

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 276969

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

1. Operator Name and Address MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240		2. OGRID Number 228937
		3. API Number 30-015-46590
4. Property Code 326902	5. Property Name HAZEL INEZ	6. Well No. 204H

7. Surface Location

UL - Lot K	Section 29	Township 22S	Range 27E	Lot Idn	Feet From 1609	N/S Line S	Feet From 2537	E/W Line W	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot M	Section 30	Township 22S	Range 27E	Lot Idn M	Feet From 716	N/S Line S	Feet From 240	E/W Line W	County Eddy
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9. Pool Information

PURPLE SAGE;WOLFCAMP (GAS)	98220
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Additional Well Information

11. Work Type New Well	12. Well Type GAS	13. Cable/Rotary	14. Lease Type Private	15. Ground Level Elevation 3155
16. Multiple N	17. Proposed Depth 16600	18. Formation Wolfcamp	19. Contractor	20. Spud Date 3/2/2020
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	240	175	0
Int1	12.25	9.625	40	2200	600	0
Int2	8.75	7.625	29.7	9200	600	2000
Prod	6.75	5.5	20	16508	628	8700

Casing/Cement Program: Additional Comments

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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.

OIL CONSERVATION DIVISION

Signature:

Printed Name: Electronically filed by Ava Monroe	Approved By: Raymond Podany
Title: Sr. Regulatory Analyst	Title: Geologist
Email Address: amonroe@matadorresources.com	Approved Date: 1/15/2020 Expiration Date: 1/15/2022
Date: 1/9/2020 Phone: 972-371-5218	Conditions of Approval Attached

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

FORM C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP (GAS)
⁴ Property Code	⁵ Property Name HAZEL INEZ	⁶ Well Number 204H
⁷ OGRID No. 228937	⁸ Operator Name MATADOR PRODUCTION COMPANY	⁹ Elevation 3155'

¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	29	22-S	27-E	-	1609'	SOUTH	2537'	WEST	EDDY

¹¹Bottom 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
M	30	22-S	27-E	-	716'	SOUTH	240'	WEST	EDDY

¹² Dedicated Acres 476.60	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

¹⁶ LAST PERF. POINT NEW MEXICO EAST NAD 1983 X=571212 Y=493874 LAT.: N 32.3576932 LONG.: W 104.2365818 NAD 1927 X=530031 Y=493815 LAT.: N 32.3575750 LONG.: W 104.2360791 NAD 83 X=570880.99 Y=495799.46 NAD 27 X=529699.44 Y=495740.21 NAD 83 X=576274.72 Y=495989.17 NAD 27 X=535093.11 Y=495929.85 NAD 83 X=570882.81 Y=493145.35 NAD 27 X=529701.21 Y=493066.17 NAD 83 X=576311.49 Y=493342.89 NAD 27 X=535129.82 Y=493283.64 NAD 83 X=578941.33 Y=493340.26 NAD 27 X=537799.63 Y=493285.98 240' 330' 717' 716' AZ = 268.55° 90.0° AZ = 268.55°, 7400.4° 660' BOTTOM HOLE LOCATION NEW MEXICO EAST NAD 1983 X=571122 Y=493872 LAT.: N 32.3576871 LONG.: W 104.2368733 NAD 1927 X=529941 Y=493813 LAT.: N 32.3575690 LONG.: W 104.2363706	30 29 SURFACE LOCATION NEW MEXICO EAST NAD 1983 X=578826 Y=494958 LAT.: N 32.3606522 LONG.: W 104.2119201 NAD 1927 X=537644 Y=494899 LAT.: N 32.3605337 LONG.: W 104.2114182 1044' 2537' AZ = 193.55° 922.7° 112° 2308' 713' 330° 1609' FIRST PERF. POINT NEW MEXICO EAST NAD 1983 X=578610 Y=494061 LAT.: N 32.3581871 LONG.: W 104.2126234 NAD 1927 X=537428 Y=494002 LAT.: N 32.3580686 LONG.: W 104.2121216	¹⁷OPERATOR 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. <i>Robert Helbing</i> 1/7/20 Signature Date Robert Helbing Printed Name rhelbing@matadorresources.com E-mail Address ¹⁸SURVEYOR 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. 07/29/2019 Date of Survey Signature and Seal of Professional Surveyor <i>ANGEL M. BAEZA</i> ANGEL M. BAEZA NEW MEXICO PROFESSIONAL SURVEYOR 28416 Certificate Number
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Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

