160.36	138.07	22.29	7.194	
3,300.00	3,275.66	3,271.44	3,263.82	12.41	11.15	92.027	189.76	428.80	148.16	125.12	23.04	6.430	
3,400.00	3,374.59	3,370.53	3,362.74	12.82	11.51	93.280	195.52	428.95	136.46	112.66	23.80	5.734	
3,500.00	3,473.52	3,469.78	3,461.84	13.22	11.86	94.903	200.98	429.20	124.94	100.39	24.56	5.088	
3,600.00	3,572.44	3,568.85	3,560.79	13.63	12.22	97.171	205.83	429.23	113.40	88.07	25.33	4.477	
3,700.00	3,671.37	3,666.71	3,658.55	14.03	12.57	100.089	210.25	430.25	103.15	77.03	26.12	3.949	
3,800.00	3,770.30	3,765.82	3,757.56	14.44	12.92	103.783	214.26	432.00	94.01	67.09	26.92	3.492	
3,900.00	3,869.23	3,865.19	3,856.84	14.84	13.28	108.431	218.02	433.63	85.31	57.57	27.74	3.075	
4,000.00	3,968.15	3,964.47	3,956.03	15.25	13.64	113.847	221.98	435.58	77.51	48.93	28.58	2.712	
4,100.00	4,067.08	4,064.53	4,055.99	15.66	14.00	120.274	226.25	437.32	70.22	40.80	29.42	2.386	
4,200.00	4,166.01	4,164.49	4,155.81	16.06	14.36	127.988	231.37	438.12	62.76	32.48	30.28	2.073	
4,300.00	4,264.94	4,263.80	4,254.98	16.47	14.71	137.889	236.56	438.41	56.32	25.19	31.13	1.809	
4,400.00	4,363.87	4,362.76	4,353.84	16.87	15.07	150.556	241.12	438.37	52.32	20.40	31.92	1.639	
4,500.00	4,462.79	4,462.43	4,453.40	17.28	15.43	164.397	245.74	438.41	51.19	18.60	32.58	1.571	
4,515.91	4,478.54	4,478.34	4,469.28	17.34	15.48	166.574	246.60	438.43	51.17	18.49	32.68	1.566	
4,600.00	4,561.72	4,562.12	4,552.92	17.69	15.79	177.770	251.52	438.67	51.92	18.78	33.15	1.566	
4,700.00	4,660.65	4,661.37	4,651.97	18.09	16.15	-169.875	257.67	439.01	54.93	21.27	33.65	1.632	
4,800.00	4,759.58	4,760.55	4,750.98	18.50	16.50	-159.470	263.53	439.51	60.36	26.19	34.18	1.766	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (023H,114H,124H,134H) - Ray State Com 124H - Wellbore #1 - Surveys													Offset Site Error:
													0.00 usft
Survey Program:	Reference	Offset	Semi Major Axis		Azimuth		Offset Wellbore Centre		Rule Assigned:		Minimum	Separation	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Reference	Offset	from North (°)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	
4,900.00	4,858.50	4,859.73	4,850.01	18.91	16.86	-151.599	268.96	440.55	67.55	32.80	34.75	1.944	
5,000.00	4,957.43	4,958.37	4,948.52	19.31	17.22	-145.321	273.85	441.20	76.41	41.05	35.36	2.161	
5,100.00	5,056.36	5,058.58	5,048.61	19.72	17.58	-140.727	278.66	442.41	85.75	49.72	36.03	2.380	
5,200.00	5,155.29	5,157.71	5,147.61	20.13	17.94	-137.518	283.19	444.42	95.16	58.45	36.72	2.592	
5,300.00	5,254.22	5,256.46	5,246.26	20.53	18.29	-134.877	287.35	446.02	105.35	67.95	37.40	2.816	
5,400.00	5,353.14	5,355.35	5,345.06	20.94	18.65	-132.606	291.36	447.15	116.18	78.08	38.10	3.049	
5,500.00	5,452.07	5,454.04	5,443.69	21.35	19.00	-130.885	294.80	448.17	127.61	88.80	38.81	3.288	
5,600.00	5,551.00	5,552.58	5,542.19	21.75	19.36	-129.602	297.67	449.08	139.59	100.07	39.51	3.533	
5,700.00	5,649.93	5,651.15	5,640.72	22.16	19.71	-128.483	300.27	449.49	152.18	111.96	40.22	3.784	
5,800.00	5,748.86	5,749.94	5,739.47	22.57	20.06	-127.514	302.81	449.71	165.02	124.09	40.94	4.031	
5,900.00	5,847.78	5,848.77	5,838.28	22.98	20.41	-126.725	305.07	449.77	178.20	136.55	41.65	4.278	
6,000.00	5,946.71	5,947.70	5,937.19	23.38	20.77	-126.144	307.06	450.01	191.43	149.05	42.37	4.518	
6,100.00	6,045.64	6,046.17	6,035.65	23.79	21.12	-125.751	308.58	450.30	204.89	161.81	43.08	4.756	
6,200.00	6,144.57	6,144.22	6,133.69	24.20	21.47	-125.424	309.83	450.33	218.73	174.94	43.79	4.995	
6,300.00	6,243.49	6,242.42	6,231.88	24.60	21.81	-125.183	310.68	450.11	233.03	188.53	44.50	5.237	
6,400.00	6,342.42	6,341.27	6,330.73	25.01	22.16	-124.939	311.52	449.66	247.51	202.30	45.22	5.474	
6,500.00	6,441.35	6,439.51	6,428.96	25.42	22.51	-124.672	312.51	449.00	262.10	216.17	45.93	5.707	
6,600.00	6,540.28	6,538.67	6,528.12	25.83	22.86	-124.429	313.42	448.21	276.84	230.19	46.65	5.934	
6,700.00	6,639.21	6,636.00	6,625.44	26.23	23.20	-124.212	314.24	447.30	291.73	244.39	47.34	6.162	
6,800.00	6,738.13	6,733.72	6,723.14	26.64	23.54	-123.963	315.03	445.82	307.13	259.08	48.04	6.393	
6,894.50	6,831.62	6,824.69	6,814.08	27.03	23.86	-123.643	316.01	443.70	322.18	273.49	48.68	6.618	
6,900.00	6,837.06	6,831.00	6,820.39	27.05	23.88	-123.617	316.09	443.52	323.07	274.33	48.74	6.629	
7,000.00	6,936.25	6,927.16	6,916.50	27.44	24.21	-123.214	317.21	440.44	337.76	288.35	49.41	6.836	
7,100.00	7,035.82	7,024.30	7,013.56	27.82	24.55	-122.762	318.34	436.68	349.56	299.48	50.08	6.980	
7,200.00	7,135.65	7,120.97	7,110.13	28.17	24.88	-122.346	318.94	432.44	358.65	307.92	50.73	7.069	
7,300.00	7,235.62	7,219.01	7,208.07	28.51	25.22	-122.009	318.73	427.91	364.93	313.53	51.40	7.100	
7,314.38	7,250.00	7,233.26	7,222.30	28.55	25.27	-121.965	318.64	427.24	365.58	314.08	51.49	7.099	
7,400.00	7,335.62	7,318.48	7,307.43	28.83	25.56	-121.743	317.88	423.32	369.33	317.26	52.07	7.093	
7,500.00	7,435.62	7,419.78	7,408.63	29.15	25.90	-121.576	316.57	419.13	373.52	320.75	52.78	7.078	
7,600.00	7,535.62	7,520.52	7,509.29	29.47	26.24	-121.477	315.08	415.47	377.39	323.93	53.47	7.058	
7,700.00	7,635.62	7,620.15	7,608.85	29.79	26.58	-121.390	313.60	411.93	381.20	327.06	54.14	7.040	
7,800.00	7,735.62	7,718.02	7,706.63	30.11	26.91	-121.327	311.89	408.33	385.26	330.46	54.79	7.031	
7,892.92	7,828.54	7,809.91	7,798.43	30.41	27.22	-121.243	310.17	404.40	389.55	334.14	55.41	7.030	
7,900.00	7,835.62	7,817.00	7,805.51	30.43	27.25	-121.238	310.04	404.09	389.84	334.38	55.46	7.029	
7,925.00	7,860.59	7,842.04	7,830.52	30.50	27.33	-121.275	309.61	402.99	390.07	334.45	55.62	7.013	
7,950.00	7,885.48	7,867.05	7,855.50	30.57	27.42	-121.392	309.20	401.89	389.13	333.35	55.78	6.976	
7,975.00	7,910.21	7,944.73	7,933.04	30.63	27.69	-121.209	312.36	401.66	385.58	329.17	56.41	6.836	
8,000.00	7,934.72	8,003.39	7,990.90	30.69	27.91	-120.770	320.83	406.01	377.69	321.27	56.42	6.695	
8,025.00	7,958.94	8,051.11	8,037.21	30.75	28.09	-120.335	330.61	411.97	367.04	310.81	56.22	6.528	
8,050.00	7,982.80	8,083.24	8,067.93	30.80	28.21	-120.135	338.56	416.98	354.24	298.09	56.15	6.309	
8,075.00	8,006.24	8,111.42	8,094.61	30.85	28.32	-119.997	346.37	421.62	340.00	283.90	56.10	6.061	
8,100.00	8,029.19	8,137.81	8,119.35	30.89	28.42	-119.898	354.36	426.16	324.41	268.38	56.03	5.790	
8,125.00	8,051.59	8,163.31	8,143.00	30.93	28.52	-119.815	362.77	430.70	307.58	251.67	55.91	5.501	
8,150.00	8,073.38	8,187.87	8,165.38	30.96	28.62	-119.677	371.86	435.07	289.54	233.80	55.74	5.195	
8,175.00	8,094.49	8,210.13	8,185.30	31.00	28.71	-119.563	380.99	438.99	270.40	214.84	55.56	4.867	
8,200.00	8,114.88	8,230.17	8,202.89	31.03	28.79	-119.530	389.93	442.49	250.30	194.93	55.37	4.521	
8,225.00	8,134.48	8,248.60	8,218.76	31.06	28.86	-119.597	398.74	445.67	229.37	174.24	55.14	4.160	
8,250.00	8,153.25	8,270.88	8,237.35	31.08	28.95	-119.171	410.35	449.63	207.54	153.10	54.44	3.812	
8,275.00	8,171.13	8,288.44	8,251.43	31.11	29.02	-119.148	420.32	452.91	184.92	131.14	53.78	3.439	
8,300.00	8,188.06	8,302.17	8,262.06	31.13	29.08	-119.761	428.60	455.57	161.80	108.69	53.11	3.047	
8,325.00	8,204.01	8,312.79	8,270.03	31.16	29.12	-121.354	435.29	457.67	138.49	86.11	52.38	2.644	
8,350.00	8,218.93	8,320.84	8,275.93	31.18	29.15	-124.551	440.52	459.30	115.33	63.84	51.50	2.240	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (023H,114H,124H,134H) - Ray State Com 124H - Wellbore #1 - Surveys

Survey Program:		200-MWD+HRGM								Rule Assigned:			Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Distance		Warning		0.00 usft		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
8,375.00	8,232.78	8,326.77	8,280.19	31.21	29.18	-130.645	444.46	460.52	92.89	42.54	50.35	1.845			
8,400.00	8,245.53	8,330.91	8,283.12	31.24	29.20	-142.567	447.25	461.37	72.23	23.30	48.93	1.476	Level 3		
8,425.00	8,257.13	8,333.52	8,284.95	31.27	29.21	-166.142	449.03	461.91	55.72	7.58	48.14	1.157	Level 3		
8,450.00	8,267.55	8,334.79	8,285.84	31.31	29.21	158.744	449.90	462.18	48.10	-3.06	51.16	0.940	Level 3		
8,452.37	8,268.48	8,334.85	8,285.88	31.32	29.21	155.541	449.94	462.19	48.04	-3.65	51.69	0.929	Level 3, CC, ES, SF		
8,475.00	8,276.78	8,334.89	8,285.91	31.35	29.21	131.592	449.97	462.20	53.43	-3.14	56.57	0.944	Level 3		
8,500.00	8,284.77	8,333.94	8,285.25	31.40	29.21	117.293	449.32	462.00	68.75	9.71	59.04	1.165	Level 3		
8,525.00	8,291.51	8,332.02	8,283.90	31.45	29.20	109.758	448.01	461.60	88.99	29.43	59.56	1.494	Level 3		
8,550.00	8,296.99	8,329.21	8,281.92	31.51	29.19	105.443	446.10	461.02	111.41	51.88	59.53	1.872			
8,575.00	8,301.18	8,325.56	8,279.33	31.57	29.17	102.798	443.65	460.27	134.83	75.44	59.38	2.270			
8,600.00	8,304.07	8,321.11	8,276.12	31.64	29.16	101.102	440.70	459.36	158.69	99.45	59.25	2.678			
8,625.00	8,305.66	8,315.88	8,272.31	31.72	29.13	99.987	437.28	458.30	182.71	123.57	59.14	3.090			
8,642.92	8,306.00	8,311.67	8,269.20	31.77	29.12	99.428	434.57	457.45	199.92	140.84	59.08	3.384			
8,700.00	8,306.00	8,298.54	8,259.28	31.99	29.06	98.234	426.37	454.85	254.98	196.03	58.95	4.325			
8,800.00	8,306.00	8,279.38	8,244.24	32.51	28.99	97.184	415.09	451.20	352.53	293.68	58.85	5.991			
8,812.71	8,306.00	8,277.25	8,242.53	32.59	28.98	97.111	413.88	450.80	365.00	306.16	58.84	6.203			
8,900.00	8,306.00	8,263.35	8,231.16	33.20	28.92	96.672	406.29	448.26	450.75	391.95	58.80	7.666			
9,000.00	8,306.00	8,249.14	8,219.23	34.04	28.86	96.185	399.01	445.76	549.10	490.33	58.77	9.343			
9,100.00	8,306.00	8,229.89	8,202.65	35.02	28.79	96.025	389.80	442.44	647.51	588.81	58.70	11.030			
9,200.00	8,306.00	8,210.25	8,185.40	36.13	28.71	95.873	381.04	439.01	745.89	687.25	58.64	12.720			
9,300.00	8,306.00	8,190.26	8,167.54	37.35	28.63	95.722	372.80	435.50	844.23	785.66	58.58	14.412			
9,400.00	8,306.00	8,169.98	8,149.11	38.67	28.55	95.567	365.13	431.89	942.54	884.02	58.52	16.106			
9,500.00	8,306.00	8,152.00	8,132.55	40.08	28.48	95.358	358.93	428.68	1,040.82	982.34	58.49	17.796			
9,600.00	8,306.00	8,135.94	8,117.61	41.57	28.42	95.130	353.77	425.83	1,139.14	1,080.67	58.46	19.484			
9,700.00	8,306.00	8,122.28	8,104.82	43.14	28.36	94.892	349.58	423.47	1,237.52	1,179.06	58.46	21.170			
9,800.00	8,306.00	8,109.18	8,092.51	44.77	28.31	94.674	345.72	421.25	1,335.97	1,277.52	58.45	22.856			
9,900.00	8,306.00	8,096.62	8,080.64	46.46	28.26	94.473	342.17	419.16	1,434.48	1,376.03	58.45	24.542			
10,000.00	8,306.00	8,084.57	8,069.20	48.19	28.22	94.287	338.92	417.20	1,533.06	1,474.61	58.45	26.228			
10,100.00	8,306.00	8,073.00	8,058.18	49.98	28.17	94.114	335.92	415.35	1,631.69	1,573.23	58.45	27.915			
10,200.00	8,306.00	8,058.00	8,043.83	51.80	28.11	93.984	332.23	413.01	1,730.37	1,671.93	58.44	29.608			
10,300.00	8,306.00	8,058.00	8,043.83	53.67	28.11	93.748	332.23	413.01	1,829.12	1,770.63	58.49	31.274			
10,400.00	8,306.00	8,058.00	8,043.83	55.56	28.11	93.536	332.23	413.01	1,927.99	1,869.46	58.53	32.942			

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (023H,114H,124H,134H) - Ray State Com 134H - Wellbore #1 - Surveys														Offset Site Error:	0.00 usft
Survey Program: 200-MWD+HRGM														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)	Azimuth from North (°)	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	74.213	106.26	375.85	390.87						
100.00	100.00	87.51	87.51	0.13	0.14	74.268	105.83	375.68	390.31	390.05	0.26	1,475.855			
200.00	200.00	190.45	190.43	0.49	0.30	74.473	104.20	375.05	389.29	388.51	0.78	497.888			
300.00	300.00	290.03	289.98	0.85	0.63	74.796	101.72	374.30	387.91	386.43	1.48	262.214			
400.00	400.00	391.77	391.67	1.20	1.00	75.214	98.63	373.67	386.52	384.32	2.21	175.255			
500.00	500.00	492.68	492.51	1.56	1.37	75.699	94.95	372.48	384.46	381.53	2.93	131.269			
600.00	600.00	585.44	585.25	1.92	1.70	75.895	93.45	371.88	383.44	379.83	3.62	106.030			
603.28	603.28	588.47	588.28	1.93	1.71	75.894	93.45	371.88	383.44	379.80	3.64	105.387			
700.00	700.00	679.98	679.76	2.28	2.02	75.629	95.37	372.23	384.29	380.00	4.29	89.529			
750.00	750.00	730.16	729.88	2.46	2.18	75.256	97.97	372.25	384.96	380.33	4.64	83.032			
800.00	800.00	780.47	780.05	2.64	2.35	74.745	101.60	371.96	385.21	380.23	4.98	77.318			
900.00	899.93	881.63	880.78	2.99	2.70	73.550	110.73	370.65	383.13	377.44	5.68	67.442			
1,000.00	999.68	983.66	982.38	3.35	3.05	72.462	119.92	368.75	377.35	370.95	6.39	59.012			
1,100.00	1,099.13	1,085.47	1,083.79	3.71	3.41	71.541	128.60	366.30	367.68	360.57	7.11	51.681			
1,169.89	1,168.38	1,155.97	1,154.04	3.96	3.67	70.999	134.29	364.33	358.64	351.02	7.62	47.069			
1,200.00	1,198.18	1,186.24	1,184.21	4.08	3.78	70.797	136.58	363.46	354.34	346.50	7.84	45.213			
1,300.00	1,297.10	1,286.96	1,284.65	4.45	4.14	70.221	143.33	360.53	339.74	331.19	8.56	39.713			
1,400.00	1,396.03	1,386.57	1,384.07	4.83	4.50	69.796	148.86	357.61	324.78	315.51	9.27	35.033			
1,500.00	1,494.96	1,485.16	1,482.50	5.22	4.85	69.460	153.71	354.89	309.77	299.79	9.98	31.026			
1,600.00	1,593.89	1,582.79	1,579.98	5.61	5.20	69.123	158.42	352.27	294.81	284.12	10.70	27.560			
1,700.00	1,692.81	1,672.45	1,669.45	6.00	5.53	68.657	164.29	351.37	282.02	270.63	11.39	24.768			
1,800.00	1,791.74	1,772.00	1,768.66	6.39	5.89	67.802	172.32	351.51	270.90	258.78	12.11	22.365			
1,900.00	1,890.67	1,877.59	1,873.98	6.79	6.27	66.859	179.86	350.31	258.30	245.44	12.86	20.088			
2,000.00	1,989.60	1,978.61	1,974.78	7.19	6.64	66.018	185.88	347.79	244.06	230.47	13.59	17.962			
2,100.00	2,088.53	2,077.13	2,073.03	7.58	7.00	64.865	192.64	344.86	229.83	215.52	14.31	16.057			
2,200.00	2,187.45	2,176.89	2,172.47	7.98	7.37	63.390	199.90	341.51	215.55	200.51	15.04	14.330			
2,300.00	2,286.38	2,274.31	2,269.74	8.38	7.72	62.505	204.54	339.21	201.15	185.39	15.76	12.760			
2,400.00	2,385.31	2,367.03	2,362.37	8.78	8.06	61.926	208.80	339.25	188.84	172.36	16.47	11.463			
2,500.00	2,484.24	2,460.57	2,455.55	9.19	8.40	60.712	216.39	341.74	180.50	163.32	17.17	10.510			
2,600.00	2,583.16	2,561.14	2,555.47	9.59	8.77	58.421	227.52	344.55	173.93	156.02	17.91	9.711			
2,700.00	2,682.09	2,664.15	2,657.89	9.99	9.15	55.599	238.41	345.16	165.57	146.91	18.66	8.871			
2,800.00	2,781.02	2,766.36	2,759.68	10.39	9.53	52.714	247.64	344.60	155.79	136.38	19.41	8.027			
2,900.00	2,879.95	2,867.06	2,860.08	10.80	9.90	49.712	255.26	343.15	144.81	124.67	20.15	7.188			
3,000.00	2,978.88	2,967.13	2,959.89	11.20	10.27	46.295	262.18	341.18	133.46	112.58	20.89	6.390			
3,100.00	3,077.80	3,067.19	3,059.74	11.60	10.64	42.412	268.28	338.90	121.86	100.23	21.63	5.634			
3,200.00	3,176.73	3,166.16	3,158.53	12.01	11.00	37.851	273.80	336.44	110.40	88.01	22.39	4.931			
3,300.00	3,275.66	3,263.25	3,255.35	12.41	11.35	31.880	280.42	333.85	100.74	77.57	23.17	4.348			
3,400.00	3,374.59	3,361.06	3,352.74	12.82	11.72	24.080	288.95	330.98	94.03	70.06	23.97	3.923			
3,500.00	3,473.52	3,460.51	3,451.75	13.22	12.09	15.085	297.88	327.96	89.55	64.75	24.80	3.611			
3,600.00	3,572.44	3,560.11	3,550.97	13.63	12.46	5.514	306.08	325.02	86.73	61.08	25.65	3.381			
3,700.00	3,671.37	3,659.93	3,650.48	14.03	12.83	-4.439	313.27	322.11	85.41	58.89	26.51	3.221			
3,729.74	3,700.80	3,689.55	3,680.03	14.15	12.94	-7.451	315.21	321.23	85.33	58.56	26.77	3.188			
3,800.00	3,770.30	3,759.37	3,749.68	14.44	13.20	-14.590	319.51	319.13	85.80	58.45	27.36	3.136			
3,900.00	3,869.23	3,858.37	3,848.47	14.84	13.56	-24.425	325.30	316.22	88.39	60.22	28.17	3.138			
4,000.00	3,968.15	3,957.23	3,947.12	15.25	13.92	-33.594	330.99	313.10	93.44	64.49	28.95	3.228			
4,100.00	4,067.08	4,056.49	4,046.18	15.66	14.28	-41.656	336.46	310.13	100.30	70.61	29.69	3.378			
4,200.00	4,166.01	4,155.10	4,144.62	16.06	14.64	-48.607	341.67	307.34	108.61	78.20	30.41	3.572			
4,300.00	4,264.94	4,253.77	4,243.04	16.47	15.01	-53.892	348.14	304.95	118.69	87.57	31.12	3.814			
4,400.00	4,363.87	4,353.01	4,342.03	16.87	15.37	-58.184	354.80	302.81	129.46	97.62	31.84	4.066			
4,500.00	4,462.79	4,453.19	4,442.00	17.28	15.74	-61.907	361.07	300.85	140.47	107.90	32.57	4.313			
4,600.00	4,561.72	4,553.18	4,541.79	17.69	16.11	-64.902	367.33	299.96	151.03	117.73	33.29	4.536			
4,700.00	4,660.65	4,652.29	4,640.70	18.09	16.47	-67.491	373.52	299.32	161.72	127.71	34.01	4.755			

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (023H,114H,124H,134H) - Ray State Com 134H - Wellbore #1 - Surveys													Offset Site Error:	0.00 usft
Survey Program:		200-MWD+HRGM		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:			Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,800.00	4,759.58	4,751.35	4,739.60	18.50	16.83	-69.974	379.13	298.34	172.82	138.10	34.72	4.977		
4,900.00	4,858.50	4,850.78	4,838.90	18.91	17.19	-72.388	384.00	297.18	184.15	148.71	35.43	5.197		
5,000.00	4,957.43	4,950.72	4,938.76	19.31	17.55	-74.769	387.98	296.07	195.46	159.32	36.15	5.408		
5,100.00	5,056.36	5,047.66	5,035.62	19.72	17.90	-77.033	391.48	294.63	207.37	170.55	36.82	5.631		
5,200.00	5,155.29	5,145.84	5,133.64	20.13	18.26	-78.612	396.77	292.80	220.26	182.73	37.53	5.869		
5,300.00	5,254.22	5,246.71	5,234.16	20.53	18.63	-79.270	404.99	291.79	232.96	194.67	38.29	6.084		
5,400.00	5,353.14	5,346.02	5,333.11	20.94	19.00	-79.774	413.50	291.28	245.28	206.25	39.04	6.284		
5,500.00	5,452.07	5,444.46	5,431.25	21.35	19.36	-80.454	421.04	290.42	257.82	218.05	39.77	6.483		
5,600.00	5,551.00	5,543.39	5,529.96	21.75	19.73	-81.299	427.55	289.21	270.57	230.08	40.49	6.682		
5,700.00	5,649.93	5,642.85	5,629.25	22.16	20.09	-82.208	433.37	287.90	283.37	242.15	41.22	6.874		
5,800.00	5,748.86	5,742.38	5,728.64	22.57	20.45	-83.160	438.54	286.72	296.02	254.07	41.95	7.056		
5,900.00	5,847.78	5,841.72	5,827.83	22.98	20.81	-84.042	443.66	285.57	308.72	266.04	42.68	7.234		
6,000.00	5,946.71	5,940.97	5,926.77	23.38	21.18	-84.373	451.45	284.85	321.31	277.89	43.42	7.400		
6,100.00	6,045.64	6,039.28	6,024.58	23.79	21.55	-84.334	461.26	284.20	334.07	289.90	44.17	7.563		
6,200.00	6,144.57	6,137.74	6,122.63	24.20	21.92	-84.450	470.18	283.17	347.10	302.18	44.91	7.728		
6,300.00	6,243.49	6,237.34	6,221.92	24.60	22.29	-84.724	478.06	281.97	360.18	314.52	45.66	7.888		
6,400.00	6,342.42	6,335.78	6,320.12	25.01	22.65	-85.171	484.69	280.75	373.21	326.82	46.39	8.045		
6,500.00	6,441.35	6,432.61	6,416.79	25.42	23.00	-85.784	490.03	279.05	386.67	339.57	47.10	8.210		
6,600.00	6,540.28	6,529.50	6,513.56	25.83	23.35	-86.492	494.45	276.72	400.75	352.95	47.80	8.384		
6,700.00	6,639.21	6,628.50	6,612.46	26.23	23.71	-87.309	497.76	274.01	415.16	366.65	48.51	8.558		
6,800.00	6,738.13	6,728.93	6,712.84	26.64	24.06	-88.231	499.86	271.45	429.41	380.18	49.23	8.723		
6,894.50	6,831.62	6,819.68	6,803.54	27.03	24.38	-89.127	501.22	269.08	443.04	393.18	49.87	8.885		
6,900.00	6,837.06	6,826.00	6,809.86	27.05	24.40	-89.176	501.31	268.89	443.85	393.94	49.91	8.893		
7,000.00	6,936.25	6,922.54	6,906.35	27.44	24.74	-89.986	502.28	265.87	457.32	406.73	50.58	9.041		
7,100.00	7,035.82	7,025.06	7,008.81	27.82	25.09	-90.445	503.79	262.97	467.71	416.40	51.31	9.115		
7,200.00	7,135.65	7,119.40	7,103.08	28.17	25.43	-90.539	506.23	260.01	475.56	423.60	51.96	9.152		
7,300.00	7,235.62	7,214.49	7,198.04	28.51	25.77	-90.365	508.92	255.89	481.72	429.11	52.61	9.156		
7,314.38	7,250.00	7,229.37	7,212.90	28.55	25.82	-90.322	509.29	255.20	482.41	429.70	52.72	9.151		
7,400.00	7,335.62	7,317.37	7,300.80	28.83	26.13	-90.132	510.88	251.43	486.08	432.75	53.33	9.114		
7,500.00	7,435.62	7,418.84	7,402.19	29.15	26.48	-90.036	511.70	247.38	490.06	436.03	54.03	9.070		
7,600.00	7,535.62	7,523.26	7,506.55	29.47	26.85	-89.962	512.32	243.89	493.41	438.66	54.76	9.011		
7,700.00	7,635.62	7,629.55	7,612.80	29.79	27.22	-89.804	513.69	241.50	495.66	440.16	55.50	8.931		
7,800.00	7,735.62	7,736.50	7,719.74	30.11	27.58	-89.802	513.71	240.57	496.53	440.31	56.22	8.831		
7,892.92	7,828.54	7,831.32	7,814.55	30.41	27.89	-89.961	512.33	240.71	496.39	439.54	56.85	8.732		
7,900.00	7,835.62	7,838.39	7,821.62	30.43	27.91	-89.974	512.22	240.73	496.32	439.43	56.89	8.724		
7,925.00	7,860.59	7,863.54	7,846.76	30.50	27.99	-90.008	511.83	240.78	495.25	438.20	57.05	8.681		
7,950.00	7,885.48	7,890.79	7,874.01	30.57	28.08	-90.026	511.46	240.91	492.81	435.60	57.22	8.613		
7,975.00	7,910.21	7,917.83	7,901.05	30.63	28.17	-90.020	511.17	241.16	488.96	431.58	57.38	8.521		
8,000.00	7,934.72	7,944.56	7,927.78	30.69	28.25	-89.990	510.96	241.55	483.72	426.17	57.54	8.406		
8,025.00	7,958.94	7,969.99	7,953.21	30.75	28.34	-89.936	510.82	242.02	477.10	419.41	57.70	8.269		
8,050.00	7,982.80	7,994.41	7,977.62	30.80	28.42	-89.863	510.71	242.51	469.20	411.36	57.84	8.112		
8,075.00	8,006.24	8,018.34	8,001.54	30.85	28.50	-89.770	510.62	243.03	460.05	402.07	57.98	7.935		
8,100.00	8,029.19	8,041.71	8,024.90	30.89	28.57	-89.656	510.54	243.56	449.66	391.55	58.11	7.738		
8,125.00	8,051.59	8,064.69	8,047.88	30.93	28.65	-89.519	510.47	244.13	438.07	379.83	58.24	7.521		
8,150.00	8,073.38	8,087.07	8,070.25	30.96	28.72	-89.358	510.41	244.73	425.30	366.94	58.37	7.287		
8,175.00	8,094.49	8,108.66	8,091.83	31.00	28.79	-89.170	510.34	245.36	411.40	352.92	58.48	7.034		
8,200.00	8,114.88	8,129.39	8,112.55	31.03	28.86	-88.950	510.28	246.00	396.40	337.81	58.59	6.765		
8,225.00	8,134.48	8,149.22	8,132.37	31.06	28.93	-88.694	510.23	246.65	380.36	321.66	58.70	6.480		
8,250.00	8,153.25	8,168.09	8,151.23	31.08	28.99	-88.395	510.18	247.31	363.32	304.52	58.80	6.179		
8,275.00	8,171.13	8,185.94	8,169.06	31.11	29.05	-88.044	510.14	247.96	345.34	286.45	58.89	5.864		
8,300.00	8,188.06	8,202.71	8,185.83	31.13	29.10	-87.631	510.12	248.60	326.48	267.50	58.97	5.536		
8,325.00	8,204.01	8,218.37	8,201.47	31.16	29.15	-87.143	510.10	249.22	306.80	247.75	59.05	5.195		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (023H,114H,124H,134H) - Ray State Com 134H - Wellbore #1 - Surveys

