

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 283931

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 30-015-47244
4. Property Code 328503	5. Property Name ACE STERN VEGAS FEE 22 21	6. Well No. 204H

7. Surface Location

UL - Lot M	Section 21	Township 22S	Range 28E	Lot Idn M	Feet From 1270	N/S Line S	Feet From 350	E/W Line W	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot P	Section 22	Township 22S	Range 28E	Lot Idn P	Feet From 676	N/S Line S	Feet From 240	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 Private	15. Ground Level Elevation 3065
16. Multiple N	17. Proposed Depth 19700	18. Formation Wolfcamp	19. Contractor	20. Spud Date 7/20/2020
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

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

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	450	550	0
Int1	9.875	7.625	29.7	8900	1350	0
Prod	6.75	5.5	20	19592	1000	8300

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 Ava Monroe	Approved By: Raymond Podany
Title: Sr. Regulatory Analyst	Title: Geologist
Email Address: amonroe@matadorresources.com	Approved Date: 6/30/2020 Expiration Date: 6/30/2022
Date: 6/29/2020 Phone: 972-371-5218	Conditions of Approval Attached

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

FORM C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code 98220	³ Pool Name Purple Sage; Wolfcamp (Gas)
⁴ Property Code 322998	⁵ Property Name ACE STERN VEGAS FEE 22-21		⁶ Well Number 204H
⁷ OGRID No. 228937	⁸ Operator Name MATADOR PRODUCTION COMPANY		⁹ Elevation 3065'

¹⁰Surface Location

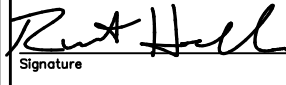
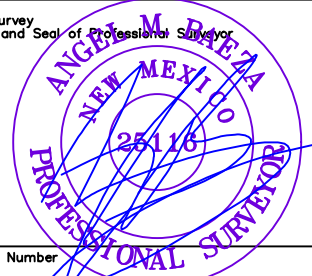
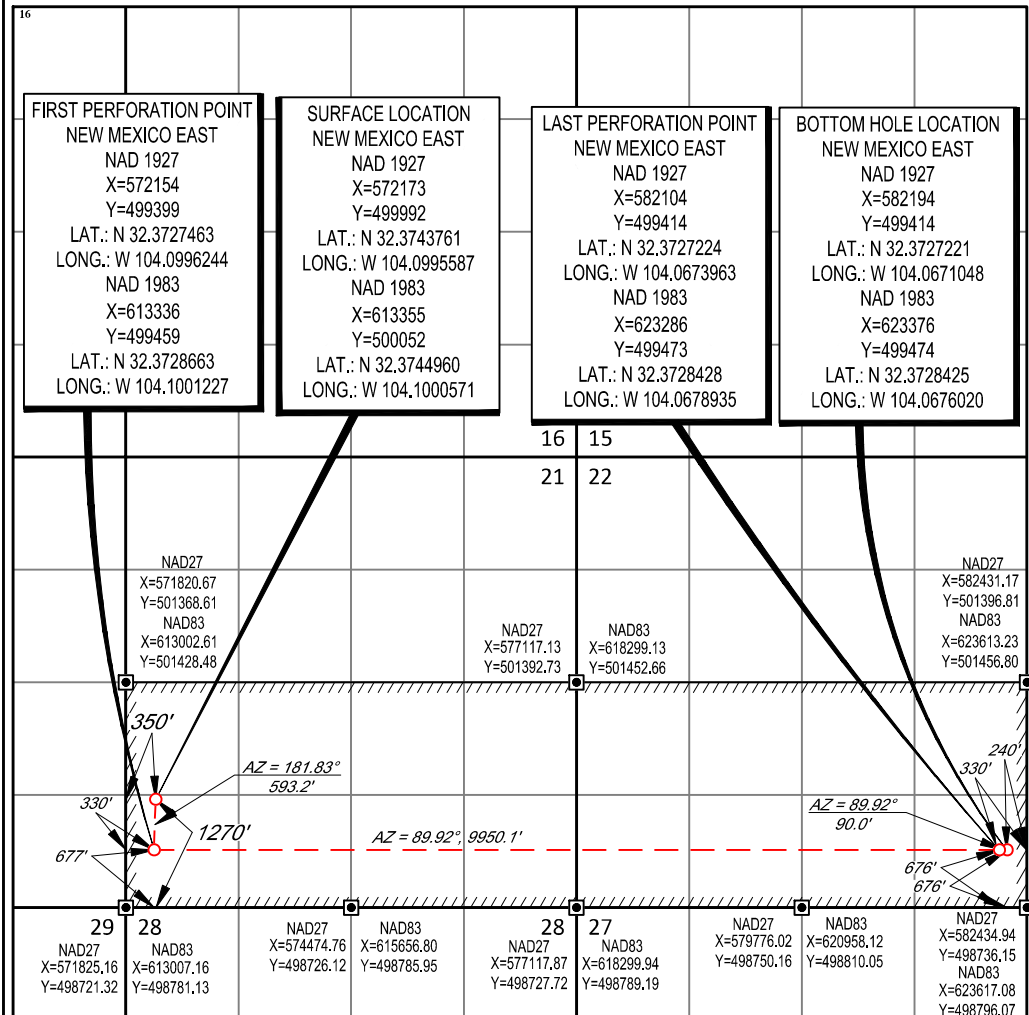
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	21	22-S	28-E	-	1270'	SOUTH	350'	WEST	EDDY

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	22	22-S	28-E	-	676'	SOUTH	240'	EAST	EDDY

¹² Dedicated Acres 640	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

¹⁶ FIRST PERFORATION POINT NEW MEXICO EAST NAD 1927 X=572154 Y=499399 LAT.: N 32.3727463 LONG.: W 104.0996244 NAD 1983 X=613336 Y=499459 LAT.: N 32.3728663 LONG.: W 104.1001227 SURFACE LOCATION NEW MEXICO EAST NAD 1927 X=572173 Y=499992 LAT.: N 32.3743761 LONG.: W 104.0995587 NAD 1983 X=613355 Y=500052 LAT.: N 32.3744960 LONG.: W 104.1000571 LAST PERFORATION POINT NEW MEXICO EAST NAD 1927 X=582104 Y=499414 LAT.: N 32.3727224 LONG.: W 104.0673963 NAD 1983 X=623286 Y=499473 LAT.: N 32.3728428 LONG.: W 104.0678935 BOTTOM HOLE LOCATION NEW MEXICO EAST NAD 1927 X=582194 Y=499414 LAT.: N 32.3727221 LONG.: W 104.0671048 NAD 1983 X=623376 Y=499474 LAT.: N 32.3728425 LONG.: W 104.0676020				¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  6/29/2020 Signature Date Robert Helbing Printed Name rhelbing@matadorresources.com E-mail Address			
¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief. 05/15/2020 Date of Survey  25116 Signature and Seal of Professional Surveyor ANGEL M. BREZA NEW MEXICO PROFESSIONAL SURVEYOR Certificate Number							

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

GAS CAPTURE PLAN

Date: 6/30/2020

☒ Original

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

☐ Amended - Reason for
Amendment: _____

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

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

Well(s)/Production Facility – Name of facility

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

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
ACE STERN VEGAS FEE 22 21 #204H	30-015-47244	M-21-22S-28E	1270S 0350W	3000	Flared	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to LONGWOOD RB PIPELINE, LLC and will be connected to LONGWOOD RB PIPELINE, LLC High Pressure gathering system located in Eddy County, New Mexico. It will require 6000' of pipeline to connect the facility to High Pressure gathering system. MATADOR PRODUCTION COMPANY provides (periodically) to LONGWOOD RB PIPELINE, LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, MATADOR PRODUCTION COMPANY and LONGWOOD RB PIPELINE, LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at LONGWOOD RB PIPELINE, LLC Processing Plant located in Sec. 31, Twn. 23S, Rng. 28E, Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

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

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

Alternatives to Reduce Flaring

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

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

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Form APD Comments

Permit 283931

PERMIT COMMENTS

Operator Name and Address: MATADOR PRODUCTION COMPANY [228937] One Lincoln Centre Dallas, TX 75240		API Number: 30-015-47244
		Well: ACE STERN VEGAS FEE 22 21 #204H
Created By	Comment	Comment Date
bfancher	On May 7, 2020, Matador filed a sundry to cancel the drilling permit for its Big Chief Fee 22 21 W #002H (API No. 30-015-45291) via EDOCS. That sundry has not yet been finalized. The subject well is being filed simultaneously with the Ace Stern Vegas Fee 22-21 203H, which will be the defining well for the horizontal spacing unit comprising the subject well and the Ace Stern Vegas 22-21 203H.	6/29/2020

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Form APD Conditions

Permit 283931

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:		API Number:
MATADOR PRODUCTION COMPANY [228937]		30-015-47244
One Lincoln Centre		Well:
Dallas, TX 75240		ACE STERN VEGAS FEE 22 21 #204H

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

Matador Production Company

Rustler Breaks

Ace Stern Vegas

Ace Stern Vegas #204H

Wellbore #1

Plan: BLM Plan #1

Standard Planning Report

26 June, 2020

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Ace Stern Vegas#204H
Company:	Matador Production Company	TVD Reference:	KB @ 3093.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3093.5usft
Site:	Ace Stern Vegas	North Reference:	Grid
Well:	Ace Stern Vegas #204H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM 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		Ace Stern Vegas			
Site Position:		Northing:	499,867.00 usft	Latitude:	32° 22' 25.372 N
From:	Map	Easting:	613,395.00 usft	Longitude:	103° 57' 57.745 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.20 °

Well	Ace Stern Vegas #204H					
Well Position	+N/-S	124.9 usft	Northing:	499,991.93 usft	Latitude:	32° 22' 27.754 N
	+E/-W	-41,225.2 usft	Easting:	572,172.99 usft	Longitude:	104° 5' 58.411 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,065.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	6/25/2020	6.88	60.08	47,663.14319774

Design	BLM Plan #1			
Audit Notes:				
Version:	1	Phase:	PLAN	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	89.92

Plan Survey Tool Program	Date	6/26/2020			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	19,571.8	BLM Plan #1 (Wellbore #1)	MWD	
				OWSG MWD - Standard	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,800.0	8.00	206.76	1,797.4	-49.8	-25.1	1.00	1.00	0.00	206.76	
5,903.9	8.00	206.76	5,861.4	-559.8	-282.3	0.00	0.00	0.00	0.00	
6,437.2	0.00	0.00	6,393.0	-593.0	-299.0	1.50	-1.50	0.00	180.00	
8,925.3	0.00	0.00	8,881.0	-593.0	-299.0	0.00	0.00	0.00	0.00	VP - Ace Stern Veg:
9,825.1	89.99	89.92	9,454.0	-592.1	273.8	10.00	10.00	9.99	89.92	
19,571.8	89.99	89.92	9,456.0	-578.3	10,020.5	0.00	0.00	0.00	0.00	BHL - Ace Stern Ve

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Ace Stern Vegas#204H
Company:	Matador Production Company	TVD Reference:	KB @ 3093.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3093.5usft
Site:	Ace Stern Vegas	North Reference:	Grid
Well:	Ace Stern Vegas #204H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM 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
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	1.00	206.76	1,100.0	-0.8	-0.4	-0.4	1.00	1.00	0.00
1,200.0	2.00	206.76	1,200.0	-3.1	-1.6	-1.6	1.00	1.00	0.00
1,300.0	3.00	206.76	1,299.9	-7.0	-3.5	-3.5	1.00	1.00	0.00
1,400.0	4.00	206.76	1,399.7	-12.5	-6.3	-6.3	1.00	1.00	0.00
1,500.0	5.00	206.76	1,499.4	-19.5	-9.8	-9.8	1.00	1.00	0.00
1,600.0	6.00	206.76	1,598.9	-28.0	-14.1	-14.2	1.00	1.00	0.00
1,700.0	7.00	206.76	1,698.3	-38.1	-19.2	-19.3	1.00	1.00	0.00
1,800.0	8.00	206.76	1,797.4	-49.8	-25.1	-25.2	1.00	1.00	0.00
1,900.0	8.00	206.76	1,896.4	-62.2	-31.4	-31.5	0.00	0.00	0.00
2,000.0	8.00	206.76	1,995.5	-74.6	-37.6	-37.7	0.00	0.00	0.00
2,100.0	8.00	206.76	2,094.5	-87.1	-43.9	-44.0	0.00	0.00	0.00
2,200.0	8.00	206.76	2,193.5	-99.5	-50.2	-50.3	0.00	0.00	0.00
2,300.0	8.00	206.76	2,292.5	-111.9	-56.4	-56.6	0.00	0.00	0.00
2,400.0	8.00	206.76	2,391.6	-124.3	-62.7	-62.9	0.00	0.00	0.00
2,500.0	8.00	206.76	2,490.6	-136.8	-69.0	-69.2	0.00	0.00	0.00
2,600.0	8.00	206.76	2,589.6	-149.2	-75.2	-75.4	0.00	0.00	0.00
2,700.0	8.00	206.76	2,688.6	-161.6	-81.5	-81.7	0.00	0.00	0.00
2,800.0	8.00	206.76	2,787.7	-174.1	-87.8	-88.0	0.00	0.00	0.00
2,900.0	8.00	206.76	2,886.7	-186.5	-94.0	-94.3	0.00	0.00	0.00
3,000.0	8.00	206.76	2,985.7	-198.9	-100.3	-100.6	0.00	0.00	0.00
3,100.0	8.00	206.76	3,084.8	-211.3	-106.6	-106.9	0.00	0.00	0.00
3,200.0	8.00	206.76	3,183.8	-223.8	-112.8	-113.1	0.00	0.00	0.00
3,300.0	8.00	206.76	3,282.8	-236.2	-119.1	-119.4	0.00	0.00	0.00
3,400.0	8.00	206.76	3,381.8	-248.6	-125.4	-125.7	0.00	0.00	0.00
3,500.0	8.00	206.76	3,480.9	-261.0	-131.6	-132.0	0.00	0.00	0.00
3,600.0	8.00	206.76	3,579.9	-273.5	-137.9	-138.3	0.00	0.00	0.00
3,700.0	8.00	206.76	3,678.9	-285.9	-144.2	-144.6	0.00	0.00	0.00
3,800.0	8.00	206.76	3,777.9	-298.3	-150.4	-150.8	0.00	0.00	0.00
3,900.0	8.00	206.76	3,877.0	-310.8	-156.7	-157.1	0.00	0.00	0.00
4,000.0	8.00	206.76	3,976.0	-323.2	-163.0	-163.4	0.00	0.00	0.00
4,100.0	8.00	206.76	4,075.0	-335.6	-169.2	-169.7	0.00	0.00	0.00
4,200.0	8.00	206.76	4,174.0	-348.0	-175.5	-176.0	0.00	0.00	0.00
4,300.0	8.00	206.76	4,273.1	-360.5	-181.8	-182.3	0.00	0.00	0.00
4,400.0	8.00	206.76	4,372.1	-372.9	-188.0	-188.6	0.00	0.00	0.00
4,500.0	8.00	206.76	4,471.1	-385.3	-194.3	-194.8	0.00	0.00	0.00
4,600.0	8.00	206.76	4,570.2	-397.7	-200.6	-201.1	0.00	0.00	0.00
4,700.0	8.00	206.76	4,669.2	-410.2	-206.8	-207.4	0.00	0.00	0.00
4,800.0	8.00	206.76	4,768.2	-422.6	-213.1	-213.7	0.00	0.00	0.00
4,900.0	8.00	206.76	4,867.2	-435.0	-219.4	-220.0	0.00	0.00	0.00
5,000.0	8.00	206.76	4,966.3	-447.4	-225.6	-226.3	0.00	0.00	0.00
5,100.0	8.00	206.76	5,065.3	-459.9	-231.9	-232.5	0.00	0.00	0.00
5,200.0	8.00	206.76	5,164.3	-472.3	-238.2	-238.8	0.00	0.00	0.00
5,300.0	8.00	206.76	5,263.3	-484.7	-244.4	-245.1	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Ace Stern Vegas#204H
Company:	Matador Production Company	TVD Reference:	KB @ 3093.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3093.5usft
Site:	Ace Stern Vegas	North Reference:	Grid
Well:	Ace Stern Vegas #204H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM 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)
5,400.0	8.00	206.76	5,362.4	-497.2	-250.7	-251.4	0.00	0.00	0.00
5,500.0	8.00	206.76	5,461.4	-509.6	-257.0	-257.7	0.00	0.00	0.00
5,600.0	8.00	206.76	5,560.4	-522.0	-263.2	-264.0	0.00	0.00	0.00
5,700.0	8.00	206.76	5,659.4	-534.4	-269.5	-270.2	0.00	0.00	0.00
5,800.0	8.00	206.76	5,758.5	-546.9	-275.8	-276.5	0.00	0.00	0.00
5,900.0	8.00	206.76	5,857.5	-559.3	-282.0	-282.8	0.00	0.00	0.00
5,903.9	8.00	206.76	5,861.4	-559.8	-282.3	-283.1	0.00	0.00	0.00
6,000.0	6.56	206.76	5,956.7	-570.6	-287.8	-288.5	1.50	-1.50	0.00
6,100.0	5.06	206.76	6,056.2	-579.7	-292.3	-293.1	1.50	-1.50	0.00
6,200.0	3.56	206.76	6,155.9	-586.4	-295.7	-296.5	1.50	-1.50	0.00
6,300.0	2.06	206.76	6,255.8	-590.8	-297.9	-298.7	1.50	-1.50	0.00
6,400.0	0.56	206.76	6,355.7	-592.8	-298.9	-299.8	1.50	-1.50	0.00
6,437.2	0.00	0.00	6,393.0	-593.0	-299.0	-299.8	1.50	-1.50	0.00
6,500.0	0.00	0.00	6,455.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
6,600.0	0.00	0.00	6,555.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
6,700.0	0.00	0.00	6,655.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
6,800.0	0.00	0.00	6,755.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
6,900.0	0.00	0.00	6,855.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
7,000.0	0.00	0.00	6,955.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
7,100.0	0.00	0.00	7,055.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
7,200.0	0.00	0.00	7,155.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
7,300.0	0.00	0.00	7,255.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
7,400.0	0.00	0.00	7,355.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
7,500.0	0.00	0.00	7,455.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
7,600.0	0.00	0.00	7,555.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
7,700.0	0.00	0.00	7,655.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
7,800.0	0.00	0.00	7,755.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
7,900.0	0.00	0.00	7,855.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
8,000.0	0.00	0.00	7,955.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
8,100.0	0.00	0.00	8,055.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
8,200.0	0.00	0.00	8,155.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
8,300.0	0.00	0.00	8,255.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
8,400.0	0.00	0.00	8,355.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
8,500.0	0.00	0.00	8,455.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
8,600.0	0.00	0.00	8,555.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
8,700.0	0.00	0.00	8,655.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
8,800.0	0.00	0.00	8,755.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
8,900.0	0.00	0.00	8,855.7	-593.0	-299.0	-299.8	0.00	0.00	0.00
8,925.3	0.00	0.00	8,881.0	-593.0	-299.0	-299.8	0.00	0.00	0.00
9,000.0	7.47	89.92	8,955.5	-593.0	-294.1	-295.0	10.00	10.00	0.00
9,100.0	17.47	89.92	9,053.0	-592.9	-272.6	-273.4	10.00	10.00	0.00
9,200.0	27.47	89.92	9,145.3	-592.9	-234.4	-235.2	10.00	10.00	0.00
9,300.0	37.47	89.92	9,229.6	-592.8	-180.8	-181.6	10.00	10.00	0.00
9,400.0	47.47	89.92	9,303.2	-592.7	-113.3	-114.2	10.00	10.00	0.00
9,500.0	57.47	89.92	9,364.1	-592.6	-34.1	-35.0	10.00	10.00	0.00
9,600.0	67.47	89.92	9,410.2	-592.5	54.4	53.6	10.00	10.00	0.00
9,700.0	77.47	89.92	9,440.3	-592.3	149.7	148.9	10.00	10.00	0.00
9,800.0	87.47	89.92	9,453.4	-592.2	248.7	247.9	10.00	10.00	0.00
9,825.1	89.99	89.92	9,454.0	-592.1	273.8	273.0	10.00	10.00	0.00
9,900.0	89.99	89.92	9,454.0	-592.0	348.7	347.9	0.00	0.00	0.00
10,000.0	89.99	89.92	9,454.0	-591.9	448.7	447.9	0.00	0.00	0.00
10,100.0	89.99	89.92	9,454.0	-591.8	548.7	547.9	0.00	0.00	0.00
10,200.0	89.99	89.92	9,454.0	-591.6	648.7	647.9	0.00	0.00	0.00
10,300.0	89.99	89.92	9,454.1	-591.5	748.7	747.9	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Ace Stern Vegas#204H
Company:	Matador Production Company	TVD Reference:	KB @ 3093.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3093.5usft
Site:	Ace Stern Vegas	North Reference:	Grid
Well:	Ace Stern Vegas #204H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM 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)
10,400.0	89.99	89.92	9,454.1	-591.3	848.7	847.9	0.00	0.00	0.00
10,500.0	89.99	89.92	9,454.1	-591.2	948.7	947.9	0.00	0.00	0.00
10,600.0	89.99	89.92	9,454.1	-591.0	1,048.7	1,047.9	0.00	0.00	0.00
10,700.0	89.99	89.92	9,454.1	-590.9	1,148.7	1,147.9	0.00	0.00	0.00
10,800.0	89.99	89.92	9,454.2	-590.8	1,248.7	1,247.9	0.00	0.00	0.00
10,900.0	89.99	89.92	9,454.2	-590.6	1,348.7	1,347.9	0.00	0.00	0.00
11,000.0	89.99	89.92	9,454.2	-590.5	1,448.7	1,447.9	0.00	0.00	0.00
11,100.0	89.99	89.92	9,454.2	-590.3	1,548.7	1,547.9	0.00	0.00	0.00
11,200.0	89.99	89.92	9,454.2	-590.2	1,648.7	1,647.9	0.00	0.00	0.00
11,300.0	89.99	89.92	9,454.3	-590.0	1,748.7	1,747.9	0.00	0.00	0.00
11,400.0	89.99	89.92	9,454.3	-589.9	1,848.7	1,847.9	0.00	0.00	0.00
11,500.0	89.99	89.92	9,454.3	-589.8	1,948.7	1,947.9	0.00	0.00	0.00
11,600.0	89.99	89.92	9,454.3	-589.6	2,048.7	2,047.9	0.00	0.00	0.00
11,700.0	89.99	89.92	9,454.4	-589.5	2,148.7	2,147.9	0.00	0.00	0.00
11,800.0	89.99	89.92	9,454.4	-589.3	2,248.7	2,247.9	0.00	0.00	0.00
11,900.0	89.99	89.92	9,454.4	-589.2	2,348.7	2,347.9	0.00	0.00	0.00
12,000.0	89.99	89.92	9,454.4	-589.0	2,448.7	2,447.9	0.00	0.00	0.00
12,100.0	89.99	89.92	9,454.4	-588.9	2,548.7	2,547.9	0.00	0.00	0.00
12,200.0	89.99	89.92	9,454.5	-588.8	2,648.7	2,647.9	0.00	0.00	0.00
12,300.0	89.99	89.92	9,454.5	-588.6	2,748.7	2,747.9	0.00	0.00	0.00
12,400.0	89.99	89.92	9,454.5	-588.5	2,848.7	2,847.9	0.00	0.00	0.00
12,500.0	89.99	89.92	9,454.5	-588.3	2,948.7	2,947.9	0.00	0.00	0.00
12,600.0	89.99	89.92	9,454.5	-588.2	3,048.7	3,047.9	0.00	0.00	0.00
12,700.0	89.99	89.92	9,454.6	-588.0	3,148.7	3,147.9	0.00	0.00	0.00
12,800.0	89.99	89.92	9,454.6	-587.9	3,248.7	3,247.9	0.00	0.00	0.00
12,900.0	89.99	89.92	9,454.6	-587.8	3,348.7	3,347.9	0.00	0.00	0.00
13,000.0	89.99	89.92	9,454.6	-587.6	3,448.7	3,447.9	0.00	0.00	0.00
13,100.0	89.99	89.92	9,454.6	-587.5	3,548.7	3,547.9	0.00	0.00	0.00
13,200.0	89.99	89.92	9,454.7	-587.3	3,648.7	3,647.9	0.00	0.00	0.00
13,300.0	89.99	89.92	9,454.7	-587.2	3,748.7	3,747.9	0.00	0.00	0.00
13,400.0	89.99	89.92	9,454.7	-587.1	3,848.7	3,847.9	0.00	0.00	0.00
13,500.0	89.99	89.92	9,454.7	-586.9	3,948.7	3,947.9	0.00	0.00	0.00
13,600.0	89.99	89.92	9,454.7	-586.8	4,048.7	4,047.9	0.00	0.00	0.00
13,700.0	89.99	89.92	9,454.8	-586.6	4,148.7	4,147.9	0.00	0.00	0.00
13,800.0	89.99	89.92	9,454.8	-586.5	4,248.7	4,247.9	0.00	0.00	0.00
13,900.0	89.99	89.92	9,454.8	-586.3	4,348.7	4,347.9	0.00	0.00	0.00
14,000.0	89.99	89.92	9,454.8	-586.2	4,448.7	4,447.9	0.00	0.00	0.00
14,100.0	89.99	89.92	9,454.9	-586.1	4,548.7	4,547.9	0.00	0.00	0.00
14,200.0	89.99	89.92	9,454.9	-585.9	4,648.7	4,647.9	0.00	0.00	0.00
14,300.0	89.99	89.92	9,454.9	-585.8	4,748.7	4,747.9	0.00	0.00	0.00
14,400.0	89.99	89.92	9,454.9	-585.6	4,848.7	4,847.9	0.00	0.00	0.00
14,500.0	89.99	89.92	9,454.9	-585.5	4,948.7	4,947.9	0.00	0.00	0.00
14,600.0	89.99	89.92	9,455.0	-585.3	5,048.7	5,047.9	0.00	0.00	0.00
14,700.0	89.99	89.92	9,455.0	-585.2	5,148.7	5,147.9	0.00	0.00	0.00
14,800.0	89.99	89.92	9,455.0	-585.1	5,248.7	5,247.9	0.00	0.00	0.00
14,900.0	89.99	89.92	9,455.0	-584.9	5,348.7	5,347.9	0.00	0.00	0.00
15,000.0	89.99	89.92	9,455.0	-584.8	5,448.7	5,447.9	0.00	0.00	0.00
15,100.0	89.99	89.92	9,455.1	-584.6	5,548.7	5,547.9	0.00	0.00	0.00
15,200.0	89.99	89.92	9,455.1	-584.5	5,648.7	5,647.9	0.00	0.00	0.00
15,300.0	89.99	89.92	9,455.1	-584.3	5,748.7	5,747.9	0.00	0.00	0.00
15,400.0	89.99	89.92	9,455.1	-584.2	5,848.7	5,847.9	0.00	0.00	0.00
15,500.0	89.99	89.92	9,455.1	-584.1	5,948.7	5,947.9	0.00	0.00	0.00
15,600.0	89.99	89.92	9,455.2	-583.9	6,048.7	6,047.9	0.00	0.00	0.00
15,700.0	89.99	89.92	9,455.2	-583.8	6,148.7	6,147.9	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Ace Stern Vegas#204H
Company:	Matador Production Company	TVD Reference:	KB @ 3093.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3093.5usft
Site:	Ace Stern Vegas	North Reference:	Grid
Well:	Ace Stern Vegas #204H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
15,800.0	89.99	89.92	9,455.2	-583.6	6,248.7	6,247.9	0.00	0.00	0.00	
15,900.0	89.99	89.92	9,455.2	-583.5	6,348.7	6,347.9	0.00	0.00	0.00	
16,000.0	89.99	89.92	9,455.3	-583.3	6,448.7	6,447.9	0.00	0.00	0.00	
16,100.0	89.99	89.92	9,455.3	-583.2	6,548.7	6,547.9	0.00	0.00	0.00	
16,200.0	89.99	89.92	9,455.3	-583.1	6,648.7	6,647.9	0.00	0.00	0.00	
16,300.0	89.99	89.92	9,455.3	-582.9	6,748.7	6,747.9	0.00	0.00	0.00	
16,400.0	89.99	89.92	9,455.3	-582.8	6,848.7	6,847.9	0.00	0.00	0.00	
16,500.0	89.99	89.92	9,455.4	-582.6	6,948.7	6,947.9	0.00	0.00	0.00	
16,600.0	89.99	89.92	9,455.4	-582.5	7,048.7	7,047.9	0.00	0.00	0.00	
16,700.0	89.99	89.92	9,455.4	-582.3	7,148.7	7,147.9	0.00	0.00	0.00	
16,800.0	89.99	89.92	9,455.4	-582.2	7,248.7	7,247.9	0.00	0.00	0.00	
16,900.0	89.99	89.92	9,455.4	-582.1	7,348.7	7,347.9	0.00	0.00	0.00	
17,000.0	89.99	89.92	9,455.5	-581.9	7,448.7	7,447.9	0.00	0.00	0.00	
17,100.0	89.99	89.92	9,455.5	-581.8	7,548.7	7,547.9	0.00	0.00	0.00	
17,200.0	89.99	89.92	9,455.5	-581.6	7,648.7	7,647.9	0.00	0.00	0.00	
17,300.0	89.99	89.92	9,455.5	-581.5	7,748.7	7,747.9	0.00	0.00	0.00	
17,400.0	89.99	89.92	9,455.5	-581.4	7,848.7	7,847.9	0.00	0.00	0.00	
17,500.0	89.99	89.92	9,455.6	-581.2	7,948.7	7,947.9	0.00	0.00	0.00	
17,600.0	89.99	89.92	9,455.6	-581.1	8,048.7	8,047.9	0.00	0.00	0.00	
17,700.0	89.99	89.92	9,455.6	-580.9	8,148.7	8,147.9	0.00	0.00	0.00	
17,800.0	89.99	89.92	9,455.6	-580.8	8,248.7	8,247.9	0.00	0.00	0.00	
17,900.0	89.99	89.92	9,455.6	-580.6	8,348.7	8,347.9	0.00	0.00	0.00	
18,000.0	89.99	89.92	9,455.7	-580.5	8,448.7	8,447.9	0.00	0.00	0.00	
18,100.0	89.99	89.92	9,455.7	-580.4	8,548.7	8,547.9	0.00	0.00	0.00	
18,200.0	89.99	89.92	9,455.7	-580.2	8,648.7	8,647.9	0.00	0.00	0.00	
18,300.0	89.99	89.92	9,455.7	-580.1	8,748.7	8,747.9	0.00	0.00	0.00	
18,400.0	89.99	89.92	9,455.8	-579.9	8,848.7	8,847.9	0.00	0.00	0.00	
18,500.0	89.99	89.92	9,455.8	-579.8	8,948.7	8,947.9	0.00	0.00	0.00	
18,600.0	89.99	89.92	9,455.8	-579.6	9,048.7	9,047.9	0.00	0.00	0.00	
18,700.0	89.99	89.92	9,455.8	-579.5	9,148.7	9,147.9	0.00	0.00	0.00	
18,800.0	89.99	89.92	9,455.8	-579.4	9,248.7	9,247.9	0.00	0.00	0.00	
18,900.0	89.99	89.92	9,455.9	-579.2	9,348.7	9,347.9	0.00	0.00	0.00	
19,000.0	89.99	89.92	9,455.9	-579.1	9,448.7	9,447.9	0.00	0.00	0.00	
19,100.0	89.99	89.92	9,455.9	-578.9	9,548.7	9,547.9	0.00	0.00	0.00	
19,200.0	89.99	89.92	9,455.9	-578.8	9,648.7	9,647.9	0.00	0.00	0.00	
19,300.0	89.99	89.92	9,455.9	-578.6	9,748.7	9,747.9	0.00	0.00	0.00	
19,400.0	89.99	89.92	9,456.0	-578.5	9,848.7	9,847.9	0.00	0.00	0.00	
19,500.0	89.99	89.92	9,456.0	-578.4	9,948.7	9,947.9	0.00	0.00	0.00	
19,571.8	89.99	89.92	9,456.0	-578.3	10,020.5	10,019.7	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
VP - Ace Stern Vegas - hit/miss target - Shape - Point	0.00	0.00	8,881.0	-593.0	-299.0	499,399.00	571,874.00	32° 22' 21.893 N	104° 6' 1.913 W	
BHL - Ace Stern Vega - plan hits target center - Point	0.00	0.00	9,456.0	-578.3	10,020.5	499,413.64	582,193.97	32° 22' 21.800 N	104° 4' 1.577 W	

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Ace Stern Vegas#204H
Company:	Matador Production Company	TVD Reference:	KB @ 3093.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3093.5usft
Site:	Ace Stern Vegas	North Reference:	Grid
Well:	Ace Stern Vegas #204H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
446.0	446.0	Salado (Top SALT)				
944.0	944.0	Castile (T)				
2,554.9	2,545.0	G26: Bell Cyn (T. Delaware)				
2,800.2	2,787.8	G30:CS14-CSB (BASE SALT)				
3,430.9	3,412.4	Z (G13: Cherry Cyn.)				
4,648.8	4,618.4	Z (G7: Brushy Cyn.)				
5,793.3	5,751.8	Z (G5: L. Brushy Cyn.)				
6,048.3	6,004.7	Z (G4: BSG (CS9))				
6,448.2	6,403.9	Z (L8.2: U. Avalon Shale)				
6,598.0	6,553.7	Z (L6.3: Avalon Carb)				
6,663.0	6,618.7	Z (L6.2: L. Avalon Shale)				
6,758.7	6,714.5	Z (L5.3: FBSC)				
7,097.8	7,053.6	Z (L5.1: FBSG)				
7,354.7	7,310.4	Z (L4.3: SBSC)				
7,834.8	7,790.5	Z (L4.1: SBSC)				
8,143.6	8,099.3	Z (L3.3: TBSC)				
9,103.4	9,056.3	Z (L3.1: TBSC)				
9,433.0	9,324.8	Z (L. TBSC)				
9,510.8	9,369.8	Z (L2: WFMP A)				
9,553.2	9,390.5	Z (X Sand (T))				
9,676.1	9,434.6	Z (X Sand (B))				
19,094.6	9,455.9	Z (Y Sand (T))				