

District I1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720**District II**811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720**District III**1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170**District IV**1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

Form C-101
August 1, 2011

Permit 366867

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 30-025-53141
4. Property Code 334302	5. Property Name IGGLES STATE COM	6. Well No. 124H

7. Surface Location

UL - Lot P	Section 21	Township 18S	Range 34E	Lot Idn P	Feet From 405	N/S Line S	Feet From 1355	E/W Line E	County Lea
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8. Proposed Bottom Hole Location

UL - Lot A	Section 16	Township 18S	Range 34E	Lot Idn A	Feet From 110	N/S Line N	Feet From 660	E/W Line E	County Lea
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9. Pool Information

VACUUM;BONE SPRING, WEST	61910
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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 4024
16. Multiple N	17. Proposed Depth 20033	18. Formation Bone Spring	19. Contractor	20. Spud Date 7/12/2024
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	1900	1241	0
Int1	9.875	7.625	29.7	9051	758	0
Prod	6.75	5.5	20	20033	710	8851

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	3000	Cameron
Double Ram	10000	5000	Cameron
Pipe	10000	5000	Cameron

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☒ if applicable.

Signature:

Printed Name: Electronically filed by Brett A Jennings

Title: Regulatory Analyst

Email Address: brett.jennings@matadorresources.com

Date: 6/10/2024

Phone: 972-629-2160

OIL CONSERVATION DIVISION

Approved By: Paul F Kautz

Title: Geologist

Approved Date: 7/5/2024

Expiration Date: 7/5/2026

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 61910		³ Pool Name Vacuum; Bone Spring West	
⁴ Property Code		⁵ Property Name IGGLES STATE COM		⁶ Well Number 124H	
⁷ GRID No. 228937		⁸ Operator Name MATADOR PRODUCTION COMPANY		⁹ Elevation 4024'	
¹⁰ Surface Location					
UL or lot no. P	Section 21	Township 18-S	Range 34-E	Lot Idn -	Feet from the 405'
				North/South line SOUTH	Feet from the 1355'
				East/West line EAST	County LEA
¹¹ Bottom Hole Location If Different From Surface					
UL or lot no. A	Section 16	Township 18-S	Range 34-E	Lot Idn -	Feet from the 110'
				North/South line NORTH	Feet from the 660'
				East/West line EAST	County LEA
¹² Dedicated Acres 320		¹³ Joint or Infill		¹⁴ Consolidation Code	
				¹⁵ Order No.	

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

	NEW MEXICO EAST NAD 1983 <u>SURFACE LOCATION (SHL)</u> 405' FSL - SEC. 21 1355' FEL - SEC. 21 X=778789 Y=629110 LAT.: N 32.7270843 LONG.: W 103.5611841 <u>KICK OFF POINT (KOP)</u> 50' FSL - SEC. 21 660' FEL - SEC. 21 X=779488 Y=628759 LAT.: N 32.7261065 LONG.: W 103.5589216 <u>FIRST PERFORATION POINT (FPP)</u> 100' FSL - SEC. 21 660' FEL - SEC. 21 X=779487 Y=628809 LAT.: N 32.7262439 LONG.: W 103.5589220 <u>LAST PERFORATION POINT (LPP)</u> <u>BOTTOM HOLE LOCATION (BHL)</u> 110' FNL - SEC. 16 660' FEL - SEC. 16 X=779394 Y=639162 LAT.: N 32.7547008 LONG.: W 103.5589795	¹⁷OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or is a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <i>Clay Wooten</i> Date: 6/5/24 Printed Name: <i>Clay Wooten</i> E-mail Address: <i>Clay.Wooten@matadorresources.com</i> 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. 09/23/2023 Date of Survey Signature and Seal of Professional Surveyor Certificate Number NEW MEXICO EAST NAD 1927 <table border="1"> <tr> <td><u>SURFACE LOCATION (SHL)</u> X=737610 Y=628645 LAT.: N 32.7259910 LONG.: W 103.5606878</td> <td><u>KICK OFF POINT (KOP)</u> X=737630 Y=628685 LAT.: N 32.7259431 LONG.: W 103.5584254</td> </tr> <tr> <td><u>FIRST PERFORATION POINT (FPP)</u> X=738358 Y=628749 LAT.: N 32.7261206 LONG.: W 103.5584258</td> <td><u>LAST PERFORATION POINT (LPP)</u> <u>BOTTOM HOLE LOCATION (BHL)</u> X=738215 Y=638098 LAT.: N 32.7545775 LONG.: W 103.5584822</td> </tr> </table>	<u>SURFACE LOCATION (SHL)</u> X=737610 Y=628645 LAT.: N 32.7259910 LONG.: W 103.5606878	<u>KICK OFF POINT (KOP)</u> X=737630 Y=628685 LAT.: N 32.7259431 LONG.: W 103.5584254	<u>FIRST PERFORATION POINT (FPP)</u> X=738358 Y=628749 LAT.: N 32.7261206 LONG.: W 103.5584258	<u>LAST PERFORATION POINT (LPP)</u> <u>BOTTOM HOLE LOCATION (BHL)</u> X=738215 Y=638098 LAT.: N 32.7545775 LONG.: W 103.5584822
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S:\SURVEY\MATADOR_RESOURCES\GLOILES_BOBBY_PICKARD_INFRASTRUCTURE\FINAL_PRODUCTS\LO_GLOILES_STATE_COM_124H_REV2.DWG 5/31/2024 8:30:32 AM jacob.eming

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Oil Conservation Division
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Form APD Conditions
Permit 366867

