<u>District I</u> 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 346802

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

Operator Name and Address	2. OGRID Number								
MATADOR PRODUCTION COMPAN	228937								
One Lincoln Centre	One Lincoln Centre								
Dallas, TX 75240		30-015-54057							
4. Property Code	5. Property Name	6. Well No.							
333122	BARRY MILLER STATE COM	222H							

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	D	855	N	460	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
F	15	22S	28E	F	1980	N	2324	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	17411	Wolfcamp		4/18/2025	
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

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	9349	800	0			
Prod	6.75	5.5	20	17411	955	9149			

Casing/Cement Program: Additional Comments

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

22. Floposed Blowout Flevention Flogram									
Туре	Working Pressure	Manufacturer							
Annular	5000	3000	Cameron						
Double Ram	10000	5000	Cameron						
Pine	10000	5000	Cameron						

knowledge and b	elief.	is true and complete to the best of my) NMAC ⊠ and/or 19.15.14.9 (B) NMAC		OIL CONSERVA	TION DIVISION
Printed Name:	Electronically filed by Brett A Je	nnings	Approved By:	Ward Rikala	
Title:	Regulatory Analyst		Title:		
Email Address:	brett.jennings@matadorresoui	rces.com	Approved Date:	8/15/2023	Expiration Date: 8/15/2025
Date:	8/7/2023	Phone: 972-629-2160	Conditions of Approval Attached		

District I
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District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

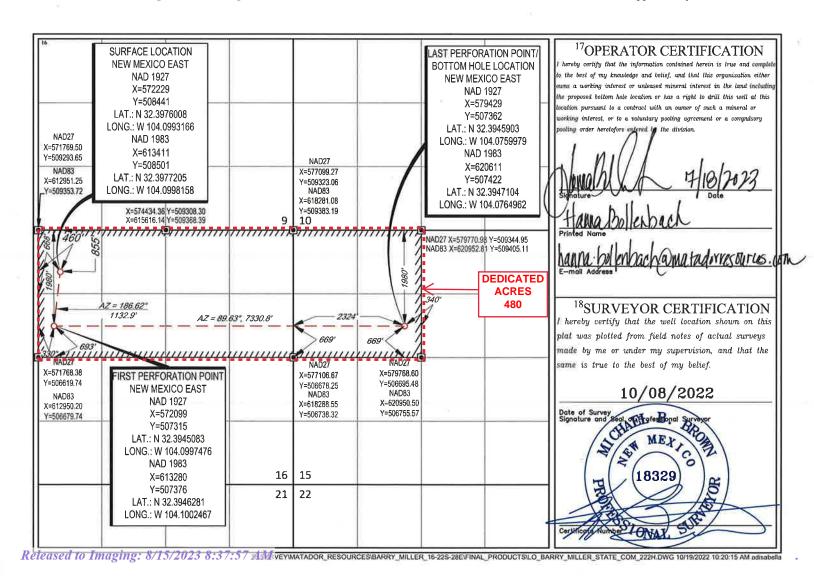
FORM C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

___ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number				² Pool Code		³ Pool Name				*
30-	30-015-54057				0	O Purple Sage; Wolfcamp (Gas)				
⁴ Property C	ode				⁵ Property	Name	7 7		61	Well Number
333122				BAR	RY MILLER	R STATE COM			222H	
7OGRID N	lo.				⁸ Operator	Name				⁹ Elevation
72893	37			MATADO	OR PRODUC	CTION COMPA	NY			3085'
	¹⁰ Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Ea	st/West line	County
D	16	22-S	28-E	-	855'	NORTH	460'	- WE	ST	EDDY
			11	Bottom He	ole Location If	Different From Su	rface			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from th	e North/South line	Feet from the	E	ist/West line	County
F	15	22-S	28-E	 X	1980'	NORTH	2324'	WE	ST	EDDY
12 Dedicated Acres	13 Joint or 1	Infill 14Co	nsolidation Co	de ¹⁵ Ore	der No.					
480			C							1

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.



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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 346802

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
MATADOR PRODUCTION COMPANY [228937]	30-015-54057
One Lincoln Centre	Well:
Dallas, TX 75240	BARRY MILLER STATE COM #222H

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 #222H

Wellbore #1 BLM Plan #1

Anticollision Report

19 July, 2023

TVD Reference:

MD Reference:

Company: Matador Production Company

Project: Rustler Breaks Reference Site: Barry Miller Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Reference Wellbore Wellbore #1 Reference Design: BLM Plan #1 Local Co-ordinate Reference:

Well Barry Miller State Com #222H KB @ 3113.5usft KB @ 3113.5usft

North Reference: Grid

Minimum Curvature Survey Calculation Method:

Output errors are at 2.00 sigma

Database: EDM 5000.14 Server Offset Datum

Offset TVD Reference:

Reference BLM Plan #1

Filter type: NO GLOBAL FILTER: Using user defined selection & filtering criteria

Interpolation Method: Stations Error Model: **I**SCWSA

Depth Range: Unlimited Scan Method: Closest Approach 3D Maximum center-center distance of 10,000.0 usft Results Limited by: **Error Surface:** Pedal Curve Warning Levels Evaluated at: 2.00 Sigma Casing Method: Not applied

Date 7/19/2023 Survey Tool Program

> From То

(usft)

Tool Name (usft) Survey (Wellbore) Description

MWD OWSG MWD - Standard 0.0 17,411.2 BLM Plan #1 (Wellbore #1)

	Reference	Offset	Dista	nce		
Site Name Offset Well - Wellbore - Design	Measured Depth (usft)	Measured Depth (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning
Barry Miller						
Barry Miller State Com #121H - Wellbore #1 - Actual	1,224.5	1,229.3	82.4	74.2	10.001	CC, ES, SF
Barry Miller State Com #121H - Wellbore #1 - Altitude Pl	2,273.1	2,265.2	19.5	3.8	1.243	Level 2, CC, ES, SF
Barry Miller State Com #122H - Wellbore #1 - Actual	1,067.1	1,066.6	88.0	80.9	12.425	CC, ES
Barry Miller State Com #122H - Wellbore #1 - Actual	7,603.5	7,608.7	157.2	100.3	2.762	SF
Barry Miller State Com #122H - Wellbore #1 - Altitude Pl	7,724.4	7,729.8	87.6	28.3	1.477	Level 3, CC, ES, SF
Barry Miller State Com #135H - Wellbore #1 - State Plan	1,223.6	1,222.7	41.8	33.5	5.058	CC
Barry Miller State Com #135H - Wellbore #1 - State Plan	1,300.0	1,299.1	42.0	33.2	4.787	ES
Barry Miller State Com #135H - Wellbore #1 - State Plan	17,411.8	16,670.0	976.2	711.2	3.684	SF
Barry Miller State Com #136H - Wellbore #1 - State Plan	1,200.0	1,201.0	29.7	21.6	3.652	CC, ES
Barry Miller State Com #136H - Wellbore #1 - State Plan	5,000.0	5,069.4	63.3	23.4	1.589	SF
Barry Miller State Com #201H - Wellbore #1 - State Plan	1,663.8	1,665.3	17.6	6.2	1.545	CC, ES, SF
Barry Miller State Com #202H - Wellbore #1 - State Plan	3,081.4	3,072.4	23.7	1.6	1.074	Level 2, CC
Barry Miller State Com #202H - Wellbore #1 - State Plan	3,100.0	3,109.1	23.8	1.5	1.069	Level 2, ES, SF
Barry Miller State Com #221H - Wellbore #1 - BLM Plan	1,517.2	1,516.9	28.3	17.9	2.734	CC, ES
Barry Miller State Com #221H - Wellbore #1 - BLM Plan	1,600.0	1,599.2	29.3	18.4	2.686	SF

Offset De	sign	Barry M	iller - Bar	ry Miller Sta	te Com#	121H - Wel	lbore #1 - Actu	al					Offset Site Error:	0.0 usft
Survey Progr		MWD Offse	et	Semi Major	Axis				Dista	ınce			Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertica l Depth (usft)	Reference (usft)	Offset (usft)	Highside Too l face (°)	Offset Wellbor +N/-S (usft)	e Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-164.89	- 110.2	-29.8	114.2					
100.0	100.0	99.3	99.3	0.1	0.1	-164.85	-110.1	-29.8	114.1	113.8	0.28	414.188		
200.0	200.0	199.4	199.4	0.5	0.4	-164.73	-109.7	-30.0	113.7	112.9	0.86	132.480		
300.0	300.0	299.9	299.9	8.0	0.7	-164.48	-109.1	-30.3	113.2	111.6	1.58	71.780		
400.0	400.0	401.0	401.0	1.2	1.1	-163.71	-107.4	-31.4	112.0	109.7	2.30	48.665		
500.0	500.0	501.9	501.8	1.6	1.5	-162.55	-104.6	-32.9	109.7	106.7	3.02	36.285		
600.0	600.0	601.8	601.6	1.9	1.8	-161.11	-101.4	-34.7	107.2	103.5	3.74	28.661		
700.0	700.0	701.9	701.7	2.3	2.2	-159.57	-98.0	-36.5	104.7	100.2	4.46	23.471		
800.0	0.008	802.5	802.2	2.6	2.5	-157.86	-94.4	-38.4	102.0	96.8	5.18	19.678		
900.0	900.0	903.6	903.1	3.0	2.9	-155.80	-89.5	-40.2	98.2	92.3	5.91	16.625		
1,000.0	1,000.0	1,004.0	1,003.4	3.4	3.3	-153.51	-83.7	-41.7	93.7	87.0	6.63	14.132		
1,100.0	1,100.0	1,104.0	1,103.2	3.7	3.6	-151.26	-77.9	-42.7	88.9	81.5	7.35	12.096		
1,200.0	1,200.0	1,204.6	1,203.6	4.1	4.0	-148.88	-71.7	-43.3	83.9	75.8	8.07	10,391		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Grid

KB @ 3113.5usft

KB @ 3113.5usft

Well Barry Miller State Com #222H

Survey Calculation Method: Minimum Curvature Output errors are at 2.00 sigma

EDM 5000.14 Server Database:

Offset Des	sign	Barry M	iller - Bar	ry Miller Sta	te Com #	#121H - Welli	bore #1 - Actu	ıal					Offset Site Error:	0.0 usft
Survey Progr Refere		-MWD Offse		Semi Major	Avie				Dista	neo			Offset Well Error:	0.0 usft
Measured	Vertica l	Measured	Vertical	Reference	Offset	Highside	Offset Wellbor	e Centre	Between	Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
1,224.5	1,224.5	1,229.3	1,228.2	4.2	4.1	11.71	-70.1	-43.3	82.4	74.2	8.24	10.001	CC, ES, SF	
1,300.0	1,300.0	1,220.0	1,219.0	4.4	4.1	11.41	- 70.7	-43.3	114.6	107.2	7.44	15.402		
1,400.0	1,400.0	1,220.0	1,219.0	4.7	4.1	11.12	-70.7	-43.3	196.7	190.1	6.64	29.619		
1,500.0	1,499.9	1,220.0	1,219.0	5.1	4.1	10.63	-70.7	-43.3	289.8	283.5	6.33	45,791		
1,600.0	1,599.7	1,220.0	1,219.0	5.4	4.1	10.00	- 70.7	-43.3	386.0	379.8	6.16	62.676		
1,700.0	1,699.4	1,220.0	1,219.0	5.8	4.1	9.28	- 70.7	-43.3	483.3	477.3	6.04	80.035		
1,800.0	1,798.9	1,220.0	1,219.0	6.1	4.1	8.52	-70.7	-43.3	581.3	575.4	5.94	97.788		
1,900.0	1,898.3	1,220.0	1,219.0	6.5	4.1	7.77	-70.7	-43.3	679.6	673.7	5.86	115.888		
2,000.0	1,997.4	1,220.0	1,219.0	6.8	4.1	7.05	-70.7	-43.3	778.0	772.2	5.79	134.297		
2,100.0 2,200.0	2,096.3 2,194.9	1,220.0 1,220.0	1,219.0 1,219.0	7.2 7.6	4.1 4.1	6.38 5.76	-70.7 -70.7	-43.3 -43.3	876 <u>.</u> 5 975.1	870.8 969.4	5.73 5.67	152.973 171.870		
2,269.4 2,300.0	2,263.2 2,293.3	1,220.0	1,219.0 1,219.0	7.9 8.0	4.1 4.1	5.37 5.37	-70.7 -70.7	-43.3 -43.3	1,043.5 1,073.7	1,037.9	5.64 5.62	185.120 190.976		
2,400.0	2,293.3	1,220.0 1,220.0	1,219.0	8.4	4.1	5.37	-70.7 -70.7	-43.3 -43.3	1,073.7	1,068.1 1,166.9	5.58	209.993		
2,500.0	2,489.8	1,220.0	1,219.0	8.8	4.1	5.37	-70.7 -70.7	-43.3 -43.3	1,172.4	1,166.9	5.55	229.098		
2,600.0	2,588.1	1,220.0	1,219.0	9.2	4.1	5.37	-70.7	-43.3	1,370.5	1,365.0	5.52	248.233		
2,700.0	2,686.3	1,220.0	1,219.0	9.6	4.1	5.37	-70.7	-43.3	1,469.7	1,464.2	5.50	267.331		
2,800.0	2,784.6	1,220.0	1,219.0	10.1	4.1	5.37	-70.7	-43.3	1,569.0	1,563.6	5.48	286.324		
2,900.0	2,882.8	1,220.0	1,219.0	10.5	4.1	5.37	-70.7	-43.3	1,668.4	1,663.0	5.47	305,138		
3,000.0	2,981.1	1,220.0	1,219.0	10.9	4.1	5.37	-70.7	-43.3	1,767.9	1,762.5	5.46	323.698		
3,100.0	3,079.4	1,220.0	1,219.0	11.4	4.1	5.37	-70.7	-43.3	1,867.4	1,862.0	5.46	341.929		
3,200.0	3,177.6	1,220.0	1,219.0	11.8	4.1	5.37	- 70.7	-43.3	1,967.0	1,961.5	5.47	359.756		
3,300.0	3,275.9	1,220.0	1,219.0	12.2	4.1	5.37	-70.7	-43.3	2,066.6	2,061.2	5.48	377.108		
3,400.0	3,374.2	1,220.0	1,219.0	12.7	4.1	5.37	-70.7	-43.3	2,166.3	2,160.8	5.50	393.921		
3,500.0	3,472.4	1,220.0	1,219.0	13.1	4.1	5.37	-70.7	-43.3	2,266.0	2,260.4	5.52	410.135		
3,600.0	3,570.7	1,220.0	1,219.0	13.6	4.1	5,37	-70.7	-43.3	2,365.7	2,360.1	5,56	425.700		
3,700.0	3,669.0	1,220.0	1,219.0	14.0	4.1	5.37	-70.7	-43.3	2,465.4	2,459.8	5.60	440.573		
3,800.0	3,767.2	1,220.0	1,219.0	14.5	4.1	5.37	- 70.7	-43.3	2,565.2	2,559.5	5.64	454.722		
3,900.0	3,865.5	1,220.0	1,219.0	14.9	4.1	5.37	- 70.7	-43.3	2,664.9	2,659.2	5.69	468.124		
4,000.0	3,963.7	1,220.0	1,219.0	15.4	4.1	5.37	-70.7	-43.3	2,764.7	2,759.0	5.75	480.766		
4,100.0	4,062.0	1,220.0	1,219.0	15.8	4.1	5.37	-70.7	-43.3	2,864.5	2,858.7	5.81	492.643		
4,200.0	4,160.3	1,220.0	1,219.0	16.3	4.1	5.37	-70.7	-43.3	2,964.3	2,958.5	5.88	503.758		
4,300.0	4,258.5	1,220.0	1,219.0	16.7	4.1	5.37	-70.7	-43.3	3,064.2	3,058.2	5.96	514,121		
4,400.0	4,356.8	1,220.0	1,219.0	17.2	4.1	5.37	-70.7	-43.3	3,164.0	3,158.0	6.04	523,746		
4,500.0	4,455.1	1,220.0	1,219.0	17.6	4.1	5.37	- 70.7	-43.3	3,263.9	3,257.7	6.13	532.655		
4,600.0	4,553.3	1,220.0	1,219.0	18.1	4.1	5.37	-70.7	-43.3	3,363.7	3,357.5	6.22	540.871		
4,700.0	4,651.6	1,220.0	1,219.0	18.5	4.1	5.37	- 70.7	-43.3	3,463.6	3,457.3	6.32	548.419		
4,800.0	4,749.8	1,220.0	1,219.0	19.0	4.1	5.37	- 70.7	-43.3	3,563.5	3,557.0	6.42	555.330		
4,900.0	4,848.1	1,220.0	1,219.0	19.5	4.1	5.37	-70.7	-43.3	3,663.3	3,656.8	6.52	561.631		
5,000.0 5,100.0	4,946.4 5,044.6	1,220.0 1,220.0	1,219.0 1,219.0	19.9 20.4	4.1 4.1	5.37 5.37	-70.7 -70.7	-43.3 -43.3	3,763.2 3,863.1	3,756.6 3,856.4	6.63 6.75	567.353 572.525		
5,200.0	5,142.9	1,220.0	1,219.0	20.8	4.1	5.37	-70.7	-43.3	3,963.0	3,956.2	6.87	577.179		
5,300.0	5,241.2	1,220.0	1,219.0	21,3	4.1	5.37	-70.7	-43.3	4,062.9	4,055.9	6.99	581,341		
5,400.0	5,339.4	1,220.0	1,219.0	21.8	4.1	5.37	- 70.7	-43.3	4,162.8	4,155.7	7.12	585.041		
5,500.0	5,437.7	1,220.0	1,219.0	22.2	4.1	5.37	- 70.7	-43.3	4,262.7	4,255.5	7.25	588.307		
5,600.0	5,536.0	1,220.0	1,219.0	22.7	4.1	5.37	-70.7	-43.3	4,362.7	4,355.3	7.38	591.163		
5,700.0	5,634.2	1,220.0	1,219.0	23.1	4.1	5.37	-70.7	-43.3	4,462.6	4,455.1	7.52	593.634		
5,800.0	5,732.5	1,220.0	1,219.0	23.6	4.1	5.37	- 70.7	-43.3	4,562.5	4,554.8	7.66	595,746		
5,900.0	5,830.7	1,220.0	1,219.0	24.1	4.1	5.37	- 70.7	-43.3	4,662.4	4,654.6	7.80	597.519		
6,000.0	5,929.0	1,220.0	1,219.0	24.5	4.1	5.37	- 70.7	-43.3	4,762.4	4,754.4	7.95	598.975		
6,100.0	6,027.3	1,220.0	1,219.0	25.0	4.1	5.37	-70.7	-43.3	4,862.3	4,854.2	8.10	600.135		
6,200.0	6,125.5	1,220.0	1,219.0	25.4	4.1	5.37	- 70.7	-43.3	4,962.2	4,954.0	8.26	601.017		

Company: Matador Production Company

Project: Rustler Breaks
Reference Site: Barry Miller
Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft
Reference Wellbore Wellbore #1
Reference Design: BLM Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: Well Barry Miller State Com #222H KB @ 3113.5usft KB @ 3113.5usft

Grid

Survey Calculation Method: Minimum Curvature

Output errors are at 2.00 sigma

Database: EDM 5000.14 Server

Database:EDM 5000.14Offset TVD Reference:Offset Datum

Offset Des	sign	Barry M	iller - Bar	ry Miller Sta	te Com #	121H - Well	bore #1 - Actu	ıal					Offset Site Error:	0.0 usft
Survey Progr		-MWD		Comi Maior	Avia				Diete				Offset Well Error:	0.0 usft
Refere Measured	ence Vertical	Offse Measured	t Vertical	Semi Major Reference	Offset	Highside	Offset Wellbor	e Centre	Dista Between	ance Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	vvarining	
6,300.0	6,223.8	1,220.0	1,219.0	25.9	4.1	5.37	- 70.7	-43.3	5,062.2	5,053.8	8.41	601.638		
6,400.0	6,322.1	1,220.0	1,219.0	26.4	4.1	5.37	- 70.7	-43.3	5,162.1	5,153.5	8.57	602.017		
6,500.0	6,420.3	1,220.0	1,219.0	26.8	4.1	5.37	- 70.7	-43.3	5,262.0	5,253.3	8.74	602.168		
6,600.0	6,518.6	1,220.0	1,219.0	27.3	4.1	5.37	- 70.7	-43.3	5,362.0	5,353.1	8.91	602,106		
6,700.0	6,616.8	1,220.0	1,219.0	27.8	4.1	5.37	- 70.7	-43.3	5,461.9	5,452.9	9.08	601.845		
6,800.0	6,715.1	1,220.0	1,219.0	28.2	4.1	5.37	- 70.7	-43.3	5,561.9	5,552.6	9.25	601.399		
6,900.0	6,813.4	1,220.0	1,219.0	28.7	4.1	5.37	-70.7	- 43.3	5,661.8	5,652.4	9.42	600.779		
7,000.0	6,911.6	1,220.0	1,219.0	29.2	4.1	5.37	-70.7	-43.3	5,761.8	5,752.2	9.60	599.998		
7,100.0	7,009.9	1,220.0	1,219.0	29.6	4.1	5.37	- 70.7	-43.3 43.3	5,861.7	5,852.0	9.78	599.065		
7,200.0 7,300.0	7,108.2 7,206.4	1,220.0 1,220.0	1,219.0 1,219.0	30.1 30.6	4.1 4.1	5.37 5.37	-70.7 -70.7	-43.3 -43.3	5,961.7 6,061.7	5,951.7 6,051.5	9.97 10.16	597.991 596.786		
7,400.0	7,304.7	1,220.0	1,219.0	31.0	4.1	5.37	-70.7	-43.3	6,161.6	6,151.3	10.35	595,458		
7,500.0	7,403.0	1,220.0	1,219.0	31.5	4.1	5.37	-70.7	-43.3 43.3	6,261.6	6,251.0	10.54	594.017		
7,600.0	7,501.2	1,220.0	1,219.0	31.9	4.1	5.37	- 70.7	-43.3	6,361.5	6,350.8	10.74	592.469		
7,700.0 7,800.0	7,599.5 7,697.7	1,220.0 1,220.0	1,219.0 1,219.0	32.4 32.9	4.1 4.1	5.37 5.37	-70.7 -70.7	-43.3 -43.3	6,461.5 6,561.5	6,450.6 6,550.3	10.94 11.14	590.823 589.084		
7,833.5	7,730.7	1,220.0	1,219.0	33.0	4.1	5.37	-70.7	- 43.3	6,595.0	6,583.8	11.21	588.482		
7,900.0	7,796.1	1,220.0	1,219.0	33.3	4.1	15.30	-70.7	-43.3	6,661.4	6,650.1	11.34	587.258		
8,000.0	7,894.9	1,220.0	1,219.0	33.8	4.1	171.86	-70.7	-43.3 43.3	6,761.4	6,749.9	11.55	585,363		
8,100.0 8,200.0	7,994.0 8,093.5	1,220.0 1,220.0	1,219.0 1,219.0	34.2 34.6	4.1 4.1	176.78 178.01	-70.7 -70.7	-43.3 -43.3	6,861.4 6,961.2	6,849.6 6,949.3	11.76 11.97	583.418 581.430		
0,200.0	0,000.0	1,220.0	1,210.0	04.0		170.01	70.7	40.0	0,001.2	0,040.0	11.07	001.400		
8,300.0	8,193.2	1,220.0	1,219.0	34.9	4.1	178.56	- 70.7	-43.3	7,060.9	7,048.7	12.19	579.399		
8,400.0	8,293.1	1,220.0	1,219.0	35.3	4.1	178.88	-70.7	-43.3	7,160.3	7,147.9	12.40	577.329		
8,500.0	8,393.0	1,220.0	1,219.0	35.6	4.1	179.08	-70.7	-43.3	7,259.5	7,246.9	12.62	575.222		
8,546.5	8,439.5	1,220.0	1,219.0	35.8	4.1	19.16	-70.7	-43.3	7,305.5	7,292.7	12.72	574.247		
8,600.0	8,493.0	1,220.0	1,219.0	35.9	4.1	19.16	-70.7	-43.3	7,358.4	7,345.5	12.84	573,051		
8,700.0	8,593.0	1,220.0	1,219.0	36.2	4.1	19.16	-70.7	-43.3	7,457.2	7,444.1	13.07	570.736		
8,800.0	8,693.0	1,220.0	1,219.0	36.4	4.1	19.16	-70.7	-43.3	7,556.1	7,542.8	13.29	568.374		
8,900.0	8,793.0	1,220.0	1,219.0	36.7	4.1	19.16	- 70.7	- 43.3	7,655.0	7,641.5	13.53	565.968		
9,000.0	8,893.0	1,220.0	1,219.0	37.0	4.1	19.16	- 70.7	-43.3	7,754.0	7,740.2	13.76	563.523		
9,100.0	8,993.0	1,220.0	1,219.0	37.3	4.1	19.16	-70.7	-43.3	7,852.9	7,838.9	14.00	561.043		
9,200.0	9,093.0	1,220.0	1,219.0	37.6	4.1	19.16	- 70.7	-43.3	7,951.9	7,937.7	14.24	558.531		
9,300.0	9,193.0	1,220.0	1,219.0	37.8	4.1	19.16	- 70.7	-43.3	8,050.9	8,036.5	14.48	555,991		
9,400.0	9,293.0	1,220.0	1,219.0	38.1	4.1	19.16	-70.7	-43.3	8,150.0	8,135.3	14.73	553,425		
9,446.5	9,339.5	1,220.0	1,219.0	38.3	4.1	19.16	-70.7	- 43.3	8,196.0	8,181.2	14.84	552.225		
9,450.0	9,343.0	1,220.0	1,219.0	38.3	4.1	-68.21	-70.7	-43.3	8,199.5	8,184.7	14.85	552.137		
9,500.0	9,393.0	1,220.0	1,219.0	38.4	4.1	-43.01	-70.7	-43.3	8,248.9	8,233.9	14.97	550.917		
9,550.0	9,442.5	1,220.0	1,219.0	38.5	4.1	-29.88	-70.7	- 43.3	8,297.6	8,282.5	15.09	549.815		
9,600.0	9,491.2	1,220.0	1,219.0	38.7	4.1	-22.63	-70.7	-4 3.3	8,345.4	8,330.2	15.21	548.822		
9,650.0 9,700.0	9,538.8 9,584.8	1,220.0 1,220.0	1,219.0 1,219.0	38.8 38.8	4.1 4.1	-18.18 -15.24	-70.7 -70.7	-43.3 -43.3	8,392.0 8,436.9	8,376.7 8,421.5	15.32 15.42	547.926 547.109		
9,750.0	9,629.0	1,220.0	1,219.0	38.9	4.1	-13.17	-70.7	- 43.3	8,479.9	8,464.3	15.52	546.341		
9,800.0	9,671.0	1,220.0	1,219.0	39.0	4.1	-11.66	-70.7	-43.3	8,520.6	8,505.0	15.62	545.583		
9,850.0	9,710.5	1,220.0	1,219.0	39.0	4.1	-10.52	- 70.7	-43.3	8,558.9	8,543.2	15.71	544.784		
9,900.0	9,747.1	1,220.0	1,219.0	39.1	4.1	-9.63	-70.7	-43.3	8,594.4	8,578.6	15.80	543.884		
9,950.0	9,780.7	1,220.0	1,219.0	39.1	4.1	-8.94	-70.7	-43.3	8,626.9	8,611.0	15.89	542.814		
10,000.0	9,810.9	1,220.0	1,219.0	39.1	4.1	-8.40	- 70.7	-43.3	8,656.1	8,640.2	15.99	541.500		
10,050.0	9,837.5	1,220.0	1,219.0	39.1	4.1	-7.97	-70.7	-43.3	8,682.0	8,666.0	16.08	539,866		
10,100.0	9,860.3	1,220.0	1,219.0	39.1	4.1	-7.63	- 70.7	-43.3	8,704.4	8,688.2	16.18	537.843		
10,106.5	9,862.9	1,220.0	1,219.0	39.1	4.1	-7.59	- 70.7	-43.3	8,707.0	8,690.8	16.19	537.733		
10,200.0	9,899.6	1,220.0	1,219.0	39.1	4.1	-7.49	-70.7	-43.3	8,743.5	8,727.1	16.43	532.214		
10,300.0	9,935.6	1,220.0	1,219.0	39.1	4.1	-7.38	-70.7	-43.3	8,780.3	8,763.6	16.72	525.232		

Company: Matador Production Company

Project: Rustler Breaks
Reference Site: Barry Miller
Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft
Reference Wellbore Wellbore #1
Reference Design: BLM Plan #1

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference: MD Reference: North Reference:

Output errors are at

Database:

KB @ 3113.5usft KB @ 3113.5usft

Well Barry Miller State Com #222H

Grid

Minimum Curvature

2.00 sigma

EDM 5000.14 Server

Offset De			liller - Bar	ry Miller Sta	ite Com #	‡121H - Well	lbore #1 - Actu	ıal					Offset Site Error:	0.0 usft
Survey Prog Refer		-MWD Offse	o t	Semi Major	Avie				Dista	nee			Offset Well Error:	0.0 usft
Measured	Vertical	Measured	et Vertical	Reference	Offset	Highside	Offset Wellbor	re Centre	Between	Between	Minimum	Separation	Manaina	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	Warning	
10,400.0	9,968.4	1,220.0	1,219.0	39.1	4.1	-7.29	-70.7	-43.3	8,815.0	8,797.9	17.04	517.199		
10,500.0	9,997.8	1,220.0	1,219.0	39.2	4.1	-7.20	-70.7	-43.3	8,847.3	8,829.9	17.41	508.242		
10,600.0	10,023.9	1,220.0	1,219.0	39.6	4.1	- 7.12	- 70.7	-43.3	8,877.4	8,859.6	17.81	498.502		
10,700.0	10,046.6	1,220.0	1,219.0	40.4	4.1	- 7.05	- 70.7	-43.3	8,905.2	8,887.0	18.24	488.125		
10,800.0	10,065.9	1,220.0	1,219.0	41.5	4.1	-6.99	- 70.7	-43.3	8,930.7	8,912.0	18.71	477.258		
10,900.0	10,081.8	1,220.0	1,219.0	42.7	4.1	-6.93	- 70.7	-43.3	8,953.9	8,934.7	19.21	466.036		
11,000.0	10,094.2	1,220.0	1,219.0	44.0	4.1	-6.88	- 70.7	-43.3	8,974.8	8,955.0	19.74	454.587		
11,100.0	10,103.2	1,220.0	1,219.0	45.4	4.1	-6.84	-70.7	-43.3	8,993.3	8,973.0	20.30	443.025		
11,200.0	10,108.6	1,220.0	1,219.0	46.9	4.1	-6.80	-70.7	-43.3	9,009.5	8,988.6	20.88	431.449		
11,293.4	10,110.6	1,220.0	1,219.0	48.3	4.1	-6.77	- 70.7	-43.3	9,022.5	9,001.1	21.45	420.699		
11,300.0	10,110.6	1,220.0	1,219.0	48.4	4.1	- 6.77	- 70.7	-43.3	9,023.4	9,001.9	21.49	419.954		
11,400.0	10,111.1	1,220.0	1,219.0	50.0	4.1	-6.77	-70.7	-43.3	9,036.9	9,014.7	22.11	408,651		
11,500.0	10,111.5	1,220.0	1,219.0	51.7	4.1	- 6.77	- 70.7	-43.3	9,051.4	9,028.6	22.76	397.700		
11,600.0	10,112.0	1,220.0	1,219.0	53.5	4.1	- 6.77	- 70.7	-43.3	9,067.0	9,043.6	23.42	387.138		
11,700.0	10,112.4	1,220.0	1,219.0	55.3	4.1	-6.77	-70.7	-43.3	9,083.7	9,059.6	24.10	376.989		
11,800.0	10,112.9	1,220.0	1,219.0	57.1	4.1	-6.77	-70.7	-43.3	9,101.5	9,076.7	24.78	367.266		
11,900.0	10,113.3	1,220.0	1,219.0	59.0	4.1	-6.77	-70.7	-43.3	9,120.3	9,094.9	25.48	357.973		
12,000.0	10,113.8	1,220.0	1,219.0	60.9	4.1	-6.77	- 70.7	-43.3	9,140.2	9,114.0	26.18	349.108		
12,100.0	10,114.3	1,220.0	1,219.0	62.9	4.1	- 6.77	- 70.7	-43.3	9,161.2	9,134.3	26,89	340,664		
12,200.0	10,114.7	1,220.0	1,219.0	64.9	4.1	- 6.77	- 70.7	-43.3	9,183.1	9,155.5	27.61	332.630		
12,300.0	10,115.2	1,220.0	1,219.0	66.9	4.1	- 6.77	-70.7	-43.3	9,206.1	9,177.8	28.33	324.993		
12,400.0	10,115.6	1,220.0	1,219.0	68.9	4.1	- 6.77	- 70.7	-43.3	9,230.2	9,201.1	29.05	317.739		
12,500.0	10,116.1	1,220.0	1,219.0	71.0	4.1	-6.77	-70.7	-43.3	9,255.2	9,225.5	29.77	310.852		
12,600.0	10,116.5	1,220.0	1,219.0	73.1	4.1	-6.77	-70.7	-43.3	9,281.3	9,250.8	30.50	304.316		
12,700.0	10,117.0	1,220.0	1,219.0	75.2	4.1	- 6.77	- 70.7	-43.3	9,308.4	9,277.1	31.22	298.115		
12,800.0	10,117.4	1,220.0	1,219.0	77.4	4.1	- 6.77	- 70.7	-43.3	9,336.4	9,304.5	31,95	292,232		
12,900.0	10,117.9	1,220.0	1,219.0	79.5	4.1	-6.77	-70.7	-43.3	9,365.5	9,332.8	32.67	286,652		
13,000.0	10,118.4	1,220.0	1,219.0	81.7	4.1	- 6.77	- 70.7	-43.3	9,395.5	9,362.1	33.39	281.359		
13,100.0	10,118.8	1,220.0	1,219.0	83.9	4.1	-6.77	-70.7	-43.3	9,426.5	9,392.4	34.11	276.339		
13,200.0	10,119.3	1,220.0	1,219.0	86.1	4.1	-6.77	-70.7	-43.3	9,458.4	9,423.6	34.83	271.577		
13,300.0	10,119.7	1,220.0	1,219.0	88.3	4.1	-6.77	-70.7	-43.3	9,491.3	9,455.8	35.54	267.059		
13,400.0	10,120.2	1,220.0	1,219.0	90.5	4.1	-6.77	-70.7	-43.3	9,525.1	9,488.9	36.25	262.773		
13,500.0	10,120.6	1,220.0	1,219.0	92.8	4.1	-6.77	- 70.7	-43.3	9,559.9	9,522.9	36.95	258,706		
13,600.0	10,121.1	1,220.0	1,219.0	95.0	4.1	- 6.77	-70.7	-43.3	9,595.5	9,557.9	37.65	254,847		
13,700.0	10,121.6	1,220.0	1,219.0	97.3	4.1	-6.77	- 70.7	-43.3	9,632.1	9,593.7	38.35	251.185		
13,800.0	10,122.0	1,220.0	1,219.0	99.5	4.1	-6.77	- 70.7	-43.3	9,669.6	9,630.5	39.04	247.710		
13,900.0	10,122.5	1,220.0	1,219.0	101.8	4.1	-6.77	-70.7	-43.3	9,707.9	9,668.2	39.72	244.411		
14,000.0	10,122.9	1,220.0	1,219.0	104.1	4.1	- 6.77	-70.7	-43.3	9,747.1	9,706.7	40.40	241.280		
14,100.0	10,123.4	1,220.0	1,219.0	106.4	4.1	-6.77	- 70.7	-43.3	9,787.2	9,746.2	41.07	238.309		
14,200.0	10,123.8	1,220.0	1,219.0	108.7	4.1	-6.77	- 70.7	-43.3	9,828.2	9,786.4	41.74	235.487		
14,300.0	10,124.3	1,220.0	1,219.0	111.0	4.1	- 6.77	-70.7	-43.3	9,870.0	9,827.6	42.39	232,809		
14,400.0	10,124.8	1,220.0	1,219.0	113.3	4.1	- 6.77	-70.7	-43.3	9,912.6	9,869.5	43.05	230,268		
14,500.0	10,125.2	1,220.0	1,219.0	115.6	4.1	- 6.77	-70.7	-43.3	9,956.0	9,912.3	43,69	227,855		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: KB @ 3113.5usft KB @ 3113.5usft MD Reference: North Reference: Grid

Survey Calculation Method: Minimum Curvature

Well Barry Miller State Com #222H

Output errors are at 2.00 sigma EDM 5000.14 Server Database:

Offset Desi	_		iller - Bar	ry Miller Sta	ite Com #	121H - Well	lbore #1 - Altitu	ude Plan #1					Offset Site Error:	0.0 usft
Survey Progra Referen		WD Offse	ıt	Semi Major	Axis				Dista	ınce			Offset Well Error:	0.0 usft
	Vertical	Measured	Vertica l	Reference	Offset	Highside	Offset Wellbor	e Centre	Between	Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Too l face (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
0.0	0.0	1.0	-1.0	0.0	0.0	-164.89	-110.2	-29.8	114.2					
100.0	100.0	101.0	99.0	0.1	0.1	-164.89	-110.2	-29.8	114.2	113.9	0.26	439.360		
200.0	200.0	201.0	199.0	0.5	0.5	-164.89	-110.2	-29.8	114.2	113.2	0.98	116.894		
300.0	300.0	301.0	299.0	0.8	0.8	-164.89	-110.2	-29.8	114.2	112.5	1.69	67.415		
400.0	400.0	401.0	399.0	1.2	1.2	-164.89	-110.2	-29.8	114.2	111.8	2.41	47.366		
500.0	500.0	501.0	499.0	1.6	1.6	-164.89	-110.2	-29.8	114.2	111.1	3.13	36.508		
600.0	600.0	601.0	599.0	1.9	1.9	-164.89	-110.2	-29.8	114.2	110.3	3.84	29.700		
700.0	700.0	701.0	699.0	2.3	2.3	-164.89	-110.2	-29.8	114.2	109.6	4.56	25.032		
800.0	0.008	801.0	799.0	2.6	2.6	-164.89	-110.2	-29.8	114.2	108.9	5.28	21.632		
900.0	900.0	901.0	899.0	3.0	3.0	-164.89	-110.2	-29.8	114.2	108.2	6.00	19.046		
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	-164.89	-110.2	-29.8	114.2	107.5	6.71	17.011		
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	-164.89	-110.2	-29.8	114.2	106.8	7.43	15,370		
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	-164.89	- 110.2	- 29.8	114.2	106.0	8.15	14.017		
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	-4.94	-110.2	-29.8	113.3	104.5	8.85	12.810		
1,400.0	1,400.0	1,401.0	1,399.0	4.7	4.8	-5.06	-110.2	-29.8	110.7	101.2	9.53	11.614		
1,500.0	1,499.9	1,501.1	1,498.9	5.1	5.2	-5.27	-110.2	-29.8	106.4	96.1	10.22	10.404		
1,600.0	1,599.7	1,601.3	1,598.7	5.4	5.5	-5.59	-110.2	-29.8	100.3	89.4	10.92	9.185		
1,700.0	1,699.4	1,698.4	1,698.4	5.8	5.9	-6.08	-110.2	-29.8	92.5	80.9	11.60	7.969		
1,800.0	1,798.9	1,798.3	1,798.3	6.1	6.2	-6.23	-109.8	-30.5	82.7	70.4	12.30	6.724		
1,900.0	1,898.3	1,898.0	1,897.9	6.5	6.6	-5.24	-108.5	-32.7	70.7	57.7	12.99	5.442		
2,000.0	1,997.4	1,997.2	1,997.1	6.8	6.9	-2.24	-106.3	-36.4	56.6	42.9	13.69	4.134		
2,100.0	2,096.3	2,095.9	2,095.6	7.2	7.3	5.23	-103.2	-41.5	40.8	26.4	14.38	2.835		
2,200.0	2,194.9	2,194.0	2,193.4	7.6	7.6	26.43	-99.3	-48.0	25.2	10.1	15.10	1.671		
2,269.4	2,263.2	2,261.6	2,260.7	7.9	7.9	62.18	-96.0	-53.3	19.5	3.9	15.64	1.247 L	evel 2	
2,273.1	2,266.9	2,265.2	2,264.3	7.9	7.9	64.56	-95.9	-53.6	19.5	3.8	15.66	1.243 L	evel 2, CC, ES, SF	
2,300.0	2,293.3	2,291.3	2,290.3	8.0	8.0	81.40	-94.5	-55.9	20.4	4.6	15.86	1,289 L	evel 3	
2,400.0	2,391.5	2,388.2	2,386.5	8.4	8.3	118.72	-88.9	-65.1	35.8	19.3	16.52	2.167		
2,500.0	2,489.8	2,485.3	2,483.0	8.8	8.7	131.31	-83.0	- 74.9	57.4	40.1	17.23	3.331		
2,600.0	2,588.1	2,582.5	2,579.5	9.2	9.0	136.94	-77.1	-84.7	80.1	62.2	17.94	4.467		
2,700.0	2,686.3	2,679.7	2,676.0	9.6	9.4	140.07	-71.2	-94.6	103.3	84.7	18.66	5.536		
2,800.0	2,784.6	2,776.8	2,772.5	10.1	9.8	142.05	- 65.3	-104.4	126.7	107.3	19.39	6.533		
2,900.0	2,882.8	2,874.0	2,868.9	10.5	10.1	143.41	-59.4	-114.2	150.1	130.0	20.12	7.462		
3,000.0	2,981.1	2,971.1	2,965.4	10.9	10.5	144.40	-53.4	-124.0	173.7	152.8	20.85	8.327		
3,100.0	3,079.4	3,068.3	3,061.9	11.4	10.9	145.16	-47.5	-133.8	197.2	175.6	21,59	9.134		
3,200.0	3,177.6	3,165.4	3,158.4	11.8	11.2	145.76	-41.6	-143.6	220.8	198.5	22.33	9.888		
3,300.0	3,275.9	3,262.6	3,254.8	12.2	11.6	146.24	-35.7	-153.5	244.4	221.3	23.07	10.593		
3,400.0	3,374.2	3,359.8	3,351.3	12.7	12.0	146.63	-29.8	-163.3	268.0	244.2	23.82	11.253		
3,500.0	3,472.4	3,456.9	3,447.8	13.1	12.4	146.96	-23.9	-173.1	291.6	267.1	24.56	11.874		
3,600.0	3,570.7	3,554.1	3,544.3	13.6	12.7	147.25	-17.9	-182.9	315.3	290.0	25.31	12.457		
3,700.0	3,669.0	3,651.2	3,640.8	14.0	13.1	147.49	-12.0	-192.7	338.9	312.8	26.06	13,006		
3,800.0	3,767.2	3,748.4	3,737.2	14.5	13.5	147.70	- 6.1	-202.5	362.5	335.7	26.81	13,524		
3,900.0	3,865.5	3,845.5	3,833.7	14.9	13.9	147.89	-0.2	-212.4	386.2	358.6	27.56	14.013		
4,000.0	3,963.7	3,942.7	3,930.2	15.4	14.3	148.05	5.7	-222.2	409.8	381.5	28,31	14,476		
4,100.0	4,062.0	4,039.9	4,026.7	15.8	14.6	148.20	11.6	-232.0	433.5	404.4	29.07	14.914		
4,200.0	4,160.3	4,137.0	4,123.2	16.3	15.0	148.33	17.5	-241.8	457.2	427.3	29.82	15.330		
4,300.0	4,258.5	4,234.2	4,219.6	16.7	15.4	148.44	23.5	-251.6	480.8	450.2	30.58	15.725		
4,400.0	4,356.8	4,331.3	4,316.1	17.2	15.8	148.55	29.4	-261.4	504.5	473.1	31.33	16.100		
4,500.0	4,455.1	4,428.5	4,412.6	17.6	16.2	148.65	35.3	-271.3	528.1	496.0	32.09	16.457		
4,600.0	4,553.3	4,525.6	4,509.1	18.1	16.6	148.74	41.2	-281.1	551.8	518.9	32.85	16.798		
4,700.0	4,651.6	4,622.8	4,605.5	18.5	16.9	148.82	47.1	-290.9	575.5	541.8	33.61	17.122		
4,800.0	4,749.8	4,720.0	4,702.0	19.0	17.3	148.90	53.0	-300.7	599.1	564.7	34.37	17.432		
4,900.0	4,848.1	4,817.1	4,798.5	19.5	17.7	148.96	59.0	-310.5	622.8	587.7	35.13	17.729		

Company: Matador Production Company

Rustler Breaks Project: Reference Site: Barry Miller Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: KB @ 3113.5usft KB @ 3113.5usft Grid

Well Barry Miller State Com #222H

Survey Calculation Method: Minimum Curvature

Output errors are at 2.00 sigma EDM 5000.14 Server Database:

														0.0
urvey Progr Refer		WD Offse	et	Semi Major	Axis				Dista	ince			Offset Well Error:	0.0 u
leasured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbor	e Centre	Between	Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	, and the second	
5,000.0	4,946.4	4,914.3	4,895.0	19.9	18.1	149.03	64.9	-320.3	646.4	610.6	35.89	18.012		
5,100.0	5,044.6	5,011.4	4,991.5	20.4	18.5	149.09	70.8	-330.2	670.1	633.5	36.65	18.283		
5,200.0	5,142.9	5,108.6	5,087.9	20.8	18.9	149.14	76.7	-340.0	693.8	656.4	37.41	18.544		
5,300.0	5,241.2	5,205.7	5,184.4	21.3	19.2	149.20	82.6	-349.8	717.5	679.3	38.18	18,793		
5,400.0	5,339.4	5,302.9	5,280.9	21.8	19.6	149.25	88.5	-359.6	741.1	702.2	38.94	19.033		
5,500.0	5,437.7	5,400.1	5,377.4	22.2	20.0	149.29	94.5	-369.4	764.8	725.1	39.70	19.263		
5,600.0	5,536.0	5,502.8	5,473.8	22.7	20.4	149.33	100.4	-379.3	788.5	748.0	40.49	19.474		
5,700.0	5,634.2	5,597.8	5,573.7	23.1	20.8	149.38	106.5	-389.3	812.1	770.8	41.26	19.681		
5,800.0	5,732.5	5,711.3	5,686.7	23.6	21.2	149.55	112.1	-398.8	834.4	792.2	42.15	19.794		
5,900.0	5,830.7	5,825.6	5,800.7	24.1	21.7	149.89	116.1	-405.3	854.8	811.8	43.02	19.870		
6,000.0	5,929.0	5,940.5	5,915.6	24.5	22.1	150.39	118.3	-409.0	873.4	829.5	43.86	19.913		
6,100.0	6,027.3	6,051.2	6,026.3	25.0	22.5	151.01	118.8	-409.8	890.1	845.5	44.64	19,939		
6,200.0	6,125.5	6,149.5	6,124.5	25.4	22.8	151.57	118.8	- 409.8	906.5	861.1	45.35	19.986		
6,300.0	6,223.8	6,247.7	6,222.8	25.9	23.1	152.12	118.8	-409.8	922.9	876.8	46.07	20.034		
6,400.0	6,322.1	6,346.0	6,321.1	26.4	23.5	152.65	118.8	-409.8	939.4	892.6	46.78	20.082		
6,500.0	6,420.3	6,444.3	6,419.3	26.8	23.8	153.16	118.8	-409.8	956.0	908.5	47.49	20.131		
6,600.0	6,518.6	6,542.5	6,517.6	27.3	24.1	153.65	118.8	-409.8	972.6	924.4	48.20	20.179		
6,700.0	6,616.8	6,640.8	6,615.8	27.8	24.5	154.12	118.8	-409.8	989.3	940.4	48.91	20,228		
6,800.0	6,715.1	6,739.1	6,714.1	28.2	24.8	154.58	118.8	-409.8	1,006.1	956.5	49.62	20,276		
6,900.0	6,813.4	6,837.3	6,812.4	28.7	25.1	155.03	118.8	-409.8	1,023.0	972.6	50.33	20.324		
7,000.0	6,911.6	6,935.6	6,910.6	29.2	25.5	155.46	118.8	-409.8	1,039.9	988.8	51.04	20.372		
7,100.0	7,009.9	7,033.8	7,008.9	29.6	25.8	155.87	118.8	-409.8	1,056.8	1,005.1	51.76	20.420		
7,200.0	7,108.2	7,132.1	7,107.2	30.1	26.1	156.28	118.8	-409.8	1,073.8	1,021.4	52.47	20.467		
7,300.0	7,206.4	7,230.4	7,205.4	30.6	26.5	156.67	118.8	-409.8	1,090.9	1,037.7	53.18	20.514		
7,400.0	7,304.7	7,328.6	7,303.7	31.0	26.8	157.05	118.8	- 409.8	1,108.0	1,054.1	53.89	20,560		
7,500.0	7,403.0	7,422.9	7,397.9	31.5	27.1	157.44	118.8	-409.1	1,125.2	1,070.7	54.57	20,620		
7,600.0	7,501.2	7,506.1	7,480.4	31.9	27.4	158.25	120.0	-399.1	1,143.4	1,088.3	55.12	20.743		
7,700.0	7,599.5	7,582.9	7,554.6	32.4	27.6	159.49	122.2	-379.5	1,163.4	1,107.9	55.57	20.937		
7,800.0	7,697.7	7,650.0	7,616.7	32.9	27.7	160.94	125.0	-354.4	1,186.0	1,130.1	55.88	21.223		
7,833.5	7,730.7	7,672.9	7,637.2	33.0	27.8	161.51	126.1	-344.2	1,194.2	1,138.2	55.97	21.338		
7,900.0	7,796.1	7,712.2	7,671.3	33.3	27.8	162.63	128.3	-324.8	1,211.3	1,155.2	56.07	21.603		
8,000.0	7,894.9	7,765.3	7,715.1	33.8	27.9	164.27	131.6	-295.0	1,238.2	1,182.1	56.09	22.077		
8,100.0	7,994.0	7,811.6	7,750.9	34.2	28.0	165.82	134.9	-265.9	1,267.2	1,211.3	55.93	22,658		
8,200.0	8,093.5	7,850.0	7,778.7	34.6	28.1	167.18	137.9	-239.6	1,298.5	1,242.9	55.57	23,367		
8,300.0	8,193.2	7,887.6	7,804.2	34.9	28.2	168.56	140.9	-212.1	1,332.3	1,277.2	55.08	24.191		
8,400.0	8,293.1	7,918.8	7,823.9	35.3	28.2	169.74	143.6	-188.0	1,368.7	1,314.3	54.39	25.164		
8,500.0	8,393.0	7,950.0	7,842.3	35.6	28.3	170.93	146.5	-163.0	1,407.8	1,354.2	53.60	26.265		
8,546.5	8,439.5	7,950.0	7,842.3	35.8	28.3	10.99	146.5	-163.0	1,426.8	1,373.8	53.01	26.915		
8,600.0	8,493.0	7,971.1	7,853.9	35.9	28.4	11.73	148.4	-145.5	1,449.6	1,397.1	52.58	27.572		
8,700.0	8,593.0	8,000.0	7,868.8	36.2	28.5	12.76	151.2	-120.9	1,496.0	1,444.4	51.59	28,998		
8,800.0	8,693.0	8,000.0	7,868.8	36.4	28.5	12,76	151,2	-120.9	1,546.8	1,496.6	50,20	30,812		
8,900.0	8,793.0	8,029.1	7,882.5	36.7	28.6	13.81	154.0	-95.3	1,601.5	1,552.3	49.20	32,555		
9,000.0	8,893.0	8,050.0	7,891.5	37.0	28.7	14.58	156.1	-76.6	1,660.2	1,612.1	48.09	34,521		
9,100.0	8,993.0	8,050.0	7,891.5	37.3	28.7	14.58	156.1	-76.6	1,722.3	1,675.6	46.75	36.845		
9,200.0	9,093.0	8,070.5	7,899.6	37.6	28.7	15.33	158.2	-58.0	1,787.5	1,741.8	45.72	39.101		
9,300.0	9,193.0	8,081.7	7,903.8	37.8	28.8	15.74	159.4	-47.6	1,855.6	1,811.0	44.62	41.587		
9,400.0	9,293.0	8,100.0	7,910.2	38.1	28.9	16.42	161.3	-30.6	1,926.3	1,882.6	43.68	44.104		
9,446.5	9,339.5	8,100.0	7,910.2	38.3	28.9	16.42	161.3	-30.6	1,959.9	1,916.8	43.15	45.418		
9,450.0	9,343.0	8,100.0	7,910.2	38.3	28.9	- 72.97	161.3	-30.6	1,962.5	1,919.4	43.11	45.519		
9,500.0	9,393.0	8,100.0	7,910.2	38.4	28.9	-68.01	161.3	-30.6	1,998.7	1,956.2	42.56	46.965		
9,550.0	9,442.5	8,100.0	7,910.2	38.5	28.9	-63.36	161.3	-30.6	2,034.4	1,992.4	42.01	48.431		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Output errors are at