Survey Program:		200-MWD+HRGM							Rule Assigned:				Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Distance				Offset Well Error:		0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
8,350.00	8,218.93	8,232.87	8,215.96	31.18	29.20	-86.562	510.09	249.82	286.36	227.24	59.12	4.843			
8,375.00	8,232.78	8,246.17	8,229.25	31.21	29.25	-85.864	510.09	250.39	265.25	206.06	59.19	4.481			
8,400.00	8,245.53	8,257.71	8,240.77	31.24	29.29	-85.000	510.16	250.89	243.54	184.28	59.26	4.110			
8,425.00	8,257.13	8,267.87	8,250.92	31.27	29.32	-83.888	510.42	251.34	221.34	162.02	59.32	3.731			
8,450.00	8,267.55	8,276.79	8,259.83	31.31	29.35	-82.459	510.80	251.73	198.76	139.37	59.39	3.347			
8,475.00	8,276.78	8,284.47	8,267.48	31.35	29.38	-80.604	511.25	252.06	175.89	116.43	59.46	2.958			
8,500.00	8,284.77	8,290.89	8,273.89	31.40	29.40	-78.150	511.70	252.34	152.89	93.35	59.54	2.568			
8,525.00	8,291.51	8,296.07	8,279.04	31.45	29.42	-74.798	512.12	252.57	129.96	70.32	59.64	2.179			
8,550.00	8,296.99	8,300.00	8,282.95	31.51	29.44	-70.009	512.48	252.74	107.42	47.64	59.78	1.797			
8,575.00	8,301.18	8,302.69	8,285.62	31.57	29.45	-62.746	512.74	252.85	85.82	25.83	59.98	1.431	Level 3		
8,600.00	8,304.07	8,304.15	8,287.08	31.64	29.45	-50.951	512.88	252.92	66.35	6.04	60.31	1.100	Level 3		
8,625.00	8,305.66	8,304.39	8,287.32	31.72	29.45	-31.123	512.91	252.93	51.69	-9.06	60.75	0.851	Level 3		
8,642.92	8,306.00	8,303.83	8,286.76	31.77	29.45	-10.941	512.85	252.90	46.82	-14.06	60.88	0.769	Level 3		
8,647.26	8,306.00	8,303.62	8,286.55	31.79	29.45	-5.611	512.83	252.89	46.60	-14.26	60.86	0.766	Level 3, CC, ES, SF		
8,700.00	8,306.00	8,301.15	8,284.09	31.99	29.44	43.768	512.59	252.79	69.64	9.85	59.79	1.165	Level 3		
8,800.00	8,306.00	8,296.86	8,279.83	32.51	29.43	70.096	512.19	252.60	157.44	98.12	59.32	2.654			
8,812.71	8,306.00	8,296.35	8,279.32	32.59	29.42	71.539	512.15	252.58	169.45	110.14	59.31	2.857			
8,900.00	8,306.00	8,292.85	8,275.84	33.20	29.41	77.757	511.86	252.43	253.70	194.41	59.29	4.279			
9,000.00	8,306.00	8,288.86	8,271.86	34.04	29.40	81.173	511.55	252.25	352.00	292.70	59.30	5.936			
9,100.00	8,306.00	8,284.86	8,267.88	35.02	29.38	83.090	511.27	252.08	451.00	391.70	59.30	7.605			
9,200.00	8,306.00	8,280.87	8,263.90	36.13	29.37	84.312	511.02	251.90	550.33	491.03	59.31	9.279			
9,300.00	8,306.00	8,276.89	8,259.92	37.35	29.35	85.158	510.80	251.73	649.85	590.53	59.31	10.956			
9,400.00	8,306.00	8,272.91	8,255.95	38.67	29.34	85.776	510.62	251.56	749.46	690.15	59.32	12.635			
9,500.00	8,306.00	8,268.93	8,251.98	40.08	29.33	86.248	510.46	251.38	849.15	789.83	59.32	14.314			
9,600.00	8,306.00	8,264.96	8,248.02	41.57	29.31	86.618	510.32	251.21	948.89	889.56	59.33	15.994			
9,700.00	8,306.00	8,261.00	8,244.06	43.14	29.30	86.917	510.22	251.04	1,048.65	989.32	59.33	17.675			
9,800.00	8,306.00	8,257.05	8,240.11	44.77	29.28	87.162	510.15	250.87	1,148.45	1,089.11	59.34	19.355			
9,900.00	8,306.00	8,249.00	8,232.08	46.46	29.26	87.367	510.09	250.51	1,248.27	1,188.93	59.34	21.038			
10,000.00	8,306.00	8,249.00	8,232.08	48.19	29.26	87.539	510.09	250.51	1,348.09	1,288.74	59.35	22.715			
10,100.00	8,306.00	8,249.00	8,232.08	49.98	29.26	87.688	510.09	250.51	1,447.93	1,388.57	59.36	24.392			
10,200.00	8,306.00	8,241.59	8,224.67	51.80	29.23	87.817	510.09	250.19	1,547.78	1,488.41	59.37	26.071			
10,300.00	8,306.00	8,237.90	8,220.99	53.67	29.22	87.931	510.09	250.04	1,647.64	1,588.26	59.38	27.749			
10,400.00	8,306.00	8,234.28	8,217.37	55.56	29.21	88.032	510.09	249.88	1,747.50	1,688.12	59.39	29.425			
10,500.00	8,306.00	8,230.71	8,213.80	57.49	29.19	88.122	510.09	249.73	1,847.38	1,787.98	59.40	31.100			
10,600.00	8,306.00	8,227.21	8,210.30	59.44	29.18	88.202	510.10	249.59	1,947.25	1,887.84	59.41	32.775			

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (113H,123H) - Ray State Com 123H - Wellbore #1 - Surveys													Offset Site Error: 0.00 usft
Survey Program: 92-VESSEI_GYRO_DROP, 2786-MWD+HRGM													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,525.00	8,291.51	8,103.86	8,080.95	31.45	20.09	-67.159	1,243.32	-1,438.91	1,980.75	1,930.62	50.13	39.514	
8,550.00	8,296.99	8,104.88	8,081.87	31.51	20.09	-66.807	1,243.75	-1,438.83	1,959.94	1,909.81	50.13	39.096	
8,575.00	8,301.18	8,105.29	8,082.25	31.57	20.09	-66.452	1,243.92	-1,438.80	1,938.87	1,888.74	50.13	38.674	
8,600.00	8,304.07	8,105.10	8,082.07	31.64	20.09	-66.093	1,243.84	-1,438.81	1,917.61	1,867.47	50.14	38.248	
8,625.00	8,305.66	8,104.31	8,081.36	31.72	20.09	-65.732	1,243.51	-1,438.88	1,896.19	1,846.05	50.14	37.818	
8,642.92	8,306.00	8,103.38	8,080.52	31.77	20.09	-65.472	1,243.12	-1,438.95	1,880.77	1,830.63	50.14	37.508	
8,700.00	8,306.00	8,079.00	8,058.29	31.99	20.01	-64.905	1,233.29	-1,440.91	1,831.64	1,781.63	50.01	36.623	
8,800.00	8,306.00	8,079.00	8,058.29	32.51	20.01	-63.386	1,233.29	-1,440.91	1,744.11	1,693.99	50.12	34.797	
8,812.71	8,306.00	8,079.00	8,058.29	32.59	20.01	-63.193	1,233.29	-1,440.91	1,732.90	1,682.76	50.14	34.561	
8,900.00	8,306.00	8,079.00	8,058.29	33.20	20.01	-61.804	1,233.29	-1,440.91	1,656.39	1,606.11	50.29	32.938	
9,000.00	8,306.00	8,079.00	8,058.29	34.04	20.01	-60.043	1,233.29	-1,440.91	1,570.13	1,519.59	50.54	31.069	
9,100.00	8,306.00	8,079.00	8,058.29	35.02	20.01	-58.076	1,233.29	-1,440.91	1,485.59	1,434.69	50.90	29.188	
9,200.00	8,306.00	8,079.00	8,058.29	36.13	20.01	-55.868	1,233.29	-1,440.91	1,403.08	1,351.68	51.39	27.301	
9,300.00	8,306.00	8,072.01	8,051.86	37.35	19.99	-53.489	1,230.61	-1,441.45	1,322.96	1,270.98	51.98	25.449	
9,400.00	8,306.00	8,065.76	8,046.09	38.67	19.97	-50.780	1,228.26	-1,441.90	1,245.69	1,192.91	52.78	23.603	
9,500.00	8,306.00	8,060.31	8,041.03	40.08	19.96	-47.685	1,226.24	-1,442.26	1,171.82	1,118.01	53.81	21.775	
9,600.00	8,306.00	8,055.50	8,036.57	41.57	19.94	-44.148	1,224.49	-1,442.56	1,102.05	1,046.92	55.13	19.990	
9,700.00	8,306.00	8,051.24	8,032.59	43.14	19.93	-40.105	1,222.96	-1,442.81	1,037.21	980.45	56.76	18.274	
9,800.00	8,306.00	8,047.43	8,029.04	44.77	19.92	-35.498	1,221.61	-1,443.02	978.30	919.59	58.71	16.664	
9,900.00	8,306.00	8,044.00	8,025.83	46.46	19.91	-30.278	1,220.41	-1,443.20	926.43	865.47	60.96	15.197	
10,000.00	8,306.00	8,040.90	8,022.93	48.19	19.90	-24.422	1,219.34	-1,443.35	882.86	819.41	63.45	13.914	
10,100.00	8,306.00	8,038.09	8,020.29	49.98	19.89	-17.956	1,218.37	-1,443.49	848.88	782.82	66.06	12.850	
10,200.00	8,306.00	8,035.52	8,017.88	51.80	19.88	-10.972	1,217.50	-1,443.60	825.66	757.04	68.62	12.032	
10,300.00	8,306.00	8,033.17	8,015.67	53.67	19.87	-3.635	1,216.71	-1,443.70	814.13	743.19	70.94	11.476	
10,344.61	8,306.00	8,032.19	8,014.74	54.51	19.87	-0.306	1,216.38	-1,443.75	812.91	741.05	71.86	11.313 CC, ES	
10,400.00	8,306.00	8,031.01	8,013.64	55.56	19.87	3.828	1,215.99	-1,443.79	814.79	741.94	72.85	11.184	
10,500.00	8,306.00	8,029.02	8,011.76	57.49	19.86	11.167	1,215.32	-1,443.87	827.61	753.38	74.23	11.149 SF	
10,600.00	8,306.00	8,027.18	8,010.02	59.44	19.85	18.157	1,214.72	-1,443.94	852.05	777.00	75.05	11.353	
10,700.00	8,306.00	8,025.47	8,008.41	61.42	19.85	24.631	1,214.16	-1,444.01	887.14	811.78	75.36	11.772	
10,800.00	8,306.00	8,023.88	8,006.91	63.42	19.84	30.499	1,213.64	-1,444.06	931.68	856.44	75.24	12.383	
10,900.00	8,306.00	8,022.40	8,005.50	65.44	19.84	35.735	1,213.15	-1,444.11	984.40	909.58	74.81	13.158	
11,000.00	8,306.00	8,021.01	8,004.19	67.47	19.84	40.363	1,212.71	-1,444.16	1,044.05	969.87	74.18	14.074	
11,100.00	8,306.00	8,019.71	8,002.96	69.53	19.83	44.431	1,212.29	-1,444.20	1,109.52	1,036.09	73.43	15.110	
11,200.00	8,306.00	8,018.49	8,001.81	71.60	19.83	48.001	1,211.90	-1,444.24	1,179.83	1,107.22	72.62	16.247	
11,300.00	8,306.00	8,017.34	8,000.72	73.68	19.82	51.135	1,211.53	-1,444.27	1,254.18	1,182.39	71.79	17.470	
11,400.00	8,306.00	8,016.26	7,999.69	75.78	19.82	53.893	1,211.19	-1,444.30	1,331.89	1,260.91	70.98	18.764	
11,500.00	8,306.00	7,984.00	7,968.91	77.89	19.72	56.638	1,201.58	-1,444.79	1,413.43	1,343.64	69.79	20.254	
11,600.00	8,306.00	7,984.00	7,968.91	80.01	19.72	58.777	1,201.58	-1,444.79	1,496.20	1,427.12	69.09	21.657	
11,700.00	8,306.00	7,984.00	7,968.91	82.13	19.72	60.678	1,201.58	-1,444.79	1,580.97	1,512.54	68.43	23.104	
11,800.00	8,306.00	7,984.00	7,968.91	84.27	19.72	62.376	1,201.58	-1,444.79	1,667.43	1,599.62	67.82	24.587	
11,900.00	8,306.00	7,984.00	7,968.91	86.42	19.72	63.899	1,201.58	-1,444.79	1,755.33	1,688.08	67.25	26.103	
12,000.00	8,306.00	7,984.00	7,968.91	88.58	19.72	65.272	1,201.58	-1,444.79	1,844.46	1,777.74	66.72	27.645	
12,100.00	8,306.00	7,984.00	7,968.91	90.74	19.72	66.513	1,201.58	-1,444.79	1,934.65	1,868.42	66.23	29.209	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (204H,217H,224H) - Ray State Com 203H - Wellbore #1 - Surveys													Offset Site Error:	0.00 usft	
Survey Program: 172-MWD+HRGM				Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
8,400.00	8,245.53	8,233.54	8,200.65	31.24	29.02	-72.943	1,072.88	-1,409.85	1,990.88	1,932.09	58.79	33.865			
8,425.00	8,257.13	8,250.58	8,217.69	31.27	29.07	-72.711	1,072.49	-1,410.18	1,970.57	1,911.70	58.87	33.475			
8,450.00	8,267.55	8,265.97	8,233.06	31.31	29.12	-72.468	1,072.04	-1,410.46	1,949.72	1,890.78	58.94	33.082			
8,475.00	8,276.78	8,279.64	8,246.73	31.35	29.17	-72.214	1,071.58	-1,410.71	1,928.41	1,869.41	59.00	32.685			
8,500.00	8,284.77	8,291.58	8,258.66	31.40	29.21	-71.949	1,071.13	-1,410.91	1,906.69	1,847.64	59.05	32.287			
8,525.00	8,291.51	8,301.76	8,268.82	31.45	29.24	-71.671	1,070.71	-1,411.08	1,884.66	1,825.55	59.10	31.888			
8,550.00	8,296.99	8,310.14	8,277.20	31.51	29.27	-71.382	1,070.34	-1,411.22	1,862.36	1,803.21	59.14	31.489			
8,575.00	8,301.18	8,316.71	8,283.76	31.57	29.29	-71.079	1,070.03	-1,411.32	1,839.87	1,780.69	59.18	31.090			
8,600.00	8,304.07	8,321.47	8,288.51	31.64	29.31	-70.765	1,069.80	-1,411.39	1,817.27	1,758.06	59.21	30.693			
8,625.00	8,305.66	8,324.39	8,291.43	31.72	29.32	-70.437	1,069.65	-1,411.44	1,794.62	1,735.39	59.23	30.298			
8,642.92	8,306.00	8,325.36	8,292.40	31.77	29.32	-70.196	1,069.60	-1,411.45	1,778.40	1,719.15	59.25	30.016			
8,700.00	8,306.00	8,326.88	8,293.92	31.99	29.33	-69.417	1,069.53	-1,411.48	1,726.55	1,667.26	59.30	29.117			
8,800.00	8,306.00	8,329.24	8,296.28	32.51	29.34	-68.065	1,069.40	-1,411.51	1,634.82	1,575.40	59.42	27.515			
8,812.71	8,306.00	8,329.51	8,296.55	32.59	29.34	-67.895	1,069.39	-1,411.51	1,623.08	1,563.64	59.44	27.308			
8,900.00	8,306.00	8,331.34	8,298.37	33.20	29.34	-66.662	1,069.29	-1,411.54	1,542.74	1,483.16	59.58	25.894			
9,000.00	8,306.00	8,333.41	8,300.43	34.04	29.35	-65.083	1,069.18	-1,411.57	1,451.69	1,391.88	59.81	24.271			
9,100.00	8,306.00	8,335.44	8,302.47	35.02	29.36	-63.295	1,069.07	-1,411.60	1,361.89	1,301.76	60.14	22.647			
9,200.00	8,306.00	8,337.45	8,304.47	36.13	29.36	-61.256	1,068.97	-1,411.63	1,273.62	1,213.04	60.58	21.024			
9,300.00	8,306.00	8,333.65	8,300.68	37.35	29.35	-58.901	1,069.20	-1,411.58	1,187.23	1,126.08	61.15	19.415			
9,400.00	8,306.00	8,335.00	8,302.02	38.67	29.36	-56.196	1,069.14	-1,411.60	1,103.11	1,041.16	61.95	17.807			
9,500.00	8,306.00	8,336.35	8,303.37	40.08	29.36	-53.053	1,069.08	-1,411.62	1,021.87	958.86	63.01	16.218			
9,600.00	8,306.00	8,337.69	8,304.72	41.57	29.37	-49.381	1,069.01	-1,411.64	944.22	879.83	64.39	14.664			
9,700.00	8,306.00	8,339.04	8,306.06	43.14	29.37	-45.071	1,068.95	-1,411.66	871.14	804.98	66.16	13.166			
9,800.00	8,306.00	8,340.39	8,307.41	44.77	29.37	-40.007	1,068.89	-1,411.68	803.88	735.50	68.38	11.756			
9,900.00	8,306.00	8,341.73	8,308.75	46.46	29.38	-34.073	1,068.83	-1,411.70	744.01	672.97	71.05	10.472			
10,000.00	8,306.00	8,343.08	8,310.10	48.19	29.38	-27.188	1,068.77	-1,411.72	693.46	619.37	74.09	9.359			
10,100.00	8,306.00	8,344.43	8,311.44	49.98	29.39	-19.353	1,068.71	-1,411.74	654.38	577.06	77.32	8.464			
10,200.00	8,306.00	8,345.77	8,312.79	51.80	29.39	-10.705	1,068.65	-1,411.76	628.91	548.53	80.38	7.825			
10,300.00	8,306.00	8,347.12	8,314.13	53.67	29.40	-1.552	1,068.59	-1,411.78	618.74	535.88	82.86	7.467			
10,313.44	8,306.00	8,347.30	8,314.31	53.92	29.40	-0.307	1,068.58	-1,411.79	618.59	535.46	83.14	7.441	CC, ES		
10,400.00	8,306.00	8,348.46	8,315.48	55.56	29.40	7.666	1,068.53	-1,411.80	624.62	540.17	84.45	7.396	SF		
10,500.00	8,306.00	8,349.81	8,316.82	57.49	29.41	16.491	1,068.47	-1,411.82	646.11	561.07	85.04	7.598			
10,600.00	8,306.00	8,351.16	8,318.16	59.44	29.41	24.572	1,068.41	-1,411.85	681.73	596.98	84.75	8.044			
10,700.00	8,306.00	8,352.50	8,319.51	61.42	29.42	31.724	1,068.35	-1,411.87	729.42	645.57	83.85	8.699			
10,800.00	8,306.00	8,353.85	8,320.85	63.42	29.42	37.915	1,068.29	-1,411.89	786.99	704.39	82.60	9.528			
10,900.00	8,306.00	8,355.19	8,322.20	65.44	29.42	43.209	1,068.24	-1,411.91	852.43	771.22	81.21	10.497			
11,000.00	8,306.00	8,356.54	8,323.54	67.47	29.43	47.715	1,068.18	-1,411.93	924.08	844.26	79.82	11.578			
11,100.00	8,306.00	8,357.88	8,324.88	69.53	29.43	51.552	1,068.12	-1,411.95	1,000.60	922.11	78.49	12.748			
11,200.00	8,306.00	8,359.23	8,326.23	71.60	29.44	54.831	1,068.07	-1,411.97	1,080.96	1,003.69	77.27	13.989			
11,300.00	8,306.00	8,360.57	8,327.57	73.68	29.44	57.648	1,068.01	-1,411.99	1,164.37	1,088.19	76.17	15.286			
11,400.00	8,306.00	8,361.92	8,328.91	75.78	29.45	60.084	1,067.96	-1,412.01	1,250.21	1,175.02	75.19	16.628			
11,500.00	8,306.00	8,363.26	8,330.26	77.89	29.45	62.203	1,067.90	-1,412.03	1,338.02	1,263.70	74.31	18.005			
11,600.00	8,306.00	8,364.61	8,331.60	80.01	29.46	64.058	1,067.85	-1,412.05	1,427.43	1,353.89	73.53	19.412			
11,700.00	8,306.00	8,365.95	8,332.94	82.13	29.46	65.694	1,067.79	-1,412.07	1,518.16	1,445.32	72.84	20.842			
11,800.00	8,306.00	8,367.29	8,334.29	84.27	29.47	67.143	1,067.74	-1,412.09	1,609.99	1,537.76	72.22	22.292			
11,900.00	8,306.00	8,368.64	8,335.63	86.42	29.47	68.436	1,067.69	-1,412.11	1,702.73	1,631.06	71.67	23.757			
12,000.00	8,306.00	8,369.98	8,336.97	88.58	29.47	69.594	1,067.64	-1,412.13	1,796.26	1,725.08	71.18	25.234			
12,100.00	8,306.00	8,371.33	8,338.31	90.74	29.48	70.637	1,067.58	-1,412.15	1,890.45	1,819.70	70.74	26.722			
12,200.00	8,306.00	8,372.67	8,339.66	92.91	29.48	71.581	1,067.53	-1,412.17	1,985.20	1,914.85	70.35	28.219			

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (204H,217H,224H) - Ray State Com 204H - Wellbore #1 - Surveys