GAS CAPTURE PLAN

Date: 1/15/2020

☒ Original

Operator & OGRID No.: [228937] MATADOR PRODUCTION COMPANY

☐ Amended - Reason for
Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
HAZEL INEZ #204H	30-015-46590	K-29-22S-27E	1609S 2537W	3000	Flared	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to LONGWOOD RB PIPELINE, LLC and will be connected to LONGWOOD RB PIPELINE, LLC High Pressure gathering system located in Eddy County, New Mexico. It will require 21120' of pipeline to connect the facility to High Pressure gathering system. MATADOR PRODUCTION COMPANY provides (periodically) to LONGWOOD RB PIPELINE, LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, MATADOR PRODUCTION COMPANY and LONGWOOD RB PIPELINE, LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at LONGWOOD RB PIPELINE, LLC Processing Plant located in Sec. 31, Twn. 23S, Rng. 28E, Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on LONGWOOD RB PIPELINE, LLC system at that time. Based on current information, it is MATADOR PRODUCTION COMPANY's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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

Form APD Comments

Permit 276969

PERMIT COMMENTS

Operator Name and Address: MATADOR PRODUCTION COMPANY [228937] One Lincoln Centre Dallas, TX 75240		API Number: 30-015-46590
		Well: HAZEL INEZ #204H

Created By	Comment	Comment Date
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Form APD Conditions

Permit 276969

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:		API Number:
MATADOR PRODUCTION COMPANY [228937]		30-015-46590
One Lincoln Centre		Well:
Dallas, TX 75240		HAZEL INEZ #204H

OCD Reviewer	Condition
rpodany	Will require a directional survey with the C-104
rpodany	Cement is required to circulate on both surface and intermediate1 strings of casing



Matador Production Company

Rustler Breaks

Hazel Inez

Hazel Inez #204H

Wellbore #1

Plan: NMOCD Plan #1

Standard Planning Report

09 January, 2020



Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Hazel Inez #204H
Company:	Matador Production Company	TVD Reference:	KB @ 3183.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3183.5usft
Site:	Hazel Inez	North Reference:	Grid
Well:	Hazel Inez #204H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	NMOCD 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	Hazel Inez				
Site Position:		Northing:	494,928.58 usft	Latitude:	32° 21' 38.215 N
From:	Lat/Long	Easting:	537,614.11 usft	Longitude:	104° 12' 41.459 W
Position Uncertainty:		Slot Radius:	13-3/16 "	Grid Convergence:	0.07

Well	Hazel Inez #204H					
Well Position	+N/-S	-29.6 usft	Northing:	494,898.97 usft	Latitude:	32° 21' 37.921 N
	+E/-W	30.3 usft	Easting:	537,644.43 usft	Longitude:	104° 12' 41.106 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,155.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	8.05	60.25	48,804.75632773

Design	NMOCD 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	268.55	

Plan Survey Tool Program	Date	1/9/2020			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	16,508.5	NMOCD 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	
2,331.2	8.31	175.95	2,328.3	-60.0	4.3	1.00	1.00	0.00	175.95	
7,857.8	8.31	175.95	7,796.8	-857.0	60.7	0.00	0.00	0.00	0.00	
8,411.9	0.00	0.00	8,349.0	-897.0	63.6	1.50	-1.50	0.00	180.00	VP - Hazel Inez #204H
9,311.9	90.00	268.60	8,922.0	-911.0	-509.2	10.00	10.00	-10.16	268.60	
16,508.5	90.00	268.60	8,922.0	-1,086.4	-7,703.6	0.00	0.00	0.00	0.00	BHL - Hazel Inez #204H



Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Hazel Inez #204H
Company:	Matador Production Company	TVD Reference:	KB @ 3183.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3183.5usft
Site:	Hazel Inez	North Reference:	Grid
Well:	Hazel Inez #204H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	NMOCD 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
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
212.3	0.00	0.00	212.3	0.0	0.0	0.0	0.00	0.00	0.00
Rustler (T. ANYDRITE)									
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
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
672.3	0.00	0.00	672.3	0.0	0.0	0.0	0.00	0.00	0.00
Castile (T)									
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
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	175.95	1,600.0	-0.9	0.1	0.0	1.00	1.00	0.00
1,700.0	2.00	175.95	1,700.0	-3.5	0.2	-0.2	1.00	1.00	0.00
1,800.0	3.00	175.95	1,799.9	-7.8	0.6	-0.4	1.00	1.00	0.00
1,898.4	3.98	175.95	1,898.1	-13.8	1.0	-0.6	1.00	1.00	0.00
G30:CS14-CSB (BASE SALT)									
1,900.0	4.00	175.95	1,899.7	-13.9	1.0	-0.6	1.00	1.00	0.00
2,000.0	5.00	175.95	1,999.4	-21.7	1.5	-1.0	1.00	1.00	0.00
2,065.6	5.66	175.95	2,064.7	-27.8	2.0	-1.3	1.00	1.00	0.00
G26: Bell Cyn. (T. DELAWARE SANDS)									
2,100.0	6.00	175.95	2,098.9	-31.3	2.2	-1.4	1.00	1.00	0.00
2,200.0	7.00	175.95	2,198.3	-42.6	3.0	-1.9	1.00	1.00	0.00
2,300.0	8.00	175.95	2,297.4	-55.6	3.9	-2.5	1.00	1.00	0.00
2,331.2	8.31	175.95	2,328.3	-60.0	4.3	-2.7	1.00	1.00	0.00
2,400.0	8.31	175.95	2,396.4	-70.0	5.0	-3.2	0.00	0.00	0.00
2,500.0	8.31	175.95	2,495.3	-84.4	6.0	-3.8	0.00	0.00	0.00
2,600.0	8.31	175.95	2,594.3	-98.8	7.0	-4.5	0.00	0.00	0.00
2,684.6	8.31	175.95	2,678.0	-111.0	7.9	-5.1	0.00	0.00	0.00
Start 4995.1 hold at 2684.6 MD									
2,700.0	8.31	175.95	2,693.2	-113.2	8.0	-5.2	0.00	0.00	0.00
2,718.6	8.31	175.95	2,711.6	-115.9	8.2	-5.3	0.00	0.00	0.00
G13: Cherry Cyn.									
2,800.0	8.31	175.95	2,792.2	-127.6	9.0	-5.8	0.00	0.00	0.00
2,900.0	8.31	175.95	2,891.1	-142.1	10.1	-6.5	0.00	0.00	0.00
3,000.0	8.31	175.95	2,990.1	-156.5	11.1	-7.1	0.00	0.00	0.00
3,100.0	8.31	175.95	3,089.0	-170.9	12.1	-7.8	0.00	0.00	0.00
3,200.0	8.31	175.95	3,188.0	-185.3	13.1	-8.4	0.00	0.00	0.00
3,300.0	8.31	175.95	3,286.9	-199.7	14.2	-9.1	0.00	0.00	0.00
3,400.0	8.31	175.95	3,385.9	-214.2	15.2	-9.8	0.00	0.00	0.00
3,500.0	8.31	175.95	3,484.8	-228.6	16.2	-10.4	0.00	0.00	0.00
3,600.0	8.31	175.95	3,583.8	-243.0	17.2	-11.1	0.00	0.00	0.00
3,700.0	8.31	175.95	3,682.7	-257.4	18.2	-11.7	0.00	0.00	0.00
3,800.0	8.31	175.95	3,781.7	-271.9	19.3	-12.4	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Hazel Inez #204H
Company:	Matador Production Company	TVD Reference:	KB @ 3183.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3183.5usft
Site:	Hazel Inez	North Reference:	Grid
Well:	Hazel Inez #204H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	NMOCD 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)