Database:

Offset TVD Reference:

Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid

Minimum Curvature

2.00 sigma EDM 5000.14 Server

Offset Des	sign	Barry M	iller - Bar	ry Miller Sta	te Com #	#121H - Well	bore #1 - Altitu	ıde Plan #1					Offset Site Error:	0.0 usft
Survey Progr			•	Somi Major	Avie				Diete	nco			Offset Well Error:	0.0 usft
Refere Measured	Vertical	Offse Measured	vertical	Semi Major Reference	Offset	Highside	Offset Wellbor	e Centre	Dista Between	Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	vvarining	
9,650.0	9,538.8	8,121.8	7,917.1	38.8	29.0	-54.74	163.6	-10.0	2,102.9	2,061.7	41.20	51.038		
9,700.0	9,584.8	8,129.8	7,919.4	38.8	29.0	-51.20	164.5	-2.4	2,135.2	2,094.5	40.78	52.364		
9,750.0	9,629.0	8,150.0	7,924.8	38.9	29.1	- 47.90	166.6	16.9	2,166.2	2,125.7	40.50	53.487		
9,800.0	9,671.0	8,150.0	7,924.8	39.0	29.1	-45.32	166.6	16.9	2,195.2	2,155.1	40.02	54.847		
9,850.0	9,710.5	8,150.0	7,924.8	39.0	29.1	-43.06	166.6	16.9	2,222.4	2,182.8	39.58	56.147		
9,900.0	9,747.1	8,150.0	7,924.8	39.1	29.1	-41.09	166.6	16.9	2,247.7	2,208.5	39.18	57.368		
9,950.0	9,780.7	8,176.6	7,930.9	39.1	29.3	-39.24	169.5	42.6	2,270.3	2,231.2	39.09	58.085		
10,000.0	9,810.9	8,200.0	7,935.2	39.1	29.4	-37.73	172.1	65.5	2,291.0	2,252.0	38.99	58.760		
10,050.0	9,837.5	8,200.0	7,935.2	39.1	29.4	-36.57	172.1	65.5	2,308.9	2,270.2	38.73	59.614		
10,100.0	9,860.3	8,200.0	7,935.2	39.1	29.4	-35.60	172.1	65.5	2,324.5	2,285.9	38.54	60.312		
10,106.5	9,862.9	8,200.0	7,935.2	39.1	29.4	-35.49	172.1	65.5	2,326.3	2,287.8	38.52	60.393		
10,200.0	9,899.6	8,230.0	7,939.4	39.1	29.7	-35.13	175.4	95.1	2,352.3	2,313.8	38.57	60,992		
10,300.0	9,935.6	8,250.0	7,941.3	39.1	29.8	-34.75	177.6	114.8	2,380.5	2,341.8	38.67	61.557		
10,400.0	9,968.4	8,276.1	7,942.8	39.1	30.0	-34.37	180.5	140.7	2,408.9	2,369.9	38.97	61.820		
10,500.0	9,997.8	8,424.5	7,947.7	39.2	31.3	-33.78	193.2	288.5	2,435.4	2,395.2	40.13	60.692		
10,600.0	10,023.9	8,592.0	7,953.3	39.6	33.2	-33.13	198.4	455.8	2,455.9	2,414.2	41.66	58.947		
10,700.0	10,046.6	8,709.9	7,956.5	40.4	34.7	-32.70	199.0	553.8	2,472.4	2,429.3	43.04	57.450		
10,800.0	10,065.9	8,788.8	7,959.8	41.5	35.9	-32.36	199.6	652.5	2,486.0	2,441.8	44.24	56.194		
10,900.0	10,081.8	8,888.0	7,963.1	42.7	37.4	-32.09	200.3	751.6	2,496.7	2,451.0	45.77	54.548		
11,000.0	10,094.2	8,987.6	7,966.4	44.0	39.0	-31.89	200.9	851.2	2,504.5	2,457.0	47.45	52.782		
11,100.0	10,103.2	9,087.4	7,969.7	45.4	40.7	-31.78	201.6	950.9	2,509.3	2,460.0	49.26	50.935		
11,200.0	10,108.6	9,187.4	7,973.0	46.9	42.4	-31.73	202.2	1,050.8	2,511.2	2,459.9	51.21	49.035		
11,293.4	10,110.6	9,280.8	7,976.1	48.3	44.2	-31.75	202.8	1,144.2	2,510.2	2,457.0	53.14	47.239		
11,300.0	10,110.6	9,287.4	7,976.3	48.4	44.3	-31.76	202.8	1,150.8	2,510.0	2,456.7	53.28	47.113		
11,400.0	10,111.1	9,387.3	7,979.6	50.0	46.2	-31.79	203.5	1,250.7	2,507.6	2,452.2	55.44	45.234		
11,500.0	10,111.5	9,487.3	7,982.9	51.7	48.1	-31.83	204.1	1,350.6	2,505.2	2,447.5	57.67	43,441		
11,600.0	10,112.0	9,587.3	7,986.2	53.5	50.1	-31.86	204.8	1,450.5	2,502.7	2,442.8	59.96	41.738		
11,700.0	10,112.4	9,687.2	7,989.5	55.3	52.1	-31.89	205.4	1,550.4	2,500.3	2,438.0	62.32	40.122		
11,800.0	10,112.9	9,787.2	7,992.8	57.1	54.2	-31.93	206.0	1,650.3	2,497.9	2,433.2	64.72	38.594		
11,900.0	10,113.3	9,887.1	7,996.1	59.0	56.3	-31.96	206.7	1,750.2	2,495.5	2,428.3	67.18	37.149		
12,000.0	10,113.8	9,987.1	7,999.4	60.9	58.4	-32.00	207.3	1,850.1	2,493.1	2,423.4	69.67	35.783		
12,100.0	10,114.3	10,087.1	8,002.7	62.9	60.6	-32.03	208.0	1,950.0	2,490.6	2,418.4	72.20	34.494		
12,200.0	10,114.7	10,187.0	8,006.0	64.9	62.7	-32.07	208.6	2,049.9	2,488.2	2,413.4	74.77	33,277		
12,300.0	10,115.2	10,287.0	8,009.3	66.9	64.9	-32.10	209.2	2,149.8	2,485.8	2,408.4	77.38	32,127		
12,400.0	10,115.6	10,386.9	8,012.7	68.9	67.1	-32.14	209.9	2,249.7	2,483.4	2,403.4	80.01	31.040		
12,500.0	10,116.1	10,486.9	8,016.0	71.0	69.4	-32.17	210.5	2,349.6	2,481.0	2,398.3	82.66	30.012		
12,600.0	10,116.5	10,586.9	8,019.3	73.1	71.6	-32.21	211.2	2,449.5	2,478.6	2,393.2	85.35	29.040		
12,700.0	10,117.0	10,686.8	8,022.6	75.2	73.8	-32.24	211.8	2,549.4	2,476.1	2,388.1	88.05	28.120		
12,800.0	10,117.4	10,786.8	8,025.9	77.4	76.1	-32.28	212.4	2,649.3	2,473.7	2,382.9	90.78	27.249		
12,900.0	10,117.9	10,886.7	8,029.2	79.5	78.4	-32.31	213.1	2,749.2	2,471.3	2,377.8	93.53	26.422		
13,000.0	10,118.4	10,986.7	8,032.5	81.7	80.7	-32,35	213.7	2,849.1	2,468.9	2,372.6	96.30	25,638		
13,100.0	10,118.8	11,086.7	8,035.8	83.9	83.0	-32.38	214.4	2,949.0	2,466.5	2,367.4	99.08	24.893		
13,200.0	10,119.3	11,186.6	8,039.1	86.1	85.3	-32.42	215.0	3,048.9	2,464.1	2,362.2	101.88	24.185		
13,300.0	10,119.7	11,286.6	8,042.4	88.3	87.6	-32.45	215.6	3,148.8	2,461.7	2,357.0	104.70	23.511		
13,400.0	10,120.2	11,386.5	8,045.7	90.5	89.9	-32.49	216.3	3,248.7	2,459.3	2,351.7	107.53	22.870		
13,500.0	10,120.6	11,486.5	8,049.0	92.8	92.2	-32.53	216.9	3,348.6	2,456.9	2,346.5	110.38	22.258		
13,600.0	10,121.1	11,586.4	8,052.3	95.0	94.6	-32.56	217.6	3,448.5	2,454.4	2,341.2	113.24	21.675		
13,700.0	10,121.6	11,715.6	8,057.9	97.3	97.6	-32.62	218.4	3,577.6	2,451.2	2,334.6	116.59	21.024		
13,800.0	10,122.0	11,815.5	8,062.6	99.5	99.9	-32.68	219.0	3,677.4	2,447.6	2,328.0	119.51	20.480		
13,900.0	10,122.5	11,915.4	8,067.3	101.8	102.3	-32.73	219.7	3,777.2	2,444.0	2,321.5	122.45	19.959		
14,000.0	10,122.9	12,015.3	8,072.0	104.1	104.6	-32.79	220.3	3,877.0	2,440.4	2,315.0	125.40	19.460		
14,100.0	10,123.4	12,115.2	8,076.7	106.4	107.0	-32.84	220.9	3,976.8	2,436.8	2,308.4	128.37	18.983		

Company: Matador Production Company

Project: Rustler Breaks
Reference Site: Barry Miller
Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft
Reference Wellbore Wellbore #1
Reference Design: BLM Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

KB @ 3113.5usft KB @ 3113.5usft

Well Barry Miller State Com #222H

KB @ 3113. Grid

Survey Calculation Method: Minimum Curvature

Output errors are at 2.00 sigma

Database: EDM 5000.14 Server

Offset Des	sign	Barry M	iller - Bar	ry Miller Sta	ite Com #	121H - Well	lbore #1 - Altitu	ude Plan #1					Offset Site Error:	0.0 usft
Survey Progr													Offset Well Error:	0.0 usft
Refere Measured Depth (usft)	ence Vertica l Depth (usft)	Offse Measured Depth (usft)	et Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface (°)	Offset Wellbor +N/-S (usft)	e Centre +E/-W (usft)	Dista Between Centres (usft)	ence Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,200.0	10,123.8	12,215.2	8,081.5	108.7	109.4	-32.89	221.6	4,076.6	2,433.2	2,301.9	131.35	18.525		
14,300.0	10,124.3	12,315.1	8,086.2	111.0	111.7	-32.95	222.2	4,176.3	2,429.6	2,295.3	134.34	18.086		
14,400.0	10,124.8	12,415.0	8,090.9	113.3	114.1	-33.00	222.9	4,276.1	2,426.0	2,288.7	137.34	17.665		
14,500.0	10,125.2	12,514.9	8,095.6	115.6	116.5	-33.06	223.5	4,375.9	2,422.5	2,282.1	140.35	17.260		
14,600.0	10,125.7	12,614.8	8,100.3	117.9	118.8	-33.11	224.1	4,475.7	2,418.9	2,275.5	143.37	16.871		
14,700.0	10,126.1	12,714.7	8,105.0	120.2	121.2	-33.17	224.8	4,575.5	2,415.3	2,268.9	146.41	16.497		
14,800.0	10,126.6	12,814.6	8,109.8	122.6	123.6	-33.22	225.4	4,675.3	2,411.7	2,262.3	149.45	16.137		
14,900.0	10,127.0	12,914.5	8,114.5	124.9	126.0	-33.28	226.1	4,775.1	2,408.2	2,255.7	152.51	15.790		
15,000.0	10,127.5	13,014.4	8,119.2	127.2	128.4	-33.33	226.7	4,874.9	2,404.6	2,249.0	155.58	15.456		
15,100.0	10,127.9	13,114.3	8,123.9	129.6	130.8	-33.39	227.3	4,974.7	2,401.0	2,242.4	158.65	15.134		
15,200.0	10,128.4	13,214.2	8,128.6	131.9	133.1	-33.45	228.0	5,074.5	2,397.5	2,235.7	161.74	14.823		
15,300.0	10,128.9	13,314.2	8,133.3	134.3	135.5	-33.50	228.6	5,174.3	2,393.9	2,229.1	164.84	14.523		
15,400.0	10,129.3	13,414.1	8,138.1	136.6	137.9	-33.56	229.3	5,274.1	2,390.4	2,222.4	167.94	14.233		
15,500.0	10,129.8	13,514.0	8,142.8	139.0	140.3	-33.62	229.9	5,373.9	2,386.8	2,215.8	171.06	13.953		
15,600.0	10,130.2	13,613.9	8,147.5	141.3	142.7	-33.67	230.5	5,473.7	2,383.3	2,209.1	174.18	13.683		
15,700.0	10,130.7	13,713.8	8,152.2	143.7	145.1	-33.73	231.2	5,573.5	2,379.7	2,202.4	177.32	13.421		
15,800.0	10,131.1	13,813.7	8,156.9	146.1	147.5	-33.79	231.8	5,673.3	2,376.2	2,195.7	180.46	13.167		
15,900.0	10,131.6	13,913.6	8,161.6	148.4	149.9	-33,84	232.4	5,773.1	2,372.6	2,189.0	183.61	12.922		
16,000.0	10,132.1	14,013.5	8,166.4	150.8	152.3	-33,90	233.1	5,872.9	2,369.1	2,182.3	186.78	12,684		
16,100.0	10,132.5	14,113.4	8,171.1	153.2	154.7	-33.96	233.7	5,972.7	2,365.5	2,175.6	189.95	12.454		
16,200.0	10,133.0	14,213.3	8,175.8	155.5	157.1	-34.02	234.4	6,072.5	2,362.0	2,168.9	193.13	12.230		
16,300.0	10,133.4	14,313.2	8,180.5	157.9	159.6	-34.07	235.0	6,172.3	2,358.5	2,162.1	196.32	12.014		
16,400.0	10,133.9	14,413.2	8,185.2	160.3	162.0	-34.13	235.6	6,272.1	2,354.9	2,155.4	199.52	11.803		
16,500.0	10,134.3	14,513.1	8,189.9	162.7	164.4	-34.19	236.3	6,371.8	2,351.4	2,148.7	202.72	11.599		
16,600.0	10,134.8	14,613.0	8,194.7	165.1	166.8	-34.25	236.9	6,471.6	2,347.9	2,141.9	205.94	11.401		
16,700.0	10,135.3	14,712.9	8,199.4	167.4	169.2	-34.31	237.6	6,571.4	2,344.3	2,135.2	209.16	11,208		
16,800.0	10,135.7	14,812.8	8,204.1	169.8	171.6	-34.37	238.2	6,671.2	2,340.8	2,128.4	212.40	11.021		
16,900.0	10,136.2	14,912.7	8,208.8	172.2	174.0	-34.43	238.8	6,771.0	2,337.3	2,121.6	215.64	10.839		
17,000.0	10,136.6	15,012.6	8,213.5	174.6	176.4	-34.48	239.5	6,870.8	2,333.8	2,114.9	218.89	10.662		
17,100.0	10,137.1	15,112.5	8,218.2	177.0	178.9	-34.54	240.1	6,970.6	2,330.2	2,108.1	222.15	10.490		
17,200.0	10,137.5	15,212.4	8,223.0	179.4	181.3	-34.60	240.8	7,070.4	2,326.7	2,101.3	225.42	10.322		
17,300.0	10,138.0	15,312.3	8,227.7	181.8	183.7	-34.66	241.4	7,170.2	2,323.2	2,094.5	228.70	10.159		
17,400.0	10,138.4	15,412.2	8,232.4	184.2	186.1	-34.72	242.0	7,270.0	2,319.7	2,087.7	231.98	10.000		
17,411.2	10,138.5	15,423.5	8,232.9	184.4	186.4	-34.73	242.1	7,281.2	2,319.3	2,087.0	232,35	9,982		
17,411.8	10,138.5	15,424.0	8,233.0	184.5	186.4	-34.73	242.1	7,281.7	2,319.3	2,086.9	232.40	9.980		

Company: Matador Production Company

Project: Rustler Breaks
Reference Site: Barry Miller
Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft
Reference Wellbore Wellbore #1
Reference Design: BLM Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid

Minimum Curvature

2.00 sigma EDM 5000.14 Server

Offset Des	sign	Barry M	iller - Bar	ry Miller Sta	te Com #	122H - Well	lbore #1 - Actu	al					Offset Site Error:	0.0 usft
Survey Progr	ram: 163	-MWD		0	0								Offset Well Error:	0.0 usft
Refere Measured	ence Vertical	Offse Measured	t Vertical	Semi Major Reference	Axis Offset	Highside	Offset Wellbor	e Centre	Dista Between	nce Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	vvarning	
0.0	0.0	0.0	0.0	0.0	0.0	179.91	-110.3	0.2	110.3					
100.0	100.0	99.2	99.2	0.1	0.1	- 179.98	-110.2	0.0	110.2	109.9	0.28	400.676		
200.0	200.0	199.9	199.9	0.5	0.4	-179.62	-109.9	-0.7	109.9	109.0	0.86	127.554		
300.0	300.0	301.0	301.0	0.8	0.7	-179.09	-108.5	-1.7	108.5	106.9	1.59	68.450		
400.0 500.0	400.0 500.0	401.6 502.1	401.6 502.0	1.2 1.6	1.1 1.5	-178.47 -177.48	-106.3 -103.5	-2.8 -4.6	106.3 103.7	104.0 100.7	2.30 3.02	46.140 34.298		
600.0 700.0	600.0 700.0	602.5 702.5	602.3 702.2	1.9 2.3	1.8 2.2	-176.37 -175.04	-100.3 -96.8	-6.4 -8.4	100.5 97.2	96.8 92.8	3.74 4.46	26.862 21.797		
800.0	800.0	802.9	802.5	2.6	2.5	-173.04	-93.1	-11.0	93.8	88.7	5.18	18.109		
900.0	900.0	901.7	901.3	3.0	2.9	-171.40	-89.1	-13.5	90.2	84.3	5.90	15.296		
1,000.0	1,000.0	1,000.7	1,000.2	3.4	3.3	-170.45	-87.4	-14.7	88.7	82.1	6.61	13.416		
1,067.1	1,067.1	1,066.6	1,066.1	3.6	3,5	-170.09	-86.6	-15.1	88.0	80.9	7.08	12,425	CC, ES	
1,100.0	1,100.0	1,098.2	1,097.7	3.7	3.6	-170.12	-86.9	-15.1	88.2	80.9	7.30	12.076		
1,200.0	1,200.0	1,196.0	1,195.4	4.1	3.9	- 170.83	-89.9	-14.5	91.2	83.2	7.98	11.425		
1,300.0	1,300.0	1,296.1	1,295.4	4.4	4.2	-11.95	-94.2	-13.5	94.3	85.7	8.65	10.908		
1,400.0	1,400.0	1,393.3	1,392.5	4.7	4.6	-13.69	-99.2	-11.8	96.8	87.5	9.29	10.419		
1,500.0	1,499.9	1,491.7	1,490.6	5.1	4.9	-15.78	-106.9	-10.0	100.2	90.2	9.94	10.076		
1,600.0	1,599.7	1,588.5	1,587.0	5.4	5.2	-17.13	-116.4	-9.8	104.0	93.4	10.58	9.832		
1,700.0	1,699.4	1,689.1	1,686.9	5.8	5.6	-17.78	-127.4	-11.4	107.6	96.3	11.27	9,545		
1,800.0	1,798.9	1,785.9	1,783.0	6.1	5.9	-18.26	-139.0	-13.8	110.6	98.7	11.92	9.279		
1,900.0	1,898.3	1,885.1	1,881.2	6.5	6.3	-19.14	-152.7	-15.9	113.7	101.1	12.60	9.026		
2,000.0	1,997.4	1,984.7	1,979.9	6.8	6.7	-21.41	-166.4	-15.8	115.3	102.0	13.30	8.667		
2,100.0	2,096.3	2,077.6	2,071.2	7.2	7.0	-22.50	-182.8	-18.1	119.1	105.3	13.87	8.587		
2,200.0	2,194.9	2,174.5	2,165.6	7.6	7.4	-22.11	-204.0	-24.1	125.6	111.0	14.52	8.646		
2,269.4	2,263.2	2,244.2	2,233.3	7.9	7.7	-21.88	-219.8	-28.7	129.6	114.6	15.03	8.624		
2,300.0	2,293.3	2,274.6	2,262.9	8.0	7.9	-21.86	-226.6	-30.6	131.2	116.0	15,25	8.604		
2,400.0	2,391.5	2,373.5	2,358.8	8.4	8.3	-21.10	-249.5	-38.5	137.0	121.0	15.96	8.585		
2,500.0	2,489.8	2,474.3	2,456.3	8.8	8.8	-19.69	-272.8	- 48.2	142.8	126.1	16.71	8.546		
2,600.0	2,588.1	2,575.8	2,554.9	9.2	9.2	-18.38	-295.1	-58.0	147.6	130.1	17.48	8.442		
2,700.0	2,686.3	2,675.9	2,652.2	9.6	9.7	-17.11	-316.5	-67.8	151.7	133.5	18.22	8.324		
2,800.0	2,784.6	2,775.5	2,749.0	10.1	10.2	-15.97	-337.9	-77.4	156.0	137.1	18.95	8.232		
2,900.0	2,882.8	2,876.5	2,847.2	10.5	10.6	-14.92	-359.4	-87.0	160.3	140.5	19.72	8.128		
3,000.0	2,981.1	2,978.3	2,946.4	10.9	11.1	-14.10	-380.1	-96.0	163.4	142.9	20.49	7.975		
3,100.0	3,079.4	3,078.9	3,044.8	11.4	11.6	-13.60	-399.8	-104.1	165.8	144.5	21,25	7.801		
3,200.0	3,177.6	3,179.5	3,143.2	11.8	12.1	-13.33	-419.3	-111.5	167.9	145.9	22.01	7.628		
3,300.0	3,275.9	3,277.3	3,238.8	12.2	12.5	-13.04	-438.5	-118.8	170.2	147.5	22.73	7.491		
3,400.0	3,374.2	3,377.4	3,336.4	12.7	13.0	-12.37	-458.9	-127.6	173.6	150.1	23.48	7.395		
3,500.0	3,472.4	3,477.8	3,434.5	13.1	13.5	-11.99	-479.2	-135.5	176.6	152.3	24.24	7.285		
3,600.0	3,570.7	3,571.5	3,525.6	13.6	13.9	-11.50	-499.2	-143.5	181.0	156.1	24.87	7.277		
3,700.0	3,669.0	3,668.4	3,619.1	14.0	14.4	-10.42	-522.3	-154.1	188.2	162.7	25.55	7.367		
3,800.0	3,767.2	3,768.3	3,715.3	14.5	15.0	-9.34	-546.7	-165.3	196.2	169.9	26.30	7.458		
3,900.0	3,865.5	3,869.8	3,813.3	14.9	15.5	-8.42	-571.0	-176.3	203.6	176.5	27.09	7.514		
4,000.0	3,963.7	3,972.1	3,912.3	15.4	16.0	-7.66	-594.5	-186.7	209.9	182.0	27.90	7.526		
4,100.0	4,062.0	4,075.1	4,012.3	15.8	16.5	-6.90	-616.8	-197.1	214.9	186.2	28.71	7.488		
4,200.0	4,160.3	4,176.3	4,110.8	16.3	17.1	-6.17	-637.5	-207.1	218.9	189.4	29.48			
4,300.0	4,258.5	4,275.2	4,207.1	16.7	17.5	-5.60	-658.0	-216.4	222.9	192.6	30.22	7.375		
4,400.0	4,356.8	4,374.0	4,303.2	17.2	18.0	-4.94	-678.8	-226.3	227.4	196.4	30.95	7.346		
4,500.0	4,455.1	4,473.9	4,400.3	17.6	18.6	-4.27	-700.0	-236.5	232.2	200.5	31.71	7.322		
4,600.0	4,553.3	4,574.6	4,498.3	18.1	19.1	-3.74	-721.3	-246.2	236.8	204.3	32.48	7.289		
4,700.0	4,651.6	4,676.2	4,597.2	18.5	19.6	-3.39	-742.5	-255.2	240.9	207.6	33.27	7.241		
4,800.0	4,749.8	4,778.5	4,697.1	19.0	20.1	-3.16	- 763.2	-263.6	244.1	210.0	34.06	7.166		
4,900.0	4,848.1	4,881.4	4,797.8	19.5	20.6	-2.96	- 782.9	-271.5	246.3	211.4	34.86	7.064		

Company: Matador Production Company

Project: Rustler Breaks
Reference Site: Barry Miller
Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft
Reference Wellbore Wellbore #1
Reference Design: BLM Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

North Reference: Survey Calculation Method:

Output errors are at

Database: Offset TVD Reference: Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid

Minimum Curvature

2.00 sigma EDM 5000.14 Server

Offset Des Survey Progra		Barry Mi MWD	iller - Bar	ry Miller Sta	te Com #	122H - Well	lbore #1 - Actu	al					Offset Site Error:	0.0 usft
Refere		Offse	t	Semi Major	Axis				Dista	nce			Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbord +N/-S (usft)	e Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,000.0	4,946.4	4,985.6	4,899.9	19.9	21.1	-2.88	-801.7	-278.7	247.0	211.3	35.67	6.925		
5,100.0	5,044.6	5,088.9	5,001.7	20.4	21.5	-2.81	-818.8	-285.3	246.2	209.7	36.45	6.753		
5,166.2	5,109.7	5,151.5	5,063.2	20.7	21.8	-2.78	-829.3	-289.3	245.7	208.8	36.92	6.654		
5,200.0	5,142.9	5,183.4	5,094.6	20.8	22.0	-2.78	-834.9	-291.4	245.8	208.6	37.15	6,616		
5,300.0	5,241.2	5,283.3	5,192.6	21.3	22.5	-2.74	-853.1	-298.1	246.6	208.7	37.91	6.504		
5,400.0	5,339.4	5,384.7	5,292.1	21.8	22.9	-2.68	-871.1	-304.9	247.0	208.3	38.69	6.385		
5,500.0 5,600.0	5,437.7 5,536.0	5,483.4 5,583.4	5,389.0 5,487.1	22.2 22.7	23.4 23.9	-2.42 -1.85	-888.4 -905.9	-312.4 -321.3	247.5 248.4	208.1 208.2	39.43 40.18	6.278 6.182		
5,700.0	5,634.2	5,686.2	5,588.0	23.1	24.4	-1.83	-905.9 -923.2	-321.3	248.5	207.6	40.18	6.066		
5,800.0	5,732.5	5,788.1	5,688.2	23.6	24.8	-0.88	-939.7	-338.1	247.9	206.1	41.74	5.939		
5,900.0	5,830.7	5,891.6	5,790.2	24.1	25.3	-0.49	-955.5	-345.7	246.1	203.6	42.52	5.789		
6,000.0	5,929.0	5,987.6	5,885.0	24.5	25.7	-0.11	-969.5	-352.5	243.6	200.4	43.24	5,634		
6,019.7	5,948.3	6,005.1	5,902.1	24.6	25.8	-0.03	-972.3	-353.9	243.5	200.2	43.37	5.615		
6,100.0	6,027.3	6,082.7	5,978.2	25.0	26.2	0.32	-986.2	-360.5	244.5	200.5	43.95	5.562		
6,200.0	6,125.5	6,179.4	6,073.0	25.4	26.6	0.62	-1,003.6	-368.3	245.6	201.0	44.67	5.499		
6,300.0	6,223.8	6,276.1	6,167.3	25.9	27.1	0.83	-1,023.5	-376.5	249.4	204.0	45.38	5.496		
6,400.0	6,322.1	6,379.8	6,268.6	26.4	27.6	0.89	-1,044.4	-384.5	252.5	206.3	46.21	5.464		
6,500.0	6,420.3	6,487.5	6,374.2	26.8	28.2	0.88	-1,064.2	-391.6	253.5	206.4	47.06	5.387		
6,600.0	6,518.6	6,593.8	6,479.0	27.3	28.6	0.85	-1,080.7	-397.5	251.3	203.5	47.85	5,252		
6,700.0	6,616.8	6,699.5	6,583.7	27.8	29.1	0.89	-1,094.7	-402.7	246.9	198.3	48.61	5.079		
6,800.0	6,715.1	6,804.0	6,687.4	28.2	29.5	0.74	-1,106.9	-406.3	240.3	191.0	49.35	4.871		
6,900.0	6,813.4	6,905.9	6,788.7	28.7	29.9	0.46	-1,117.5	-408.9	232.4	182.3	50.07	4.641		
7,000.0	6,911.6	7,007.9	6,890.2	29.2	30.3	0.19	-1,127.3	-411.2	223.5	172.7	50.79	4.401		
7,100.0	7,009.9	7,110.7	6,992.6	29.6	30.7	-0.18	-1,135.8	-412.9	213.2	161.7	51.49	4.141		
7,200.0	7,108.2	7,212.2	7,093.8	30.1	31.0	-0.57	-1,143.0	-414.1	201.6	149.5	52.19	3.864		
7,300.0	7,206.4	7,312.1	7,193.6	30.6	31.4	-0.90	-1,149.3	-415.4	189.4	136.5	52.90	3,580		
7,400.0	7,304.7	7,422.9	7,304.1	31.0	31.7	-2.58	-1,154.9	-412.3	174.8	121.5	53.29	3.281		
7,500.0	7,403.0	7,505.3	7,384.6	31.5	32.0	-8.83	-1,161.5	-396.9	159.9	105.3	54.67	2.925		
7,600.0 7,603.5	7,501.2 7,504.6	7,605.2 7,608.7	7,474.5 7,477.4	31.9 32.0	32.2 32.2	-25.26 -25.99	-1,177.3 -1,177.6	-357.3 -355.5	157.2 157.2	100.4 100.3	56.79 56.89	2.768 2.762 S	· -	
7,700.0	7,599.5	7,693.5	7,546.7	32.4	32.3	-45.30	-1,180.4	-306.6	165.8	106.8	59.02	2.809	21	
7,800.0	7,697.7	7,776.3	7,613.5	32.9	32.4	-62.53	-1,178.0	-257.9	193.9	134.7	59.16	3.277		
7,833.5	7,730.7	7,805.7	7,637.9	33.0	32.4	-67.55	-1,177.1	-241.4	206.3	147.1	59.19	3.485		
7,900.0	7,796.1	7,855.4	7,679.2	33,3	32.4	-75.28	-1,175.4	-213.9	234.7	176.5	58.21	4.031		
8,000.0	7,894.9	7,901.0	7,716.7	33.8	32.5	-81.70	-1,173.5	-188.0	286.4	232.9	53.55	5.349		
8,100.0	7,994.0	7,952.8	7,756.5	34.2	32.5	-88.02	-1,171.1	-154.9	348.4	297.9	50.48	6.903		
8,200.0	8,093.5	7,996.0	7,785.1	34.6	32.5	-92.88	-1,168.9	-122.7	421.1	373.6	47.43	8.877		
8,300.0	8,193.2	7,996.0	7,785.1	34.9	32.5	-94.76	-1,168.9	-122.7	499.2	457.8	41.41	12.055		
8,400.0	8,293.1	8,037.1	7,809.0	35.3	32.5	-98.91	-1,167.4	-89.3	581.0	540.8	40.14	14.472		
8,500.0	8,393.0	8,061.3	7,821.9	35.6	32.5	-101.96	-1,167.1	-68.8	665.7	627.6	38.08	17.483		
8,546.5	8,439.5	8,091.0	7,836.4	35.8	32.5	96.42	-1,167.4	-43.0	706.4	667.8	38.56	18,319		
8,600.0	8,493.0	8,091.0	7,836.4	35.9	32.5	96.42	-1,167.4	-43.0	752.5	715.6	36.88	20.406		
8,700.0	8,593.0	8,110.4	7,845.4	36.2	32.5	96.17	-1,167.6	-25.7	840.8	805.4	35.39	23,756		
8,800.0	8,693.0	8,143.1	7,860.1	36.4	32.5	95.67	-1,167.1	3.4	929.9	895.0	34.92	26.632		
8,900.0	8,793.0	8,173.8	7,873.5	36.7	32.5	95.13	-1,165.7	31.0	1,019.7	985.2	34.47	29.583		
9,000.0	8,893.0	8,186.0	7,878.7	37.0	32.5	94.91	-1,164.9	42.0	1,110.2	1,076.9	33.35	33.292		
9,100.0	8,993.0	8,216.8	7,891.3	37.3	32.5	94.33	-1,162.4	70.0	1,201.3	1,168.2	33.16	36.225		
9,200.0	9,093.0	8,234.1	7,898.1	37.6	32.4	94.00	-1,160.7	85.9	1,293.3	1,260.7	32,56	39.716		
9,300.0	9,193.0	8,250.1	7,904.0	37.8	32.4	93.69	-1,159.0	100.6	1,385.9	1,353.9	32.04	43.253		
9,400.0 9,446.5	9,293.0 9,339.5	8,281.0 8,281.0	7,914.8 7,914.8	38.1 38.3	32.4 32.4	93.09 93.09	-1,155.2 -1,155.2	129.3 129.3	1,479.4 1,522.7	1,447.3 1,491.0	32.08 31.69	46.110 48.050		
9,450.0	9,343.0	8,281.0	7,914.8	38.3	32.4	3.29	-1,155.2	129.3	1,526.0	1,494.4	31.66	48.198		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Reference Wellbore Wellbore #1 Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

KB @ 3113.5usft Grid

Well Barry Miller State Com #222H

KB @ 3113.5usft

Survey Calculation Method:

Minimum Curvature Output errors are at 2.00 sigma

EDM 5000.14 Server Database:

	ıram: 163												Offset Well Error:	0.0 us
Refer	rence	Offse	t	Semi Major	Axis				Dista	ince				
leasured Depth	Vertical Depth	Measured Depth	Vertica l Depth	Reference	Offset	Highside Too l face	Offset Wellbor +N/-S	e Centre +E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
9,500.0	9,393.0	8,281.0	7,914.8	38.4	32.4	2.68	-1,155.2	129.3	1,572.0	1,540.8	31.22	50.358		
9,550.0	9,442.5	8,281.0	7,914.8	38.5	32.4	2.27	-1,155.2	129.3	1,616.3	1,585.6	30.71	52.636		
9,600.0	9,491.2	8,281.0	7,914.8	38.7	32.4	1.97	-1,155.2	129.3	1,658.9	1,628.8	30.15	55.018		
9,650.0	9,538.8	8,281.0	7,914.8	38.8	32.4	1.74	-1,155.2	129.3	1,699.6	1,670.0	29,56	57.489		
9,700.0	9,584.8	8,281.0	7,914.8	38.8	32.4	1.57	-1,155.2	129.3	1,738.1	1,709.2	28.95	60.034		
9,750.0	9,629.0	8,281.0	7,914.8	38.9	32.4	1.43	-1,155.2	129.3	1,774.4	1,746.1	28.33	62.630		
9,800.0	9,671.0	8,318.2	7,925.7	39.0	32.4	1.09	-1,150.1	164.5	1,806.4	1,777.9	28.49	63.396		
9,850.0	9,710.5	8,326.0	7,927.7	39.0	32.4	0.97	-1,148.9	172.0	1,836.9	1,808.9	28.00	65.613		
9,900.0	9,747.1	8,334.1	7,929.5	39.1	32.4	0.87	-1,147.7	179.7	1,864.5	1,837.0	27.51	67.782		
9,950.0	9,780.7	8,377.0	7,937.0	39.1	32.3	0.60	-1,141.0	221.5	1,890.9	1,863.3	27.67	68.349		
10,000.0	9,810.9	8,377.0	7,937.0	39.1	32.3	0.58	-1,141.0	221.5	1,912.0	1,884.9	27.04	70.720		
10,050.0	9,837.5	8,377.0	7,937.0	39.1	32.3	0.56	-1,141.0	221.5	1,930.1	1,903.6	26.47	72,928		
10,100.0	9,860.3	8,377.0	7,937.0	39.1	32.3	0.54	-1,141.0	221.5	1,945.2	1,919.3	25.97	74.906		
10,106.5	9,862.9	8,377.0	7,937.0	39.1	32.3	0.54	-1,141.0	221.5	1,947.0	1,921.1	25.91	75.151		
10,200.0	9,899.6	8,406.9	7,940.6	39.1	32.3	0.39	-1,136.1	250.8	1,972.0	1,946.4	25.59	77.057		
10,300.0	9,935.6	8,471.0	7,947.3	39.1	32.3	0.06	-1,124.8	313.5	1,997.7	1,972.0	25.75	77.596		
10 400 0	0.000.1	0 500 1	7.050.5	20.1	20.2	0.40	4 440 4	054.0	0.000.0	1.000.1	05.00	70.070		
10,400.0	9,968.4	8,509.4	7,950.5	39.1	32.3	-0.13	-1,118.1	351.2	2,022.2	1,996.4	25.80	78.370		
10,500.0	9,997.8	8,566.0	7,953.7	39.2	32.6	-0.37	-1,109.3	406.9	2,046.0	2,019.8	26.15	78.226		
10,600.0	10,023.9	8,601.0	7,954.9	39.6	33.0	-0.50	-1,104.6	441.6	2,068.6	2,042.1	26.54	77.947		
10,700.0	10,046.6	8,660.0	7,955.3	40.4	33.6	-0.66 0.43	-1,098.3 1 104.3	500.3 780.5	2,090.5	2,063.3	27.17	76.930 71.301		
10,800.0	10,065.9	8,941.0	7,962.1	41.5	37.6	-0.43	-1,104.3	780.5	2,111.4	2,081.8	29.61	71.301		
10,900.0	10,081.8	9,001.2	7,967.4	42.7	38.6	-0.32	-1,107.9	840.3	2,118.8	2,088.5	30.28	69.974		
11,000.0	10,094.2	9,068.4	7,971.2	44.0	39.7	-0.19	-1,112.4	907.3	2,125.3	2,094.2	31.10	68.340		
11,100.0	10,103.2	9,178.5	7,978.0	45.4	41.6	-0.04	-1,117.1	1,017.1	2,128.1	2,095.7	32.34	65.801		
11,200.0	10,108.6	9,278.7	7,983.8	46.9	43.4	0.06	-1,120.2	1,117.0	2,127.7	2,094.2	33.51	63,493		
11,293.4	10,110.6	9,387.2	7,991.0	48.3	45.4	0.10	-1,120.9	1,225,3	2,123.4	2,088.7	34.74	61,126		
11,300.0	10,110.6	9,393.2	7,991.4	48.4	45.6	0.10	-1,120.9	1,231.3	2,123.0	2,088.2	34.81	60.988		
11,400.0	10,111.1	9,477.5	7,996.8	50.0	47.2	0.11	-1,120.7	1,315.4	2,117.0	2,081.2	35.86	59.040		
11,500.0	10,111.5	9,556.1	8,001.2	51.7	48.7	0.09	-1,119.5	1,393.9	2,112.0	2,075.1	36.88	57.263		
11,600.0	10,112.0	9,638.3	8,004.8	53.5	50.3	0.04	-1,117.2	1,476.0	2,108.0	2,070.0	37.96	55.533		
11,700.0	10,112.4	9,748.9	8,009.8	55.3	52.5	-0.01	-1,114.7	1,586.5	2,103.9	2,064.6	39.28	53.562		
44 000 0	10.110.0	0.000.4	0.040.5	57.4	540	0.00	4 440 5	4 000 0	0.400.0	0.050.0	10.11	54.004		
11,800.0	10,112.9	9,832.1	8,013.5	57.1	54.2	-0.06	-1,112.5	1,669.6	2,100.0	2,059.6	40.41	51.961		
11,900.0	10,113.3	9,898.3	8,015.5	59.0	55.6	-0.10	-1,110.5	1,735.7	2,097.4	2,055.9	41.46	50.589		
12,000.0	10,113.8	10,080.0	8,025.2	60.9	59.4	-0.30	-1,101.9	1,916.9	2,091.5	2,048.2	43.31	48.290		
12,100.0 12,200.0	10,114.3 10,114.7	10,158.0 10,232.5	8,029.6 8,033.0	62.9 64.9	61.0 62.6	-0.43 -0.58	-1,096.7 -1,090.7	1,994.6 2,068.7	2,086.4 2,082.3	2,042.0 2,036.8	44.42 45.53	46.966 45.737		
12,200.0	10,114.7	10,202.0	0,000.0	07.5	02.0	0.50	1,000.7	2,000.7	2,002.3	2,000.0	75.55	-10.707		
12,300.0	10,115.2	10,337.6	8,036.7	66.9	64.8	-0.81	-1,081.9	2,173.5	2,079.5	2,032.6	46.86	44.377		
12,400.0	10,115.6	10,455.5	8,042.6	68.9	67.4	-1.02	-1,073.6	2,290.9	2,074.9	2,026.6	48.31	42.948		
12,500.0	10,116.1	10,536.6	8,046.4	71.0	69.2	-1.18	-1,067.2	2,371.7	2,070.8	2,021.3	49.51	41.822		
12,600.0	10,116.5	10,701.3	8,054.9	73.1	72.8	-1.49	-1,055.4	2,535.7	2,066.6	2,015.2	51.36	40.240		
12,700.0	10,117.0	10,818.9	8,064.6	75.2	75.4	-1.62	-1,050.2	2,652.8	2,058.8	2,005.9	52.89	38,926		
12,800.0	10,117.4	10,902.8	8,071.0	77.4	77.3	-1.71	-1,046.5	2,736.3	2,051.7	1,997.5	54.16	37.882		
12,900.0		10,982.9	8,076.6	79.5	79.1	-1.80	-1,043.1	2,816.1	2,045.3	1,989.9	55.42	36,908		
13,000.0		11,055.7	8,080.7	81.7	80.8	-1.81	-1,042.2	2,888.9	2,040.2	1,983.6	56.64	36.019		
13,100.0	10,118.8	11,136.6	8,084.2	83.9	82.6	-1.77	-1,043.2	2,969.7	2,036.2	1,978.2	57.95	35.137		
13,200.0		11,207.0	8,086.5	86.1	84.2	-1.72	-1,044.6	3,040.0	2,033.4	1,974.2	59.19	34.352		
40 000 0	10 110 =	44.004.1	0.007.0	00.0	00.0	4.07		2 44 4 .	0.001.5	4 074 -	20.45	20.500		
13,300.0	10,119.7	11,281.4	8,087.8	88.3	86.0	-1.67	-1,046.0	3,114.4	2,031.9	1,971.5	60.48	33.598		
13,400.0		11,369.3	8,088.5	90.5	88.0	-1.62	-1,047.3	3,202.3	2,031.6	1,969.7	61.87	32.839		
13,500.0		11,467.7	8,089.1	92.8	90.3	-1.54	-1,049.5	3,300.6	2,031.3	1,968.0	63.33	32.073		
13,600.0		11,602.3	8,090.4	95.0	93.4	-1.42	-1,052.7	3,435.2	2,030.9	1,965.8	65.06	31.214		
13,700.0	10,121.6	11,689.4	8,092.2	97.3	95.4	-1.34	-1,055.0	3,522.2	2,029.2	1,962.7	66.46	30.532		
13,800.0	10,122.0	11,777.7	8,093.3	99.5	97.5	-1.27	-1,057.2	3,610.5	2,028.3	1,960.4	67.87	29.883		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Grid **Survey Calculation Method:** Minimum Curvature

Well Barry Miller State Com #222H

KB @ 3113.5usft

KB @ 3113.5usft

Output errors are at 2.00 sigma

EDM 5000.14 Server Database:

Offset De	sign	Barry M	iller - Bar	ry Miller Sta	ite Com #	122H - Well	bore #1 - Actu	ıal					Offset Site Error:	0.0 usft
Survey Prog Refer		-MWD Offse	at .	Semi Major	Δvis				Dista	ance			Offset Well Error:	0.0 usft
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbor	e Centre	Between	Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	vvarming	
13,900.0	10,122.5	11,887.8	8,094.6	101.8	100.1	-1.17	-1,059.9	3,720.5	2,027.6	1,958.1	69.44	29.198		
14,000.0	10,122.9	11,972.8	8,095.7	104.1	102.1	-1.10	-1,061.8	3,805.5	2,026.7	1,955.9	70.84	28.610		
14,047.4	10,123.1	12,012.2	8,095.9	105.2	103.0	-1.08	-1,062.2	3,844.9	2,026.6	1,955.1	71.50	28.346		
14,100.0	10,123.4	12,056.5	8,096.0	106.4	104.0	-1.06	-1,062.6	3,889.2	2,026.7	1,954.5	72.23	28,061		
14,200.0	10,123.8	12,196.8	8,096.9	108.7	107.3	-0.95	-1,065.9	4,029.4	2,026.7	1,952.7	74.01	27.383		
14,300.0	10,124.3	12,293.9	8,098.7	111.0	109.6	-0.82	-1,069.7	4,126.5	2,025.2	1,949.6	75.51	26.819		
14,400.0	10,124.8	12,372.0	8,099.7	113.3	111.5	-0.75	-1,071.9	4,204.5	2,024.3	1,947.4	76.88	26.331		
14,500.0	10,125.2	12,546.0	8,104.7	115.6	115.6	-0.65	-1,074.3	4,378.4	2,021.6	1,942.7	78.88	25.628		
14,600.0	10,125.7	12,633.7	8,108.5	117.9	117.7	-0.60	-1,075.5	4,466.0	2,017.8	1,937.5	80.32	25.123		
14,700.0	10,126.1	12,811.9	8,118.1	120.2	121.9	-0.45	-1,079.7	4,643.9	2,013.1	1,930.8	82.34	24.450		
14,800.0	10,126.6	12,921.6	8,127.2	122.6	124.6	-0.29	-1,084.6	4,753.1	2,005.2	1,921.3	83.93	23.891		
14,900.0	10,127.0	13,008.6	8,134.0	124.9	126.6	-0.14	-1,089.4	4,839.8	1,997.8	1,912.4	85.40	23,394		
15,000.0	10,127.5	13,093.8	8,140.1	127.2	128.7	0.01	-1,093.9	4,924.6	1,991.0	1,904.1	86.86	22.922		
15,100.0	10,127.9	13,178.6	8,145.6	129.6	130.7	0.15	-1,098.3	5,009.2	1,985.0	1,896.7	88.33	22.473		
15,200.0	10,128.4	13,268.5	8,150.8	131.9	132.9	0.30	-1,102.9	5,098.7	1,979.7	1,889.9	89.83	22.038		
15,300.0	10,128.9	13,367.9	8,156.3	134.3	135.2	0.45	-1,107.4	5,197.9	1,974.7	1,883.3	91.40	21,605		
15,400.0	10,129.3	13,470.2	8,162.1	136.6	137.7	0.58	-1,111.1	5,300.0	1,969.5	1,876.5	92.98	21.182		
15,500.0	10,129.8	13,561.0	8,167.1	139.0	139.9	0.66	-1,113.1	5,390.6	1,964.5	1,870.0	94.48	20.792		
15,600.0	10,130.2	13,646.3	8,171.2	141.3	141.9	0.69	-1,113.6	5,475.8	1,960.1	1,864.2	95.93	20,432		
15,700.0	10,130.7	13,732.5	8,174.7	143.7	144.0	0.67	-1,112.5	5,561.9	1,956.5	1,859.1	97.37	20.093		
15,800.0	10,131.1	13,820.2	8,177.7	146.1	146.1	0.64	-1,110.7	5,649.5	1,953.5	1,854.7	98.81	19.771		
15,900.0	10,131.6	13,912.2	8,180.3	148.4	148.3	0.57	-1,107.7	5,741.5	1,951.1	1,850.9	100.25	19.461		
16,000.0	10,132.1	14,008.1	8,182.9	150.8	150.6	0.50	-1,104.6	5,837.3	1,948.9	1,847.2	101.73	19.158		
16,100.0	10,132.5	14,097.8	8,184.8	153.2	152.7	0.45	-1,102.3	5,926.9	1,947.1	1,844.0	103.17	18.873		
16,200.0	10,133.0	14,192.8	8,186.5	155.5	155.0	0.39	-1,099.8	6,021.8	1,945.8	1,841.1	104.65	18.594		
16,300.0	10,133.4	14,287.1	8,188.1	157.9	157.3	0.30	-1,096.0	6,116.1	1,944.6	1,838.5	106.10	18,327		
16,400.0	10,133.9	14,371.3	8,188.9	160.3	159.3	0.19	-1,091.8	6,200.2	1,944.0	1,836.6	107.50	18.085		
16,421.4	10,134.0	14,389.9	8,189.0	160.8	159.7	0.17	-1,090.9	6,218.8	1,944.0	1,836.2	107.80	18.034		
16,500.0	10,134.3	14,471.9	8,189.2	162.7	161.7	0.05	-1,086.5	6,300.6	1,944.2	1,835.2	108.98	17.839		
16,600.0	10,134.8	16,600.0	8,198.4	165.1	213.0	0.00	-1,083.2	6,528.5	1,940.5	1,814.5	125.95	15.407		
16,700.0	10,135.3	14,840.3	8,210.8	167.4	170.6	0.01	-1,082.8	6,668.2	1,931.9	1,819.0	112.91	17.109		
16,800.0	10,135.7	14,939.8	8,220.2	169.8	173.0	0.00	-1,081.6	6,767.2	1,922.8	1,808.4	114.44	16.803		
16,900.0	10,136.2	15,018.1	8,227.0	172.2	174.8	-0.03	-1,080.1	6,845.2	1,914.6	1,798.7	115.87	16,523		
17,000.0	10,136.6	15,106.3	8,234.0	174.6	177.0	-0.09	- 1,077.8	6,933.1	1,907.1	1,789.8	117.35	16,252		
17,100.0	10,137.1	15,178.1	8,238.9	177.0	178.7	-0.14	- 1,075.5	7,004.7	1,900.8	1,782.0	118.74	16.007		
17,200.0	10,137.5	15,240.7	8,242.2	179.4	180.2	-0.20	-1,073.1	7,067.2	1,896.0	1,775.9	120.08	15.790		
17,300.0	10,138.0	15,300.9	8,244.0	181.8	181.6	-0.27	-1,070.6	7,127.2	1,893.4	1,772.0	121.37	15.600		
17,400.0	10,138.4	15,370.8	8,244.9	184.2	183.3	-0.35	-1,067.4	7,197.1	1,892.6	1,769.9	122.69	15.425		
17,400.4	10,138.5	15,371.1	8,244.9	184.2	183.3	-0.35	-1,067.3	7,197.4	1,892.6	1,769.9	122.70	15.425		
17,411.2	10,138.5	15,378.7	8,244.9	184.4	183.5	-0.36	-1,067.0	7,205.0	1,892.6	1,769.8	122.84	15.407		
17,411.8	10,138.5	15,379.0	8,244.9	184.5	183.5	-0.36	-1,067.0	7,205.3	1,892.6	1,769.8	122,84	15,407		

