

District I1625 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 369218

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 30-015-55327
4. Property Code 336207	5. Property Name Dr. Ireland State 16	6. Well No. 229H

7. Surface Location

UL - Lot B	Section 21	Township 23S	Range 28E	Lot Idn	Feet From 866	N/S Line N	Feet From 1900	E/W Line E	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot P	Section 16	Township 23S	Range 28E	Lot Idn P	Feet From 340	N/S Line S	Feet From 660	E/W Line E	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 State	15. Ground Level Elevation 3024
16. Multiple N	17. Proposed Depth 21288	18. Formation Wolfcamp	19. Contractor	20. Spud Date 7/29/2024
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	338	177	0
Int1	9.875	7.625	20	9749	900	0
Prod	6.75	5.5	20	21288	742	9549

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.

Signature:

Printed Name: Electronically filed by Brett A Jennings

Title: Regulatory Analyst

Email Address: brett.jennings@matadorresources.com

Date: 7/8/2024

Phone: 972-629-2160

OIL CONSERVATION DIVISION

Approved By: Ward Rikala

Title: Petroleum Specialist Supervisor

Approved Date: 8/14/2024

Expiration Date: 8/14/2026

Conditions of Approval Attached

District I
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District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

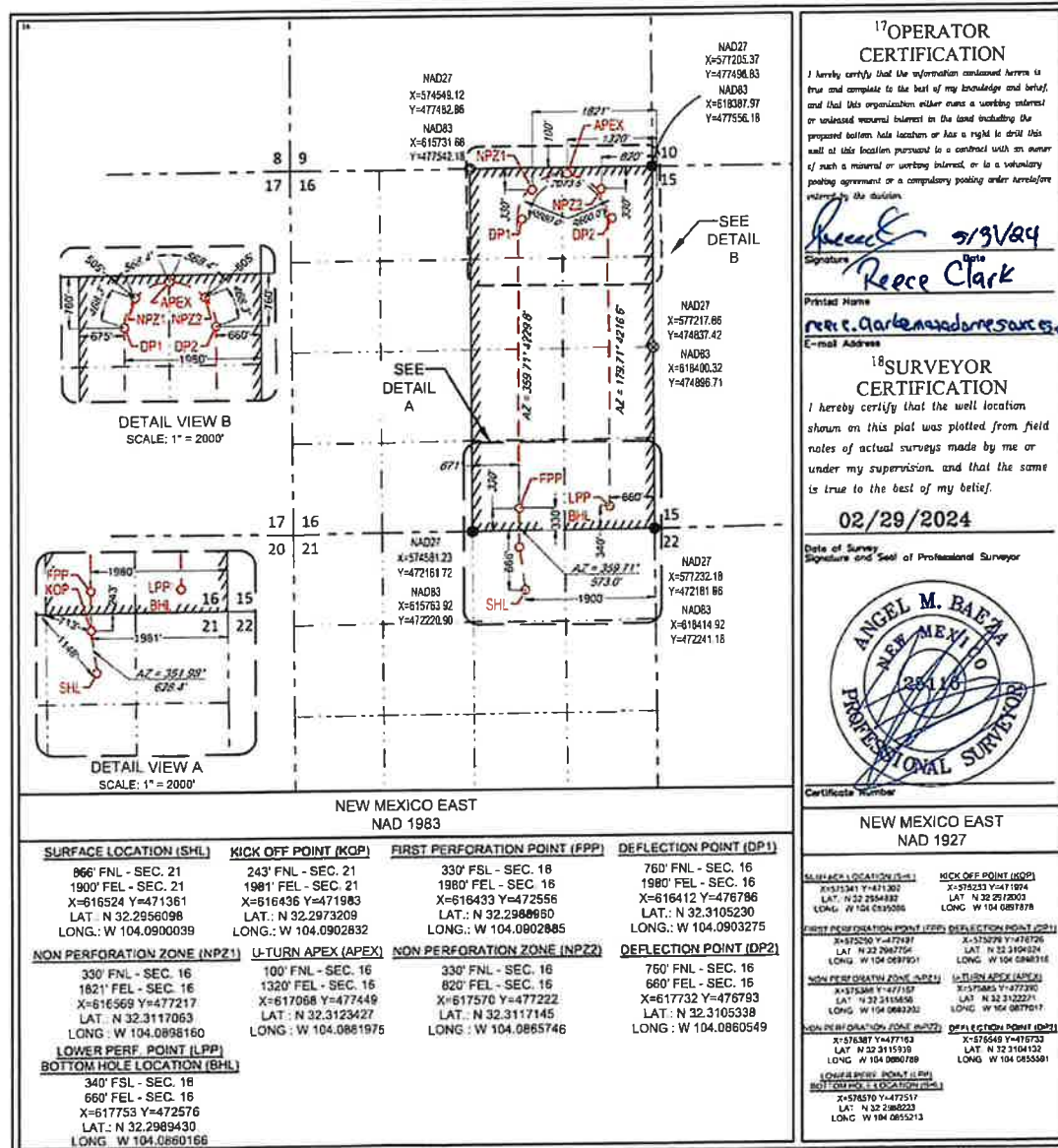
State of New Mexico
Energy, Minerals & Natural Resources
Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-55327		Pool Code 98220		Pool Name Purple Sage; Wolfcamp (gas)	
Property Code 336207		Property Name DR. IRELAND STATE 16		Well Number 229H	
GRID No. 22 89 37		Operator Name MATADOR PRODUCTION COMPANY		Elevation 3024'	
10 Surface Location					
UL or lot no. B	Section 21	Township 23-S	Range 28-E	Lot Idn -	Feet from the 866'
				North/South line NORTH	Feet from the 1900'
				East/West line EAST	County EDDY
11 Bottom Hole Location If Different From Surface					
UL or lot no. P	Section 16	Township 23-S	Range 28-E	Lot Idn -	Feet from the 340'
				North/South line SOUTH	Feet from the 660'
				East/West line EAST	County EDDY
Dedicated Acres 320		Joint or Infill		Consolidation Code	
				Order No.	

