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Phone:(575) 748-1283 Fax:(575) 748-9720
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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 274915

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	228937
	3. API Number 30-015-46475

4. Property Code	5. Property Name	6. Well No.
326434	RAY STATE COM	203H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
O	36	23S	28E		159	S	2598	E	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
B	25	23S	28E	B	240	N	2296	E	Eddy

9. Pool Information

PURPLE SAGE;WOLFCAMP (GAS)	98220

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	GAS		State	2962
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	19990	Wolfcamp		12/21/2019
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	225	300	0
Int1	12.25	9.625	40	2750	750	0
Int2	8.75	7.625	29.7	9975	445	2550
Prod	6.75	5.5	20	19890	1280	9160

Casing/Cement Program: Additional Comments

Option to drill surface hole with surface setting rig

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:	12/9/2019 Expiration Date: 12/9/2021
Date:	11/21/2019 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	[3]Pool Name
	98220	Purple Sage; Wolfcamp

[4]Property Code	[5]Property Name	[6]Well Number
	RAY STATE COM	203H

[7]OGRID No.	[8]Operator Name	[9]Elevation
228937	MATADOR PRODUCTION COMPANY	2962'

[10]Surface Location

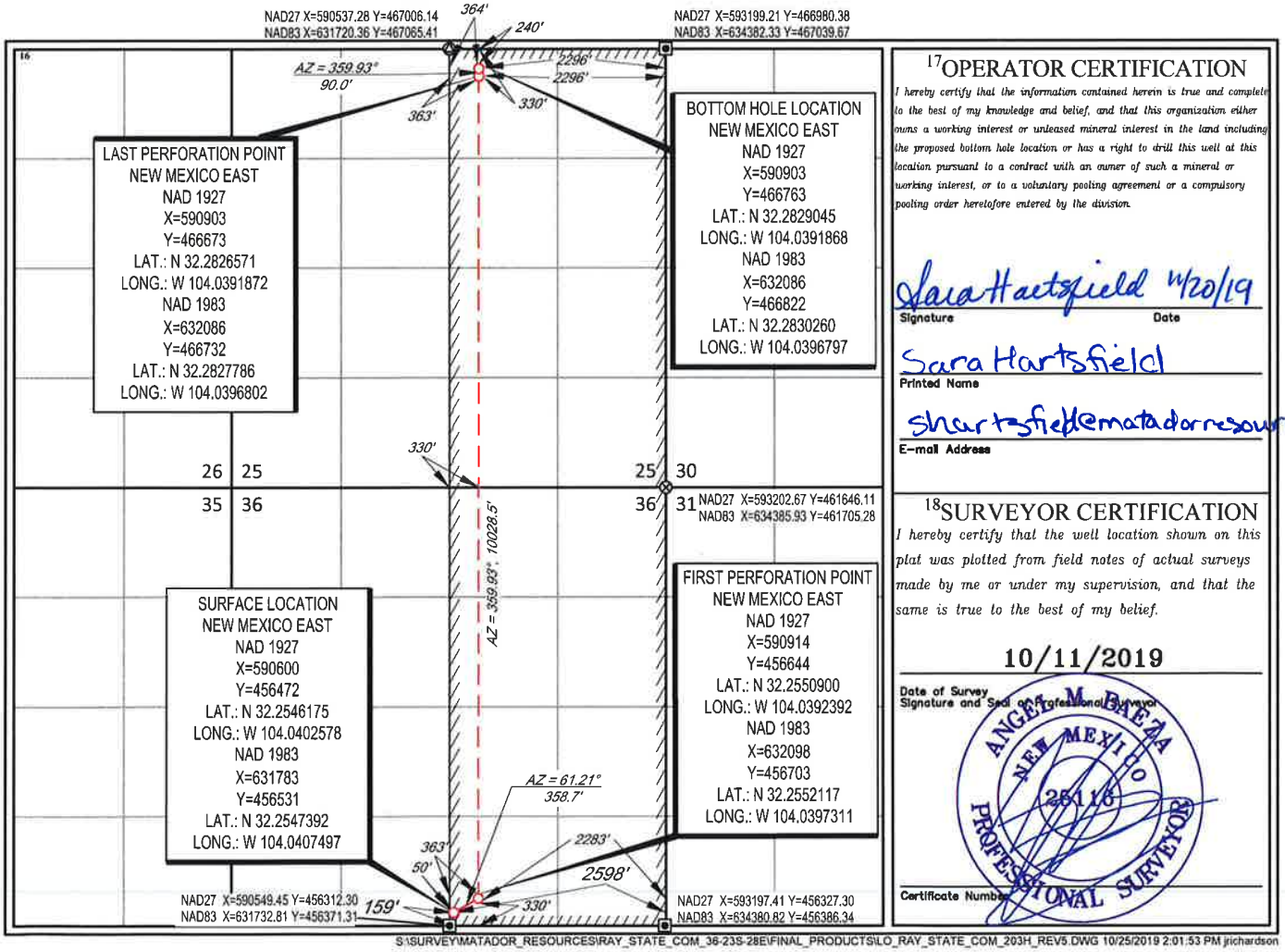
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	36	23-S	28-E	-	159'	SOUTH	2598'	EAST	EDDY

