Received by OCD: 11/13/2023 5:58:21 PM

Well Name: VONI FED COM

Well Location: T26S / R31E / SEC 21 / NWNE / 32.0345013 / -103.7809507

County or Parish/State: EDDY / NM

Well Number: 23H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM138866

Unit or CA Name:

Unit or CA Number:

US Well Number: 300154699400X1

Well Status: Approved Application for Permit to Drill

Operator: MATADOR PRODUCTION COMPANY

Notice of Intent

Sundry ID: 2757954

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 10/24/2023

Time Sundry Submitted: 06:57

Date proposed operation will begin: 12/24/2023

Procedure Description: BLM Bond NMB001079 Surety Bond No.: RLB0015172 Matador request option to change the SHL, BHL and casing as shown below: -SHL change from 350’ FNL & 1946’ FEL to 350’ FNL & 1966’ FEL. SHL remains on previously approved pad. -BHL change from 100’ FSL & 1980’ FEL to 110’ FSL & 1002’ FEL. -Amend casing design by reducing 9-5/8” casing to 7-5/8” and deepening to KOP. Amended drill plan is attached for review

NOI Attachments

Procedure Description

Voni_Fed_Com_023H_Drill_Plan_20231024185621.pdf

Voni_Fed_Com_023H_Directional_Well_Plan_v3_20231024185019.pdf

Voni_Fed_Com_023H_Directional_Wall_Plot_v3_20231024185011.pdf

LO_VONI_FED_COM_023H_REV4_S_20231024184858.pdf

Voni_Fed_Com_023H_Directional_AC_Report_v3_20231024184845.pdf

Released to Imaging: 10/25/2024 2:41:09 PM

Well Name: VONI FED COM

Well Location: T26S / R31E / SEC 21 / NWNE / 32.0345013 / -103.7809507

County or Parish/State: EDDY / NM

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US Well Number: 300154699400X1

Well Status: Approved Application for Permit to Drill

Operator: MATADOR PRODUCTION COMPANY

Conditions of Approval

Additional

VONI_FED_COM_23H_Sundry_COA_20231106115237.pdf

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: NICKY FITZGERALD

Signed on: OCT 24, 2023 06:50 PM

Name: MATADOR PRODUCTION COMPANY

Title: Regulatory Consultant

Street Address: 5400 LBJ FREEWAY STE 1500

City: DALLAS **State:** TX

Phone: (972) 371-5448

Email address: nicky.fitzgerald@matadorresources.com

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 11/06/2023

Signature: Chris Walls

Released to Imaging: 10/25/2024 2:41:09 PM

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

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.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

2. Name of Operator

9. API Well No.

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool or Exploratory Area

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

11. Country or Parish, State

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
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

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 recomplete 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 perfonned 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 recompletion 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 detennined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*

Title

Signature

Date

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by

Title

Date

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

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)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.
PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.
ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.
EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.
Response to this request is mandatory.
The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect ofthis form to U.S. Department ofthe Interior, Bureau ofLand Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: NWNE / 350 FNL / 1946 FEL / TWSP: 26S / RANGE: 31E / SECTION: 21 / LAT: 32.0345013 / LONG: -103.7809507 (TVD: 0 feet, MD: 0 feet)

PPP: NWNE / 100 FNL / 1980 FEL / TWSP: 26S / RANGE: 31E / SECTION: 21 / LAT: 32.0351884 / LONG: -103.7810658 (TVD: 7630 feet, MD: 7974 feet)

PPP: NWNE / 0 FSL / 1980 FEL / TWSP: 26S / RANGE: 31E / SECTION: 28 / LAT: 32.02082 / LONG: -103.781016 (TVD: 7630 feet, MD: 13218 feet)

BHL: LOT 2 / 100 FSL / 1980 FEL / TWSP: 26S / RANGE: 31E / SECTION: 33 / LAT: 32.0004552 / LONG: -103.7809431 (TVD: 7630 feet, MD: 20099 feet)

CONFIDENTIAL

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MATADOR PRODUCTION COMPANY
WELL NAME & NO.:	VONI FED COM 23H
SURFACE HOLE FOOTAGE:	350'/N & 1966'/E
BOTTOM HOLE FOOTAGE	110'/S & 1002'/E
LOCATION:	Section 21, T.26 S., R.31 E., NMP
COUNTY:	Eddy County, New Mexico

COA

H_2S	(•) Yes	( ) No	
Potash	(•) None	( ) Secretary	( ) R-111-P
Cave/Karst Potential	( ) Low	(•) Medium	( ) High
Cave/Karst Potential	( ) Critical		
Variance	( ) None	(•) Flex Hose	( ) Other
Wellhead	( ) Conventional	(•) Multibowl	( ) Both
Other	[ ] 4 String	[ ] Capitan Reef	[ ] WIPP
Other	[ ] Fluid Filled	[ ] Pilot Hole	[ ] Open Annulus
Special Requirements	[ ] Water Disposal	[x] COM	[ ] Unit

SEE ORIGINAL COA FOR ALL OTHER REQUIREMENTS.

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H_2S) Drilling Plan shall be activated **AT SPUD**. As a result, the Hydrogen Sulfide area must meet **title 43 CFR 3176** requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING DESIGN

1. The **13-3/8** inch surface casing shall be set at approximately **1,066** feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 ft. above the salt.**
    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8**

hours or **500 psi compressive strength**, whichever is greater. (This is to include the lead cement)

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 psi compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Note: Operator has requested to have option to drill either 17-1/2" or 20" surface hole. Both hole sizes meet title 43 CFR 3172 clearance requirements. This option is granted; adjust cement volume accordingly.

Note: Cement volume allocated for cementing surface casing to surface is insufficient due to a change in surface casing set depth. Operator must adjust cement volume accordingly.

2. The **7-5/8** inch intermediate casing shall be set at approximately **7,533 ft.** The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

Option 1 (Single Stage): Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to **Cave and Karst**.

Option 2 (Two-stage): Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
b. Second stage above DV tool:
   - **Cement to surface.** If cement does not circulate, contact the appropriate BLM office. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to **Cave and Karst**.

Note: In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

Note: Excess cement for 2nd stage is below CFO's recommendation of %25. More cement might be needed.

Note: Operator has requested to have an option to deepen the intermediate casing set depth to 80° in curve with no changes in pipe grade or weight per foot. This option is granted.

3. The minimum required fill of cement behind the **5-1/2 in.** production casing is:

- Cement should tie-back **at least 200 feet** into previous casing string. Operator shall provide method of verification.

Note: Excess cement is below CFO's recommendation of %25. More cement might be needed.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi. Before drilling out the surface casing shoe, the BOP/BOPE and annular preventer shall be pressure-tested in accordance with **title 43 CFR 3172** and **API Standard 53**.

a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
c. Manufacturer representative shall install the test plug for the initial BOP test.
d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
e. Whenever any seal subject to test pressure is broken, all the tests in the **title 43 CFR 3172.6(b)(9)** must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.

- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.

- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ Eddy County
EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
BLM_NM_CFO_DrillingNotifications@BLM.GOV
(575) 361-2822

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).

   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per **title 43 CFR 3172**
      - as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in the **title 43 CFR 3172** and **API STD 53 Sec. 5.3**.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in the **title 43 CFR 3172.6(b)(9)** must be followed.
    e. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000-psi chart for a 2-3M BOP/BOP, on a 10000-psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one-hour chart. A circular chart shall have a maximum 2-hour clock. If a twelve hour or twenty-four-hour chart is used, tester shall make a notation that it is run with a two-hour clock.

e. The results of the test shall be reported to the appropriate BLM office.

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low-pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of

the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

SA 11/06/2023

Voni Fed Com 023H
SHL: 350' FNL & 1966' FEL Section 21
BHL: 110' FSL & 1002' FEL Section 33
Township/Range: 26S 31E
Elevation Above Sea Level: 3192

Drilling Operation Plan

Proposed Drilling Depth: 20864' MD / 8075' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type Oil

Geologic Name of Surface Formatio Quaternary Deposits

KOP Lat/Long (NAD83): 32.0353303 N / 103.7778081 W
TD Lat/Long (NAD83): 32.0004849 N / 103.7777860 W

1. Estimated Tops

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	893	893	678	Anhydrite	Barren
Salado (Top of Salt)	1,574	1,571	1,812	Salt	Barren
Castile	3,391	3,383	623	Salt	Barren
Lamar (Base of Salt)	4,047	4,006	27	Dolomite	Barren
Bell Canyon	4,075	4,033	1,076	Sandstone	Oil/Natural Gas
Cherry Canyon	5,167	5,109	1,131	Sandstone	Oil/Natural Gas
Brushy Canyon	6,316	6,240	1,656	Sandstone	Oil/Natural Gas
KOP	**7,633**	**7,546**	**-**	**Limestone**	**Oil/Natural Gas**
Bone Spring Lime	8,011	7,896	175	Limestone	Oil/Natural Gas
Avalon	8,297	8,071	-	Shale	Oil/Natural Gas
TD	**20,864**	**8,075**		**Shale**	**Oil/Natural Gas**

2. Notable Zones

1st 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 Title 43 CFR 3172 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 Title 43 CFR 3172. 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.

Matador request the option to offline cement surface casing. The “Surface Offline Cement Procedure” is attached for review. No changes in cement program are necessary.

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 - 415	0 - 415	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	9.875	0 - 7533	0 - 7446	7.625	29.7	P-110	BUTT	1.125	1.125	1.8
Production	6.75	0 - 20864	0 - 8075	5.5	20	P-110	Hunting TLW-SC	1.125	1.125	1.8

- All casing strings will be tested in accordance with Title 43 CFR 3172.7(b)(8)
- 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 the option to deepen the Intermediate 1 casing set depth to 80° in curve, no changes in pipe grade or weight 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. Option to cancel 2nd stage cement if cement is circulated on 1st stage.

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, cement volumes will be adjusted accordingly.

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.

Primary Cement Design - DV/Packer 2-Stage Cement

String	Type	Sacks	Yield	Cu. Ft.	Weight	Percent Excess	Top of Cement (ft)	Class	Blend
Surface	Lead	70	1.72	116	13.5	50%	0	C	5% NaCl + LCM
	Tail	250	1.38	347	14.8	50%	115	C	5% NaCl + LCM
Intermediate 1 w/ DV @ 465'	Stg 2 Tail	140	1.78	240	13.5	10%	0	A/C	5% NaCl + LCM
	Stg 1 Lead	1090	1.84	2013	12.5	35%	0	A/C	Bentonite + 1% CaCl2 + 8% NaCl + LCM
	Stg 1 Tail	230	1.33	311	14.8	35%	6533	A/C	5% NaCl + LCM
Production	Tail	1040	1.35	1410	13.2	25%	7333	A/C	Fluid Loss + Dispersant + Retarder + LCM

5. Mud Program

An electronic Pason mud monitoring system complying with Title 43 CFR 3172 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 - 415	8.4 - 8.8	28-30	NC
Intermediate 1	9.875	Diesel Brine Emulsion	1728 - 7533	8.7 - 9.4	28-30	NC
Production	6.75	OBM	7533 - 20864	8.8 - 9.7	30-55	<20

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. We will be running a Neutron log on one of the wells on each pad.

7. Down Hole Conditions

No abnormal pressure or temperature is expected. Bottom hole pressure is 4073 psi. Maximum anticipated surface pressure is 2297 psi. Expected bottom hole temperature is 140 F.

In accordance with Title 43 CFR 3176, 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 an "H2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H2S safety package on all wells, attached is an "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 equipment being used.

Matador Production Company

Rustler Breaks
Voni
Voni Fed Com #023H

Wellbore #1

Plan: BLM Plan #1

Standard Planning Report

14 October, 2023

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3220.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3220.5usft
Site:	Voni	**North Reference:**	Grid
Well:	Voni Fed Com #023H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

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

Site	Voni				
Site Position:		**Northing:**	376,651.72 usft	**Latitude:**	32° 2' 3.721 N
From:	Lat/Long	**Easting:**	668,298.64 usft	**Longitude:**	103° 47' 24.814 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.29 °

Well	Voni Fed Com #023H				
Well Position	**+N/-S**	18.5 usft	**Northing:**	376,670.24 usft	**Latitude:**	32° 2' 3.754 N
	+E/-W	3,001.5 usft	**Easting:**	671,299.94 usft	**Longitude:**	103° 46' 49.947 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,192.0 usft

Wellbore	Wellbore #1				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	10/14/2023	6.35	59.77	47,158.09468347

Design	BLM Plan #1				
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	179.67	

Plan Survey Tool Program **Date** 10/14/2023

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	20,606.7	BLM Plan #1 (Wellbore #1)	MWD	
				OWSG MWD - Standard	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	10.00	74.42	1,497.5	11.7	41.9	2.00	2.00	0.00	74.42	
6,981.8	10.00	74.42	6,896.0	267.4	958.9	0.00	0.00	0.00	0.00	
7,381.8	0.00	0.00	7,294.0	276.7	992.4	2.50	-2.50	0.00	180.00	
7,633.8	0.00	0.00	7,546.0	276.7	992.4	0.00	0.00	0.00	0.00	KOP - Voni Fed Com
8,533.8	90.00	179.67	8,119.0	-296.2	995.7	10.00	10.00	0.00	179.67	
20,606.7	90.00	179.67	8,119.0	-12,368.8	1,065.2	0.00	0.00	0.00	0.00	BHL - Voni Fed Com #

