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

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

Form C-101
August 1, 2011

Permit 322673

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

1. Operator Name and Address	2. OGRID Number
MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	228937
	3. API Number 30-015-49803

4. Property Code	5. Property Name	6. Well No.
333122	BARRY MILLER STATE COM	121H

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		965	N	430	W	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
C	15	22S	28E	C	660	N	2559	W	Eddy

9. Pool Information

CULEBRA BLUFF;BONE SPRING, SOUTH	15011

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3084
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	15575	Bone Spring		8/20/2022
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

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

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	385	380	0
Int1	9.875	7.625	29.7	7302	1075	0
Prod	6.75	5.5	20	15575	620	7102

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

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

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☒, if applicable.

Signature:

OIL CONSERVATION DIVISION

Printed Name:	Electronically filed by Brett A Jennings	Approved By:	Katherine Pickford	
Title:	Regulatory Analyst	Title:	Geoscientist	
Email Address:	brett.jennings@matadorresources.com	Approved Date:	8/4/2022	Expiration Date: 8/4/2024
Date:	8/4/2022 Phone: 972-629-2160	Conditions of Approval Attached		

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

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

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

☐ **AMENDED REPORT**

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1]API Number	[2]Pool Code	[3]Pool Name
30-015-49803	15011	Culebra Bluff; Bone Spring South

[4]Property Code	[5]Property Name	[6]Well Number
333122	BARRY MILLER STATE COM	121H

[7]OGRID No.	[8]Operator Name	[9]Elevation
228937	MATADOR PRODUCTION COMPANY	3084'

[10]Surface Location

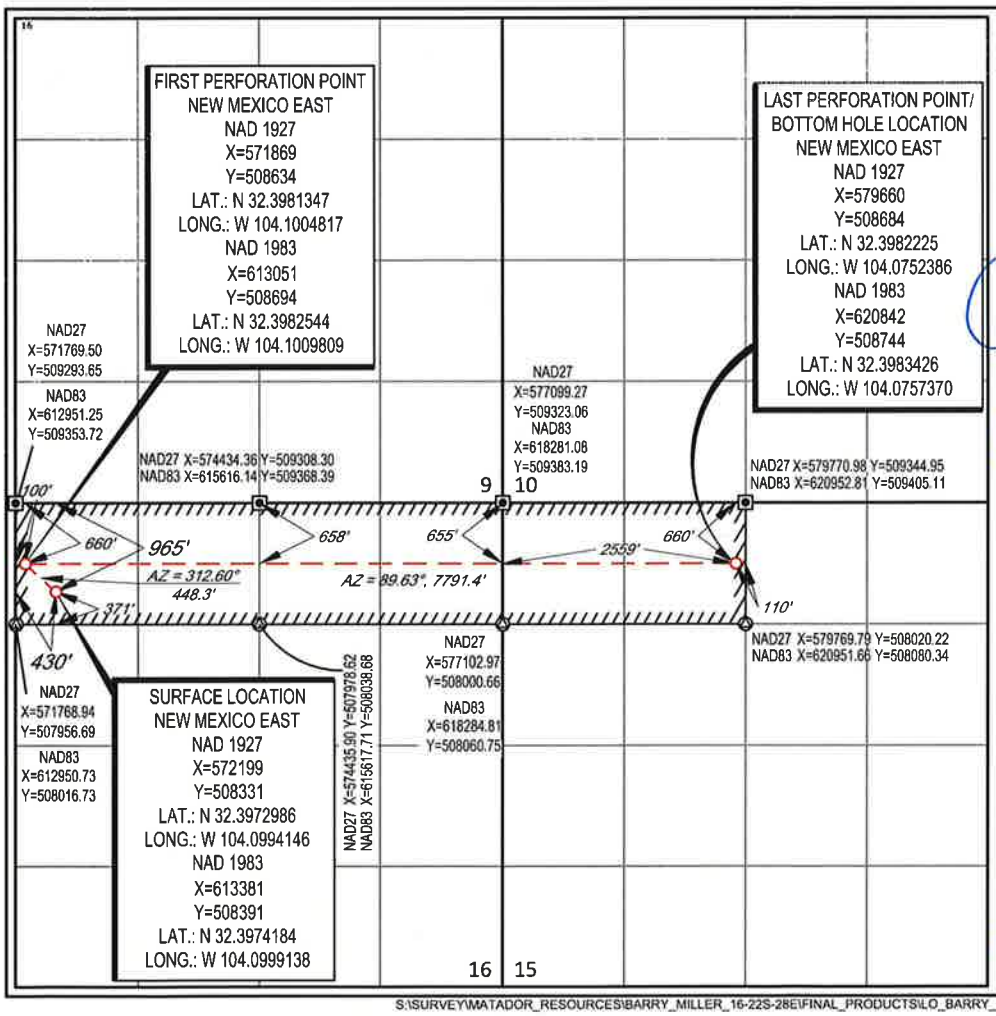
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	16	22-S	28-E	–	965'	NORTH	430'	WEST	EDDY