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: MATADOR PRODUCTION COMPANY [228937] One Lincoln Centre Dallas, TX 75240		API Number: 30-025-53141
		Well: IGGLES STATE COM #124H
OCD Reviewer	Condition	
pkautz	Notify OCD 24 hours prior to casing & cement	
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	
pkautz	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	
pkautz	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	
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	
pkautz	If cement does not circulate on any string, a CBL is required for that string of casing	
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud	
pkautz	Pit construction and closure must satisfy all requirements of your approved plan	
pkautz	If using a pit for drilling and completion operations, must have an approved pit from prior to spudding the well	

Well Name: Iggles State Com #124H										
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	1900	0	1241	0	Option to drill surface hole with surface setting rig
INT 1	Diesel Brine Emulsion	9.875	7.625	P-110	29.70	9051	0	758	0	Option to run DV tool and Packer.
PROD	OBM	6.75	5.5	P-110	20.00	20033	0	710	8851	

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:** 2/20/2024

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
Iggles State Com 122H	30-025	UL-N Sec 21 T18S R34E	777' FSL 1543' FWL	850 BOPD	650 MCFD	2250 BWPD
Iggles State Com 123H	30-025	UL-P Sec 21 T18S R34E	405' FSL 1385' FEL	850 BOPD	650 MCFD	2250 BWPD
Iggles State Com 124H	30-025	UL-P Sec 21 T18S R34E	405' FSL 1355' FEL	850 BOPD	650 MCFD	2250 BWPD
Iggles State Com 131H	30-025	UL-N Sec 21 T18S R34E	716' FSL 1723' FWL	850 BOPD	450 MCFD	1300 BWPD
Iggles State Com 132H	30-025	UL-N Sec 21 T18S R34E	706' FSL 1752' FWL	850 BOPD	450 MCFD	1300 BWPD
Iggles State Com 133H	30-025	UL-P Sec 21 T18S R34E	405' FSL 1165' FEL	850 BOPD	450 MCFD	1300 BWPD
Iggles State Com 134H	30-025	UL-P Sec 21 T18S R34E	405' FSL 1135' FEL	850 BOPD	450 MCFD	1300 BWPD
Iggles State Com 241H	30-025	UL-N Sec 21 T18S R34E	751' FSL 1619' FWL	550 BOPD	600 MCFD	2250 BWPD
Iggles State Com 242H	30-025	UL-N Sec 21 T18S R34E	741' FSL 1647' FWL	575 BOPD	600 MCFD	2250 BWPD
Iggles State Com 243H	30-025	UL-P Sec 21 T18S R34E	405' FSL 1275' FEL	550 BOPD	600 MCFD	2250 BWPD
Iggles State Com 244H	30-025	UL-P Sec 21 T18S R34E	405' FSL 1245' FEL	550 BOPD	600 MCFD	2250 BWPD

IV. Central Delivery Point Name: Iggles 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
Iggles State Com 122H	30-025	11/16/2024	12/9/2024	2/25/25	5/18/25	5/18/25
Iggles State Com 123H	30-025	12/9/2024	1/1/2025	2/25/25	5/18/25	5/18/25
Iggles State Com 124H	30-025	1/2/2025	1/25/2025	2/25/25	5/18/25	5/18/25
Iggles State Com 241H	30-025	12/10/2024	1/5/2025	2/25/25	5/18/25	5/18/25

Iggles State Com 242H	30-025	4/4/2026	4/30/2026	TBD	TBD	TBD
Iggles State Com 243H	30-025	6/26/2026	7/22/2026	TBD	TBD	TBD
Iggles State Com 244H	30-025	7/23/2026	8/18/2026	TBD	TBD	TBD
Iggles State Com 131H	30-025	TBD	TBD	TBD	TBD	TBD
Iggles State Com 132H	30-025	TBD	TBD	TBD	TBD	TBD
Iggles State Com 133H	30-025	TBD	TBD	TBD	TBD	TBD
Iggles State Com 134H	30-025	TBD	TBD	TBD	TBD	TBD

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: Mark Gonzales
Title: Operations Engineer
E-mail Address: mark.gonzales@matadorresources.com
Date: 2/20/2024
Phone: (915) 240-3468
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

Iggles State Com 122H, 123H, 124H, 131H, 132H, 133H, 134H, 241H, 242H, 243H, 244H

VI. Separation Equipment

Flow from each well 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 for each well can be seen in the table below. 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
Iggles State Com 122H	850 BOPD	650 MCFD	2250 BWPD
Iggles State Com 123H	850 BOPD	650 MCFD	2250 BWPD
Iggles State Com 124H	850 BOPD	650 MCFD	2250 BWPD
Iggles State Com 131H	850 BOPD	450 MCFD	1300 BWPD
Iggles State Com 132H	850 BOPD	450 MCFD	1300 BWPD
Iggles State Com 133H	850 BOPD	450 MCFD	1300 BWPD
Iggles State Com 134H	850 BOPD	450 MCFD	1300 BWPD
Iggles State Com 241H	550 BOPD	600 MCFD	2250 BWPD
Iggles State Com 242H	575 BOPD	600 MCFD	2250 BWPD
Iggles State Com 243H	550 BOPD	600 MCFD	2250 BWPD
Iggles State Com 244H	550 BOPD	600 MCFD	2250 BWPD

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.