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Survey Program: 63-VESSE_GYRO_DROP, 2853-MWD+HRGM								Rule Assigned:					
Reference		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	82.702	63.02	492.09	496.47				
100.00	100.00	84.16	84.16	0.13	0.07	82.642	63.50	491.78	495.87	495.67	0.20	2,498.229	
200.00	200.00	189.55	189.52	0.49	0.26	82.425	65.20	490.30	494.69	493.94	0.75	661.683	
300.00	300.00	292.57	292.49	0.85	0.45	82.137	67.36	487.77	492.53	491.24	1.29	381.512	
400.00	400.00	393.60	393.46	1.20	0.63	81.819	69.72	485.00	490.15	488.32	1.83	267.899	
500.00	500.00	491.47	491.25	1.56	0.80	81.488	72.16	482.17	487.65	485.29	2.36	206.476	
600.00	600.00	586.51	586.23	1.92	0.97	81.146	74.81	480.24	486.06	483.18	2.89	168.285	
700.00	700.00	682.47	682.14	2.28	1.14	80.793	77.67	479.19	485.44	482.03	3.42	142.132	
731.95	731.95	713.29	712.95	2.39	1.19	80.676	78.64	478.99	485.40	481.82	3.58	135.437	
750.00	750.00	730.83	730.48	2.46	1.22	80.611	79.19	478.91	485.41	481.73	3.68	131.936	
800.00	800.00	779.49	779.12	2.64	1.31	80.477	80.51	478.81	485.14	481.20	3.94	123.105	
900.00	899.93	878.59	878.20	2.99	1.48	80.415	82.58	479.00	482.52	478.05	4.46	108.088	
1,000.00	999.68	977.22	976.81	3.35	1.66	80.536	84.62	479.32	476.87	471.88	4.99	95.579	
1,100.00	1,099.13	1,079.22	1,078.77	3.71	1.84	80.749	87.42	479.50	468.06	462.53	5.52	84.723	
1,169.89	1,168.38	1,149.90	1,149.40	3.96	1.97	80.902	90.21	479.15	459.70	453.80	5.90	77.893	
1,200.00	1,198.18	1,180.25	1,179.71	4.08	2.02	80.950	91.71	478.89	455.72	449.66	6.06	75.146	
1,300.00	1,297.10	1,280.26	1,279.51	4.45	2.20	80.946	97.97	477.66	442.34	435.74	6.60	66.985	
1,400.00	1,396.03	1,378.70	1,377.63	4.83	2.38	80.747	105.66	476.17	428.92	421.78	7.15	60.024	
1,500.00	1,494.96	1,475.44	1,473.96	5.22	2.56	80.372	114.59	474.87	415.91	408.22	7.69	54.081	
1,600.00	1,593.89	1,572.73	1,570.62	5.61	2.74	79.697	125.50	473.66	403.37	395.13	8.24	48.943	
1,700.00	1,692.81	1,670.07	1,667.24	6.00	2.93	78.863	137.31	472.93	391.54	382.75	8.80	44.516	
1,800.00	1,791.74	1,771.57	1,767.98	6.39	3.12	77.886	149.64	471.78	379.45	370.10	9.35	40.563	
1,900.00	1,890.67	1,871.49	1,867.19	6.79	3.31	76.920	161.47	470.51	367.27	357.36	9.91	37.064	
2,000.00	1,989.60	1,972.85	1,967.87	7.19	3.50	75.904	173.04	468.69	354.58	344.12	10.46	33.890	
2,100.00	2,088.53	2,072.22	2,066.60	7.58	3.69	74.887	184.08	466.58	341.61	330.60	11.01	31.022	
2,200.00	2,187.45	2,171.56	2,165.35	7.98	3.87	73.859	194.74	464.57	328.76	317.20	11.56	28.440	
2,300.00	2,286.38	2,269.83	2,263.00	8.38	4.05	72.732	205.45	462.44	315.93	303.83	12.11	26.095	
2,400.00	2,385.31	2,369.56	2,361.97	8.78	4.23	71.250	217.55	460.11	303.47	290.81	12.66	23.979	
2,500.00	2,484.24	2,468.77	2,460.46	9.19	4.42	69.697	229.24	457.50	290.84	277.63	13.20	22.028	
2,600.00	2,583.16	2,567.76	2,558.72	9.59	4.60	67.999	240.96	454.87	278.43	264.68	13.75	20.250	
2,700.00	2,682.09	2,665.55	2,655.78	9.99	4.78	66.169	252.62	452.39	266.44	252.15	14.30	18.637	
2,800.00	2,781.02	2,765.11	2,754.67	10.39	4.88	64.271	263.94	450.27	254.88	240.12	14.76	17.264	
2,900.00	2,879.95	2,864.69	2,853.66	10.80	4.97	62.365	274.48	448.20	243.31	228.09	15.22	15.985	
3,000.00	2,978.88	2,962.69	2,950.97	11.20	5.03	60.035	285.87	445.71	232.15	216.50	15.65	14.837	
3,100.00	3,077.80	3,060.71	3,047.99	11.60	5.10	56.902	299.38	442.44	221.93	205.85	16.08	13.799	
3,200.00	3,176.73	3,160.39	3,146.59	12.01	5.21	53.236	313.59	438.61	212.35	195.78	16.57	12.816	
3,300.00	3,275.66	3,259.92	3,245.07	12.41	5.34	49.263	327.39	434.45	203.21	186.13	17.07	11.901	
3,400.00	3,374.59	3,359.22	3,343.37	12.82	5.51	44.992	340.75	430.10	194.70	177.08	17.62	11.049	
3,500.00	3,473.52	3,457.84	3,441.05	13.22	5.69	40.453	353.61	425.75	187.03	168.84	18.19	10.281	
3,600.00	3,572.44	3,555.65	3,538.00	13.63	5.89	35.860	366.08	422.31	180.92	162.13	18.79	9.629	
3,700.00	3,671.37	3,654.58	3,636.12	14.03	6.10	31.266	378.39	419.83	176.32	156.91	19.41	9.085	
3,800.00	3,770.30	3,754.54	3,735.36	14.44	6.34	26.600	390.17	417.57	172.42	152.37	20.05	8.599	
3,900.00	3,869.23	3,852.54	3,832.71	14.84	6.58	21.903	401.33	415.55	169.41	148.70	20.71	8.181	
3,975.00	3,943.42	3,925.03	3,904.64	15.15	6.77	18.351	410.25	414.43	168.70	147.49	21.21	7.955 CC	
4,000.00	3,968.15	3,949.20	3,928.60	15.25	6.84	17.169	413.37	414.14	168.78	147.40	21.37	7.897 ES	
4,100.00	4,067.08	4,047.85	4,026.36	15.66	7.11	12.469	426.57	413.15	170.30	148.23	22.06	7.719	
4,200.00	4,166.01	4,147.62	4,125.26	16.06	7.40	7.801	439.64	411.92	172.62	149.85	22.77	7.580	
4,300.00	4,264.94	4,248.60	4,225.44	16.47	7.70	3.167	452.21	410.29	175.36	151.86	23.50	7.461	
4,400.00	4,363.87	4,349.96	4,326.15	16.87	8.00	-1.492	463.49	408.06	177.89	153.65	24.25	7.337	
4,500.00	4,462.79	4,445.36	4,420.91	17.28	8.30	-6.137	474.19	405.39	181.69	156.74	24.95	7.281	
4,600.00	4,561.72	4,539.72	4,514.35	17.69	8.60	-10.628	486.89	402.21	188.93	163.29	25.64	7.369	
4,700.00	4,660.65	4,638.27	4,611.76	18.09	8.93	-14.811	501.38	398.48	198.52	172.14	26.38	7.527	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (204H,217H,224H) - Ray State Com 204H - Wellbore #1 - Surveys													Offset Site Error:
Survey Program: 63-VESSE_GYRO_DROP, 2853-MWD+HRGM													Offset Well Error:
Reference	Offset	Semi Major Axis	Rule Assigned:		Offset Site Error:		Offset Well Error:		Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Azimuth from North (°)	Offset Wellbore Centre	+N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Minimum Separation (usft)	Separation Factor	
4,800.00	4,759.58	4,737.37	4,709.75	18.50	9.27	-18.654	515.64	394.59	208.80	181.69	27.12	7.701	
4,900.00	4,858.50	4,836.11	4,807.39	18.91	9.61	-21.939	529.96	391.42	219.75	191.90	27.85	7.889	
5,000.00	4,957.43	4,935.40	4,905.54	19.31	9.96	-24.481	544.89	389.81	231.18	202.58	28.60	8.084	
5,100.00	5,056.36	5,036.60	5,005.65	19.72	10.31	-26.686	559.66	388.72	242.37	213.01	29.36	8.254	
5,200.00	5,155.29	5,137.51	5,105.63	20.13	10.67	-28.856	573.26	387.42	253.01	222.88	30.13	8.398	
5,300.00	5,254.22	5,237.19	5,204.48	20.53	11.02	-30.995	586.00	385.83	263.54	232.67	30.88	8.535	
5,400.00	5,353.14	5,335.98	5,302.50	20.94	11.37	-33.077	598.21	383.95	274.23	242.61	31.62	8.673	
5,500.00	5,452.07	5,433.29	5,398.96	21.35	11.72	-34.906	610.88	382.32	285.65	253.31	32.35	8.831	
5,600.00	5,551.00	5,531.53	5,496.25	21.75	12.07	-36.434	624.50	381.01	297.82	264.73	33.09	9.001	
5,700.00	5,649.93	5,631.04	5,594.79	22.16	12.44	-37.808	638.30	379.79	310.11	276.27	33.84	9.163	
5,800.00	5,748.86	5,731.15	5,693.96	22.57	12.80	-39.084	651.95	378.62	322.35	287.75	34.61	9.315	
5,900.00	5,847.78	5,831.85	5,793.77	22.98	13.17	-40.300	665.17	377.56	334.29	298.91	35.38	9.449	
6,000.00	5,946.71	5,929.32	5,890.43	23.38	13.53	-41.498	677.73	376.54	346.18	310.07	36.11	9.586	
6,100.00	6,045.64	6,025.04	5,985.24	23.79	13.89	-42.605	690.79	375.14	359.05	322.22	36.84	9.748	
6,200.00	6,144.57	6,125.67	6,084.90	24.20	14.26	-43.615	704.66	373.18	372.46	334.86	37.61	9.904	
6,300.00	6,243.49	6,228.51	6,186.97	24.60	14.64	-44.799	716.87	370.54	385.06	346.66	38.40	10.028	
6,400.00	6,342.42	6,329.10	6,286.98	25.01	15.00	-46.141	727.24	367.46	397.07	357.91	39.16	10.140	
6,500.00	6,441.35	6,429.28	6,386.64	25.42	15.36	-47.513	736.77	364.13	408.96	369.05	39.91	10.246	
6,600.00	6,540.28	6,532.66	6,489.60	25.83	15.72	-48.950	745.23	360.42	420.39	379.70	40.68	10.333	
6,700.00	6,639.21	6,637.70	6,594.36	26.23	16.08	-50.530	751.75	356.43	431.00	389.54	41.46	10.396	
6,800.00	6,738.13	6,732.50	6,709.05	26.64	16.45	-52.148	756.07	353.79	439.26	396.99	42.27	10.392	
6,894.50	6,831.62	6,852.79	6,809.33	27.03	16.77	-53.749	757.32	353.42	444.50	401.54	42.96	10.346	
6,900.00	6,837.06	6,858.09	6,814.62	27.05	16.78	-53.848	757.33	353.38	444.81	401.80	43.00	10.344	
7,000.00	6,936.25	6,954.19	6,910.70	27.44	17.07	-55.574	756.66	351.62	450.21	406.55	43.67	10.310	
7,100.00	7,035.82	7,051.22	7,007.65	27.82	17.35	-57.140	754.45	348.08	455.37	411.06	44.31	10.277	
7,200.00	7,135.65	7,149.25	7,105.51	28.17	17.63	-58.445	751.26	343.51	459.82	414.89	44.93	10.235	
7,300.00	7,235.62	7,252.39	7,208.48	28.51	17.93	-59.384	747.76	338.65	463.03	417.47	45.57	10.162	
7,314.38	7,250.00	7,267.70	7,223.78	28.55	17.98	-59.449	747.46	338.17	463.29	417.63	45.66	10.146	
7,400.00	7,335.62	7,358.95	7,315.02	28.83	18.26	-59.571	747.05	336.92	464.10	417.88	46.22	10.041	
7,500.00	7,435.62	7,462.79	7,418.84	29.15	18.58	-59.408	748.13	337.69	464.00	417.12	46.88	9.898	
7,600.00	7,535.62	7,566.17	7,522.21	29.47	18.90	-59.265	748.68	339.03	463.15	415.62	47.53	9.744	
7,700.00	7,635.62	7,666.75	7,622.78	29.79	19.20	-59.217	748.37	340.32	461.89	413.73	48.16	9.590	
7,800.00	7,735.62	7,767.37	7,723.39	30.11	19.51	-59.317	746.95	341.12	460.49	411.69	48.80	9.437	
7,892.92	7,828.54	7,860.74	7,816.74	30.41	19.79	-59.395	745.69	342.03	459.07	409.69	49.38	9.296	
7,900.00	7,835.62	7,867.85	7,823.86	30.43	19.81	-59.393	745.62	342.12	458.92	409.49	49.43	9.285	
7,925.00	7,860.59	7,892.94	7,848.94	30.50	19.88	-59.319	745.41	342.45	457.69	408.12	49.58	9.232	
7,950.00	7,885.48	7,917.91	7,873.91	30.57	19.96	-59.139	745.25	342.83	455.41	405.68	49.73	9.158	
7,975.00	7,910.21	7,942.00	7,898.00	30.63	20.03	-58.854	745.14	343.22	452.08	402.21	49.87	9.065	
8,000.00	7,934.72	7,965.41	7,921.41	30.69	20.11	-58.463	745.07	343.58	447.78	397.77	50.01	8.953	
8,025.00	7,958.94	7,987.93	7,943.92	30.75	20.18	-57.966	745.04	343.85	442.58	392.44	50.15	8.825	
8,050.00	7,982.80	8,010.14	7,966.14	30.80	20.25	-57.358	745.04	344.04	436.52	386.24	50.28	8.681	
8,075.00	8,006.24	8,032.00	7,987.99	30.85	20.32	-56.632	745.07	344.15	429.62	379.21	50.41	8.523	
8,100.00	8,029.19	8,053.46	8,009.45	30.89	20.38	-55.779	745.14	344.19	421.94	371.41	50.53	8.350	
8,125.00	8,051.59	8,074.46	8,030.45	30.93	20.45	-54.790	745.23	344.17	413.54	362.89	50.65	8.165	
8,150.00	8,073.38	8,094.95	8,050.94	30.96	20.52	-53.653	745.35	344.08	404.46	353.70	50.76	7.968	
8,175.00	8,094.49	8,114.88	8,070.87	31.00	20.58	-52.356	745.49	343.94	394.80	343.93	50.87	7.761	
8,200.00	8,114.88	8,134.64	8,090.62	31.03	20.64	-50.884	745.65	343.74	384.62	333.65	50.97	7.546	
8,225.00	8,134.48	8,154.81	8,110.79	31.06	20.71	-49.222	745.80	343.52	373.98	322.91	51.07	7.322	
8,250.00	8,153.25	8,174.15	8,130.13	31.08	20.77	-47.351	745.91	343.30	362.97	311.80	51.17	7.093	
8,275.00	8,171.13	8,192.60	8,148.58	31.11	20.83	-45.248	745.97	343.09	351.72	300.46	51.26	6.862	
8,300.00	8,188.06	8,210.12	8,166.10	31.13	20.88	-42.892	746.00	342.88	340.38	289.05	51.34	6.630	
8,325.00	8,204.01	8,226.65	8,182.63	31.16	20.93	-40.257	746.01	342.69	329.15	277.74	51.41	6.402	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (204H,217H,224H) - Ray State Com 204H - Wellbore #1 - Surveys													Offset Site Error:	0.00 usft
Survey Program: 63-VESSI_GYRO_DROP, 2853-MWD+HRGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre			Rule Assigned: Distance			Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,350.00	8,218.93	8,242.15	8,198.13	31.18	20.98	-37.320	745.99	342.51	318.21	266.73	51.48	6.181		
8,375.00	8,232.78	8,256.58	8,212.56	31.21	21.03	-34.060	745.95	342.33	307.77	256.24	51.54	5.972		
8,400.00	8,245.53	8,269.90	8,225.87	31.24	21.07	-30.463	745.90	342.17	298.09	246.50	51.59	5.778		
8,425.00	8,257.13	8,282.06	8,238.04	31.27	21.11	-26.521	745.83	342.02	289.42	237.78	51.63	5.605		
8,450.00	8,267.55	8,293.04	8,249.01	31.31	21.15	-22.242	745.76	341.88	282.02	230.34	51.67	5.458		
8,475.00	8,276.78	8,302.80	8,258.78	31.35	21.18	-17.653	745.69	341.76	276.15	224.45	51.70	5.341		
8,500.00	8,284.77	8,311.32	8,267.29	31.40	21.20	-12.799	745.62	341.65	272.07	220.35	51.72	5.260		
8,525.00	8,291.51	8,318.57	8,274.54	31.45	21.23	-7.749	745.56	341.56	269.98	218.24	51.74	5.218		
8,536.93	8,294.28	8,321.53	8,277.50	31.48	21.24	-5.294	745.53	341.52	269.73	217.98	51.75	5.213 SF		
8,550.00	8,296.99	8,324.45	8,280.42	31.51	21.24	-2.588	745.50	341.48	270.03	218.28	51.75	5.218		
8,575.00	8,301.18	8,329.04	8,285.01	31.57	21.26	2.586	745.46	341.43	272.31	220.55	51.76	5.261		
8,600.00	8,304.07	8,332.32	8,288.29	31.64	21.27	7.674	745.42	341.38	276.82	225.06	51.76	5.348		
8,625.00	8,305.66	8,334.28	8,290.25	31.72	21.28	12.587	745.40	341.36	283.49	231.73	51.76	5.477		
8,642.92	8,306.00	8,334.86	8,290.83	31.77	21.28	15.960	745.40	341.35	289.51	237.76	51.75	5.594		
8,700.00	8,306.00	8,335.64	8,291.61	31.99	21.28	25.760	745.39	341.34	314.09	262.34	51.75	6.070		
8,800.00	8,306.00	8,336.95	8,292.92	32.51	21.28	39.511	745.38	341.33	371.59	319.81	51.78	7.176		
8,812.71	8,306.00	8,337.12	8,293.09	32.59	21.28	40.980	745.37	341.32	379.89	328.10	51.79	7.336		
8,900.00	8,306.00	8,338.24	8,294.20	33.20	21.29	49.508	745.36	341.31	442.37	390.53	51.83	8.534		
9,000.00	8,306.00	8,339.51	8,295.48	34.04	21.29	56.599	745.35	341.29	522.75	470.87	51.88	10.076		
9,100.00	8,306.00	8,340.79	8,296.76	35.02	21.30	61.744	745.34	341.28	608.97	557.05	51.92	11.728		
9,200.00	8,306.00	8,342.07	8,298.04	36.13	21.30	65.590	745.32	341.26	698.87	646.91	51.96	13.451		
9,300.00	8,306.00	8,343.34	8,299.31	37.35	21.30	68.550	745.31	341.25	791.19	739.21	51.98	15.220		
9,400.00	8,306.00	8,344.61	8,300.58	38.67	21.31	70.886	745.30	341.23	885.18	833.17	52.01	17.020		
9,500.00	8,306.00	8,345.88	8,301.85	40.08	21.31	72.771	745.28	341.21	980.36	928.33	52.03	18.842		
9,600.00	8,306.00	8,347.15	8,303.11	41.57	21.31	74.321	745.27	341.20	1,076.42	1,024.37	52.05	20.680		
9,700.00	8,306.00	8,348.41	8,304.38	43.14	21.32	75.617	745.25	341.18	1,173.13	1,121.06	52.07	22.530		
9,800.00	8,306.00	8,349.67	8,305.64	44.77	21.32	76.714	745.24	341.17	1,270.35	1,218.26	52.09	24.389		
9,900.00	8,306.00	8,350.93	8,306.90	46.46	21.33	77.656	745.23	341.15	1,367.97	1,315.86	52.11	26.254		
10,000.00	8,306.00	8,352.19	8,308.16	48.19	21.33	78.471	745.21	341.14	1,465.91	1,413.78	52.12	28.123		
10,100.00	8,306.00	8,353.45	8,309.42	49.98	21.33	79.185	745.20	341.12	1,564.10	1,511.96	52.14	29.997		
10,200.00	8,306.00	8,354.70	8,310.67	51.80	21.34	79.814	745.18	341.10	1,662.52	1,610.36	52.16	31.872		
10,300.00	8,306.00	8,355.96	8,311.92	53.67	21.34	80.372	745.17	341.09	1,761.11	1,708.93	52.18	33.750		
10,400.00	8,306.00	8,357.21	8,313.17	55.56	21.35	80.872	745.16	341.07	1,859.85	1,807.65	52.20	35.629		
10,500.00	8,306.00	8,358.46	8,314.42	57.49	21.35	81.321	745.14	341.06	1,958.72	1,906.49	52.22	37.508		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (204H,217H,224H) - Ray State Com 217H - Wellbore #1 - Surveys													Offset Site Error:
													0.00 usft
Survey Program: 165-VESSI_GYRO_DROP, 2837-MWD+HRGM													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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	77.622	97.02	442.09	453.01				
100.00	100.00	87.60	87.60	0.13	0.07	77.647	96.70	441.50	452.02	451.82	0.20	2,266.408	
200.00	200.00	193.90	193.86	0.49	0.19	77.738	95.48	439.27	449.71	449.05	0.67	674.491	
300.00	300.00	294.75	294.67	0.85	0.37	77.825	94.16	436.44	446.69	445.48	1.20	371.598	
400.00	400.00	394.24	394.12	1.20	0.54	77.885	93.08	433.63	443.70	441.96	1.74	255.545	
500.00	500.00	494.64	494.47	1.56	0.72	77.931	92.11	430.78	440.72	438.45	2.27	193.906	
600.00	600.00	595.62	595.39	1.92	0.89	77.911	91.59	427.62	437.55	434.74	2.81	155.667	
700.00	700.00	697.67	697.37	2.28	1.08	77.670	92.62	423.76	434.07	430.72	3.35	129.520	
750.00	750.00	748.44	748.07	2.46	1.17	77.472	93.66	421.50	432.12	428.50	3.62	119.317	
800.00	800.00	797.98	797.55	2.64	1.26	77.283	94.78	419.27	429.76	425.87	3.89	110.524	
900.00	899.93	896.90	896.34	2.99	1.43	77.022	97.12	414.93	422.78	418.36	4.42	95.656	
1,000.00	999.68	994.97	994.31	3.35	1.61	76.938	99.47	410.88	412.82	407.87	4.95	83.381	
1,100.00	1,099.13	1,094.40	1,093.63	3.71	1.79	77.049	101.74	407.00	399.85	394.37	5.49	72.895	
1,169.89	1,168.38	1,162.98	1,162.14	3.96	1.91	77.271	103.15	404.31	388.85	382.99	5.86	66.371	
1,200.00	1,198.18	1,192.35	1,191.49	4.08	1.96	77.396	103.74	403.21	383.81	377.79	6.02	63.762	
1,300.00	1,297.10	1,294.18	1,293.21	4.45	2.14	77.765	106.02	398.96	366.76	360.21	6.55	55.956	
1,400.00	1,396.03	1,399.92	1,398.69	4.83	2.33	77.854	109.83	392.62	348.25	341.15	7.10	49.063	
1,500.00	1,494.96	1,507.76	1,505.93	5.22	2.54	77.574	115.07	382.71	326.89	319.24	7.64	42.772	
1,600.00	1,593.89	1,605.20	1,602.67	5.61	2.73	77.200	120.52	372.43	304.42	296.24	8.18	37.211	
1,700.00	1,692.81	1,703.38	1,700.15	6.00	2.92	76.808	125.70	361.88	281.71	272.99	8.72	32.308	
1,800.00	1,791.74	1,800.08	1,796.16	6.39	3.10	76.367	130.83	351.55	259.07	249.82	9.26	27.981	
1,900.00	1,890.67	1,897.53	1,892.92	6.79	3.28	75.808	136.14	341.30	236.64	226.84	9.80	24.150	
2,000.00	1,989.60	1,995.63	1,990.30	7.19	3.47	75.102	141.46	330.67	213.94	203.61	10.34	20.696	
2,100.00	2,088.53	2,093.80	2,087.71	7.58	3.66	74.181	146.87	319.82	191.10	180.23	10.88	17.572	
2,200.00	2,187.45	2,191.58	2,184.57	7.98	3.84	72.618	153.18	307.99	167.60	156.18	11.42	14.681	
2,300.00	2,286.38	2,288.45	2,280.48	8.38	4.03	70.277	160.26	296.29	144.55	132.59	11.96	12.082	
2,400.00	2,385.31	2,385.51	2,376.37	8.78	4.22	66.393	168.56	283.85	121.64	109.12	12.52	9.716	
2,500.00	2,484.24	2,482.36	2,472.04	9.19	4.41	60.581	177.28	271.54	99.85	86.76	13.09	7.629	
2,600.00	2,583.16	2,579.37	2,567.88	9.59	4.60	51.837	185.70	259.14	79.42	65.74	13.69	5.803	
2,700.00	2,682.09	2,676.30	2,663.69	9.99	4.75	37.913	194.08	246.98	62.20	47.89	14.31	4.346	
2,800.00	2,781.02	2,773.51	2,759.79	10.39	4.85	16.075	202.17	234.83	50.87	35.90	14.97	3.399	
2,862.03	2,842.38	2,833.80	2,819.41	10.64	4.92	-1.079	206.99	227.28	48.66	33.29	15.37	3.166	CC, ES, SF
2,900.00	2,879.95	2,870.63	2,855.84	10.80	4.94	-11.798	209.89	222.68	49.53	33.96	15.57	3.181	
3,000.00	2,978.88	2,967.66	2,951.81	11.20	5.01	-35.641	217.56	210.64	59.07	43.13	15.95	3.704	
3,100.00	3,077.80	3,064.26	3,047.36	11.60	5.09	-51.009	225.31	198.71	75.53	59.25	16.28	4.640	
3,200.00	3,176.73	3,159.25	3,141.09	12.01	5.22	-60.399	233.76	185.83	96.79	80.16	16.63	5.821	
3,300.00	3,275.66	3,254.02	3,234.28	12.41	5.36	-66.171	243.25	171.47	121.52	104.49	17.03	7.136	
3,400.00	3,374.59	3,350.59	3,329.18	12.82	5.56	-69.902	253.16	156.55	147.39	129.86	17.53	8.407	
3,500.00	3,473.52	3,447.53	3,424.49	13.22	5.76	-72.515	262.97	141.82	173.41	155.34	18.06	9.599	
3,600.00	3,572.44	3,545.31	3,520.73	13.63	5.99	-74.462	272.60	127.49	199.11	180.46	18.64	10.681	
3,700.00	3,671.37	3,643.37	3,617.38	14.03	6.24	-76.000	281.92	113.73	224.30	205.07	19.23	11.663	
3,800.00	3,770.30	3,741.66	3,714.36	14.44	6.51	-77.294	290.81	100.50	248.99	229.15	19.84	12.549	
3,900.00	3,869.23	3,839.64	3,811.14	14.84	6.78	-78.430	299.22	87.78	273.21	252.75	20.46	13.353	
4,000.00	3,968.15	3,937.01	3,907.38	15.25	7.06	-79.453	307.20	75.30	297.31	276.23	21.08	14.102	
4,100.00	4,067.08	4,034.85	4,004.13	15.66	7.36	-80.374	314.88	62.88	321.31	299.59	21.72	14.793	
4,200.00	4,166.01	4,133.26	4,101.49	16.06	7.66	-81.195	322.33	50.71	345.01	322.64	22.37	15.421	
4,300.00	4,264.94	4,228.58	4,195.83	16.47	7.97	-81.960	329.39	39.05	368.64	345.64	23.00	16.027	
4,400.00	4,363.87	4,321.34	4,287.51	16.87	8.27	-82.643	336.46	26.84	393.24	369.63	23.61	16.656	
4,500.00	4,462.79	4,416.34	4,381.29	17.28	8.59	-83.219	343.86	13.52	418.73	394.48	24.25	17.266	
4,600.00	4,561.72	4,513.32	4,477.02	17.69	8.93	-83.743	351.20	-0.12	444.28	419.36	24.92	17.825	
4,700.00	4,660.65	4,609.97	4,572.46	18.09	9.27	-84.245	358.23	-13.69	469.80	444.20	25.60	18.353	
4,800.00	4,759.58	4,706.39	4,667.68	18.50	9.61	-84.736	364.93	-27.28	495.38	469.11	26.27	18.855	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (204H,217H,224H) - Ray State Com 217H - Wellbore #1 - Surveys													Offset Site Error:
													0.00 usft
Survey Program:	Reference	Offset	Semi Major Axis	Rule Assigned:		Offset Wellbore Centre		Distance	Minimum	Separation	Offset Well Error:		0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	Warning
4,900.00	4,858.50	4,803.89	4,763.96		18.91	-85.155	371.84	-40.97	520.96	493.99	26.97	19.318	
5,000.00	4,957.43	4,902.11	4,860.88	19.31	10.33	-85.353	380.44	-54.36	546.31	518.63	27.68	19.740	
5,100.00	5,056.36	5,002.77	4,960.20	19.72	10.70	-85.417	390.19	-67.55	571.23	542.82	28.41	20.104	
5,200.00	5,155.29	5,104.47	5,060.72	20.13	11.08	-85.562	399.00	-80.18	595.39	566.23	29.16	20.418	
5,300.00	5,254.22	5,209.18	5,164.43	20.53	11.45	-85.772	406.94	-92.24	618.60	588.67	29.93	20.670	
5,400.00	5,353.14	5,313.04	5,267.51	20.94	11.83	-86.056	413.78	-103.00	640.60	609.91	30.68	20.877	
5,500.00	5,452.07	5,406.02	5,359.77	21.35	12.16	-86.355	420.16	-112.56	662.57	631.21	31.35	21.134	
5,600.00	5,551.00	5,498.86	5,451.77	21.75	12.50	-86.553	427.53	-122.67	685.22	653.20	32.02	21.400	
5,700.00	5,649.93	5,592.37	5,544.29	22.16	12.85	-86.671	435.79	-133.36	708.46	675.76	32.70	21.664	
5,800.00	5,748.86	5,685.63	5,636.46	22.57	13.21	-86.728	444.74	-144.47	732.22	698.84	33.39	21.932	
5,900.00	5,847.78	5,778.66	5,728.32	22.98	13.57	-86.776	453.79	-156.03	756.51	722.43	34.07	22.203	
6,000.00	5,946.71	5,871.93	5,820.38	23.38	13.93	-86.843	462.57	-168.14	781.30	746.54	34.76	22.476	
6,100.00	6,045.64	5,971.88	5,919.08	23.79	14.32	-86.899	471.50	-181.16	806.11	770.60	35.51	22.700	
6,200.00	6,144.57	6,072.76	6,018.80	24.20	14.72	-86.989	479.88	-193.94	830.54	794.27	36.27	22.900	
6,300.00	6,243.49	6,177.34	6,122.31	24.60	15.12	-87.098	487.89	-206.49	854.28	817.22	37.05	23.055	
6,400.00	6,342.42	6,274.65	6,218.74	25.01	15.49	-87.265	494.85	-217.50	877.32	839.54	37.78	23.224	
6,500.00	6,441.35	6,359.37	6,302.55	25.42	15.82	-87.430	501.67	-227.85	901.30	862.91	38.40	23.473	
6,600.00	6,540.28	6,448.41	6,390.39	25.83	16.17	-87.500	509.94	-239.87	926.59	887.53	39.05	23.726	
6,700.00	6,639.21	6,563.34	6,503.95	26.23	16.62	-87.482	519.74	-254.55	951.14	911.20	39.94	23.816	
6,800.00	6,738.13	6,663.98	6,603.69	26.64	17.02	-87.618	526.81	-265.98	974.22	933.53	40.69	23.940	
6,894.50	6,831.62	6,745.60	6,684.50	27.03	17.34	-87.782	532.73	-275.81	996.69	955.40	41.30	24.136	
6,900.00	6,837.06	6,750.35	6,689.19	27.05	17.35	-87.791	533.08	-276.41	998.03	956.70	41.33	24.147	
7,000.00	6,936.25	6,843.74	6,781.51	27.44	17.72	-87.842	540.29	-288.57	1,021.30	979.28	42.02	24.306	
7,100.00	7,035.82	6,952.36	6,889.01	27.82	18.14	-87.758	547.85	-302.15	1,041.32	998.50	42.82	24.317	
7,200.00	7,135.65	7,041.49	6,977.32	28.17	18.50	-87.667	553.39	-312.88	1,058.18	1,014.73	43.46	24.351	
7,300.00	7,235.62	7,116.95	7,051.85	28.51	18.80	-87.476	558.72	-323.39	1,074.20	1,030.25	43.96	24.438	
7,314.38	7,250.00	7,127.78	7,062.52	28.55	18.85	-87.437	559.55	-325.03	1,076.46	1,032.44	44.03	24.451	
7,400.00	7,335.62	7,194.15	7,127.80	28.83	19.12	-87.174	564.96	-335.77	1,090.65	1,046.20	44.45	24.536	
7,500.00	7,435.62	7,296.60	7,228.47	29.15	19.55	-86.789	573.14	-352.89	1,107.80	1,062.61	45.19	24.516	
7,600.00	7,535.62	7,402.17	7,332.34	29.47	19.99	-86.448	580.73	-370.15	1,124.58	1,078.63	45.95	24.473	
7,700.00	7,635.62	7,516.35	7,444.81	29.79	20.47	-86.031	590.02	-387.48	1,140.30	1,093.51	46.79	24.370	
7,800.00	7,735.62	7,617.86	7,544.87	30.11	20.89	-85.611	599.41	-401.76	1,155.05	1,107.53	47.52	24.309	
7,892.92	7,828.54	7,704.03	7,629.85	30.41	21.24	-85.314	606.38	-414.24	1,169.10	1,120.98	48.12	24.296	
7,900.00	7,835.62	7,710.60	7,636.33	30.43	21.27	-85.293	606.86	-415.22	1,170.14	1,121.97	48.16	24.295	
7,925.00	7,860.59	7,733.91	7,659.32	30.50	21.37	-85.217	608.52	-418.69	1,173.00	1,124.69	48.32	24.277	
7,950.00	7,885.48	7,752.00	7,677.16	30.57	21.44	-85.147	609.74	-421.42	1,174.64	1,126.21	48.42	24.257	
7,975.00	7,910.21	7,778.53	7,703.31	30.63	21.55	-85.043	611.55	-425.47	1,175.02	1,126.42	48.60	24.176	
8,000.00	7,934.72	7,800.11	7,724.58	30.69	21.64	-84.938	613.10	-428.82	1,174.20	1,125.46	48.73	24.094	
8,025.00	7,958.94	7,821.61	7,745.75	30.75	21.74	-84.818	614.70	-432.22	1,172.17	1,123.30	48.86	23.990	
8,050.00	7,982.80	7,842.97	7,766.77	30.80	21.83	-84.684	616.35	-435.64	1,168.93	1,119.94	48.99	23.863	
8,075.00	8,006.24	7,864.14	7,787.58	30.85	21.92	-84.534	618.05	-439.09	1,164.50	1,115.39	49.10	23.715	
8,100.00	8,029.19	7,885.06	7,808.15	30.89	22.00	-84.370	619.79	-442.55	1,158.89	1,109.67	49.22	23.546	
8,125.00	8,051.59	7,905.69	7,828.41	30.93	22.09	-84.191	621.56	-446.00	1,152.11	1,102.78	49.33	23.356	
8,150.00	8,073.38	7,925.98	7,848.31	30.96	22.18	-83.996	623.37	-449.45	1,144.18	1,094.75	49.43	23.146	
8,175.00	8,094.49	7,947.62	7,869.54	31.00	22.27	-83.779	625.35	-453.18	1,135.12	1,085.57	49.55	22.909	
8,200.00	8,114.88	7,973.96	7,895.38	31.03	22.38	-83.525	627.85	-457.65	1,124.86	1,075.15	49.71	22.628	
8,225.00	8,134.48	7,999.45	7,920.39	31.06	22.49	-83.253	630.35	-461.88	1,113.39	1,063.53	49.86	22.329	
8,250.00	8,153.25	8,024.02	7,944.51	31.08	22.60	-82.963	632.84	-465.87	1,100.76	1,050.75	50.01	22.012	
8,275.00	8,171.13	8,047.59	7,967.65	31.11	22.70	-82.656	635.31	-469.61	1,087.01	1,036.87	50.14	21.679	
8,300.00	8,188.06	8,070.09	7,989.74	31.13	22.80	-82.330	637.72	-473.10	1,072.20	1,021.94	50.27	21.330	
8,325.00	8,204.01	8,091.46	8,010.73	31.16	22.89	-81.986	640.08	-476.34	1,056.38	1,006.00	50.38	20.967	
8,350.00	8,218.93	8,111.64	8,030.56	31.18	22.98	-81.623	642.36	-479.34	1,039.59	989.11	50.49	20.591	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (204H,217H,224H) - Ray State Com 217H - Wellbore #1 - Surveys													Offset Site Error:
													0.00 usft
Survey Program:	Reference	Offset	Semi Major Axis	Rule Assigned:		Offset Wellbore Centre		Distance	Minimum	Separation	Offset Well Error:		0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	from North (")	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	Warning
8,375.00	8,232.78	8,131.08	8,049.66	31.21	23.06	-81.239	644.60	-482.17	1,021.91	971.32	50.59	20.200	
8,400.00	8,245.53	8,152.20	8,070.43	31.24	23.15	-80.825	646.99	-485.16	1,003.36	952.65	50.71	19.787	
8,425.00	8,257.13	8,171.67	8,089.61	31.27	23.22	-80.400	649.08	-487.83	983.98	933.16	50.81	19.364	
8,450.00	8,267.55	8,189.47	8,107.16	31.31	23.30	-79.962	650.91	-490.20	963.85	912.94	50.91	18.933	
8,475.00	8,276.78	8,205.56	8,123.03	31.35	23.36	-79.509	652.49	-492.27	943.05	892.06	50.99	18.494	
8,500.00	8,284.77	8,219.90	8,137.19	31.40	23.42	-79.039	653.84	-494.07	921.65	870.59	51.07	18.048	
8,525.00	8,291.51	8,232.48	8,149.62	31.45	23.47	-78.550	654.98	-495.61	899.74	848.61	51.13	17.598	
8,550.00	8,296.99	8,243.29	8,160.32	31.51	23.51	-78.040	655.93	-496.91	877.38	826.20	51.18	17.143	
8,575.00	8,301.18	8,252.33	8,169.26	31.57	23.55	-77.507	656.70	-497.97	854.66	803.44	51.23	16.684	
8,600.00	8,304.07	8,259.60	8,176.45	31.64	23.58	-76.948	657.31	-498.81	831.66	780.40	51.26	16.224	
8,625.00	8,305.66	8,265.11	8,181.91	31.72	23.60	-76.363	657.75	-499.44	808.44	757.15	51.29	15.762	
8,642.92	8,306.00	8,267.99	8,184.77	31.77	23.61	-75.926	657.98	-499.77	791.72	740.41	51.31	15.431	
8,700.00	8,306.00	8,275.73	8,192.43	31.99	23.64	-74.470	658.60	-500.63	738.30	686.94	51.36	14.375	
8,800.00	8,306.00	8,289.16	8,205.74	32.51	23.70	-71.689	659.62	-502.11	644.56	593.06	51.50	12.515	
8,812.71	8,306.00	8,290.85	8,207.41	32.59	23.71	-71.309	659.74	-502.29	632.64	581.11	51.53	12.278	
8,900.00	8,306.00	8,302.16	8,218.63	33.20	23.75	-68.292	660.56	-503.49	551.49	499.75	51.74	10.658	
9,000.00	8,306.00	8,314.47	8,230.85	34.04	23.80	-63.553	661.42	-504.77	461.03	408.84	52.19	8.834	
9,100.00	8,306.00	8,326.15	8,242.44	35.02	23.85	-56.585	662.19	-505.95	375.11	322.04	53.07	7.069	
9,200.00	8,306.00	8,334.82	8,251.04	36.13	23.88	-45.763	662.78	-506.85	297.80	242.97	54.83	5.432	
9,300.00	8,306.00	8,345.04	8,261.18	37.35	23.92	-28.548	663.46	-507.92	237.57	179.43	58.14	4.086	
9,400.00	8,306.00	8,355.46	8,271.52	38.67	23.96	-3.826	664.16	-509.01	209.72	147.72	62.00	3.383	
9,412.98	8,306.00	8,356.82	8,272.87	38.85	23.97	-0.307	664.25	-509.15	209.32	146.98	62.34	3.358	
9,500.00	8,306.00	8,366.07	8,282.05	40.08	24.00	22.026	664.86	-510.13	226.50	163.78	62.72	3.611	
9,600.00	8,306.00	8,376.88	8,292.77	41.57	24.04	41.030	665.58	-511.29	279.99	219.27	60.72	4.611	
9,700.00	8,306.00	8,387.90	8,303.71	43.14	24.09	53.065	666.31	-512.47	353.92	295.28	58.63	6.036	
9,800.00	8,306.00	8,399.14	8,314.85	44.77	24.13	60.733	667.05	-513.70	438.04	380.89	57.15	7.665	
9,900.00	8,306.00	8,410.60	8,326.21	46.46	24.18	65.875	667.81	-514.96	527.49	471.34	56.15	9.394	
10,000.00	8,306.00	8,422.28	8,337.80	48.19	24.22	69.508	668.57	-516.26	619.97	564.49	55.48	11.175	
10,100.00	8,306.00	8,434.20	8,349.62	49.98	24.27	72.191	669.36	-517.59	714.30	659.29	55.01	12.984	
10,200.00	8,306.00	8,446.35	8,361.67	51.80	24.31	74.245	670.15	-518.97	809.82	755.14	54.68	14.811	
10,300.00	8,306.00	8,458.76	8,373.97	53.67	24.36	75.863	670.96	-520.39	906.15	851.72	54.43	16.647	
10,400.00	8,306.00	8,471.42	8,386.52	55.56	24.41	77.169	671.79	-521.85	1,003.06	948.80	54.26	18.488	
10,500.00	8,306.00	8,484.35	8,399.33	57.49	24.46	78.244	672.63	-523.36	1,100.39	1,046.26	54.12	20.331	
10,600.00	8,306.00	8,497.55	8,412.41	59.44	24.51	79.143	673.48	-524.92	1,198.03	1,144.00	54.03	22.175	
10,700.00	8,306.00	8,511.03	8,425.76	61.42	24.57	79.906	674.35	-526.52	1,295.91	1,241.95	53.95	24.019	
10,800.00	8,306.00	8,524.02	8,438.63	63.42	24.62	80.563	675.20	-528.09	1,393.97	1,340.07	53.91	25.859	
10,900.00	8,306.00	8,537.45	8,451.93	65.44	24.67	81.132	676.10	-529.72	1,492.19	1,438.31	53.88	27.697	
11,000.00	8,306.00	8,551.12	8,465.47	67.47	24.73	81.629	677.02	-531.39	1,590.52	1,536.66	53.86	29.532	
11,100.00	8,306.00	8,565.04	8,479.25	69.53	24.78	82.067	677.98	-533.11	1,688.95	1,635.10	53.85	31.363	
11,200.00	8,306.00	8,579.22	8,493.29	71.60	24.84	82.456	678.97	-534.88	1,787.46	1,733.60	53.86	33.189	
11,300.00	8,306.00	8,593.66	8,507.58	73.68	24.90	82.803	679.99	-536.70	1,886.03	1,832.16	53.87	35.011	
11,400.00	8,306.00	8,608.38	8,522.13	75.78	24.96	83.114	681.05	-538.57	1,984.65	1,930.76	53.89	36.827	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (204H,217H,224H) - Ray State Com 217H - Wellbore #2 - Surveys													Offset Site Error:
Survey Program: 165-VESSI_GYRO_DROP, 2837-MWD+HRGM, 13809-MWD+HRGM													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+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	77.622	97.02	442.09	453.01				
100.00	100.00	87.60	87.60	0.13	0.07	77.647	96.70	441.50	452.02	451.82	0.20	2,266.408	
200.00	200.00	193.90	193.86	0.49	0.19	77.738	95.48	439.27	449.71	449.05	0.67	674.491	
300.00	300.00	294.75	294.67	0.85	0.37	77.825	94.16	436.44	446.69	445.48	1.20	371.598	
400.00	400.00	394.24	394.12	1.20	0.54	77.885	93.08	433.63	443.70	441.96	1.74	255.545	
500.00	500.00	494.64	494.47	1.56	0.72	77.931	92.11	430.78	440.72	438.45	2.27	193.906	
600.00	600.00	595.62	595.39	1.92	0.89	77.911	91.59	427.62	437.55	434.74	2.81	155.667	
700.00	700.00	697.67	697.37	2.28	1.08	77.670	92.62	423.76	434.07	430.72	3.35	129.520	
750.00	750.00	748.44	748.07	2.46	1.17	77.472	93.66	421.50	432.12	428.50	3.62	119.317	
800.00	800.00	797.98	797.55	2.64	1.26	77.283	94.78	419.27	429.76	425.87	3.89	110.524	
900.00	899.93	896.90	896.34	2.99	1.43	77.022	97.12	414.93	422.78	418.36	4.42	95.656	
1,000.00	999.68	994.97	994.31	3.35	1.61	76.938	99.47	410.88	412.82	407.87	4.95	83.381	
1,100.00	1,099.13	1,094.40	1,093.63	3.71	1.79	77.049	101.74	407.00	399.85	394.37	5.49	72.895	
1,169.89	1,168.38	1,162.98	1,162.14	3.96	1.91	77.271	103.15	404.31	388.85	382.99	5.86	66.371	
1,200.00	1,198.18	1,192.35	1,191.49	4.08	1.96	77.396	103.74	403.21	383.81	377.79	6.02	63.762	
1,300.00	1,297.10	1,294.18	1,293.21	4.45	2.14	77.765	106.02	398.96	366.76	360.21	6.55	55.956	
1,400.00	1,396.03	1,399.92	1,398.69	4.83	2.33	77.854	109.83	392.62	348.25	341.15	7.10	49.063	
1,500.00	1,494.96	1,507.76	1,505.93	5.22	2.54	77.574	115.07	382.71	326.89	319.24	7.64	42.772	
1,600.00	1,593.89	1,605.20	1,602.67	5.61	2.73	77.200	120.52	372.43	304.42	296.24	8.18	37.211	
1,700.00	1,692.81	1,703.38	1,700.15	6.00	2.92	76.808	125.70	361.88	281.71	272.99	8.72	32.308	
1,800.00	1,791.74	1,800.08	1,796.16	6.39	3.10	76.367	130.83	351.55	259.07	249.82	9.26	27.981	
1,900.00	1,890.67	1,897.53	1,892.92	6.79	3.28	75.808	136.14	341.30	236.64	226.84	9.80	24.150	
2,000.00	1,989.60	1,995.63	1,990.30	7.19	3.47	75.102	141.46	330.67	213.94	203.61	10.34	20.696	
2,100.00	2,088.53	2,093.80	2,087.71	7.58	3.66	74.181	146.87	319.82	191.10	180.23	10.88	17.572	
2,200.00	2,187.45	2,191.58	2,184.57	7.98	3.84	72.618	153.18	307.99	167.60	156.18	11.42	14.681	
2,300.00	2,286.38	2,288.45	2,280.48	8.38	4.03	70.277	160.26	296.29	144.55	132.59	11.96	12.082	
2,400.00	2,385.31	2,385.51	2,376.37	8.78	4.22	66.393	168.56	283.85	121.64	109.12	12.52	9.716	
2,500.00	2,484.24	2,482.36	2,472.04	9.19	4.41	60.581	177.28	271.54	99.85	86.76	13.09	7.629	
2,600.00	2,583.16	2,579.37	2,567.88	9.59	4.60	51.837	185.70	259.14	79.42	65.74	13.69	5.803	
2,700.00	2,682.09	2,676.30	2,663.69	9.99	4.75	37.913	194.08	246.98	62.20	47.89	14.31	4.346	
2,800.00	2,781.02	2,773.51	2,759.79	10.39	4.85	16.075	202.17	234.83	50.87	35.90	14.97	3.399	
2,862.03	2,842.38	2,833.80	2,819.41	10.64	4.92	-1.079	206.99	227.28	48.66	33.29	15.37	3.166	CC, ES, SF
2,900.00	2,879.95	2,870.63	2,855.84	10.80	4.94	-11.798	209.89	222.68	49.53	33.96	15.57	3.181	
3,000.00	2,978.88	2,967.66	2,951.81	11.20	5.01	-35.641	217.56	210.64	59.07	43.13	15.95	3.704	
3,100.00	3,077.80	3,064.26	3,047.36	11.60	5.09	-51.009	225.31	198.71	75.53	59.25	16.28	4.640	
3,200.00	3,176.73	3,159.25	3,141.09	12.01	5.22	-60.399	233.76	185.83	96.79	80.16	16.63	5.821	
3,300.00	3,275.66	3,254.02	3,234.28	12.41	5.36	-66.171	243.25	171.47	121.52	104.49	17.03	7.136	
3,400.00	3,374.59	3,350.59	3,329.18	12.82	5.56	-69.902	253.16	156.55	147.39	129.86	17.53	8.407	
3,500.00	3,473.52	3,447.53	3,424.49	13.22	5.76	-72.515	262.97	141.82	173.41	155.34	18.06	9.599	
3,600.00	3,572.44	3,545.31	3,520.73	13.63	5.99	-74.462	272.60	127.49	199.11	180.46	18.64	10.681	
3,700.00	3,671.37	3,643.37	3,617.38	14.03	6.24	-76.000	281.92	113.73	224.30	205.07	19.23	11.663	
3,800.00	3,770.30	3,741.66	3,714.36	14.44	6.51	-77.294	290.81	100.50	248.99	229.15	19.84	12.549	
3,900.00	3,869.23	3,839.64	3,811.14	14.84	6.78	-78.430	299.22	87.78	273.21	252.75	20.46	13.353	
4,000.00	3,968.15	3,937.01	3,907.38	15.25	7.06	-79.453	307.20	75.30	297.31	276.23	21.08	14.102	
4,100.00	4,067.08	4,034.85	4,004.13	15.66	7.36	-80.374	314.88	62.88	321.31	299.59	21.72	14.793	
4,200.00	4,166.01	4,133.26	4,101.49	16.06	7.66	-81.195	322.33	50.71	345.01	322.64	22.37	15.421	
4,300.00	4,264.94	4,228.58	4,195.83	16.47	7.97	-81.960	329.39	39.05	368.64	345.64	23.00	16.027	
4,400.00	4,363.87	4,321.34	4,287.51	16.87	8.27	-82.643	336.46	26.84	393.24	369.63	23.61	16.656	
4,500.00	4,462.79	4,416.34	4,381.29	17.28	8.59	-83.219	343.86	13.52	418.73	394.48	24.25	17.266	
4,600.00	4,561.72	4,513.32	4,477.02	17.69	8.93	-83.743	351.20	-0.12	444.28	419.36	24.92	17.825	
4,700.00	4,660.65	4,609.97	4,572.46	18.09	9.27	-84.245	358.23	-13.69	469.80	444.20	25.60	18.353	
4,800.00	4,759.58	4,706.39	4,667.68	18.50	9.61	-84.736	364.93	-27.28	495.38	469.11	26.27	18.855	