[11]Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	15	22-S	28-E	–	660'	NORTH	2559'	WEST	EDDY

[12]Dedicated Acres	[13]Joint or Infill	[14]Consolidation Code	[15]Order No.
240			

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



[17]OPERATOR CERTIFICATION

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

Signature 7/27/22 Date

Hanna Bollenbach
Printed Name

hanna.bollenbach@matadorresources.com
E-mail Address

[18]SURVEYOR CERTIFICATION

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

07/17/2020
Date of Survey
Signature and Seal of Professional Surveyor

MICHAEL B. BROWN
NEW MEXICO
18329
PROFESSIONAL SURVEYOR

Certificate Number

S:\SURVEY\MATADOR_RESOURCES\BARRY_MILLER_16-22S-28E\FINAL_PRODUCTS\LO_BARRY_MILLER_STATE_COM_121H_REV3.DWG 7/27/2022 9:26:16 AM adisabella

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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 322673

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
MATADOR PRODUCTION COMPANY [228937] One Lincoln Centre Dallas, TX 75240	30-015-49803
	Well: BARRY MILLER STATE COM #121H

OCD Reviewer	Condition
kpickford	Notify OCD 24 hours prior to casing & cement
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104
kpickford	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
kpickford	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
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing
kpickford	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

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: Matador Production Company **OGRID:** 228937 **Date:** 08/03/2022

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Barry Miller State Com 122H	TBD	D 16-22S-28E	965' FNL 460' FWL	1,400	2,600	1,400
Barry Miller State Com 121H	TBD	D 16-22S-28E	965' FNL 430' FWL	1,400	2,600	1,400
Michael Ryan State Com 123H	TBD	D 16-22S-28E	658' FNL 320'FWL	1,400	2,600	1,400
Michael Ryan Fed Com 124H	TBD	D 16-22S-28E	658' FNL 350'FWL	1,400	2,600	1,400

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

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

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Barry Miller State Com 122H	TBD	10/17/2022	10/30/2022	11/20/2022	12/15/2022	12/15/2022
Barry Miller State Com 121H	TBD	10/31/2022	11/13/2022	11/20/2022	12/15/2022	12/15/2022
Michael Ryan State Com 123H	TBD	10/17/2022	10/30/2022	11/20/2022	12/15/2022	12/15/2022
Michael Ryan Fed Com 124H	TBD	10/31/2022	11/13/2022	11/20/2022	12/15/2022	12/15/2022

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

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

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

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature: Omar Enriquez Digitally signed by Omar Enriquez DN: cn=Omar Enriquez, o, ou, email=oenriquez@matadorresources.com, c=US Date: 2022.08.03 14:52:39 -05'00'
Printed Name: Omar Enriquez
Title: Sr. Production Engineer
E-mail Address: oenriquez@matadorresources.com
Date: 08/03/2022
Phone: (972)-587-4638
OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

Addendum to Natural Gas Management Plan for Matador's

Barry Miller State Com 121H, 122H and Michael Ryan 123H and 124H

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 122H	1,400	2,600	1,400
Barry Miller State Com 121H	1,400	2,600	1,400
Michael Ryan State Com 123H	1,400	2,600	1,400
Michael Ryan Fed Com 124H	1,400	2,600	1,400

VII. Operation Practices

Although not a complete recitation of all our efforts to comply with a subsection A through F of 19.15.27.8 NMAC, a summary is as follows. During drilling, Matador will have a properly sized flare stack at least 100 feet from the nearest surface hole. 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

Matador Production Company

Rustler Breaks
Barry Miller
Barry Miller State Com #121H

Wellbore #1

Plan: State Plan #1

Standard Planning Report

27 July, 2022

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Barry Miller State Com #121H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3113.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3113.5usft
Site:	Barry Miller	**North Reference:**	Grid
Well:	Barry Miller State Com #121H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	State Plan #1		

Project Rustler Breaks,

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		Using geodetic scale factor

Site Barry Miller

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

Well Barry Miller State Com #121H

Well Position	**+N/-S**	-109.8 usft	**Northing:**	508,331.00 usft	**Latitude:**	32° 23' 50.277 N
	+E/-W	-0.2 usft	**Easting:**	572,199.00 usft	**Longitude:**	104° 5' 57.895 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,085.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	7/27/2022	6.66	60.07	47,462.59609979

Design State Plan #1

Audit Notes:

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

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

Plan Survey Tool Program **Date** 7/27/2022

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	15,575.4	State Plan #1 (Wellbore #1)	MWD	
				OWSG MWD - Standard	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,300.0	8.00	312.89	2,297.4	38.0	-40.9	1.00	1.00	0.00	312.89	
5,359.4	8.00	312.89	5,327.0	327.7	-352.8	0.00	0.00	0.00	0.00	
5,892.7	0.00	0.00	5,858.6	353.0	-380.0	1.50	-1.50	0.00	180.00	
7,402.1	0.00	0.00	7,368.0	353.0	-380.0	0.00	0.00	0.00	0.00	VP - Barry Miller Fe
8,284.1	88.20	93.90	7,940.7	315.3	173.6	10.00	10.00	0.00	93.90	
8,496.9	88.20	89.64	7,947.4	308.7	386.2	2.00	0.00	-2.00	-90.10	
15,575.4	88.20	89.64	8,170.0	353.0	7,461.1	0.00	0.00	0.00	0.00	BHL - Barry Miller F

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Barry Miller State Com #121H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3113.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3113.5usft
Site:	Barry Miller	**North Reference:**	Grid
Well:	Barry Miller State Com #121H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	State Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
140.0	0.00	0.00	140.0	0.0	0.0	0.0	0.00	0.00	0.00
Z (Rustler)									
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
429.0	0.00	0.00	429.0	0.0	0.0	0.0	0.00	0.00	0.00
Z (Salado)									
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
744.0	0.00	0.00	744.0	0.0	0.0	0.0	0.00	0.00	0.00
Z (Castile (T))									
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 1.00									
1,600.0	1.00	312.89	1,600.0	0.6	-0.6	-0.6	1.00	1.00	0.00
1,700.0	2.00	312.89	1,700.0	2.4	-2.6	-2.5	1.00	1.00	0.00
1,800.0	3.00	312.89	1,799.9	5.3	-5.8	-5.7	1.00	1.00	0.00
1,900.0	4.00	312.89	1,899.7	9.5	-10.2	-10.2	1.00	1.00	0.00
2,000.0	5.00	312.89	1,999.4	14.8	-16.0	-15.9	1.00	1.00	0.00
2,100.0	6.00	312.89	2,098.9	21.4	-23.0	-22.8	1.00	1.00	0.00
2,200.0	7.00	312.89	2,198.3	29.1	-31.3	-31.1	1.00	1.00	0.00
2,300.0	8.00	312.89	2,297.4	38.0	-40.9	-40.6	1.00	1.00	0.00
Start 3059.4 hold at 2300.0 MD									
2,400.0	8.00	312.89	2,396.4	47.4	-51.0	-50.7	0.00	0.00	0.00
2,497.5	8.00	312.89	2,493.0	56.7	-61.0	-60.6	0.00	0.00	0.00
Z (G30:CS14-CSB)									
2,500.0	8.00	312.89	2,495.5	56.9	-61.2	-60.8	0.00	0.00	0.00
2,568.9	8.00	312.89	2,563.7	63.4	-68.3	-67.8	0.00	0.00	0.00
Z (G26: Bell Cyn.)									
2,600.0	8.00	312.89	2,594.5	66.4	-71.4	-71.0	0.00	0.00	0.00
2,700.0	8.00	312.89	2,693.5	75.8	-81.6	-81.1	0.00	0.00	0.00
2,800.0	8.00	312.89	2,792.5	85.3	-91.8	-91.2	0.00	0.00	0.00
2,900.0	8.00	312.89	2,891.6	94.8	-102.0	-101.4	0.00	0.00	0.00
3,000.0	8.00	312.89	2,990.6	104.3	-112.2	-111.5	0.00	0.00	0.00
3,100.0	8.00	312.89	3,089.6	113.7	-122.4	-121.6	0.00	0.00	0.00
3,200.0	8.00	312.89	3,188.6	123.2	-132.6	-131.8	0.00	0.00	0.00
3,300.0	8.00	312.89	3,287.7	132.7	-142.8	-141.9	0.00	0.00	0.00
3,400.0	8.00	312.89	3,386.7	142.1	-153.0	-152.0	0.00	0.00	0.00
3,409.2	8.00	312.89	3,395.8	143.0	-154.0	-153.0	0.00	0.00	0.00
Z (G13: Cherry Cyn.)									
3,500.0	8.00	312.89	3,485.7	151.6	-163.2	-162.1	0.00	0.00	0.00
3,600.0	8.00	312.89	3,584.8	161.1	-173.4	-172.3	0.00	0.00	0.00
3,700.0	8.00	312.89	3,683.8	170.6	-183.6	-182.4	0.00	0.00	0.00
