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

Form C-101
August 1, 2011

Permit 346798

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	228937
	3. API Number 30-015-54056

4. Property Code	5. Property Name	6. Well No.
333122	BARRY MILLER STATE COM	221H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
D	16	22S	28E		855	N	430	W	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
C	15	22S	28E	C	660	N	2329	W	Eddy

9. Pool Information

PURPLE SAGE;WOLFCAMP (GAS)	98220

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	GAS		State	3085
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	17218	Wolfcamp		5/7/2025
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	400	380	0
Int1	9.875	7.625	29.7	9172	800	0
Prod	6.75	5.5	20	17218	950	8972

Casing/Cement Program: Additional Comments

Option to drill surface hole with surface setting rig Option to run DV tool and Packer.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	3000	Cameron
Double Ram	10000	5000	Cameron
Pipe	10000	5000	Cameron

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature:		**OIL CONSERVATION DIVISION**	
Printed Name:	Electronically filed by Brett A Jennings	Approved By:	Ward Rikala
Title:	Regulatory Analyst	Title:	
Email Address:	brett.jennings@matadorresources.com	Approved Date:	8/15/2023 Expiration Date: 8/15/2025
Date:	8/7/2023 Phone: 972-629-2160	Conditions of Approval Attached	

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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	[2]Pool Code	[3]Pool Name
30-015-54056	98220	Purple Sage; Wolfcamp (Gas)

[4]Property Code	[5]Property Name	[6]Well Number
333122	BARRY MILLER STATE COM	221H

[7]OGRID No.	[8]Operator Name	[9]Elevation
228937	MATADOR PRODUCTION COMPANY	3085'

[10]Surface Location

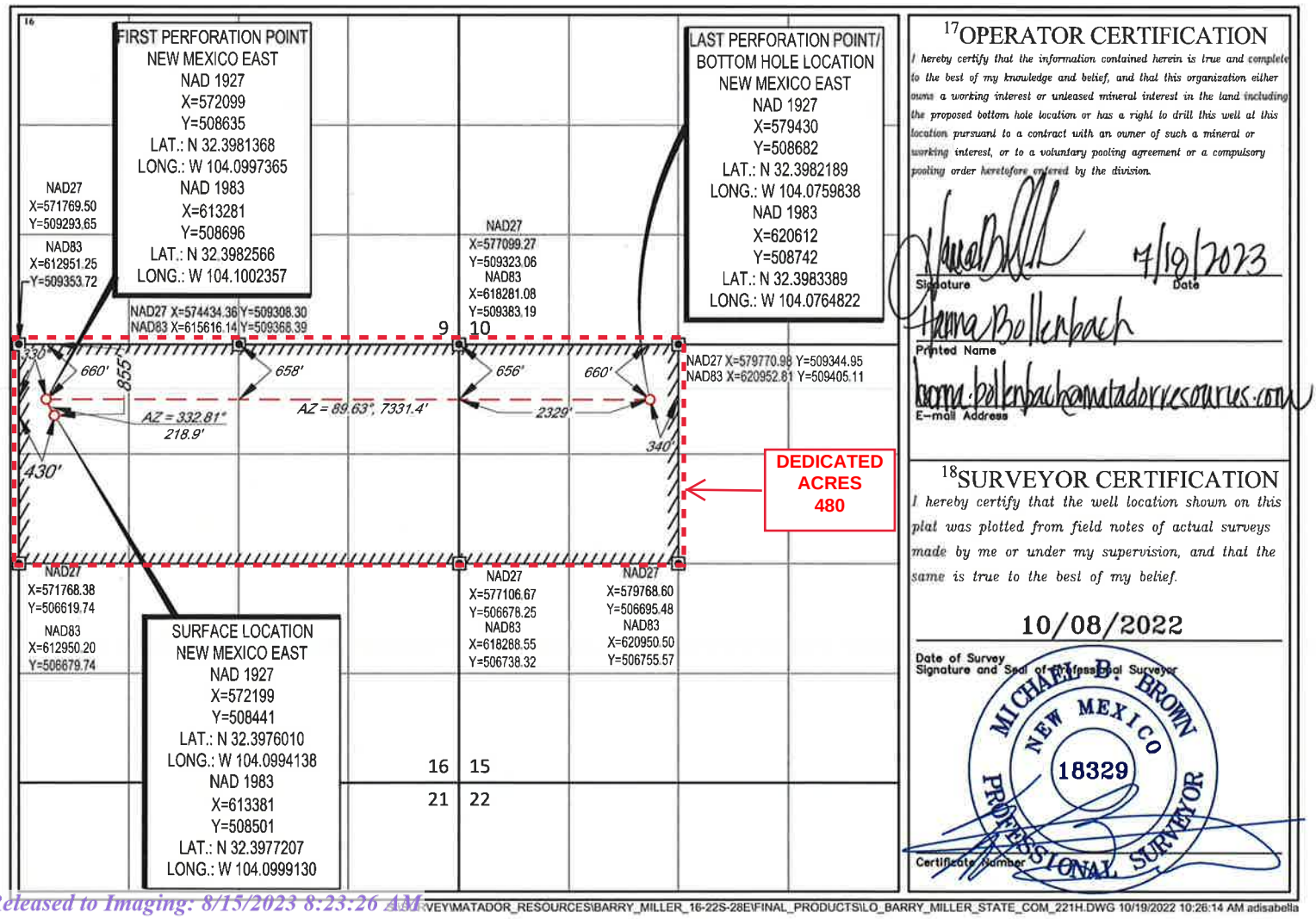
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	16	22-S	28-E	–	855'	NORTH	430'	WEST	EDDY

[11]Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	15	22-S	28-E	–	660'	NORTH	2329'	WEST	EDDY

[12]Dedicated Acres	[13]Joint or Infill	[14]Consolidation Code	[15]Order No.
480		C	

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.



[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 unleased 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 to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature 7/19/2023 Date

Printed Name: Hanna Bollenbach

E-mail Address: hanna.bollenbach@matadorresources.com

[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.

10/08/2022

Date of Survey
Signature and Seal of Professional Surveyor

MICHAEL B. BROWN
NEW MEXICO
18329
PROFESSIONAL SURVEYOR

Certificate Number

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

Form APD Conditions

Permit 346798

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
MATADOR PRODUCTION COMPANY [228937] One Lincoln Centre Dallas, TX 75240	30-015-54056
	Well: BARRY MILLER STATE COM #221H

OCD Reviewer	Condition
ward.rikala	Notify OCD 24 hours prior to casing & cement
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system
ward.rikala	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud

Matador Production Company

Rustler Breaks
Barry Miller
Barry Miller State Com #221H

Wellbore #1
BLM Plan #1

Anticollision Report

19 July, 2023

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Reference BLM Plan #1

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0 usft	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 7/19/2023

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	17,218.0	BLM Plan #1 (Wellbore #1)	MWD	OWSG MWD - Standard

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
Barry Miller						
Barry Miller State Com #121H - Wellbore #1 - Actual	1,224.5	1,229.2	71.5	63.2	8.679	CC, ES, SF
Barry Miller State Com #121H - Wellbore #1 - Altitude Pl	7,495.1	7,491.8	74.8	20.6	1.381	Level 3, CC
Barry Miller State Com #121H - Wellbore #1 - Altitude Pl	7,500.0	7,496.7	74.8	20.6	1.381	Level 3, ES, SF
Barry Miller State Com #122H - Wellbore #1 - Actual	1,068.6	1,068.1	87.9	80.8	12.410	CC, ES
Barry Miller State Com #122H - Wellbore #1 - Actual	17,218.0	15,426.4	2,310.6	2,076.9	9.889	SF
Barry Miller State Com #122H - Wellbore #1 - Altitude Pl	1,000.0	999.0	114.3	107.6	17.052	CC
Barry Miller State Com #122H - Wellbore #1 - Altitude Pl	1,100.0	1,097.4	115.0	107.6	15.542	ES
Barry Miller State Com #122H - Wellbore #1 - Altitude Pl	17,218.7	15,513.6	2,328.4	2,093.5	9.913	SF
Barry Miller State Com #135H - Wellbore #1 - State Plan	1,536.9	1,536.6	17.7	7.3	1.697	CC, ES
Barry Miller State Com #135H - Wellbore #1 - State Plan	1,600.0	1,599.3	18.5	7.6	1.696	SF
Barry Miller State Com #136H - Wellbore #1 - State Plan	1,500.0	1,501.0	42.4	32.1	4.120	CC
Barry Miller State Com #136H - Wellbore #1 - State Plan	1,600.0	1,601.0	42.7	31.7	3.879	ES
Barry Miller State Com #136H - Wellbore #1 - State Plan	1,800.0	1,801.1	45.5	33.1	3.663	SF
Barry Miller State Com #201H - Wellbore #1 - State Plan	1,897.2	1,902.1	39.4	26.3	2.995	CC
Barry Miller State Com #201H - Wellbore #1 - State Plan	1,900.0	1,904.8	39.4	26.3	2.991	ES
Barry Miller State Com #201H - Wellbore #1 - State Plan	2,000.0	2,004.7	40.7	26.8	2.925	SF
Barry Miller State Com #202H - Wellbore #1 - State Plan	0.0	0.0	85.7			
Barry Miller State Com #202H - Wellbore #1 - State Plan	17,218.0	16,711.6	1,145.7	819.5	3.512	SF
Barry Miller State Com #222H - Wellbore #1 - BLM Plan	1,516.9	1,517.2	28.3	17.9	2.734	CC, ES
Barry Miller State Com #222H - Wellbore #1 - BLM Plan	1,600.0	1,600.1	29.3	18.4	2.686	SF