VII. 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

Matador Production Company

Ranger/Arrowhead

Iggles/Bobby Pickard

Iggles State Com #124H

Wellbore #1

Plan: State Plan #1

Standard Planning Report

01 June, 2024

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Iggles State Com #124H
Company:	Matador Production Company	TVD Reference:	KB @ 4052.5usft
Project:	Ranger/Arrowhead	MD Reference:	KB @ 4052.5usft
Site:	Iggles/Bobby Pickard	North Reference:	Grid
Well:	Iggles State Com #124H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	State Plan #1		

Project	Ranger/Arrowhead		
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		Iggles/Bobby Pickard			
Site Position:		Northing:	629,399.76 usft	Latitude:	32° 43' 40.735 N
From:	Lat/Long	Easting:	735,234.71 usft	Longitude:	103° 34' 6.251 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.41 °

Well	Iggles State Com #124H					
Well Position	+N/-S	-354.2 usft	Northing:	629,045.56 usft	Latitude:	32° 43' 37.060 N
	+E/-W	2,375.4 usft	Easting:	737,610.09 usft	Longitude:	103° 33' 38.476 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	4,024.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/20/2024	6.25	60.43	47,541.16674320

Design	State Plan #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.45

Plan Survey Tool Program	Date	6/1/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	20,033.7	State 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	
1,400.0	8.00	108.73	1,398.7	-9.0	26.4	2.00	2.00	0.00	108.73	
8,733.0	8.00	108.73	8,660.3	-336.7	992.9	0.00	0.00	0.00	0.00	
9,266.3	0.00	0.00	9,191.9	-348.6	1,028.1	1.50	-1.50	0.00	180.00	
9,301.4	0.00	0.00	9,227.0	-348.6	1,028.1	0.00	0.00	0.00	0.00	KOP - Iggles State Cc
10,201.4	90.00	359.48	9,800.0	224.3	1,022.9	10.00	10.00	0.00	359.48	
20,033.7	90.00	359.48	9,800.0	10,056.2	933.7	0.00	0.00	0.00	0.00	BHL - Iggles State Co

