

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTREC'D NMOCD
11/18/2020FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.5. Lease Serial No.
NMNM138865

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
BOROS FEDERAL 133H9. API Well No.
30-015-46571-00-X110. Field and Pool or Exploratory Area
BONE SPRINGS11. County or Parish, State
EDDY COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Contact: NICKY FITZGERALD

MATADOR PRODUCTION COMPANY E-Mail: nicky.fitzgerald@matadorresources.com

3a. Address

ONE LINCOLN CENTER 5400 LBJ FREEWAY SUITE 1500
DALLAS, TX 75240

3b. Phone No. (include area code)

1500 972-371-5448

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 15 T26S R31E NWNE 400FNL 2324FEL
32.048954 N Lat, 103.764565 W Lon

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

BLM Bond No. NMB001079
Surety Bond No. RLB0015172

Please see the attached C102 to revise the SHL of Matador's Boros Federal 133H (30-015-46571) well from 430' FNL and 2213' FEL of Sec. 15 T26S R31E to 400' FNL and 2324' FEL of Sec. 15 T26S R31E. This proposed SHL move lies within the approved well pad location footprint covered in Environmental Assessment DOI-BLM-NM-P020-2020-0098-EA.

Matador requests the BHL be revised from 100' FSL and 1980' FEL (there is a typo on the NMOCD well information showing the BHL 2213' FEL) of Sec. 22 T26S R31E to 100' FSL and 1550' FEL of Sec. 22 T26S R31E. Please see attached C-102 and directional plans.

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #526601 verified by the BLM Well Information System
For MATADOR PRODUCTION COMPANY, sent to the Carlsbad
Committed to AFMSS for processing by JUANA MEDRANO on 08/20/2020 (20JM0095SE)**

Name (Printed/Typed) NICKY FITZGERALD

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 08/20/2020

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By CODY LAYTON

Title ASSIST FIELD MANAGER LANDS MINERALS

Date 11/06/2020

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Carlsbad

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

COAs: • NSL Will require an administrative order for non-standard location prior to placing the well on production

KP 12/4/2020 GEO Review

- Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 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 97860		³ Pool Name JENNINGS; BONE SPRING, WEST	
⁴ Property Code		⁵ Property Name BOROS FEDERAL			⁶ Well Number 133H
⁷ OGRID No. 228937		⁸ Operator Name MATADOR PRODUCTION COMPANY			⁹ Elevation 3225'

¹⁰Surface Location

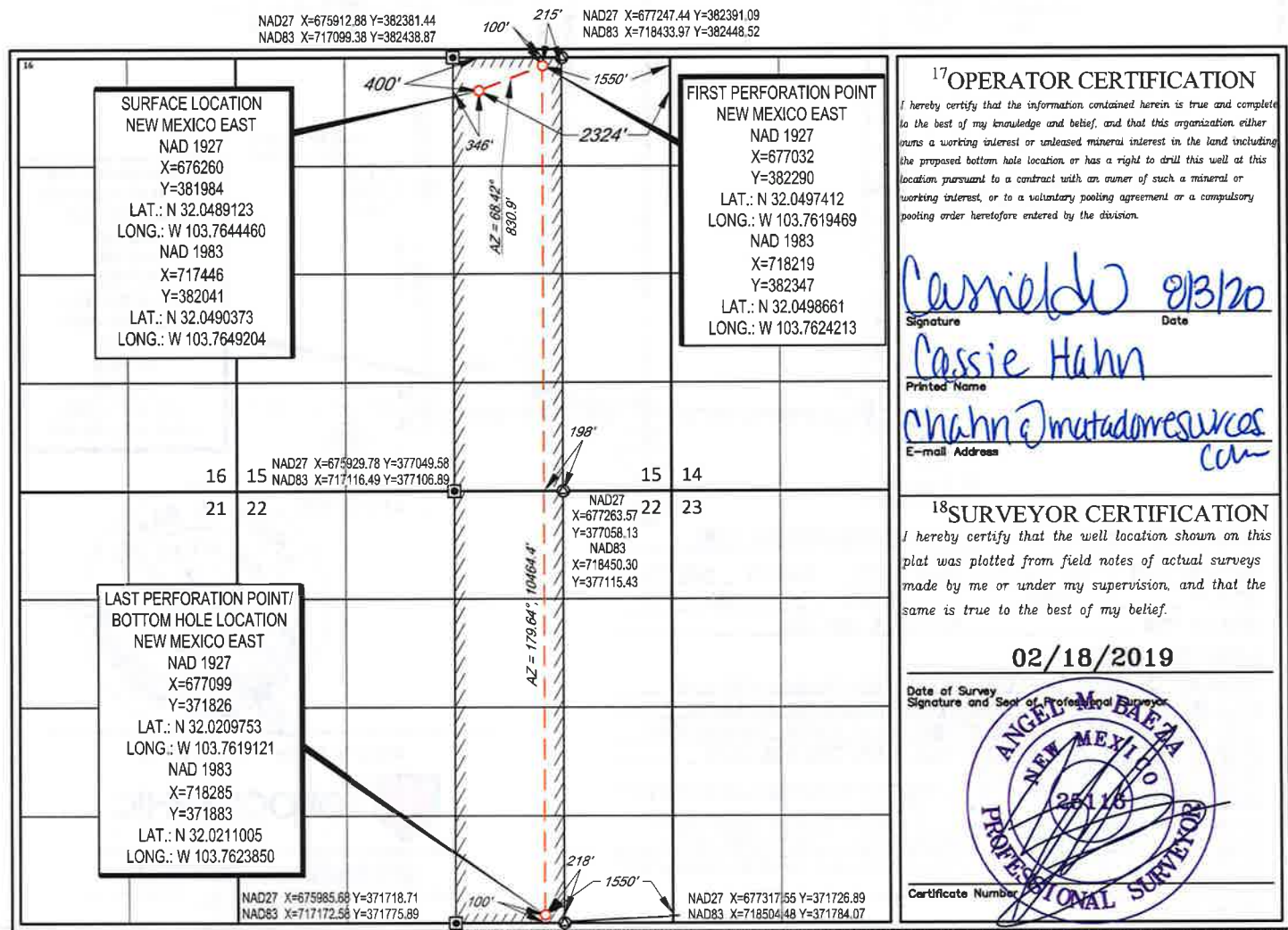
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	15	26-S	31-E	-	400'	NORTH	2324'	EAST	EDDY

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
0	22	26-S	31-E	-	100'	SOUTH	1550'	EAST	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.



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 released 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.

Cassie Hahn 01/3/20
Signature Date

Cassie Hahn
Printed Name

chahn@matadorresources.com
E-mail Address

¹⁸SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief.

02/18/2019

Date of Survey
Signature and Seal of Professional Surveyor

ANGEL M. BAEZA
NEW MEXICO
25418
PROFESSIONAL SURVEYOR
Certificate Number

Additional data for EC transaction #526601 that would not fit on the form

32. Additional remarks, continued

Also, Matador respectfully requests the option to amend the casing, cementing and mud program.

Please find supporting documentation attached and contact Blake Hermes at 972-371-5485 or BHermes@matadorresources.com for any questions.