Offset Design Barry Miller - Barry Miller State Com #121H - Wellbore #1 - Actual

Survey Program: 163-MWD

Offset Site Error: 0.0 usft

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	179.87	-110.2	0.2	110.2				
100.0	100.0	99.3	99.3	0.1	0.1	179.90	-110.1	0.2	110.1	109.8	0.28	399.505	
200.0	200.0	199.5	199.5	0.5	0.4	179.98	-109.7	0.0	109.7	108.9	0.86	127.775	
300.0	300.0	300.1	300.1	0.8	0.7	-179.84	-109.1	-0.3	109.1	107.5	1.58	69.100	
400.0	400.0	401.4	401.4	1.2	1.1	-179.26	-107.4	-1.4	107.5	105.2	2.30	46.660	
500.0	500.0	502.4	502.3	1.6	1.5	-178.42	-104.6	-2.9	104.7	101.6	3.03	34.589	
600.0	600.0	602.3	602.2	1.9	1.8	-177.35	-101.4	-4.7	101.5	97.8	3.74	27.127	
700.0	700.0	702.5	702.2	2.3	2.2	-176.19	-98.0	-6.5	98.3	93.8	4.46	22.036	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
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Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #121H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 163-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
800.0	800.0	803.1	802.8	2.6	2.5	-174.91	-94.4	-8.4	94.8	89.6	5.18	18.298	
900.0	900.0	904.1	903.7	3.0	2.9	-173.48	-89.5	-10.2	90.2	84.3	5.91	15.267	
1,000.0	1,000.0	1,004.4	1,003.8	3.4	3.3	-172.02	-83.7	-11.7	84.7	78.1	6.62	12.783	
1,100.0	1,100.0	1,104.3	1,103.5	3.7	3.6	-170.74	-77.8	-12.7	79.0	71.7	7.34	10.759	
1,200.0	1,200.0	1,204.6	1,203.6	4.1	4.0	-169.50	-71.7	-13.3	73.1	65.0	8.06	9.063	
1,224.5	1,224.5	1,229.2	1,228.1	4.2	4.1	-169.26	-70.1	-13.3	71.5	63.2	8.24	8.679	CC, ES, SF
1,300.0	1,300.0	1,220.0	1,219.0	4.4	4.1	-169.35	-70.7	-13.3	107.6	100.3	7.29	14.766	
1,400.0	1,400.0	1,220.0	1,219.0	4.8	4.1	-169.35	-70.7	-13.3	193.9	187.3	6.57	29.499	
1,500.0	1,500.0	1,220.0	1,219.0	5.1	4.1	-169.35	-70.7	-13.3	289.1	282.8	6.31	45.782	
1,600.0	1,600.0	1,220.0	1,219.0	5.5	4.1	-101.90	-70.7	-13.3	386.8	380.6	6.17	62.660	
1,700.0	1,700.0	1,220.0	1,219.0	5.9	4.1	-95.81	-70.7	-13.3	485.5	479.4	6.07	79.957	
1,800.0	1,799.9	1,220.0	1,219.0	6.2	4.1	-88.14	-70.7	-13.3	584.6	578.7	5.99	97.615	
1,900.0	1,899.7	1,220.0	1,219.0	6.6	4.1	-79.14	-70.7	-13.3	684.0	678.1	5.92	115.597	
2,000.0	1,999.4	1,220.0	1,219.0	6.9	4.1	-69.36	-70.7	-13.3	783.6	777.7	5.85	133.864	
2,100.0	2,098.9	1,220.0	1,219.0	7.3	4.1	-59.61	-70.7	-13.3	883.1	877.3	5.80	152.380	
2,200.0	2,198.3	1,220.0	1,219.0	7.6	4.1	-50.60	-70.7	-13.3	982.7	977.0	5.74	171.100	
2,300.0	2,297.4	1,220.0	1,219.0	8.0	4.1	-42.76	-70.7	-13.3	1,082.3	1,076.6	5.70	189.976	
2,400.0	2,396.4	1,220.0	1,219.0	8.4	4.1	-42.76	-70.7	-13.3	1,181.9	1,176.2	5.66	208.939	
2,500.0	2,495.5	1,220.0	1,219.0	8.8	4.1	-42.76	-70.7	-13.3	1,281.6	1,275.9	5.62	227.955	
2,600.0	2,594.5	1,220.0	1,219.0	9.2	4.1	-42.76	-70.7	-13.3	1,381.3	1,375.7	5.59	247.003	
2,700.0	2,693.5	1,220.0	1,219.0	9.5	4.1	-42.76	-70.7	-13.3	1,481.0	1,475.4	5.57	266.024	
2,800.0	2,792.5	1,220.0	1,219.0	9.9	4.1	-42.76	-70.7	-13.3	1,580.8	1,575.2	5.55	284.949	
2,900.0	2,891.6	1,220.0	1,219.0	10.3	4.1	-42.76	-70.7	-13.3	1,680.6	1,675.1	5.53	303.712	
3,000.0	2,990.6	1,220.0	1,219.0	10.7	4.1	-42.76	-70.7	-13.3	1,780.4	1,774.9	5.53	322.238	
3,100.0	3,089.6	1,220.0	1,219.0	11.1	4.1	-42.76	-70.7	-13.3	1,880.3	1,874.7	5.52	340.457	
3,200.0	3,188.6	1,220.0	1,219.0	11.5	4.1	-42.76	-70.7	-13.3	1,980.1	1,974.6	5.53	358.296	
3,300.0	3,287.7	1,220.0	1,219.0	11.9	4.1	-42.76	-70.7	-13.3	2,080.0	2,074.5	5.54	375.685	
3,400.0	3,386.7	1,220.0	1,219.0	12.3	4.1	-42.76	-70.7	-13.3	2,179.9	2,174.3	5.55	392.560	
3,500.0	3,485.7	1,220.0	1,219.0	12.7	4.1	-42.76	-70.7	-13.3	2,279.8	2,274.2	5.58	408.861	
3,600.0	3,584.8	1,220.0	1,219.0	13.1	4.1	-42.76	-70.7	-13.3	2,379.7	2,374.1	5.61	424.536	
3,700.0	3,683.8	1,220.0	1,219.0	13.5	4.1	-42.76	-70.7	-13.3	2,479.6	2,474.0	5.64	439.542	
3,800.0	3,782.8	1,220.0	1,219.0	13.9	4.1	-42.76	-70.7	-13.3	2,579.5	2,573.8	5.68	453.843	
3,900.0	3,881.8	1,220.0	1,219.0	14.4	4.1	-42.76	-70.7	-13.3	2,679.4	2,673.7	5.73	467.413	
4,000.0	3,980.9	1,220.0	1,219.0	14.8	4.1	-42.76	-70.7	-13.3	2,779.4	2,773.6	5.79	480.236	
4,100.0	4,079.9	1,220.0	1,219.0	15.2	4.1	-42.76	-70.7	-13.3	2,879.3	2,873.5	5.85	492.302	
4,200.0	4,178.9	1,220.0	1,219.0	15.6	4.1	-42.76	-70.7	-13.3	2,979.3	2,973.3	5.92	503.612	
4,300.0	4,277.9	1,220.0	1,219.0	16.0	4.1	-42.76	-70.7	-13.3	3,079.2	3,073.2	5.99	514.171	
4,400.0	4,377.0	1,220.0	1,219.0	16.4	4.1	-42.76	-70.7	-13.3	3,179.1	3,173.1	6.07	523.992	
4,500.0	4,476.0	1,220.0	1,219.0	16.8	4.1	-42.76	-70.7	-13.3	3,279.1	3,272.9	6.15	533.093	
4,600.0	4,575.0	1,220.0	1,219.0	17.2	4.1	-42.76	-70.7	-13.3	3,379.0	3,372.8	6.24	541.493	
4,698.1	4,672.2	1,220.0	1,219.0	17.6	4.1	-42.76	-70.7	-13.3	3,477.1	3,470.8	6.33	549.078	
4,700.0	4,674.0	1,220.0	1,219.0	17.6	4.1	-43.43	-70.7	-13.3	3,479.0	3,472.7	6.33	549.218	
4,800.0	4,773.3	1,220.0	1,219.0	18.0	4.1	-105.76	-70.7	-13.3	3,579.0	3,572.5	6.43	556.318	
4,900.0	4,872.7	1,220.0	1,219.0	18.4	4.1	-148.91	-70.7	-13.3	3,678.9	3,672.4	6.54	562.885	
5,000.0	4,972.5	1,220.0	1,219.0	18.8	4.1	-161.97	-70.7	-13.3	3,778.8	3,772.2	6.64	568.982	
5,100.0	5,072.4	1,220.0	1,219.0	19.2	4.1	-167.53	-70.7	-13.3	3,878.6	3,871.8	6.75	574.610	
5,200.0	5,172.3	1,220.0	1,219.0	19.5	4.1	-170.55	-70.7	-13.3	3,978.1	3,971.3	6.86	579.772	
5,231.4	5,203.8	1,220.0	1,219.0	19.6	4.1	125.82	-70.7	-13.3	4,009.4	4,002.5	6.90	581.398	
5,300.0	5,272.3	1,220.0	1,219.0	19.8	4.1	125.82	-70.7	-13.3	4,077.5	4,070.5	6.98	584.394	
5,400.0	5,372.3	1,220.0	1,219.0	20.2	4.1	125.82	-70.7	-13.3	4,176.9	4,169.8	7.10	588.271	
5,500.0	5,472.3	1,220.0	1,219.0	20.5	4.1	125.82	-70.7	-13.3	4,276.3	4,269.1	7.23	591.683	
5,600.0	5,572.3	1,220.0	1,219.0	20.8	4.1	125.82	-70.7	-13.3	4,375.8	4,368.4	7.36	594.656	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #121H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 163-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,700.0	5,672.3	1,220.0	1,219.0	21.2	4.1	125.82	-70.7	-13.3	4,475.3	4,467.8	7.49	597.219	
5,800.0	5,772.3	1,220.0	1,219.0	21.5	4.1	125.82	-70.7	-13.3	4,574.8	4,567.1	7.63	599.397	
5,900.0	5,872.3	1,220.0	1,219.0	21.8	4.1	125.82	-70.7	-13.3	4,674.3	4,666.5	7.77	601.214	
6,000.0	5,972.3	1,220.0	1,219.0	22.2	4.1	125.82	-70.7	-13.3	4,773.8	4,765.9	7.92	602.694	
6,100.0	6,072.3	1,220.0	1,219.0	22.5	4.1	125.82	-70.7	-13.3	4,873.4	4,865.3	8.07	603.859	
6,200.0	6,172.3	1,220.0	1,219.0	22.9	4.1	125.82	-70.7	-13.3	4,973.0	4,964.7	8.22	604.730	
6,300.0	6,272.3	1,220.0	1,219.0	23.2	4.1	125.82	-70.7	-13.3	5,072.6	5,064.2	8.38	605.326	
6,400.0	6,372.3	1,220.0	1,219.0	23.5	4.1	125.82	-70.7	-13.3	5,172.2	5,163.6	8.54	605.664	
6,500.0	6,472.3	1,220.0	1,219.0	23.9	4.1	125.82	-70.7	-13.3	5,271.8	5,263.1	8.70	605.764	
6,600.0	6,572.3	1,220.0	1,219.0	24.2	4.1	125.82	-70.7	-13.3	5,371.4	5,362.6	8.87	605.640	
6,700.0	6,672.3	1,220.0	1,219.0	24.6	4.1	125.82	-70.7	-13.3	5,471.1	5,462.0	9.04	605.307	
6,800.0	6,772.3	1,220.0	1,219.0	24.9	4.1	125.82	-70.7	-13.3	5,570.7	5,561.5	9.21	604.781	
6,900.0	6,872.3	1,220.0	1,219.0	25.2	4.1	125.82	-70.7	-13.3	5,670.4	5,661.0	9.39	604.073	
7,000.0	6,972.3	1,220.0	1,219.0	25.6	4.1	125.82	-70.7	-13.3	5,770.1	5,760.5	9.57	603.198	
7,100.0	7,072.3	1,220.0	1,219.0	25.9	4.1	125.82	-70.7	-13.3	5,869.8	5,860.1	9.75	602.166	
7,200.0	7,172.3	1,220.0	1,219.0	26.3	4.1	125.82	-70.7	-13.3	5,969.5	5,959.6	9.93	600.988	
7,300.0	7,272.3	1,220.0	1,219.0	26.6	4.1	125.82	-70.7	-13.3	6,069.2	6,059.1	10.12	599.674	
7,400.0	7,372.3	1,220.0	1,219.0	27.0	4.1	125.82	-70.7	-13.3	6,169.0	6,158.6	10.31	598.235	
7,500.0	7,472.3	1,220.0	1,219.0	27.3	4.1	125.82	-70.7	-13.3	6,268.7	6,258.2	10.51	596.678	
7,600.0	7,572.3	1,220.0	1,219.0	27.7	4.1	125.82	-70.7	-13.3	6,368.4	6,357.7	10.70	595.014	
7,700.0	7,672.3	1,220.0	1,219.0	28.0	4.1	125.82	-70.7	-13.3	6,468.2	6,457.3	10.90	593.249	
7,800.0	7,772.3	1,220.0	1,219.0	28.3	4.1	125.82	-70.7	-13.3	6,567.9	6,556.8	11.11	591.390	
7,900.0	7,872.3	1,220.0	1,219.0	28.7	4.1	125.82	-70.7	-13.3	6,667.7	6,656.4	11.31	589.446	
8,000.0	7,972.3	1,220.0	1,219.0	29.0	4.1	125.82	-70.7	-13.3	6,767.5	6,756.0	11.52	587.422	
8,100.0	8,072.3	1,220.0	1,219.0	29.4	4.1	125.82	-70.7	-13.3	6,867.3	6,855.5	11.73	585.325	
8,200.0	8,172.3	1,220.0	1,219.0	29.7	4.1	125.82	-70.7	-13.3	6,967.0	6,955.1	11.95	583.160	
8,300.0	8,272.3	1,220.0	1,219.0	30.1	4.1	125.82	-70.7	-13.3	7,066.8	7,054.7	12.16	580.932	
8,400.0	8,372.3	1,220.0	1,219.0	30.4	4.1	125.82	-70.7	-13.3	7,166.6	7,154.2	12.39	578.648	
8,500.0	8,472.3	1,220.0	1,219.0	30.8	4.1	125.82	-70.7	-13.3	7,266.4	7,253.8	12.61	576.311	
8,600.0	8,572.3	1,220.0	1,219.0	31.1	4.1	125.82	-70.7	-13.3	7,366.2	7,353.4	12.83	573.926	
8,700.0	8,672.3	1,220.0	1,219.0	31.5	4.1	125.82	-70.7	-13.3	7,466.1	7,453.0	13.06	571.497	
8,800.0	8,772.3	1,220.0	1,219.0	31.8	4.1	125.82	-70.7	-13.3	7,565.9	7,552.6	13.30	569.028	
8,900.0	8,872.3	1,220.0	1,219.0	32.2	4.1	125.82	-70.7	-13.3	7,665.7	7,652.2	13.53	566.524	
9,000.0	8,972.3	1,220.0	1,219.0	32.5	4.1	125.82	-70.7	-13.3	7,765.5	7,751.8	13.77	563.986	
9,100.0	9,072.3	1,220.0	1,219.0	32.9	4.1	125.82	-70.7	-13.3	7,865.4	7,851.4	14.01	561.419	
9,200.0	9,172.3	1,220.0	1,219.0	33.2	4.1	125.82	-70.7	-13.3	7,965.2	7,950.9	14.25	558.826	
9,272.2	9,244.5	1,220.0	1,219.0	33.5	4.1	125.82	-70.7	-13.3	8,037.3	8,022.8	14.43	556.940	
9,300.0	9,272.3	1,220.0	1,219.0	33.6	4.1	19.39	-70.7	-13.3	8,065.0	8,050.5	14.50	556.241	
9,350.0	9,322.1	1,220.0	1,219.0	33.7	4.1	10.36	-70.7	-13.3	8,114.5	8,099.9	14.62	555.070	
9,400.0	9,371.3	1,220.0	1,219.0	33.9	4.1	7.06	-70.7	-13.3	8,163.2	8,148.5	14.73	554.042	
9,450.0	9,419.5	1,220.0	1,219.0	34.0	4.1	5.38	-70.7	-13.3	8,210.8	8,196.0	14.84	553.142	
9,500.0	9,466.4	1,220.0	1,219.0	34.1	4.1	4.36	-70.7	-13.3	8,256.9	8,242.0	14.95	552.355	
9,550.0	9,511.6	1,220.0	1,219.0	34.2	4.1	3.68	-70.7	-13.3	8,301.3	8,286.2	15.05	551.660	
9,600.0	9,554.7	1,220.0	1,219.0	34.4	4.1	3.21	-70.7	-13.3	8,343.5	8,328.4	15.14	551.024	
9,650.0	9,595.5	1,220.0	1,219.0	34.5	4.1	2.86	-70.7	-13.3	8,383.4	8,368.1	15.23	550.404	
9,700.0	9,633.7	1,220.0	1,219.0	34.6	4.1	2.59	-70.7	-13.3	8,420.6	8,405.3	15.32	549.745	
9,750.0	9,668.8	1,220.0	1,219.0	34.7	4.1	2.39	-70.7	-13.3	8,454.9	8,439.5	15.40	548.981	
9,800.0	9,700.8	1,220.0	1,219.0	34.8	4.1	2.23	-70.7	-13.3	8,486.1	8,470.6	15.48	548.036	
9,850.0	9,729.2	1,220.0	1,219.0	35.0	4.1	2.10	-70.7	-13.3	8,514.0	8,498.4	15.57	546.834	
9,900.0	9,754.0	1,220.0	1,219.0	35.1	4.1	2.00	-70.7	-13.3	8,538.4	8,522.7	15.66	545.295	
9,950.0	9,774.9	1,220.0	1,219.0	35.3	4.1	1.92	-70.7	-13.3	8,559.1	8,543.3	15.75	543.345	
10,000.0	9,791.8	1,220.0	1,219.0	35.5	4.1	1.86	-70.7	-13.3	8,576.0	8,560.2	15.85	540.921	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #121H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 163-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,050.0	9,804.5	1,220.0	1,219.0	35.8	4.1	1.82	-70.7	-13.3	8,589.0	8,573.1	15.97	537.979	
10,100.0	9,812.9	1,220.0	1,219.0	36.0	4.1	1.79	-70.7	-13.3	8,598.1	8,582.0	16.09	534.494	
10,125.2	9,815.5	1,220.0	1,219.0	36.2	4.1	1.78	-70.7	-13.3	8,601.2	8,585.0	16.15	532.565	
10,200.0	9,820.7	1,220.0	1,219.0	36.7	4.1	1.77	-70.7	-13.3	8,608.0	8,591.7	16.37	525.981	
10,225.5	9,822.0	1,220.0	1,219.0	36.9	4.1	1.77	-70.7	-13.3	8,610.1	8,593.6	16.45	523.566	
10,300.0	9,825.5	1,220.0	1,219.0	37.5	4.1	1.77	-70.7	-13.3	8,616.2	8,599.5	16.70	516.011	
10,400.0	9,830.2	1,220.0	1,219.0	38.4	4.1	1.77	-70.7	-13.3	8,625.3	8,608.2	17.08	505.022	
10,500.0	9,834.9	1,220.0	1,219.0	39.4	4.1	1.77	-70.7	-13.3	8,635.6	8,618.1	17.51	493.321	
10,600.0	9,839.7	1,220.0	1,219.0	40.6	4.1	1.77	-70.7	-13.3	8,647.1	8,629.1	17.97	481.166	
10,700.0	9,844.4	1,220.0	1,219.0	41.9	4.1	1.77	-70.7	-13.3	8,659.7	8,641.2	18.47	468.779	
10,800.0	9,849.1	1,220.0	1,219.0	43.3	4.1	1.77	-70.7	-13.3	8,673.5	8,654.4	19.01	456.346	
10,900.0	9,853.8	1,220.0	1,219.0	44.7	4.1	1.77	-70.7	-13.3	8,688.3	8,668.8	19.57	444.018	
11,000.0	9,858.5	1,220.0	1,219.0	46.3	4.1	1.77	-70.7	-13.3	8,704.3	8,684.2	20.15	431.913	
11,100.0	9,863.2	1,220.0	1,219.0	47.9	4.1	1.77	-70.7	-13.3	8,721.4	8,700.7	20.76	420.119	
11,200.0	9,867.9	1,220.0	1,219.0	49.6	4.1	1.77	-70.7	-13.3	8,739.6	8,718.3	21.38	408.700	
11,300.0	9,872.6	1,220.0	1,219.0	51.4	4.1	1.77	-70.7	-13.3	8,759.0	8,736.9	22.02	397.699	
11,400.0	9,877.3	1,220.0	1,219.0	53.2	4.1	1.77	-70.7	-13.3	8,779.4	8,756.7	22.68	387.145	
11,500.0	9,882.1	1,220.0	1,219.0	55.1	4.1	1.77	-70.7	-13.3	8,800.9	8,777.6	23.34	377.050	
11,600.0	9,886.8	1,220.0	1,219.0	57.0	4.1	1.77	-70.7	-13.3	8,823.5	8,799.5	24.01	367.420	
11,700.0	9,891.5	1,220.0	1,219.0	58.9	4.1	1.77	-70.7	-13.3	8,847.1	8,822.4	24.70	358.252	
11,800.0	9,896.2	1,220.0	1,219.0	60.9	4.1	1.77	-70.7	-13.3	8,871.9	8,846.5	25.38	349.537	
11,900.0	9,900.9	1,220.0	1,219.0	63.0	4.1	1.77	-70.7	-13.3	8,897.7	8,871.6	26.07	341.263	
12,000.0	9,905.6	1,220.0	1,219.0	65.0	4.1	1.77	-70.7	-13.3	8,924.5	8,897.7	26.77	333.415	
12,100.0	9,910.3	1,220.0	1,219.0	67.1	4.1	1.77	-70.7	-13.3	8,952.3	8,924.9	27.46	325.976	
12,200.0	9,915.0	1,220.0	1,219.0	69.2	4.1	1.77	-70.7	-13.3	8,981.2	8,953.1	28.16	318.928	
12,300.0	9,919.8	1,220.0	1,219.0	71.3	4.1	1.77	-70.7	-13.3	9,011.1	8,982.3	28.86	312.254	
12,400.0	9,924.5	1,220.0	1,219.0	73.5	4.1	1.77	-70.7	-13.3	9,042.1	9,012.5	29.56	305.934	
12,500.0	9,929.2	1,220.0	1,219.0	75.6	4.1	1.77	-70.7	-13.3	9,074.0	9,043.7	30.25	299.952	
12,600.0	9,933.9	1,220.0	1,219.0	77.8	4.1	1.77	-70.7	-13.3	9,106.9	9,075.9	30.95	294.289	
12,700.0	9,938.6	1,220.0	1,219.0	80.0	4.1	1.77	-70.7	-13.3	9,140.7	9,109.1	31.64	288.928	
12,800.0	9,943.3	1,220.0	1,219.0	82.2	4.1	1.77	-70.7	-13.3	9,175.6	9,143.3	32.33	283.853	
12,900.0	9,948.0	1,220.0	1,219.0	84.4	4.1	1.77	-70.7	-13.3	9,211.4	9,178.4	33.01	279.048	
13,000.0	9,952.7	1,220.0	1,219.0	86.7	4.1	1.77	-70.7	-13.3	9,248.1	9,214.4	33.69	274.500	
13,100.0	9,957.5	1,220.0	1,219.0	88.9	4.1	1.77	-70.7	-13.3	9,285.8	9,251.4	34.37	270.193	
13,200.0	9,962.2	1,220.0	1,219.0	91.2	4.1	1.77	-70.7	-13.3	9,324.4	9,289.3	35.04	266.114	
13,300.0	9,966.9	1,220.0	1,219.0	93.4	4.1	1.77	-70.7	-13.3	9,363.9	9,328.2	35.71	262.251	
13,400.0	9,971.6	1,220.0	1,219.0	95.7	4.1	1.77	-70.7	-13.3	9,404.3	9,367.9	36.37	258.592	
13,500.0	9,976.3	1,220.0	1,219.0	98.0	4.1	1.77	-70.7	-13.3	9,445.5	9,408.5	37.02	255.127	
13,600.0	9,981.0	1,220.0	1,219.0	100.3	4.1	1.77	-70.7	-13.3	9,487.7	9,450.0	37.67	251.844	
13,700.0	9,985.7	1,220.0	1,219.0	102.6	4.1	1.77	-70.7	-13.3	9,530.7	9,492.4	38.32	248.734	
13,800.0	9,990.4	1,220.0	1,219.0	104.9	4.1	1.77	-70.7	-13.3	9,574.6	9,535.6	38.95	245.787	
13,900.0	9,995.2	1,220.0	1,219.0	107.2	4.1	1.77	-70.7	-13.3	9,619.3	9,579.7	39.59	242.996	
14,000.0	9,999.9	1,220.0	1,219.0	109.5	4.1	1.77	-70.7	-13.3	9,664.8	9,624.6	40.21	240.352	
14,100.0	10,004.6	1,220.0	1,219.0	111.9	4.1	1.77	-70.7	-13.3	9,711.2	9,670.4	40.83	237.847	
14,200.0	10,009.3	1,220.0	1,219.0	114.2	4.1	1.77	-70.7	-13.3	9,758.3	9,716.9	41.44	235.474	
14,300.0	10,014.0	1,220.0	1,219.0	116.5	4.1	1.77	-70.7	-13.3	9,806.3	9,764.2	42.05	233.227	
14,400.0	10,018.7	1,220.0	1,219.0	118.9	4.1	1.77	-70.7	-13.3	9,855.0	9,812.4	42.64	231.099	
14,500.0	10,023.4	1,220.0	1,219.0	121.2	4.1	1.77	-70.7	-13.3	9,904.5	9,861.3	43.24	229.084	
14,600.0	10,028.1	1,220.0	1,219.0	123.6	4.1	1.77	-70.7	-13.3	9,954.8	9,911.0	43.82	227.178	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #121H - Wellbore #1 - Altitude Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.0	-1.0	0.0	0.0	179.87	-110.2	0.2	110.2				
100.0	100.0	101.0	99.0	0.1	0.1	179.87	-110.2	0.2	110.2	110.0	0.26	424.175	
200.0	200.0	201.0	199.0	0.5	0.5	179.87	-110.2	0.2	110.2	109.3	0.98	112.854	
300.0	300.0	301.0	299.0	0.8	0.8	179.87	-110.2	0.2	110.2	108.5	1.69	65.085	
400.0	400.0	401.0	399.0	1.2	1.2	179.87	-110.2	0.2	110.2	107.8	2.41	45.729	
500.0	500.0	501.0	499.0	1.6	1.6	179.87	-110.2	0.2	110.2	107.1	3.13	35.247	
600.0	600.0	601.0	599.0	1.9	1.9	179.87	-110.2	0.2	110.2	106.4	3.84	28.674	
700.0	700.0	701.0	699.0	2.3	2.3	179.87	-110.2	0.2	110.2	105.7	4.56	24.167	
800.0	800.0	801.0	799.0	2.6	2.6	179.87	-110.2	0.2	110.2	105.0	5.28	20.885	
900.0	900.0	901.0	899.0	3.0	3.0	179.87	-110.2	0.2	110.2	104.2	6.00	18.387	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	179.87	-110.2	0.2	110.2	103.5	6.71	16.423	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	179.87	-110.2	0.2	110.2	102.8	7.43	14.838	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	179.87	-110.2	0.2	110.2	102.1	8.15	13.533	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	179.87	-110.2	0.2	110.2	101.4	8.86	12.438	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	179.87	-110.2	0.2	110.2	100.7	9.58	11.507	
1,500.0	1,500.0	1,501.0	1,499.0	5.1	5.2	179.87	-110.2	0.2	110.2	99.9	10.30	10.706	
1,600.0	1,600.0	1,601.0	1,599.0	5.5	5.5	-117.57	-110.2	0.2	110.6	99.6	11.01	10.050	
1,700.0	1,700.0	1,699.0	1,699.0	5.9	5.9	-118.75	-110.2	0.2	111.9	100.2	11.71	9.553	
1,800.0	1,799.9	1,800.0	1,800.0	6.2	6.2	-120.31	-109.8	-0.5	113.6	101.1	12.42	9.142	
1,900.0	1,899.7	1,901.1	1,901.0	6.6	6.6	-121.86	-108.4	-2.8	115.2	102.1	13.13	8.775	
2,000.0	1,999.4	2,002.2	2,002.1	6.9	6.9	-123.39	-106.1	-6.6	116.8	103.0	13.84	8.441	
2,100.0	2,098.9	2,103.5	2,103.1	7.3	7.3	-124.91	-102.9	-11.9	118.4	103.8	14.55	8.136	
2,200.0	2,198.3	2,204.8	2,204.1	7.6	7.7	-126.41	-98.8	-18.8	119.9	104.7	15.27	7.856	
2,300.0	2,297.4	2,306.1	2,305.0	8.0	8.0	-127.91	-93.7	-27.2	121.5	105.5	15.99	7.598	
2,400.0	2,396.4	2,407.1	2,405.3	8.4	8.4	-129.11	-87.8	-37.0	122.5	105.8	16.71	7.328	
2,500.0	2,495.5	2,507.1	2,504.6	8.8	8.8	-130.14	-81.7	-47.1	123.2	105.8	17.45	7.062	
2,600.0	2,594.5	2,607.0	2,603.9	9.2	9.1	-131.15	-75.6	-57.2	124.0	105.8	18.18	6.818	
2,700.0	2,693.5	2,707.0	2,703.1	9.5	9.5	-132.15	-69.5	-67.3	124.8	105.9	18.93	6.595	
2,800.0	2,792.5	2,807.0	2,802.4	9.9	9.9	-133.13	-63.4	-77.4	125.7	106.0	19.67	6.390	
2,900.0	2,891.6	2,907.0	2,901.7	10.3	10.3	-134.11	-57.4	-87.5	126.6	106.2	20.41	6.201	
3,000.0	2,990.6	3,006.9	3,001.0	10.7	10.6	-135.06	-51.3	-97.6	127.5	106.3	21.16	6.027	
3,100.0	3,089.6	3,106.9	3,100.2	11.1	11.0	-136.01	-45.2	-107.7	128.5	106.6	21.90	5.866	
3,200.0	3,188.6	3,206.9	3,199.5	11.5	11.4	-136.94	-39.1	-117.8	129.5	106.8	22.65	5.717	
3,300.0	3,287.7	3,306.8	3,298.8	11.9	11.8	-137.85	-33.0	-127.9	130.5	107.1	23.39	5.579	
3,400.0	3,386.7	3,406.8	3,398.1	12.3	12.2	-138.75	-26.9	-138.0	131.6	107.4	24.14	5.451	
3,500.0	3,485.7	3,506.8	3,497.3	12.7	12.6	-139.64	-20.8	-148.1	132.7	107.8	24.88	5.332	
3,600.0	3,584.8	3,606.8	3,596.6	13.1	12.9	-140.51	-14.7	-158.2	133.8	108.2	25.63	5.221	
3,700.0	3,683.8	3,706.7	3,695.9	13.5	13.3	-141.37	-8.7	-168.3	135.0	108.6	26.37	5.118	
3,800.0	3,782.8	3,806.7	3,795.2	13.9	13.7	-142.21	-2.6	-178.4	136.1	109.0	27.11	5.021	
3,900.0	3,881.8	3,906.7	3,894.4	14.4	14.1	-143.04	3.5	-188.5	137.4	109.5	27.86	4.931	
4,000.0	3,980.9	4,006.7	3,993.7	14.8	14.5	-143.85	9.6	-198.6	138.6	110.0	28.60	4.847	
4,100.0	4,079.9	4,106.6	4,093.0	15.2	14.9	-144.65	15.7	-208.7	139.9	110.5	29.34	4.768	
4,200.0	4,178.9	4,206.6	4,192.3	15.6	15.3	-145.43	21.8	-218.8	141.2	111.1	30.08	4.694	
4,300.0	4,277.9	4,306.6	4,291.5	16.0	15.7	-146.20	27.9	-228.9	142.5	111.7	30.82	4.624	
4,400.0	4,377.0	4,406.5	4,390.8	16.4	16.1	-146.95	34.0	-239.0	143.9	112.3	31.56	4.559	
4,500.0	4,476.0	4,506.5	4,490.1	16.8	16.5	-147.69	40.0	-249.1	145.2	112.9	32.30	4.497	
4,600.0	4,575.0	4,606.5	4,589.4	17.2	16.9	-148.42	46.1	-259.2	146.6	113.6	33.03	4.439	
4,698.1	4,672.2	4,704.6	4,686.7	17.6	17.3	-149.12	52.1	-269.2	148.0	114.3	33.76	4.385	
4,700.0	4,674.0	4,706.5	4,688.6	17.6	17.3	-149.13	52.2	-269.4	148.1	114.3	33.77	4.384	
4,800.0	4,773.3	4,806.5	4,787.9	18.0	17.7	-149.57	58.3	-279.5	148.3	113.8	34.51	4.298	
4,900.0	4,872.7	4,906.4	4,887.2	18.4	18.1	-149.47	64.4	-289.6	146.4	111.1	35.26	4.151	
5,000.0	4,972.5	5,006.3	4,986.4	18.8	18.5	-148.82	70.5	-299.6	142.1	106.1	36.01	3.947	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #121H - Wellbore #1 - Altitude Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,072.4	5,106.1	5,085.4	19.2	18.9	-147.53	76.6	-309.7	135.7	98.9	36.78	3.690	
5,200.0	5,172.3	5,205.6	5,184.3	19.5	19.2	-145.44	82.6	-319.8	127.2	89.6	37.57	3.386	
5,231.4	5,203.8	5,236.8	5,215.3	19.6	19.4	152.47	84.5	-322.9	124.1	86.3	37.82	3.282	
5,300.0	5,272.3	5,304.9	5,282.9	19.8	19.6	154.52	88.7	-329.8	117.3	78.9	38.37	3.056	
5,400.0	5,372.3	5,404.2	5,381.5	20.2	20.0	157.98	94.7	-339.9	107.6	68.4	39.20	2.745	
5,500.0	5,472.3	5,503.5	5,480.1	20.5	20.4	162.09	100.8	-349.9	98.4	58.4	40.05	2.457	
5,600.0	5,572.3	5,602.3	5,578.3	20.8	20.8	166.94	106.7	-359.8	89.9	49.0	40.93	2.196	
5,700.0	5,672.3	5,700.4	5,675.8	21.2	21.2	171.68	111.7	-368.0	83.4	41.6	41.80	1.994	
5,800.0	5,772.3	5,798.9	5,774.0	21.5	21.6	175.66	115.3	-374.1	79.0	36.3	42.62	1.853	
5,900.0	5,872.3	5,897.6	5,872.7	21.8	21.9	178.45	117.7	-378.0	76.4	33.0	43.39	1.760	
6,000.0	5,972.3	5,996.6	5,971.6	22.2	22.3	179.75	118.7	-379.7	75.3	31.2	44.10	1.708	
6,046.7	6,019.0	6,043.0	6,018.0	22.3	22.4	179.81	118.8	-379.8	75.2	30.8	44.41	1.694	
6,100.0	6,072.3	6,103.7	6,071.3	22.5	22.6	179.81	118.8	-379.8	75.2	30.4	44.80	1.680	
6,200.0	6,172.3	6,203.7	6,171.3	22.9	23.0	179.81	118.8	-379.8	75.2	29.8	45.48	1.655	
6,300.0	6,272.3	6,303.7	6,271.3	23.2	23.3	179.81	118.8	-379.8	75.2	29.1	46.16	1.630	
6,400.0	6,372.3	6,403.7	6,371.3	23.5	23.6	179.81	118.8	-379.8	75.2	28.4	46.84	1.606	
6,500.0	6,472.3	6,503.7	6,471.3	23.9	24.0	179.81	118.8	-379.8	75.2	27.7	47.53	1.583	
6,600.0	6,572.3	6,596.3	6,571.3	24.2	24.3	179.81	118.8	-379.8	75.2	27.1	48.19	1.561	
6,700.0	6,672.3	6,696.3	6,671.3	24.6	24.6	179.81	118.8	-379.8	75.2	26.4	48.87	1.540	
6,800.0	6,772.3	6,803.7	6,771.3	24.9	25.0	179.81	118.8	-379.8	75.2	25.7	49.59	1.517	
6,900.0	6,872.3	6,903.7	6,871.3	25.2	25.3	179.81	118.8	-379.8	75.2	25.0	50.27	1.497	Level 3
7,000.0	6,972.3	6,996.3	6,971.3	25.6	25.7	179.81	118.8	-379.8	75.2	24.3	50.94	1.477	Level 3
7,100.0	7,072.3	7,103.7	7,071.3	25.9	26.0	179.81	118.8	-379.8	75.2	23.6	51.65	1.457	Level 3
7,200.0	7,172.3	7,196.3	7,171.3	26.3	26.3	179.81	118.8	-379.8	75.2	22.9	52.32	1.438	Level 3
7,300.0	7,272.3	7,296.3	7,271.3	26.6	26.7	179.81	118.8	-379.8	75.2	22.2	53.01	1.419	Level 3
7,400.0	7,372.3	7,396.3	7,371.4	27.0	27.0	179.81	118.8	-379.8	75.2	21.5	53.70	1.401	Level 3
7,495.1	7,467.4	7,491.8	7,466.4	27.3	27.3	173.60	119.7	-371.7	74.8	20.6	54.17	1.381	Level 3, CC
7,500.0	7,472.3	7,496.7	7,471.2	27.3	27.3	172.96	119.8	-370.9	74.8	20.6	54.18	1.381	Level 3, ES, SF
7,600.0	7,572.3	7,591.2	7,562.4	27.7	27.6	155.07	122.5	-346.8	79.4	25.7	53.72	1.478	Level 3
7,700.0	7,672.3	7,675.8	7,639.7	28.0	27.8	135.22	126.3	-312.8	100.5	49.5	51.03	1.970	
7,800.0	7,772.3	7,749.0	7,701.9	28.3	27.9	121.04	130.6	-274.6	141.3	94.3	47.01	3.005	
7,900.0	7,872.3	7,810.9	7,750.4	28.7	28.0	112.37	134.9	-236.3	196.9	153.8	43.13	4.565	
8,000.0	7,972.3	7,863.0	7,787.7	29.0	28.1	107.04	138.9	-200.3	262.8	223.0	39.78	6.606	
8,100.0	8,072.3	7,906.6	7,816.4	29.4	28.2	103.61	142.6	-167.6	335.8	298.9	36.94	9.091	
8,200.0	8,172.3	7,950.0	7,842.3	29.7	28.3	100.90	146.5	-133.0	414.2	379.0	35.20	11.766	
8,300.0	8,272.3	7,974.3	7,855.6	30.1	28.4	99.62	148.7	-112.8	496.3	463.7	32.58	15.232	
8,400.0	8,372.3	8,000.0	7,868.8	30.4	28.5	98.43	151.2	-90.9	581.4	550.5	30.87	18.833	
8,500.0	8,472.3	8,023.6	7,880.0	30.8	28.6	97.45	153.5	-70.3	668.8	639.3	29.55	22.630	
8,600.0	8,572.3	8,050.0	7,891.5	31.1	28.7	96.48	156.1	-46.6	758.2	729.4	28.78	26.340	
8,700.0	8,672.3	8,050.0	7,891.5	31.5	28.7	96.48	156.1	-46.6	849.0	822.0	26.99	31.460	
8,800.0	8,772.3	8,075.6	7,901.6	31.8	28.8	95.64	158.8	-23.3	940.8	914.0	26.71	35.215	
8,900.0	8,872.3	8,100.0	7,910.2	32.2	28.9	94.93	161.3	-0.6	1,033.8	1,007.3	26.51	38.997	
9,000.0	8,972.3	8,100.0	7,910.2	32.5	28.9	94.93	161.3	-0.6	1,127.4	1,101.9	25.55	44.127	
9,100.0	9,072.3	8,100.0	7,910.2	32.9	28.9	94.93	161.3	-0.6	1,222.0	1,197.2	24.82	49.242	
9,200.0	9,172.3	8,121.0	7,916.9	33.2	29.0	94.37	163.5	19.2	1,316.8	1,292.0	24.85	52.995	
9,272.2	9,244.5	8,127.3	7,918.7	33.5	29.0	94.21	164.2	25.2	1,385.7	1,361.0	24.66	56.185	
9,300.0	9,272.3	8,129.8	7,919.4	33.6	29.0	3.75	164.5	27.6	1,412.1	1,387.5	24.59	57.430	
9,350.0	9,322.1	8,150.0	7,924.8	33.7	29.1	2.72	166.6	46.9	1,458.8	1,434.0	24.79	58.847	
9,400.0	9,371.3	8,150.0	7,924.8	33.9	29.1	2.29	166.6	46.9	1,503.5	1,479.1	24.42	61.579	
9,450.0	9,419.5	8,150.0	7,924.8	34.0	29.1	1.98	166.6	46.9	1,546.4	1,522.4	24.01	64.412	
9,500.0	9,466.4	8,150.0	7,924.8	34.1	29.1	1.74	166.6	46.9	1,587.5	1,563.9	23.58	67.321	
9,550.0	9,511.6	8,150.0	7,924.8	34.2	29.1	1.56	166.6	46.9	1,626.5	1,603.4	23.15	70.272	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #121H - Wellbore #1 - Altitude Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,600.0	9,554.7	8,172.6	7,930.1	34.4	29.3	1.29	169.1	68.8	1,662.8	1,639.6	23.13	71.888	
9,650.0	9,595.5	8,181.9	7,932.0	34.5	29.3	1.14	170.1	77.8	1,696.7	1,673.9	22.84	74.284	
9,700.0	9,633.7	8,200.0	7,935.2	34.6	29.4	0.97	172.1	95.5	1,728.1	1,705.4	22.70	76.135	
9,750.0	9,668.8	8,200.0	7,935.2	34.7	29.4	0.92	172.1	95.5	1,756.5	1,734.2	22.27	78.860	
9,800.0	9,700.8	8,200.0	7,935.2	34.8	29.4	0.87	172.1	95.5	1,782.2	1,760.3	21.90	81.364	
9,850.0	9,729.2	8,222.9	7,938.6	35.0	29.6	0.74	174.6	118.0	1,804.6	1,782.7	21.87	82.533	
9,900.0	9,754.0	8,250.0	7,941.3	35.1	29.8	0.61	177.6	144.8	1,824.4	1,802.5	21.88	83.363	
9,950.0	9,774.9	8,250.0	7,941.3	35.3	29.8	0.59	177.6	144.8	1,840.4	1,818.7	21.66	84.986	
10,000.0	9,791.8	8,250.0	7,941.3	35.5	29.8	0.58	177.6	144.8	1,853.5	1,832.0	21.53	86.100	
10,050.0	9,804.5	8,276.1	7,942.8	35.8	30.0	0.48	180.5	170.7	1,863.4	1,841.7	21.65	86.070	
10,100.0	9,812.9	8,290.2	7,943.3	36.0	30.1	0.43	182.1	184.8	1,869.8	1,848.0	21.75	85.974	
10,125.2	9,815.5	8,315.1	7,944.1	36.2	30.3	0.35	184.6	209.4	1,871.6	1,849.7	21.90	85.464	
10,200.0	9,820.7	8,389.3	7,946.6	36.7	30.9	0.17	190.9	283.4	1,874.2	1,851.8	22.37	83.777	
10,225.5	9,822.0	8,414.6	7,947.4	36.9	31.2	0.13	192.6	308.6	1,874.7	1,852.1	22.54	83.158	
10,300.0	9,825.5	8,488.9	7,949.9	37.5	32.0	0.03	196.4	382.7	1,875.7	1,852.6	23.07	81.288	
10,400.0	9,830.2	8,588.7	7,953.2	38.4	33.1	-0.02	198.4	482.5	1,877.1	1,853.2	23.85	78.705	
10,500.0	9,834.9	8,688.7	7,956.5	39.4	34.4	-0.02	199.0	582.4	1,878.5	1,853.8	24.70	76.055	
10,600.0	9,839.7	8,788.7	7,959.8	40.6	35.8	-0.02	199.6	682.4	1,879.9	1,854.3	25.61	73.393	
10,700.0	9,844.4	8,888.7	7,963.1	41.9	37.4	-0.02	200.3	782.3	1,881.3	1,854.7	26.59	70.756	
10,800.0	9,849.1	8,988.7	7,966.4	43.3	39.0	-0.02	200.9	882.2	1,882.7	1,855.1	27.62	68.172	
10,900.0	9,853.8	9,088.7	7,969.7	44.7	40.7	-0.02	201.6	982.2	1,884.1	1,855.4	28.69	65.666	
11,000.0	9,858.5	9,188.7	7,973.0	46.3	42.5	-0.02	202.2	1,082.1	1,885.5	1,855.7	29.81	63.248	
11,100.0	9,863.2	9,288.6	7,976.3	47.9	44.3	-0.02	202.8	1,182.0	1,886.9	1,856.0	30.97	60.932	
11,200.0	9,867.9	9,388.6	7,979.6	49.6	46.2	-0.02	203.5	1,282.0	1,888.3	1,856.2	32.16	58.720	
11,300.0	9,872.6	9,488.6	7,982.9	51.4	48.1	-0.02	204.1	1,381.9	1,889.7	1,856.4	33.38	56.614	
11,400.0	9,877.3	9,588.6	7,986.2	53.2	50.1	-0.02	204.8	1,481.8	1,891.1	1,856.5	34.63	54.614	
11,500.0	9,882.1	9,688.6	7,989.6	55.1	52.2	-0.02	205.4	1,581.8	1,892.5	1,856.6	35.90	52.717	
11,600.0	9,886.8	9,788.6	7,992.9	57.0	54.2	-0.02	206.0	1,681.7	1,894.0	1,856.8	37.19	50.920	
11,700.0	9,891.5	9,888.6	7,996.2	58.9	56.3	-0.02	206.7	1,781.6	1,895.4	1,856.8	38.51	49.219	
11,800.0	9,896.2	9,988.6	7,999.5	60.9	58.5	-0.02	207.3	1,881.6	1,896.8	1,856.9	39.84	47.608	
11,900.0	9,900.9	10,088.6	8,002.8	63.0	60.6	-0.02	208.0	1,981.5	1,898.2	1,857.0	41.19	46.083	
12,000.0	9,905.6	10,188.6	8,006.1	65.0	62.8	-0.02	208.6	2,081.4	1,899.6	1,857.0	42.55	44.640	
12,100.0	9,910.3	10,288.5	8,009.4	67.1	65.0	-0.02	209.2	2,181.4	1,901.0	1,857.0	43.93	43.273	
12,200.0	9,915.0	10,388.5	8,012.7	69.2	67.2	-0.02	209.9	2,281.3	1,902.4	1,857.1	45.32	41.977	
12,300.0	9,919.8	10,488.5	8,016.0	71.3	69.4	-0.02	210.5	2,381.2	1,903.8	1,857.1	46.72	40.749	
12,400.0	9,924.5	10,588.5	8,019.3	73.5	71.6	-0.02	211.2	2,481.2	1,905.2	1,857.1	48.13	39.584	
12,500.0	9,929.2	10,688.5	8,022.6	75.6	73.9	-0.02	211.8	2,581.1	1,906.6	1,857.0	49.55	38.479	
12,600.0	9,933.9	10,788.5	8,025.9	77.8	76.2	-0.02	212.4	2,681.0	1,908.0	1,857.0	50.98	37.428	
12,700.0	9,938.6	10,888.5	8,029.2	80.0	78.4	-0.02	213.1	2,781.0	1,909.4	1,857.0	52.41	36.429	
12,800.0	9,943.3	10,988.5	8,032.6	82.2	80.7	-0.02	213.7	2,880.9	1,910.8	1,857.0	53.86	35.479	
12,900.0	9,948.0	11,088.5	8,035.9	84.4	83.0	-0.02	214.4	2,980.8	1,912.2	1,856.9	55.31	34.574	
13,000.0	9,952.7	11,188.5	8,039.2	86.7	85.3	-0.02	215.0	3,080.8	1,913.6	1,856.9	56.76	33.712	
13,100.0	9,957.5	11,288.4	8,042.5	88.9	87.6	-0.02	215.6	3,180.7	1,915.0	1,856.8	58.23	32.890	
13,200.0	9,962.2	11,388.4	8,045.8	91.2	89.9	-0.02	216.3	3,280.6	1,916.4	1,856.7	59.69	32.105	
13,300.0	9,966.9	11,488.4	8,049.1	93.4	92.3	-0.02	216.9	3,380.6	1,917.8	1,856.7	61.17	31.355	
13,400.0	9,971.6	11,588.4	8,052.4	95.7	94.6	-0.02	217.6	3,480.5	1,919.2	1,856.6	62.64	30.638	
13,500.0	9,976.3	11,715.6	8,057.9	98.0	97.6	-0.02	218.4	3,607.5	1,919.6	1,855.3	64.28	29.863	
13,600.0	9,981.0	11,815.6	8,062.6	100.3	99.9	-0.02	219.0	3,707.4	1,919.6	1,853.8	65.76	29.188	
13,700.0	9,985.7	11,915.6	8,067.3	102.6	102.3	-0.02	219.7	3,807.3	1,919.6	1,852.3	67.25	28.542	
13,800.0	9,990.4	12,015.6	8,072.0	104.9	104.6	-0.02	220.3	3,907.2	1,919.5	1,850.8	68.75	27.922	
13,900.0	9,995.2	12,115.6	8,076.8	107.2	107.0	-0.02	220.9	4,007.1	1,919.5	1,849.3	70.24	27.327	
14,000.0	9,999.9	12,215.6	8,081.5	109.5	109.4	-0.02	221.6	4,106.9	1,919.5	1,847.8	71.74	26.756	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #121H - Wellbore #1 - Altitude Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,100.0	10,004.6	12,315.6	8,086.2	111.9	111.7	-0.02	222.2	4,206.8	1,919.5	1,846.3	73.24	26.207	
14,200.0	10,009.3	12,415.6	8,090.9	114.2	114.1	-0.02	222.9	4,306.7	1,919.5	1,844.8	74.75	25.680	
14,300.0	10,014.0	12,515.6	8,095.6	116.5	116.5	-0.02	223.5	4,406.6	1,919.5	1,843.2	76.26	25.172	
14,400.0	10,018.7	12,615.6	8,100.4	118.9	118.9	-0.02	224.1	4,506.5	1,919.5	1,841.7	77.77	24.683	
14,500.0	10,023.4	12,715.6	8,105.1	121.2	121.2	-0.02	224.8	4,606.4	1,919.5	1,840.2	79.28	24.212	
14,600.0	10,028.1	12,815.6	8,109.8	123.6	123.6	-0.02	225.4	4,706.3	1,919.5	1,838.7	80.79	23.759	
14,700.0	10,032.8	12,915.6	8,114.5	125.9	126.0	-0.02	226.1	4,806.2	1,919.5	1,837.2	82.31	23.321	
14,800.0	10,037.6	13,015.6	8,119.2	128.3	128.4	-0.02	226.7	4,906.0	1,919.5	1,835.6	83.82	22.898	
14,900.0	10,042.3	13,115.6	8,124.0	130.7	130.8	-0.02	227.3	5,005.9	1,919.4	1,834.1	85.34	22.491	
15,000.0	10,047.0	13,215.6	8,128.7	133.0	133.2	-0.02	228.0	5,105.8	1,919.4	1,832.6	86.87	22.097	
15,100.0	10,051.7	13,315.6	8,133.4	135.4	135.6	-0.02	228.6	5,205.7	1,919.4	1,831.0	88.39	21.716	
15,200.0	10,056.4	13,415.6	8,138.1	137.8	138.0	-0.02	229.3	5,305.6	1,919.4	1,829.5	89.91	21.347	
15,300.0	10,061.1	13,515.6	8,142.9	140.1	140.4	-0.02	229.9	5,405.5	1,919.4	1,828.0	91.44	20.991	
15,400.0	10,065.8	13,615.6	8,147.6	142.5	142.8	-0.02	230.5	5,505.4	1,919.4	1,826.4	92.97	20.646	
15,500.0	10,070.5	13,715.6	8,152.3	144.9	145.2	-0.02	231.2	5,605.2	1,919.4	1,824.9	94.50	20.312	
15,600.0	10,075.3	13,815.6	8,157.0	147.3	147.6	-0.02	231.8	5,705.1	1,919.4	1,823.4	96.03	19.988	
15,700.0	10,080.0	13,915.6	8,161.7	149.7	150.0	-0.02	232.5	5,805.0	1,919.4	1,821.8	97.56	19.674	
15,800.0	10,084.7	14,015.6	8,166.5	152.0	152.4	-0.02	233.1	5,904.9	1,919.4	1,820.3	99.09	19.370	
15,900.0	10,089.4	14,115.6	8,171.2	154.4	154.8	-0.02	233.7	6,004.8	1,919.4	1,818.7	100.62	19.075	
16,000.0	10,094.1	14,215.6	8,175.9	156.8	157.2	-0.02	234.4	6,104.7	1,919.3	1,817.2	102.16	18.788	
16,100.0	10,098.8	14,315.6	8,180.6	159.2	159.6	-0.02	235.0	6,204.6	1,919.3	1,815.6	103.69	18.510	
16,200.0	10,103.5	14,415.6	8,185.3	161.6	162.0	-0.02	235.7	6,304.5	1,919.3	1,814.1	105.23	18.239	
16,300.0	10,108.2	14,515.6	8,190.1	164.0	164.4	-0.02	236.3	6,404.3	1,919.3	1,812.6	106.77	17.977	
16,400.0	10,113.0	14,615.6	8,194.8	166.4	166.9	-0.02	236.9	6,504.2	1,919.3	1,811.0	108.31	17.721	
16,500.0	10,117.7	14,715.6	8,199.5	168.8	169.3	-0.02	237.6	6,604.1	1,919.3	1,809.5	109.84	17.473	
16,600.0	10,122.4	14,815.6	8,204.2	171.2	171.7	-0.02	238.2	6,704.0	1,919.3	1,807.9	111.38	17.231	
16,700.0	10,127.1	14,915.6	8,208.9	173.6	174.1	-0.02	238.9	6,803.9	1,919.3	1,806.4	112.93	16.996	
16,800.0	10,131.8	15,015.6	8,213.7	176.0	176.5	-0.02	239.5	6,903.8	1,919.3	1,804.8	114.47	16.767	
16,900.0	10,136.5	15,115.6	8,218.4	178.4	178.9	-0.02	240.1	7,003.7	1,919.3	1,803.3	116.01	16.544	
17,000.0	10,141.2	15,215.6	8,223.1	180.8	181.4	-0.02	240.8	7,103.5	1,919.3	1,801.7	117.55	16.327	
17,100.0	10,145.9	15,315.6	8,227.8	183.2	183.8	-0.02	241.4	7,203.4	1,919.2	1,800.2	119.10	16.115	
17,200.0	10,150.7	15,415.6	8,232.6	185.6	186.2	-0.02	242.1	7,303.3	1,919.2	1,798.6	120.64	15.909	
17,218.0	10,151.5	15,433.5	8,233.4	186.1	186.6	-0.02	242.2	7,321.3	1,919.2	1,798.3	120.92	15.872	
17,218.7	10,151.5	15,434.3	8,233.4	186.1	186.7	-0.02	242.2	7,322.0	1,919.2	1,798.3	120.93	15.871	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #122H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 163-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	164.69	-110.3	30.2	114.3				
100.0	100.0	99.3	99.3	0.1	0.1	164.79	-110.2	30.0	114.2	113.9	0.28	414.418	
200.0	200.0	200.2	200.2	0.5	0.4	165.08	-109.9	29.3	113.7	112.9	0.86	131.728	
300.0	300.0	301.3	301.3	0.8	0.7	165.39	-108.5	28.3	112.1	110.5	1.59	70.659	
400.0	400.0	402.0	402.0	1.2	1.1	165.67	-106.2	27.1	109.7	107.4	2.31	47.557	
500.0	500.0	502.7	502.6	1.6	1.5	166.20	-103.5	25.4	106.7	103.6	3.03	35.251	
600.0	600.0	603.0	602.9	1.9	1.8	166.74	-100.3	23.6	103.1	99.3	3.74	27.529	
700.0	700.0	703.2	702.9	2.3	2.2	167.43	-96.8	21.6	99.2	94.8	4.46	22.241	
800.0	800.0	803.7	803.3	2.6	2.5	168.49	-93.1	19.0	95.1	89.9	5.18	18.351	
900.0	900.0	902.3	901.8	3.0	2.9	169.50	-89.1	16.5	90.7	84.8	5.89	15.388	
1,000.0	1,000.0	1,001.0	1,000.5	3.4	3.3	170.09	-87.4	15.3	88.8	82.2	6.61	13.440	
1,068.6	1,068.6	1,068.1	1,067.6	3.6	3.5	170.27	-86.6	14.9	87.9	80.8	7.08	12.410	CC, ES
1,100.0	1,100.0	1,098.1	1,097.6	3.7	3.6	170.29	-86.9	14.9	88.2	80.9	7.30	12.080	
1,200.0	1,200.0	1,195.8	1,195.2	4.1	3.9	170.23	-89.9	15.5	91.3	83.4	7.97	11.454	
1,300.0	1,300.0	1,295.6	1,295.0	4.4	4.2	170.07	-94.2	16.5	95.7	87.0	8.66	11.047	
1,400.0	1,400.0	1,392.6	1,391.8	4.8	4.6	169.60	-99.2	18.2	101.1	91.8	9.33	10.839	
1,500.0	1,500.0	1,490.8	1,489.7	5.1	4.9	169.39	-106.8	20.0	109.1	99.1	10.01	10.903	
1,600.0	1,600.0	1,587.8	1,586.2	5.5	5.2	-127.16	-116.3	20.2	119.2	108.6	10.67	11.171	
1,700.0	1,700.0	1,687.8	1,685.6	5.9	5.6	-126.43	-127.2	18.6	131.3	120.0	11.37	11.548	
1,800.0	1,799.9	1,783.3	1,780.4	6.2	5.9	-126.00	-138.7	16.3	145.3	133.3	12.03	12.082	
1,900.0	1,899.7	1,880.3	1,876.4	6.6	6.3	-126.05	-152.0	14.1	162.1	149.4	12.70	12.761	
2,000.0	1,999.4	1,979.1	1,974.3	6.9	6.7	-127.24	-165.6	14.2	180.3	166.9	13.41	13.445	
2,100.0	2,098.9	2,065.9	2,059.8	7.3	7.0	-127.70	-180.4	12.4	202.5	188.5	13.97	14.493	
2,200.0	2,198.3	2,157.4	2,149.0	7.6	7.4	-127.26	-200.1	7.1	229.2	214.6	14.60	15.701	
2,300.0	2,297.4	2,253.6	2,242.5	8.0	7.8	-126.93	-221.9	0.7	258.0	242.7	15.31	16.849	
2,400.0	2,396.4	2,347.8	2,333.9	8.4	8.2	-126.85	-243.5	-6.2	287.4	271.4	16.01	17.953	
2,500.0	2,495.5	2,445.1	2,428.1	8.8	8.6	-126.40	-266.1	-15.3	316.9	300.1	16.76	18.908	
2,600.0	2,594.5	2,545.3	2,525.2	9.2	9.1	-125.99	-288.5	-25.0	345.4	327.8	17.55	19.683	
2,700.0	2,693.5	2,643.7	2,620.9	9.5	9.5	-125.67	-309.6	-34.6	373.0	354.7	18.32	20.363	
2,800.0	2,792.5	2,738.0	2,712.5	9.9	10.0	-125.42	-329.8	-43.8	400.6	381.5	19.04	21.035	
2,900.0	2,891.6	2,834.8	2,806.6	10.3	10.4	-125.20	-350.6	-53.1	428.3	408.5	19.80	21.626	
3,000.0	2,990.6	2,935.7	2,904.9	10.7	10.9	-125.07	-371.5	-62.3	455.3	434.7	20.61	22.090	
3,100.0	3,089.6	3,034.8	3,001.7	11.1	11.4	-125.08	-391.2	-70.6	481.5	460.1	21.40	22.502	
3,200.0	3,188.6	3,131.4	3,096.1	11.5	11.8	-125.17	-410.0	-78.0	507.6	485.4	22.16	22.904	
3,300.0	3,287.7	3,227.5	3,190.2	11.9	12.3	-125.32	-428.5	-84.8	533.5	510.6	22.92	23.276	
3,400.0	3,386.7	3,319.5	3,280.0	12.3	12.7	-125.30	-447.1	-92.5	560.2	536.5	23.64	23.692	
3,500.0	3,485.7	3,417.4	3,375.5	12.7	13.2	-125.28	-467.0	-100.8	586.9	562.4	24.43	24.022	
3,600.0	3,584.8	3,509.3	3,465.1	13.1	13.6	-125.34	-485.6	-107.8	613.6	588.5	25.15	24.394	
3,700.0	3,683.8	3,590.7	3,544.1	13.5	14.0	-125.22	-503.7	-115.5	642.1	616.4	25.77	24.918	
3,800.0	3,782.8	3,680.5	3,630.7	13.9	14.5	-124.95	-525.3	-125.5	672.1	645.6	26.48	25.380	
3,900.0	3,881.8	3,776.8	3,723.5	14.4	15.0	-124.66	-548.8	-136.2	702.4	675.2	27.27	25.755	
4,000.0	3,980.9	3,878.2	3,821.3	14.8	15.5	-124.43	-573.0	-147.2	732.3	704.2	28.12	26.039	
4,100.0	4,079.9	3,981.9	3,921.8	15.2	16.1	-124.27	-596.7	-157.7	761.3	732.3	28.99	26.258	
4,200.0	4,178.9	4,089.6	4,026.4	15.6	16.6	-124.15	-619.8	-168.6	788.9	759.0	29.90	26.388	
4,300.0	4,277.9	4,188.0	4,122.2	16.0	17.1	-124.07	-639.9	-178.2	815.6	784.9	30.70	26.564	
4,400.0	4,377.0	4,280.7	4,212.5	16.4	17.6	-124.03	-659.1	-187.0	842.6	811.1	31.46	26.786	
4,500.0	4,476.0	4,375.2	4,304.4	16.8	18.1	-123.94	-679.0	-196.5	869.8	837.6	32.23	26.990	
4,600.0	4,575.0	4,470.7	4,397.3	17.2	18.5	-123.85	-699.3	-206.2	897.3	864.2	33.01	27.179	
4,698.1	4,672.2	4,565.6	4,489.5	17.6	19.0	-123.80	-719.4	-215.4	924.1	890.3	33.79	27.347	
4,700.0	4,674.0	4,567.5	4,491.3	17.6	19.0	-123.80	-719.8	-215.6	924.7	890.8	33.81	27.350	
4,800.0	4,773.3	4,667.1	4,588.3	18.0	19.5	-124.07	-740.6	-224.5	951.2	916.6	34.62	27.474	
4,900.0	4,872.7	4,771.9	4,690.6	18.4	20.0	-124.21	-761.8	-233.0	975.7	940.3	35.46	27.513	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #122H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 163-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,972.5	4,878.7	4,795.1	18.8	20.6	-124.23	-782.4	-241.3	997.9	961.6	36.30	27.490	
5,100.0	5,072.4	4,991.9	4,906.2	19.2	21.1	-124.14	-802.8	-249.1	1,017.6	980.4	37.17	27.377	
5,200.0	5,172.3	5,104.6	5,017.1	19.5	21.6	-123.93	-821.3	-256.3	1,034.3	996.3	38.00	27.218	
5,231.4	5,203.8	5,124.7	5,036.9	19.6	21.7	173.14	-824.7	-257.5	1,039.4	1,001.2	38.14	27.250	
5,300.0	5,272.3	5,179.2	5,090.4	19.8	22.0	173.40	-834.2	-261.1	1,050.7	1,012.2	38.52	27.279	
5,400.0	5,372.3	5,276.4	5,185.8	20.2	22.4	173.86	-851.8	-267.6	1,068.1	1,028.9	39.22	27.233	
5,500.0	5,472.3	5,381.6	5,289.1	20.5	22.9	174.35	-870.5	-274.6	1,085.2	1,045.2	39.99	27.137	
5,600.0	5,572.3	5,480.1	5,385.8	20.8	23.4	174.83	-887.8	-282.1	1,102.0	1,061.3	40.70	27.076	
5,700.0	5,672.3	5,582.0	5,485.6	21.2	23.9	175.38	-905.7	-291.2	1,118.8	1,077.3	41.44	26.995	
5,800.0	5,772.3	5,688.8	5,590.5	21.5	24.4	175.92	-923.7	-300.2	1,135.0	1,092.8	42.22	26.881	
5,900.0	5,872.3	5,795.3	5,695.3	21.8	24.9	176.40	-940.9	-308.7	1,150.7	1,107.7	43.00	26.763	
6,000.0	5,972.3	5,910.9	5,809.2	22.2	25.4	176.87	-958.3	-317.0	1,165.4	1,121.6	43.83	26.591	
6,100.0	6,072.3	5,989.1	5,886.5	22.5	25.7	177.18	-969.7	-322.6	1,179.7	1,135.3	44.39	26.577	