Company: Matador Production Company

Project: Rustler Breaks
Reference Site: Barry Miller
Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft
Reference Wellbore Wellbore #1
Reference Design: BLM Plan #1

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference: MD Reference: North Reference:

Output errors are at

Database:

Well Barry Miller State Com #222H KB @ 3113.5usft

KB @ 3113.5usft

Grid
Minimum Curvature

2.00 sigma

EDM 5000.14 Server

	sign	Dairy IVI	ilici bai	Ty William Old	ile Colli #	-12211 - 00011	bore #1 - Altitu	ide Plan #1					Offset Site Error:	0.0 usft
Survey Progr. Refere		WD Offse		Semi Major	Avis				Dista	-neo			Offset Well Error:	0.0 usft
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbor	e Centre	Between	Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	••••••	
0.0	0.0	1.0	-1.0	0.0	0.0	179.91	-110.3	0.2	110.3					
100.0	100.0	101.0	99.0	0.1	0.1	179.91	-110.3	0.2	110.3	110.0	0.26	424.342		
200.0	200.0	201.0	199.0	0.5	0.5	179.91	-110.3	0.2	110.3	109.3	0.98	112.898		
300.0	300.0	301.0	299.0	0.8	8.0	179.91	-110.3	0,2	110.3	108.6	1.69	65,111		
400.0	400.0	401.0	399.0	1.2	1.2	179.91	-110.3	0.2	110.3	107.9	2.41	45.747		
500.0	500.0	501.0	499.0	1.6	1.6	179.91	-110.3	0.2	110.3	107.2	3.13	35.261		
600.0	600.0	601.0	599.0	1.9	1.9	179.91	-110.3	0.2	110.3	106.4	3.84	28.685		
700.0	700.0	701.0	699.0	2.3	2.3	179.91	-110.3	0.2	110.3	105.7	4.56	24.177		
800.0 900.0	800.0 900.0	801.0	799.0 899.0	2.6	2.6	179.91	-110.3	0.2	110.3	105.0	5.28	20.893		
1,000.0	1,000.0	901.0 999.0	999.0	3.0 3.4	3.0 3.4	179.91 179.91	-110.3 -110.3	0.2 0.2	110.3 110.3	104.3 103.6	6.00 6.71	18.395 16.447		
1,100.0	1,100.0	1,097.3	1,097.3 1,195.4	3.7	3.7 4.0	-179.93 170.46	-111.0 -113.4	-0.1	111.1	103.7 105.4	7.40 8.08	15.010		
1,200.0 1,300.0	1,200.0 1,300.0	1,195.4 1,293.5	1,195.4	4.1 4.4	4.0	-179.46 -18.85	-117.3	-1.1 -2.6	113.4 116.6	105.4	8.74	14.040 13.334		
1,400.0	1,400.0	1,391.6	1,391.3	4.7	4.7	-18.24	-122.7	-2.0 -4.8	119.7	110.3	9.40	12.740		
1,500.0	1,499.9	1,489.6	1,489.0	5.1	5.0	-17.64	-129.7	-7.6	122.8	112.7	10.05	12.213		
1,600.0	1,599.7	1,587.5	1,586.5	5.4	5.4	-17.05	-138.2	-11.1	125.8	115.1	10.71	11.744		
1,700.0	1,699.4	1,685.4	1,683.8	5.8	5.7	-16.46	-148.3	-15.1	128.8	117.4	11.38	11.322		
1,800.0	1,798.9	1,783.2	1,780.8	6.1	6.1	-15.89	-159.9	-19.8	131.8	119.7	12.05	10,941		
1,900.0	1,898.3	1,881.0	1,877.6	6.5	6.4	-15.32	-173.0	-25.1	134.7	122.0	12.71	10.595		
2,000.0	1,997.4	1,978.8	1,974.0	6.8	6.8	-14.76	-187.6	-31.0	137.6	124.2	13.38	10.279		
2,100.0	2,096.3	2,076.4	2,070.1	7.2	7.2	-14.20	-203.8	-37.6	140.4	126.4	14.06	9.989		
2,200.0	2,194.9	2,174.1	2,165.9	7.6	7.6	-13.65	-221.4	-44.7	143.2	128.5	14.73	9.722		
2,269.4	2,263.2	2,241.8	2,232.1	7.9	7.9	-13.26	-234.6	-50.0	145.1	129.9	15.20	9.549		
2,300.0	2,293.3	2,272.2	2,261.8	8.0	8.0	-13.09	-240.7	-52.4	146.0	130.6	15.42	9.470		
2,400.0	2,391.5	2,372.2	2,359.4	8.4	8,5	-12.54	-260.7	-60.5	148.9	132.7	16.14	9,222		
2,500.0	2,489.8	2,472.1	2,457.0	8.8	8.9	-12.02	-280.7	-68.6	151.7	134.9	16.87	8.993		
2,600.0	2,588.1	2,572.1	2,554.6	9.2	9.4	-11.51	-300.8	- 76.7	154.6	137.0	17.61	8.783		
2,700.0	2,686.3	2,672.0	2,652.1	9.6	9.8	-11.02	-320.8	-84.8	157.5	139.2	18.34	8.588		
2,800.0	2,784.6	2,772.0	2,749.7	10.1	10.3	-10.54	-340.8	-92.9	160.4	141.3	19.08	8.408		
2,900.0	2,882.8	2,871.9	2,847.3	10.5	10.7	-10.09	-360.8	-100.9	163.3	143.5	19.82	8.241		
3,000.0	2,981.1	2,971.9	2,944.9	10.9	11.2	-9.65	-380.9	-109.0	166.3	145.7	20.56	8.086		
3,100.0	3,079.4	3,071.8	3,042.5	11.4	11.7	-9.23	-400.9	-117.1	169.2	147.9	21.31	7.941		
3,200.0	3,177.6	3,171.8	3,140.1	11.8	12.1	-8.82	- 420.9	-125.2	172.2	150.1	22,05	7,806		
3,300.0	3,275.9	3,271.7	3,237.7	12.2	12.6	-8.42	-441.0	-133.3	175.1	152.3	22.80	7.680		
3,400.0	3,374.2	3,371.7	3,335.3	12.7	13.1	-8.04	- 461.0	-141.4	178.1	154.5	23.55	7.562		
3,500.0	3,472.4	3,471.6	3,432.9	13.1	13.6	-7.67	-481.0	-149.5	181.1	156.8	24.30	7.451		
3,600.0	3,570.7	3,571.6	3,530.4	13.6	14.0	-7.31	-501.0	-157.5	184.0	159.0	25.05	7.347		
3,700.0	3,669.0	3,671.5	3,628.0	14.0	14.5	-6.96	-521.1	-165.6	187.0	161.2	25.80	7.248		
3,800.0 3,900.0	3,767.2	3,771.5 3,871.4	3,725.6	14.5	15.0 15.5	-6.63 -6.30	-541.1 -561.1	-173.7 -181.8	190.0 193.0	163.5 165.7	26.55 27.31	7.156 7.068		
	3,865.5	3,871.4	3,823.2	14.9	15.5	-6.30	-561.1	-181.8		165.7	27.31	7.068		
4,000.0	3,963.7	3,971.4	3,920.8	15.4	16.0	-5.98	-581.1	-189.9	196.0	168.0	28.06	6.985		
4,100.0	4,062.0	4,071.3	4,018.4	15.8	16.5	-5.68	-601.2	-198.0	199.0	170.2	28.81	6.907		
4,200.0	4,160.3	4,171.2	4,116.0	16.3	17.0	-5.38	-621.2	-206.0	202.0	172.5	29.57	6.833		
4,300.0 4,400.0	4,258.5 4,356.8	4,271.2 4,371.1	4,213.6 4,311.1	16.7 17.2	17.4 17.9	-5.09 -4.81	-641.2 -661.3	-214.1 -222.2	205.1 208.1	174.7 177.0	30.33 31.08	6.762 6.695		
4,500.0	4,455.1	4,471.1	4,408.7	17.6	18.4	-4.54	-681.3	-230.3	211.1	179.3	31.84	6.631		
4,600.0	4,553.3	4,571.0	4,506.3	18.1	18.9	-4.28	-701.3	-238.4	214.2	181.6	32.60	6.570		
4,700.0	4,651.6	4,671.0	4,603.9	18.5	19.4	-4.02	-721.3	-246.5	217.2	183.8	33.35	6.512		
4,800.0	4,749.8	4,770.9	4,701.5	19.0	19.9	-3.77	-741.4	-254.5	220.2	186.1	34.11	6.456		
4,900.0	4,848.1	4,870.9	4,799.1	19.5	20.4	-3.53	-761.4	-262.6	223.3	188.4	34.87	6.403		
5,000.0	4,946.4	4,970.8	4,896.7	19.9	20.9	-3.29	-781.4	- 270.7	226.3	190.7	35.63	6.352		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: KB @ 3113.5usft KB @ 3113.5usft MD Reference: North Reference: Grid

Survey Calculation Method: Minimum Curvature

Well Barry Miller State Com #222H

Output errors are at 2.00 sigma EDM 5000.14 Server Database:

Offset Des	sign	Barry Mi	ller - Bar	ry Miller Sta	te Com #	122H - Well	bore #1 - Altitu	ıde Plan #1					Offset Site Error:	0.0 usf
Survey Progra Refere		WD Offse		Semi Major	Avie				Dista	nco			Offset Well Error:	0.0 usf
	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore	e Centre	Between	Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	· · · · · · · · · · · · · · · · · · ·	
5,100.0	5,044.6	5,070.8	4,994.3	20.4	21.4	-3.06	-801.4	-278.8	229.4	193.0	36.39	6.303		
5,200.0	5,142.9	5,170.7	5,091.8	20.8	21.9	-2.84	-821.5	-286.9	232.5	195.3	37.15	6.257		
5,300.0	5,241.2	5,270.7	5,189.4	21.3	22.4	-2.62	-841.5	-295.0	235.5	197.6	37.91	6.212		
5,400.0	5,339.4	5,370.6	5,287.0	21.8	22.8	-2.41	-861.5	-303.0	238.6	199.9	38.67	6,169		
5,500.0	5,437.7	5,470.6	5,384.6	22.2	23.3	-2.20	-881.6	-311.1	241.7	202.2	39.44	6.128		
5,600.0	5,536.0	5,570.5	5,482.2	22.7	23.8	-2.00	-901.6	-319.2	244.7	204.5	40.20	6.088		
5,700.0	5,634.2	5,670.5	5,579.8	23.1	24.3	-1.80	- 921.6	-327.3	247.8	206.8	40.96	6.050		
5,800.0	5,732.5	5,770.4	5,677.4	23.6	24.8	-1.61	-941.6	-335.4	250.9	209.2	41.72	6.013		
5,900.0	5,830.7	5,870.4	5,775.0	24.1	25.3	-1.42	-961.7	-343.5	254.0	211.5	42.49	5.978		
6,000.0	5,929.0	5,970.3	5,872.5	24.5	25.8	-1.24	-981.7	-351.5	257.0	213.8	43.25	5.943		
6,100.0	6,027.3	6,070.3	5,970.1	25.0	26.3	-1.06	-1,001.7	-359.6	260.1	216.1	44.01	5.910		
6,200.0	6,125.5	6,170.2	6,067.7	25.4	26,8	-0.89	-1,021.7	-367.7	263,2	218.4	44.78	5.878		
6,300.0	6,223.8	6,270.2	6,165.3	25.9	27.3	-0.72	-1,041.8	-375.8	266.3	220.8	45.54	5.848		
6,400.0	6,322.1	6,377.0	6,269.8	26.4	27.8	-0.55	-1,062.0	-384.0	268.3	221.9	46.39	5.783		
6,500.0	6,420.3	6,484.5	6,375.7	26.8	28.3	-0.41	-1,079.7	-391.1	267.4	220.2	47.21	5.664		
6,600.0	6,518.6	6,591.9	6,481.8	27.3	28.8	-0.30	-1,094.6	-397.1	263.7	215.8	47.99	5.496		
6,700.0	6,616.8	6,699.0	6,588.1	27.8	29.2	-0.21	-1,106.7	-402.0	257.3	208.6	48.72	5.281		
6,800.0	6,715.1	6,805.6	6,694.3	28.2	29.6	-0.13	-1,116.0	-405.7	248.0	198.6	49.40	5.020		
6,900.0	6,813.4	6,911.6	6,800.0	28.7	30.0	-0.08	-1,122.5	-408.4	236.0	186.0	50.04	4.716		
7,000.0	6,911.6	7,016.8	6,905.1	29.2	30.3	-0.05	-1,126.3	-409.9	221.3	170.6	50.64	4.369		
7,100.0	7,009.9	7,120.6	7,008.9	29.6	30.6	-0.04	-1,127.4	-410.3	203.8	152.6	51.20	3.981		
7,200.0	7,108.2	7,218.8	7,107.2	30.1	30.9	-0.05	-1,127.4	-410.3	185.2	133.4	51.88	3.571		
7,300.0	7,206.4	7,326.7	7,205.4	30.6	31.2	-0.05	-1,127.4	-410.3	166.7	114.1	52.59	3.170		
7,400.0	7,304.7	7,415.3	7,303.7	31.0	31.4	-0.06	-1,127.4	-410.3	148.1	94.9	53.25	2.782		
7,500.0	7,403.0	7,517.1	7,405.4	31.5	31.7	-0.83	-1,127.4	-408.6	129.0	75.3	53.73	2.401		
7,600.0	7,501.2	7,618.7	7,505.4	31.9	31.9	-9.86	-1,127.2	-391.6	106.1	51.6	54.50	1,947		
7,700.0	7,599.5	7,709.6	7,591.2	32.4	32.1	-31.17	-1,127.1	-361.7	88.6	30.4	58.19	1,522		
7,724.4	7,623.4	7,729.8	7,609.6	32.5	32.1	-37.76	-1,127.0	-353.3	87.6	28.3	59.31		Level 3, CC, ES, SF	
7,800.0	7,697.7	7,787.7	7,660.3	32.9	32.2	-57.72	-1,126.8	-325.5	98.2	38.2	60.01	1.637		
7,833.5	7,730.7	7,811.0	7,679.9	33.0	32.2	-65.14	-1,126.7	-312.9	109.5	50.8	58.74	1.864		
7,900.0	7,796.1	7,853.4	7,714.2	33.3	32.3	-76.89	-1,126.6	-288.0	141.2	86.1	55.05	2.564		
8,000.0	7,894.9	7,908.6	7,755.9	33.8	32.3	-88.07	-1,126.3	-251.8	203.5	153.7	49.70	4.093		
8,100.0	7,994.0	7,955.0	7,788.1	34.2	32.3	-94.84	-1,126.1	-218.4	275.6	230.1	45.47	6.062		
8,200.0	8,093.5	8,000.0	7,816.7	34.6	32.3	-99.77	-1,125.9	-183.7	353,7	310.9	42.83	8.257		
8,300.0 8,400.0	8,193.2 8,293.1	8,027.8 8,050.0	7,833.0 7,845.1	34.9 35.3	32.3 32.3	-103.04 -105.97	-1,125.8 -1,125.6	-161.2 -142.6	435.5 520.3	396.2 483.8	39.36 36.48	11.066 14.264		
8,500.0	8,393.0	8,081.6	7,861.2	35.6	32.3	-108.88	-1,125.5	-115.4	607.0	571.8	35.22	17.237		
8,546.5	8,439.5	8,100.0	7,869.9	35.8	32.3	89.87	-1,125.4	-99.2	648.0	613.0	35.04	18.493		
8,600.0	8,493.0	8,100.0	7,869.9	35.9	32.3	89.87	-1,125.4	-99.2	695.5	662.1	33.39	20.826		
8,700.0	8,593.0	8,122.6	7,879.8	36.2	32.3	89.86	-1,125.2	-78.9	785.4	753.1	32,32	24.303		
8,800.0	8,693.0	8,150.0	7,890.8	36.4	32.3	89.84	-1,125.1	-53.8	876.9	845.1	31,80	27,576		
8,900.0	8,793.0	8,150.0	7,890.8	36.7	32.3	89.84	-1,125.1	-53.8	969.1	939.0	30.09	32,207		
9,000.0	8,893.0	8,166.9	7,896.9	37.0	32.3	89.83	-1,125.0	-38.0	1,062.4	1,032.8	29,51	36,001		
9,100.0	8,993.0	8,178.5	7,900.9	37.3	32.3	89.83	-1,124.9	-27.1	1,156.4	1,127.5	28.87	40.055		
9,200.0	9,093.0	8,200.0	7,907.6	37.6	32.3	89.82	-1,124.8	-6.7	1,251.2	1,222.4	28.74	43.531		
9,300.0	9,193.0	8,200.0	7,907.6	37.8	32.3	89.82	-1,124.8	-6.7	1,346.2	1,318.3	27.97	48.132		
9,400.0	9,293.0	8,200.0	7,907.6	38.1	32.3	89.82	-1,124.8	-6.7	1,442.0	1,414.6	27.37	52.689		
9,446.5	9,339.5	8,200.0	7,907.6	38.3	32.3	89.82	-1,124.8	-6.7	1,486.6	1,459.5	27.14	54.785		
9,450.0	9,343.0	8,200.0	7,907.6	38.3	32.3	0.07	-1,124.8	-6.7	1,490.0	1,462.9	27.12	54.945		
9,500.0	9,393.0	8,200.0	7,907.6	38.4	32.3	0.05	-1,124.8	-6.7	1,537.5	1,510.7	26.84	57.276		
9,550.0	9,442.5	8,220.5	7,913.3	38.5	32.2	0.04	-1,124.6	12.9	1,583.1	1,556.1	27.04	58.556		
9,600.0	9,491.2	8,226.6	7,914.9	38.7	32.2	0.03	-1,124.6	18.8	1,627.4	1,600.6	26.78	60.770		

Company: Matador Production Company

Project: Rustler Breaks
Reference Site: Barry Miller
Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft
Reference Wellbore Wellbore #1
Reference Design: BLM Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Output errors are at

Database: Offset TVD Reference: Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid

Minimum Curvature

2.00 sigma

EDM 5000.14 Server

Offset Des	sign	Barry M	iller - Barı	ry Miller Sta	te Com #	122H - Well	bore #1 - Altitu	ıde Plan #1					Offset Site Error:	0.0 usft
urvey Progra	ram: 0-M	WD											Offset Well Error:	0.0 usft
Refere Measured	ence Vertical	Offse Measured	t Vertical	Semi Major Reference	Axis Offset	Highside	Offset Wellbor	e Centre	Dista Between	nce Between	Minimum	Separation	Mornin	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Too l face (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	Warning	
9,650.0	9,538.8	8,250.0	7,920.3	38.8	32.2	0.02	-1,124.4	41.6	1,670.1	1,643.2	26.89	62.106		
9,700.0	9,584.8	8,250.0	7,920.3	38.8	32.2	0.02	-1,124.4	41.6	1,710.1	1,683.7	26.39	64.796		
9,750.0	9,629.0	8,250.0	7,920.3	38.9	32.2	0.02	-1,124.4	41.6	1,748.0	1,722.1	25.89	67.513		
9,800.0	9,671.0	8,250.0	7,920.3	39.0	32.2	0.02	-1,124.4	41.6	1,783.6	1,758.2	25.40	70.216		
9,850.0	9,710.5	8,250.0	7,920.3	39.0	32.2	0.02	-1,124.4	41.6	1,816.8	1,791.8	24.94	72.850		
9,900.0	9,747.1	8,276.2	7,925.2	39.1	32.2	0.02	-1,124.3	67.3	1,846.6	1,821.7	24.95	74.025		
9,950.0	9,780.7	8,300.0	7,928.7	39.1	32.2	0.01	-1,124.1	90.9	1,874.1	1,849.2	24.90	75.273		
10,000.0	9,810.9	8,300.0	7,928.7	39.1	32.2	0.01	-1,124.1	90.9	1,898.2	1,873.7	24.50	77.474		
10,050.0	9,837.5	8,300.0	7,928.7	39.1	32.2	0.01	-1,124.1	90.9	1,919.4	1,895.2	24.18	79.364		
10,100.0	9,860.3	8,317.4	7,930.6	39.1	32.2	0.01	-1,124.0	108.2	1,937.4	1,913.3	24.14	80.259		
10,106.5	9,862.9	8,318.8	7,930.7	39.1	32.2	0.01	-1,124.0	109.5	1,939.5	1,915.4	24.12	80.400		
10,200.0	9,899.6	8,347.1	7,932.7	39.1	32,2	0.01	-1,123.8	137.8	1,969.7	1,945.5	24.16	81,520		
10,300.0	9,935.6	8,405.2	7,935.2	39.1	32.2	0.00	-1,123.5	195.9	2,001.3	1,976.7	24.58	81.430		
10,400.0	9,968.4	8,501.0	7,939.3	39.1	32.3	0.00	-1,122.8	291.6	2,029.9	2,004.6	25.31	80.211		
10,500.0	9,997.8	8,602.2	7,943.5	39.2	33.0	0.00	-1,122.2	388.2	2,055.2	2,029.1	26.13	78.666		
10,600.0	10,023.9	8,704.7	7,947.8	39.6	34.1	-0.01	-1,121.6	485.7	2,077.1	2,050.1	27.01	76.897		
40 700 0	40.040.0	0.700.0	7.050.0	40.4	25.2	0.04	4 400 0	500.0	2.005.0	0.007.7	07.00	75 467		
10,700.0	10,046.6	8,793.6	7,952.0	40.4	35.3	-0.01	-1,120.9	583.9	2,095.6	2,067.7	27.88	75.167		
10,800.0	10,065.9	8,907.5	7,956.3	41.5	36.9	-0.01	-1,120.3	682.7	2,110.6	2,081.7	28.93	72.945		
10,900.0	10,081.8	9,008.2	7,960.6	42.7	38.4	-0.01	-1,119.7	781.9	2,122.2	2,092.2	29.96	70,830		
11,000.0 11,100.0	10,094.2 10,103.2	9,091.5	7,964.9 7,969.2	44.0	39.8	-0.01	-1,119.0 1,119.4	881.5	2,130.3 2,134.9	2,099.4	30.92	68.890		
11,100.0	10,103.2	9,208.6	7,909.2	45.4	41.8	-0.02	-1,118.4	981.3	2,134.9	2,102.8	32.13	66.450		
11,200.0	10,108.6	9,308.7	7,973.6	46.9	43.6	-0.02	-1,117.7	1,081.1	2,136.1	2,102.8	33.26	64.222		
11,293.4	10,110.6	9,384.7	7,977.6	48.3	45.0	-0.02	-1,117.1	1,174.4	2,134.0	2,099.7	34.23	62.342		
11,300.0	10,110.6	9,408.7	7,977.9	48.4	45.4	-0.02	-1,117.1	1,181.0	2,133.7	2,099.3	34.42	61.989		
11,400.0	10,111.1	9,508.8	7,982.2	50.0	47.3	-0.02	-1,116.4	1,280.8	2,129.8	2,094.2	35.61	59.812		
11,500.0	10,111.5	9,608.8	7,986.5	51.7	49.3	-0.02	-1,115.8	1,380.7	2,126.0	2,089.1	36,82	57.733		
44 000 0	10 110 0	0.700.0	7 000 0	50.5	54.0	0.00	4.445.0	4 400 5	0.400.4	0.004.0	00.00	55.750		
11,600.0	10,112.0	9,708.9	7,990.9	53.5	51.3	-0.02	-1,115.2	1,480.5	2,122.1	2,084.0	38.06	55.750		
11,700.0	10,112.4	9,809.0	7,995.2	55.3	53.3	-0.02	-1,114.5	1,580.3	2,118.2	2,078.9	39.33	53.860		
11,800.0	10,112.9	9,890.9	7,999.5	57.1	55.0	-0.02	-1,113.9	1,680.2	2,114.3	2,073.8	40.48	52.225		
11,900.0	10,113.3	9,990.8	8,003.9	59.0	57.1	-0.05	-1,111.8 1.106.5	1,779.9	2,110.5	2,068.7	41.77	50.525		
12,000.0	10,113.8	10,109.4	8,008.2	60.9	59.5	-0.18	-1,106.5	1,879.5	2,106.6	2,063.4	43.18	48.791		
12,100.0	10,114.3	10,209.6	8,012.5	62.9	61.7	-0.32	-1,100.7	1,979.0	2,102.7	2,058.3	44.46	47.292		
12,200.0	10,114.7	10,290.2	8,016.8	64.9	63.4	-0.47	-1,094.8	2,078.5	2,098.9	2,053.3	45.63	46.002		
12,300.0	10,115.2	10,390.0	8,021.1	66.9	65.5	-0.61	-1,088.9	2,178.1	2,095.1	2,048.1	46.94	44,630		
12,400.0	10,115.6	10,489.8	8,025.4	68.9	67.7	-0.75	-1,083.1	2,277.6	2,091.3	2,043.0	48.28	43.319		
12,500.0	10,116.1	10,589.5	8,029.8	71.0	69.9	-0.90	-1,077.2	2,377.1	2,087.5	2,037.8	49.62	42.066		
40.000.0	10 110 5	10.000.0	0.004.4	70.4	70.4	4.04	1.071.1	0.470.0	0.000 7	0.000.7	50.00	10.000		
12,600.0	10,116.5	10,689.3	8,034.1	73.1	72.1	-1.04	-1,071.4	2,476.6	2,083.7	2,032.7	50.98	40.868		
12,700.0	10,117.0	10,789.1	8,038.4	75.2	74.3	-1.19	-1,065.5	2,576.1	2,079.9	2,027.5	52.36	39.723		
12,800.0	10,117.4	10,888.9	8,042.7	77.4	76.5	-1.34	-1,059.6	2,675.7	2,076.1	2,022.4	53.75	38.627		
12,900.0	10,117.9	10,990.0	8,047.1	79.5	78.8 91.1	-1.46 1.40	-1,054.6 1,053.0	2,776.5	2,072.4	2,017.2	55.16 56.61	37.569		
13,000.0	10,118.4	11,091.8	8,051.5	81.7	81.1	-1.49	-1,052.9	2,878.2	2,068.5	2,011.9	56.61	36,542		
13,100.0	10,118.8	11,193.6	8,055.9	83.9	83.5	-1.43	-1,054.8	2,979.9	2,064.6	2,006.5	58.08	35.550		
13,200.0	10,119.3	11,277.3	8,059.2	86.1	85.4	-1.31	-1,058.5	3,063.4	2,061.0	2,001.6	59.44	34,676		
13,300.0	10,119.7	11,377.1	8,062.7	88.3	87.7	-1.17	-1,063.1	3,163.1	2,057.8	1,996.9	60.92	33.781		
13,400.0	10,120.2	11,476.9	8,066.2	90.5	90.0	-1.02	-1,067.6	3,262.7	2,054.7	1,992.3	62.40	32.925		
13,500.0	10,120.6	11,576.8	8,069.7	92.8	92.4	-0.88	-1,072.2	3,362.4	2,051.5	1,987.6	63.90	32.106		
40.000.0	40 101 :	44.070.0	0.070.0	05.0	047	0.70	4.070.0	2 400 6	0.040.5	4 000 0	05.70	24.004		
13,600.0	10,121.1	11,676.6	8,073.2	95.0	94.7	-0.73	-1,076.8	3,462.0	2,048.3	1,983.0	65.40	31.321		
13,700.0	10,121.6	11,776.4	8,076.8	97.3	97.0	-0.59	-1,081.4	3,561.7	2,045.2	1,978.3	66.90	30,569		
13,800.0	10,122.0	11,876.2	8,080.3	99.5	99.4	-0.44	-1,085.9	3,661.3	2,042.1	1,973.7	68.42	29.848		
13,900.0	10,122.5	11,976.0	8,083.8	101.8	101.7	-0.30	-1,090.5	3,761.0	2,039.0	1,969.1	69.94	29.155		
14,000.0	10,122.9	12,075.8	8,087.3	104.1	104.1	-0.15	-1,095.1	3,860.6	2,035.9	1,964.4	71.46	28.490		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

Well Barry Miller State Com #222H TVD Reference: KB @ 3113.5usft KB @ 3113.5usft MD Reference: North Reference: Grid

Survey Calculation Method: Minimum Curvature

Output errors are at 2.00 sigma EDM 5000.14 Server Database:

Offset De	_		ıııer - Bar	ry Miller Sta	ate Com #	122H - Wel	lbore #1 - Altit	ude Plan #1					Offset Site Error:	0.0 u
urvey Prog Refer		WD Offse	ət	Semi Major	Axis				Dista	ance			Offset Well Error:	0.0 ι
leasured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbor +N/-S (usft)	re Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,200.0	10,123.8	12,275.1	8,094.3	108.7	108.8	-0.01	-1,098.6	4,059.7	2,029.8	1,955.3	74.47	27.255		
14,300.0	10,124.3	12,375.1	8,097.8	111.0	111.1	-0.01	-1,098.0	4,159.6	2,026.7	1,950.7	75.97	26.679		
14,400.0	10.124.8	12,475,0	8,101.3	113.3	113.5	-0.01	-1,097.3	4,259.5	2.023.7	1,946.2	77.46	26.125		
14,500.0	10,125,2	12,575.0	8,104.8	115.6	115.9	-0.02	-1,096.7	4,359.4	2,020.6	1,941.7	78.96	25,590		
14,600.0	10,125.7	12,674.9	8,108.3	117.9	118.2	-0.02	-1,096.0	4,459.3	2,017.6	1,937.1	80.46	25.075		
14,700.0	10,126.1	12,806.2	8,113.1	120.2	121.4	-0.02	-1,095.3	4,578.0	2,014.1	1,931.9	82.17	24.511		
14,800.0	10,126.6	12,906.3	8,117.5	122.6	123.7	-0.02	-1,094.6	4,677.9	2,010.1	1,926.4	83.67	24.022		
14,900.0	10,127.0	12,993.6	8,121.9	124.9	125.8	-0.02	-1,094.0	4,777.7	2,006.1	1,921.0	85.09	23.577		
15,000.0	10,127.5	13,106.5	8,126.4	127.2	128.5	-0.02	-1,093.3	4,877.5	2,002.1	1,915.4	86.69	23.094		
15,100.0	10,127.9	13,206.5	8,130.8	129.6	130.9	-0.02	-1,092.7	4,977.3	1,998.1	1,909.9	88.21	22,652		
15,200.0	10,128.4	13,306.6	8,135.3	131.9	133.3	-0.02	-1,092.1	5,077.1	1,994.1	1,904.4	89.72	22.226		
15,300.0	10,128.9	13,393.3	8,139.7	134.3	135.4	-0.02	-1,091.4	5,177.0	1,990.1	1,899.0	91.13	21.837		
15,400.0	10,129.3	13,506.8	8,144.2	136.6	138.1	-0.02	-1,090.8	5,276.8	1,986.1	1,893.4	92.76	21.412		
15,500.0	10,129.8	13,606.9	8,148.6	139.0	140.5	-0.01	-1,090.2	5,376.6	1,982.1	1,887.9	94.28	21.025		
15,600.0	10,130.2	13,706.9	8,153.0	141.3	142.9	-0.01	-1,089.5	5,476.4	1,978.1	1,882.3	95.80	20.649		
15,700.0	10,130.7	13,793.0	8,157.5	143.7	144.9	-0.01	-1,088.9	5,576.2	1,974.2	1,876.9	97.21	20.308		
15,800.0	10,131.1	13,907.1	8,161.9	146.1	147.7	-0.01	-1,088.2	5,676.1	1,970.2	1,871.3	98.85	19.932		
15,900.0	10,131.6	14,007.2	8,166.4	148.4	150.1	-0.01	-1,087.6	5,775.9	1,966.2	1,865.8	100.37	19.589		
16,000.0	10,132.1	14,107.3	8,170.8	150.8	152.5	-0.01	-1,087.0	5,875.7	1,962.2	1,860.3	101.90	19.256		
16,100.0	10,132.5	14,192.7	8,175.3	153.2	154.5	-0.01	-1,086.3	5,975.5	1,958.2	1,854.9	103.31	18.954		
16,200.0	10,133.0	14,307.4	8,179.7	155.5	157.3	-0.01	-1,085.7	6,075.3	1,954.2	1,849.3	104.96	18.619		
16,300.0	10,133.4	14,407.5	8,184.1	157.9	159.7	-0.01	-1,085.1	6,175.2	1,950.2	1,843.7	106.49	18.314		
16,400.0	10,133.9	14,507.6	8,188.6	160.3	162.1	-0.01	-1,084.4	6,275.0	1,946.2	1,838.2	108.02	18.018		
16,500.0	10,134.3	14,607.7	8,193.0	162.7	164.5	-0.01	-1,083.8	6,374.8	1,942.2	1,832.7	109.55	17.729		
16,600.0	10,134.8	14,707.7	8,197.5	165.1	166.9	-0.01	-1,083.1	6,474.6	1,938.3	1,827.2	111.09	17.448		
16,700.0	10,135.3	14,807.8	8,201.9	167.4	169.4	-0.01	-1,082.5	6,574.4	1,934.3	1,821.6	112,62	17,175		
16,800.0	10,135.7	14,907.9	8,206.3	169.8	171.8	-0.01	-1,081.9	6,674.3	1,930.3	1,816.1	114.16	16,909		
16,900.0	10,136.2	15,008.0	8,210.8	172.2	174.2	-0.01	-1,081.2	6,774.1	1,926.3	1,810.6	115.69	16.650		
17,000.0	10,136.6	15,092.0	8,215.2	174.6	176.2	-0.01	-1,080.6	6,873.9	1,922.3	1,805.2	117.11	16.415		
17,100.0	10,137.1	15,191.9	8,219.7	177.0	178.6	-0.01	-1,080.0	6,973.7	1,918.3	1,799.7	118.64	16.169		
17,200.0	10,137.5	15,308.2	8,224.1	179.4	181.4	-0.01	-1,079.3	7,073.5	1,914.3	1,794.0	120.31	15.912		
17,300.0	10,138.0	15,391.7	8,228.6	181.8	183.5	-0.01	-1,078.7	7,173.4	1,910.3	1,788.6	121.72	15.695		
17,400.0	10,138.4	15,508.4	8,233.0	184.2	186.3	-0.01	-1,078.0	7,273.2	1,906.3	1,782.9	123.39	15.450		
17,411.2	10,138.5	15,502.9	8,233.5	184.4	186.2	-0.01	-1,078.0	7,284.4	1,905.9	1,782.5	123,43	15.441		
17,411.8	10,138.5	15,503.4	8,233.5	184.5	186.2	-0.01	-1,078.0	7,284.9	1,905.9	1,782.3	123.52	15.429		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

KB @ 3113.5usft Grid

Well Barry Miller State Com #222H

KB @ 3113.5usft

Survey Calculation Method: Minimum Curvature

Output errors are at 2.00 sigma EDM 5000.14 Server Database:

Offset Design Survey Program Reference Measured	m : 0-M\	WD		•			bore #1 - State							
	ice												Offset Well Error:	0.0 usft
weasureu v	Vertical	Offse	t Vertica l	Semi Major	Axis Offset	Lliabaida	Offset Wellbor	o Contro	Dista		Minimum	Congretion		
	Depth (usft)	Measured Depth (usft)	Depth (usft)	Reference (usft)	(usft)	Highside Too l face (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.0	0.0	1.0	-1.0	0.0	0.0	-44.97	29.8	-29.8	42.1					
100.0	100.0	101.0	99.0	0.1	0.1	-44.97	29.8	-29.8	42.1	41.8	0.26	162.026		
200.0	200.0	201.0	199.0	0.5	0.5	-44.97	29.8	-29.8	42.1	41.1	0.98	43.108		
300.0	300.0	301.0	299.0	0.8	0.8	-44.97	29.8	-29.8	42.1	40.4	1.69	24.861		
400.0	400.0	401.0	399.0	1.2	1.2	-44.97	29.8	-29.8	42.1	39.7	2.41	17.467		
500.0	500.0	501.0	499.0	1.6	1.6	-44.97	29.8	-29.8	42.1	39.0	3.13	13.463		
600.0	600.0	601.0	599.0	1.9	1.9	-44.97	29.8	-29.8	42.1	38.3	3.84	10.953		
700.0	700.0	701.0	699.0	2.3	2.3	-44.97	29.8	- 29.8	42.1	37.5	4.56	9.231		
800.0	0.008	801.0	799.0	2.6	2.6	-44.97	29.8	- 29.8	42.1	36.8	5.28	7.978		
900.0	900.0	901.0	899.0	3.0	3.0	-44.97	29.8	- 29.8	42.1	36.1	6.00	7.024		
1,000.0	1,000.0	999.0	999.0	3.4	3.4	-44.97	29.8	-29.8	42.1	35.4	6.71	6.280		
1,100.0	1,100.0	1,099.1	1,099.1	3.7	3.7	-46.13	29.1	-30.3	42.0	34.6	7.41	5,671		
1,200.0	1,200.0	1,199.1	1,199.1	4.1	4.0	-49.67	27.0	-31.9	41.8	33.7	8.10	5.160		
1,223.6	1,223.6	1,222.7	1,222.6	4.2	4.1	109.19	26.3	-32.4	41.8	33.5	8.26	5.058 CC		
1,300.0	1,300.0	1,299.1	1,298.9	4.4	4.4	105.51	23.6	-34.5	42.0	33.2	8.77	4.787 ES		
1,400.0	1,400.0	1,398.9	1,398.6	4.7	4.7	100.75	18.7	-38.2	43.0	33.6	9.44	4.557		
1,500.0	1,499.9	1,498.8	1,498.1	5.1	5.0	96.27	12.5	-42.9	44.9	34.7	10.12	4.432		
1,600.0	1,599.7	1,598.5	1,597.4	5.4	5.4	92.23	4.9	-48.6	47.4	36.6	10.81	4.391		
1,700.0	1,699.4	1,698.1	1,696.4	5.8	5.8	88.72	-4.0	-55.4	50.8	39.3	11.50	4.413		
1,800.0	1,798.9	1,802.3	1,795.1	6.1	6.2	85.77	-14.4	-63.3	54.8	42.5	12.23	4.477		
1,900.0	1,898.3	1,902.4	1,894.1	6.5	6.5	84.09	-25.4	-71.7	59.0	46.1	12.96	4.555		
2,000.0	1,997.4	2,002.5	1,993.0	6.8	6.9	84.21	-36.5	-80.1	63.1	49.4	13.70	4.608		
2,100.0	2,096.3	2,102.6	2,091.9	7.2	7.3	85.79	-47.6	-88.5	67.1	52.7	14.47	4.640		
2,200.0	2,194.9	2,197.3	2,190.8	7.6	7.7	88.59	-58.7	-96.9	71.1	55.8	15.23	4.668		
2,269.4	2,263.2	2,266.6	2,259.4	7.9	7.9	91.15	-66.3	-102.7	73.9	58.1	15.78	4.685		
2,300.0	2,293.3	2,302.9	2,289.6	8.0	8.1	92.36	-69.7	-105.3	75.2	59.2	16.05	4.688		
2,400.0	2,391.5	2,403.2	2,388.4	8.4	8.5	96.05	-80.8	-113.7	79.7	62.9	16.86	4.730		
2,500.0	2,489.8	2,503.4	2,487.2	8.8	8.9	99.34	-91.8	-122.1	84.5	66.9	17.67	4.784		
2,600.0	2,588.1	2,603.6	2,586.0	9.2	9.3	102.26	-102.9	-130.5	89.6	71.1	18.49	4.845		
2,700.0	2,686.3	2,703.8	2,684.9	9.6	9.7	104.87	-114.0	-138.9	94.8	75.5	19.31	4.911		
2,800.0	2,784.6	2,804.1	2,783.7	10.1	10.1	107.20	-125.0	-147.3	100.3	80.1	20.13	4.981		
2,900.0	2,882.8	2,904.3	2,882.5	10.5	10.5	109.28	-136.1	-155.7	105.8	84.9	20.95	5.052		
3,000.0	2,981.1	2,995.5	2,981.3	10.9	10.9	111.16	-147.1	-164.1	111.5	89.8	21.74	5.132		
3,100.0	3,079.4	3,104.7	3,080.1	11.4	11.3	112,85	-158.2	-172.5	117.4	94.8	22,59	5.194		
3,200.0	3,177.6	3,205.0	3,178.9	11.8	11.8	114.39	-169.2	-180.9	123.3	99.8	23.42	5.264		
3,300.0	3,275.9	3,305.2	3,277.7	12.2	12.2	115.78	-180.3	-189.3	129.2	105.0	24.24	5.332		
3,400.0	3,374.2	3,405.4	3,376.5	12.7	12.6	117.04	-191.4	-197.7	135.3	110.2	25.06	5.399		
3,500.0	3,472.4	3,505.6	3,475.3	13.1	13.0	118.20	-202.4	-206.1	141.4	115.5	25.88	5.464		
3,600.0	3,570.7	3,605.9	3,574.1	13.6	13.4	119.27	-213.5	-214.5	147.6	120.9	26.70	5.527		
3,700.0	3,669.0	3,706.1	3,672.9	14.0	13.8	120.24	-224.5	-222.9	153.8	126.3	27.52	5.587		
3,800.0	3,767.2	3,793.7	3,771.7	14.5	14.2	121.14	-235.6	-231.3	160.0	131.7	28.29	5,657		
3,900.0	3,865.5	3,906.5	3,870.5	14.9	14.7	121.98	-246.7	-239.7	166.3	137.2	29.16	5.703		
4,000.0	3,963.7	4,006.8	3,969.3	15.4	15.1	122.75	-257.7	-248.1	172.6	142.7	29.99	5.758		
4,100.0	4,062.0	4,107.0	4,068.1	15.8	15.5	123.46	-268.8	-256.5	179.0	148.2	30.81	5.810		
4,200.0	4,160.3	4,207.2	4,166.9	16.3	15.9	124.13	-279.8	-264.9	185.4	153.7	31.63	5.861		
4,300.0	4,258.5	4,307.4	4,265.7	16.7	16.3	124.76	-290.9	-273.3	191.8	159.3	32.45	5.910		
4,400.0	4,356.8	4,392.3	4,364.5	17.2	16.7	125.34	-302.0	-281.7	198.2	165.0	33.21	5.969		
4,500.0	4,455.1	4,507.9	4,463.3	17.2	17.2	125.89	-313.0	-290.0	204.6	170.5	34.09	6.003		
4,600.0	4,553.3	4,608.1	4,562.1	18.1	17.6	126.40	-324.1	-298.4	211.1	176.2	34.91	6.047		
4,700.0	4,651.6	4,708.4	4,660.9	18.5	18.0	126.88	-335.1	-306.8	217.6	181.8	35.73	6.089		
4,800.0	4,749.8	4,791.4	4,759.7	19.0	18.4	127.34	-346.2	-315.2	224.1	187.6	36.48	6.142		
4,900.0	4,848.1	4,891.2	4,858.5	19.5	18.8	127.77	-357.3	-323.6	230.6	193.3	37.30	6.181		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: KB @ 3113.5usft KB @ 3113.5usft

Well Barry Miller State Com #222H

Grid

Survey Calculation Method: Minimum Curvature Output errors are at

2.00 sigma

EDM 5000.14 Server Database:

Offset Des	sign	Barry M	iller - Bar	rry Miller Sta	te Com #	135H - Well	bore #1 - State	e Plan #1					Offset Site Error:	0.0 usft
Survey Progr				Sami Majar	Avia				Diete				Offset Well Error:	0.0 usft
Refere Measured	ence Vertical	Offse Measured	τ Vertical	Semi Major Reference	Offset	Highside	Offset Wellbor	e Centre	Dista Between	ance Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	warming	
5,000.0	4,946.4	5,009.0	4,957.3	19.9	19.3	128.17	-368.3	-332.0	237.1	198.9	38.19	6.207		
5,100.0	5,044.6	5,090.7	5,056.1	20.4	19.6	128.56	-379.4	-340.4	243.6	204.7	38.94	6.256		
5,200.0	5,142.9	5,209.5	5,154.9	20.8	20.1	128.92	-390.4	-348.8	250.1	210.3	39.84	6.279		
5,300.0	5,241.2	5,309.7	5,253.7	21.3	20.5	129.27	-401.5	-357.2	256.7	216.0	40.66	6,313		
5,400.0	5,339.4	5,390.1	5,352.5	21.8	20.9	129.59	-412.5	-365.6	263.2	221.8	41.40	6.359		
5,500.0	5,437.7	5,489.8	5,451.3	22.2	21.3	129.91	-423.6	-374.0	269.8	227.6	42.21	6.391		
5,600.0	5,536.0	5,589.6	5,550.1	22.7	21.7	130.20	-434.7	-382.4	276.4	233.3	43.03	6.422		
5,700.0	5,634.2	5,688.3	5,647.9	23.1	22.1	130.52	-445.5	-390.6	283.0	239.2	43.84	6.455		
5,800.0	5,732.5	5,785.0	5,743.9	23.6	22.5	131.17	-454.5	-397.4	290.5	245.9	44.60	6.514		
5,900.0 6,000.0	5,830.7 5,929.0	5,881.4 5,977.2	5,839.9 5,935.5	24.1 24.5	22.9 23.3	132.22 133.61	-461.5 -466.6	-402.8 -406.6	299.1 308.9	253.8 263.0	45.30 45.94	6.603 6.724		
6,100.0 6,200.0	6,027.3	6,072.5	6,030.7 6,125.3	25.0 25.4	23.6 23.9	135.28	-469.7 -471.0	-409.0 -410.0	320.1 332.8	273.6 285.7	46.53 47.06	6.879 7.072		
6,300.0	6,125.5 6,223.8	6,167.1 6,264.6	6,222.8	25.4	23.9	137.19 139.24	-471.0 -471.0	-410.0 -410.0	332.0 346.7	299.1	47.59	7.072		
6,400.0	6,322.1	6,362.9	6,321.1	26.4	24.2	141.15	-471.0 -471.0	-410.0 -410.0	361.1	313.0	48.13	7.502		
6,500.0	6,420.3	6,461.1	6,419.3	26.8	24.8	142.91	-471.0	-410.0	375.8	327.1	48.68	7.720		
6,600.0	6,518.6	6,559.4	6,517.6	27.3	25.1	144.54	-471.0	-410.0	390.9	341.6	49.25	7.937		
6,700.0	6,616.8	6,657.7	6,615.8	27.8	25.4	146.05	-471.0	- 410.0	406.2	356.4	49.82	8.154		
6,800.0	6,715.1	6,755.9	6,714.1	28.2	25.7	147.45	-471.0	-410.0	421.8	371.4	50.40	8.369		
6,900.0	6,813.4	6,854.2	6,812.4	28.7	26.0	148.75	-471.0	-410.0	437.6	386.7	50.99	8.583		
7,000.0	6,911.6	6,952.4	6,910.6	29.2	26.3	149.96	- 471.0	-410.0	453.7	402.1	51.59	8.794		
7,100.0	7,009.9	7,050.7	7,008.9	29.6	26.6	151.09	-471.0	-410.0	469.9	417.7	52.20	9.002		
7,200.0	7,108.2	7,149.0	7,107.2	30.1	26.9	152.14	- 471.0	-410.0	486.3	433.5	52.82	9.207		
7,300.0	7,206.4	7,247.2	7,205.4	30.6	27.2	153.13	- 471.0	-410.0	502.8	449.4	53.44	9.410		
7,400.0	7,304.7	7,345.5	7,303.7	31.0	27.5	154.05	-471.0	-410.0	519.5	465.5	54.07	9.609		
7,500.0	7,403.0	7,443.8	7,402.0	31.5	27.8	154,92	-471.0	-410.0	536.3	481.6	54.70	9.804		
7,600.0	7,501.2	7,542.0	7,500.2	31.9	28.2	155.73	-471.0	-410.0	553.2	497.9	55.34	9.997		
7,700.0	7,599.5	7,640.3	7,598.5	32.4	28.5	156.49	- 471.0	-410.0	570.2	514.3	55.99	10.186		
7,800.0	7,697.7	7,738.5	7,696.7	32.9	28.8	157.21	- 471.0	-410.0	587.4	530.7	56.64	10.371		
7,833.5	7,730.7	7,771.5	7,729.7	33.0	28.9	157.44	-471.0	-410.0	593.1	536.3	56.85	10.432		
7,900.0	7,796.1	7,836.9	7,795.1	33.3	29.1	157.93	- 471.0	-4 10.0	604.0	546.7	57.29	10.543		
8,000.0	7,894.9	7,935.7	7,893.9	33.8	29.4	158.55	- 471.0	-410.0	618.5	560.5	57.95	10.673		
8,100.0	7,994.0	8,034.8	7,993.0	34.2	29.7	159.05	-471.0	-410.0	630.6	572.0	58.62	10.758		
8,200.0	8,093.5	8,134.3	8,092.5	34.6	30.0	159.43	- 471.0	-410.0	640.3	581.0	59,28	10.800		
8,300.0	8,193.2	8,234.0	8,192.2	34.9	30.4	159.71	- 471.0	- 410.0	647.6	587.6	59.95	10.801		
8,400.0	8,293.1	8,333.9	8,292.1	35.3	30.7	159.89	-471.0	-4 10.0	652.4	591.8	60.62	10.761		
8,500.0	8,393.0	8,433.8	8,392.0	35.6	31.0	159.98	-471.0	-410.0	654.8	593.5	61.30	10.682		
8,546.5	8,439.5	8,480.3	8,438.5	35.8	31.2	0.00	-471.0	-410.0	655.0	593.4	61.60	10.633		
8,600.0	8,493.0	8,533.8	8,492.0	35.9	31.3	0.00	-4 71.0	- 410.0	655.0	593.1	61.95	10.574		
8,700.0	8,593.0	8,633.8	8,592.0	36.2	31.7	0.00	-471.0	- 410.0	655.0	592.4	62,60	10.464		
8,710.5	8,603.5	8,644.3	8,602.5	36,2	31.7	0.00	- 471.0	- 410.0	655.0	592.4	62,66	10,453		
8,800.0	8,693.0	8,733.7	8,691.9	36.4	32.0	0.02	-471.0	-409.8	655.0	591.8	63.24	10.358		
8,900.0	8,793.0	8,831.4	8,788.9	36.7	32.3	0.98	-471.0	-398.8	655.2	591.5	63,75	10,278		
9,000.0	8,893.0	8,922.9	8,876.7	37.0	32.5	3.17	-470.8	-373.7	656.5	592.4	64.02	10.254		
9,100.0	8,993.0	9,004.7	8,951.0	37.3	32.7	6.12	-470.5	-339.7	660.5	596.5	64.03	10.317		
9,200.0	9,093.0	9,075.5	9,010.9	37.6	32.8	9.36	- 470.3	-302.0	669.5	605.9	63.68	10.514		
9,300.0	9,193.0	9,135.6	9,057.8	37.8	32.9	12.52	-4 70.0	-264.3	685.3	622.4	62.88	10.898		
9,400.0	9,293.0	9,186.3	9,094.0	38.1	32.9	15.42	-469.8	-228.9	709.0	647.4	61.58	11.514		
9,446.5	9,339.5	9,207.0	9,107.9	38.3	32.9	16.66	-469.7	-213.6	722.9	662.1	60.81	11.888		
9,450.0	9,343.0	9,208.5	9,108.9	38.3	32.9	-72.88	-469.7	-212.4	724.0	663.3	60.75	11.919		
9,500.0	9,393.0	9,230.1	9,122.7	38.4	33.0	-69.99	-469.5	-195.9	740.5	680.6	59.83	12.376		
9,550.0	9,442.5	9,250.0	9,134.9	38.5	33.0	-67.25	-469.4	-180.1	757.4	698.6	58.81	12.879		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Output errors are at