Revisions to Operator-Submitted EC Data for Sundry Notice #526601

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMNM138865	NMNM138865
Agreement:		
Operator:	MATADOR PRODUCTION COMPANY 5400 LBJ FREEWAY, SUITE 1500 DALLAS, TX 75240 Ph: 972-371-5448	MATADOR PRODUCTION COMPANY ONE LINCOLN CENTER 5400 LBJ FREEWAY SUITE 1500 DALLAS, TX 75240 Ph: 972.371.5200
Admin Contact:	NICKY FITZGERALD REGULATORY ANALYST E-Mail: nicky.fitzgerald@matadorresources.com Ph: 972-371-5448	NICKY FITZGERALD REGULATORY ANALYST E-Mail: nicky.fitzgerald@matadorresources.com Ph: 972-371-5448
Tech Contact:	NICKY FITZGERALD REGULATORY ANALYST E-Mail: nicky.fitzgerald@matadorresources.com Ph: 972-371-5448	NICKY FITZGERALD REGULATORY ANALYST E-Mail: nicky.fitzgerald@matadorresources.com Ph: 972-371-5448
Location:		
State:	NM	NM
County:	EDDY	EDDY
Field/Pool:	JENNINGS;BONE SPRING,WEST	BONE SPRINGS
Well/Facility:	BOROS FEDERAL 133H Sec 15 T26S R31E 430FNL 2213FEL	BOROS FEDERAL 133H Sec 15 T26S R31E NWNE 400FNL 2324FEL 32.048954 N Lat, 103.764565 W Lon

Boros Federal 133H
SHL: 400' FNL & 2324' FEL Section 15
BHL: 100' FSL & 1550' FEL Section 22
Township/Range: 26S 31E
Elevation Above Sea Level: 3225

Drilling Operation Plan

Proposed Drilling Depth: 21027' MD / 10700' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.0498661 N / -103.7619469 W

TD Lat/Long (NAD83): 32.0211005 N / -103.7623850 W

1. Estimated Tops

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	1,356	1,356	132	Anhydrite	Barren
Top of Salt	1,488	1,488	2,609	Salt	Barren
Base of Salt	4,097	4,097	29	Salt	Barren
Bell Canyon	4,126	4,126	1,053	Sandstone	Oil/Natural Gas
Cherry Canyon	5,179	5,179	1,206	Sandstone	Oil/Natural Gas
Brushy Canyon	6,385	6,385	1,683	Sandstone	Oil/Natural Gas
Bone Spring Lime	8,068	8,068	171	Limestone	Oil/Natural Gas
Avalon	8,239	8,239	802	Sandstone	Oil/Natural Gas
KOP	10,158	10,127	76	Sandstone	Oil/Natural Gas
3rd Bone Spring Carb	10,234	10,203	762	Sandstone	Oil/Natural Gas
#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
TD	21,027	10,700		Sandstone	Oil/Natural Gas

2. Notable Zones

2nd Bone Spring is the goal. All perforations will be within the setback requirements as prescribed or permitted by the New Mexico Oil Conservation Division. OSE estimated ground water depth at this location is 230'.

3. Pressure Control

Equipment

A 12,000' 5000-psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and one annular preventer will be utilized below surface casing to TD. See attachments for BOP and choke manifold diagrams.

An accumulator complying with Onshore Order #2 requirements for the pressure rating of the BOP stack will be present. A rotating head will also be installed as needed.

Testing Procedure

BOP will be inspected and operated as required in Onshore Order #2. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs.

After setting surface casing, a minimum 5M BOPE system will be installed. Test pressures will be 250 psi low and 5000 psi high with the annular preventer being tested to 250 psi low and 2500 psi high before drilling below surface shoe. In the event that the rig drills multiple wells on the pad and any seal subject to test pressures are broken, a full BOP test will be performed when the rig returns and the 5M BOPE system is re-installed.

Variance Request

Matador requests a variance to have the option of running a multi-bowl wellhead assembly for setting the Intermediate 1 and Production Strings. The BOPs will not be tested again unless any flanges are separated.

Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not available, then one of equal or higher rating will be used.

Matador requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, the wellbore will be secured with a blind flange of like pressure. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test.

4. Casing & Cement

All casing will be API and new. See attached casing assumption worksheet.

String	Hole Size (in)	Set MD (ft)	Set TVD (ft)	Casing Size (in)	Wt. (lb/ft)	Grade	Joint	Collapse	Burst	Tension
Surface	17.5	0 - 1158	0 - 1158	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	9.875	0 - 10058	0 - 10058	7.625	29.7	P-110	BUTT	1.125	1.125	1.8
Production	8.75	0 - 21027	0 - 10700	5.5	20	P-110	Hunting TLW	1.125	1.125	1.8

- All casing strings will be tested in accordance with Onshore Order #2 - III.B.1.h
- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed
- All non-API joint connections will be of like or greater quality and as run specification sheets will be on location for review
- Request open to deepen Intermediate 1 set depth into curve, no changes in pipe weight or grade is necessary.

Variance Request

Matador request a variance to wave the centralizer requirement for the 7-5/8" casing and the 5-1/2" SF/Flush casing in the 6-3/4" hole.

If a DV tool is used, depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above the current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Matador request option to perform a bradenhead cement squeeze on Intermediate 1 string.

Matador request a variance to utilize a surface setting rig. If this is used, Matador request the option to drill either 17.5" or 20" surface hole.

String	Type	Sacks	Yield	Cu. Ft.	Weight	Percent Excess	Top of Cement	Class	Blend
Surface	Lead	560	1.72	966	12.5	50%	0	C	5% NaCl + LCM
	Tail	250	1.38	347	14.8	50%	858	C	5% NaCl + LCM
Intermediate 1	Lead	780	3.66	2859	10.3	35%	0	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	440	1.38	604	13.2	35%	8046	A/C	5% NaCl + LCM
Production	Lead	10	3.66	53	10.3	35%	9858	A/C	Fluid Loss + Dispersant + Retarder + LCM
	Tail	2240	1.35	3030	13.2	10%	10158	A/C	Fluid Loss + Dispersant + Retarder + LCM

5. Mud Program

An electronic Pason mud monitoring system complying with Onshore Order 2 will be used. All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions.

Hole Section	Hole Size (in)	Mud Type	Interval MD (ft)	Density (lb/gal)	Viscosity	Fluid Loss
Surface	17.5	Spud Mud	0 - 1158	8.4 - 8.8	28-30	NC
Intermediate 1	9.875	Diesel Bine Emulsion	1158 - 10058	8.7 - 9.4	28-30	NC
Production	8.75	Cut Brine/OBM	10058 - 21027	8.6 - 9.4	28-30	NC

6. Cores, Test, & Logs

No core or drill stem test is planned.

No electric logs are planned at this time. GR will be collected through the MWD tools from Intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to top of curve.

7. Down Hole Conditions

No abnormal pressure or temperature is expected. Maximum anticipated surface pressure is 2876 psi. Expected bottom hole temperature is 186 F.

In accordance with Onshore Order 6, Matador does not anticipate that there will be enough H2S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of a "H2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have a H2S safety package on all wells, attached is a "H2S Drilling Operations Plan." Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of the equipment being used.