6,200.0	6,172.3	6,063.1	5,959.0	22.9	26.1	177.51	-982.7	-328.9	1,196.8	1,151.9	44.90	26.651	
6,300.0	6,272.3	6,156.4	6,050.5	23.2	26.5	177.91	-999.3	-336.4	1,214.3	1,168.8	45.58	26.643	
6,400.0	6,372.3	6,227.0	6,119.5	23.5	26.9	178.21	-1,013.3	-342.3	1,233.8	1,187.8	46.05	26.793	
6,500.0	6,472.3	6,330.0	6,219.9	23.9	27.4	178.64	-1,034.6	-350.8	1,254.4	1,207.6	46.81	26.795	
6,600.0	6,572.3	6,460.2	6,347.3	24.2	28.0	179.08	-1,059.5	-360.0	1,273.5	1,225.7	47.80	26.641	
6,700.0	6,672.3	6,605.0	6,490.1	24.6	28.7	179.46	-1,082.3	-368.1	1,289.1	1,240.3	48.85	26.389	
6,800.0	6,772.3	6,733.1	6,617.0	24.9	29.2	179.73	-1,098.8	-374.0	1,302.0	1,252.3	49.74	26.179	
6,900.0	6,872.3	6,850.4	6,733.5	25.2	29.7	179.89	-1,111.8	-377.5	1,313.1	1,262.6	50.53	25.985	
7,000.0	6,972.3	6,962.8	6,845.3	25.6	30.1	-179.99	-1,123.1	-380.2	1,323.1	1,271.8	51.29	25.794	
7,100.0	7,072.3	7,083.7	6,965.7	25.9	30.6	-179.89	-1,133.7	-382.5	1,331.9	1,279.8	52.09	25.571	
7,200.0	7,172.3	7,200.2	7,081.9	26.3	31.0	-179.83	-1,142.2	-383.9	1,339.2	1,286.3	52.84	25.342	
7,300.0	7,272.3	7,306.2	7,187.7	26.6	31.4	-179.78	-1,148.9	-385.3	1,345.5	1,292.0	53.56	25.124	
7,400.0	7,372.3	7,400.0	7,313.3	27.0	31.7	-179.96	-1,155.1	-380.9	1,350.3	1,296.1	54.21	24.908	
7,500.0	7,472.3	7,438.0	7,319.1	27.3	31.8	-179.98	-1,155.3	-380.5	1,357.9	1,303.3	54.61	24.867	
7,600.0	7,572.3	7,494.2	7,374.0	27.7	31.9	179.57	-1,159.9	-369.8	1,368.2	1,313.2	55.00	24.879	
7,700.0	7,672.3	7,781.4	7,617.8	28.0	32.4	173.55	-1,177.9	-224.9	1,381.7	1,325.4	56.30	24.541	
7,800.0	7,772.3	7,876.0	7,696.2	28.3	32.4	171.37	-1,174.6	-172.2	1,386.3	1,329.4	56.93	24.353	
7,900.0	7,872.3	7,935.5	7,743.8	28.7	32.5	169.90	-1,171.9	-136.7	1,393.3	1,335.9	57.42	24.266	
8,000.0	7,972.3	7,974.0	7,771.1	29.0	32.5	168.79	-1,170.0	-109.6	1,404.9	1,347.2	57.71	24.344	
8,100.0	8,072.3	7,996.0	7,785.1	29.4	32.5	168.10	-1,168.9	-92.7	1,422.0	1,364.2	57.75	24.624	
8,200.0	8,172.3	7,996.0	7,785.1	29.7	32.5	168.10	-1,168.9	-92.7	1,445.4	1,388.0	57.43	25.170	
8,300.0	8,272.3	8,042.2	7,811.8	30.1	32.5	166.57	-1,167.3	-55.1	1,473.1	1,415.8	57.33	25.696	
8,400.0	8,372.3	8,059.2	7,820.8	30.4	32.5	166.00	-1,167.1	-40.7	1,507.0	1,450.1	56.84	26.514	
8,500.0	8,472.3	8,091.0	7,836.4	30.8	32.5	164.91	-1,167.4	-12.9	1,546.4	1,490.0	56.37	27.433	
8,600.0	8,572.3	8,091.0	7,836.4	31.1	32.5	164.91	-1,167.4	-12.9	1,590.0	1,534.5	55.48	28.658	
8,700.0	8,672.3	8,210.7	7,888.9	31.5	32.5	160.73	-1,162.9	94.4	1,636.6	1,580.8	55.86	29.301	
8,800.0	8,772.3	8,246.0	7,902.5	31.8	32.4	159.47	-1,159.4	126.8	1,686.3	1,631.0	55.26	30.516	
8,900.0	8,872.3	8,275.8	7,913.0	32.2	32.4	158.40	-1,155.9	154.5	1,739.6	1,685.0	54.56	31.884	
9,000.0	8,972.3	8,281.0	7,914.8	32.5	32.4	158.21	-1,155.2	159.3	1,796.5	1,743.0	53.57	33.533	
9,100.0	9,072.3	8,281.0	7,914.8	32.9	32.4	158.21	-1,155.2	159.3	1,857.1	1,804.6	52.53	35.356	
9,200.0	9,172.3	8,281.0	7,914.8	33.2	32.4	158.21	-1,155.2	159.3	1,921.0	1,869.5	51.49	37.311	
9,272.2	9,244.5	8,281.0	7,914.8	33.5	32.4	158.21	-1,155.2	159.3	1,968.9	1,918.2	50.75	38.798	
9,300.0	9,272.3	8,315.1	7,924.9	33.6	32.4	64.89	-1,150.5	191.6	1,986.6	1,935.7	50.82	39.090	
9,350.0	9,322.1	8,319.7	7,926.1	33.7	32.4	60.88	-1,149.8	195.9	2,019.3	1,969.0	50.34	40.115	
9,400.0	9,371.3	8,325.0	7,927.4	33.9	32.4	57.18	-1,149.1	201.0	2,051.1	2,001.3	49.86	41.141	
9,450.0	9,419.5	8,331.0	7,928.8	34.0	32.4	53.82	-1,148.2	206.7	2,081.8	2,032.4	49.38	42.159	
9,500.0	9,466.4	8,337.6	7,930.3	34.1	32.4	50.79	-1,147.2	213.1	2,111.1	2,062.1	48.91	43.162	
9,550.0	9,511.6	8,377.0	7,937.0	34.2	32.3	47.40	-1,141.0	251.5	2,139.8	2,091.1	48.75	43.897	
9,600.0	9,554.7	8,377.0	7,937.0	34.4	32.3	45.25	-1,141.0	251.5	2,165.4	2,117.1	48.23	44.894	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #122H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 163-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,650.0	9,595.5	8,377.0	7,937.0	34.5	32.3	43.36	-1,141.0	251.5	2,189.2	2,141.4	47.74	45.852	
9,700.0	9,633.7	8,377.0	7,937.0	34.6	32.3	41.72	-1,141.0	251.5	2,211.0	2,163.7	47.28	46.761	
9,750.0	9,668.8	8,377.0	7,937.0	34.7	32.3	40.30	-1,141.0	251.5	2,230.8	2,184.0	46.86	47.607	
9,800.0	9,700.8	8,410.0	7,941.0	34.8	32.3	38.70	-1,135.5	283.7	2,248.2	2,201.5	46.76	48.082	
9,850.0	9,729.2	8,441.8	7,944.5	35.0	32.3	37.41	-1,130.0	314.9	2,262.8	2,216.1	46.67	48.483	
9,900.0	9,754.0	8,471.0	7,947.3	35.1	32.3	36.40	-1,124.8	343.5	2,274.4	2,227.8	46.59	48.822	
9,950.0	9,774.9	8,471.0	7,947.3	35.3	32.3	35.86	-1,124.8	343.5	2,283.4	2,237.0	46.36	49.255	
10,000.0	9,791.8	8,509.7	7,950.5	35.5	32.3	35.22	-1,118.1	381.4	2,289.1	2,242.6	46.49	49.238	
10,050.0	9,804.5	8,528.6	7,951.8	35.8	32.4	34.93	-1,115.0	400.0	2,292.2	2,245.6	46.53	49.258	
10,100.0	9,812.9	8,566.0	7,953.7	36.0	32.6	34.75	-1,109.3	437.0	2,292.6	2,245.8	46.77	49.013	
10,125.2	9,815.5	8,566.0	7,953.7	36.2	32.6	34.82	-1,109.3	437.0	2,291.4	2,244.6	46.79	48.973	
10,200.0	9,820.7	8,566.0	7,953.7	36.7	32.6	34.88	-1,109.3	437.0	2,287.5	2,240.6	46.93	48.747	
10,225.5	9,822.0	8,594.1	7,954.7	36.9	32.9	34.81	-1,105.5	464.8	2,286.0	2,238.8	47.19	48.437	
10,300.0	9,825.5	8,621.0	7,955.2	37.5	33.2	34.74	-1,102.2	491.5	2,282.8	2,235.1	47.65	47.910	
10,400.0	9,830.2	8,660.0	7,955.3	38.4	33.6	34.64	-1,098.3	530.3	2,280.9	2,232.5	48.39	47.135	
10,413.2	9,830.8	8,660.0	7,955.3	38.5	33.6	34.64	-1,098.3	530.3	2,280.9	2,232.4	48.47	47.056	
10,500.0	9,834.9	8,690.5	7,955.0	39.4	34.0	34.57	-1,096.1	560.7	2,281.9	2,232.7	49.24	46.346	
10,600.0	9,839.7	8,723.5	7,954.2	40.6	34.5	34.52	-1,094.9	593.6	2,285.8	2,235.6	50.23	45.507	
10,700.0	9,844.4	8,941.0	7,962.1	41.9	37.6	34.71	-1,104.3	810.5	2,290.6	2,237.5	53.15	43.097	
10,800.0	9,849.1	9,000.2	7,967.3	43.3	38.6	34.82	-1,107.8	869.3	2,291.3	2,236.6	54.73	41.864	
10,900.0	9,853.8	10,900.0	7,972.8	44.7	71.3	34.96	-1,113.2	961.2	2,294.0	2,217.8	76.18	30.113	
11,000.0	9,858.5	9,214.3	7,980.1	46.3	42.3	35.10	-1,118.4	1,082.8	2,295.7	2,236.5	59.18	38.792	
11,100.0	9,863.2	9,378.2	7,990.4	47.9	45.3	35.22	-1,120.9	1,246.3	2,295.6	2,233.5	62.13	36.946	
11,200.0	9,867.9	9,474.9	7,996.7	49.6	47.1	35.25	-1,120.7	1,342.9	2,294.4	2,230.0	64.39	35.632	
11,300.0	9,872.6	9,573.3	8,002.0	51.4	49.0	35.24	-1,119.1	1,441.1	2,293.2	2,226.6	66.69	34.389	
11,400.0	9,877.3	9,668.4	8,006.1	53.2	50.9	35.19	-1,116.3	1,536.1	2,292.2	2,223.3	68.96	33.241	
11,500.0	9,882.1	9,767.6	8,010.7	55.1	52.9	35.16	-1,114.2	1,635.1	2,291.5	2,220.1	71.35	32.117	
11,600.0	9,886.8	9,853.8	8,014.3	57.0	54.6	35.11	-1,111.8	1,721.2	2,290.7	2,217.1	73.62	31.116	
11,700.0	9,891.5	10,050.9	8,023.4	58.9	58.7	34.97	-1,103.6	1,917.9	2,289.2	2,212.1	77.06	29.706	
11,800.0	9,896.2	10,145.2	8,028.9	60.9	60.7	34.87	-1,097.6	2,011.8	2,284.9	2,205.4	79.43	28.764	
11,900.0	9,900.9	10,234.8	8,033.1	63.0	62.6	34.74	-1,090.5	2,101.1	2,280.8	2,199.0	81.72	27.908	
12,000.0	9,905.6	10,327.6	8,036.3	65.0	64.6	34.57	-1,082.6	2,193.5	2,277.3	2,193.3	84.02	27.105	
12,100.0	9,910.3	10,443.8	8,042.0	67.1	67.1	34.42	-1,074.5	2,309.2	2,273.5	2,186.9	86.62	26.247	
12,200.0	9,915.0	10,535.2	8,046.3	69.2	69.1	34.28	-1,067.3	2,400.2	2,269.4	2,180.5	88.97	25.507	
12,300.0	9,919.8	10,649.1	8,051.5	71.3	71.6	34.11	-1,058.6	2,513.7	2,265.7	2,174.1	91.54	24.752	
12,400.0	9,924.5	10,770.4	8,060.5	73.5	74.3	34.04	-1,052.2	2,634.5	2,260.8	2,166.4	94.35	23.962	
12,500.0	9,929.2	10,853.2	8,067.3	75.6	76.2	34.02	-1,048.7	2,716.9	2,255.9	2,159.1	96.83	23.297	
12,600.0	9,933.9	10,945.2	8,074.1	77.8	78.3	33.98	-1,044.6	2,808.6	2,251.5	2,152.1	99.40	22.652	
12,700.0	9,938.6	10,996.6	8,077.4	80.0	79.4	33.96	-1,042.7	2,859.9	2,248.3	2,146.8	101.54	22.141	
12,795.3	9,943.1	11,046.0	8,080.2	82.1	80.5	33.96	-1,042.2	2,909.2	2,247.4	2,143.8	103.62	21.689	
12,800.0	9,943.3	11,046.0	8,080.2	82.2	80.5	33.96	-1,042.2	2,909.2	2,247.4	2,143.7	103.69	21.674	
12,900.0	9,948.0	11,113.1	8,083.3	84.4	82.1	33.98	-1,042.8	2,976.2	2,248.3	2,142.2	106.08	21.194	
13,000.0	9,952.7	11,184.0	8,085.9	86.7	83.7	34.01	-1,044.2	3,047.0	2,250.7	2,142.1	108.54	20.736	
13,100.0	9,957.5	11,260.4	8,087.5	88.9	85.5	34.03	-1,045.6	3,123.4	2,254.2	2,143.1	111.05	20.299	
13,200.0	9,962.2	11,345.9	8,088.3	91.2	87.4	34.02	-1,047.0	3,208.9	2,258.5	2,144.9	113.64	19.875	
13,300.0	9,966.9	11,436.7	8,088.9	93.4	89.5	34.02	-1,048.8	3,299.7	2,263.4	2,147.1	116.32	19.458	
13,400.0	9,971.6	11,538.6	8,089.4	95.7	91.9	34.02	-1,051.1	3,401.6	2,268.5	2,149.3	119.18	19.035	
13,500.0	9,976.3	11,657.7	8,091.6	98.0	94.7	34.05	-1,054.2	3,520.5	2,272.6	2,150.3	122.35	18.575	
13,600.0	9,981.0	11,745.1	8,093.0	100.3	96.7	34.07	-1,056.4	3,607.9	2,277.1	2,152.0	125.06	18.207	
13,700.0	9,985.7	11,845.1	8,094.0	102.6	99.1	34.08	-1,058.8	3,707.9	2,281.8	2,153.8	127.95	17.834	
13,800.0	9,990.4	11,949.9	8,095.4	104.9	101.5	34.10	-1,061.4	3,812.6	2,286.3	2,155.4	130.92	17.463	
13,900.0	9,995.2	12,045.1	8,096.0	107.2	103.8	34.08	-1,062.5	3,907.8	2,290.7	2,157.1	133.68	17.136	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #122H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 163-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,000.0	9,999.9	12,135.0	8,096.1	109.5	105.9	34.06	-1,063.6	3,997.7	2,295.6	2,159.3	136.35	16.836	
14,100.0	10,004.6	12,238.3	8,097.6	111.9	108.3	34.10	-1,067.5	4,100.9	2,300.8	2,161.3	139.41	16.504	
14,200.0	10,009.3	12,340.4	8,099.4	114.2	110.7	34.15	-1,071.1	4,203.0	2,305.5	2,163.1	142.45	16.185	
14,300.0	10,014.0	12,513.7	8,103.4	116.5	114.9	34.17	-1,073.8	4,376.2	2,308.8	2,162.4	146.42	15.769	
14,400.0	10,018.7	12,613.5	8,107.7	118.9	117.2	34.21	-1,075.3	4,475.9	2,310.3	2,160.9	149.42	15.461	
14,500.0	10,023.4	12,725.0	8,112.4	121.2	119.9	34.25	-1,077.0	4,587.3	2,311.9	2,159.3	152.61	15.149	
14,600.0	10,028.1	12,858.9	8,121.9	123.6	123.1	34.41	-1,081.6	4,720.8	2,312.2	2,155.8	156.40	14.784	
14,630.4	10,029.6	12,882.5	8,123.9	124.3	123.6	34.44	-1,082.7	4,744.3	2,312.1	2,154.8	157.31	14.698	
14,700.0	10,032.8	12,938.0	8,128.5	125.9	125.0	34.54	-1,085.5	4,799.5	2,312.4	2,152.9	159.45	14.502	
14,800.0	10,037.6	13,025.0	8,135.2	128.3	127.0	34.68	-1,090.3	4,886.1	2,313.3	2,150.7	162.65	14.222	
14,900.0	10,042.3	13,112.6	8,141.4	130.7	129.1	34.82	-1,094.9	4,973.3	2,314.8	2,148.9	165.85	13.957	
15,000.0	10,047.0	13,199.1	8,146.8	133.0	131.2	34.94	-1,099.4	5,059.6	2,316.8	2,147.8	169.01	13.708	
15,100.0	10,051.7	13,296.3	8,152.3	135.4	133.5	35.06	-1,104.2	5,156.4	2,319.2	2,146.9	172.33	13.458	
15,200.0	10,056.4	13,412.3	8,158.8	137.8	136.3	35.19	-1,109.2	5,272.2	2,321.4	2,145.4	175.95	13.194	
15,300.0	10,061.1	13,532.6	8,165.6	140.1	139.2	35.29	-1,112.7	5,392.2	2,322.6	2,143.1	179.54	12.937	
15,400.0	10,065.8	13,645.2	8,171.2	142.5	141.9	35.33	-1,113.6	5,504.7	2,323.3	2,140.5	182.83	12.707	
15,500.0	10,070.5	13,748.7	8,175.3	144.9	144.4	35.31	-1,112.2	5,608.1	2,323.5	2,137.6	185.81	12.504	
15,600.0	10,075.3	13,851.9	8,178.7	147.3	146.8	35.25	-1,109.8	5,711.2	2,323.7	2,135.0	188.67	12.316	
15,700.0	10,080.0	13,950.5	8,181.3	149.7	149.2	35.16	-1,106.4	5,809.7	2,323.7	2,132.3	191.39	12.141	
15,800.0	10,084.7	14,034.7	8,183.5	152.0	151.2	35.10	-1,103.8	5,893.9	2,324.1	2,130.1	193.98	11.981	
15,900.0	10,089.4	14,124.0	8,185.3	154.4	153.4	35.03	-1,101.6	5,983.1	2,325.2	2,128.6	196.62	11.826	
16,000.0	10,094.1	14,240.6	8,187.3	156.8	156.2	34.93	-1,098.1	6,099.6	2,326.3	2,126.8	199.46	11.663	
16,100.0	10,098.8	14,339.2	8,188.7	159.2	158.5	34.80	-1,093.5	6,198.1	2,326.8	2,124.8	202.00	11.519	
16,200.0	10,103.5	14,430.0	8,189.1	161.6	160.7	34.66	-1,088.7	6,288.8	2,327.6	2,123.2	204.36	11.389	
16,300.0	10,108.2	14,522.1	8,189.8	164.0	162.9	34.54	-1,084.8	6,380.8	2,328.8	2,122.0	206.81	11.260	
16,400.0	10,113.0	14,739.3	8,201.4	166.4	168.1	34.56	-1,083.2	6,597.6	2,328.8	2,117.7	211.18	11.028	
16,500.0	10,117.7	14,844.4	8,211.2	168.8	170.7	34.63	-1,082.8	6,702.3	2,325.3	2,110.8	214.50	10.841	
16,600.0	10,122.4	14,952.7	8,221.4	171.2	173.3	34.69	-1,081.4	6,810.0	2,321.0	2,103.2	217.80	10.657	
16,700.0	10,127.1	15,041.4	8,228.9	173.6	175.4	34.71	-1,079.5	6,898.5	2,317.0	2,096.2	220.79	10.494	
16,800.0	10,131.8	15,131.3	8,235.8	176.0	177.6	34.71	-1,077.1	6,988.0	2,313.4	2,089.7	223.70	10.342	
16,900.0	10,136.5	15,199.0	8,240.1	178.4	179.2	34.68	-1,074.8	7,055.6	2,310.6	2,084.3	226.30	10.210	
17,000.0	10,141.2	15,270.4	8,243.3	180.8	180.9	34.63	-1,071.9	7,126.9	2,309.0	2,080.2	228.77	10.093	
17,044.9	10,143.3	15,299.3	8,244.0	181.9	181.6	34.60	-1,070.7	7,155.7	2,308.9	2,079.1	229.81	10.047	
17,100.0	10,145.9	15,339.8	8,244.7	183.2	182.6	34.55	-1,068.8	7,196.2	2,309.0	2,078.0	231.07	9.993	
17,200.0	10,150.7	15,413.2	8,244.9	185.6	184.3	34.44	-1,065.3	7,269.5	2,310.2	2,077.0	233.26	9.904	
17,218.0	10,151.5	15,426.4	8,244.8	186.1	184.7	34.42	-1,064.6	7,282.7	2,310.6	2,076.9	233.64	9.889	SF
17,218.7	10,151.5	15,427.0	8,244.8	186.1	184.7	34.42	-1,064.6	7,283.2	2,310.6	2,077.0	233.64	9.890	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #122H - Wellbore #1 - Altitude Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.0	-1.0	0.0	0.0	164.69	-110.3	30.2	114.3				
100.0	100.0	101.0	99.0	0.1	0.1	164.69	-110.3	30.2	114.3	114.1	0.26	439.947	
200.0	200.0	201.0	199.0	0.5	0.5	164.69	-110.3	30.2	114.3	113.4	0.98	117.050	
300.0	300.0	301.0	299.0	0.8	0.8	164.69	-110.3	30.2	114.3	112.6	1.69	67.505	
400.0	400.0	401.0	399.0	1.2	1.2	164.69	-110.3	30.2	114.3	111.9	2.41	47.429	
500.0	500.0	501.0	499.0	1.6	1.6	164.69	-110.3	30.2	114.3	111.2	3.13	36.557	
600.0	600.0	601.0	599.0	1.9	1.9	164.69	-110.3	30.2	114.3	110.5	3.84	29.740	
700.0	700.0	701.0	699.0	2.3	2.3	164.69	-110.3	30.2	114.3	109.8	4.56	25.066	
800.0	800.0	801.0	799.0	2.6	2.6	164.69	-110.3	30.2	114.3	109.1	5.28	21.661	
900.0	900.0	901.0	899.0	3.0	3.0	164.69	-110.3	30.2	114.3	108.3	6.00	19.071	
1,000.0	1,000.0	999.0	999.0	3.4	3.4	164.69	-110.3	30.2	114.3	107.6	6.71	17.052	CC
1,100.0	1,100.0	1,097.4	1,097.4	3.7	3.7	164.94	-111.1	29.9	115.0	107.6	7.40	15.542	ES
1,200.0	1,200.0	1,195.8	1,195.8	4.1	4.0	165.69	-113.4	28.9	117.1	109.0	8.08	14.486	
1,300.0	1,300.0	1,294.1	1,293.9	4.4	4.3	166.87	-117.3	27.4	120.5	111.8	8.76	13.753	
1,400.0	1,400.0	1,392.2	1,391.8	4.8	4.7	168.41	-122.7	25.2	125.5	116.0	9.45	13.279	
1,500.0	1,500.0	1,490.0	1,489.4	5.1	5.0	170.22	-129.7	22.3	132.0	121.8	10.14	13.020	
1,600.0	1,600.0	1,587.6	1,586.5	5.5	5.4	-125.06	-138.2	18.9	140.5	129.7	10.81	12.995	
1,700.0	1,700.0	1,684.7	1,683.1	5.9	5.7	-123.71	-148.2	14.9	151.7	140.2	11.49	13.201	
1,800.0	1,799.9	1,781.4	1,779.0	6.2	6.1	-122.74	-159.6	10.3	165.3	153.1	12.16	13.589	
1,900.0	1,899.7	1,877.5	1,874.1	6.6	6.4	-122.11	-172.5	5.1	181.4	168.5	12.84	14.126	
2,000.0	1,999.4	1,973.0	1,968.3	6.9	6.8	-121.75	-186.7	-0.7	199.8	186.3	13.51	14.787	
2,100.0	2,098.9	2,067.7	2,061.5	7.3	7.2	-121.59	-202.3	-6.9	220.6	206.4	14.18	15.551	
2,200.0	2,198.3	2,161.6	2,153.7	7.6	7.6	-121.58	-219.1	-13.7	243.7	228.8	14.86	16.402	
2,300.0	2,297.4	2,254.9	2,244.9	8.0	8.0	-121.68	-237.2	-21.0	269.1	253.6	15.54	17.321	
2,400.0	2,396.4	2,351.3	2,339.0	8.4	8.4	-122.04	-256.5	-28.8	295.5	279.3	16.26	18.172	
2,500.0	2,495.5	2,447.7	2,433.2	8.8	8.8	-122.35	-275.8	-36.6	322.0	305.0	17.00	18.944	
2,600.0	2,594.5	2,544.2	2,527.3	9.2	9.2	-122.60	-295.2	-44.4	348.5	330.7	17.74	19.646	
2,700.0	2,693.5	2,640.6	2,621.5	9.5	9.7	-122.82	-314.5	-52.2	375.0	356.5	18.48	20.287	
2,800.0	2,792.5	2,737.0	2,715.6	9.9	10.1	-123.01	-333.8	-60.0	401.4	382.2	19.23	20.873	
2,900.0	2,891.6	2,833.4	2,809.8	10.3	10.6	-123.18	-353.1	-67.8	427.9	407.9	19.99	21.412	
3,000.0	2,990.6	2,929.9	2,903.9	10.7	11.0	-123.33	-372.5	-75.6	454.4	433.7	20.74	21.907	
3,100.0	3,089.6	3,026.3	2,998.0	11.1	11.5	-123.46	-391.8	-83.4	480.9	459.4	21.50	22.365	
3,200.0	3,188.6	3,122.7	3,092.2	11.5	11.9	-123.58	-411.1	-91.2	507.4	485.1	22.27	22.788	
3,300.0	3,287.7	3,219.1	3,186.3	11.9	12.4	-123.69	-430.4	-99.0	533.9	510.9	23.03	23.181	
3,400.0	3,386.7	3,315.5	3,280.5	12.3	12.8	-123.78	-449.7	-106.8	560.4	536.6	23.80	23.546	
3,500.0	3,485.7	3,412.0	3,374.6	12.7	13.3	-123.87	-469.1	-114.6	586.9	562.3	24.57	23.887	
3,600.0	3,584.8	3,508.4	3,468.8	13.1	13.7	-123.95	-488.4	-122.4	613.4	588.0	25.34	24.205	
3,700.0	3,683.8	3,604.8	3,562.9	13.5	14.2	-124.02	-507.7	-130.2	639.9	613.8	26.12	24.502	
3,800.0	3,782.8	3,701.2	3,657.0	13.9	14.7	-124.09	-527.0	-138.0	666.4	639.5	26.89	24.781	
3,900.0	3,881.8	3,802.4	3,751.2	14.4	15.2	-124.15	-546.3	-145.8	692.9	665.2	27.69	25.026	
4,000.0	3,980.9	3,905.9	3,845.3	14.8	15.7	-124.21	-565.7	-153.6	719.4	690.9	28.49	25.247	
4,100.0	4,079.9	4,009.5	3,939.5	15.2	16.2	-124.26	-585.0	-161.4	745.9	716.6	29.30	25.454	
4,200.0	4,178.9	4,086.9	4,033.6	15.6	16.5	-124.31	-604.3	-169.2	772.4	742.4	30.01	25.741	
4,300.0	4,277.9	4,183.3	4,127.8	16.0	17.0	-124.36	-623.6	-177.0	798.9	768.1	30.79	25.948	
4,400.0	4,377.0	4,279.8	4,221.9	16.4	17.5	-124.40	-642.9	-184.8	825.4	793.8	31.57	26.144	
4,500.0	4,476.0	4,376.2	4,316.1	16.8	18.0	-124.45	-662.3	-192.6	851.9	819.6	32.35	26.330	
4,600.0	4,575.0	4,472.6	4,410.2	17.2	18.4	-124.48	-681.6	-200.4	878.4	845.3	33.14	26.507	
4,698.1	4,672.2	4,567.2	4,502.5	17.6	18.9	-124.52	-700.5	-208.1	904.4	870.5	33.91	26.671	
4,700.0	4,674.0	4,569.0	4,504.3	17.6	18.9	-124.53	-700.9	-208.2	904.9	871.0	33.93	26.674	
4,800.0	4,773.3	4,665.6	4,598.7	18.0	19.4	-124.82	-720.3	-216.0	930.7	896.0	34.70	26.817	
4,900.0	4,872.7	4,762.6	4,693.3	18.4	19.9	-124.96	-739.7	-223.9	955.0	919.5	35.47	26.923	
5,000.0	4,972.5	4,859.8	4,788.3	18.8	20.3	-124.96	-759.2	-231.7	977.9	941.6	36.23	26.994	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #122H - Wellbore #1 - Altitude Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,072.4	4,957.3	4,883.4	19.2	20.8	-124.83	-778.7	-239.6	999.3	962.4	36.97	27.033	
5,200.0	5,172.3	5,054.8	4,978.7	19.5	21.3	-124.57	-798.2	-247.5	1,019.4	981.7	37.69	27.044	
5,231.4	5,203.8	5,085.5	5,008.6	19.6	21.4	172.58	-804.4	-250.0	1,025.4	987.5	37.92	27.042	
5,300.0	5,272.3	5,152.5	5,074.0	19.8	21.8	172.98	-817.8	-255.4	1,038.4	1,000.0	38.41	27.037	
5,400.0	5,372.3	5,250.1	5,169.3	20.2	22.3	173.54	-837.4	-263.3	1,057.4	1,018.3	39.12	27.031	
5,500.0	5,472.3	5,347.7	5,264.7	20.5	22.7	174.09	-856.9	-271.2	1,076.6	1,036.8	39.83	27.028	
5,600.0	5,572.3	5,445.4	5,360.0	20.8	23.2	174.61	-876.5	-279.1	1,095.8	1,055.3	40.54	27.028	
5,700.0	5,672.3	5,543.0	5,455.3	21.2	23.7	175.12	-896.1	-287.0	1,115.2	1,073.9	41.26	27.030	
5,800.0	5,772.3	5,640.7	5,550.7	21.5	24.2	175.61	-915.6	-294.9	1,134.6	1,092.6	41.97	27.033	
5,900.0	5,872.3	5,738.3	5,646.0	21.8	24.7	176.09	-935.2	-302.8	1,154.1	1,111.4	42.68	27.039	
6,000.0	5,972.3	5,835.9	5,741.3	22.2	25.2	176.54	-954.8	-310.7	1,173.6	1,130.2	43.39	27.045	
6,100.0	6,072.3	5,933.6	5,836.7	22.5	25.6	176.99	-974.3	-318.6	1,193.3	1,149.1	44.11	27.053	
6,200.0	6,172.3	6,031.2	5,932.0	22.9	26.1	177.42	-993.9	-326.5	1,213.0	1,168.1	44.82	27.063	
6,300.0	6,272.3	6,128.8	6,027.3	23.2	26.6	177.83	-1,013.5	-334.4	1,232.7	1,187.2	45.53	27.073	
6,400.0	6,372.3	6,226.5	6,122.6	23.5	27.1	178.24	-1,033.0	-342.3	1,252.5	1,206.3	46.25	27.084	
6,500.0	6,472.3	6,343.8	6,237.3	23.9	27.7	178.69	-1,056.0	-351.5	1,272.1	1,225.0	47.13	26.992	
6,600.0	6,572.3	6,486.1	6,377.3	24.2	28.3	179.15	-1,080.0	-361.2	1,288.8	1,240.6	48.18	26.751	
6,700.0	6,672.3	6,630.3	6,519.9	24.6	28.9	179.51	-1,099.3	-369.0	1,302.2	1,253.0	49.17	26.482	
6,800.0	6,772.3	6,775.9	6,664.6	24.9	29.5	179.77	-1,113.7	-374.8	1,312.1	1,262.0	50.10	26.187	
6,900.0	6,872.3	6,922.4	6,810.8	25.2	30.0	179.94	-1,123.0	-378.6	1,318.4	1,267.5	50.96	25.870	
7,000.0	6,972.3	7,069.4	6,957.8	25.6	30.5	-179.99	-1,127.1	-380.2	1,321.2	1,269.5	51.75	25.531	
7,100.0	7,072.3	7,183.0	7,071.3	25.9	30.8	-179.99	-1,127.4	-380.3	1,321.4	1,269.0	52.43	25.204	
7,200.0	7,172.3	7,283.0	7,171.3	26.3	31.1	-179.99	-1,127.4	-380.3	1,321.4	1,268.3	53.08	24.895	
7,300.0	7,272.3	7,383.0	7,271.3	26.6	31.3	-179.99	-1,127.4	-380.3	1,321.4	1,267.6	53.73	24.592	
7,400.0	7,372.3	7,483.2	7,371.5	27.0	31.6	-179.99	-1,127.4	-380.2	1,321.4	1,267.0	54.39	24.296	
7,489.2	7,461.5	7,572.7	7,460.5	27.3	31.8	179.63	-1,127.3	-371.5	1,321.3	1,266.4	54.96	24.040	
7,500.0	7,472.3	7,583.3	7,470.9	27.3	31.9	179.55	-1,127.3	-369.5	1,321.3	1,266.3	55.03	24.010	
7,600.0	7,572.3	7,677.1	7,561.0	27.7	32.0	178.44	-1,127.1	-344.0	1,321.7	1,266.0	55.66	23.746	
7,700.0	7,672.3	7,760.7	7,636.9	28.0	32.2	176.93	-1,126.9	-309.1	1,323.3	1,267.0	56.26	23.521	
7,800.0	7,772.3	7,832.7	7,697.7	28.3	32.2	175.26	-1,126.7	-270.4	1,327.3	1,270.4	56.80	23.365	
7,900.0	7,872.3	7,893.7	7,744.9	28.7	32.3	173.60	-1,126.4	-232.0	1,334.7	1,277.4	57.26	23.311	
8,000.0	7,972.3	7,944.8	7,781.3	29.0	32.3	172.07	-1,126.2	-196.0	1,346.4	1,288.9	57.57	23.388	
8,100.0	8,072.3	7,987.7	7,809.1	29.4	32.3	170.68	-1,126.0	-163.5	1,363.1	1,305.4	57.71	23.620	
8,200.0	8,172.3	8,023.7	7,830.6	29.7	32.3	169.46	-1,125.8	-134.5	1,385.0	1,327.3	57.65	24.023	
8,300.0	8,272.3	8,050.0	7,845.1	30.1	32.3	168.55	-1,125.6	-112.6	1,412.3	1,354.9	57.36	24.620	
8,400.0	8,372.3	8,080.3	7,860.6	30.4	32.3	167.46	-1,125.5	-86.5	1,445.0	1,388.0	56.96	25.366	
8,500.0	8,472.3	8,100.0	7,869.9	30.8	32.3	166.74	-1,125.4	-69.2	1,482.9	1,426.6	56.34	26.323	
8,600.0	8,572.3	8,122.2	7,879.6	31.1	32.3	165.93	-1,125.2	-49.3	1,525.9	1,470.2	55.63	27.429	
8,700.0	8,672.3	8,150.0	7,890.8	31.5	32.3	164.89	-1,125.1	-23.8	1,573.6	1,518.7	54.90	28.664	
8,800.0	8,772.3	8,150.0	7,890.8	31.8	32.3	164.89	-1,125.1	-23.8	1,625.5	1,571.7	53.82	30.200	
8,900.0	8,872.3	8,167.2	7,897.0	32.2	32.3	164.24	-1,125.0	-7.8	1,681.5	1,628.6	52.90	31.787	
9,000.0	8,972.3	8,178.9	7,901.0	32.5	32.3	163.80	-1,124.9	3.3	1,741.3	1,689.4	51.91	33.546	
9,100.0	9,072.3	8,200.0	7,907.6	32.9	32.3	163.00	-1,124.8	23.3	1,804.5	1,753.4	51.02	35.370	
9,200.0	9,172.3	8,200.0	7,907.6	33.2	32.3	163.00	-1,124.8	23.3	1,870.5	1,820.6	49.93	37.466	
9,272.2	9,244.5	8,200.0	7,907.6	33.5	32.3	163.00	-1,124.8	23.3	1,920.0	1,870.8	49.16	39.058	
9,300.0	9,272.3	8,200.0	7,907.6	33.6	32.3	70.64	-1,124.8	23.3	1,939.3	1,890.5	48.86	39.690	
9,350.0	9,322.1	8,200.0	7,907.6	33.7	32.3	66.24	-1,124.8	23.3	1,973.7	1,925.4	48.32	40.845	
9,400.0	9,371.3	8,218.9	7,912.9	33.9	32.2	61.56	-1,124.6	41.4	2,007.2	1,959.2	47.98	41.834	
9,450.0	9,419.5	8,225.8	7,914.7	34.0	32.2	57.64	-1,124.6	48.0	2,039.9	1,992.3	47.51	42.934	
9,500.0	9,466.4	8,250.0	7,920.3	34.1	32.2	53.71	-1,124.4	71.6	2,071.6	2,024.4	47.22	43.870	
9,550.0	9,511.6	8,250.0	7,920.3	34.2	32.2	50.75	-1,124.4	71.6	2,101.6	2,054.9	46.71	44.994	
9,600.0	9,554.7	8,250.0	7,920.3	34.4	32.2	48.12	-1,124.4	71.6	2,130.1	2,083.9	46.21	46.090	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #122H - Wellbore #1 - Altitude Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,650.0	9,595.5	8,250.0	7,920.3	34.5	32.2	45.79	-1,124.4	71.6	2,157.0	2,111.2	45.75	47.144	
9,700.0	9,633.7	8,269.2	7,924.0	34.6	32.2	43.51	-1,124.3	90.5	2,181.7	2,136.2	45.50	47.952	
9,750.0	9,668.8	8,279.3	7,925.7	34.7	32.2	41.66	-1,124.3	100.4	2,204.5	2,159.3	45.20	48.774	
9,800.0	9,700.8	8,300.0	7,928.7	34.8	32.2	39.99	-1,124.1	120.9	2,225.2	2,180.2	45.03	49.418	
9,850.0	9,729.2	8,300.0	7,928.7	35.0	32.2	38.75	-1,124.1	120.9	2,243.4	2,198.6	44.74	50.138	
9,900.0	9,754.0	8,300.0	7,928.7	35.1	32.2	37.71	-1,124.1	120.9	2,259.3	2,214.8	44.53	50.741	
9,950.0	9,774.9	8,322.7	7,931.1	35.3	32.2	36.75	-1,124.0	143.5	2,272.5	2,228.0	44.54	51.021	
10,000.0	9,791.8	8,347.1	7,932.7	35.5	32.2	36.00	-1,123.8	167.8	2,283.4	2,238.8	44.62	51.171	
10,050.0	9,804.5	8,347.1	7,932.7	35.8	32.2	35.54	-1,123.8	167.8	2,291.3	2,246.7	44.62	51.351	
10,100.0	9,812.9	8,409.8	7,934.5	36.0	32.2	35.16	-1,123.5	210.9	2,296.3	2,251.3	45.08	50.940	
10,125.2	9,815.5	8,415.3	7,935.6	36.2	32.2	35.07	-1,123.4	235.9	2,297.6	2,252.4	45.19	50.843	
10,200.0	9,820.7	8,509.9	7,938.9	36.7	32.3	35.03	-1,122.9	310.7	2,299.0	2,253.0	46.08	49.894	
10,225.5	9,822.0	8,515.6	7,940.0	36.9	32.4	35.03	-1,122.7	336.1	2,299.2	2,253.0	46.23	49.732	
10,300.0	9,825.5	8,609.9	7,943.2	37.5	33.0	35.02	-1,122.3	410.6	2,299.4	2,252.2	47.28	48.632	
10,400.0	9,830.2	8,709.9	7,947.5	38.4	34.2	35.02	-1,121.6	510.5	2,299.8	2,251.1	48.65	47.268	
10,500.0	9,834.9	8,809.9	7,951.9	39.4	35.5	35.01	-1,121.0	610.4	2,300.1	2,249.9	50.18	45.840	
10,600.0	9,839.7	8,909.9	7,956.2	40.6	36.9	35.01	-1,120.3	710.3	2,300.4	2,248.5	51.84	44.378	
10,700.0	9,844.4	9,009.9	7,960.5	41.9	38.5	35.00	-1,119.7	810.2	2,300.7	2,247.1	53.62	42.906	
10,800.0	9,849.1	9,090.1	7,964.9	43.3	39.8	34.99	-1,119.0	910.1	2,301.0	2,245.7	55.31	41.600	
10,900.0	9,853.8	9,209.9	7,969.2	44.7	41.8	34.99	-1,118.4	1,010.0	2,301.3	2,243.8	57.52	40.008	
11,000.0	9,858.5	9,309.9	7,973.5	46.3	43.6	34.98	-1,117.7	1,109.9	2,301.6	2,242.0	59.61	38.609	
11,100.0	9,863.2	9,409.9	7,977.8	47.9	45.4	34.98	-1,117.1	1,209.8	2,301.9	2,240.1	61.79	37.255	
11,200.0	9,867.9	9,509.9	7,982.2	49.6	47.3	34.97	-1,116.5	1,309.7	2,302.2	2,238.2	64.04	35.951	
11,300.0	9,872.6	9,609.9	7,986.5	51.4	49.3	34.97	-1,115.8	1,409.6	2,302.5	2,236.2	66.35	34.701	
11,400.0	9,877.3	9,709.9	7,990.8	53.2	51.3	34.96	-1,115.2	1,509.5	2,302.8	2,234.1	68.73	33.507	
11,500.0	9,882.1	9,790.1	7,995.2	55.1	52.9	34.96	-1,114.5	1,609.4	2,303.2	2,232.2	70.90	32.482	
11,600.0	9,886.8	9,890.1	7,999.5	57.0	55.0	34.95	-1,113.9	1,709.3	2,303.5	2,230.1	73.38	31.392	
11,700.0	9,891.5	10,059.1	8,006.8	58.9	58.5	34.85	-1,108.4	1,878.0	2,302.3	2,225.7	76.53	30.083	
11,800.0	9,896.2	10,158.9	8,011.1	60.9	60.6	34.74	-1,102.5	1,977.6	2,299.6	2,220.7	78.94	29.130	
11,900.0	9,900.9	10,258.8	8,015.5	63.0	62.7	34.63	-1,096.7	2,077.2	2,296.9	2,215.6	81.38	28.225	
12,000.0	9,905.6	10,358.7	8,019.8	65.0	64.9	34.51	-1,090.8	2,176.8	2,294.3	2,210.4	83.83	27.367	
12,100.0	9,910.3	10,458.5	8,024.1	67.1	67.0	34.40	-1,084.9	2,276.4	2,291.6	2,205.3	86.31	26.552	
12,200.0	9,915.0	10,558.4	8,028.4	69.2	69.2	34.29	-1,079.1	2,376.0	2,289.0	2,200.2	88.79	25.778	
12,300.0	9,919.8	10,658.3	8,032.7	71.3	71.4	34.17	-1,073.2	2,475.6	2,286.3	2,195.0	91.29	25.044	
12,400.0	9,924.5	10,758.1	8,037.1	73.5	73.6	34.06	-1,067.3	2,575.2	2,283.7	2,189.9	93.80	24.346	
12,500.0	9,929.2	10,858.0	8,041.4	75.6	75.9	33.94	-1,061.5	2,674.8	2,281.1	2,184.8	96.32	23.682	
12,600.0	9,933.9	10,946.4	8,045.2	77.8	77.8	33.85	-1,056.4	2,763.0	2,278.6	2,179.8	98.74	23.076	
12,700.0	9,938.6	11,015.6	8,048.2	80.0	79.4	33.80	-1,053.8	2,832.1	2,277.2	2,176.1	101.04	22.537	
12,755.7	9,941.2	11,054.2	8,049.9	81.2	80.3	33.78	-1,053.1	2,870.7	2,277.0	2,174.6	102.35	22.247	
12,800.0	9,943.3	11,085.0	8,051.2	82.2	81.0	33.78	-1,052.9	2,901.4	2,277.1	2,173.7	103.40	22.021	
12,900.0	9,948.0	11,154.3	8,054.2	84.4	82.6	33.80	-1,053.6	2,970.6	2,278.4	2,172.5	105.84	21.527	
13,000.0	9,952.7	11,220.1	8,057.1	86.7	84.1	33.86	-1,055.9	3,036.4	2,281.0	2,172.7	108.28	21.065	
13,100.0	9,957.5	11,309.7	8,060.3	88.9	86.2	33.94	-1,060.0	3,125.7	2,284.8	2,173.7	111.10	20.564	
13,200.0	9,962.2	11,409.5	8,063.8	91.2	88.5	34.03	-1,064.5	3,225.4	2,288.7	2,174.6	114.10	20.059	
13,300.0	9,966.9	11,509.4	8,067.4	93.4	90.8	34.12	-1,069.1	3,325.1	2,292.6	2,175.5	117.11	19.577	
13,400.0	9,971.6	11,609.2	8,070.9	95.7	93.1	34.22	-1,073.7	3,424.8	2,296.5	2,176.4	120.14	19.115	
13,500.0	9,976.3	11,709.1	8,074.4	98.0	95.5	34.31	-1,078.3	3,524.5	2,300.4	2,177.2	123.19	18.674	
13,600.0	9,981.0	11,808.9	8,077.9	100.3	97.8	34.40	-1,082.9	3,624.2	2,304.3	2,178.1	126.26	18.251	
13,700.0	9,985.7	11,908.8	8,081.4	102.6	100.1	34.49	-1,087.4	3,723.9	2,308.3	2,178.9	129.34	17.846	
13,800.0	9,990.4	12,008.7	8,084.9	104.9	102.5	34.58	-1,092.0	3,823.6	2,312.2	2,179.8	132.44	17.458	
13,900.0	9,995.2	12,121.5	8,088.9	107.2	105.2	34.68	-1,097.1	3,936.2	2,316.1	2,180.4	135.76	17.061	
14,000.0	9,999.9	12,277.2	8,094.4	109.5	108.8	34.70	-1,098.6	4,091.8	2,317.9	2,178.4	139.45	16.622	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #122H - Wellbore #1 - Altitude Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,100.0	10,004.6	12,377.2	8,097.9	111.9	111.2	34.68	-1,098.0	4,191.7	2,318.9	2,176.5	142.33	16.292	
14,200.0	10,009.3	12,477.2	8,101.4	114.2	113.6	34.67	-1,097.3	4,291.7	2,319.9	2,174.6	145.22	15.975	
14,300.0	10,014.0	12,577.2	8,104.9	116.5	115.9	34.65	-1,096.7	4,391.6	2,320.8	2,172.7	148.10	15.670	
14,400.0	10,018.7	12,677.2	8,108.4	118.9	118.3	34.63	-1,096.0	4,491.5	2,321.8	2,170.8	151.00	15.377	
14,500.0	10,023.4	12,805.1	8,113.1	121.2	121.3	34.62	-1,095.2	4,609.2	2,322.4	2,168.2	154.27	15.054	
14,600.0	10,028.1	12,905.1	8,117.6	123.6	123.7	34.62	-1,094.6	4,709.1	2,322.6	2,165.4	157.21	14.774	
14,700.0	10,032.8	13,005.1	8,122.0	125.9	126.1	34.61	-1,094.0	4,809.0	2,322.9	2,162.7	160.15	14.504	
14,800.0	10,037.6	13,105.1	8,126.4	128.3	128.5	34.61	-1,093.3	4,908.9	2,323.1	2,160.0	163.09	14.244	
14,900.0	10,042.3	13,205.1	8,130.9	130.7	130.9	34.61	-1,092.7	5,008.8	2,323.3	2,157.3	166.04	13.992	
15,000.0	10,047.0	13,305.1	8,135.3	133.0	133.3	34.60	-1,092.1	5,108.7	2,323.5	2,154.5	168.99	13.749	
15,100.0	10,051.7	13,394.9	8,139.8	135.4	135.4	34.60	-1,091.4	5,208.6	2,323.7	2,151.9	171.80	13.526	
15,200.0	10,056.4	13,494.9	8,144.2	137.8	137.8	34.59	-1,090.8	5,308.4	2,324.0	2,149.2	174.75	13.298	
15,300.0	10,061.1	13,594.9	8,148.7	140.1	140.2	34.59	-1,090.1	5,408.3	2,324.2	2,146.5	177.71	13.078	
15,400.0	10,065.8	13,694.9	8,153.1	142.5	142.6	34.59	-1,089.5	5,508.2	2,324.4	2,143.7	180.68	12.865	
15,500.0	10,070.5	13,794.9	8,157.6	144.9	145.0	34.58	-1,088.9	5,608.1	2,324.6	2,141.0	183.64	12.658	
15,600.0	10,075.3	13,905.1	8,162.0	147.3	147.6	34.58	-1,088.2	5,708.0	2,324.8	2,138.1	186.76	12.448	
15,700.0	10,080.0	14,005.1	8,166.5	149.7	150.0	34.58	-1,087.6	5,807.9	2,325.1	2,135.3	189.73	12.254	
15,800.0	10,084.7	14,105.1	8,170.9	152.0	152.4	34.57	-1,087.0	5,907.8	2,325.3	2,132.6	192.70	12.067	
15,900.0	10,089.4	14,205.1	8,175.3	154.4	154.8	34.57	-1,086.3	6,007.7	2,325.5	2,129.8	195.68	11.884	
16,000.0	10,094.1	14,305.1	8,179.8	156.8	157.2	34.56	-1,085.7	6,107.6	2,325.7	2,127.1	198.65	11.707	
16,100.0	10,098.8	14,405.1	8,184.2	159.2	159.6	34.56	-1,085.0	6,207.5	2,325.9	2,124.3	201.63	11.536	
16,200.0	10,103.5	14,505.1	8,188.7	161.6	162.1	34.56	-1,084.4	6,307.4	2,326.2	2,121.6	204.61	11.369	
16,300.0	10,108.2	14,605.1	8,193.1	164.0	164.5	34.55	-1,083.8	6,407.3	2,326.4	2,118.8	207.59	11.207	
16,400.0	10,113.0	14,705.1	8,197.6	166.4	166.9	34.55	-1,083.1	6,507.2	2,326.6	2,116.0	210.57	11.049	
16,500.0	10,117.7	14,805.1	8,202.0	168.8	169.3	34.55	-1,082.5	6,607.1	2,326.8	2,113.3	213.56	10.896	
16,600.0	10,122.4	14,894.9	8,206.5	171.2	171.5	34.54	-1,081.8	6,707.0	2,327.0	2,110.7	216.39	10.754	
16,700.0	10,127.1	15,005.1	8,210.9	173.6	174.1	34.54	-1,081.2	6,806.9	2,327.3	2,107.7	219.53	10.601	
16,800.0	10,131.8	15,105.1	8,215.4	176.0	176.5	34.53	-1,080.6	6,906.8	2,327.5	2,105.0	222.52	10.460	
16,900.0	10,136.5	15,205.1	8,219.8	178.4	179.0	34.53	-1,079.9	7,006.7	2,327.7	2,102.2	225.50	10.322	
17,000.0	10,141.2	15,294.9	8,224.3	180.8	181.1	34.53	-1,079.3	7,106.6	2,327.9	2,099.6	228.34	10.195	
17,100.0	10,145.9	15,405.1	8,228.7	183.2	183.8	34.52	-1,078.7	7,206.5	2,328.1	2,096.7	231.48	10.057	
17,200.0	10,150.7	15,505.1	8,233.1	185.6	186.2	34.52	-1,078.0	7,306.4	2,328.4	2,093.9	234.47	9.930	
17,218.0	10,151.5	15,512.9	8,233.9	186.1	186.4	34.52	-1,077.9	7,324.4	2,328.4	2,093.5	234.86	9.914	
17,218.7	10,151.5	15,513.6	8,234.0	186.1	186.4	34.52	-1,077.9	7,325.1	2,328.4	2,093.5	234.87	9.913	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #135H - Wellbore #1 - State Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.0	-1.0	0.0	0.0	0.47	29.8	0.2	29.8				
100.0	100.0	101.0	99.0	0.1	0.1	0.47	29.8	0.2	29.8	29.5	0.26	114.637	
200.0	200.0	201.0	199.0	0.5	0.5	0.47	29.8	0.2	29.8	28.8	0.98	30.500	
300.0	300.0	301.0	299.0	0.8	0.8	0.47	29.8	0.2	29.8	28.1	1.69	17.590	
400.0	400.0	401.0	399.0	1.2	1.2	0.47	29.8	0.2	29.8	27.4	2.41	12.359	
500.0	500.0	501.0	499.0	1.6	1.6	0.47	29.8	0.2	29.8	26.7	3.13	9.526	
600.0	600.0	601.0	599.0	1.9	1.9	0.47	29.8	0.2	29.8	25.9	3.84	7.749	
700.0	700.0	701.0	699.0	2.3	2.3	0.47	29.8	0.2	29.8	25.2	4.56	6.531	
800.0	800.0	801.0	799.0	2.6	2.6	0.47	29.8	0.2	29.8	24.5	5.28	5.644	
900.0	900.0	901.0	899.0	3.0	3.0	0.47	29.8	0.2	29.8	23.8	6.00	4.969	
1,000.0	1,000.0	999.0	999.0	3.4	3.4	0.47	29.8	0.2	29.8	23.1	6.71	4.443	
1,100.0	1,100.0	1,099.4	1,099.4	3.7	3.7	-0.55	29.1	-0.3	29.1	21.7	7.41	3.930	
1,200.0	1,200.0	1,199.8	1,199.7	4.1	4.0	-3.94	27.0	-1.9	27.1	19.0	8.10	3.346	
1,300.0	1,300.0	1,300.0	1,299.8	4.4	4.4	-10.83	23.5	-4.5	24.0	15.2	8.79	2.728	
1,400.0	1,400.0	1,400.0	1,399.7	4.8	4.7	-23.70	18.7	-8.2	20.4	10.9	9.49	2.150	
1,500.0	1,500.0	1,499.8	1,499.2	5.1	5.1	-46.11	12.4	-12.9	17.9	7.7	10.20	1.759	
1,536.9	1,536.9	1,536.6	1,535.8	5.3	5.2	6.26	9.8	-14.9	17.7	7.3	10.46	1.697	CC, ES
1,600.0	1,600.0	1,599.3	1,598.2	5.5	5.4	-13.08	4.9	-18.7	18.5	7.6	10.89	1.696	SF
1,700.0	1,700.0	1,698.5	1,696.8	5.9	5.8	-41.14	-4.1	-25.5	23.2	11.6	11.56	2.005	
1,800.0	1,799.9	1,802.8	1,794.6	6.2	6.2	-60.99	-14.3	-33.2	32.0	19.8	12.23	2.620	
1,900.0	1,899.7	1,903.8	1,892.7	6.6	6.5	-73.89	-25.3	-41.6	43.4	30.5	12.92	3.361	
2,000.0	1,999.4	2,004.9	1,990.6	6.9	6.9	-82.94	-36.2	-49.9	55.9	42.2	13.63	4.097	
2,100.0	2,098.9	2,093.9	2,088.5	7.3	7.3	-90.01	-47.2	-58.2	69.2	54.8	14.31	4.831	
2,200.0	2,198.3	2,207.4	2,186.2	7.6	7.7	-95.90	-58.1	-66.5	83.4	68.3	15.10	5.521	
2,300.0	2,297.4	2,308.9	2,283.7	8.0	8.1	-101.00	-69.0	-74.8	98.5	82.7	15.85	6.215	
2,400.0	2,396.4	2,389.5	2,381.1	8.4	8.4	-105.26	-80.0	-83.1	114.5	98.0	16.53	6.925	
2,500.0	2,495.5	2,487.9	2,478.6	8.8	8.8	-108.47	-90.9	-91.4	130.9	113.7	17.29	7.574	
2,600.0	2,594.5	2,586.3	2,576.0	9.2	9.2	-110.96	-101.8	-99.7	147.7	129.7	18.04	8.186	
2,700.0	2,693.5	2,684.7	2,673.5	9.5	9.6	-112.94	-112.7	-107.9	164.7	145.9	18.80	8.758	
2,800.0	2,792.5	2,783.1	2,770.9	9.9	10.0	-114.55	-123.6	-116.2	181.8	162.2	19.57	9.292	
2,900.0	2,891.6	2,881.5	2,868.4	10.3	10.4	-115.88	-134.5	-124.5	199.1	178.7	20.33	9.791	
3,000.0	2,990.6	2,979.9	2,965.8	10.7	10.8	-117.00	-145.4	-132.8	216.4	195.3	21.10	10.257	
3,100.0	3,089.6	3,078.3	3,063.3	11.1	11.2	-117.95	-156.3	-141.1	233.8	211.9	21.86	10.693	
3,200.0	3,188.6	3,176.7	3,160.7	11.5	11.6	-118.78	-167.2	-149.3	251.3	228.6	22.63	11.101	
3,300.0	3,287.7	3,275.1	3,258.2	11.9	12.0	-119.49	-178.1	-157.6	268.8	245.3	23.41	11.483	
3,400.0	3,386.7	3,373.5	3,355.6	12.3	12.5	-120.12	-189.0	-165.9	286.3	262.1	24.18	11.841	
3,500.0	3,485.7	3,471.9	3,453.1	12.7	12.9	-120.67	-199.9	-174.2	303.9	278.9	24.95	12.177	
3,600.0	3,584.8	3,570.3	3,550.5	13.1	13.3	-121.17	-210.8	-182.5	321.4	295.7	25.73	12.494	
3,700.0	3,683.8	3,668.7	3,648.0	13.5	13.7	-121.61	-221.8	-190.8	339.1	312.6	26.50	12.793	
3,800.0	3,782.8	3,767.1	3,745.4	13.9	14.1	-122.01	-232.7	-199.0	356.7	329.4	27.28	13.074	
3,900.0	3,881.8	3,865.6	3,842.9	14.4	14.5	-122.37	-243.6	-207.3	374.3	346.3	28.06	13.341	
4,000.0	3,980.9	3,964.0	3,940.3	14.8	14.9	-122.70	-254.5	-215.6	392.0	363.2	28.84	13.592	
4,100.0	4,079.9	4,062.4	4,037.7	15.2	15.3	-123.00	-265.4	-223.9	409.7	380.0	29.62	13.831	
4,200.0	4,178.9	4,160.8	4,135.2	15.6	15.7	-123.28	-276.3	-232.2	427.3	396.9	30.40	14.057	
4,300.0	4,277.9	4,259.2	4,232.6	16.0	16.1	-123.53	-287.2	-240.4	445.0	413.8	31.18	14.272	
4,400.0	4,377.0	4,357.6	4,330.1	16.4	16.5	-123.76	-298.1	-248.7	462.7	430.8	31.96	14.477	
4,500.0	4,476.0	4,456.0	4,427.5	16.8	17.0	-123.98	-309.0	-257.0	480.4	447.7	32.75	14.671	
4,600.0	4,575.0	4,554.4	4,525.0	17.2	17.4	-124.18	-319.9	-265.3	498.1	464.6	33.53	14.857	
4,698.1	4,672.2	4,650.9	4,620.6	17.6	17.8	-124.37	-330.6	-273.4	515.5	481.2	34.30	15.030	
4,700.0	4,674.0	4,652.8	4,622.4	17.6	17.8	-124.38	-330.8	-273.6	515.8	481.5	34.31	15.034	
4,800.0	4,773.3	4,751.3	4,720.0	18.0	18.2	-124.64	-341.8	-281.9	532.8	497.7	35.09	15.184	
4,900.0	4,872.7	4,850.1	4,817.8	18.4	18.6	-124.66	-352.7	-290.2	548.3	512.4	35.86	15.292	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #135H - Wellbore #1 - State Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,972.5	4,949.1	4,915.8	18.8	19.0	-124.44	-363.7	-298.5	562.3	525.7	36.61	15.360	
5,100.0	5,072.4	5,048.1	5,013.9	19.2	19.4	-124.01	-374.6	-306.8	575.0	537.6	37.35	15.394	
5,200.0	5,172.3	5,147.1	5,112.0	19.5	19.9	-123.38	-385.6	-315.2	586.2	548.1	38.07	15.396	
5,231.4	5,203.8	5,178.3	5,142.8	19.6	20.0	173.91	-389.1	-317.8	589.5	551.2	38.30	15.391	
5,300.0	5,272.3	5,246.2	5,210.0	19.8	20.3	174.53	-396.6	-323.5	596.5	557.7	38.79	15.379	
5,400.0	5,372.3	5,345.2	5,308.1	20.2	20.7	175.42	-407.6	-331.8	606.8	567.3	39.49	15.364	
5,500.0	5,472.3	5,444.2	5,406.2	20.5	21.1	176.28	-418.6	-340.2	617.3	577.1	40.20	15.355	
5,600.0	5,572.3	5,543.2	5,504.2	20.8	21.5	177.11	-429.5	-348.5	627.9	587.0	40.91	15.348	
5,700.0	5,672.3	5,642.3	5,602.3	21.2	21.9	177.91	-440.5	-356.8	638.7	597.1	41.62	15.346	
5,800.0	5,772.3	5,755.2	5,714.3	21.5	22.4	178.71	-451.9	-365.5	648.6	606.1	42.44	15.282	
5,900.0	5,872.3	5,870.2	5,828.8	21.8	22.9	179.32	-460.8	-372.2	656.2	613.0	43.25	15.172	
6,000.0	5,972.3	5,985.8	5,944.1	22.2	23.3	179.73	-466.9	-376.9	661.5	617.5	44.03	15.024	
6,100.0	6,072.3	6,101.8	6,060.0	22.5	23.7	179.95	-470.3	-379.5	664.4	619.7	44.78	14.837	
6,200.0	6,172.3	6,213.1	6,171.3	22.9	24.0	-180.00	-471.0	-380.0	665.0	619.6	45.48	14.624	
6,300.0	6,272.3	6,313.1	6,271.3	23.2	24.3	-180.00	-471.0	-380.0	665.0	618.9	46.14	14.415	
6,400.0	6,372.3	6,413.1	6,371.3	23.5	24.6	-180.00	-471.0	-380.0	665.0	618.2	46.80	14.211	
6,500.0	6,472.3	6,513.1	6,471.3	23.9	25.0	-180.00	-471.0	-380.0	665.0	617.6	47.46	14.012	
6,600.0	6,572.3	6,613.1	6,571.3	24.2	25.3	-180.00	-471.0	-380.0	665.0	616.9	48.13	13.819	
6,700.0	6,672.3	6,713.1	6,671.3	24.6	25.6	-180.00	-471.0	-380.0	665.0	616.3	48.79	13.630	
6,800.0	6,772.3	6,813.1	6,771.3	24.9	25.9	-180.00	-471.0	-380.0	665.0	615.6	49.46	13.446	
6,900.0	6,872.3	6,913.1	6,871.3	25.2	26.2	-180.00	-471.0	-380.0	665.0	614.9	50.13	13.267	
7,000.0	6,972.3	7,013.1	6,971.3	25.6	26.5	-180.00	-471.0	-380.0	665.0	614.2	50.80	13.092	
7,100.0	7,072.3	7,113.1	7,071.3	25.9	26.8	-180.00	-471.0	-380.0	665.0	613.6	51.47	12.921	
7,200.0	7,172.3	7,213.1	7,171.3	26.3	27.1	-180.00	-471.0	-380.0	665.0	612.9	52.14	12.754	
7,300.0	7,272.3	7,313.1	7,271.3	26.6	27.4	-180.00	-471.0	-380.0	665.0	612.2	52.82	12.591	
7,400.0	7,372.3	7,413.1	7,371.3	27.0	27.7	-180.00	-471.0	-380.0	665.0	611.6	53.49	12.432	
7,500.0	7,472.3	7,513.1	7,471.3	27.3	28.1	-180.00	-471.0	-380.0	665.0	610.9	54.17	12.277	
7,600.0	7,572.3	7,613.1	7,571.3	27.7	28.4	-180.00	-471.0	-380.0	665.0	610.2	54.85	12.126	
7,700.0	7,672.3	7,713.1	7,671.3	28.0	28.7	-180.00	-471.0	-380.0	665.0	609.5	55.52	11.978	
7,800.0	7,772.3	7,813.1	7,771.3	28.3	29.0	-180.00	-471.0	-380.0	665.0	608.8	56.20	11.833	
7,900.0	7,872.3	7,913.1	7,871.3	28.7	29.3	-180.00	-471.0	-380.0	665.0	608.2	56.88	11.691	
8,000.0	7,972.3	8,013.1	7,971.3	29.0	29.7	-180.00	-471.0	-380.0	665.0	607.5	57.56	11.553	
8,100.0	8,072.3	8,113.1	8,071.3	29.4	30.0	-180.00	-471.0	-380.0	665.0	606.8	58.25	11.418	
8,200.0	8,172.3	8,213.1	8,171.3	29.7	30.3	-180.00	-471.0	-380.0	665.0	606.1	58.93	11.286	