3,800.0	8.00	312.89	3,782.8	180.0	-193.8	-192.5	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Barry Miller State Com #121H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3113.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3113.5usft
Site:	Barry Miller	**North Reference:**	Grid
Well:	Barry Miller State Com #121H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	State Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,900.0	8.00	312.89	3,881.8	189.5	-204.0	-202.7	0.00	0.00	0.00
4,000.0	8.00	312.89	3,980.9	199.0	-214.2	-212.8	0.00	0.00	0.00
4,100.0	8.00	312.89	4,079.9	208.4	-224.4	-222.9	0.00	0.00	0.00
4,200.0	8.00	312.89	4,178.9	217.9	-234.6	-233.1	0.00	0.00	0.00
4,300.0	8.00	312.89	4,277.9	227.4	-244.8	-243.2	0.00	0.00	0.00
4,381.8	8.00	312.89	4,358.9	235.1	-253.1	-251.5	0.00	0.00	0.00
Start Drop -1.50									
4,400.0	8.00	312.89	4,377.0	236.9	-255.0	-253.3	0.00	0.00	0.00
4,500.0	8.00	312.89	4,476.0	246.3	-265.2	-263.5	0.00	0.00	0.00
4,600.0	8.00	312.89	4,575.0	255.8	-275.4	-273.6	0.00	0.00	0.00
4,605.8	8.00	312.89	4,580.8	256.4	-276.0	-274.2	0.00	0.00	0.00
Z (G7: Brushy Cyn.)									
4,700.0	8.00	312.89	4,674.0	265.3	-285.6	-283.7	0.00	0.00	0.00
4,800.0	8.00	312.89	4,773.1	274.8	-295.8	-293.8	0.00	0.00	0.00
4,875.9	8.00	312.89	4,848.2	281.9	-303.5	-301.5	0.00	0.00	0.00
Start Drop -1.50									
4,900.0	8.00	312.89	4,872.1	284.2	-306.0	-304.0	0.00	0.00	0.00
4,915.1	8.00	312.89	4,887.1	285.7	-307.5	-305.5	0.00	0.00	0.00
Start 2458.0 hold at 4915.1 MD									
5,000.0	8.00	312.89	4,971.1	293.7	-316.2	-314.1	0.00	0.00	0.00
5,100.0	8.00	312.89	5,070.2	303.2	-326.4	-324.2	0.00	0.00	0.00
5,200.0	8.00	312.89	5,169.2	312.6	-336.6	-334.4	0.00	0.00	0.00
5,300.0	8.00	312.89	5,268.2	322.1	-346.8	-344.5	0.00	0.00	0.00
5,359.4	8.00	312.89	5,327.0	327.7	-352.8	-350.5	0.00	0.00	0.00
Start Drop -1.50									
5,400.0	7.39	312.89	5,367.3	331.4	-356.8	-354.5	1.50	-1.50	0.00
5,409.2	7.25	312.89	5,376.4	332.2	-357.7	-355.3	1.50	-1.50	0.00
Start 1968.7 hold at 5409.2 MD									
5,500.0	5.89	312.89	5,466.6	339.3	-365.3	-362.9	1.50	-1.50	0.00
5,600.0	4.39	312.89	5,566.2	345.4	-371.8	-369.4	1.50	-1.50	0.00
5,700.0	2.89	312.89	5,666.0	349.7	-376.5	-374.0	1.50	-1.50	0.00
5,800.0	1.39	312.89	5,765.9	352.3	-379.2	-376.7	1.50	-1.50	0.00
5,892.7	0.00	0.00	5,858.6	353.0	-380.0	-377.6	1.50	-1.50	0.00
Start 1509.4 hold at 5892.7 MD									
5,900.0	0.00	0.00	5,865.9	353.0	-380.0	-377.6	0.00	0.00	0.00
5,989.4	0.00	0.00	5,955.3	353.0	-380.0	-377.6	0.00	0.00	0.00
Z (G4: BSGL (CS9))									
6,000.0	0.00	0.00	5,965.9	353.0	-380.0	-377.6	0.00	0.00	0.00
6,100.0	0.00	0.00	6,065.9	353.0	-380.0	-377.6	0.00	0.00	0.00
6,200.0	0.00	0.00	6,165.9	353.0	-380.0	-377.6	0.00	0.00	0.00
6,300.0	0.00	0.00	6,265.9	353.0	-380.0	-377.6	0.00	0.00	0.00
6,400.0	0.00	0.00	6,365.9	353.0	-380.0	-377.6	0.00	0.00	0.00
6,452.4	0.00	0.00	6,418.3	353.0	-380.0	-377.6	0.00	0.00	0.00
Z (L8.2: U. Avalon Shale)									
6,500.0	0.00	0.00	6,465.9	353.0	-380.0	-377.6	0.00	0.00	0.00
6,570.4	0.00	0.00	6,536.3	353.0	-380.0	-377.6	0.00	0.00	0.00
Z (L6.3: Avalon Carb)									
6,600.0	0.00	0.00	6,565.9	353.0	-380.0	-377.6	0.00	0.00	0.00
6,614.4	0.00	0.00	6,580.3	353.0	-380.0	-377.6	0.00	0.00	0.00
Z (L6.2: L. Avalon Shale)									
6,700.0	0.00	0.00	6,665.9	353.0	-380.0	-377.6	0.00	0.00	0.00