[11]Bottom 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
B	25	23-S	28-E	-	240'	NORTH	2296'	EAST	EDDY

[12]Dedicated Acres	[13]Joint or Infill	[14]Consolidation Code	[15]Order No.
640			

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.



[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.

Sara Hartsfield 9/20/19
Signature Date

Sara Hartsfield
Printed Name

shartsfield@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.

10/11/2019
Date of Survey
Signature and Seal of Professional Surveyor

ANGEL M. PEÑA NEW MEXICO 25116 PROFESSIONAL SURVEYOR

Certificate Number

S:\SURVEY\MATADOR_RESOURCES\RAY_STATE_COM_36-23S-28E\FINAL_PRODUCTS\LO_RAY_STATE_COM_203H_REV5.DWG 10/25/2019 2:01:53 PM jrichardson

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GAS CAPTURE PLAN

Date: 12/9/2019

☒ Original
☐ Amended - Reason for Amendment:

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

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
RAY STATE COM #203H	30-015-46475	O-36-23S-28E	0159S 2598E	4500	Flared	+/- 4500 MCF/D

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 5280' 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 274915

PERMIT COMMENTS

Operator Name and Address:	API Number:
MATADOR PRODUCTION COMPANY [228937] One Lincoln Centre Dallas, TX 75240	30-015-46475
	Well: RAY STATE COM #203H

Created By	Comment	Comment Date
nfitzgerald	Option to drill surface hole with surface setting rig	11/20/2019

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Form APD Conditions

Permit 274915

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
MATADOR PRODUCTION COMPANY [228937] One Lincoln Centre Dallas, TX 75240	30-015-46475
	Well: RAY STATE COM #203H

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 Production Company

Rustler Breaks
Ray State
Ray State Com #203H

Wellbore #1

Plan: State Plan #1

Standard Planning Report

28 October, 2019

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Ray State Com #203H
Company:	Matador Production Company	**TVD Reference:**	KB @ 2989.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 2989.5usft
Site:	Ray State	**North Reference:**	Grid
Well:	Ray State Com #203H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	State Plan #1		

Project Rustler Breaks

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		Using geodetic scale factor

Site Ray State

Site Position:		**Northing:**	455,431.16 usft	**Latitude:**	32° 15' 6.263 N
From:	Lat/Long	**Easting:**	592,908.03 usft	**Longitude:**	104° 1' 58.085 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.16 °

Well Ray State Com #203H

Well Position	**+N/-S**	1,040.5 usft	**Northing:**	456,471.62 usft	**Latitude:**	32° 15' 16.623 N
	+E/-W	-2,308.1 usft	**Easting:**	590,600.08 usft	**Longitude:**	104° 2' 24.928 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	2,961.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.96	60.19	48,761.95675811

Design State Plan #1

Audit Notes:

Version:	1	**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.93

Plan Survey Tool Program **Date** 10/28/2019

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	19,887.5	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	
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,000.0	8.00	108.92	3,997.4	-18.1	52.7	1.00	1.00	0.00	108.92	
5,716.9	8.00	108.92	5,697.6	-95.6	278.8	0.00	0.00	0.00	0.00	
6,250.2	0.00	0.00	6,229.2	-107.6	313.9	1.50	-1.50	0.00	180.00	
9,163.0	0.00	0.00	9,142.0	-107.6	313.9	0.00	0.00	0.00	0.00	VP - Ray State Con
10,063.0	90.00	0.10	9,715.0	465.3	314.9	10.00	10.00	0.00	0.10	
10,071.6	90.00	359.93	9,715.0	473.9	314.9	2.00	0.00	-2.00	-90.08	
19,887.9	90.00	359.93	9,715.0	10,290.2	302.9	0.00	0.00	0.00	0.00	BHL - Ray State Cc

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Ray State Com #203H
Company:	Matador Production Company	**TVD Reference:**	KB @ 2989.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 2989.5usft
Site:	Ray State	**North Reference:**	Grid
Well:	Ray State Com #203H	**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
21.0	0.00	0.00	21.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
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
425.0	0.00	0.00	425.0	0.0	0.0	0.0	0.00	0.00	0.00
Top Salt									
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	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 1.00									
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,675.0	0.00	0.00	2,675.0	0.0	0.0	0.0	0.00	0.00	0.00
Lamar (Base Salt)									
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
Start 2532.2 hold at 2800.0 MD									
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	1.00	108.92	3,300.0	-0.3	0.8	-0.3	1.00	1.00	0.00
3,400.0	2.00	108.92	3,400.0	-1.1	3.3	-1.1	1.00	1.00	0.00
3,500.0	3.00	108.92	3,499.9	-2.5	7.4	-2.6	1.00	1.00	0.00
3,600.0	4.00	108.92	3,599.7	-4.5	13.2	-4.5	1.00	1.00	0.00
3,700.0	5.00	108.92	3,699.4	-7.1	20.6	-7.1	1.00	1.00	0.00
3,800.0	6.00	108.92	3,798.9	-10.2	29.7	-10.2	1.00	1.00	0.00
3,900.0	7.00	108.92	3,898.3	-13.9	40.4	-13.9	1.00	1.00	0.00
4,000.0	8.00	108.92	3,997.4	-18.1	52.7	-18.1	1.00	1.00	0.00
4,100.0	8.00	108.92	4,096.4	-22.6	65.9	-22.7	0.00	0.00	0.00
4,200.0	8.00	108.92	4,195.5	-27.1	79.1	-27.2	0.00	0.00	0.00
4,300.0	8.00	108.92	4,294.5	-31.6	92.2	-31.7	0.00	0.00	0.00
4,400.0	8.00	108.92	4,393.5	-36.1	105.4	-36.3	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Ray State Com #203H
Company:	Matador Production Company	**TVD Reference:**	KB @ 2989.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 2989.5usft
Site:	Ray State	**North Reference:**	Grid
Well:	Ray State Com #203H	**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)
4,500.0	8.00	108.92	4,492.5	-40.6	118.6	-40.8	0.00	0.00	0.00
4,600.0	8.00	108.92	4,591.6	-45.2	131.7	-45.3	0.00	0.00	0.00
4,700.0	8.00	108.92	4,690.6	-49.7	144.9	-49.9	0.00	0.00	0.00
4,800.0	8.00	108.92	4,789.6	-54.2	158.1	-54.4	0.00	0.00	0.00
4,900.0	8.00	108.92	4,888.6	-58.7	171.2	-58.9	0.00	0.00	0.00
5,000.0	8.00	108.92	4,987.7	-63.2	184.4	-63.4	0.00	0.00	0.00
5,100.0	8.00	108.92	5,086.7	-67.7	197.6	-68.0	0.00	0.00	0.00
5,200.0	8.00	108.92	5,185.7	-72.2	210.7	-72.5	0.00	0.00	0.00
