

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 369214

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 30-015-55325
4. Property Code 336207	5. Property Name Dr. Ireland State 16	6. Well No. 129H

7. Surface Location

UL - Lot B	Section 21	Township 23S	Range 28E	Lot Idn	Feet From 836	N/S Line N	Feet From 1930	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 110	N/S Line S	Feet From 660	E/W Line E	County Eddy
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9. Pool Information

CULEBRA BLUFF;BONE SPRING, SOUTH	15011
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3024
16. Multiple N	17. Proposed Depth 19471	18. Formation Bone Spring	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	29.7	7481	704	0
Prod	6.75	5.5	20	19471	770	7281

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:

OIL CONSERVATION DIVISION

Printed Name: Electronically filed by Brett A Jennings	Approved By: Ward Rikala
Title: Regulatory Analyst	Title: Petroleum Specialist Supervisor
Email Address: brett.jennings@matadorresources.com	Approved Date: 8/14/2024 Expiration Date: 8/14/2026
Date: 7/8/2024 Phone: 972-629-2160	Conditions of Approval Attached

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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 30-015-55325	² Pool Code 15011	³ Pool Name Culebra Bluff; Bone Springs, South
⁴ Property Code 336207	⁵ Property Name DR. IRELAND STATE 16	
⁶ GRID No. 22 8937	⁷ Operator Name MATADOR PRODUCTION COMPANY	⁸ Well Number 129H
		⁹ Elevation 3024'

¹⁰Surface Location

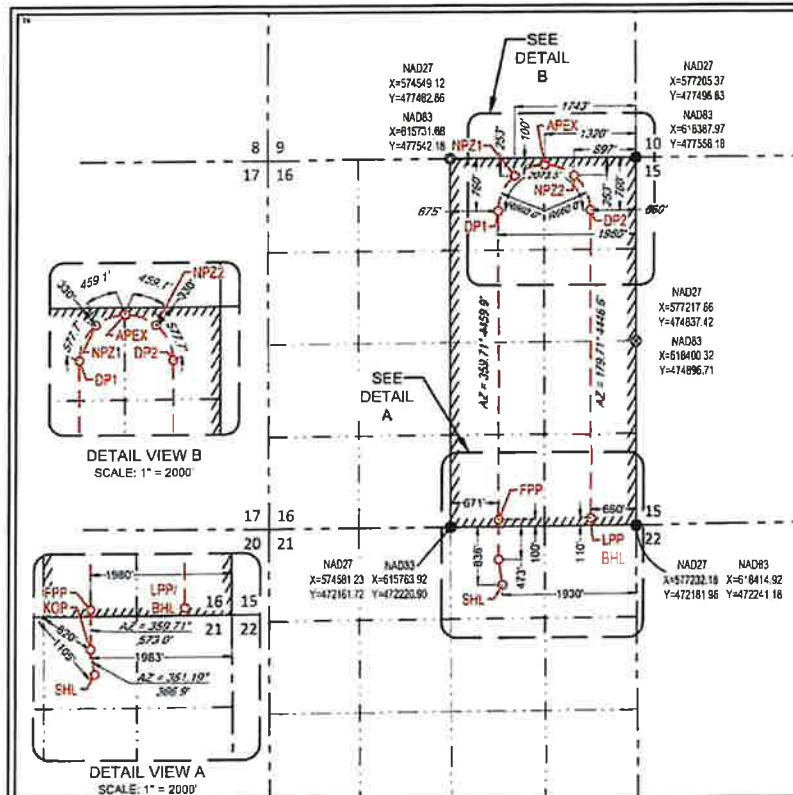
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
B	21	23-S	28-E	-	836'	NORTH	1930'	EAST	EDDY

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
P	16	23-S	28-E	-	110'	SOUTH	660'	EAST	EDDY

¹²Dedicated Acres
320
¹³Joint or Infill
¹⁴Consolidation Code
¹⁵Order 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.


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 undivided mineral interest in the land underlying 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 is a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Reece Clark 5/31/24
Date

Printed Name

Reece.Clark@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.

02/29/2024

Date of Survey

Signature and Seal of Professional Surveyor



Certificate Number

NEW MEXICO EAST

NAD 1927

NEW MEXICO EAST NAD 1983			
SURFACE LOCATION (SHL)	KICK OFF POINT (KOP)	FIRST PERFORATION POINT (FPP)	DEFLECTION POINT (DP1)
836' FNL - SEC. 21 1930' FEL - SEC. 21 X=618484 Y=471380 LAT.: N 32.2956917 LONG.: W 104.0901016	473' FNL - SEC. 21 1963' FEL - SEC. 21 X=616437 Y=471753 LAT.: N 32.2968887 LONG.: W 104.0902808	100' FSL - SEC. 16 1980' FEL - SEC. 16 X=616434 Y=472326 LAT.: N 32.2982638 LONG.: W 104.0902861	780' FNL - SEC. 16 1980' FEL - SEC. 16 X=616412 Y=476786 LAT.: N 32.3105230 LONG.: W 104.0903275
NON PERFORATION ZONE (NPZ1)	U-TURN APEX (APEX)	NON PERFORATION ZONE (NPZ2)	DEFLECTION POINT (DP2)
253' FNL - SEC. 16 1743' FEL - SEC. 16 X=618646 Y=477294 LAT.: N 32.3119177 LONG.: W 104.0895651	100' FNL - SEC. 16 1320' FEL - SEC. 16 X=617068 Y=477449 LAT.: N 32.3123427 LONG.: W 104.0861975	253' FNL - SEC. 16 897' FEL - SEC. 16 X=617492 Y=477298 LAT.: N 32.3119246 LONG.: W 104.0888270	760' FNL - SEC. 16 860' FEL - SEC. 16 X=617732 Y=476793 LAT.: N 32.3105398 LONG.: W 104.0860549
LOWER PERFOR. POINT (LPP)	BOTTOM HOLE LOCATION (BHL)		
110' FSL - SEC. 16 660' FEL - SEC. 16 X=617754 Y=472346 LAT.: N 32.2983107 LONG.: W 104.0860142			

SURFACE LOCATION (SHL)	KICK OFF POINT (KOP)
X=575211 Y=471531 LAT.: N 32.2956712 LONG.: W 104.0895462	X=575235 Y=471684 LAT.: N 32.2956860 LONG.: W 104.0897554

FIRST PERFORATION POINT (FPP)	DEFLECTION POINT (DP1)
X=575252 Y=472754 LAT.: N 32.2981431 LONG.: W 104.0897907	X=575225 Y=476782 LAT.: N 32.3104224 LONG.: W 104.0894316

NON PERFORATION ZONE (NPZ1)	U-TURN APEX (APEX)
X=575453 Y=477234 LAT.: N 32.3117872 LONG.: W 104.0895932	X=575580 Y=477280 LAT.: N 32.3122221 LONG.: W 104.0877017

NON PERFORATION ZONE (NPZ2)	DEFLECTION POINT (DP2)
X=575739 Y=477220 LAT.: N 32.3112811 LONG.: W 104.0883313	X=575243 Y=476732 LAT.: N 32.3104132 LONG.: W 104.0855551

LOWER PERFOR. POINT (LPP)	BOTTOM HOLE LOCATION (BHL)
X=575752 Y=477287 LAT.: N 32.2981900 LONG.: W 104.0855169	

S:\SURVEY\MATADOR_RESOURCES\DR. IRELAND_21-23S-28E\FINAL_PRODUCT\5410_DR. IRELAND_STATE_16_129H_REV3.DWG 5/31/2024 1:32:21 PM areabeta

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

Form APD Conditions
Permit 369214

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: MATADOR PRODUCTION COMPANY [228937] One Lincoln Centre Dallas, TX 75240	API Number: 30-015-55325
	Well: Dr. Ireland State 16 #129H

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 #129H										
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	7481	0	704	0	Option to run DV tool and Packer.
PROD	OBM	6.75	5.5	P-110	20.00	19471	0	770	7281	

Matador Production Company

Rustler Breaks

Dr Ireland

Dr Ireland State 16 #129H

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 #129H
Company:	Matador Production Company	TVD Reference:	KB @ 3053.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3053.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #129H	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	Latitude:	32° 17' 43.761 N	
From:	Lat/Long	Easting:	575,341.07 usft	Longitude:	104° 5' 22.231 W	
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.13 °

Well	Dr Ireland State 16 #129H					
Well Position	+N/-S	29.7 usft	Northing:	471,331.29 usft	Latitude:	32° 17' 44.056 N
	+E/-W	-30.2 usft	Easting:	575,310.85 usft	Longitude:	104° 5' 22.582 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		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	47,228.12882239

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	359.71

Plan Survey Tool Program	Date	6/13/2024			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	19,470.5	State Plan #1 (Wellbore #1)	MWD	
			OWSG MWD - Standard		

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dr Ireland State 16 #129H
Company:	Matador Production Company	TVD Reference:	KB @ 3053.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3053.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #129H	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	351.25	2,031.6	36.7	-5.7	1.50	1.50	0.00	351.25	
4,136.3	8.00	351.25	4,114.1	326.0	-50.2	0.00	0.00	0.00	0.00	
4,669.6	0.00	0.00	4,645.7	362.7	-55.9	1.50	-1.50	0.00	180.00	
7,580.9	0.00	0.00	7,557.0	362.7	-55.9	0.00	0.00	0.00	0.00	KOP - Dr Ireland State
8,480.9	90.00	359.69	8,130.0	935.7	-59.0	10.00	10.00	0.00	359.69	
8,481.7	90.00	359.71	8,130.0	936.5	-59.0	2.00	-0.07	2.00	91.96	
12,940.1	90.00	359.71	8,130.0	5,394.8	-81.8	0.00	0.00	0.00	0.00	DP1 - Dr Ireland State
13,952.3	90.00	87.56	8,130.0	6,057.7	550.2	8.68	0.00	8.68	90.00	
13,976.3	90.00	87.56	8,130.0	6,058.8	574.2	0.00	0.00	0.00	0.00	Apex - Dr Ireland State
15,000.9	90.00	179.75	8,130.0	5,425.3	1,238.1	9.00	0.00	9.00	90.00	
15,024.5	90.00	179.75	8,130.0	5,401.8	1,238.2	0.00	0.00	0.00	0.00	DP2 - Dr Ireland State
15,026.7	90.00	179.70	8,130.0	5,399.6	1,238.2	2.00	0.02	-2.00	-89.34	
19,470.5	90.00	179.70	8,130.0	955.8	1,261.2	0.00	0.00	0.00	0.00	BHL - Dr Ireland State

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dr Ireland State 16 #129H
Company:	Matador Production Company	TVD Reference:	KB @ 3053.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3053.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #129H	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	351.25	1,600.0	1.3	-0.2	1.3	1.50	1.50	0.00
1,700.0	3.00	351.25	1,699.9	5.2	-0.8	5.2	1.50	1.50	0.00
1,800.0	4.50	351.25	1,799.7	11.6	-1.8	11.6	1.50	1.50	0.00
1,900.0	6.00	351.25	1,899.3	20.7	-3.2	20.7	1.50	1.50	0.00
2,000.0	7.50	351.25	1,998.6	32.3	-5.0	32.3	1.50	1.50	0.00
2,033.3	8.00	351.25	2,031.6	36.7	-5.7	36.8	1.50	1.50	0.00
Start 2103.0 hold at 2033.3 MD									
2,100.0	8.00	351.25	2,097.6	45.9	-7.1	45.9	0.00	0.00	0.00
2,200.0	8.00	351.25	2,196.6	59.7	-9.2	59.7	0.00	0.00	0.00
2,300.0	8.00	351.25	2,295.7	73.4	-11.3	73.5	0.00	0.00	0.00
2,400.0	8.00	351.25	2,394.7	87.2	-13.4	87.2	0.00	0.00	0.00
2,500.0	8.00	351.25	2,493.7	100.9	-15.5	101.0	0.00	0.00	0.00
2,563.9	8.00	351.25	2,557.0	109.7	-16.9	109.8	0.00	0.00	0.00
G30:CS14-CSB									
2,598.2	8.00	351.25	2,591.0	114.4	-17.6	114.5	0.00	0.00	0.00
G26: Bell Cyn.									
2,600.0	8.00	351.25	2,592.8	114.7	-17.7	114.8	0.00	0.00	0.00
2,700.0	8.00	351.25	2,691.8	128.4	-19.8	128.5	0.00	0.00	0.00
2,800.0	8.00	351.25	2,790.8	142.2	-21.9	142.3	0.00	0.00	0.00
2,900.0	8.00	351.25	2,889.8	156.0	-24.0	156.1	0.00	0.00	0.00
3,000.0	8.00	351.25	2,988.9	169.7	-26.1	169.8	0.00	0.00	0.00
3,100.0	8.00	351.25	3,087.9	183.5	-28.2	183.6	0.00	0.00	0.00
3,200.0	8.00	351.25	3,186.9	197.2	-30.4	197.4	0.00	0.00	0.00
3,300.0	8.00	351.25	3,285.9	211.0	-32.5	211.1	0.00	0.00	0.00
3,400.0	8.00	351.25	3,385.0	224.7	-34.6	224.9	0.00	0.00	0.00
3,425.3	8.00	351.25	3,410.0	228.2	-35.1	228.4	0.00	0.00	0.00
G16: Manzanita									
3,470.7	8.00	351.25	3,455.0	234.5	-36.1	234.6	0.00	0.00	0.00
G13: Cherry Cyn.									
3,500.0	8.00	351.25	3,484.0	238.5	-36.7	238.7	0.00	0.00	0.00

Planning Report

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Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #129H	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	351.25	3,583.0	252.2	-38.8	252.4	0.00	0.00	0.00
3,700.0	8.00	351.25	3,682.0	266.0	-41.0	266.2	0.00	0.00	0.00
3,800.0	8.00	351.25	3,781.1	279.7	-43.1	280.0	0.00	0.00	0.00
3,900.0	8.00	351.25	3,880.1	293.5	-45.2	293.7	0.00	0.00	0.00
4,000.0	8.00	351.25	3,979.1	307.3	-47.3	307.5	0.00	0.00	0.00
4,100.0	8.00	351.25	4,078.2	321.0	-49.4	321.3	0.00	0.00	0.00
4,136.3	8.00	351.25	4,114.1	326.0	-50.2	326.3	0.00	0.00	0.00
Start Drop -1.50									
4,200.0	7.04	351.25	4,177.3	334.2	-51.5	334.5	1.50	-1.50	0.00
4,300.0	5.54	351.25	4,276.6	345.1	-53.1	345.3	1.50	-1.50	0.00
4,400.0	4.04	351.25	4,376.3	353.3	-54.4	353.6	1.50	-1.50	0.00
4,500.0	2.54	351.25	4,476.1	359.0	-55.3	359.3	1.50	-1.50	0.00
4,600.0	1.04	351.25	4,576.1	362.1	-55.8	362.4	1.50	-1.50	0.00
4,610.9	0.88	351.25	4,587.0	362.3	-55.8	362.6	1.50	-1.50	0.00
G7: Brushy Cyn.									
4,669.6	0.00	0.00	4,645.7	362.7	-55.9	363.0	1.50	-1.50	0.00
Start 2911.3 hold at 4669.6 MD									
4,700.0	0.00	0.00	4,676.1	362.7	-55.9	363.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,776.1	362.7	-55.9	363.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,876.1	362.7	-55.9	363.0	0.00	0.00	0.00
5,000.0	0.00	0.00	4,976.1	362.7	-55.9	363.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,076.1	362.7	-55.9	363.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,176.1	362.7	-55.9	363.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,276.1	362.7	-55.9	363.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,376.1	362.7	-55.9	363.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,476.1	362.7	-55.9	363.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,576.1	362.7	-55.9	363.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,676.1	362.7	-55.9	363.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,776.1	362.7	-55.9	363.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,876.1	362.7	-55.9	363.0	0.00	0.00	0.00
6,000.0	0.00	0.00	5,976.1	362.7	-55.9	363.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,076.1	362.7	-55.9	363.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,176.1	362.7	-55.9	363.0	0.00	0.00	0.00
6,204.9	0.00	0.00	6,181.0	362.7	-55.9	363.0	0.00	0.00	0.00
BSGL									
6,253.9	0.00	0.00	6,230.0	362.7	-55.9	363.0	0.00	0.00	0.00
G4.1: AVALON-SS									
6,280.9	0.00	0.00	6,257.0	362.7	-55.9	363.0	0.00	0.00	0.00
G3.3: AVALON SS									
6,300.0	0.00	0.00	6,276.1	362.7	-55.9	363.0	0.00	0.00	0.00
6,385.9	0.00	0.00	6,362.0	362.7	-55.9	363.0	0.00	0.00	0.00
L8.2: U. Avalon Shale									
6,400.0	0.00	0.00	6,376.1	362.7	-55.9	363.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,476.1	362.7	-55.9	363.0	0.00	0.00	0.00
6,501.9	0.00	0.00	6,478.0	362.7	-55.9	363.0	0.00	0.00	0.00
L6.3: Avalon Carb									
6,600.0	0.00	0.00	6,576.1	362.7	-55.9	363.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,676.1	362.7	-55.9	363.0	0.00	0.00	0.00
6,714.9	0.00	0.00	6,691.0	362.7	-55.9	363.0	0.00	0.00	0.00
L6.2: L. Avalon Shale									
6,800.0	0.00	0.00	6,776.1	362.7	-55.9	363.0	0.00	0.00	0.00
6,896.9	0.00	0.00	6,873.0	362.7	-55.9	363.0	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dr Ireland State 16 #129H
Company:	Matador Production Company	TVD Reference:	KB @ 3053.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3053.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #129H	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									
6,900.0	0.00	0.00	6,876.1	362.7	-55.9	363.0	0.00	0.00	0.00
7,000.0	0.00	0.00	6,976.1	362.7	-55.9	363.0	0.00	0.00	0.00
7,067.9	0.00	0.00	7,044.0	362.7	-55.9	363.0	0.00	0.00	0.00
L5.1: FBSC									
7,100.0	0.00	0.00	7,076.1	362.7	-55.9	363.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,176.1	362.7	-55.9	363.0	0.00	0.00	0.00
7,239.9	0.00	0.00	7,216.0	362.7	-55.9	363.0	0.00	0.00	0.00
M. FBSC									
7,300.0	0.00	0.00	7,276.1	362.7	-55.9	363.0	0.00	0.00	0.00
7,329.9	0.00	0.00	7,306.0	362.7	-55.9	363.0	0.00	0.00	0.00
L. FBSC									
7,400.0	0.00	0.00	7,376.1	362.7	-55.9	363.0	0.00	0.00	0.00
7,439.9	0.00	0.00	7,416.0	362.7	-55.9	363.0	0.00	0.00	0.00
L4.3: SBSC									
7,500.0	0.00	0.00	7,476.1	362.7	-55.9	363.0	0.00	0.00	0.00
7,580.9	0.00	0.00	7,557.0	362.7	-55.9	363.0	0.00	0.00	0.00
Start Build 10.00 - KOP - Dr Ireland State 16 #129H									
7,600.0	1.91	359.69	7,576.1	363.1	-55.9	363.3	10.00	10.00	0.00
7,700.0	11.91	359.69	7,675.2	375.1	-55.9	375.4	10.00	10.00	0.00
7,800.0	21.91	359.69	7,770.8	404.1	-56.1	404.4	10.00	10.00	0.00
7,890.8	30.99	359.69	7,852.0	444.5	-56.3	444.8	10.00	10.00	0.00
L4.1: SBSC									
7,900.0	31.91	359.69	7,859.8	449.3	-56.3	449.6	10.00	10.00	0.00
8,000.0	41.91	359.69	7,939.7	509.3	-56.6	509.6	10.00	10.00	0.00
8,074.9	49.40	359.69	7,992.0	562.8	-56.9	563.1	10.00	10.00	0.00
L4.1: SBSC B Carb									
8,100.0	51.91	359.69	8,007.9	582.2	-57.0	582.5	10.00	10.00	0.00
8,200.0	61.91	359.69	8,062.5	665.9	-57.5	666.2	10.00	10.00	0.00
8,300.0	71.91	359.69	8,101.6	757.8	-58.0	758.0	10.00	10.00	0.00
8,400.0	81.91	359.69	8,124.3	855.0	-58.5	855.3	10.00	10.00	0.00
8,481.0	90.00	359.69	8,130.0	935.7	-59.0	936.0	9.99	9.99	0.00
Start DLS 2.00 TFO 91.96 - FPP - Dr Ireland State 16 #129H									
8,481.7	90.00	359.71	8,130.0	936.5	-59.0	936.8	2.11	-0.07	2.11
Start 4458.3 hold at 8481.7 MD									
8,500.0	90.00	359.71	8,130.0	954.8	-59.0	955.1	0.00	0.00	0.00
8,600.0	90.00	359.71	8,130.0	1,054.8	-59.6	1,055.1	0.00	0.00	0.00
8,700.0	90.00	359.71	8,130.0	1,154.8	-60.1	1,155.1	0.00	0.00	0.00
8,800.0	90.00	359.71	8,130.0	1,254.8	-60.6	1,255.1	0.00	0.00	0.00
8,900.0	90.00	359.71	8,130.0	1,354.8	-61.1	1,355.1	0.00	0.00	0.00
9,000.0	90.00	359.71	8,130.0	1,454.8	-61.6	1,455.1	0.00	0.00	0.00
9,100.0	90.00	359.71	8,130.0	1,554.8	-62.1	1,555.1	0.00	0.00	0.00
9,200.0	90.00	359.71	8,130.0	1,654.8	-62.6	1,655.1	0.00	0.00	0.00
9,300.0	90.00	359.71	8,130.0	1,754.8	-63.2	1,755.1	0.00	0.00	0.00
9,400.0	90.00	359.71	8,130.0	1,854.8	-63.7	1,855.1	0.00	0.00	0.00
9,500.0	90.00	359.71	8,130.0	1,954.8	-64.2	1,955.1	0.00	0.00	0.00
9,600.0	90.00	359.71	8,130.0	2,054.8	-64.7	2,055.1	0.00	0.00	0.00
9,700.0	90.00	359.71	8,130.0	2,154.8	-65.2	2,155.1	0.00	0.00	0.00
9,800.0	90.00	359.71	8,130.0	2,254.8	-65.7	2,255.1	0.00	0.00	0.00
9,900.0	90.00	359.71	8,130.0	2,354.7	-66.2	2,355.1	0.00	0.00	0.00
10,000.0	90.00	359.71	8,130.0	2,454.7	-66.8	2,455.1	0.00	0.00	0.00
10,100.0	90.00	359.71	8,130.0	2,554.7	-67.3	2,555.1	0.00	0.00	0.00
10,200.0	90.00	359.71	8,130.0	2,654.7	-67.8	2,655.1	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dr Ireland State 16 #129H
Company:	Matador Production Company	TVD Reference:	KB @ 3053.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3053.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #129H	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)
10,300.0	90.00	359.71	8,130.0	2,754.7	-68.3	2,755.1	0.00	0.00	0.00
10,400.0	90.00	359.71	8,130.0	2,854.7	-68.8	2,855.1	0.00	0.00	0.00
10,500.0	90.00	359.71	8,130.0	2,954.7	-69.3	2,955.1	0.00	0.00	0.00
10,600.0	90.00	359.71	8,130.0	3,054.7	-69.8	3,055.1	0.00	0.00	0.00
10,700.0	90.00	359.71	8,130.0	3,154.7	-70.3	3,155.1	0.00	0.00	0.00
10,800.0	90.00	359.71	8,130.0	3,254.7	-70.9	3,255.1	0.00	0.00	0.00
10,900.0	90.00	359.71	8,130.0	3,354.7	-71.4	3,355.1	0.00	0.00	0.00
11,000.0	90.00	359.71	8,130.0	3,454.7	-71.9	3,455.1	0.00	0.00	0.00
11,100.0	90.00	359.71	8,130.0	3,554.7	-72.4	3,555.1	0.00	0.00	0.00
11,200.0	90.00	359.71	8,130.0	3,654.7	-72.9	3,655.1	0.00	0.00	0.00
11,300.0	90.00	359.71	8,130.0	3,754.7	-73.4	3,755.1	0.00	0.00	0.00
11,400.0	90.00	359.71	8,130.0	3,854.7	-73.9	3,855.1	0.00	0.00	0.00
11,500.0	90.00	359.71	8,130.0	3,954.7	-74.5	3,955.1	0.00	0.00	0.00
11,600.0	90.00	359.71	8,130.0	4,054.7	-75.0	4,055.1	0.00	0.00	0.00
11,700.0	90.00	359.71	8,130.0	4,154.7	-75.5	4,155.1	0.00	0.00	0.00
11,800.0	90.00	359.71	8,130.0	4,254.7	-76.0	4,255.1	0.00	0.00	0.00
11,900.0	90.00	359.71	8,130.0	4,354.7	-76.5	4,355.1	0.00	0.00	0.00
12,000.0	90.00	359.71	8,130.0	4,454.7	-77.0	4,455.1	0.00	0.00	0.00
12,100.0	90.00	359.71	8,130.0	4,554.7	-77.5	4,555.1	0.00	0.00	0.00
12,200.0	90.00	359.71	8,130.0	4,654.7	-78.0	4,655.1	0.00	0.00	0.00
12,300.0	90.00	359.71	8,130.0	4,754.7	-78.6	4,755.1	0.00	0.00	0.00
12,400.0	90.00	359.71	8,130.0	4,854.7	-79.1	4,855.1	0.00	0.00	0.00
12,500.0	90.00	359.71	8,130.0	4,954.7	-79.6	4,955.1	0.00	0.00	0.00
12,600.0	90.00	359.71	8,130.0	5,054.7	-80.1	5,055.1	0.00	0.00	0.00
12,700.0	90.00	359.71	8,130.0	5,154.7	-80.6	5,155.1	0.00	0.00	0.00
12,800.0	90.00	359.71	8,130.0	5,254.7	-81.1	5,255.1	0.00	0.00	0.00
12,900.0	90.00	359.71	8,130.0	5,354.7	-81.6	5,355.1	0.00	0.00	0.00
12,940.1	90.00	359.71	8,130.0	5,394.8	-81.8	5,395.1	0.00	0.00	0.00
Start DLS 8.68 TFO 90.00 - DP1 - Dr Ireland State16 #129H									
13,000.0	90.00	4.91	8,130.0	5,454.6	-79.4	5,455.0	8.68	0.00	8.68
13,100.0	90.00	13.59	8,130.0	5,553.2	-63.4	5,553.5	8.68	0.00	8.68
13,200.0	90.00	22.27	8,130.0	5,648.3	-32.6	5,648.4	8.68	0.00	8.68
13,300.0	90.00	30.94	8,130.0	5,737.6	12.1	5,737.5	8.68	0.00	8.68
13,400.0	90.00	39.62	8,130.0	5,819.2	69.8	5,818.8	8.68	0.00	8.68
13,500.0	90.00	48.30	8,130.0	5,891.1	139.2	5,890.3	8.68	0.00	8.68
13,517.1	90.00	49.79	8,130.0	5,902.3	152.1	5,901.5	8.68	0.00	8.68
NPZ1 - Dr Ireland State 16 #129H									
13,600.0	90.00	56.98	8,130.0	5,951.7	218.6	5,950.5	8.68	0.00	8.68
13,700.0	90.00	65.66	8,130.0	5,999.7	306.2	5,998.0	8.68	0.00	8.68
13,800.0	90.00	74.34	8,130.0	6,033.8	400.1	6,031.7	8.68	0.00	8.68
13,900.0	90.00	83.02	8,130.0	6,053.4	498.1	6,050.8	8.68	0.00	8.68
13,952.3	90.00	87.56	8,130.0	6,057.7	550.2	6,054.9	8.68	0.00	8.68
Start 24.0 hold at 13952.3 MD									
13,976.3	90.00	87.56	8,130.0	6,058.8	574.2	6,055.8	0.00	0.00	0.00
Start DLS 9.00 TFO 90.00 - Apex - Dr Ireland State 16 #129H									
14,000.0	90.00	89.69	8,130.0	6,059.3	597.8	6,056.2	9.00	0.00	9.00
14,100.0	90.00	98.69	8,130.0	6,052.0	697.5	6,048.4	9.00	0.00	9.00
14,200.0	90.00	107.69	8,130.0	6,029.2	794.7	6,025.1	9.00	0.00	9.00
14,300.0	90.00	116.68	8,130.0	5,991.5	887.2	5,986.9	9.00	0.00	9.00
14,400.0	90.00	125.68	8,130.0	5,939.8	972.7	5,934.8	9.00	0.00	9.00
14,452.5	90.00	130.40	8,130.0	5,907.4	1,014.0	5,902.2	9.00	0.00	9.00
NPZ2 - Dr Ireland State 16 #129H									
14,500.0	90.00	134.68	8,130.0	5,875.3	1,049.0	5,869.9	9.00	0.00	9.00

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dr Ireland State 16 #129H
Company:	Matador Production Company	TVD Reference:	KB @ 3053.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3053.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #129H	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)
14,600.0	90.00	143.68	8,130.0	5,799.7	1,114.3	5,794.0	9.00	0.00	9.00
14,700.0	90.00	152.67	8,130.0	5,714.8	1,167.0	5,708.9	9.00	0.00	9.00
14,800.0	90.00	161.67	8,130.0	5,622.8	1,205.8	5,616.6	9.00	0.00	9.00
14,900.0	90.00	170.67	8,130.0	5,525.8	1,229.6	5,519.5	9.00	0.00	9.00
15,000.0	90.00	179.67	8,130.0	5,426.2	1,238.1	5,419.9	9.00	0.00	9.00
15,000.9	90.00	179.75	8,130.0	5,425.3	1,238.1	5,419.0	9.00	0.00	9.00
Start 23.6 hold at 15000.9 MD									
15,024.5	90.00	179.75	8,130.0	5,401.8	1,238.2	5,395.4	0.00	0.00	0.00
Start DLS 2.00 TFO -89.34 - DP2 - Dr Ireland State 16 #129H									
15,026.7	90.00	179.70	8,130.0	5,399.6	1,238.2	5,393.2	2.00	0.02	-2.00
Start 4443.9 hold at 15026.7 MD									
15,100.0	90.00	179.70	8,130.0	5,326.2	1,238.6	5,319.9	0.00	0.00	0.00
15,200.0	90.00	179.70	8,130.0	5,226.2	1,239.1	5,219.9	0.00	0.00	0.00
15,300.0	90.00	179.70	8,130.0	5,126.2	1,239.6	5,119.9	0.00	0.00	0.00
15,400.0	90.00	179.70	8,130.0	5,026.2	1,240.1	5,019.9	0.00	0.00	0.00
15,500.0	90.00	179.70	8,130.0	4,926.2	1,240.6	4,919.9	0.00	0.00	0.00
15,600.0	90.00	179.70	8,130.0	4,826.2	1,241.2	4,819.9	0.00	0.00	0.00
15,700.0	90.00	179.70	8,130.0	4,726.2	1,241.7	4,719.9	0.00	0.00	0.00
15,800.0	90.00	179.70	8,130.0	4,626.2	1,242.2	4,619.9	0.00	0.00	0.00
15,900.0	90.00	179.70	8,130.0	4,526.2	1,242.7	4,519.9	0.00	0.00	0.00
16,000.0	90.00	179.70	8,130.0	4,426.2	1,243.2	4,419.9	0.00	0.00	0.00
16,100.0	90.00	179.70	8,130.0	4,326.2	1,243.7	4,319.9	0.00	0.00	0.00
16,200.0	90.00	179.70	8,130.0	4,226.2	1,244.3	4,219.9	0.00	0.00	0.00
16,300.0	90.00	179.70	8,130.0	4,126.3	1,244.8	4,119.9	0.00	0.00	0.00
16,400.0	90.00	179.70	8,130.0	4,026.3	1,245.3	4,019.9	0.00	0.00	0.00
16,500.0	90.00	179.70	8,130.0	3,926.3	1,245.8	3,919.9	0.00	0.00	0.00
16,600.0	90.00	179.70	8,130.0	3,826.3	1,246.3	3,819.9	0.00	0.00	0.00
16,700.0	90.00	179.70	8,130.0	3,726.3	1,246.9	3,719.9	0.00	0.00	0.00
16,800.0	90.00	179.70	8,130.0	3,626.3	1,247.4	3,619.9	0.00	0.00	0.00
16,900.0	90.00	179.70	8,130.0	3,526.3	1,247.9	3,519.9	0.00	0.00	0.00
17,000.0	90.00	179.70	8,130.0	3,426.3	1,248.4	3,419.9	0.00	0.00	0.00
17,100.0	90.00	179.70	8,130.0	3,326.3	1,248.9	3,319.9	0.00	0.00	0.00
17,200.0	90.00	179.70	8,130.0	3,226.3	1,249.5	3,219.9	0.00	0.00	0.00
17,300.0	90.00	179.70	8,130.0	3,126.3	1,250.0	3,119.9	0.00	0.00	0.00
17,400.0	90.00	179.70	8,130.0	3,026.3	1,250.5	3,019.9	0.00	0.00	0.00
17,500.0	90.00	179.70	8,130.0	2,926.3	1,251.0	2,919.9	0.00	0.00	0.00
17,600.0	90.00	179.70	8,130.0	2,826.3	1,251.5	2,819.9	0.00	0.00	0.00
17,700.0	90.00	179.70	8,130.0	2,726.3	1,252.0	2,719.9	0.00	0.00	0.00
17,800.0	90.00	179.70	8,130.0	2,626.3	1,252.6	2,619.9	0.00	0.00	0.00
17,900.0	90.00	179.70	8,130.0	2,526.3	1,253.1	2,519.9	0.00	0.00	0.00
18,000.0	90.00	179.70	8,130.0	2,426.3	1,253.6	2,419.9	0.00	0.00	0.00
18,100.0	90.00	179.70	8,130.0	2,326.3	1,254.1	2,319.9	0.00	0.00	0.00
18,200.0	90.00	179.70	8,130.0	2,226.3	1,254.6	2,219.9	0.00	0.00	0.00
18,300.0	90.00	179.70	8,130.0	2,126.3	1,255.2	2,119.9	0.00	0.00	0.00
18,400.0	90.00	179.70	8,130.0	2,026.3	1,255.7	2,019.9	0.00	0.00	0.00
18,500.0	90.00	179.70	8,130.0	1,926.3	1,256.2	1,919.9	0.00	0.00	0.00
18,600.0	90.00	179.70	8,130.0	1,826.3	1,256.7	1,819.9	0.00	0.00	0.00
18,700.0	90.00	179.70	8,130.0	1,726.3	1,257.2	1,719.9	0.00	0.00	0.00
18,800.0	90.00	179.70	8,130.0	1,626.3	1,257.7	1,619.9	0.00	0.00	0.00
18,900.0	90.00	179.70	8,130.0	1,526.3	1,258.3	1,519.9	0.00	0.00	0.00
19,000.0	90.00	179.70	8,130.0	1,426.3	1,258.8	1,419.9	0.00	0.00	0.00
19,100.0	90.00	179.70	8,130.0	1,326.3	1,259.3	1,319.9	0.00	0.00	0.00
19,200.0	90.00	179.70	8,130.0	1,226.3	1,259.8	1,219.9	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dr Ireland State 16 #129H
Company:	Matador Production Company	TVD Reference:	KB @ 3053.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3053.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #129H	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)	
19,300.0	90.00	179.70	8,130.0	1,126.3	1,260.3	1,119.9	0.00	0.00	0.00	
19,400.0	90.00	179.70	8,130.0	1,026.3	1,260.9	1,019.9	0.00	0.00	0.00	
19,470.5	90.00	179.70	8,130.0	955.8	1,261.2	949.4	0.00	0.00	0.00	
TD at 19470.5 - BHL - Dr Ireland State 16 #129H										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
KOP - Dr Ireland State 1 - plan hits target center - Point	0.00	0.00	7,557.0	362.7	-55.9	471,694.00	575,255.00	32° 17' 47.646 N	104° 5' 23.223 W	
FPP - Dr Ireland State 1 - plan hits target center - Point	0.00	0.00	8,130.0	935.7	-58.9	472,266.96	575,251.92	32° 17' 53.317 N	104° 5' 23.244 W	
DP1 - Dr Ireland State 1 - plan hits target center - Point	0.00	0.00	8,130.0	5,394.8	-81.8	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	8,130.0	5,401.8	1,238.2	476,733.00	576,549.00	32° 18' 37.484 N	104° 5' 8.012 W	
NPZ1 - Dr Ireland State - plan misses target center by 1.2usft at 13517.1usft MD (8130.0 TVD, 5902.3 N, 152.1 E) - Point	0.00	0.00	8,130.0	5,901.3	152.9	477,232.59	575,463.72	32° 18' 42.452 N	104° 5' 20.645 W	
BHL - Dr Ireland State 1 - plan hits target center - Point	0.00	0.00	8,130.0	955.8	1,261.2	472,287.00	576,572.00	32° 17' 53.485 N	104° 5' 7.863 W	
NPZ2 - Dr Ireland State - plan misses target center by 1.4usft at 14452.5usft MD (8130.0 TVD, 5907.4 N, 1014.1 E) - Point	0.00	0.00	8,130.0	5,906.4	1,013.1	477,237.60	576,323.94	32° 18' 42.482 N	104° 5' 10.621 W	
Apex - Dr Ireland State 1 - plan hits target center - Point	0.00	0.00	8,130.0	6,058.8	574.2	477,390.00	575,885.00	32° 18' 44.001 N	104° 5' 15.731 W	

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dr Ireland State 16 #129H
Company:	Matador Production Company	TVD Reference:	KB @ 3053.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3053.5usft
Site:	Dr Ireland	North Reference:	Grid
Well:	Dr Ireland State 16 #129H	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.				
4,610.9	4,587.0	G7: Brushy Cyn.				
6,204.9	6,181.0	BSGL				
6,253.9	6,230.0	G4.1: AVALON-SS				
6,280.9	6,257.0	G3.3: AVALON SS				
6,385.9	6,362.0	L8.2: U. Avalon Shale				
6,501.9	6,478.0	L6.3: Avalon Carb				
6,714.9	6,691.0	L6.2: L. Avalon Shale				
6,896.9	6,873.0	L5.3: FBSC				
7,067.9	7,044.0	L5.1: FBSG				
7,239.9	7,216.0	M. FBSG				
7,329.9	7,306.0	L. FBSG				
7,439.9	7,416.0	L4.3: SBSC				
7,890.8	7,852.0	L4.1: SBSG				
8,074.9	7,992.0	L4.1: SBSG B Carb				

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 1.50	
2,033.3	2,031.6	36.7	-5.7	Start 2103.0 hold at 2033.3 MD	
4,136.3	4,114.1	326.0	-50.2	Start Drop -1.50	
4,669.6	4,645.7	362.7	-55.9	Start 2911.3 hold at 4669.6 MD	
7,580.9	7,557.0	362.7	-55.9	Start Build 10.00	
8,480.9	8,130.0	935.7	-59.0	Start DLS 2.00 TFO 91.96	
8,481.7	8,130.0	936.5	-59.0	Start 4458.3 hold at 8481.7 MD	
12,940.1	8,130.0	5,394.8	-81.8	Start DLS 8.68 TFO 90.00	
13,952.3	8,130.0	6,057.7	550.2	Start 24.0 hold at 13952.3 MD	
13,976.3	8,130.0	6,058.7	574.2	Start DLS 9.00 TFO 90.00	
15,000.9	8,130.0	5,425.3	1,238.1	Start 23.6 hold at 15000.9 MD	
15,024.5	8,130.0	5,401.8	1,238.2	Start DLS 2.00 TFO -89.34	
15,026.7	8,130.0	5,399.6	1,238.2	Start 4443.9 hold at 15026.7 MD	
19,470.5	8,130.0	955.8	1,261.2	TD at 19470.5	

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

Well Name: PATRICK 10 FEDERAL COM	Well Location: T19S / R25E / SEC 11 / NWNW / 32.6809356 / -104.4600873	County or Parish/State: EDDY / NM
Well Number: 11H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMLC064488E	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001553463	Operator: SPUR ENERGY PARTNERS LLC	

Subsequent Report

Sundry ID: 2803562

Type of Submission: Subsequent Report	Type of Action: Drilling Operations
Date Sundry Submitted: 07/29/2024	Time Sundry Submitted: 11:39
Date Operation Actually Began: 07/22/2024	

Actual Procedure: 07/22/2024 NU BOP, test to 250# low 2500# high, good test. Test 9-5/8" csg to 1500# for 30 minutes, good test. Drill 8-3/4" hole to 8448'M/2469'V – TD reached on 07/25/2024. RIH & set 7" 32# L-80 BK-HT csg @ 2964' then crossover and set 5-1/2" 20# L-80 BK-HT csg @ 8448', pump 30 bbl FWS, then cmt w/ 80 bbl (185 sxs) class C w/ additives 11.4ppg 2.48 yield followed by tail job w/ 328 bbl (1315 sxs) class C w/ additives 13.2ppg and 1.4 yield. Full returns throughout job, circ 97 bbl (331 sxs) cmt to surface. Pressure test csg to 6000psi for 30 minutes, good test. Rig release 07/27/2024.

Received by OCD: 7/8/2024 6:58:50 AM

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Well Name: PATRICK 10 FEDERAL COM	Well Location: T19S / R25E / SEC 11 / NWNW / 32.6809356 / -104.4600873	County or Parish/State: EDDY / NM
Well Number: 11H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMLC064488E	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001553463	Operator: SPUR ENERGY PARTNERS LLC	

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: SARAH CHAPMAN	Signed on: JUL 29, 2024 11:39 AM
Name: SPUR ENERGY PARTNERS LLC	
Title: Regulatory Director	
Street Address: 9655 KATY FREEWAY SUITE 500	
City: HOUSTON	State: TX
Phone: (281) 642-5503	
Email address: SCHAPMAN@SPURENERGY.COM	

Field

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: JONATHON W SHEPARD	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752345972	BLM POC Email Address: jshepard@blm.gov
Disposition: Accepted	Disposition Date: 07/31/2024
Signature: Jonathon Shepard	