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



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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 369218

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: MATADOR PRODUCTION COMPANY [228937] One Lincoln Centre Dallas, TX 75240	API Number: 30-015-55327
	Well: Dr. Ireland State 16 #229H

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	If cement does not circulate on any string, a CBL is required for that string 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

Well Name: Dr Ireland State Com #229H										
STRING	FLUID TYPE	HOLE SZ	CSG SZ	CSG GRADE	CSG WT	DEPTH SET	TOP CSG	TTL SX CEMENT	EST TOC	ADDITIONAL INFO FOR CSG/CMT PROGRAM (Optional)
SURF	FRESH WTR	17.5	13.375	J-55	54.50	338	0	177	0	Option to drill surface hole with surface setting rig
INT 1	Diesel Brine Emulsion	9.875	7.625	P-110	29.70	9749	0	900	0	Option to run DV tool and Packer.
PROD	OBM	6.75	5.5	P-110	20.00	21288	0	742	9549	

Matador Production Company

Rustler Breaks

Dr Ireland

Dr Ireland State 16 #229H

Wellbore #1

Plan: State Plan #1

Standard Planning Report

13 June, 2024

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dr Ireland State 16 #229H
Company:	Matador Production Company	TVD Reference:	KB @ 3052.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3052.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #229H	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	Dr Ireland		
Site Position:		Northing:	471,301.60 usft
From:	Lat/Long	Easting:	575,341.07 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 17' 43.761 N
		Longitude:	104° 5' 22.231 W
		Grid Convergence:	0.13 °

Well	Dr Ireland State 16 #229H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	
		Latitude:	32° 17' 43.761 N
		Longitude:	104° 5' 22.231 W
		Ground Level:	3,024.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/17/2024	6.46	59.96	47,228.09847532

Design	State Plan #1			
Audit Notes:				
Version:	1	Phase:	PLAN	Tie On Depth:
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.71

Plan Survey Tool Program	Date	6/13/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	21,287.9	State Plan #1 (Wellbore #1)	MWD
				OWSG MWD - Standard

Planning Report

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Company:	Matador Production Company	TVD Reference:	KB @ 3052.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3052.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #229H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	State Plan #1		

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	
2,033.3	8.00	3.85	2,031.6	37.1	2.5	1.50	1.50	0.00	3.85	
5,981.6	8.00	3.85	5,941.4	585.3	39.4	0.00	0.00	0.00	0.00	
6,514.9	0.00	0.00	6,473.0	622.4	41.9	1.50	-1.50	0.00	180.00	
9,848.9	0.00	0.00	9,807.0	622.4	41.9	0.00	0.00	0.00	0.00	KOP - Dr Ireland State
10,748.9	90.00	350.45	10,380.0	1,187.4	-53.1	10.00	10.00	0.00	350.45	
11,211.8	90.00	359.71	10,380.0	1,648.1	-92.8	2.00	0.00	2.00	90.00	
14,987.8	90.00	359.71	10,380.0	5,424.1	-112.1	0.00	0.00	0.00	0.00	DP1 - Dr Ireland State
16,000.0	90.00	87.56	10,380.0	6,087.0	519.9	8.68	0.00	8.68	90.00	
16,024.0	90.00	87.56	10,380.0	6,088.1	543.9	0.00	0.00	0.00	0.00	Apex - Dr Ireland State
17,048.5	90.00	179.75	10,380.0	5,454.7	1,207.8	9.00	0.00	9.00	90.00	
17,072.1	90.00	179.75	10,380.0	5,431.1	1,207.9	0.00	0.00	0.00	0.00	DP2 - Dr Ireland State
17,073.8	90.00	179.71	10,380.0	5,429.4	1,207.9	2.00	0.03	-2.00	-89.05	
21,287.9	90.00	179.71	10,380.0	1,215.4	1,228.9	0.00	0.00	0.00	0.00	BHL - Dr Ireland State

Planning Report

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Company:	Matador Production Company	TVD Reference:	KB @ 3052.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3052.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #229H	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
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
268.0	0.00	0.00	268.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
345.0	0.00	0.00	345.0	0.0	0.0	0.0	0.00	0.00	0.00
Salado									
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
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
991.0	0.00	0.00	991.0	0.0	0.0	0.0	0.00	0.00	0.00
Castile									
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 1.50									
1,600.0	1.50	3.85	1,600.0	1.3	0.1	1.3	1.50	1.50	0.00
1,700.0	3.00	3.85	1,699.9	5.2	0.4	5.2	1.50	1.50	0.00
1,800.0	4.50	3.85	1,799.7	11.7	0.8	11.7	1.50	1.50	0.00
1,900.0	6.00	3.85	1,899.3	20.9	1.4	20.9	1.50	1.50	0.00
2,000.0	7.50	3.85	1,998.6	32.6	2.2	32.6	1.50	1.50	0.00
2,033.3	8.00	3.85	2,031.6	37.1	2.5	37.1	1.50	1.50	0.00
Start 3948.2 hold at 2033.3 MD									
2,100.0	8.00	3.85	2,097.6	46.3	3.1	46.3	0.00	0.00	0.00
2,200.0	8.00	3.85	2,196.6	60.2	4.1	60.2	0.00	0.00	0.00
2,300.0	8.00	3.85	2,295.7	74.1	5.0	74.1	0.00	0.00	0.00
2,400.0	8.00	3.85	2,394.7	88.0	5.9	88.0	0.00	0.00	0.00
2,500.0	8.00	3.85	2,493.7	101.9	6.9	101.9	0.00	0.00	0.00
2,563.9	8.00	3.85	2,557.0	110.8	7.5	110.7	0.00	0.00	0.00
G30:CS14-CSB									
2,598.2	8.00	3.85	2,591.0	115.5	7.8	115.5	0.00	0.00	0.00
G26: Bell Cyn.									
2,600.0	8.00	3.85	2,592.8	115.8	7.8	115.7	0.00	0.00	0.00
2,700.0	8.00	3.85	2,691.8	129.7	8.7	129.6	0.00	0.00	0.00
2,800.0	8.00	3.85	2,790.8	143.5	9.7	143.5	0.00	0.00	0.00
2,900.0	8.00	3.85	2,889.8	157.4	10.6	157.4	0.00	0.00	0.00
3,000.0	8.00	3.85	2,988.9	171.3	11.5	171.3	0.00	0.00	0.00
3,100.0	8.00	3.85	3,087.9	185.2	12.5	185.1	0.00	0.00	0.00
3,200.0	8.00	3.85	3,186.9	199.1	13.4	199.0	0.00	0.00	0.00
3,300.0	8.00	3.85	3,285.9	213.0	14.3	212.9	0.00	0.00	0.00
3,400.0	8.00	3.85	3,385.0	226.9	15.3	226.8	0.00	0.00	0.00
3,425.3	8.00	3.85	3,410.0	230.4	15.5	230.3	0.00	0.00	0.00
G16: Manzanita									
3,470.7	8.00	3.85	3,455.0	236.7	15.9	236.6	0.00	0.00	0.00
G13: Cherry Cyn.									
3,500.0	8.00	3.85	3,484.0	240.7	16.2	240.7	0.00	0.00	0.00