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



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Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design:Ray State Com (204H,217H,224H) - Ray State Com 217H - Wellbore #2 - Surveys													Offset Site Error:	0.00 usft	
Survey Program: Reference		165-VESSI_GYRO_DROP, 2837-MWD+HRGM, 13809-MWD+HRGM		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned: Distance				Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
4,900.00	4,858.50	4,803.89	4,763.96	18.91	9.97	-85.155	371.84	-40.97	520.96	493.99	26.97	19.318			
5,000.00	4,957.43	4,902.11	4,860.88	19.31	10.33	-85.353	380.44	-54.36	546.31	518.63	27.68	19.740			
5,100.00	5,056.36	5,002.77	4,960.20	19.72	10.70	-85.417	390.19	-67.55	571.23	542.82	28.41	20.104			
5,200.00	5,155.29	5,104.47	5,060.72	20.13	11.08	-85.562	399.00	-80.18	595.39	566.23	29.16	20.418			
5,300.00	5,254.22	5,209.18	5,164.43	20.53	11.45	-85.772	406.94	-92.24	618.60	588.67	29.93	20.670			
5,400.00	5,353.14	5,313.04	5,267.51	20.94	11.83	-86.056	413.78	-103.00	640.60	609.91	30.68	20.877			
5,500.00	5,452.07	5,406.02	5,359.77	21.35	12.16	-86.355	420.16	-112.56	662.57	631.21	31.35	21.134			
5,600.00	5,551.00	5,498.86	5,451.77	21.75	12.50	-86.553	427.53	-122.67	685.22	653.20	32.02	21.400			
5,700.00	5,649.93	5,592.37	5,544.29	22.16	12.85	-86.671	435.79	-133.36	708.46	675.76	32.70	21.664			
5,800.00	5,748.86	5,685.63	5,636.46	22.57	13.21	-86.728	444.74	-144.47	732.22	698.84	33.39	21.932			
5,900.00	5,847.78	5,778.66	5,728.32	22.98	13.57	-86.776	453.79	-156.03	756.51	722.43	34.07	22.203			
6,000.00	5,946.71	5,871.93	5,820.38	23.38	13.93	-86.843	462.57	-168.14	781.30	746.54	34.76	22.476			
6,100.00	6,045.64	5,971.88	5,919.08	23.79	14.32	-86.899	471.50	-181.16	806.11	770.60	35.51	22.700			
6,200.00	6,144.57	6,072.76	6,018.80	24.20	14.72	-86.989	479.88	-193.94	830.54	794.27	36.27	22.900			
6,300.00	6,243.49	6,177.34	6,122.31	24.60	15.12	-87.098	487.89	-206.49	854.28	817.22	37.05	23.055			
6,400.00	6,342.42	6,274.65	6,218.74	25.01	15.49	-87.265	494.85	-217.50	877.32	839.54	37.78	23.224			
6,500.00	6,441.35	6,359.37	6,302.55	25.42	15.82	-87.430	501.67	-227.85	901.30	862.91	38.40	23.473			
6,600.00	6,540.28	6,448.41	6,390.39	25.83	16.17	-87.500	509.94	-239.87	926.59	887.53	39.05	23.726			
6,700.00	6,639.21	6,563.34	6,503.95	26.23	16.62	-87.482	519.74	-254.55	951.14	911.20	39.94	23.816			
6,800.00	6,738.13	6,663.98	6,603.69	26.64	17.02	-87.618	526.81	-265.98	974.22	933.53	40.69	23.940			
6,894.50	6,831.62	6,745.60	6,684.50	27.03	17.34	-87.782	532.73	-275.81	996.69	955.40	41.30	24.136			
6,900.00	6,837.06	6,750.35	6,689.19	27.05	17.35	-87.791	533.08	-276.41	998.03	956.70	41.33	24.147			
7,000.00	6,936.25	6,843.74	6,781.51	27.44	17.72	-87.842	540.29	-288.57	1,021.30	979.28	42.02	24.306			
7,100.00	7,035.82	6,952.36	6,889.01	27.82	18.14	-87.758	547.85	-302.15	1,041.32	998.50	42.82	24.317			
7,200.00	7,135.65	7,041.49	6,977.32	28.17	18.50	-87.667	553.39	-312.88	1,058.18	1,014.73	43.46	24.351			
7,300.00	7,235.62	7,116.95	7,051.85	28.51	18.80	-87.476	558.72	-323.39	1,074.20	1,030.25	43.96	24.438			
7,314.38	7,250.00	7,127.78	7,062.52	28.55	18.85	-87.437	559.55	-325.03	1,076.46	1,032.44	44.03	24.451			
7,400.00	7,335.62	7,194.15	7,127.80	28.83	19.12	-87.174	564.96	-335.77	1,090.65	1,046.20	44.45	24.536			
7,500.00	7,435.62	7,296.60	7,228.47	29.15	19.55	-86.789	573.14	-352.89	1,107.80	1,062.61	45.19	24.516			
7,600.00	7,535.62	7,402.17	7,332.34	29.47	19.99	-86.448	580.73	-370.15	1,124.58	1,078.63	45.95	24.473			
7,700.00	7,635.62	7,516.35	7,444.81	29.79	20.47	-86.031	590.02	-387.48	1,140.30	1,093.51	46.79	24.370			
7,800.00	7,735.62	7,617.86	7,544.87	30.11	20.89	-85.611	599.41	-401.76	1,155.05	1,107.53	47.52	24.309			
7,892.92	7,828.54	7,704.03	7,629.85	30.41	21.24	-85.314	606.38	-414.24	1,169.10	1,120.98	48.12	24.296			
7,900.00	7,835.62	7,710.60	7,636.33	30.43	21.27	-85.293	606.86	-415.22	1,170.14	1,121.97	48.16	24.295			
7,925.00	7,860.59	7,733.91	7,659.32	30.50	21.37	-85.217	608.52	-418.69	1,173.00	1,124.69	48.32	24.277			
7,950.00	7,885.48	7,752.00	7,677.16	30.57	21.44	-85.147	609.74	-421.42	1,174.64	1,126.21	48.42	24.257			
7,975.00	7,910.21	7,778.53	7,703.31	30.63	21.55	-85.043	611.55	-425.47	1,175.02	1,126.42	48.60	24.176			
8,000.00	7,934.72	7,800.11	7,724.58	30.69	21.65	-84.938	613.10	-428.82	1,174.20	1,125.46	48.73	24.094			
8,025.00	7,958.94	7,821.61	7,745.75	30.75	21.74	-84.818	614.70	-432.22	1,172.17	1,123.30	48.86	23.990			
8,050.00	7,982.80	7,842.97	7,766.77	30.80	21.83	-84.684	616.35	-435.64	1,168.93	1,119.94	48.99	23.863			
8,075.00	8,006.24	7,864.14	7,787.58	30.85	21.92	-84.534	618.05	-439.09	1,164.50	1,115.39	49.10	23.715			
8,100.00	8,029.19	7,885.06	7,808.15	30.89	22.00	-84.370	619.79	-442.55	1,158.89	1,109.67	49.22	23.546			
8,125.00	8,051.59	7,905.69	7,828.41	30.93	22.09	-84.191	621.56	-446.00	1,152.11	1,102.78	49.33	23.356			
8,150.00	8,073.38	7,925.98	7,848.31	30.96	22.18	-83.996	623.37	-449.45	1,144.18	1,094.75	49.43	23.146			
8,175.00	8,094.49	7,947.62	7,869.54	31.00	22.27	-83.779	625.35	-453.18	1,135.12	1,085.57	49.55	22.909			
8,200.00	8,114.88	7,973.96	7,895.38	31.03	22.38	-83.525	627.85	-457.65	1,124.86	1,075.15	49.71	22.628			
8,225.00	8,134.48	7,999.45	7,920.39	31.06	22.49	-83.253	630.35	-461.88	1,113.39	1,063.53	49.86	22.329			
8,250.00	8,153.25	8,024.02	7,944.51	31.08	22.60	-82.963	632.84	-465.87	1,100.76	1,050.75	50.01	22.012			
8,275.00	8,171.13	8,047.59	7,967.65	31.11	22.70	-82.656	635.31	-469.61	1,087.01	1,036.87	50.14	21.679			
8,300.00	8,188.06	8,070.09	7,989.74	31.13	22.80	-82.330	637.72	-473.10	1,072.20	1,021.94	50.27	21.330			
8,325.00	8,204.01	8,091.46	8,010.73	31.16	22.89	-81.986	640.08	-476.34	1,056.38	1,006.00	50.38	20.967			
8,350.00	8,218.93	8,111.64	8,030.56	31.18	22.98	-81.623	642.36	-479.34	1,039.59	989.11	50.49	20.591			