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3220.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3220.5usft
Site:	Voni	**North Reference:**	Grid
Well:	Voni Fed Com #023H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
893.6	0.00	0.00	893.6	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
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	74.42	1,100.0	0.5	1.7	-0.5	2.00	2.00	0.00
1,200.0	4.00	74.42	1,199.8	1.9	6.7	-1.8	2.00	2.00	0.00
1,300.0	6.00	74.42	1,299.5	4.2	15.1	-4.1	2.00	2.00	0.00
1,400.0	8.00	74.42	1,398.7	7.5	26.9	-7.3	2.00	2.00	0.00
1,500.0	10.00	74.42	1,497.5	11.7	41.9	-11.4	2.00	2.00	0.00
Start 5481.8 hold at 1500.0 MD									
1,574.9	10.00	74.42	1,571.2	15.2	54.5	-14.9	0.00	0.00	0.00
Salado (Top Salt)									
1,600.0	10.00	74.42	1,595.9	16.4	58.6	-16.0	0.00	0.00	0.00
1,700.0	10.00	74.42	1,694.4	21.0	75.4	-20.6	0.00	0.00	0.00
1,800.0	10.00	74.42	1,792.9	25.7	92.1	-25.2	0.00	0.00	0.00
1,900.0	10.00	74.42	1,891.4	30.3	108.8	-29.7	0.00	0.00	0.00
2,000.0	10.00	74.42	1,989.9	35.0	125.6	-34.3	0.00	0.00	0.00
2,100.0	10.00	74.42	2,088.4	39.7	142.3	-38.9	0.00	0.00	0.00
2,200.0	10.00	74.42	2,186.8	44.3	159.0	-43.4	0.00	0.00	0.00
2,300.0	10.00	74.42	2,285.3	49.0	175.7	-48.0	0.00	0.00	0.00
2,400.0	10.00	74.42	2,383.8	53.7	192.5	-52.6	0.00	0.00	0.00
2,500.0	10.00	74.42	2,482.3	58.3	209.2	-57.1	0.00	0.00	0.00
2,600.0	10.00	74.42	2,580.8	63.0	225.9	-61.7	0.00	0.00	0.00
2,700.0	10.00	74.42	2,679.2	67.7	242.6	-66.3	0.00	0.00	0.00
2,800.0	10.00	74.42	2,777.7	72.3	259.4	-70.8	0.00	0.00	0.00
2,900.0	10.00	74.42	2,876.2	77.0	276.1	-75.4	0.00	0.00	0.00
3,000.0	10.00	74.42	2,974.7	81.7	292.8	-80.0	0.00	0.00	0.00
3,100.0	10.00	74.42	3,073.2	86.3	309.6	-84.5	0.00	0.00	0.00
3,200.0	10.00	74.42	3,171.6	91.0	326.3	-89.1	0.00	0.00	0.00
3,300.0	10.00	74.42	3,270.1	95.6	343.0	-93.7	0.00	0.00	0.00
3,400.0	10.00	74.42	3,368.6	100.3	359.7	-98.2	0.00	0.00	0.00
3,500.0	10.00	74.42	3,467.1	105.0	376.5	-102.8	0.00	0.00	0.00
3,600.0	10.00	74.42	3,565.6	109.6	393.2	-107.4	0.00	0.00	0.00
3,700.0	10.00	74.42	3,664.0	114.3	409.9	-111.9	0.00	0.00	0.00
3,800.0	10.00	74.42	3,762.5	119.0	426.6	-116.5	0.00	0.00	0.00
3,900.0	10.00	74.42	3,861.0	123.6	443.4	-121.1	0.00	0.00	0.00
4,000.0	10.00	74.42	3,959.5	128.3	460.1	-125.6	0.00	0.00	0.00
4,047.8	10.00	74.42	4,006.6	130.5	468.1	-127.8	0.00	0.00	0.00
Base Salt									
4,075.3	10.00	74.42	4,033.6	131.8	472.7	-129.1	0.00	0.00	0.00
Bell Canyon									
4,100.0	10.00	74.42	4,058.0	133.0	476.8	-130.2	0.00	0.00	0.00
4,200.0	10.00	74.42	4,156.4	137.6	493.5	-134.8	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3220.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3220.5usft
Site:	Voni	**North Reference:**	Grid
Well:	Voni Fed Com #023H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,300.0	10.00	74.42	4,254.9	142.3	510.3	-139.3	0.00	0.00	0.00
4,400.0	10.00	74.42	4,353.4	147.0	527.0	-143.9	0.00	0.00	0.00
4,500.0	10.00	74.42	4,451.9	151.6	543.7	-148.5	0.00	0.00	0.00
4,600.0	10.00	74.42	4,550.4	156.3	560.5	-153.1	0.00	0.00	0.00
4,700.0	10.00	74.42	4,648.9	160.9	577.2	-157.6	0.00	0.00	0.00
4,800.0	10.00	74.42	4,747.3	165.6	593.9	-162.2	0.00	0.00	0.00
4,900.0	10.00	74.42	4,845.8	170.3	610.6	-166.8	0.00	0.00	0.00
5,000.0	10.00	74.42	4,944.3	174.9	627.4	-171.3	0.00	0.00	0.00
5,100.0	10.00	74.42	5,042.8	179.6	644.1	-175.9	0.00	0.00	0.00
5,167.2	10.00	74.42	5,109.0	182.7	655.3	-179.0	0.00	0.00	0.00
Cherry Canyon									
5,200.0	10.00	74.42	5,141.3	184.3	660.8	-180.5	0.00	0.00	0.00
5,300.0	10.00	74.42	5,239.7	188.9	677.5	-185.0	0.00	0.00	0.00
5,400.0	10.00	74.42	5,338.2	193.6	694.3	-189.6	0.00	0.00	0.00
5,500.0	10.00	74.42	5,436.7	198.3	711.0	-194.2	0.00	0.00	0.00
5,600.0	10.00	74.42	5,535.2	202.9	727.7	-198.7	0.00	0.00	0.00
5,700.0	10.00	74.42	5,633.7	207.6	744.4	-203.3	0.00	0.00	0.00
5,800.0	10.00	74.42	5,732.1	212.3	761.2	-207.9	0.00	0.00	0.00
5,900.0	10.00	74.42	5,830.6	216.9	777.9	-212.4	0.00	0.00	0.00
6,000.0	10.00	74.42	5,929.1	221.6	794.6	-217.0	0.00	0.00	0.00
6,100.0	10.00	74.42	6,027.6	226.2	811.4	-221.6	0.00	0.00	0.00
6,200.0	10.00	74.42	6,126.1	230.9	828.1	-226.1	0.00	0.00	0.00
6,300.0	10.00	74.42	6,224.5	235.6	844.8	-230.7	0.00	0.00	0.00
6,316.6	10.00	74.42	6,240.9	236.3	847.6	-231.5	0.00	0.00	0.00
Brushy Canyon									
6,400.0	10.00	74.42	6,323.0	240.2	861.5	-235.3	0.00	0.00	0.00
6,500.0	10.00	74.42	6,421.5	244.9	878.3	-239.8	0.00	0.00	0.00
6,600.0	10.00	74.42	6,520.0	249.6	895.0	-244.4	0.00	0.00	0.00
6,700.0	10.00	74.42	6,618.5	254.2	911.7	-249.0	0.00	0.00	0.00
6,800.0	10.00	74.42	6,716.9	258.9	928.4	-253.5	0.00	0.00	0.00
6,900.0	10.00	74.42	6,815.4	263.6	945.2	-258.1	0.00	0.00	0.00
6,981.8	10.00	74.42	6,896.0	267.4	958.9	-261.8	0.00	0.00	0.00
Start Drop -2.50									
7,000.0	9.55	74.42	6,913.9	268.2	961.8	-262.7	2.50	-2.50	0.00
7,100.0	7.05	74.42	7,012.9	272.1	975.7	-266.5	2.50	-2.50	0.00
7,200.0	4.55	74.42	7,112.3	274.8	985.4	-269.1	2.50	-2.50	0.00
7,300.0	2.05	74.42	7,212.2	276.3	991.0	-270.6	2.50	-2.50	0.00
7,381.8	0.00	0.00	7,294.0	276.7	992.4	-271.0	2.50	-2.50	0.00
Start 252.0 hold at 7381.8 MD									
7,400.0	0.00	0.00	7,312.2	276.7	992.4	-271.0	0.00	0.00	0.00
7,412.7	0.00	0.00	7,324.9	276.7	992.4	-271.0	0.00	0.00	0.00
L. Brushy Canyon									
7,500.0	0.00	0.00	7,412.2	276.7	992.4	-271.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,512.2	276.7	992.4	-271.0	0.00	0.00	0.00
7,633.8	0.00	0.00	7,546.0	276.7	992.4	-271.0	0.00	0.00	0.00
Start Build 10.00 - KOP - Voni Fed Com #023H									
7,650.0	1.62	179.67	7,562.2	276.5	992.4	-270.8	10.00	10.00	0.00
7,700.0	6.62	179.67	7,612.0	272.9	992.4	-267.2	10.00	10.00	0.00
7,750.0	11.62	179.67	7,661.4	265.0	992.5	-259.3	10.00	10.00	0.00
7,800.0	16.62	179.67	7,709.8	252.8	992.5	-247.1	10.00	10.00	0.00
7,850.0	21.62	179.67	7,757.1	236.4	992.6	-230.7	10.00	10.00	0.00
7,900.0	26.62	179.67	7,802.7	216.0	992.7	-210.3	10.00	10.00	0.00
7,950.0	31.62	179.67	7,846.4	191.7	992.9	-186.0	10.00	10.00	0.00

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3220.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3220.5usft
Site:	Voni	**North Reference:**	Grid
Well:	Voni Fed Com #023H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,000.0	36.62	179.67	7,887.7	163.7	993.0	-157.9	10.00	10.00	0.00
8,011.0	37.72	179.67	7,896.5	157.0	993.1	-151.3	10.00	10.00	0.00
BSGL									
8,050.0	41.62	179.67	7,926.5	132.1	993.2	-126.4	10.00	10.00	0.00
8,100.0	46.62	179.67	7,962.4	97.3	993.4	-91.6	10.00	10.00	0.00
8,150.0	51.62	179.67	7,995.1	59.5	993.6	-53.8	10.00	10.00	0.00
8,200.0	56.62	179.67	8,024.4	19.0	993.9	-13.3	10.00	10.00	0.00
8,250.0	61.62	179.67	8,050.1	-23.8	994.1	29.6	10.00	10.00	0.00
8,297.9	66.41	179.67	8,071.1	-66.9	994.4	72.6	10.00	10.00	0.00
Avalon-SS									
8,300.0	66.62	179.67	8,071.9	-68.8	994.4	74.5	10.00	10.00	0.00
8,350.0	71.62	179.67	8,089.7	-115.5	994.6	121.2	10.00	10.00	0.00
8,400.0	76.62	179.67	8,103.4	-163.6	994.9	169.3	10.00	10.00	0.00
8,450.0	81.62	179.67	8,112.8	-212.7	995.2	218.4	10.00	10.00	0.00
8,494.5	86.07	179.67	8,117.6	-256.9	995.5	262.7	10.00	10.00	0.00
FTP - Voni Fed Com #023H									
8,500.0	86.62	179.67	8,118.0	-262.4	995.5	268.1	10.00	10.00	0.00
8,533.8	90.00	179.67	8,119.0	-296.2	995.7	301.9	10.00	10.00	0.00
Start 12072.8 hold at 8533.8 MD									
8,600.0	90.00	179.67	8,119.0	-362.4	996.1	368.1	0.00	0.00	0.00
8,700.0	90.00	179.67	8,119.0	-462.4	996.6	468.1	0.00	0.00	0.00
8,800.0	90.00	179.67	8,119.0	-562.4	997.2	568.1	0.00	0.00	0.00
8,900.0	90.00	179.67	8,119.0	-662.4	997.8	668.1	0.00	0.00	0.00
9,000.0	90.00	179.67	8,119.0	-762.4	998.4	768.1	0.00	0.00	0.00
9,100.0	90.00	179.67	8,119.0	-862.4	999.0	868.1	0.00	0.00	0.00
9,200.0	90.00	179.67	8,119.0	-962.4	999.5	968.1	0.00	0.00	0.00
9,300.0	90.00	179.67	8,119.0	-1,062.4	1,000.1	1,068.1	0.00	0.00	0.00
9,400.0	90.00	179.67	8,119.0	-1,162.4	1,000.7	1,168.1	0.00	0.00	0.00
9,500.0	90.00	179.67	8,119.0	-1,262.4	1,001.3	1,268.1	0.00	0.00	0.00
9,600.0	90.00	179.67	8,119.0	-1,362.4	1,001.8	1,368.1	0.00	0.00	0.00
9,700.0	90.00	179.67	8,119.0	-1,462.4	1,002.4	1,468.1	0.00	0.00	0.00
9,800.0	90.00	179.67	8,119.0	-1,562.4	1,003.0	1,568.1	0.00	0.00	0.00
9,900.0	90.00	179.67	8,119.0	-1,662.4	1,003.6	1,668.1	0.00	0.00	0.00
10,000.0	90.00	179.67	8,119.0	-1,762.4	1,004.1	1,768.1	0.00	0.00	0.00
10,100.0	90.00	179.67	8,119.0	-1,862.4	1,004.7	1,868.1	0.00	0.00	0.00
10,200.0	90.00	179.67	8,119.0	-1,962.3	1,005.3	1,968.1	0.00	0.00	0.00
10,300.0	90.00	179.67	8,119.0	-2,062.3	1,005.9	2,068.1	0.00	0.00	0.00
10,400.0	90.00	179.67	8,119.0	-2,162.3	1,006.4	2,168.1	0.00	0.00	0.00
10,500.0	90.00	179.67	8,119.0	-2,262.3	1,007.0	2,268.1	0.00	0.00	0.00
10,600.0	90.00	179.67	8,119.0	-2,362.3	1,007.6	2,368.1	0.00	0.00	0.00
10,700.0	90.00	179.67	8,119.0	-2,462.3	1,008.2	2,468.1	0.00	0.00	0.00
10,800.0	90.00	179.67	8,119.0	-2,562.3	1,008.7	2,568.1	0.00	0.00	0.00
10,900.0	90.00	179.67	8,119.0	-2,662.3	1,009.3	2,668.1	0.00	0.00	0.00
11,000.0	90.00	179.67	8,119.0	-2,762.3	1,009.9	2,768.1	0.00	0.00	0.00
11,100.0	90.00	179.67	8,119.0	-2,862.3	1,010.5	2,868.1	0.00	0.00	0.00
11,200.0	90.00	179.67	8,119.0	-2,962.3	1,011.0	2,968.1	0.00	0.00	0.00
11,300.0	90.00	179.67	8,119.0	-3,062.3	1,011.6	3,068.1	0.00	0.00	0.00
11,400.0	90.00	179.67	8,119.0	-3,162.3	1,012.2	3,168.1	0.00	0.00	0.00
11,500.0	90.00	179.67	8,119.0	-3,262.3	1,012.8	3,268.1	0.00	0.00	0.00
11,600.0	90.00	179.67	8,119.0	-3,362.3	1,013.4	3,368.1	0.00	0.00	0.00
11,700.0	90.00	179.67	8,119.0	-3,462.3	1,013.9	3,468.1	0.00	0.00	0.00
11,800.0	90.00	179.67	8,119.0	-3,562.3	1,014.5	3,568.1	0.00	0.00	0.00
11,900.0	90.00	179.67	8,119.0	-3,662.3	1,015.1	3,668.1	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3220.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3220.5usft
Site:	Voni	**North Reference:**	Grid
Well:	Voni Fed Com #023H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,000.0	90.00	179.67	8,119.0	-3,762.3	1,015.7	3,768.1	0.00	0.00	0.00
12,100.0	90.00	179.67	8,119.0	-3,862.3	1,016.2	3,868.1	0.00	0.00	0.00
12,200.0	90.00	179.67	8,119.0	-3,962.3	1,016.8	3,968.1	0.00	0.00	0.00
12,300.0	90.00	179.67	8,119.0	-4,062.3	1,017.4	4,068.1	0.00	0.00	0.00
12,400.0	90.00	179.67	8,119.0	-4,162.3	1,018.0	4,168.1	0.00	0.00	0.00
12,500.0	90.00	179.67	8,119.0	-4,262.3	1,018.5	4,268.1	0.00	0.00	0.00
12,600.0	90.00	179.67	8,119.0	-4,362.3	1,019.1	4,368.1	0.00	0.00	0.00
12,700.0	90.00	179.67	8,119.0	-4,462.3	1,019.7	4,468.1	0.00	0.00	0.00
12,800.0	90.00	179.67	8,119.0	-4,562.3	1,020.3	4,568.1	0.00	0.00	0.00
12,900.0	90.00	179.67	8,119.0	-4,662.3	1,020.8	4,668.1	0.00	0.00	0.00
13,000.0	90.00	179.67	8,119.0	-4,762.3	1,021.4	4,768.1	0.00	0.00	0.00
13,100.0	90.00	179.67	8,119.0	-4,862.3	1,022.0	4,868.1	0.00	0.00	0.00
13,200.0	90.00	179.67	8,119.0	-4,962.3	1,022.6	4,968.1	0.00	0.00	0.00
13,210.4	90.00	179.67	8,119.0	-4,972.7	1,022.6	4,978.6	0.00	0.00	0.00
Enter NMNM 138867 - Voni Fed Com #023H									
13,300.0	90.00	179.67	8,119.0	-5,062.3	1,023.1	5,068.1	0.00	0.00	0.00
13,400.0	90.00	179.67	8,119.0	-5,162.3	1,023.7	5,168.1	0.00	0.00	0.00
13,500.0	90.00	179.67	8,119.0	-5,262.3	1,024.3	5,268.1	0.00	0.00	0.00
13,600.0	90.00	179.67	8,119.0	-5,362.3	1,024.9	5,368.1	0.00	0.00	0.00
13,700.0	90.00	179.67	8,119.0	-5,462.3	1,025.4	5,468.1	0.00	0.00	0.00
13,800.0	90.00	179.67	8,119.0	-5,562.3	1,026.0	5,568.1	0.00	0.00	0.00
13,900.0	90.00	179.67	8,119.0	-5,662.3	1,026.6	5,668.1	0.00	0.00	0.00
14,000.0	90.00	179.67	8,119.0	-5,762.3	1,027.2	5,768.1	0.00	0.00	0.00
14,100.0	90.00	179.67	8,119.0	-5,862.3	1,027.7	5,868.1	0.00	0.00	0.00
14,200.0	90.00	179.67	8,119.0	-5,962.3	1,028.3	5,968.1	0.00	0.00	0.00
14,300.0	90.00	179.67	8,119.0	-6,062.3	1,028.9	6,068.1	0.00	0.00	0.00
14,400.0	90.00	179.67	8,119.0	-6,162.3	1,029.5	6,168.1	0.00	0.00	0.00
14,500.0	90.00	179.67	8,119.0	-6,262.3	1,030.1	6,268.1	0.00	0.00	0.00
14,600.0	90.00	179.67	8,119.0	-6,362.3	1,030.6	6,368.1	0.00	0.00	0.00
14,700.0	90.00	179.67	8,119.0	-6,462.3	1,031.2	6,468.1	0.00	0.00	0.00
14,800.0	90.00	179.67	8,119.0	-6,562.3	1,031.8	6,568.1	0.00	0.00	0.00
14,900.0	90.00	179.67	8,119.0	-6,662.3	1,032.4	6,668.1	0.00	0.00	0.00
15,000.0	90.00	179.67	8,119.0	-6,762.3	1,032.9	6,768.1	0.00	0.00	0.00
15,100.0	90.00	179.67	8,119.0	-6,862.3	1,033.5	6,868.1	0.00	0.00	0.00
15,200.0	90.00	179.67	8,119.0	-6,962.3	1,034.1	6,968.1	0.00	0.00	0.00
15,300.0	90.00	179.67	8,119.0	-7,062.3	1,034.7	7,068.1	0.00	0.00	0.00
15,400.0	90.00	179.67	8,119.0	-7,162.3	1,035.2	7,168.1	0.00	0.00	0.00
15,500.0	90.00	179.67	8,119.0	-7,262.3	1,035.8	7,268.1	0.00	0.00	0.00
15,600.0	90.00	179.67	8,119.0	-7,362.3	1,036.4	7,368.1	0.00	0.00	0.00
15,700.0	90.00	179.67	8,119.0	-7,462.3	1,037.0	7,468.1	0.00	0.00	0.00
15,800.0	90.00	179.67	8,119.0	-7,562.3	1,037.5	7,568.1	0.00	0.00	0.00
15,874.8	90.00	179.67	8,119.0	-7,637.1	1,038.0	7,642.9	0.00	0.00	0.00
Exit NMNM 138867 - Voni Fed Com #023H									
15,900.0	90.00	179.67	8,119.0	-7,662.3	1,038.1	7,668.1	0.00	0.00	0.00
16,000.0	90.00	179.67	8,119.0	-7,762.3	1,038.7	7,768.1	0.00	0.00	0.00
16,100.0	90.00	179.67	8,119.0	-7,862.3	1,039.3	7,868.1	0.00	0.00	0.00
16,200.0	90.00	179.67	8,119.0	-7,962.2	1,039.8	7,968.1	0.00	0.00	0.00
16,300.0	90.00	179.67	8,119.0	-8,062.2	1,040.4	8,068.1	0.00	0.00	0.00
16,400.0	90.00	179.67	8,119.0	-8,162.2	1,041.0	8,168.1	0.00	0.00	0.00
16,500.0	90.00	179.67	8,119.0	-8,262.2	1,041.6	8,268.1	0.00	0.00	0.00
16,600.0	90.00	179.67	8,119.0	-8,362.2	1,042.1	8,368.1	0.00	0.00	0.00
16,700.0	90.00	179.67	8,119.0	-8,462.2	1,042.7	8,468.1	0.00	0.00	0.00
16,800.0	90.00	179.67	8,119.0	-8,562.2	1,043.3	8,568.1	0.00	0.00	0.00
16,900.0	90.00	179.67	8,119.0	-8,662.2	1,043.9	8,668.1	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3220.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3220.5usft
Site:	Voni	**North Reference:**	Grid
Well:	Voni Fed Com #023H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,000.0	90.00	179.67	8,119.0	-8,762.2	1,044.5	8,768.1	0.00	0.00	0.00
17,100.0	90.00	179.67	8,119.0	-8,862.2	1,045.0	8,868.1	0.00	0.00	0.00
17,200.0	90.00	179.67	8,119.0	-8,962.2	1,045.6	8,968.1	0.00	0.00	0.00
17,207.5	90.00	179.67	8,119.0	-8,969.7	1,045.6	8,975.6	0.00	0.00	0.00
Enter NMNM 138867 - Voni Fed Com #023H (2)									
17,300.0	90.00	179.67	8,119.0	-9,062.2	1,046.2	9,068.1	0.00	0.00	0.00
17,400.0	90.00	179.67	8,119.0	-9,162.2	1,046.8	9,168.1	0.00	0.00	0.00
17,500.0	90.00	179.67	8,119.0	-9,262.2	1,047.3	9,268.1	0.00	0.00	0.00
17,600.0	90.00	179.67	8,119.0	-9,362.2	1,047.9	9,368.1	0.00	0.00	0.00
17,700.0	90.00	179.67	8,119.0	-9,462.2	1,048.5	9,468.1	0.00	0.00	0.00
17,800.0	90.00	179.67	8,119.0	-9,562.2	1,049.1	9,568.1	0.00	0.00	0.00
17,900.0	90.00	179.67	8,119.0	-9,662.2	1,049.6	9,668.1	0.00	0.00	0.00
18,000.0	90.00	179.67	8,119.0	-9,762.2	1,050.2	9,768.1	0.00	0.00	0.00
18,100.0	90.00	179.67	8,119.0	-9,862.2	1,050.8	9,868.1	0.00	0.00	0.00
18,200.0	90.00	179.67	8,119.0	-9,962.2	1,051.4	9,968.1	0.00	0.00	0.00
18,300.0	90.00	179.67	8,119.0	-10,062.2	1,051.9	10,068.1	0.00	0.00	0.00
18,400.0	90.00	179.67	8,119.0	-10,162.2	1,052.5	10,168.1	0.00	0.00	0.00
18,500.0	90.00	179.67	8,119.0	-10,262.2	1,053.1	10,268.1	0.00	0.00	0.00
18,600.0	90.00	179.67	8,119.0	-10,362.2	1,053.7	10,368.1	0.00	0.00	0.00
18,700.0	90.00	179.67	8,119.0	-10,462.2	1,054.2	10,468.1	0.00	0.00	0.00
18,800.0	90.00	179.67	8,119.0	-10,562.2	1,054.8	10,568.1	0.00	0.00	0.00
18,900.0	90.00	179.67	8,119.0	-10,662.2	1,055.4	10,668.1	0.00	0.00	0.00
19,000.0	90.00	179.67	8,119.0	-10,762.2	1,056.0	10,768.1	0.00	0.00	0.00
19,100.0	90.00	179.67	8,119.0	-10,862.2	1,056.5	10,868.1	0.00	0.00	0.00
19,200.0	90.00	179.67	8,119.0	-10,962.2	1,057.1	10,968.1	0.00	0.00	0.00
19,300.0	90.00	179.67	8,119.0	-11,062.2	1,057.7	11,068.1	0.00	0.00	0.00
19,400.0	90.00	179.67	8,119.0	-11,162.2	1,058.3	11,168.1	0.00	0.00	0.00
19,500.0	90.00	179.67	8,119.0	-11,262.2	1,058.9	11,268.1	0.00	0.00	0.00
19,600.0	90.00	179.67	8,119.0	-11,362.2	1,059.4	11,368.1	0.00	0.00	0.00
19,700.0	90.00	179.67	8,119.0	-11,462.2	1,060.0	11,468.1	0.00	0.00	0.00
19,800.0	90.00	179.67	8,119.0	-11,562.2	1,060.6	11,568.1	0.00	0.00	0.00
19,900.0	90.00	179.67	8,119.0	-11,662.2	1,061.2	11,668.1	0.00	0.00	0.00
20,000.0	90.00	179.67	8,119.0	-11,762.2	1,061.7	11,768.1	0.00	0.00	0.00
20,100.0	90.00	179.67	8,119.0	-11,862.2	1,062.3	11,868.1	0.00	0.00	0.00
20,200.0	90.00	179.67	8,119.0	-11,962.2	1,062.9	11,968.1	0.00	0.00	0.00
20,300.0	90.00	179.67	8,119.0	-12,062.2	1,063.5	12,068.1	0.00	0.00	0.00
20,400.0	90.00	179.67	8,119.0	-12,162.2	1,064.0	12,168.1	0.00	0.00	0.00
20,500.0	90.00	179.67	8,119.0	-12,262.2	1,064.6	12,268.1	0.00	0.00	0.00
20,606.7	90.00	179.67	8,119.0	-12,368.8	1,065.2	12,374.8	0.00	0.00	0.00
TD at 20606.7 - BHL - Voni Fed Com #023H									