8,300.0	8,272.3	8,313.1	8,271.3	30.1	30.6	-180.00	-471.0	-380.0	665.0	605.4	59.61	11.156	
8,400.0	8,372.3	8,413.1	8,371.3	30.4	30.9	-180.00	-471.0	-380.0	665.0	604.7	60.30	11.030	
8,500.0	8,472.3	8,513.1	8,471.3	30.8	31.3	-180.00	-471.0	-380.0	665.0	604.1	60.98	10.906	
8,600.0	8,572.3	8,613.1	8,571.3	31.1	31.6	-180.00	-471.0	-380.0	665.0	603.4	61.67	10.785	
8,700.0	8,672.3	8,713.1	8,671.3	31.5	31.9	-180.00	-471.0	-380.0	665.0	602.7	62.35	10.666	
8,777.5	8,749.8	8,790.8	8,748.8	31.7	32.2	179.60	-471.0	-375.4	665.0	602.2	62.87	10.577	
8,800.0	8,772.3	8,813.0	8,770.8	31.8	32.2	179.32	-471.0	-372.1	665.0	602.0	63.02	10.552	
8,900.0	8,872.3	8,907.5	8,862.2	32.2	32.5	177.32	-470.8	-348.9	665.6	602.0	63.66	10.456	
9,000.0	8,972.3	8,992.4	8,940.2	32.5	32.6	174.45	-470.6	-315.5	668.4	604.2	64.21	10.411	
9,100.0	9,072.3	9,066.0	9,003.2	32.9	32.8	171.22	-470.3	-277.4	675.7	611.1	64.54	10.469	
9,200.0	9,172.3	9,128.6	9,052.5	33.2	32.9	168.01	-470.0	-239.0	689.2	624.7	64.49	10.686	
9,272.2	9,244.5	9,167.4	9,080.9	33.5	32.9	165.84	-469.9	-212.5	703.7	639.6	64.15	10.970	
9,300.0	9,272.3	9,181.4	9,090.7	33.6	32.9	74.59	-469.8	-202.5	710.3	646.4	63.94	11.109	
9,350.0	9,322.1	9,206.7	9,107.7	33.7	32.9	72.01	-469.7	-183.8	722.8	659.4	63.48	11.387	
9,400.0	9,371.3	9,231.9	9,123.8	33.9	33.0	69.48	-469.5	-164.5	736.0	673.0	62.92	11.696	
9,450.0	9,419.5	9,257.1	9,139.1	34.0	33.0	67.04	-469.4	-144.5	749.4	687.1	62.29	12.031	
9,500.0	9,466.4	9,282.2	9,153.5	34.1	33.0	64.72	-469.2	-123.8	763.0	701.4	61.61	12.385	
9,550.0	9,511.6	9,307.4	9,166.9	34.2	33.0	62.53	-469.1	-102.5	776.4	715.5	60.88	12.753	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #135H - Wellbore #1 - State Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,600.0	9,554.7	9,332.6	9,179.4	34.4	33.0	60.50	-468.9	-80.7	789.5	729.4	60.15	13.127	
9,650.0	9,595.5	9,350.0	9,187.5	34.5	33.1	58.84	-468.8	-65.2	802.2	742.9	59.26	13.538	
9,700.0	9,633.7	9,382.9	9,201.5	34.6	33.1	56.94	-468.6	-35.5	814.0	755.3	58.70	13.866	
9,750.0	9,668.8	9,400.0	9,208.1	34.7	33.1	55.58	-468.5	-19.7	825.2	767.3	57.89	14.254	
9,800.0	9,700.8	9,433.1	9,219.5	34.8	33.2	54.07	-468.3	11.4	835.3	777.8	57.45	14.540	
9,850.0	9,729.2	9,450.0	9,224.6	35.0	33.2	53.03	-468.2	27.5	844.4	787.6	56.80	14.867	
9,900.0	9,754.0	9,483.4	9,233.3	35.1	33.3	51.91	-468.0	59.7	852.3	795.8	56.52	15.079	
9,950.0	9,774.9	9,500.0	9,236.9	35.3	33.4	51.17	-467.8	75.9	859.1	803.0	56.12	15.309	
10,000.0	9,791.8	9,533.6	9,242.8	35.5	33.5	50.43	-467.6	109.1	864.4	808.4	56.06	15.419	
10,050.0	9,804.5	9,550.0	9,245.0	35.8	33.6	49.99	-467.5	125.3	868.6	812.7	55.96	15.523	
10,100.0	9,812.9	9,583.9	9,248.0	36.0	33.8	49.62	-467.3	159.0	871.3	815.1	56.16	15.513	
10,125.2	9,815.5	9,603.5	9,248.8	36.2	33.9	49.50	-467.1	178.6	872.2	815.9	56.32	15.486	
10,200.0	9,820.7	9,664.9	9,250.3	36.7	34.4	49.34	-466.7	240.0	874.0	817.1	56.95	15.346	
10,225.5	9,822.0	9,690.4	9,250.9	36.9	34.5	49.30	-466.5	265.5	874.4	817.2	57.23	15.280	
10,300.0	9,825.5	9,764.9	9,252.8	37.5	35.2	49.22	-465.9	339.9	875.4	817.3	58.15	15.054	
10,400.0	9,830.2	9,864.9	9,255.3	38.4	36.2	49.10	-465.1	439.9	876.8	817.2	59.58	14.717	
10,500.0	9,834.9	9,964.8	9,257.8	39.4	37.3	48.98	-464.3	539.8	878.1	816.9	61.20	14.349	
10,600.0	9,839.7	10,064.8	9,260.3	40.6	38.6	48.87	-463.5	639.8	879.5	816.5	63.00	13.960	
10,700.0	9,844.4	10,164.8	9,262.8	41.9	39.9	48.75	-462.8	739.7	880.8	815.9	64.97	13.558	
10,800.0	9,849.1	10,264.8	9,265.3	43.3	41.4	48.64	-462.0	839.6	882.2	815.1	67.09	13.150	
10,900.0	9,853.8	10,364.7	9,267.7	44.7	42.9	48.53	-461.2	939.6	883.6	814.2	69.34	12.743	
11,000.0	9,858.5	10,464.7	9,270.2	46.3	44.5	48.41	-460.4	1,039.5	884.9	813.2	71.71	12.341	
11,100.0	9,863.2	10,564.7	9,272.7	47.9	46.2	48.30	-459.6	1,139.5	886.3	812.1	74.19	11.947	
11,200.0	9,867.9	10,664.7	9,275.2	49.6	48.0	48.18	-458.8	1,239.4	887.7	810.9	76.76	11.565	
11,300.0	9,872.6	10,764.6	9,277.7	51.4	49.8	48.07	-458.1	1,339.4	889.1	809.7	79.41	11.196	
11,400.0	9,877.3	10,864.6	9,280.2	53.2	51.7	47.96	-457.3	1,439.3	890.4	808.3	82.14	10.841	
11,500.0	9,882.1	10,964.6	9,282.7	55.1	53.6	47.85	-456.5	1,539.2	891.8	806.9	84.93	10.500	
11,600.0	9,886.8	11,064.6	9,285.2	57.0	55.6	47.74	-455.7	1,639.2	893.2	805.4	87.78	10.175	
11,700.0	9,891.5	11,164.5	9,287.7	58.9	57.6	47.62	-454.9	1,739.1	894.6	803.9	90.69	9.865	
11,800.0	9,896.2	11,264.5	9,290.2	60.9	59.6	47.51	-454.2	1,839.1	896.0	802.4	93.63	9.569	
11,900.0	9,900.9	11,364.5	9,292.6	63.0	61.7	47.40	-453.4	1,939.0	897.4	800.8	96.62	9.288	
12,000.0	9,905.6	11,464.5	9,295.1	65.0	63.7	47.29	-452.6	2,038.9	898.8	799.2	99.64	9.020	
12,100.0	9,910.3	11,564.4	9,297.6	67.1	65.9	47.18	-451.8	2,138.9	900.2	797.5	102.70	8.766	
12,200.0	9,915.0	11,664.4	9,300.1	69.2	68.0	47.07	-451.0	2,238.8	901.6	795.8	105.78	8.524	
12,300.0	9,919.8	11,764.4	9,302.6	71.3	70.2	46.96	-450.3	2,338.8	903.0	794.1	108.88	8.294	
12,400.0	9,924.5	11,864.4	9,305.1	73.5	72.3	46.85	-449.5	2,438.7	904.4	792.4	112.00	8.075	
12,500.0	9,929.2	11,964.3	9,307.6	75.6	74.5	46.75	-448.7	2,538.6	905.9	790.7	115.15	7.867	
12,600.0	9,933.9	12,064.3	9,310.1	77.8	76.7	46.64	-447.9	2,638.6	907.3	789.0	118.30	7.669	
12,700.0	9,938.6	12,164.3	9,312.6	80.0	79.0	46.53	-447.1	2,738.5	908.7	787.2	121.47	7.481	
12,800.0	9,943.3	12,264.3	9,315.1	82.2	81.2	46.42	-446.4	2,838.5	910.1	785.5	124.66	7.301	
12,900.0	9,948.0	12,364.2	9,317.6	84.4	83.4	46.31	-445.6	2,938.4	911.6	783.7	127.85	7.130	
13,000.0	9,952.7	12,464.2	9,320.0	86.7	85.7	46.21	-444.8	3,038.4	913.0	781.9	131.05	6.967	
13,100.0	9,957.5	12,564.2	9,322.5	88.9	88.0	46.10	-444.0	3,138.3	914.4	780.2	134.26	6.811	
13,200.0	9,962.2	12,664.2	9,325.0	91.2	90.3	45.99	-443.2	3,238.2	915.9	778.4	137.47	6.662	
13,300.0	9,966.9	12,764.1	9,327.5	93.4	92.5	45.89	-442.5	3,338.2	917.3	776.6	140.69	6.520	
13,400.0	9,971.6	12,864.1	9,330.0	95.7	94.8	45.78	-441.7	3,438.1	918.8	774.9	143.91	6.384	
13,500.0	9,976.3	12,964.1	9,332.5	98.0	97.1	45.68	-440.9	3,538.1	920.2	773.1	147.13	6.254	
13,600.0	9,981.0	13,064.1	9,335.0	100.3	99.5	45.57	-440.1	3,638.0	921.7	771.3	150.35	6.130	
13,700.0	9,985.7	13,164.0	9,337.5	102.6	101.8	45.47	-439.3	3,737.9	923.1	769.5	153.58	6.011	
13,800.0	9,990.4	13,264.0	9,340.0	104.9	104.1	45.36	-438.5	3,837.9	924.6	767.8	156.80	5.896	
13,900.0	9,995.2	13,364.0	9,342.5	107.2	106.4	45.26	-437.8	3,937.8	926.0	766.0	160.03	5.787	
14,000.0	9,999.9	13,464.0	9,345.0	109.5	108.8	45.16	-437.0	4,037.8	927.5	764.3	163.25	5.681	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #135H - Wellbore #1 - State Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,100.0	10,004.6	13,563.9	9,347.4	111.9	111.1	45.05	-436.2	4,137.7	929.0	762.5	166.47	5.580	
14,200.0	10,009.3	13,663.9	9,349.9	114.2	113.4	44.95	-435.4	4,237.6	930.4	760.8	169.69	5.483	
14,300.0	10,014.0	13,763.9	9,352.4	116.5	115.8	44.85	-434.6	4,337.6	931.9	759.0	172.91	5.390	
14,400.0	10,018.7	13,863.9	9,354.9	118.9	118.1	44.74	-433.9	4,437.5	933.4	757.3	176.12	5.300	
14,500.0	10,023.4	13,963.8	9,357.4	121.2	120.5	44.64	-433.1	4,537.5	934.9	755.5	179.33	5.213	
14,600.0	10,028.1	14,063.8	9,359.9	123.6	122.9	44.54	-432.3	4,637.4	936.4	753.8	182.54	5.130	
14,700.0	10,032.8	14,163.8	9,362.4	125.9	125.2	44.44	-431.5	4,737.4	937.8	752.1	185.74	5.049	
14,800.0	10,037.6	14,263.8	9,364.9	128.3	127.6	44.34	-430.7	4,837.3	939.3	750.4	188.94	4.972	
14,900.0	10,042.3	14,363.7	9,367.4	130.7	130.0	44.24	-430.0	4,937.2	940.8	748.7	192.13	4.897	
15,000.0	10,047.0	14,463.7	9,369.9	133.0	132.3	44.14	-429.2	5,037.2	942.3	747.0	195.32	4.824	
15,100.0	10,051.7	14,563.7	9,372.4	135.4	134.7	44.04	-428.4	5,137.1	943.8	745.3	198.51	4.755	
15,200.0	10,056.4	14,663.7	9,374.8	137.8	137.1	43.94	-427.6	5,237.1	945.3	743.6	201.68	4.687	
15,300.0	10,061.1	14,763.6	9,377.3	140.1	139.5	43.84	-426.8	5,337.0	946.8	742.0	204.85	4.622	
15,400.0	10,065.8	14,863.6	9,379.8	142.5	141.9	43.74	-426.1	5,436.9	948.3	740.3	208.02	4.559	
15,500.0	10,070.5	14,963.6	9,382.3	144.9	144.2	43.64	-425.3	5,536.9	949.8	738.7	211.18	4.498	
15,600.0	10,075.3	15,063.6	9,384.8	147.3	146.6	43.54	-424.5	5,636.8	951.4	737.0	214.34	4.439	
15,700.0	10,080.0	15,163.5	9,387.3	149.7	149.0	43.44	-423.7	5,736.8	952.9	735.4	217.48	4.381	
15,800.0	10,084.7	15,263.5	9,389.8	152.0	151.4	43.34	-422.9	5,836.7	954.4	733.8	220.62	4.326	
15,900.0	10,089.4	15,363.5	9,392.3	154.4	153.8	43.25	-422.2	5,936.6	955.9	732.1	223.76	4.272	
16,000.0	10,094.1	15,463.5	9,394.8	156.8	156.2	43.15	-421.4	6,036.6	957.4	730.5	226.89	4.220	
16,100.0	10,098.8	15,563.4	9,397.3	159.2	158.6	43.05	-420.6	6,136.5	959.0	728.9	230.01	4.169	
16,200.0	10,103.5	15,663.4	9,399.7	161.6	161.0	42.96	-419.8	6,236.5	960.5	727.4	233.12	4.120	
16,300.0	10,108.2	15,763.4	9,402.2	164.0	163.4	42.86	-419.0	6,336.4	962.0	725.8	236.23	4.072	
16,400.0	10,113.0	15,863.4	9,404.7	166.4	165.8	42.76	-418.3	6,436.4	963.5	724.2	239.33	4.026	
16,500.0	10,117.7	15,963.3	9,407.2	168.8	168.2	42.67	-417.5	6,536.3	965.1	722.7	242.42	3.981	
16,600.0	10,122.4	16,063.3	9,409.7	171.2	170.6	42.57	-416.7	6,636.2	966.6	721.1	245.51	3.937	
16,700.0	10,127.1	16,163.3	9,412.2	173.6	173.0	42.48	-415.9	6,736.2	968.2	719.6	248.59	3.895	
16,800.0	10,131.8	16,263.3	9,414.7	176.0	175.4	42.38	-415.1	6,836.1	969.7	718.1	251.66	3.853	
16,900.0	10,136.5	16,363.2	9,417.2	178.4	177.8	42.29	-414.3	6,936.1	971.3	716.5	254.72	3.813	
17,000.0	10,141.2	16,463.2	9,419.7	180.8	180.3	42.19	-413.6	7,036.0	972.8	715.0	257.78	3.774	
17,100.0	10,145.9	16,563.2	9,422.2	183.2	182.7	42.10	-412.8	7,135.9	974.4	713.5	260.83	3.736	
17,200.0	10,150.7	16,663.2	9,424.7	185.6	185.1	42.01	-412.0	7,235.9	975.9	712.0	263.87	3.698	
17,218.0	10,151.5	16,681.1	9,425.1	186.1	185.5	41.99	-411.9	7,253.8	976.2	711.8	264.42	3.692	
17,218.7	10,151.5	16,681.9	9,425.1	186.1	185.5	41.99	-411.9	7,254.6	976.2	711.8	264.43	3.692	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #136H - Wellbore #1 - State Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.0	-1.0	0.0	0.0	45.48	29.7	30.2	42.4				
100.0	100.0	101.0	99.0	0.1	0.1	45.48	29.7	30.2	42.4	42.2	0.26	163.240	
200.0	200.0	201.0	199.0	0.5	0.5	45.48	29.7	30.2	42.4	41.4	0.98	43.431	
300.0	300.0	301.0	299.0	0.8	0.8	45.48	29.7	30.2	42.4	40.7	1.69	25.048	
400.0	400.0	401.0	399.0	1.2	1.2	45.48	29.7	30.2	42.4	40.0	2.41	17.598	
500.0	500.0	501.0	499.0	1.6	1.6	45.48	29.7	30.2	42.4	39.3	3.13	13.564	
600.0	600.0	601.0	599.0	1.9	1.9	45.48	29.7	30.2	42.4	38.6	3.84	11.035	
700.0	700.0	701.0	699.0	2.3	2.3	45.48	29.7	30.2	42.4	37.9	4.56	9.301	
800.0	800.0	801.0	799.0	2.6	2.6	45.48	29.7	30.2	42.4	37.1	5.28	8.037	
900.0	900.0	901.0	899.0	3.0	3.0	45.48	29.7	30.2	42.4	36.4	6.00	7.076	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	45.48	29.7	30.2	42.4	35.7	6.71	6.320	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	45.48	29.7	30.2	42.4	35.0	7.43	5.710	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	45.48	29.7	30.2	42.4	34.3	8.15	5.208	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	45.48	29.7	30.2	42.4	33.6	8.86	4.787	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	45.48	29.7	30.2	42.4	32.8	9.58	4.428	
1,500.0	1,500.0	1,501.0	1,499.0	5.1	5.2	45.48	29.7	30.2	42.4	32.1	10.30	4.120	CC
1,600.0	1,600.0	1,601.0	1,599.0	5.5	5.5	109.54	29.7	30.2	42.7	31.7	11.01	3.879	ES
1,700.0	1,700.0	1,701.0	1,699.0	5.9	5.9	112.77	29.7	30.2	43.7	31.9	11.72	3.725	
1,800.0	1,799.9	1,801.1	1,798.9	6.2	6.2	117.82	29.7	30.2	45.5	33.1	12.43	3.663	SF
1,900.0	1,899.7	1,901.3	1,898.7	6.6	6.6	124.15	29.7	30.2	48.7	35.5	13.14	3.704	
2,000.0	1,999.4	2,001.6	1,998.4	6.9	6.9	131.08	29.7	30.2	53.5	39.6	13.85	3.861	
2,100.0	2,098.9	2,102.1	2,097.9	7.3	7.3	137.91	29.7	30.2	60.2	45.7	14.57	4.134	
2,200.0	2,198.3	2,202.7	2,197.3	7.6	7.7	144.15	29.7	30.2	69.1	53.8	15.28	4.519	
2,300.0	2,297.4	2,303.6	2,296.4	8.0	8.0	149.56	29.7	30.2	80.0	64.0	16.00	5.003	
2,400.0	2,396.4	2,404.6	2,395.4	8.4	8.4	153.93	29.7	30.2	92.3	75.6	16.71	5.524	
2,500.0	2,495.5	2,505.5	2,494.5	8.8	8.8	157.27	29.7	30.2	105.0	87.6	17.43	6.025	
2,600.0	2,594.5	2,606.5	2,593.5	9.2	9.1	159.88	29.7	30.2	118.0	99.9	18.15	6.502	
2,700.0	2,693.5	2,707.5	2,692.5	9.5	9.5	161.97	29.7	30.2	131.2	112.3	18.87	6.952	
2,800.0	2,792.5	2,808.5	2,791.5	9.9	9.8	163.67	29.7	30.2	144.5	124.9	19.59	7.377	
2,900.0	2,891.6	2,909.4	2,890.6	10.3	10.2	165.09	29.7	30.2	157.9	137.6	20.31	7.776	
3,000.0	2,990.6	2,989.6	2,989.6	10.7	10.5	166.29	29.7	30.2	171.4	150.4	20.95	8.180	
3,100.0	3,089.6	3,088.5	3,088.5	11.1	10.8	167.74	28.4	29.9	185.0	163.3	21.65	8.545	
3,200.0	3,188.6	3,186.9	3,186.8	11.5	11.1	169.96	23.8	28.8	198.9	176.5	22.32	8.908	
3,300.0	3,287.7	3,284.7	3,284.3	11.9	11.5	172.78	16.0	27.0	213.4	190.4	22.99	9.279	
3,400.0	3,386.7	3,381.6	3,380.5	12.3	11.8	176.04	5.1	24.4	228.8	205.2	23.66	9.673	
3,500.0	3,485.7	3,477.5	3,475.2	12.7	12.1	179.60	-8.9	21.1	245.7	221.4	24.32	10.106	
3,600.0	3,584.8	3,572.0	3,568.2	13.1	12.4	-176.67	-25.6	17.1	264.4	239.5	24.97	10.591	
3,700.0	3,683.8	3,665.1	3,659.1	13.5	12.7	-172.89	-45.0	12.5	285.2	259.6	25.60	11.142	
3,800.0	3,782.8	3,756.5	3,747.8	13.9	13.1	-169.16	-66.9	7.2	308.5	282.3	26.21	11.768	
3,900.0	3,881.8	3,846.3	3,834.0	14.4	13.4	-165.54	-91.0	1.5	334.3	307.5	26.80	12.475	
4,000.0	3,980.9	3,934.1	3,917.6	14.8	13.8	-162.10	-117.1	-4.7	363.0	335.6	27.36	13.268	
4,100.0	4,079.9	4,020.0	3,998.5	15.2	14.1	-158.86	-145.0	-11.4	394.5	366.6	27.88	14.149	
4,200.0	4,178.9	4,103.8	4,076.7	15.6	14.5	-155.85	-174.6	-18.4	428.9	400.5	28.37	15.117	
4,300.0	4,277.9	4,185.4	4,151.9	16.0	14.9	-153.07	-205.5	-25.7	466.1	437.3	28.82	16.171	
4,400.0	4,377.0	4,264.9	4,224.2	16.4	15.3	-150.52	-237.5	-33.4	506.1	476.9	29.24	17.307	
4,500.0	4,476.0	4,346.8	4,297.8	16.8	15.7	-148.07	-272.4	-41.7	548.7	519.0	29.73	18.457	
4,600.0	4,575.0	4,434.2	4,376.3	17.2	16.1	-145.77	-309.9	-50.6	592.5	562.1	30.36	19.513	
4,698.1	4,672.2	4,519.9	4,453.2	17.6	16.6	-143.82	-346.7	-59.4	636.1	605.1	31.00	20.517	
4,700.0	4,674.0	4,521.6	4,454.7	17.6	16.6	-143.79	-347.5	-59.5	636.9	605.9	31.02	20.536	
4,800.0	4,773.3	4,609.3	4,533.4	18.0	17.1	-142.42	-385.1	-68.5	681.0	649.3	31.68	21.500	
4,900.0	4,872.7	4,702.4	4,612.6	18.4	17.7	-141.13	-423.0	-77.5	723.7	691.4	32.36	22.366	
5,000.0	4,972.5	4,786.3	4,692.2	18.8	18.2	-139.89	-461.1	-86.6	765.2	732.2	33.00	23.188	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #136H - Wellbore #1 - State Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,072.4	4,875.4	4,772.2	19.2	18.7	-138.69	-499.4	-95.7	805.4	771.7	33.66	23.928	
5,200.0	5,172.3	4,964.9	4,852.4	19.5	19.3	-137.52	-537.8	-104.8	844.3	810.0	34.31	24.607	
5,231.4	5,203.8	5,006.9	4,877.7	19.6	19.5	159.90	-549.9	-107.7	856.3	821.7	34.58	24.763	
5,300.0	5,272.3	5,054.6	4,932.9	19.8	19.8	160.95	-576.3	-114.0	882.4	847.5	34.96	25.242	
5,400.0	5,372.3	5,144.3	5,013.5	20.2	20.4	162.38	-614.9	-123.2	921.1	885.4	35.61	25.863	
5,500.0	5,472.3	5,234.1	5,094.0	20.5	21.0	163.71	-653.4	-132.4	960.1	923.9	36.27	26.472	
5,600.0	5,572.3	5,323.8	5,174.5	20.8	21.6	164.93	-691.9	-141.5	999.6	962.7	36.93	27.068	
5,700.0	5,672.3	5,413.5	5,255.0	21.2	22.2	166.07	-730.5	-150.7	1,039.5	1,001.9	37.60	27.650	
5,800.0	5,772.3	5,503.2	5,335.5	21.5	22.8	167.12	-769.0	-159.9	1,079.7	1,041.5	38.26	28.217	
5,900.0	5,872.3	5,607.0	5,416.0	21.8	23.5	168.10	-807.5	-169.0	1,120.2	1,081.2	39.00	28.722	
6,000.0	5,972.3	5,682.7	5,496.5	22.2	24.1	169.02	-846.1	-178.2	1,161.0	1,121.4	39.61	29.309	
6,100.0	6,072.3	5,772.4	5,577.1	22.5	24.7	169.87	-884.6	-187.4	1,202.0	1,161.7	40.29	29.834	
6,200.0	6,172.3	5,862.2	5,657.6	22.9	25.3	170.67	-923.1	-196.6	1,243.2	1,202.3	40.97	30.344	
6,300.0	6,272.3	5,951.9	5,738.1	23.2	26.0	171.42	-961.7	-205.7	1,284.7	1,243.0	41.66	30.840	
6,400.0	6,372.3	6,041.6	5,818.6	23.5	26.6	172.13	-1,000.2	-214.9	1,326.3	1,283.9	42.34	31.322	
6,500.0	6,472.3	6,131.4	5,899.1	23.9	27.2	172.79	-1,038.7	-224.1	1,368.0	1,325.0	43.03	31.791	
6,600.0	6,572.3	6,221.1	5,979.6	24.2	27.9	173.41	-1,077.3	-233.3	1,409.9	1,366.2	43.72	32.246	
6,700.0	6,672.3	6,310.8	6,060.1	24.6	28.5	174.00	-1,115.8	-242.4	1,451.9	1,407.5	44.42	32.689	
6,800.0	6,772.3	6,400.5	6,140.6	24.9	29.2	174.56	-1,154.3	-251.6	1,494.1	1,449.0	45.11	33.119	
6,900.0	6,872.3	6,509.7	6,221.2	25.2	30.0	175.09	-1,192.9	-260.8	1,536.4	1,490.5	45.90	33.471	
7,000.0	6,972.3	6,580.0	6,301.7	25.6	30.5	175.58	-1,231.4	-269.9	1,578.7	1,532.2	46.51	33.943	
7,100.0	7,072.3	6,669.7	6,382.2	25.9	31.2	176.06	-1,269.9	-279.1	1,621.2	1,574.0	47.21	34.337	
7,200.0	7,172.3	6,759.5	6,462.7	26.3	31.8	176.51	-1,308.5	-288.3	1,663.7	1,615.8	47.92	34.721	
7,300.0	7,272.3	6,903.2	6,592.6	26.6	32.9	177.16	-1,368.4	-302.6	1,705.2	1,655.9	49.35	34.554	
7,400.0	7,372.3	7,066.5	6,742.8	27.0	34.0	177.79	-1,430.7	-317.4	1,743.2	1,692.3	50.95	34.217	
7,500.0	7,472.3	7,235.6	6,901.1	27.3	35.1	178.34	-1,488.6	-331.2	1,777.3	1,724.8	52.50	33.855	
7,600.0	7,572.3	7,410.2	7,067.0	27.7	36.2	178.80	-1,541.1	-343.7	1,807.3	1,753.3	53.99	33.477	
7,700.0	7,672.3	7,589.6	7,240.0	28.0	37.2	179.18	-1,587.4	-354.7	1,833.0	1,777.6	55.39	33.094	
7,800.0	7,772.3	7,773.3	7,419.3	28.3	38.1	179.49	-1,626.5	-364.0	1,854.3	1,797.6	56.69	32.711	
7,900.0	7,872.3	7,960.7	7,603.8	28.7	38.9	179.73	-1,657.7	-371.4	1,871.0	1,813.1	57.87	32.332	
8,000.0	7,972.3	8,150.8	7,792.5	29.0	39.6	179.90	-1,680.3	-376.8	1,882.9	1,823.9	58.91	31.962	
8,100.0	8,072.3	8,342.7	7,983.9	29.4	40.3	180.00	-1,693.9	-380.0	1,889.9	1,830.1	59.81	31.601	
8,200.0	8,172.3	8,530.2	8,171.3	29.7	40.8	-179.97	-1,698.1	-381.0	1,892.1	1,831.6	60.54	31.251	
8,300.0	8,272.3	8,630.2	8,271.3	30.1	41.0	-179.97	-1,698.1	-381.0	1,892.1	1,830.9	61.20	30.918	
8,400.0	8,372.3	8,730.2	8,371.3	30.4	41.3	-179.97	-1,698.1	-381.0	1,892.1	1,830.3	61.85	30.591	
8,500.0	8,472.3	8,830.2	8,471.3	30.8	41.5	-179.97	-1,698.1	-381.0	1,892.1	1,829.6	62.51	30.270	
8,600.0	8,572.3	8,930.2	8,571.3	31.1	41.8	-179.97	-1,698.1	-381.0	1,892.1	1,828.9	63.16	29.955	
8,614.6	8,586.9	8,944.8	8,585.9	31.2	41.8	-179.97	-1,698.1	-381.0	1,892.1	1,828.8	63.26	29.910	
8,700.0	8,672.3	9,028.5	8,669.6	31.5	42.0	-179.97	-1,698.1	-381.0	1,892.1	1,828.3	63.82	29.646	
8,800.0	8,772.3	9,100.0	8,740.9	31.8	42.2	179.88	-1,698.7	-376.1	1,893.0	1,828.5	64.47	29.363	
8,900.0	8,872.3	9,166.3	8,806.0	32.2	42.3	179.51	-1,700.3	-363.7	1,895.5	1,830.4	65.10	29.119	
9,000.0	8,972.3	9,230.3	8,867.0	32.5	42.4	178.93	-1,702.8	-344.7	1,900.0	1,834.3	65.70	28.919	
9,100.0	9,072.3	9,289.4	8,921.1	32.9	42.6	178.23	-1,705.8	-321.3	1,906.6	1,840.4	66.26	28.773	
9,200.0	9,172.3	9,350.0	8,973.9	33.2	42.7	177.34	-1,709.6	-291.7	1,915.9	1,849.1	66.80	28.681	
9,272.2	9,244.5	9,378.1	8,997.2	33.5	42.7	176.88	-1,711.6	-276.1	1,924.3	1,857.2	67.10	28.677	
9,300.0	9,272.3	9,391.2	9,007.8	33.6	42.7	86.49	-1,712.6	-268.5	1,927.9	1,860.7	67.21	28.684	
9,350.0	9,322.1	9,414.6	9,026.3	33.7	42.8	85.42	-1,714.4	-254.2	1,934.9	1,867.5	67.38	28.716	
9,400.0	9,371.3	9,438.2	9,044.3	33.9	42.8	84.35	-1,716.4	-239.1	1,942.2	1,874.7	67.52	28.766	
9,450.0	9,419.5	9,461.8	9,061.6	34.0	42.8	83.27	-1,718.4	-223.3	1,949.8	1,882.2	67.63	28.833	
9,500.0	9,466.4	9,485.4	9,078.4	34.1	42.8	82.20	-1,720.6	-206.8	1,957.7	1,890.0	67.71	28.913	
9,550.0	9,511.6	9,500.0	9,088.4	34.2	42.9	81.25	-1,721.9	-196.2	1,965.7	1,897.9	67.72	29.025	
9,600.0	9,554.7	9,532.7	9,109.7	34.4	42.9	80.15	-1,725.1	-171.7	1,973.6	1,905.8	67.83	29.096	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #136H - Wellbore #1 - State Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,650.0	9,595.5	9,550.0	9,120.4	34.5	42.9	79.23	-1,726.8	-158.2	1,981.5	1,913.7	67.84	29.210	
9,700.0	9,633.7	9,580.1	9,138.1	34.6	42.9	78.27	-1,729.9	-134.0	1,989.2	1,921.3	67.93	29.283	
9,750.0	9,668.8	9,600.0	9,149.1	34.7	43.0	77.43	-1,732.1	-117.6	1,996.7	1,928.8	67.97	29.376	
9,800.0	9,700.8	9,627.5	9,163.3	34.8	43.0	76.62	-1,735.1	-94.2	2,004.0	1,935.9	68.09	29.433	
9,850.0	9,729.2	9,650.0	9,174.0	35.0	43.0	75.90	-1,737.6	-74.6	2,010.8	1,942.6	68.20	29.486	
9,900.0	9,754.0	9,674.9	9,185.0	35.1	43.0	75.25	-1,740.5	-52.4	2,017.3	1,948.9	68.37	29.507	
9,950.0	9,774.9	9,700.0	9,195.1	35.3	43.0	74.68	-1,743.4	-29.7	2,023.2	1,954.7	68.58	29.503	
10,000.0	9,791.8	9,722.3	9,203.2	35.5	43.0	74.19	-1,746.1	-9.0	2,028.7	1,959.9	68.83	29.475	
10,050.0	9,804.5	9,750.0	9,212.1	35.8	43.1	73.80	-1,749.4	17.0	2,033.7	1,964.5	69.17	29.403	
10,100.0	9,812.9	9,769.6	9,217.7	36.0	43.1	73.47	-1,751.8	35.6	2,038.0	1,968.5	69.51	29.319	
10,125.2	9,815.5	9,781.5	9,220.7	36.2	43.1	73.34	-1,753.3	47.0	2,040.0	1,970.3	69.72	29.260	
10,200.0	9,820.7	9,817.1	9,228.5	36.7	43.1	73.41	-1,757.8	81.5	2,046.2	1,975.8	70.41	29.059	
10,225.5	9,822.0	9,829.4	9,230.6	36.9	43.1	73.42	-1,759.3	93.4	2,048.5	1,977.8	70.67	28.985	
10,300.0	9,825.5	9,865.5	9,235.4	37.5	43.2	73.54	-1,763.9	128.9	2,056.2	1,984.7	71.50	28.758	
10,400.0	9,830.2	10,043.7	9,247.8	38.4	43.4	73.80	-1,782.3	305.7	2,066.5	1,992.8	73.75	28.020	
10,500.0	9,834.9	10,278.7	9,257.8	39.4	44.0	73.85	-1,790.8	540.3	2,070.7	1,993.8	76.90	26.927	
10,600.0	9,839.7	10,390.6	9,260.7	40.6	44.6	73.79	-1,789.9	652.2	2,071.2	1,991.9	79.28	26.126	
10,700.0	9,844.4	10,509.4	9,263.2	41.9	45.4	73.73	-1,789.0	752.1	2,071.5	1,989.5	82.00	25.263	
10,800.0	9,849.1	10,609.4	9,265.7	43.3	46.3	73.67	-1,788.1	852.1	2,071.9	1,987.2	84.68	24.467	
10,900.0	9,853.8	10,709.4	9,268.3	44.7	47.4	73.61	-1,787.3	952.0	2,072.3	1,984.8	87.54	23.673	
11,000.0	9,858.5	10,809.5	9,270.8	46.3	48.6	73.55	-1,786.4	1,051.9	2,072.7	1,982.2	90.55	22.891	
11,100.0	9,863.2	10,909.5	9,273.3	47.9	50.1	73.49	-1,785.5	1,151.9	2,073.1	1,979.4	93.69	22.126	
11,200.0	9,867.9	11,009.5	9,275.9	49.6	51.6	73.43	-1,784.6	1,251.8	2,073.5	1,976.5	96.97	21.384	
11,300.0	9,872.6	11,109.5	9,278.4	51.4	53.2	73.37	-1,783.8	1,351.8	2,073.9	1,973.5	100.35	20.666	
11,400.0	9,877.3	11,209.6	9,280.9	53.2	55.0	73.31	-1,782.9	1,451.7	2,074.3	1,970.5	103.84	19.976	
11,500.0	9,882.1	11,309.6	9,283.5	55.1	56.7	73.25	-1,782.0	1,551.6	2,074.7	1,967.3	107.41	19.315	
11,600.0	9,886.8	11,390.4	9,286.0	57.0	58.2	73.19	-1,781.2	1,651.6	2,075.1	1,964.4	110.72	18.743	
11,700.0	9,891.5	11,509.6	9,288.5	58.9	60.5	73.13	-1,780.3	1,751.5	2,075.5	1,960.7	114.80	18.079	
11,800.0	9,896.2	11,609.7	9,291.1	60.9	62.4	73.07	-1,779.4	1,851.5	2,075.9	1,957.3	118.60	17.503	
11,900.0	9,900.9	11,709.7	9,293.6	63.0	64.4	73.01	-1,778.5	1,951.4	2,076.3	1,953.9	122.46	16.955	
12,000.0	9,905.6	11,809.7	9,296.1	65.0	66.4	72.95	-1,777.7	2,051.3	2,076.8	1,950.4	126.37	16.434	
12,100.0	9,910.3	11,909.7	9,298.7	67.1	68.4	72.90	-1,776.8	2,151.3	2,077.2	1,946.8	130.33	15.938	
12,200.0	9,915.0	12,009.8	9,301.2	69.2	70.5	72.84	-1,775.9	2,251.2	2,077.6	1,943.3	134.34	15.466	
12,300.0	9,919.8	12,109.8	9,303.7	71.3	72.6	72.78	-1,775.1	2,351.2	2,078.0	1,939.6	138.38	15.017	
12,400.0	9,924.5	12,209.8	9,306.3	73.5	74.7	72.72	-1,774.2	2,451.1	2,078.4	1,936.0	142.46	14.589	
12,500.0	9,929.2	12,309.8	9,308.8	75.6	76.8	72.66	-1,773.3	2,551.0	2,078.9	1,932.3	146.58	14.183	
12,600.0	9,933.9	12,409.9	9,311.3	77.8	79.0	72.60	-1,772.4	2,651.0	2,079.3	1,928.6	150.72	13.796	
12,700.0	9,938.6	12,509.9	9,313.9	80.0	81.2	72.54	-1,771.6	2,750.9	2,079.7	1,924.8	154.89	13.427	
12,800.0	9,943.3	12,609.9	9,316.4	82.2	83.4	72.48	-1,770.7	2,850.9	2,080.2	1,921.1	159.09	13.075	
12,900.0	9,948.0	12,709.9	9,318.9	84.4	85.6	72.42	-1,769.8	2,950.8	2,080.6	1,917.3	163.31	12.740	
13,000.0	9,952.7	12,810.0	9,321.5	86.7	87.8	72.36	-1,768.9	3,050.7	2,081.0	1,913.5	167.55	12.421	
13,100.0	9,957.5	12,910.0	9,324.0	88.9	90.0	72.30	-1,768.1	3,150.7	2,081.5	1,909.7	171.81	12.115	
13,200.0	9,962.2	12,990.0	9,326.5	91.2	91.8	72.24	-1,767.2	3,250.6	2,081.9	1,906.3	175.65	11.853	
13,300.0	9,966.9	13,090.0	9,329.1	93.4	94.0	72.19	-1,766.3	3,350.6	2,082.3	1,902.4	179.94	11.572	
13,400.0	9,971.6	13,190.0	9,331.6	95.7	96.3	72.13	-1,765.5	3,450.5	2,082.8	1,898.6	184.24	11.305	
13,500.0	9,976.3	13,289.9	9,334.1	98.0	98.6	72.07	-1,764.6	3,550.4	2,083.2	1,894.7	188.56	11.048	
13,600.0	9,981.0	13,389.9	9,336.7	100.3	100.8	72.01	-1,763.7	3,650.4	2,083.7	1,890.8	192.89	10.802	
13,700.0	9,985.7	13,489.9	9,339.2	102.6	103.1	71.95	-1,762.8	3,750.3	2,084.1	1,886.9	197.23	10.567	
13,800.0	9,990.4	13,589.9	9,341.7	104.9	105.4	71.89	-1,762.0	3,850.3	2,084.6	1,883.0	201.58	10.341	
13,900.0	9,995.2	13,689.8	9,344.3	107.2	107.7	71.83	-1,761.1	3,950.2	2,085.1	1,879.1	205.95	10.124	
14,000.0	9,999.9	13,789.8	9,346.8	109.5	110.0	71.77	-1,760.2	4,050.1	2,085.5	1,875.2	210.32	9.916	
14,100.0	10,004.6	13,889.8	9,349.3	111.9	112.3	71.71	-1,759.4	4,150.1	2,086.0	1,871.3	214.69	9.716	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #136H - Wellbore #1 - State Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,200.0	10,009.3	13,989.8	9,351.9	114.2	114.6	71.65	-1,758.5	4,250.0	2,086.4	1,867.4	219.08	9.524	
14,300.0	10,014.0	14,089.7	9,354.4	116.5	117.0	71.60	-1,757.6	4,350.0	2,086.9	1,863.4	223.47	9.339	
14,400.0	10,018.7	14,189.7	9,356.9	118.9	119.3	71.54	-1,756.7	4,449.9	2,087.4	1,859.5	227.87	9.160	
14,500.0	10,023.4	14,289.7	9,359.5	121.2	121.6	71.48	-1,755.9	4,549.8	2,087.8	1,855.6	232.27	8.989	
14,600.0	10,028.1	14,389.7	9,362.0	123.6	124.0	71.42	-1,755.0	4,649.8	2,088.3	1,851.6	236.68	8.823	
14,700.0	10,032.8	14,489.6	9,364.5	125.9	126.3	71.36	-1,754.1	4,749.7	2,088.8	1,847.7	241.09	8.664	
14,800.0	10,037.6	14,589.6	9,367.1	128.3	128.7	71.30	-1,753.3	4,849.7	2,089.3	1,843.8	245.51	8.510	
14,900.0	10,042.3	14,689.6	9,369.6	130.7	131.0	71.24	-1,752.4	4,949.6	2,089.7	1,839.8	249.93	8.361	
15,000.0	10,047.0	14,789.6	9,372.1	133.0	133.4	71.19	-1,751.5	5,049.5	2,090.2	1,835.9	254.36	8.218	
15,100.0	10,051.7	14,889.5	9,374.7	135.4	135.7	71.13	-1,750.6	5,149.5	2,090.7	1,831.9	258.79	8.079	
15,200.0	10,056.4	14,989.5	9,377.2	137.8	138.1	71.07	-1,749.8	5,249.4	2,091.2	1,828.0	263.22	7.945	
15,300.0	10,061.1	15,089.5	9,379.7	140.1	140.4	71.01	-1,748.9	5,349.4	2,091.7	1,824.0	267.65	7.815	
15,400.0	10,065.8	15,189.5	9,382.3	142.5	142.8	70.95	-1,748.0	5,449.3	2,092.2	1,820.1	272.08	7.689	
15,500.0	10,070.5	15,289.4	9,384.8	144.9	145.2	70.89	-1,747.1	5,549.2	2,092.7	1,816.1	276.52	7.568	
15,600.0	10,075.3	15,389.4	9,387.3	147.3	147.5	70.83	-1,746.3	5,649.2	2,093.2	1,812.2	280.96	7.450	
15,700.0	10,080.0	15,489.4	9,389.9	149.7	149.9	70.78	-1,745.4	5,749.1	2,093.7	1,808.3	285.40	7.336	
15,800.0	10,084.7	15,589.4	9,392.4	152.0	152.3	70.72	-1,744.5	5,849.1	2,094.2	1,804.3	289.84	7.225	
15,900.0	10,089.4	15,689.3	9,394.9	154.4	154.7	70.66	-1,743.7	5,949.0	2,094.7	1,800.4	294.28	7.118	
16,000.0	10,094.1	15,789.3	9,397.5	156.8	157.1	70.60	-1,742.8	6,048.9	2,095.2	1,796.4	298.72	7.014	
16,100.0	10,098.8	15,889.3	9,400.0	159.2	159.4	70.54	-1,741.9	6,148.9	2,095.7	1,792.5	303.17	6.913	
16,200.0	10,103.5	15,989.3	9,402.5	161.6	161.8	70.48	-1,741.0	6,248.8	2,096.2	1,788.6	307.61	6.814	
16,300.0	10,108.2	16,089.3	9,405.1	164.0	164.2	70.43	-1,740.2	6,348.8	2,096.7	1,784.6	312.05	6.719	
16,400.0	10,113.0	16,189.2	9,407.6	166.4	166.6	70.37	-1,739.3	6,448.7	2,097.2	1,780.7	316.50	6.626	
16,500.0	10,117.7	16,289.2	9,410.1	168.8	169.0	70.31	-1,738.4	6,548.6	2,097.7	1,776.8	320.94	6.536	
16,600.0	10,122.4	16,389.2	9,412.7	171.2	171.4	70.25	-1,737.6	6,648.6	2,098.2	1,772.8	325.38	6.448	
16,700.0	10,127.1	16,489.2	9,415.2	173.6	173.8	70.19	-1,736.7	6,748.5	2,098.7	1,768.9	329.83	6.363	
16,800.0	10,131.8	16,589.1	9,417.7	176.0	176.2	70.13	-1,735.8	6,848.5	2,099.3	1,765.0	334.27	6.280	
16,900.0	10,136.5	16,689.1	9,420.3	178.4	178.6	70.08	-1,734.9	6,948.4	2,099.8	1,761.1	338.71	6.199	
17,000.0	10,141.2	16,789.1	9,422.8	180.8	181.0	70.02	-1,734.1	7,048.3	2,100.3	1,757.2	343.15	6.121	
17,100.0	10,145.9	16,889.1	9,425.3	183.2	183.4	69.96	-1,733.2	7,148.3	2,100.8	1,753.2	347.59	6.044	
17,200.0	10,150.7	16,989.0	9,427.9	185.6	185.8	69.90	-1,732.3	7,248.2	2,101.4	1,749.3	352.03	5.969	
17,218.0	10,151.5	17,007.0	9,428.3	186.1	186.2	69.89	-1,732.2	7,266.2	2,101.5	1,748.6	352.83	5.956	
17,218.7	10,151.5	17,007.7	9,428.4	186.1	186.2	69.89	-1,732.2	7,266.9	2,101.5	1,748.6	352.86	5.956	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #201H - Wellbore #1 - State Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	179.85	-80.2	0.2	80.2				
100.0	100.0	100.0	100.0	0.1	0.1	179.41	-79.6	0.8	79.6	79.4	0.27	299.472	
200.0	200.0	200.9	200.9	0.5	0.5	178.01	-77.7	2.7	77.8	76.8	0.99	78.642	
300.0	300.0	301.7	301.6	0.8	0.9	175.54	-74.6	5.8	74.9	73.2	1.72	43.646	
400.0	400.0	401.6	401.3	1.2	1.2	172.36	-70.9	9.5	71.6	69.2	2.43	29.434	
500.0	500.0	501.4	501.0	1.6	1.6	168.88	-67.2	13.2	68.5	65.4	3.15	21.740	
600.0	600.0	601.3	600.7	1.9	2.0	165.10	-63.5	16.9	65.8	61.9	3.87	16.971	
700.0	700.0	701.1	700.5	2.3	2.3	161.00	-59.8	20.6	63.3	58.7	4.60	13.764	
800.0	800.0	801.0	800.2	2.6	2.7	156.59	-56.1	24.3	61.2	55.9	5.32	11.493	
900.0	900.0	900.9	899.9	3.0	3.1	151.90	-52.4	28.0	59.4	53.4	6.05	9.829	
1,000.0	1,000.0	1,000.7	999.6	3.4	3.4	146.97	-48.7	31.7	58.1	51.4	6.77	8.583	
1,100.0	1,100.0	1,100.6	1,099.4	3.7	3.8	141.85	-45.0	35.4	57.3	49.8	7.50	7.639	
1,200.0	1,200.0	1,200.5	1,199.1	4.1	4.2	136.61	-41.3	39.1	56.9	48.7	8.22	6.919	
1,230.7	1,230.7	1,231.1	1,229.7	4.2	4.3	135.00	-40.2	40.2	56.9	48.4	8.45	6.734	
1,300.0	1,300.0	1,300.3	1,298.8	4.4	4.5	131.35	-37.7	42.8	57.0	48.0	8.95	6.370	
1,400.0	1,400.0	1,401.7	1,400.0	4.8	4.9	126.24	-33.2	45.3	56.2	46.6	9.67	5.815	
1,500.0	1,500.0	1,503.0	1,501.2	5.1	5.3	121.11	-27.5	45.6	53.3	42.9	10.38	5.131	
1,600.0	1,600.0	1,604.1	1,602.0	5.5	5.6	178.21	-20.5	43.5	49.0	37.9	11.08	4.423	
1,700.0	1,700.0	1,705.1	1,702.5	5.9	6.0	171.04	-12.2	39.0	44.5	32.7	11.77	3.779	
1,800.0	1,799.9	1,805.0	1,801.9	6.2	6.3	162.34	-3.0	33.0	40.7	28.2	12.47	3.260	
1,897.2	1,896.9	1,902.1	1,898.3	6.5	6.7	153.52	5.9	27.1	39.4	26.3	13.17	2.995	CC
1,900.0	1,899.7	1,904.8	1,901.1	6.6	6.7	153.28	6.2	26.9	39.4	26.3	13.19	2.991	ES
2,000.0	1,999.4	2,004.7	2,000.3	6.9	7.0	145.32	15.3	20.9	40.7	26.8	13.91	2.925	SF
2,100.0	2,098.9	2,104.5	2,099.6	7.3	7.4	139.46	24.5	14.8	44.0	29.3	14.64	3.004	
2,200.0	2,198.3	2,204.4	2,198.8	7.6	7.8	135.91	33.7	8.7	48.9	33.5	15.37	3.180	
2,300.0	2,297.4	2,304.2	2,298.0	8.0	8.1	134.32	42.9	2.6	55.1	39.0	16.11	3.423	
2,400.0	2,396.4	2,403.9	2,397.1	8.4	8.5	133.68	52.0	-3.5	62.0	45.2	16.85	3.682	
2,500.0	2,495.5	2,503.7	2,496.3	8.8	8.9	133.17	61.2	-9.5	68.9	51.3	17.60	3.918	
2,600.0	2,594.5	2,603.4	2,595.4	9.2	9.3	132.75	70.4	-15.6	75.9	57.5	18.35	4.134	
2,700.0	2,693.5	2,703.2	2,694.6	9.5	9.7	132.40	79.5	-21.7	82.8	63.7	19.11	4.332	
2,800.0	2,792.5	2,803.0	2,793.7	9.9	10.0	132.11	88.7	-27.8	89.7	69.8	19.86	4.515	
2,900.0	2,891.6	2,902.7	2,892.9	10.3	10.4	131.86	97.9	-33.9	96.6	76.0	20.62	4.684	
3,000.0	2,990.6	3,002.5	2,992.0	10.7	10.8	131.64	107.0	-39.9	103.5	82.1	21.39	4.840	
3,100.0	3,089.6	3,102.2	3,091.2	11.1	11.2	131.45	116.2	-46.0	110.4	88.3	22.15	4.985	
3,200.0	3,188.6	3,202.0	3,190.4	11.5	11.6	131.28	125.4	-52.1	117.3	94.4	22.92	5.120	
3,300.0	3,287.7	3,301.8	3,289.5	11.9	12.0	131.13	134.5	-58.2	124.3	100.6	23.69	5.246	
3,400.0	3,386.7	3,401.5	3,388.7	12.3	12.3	130.99	143.7	-64.3	131.2	106.7	24.46	5.364	
3,500.0	3,485.7	3,501.3	3,487.8	12.7	12.7	130.87	152.9	-70.3	138.1	112.9	25.23	5.474	
3,600.0	3,584.8	3,601.0	3,587.0	13.1	13.1	130.76	162.1	-76.4	145.0	119.0	26.00	5.577	
3,700.0	3,683.8	3,700.8	3,686.1	13.5	13.5	130.66	171.2	-82.5	152.0	125.2	26.78	5.674	
3,800.0	3,782.8	3,800.5	3,785.3	13.9	13.9	130.57	180.4	-88.6	158.9	131.3	27.56	5.766	
3,900.0	3,881.8	3,900.3	3,884.4	14.4	14.3	130.49	189.6	-94.6	165.8	137.5	28.33	5.852	
4,000.0	3,980.9	4,000.1	3,983.6	14.8	14.7	130.41	198.7	-100.7	172.7	143.6	29.11	5.934	
4,100.0	4,079.9	4,100.2	4,082.7	15.2	15.1	130.34	207.9	-106.8	179.7	149.8	29.89	6.010	
4,200.0	4,178.9	4,200.4	4,181.9	15.6	15.5	130.28	217.1	-112.9	186.6	155.9	30.67	6.083	
4,300.0	4,277.9	4,300.7	4,281.0	16.0	15.8	130.22	226.2	-119.0	193.5	162.0	31.45	6.152	
4,400.0	4,377.0	4,400.9	4,380.2	16.4	16.2	130.16	235.4	-125.0	200.4	168.2	32.24	6.217	
4,500.0	4,476.0	4,501.1	4,479.3	16.8	16.6	130.11	244.6	-131.1	207.4	174.3	33.02	6.280	
4,600.0	4,575.0	4,601.4	4,578.5	17.2	17.0	130.06	253.7	-137.2	214.3	180.5	33.80	6.339	
4,698.1	4,672.2	4,703.5	4,675.7	17.6	17.4	130.01	262.7	-143.2	221.1	186.5	34.59	6.391	
4,700.0	4,674.0	4,701.6	4,677.6	17.6	17.4	130.01	262.9	-143.3	221.2	186.6	34.59	6.395	
4,800.0	4,773.3	4,801.8	4,776.8	18.0	17.8	129.78	272.1	-149.3	227.3	191.9	35.37	6.425	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #201H - Wellbore #1 - State Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,900.0	4,872.7	4,902.0	4,876.1	18.4	18.2	129.04	281.3	-155.4	231.7	195.5	36.16	6.407	
5,000.0	4,972.5	5,002.1	4,975.3	18.8	18.6	127.81	290.4	-161.5	234.5	197.6	36.94	6.348	
5,100.0	5,072.4	5,097.6	5,074.4	19.2	19.0	126.09	299.6	-167.6	235.9	198.2	37.71	6.256	
5,200.0	5,172.3	5,202.8	5,173.4	19.5	19.4	123.86	308.7	-173.7	236.1	197.5	38.51	6.130	
5,231.4	5,203.8	5,228.4	5,204.4	19.6	19.5	60.09	311.6	-175.6	235.9	197.1	38.73	6.090	
5,300.0	5,272.3	5,303.4	5,272.2	19.8	19.8	58.27	317.9	-179.7	235.5	196.2	39.28	5.995	
5,367.8	5,340.2	5,364.0	5,339.2	20.1	20.0	56.46	324.1	-183.8	235.4	195.6	39.78	5.918	
5,400.0	5,372.3	5,404.0	5,370.9	20.2	20.2	55.60	327.0	-185.8	235.4	195.4	40.05	5.878	
5,500.0	5,472.3	5,504.6	5,469.7	20.5	20.6	52.94	336.2	-191.8	235.9	195.0	40.81	5.779	
5,600.0	5,572.3	5,605.3	5,568.5	20.8	21.0	50.29	345.3	-197.9	236.8	195.2	41.57	5.696	
5,700.0	5,672.3	5,705.9	5,667.3	21.2	21.4	47.67	354.4	-203.9	238.2	195.9	42.32	5.630	
5,800.0	5,772.3	5,806.5	5,766.1	21.5	21.8	45.08	363.6	-210.0	240.2	197.1	43.06	5.578	
5,900.0	5,872.3	5,907.1	5,864.9	21.8	22.2	42.54	372.7	-216.0	242.6	198.8	43.79	5.540	
6,000.0	5,972.3	6,007.7	5,963.6	22.2	22.6	40.06	381.8	-222.1	245.5	201.0	44.52	5.515	
6,100.0	6,072.3	6,108.3	6,062.4	22.5	22.9	37.64	391.0	-228.2	248.9	203.6	45.24	5.501	
6,200.0	6,172.3	6,191.1	6,161.2	22.9	23.3	35.28	400.1	-234.2	252.7	206.8	45.88	5.506	
6,300.0	6,272.3	6,309.5	6,260.0	23.2	23.7	33.00	409.2	-240.3	256.9	210.2	46.66	5.505	
6,400.0	6,372.3	6,389.9	6,358.8	23.5	24.1	30.79	418.4	-246.3	261.5	214.2	47.28	5.530	
6,500.0	6,472.3	6,489.3	6,457.6	23.9	24.5	28.66	427.5	-252.4	266.5	218.5	47.98	5.554	
6,600.0	6,572.3	6,588.6	6,556.4	24.2	24.8	26.62	436.6	-258.4	271.8	223.1	48.67	5.585	
6,700.0	6,672.3	6,688.0	6,655.1	24.6	25.2	24.65	445.8	-264.5	277.5	228.1	49.36	5.622	
6,800.0	6,772.3	6,787.4	6,753.9	24.9	25.6	22.76	454.9	-270.5	283.5	233.4	50.04	5.665	
6,900.0	6,872.3	6,886.8	6,852.7	25.2	26.0	20.96	464.0	-276.6	289.8	239.0	50.72	5.712	
7,000.0	6,972.3	6,986.2	6,951.5	25.6	26.4	19.23	473.2	-282.7	296.3	244.9	51.40	5.764	
7,100.0	7,072.3	7,085.6	7,050.3	25.9	26.8	17.57	482.3	-288.7	303.1	251.1	52.08	5.820	
7,200.0	7,172.3	7,185.0	7,149.1	26.3	27.2	15.99	491.4	-294.8	310.2	257.4	52.76	5.879	
7,300.0	7,272.3	7,284.4	7,247.8	26.6	27.6	14.48	500.6	-300.8	317.5	264.1	53.44	5.941	
7,400.0	7,372.3	7,383.8	7,346.6	27.0	28.0	13.04	509.7	-306.9	325.0	270.9	54.12	6.005	
7,500.0	7,472.3	7,483.2	7,445.4	27.3	28.4	11.67	518.8	-312.9	332.7	277.9	54.80	6.071	
7,600.0	7,572.3	7,582.5	7,544.2	27.7	28.8	10.36	528.0	-319.0	340.6	285.1	55.48	6.138	
7,700.0	7,672.3	7,681.9	7,643.0	28.0	29.2	9.10	537.1	-325.1	348.6	292.5	56.16	6.207	
7,800.0	7,772.3	7,781.3	7,741.8	28.3	29.6	7.91	546.2	-331.1	356.8	300.0	56.85	6.277	
7,900.0	7,872.3	7,880.7	7,840.5	28.7	29.9	6.76	555.4	-337.2	365.2	307.7	57.53	6.348	
8,000.0	7,972.3	7,980.1	7,939.3	29.0	30.3	5.67	564.5	-343.2	373.7	315.5	58.21	6.420	
8,100.0	8,072.3	8,079.5	8,038.1	29.4	30.7	4.63	573.7	-349.3	382.3	323.4	58.90	6.491	
8,200.0	8,172.3	8,178.9	8,136.9	29.7	31.1	3.63	582.8	-355.3	391.1	331.5	59.58	6.564	
8,300.0	8,272.3	8,278.3	8,235.7	30.1	31.5	2.68	591.9	-361.4	399.9	339.7	60.27	6.636	
8,400.0	8,372.3	8,378.1	8,334.9	30.4	31.9	1.77	601.1	-367.5	408.9	347.9	60.96	6.707	
8,500.0	8,472.3	8,487.4	8,443.7	30.8	32.3	0.94	609.7	-373.2	416.7	355.0	61.72	6.751	
8,600.0	8,572.3	8,597.1	8,553.2	31.1	32.7	0.38	615.8	-377.2	422.2	359.7	62.45	6.759	
8,700.0	8,672.3	8,707.2	8,663.2	31.5	33.1	0.07	619.2	-379.5	425.3	362.1	63.16	6.734	
8,800.0	8,772.3	8,815.9	8,771.8	31.8	33.5	0.05	620.0	-379.6	426.0	362.2	63.83	6.674	
8,900.0	8,872.3	8,916.5	8,871.6	32.2	33.8	1.73	619.6	-367.2	425.8	361.3	64.54	6.597	
8,905.8	8,878.1	8,922.2	8,877.1	32.2	33.8	1.89	619.6	-366.0	425.8	361.2	64.59	6.593	
9,000.0	8,972.3	9,010.2	8,961.1	32.5	34.0	5.37	618.7	-340.1	426.7	361.4	65.32	6.533	
9,100.0	9,072.3	9,093.2	9,035.9	32.9	34.1	10.15	617.5	-304.2	431.7	365.7	65.98	6.543	
9,200.0	9,172.3	9,164.5	9,095.4	33.2	34.2	15.23	616.2	-265.0	444.2	378.0	66.14	6.716	
9,272.2	9,244.5	9,208.9	9,129.8	33.5	34.3	18.75	615.3	-237.0	459.2	393.5	65.73	6.987	
9,300.0	9,272.3	9,224.9	9,141.7	33.6	34.3	-69.09	615.0	-226.3	466.3	400.9	65.43	7.127	
9,350.0	9,322.1	9,253.4	9,162.0	33.7	34.3	-65.66	614.3	-206.3	479.9	415.2	64.74	7.412	
9,400.0	9,371.3	9,281.7	9,181.2	33.9	34.3	-62.40	613.6	-185.6	494.2	430.3	63.88	7.737	
9,450.0	9,419.5	9,309.7	9,199.2	34.0	34.3	-59.34	612.9	-164.1	509.0	446.1	62.88	8.094	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #201H - Wellbore #1 - State Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,500.0	9,466.4	9,337.6	9,216.0	34.1	34.3	-56.50	612.2	-141.9	523.8	462.0	61.78	8.478	
9,550.0	9,511.6	9,365.2	9,231.6	34.2	34.4	-53.90	611.4	-119.1	538.4	477.7	60.61	8.882	
9,600.0	9,554.7	9,392.8	9,246.1	34.4	34.4	-51.54	610.7	-95.7	552.5	493.1	59.41	9.300	
9,650.0	9,595.5	9,420.2	9,259.3	34.5	34.4	-49.42	609.9	-71.7	566.0	507.8	58.21	9.724	
9,700.0	9,633.7	9,450.0	9,272.4	34.6	34.4	-47.45	609.0	-44.9	578.8	521.6	57.11	10.133	
9,750.0	9,668.8	9,474.7	9,282.1	34.7	34.4	-45.86	608.2	-22.2	590.5	534.6	55.91	10.561	
9,800.0	9,700.8	9,500.0	9,291.1	34.8	34.4	-44.45	607.5	1.4	601.1	546.3	54.82	10.965	
9,850.0	9,729.2	9,528.9	9,300.0	35.0	34.4	-43.16	606.5	28.9	610.6	556.6	53.95	11.317	
9,900.0	9,754.0	9,550.0	9,305.7	35.1	34.4	-42.20	605.9	49.2	618.7	565.7	53.02	11.670	
9,950.0	9,774.9	9,582.9	9,313.0	35.3	34.5	-41.23	604.8	81.2	625.5	572.9	52.51	11.910	
10,000.0	9,791.8	9,609.8	9,317.6	35.5	34.6	-40.54	603.9	107.8	630.8	578.7	52.04	12.120	
10,050.0	9,804.5	9,636.7	9,321.0	35.8	34.7	-40.01	603.1	134.4	634.6	582.9	51.77	12.259	
10,100.0	9,812.9	9,663.6	9,323.1	36.0	34.9	-39.65	602.2	161.2	637.0	585.3	51.70	12.320	
10,125.2	9,815.5	9,677.3	9,323.7	36.2	35.0	-39.53	601.7	174.9	637.6	585.8	51.74	12.322	
10,200.0	9,820.7	9,751.7	9,326.0	36.7	35.5	-39.17	599.3	249.2	638.0	585.8	52.22	12.216	
10,225.5	9,822.0	9,777.1	9,326.8	36.9	35.7	-39.07	598.5	274.6	637.8	585.3	52.42	12.167	
10,300.0	9,825.5	9,851.2	9,329.2	37.5	36.4	-38.81	596.1	348.7	636.9	583.8	53.08	11.998	
10,400.0	9,830.2	9,950.8	9,332.3	38.4	37.4	-38.46	593.1	448.1	635.8	581.7	54.12	11.748	
10,500.0	9,834.9	10,050.3	9,335.4	39.4	38.5	-38.12	590.1	547.5	634.8	579.5	55.30	11.478	
10,600.0	9,839.7	10,149.8	9,338.6	40.6	39.7	-37.78	587.2	647.0	633.8	577.2	56.63	11.193	