6,704.4	0.00	0.00	6,670.3	353.0	-380.0	-377.6	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Barry Miller State Com #121H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3113.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3113.5usft
Site:	Barry Miller	**North Reference:**	Grid
Well:	Barry Miller State Com #121H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	State Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Z (L5.3: FBSC)									
6,800.0	0.00	0.00	6,765.9	353.0	-380.0	-377.6	0.00	0.00	0.00
6,900.0	0.00	0.00	6,865.9	353.0	-380.0	-377.6	0.00	0.00	0.00
7,000.0	0.00	0.00	6,965.9	353.0	-380.0	-377.6	0.00	0.00	0.00
7,010.4	0.00	0.00	6,976.3	353.0	-380.0	-377.6	0.00	0.00	0.00
Z (L5.1: FBSG)									
7,070.4	0.00	0.00	7,036.3	353.0	-380.0	-377.6	0.00	0.00	0.00
Z (M. FBSG)									
7,100.0	0.00	0.00	7,065.9	353.0	-380.0	-377.6	0.00	0.00	0.00
7,200.0	0.00	0.00	7,165.9	353.0	-380.0	-377.6	0.00	0.00	0.00
7,219.4	0.00	0.00	7,185.3	353.0	-380.0	-377.6	0.00	0.00	0.00
Z (L. FBSG)									
7,278.4	0.00	0.00	7,244.3	353.0	-380.0	-377.6	0.00	0.00	0.00
Z (L4.3: SBSC)									
7,300.0	0.00	0.00	7,265.9	353.0	-380.0	-377.6	0.00	0.00	0.00
7,373.1	0.00	0.00	7,339.0	353.0	-380.0	-377.6	0.00	0.00	0.00
Start Build 10.00									
7,377.9	0.00	0.00	7,343.8	353.0	-380.0	-377.6	0.00	0.00	0.00
Start Build 10.00									
7,402.1	0.00	0.00	7,368.0	353.0	-380.0	-377.6	0.00	0.00	0.00
Start Build 10.00 - VP - Barry Miller Fed Com #121H									
7,450.0	4.79	93.90	7,415.8	352.9	-378.0	-375.6	10.00	10.00	0.00
7,500.0	9.79	93.90	7,465.4	352.5	-371.7	-369.2	10.00	10.00	0.00
7,550.0	14.79	93.90	7,514.3	351.7	-361.1	-358.6	10.00	10.00	0.00
7,600.0	19.79	93.90	7,562.0	350.7	-346.3	-343.8	10.00	10.00	0.00
7,650.0	24.79	93.90	7,608.2	349.4	-327.4	-324.9	10.00	10.00	0.00
7,700.0	29.79	93.90	7,652.7	347.9	-304.5	-302.1	10.00	10.00	0.00
7,722.8	32.07	93.90	7,672.2	347.1	-292.8	-290.4	10.00	10.00	0.00
Z (L4.1: SBSG)									
7,750.0	34.79	93.90	7,694.9	346.1	-277.9	-275.4	10.00	10.00	0.00
7,800.0	39.79	93.90	7,734.7	344.0	-247.6	-245.2	10.00	10.00	0.00
7,850.0	44.79	93.90	7,771.7	341.7	-214.1	-211.7	10.00	10.00	0.00
7,868.6	46.65	93.90	7,784.6	340.8	-200.8	-198.4	10.00	10.00	0.00
FTP - Barry Miller Fed Com #121H									
7,900.0	49.79	93.90	7,805.6	339.2	-177.4	-175.1	10.00	10.00	0.00
7,950.0	54.79	93.90	7,836.1	336.5	-138.0	-135.6	10.00	10.00	0.00
7,973.1	57.10	93.90	7,849.1	335.2	-118.9	-116.6	10.00	10.00	0.00
Z (L4.1: SBSG B Carb)									
8,000.0	59.79	93.90	7,863.1	333.7	-96.0	-93.7	10.00	10.00	0.00
8,050.0	64.79	93.90	7,886.4	330.7	-51.9	-49.6	10.00	10.00	0.00
8,100.0	69.79	93.90	7,905.7	327.5	-5.9	-3.6	10.00	10.00	0.00
8,150.0	74.79	93.90	7,920.9	324.3	41.6	43.9	10.00	10.00	0.00
8,194.9	79.28	93.90	7,931.0	321.3	85.3	87.5	10.00	10.00	0.00
Start DLS 2.00 TFO -34.17									
8,200.0	79.79	93.90	7,931.9	321.0	90.3	92.5	10.00	10.00	0.00
8,250.0	84.79	93.90	7,938.6	317.6	139.7	141.9	10.00	10.00	0.00
8,253.8	85.17	93.90	7,938.9	317.3	143.4	145.7	10.00	10.00	0.00
Start 9966.1 hold at 8253.8 MD									
8,284.1	88.20	93.90	7,940.7	315.3	173.6	175.8	10.00	10.00	0.00
Start DLS 2.00 TFO -90.10									
8,300.0	88.20	93.58	7,941.2	314.3	189.5	191.7	2.00	0.00	-2.00
8,400.0	88.20	91.58	7,944.3	309.8	289.3	291.5	2.00	0.00	-2.00
8,496.9	88.20	89.64	7,947.4	308.7	386.2	388.4	2.00	0.00	-2.00