Casing Table Specification Sheet

Boros Federal 133H
SHL: 400' FNL & 2324' FEL Section 15
BHL: 100' FSL & 1550' FEL Section 22
Township/Range: 26S 31E
Elevation Above Sea Level: 3225

String	Hole Size (in)	Set MD (ft)	Set TVD (ft)	Casing Size (in)	Wt. (lb/ft)	Grade	Joint	Collapse	Burst	Tension
Surface	17.5	0 - 1158	0 - 1158	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	9.875	0 - 10058	0 - 10058	7.625	29.7	P-110	BUTT	1.125	1.125	1.8
Production	8.75	0 - 21027	0 - 10700	5.5	20	P-110	Hunting TLW	1.125	1.125	1.8

Matador Production Company

Rustler Breaks

Boros

Boros Federal #133H

Wellbore #1

BLM Plan #2

Anticollision Report

12 August, 2020

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Boros Federal #133H
Project:	Rustler Breaks	TVD Reference:	KB @ 3253.5usft
Reference Site:	Boros	MD Reference:	KB @ 3253.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Boros Federal #133H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #2	Offset TVD Reference:	Offset Datum

Reference	BLM Plan #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0 us	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	8/12/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	21,026.2	BLM Plan #2 (Wellbore #1)	MWD	OWSG MWD - Standard	

Summary						
Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning
Boros						
Boros Federal #023H - Wellbore #1 - BLM Plan #2	5,925.4	5,928.3	140.7	97.3	3.241	CC
Boros Federal #023H - Wellbore #1 - BLM Plan #2	6,000.0	6,002.5	140.9	96.9	3.203	ES
Boros Federal #023H - Wellbore #1 - BLM Plan #2	6,200.0	6,201.5	143.4	97.9	3.153	SF
Boros Federal #103H - Wellbore #1 - BLM Plan #2	1,603.3	1,605.4	75.7	64.6	6.818	CC, ES
Boros Federal #103H - Wellbore #1 - BLM Plan #2	1,800.0	1,801.5	81.3	68.8	6.494	SF
Boros Federal #107H - Wellbore #1 - BLM Plan #2	0.0	0.0	42.4			
Boros Federal #107H - Wellbore #1 - BLM Plan #2	7,100.0	7,119.3	74.8	22.3	1.424	Level 3, ES, SF
Boros Federal #113H - Wellbore #1 - BLM Plan #2	1,500.0	1,500.0	30.0	19.8	2.919	CC
Boros Federal #113H - Wellbore #1 - BLM Plan #2	1,600.0	1,600.0	30.5	19.5	2.775	ES
Boros Federal #113H - Wellbore #1 - BLM Plan #2	1,700.0	1,700.0	32.1	20.4	2.741	SF
Boros Federal #123H - Wellbore #1 - Actual	1,250.4	1,251.4	57.8	49.5	6.953	CC
Boros Federal #123H - Wellbore #1 - Actual	1,300.0	1,300.5	58.0	49.4	6.697	ES
Boros Federal #123H - Wellbore #1 - Actual	6,300.0	6,309.0	100.3	55.1	2.217	SF
Boros Federal #203H - Wellbore #1 - Actual	956.6	959.7	106.4	100.1	16.938	CC
Boros Federal #203H - Wellbore #1 - Actual	1,100.0	1,102.2	107.0	99.7	14.701	ES
Boros Federal #203H - Wellbore #1 - Actual	20,900.0	21,535.1	1,039.5	760.7	3.729	SF
Boros Federal #217H - Wellbore #1 - Actual	1,732.7	1,735.7	38.3	26.4	3.213	CC
Boros Federal #217H - Wellbore #1 - Actual	4,300.0	4,303.6	52.8	22.4	1.734	ES
Boros Federal #217H - Wellbore #1 - Actual	10,361.8	10,376.3	122.3	48.8	1.665	SF
Boros Federal #223H - Wellbore #1 - Actual	0.0	1.0	110.1			
Boros Federal #223H - Wellbore #1 - Actual	1,600.0	1,602.4	119.9	109.0	10.972	ES
Boros Federal #223H - Wellbore #1 - Actual	10,200.0	10,193.4	344.2	272.2	4.775	SF
Boros Federal #227H - Wellbore #1 - BLM Plan #2	1,873.1	1,875.2	17.4	4.4	1.337	Level 3, CC, ES, SF
Boros Federal #243H - Wellbore #1 - BLM Plan #2	2,444.8	2,438.4	101.9	84.9	5.999	CC
Boros Federal #243H - Wellbore #1 - BLM Plan #2	2,600.0	2,606.8	102.6	84.4	5.650	ES
Boros Federal #243H - Wellbore #1 - BLM Plan #2	3,200.0	3,207.4	112.7	90.1	4.999	SF

Offset Design												Boros - Boros Federal #023H - Wellbore #1 - BLM Plan #2		Offset Site Error:		0.0 usft	
Survey Program: 0-MWD														Offset Well Error:		0.0 usft	
Reference		Offset		Semi Major Axis			Distance										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning				
0.0	0.0	2.0	-2.0	0.0	0.0	100.89	-28.9	150.2	153.0								
100.0	100.0	102.0	98.0	0.1	0.1	100.89	-28.9	150.2	153.0	152.7	0.26	580.591					

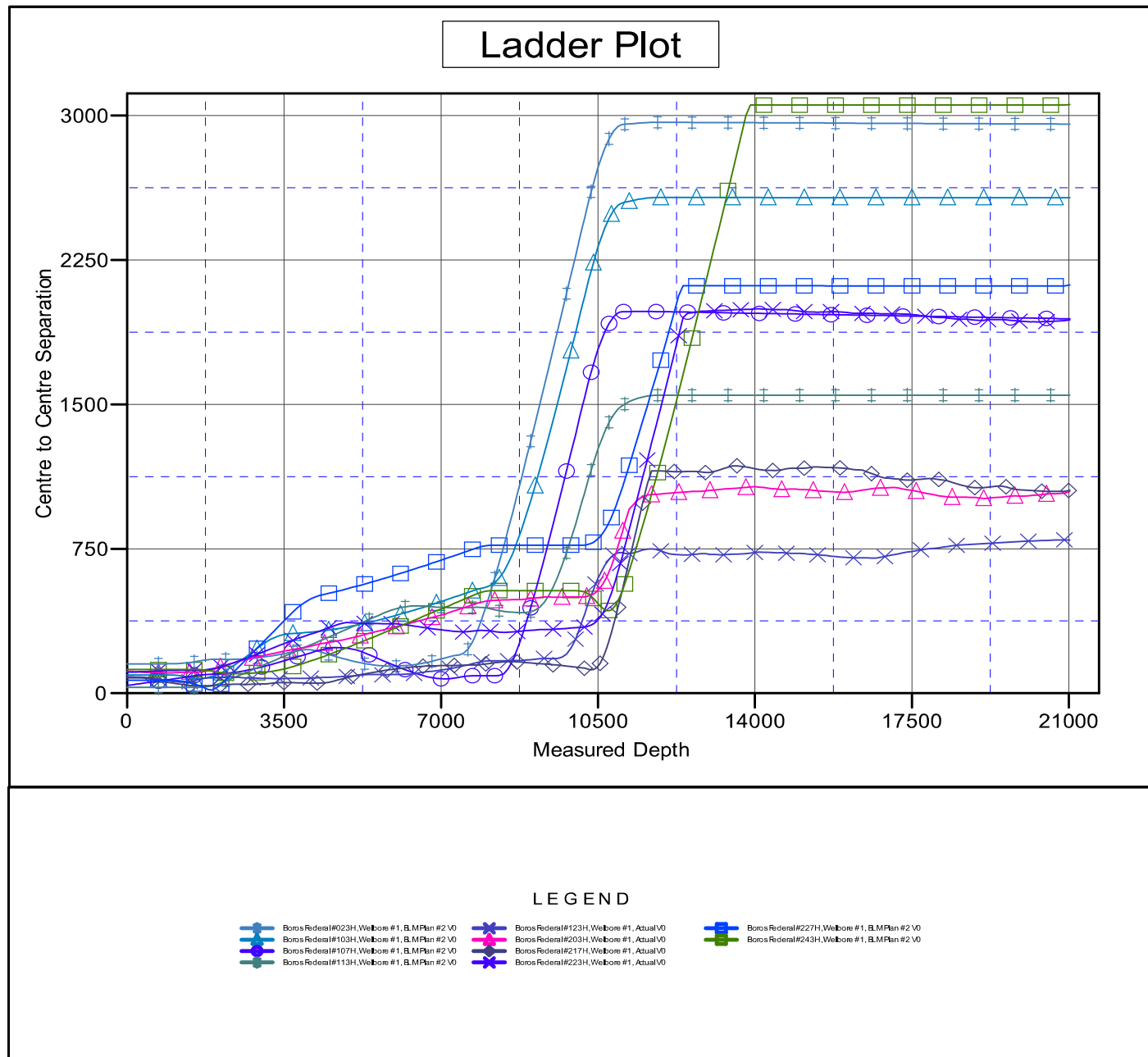
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Boros Federal #133H
Project:	Rustler Breaks	TVD Reference:	KB @ 3253.5usft
Reference Site:	Boros	MD Reference:	KB @ 3253.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Boros Federal #133H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 3253.5usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Boros Federal #133H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.30°