10,700.0	9,844.4	10,249.4	9,341.7	41.9	41.0	-37.45	584.4	746.4	633.0	574.9	58.08	10.899	
10,800.0	9,849.1	10,348.9	9,344.8	43.3	42.5	-37.12	581.7	845.9	632.2	572.6	59.63	10.601	
10,900.0	9,853.8	10,448.5	9,347.9	44.7	44.0	-36.80	579.1	945.3	631.5	570.2	61.29	10.304	
11,000.0	9,858.5	10,548.0	9,351.0	46.3	45.6	-36.49	576.6	1,044.8	630.9	567.9	63.03	10.010	
11,100.0	9,863.2	10,647.6	9,354.1	47.9	47.2	-36.18	574.2	1,144.3	630.4	565.5	64.84	9.722	
11,200.0	9,867.9	10,747.1	9,357.2	49.6	49.0	-35.88	571.9	1,243.8	629.9	563.2	66.72	9.442	
11,300.0	9,872.6	10,846.7	9,360.3	51.4	50.8	-35.58	569.7	1,343.3	629.5	560.9	68.65	9.170	
11,400.0	9,877.3	10,946.3	9,363.4	53.2	52.6	-35.30	567.6	1,442.8	629.2	558.6	70.63	8.908	
11,500.0	9,882.1	11,045.9	9,366.5	55.1	54.5	-35.01	565.5	1,542.3	629.0	556.3	72.66	8.657	
11,600.0	9,886.8	11,145.5	9,369.6	57.0	56.4	-34.74	563.6	1,641.9	628.8	554.1	74.72	8.416	
11,700.0	9,891.5	11,245.1	9,372.7	58.9	58.4	-34.47	561.8	1,741.4	628.8	552.0	76.81	8.186	
11,767.8	9,894.7	11,312.6	9,374.8	60.3	59.8	-34.29	560.6	1,808.9	628.7	550.5	78.25	8.035	
11,800.0	9,896.2	11,344.7	9,375.8	60.9	60.4	-34.21	560.0	1,840.9	628.8	549.8	78.93	7.965	
11,900.0	9,900.9	11,444.3	9,378.8	63.0	62.5	-33.95	558.3	1,940.5	628.8	547.7	81.08	7.755	
12,000.0	9,905.6	11,543.9	9,381.9	65.0	64.5	-33.70	556.8	2,040.0	628.9	545.7	83.25	7.555	
12,100.0	9,910.3	11,643.5	9,385.0	67.1	66.6	-33.46	555.3	2,139.6	629.1	543.7	85.43	7.364	
12,200.0	9,915.0	11,743.1	9,388.0	69.2	68.7	-33.23	554.0	2,239.1	629.4	541.8	87.63	7.182	
12,300.0	9,919.8	11,842.7	9,391.1	71.3	70.9	-33.00	552.7	2,338.7	629.7	539.9	89.85	7.008	
12,400.0	9,924.5	11,942.4	9,394.2	73.5	73.0	-32.78	551.5	2,438.3	630.1	538.0	92.08	6.843	
12,500.0	9,929.2	12,042.0	9,397.2	75.6	75.2	-32.57	550.4	2,537.8	630.6	536.2	94.32	6.685	
12,600.0	9,933.9	12,141.6	9,400.3	77.8	77.4	-32.36	549.4	2,637.4	631.1	534.5	96.58	6.535	
12,700.0	9,938.6	12,241.2	9,403.3	80.0	79.6	-32.16	548.5	2,737.0	631.7	532.8	98.84	6.391	
12,800.0	9,943.3	12,340.9	9,406.3	82.2	81.8	-31.97	547.7	2,836.6	632.3	531.2	101.12	6.253	
12,900.0	9,948.0	12,440.5	9,409.4	84.4	84.0	-31.79	547.0	2,936.2	633.0	529.6	103.40	6.122	
13,000.0	9,952.7	12,540.2	9,412.4	86.7	86.3	-31.61	546.4	3,035.8	633.8	528.1	105.70	5.996	
13,100.0	9,957.5	12,639.8	9,415.4	88.9	88.5	-31.45	545.9	3,135.4	634.6	526.6	108.00	5.876	
13,200.0	9,962.2	12,739.4	9,418.5	91.2	90.8	-31.28	545.4	3,234.9	635.5	525.2	110.32	5.760	
13,300.0	9,966.9	12,839.1	9,421.5	93.4	93.1	-31.13	545.1	3,334.5	636.4	523.8	112.64	5.650	
13,400.0	9,971.6	12,938.7	9,424.5	95.7	95.4	-30.99	544.9	3,434.1	637.4	522.4	114.98	5.544	
13,500.0	9,976.3	13,038.4	9,427.5	98.0	97.6	-30.85	544.7	3,533.8	638.5	521.1	117.33	5.442	
13,600.0	9,981.0	13,138.0	9,430.5	100.3	99.9	-30.72	544.7	3,633.4	639.6	519.9	119.69	5.344	
13,700.0	9,985.7	13,237.7	9,433.5	102.6	102.2	-30.60	544.7	3,733.0	640.7	518.7	122.06	5.249	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #201H - Wellbore #1 - State Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,800.0	9,990.4	13,337.3	9,436.5	104.9	104.5	-30.48	544.9	3,832.6	641.9	517.5	124.44	5.158	
13,900.0	9,995.2	13,437.0	9,439.5	107.2	106.9	-30.37	545.1	3,932.2	643.2	516.4	126.84	5.071	
14,000.0	9,999.9	13,536.6	9,442.5	109.5	109.2	-30.27	545.4	4,031.8	644.5	515.3	129.25	4.987	
14,100.0	10,004.6	13,636.3	9,445.5	111.9	111.5	-30.18	545.9	4,131.4	645.9	514.2	131.68	4.905	
14,200.0	10,009.3	13,735.9	9,448.4	114.2	113.8	-30.09	546.4	4,231.0	647.3	513.2	134.12	4.826	
14,300.0	10,014.0	13,835.6	9,451.4	116.5	116.2	-30.02	547.0	4,330.6	648.8	512.2	136.58	4.750	
14,400.0	10,018.7	13,935.5	9,454.4	118.9	118.5	-29.94	547.7	4,430.5	650.3	511.3	139.06	4.677	
14,500.0	10,023.4	14,035.5	9,457.4	121.2	120.9	-29.87	548.4	4,530.4	651.9	510.3	141.53	4.606	
14,600.0	10,028.1	14,135.5	9,460.4	123.6	123.2	-29.80	549.0	4,630.3	653.4	509.4	144.00	4.538	
14,700.0	10,032.8	14,235.5	9,463.3	125.9	125.6	-29.73	549.7	4,730.3	654.9	508.5	146.46	4.472	
14,800.0	10,037.6	14,335.4	9,466.3	128.3	127.9	-29.66	550.4	4,830.2	656.4	507.5	148.93	4.408	
14,900.0	10,042.3	14,435.4	9,469.3	130.7	130.3	-29.58	551.1	4,930.2	658.0	506.6	151.39	4.346	
15,000.0	10,047.0	14,535.4	9,472.3	133.0	132.7	-29.51	551.8	5,030.1	659.5	505.7	153.85	4.287	
15,100.0	10,051.7	14,635.4	9,475.3	135.4	135.1	-29.44	552.5	5,130.0	661.0	504.7	156.30	4.229	
15,200.0	10,056.4	14,735.4	9,478.3	137.8	137.4	-29.37	553.2	5,230.0	662.6	503.8	158.75	4.173	
15,300.0	10,061.1	14,835.4	9,481.2	140.1	139.8	-29.30	553.8	5,329.9	664.1	502.9	161.20	4.120	
15,400.0	10,065.8	14,935.4	9,484.2	142.5	142.2	-29.23	554.5	5,429.8	665.6	502.0	163.65	4.067	
15,500.0	10,070.5	15,035.3	9,487.2	144.9	144.6	-29.17	555.2	5,529.8	667.2	501.1	166.09	4.017	
15,600.0	10,075.3	15,135.3	9,490.2	147.3	147.0	-29.10	555.9	5,629.7	668.7	500.2	168.52	3.968	
15,700.0	10,080.0	15,235.3	9,493.2	149.7	149.3	-29.03	556.6	5,729.7	670.2	499.3	170.96	3.920	
15,800.0	10,084.7	15,335.3	9,496.2	152.0	151.7	-28.96	557.3	5,829.6	671.8	498.4	173.39	3.874	
15,900.0	10,089.4	15,435.3	9,499.1	154.4	154.1	-28.89	557.9	5,929.5	673.3	497.5	175.81	3.830	
16,000.0	10,094.1	15,535.3	9,502.1	156.8	156.5	-28.82	558.6	6,029.5	674.8	496.6	178.23	3.786	
16,100.0	10,098.8	15,635.3	9,505.1	159.2	158.9	-28.76	559.3	6,129.4	676.4	495.7	180.65	3.744	
16,200.0	10,103.5	15,735.2	9,508.1	161.6	161.3	-28.69	560.0	6,229.4	677.9	494.8	183.06	3.703	
16,300.0	10,108.2	15,835.2	9,511.1	164.0	163.7	-28.62	560.7	6,329.3	679.5	494.0	185.47	3.663	
16,400.0	10,113.0	15,935.2	9,514.1	166.4	166.1	-28.56	561.4	6,429.2	681.0	493.1	187.87	3.625	
16,500.0	10,117.7	16,035.2	9,517.0	168.8	168.5	-28.49	562.1	6,529.2	682.5	492.3	190.27	3.587	
16,600.0	10,122.4	16,135.2	9,520.0	171.2	170.9	-28.43	562.7	6,629.1	684.1	491.4	192.67	3.551	
16,700.0	10,127.1	16,235.2	9,523.0	173.6	173.3	-28.36	563.4	6,729.0	685.6	490.6	195.06	3.515	
16,800.0	10,131.8	16,335.1	9,526.0	176.0	175.7	-28.30	564.1	6,829.0	687.2	489.7	197.45	3.480	
16,900.0	10,136.5	16,435.1	9,529.0	178.4	178.1	-28.23	564.8	6,928.9	688.7	488.9	199.83	3.447	
17,000.0	10,141.2	16,535.1	9,532.0	180.8	180.5	-28.17	565.5	7,028.9	690.3	488.1	202.20	3.414	
17,100.0	10,145.9	16,635.1	9,534.9	183.2	182.9	-28.10	566.2	7,128.8	691.8	487.2	204.57	3.382	
17,200.0	10,150.7	16,735.1	9,537.9	185.6	185.3	-28.04	566.9	7,228.7	693.4	486.4	206.94	3.350	
17,218.0	10,151.5	16,737.8	9,538.0	186.1	185.4	-28.04	566.9	7,231.5	693.8	486.6	207.25	3.348	
17,218.7	10,151.5	16,737.8	9,538.0	186.1	185.4	-28.04	566.9	7,231.5	693.8	486.6	207.22	3.348	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #202H - Wellbore #1 - State Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	159.37	-80.2	30.2	85.7				
100.0	100.0	98.5	98.5	0.1	0.1	158.84	-80.2	31.1	86.0	85.8	0.26	334.614	
200.0	200.0	197.9	197.8	0.5	0.5	157.26	-80.2	33.6	87.0	86.0	0.97	89.581	
300.0	300.0	302.9	297.0	0.8	0.9	154.71	-80.2	37.9	88.8	87.0	1.71	51.817	
400.0	400.0	403.0	396.7	1.2	1.2	151.73	-80.2	43.1	91.1	88.7	2.44	37.420	
500.0	500.0	503.1	496.5	1.6	1.6	148.92	-80.2	48.4	93.7	90.6	3.16	29.682	
600.0	600.0	603.3	596.2	1.9	2.0	146.26	-80.2	53.6	96.5	92.6	3.88	24.883	
700.0	700.0	703.4	695.9	2.3	2.3	143.75	-80.2	58.8	99.5	94.9	4.60	21.634	
800.0	800.0	803.5	795.6	2.6	2.7	141.40	-80.2	64.0	102.7	97.4	5.32	19.302	
900.0	900.0	896.3	895.4	3.0	3.0	139.19	-80.2	69.3	106.1	100.0	6.02	17.632	
1,000.0	1,000.0	996.2	995.1	3.4	3.4	137.12	-80.2	74.5	109.6	102.8	6.73	16.269	
1,100.0	1,100.0	1,096.6	1,095.4	3.7	3.8	135.99	-81.2	78.4	112.9	105.5	7.45	15.160	
1,200.0	1,200.0	1,197.1	1,195.9	4.1	4.1	136.64	-84.2	79.5	115.9	107.7	8.15	14.212	
1,300.0	1,300.0	1,297.4	1,296.0	4.4	4.5	138.95	-89.3	77.8	118.4	109.6	8.84	13.391	
1,400.0	1,400.0	1,397.3	1,395.6	4.8	4.8	142.79	-96.4	73.2	121.0	111.5	9.53	12.700	
1,500.0	1,500.0	1,503.2	1,494.5	5.1	5.1	147.38	-104.6	66.9	124.3	114.0	10.24	12.135	
1,600.0	1,600.0	1,603.8	1,593.4	5.5	5.5	-145.51	-112.9	60.7	129.0	118.1	10.94	11.797	
1,700.0	1,700.0	1,704.3	1,692.3	5.9	5.8	-142.10	-121.1	54.5	135.7	124.1	11.63	11.669	
1,800.0	1,799.9	1,804.9	1,791.2	6.2	6.2	-139.45	-129.4	48.2	144.2	131.8	12.33	11.692	
1,900.0	1,899.7	1,905.5	1,890.1	6.6	6.5	-137.52	-137.6	42.0	154.2	141.1	13.04	11.827	
2,000.0	1,999.4	2,006.2	1,988.8	6.9	6.9	-136.23	-145.9	35.7	165.6	151.8	13.75	12.044	
2,100.0	2,098.9	2,107.0	2,087.5	7.3	7.3	-135.49	-154.1	29.5	178.2	163.8	14.46	12.324	
2,200.0	2,198.3	2,208.0	2,186.0	7.6	7.6	-135.19	-162.4	23.3	192.2	177.0	15.19	12.654	
2,300.0	2,297.4	2,309.1	2,284.3	8.0	8.0	-135.25	-170.6	17.1	207.3	191.4	15.92	13.025	
2,400.0	2,396.4	2,389.6	2,382.5	8.4	8.3	-135.56	-178.8	10.9	223.1	206.5	16.58	13.459	
2,500.0	2,495.5	2,488.3	2,480.7	8.8	8.7	-135.83	-187.0	4.7	238.9	221.6	17.31	13.803	
2,600.0	2,594.5	2,587.1	2,578.9	9.2	9.1	-136.06	-195.2	-1.5	254.7	236.6	18.04	14.116	
2,700.0	2,693.5	2,685.8	2,677.1	9.5	9.4	-136.27	-203.4	-7.7	270.5	251.7	18.78	14.403	
2,800.0	2,792.5	2,784.6	2,775.3	9.9	9.8	-136.45	-211.6	-13.9	286.3	266.7	19.52	14.666	
2,900.0	2,891.6	2,883.3	2,873.5	10.3	10.2	-136.62	-219.8	-20.1	302.1	281.8	20.26	14.908	
3,000.0	2,990.6	2,982.0	2,971.7	10.7	10.6	-136.77	-228.0	-26.3	317.9	296.8	21.01	15.131	
3,100.0	3,089.6	3,080.8	3,069.9	11.1	11.0	-136.90	-236.2	-32.5	333.7	311.9	21.75	15.337	
3,200.0	3,188.6	3,179.5	3,168.1	11.5	11.3	-137.02	-244.4	-38.7	349.5	326.9	22.50	15.529	
3,300.0	3,287.7	3,278.3	3,266.3	11.9	11.7	-137.13	-252.6	-44.9	365.3	342.0	23.25	15.707	
3,400.0	3,386.7	3,377.0	3,364.5	12.3	12.1	-137.24	-260.8	-51.1	381.1	357.1	24.01	15.873	
3,500.0	3,485.7	3,475.7	3,462.7	12.7	12.5	-137.33	-269.0	-57.3	396.9	372.1	24.76	16.028	
3,600.0	3,584.8	3,574.5	3,560.9	13.1	12.9	-137.42	-277.2	-63.5	412.7	387.2	25.52	16.173	
3,700.0	3,683.8	3,673.2	3,659.1	13.5	13.3	-137.50	-285.4	-69.7	428.5	402.2	26.27	16.309	
3,800.0	3,782.8	3,772.0	3,757.3	13.9	13.6	-137.57	-293.6	-75.9	444.3	417.3	27.03	16.436	
3,900.0	3,881.8	3,870.7	3,855.5	14.4	14.0	-137.64	-301.8	-82.1	460.1	432.3	27.79	16.557	
4,000.0	3,980.9	3,969.5	3,953.7	14.8	14.4	-137.71	-310.0	-88.3	475.9	447.3	28.55	16.670	
4,100.0	4,079.9	4,068.2	4,051.9	15.2	14.8	-137.77	-318.2	-94.5	491.7	462.4	29.31	16.777	
4,200.0	4,178.9	4,166.9	4,150.1	15.6	15.2	-137.83	-326.4	-100.7	507.5	477.4	30.07	16.878	
4,300.0	4,277.9	4,265.7	4,248.3	16.0	15.6	-137.88	-334.6	-106.8	523.3	492.5	30.83	16.974	
4,400.0	4,377.0	4,364.4	4,346.6	16.4	16.0	-137.93	-342.8	-113.0	539.1	507.5	31.59	17.065	
4,500.0	4,476.0	4,463.2	4,444.8	16.8	16.3	-137.98	-351.0	-119.2	554.9	522.6	32.36	17.151	
4,600.0	4,575.0	4,561.9	4,543.0	17.2	16.7	-138.02	-359.2	-125.4	570.8	537.6	33.12	17.233	
4,698.1	4,672.2	4,658.8	4,639.3	17.6	17.1	-138.06	-367.2	-131.5	586.3	552.4	33.87	17.309	
4,700.0	4,674.0	4,660.6	4,641.2	17.6	17.1	-138.07	-367.4	-131.6	586.6	552.7	33.88	17.311	
4,800.0	4,773.3	4,759.5	4,739.5	18.0	17.5	-138.17	-375.6	-137.8	601.4	566.7	34.65	17.358	
4,900.0	4,872.7	4,858.7	4,838.1	18.4	17.9	-138.09	-383.8	-144.1	614.3	578.9	35.40	17.352	
5,000.0	4,972.5	4,958.0	4,936.9	18.8	18.3	-137.84	-392.1	-150.3	625.2	589.1	36.15	17.296	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #202H - Wellbore #1 - State Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,072.4	5,057.4	5,035.8	19.2	18.7	-137.42	-400.3	-156.5	634.3	597.4	36.89	17.195	
5,200.0	5,172.3	5,156.9	5,134.7	19.5	19.1	-136.84	-408.6	-162.8	641.5	603.9	37.62	17.053	
5,231.4	5,203.8	5,188.1	5,165.8	19.6	19.2	160.42	-411.2	-164.7	643.4	605.6	37.85	17.000	
5,300.0	5,272.3	5,256.3	5,233.6	19.8	19.5	160.95	-416.9	-169.0	647.4	609.0	38.34	16.885	
5,400.0	5,372.3	5,355.8	5,332.6	20.2	19.9	161.70	-425.1	-175.3	653.3	614.2	39.06	16.724	
5,500.0	5,472.3	5,455.3	5,431.5	20.5	20.2	162.44	-433.4	-181.5	659.3	619.5	39.78	16.571	
5,600.0	5,572.3	5,554.7	5,530.4	20.8	20.6	163.17	-441.6	-187.8	665.4	624.8	40.50	16.428	
5,700.0	5,672.3	5,654.2	5,629.3	21.2	21.0	163.89	-449.9	-194.0	671.6	630.3	41.22	16.292	
5,800.0	5,772.3	5,753.6	5,728.2	21.5	21.4	164.59	-458.2	-200.2	677.9	635.9	41.94	16.163	
5,900.0	5,872.3	5,853.1	5,827.1	21.8	21.8	165.28	-466.4	-206.5	684.3	641.6	42.66	16.041	
6,000.0	5,972.3	5,952.5	5,926.1	22.2	22.2	165.95	-474.7	-212.7	690.8	647.4	43.38	15.925	
6,100.0	6,072.3	6,052.0	6,025.0	22.5	22.6	166.62	-482.9	-219.0	697.4	653.3	44.09	15.816	
6,200.0	6,172.3	6,151.5	6,123.9	22.9	23.0	167.27	-491.2	-225.2	704.1	659.3	44.81	15.712	
6,300.0	6,272.3	6,250.9	6,222.8	23.2	23.4	167.91	-499.5	-231.5	710.9	665.3	45.53	15.614	
6,400.0	6,372.3	6,350.4	6,321.7	23.5	23.8	168.53	-507.7	-237.7	717.7	671.5	46.24	15.520	
6,500.0	6,472.3	6,449.8	6,420.6	23.9	24.2	169.15	-516.0	-243.9	724.7	677.7	46.96	15.432	
6,600.0	6,572.3	6,549.3	6,519.5	24.2	24.6	169.75	-524.2	-250.2	731.7	684.1	47.68	15.348	
6,700.0	6,672.3	6,648.7	6,618.5	24.6	25.0	170.34	-532.5	-256.4	738.8	690.5	48.39	15.268	
6,800.0	6,772.3	6,748.2	6,717.4	24.9	25.4	170.93	-540.8	-262.7	746.0	696.9	49.11	15.192	
6,900.0	6,872.3	6,847.7	6,816.3	25.2	25.7	171.49	-549.0	-268.9	753.3	703.5	49.82	15.120	
7,000.0	6,972.3	6,947.1	6,915.2	25.6	26.1	172.05	-557.3	-275.2	760.6	710.1	50.54	15.051	
7,100.0	7,072.3	7,046.6	7,014.1	25.9	26.5	172.60	-565.5	-281.4	768.1	716.8	51.25	14.986	
7,200.0	7,172.3	7,146.0	7,113.0	26.3	26.9	173.14	-573.8	-287.6	775.5	723.6	51.97	14.924	
7,300.0	7,272.3	7,245.5	7,212.0	26.6	27.3	173.67	-582.1	-293.9	783.1	730.4	52.68	14.865	
7,400.0	7,372.3	7,344.9	7,310.9	27.0	27.7	174.18	-590.3	-300.1	790.7	737.3	53.39	14.809	
7,500.0	7,472.3	7,444.4	7,409.8	27.3	28.1	174.69	-598.6	-306.4	798.4	744.3	54.11	14.756	
7,600.0	7,572.3	7,543.9	7,508.7	27.7	28.5	175.19	-606.8	-312.6	806.1	751.3	54.82	14.705	
7,700.0	7,672.3	7,643.3	7,607.6	28.0	28.9	175.68	-615.1	-318.9	813.9	758.4	55.53	14.656	
7,800.0	7,772.3	7,742.8	7,706.5	28.3	29.3	176.16	-623.4	-325.1	821.8	765.5	56.25	14.610	
7,900.0	7,872.3	7,842.2	7,805.5	28.7	29.7	176.63	-631.6	-331.3	829.7	772.7	56.96	14.566	
8,000.0	7,972.3	7,941.7	7,904.4	29.0	30.1	177.09	-639.9	-337.6	837.7	780.0	57.67	14.524	
8,100.0	8,072.3	8,041.1	8,003.3	29.4	30.5	177.54	-648.1	-343.8	845.7	787.3	58.39	14.484	
8,200.0	8,172.3	8,140.6	8,102.2	29.7	30.9	177.98	-656.4	-350.1	853.7	794.6	59.10	14.446	
8,300.0	8,272.3	8,240.0	8,201.1	30.1	31.3	178.42	-664.7	-356.3	861.9	802.1	59.81	14.410	
8,400.0	8,372.3	8,339.5	8,300.0	30.4	31.6	178.85	-672.9	-362.5	870.0	809.5	60.52	14.375	
8,500.0	8,472.3	8,439.0	8,399.0	30.8	32.0	179.26	-681.2	-368.8	878.3	817.0	61.24	14.342	
8,600.0	8,572.3	8,561.3	8,520.7	31.1	32.5	179.71	-690.1	-375.6	885.6	823.5	62.10	14.261	
8,700.0	8,672.3	8,693.9	8,653.2	31.5	33.0	179.96	-695.3	-379.5	889.5	826.5	62.95	14.129	
8,800.0	8,772.3	8,809.2	8,768.5	31.8	33.4	179.90	-696.1	-378.5	890.1	826.5	63.67	13.980	
8,900.0	8,872.3	8,900.7	8,858.8	32.2	33.6	179.00	-696.7	-364.6	890.9	826.6	64.31	13.854	
9,000.0	8,972.3	8,985.8	8,939.8	32.5	33.8	177.36	-697.8	-338.9	893.3	828.4	64.89	13.766	
9,100.0	9,072.3	9,061.9	9,008.4	32.9	34.0	175.26	-699.2	-306.0	898.4	833.1	65.37	13.744	
9,200.0	9,172.3	9,128.1	9,064.0	33.2	34.0	173.00	-700.7	-270.2	907.8	842.1	65.67	13.824	
9,272.2	9,244.5	9,169.9	9,096.9	33.5	34.1	171.39	-701.7	-244.3	917.8	852.0	65.71	13.966	
9,300.0	9,272.3	9,185.1	9,108.3	33.6	34.1	80.53	-702.2	-234.4	922.3	856.6	65.69	14.041	
9,350.0	9,322.1	9,212.3	9,128.1	33.7	34.1	78.63	-702.9	-215.8	931.1	865.6	65.58	14.199	
9,400.0	9,371.3	9,239.3	9,146.9	33.9	34.2	76.75	-703.7	-196.5	940.5	875.1	65.40	14.381	
9,450.0	9,419.5	9,266.1	9,164.7	34.0	34.2	74.92	-704.6	-176.4	950.3	885.2	65.17	14.583	
9,500.0	9,466.4	9,292.9	9,181.5	34.1	34.2	73.14	-705.5	-155.5	960.3	895.5	64.89	14.800	
9,550.0	9,511.6	9,319.6	9,197.2	34.2	34.2	71.44	-706.4	-134.0	970.4	905.8	64.57	15.028	
9,600.0	9,554.7	9,350.0	9,213.9	34.4	34.2	69.75	-707.4	-108.6	980.4	916.1	64.29	15.250	
9,650.0	9,595.5	9,372.7	9,225.4	34.5	34.2	68.34	-708.2	-89.1	990.1	926.2	63.90	15.495	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #202H - Wellbore #1 - State Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,700.0	9,633.7	9,400.0	9,238.3	34.6	34.2	66.94	-709.3	-65.0	999.4	935.8	63.58	15.720	
9,750.0	9,668.8	9,425.5	9,249.2	34.7	34.2	65.70	-710.2	-42.0	1,008.3	945.0	63.27	15.936	
9,800.0	9,700.8	9,450.0	9,258.8	34.8	34.2	64.60	-711.2	-19.4	1,016.5	953.5	62.99	16.138	
9,850.0	9,729.2	9,478.2	9,268.6	35.0	34.2	63.58	-712.3	7.0	1,024.0	961.2	62.82	16.302	
9,900.0	9,754.0	9,500.0	9,275.2	35.1	34.2	62.76	-713.1	27.7	1,030.8	968.2	62.64	16.456	
9,950.0	9,774.9	9,530.8	9,283.3	35.3	34.2	62.01	-714.4	57.4	1,036.7	974.0	62.66	16.544	
10,000.0	9,791.8	9,550.0	9,287.5	35.5	34.2	61.46	-715.2	76.1	1,041.7	979.1	62.65	16.627	
10,050.0	9,804.5	9,583.2	9,293.3	35.8	34.3	60.99	-716.5	108.8	1,045.8	982.9	62.89	16.628	
10,100.0	9,812.9	9,609.5	9,296.6	36.0	34.3	60.70	-717.6	134.8	1,048.8	985.7	63.17	16.604	
10,125.2	9,815.5	9,622.7	9,297.7	36.2	34.4	60.60	-718.2	148.0	1,050.0	986.7	63.35	16.575	
10,200.0	9,820.7	9,689.7	9,301.9	36.7	34.8	60.62	-721.0	214.9	1,053.2	989.0	64.21	16.403	
10,225.5	9,822.0	9,715.4	9,303.5	36.9	35.0	60.65	-722.0	240.5	1,054.1	989.6	64.56	16.327	
10,300.0	9,825.5	9,790.5	9,308.1	37.5	35.6	60.79	-725.0	315.4	1,056.6	990.9	65.70	16.083	
10,400.0	9,830.2	9,891.3	9,314.1	38.4	36.6	60.97	-728.9	415.9	1,060.0	992.5	67.45	15.715	
10,500.0	9,834.9	9,992.2	9,320.1	39.4	37.7	61.14	-732.7	516.5	1,063.2	993.8	69.43	15.313	
10,600.0	9,839.7	10,093.0	9,325.9	40.6	38.9	61.31	-736.2	617.1	1,066.3	994.7	71.63	14.887	
10,700.0	9,844.4	10,193.9	9,331.7	41.9	40.2	61.46	-739.7	717.7	1,069.4	995.4	74.02	14.447	
10,800.0	9,849.1	10,294.7	9,337.4	43.3	41.7	61.60	-743.0	818.4	1,072.4	995.8	76.60	14.000	
10,900.0	9,853.8	10,395.6	9,343.0	44.7	43.2	61.74	-746.1	919.1	1,075.3	996.0	79.34	13.552	
11,000.0	9,858.5	10,496.5	9,348.5	46.3	44.8	61.87	-749.1	1,019.8	1,078.1	995.9	82.24	13.110	
11,100.0	9,863.2	10,597.4	9,353.9	47.9	46.5	61.98	-752.0	1,120.5	1,080.9	995.6	85.26	12.677	
11,200.0	9,867.9	10,698.3	9,359.2	49.6	48.2	62.09	-754.6	1,221.2	1,083.5	995.1	88.40	12.256	
11,300.0	9,872.6	10,799.2	9,364.4	51.4	50.0	62.19	-757.2	1,322.0	1,086.1	994.4	91.66	11.850	
11,400.0	9,877.3	10,900.2	9,369.5	53.2	51.9	62.28	-759.6	1,422.8	1,088.6	993.6	95.01	11.458	
11,500.0	9,882.1	11,001.1	9,374.6	55.1	53.8	62.37	-761.8	1,523.6	1,091.0	992.5	98.44	11.082	
11,600.0	9,886.8	11,102.1	9,379.5	57.0	55.8	62.44	-763.9	1,624.4	1,093.3	991.3	101.96	10.723	
11,700.0	9,891.5	11,203.0	9,384.3	58.9	57.7	62.51	-765.8	1,725.2	1,095.5	990.0	105.54	10.380	
11,800.0	9,896.2	11,304.0	9,389.1	60.9	59.8	62.57	-767.6	1,826.0	1,097.6	988.4	109.18	10.053	
11,900.0	9,900.9	11,405.0	9,393.7	63.0	61.8	62.62	-769.2	1,926.9	1,099.7	986.8	112.88	9.742	
12,000.0	9,905.6	11,506.0	9,398.3	65.0	63.9	62.66	-770.6	2,027.8	1,101.6	985.0	116.63	9.446	
12,100.0	9,910.3	11,606.9	9,402.8	67.1	66.0	62.69	-772.0	2,128.6	1,103.5	983.1	120.42	9.164	
12,200.0	9,915.0	11,707.9	9,407.1	69.2	68.2	62.72	-773.1	2,229.5	1,105.2	981.0	124.25	8.895	
12,300.0	9,919.8	11,808.9	9,411.4	71.3	70.3	62.73	-774.1	2,330.4	1,106.9	978.8	128.11	8.640	
12,400.0	9,924.5	11,909.9	9,415.6	73.5	72.5	62.74	-775.0	2,431.3	1,108.5	976.5	132.00	8.398	
12,500.0	9,929.2	12,010.9	9,419.7	75.6	74.7	62.74	-775.7	2,532.3	1,110.0	974.1	135.92	8.166	
12,600.0	9,933.9	12,112.0	9,423.7	77.8	76.9	62.74	-776.3	2,633.2	1,111.4	971.5	139.86	7.946	
12,700.0	9,938.6	12,213.0	9,427.6	80.0	79.1	62.72	-776.7	2,734.1	1,112.7	968.9	143.82	7.737	
12,800.0	9,943.3	12,314.0	9,431.4	82.2	81.4	62.70	-776.9	2,835.1	1,113.9	966.1	147.79	7.537	
12,900.0	9,948.0	12,415.0	9,435.1	84.4	83.6	62.67	-777.0	2,936.0	1,115.0	963.3	151.78	7.346	
13,000.0	9,952.7	12,516.0	9,438.8	86.7	85.9	62.63	-776.9	3,037.0	1,116.1	960.3	155.78	7.165	
13,100.0	9,957.5	12,617.0	9,442.3	88.9	88.2	62.59	-776.7	3,137.9	1,117.0	957.2	159.78	6.991	
13,200.0	9,962.2	12,718.0	9,445.7	91.2	90.5	62.53	-776.4	3,238.9	1,117.9	954.1	163.79	6.825	
13,300.0	9,966.9	12,819.0	9,449.1	93.4	92.7	62.47	-775.9	3,339.8	1,118.6	950.8	167.81	6.666	
13,400.0	9,971.6	12,919.7	9,452.3	95.7	95.0	62.40	-775.2	3,440.5	1,119.3	947.5	171.82	6.514	
13,500.0	9,976.3	13,019.7	9,455.5	98.0	97.3	62.33	-774.5	3,540.4	1,120.0	944.1	175.82	6.370	
13,600.0	9,981.0	13,119.7	9,458.7	100.3	99.6	62.26	-773.8	3,640.3	1,120.6	940.8	179.84	6.231	
13,700.0	9,985.7	13,219.7	9,461.9	102.6	101.9	62.19	-773.1	3,740.3	1,121.3	937.4	183.87	6.098	
13,800.0	9,990.4	13,319.7	9,465.1	104.9	104.2	62.12	-772.4	3,840.2	1,121.9	934.0	187.90	5.971	
13,900.0	9,995.2	13,419.7	9,468.3	107.2	106.5	62.05	-771.7	3,940.1	1,122.6	930.6	191.94	5.849	
14,000.0	9,999.9	13,519.7	9,471.5	109.5	108.9	61.98	-771.0	4,040.1	1,123.3	927.3	195.98	5.731	
14,100.0	10,004.6	13,619.7	9,474.7	111.9	111.2	61.91	-770.3	4,140.0	1,123.9	923.9	200.03	5.619	
14,200.0	10,009.3	13,719.7	9,477.9	114.2	113.5	61.84	-769.6	4,240.0	1,124.6	920.5	204.09	5.510	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #202H - Wellbore #1 - State Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,300.0	10,014.0	13,819.6	9,481.1	116.5	115.8	61.78	-768.9	4,339.9	1,125.2	917.1	208.14	5.406	
14,400.0	10,018.7	13,919.6	9,484.3	118.9	118.2	61.71	-768.2	4,439.8	1,125.9	913.7	212.21	5.306	
14,500.0	10,023.4	14,019.6	9,487.5	121.2	120.5	61.64	-767.6	4,539.8	1,126.6	910.3	216.27	5.209	
14,600.0	10,028.1	14,119.6	9,490.7	123.6	122.9	61.57	-766.9	4,639.7	1,127.3	906.9	220.34	5.116	
14,700.0	10,032.8	14,219.6	9,493.9	125.9	125.2	61.50	-766.2	4,739.6	1,127.9	903.5	224.40	5.026	
14,800.0	10,037.6	14,319.6	9,497.1	128.3	127.6	61.43	-765.5	4,839.6	1,128.6	900.1	228.47	4.940	
14,900.0	10,042.3	14,419.6	9,500.3	130.7	129.9	61.36	-764.8	4,939.5	1,129.3	896.7	232.55	4.856	
15,000.0	10,047.0	14,519.6	9,503.4	133.0	132.3	61.29	-764.1	5,039.4	1,130.0	893.4	236.62	4.776	
15,100.0	10,051.7	14,619.6	9,506.6	135.4	134.7	61.22	-763.4	5,139.4	1,130.7	890.0	240.69	4.698	
15,200.0	10,056.4	14,719.5	9,509.8	137.8	137.0	61.15	-762.7	5,239.3	1,131.3	886.6	244.76	4.622	
15,300.0	10,061.1	14,819.5	9,513.0	140.1	139.4	61.08	-762.0	5,339.2	1,132.0	883.2	248.84	4.549	
15,400.0	10,065.8	14,919.5	9,516.2	142.5	141.8	61.02	-761.3	5,439.2	1,132.7	879.8	252.91	4.479	
15,500.0	10,070.5	15,019.5	9,519.4	144.9	144.1	60.95	-760.6	5,539.1	1,133.4	876.4	256.98	4.410	
15,600.0	10,075.3	15,119.5	9,522.6	147.3	146.5	60.88	-759.9	5,639.0	1,134.1	873.0	261.05	4.344	
15,700.0	10,080.0	15,219.5	9,525.8	149.7	148.9	60.81	-759.2	5,739.0	1,134.8	869.7	265.12	4.280	
15,800.0	10,084.7	15,319.5	9,529.0	152.0	151.3	60.74	-758.5	5,838.9	1,135.5	866.3	269.19	4.218	
15,900.0	10,089.4	15,419.5	9,532.2	154.4	153.7	60.67	-757.8	5,938.8	1,136.2	862.9	273.26	4.158	
16,000.0	10,094.1	15,519.4	9,535.4	156.8	156.0	60.61	-757.1	6,038.8	1,136.9	859.5	277.32	4.099	
16,100.0	10,098.8	15,619.4	9,538.6	159.2	158.4	60.54	-756.4	6,138.7	1,137.5	856.2	281.39	4.043	
16,200.0	10,103.5	15,719.4	9,541.8	161.6	160.8	60.47	-755.7	6,238.7	1,138.2	852.8	285.45	3.988	
16,300.0	10,108.2	15,819.4	9,545.0	164.0	163.2	60.40	-755.1	6,338.6	1,138.9	849.4	289.51	3.934	
16,400.0	10,113.0	15,919.4	9,548.2	166.4	165.6	60.34	-754.4	6,438.5	1,139.7	846.1	293.57	3.882	
16,500.0	10,117.7	16,019.4	9,551.4	168.8	168.0	60.27	-753.7	6,538.5	1,140.4	842.7	297.62	3.832	
16,600.0	10,122.4	16,119.4	9,554.6	171.2	170.4	60.20	-753.0	6,638.4	1,141.1	839.4	301.68	3.782	
16,700.0	10,127.1	16,219.4	9,557.8	173.6	172.8	60.13	-752.3	6,738.3	1,141.8	836.0	305.73	3.735	
16,800.0	10,131.8	16,319.4	9,561.0	176.0	175.2	60.07	-751.6	6,838.3	1,142.5	832.7	309.77	3.688	
16,900.0	10,136.5	16,419.3	9,564.2	178.4	177.6	60.00	-750.9	6,938.2	1,143.2	829.4	313.82	3.643	
17,000.0	10,141.2	16,519.3	9,567.4	180.8	180.0	59.93	-750.2	7,038.1	1,143.9	826.0	317.86	3.599	
17,100.0	10,145.9	16,619.3	9,570.6	183.2	182.4	59.86	-749.5	7,138.1	1,144.6	822.7	321.90	3.556	
17,200.0	10,150.7	16,711.6	9,573.5	185.6	184.6	59.80	-748.9	7,230.3	1,145.3	819.5	325.81	3.515	
17,218.0	10,151.5	16,711.6	9,573.5	186.1	184.6	59.80	-748.9	7,230.3	1,145.7	819.5	326.19	3.512 SF	
17,218.7	10,151.5	16,711.6	9,573.5	186.1	184.6	59.80	-748.9	7,230.3	1,145.8	819.6	326.19	3.513	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #222H - Wellbore #1 - BLM Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	30.0	30.0				
100.0	100.0	100.0	100.0	0.1	0.1	90.00	0.0	30.0	30.0	29.7	0.26	117.057	
200.0	200.0	200.0	200.0	0.5	0.5	90.00	0.0	30.0	30.0	29.0	0.97	30.827	
300.0	300.0	300.0	300.0	0.8	0.8	90.00	0.0	30.0	30.0	28.3	1.69	17.751	
400.0	400.0	400.0	400.0	1.2	1.2	90.00	0.0	30.0	30.0	27.6	2.41	12.464	
500.0	500.0	500.0	500.0	1.6	1.6	90.00	0.0	30.0	30.0	26.9	3.12	9.604	
600.0	600.0	600.0	600.0	1.9	1.9	90.00	0.0	30.0	30.0	26.2	3.84	7.811	
700.0	700.0	700.0	700.0	2.3	2.3	90.00	0.0	30.0	30.0	25.4	4.56	6.582	
800.0	800.0	800.0	800.0	2.6	2.6	90.00	0.0	30.0	30.0	24.7	5.27	5.688	
900.0	900.0	900.0	900.0	3.0	3.0	90.00	0.0	30.0	30.0	24.0	5.99	5.007	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	90.00	0.0	30.0	30.0	23.3	6.71	4.472	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	90.00	0.0	30.0	30.0	22.6	7.43	4.040	
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	90.00	0.0	30.0	30.0	21.9	8.14	3.685	
1,300.0	1,300.0	1,300.2	1,300.2	4.4	4.4	91.59	-0.8	29.7	29.7	20.9	8.84	3.360	
1,400.0	1,400.0	1,400.3	1,400.2	4.8	4.7	96.51	-3.3	28.8	29.0	19.5	9.53	3.043	
1,500.0	1,500.0	1,500.3	1,500.1	5.1	5.1	105.14	-7.4	27.3	28.3	18.1	10.22	2.769	
1,516.9	1,516.9	1,517.2	1,517.0	5.2	5.1	169.95	-8.2	27.0	28.3	17.9	10.34	2.734	CC, ES
1,600.0	1,600.0	1,600.1	1,599.7	5.5	5.4	-179.58	-13.1	25.2	29.3	18.4	10.91	2.686	SF
1,700.0	1,700.0	1,699.5	1,698.9	5.9	5.8	-166.37	-20.5	22.6	33.8	22.2	11.60	2.918	
1,800.0	1,799.9	1,798.7	1,797.6	6.2	6.1	-155.57	-29.4	19.3	42.2	29.9	12.28	3.437	
1,900.0	1,899.7	1,897.3	1,895.5	6.6	6.4	-148.00	-39.8	15.5	54.1	41.2	12.97	4.174	
2,000.0	1,999.4	1,995.3	1,992.7	6.9	6.8	-143.01	-51.8	11.1	69.2	55.5	13.65	5.068	
2,100.0	2,098.9	2,092.6	2,089.0	7.3	7.2	-139.74	-65.2	6.3	87.1	72.8	14.33	6.078	
2,200.0	2,198.3	2,189.2	2,184.3	7.6	7.5	-137.57	-80.0	0.9	107.7	92.7	15.01	7.176	
2,300.0	2,297.4	2,285.2	2,278.7	8.0	7.9	-136.11	-96.3	-5.0	130.9	115.2	15.70	8.338	
2,400.0	2,396.4	2,382.2	2,374.0	8.4	8.3	-135.29	-113.2	-11.2	155.1	138.7	16.41	9.452	
2,500.0	2,495.5	2,479.2	2,469.3	8.8	8.7	-134.69	-130.1	-17.4	179.4	162.3	17.14	10.470	
2,600.0	2,594.5	2,576.1	2,564.6	9.2	9.1	-134.23	-147.0	-23.5	203.7	185.9	17.87	11.403	
2,700.0	2,693.5	2,673.1	2,659.9	9.5	9.5	-133.87	-163.9	-29.7	228.1	209.4	18.60	12.259	
2,800.0	2,792.5	2,770.1	2,755.2	9.9	9.9	-133.58	-180.8	-35.8	252.4	233.0	19.34	13.048	
2,900.0	2,891.6	2,867.1	2,850.5	10.3	10.3	-133.34	-197.7	-42.0	276.7	256.6	20.09	13.776	
3,000.0	2,990.6	2,964.1	2,945.8	10.7	10.8	-133.14	-214.6	-48.2	301.0	280.2	20.83	14.450	
3,100.0	3,089.6	3,061.1	3,041.2	11.1	11.2	-132.97	-231.6	-54.3	325.4	303.8	21.58	15.075	
3,200.0	3,188.6	3,158.1	3,136.5	11.5	11.6	-132.82	-248.5	-60.5	349.7	327.4	22.34	15.657	
3,300.0	3,287.7	3,255.1	3,231.8	11.9	12.0	-132.69	-265.4	-66.6	374.0	350.9	23.09	16.198	
3,400.0	3,386.7	3,352.1	3,327.1	12.3	12.5	-132.58	-282.3	-72.8	398.4	374.5	23.85	16.704	
3,500.0	3,485.7	3,449.1	3,422.4	12.7	12.9	-132.48	-299.2	-78.9	422.7	398.1	24.61	17.177	
3,600.0	3,584.8	3,546.1	3,517.7	13.1	13.3	-132.39	-316.1	-85.1	447.0	421.7	25.37	17.621	
3,700.0	3,683.8	3,643.0	3,613.0	13.5	13.8	-132.31	-333.0	-91.3	471.4	445.3	26.13	18.038	
3,800.0	3,782.8	3,740.0	3,708.3	13.9	14.2	-132.24	-349.9	-97.4	495.7	468.8	26.90	18.430	
3,900.0	3,881.8	3,837.0	3,803.6	14.4	14.6	-132.18	-366.8	-103.6	520.1	492.4	27.67	18.799	
4,000.0	3,980.9	3,934.0	3,898.9	14.8	15.1	-132.12	-383.8	-109.7	544.4	516.0	28.43	19.147	
4,100.0	4,079.9	4,031.0	3,994.2	15.2	15.5	-132.06	-400.7	-115.9	568.8	539.6	29.20	19.476	
4,200.0	4,178.9	4,128.0	4,089.5	15.6	15.9	-132.01	-417.6	-122.0	593.1	563.1	29.97	19.788	
4,300.0	4,277.9	4,225.0	4,184.8	16.0	16.4	-131.97	-434.5	-128.2	617.4	586.7	30.74	20.083	
4,400.0	4,377.0	4,322.0	4,280.1	16.4	16.8	-131.92	-451.4	-134.4	641.8	610.3	31.52	20.364	
4,500.0	4,476.0	4,419.0	4,375.4	16.8	17.3	-131.89	-468.3	-140.5	666.1	633.8	32.29	20.630	
4,600.0	4,575.0	4,516.0	4,470.7	17.2	17.7	-131.85	-485.2	-146.7	690.5	657.4	33.06	20.883	
4,698.1	4,672.2	4,611.1	4,564.2	17.6	18.1	-131.82	-501.8	-152.7	714.4	680.5	33.82	21.120	
4,700.0	4,674.0	4,612.9	4,566.0	17.6	18.1	-131.82	-502.1	-152.8	714.8	681.0	33.84	21.125	
4,800.0	4,773.3	4,710.1	4,661.6	18.0	18.6	-131.98	-519.1	-159.0	738.3	703.7	34.61	21.332	
4,900.0	4,872.7	4,807.7	4,757.4	18.4	19.0	-131.97	-536.1	-165.2	760.1	724.7	35.37	21.489	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #222H - Wellbore #1 - BLM Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,972.5	4,905.5	4,853.5	18.8	19.5	-131.81	-553.2	-171.4	780.1	744.0	36.12	21.599	
5,100.0	5,072.4	5,003.6	4,949.9	19.2	19.9	-131.51	-570.3	-177.6	798.6	761.7	36.86	21.666	
5,200.0	5,172.3	5,101.7	5,046.4	19.5	20.4	-131.07	-587.4	-183.9	815.3	777.8	37.58	21.693	
5,231.4	5,203.8	5,132.6	5,076.7	19.6	20.5	166.14	-592.8	-185.8	820.3	782.5	37.81	21.695	
5,300.0	5,272.3	5,200.0	5,142.9	19.8	20.8	166.62	-604.5	-190.1	830.9	792.6	38.30	21.696	
5,400.0	5,372.3	5,301.7	5,239.5	20.2	21.3	167.31	-621.6	-196.4	846.6	807.5	39.03	21.692	
5,500.0	5,472.3	5,403.5	5,336.0	20.5	21.8	167.97	-638.8	-202.6	862.3	822.6	39.75	21.691	
5,600.0	5,572.3	5,505.2	5,432.6	20.8	22.2	168.61	-655.9	-208.8	878.2	837.7	40.48	21.694	
5,700.0	5,672.3	5,606.9	5,529.1	21.2	22.7	169.23	-673.0	-215.1	894.2	852.9	41.21	21.699	
5,800.0	5,772.3	5,708.7	5,625.7	21.5	23.2	169.82	-690.2	-221.3	910.2	868.3	41.93	21.706	
5,900.0	5,872.3	5,789.6	5,722.2	21.8	23.6	170.40	-707.3	-227.5	926.4	883.8	42.58	21.757	
6,000.0	5,972.3	5,887.8	5,818.8	22.2	24.0	170.95	-724.4	-233.8	942.6	899.3	43.29	21.775	
6,100.0	6,072.3	5,986.1	5,915.4	22.5	24.5	171.49	-741.6	-240.0	958.9	914.9	44.00	21.793	
6,200.0	6,172.3	6,084.4	6,011.9	22.9	24.9	172.01	-758.7	-246.3	975.4	930.6	44.71	21.813	
6,300.0	6,272.3	6,182.6	6,108.5	23.2	25.4	172.51	-775.8	-252.5	991.8	946.4	45.43	21.834	
6,400.0	6,372.3	6,280.9	6,205.0	23.5	25.8	172.99	-793.0	-258.7	1,008.4	962.3	46.14	21.856	
6,500.0	6,472.3	6,379.2	6,301.6	23.9	26.3	173.46	-810.1	-265.0	1,025.0	978.2	46.85	21.878	
6,600.0	6,572.3	6,477.4	6,398.1	24.2	26.7	173.92	-827.3	-271.2	1,041.7	994.1	47.56	21.902	
6,700.0	6,672.3	6,575.7	6,494.7	24.6	27.2	174.36	-844.4	-277.5	1,058.5	1,010.2	48.28	21.925	
6,800.0	6,772.3	6,674.0	6,591.3	24.9	27.6	174.79	-861.5	-283.7	1,075.3	1,026.3	48.99	21.950	
6,900.0	6,872.3	6,772.2	6,687.8	25.2	28.1	175.20	-878.7	-289.9	1,092.1	1,042.4	49.70	21.974	
7,000.0	6,972.3	6,870.5	6,784.4	25.6	28.6	175.60	-895.8	-296.2	1,109.1	1,058.7	50.41	21.999	
7,100.0	7,072.3	6,968.7	6,880.9	25.9	29.0	175.99	-912.9	-302.4	1,126.0	1,074.9	51.13	22.025	
7,200.0	7,172.3	7,067.0	6,977.5	26.3	29.5	176.37	-930.1	-308.6	1,143.1	1,091.2	51.84	22.050	
7,300.0	7,272.3	7,165.3	7,074.0	26.6	29.9	176.73	-947.2	-314.9	1,160.1	1,107.6	52.55	22.076	
7,400.0	7,372.3	7,263.5	7,170.6	27.0	30.4	177.09	-964.3	-321.1	1,177.2	1,124.0	53.27	22.101	
7,500.0	7,472.3	7,361.8	7,267.1	27.3	30.8	177.44	-981.5	-327.4	1,194.4	1,140.4	53.98	22.127	
7,600.0	7,572.3	7,460.1	7,363.7	27.7	31.3	177.77	-998.6	-333.6	1,211.6	1,156.9	54.69	22.152	
7,700.0	7,672.3	7,558.3	7,460.3	28.0	31.8	178.10	-1,015.7	-339.8	1,228.8	1,173.4	55.41	22.178	
7,800.0	7,772.3	7,656.6	7,556.8	28.3	32.2	178.42	-1,032.9	-346.1	1,246.1	1,190.0	56.12	22.204	
7,900.0	7,872.3	7,754.8	7,653.4	28.7	32.7	178.72	-1,050.0	-352.3	1,263.4	1,206.6	56.84	22.229	
8,000.0	7,972.3	7,862.1	7,758.8	29.0	33.2	179.05	-1,068.6	-359.1	1,280.7	1,223.1	57.63	22.224	
8,100.0	8,072.3	8,006.4	7,901.2	29.4	33.8	179.42	-1,090.2	-367.0	1,295.7	1,237.0	58.69	22.075	
8,200.0	8,172.3	8,152.2	8,046.0	29.7	34.4	179.69	-1,106.9	-373.1	1,307.1	1,247.4	59.69	21.899	
8,300.0	8,272.3	8,299.3	8,192.5	30.1	34.9	179.88	-1,118.5	-377.3	1,315.0	1,254.4	60.61	21.697	
8,400.0	8,372.3	8,447.0	8,340.1	30.4	35.4	179.98	-1,124.8	-379.6	1,319.2	1,257.8	61.44	21.472	
8,500.0	8,472.3	8,579.3	8,472.3	30.8	35.8	180.00	-1,126.0	-380.0	1,320.1	1,257.9	62.17	21.235	
8,600.0	8,572.3	8,679.3	8,572.3	31.1	36.1	180.00	-1,126.0	-380.0	1,320.1	1,257.2	62.83	21.011	
8,700.0	8,672.3	8,779.3	8,672.3	31.5	36.4	180.00	-1,126.0	-380.0	1,320.1	1,256.6	63.49	20.793	
8,800.0	8,772.3	8,879.3	8,772.3	31.8	36.7	180.00	-1,126.0	-380.0	1,320.1	1,255.9	64.15	20.578	
8,900.0	8,872.3	8,979.3	8,872.3	32.2	36.9	180.00	-1,126.0	-380.0	1,320.1	1,255.2	64.81	20.367	
9,000.0	8,972.3	9,079.3	8,972.3	32.5	37.2	180.00	-1,126.0	-380.0	1,320.1	1,254.6	65.48	20.160	
9,100.0	9,072.3	9,179.3	9,072.3	32.9	37.5	180.00	-1,126.0	-380.0	1,320.1	1,253.9	66.14	19.957	
9,200.0	9,172.3	9,279.3	9,172.3	33.2	37.8	180.00	-1,126.0	-380.0	1,320.1	1,253.2	66.81	19.758	
9,272.2	9,244.5	9,351.5	9,244.5	33.5	38.0	180.00	-1,126.0	-380.0	1,320.1	1,252.8	67.29	19.616	
9,300.0	9,272.3	9,379.3	9,272.3	33.6	38.1	90.23	-1,126.0	-380.0	1,320.1	1,252.6	67.47	19.564	
9,350.0	9,322.1	9,429.1	9,322.1	33.7	38.2	90.42	-1,126.0	-380.0	1,320.1	1,252.3	67.78	19.477	
9,400.0	9,371.3	9,479.4	9,372.4	33.9	38.3	90.77	-1,126.0	-379.1	1,320.2	1,252.1	68.06	19.396	
9,450.0	9,419.5	9,530.8	9,423.5	34.0	38.5	91.12	-1,126.0	-373.8	1,320.3	1,252.0	68.33	19.322	
9,500.0	9,466.4	9,583.0	9,474.7	34.1	38.6	91.47	-1,126.0	-363.8	1,320.5	1,251.9	68.58	19.255	
9,550.0	9,511.6	9,636.0	9,525.6	34.2	38.7	91.80	-1,125.9	-349.0	1,320.7	1,251.9	68.81	19.195	
9,600.0	9,554.7	9,689.8	9,575.6	34.4	38.8	92.13	-1,125.8	-329.1	1,320.9	1,251.9	69.02	19.139	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #222H - Wellbore #1 - BLM Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,650.0	9,595.5	9,744.5	9,624.2	34.5	38.9	92.44	-1,125.7	-304.3	1,321.2	1,252.0	69.22	19.088	
9,700.0	9,633.7	9,799.9	9,671.0	34.6	39.0	92.74	-1,125.6	-274.4	1,321.5	1,252.1	69.41	19.039	
9,750.0	9,668.8	9,856.2	9,715.2	34.7	39.0	93.01	-1,125.4	-239.7	1,321.8	1,252.2	69.61	18.989	
9,800.0	9,700.8	9,913.2	9,756.3	34.8	39.1	93.26	-1,125.3	-200.2	1,322.1	1,252.2	69.82	18.935	
9,850.0	9,729.2	9,970.9	9,793.7	35.0	39.1	93.48	-1,125.1	-156.3	1,322.3	1,252.3	70.06	18.875	
9,900.0	9,754.0	10,029.2	9,826.8	35.1	39.1	93.68	-1,124.9	-108.4	1,322.6	1,252.2	70.34	18.803	
9,950.0	9,774.9	10,088.0	9,855.2	35.3	39.1	93.84	-1,124.6	-56.8	1,322.7	1,252.1	70.67	18.718	
10,000.0	9,791.8	10,142.0	9,877.2	35.5	39.1	93.99	-1,124.4	-7.6	1,323.0	1,251.9	71.06	18.619	
10,050.0	9,804.5	10,193.3	9,897.0	35.8	39.1	94.26	-1,124.2	39.8	1,323.4	1,252.0	71.46	18.520	
10,100.0	9,812.9	10,244.2	9,915.9	36.0	39.1	94.64	-1,124.0	87.0	1,324.2	1,252.3	71.92	18.412	
10,125.2	9,815.5	10,269.6	9,925.0	36.2	39.1	94.87	-1,123.9	110.7	1,324.7	1,252.6	72.15	18.360	
10,200.0	9,820.7	10,345.0	9,950.8	36.7	39.1	95.73	-1,123.5	181.6	1,326.7	1,253.8	72.94	18.189	
10,225.5	9,822.0	10,370.8	9,959.2	36.9	39.1	96.03	-1,123.4	206.0	1,327.5	1,254.3	73.23	18.128	
10,300.0	9,825.5	10,447.0	9,982.6	37.5	39.1	96.88	-1,123.1	278.5	1,329.9	1,255.7	74.20	17.924	
10,400.0	9,830.2	10,550.9	10,011.5	38.4	39.3	97.92	-1,122.6	378.3	1,333.1	1,257.3	75.74	17.601	
10,500.0	9,834.9	10,656.5	10,037.2	39.4	40.0	98.80	-1,122.0	480.7	1,336.1	1,258.5	77.56	17.226	
10,600.0	9,839.7	10,763.5	10,059.3	40.6	41.1	99.52	-1,121.5	585.4	1,338.8	1,259.1	79.66	16.806	
10,700.0	9,844.4	10,871.7	10,077.7	41.9	42.3	100.08	-1,120.9	692.0	1,341.0	1,258.9	82.03	16.347	
10,800.0	9,849.1	10,980.7	10,092.1	43.3	43.7	100.48	-1,120.2	800.0	1,342.6	1,257.9	84.65	15.859	
10,900.0	9,853.8	11,090.3	10,102.4	44.7	45.2	100.69	-1,119.6	909.1	1,343.5	1,255.9	87.52	15.350	
11,000.0	9,858.5	11,200.1	10,108.6	46.3	46.9	100.74	-1,118.9	1,018.7	1,343.7	1,253.0	90.62	14.828	
11,100.0	9,863.2	11,308.4	10,110.6	47.9	48.6	100.61	-1,118.2	1,127.0	1,343.1	1,249.2	93.91	14.303	
11,200.0	9,867.9	11,408.3	10,111.1	49.6	50.2	100.43	-1,117.6	1,226.9	1,342.3	1,245.1	97.24	13.804	
11,300.0	9,872.6	11,508.2	10,111.6	51.4	51.9	100.25	-1,116.9	1,326.8	1,341.6	1,240.9	100.71	13.321	
11,400.0	9,877.3	11,608.1	10,112.0	53.2	53.6	100.07	-1,116.3	1,426.7	1,340.8	1,236.5	104.29	12.857	
11,500.0	9,882.1	11,708.0	10,112.5	55.1	55.4	99.89	-1,115.6	1,526.6	1,340.1	1,232.1	107.97	12.411	
11,600.0	9,886.8	11,807.9	10,112.9	57.0	57.3	99.71	-1,115.0	1,626.5	1,339.4	1,227.6	111.75	11.985	
11,700.0	9,891.5	11,907.8	10,113.4	58.9	59.1	99.53	-1,114.3	1,726.4	1,338.6	1,223.0	115.61	11.578	
11,800.0	9,896.2	12,007.7	10,113.8	60.9	61.1	99.35	-1,113.7	1,826.3	1,337.9	1,218.4	119.56	11.191	
11,900.0	9,900.9	12,107.6	10,114.3	63.0	63.0	99.17	-1,113.1	1,926.2	1,337.2	1,213.7	123.57	10.822	
12,000.0	9,905.6	12,207.5	10,114.7	65.0	65.0	98.99	-1,112.4	2,026.1	1,336.6	1,208.9	127.64	10.471	
12,100.0	9,910.3	12,307.4	10,115.2	67.1	67.1	98.81	-1,111.8	2,126.0	1,335.9	1,204.1	131.78	10.138	
12,200.0	9,915.0	12,407.4	10,115.7	69.2	69.1	98.63	-1,111.1	2,225.9	1,335.3	1,199.3	135.97	9.820	
12,300.0	9,919.8	12,507.3	10,116.1	71.3	71.2	98.45	-1,110.5	2,325.8	1,334.6	1,194.4	140.20	9.519	
12,400.0	9,924.5	12,607.2	10,116.6	73.5	73.3	98.27	-1,109.8	2,425.8	1,334.0	1,189.5	144.49	9.233	
12,500.0	9,929.2	12,707.1	10,117.0	75.6	75.4	98.09	-1,109.2	2,525.7	1,333.4	1,184.6	148.81	8.960	
12,600.0	9,933.9	12,807.0	10,117.5	77.8	77.5	97.91	-1,108.6	2,625.6	1,332.8	1,179.6	153.17	8.701	
12,700.0	9,938.6	12,906.9	10,117.9	80.0	79.7	97.73	-1,107.9	2,725.5	1,332.2	1,174.6	157.56	8.455	
12,800.0	9,943.3	13,006.8	10,118.4	82.2	81.9	97.55	-1,107.3	2,825.4	1,331.6	1,169.6	161.99	8.220	
12,900.0	9,948.0	13,106.7	10,118.8	84.4	84.0	97.37	-1,106.6	2,925.3	1,331.1	1,164.6	166.45	7.997	
13,000.0	9,952.7	13,206.6	10,119.3	86.7	86.2	97.18	-1,106.0	3,025.2	1,330.5	1,159.6	170.93	7.784	
13,100.0	9,957.5	13,306.5	10,119.8	88.9	88.4	97.00	-1,105.3	3,125.1	1,330.0	1,154.6	175.44	7.581	
13,200.0	9,962.2	13,406.4	10,120.2	91.2	90.7	96.82	-1,104.7	3,225.0	1,329.5	1,149.5	179.98	7.387	
13,300.0	9,966.9	13,506.4	10,120.7	93.4	92.9	96.64	-1,104.1	3,324.9	1,329.0	1,144.5	184.53	7.202	
13,400.0	9,971.6	13,606.3	10,121.1	95.7	95.2	96.46	-1,103.4	3,424.8	1,328.5	1,139.4	189.11	7.025	
13,500.0	9,976.3	13,706.2	10,121.6	98.0	97.4	96.27	-1,102.8	3,524.7	1,328.0	1,134.3	193.70	6.856	
13,600.0	9,981.0	13,806.1	10,122.0	100.3	99.7	96.09	-1,102.1	3,624.6	1,327.6	1,129.2	198.31	6.694	
13,700.0	9,985.7	13,906.0	10,122.5	102.6	101.9	95.91	-1,101.5	3,724.5	1,327.1	1,124.2	202.94	6.539	
13,800.0	9,990.4	14,005.9	10,123.0	104.9	104.2	95.73	-1,100.8	3,824.4	1,326.7	1,119.1	207.58	6.391	
13,900.0	9,995.2	14,105.8	10,123.4	107.2	106.5	95.54	-1,100.2	3,924.3	1,326.3	1,114.0	212.24	6.249	
14,000.0	9,999.9	14,205.7	10,123.9	109.5	108.8	95.36	-1,099.6	4,024.3	1,325.8	1,108.9	216.91	6.112	
14,100.0	10,004.6	14,305.6	10,124.3	111.9	111.1	95.18	-1,098.9	4,124.2	1,325.4	1,103.9	221.59	5.981	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design Barry Miller - Barry Miller State Com #222H - Wellbore #1 - BLM Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