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Barry Miller State Com #121H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3113.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3113.5usft
Site:	Barry Miller	**North Reference:**	Grid
Well:	Barry Miller State Com #121H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	State Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Start 7078.5 hold at 8496.9 MD									
8,500.0	88.20	89.64	7,947.5	308.7	389.3	391.4	0.00	0.00	0.00
8,578.7	88.20	89.64	7,949.9	309.2	467.9	470.1	0.00	0.00	0.00
Start 9698.6 hold at 8578.7 MD									
8,600.0	88.20	89.64	7,950.6	309.4	489.2	491.4	0.00	0.00	0.00
8,700.0	88.20	89.64	7,953.8	310.0	589.2	591.3	0.00	0.00	0.00
8,800.0	88.20	89.64	7,956.9	310.6	689.1	691.3	0.00	0.00	0.00
8,900.0	88.20	89.64	7,960.0	311.2	789.1	791.2	0.00	0.00	0.00
9,000.0	88.20	89.64	7,963.2	311.9	889.0	891.2	0.00	0.00	0.00
9,100.0	88.20	89.64	7,966.3	312.5	989.0	991.1	0.00	0.00	0.00
9,200.0	88.20	89.64	7,969.5	313.1	1,088.9	1,091.1	0.00	0.00	0.00
9,300.0	88.20	89.64	7,972.6	313.7	1,188.9	1,191.0	0.00	0.00	0.00
9,400.0	88.20	89.64	7,975.8	314.4	1,288.8	1,291.0	0.00	0.00	0.00
9,500.0	88.20	89.64	7,978.9	315.0	1,388.8	1,390.9	0.00	0.00	0.00
9,600.0	88.20	89.64	7,982.1	315.6	1,488.7	1,490.9	0.00	0.00	0.00
9,700.0	88.20	89.64	7,985.2	316.2	1,588.7	1,590.8	0.00	0.00	0.00
9,800.0	88.20	89.64	7,988.4	316.9	1,688.6	1,690.8	0.00	0.00	0.00
9,900.0	88.20	89.64	7,991.5	317.5	1,788.6	1,790.7	0.00	0.00	0.00
10,000.0	88.20	89.64	7,994.6	318.1	1,888.5	1,890.7	0.00	0.00	0.00
10,100.0	88.20	89.64	7,997.8	318.7	1,988.5	1,990.6	0.00	0.00	0.00
10,200.0	88.20	89.64	8,000.9	319.4	2,088.4	2,090.6	0.00	0.00	0.00
10,300.0	88.20	89.64	8,004.1	320.0	2,188.4	2,190.5	0.00	0.00	0.00
10,400.0	88.20	89.64	8,007.2	320.6	2,288.3	2,290.5	0.00	0.00	0.00
10,500.0	88.20	89.64	8,010.4	321.3	2,388.2	2,390.4	0.00	0.00	0.00
10,600.0	88.20	89.64	8,013.5	321.9	2,488.2	2,490.4	0.00	0.00	0.00
10,700.0	88.20	89.64	8,016.7	322.5	2,588.1	2,590.3	0.00	0.00	0.00
10,800.0	88.20	89.64	8,019.8	323.1	2,688.1	2,690.3	0.00	0.00	0.00
10,900.0	88.20	89.64	8,022.9	323.8	2,788.0	2,790.2	0.00	0.00	0.00
11,000.0	88.20	89.64	8,026.1	324.4	2,888.0	2,890.2	0.00	0.00	0.00
11,100.0	88.20	89.64	8,029.2	325.0	2,987.9	2,990.1	0.00	0.00	0.00
11,200.0	88.20	89.64	8,032.4	325.6	3,087.9	3,090.1	0.00	0.00	0.00
11,300.0	88.20	89.64	8,035.5	326.3	3,187.8	3,190.0	0.00	0.00	0.00
11,400.0	88.20	89.64	8,038.7	326.9	3,287.8	3,290.0	0.00	0.00	0.00
11,500.0	88.20	89.64	8,041.8	327.5	3,387.7	3,389.9	0.00	0.00	0.00
11,600.0	88.20	89.64	8,045.0	328.1	3,487.7	3,489.9	0.00	0.00	0.00
11,700.0	88.20	89.64	8,048.1	328.8	3,587.6	3,589.8	0.00	0.00	0.00
11,800.0	88.20	89.64	8,051.3	329.4	3,687.6	3,689.8	0.00	0.00	0.00
11,900.0	88.20	89.64	8,054.4	330.0	3,787.5	3,789.7	0.00	0.00	0.00
12,000.0	88.20	89.64	8,057.5	330.6	3,887.5	3,889.7	0.00	0.00	0.00
12,100.0	88.20	89.64	8,060.7	331.3	3,987.4	3,989.6	0.00	0.00	0.00
12,200.0	88.20	89.64	8,063.8	331.9	4,087.4	4,089.6	0.00	0.00	0.00
12,300.0	88.20	89.64	8,067.0	332.5	4,187.3	4,189.5	0.00	0.00	0.00
12,400.0	88.20	89.64	8,070.1	333.1	4,287.3	4,289.5	0.00	0.00	0.00
12,500.0	88.20	89.64	8,073.3	333.8	4,387.2	4,389.4	0.00	0.00	0.00
12,600.0	88.20	89.64	8,076.4	334.4	4,487.2	4,489.4	0.00	0.00	0.00
12,700.0	88.20	89.64	8,079.6	335.0	4,587.1	4,589.3	0.00	0.00	0.00
12,800.0	88.20	89.64	8,082.7	335.6	4,687.1	4,689.3	0.00	0.00	0.00
12,900.0	88.20	89.64	8,085.9	336.3	4,787.0	4,789.2	0.00	0.00	0.00
13,000.0	88.20	89.64	8,089.0	336.9	4,887.0	4,889.2	0.00	0.00	0.00
13,100.0	88.20	89.64	8,092.1	337.5	4,986.9	4,989.1	0.00	0.00	0.00
13,200.0	88.20	89.64	8,095.3	338.1	5,086.9	5,089.1	0.00	0.00	0.00
13,300.0	88.20	89.64	8,098.4	338.8	5,186.8	5,189.0	0.00	0.00	0.00
13,400.0	88.20	89.64	8,101.6	339.4	5,286.8	5,289.0	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Barry Miller State Com #121H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3113.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3113.5usft
Site:	Barry Miller	**North Reference:**	Grid
Well:	Barry Miller State Com #121H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	State Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,500.0	88.20	89.64	8,104.7	340.0	5,386.7	5,388.9	0.00	0.00	0.00
13,600.0	88.20	89.64	8,107.9	340.6	5,486.7	5,488.9	0.00	0.00	0.00
13,700.0	88.20	89.64	8,111.0	341.3	5,586.6	5,588.8	0.00	0.00	0.00
13,800.0	88.20	89.64	8,114.2	341.9	5,686.6	5,688.8	0.00	0.00	0.00
13,900.0	88.20	89.64	8,117.3	342.5	5,786.5	5,788.7	0.00	0.00	0.00
14,000.0	88.20	89.64	8,120.4	343.1	5,886.4	5,888.7	0.00	0.00	0.00
14,100.0	88.20	89.64	8,123.6	343.8	5,986.4	5,988.7	0.00	0.00	0.00
14,200.0	88.20	89.64	8,126.7	344.4	6,086.3	6,088.6	0.00	0.00	0.00
14,300.0	88.20	89.64	8,129.9	345.0	6,186.3	6,188.6	0.00	0.00	0.00
14,400.0	88.20	89.64	8,133.0	345.6	6,286.2	6,288.5	0.00	0.00	0.00
14,500.0	88.20	89.64	8,136.2	346.3	6,386.2	6,388.5	0.00	0.00	0.00
14,600.0	88.20	89.64	8,139.3	346.9	6,486.1	6,488.4	0.00	0.00	0.00
14,700.0	88.20	89.64	8,142.5	347.5	6,586.1	6,588.4	0.00	0.00	0.00
14,800.0	88.20	89.64	8,145.6	348.2	6,686.0	6,688.3	0.00	0.00	0.00
14,900.0	88.20	89.64	8,148.8	348.8	6,786.0	6,788.3	0.00	0.00	0.00
15,000.0	88.20	89.64	8,151.9	349.4	6,885.9	6,888.2	0.00	0.00	0.00
15,100.0	88.20	89.64	8,155.0	350.0	6,985.9	6,988.2	0.00	0.00	0.00
15,200.0	88.20	89.64	8,158.2	350.7	7,085.8	7,088.1	0.00	0.00	0.00
15,300.0	88.20	89.64	8,161.3	351.3	7,185.8	7,188.1	0.00	0.00	0.00
15,400.0	88.20	89.64	8,164.5	351.9	7,285.7	7,288.0	0.00	0.00	0.00
15,500.0	88.20	89.64	8,167.6	352.5	7,385.7	7,388.0	0.00	0.00	0.00
15,575.4	88.20	89.64	8,170.0	353.0	7,461.1	7,463.3	0.00	0.00	0.00
TD at 15575.4 - BHL - Barry Miller Fed Com #121H									