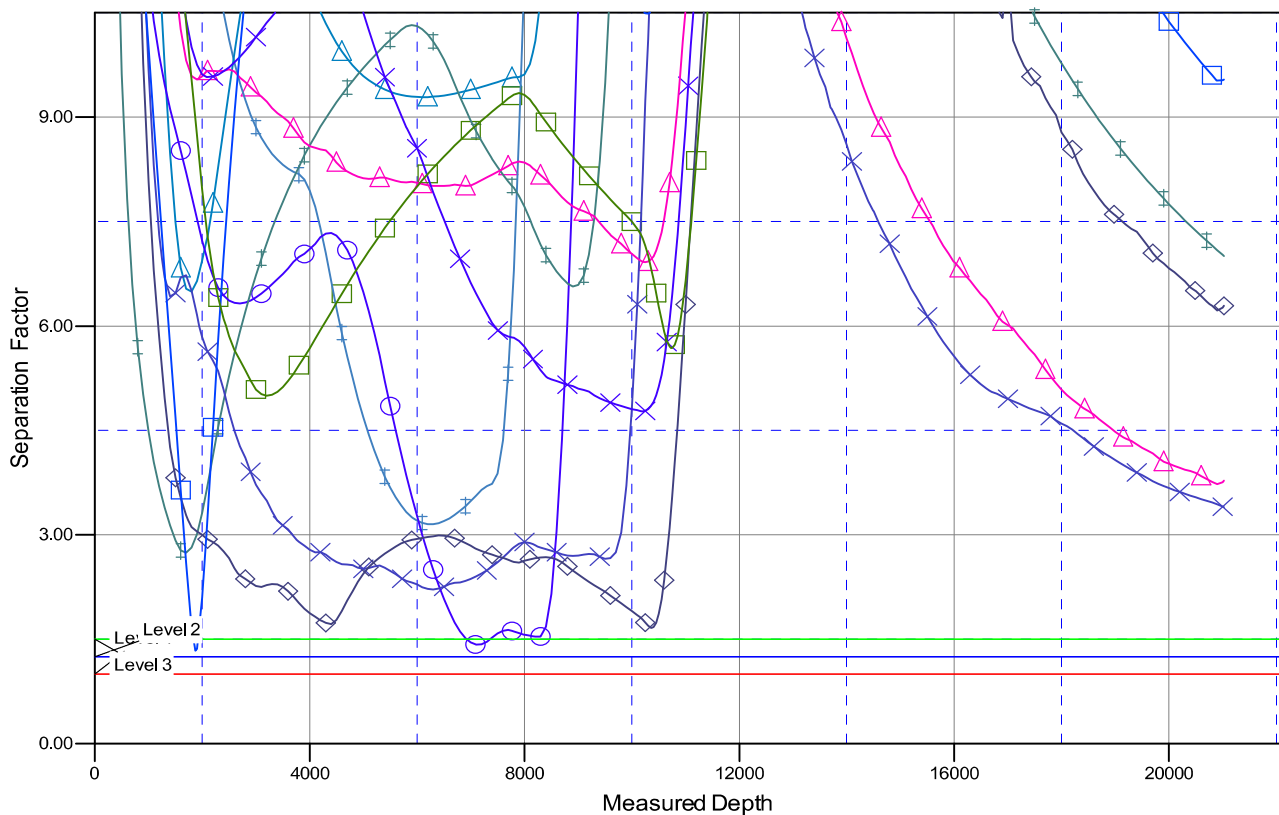
Anticollision Report

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Project:	Rustler Breaks	TVD Reference:	KB @ 3253.5usft
Reference Site:	Boros	MD Reference:	KB @ 3253.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Boros Federal #133H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 3253.5usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Boros Federal #133H
 Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
 Grid Convergence at Surface is: 0.30°

Separation Factor Plot



LEGEND

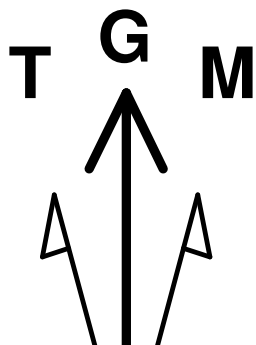
Boros Federal #1023H, Wellbore #1, BLM Plan #2 VO	Boros Federal #123H, Wellbore #1, Actual VO	Boros Federal #227H, Wellbore #1, BLM Plan #2 VO
Boros Federal #103H, Wellbore #1, BLM Plan #2 VO	Boros Federal #203H, Wellbore #1, Actual VO	Boros Federal #243H, Wellbore #1, BLM Plan #2 VO
Boros Federal #107H, Wellbore #1, BLM Plan #2 VO	Boros Federal #217H, Wellbore #1, Actual VO	
Boros Federal #113H, Wellbore #1, BLM Plan #2 VO	Boros Federal #223H, Wellbore #1, Actual VO	



Company: Matador Production Company
Well: Boros Federal #133H
County: Eddy County, New Mexico
Wellbore: Wellbore #1
Plan: BLM Plan #2
Date: 8/11/2020

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

To convert a Magnetic Direction to a Grid Direction, Add
To convert a Magnetic Direction to a True Direction, Add 6
To convert a True Direction to a Grid Direction, Subtract



Azimuths to
True N
Magnetic

Ma

Matador Production Company

Rustler Breaks

Boros

Boros Federal #133H

Wellbore #1

Plan: BLM Plan #2

Standard Planning Report

12 August, 2020

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Boros Federal #133H
Company:	Matador Production Company	TVD Reference:	KB @ 3253.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3253.5usft
Site:	Boros	North Reference:	Grid
Well:	Boros Federal #133H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #2		

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	Boros				
Site Position:		Northing:	381,953.36 usft	Latitude:	32° 2' 55.786 N
From:	Lat/Long	Easting:	676,179.89 usft	Longitude:	103° 45' 52.934 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.30 °

Well		Boros Federal #133H				
Well Position	+N/-S	30.6 usft	Northing:	381,983.94 usft	Latitude:	32° 2' 56.084 N
	+E/-W	79.7 usft	Easting:	676,259.64 usft	Longitude:	103° 45' 52.006 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,225.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/11/2020	6.69	59.83	47,492.37242387