3,859.6	8.31	175.95	3,840.6	-280.4	19.9	-12.8	0.00	0.00	0.00
G7: Brushy Cyn.									
3,900.0	8.31	175.95	3,880.6	-286.3	20.3	-13.0	0.00	0.00	0.00
4,000.0	8.31	175.95	3,979.6	-300.7	21.3	-13.7	0.00	0.00	0.00
4,100.0	8.31	175.95	4,078.5	-315.1	22.3	-14.4	0.00	0.00	0.00
4,200.0	8.31	175.95	4,177.5	-329.5	23.4	-15.0	0.00	0.00	0.00
4,300.0	8.31	175.95	4,276.4	-344.0	24.4	-15.7	0.00	0.00	0.00
4,400.0	8.31	175.95	4,375.4	-358.4	25.4	-16.3	0.00	0.00	0.00
4,500.0	8.31	175.95	4,474.3	-372.8	26.4	-17.0	0.00	0.00	0.00
4,600.0	8.31	175.95	4,573.3	-387.2	27.4	-17.6	0.00	0.00	0.00
4,700.0	8.31	175.95	4,672.2	-401.6	28.5	-18.3	0.00	0.00	0.00
4,800.0	8.31	175.95	4,771.2	-416.1	29.5	-18.9	0.00	0.00	0.00
4,900.0	8.31	175.95	4,870.1	-430.5	30.5	-19.6	0.00	0.00	0.00
5,000.0	8.31	175.95	4,969.1	-444.9	31.5	-20.3	0.00	0.00	0.00
5,100.0	8.31	175.95	5,068.0	-459.3	32.6	-20.9	0.00	0.00	0.00
5,200.0	8.31	175.95	5,166.9	-473.7	33.6	-21.6	0.00	0.00	0.00
5,300.0	8.31	175.95	5,265.9	-488.2	34.6	-22.2	0.00	0.00	0.00
5,400.0	8.31	175.95	5,364.8	-502.6	35.6	-22.9	0.00	0.00	0.00
5,414.5	8.31	175.95	5,379.2	-504.7	35.8	-23.0	0.00	0.00	0.00
G4: BSG (CS9) (T. Bonesprings)									
5,500.0	8.31	175.95	5,463.8	-517.0	36.6	-23.5	0.00	0.00	0.00
5,600.0	8.31	175.95	5,562.7	-531.4	37.7	-24.2	0.00	0.00	0.00
5,700.0	8.31	175.95	5,661.7	-545.8	38.7	-24.9	0.00	0.00	0.00
5,705.8	8.31	175.95	5,667.4	-546.7	38.7	-24.9	0.00	0.00	0.00
L8.2: U. Avalon Shale									
5,798.9	8.31	175.95	5,759.5	-560.1	39.7	-25.5	0.00	0.00	0.00
L6.3: Avalon Carb									
5,800.0	8.31	175.95	5,760.6	-560.3	39.7	-25.5	0.00	0.00	0.00
5,900.0	8.31	175.95	5,859.6	-574.7	40.7	-26.2	0.00	0.00	0.00
6,000.0	8.31	175.95	5,958.5	-589.1	41.8	-26.8	0.00	0.00	0.00
6,029.8	8.31	175.95	5,988.1	-593.4	42.1	-27.0	0.00	0.00	0.00
L6.2: L. Avalon Shale									
6,068.8	8.31	175.95	6,026.6	-599.0	42.5	-27.3	0.00	0.00	0.00
L5.3: FBSC									
6,100.0	8.31	175.95	6,057.5	-603.5	42.8	-27.5	0.00	0.00	0.00
6,200.0	8.31	175.95	6,156.4	-618.0	43.8	-28.1	0.00	0.00	0.00
6,300.0	8.31	175.95	6,255.4	-632.4	44.8	-28.8	0.00	0.00	0.00
6,400.0	8.31	175.95	6,354.3	-646.8	45.8	-29.5	0.00	0.00	0.00
6,416.0	8.31	175.95	6,370.1	-649.1	46.0	-29.6	0.00	0.00	0.00
L5.1: FBSC									
6,500.0	8.31	175.95	6,453.3	-661.2	46.9	-30.1	0.00	0.00	0.00
6,600.0	8.31	175.95	6,552.2	-675.6	47.9	-30.8	0.00	0.00	0.00
6,674.4	8.31	175.95	6,625.9	-686.4	48.6	-31.3	0.00	0.00	0.00
L4.3: SBSC									
6,700.0	8.31	175.95	6,651.2	-690.1	48.9	-31.4	0.00	0.00	0.00
6,800.0	8.31	175.95	6,750.1	-704.5	49.9	-32.1	0.00	0.00	0.00
6,900.0	8.31	175.95	6,849.1	-718.9	51.0	-32.7	0.00	0.00	0.00
7,000.0	8.31	175.95	6,948.0	-733.3	52.0	-33.4	0.00	0.00	0.00
7,030.5	8.31	175.95	6,978.2	-737.7	52.3	-33.6	0.00	0.00	0.00
L4.1: SBSG									
7,100.0	8.31	175.95	7,047.0	-747.7	53.0	-34.1	0.00	0.00	0.00
7,182.6	8.31	175.95	7,128.7	-759.6	53.8	-34.6	0.00	0.00	0.00
L3.3: TBSC									



Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Hazel Inez #204H
Company:	Matador Production Company	TVD Reference:	KB @ 3183.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3183.5usft
Site:	Hazel Inez	North Reference:	Grid
Well:	Hazel Inez #204H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	NMOCD Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,200.0	8.31	175.95	7,145.9	-762.2	54.0	-34.7	0.00	0.00	0.00
7,300.0	8.31	175.95	7,244.9	-776.6	55.0	-35.4	0.00	0.00	0.00
7,400.0	8.31	175.95	7,343.8	-791.0	56.1	-36.0	0.00	0.00	0.00
7,500.0	8.31	175.95	7,442.8	-805.4	57.1	-36.7	0.00	0.00	0.00
7,600.0	8.31	175.95	7,541.7	-819.8	58.1	-37.3	0.00	0.00	0.00
7,679.7	8.31	175.95	7,620.6	-831.3	58.9	-37.9	0.00	0.00	0.00
Start Drop -1.50									
7,700.0	8.31	175.95	7,640.7	-834.3	59.1	-38.0	0.00	0.00	0.00
7,800.0	8.31	175.95	7,739.6	-848.7	60.1	-38.7	0.00	0.00	0.00
7,857.8	8.31	175.95	7,796.8	-857.0	60.7	-39.0	0.00	0.00	0.00
7,900.0	7.68	175.95	7,838.6	-862.9	61.2	-39.3	1.50	-1.50	0.00
7,908.5	7.55	175.95	7,847.0	-864.0	61.2	-39.4	1.50	-1.50	0.00
L3.3.2: Break Sand (T)									
7,990.6	6.32	175.95	7,928.6	-873.9	61.9	-39.8	1.50	-1.50	0.00
L3.3.1: Break Sand (B)									
8,000.0	6.18	175.95	7,937.9	-874.9	62.0	-39.8	1.50	-1.50	0.00
8,100.0	4.68	175.95	8,037.4	-884.3	62.7	-40.3	1.50	-1.50	0.00
8,200.0	3.18	175.95	8,137.2	-891.2	63.2	-40.6	1.50	-1.50	0.00
8,300.0	1.68	175.95	8,237.1	-895.4	63.5	-40.8	1.50	-1.50	0.00
8,400.0	0.18	175.95	8,337.1	-897.0	63.6	-40.9	1.50	-1.50	0.00
8,411.9	0.00	0.00	8,349.0	-897.0	63.6	-40.9	1.50	-1.50	-1,476.78
VP - Hazel Inez #204H									
8,469.4	5.75	268.60	8,406.4	-897.1	60.7	-38.0	10.00	10.00	-158.95
Start DLS 10.00 TFO 268.60									
8,500.0	8.81	268.60	8,436.7	-897.2	56.8	-34.1	10.00	10.00	0.00
8,510.2	9.83	268.60	8,446.8	-897.2	55.2	-32.4	10.00	10.00	0.00
L3.1: TBSG									
8,600.0	18.81	268.60	8,533.7	-897.8	33.0	-10.3	10.00	10.00	0.00
8,700.0	28.81	268.60	8,625.1	-898.8	-7.3	30.1	10.00	10.00	0.00
8,800.0	38.81	268.60	8,708.1	-900.1	-62.9	85.6	10.00	10.00	0.00
8,900.0	48.81	268.60	8,780.2	-901.8	-132.0	154.8	10.00	10.00	0.00
8,934.1	52.22	268.60	8,801.9	-902.5	-158.3	181.1	10.00	10.00	0.00
WFMP A (T. WOLFCAMP)									
8,991.6	57.97	268.60	8,834.7	-903.6	-205.4	228.2	10.00	10.00	0.00
X Sand (T)									
9,000.0	58.81	268.60	8,839.1	-903.8	-212.6	235.4	10.00	10.00	0.00
9,077.3	66.54	268.60	8,874.6	-905.4	-281.2	304.0	10.00	10.00	0.00
X Sand (B)									
9,100.0	68.81	268.60	8,883.2	-906.0	-302.2	325.0	10.00	10.00	0.00
9,179.9	76.80	268.60	8,906.8	-907.8	-378.4	401.2	10.00	10.00	0.00
Y Sand (T)									
9,200.0	78.81	268.60	8,911.1	-908.3	-398.0	420.9	10.00	10.00	0.00
9,300.0	88.81	268.60	8,921.8	-910.7	-497.3	520.2	10.00	10.00	0.00
9,311.9	90.00	268.60	8,922.0	-911.0	-509.2	532.1	10.00	10.00	0.00
9,369.4	90.00	268.60	8,922.0	-912.4	-566.7	589.6	0.00	0.00	0.00
Start 7197.3 hold at 9369.4 MD									
9,400.0	90.00	268.60	8,922.0	-913.2	-597.3	620.2	0.00	0.00	0.00
9,500.0	90.00	268.60	8,922.0	-915.6	-697.2	720.2	0.00	0.00	0.00
9,600.0	90.00	268.60	8,922.0	-918.0	-797.2	820.2	0.00	0.00	0.00
9,700.0	90.00	268.60	8,922.0	-920.5	-897.2	920.2	0.00	0.00	0.00
9,800.0	90.00	268.60	8,922.0	-922.9	-997.2	1,020.2	0.00	0.00	0.00
9,900.0	90.00	268.60	8,922.0	-925.3	-1,097.1	1,120.2	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Hazel Inez #204H
Company:	Matador Production Company	TVD Reference:	KB @ 3183.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3183.5usft
Site:	Hazel Inez	North Reference:	Grid
Well:	Hazel Inez #204H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	NMOCD 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)	
10,000.0	90.00	268.60	8,922.0	-927.8	-1,197.1	1,220.2	0.00	0.00	0.00	