Planning Report

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Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #229H	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)
3,600.0	8.00	3.85	3,583.0	254.6	17.2	254.5	0.00	0.00	0.00
3,700.0	8.00	3.85	3,682.0	268.5	18.1	268.4	0.00	0.00	0.00
3,800.0	8.00	3.85	3,781.1	282.4	19.0	282.3	0.00	0.00	0.00
3,900.0	8.00	3.85	3,880.1	296.3	20.0	296.2	0.00	0.00	0.00
4,000.0	8.00	3.85	3,979.1	310.2	20.9	310.1	0.00	0.00	0.00
4,100.0	8.00	3.85	4,078.2	324.1	21.8	323.9	0.00	0.00	0.00
4,200.0	8.00	3.85	4,177.2	337.9	22.8	337.8	0.00	0.00	0.00
4,300.0	8.00	3.85	4,276.2	351.8	23.7	351.7	0.00	0.00	0.00
4,400.0	8.00	3.85	4,375.2	365.7	24.6	365.6	0.00	0.00	0.00
4,500.0	8.00	3.85	4,474.3	379.6	25.6	379.5	0.00	0.00	0.00
4,600.0	8.00	3.85	4,573.3	393.5	26.5	393.4	0.00	0.00	0.00
4,613.8	8.00	3.85	4,587.0	395.4	26.6	395.3	0.00	0.00	0.00
G7: Brushy Cyn.									
4,700.0	8.00	3.85	4,672.3	407.4	27.4	407.2	0.00	0.00	0.00
4,800.0	8.00	3.85	4,771.3	421.3	28.4	421.1	0.00	0.00	0.00
4,900.0	8.00	3.85	4,870.4	435.1	29.3	435.0	0.00	0.00	0.00
5,000.0	8.00	3.85	4,969.4	449.0	30.2	448.9	0.00	0.00	0.00
5,100.0	8.00	3.85	5,068.4	462.9	31.2	462.8	0.00	0.00	0.00
5,200.0	8.00	3.85	5,167.5	476.8	32.1	476.6	0.00	0.00	0.00
5,300.0	8.00	3.85	5,266.5	490.7	33.1	490.5	0.00	0.00	0.00
5,400.0	8.00	3.85	5,365.5	504.6	34.0	504.4	0.00	0.00	0.00
5,500.0	8.00	3.85	5,464.5	518.5	34.9	518.3	0.00	0.00	0.00
5,600.0	8.00	3.85	5,563.6	532.4	35.9	532.2	0.00	0.00	0.00
5,700.0	8.00	3.85	5,662.6	546.2	36.8	546.0	0.00	0.00	0.00
5,800.0	8.00	3.85	5,761.6	560.1	37.7	559.9	0.00	0.00	0.00
5,900.0	8.00	3.85	5,860.6	574.0	38.7	573.8	0.00	0.00	0.00
5,981.6	8.00	3.85	5,941.4	585.3	39.4	585.1	0.00	0.00	0.00
Start Drop -1.50									
6,000.0	7.72	3.85	5,959.7	587.9	39.6	587.6	1.50	-1.50	0.00
6,100.0	6.22	3.85	6,058.9	600.0	40.4	599.8	1.50	-1.50	0.00
6,200.0	4.72	3.85	6,158.5	609.5	41.1	609.3	1.50	-1.50	0.00
6,222.6	4.38	3.85	6,181.0	611.3	41.2	611.1	1.50	-1.50	0.00
BSGL									
6,271.7	3.65	3.85	6,230.0	614.7	41.4	614.5	1.50	-1.50	0.00
G4.1: AVALON-SS									
6,298.8	3.24	3.85	6,257.0	616.3	41.5	616.1	1.50	-1.50	0.00
G3.3: AVALON SS									
6,300.0	3.22	3.85	6,258.2	616.4	41.5	616.2	1.50	-1.50	0.00
6,400.0	1.72	3.85	6,358.1	620.7	41.8	620.5	1.50	-1.50	0.00
6,403.9	1.67	3.85	6,362.0	620.8	41.8	620.6	1.50	-1.50	0.00
L8.2: U. Avalon Shale									
6,500.0	0.22	3.85	6,458.1	622.4	41.9	622.2	1.50	-1.50	0.00
6,514.9	0.00	0.00	6,473.0	622.4	41.9	622.2	1.50	-1.50	0.00
Start 3334.0 hold at 6514.9 MD									
6,519.9	0.00	0.00	6,478.0	622.4	41.9	622.2	0.00	0.00	0.00
L6.3: Avalon Carb									
6,600.0	0.00	0.00	6,558.1	622.4	41.9	622.2	0.00	0.00	0.00
6,700.0	0.00	0.00	6,658.1	622.4	41.9	622.2	0.00	0.00	0.00
6,732.9	0.00	0.00	6,691.0	622.4	41.9	622.2	0.00	0.00	0.00
L6.2: L. Avalon Shale									
6,800.0	0.00	0.00	6,758.1	622.4	41.9	622.2	0.00	0.00	0.00
6,900.0	0.00	0.00	6,858.1	622.4	41.9	622.2	0.00	0.00	0.00
6,914.9	0.00	0.00	6,873.0	622.4	41.9	622.2	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dr Ireland State 16 #229H
Company:	Matador Production Company	TVD Reference:	KB @ 3052.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3052.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #229H	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)
L5.3: FBSC									
7,000.0	0.00	0.00	6,958.1	622.4	41.9	622.2	0.00	0.00	0.00
7,085.9	0.00	0.00	7,044.0	622.4	41.9	622.2	0.00	0.00	0.00
L5.1: FBSC									
7,100.0	0.00	0.00	7,058.1	622.4	41.9	622.2	0.00	0.00	0.00
7,200.0	0.00	0.00	7,158.1	622.4	41.9	622.2	0.00	0.00	0.00
7,257.9	0.00	0.00	7,216.0	622.4	41.9	622.2	0.00	0.00	0.00
M. FBSC									
7,300.0	0.00	0.00	7,258.1	622.4	41.9	622.2	0.00	0.00	0.00
7,347.9	0.00	0.00	7,306.0	622.4	41.9	622.2	0.00	0.00	0.00
L. FBSC									
7,400.0	0.00	0.00	7,358.1	622.4	41.9	622.2	0.00	0.00	0.00
7,457.9	0.00	0.00	7,416.0	622.4	41.9	622.2	0.00	0.00	0.00
L4.3: SBSC									
7,500.0	0.00	0.00	7,458.1	622.4	41.9	622.2	0.00	0.00	0.00
7,600.0	0.00	0.00	7,558.1	622.4	41.9	622.2	0.00	0.00	0.00
7,700.0	0.00	0.00	7,658.1	622.4	41.9	622.2	0.00	0.00	0.00
7,800.0	0.00	0.00	7,758.1	622.4	41.9	622.2	0.00	0.00	0.00
7,893.9	0.00	0.00	7,852.0	622.4	41.9	622.2	0.00	0.00	0.00
L4.1: SBSC									
7,900.0	0.00	0.00	7,858.1	622.4	41.9	622.2	0.00	0.00	0.00
8,000.0	0.00	0.00	7,958.1	622.4	41.9	622.2	0.00	0.00	0.00
8,033.9	0.00	0.00	7,992.0	622.4	41.9	622.2	0.00	0.00	0.00
L4.1: SBSC B Carb									
8,100.0	0.00	0.00	8,058.1	622.4	41.9	622.2	0.00	0.00	0.00
8,200.0	0.00	0.00	8,158.1	622.4	41.9	622.2	0.00	0.00	0.00
8,240.9	0.00	0.00	8,199.0	622.4	41.9	622.2	0.00	0.00	0.00
L4.1: SBSC C									
8,251.9	0.00	0.00	8,210.0	622.4	41.9	622.2	0.00	0.00	0.00
L3.3: TBSC									
8,300.0	0.00	0.00	8,258.1	622.4	41.9	622.2	0.00	0.00	0.00
8,400.0	0.00	0.00	8,358.1	622.4	41.9	622.2	0.00	0.00	0.00
8,500.0	0.00	0.00	8,458.1	622.4	41.9	622.2	0.00	0.00	0.00
8,600.0	0.00	0.00	8,558.1	622.4	41.9	622.2	0.00	0.00	0.00
8,614.9	0.00	0.00	8,573.0	622.4	41.9	622.2	0.00	0.00	0.00
L3.3.2: Break Sand									
8,657.9	0.00	0.00	8,616.0	622.4	41.9	622.2	0.00	0.00	0.00
L3.3.1: Break Sand									
8,700.0	0.00	0.00	8,658.1	622.4	41.9	622.2	0.00	0.00	0.00
8,800.0	0.00	0.00	8,758.1	622.4	41.9	622.2	0.00	0.00	0.00
8,900.0	0.00	0.00	8,858.1	622.4	41.9	622.2	0.00	0.00	0.00
8,981.9	0.00	0.00	8,940.0	622.4	41.9	622.2	0.00	0.00	0.00
L3.2: TBSC									
9,000.0	0.00	0.00	8,958.1	622.4	41.9	622.2	0.00	0.00	0.00
9,100.0	0.00	0.00	9,058.1	622.4	41.9	622.2	0.00	0.00	0.00
9,148.9	0.00	0.00	9,107.0	622.4	41.9	622.2	0.00	0.00	0.00
L3.1: TBSC									
9,200.0	0.00	0.00	9,158.1	622.4	41.9	622.2	0.00	0.00	0.00
9,300.0	0.00	0.00	9,258.1	622.4	41.9	622.2	0.00	0.00	0.00
9,400.0	0.00	0.00	9,358.1	622.4	41.9	622.2	0.00	0.00	0.00
9,427.9	0.00	0.00	9,386.0	622.4	41.9	622.2	0.00	0.00	0.00
L. TBSC									