Planning Report

Database:	EDM 5000.14 Server	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3220.5usft
Project:	Rustler Breaks	**MD Reference:**	KB @ 3220.5usft
Site:	Voni	**North Reference:**	Grid
Well:	Voni Fed Com #023H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

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
KOP - Voni Fed Com #0 - plan hits target center - Point	0.00	0.01	7,546.0	276.7	992.4	376,946.94	672,292.23	32° 2' 6.442 N	103° 46' 38.403 W
FTP - Voni Fed Com #02 - plan misses target center by 0.3usft at 8494.5usft MD (8117.6 TVD, -256.9 N, 995.5 E) - Point	0.00	0.00	8,117.6	-256.9	995.2	376,413.33	672,295.06	32° 2' 1.161 N	103° 46' 38.402 W
Exit NMNM 138867 - Vc - plan misses target center by 0.3usft at 15874.8usft MD (8119.0 TVD, -7637.1 N, 1038.0 E) - Point	0.00	0.00	8,119.0	-7,637.1	1,037.7	369,033.33	672,337.64	32° 0' 48.124 N	103° 46' 38.349 W
Enter NMNM 138867 - \ - plan misses target center by 0.3usft at 17207.5usft MD (8119.0 TVD, -8969.7 N, 1045.6 E) - Point	0.00	0.00	8,119.0	-8,969.7	1,045.4	367,700.63	672,345.33	32° 0' 34.935 N	103° 46' 38.339 W
Enter NMNM 138867 - \ - plan misses target center by 0.3usft at 13210.4usft MD (8119.0 TVD, -4972.7 N, 1022.6 E) - Point	0.00	0.00	8,119.0	-4,972.7	1,022.4	371,697.70	672,322.28	32° 1' 14.492 N	103° 46' 38.368 W
BHL - Voni Fed Com #02 - plan misses target center by 1.3usft at 20606.7usft MD (8119.0 TVD, -12368.8 N, 1065.2 E) - Point	0.00	0.00	8,119.0	-12,368.9	1,064.0	364,301.37	672,363.90	32° 0' 1.294 N	103° 46' 38.326 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
893.6	893.6	Rustler			
1,574.9	1,571.2	Salado (Top Salt)			
4,047.8	4,006.6	Base Salt			
4,075.3	4,033.6	Bell Canyon			
5,167.2	5,109.0	Cherry Canyon			
6,316.6	6,240.9	Brushy Canyon			
7,412.7	7,324.9	L. Brushy Canyon			
8,011.0	7,896.5	BSGL			
8,297.9	8,071.1	Avalon-SS			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,000.0	1,000.0	0.0	0.0	Start Build 2.00
1,500.0	1,497.5	11.7	41.9	Start 5481.8 hold at 1500.0 MD
6,981.8	6,896.0	267.4	958.9	Start Drop -2.50
7,381.8	7,294.0	276.7	992.4	Start 252.0 hold at 7381.8 MD
7,633.8	7,546.0	276.7	992.4	Start Build 10.00
8,533.8	8,119.0	-296.2	995.7	Start 12072.8 hold at 8533.8 MD
20,606.7	8,119.0	-12,368.8	1,065.2	TD at 20606.7

Received by OCD: 11/13/2023 5:58:21 PM

Company: Matador Production Company
Well: Voni Fed Com #023H
County: Eddy County, New Mexico
Wellbore: Wellbore #1
Plan: BLM Plan #1
Date: 10/14/2023

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 6.05°
To convert a Magnetic Direction to a True Direction, Add 6.35° East
To convert a True Direction to a Grid Direction, Subtract 0.29°

T G M

Azimuths to Grid North
True North: -0.29°
Magnetic North: 6.05°

Magnetic Field
Strength: 47158.1snT
Dip Angle: 59.77°
Date: 10/14/2023
Model: IGRF2015

SURVEY PROGRAM

Depth From	Depth To	Survey/Plan	Tool
0.0	20606.7	BLM Plan #1 (Wellbore #1)	MWD

WELL DETAILS: Voni Fed Com #023H

GL @ 3192.0 KB @ 3220.5usft

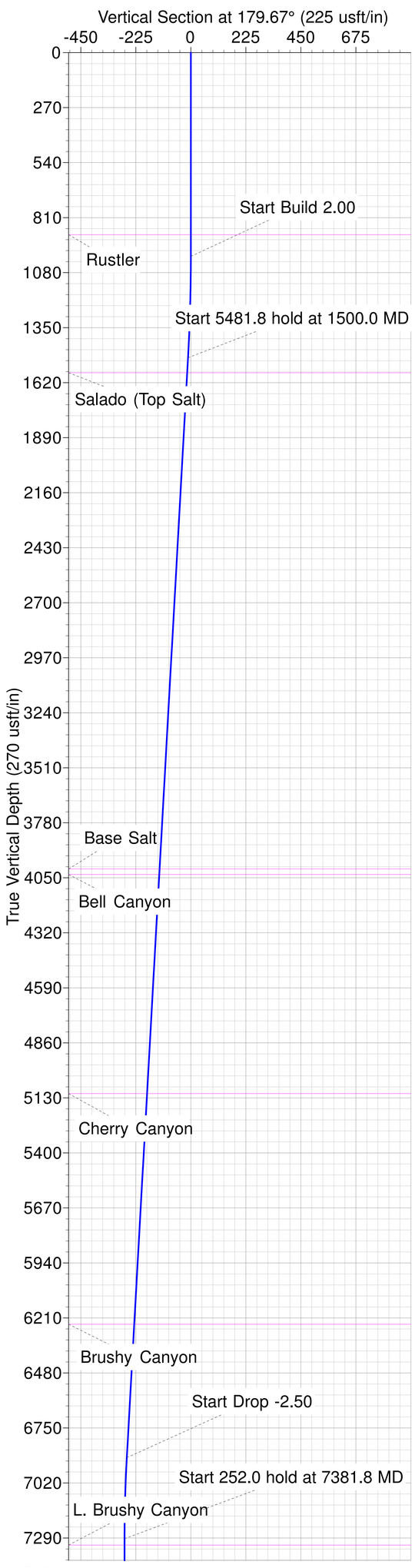
+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.0	0.0	376670.24	671299.95	32° 2' 3.754 N	103° 46' 49.947 W	

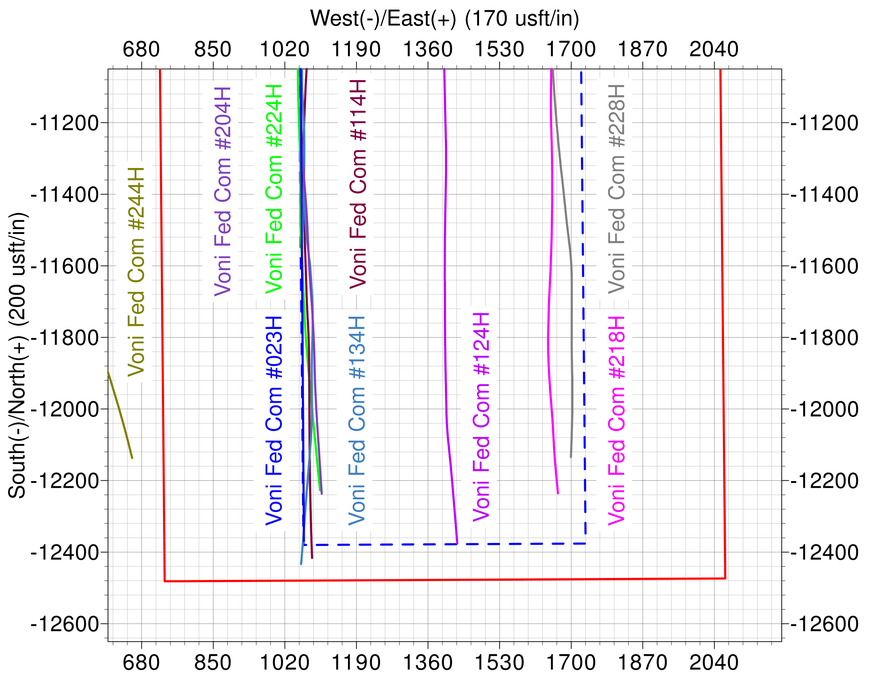
DESIGN TARGET DETAILS

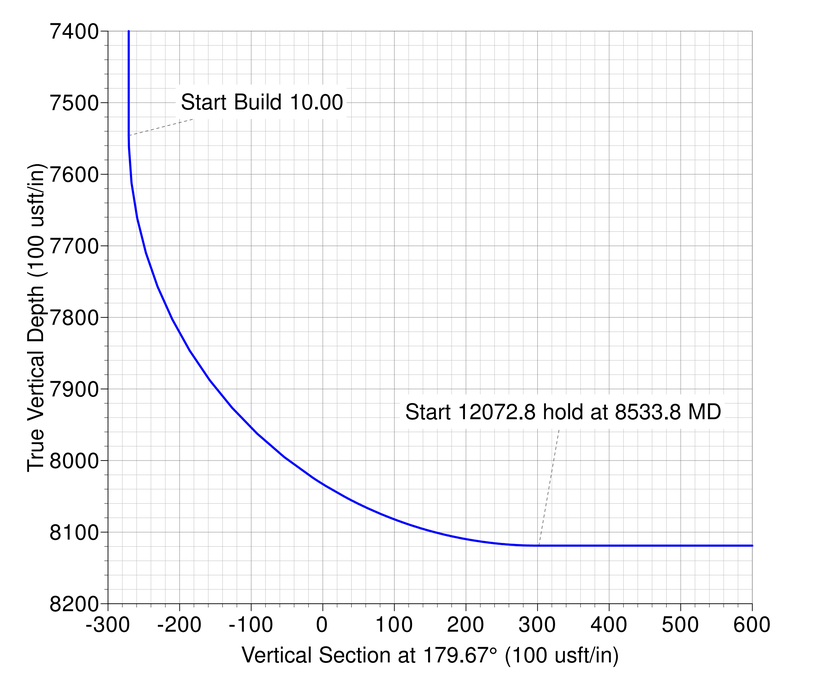
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
KOP - Voni Fed Com #023H	7546.0	276.7	992.4	376946.94	672292.23	32° 2' 6.442 N	103° 46' 38.403 W
BHL - Voni Fed Com #023H	8119.0	-12368.9	1064.0	364301.37	672363.91	32° 0' 1.294 N	103° 46' 38.326 W
Enter NMNM 138867 - Voni Fed Com #023H	8119.0	-4972.7	1022.4	371697.70	672322.28	32° 1' 14.492 N	103° 46' 38.368 W
Enter NMNM 138867 - Voni Fed Com #023H (2)	8119.0	-8969.7	1045.4	367700.63	672345.33	32° 0' 34.935 N	103° 46' 38.339 W
Exit NMNM 138867 - Voni Fed Com #023H	8119.0	-7637.1	1037.7	369033.33	672337.65	32° 0' 48.124 N	103° 46' 38.349 W
FTP - Voni Fed Com #023H	8117.6	-256.9	995.2	376413.33	672295.07	32° 2' 1.161 N	103° 46' 38.402 W