10,100.0	90.00	268.60	8,922.0	-930.2	-1,297.1	1,320.2	0.00	0.00	0.00	
10,200.0	90.00	268.60	8,922.0	-932.6	-1,397.0	1,420.2	0.00	0.00	0.00	
10,300.0	90.00	268.60	8,922.0	-935.1	-1,497.0	1,520.2	0.00	0.00	0.00	
10,400.0	90.00	268.60	8,922.0	-937.5	-1,597.0	1,620.2	0.00	0.00	0.00	
10,500.0	90.00	268.60	8,922.0	-940.0	-1,696.9	1,720.2	0.00	0.00	0.00	
10,600.0	90.00	268.60	8,922.0	-942.4	-1,796.9	1,820.2	0.00	0.00	0.00	
10,700.0	90.00	268.60	8,922.0	-944.8	-1,896.9	1,920.2	0.00	0.00	0.00	
10,800.0	90.00	268.60	8,922.0	-947.3	-1,996.9	2,020.2	0.00	0.00	0.00	
10,900.0	90.00	268.60	8,922.0	-949.7	-2,096.8	2,120.2	0.00	0.00	0.00	
11,000.0	90.00	268.60	8,922.0	-952.1	-2,196.8	2,220.2	0.00	0.00	0.00	
11,100.0	90.00	268.60	8,922.0	-954.6	-2,296.8	2,320.2	0.00	0.00	0.00	
11,200.0	90.00	268.60	8,922.0	-957.0	-2,396.7	2,420.2	0.00	0.00	0.00	
11,300.0	90.00	268.60	8,922.0	-959.4	-2,496.7	2,520.2	0.00	0.00	0.00	
11,400.0	90.00	268.60	8,922.0	-961.9	-2,596.7	2,620.2	0.00	0.00	0.00	
11,500.0	90.00	268.60	8,922.0	-964.3	-2,696.6	2,720.2	0.00	0.00	0.00	
11,600.0	90.00	268.60	8,922.0	-966.8	-2,796.6	2,820.2	0.00	0.00	0.00	
11,700.0	90.00	268.60	8,922.0	-969.2	-2,896.6	2,920.2	0.00	0.00	0.00	
11,800.0	90.00	268.60	8,922.0	-971.6	-2,996.6	3,020.2	0.00	0.00	0.00	
11,900.0	90.00	268.60	8,922.0	-974.1	-3,096.5	3,120.2	0.00	0.00	0.00	
12,000.0	90.00	268.60	8,922.0	-976.5	-3,196.5	3,220.2	0.00	0.00	0.00	
12,100.0	90.00	268.60	8,922.0	-978.9	-3,296.5	3,320.2	0.00	0.00	0.00	
12,200.0	90.00	268.60	8,922.0	-981.4	-3,396.4	3,420.2	0.00	0.00	0.00	
12,300.0	90.00	268.60	8,922.0	-983.8	-3,496.4	3,520.2	0.00	0.00	0.00	
12,400.0	90.00	268.60	8,922.0	-986.2	-3,596.4	3,620.2	0.00	0.00	0.00	
12,500.0	90.00	268.60	8,922.0	-988.7	-3,696.4	3,720.2	0.00	0.00	0.00	
12,600.0	90.00	268.60	8,922.0	-991.1	-3,796.3	3,820.2	0.00	0.00	0.00	
12,700.0	90.00	268.60	8,922.0	-993.6	-3,896.3	3,920.2	0.00	0.00	0.00	
12,800.0	90.00	268.60	8,922.0	-996.0	-3,996.3	4,020.2	0.00	0.00	0.00	
12,900.0	90.00	268.60	8,922.0	-998.4	-4,096.2	4,120.2	0.00	0.00	0.00	
13,000.0	90.00	268.60	8,922.0	-1,000.9	-4,196.2	4,220.2	0.00	0.00	0.00	
13,100.0	90.00	268.60	8,922.0	-1,003.3	-4,296.2	4,320.2	0.00	0.00	0.00	
13,200.0	90.00	268.60	8,922.0	-1,005.7	-4,396.1	4,420.2	0.00	0.00	0.00	
13,300.0	90.00	268.60	8,922.0	-1,008.2	-4,496.1	4,520.2	0.00	0.00	0.00	
13,400.0	90.00	268.60	8,922.0	-1,010.6	-4,596.1	4,620.2	0.00	0.00	0.00	
13,500.0	90.00	268.60	8,922.0	-1,013.1	-4,696.1	4,720.2	0.00	0.00	0.00	
13,600.0	90.00	268.60	8,922.0	-1,015.5	-4,796.0	4,820.2	0.00	0.00	0.00	
13,700.0	90.00	268.60	8,922.0	-1,017.9	-4,896.0	4,920.2	0.00	0.00	0.00	
13,800.0	90.00	268.60	8,922.0	-1,020.4	-4,996.0	5,020.2	0.00	0.00	0.00	
13,900.0	90.00	268.60	8,922.0	-1,022.8	-5,095.9	5,120.2	0.00	0.00	0.00	
14,000.0	90.00	268.60	8,922.0	-1,025.2	-5,195.9	5,220.2	0.00	0.00	0.00	
14,100.0	90.00	268.60	8,922.0	-1,027.7	-5,295.9	5,320.2	0.00	0.00	0.00	
14,200.0	90.00	268.60	8,922.0	-1,030.1	-5,395.8	5,420.2	0.00	0.00	0.00	
14,300.0	90.00	268.60	8,922.0	-1,032.5	-5,495.8	5,520.2	0.00	0.00	0.00	
14,400.0	90.00	268.60	8,922.0	-1,035.0	-5,595.8	5,620.2	0.00	0.00	0.00	
14,500.0	90.00	268.60	8,922.0	-1,037.4	-5,695.8	5,720.2	0.00	0.00	0.00	
14,600.0	90.00	268.60	8,922.0	-1,039.9	-5,795.7	5,820.2	0.00	0.00	0.00	
14,700.0	90.00	268.60	8,922.0	-1,042.3	-5,895.7	5,920.2	0.00	0.00	0.00	
14,800.0	90.00	268.60	8,922.0	-1,044.7	-5,995.7	6,020.2	0.00	0.00	0.00	
14,900.0	90.00	268.60	8,922.0	-1,047.2	-6,095.6	6,120.2	0.00	0.00	0.00	
15,000.0	90.00	268.60	8,922.0	-1,049.6	-6,195.6	6,220.2	0.00	0.00	0.00	
15,100.0	90.00	268.60	8,922.0	-1,052.0	-6,295.6	6,320.2	0.00	0.00	0.00	
15,200.0	90.00	268.60	8,922.0	-1,054.5	-6,395.5	6,420.2	0.00	0.00	0.00	
15,300.0	90.00	268.60	8,922.0	-1,056.9	-6,495.5	6,520.2	0.00	0.00	0.00	



Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Hazel Inez #204H
Company:	Matador Production Company	TVD Reference:	KB @ 3183.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3183.5usft
Site:	Hazel Inez	North Reference:	Grid
Well:	Hazel Inez #204H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	NMOCD 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)	
15,400.0	90.00	268.60	8,922.0	-1,059.3	-6,595.5	6,620.2	0.00	0.00	0.00	
15,500.0	90.00	268.60	8,922.0	-1,061.8	-6,695.5	6,720.2	0.00	0.00	0.00	
15,600.0	90.00	268.60	8,922.0	-1,064.2	-6,795.4	6,820.2	0.00	0.00	0.00	
15,700.0	90.00	268.60	8,922.0	-1,066.7	-6,895.4	6,920.2	0.00	0.00	0.00	
15,800.0	90.00	268.60	8,922.0	-1,069.1	-6,995.4	7,020.2	0.00	0.00	0.00	
15,900.0	90.00	268.60	8,922.0	-1,071.5	-7,095.3	7,120.2	0.00	0.00	0.00	
16,000.0	90.00	268.60	8,922.0	-1,074.0	-7,195.3	7,220.2	0.00	0.00	0.00	
16,100.0	90.00	268.60	8,922.0	-1,076.4	-7,295.3	7,320.2	0.00	0.00	0.00	
16,200.0	90.00	268.60	8,922.0	-1,078.8	-7,395.3	7,420.2	0.00	0.00	0.00	
16,300.0	90.00	268.60	8,922.0	-1,081.3	-7,495.2	7,520.2	0.00	0.00	0.00	
16,400.0	90.00	268.60	8,922.0	-1,083.7	-7,595.2	7,620.2	0.00	0.00	0.00	
16,500.0	90.00	268.60	8,922.0	-1,086.1	-7,695.2	7,720.2	0.00	0.00	0.00	
16,508.5	90.00	268.60	8,922.0	-1,086.4	-7,703.6	7,728.6	0.00	0.00	0.00	
BHL - Hazel Inez #204H										