5,300.0	8.00	108.92	5,284.8	-76.8	223.9	-77.0	0.00	0.00	0.00
5,332.2	8.00	108.92	5,316.7	-78.2	228.1	-78.5	0.00	0.00	0.00
Start Drop -1.50									
5,400.0	8.00	108.92	5,383.8	-81.3	237.1	-81.6	0.00	0.00	0.00
5,500.0	8.00	108.92	5,482.8	-85.8	250.2	-86.1	0.00	0.00	0.00
5,600.0	8.00	108.92	5,581.8	-90.3	263.4	-90.6	0.00	0.00	0.00
5,700.0	8.00	108.92	5,680.9	-94.8	276.6	-95.1	0.00	0.00	0.00
5,716.9	8.00	108.92	5,697.6	-95.6	278.8	-95.9	0.00	0.00	0.00
5,800.0	6.75	108.92	5,780.0	-99.0	288.9	-99.4	1.50	-1.50	0.00
5,865.5	5.77	108.92	5,845.2	-101.4	295.6	-101.7	1.50	-1.50	0.00
Start 3305.4 hold at 5865.5 MD									
5,900.0	5.25	108.92	5,879.5	-102.4	298.8	-102.8	1.50	-1.50	0.00
6,000.0	3.75	108.92	5,979.1	-105.0	306.2	-105.3	1.50	-1.50	0.00
6,100.0	2.25	108.92	6,079.0	-106.7	311.1	-107.0	1.50	-1.50	0.00
6,200.0	0.75	108.92	6,179.0	-107.5	313.6	-107.9	1.50	-1.50	0.00
6,250.2	0.00	0.00	6,229.2	-107.6	313.9	-108.0	1.50	-1.50	0.00
6,300.0	0.00	0.00	6,279.0	-107.6	313.9	-108.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,379.0	-107.6	313.9	-108.0	0.00	0.00	0.00
6,413.0	0.00	0.00	6,392.0	-107.6	313.9	-108.0	0.00	0.00	0.00
BSGL									
6,500.0	0.00	0.00	6,479.0	-107.6	313.9	-108.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,579.0	-107.6	313.9	-108.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,679.0	-107.6	313.9	-108.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,779.0	-107.6	313.9	-108.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,879.0	-107.6	313.9	-108.0	0.00	0.00	0.00
7,000.0	0.00	0.00	6,979.0	-107.6	313.9	-108.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,079.0	-107.6	313.9	-108.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,179.0	-107.6	313.9	-108.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,279.0	-107.6	313.9	-108.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,379.0	-107.6	313.9	-108.0	0.00	0.00	0.00
7,414.0	0.00	0.00	7,393.0	-107.6	313.9	-108.0	0.00	0.00	0.00
FBSG									
7,500.0	0.00	0.00	7,479.0	-107.6	313.9	-108.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,579.0	-107.6	313.9	-108.0	0.00	0.00	0.00
7,632.0	0.00	0.00	7,611.0	-107.6	313.9	-108.0	0.00	0.00	0.00
SBSC									
7,700.0	0.00	0.00	7,679.0	-107.6	313.9	-108.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,779.0	-107.6	313.9	-108.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,879.0	-107.6	313.9	-108.0	0.00	0.00	0.00
8,000.0	0.00	0.00	7,979.0	-107.6	313.9	-108.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,079.0	-107.6	313.9	-108.0	0.00	0.00	0.00
8,166.0	0.00	0.00	8,145.0	-107.6	313.9	-108.0	0.00	0.00	0.00
SBSG									
8,200.0	0.00	0.00	8,179.0	-107.6	313.9	-108.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,279.0	-107.6	313.9	-108.0	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Ray State Com #203H
Company:	Matador Production Company	**TVD Reference:**	KB @ 2989.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 2989.5usft
Site:	Ray State	**North Reference:**	Grid
Well:	Ray State Com #203H	**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)
8,400.0	0.00	0.00	8,379.0	-107.6	313.9	-108.0	0.00	0.00	0.00
8,436.0	0.00	0.00	8,415.0	-107.6	313.9	-108.0	0.00	0.00	0.00