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Iggles State Com #124H
Company:	Matador Production Company	TVD Reference:	KB @ 4052.5usft
Project:	Ranger/Arrowhead	MD Reference:	KB @ 4052.5usft
Site:	Iggles/Bobby Pickard	North Reference:	Grid
Well:	Iggles State Com #124H	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
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
Start Build 2.00									
1,100.0	2.00	108.73	1,100.0	-0.6	1.7	-0.6	2.00	2.00	0.00
1,200.0	4.00	108.73	1,199.8	-2.2	6.6	-2.3	2.00	2.00	0.00
1,300.0	6.00	108.73	1,299.5	-5.0	14.9	-5.2	2.00	2.00	0.00
1,400.0	8.00	108.73	1,398.7	-9.0	26.4	-9.2	2.00	2.00	0.00
Start 7333.0 hold at 1400.0 MD									
1,500.0	8.00	108.73	1,497.7	-13.4	39.6	-13.8	0.00	0.00	0.00
1,600.0	8.00	108.73	1,596.8	-17.9	52.8	-18.4	0.00	0.00	0.00
1,700.0	8.00	108.73	1,695.8	-22.4	65.9	-23.0	0.00	0.00	0.00
1,800.0	8.00	108.73	1,794.8	-26.8	79.1	-27.6	0.00	0.00	0.00
1,831.5	8.00	108.73	1,826.0	-28.2	83.3	-29.0	0.00	0.00	0.00
Rustler									
1,900.0	8.00	108.73	1,893.8	-31.3	92.3	-32.2	0.00	0.00	0.00
2,000.0	8.00	108.73	1,992.9	-35.8	105.5	-36.8	0.00	0.00	0.00
2,099.5	8.00	108.73	2,091.3	-40.2	118.6	-41.4	0.00	0.00	0.00
Salado									
2,100.0	8.00	108.73	2,091.9	-40.2	118.7	-41.4	0.00	0.00	0.00
2,200.0	8.00	108.73	2,190.9	-44.7	131.8	-46.0	0.00	0.00	0.00
2,300.0	8.00	108.73	2,289.9	-49.2	145.0	-50.6	0.00	0.00	0.00
2,400.0	8.00	108.73	2,389.0	-53.6	158.2	-55.2	0.00	0.00	0.00
2,500.0	8.00	108.73	2,488.0	-58.1	171.4	-59.8	0.00	0.00	0.00
2,600.0	8.00	108.73	2,587.0	-62.6	184.6	-64.4	0.00	0.00	0.00
2,700.0	8.00	108.73	2,686.1	-67.1	197.7	-68.9	0.00	0.00	0.00
2,800.0	8.00	108.73	2,785.1	-71.5	210.9	-73.5	0.00	0.00	0.00
2,900.0	8.00	108.73	2,884.1	-76.0	224.1	-78.1	0.00	0.00	0.00
3,000.0	8.00	108.73	2,983.1	-80.5	237.3	-82.7	0.00	0.00	0.00
3,007.9	8.00	108.73	2,990.9	-80.8	238.3	-83.1	0.00	0.00	0.00
Fletcher Anhy.									
3,100.0	8.00	108.73	3,082.2	-84.9	250.5	-87.3	0.00	0.00	0.00
3,194.1	8.00	108.73	3,175.3	-89.1	262.9	-91.7	0.00	0.00	0.00
G30:CS14-CSB									
3,200.0	8.00	108.73	3,181.2	-89.4	263.6	-91.9	0.00	0.00	0.00
3,300.0	8.00	108.73	3,280.2	-93.9	276.8	-96.5	0.00	0.00	0.00
3,400.0	8.00	108.73	3,379.2	-98.3	290.0	-101.1	0.00	0.00	0.00
3,500.0	8.00	108.73	3,478.3	-102.8	303.2	-105.7	0.00	0.00	0.00
3,600.0	8.00	108.73	3,577.3	-107.3	316.4	-110.3	0.00	0.00	0.00
3,700.0	8.00	108.73	3,676.3	-111.7	329.5	-114.9	0.00	0.00	0.00
3,800.0	8.00	108.73	3,775.3	-116.2	342.7	-119.5	0.00	0.00	0.00
3,900.0	8.00	108.73	3,874.4	-120.7	355.9	-124.1	0.00	0.00	0.00
4,000.0	8.00	108.73	3,973.4	-125.2	369.1	-128.7	0.00	0.00	0.00
4,100.0	8.00	108.73	4,072.4	-129.6	382.3	-133.3	0.00	0.00	0.00
4,200.0	8.00	108.73	4,171.5	-134.1	395.4	-137.9	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Iggles State Com #124H
Company:	Matador Production Company	TVD Reference:	KB @ 4052.5usft
Project:	Ranger/Arrowhead	MD Reference:	KB @ 4052.5usft
Site:	Iggles/Bobby Pickard	North Reference:	Grid
Well:	Iggles State Com #124H	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)
4,300.0	8.00	108.73	4,270.5	-138.6	408.6	-142.5	0.00	0.00	0.00
4,400.0	8.00	108.73	4,369.5	-143.0	421.8	-147.1	0.00	0.00	0.00
4,500.0	8.00	108.73	4,468.5	-147.5	435.0	-151.7	0.00	0.00	0.00
4,597.6	8.00	108.73	4,565.2	-151.9	447.9	-156.2	0.00	0.00	0.00
G16.1: Shattuck-SS (CS12-TSS)									
4,600.0	8.00	108.73	4,567.6	-152.0	448.2	-156.3	0.00	0.00	0.00
4,661.2	8.00	108.73	4,628.1	-154.7	456.2	-159.1	0.00	0.00	0.00
G14.3 Queen Fm. (CS11-CSB)									
4,700.0	8.00	108.73	4,666.6	-156.4	461.3	-160.9	0.00	0.00	0.00
4,800.0	8.00	108.73	4,765.6	-160.9	474.5	-165.5	0.00	0.00	0.00
4,900.0	8.00	108.73	4,864.6	-165.4	487.7	-170.1	0.00	0.00	0.00
5,000.0	8.00	108.73	4,963.7	-169.8	500.9	-174.6	0.00	0.00	0.00
5,100.0	8.00	108.73	5,062.7	-174.3	514.1	-179.2	0.00	0.00	0.00
5,200.0	8.00	108.73	5,161.7	-178.8	527.2	-183.8	0.00	0.00	0.00
5,300.0	8.00	108.73	5,260.7	-183.3	540.4	-188.4	0.00	0.00	0.00
5,400.0	8.00	108.73	5,359.8	-187.7	553.6	-193.0	0.00	0.00	0.00
5,500.0	8.00	108.73	5,458.8	-192.2	566.8	-197.6	0.00	0.00	0.00
5,600.0	8.00	108.73	5,557.8	-196.7	580.0	-202.2	0.00	0.00	0.00
5,700.0	8.00	108.73	5,656.9	-201.1	593.2	-206.8	0.00	0.00	0.00
5,800.0	8.00	108.73	5,755.9	-205.6	606.3	-211.4	0.00	0.00	0.00
5,900.0	8.00	108.73	5,854.9	-210.1	619.5	-216.0	0.00	0.00	0.00
6,000.0	8.00	108.73	5,953.9	-214.5	632.7	-220.6	0.00	0.00	0.00
6,100.0	8.00	108.73	6,053.0	-219.0	645.9	-225.2	0.00	0.00	0.00