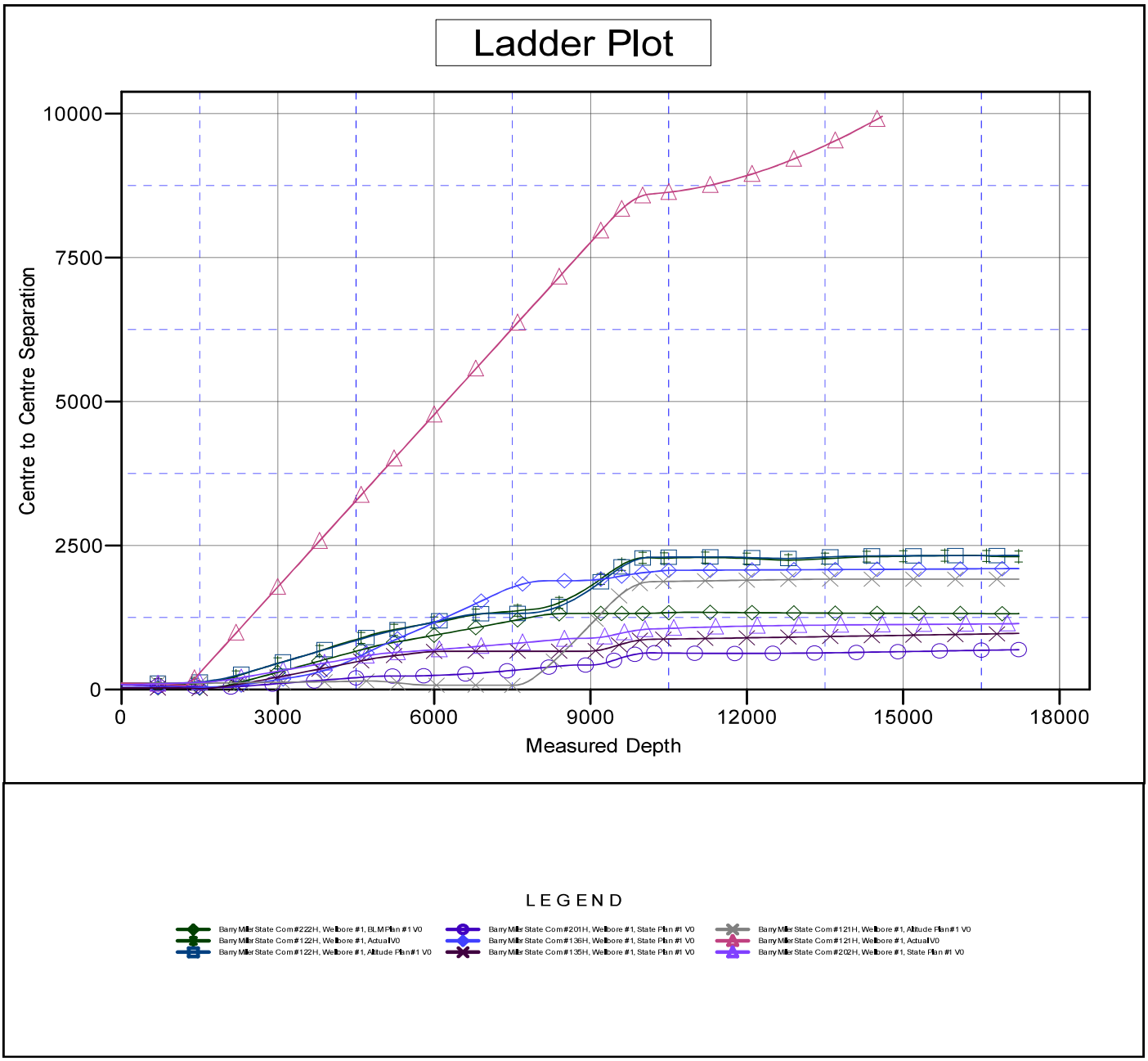
Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,200.0	10,009.3	14,405.5	10,124.8	114.2	113.4	95.00	-1,098.3	4,224.1	1,325.1	1,098.8	226.29	5.856	
14,300.0	10,014.0	14,505.5	10,125.2	116.5	115.7	94.81	-1,097.6	4,324.0	1,324.7	1,093.7	230.99	5.735	
14,400.0	10,018.7	14,605.4	10,125.7	118.9	118.0	94.63	-1,097.0	4,423.9	1,324.3	1,088.6	235.71	5.619	
14,500.0	10,023.4	14,705.3	10,126.1	121.2	120.4	94.45	-1,096.4	4,523.8	1,324.0	1,083.6	240.43	5.507	
14,600.0	10,028.1	14,805.2	10,126.6	123.6	122.7	94.26	-1,095.7	4,623.7	1,323.7	1,078.5	245.16	5.399	
14,700.0	10,032.8	14,905.1	10,127.1	125.9	125.0	94.08	-1,095.1	4,723.6	1,323.4	1,073.5	249.90	5.296	
14,800.0	10,037.6	15,005.0	10,127.5	128.3	127.3	93.89	-1,094.4	4,823.5	1,323.1	1,068.4	254.65	5.196	
14,900.0	10,042.3	15,104.9	10,128.0	130.7	129.7	93.71	-1,093.8	4,923.4	1,322.8	1,063.4	259.40	5.099	
15,000.0	10,047.0	15,204.8	10,128.4	133.0	132.0	93.53	-1,093.1	5,023.3	1,322.5	1,058.3	264.16	5.006	
15,100.0	10,051.7	15,304.7	10,128.9	135.4	134.4	93.34	-1,092.5	5,123.2	1,322.2	1,053.3	268.93	4.917	
15,200.0	10,056.4	15,404.6	10,129.3	137.8	136.7	93.16	-1,091.9	5,223.1	1,322.0	1,048.3	273.70	4.830	
15,300.0	10,061.1	15,504.5	10,129.8	140.1	139.1	92.98	-1,091.2	5,323.0	1,321.8	1,043.3	278.48	4.746	
15,400.0	10,065.8	15,604.5	10,130.3	142.5	141.4	92.79	-1,090.6	5,422.9	1,321.5	1,038.3	283.26	4.666	
15,500.0	10,070.5	15,704.4	10,130.7	144.9	143.8	92.61	-1,089.9	5,522.8	1,321.3	1,033.3	288.04	4.587	
15,600.0	10,075.3	15,804.3	10,131.2	147.3	146.2	92.42	-1,089.3	5,622.8	1,321.2	1,028.3	292.83	4.512	
15,700.0	10,080.0	15,904.2	10,131.6	149.7	148.5	92.24	-1,088.6	5,722.7	1,321.0	1,023.4	297.62	4.438	
15,800.0	10,084.7	16,004.1	10,132.1	152.0	150.9	92.05	-1,088.0	5,822.6	1,320.8	1,018.4	302.42	4.368	
15,900.0	10,089.4	16,104.0	10,132.5	154.4	153.3	91.87	-1,087.4	5,922.5	1,320.7	1,013.4	307.21	4.299	
16,000.0	10,094.1	16,203.9	10,133.0	156.8	155.6	91.69	-1,086.7	6,022.4	1,320.5	1,008.5	312.01	4.232	
16,100.0	10,098.8	16,303.8	10,133.4	159.2	158.0	91.50	-1,086.1	6,122.3	1,320.4	1,003.6	316.81	4.168	
16,200.0	10,103.5	16,403.7	10,133.9	161.6	160.4	91.32	-1,085.4	6,222.2	1,320.3	998.7	321.62	4.105	
16,300.0	10,108.2	16,503.6	10,134.4	164.0	162.8	91.13	-1,084.8	6,322.1	1,320.2	993.8	326.42	4.044	
16,400.0	10,113.0	16,603.5	10,134.8	166.4	165.1	90.95	-1,084.1	6,422.0	1,320.1	988.9	331.23	3.986	
16,500.0	10,117.7	16,703.5	10,135.3	168.8	167.5	90.76	-1,083.5	6,521.9	1,320.1	984.0	336.03	3.928	
16,600.0	10,122.4	16,803.4	10,135.7	171.2	169.9	90.58	-1,082.9	6,621.8	1,320.0	979.2	340.84	3.873	
16,700.0	10,127.1	16,903.3	10,136.2	173.6	172.3	90.39	-1,082.2	6,721.7	1,320.0	974.3	345.64	3.819	
16,800.0	10,131.8	17,003.2	10,136.6	176.0	174.7	90.21	-1,081.6	6,821.6	1,319.9	969.5	350.45	3.766	
16,900.0	10,136.5	17,103.1	10,137.1	178.4	177.1	90.02	-1,080.9	6,921.5	1,319.9	964.7	355.25	3.715	
16,942.1	10,138.5	17,145.2	10,137.3	179.4	178.1	89.95	-1,080.7	6,963.6	1,319.9	962.6	357.28	3.694	
17,000.0	10,141.2	17,203.0	10,137.5	180.8	179.5	89.84	-1,080.3	7,021.4	1,319.9	959.9	360.06	3.666	
17,100.0	10,145.9	17,302.9	10,138.0	183.2	181.9	89.66	-1,079.6	7,121.4	1,319.9	955.1	364.86	3.618	
17,200.0	10,150.7	17,402.8	10,138.5	185.6	184.2	89.47	-1,079.0	7,221.3	1,320.0	950.3	369.67	3.571	
17,218.0	10,151.5	17,411.8	10,138.5	186.1	184.5	89.45	-1,078.9	7,230.2	1,320.0	949.6	370.35	3.564	
17,218.7	10,151.5	17,411.8	10,138.5	186.1	184.5	89.45	-1,078.9	7,230.2	1,320.0	949.6	370.37	3.564	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KB @ 3113.5usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Barry Miller State Com #221H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.13°