SBSG Target (120 Series)									
8,500.0	0.00	0.00	8,479.0	-107.6	313.9	-108.0	0.00	0.00	0.00
8,536.0	0.00	0.00	8,515.0	-107.6	313.9	-108.0	0.00	0.00	0.00
TBSC									
8,600.0	0.00	0.00	8,579.0	-107.6	313.9	-108.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,679.0	-107.6	313.9	-108.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,779.0	-107.6	313.9	-108.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,879.0	-107.6	313.9	-108.0	0.00	0.00	0.00
9,000.0	0.00	0.00	8,979.0	-107.6	313.9	-108.0	0.00	0.00	0.00
9,100.0	0.00	0.00	9,079.0	-107.6	313.9	-108.0	0.00	0.00	0.00
9,163.0	0.00	0.00	9,142.0	-107.6	313.9	-108.0	0.00	0.00	0.00
VP - Ray State Com #203H									
9,171.0	0.79	0.10	9,149.9	-107.6	313.9	-108.0	10.00	10.00	0.00
Start Build 10.00									
9,200.0	3.70	0.10	9,178.9	-106.4	313.9	-106.8	10.00	10.00	0.00
9,276.8	11.37	0.10	9,255.0	-96.4	314.0	-96.8	10.00	10.00	0.00
TBSG									
9,300.0	13.70	0.10	9,277.7	-91.3	314.0	-91.7	10.00	10.00	0.00
9,400.0	23.70	0.10	9,372.3	-59.3	314.0	-59.7	10.00	10.00	0.00
9,500.0	33.70	0.10	9,459.9	-11.4	314.1	-11.7	10.00	10.00	0.00
9,600.0	43.70	0.10	9,537.8	51.1	314.2	50.7	10.00	10.00	0.00
9,700.0	53.70	0.10	9,603.7	126.1	314.3	125.7	10.00	10.00	0.00
9,719.5	55.64	0.10	9,615.0	142.0	314.4	141.6	10.00	10.00	0.00
WFMP									
9,800.0	63.70	0.10	9,655.6	211.4	314.5	211.1	10.00	10.00	0.00
9,900.0	73.70	0.10	9,691.9	304.5	314.7	304.1	10.00	10.00	0.00
10,000.0	83.70	0.10	9,711.5	402.4	314.8	402.0	10.00	10.00	0.00
10,063.0	90.00	0.10	9,715.0	465.3	314.9	464.9	10.00	10.00	0.00
Y Sand Top (200 Series)									
10,071.0	90.00	359.94	9,715.0	473.3	314.9	472.9	2.00	0.00	-2.00
Start DLS 2.00 TFO -90.08									
10,071.6	90.00	359.93	9,715.0	473.9	314.9	473.5	2.00	0.00	-2.00
10,079.5	90.00	359.93	9,715.0	481.8	314.9	481.4	0.00	0.00	0.00
Start 9816.3 hold at 10079.5 MD									
10,100.0	90.00	359.93	9,715.0	502.3	314.9	501.9	0.00	0.00	0.00
10,200.0	90.00	359.93	9,715.0	602.3	314.8	601.9	0.00	0.00	0.00
10,300.0	90.00	359.93	9,715.0	702.3	314.7	701.9	0.00	0.00	0.00
10,400.0	90.00	359.93	9,715.0	802.3	314.5	801.9	0.00	0.00	0.00
10,500.0	90.00	359.93	9,715.0	902.3	314.4	901.9	0.00	0.00	0.00
10,600.0	90.00	359.93	9,715.0	1,002.3	314.3	1,001.9	0.00	0.00	0.00
10,700.0	90.00	359.93	9,715.0	1,102.3	314.2	1,101.9	0.00	0.00	0.00
10,800.0	90.00	359.93	9,715.0	1,202.3	314.0	1,201.9	0.00	0.00	0.00
10,900.0	90.00	359.93	9,715.0	1,302.3	313.9	1,301.9	0.00	0.00	0.00
11,000.0	90.00	359.93	9,715.0	1,402.3	313.8	1,401.9	0.00	0.00	0.00
11,100.0	90.00	359.93	9,715.0	1,502.3	313.7	1,501.9	0.00	0.00	0.00
11,200.0	90.00	359.93	9,715.0	1,602.3	313.6	1,601.9	0.00	0.00	0.00
11,300.0	90.00	359.93	9,715.0	1,702.3	313.4	1,701.9	0.00	0.00	0.00
11,400.0	90.00	359.93	9,715.0	1,802.3	313.3	1,801.9	0.00	0.00	0.00
11,500.0	90.00	359.93	9,715.0	1,902.3	313.2	1,901.9	0.00	0.00	0.00
11,600.0	90.00	359.93	9,715.0	2,002.3	313.1	2,001.9	0.00	0.00	0.00
11,700.0	90.00	359.93	9,715.0	2,102.3	312.9	2,101.9	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Ray State Com #203H
Company:	Matador Production Company	**TVD Reference:**	KB @ 2989.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 2989.5usft