Design	BLM Plan #2				
Audit Notes:					
Version:	1	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	179.64	

Plan Survey Tool Program	Date	8/12/2020			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	21,026.2	BLM Plan #2 (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	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,081.8	5.82	55.76	2,080.8	16.6	24.4	1.00	1.00	0.00	55.76	
7,770.1	5.82	55.76	7,739.8	341.0	501.1	0.00	0.00	0.00	0.00	
8,158.0	0.00	0.00	8,127.0	352.1	517.4	1.50	-1.50	0.00	180.00	
10,158.0	0.00	0.00	10,127.0	352.1	517.4	0.00	0.00	0.00	0.00	VP - Boros Federal
11,058.0	90.00	164.20	10,700.0	-199.2	673.4	10.00	10.00	0.00	164.20	
11,830.1	90.00	179.64	10,700.0	-961.4	781.6	2.00	0.00	2.00	90.00	
21,026.6	90.00	179.64	10,700.0	-10,157.7	838.8	0.00	0.00	0.00	0.00	BHL - Boros Federal

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Boros Federal #133H
Company:	Matador Production Company	TVD Reference:	KB @ 3253.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3253.5usft
Site:	Boros	North Reference:	Grid
Well:	Boros Federal #133H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	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
1,357.2	0.00	0.00	1,357.2	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,488.5	0.00	0.00	1,488.5	0.0	0.0	0.0	0.00	0.00	0.00
Salado (Top Salt)									
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 1.00									
1,600.0	1.00	55.76	1,600.0	0.5	0.7	-0.5	1.00	1.00	0.00
1,700.0	2.00	55.76	1,700.0	2.0	2.9	-1.9	1.00	1.00	0.00
1,800.0	3.00	55.76	1,799.9	4.4	6.5	-4.4	1.00	1.00	0.00
1,900.0	4.00	55.76	1,899.7	7.9	11.5	-7.8	1.00	1.00	0.00
2,000.0	5.00	55.76	1,999.4	12.3	18.0	-12.2	1.00	1.00	0.00
2,081.8	5.82	55.76	2,080.8	16.6	24.4	-16.5	1.00	1.00	0.00
Start 5688.3 hold at 2081.8 MD									
2,100.0	5.82	55.76	2,098.9	17.6	25.9	-17.5	0.00	0.00	0.00
2,200.0	5.82	55.76	2,198.4	23.3	34.3	-23.1	0.00	0.00	0.00
2,300.0	5.82	55.76	2,297.9	29.0	42.7	-28.8	0.00	0.00	0.00
2,400.0	5.82	55.76	2,397.4	34.8	51.1	-34.4	0.00	0.00	0.00
2,500.0	5.82	55.76	2,496.8	40.5	59.4	-40.1	0.00	0.00	0.00
2,600.0	5.82	55.76	2,596.3	46.2	67.8	-45.7	0.00	0.00	0.00
2,700.0	5.82	55.76	2,695.8	51.9	76.2	-51.4	0.00	0.00	0.00
2,800.0	5.82	55.76	2,795.3	57.6	84.6	-57.0	0.00	0.00	0.00
2,900.0	5.82	55.76	2,894.8	63.3	93.0	-62.7	0.00	0.00	0.00
3,000.0	5.82	55.76	2,994.3	69.0	101.4	-68.3	0.00	0.00	0.00
3,100.0	5.82	55.76	3,093.8	74.7	109.7	-74.0	0.00	0.00	0.00
3,200.0	5.82	55.76	3,193.2	80.4	118.1	-79.6	0.00	0.00	0.00
3,300.0	5.82	55.76	3,292.7	86.1	126.5	-85.3	0.00	0.00	0.00
3,400.0	5.82	55.76	3,392.2	91.8	134.9	-90.9	0.00	0.00	0.00
3,500.0	5.82	55.76	3,491.7	97.5	143.3	-96.6	0.00	0.00	0.00
3,600.0	5.82	55.76	3,591.2	103.2	151.6	-102.2	0.00	0.00	0.00
3,700.0	5.82	55.76	3,690.7	108.9	160.0	-107.9	0.00	0.00	0.00
3,800.0	5.82	55.76	3,790.1	114.6	168.4	-113.5	0.00	0.00	0.00
3,900.0	5.82	55.76	3,889.6	120.3	176.8	-119.2	0.00	0.00	0.00
4,000.0	5.82	55.76	3,989.1	126.0	185.2	-124.8	0.00	0.00	0.00
4,100.0	5.82	55.76	4,088.6	131.7	193.5	-130.5	0.00	0.00	0.00
4,108.9	5.82	55.76	4,097.5	132.2	194.3	-131.0	0.00	0.00	0.00
Base Salt									
4,139.1	5.82	55.76	4,127.5	133.9	196.8	-132.7	0.00	0.00	0.00
Bell Canyon									

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Boros Federal #133H
Company:	Matador Production Company	TVD Reference:	KB @ 3253.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3253.5usft
Site:	Boros	North Reference:	Grid
Well:	Boros Federal #133H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #2		