6,200.0	8.00	108.73	6,152.0	-223.5	659.1	-229.8	0.00	0.00	0.00
6,300.0	8.00	108.73	6,251.0	-227.9	672.2	-234.4	0.00	0.00	0.00
6,400.0	8.00	108.73	6,350.0	-232.4	685.4	-239.0	0.00	0.00	0.00
6,500.0	8.00	108.73	6,449.1	-236.9	698.6	-243.6	0.00	0.00	0.00
6,600.0	8.00	108.73	6,548.1	-241.4	711.8	-248.2	0.00	0.00	0.00
6,696.3	8.00	108.73	6,643.4	-245.7	724.5	-252.6	0.00	0.00	0.00
G7: Brushy Cyn.									
6,700.0	8.00	108.73	6,647.1	-245.8	725.0	-252.8	0.00	0.00	0.00
6,800.0	8.00	108.73	6,746.1	-250.3	738.1	-257.4	0.00	0.00	0.00
6,900.0	8.00	108.73	6,845.2	-254.8	751.3	-262.0	0.00	0.00	0.00
7,000.0	8.00	108.73	6,944.2	-259.2	764.5	-266.6	0.00	0.00	0.00
7,100.0	8.00	108.73	7,043.2	-263.7	777.7	-271.2	0.00	0.00	0.00
7,200.0	8.00	108.73	7,142.3	-268.2	790.9	-275.8	0.00	0.00	0.00
7,300.0	8.00	108.73	7,241.3	-272.6	804.0	-280.3	0.00	0.00	0.00
7,400.0	8.00	108.73	7,340.3	-277.1	817.2	-284.9	0.00	0.00	0.00
7,500.0	8.00	108.73	7,439.3	-281.6	830.4	-289.5	0.00	0.00	0.00
7,546.6	8.00	108.73	7,485.5	-283.7	836.5	-291.7	0.00	0.00	0.00
G5: L. Brushy Cyn.									
7,600.0	8.00	108.73	7,538.4	-286.0	843.6	-294.1	0.00	0.00	0.00
7,700.0	8.00	108.73	7,637.4	-290.5	856.8	-298.7	0.00	0.00	0.00
7,773.0	8.00	108.73	7,709.7	-293.8	866.4	-302.1	0.00	0.00	0.00
G4: BSGI (CS9)									
7,800.0	8.00	108.73	7,736.4	-295.0	869.9	-303.3	0.00	0.00	0.00
7,900.0	8.00	108.73	7,835.4	-299.5	883.1	-307.9	0.00	0.00	0.00
7,926.9	8.00	108.73	7,862.1	-300.7	886.7	-309.2	0.00	0.00	0.00
G4.1: AVALON-SS									
7,972.3	8.00	108.73	7,907.1	-302.7	892.6	-311.2	0.00	0.00	0.00
G3.3: Avalon SS (B)									
8,000.0	8.00	108.73	7,934.5	-303.9	896.3	-312.5	0.00	0.00	0.00
8,100.0	8.00	108.73	8,033.5	-308.4	909.5	-317.1	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Iggles State Com #124H
Company:	Matador Production Company	TVD Reference:	KB @ 4052.5usft
Project:	Ranger/Arrowhead	MD Reference:	KB @ 4052.5usft
Site:	Iggles/Bobby Pickard	North Reference:	Grid
Well:	Iggles State Com #124H	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)
8,200.0	8.00	108.73	8,132.5	-312.9	922.7	-321.7	0.00	0.00	0.00
8,300.0	8.00	108.73	8,231.6	-317.3	935.8	-326.3	0.00	0.00	0.00
8,399.4	8.00	108.73	8,330.0	-321.8	948.9	-330.9	0.00	0.00	0.00
L8.2: U. Avalon Shale									
8,400.0	8.00	108.73	8,330.6	-321.8	949.0	-330.9	0.00	0.00	0.00
8,500.0	8.00	108.73	8,429.6	-326.3	962.2	-335.5	0.00	0.00	0.00
8,587.8	8.00	108.73	8,516.6	-330.2	973.8	-339.5	0.00	0.00	0.00
L6.3: Avalon Carb									
8,600.0	8.00	108.73	8,528.6	-330.7	975.4	-340.1	0.00	0.00	0.00
8,700.0	8.00	108.73	8,627.7	-335.2	988.6	-344.7	0.00	0.00	0.00
8,733.0	8.00	108.73	8,660.3	-336.7	992.9	-346.2	0.00	0.00	0.00
Start Drop -1.50									
8,800.0	7.00	108.73	8,726.8	-339.5	1,001.2	-349.1	1.50	-1.50	0.00
8,835.5	6.46	108.73	8,762.0	-340.8	1,005.1	-350.5	1.50	-1.50	0.00
L6.2: L. Avalon Shale									
8,900.0	5.50	108.73	8,826.2	-343.0	1,011.5	-352.7	1.50	-1.50	0.00
8,914.2	5.28	108.73	8,840.3	-343.4	1,012.8	-353.1	1.50	-1.50	0.00
L5.3: FBSC									
9,000.0	4.00	108.73	8,925.8	-345.6	1,019.3	-355.4	1.50	-1.50	0.00
9,051.2	3.23	108.73	8,976.9	-346.7	1,022.4	-356.5	1.50	-1.50	0.00
L5.1: FBSCG									
9,086.9	2.69	108.73	9,012.5	-347.3	1,024.1	-357.1	1.50	-1.50	0.00
L4.3: SBSG									
9,100.0	2.50	108.73	9,025.7	-347.5	1,024.7	-357.3	1.50	-1.50	0.00
9,200.0	1.00	108.73	9,125.6	-348.4	1,027.6	-358.3	1.50	-1.50	0.00
9,266.3	0.00	0.00	9,191.9	-348.6	1,028.1	-358.5	1.50	-1.50	0.00
Start 35.1 hold at 9266.3 MD									
9,300.0	0.00	0.00	9,225.6	-348.6	1,028.1	-358.5	0.00	0.00	0.00
9,301.4	0.00	0.00	9,227.0	-348.6	1,028.1	-358.5	0.00	0.00	0.00
Start Build 10.00 - KOP - Iggles State Com #124H									
9,325.3	2.39	359.48	9,250.9	-348.1	1,028.1	-358.0	10.00	10.00	0.00
L4.1: SBSG									
9,400.0	9.86	359.48	9,325.1	-340.2	1,028.0	-350.0	10.00	10.00	0.00
9,473.1	17.17	359.48	9,396.2	-323.1	1,027.9	-332.9	10.00	10.00	0.00
L4.1: SBSG B Carb									
9,500.0	19.86	359.48	9,421.7	-314.5	1,027.8	-324.4	10.00	10.00	0.00
9,600.0	29.86	359.48	9,512.3	-272.6	1,027.4	-282.4	10.00	10.00	0.00
9,700.0	39.86	359.48	9,594.2	-215.5	1,026.9	-225.3	10.00	10.00	0.00
9,787.3	48.59	359.48	9,656.7	-154.6	1,026.4	-164.5	10.00	10.00	0.00
FTP - Iggles State Com #124H									
9,800.0	49.86	359.48	9,665.0	-145.0	1,026.3	-154.9	10.00	10.00	0.00
9,900.0	59.86	359.48	9,722.5	-63.4	1,025.5	-73.2	10.00	10.00	0.00
9,908.9	60.75	359.48	9,726.9	-55.6	1,025.5	-65.5	10.00	10.00	0.00
SBSG B Target									
10,000.0	69.86	359.48	9,764.9	27.0	1,024.7	17.2	10.00	10.00	0.00