Site:	Ray State	**North Reference:**	Grid
Well:	Ray State Com #203H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	State Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,800.0	90.00	359.93	9,715.0	2,202.3	312.8	2,201.9	0.00	0.00	0.00
11,900.0	90.00	359.93	9,715.0	2,302.3	312.7	2,301.9	0.00	0.00	0.00
12,000.0	90.00	359.93	9,715.0	2,402.3	312.6	2,401.9	0.00	0.00	0.00
12,100.0	90.00	359.93	9,715.0	2,502.3	312.4	2,501.9	0.00	0.00	0.00
12,200.0	90.00	359.93	9,715.0	2,602.3	312.3	2,601.9	0.00	0.00	0.00
12,300.0	90.00	359.93	9,715.0	2,702.3	312.2	2,701.9	0.00	0.00	0.00
12,400.0	90.00	359.93	9,715.0	2,802.3	312.1	2,801.9	0.00	0.00	0.00
12,500.0	90.00	359.93	9,715.0	2,902.3	312.0	2,901.9	0.00	0.00	0.00
12,600.0	90.00	359.93	9,715.0	3,002.3	311.8	3,001.9	0.00	0.00	0.00
12,700.0	90.00	359.93	9,715.0	3,102.3	311.7	3,101.9	0.00	0.00	0.00
12,800.0	90.00	359.93	9,715.0	3,202.3	311.6	3,201.9	0.00	0.00	0.00
12,900.0	90.00	359.93	9,715.0	3,302.3	311.5	3,301.9	0.00	0.00	0.00
13,000.0	90.00	359.93	9,715.0	3,402.3	311.3	3,401.9	0.00	0.00	0.00
13,100.0	90.00	359.93	9,715.0	3,502.3	311.2	3,501.9	0.00	0.00	0.00
13,200.0	90.00	359.93	9,715.0	3,602.3	311.1	3,601.9	0.00	0.00	0.00
13,300.0	90.00	359.93	9,715.0	3,702.3	311.0	3,701.9	0.00	0.00	0.00
13,400.0	90.00	359.93	9,715.0	3,802.3	310.8	3,801.9	0.00	0.00	0.00
13,500.0	90.00	359.93	9,715.0	3,902.3	310.7	3,901.9	0.00	0.00	0.00
13,600.0	90.00	359.93	9,715.0	4,002.3	310.6	4,001.9	0.00	0.00	0.00
13,700.0	90.00	359.93	9,715.0	4,102.3	310.5	4,101.9	0.00	0.00	0.00
13,800.0	90.00	359.93	9,715.0	4,202.3	310.4	4,201.9	0.00	0.00	0.00
13,900.0	90.00	359.93	9,715.0	4,302.3	310.2	4,301.9	0.00	0.00	0.00
14,000.0	90.00	359.93	9,715.0	4,402.3	310.1	4,401.9	0.00	0.00	0.00
14,100.0	90.00	359.93	9,715.0	4,502.3	310.0	4,501.9	0.00	0.00	0.00
14,200.0	90.00	359.93	9,715.0	4,602.3	309.9	4,601.9	0.00	0.00	0.00
14,300.0	90.00	359.93	9,715.0	4,702.3	309.7	4,701.9	0.00	0.00	0.00
14,400.0	90.00	359.93	9,715.0	4,802.3	309.6	4,801.9	0.00	0.00	0.00
14,500.0	90.00	359.93	9,715.0	4,902.3	309.5	4,901.9	0.00	0.00	0.00
14,600.0	90.00	359.93	9,715.0	5,002.3	309.4	5,001.9	0.00	0.00	0.00
14,700.0	90.00	359.93	9,715.0	5,102.3	309.2	5,101.9	0.00	0.00	0.00
14,800.0	90.00	359.93	9,715.0	5,202.3	309.1	5,201.9	0.00	0.00	0.00
14,900.0	90.00	359.93	9,715.0	5,302.3	309.0	5,301.9	0.00	0.00	0.00
15,000.0	90.00	359.93	9,715.0	5,402.3	308.9	5,401.9	0.00	0.00	0.00
15,100.0	90.00	359.93	9,715.0	5,502.3	308.8	5,501.9	0.00	0.00	0.00
15,200.0	90.00	359.93	9,715.0	5,602.3	308.6	5,601.9	0.00	0.00	0.00
15,300.0	90.00	359.93	9,715.0	5,702.3	308.5	5,701.9	0.00	0.00	0.00
15,400.0	90.00	359.93	9,715.0	5,802.3	308.4	5,801.9	0.00	0.00	0.00
15,500.0	90.00	359.93	9,715.0	5,902.3	308.3	5,901.9	0.00	0.00	0.00
15,600.0	90.00	359.93	9,715.0	6,002.3	308.1	6,001.9	0.00	0.00	0.00
15,700.0	90.00	359.93	9,715.0	6,102.3	308.0	6,101.9	0.00	0.00	0.00
15,800.0	90.00	359.93	9,715.0	6,202.3	307.9	6,201.9	0.00	0.00	0.00
15,900.0	90.00	359.93	9,715.0	6,302.3	307.8	6,301.9	0.00	0.00	0.00
16,000.0	90.00	359.93	9,715.0	6,402.3	307.6	6,401.9	0.00	0.00	0.00
16,100.0	90.00	359.93	9,715.0	6,502.3	307.5	6,501.9	0.00	0.00	0.00
16,200.0	90.00	359.93	9,715.0	6,602.3	307.4	6,601.9	0.00	0.00	0.00