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)
4,200.0	5.82	55.76	4,188.1	137.4	201.9	-136.1	0.00	0.00	0.00
4,300.0	5.82	55.76	4,287.6	143.1	210.3	-141.8	0.00	0.00	0.00
4,400.0	5.82	55.76	4,387.1	148.8	218.7	-147.4	0.00	0.00	0.00
4,500.0	5.82	55.76	4,486.5	154.5	227.1	-153.1	0.00	0.00	0.00
4,600.0	5.82	55.76	4,586.0	160.2	235.4	-158.7	0.00	0.00	0.00
4,700.0	5.82	55.76	4,685.5	165.9	243.8	-164.4	0.00	0.00	0.00
4,800.0	5.82	55.76	4,785.0	171.6	252.2	-170.0	0.00	0.00	0.00
4,900.0	5.82	55.76	4,884.5	177.3	260.6	-175.7	0.00	0.00	0.00
5,000.0	5.82	55.76	4,984.0	183.0	269.0	-181.3	0.00	0.00	0.00
5,100.0	5.82	55.76	5,083.5	188.7	277.3	-187.0	0.00	0.00	0.00
5,196.6	5.82	55.76	5,179.5	194.2	285.4	-192.4	0.00	0.00	0.00
Cherry Canyon									
5,200.0	5.82	55.76	5,182.9	194.4	285.7	-192.6	0.00	0.00	0.00
5,300.0	5.82	55.76	5,282.4	200.1	294.1	-198.3	0.00	0.00	0.00
5,400.0	5.82	55.76	5,381.9	205.8	302.5	-203.9	0.00	0.00	0.00
5,500.0	5.82	55.76	5,481.4	211.5	310.9	-209.6	0.00	0.00	0.00
5,600.0	5.82	55.76	5,580.9	217.3	319.3	-215.2	0.00	0.00	0.00
5,700.0	5.82	55.76	5,680.4	223.0	327.6	-220.9	0.00	0.00	0.00
5,800.0	5.82	55.76	5,779.8	228.7	336.0	-226.5	0.00	0.00	0.00
5,900.0	5.82	55.76	5,879.3	234.4	344.4	-232.2	0.00	0.00	0.00
6,000.0	5.82	55.76	5,978.8	240.1	352.8	-237.8	0.00	0.00	0.00
6,100.0	5.82	55.76	6,078.3	245.8	361.2	-243.5	0.00	0.00	0.00
6,200.0	5.82	55.76	6,177.8	251.5	369.5	-249.1	0.00	0.00	0.00
6,300.0	5.82	55.76	6,277.3	257.2	377.9	-254.8	0.00	0.00	0.00
6,400.0	5.82	55.76	6,376.8	262.9	386.3	-260.4	0.00	0.00	0.00
6,409.4	5.82	55.76	6,386.1	263.4	387.1	-261.0	0.00	0.00	0.00
Brushy Canyon									
6,500.0	5.82	55.76	6,476.2	268.6	394.7	-266.1	0.00	0.00	0.00
6,600.0	5.82	55.76	6,575.7	274.3	403.1	-271.7	0.00	0.00	0.00
6,700.0	5.82	55.76	6,675.2	280.0	411.4	-277.4	0.00	0.00	0.00
6,800.0	5.82	55.76	6,774.7	285.7	419.8	-283.0	0.00	0.00	0.00
6,900.0	5.82	55.76	6,874.2	291.4	428.2	-288.7	0.00	0.00	0.00
7,000.0	5.82	55.76	6,973.7	297.1	436.6	-294.3	0.00	0.00	0.00
7,100.0	5.82	55.76	7,073.2	302.8	445.0	-300.0	0.00	0.00	0.00
7,200.0	5.82	55.76	7,172.6	308.5	453.3	-305.6	0.00	0.00	0.00
7,300.0	5.82	55.76	7,272.1	314.2	461.7	-311.3	0.00	0.00	0.00
7,400.0	5.82	55.76	7,371.6	319.9	470.1	-316.9	0.00	0.00	0.00
7,500.0	5.82	55.76	7,471.1	325.6	478.5	-322.6	0.00	0.00	0.00
7,536.6	5.82	55.76	7,507.5	327.7	481.6	-324.7	0.00	0.00	0.00
L. Brushy Canyon									
7,600.0	5.82	55.76	7,570.6	331.3	486.9	-328.2	0.00	0.00	0.00
7,700.0	5.82	55.76	7,670.1	337.0	495.2	-333.9	0.00	0.00	0.00
7,770.1	5.82	55.76	7,739.8	341.0	501.1	-337.9	0.00	0.00	0.00
Start Drop -1.50									
7,800.0	5.37	55.76	7,769.6	342.7	503.5	-339.5	1.50	-1.50	0.00
7,900.0	3.87	55.76	7,869.2	347.2	510.2	-344.0	1.50	-1.50	0.00
8,000.0	2.37	55.76	7,969.1	350.2	514.7	-347.0	1.50	-1.50	0.00
8,099.8	0.87	55.76	8,068.8	351.8	517.0	-348.6	1.50	-1.50	0.00
BSGL									
8,100.0	0.87	55.76	8,069.0	351.8	517.0	-348.6	1.50	-1.50	0.00
8,158.0	0.00	0.00	8,127.0	352.1	517.4	-348.8	1.50	-1.50	0.00
Start 2000.0 hold at 8158.0 MD									
8,200.0	0.00	0.00	8,169.0	352.1	517.4	-348.8	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Boros Federal #133H
Company:	Matador Production Company	TVD Reference:	KB @ 3253.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3253.5usft
Site:	Boros	North Reference:	Grid
Well:	Boros Federal #133H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #2		

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)
8,237.1	0.00	0.00	8,206.2	352.1	517.4	-348.8	0.00	0.00	0.00
Avalon-SS									
8,300.0	0.00	0.00	8,269.0	352.1	517.4	-348.8	0.00	0.00	0.00
8,400.0	0.00	0.00	8,369.0	352.1	517.4	-348.8	0.00	0.00	0.00
8,500.0	0.00	0.00	8,469.0	352.1	517.4	-348.8	0.00	0.00	0.00
8,600.0	0.00	0.00	8,569.0	352.1	517.4	-348.8	0.00	0.00	0.00
8,700.0	0.00	0.00	8,669.0	352.1	517.4	-348.8	0.00	0.00	0.00
8,800.0	0.00	0.00	8,769.0	352.1	517.4	-348.8	0.00	0.00	0.00
8,900.0	0.00	0.00	8,869.0	352.1	517.4	-348.8	0.00	0.00	0.00
9,000.0	0.00	0.00	8,969.0	352.1	517.4	-348.8	0.00	0.00	0.00
9,100.0	0.00	0.00	9,069.0	352.1	517.4	-348.8	0.00	0.00	0.00
9,200.0	0.00	0.00	9,169.0	352.1	517.4	-348.8	0.00	0.00	0.00
9,244.1	0.00	0.00	9,213.2	352.1	517.4	-348.8	0.00	0.00	0.00
FBSG									
9,300.0	0.00	0.00	9,269.0	352.1	517.4	-348.8	0.00	0.00	0.00
9,400.0	0.00	0.00	9,369.0	352.1	517.4	-348.8	0.00	0.00	0.00
9,500.0	0.00	0.00	9,469.0	352.1	517.4	-348.8	0.00	0.00	0.00
9,524.8	0.00	0.00	9,493.8	352.1	517.4	-348.8	0.00	0.00	0.00
SBSG									
9,600.0	0.00	0.00	9,569.0	352.1	517.4	-348.8	0.00	0.00	0.00
9,700.0	0.00	0.00	9,669.0	352.1	517.4	-348.8	0.00	0.00	0.00
9,778.7	0.00	0.00	9,747.8	352.1	517.4	-348.8	0.00	0.00	0.00
SBSG									
9,800.0	0.00	0.00	9,769.0	352.1	517.4	-348.8	0.00	0.00	0.00
9,900.0	0.00	0.00	9,869.0	352.1	517.4	-348.8	0.00	0.00	0.00
10,000.0	0.00	0.00	9,969.0	352.1	517.4	-348.8	0.00	0.00	0.00
10,100.0	0.00	0.00	10,069.0	352.1	517.4	-348.8	0.00	0.00	0.00
10,158.0	0.00	0.00	10,127.0	352.1	517.4	-348.8	0.00	0.00	0.00
Start Build 10.00 - VP - Boros Federal #133H									
10,200.0	4.20	164.20	10,169.0	350.6	517.8	-347.3	10.00	10.00	0.00
10,234.2	7.62	164.20	10,203.0	347.2	518.8	-343.9	10.00	10.00	0.00
TBSC									
10,300.0	14.20	164.20	10,267.6	335.2	522.2	-331.9	10.00	10.00	0.00
10,400.0	24.20	164.20	10,361.9	303.6	531.1	-300.3	10.00	10.00	0.00
10,500.0	34.20	164.20	10,449.1	256.7	544.4	-253.3	10.00	10.00	0.00
10,600.0	44.20	164.20	10,526.5	196.0	561.6	-192.5	10.00	10.00	0.00
10,700.0	54.20	164.20	10,591.7	123.2	582.1	-119.6	10.00	10.00	0.00
10,800.0	64.20	164.20	10,642.9	40.7	605.5	-36.9	10.00	10.00	0.00
10,900.0	74.20	164.20	10,678.3	-49.1	630.9	53.1	10.00	10.00	0.00
11,000.0	84.20	164.20	10,697.0	-143.5	657.6	147.7	10.00	10.00	0.00
11,058.0	90.00	164.20	10,700.0	-199.2	673.4	203.5	10.00	10.00	0.00
Start DLS 2.00 TFO 90.00									
11,100.0	90.00	165.04	10,700.0	-239.8	684.5	244.1	2.00	0.00	2.00
11,200.0	90.00	167.04	10,700.0	-336.8	708.7	341.2	2.00	0.00	2.00
11,300.0	90.00	169.04	10,700.0	-434.6	729.4	439.2	2.00	0.00	2.00
11,400.0	90.00	171.04	10,700.0	-533.1	746.7	537.8	2.00	0.00	2.00
11,500.0	90.00	173.04	10,700.0	-632.1	760.5	636.9	2.00	0.00	2.00
11,600.0	90.00	175.04	10,700.0	-731.6	770.9	736.4	2.00	0.00	2.00
11,700.0	90.00	177.04	10,700.0	-831.4	777.8	836.2	2.00	0.00	2.00
11,800.0	90.00	179.04	10,700.0	-931.3	781.2	936.2	2.00	0.00	2.00
11,830.1	90.00	179.64	10,700.0	-961.4	781.6	966.3	2.00	0.00	2.00
Start 9196.5 hold at 11830.1 MD									
11,900.0	90.00	179.64	10,700.0	-1,031.3	782.0	1,036.2	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Boros Federal #133H
Company:	Matador Production Company	TVD Reference:	KB @ 3253.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3253.5usft
Site:	Boros	North Reference:	Grid
Well:	Boros Federal #133H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #2		