10,100.0	79.86	359.48	9,791.0	123.4	1,023.8	113.6	10.00	10.00	0.00
10,200.0	89.86	359.48	9,800.0	222.9	1,022.9	213.1	10.00	10.00	0.00
10,201.4	90.00	359.48	9,800.0	224.3	1,022.9	214.5	10.00	10.00	0.00
Start 9832.3 hold at 10201.4 MD									
10,300.0	90.00	359.48	9,800.0	322.9	1,022.0	313.1	0.00	0.00	0.00
10,400.0	90.00	359.48	9,800.0	422.9	1,021.1	413.1	0.00	0.00	0.00
10,500.0	90.00	359.48	9,800.0	522.9	1,020.2	513.1	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Iggles State Com #124H
Company:	Matador Production Company	TVD Reference:	KB @ 4052.5usft
Project:	Ranger/Arrowhead	MD Reference:	KB @ 4052.5usft
Site:	Iggles/Bobby Pickard	North Reference:	Grid
Well:	Iggles State Com #124H	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)	
10,600.0	90.00	359.48	9,800.0	622.9	1,019.3	613.1	0.00	0.00	0.00	
10,700.0	90.00	359.48	9,800.0	722.9	1,018.4	713.1	0.00	0.00	0.00	
10,800.0	90.00	359.48	9,800.0	822.9	1,017.5	813.1	0.00	0.00	0.00	
10,900.0	90.00	359.48	9,800.0	922.9	1,016.6	913.1	0.00	0.00	0.00	
11,000.0	90.00	359.48	9,800.0	1,022.9	1,015.7	1,013.1	0.00	0.00	0.00	
11,100.0	90.00	359.48	9,800.0	1,122.9	1,014.8	1,113.1	0.00	0.00	0.00	
11,200.0	90.00	359.48	9,800.0	1,222.9	1,013.8	1,213.1	0.00	0.00	0.00	
11,300.0	90.00	359.48	9,800.0	1,322.9	1,012.9	1,313.1	0.00	0.00	0.00	
11,400.0	90.00	359.48	9,800.0	1,422.9	1,012.0	1,413.1	0.00	0.00	0.00	
11,500.0	90.00	359.48	9,800.0	1,522.9	1,011.1	1,513.1	0.00	0.00	0.00	
11,600.0	90.00	359.48	9,800.0	1,622.9	1,010.2	1,613.1	0.00	0.00	0.00	
11,700.0	90.00	359.48	9,800.0	1,722.9	1,009.3	1,713.1	0.00	0.00	0.00	
11,800.0	90.00	359.48	9,800.0	1,822.9	1,008.4	1,813.1	0.00	0.00	0.00	
11,900.0	90.00	359.48	9,800.0	1,922.8	1,007.5	1,913.1	0.00	0.00	0.00	
12,000.0	90.00	359.48	9,800.0	2,022.8	1,006.6	2,013.1	0.00	0.00	0.00	
12,100.0	90.00	359.48	9,800.0	2,122.8	1,005.7	2,113.1	0.00	0.00	0.00	
12,200.0	90.00	359.48	9,800.0	2,222.8	1,004.8	2,213.1	0.00	0.00	0.00	
12,300.0	90.00	359.48	9,800.0	2,322.8	1,003.9	2,313.1	0.00	0.00	0.00	
12,400.0	90.00	359.48	9,800.0	2,422.8	1,003.0	2,413.1	0.00	0.00	0.00	
12,500.0	90.00	359.48	9,800.0	2,522.8	1,002.0	2,513.1	0.00	0.00	0.00	
12,600.0	90.00	359.48	9,800.0	2,622.8	1,001.1	2,613.1	0.00	0.00	0.00	
12,700.0	90.00	359.48	9,800.0	2,722.8	1,000.2	2,713.1	0.00	0.00	0.00	
12,800.0	90.00	359.48	9,800.0	2,822.8	999.3	2,813.1	0.00	0.00	0.00	
12,900.0	90.00	359.48	9,800.0	2,922.8	998.4	2,913.1	0.00	0.00	0.00	
13,000.0	90.00	359.48	9,800.0	3,022.8	997.5	3,013.1	0.00	0.00	0.00	
13,100.0	90.00	359.48	9,800.0	3,122.8	996.6	3,113.1	0.00	0.00	0.00	
13,200.0	90.00	359.48	9,800.0	3,222.8	995.7	3,213.1	0.00	0.00	0.00	
13,300.0	90.00	359.48	9,800.0	3,322.8	994.8	3,313.1	0.00	0.00	0.00	
13,400.0	90.00	359.48	9,800.0	3,422.8	993.9	3,413.1	0.00	0.00	0.00	
13,500.0	90.00	359.48	9,800.0	3,522.8	993.0	3,513.1	0.00	0.00	0.00	
13,600.0	90.00	359.48	9,800.0	3,622.8	992.1	3,613.1	0.00	0.00	0.00	
13,700.0	90.00	359.48	9,800.0	3,722.8	991.2	3,713.1	0.00	0.00	0.00	
13,800.0	90.00	359.48	9,800.0	3,822.8	990.3	3,813.1	0.00	0.00	0.00	
13,900.0	90.00	359.48	9,800.0	3,922.8	989.3	3,913.1	0.00	0.00	0.00	
14,000.0	90.00	359.48	9,800.0	4,022.8	988.4	4,013.1	0.00	0.00	0.00	
14,100.0	90.00	359.48	9,800.0	4,122.8	987.5	4,113.1	0.00	0.00	0.00	
14,200.0	90.00	359.48	9,800.0	4,222.8	986.6	4,213.1	0.00	0.00	0.00	
14,300.0	90.00	359.48	9,800.0	4,322.7	985.7	4,313.1	0.00	0.00	0.00	
14,400.0	90.00	359.48	9,800.0	4,422.7	984.8	4,413.1	0.00	0.00	0.00	
14,500.0	90.00	359.48	9,800.0	4,522.7	983.9	4,513.1	0.00	0.00	0.00	
14,600.0	90.00	359.48	9,800.0	4,622.7	983.0	4,613.1	0.00	0.00	0.00	
14,700.0	90.00	359.48	9,800.0	4,722.7	982.1	4,713.1	0.00	0.00	0.00	
14,800.0	90.00	359.48	9,800.0	4,822.7	981.2	4,813.1	0.00	0.00	0.00	
14,900.0	90.00	359.48	9,800.0	4,922.7	980.3	4,913.1	0.00	0.00	0.00	
15,000.0	90.00	359.48	9,800.0	5,022.7	979.4	5,013.1	0.00	0.00	0.00	
15,100.0	90.00	359.48	9,800.0	5,122.7	978.5	5,113.1	0.00	0.00	0.00	
15,200.0	90.00	359.48	9,800.0	5,222.7	977.5	5,213.1	0.00	0.00	0.00	
15,300.0	90.00	359.48	9,800.0	5,322.7	976.6	5,313.1	0.00	0.00	0.00	
15,400.0	90.00	359.48	9,800.0	5,422.7	975.7	5,413.1	0.00	0.00	0.00	
15,500.0	90.00	359.48	9,800.0	5,522.7	974.8	5,513.1	0.00	0.00	0.00	
15,600.0	90.00	359.48	9,800.0	5,622.7	973.9	5,613.1	0.00	0.00	0.00	
15,700.0	90.00	359.48	9,800.0	5,722.7	973.0	5,713.1	0.00	0.00	0.00	
15,800.0	90.00	359.48	9,800.0	5,822.7	972.1	5,813.1	0.00	0.00	0.00	
15,900.0	90.00	359.48	9,800.0	5,922.7	971.2	5,913.1	0.00	0.00	0.00	