16,300.0	90.00	359.93	9,715.0	6,702.3	307.3	6,701.9	0.00	0.00	0.00
16,400.0	90.00	359.93	9,715.0	6,802.3	307.2	6,801.9	0.00	0.00	0.00
16,500.0	90.00	359.93	9,715.0	6,902.3	307.0	6,901.9	0.00	0.00	0.00
16,600.0	90.00	359.93	9,715.0	7,002.3	306.9	7,001.9	0.00	0.00	0.00
16,700.0	90.00	359.93	9,715.0	7,102.3	306.8	7,101.9	0.00	0.00	0.00
16,800.0	90.00	359.93	9,715.0	7,202.3	306.7	7,201.9	0.00	0.00	0.00
16,900.0	90.00	359.93	9,715.0	7,302.3	306.5	7,301.9	0.00	0.00	0.00
17,000.0	90.00	359.93	9,715.0	7,402.3	306.4	7,401.9	0.00	0.00	0.00
17,100.0	90.00	359.93	9,715.0	7,502.3	306.3	7,501.9	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Ray State Com #203H
Company:	Matador Production Company	**TVD Reference:**	KB @ 2989.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 2989.5usft
Site:	Ray State	**North Reference:**	Grid
Well:	Ray State Com #203H	**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)
17,200.0	90.00	359.93	9,715.0	7,602.3	306.2	7,601.9	0.00	0.00	0.00
17,300.0	90.00	359.93	9,715.0	7,702.3	306.0	7,701.9	0.00	0.00	0.00
17,400.0	90.00	359.93	9,715.0	7,802.3	305.9	7,801.9	0.00	0.00	0.00
17,500.0	90.00	359.93	9,715.0	7,902.3	305.8	7,901.9	0.00	0.00	0.00
17,600.0	90.00	359.93	9,715.0	8,002.3	305.7	8,001.9	0.00	0.00	0.00
17,700.0	90.00	359.93	9,715.0	8,102.3	305.6	8,101.9	0.00	0.00	0.00
17,800.0	90.00	359.93	9,715.0	8,202.3	305.4	8,201.9	0.00	0.00	0.00
17,900.0	90.00	359.93	9,715.0	8,302.3	305.3	8,301.9	0.00	0.00	0.00
18,000.0	90.00	359.93	9,715.0	8,402.3	305.2	8,401.9	0.00	0.00	0.00
18,100.0	90.00	359.93	9,715.0	8,502.3	305.1	8,501.9	0.00	0.00	0.00
18,200.0	90.00	359.93	9,715.0	8,602.3	304.9	8,601.9	0.00	0.00	0.00
18,300.0	90.00	359.93	9,715.0	8,702.3	304.8	8,701.9	0.00	0.00	0.00
18,400.0	90.00	359.93	9,715.0	8,802.3	304.7	8,801.9	0.00	0.00	0.00
18,500.0	90.00	359.93	9,715.0	8,902.3	304.6	8,901.9	0.00	0.00	0.00
18,600.0	90.00	359.93	9,715.0	9,002.3	304.4	9,001.9	0.00	0.00	0.00
18,700.0	90.00	359.93	9,715.0	9,102.3	304.3	9,101.9	0.00	0.00	0.00
18,800.0	90.00	359.93	9,715.0	9,202.3	304.2	9,201.9	0.00	0.00	0.00
18,900.0	90.00	359.93	9,715.0	9,302.3	304.1	9,301.9	0.00	0.00	0.00
19,000.0	90.00	359.93	9,715.0	9,402.3	304.0	9,401.9	0.00	0.00	0.00
19,100.0	90.00	359.93	9,715.0	9,502.3	303.8	9,501.9	0.00	0.00	0.00
19,200.0	90.00	359.93	9,715.0	9,602.3	303.7	9,601.9	0.00	0.00	0.00
19,300.0	90.00	359.93	9,715.0	9,702.3	303.6	9,701.9	0.00	0.00	0.00
19,400.0	90.00	359.93	9,715.0	9,802.3	303.5	9,801.9	0.00	0.00	0.00
19,500.0	90.00	359.93	9,715.0	9,902.3	303.3	9,901.9	0.00	0.00	0.00
19,600.0	90.00	359.93	9,715.0	10,002.3	303.2	10,001.9	0.00	0.00	0.00
19,700.0	90.00	359.93	9,715.0	10,102.3	303.1	10,101.9	0.00	0.00	0.00
19,800.0	90.00	359.93	9,715.0	10,202.3	303.0	10,201.9	0.00	0.00	0.00
19,887.9	90.00	359.93	9,715.0	10,290.2	302.9	10,289.8	0.00	0.00	0.00
BHL - Ray State Com #203H									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
VP - Ray State Com # - plan hits target center - Point	0.00	0.00	9,142.0	-107.6	313.9	456,364.00	590,914.00	32° 15' 15.549 N	104° 2' 21.276 W
BHL - Ray State Com - plan hits target center - Point	0.00	0.00	9,715.0	10,290.2	302.9	466,762.60	590,902.96	32° 16' 58.456 N	104° 2' 21.072 W