Database: Offset TVD Reference: Well Barry Miller State Com #222H

KB @ 3113.5usft

KB @ 3113.5usft Grid

Minimum Curvature

2.00 sigma

EDM 5000.14 Server

Offset Des			iller - Bar	ry Miller Sta	ite Com #	135H - Well	bore #1 - State	e Plan #1					Offset Site Error:	0.0 usft
Survey Progr Refere		WD Offse	et	Semi Major	Axis				Dista	ance			Offset Well Error:	0.0 usft
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbor	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	40.000		
9,600.0 9,650.0	9,491.2 9,538.8	9,274.0 9,300.0	9,148.9 9,163.1	38.7 38.8	33.0 33.0	-64.42 -61.66	-469.3 -469.1	-160.6 -138.8	774.7 791.9	716.8 735.0	57.86 56.93	13.389 13.911		
9,700.0	9,584.8	9,318.7	9,172.6	38.8	33.0	-59.37	-469.0	-122.8	808.9	753.1	55.79	14.498		
9,750.0	9,629.0	9,350.0	9,187.5	38.9	33.1	-56.81	-468.8	-95.2	825.4	770.4	54.99	15.010		
9,800.0	9,671.0	9,363.9	9,193.6	39.0	33.1	-55.03	-468.7	-82.8	841.1	787.4	53.76	15.646		
9,850.0	9,710.5	9,386.6	9,202.9	39.0	33.1	-53.16	-468.6	-62.0	856.1	803.3	52.80	16.214		
9,900.0	9,747.1	9,400.0	9,208.1	39.1	33.1	-51.68	-468.5	-4 9.7	870.1	818.4	51.67	16.839		
9,950.0	9,780.7	9,432.4	9,219.2	39.1	33.2	-50.01	-468.3	-19.3	882.7	831.6	51.06	17.286		
10,000.0	9,810.9	9,450.0	9,224.6	39.1	33.2	-48.80	-468.2	-2.5	894.2	844.0	50.22	17.807		
10,050.0	9,837.5	9,478.4	9,232.1	39.1	33.3	- 47.63	-468.0	24.9	904.3	854.6	49.70	18.195		
10,100.0	9,860.3	9,500.0	9,236.9	39.1	33.4	-46.73	- 467.8	45.9	913.0	863.8	49.17	18.568		
10,106.5	9,862.9	9,500.0	9,236.9	39.1	33.4	-46.65	-467.8	45.9	914.0	864.9	49.07	18,627		
10,200.0	9,899.6	9,550.0	9,245.0	39.1	33.6	- 45.88	-467.5	95.3	929.9	881.4	48.47	19.186		
10,300.0	9,935.6	9,591.3	9,248.3	39.1	33.8	- 45.07	-467.2	136.4	950.1	902.2	47.88	19.845		
10,400.0	9,968.4	9,671.3	9,250.5	39.1	34.4	-43.73	-466.6	216.4	972.3	924.6	47.74	20.366		
10,500.0	9,997.8	9,767.6	9,252.9	39.2	35.2	-42.40	-465.9	312.7	992.6	944.6	47.98	20.687		
10,600.0	10,023.9	9,864.7	9,255.3	39.6	36.2	-41.27	-465.1	409.8	1,010.6	962.1	48.52	20.829		
10,700.0	10,046.6	9,962.7	9,257.7	40.4	37.3	-40.34	-464.3	507.6	1,026.3	977.0	49.34	20.799		
10,800.0	10,065.9	10,061.2	9,260.2	41.5	38.5	-39.58	-463.6	606.2	1,039.4	989.0	50.43	20,613		
10,900.0	10,081.8	10,160.3	9,262.7	42.7	39.8	-38.99	-462.8	705.2	1,050.0	998.2	51.76	20.285		
11,000.0	10,094.2	10,259.8	9,265.1	44.0	41.3	-38.56	-462.0	804.7	1,057.9	1,004.5	53.33	19.836		
11,100.0	10,103.2	10,359.6	9,267.6	45.4	42.8	-38.29	-461.2	904.5	1,063.0	1,007.9	55.13	19.284		
11,200.0	10,108.6	10,459.6	9,270.1	46.9	44.4	-38.16	-460.4	1,004.4	1,065.5	1,008.3	57.14	18.646		
11,293.4	10,110.6	10,553.0	9,272.4	48.3	46.0	-38.18	-459.7	1,097.7	1,065.3	1,006.0	59.22	17.989		
11,300.0	10,110.6	10,559.5	9,272.6	48.4	46.1	-38.19	-459.7	1,104.3	1,065.2	1,005.8	59.37	17.941		
11,400.0	10,111.1	10,659.5	9,275.1	50.0	47.9	-38.26	-458.9	1,204.3	1,063.6	1,001.9	61.75	17,226		
11,500.0	10,111.5	10,759.5	9,277.6	51.7	49.7	-38.34	-458.1	1,304.2	1,062.1	997.9	64.21	16.540		
11,600.0	10,112.0	10,859.5	9,280.1	53.5	51.6	-38.41	-457.3	1,404.2	1,060.6	993.9	66.77	15.886		
11,700.0	10,112.4	10,959.5	9,282.6	55.3	53.5	-38.48	-456.5	1,504.1	1,059.1	989.7	69.39	15.263		
11,800.0	10,112.9	11,059.4	9,285.1	57.1	55.5	-38.56	-455.8	1,604.1	1,057.6	985.5	72.08	14.672		
11,900.0	10,113.3	11,159.4	9,287.5	59.0	57.5	-38.63	-455.0	1,704.0	1,056.1	981.3	74.84	14.112		
12,000.0	10,113.8	11,259.4	9,290.0	60.9	59.5	-38.71	-454.2	1,803.9	1,054.6	976.9	77.65	13.582		
12,100.0	10,114.3	11,359.4	9,292.5	62.9	61.6	-38.78	-453.4	1,903.9	1,053.1	972.6	80.51	13.080		
12,200.0	10,114.7	11,459.4	9,295.0	64.9	63.6	-38.86	-452.6	2,003.8	1,051.6	968.2	83.42	12,606		
12,300.0 12,400.0	10,115.2 10,115.6	11,559.3 11,659.3	9,297.5 9,300.0	66.9 68.9	65.8 67.9	-38.93 -39.01	-451.9 -451.1	2,103.8 2,203.7	1,050.1 1,048.6	963.7 959.2	86.37 89.37	12.158 11.734		
12,500.0	10,116.1	11,759.3	9,302.5	71.0	70.0	-39.09	-450.3	2,303.7	1,047.1	954.7	92.40	11.333		
12,600.0	10,116.5	11,859.3	9,305.0	73.1	72.2	-39.16	-449.5	2,403.6	1,045.6	950.2	95.46	10.953		
12,700.0	10,117.0	11,959.3	9,307.5	75.2	74.4	-39.24	-448.7	2,503.6	1,044.1	945.6	98.56	10.594		
12,800.0	10,117.4	12,059.2	9,310.0	77.4	76.6	-39.32	-448.0	2,603.5	1,042.6	941.0	101.68	10,254		
12,900.0	10,117.9	12,159.2	9,312.4	79.5	78.8	-39.39	-447.2	2,703.5	1,041.2	936.3	104.84	9.931		
13,000.0	10,118.4	12,259.2	9,314.9	81.7	81.1	-39.47	-446.4	2,803.4	1,039.7	931.7	108.02	9.625		
13,100.0	10,118.8	12,359.2	9,317.4	83.9	83.3	-39.55	-445.6	2,903.3	1,038.2	927.0	111.23	9.334		
13,200.0	10,119.3	12,459.1	9,319.9	86.1	85.6	-39.62	-444.8	3,003.3	1,036.7	922.2	114.46	9.057		
13,300.0	10,119.7	12,559.1	9,322.4	88.3	87.9	-39.70	-444.1	3,103.2	1,035.2	917.5	117.72	8.794		
13,400.0	10,120.2	12,659.1	9,324.9	90.5	90.1	-39.78	-443.3	3,203.2	1,033.8	912.8	120.99	8.544		
13,500.0	10,120.6	12,759.1	9,327.4	92.8	92.4	-39.86	-442.5	3,303.1	1,032.3	908.0	124.29	8.305		
13,600.0	10,121.1	12,859.1	9,329.9	95.0	94.7	-39.94	-441.7	3,403.1	1,030.8	903.2	127.61	8.078		
13,700.0	10,121.6	12,959.0	9,332.4	97.3	97.0	-40.01	-440.9	3,503.0	1,029.3	898.4	130.94	7.861		
13,800.0	10,122.0	13,059.0	9,334.9	99.5	99.3	- 40.09	-440.1	3,603.0	1,027.9	893.6	134.30	7.654		
13,900.0	10,122.5	13,159.0	9,337.4	101.8	101.7	-40.17	-439.4	3,702.9	1,026.4	888.7	137.67	7.455		
14,000.0	10,122.9	13,259.0	9,339.8	104.1	104.0	-40.25	-438.6	3,802.9	1,024.9	883.9	141.06	7.266		

Company: Matador Production Company

Project: Rustler Breaks
Reference Site: Barry Miller
Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft
Reference Wellbore Wellbore #1
Reference Design: BLM Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Output errors are at

Database:

Well Barry Miller State Com #222H KB @ 3113.5usft KB @ 3113.5usft

Grid

Survey Calculation Method: Minimum Curvature

2.00 sigma

EDM 5000.14 Server

Offset De	esign	Barry M	iller - Bar	ry Miller Sta	ite Com #	135H - Well	bore #1 - Stat	e Plan #1					Offset Site Error:	0.0 usf
Survey Prog Refer		ND Offse	at	Semi Major	Avie				Dista	nce			Offset Well Error:	0.0 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Too l face (°)	Offset Wellbor +N/-S (usft)	e Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,100.0	10,123.4	13,359.0	9,342.3	106.4	106.3	-40.33	-437.8	3,902.8	1,023.5	879.0	144.47	7.084		
14,200.0	10,123.8	13,458.9	9,344.8	108.7	108.6	-40.41	-437.0	4,002.7	1,022.0	874.1	147.89	6.910		
14,300.0	10,124.3	13,558.9	9,347.3	111.0	111.0	-40.49	-436.2	4,102.7	1,020.6	869.2	151.33	6.744		
14,400.0	10,124.8	13,658.9	9,349.8	113.3	113.3	-40.57	-435.5	4,202.6	1,019.1	864.3	154.79	6.584		
14,500.0	10,125.2	13,758.9	9,352.3	115.6	115.7	-40.65	-434.7	4,302.6	1,017.6	859.4	158.26	6.430		
14,600.0	10,125.7	13,858.9	9,354.8	117.9	118.0	-40.73	-433.9	4,402.5	1,016.2	854.4	161.74	6.283		
14,700.0	10,126.1	13,958.8	9,357.3	120.2	120.4	-40.81	-433.1	4,502.5	1,014.7	849.5	165.24	6.141		
14,800.0	10,126.6	14,058.8	9,359.8	122.6	122.7	-40.89	-432.3	4,602.4	1,013.3	844.5	168.75	6.005		
14,900.0	10,127.0	14,158.8	9,362.3	124.9	125.1	-40.98	-431.6	4,702.4	1,011.8	839.6	172.28	5.873		
15,000.0	10,127.5	14,258.8	9,364.8	127.2	127.5	-41.06	-430.8	4,802.3	1,010.4	834.6	175.82	5.747		
15,100.0	10,127.9	14,358.8	9,367.2	129.6	129.8	-41.14	-430.0	4,902.2	1,009.0	829.6	179.38	5.625		
15,200.0	10,128,4	14,458,7	9,369.7	131.9	132,2	-41.22	-429.2	5,002.2	1,007.5	824,6	182,94	5.507		
15,300.0	10,128.9	14,558.7	9,372.2	134.3	134.6	-41.30	-428.4	5,102.1	1,006.1	819.5	186.52	5.394		
15,400.0	10,129.3	14,658.7	9,374.7	136.6	137.0	-41.39	-427.7	5,202.1	1,004.6	814.5	190.12	5.284		
15,500.0	10,129.8	14,758.7	9,377.2	139.0	139.4	-41.47	-426.9	5,302.0	1,003.2	809.5	193.72	5.179		
15,600.0	10,130.2	14,858.7	9,379.7	141.3	141.7	-41.55	-426.1	5,402.0	1,001.8	804.4	197.34	5.076		
15,700.0	10,130.7	14,958.6	9,382.2	143.7	144.1	-41.63	-425.3	5,501.9	1,000.3	799.4	200.97	4.977		
15,800.0	10,131.1	15,058.6	9,384.7	146.1	146.5	-41.72	-424.5	5,601.9	998.9	794.3	204.62	4.882		
15,900,0	10,131,6	15,158,6	9,387.2	148,4	148.9	-41.80	-423,8	5,701.8	997.5	789,2	208,27	4,789		
16,000.0	10,132.1	15,258.6	9,389.7	150.8	151.3	-41.89	-423.0	5,801.8	996.1	784.1	211.94	4.700		
16,100.0	10,132.5	15,358.5	9,392.2	153.2	153.7	-41.97	-422.2	5,901.7	994.6	779.0	215.62	4.613		
16,200.0	10,133.0	15,458.5	9,394.6	155.5	156.1	-42.05	-421.4	6,001.6	993.2	773.9	219.31	4.529		
16,300.0	10,133.4	15,558.5	9,397.1	157.9	158.5	-42.14	-420.6	6,101.6	991.8	768.8	223.02	4.447		
16,400.0	10,133.9	15,658.5	9,399.6	160.3	160.9	-42.22	-419.9	6,201.5	990.4	763.7	226.73	4.368		
16,500.0	10,134.3	15,758.5	9,402.1	162.7	163.3	-42.31	-419.1	6,301.5	989.0	758.5	230.46	4.291		
16,600.0	10,134.8	15,858.4	9,404.6	165.1	165.7	-42.39	-418.3	6,401.4	987.6	753.4	234.20	4,217		
16,700.0	10,135.3	15,958.4	9,407.1	167.4	168.1	-42.48	-417.5	6,501.4	986.2	748.2	237.95	4.144		
16,800.0	10,135.7	16,058.4	9,409.6	169.8	170.5	-42.57	-416.7	6,601.3	984.7	743.0	241.71	4.074		
16,900.0	10,135.7	16,158.4	9,412.1	172.2	170.5	-42.57 -42.65	-415.9	6,701.3	983.3	743.0	241.71	4.006		
17,000.0	10,136.2	16,258.4	9,414.6	174.6	175.3	-42.74	-415.2	6,801.2	981.9	737.9	249.27	3.939		
17,100.0	10,137.1	16,358.3	9,417.1	177.0	177.7	-42.83	-414.4	6,901.2	980.5	727.5	253.07	3.875		
17,200.0	10,137.5	16,458.3	9,419.6	179.4	180.1	-42.91	-413.6	7,001.1	979.1	722.3	256.87	3.812		
17,300.0	10,138.0	16,558.3	9,422.0	181.8	182.5	-43.00	-412.8	7,101.0	977.7	717.1	260,69	3.751		
17,400.0	10,138.4	16,658.3	9,424.5	184.2	185.0	-43.09	-412.0	7,201.0	976.4	711.8	264,52	3,691		
17,411.2	10,138.5	16,669.5	9,424.8	184.4	185.2	-43.10	-412.0	7,212.2	976.2	711.2	264.95	3.684		
17,411.8	10,138.5	16,670.0	9,424.8	184.5	185.2	-43.10	-412.0	7,212.7	976.2	711.2	264.98	3.684 S	F	

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

KB @ 3113.5usft Grid

Well Barry Miller State Com #222H

KB @ 3113.5usft

Survey Calculation Method: Minimum Curvature Output errors are at 2.00 sigma

EDM 5000.14 Server Database:

Offset Des	sign	Barry M	iller - Bar	ry Miller Sta	te Com #	136H - Well	bore #1 - State	e Plan #1					Offset Site Error:	0.0 usft
Survey Progr				Comi Maior	Avia				Diete				Offset Well Error:	0.0 usft
Refere Measured	ence Vertical	Offse Measured	vertical	Semi Major Reference	Offset	Highside	Offset Wellbor	e Centre	Dista Between	Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	warning	
0.0	0.0	1.0	-1.0	0.0	0.0	0.47	29.7	0.2	29.7					
100.0	100.0	101.0	99.0	0.1	0.1	0.47	29.7	0.2	29.7	29.5	0.26	114.470		
200.0	200.0	201.0	199.0	0.5	0.5	0.47	29.7	0.2	29.7	28.8	0.98	30.455		
300.0	300.0	301.0	299.0	8.0	0.8	0.47	29.7	0.2	29.7	28.1	1.69	17,564		
400.0	400.0	401.0	399.0	1.2	1.2	0.47	29.7	0.2	29.7	27.3	2.41	12.341		
500.0	500.0	501.0	499.0	1.6	1.6	0.47	29.7	0.2	29.7	26.6	3.13	9.512		
600.0	600.0	601.0	599.0	1.9	1.9	0.47	29.7	0.2	29.7	25.9	3.84	7.738		
700.0	700.0	701.0	699.0	2.3	2.3	0.47	29.7	0.2	29.7	25.2	4.56	6.522		
800.0	800.0	801.0	799.0	2.6	2.6	0.47	29.7	0.2	29.7	24.5	5.28	5.636		
900.0	900.0	901.0	899.0	3.0	3.0	0.47	29.7	0.2	29.7	23.8	6.00	4.962		
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	0.47	29.7	0.2	29.7	23.0	6.71	4.432		
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	0.47	29.7	0.2	29.7	22.3	7.43	4.004		
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	0.47	29.7	0.2	29.7	21.6	8.15	3.652	JC, ES	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	161.01	29.7	0.2	30.6	21.7	8.85	3.456		
1,400.0 1,500.0	1,400.0 1,499.9	1,401.0	1,399.0 1,498.9	4.7 5.1	4.8	162.48	29.7 29.7	0.2 0.2	33.1 37.2	23.5 27.0	9.53	3.468 3.643		
		1,501.1			5.2	164.49					10.22			
1,600.0	1,599.7	1,601.3	1,598.7	5.4	5.5	166.64	29.7	0.2	43.2	32.2	10.92	3.953		
1,700.0	1,699.4	1,701.6	1,698.4	5.8	5.9	168.67	29.7	0.2	50.8	39.2	11.62	4.375		
1,800.0	1,798.9	1,802.1	1,797.9	6.1	6.2	170.44	29.7	0.2	60.3	47.9	12.32	4.891		
1,900.0	1,898.3	1,902.7	1,897.3	6.5	6.6	171.94	29.7	0.2	71.4	58.4	13.02	5.486		
2,000.0	1,997.4	2,003.6	1,996.4	6.8	7.0	173.16	29.7	0.2	84.4	70.7	13.73	6.146		
2,100.0	2,096.3	2,104.7	2,095.3	7.2	7.3	174.17	29.7	0.2	99.1	84.6	14.44	6.862		
2,200.0	2,194.9	2,206.1	2,193.9	7.6	7.7	174.98	29.7	0.2	115.5	100.4	15.15	7.624		
2,269.4	2,263.2	2,262.2	2,262.2	7.9	7.9	175.46	29.7	0.2	127.9	112.3	15.60	8.204		
2,300.0	2,293.3	2,307.7	2,292.3	8.0	8.0	175.65	29.7	0.2	133.6	117.7	15.87	8.420		
2,400.0	2,391.5	2,409.5	2,390.5	8.4	8.4	176.18	29.7	0.2	152.1	135,5	16.58	9.174		
2,500.0	2,489.8	2,488.8	2,488.8	8.8	8.7	176.60	29.7	0.2	170.6	153.4	17.22	9.910		
2,600.0	2,588.1	2,587.1	2,587.1	9.2	9.0	176.93	29.7	0.2	189.2	171.2	17.92	10.553		
2,700.0	2,686.3	2,685.3	2,685.3	9.6	9.4	177.21	29.7	0.2	207.7	189.1	18.63	11.146		
2,800.0 2,900.0	2,784.6 2,882.8	2,783.6 2,881.8	2,783.6 2,881.8	10.1 10.5	9.7 10.1	177.44 177.63	29.7 29.7	0.2 0.2	226.2 244.8	206.9 224.7	19.34 20.05	11.695 12.205		
2 000 0	0.004.4	2.000.4	0.000.4	40.0	40.5	477.00	20.7	0.0	202.2	242.5	20.77	40.070		
3,000.0	2,981.1 3,079.4	2,980.1	2,980.1 3,086.9	10.9	10.5 10.8	177.80	29.7 28.5	0.2	263.3	242.5	20.77	12.679		
3,100.0 3,200.0	3,079.4	3,086.9 3,196.9	3,196.8	11.4 11.8	11.2	177.97 178.20	23.2	-0.1 -1.3	280.7 294.3	259.2 272.1	21.51 22.23	13.048 13.242		
3,300.0	3,177.0	3,308.0	3,307.4	12.2	11.5	178.48	13.7	-1.5	304.2	281.3	22.23	13.242		
3,400.0	3,374.2	3,419.8	3,418.3	12.7	11.9	178.81	-0.1	-6.9	310.2	286.6	23.59	13.153		
3,500.0	3,472.4	3,531.8	3,528.8	13.1	12.3	179.22	-18.1	-11.2	312.4	288.1	24.22	12.896		
3,600.0	3,570.7	3,643.9	3,638.5	13.6	12.7	179.70	-40.4	-16.4	310.6	285.8	24.82	12.512		
3,700.0	3,669.0	3,755.7	3,746.9	14.0	13.1	-179.72	-66.6	-22.7	305.0	279.6	25.39	12.011		
3,800.0	3,767.2	3,866.7	3,853.6	14.5	13.5	-179.01	-96.8	-29.9	295.6	269.6	25.93	11.399		
3,900.0	3,865.5	3,976.8	3,958.0	14.9	13.9	-178.14	-130.7	-37.9	282.4	256.0	26,43	10.684		
4,000.0	3,963.7	4,085.5	4,059.7	15.4	14.4	-177.04	-167.9	-46.8	265.5	238.6	26.91	9.869		
4,100.0	4,062.0	4,192.7	4,158.5	15.8	14.9	-175.62	-208.3	-56.4	245.1	217.8	27.36	8,961		
4,200.0	4,160.3	4,298.0	4,254.0	16.3	15.4	-173.73	-251.5	-66.7	221.4	193.6	27.80	7.963		
4,300.0	4,258.5	4,395.2	4,341.3	16.7	15.9	-171.40	-293.2	-76.6	195.7	167.2	28.55	6.856		
4,400.0	4,356.8	4,508.5	4,427.7	17.2	16.5	-168.39	-334.5	-86.5	170.5	141.0	29.46	5.786		
4,500.0	4,455.1	4,587.8	4,514.1	17.6	17.0	-164.37	-375.9	-96.3	145.8	115.5	30.34	4.805		
4,600.0	4,553.3	4,684.1	4,600.5	18.1	17.6	-158.77	-417.2	-106.2	122.1	90.6	31.47	3,880		
4,700.0	4,651.6	4,780.4	4,686.9	18.5	18.1	-150.67	-458.6	-116.0	100.0	67.1	32.93	3.038		
4,800.0	4,749.8	4,876.7	4,773.3	19.0	18.7	-138.56	-500.0	-125.8	81.0	46.0	34.96	2.316		
4,900.0	4,848.1	4,973.0	4,859.8	19.5	19.3	-120.78	-541.3	-135.7	67.5	29.9	37.61	1.794		
4,988.1	4,934.7	5,057.9	4,935.9	19.9	19.9	-100.89	-577.8	-144.4	63.2	23.5	39.63	1.594		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: KB @ 3113.5usft KB @ 3113.5usft

Well Barry Miller State Com #222H

Grid

Survey Calculation Method: Minimum Curvature

Output errors are at 2.00 sigma

EDM 5000.14 Server Database:

Offset Des	sign	Barry M	iller - Bar	ry Miller Sta	te Com #	136H - Well	bore #1 - State	e Plan #1					Offset Site Error:	0.0 usft
Survey Progr				Oi M-i	A ! -				Dist				Offset Well Error:	0.0 usft
Refere Measured	ence Vertical	Offse Measured	t Vertical	Semi Major Reference	Offset	Highside	Offset Wellbor	e Centre	Dista Between	ance Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	vvarming	
5,000.0	4,946.4	5,069.4	4,946.2	19.9	19.9	-98.10	-582.7	-145.5	63.3	23.4	39.81	1.589 SF		
5,100.0	5,044.6	5,165.7	5,032.6	20.4	20.6	-76.23	-624.0	-155.4	70.0	29.7	40.24	1.739		
5,200.0	5,142.9	5,262.0	5,119.0	20.8	21.2	-59.88	-665.4	-165.2	85.1	45.4	39.74	2.142		
5,300.0	5,241.2	5,358.3	5,205.4	21.3	21.8	-48.89	-706.8	-175.1	105.1	65.7	39.36	2,670		
5,400.0	5,339.4	5,454.6	5,291.8	21.8	22.5	-41.50	-748.1	-184.9	127.6	88.3	39.32	3.246		
5,500.0	5,437.7	5,550.9	5,378.3	22.2	23.1	-36.35	- 789.5	-194.7	151.6	112.1	39.54	3.834		
5,600.0	5,536.0	5,647.2	5,464.7	22.7	23.8	-32.61	-830.8	-204.6	176.4	136.5	39.94	4.418		
5,700.0	5,634.2	5,743.5	5,551.1	23.1	24.5	-29.79	-872.2	-214.4	201.8	161.4	40.44	4.990		
5,800.0	5,732.5	5,839.8	5,637.5	23.6	25.2	-27.60	-913.5	-224.3	227.5	186.5	41.02	5.547		
5,900.0	5,830.7	5,936.1	5,723.9	24.1	25.8	- 25.85	-954.9	-234.1	253.5	211.9	41.65	6.087		
6,000.0	5,929.0	6,032.4	5,810.3	24.5	26.5	-24.43	-996.3	-244.0	279.7	237.3	42.31	6.609		
6,100.0	6,027.3	6,128.7	5,896.8	25.0	27.2	-23.25	-1,037.6	-253.8	305.9	262.9	43.00	7.114		
6,200.0	6,125.5	6,225.0	5,983.2	25.4	27.9	-22.26	-1,079.0	-263.7	332.3	288.6	43.71	7.602		
6,300.0	6,223.8	6,321.4	6,069.6	25.9	28.6	-21.42	-1,120.3	-273.5	358.8	314.4	44.44	8.074		
6,400.0	6,322.1	6,417.7	6,156.0	26.4	29.3	-20.69	-1,161.7	-283.3	385.3	340.1	45.18	8.529		
6,500.0	6,420.3	6,514.0	6,242.4	26.8	30.0	-20.05	-1,203.1	-293.2	411.9	366.0	45.93	8.969		
6,600.0	6,518.6	6,610.3	6,328.8	27.3	30.7	-19.49	-1,244.4	-303.0	438.5	391.8	46.68	9.394		
6,700.0	6,616.8	6,706.6	6,415.3	27.8	31.4	-18.99	-1,285.8	-312.9	465.2	417.7	47.44	9.805		
6,800.0	6,715.1	6,806.5	6,504.9	28.2	32.2	-18.54	-1,328.6	-323.1	491.8	443.5	48.32	10.179		
6,900.0	6,813.4	6,917.7	6,605.8	28.7	33.0	-18.14	-1,374.2	-333.9	516.4	466.9	49.47	10.438		
7,000.0	6,911.6	7,030.6	6,709.5	29.2	33.8	-17.85	-1,417.5	-344.2	538.3	487.7	50.61	10.635		
7,100.0	7,009.9	7,144.8	6,815.7	29.6	34.5	-17.65	-1,458.4	-354.0	557.3	505.5	51.72	10.774		
7,200.0	7,108.2	7,260.3	6,924.3	30.1	35.3	-17.53	-1,496.5	-363.0	573.4	520.6	52.80	10.859		
7,300.0	7,206.4	7,376.7	7,035.1	30.6	36.0	-17.49	-1,531.6	-371.4	586.5	532.7	53.85	10.893		
7,400.0	7,304.7	7,494.1	7,147.6	31.0	36.6	-17.51	-1,563.7	-379.0	596.7	541.9	54.85	10.879		
7,500.0	7,403.0	7,612.0	7,261.8	31.5	37.3	-17.60	-1,592.6	-385.9	603.9	548.1	55,80	10,822		
7,600.0	7,501.2	7,730.3	7,377.2	31.9	37.9	-17.75	-1,618.1	-392.0	608.0	551.3	56.71	10.722		
7,700.0	7,599.5	7,848.8	7,493.4	32.4	38.4	-17.97	-1,640.1	-397.2	609.1	551.5	57.56	10.581		
7,800.0	7,697.7	7,967.2	7,610.3	32.9	38.9	-18.26	-1,658.6	-401.6	607.2	548.8	58.37	10.402		
7,833.5 7,900.0	7,730.7 7,796.1	8,006.9 8,085.4	7,649.6 7,727.5	33.0 33.3	39.1 39.4	-18.37 -18.58	-1,664.0 -1,673.6	-402.9 -405.2	605.9 602.8	547.2 543.7	58.63 59.12	10.334 10.196		
0.000.0	7 004 0	0.000.4	7.044.0	22.0	20.0	40.00	4 685 0	407.0	507.7	527.0	E0.00	0.000		
8,000.0	7,894.9 7,994.0	8,203.4	7,844.9	33.8	39.8 40.2	-18.89 10.17	-1,685.0	-407.9 -409.8	597.7	537.9 531.7	59.80 60.41	9.996 9.802		
8,100.0 8,200.0	8,093.5	8,321.1 8,438.5	7,962.3 8,079.7	34.2 34.6	40.2	-19.17 -19.44	-1,692.8 -1,697.2	-409.8 -410.8	592.1 586.0	525.1	60.41	9.602		
8,300.0	8,193.2	8,551.1	8,192.2	34.9	40.9	-19.68	-1,698.1	-410.8 -411.0	579.5	518.0	61.49	9.425		
8,400.0	8,293.1	8,650.9	8,292.1	35.3	41.1	-19.83	-1,698.1	-411.0	574.7	512.5	62.17	9.244		
8,500.0	8,393.0	8,750.9	8,392.0	35.6	41.3	-19.90	-1,698.1	-411.0	572.3	509.5	62.83	9.109		
8,546.5	8,439.5	8,802.6	8,438.5	35.8	41.4	-179.90	-1,698.1	-411.0	572.0	508.9	63.14	9.060		
8,600.0	8,493.0	8,850.9	8,492.0	35.9	41.6	-179.90	-1,698.1	-411.0	572.0	508.6	63.46	9.015		
8,700.0	8,593.0	8,950.9	8,592.0	36.2	41.8	-179.90	-1,698.1	-411.0	572.0	508.0	64.08	8.928		
8,704.7	8,597.7	8,955.6	8,596.7	36,2	41.8	-179.90	-1,698.1	-411.0	572.0	507.9	64.10	8.924		
8,800.0	8,693.0	9,047.9	8,689.0	36.4	42.0	-179.95	-1,698.2	-410.5	572.1	507.4	64.74	8.837		
8,900.0	8,793.0	9,135.3	8,775.8	36.7	42.2	179.04	-1,699.5	-400.4	573.7	508.1	65.66	8.738		
9,000.0	8,893.0	9,217.8	8,855.3	37.0	42.4	176.91	-1,702.2	-378.9	578.2	511.4	66.74	8.663		
9,100.0	8,993.0	9,292.8	8,924.2	37.3	42.6	174.07	-1,706.0	-349.8	587.0	519.1	67.89	8.647		
9,200.0	9,093.0	9,359.1	8,981.5	37.6	42.7	170.93	-1,710.2	-316.8	601.8	533.0	68.86	8.740		
9,300.0	9,193.0	9,416.6	9,027.8	37.8	42.8	167.82	-1,714.6	-283.0	624.1	554.7	69.39	8.994		
9,400.0	9,293.0	9,466.0	9,064.7	38.1	42.8	164.93	-1,718.8	-250.4	654.6	585.3	69.33	9.442		
9,446.5	9,339.5	9,486.5	9,079.1	38.3	42.8	163.69	-1,720.7	-236.0	671.7	602.6	69.08	9.723		
9,450.0	9,343.0	9,488.0	9,080.1	38.3	42.8	73.70	-1,720.8	-234.9	673.0	604.0	69.06	9.746		
9,500.0	9,393.0	9,509.4	9,094.6	38.4	42.9	70.42	-1,722.8	-219.3	692.8	624.2	68.62	10.096		
9,550.0	9,442.5	9,531.0	9,108.7	38.5	42.9	67.23	-1,724.9	-203.0	713.1	645.1	68.03	10.482		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Grid

Well Barry Miller State Com #222H

KB @ 3113.5usft

KB @ 3113.5usft

Survey Calculation Method: Minimum Curvature Output errors are at 2.00 sigma

EDM 5000.14 Server Database:

Offset Des			iller - Bar	ry Miller Sta	ite Com #	£136H - Well	bore #1 - Stat	e Plan #1					Offset Site Error:	0.0 usft
Survey Progr Refere		WD Offse	et	Semi Major	Axis				Dista	ance			Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbor +N/-S (usft)	e Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
9,600.0	9,491.2	9,550.0	9,120.4	38.7	42.9	64.30	-1,726.8	-188.2	733.7	666.5	67.23	10.913		
9,650.0	9,538.8	9,574.8	9,135.1	38.8	42.9	61.32	-1,729.4	-168.3	754.2	687.6	66.54	11.335		
9,700.0	9,584.8	9,600.0	9,149.1	38.8	43.0	58.57	-1,732.1	-147.6	774.3	708.5	65.79	11.769		
9,750.0	9,629.0	9,619.2	9,159.1	38.9	43.0	56.23	-1,734.2	-131.3	793.8	729.0	64.82	12,247		
9,800.0	9,671.0	9,650.0	9,174.0	39.0	43.0	53.85	-1,737.6	-104.6	812.7	748.5	64.22	12.656		
9,850.0	9,710.5	9,664.0	9,180.3	39.0	43.0	52.07	-1,739.2	-92.2	830.5	767.3	63.12	13.158		
9,900.0	9,747.1	9,686.5	9,189.8	39.1	43.0	50.34	-1,741.8	- 72.0	847.2	784.9	62.34	13.590		
9,950.0	9,780.7	9,700.0	9,195.1	39.1	43.0	48.91	-1,743.4	-59.7	862.8	801.4	61.40	14.053		
10,000.0	9,810.9	9,731.7	9,206.4	39.1	43.1	47.52	-1,747.2	-30.3	876.9	815.8	61.06	14.361		
10,050.0	9,837.5	9,750.0	9,212.1	39.1	43.1	46.44	-1,749.4 4,753.7	-13.1	889.7	829.2	60.50	14.705		
10,100.0	9,860.3	9,777.0	9,219.6	39.1	43.1	45.52	-1,752.7	12.7	900.9	840.6	60.29	14.943		
10,106.5	9,862.9	9,779.9	9,220.3	39.1	43.1	45,42	-1,753.1	15.5	902.2	842.0	60.26	14,973		
10,200.0	9,899.6	9,821.9	9,229.3	39.1	43.1	45.02	-1,758.3	56.1	922.9	862.9	60.01	15.379		
10,300.0	9,935.6	9,865.7	9,235.5	39.1	43.2	44.47	-1,763.9	99.1	948.0	887.9	60.06	15.784		
10,400.0 10,500.0	9,968.4 9,997.8	9,953.1 10,063.3	9,242.1	39.1 39.2	43.3 43.5	43.63 42.69	-1,774.2 -1,783.7	185.7 295.2	974.7 998.1	913.9	60.79	16.033		
			9,248.9			42.69				936.2	61.83	16.142		
10,600.0	10,023.9	10,174.3	9,254.2	39.6	43.7	41.76	-1,789.2	406.0	1,017.7	954.8	62.95	16.168		
10,700.0	10,046.6	10,285.7	9,258.0	40.4	44.1	40.83	-1,790.8	517.3	1,033.7	969.6	64.12	16.121		
10,800.0	10,065.9	10,385.9	9,260.6	41.5	44.5	40.04	-1,789.9	617.5	1,046.4	981.0	65.34	16.013		
10,900.0	10,081.8	10,485.0	9,263.1	42.7	45.2	39.44	- 1,789.1	716.6	1,056.5	989.7	66.76	15.826		
11,000.0	10,094.2	10,584.5	9,265.6	44.0	46.0	39.00	-1,788.2	816.0	1,064.0	995.6	68.36	15.565		
11,100.0	10,103.2	10,684.3	9,268.1	45.4	47.1	38.71	-1,787.3	915.8	1,068.8	998.7	70.14	15.237		
11,200.0	10,108.6	10,784.3	9,270.6	46.9	48.3	38.57	-1,786.4	1,015.7	1,070.9	998.8	72.11	14.851		
11,293.4	10,110.6	10,877.7	9,273.0	48.3	49.6	38.58	-1,785.6	1,109.1	1,070.5	996.3	74.12	14.443		
11,300.0	10,110.6	10,884.3	9,273.2	48.4	49.7	38.59	-1,785.6	1,115.6	1,070.3	996.1	74.26	14.413		
11,400.0	10,111.1	10,984.2	9,275.7	50.0	51.2	38,65	-1,784.7	1,215.6	1,068.6	992.0	76.54	13,961		
11,500.0	10,111.5	11,084.2	9,278.3	51.7	52.8	38.71	-1,783.8	1,315.5	1,066.8	987.9	78.90	13.522		
11,600.0	10,112.0	11,184.2	9,280.8	53.5	54.5	38.77	-1,783.0	1,415.5	1,065.1	983.7	81.33	13.096		
11,700.0	10,112.4	11,284.2	9,283.3	55.3	56.3	38.83	-1,782.1	1,515.4	1,063.3	979.5	83.82	12.685		
11,800.0 11,900.0	10,112.9 10,113.3	11,384.2 11,484.1	9,285.9 9,288.4	57.1 59.0	58.1 60.0	38.89 38.95	-1,781.2 -1,780.3	1,615.4 1,715.3	1,061.5 1,059.8	975.1 970.8	86.38 89.00	12.288 11.907		
12,000.0	10,113.8	11,584.1	9,290.9	60.9	61.9	39.01	-1,779.5	1,815.2	1,058.0	966.3	91.67	11.541		
12,100.0	10,114.3	11,684.1	9,293.5	62.9	63.9	39.07	-1,778.6	1,915.2	1,056.2	961.9	94.40	11.190		
12,200.0	10,114.7	11,784.1	9,296.0	64.9	65.9	39.13	-1,777.7	2,015.1	1,054.5	957.3	97.16	10,853		
12,300.0	10,115.2	11,884.0	9,298.5	66.9	67.9	39.20	-1,776.9	2,115.1	1,052.7	952.8	99.98	10.530		
12,400.0	10,115.6	11,984.0	9,301.1	68.9	70.0	39.26	-1,776.0	2,215.0	1,051.0	948.2	102.83	10.221		
12,500.0	10,116.1	12,084.0	9,303.6	71.0	72.0	39.32	-1,775.1	2,315.0	1,049.2	943.5	105.72	9.925		
12,600.0	10,116.5	12,184.0	9,306.1	73.1	74.2	39.38	-1,774.2	2,414.9	1,047.5	938.8	108.65	9.641		
12,700.0	10,117.0	12,284.0	9,308.7	75.2	76.3	39.44	-1,773.4	2,514.8	1,045.7	934.1	111.61	9.370		
12,800.0	10,117.4	12,383.9	9,311.2	77.4	78.4	39.51	-1,772.5	2,614.8	1,044.0	929.4	114.60	9.110		
12,900.0	10,117.9	12,483.9	9,313.7	79.5	80.6	39.57	-1,771.6	2,714.7	1,042.2	924.6	117.62	8,861		
13,000.0	10,118.4	12,583.9	9,316.3	81.7	82.8	39.63	-1,770.7	2,814.7	1,040.5	919.8	120.67	8,623		
13,100.0	10,118.8	12,683.9	9,318.8	83.9	85.0	39.70	-1,769.9	2,914.6	1,038.7	915.0	123.74	8.394		
13,200.0	10,119.3	12,783.8	9,321.3	86.1	87.2	39.76	-1,769.0	3,014.5	1,037.0	910.1	126.84	8.175		
13,300.0	10,119.7	12,883.8	9,323.9	88.3	89.4	39.82	-1,768.1	3,114.5	1,035.2	905.3	129.97	7.965		
13,400.0	10,120.2	12,983.8	9,326.4	90.5	91.7	39.89	-1,767.3	3,214.4	1,033.5	900.4	133.12	7.764		
13,500.0	10,120.6	13,083.8	9,328.9	92.8	93.9	39.95	-1,766.4	3,314.4	1,031.8	895.5	136.29	7.570		
13,600.0	10,121.1	13,183.8	9,331.5	95.0	96.2	40.02	-1,765.5	3,414.3	1,030.0	890.5	139.48	7.385		
13,700.0	10,121.6	13,283.7	9,334.0	97.3	98.4	40.08	-1,764.6	3,514.3	1,028.3	885.6	142.69	7.206		
13,800.0	10,122.0	13,383.7	9,336.5	99.5	100.7	40.15	-1,763.8	3,614.2	1,026.5	880.6	145.92	7.035		
13,900.0	10,122.5	13,483.7	9,339.1	101.8	103.0	40.21	- 1,762.9	3,714.1	1,024.8	875.6	149.17	6.870		
14,000.0	10,122.9	13,583.7	9,341.6	104.1	105.3	40.28	-1,762.0	3,814.1	1,023.1	870.6	152.44	6.711		

Company: Matador Production Company

Project: Rustler Breaks
Reference Site: Barry Miller
Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft
Reference Wellbore Wellbore #1
Reference Design: BLM Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Output errors are at

Database: Offset TVD Reference: Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid

Minimum Curvature

2.00 sigma

EDM 5000.14 Server

Survey Prog													Offset Well Error:	0.0 u
Refer		Offse		Semi Major					Dista					
leasured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Too l face (°)	Offset Wellbor +N/-S (usft)	e Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,100.0	10,123.4	13,683.7	9,344.1	106.4	107.6	40.34	-1,761.2	3,914.0	1,021.3	865.6	155.73	6.559		
14,200.0	10,123.8	13,783.6	9,346.7	108.7	109.9	40.41	-1,760.3	4,014.0	1,019.6	860.6	159.03	6.411		
14,300.0	10,124.3	13,883.6	9,349.2	111.0	112.2	40.47	-1,759.4	4,113.9	1,017.9	855.5	162.35	6.270		
14,400.0	10,124.8	13,983.6	9,351.7	113.3	114.5	40.54	-1,758.5	4,213.9	1,016.2	850.5	165,69	6.133		
14,500.0	10,125.2	14,083.6	9,354.3	115.6	116.8	40.61	-1,757.7	4,313.8	1,014.4	845.4	169.04	6.001		
14,600.0	10,125.7	14,183.5	9,356.8	117.9	119.2	40.67	-1,756.8	4,413.7	1,012.7	840.3	172.40	5.874		
14,700.0	10,126.1	14,283.5	9,359.3	120.2	121.5	40.74	-1,755.9	4,513.7	1,011.0	835.2	175.78	5.751		
14,800.0	10,126.6	14,383.5	9,361.9	122.6	123.8	40.81	-1,755.0	4,613.6	1,009.3	830.1	179.18	5.633		
14,900.0	10,127.0	14,483.5	9,364.4	124.9	126.2	40.87	-1,754.2	4,713.6	1,007.5	824.9	182.59	5.518		
15,000.0	10,127.5	14,583.5	9,366.9	127.2	128.5	40.94	-1,753.3	4,813.5	1,005.8	819.8	186.01	5.407		
15,100.0	10,127.9	14,683.4	9,369.5	129.6	130.9	41.01	-1,752.4	4,913.5	1,004.1	814.6	189.45	5.300		
15,200.0	10,128.4	14,783.4	9,372.0	131.9	133.2	41.08	-1,751.6	5,013.4	1,002.4	809.5	192.90	5,196		
15,300.0	10,128.9	14,883.4	9,374.5	134.3	135.6	41.15	-1,750.7	5,113.3	1,000.7	804.3	196.36	5.096		
15,400.0	10,129.3	14,983.4	9,377.1	136.6	137.9	41.21	-1,749.8	5,213.3	998.9	799.1	199.83	4.999		
15,500.0	10,129.8	15,083.3	9,379.6	139.0	140.3	41.28	-1,748.9	5,313.2	997.2	793.9	203.32	4.905		
15,600.0	10,130.2	15,183.3	9,382.1	141.3	142.7	41.35	-1,748.1	5,413.2	995.5	788.7	206.82	4.813		
15,700.0	10,130.7	15,283.3	9,384.7	143.7	145.0	41.42	-1,747.2	5,513.1	993.8	783.5	210.33	4.725		
15,800.0	10,131.1	15,383.3	9,387.2	146.1	147.4	41.49	-1,746.3	5,613.0	992.1	778.2	213.86	4.639		
15,900.0	10,131.6	15,483.3	9,389.7	148.4	149.8	41.56	-1,745.5	5,713.0	990.4	773.0	217.40	4.556		
16,000.0	10,132.1	15,583.2	9,392.3	150.8	152.1	41.63	-1,744.6	5,812.9	988.7	767.7	220.94	4.475		
16,100.0	10,132.5	15,683.2	9,394.8	153.2	154.5	41.70	-1,743.7	5,912.9	987.0	762.5	224.50	4.396		
16,200.0	10,133.0	15,783.2	9,397.3	155.5	156.9	41.77	-1,742.8	6,012.8	985.3	757.2	228.08	4.320		
16,300.0	10,133.4	15,883.2	9,399.9	157.9	159.3	41.84	-1,742.0	6,112.8	983.6	751.9	231.66	4.246		
16,400.0	10,133.9	15,983.2	9,402.4	160.3	161.7	41.91	-1,741.1	6,212.7	981.9	746.6	235.25	4.174		
16,500.0	10,134.3	16,083.1	9,404.9	162.7	164.1	41.98	-1,740.2	6,312.6	980.2	741.3	238.86	4.104		
16,600.0	10,134.8	16,183.1	9,407.5	165.1	166.4	42.05	-1,739.3	6,412.6	978.5	736.0	242.48	4.035		
16,700.0	10,135.3	16,283.1	9,410.0	167.4	168.8	42.13	-1,738.5	6,512.5	976.8	730.7	246.10	3.969		
16,800.0	10,135.7	16,383.1	9,412.5	169.8	171.2	42.20	-1,737.6	6,612.5	975.1	725.3	249.74	3.904		
16,900.0	10,136.2	16,483.0	9,415.1	172.2	173.6	42.27	-1,736.7	6,712.4	973.4	720.0	253.39	3.841		
17,000.0	10,136.6	16,583.0	9,417.6	174.6	176.0	42.34	-1,735.9	6,812.4	971.7	714.7	257.05	3.780		
17,100.0	10,137.1	16,683.0	9,420.1	177.0	178.4	42.42	-1,735.0	6,912.3	970.0	709.3	260.72	3.720		
17,200.0	10,137.5	16,783.0	9,422.7	179.4	180.8	42.49	-1,734.1	7,012.2	968.3	703.9	264.40	3.662		
17,300.0	10,138.0	16,883.0	9,425.2	181.8	183.2	42.56	-1,733.2	7,112.2	966.6	698.5	268.10	3.606		
17,400.0	10,138,4	16,982.9	9,427.7	184.2	185,6	42.63	-1,732.4	7,212.1	965.0	693.2	271.80	3,550		
17,411.2	10,138.5	16,994.2	9,428.0	184.4	185.9	42.64	-1,732.3	7,223.3	964.8	692.5	272.22	3.544		
17,411.8	10,138.5	16,994.7	9,428.0	184.5	185.9	42.64	-1,732.3	7,223.9	964.8	692.5	272.24	3.544		