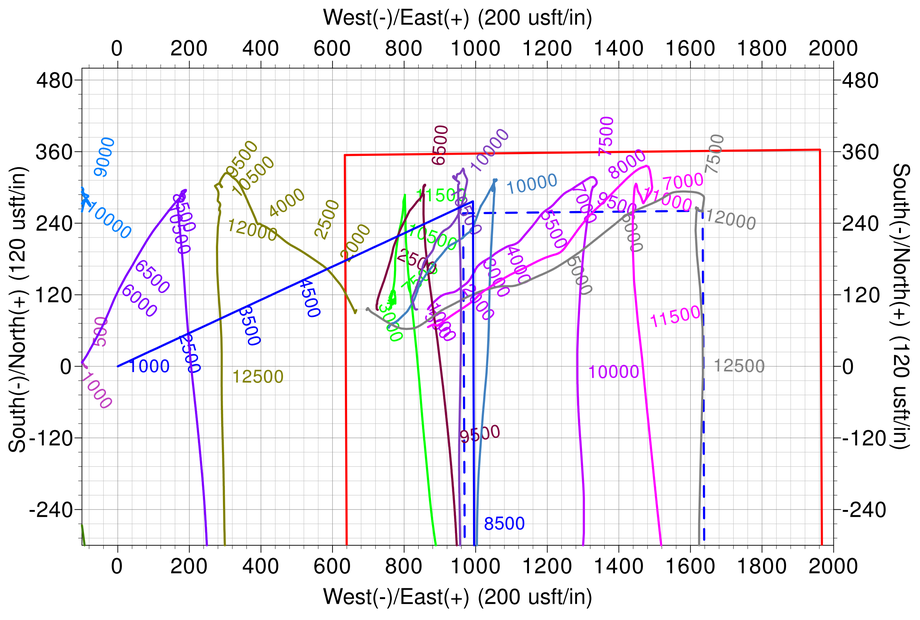
SECTION DETIALS

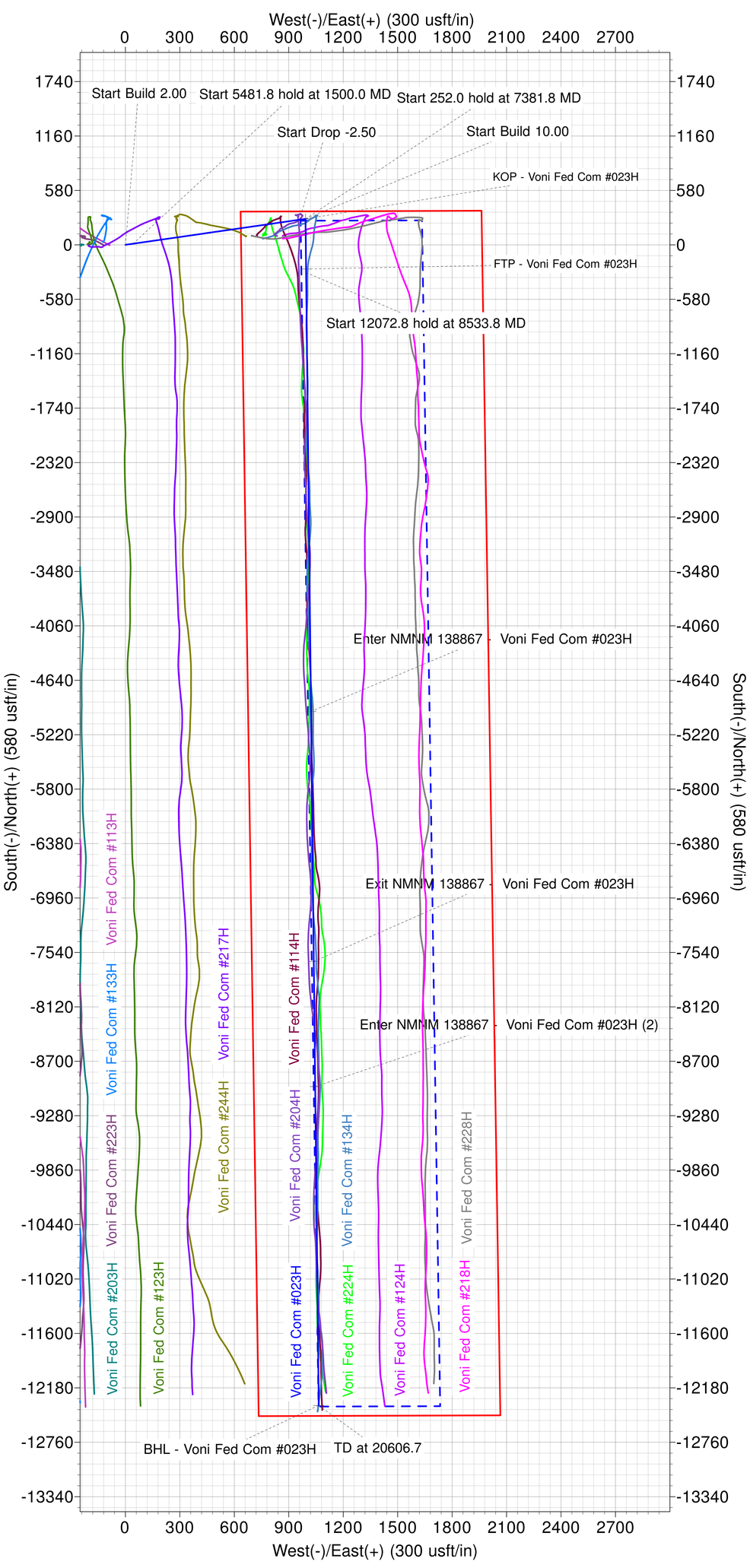
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00
1500.0	10.00	74.42	1497.5	11.7	41.9	2.00	74.42	-11.4	Start 5481.8 hold at 1500.0 MD
6981.8	10.00	74.42	6896.0	267.4	958.9	0.00	0.00	-261.8	Start Drop -2.50
7381.8	0.00	0.00	7294.0	276.7	992.4	2.50	180.00	-271.0	Start 252.0 hold at 7381.8 MD
7633.8	0.00	0.00	7546.0	276.7	992.4	0.00	0.00	-271.0	Start Build 10.00
8533.8	90.00	179.67	8119.0	-296.2	995.7	10.00	179.67	301.9	Start 12072.8 hold at 8533.8 MD
20606.7	90.00	179.67	8119.0	-12368.8	1065.2	0.00	0.00	12374.8	TD at 20606.7

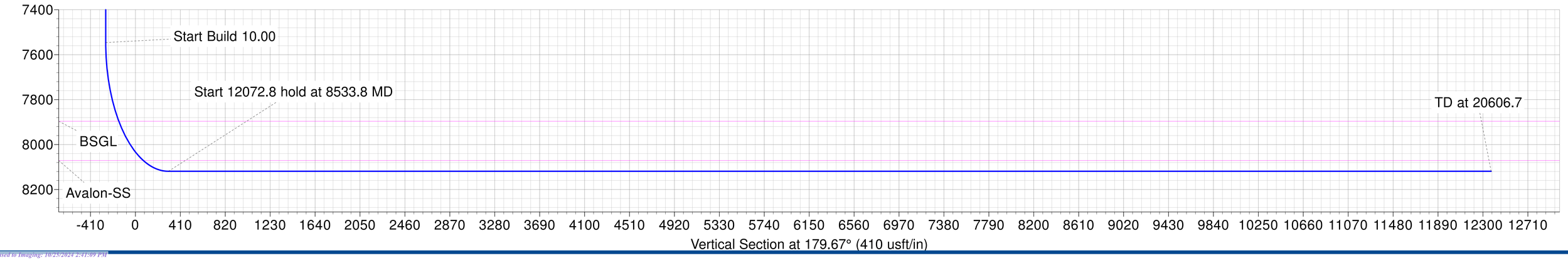












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District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 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	[3]Pool Name
30-015-46994	96411	BIG SINKS DELAWARE,SOUTHEAST

[4]Property Code	[5]Property Name	[6]Well Number
328098	VONI FED COM	023H

[7]OGRID No.	[8]Operator Name	[9]Elevation
228937	MATADOR PRODUCTION COMPANY	3192'

[10]Surface Location

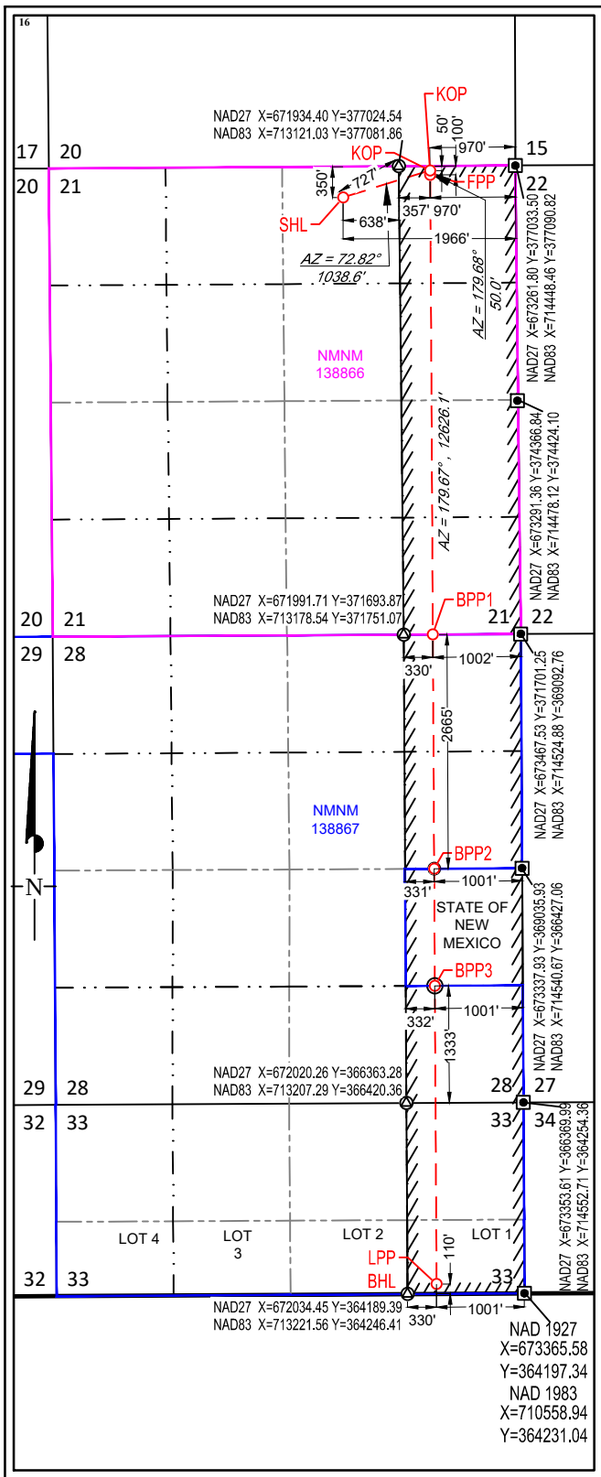
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	21	26-S	31-E	-	350'	NORTH	1966'	EAST	EDDY

[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
1	33	26-S	31-E	-	110'	SOUTH	1002'	EAST	EDDY

[12]Dedicated Acres	[13]Joint or Infill	[14]Consolidation Code	[15]Order No.
385.33			

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

SURFACE LOCATION (SHL)
350' FNL - SEC. 21
1966' FEL - SEC. 21
X=712487 Y=376728
LAT.: N 32.0345012
LONG.: W 103.7810153

KICK OFF POINT (KOP)
50' FNL - SEC. 21
970' FEL - SEC. 21
X=713479 Y=377034
LAT.: N 32.0353303
LONG.: W 103.7778081

FIRST PERFORATION POINT (FPP)
100' FNL - SEC. 21
970' FEL - SEC. 21
X=713479 Y=376984
LAT.: N 32.0351929
LONG.: W 103.7778080

BLM PERF. POINT (BPP1)
0' FSL - SEC. 21
1002' FEL - SEC. 21
X=713509 Y=371753
LAT.: N 32.0208121
LONG.: W 103.7777989

BLM PERF. POINT (BPP2)
2665' FNL - SEC. 28
1001' FEL - SEC. 28
X=713524 Y=369088
LAT.: N 32.0134857
LONG.: W 103.7777943

BLM PERF. POINT (BPP3)
1333' FSL - SEC. 28
1001' FEL - SEC. 28
X=713532 Y=367755
LAT.: N 32.0098218
LONG.: W 103.7777919

LAST PERFORATION POINT (LPP)
BOTTOM HOLE LOCATION (BHL)
110' FSL - SEC. 33
1001' FEL - SEC. 33
X=713551 Y=364358
LAT.: N 32.0004849
LONG.: W 103.7777860

[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.

Nicky Fitzgerald 10/24/23
Signature Date

Nicky Fitzgerald
Printed Name

nicky.fitzgerald@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.

09/27/2023
Date of Survey
Signature and Seal of Professional Surveyor

ANGEL M. BAEZA
NEW MEXICO
25116
PROFESSIONAL SURVEYOR

Certificate Number

NEW MEXICO EAST
NAD 1927

SURFACE LOCATION (SHL)
X=671300 Y=376670
LAT.: N 32.0343761
LONG.: W 103.7805410

KICK OFF POINT (KOP)
X=672292 Y=376977
LAT.: N 32.0352052
LONG.: W 103.7773339

FIRST PERFORATION POINT (FPP)
X=672292 Y=376927
LAT.: N 32.0350678
LONG.: W 103.7773338

BLM PERF. POINT (BPP1)
X=672322 Y=371696
LAT.: N 32.0206869
LONG.: W 103.7773254

BLM PERF. POINT (BPP2)
X=672337 Y=369031
LAT.: N 32.0133604
LONG.: W 103.7773211

BLM PERF. POINT (BPP3)
X=672345 Y=367698
LAT.: N 32.0096964
LONG.: W 103.7773190

LAST PERFORATION POINT (LPP)
BOTTOM HOLE LOCATION (BHL)
X=672364 Y=364301
LAT.: N 32.0003595
LONG.: W 103.7773135

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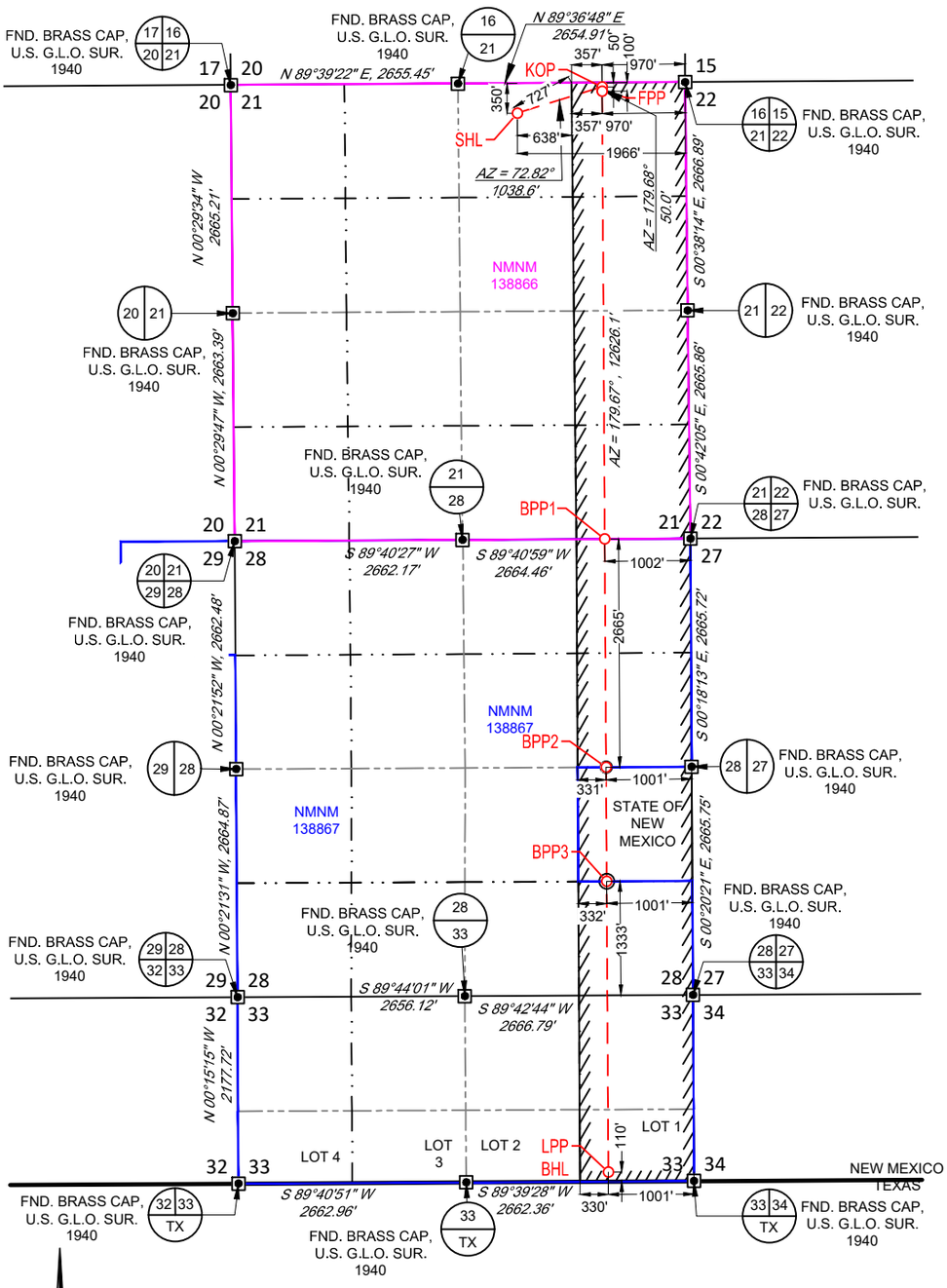
SECTION 21, TOWNSHIP 26-S, RANGE 31-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