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Ray State Com #203H
Company:	Matador Production Company	**TVD Reference:**	KB @ 2989.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 2989.5usft
Site:	Ray State	**North Reference:**	Grid
Well:	Ray State Com #203H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	State Plan #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
21.0	21.0	Rustler			
425.0	425.0	Top Salt			
2,675.0	2,675.0	Lamar (Base Salt)			
6,413.0	6,392.0	BSGL			
7,414.0	7,393.0	FBSG			
7,632.0	7,611.0	SBSC			
8,166.0	8,145.0	SBSG			
8,436.0	8,415.0	SBSG Target (120 Series)			
8,536.0	8,515.0	TBSC			
9,276.8	9,255.0	TBSG			
9,719.5	9,615.0	WFMP			
10,063.0	9,715.0	Y Sand Top (200 Series)			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
2,000.0	2,000.0	0.0	0.0	Start Build 1.00
2,800.0	2,800.0	0.0	0.0	Start 2532.2 hold at 2800.0 MD
5,332.2	5,316.7	-78.2	228.1	Start Drop -1.50
5,865.5	5,845.2	-101.4	295.6	Start 3305.4 hold at 5865.5 MD
9,171.0	9,149.9	-107.6	313.9	Start Build 10.00
10,071.0	9,715.0	473.3	314.9	Start DLS 2.00 TFO -90.08
10,079.5	9,715.0	481.8	314.9	Start 9816.3 hold at 10079.5 MD
19,895.8				TD at 19895.8