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dr Ireland State 16 #229H
Company:	Matador Production Company	TVD Reference:	KB @ 3052.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3052.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #229H	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)
9,484.9	0.00	0.00	9,443.0	622.4	41.9	622.2	0.00	0.00	0.00
L2: WFMP A									
9,500.0	0.00	0.00	9,458.1	622.4	41.9	622.2	0.00	0.00	0.00
9,519.9	0.00	0.00	9,478.0	622.4	41.9	622.2	0.00	0.00	0.00
X Sand (T)									
9,565.9	0.00	0.00	9,524.0	622.4	41.9	622.2	0.00	0.00	0.00
X Sand (B)									
9,599.9	0.00	0.00	9,558.0	622.4	41.9	622.2	0.00	0.00	0.00
Y Sand (T)									
9,600.0	0.00	0.00	9,558.1	622.4	41.9	622.2	0.00	0.00	0.00
9,636.9	0.00	0.00	9,595.0	622.4	41.9	622.2	0.00	0.00	0.00
Y Sand (B)									
9,658.9	0.00	0.00	9,617.0	622.4	41.9	622.2	0.00	0.00	0.00
Z Sand (T)									
9,700.0	0.00	0.00	9,658.1	622.4	41.9	622.2	0.00	0.00	0.00
9,724.9	0.00	0.00	9,683.0	622.4	41.9	622.2	0.00	0.00	0.00
Z Sand (B)									
9,732.9	0.00	0.00	9,691.0	622.4	41.9	622.2	0.00	0.00	0.00
L1_WFMP A Fat									
9,800.0	0.00	0.00	9,758.1	622.4	41.9	622.2	0.00	0.00	0.00
9,848.9	0.00	0.00	9,807.0	622.4	41.9	622.2	0.00	0.00	0.00
Start Build 10.00 - KOP - Dr Ireland State 16 #229H									
9,868.9	2.00	350.45	9,827.0	622.8	41.9	622.5	10.00	10.00	0.00
WFMP B									
9,900.0	5.11	350.45	9,858.0	624.7	41.6	624.5	10.00	10.00	0.00
10,000.0	15.11	350.45	9,956.4	642.0	38.6	641.8	10.00	10.00	0.00
10,100.0	25.11	350.45	10,050.2	675.8	32.9	675.7	10.00	10.00	0.00
10,182.4	33.35	350.45	10,122.0	715.5	26.3	715.3	10.00	10.00	0.00
WFMP B.1									
10,200.0	35.11	350.45	10,136.5	725.2	24.6	725.1	10.00	10.00	0.00
10,300.0	45.11	350.45	10,212.9	788.7	14.0	788.6	10.00	10.00	0.00
10,336.7	48.78	350.45	10,238.0	815.2	9.5	815.1	10.00	10.00	0.00
WFMP B.2									
10,400.0	55.11	350.45	10,277.0	864.3	1.2	864.2	10.00	10.00	0.00
10,500.0	65.11	350.45	10,326.7	949.6	-13.1	949.7	10.00	10.00	0.00
10,600.0	75.11	350.45	10,360.7	1,042.3	-28.7	1,042.4	10.00	10.00	0.00
10,673.5	82.46	350.45	10,375.0	1,113.3	-40.7	1,113.5	10.00	10.00	0.00
WFMP B.3									
10,700.0	85.11	350.45	10,377.9	1,139.3	-45.0	1,139.5	10.00	10.00	0.00
10,748.9	90.00	350.45	10,380.0	1,187.4	-53.1	1,187.7	10.00	10.00	0.00
Start DLS 2.00 TFO 90.00									
10,756.2	90.00	350.60	10,380.0	1,194.7	-54.3	1,194.9	2.00	0.00	2.00
FPP - Dr Ireland State 16 #229H									
10,800.0	90.00	351.47	10,380.0	1,237.9	-61.2	1,238.2	2.00	0.00	2.00
10,900.0	90.00	353.47	10,380.0	1,337.1	-74.3	1,337.4	2.00	0.00	2.00
11,000.0	90.00	355.47	10,380.0	1,436.6	-83.9	1,437.0	2.00	0.00	2.00
11,100.0	90.00	357.47	10,380.0	1,536.4	-90.0	1,536.8	2.00	0.00	2.00
11,200.0	90.00	359.47	10,380.0	1,636.3	-92.7	1,636.8	2.00	0.00	2.00
11,211.8	90.00	359.71	10,380.0	1,648.1	-92.8	1,648.6	2.00	0.00	2.00
Start 3776.1 hold at 11211.8 MD									
11,300.0	90.00	359.71	10,380.0	1,736.3	-93.2	1,736.8	0.00	0.00	0.00
11,400.0	90.00	359.71	10,380.0	1,836.3	-93.8	1,836.8	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dr Ireland State 16 #229H
Company:	Matador Production Company	TVD Reference:	KB @ 3052.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3052.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #229H	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)
11,500.0	90.00	359.71	10,380.0	1,936.3	-94.3	1,936.8	0.00	0.00	0.00
11,600.0	90.00	359.71	10,380.0	2,036.3	-94.8	2,036.8	0.00	0.00	0.00
11,700.0	90.00	359.71	10,380.0	2,136.3	-95.3	2,136.8	0.00	0.00	0.00
11,800.0	90.00	359.71	10,380.0	2,236.3	-95.8	2,236.8	0.00	0.00	0.00
11,900.0	90.00	359.71	10,380.0	2,336.3	-96.3	2,336.8	0.00	0.00	0.00
12,000.0	90.00	359.71	10,380.0	2,436.3	-96.8	2,436.8	0.00	0.00	0.00
12,100.0	90.00	359.71	10,380.0	2,536.3	-97.3	2,536.8	0.00	0.00	0.00
12,200.0	90.00	359.71	10,380.0	2,636.3	-97.8	2,636.8	0.00	0.00	0.00
12,300.0	90.00	359.71	10,380.0	2,736.3	-98.3	2,736.8	0.00	0.00	0.00
12,400.0	90.00	359.71	10,380.0	2,836.3	-98.9	2,836.8	0.00	0.00	0.00
12,500.0	90.00	359.71	10,380.0	2,936.3	-99.4	2,936.8	0.00	0.00	0.00
12,600.0	90.00	359.71	10,380.0	3,036.3	-99.9	3,036.8	0.00	0.00	0.00
12,700.0	90.00	359.71	10,380.0	3,136.3	-100.4	3,136.8	0.00	0.00	0.00
12,800.0	90.00	359.71	10,380.0	3,236.3	-100.9	3,236.8	0.00	0.00	0.00
12,900.0	90.00	359.71	10,380.0	3,336.3	-101.4	3,336.8	0.00	0.00	0.00
13,000.0	90.00	359.71	10,380.0	3,436.3	-101.9	3,436.8	0.00	0.00	0.00
13,100.0	90.00	359.71	10,380.0	3,536.3	-102.4	3,536.8	0.00	0.00	0.00
13,200.0	90.00	359.71	10,380.0	3,636.3	-102.9	3,636.8	0.00	0.00	0.00
13,300.0	90.00	359.71	10,380.0	3,736.3	-103.5	3,736.8	0.00	0.00	0.00
13,400.0	90.00	359.71	10,380.0	3,836.3	-104.0	3,836.8	0.00	0.00	0.00
13,500.0	90.00	359.71	10,380.0	3,936.3	-104.5	3,936.8	0.00	0.00	0.00
13,600.0	90.00	359.71	10,380.0	4,036.3	-105.0	4,036.8	0.00	0.00	0.00
13,700.0	90.00	359.71	10,380.0	4,136.3	-105.5	4,136.8	0.00	0.00	0.00
13,800.0	90.00	359.71	10,380.0	4,236.3	-106.0	4,236.8	0.00	0.00	0.00
13,900.0	90.00	359.71	10,380.0	4,336.3	-106.5	4,336.8	0.00	0.00	0.00
14,000.0	90.00	359.71	10,380.0	4,436.3	-107.0	4,436.8	0.00	0.00	0.00
14,100.0	90.00	359.71	10,380.0	4,536.3	-107.5	4,536.8	0.00	0.00	0.00
14,200.0	90.00	359.71	10,380.0	4,636.3	-108.0	4,636.8	0.00	0.00	0.00
14,300.0	90.00	359.71	10,380.0	4,736.3	-108.6	4,736.8	0.00	0.00	0.00
14,400.0	90.00	359.71	10,380.0	4,836.3	-109.1	4,836.8	0.00	0.00	0.00
14,500.0	90.00	359.71	10,380.0	4,936.3	-109.6	4,936.8	0.00	0.00	0.00
14,600.0	90.00	359.71	10,380.0	5,036.3	-110.1	5,036.8	0.00	0.00	0.00
14,700.0	90.00	359.71	10,380.0	5,136.3	-110.6	5,136.8	0.00	0.00	0.00
14,800.0	90.00	359.71	10,380.0	5,236.3	-111.1	5,236.8	0.00	0.00	0.00
14,900.0	90.00	359.71	10,380.0	5,336.3	-111.6	5,336.8	0.00	0.00	0.00
14,987.8	90.00	359.71	10,380.0	5,424.1	-112.1	5,424.6	0.00	0.00	0.00
Start DLS 8.68 TFO 90.00 - DP1 - Dr Ireland State 16 #229H									
15,000.0	90.00	0.76	10,380.0	5,436.3	-112.0	5,436.8	8.68	0.00	8.68
15,100.0	90.00	9.44	10,380.0	5,535.8	-103.1	5,536.3	8.68	0.00	8.68
15,200.0	90.00	18.12	10,380.0	5,632.8	-79.3	5,633.2	8.68	0.00	8.68
15,300.0	90.00	26.80	10,380.0	5,725.2	-41.2	5,725.3	8.68	0.00	8.68
15,400.0	90.00	35.48	10,380.0	5,810.7	10.5	5,810.5	8.68	0.00	8.68
15,455.0	90.00	40.25	10,380.0	5,854.0	44.2	5,853.7	8.68	0.00	8.68
NPZ1 - Dr Ireland State 16 #229H									
15,500.0	90.00	44.16	10,380.0	5,887.4	74.5	5,886.9	8.68	0.00	8.68
15,600.0	90.00	52.84	10,380.0	5,953.6	149.3	5,952.8	8.68	0.00	8.68
15,700.0	90.00	61.52	10,380.0	6,007.7	233.3	6,006.5	8.68	0.00	8.68
15,800.0	90.00	70.20	10,380.0	6,048.6	324.4	6,046.9	8.68	0.00	8.68
15,900.0	90.00	78.88	10,380.0	6,075.2	420.7	6,073.0	8.68	0.00	8.68
16,000.0	90.00	87.56	10,380.0	6,087.0	519.9	6,084.3	8.68	0.00	8.68
Start 24.0 hold at 16000.0 MD									
16,024.0	90.00	87.56	10,380.0	6,088.1	543.9	6,085.2	0.00	0.00	0.00
Start DLS 9.00 TFO 90.00 - Apex - Dr Ireland State 16 #229H									

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dr Ireland State 16 #229H
Company:	Matador Production Company	TVD Reference:	KB @ 3052.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3052.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #229H	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)
16,100.0	90.00	94.40	10,380.0	6,086.8	619.9	6,083.5	9.00	0.00	9.00
16,200.0	90.00	103.40	10,380.0	6,071.3	718.5	6,067.6	9.00	0.00	9.00
16,300.0	90.00	112.39	10,380.0	6,040.6	813.6	6,036.4	9.00	0.00	9.00
16,400.0	90.00	121.39	10,380.0	5,995.4	902.7	5,990.8	9.00	0.00	9.00
16,500.0	90.00	130.39	10,380.0	5,936.9	983.6	5,931.8	9.00	0.00	9.00
16,600.0	90.00	139.39	10,380.0	5,866.4	1,054.4	5,860.9	9.00	0.00	9.00
16,608.2	90.00	140.12	10,380.0	5,860.1	1,059.7	5,854.7	9.00	0.00	9.00
NP22 - Dr Ireland State 16 #229H									
16,700.0	90.00	148.39	10,380.0	5,785.7	1,113.3	5,779.9	9.00	0.00	9.00
16,800.0	90.00	157.39	10,380.0	5,696.7	1,158.8	5,690.8	9.00	0.00	9.00
16,900.0	90.00	166.38	10,380.0	5,601.8	1,189.9	5,595.7	9.00	0.00	9.00
17,000.0	90.00	175.38	10,380.0	5,503.2	1,205.7	5,497.0	9.00	0.00	9.00
17,048.5	90.00	179.75	10,380.0	5,454.7	1,207.8	5,448.5	9.00	0.00	9.00
Start 23.6 hold at 17048.5 MD									
17,072.1	90.00	179.75	10,380.0	5,431.1	1,207.9	5,424.9	0.00	0.00	0.00
Start DLS 2.00 TFO -89.05 - DP2 - Dr Ireland State 16 #229H									
17,073.8	90.00	179.71	10,380.0	5,429.4	1,207.9	5,423.3	2.00	0.03	-2.00
Start 4214.1 hold at 17073.8 MD									
17,100.0	90.00	179.71	10,380.0	5,403.2	1,208.0	5,397.0	0.00	0.00	0.00
17,200.0	90.00	179.71	10,380.0	5,303.2	1,208.5	5,297.0	0.00	0.00	0.00
17,300.0	90.00	179.71	10,380.0	5,203.2	1,209.0	5,197.0	0.00	0.00	0.00
17,400.0	90.00	179.71	10,380.0	5,103.2	1,209.5	5,097.0	0.00	0.00	0.00
17,500.0	90.00	179.71	10,380.0	5,003.2	1,210.0	4,997.0	0.00	0.00	0.00
17,600.0	90.00	179.71	10,380.0	4,903.2	1,210.5	4,897.0	0.00	0.00	0.00
17,700.0	90.00	179.71	10,380.0	4,803.2	1,211.0	4,797.0	0.00	0.00	0.00
17,800.0	90.00	179.71	10,380.0	4,703.2	1,211.5	4,697.0	0.00	0.00	0.00
17,900.0	90.00	179.71	10,380.0	4,603.2	1,212.0	4,597.0	0.00	0.00	0.00
18,000.0	90.00	179.71	10,380.0	4,503.2	1,212.5	4,497.0	0.00	0.00	0.00
18,100.0	90.00	179.71	10,380.0	4,403.2	1,213.0	4,397.0	0.00	0.00	0.00
18,200.0	90.00	179.71	10,380.0	4,303.2	1,213.5	4,297.0	0.00	0.00	0.00
18,300.0	90.00	179.71	10,380.0	4,203.2	1,214.0	4,197.0	0.00	0.00	0.00
18,400.0	90.00	179.71	10,380.0	4,103.2	1,214.5	4,097.0	0.00	0.00	0.00
18,500.0	90.00	179.71	10,380.0	4,003.2	1,215.0	3,997.0	0.00	0.00	0.00
18,600.0	90.00	179.71	10,380.0	3,903.2	1,215.5	3,897.0	0.00	0.00	0.00
18,700.0	90.00	179.71	10,380.0	3,803.2	1,216.0	3,797.0	0.00	0.00	0.00
18,800.0	90.00	179.71	10,380.0	3,703.2	1,216.5	3,697.0	0.00	0.00	0.00
18,900.0	90.00	179.71	10,380.0	3,603.2	1,217.0	3,597.0	0.00	0.00	0.00
19,000.0	90.00	179.71	10,380.0	3,503.2	1,217.5	3,497.0	0.00	0.00	0.00
19,100.0	90.00	179.71	10,380.0	3,403.2	1,218.0	3,397.0	0.00	0.00	0.00
19,200.0	90.00	179.71	10,380.0	3,303.2	1,218.5	3,297.0	0.00	0.00	0.00
19,300.0	90.00	179.71	10,380.0	3,203.2	1,219.0	3,197.0	0.00	0.00	0.00
19,400.0	90.00	179.71	10,380.0	3,103.2	1,219.5	3,097.0	0.00	0.00	0.00
19,500.0	90.00	179.71	10,380.0	3,003.2	1,220.0	2,997.0	0.00	0.00	0.00
19,600.0	90.00	179.71	10,380.0	2,903.2	1,220.5	2,897.0	0.00	0.00	0.00
19,700.0	90.00	179.71	10,380.0	2,803.2	1,221.0	2,797.0	0.00	0.00	0.00
19,800.0	90.00	179.71	10,380.0	2,703.2	1,221.5	2,697.0	0.00	0.00	0.00
19,900.0	90.00	179.71	10,380.0	2,603.2	1,222.0	2,597.0	0.00	0.00	0.00
20,000.0	90.00	179.71	10,380.0	2,503.2	1,222.5	2,497.0	0.00	0.00	0.00
20,100.0	90.00	179.71	10,380.0	2,403.2	1,223.0	2,397.0	0.00	0.00	0.00
20,200.0	90.00	179.71	10,380.0	2,303.3	1,223.5	2,297.0	0.00	0.00	0.00
20,300.0	90.00	179.71	10,380.0	2,203.3	1,224.0	2,197.0	0.00	0.00	0.00
20,400.0	90.00	179.71	10,380.0	2,103.3	1,224.5	2,097.0	0.00	0.00	0.00
20,500.0	90.00	179.71	10,380.0	2,003.3	1,225.0	1,997.0	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dr Ireland State 16 #229H
Company:	Matador Production Company	TVD Reference:	KB @ 3052.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3052.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #229H	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)	
20,600.0	90.00	179.71	10,380.0	1,903.3	1,225.5	1,897.0	0.00	0.00	0.00	
20,700.0	90.00	179.71	10,380.0	1,803.3	1,226.0	1,797.0	0.00	0.00	0.00	
20,800.0	90.00	179.71	10,380.0	1,703.3	1,226.5	1,697.0	0.00	0.00	0.00	
20,900.0	90.00	179.71	10,380.0	1,603.3	1,227.0	1,597.0	0.00	0.00	0.00	
21,000.0	90.00	179.71	10,380.0	1,503.3	1,227.5	1,497.0	0.00	0.00	0.00	
21,100.0	90.00	179.71	10,380.0	1,403.3	1,228.0	1,397.0	0.00	0.00	0.00	
21,200.0	90.00	179.71	10,380.0	1,303.3	1,228.5	1,297.0	0.00	0.00	0.00	
21,287.9	90.00	179.71	10,380.0	1,215.4	1,228.9	1,209.2	0.00	0.00	0.00	
TD at 21287.9 - BHL - Dr Ireland State 16 #229H										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude		
- hit/miss target										
- Shape								Longitude		
KOP - Dr Ireland State 1 - plan hits target center - Point	0.00	0.00	9,807.0	622.4	41.9	471,924.00	575,383.00	32° 17' 49.920 N 104° 5' 21.726 W		
FPP - Dr Ireland State 1 - plan hits target center - Point	0.00	0.00	10,380.0	1,194.7	-54.4	472,496.25	575,286.70	32° 17' 55.585 N 104° 5' 22.833 W		
Apex - Dr Ireland State 1 - plan hits target center - Point	0.00	0.00	10,380.0	6,088.1	543.9	477,390.00	575,885.00	32° 18' 44.001 N 104° 5' 15.731 W		
BHL - Dr Ireland State 1 - plan hits target center - Point	0.00	0.00	10,380.0	1,215.4	1,228.9	472,517.00	576,570.00	32° 17' 55.761 N 104° 5' 7.881 W		
NPZ1 - Dr Ireland State - plan misses target center by 1.1usft at 15454.9usft MD (10380.0 TVD, 5854.0 N, 44.2 E) - Point	0.00	0.00	10,380.0	5,853.4	45.0	477,155.28	575,386.11	32° 18' 41.689 N 104° 5' 21.551 W		
NPZ2 - Dr Ireland State - plan misses target center by 1.3usft at 16608.1usft MD (10380.0 TVD, 5860.2 N, 1059.6 E) - Point	0.00	0.00	10,380.0	5,859.4	1,058.7	477,161.28	576,399.79	32° 18' 41.726 N 104° 5' 9.739 W		
DP1 - Dr Ireland State 1 - plan hits target center - Point	0.00	0.00	10,380.0	5,424.1	-112.1	476,726.00	575,229.00	32° 18' 37.444 N 104° 5' 23.393 W		
DP2 - Dr Ireland State 1 - plan hits target center - Point	0.00	0.00	10,380.0	5,431.1	1,207.9	476,733.00	576,549.00	32° 18' 37.484 N 104° 5' 8.012 W		

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dr Ireland State 16 #229H
Company:	Matador Production Company	TVD Reference:	KB @ 3052.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3052.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #229H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	State Plan #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
268.0	268.0	Rustler				
345.0	345.0	Salado				
991.0	991.0	Castile				
2,563.9	2,557.0	G30:CS14-CSB				
2,598.2	2,591.0	G26: Bell Cyn.				
3,425.3	3,410.0	G16: Manzanita				
3,470.7	3,455.0	G13: Cherry Cyn.				
4,613.8	4,587.0	G7: Brushy Cyn.				
6,222.6	6,181.0	BSGL				
6,271.7	6,230.0	G4.1: AVALON-SS				
6,298.8	6,257.0	G3.3: AVALON SS				
6,403.9	6,362.0	L8.2: U. Avalon Shale				
6,519.9	6,478.0	L6.3: Avalon Carb				
6,732.9	6,691.0	L6.2: L. Avalon Shale				
6,914.9	6,873.0	L5.3: FBSC				
7,085.9	7,044.0	L5.1: FBSC				
7,257.9	7,216.0	M. FBSC				
7,347.9	7,306.0	L. FBSC				
7,457.9	7,416.0	L4.3: SBSC				
7,893.9	7,852.0	L4.1: SBSC				
8,033.9	7,992.0	L4.1: SBSC B Carb				
8,240.9	8,199.0	L4.1: SBSC C				
8,251.9	8,210.0	L3.3: TBSC				
8,614.9	8,573.0	L3.3.2: Break Sand				
8,657.9	8,616.0	L3.3.1: Break Sand				
8,981.9	8,940.0	L3.2: TBSC				
9,148.9	9,107.0	L3.1: TBSC				
9,427.9	9,386.0	L. TBSC				
9,484.9	9,443.0	L2: WFMP A				
9,519.9	9,478.0	X Sand (T)				
9,565.9	9,524.0	X Sand (B)				
9,599.9	9,558.0	Y Sand (T)				
9,636.9	9,595.0	Y Sand (B)				
9,658.9	9,617.0	Z Sand (T)				
9,724.9	9,683.0	Z Sand (B)				
9,732.9	9,691.0	L1_WFMP A Fat				
9,868.9	9,827.0	WFMP B				
10,182.4	10,122.0	WFMP B.1				
10,336.7	10,238.0	WFMP B.2				
10,673.5	10,375.0	WFMP B.3				

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dr Ireland State 16 #229H
Company:	Matador Production Company	TVD Reference:	KB @ 3052.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3052.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #229H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	State Plan #1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,500.0	1,500.0	0.0	0.0	Start Build 1.50
2,033.3	2,031.6	37.1	2.5	Start 3948.2 hold at 2033.3 MD
5,981.6	5,941.4	585.3	39.4	Start Drop -1.50
6,514.9	6,473.0	622.4	41.9	Start 3334.0 hold at 6514.9 MD
9,848.9	9,807.0	622.4	41.9	Start Build 10.00
10,748.9	10,380.0	1,187.4	-53.1	Start DLS 2.00 TFO 90.00
11,211.8	10,380.0	1,648.1	-92.8	Start 3776.1 hold at 11211.8 MD
14,987.8	10,380.0	5,424.1	-112.1	Start DLS 8.68 TFO 90.00
16,000.0	10,380.0	6,087.0	519.9	Start 24.0 hold at 16000.0 MD
16,024.0	10,380.0	6,088.1	543.9	Start DLS 9.00 TFO 90.00
17,048.5	10,380.0	5,454.7	1,207.8	Start 23.6 hold at 17048.5 MD
17,072.1	10,380.0	5,431.1	1,207.9	Start DLS 2.00 TFO -89.05
17,073.8	10,380.0	5,429.4	1,207.9	Start 4214.1 hold at 17073.8 MD
21,287.9	10,380.0	1,215.4	1,228.9	TD at 21287.9

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:** 6/3/2024

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
Dr. Ireland State 16 229H	TBD	B 21-23S-28E	866' FNL 1900' FEL	480	6,100	4,100
Dr. Ireland State 16 209H	TBD	B 21-23S-28E	866' FNL 1930' FEL	880	2,200	4,800
Dr. Ireland State 16 129H	TBD	B 21-23S-28E	836' FNL 1930' FEL	850	1,800	4,000
Dr. Ireland State 16 119H	TBD	B 21-23S-28E	836' FNL 1900' FEL	700	3,700	3,800

IV. Central Delivery Point Name: Dr. Ireland 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
Dr. Ireland State 16 229H	TBD	12/20/2024	01/09/2025	03/15/2025	05/25/2025	05/25/2025
Dr. Ireland State 16 209H	TBD	01/10/2025	01/30/2025	03/15/2025	05/25/2025	05/25/2025
Dr. Ireland State 16 129H	TBD	01/31/2025	02/19/2025	03/15/2025	05/25/2025	05/25/2025
Dr. Ireland State 16 119H	TBD	02/20/2025	03/10/2025	03/15/2025	05/25/2025	05/25/2025

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

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

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

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications**Effective May 25, 2021**

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

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

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

If Operator checks this box, Operator will select one of the following:

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature: 
Printed Name: Klint Franz
Title: Facilities Engineer
E-mail Address: klint.franz@matadorresources.com
Date: 06/03/2024
Phone: (972) 371-5200
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

Dr. Ireland State 16 119H, 129H, 209H, 229H

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
Dr. Ireland State 16 229H	480	6,100	4,100
Dr. Ireland State 16 209H	880	2,200	4,800
Dr. Ireland State 16 129H	850	1,800	4,000
Dr. Ireland State 16 119H	700	3,700	3,800

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.

VIII. 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

Gas is within spec