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Reference	Offset	Semi Major Axis		Azimuth		Offset Wellbore Centre		Distance		Rule Assigned:		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
8,375.00	8,232.78	8,131.08	8,049.66	31.21	23.06	-81.239	644.60	-482.17	1,021.91	971.32	50.59	20.200	
8,400.00	8,245.53	8,152.20	8,070.43	31.24	23.15	-80.825	646.99	-485.16	1,003.36	952.65	50.71	19.787	
8,425.00	8,257.13	8,171.67	8,089.61	31.27	23.22	-80.400	649.08	-487.83	983.98	933.16	50.81	19.364	
8,450.00	8,267.55	8,189.47	8,107.16	31.31	23.30	-79.962	650.91	-490.20	963.85	912.94	50.91	18.933	
8,475.00	8,276.78	8,205.56	8,123.03	31.35	23.36	-79.509	652.49	-492.27	943.05	892.06	50.99	18.494	
8,500.00	8,284.77	8,219.90	8,137.19	31.40	23.42	-79.039	653.84	-494.07	921.65	870.59	51.07	18.048	
8,525.00	8,291.51	8,232.48	8,149.62	31.45	23.47	-78.550	654.98	-495.61	899.74	848.61	51.13	17.598	
8,550.00	8,296.99	8,243.29	8,160.32	31.51	23.51	-78.040	655.93	-496.91	877.38	826.20	51.18	17.143	
8,575.00	8,301.18	8,252.33	8,169.26	31.57	23.55	-77.507	656.70	-497.97	854.66	803.44	51.23	16.684	
8,600.00	8,304.07	8,259.60	8,176.45	31.64	23.58	-76.948	657.31	-498.81	831.66	780.40	51.26	16.224	
8,625.00	8,305.66	8,265.11	8,181.91	31.72	23.60	-76.363	657.75	-499.44	808.44	757.15	51.29	15.762	
8,642.92	8,306.00	8,267.99	8,184.77	31.77	23.61	-75.926	657.98	-499.77	791.72	740.41	51.31	15.431	
8,700.00	8,306.00	8,275.73	8,192.43	31.99	23.65	-74.470	658.60	-500.63	738.30	686.94	51.36	14.375	
8,800.00	8,306.00	8,289.16	8,205.74	32.51	23.70	-71.689	659.62	-502.11	644.56	593.06	51.50	12.515	
8,812.71	8,306.00	8,290.85	8,207.41	32.59	23.71	-71.309	659.74	-502.29	632.64	581.11	51.53	12.278	
8,900.00	8,306.00	8,302.16	8,218.63	33.20	23.75	-68.292	660.56	-503.49	551.49	499.75	51.74	10.658	
9,000.00	8,306.00	8,314.47	8,230.85	34.04	23.80	-63.553	661.42	-504.77	461.03	408.84	52.19	8.834	
9,100.00	8,306.00	8,326.15	8,242.44	35.02	23.85	-56.585	662.19	-505.95	375.11	322.04	53.07	7.069	
9,200.00	8,306.00	8,334.82	8,251.04	36.13	23.88	-45.763	662.78	-506.85	297.80	242.97	54.83	5.432	
9,300.00	8,306.00	8,345.04	8,261.18	37.35	23.92	-28.548	663.46	-507.92	237.57	179.43	58.14	4.086	
9,400.00	8,306.00	8,355.46	8,271.52	38.67	23.96	-3.826	664.16	-509.01	209.72	147.72	62.00	3.383	
9,412.98	8,306.00	8,356.82	8,272.87	38.85	23.97	-0.307	664.25	-509.15	209.32	146.98	62.34	3.358	
9,500.00	8,306.00	8,366.07	8,282.05	40.08	24.00	22.026	664.86	-510.13	226.50	163.77	62.72	3.611	
9,600.00	8,306.00	8,376.88	8,292.77	41.57	24.04	41.030	665.58	-511.29	279.99	219.27	60.72	4.611	
9,700.00	8,306.00	8,387.90	8,303.71	43.14	24.09	53.065	666.31	-512.47	353.92	295.28	58.63	6.036	
9,800.00	8,306.00	8,399.14	8,314.85	44.77	24.13	60.733	667.05	-513.70	438.04	380.89	57.15	7.665	
9,900.00	8,306.00	8,410.60	8,326.21	46.46	24.18	65.875	667.81	-514.96	527.49	471.34	56.15	9.394	
10,000.00	8,306.00	8,422.28	8,337.80	48.19	24.22	69.508	668.57	-516.26	619.97	564.49	55.48	11.175	
10,100.00	8,306.00	8,434.20	8,349.62	49.98	24.27	72.191	669.36	-517.59	714.30	659.29	55.01	12.984	
10,200.00	8,306.00	8,446.35	8,361.67	51.80	24.31	74.245	670.15	-518.97	809.82	755.14	54.68	14.811	
10,300.00	8,306.00	8,458.76	8,373.97	53.67	24.36	75.863	670.96	-520.39	906.15	851.72	54.44	16.646	
10,400.00	8,306.00	8,471.42	8,386.52	55.56	24.41	77.169	671.79	-521.85	1,003.06	948.80	54.26	18.488	
10,500.00	8,306.00	8,484.35	8,399.33	57.49	24.46	78.244	672.63	-523.36	1,100.39	1,046.26	54.12	20.331	
10,600.00	8,306.00	8,497.55	8,412.41	59.44	24.51	79.143	673.48	-524.92	1,198.03	1,144.00	54.03	22.175	
10,700.00	8,306.00	8,511.03	8,425.76	61.42	24.57	79.906	674.35	-526.52	1,295.91	1,241.95	53.95	24.018	
10,800.00	8,306.00	8,524.02	8,438.63	63.42	24.62	80.563	675.20	-528.09	1,393.97	1,340.07	53.91	25.859	
10,900.00	8,306.00	8,537.45	8,451.93	65.44	24.67	81.132	676.10	-529.72	1,492.19	1,438.31	53.88	27.697	
11,000.00	8,306.00	8,551.12	8,465.47	67.47	24.73	81.629	677.02	-531.39	1,590.52	1,536.66	53.86	29.532	
11,100.00	8,306.00	8,565.04	8,479.25	69.53	24.78	82.067	677.98	-533.11	1,688.95	1,635.10	53.85	31.363	
11,200.00	8,306.00	8,579.22	8,493.29	71.60	24.84	82.456	678.97	-534.88	1,787.46	1,733.60	53.86	33.189	
11,300.00	8,306.00	8,593.66	8,507.58	73.68	24.90	82.803	679.99	-536.70	1,886.03	1,832.16	53.87	35.011	
11,400.00	8,306.00	8,608.38	8,522.13	75.78	24.96	83.114	681.05	-538.57	1,984.65	1,930.76	53.89	36.827	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (204H,217H,224H) - Ray State Com 223H - Wellbore #1 - Surveys													Offset Site Error:
													0.00 usft
Survey Program:	200-MWD+HRGM												Offset Well Error:
Reference	Offset												0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	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
8,550.00	8,296.99	8,365.77	8,345.89	31.51	29.17	-73.198	1,047.02	-1,538.19	1,977.40	1,918.13	59.27	33.365	
8,575.00	8,301.18	8,368.97	8,349.09	31.57	29.19	-72.924	1,047.01	-1,538.08	1,954.48	1,895.19	59.28	32.968	
8,600.00	8,304.07	8,370.93	8,351.05	31.64	29.19	-72.642	1,047.00	-1,538.01	1,931.47	1,872.17	59.30	32.572	
8,625.00	8,305.66	8,371.65	8,351.76	31.72	29.20	-72.352	1,047.00	-1,537.99	1,908.45	1,849.14	59.31	32.178	
8,642.92	8,306.00	8,371.39	8,351.51	31.77	29.19	-72.140	1,047.00	-1,538.00	1,891.98	1,832.66	59.32	31.896	
8,700.00	8,306.00	8,369.53	8,349.65	31.99	29.19	-71.462	1,047.00	-1,538.06	1,839.36	1,780.02	59.34	30.996	
8,800.00	8,306.00	8,366.23	8,346.35	32.51	29.18	-70.301	1,047.02	-1,538.17	1,746.26	1,686.84	59.41	29.391	
8,812.71	8,306.00	8,365.81	8,345.93	32.59	29.17	-70.156	1,047.02	-1,538.19	1,734.35	1,674.92	59.43	29.184	
8,900.00	8,306.00	8,362.88	8,343.01	33.20	29.16	-69.114	1,047.03	-1,538.29	1,652.72	1,593.19	59.52	27.766	
9,000.00	8,306.00	8,359.50	8,339.63	34.04	29.15	-67.786	1,047.05	-1,538.41	1,559.95	1,500.27	59.68	26.138	
9,100.00	8,306.00	8,356.09	8,336.22	35.02	29.14	-66.292	1,047.06	-1,538.53	1,468.13	1,408.22	59.91	24.505	
9,200.00	8,306.00	8,352.65	8,332.78	36.13	29.13	-64.599	1,047.07	-1,538.65	1,377.44	1,317.20	60.23	22.868	
9,300.00	8,306.00	8,349.18	8,329.31	37.35	29.12	-62.670	1,047.08	-1,538.77	1,288.11	1,227.44	60.67	21.230	
9,400.00	8,306.00	8,345.68	8,325.81	38.67	29.10	-60.457	1,047.09	-1,538.89	1,200.46	1,139.19	61.27	19.593	
9,500.00	8,306.00	8,342.14	8,322.27	40.08	29.09	-57.900	1,047.10	-1,539.02	1,114.89	1,052.81	62.07	17.961	
9,600.00	8,306.00	8,338.57	8,318.71	41.57	29.08	-54.924	1,047.11	-1,539.15	1,031.89	968.76	63.13	16.345	
9,700.00	8,306.00	8,334.96	8,315.10	43.14	29.06	-51.441	1,047.12	-1,539.28	952.16	887.63	64.52	14.757	
9,800.00	8,306.00	8,331.33	8,311.47	44.77	29.05	-47.339	1,047.13	-1,539.41	876.57	810.26	66.32	13.218	
9,900.00	8,306.00	8,327.65	8,307.80	46.46	29.04	-42.494	1,047.13	-1,539.54	806.31	737.73	68.58	11.758	
10,000.00	8,306.00	8,323.95	8,304.09	48.19	29.03	-36.776	1,047.14	-1,539.68	742.87	671.53	71.34	10.413	
10,100.00	8,306.00	8,320.18	8,300.34	49.98	29.01	-30.073	1,047.14	-1,539.81	688.15	613.60	74.55	9.231	
10,200.00	8,306.00	8,316.38	8,296.53	51.80	29.00	-22.341	1,047.15	-1,539.95	644.38	566.34	78.04	8.257	
10,300.00	8,306.00	8,312.54	8,292.70	53.67	28.98	-13.668	1,047.15	-1,540.10	613.89	532.43	81.46	7.536	
10,400.00	8,306.00	8,308.68	8,288.84	55.56	28.97	-4.329	1,047.15	-1,540.24	598.73	514.38	84.35	7.099	
10,442.06	8,306.00	8,307.04	8,287.20	56.37	28.96	-0.307	1,047.15	-1,540.30	597.25	511.96	85.30	7.002 CC, ES	
10,500.00	8,306.00	8,304.79	8,284.95	57.49	28.96	5.226	1,047.15	-1,540.38	600.05	513.77	86.28	6.955 SF	
10,600.00	8,306.00	8,300.87	8,281.03	59.44	28.94	14.485	1,047.15	-1,540.53	617.75	530.68	87.07	7.095	
10,700.00	8,306.00	8,296.92	8,277.09	61.42	28.93	23.021	1,047.15	-1,540.68	650.50	563.68	86.82	7.493	
10,800.00	8,306.00	8,292.95	8,273.12	63.42	28.91	30.591	1,047.15	-1,540.83	696.16	610.34	85.82	8.112	
10,900.00	8,306.00	8,288.95	8,269.12	65.44	28.90	37.132	1,047.14	-1,540.98	752.40	668.01	84.39	8.916	
11,000.00	8,306.00	8,284.92	8,265.09	67.47	28.89	42.702	1,047.14	-1,541.13	817.03	734.24	82.79	9.869	
11,100.00	8,306.00	8,280.86	8,261.04	69.53	28.87	47.420	1,047.13	-1,541.28	888.23	807.04	81.19	10.941	
11,200.00	8,306.00	8,276.77	8,256.95	71.60	28.86	51.415	1,047.12	-1,541.44	964.53	884.86	79.67	12.107	
11,300.00	8,306.00	8,272.65	8,252.83	73.68	28.84	54.811	1,047.11	-1,541.60	1,044.83	966.55	78.28	13.347	
11,400.00	8,306.00	8,268.50	8,248.69	75.78	28.83	57.714	1,047.10	-1,541.75	1,128.26	1,051.23	77.03	14.647	
11,500.00	8,306.00	8,264.32	8,244.51	77.89	28.81	60.212	1,047.09	-1,541.92	1,214.19	1,138.27	75.92	15.994	
11,600.00	8,306.00	8,260.11	8,240.30	80.01	28.80	62.376	1,047.08	-1,542.08	1,302.11	1,227.19	74.93	17.378	
11,700.00	8,306.00	8,255.87	8,236.07	82.13	28.78	64.265	1,047.06	-1,542.24	1,391.66	1,317.61	74.05	18.793	
11,800.00	8,306.00	8,251.60	8,231.80	84.27	28.77	65.923	1,047.04	-1,542.41	1,482.53	1,409.25	73.28	20.232	
11,900.00	8,306.00	8,247.29	8,227.50	86.42	28.75	67.389	1,047.03	-1,542.58	1,574.50	1,501.91	72.59	21.690	
12,000.00	8,306.00	8,242.96	8,223.16	88.58	28.74	68.693	1,047.01	-1,542.75	1,667.38	1,595.40	71.98	23.165	
12,100.00	8,306.00	8,238.59	8,218.80	90.74	28.72	69.858	1,046.98	-1,542.92	1,761.03	1,689.60	71.43	24.653	
12,200.00	8,306.00	8,234.19	8,214.40	92.91	28.70	70.906	1,046.96	-1,543.09	1,855.34	1,784.40	70.94	26.152	
12,300.00	8,306.00	8,229.75	8,209.97	95.08	28.69	71.852	1,046.94	-1,543.27	1,950.20	1,879.70	70.51	27.660	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (204H,217H,224H) - Ray State Com 223H - Wellbore #2 - Surveys													Offset Site Error:
													0.00 usft
Survey Program:	Reference	Offset	Semi Major Axis	Offset	Reference	Offset	Azimuth from North (°)	Offset Wellbore Centre	Distance	Rule Assigned:	Minimum Separation	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Reference	Offset	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Warning
8,550.00	8,296.99	8,365.77	8,345.89	31.51	29.17	-73.198	1,047.02	-1,538.19	1,977.40	1,918.13	59.27	33.365	
8,575.00	8,301.18	8,368.97	8,349.09	31.57	29.19	-72.924	1,047.01	-1,538.08	1,954.48	1,895.19	59.28	32.968	
8,600.00	8,304.07	8,370.93	8,351.05	31.64	29.19	-72.642	1,047.00	-1,538.01	1,931.47	1,872.17	59.30	32.572	
8,625.00	8,305.66	8,371.65	8,351.76	31.72	29.20	-72.352	1,047.00	-1,537.99	1,908.45	1,849.14	59.31	32.178	
8,642.92	8,306.00	8,371.39	8,351.51	31.77	29.19	-72.140	1,047.00	-1,538.00	1,891.98	1,832.66	59.32	31.896	
8,700.00	8,306.00	8,369.53	8,349.65	31.99	29.19	-71.462	1,047.00	-1,538.06	1,839.36	1,780.02	59.34	30.996	
8,800.00	8,306.00	8,366.23	8,346.35	32.51	29.18	-70.301	1,047.02	-1,538.17	1,746.26	1,686.84	59.41	29.391	
8,812.71	8,306.00	8,365.81	8,345.93	32.59	29.17	-70.156	1,047.02	-1,538.19	1,734.35	1,674.92	59.43	29.184	
8,900.00	8,306.00	8,362.88	8,343.01	33.20	29.16	-69.114	1,047.03	-1,538.29	1,652.72	1,593.19	59.52	27.766	
9,000.00	8,306.00	8,359.50	8,339.63	34.04	29.15	-67.786	1,047.05	-1,538.41	1,559.95	1,500.27	59.68	26.138	
9,100.00	8,306.00	8,356.09	8,336.22	35.02	29.14	-66.292	1,047.06	-1,538.53	1,468.13	1,408.22	59.91	24.505	
9,200.00	8,306.00	8,352.65	8,332.78	36.13	29.13	-64.599	1,047.07	-1,538.65	1,377.44	1,317.20	60.23	22.868	
9,300.00	8,306.00	8,349.18	8,329.31	37.35	29.12	-62.670	1,047.08	-1,538.77	1,288.11	1,227.44	60.67	21.230	
9,400.00	8,306.00	8,345.68	8,325.81	38.67	29.10	-60.457	1,047.09	-1,538.89	1,200.46	1,139.19	61.27	19.593	
9,500.00	8,306.00	8,342.14	8,322.27	40.08	29.09	-57.900	1,047.10	-1,539.02	1,114.89	1,052.81	62.07	17.961	
9,600.00	8,306.00	8,338.57	8,318.71	41.57	29.08	-54.924	1,047.11	-1,539.15	1,031.89	968.76	63.13	16.345	
9,700.00	8,306.00	8,334.96	8,315.10	43.14	29.06	-51.441	1,047.12	-1,539.28	952.16	887.63	64.52	14.757	
9,800.00	8,306.00	8,331.33	8,311.47	44.77	29.05	-47.339	1,047.13	-1,539.41	876.57	810.26	66.32	13.218	
9,900.00	8,306.00	8,327.65	8,307.80	46.46	29.04	-42.494	1,047.13	-1,539.54	806.31	737.73	68.58	11.758	
10,000.00	8,306.00	8,323.95	8,304.09	48.19	29.03	-36.776	1,047.14	-1,539.68	742.87	671.53	71.34	10.413	
10,100.00	8,306.00	8,320.18	8,300.34	49.98	29.01	-30.073	1,047.14	-1,539.81	688.15	613.60	74.55	9.231	
10,200.00	8,306.00	8,316.38	8,296.53	51.80	29.00	-22.341	1,047.15	-1,539.95	644.38	566.34	78.04	8.257	
10,300.00	8,306.00	8,312.54	8,292.70	53.67	28.98	-13.668	1,047.15	-1,540.10	613.89	532.43	81.46	7.536	
10,400.00	8,306.00	8,308.68	8,288.84	55.56	28.97	-4.329	1,047.15	-1,540.24	598.73	514.38	84.35	7.099	
10,442.06	8,306.00	8,307.04	8,287.20	56.37	28.96	-0.307	1,047.15	-1,540.30	597.25	511.96	85.30	7.002 CC, ES	
10,500.00	8,306.00	8,304.79	8,284.95	57.49	28.96	5.226	1,047.15	-1,540.38	600.05	513.77	86.28	6.955 SF	
10,600.00	8,306.00	8,300.87	8,281.03	59.44	28.94	14.485	1,047.15	-1,540.53	617.75	530.68	87.07	7.095	
10,700.00	8,306.00	8,296.92	8,277.09	61.42	28.93	23.021	1,047.15	-1,540.68	650.50	563.68	86.82	7.493	
10,800.00	8,306.00	8,292.95	8,273.12	63.42	28.91	30.591	1,047.15	-1,540.83	696.16	610.34	85.82	8.112	
10,900.00	8,306.00	8,288.95	8,269.12	65.44	28.90	37.132	1,047.14	-1,540.98	752.40	668.01	84.39	8.916	
11,000.00	8,306.00	8,284.92	8,265.09	67.47	28.89	42.702	1,047.14	-1,541.13	817.03	734.24	82.79	9.869	
11,100.00	8,306.00	8,280.86	8,261.04	69.53	28.87	47.420	1,047.13	-1,541.28	888.23	807.04	81.19	10.941	
11,200.00	8,306.00	8,276.77	8,256.95	71.60	28.86	51.415	1,047.12	-1,541.44	964.53	884.86	79.67	12.107	
11,300.00	8,306.00	8,272.65	8,252.83	73.68	28.84	54.811	1,047.11	-1,541.60	1,044.83	966.55	78.28	13.347	
11,400.00	8,306.00	8,268.50	8,248.69	75.78	28.83	57.714	1,047.10	-1,541.75	1,128.26	1,051.23	77.03	14.647	
11,500.00	8,306.00	8,264.32	8,244.51	77.89	28.81	60.212	1,047.09	-1,541.92	1,214.19	1,138.27	75.92	15.994	
11,600.00	8,306.00	8,260.11	8,240.30	80.01	28.80	62.376	1,047.08	-1,542.08	1,302.11	1,227.19	74.93	17.378	
11,700.00	8,306.00	8,255.87	8,236.07	82.13	28.78	64.265	1,047.06	-1,542.24	1,391.66	1,317.61	74.05	18.793	
11,800.00	8,306.00	8,251.60	8,231.80	84.27	28.77	65.923	1,047.04	-1,542.41	1,482.53	1,409.25	73.28	20.232	
11,900.00	8,306.00	8,247.29	8,227.50	86.42	28.75	67.389	1,047.03	-1,542.58	1,574.50	1,501.91	72.59	21.690	
12,000.00	8,306.00	8,242.96	8,223.16	88.58	28.74	68.693	1,047.01	-1,542.75	1,667.38	1,595.40	71.98	23.165	
12,100.00	8,306.00	8,238.59	8,218.80	90.74	28.72	69.858	1,046.98	-1,542.92	1,761.03	1,689.60	71.43	24.653	
12,200.00	8,306.00	8,234.19	8,214.40	92.91	28.70	70.906	1,046.96	-1,543.09	1,855.34	1,784.40	70.94	26.152	
12,300.00	8,306.00	8,229.75	8,209.97	95.08	28.69	71.852	1,046.94	-1,543.27	1,950.20	1,879.70	70.51	27.660	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (204H,217H,224H) - Ray State Com 224H - Wellbore #1 - Surveys													Offset Site Error:
Survey Program: 65-VESLI_GYRO_DROP, 2853-MWD+HRGM													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	85.878	34.02	472.09	473.69				
100.00	100.00	83.68	83.68	0.13	0.07	85.880	33.99	471.81	473.04	472.85	0.19	2,429.799	
200.00	200.00	183.47	183.46	0.49	0.24	85.786	34.71	471.14	472.42	471.70	0.73	648.118	
276.62	276.62	257.60	257.58	0.76	0.38	85.622	36.05	470.83	472.21	471.08	1.14	416.019	
300.00	300.00	279.46	279.43	0.85	0.41	85.563	36.54	470.83	472.25	470.99	1.26	375.508	
400.00	400.00	372.82	372.77	1.20	0.58	85.314	38.66	471.62	473.28	471.50	1.78	265.667	
500.00	500.00	467.99	467.89	1.56	0.75	85.121	40.44	473.78	475.68	473.38	2.31	206.291	
600.00	600.00	569.42	569.28	1.92	0.93	85.082	41.00	476.46	478.36	475.52	2.84	168.417	
700.00	700.00	674.59	674.43	2.28	1.11	85.235	39.90	478.66	480.37	476.98	3.38	142.001	
750.00	750.00	726.91	726.73	2.46	1.20	85.357	38.92	479.28	480.88	477.22	3.65	131.607	
800.00	800.00	774.06	773.87	2.64	1.28	85.480	38.16	479.90	481.09	477.18	3.91	122.926	
900.00	899.93	871.17	870.96	2.99	1.45	85.778	37.57	481.80	479.98	475.54	4.44	108.203	
1,000.00	999.68	973.75	973.52	3.35	1.63	86.098	38.60	483.70	475.90	470.93	4.97	95.727	
1,100.00	1,099.13	1,086.42	1,086.17	3.71	1.83	86.528	40.47	483.90	467.26	461.73	5.53	84.539	
1,169.89	1,168.38	1,155.79	1,155.53	3.96	1.95	87.106	40.66	482.93	458.33	452.43	5.90	77.704	
1,200.00	1,198.18	1,185.39	1,185.12	4.08	2.00	87.437	40.34	482.56	454.21	448.15	6.06	74.974	
1,300.00	1,297.10	1,287.82	1,287.53	4.45	2.18	88.578	39.29	480.84	440.24	433.65	6.59	66.769	
1,400.00	1,396.03	1,390.67	1,390.34	4.83	2.36	89.486	40.51	478.10	425.49	418.36	7.13	59.654	
1,500.00	1,494.96	1,492.51	1,492.05	5.22	2.54	90.116	44.20	474.50	409.99	402.32	7.67	53.420	
1,600.00	1,593.89	1,591.64	1,590.89	5.61	2.72	90.425	50.44	470.38	393.90	385.68	8.22	47.924	
1,700.00	1,692.81	1,688.23	1,687.11	6.00	2.90	90.535	58.16	466.92	378.36	369.60	8.77	43.158	
1,800.00	1,791.74	1,788.23	1,786.59	6.39	3.08	90.366	67.71	463.42	362.88	353.56	9.32	38.932	
1,900.00	1,890.67	1,891.65	1,889.31	6.79	3.28	89.915	78.87	459.03	346.68	336.80	9.88	35.092	
2,000.00	1,989.60	1,994.64	1,991.28	7.19	3.48	89.077	91.97	453.00	328.90	318.46	10.44	31.512	
2,100.00	2,088.53	2,094.94	2,090.54	7.58	3.68	88.222	104.62	446.16	310.23	299.23	10.99	28.221	
2,200.00	2,187.45	2,190.53	2,185.19	7.98	3.87	87.437	116.37	439.63	291.62	280.06	11.55	25.246	
2,300.00	2,286.38	2,287.91	2,281.68	8.38	4.05	86.562	128.08	433.80	273.89	261.78	12.11	22.623	
2,400.00	2,385.31	2,383.39	2,376.40	8.78	4.23	85.759	138.99	428.65	256.78	244.11	12.66	20.277	
2,500.00	2,484.24	2,480.69	2,472.98	9.19	4.41	84.858	149.90	424.34	240.66	227.45	13.22	18.208	
2,600.00	2,583.16	2,580.25	2,571.83	9.59	4.59	83.793	160.95	419.98	224.66	210.89	13.77	16.321	
2,700.00	2,682.09	2,680.73	2,671.46	9.99	4.77	82.284	172.92	414.75	208.04	193.73	14.30	14.543	
2,800.00	2,781.02	2,778.89	2,768.76	10.39	4.87	80.564	184.67	409.26	191.21	176.44	14.77	12.946	
2,900.00	2,879.95	2,876.76	2,865.89	10.80	4.96	78.816	195.54	404.06	174.70	159.47	15.23	11.473	
3,000.00	2,978.88	2,973.48	2,961.81	11.20	5.02	76.552	207.02	399.56	159.19	143.53	15.66	10.166	
3,100.00	3,077.80	3,070.91	3,058.31	11.60	5.09	73.349	219.92	395.78	145.13	129.03	16.10	9.013	
3,200.00	3,176.73	3,169.76	3,156.20	12.01	5.20	69.330	233.20	392.07	131.84	115.26	16.58	7.954	
3,300.00	3,275.66	3,268.58	3,254.07	12.41	5.34	64.506	246.28	388.27	119.17	102.10	17.07	6.981	
3,400.00	3,374.59	3,367.32	3,351.86	12.82	5.50	58.554	259.34	384.32	107.43	89.83	17.60	6.103	
3,500.00	3,473.52	3,466.27	3,449.87	13.22	5.68	51.184	272.39	380.20	96.99	78.83	18.17	5.339	
3,600.00	3,572.44	3,565.53	3,548.26	13.63	5.89	42.408	284.75	375.86	87.86	69.09	18.77	4.681	
3,700.00	3,671.37	3,664.00	3,645.93	14.03	6.11	32.069	296.47	371.40	80.67	61.24	19.43	4.152	
3,800.00	3,770.30	3,761.87	3,742.91	14.44	6.35	20.068	308.84	367.07	77.31	57.18	20.13	3.841	
3,824.59	3,794.63	3,785.93	3,766.74	14.54	6.40	16.973	312.02	366.03	77.17	56.87	20.30	3.801 CC, ES	
3,900.00	3,869.23	3,860.09	3,840.15	14.84	6.60	7.485	322.00	362.81	78.32	57.47	20.85	3.756 SF	
4,000.00	3,968.15	3,958.48	3,937.53	15.25	6.87	-4.334	335.38	358.47	83.11	61.54	21.57	3.852	
4,100.00	4,067.08	4,057.27	4,035.30	15.66	7.15	-14.605	348.78	353.98	90.94	68.65	22.29	4.080	
4,200.00	4,166.01	4,156.19	4,133.27	16.06	7.44	-23.264	361.67	349.26	100.74	77.75	22.99	4.381	
4,300.00	4,264.94	4,255.10	4,231.29	16.47	7.74	-30.516	373.97	344.29	112.00	88.31	23.69	4.728	
4,400.00	4,363.87	4,353.97	4,329.32	16.87	8.05	-36.640	385.66	339.03	124.37	100.00	24.37	5.103	
4,500.00	4,462.79	4,450.70	4,425.18	17.28	8.36	-41.601	397.45	333.68	138.29	113.27	25.02	5.527	
4,600.00	4,561.72	4,547.09	4,520.48	17.69	8.68	-45.234	410.82	328.26	154.28	128.62	25.67	6.011	
4,700.00	4,660.65	4,645.17	4,617.33	18.09	9.01	-47.954	425.28	322.65	171.41	145.05	26.36	6.503	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (204H,217H,224H) - Ray State Com 224H - Wellbore #1 - Surveys													Offset Site Error:
Survey Program: 65-VESSE_GYRO_DROP, 2853-MWD+HRGM													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,800.00	4,759.58	4,743.37	4,714.29	18.50	9.35	-50.205	439.71	316.91	188.91	161.85	27.06	6.981	
4,900.00	4,858.50	4,843.53	4,813.29	18.91	9.71	-52.132	453.83	311.21	206.17	178.37	27.80	7.416	
5,000.00	4,957.43	4,943.75	4,912.50	19.31	10.06	-53.913	466.92	305.88	222.72	194.18	28.54	7.804	
5,100.00	5,056.36	5,043.21	5,011.09	19.72	10.40	-55.622	479.03	300.68	238.87	209.61	29.26	8.163	
5,200.00	5,155.29	5,142.99	5,110.08	20.13	10.75	-57.256	490.38	295.46	254.79	224.80	29.99	8.496	
5,300.00	5,254.22	5,243.62	5,209.98	20.53	11.10	-58.653	501.59	290.85	270.22	239.49	30.73	8.793	
5,400.00	5,353.14	5,342.17	5,307.84	20.94	11.45	-59.866	512.53	287.01	285.20	253.75	31.45	9.069	
5,500.00	5,452.07	5,437.35	5,402.32	21.35	11.78	-61.095	523.07	282.39	301.11	268.99	32.12	9.373	
5,600.00	5,551.00	5,533.24	5,497.44	21.75	12.13	-62.272	533.80	276.61	318.20	285.39	32.81	9.698	
5,700.00	5,649.93	5,630.39	5,593.69	22.16	12.48	-63.179	545.57	270.71	335.86	302.34	33.52	10.019	
5,800.00	5,748.86	5,726.82	5,689.10	22.57	12.84	-63.850	558.25	264.96	353.98	319.74	34.23	10.340	
5,900.00	5,847.78	5,822.44	5,783.59	22.98	13.20	-64.379	571.63	258.95	372.77	337.83	34.94	10.669	
6,000.00	5,946.71	5,921.17	5,881.08	23.38	13.58	-64.763	585.91	252.48	392.04	356.35	35.69	10.985	
6,100.00	6,045.64	6,022.77	5,981.54	23.79	13.97	-65.176	599.64	246.12	410.65	374.18	36.47	11.259	
6,200.00	6,144.57	6,124.87	6,082.66	24.20	14.35	-65.642	612.43	240.23	428.44	391.18	37.26	11.500	
6,300.00	6,243.49	6,227.38	6,184.30	24.60	14.74	-66.086	624.74	235.09	445.36	407.32	38.04	11.707	
6,400.00	6,342.42	6,326.62	6,282.74	25.01	15.11	-66.521	636.52	230.70	461.73	422.94	38.79	11.903	
6,500.00	6,441.35	6,425.27	6,380.55	25.42	15.47	-66.873	648.68	226.55	478.11	438.57	39.54	12.092	
6,600.00	6,540.28	6,524.74	6,479.20	25.83	15.85	-67.208	660.77	222.40	494.41	454.12	40.29	12.271	
6,700.00	6,639.21	6,624.22	6,577.95	26.23	16.22	-67.630	671.92	218.03	510.56	469.51	41.04	12.439	
6,800.00	6,738.13	6,722.56	6,675.68	26.64	16.58	-68.160	681.87	213.33	526.68	484.90	41.78	12.607	
6,894.50	6,831.62	6,815.12	6,767.73	27.03	16.91	-68.760	690.16	208.41	542.01	499.55	42.46	12.764	
6,900.00	6,837.06	6,820.32	6,772.91	27.05	16.93	-68.798	690.60	208.12	542.91	500.40	42.50	12.774	
7,000.00	6,936.25	6,915.01	6,867.06	27.44	17.28	-69.277	699.03	202.60	558.60	515.41	43.19	12.934	
7,100.00	7,035.82	7,010.44	6,961.85	27.82	17.63	-69.391	708.22	196.57	573.10	529.23	43.87	13.063	
7,200.00	7,135.65	7,109.61	7,060.30	28.17	18.00	-69.147	718.30	190.23	585.91	541.33	44.58	13.142	
7,300.00	7,235.62	7,208.69	7,158.63	28.51	18.38	-68.589	728.83	184.07	596.82	551.54	45.28	13.180	
7,314.38	7,250.00	7,222.85	7,172.68	28.55	18.43	-68.480	730.41	183.21	598.24	552.86	45.38	13.182	
7,400.00	7,335.62	7,307.05	7,256.13	28.83	18.75	-67.762	740.46	178.34	606.68	560.71	45.97	13.197	
7,500.00	7,435.62	7,404.53	7,352.60	29.15	19.13	-66.829	753.40	173.10	616.82	570.16	46.65	13.221	
7,600.00	7,535.62	7,500.67	7,447.70	29.47	19.51	-65.928	766.40	167.64	627.50	580.17	47.33	13.259	
7,700.00	7,635.62	7,599.44	7,545.41	29.79	19.90	-65.076	779.48	161.49	638.70	590.68	48.02	13.300	
7,800.00	7,735.62	7,703.49	7,648.55	30.11	20.29	-64.369	791.42	154.71	649.52	600.76	48.76	13.320	
7,892.92	7,828.54	7,803.02	7,747.42	30.41	20.67	-63.884	800.74	148.14	658.86	609.39	49.47	13.319	
7,900.00	7,835.62	7,810.81	7,755.17	30.43	20.70	-63.848	801.40	147.65	659.48	609.96	49.52	13.317	
7,925.00	7,860.59	7,838.34	7,782.56	30.50	20.80	-63.690	803.65	145.97	660.89	611.18	49.71	13.296	
7,950.00	7,885.48	7,865.88	7,809.96	30.57	20.90	-63.479	805.79	144.35	661.09	611.21	49.89	13.252	
7,975.00	7,910.21	7,893.33	7,837.29	30.63	21.00	-63.215	807.81	142.79	660.09	610.03	50.07	13.185	
8,000.00	7,934.72	7,920.61	7,864.47	30.69	21.10	-62.897	809.70	141.32	657.91	607.67	50.24	13.096	
8,025.00	7,958.94	7,947.63	7,891.39	30.75	21.19	-62.523	811.46	139.91	654.55	604.14	50.41	12.985	
8,050.00	7,982.80	7,970.00	7,913.69	30.80	21.28	-62.095	812.96	138.77	650.14	599.61	50.54	12.865	
8,075.00	8,006.24	7,992.75	7,936.35	30.85	21.36	-61.591	814.56	137.62	644.75	594.08	50.67	12.725	
8,100.00	8,029.19	8,015.07	7,958.58	30.89	21.44	-61.012	816.21	136.49	638.40	587.61	50.79	12.569	
8,125.00	8,051.59	8,036.88	7,980.30	30.93	21.52	-60.355	817.91	135.39	631.15	580.24	50.91	12.397	
8,150.00	8,073.38	8,058.13	8,001.46	30.96	21.60	-59.616	819.63	134.33	623.03	572.00	51.02	12.211	
8,175.00	8,094.49	8,078.77	8,021.99	31.00	21.67	-58.791	821.37	133.31	614.09	562.96	51.13	12.011	
8,200.00	8,114.88	8,098.73	8,041.85	31.03	21.74	-57.876	823.13	132.32	604.39	553.16	51.23	11.798	
8,225.00	8,134.48	8,117.96	8,060.97	31.06	21.81	-56.866	824.88	131.38	594.00	542.68	51.32	11.574	
8,250.00	8,153.25	8,137.37	8,080.27	31.08	21.88	-55.751	826.69	130.43	582.98	531.56	51.42	11.338	
8,275.00	8,171.13	8,157.30	8,100.10	31.11	21.96	-54.532	828.51	129.47	571.34	519.82	51.52	11.089	
8,300.00	8,188.06	8,176.26	8,118.97	31.13	22.03	-53.208	830.17	128.56	559.16	507.54	51.62	10.833	
8,325.00	8,204.01	8,194.20	8,136.83	31.16	22.09	-51.773	831.69	127.72	546.54	494.83	51.71	10.569	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Ray State Com (204H,217H,224H) - Ray State Com 224H - Wellbore #1 - Surveys