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 - plan hits target center - Point	0.00	0.00	7,368.0	353.0	-380.0	508,684.00	571,819.00	32° 23' 53.779 N	104° 6' 2.319 W
FTP - Barry Miller Fed - plan misses target center by 192.0usft at 7868.6usft MD (7784.6 TVD, 340.8 N, -200.8 E) - Point	0.00	0.00	7,921.5	303.0	-330.0	508,634.00	571,869.00	32° 23' 53.283 N	104° 6' 1.737 W
BHL - Barry Miller Fed - plan hits target center - Point	0.00	0.00	8,170.0	353.0	7,461.1	508,684.00	579,660.00	32° 23' 53.601 N	104° 4' 30.864 W

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Barry Miller State Com #121H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3113.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3113.5usft
Site:	Barry Miller	**North Reference:**	Grid
Well:	Barry Miller State Com #121H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	State Plan #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
140.0	140.0	Z (Rustler)		1.93	89.60
429.0	429.0	Z (Salado)		1.93	89.60
744.0	744.0	Z (Castile (T))		1.93	89.60
2,497.5	2,493.0	Z (G30:CS14-CSB)		1.93	89.60
2,568.9	2,563.7	Z (G26: Bell Cyn.)		1.93	89.60
3,409.2	3,395.8	Z (G13: Cherry Cyn.)		1.93	89.60
4,605.8	4,580.8	Z (G7: Brushy Cyn.)		1.93	89.60
5,989.4	5,955.3	Z (G4: BSGL (CS9))		1.93	89.60
6,452.4	6,418.3	Z (L8.2: U. Avalon Shale)		1.93	89.60
6,570.4	6,536.3	Z (L6.3: Avalon Carb)		1.93	89.60
6,614.4	6,580.3	Z (L6.2: L. Avalon Shale)		1.93	89.60
6,704.4	6,670.3	Z (L5.3: FBSC)		1.93	89.60
7,010.4	6,976.3	Z (L5.1: FBSG)		1.93	89.60
7,070.4	7,036.3	Z (M. FBSG)		1.93	89.60
7,219.4	7,185.3	Z (L. FBSG)		1.93	89.60
7,278.4	7,244.3	Z (L4.3: SBSC)		1.93	89.60
7,722.8	7,672.2	Z (L4.1: SBSG)		1.93	89.60
7,973.1	7,849.1	Z (L4.1: SBSG B Carb)		1.93	89.60