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:		Well Iggles State Com #124H					
Company:	Matador Production Company			KB @ 4052.5usft					
Project:	Ranger/Arrowhead			KB @ 4052.5usft					
Site:	Iggles/Bobby Pickard			Grid					
Well:	Iggles State Com #124H			Minimum Curvature					
Wellbore:	Wellbore #1								
Design:	State Plan #1								
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
16,000.0	90.00	359.48	9,800.0	6,022.7	970.3	6,013.1	0.00	0.00	0.00
16,100.0	90.00	359.48	9,800.0	6,122.7	969.4	6,113.1	0.00	0.00	0.00
16,200.0	90.00	359.48	9,800.0	6,222.7	968.5	6,213.1	0.00	0.00	0.00
16,300.0	90.00	359.48	9,800.0	6,322.7	967.6	6,313.1	0.00	0.00	0.00
16,400.0	90.00	359.48	9,800.0	6,422.7	966.7	6,413.1	0.00	0.00	0.00
16,500.0	90.00	359.48	9,800.0	6,522.7	965.7	6,513.1	0.00	0.00	0.00
16,600.0	90.00	359.48	9,800.0	6,622.7	964.8	6,613.1	0.00	0.00	0.00
16,700.0	90.00	359.48	9,800.0	6,722.6	963.9	6,713.1	0.00	0.00	0.00
16,800.0	90.00	359.48	9,800.0	6,822.6	963.0	6,813.1	0.00	0.00	0.00
16,900.0	90.00	359.48	9,800.0	6,922.6	962.1	6,913.1	0.00	0.00	0.00
17,000.0	90.00	359.48	9,800.0	7,022.6	961.2	7,013.1	0.00	0.00	0.00
17,100.0	90.00	359.48	9,800.0	7,122.6	960.3	7,113.1	0.00	0.00	0.00
17,200.0	90.00	359.48	9,800.0	7,222.6	959.4	7,213.1	0.00	0.00	0.00
17,300.0	90.00	359.48	9,800.0	7,322.6	958.5	7,313.1	0.00	0.00	0.00
17,400.0	90.00	359.48	9,800.0	7,422.6	957.6	7,413.1	0.00	0.00	0.00
17,500.0	90.00	359.48	9,800.0	7,522.6	956.7	7,513.1	0.00	0.00	0.00
17,600.0	90.00	359.48	9,800.0	7,622.6	955.8	7,613.1	0.00	0.00	0.00
17,700.0	90.00	359.48	9,800.0	7,722.6	954.9	7,713.1	0.00	0.00	0.00
17,800.0	90.00	359.48	9,800.0	7,822.6	953.9	7,813.1	0.00	0.00	0.00
17,900.0	90.00	359.48	9,800.0	7,922.6	953.0	7,913.1	0.00	0.00	0.00
18,000.0	90.00	359.48	9,800.0	8,022.6	952.1	8,013.1	0.00	0.00	0.00
18,100.0	90.00	359.48	9,800.0	8,122.6	951.2	8,113.1	0.00	0.00	0.00
18,200.0	90.00	359.48	9,800.0	8,222.6	950.3	8,213.1	0.00	0.00	0.00
18,300.0	90.00	359.48	9,800.0	8,322.6	949.4	8,313.1	0.00	0.00	0.00
18,400.0	90.00	359.48	9,800.0	8,422.6	948.5	8,413.1	0.00	0.00	0.00
18,500.0	90.00	359.48	9,800.0	8,522.6	947.6	8,513.1	0.00	0.00	0.00
18,600.0	90.00	359.48	9,800.0	8,622.6	946.7	8,613.1	0.00	0.00	0.00
18,700.0	90.00	359.48	9,800.0	8,722.6	945.8	8,713.1	0.00	0.00	0.00
18,800.0	90.00	359.48	9,800.0	8,822.6	944.9	8,813.1	0.00	0.00	0.00
18,900.0	90.00	359.48	9,800.0	8,922.6	944.0	8,913.1	0.00	0.00	0.00
19,000.0	90.00	359.48	9,800.0	9,022.6	943.1	9,013.1	0.00	0.00	0.00
19,100.0	90.00	359.48	9,800.0	9,122.5	942.2	9,113.1	0.00	0.00	0.00
19,200.0	90.00	359.48	9,800.0	9,222.5	941.2	9,213.1	0.00	0.00	0.00
19,300.0	90.00	359.48	9,800.0	9,322.5	940.3	9,313.1	0.00	0.00	0.00
19,400.0	90.00	359.48	9,800.0	9,422.5	939.4	9,413.1	0.00	0.00	0.00
19,500.0	90.00	359.48	9,800.0	9,522.5	938.5	9,513.1	0.00	0.00	0.00
19,600.0	90.00	359.48	9,800.0	9,622.5	937.6	9,613.1	0.00	0.00	0.00
19,700.0	90.00	359.48	9,800.0	9,722.5	936.7	9,713.1	0.00	0.00	0.00
19,800.0	90.00	359.48	9,800.0	9,822.5	935.8	9,813.1	0.00	0.00	0.00
19,900.0	90.00	359.48	9,800.0	9,922.5	934.9	9,913.1	0.00	0.00	0.00
20,000.0	90.00	359.48	9,800.0	10,022.5	934.0	10,013.1	0.00	0.00	0.00
20,033.6	90.00	359.48	9,800.0	10,056.1	933.7	10,046.6	0.00	0.00	0.00
BHL - Iggles State Com #124H									
20,033.7	90.00	359.48	9,800.0	10,056.2	933.7	10,046.8	0.00	0.00	0.00
TD at 20033.7									