Survey Program: 65-VESLI_GYRO_DROP, 2853-MWD+HRGM										Rule Assigned:		Offset Site Error:	0.00 usft
Reference: 65-VESLI_GYRO_DROP, 2853-MWD+HRGM										Offset Well Error:		0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	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
8,350.00	8,218.93	8,211.07	8,153.62	31.18	22.15	-50.217	833.06	126.93	533.57	481.77	51.80	10.301	
8,375.00	8,232.78	8,226.82	8,169.30	31.21	22.21	-48.532	834.30	126.21	520.37	468.49	51.88	10.031	
8,400.00	8,245.53	8,241.40	8,183.82	31.24	22.26	-46.708	835.41	125.54	507.05	455.09	51.96	9.759	
8,425.00	8,257.13	8,254.77	8,197.14	31.27	22.31	-44.735	836.40	124.94	493.74	441.70	52.03	9.489	
8,450.00	8,267.55	8,266.89	8,209.23	31.31	22.35	-42.606	837.26	124.40	480.57	428.46	52.11	9.222	
8,475.00	8,276.78	8,277.74	8,220.04	31.35	22.39	-40.311	838.01	123.92	467.69	415.50	52.19	8.961	
8,500.00	8,284.77	8,287.28	8,229.55	31.40	22.43	-37.846	838.66	123.50	455.23	402.96	52.27	8.709	
8,525.00	8,291.51	8,295.49	8,237.73	31.45	22.46	-35.205	839.20	123.14	443.36	391.00	52.36	8.468	
8,550.00	8,296.99	8,302.35	8,244.56	31.51	22.48	-32.389	839.64	122.85	432.22	379.77	52.45	8.241	
8,575.00	8,301.18	8,307.83	8,250.03	31.57	22.50	-29.399	839.99	122.61	421.96	369.42	52.55	8.030	
8,600.00	8,304.07	8,311.92	8,254.11	31.64	22.52	-26.243	840.25	122.43	412.74	360.08	52.65	7.839	
8,625.00	8,305.66	8,314.62	8,256.80	31.72	22.53	-22.935	840.42	122.32	404.67	351.91	52.77	7.669	
8,642.92	8,306.00	8,315.69	8,257.87	31.77	22.53	-20.482	840.48	122.27	399.68	346.83	52.85	7.562	
8,700.00	8,306.00	8,318.01	8,260.18	31.99	22.54	-12.335	840.63	122.17	387.95	334.77	53.17	7.296	
8,772.90	8,306.00	8,321.13	8,263.29	32.37	22.55	-1.500	840.82	122.04	382.44	328.77	53.67	7.125	
8,800.00	8,306.00	8,322.33	8,264.49	32.51	22.56	2.555	840.89	121.99	383.20	329.36	53.85	7.117	
8,812.71	8,306.00	8,322.90	8,265.06	32.59	22.56	4.447	840.93	121.96	384.09	330.16	53.93	7.121	
8,900.00	8,306.00	8,326.48	8,268.63	33.20	22.57	16.970	841.15	121.81	400.85	346.38	54.47	7.359	
9,000.00	8,306.00	8,330.77	8,272.91	34.04	22.58	29.450	841.41	121.63	440.96	386.09	54.87	8.036	
9,100.00	8,306.00	8,335.02	8,277.15	35.02	22.60	39.455	841.66	121.45	498.17	443.12	55.05	9.049	
9,200.00	8,306.00	8,339.23	8,281.34	36.13	22.61	47.212	841.91	121.28	567.34	512.25	55.09	10.299	
9,300.00	8,306.00	8,343.39	8,285.49	37.35	22.63	53.199	842.16	121.11	644.62	589.56	55.05	11.709	
9,400.00	8,306.00	8,347.51	8,289.60	38.67	22.64	57.866	842.40	120.93	727.43	672.44	54.99	13.228	
9,500.00	8,306.00	8,351.58	8,293.66	40.08	22.66	61.559	842.64	120.77	814.10	759.17	54.93	14.821	
9,600.00	8,306.00	8,355.62	8,297.69	41.57	22.67	64.533	842.88	120.60	903.50	848.64	54.87	16.468	
9,700.00	8,306.00	8,359.61	8,301.67	43.14	22.68	66.966	843.11	120.44	994.91	940.10	54.81	18.152	
9,800.00	8,306.00	8,363.56	8,305.62	44.77	22.70	68.988	843.34	120.28	1,087.81	1,033.05	54.76	19.864	
9,900.00	8,306.00	8,367.48	8,309.52	46.46	22.71	70.689	843.56	120.12	1,181.86	1,127.14	54.72	21.597	
10,000.00	8,306.00	8,371.35	8,313.39	48.19	22.73	72.140	843.78	119.97	1,276.81	1,222.12	54.69	23.346	
10,100.00	8,306.00	8,375.19	8,317.22	49.98	22.74	73.388	844.00	119.81	1,372.46	1,317.79	54.66	25.107	
10,200.00	8,306.00	8,378.99	8,321.01	51.80	22.75	74.474	844.22	119.66	1,468.68	1,414.03	54.64	26.877	
10,300.00	8,306.00	8,382.75	8,324.76	53.67	22.77	75.427	844.43	119.51	1,565.36	1,510.73	54.63	28.654	
10,400.00	8,306.00	8,386.48	8,328.48	55.56	22.78	76.268	844.63	119.37	1,662.43	1,607.81	54.62	30.437	
10,500.00	8,306.00	8,390.17	8,332.16	57.49	22.79	77.017	844.84	119.22	1,759.81	1,705.20	54.61	32.224	
10,600.00	8,306.00	8,393.82	8,335.80	59.44	22.80	77.687	845.04	119.08	1,857.47	1,802.86	54.61	34.013	
10,700.00	8,306.00	8,397.44	8,339.41	61.42	22.82	78.290	845.24	118.94	1,955.36	1,900.75	54.61	35.805	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Spud Muffin 31 30 Fed Com - Spud Muffin 31-30 Fed Com 621H - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 168-MWD+HRGM												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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,600.00	2,583.16	3,025.01	3,004.04	9.59	10.83	55.561	1,227.88	1,788.12	1,980.34	1,961.25	19.09	103.722	
2,700.00	2,682.09	3,124.15	3,100.30	9.99	11.27	55.330	1,221.57	1,765.26	1,943.69	1,923.88	19.81	98.128	
2,800.00	2,781.02	3,216.54	3,189.96	10.39	11.68	55.100	1,215.78	1,743.70	1,906.90	1,886.39	20.51	92.963	
2,900.00	2,879.95	3,299.22	3,270.25	10.80	12.06	54.888	1,210.69	1,724.67	1,870.45	1,849.25	21.20	88.218	
3,000.00	2,978.88	3,388.00	3,356.55	11.20	12.46	54.660	1,205.15	1,704.57	1,834.29	1,812.38	21.91	83.736	
3,100.00	3,077.80	3,477.01	3,443.13	11.60	12.86	54.430	1,199.52	1,684.71	1,798.37	1,775.76	22.61	79.534	
3,200.00	3,176.73	3,562.27	3,526.16	12.01	13.25	54.206	1,194.23	1,666.05	1,762.87	1,739.56	23.31	75.618	
3,300.00	3,275.66	3,640.68	3,602.63	12.41	13.61	53.998	1,189.45	1,649.40	1,727.99	1,703.98	24.01	71.982	
3,400.00	3,374.59	3,740.62	3,700.23	12.82	14.06	53.741	1,183.33	1,628.82	1,693.63	1,668.90	24.73	68.479	
3,500.00	3,473.52	3,835.04	3,792.33	13.22	14.48	53.482	1,177.34	1,608.88	1,658.76	1,633.30	25.45	65.172	
3,600.00	3,572.44	3,950.69	3,905.00	13.63	15.02	53.141	1,170.00	1,583.88	1,623.56	1,597.36	26.20	61.976	
3,700.00	3,671.37	4,046.63	3,998.25	14.03	15.46	52.829	1,163.64	1,562.23	1,587.47	1,560.55	26.92	58.967	
3,800.00	3,770.30	4,127.24	4,076.67	14.44	15.84	52.561	1,158.24	1,544.38	1,551.72	1,524.09	27.63	56.151	
3,900.00	3,869.23	4,207.22	4,154.64	14.84	16.21	52.293	1,153.07	1,527.33	1,516.78	1,488.43	28.35	53.503	
4,000.00	3,968.15	4,307.17	4,252.17	15.25	16.67	51.954	1,146.81	1,506.39	1,482.29	1,453.21	29.08	50.971	
4,100.00	4,067.08	4,395.31	4,338.11	15.66	17.07	51.631	1,141.18	1,487.60	1,447.48	1,417.68	29.81	48.561	
4,200.00	4,166.01	4,496.50	4,436.80	16.06	17.54	51.243	1,134.95	1,466.12	1,412.95	1,382.41	30.54	46.262	
4,300.00	4,264.94	4,591.70	4,529.45	16.47	17.99	50.826	1,129.30	1,445.04	1,377.90	1,346.62	31.28	44.051	
4,400.00	4,363.87	4,683.31	4,618.63	16.87	18.42	50.398	1,123.98	1,424.74	1,342.97	1,310.95	32.02	41.943	
4,500.00	4,462.79	4,774.59	4,707.52	17.28	18.85	49.950	1,118.72	1,404.63	1,308.25	1,275.49	32.76	39.932	
4,600.00	4,561.72	4,863.96	4,794.58	17.69	19.27	49.490	1,113.65	1,385.10	1,273.81	1,240.30	33.51	38.014	
4,700.00	4,660.65	4,958.51	4,886.72	18.09	19.71	48.979	1,108.42	1,364.56	1,239.63	1,205.37	34.26	36.185	
4,800.00	4,759.58	5,050.59	4,976.41	18.50	20.14	48.441	1,103.41	1,344.34	1,205.44	1,170.42	35.01	34.429	
4,900.00	4,858.50	5,133.83	5,057.60	18.91	20.53	47.935	1,098.88	1,326.52	1,171.76	1,135.99	35.78	32.754	
5,000.00	4,957.43	5,218.83	5,140.73	19.31	20.92	47.424	1,094.38	1,309.37	1,139.15	1,102.61	36.54	31.177	
5,100.00	5,056.36	5,303.85	5,223.97	19.72	21.31	46.892	1,090.07	1,292.64	1,107.17	1,069.86	37.30	29.679	
5,200.00	5,155.29	5,388.08	5,306.66	20.13	21.68	46.355	1,086.19	1,277.04	1,076.40	1,038.32	38.07	28.272	
5,300.00	5,254.22	5,481.47	5,398.33	20.53	22.10	45.727	1,082.20	1,259.72	1,045.96	1,007.12	38.84	26.928	
5,400.00	5,353.14	5,569.66	5,485.02	20.94	22.49	45.102	1,078.71	1,243.90	1,016.27	976.66	39.62	25.651	
5,500.00	5,452.07	5,669.78	5,583.40	21.35	22.93	44.371	1,074.57	1,225.77	986.49	946.10	40.39	24.423	
5,600.00	5,551.00	5,762.06	5,674.09	21.75	23.34	43.645	1,070.79	1,209.15	956.96	915.78	41.18	23.240	
5,700.00	5,649.93	5,859.85	5,770.15	22.16	23.77	42.827	1,066.75	1,191.28	927.40	885.44	41.96	22.100	
5,800.00	5,748.86	5,952.06	5,860.75	22.57	24.18	42.012	1,062.74	1,174.62	898.01	855.25	42.76	21.000	
5,900.00	5,847.78	6,040.62	5,947.89	22.98	24.57	41.203	1,058.88	1,159.29	869.32	825.75	43.57	19.952	
6,000.00	5,946.71	6,128.29	6,034.32	23.38	24.94	40.392	1,055.20	1,145.07	841.61	797.23	44.38	18.963	
6,100.00	6,045.64	6,218.37	6,123.27	23.79	25.32	39.554	1,051.54	1,131.34	814.82	769.63	45.19	18.031	
6,200.00	6,144.57	6,309.51	6,213.40	24.20	25.70	38.703	1,047.83	1,118.29	788.78	742.78	46.00	17.148	
6,300.00	6,243.49	6,396.00	6,299.07	24.60	26.05	37.875	1,044.50	1,106.88	763.79	716.97	46.81	16.316	
6,400.00	6,342.42	6,481.79	6,384.21	25.01	26.39	37.052	1,041.67	1,096.78	740.26	692.63	47.62	15.544	
6,500.00	6,441.35	6,564.82	6,466.79	25.42	26.70	36.249	1,039.65	1,088.37	718.53	670.10	48.43	14.837	
6,600.00	6,540.28	6,646.45	6,548.12	25.83	27.00	35.446	1,038.75	1,081.47	698.97	649.76	49.22	14.202	
6,700.00	6,639.21	6,738.95	6,640.40	26.23	27.33	34.581	1,038.86	1,074.99	681.38	631.37	50.01	13.626	
6,800.00	6,738.13	6,831.53	6,732.78	26.64	27.65	33.709	1,038.94	1,069.03	664.26	613.46	50.79	13.078	
6,894.50	6,831.62	6,918.88	6,819.99	27.03	27.95	32.863	1,039.69	1,064.09	649.22	597.69	51.54	12.597	
6,900.00	6,837.06	6,924.09	6,825.19	27.05	27.97	32.814	1,039.74	1,063.82	648.38	596.80	51.58	12.570	
7,000.00	6,936.25	7,018.09	6,919.08	27.44	28.28	31.993	1,040.74	1,059.39	635.07	582.71	52.36	12.130	
7,100.00	7,035.82	7,119.31	7,020.21	27.82	28.62	31.284	1,041.93	1,055.30	625.52	572.39	53.13	11.774	
7,200.00	7,135.65	7,222.47	7,123.29	28.17	28.97	30.736	1,042.20	1,051.26	618.49	564.61	53.87	11.480	
7,300.00	7,235.62	7,314.03	7,214.81	28.51	29.27	30.418	1,042.27	1,048.41	614.95	560.38	54.57	11.269	
7,314.38	7,250.00	7,326.85	7,227.62	28.55	29.31	30.389	1,042.36	1,048.13	614.84	560.17	54.67	11.247	
7,366.40	7,302.02	7,376.46	7,277.22	28.72	29.47	30.299	1,042.79	1,047.26	614.77	559.75	55.02	11.174	
7,400.00	7,335.62	7,409.02	7,309.77	28.83	29.57	30.254	1,043.06	1,046.85	614.79	559.55	55.24	11.130	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Spud Muffin 31 30 Fed Com - Spud Muffin 31-30 Fed Com 621H - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 168-MWD+HRGM												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,500.00	7,435.62	7,509.78	7,410.53	29.15	29.89	30.148	1,043.78	1,045.96	614.97	559.06	55.91	10.999	
7,600.00	7,535.62	7,614.67	7,515.41	29.47	30.22	30.007	1,044.26	1,044.48	614.66	558.05	56.60	10.859	
7,700.00	7,635.62	7,712.00	7,612.72	29.79	30.54	29.847	1,044.71	1,042.77	614.18	556.89	57.28	10.722	
7,800.00	7,735.62	7,814.89	7,715.60	30.11	30.87	29.676	1,045.16	1,040.91	613.66	555.69	57.98	10.585	
7,892.92	7,828.54	7,906.18	7,806.86	30.41	31.17	29.491	1,045.66	1,038.92	613.11	554.49	58.61	10.460	
7,897.74	7,833.36	7,911.42	7,812.10	30.42	31.19	29.480	1,045.71	1,038.79	613.10	554.45	58.65	10.454	CC
7,900.00	7,835.62	7,913.87	7,814.55	30.43	31.20	29.476	1,045.72	1,038.72	613.10	554.43	58.66	10.451	ES
7,925.00	7,860.59	7,941.02	7,841.69	30.50	31.29	29.484	1,045.91	1,037.96	613.49	554.66	58.83	10.428	
7,950.00	7,885.48	7,968.12	7,868.77	30.57	31.38	29.583	1,046.06	1,037.07	614.54	555.56	58.98	10.419	SF
7,975.00	7,910.21	7,995.15	7,895.78	30.63	31.47	29.773	1,046.17	1,036.06	616.26	557.13	59.13	10.423	
8,000.00	7,934.72	8,022.60	7,923.21	30.69	31.56	30.052	1,046.22	1,034.93	618.63	559.37	59.26	10.439	
8,025.00	7,958.94	8,049.82	7,950.41	30.75	31.66	30.426	1,046.16	1,033.74	621.66	562.28	59.38	10.469	
8,050.00	7,982.80	8,076.74	7,977.29	30.80	31.75	30.889	1,046.00	1,032.51	625.37	565.88	59.49	10.512	
8,075.00	8,006.24	8,103.56	8,004.08	30.85	31.84	31.438	1,045.74	1,031.21	629.76	570.17	59.59	10.568	
8,100.00	8,029.19	8,130.14	8,030.62	30.89	31.94	32.067	1,045.37	1,029.85	634.85	575.18	59.68	10.638	
8,125.00	8,051.59	8,156.23	8,056.67	30.93	32.03	32.772	1,044.90	1,028.46	640.67	580.91	59.75	10.722	
8,150.00	8,073.38	8,181.86	8,082.26	30.96	32.12	33.546	1,044.33	1,027.02	647.22	587.40	59.82	10.820	
8,175.00	8,094.49	8,210.03	8,110.37	31.00	32.22	34.374	1,043.53	1,025.33	654.48	594.61	59.87	10.931	
8,200.00	8,114.88	8,237.54	8,137.80	31.03	32.32	35.259	1,042.53	1,023.54	662.43	602.52	59.91	11.056	
8,225.00	8,134.48	8,264.32	8,164.49	31.06	32.42	36.193	1,041.35	1,021.66	671.10	611.15	59.95	11.195	
8,250.00	8,153.25	8,286.29	8,186.37	31.08	32.50	37.181	1,040.25	1,020.03	680.54	620.56	59.98	11.346	
8,275.00	8,171.13	8,304.66	8,204.66	31.11	32.57	38.210	1,039.31	1,018.69	690.92	630.90	60.02	11.512	
8,300.00	8,188.06	8,322.14	8,222.08	31.13	32.63	39.266	1,038.42	1,017.46	702.25	642.20	60.05	11.694	
8,325.00	8,204.01	8,338.69	8,238.57	31.16	32.69	40.339	1,037.58	1,016.31	714.53	654.45	60.08	11.893	
8,350.00	8,218.93	8,354.25	8,254.08	31.18	32.75	41.422	1,036.79	1,015.26	727.74	667.64	60.10	12.108	
8,375.00	8,232.78	8,369.00	8,268.77	31.21	32.80	42.507	1,036.04	1,014.28	741.87	681.74	60.12	12.339	
8,400.00	8,245.53	8,380.63	8,280.36	31.24	32.84	43.589	1,035.46	1,013.53	756.88	696.74	60.15	12.584	
8,425.00	8,257.13	8,391.47	8,291.16	31.27	32.88	44.659	1,034.96	1,012.85	772.78	712.61	60.17	12.844	
8,450.00	8,267.55	8,401.31	8,300.98	31.31	32.92	45.711	1,034.52	1,012.24	789.50	729.32	60.18	13.118	
8,475.00	8,276.78	8,410.13	8,309.77	31.35	32.95	46.742	1,034.15	1,011.71	807.00	746.80	60.20	13.405	
8,500.00	8,284.77	8,417.92	8,317.54	31.40	32.98	47.747	1,033.84	1,011.24	825.21	765.00	60.21	13.705	
8,525.00	8,291.51	8,424.66	8,324.27	31.45	33.00	48.724	1,033.58	1,010.85	844.09	783.86	60.22	14.016	
8,550.00	8,296.99	8,430.34	8,329.94	31.51	33.02	49.671	1,033.38	1,010.52	863.55	803.32	60.23	14.337	
8,575.00	8,301.18	8,434.96	8,334.54	31.57	33.04	50.585	1,033.21	1,010.26	883.55	823.30	60.24	14.667	
8,600.00	8,304.07	8,438.51	8,338.09	31.64	33.05	51.465	1,033.09	1,010.06	904.00	843.75	60.25	15.004	
8,625.00	8,305.66	8,440.99	8,340.56	31.72	33.06	52.310	1,033.01	1,009.92	924.84	864.59	60.25	15.349	
8,642.92	8,306.00	8,442.11	8,341.68	31.77	33.06	52.894	1,032.97	1,009.86	939.98	879.73	60.26	15.600	
8,700.00	8,306.00	8,444.77	8,344.33	31.99	33.07	54.678	1,032.88	1,009.71	988.47	928.20	60.27	16.401	
8,800.00	8,306.00	8,449.25	8,348.80	32.51	33.09	57.601	1,032.74	1,009.47	1,073.42	1,013.09	60.33	17.792	
8,812.71	8,306.00	8,449.80	8,349.36	32.59	33.09	57.956	1,032.72	1,009.44	1,084.21	1,023.87	60.34	17.969	
8,900.00	8,306.00	8,463.00	8,362.53	33.20	33.14	60.230	1,032.33	1,008.73	1,159.26	1,098.83	60.43	19.183	
9,000.00	8,306.00	8,463.00	8,362.53	34.04	33.14	62.495	1,032.33	1,008.73	1,247.10	1,186.55	60.55	20.596	
9,100.00	8,306.00	8,463.00	8,362.53	35.02	33.14	64.458	1,032.33	1,008.73	1,336.65	1,275.97	60.67	22.031	
9,200.00	8,306.00	8,463.00	8,362.53	36.13	33.14	66.172	1,032.33	1,008.73	1,427.58	1,366.79	60.79	23.482	
9,300.00	8,306.00	8,463.00	8,362.53	37.35	33.14	67.680	1,032.33	1,008.73	1,519.66	1,458.74	60.91	24.948	
9,400.00	8,306.00	8,463.00	8,362.53	38.67	33.14	69.013	1,032.33	1,008.73	1,612.68	1,551.65	61.03	26.425	
9,500.00	8,306.00	8,477.37	8,376.88	40.08	33.19	70.204	1,031.95	1,007.98	1,706.40	1,645.24	61.16	27.900	
9,600.00	8,306.00	8,481.03	8,380.53	41.57	33.20	71.268	1,031.86	1,007.80	1,800.84	1,739.56	61.27	29.390	
9,700.00	8,306.00	8,484.60	8,384.09	43.14	33.21	72.225	1,031.78	1,007.62	1,895.83	1,834.45	61.38	30.887	
9,800.00	8,306.00	8,488.09	8,387.58	44.77	33.22	73.091	1,031.70	1,007.45	1,991.31	1,929.83	61.48	32.388	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Spud Muffin 31-30 Fed Com (Offsets) - Height CC 6 7 Federal Com #311H - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 25-												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
4,700.00	4,660.65	5,224.46	5,183.60	18.09	22.56	70.166	950.58	2,220.10	1,961.76	1,926.37	35.39	55.431	
4,800.00	4,759.58	5,309.81	5,265.20	18.50	23.49	70.025	950.40	2,195.06	1,920.70	1,884.51	36.19	53.073	
4,900.00	4,858.50	5,405.23	5,356.41	18.91	24.58	69.841	950.32	2,167.02	1,879.67	1,842.66	37.01	50.793	
5,000.00	4,957.43	5,500.90	5,447.75	19.31	25.72	69.643	950.32	2,138.58	1,838.35	1,800.52	37.84	48.586	
5,100.00	5,056.36	5,589.44	5,532.24	19.72	26.89	69.455	950.42	2,112.13	1,796.97	1,758.28	38.70	46.438	
5,200.00	5,155.29	5,675.22	5,614.16	20.13	28.09	69.267	950.63	2,086.70	1,755.85	1,716.27	39.58	44.367	
5,300.00	5,254.22	5,754.22	5,689.68	20.53	29.14	69.090	951.09	2,063.48	1,715.10	1,674.63	40.47	42.379	
5,400.00	5,353.14	5,826.90	5,759.21	20.94	30.06	68.884	953.03	2,042.40	1,675.35	1,633.96	41.39	40.477	
5,500.00	5,452.07	5,921.70	5,849.96	21.35	31.35	68.554	955.95	2,015.15	1,636.02	1,593.65	42.37	38.613	
5,600.00	5,551.00	6,017.26	5,941.50	21.75	32.64	68.238	957.97	1,987.81	1,596.54	1,553.19	43.35	36.828	
5,700.00	5,649.93	6,117.90	6,037.92	22.16	33.88	67.929	958.70	1,958.98	1,556.61	1,512.34	44.27	35.165	
5,800.00	5,748.86	6,200.00	6,116.68	22.57	34.88	67.716	958.66	1,935.79	1,516.81	1,471.63	45.18	33.572	
5,900.00	5,847.78	6,295.61	6,208.44	22.98	36.03	67.437	958.57	1,908.96	1,477.20	1,431.11	46.09	32.053	
6,000.00	5,946.71	6,378.90	6,288.42	23.38	37.02	67.201	958.48	1,885.73	1,437.76	1,390.74	47.02	30.579	
6,100.00	6,045.64	6,463.62	6,369.92	23.79	38.01	66.954	958.36	1,862.58	1,398.85	1,350.89	47.95	29.172	
6,200.00	6,144.57	6,544.77	6,448.11	24.20	38.93	66.711	958.42	1,840.84	1,360.52	1,311.62	48.90	27.822	
6,300.00	6,243.49	6,630.07	6,530.44	24.60	39.86	66.430	958.87	1,818.56	1,322.96	1,273.10	49.86	26.536	
6,400.00	6,342.42	6,721.30	6,618.56	25.01	40.85	66.105	959.39	1,794.94	1,285.67	1,234.86	50.81	25.302	
6,500.00	6,441.35	6,816.00	6,710.04	25.42	41.86	65.751	959.75	1,770.47	1,248.40	1,196.64	51.77	24.115	
6,600.00	6,540.28	6,906.80	6,797.80	25.83	42.82	65.431	959.38	1,747.13	1,211.01	1,158.29	52.72	22.971	
6,700.00	6,639.21	6,995.18	6,883.37	26.23	43.73	65.137	958.58	1,725.05	1,174.08	1,120.41	53.67	21.877	
6,800.00	6,738.13	7,094.63	6,979.63	26.64	44.76	64.762	957.76	1,700.09	1,137.13	1,082.54	54.59	20.829	
6,894.50	6,831.62	7,185.72	7,067.58	27.03	45.74	64.382	956.99	1,676.42	1,101.51	1,046.01	55.49	19.849	
6,900.00	6,837.06	7,190.34	7,072.05	27.05	45.79	64.364	956.93	1,675.23	1,099.44	1,043.90	55.55	19.793	
7,000.00	6,936.25	7,275.32	7,154.32	27.44	46.70	64.047	955.32	1,654.01	1,064.04	1,007.50	56.54	18.819	
7,100.00	7,035.82	7,369.61	7,245.87	27.82	47.68	63.715	952.49	1,631.62	1,032.55	975.07	57.48	17.962	
7,200.00	7,135.65	7,479.66	7,352.35	28.17	48.81	63.195	949.63	1,603.98	1,003.35	944.96	58.39	17.184	
7,300.00	7,235.62	7,575.57	7,444.81	28.51	49.89	62.593	948.28	1,578.53	976.78	917.28	59.50	16.417	
7,314.38	7,250.00	7,588.36	7,457.14	28.55	50.04	62.505	948.17	1,575.14	973.28	913.61	59.67	16.311	
7,400.00	7,335.62	7,660.06	7,526.33	28.83	50.84	61.981	947.93	1,556.31	953.13	892.38	60.74	15.691	
7,500.00	7,435.62	7,739.54	7,603.23	29.15	51.68	61.340	948.80	1,536.27	931.27	869.21	62.06	15.006	
7,600.00	7,535.62	7,814.00	7,675.55	29.47	52.40	60.715	950.30	1,518.61	911.41	848.01	63.40	14.375	
7,700.00	7,635.62	7,908.00	7,767.15	29.79	53.21	59.897	952.92	1,497.65	893.26	828.56	64.70	13.807	
7,800.00	7,735.62	7,989.70	7,846.95	30.11	53.86	59.154	955.90	1,480.39	876.71	810.67	66.03	13.276	
7,892.92	7,828.54	8,108.39	7,962.59	30.41	54.88	57.960	960.75	1,454.13	861.04	793.75	67.29	12.795	
7,900.00	7,835.62	8,113.77	7,967.81	30.43	54.94	57.904	960.96	1,452.86	859.79	792.38	67.40	12.756	
7,925.00	7,860.59	8,140.67	7,993.90	30.50	55.21	57.644	961.95	1,446.40	856.04	788.29	67.75	12.634	
7,950.00	7,885.48	8,167.80	8,020.21	30.57	55.48	57.423	962.87	1,439.84	853.40	785.31	68.09	12.534	
7,975.00	7,910.21	8,195.71	8,047.27	30.63	55.76	57.236	963.74	1,433.04	851.85	783.46	68.40	12.455	
8,000.00	7,934.72	8,231.16	8,081.61	30.69	56.13	57.021	964.50	1,424.29	851.27	782.63	68.65	12.401	
8,004.32	7,938.93	8,237.29	8,087.54	30.70	56.20	56.991	964.58	1,422.75	851.26	782.57	68.69	12.393 CC, ES	
8,025.00	7,958.94	8,266.67	8,115.97	30.75	56.51	56.868	964.75	1,415.32	851.55	782.70	68.86	12.367	
8,050.00	7,982.80	8,302.19	8,150.28	30.80	56.88	56.778	964.48	1,406.16	852.69	783.67	69.03	12.353	
8,075.00	8,006.24	8,321.15	8,168.62	30.85	57.08	56.884	964.33	1,401.34	855.02	785.77	69.25	12.347 SF	
8,100.00	8,029.19	8,344.64	8,191.34	30.89	57.33	56.991	964.06	1,395.38	858.51	789.10	69.42	12.367	
8,125.00	8,051.59	8,367.89	8,213.85	30.93	57.58	57.141	963.76	1,389.53	863.19	793.63	69.56	12.409	
8,150.00	8,073.38	8,392.56	8,237.73	30.96	57.85	57.317	963.42	1,383.38	869.04	799.37	69.67	12.473	
8,175.00	8,094.49	8,420.93	8,265.16	31.00	58.16	57.487	963.07	1,376.17	875.94	806.19	69.75	12.559	
8,200.00	8,114.88	8,448.92	8,292.18	31.03	58.48	57.681	962.77	1,368.86	883.83	814.04	69.80	12.663	
8,225.00	8,134.48	8,476.49	8,318.74	31.06	58.79	57.897	962.54	1,361.46	892.71	822.88	69.83	12.784	
8,250.00	8,153.25	8,498.80	8,340.21	31.08	59.05	58.180	962.38	1,355.39	902.62	832.74	69.88	12.917	
8,275.00	8,171.13	8,520.04	8,360.65	31.11	59.31	58.494	962.23	1,349.63	913.61	843.70	69.91	13.069	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Spud Muffin 31-30 Fed Com (Offsets) - Height CC 6 7 Federal Com #311H - Wellbore #1 - Surveys													Offset Site Error: 0.00 usft
Survey Program: 25-Reference													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,300.00	8,188.06	8,540.62	8,380.46	31.13	59.55	58.831	962.10	1,344.05	925.66	855.75	69.92	13.240	
8,325.00	8,204.01	8,560.49	8,399.59	31.16	59.79	59.189	961.98	1,338.69	938.75	868.84	69.90	13.429	
8,350.00	8,218.93	8,579.48	8,417.88	31.18	60.02	59.565	961.87	1,333.57	952.84	882.96	69.87	13.636	
8,375.00	8,232.78	8,597.40	8,435.15	31.21	60.23	59.958	961.76	1,328.76	967.90	898.08	69.83	13.861	
8,400.00	8,245.53	8,614.45	8,451.57	31.24	60.43	60.364	961.67	1,324.20	983.91	914.15	69.76	14.103	
8,425.00	8,257.13	8,630.59	8,467.13	31.27	60.61	60.778	961.58	1,319.90	1,000.81	931.13	69.69	14.362	
8,450.00	8,267.55	8,645.76	8,481.76	31.31	60.79	61.200	961.50	1,315.87	1,018.57	948.98	69.59	14.636	
8,475.00	8,276.78	8,659.94	8,495.42	31.35	60.96	61.626	961.43	1,312.12	1,037.14	967.65	69.49	14.925	
8,500.00	8,284.77	8,673.44	8,508.45	31.40	61.11	62.051	961.36	1,308.56	1,056.47	987.09	69.38	15.228	
8,525.00	8,291.51	8,686.64	8,521.18	31.45	61.26	62.471	961.28	1,305.08	1,076.49	1,007.25	69.25	15.546	
8,550.00	8,296.99	8,698.65	8,532.77	31.51	61.40	62.890	961.20	1,301.91	1,097.16	1,028.05	69.11	15.876	
8,575.00	8,301.18	8,709.47	8,543.20	31.57	61.53	63.307	961.12	1,299.06	1,118.41	1,049.45	68.97	16.217	
8,600.00	8,304.07	8,719.05	8,552.44	31.64	61.64	63.719	961.04	1,296.54	1,140.20	1,071.38	68.82	16.568	
8,625.00	8,305.66	8,727.36	8,560.47	31.72	61.73	64.124	960.96	1,294.35	1,162.46	1,093.80	68.67	16.929	
8,642.92	8,306.00	8,732.54	8,565.46	31.77	61.79	64.411	960.91	1,292.99	1,178.67	1,110.12	68.55	17.193	
8,700.00	8,306.00	8,747.97	8,580.35	31.99	61.97	65.318	960.76	1,288.93	1,230.50	1,162.30	68.20	18.044	
8,800.00	8,306.00	8,774.01	8,605.47	32.51	62.26	66.915	960.45	1,282.08	1,320.55	1,252.96	67.59	19.539	
8,812.71	8,306.00	8,777.09	8,608.44	32.59	62.30	67.119	960.42	1,281.28	1,331.93	1,264.42	67.51	19.729	
8,900.00	8,306.00	8,798.13	8,628.75	33.20	62.53	68.445	960.16	1,275.78	1,410.40	1,343.36	67.04	21.037	
9,000.00	8,306.00	8,821.96	8,651.76	34.04	62.80	69.794	959.88	1,269.58	1,501.10	1,434.50	66.60	22.539	
9,100.00	8,306.00	8,845.51	8,674.50	35.02	63.06	70.990	959.59	1,263.50	1,592.53	1,526.30	66.24	24.043	
9,200.00	8,306.00	8,860.00	8,688.50	36.13	63.22	72.078	959.41	1,259.77	1,684.60	1,618.64	65.96	25.539	
9,300.00	8,306.00	8,884.63	8,712.32	37.35	63.48	73.027	959.19	1,253.50	1,777.22	1,711.50	65.72	27.043	
9,400.00	8,306.00	8,902.00	8,729.14	38.67	63.66	73.893	959.14	1,249.14	1,870.38	1,804.85	65.53	28.541	
9,500.00	8,306.00	8,918.98	8,745.58	40.08	63.84	74.675	959.17	1,244.92	1,963.99	1,898.61	65.38	30.038	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Spud Muffin 31-30 Fed Com (Offsets) - Spud Muffin 31-30 Fed Com 621H - Wellbore #1 - Surveys													Offset Site Error:	0.00 usft
Survey Program: 168-													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	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	
2,600.00	2,583.16	3,025.02	3,004.04	9.59	11.01	55.561	1,227.89	1,788.13	1,980.35	1,961.23	19.12	103.573		
2,700.00	2,682.09	3,124.15	3,100.30	9.99	11.48	55.330	1,221.58	1,765.27	1,943.71	1,923.87	19.84	97.972		
2,800.00	2,781.02	3,216.55	3,189.96	10.39	11.92	55.100	1,215.79	1,743.71	1,906.91	1,886.36	20.55	92.801		
2,900.00	2,879.95	3,299.23	3,270.26	10.80	12.32	54.887	1,210.70	1,724.68	1,870.47	1,849.22	21.24	88.052		
3,000.00	2,978.88	3,388.00	3,356.55	11.20	12.75	54.660	1,205.16	1,704.58	1,834.30	1,812.35	21.95	83.567		
3,100.00	3,077.80	3,477.02	3,443.14	11.60	13.18	54.430	1,199.53	1,684.72	1,798.38	1,775.72	22.66	79.363		
3,200.00	3,176.73	3,562.28	3,526.16	12.01	13.60	54.206	1,194.24	1,666.06	1,762.89	1,739.52	23.37	75.446		
3,300.00	3,275.66	3,640.68	3,602.63	12.41	13.97	53.998	1,189.46	1,649.41	1,728.00	1,703.94	24.06	71.810		
3,400.00	3,374.59	3,740.62	3,700.24	12.82	14.45	53.741	1,183.34	1,628.83	1,693.64	1,668.85	24.79	68.307		
3,500.00	3,473.52	3,835.05	3,792.34	13.22	14.91	53.482	1,177.35	1,608.89	1,658.77	1,633.25	25.52	65.000		
3,600.00	3,572.44	3,950.69	3,905.01	13.63	15.47	53.141	1,170.01	1,583.89	1,623.57	1,597.30	26.27	61.801		
3,700.00	3,671.37	4,046.63	3,998.25	14.03	15.95	52.829	1,163.64	1,562.24	1,587.49	1,560.48	27.00	58.791		
3,800.00	3,770.30	4,127.24	4,076.67	14.44	16.35	52.561	1,158.25	1,544.39	1,551.73	1,524.01	27.72	55.977		
3,900.00	3,869.23	4,207.22	4,154.64	14.84	16.75	52.293	1,153.08	1,527.34	1,516.79	1,488.35	28.44	53.330		
4,000.00	3,968.15	4,307.17	4,252.18	15.25	17.24	51.954	1,146.82	1,506.40	1,482.30	1,453.12	29.18	50.798		
4,100.00	4,067.08	4,395.31	4,338.11	15.66	17.67	51.631	1,141.19	1,487.61	1,447.50	1,417.58	29.91	48.389		
4,200.00	4,166.01	4,496.51	4,436.80	16.06	18.17	51.243	1,134.96	1,466.14	1,412.97	1,382.31	30.66	46.090		
4,300.00	4,264.94	4,591.70	4,529.46	16.47	18.65	50.826	1,129.31	1,445.06	1,377.91	1,346.51	31.40	43.878		
4,400.00	4,363.87	4,683.32	4,618.64	16.87	19.11	50.398	1,123.99	1,424.75	1,342.99	1,310.83	32.15	41.769		
4,500.00	4,462.79	4,774.60	4,707.52	17.28	19.57	49.950	1,118.72	1,404.64	1,308.26	1,275.36	32.91	39.757		
4,600.00	4,561.72	4,863.96	4,794.58	17.69	20.01	49.490	1,113.65	1,385.11	1,273.82	1,240.15	33.66	37.839		
4,700.00	4,660.65	4,958.51	4,886.72	18.09	20.49	48.979	1,108.43	1,364.57	1,239.64	1,205.22	34.43	36.009		
4,800.00	4,759.58	5,050.59	4,976.41	18.50	20.95	48.441	1,103.42	1,344.35	1,205.45	1,170.26	35.19	34.252		
4,900.00	4,858.50	5,133.83	5,057.60	18.91	21.36	47.935	1,098.89	1,326.53	1,171.78	1,135.81	35.97	32.577		
5,000.00	4,957.43	5,218.83	5,140.73	19.31	21.78	47.424	1,094.38	1,309.38	1,139.16	1,102.42	36.75	31.002		
5,100.00	5,056.36	5,303.86	5,223.98	19.72	22.19	46.892	1,090.07	1,292.65	1,107.18	1,069.66	37.52	29.505		
5,200.00	5,155.29	5,388.09	5,306.66	20.13	22.59	46.356	1,086.20	1,277.05	1,076.41	1,038.10	38.31	28.099		
5,300.00	5,254.22	5,481.47	5,398.34	20.53	23.03	45.727	1,082.21	1,259.73	1,045.97	1,006.88	39.09	26.756		
5,400.00	5,353.14	5,569.66	5,485.03	20.94	23.44	45.102	1,078.72	1,243.91	1,016.29	976.40	39.89	25.480		
5,500.00	5,452.07	5,669.78	5,583.40	21.35	23.90	44.371	1,074.58	1,225.78	986.51	945.83	40.68	24.252		
5,600.00	5,551.00	5,762.06	5,674.09	21.75	24.33	43.646	1,070.79	1,209.16	956.97	915.49	41.48	23.069		
5,700.00	5,649.93	5,859.85	5,770.16	22.16	24.79	42.828	1,066.75	1,191.29	927.42	885.12	42.29	21.930		
5,800.00	5,748.86	5,952.06	5,860.76	22.57	25.22	42.012	1,062.75	1,174.63	898.03	854.91	43.11	20.830		
5,900.00	5,847.78	6,040.62	5,947.89	22.98	25.63	41.204	1,058.89	1,159.30	869.33	825.39	43.94	19.784		
6,000.00	5,946.71	6,128.29	6,034.32	23.38	26.02	40.393	1,055.20	1,145.09	841.62	796.85	44.78	18.797		
6,100.00	6,045.64	6,218.37	6,123.27	23.79	26.42	39.554	1,051.55	1,131.35	814.83	769.23	45.61	17.867		
6,200.00	6,144.57	6,309.51	6,213.40	24.20	26.81	38.703	1,047.83	1,118.30	788.79	742.36	46.44	16.986		
6,300.00	6,243.49	6,396.00	6,299.07	24.60	27.18	37.875	1,044.51	1,106.89	763.80	716.52	47.27	16.157		
6,400.00	6,342.42	6,481.79	6,384.22	25.01	27.52	37.052	1,041.68	1,096.79	740.27	692.16	48.11	15.388		
6,500.00	6,441.35	6,564.82	6,466.80	25.42	27.85	36.249	1,039.66	1,088.39	718.54	669.61	48.93	14.685		
6,600.00	6,540.28	6,646.45	6,548.12	25.83	28.15	35.447	1,038.75	1,081.48	698.99	649.25	49.74	14.053		
6,700.00	6,639.21	6,738.96	6,640.40	26.23	28.48	34.581	1,038.87	1,075.01	681.39	630.84	50.55	13.480		
6,800.00	6,738.13	6,831.53	6,732.78	26.64	28.80	33.710	1,038.95	1,069.04	664.27	612.91	51.36	12.935		
6,894.50	6,831.62	6,918.88	6,819.99	27.03	29.10	32.864	1,039.70	1,064.10	649.24	597.12	52.12	12.457		
6,900.00	6,837.06	6,924.09	6,825.19	27.05	29.12	32.815	1,039.75	1,063.83	648.39	596.23	52.16	12.430		
7,000.00	6,936.25	7,018.09	6,919.08	27.44	29.43	31.994	1,040.75	1,059.40	635.08	582.13	52.95	11.993		
7,100.00	7,035.82	7,119.31	7,020.21	27.82	29.76	31.285	1,041.94	1,055.31	625.53	571.79	53.74	11.640		
7,200.00	7,135.65	7,222.47	7,123.29	28.17	30.10	30.737	1,042.20	1,051.27	618.50	564.00	54.50	11.350		
7,300.00	7,235.62	7,314.03	7,214.81	28.51	30.40	30.418	1,042.28	1,048.42	614.96	559.76	55.20	11.141		
7,314.38	7,250.00	7,326.85	7,227.62	28.55	30.44	30.390	1,042.37	1,048.14	614.85	559.56	55.29	11.120		
7,366.41	7,302.03	7,376.46	7,277.23	28.72	30.59	30.299	1,042.80	1,047.27	614.78	559.14	55.64	11.049		
7,400.00	7,335.62	7,409.02	7,309.77	28.83	30.69	30.255	1,043.06	1,046.87	614.81	558.94	55.86	11.005		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Offset Design: Spud Muffin 31-30 Fed Com (Offsets) - Spud Muffin 31-30 Fed Com 621H - Wellbore #1 - Surveys													Offset Site Error:
													0.00 usft
Survey Program:	168-	Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned:		Minimum Separation (usft)	Separation Factor	Warning
Reference	Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	+N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)			
7,500.00	7,435.62	7,509.78	7,410.53	29.15	31.00	30.149	1,043.79	1,045.97	614.98	558.45	56.54	10.878	
7,600.00	7,535.62	7,614.67	7,515.41	29.47	31.33	30.007	1,044.26	1,044.49	614.67	557.44	57.22	10.741	
7,700.00	7,635.62	7,712.00	7,612.72	29.79	31.63	29.848	1,044.71	1,042.78	614.19	556.29	57.90	10.608	
7,800.00	7,735.62	7,814.89	7,715.60	30.11	31.96	29.676	1,045.17	1,040.92	613.67	555.08	58.59	10.474	
7,892.92	7,828.54	7,906.18	7,806.86	30.41	32.25	29.491	1,045.67	1,038.93	613.12	553.89	59.23	10.351	
7,897.74	7,833.36	7,911.42	7,812.10	30.42	32.27	29.481	1,045.71	1,038.80	613.11	553.84	59.27	10.345 CC	
7,900.00	7,835.62	7,913.87	7,814.55	30.43	32.28	29.477	1,045.73	1,038.74	613.11	553.83	59.28	10.342 ES	
7,925.00	7,860.59	7,941.02	7,841.69	30.50	32.37	29.485	1,045.92	1,037.98	613.50	554.05	59.45	10.320	
7,950.00	7,885.48	7,968.12	7,868.77	30.57	32.46	29.584	1,046.07	1,037.09	614.55	554.95	59.60	10.312 SF	
7,975.00	7,910.21	7,995.15	7,895.79	30.63	32.55	29.773	1,046.18	1,036.07	616.27	556.53	59.74	10.316	
8,000.00	7,934.72	8,022.60	7,923.21	30.69	32.64	30.053	1,046.22	1,034.94	618.64	558.78	59.86	10.334	
8,025.00	7,958.94	8,049.82	7,950.41	30.75	32.73	30.426	1,046.16	1,033.75	621.67	561.69	59.98	10.365	
8,050.00	7,982.80	8,076.74	7,977.30	30.80	32.83	30.890	1,046.00	1,032.52	625.38	565.30	60.08	10.409	
8,075.00	8,006.24	8,103.56	8,004.08	30.85	32.92	31.439	1,045.75	1,031.22	629.77	569.61	60.17	10.467	
8,100.00	8,029.19	8,130.14	8,030.63	30.89	33.01	32.068	1,045.38	1,029.87	634.86	574.62	60.24	10.539	
8,125.00	8,051.59	8,156.23	8,056.67	30.93	33.10	32.773	1,044.90	1,028.47	640.68	580.37	60.30	10.624	
8,150.00	8,073.38	8,181.87	8,082.26	30.96	33.19	33.547	1,044.34	1,027.03	647.23	586.88	60.35	10.724	
8,175.00	8,094.49	8,210.04	8,110.37	31.00	33.30	34.375	1,043.54	1,025.34	654.49	594.10	60.39	10.838	
8,200.00	8,114.88	8,237.54	8,137.80	31.03	33.40	35.259	1,042.54	1,023.55	662.44	602.03	60.42	10.965	
8,225.00	8,134.48	8,264.32	8,164.49	31.06	33.50	36.194	1,041.36	1,021.67	671.11	610.68	60.43	11.106	
8,250.00	8,153.25	8,286.29	8,186.37	31.08	33.58	37.182	1,040.25	1,020.04	680.55	620.10	60.45	11.259	
8,275.00	8,171.13	8,304.66	8,204.67	31.11	33.64	38.211	1,039.32	1,018.71	690.93	630.47	60.46	11.427	
8,300.00	8,188.06	8,322.14	8,222.08	31.13	33.71	39.266	1,038.43	1,017.47	702.27	641.79	60.47	11.613	
8,325.00	8,204.01	8,338.69	8,238.57	31.16	33.77	40.339	1,037.58	1,016.32	714.54	654.06	60.48	11.814	
8,350.00	8,218.93	8,354.26	8,254.08	31.18	33.83	41.422	1,036.79	1,015.27	727.76	667.27	60.49	12.032	
8,375.00	8,232.78	8,369.00	8,268.77	31.21	33.88	42.507	1,036.04	1,014.29	741.88	681.39	60.49	12.265	
8,400.00	8,245.53	8,380.63	8,280.36	31.24	33.92	43.590	1,035.47	1,013.54	756.90	696.40	60.49	12.512	
8,425.00	8,257.13	8,391.47	8,291.16	31.27	33.96	44.659	1,034.96	1,012.86	772.79	712.30	60.49	12.775	
8,450.00	8,267.55	8,401.31	8,300.98	31.31	34.00	45.711	1,034.53	1,012.25	789.51	729.02	60.49	13.052	
8,475.00	8,276.78	8,410.13	8,309.78	31.35	34.03	46.742	1,034.16	1,011.72	807.01	746.52	60.49	13.342	
8,500.00	8,284.77	8,417.92	8,317.55	31.40	34.06	47.747	1,033.85	1,011.26	825.23	764.74	60.48	13.644	
8,525.00	8,291.51	8,424.66	8,324.27	31.45	34.08	48.725	1,033.59	1,010.86	844.10	783.62	60.48	13.957	
8,550.00	8,296.99	8,430.34	8,329.94	31.51	34.10	49.671	1,033.38	1,010.54	863.57	803.09	60.47	14.280	
8,575.00	8,301.18	8,434.96	8,334.55	31.57	34.12	50.585	1,033.22	1,010.27	883.56	823.09	60.47	14.612	
8,600.00	8,304.07	8,438.51	8,338.09	31.64	34.13	51.465	1,033.10	1,010.07	904.01	843.55	60.46	14.952	
8,625.00	8,305.66	8,440.99	8,340.56	31.72	34.14	52.311	1,033.01	1,009.93	924.86	864.40	60.45	15.299	
8,642.92	8,306.00	8,442.11	8,341.68	31.77	34.15	52.895	1,032.98	1,009.87	939.99	879.55	60.45	15.551	
8,700.00	8,306.00	8,444.77	8,344.33	31.99	34.16	54.678	1,032.89	1,009.72	988.48	928.05	60.43	16.357	
8,800.00	8,306.00	8,449.25	8,348.80	32.51	34.17	57.601	1,032.75	1,009.48	1,073.43	1,012.98	60.46	17.756	
8,812.71	8,306.00	8,449.80	8,349.36	32.59	34.17	57.956	1,032.73	1,009.45	1,084.22	1,023.76	60.46	17.933	
8,900.00	8,306.00	8,463.00	8,362.53	33.20	34.22	60.230	1,032.34	1,008.74	1,159.27	1,098.75	60.53	19.153	
9,000.00	8,306.00	8,463.00	8,362.53	34.04	34.22	62.495	1,032.34	1,008.74	1,247.11	1,186.49	60.62	20.573	
9,100.00	8,306.00	8,463.00	8,362.53	35.02	34.22	64.458	1,032.34	1,008.74	1,336.66	1,275.94	60.72	22.012	
9,200.00	8,306.00	8,463.00	8,362.53	36.13	34.22	66.172	1,032.34	1,008.74	1,427.60	1,366.76	60.83	23.468	
9,300.00	8,306.00	8,463.00	8,362.53	37.35	34.22	67.679	1,032.34	1,008.74	1,519.67	1,458.73	60.94	24.936	
9,400.00	8,306.00	8,463.00	8,362.53	38.67	34.22	69.013	1,032.34	1,008.74	1,612.69	1,551.64	61.05	26.416	
9,500.00	8,306.00	8,477.37	8,376.88	40.08	34.27	70.204	1,031.96	1,007.99	1,706.42	1,645.24	61.18	27.894	
9,600.00	8,306.00	8,481.03	8,380.53	41.57	34.28	71.268	1,031.87	1,007.81	1,800.85	1,739.57	61.28	29.386	
9,700.00	8,306.00	8,484.60	8,384.09	43.14	34.30	72.225	1,031.79	1,007.63	1,895.84	1,834.46	61.39	30.884	
9,800.00	8,306.00	8,488.09	8,387.58	44.77	34.31	73.091	1,031.71	1,007.46	1,991.32	1,929.83	61.49	32.386	