NEW MEXICO EAST NAD 1983
SURFACE LOCATION (SHL)
350' FNL - SEC. 21 1966' FEL - SEC. 21 X=712487 Y=376728 LAT.: N 32.0345012 LONG.: W 103.7810153
KICK OFF POINT (KOP)
50' FNL - SEC. 21 970' FEL - SEC. 21 X=713479 Y=377034 LAT.: N 32.0353303 LONG.: W 103.7778081
FIRST PERFORATION POINT (FPP)
100' FNL - SEC. 21 970' FEL - SEC. 21 X=713479 Y=376984 LAT.: N 32.0351929 LONG.: W 103.7778080
BLM PERF. POINT (BPP1)
0' FSL - SEC. 21 1002' FEL - SEC. 21 X=713509 Y=371753 LAT.: N 32.0208121 LONG.: W 103.7777989
BLM PERF. POINT (BPP2)
2665' FNL - SEC. 28 1001' FEL - SEC. 28 X=713524 Y=369088 LAT.: N 32.0134857 LONG.: W 103.7777943
BLM PERF. POINT (BPP3)
1333' FSL - SEC. 28 1001' FEL - SEC. 28 X=713532 Y=367755 LAT.: N 32.0098218 LONG.: W 103.7777919
LAST PERFORATION POINT (LPP) BOTTOM HOLE LOCATION (BHL)
110' FSL - SEC. 33 1001' FEL - SEC. 33 X=713551 Y=364358 LAT.: N 32.0004849 LONG.: W 103.7777860

LEASE NAME & WELL NO.: VONI FED COM 023H

SECTION 21 TWP 26-S RGE 31-E SURVEY N.M.P.M.
COUNTY EDDY STATE NM
DESCRIPTION 350' FN/SL & 1966' FW/EL

DISTANCE & DIRECTION

FROM INT. OF NM128, & J-1/ORLA RD., GO SOUTH ON J-1/ORLA RD. ±10.5 MILES, THENCE WEST (RIGHT) ON PIPELINE RD ±5.2 MILES, THENCE SOUTH (LEFT) ON PROPOSED RD. ±1.0 MILES, THENCE WEST (RIGHT) ON PROPOSED RD. ±1.8 MILES, THENCE WEST (RIGHT) ON PROPOSED RD. ±194 FEET, TO A POINT ±275 FEET NORTHEAST OF THE LOCATION.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

AS OF THE DATE OF SURVEY, ALL ABOVE GROUND APPURTENANCES WITHIN 300' OF THE STAKED LOCATION ARE SHOWN HEREON.

ANGEL M. BAEZA NEW MEXICO 25116 PROFESSIONAL SURVEYOR

Angel M. Baeza, P.S. No. 25116

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
481 WINSCOTT ROAD, Ste. 200 • BENBROOK, TEXAS 76126
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2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
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S:\SURVEY\MATADOR_RESOURCES\VONI_FEDERAL_21-26S-31E\FINAL_PRODUCTS\LO_VONI_FED_COM_023H_REV4.DWG 10/10/2023 12:57:09 PM adisabella

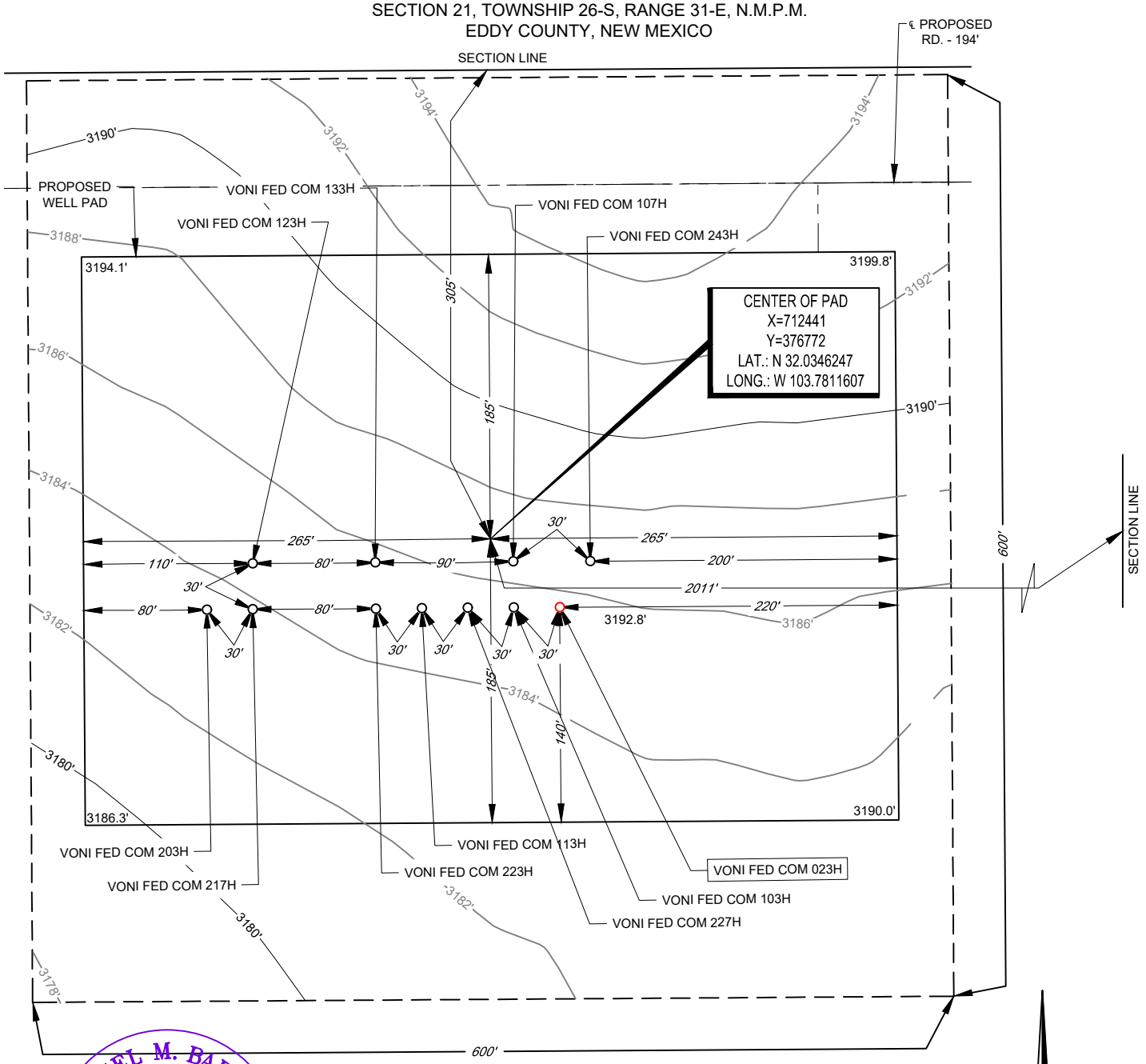
LEGEND

SECTION LINE
PROPOSED ROAD

Matador PRODUCTION COMPANY

DETAIL VIEW
SCALE: 1" = 100'

SECTION 21, TOWNSHIP 26-S, RANGE 31-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: VONI FED COM 023H

023H LATITUDE 32.0345012 023H LONGITUDE 103.7810153

CENTER OF PAD IS 305' FNL & 2011' FEL

SCALE: 1" = 100'
0' 50' 100'

ANGEL M. BAEZA NEW MEXICO 25116 PROFESSIONAL SURVEYOR

Angel M. Baeza, P.S. No. 25116

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET. ELEVATIONS USED ARE NAVD88, OBTAINED THROUGH AN OPUS SOLUTION.

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. ONLY THE DATA SHOWN ABOVE IS BEING CERTIFIED TO, ALL OTHER INFORMATION WAS INTENTIONALLY OMITTED. THIS PLAT IS ONLY INTENDED TO BE USED FOR A PERMIT AND IS NOT A BOUNDARY SURVEY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

ORIGINAL DOCUMENT SIZE: 8.5" X 11"

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
481 WINSCOTT ROAD, Ste. 200 • BENBROOK, TEXAS 76126
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM

Matador Production Company

Rustler Breaks
Voni
Voni Fed Com #023H

Wellbore #1
BLM Plan #1

Anticollision Report

14 October, 2023

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Reference	BLM Plan #1		
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 usft	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 10/14/2023

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	20,606.7	BLM Plan #1 (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)	Distance Between Ellipses (usft)	Separation Factor	Warning
Voni						
Voni Fed Com #022H - Wellbore #1 - BLM Plan #1	1,000.0	993.0	965.3	958.6	144.425	CC, ES
Voni Fed Com #022H - Wellbore #1 - BLM Plan #1	20,606.7	20,869.5	3,986.8	3,571.0	9.588	SF
Voni Fed Com #111H - Wellbore #1 - Actual	954.0	957.3	2,966.5	2,960.4	487.182	CC
Voni Fed Com #111H - Wellbore #1 - Actual	1,000.0	996.3	2,966.6	2,960.2	464.065	ES
Voni Fed Com #111H - Wellbore #1 - Actual	20,606.7	21,446.0	4,025.9	3,616.7	9.837	SF
Voni Fed Com #112H - Wellbore #1 - Actual Surveys	1,036.1	1,043.5	1,096.3	1,089.2	155.093	CC, ES
Voni Fed Com #112H - Wellbore #1 - Actual Surveys	20,606.7	22,957.0	3,884.2	3,528.0	10.906	SF
Voni Fed Com #113H - Wellbore #1 - Actual Survey	967.4	968.4	85.9	79.7	13.806	CC
Voni Fed Com #113H - Wellbore #1 - Actual Survey	1,000.0	1,000.6	86.0	79.6	13.337	ES
Voni Fed Com #113H - Wellbore #1 - Actual Survey	20,606.7	21,687.0	1,757.7	1,422.2	5.239	SF
Voni Fed Com #114H - Wellbore #1 - Actual	6,482.8	6,413.9	62.7	13.0	1.261	Level 3, CC
Voni Fed Com #114H - Wellbore #1 - Actual	6,500.0	6,430.8	62.8	12.9	1.260	Level 3, ES, SF
Voni Fed Com #121H - Wellbore #1 - Actual	860.3	862.3	2,940.2	2,934.7	540.713	CC
Voni Fed Com #121H - Wellbore #1 - Actual	1,000.0	987.7	2,940.5	2,934.1	461.660	ES
Voni Fed Com #121H - Wellbore #1 - Actual	20,606.7	22,296.0	4,030.0	3,642.1	10.389	SF
Voni Fed Com #122H - Wellbore #1 - Actual	894.5	887.6	1,244.8	1,239.0	216.585	CC
Voni Fed Com #122H - Wellbore #1 - Actual	1,000.0	989.7	1,244.9	1,238.4	191.865	ES
Voni Fed Com #122H - Wellbore #1 - Actual	20,606.7	22,419.0	2,943.5	2,586.6	8.249	SF
Voni Fed Com #123H - Wellbore #1 - Actual	1,005.0	1,004.4	195.7	189.1	29.579	CC, ES
Voni Fed Com #123H - Wellbore #1 - Actual	20,606.7	22,273.0	2,042.6	1,774.8	7.629	SF
Voni Fed Com #124H - Wellbore #1 - Actual	7,253.9	7,167.6	323.7	271.7	6.218	CC, ES
Voni Fed Com #124H - Wellbore #1 - Actual	7,381.8	7,296.9	327.0	274.1	6.175	SF
Voni Fed Com #131H - Wellbore #1 - Actual Surveys	862.3	863.4	2,859.0	2,853.5	520.365	CC
Voni Fed Com #131H - Wellbore #1 - Actual Surveys	1,000.0	994.4	2,859.2	2,852.8	442.908	ES
Voni Fed Com #131H - Wellbore #1 - Actual Surveys	14,200.0	1,096.0	9,994.6	9,941.3	187.772	SF
Voni Fed Com #132H - Wellbore #1 - Actual Surveys	0.0	0.0	1,135.8			
Voni Fed Com #132H - Wellbore #1 - Actual Surveys	1,011.8	1,010.4	1,136.1	1,129.3	166.363	ES
Voni Fed Com #132H - Wellbore #1 - Actual Surveys	20,606.7	23,055.0	3,242.1	2,918.3	10.013	SF
Voni Fed Com #133H - Wellbore #1 - Actual Survey	0.0	2.0	123.7			
Voni Fed Com #133H - Wellbore #1 - Actual Survey	1,044.0	1,047.7	127.8	121.0	18.871	ES
Voni Fed Com #133H - Wellbore #1 - Actual Survey	20,606.7	22,854.7	2,683.9	2,414.8	9.974	SF
Voni Fed Com #134H - Wellbore #1 - Actual	7,647.9	7,580.8	62.1	7.8	1.143	Level 2, CC
Voni Fed Com #134H - Wellbore #1 - Actual	7,650.0	7,582.9	62.1	7.7	1.142	Level 2, ES, SF
Voni Fed Com #201H - Wellbore #1 - Actual	0.0	2.8	2,971.5			
Voni Fed Com #201H - Wellbore #1 - Actual	200.0	187.8	2,972.1	2,971.3	3,796.508	ES
Voni Fed Com #201H - Wellbore #1 - Actual	20,606.7	23,500.0	4,970.3	4,618.2	14.116	SF
Voni Fed Com #202H - Wellbore #1 - Actual	0.0	0.0	1,245.3			

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Voni						
Voni Fed Com #202H - Wellbore #1 - Actual	800.0	786.8	1,249.2	1,244.1	244.855	ES
Voni Fed Com #202H - Wellbore #1 - Actual	20,606.7	23,575.0	4,076.0	3,765.1	13.113	SF
Voni Fed Com #203H - Wellbore #1 - Actual	0.0	0.0	230.1			
Voni Fed Com #203H - Wellbore #1 - Actual	600.0	597.7	231.8	228.1	61.883	ES
Voni Fed Com #203H - Wellbore #1 - Actual	20,606.7	23,611.2	3,383.7	3,143.0	14.059	SF
Voni Fed Com #204H - Wellbore #1 - Actual	7,112.6	7,035.1	56.0	1.7	1.030	Level 2, CC, ES, SF
Voni Fed Com #215H - Wellbore #1 - Actual	821.1	823.1	2,939.6	2,934.4	567.524	CC
Voni Fed Com #215H - Wellbore #1 - Actual	1,000.0	979.5	2,940.3	2,933.9	461.229	ES
Voni Fed Com #215H - Wellbore #1 - Actual	20,606.7	23,992.0	4,749.5	4,423.3	14.563	SF
Voni Fed Com #216H - Wellbore #1 - Actual	186.4	180.6	1,215.3	1,214.6	1,720.909	CC
Voni Fed Com #216H - Wellbore #1 - Actual	1,000.0	989.2	1,219.6	1,213.1	186.431	ES
Voni Fed Com #216H - Wellbore #1 - Actual	20,606.7	23,935.0	3,998.8	3,720.4	14.364	SF
Voni Fed Com #217H - Wellbore #1 - Actual	596.3	595.3	198.6	194.9	53.507	CC
Voni Fed Com #217H - Wellbore #1 - Actual	1,000.0	997.8	200.1	193.5	30.457	ES
Voni Fed Com #217H - Wellbore #1 - Actual	8,000.0	7,943.1	817.8	760.3	14.233	SF
Voni Fed Com #218H - Wellbore #1 - Actual	7,818.0	7,784.4	490.1	434.5	8.829	CC, ES
Voni Fed Com #218H - Wellbore #1 - Actual	7,900.0	7,861.7	491.3	435.5	8.798	SF
Voni Fed Com #221H - Wellbore #1 - Actual Surveys	247.2	250.1	2,861.7	2,860.6	2,730.080	CC
Voni Fed Com #221H - Wellbore #1 - Actual Surveys	600.0	590.8	2,862.7	2,859.1	799.729	ES
Voni Fed Com #221H - Wellbore #1 - Actual Surveys	20,606.7	24,369.0	5,456.1	5,123.6	16.408	SF
Voni Fed Com #222H - Wellbore #1 - Actual Survey	983.0	977.1	1,128.5	1,121.9	169.359	CC
Voni Fed Com #222H - Wellbore #1 - Actual Survey	1,000.0	993.1	1,128.5	1,121.7	166.443	ES
Voni Fed Com #222H - Wellbore #1 - Actual Survey	20,606.7	24,400.0	4,638.4	4,348.1	15.976	SF
Voni Fed Com #223H - Wellbore #1 - Actual Survey	0.0	0.0	120.1			
Voni Fed Com #223H - Wellbore #1 - Actual Survey	700.0	699.1	121.9	117.6	28.269	ES
Voni Fed Com #223H - Wellbore #1 - Actual Survey	20,606.7	24,421.0	4,067.4	3,833.1	17.358	SF
Voni Fed Com #224H - Wellbore #1 - Actual	5,736.4	5,670.8	84.7	41.4	1.958	CC, ES
Voni Fed Com #224H - Wellbore #1 - Actual	5,800.0	5,733.3	85.5	41.8	1.956	SF
Voni Fed Com #226H - Wellbore #1 - Actual	1,117.4	1,154.0	1,073.5	1,066.1	145.170	CC
Voni Fed Com #226H - Wellbore #1 - Actual	1,200.0	1,252.0	1,074.0	1,066.0	133.773	ES
Voni Fed Com #226H - Wellbore #1 - Actual	20,606.7	24,616.0	4,753.7	4,501.8	18.875	SF
Voni Fed Com #228H - Wellbore #1 - Actual	7,191.7	7,133.5	611.8	559.5	11.711	CC
Voni Fed Com #228H - Wellbore #1 - Actual	7,200.0	7,142.0	611.8	559.5	11.697	ES
Voni Fed Com #228H - Wellbore #1 - Actual	7,850.0	7,820.4	644.7	588.3	11.422	SF
Voni Fed Com #242H - Wellbore #1 - Actual	100.0	93.9	1,045.3	1,045.0	3,807.818	CC
Voni Fed Com #242H - Wellbore #1 - Actual	700.0	685.2	1,047.4	1,043.1	244.988	ES
Voni Fed Com #242H - Wellbore #1 - Actual	20,606.7	24,570.0	5,379.6	5,082.0	18.078	SF
Voni Fed Com #244H - Wellbore #1 - Actual	3,803.5	3,789.1	124.4	95.9	4.357	CC, ES
Voni Fed Com #244H - Wellbore #1 - Actual	3,900.0	3,879.5	126.8	97.7	4.351	SF