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)
12,000.0	90.00	179.64	10,700.0	-1,131.3	782.6	1,136.2	0.00	0.00	0.00
12,100.0	90.00	179.64	10,700.0	-1,231.3	783.3	1,236.2	0.00	0.00	0.00
12,200.0	90.00	179.64	10,700.0	-1,331.3	783.9	1,336.2	0.00	0.00	0.00
12,300.0	90.00	179.64	10,700.0	-1,431.3	784.5	1,436.2	0.00	0.00	0.00
12,400.0	90.00	179.64	10,700.0	-1,531.3	785.1	1,536.2	0.00	0.00	0.00
12,500.0	90.00	179.64	10,700.0	-1,631.3	785.7	1,636.2	0.00	0.00	0.00
12,600.0	90.00	179.64	10,700.0	-1,731.3	786.4	1,736.2	0.00	0.00	0.00
12,700.0	90.00	179.64	10,700.0	-1,831.3	787.0	1,836.2	0.00	0.00	0.00
12,800.0	90.00	179.64	10,700.0	-1,931.3	787.6	1,936.2	0.00	0.00	0.00
12,900.0	90.00	179.64	10,700.0	-2,031.3	788.2	2,036.2	0.00	0.00	0.00
13,000.0	90.00	179.64	10,700.0	-2,131.3	788.9	2,136.2	0.00	0.00	0.00
13,100.0	90.00	179.64	10,700.0	-2,231.3	789.5	2,236.2	0.00	0.00	0.00
13,200.0	90.00	179.64	10,700.0	-2,331.3	790.1	2,336.2	0.00	0.00	0.00
13,300.0	90.00	179.64	10,700.0	-2,431.3	790.7	2,436.2	0.00	0.00	0.00
13,400.0	90.00	179.64	10,700.0	-2,531.3	791.3	2,536.2	0.00	0.00	0.00
13,500.0	90.00	179.64	10,700.0	-2,631.3	792.0	2,636.2	0.00	0.00	0.00
13,600.0	90.00	179.64	10,700.0	-2,731.3	792.6	2,736.2	0.00	0.00	0.00
13,700.0	90.00	179.64	10,700.0	-2,831.2	793.2	2,836.2	0.00	0.00	0.00
13,800.0	90.00	179.64	10,700.0	-2,931.2	793.8	2,936.2	0.00	0.00	0.00
13,900.0	90.00	179.64	10,700.0	-3,031.2	794.5	3,036.2	0.00	0.00	0.00
14,000.0	90.00	179.64	10,700.0	-3,131.2	795.1	3,136.2	0.00	0.00	0.00
14,100.0	90.00	179.64	10,700.0	-3,231.2	795.7	3,236.2	0.00	0.00	0.00
14,200.0	90.00	179.64	10,700.0	-3,331.2	796.3	3,336.2	0.00	0.00	0.00
14,300.0	90.00	179.64	10,700.0	-3,431.2	796.9	3,436.2	0.00	0.00	0.00
14,400.0	90.00	179.64	10,700.0	-3,531.2	797.6	3,536.2	0.00	0.00	0.00
14,500.0	90.00	179.64	10,700.0	-3,631.2	798.2	3,636.2	0.00	0.00	0.00
14,600.0	90.00	179.64	10,700.0	-3,731.2	798.8	3,736.2	0.00	0.00	0.00
14,700.0	90.00	179.64	10,700.0	-3,831.2	799.4	3,836.2	0.00	0.00	0.00
14,800.0	90.00	179.64	10,700.0	-3,931.2	800.1	3,936.2	0.00	0.00	0.00
14,900.0	90.00	179.64	10,700.0	-4,031.2	800.7	4,036.2	0.00	0.00	0.00
15,000.0	90.00	179.64	10,700.0	-4,131.2	801.3	4,136.2	0.00	0.00	0.00
15,100.0	90.00	179.64	10,700.0	-4,231.2	801.9	4,236.2	0.00	0.00	0.00
15,200.0	90.00	179.64	10,700.0	-4,331.2	802.5	4,336.2	0.00	0.00	0.00
15,300.0	90.00	179.64	10,700.0	-4,431.2	803.2	4,436.2	0.00	0.00	0.00
15,400.0	90.00	179.64	10,700.0	-4,531.2	803.8	4,536.2	0.00	0.00	0.00
15,500.0	90.00	179.64	10,700.0	-4,631.2	804.4	4,636.2	0.00	0.00	0.00
15,600.0	90.00	179.64	10,700.0	-4,731.2	805.0	4,736.2	0.00	0.00	0.00
15,700.0	90.00	179.64	10,700.0	-4,831.2	805.7	4,836.2	0.00	0.00	0.00
15,800.0	90.00	179.64	10,700.0	-4,931.2	806.3	4,936.2	0.00	0.00	0.00
15,900.0	90.00	179.64	10,700.0	-5,031.2	806.9	5,036.2	0.00	0.00	0.00
16,000.0	90.00	179.64	10,700.0	-5,131.2	807.5	5,136.2	0.00	0.00	0.00
16,100.0	90.00	179.64	10,700.0	-5,231.2	808.1	5,236.2	0.00	0.00	0.00
16,200.0	90.00	179.64	10,700.0	-5,331.2	808.8	5,336.2	0.00	0.00	0.00
16,300.0	90.00	179.64	10,700.0	-5,431.2	809.4	5,436.2	0.00	0.00	0.00
16,400.0	90.00	179.64	10,700.0	-5,531.2	810.0	5,536.2	0.00	0.00	0.00
16,500.0	90.00	179.64	10,700.0	-5,631.2	810.6	5,636.2	0.00	0.00	0.00
16,600.0	90.00	179.64	10,700.0	-5,731.2	811.3	5,736.2	0.00	0.00	0.00
16,700.0	90.00	179.64	10,700.0	-5,831.2	811.9	5,836.2	0.00	0.00	0.00
16,800.0	90.00	179.64	10,700.0	-5,931.2	812.5	5,936.2	0.00	0.00	0.00
16,900.0	90.00	179.64	10,700.0	-6,031.2	813.1	6,036.2	0.00	0.00	0.00
17,000.0	90.00	179.64	10,700.0	-6,131.2	813.7	6,136.2	0.00	0.00	0.00
17,100.0	90.00	179.64	10,700.0	-6,231.2	814.4	6,236.2	0.00	0.00	0.00
17,200.0	90.00	179.64	10,700.0	-6,331.2	815.0	6,336.2	0.00	0.00	0.00
17,300.0	90.00	179.64	10,700.0	-6,431.2	815.6	6,436.2	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Boros Federal #133H
Company:	Matador Production Company	TVD Reference:	KB @ 3253.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3253.5usft
Site:	Boros	North Reference:	Grid
Well:	Boros Federal #133H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #2		