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

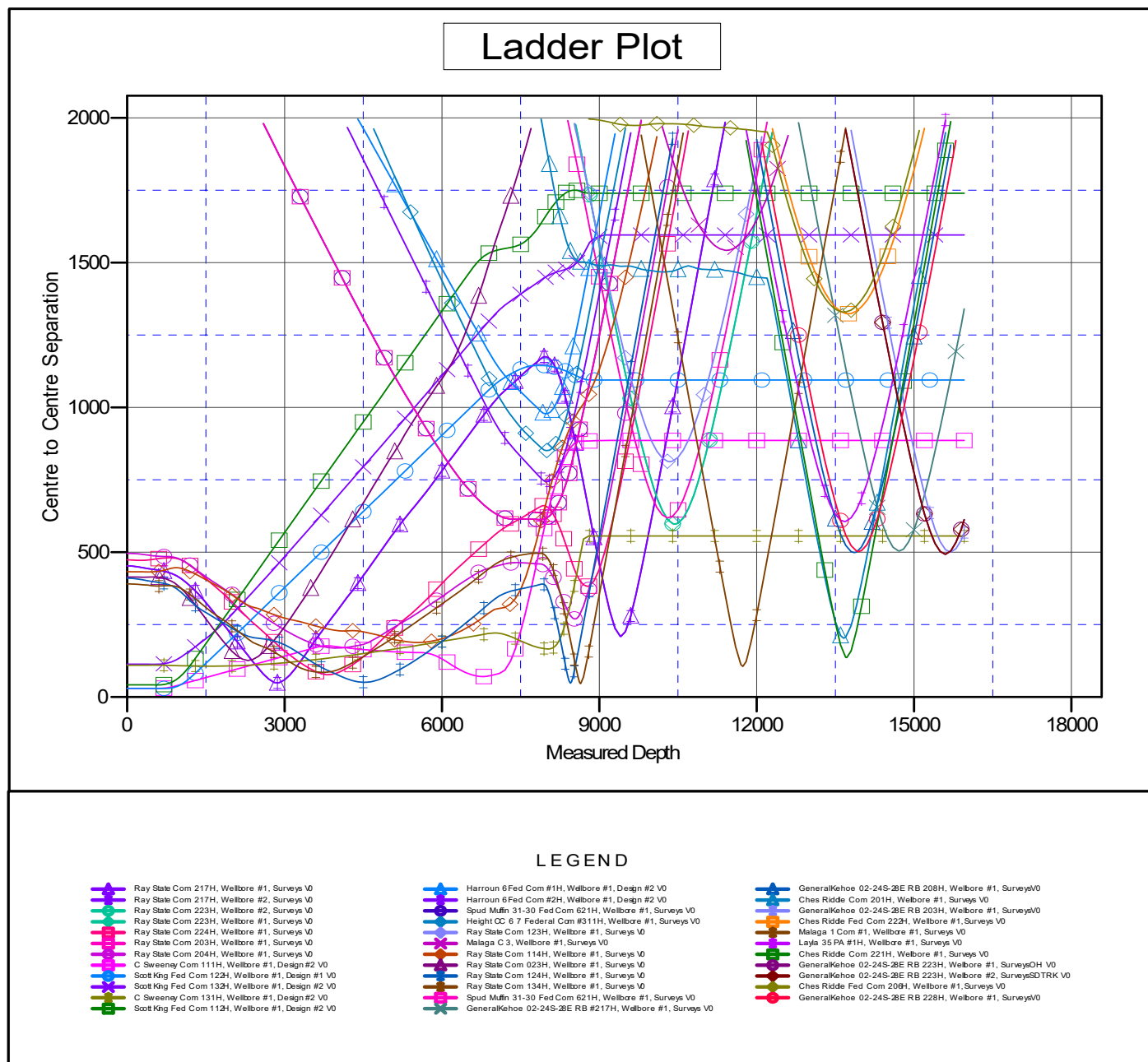


MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to Well @ 3009.50usft (Patterson 298) Coordinates are relative to: C Sweeney Com 121H
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 301
 Central Meridian is -104.333334 Grid Convergence at Surface is: 0.160°



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



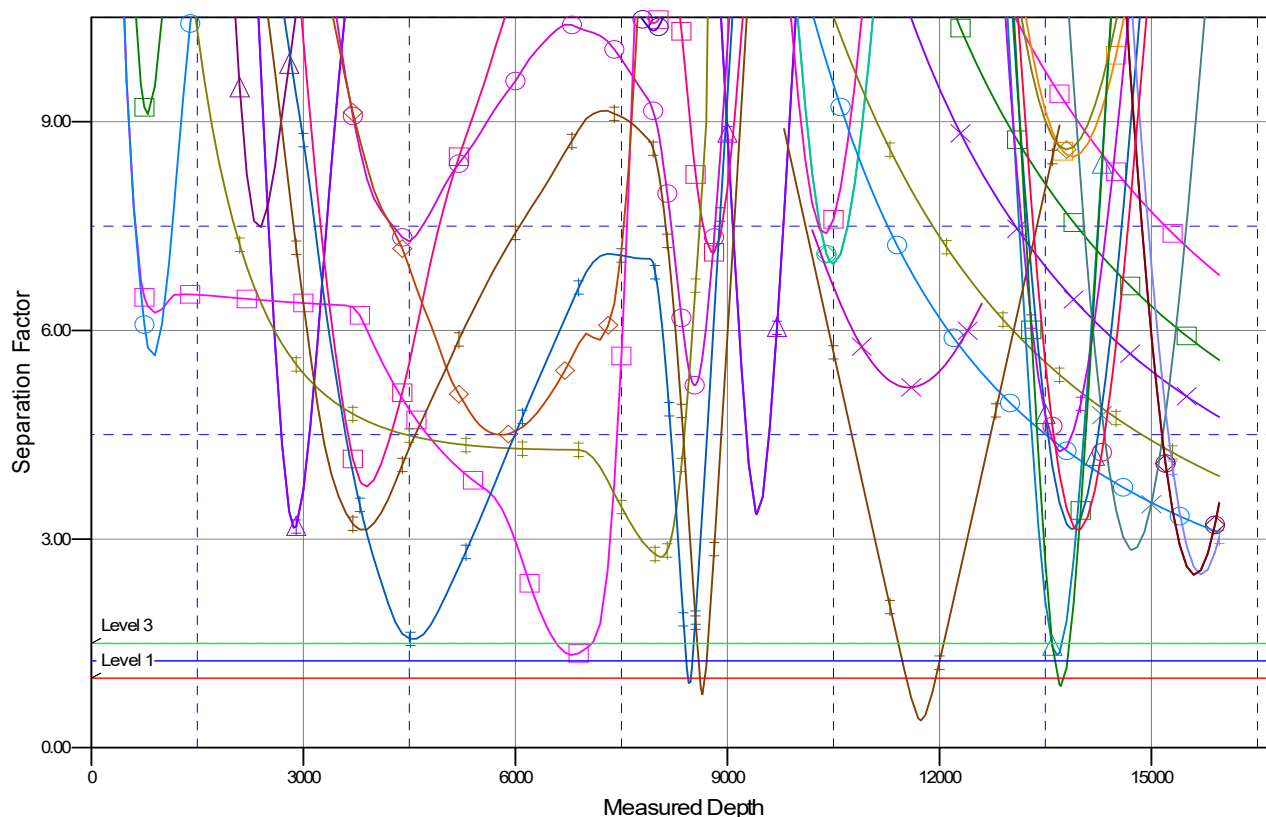
MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Reference Site:	C Sweeney & Scott King (111H - 132H)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Conroe DB
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to Well @ 3009.50usft (Patterson 298) Coordinates are relative to: C Sweeney Com 121H
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
 Central Meridian is -104.333334 Grid Convergence at Surface is: 0.160°

Separation Factor Plot



LEGEND

- Ray State Com 217H, Wellbore #1, Surveys V0 - Ray State Com 217H, Wellbore #2, Surveys V0 - Ray State Com 223H, Wellbore #2, Surveys V0 - Ray State Com 223H, Wellbore #1, Surveys V0 - Ray State Com 224H, Wellbore #1, Surveys V0 - Ray State Com 203H, Wellbore #1, Surveys V0 - Ray State Com 204H, Wellbore #1, Surveys V0 - C Sweeney Com 111H, Wellbore #1, Design #2 V0 - Scott King Fed Com 122H, Wellbore #1, Design #1 V0 - Scott King Fed Com 132H, Wellbore #1, Design #2 V0 - C Sweeney Com 131H, Wellbore #1, Design #2 V0 - Scott King Fed Com 112H, Wellbore #1, Design #2 V0	- Harroun 6 Fed Com #1H, Wellbore #1, Design #2 V0 - Harroun 6 Fed Com #2H, Wellbore #1, Design #2 V0 - Spud Muffin 31-30 Fed Com 621H, Wellbore #1, Surveys V0 - Height CC 6.7 Federal Com #311H, Wellbore #1, Surveys V0 - Ray State Com 123H, Wellbore #1, Surveys V0 - Malaga C 3, Wellbore #1, Surveys V0 - Ray State Com 114H, Wellbore #1, Surveys V0 - Ray State Com 023H, Wellbore #1, Surveys V0 - Ray State Com 124H, Wellbore #1, Surveys V0 - Ray State Com 134H, Wellbore #1, Surveys V0 - Spud Muffin 31-30 Fed Com 621H, Wellbore #1, Surveys V0 - GeneralKehoe 02-24S-28E RB #217H, Wellbore #1, Surveys V0	- GeneralKehoe 02-24S-28E RB 208H, Wellbore #1, Surveys V0 - Ches Ridde Com 201H, Wellbore #1, Surveys V0 - GeneralKehoe 02-24S-28E RB 203H, Wellbore #1, Surveys V0 - Ches Ridde Fed Com 222H, Wellbore #1, Surveys V0 - Malaga 1 Com #1, Wellbore #1, Surveys V0 - Layla 35 PA #1H, Wellbore #1, Surveys V0 - Ches Ridde Com 221H, Wellbore #1, Surveys V0 - GeneralKehoe 02-24S-28E RB 223H, Wellbore #1, Surveys V0 - GeneralKehoe 02-24S-28E RB 223H, Wellbore #2, Surveys V0 - Ches Ridde Fed Com 208H, Wellbore #1, Surveys V0 - GeneralKehoe 02-24S-28E RB 228H, Wellbore #1, Surveys V0
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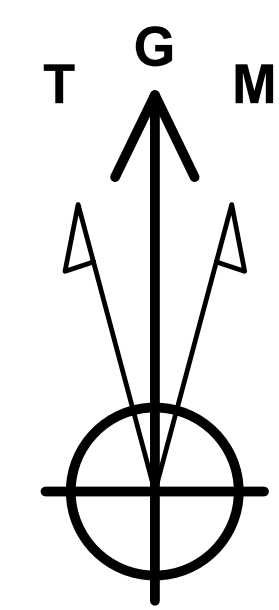
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company: Matador Resources
Well: C Sweeney Com 121H
County: Eddy County, New Mexico (NAD 27)
Rig: Patterson #98
Wellbore: Wellbore #1
Design: Design #2
Date: 11:21, December 14 2023

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

To convert a Magnetic Direction to a Grid Direction, Add 6.474°
To convert a Magnetic Direction to a True Direction, Add 6.633° East
To convert a True Direction to a Grid Direction, Subtract 0.160°



Azimuths to Grid North
True North: -0.16°
Magnetic North: 6.47°

Magnetic Field
Strength: 47410.9nT
Dip Angle: 59.83°
Date: 12/31/2023
Model: HDGM2023



WELL DETAILS: C Sweeney Com 121H

	GL @ 2981.00	Well @ 3009.50usft (Patterson 298)		
	Northing	Easting	Latitude	Longitude
+N/-S	0.00	592412.91	32.251410	-104.034404
+E/-W	0.00			

SURVEY PROGRAM

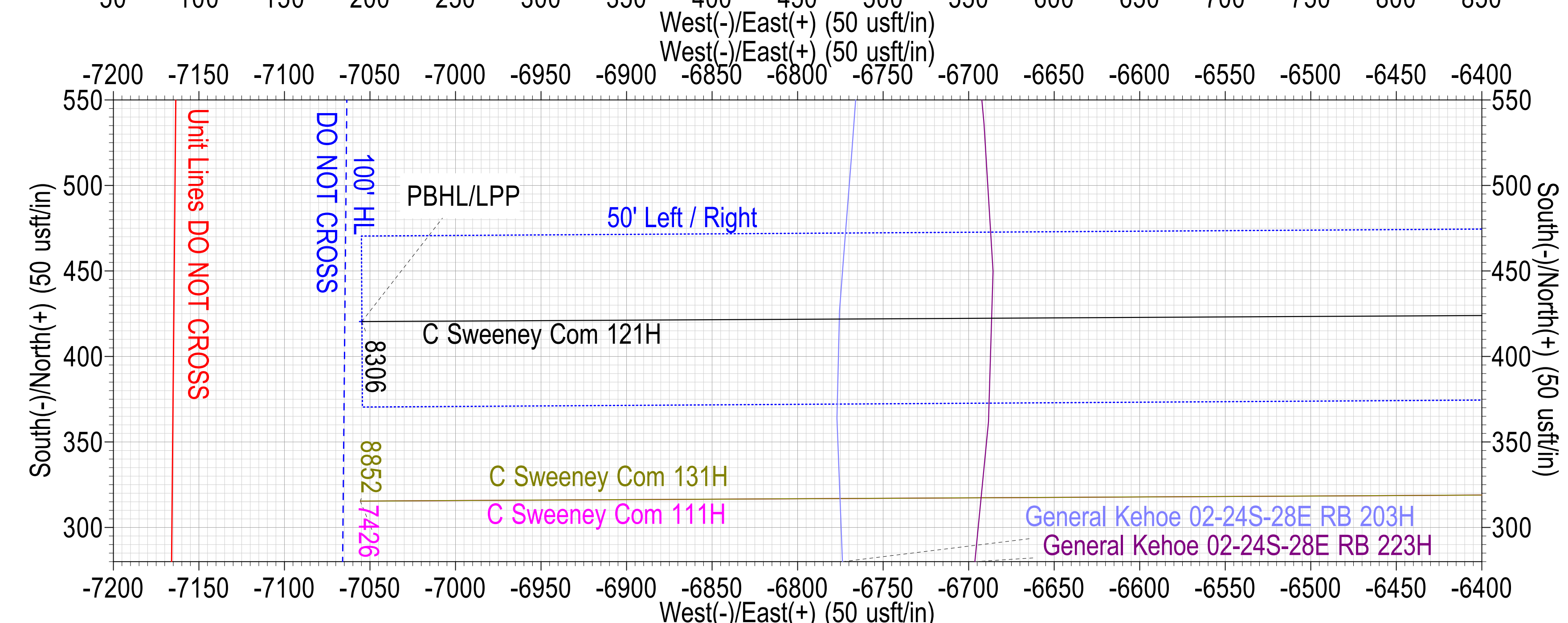
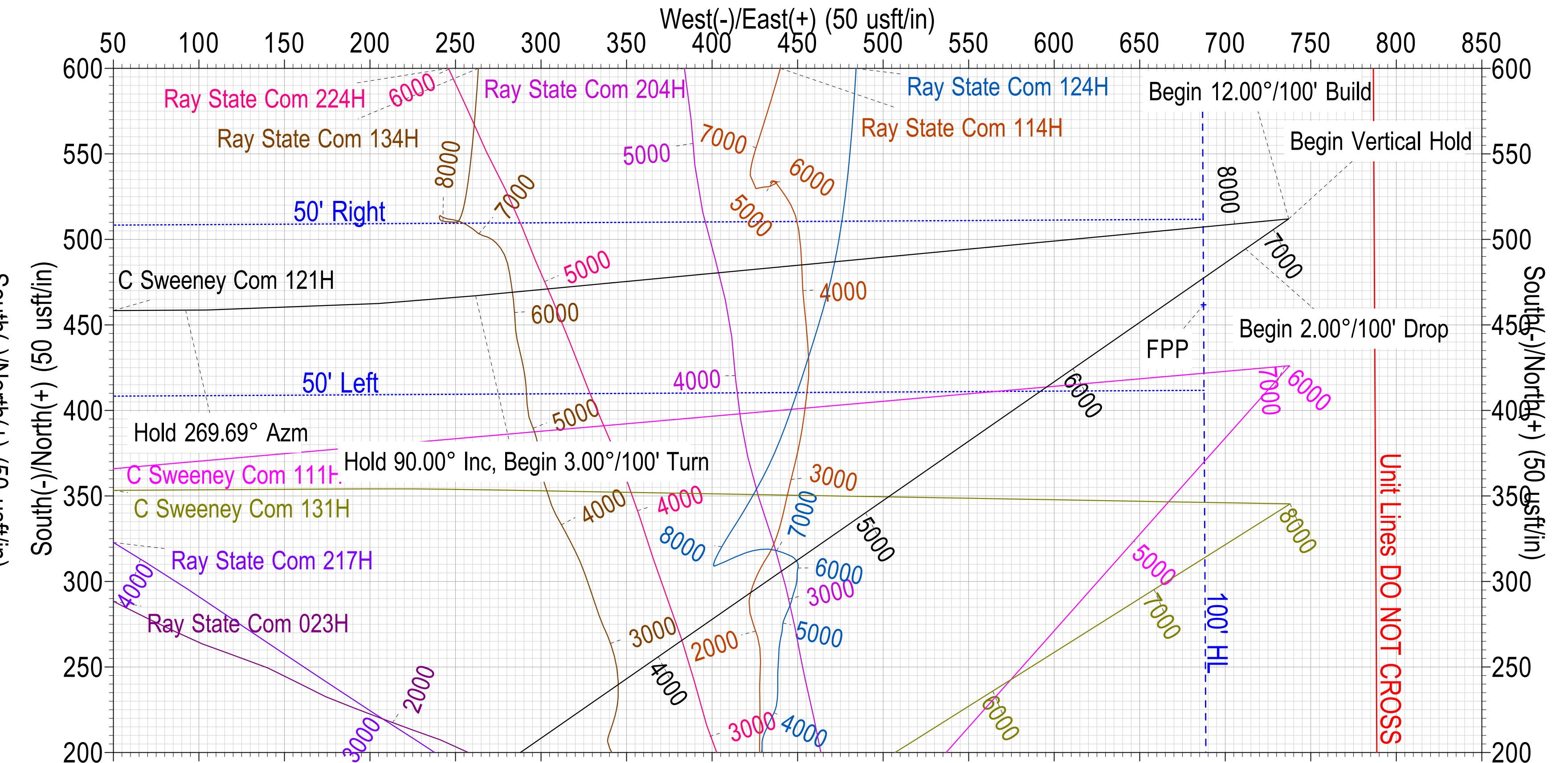
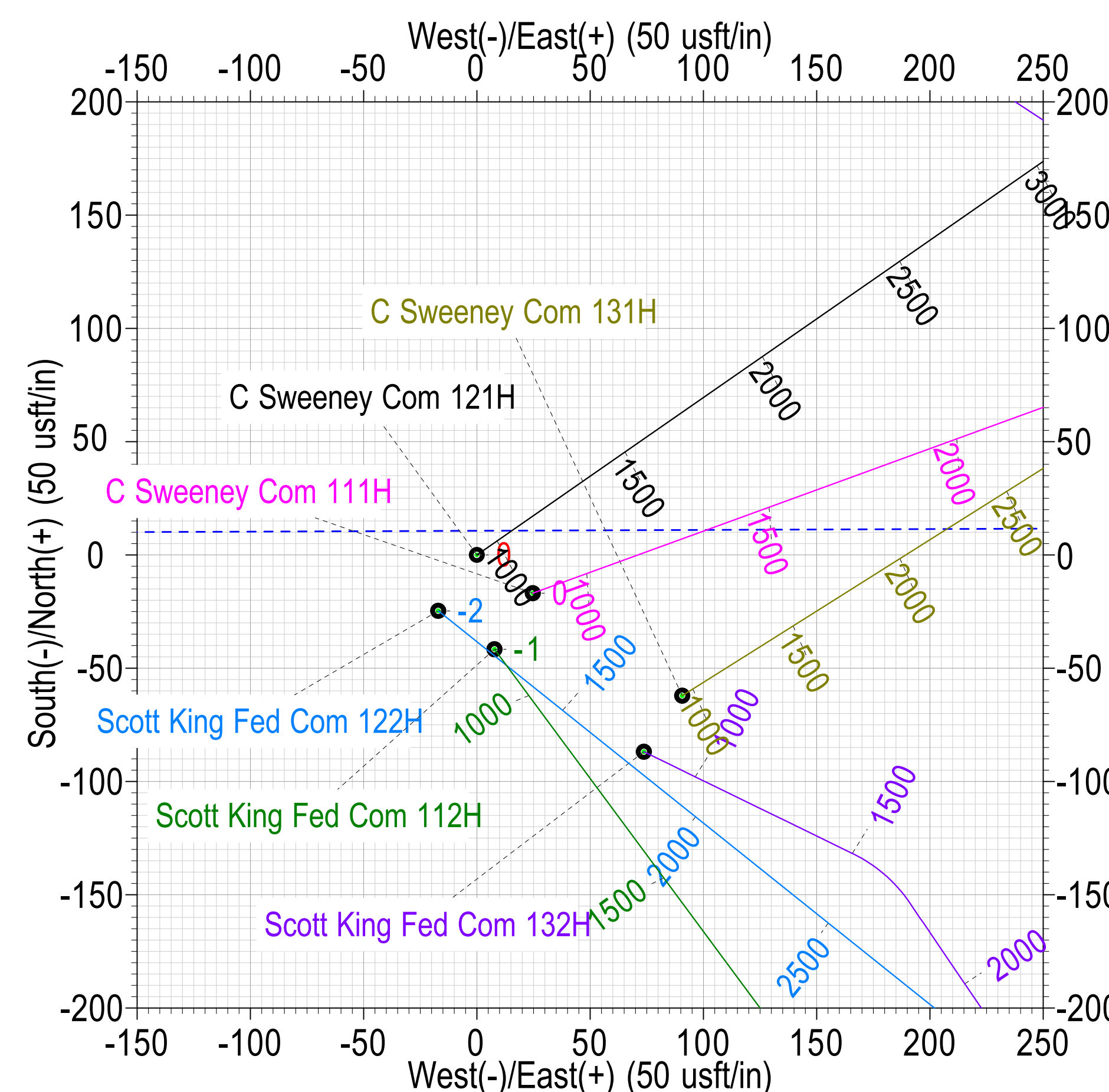
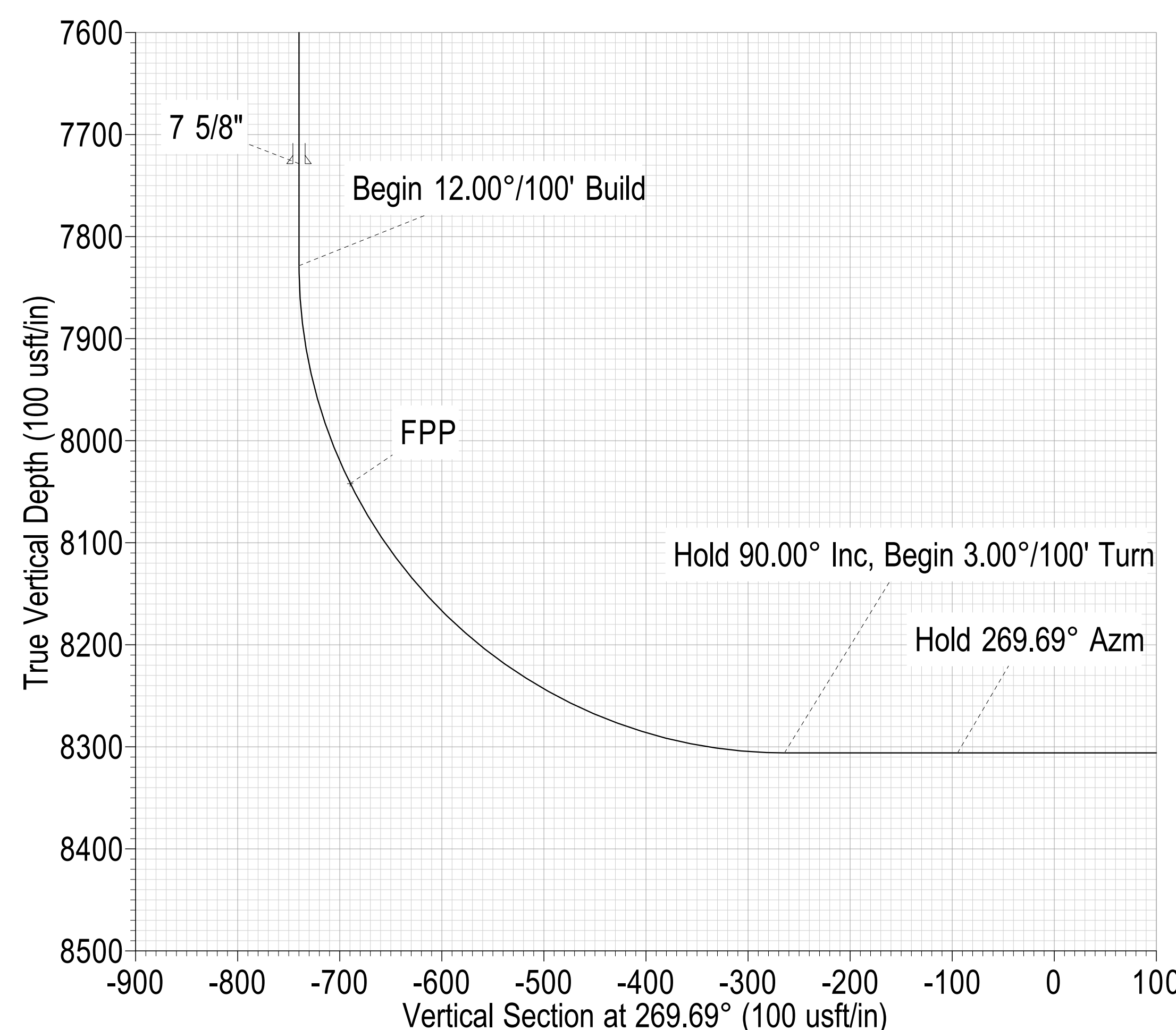
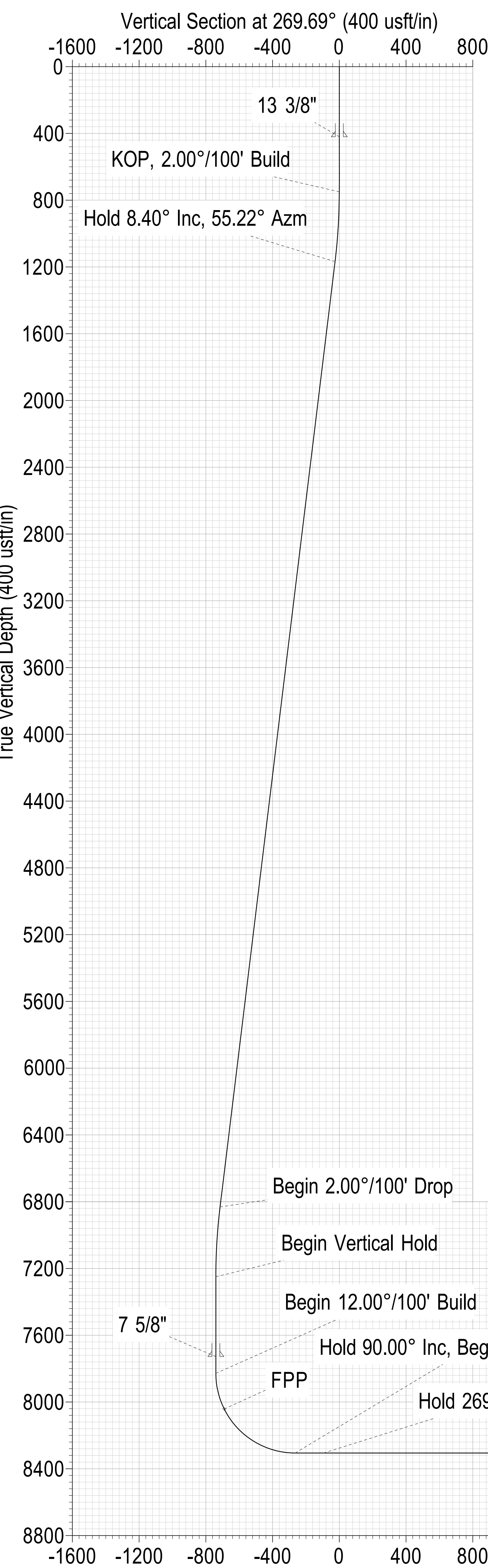
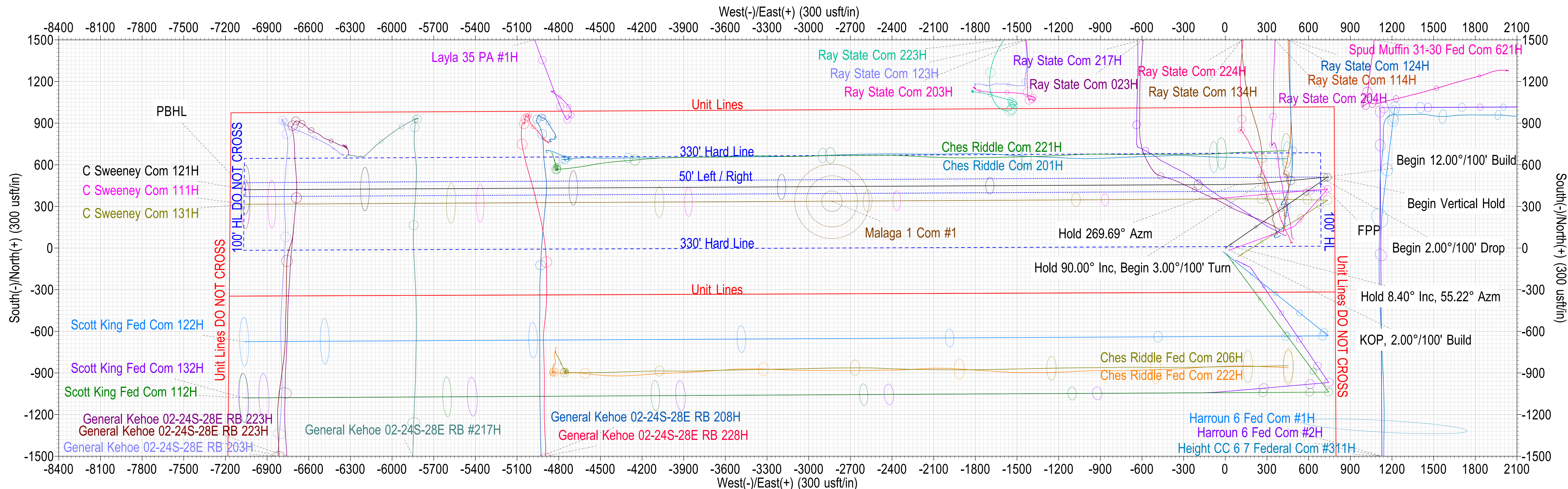
Depth From	Depth To	Survey/Plan	Tool
0.00	15959.75	Design #2 (Wellbore #1)	MWD+HRGM