Offset Design Voni - Voni Fed Com #022H - Wellbore #1 - BLM Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	7.0	-7.0	0.0	0.0	-90.37	-6.3	-965.3	965.3				
100.0	100.0	107.0	93.0	0.1	0.2	-90.37	-6.3	-965.3	965.3	965.0	0.28	3,430.331	
200.0	200.0	207.0	193.0	0.5	0.5	-90.37	-6.3	-965.3	965.3	964.3	1.00	966.899	
300.0	300.0	307.0	293.0	0.8	0.9	-90.37	-6.3	-965.3	965.3	963.6	1.72	562.761	
400.0	400.0	407.0	393.0	1.2	1.2	-90.37	-6.3	-965.3	965.3	962.9	2.43	396.877	
500.0	500.0	507.0	493.0	1.6	1.6	-90.37	-6.3	-965.3	965.3	962.1	3.15	306.524	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #022H - Wellbore #1 - BLM Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
600.0	600.0	607.0	593.0	1.9	1.9	-90.37	-6.3	-965.3	965.3	961.4	3.87	249.681	
700.0	700.0	707.0	693.0	2.3	2.3	-90.37	-6.3	-965.3	965.3	960.7	4.58	210.623	
800.0	800.0	807.0	793.0	2.6	2.7	-90.37	-6.3	-965.3	965.3	960.0	5.30	182.131	
900.0	900.0	907.0	893.0	3.0	3.0	-90.37	-6.3	-965.3	965.3	959.3	6.02	160.430	
1,000.0	1,000.0	993.0	993.0	3.4	3.3	-90.37	-6.3	-965.3	965.3	958.6	6.68	144.425	CC, ES
1,100.0	1,100.0	1,079.1	1,079.1	3.7	3.6	-164.69	-4.4	-965.9	967.6	960.3	7.34	131.766	
1,200.0	1,199.8	1,163.6	1,163.4	4.1	3.9	-164.37	1.6	-967.7	974.9	966.9	7.99	121.948	
1,300.0	1,299.5	1,247.0	1,246.1	4.4	4.2	-163.82	11.7	-970.9	987.1	978.5	8.65	114.179	
1,400.0	1,398.7	1,328.8	1,326.6	4.8	4.6	-163.09	25.5	-975.2	1,004.3	995.0	9.30	108.031	
1,500.0	1,497.5	1,408.5	1,404.2	5.2	4.9	-162.17	42.6	-980.6	1,026.6	1,016.7	9.95	103.200	
1,600.0	1,595.9	1,484.7	1,477.5	5.5	5.2	-161.29	62.3	-986.8	1,052.4	1,041.8	10.59	99.348	
1,700.0	1,694.4	1,553.9	1,544.1	5.9	5.5	-160.55	79.8	-993.9	1,080.5	1,069.3	11.20	96.451	
1,800.0	1,792.9	1,623.0	1,610.9	6.3	5.8	-159.98	94.9	-1,002.9	1,111.0	1,099.2	11.80	94.130	
1,900.0	1,891.4	1,691.7	1,677.6	6.8	6.1	-159.55	107.6	-1,013.5	1,143.9	1,131.5	12.39	92.321	
2,000.0	1,989.9	1,759.8	1,743.8	7.2	6.4	-159.28	117.9	-1,025.8	1,178.8	1,165.9	12.96	90.992	
2,100.0	2,088.4	1,827.0	1,809.1	7.6	6.7	-159.15	125.8	-1,039.5	1,215.8	1,202.3	13.50	90.055	
2,200.0	2,186.8	1,900.0	1,879.9	8.0	7.0	-159.14	131.7	-1,056.2	1,254.8	1,240.7	14.07	89.196	
2,300.0	2,285.3	1,962.2	1,939.9	8.5	7.3	-159.24	134.9	-1,071.9	1,295.6	1,281.0	14.55	89.039	
2,400.0	2,383.8	2,038.0	2,013.0	8.9	7.6	-159.37	138.2	-1,091.9	1,337.6	1,322.5	15.12	88.484	
2,500.0	2,482.3	2,113.0	2,085.1	9.3	8.0	-159.51	141.4	-1,112.6	1,380.7	1,365.0	15.68	88.058	
2,600.0	2,580.8	2,187.2	2,156.1	9.8	8.3	-159.64	144.5	-1,133.8	1,424.7	1,408.5	16.24	87.749	
2,700.0	2,679.2	2,260.6	2,226.1	10.2	8.7	-159.77	147.4	-1,155.5	1,469.8	1,453.0	16.79	87.543	
2,800.0	2,777.7	2,333.2	2,295.1	10.6	9.1	-159.90	150.3	-1,177.8	1,515.8	1,498.5	17.34	87.431	
2,900.0	2,876.2	2,404.9	2,363.1	11.1	9.4	-160.03	153.0	-1,200.6	1,562.8	1,544.9	17.88	87.405	
3,000.0	2,974.7	2,475.8	2,430.1	11.5	9.8	-160.15	155.6	-1,223.8	1,610.8	1,592.3	18.42	87.454	
3,100.0	3,073.2	2,545.9	2,496.0	11.9	10.2	-160.27	158.1	-1,247.4	1,659.6	1,640.7	18.95	87.574	
3,200.0	3,171.6	2,615.1	2,560.9	12.4	10.6	-160.39	160.5	-1,271.4	1,709.4	1,689.9	19.48	87.758	
3,300.0	3,270.1	2,683.6	2,624.8	12.8	11.0	-160.50	162.8	-1,295.8	1,760.1	1,740.1	20.00	88.000	
3,400.0	3,368.6	2,751.2	2,687.6	13.3	11.4	-160.62	164.9	-1,320.6	1,811.6	1,791.1	20.52	88.294	
3,500.0	3,467.1	2,817.9	2,749.4	13.7	11.9	-160.73	167.0	-1,345.7	1,864.0	1,843.0	21.03	88.640	
3,600.0	3,565.6	2,883.8	2,810.3	14.2	12.3	-160.83	169.0	-1,371.1	1,917.3	1,895.8	21.54	89.029	
3,700.0	3,664.0	2,948.9	2,870.1	14.6	12.7	-160.94	170.9	-1,396.7	1,971.4	1,949.4	22.04	89.460	
3,800.0	3,762.5	3,013.2	2,928.9	15.1	13.2	-161.04	172.7	-1,422.6	2,026.3	2,003.8	22.53	89.931	
3,900.0	3,861.0	3,076.7	2,986.7	15.5	13.6	-161.14	174.4	-1,448.7	2,082.0	2,059.0	23.02	90.436	
4,000.0	3,959.5	3,139.3	3,043.5	16.0	14.1	-161.24	176.0	-1,475.1	2,138.5	2,115.0	23.51	90.975	
4,100.0	4,058.0	3,200.0	3,098.3	16.4	14.5	-161.33	177.5	-1,501.1	2,195.8	2,171.8	23.98	91.587	
4,200.0	4,156.4	3,262.2	3,154.3	16.8	15.0	-161.42	178.9	-1,528.2	2,253.8	2,229.4	24.46	92.143	
4,300.0	4,254.9	3,322.5	3,208.2	17.3	15.5	-161.51	180.3	-1,555.1	2,312.6	2,287.7	24.93	92.768	
4,400.0	4,353.4	3,381.9	3,261.1	17.7	16.0	-161.60	181.6	-1,582.0	2,372.1	2,346.7	25.39	93.418	
4,500.0	4,451.9	3,440.6	3,313.2	18.2	16.4	-161.68	182.8	-1,609.0	2,432.3	2,406.5	25.85	94.090	
4,600.0	4,550.4	3,500.0	3,365.7	18.6	16.9	-161.77	183.9	-1,636.9	2,493.2	2,466.9	26.32	94.733	
4,700.0	4,648.9	3,555.5	3,414.5	19.1	17.4	-161.85	184.9	-1,663.4	2,554.8	2,528.1	26.75	95.500	
4,800.0	4,747.3	3,611.9	3,463.8	19.5	17.9	-161.92	185.9	-1,690.6	2,617.1	2,589.9	27.19	96.235	
4,900.0	4,845.8	3,667.4	3,512.2	20.0	18.4	-162.00	186.9	-1,717.9	2,680.0	2,652.4	27.63	96.986	
5,000.0	4,944.3	3,722.3	3,559.7	20.4	18.9	-162.07	187.7	-1,745.3	2,743.6	2,715.5	28.07	97.755	
5,100.0	5,042.8	3,776.3	3,606.3	20.9	19.3	-162.15	188.5	-1,772.6	2,807.8	2,779.3	28.49	98.538	
5,200.0	5,141.3	3,831.2	3,651.9	21.3	19.9	-162.22	189.2	-1,799.8	2,872.6	2,843.7	28.92	99.319	
5,300.0	5,239.7	3,905.2	3,716.8	21.8	20.5	-162.31	190.2	-1,838.9	2,937.8	2,908.2	29.56	99.371	
5,400.0	5,338.2	3,981.0	3,781.7	22.2	21.3	-162.41	191.3	-1,878.0	3,002.9	2,972.7	30.22	99.384	
5,500.0	5,436.7	4,056.7	3,846.6	22.7	22.0	-162.49	192.3	-1,917.1	3,068.1	3,037.2	30.87	99.390	
5,600.0	5,535.2	4,132.5	3,911.5	23.1	22.7	-162.58	193.3	-1,956.2	3,133.2	3,101.7	31.52	99.389	
5,700.0	5,633.7	4,208.3	3,976.4	23.6	23.4	-162.66	194.3	-1,995.3	3,198.4	3,166.2	32.18	99.382	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #022H - Wellbore #1 - BLM Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,800.0	5,732.1	4,284.1	4,041.3	24.0	24.2	-162.74	195.3	-2,034.4	3,263.5	3,230.7	32.84	99.369	
5,900.0	5,830.6	4,388.8	4,131.1	24.5	25.2	-162.84	196.7	-2,088.2	3,328.6	3,294.8	33.79	98.521	
6,000.0	5,929.1	4,545.1	4,266.7	24.9	26.6	-162.99	198.7	-2,166.1	3,392.2	3,357.0	35.21	96.335	
6,100.0	6,027.6	4,707.6	4,409.5	25.4	28.1	-163.13	200.7	-2,243.7	3,453.9	3,417.3	36.67	94.193	
6,200.0	6,126.1	4,876.5	4,559.8	25.8	29.6	-163.27	202.7	-2,320.5	3,513.7	3,475.5	38.15	92.107	
6,300.0	6,224.5	5,051.8	4,717.9	26.3	31.1	-163.41	204.6	-2,396.3	3,571.3	3,531.7	39.65	90.080	
6,400.0	6,323.0	5,233.7	4,884.0	26.7	32.5	-163.55	206.5	-2,470.4	3,626.8	3,585.6	41.16	88.118	
6,500.0	6,421.5	6,500.0	5,021.1	27.2	42.0	-163.66	208.0	-2,527.4	3,679.9	3,632.6	47.29	77.809	
6,600.0	6,520.0	5,617.6	5,240.8	27.6	35.3	-163.82	210.2	-2,611.7	3,730.5	3,686.3	44.20	84.407	
6,700.0	6,618.5	5,819.7	5,431.8	28.1	36.7	-163.96	211.9	-2,677.7	3,778.6	3,732.9	45.71	82.667	
6,800.0	6,716.9	6,028.4	5,631.1	28.5	37.9	-164.10	213.5	-2,739.8	3,823.9	3,776.7	47.20	81.009	
6,900.0	6,815.4	6,243.8	5,838.7	29.0	39.1	-164.23	215.0	-2,797.2	3,866.3	3,817.6	48.67	79.435	
6,981.8	6,896.0	6,981.8	5,971.7	29.4	43.0	-164.32	215.8	-2,830.1	3,898.8	3,846.8	51.94	75.060	
7,000.0	6,913.9	6,465.7	6,054.3	29.5	40.3	-164.42	216.3	-2,849.3	3,905.7	3,855.5	50.11	77.946	
7,100.0	7,012.9	6,696.1	6,280.0	29.9	41.4	-164.77	217.5	-2,895.7	3,939.2	3,887.7	51.50	76.486	
7,200.0	7,112.3	6,934.9	6,515.5	30.3	42.3	-165.02	218.5	-2,935.5	3,965.4	3,912.6	52.84	75.044	
7,300.0	7,212.2	7,180.1	6,758.6	30.6	43.2	-165.18	219.4	-2,967.5	3,984.0	3,929.9	54.11	73.632	
7,381.8	7,294.0	7,384.1	6,961.6	30.9	43.9	-90.82	219.9	-2,987.2	3,993.3	3,938.2	55.07	72.515	
7,400.0	7,312.2	7,429.6	7,007.0	30.9	44.0	-90.82	220.0	-2,990.8	3,994.7	3,939.4	55.27	72.274	
7,500.0	7,412.2	7,681.0	7,258.0	31.2	44.7	-90.81	220.3	-3,004.8	4,000.3	3,944.0	56.33	71.009	
7,600.0	7,512.2	7,600.0	7,497.6	31.5	44.6	-90.81	220.4	-3,009.3	4,002.1	3,945.8	56.31	71.073	
7,633.8	7,546.0	7,960.3	7,537.2	31.6	45.3	-90.82	219.3	-3,009.3	4,002.1	3,944.6	57.49	69.614	
7,650.0	7,562.2	7,975.6	7,552.5	31.7	45.4	89.49	218.2	-3,009.3	4,002.1	3,944.5	57.58	69.500	
7,700.0	7,612.0	8,022.9	7,599.3	31.8	45.4	89.45	212.1	-3,009.2	4,002.1	3,944.2	57.86	69.164	
7,750.0	7,661.4	8,070.0	7,645.3	31.9	45.5	89.42	202.2	-3,009.2	4,002.1	3,944.0	58.13	68.852	
7,800.0	7,709.8	8,116.9	7,690.2	32.0	45.6	89.38	188.6	-3,009.1	4,002.1	3,943.8	58.37	68.563	
7,850.0	7,757.1	8,163.6	7,733.7	32.1	45.7	89.36	171.5	-3,008.9	4,002.1	3,943.5	58.60	68.294	
7,900.0	7,802.7	8,210.2	7,775.5	32.2	45.7	89.33	150.9	-3,008.8	4,002.1	3,943.3	58.82	68.044	
7,950.0	7,846.4	8,256.7	7,815.4	32.3	45.8	89.31	127.1	-3,008.6	4,002.1	3,943.1	59.02	67.808	
8,000.0	7,887.7	8,303.1	7,853.2	32.4	45.8	89.30	100.2	-3,008.4	4,002.1	3,942.9	59.22	67.583	
8,050.0	7,926.5	8,349.4	7,888.6	32.4	45.9	89.29	70.4	-3,008.2	4,002.1	3,942.7	59.41	67.364	
8,100.0	7,962.4	8,395.7	7,921.4	32.5	45.9	89.29	37.8	-3,008.0	4,002.0	3,942.4	59.60	67.147	
8,150.0	7,995.1	8,441.9	7,951.5	32.5	46.0	89.29	2.7	-3,007.8	4,002.0	3,942.2	59.80	66.927	
8,200.0	8,024.4	8,488.2	7,978.7	32.6	46.0	89.30	-34.7	-3,007.5	4,001.9	3,941.9	60.00	66.701	
8,250.0	8,050.1	8,534.4	8,002.8	32.6	46.0	89.31	-74.1	-3,007.2	4,001.9	3,941.7	60.21	66.461	
8,300.0	8,071.9	8,580.7	8,023.6	32.7	46.0	89.32	-115.5	-3,006.9	4,001.8	3,941.4	60.44	66.212	
8,350.0	8,089.7	8,627.1	8,041.1	32.7	46.1	89.34	-158.4	-3,006.6	4,001.7	3,941.1	60.68	65.946	
8,400.0	8,103.4	8,673.5	8,055.0	32.7	46.1	89.37	-202.7	-3,006.3	4,001.7	3,940.7	60.94	65.663	
8,450.0	8,112.8	8,720.1	8,065.4	32.8	46.1	89.40	-248.1	-3,006.0	4,001.6	3,940.4	61.22	65.363	
8,500.0	8,118.0	8,766.8	8,072.0	32.9	46.1	89.44	-294.3	-3,005.7	4,001.5	3,940.0	61.52	65.047	
8,533.8	8,119.0	8,798.4	8,074.3	33.0	46.2	89.46	-325.9	-3,005.5	4,001.5	3,939.7	61.73	64.827	
8,600.0	8,119.0	8,862.9	8,075.0	33.1	46.2	89.47	-390.3	-3,005.0	4,001.4	3,939.2	62.19	64.343	