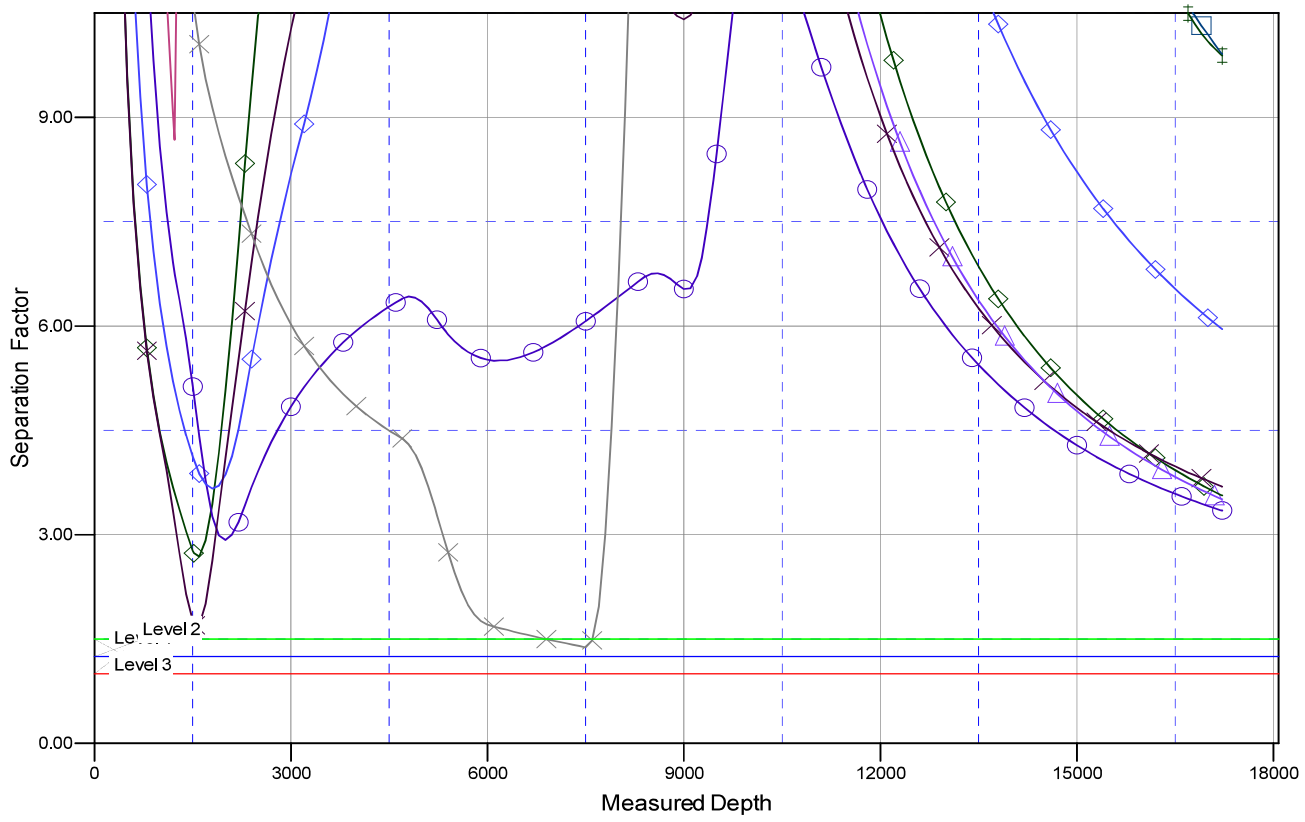
Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3113.5usft
Reference Site:	Barry Miller	**MD Reference:**	KB @ 3113.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM 5000.14 Server
Reference Design:	BLM Plan #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KB @ 3113.5usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Barry Miller State Com #221H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.13°