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)	
17,400.0	90.00	179.64	10,700.0	-6,531.2	816.2	6,536.2	0.00	0.00	0.00	
17,500.0	90.00	179.64	10,700.0	-6,631.2	816.9	6,636.2	0.00	0.00	0.00	
17,600.0	90.00	179.64	10,700.0	-6,731.2	817.5	6,736.2	0.00	0.00	0.00	
17,700.0	90.00	179.64	10,700.0	-6,831.2	818.1	6,836.2	0.00	0.00	0.00	
17,800.0	90.00	179.64	10,700.0	-6,931.2	818.7	6,936.2	0.00	0.00	0.00	
17,900.0	90.00	179.64	10,700.0	-7,031.2	819.3	7,036.2	0.00	0.00	0.00	
18,000.0	90.00	179.64	10,700.0	-7,131.2	820.0	7,136.2	0.00	0.00	0.00	
18,100.0	90.00	179.64	10,700.0	-7,231.2	820.6	7,236.2	0.00	0.00	0.00	
18,200.0	90.00	179.64	10,700.0	-7,331.2	821.2	7,336.2	0.00	0.00	0.00	
18,300.0	90.00	179.64	10,700.0	-7,431.2	821.8	7,436.2	0.00	0.00	0.00	
18,400.0	90.00	179.64	10,700.0	-7,531.2	822.5	7,536.2	0.00	0.00	0.00	
18,500.0	90.00	179.64	10,700.0	-7,631.2	823.1	7,636.2	0.00	0.00	0.00	
18,600.0	90.00	179.64	10,700.0	-7,731.2	823.7	7,736.2	0.00	0.00	0.00	
18,700.0	90.00	179.64	10,700.0	-7,831.2	824.3	7,836.2	0.00	0.00	0.00	
18,800.0	90.00	179.64	10,700.0	-7,931.2	824.9	7,936.2	0.00	0.00	0.00	
18,900.0	90.00	179.64	10,700.0	-8,031.1	825.6	8,036.2	0.00	0.00	0.00	
19,000.0	90.00	179.64	10,700.0	-8,131.1	826.2	8,136.2	0.00	0.00	0.00	
19,100.0	90.00	179.64	10,700.0	-8,231.1	826.8	8,236.2	0.00	0.00	0.00	
19,200.0	90.00	179.64	10,700.0	-8,331.1	827.4	8,336.2	0.00	0.00	0.00	
19,300.0	90.00	179.64	10,700.0	-8,431.1	828.1	8,436.2	0.00	0.00	0.00	
19,400.0	90.00	179.64	10,700.0	-8,531.1	828.7	8,536.2	0.00	0.00	0.00	
19,500.0	90.00	179.64	10,700.0	-8,631.1	829.3	8,636.2	0.00	0.00	0.00	
19,600.0	90.00	179.64	10,700.0	-8,731.1	829.9	8,736.2	0.00	0.00	0.00	
19,700.0	90.00	179.64	10,700.0	-8,831.1	830.5	8,836.2	0.00	0.00	0.00	
19,800.0	90.00	179.64	10,700.0	-8,931.1	831.2	8,936.2	0.00	0.00	0.00	
19,900.0	90.00	179.64	10,700.0	-9,031.1	831.8	9,036.2	0.00	0.00	0.00	
20,000.0	90.00	179.64	10,700.0	-9,131.1	832.4	9,136.2	0.00	0.00	0.00	
20,100.0	90.00	179.64	10,700.0	-9,231.1	833.0	9,236.2	0.00	0.00	0.00	
20,200.0	90.00	179.64	10,700.0	-9,331.1	833.7	9,336.2	0.00	0.00	0.00	
20,300.0	90.00	179.64	10,700.0	-9,431.1	834.3	9,436.2	0.00	0.00	0.00	
20,400.0	90.00	179.64	10,700.0	-9,531.1	834.9	9,536.2	0.00	0.00	0.00	
20,500.0	90.00	179.64	10,700.0	-9,631.1	835.5	9,636.2	0.00	0.00	0.00	
20,600.0	90.00	179.64	10,700.0	-9,731.1	836.1	9,736.2	0.00	0.00	0.00	
20,700.0	90.00	179.64	10,700.0	-9,831.1	836.8	9,836.2	0.00	0.00	0.00	
20,800.0	90.00	179.64	10,700.0	-9,931.1	837.4	9,936.2	0.00	0.00	0.00	
20,900.0	90.00	179.64	10,700.0	-10,031.1	838.0	10,036.2	0.00	0.00	0.00	
21,000.0	90.00	179.64	10,700.0	-10,131.1	838.6	10,136.2	0.00	0.00	0.00	
21,026.6	90.00	179.64	10,700.0	-10,157.7	838.8	10,162.8	0.00	0.00	0.00	
TD at 21026.6 - BHL - Boros Federal #133H										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
VP - Boros Federal #1 - hit/miss target - Shape - Point	0.00	0.00	10,127.0	352.1	517.4	382,336.00	676,777.00	32° 2' 59.541 N	103° 45' 45.973 W	
BHL - Boros Federal # - plan hits target center - Point	0.00	0.00	10,700.0	-10,157.7	838.8	371,825.55	677,098.50	32° 1' 15.511 N	103° 45' 42.884 W	

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Boros Federal #133H
Company:	Matador Production Company	TVD Reference:	KB @ 3253.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3253.5usft
Site:	Boros	North Reference:	Grid
Well:	Boros Federal #133H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #2		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,357.2	1,357.2	Rustler			
1,488.5	1,488.5	Salado (Top Salt)			
4,108.9	4,097.5	Base Salt			
4,139.1	4,127.5	Bell Canyon			
5,196.6	5,179.5	Cherry Canyon			
6,409.4	6,386.1	Brushy Canyon			
7,536.6	7,507.5	L. Brushy Canyon			
8,099.8	8,068.8	BSGL			
8,237.1	8,206.2	Avalon-SS			
9,244.1	9,213.2	FBSG			
9,524.8	9,493.8	SBSC			
9,778.7	9,747.8	SBSG			
10,234.2	10,203.0	TBSC			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,500.0	1,500.0	0.0	0.0	Start Build 1.00
2,081.8	2,080.8	16.6	24.4	Start 5688.3 hold at 2081.8 MD
7,770.1	7,739.8	341.0	501.1	Start Drop -1.50
8,158.0	8,127.0	352.1	517.4	Start 2000.0 hold at 8158.0 MD
10,158.0	10,127.0	352.1	517.4	Start Build 10.00
11,058.0	10,700.0	-199.2	673.4	Start DLS 2.00 TFO 90.00
11,830.1	10,700.0	-961.4	781.6	Start 9196.5 hold at 11830.1 MD
21,026.6	10,700.0	-10,157.7	838.8	TD at 21026.6