8,700.0	8,119.0	8,962.9	8,075.0	33.4	46.4	89.47	-490.3	-3,004.3	4,001.3	3,938.2	63.03	63.482	
8,800.0	8,119.0	9,062.9	8,075.0	33.8	46.5	89.47	-590.3	-3,003.6	4,001.1	3,937.1	64.03	62.490	
8,900.0	8,119.0	9,162.9	8,075.0	34.3	46.7	89.47	-690.3	-3,002.9	4,001.0	3,935.8	65.18	61.384	
9,000.0	8,119.0	9,262.9	8,075.0	34.9	47.0	89.47	-790.3	-3,002.2	4,000.9	3,934.4	66.48	60.185	
9,100.0	8,119.0	9,362.9	8,075.0	35.5	47.3	89.47	-890.2	-3,001.5	4,000.8	3,932.9	67.91	58.913	
9,200.0	8,119.0	9,462.9	8,075.0	36.3	47.6	89.47	-990.2	-3,000.8	4,000.6	3,931.2	69.47	57.588	
9,300.0	8,119.0	9,562.9	8,075.0	37.1	48.0	89.47	-1,090.2	-3,000.2	4,000.5	3,929.4	71.15	56.226	
9,400.0	8,119.0	9,662.9	8,075.0	37.9	48.5	89.47	-1,190.2	-2,999.5	4,000.4	3,927.5	72.94	54.843	
9,500.0	8,119.0	9,762.9	8,075.0	38.8	49.0	89.47	-1,290.2	-2,998.8	4,000.3	3,925.4	74.84	53.452	
9,600.0	8,119.0	9,862.9	8,075.0	39.8	49.5	89.47	-1,390.2	-2,998.1	4,000.2	3,923.3	76.83	52.065	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #022H - Wellbore #1 - BLM Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,700.0	8,119.0	9,962.9	8,075.0	40.8	50.2	89.47	-1,490.2	-2,997.4	4,000.0	3,921.1	78.91	50.691	
9,800.0	8,119.0	10,062.9	8,075.0	41.8	50.8	89.47	-1,590.2	-2,996.7	3,999.9	3,918.8	81.07	49.339	
9,900.0	8,119.0	10,162.9	8,075.0	42.9	51.6	89.47	-1,690.2	-2,996.0	3,999.8	3,916.5	83.31	48.012	
10,000.0	8,119.0	10,262.9	8,075.0	44.0	52.3	89.47	-1,790.2	-2,995.3	3,999.7	3,914.1	85.61	46.718	
10,100.0	8,119.0	10,362.9	8,075.0	45.2	53.2	89.47	-1,890.2	-2,994.6	3,999.6	3,911.6	87.98	45.458	
10,200.0	8,119.0	10,462.9	8,075.0	46.3	54.0	89.47	-1,990.2	-2,993.9	3,999.4	3,909.0	90.41	44.235	
10,300.0	8,119.0	10,562.9	8,075.0	47.5	55.0	89.47	-2,090.2	-2,993.2	3,999.3	3,906.4	92.90	43.052	
10,400.0	8,119.0	10,662.9	8,075.0	48.8	55.9	89.47	-2,190.2	-2,992.5	3,999.2	3,903.8	95.43	41.908	
10,500.0	8,119.0	10,762.9	8,075.0	50.0	56.9	89.47	-2,290.2	-2,991.8	3,999.1	3,901.1	98.01	40.803	
10,600.0	8,119.0	10,862.9	8,075.0	51.3	58.0	89.47	-2,390.2	-2,991.1	3,999.0	3,898.3	100.63	39.739	
10,700.0	8,119.0	10,962.9	8,075.0	52.6	59.1	89.47	-2,490.2	-2,990.4	3,998.8	3,895.5	103.29	38.714	
10,800.0	8,119.0	11,062.9	8,075.0	54.0	60.2	89.47	-2,590.2	-2,989.7	3,998.7	3,892.7	105.99	37.727	
10,900.0	8,119.0	11,162.9	8,075.0	55.3	61.3	89.47	-2,690.2	-2,989.0	3,998.6	3,889.9	108.72	36.778	
11,000.0	8,119.0	11,262.9	8,075.0	56.7	62.5	89.47	-2,790.2	-2,988.3	3,998.5	3,887.0	111.48	35.866	
11,100.0	8,119.0	11,362.9	8,075.0	58.0	63.7	89.47	-2,890.2	-2,987.6	3,998.3	3,884.1	114.28	34.989	
11,200.0	8,119.0	11,462.9	8,075.0	59.4	64.9	89.47	-2,990.2	-2,986.9	3,998.2	3,881.1	117.09	34.145	
11,300.0	8,119.0	11,562.9	8,075.0	60.8	66.2	89.47	-3,090.2	-2,986.2	3,998.1	3,878.2	119.94	33.335	
11,400.0	8,119.0	11,662.9	8,075.0	62.2	67.4	89.47	-3,190.2	-2,985.5	3,998.0	3,875.2	122.80	32.556	
11,500.0	8,119.0	11,762.9	8,075.0	63.6	68.7	89.47	-3,290.2	-2,984.8	3,997.9	3,872.2	125.69	31.806	
11,600.0	8,119.0	11,862.9	8,075.0	65.1	70.0	89.47	-3,390.2	-2,984.1	3,997.7	3,869.1	128.60	31.086	
11,700.0	8,119.0	11,962.9	8,075.0	66.5	71.3	89.47	-3,490.2	-2,983.4	3,997.6	3,866.1	131.53	30.393	
11,800.0	8,119.0	12,062.9	8,075.0	68.0	72.7	89.47	-3,590.2	-2,982.7	3,997.5	3,863.0	134.47	29.727	
11,900.0	8,119.0	12,162.9	8,075.0	69.4	74.0	89.47	-3,690.2	-2,982.0	3,997.4	3,859.9	137.44	29.085	
12,000.0	8,119.0	12,262.9	8,075.0	70.9	75.4	89.47	-3,790.2	-2,981.3	3,997.3	3,856.8	140.41	28.468	
12,100.0	8,119.0	12,362.9	8,075.0	72.4	76.8	89.47	-3,890.2	-2,980.6	3,997.1	3,853.7	143.41	27.873	
12,200.0	8,119.0	12,462.9	8,075.0	73.9	78.2	89.47	-3,990.2	-2,979.9	3,997.0	3,850.6	146.41	27.300	
12,300.0	8,119.0	12,562.9	8,075.0	75.4	79.6	89.47	-4,090.2	-2,979.2	3,996.9	3,847.5	149.43	26.748	
12,400.0	8,119.0	12,662.9	8,075.0	76.9	81.0	89.47	-4,190.2	-2,978.5	3,996.8	3,844.3	152.46	26.215	
12,500.0	8,119.0	12,762.9	8,075.0	78.4	82.4	89.47	-4,290.2	-2,977.8	3,996.7	3,841.2	155.50	25.702	
12,600.0	8,119.0	12,862.9	8,075.0	79.9	83.8	89.47	-4,390.2	-2,977.2	3,996.5	3,838.0	158.55	25.206	
12,700.0	8,119.0	12,962.9	8,075.0	81.4	85.3	89.47	-4,490.2	-2,976.5	3,996.4	3,834.8	161.61	24.728	
12,800.0	8,119.0	13,062.9	8,075.0	82.9	86.7	89.47	-4,590.2	-2,975.8	3,996.3	3,831.6	164.69	24.266	
12,900.0	8,119.0	13,162.9	8,075.0	84.5	88.2	89.47	-4,690.2	-2,975.1	3,996.2	3,828.4	167.77	23.820	
13,000.0	8,119.0	13,262.9	8,075.0	86.0	89.7	89.47	-4,790.2	-2,974.4	3,996.0	3,825.2	170.86	23.388	
13,100.0	8,119.0	13,362.9	8,075.0	87.5	91.1	89.47	-4,890.1	-2,973.7	3,995.9	3,822.0	173.95	22.971	
13,200.0	8,119.0	13,462.9	8,075.0	89.1	92.6	89.47	-4,990.1	-2,973.0	3,995.8	3,818.7	177.06	22.568	
13,300.0	8,119.0	13,562.9	8,075.0	90.6	94.1	89.47	-5,090.1	-2,972.3	3,995.7	3,815.5	180.17	22.177	
13,400.0	8,119.0	13,662.9	8,075.0	92.2	95.6	89.47	-5,190.1	-2,971.6	3,995.6	3,812.3	183.29	21.799	
13,500.0	8,119.0	13,762.9	8,075.0	93.7	97.1	89.47	-5,290.1	-2,970.9	3,995.4	3,809.0	186.41	21.433	
13,600.0	8,119.0	13,862.9	8,075.0	95.3	98.6	89.47	-5,390.1	-2,970.2	3,995.3	3,805.8	189.55	21.078	
13,700.0	8,119.0	13,962.9	8,075.0	96.8	100.1	89.47	-5,490.1	-2,969.5	3,995.2	3,802.5	192.68	20.735	
13,800.0	8,119.0	14,062.9	8,075.0	98.4	101.6	89.47	-5,590.1	-2,968.8	3,995.1	3,799.3	195.83	20.401	
13,900.0	8,119.0	14,162.9	8,075.0	100.0	103.1	89.47	-5,690.1	-2,968.1	3,995.0	3,796.0	198.97	20.078	
14,000.0	8,119.0	14,262.9	8,075.0	101.5	104.6	89.47	-5,790.1	-2,967.4	3,994.8	3,792.7	202.13	19.764	
14,100.0	8,119.0	14,362.9	8,075.0	103.1	106.2	89.47	-5,890.1	-2,966.7	3,994.7	3,789.4	205.29	19.459	
14,200.0	8,119.0	14,462.9	8,075.0	104.7	107.7	89.47	-5,990.1	-2,966.0	3,994.6	3,786.1	208.45	19.163	
14,300.0	8,119.0	14,562.9	8,075.0	106.2	109.2	89.47	-6,090.1	-2,965.3	3,994.5	3,782.9	211.62	18.876	
14,400.0	8,119.0	14,662.9	8,075.0	107.8	110.7	89.47	-6,190.1	-2,964.6	3,994.4	3,779.6	214.79	18.597	
14,500.0	8,119.0	14,762.9	8,075.0	109.4	112.3	89.47	-6,290.1	-2,963.9	3,994.2	3,776.3	217.96	18.325	
14,600.0	8,119.0	14,862.9	8,075.0	111.0	113.8	89.47	-6,390.1	-2,963.2	3,994.1	3,773.0	221.14	18.061	
14,700.0	8,119.0	14,962.9	8,075.0	112.6	115.4	89.47	-6,490.1	-2,962.5	3,994.0	3,769.7	224.33	17.804	
14,800.0	8,119.0	15,062.9	8,075.0	114.2	116.9	89.47	-6,590.1	-2,961.8	3,993.9	3,766.4	227.51	17.554	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #022H - Wellbore #1 - BLM Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,900.0	8,119.0	15,162.9	8,075.0	115.7	118.5	89.47	-6,690.1	-2,961.1	3,993.7	3,763.0	230.70	17.311	
15,000.0	8,119.0	15,262.9	8,075.0	117.3	120.0	89.47	-6,790.1	-2,960.4	3,993.6	3,759.7	233.90	17.074	
15,100.0	8,119.0	15,362.9	8,075.0	118.9	121.6	89.47	-6,890.1	-2,959.7	3,993.5	3,756.4	237.10	16.843	
15,200.0	8,119.0	15,462.9	8,075.0	120.5	123.2	89.47	-6,990.1	-2,959.0	3,993.4	3,753.1	240.29	16.619	
15,300.0	8,119.0	15,562.9	8,075.0	122.1	124.7	89.47	-7,090.1	-2,958.3	3,993.3	3,749.8	243.50	16.400	
15,400.0	8,119.0	15,662.9	8,075.0	123.7	126.3	89.47	-7,190.1	-2,957.6	3,993.1	3,746.4	246.70	16.186	
15,500.0	8,119.0	15,762.9	8,075.0	125.3	127.8	89.47	-7,290.1	-2,956.9	3,993.0	3,743.1	249.91	15.978	
15,600.0	8,119.0	15,862.8	8,075.0	126.9	129.4	89.47	-7,390.1	-2,956.2	3,992.9	3,739.8	253.12	15.775	
15,700.0	8,119.0	15,962.8	8,075.0	128.5	131.0	89.47	-7,490.1	-2,955.5	3,992.8	3,736.4	256.33	15.576	
15,800.0	8,119.0	16,062.8	8,075.0	130.1	132.6	89.47	-7,590.1	-2,954.8	3,992.7	3,733.1	259.55	15.383	
15,900.0	8,119.0	16,162.8	8,075.0	131.7	134.1	89.47	-7,690.1	-2,954.2	3,992.5	3,729.8	262.77	15.194	
16,000.0	8,119.0	16,262.8	8,075.0	133.3	135.7	89.47	-7,790.1	-2,953.5	3,992.4	3,726.4	265.99	15.010	
16,100.0	8,119.0	16,362.8	8,075.0	134.9	137.3	89.47	-7,890.1	-2,952.8	3,992.3	3,723.1	269.21	14.830	
16,200.0	8,119.0	16,462.8	8,075.0	136.5	138.9	89.47	-7,990.1	-2,952.1	3,992.2	3,719.7	272.43	14.654	
16,300.0	8,119.0	16,562.8	8,075.0	138.1	140.5	89.47	-8,090.1	-2,951.4	3,992.1	3,716.4	275.66	14.482	
16,400.0	8,119.0	16,662.8	8,075.0	139.7	142.0	89.47	-8,190.1	-2,950.7	3,991.9	3,713.0	278.89	14.314	
16,500.0	8,119.0	16,762.8	8,075.0	141.4	143.6	89.47	-8,290.1	-2,950.0	3,991.8	3,709.7	282.12	14.149	
16,600.0	8,119.0	16,862.8	8,075.0	143.0	145.2	89.47	-8,390.1	-2,949.3	3,991.7	3,706.3	285.35	13.989	
16,700.0	8,119.0	16,962.8	8,075.0	144.6	146.8	89.47	-8,490.1	-2,948.6	3,991.6	3,703.0	288.58	13.832	
16,800.0	8,119.0	17,062.8	8,075.0	146.2	148.4	89.47	-8,590.1	-2,947.9	3,991.4	3,699.6	291.82	13.678	
16,900.0	8,119.0	17,162.8	8,075.0	147.8	150.0	89.47	-8,690.1	-2,947.2	3,991.3	3,696.3	295.06	13.527	
17,000.0	8,119.0	17,262.8	8,075.0	149.4	151.6	89.47	-8,790.1	-2,946.5	3,991.2	3,692.9	298.29	13.380	
17,100.0	8,119.0	17,362.8	8,075.0	151.0	153.2	89.47	-8,890.0	-2,945.8	3,991.1	3,689.6	301.53	13.236	
17,200.0	8,119.0	17,462.8	8,075.0	152.7	154.8	89.47	-8,990.0	-2,945.1	3,991.0	3,686.2	304.77	13.095	
17,300.0	8,119.0	17,562.8	8,075.0	154.3	156.4	89.47	-9,090.0	-2,944.4	3,990.8	3,682.8	308.02	12.957	
17,400.0	8,119.0	17,662.8	8,075.0	155.9	158.0	89.47	-9,190.0	-2,943.7	3,990.7	3,679.5	311.26	12.821	
17,500.0	8,119.0	17,762.8	8,075.0	157.5	159.6	89.47	-9,290.0	-2,943.0	3,990.6	3,676.1	314.51	12.688	
17,600.0	8,119.0	17,862.8	8,075.0	159.1	161.2	89.47	-9,390.0	-2,942.3	3,990.5	3,672.7	317.75	12.558	
17,700.0	8,119.0	17,962.8	8,075.0	160.7	162.8	89.47	-9,490.0	-2,941.6	3,990.4	3,669.4	321.00	12.431	
17,800.0	8,119.0	18,062.8	8,075.0	162.4	164.4	89.47	-9,590.0	-2,940.9	3,990.2	3,666.0	324.25	12.306	
17,900.0	8,119.0	18,162.8	8,075.0	164.0	166.0	89.47	-9,690.0	-2,940.2	3,990.1	3,662.6	327.50	12.184	