Company: Matador Production Company

Project: Rustler Breaks
Reference Site: Barry Miller
Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft
Reference Wellbore Wellbore #1
Reference Design: BLM Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

erence: KB @ 3113.5usft leference: Grid

Survey Calculation Method: Minimum Curvature

Output errors are at 2.00 sigma

Database: EDM 5000.14 Server

Well Barry Miller State Com #222H

KB @ 3113.5usft

Offset De	sign	Barry M	iller - Bar	ry Miller Sta	ate Com #	201H - Wel	lbore #1 - Stat	e Plan #1					Offset Site Error:	0.0 usft
Survey Progr Refere		WD Offse		Semi Major	Avie				Dista	nco			Offset Well Error:	0.0 usft
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbor	e Centre	Between	Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	vvarining	
0.0	0.0	0.0	0.0	0.0	0.0	-159.62	-80.2	-29.8	85.6					
100.0	100.0	100.4	100.3	0.1	0.1	-159.87	-79.6	-29.2	84.8	84.5	0.27	311.292		
200.0	200.0	201.7	201.6	0.5	0.5	-160.65	-77.7	-27.3	82.4	81.4	1.00	82,429		
300.0	300.0	302.8	302.7	0.8	0.9	-162.06	-74.6	-24.1	78.5	76.7	1.73	45.364		
400.0	400.0	402.7	402.4	1.2	1.2	-163.91	- 70.9	-20.4	73.8	71.4	2.44	30.265		
500.0	500.0	502.5	502.1	1.6	1.6	-166.00	-67.2	-16.7	69.3	66.1	3.16	21.965		
600.0	600.0	602.4	601.8	1.9	2.0	-168.38	-63.5	-13.1	64.9	61.0	3.87	16.749		
700.0	700.0	702.3	701.6	2.3	2.3	-171.10	-59.8	-9.4	60.6	56.0	4.59	13.188		
800.0	800.0	802.1	801.3	2.6	2.7	-174.24	-56.1	-5.7	56.4	51.1	5.31	10.618		
900.0	900.0	902.0	901.0	3.0	3.1	-177.85	-52.4	-2.0	52.5	46.4	6.04	8.692		
1,000.0	1,000.0	1,001.8	1,000.7	3.4	3.4	177.97	- 48.7	1.7	48.8	42.0	6.76	7.212		
1,100.0	1,100.0	1,101.7	1,100.5	3.7	3.8	173,13	-45.0	5.4	45.4	37.9	7.49	6.058		
1,200.0	1,200.0	1,201.6	1,200.2	4.1	4.2	167.55	-41.3	9.1	42.3	34.1	8.21	5.152		
1,300.0	1,300.0	1,301.4	1,299.9	4.4	4.5	-39.64	-37.6	12.8	39.1	30.1	8.93	4.377		
1,400.0	1,400.0	1,401.9	1,400.2	4.7	4.9	-49.00	-33.2	15.3	34.2	24.6	9.62	3.558		
1,500.0	1,499.9	1,502.1	1,500.3	5.1	5.2	-62.33	-27.6	15.6	27.3	17.0	10.31	2.644		
1,600.0	1,599.7	1,601.9	1,599.8	5.4	5.6	-87.90	-20.6	13.5	19.8	8.9	10.98	1.806		
1,663.8	1,663.3	1,665.3	1,663.0	5.6	5.8	-116.73	-15.6	11.1	17.6	6.2	11.40	1.545 (CC, ES, SF	
1,700.0	1,699.4	1,701.1	1,698.6	5.8	6.0	-135.44	-12.5	9.3	18.5	6.9	11.63	1,592		
1,800.0	1,798.9	1,800.5	1,796.4	6.1	6.3	-171.42	-3.5	3.4	29.6	17.3	12.31	2.404		
1,900.0	1,898.3	1,902.5	1,893.8	6.5	6.7	174.64	5.5	-2.6	47.3	34.3	13.00	3.638		
2,000.0	1,997.4	1,995.1	1,990.9	6.8	7.0	168.69	14.5	-8.6	67.9	54.2	13.67	4.969		
2,100.0	2,096.3	2,107.5	2,087.6	7.2	7.4	165.77	23.4	-14.5	90.5	76.1	14.41	6.284		
2,200.0	2,194.9	2,189.4	2,184.0	7.6	7.7	164.23	32.3	-20.4	114.9	99.9	15.04	7.639		
2,269.4	2,263.2	2,256.5	2,250.6	7.9	8.0	163.60	38.5	-24.5	132.8	117.3	15.53	8,556		
2,300.0	2,293.3	2,286.0	2,279.9	8.0	8.1	163.42	41,2	-26.3	140.9	125.2	15.74	8,953		
2,400.0	2,391.5	2,382.4	2,375.8	8.4	8.4	162.94	50.1	-32.2	167.3	150.9	16.43	10.180		
2,500.0	2,489.8	2,478.9	2,471.6	8.8	8.8	162.59	58.9	-38.0	193.7	176.6	17.13	11.305		
2,600.0	2,588.1	2,575.3	2,567.5	9.2	9.2	162.32	67.8	-4 3.9	220.1	202.3	17.84	12.340		
2,700.0	2,686.3	2,671.8	2,663.4	9.6	9.5	162.12	76.6	-49.8	246.5	227.9	18.54	13.294		
2,800.0	2,784.6	2,768.2	2,759.2	10.1	9.9	161.95	85.5	-55.7	272.9	253.6	19.25	14.177		
2,900.0	2,882.8	2,864.7	2,855.1	10.5	10.3	161.81	94.4	-61.5	299.3	279.3	19.96	14.994		
3,000.0	2,981.1	2,961.1	2,950.9	10.9	10.6	161.69	103.2	-67.4	325.7	305.0	20.67	15.754		
3,100.0	3,079.4	3,057.6	3,046.8	11.4	11.0	161,59	112.1	-73.3	352.1	330.7	21,39	16,462		
3,200.0	3,177.6	3,154.0	3,142.7	11.8	11.4	161.51	121.0	- 79.2	378.5	356.4	22.11	17.122		
3,300.0	3,275.9	3,250.5	3,238.5	12.2	11.8	161.44	129.8	-85.1	404.9	382.1	22.83	17.739		
3,400.0	3,374.2	3,346.9	3,334.4	12.7	12.1	161.37	138.7	-90.9	431.3	407.8	23.55	18.318		
3,500.0	3,472.4	3,443.3	3,430.2	13.1	12.5	161.31	147.6	-96.8	457.8	433.5	24.27	18.861		
3,600.0	3,570.7	3,539.8	3,526.1	13.6	12.9	161.26	156.4	-102.7	484.2	459.2	24.99	19.372		
3,700.0	3,669.0	3,636.2	3,622.0	14.0	13.3	161.22	165.3	-108.6	510.6	484.9	25.72	19.853		
3,800.0	3,767.2	3,732.7	3,717.8	14.5	13.6	161.18	174.2	-114.4	537.0	510.6	26.44	20.307		
3,900.0	3,865.5	3,829.1	3,813.7	14.9	14.0	161,14	183.0	-120.3	563.4	536.2	27.17	20.736		
4,000.0	3,963.7	3,925.6	3,909.5	15.4	14.4	161,11	191.9	-126.2	589.8	561.9	27.90	21,142		
4,100.0	4,062.0	4,022.0	4,005.4	15.8	14.8	161.07	200.7	-132.1	616.2	587.6	28.63	21.526		
4,200.0	4,160.3	4,118.5	4,101.3	16.3	15.1	161.05	209.6	-137.9	642.6	613.3	29.36	21.891		
4,300.0	4,258.5	4,214.9	4,197.1	16.7	15.5	161.02	218.5	-143.8	669.1	639.0	30.09	22.238		
4,400.0	4,356.8	4,311.4	4,293.0	17.2	15.9	160.99	227.3	-149.7	695.5	664.7	30.82	22.567		
4,500.0	4,455.1	4,407.8	4,388.8	17.6	16.3	160.97	236.2	-155.6	721.9	690.3	31.55	22,881		
4,600.0	4,553.3	4,504.3	4,484.7	18.1	16.6	160.95	245.1	-161.4	748.3	716.0	32.28	23.180		
4,700.0 4,800.0	4,651.6 4,749.8	4,600.7 4,697.2	4,580.6 4,676.4	18.5 19.0	17.0 17.4	160.93 160.91	253.9 262.8	-167.3 -173.2	774.7 801.1	741.7 767.4	33.01 33.75	23.466 23.739		
4,900.0	4,848.1	4,793.6	4,772.3	19.5	17.8	160.90	271.7	-179.1	827.5	793.1	34.48	24.000		

0.0 usft

Anticollision Report

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

Company: Matador Production Company

Project: Rustler Breaks
Reference Site: Barry Miller
Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft
Reference Wellbore Wellbore #1
Reference Design: BLM Plan #1

Offset Design

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Output errors are at

Database: Offset TVD Reference: Well Barry Miller State Com #222H

KB @ 3113.5usft

KB @ 3113.5usft Grid

Minimum Curvature

2.00 sigma EDM 5000.14 Server

Offe et Deture

Oliset Datum	
	Offset Site Error:
	Offset Well Error:

Survey Prog													Offset Well Error:	0.0 usft
Refer		Offse		Semi Major					Dista					
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Too l face	Offset Wellbor +N/-S	e Centre +E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+IN/-S (usft)	(usft)	(usft)	(usft)	(usft)	i dotoi		
5,000.0	4,946.4	4,909.9	4,868.1	19.9	18.2	160.88	280.5	-184.9	854.0	818.7	35.29	24.198		
5,100.0	5,044.6	4,986.5	4,964.0	20.4	18.5	160.87	289.4	-190.8	880.4	844.4	35.95	24.489		
5,200.0	5,142.9	5,083.0	5,059.9	20.8	18.9	160.85	298.3	-196.7	906.8	870.1	36.69	24.718		
5,300.0	5,241.2	5,179.4	5,155.7	21.3	19.3	160.84	307.1	-202.6	933.2	895.8	37.42	24,938		
5,400.0	5,339.4	5,275.9	5,251.6	21.8	19.7	160.83	316.0	-208.5	959.6	921.5	38.16	25.149		
5,500.0	5,437.7	5,372.3	5,347.4	22.2	20.1	160.81	324.8	-214.3	986.0	947.1	38.89	25.352		
5,600.0	5,536.0	5,468.8	5,443.3	22.7	20.4	160.80	333.7	-220.2	1,012.4	972.8	39.63	25.548		
5,700.0	5,634.2	5,565.2	5,539.2	23.1	20.8	160.79	342.6	-226.1	1,038.9	998.5	40.37	25.735		
5,800.0	5,732.5	5,661.7	5,635.0	23.6	21.2	160.78	351.4	-232.0	1,065.3	1,024.2	41.10	25.916		
5,900.0	5,830.7	5,758.1	5,730.9	24.1	21.6	160.77	360.3	-237.8	1,091.7	1,049.8	41.84	26.091		
6,000.0	5,929.0	5,854.6	5,826.7	24.5	21.9	160.76	369.2	-243.7	1,118.1	1,075.5	42.58	26.259		
6,100.0	6,027.3	5,951.0	5,922.6	25.0	22.3	160.75	378.0	-249.6	1,144.5	1,101.2	43.32	26,421		
6,200.0		6,047.5	6,018.5	25.4	22.7	160.75	386.9	-255.5	1,170.9	1,126.9	44.06	26.578		
6,300.0		6,143.9	6,114.3	25.9	23.1	160.74	395.8	-261.3	1,197.3	1,152.5	44.79	26.729		
6,400.0		6,240.3	6,210.2	26.4	23.5	160.73	404.6	-267.2	1,223.8	1,178.2	45.53	26.876		
6,500.0	6,420.3	6,336.8	6,306.0	26.8	23.8	160.72	413.5	-273.1	1,250.2	1,203.9	46.27	27.017		
6,600.0	6,518.6	6,433.2	6,401.9	27.3	24.2	160.71	422.4	-279.0	1,276.6	1,229.6	47.01	27.154		
6,700.0	6,616.8	6,529.7	6,497.8	27.8	24.6	160.71	431.2	-284.8	1,303.0	1,255.2	47.75	27.287		
6,800.0	6,715.1	6,626.1	6,593.6	28.2	25.0	160.71	440.1	-290.7	1,329.4	1,280.9	48.49	27.415		
6,900.0		6,722.6	6,689.5	28.7	25.4	160.70	448.9	-296.6	1,355.8	1,306.6	49.23	27.539		
7,000.0		6,819.0	6,785.3	29.2	25.8	160.69	457.8	-302.5	1,382.2	1,332.3	49.97	27.660		
7 400 0	7.000.0	0.045.5	0.004.0	20.0	00.4	400.00	100.7	202.4	4 400 7	4.057.0	50.74			
7,100.0		6,915.5	6,881.2	29.6	26.1	160.68	466.7 475.5	-308.4	1,408.7	1,357.9	50.71	27.777		
7,200.0 7,300.0	7,108.2 7,206.4	7,011.9 7,108.4	6,977.1 7,072.9	30.1 30.6	26.5 26.9	160.68 160.67	484.4	-314.2 -320.1	1,435.1 1,461.5	1,383.6 1,409.3	51.45 52.19	27.890 28.000		
7,400.0		7,100.4	7,168.8	31.0	27.3	160.67	493.3	-326.0	1,487.9	1,435.0	52.19	28.107		
7,500.0		7,204.0	7,166.6	31.5	27.7	160.66	502.1	-331.9	1,514.3	1,460.6	53,68	28,211		
7,600.0	7,501.2	7,402.3	7,360.5	31.9	28.1	160.66	511.0	-337.7	1,540.7	1,486.3	54.44	28,303		
7,700.0	7,599.5	7,505.8	7,456.4	32.4	28.5	160.65	519.9	-343.6	1,567.1	1,511.9	55.20	28.388		
7,800.0		7,609.4	7,552.2	32.9	28.9	160.65	528.7	-349.5	1,593.6	1,537.6	55.97	28.470		
7,833.5 7,900.0		7,623.0 7,687.2	7,584.4 7,648.2	33.0 33.3	28.9 29.2	160.65 160.72	531.7 537.6	-351.5 -355.4	1,602.4 1,619.4	1,546.3 1,562.8	56.15 56.64	28.537 28.590		
7,900.0	7,790.1	7,007.2	7,040.2	33.3	29.2	100.72	557.6	-333.4	1,019.4	1,502.6	30.04	20.590		
8,000.0	7,894.9	7,784.4	7,744.8	33.8	29.6	160.80	546.5	-361.3	1,643.1	1,585.7	57.38	28.633		
8,100.0	7,994.0	7,882.1	7,841.9	34.2	29.9	160.84	555.5	-367.2	1,664.3	1,606.2	58.12	28,636		
8,200.0		7,980.2	7,939.5	34.6	30.3	160.84	564.5	-373.2	1,683.1	1,624.2	58.85	28,599		
8,300.0	8,193.2	8,078.8	8,037.4	34.9	30.7	160.79	573.6	-379.2	1,699.5	1,639.9	59.58	28.524		
8,400.0	8,293.1	8,177.7	8,135.8	35.3	31.1	160.71	582.7	-385.3	1,713.4	1,653.1	60.31	28.412		
8,500.0	8,393.0	8,276.9	8,234.3	35.6	31.5	160.59	591.8	-391.3	1,724.9	1,663.9	61.02	28.266		
8,546.5	8,439.5	8,323.1	8,280.2	35.8	31.7	0.53	596.0	-394.1	1,729.4	1,668.1	61.35	28.189		
8,600.0	8,493.0	8,378.3	8,335.1	35.9	31.9	0.42	601.1	-397.5	1,734.3	1,672.6	61.73	28.093		
8,700.0	8,593.0	8,538.6	8,494.8	36.2	32.5	0.16	612.9	-405.3	1,741.6	1,678.8	62.84	27.715		
8,800.0	8,693.0	8,699.8	8,655.8	36.4	33,1	0.02	619.0	-409.4	1,745.5	1,681.6	63,86	27,332		
8,900.0	8,793.0	8,840.5	8,796.5	36.7	33.6	0.06	620.0	- 408.2	1,746.0	1,681.3	64.69	26.989		
9,000.0		8,948.1	8,902.2	37.0	33.8	0.67	619.4	-389.7	1,745.6	1,680.3	65.30	26,730		
9,100.0		9,045.7	8,993.7	37.3	34.0	1.77	618.3	356.1	1,745.1	1,679.3	65.83	26.511		
9,109.3		9,054.1	9,001.4	37.3	34.1	1.89	618.1	-352.5	1,745.1	1,679.3	65.87	26.492		
9,200.0		9,130.0	9,067.2	37.6	34.2	3.12	616.9	-314.9	1,745.7	1,679.4	66.27	26.342		
9,300.0	9,193.0	9,200.6	9,123.5	37.8	34.3	4.52	615.5	-272.5	1,748.3	1,681.7	66.63	26.237		
9,400.0		9,258.9	9,123.5 9,165.9	37.6 38.1	34.3	5.83	614.2	-272.5 -232.3	1,746.3	1,686.9	66.90	26.237 26.216		
9,446.5		9,282.5	9,181.7	38.3	34.3	6.40	613.6	-232.3 -215.0	1,757.6	1,690.6	66.98	26.240		
9,450.0		9,284.2	9,182.8	38.3	34.3	-83.28	613.6	-213.7	1,757.9	1,690.9	66.99	26.242		
9,500.0		9,308.4	9,198.4	38.4	34.3	-82.23	612.9	-195.2	1,762.6	1,695.5	67.05	26.289		
9,550.0	9,442.5	9,332.7	9,213.1	38.5	34.3	-81.18	612.3	-175.9	1,767.6	1,700.5	67.08	26.352		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Grid