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 - Hazel Inez #204H - plan hits target center - Point	0.00	0.00	8,349.0	-897.0	63.6	494,002.00	537,708.00	32° 21' 29.044 N	104° 12' 40.376 W	
BHL - Hazel Inez #204H - plan hits target center - Point	0.00	0.01	8,922.0	-1,086.4	-7,703.6	493,812.60	529,940.71	32° 21' 27.248 N	104° 14' 10.934 W	



Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Hazel Inez #204H
Company:	Matador Production Company	TVD Reference:	KB @ 3183.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3183.5usft
Site:	Hazel Inez	North Reference:	Grid
Well:	Hazel Inez #204H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	NMOCD Plan #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
212.3	212.3	Rustler (T. ANYDRITE)				
672.3	672.3	Castile (T)				
1,898.4	1,898.1	G30:CS14-CSB (BASE SALT)				
2,065.6	2,064.7	G26: Bell Cyn. (T. DELAWARE SANDS)				
2,718.6	2,711.6	G13: Cherry Cyn.				
3,859.6	3,840.6	G7: Brushy Cyn.				
5,414.5	5,379.2	G4: BSG (CS9) (T. Bonesprings)				
5,705.8	5,667.4	L8.2: U. Avalon Shale				
5,798.9	5,759.5	L6.3: Avalon Carb				
6,029.8	5,988.1	L6.2: L. Avalon Shale				
6,068.8	6,026.6	L5.3: FBSC				
6,416.0	6,370.1	L5.1: FBSG				
6,674.4	6,625.9	L4.3: SBSC				
7,030.5	6,978.2	L4.1: SBSG				
7,182.6	7,128.7	L3.3: TBSC				
7,908.5	7,847.0	L3.3.2: Break Sand (T)				
7,990.6	7,928.6	L3.3.1: Break Sand (B)				
8,510.2	8,446.8	L3.1: TBSG				
8,934.1	8,801.9	WFMP A (T. WOLFCAMP)				
8,991.6	8,834.7	X Sand (T)				
9,077.3	8,874.6	X Sand (B)				
9,179.9	8,906.8	Y Sand (T)				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,500.0	1,500.0	0.0	0.0	Start Build 1.00	
2,684.6	2,676.2	-121.9	6.4	Start 4995.1 hold at 2684.6 MD	
7,679.7	7,564.9	-1,145.8	60.3	Start Drop -1.50	
8,469.4	8,349.0	-1,227.1	64.6	Start DLS 10.00 TFO 268.60	
9,369.4	8,922.0	-1,241.0	-508.2	Start 7197.3 hold at 9369.4 MD	
16,566.7	8,922.0	-1,416.4	-7,703.4	TD at 16566.7	