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
FPP v2 - C Sweeney Com 121H	8042.19	461.76	687.33	455771.74	593100.24	32.252675	-104.032177
PBHL/LPP v2 - C Sweeney Com 121H	8306.00	420.41	-7054.71	455730.39	585358.20	32.252618	-104.057220

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	
750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.000	0.00	KOP, 2.00°/100' Build
1169.89	8.40	55.22	1168.38	17.52	25.23	2.00	55.216	-25.32	Hold 8.40° Inc, 55.22° Azm
6894.50	8.40	55.22	6831.62	494.48	711.87	0.00	0.000	-714.50	Begin 2.00°/100' Drop
7314.38	0.00	0.00	7250.00	512.00	737.10	2.00	180.000	-739.82	Begin Vertical Hold
7892.92	0.00	0.00	7828.54	512.00	737.10	0.00	0.000	-739.82	Begin 12.00°/100' Build
8642.92	90.00	264.60	8306.00	467.07	261.75	12.00	264.600	-264.24	Hold 90.00° Inc, Begin 3.00°/100' Turn
8812.71	90.00	269.69	8306.00	458.62	92.23	3.00	90.000	-94.68	Hold 269.69° Azm
15959.75	90.00	269.69	8306.00	420.41	-7054.71	0.00	0.000	7052.37	PBHL





Matador Resources

**Eddy County, New Mexico (NAD 27)
C Sweeney & Scott King (111H - 132H)
C Sweeney Com 121H**

Wellbore #1

Plan: Design #2

Standard Planning Report

14 December, 2023





MS Directional Planning Report



Database:	EDM 5000.15 Conroe DB	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Company:	Matador Resources	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Project:	Eddy County, New Mexico (NAD 27)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site:	C Sweeney & Scott King (111H - 132H)	North Reference:	Grid
Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Project	Eddy County, New Mexico (NAD 27)		
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	C Sweeney & Scott King (111H - 132H)		
Site Position:		Northing:	455,293.10 usft
From:	Map	Easting:	592,437.66 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.251364
		Longitude:	-104.034325

Well	C Sweeney Com 121H					
Well Position	+N/-S	0.00 usft	Northing:	455,309.98 usft	Latitude:	32.251411
	+E/-W	0.00 usft	Easting:	592,412.92 usft	Longitude:	-104.034404
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	2,981.00 usft
Grid Convergence:		0.160 °				

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2023	12/31/2023	6.633	59.833	47,410.900

Design	Design #2				
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	269.69	

Plan Survey Tool Program	Date	12/14/2023			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	15,959.75	Design #2 (Wellbore #1)	MWD+HRGM	
				OWSG MWD + HRGM	



MS Directional Planning Report



Database:	EDM 5000.15 Conroe DB	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Company:	Matador Resources	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Project:	Eddy County, New Mexico (NAD 27)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site:	C Sweeney & Scott King (111H - 132H)	North Reference:	Grid
Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Plan Sections										
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	0.000	
750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	0.000	
1,169.89	8.40	55.22	1,168.38	17.52	25.23	2.00	2.00	0.00	55.216	
6,894.50	8.40	55.22	6,831.62	494.48	711.87	0.00	0.00	0.00	0.000	
7,314.38	0.00	0.00	7,250.00	512.00	737.10	2.00	-2.00	0.00	180.000	
7,892.92	0.00	0.00	7,828.54	512.00	737.10	0.00	0.00	0.00	0.000	
8,642.92	90.00	264.60	8,306.00	467.07	261.75	12.00	12.00	0.00	264.600	
8,812.71	90.00	269.69	8,306.00	458.62	92.23	3.00	0.00	3.00	90.000	
15,959.75	90.00	269.69	8,306.00	420.41	-7,054.71	0.00	0.00	0.00	0.000	PBHL/LPP v2 - C S



MS Directional Planning Report



Database:	EDM 5000.15 Conroe DB	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Company:	Matador Resources	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Project:	Eddy County, New Mexico (NAD 27)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site:	C Sweeney & Scott King (111H - 132H)	North Reference:	Grid
Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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
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
420.00	0.00	0.00	420.00	0.00	0.00	0.00	0.00	0.00	0.00
13 3/8"									
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
750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP, 2.00°/100' Build									
800.00	1.00	55.22	800.00	0.25	0.36	-0.36	2.00	2.00	0.00
900.00	3.00	55.22	899.93	2.24	3.22	-3.24	2.00	2.00	0.00
1,000.00	5.00	55.22	999.68	6.22	8.95	-8.99	2.00	2.00	0.00
1,100.00	7.00	55.22	1,099.13	12.18	17.54	-17.60	2.00	2.00	0.00
1,169.89	8.40	55.22	1,168.38	17.52	25.23	-25.32	2.00	2.00	0.00
Hold 8.40° Inc, 55.22° Azm									
1,200.00	8.40	55.22	1,198.18	20.03	28.84	-28.95	0.00	0.00	0.00
1,300.00	8.40	55.22	1,297.10	28.36	40.83	-40.98	0.00	0.00	0.00
1,400.00	8.40	55.22	1,396.03	36.70	52.83	-53.02	0.00	0.00	0.00
1,500.00	8.40	55.22	1,494.96	45.03	64.82	-65.06	0.00	0.00	0.00
1,600.00	8.40	55.22	1,593.89	53.36	76.82	-77.10	0.00	0.00	0.00
1,700.00	8.40	55.22	1,692.81	61.69	88.81	-89.14	0.00	0.00	0.00
1,800.00	8.40	55.22	1,791.74	70.02	100.81	-101.18	0.00	0.00	0.00
1,900.00	8.40	55.22	1,890.67	78.35	112.80	-113.22	0.00	0.00	0.00
2,000.00	8.40	55.22	1,989.60	86.69	124.80	-125.26	0.00	0.00	0.00
2,100.00	8.40	55.22	2,088.53	95.02	136.79	-137.30	0.00	0.00	0.00
2,200.00	8.40	55.22	2,187.45	103.35	148.79	-149.34	0.00	0.00	0.00
2,300.00	8.40	55.22	2,286.38	111.68	160.78	-161.37	0.00	0.00	0.00
2,400.00	8.40	55.22	2,385.31	120.01	172.77	-173.41	0.00	0.00	0.00
2,500.00	8.40	55.22	2,484.24	128.34	184.77	-185.45	0.00	0.00	0.00
2,600.00	8.40	55.22	2,583.16	136.68	196.76	-197.49	0.00	0.00	0.00
2,700.00	8.40	55.22	2,682.09	145.01	208.76	-209.53	0.00	0.00	0.00
2,800.00	8.40	55.22	2,781.02	153.34	220.75	-221.57	0.00	0.00	0.00
2,900.00	8.40	55.22	2,879.95	161.67	232.75	-233.61	0.00	0.00	0.00
3,000.00	8.40	55.22	2,978.88	170.00	244.74	-245.65	0.00	0.00	0.00
3,100.00	8.40	55.22	3,077.80	178.33	256.74	-257.69	0.00	0.00	0.00
3,200.00	8.40	55.22	3,176.73	186.66	268.73	-269.72	0.00	0.00	0.00
3,300.00	8.40	55.22	3,275.66	195.00	280.73	-281.76	0.00	0.00	0.00
3,400.00	8.40	55.22	3,374.59	203.33	292.72	-293.80	0.00	0.00	0.00
3,500.00	8.40	55.22	3,473.52	211.66	304.72	-305.84	0.00	0.00	0.00
3,600.00	8.40	55.22	3,572.44	219.99	316.71	-317.88	0.00	0.00	0.00
3,700.00	8.40	55.22	3,671.37	228.32	328.70	-329.92	0.00	0.00	0.00
3,800.00	8.40	55.22	3,770.30	236.65	340.70	-341.96	0.00	0.00	0.00
3,900.00	8.40	55.22	3,869.23	244.99	352.69	-354.00	0.00	0.00	0.00
4,000.00	8.40	55.22	3,968.15	253.32	364.69	-366.04	0.00	0.00	0.00
4,100.00	8.40	55.22	4,067.08	261.65	376.68	-378.08	0.00	0.00	0.00
4,200.00	8.40	55.22	4,166.01	269.98	388.68	-390.11	0.00	0.00	0.00
4,300.00	8.40	55.22	4,264.94	278.31	400.67	-402.15	0.00	0.00	0.00
4,400.00	8.40	55.22	4,363.87	286.64	412.67	-414.19	0.00	0.00	0.00
4,500.00	8.40	55.22	4,462.79	294.98	424.66	-426.23	0.00	0.00	0.00
4,600.00	8.40	55.22	4,561.72	303.31	436.66	-438.27	0.00	0.00	0.00



MS Directional Planning Report



Database:	EDM 5000.15 Conroe DB	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Company:	Matador Resources	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Project:	Eddy County, New Mexico (NAD 27)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site:	C Sweeney & Scott King (111H - 132H)	North Reference:	Grid
Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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)
4,700.00	8.40	55.22	4,660.65	311.64	448.65	-450.31	0.00	0.00	0.00
4,800.00	8.40	55.22	4,759.58	319.97	460.65	-462.35	0.00	0.00	0.00
4,900.00	8.40	55.22	4,858.50	328.30	472.64	-474.39	0.00	0.00	0.00
5,000.00	8.40	55.22	4,957.43	336.63	484.64	-486.43	0.00	0.00	0.00
5,100.00	8.40	55.22	5,056.36	344.97	496.63	-498.47	0.00	0.00	0.00
5,200.00	8.40	55.22	5,155.29	353.30	508.62	-510.50	0.00	0.00	0.00
5,300.00	8.40	55.22	5,254.22	361.63	520.62	-522.54	0.00	0.00	0.00
5,400.00	8.40	55.22	5,353.14	369.96	532.61	-534.58	0.00	0.00	0.00
5,500.00	8.40	55.22	5,452.07	378.29	544.61	-546.62	0.00	0.00	0.00
5,600.00	8.40	55.22	5,551.00	386.62	556.60	-558.66	0.00	0.00	0.00
5,700.00	8.40	55.22	5,649.93	394.96	568.60	-570.70	0.00	0.00	0.00
5,800.00	8.40	55.22	5,748.86	403.29	580.59	-582.74	0.00	0.00	0.00
5,900.00	8.40	55.22	5,847.78	411.62	592.59	-594.78	0.00	0.00	0.00
6,000.00	8.40	55.22	5,946.71	419.95	604.58	-606.82	0.00	0.00	0.00
6,100.00	8.40	55.22	6,045.64	428.28	616.58	-618.85	0.00	0.00	0.00
6,200.00	8.40	55.22	6,144.57	436.61	628.57	-630.89	0.00	0.00	0.00
6,300.00	8.40	55.22	6,243.49	444.95	640.57	-642.93	0.00	0.00	0.00
6,400.00	8.40	55.22	6,342.42	453.28	652.56	-654.97	0.00	0.00	0.00
6,500.00	8.40	55.22	6,441.35	461.61	664.55	-667.01	0.00	0.00	0.00
6,600.00	8.40	55.22	6,540.28	469.94	676.55	-679.05	0.00	0.00	0.00
6,700.00	8.40	55.22	6,639.21	478.27	688.54	-691.09	0.00	0.00	0.00
6,800.00	8.40	55.22	6,738.13	486.60	700.54	-703.13	0.00	0.00	0.00
6,894.50	8.40	55.22	6,831.62	494.48	711.87	-714.50	0.00	0.00	0.00
Begin 2.00°/100' Drop									
6,900.00	8.29	55.22	6,837.06	494.93	712.53	-715.16	2.00	-2.00	0.00
7,000.00	6.29	55.22	6,936.25	502.17	722.95	-725.62	2.00	-2.00	0.00
7,100.00	4.29	55.22	7,035.82	507.43	730.52	-733.21	2.00	-2.00	0.00
7,200.00	2.29	55.22	7,135.65	510.70	735.22	-737.94	2.00	-2.00	0.00
7,300.00	0.29	55.22	7,235.62	511.98	737.07	-739.79	2.00	-2.00	0.00
7,314.38	0.00	0.00	7,250.00	512.00	737.10	-739.82	2.00	-2.00	0.00
Begin Vertical Hold									
7,400.00	0.00	0.00	7,335.62	512.00	737.10	-739.82	0.00	0.00	0.00
7,500.00	0.00	0.00	7,435.62	512.00	737.10	-739.82	0.00	0.00	0.00
7,600.00	0.00	0.00	7,535.62	512.00	737.10	-739.82	0.00	0.00	0.00
7,700.00	0.00	0.00	7,635.62	512.00	737.10	-739.82	0.00	0.00	0.00
7,792.92	0.00	0.00	7,728.54	512.00	737.10	-739.82	0.00	0.00	0.00
7 5/8"									
7,800.00	0.00	0.00	7,735.62	512.00	737.10	-739.82	0.00	0.00	0.00
7,892.92	0.00	0.00	7,828.54	512.00	737.10	-739.82	0.00	0.00	0.00
Begin 12.00°/100' Build									
7,900.00	0.85	264.60	7,835.62	512.00	737.05	-739.77	12.00	12.00	0.00
7,925.00	3.85	264.60	7,860.59	511.90	736.03	-738.75	12.00	12.00	0.00
7,950.00	6.85	264.60	7,885.48	511.68	733.71	-736.43	12.00	12.00	0.00
7,975.00	9.85	264.60	7,910.21	511.34	730.09	-732.81	12.00	12.00	0.00
8,000.00	12.85	264.60	7,934.72	510.87	725.20	-727.91	12.00	12.00	0.00
8,025.00	15.85	264.60	7,958.94	510.29	719.03	-721.74	12.00	12.00	0.00
8,050.00	18.85	264.60	7,982.80	509.59	711.61	-714.32	12.00	12.00	0.00
8,075.00	21.85	264.60	8,006.24	508.77	702.95	-705.66	12.00	12.00	0.00
8,100.00	24.85	264.60	8,029.19	507.84	693.09	-695.79	12.00	12.00	0.00
8,125.00	27.85	264.60	8,051.59	506.80	682.04	-684.74	12.00	12.00	0.00
8,150.00	30.85	264.60	8,073.38	505.64	669.84	-672.54	12.00	12.00	0.00
8,175.00	33.85	264.60	8,094.49	504.38	656.53	-659.21	12.00	12.00	0.00
8,200.00	36.85	264.60	8,114.88	503.02	642.13	-644.81	12.00	12.00	0.00
8,225.00	39.85	264.60	8,134.48	501.56	626.69	-629.36	12.00	12.00	0.00



MS Directional Planning Report



Database:	EDM 5000.15 Conroe DB	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Company:	Matador Resources	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Project:	Eddy County, New Mexico (NAD 27)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site:	C Sweeney & Scott King (111H - 132H)	North Reference:	Grid
Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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)
8,250.00	42.85	264.60	8,153.25	500.01	610.25	-612.91	12.00	12.00	0.00
8,275.00	45.85	264.60	8,171.13	498.36	592.85	-595.50	12.00	12.00	0.00
8,300.00	48.85	264.60	8,188.06	496.63	574.55	-577.19	12.00	12.00	0.00
8,325.00	51.85	264.60	8,204.01	494.82	555.39	-558.02	12.00	12.00	0.00
8,350.00	54.85	264.60	8,218.93	492.94	535.42	-538.05	12.00	12.00	0.00
8,375.00	57.85	264.60	8,232.78	490.98	514.70	-517.32	12.00	12.00	0.00
8,400.00	60.85	264.60	8,245.53	488.95	493.29	-495.90	12.00	12.00	0.00
8,425.00	63.85	264.60	8,257.13	486.87	471.25	-473.84	12.00	12.00	0.00
8,450.00	66.85	264.60	8,267.55	484.73	448.63	-451.21	12.00	12.00	0.00
8,475.00	69.85	264.60	8,276.78	482.55	425.50	-428.07	12.00	12.00	0.00
8,500.00	72.85	264.60	8,284.77	480.32	401.92	-404.48	12.00	12.00	0.00
8,525.00	75.85	264.60	8,291.51	478.05	377.96	-380.51	12.00	12.00	0.00
8,550.00	78.85	264.60	8,296.99	475.76	353.68	-356.21	12.00	12.00	0.00
8,575.00	81.85	264.60	8,301.18	473.44	329.14	-331.67	12.00	12.00	0.00
8,600.00	84.85	264.60	8,304.07	471.10	304.42	-306.93	12.00	12.00	0.00
8,625.00	87.85	264.60	8,305.66	468.75	279.59	-282.09	12.00	12.00	0.00
8,642.92	90.00	264.60	8,306.00	467.07	261.75	-264.24	12.00	12.00	0.00
Hold 90.00° Inc, Begin 3.00°/100' Turn									
8,700.00	90.00	266.31	8,306.00	462.54	204.85	-207.32	3.00	0.00	3.00
8,800.00	90.00	269.31	8,306.00	458.73	104.94	-107.39	3.00	0.00	3.00
8,812.71	90.00	269.69	8,306.00	458.62	92.23	-94.68	3.00	0.00	3.00
Hold 269.69° Azm									
8,900.00	90.00	269.69	8,306.00	458.15	4.94	-7.39	0.00	0.00	0.00
9,000.00	90.00	269.69	8,306.00	457.62	-95.06	92.61	0.00	0.00	0.00
9,100.00	90.00	269.69	8,306.00	457.08	-195.06	192.61	0.00	0.00	0.00
9,200.00	90.00	269.69	8,306.00	456.55	-295.06	292.61	0.00	0.00	0.00
9,300.00	90.00	269.69	8,306.00	456.01	-395.06	392.61	0.00	0.00	0.00
9,400.00	90.00	269.69	8,306.00	455.48	-495.05	492.61	0.00	0.00	0.00
9,500.00	90.00	269.69	8,306.00	454.94	-595.05	592.61	0.00	0.00	0.00
9,600.00	90.00	269.69	8,306.00	454.41	-695.05	692.61	0.00	0.00	0.00
9,700.00	90.00	269.69	8,306.00	453.87	-795.05	792.61	0.00	0.00	0.00
9,800.00	90.00	269.69	8,306.00	453.34	-895.05	892.61	0.00	0.00	0.00
9,900.00	90.00	269.69	8,306.00	452.81	-995.05	992.61	0.00	0.00	0.00
10,000.00	90.00	269.69	8,306.00	452.27	-1,095.05	1,092.61	0.00	0.00	0.00
10,100.00	90.00	269.69	8,306.00	451.74	-1,195.04	1,192.61	0.00	0.00	0.00
10,200.00	90.00	269.69	8,306.00	451.20	-1,295.04	1,292.61	0.00	0.00	0.00
10,300.00	90.00	269.69	8,306.00	450.67	-1,395.04	1,392.61	0.00	0.00	0.00
10,400.00	90.00	269.69	8,306.00	450.13	-1,495.04	1,492.61	0.00	0.00	0.00
10,500.00	90.00	269.69	8,306.00	449.60	-1,595.04	1,592.61	0.00	0.00	0.00
10,600.00	90.00	269.69	8,306.00	449.06	-1,695.04	1,692.61	0.00	0.00	0.00
10,700.00	90.00	269.69	8,306.00	448.53	-1,795.04	1,792.61	0.00	0.00	0.00
10,800.00	90.00	269.69	8,306.00	447.99	-1,895.03	1,892.61	0.00	0.00	0.00
10,900.00	90.00	269.69	8,306.00	447.46	-1,995.03	1,992.61	0.00	0.00	0.00
11,000.00	90.00	269.69	8,306.00	446.92	-2,095.03	2,092.61	0.00	0.00	0.00
11,100.00	90.00	269.69	8,306.00	446.39	-2,195.03	2,192.61	0.00	0.00	0.00
11,200.00	90.00	269.69	8,306.00	445.86	-2,295.03	2,292.61	0.00	0.00	0.00
11,300.00	90.00	269.69	8,306.00	445.32	-2,395.03	2,392.61	0.00	0.00	0.00
11,400.00	90.00	269.69	8,306.00	444.79	-2,495.03	2,492.61	0.00	0.00	0.00
11,500.00	90.00	269.69	8,306.00	444.25	-2,595.02	2,592.61	0.00	0.00	0.00
11,600.00	90.00	269.69	8,306.00	443.72	-2,695.02	2,692.61	0.00	0.00	0.00
11,700.00	90.00	269.69	8,306.00	443.18	-2,795.02	2,792.61	0.00	0.00	0.00
11,800.00	90.00	269.69	8,306.00	442.65	-2,895.02	2,892.61	0.00	0.00	0.00
11,900.00	90.00	269.69	8,306.00	442.11	-2,995.02	2,992.61	0.00	0.00	0.00



MS Directional Planning Report



Database:	EDM 5000.15 Conroe DB	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Company:	Matador Resources	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Project:	Eddy County, New Mexico (NAD 27)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site:	C Sweeney & Scott King (111H - 132H)	North Reference:	Grid
Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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)
12,000.00	90.00	269.69	8,306.00	441.58	-3,095.02	3,092.61	0.00	0.00	0.00
12,100.00	90.00	269.69	8,306.00	441.04	-3,195.02	3,192.61	0.00	0.00	0.00
12,200.00	90.00	269.69	8,306.00	440.51	-3,295.01	3,292.61	0.00	0.00	0.00
12,300.00	90.00	269.69	8,306.00	439.98	-3,395.01	3,392.61	0.00	0.00	0.00
12,400.00	90.00	269.69	8,306.00	439.44	-3,495.01	3,492.61	0.00	0.00	0.00
12,500.00	90.00	269.69	8,306.00	438.91	-3,595.01	3,592.61	0.00	0.00	0.00
12,600.00	90.00	269.69	8,306.00	438.37	-3,695.01	3,692.61	0.00	0.00	0.00
12,700.00	90.00	269.69	8,306.00	437.84	-3,795.01	3,792.61	0.00	0.00	0.00
12,800.00	90.00	269.69	8,306.00	437.30	-3,895.01	3,892.61	0.00	0.00	0.00
12,900.00	90.00	269.69	8,306.00	436.77	-3,995.00	3,992.61	0.00	0.00	0.00
13,000.00	90.00	269.69	8,306.00	436.23	-4,095.00	4,092.61	0.00	0.00	0.00
13,100.00	90.00	269.69	8,306.00	435.70	-4,195.00	4,192.61	0.00	0.00	0.00
13,200.00	90.00	269.69	8,306.00	435.16	-4,295.00	4,292.61	0.00	0.00	0.00
13,300.00	90.00	269.69	8,306.00	434.63	-4,395.00	4,392.61	0.00	0.00	0.00
13,400.00	90.00	269.69	8,306.00	434.09	-4,495.00	4,492.61	0.00	0.00	0.00
13,500.00	90.00	269.69	8,306.00	433.56	-4,595.00	4,592.61	0.00	0.00	0.00
13,600.00	90.00	269.69	8,306.00	433.03	-4,694.99	4,692.61	0.00	0.00	0.00
13,700.00	90.00	269.69	8,306.00	432.49	-4,794.99	4,792.61	0.00	0.00	0.00
13,800.00	90.00	269.69	8,306.00	431.96	-4,894.99	4,892.61	0.00	0.00	0.00
13,900.00	90.00	269.69	8,306.00	431.42	-4,994.99	4,992.61	0.00	0.00	0.00
14,000.00	90.00	269.69	8,306.00	430.89	-5,094.99	5,092.61	0.00	0.00	0.00
14,100.00	90.00	269.69	8,306.00	430.35	-5,194.99	5,192.61	0.00	0.00	0.00
14,200.00	90.00	269.69	8,306.00	429.82	-5,294.99	5,292.61	0.00	0.00	0.00
14,300.00	90.00	269.69	8,306.00	429.28	-5,394.98	5,392.61	0.00	0.00	0.00
14,400.00	90.00	269.69	8,306.00	428.75	-5,494.98	5,492.61	0.00	0.00	0.00
14,500.00	90.00	269.69	8,306.00	428.21	-5,594.98	5,592.61	0.00	0.00	0.00
14,600.00	90.00	269.69	8,306.00	427.68	-5,694.98	5,692.61	0.00	0.00	0.00
14,700.00	90.00	269.69	8,306.00	427.15	-5,794.98	5,792.61	0.00	0.00	0.00
14,800.00	90.00	269.69	8,306.00	426.61	-5,894.98	5,892.61	0.00	0.00	0.00
14,900.00	90.00	269.69	8,306.00	426.08	-5,994.98	5,992.61	0.00	0.00	0.00
15,000.00	90.00	269.69	8,306.00	425.54	-6,094.97	6,092.61	0.00	0.00	0.00
15,100.00	90.00	269.69	8,306.00	425.01	-6,194.97	6,192.61	0.00	0.00	0.00
15,200.00	90.00	269.69	8,306.00	424.47	-6,294.97	6,292.61	0.00	0.00	0.00
15,300.00	90.00	269.69	8,306.00	423.94	-6,394.97	6,392.61	0.00	0.00	0.00
15,400.00	90.00	269.69	8,306.00	423.40	-6,494.97	6,492.61	0.00	0.00	0.00
15,500.00	90.00	269.69	8,306.00	422.87	-6,594.97	6,592.61	0.00	0.00	0.00
15,600.00	90.00	269.69	8,306.00	422.33	-6,694.97	6,692.61	0.00	0.00	0.00
15,700.00	90.00	269.69	8,306.00	421.80	-6,794.96	6,792.61	0.00	0.00	0.00
15,800.00	90.00	269.69	8,306.00	421.27	-6,894.96	6,892.61	0.00	0.00	0.00
15,900.00	90.00	269.69	8,306.00	420.73	-6,994.96	6,992.61	0.00	0.00	0.00
15,959.75	90.00	269.69	8,306.00	420.41	-7,054.71	7,052.37	0.00	0.00	0.00
PBHL									



MS Directional Planning Report



Database:	EDM 5000.15 Conroe DB	Local Co-ordinate Reference:	Well C Sweeney Com 121H
Company:	Matador Resources	TVD Reference:	Well @ 3009.50usft (Patterson 298)
Project:	Eddy County, New Mexico (NAD 27)	MD Reference:	Well @ 3009.50usft (Patterson 298)
Site:	C Sweeney & Scott King (111H - 132H)	North Reference:	Grid
Well:	C Sweeney Com 121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FPP v2 - C Sweeney - plan misses target center by 45.47usft at 8116.12usft MD (8043.70 TVD, 507.18 N, 686.10 E) - Point	0.00	0.01	8,042.19	461.76	687.33	455,771.74	593,100.25	32.252675	-104.032177
PBHL/LPP v2 - C Sw - plan hits target center - Point	0.00	0.01	8,306.00	420.41	-7,054.71	455,730.39	585,358.20	32.252618	-104.057221

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
420.00	420.00	13 3/8"	13-3/8	17-1/2
7,792.92	7,728.54	7 5/8"	7-5/8	12-1/4

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
750.00	750.00	0.00	0.00	KOP, 2.00°/100' Build
1,169.89	1,168.38	17.52	25.23	Hold 8.40° Inc, 55.22° Azm
6,894.50	6,831.62	494.48	711.87	Begin 2.00°/100' Drop
7,314.38	7,250.00	512.00	737.10	Begin Vertical Hold
7,892.92	7,828.54	512.00	737.10	Begin 12.00°/100' Build
8,642.92	8,306.00	467.07	261.75	Hold 90.00° Inc, Begin 3.00°/100' Turn
8,812.71	8,306.00	458.62	92.23	Hold 269.69° Azm
15,959.75	8,306.00	420.41	-7,054.71	PBHL

Well Name: C Sweeney State Com #121H										
STRING	FLUID TYPE	HOLE SZ	CSG SZ	CSG GRADE	CSG WT	DEPTH SET	TOP CSG	TTL SX CEMENT	EST TOC	ADDITIONAL INFO FOR CSG/CMT PROGRAM (Optional)
SURF	FRESH WTR	17.5	13.375	J-55	54.50	420	0	400	0	Option to drill surface hole with surface setting rig
INT 1	Diesel/Brine Emulsion	9.875	7.625	P-110	29.70	7793	0	880	0	Option to run DV tool and Packer.
PROD	OBM/Cutbrine	6.75	5.5	P-110	20.00	15959	0	875	7293	

Fluid Type

Pick List Choices

Air

Fresh Water

Cut Brine

Brine

Produced Water

Mud

Oil-Based Mud

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 303144

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 303144
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply.	1/24/2024