Separation Factor Plot



LEGEND

Barry Miller State Com #222H, Wellbore #1, BLM Plan #1 V0
Barry Miller State Com #122H, Wellbore #1, Actual V0
Barry Miller State Com #122H, Wellbore #1, Altitude Plan #1 V0
Barry Miller State Com #201H, Wellbore #1, State Plan #1 V0
Barry Miller State Com #136H, Wellbore #1, State Plan #1 V0
Barry Miller State Com #135H, Wellbore #1, State Plan #1 V0
Barry Miller State Com #121H, Wellbore #1, Altitude Plan #1 V0
Barry Miller State Com #121H, Wellbore #1, Actual V0
Barry Miller State Com #202H, Wellbore #1, State Plan #1 V0

Matador Production Company

Rustler Breaks
Barry Miller
Barry Miller State Com #221H

Wellbore #1

Plan: BLM Plan #1

Standard Planning Report

19 July, 2023

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3113.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3113.5usft
Site:	Barry Miller	**North Reference:**	Grid
Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Project Rustler Breaks,

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		Using geodetic scale factor

Site Barry Miller

Site Position:		**Northing:**	508,440.78 usft	**Latitude:**	32° 23' 51.364 N
From:	Lat/Long	**Easting:**	572,199.25 usft	**Longitude:**	104° 5' 57.890 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.13 °

Well Barry Miller State Com #221H

Well Position	**+N/-S**	0.2 usft	**Northing:**	508,441.00 usft	**Latitude:**	32° 23' 51.366 N
	+E/-W	-0.2 usft	**Easting:**	572,199.00 usft	**Longitude:**	104° 5' 57.893 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,085.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	7/19/2023	6.55	60.06	47,362.55806955

Design BLM Plan #1

Audit Notes:

Version:	1	**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	89.60

Plan Survey Tool Program **Date** 7/19/2023

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,218.0	BLM Plan #1 (Wellbore #1)	MWD	
				OWSG MWD - Standard	

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,300.0	8.00	297.05	2,297.4	25.4	-49.7	1.00	1.00	0.00	297.05	
4,698.1	8.00	297.05	4,672.2	177.1	-346.9	0.00	0.00	0.00	0.00	
5,231.4	0.00	0.00	5,203.8	194.0	-380.0	1.50	-1.50	0.00	180.00	
9,272.2	0.00	0.00	9,244.5	194.0	-380.0	0.00	0.00	0.00	0.00	VP - Barry Miller Fed
10,125.2	85.30	89.80	9,815.5	195.8	146.0	10.00	10.00	0.00	89.80	
10,225.5	87.30	89.63	9,822.0	196.3	246.1	2.00	1.99	-0.17	-4.75	
17,218.0	87.30	89.63	10,151.5	241.0	7,230.7	0.00	0.00	0.00	0.00	BHL - Barry Miller Fec

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3113.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3113.5usft
Site:	Barry Miller	**North Reference:**	Grid
Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
140.0	0.00	0.00	140.0	0.0	0.0	0.0	0.00	0.00	0.00
Z (Rustler)									
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
429.0	0.00	0.00	429.0	0.0	0.0	0.0	0.00	0.00	0.00
Z (Salado)									
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
744.0	0.00	0.00	744.0	0.0	0.0	0.0	0.00	0.00	0.00
Z (Castile (T))									
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 1.00									
1,600.0	1.00	297.05	1,600.0	0.4	-0.8	-0.8	1.00	1.00	0.00
1,700.0	2.00	297.05	1,700.0	1.6	-3.1	-3.1	1.00	1.00	0.00
1,800.0	3.00	297.05	1,799.9	3.6	-7.0	-7.0	1.00	1.00	0.00
1,900.0	4.00	297.05	1,899.7	6.3	-12.4	-12.4	1.00	1.00	0.00
2,000.0	5.00	297.05	1,999.4	9.9	-19.4	-19.3	1.00	1.00	0.00
2,100.0	6.00	297.05	2,098.9	14.3	-28.0	-27.9	1.00	1.00	0.00
2,200.0	7.00	297.05	2,198.3	19.4	-38.0	-37.9	1.00	1.00	0.00
2,300.0	8.00	297.05	2,297.4	25.4	-49.7	-49.5	1.00	1.00	0.00
Start 2398.1 hold at 2300.0 MD									
2,400.0	8.00	297.05	2,396.4	31.7	-62.1	-61.8	0.00	0.00	0.00
2,497.1	8.00	297.05	2,492.6	37.8	-74.1	-73.8	0.00	0.00	0.00
Z (G30:CS14-CSB)									
2,500.0	8.00	297.05	2,495.5	38.0	-74.5	-74.2	0.00	0.00	0.00
2,568.5	8.00	297.05	2,563.3	42.3	-82.9	-82.6	0.00	0.00	0.00
Z (G26: Bell Cyn.)									
2,600.0	8.00	297.05	2,594.5	44.3	-86.8	-86.5	0.00	0.00	0.00
2,700.0	8.00	297.05	2,693.5	50.7	-99.2	-98.9	0.00	0.00	0.00
2,800.0	8.00	297.05	2,792.5	57.0	-111.6	-111.2	0.00	0.00	0.00
2,900.0	8.00	297.05	2,891.6	63.3	-124.0	-123.6	0.00	0.00	0.00
3,000.0	8.00	297.05	2,990.6	69.7	-136.4	-135.9	0.00	0.00	0.00
3,100.0	8.00	297.05	3,089.6	76.0	-148.8	-148.3	0.00	0.00	0.00
3,200.0	8.00	297.05	3,188.6	82.3	-161.2	-160.6	0.00	0.00	0.00
3,300.0	8.00	297.05	3,287.7	88.6	-173.6	-173.0	0.00	0.00	0.00
3,400.0	8.00	297.05	3,386.7	95.0	-186.0	-185.3	0.00	0.00	0.00
3,408.2	8.00	297.05	3,394.9	95.5	-187.0	-186.4	0.00	0.00	0.00
Z (G13: Cherry Cyn.)									
3,500.0	8.00	297.05	3,485.7	101.3	-198.4	-197.7	0.00	0.00	0.00
3,600.0	8.00	297.05	3,584.8	107.6	-210.8	-210.0	0.00	0.00	0.00
3,700.0	8.00	297.05	3,683.8	113.9	-223.2	-222.4	0.00	0.00	0.00
3,800.0	8.00	297.05	3,782.8	120.3	-235.6	-234.7	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3113.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3113.5usft
Site:	Barry Miller	**North Reference:**	Grid
Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,900.0	8.00	297.05	3,881.8	126.6	-248.0	-247.1	0.00	0.00	0.00
4,000.0	8.00	297.05	3,980.9	132.9	-260.4	-259.4	0.00	0.00	0.00
4,100.0	8.00	297.05	4,079.9	139.3	-272.8	-271.8	0.00	0.00	0.00
4,200.0	8.00	297.05	4,178.9	145.6	-285.2	-284.2	0.00	0.00	0.00
4,300.0	8.00	297.05	4,277.9	151.9	-297.6	-296.5	0.00	0.00	0.00
4,400.0	8.00	297.05	4,377.0	158.2	-310.0	-308.9	0.00	0.00	0.00
4,500.0	8.00	297.05	4,476.0	164.6	-322.4	-321.2	0.00	0.00	0.00
4,600.0	8.00	297.05	4,575.0	170.9	-334.8	-333.6	0.00	0.00	0.00
4,604.0	8.00	297.05	4,579.0	171.2	-335.3	-334.0	0.00	0.00	0.00
Z (G7: Brushy Cyn.)									
4,698.1	8.00	297.05	4,672.2	177.1	-346.9	-345.7	0.00	0.00	0.00
Start Drop -1.50									
4,700.0	7.97	297.05	4,674.0	177.2	-347.2	-345.9	1.50	-1.50	0.00
4,800.0	6.47	297.05	4,773.3	182.9	-358.3	-357.1	1.50	-1.50	0.00
4,900.0	4.97	297.05	4,872.7	187.5	-367.2	-365.9	1.50	-1.50	0.00
5,000.0	3.47	297.05	4,972.5	190.8	-373.8	-372.4	1.50	-1.50	0.00
5,100.0	1.97	297.05	5,072.4	193.0	-378.0	-376.7	1.50	-1.50	0.00
5,200.0	0.47	297.05	5,172.3	194.0	-379.9	-378.5	1.50	-1.50	0.00
5,231.4	0.00	0.00	5,203.8	194.0	-380.0	-378.7	1.50	-1.50	0.00
Start 4040.7 hold at 5231.4 MD									
5,300.0	0.00	0.00	5,272.3	194.0	-380.0	-378.7	0.00	0.00	0.00
5,400.0	0.00	0.00	5,372.3	194.0	-380.0	-378.7	0.00	0.00	0.00
5,500.0	0.00	0.00	5,472.3	194.0	-380.0	-378.7	0.00	0.00	0.00
5,600.0	0.00	0.00	5,572.3	194.0	-380.0	-378.7	0.00	0.00	0.00
5,700.0	0.00	0.00	5,672.3	194.0	-380.0	-378.7	0.00	0.00	0.00
5,800.0	0.00	0.00	5,772.3	194.0	-380.0	-378.7	0.00	0.00	0.00
5,900.0	0.00	0.00	5,872.3	194.0	-380.0	-378.7	0.00	0.00	0.00
5,983.2	0.00	0.00	5,955.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (G4: BSGL (CS9))									
6,000.0	0.00	0.00	5,972.3	194.0	-380.0	-378.7	0.00	0.00	0.00
6,100.0	0.00	0.00	6,072.3	194.0	-380.0	-378.7	0.00	0.00	0.00
6,200.0	0.00	0.00	6,172.3	194.0	-380.0	-378.7	0.00	0.00	0.00
6,300.0	0.00	0.00	6,272.3	194.0	-380.0	-378.7	0.00	0.00	0.00
6,400.0	0.00	0.00	6,372.3	194.0	-380.0	-378.7	0.00	0.00	0.00
6,446.2	0.00	0.00	6,418.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (L8.2: U. Avalon Shale)									
6,500.0	0.00	0.00	6,472.3	194.0	-380.0	-378.7	0.00	0.00	0.00
6,564.2	0.00	0.00	6,536.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (L6.3: Avalon Carb)									
6,600.0	0.00	0.00	6,572.3	194.0	-380.0	-378.7	0.00	0.00	0.00
6,608.2	0.00	0.00	6,580.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (L6.2: L. Avalon Shale)									
6,698.2	0.00	0.00	6,670.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (L5.3: FBSC)									
6,700.0	0.00	0.00	6,672.3	194.0	-380.0	-378.7	0.00	0.00	0.00
6,800.0	0.00	0.00	6,772.3	194.0	-380.0	-378.7	0.00	0.00	0.00
6,900.0	0.00	0.00	6,872.3	194.0	-380.0	-378.7	0.00	0.00	0.00
7,000.0	0.00	0.00	6,972.3	194.0	-380.0	-378.7	0.00	0.00	0.00
7,004.2	0.00	0.00	6,976.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (L5.1: FBSG)									
7,064.2	0.00	0.00	7,036.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (M. FBSG)									
7,100.0	0.00	0.00	7,072.3	194.0	-380.0	-378.7	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3113.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3113.5usft
Site:	Barry Miller	**North Reference:**	Grid
Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

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)
7,200.0	0.00	0.00	7,172.3	194.0	-380.0	-378.7	0.00	0.00	0.00
7,213.2	0.00	0.00	7,185.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (L. FBSG)									
7,272.2	0.00	0.00	7,244.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (L4.3: SBSC)									
7,300.0	0.00	0.00	7,272.3	194.0	-380.0	-378.7	0.00	0.00	0.00
7,400.0	0.00	0.00	7,372.3	194.0	-380.0	-378.7	0.00	0.00	0.00
7,500.0	0.00	0.00	7,472.3	194.0	-380.0	-378.7	0.00	0.00	0.00
7,600.0	0.00	0.00	7,572.3	194.0	-380.0	-378.7	0.00	0.00	0.00
7,697.2	0.00	0.00	7,669.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (L4.1: SBSG)									
7,700.0	0.00	0.00	7,672.3	194.0	-380.0	-378.7	0.00	0.00	0.00
7,800.0	0.00	0.00	7,772.3	194.0	-380.0	-378.7	0.00	0.00	0.00
7,868.2	0.00	0.00	7,840.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (L4.1: SBSG B Carb)									
7,900.0	0.00	0.00	7,872.3	194.0	-380.0	-378.7	0.00	0.00	0.00
7,953.2	0.00	0.00	7,925.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (SBSG B Target)									
8,000.0	0.00	0.00	7,972.3	194.0	-380.0	-378.7	0.00	0.00	0.00
8,009.2	0.00	0.00	7,981.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (L4.1: SBSG C)									
8,031.2	0.00	0.00	8,003.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (L3.3: TBSC)									
8,100.0	0.00	0.00	8,072.3	194.0	-380.0	-378.7	0.00	0.00	0.00
8,200.0	0.00	0.00	8,172.3	194.0	-380.0	-378.7	0.00	0.00	0.00
8,300.0	0.00	0.00	8,272.3	194.0	-380.0	-378.7	0.00	0.00	0.00
8,400.0	0.00	0.00	8,372.3	194.0	-380.0	-378.7	0.00	0.00	0.00
8,439.2	0.00	0.00	8,411.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (L3.3.2: Break Sand (T))									
8,500.0	0.00	0.00	8,472.3	194.0	-380.0	-378.7	0.00	0.00	0.00
8,600.0	0.00	0.00	8,572.3	194.0	-380.0	-378.7	0.00	0.00	0.00
8,700.0	0.00	0.00	8,672.3	194.0	-380.0	-378.7	0.00	0.00	0.00
8,800.0	0.00	0.00	8,772.3	194.0	-380.0	-378.7	0.00	0.00	0.00
8,900.0	0.00	0.00	8,872.3	194.0	-380.0	-378.7	0.00	0.00	0.00
8,969.2	0.00	0.00	8,941.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (L3.1: TBSG)									
9,000.0	0.00	0.00	8,972.3	194.0	-380.0	-378.7	0.00	0.00	0.00
9,100.0	0.00	0.00	9,072.3	194.0	-380.0	-378.7	0.00	0.00	0.00
9,200.0	0.00	0.00	9,172.3	194.0	-380.0	-378.7	0.00	0.00	0.00
9,259.2	0.00	0.00	9,231.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Z (L. TBSG)									
9,272.2	0.00	0.00	9,244.5	194.0	-380.0	-378.7	0.00	0.00	0.00
Start Build 10.00 - VP - Barry Miller Fed Com #221H									
9,289.2	1.70	89.80	9,261.5	194.0	-379.8	-378.4	10.00	10.00	0.00
Z (L2: WFMP A)									
9,300.0	2.78	89.80	9,272.3	194.0	-379.3	-378.0	10.00	10.00	0.00
9,350.0	7.78	89.80	9,322.1	194.0	-374.7	-373.4	10.00	10.00	0.00
9,400.0	12.78	89.80	9,371.3	194.1	-365.8	-364.5	10.00	10.00	0.00
9,430.9	15.87	89.80	9,401.2	194.1	-358.2	-356.8	10.00	10.00	0.00
Z (WFMP A Fat)									
9,450.0	17.78	89.80	9,419.5	194.1	-352.6	-351.3	10.00	10.00	0.00
9,500.0	22.78	89.80	9,466.4	194.2	-335.3	-334.0	10.00	10.00	0.00

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3113.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3113.5usft
Site:	Barry Miller	**North Reference:**	Grid
Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,550.0	27.78	89.80	9,511.6	194.2	-314.0	-312.6	10.00	10.00	0.00
9,600.0	32.78	89.80	9,554.7	194.3	-288.8	-287.4	10.00	10.00	0.00
9,650.0	37.78	89.80	9,595.5	194.4	-259.9	-258.5	10.00	10.00	0.00
9,691.4	41.93	89.80	9,627.3	194.5	-233.3	-232.0	10.00	10.00	0.00
Z (WFMP B)									
9,700.0	42.78	89.80	9,633.7	194.5	-227.6	-226.2	10.00	10.00	0.00
9,750.0	47.78	89.80	9,668.8	194.7	-192.1	-190.7	10.00	10.00	0.00
9,800.0	52.78	89.80	9,700.8	194.8	-153.6	-152.2	10.00	10.00	0.00
9,810.9	53.87	89.80	9,707.3	194.8	-144.9	-143.5	10.00	10.00	0.00
Z (WFMP B.1)									
9,850.0	57.78	89.80	9,729.2	194.9	-112.5	-111.2	10.00	10.00	0.00
9,900.0	62.78	89.80	9,754.0	195.1	-69.1	-67.7	10.00	10.00	0.00
9,901.4	62.93	89.80	9,754.7	195.1	-67.8	-66.5	10.00	10.00	0.00
FTP - Barry Miller Fed Com #221H									
9,901.7	62.96	89.80	9,754.8	195.1	-67.6	-66.2	10.00	10.00	0.00
Z (WFMP B.2)									
9,950.0	67.78	89.80	9,774.9	195.3	-23.7	-22.3	10.00	10.00	0.00
10,000.0	72.78	89.80	9,791.8	195.4	23.3	24.7	10.00	10.00	0.00
10,050.0	77.78	89.80	9,804.5	195.6	71.7	73.1	10.00	10.00	0.00
10,100.0	82.78	89.80	9,812.9	195.8	121.0	122.3	10.00	10.00	0.00
10,125.2	85.30	89.80	9,815.5	195.8	146.0	147.3	10.00	10.00	0.00
Start DLS 2.00 TFO -4.75									
10,200.0	86.79	89.68	9,820.7	196.2	220.6	222.0	2.00	1.99	-0.17
10,225.5	87.30	89.63	9,822.0	196.3	246.1	247.4	2.00	1.99	-0.17
Start 6992.5 hold at 10225.5 MD									
10,300.0	87.30	89.63	9,825.5	196.8	320.5	321.9	0.00	0.00	0.00
10,400.0	87.30	89.63	9,830.2	197.5	420.4	421.8	0.00	0.00	0.00
10,500.0	87.30	89.63	9,834.9	198.1	520.3	521.7	0.00	0.00	0.00
10,600.0	87.30	89.63	9,839.7	198.7	620.2	621.6	0.00	0.00	0.00
10,700.0	87.30	89.63	9,844.4	199.4	720.1	721.4	0.00	0.00	0.00
10,800.0	87.30	89.63	9,849.1	200.0	820.0	821.3	0.00	0.00	0.00
10,900.0	87.30	89.63	9,853.8	200.6	919.8	921.2	0.00	0.00	0.00
11,000.0	87.30	89.63	9,858.5	201.3	1,019.7	1,021.1	0.00	0.00	0.00
11,100.0	87.30	89.63	9,863.2	201.9	1,119.6	1,121.0	0.00	0.00	0.00
11,200.0	87.30	89.63	9,867.9	202.6	1,219.5	1,220.9	0.00	0.00	0.00
11,300.0	87.30	89.63	9,872.6	203.2	1,319.4	1,320.8	0.00	0.00	0.00
11,400.0	87.30	89.63	9,877.3	203.8	1,419.3	1,420.7	0.00	0.00	0.00
11,500.0	87.30	89.63	9,882.1	204.5	1,519.2	1,520.6	0.00	0.00	0.00
11,600.0	87.30	89.63	9,886.8	205.1	1,619.0	1,620.4	0.00	0.00	0.00
11,700.0	87.30	89.63	9,891.5	205.8	1,718.9	1,720.3	0.00	0.00	0.00
11,800.0	87.30	89.63	9,896.2	206.4	1,818.8	1,820.2	0.00	0.00	0.00
11,900.0	87.30	89.63	9,900.9	207.0	1,918.7	1,920.1	0.00	0.00	0.00
12,000.0	87.30	89.63	9,905.6	207.7	2,018.6	2,020.0	0.00	0.00	0.00
12,100.0	87.30	89.63	9,910.3	208.3	2,118.5	2,119.9	0.00	0.00	0.00
12,200.0	87.30	89.63	9,915.0	208.9	2,218.4	2,219.8	0.00	0.00	0.00
12,300.0	87.30	89.63	9,919.8	209.6	2,318.3	2,319.7	0.00	0.00	0.00
12,400.0	87.30	89.63	9,924.5	210.2	2,418.1	2,419.6	0.00	0.00	0.00
12,500.0	87.30	89.63	9,929.2	210.9	2,518.0	2,519.4	0.00	0.00	0.00
12,600.0	87.30	89.63	9,933.9	211.5	2,617.9	2,619.3	0.00	0.00	0.00
12,700.0	87.30	89.63	9,938.6	212.1	2,717.8	2,719.2	0.00	0.00	0.00
12,800.0	87.30	89.63	9,943.3	212.8	2,817.7	2,819.1	0.00	0.00	0.00
12,900.0	87.30	89.63	9,948.0	213.4	2,917.6	2,919.0	0.00	0.00	0.00
13,000.0	87.30	89.63	9,952.7	214.1	3,017.5	3,018.9	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3113.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3113.5usft
Site:	Barry Miller	**North Reference:**	Grid
Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

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)
13,100.0	87.30	89.63	9,957.5	214.7	3,117.4	3,118.8	0.00	0.00	0.00
13,132.5	87.30	89.63	9,959.0	214.9	3,149.8	3,151.2	0.00	0.00	0.00
Z (Blair Shale)									
13,200.0	87.30	89.63	9,962.2	215.3	3,217.2	3,218.7	0.00	0.00	0.00
13,273.7	87.30	89.63	9,965.6	215.8	3,290.9	3,292.3	0.00	0.00	0.00
Z (WFMP B.4)									
13,300.0	87.30	89.63	9,966.9	216.0	3,317.1	3,318.6	0.00	0.00	0.00
13,400.0	87.30	89.63	9,971.6	216.6	3,417.0	3,418.4	0.00	0.00	0.00
13,500.0	87.30	89.63	9,976.3	217.3	3,516.9	3,518.3	0.00	0.00	0.00
13,600.0	87.30	89.63	9,981.0	217.9	3,616.8	3,618.2	0.00	0.00	0.00
13,700.0	87.30	89.63	9,985.7	218.5	3,716.7	3,718.1	0.00	0.00	0.00
13,800.0	87.30	89.63	9,990.4	219.2	3,816.6	3,818.0	0.00	0.00	0.00
13,900.0	87.30	89.63	9,995.2	219.8	3,916.4	3,917.9	0.00	0.00	0.00
14,000.0	87.30	89.63	9,999.9	220.4	4,016.3	4,017.8	0.00	0.00	0.00
14,100.0	87.30	89.63	10,004.6	221.1	4,116.2	4,117.7	0.00	0.00	0.00
14,200.0	87.30	89.63	10,009.3	221.7	4,216.1	4,217.6	0.00	0.00	0.00
14,300.0	87.30	89.63	10,014.0	222.4	4,316.0	4,317.4	0.00	0.00	0.00
14,400.0	87.30	89.63	10,018.7	223.0	4,415.9	4,417.3	0.00	0.00	0.00
14,500.0	87.30	89.63	10,023.4	223.6	4,515.8	4,517.2	0.00	0.00	0.00
14,600.0	87.30	89.63	10,028.1	224.3	4,615.7	4,617.1	0.00	0.00	0.00
14,686.2	87.30	89.63	10,032.2	224.8	4,701.8	4,703.2	0.00	0.00	0.00
Z (WFMP B.3)									
14,700.0	87.30	89.63	10,032.8	224.9	4,715.5	4,717.0	0.00	0.00	0.00
14,800.0	87.30	89.63	10,037.6	225.6	4,815.4	4,816.9	0.00	0.00	0.00
14,900.0	87.30	89.63	10,042.3	226.2	4,915.3	4,916.8	0.00	0.00	0.00
15,000.0	87.30	89.63	10,047.0	226.8	5,015.2	5,016.7	0.00	0.00	0.00
15,100.0	87.30	89.63	10,051.7	227.5	5,115.1	5,116.6	0.00	0.00	0.00
15,200.0	87.30	89.63	10,056.4	228.1	5,215.0	5,216.4	0.00	0.00	0.00
15,300.0	87.30	89.63	10,061.1	228.7	5,314.9	5,316.3	0.00	0.00	0.00
15,400.0	87.30	89.63	10,065.8	229.4	5,414.7	5,416.2	0.00	0.00	0.00
15,500.0	87.30	89.63	10,070.5	230.0	5,514.6	5,516.1	0.00	0.00	0.00
15,600.0	87.30	89.63	10,075.3	230.7	5,614.5	5,616.0	0.00	0.00	0.00
15,700.0	87.30	89.63	10,080.0	231.3	5,714.4	5,715.9	0.00	0.00	0.00
15,800.0	87.30	89.63	10,084.7	231.9	5,814.3	5,815.8	0.00	0.00	0.00
15,900.0	87.30	89.63	10,089.4	232.6	5,914.2	5,915.7	0.00	0.00	0.00
16,000.0	87.30	89.63	10,094.1	233.2	6,014.1	6,015.6	0.00	0.00	0.00
16,100.0	87.30	89.63	10,098.8	233.9	6,114.0	6,115.4	0.00	0.00	0.00
16,200.0	87.30	89.63	10,103.5	234.5	6,213.8	6,215.3	0.00	0.00	0.00
16,300.0	87.30	89.63	10,108.2	235.1	6,313.7	6,315.2	0.00	0.00	0.00
16,400.0	87.30	89.63	10,113.0	235.8	6,413.6	6,415.1	0.00	0.00	0.00
16,500.0	87.30	89.63	10,117.7	236.4	6,513.5	6,515.0	0.00	0.00	0.00
16,600.0	87.30	89.63	10,122.4	237.0	6,613.4	6,614.9	0.00	0.00	0.00
16,700.0	87.30	89.63	10,127.1	237.7	6,713.3	6,714.8	0.00	0.00	0.00
16,800.0	87.30	89.63	10,131.8	238.3	6,813.2	6,814.7	0.00	0.00	0.00
16,900.0	87.30	89.63	10,136.5	239.0	6,913.1	6,914.6	0.00	0.00	0.00
17,000.0	87.30	89.63	10,141.2	239.6	7,012.9	7,014.4	0.00	0.00	0.00
17,100.0	87.30	89.63	10,145.9	240.2	7,112.8	7,114.3	0.00	0.00	0.00
17,200.0	87.30	89.63	10,150.7	240.9	7,212.7	7,214.2	0.00	0.00	0.00
17,218.0	87.30	89.63	10,151.5	241.0	7,230.7	7,232.2	0.00	0.00	0.00
TD at 17218.0 - BHL - Barry Miller Fed Com #221H									

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3113.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3113.5usft
Site:	Barry Miller	**North Reference:**	Grid
Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

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
VP - Barry Miller Fed Co - plan hits target center - Point	0.00	0.00	9,244.5	194.0	-380.0	508,635.00	571,819.00	32° 23' 53.294 N	104° 6' 2.320 W
FTP - Barry Miller Fed C - plan misses target center by 70.6usft at 9901.4usft MD (9754.7 TVD, 195.1 N, -67.8 E) - Point	0.00	0.00	9,817.5	194.0	-100.0	508,635.00	572,099.00	32° 23' 53.288 N	104° 5' 59.054 W
BHL - Barry Miller Fed C - plan hits target center - Point	0.00	0.00	10,151.5	241.0	7,230.7	508,682.00	579,430.00	32° 23' 53.586 N	104° 4' 33.546 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
140.0	140.0	Z (Rustler)		1.89	89.60
429.0	429.0	Z (Salado)		1.89	89.60
744.0	744.0	Z (Castile (T))		1.89	89.60
2,497.1	2,492.6	Z (G30:CS14-CSB)		1.89	89.60
2,568.5	2,563.3	Z (G26: Bell Cyn.)		1.89	89.60
3,408.2	3,394.9	Z (G13: Cherry Cyn.)		1.89	89.60
4,604.0	4,579.0	Z (G7: Brushy Cyn.)		1.89	89.60
5,983.2	5,955.5	Z (G4: BSGL (CS9))		1.89	89.60
6,446.2	6,418.5	Z (L8.2: U. Avalon Shale)		1.89	89.60
6,564.2	6,536.5	Z (L6.3: Avalon Carb)		1.89	89.60
6,608.2	6,580.5	Z (L6.2: L. Avalon Shale)		1.89	89.60
6,698.2	6,670.5	Z (L5.3: FBSC)		1.89	89.60
7,004.2	6,976.5	Z (L5.1: FBSG)		1.89	89.60
7,064.2	7,036.5	Z (M. FBSG)		1.89	89.60
7,213.2	7,185.5	Z (L. FBSG)		1.89	89.60
7,272.2	7,244.5	Z (L4.3: SBSC)		1.89	89.60
7,697.2	7,669.5	Z (L4.1: SBSG)		1.89	89.60
7,868.2	7,840.5	Z (L4.1: SBSG B Carb)		1.89	89.60
7,953.2	7,925.5	Z (SBSG B Target)		1.89	89.60
8,009.2	7,981.5	Z (L4.1: SBSG C)		1.89	89.60
8,031.2	8,003.5	Z (L3.3: TBSC)		1.89	89.60
8,439.2	8,411.5	Z (L3.3.2: Break Sand (T))		1.89	89.60
8,969.2	8,941.5	Z (L3.1: TBSG)		1.89	89.60
9,259.2	9,231.5	Z (L. TBSG)		1.89	89.60
9,289.2	9,261.5	Z (L2: WFMP A)		1.89	89.60
9,430.9	9,401.2	Z (WFMP A Fat)		1.89	89.60
9,691.4	9,627.3	Z (WFMP B)		1.89	89.60
9,810.9	9,707.3	Z (WFMP B.1)		1.89	89.60
9,901.7	9,754.8	Z (WFMP B.2)		1.89	89.60
13,132.5	9,959.0	Z (Blair Shale)		1.89	89.60
13,273.7	9,965.6	Z (WFMP B.4)		1.89	89.60
14,686.2	10,032.2	Z (WFMP B.3)		1.89	89.60

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Barry Miller State Com #221H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3113.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3113.5usft
Site:	Barry Miller	**North Reference:**	Grid
Well:	Barry Miller State Com #221H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,500.0	1,500.0	0.0	0.0	Start Build 1.00
2,300.0	2,297.4	25.4	-49.7	Start 2398.1 hold at 2300.0 MD
4,698.1	4,672.2	177.1	-346.9	Start Drop -1.50
5,231.4	5,203.8	194.0	-380.0	Start 4040.7 hold at 5231.4 MD
9,272.2	9,244.5	194.0	-380.0	Start Build 10.00
10,125.2	9,815.5	195.8	146.0	Start DLS 2.00 TFO -4.75
10,225.5	9,822.0	196.3	246.1	Start 6992.5 hold at 10225.5 MD
17,218.0	10,151.5	241.0	7,230.7	TD at 17218.0

Addendum to Natural Gas Management Plan for Matador's

Michael Ryan TB

VI. Separation Equipment

Flow from the wells will be routed via a flowline to a 48"x15' three phase separator dedicated to the well. The first stage separators are sized with input from BRE ProMax and API 12J. Anticipated production rates can be seen in the below table. Liquid retention times at expected maximum rates will be >3 minutes. Gas will be routed from the first stage separator to sales. Hydrocarbon liquids are dumped from the first stage separator and commingled to one or more heater treaters. The flash gas from the heater treater(s) could either be sent to sales or routed to a compressor if the sales line pressure is higher than the MAWP of the heater treater (125 psi). From the heater treaters, hydrocarbon liquid will be routed to the tanks where vapor is compressed by a VRU if technically feasible to either sales or a compressor if the sales line pressure is higher than the VRU's maximum discharge pressure (~150 psi). Therefore, Matador has sized our separation equipment to optimize gas capture and our separation equipment is of sufficient size to handle the expected volumes of gas.

Well Name	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Barry Miller State Com 221H	400	4,500	2,500
Barry Miller State Com 222H	400	4,500	2,500
Michel Ryan Federal Com 223H	400	4,500	2,500

VII. Operation Practices

Although not a complete recitation of all our efforts to comply with subsection A through F of 19.15.27.8 NMAC, a summary is as follows. During initial flowback we will route the flowback fluids into completion or storage tanks and, to the extent possible, flare rather than vent any gas. We will commence operation of a separator as soon as technically feasible and have instructed our team that we want to connect the gas to sales as soon as possible but not later than 30 days after initial flowback.

Regarding production operations, we have designed our production facilities to be compliant with the requirements of Part E of 19.15.27.8 NMAC. We will instruct our team to perform the AVOs on the frequency required under the rules. While the well is producing, we will take steps to minimize flaring during maintenance, as set forth below, and we have a process in place for the measuring of any flared gas and the reporting of any reportable flaring events.

VII. Best Management Practices

Steps are taken to minimize venting during active or planned maintenance when technically feasible including:

- Isolating the affected component and reducing pressure through process piping
- Blowing down the equipment being maintained to a control device

- Performing preventative maintenance and minimizing the duration of maintenance activities
- Shutting in sources of supply as possible
- Other steps that are available depending on the maintenance being performed

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: Matador Production Company OGRID: 228937 Date: 07/26/2023

II. Type: ☒Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Barry Miller State Com 221H	TBD	D 16-22S-28E	855' FNL 430' FWL	400	4,500	2,500
Barry Miller State Com 222H	TBD	D 21-22S-28E	855' FNL 460' FWL	400	4,500	2,500
Michel Ryan Federal Com 223H	TBD	D-16-22S-28E	549' FSL 320' FWL	400	4,500	2,500

IV. Central Delivery Point Name: Michael Ryan TB [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Barry Miller State Com 221H	TBD	05/07/2025	05/25/2025	07/07/2025	08/07/2025	08/08/2025
Barry Miller State Com 222H	TBD	04/18/2025	05/06/2025	07/07/2025	08/07/2025	08/08/2025
Michel Ryan Federal Com 223H	TBD	05/30/2025	05/30/2025	07/07/2025	08/07/2025	08/08/2025

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:
☒Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. ***If Operator checks this box, Operator will select one of the following:***

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- **(a)** power generation on lease;
- **(b)** power generation for grid;
- **(c)** compression on lease;
- **(d)** liquids removal on lease;
- **(e)** reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- **(h)** fuel cell production; and
- **(i)** other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: Omar Enriquez Digitally signed by Omar Enriquez DN: cn=Omar Enriquez, o, ou, email=oenriquez@matadorresources.com, c=US Date: 2025.07.26 15:44:16 -05'00'
Printed Name: Omar Enriquez
Title: Sr. Production Engineer
E-mail Address: oenriquez@matadorresources.com
Date: 07/26/2025
Phone: (972) 587-4638

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval: