

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 273131

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
4. Property Code 325764		3. API Number 30-015-46379
5. Property Name JACK SLEEPER STATE COM 9 16 23S 28E		6. Well No. 111H

7. Surface Location

UL - Lot	M	Section	4	Township	23S	Range	28E	Lot Idn		Feet From	227	N/S Line	S	Feet From	235	E/W Line	W	County	Eddy
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8. Proposed Bottom Hole Location

UL - Lot	M	Section	16	Township	23S	Range	28E	Lot Idn	M	Feet From	60	N/S Line	S	Feet From	660	E/W Line	W	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 3014
16. Multiple N	17. Proposed Depth 17487	18. Formation Bone Spring	19. Contractor	20. Spud Date 3/9/2021
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	400	500	0
Int1	12.25	9.625	40	2500	1035	0
Prod	8.75	5.5	20	17487	3250	1500

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 Title: Sr. Regulatory Analyst Email Address: amonroe@matadorresources.com Date: 10/8/2019	Approved By: Raymond Podany Title: Geologist Approved Date: 10/17/2019 Expiration Date: 10/17/2021 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		² Pool Code 15011		³ Pool Name Culebra Bluff; Bone Spring, South	
⁴ Property Code		⁵ Property Name JACK SLEEPER COM 9 & 16-23S-28E			⁶ Well Number 111H
⁷ OGRID No. 228937		⁸ Operator Name MATADOR PRODUCTION COMPANY			⁹ Elevation 3014'

¹⁰Surface Location

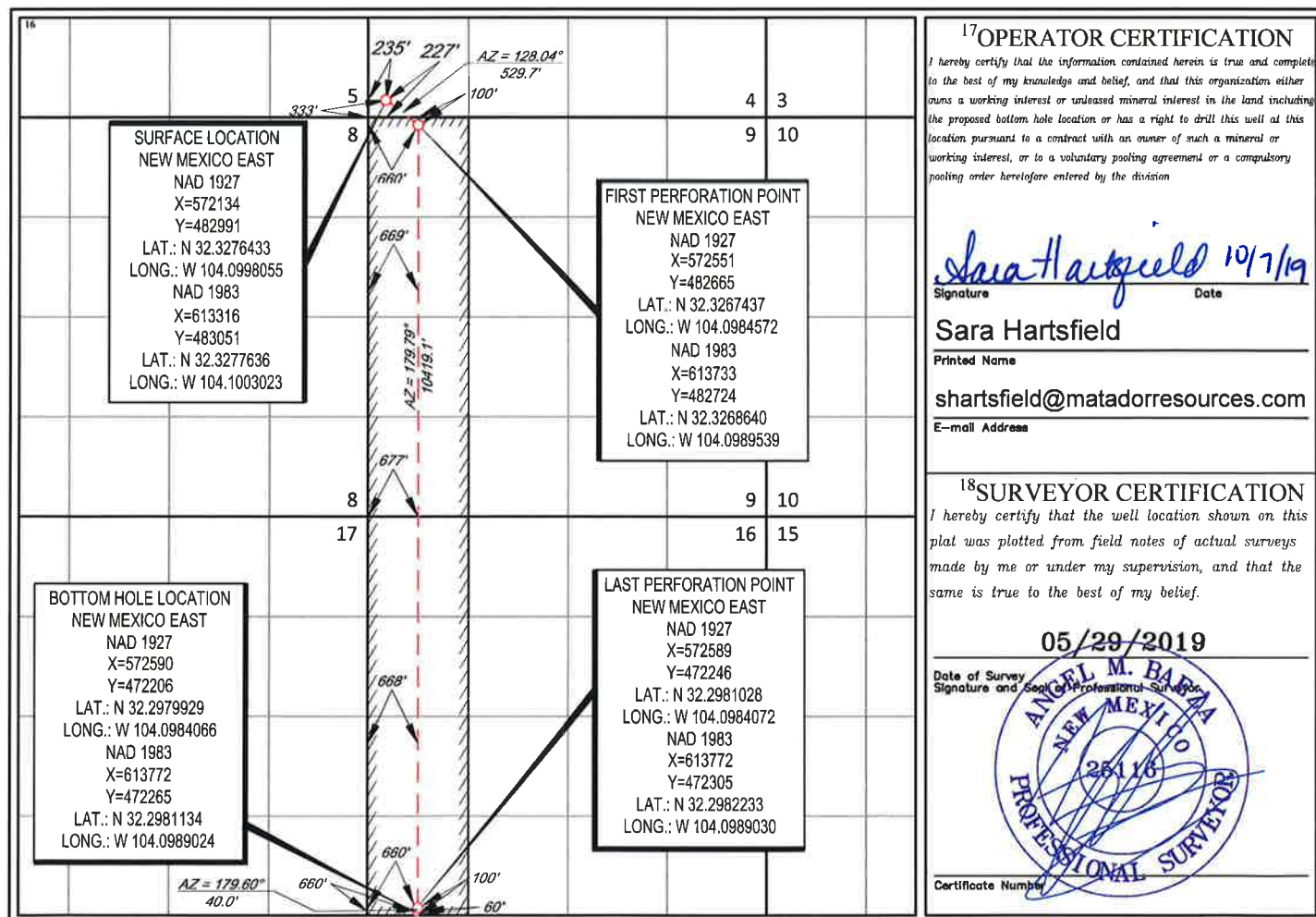
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	4	23-S	28-E	-	227'	SOUTH	235'	WEST	EDDY

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	16	23-S	28-E	-	60'	SOUTH	660'	WEST	EDDY

¹² Dedicated Acres 320	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.



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

GAS CAPTURE PLAN

Date: 10/17/2019

☒ 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, recomplete 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
JACK SLEEPER STATE COM 9 16 23S 28E #111H	30-015-46379	M-4-23S-28E	0227S 0235W	4	Flared	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup.

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 MIDSTREAM DELAWARE, LLC and will be connected to LONGWOOD MIDSTREAM DELAWARE, LLC High Pressure gathering system located in Eddy County, New Mexico. It will require 18480' of pipeline to connect the facility to High Pressure gathering system. MATADOR PRODUCTION COMPANY provides (periodically) to LONGWOOD MIDSTREAM DELAWARE, 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 MIDSTREAM DELAWARE, LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at LONGWOOD MIDSTREAM DELAWARE, 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 MIDSTREAM DELAWARE, LLC system at that time. Based on current information, it is MATADOR PRODUCTION COMPANY's belief the system can take this gas upon completion of the well(s).

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

Alternatives to Reduce Flaring

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

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

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

Form APD Comments

Permit 273131

PERMIT COMMENTS

Operator Name and Address: MATADOR PRODUCTION COMPANY [228937] One Lincoln Centre Dallas, TX 75240		API Number: 30-015-46379
		Well: JACK SLEEPER STATE COM 9 16 23S 28E #111H
Created By	Comment	Comment Date
msalvidrez	Fee Cancellation - System timed out, please resubmit.	10/8/2019

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Santa Fe, NM 87505

Form APD Conditions

Permit 273131

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:		API Number:
MATADOR PRODUCTION COMPANY [228937]		30-015-46379
One Lincoln Centre		Well:
Dallas, TX 75240		JACK SLEEPER STATE COM 9 16 23S 28E #111H
OCD Reviewer	Condition	
rpodany	Will require a directional survey with the C-104	
rpodany	Cement is required to circulate on both surface and intermediate1 strings of casing	

Matador Resources

Eddy County, NM (NAD27)

Jack Sleeper Com 9&16-23-28E

#111H

OH

Plan: Prelim A

Standard Planning Report

03 October, 2019

Pro Directional Planning Report

Database:	WellPlanner1	Local Co-ordinate Reference:	Well #111H
Company:	Matador Resources	TVD Reference:	3014 + 28.5 = KB @ 3042.50usft (Rig)
Project:	Eddy County, NM (NAD27)	MD Reference:	3014 + 28.5 = KB @ 3042.50usft (Rig)
Site:	Jack Sleeper Com 9&16-23-28E	North Reference:	Grid
Well:	#111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim A		

Project	Eddy County, NM (NAD27)		
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		

Site	Jack Sleeper Com 9&16-23-28E		
Site Position:		Northing:	482,961.00 usft
From:	Map	Easting:	572,054.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.327560
		Longitude:	-104.100065
		Grid Convergence:	0.12 °

Well	#111H		
Well Position	+N/-S	30.00 usft	Northing: 482,991.00 usft
	+E/-W	80.00 usft	Easting: 572,134.00 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	Latitude: 32.327642
			Longitude: -104.099805
			Ground Level: 3,014.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	HDGM	10/31/2019	7.12
			Dip Angle (°) 60.03
			Field Strength (nT) 47,865.20

Design	Prelim A		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			Direction (°) 179.79

Plan Survey Tool Program	Date	10/3/2019		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	17,487.20	Prelim A (OH)	MWD+HDGM
				OWSG MWD + HRGM

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,050.17	5.50	337.17	2,049.32	24.33	-10.24	1.00	1.00	0.00	337.17	
2,666.47	5.50	337.17	2,662.79	78.78	-33.17	0.00	0.00	0.00	0.00	
3,033.25	0.00	0.00	3,029.00	95.00	-40.00	1.50	-1.50	0.00	180.00	
6,390.02	0.00	0.00	6,385.77	95.00	-40.00	0.00	0.00	0.00	0.00	
7,436.53	90.00	169.00	7,052.00	-558.99	87.12	8.60	8.60	0.00	169.00	
7,976.21	90.00	179.79	7,052.00	-1,095.30	139.74	2.00	0.00	2.00	90.00	
17,487.97	90.00	179.79	7,052.00	-10,607.00	174.00	0.00	0.00	0.00	0.00	BHL (Jack S. #111H)

Pro Directional Planning Report

Database:	WellPlanner1	Local Co-ordinate Reference:	Well #111H
Company:	Matador Resources	TVD Reference:	3014 + 28.5 = KB @ 3042.50usft (Rig)
Project:	Eddy County, NM (NAD27)	MD Reference:	3014 + 28.5 = KB @ 3042.50usft (Rig)
Site:	Jack Sleeper Com 9&16-23-28E	North Reference:	Grid
Well:	#111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim A		

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
94.05	0.00	0.00	94.05	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
339.37	0.00	0.00	339.37	0.00	0.00	0.00	0.00	0.00	0.00
Salado (TOP SALT)									
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
989.96	0.00	0.00	989.96	0.00	0.00	0.00	0.00	0.00	0.00
Castile (T)									
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.00									
1,600.00	1.00	337.17	1,599.99	0.80	-0.34	-0.81	1.00	1.00	0.00
1,700.00	2.00	337.17	1,699.96	3.22	-1.35	-3.22	1.00	1.00	0.00
1,800.00	3.00	337.17	1,799.86	7.24	-3.05	-7.25	1.00	1.00	0.00
1,900.00	4.00	337.17	1,899.68	12.86	-5.42	-12.88	1.00	1.00	0.00
2,000.00	5.00	337.17	1,999.37	20.09	-8.46	-20.13	1.00	1.00	0.00
2,050.17	5.50	337.17	2,049.32	24.33	-10.24	-24.36	1.00	1.00	0.00
2,100.00	5.50	337.17	2,098.93	28.73	-12.10	-28.77	0.00	0.00	0.00
2,200.00	5.50	337.17	2,198.46	37.56	-15.82	-37.62	0.00	0.00	0.00
2,300.00	5.50	337.17	2,298.00	46.40	-19.54	-46.47	0.00	0.00	0.00
2,400.00	5.50	337.17	2,397.54	55.24	-23.26	-55.32	0.00	0.00	0.00
2,485.66	5.50	337.17	2,482.81	62.81	-26.44	-62.90	0.00	0.00	0.00
G30:CS14-CSB (BASE SALT)									
2,500.00	5.50	337.17	2,497.08	64.07	-26.98	-64.17	0.00	0.00	0.00
2,532.82	5.50	337.17	2,529.75	66.97	-28.20	-67.08	0.00	0.00	0.00
G26: Bell Cyn.									
2,600.00	5.50	337.17	2,596.62	72.91	-30.70	-73.02	0.00	0.00	0.00
2,666.47	5.50	337.17	2,662.79	78.78	-33.17	-78.90	0.00	0.00	0.00
Start Drop -1.50									
2,700.00	5.00	337.17	2,696.18	81.61	-34.36	-81.74	1.50	-1.50	0.00
2,800.00	3.50	337.17	2,795.90	88.44	-37.24	-88.57	1.50	-1.50	0.00
2,900.00	2.00	337.17	2,895.78	92.86	-39.10	-93.00	1.50	-1.50	0.00
3,000.00	0.50	337.17	2,995.75	94.87	-39.94	-95.01	1.50	-1.50	0.00
3,033.25	0.00	0.00	3,029.00	95.00	-40.00	-95.15	1.50	-1.50	0.00
3,100.00	0.00	0.00	3,095.75	95.00	-40.00	-95.15	0.00	0.00	0.00
3,200.00	0.00	0.00	3,195.75	95.00	-40.00	-95.15	0.00	0.00	0.00
3,300.00	0.00	0.00	3,295.75	95.00	-40.00	-95.15	0.00	0.00	0.00
3,399.57	0.00	0.00	3,395.32	95.00	-40.00	-95.15	0.00	0.00	0.00
G13: Cherry Cyn.									
3,400.00	0.00	0.00	3,395.75	95.00	-40.00	-95.15	0.00	0.00	0.00
3,500.00	0.00	0.00	3,495.75	95.00	-40.00	-95.15	0.00	0.00	0.00

Pro Directional Planning Report

Database:	WellPlanner1	Local Co-ordinate Reference:	Well #111H
Company:	Matador Resources	TVD Reference:	3014 + 28.5 = KB @ 3042.50usft (Rig)
Project:	Eddy County, NM (NAD27)	MD Reference:	3014 + 28.5 = KB @ 3042.50usft (Rig)
Site:	Jack Sleeper Com 9&16-23-28E	North Reference:	Grid
Well:	#111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim A		

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)
3,600.00	0.00	0.00	3,595.75	95.00	-40.00	-95.15	0.00	0.00	0.00
3,700.00	0.00	0.00	3,695.75	95.00	-40.00	-95.15	0.00	0.00	0.00
3,800.00	0.00	0.00	3,795.75	95.00	-40.00	-95.15	0.00	0.00	0.00
3,900.00	0.00	0.00	3,895.75	95.00	-40.00	-95.15	0.00	0.00	0.00
4,000.00	0.00	0.00	3,995.75	95.00	-40.00	-95.15	0.00	0.00	0.00
4,100.00	0.00	0.00	4,095.75	95.00	-40.00	-95.15	0.00	0.00	0.00
4,200.00	0.00	0.00	4,195.75	95.00	-40.00	-95.15	0.00	0.00	0.00
4,300.00	0.00	0.00	4,295.75	95.00	-40.00	-95.15	0.00	0.00	0.00
4,400.00	0.00	0.00	4,395.75	95.00	-40.00	-95.15	0.00	0.00	0.00
4,500.00	0.00	0.00	4,495.75	95.00	-40.00	-95.15	0.00	0.00	0.00
4,526.51	0.00	0.00	4,522.26	95.00	-40.00	-95.15	0.00	0.00	0.00
G7: Brushy Cyn.									
4,600.00	0.00	0.00	4,595.75	95.00	-40.00	-95.15	0.00	0.00	0.00
4,700.00	0.00	0.00	4,695.75	95.00	-40.00	-95.15	0.00	0.00	0.00
4,800.00	0.00	0.00	4,795.75	95.00	-40.00	-95.15	0.00	0.00	0.00
4,900.00	0.00	0.00	4,895.75	95.00	-40.00	-95.15	0.00	0.00	0.00
5,000.00	0.00	0.00	4,995.75	95.00	-40.00	-95.15	0.00	0.00	0.00
5,100.00	0.00	0.00	5,095.75	95.00	-40.00	-95.15	0.00	0.00	0.00
5,200.00	0.00	0.00	5,195.75	95.00	-40.00	-95.15	0.00	0.00	0.00
5,300.00	0.00	0.00	5,295.75	95.00	-40.00	-95.15	0.00	0.00	0.00
5,400.00	0.00	0.00	5,395.75	95.00	-40.00	-95.15	0.00	0.00	0.00
5,500.00	0.00	0.00	5,495.75	95.00	-40.00	-95.15	0.00	0.00	0.00
5,600.00	0.00	0.00	5,595.75	95.00	-40.00	-95.15	0.00	0.00	0.00
5,700.00	0.00	0.00	5,695.75	95.00	-40.00	-95.15	0.00	0.00	0.00
5,800.00	0.00	0.00	5,795.75	95.00	-40.00	-95.15	0.00	0.00	0.00
5,900.00	0.00	0.00	5,895.75	95.00	-40.00	-95.15	0.00	0.00	0.00
6,000.00	0.00	0.00	5,995.75	95.00	-40.00	-95.15	0.00	0.00	0.00
6,078.75	0.00	0.00	6,074.50	95.00	-40.00	-95.15	0.00	0.00	0.00
G4: BSGI (CS9)									
6,100.00	0.00	0.00	6,095.75	95.00	-40.00	-95.15	0.00	0.00	0.00
6,200.00	0.00	0.00	6,195.75	95.00	-40.00	-95.15	0.00	0.00	0.00
6,273.88	0.00	0.00	6,269.63	95.00	-40.00	-95.15	0.00	0.00	0.00
L8.2: U. Avalon Shale									
6,300.00	0.00	0.00	6,295.75	95.00	-40.00	-95.15	0.00	0.00	0.00
6,390.02	0.00	0.00	6,385.77	95.00	-40.00	-95.15	0.00	0.00	0.00
KOP: Build 8.60									
6,400.00	0.86	169.00	6,395.75	94.93	-39.99	-95.07	8.60	8.60	0.00
6,438.08	4.13	169.00	6,433.79	93.30	-39.67	-93.44	8.60	8.60	0.00
L6.3: Avalon Carb									
6,450.00	5.16	169.00	6,445.67	92.35	-39.49	-92.50	8.60	8.60	0.00
6,500.00	9.46	169.00	6,495.25	86.11	-38.27	-86.25	8.60	8.60	0.00
6,550.00	13.76	169.00	6,544.22	76.23	-36.35	-76.37	8.60	8.60	0.00
6,600.00	18.06	169.00	6,592.29	62.78	-33.74	-62.91	8.60	8.60	0.00
6,614.16	19.28	169.00	6,605.71	58.34	-32.87	-58.46	8.60	8.60	0.00
L6.2: L. Avalon Shale									
6,650.00	22.36	169.00	6,639.20	45.83	-30.44	-45.95	8.60	8.60	0.00
6,700.00	26.66	169.00	6,684.69	25.48	-26.49	-25.58	8.60	8.60	0.00
6,750.00	30.96	169.00	6,728.49	1.83	-21.89	-1.91	8.60	8.60	0.00
6,777.79	33.35	169.00	6,752.02	-12.69	-19.07	12.62	8.60	8.60	0.00
L5.3: FBSC									
6,800.00	35.26	169.00	6,770.36	-24.97	-16.68	24.91	8.60	8.60	0.00
6,850.00	39.56	169.00	6,810.07	-54.78	-10.89	54.74	8.60	8.60	0.00
6,900.00	43.86	169.00	6,847.39	-87.43	-4.54	87.41	8.60	8.60	0.00

Pro Directional Planning Report

Database:	WellPlanner1	Local Co-ordinate Reference:	Well #111H
Company:	Matador Resources	TVD Reference:	3014 + 28.5 = KB @ 3042.50usft (Rig)
Project:	Eddy County, NM (NAD27)	MD Reference:	3014 + 28.5 = KB @ 3042.50usft (Rig)
Site:	Jack Sleeper Com 9&16-23-28E	North Reference:	Grid
Well:	#111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim A		

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)
6,950.00	48.16	169.00	6,882.11	-122.73	2.32	122.74	8.60	8.60	0.00
7,000.00	52.46	169.00	6,914.03	-160.49	9.66	160.52	8.60	8.60	0.00
7,050.00	56.76	169.00	6,942.98	-200.49	17.44	200.56	8.60	8.60	0.00
7,100.00	61.06	169.00	6,968.80	-242.51	25.61	242.61	8.60	8.60	0.00
7,150.00	65.36	169.00	6,991.33	-286.32	34.12	286.44	8.60	8.60	0.00
7,200.00	69.66	169.00	7,010.45	-331.65	42.93	331.81	8.60	8.60	0.00
7,204.67	70.06	169.00	7,012.06	-335.96	43.77	336.11	8.60	8.60	0.00
L5.1: FBSC									
7,250.00	73.96	169.00	7,026.06	-378.27	51.99	378.46	8.60	8.60	0.00
7,300.00	78.26	169.00	7,038.06	-425.90	61.25	426.13	8.60	8.60	0.00
7,350.00	82.56	169.00	7,046.39	-474.29	70.66	474.54	8.60	8.60	0.00
7,400.00	86.86	169.00	7,051.00	-523.15	80.16	523.44	8.60	8.60	0.00
7,436.53	90.00	169.00	7,052.00	-558.99	87.12	559.31	8.60	8.60	0.00
Land: DLS 2.00 TFO 90.00									
7,500.00	90.00	170.27	7,052.00	-621.42	98.54	621.78	2.00	0.00	2.00
7,600.00	90.00	172.27	7,052.00	-720.26	113.72	720.67	2.00	0.00	2.00
7,700.00	90.00	174.27	7,052.00	-819.57	125.44	820.02	2.00	0.00	2.00
7,800.00	90.00	176.27	7,052.00	-919.22	133.69	919.70	2.00	0.00	2.00
7,900.00	90.00	178.27	7,052.00	-1,019.10	138.45	1,019.60	2.00	0.00	2.00
7,976.21	90.00	179.79	7,052.00	-1,095.30	139.74	1,095.80	2.00	0.00	2.00
8,000.00	90.00	179.79	7,052.00	-1,119.09	139.82	1,119.59	0.00	0.00	0.00
8,100.00	90.00	179.79	7,052.00	-1,219.09	140.18	1,219.59	0.00	0.00	0.00
8,200.00	90.00	179.79	7,052.00	-1,319.09	140.54	1,319.59	0.00	0.00	0.00
8,300.00	90.00	179.79	7,052.00	-1,419.09	140.90	1,419.59	0.00	0.00	0.00
8,400.00	90.00	179.79	7,052.00	-1,519.09	141.26	1,519.59	0.00	0.00	0.00
8,500.00	90.00	179.79	7,052.00	-1,619.08	141.63	1,619.59	0.00	0.00	0.00
8,600.00	90.00	179.79	7,052.00	-1,719.08	141.99	1,719.59	0.00	0.00	0.00
8,700.00	90.00	179.79	7,052.00	-1,819.08	142.35	1,819.59	0.00	0.00	0.00
8,800.00	90.00	179.79	7,052.00	-1,919.08	142.71	1,919.59	0.00	0.00	0.00
8,900.00	90.00	179.79	7,052.00	-2,019.08	143.07	2,019.59	0.00	0.00	0.00
9,000.00	90.00	179.79	7,052.00	-2,119.08	143.43	2,119.59	0.00	0.00	0.00
9,100.00	90.00	179.79	7,052.00	-2,219.08	143.79	2,219.59	0.00	0.00	0.00
9,200.00	90.00	179.79	7,052.00	-2,319.08	144.15	2,319.59	0.00	0.00	0.00
9,300.00	90.00	179.79	7,052.00	-2,419.08	144.51	2,419.59	0.00	0.00	0.00
9,400.00	90.00	179.79	7,052.00	-2,519.08	144.87	2,519.59	0.00	0.00	0.00
9,500.00	90.00	179.79	7,052.00	-2,619.08	145.23	2,619.59	0.00	0.00	0.00
9,600.00	90.00	179.79	7,052.00	-2,719.08	145.59	2,719.59	0.00	0.00	0.00
9,700.00	90.00	179.79	7,052.00	-2,819.08	145.95	2,819.59	0.00	0.00	0.00
9,800.00	90.00	179.79	7,052.00	-2,919.08	146.31	2,919.59	0.00	0.00	0.00
9,900.00	90.00	179.79	7,052.00	-3,019.08	146.67	3,019.59	0.00	0.00	0.00
10,000.00	90.00	179.79	7,052.00	-3,119.07	147.03	3,119.59	0.00	0.00	0.00
10,100.00	90.00	179.79	7,052.00	-3,219.07	147.39	3,219.59	0.00	0.00	0.00
10,200.00	90.00	179.79	7,052.00	-3,319.07	147.75	3,319.59	0.00	0.00	0.00
10,300.00	90.00	179.79	7,052.00	-3,419.07	148.11	3,419.59	0.00	0.00	0.00
10,400.00	90.00	179.79	7,052.00	-3,519.07	148.47	3,519.59	0.00	0.00	0.00
10,500.00	90.00	179.79	7,052.00	-3,619.07	148.83	3,619.59	0.00	0.00	0.00
10,600.00	90.00	179.79	7,052.00	-3,719.07	149.19	3,719.59	0.00	0.00	0.00
10,700.00	90.00	179.79	7,052.00	-3,819.07	149.55	3,819.59	0.00	0.00	0.00
10,800.00	90.00	179.79	7,052.00	-3,919.07	149.91	3,919.59	0.00	0.00	0.00
10,900.00	90.00	179.79	7,052.00	-4,019.07	150.27	4,019.59	0.00	0.00	0.00
11,000.00	90.00	179.79	7,052.00	-4,119.07	150.63	4,119.59	0.00	0.00	0.00
11,100.00	90.00	179.79	7,052.00	-4,219.07	150.99	4,219.59	0.00	0.00	0.00
11,200.00	90.00	179.79	7,052.00	-4,319.07	151.35	4,319.59	0.00	0.00	0.00
11,300.00	90.00	179.79	7,052.00	-4,419.07	151.71	4,419.59	0.00	0.00	0.00

Pro Directional Planning Report

Database:	WellPlanner1	Local Co-ordinate Reference:	Well #111H
Company:	Matador Resources	TVD Reference:	3014 + 28.5 = KB @ 3042.50usft (Rig)
Project:	Eddy County, NM (NAD27)	MD Reference:	3014 + 28.5 = KB @ 3042.50usft (Rig)
Site:	Jack Sleeper Com 9&16-23-28E	North Reference:	Grid
Well:	#111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim A		

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)
11,400.00	90.00	179.79	7,052.00	-4,519.07	152.07	4,519.59	0.00	0.00	0.00
11,500.00	90.00	179.79	7,052.00	-4,619.07	152.43	4,619.59	0.00	0.00	0.00
11,600.00	90.00	179.79	7,052.00	-4,719.06	152.79	4,719.59	0.00	0.00	0.00
11,700.00	90.00	179.79	7,052.00	-4,819.06	153.15	4,819.59	0.00	0.00	0.00
11,800.00	90.00	179.79	7,052.00	-4,919.06	153.51	4,919.59	0.00	0.00	0.00
11,900.00	90.00	179.79	7,052.00	-5,019.06	153.87	5,019.59	0.00	0.00	0.00
12,000.00	90.00	179.79	7,052.00	-5,119.06	154.23	5,119.59	0.00	0.00	0.00
12,100.00	90.00	179.79	7,052.00	-5,219.06	154.59	5,219.59	0.00	0.00	0.00
12,200.00	90.00	179.79	7,052.00	-5,319.06	154.95	5,319.59	0.00	0.00	0.00
12,300.00	90.00	179.79	7,052.00	-5,419.06	155.31	5,419.59	0.00	0.00	0.00
12,400.00	90.00	179.79	7,052.00	-5,519.06	155.67	5,519.59	0.00	0.00	0.00
12,500.00	90.00	179.79	7,052.00	-5,619.06	156.03	5,619.59	0.00	0.00	0.00
12,600.00	90.00	179.79	7,052.00	-5,719.06	156.39	5,719.59	0.00	0.00	0.00
12,700.00	90.00	179.79	7,052.00	-5,819.06	156.75	5,819.59	0.00	0.00	0.00
12,800.00	90.00	179.79	7,052.00	-5,919.06	157.11	5,919.59	0.00	0.00	0.00
12,900.00	90.00	179.79	7,052.00	-6,019.06	157.47	6,019.59	0.00	0.00	0.00
13,000.00	90.00	179.79	7,052.00	-6,119.06	157.83	6,119.59	0.00	0.00	0.00
13,100.00	90.00	179.79	7,052.00	-6,219.05	158.19	6,219.59	0.00	0.00	0.00
13,200.00	90.00	179.79	7,052.00	-6,319.05	158.55	6,319.59	0.00	0.00	0.00
13,300.00	90.00	179.79	7,052.00	-6,419.05	158.91	6,419.59	0.00	0.00	0.00
13,400.00	90.00	179.79	7,052.00	-6,519.05	159.27	6,519.59	0.00	0.00	0.00
13,500.00	90.00	179.79	7,052.00	-6,619.05	159.64	6,619.59	0.00	0.00	0.00
13,600.00	90.00	179.79	7,052.00	-6,719.05	160.00	6,719.59	0.00	0.00	0.00
13,700.00	90.00	179.79	7,052.00	-6,819.05	160.36	6,819.59	0.00	0.00	0.00
13,800.00	90.00	179.79	7,052.00	-6,919.05	160.72	6,919.59	0.00	0.00	0.00
13,900.00	90.00	179.79	7,052.00	-7,019.05	161.08	7,019.59	0.00	0.00	0.00
14,000.00	90.00	179.79	7,052.00	-7,119.05	161.44	7,119.59	0.00	0.00	0.00
14,100.00	90.00	179.79	7,052.00	-7,219.05	161.80	7,219.59	0.00	0.00	0.00
14,200.00	90.00	179.79	7,052.00	-7,319.05	162.16	7,319.59	0.00	0.00	0.00
14,300.00	90.00	179.79	7,052.00	-7,419.05	162.52	7,419.59	0.00	0.00	0.00
14,400.00	90.00	179.79	7,052.00	-7,519.05	162.88	7,519.59	0.00	0.00	0.00
14,500.00	90.00	179.79	7,052.00	-7,619.05	163.24	7,619.59	0.00	0.00	0.00
14,600.00	90.00	179.79	7,052.00	-7,719.05	163.60	7,719.59	0.00	0.00	0.00
14,700.00	90.00	179.79	7,052.00	-7,819.04	163.96	7,819.59	0.00	0.00	0.00
14,800.00	90.00	179.79	7,052.00	-7,919.04	164.32	7,919.59	0.00	0.00	0.00
14,900.00	90.00	179.79	7,052.00	-8,019.04	164.68	8,019.59	0.00	0.00	0.00
15,000.00	90.00	179.79	7,052.00	-8,119.04	165.04	8,119.59	0.00	0.00	0.00
15,100.00	90.00	179.79	7,052.00	-8,219.04	165.40	8,219.59	0.00	0.00	0.00
15,200.00	90.00	179.79	7,052.00	-8,319.04	165.76	8,319.59	0.00	0.00	0.00
15,300.00	90.00	179.79	7,052.00	-8,419.04	166.12	8,419.59	0.00	0.00	0.00
15,400.00	90.00	179.79	7,052.00	-8,519.04	166.48	8,519.59	0.00	0.00	0.00
15,500.00	90.00	179.79	7,052.00	-8,619.04	166.84	8,619.59	0.00	0.00	0.00
15,600.00	90.00	179.79	7,052.00	-8,719.04	167.20	8,719.59	0.00	0.00	0.00
15,700.00	90.00	179.79	7,052.00	-8,819.04	167.56	8,819.59	0.00	0.00	0.00
15,800.00	90.00	179.79	7,052.00	-8,919.04	167.92	8,919.59	0.00	0.00	0.00
15,900.00	90.00	179.79	7,052.00	-9,019.04	168.28	9,019.59	0.00	0.00	0.00
16,000.00	90.00	179.79	7,052.00	-9,119.04	168.64	9,119.59	0.00	0.00	0.00
16,100.00	90.00	179.79	7,052.00	-9,219.04	169.00	9,219.59	0.00	0.00	0.00
16,200.00	90.00	179.79	7,052.00	-9,319.03	169.36	9,319.59	0.00	0.00	0.00
16,300.00	90.00	179.79	7,052.00	-9,419.03	169.72	9,419.59	0.00	0.00	0.00
16,400.00	90.00	179.79	7,052.00	-9,519.03	170.08	9,519.59	0.00	0.00	0.00
16,500.00	90.00	179.79	7,052.00	-9,619.03	170.44	9,619.59	0.00	0.00	0.00
16,600.00	90.00	179.79	7,052.00	-9,719.03	170.80	9,719.59	0.00	0.00	0.00
16,700.00	90.00	179.79	7,052.00	-9,819.03	171.16	9,819.59	0.00	0.00	0.00

Pro Directional Planning Report

Database:	WellPlanner1	Local Co-ordinate Reference:	Well #111H
Company:	Matador Resources	TVD Reference:	3014 + 28.5 = KB @ 3042.50usft (Rig)
Project:	Eddy County, NM (NAD27)	MD Reference:	3014 + 28.5 = KB @ 3042.50usft (Rig)
Site:	Jack Sleeper Com 9&16-23-28E	North Reference:	Grid
Well:	#111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim A		

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)
16,800.00	90.00	179.79	7,052.00	-9,919.03	171.52	9,919.59	0.00	0.00	0.00
16,900.00	90.00	179.79	7,052.00	-10,019.03	171.88	10,019.59	0.00	0.00	0.00
17,000.00	90.00	179.79	7,052.00	-10,119.03	172.24	10,119.59	0.00	0.00	0.00
17,100.00	90.00	179.79	7,052.00	-10,219.03	172.60	10,219.59	0.00	0.00	0.00
17,200.00	90.00	179.79	7,052.00	-10,319.03	172.96	10,319.59	0.00	0.00	0.00
17,300.00	90.00	179.79	7,052.00	-10,419.03	173.32	10,419.59	0.00	0.00	0.00
17,400.00	90.00	179.79	7,052.00	-10,519.03	173.68	10,519.59	0.00	0.00	0.00
17,487.97	90.00	179.79	7,052.00	-10,607.00	174.00	10,607.56	0.00	0.00	0.00
TD at 17487.97									

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									
FPP 50' E (Jack S. #1	0.00	0.00	0.00	-556.00	137.00	482,435.00	572,271.00	32.326113	-104.099366
- plan misses target center by 572.63usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
BHL (Jack S. #111H)	0.00	0.00	7,052.00	-10,607.00	174.00	472,384.00	572,308.00	32.298483	-104.099317
- plan hits target center									
- Point									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
94.05	94.05	Rustler				
339.37	339.37	Salado (TOP SALT)				
989.96	989.96	Castile (T)				
2,485.66	2,482.81	G30:CS14-CSB (BASE SALT)				
2,532.82	2,529.75	G26: Bell Cyn.				
3,399.57	3,395.32	G13: Cherry Cyn.				
4,526.51	4,522.26	G7: Brushy Cyn.				
6,078.75	6,074.50	G4: BSGl (CS9)				
6,273.88	6,269.63	L8.2: U. Avalon Shale				
6,438.08	6,433.79	L6.3: Avalon Carb				
6,614.16	6,605.71	L6.2: L. Avalon Shale				
6,777.79	6,752.02	L5.3: FBSC				
7,204.67	7,012.06	L5.1: FBSG				

Pro Directional Planning Report

Database:	WellPlanner1	Local Co-ordinate Reference:	Well #111H
Company:	Matador Resources	TVD Reference:	3014 + 28.5 = KB @ 3042.50usft (Rig)
Project:	Eddy County, NM (NAD27)	MD Reference:	3014 + 28.5 = KB @ 3042.50usft (Rig)
Site:	Jack Sleeper Com 9&16-23-28E	North Reference:	Grid
Well:	#111H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim A		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,500.00	1,500.00	0.00	0.00	Start Build 1.00
2,666.47	2,662.79	78.78	-33.17	Start Drop -1.50
6,390.02	6,385.77	95.00	-40.00	KOP: Build 8.60
7,436.53	7,052.00	-558.99	87.12	Land: DLS 2.00 TFO 90.00
17,487.97	7,052.00	-10,607.00	174.00	TD at 17487.97