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Iggles State Com #124H
Company:	Matador Production Company	TVD Reference:	KB @ 4052.5usft
Project:	Ranger/Arrowhead	MD Reference:	KB @ 4052.5usft
Site:	Iggles/Bobby Pickard	North Reference:	Grid
Well:	Iggles State Com #124H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	State Plan #1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
KOP - Iggles State Com	0.00	0.00	9,227.0	-348.6	1,028.1	628,697.00	738,638.00	32° 43' 33.536 N	103° 33' 26.474 W
- plan hits target center									
- Point									
FTP - Iggles State Com :	0.00	0.00	9,800.0	-298.6	1,028.1	628,747.00	738,638.00	32° 43' 34.031 N	103° 33' 26.470 W
- plan misses target center by 203.1usft at 9787.3usft MD (9656.7 TVD, -154.6 N, 1026.4 E)									
- Point									
BHL - Iggles State Com	0.00	0.00	9,800.0	10,053.1	604.9	639,097.77	738,214.90	32° 45' 16.479 N	103° 33' 30.536 W
- plan misses target center by 328.8usft at 20033.6usft MD (9800.0 TVD, 10056.1 N, 933.7 E)									
- Point									

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(usft)	(usft)			(°)	(°)
1,831.5	1,826.0	Rustler		0.00	359.45
2,099.5	2,091.3	Salado		0.00	359.45
3,007.9	2,990.9	Fletcher Anhy.		0.00	359.45
3,194.1	3,175.3	G30:CS14-CSB		0.00	359.45
4,597.6	4,565.2	G16.1: Shattuck-SS (CS12-TSS)		0.00	359.45
4,661.2	4,628.1	G14.3 Queen Fm. (CS11-CSB)		0.00	359.45
6,696.3	6,643.4	G7: Brushy Cyn.		0.00	359.45
7,546.6	7,485.5	G5: L. Brushy Cyn.		0.00	359.45
7,773.0	7,709.7	G4: BSG (CS9)		0.00	359.45
7,926.9	7,862.1	G4.1: AVALON-SS		0.00	359.45
7,972.3	7,907.1	G3.3: Avalon SS (B)		0.00	359.45
8,399.4	8,330.0	L8.2: U. Avalon Shale		0.00	359.45
8,587.8	8,516.6	L6.3: Avalon Carb		0.00	359.45
8,835.5	8,762.0	L6.2: L. Avalon Shale		0.00	359.45
8,914.2	8,840.3	L5.3: FBSC		0.00	359.45
9,051.2	8,976.9	L5.1: FBSC		0.00	359.45
9,086.9	9,012.5	L4.3: SBSC		0.00	359.45
9,325.3	9,250.9	L4.1: SBSG		0.00	359.45
9,473.1	9,396.2	L4.1: SBSG B Carb		0.00	359.45
9,908.9	9,726.9	SBSG B Target		0.00	359.45

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
1,000.0	1,000.0	0.0	0.0	Start Build 2.00
1,400.0	1,398.7	-9.0	26.4	Start 7333.0 hold at 1400.0 MD
8,733.0	8,660.3	-336.7	992.9	Start Drop -1.50
9,266.3	9,191.9	-348.6	1,028.1	Start 35.1 hold at 9266.3 MD
9,301.4	9,227.0	-348.6	1,028.1	Start Build 10.00
10,201.4	9,800.0	224.3	1,022.9	Start 9832.3 hold at 10201.4 MD
20,033.7	9,800.0	10,056.2	933.7	TD at 20033.7