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,500.0	1,500.0	0.0	0.0	Start Build 1.00
2,300.0	2,297.4	38.0	-40.9	Start 3059.4 hold at 2300.0 MD
4,381.8	4,358.9	235.1	-253.1	Start Drop -1.50
4,875.9	4,848.2	281.9	-303.5	Start Drop -1.50
4,915.1	4,887.1	285.7	-307.5	Start 2458.0 hold at 4915.1 MD
5,359.4	5,327.0	327.7	-352.8	Start Drop -1.50
5,409.2	5,376.4	332.2	-357.7	Start 1968.7 hold at 5409.2 MD
5,892.7	5,858.6	353.0	-380.0	Start 1509.4 hold at 5892.7 MD
7,373.1	7,339.0	353.0	-380.0	Start Build 10.00
7,377.9	7,343.8	353.0	-380.0	Start Build 10.00
7,402.1	7,368.0	353.0	-380.0	Start Build 10.00
8,194.9	7,931.0	321.3	85.3	Start DLS 2.00 TFO -34.17
8,253.8	7,938.9	317.3	143.4	Start 9966.1 hold at 8253.8 MD
8,284.1	7,940.7	315.3	173.6	Start DLS 2.00 TFO -90.10
8,496.9	7,947.4	308.7	386.2	Start 7078.5 hold at 8496.9 MD
8,578.7	7,949.9	309.2	467.9	Start 9698.6 hold at 8578.7 MD
15,575.4	8,170.0	353.0	7,461.1	TD at 15575.4
18,219.8				TD at 18219.8
18,277.3				TD at 18277.3