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Minimum Curvature

2.00 sigma

EDM 5000.14 Server

	Offset Des	ign	Barry M	iller - Bar	ry Miller Sta	te Com #	#201H - Well	bore #1 - State	e Plan #1					Offset Site Error:	0.0 usft
Marchage	Survey Progra	am: 0-M	WD		•					D				Offset Well Error:	0.0 usft
					•		Lliaboido	Officet Wellbar	o Contro			Minimum	Congretion		
980.00 6341.2 937.0 9227.1 937 944 -80.13 611.7 -196.0 1.772.6 1.705.8 67.08 28.428 9381.4 2.402.2 38.8 344 -7.109 611.6 -135.4 1.783.1 7.175.7 67.07 28.615 970.0 9.684.8 9.400.0 9.249.7 38.8 344 -7.12 610.6 -135.4 1.783.1 7.176.7 67.00 2.6024 9.602 2.253.8 39.8 344 -7.12 600.0 -2.07 -7.43 1.789.1 1.724.4 66.09 2.876 9.602.0 9.700.0 9.600.0 9.771.0 9.770.2 9.800.0 9.771.0 9.770.2 9.800.0 9.771.0 9.770.2 9.800.0 9.771.0 9.770.2 9.800.0 9.771.0 9.770.2 9.800.0 9.771.0 9.770.2 9.800.0 9.771.0 9.770.2 9.800.0 9.771.0 9.770.2 9.800.0 9.771.0 9.770.2 9.800.0 9.771.0 9.770.2 9.800.0 9.771.0 9.770.2 9.800.0 9.771.0 9.770.2 9.800.0 9.771.0 9.770.2 9.800.0 9.771.0 9.770.0 9.800.0 9.771.0 9.770.0 9.800.0 9.771.0 9.770.0 9.800.0	Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Centres	Ellipses	Separation		Warning	
98500 9,588 9,4800 9,4802 9,2407 98,8 944 77,10 910 158,4 1,778.3 1,711.2 67,07 26,115 9,7000 9,8900 9,4802 9,680,9 3,681 344 77,12 609,6 40,07 1,781.1 1,721.1 66,80 26,709 9,8000 8,771 9,5000 2,972.4 38,8 38,0 344 77,27 609,6 74,99 1,784.3 1,724.1 60,80 28,000 9,747,1 9,5000 2,972.4 38,8 38,0 344 74,59 601,5 48,00 1,799.3 1,732.4 60,80 22,901 9,8000 9,747,1 9,5000 2,911 38,1 34,4 74,59 601,5 48,00 1,799.3 1,732.4 60,80 22,901 9,8000 9,747,1 9,5000 9,500,7 9,500 3,11 34,4 74,59 601,5 48,00 1,799.3 1,741.3 60,81 2,700 9,8000 9,747,1 9,5000 9,500,7 9,500 3,11 34,4 74,59 601,5 48,00 1,799.3 1,741.3 60,81 2,700 9,8000 9,800,3 9,600 9,500,7 9,500 3,11 34,4 74,50 606,6 1,77 4,000 1,741.3 60,81 2,700 9,8000 9,800,3 9,600 9,300,7 9,311.3 34,4 74,20 600,0 44,9 9,112 1,741.3 60,81 2,716 9,8000 9,800,3 9,600 9,316,1 98,1 34,5 77,210 604,3 68,1 1,879.9 1,789.3 66,87 2,716 9,8000 9,800,5 9,800 9,316,1 98,1 34,5 77,210 604,3 88,1 1,818.2 1,781.3 66,87 2,716 9,8000 9,800,5 9,800 9,322,2 38,1 34,6 77,57 60,66 1,77 1,823.3 1,761.1 67,24 2,716 9,8000 9,800,5 9,800 9,322,2 38,1 34,5 77,11 604,3 88,1 1,818.2 1,781.3 66,87 2,716 9,8000 9,800,5 9,800 9,322,3 38,1 34,6 77,57 60,66 1,77 1,823.3 1,761.1 7,77 2,700 9,8000 9,800,5 9,800 9,322,3 38,1 34,6 77,57 60,66 1,77 1,823.3 1,761.1 7,77 2,700 9,8000 9,800,5 9,800 9,800,5 9,800 9,8	9,600.0	9.491.2	9.357.0	9.227.1	38.7	34.4	-80.13			1,772.9	1,705,8	67.08	26,428		
9.750.0 9.629.0 9.400.2 9.203.0 9.80 9.44 77.712 0.990 74.79 1.789.1 1.722.1 0.960 2.700 9.400.0 0.771.0 9.400.0 0.771.0 9.400.0 0.771.0 9.400.0 0.771.0 9.400.0 0.771.0 9.400.0 0.771.1 9.600.0 0.771.1 9.600.0 0.771.1 9.600.0 0.771.1 9.600.0 0.780.7 9.600.0 0.780.7 9.600.0 0.780.7 9.600.0 0.780.7 9.600.0 0.780.7 9.600.0 0.800.0 3.050.7 30.1 34.4 7.78.9 0.650.0 1.650.0 1.650.0 1.787.1 0.650.0 0.771.1 0.650.0 0.800.0 3.050.7 30.1 34.4 7.78.9 0.650.0 1.650.0 1.650.2 1.745.1 0.650.0 0.771.2 0.771.0 0.780.0 0.771.2 0.771.0 0.780.0 0.780.7 0.780.0 0.7															
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9,980,0 9,780,7 9,528,3 9,299,9 38.1 34.4 -73.81 906,8 -1.77 1,808,2 1,741,3 68.82 27,081 10,000,0 9,810,9 9,550,0 3,957,7 3,911,9 38.1 34.5 -72.80 905,0 45.9 1,815,2 1,746,3 68.87 27,146 10,100,0 9,803 9,000,0 3,161 38.1 34.5 -72.11 904,3 68.1 1,817,2 1,746,3 68.04 27,163 10,200,0 9,896,8 9,800,0 9,322,2 38.1 34.6 -71.57 902,6 11,77 1,823,3 1,766,1 67.24 27,117 10,000,0 9,896,8 9,800,0 9,322,2 38.1 3.4 -71.57 902,6 11,77 1,823,3 1,766,1 67.24 27,117 10,000,0 9,864 8,911,0 9,327,9 38.1 55.0 -88.76 597.4 27.64 1,817,2 1,765,5 68.68 26,749 10,000,0 9,966,4 8,911,0 9,333,9 36.3 36.0 -88.76 597.4 27.64 1,817,2 1,765,5 68.68 26,349 10,000,0 10,000,0 9,000,0 9,338,9 40.4 35.0 -68.69 69.4 37.32 1,843,5 1,775,3 73.05 68.68 26,349 10,000,0 10,000,0 10,007,8 8,383,9 40.4 35.0 -67.45 588.7 565.0 1,862,9 1,776,1 73.02 28,376 10,000,0 10,007,8 10,007,8 8,383,0 40.4 35.0 -67.45 588.7 565.0 1,862,9 1,776,1 73.02 28,376 10,000,0 10,004,2 10,3002 3,840,0 40.4 43.1 -86.69 58.39 60.9 1,863,1 1,761,1 74.66 24,760 10,000,0 10,004,2 10,3602 3,840,0 40.4 43.1 -86.69 58.39 56.9 1,863,1 1,761,1 74.66 23.371 11,000,0 10,004,2 10,3602 3,840,0 40.4 43.1 -86.69 58.33 784 1,882,1 1,761,1 74.66 23.371 11,000,0 10,004,2 10,3602 3,840,0 40.4 43.6 -86.97 37.1 1,842,2 1,883,3 1,776,1 24.607 11,000,0 10,004,2 10,3602 3,840,0 40.4 43.6 -86.97 37.1 1,842,2 1,883,3 1,776,2 20.14 11,000,0 10,004,2 10,3602 3,840,0 44.4 46.8 -86.97 37.1 1,842,2 1,883,3 1,776,1 4,771,5 4,744,4 4,744,4 4,744,4 4,744,4 4,744,4 4,744,4 4,744,4 4,744,4 4,744,4 4,744,4 4,744,4 4,744,4 4,744,4 4,744,4 4,744,4 4,744,4 4,744,4 4,744,4															
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10500.0 9887.5 9877.4 9.311.9 39.1 34.5 7.72.00 609.0 45.9 1815.2 1748.3 60.87 27.146 10100.0 9889.3 9800.0 9.316.1 39.1 34.5 7.72.14 604.3 68.1 1817.3 175.0 66.94 27.156 10200.0 9899.6 9650.0 9.322.2 39.1 34.8 7.157 602.6 117.7 1823.3 1.756.1 67.24 27.117 10200.0 9889.6 9.717.2 33.24 39.1 35.3 7.757 602.6 117.7 1823.3 1.756.1 67.24 27.117 10200.0 9989.6 9.811.0 3.327.9 39.1 35.3 7.757 602.6 117.7 1823.3 1.756.5 68.88 28.749 10200.0 9089.6 9.810.0 3.327.9 39.1 30.0 49.78 597.4 278.4 1837.2 1.765.5 68.88 28.749 10500.0 10023.9 10.001.4 9.333.8 38.6 37.9 48.88 49.4 373.2 18.43.3 1.755.5 68.88 28.749 10500.0 1008.6 10.007.8 39.38.0 40.4 30.0 47.45 588.7 596.0 1852.9 1.779.9 73.02 23.376 10500.0 10.085.9 10.194.8 3.940.0 41.5 40.3 40.9 40.8 58.3 40.9 40.8 40.9 40.9 40.9 10500.0 10.081.8 10.322.3 3.94.0 40.4 30.0 47.45 588.7 596.0 1852.9 1.779.3 77.14 24.087 10500.0 10.081.8 10.322.3 3.94.0 40.4 40.9 40.2 40.8 583.3 799.4 18.86.1 1.761.1 74.56 47.60 10500.0 10.081.8 10.322.3 3.94.0 40.4 40.9 40.2 40.8 10500.0 10.081.8 10.322.3 3.94.0 40.4 40.9 40.2 40.8 10500.0 10.081.8 10.322.3 3.94.0 40.5 40.9 40.2 40.8 10500.0 10.081.8 10.322.3 3.94.0 40.5 40.9 40.8 40.8 10500.0 10.081.8 10.322.3 3.94.0 40.5 40.9 40.8 40.8 10500.0 10.081.8 10.322.3 3.94.0 40.5 40.9 40.8 40.8 10500.0 10.081.8 10.322.3 3.94.0 40.5 40.9 40.8 40.8 10500.0 10.081.8 10.322.3 3.94.0 40.5 40.9 40.8 40.8 10500.0 10.081.8 10.322.3 3.94.0 40.5 40.9 40.8 40.8 10500.0 10.081.8 10.382.3 40.8 40.8 40.8 40.8 40.8 10500.0 10.081.8 10.382.3 40.8 40.8 40.8 40.8 40.8	9,950.0	9,780.7	9,528.3	9,299.9	39.1	34.4	-73.81	606.6	-1.7	1,808.2	1,741.3	66.82	27.061		
10,100,00 9,880,3 9,800,0 9,316,1 39,1 34,5 -72,14 90,3 68,1 1,817,9 1,750,9 68,4 27,163	10,000.0	9,810.9	9,550.0	9,305.7	39.1	34.4	-73.19	605.9	19.2	1,811.9	1,745.1	66.80	27.124		
10,106,5 9,862,9 9,600,0 9,316,1 30,1 34,3 -72,11 604,3 68,1 1,818,2 1,751,3 66,94 27,163 10,000 9,908,6 9,712 9,324,9 30,1 34,8 -71,167 602,8 117,7 1,023,3 1,756,1 67,24 27,117 10,000 9,908,6 9,712 9,324,9 30,1 36,0 -86,76 987,4 276,4 1,837,2 1,762,6 67,77 27,000 10,000 9,968,4 9,811,0 9,327,9 30,1 36,0 -86,76 987,4 276,4 1,837,2 1,765,5 68,68 26,749 10,500 10,500 997,8 9,905,6 9,330,9 30,2 36,9 -86,89 984,4 373,2 1,843,7 1,773,5 71,31 25,523 10,700 10,046,8 10,978,9 333,9 40,4 30,0 -67,46 988,7 565,0 1,829,9 1,776,9 73,02 25,376 10,800,0 10,059,9 10,194,9 9,343,0 42,7 41,6 -86,49 88,3 756,4 1,884,6 1,777,3 71,31 25,523 10,000 10,003,9 10,004,2 10,300,2 9,346,1 44,0 43,1 -86,19 880,8 87,2 1,868,1 1,781,0 77,14 24,667 11,000 10,003,2 10,004,2 10,300,2 9,346,1 44,0 43,1 -86,19 880,8 887,2 1,868,1 1,776,2 62,14 22,667 11,000 10,103,2 10,488,4 9,340,2 44,0 43,1 -86,19 880,8 887,2 1,868,1 1,776,2 62,14 22,667 11,000 10,103,2 10,488,4 9,340,2 44,0 43,1 -86,19 880,8 887,2 1,868,1 1,776,2 62,14 22,667 11,000 10,100,8 10,568,7 9,352,2 46,6 48,2 -85,97 57,8 1,1 95,2 1,868,3 1,776,2 62,14 22,667 11,000 10,100,8 10,668,5 9,355,3 48,4 47,9 -85,99 57,3 51,165,2 1,868,3 1,776,2 62,14 22,674 11,000 10,100,8 10,106,8 10,568,7 9,352,2 46,6 48,2 -85,99 57,3 51,164,2 1,865,2 1,776,3 84,04 21,866 11,400,0 10,110,8 10,676,8 9,355,3 48,4 47,9 -85,99 57,3 51,164,2 1,865,2 1,776,3 87,02 21,078 11,000 10,101,8 10,676,8 9,355,3 48,4 47,9 -85,99 57,3 51,164,2 1,865,2 1,776,3 87,02 21,078 11,000 10,110,8 10,676,8 9,355,3 48,4 47,9 -85,99 57,3 51,144,4 1,842,2 1,744,6 97,64 18,866 11,700,0 10,111,1 10,763,3 9,356,4 50,0 48,4 50	10,050.0	9,837.5	9,577.4	9,311.9	39.1	34.5	- 72.60	605.0	45.9	1,815.2	1,748.3	66.87	27.146		
10,000 9,898.6 9,850.0 9,322.2 39.1 34.8 -71.57 00.26 117.7 1,22.3 1,786.1 07.24 27.117 10,000 9,981.4 8,811.0 9,327.9 39.1 36.0 -80.78 597.4 278.4 1,837.2 1,786.5 66.88 26.749 10,000 9,997.8 9,908.8 9,300.9 39.2 36.9 -80.88 597.4 278.4 1,837.2 1,786.5 66.88 26.749 10,000 0,000.9 0,000.8 0,000.8 0,300.9 39.2 36.9 -80.88 597.4 278.4 1,837.2 1,786.5 66.88 26.386 10,000.0 10,000.9 10,000.9 10,000.9 0	10,100.0	9,860.3	9,600.0	9,316.1	39.1	34.5	-72.14	604.3	68.1	1,817.9	1,750.9	66.94	27.156		
10,000 9,935.6 87,172 63,24.9 39.1 35.3 70,77 600.4 184.7 1,830.3 1,762.6 67,77 27,009	10,106.5	9,862.9	9,600.0	9,316.1	39.1	34.5	-72.11	604.3	68.1	1,818,2	1,751.3	66.94	27,163		
10,000 9,988 9,811 08,072 39,1 36,0 48,78 5974 278.4 1,837.2 1,786.5 68,88 26,749	10,200.0	9,899.6	9,650.0	9,322.2	39.1	34.8	- 71.57	602.6	117.7	1,823.3	1,756.1	67.24	27.117		
10,500.0 10,002.9 10,001.4 9,333.9 38.6 37.9 -88.89 594.4 373.2 1,843.3 1,773.5 69.86 26,386 10,000.0 10,002.9 10,001.4 9,333.9 39.6 37.9 -88.12 591.5 468.7 1,846.8 1,773.3 1,773.5 1,731 25,923 10,000.0 10,006.5 10,078.8 9,338.9 40.4 39.0 -97.45 586.7 565.0 1,882.9 1,779.9 73.02 25,376 10,500.0 10,081.8 10,282.3 9,340.0 41.5 40.3 -66.91 585.9 661.9 1,855.1 1,781.1 77.99 24,780 10,000.0 10,081.8 10,282.3 9,343.0 42.7 41.6 -86.48 583.3 759.4 1,856.1 1,781.0 77.14 24,087 11,000.0 10,081.2 10,488.4 9,349.2 45.4 44.6 -85.97 578.1 555.2 1,856.9 1,779.3 79.54 22,624 11,000.0 10,108.6 10,586.7 9,355.2 46.9 46.2 -85.90 575.7 1,055.5 1,865.4 1,771.5 84.94 21,866 11,293.4 10,108.6 10,586.7 9,355.1 46.3 47.8 -86.95 573.5 1,145.2 1,853.5 1,766.8 87.72 21,078 11,400.0 10,111.1 10,783.3 9,354.4 50.0 49.6 -65.99 571.3 1,151.7 1,853.2 1,765.3 87.92 21,078 11,600.0 10,111.5 10,881.6 9,361.4 51.7 51.4 -96.03 568.9 1,348.2 1,846.8 1,751.5 94.30 19,574 11,000.0 10,112.0 10,779.9 9,346.5 53.5 53.3 -66.07 566.9 1,446.4 1,842.2 1,744.6 91.09 20,312 11,700.0 10,112.4 11,763.9 9,373.6 553.3 553.1 -66.71 566.9 1,446.4 1,842.2 1,744.6 1,69.0 1,723.8 10,000 1,112.4 11,763.9 9,373.6 553.3 553.1 -66.71 566.9 1,446.4 1,842.2 1,744.6 1,69.3 1,723.8 10,000 1,114.3 1,174.6 9,370.6 571.1 571.1 -66.15 563.0 1,642.9 1,835.3 1,730.7 104.61 17,544 1,900.0 10,114.3 11,471.6 9,370.6 571.1 571.1 -66.15 563.0 1,642.9 1,835.3 1,730.7 104.61 17,544 1,900.0 10,114.3 11,471.6 9,370.6 571.1 571.1 -66.15 563.0 1,642.9 1,835.3 1,730.7 104.61 17,544 1,630.0 1,142.9 1,176.6 9,370.6 571.1 571.1 -66.15 563.0 1,331.8 1,825.6 1,710.0	10,300.0	9,935.6	9,717.2	9,324.9	39.1	35.3	-70.77	600.4	184.7	1,830.3	1,762.6	67.77	27.009		
10,600.0 10,023.9 10,001.4 9,333.9 39,6 37.9 -68.12 591.5 468.7 1848.6 1,777.3 71.31 25.923 10,700.0 10,046.6 10,097.8 9,338.9 40.4 39.0 -67.45 568.7 565.0 1,852.9 1,779.9 77.00 22.5376 10,800.0 10,65.9 10,194.8 9,340.0 41.5 40.3 -66.91 565.9 661.9 1,856.1 1,781.1 74.99 24.760 10,000.0 10,081.8 10,292.3 9,343.0 42.7 41.6 -66.48 583.3 759.4 1,856.1 1,781.0 77.14 24.087 11,000.0 10,084.2 10,390.2 9,346.1 44.0 43.1 -66.16 580.6 857.2 1,858.9 1,779.3 79.54 23.371 11,100.0 10,103.2 10,488.4 9,340.2 45.4 44.6 -65.97 578.1 955.2 1,859.3 1,776.2 82.14 22.624 11,200.0 10,108.6 10,586.7 9,352.2 46.9 46.2 -65.90 575.7 1,053.5 1,856.4 1,771.5 84.94 21.866 11,293.4 10,110.6 10,676.5 9,355.1 46.3 47.9 -65.95 573.5 1,146.2 1,853.2 1,765.3 87.72 21.129 11,300.0 10,110.6 10,680.0 9,355.3 48.4 47.9 -65.95 573.5 1,146.2 1,853.2 1,765.3 87.72 21.078 11,000.0 10,111.1 10,783.3 9,358.4 50.0 40.6 -65.99 571.1 1,249.9 1,849.5 1,758.4 91.05 20,312 11,500.0 10,111.2 10,783.3 9,357.5 53.3 55.1 66.07 569.9 571.1 1,249.9 1,842.2 1,744.6 97.64 18.866 1,700.0 10,112.0 10,779.9 9,364.5 53.5 53.3 66.07 569.9 1,444.4 1,842.2 1,744.6 97.64 18.866 1,700.0 10,112.0 10,779.9 9,364.5 53.5 53.3 66.07 569.9 1,444.4 1,842.2 1,744.6 97.64 18.866 1,700.0 10,112.0 10,779.9 9,364.5 55.3 56.3 56.0 56.0 56.0 1,343.2 1,863.3 1,730.7 10,461 1,754.4 1,900.0 10,112.0 10,779.9 9,364.5 55.3 56.3 56.0 56.0 56.0 56.0 56.0 1,343.2 1,863.3 1,863.7 1,737.6 101.0 18.190 1,100.0 10,112.0 10,779.9 9,364.5 56.3 56.0 66.0 56.0	10,400.0	9,968.4	9,811.0	9,327.9	39.1	36.0	-69.78	597.4	278.4	1,837.2	1,768.5	68.68	26.749		
10,000 10,046 10,097.8 33.56.9 40,4 39.0 -97.45 588.7 585.0 1,85.29 1,779.9 73.02 25.376	10,500.0	9,997.8	9,905.8	9,330.9	39.2	36.9	-68.89	594.4	373.2	1,843.3	1,773.5	69.86	26.386		
10,800, 0 10,081,8 10,194,8 0,340,0 41,5 40,3 -66,91 585,9 661,9 1,856,1 1,781,1 74,96 24,780	10,600.0	10,023.9	10,001.4	9,333.9	39.6	37.9	-68.12	591.5	468.7	1,848.6	1,777.3	71.31	25.923		
10,000.0 10,081.8 10,282.3 9,343.0 42.7 41.6 -66.48 583.3 759.4 1,885.1 1,781.0 77.14 24,087 11,000.0 10,094.2 10,390.2 9,346.1 44.0 43.1 -86.16 580.6 857.2 1,858.9 1,779.3 79.54 23,371 11,000.0 10,103.2 10,488.4 9,346.2 45.6 46.2 -85.50 575.7 1,053.5 1,856.3 1,776.2 84.94 21.856 11,293.4 10,110.6 10,678.5 9,356.1 48.3 47.8 -85.95 573.5 1,145.2 1,853.5 1,768.8 87.72 21.129 11,300.0 10,110.6 10,685.0 9,356.3 48.4 47.9 -65.95 573.5 1,145.2 1,853.5 1,768.3 87.92 21.078 11,400.0 10,111.1 10,783.3 9,358.4 50.0 49.6 -65.99 571.1 1,249.9 1,849.5 1,758.4 91.05 20,312 11,500.0 10,111.5 10,881.6 9,361.4 51.7 51.4 -66.03 568.9 1,348.2 1,845.8 1,751.5 94.30 19,574 11,600.0 10,112.0 110,783.3 9,367.5 55.3 53.3 -66.07 566.9 1,446.4 1,842.2 1,744.6 97.64 18.866 11,700.0 10,112.4 11,078.3 9,375.5 55.3 55.1 -66.11 564.9 154.4 1,832.7 1,737.6 101.09 18.190 11,800.0 10,112.9 11,176.8 9,370.6 57.1 57.1 -66.12 563.0 1,642.9 1,835.3 1,730.7 104.61 17.544 11,900.0 10,113.3 11,274.9 9,373.6 57.1 57.1 -66.12 563.0 1,642.9 1,835.3 1,730.7 104.61 17.544 11,900.0 10,113.3 11,274.9 9,373.6 57.1 57.1 -66.12 565.2 557.9 1,937.8 1,825.6 1,710.0 115.62 15.790 12,200.0 10,114.3 11,471.6 9,379.7 62.9 63.0 -66.29 557.9 1,937.8 1,825.6 1,710.0 115.62 15.790 12,200.0 10,114.3 11,471.6 9,387.7 62.9 63.0 -66.29 557.9 1,937.8 1,825.6 1,710.0 115.62 15.790 12,200.0 10,114.7 11,500.0 9,382.7 64.9 65.1 -66.33 556.4 2,036.1 1,822.5 1,703.1 119.41 15.633 12,200.0 10,114.7 11,500.0 9,382.7 64.9 65.1 -66.33 556.4 2,036.1 1,822.5 1,703.1 119.41 15.633 12,200.0 10,116.5 11,666.1 1,940.8 77.4 77.8 -66.49 65.1 -66.33 556.0 2,227.7	10,700.0	10,046.6	10,097.8	9,336.9	40.4	39.0	-67.45	588.7	565.0	1,852.9	1,779.9	73.02	25,376		
11,000.0 10,094.2 10,390.2 9,346.1 44.0 43.1 -66.16 580.6 857.2 1,856.9 1,779.3 79.54 23.371 11,100.0 10,103.2 10,488.4 9,346.2 45.4 44.6 -65.97 578.1 955.2 1,856.3 1,776.2 82.14 22.624 11,200.0 10,108.6 10,586.7 9,352.2 46.9 46.2 -65.90 575.7 1,053.5 1,665.4 1,771.5 84.94 21.856 11,293.4 10,110.5 10,678.5 9,355.1 48.3 47.8 -65.95 573.5 1,145.2 1,853.5 1,765.8 87.72 21.129 11,300.0 10,110.6 10,685.0 9,355.3 48.4 47.9 -65.95 573.3 1,151.7 1,853.2 1,765.3 87.92 21.078 11,400.0 10,111.1 10,783.3 9,358.4 50.0 49.6 -65.99 571.1 1,249 1,849.5 1,756.4 1,756.4 1,756.4 11,500.0 10,111.5 10,881.6 9,361.4 51.7 51.4 -68.03 568.9 1,348.2 1,845.8 1,751.5 94.30 19.674 11,600.0 10,112.0 10,979.9 9,364.5 53.5 53.3 -65.07 566.9 1,446.4 1,842.2 1,744.6 97.64 18.866 11,700.0 10,112.4 11,766.9 9,367.5 55.3 55.1 -66.11 564.9 1,544.7 1,838.7 1,773.6 101.09 18.190 12,000.0 10,113.3 11,274.9 9,373.6 550.0 56.0 -66.20 561.2 1,741.2 1,832.0 1,723.8 108.21 19.330 12,000.0 10,114.3 11,471.6 9,370.7 60.9 63.0 -66.20 551.9 1,741.2 1,820.0 1,723.8 108.21 19.830 12,000.0 10,114.3 11,373.3 9,386.7 60.9 61.0 -66.24 559.5 1,835.5 1,703.1 119.41 15.29 15.790 12,000.0 10,114.3 11,676.7 9,388.8 66.9 67.1 -66.33 556.4 2,036.1 1,822.5 1,703.1 119.41 15.29 15.790 12,000.0 10,116.5 11,683.9 9,386.7 66.9 67.1 -66.33 556.4 2,036.1 1,822.5 1,703.1 119.41 15.29 15.790 12,000.0 10,116.5 11,683.9 9,386.7 66.9 67.1 -66.33 556.4 2,036.1 1,822.5 1,703.1 119.41 15.293 12,000.0 10,116.5 11,683.9 9,388.8 66.9 67.1 -66.33 556.2 2,31.0 1,813.9 1,862.8 131.09 13.837 12,000.0 10,116.5 11,683.9 9,388.8 66.9 67.1	10,800.0	10,065.9	10,194.8	9,340.0	41.5	40.3	-66.91	585,9	661.9	1,856.1	1,781.1	74.96	24,760		
11,100.0 10,103.2 10,488.4 9,349.2 45.4 44.6 -65.97 578.1 955.2 1,858.3 1,776.2 82.14 22.624 11,200.0 10,108.8 10,586.7 9,352.2 46.9 46.2 -65.90 575.7 1,053.5 1,856.4 1,771.5 84.94 21,856 11,293.4 10,110.6 10,676.5 9,355.1 48.3 47.8 -65.95 573.5 1,146.2 1,853.5 1,765.8 87.72 21,129 11,300.0 10,110.6 10,685.0 9,355.3 48.4 47.9 -65.95 573.5 1,146.2 1,853.5 1,765.8 87.72 21,179 11,300.0 10,111.1 10,783.3 9,358.4 50.0 49.6 -65.99 571.1 1,240.9 1,849.5 1,758.4 91.05 20,312 11,500.0 10,111.1 10,783.3 9,358.4 50.0 49.6 -65.99 571.1 1,240.9 1,849.5 1,758.4 91.05 20,312 11,500.0 10,111.5 10,881.6 9,381.4 51.7 51.4 -68.03 588.9 1,348.2 1,446.2 1,848.8 1,751.5 94.30 19,574 11,500.0 10,112.0 10,379.9 9,364.5 53.5 53.3 -66.07 566.9 1,446.4 1,842.2 1,744.6 97.64 18.866 11,700.0 10,112.0 11,176.3 9,367.5 55.3 55.1 -66.11 564.9 1,544.7 1,838.7 1,737.6 10,109 18.190 11,900.0 10,112.9 11,176.6 9,370.6 57.1 57.1 -66.15 563.0 1,642.9 1,835.3 1,730.7 104.61 17,544 11,900.0 10,113.3 11,274.9 9,373.6 95.0 95.0 -68.20 561.2 1,744.1 1,836.5 1,730.7 104.61 17,544 11,900.0 10,113.3 11,274.9 9,373.6 95.0 95.0 -68.20 561.2 1,741.2 1,832.0 1,723.8 10,821 16.930 12,200.0 10,114.3 11,471.6 9,379.7 62.9 63.0 -68.29 557.9 1,937.8 1,828.7 1,716.9 111.88 16.345 12,200.0 10,114.3 11,471.6 9,379.7 62.9 63.0 -68.29 557.9 1,937.8 1,828.7 1,716.9 111.88 16.345 12,200.0 10,114.7 11,570.0 9,382.7 64.9 65.1 -68.33 566.4 2,036.1 1,822.5 1,703.1 119,41 15.263 12,200.0 10,115.5 11,668.3 9,385.7 66.9 67.1 -68.33 556.4 2,036.1 1,822.5 1,703.1 119,41 15.263 12,200.0 10,115.5 11,668.3 9,385.7 66.9 67.1 -68.33 556.4 2,036.1 1,822.5 1,703.1 119,41 15.263 12,200.0 10,115.5 11,668.3 9,385.7 66.9 67.1 -68.63 555.0 2,134.4 1,811.6 1,666.5 136.0 13.25 14.763 12,200.0 10,115.5 11,668.3 9,385.7 66.9 67.1 -68.63 555.0 2,232.7 1,816.7 1,689.6 127.15 14,288 12,200.0 10,115.5 11,668.3 9,384.8 68.9 69.2 -68.63 555.0 2,232.7 1,816.7 1,689.6 127.15 14,288 12,200.0 10,117.0 12,661.7 9,387.8 75.2 75.6 -68.63 555.0 2,200.0 1,173.8 11,200.0 10,117.0 12,655.9 9,408.8 83.9 84.4 -68.	10,900.0	10,081.8	10,292.3	9,343.0	42.7	41.6	-66.48	583.3	759.4	1,858.1	1,781.0	77.14	24.087		
11,200,0	11,000.0	10,094.2	10,390.2	9,346.1	44.0	43.1	-66.16	580.6	857.2	1,858.9	1,779.3	79.54	23.371		
11233.4 10,110.6 10,678.5 9,355.1 48.3 47.8 -65.95 573.5 1,146.2 1,768.8 87.72 21,129 11,300.0 10,110.6 10,685.0 9,355.3 48.4 47.9 -65.95 573.3 1,151.7 1,853.2 1,768.4 91.05 20,312 11,500.0 10,111.5 10,881.6 9,361.4 51.7 61.4 -86.03 568.9 1,348.2 1,846.8 1,751.5 94.30 19,574 11,600.0 10,112.0 10,979.9 9,364.5 53.5 53.3 -86.07 566.9 1,446.4 1,842.2 1,744.6 97.64 18.866 11,700.0 10,112.4 11,076.3 9,370.6 57.1 57.1 -66.15 563.0 1,842.9 1,835.3 1,737.6 101.09 18.190 11,800.0 10,113.3 11,274.9 9,373.6 59.0 69.0 -66.20 561.2 1,741.2 1,835.0 1,733.8 108.21 16,930 12,000.0 10,113.3 <td>11,100.0</td> <td>10,103.2</td> <td>10,488.4</td> <td>9,349.2</td> <td>45.4</td> <td>44.6</td> <td>-65.97</td> <td>578.1</td> <td>955.2</td> <td>1,858.3</td> <td>1,776.2</td> <td>82.14</td> <td>22.624</td> <td></td> <td></td>	11,100.0	10,103.2	10,488.4	9,349.2	45.4	44.6	-65.97	578.1	955.2	1,858.3	1,776.2	82.14	22.624		
11,300,0 10,110,6 10,685,0 9,355,3 48,4 47,9 -65,95 573,3 1,151,7 1,853,2 1,765,3 87,92 21,078 11,400,0 10,111,1 10,783,3 9,384,4 50,0 49,6 -65,99 571,1 1,249,9 1,849,5 1,765,4 91,05 20,312 11,500,0 10,111,5 10,881,6 9,364,5 55,5 53,3 -66,07 568,9 1,446,4 1,842,2 1,744,6 97,64 18,866 11,700,0 10,112,4 11,076,3 9,367,5 55,3 55,1 -66,11 564,9 1,544,7 1,838,7 1,737,6 101,09 18,190 11,800,0 10,112,9 11,176,6 9,370,6 57,1 57,1 -66,15 563,0 1,642,9 1,835,3 1,730,7 104,61 17,544 11,900,0 10,113,3 11,373,3 9,376,7 60,9 61,0 -66,24 559,5 1,839,5 1,823,0 1,710,0 115,62 15,790 12,200,0 </td <td>11,200.0</td> <td>10,108.6</td> <td>10,586.7</td> <td>9,352.2</td> <td>46.9</td> <td>46.2</td> <td>-65.90</td> <td>575.7</td> <td>1,053.5</td> <td>1,856.4</td> <td>1,771.5</td> <td>84.94</td> <td>21.856</td> <td></td> <td></td>	11,200.0	10,108.6	10,586.7	9,352.2	46.9	46.2	-65.90	575.7	1,053.5	1,856.4	1,771.5	84.94	21.856		
11,400.0 10,111.1 10,783.3 9,358.4 50.0 49.6 -65.99 571.1 1,249.9 1,849.5 1,758.4 91.05 20,312 11,500.0 10,111.5 10,881.6 9,361.4 51.7 51.4 -66.03 568.9 1,346.2 1,845.8 1,751.5 94.30 19,574 11,600.0 10,112.0 10,979.9 9,364.5 53.5 53.3 -66.07 566.9 1,446.4 1,842.2 1,744.6 97.64 18.866 11,700.0 10,112.4 11,078.3 9,367.5 55.3 55.1 -66.11 564.9 1,544.7 1,838.7 1,737.6 101.09 18.190 11,800.0 10,112.9 11,176.6 9,370.6 57.1 57.1 66.15 563.0 1,642.9 1,835.3 1,730.7 104.61 17,544 11,900.0 10,113.3 11,274.9 9,373.6 59.0 59.0 69.0 -66.20 561.2 1,741.2 1,832.0 1,723.8 108.21 16,930 12,000.0 10,113.8 11,373.3 9,376.7 60.9 61.0 -66.24 559.5 1,839.5 1,828.7 1,716.9 111.88 16,345 12,100.0 10,114.7 11,570.0 9,382.7 64.9 65.1 -66.33 556.4 2,036.1 1,822.5 1,703.1 11194.1 15,263 12,200.0 10,115.2 11,688.3 9,385.7 66.9 67.1 -68.38 555.0 2,134.4 1,819.6 1,696.3 123.25 14,763 12,400.0 10,115.6 11,766.7 9,388.8 68.9 69.2 -66.43 553.6 2,232.7 1,816.7 1,699.6 127.15 14,288 12,500.0 10,116.1 11,865.0 9,391.8 71.0 71.3 -66.48 552.4 2,331.0 1,813.9 1,682.8 131.09 13,837 12,600.0 10,117.0 12,061.7 9,384.8 73.1 73.5 -66.53 551.3 2,429.3 1,811.2 1,676.1 135.07 13,410 12,700.0 10,117.0 12,061.7 9,387.8 78.5 75.6 -66.59 550.0 548.4 2,724.2 1,803.7 1,666.4 147.23 12,261 13,000.0 10,117.0 12,061.7 9,387.8 78.5 75.6 -66.59 550.0 548.4 2,724.2 1,803.7 1,666.4 147.23 12,261 13,000.0 10,117.0 12,265.0 9,403.8 77.4 77.8 -66.64 549.2 2,625.9 1,806.1 1,662.9 143.14 12,617 12,900.0 10,117.0 12,265.0 9,403.8 81.7 82.2 -66.75 547.6 2,822.6 1,801.3 1,666.0 151.35 11,570 13,000.0 10,118.4 12,356.9 9,406.8 81.7 82.2 -66.81 546.9 2,920.9 1,799.1 1,643.6 155.50 11,570 13,000.0 10,118.4 12,460.1 9,408.8 81.7 82.2 -66.68 546.9 2,920.9 1,799.1 1,643.6 155.50 11,570 13,000.0 10,118.4 12,460.1 9,408.8 81.7 82.2 -66.68 546.9 2,920.9 1,799.1 1,643.6 155.50 11,570 13,000.0 10,119.3 12,555.6 9,403.8 83.9 84.4 -66.81 546.9 2,920.9 1,799.1 1,643.6 155.50 11,570 13,000.0 10,119.3 12,555.6 9,403.8 83.9 88.4 -66.93 545.8 3,117.6 1,794.8 1,612.5 176.61 10,	11,293.4	10,110.6	10,678.5	9,355.1	48.3	47.8	-65.95	573.5	1,145.2	1,853.5	1,765.8	87.72	21.129		
11,500.0 10,111.5 10,881.6 9,361.4 51.7 51.4 -66.03 568.9 1,348.2 1,845.8 1,751.5 94.30 19.574 11,600.0 10,112.0 10,979.9 9,364.5 53.5 53.3 -66.07 566.9 1,446.4 1,842.2 1,744.6 97.64 18.866 11,700.0 10,112.4 11,078.3 9,367.5 55.3 55.1 -66.11 564.9 1,544.7 1,838.7 1,737.6 101.09 18.190 11,800.0 10,112.9 11,176.6 9,370.6 57.1 57.1 -66.15 563.0 1,642.9 1,835.3 1,730.7 104.61 17.544 11,900.0 10,113.3 11,274.9 9,373.6 59.0 59.0 -66.20 561.2 1,741.2 1,832.0 1,723.8 108.21 10,930 12,000.0 10,113.3 11,373.3 9,376.7 60.9 61.0 -66.24 559.5 1,393.5 1,839.5 1,826.7 1,716.9 111.86 16.345 12,100.0 10,114.3 11,471.6 9,379.7 62.9 63.0 -66.29 567.9 1,937.8 1,825.8 1,710.0 115.62 15,790 12,200.0 10,114.7 11,570.0 9,382.7 64.9 65.1 -66.33 556.4 2,036.1 1,822.5 1,703.1 119.41 15.263 12,300.0 10,115.2 11,766.7 9,388.8 68.9 69.2 -66.43 553.6 2,232.7 1,816.7 1,889.6 127.15 14,288 12,500.0 10,116.1 11,665.0 9,391.8 71.0 71.3 -66.49 552.4 2,331.0 1,813.9 1,682.8 131.09 13,837 12,500.0 10,116.5 11,667.7 9,388.8 68.9 69.2 -66.43 553.6 2,232.7 1,816.7 1,669.5 139.09 13,003 12,200.0 10,117.0 12,661.7 9,397.8 75.2 75.6 -66.53 551.3 2,429.3 1,811.2 1,676.1 135.07 13,410 12,200.0 10,117.0 12,261.7 9,397.8 75.2 75.6 -66.53 551.3 2,429.3 1,811.2 1,676.1 135.07 13,410 12,200.0 10,117.0 12,261.7 9,397.8 75.2 75.6 -66.53 551.3 2,429.3 1,811.2 1,676.1 135.07 13,410 12,200.0 10,117.0 12,265.5 9,403.8 77.4 77.8 -66.64 549.2 2,527.6 1,806.8 1,669.5 139.99 13,003 12,800.0 10,117.4 12,160.1 9,400.8 77.4 77.8 -66.64 549.2 2,625.9 1,806.1 1,602.9 143.14 12,617 12,900.0 10,117.9 12,255.5 9,403.8 77.4 77.8 -66.64 549.2 2,625.9 1,806.1 1,602.9 143.14 12,617 12,900.0 10,117.9 12,255.5 9,403.8 77.4 77.8 -66.64 549.2 2,625.9 1,806.1 1,602.9 143.14 12,617 12,900.0 10,117.9 12,255.5 9,403.8 77.4 77.8 -66.64 549.2 2,625.9 1,806.1 1,602.9 143.14 12,617 12,900.0 10,117.9 12,255.5 9,403.8 77.4 77.8 -66.64 549.2 2,625.9 1,806.1 1,602.9 143.14 12,617 12,900.0 10,117.9 12,255.5 9,403.8 77.4 77.8 -66.64 549.2 2,625.9 1,806.1 1,602.9 143.14 12,617 12,900.0 10,117.9 12,255	11,300.0	10,110.6	10,685.0	9,355.3	48.4	47.9	-65.95	573.3	1,151.7	1,853.2	1,765.3	87.92	21.078		
11,600.0 10,112.0 10,979.9 9,364.5 53.5 53.3 -66.07 566.9 1,446.4 1,842.2 1,744.6 97.64 18.866 11,700.0 10,112.4 11,078.3 9,367.5 55.3 55.1 -66.15 563.0 1,644.7 1,839.7 1,737.6 101.09 18.190 11,800.0 10,112.9 11,176.6 9,370.6 57.1 57.1 -66.15 563.0 1,642.9 1,835.3 1,730.7 104.61 17.544 11,900.0 10,113.3 11,274.9 9,373.6 59.0 59.0 -66.20 561.2 1,741.2 1,832.0 1,723.8 108.21 16,930 12,000.0 10,113.8 11,373.3 9,376.7 60.9 61.0 -66.24 559.5 1,839.5 1,828.7 1,716.9 111.88 16.345 12,100.0 10,114.3 11,471.6 9,379.7 62.9 63.0 -66.29 557.9 1,937.8 1,825.6 1,710.0 115.62 15,790 12,200.0 10,114.7 11,570.0 9,382.7 64.9 65.1 -66.33 556.4 2,036.1 1,822.5 1,703.1 119.41 15,263 12,300.0 10,115.2 11,668.3 9,385.7 66.9 67.1 -66.33 555.6 2,232.7 1,816.7 1,696.3 123.25 1,763 12,400.0 10,115.2 11,668.3 9,385.7 66.9 67.1 -66.33 555.6 2,232.7 1,816.7 1,696.3 123.25 1,763 12,400.0 10,115.6 11,766.7 9,388.8 68.9 69.2 -66.43 553.6 2,232.7 1,816.7 1,696.3 123.25 1,763 12,200.0 10,115.1 11,865.0 9,391.8 71.0 71.3 -66.48 552.4 2,331.0 1,813.9 1,682.8 131.09 13,837 12,600.0 10,117.0 12,061.7 9,397.8 75.2 75.6 -66.59 550.2 2,527.6 1,806.5 1,696.5 139.09 13,003 12,800.0 10,117.0 12,261.7 9,397.8 75.2 75.6 -66.59 550.2 2,527.6 1,806.1 1,662.9 143.14 12,617 12,600.1 1,017.4 12,160.1 9,400.8 77.4 77.8 -66.64 549.2 2,625.9 1,806.1 1,662.9 143.14 12,617 12,600.0 10,117.9 12,258.5 9,409.8 83.9 84.4 -66.81 546.9 2,920.9 1,799.1 1,643.6 155.5 11,570 13,200.0 10,119.3 12,553.6 9,408.8 83.9 84.4 -66.81 546.9 2,920.9 1,799.1 1,643.6 155.5 11,570 13,200.0 10,119.7 12,652.0 9,415.8 86.1 86.6 -66.87 546.3 3,019.2 1,796.9 1,637	11,400.0	10,111.1	10,783.3	9,358.4	50.0	49.6	-65.99	571.1	1,249.9	1,849.5	1,758.4	91.05	20,312		
11,700.0 10,112.4 11,078.3 9,367.5 55.3 55.1 -66.11 564.9 1,544.7 1,838.7 1,737.6 101.09 18,190 11,800.0 10,112.9 11,176.6 9,370.6 57.1 57.1 -66.15 563.0 1,642.9 1,835.3 1,730.7 104.61 17,544 11,900.0 10,113.3 11,274.9 9,373.6 59.0 59.0 -66.20 561.2 1,741.2 1,832.0 1,723.8 108.21 16,930 12,000.0 10,114.3 11,471.6 9,378.7 60.9 61.0 -66.24 555.9 1,839.5 1,828.7 1,710.0 115.62 15,790 12,200.0 10,114.7 11,570.0 9,382.7 64.9 65.1 -66.33 556.4 2,036.1 1,822.5 1,703.1 119.41 15,263 12,200.0 10,116.5 11,566.7 9,388.8 66.9 67.1 -66.33 550.6 2,232.7 1,816.9 1,822.5 1,703.1 119.41 15,263	11,500.0	10,111.5	10,881.6	9,361.4	51.7	51.4	-66.03	568.9	1,348.2	1,845.8	1,751.5	94.30	19.574		
11,800.0 10,112.9 11,176.6 9,370.6 57.1 57.1 -66.15 563.0 1,642.9 1,835.3 1,730.7 104.61 17,544 11,900.0 10,113.3 11,274.9 9,373.6 59.0 59.0 -66.20 561.2 1,741.2 1,832.0 1,723.8 108.21 16,930 12,000.0 10,113.8 11,373.3 9,376.7 60.9 61.0 -66.24 559.5 1,839.5 1,828.7 1,716.9 111.88 16,345 12,100.0 10,114.3 11,471.6 9,379.7 62.9 63.0 -66.29 557.9 1,937.8 1,825.6 1,710.0 115.62 15,790 12,200.0 10,114.7 11,570.0 9,382.7 64.9 65.1 -66.33 556.4 2,036.1 1,822.5 1,703.1 119.41 15,263 12,400.0 10,115.6 11,766.7 9,388.8 68.9 69.2 -66.43 553.6 2,232.7 1,816.7 1,689.6 127.15 14,288 12,500.	11,600.0	10,112.0	10,979.9	9,364.5	53.5	53.3	-66.07	566.9	1,446.4	1,842.2	1,744.6	97.64	18.866		
11,900.0 10,113.3 11,274.9 9,373.6 59.0 59.0 -66.20 561.2 1,741.2 1,832.0 1,723.8 108.21 16.930 12,000.0 10,113.8 11,373.3 9,376.7 60.9 61.0 -66.29 557.9 1,937.8 1,825.6 1,710.0 115.62 15.790 12,200.0 10,114.7 11,570.0 9,382.7 64.9 65.1 -66.33 556.4 2,036.1 1,822.5 1,703.1 119.41 15.62 12,300.0 10,115.2 11,668.3 9,388.7 66.9 67.1 -66.38 555.0 2,134.4 1,819.6 16.96.3 123.25 14.763 12,500.0 10,116.1 11,865.0 9,391.8 71.0 71.3 -66.48 552.4 2,331.0 1,813.9 1,682.8 131.09 13.837 12,600.0 10,116.5 11,963.4 9,394.8 73.1 73.5 -66.53 551.3 2,429.3 1,811.2 1,676.1 135.07 13.410 12,900.0 10,117.0 12,061.7 9,397.8 75.2 75.6 -66.59 <td< td=""><td>11,700.0</td><td>10,112.4</td><td>11,078.3</td><td>9,367.5</td><td>55.3</td><td>55.1</td><td>-66.11</td><td>564.9</td><td>1,544.7</td><td>1,838.7</td><td>1,737.6</td><td>101.09</td><td>18.190</td><td></td><td></td></td<>	11,700.0	10,112.4	11,078.3	9,367.5	55.3	55.1	-66.11	564.9	1,544.7	1,838.7	1,737.6	101.09	18.190		
12,000.0 10,113.8 11,373.3 9,376.7 60.9 61.0 -66.24 559.5 1,839.5 1,828.7 1,716.9 111.88 16.345 12,100.0 10,114.3 11,471.6 9,379.7 62.9 63.0 -66.29 557.9 1,937.8 1,826.6 1,710.0 115.62 15.790 12,200.0 10,114.7 11,570.0 9,382.7 64.9 65.1 -66.33 556.4 2,036.1 1,822.5 1,703.1 119.41 15.263 12,300.0 10,115.2 11,668.3 9,385.7 66.9 67.1 -66.38 555.0 2,134.4 1,819.6 1,696.3 123.25 14.763 12,400.0 10,116.6 11,766.7 9,388.8 68.9 69.2 -66.48 552.4 2,331.0 1,813.9 1,682.8 131.09 13.837 12,500.0 10,116.5 11,963.4 9,394.8 73.1 73.5 -66.53 551.3 2,429.3 1,811.2 1,676.1 135.07 13.410 12,700.0 10,117.0 12,061.7 9,397.8 75.2 75.6 -66.59 <t< td=""><td>11,800.0</td><td>10,112.9</td><td>11,176.6</td><td>9,370.6</td><td>57.1</td><td>57.1</td><td>-66.15</td><td>563.0</td><td>1,642.9</td><td>1,835.3</td><td>1,730.7</td><td>104.61</td><td>17.544</td><td></td><td></td></t<>	11,800.0	10,112.9	11,176.6	9,370.6	57.1	57.1	-66.15	563.0	1,642.9	1,835.3	1,730.7	104.61	17.544		
12,100.0 10,114.3 11,471.6 9,379.7 62.9 63.0 -66.29 557.9 1,937.8 1,825.6 1,710.0 115.62 15.790 12,200.0 10,114.7 11,570.0 9,382.7 64.9 65.1 -66.33 556.4 2,036.1 1,822.5 1,703.1 119.41 15,263 12,300.0 10,115.2 11,668.3 9,385.7 66.9 67.1 -66.38 555.0 2,134.4 1,819.6 1,696.3 123.25 14.763 12,400.0 10,115.6 11,766.7 9,388.8 68.9 69.2 -66.43 555.6 2,232.7 1,816.7 1,689.6 127.15 14.288 12,500.0 10,116.1 11,865.0 9,391.8 71.0 71.3 -66.48 552.4 2,331.0 1,813.9 1,682.8 131.09 13.837 12,600.0 10,116.5 11,963.4 9,394.8 73.1 73.5 -66.53 551.3 2,429.3 1,811.2 1,676.1 135.07 13.410 12,700.0 10,117.0 12,061.7 9,397.8 75.2 75.6 -66.59 <t< td=""><td>11,900.0</td><td>10,113.3</td><td>11,274.9</td><td>9,373.6</td><td>59.0</td><td>59.0</td><td>-66.20</td><td>561.2</td><td>1,741.2</td><td>1,832.0</td><td>1,723.8</td><td>108.21</td><td>16.930</td><td></td><td></td></t<>	11,900.0	10,113.3	11,274.9	9,373.6	59.0	59.0	-66.20	561.2	1,741.2	1,832.0	1,723.8	108.21	16.930		
12,200.0 10,114.7 11,570.0 9,382.7 64.9 65.1 -66.33 556.4 2,036.1 1,822.5 1,703.1 119.41 15,263 12,300.0 10,115.2 11,668.3 9,385.7 66.9 67.1 -66.38 555.0 2,134.4 1,819.6 1,696.3 123.25 14.763 12,400.0 10,115.6 11,766.7 9,388.8 68.9 69.2 -66.43 553.6 2,232.7 1,816.7 1,689.6 127.15 14.288 12,500.0 10,116.1 11,865.0 9,391.8 71.0 71.3 -66.48 552.4 2,331.0 1,813.9 1,682.8 131.09 13.837 12,600.0 10,116.5 11,963.4 9,394.8 73.1 73.5 -66.53 551.3 2,429.3 1,811.2 1,676.1 135.07 13.410 12,700.0 10,117.0 12,061.7 9,397.8 75.2 75.6 -66.59 550.2 2,527.6 1,808.6 1,669.5 139.09 13.003 12,900.0 10,117.4 12,160.1 9,400.8 77.4 77.8 -66.64 <t< td=""><td>12,000.0</td><td>10,113.8</td><td>11,373.3</td><td>9,376.7</td><td>60.9</td><td>61.0</td><td>-66.24</td><td>559.5</td><td>1,839.5</td><td>1,828.7</td><td>1,716.9</td><td>111.88</td><td>16.345</td><td></td><td></td></t<>	12,000.0	10,113.8	11,373.3	9,376.7	60.9	61.0	-66.24	559.5	1,839.5	1,828.7	1,716.9	111.88	16.345		
12,300.0 10,115.2 11,668.3 9,385.7 66.9 67.1 -66.38 555.0 2,134.4 1,819.6 1,696.3 123.25 14.763 12,400.0 10,115.6 11,766.7 9,388.8 68.9 69.2 -66.43 553.6 2,232.7 1,816.7 1,689.6 127.15 14.288 12,500.0 10,116.1 11,865.0 9,391.8 71.0 71.3 -66.48 552.4 2,331.0 1,813.9 1,682.8 131.09 13.837 12,600.0 10,116.5 11,963.4 9,394.8 73.1 73.5 -66.53 551.3 2,429.3 1,811.2 1,676.1 135.07 13.410 12,700.0 10,117.0 12,061.7 9,397.8 75.2 75.6 -66.59 550.2 2,527.6 1,808.6 1,669.5 139.09 13.003 12,800.0 10,117.4 12,160.1 9,400.8 77.4 77.8 -66.64 549.2 2,625.9 1,806.1 1,662.9 143.14 12,617 12,900.0 10,117.9 12,256.5 9,403.8 79.5 80.0 -66.70 <t< td=""><td>12,100.0</td><td>10,114.3</td><td>11,471.6</td><td>9,379.7</td><td>62.9</td><td>63.0</td><td>-66.29</td><td>557.9</td><td>1,937.8</td><td>1,825.6</td><td>1,710.0</td><td>115.62</td><td>15.790</td><td></td><td></td></t<>	12,100.0	10,114.3	11,471.6	9,379.7	62.9	63.0	-66.29	557.9	1,937.8	1,825.6	1,710.0	115.62	15.790		
12,400.0 10,115.6 11,766.7 9,388.8 68.9 69.2 -66.43 553.6 2,232.7 1,816.7 1,689.6 127.15 14.288 12,500.0 10,116.1 11,865.0 9,391.8 71.0 71.3 -66.48 552.4 2,331.0 1,813.9 1,682.8 131.09 13.837 12,600.0 10,116.5 11,963.4 9,394.8 73.1 73.5 -66.53 551.3 2,429.3 1,811.2 1,676.1 135.07 13.410 12,700.0 10,117.0 12,061.7 9,397.8 75.2 75.6 -66.59 550.2 2,527.6 1,808.6 1,699.5 139.09 13.003 12,800.0 10,117.4 12,160.1 9,400.8 77.4 77.8 -66.64 549.2 2,625.9 1,806.1 1,662.9 143.14 12,617 12,900.0 10,117.9 12,258.5 9,403.8 79.5 80.0 -66.70 548.4 2,724.2 1,803.7 1,656.4 147.23 12,251 13,000.0 10,118.4 12,356.9 9,406.8 81.7 82.2 -66.75 <t< td=""><td>12,200.0</td><td>10,114.7</td><td>11,570.0</td><td>9,382.7</td><td>64.9</td><td>65.1</td><td>-66.33</td><td>556.4</td><td>2,036.1</td><td>1,822.5</td><td>1,703.1</td><td>119.41</td><td>15,263</td><td></td><td></td></t<>	12,200.0	10,114.7	11,570.0	9,382.7	64.9	65.1	-66.33	556.4	2,036.1	1,822.5	1,703.1	119.41	15,263		
12,400.0 10,115.6 11,766.7 9,388.8 68.9 69.2 -66.43 553.6 2,232.7 1,816.7 1,689.6 127.15 14.288 12,500.0 10,116.1 11,865.0 9,391.8 71.0 71.3 -66.48 552.4 2,331.0 1,813.9 1,682.8 131.09 13.837 12,600.0 10,116.5 11,963.4 9,394.8 73.1 73.5 -66.53 551.3 2,429.3 1,811.2 1,676.1 135.07 13.410 12,700.0 10,117.0 12,061.7 9,397.8 75.2 75.6 -66.59 550.2 2,527.6 1,808.6 1,699.5 139.09 13.003 12,800.0 10,117.4 12,160.1 9,400.8 77.4 77.8 -66.64 549.2 2,625.9 1,806.1 1,662.9 143.14 12,617 12,900.0 10,117.9 12,258.5 9,403.8 79.5 80.0 -66.70 548.4 2,724.2 1,803.7 1,656.4 147.23 12,251 13,000.0 10,118.4 12,356.9 9,406.8 81.7 82.2 -66.75 <t< td=""><td>12,300.0</td><td>10,115.2</td><td>11,668.3</td><td>9,385.7</td><td>66.9</td><td>67.1</td><td>-66.38</td><td>555.0</td><td>2,134.4</td><td>1,819.6</td><td></td><td>123.25</td><td>14.763</td><td></td><td></td></t<>	12,300.0	10,115.2	11,668.3	9,385.7	66.9	67.1	-66.38	555.0	2,134.4	1,819.6		123.25	14.763		
12,600.0 10,116.5 11,963.4 9,394.8 73.1 73.5 -66.53 551.3 2,429.3 1,811.2 1,676.1 135.07 13.410 12,700.0 10,117.0 12,061.7 9,397.8 75.2 75.6 -66.59 550.2 2,527.6 1,808.6 1,669.5 139.09 13.003 12,800.0 10,117.4 12,160.1 9,400.8 77.4 77.8 -66.64 549.2 2,625.9 1,806.1 1,662.9 143.14 12,617 12,900.0 10,117.9 12,258.5 9,403.8 79.5 80.0 -66.70 548.4 2,724.2 1,803.7 1,656.4 147.23 12,251 13,000.0 10,118.4 12,356.9 9,406.8 81.7 82.2 -66.75 547.6 2,822.6 1,801.3 1,650.0 151.35 11,902 13,100.0 10,118.8 12,455.2 9,409.8 83.9 84.4 -66.81 546.9 2,920.9 1,799.1 1,643.6 155.50 11.570 13,200.0 10,119.3 12,553.6 9,412.8 86.1 86.6 -66.87 <t< td=""><td></td><td>10,115.6</td><td></td><td></td><td>68.9</td><td>69.2</td><td></td><td>553.6</td><td></td><td></td><td></td><td></td><td>14.288</td><td></td><td></td></t<>		10,115.6			68.9	69.2		553.6					14.288		
12,600.0 10,116.5 11,963.4 9,394.8 73.1 73.5 -66.53 551.3 2,429.3 1,811.2 1,676.1 135.07 13.410 12,700.0 10,117.0 12,061.7 9,397.8 75.2 75.6 -66.59 550.2 2,527.6 1,808.6 1,669.5 139.09 13.003 12,800.0 10,117.4 12,160.1 9,400.8 77.4 77.8 -66.64 549.2 2,625.9 1,806.1 1,662.9 143.14 12,617 12,900.0 10,117.9 12,258.5 9,403.8 79.5 80.0 -66.70 548.4 2,724.2 1,803.7 1,656.4 147.23 12,251 13,000.0 10,118.4 12,356.9 9,406.8 81.7 82.2 -66.75 547.6 2,822.6 1,801.3 1,650.0 151.35 11,902 13,100.0 10,118.8 12,455.2 9,409.8 83.9 84.4 -66.81 546.9 2,920.9 1,799.1 1,643.6 155.50 11.570 13,200.0 10,119.3 12,553.6 9,412.8 86.1 86.6 -66.87 <t< td=""><td>12,500.0</td><td>10,116.1</td><td>11,865.0</td><td>9,391.8</td><td>71.0</td><td>71.3</td><td>-66.48</td><td>552.4</td><td>2,331.0</td><td>1,813.9</td><td>1,682.8</td><td>131.09</td><td>13.837</td><td></td><td></td></t<>	12,500.0	10,116.1	11,865.0	9,391.8	71.0	71.3	-66.48	552.4	2,331.0	1,813.9	1,682.8	131.09	13.837		
12,700.0 10,117.0 12,061.7 9,397.8 75.2 75.6 -66.59 550.2 2,527.6 1,808.6 1,669.5 139.09 13.003 12,800.0 10,117.4 12,160.1 9,400.8 77.4 77.8 -66.64 549.2 2,625.9 1,806.1 1,662.9 143.14 12,617 12,900.0 10,117.9 12,258.5 9,403.8 79.5 80.0 -66.70 548.4 2,724.2 1,803.7 1,656.4 147.23 12,251 13,000.0 10,118.4 12,356.9 9,406.8 81.7 82.2 -66.75 547.6 2,822.6 1,801.3 1,650.0 151.35 11,902 13,100.0 10,118.8 12,455.2 9,409.8 83.9 84.4 -66.81 546.9 2,920.9 1,799.1 1,643.6 155.50 11,570 13,200.0 10,119.3 12,553.6 9,412.8 86.1 86.6 -66.87 546.3 3,019.2 1,796.9 1,637.2 159.67 11.254 13,400.0 10,119.7 12,652.0 9,415.8 88.3 88.8 -66.93 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>															
12,800.0 10,117.4 12,160.1 9,400.8 77.4 77.8 -66.64 549.2 2,625.9 1,806.1 1,662.9 143.14 12,617 12,900.0 10,117.9 12,258.5 9,403.8 79.5 80.0 -66.70 548.4 2,724.2 1,803.7 1,656.4 147.23 12,251 13,000.0 10,118.4 12,356.9 9,406.8 81.7 82.2 -66.75 547.6 2,822.6 1,801.3 1,650.0 151.35 11,902 13,100.0 10,118.8 12,455.2 9,409.8 83.9 84.4 -66.81 546.9 2,920.9 1,799.1 1,643.6 155.50 11,570 13,200.0 10,119.3 12,553.6 9,412.8 86.1 86.6 -66.87 546.3 3,019.2 1,796.9 1,637.2 159.67 11.254 13,300.0 10,119.7 12,652.0 9,415.8 88.3 88.8 -66.93 545.8 3,117.6 1,794.8 1,631.0 163.87 10.953 13,400.0 10,120.2 12,750.4 9,418.8 90.5 91.0 -66.99 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>															
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13,100.0 10,118.8 12,455.2 9,409.8 83.9 84.4 -66.81 546.9 2,920.9 1,799.1 1,643.6 155.50 11.570 13,200.0 10,119.3 12,553.6 9,412.8 86.1 86.6 -66.87 546.3 3,019.2 1,796.9 1,637.2 159.67 11.254 13,300.0 10,119.7 12,652.0 9,415.8 88.3 88.8 -66.93 545.8 3,117.6 1,794.8 1,631.0 163.87 10.953 13,400.0 10,120.2 12,750.4 9,418.8 90.5 91.0 -66.99 545.4 3,215.9 1,792.8 1,624.7 168.09 10.666 13,500.0 10,120.6 12,848.8 9,421.8 92.8 93.3 -67.06 545.1 3,314.2 1,790.9 1,618.6 172.34 10.392 13,600.0 10,121.1 12,947.2 9,424.7 95.0 95.5 -67.12 544.8 3,412.6 1,789.1 1,612.5 176.61 10.131 13,700.0 10,121.6 13,045.6 9,427.7 97.3 97.8 -67.19 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>															
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13,200.0 10,119.3 12,553.6 9,412.8 86.1 86.6 -66.87 546.3 3,019.2 1,796.9 1,637.2 159.67 11.254 13,300.0 10,119.7 12,652.0 9,415.8 88.3 88.8 -66.93 545.8 3,117.6 1,794.8 1,631.0 163.87 10,953 13,400.0 10,120.2 12,750.4 9,418.8 90.5 91.0 -66.99 545.4 3,215.9 1,792.8 1,624.7 168.09 10,666 13,500.0 10,120.6 12,848.8 9,421.8 92.8 93.3 -67.06 545.1 3,314.2 1,790.9 1,618.6 172.34 10,392 13,600.0 10,121.1 12,947.2 9,424.7 95.0 95.5 -67.12 544.8 3,412.6 1,789.1 1,612.5 176.61 10,131 13,700.0 10,121.6 13,045.6 9,427.7 97.3 97.8 -67.19 544.7 3,510.9 1,787.4 1,606.5 180.89 9.881															
13,300.0 10,119.7 12,652.0 9,415.8 88.3 88.8 -66.93 545.8 3,117.6 1,794.8 1,631.0 163.87 10,953 13,400.0 10,120.2 12,750.4 9,418.8 90.5 91.0 -66.99 545.4 3,215.9 1,792.8 1,624.7 168.09 10,666 13,500.0 10,120.6 12,848.8 9,421.8 92.8 93.3 -67.06 545.1 3,314.2 1,790.9 1,618.6 172.34 10,392 13,600.0 10,121.1 12,947.2 9,424.7 95.0 95.5 -67.12 544.8 3,412.6 1,789.1 1,612.5 176.61 10,131 13,700.0 10,121.6 13,045.6 9,427.7 97.3 97.8 -67.19 544.7 3,510.9 1,787.4 1,606.5 180.89 9.881															
13,400.0 10,120.2 12,750.4 9,418.8 90.5 91.0 -66.99 545.4 3,215.9 1,792.8 1,624.7 168.09 10,666 13,500.0 10,120.6 12,848.8 9,421.8 92.8 93.3 -67.06 545.1 3,314.2 1,790.9 1,618.6 172.34 10,392 13,600.0 10,121.1 12,947.2 9,424.7 95.0 95.5 -67.12 544.8 3,412.6 1,789.1 1,612.5 176.61 10,131 13,700.0 10,121.6 13,045.6 9,427.7 97.3 97.8 -67.19 544.7 3,510.9 1,787.4 1,606.5 180.89 9.881															
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13,600.0 10,121.1 12,947.2 9,424.7 95.0 95.5 -67.12 544.8 3,412.6 1,789.1 1,612.5 176.61 10,131 13,700.0 10,121.6 13,045.6 9,427.7 97.3 97.8 -67.19 544.7 3,510.9 1,787.4 1,606.5 180.89 9.881	13,500.0	10,120.6	12,848.8	9,421.8	92.8	93.3	-67.06	545.1	3,314.2	1.790 9	1.618 6	172.34	10.392		
13,700.0 10,121.6 13,045.6 9,427.7 97.3 97.8 -67.19 544.7 3,510.9 1,787.4 1,606.5 180.89 9.881															
	13,800.0	10,122.0	13,144.0	9,430.7	99.5	100.1	-67.25	544.7	3,609.3	1,785.8	1,600.6	185.20	9.643		
13,900.0 10,122.5 13,242.3 9,433.6 101.8 102.3 -67.32 544.7 3,707.6 1,784.3 1,594.8 189.52 9.415															
14,000.0 10,122.9 13,340.7 9,436.6 104.1 104.6 -67.39 544.9 3,806.0 1,782.8 1,589.0 193.87 9.196	14,000.0	10,122.9	13,340.7	9,436.6	104.1	104.6	-67.39	544.9	3,806.0	1,782.8	1,589.0	193.87	9.196		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Output errors are at

Database: Offset TVD Reference: Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid Minimum Curvature

2.00 sigma EDM 5000.14 Server

	sign		illei - bai	ry Miller Sta	ite Com #	-201H - vveii	bore #1 - Stat	e Plan #1					Offset Site Error:	0.0 u
rvey Prog Refer		ND Offse	at .	Semi Major	Axis				Dista	ince			Offset Well Error:	0.0 u
easured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Too l face (°)	Offset Wellbor +N/-S (usft)	e Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,100.0	10,123.4	13,439.1	9,439.6	106.4	106.9	-67.46	545.1	3,904.3	1,781.5	1,583.3	198.22	8.987		
14,200.0	10,123.8	13,537.5	9,442.5	108.7	109.2	-67.53	545.4	4,002.7	1,780.2	1,577.6	202.60	8.787		
14,300.0	10,124.3	13,635.9	9,445.5	111.0	111.5	-67.60	545.9	4,101.0	1,779.1	1,572.1	206.99	8.595		
14,400.0	10,124.8	13,734.3	9,448.4	113.3	113.8	-67.67	546.4	4,199.4	1,778.0	1,566.6	211.39	8.411		
14,500.0	10,125.2	13,832.7	9,451.3	115.6	116.1	-67.75	547.0	4,297.7	1,777.0	1,561.2	215.81	8.234		
14,600.0	10,125.7	13,932.3	9,454.3	117.9	118.4	-67.82	547.6	4,397.2	1,776.1	1,555.8	220.27	8.063		
14,700.0	10,126.1	14,032.3	9,457.3	120.2	120.8	-67.90	548.3	4,497.2	1,775.2	1,550.4	224.75	7.898		
14,800.0	10,126.6	14,132.2	9,460.3	122.6	123.2	-67.97	549.0	4,597.1	1,774.2	1,545.0	229.25	7.739		
14,900.0	10,127.0	14,232.2	9,463.2	124.9	125.5	-68.05	549.7	4,697.0	1,773.3	1,539.6	233.76	7.586		
15,000.0	10,127.5	14,332.2	9,466.2	127.2	127.9	-68.13	550.4	4,796.9	1,772.4	1,534.2	238.27	7.439		
15,100.0	10,127.9	14,432.1	9,469.2	129.6	130.2	-68.20	551.1	4,896.9	1,771.5	1,528.7	242.80	7.296		
15,200.0	10,128,4	14,532.1	9,472.2	131.9	132,6	-68.28	551.8	4,996.8	1,770.6	1,523.3	247.34	7,159		
15,300.0	10,128.9	14,632.1	9,475.2	134.3	135.0	-68.35	552.4	5,096.7	1,769.7	1,517.9	251.89	7.026		
15,400.0	10,129.3	14,732.0	9,478.2	136.6	137.4	-68.43	553.1	5,196.6	1,768.9	1,512.4	256.44	6.898		
15,500.0	10,129.8	14,832.0	9,481.1	139.0	139.7	-68.51	553.8	5,296.5	1,768.0	1,507.0	261.01	6.774		
15,600.0	10,130.2	14,932.0	9,484.1	141.3	142.1	-68.58	554.5	5,396.5	1,767.1	1,501.5	265.59	6.654		
15,700.0	10,130.7	15,031.9	9,487.1	143.7	144.5	-68.66	555.2	5,496.4	1,766.2	1,496.0	270.17	6.537		
15,800.0	10,130.7	15,131.9	9,490.1	146.1	146.9	-68.74	555.9	5,596.3	1,765.3	1,490.6	274.76	6.425		
15,900.0	10,131.1	15,131.9	9,493.1	148.4	149.3	-68,82	556.6	5,696.2	1,764.4	1,485.1	279.36	6.316		
16,000.0	10,131.0	15,331.8	9,496.1	150.8	151.6	-68.89	557.2	5,796.1	1,763.6	1,479.6	283.97	6.210		
16,100.0	10,132.5	15,431.8	9,499.0	153.2	154.0	-68.97	557.9	5,896.1	1,762.7	1,474.1	288.59	6.108		
16,200.0	10,133.0	15,531.8	9,502.0	155.5	156.4	-69.05	558.6	5,996.0	1,761.8	1,468.6	293.21	6.009		
16,300.0	10,133.4	15,631.7	9,505.0	157.9	158.8	-69.12	559.3	6,095.9	1,761.0	1,463.1	297.84	5.912		
16,400.0	10,133.9	15,731.7	9,508.0	160.3	161.2	-69.20	560.0	6,195.8	1,760.1	1,457.6	302.48	5.819		
16,500.0	10,134.3	15,831.7	9,511.0	162.7	163.6	-69.28	560.7	6,295.8	1,759.3	1,452.1	307.13	5.728		
16,600.0	10,134.8	15,931.6	9,513.9	165.1	166.0	-69.36	561.3	6,395.7	1,758.4	1,446.6	311.78	5,640		
16,700.0	10,135.3	16,031.6	9,516.9	167.4	168.4	-69.43	562.0	6,495.6	1,757.6	1,441.1	316.44	5.554		
16,800.0	10,135.7	16,131.6	9,519.9	169.8	170.8	-69.51	562.7	6,595.5	1,756.7	1,435.6	321.11	5.471		
16,900.0	10,136.2	16,231.6	9,522.9	172.2	173.2	-69.59	563.4	6,695.4	1,755.9	1,430.1	325.78	5.390		
17,000.0	10,136.6	16,331.5	9,525.9	174.6	175.6	-69.67	564.1	6,795.4	1,755.0	1,424.6	330.46	5.311		
17,100.0	10,137.1	16,431.5	9,528.9	177.0	178.0	-69.74	564.8	6,895.3	1,754.2	1,419.0	335.14	5.234		
17,200.0	10,137.5	16,531.5	9,531.8	179.4	180.4	-69.82	565.5	6,995.2	1,753.4	1,413.5	339.83	5.159		
17,300.0	10,138.0	16,631.4	9,534.8	181.8	182.9	-69.90	566.1	7,095.1	1,752.5	1,408.0	344.53	5.087		
17,400.0	10,138.4	16,731.4	9,537.8	184.2	185.3	-69.98	566.8	7,195.0	1,751.7	1,402.5	349.23	5.016		
17,411.2	10,138.5	16,737.8	9,538.0	184.4	185.4	-69.98	566.9	7,201.5	1,751.6	1,402.0	349.64	5.010		
,	10,138.5	16,737.8	9,538.0	184.5	185.4	-69.98	566.9	7,201.5	1,751.6	1,402.0	349.65	5.010		

0.0 usft

Offset Site Error:

Anticollision Report

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

Company: Matador Production Company

Rustler Breaks Project: Reference Site: Barry Miller Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Reference Wellbore Wellbore #1 Reference Design: BLM Plan #1

Offset Design

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Output errors are at

Database:

Offset TVD Reference:

Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid

Minimum Curvature

2.00 sigma EDM 5000.14 Server

Offset De	_		illei - Dai	ry Miller Sta	ile Com #	20211 VVCII	bore #1 - State	i lali#i					Offset Site Error:	0.0 us
Survey Prog													Offset Well Error:	0.0 us
Refer		Offse		Semi Major					Dista					
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore		Between	Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface	+N/-S	+E/-W	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
(usit)	(usit)	(usit)	(usit)	(usit)	(usit)	(°)	(usft)	(usft)	(usit)	(usit)	(usit)			
0.0	0.0	0.0	0.0	0.0	0.0	179.85	-80.2	0.2	80.2					
100.0	100.0	99.0	99.0	0.1	0.1	179.24	-80.2	1.1	80.2	80.0	0.26	314.158		
200.0	200.0	198.9	198.9	0.5	0.5	177.39	-80.2	3.7	80.3	79.3	0.97	82.619		
300.0	300.0	301.3	298.6	0.8	0.9	174.31	-80.2	8.0	80.6	78.9	1.70	47.330		
400.0	400.0	401.4	398.3	1.2	1.2	170.64	-80.2	13.2	81.3	78.9	2.43	33.476		
500.0	500.0	501.6	498.0	1.6	1.6	167.05	-80.2	18.4	82.3	79.2	3.15	26.101		
600.0	600.0	601.7	597.8	1.9	2.0	163.56	-80.2	23.7	83.7	79.8	3.88	21.568		
700.0	700.0	701.8	697.5	2.3	2.3	160.19	-80.2	28.9	85.3	80.7	4.60	18.530		
0.008	0.008	802.0	797.2	2.6	2.7	156.96	- 80.2	34.1	87.2	81.9	5.33	16.374		
900.0	900.0	902.1	896.9	3.0	3.1	153.87	- 80.2	39.4	89.4	83.3	6.05	14.779		
1,000.0	1,000.0	997.8	996.7	3.4	3.4	150.94	-80.2	44.6	91.8	85.1	6.75	13.595		
1,100.0	1,100.0	1,097.4	1,096.2	3.7	3.8	149.18	-81.2	48.5	94.6	87.1	7.47	12.669		
1,200.0	1,200.0	1,197.0	1,195.8	4.1	4.1	149.54	-84.2	49.5	97.7	89.6	8.17	11.970		
1,300.0	1,300.0	1,296.5	1,295.1	4.4	4.5	-48.52	-89.2	47.8	100.7	91.9	8.83	11.400		
1,400.0	1,400.0	1,395.8	1,394.1	4.7	4.8	-45.51	-96.2	43.3	103.2	93.7	9.48	10.877		
1,500.0	1,499.9	1,504.5	1,493.3	5.1	5.1	-42.17	-104.5	37.0	105.1	94.9	10.17	10.330		
				_										
1,600.0	1,599.7	1,604.6	1,592.6	5.4	5.5	-39.54	-112.8	30.8	106.0	95.2	10.85	9.774		
1,700.0	1,699.4	1,704.7	1,692.0	5.8	5.8	-37.54	-121.1	24.5	105.8	94.2	11.53	9.175		
1,800.0	1,798.9	1,804.7	1,791.4	6.1	6.2	-36.09	-129.4	18.2	104.2	92.0	12,22	8,531		
1,900.0	1,898.3	1,904.8	1,890.8	6.5	6.5	-35.17	-137.7	11.9	101.3	88.4	12.92	7.846		
2,000.0	1,997.4	2,004.9	1,990.1	6.8	6.9	-34.78	-146.0	5.7	97.0	83.4	13.62	7.122		
2,100.0	2,096.3	2,095.0	2,089.4	7.2	7.2	-34.98	-154.3	-0.6	91.3	77.0	14.30	6.383		
2,200.0	2,194.9	2,205.3	2,188.6	7.6	7.6	-35.89	-162.6	-6.9	84.1	69.1	15.07	5.585		
2,269.4	2,263.2	2,263.9	2,257.4	7.9	7.8	-37.07	-168.3	-11.2	78.4	62.8	15.54	5.044		
2,300.0	2,293.3	2,305.7	2,287.7	8.0	8.0	-37.72	-170.9	-13.1	75.7	59.9	15.81	4.789		
2,400.0	2,391.5	2,406.1	2,386.7	8.4	8.4	-40.19	-179.1	-19.4	67.0	50.5	16,56	4.046		
2,500.0	2,489.8	2,506.5	2,485.8	8.8	8.8	-43.38	-187.4	-25.6	58.5	41.2	17.34	3.374		
2,600.0	2,588.1	2,607.0	2,584.8	9.2	9.1	-47.65	-195.7	-31.9	50.2	32.1	18.14	2.770		
2,700.0	2,686.3	2,707.4	2,683.8	9.6	9.5	-53.54	-203.9	-38.1	42.3	23.4	18.96	2.233		
2,800.0	2,784.6	2,807.8	2,782.9	10.1	9.9	-61.99	-212.2	-44.4	35.1	15.3	19.83	1.770		
2,900.0	2,882.8	2,908.2	2,881.9	10.5	10.3	-74.35	-220.5	-50.6	29.0	8.2	20.73	1.398 L	evel 3	
3,000.0	2,981.1	3,008.7	2,980.9	10.9	10.7	-91.93	-228.7	-56.9	24.9	3.3	21.59	1.151 L		
3,081.4	3,061.1	3,072.4	3,061.6	11.3	10.9	-109.40	-235.5	-62.0	23.7	1.6	22.06		evel 2, CC	
3,100.0	3,079.4	3,109.1	3,080.0	11.4	11,1	-113.51	-237.0	-63.1	23.8	1.5	22,23		evel 2, ES, SF	
3,200.0	3,177.6	3,209.5	3,179.0	11.8	11.5	-134.03	-245.3	-69.4	26.1	3.4	22.68	1.150 L	evel 2	
3,300.0	3,275.9	3,309.9	3,278.0	12.2	11.8	-149.60	-253.6	-75.6	31.1	7.9	23.16	1.342 L	evel 3	
3,400.0	3,374.2	3,389.7	3,377.1	12.7	12.2	-160.33	-261.8	-81.9	37.7	14.0	23.67	1.592		
3,500.0	3,472.4	3,489.2	3,476.1	13.1	12.5	-167.69	-270.1	-88.1	45.2	20.9	24.33	1.858		
3,600.0	3,570.7	3,588.8	3,575.2	13.6	12.9	-172.89	-278.4	-94.4	53.3	28.2	25.03	2.128		
3,700.0	3,669.0	3,688.4	3,674.2	14.0	13.3	-176.71	-286.6	-100.6	61.6	35.9	25.76	2.393		
3,800.0	3,767.2	3,788.0	3,773.2	14.5	13.7	-179.61	-294.9	-106.9	70.2	43.7	26.49	2,651		
3,900.0	3,865.5	3,887.5	3,872.3	14.9	14.1	178.13	- 303.2	-113.1	78.9	51.7	27.23	2.899		
4,000.0	3,963.7	3,987.1	3,971.3	15.4	14.5	176.32	-311.4	-119.4	87.8	59.8	27.98	3,137		
4,100.0	4,062.0	4,086.7	4,070.3	15.8	14.9	174.85	-319.7	-125.6	96.7	67.9	28.73	3.364		
4,200.0	4,160.3	4,186.3	4,169.4	16.3	15.3	173.62	-328.0	-131.9	105.6	76.1	29.48	3.582		
4,300.0	4,258.5	4,285.8	4,268.4	16.7	15.7	172.58	-336.3	-138.1	114.6	84.3	30.23	3.790		
4,400.0	4,356.8	4,385.4	4,367.4	17.2	16.0	171.70	-344.5	-144.4	123.6	92.6	30.99	3.989		
4,500.0	4,455.1	4,485.0	4,466.5	17.6	16.4	170.93	-352.8	-150.6	132.6	100.9	31.74	4.179		
4,600.0	4,553.3	4,584.6	4,565.5	18.1	16.8	170.26	-361.1	-156.9	141.7	109.2	32.50	4.360		
4,700.0	4,651.6	4,684.1	4,664.5	18.5	17.2	169.68	-369.3	-163.1	150.8	117.5	33.25	4.534		
4,800.0	4,749.8	4,783.7	4,763.6	19.0	17.6	169.16	-377.6	-169.4	159.9	125.9	34.01	4.701		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: KB @ 3113.5usft KB @ 3113.5usft MD Reference: North Reference: Grid

Survey Calculation Method: Minimum Curvature Output errors are at 2.00 sigma

EDM 5000.14 Server Database:

Well Barry Miller State Com #222H

Depth		WD Offse Measured	t	Semi Major	A ! -								Offset Well Error:	0.0 usft
Measured \ Depth	Vertical								Diete					
Depth			Vertical	Reference	Offset	Highside	Offset Wellbor	e Centre	Dista Between	Between	Minimum	Separation	Warning	
	(usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Too l face (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	••••••	
5,000.0	4,946.4	4,982.9	4,961.6	19.9	18.4	168.28	-394.1	-181.9	178.1	142.6	35.52	5.013		
5,100.0	5,044.6	5,082.4	5,060.7	20.4	18.8	167.90	-402.4	-188.1	187.2	150.9	36.28	5.160		
5,200.0	5,142.9	5,182.0	5,159.7	20.8	19.2	167.56	-410.7	-194.4	196.3	159.3	37.04	5.301		
5,300.0	5,241.2	5,281.6	5,258.7	21.3	19.6	167.25	-419.0	-200.6	205.5	167.7	37.80	5.436		
5,400.0	5,339.4	5,381.2	5,357.8	21.8	20.0	166.96	-427.2	-206.9	214.6	176.1	38.55	5.567		
5,500.0	5,437.7	5,480.7	5,456.8	22.2	20.3	166.70	-435.5	-213.1	223.8	184.4	39.31	5.692		
5,600.0	5,536.0	5,580.3	5,555.9	22.7	20.7	166.46	-443.8	-219.4	232.9	192.8	40.07	5.812		
5,700.0	5,634.2	5,679.9	5,654.9	23.1	21.1	166.24	-452.0	-225.6	242.1	201.2	40.83	5.928		
5,800.0	5,732.5	5,779.5	5,753.9	23.6	21.5	166.03	-460.3	-231.9	251.2	209.6	41.59	6.040		
5,900.0 6,000.0	5,830.7 5,929.0	5,879.1 5,978.6	5,853.0 5,952.0	24.1 24.5	21.9 22.3	165.84 165.66	-468.6 -476.8	-238.1 -244.4	260.4 269.5	218.0 226.4	42.35 43.11	6.148 6.253		
6,100.0	6,027.3	6,078.2	6,051.0	25.0	22.7	165.50	- 485.1	-250.6	278.7	234.8	43.87	6.353		
6,200.0	6,125.5	6,177.8	6,150.1	25.4	23.1	165.34	-493.4	-256.9	287.9	243.2	44.63	6.450		
6,300.0	6,223.8	6,277.4	6,249.1	25.4	23.1	165.19	-501.7	-263.1	297.0	251.7	45.39	6.544		
6,400.0	6,322.1	6,376.9	6,348.1	26.4	23.9	165.05	-509.9	-269.4	306.2	260.1	46.15	6.635		
6,500.0	6,420.3	6,476.5	6,447.2	26.8	24.3	164.92	-518.2	-275.6	315.4	268.5	46.91	6.723		
6,600.0	6,518.6	6,576.1	6,546.2	27.3	24.7	164.80	-526.5	-281.9	324.6	276.9	47.67	6.808		
6,700.0	6,616.8	6,675.7	6,645.2	27.8	25.1	164.69	-534.7	-288.1	333.7	285.3	48.43	6.891		
6,800.0	6,715.1	6,775.2	6,744.3	28.2	25.5	164.58	-543.0	-294.4	342.9	293.7	49.19	6.971		
6,900.0	6,813.4	6,874.8	6,843.3	28.7	25.9	164.47	-551.3	-300.6	352.1	302.1	49.95	7.048		
7,000.0	6,911.6	6,974.4	6,942.3	29.2	26.2	164.37	-559.5	-306.9	361.3	310.6	50.72	7.124		
7,100.0	7,009.9	7,074.0	7,041.4	29.6	26.6	164.28	-567.8	-313.1	370.5	319.0	51.48	7.197		
7,200.0	7,108.2	7,173.5	7,140.4	30.1	27.0	164.19	-576.1	-319.4	379.6	327.4	52.24	7.267		
7,300.0	7,206.4	7,273.1	7,239.4	30.6	27.4	164.11	-584.4	-325.6	388.8	335.8	53.00	7.336		
7,400.0	7,304.7	7,372.7	7,338.5	31.0	27.8	164.02	-592.6	-331.9	398.0	344.2	53.76	7.403		
7,500.0	7,403.0	7,472.3	7,437.5	31,5	28,2	163,95	-600.9	-338.1	407.2	352.7	54.52	7.468		
7,600.0	7,501.2	7,571.8	7,536.5	31.9	28.6	163.87	-609.2	-344.4	416.4	361.1	55.29	7.531		
7,700.0	7,599.5	7,671.4	7,635.6	32.4	29.0	163.80	-617.4	-350.6	425.6	369.5	56.05	7.593		
7,800.0	7,697.7	7,771.0	7,734.6	32.9	29.4	163.74	-625.7	-356.9	434.7	377.9	56.81	7.652		
7,833.5	7,730.7	7,804.4	7,767.8	33.0	29.5	163.71	-628.5	-359.0	437.8	380.8	57.07	7.672		
7,900.0	7,796.1	7,870.6	7,833.7	33.3	29.8	163.67	-634.0	-363.1	443.4	385.8	57.57	7.701		
8,000.0	7,894.9	7,970.4	7,932.9	33.8	30.2	163.53	-642.3	-369.4	449.6	391.3	58.34	7.708		
8,100.0	7,994.0	8,070.3	8,032.3	34.2	30.6	163.28	-650.6	-375.7	453.4	394.3	59.10	7.672		
8,200.0	8,093.5	8,170.3	8,131.7	34.6	31.0	162,93	-658.9	-381.9	454.7	394.8	59.87	7,595		
8,300.0 8,400.0	8,193.2 8,293.1	8,270.2 8,370.0	8,231.1 8,330.4	34.9 35.3	31.4 31.8	162.48 161.90	-667.2 -675.5	-388.2 -394.5	453.5 449.8	392.9 388.4	60.64 61.40	7.479 7.326		
8,500.0	8,393.0	8,469.7	8,429.5	35.6	32.2	161.20	-683.7	- 400.7	443.7	381.6	62.17	7.137		
8,546.5	8,439.5	8,510.7	8,470.3	35.8	32.3	0.90	-686.9	-403.1	440.4	377.9	62.49	7.047		
8,600.0	8,493.0	8,558.2	8,517.7	35.9	32.5	0.60	-690.0	-405.4	436.9	374.0	62.83	6.953		
8,700.0	8,593.0	8,647.2	8,606.5	36.2	32.8	0.20	-694.0	-408.5	432.3	368.8	63.42	6.816		
8,800.0	8,693.0	8,736.4	8,695.7	36.4	33,1	0.01	-695.9	- 409.9	430.1	366.2	63.95	6.726		
8,900.0	8,793.0	8,834.5	8,793.7	36.7	33.4	0.53	-696.2	-406.1	429.9	365.4	64.50	6.664		
8,977.0	8,870.0	8,911.3	8,869.0	36.9	33.6	2.40	-696.8	-392.0	429.6	364.8	64.77	6,633		
9,000.0	8,893.0	8,933.3	8,890.3	37.0	33.7	3.19	-697.0	-386.1	429.7	364.9	64.82	6.629		
9,100.0	8,993.0	9,022.9	8,973.8	37.3	33.9	7.47	-698.4	-354.0	431.7	366.9	64.77	6.665		
9,200.0	9,093.0	9,100.9	9,041.7	37.6	34.0	12.49	-700.0	-315.6	439.3	375.0	64.22	6.840		
9,300.0	9,193.0	9,167.1	9,094.7	37.8	34.1	17.51	-701.7	-276.1	455.5	392.5	62.97	7.234		
9,400.0	9,293.0	9,222.6	9,135.5	38.1	34.1	22.08	- 703.2	-238.5	482.4	421.5	60.90	7.922		
9,446.5	9,339.5	9,245.2	9,150.9	38.3	34.2	24.00	-703.9	-222.1	498.7	439.0	59.68	8.356		
9,450.0 9,500.0	9,343.0 9,393.0	9,250.0 9,270.2	9,154.2 9,167.3	38.3 38.4	34.2 34.2	-65.21 -61.72	-704.1 -704.7	-218.5 -203.2	500.0 519.3	440.3 461.2	59.72 58.16	8.373 8.929		
9,550.0	9,442.5	9,293.7	9,182.0	38.5	34.2	-58.14	-705.5	-184.9	539.2	482.5	56.67	9.515		

Company: Matador Production Company

Project: Rustler Breaks
Reference Site: Barry Miller
Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft
Reference Wellbore Wellbore #1
Reference Design: BLM Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

North Reference: Survey Calculation Method:

Output errors are at

Database: Offset TVD Reference: Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid

Minimum Curvature

2.00 sigma EDM 5000.14 Server

urvey Prog	ram: 0-M	WD											Offset Well Error:	0.0 us
Refer		Offs	et	Semi Major	Axis				Dista	ınce			Oliset Well Error:	0.0 ds
leasured Depth	Vertical Depth	Measured Depth	Vertica l Depth	Reference	Offset	Highside Too l face	Offset Wellbor +N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
9,600.0	9,491.2	9,317.3	9,195.9	38.7	34.2	-54.79	-706.3	-165.8	559.3	504.1	55.14	10.143		
9,650.0	9,538.8	9,341.0	9,209.1	38.8	34.2	-51.71	-707.1	-146.2	579.2	525.6	53.58	10.809		
9,700.0	9,584.8	9,364.8	9,221.5	38.8	34.2	- 48.90	-708.0	-125.9	598.6	546.6	52.02	11.507		
9,750.0	9,629.0	9,388.6	9,233.1	38.9	34.2	-46.36	-708.8 -700.7	-105.1	617.3	566.8	50.47	12,231		
9,800.0 9,850.0	9,671.0 9,710.5	9,412.5 9,436.5	9,243.8 9,253.6	39.0 39.0	34.2 34.2	-44.11 -42.11	-709.7 -710.6	-83.7 -61.9	635.1 651.7	586.1 604.2	48.95 47.47	12.974 13.728		
3,030.0	3,710.3	3,430.3	9,233.0	33.0	34.2	72.11	-7 10.0	-01.0	031.7	004.2	77.77	15.720		
9,900.0	9,747.1	9,460.4	9,262.6	39.1	34.2	-40.36	-711.6	-39.7	667.1	621.0	46.07	14.481		
9,950.0	9,780.7	9,484.5	9,270.6	39.1	34.2	-38.83	-712.5	-17.1	681.1	636.3	44.75	15.220		
10,000.0	9,810.9	9,500.0	9,275.2	39.1	34.2	-37.69	-713.1	-2.3	693.7	650.4	43.26	16.035		
10,050.0	9,837.5	9,532.6	9,283.7	39.1	34.2	-36.42	-714.5	29.2	704.5	662.0	42.47	16.588		
10,100.0	9,860.3	9,550.0	9,287.5	39.1	34.2	-35.59	-715.2	46.1	713.8	672.4	41.38	17.248		
10 106 F	0.060.0	0.550.0	0.207.5	20.4	24.2	25.52	745.0	46.4	714.0	670.7	44.04	17.240		
10,106.5 10,200.0	9,862.9 9,899.6	9,550.0 9,600.0	9,287.5 9,295.5	39.1 39.1	34,2 34.3	-35.52 -34.61	-715.2 -717.2	46.1 95.4	71 4 .9 731.8	673.7 691.8	41.21 40.02	17.349 18.288		
10,200.0	9,935.6	9,669.9	9,295.5	39.1	34.3 34.7	-34.61	-717.2 -720.1	165.0	751.6 753.6	714.4	39.20	19.223		
10,300.0	9,955.6	9,764.9	9,306.7	39.1	35.4	-33.26 -31.70	-720.1 -724.0	259.8	774.2	735.2	38.94	19.223		
10,500.0	9,997.8	9,860.8	9,312.3	39.1	36.3	-30.37	-727.7	355.5	792.4	753.4	38.96	20.337		
. 2,300.0	2,007.0	2,000.0	2,312.0	00.2	55.5	50.07	, ,		, 02.7	, , , , ,	55.56	_3,007		
10,600.0	10,023.9	9,957.5	9,318.0	39.6	37.3	-29.24	-731.4	451.9	808.0	768.7	39.25	20.584		
10,700.0	10,046.6	10,054.7	9,323.7	40.4	38.4	-28.30	-734.9	548.9	820.9	781.2	39.78	20.636		
10,800.0	10,065.9	10,152.5	9,329.4	41.5	39.7	-27.53	-738.3	646.4	831.1	790.6	40,53	20,508		
10,900.0	10,081.8	10,250.6	9,334.9	42.7	41.0	-26.91	-741.6	744.4	838.5	797.0	41.47	20.219		
11,000.0	10,094.2	10,349.1	9,340.4	44.0	42.5	-26.44	-744.7	842.6	842.9	800.3	42.60	19.788		
11,100.0	10,103.2	10,447.7	9,345.8	45.4	44.0	-26.10	-747.7	941.1	844.4	800.5	43.90	19.237		
11,200.0	10,108.6	10,546.4	9,351.2	46.9	45.6	-25.90	-750.5	1,039.6	842.9	797.6	45.36	18.583		
11,293.4	10,110.6	10,638.6	9,356.1	48.3	47.2	-25.83	-753.1	1,131.6	838.8	792.0	46.88	17.895		
11,300.0	10,110.6	10,645.1	9,356.4	48.4	47.3	-25.83	-753.2	1,138.1	838.4	791.5	46.99	17.844		
11,400.0	10,111.1	10,743.7	9,361.5	50.0	49.0	-25.77	-755.8	1,236.5	832.8	784.0	48.73	17,091		
11,500.0	10,111.5	10,842.3	9,366.6	51.7	50.8	-25.72	-758.2	1,335.0	827.2	776.7	50.53	16.371		
11,600.0	10,112.0	10,941.0	9,371.6	53.5	52.7	-25.68	-760.5	1,433.5	821.8	769.4	52.39	15.686		
11,700.0	10,112.4	11,039.6	9,376.4	55.3	54.5	-25.64	-762.6	1,532.0	816.5	762.2	54.30	15.037		
11,800.0	10,112.9	11,138.3	9,381.2	57.1	56.5	-25.60	-764.6	1,630.6	811.4	755.2	56.27	14.421		
11,900.0	10,113.3	11,237.0	9,385.9	59.0	58.4	-25.57	-766.4	1,729.1	806.5	748.2	58.28	13.839		
12,000.0	10,113.8	11,335.7	9,390.6	60.9	60.4	-25.55	-768.1	1,827.7	801.7	741.3	60.33	13.288		
12,100.0	10,114.3	11,434.4	9,395.1	62.9	62.4	-25.54	-769.6	1,926.3	797.0	734.6	62.42	12,769		
12,200.0	10,114.7	11,533.2	9,399.5	64.9	64.5	-25.53	-771.0	2,025.0	792.5	727.9	64.54	12,278		
12,300.0	10,115.2	11,631.9	9,403.9	66.9	66.6	-25.53	-772.3	2,123.6	788.1	721.4	66.71	11.814		
12,400.0	10,115.6	11,730.7	9,408.1	68.9	68.7	-25.53	-773.4	2,222.3	783.8	714.9	68.90	11.376		
12,500.0	10,116.1	11,829.5	9,412.3	71.0	70.8	-25.55	-774.3	2,321.0	779.8	708.6	71.13	10.962		
12,600.0	10,116.5	11,928.3	9,416.4	73.1	72.9	-25.57	-775.1	2,419.7	775.8	702.4	73.40	10.570		
12,700.0	10,117.0	12,027.1	9,420.3	75.2	75.1	-25.59	-775.8	2,518.4	772.0	696.3	75.69	10.200		
12,800.0	10,117.4	12,125.9	9,424.2	77.4	77.2	-25.63	-776.3	2,617.1	768.4	690.3	78.02	9.849		
12,900.0	10,117.9	12,224.7	9,428.1	79.5	79.4	-25.67	-776.7	2,715.8	764.8	684.5	80.37	9,516		
13,000.0	10,118.4	12,323.5	9,431.8	81.7	81.6	-25.72	-776.9	2,814.6	761.5	678.7	82.76	9,201		
13,100.0	10,118.8	12,422.3	9,435.4	83.9	83.8	-25.77	-777.0	2,913.4	758.3	673.1	85.18	8,902		
13,200.0	10,119.3	12,521.2	9,439.0	86.1	86.0	-25.83	-776.9	3,012.1	755.2	667.6	87.63	8.618		
13,300.0	10,119.7	12,620.0	9,442.4	88.3	88.2	-25.90	-776.7	3,110.9	752.3	662.2	90.12	8.348		
13,400.0	10,120.2	12,718.9	9,445.8	90.5	90.5	-25.98	-776.4	3,209.7	749.5	656.9	92.63	8.091		
13,500.0	10,120.6	12,817.8	9,449.0	92.8	92.7	-26.07	-775.9	3,308.5	746.9	651.7	95.18	7.847		
13,600.0	10,121.1	12,916.9	9,452.2	95.0	95.0	-26.16	-775.2	3,407.6	744.4	646.6	97.77	7.614		
13,700.0	10,121.6	13,016.9	9,455.4	97.3	97.3	-26.26	-774.5	3,507.5	742.0	641.6	100.41	7.390		
13,800.0	10,122.0	13,116.8	9,458.6	99.5	99.6	-26.36	-773.8	3,607.4	739.6	636.5	103.07	7.175		
13,900.0	10,122.5	13,216.8	9,461.8	101.8	101.9	-26.45	-773.1	3,707.3	737.1	631.4	105.74	6.971		

Database:

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

KB @ 3113.5usft Grid

KB @ 3113.5usft

Survey Calculation Method: Minimum Curvature Output errors are at

2.00 sigma

EDM 5000.14 Server

Well Barry Miller State Com #222H

Offset De Survey Prog	•		iller - Bar	ry Miller Sta	ite Com #	-202H - VVel	DOIE #1 - State	e Plan #1					Offset Site Error: Offset Well Error:	0.0 us 0.0 us
Refer	ence	Offse	et	Semi Major	Axis				Dista	nce				
Measured Depth (usft)	Vertica l Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbor +N/-S (usft)	e Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,100.0	10,123.4	13,416.7	9,468.2	106.4	106.5	-26.65	-771.7	3,907.2	732.3	621.1	111.15	6.588		
14,200.0	10,123.8	13,516.7	9,471.4	108.7	108.8	-26.75	-771.0	4,007.1	729.8	616.0	113.88	6.409		
14,300.0	10,124.3	13,616.6	9,474.6	111.0	111.1	-26.85	-770.4	4,107.0	727.4	610.8	116.63	6.237		
14,400.0	10,124.8	13,716.6	9,477.8	113.3	113.4	-26.95	- 769.7	4,206.9	725.0	605.6	119.40	6.072		
14,500.0	10,125.2	13,816.6	9,481.0	115.6	115.8	-27.06	-769.0	4,306.8	722.6	600.4	122.19	5.914		
14,600.0	10,125.7	13,916.5	9,484.2	117.9	118.1	-27.16	-768.3	4,406.7	720.2	595.2	124.99	5.762		
14,700.0	10,126.1	14,016.5	9,487.4	120.2	120.5	-27.26	-767.6	4,506.6	717.8	589.9	127.81	5.616		
14,800.0	10,126.6	14,116.4	9,490.6	122.6	122.8	-27.37	-766.9	4,606.5	715.3	584.7	130.65	5.475		
14,900.0	10,127.0	14,216.4	9,493.8	124.9	125.2	-27.47	-766.2	4,706.4	712.9	579.4	133.51	5.340		
15,000.0	10,127.5	14,316.4	9,497.0	127.2	127.5	-27.58	-765.5	4,806.3	710.5	574.1	136.38	5.210		
15,100.0	10,127.9	14,416.3	9,500.1	129.6	129.9	- 27.68	-764.8	4,906.3	708.1	568.9	139.28	5.084		
15,200.0	10,128.4	14,516.3	9,503.3	131.9	132.2	-27.79	-764.1	5,006.2	705.7	563.5	142,19	4.963		
15,300.0	10,128.9	14,616.3	9,506.5	134.3	134.6	-27.90	-763.4	5,106.1	703.3	558.2	145.11	4.847		
15,400.0	10,129.3	14,716.2	9,509.7	136.6	137.0	-28.01	-762.7	5,206.0	700.9	552.9	148.06	4.734		
15,500.0	10,129.8	14,816.2	9,512.9	139.0	139.3	-28.12	-762.0	5,305.9	698.5	547.5	151.02	4.625		
15,600.0	10,130.2	14,916.1	9,516.1	141.3	141.7	-28.23	-761.3	5,405.8	696.1	542.1	154.00	4.520		
15,700.0	10,130.7	15,016.1	9,519.3	143.7	144.1	-28.34	-760.6	5,505.7	693.8	536.8	157.00	4.419		
15,800.0	10,131,1	15,116,1	9.522.5	146.1	146.4	-28.45	-759.9	5,605,6	691.4	531.4	160.02	4,321		
15,900.0	10,131,6	15,216,0	9,525.7	148.4	148,8	-28,56	-759.2	5,705,5	689.0	525.9	163.05	4,226		
16,000.0	10,132.1	15,316.0	9.528.9	150.8	151.2	-28.67	-758.5	5.805.4	686.6	520.5	166.10	4.134		
16,100.0	10,132.5	15,416.0	9,532.1	153.2	153.6	-28.79	-757.9	5,905.3	684.2	515.1	169.17	4.045		
16,200.0	10,133.0	15,515.9	9,535.3	155.5	156.0	-28.90	-757.2	6,005.3	681.9	509.6	172.25	3.958		
16,300.0	10,133.4	15,615.9	9,538.5	157.9	158.4	-29.02	-756.5	6,105.2	679.5	504.1	175.36	3.875		
16,400.0	10,133.9	15,715.8	9,541.7	160.3	160.7	-29.13	-755.8	6,205.1	677.1	498.6	178.48	3.794		
16,500.0	10,134.3	15,815.8	9,544.9	162.7	163.1	-29.25	-755.1	6,305.0	674.8	493.1	181.62	3.715		
16,600.0	10,134.8	15,915.8	9,548.1	165.1	165.5	-29.37	-754.4	6,404.9	672.4	487.6	184.78	3,639		
16,700.0	10,135.3	16,015.7	9,551.3	167.4	167.9	-29.49	-753.7	6,504.8	670.0	482.1	187.96	3,565		
16,800.0	10,135.7	16,115.7	9,554.5	169.8	170.3	-29.61	-753.0	6,604.7	667.7	476.5	191.16	3.493		
16,900.0	10,136.2	16,215.7	9,557.7	172.2	172.7	-29.73	-752.3	6,704.6	665.3	470.9	194.37	3.423		
17,000.0	10,136.6	16,315.6	9,560.8	174.6	175.1	-29.85	-751.6	6,804.5	663.0	465.4	197.60	3.355		
17,100.0	10,137.1	16,415.6	9,564.0	177.0	177.5	-29.97	-750.9	6,904.4	660.6	459.8	200.85	3.289		
17,200.0	10,137.5	16,515.5	9,567.2	179.4	179.9	-30.09	-750.2	7,004.3	658.3	454.1	204.13	3.225		
17,300.0	10,138.0	16,615.5	9,570.4	181.8	182.3	-30.22	-749.5	7,104.3	655.9	448.5	207.42	3,162		
17,400.0	10,138,4	16,711,6	9,573,5	184.2	184.6	-30.34	-748.9	7,200,3	653,6	443.0	210,60	3,103		
17,411.2	10,138.5	16,711.6	9,573.5	184.4	184.6	-30.34	-748.9	7,200.3	653.5	442.9	210.58	3.103		
17,411.4	10,138.5	16,711.6	9,573.5	184.5	184.6	-30.34	-748.9	7,200.3	653.5	442.9	210.58	3.103		
17,411.8	10,138.5	16,711.6	9,573.5	184.5	184.6	-30.34	-748.9	7,200.3	653.5	442.9	210.58	3.103		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Grid **Survey Calculation Method:** Minimum Curvature

Well Barry Miller State Com #222H

KB @ 3113.5usft

KB @ 3113.5usft

Output errors are at 2.00 sigma

EDM 5000.14 Server Database:

Offset TVD Reference: Offset Datum

Depth Ustr) Ustr	Offset Well Error: 0.0 us paration actor Warning 117.057 30.827 17.751 12.464
Measured Depth Depth Depth Depth Depth Ustr) U	117.057 30.827 17.751 12.464
Depth (usft)	117.057 30.827 17.751 12.464
100.0 100.0 100.0 100.0 100.0 0.1 0.1 -90.00 0.0 -30.0 30.0 29.7 0.26 1	30.827 17.751 12.464
200.0 200.0 200.0 200.0 200.0 0.5 0.5 -90.00 0.0 -30.0 30.0 29.0 0.97	30.827 17.751 12.464
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800.0 800.0 800.0 800.0 2.6 2.6 -90.00 0.0 -30.0 30.0 24.7 5.27 900.0 900.0 900.0 30.0 3.0 3.0 -90.00 0.0 -30.0 30.0 24.0 5.99 1,000.0 1,000.0 1,000.0 1,000.0 3.7 3.7 -90.00 0.0 -30.0 30.0 22.6 7.43 1,200.0 1,200.0 1,200.0 1,200.0 4.1 4.1 -90.00 0.0 -30.0 30.0 22.6 7.43 1,300.0 1,300.0 1,300.0 4.4 4.4 71.58 0.0 -30.0 30.0 21.9 8.84 1,400.0 1,400.0 4.7 4.8 76.50 0.0 -30.0 29.0 19.5 9.53 1,500.0 1,499.9 1,499.9 5.1 5.1 85.1 86.98 0.0 -30.0 28.3 18.1 10.22 1,517.2 1,517.0 1,516	7.811
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1,300.0 1,300.0 1,300.0 1,300.0 1,300.0 4.4 4.4 71.58 0.0 -30.0 29.7 20.9 8.84 1,400.0 1,400.0 1,400.0 1,400.0 4.7 4.8 76.50 0.0 -30.0 29.0 19.5 9.53 1,500.0 1,499.9 1,499.9 1,499.9 5.1 5.1 85.11 0.0 -30.0 28.3 18.1 10.22 1,517.2 1,517.0 1,516.9 1,516.9 5.1 5.2 86.98 0.0 -30.0 28.3 17.9 10.34 1,600.0 1,599.7 1,599.2 1,599.2 5.4 5.5 97.36 0.4 -30.8 29.3 18.4 10.91 1,700.0 1,699.4 1,698.3 1,698.2 5.8 5.8 110.50 1.6 -33.1 33.8 22.2 11.59 1,800.0 1,798.9 1,797.1 1,796.9 6.1 6.2 121.24 3.5 -36.9 42.1 29.8 12.28 1,900.0 1,898.3 1,895.4 1,895.1 6.5	4.040
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1,600.0 1,599.7 1,599.2 1,599.2 5.4 5.5 97.36 0.4 -30.8 29.3 18.4 10.91 1,700.0 1,699.4 1,698.3 1,698.2 5.8 5.8 110.50 1.6 -33.1 33.8 22.2 11.59 1,800.0 1,798.9 1,797.1 1,796.9 6.1 6.2 121.24 3.5 -36.9 42.1 29.8 12.28 1,900.0 1,898.3 1,895.4 1,895.1 6.5 6.5 6.5 128.74 6.2 -42.2 54.0 41.0 12.97 2,000.0 1,997.4 1,993.3 1,992.7 6.8 6.9 133.64 9.6 -48.9 69.0 55.3 13.66 2,100.0 2,096.3 2,090.5 2,089.5 7.2 7.2 136.80 13.8 -57.1 86.9 72.5 14.35 2,200.0 2,194.9 2,187.1 2,185.5 7.6 7.6 138.83 18.7 -66.7 107.5 92.4 15.04 2,269.4 2,263.2 2,253.7 2,251.5 <t< td=""><td>3.043 2.769</td></t<>	3.043 2.769
1,600.0 1,599.7 1,599.2 1,599.2 5.4 5.5 97.36 0.4 -30.8 29.3 18.4 10.91 1,700.0 1,699.4 1,698.3 1,698.2 5.8 5.8 110.50 1.6 -33.1 33.8 22.2 11.59 1,800.0 1,798.9 1,797.1 1,796.9 6.1 6.2 121.24 3.5 -36.9 42.1 29.8 12.28 1,900.0 1,898.3 1,895.4 1,895.1 6.5 6.5 6.5 128.74 6.2 -42.2 54.0 41.0 12.97 2,000.0 1,997.4 1,993.3 1,992.7 6.8 6.9 133.64 9.6 -48.9 69.0 55.3 13.66 2,100.0 2,096.3 2,090.5 2,089.5 7.2 7.2 136.80 13.8 -57.1 86.9 72.5 14.35 2,200.0 2,194.9 2,187.1 2,185.5 7.6 7.6 138.83 18.7 -66.7 107.5 92.4 15.04 2,269.4 2,263.2 2,253.7 2,251.5 <t< td=""><td>2.734 CC, ES</td></t<>	2.734 CC, ES
1,700.0 1,699.4 1,698.3 1,698.2 5.8 5.8 110.50 1.6 -33.1 33.8 22.2 11,59 1,800.0 1,798.9 1,797.1 1,796.9 6.1 6.2 121.24 3.5 -36.9 42.1 29.8 12.28 1,900.0 1,898.3 1,895.4 1,895.1 6.5 6.5 128.74 6.2 -42.2 54.0 41.0 12.97 2,000.0 1,997.4 1,993.3 1,992.7 6.8 6.9 133.64 9.6 -48.9 69.0 55.3 13.66 2,100.0 2,096.3 2,090.5 2,089.5 7.2 7.2 136.80 13.8 -57.1 86.9 72.5 14.35 2,200.0 2,194.9 2,187.1 2,185.5 7.6 7.6 138.83 18.7 -66.7 107.5 92.4 15.04 2,269.4 2,263.2 2,253.7 2,251.5 7.9 7.8 139.80 22.5 -74.1 123.3 107.8	2.686 SF
1,800.0 1,798.9 1,797.1 1,796.9 6.1 6.2 121.24 3.5 -36.9 42.1 29.8 12.28 1,900.0 1,898.3 1,895.4 1,895.1 6.5 6.5 128.74 6.2 -42.2 54.0 41.0 12.97 2,000.0 1,997.4 1,993.3 1,992.7 6.8 6.9 133.64 9.6 -48.9 69.0 55.3 13.66 2,100.0 2,096.3 2,090.5 2,089.5 7.2 7.2 136.80 13.8 -57.1 86.9 72.5 14.35 2,200.0 2,194.9 2,187.1 2,185.5 7.6 7.6 138.83 18.7 -66.7 107.5 92.4 15.04 2,269.4 2,263.2 2,253.7 2,251.5 7.9 7.8 139.80 22.5 -74.1 123.3 107.8 15.53 2,300.0 2,293.3 2,282.9 2,280.5 8.0 8.0 140.16 24.3 -77.6 130.6 114.8 15.74 2,400.0 2,391.5 2,379.6 2,376.3 8.4	2.916
1,900.0 1,898.3 1,895.4 1,895.1 6.5 6.5 128.74 6.2 -42.2 54.0 41.0 12.97 2,000.0 1,997.4 1,993.3 1,992.7 6.8 6.9 133.64 9.6 -48.9 69.0 55.3 13.66 2,100.0 2,096.3 2,090.5 2,089.5 7.2 7.2 136.80 13.8 -57.1 86.9 72.5 14.35 2,200.0 2,194.9 2,187.1 2,185.5 7.6 7.6 138.83 18.7 -66.7 107.5 92.4 15.04 2,269.4 2,263.2 2,253.7 2,251.5 7.9 7.8 139.80 22.5 -74.1 123.3 107.8 15.53 2,300.0 2,293.3 2,282.9 2,280.5 8.0 8.0 140.16 24.3 -77.6 130.6 114.8 15.74 2,400.0 2,391.5 2,379.6 2,376.3 8.4 8.3 141.00 30.4 -89.5 154.8 138.4 16.46 2,500.0 2,489.8 2,476.6 2,472.3 8.8 <td>3.431</td>	3.431
2,100.0 2,096.3 2,090.5 2,089.5 7.2 7.2 136.80 13.8 -57.1 86.9 72.5 14.35 2,200.0 2,194.9 2,187.1 2,185.5 7.6 7.6 138.83 18.7 -66.7 107.5 92.4 15.04 2,269.4 2,263.2 2,253.7 2,251.5 7.9 7.8 139.80 22.5 -74.1 123.3 107.8 15.53 2,300.0 2,293.3 2,282.9 2,280.5 8.0 8.0 140.16 24.3 -77.6 130.6 114.8 15.74 2,400.0 2,391.5 2,379.6 2,376.3 8.4 8.3 141.00 30.4 -89.5 154.8 138.4 16.46 2,500.0 2,489.8 2,476.6 2,472.3 8.8 8.7 141.60 36.5 -101.6 179.1 161.9 17.18	4.164
2,100.0 2,096.3 2,090.5 2,089.5 7.2 7.2 136.80 13.8 -57.1 86.9 72.5 14.35 2,200.0 2,194.9 2,187.1 2,185.5 7.6 7.6 138.83 18.7 -66.7 107.5 92.4 15.04 2,269.4 2,263.2 2,253.7 2,251.5 7.9 7.8 139.80 22.5 -74.1 123.3 107.8 15.53 2,300.0 2,293.3 2,282.9 2,280.5 8.0 8.0 140.16 24.3 -77.6 130.6 114.8 15.74 2,400.0 2,391.5 2,379.6 2,376.3 8.4 8.3 141.00 30.4 -89.5 154.8 138.4 16.46 2,500.0 2,489.8 2,476.6 2,472.3 8.8 8.7 141.60 36.5 -101.6 179.1 161.9 17.18	5.052
2,200.0 2,194.9 2,187.1 2,185.5 7.6 7.6 138.83 18.7 -66.7 107.5 92.4 15.04 2,269.4 2,263.2 2,253.7 2,251.5 7.9 7.8 139.80 22.5 -74.1 123.3 107.8 15.53 2,300.0 2,293.3 2,282.9 2,280.5 8.0 8.0 140.16 24.3 -77.6 130.6 114.8 15.74 2,400.0 2,391.5 2,379.6 2,376.3 8.4 8.3 141.00 30.4 -89.5 154.8 138.4 16.46 2,500.0 2,489.8 2,476.6 2,472.3 8.8 8.7 141.60 36.5 -101.6 179.1 161.9 17.18	6.055
2,269.4 2,263.2 2,253.7 2,251.5 7.9 7.8 139.80 22.5 -74.1 123.3 107.8 15.53 2,300.0 2,293.3 2,282.9 2,280.5 8.0 8.0 140.16 24.3 -77.6 130.6 114.8 15.74 2,400.0 2,391.5 2,379.6 2,376.3 8.4 8.3 141.00 30.4 -89.5 154.8 138.4 16.46 2,500.0 2,489.8 2,476.6 2,472.3 8.8 8.7 141.60 36.5 -101.6 179.1 161.9 17.18	7.144
2,400.0 2,391.5 2,379.6 2,376.3 8.4 8.3 141.00 30.4 -89.5 154.8 138.4 16.46 2,500.0 2,489.8 2,476.6 2,472.3 8.8 8.7 141.60 36.5 -101.6 179.1 161.9 17.18	7.940
2,500.0 2,489.8 2,476.6 2,472.3 8.8 8.7 141.60 36.5 -101.6 179.1 161.9 17.18	8.297
	9.409
2,600.0 2,588.1 2,573.6 2,568.3 9.2 9.1 142.06 42.7 -113.6 203.4 185.5 17.92	10.424
	11.354
2,700.0 2,686.3 2,670.6 2,664.4 9.6 9.4 142.42 48.8 -125.6 227.7 209.1 18.65	12.209
2,800.0 2,784.6 2,767.6 2,760.4 10.1 9.8 142.71 54.9 -137.6 252.1 232.7 19.39	12.997
2,900.0 2,882.8 2,864.6 2,856.5 10.5 10.2 142.95 61.1 -149.6 276.4 256.2 20.14	13.724
3,000.0 2,981.1 2,961.6 2,952.5 10.9 10.6 143.15 67.2 -161.7 300.7 279.8 20.89	14.397
	15.022
	15.603
3,300.0 3,275.9 3,252.5 3,240.7 12.2 11.7 143.60 85.6 -197.7 373.7 350.6 23.15	16.145
	16.650
	17.124
	17.568
	17.985 18.377
3,900.0 3,865.5 3,834.5 3,817.0 14.9 14.1 144.12 122.5 - 269.9 519.8 492.0 27.73	18.746
	19.095
	19.425
	19.737
	20.033
4,400.0 4,356.8 4,319.4 4,297.2 17.2 16.1 144.37 153.1 -330.0 641.5 609.9 31.58	20.314
	20.581
	20.835
	21.076
	21.299
4,900.0 4,848.1 4,820.6 4,793.8 19.5 18.1 144.66 184.0 -390.4 762.1 726.5 35.58	

Company: Matador Production Company

Project: Rustler Breaks Reference Site: Barry Miller Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Grid

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Minimum Curvature

2.00 sigma EDM 5000.14 Server

Offset Datum

Offset Desi		- any 19111	ici - Dai	ıy ıvım c ı ola	te Com #	ZZIN - VVEII	bore #1 - BLM	Plan #1					Offset Site Error:	0.0 usft
Survey Progra	ım: 0-M\	ND											Offset Well Error:	0.0 usft
Referen		Offset		Semi Major		Higheida	Offset Wellbore	Contro	Dista		Minimum	Sonarotion		
	Vertica l Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Too l face (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Separation Factor	Warning	
5,000.0	4,946.4	4,933.4	4,906.0	19.9	18.5	144.98	188.7	-399.7	783.4	746.9	36.46	21.487		
5,100.0	5,044.6	5,046.8	5,019.2	20.4	19.0	145.47	192.0	-406.1	802.8	765.5	37.31	21.520		
5,200.0	5,142.9	5,160.7	5,133.1	20.8	19.4	146.11	193.7	-409.4	820.4	782.3	38.13	21.517		
5,300.0	5,241.2	5,268.8	5,241.2	21.3	19.7	146.86	194.0	-410.0	836.3	797.5	38.90	21,502		
5,400.0	5,339.4	5,367.1	5,339.4	21.8	20.1	147.53	194.0	-410.0	852.0	812.4	39.61	21.510		
5,500.0	5,437.7	5,465.4	5,437.7	22.2	20.4	148.19	194.0	- 410.0	867.8	827.5	40.32	21.521		
5,600.0	5,536.0	5,563.6	5,536.0	22.7	20.7	148.82	194.0	-410.0	883.7	842.7	41.04	21.534		
5,700.0	5,634.2	5,661.9	5,634.2	23.1	21.0	149.43	194.0	-4 10.0	899.7	858.0	41.75	21.549		
5,800.0	5,732.5	5,760.1	5,732.5	23.6	21.4	150.02	194.0	-410.0	915.8	873.3	42.46	21.566		
5,900.0	5,830.7	5,858.4	5,830.7	24.1	21.7	150.59	194.0	-410.0	932.0	8.888	43.18	21.585		
6,000.0	5,929.0	5,956.7	5,929.0	24.5	22.0	151.13	194.0	-410.0	948.3	904.4	43.89	21.606		
6,100.0	6,027.3	6,054.9	6,027.3	25.0	22.4	151.66	194.0	-410.0	964.6	920.0	44.60	21,627		
6,200.0	6,125.5	6,153.2	6,125.5	25.4	22.7	152.18	194.0	-410.0	981.1	935.8	45.31	21.650		
6,300.0	6,223.8	6,251.5	6,223.8	25.9	23.0	152.67	194.0	-410.0	997.6	951.6	46.03	21.674		
6,400.0	6,322.1	6,349.7	6,322.1	26.4	23.4	153.15	194.0	-410.0	1,014.2	967.4	46.74	21.698		
6,500.0	6,420.3	6,448.0	6,420.3	26.8	23.7	153.62	194.0	-410.0	1,030.8	983.4	47.45	21.723		
6,600.0	6,518.6	6,546.3	6,518.6	27.3	24.0	154.07	194.0	-410.0	1,047.5	999.4	48.16	21.749		
6,700.0	6,616.8	6,644.5	6,616.8	27.8	24.4	154.50	194.0	-410.0	1,064.3	1,015.4	48.88	21.776		
6,800.0	6,715.1	6,742.8	6,715.1	28.2	24.7	154.92	194.0	-410.0	1,081.1	1,031.5	49.59	21,802		
6,900.0	6,813.4	6,841.0	6,813.4	28.7	25.0	155.33	194.0	-410.0	1,098.0	1,047.7	50.30	21.829		
7,000.0	6,911.6	6,939.3	6,911.6	29.2	25.4	155.73	194.0	-410.0	1,115.0	1,063.9	51.01	21.856		
7,100.0	7,009.9	7,037.6	7,009.9	29.6	25.7	156.11	194.0	- 410.0	1,131.9	1,080.2	51.73	21.884		
7,200.0	7,108.2	7,135.8	7,108.2	30.1	26.1	156.49	194.0	-410.0	1,149.0	1,096.5	52.44	21.911		
7,300.0	7,206.4	7,234.1	7,206.4	30.6	26.4	156.85	194.0	-410.0	1,166.1	1,112.9	53.15	21.939		
7,400.0	7,304.7	7,332.4	7,304.7	31.0	26.7	157.20	194.0	-410.0	1,183.2	1,129.3	53.86	21.966		
7,500.0	7,403.0	7,430.6	7,403.0	31.5	27.1	157,55	194.0	- 410.0	1,200.4	1,145.8	54.58	21,994		
7,600.0	7,501.2	7,528.9	7,501.2	31.9	27.4	157.88	194.0	-410.0	1,217.6	1,162.3	55.29	22.022		
7,700.0	7,599.5	7,627.1	7,599.5	32.4	27.7	158.20	194.0	-410.0	1,234.8	1,178.8	56.00	22.049		
7,800.0	7,697.7	7,725.4	7,697.7	32.9	28.1	158.52	194.0	-410.0	1,252.1	1,195.4	56.72	22.076		
7,833.5 7,900.0	7,730.7 7,796.1	7,758.3 7,823.8	7,730.7 7,796.1	33.0 33.3	28.2 28.4	158.62 158.87	194.0 194.0	-410.0 -410.0	1,257.9 1,268.9	1,201.0 1,211.5	56.96 57.43	22.086 22.095		
8,000.0	7,894.9	7,922.6	7,894.9	33.8	28.8	159.20	194.0	-410.0	1,283.5	1,225.3	58.14	22.075		
8,100.0	7,994.0	8,021.7	7,994.0	34.2	29.1	159.47	194.0	-410.0	1,295.6	1,236.8	58.85	22.016		
8,200.0	8,093.5	8,121,2	8,093.5	34.6	29.5	159.68	194.0	-410.0	1,305.3	1,245.8	59.55	21,919		
8,300.0	8,193.2	8,220.9	8,193.2	34.9	29.8	159.83	194.0	-410.0	1,312.6	1,252.3	60.25	21.785		
8,400.0	8,293.1	8,320.7	8,293.1	35.3	30.2	159.94	194.0	-410.0	1,317.4	1,256.5	60.95	21.616		
8,500.0	8,393.0	8,420.7	8,393.0	35.6	30.5	159.99	194.0	-410.0	1,319.8	1,258.2	61.63	21.413		
8,546.5	8,439.5	8,467.2	8,439.5	35.8	30.7	0.00	194.0	-410.0	1,320.1	1,258.1	61.95	21.309		
8,600.0	8,493.0	8,520.7	8,493.0	35.9	30.8	0.00	194.0	-410.0	1,320.1	1,257.8	62.30	21.189		
8,700.0	8,593.0	8,620.7	8,593.0	36.2	31.2	0.00	194.0	-410.0	1,320.1	1,257.1	62.96	20,966		
8,800.0	8,693.0	8,720.7	8,693.0	36.4	31.5	0.00	194.0	-410.0	1,320.1	1,256.4	63,62	20.748		
8,900.0	8,793.0	8,820.7	8,793.0	36.7	31.9	0.00	194.0	-410.0	1,320.1	1,255.8	64.29	20.534		
9,000.0	8,893.0	8,920.7	8,893.0	37.0	32,2	0.00	194.0	-410.0	1,320.1	1,255.1	64.95	20,324		
9,100.0	8,993.0	9,020.7	8,993.0	37.3	32.6	0.00	194.0	-410.0	1,320.1	1,254.4	65.61	20.118		
9,200.0	9,093.0	9,120.7	9,093.0	37.6	32.9	0.00	194.0	-410.0	1,320.1	1,253.8	66.28	19.916		
9,300.0	9,193.0	9,220.7	9,193.0	37.8	33.3	0.00	194.0	-410.0	1,320.1	1,253.1	66.95	19.718		
9,400.0	9,293.0	9,354.7	9,326.7	38.1	33.7	0.25	192.9	-404.2	1,319.4	1,251.7	67.75	19.475		
9,446.5	9,339.5	9,430.6	9,401.0	38.3	33.9	0.93	190.1	-388.6	1,317.7	1,249.6	68.10	19.350		
9,450.0	9,343.0	9,436.2	9,406.3	38.3	34.0	-88.77	189.8	-387.1	1,317.6	1,249.4	68.13	19.340		
9,500.0	9,393.0	9,513.0	9,478.3	38.4	34.1	-88.07	185.0	-361.0	1,314.6	1,246.2	68.43	19.212		
9,550.0	9,442.5	9,585.3	9,542.2	38.5	34.3	-87.40	179.0	-328.0	1,310.8	1,242.1	68.69	19.083		
9,600.0	9,491.2	9,653.2	9,598.1	38.7	34.5	-86.77	172.0	-289.9	1,306.1	1,237.2	68.93	18.949		

Company: Matador Production Company

Project: Rustler Breaks
Reference Site: Barry Miller
Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft
Reference Wellbore Wellbore #1
Reference Design: BLM Plan #1

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference: MD Reference: North Reference:

Output errors are at

Database:

KB @ 3113.5usft KB @ 3113.5usft

Well Barry Miller State Com #222H

Grid

Minimum Curvature

2.00 sigma

EDM 5000.14 Server

Offset TVD Reference: Offset Datum

Offset De	_		iller - Bar	ry Miller Sta	te Com #	‡221H - Well	lbore #1 - BLM	1 Plan #1					Offset Site Error:	0.0 usft
Survey Progr Refere		WD Offse	et	Semi Major	Axis				Dista	ance			Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Too l face (°)	Offset Wellbor +N/-S (usft)	e Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
9,650.0	9,538.8	9,717.1	9,646.1	38.8	34.6	-86.19	164.4	-248.5	1,300.8	1,231.6	69.17	18.807		
9,700.0	9,584.8	9,777.3	9,686.7	38.8	34.8	-85.67	156.4	-204.8	1,294.9	1,225.5	69.41	18.656		
9,750.0	9,629.0	9,834.1	9,720.6	38.9	34.9	- 85.22	148.1	-160.0	1,288.6	1,218.9	69.67	18.495		
9,800.0	9,671.0	9,888.0	9,748.4	39.0	35.1	-84.83	139.8	-114.7	1,281.9	1,211.9	69.95	18.327		
9,850.0	9,710.5	9,939.2	9,770.7	39.0	35.3	-84.50	131.5	-69.4	1,274.9	1,204.6	70.23	18.152		
9,900.0	9,747.1	9,988.1	9,788.1	39.1	35.5	-84.24	123.2	-24.4	1,267.6	1,197.1	70.53	17.972		
9,950.0	9,780.7	10,035.0	9,801.1	39.1	35.7	-84.02	115.1	19.9	1,260.2	1,189.4	70.85	17.788		
10,000.0	9,810.9	10,080.2	9,810.1	39.1	35.9	-83.87	107.1	63.5	1,252.7	1,181.5	71.17	17.601		
10,050.0	9,837.5	10,123.9	9,815.4	39.1	36.2	-83.75	99.3	106.1	1,245.1	1,173.6	71.50	17.413		
10,100.0 10,106.5	9,860.3 9,862.9	10,156.0 10,160.2	9,818.0 9,818.4	39.1 39.1	36.4 36.4	-83.92 -83.95	93.7 93.0	137.6 141.8	1,237.6 1,236.6	1,165.8 1,164.8	71.81 71.85	17.234 17.211		
10,200.0	9,899.6	10,221.6	9,823.2	39.1	36.8	-83.24	83.3	202.1	1,224.1	1,151.6	72.51	16,881		
10,300.0	9,935.6	10,288.2	9,828.1	39.1	37.3	-82.51	74.2	267.9	1,213.2	1,139.9	73.36	16.538		
10,400.0	9,968.4	10,355.6	9,832.9	39.1	37.9	-81.80 81.13	66.6	334.8	1,204.7	1,130.4	74.37	16.200		
10,500.0 10,600.0	9,997.8 10,023.9	10,423.9 10,500.0	9,837.4 9,842.2	39.2 39.6	38.6 39.4	-81.13 -80.46	60.5 55.5	402.6 478.4	1,198.6 1,194.6	1,123.0 1,117.7	75.53 76.94	15.869 15.527		
10,700.0	10,046.6	10,562.3	9,845.8	40.4	40.1	- 79.97	52.9	540.6	1,192.7	1,114.4	78.36	15.221		
10,738.5	10,054.5	10,589.2	9,847.3	40.8	40.4	-79.78 -79.40	52.2	567.4	1,192.5	1,113.5	78.98	15.098		
10,800.0	10,065.9 10,081.8	10,632.2	9,849.6	41.5	40.9	-79.49 -70.40	51.6 52.0	610.4	1,192.8	1,112.8	80.02	14.906		
10,900.0 11,000.0	10,081.8	10,700.0 10,788.1	9,853.0 9,857.0	42.7 44.0	41.8 43.0	-79.10 -78.73	52.0 54.3	678.1 766.0	1,194.8 1,198.3	1,113.0 1,114.2	81.79 84.09	14.608 14.250		
11,100.0	10,103.2	10,887.9	9,861.6	45.4	44.4	-78.48	57.2	865.7	1,201.5	1,114.6	86.82	13.838		
11,200.0	10,108.6	10,987.9	9,866.2	46.9	45.9	-78.42 -78.51	60.1	965.5	1,203.9	1,114.1	89.76	13.412		
11,293.4	10,110.6	11,081.3	9,870.4	48.3	47.4	-78.51	62.8	1,058.7	1,205.5	1,112.8	92.69	13.005		
11,300.0 11,400.0	10,110.6 10,111.1	11,087.8 11,187.7	9,870.7 9,875.3	48.4 50.0	47.5 49.2	-78.53 -78.74	63.0 65.9	1,065.3 1,165.1	1,205.6 1,207.0	1,112.7 1,110.8	92.90 96.20	12.977 12.546		
11,500.0	10,111.5	11,287.6	9,879.9	51.7	50.9	- 78.95	68.8	1,264.8	1,208.4	1,108.7	99.64	12.128		
11,600.0	10,112.0	11,387.5	9,884.4	53.5	52.7	- 79.16	71.7	1,364.6	1,209.8	1,106.6	103.19	11.724		
11,700.0	10,112.4	11,487.4	9,889.0	55.3	54.5	-79.37 -79.58	74.6	1,464.3	1,211.3	1,104.4	106.85	11.337		
11,800.0 11,900.0	10,112.9 10,113.3	11,587.3 11,687.2	9,893.6 9,898.1	57.1 59.0	56.4 58.3	-79.79	77.5 80.3	1,564.0 1,663.8	1,212.7 1,214.2	1,102.1 1,099.8	110.60 114.44	10.965 10.610		
12,000.0	10,113.8	11,787.1	9,902.7	60.9	60.3	-80.00	83.2	1,763.5	1,215.7	1,097.4	118.36	10.272		
12,100.0	10,114.3	11,887.0	9,907.3	62.9	62.3	-80.21	86.1	1,863.3	1,217.2	1,094.9	122.35	9.949		
12,200.0	10,114.7	11,986.8	9,911.8	64.9	64.3	-80.42	89.0	1,963.0	1,218.8	1,092.4	126.40	9,642		
12,300.0	10,115.2	12,086.7	9,916.4	66.9	66.3	-80.63	91.9	2,062.8	1,220.3	1,089.8	130.52	9.350		
12,400.0	10,115.6	12,186.6	9,920.9	68.9	68.4	-80.84	94.8	2,162.5	1,221.9	1,087.2	134.69	9.072		
12,500.0	10,116.1	12,286.5	9,925.5	71.0	70.5	-81.04	97.7	2,262.2	1,223.5	1,084.6	138.91	8.808		
12,600.0	10,116.5	12,386.4	9,930.1	73.1	72.6	-81.25	100.6	2,362.0	1,225.1	1,081.9	143.18	8.556		
12,700.0	10,117.0	12,486.3	9,934.6	75.2	74.8	-81.45	103.5	2,461.7	1,226.7	1,079.2	147.48	8.317		
12,800.0	10,117.4	12,586.2	9,939.2	77.4	76.9	-81.66	106.4	2,561.5	1,228.3	1,076.5	151.83	8.090		
12,900.0	10,117.9	12,686.1	9,943.8	79.5	79.1	-81.86	109.3	2,661.2	1,229.9	1,073.7	156,21	7.874		
13,000.0	10,118.4	12,786.0	9,948.3	81.7	81.3	-82.07	112.2	2,761.0	1,231.6	1,071.0	160.62	7.668		
13,100.0	10,118.8	12,885.9	9,952.9	83.9	83.5	-82,27	115.1	2,860.7	1,233.3	1,068.2	165.07	7.471		
13,200.0	10,119.3	12,985.7	9,957.5	86.1	85.7	-82.47	118.0	2,960.5	1,235.0	1,065.4	169.54	7.284		
13,300.0	10,119.7	13,085.6	9,962.0	88.3	87.9	-82.68	120.9	3,060.2	1,236.7	1,062.6	174.03	7.106		
13,400.0	10,120.2	13,185.5	9,966.6	90.5	90.2	-82.88	123.8	3,159.9	1,238.4	1,059.8	178.55	6.936		
13,500.0	10,120.6	13,285.4	9,971.2	92.8	92.4	-83.08	126.6	3,259.7	1,240.1	1,057.0	183.10	6.773		
13,600.0	10,121.1	13,385.3	9,975.7	95.0	94.7	-83.28	129.5	3,359.4	1,241.9	1,054.2	187.66	6.618		
13,700.0	10,121.6	13,485.2	9,980.3	97.3	96.9	-83.48	132.4	3,459.2	1,243.7	1,051.4	192.24	6.469		
13,800.0	10,122.0	13,585.1	9,984.8	99.5	99.2	-83.68	135.3	3,558.9	1,245.4	1,048.6		6.327		
13,900.0	10,122.5	13,685.0	9,989.4	101.8	101.5	-83.88	138.2	3,658.7	1,247.2	1,045.8	201.45	6.191		
14,000.0	10,122.9	13,784.9	9,994.0	104.1	103.8	-84.08	141.1	3,758.4	1,249.0	1,043.0	206.08	6.061		

Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft Wellbore #1 Reference Wellbore Reference Design: BLM Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid

Minimum Curvature

2.00 sigma EDM 5000.14 Server

Offset Datum

Survey Prog		WD	iller - Bar	·									Offset Well Error:	0.0 u
Refer Neasured Depth (usft)	rence Vertical Depth (usft)	Offse Measured Depth (usft)	vertical Vertical Depth (usft)	Semi Major Reference (usft)	Axis Offset (usft)	Highside Toolface	Offset Wellbor	+E/-W	Dista Between Centres (usft)	nce Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
	, ,		9,998.5			(°) -84.28	(usft)	(usft)		. ,	210.73	5.936		
14,100.0 14,200.0		13,884.8 13,984.6	10,003.1	106.4 108.7	106.1 108.4	-84.28 -84.47	144.0 146.9	3,858.1 3,957.9	1,250.9 1,252.7	1,040.1 1,037.3	210.73	5.816		
14,200.0		14,084.5	10,003.1	111.0	110.7	-84.67	149.8	4,057.6	1,254.6	1,037.5	220.05	5.701		
14,400.0		14,184.4	10,007.7	113.3	113.0	-84.87	152.7	4,057.4	1,256.4	1,034.3	224.73	5.591		
14,500.0		14,284.3	10,016.8	115.6	115.3	-85.06	155.6	4,257.1	1,258.3	1,028.9	229.42	5.485		
14,600.0		14,384.2	10,021.4	117.9	117.7	-85.26	158.5	4,356.9	1,260.2	1,026.1	234.12	5.383		
									.,					
14,700.0		14,484.1	10,025.9	120.2	120.0	-85.45	161.4	4,456.6	1,262.1	1,023.3	238.83	5.285		
14,800.0		14,584.0	10,030.5	122.6	122.3	-85.64	164.3	4,556.4	1,264.1	1,020.5	243.55	5.190		
14,900.0		14,683.9	10,035.1	124.9	124.7	-85.84	167.2	4,656.1	1,266.0	1,017.7	248.28	5.099		
15,000.0		14,783.8	10,039.6	127.2	127.0	-86.03	170.1	4,755.8	1,268.0	1,015.0	253.01	5.012		
15,100.0	10,127.9	14,883.7	10,044.2	129.6	129.3	-86.22	173.0	4,855.6	1,270.0	1,012.2	257.75	4.927		
15,200.0	10,128.4	14,983.5	10,048.7	131.9	131.7	-86.41	175.8	4,955.3	1,271.9	1,009.5	262.49	4.846		
15,300.0	10,128.9	15,083.4	10,053.3	134.3	134.0	-86.60	178.7	5,055.1	1,273.9	1,006.7	267.24	4.767		
15,400.0	10,129.3	15,183.3	10,057.9	136.6	136.4	-86.80	181.6	5,154.8	1,276.0	1,004.0	272.00	4.691		
15,500.0	10,129.8	15,283.2	10,062.4	139.0	138.7	-86.98	184.5	5,254.6	1,278.0	1,001.2	276.76	4.618		
15,600.0	10,130.2	15,383.1	10,067.0	141.3	141.1	-87.17	187.4	5,354.3	1,280.0	998.5	281.52	4.547		
15,700.0	10,130.7	15,483.0	10,071.6	143.7	143.5	-87.36	190.3	5,454.0	1,282.1	995.8	286.29	4.478		
15,800.0	10,131.1	15,582.9	10,076.1	146.1	145.8	-87.55	193.2	5,553.8	1,284.2	993.1	291.06	4.412		
15,900.0	10,131.6	15,682.8	10,080.7	148.4	148.2	-87.74	196.1	5,653.5	1,286.3	990.4	295.84	4.348		
16,000.0	10,132.1	15,782.7	10,085.3	150.8	150.6	-87.92	199.0	5,753.3	1,288.4	987.7	300.62	4.286		
16,100.0	10,132.5	15,882.6	10,089.8	153.2	152.9	-88.11	201.9	5,853.0	1,290.5	985.1	305.40	4.226		
16,200.0	10,133.0	15,982.4	10,094.4	155.5	155.3	-88.29	204.8	5,952.8	1,292.6	982.4	310.18	4.167		
16,300.0	10,133.4	16,082.3	10,099.0	157.9	157.7	-88.48	207.7	6,052.5	1,294.7	979.8	314.96	4.111		
16,400.0		16,182.2	10,103.5	160.3	160.1	-88.66	210.6	6,152.2	1,296.9	977.1	319.75	4.056		
16,500.0		16,282.1	10,108.1	162.7	162.4	-88.85	213.5	6,252.0	1,299.1	974.5	324.53	4.003		
16,600.0		16,382.0	10,112.7	165.1	164.8	-89.03	216.4	6,351.7	1,301.2	971.9	329.32	3,951		
16,700.0	10,135.3	16,481.9	10,117.2	167.4	167.2	-89.21	219.3	6,451.5	1,303.4	969.3	334.11	3.901		
16,800.0		16,581.8	10,117.2	169.8	169.6	-89.39	222.1	6,551.2	1,305.4	966.7	338.90	3.853		
16,900.0		16,681.7	10,121.0	172.2	172.0	-89.58	225.0	6,651.0	1,307.9	964.2	343.69	3.805		
17,000.0		16,781.6	10,120.9	174.6	174.4	-89.76	227.9	6,750.7	1,310.1	961.6	348.48	3.759		
17,100.0		16,881.5	10,135.5	177.0	176.7	-89.94	230.8	6,850.5	1,312.3	959.1	353.27	3.715		
17,200.0		16,981.3	10,140.0	179.4	179.1	-90.12	233.7	6,950.2	1,314.6	956.5	358.06	3.671		
17,300.0		17,081.2	10,144.6	181.8	181.5	-90.29	236.6	7,049.9	1,316.9	954.0	362.84	3.629		
17,400.0		17,181.1	10,149.2	184.2	183.9	-90.47	239.5	7,149.7	1,319.1	951.5	367,63	3,588		
17,411.2		17,192.3	10,149.7	184.4	184.2	-90.49	239.8	7,160.9	1,319.4	951.2	368.17	3.584		
17,411.8	10,138.5	17,192.9	10,149.7	184.5	184.2	-90.49	239.9	7,161.4	1,319.4	951.2	368.19	3.584		

Company: Matador Production Company

Project:Rustler BreaksReference Site:Barry MillerSite Error:0.0 usft

Reference Well: Barry Miller State Com #222H

Well Error: 0.0 usft
Reference Wellbore Wellbore #1
Reference Design: BLM Plan #1

Local Co-ordinate Reference: Well Barry Miller State Com #222H

TVD Reference: KB @ 3113.5usft MD Reference: KB @ 3113.5usft

North Reference: Grid

Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma

Database: EDM 5000.14 Server

Offset TVD Reference: Offset Datum

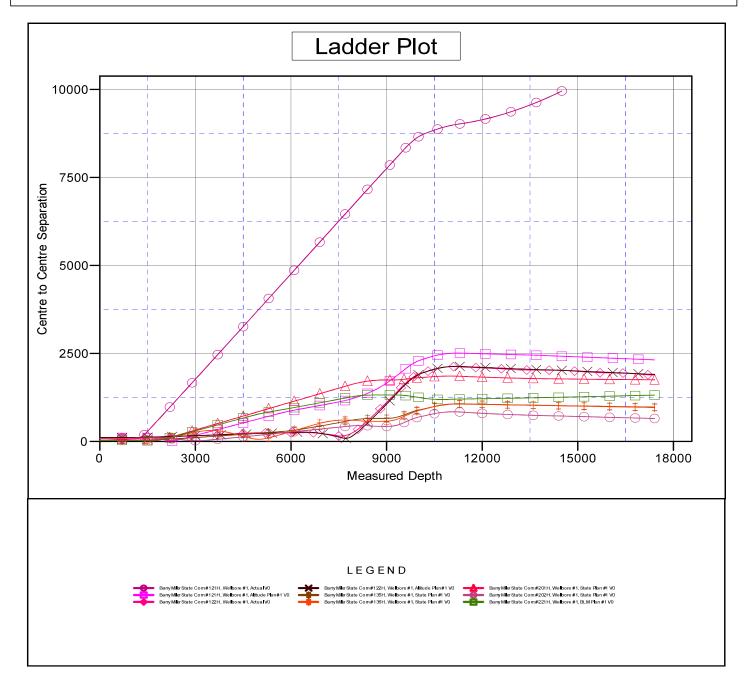
Reference Depths are relative to KB @ 3113.5usft
Offset Depths are relative to Offset Datum

Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Barry Miller State Com #222H

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

Grid Convergence at Surface is: 0.13°



Company: Matador Production Company

Project: Rustler Breaks Barry Miller Reference Site: Site Error: 0.0 usft

Barry Miller State Com #222H Reference Well:

Well Error: 0.0 usft Reference Wellbore Wellbore #1 Reference Design: BLM Plan #1 Local Co-ordinate Reference:

KB @ 3113.5usft **TVD Reference:** MD Reference: KB @ 3113.5usft Grid

North Reference:

Survey Calculation Method: Minimum Curvature Output errors are at 2.00 sigma

Database: EDM 5000.14 Server Offset TVD Reference: Offset Datum

Reference Depths are relative to KB @ 3113.5usft Offset Depths are relative to Offset Datum

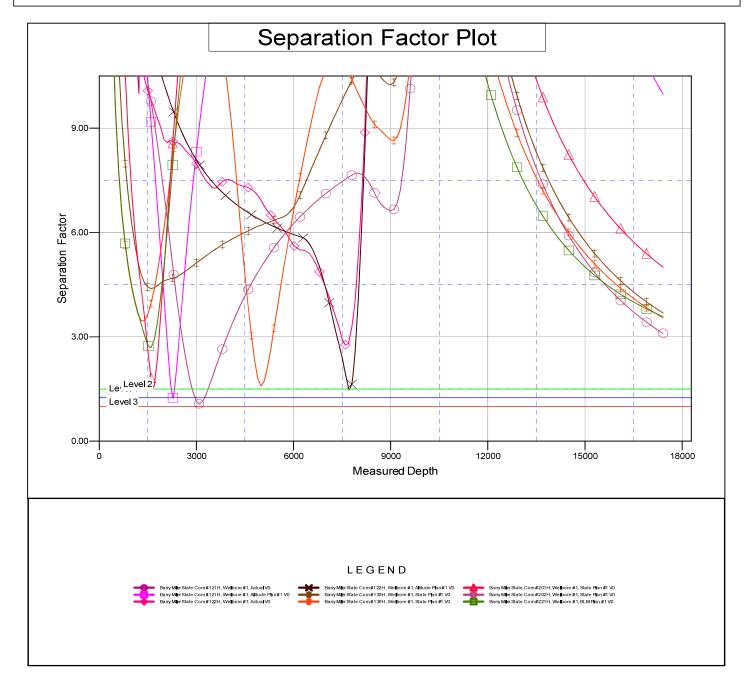
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Barry Miller State Com #222H

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

Well Barry Miller State Com #222H

Grid Convergence at Surface is: 0.13°



Matador Production Company

Rustler Breaks
Barry Miller
Barry Miller State Com #222H

Wellbore #1

Plan: BLM Plan #1

Standard Planning Report

19 July, 2023

EDM 5000.14 Server Database:

Company: Matador Production Company Rustler Breaks

Project: Site:

Barry Miller

Well: Barry Miller State Com #222H Wellbore: Wellbore #1 BLM Plan #1 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid

Minimum Curvature

Project Rustler Breaks,

Map System: Geo Datum:

Map Zone:

US State Plane 1927 (Exact solution) NAD 1927 (NADCON CONUS)

New Mexico East 3001

System Datum:

Mean Sea Level

Using geodetic scale factor

89.60

Site Barry Miller

0.0

Northing: 508,440.78 usft Site Position: 32° 23' 51.364 N Latitude: 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 #222H

Well Position +N/-S 508,441.00 usft 32° 23' 51.365 N 0.2 usft Northing: Latitude: +E/-W 29.8 usft Easting: 572,229.00 usft Longitude: 104° 5' 57.543 W

0.0 usft Wellhead Elevation: Ground Level: 3,085.0 usft **Position Uncertainty**

Wellbore Wellbore #1 Magnetics **Model Name** Sample Date Declination **Dip Angle** Field Strength (°) (°) (nT) IGRF2015 7/19/2023 6.55 60.06 47.362.56805736

BLM Plan #1 Design Audit Notes: Version: Phase: **PLAN** Tie On Depth: 0.0 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°)

0.0

MWD

0.0

Plan Survey Tool Program 7/19/2023 Date Depth From Depth To

(usft) (usft) Survey (Wellbore) **Tool Name** Remarks

17,411.2 BLM Plan #1 (Wellbore #1)

იი

OWSG MWD - Standard

Plan Sections Vertical Dogleg Build Measured Turn Depth Inclination Azimuth Depth +N/-S +E/-W Rate Rate Rate TFO (usft) (usft) (°/100usft) (°/100usft) (°/100usft) (°) (°) (usft) (usft) (°) **Target** 0.0 0.00 0.00 0.0 0.0 0.0 0.00 0.00 0.00 0.00 1,200.0 0.00 0.00 1,200.0 0.0 0.0 0.00 0.00 0.00 0.00 2,269.4 10.69 200.01 2,263.2 -93.5 -34.0 1.00 1.00 0.00 200.01 7.833.5 10.69 200.01 7.730.7 -1.063.7 -387.3 0.00 0.00 0.00 0.00 8 546 5 0.00 0.00 8,439.5 -1,126.0-410 0 1.50 -1500.00 180 00 9,446.5 0.00 0.00 9,339.5 -1,126.0 -410.0 0.00 0.00 0.00 0.00 VP - Barry Miller Fed 10,106.5 66.00 89.75 9,862.9 -1,124.6 -70.1 10.00 10.00 0.00 89.75 89.74 11,293.4 89 63 10,110.6 -1,118.3 1,082.0 2.00 2.00 -0.01 17.411.2 89.74 89.63 10.138.5 -1.078.9 7.199.7 0.00 0.00 0.00 0.00 BHL - Barry Miller Fed

Database: EDM 5000.14 Server

Company: Matador Production Company

Project: Rustler Breaks
Site: Barry Miller

Well: Barry Miller State Com #222H

Wellbore: Wellbore #1
Design: BLM Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid

ned 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
140.4	0.00	0.00	140.4	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
429.2	0.00	0.00	429.2	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
742.9	0.00	0.00	742.9	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
Start Build 1									
1,300.0	1.00	200.01	1,300.0	-0.8	-0.3	-0.3	1.00	1.00	0.00
1,400.0	2.00	200.01	1,400.0	-3.3	-1.2	-1.2	1.00	1.00	0.00
1,500.0	3.00	200.01	1,499.9	-7.4	-2.7	-2.7	1.00	1.00	0.00
1,600.0	4.00	200.01	1,599.7	-13.1	-4.8	-4.9	1.00	1.00	0.00
1,700.0	5.00	200.01	1,699.4	-20.5	-7.5	-7.6	1.00	1.00	0.00
1,800.0	6.00	200.01	1,798.9	-29.5	-10.7	-10.9	1.00	1.00	0.00
1,900.0	7.00	200.01	1,898.3	-40.1	-14.6	-14.9	1.00	1.00	0.00
2,000.0	8.00	200.01	1,997.4	-52.4	-19.1	-19.4	1.00	1.00	0.00
2,100.0	9.00	200.01	2,096.3	-66.3	-24.1	-24.6	1.00	1.00	0.00
2,200.0	10.00	200.01	2,194.9	-81.8	-29.8	-30.4	1.00	1.00	0.00
2,269.4	10.69	200.01	2,194.9	-93.5	-29.6 -34.0	-30.4 -34.7	1.00	1.00	0.00
			2,200.2	-90.0	-54.0	-54.7	1.00	1.00	0.00
	hold at 2269.4 N		0.000.0	00.0	00.0	00.7	0.00	0.00	0.00
2,300.0	10.69	200.01	2,293.3	-98.8 -116.3	-36.0 -42.3	-36.7 -43.1	0.00	0.00	0.00
2,400.0	10.69	200.01	2,391.5	-116.3	-42.3	-43.1	0.00	0.00	0.00
2,500.0	10.69	200.01	2,489.8	-133.7	-48.7	-49.6	0.00	0.00	0.00
2,505.8	10.69	200.01	2,495.5	-134.7	-49.1	-50.0	0.00	0.00	0.00
Z (G30:CS14	⊢CSB)								
2,577.9	10.69	200.01	2,566.4	-147.3	-53.6	-54.7	0.00	0.00	0.00
Z (G26: Bell	Cyn.)								
2,600.0	10.69	200.01	2,588.1	-151.2	-55.0	-56.1	0.00	0.00	0.00
2,700.0	10.69	200.01	2,686.3	-168.6	-61.4	-62.6	0.00	0.00	0.00
2,800.0	10.69	200.01	2,784.6	-186.0	-67.7	-69.0	0.00	0.00	0.00
2,900.0	10.69	200.01	2,882.8	-203.5	-74.1	-75.5	0.00	0.00	0.00
3,000.0 3,100.0	10.69	200.01	2,981.1 3,079.4	-220.9	-80.4	-82.0 -88.4	0.00	0.00	0.00
3,100.0 3,200.0	10.69	200.01		-238.3 255.8	-86.8 93.1		0.00	0.00	0.00
3,200.0 3,300.0	10.69	200.01	3,177.6 3,275.0	-255.8 273.2	-93.1	-94.9 101.4	0.00	0.00	0.00
	10.69	200.01	3,275.9	-273.2	-99.5	-101.4	0.00	0.00	0.00
3,400.0	10.69	200.01	3,374.2	-290.6	-105.8	-107.9	0.00	0.00	0.00
3,427.3	10.69	200.01	3,401.0	-295.4	-107.6	-109.6	0.00	0.00	0.00
Z (G13: Cher	rry Cyn.)								
3,500.0	10.69	200.01	3,472.4	-308.1	-112.2	-114.3	0.00	0.00	0.00
		000.04	0.570.7	20E E	110 E	100.0	0.00	0.00	0.00
3,600.0 3,700.0	10.69	200.01	3,570.7 3,669.0	-325.5	-118.5	-120.8 -127.3	0.00	0.00	0.00

Database: EDM 5000.14 Server

Company: Matador Production Company

Project: Rustler Breaks
Site: Barry Miller

Well: Barry Miller State Com #222H

Wellbore: Wellbore #1
Design: BLM Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid

yıı.		DLIVI FIAIT#1								
nned Sur	vey									
De	sured epth usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
	3,800.0	10.69	200.01	3,767.2	-360.4	-131.2	-133.7	0.00	0.00	0.00
	3,900.0	10.69	200.01	3,865.5	-377.8	-137.6	-140.2	0.00	0.00	0.00
	4,000.0	10.69	200.01	3,963.7	-395.3	-143.9	-146.7	0.00	0.00	0.00
	4,100.0	10.69	200.01	4,062.0	-412.7	-150.3		0.00	0.00	0.00
							-153.2			
	4,200.0	10.69	200.01	4,160.3	-430.1	-156.6	-159.6	0.00	0.00	0.00
	4,300.0	10.69	200.01	4,258.5	-447.6	-163.0	-166.1	0.00	0.00	0.00
	4,400.0	10.69	200.01	4,356.8	-465.0	-169.3	-172.6	0.00	0.00	0.00
	4,500.0	10.69	200.01	4,455.1	-482.5	-175.7	-179.0	0.00	0.00	0.00
	4,600.0	10.69	200.01	4,553.3	-499.9	-182.0	-185.5	0.00	0.00	0.00
	4,636.2	10.69	200.01	4,588.9	-506.2	-184.3	-187.8	0.00	0.00	0.00
Z ((G7: Brush	v Cvn.)								
- (-	o <u>o</u>	, -,,								
	4,700.0	10.69	200.01	4,651.6	-517.3	-188.4	-192.0	0.00	0.00	0.00
	4,800.0	10.69	200.01	4,749.8	-534.8	-194.7	-198.4	0.00	0.00	0.00
	4,900.0	10.69	200.01	4,848.1	-552.2	-201.1	-204.9	0.00	0.00	0.00
	5,000.0	10.69	200.01	4,946.4	-569.6	-207.4	-211.4	0.00	0.00	0.00
	5,100.0	10.69	200.01	5,044.6	-587.1	-213.8	- 217.9	0.00	0.00	0.00
	5,200.0	10.69	200.01	5,142.9	-604.5	-220.1	-224.3	0.00	0.00	0.00
	5,300.0	10.69	200.01	5,241.2	-621.9	-226.5	-230.8	0.00	0.00	0.00
						-232.8				
	5,400.0	10.69	200.01	5,339.4	-639.4		-237.3	0.00	0.00	0.00
	5,500.0	10.69	200.01	5,437.7	-656.8	-239.2	-243.7	0.00	0.00	0.00
	5,600.0	10.69	200.01	5,536.0	-674.3	-245.5	-250.2	0.00	0.00	0.00
	F 700 0	40.00	000.04	F 004 0	004.7	054.0	050.7	0.00	0.00	0.00
	5,700.0	10.69	200.01	5,634.2	-691.7	-251.9	-256.7	0.00	0.00	0.00
	5,800.0	10.69	200.01	5,732.5	-709.1	-258.2	-263.2	0.00	0.00	0.00
	5,900.0	10.69	200.01	5,830.7	-726.6	-264.6	-269.6	0.00	0.00	0.00
	6,000.0	10.69	200.01	5,929.0	-744.0	-270.9	-276.1	0.00	0.00	0.00
	6,038.6	10.69	200.01	5,966.9	-750.7	-273.4	-278.6	0.00	0.00	0.00
	G4: BSGL	(CS9))								
		10.00			70.4					
	6,100.0	10.69	200.01	6,027.3	-761.4	-277.3	-282.6	0.00	0.00	0.00
	6,200.0	10.69	200.01	6,125.5	-778.9	-283.6	-289.0	0.00	0.00	0.00
	6,300.0	10.69	200.01	6,223.8	-796.3	-290.0	-295.5	0.00	0.00	0.00
	6,400.0	10.69	200.01	6,322.1	-813.7	-296.3	-302.0	0.00	0.00	0.00
	6,500.0	10.69	200.01	6,420.3	-831.2	-302.7	-308.4	0.00	0.00	0.00
	6,510.8	10.69	200.01	6,431.0	-833.1	-303.3	-309.1	0.00	0.00	0.00
		valon Shale)	200.04	0.540.0	0.40.0	200.0	044.0	0.00	0.00	0.00
	6,600.0	10.69	200.01	6,518.6	-848.6	-309.0	-314.9	0.00	0.00	0.00
	6,630.4	10.69	200.01	6,548.4	-853.9	-310.9	-316.9	0.00	0.00	0.00
Z (l	L6.3: Aval	on Carb)								
•	6,674.3	10.69	200.01	6,591.6	-861.6	-313.7	-319.7	0.00	0.00	0.00
		/alon Shale)		,						
			000.04	0.040.0	000.4	045.4	004.4	0.00	0.00	0.00
	6,700.0	10.69	200.01	6,616.8	-866.1	-315.4	-321.4	0.00	0.00	0.00
	6.765.5	10.69	200.01	6,681.2	-877.5	-319.5	-325.6	0.00	0.00	0.00
	,		_00.01	5,551.2	377.0	0.0.0	525.5	3.53	0.00	0.00
•	L5.3: FBS	•								
	6,800.0	10.69	200.01	6,715.1	-883.5	-321.7	-327.9	0.00	0.00	0.00
	6,900.0	10.69	200.01	6,813.4	-900.9	-328.0	-334.3	0.00	0.00	0.00
	7,000.0	10.69	200.01	6,911.6	-918.4	-334.4	-340.8	0.00	0.00	0.00
	7,077.5	10.69	200.01	6,987.8	-931.9	-339.3	-345.8	0.00	0.00	0.00
	L5.1: FBS			_,555	300	222.3	2 . 3 . 3	5.53	5.53	3.33
•	7,100.0	10.69	200.01	7,009.9	-935.8	-340.7	-347.3	0.00	0.00	0.00
	*									
	7,139.2	10.69	200.01	7,048.4	- 942.6	-343.2	-349.8	0.00	0.00	0.00
7 (1	M. FBSG)									
					050.0	0.47.4	050.7	0.00	0.00	0.00
	7.200 0	10 69	200 01	7 108 2	-953 Z	-34/1	-353 /	() (10)	11111	
	7,200.0	10.69 10.69	200.01	7,108.2 7.197.9	-953.2 -969.2	-347.1 -352.9	-353.7 -359.7	0.00		
	7,200.0 7,291.3 L. FBSG)	10.69 10.69	200.01 200.01	7,108.2 7,197.9	-953.2 -969.2	-347.1 -352.9	-353.7 -359.7	0.00	0.00	0.00

Database: EDM 5000.14 Server

Company: Matador Production Company

Project: Rustler Breaks
Site: Barry Miller

Well: Barry Miller State Com #222H

Wellbore: Wellbore #1
Design: BLM Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid

11.	DLIVI FIAIT#1								
ned 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)
7,300.0	10.69	200.01	7,206.4	-970.7	-353.4	-360.2	0.00	0.00	0.00
7,351.4	10.69	200.01	7,256.9	-979.6	-356.7	-363.5	0.00	0.00	0.00
Z (L4.3: SB	SC)								
7,400.0 7,500.0 7,600.0 7,700.0	10.69 10.69 10.69 10.69	200.01 200.01 200.01 200.01	7,304.7 7,403.0 7,501.2 7,599.5	-988.1 -1,005.6 -1,023.0 -1,040.4	-359.8 -366.1 -372.5 -378.8	-366.7 -373.2 -379.6 -386.1	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
7,782.6	10.69	200.01	7,680.7	-1,054.8	-384.1	-391.4	0.00	0.00	0.00
Z (L4.1: SB	•								
7,800.0 7,833.5	10.69 10.69	200.01 200.01	7,697.7 7,730.7	-1,057.9 -1,063.7	-385.2 -387.3	-392.6 -394.7	0.00 0.00	0.00 0.00	0.00 0.00
Start Drop	-1.50								
7,900.0 7,955.8	9.70 8.86	200.01 200.01	7,796.1 7,851.2	-1,074.8 -1,083.2	-391.3 -394.4	-398.8 -402.0	1.50 1.50	-1.50 -1.50	0.00 0.00
Z (L4.1: SB		200.01	7,001.2	1,000.2	001.1	402.0	1.00	1,00	0.00
8,000.0 8,042.4	8.20 7.56	200.01 200.01	7,894.9 7,936.9	-1,089.4 -1,094.8	-396.7 -398.7	-404.3 -406.3	1.50 1.50	-1.50 -1.50	0.00 0.00
Z (SBSG B	• /								
8,098.7 Z (L4.1: SB :	6.72	200.01	7,992.8	-1,101.4	-401.0	-408.7	1.50	-1.50	0.00
8,100.0 8,120.6	6.70 6.39	200.01 200.01	7,994.0 8,014.5	-1,101.6 -1,103.8	-401.1 -401.9	-408.8 -409.6	1.50 1.50	-1.50 -1.50	0.00 0.00
Z (L3.3: TB	SC)								
8,200.0 8,300.0 8,400.0 8,500.0 8,530.5	5.20 3.70 2.20 0.70 0.24	200.01 200.01 200.01 200.01 200.01	8,093.5 8,193.2 8,293.1 8,393.0 8,423.6	-1,111.3 -1,118.6 -1,123.4 -1,125.8 -1,126.0	-404.6 -407.3 -409.1 -409.9 -410.0	-412.4 -415.1 -416.9 -417.8 -417.9	1.50 1.50 1.50 1.50 1.50	-1.50 -1.50 -1.50 -1.50 -1.50	0.00 0.00 0.00 0.00 0.00
Z (L3.3.2: B	reak Sand (T))								
8,546.5	0.00	0.00	8,439.5	-1,126.0	-410.0	-417.9	1.50	-1.50	0.00
Start 900.0 8,600.0	hold at 8546.5 MI 0.00	0.00	8,493.0	-1,126.0	-410.0	-417.9	0.00	0.00	0.00
8,700.0 8,800.0 8,900.0	0.00 0.00 0.00	0.00 0.00 0.00	8,593.0 8,693.0 8,793.0	-1,126.0 -1,126.0 -1,126.0	-410.0 -410.0 -410.0	-417.9 -417.9 -417.9	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
9,000.0 9,060.3	0.00 0.00	0.00 0.00	8,893.0 8,953.3	-1,126.0 -1,126.0	-410.0 -410.0	-417.9 -417.9	0.00 0.00	0.00 0.00	0.00 0.00
Z (L3.1: TB: 9,100.0 9,200.0 9,300.0	0.00 0.00 0.00 0.00	0.00 0.00 0.00	8,993.0 9,093.0 9,193.0	-1,126.0 -1,126.0 -1,126.0	-410.0 -410.0 -410.0	-417.9 -417.9 -417.9	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
9,349.0	0.00	0.00	9,242.0	-1,126.0	-410.0	-417.9	0.00	0.00	0.00
Z (L. TBSG)			0.674.0	4 400 0			2.25		
9,378.8 Z (L2: WFN	0.00 IP A)	0.00	9,271.9	-1,126.0	-410.0	-417.9	0.00	0.00	0.00
9,400.0 9,446.5	0.00 0.00	0.00 0.00	9,293.0 9,339.5	-1,126.0 -1,126.0	-410.0 -410.0	-417.9 -417.9	0.00 0.00	0.00 0.00	0.00 0.00
	10.00 - VP - Barry			4 400 0			40.00	12.25	
9,450.0 9.500.0	0.35 5.35	89.75 89.75	9,343.0	-1,126.0 -1,126.0	-410.0 -407.5	-417.9 -415.4	10.00	10.00	0.00
9,500.0 9,518.0	5.35 7.15	89.75 89.75	9,393.0 9,410.8	-1,126.0 -1,126.0	-407.5 -405.6	-415.4 -413.4	10.00 10.00	10.00 10.00	0.00 0.00
Z (WFMP A	Fat)								

Database: EDM 5000.14 Server

Company: Matador Production Company

Project: Rustler Breaks
Site: Barry Miller

Well: Barry Miller State Com #222H

Wellbore: Wellbore #1
Design: BLM Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid

nned 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 9,600.0 9,650.0	10.35 15.35 20.35	89.75 89.75 89.75	9,442.5 9,491.2 9,538.8	-1,126.0 -1,126.0 -1,125.9	-400.7 -389.6 -374.2	-408.5 -397.4 -382.1	10.00 10.00 10.00	10.00 10.00 10.00	0.00 0.00 0.00
9,700.0 9,750.0 9,753.9	25.35 30.35 30.74	89.75 89.75 89.75	9,584.8 9,629.0 9,632.4	-1,125.8 -1,125.7 -1,125.7	-354.8 -331.5 -329.5	-362.7 -339.3 -337.4	10.00 10.00 10.00	10.00 10.00 10.00	0.00 0.00 0.00
Z (WFMP B) 9,800.0 9,848.9	35.35 40.24	89.75 89.75	9,671.0 9,709.6	-1,125.6 -1,125.5	-304.4 -274.4	-312.2 -282.3	10.00 10.00	10.00 10.00	0.00 0.00
Z (WFMP B.	1)								
9,850.0 9,900.0 9,911.2	40.35 45.35 46.47	89.75 89.75 89.75	9,710.5 9,747.1 9,754.9	-1,125.5 -1,125.3 -1,125.3	-273.7 -239.7 -231.7	-281.5 -247.6 -239.5	10.00 10.00 10.00	10.00 10.00 10.00	0.00 0.00 0.00
Z (WFMP B.2 9,950.0 10,000.0	2) 50.35 55.35	89.75 89.75	9,780.7 9,810.9	-1,125.1 -1,125.0	-202.6 -162.8	-210.5 -170.7	10.00 10.00	10.00 10.00	0.00 0.00
10,050.0	60.35	89.75	9,837.5	-1,123.0 -1,124.8 -1,124.7	-120.5	-128.3	10.00	10.00	0.00
•	63.04 Miller Fed Com #		9,850.2	,	-96.8	-104.7	10.00	10.00	0.00
10,082.5 Z (Blair Shal	63.60 le)	89.75	9,852.7	-1,124.7	-91.8	-99.6	10.00	10.00	0.00
10,086.2 Z (WFMP B. 4	63.98 4)	89.75	9,854.4	-1,124.6	-88.4	-96.3	10.00	10.00	0.00
10,100.0	65.35	89.75	9,860.3	-1,124.6	-76.0	-83.9	10.00	10.00	0.00
10,106.5 Start DLS 2.	66.00 00 TFO -0.29	89.75	9,862.9	-1,124.6	-70.1	-78.0	10.00	10.00	0.00
10,139.8	66.67	89.75	9,876.3	-1,124.4	-39.6	-47.5	2.00	2.00	-0.01
Z (WFMP B.:	3) 67.87	89.74	9,899.6	-1,124.2	15.9	0.1	2.00	2.00	-0.01
10,200.0 10,300.0	69.87	89.74 89.73	9,699.6 9,935.6	-1,124.2 -1,123.8	109.2	8.1 101.4	2.00 2.00	2.00	-0.01 -0.01
10,400.0	71.87	89.72	9,968.4	-1,123.3	203.7	195.8	2.00	2.00	-0.01
10,500.0	73.87	89.71	9,997.8	-1,122.8	299.2	291.4	2.00	2.00	-0.01
10,600.0	75.87	89.70	10,023.9	-1,122.3	395.8	387.9	2.00	2.00	-0.01
10,700.0	77.87	89.69	10,046.6	-1,121.8	493.1	485.3	2.00	2.00	-0.01
10,800.0	79.87	89.68	10,065.9	-1,121.3	591.3	583.4	2.00	2.00	-0.01
10,900.0	81.87	89.67	10,081.8	-1,120.7	690.0	682.1	2.00	2.00	-0.01
11,000.0	83.87	89.66	10,094.2	-1,120.1	789.2	781.4	2.00	2.00	-0.01
11,100.0	85.87	89.65	10,103.2	-1,119.5	888.8	881.0	2.00	2.00	-0.01
11,200.0	87.87	89.64	10,108.6	-1,118.9	988.6	980.8	2.00	2.00	-0.01
11,293.4	89.74	89.63	10,110.6	-1,118.3	1,082.0	1,074.2	2.00	2.00	-0.01
	hold at 11293.4								
11,300.0	89.74	89.63	10,110.6	-1,118.3	1,088.6	1,080.8	0.00	0.00	0.00
11,400.0	89.74	89.63	10,111.1	-1,117.6	1,188.6	1,180.8	0.00	0.00	0.00
11,500.0	89.74	89.63	10,111.5	-1,117.0	1,288.6	1,280.8	0.00	0.00	0.00
11,600.0	89.74	89.63	10,112.0	-1,116.3	1,388.6	1,380.8	0.00	0.00	0.00
11,700.0	89.74	89.63	10,112.4	-1,115.7	1,488.6	1,480.8	0.00	0.00	0.00
11,800.0	89.74	89.63	10,112.9	-1,115.0	1,588.6	1,580.8	0.00	0.00	0.00
11,900.0	89.74	89.63	10,113.3	-1,114.4	1,688.6	1,680.8	0.00	0.00	0.00
12,000.0	89.74	89.63	10,113.8	-1,113.7	1,788.6	1,780.8	0.00	0.00	0.00
12,100.0	89.74	89.63	10,114.3	-1,113.1	1,888.6	1,880.8	0.00	0.00	0.00
12,200.0	89.74	89.63	10,114.7	-1,112.5	1,988.6	1,980.8	0.00	0.00	0.00
12,300.0	89.74	89.63	10,115.2	-1,111.8	2,088.6	2,080.8	0.00	0.00	0.00
12,400.0	89.74	89.63	10,115.6	-1,111.2	2,188.6	2,180.8	0.00	0.00	0.00

Database: EDM 5000.14 Server

Company: Matador Production Company

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Survey Calculation Method:

Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,500.0	89.74	89.63	10,116.1	-1,110.5	2,288.6	2,280.8	0.00	0.00	0.00
12,600.0	89.74	89.63	10,116.5	-1,109.9	2,388.6	2,380.8	0.00	0.00	0.00
12,700.0	89.74	89.63	10,117.0	-1,109.2	2,488.6	2,480.8	0.00	0.00	0.00
12,800.0	89.74	89.63	10,117.4	-1,108.6	2,588.6	2,580.8	0.00	0.00	0.00
12,900.0	89.74	89.63	10,117.9	-1,108.0	2.688.6	2,680.8	0.00	0.00	0.00
13,000.0	89.74	89.63	10,118.4	-1,107.3	2,788.6	2,780.8	0.00	0.00	0.00
13,100.0	89.74	89.63	10,118.8	-1,106.7	2,888.6	2,880.8	0.00	0.00	0.00
13,200.0	89.74	89.63	10,119.3	-1,106.0	2,988.6	2,980.8	0.00	0.00	0.00
13,300.0	89.74	89.63	10,119.7	-1,105.4	3,088.6	3,080.8	0.00	0.00	0.00
13,400.0	89.74	89.63	10,120.2	-1,104.7	3,188.6	3,180.8	0.00	0.00	0.00
13,500.0	89.74	89.63	10,120.6	-1,104.1	3,288.6	3,280.8	0.00	0.00	0.00
13,600.0	89.74	89.63	10,121.1	-1,103.5	3,388.5	3,380.8	0.00	0.00	0.00
13,700.0	89.74	89.63	10,121.6	-1,102.8	3,488.5	3,480.8	0.00	0.00	0.00
13,800.0	89.74	89.63	10,122.0	-1,102.2	3,588.5	3,580.8	0.00	0.00	0.00
13,900.0	89.74	89.63	10,122.5	-1,101.5	3,688.5	3,680.8	0.00	0.00	0.00
14,000.0	89.74	89.63	10,122.9	-1,100.9	3,788.5	3,780.8	0.00	0.00	0.00
14,100.0	89.74	89.63	10,123.4	-1,100.2	3,888.5	3,880.8	0.00	0.00	0.00
14,200.0	89.74	89.63	10,123.8	-1,099.6	3,988.5	3,980.8	0.00	0.00	0.00
14,300.0	89.74	89.63	10,124.3	-1,099.0	4,088.5	4,080.8	0.00	0.00	0.00
14,400.0	89.74	89.63	10,124.8	-1,098.3	4,188.5	4,180.8	0.00	0.00	0.00
14,400.0	89.74 89.74	89.63	10,124.6	-1,096.3 -1,097.7	4,100.5	4,180.8	0.00	0.00	0.00
14,500.0	89.74	89.63	10,125.7	-1,097.7 -1,097.0	4,288.5	4,280.8	0.00	0.00	0.00
14,700.0	89.74	89.63	10,125.7	-1,097.0 -1,096.4	4,488.5	4,380.8	0.00	0.00	0.00
14,800.0	89.74	89.63	10,126.6	-1,095.7	4,588.5	4,580.7	0.00	0.00	0.00
14,900.0	89.74	89.63	10,127.0	-1,095.1	4,688.5	4,680.7	0.00	0.00	0.00
15,000.0	89.74	89.63	10,127.5	-1,094.5	4,788.5	4,780.7	0.00	0.00	0.00
15,100.0	89.74	89.63	10,127.9	-1,093.8	4,888.5	4,880.7	0.00	0.00	0.00
15,200.0	89.74	89.63	10,128.4	-1,093.2	4,988.5	4,980.7	0.00	0.00	0.00
15,300.0	89.74	89.63	10,128.9	-1,092.5	5,088.5	5,080.7	0.00	0.00	0.00
15,400.0	89.74	89.63	10,129.3	-1,091.9	5,188.5	5,180.7	0.00	0.00	0.00
15,500.0	89.74	89.63	10,129.8	-1,091.2	5,288.5	5,280.7	0.00	0.00	0.00
15,600.0	89.74	89.63	10,130.2	-1,090.6	5,388.5	5,380.7	0.00	0.00	0.00
15,700.0	89.74	89.63	10,130.7	-1,090.0	5,488.5	5,480.7	0.00	0.00	0.00
15,800.0	89.74	89.63	10,131.1	-1,089.3	5,588.5	5,580.7	0.00	0.00	0.00
15,900.0	89.74	89.63	10,131.6	-1,088.7	5,688.5	5,680.7	0.00	0.00	0.00
16,000.0	89.74	89.63	10,131.0	-1,088.7 -1,088.0	5,788.5	5,780.7	0.00	0.00	0.00
16,000.0	89.74 89.74	89.63	10,132.1	-1,088.0 -1,087.4	5,888.5	5,880.7	0.00	0.00	0.00
16,100.0	89.74 89.74	89.63	10,132.5	-1,087.4 -1,086.7	5,988.5	5,980.7	0.00	0.00	0.00
16,300.0	89.74	89.63	10,133.4	-1,086.1 -1,086.1	6,088.5	6,080.7	0.00	0.00	0.00
16,400.0	89.74	89.63	10,133.9	-1,085.5	6,188.5	6,180.7	0.00	0.00	0.00
16,500.0	89.74	89.63	10,134.3	-1,084.8	6,288.5	6,280.7	0.00	0.00	0.00
16,600.0	89.74	89.63	10,134.8	-1,084.2	6,388.5	6,380.7	0.00	0.00	0.00
16,700.0	89.74	89.63	10,135.3	-1,083.5	6,488.5	6,480.7	0.00	0.00	0.00
16,800.0	89.74	89.63	10,135.7	-1,082.9	6,588.4	6,580.7	0.00	0.00	0.00
16,900.0	89.74	89.63	10,136.2	-1,082.2	6,688.4	6,680.7	0.00	0.00	0.00
17,000.0	89.74	89.63	10,136.6	-1,081.6	6,788.4	6,780.7	0.00	0.00	0.00
17,100.0	89.74	89.63	10,137.1	-1,081.0	6,888.4	6,880.7	0.00	0.00	0.00
17,200.0	89.74	89.63	10,137.5	-1,080.3	6,988.4	6,980.7	0.00	0.00	0.00
17,300.0	89.74	89.63	10,138.0	-1,079.7	7,088.4	7,080.7	0.00	0.00	0.00
	89.74	89.63	10,138.4			7,180.7	0.00	0.00	0.00
17,400.0 17,411.2	89.74 89.74	89.63		-1,079.0 1,078.0	7,188.4 7,199.7	7,180.7 7,192.0	0.00	0.00	0.00
17,411.2	89.74	89.63	10,138.5	-1,078.9	7,199.7	7,192.0	0.00	0.00	0.00

Database: EDM 5000.14 Server

Company: Matador Production Company

Project: Rustler Breaks
Site: Barry Miller

Well: Barry Miller State Com #222H

Wellbore: Wellbore #1
Design: BLM Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid

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 cer - Point		0.00	9,339.5	-1,126.0	-4 10.0	507,315.00	571,819.00	32° 23' 40.231 N	104° 6' 2.353 W
FTP - Barry Miller Fed C - plan misses target - Point		0.00 Susft at 10076	9,912.5 3.9usft MD	-1,126.0 (9850.2 TVD, -	-130.0 1124.7 N , -96	507,315.00 .8 E)	572,099.00	32° 23′ 40.225 N	104° 5′ 59.088 W
BHL - Barry Miller Fed C - plan hits target cer - Point		0.00	10,138.5	-1,078.9	7,199.7	507,362.00	579,429.00	32° 23' 40.524 N	104° 4' 33.595 W

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
140.4		Z (Rustler)	Littlology	0.18	89.60
429.2		Z (Salado)		0.18	89.60
742.9		Z (Castile (T))		0.18	89.60
2,505.8		Z (G30:CS14-CSB)		0.18	89.60
2,577.9	•	Z (G26: Bell Cyn.)		0.18	89.60
3,427.3		Z (G13: Cherry Cyn.)		0.18	89.60
4,636.2		Z (G7: Brushy Cyn.)		0.18	89.60
6,038.6		Z (G4: BSGL (CS9))		0.18	89.60
6,510.8		Z (L8.2: U. Avalon Shale)		0.18	89.60
6,630.4		Z (L6.3: Avalon Carb)		0.18	89.60
6,674.3		Z (L6.2: L. Avalon Shale)		0.18	89.60
6,765.5		Z (L5.3: FBSC)		0.18	89.60
7,077.5		Z (L5.1: FBSG)		0.18	89.60
7,139.2		Z (M. FBSG)		0.18	89.60
7,291.3	7,197.9	Z (L. FBSG)		0.18	89.60
7,351.4	7,256.9	Z (L4.3: SBSC)		0.18	89.60
7,782.6	7,680.7	Z (L4.1: SBSG)		0.18	89.60
7,955.8	7,851.2	Z (L4.1: SBSG B Carb)		0.18	89.60
8,042.4	7,936.9	Z (SBSG B Target)		0.18	89.60
8,098.7	7,992.8	Z (L4.1: SBSG C)		0.18	89.60
8,120.6	8,014.5	Z (L3.3: TBSC)		0.18	89.60
8,530.5	8,423.6	Z (L3.3.2: Break Sand (T))		0.18	89.60
9,060.3	8,953.3	Z (L3.1: TBSG)		0.18	89.60
9,349.0	9,242.0	Z (L. TBSG)		0.18	89.60
9,378.8	9,271.9	Z (L2: WFMPA)		0.18	89.60
9,518.0	9,410.8	Z (WFMP A Fat)		0.18	89.60
9,753.9	9,632.4	Z (WFMP B)		0.18	89.60
9,848.9	9,709.6	Z (WFMP B.1)		0.18	89.60
9,911.2	9,754.9	Z (WFMP B.2)		0.18	89.60
10,082.5	9,852.7	Z (Blair Shale)		0.18	89.60
10,086.2	9,854.4	Z (WFMP B.4)		0.18	89.60
10,139.8	9,876.3	Z (WFMP B.3)		0.18	89.60

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Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Barry Miller State Com #222H

KB @ 3113.5usft KB @ 3113.5usft

Grid

n Annotations				
Measured	Vertical	Local Coor	dinates	
Depth (usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
1,200.0	1,200.0	0.0	0.0	Start Build 1.00
2,269.4	2,263.2	-93.5	-34.0	Start 5564.1 hold at 2269.4 MD
7,833.5	7,730.7	-1,063.7	-387.3	Start Drop -1.50
8,546.5	8,439.5	-1,126.0	-410.0	Start 900.0 hold at 8546.5 MD
9,446.5	9,339.5	-1,126.0	-410.0	Start Build 10.00
10,106.5	9,862.9	-1,124.6	-70.1	Start DLS 2.00 TFO -0.29
11,293.4	10,110.6	-1,118.3	1,082.0	Start 6117.8 hold at 11293.4 MD
17,411.2	10,138.5	-1,078.9	7,199.7	TD at 17411.2

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: 22	8027		Data: (07/26/	2023
I. Operator: Matador Production Company C			OGRID: <u>22</u>	228937 Date:			J // 20/	2023
II. Type: ⊠Original □	Amendment	due to □ 19.15.27	'.9.D(6)(a) NM	AC □ 19.15.27.9.	D(6)(b) NMAC [Othe	r.
If Other, please describ	oe:							
III. Well(s): Provide the recompleted from a sir					wells p	roposed to	be dril	led or proposed to be
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D		ticipated s 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		D 21-22S-28E	855' FNL 460' FWL		4,500		2,500	
Michel Ryan Federal Com 2231	H TBD	D-16-22S-28E	549' FSL 320' FWL	400	4,500	-	2,500	
IV. Central Delivery	ıle: Provide th	e following informa	ation for each ne					7.9(D)(1) NMAC]
proposed to be recomp	oleted from a	single well pad or	connected to a	central delivery p	oint.			
Well Name	API	Spud Date	TD Reached Date	Completio Commencemen		Initial F Back I		First Production Date
Barry Miller State Com 221H	1	05/07/2025	05/25/2025	07/07/2025		08/07/2025		08/08/2025
Barry Miller State Com 222H	1	04/18/2025	05/06/2025	07/07/2025		08/07/2025		08/08/2025
Michel Ryan Federal Com 2231	H TBD	05/30/2025	05/30/2025	07/07/2025		08/07/2025		08/08/2025
VI. Separation Equiporation VII. Operational Practices Subsection A through	ctices: ⊠ Atta	ich a complete des		-	-			
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 app licable 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. \square 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 \square will \square 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 \(\subseteq \text{does} \) 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 p ipeline 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 d ays 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.