18,000.0	8,119.0	18,262.8	8,075.0	165.6	167.6	89.47	-9,790.0	-2,939.5	3,990.0	3,659.2	330.75	12.063	
18,100.0	8,119.0	18,362.8	8,075.0	167.2	169.2	89.47	-9,890.0	-2,938.8	3,989.9	3,655.9	334.00	11.946	
18,200.0	8,119.0	18,462.8	8,075.0	168.9	170.8	89.47	-9,990.0	-2,938.1	3,989.8	3,652.5	337.26	11.830	
18,300.0	8,119.0	18,562.8	8,075.0	170.5	172.4	89.47	-10,090.0	-2,937.4	3,989.6	3,649.1	340.51	11.717	
18,400.0	8,119.0	18,662.8	8,075.0	172.1	174.0	89.47	-10,190.0	-2,936.7	3,989.5	3,645.7	343.77	11.605	
18,500.0	8,119.0	18,762.8	8,075.0	173.7	175.6	89.47	-10,290.0	-2,936.0	3,989.4	3,642.4	347.03	11.496	
18,600.0	8,119.0	18,862.8	8,075.0	175.4	177.2	89.47	-10,390.0	-2,935.3	3,989.3	3,639.0	350.28	11.389	
18,700.0	8,119.0	18,962.8	8,075.0	177.0	178.8	89.47	-10,490.0	-2,934.6	3,989.1	3,635.6	353.54	11.283	
18,800.0	8,119.0	19,062.8	8,075.0	178.6	180.5	89.47	-10,590.0	-2,933.9	3,989.0	3,632.2	356.80	11.180	
18,900.0	8,119.0	19,162.8	8,075.0	180.2	182.1	89.47	-10,690.0	-2,933.2	3,988.9	3,628.8	360.06	11.078	
19,000.0	8,119.0	19,262.8	8,075.0	181.9	183.7	89.47	-10,790.0	-2,932.5	3,988.8	3,625.5	363.32	10.979	
19,100.0	8,119.0	19,362.8	8,075.0	183.5	185.3	89.47	-10,890.0	-2,931.8	3,988.7	3,622.1	366.58	10.881	
19,200.0	8,119.0	19,462.8	8,075.0	185.1	186.9	89.47	-10,990.0	-2,931.2	3,988.5	3,618.7	369.85	10.784	
19,300.0	8,119.0	19,562.8	8,075.0	186.8	188.5	89.47	-11,090.0	-2,930.5	3,988.4	3,615.3	373.11	10.690	
19,400.0	8,119.0	19,662.8	8,075.0	188.4	190.1	89.47	-11,190.0	-2,929.8	3,988.3	3,611.9	376.38	10.597	
19,500.0	8,119.0	19,762.8	8,075.0	190.0	191.8	89.47	-11,290.0	-2,929.1	3,988.2	3,608.5	379.64	10.505	
19,600.0	8,119.0	19,862.8	8,075.0	191.6	193.4	89.47	-11,390.0	-2,928.4	3,988.1	3,605.2	382.91	10.415	
19,700.0	8,119.0	19,962.8	8,075.0	193.3	195.0	89.47	-11,490.0	-2,927.7	3,987.9	3,601.8	386.17	10.327	
19,800.0	8,119.0	20,062.8	8,075.0	194.9	196.6	89.47	-11,590.0	-2,927.0	3,987.8	3,598.4	389.44	10.240	
19,900.0	8,119.0	20,162.8	8,075.0	196.5	198.2	89.47	-11,690.0	-2,926.3	3,987.7	3,595.0	392.71	10.154	
20,000.0	8,119.0	20,262.8	8,075.0	198.2	199.9	89.47	-11,790.0	-2,925.6	3,987.6	3,591.6	395.98	10.070	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #022H - Wellbore #1 - BLM Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
20,100.0	8,119.0	20,362.8	8,075.0	199.8	201.5	89.47	-11,890.0	-2,924.9	3,987.5	3,588.2	399.25	9.987	
20,200.0	8,119.0	20,462.8	8,075.0	201.4	203.1	89.47	-11,990.0	-2,924.2	3,987.3	3,584.8	402.52	9.906	
20,300.0	8,119.0	20,562.8	8,075.0	203.1	204.7	89.47	-12,090.0	-2,923.5	3,987.2	3,581.4	405.79	9.826	
20,400.0	8,119.0	20,662.8	8,075.0	204.7	206.3	89.47	-12,190.0	-2,922.8	3,987.1	3,578.0	409.06	9.747	
20,500.0	8,119.0	20,762.8	8,075.0	206.3	208.0	89.47	-12,290.0	-2,922.1	3,987.0	3,574.6	412.33	9.669	
20,606.7	8,119.0	20,869.5	8,075.0	208.1	209.7	89.47	-12,396.6	-2,921.3	3,986.8	3,571.0	415.82	9.588	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #111H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 234-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	2.9	2.9	0.0	0.0	-89.78	11.6	-2,971.7	2,971.7				
100.0	100.0	99.6	99.6	0.1	0.2	-89.78	11.5	-2,971.7	2,971.7	2,971.5	0.29	N/A	
200.0	200.0	196.2	196.2	0.5	0.3	-89.79	11.1	-2,971.9	2,971.9	2,971.1	0.80	3,734.138	
300.0	300.0	301.1	301.1	0.8	0.6	-89.80	10.5	-2,972.1	2,972.1	2,970.7	1.45	2,048.605	
400.0	400.0	411.2	411.2	1.2	1.0	-89.80	10.1	-2,972.0	2,972.0	2,969.8	2.20	1,351.877	
500.0	500.0	527.2	527.2	1.6	1.4	-89.80	10.4	-2,971.4	2,971.5	2,968.5	2.96	1,003.894	
600.0	600.0	641.1	641.1	1.9	1.8	-89.77	11.7	-2,970.1	2,970.4	2,966.7	3.71	799.786	
700.0	700.0	750.4	750.3	2.3	2.2	-89.72	14.4	-2,968.5	2,969.0	2,964.5	4.45	666.864	
800.0	800.0	838.4	838.2	2.6	2.5	-89.66	17.7	-2,967.2	2,967.5	2,962.3	5.12	579.764	
900.0	900.0	915.6	915.4	3.0	2.8	-89.59	21.3	-2,966.5	2,966.6	2,960.9	5.75	516.038	
954.0	954.0	957.3	957.0	3.2	2.9	-89.55	23.5	-2,966.4	2,966.5	2,960.4	6.09	487.182	CC
1,000.0	1,000.0	996.3	995.9	3.4	3.0	-89.50	25.7	-2,966.5	2,966.6	2,960.2	6.39	464.065	ES
1,100.0	1,100.0	1,086.5	1,086.0	3.7	3.4	-163.82	30.7	-2,966.8	2,968.7	2,961.6	7.07	420.128	
1,200.0	1,199.8	1,180.3	1,179.7	4.1	3.7	-163.73	35.2	-2,967.4	2,974.4	2,966.6	7.75	383.820	
1,300.0	1,299.5	1,290.2	1,289.5	4.4	4.1	-163.64	40.2	-2,968.2	2,983.5	2,975.0	8.50	351.204	
1,400.0	1,398.7	1,422.1	1,421.1	4.8	4.6	-163.50	48.5	-2,967.9	2,995.1	2,985.8	9.32	321.210	
1,500.0	1,497.5	1,513.0	1,511.8	5.2	4.9	-163.37	55.0	-2,967.4	3,009.6	2,999.6	10.01	300.580	
1,600.0	1,595.9	1,604.3	1,602.9	5.5	5.2	-163.33	61.2	-2,967.0	3,026.0	3,015.3	10.70	282.747	
1,700.0	1,694.4	1,692.8	1,691.2	5.9	5.6	-163.31	66.7	-2,967.0	3,042.7	3,031.3	11.38	267.357	
1,800.0	1,792.9	1,781.1	1,779.3	6.3	5.9	-163.30	71.9	-2,967.2	3,059.7	3,047.7	12.06	253.699	
1,900.0	1,891.4	1,905.7	1,903.7	6.8	6.3	-163.27	79.7	-2,967.4	3,076.6	3,063.7	12.88	238.824	
2,000.0	1,989.9	2,024.6	2,022.3	7.2	6.8	-163.20	89.1	-2,966.3	3,092.5	3,078.8	13.69	225.953	
2,100.0	2,088.4	2,119.4	2,116.8	7.6	7.1	-163.16	96.1	-2,965.4	3,108.3	3,093.9	14.40	215.818	
2,200.0	2,186.8	2,229.3	2,226.5	8.0	7.5	-163.14	102.9	-2,964.3	3,124.1	3,108.9	15.18	205.843	
2,300.0	2,285.3	2,363.9	2,360.7	8.5	8.0	-163.09	112.4	-2,961.8	3,139.0	3,122.9	16.05	195.616	
2,400.0	2,383.8	2,479.4	2,475.8	8.9	8.5	-163.03	121.4	-2,958.6	3,153.1	3,136.2	16.85	187.136	
2,500.0	2,482.3	2,593.8	2,589.8	9.3	8.9	-162.97	130.4	-2,954.9	3,166.7	3,149.0	17.65	179.429	
2,600.0	2,580.8	2,707.1	2,702.7	9.8	9.3	-162.91	138.9	-2,950.8	3,179.8	3,161.4	18.44	172.400	
2,700.0	2,679.2	2,801.4	2,796.6	10.2	9.7	-162.88	145.5	-2,947.0	3,192.7	3,173.5	19.17	166.573	
2,800.0	2,777.7	2,885.1	2,880.2	10.6	10.0	-162.86	150.8	-2,944.1	3,206.0	3,186.1	19.85	161.523	
2,900.0	2,876.2	2,969.4	2,964.3	11.1	10.3	-162.85	155.6	-2,941.6	3,219.8	3,199.2	20.53	156.829	
3,000.0	2,974.7	3,054.5	3,049.2	11.5	10.6	-162.85	160.0	-2,939.4	3,234.0	3,212.8	21.21	152.451	
3,100.0	3,073.2	3,157.3	3,151.9	11.9	11.0	-162.85	165.0	-2,937.2	3,248.6	3,226.6	21.97	147.898	
3,200.0	3,171.6	3,200.0	3,282.4	12.4	11.1	-162.84	172.2	-2,932.3	3,261.4	3,238.9	22.50	144.932	
3,300.0	3,270.1	3,449.2	3,443.1	12.8	12.0	-162.84	180.6	-2,924.5	3,273.1	3,249.3	23.79	137.554	
3,400.0	3,368.6	3,631.0	3,624.5	13.3	12.7	-162.91	185.7	-2,913.2	3,283.8	3,259.0	24.81	132.344	
3,500.0	3,467.1	3,737.2	3,730.3	13.7	13.1	-162.99	186.3	-2,904.4	3,292.1	3,266.6	25.56	128.785	
3,600.0	3,565.6	3,793.4	3,786.3	14.2	13.3	-163.02	187.2	-2,900.3	3,301.6	3,275.4	26.14	126.287	
3,700.0	3,664.0	3,849.5	3,842.3	14.6	13.5	-163.04	188.9	-2,896.9	3,312.3	3,285.6	26.72	123.972	
3,800.0	3,762.5	3,885.0	3,877.7	15.1	13.6	-163.04	190.4	-2,895.1	3,324.4	3,297.2	27.21	122.177	
3,900.0	3,861.0	3,961.8	3,954.4	15.5	13.9	-163.04	194.3	-2,892.3	3,337.6	3,309.8	27.86	119.788	
4,000.0	3,959.5	4,017.8	4,010.3	16.0	14.1	-163.03	197.6	-2,891.1	3,352.2	3,323.8	28.43	117.916	
4,100.0	4,058.0	4,075.0	4,067.3	16.4	14.3	-163.02	201.3	-2,890.6	3,368.1	3,339.1	28.99	116.164	
4,200.0	4,156.4	4,165.0	4,157.1	16.8	14.6	-162.99	207.5	-2,890.4	3,384.7	3,355.0	29.70	113.970	
4,300.0	4,254.9	4,257.3	4,249.2	17.3	15.0	-162.97	213.6	-2,890.4	3,401.5	3,371.1	30.41	111.848	
4,400.0	4,353.4	4,359.1	4,350.8	17.7	15.3	-162.95	220.0	-2,890.5	3,418.3	3,387.1	31.16	109.686	
4,500.0	4,451.9	4,461.8	4,453.3	18.2	15.7	-162.93	226.1	-2,890.5	3,435.0	3,403.1	31.92	107.610	
4,600.0	4,550.4	4,544.6	4,536.0	18.6	16.0	-162.92	230.7	-2,890.7	3,451.9	3,419.4	32.59	105.923	
4,700.0	4,648.9	4,628.5	4,619.8	19.1	16.3	-162.92	235.1	-2,891.2	3,469.3	3,436.0	33.26	104.304	
4,800.0	4,747.3	4,730.7	4,721.8	19.5	16.7	-162.92	240.2	-2,892.0	3,486.8	3,452.8	34.01	102.516	
4,900.0	4,845.8	4,837.1	4,828.2	20.0	17.1	-162.92	245.7	-2,892.6	3,504.1	3,469.3	34.78	100.745	
5,000.0	4,944.3	4,930.8	4,921.7	20.4	17.4	-162.93	250.3	-2,893.1	3,521.4	3,485.9	35.50	99.208	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #111H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 234-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	5,024.8	5,015.6	20.9	17.8	-162.94	254.6	-2,893.8	3,538.8	3,502.6	36.21	97.732	
5,200.0	5,141.3	5,117.9	5,108.6	21.3	18.1	-162.95	258.5	-2,894.6	3,556.3	3,519.4	36.92	96.333	
5,300.0	5,239.7	5,211.0	5,201.6	21.8	18.4	-162.96	262.3	-2,895.5	3,574.0	3,536.4	37.62	94.992	
5,400.0	5,338.2	5,305.0	5,295.6	22.2	18.8	-162.98	266.1	-2,896.5	3,591.8	3,553.5	38.34	93.695	
5,500.0	5,436.7	5,399.0	5,389.5	22.7	19.1	-163.00	269.9	-2,897.7	3,609.8	3,570.7	39.05	92.450	
5,600.0	5,535.2	5,511.9	5,502.3	23.1	19.5	-163.02	274.0	-2,899.0	3,627.6	3,587.7	39.84	91.055	
5,700.0	5,633.7	5,625.5	5,615.8	23.6	19.9	-163.06	277.5	-2,899.8	3,645.0	3,604.3	40.64	89.699	
5,800.0	5,732.1	5,714.4	5,704.7	24.0	20.2	-163.09	279.8	-2,900.5	3,662.4	3,621.1	41.32	88.637	
5,900.0	5,830.6	5,808.1	5,798.3	24.5	20.6	-163.14	282.0	-2,901.3	3,679.9	3,637.9	42.02	87.568	
6,000.0	5,929.1	5,899.6	5,889.8	24.9	20.9	-163.18	283.8	-2,902.2	3,697.6	3,654.9	42.71	86.565	
6,100.0	6,027.6	5,988.7	5,979.0	25.4	21.2	-163.23	285.2	-2,903.3	3,715.5	3,672.1	43.39	85.622	
6,200.0	6,126.1	6,070.5	6,060.7	25.8	21.5	-163.28	286.2	-2,904.6	3,733.7	3,689.7	44.04	84.789	
6,300.0	6,224.5	6,152.1	6,142.3	26.3	21.7	-163.33	287.0	-2,906.3	3,752.4	3,707.7	44.67	83.995	
6,400.0	6,323.0	6,341.3	6,331.4	26.7	22.4	-163.49	285.7	-2,908.4	3,770.2	3,724.5	45.76	82.391	
6,500.0	6,421.5	6,433.7	6,423.8	27.2	22.7	-163.60	283.6	-2,908.3	3,786.8	3,740.4	46.43	81.564	
6,600.0	6,520.0	6,522.4	6,512.5	27.6	22.9	-163.69	281.6	-2,908.5	3,803.6	3,756.5	47.08	80.794	
6,700.0	6,618.5	6,640.6	6,630.7	28.1	23.3	-163.82	279.1	-2,908.6	3,820.4	3,772.5	47.85	79.837	
6,800.0	6,716.9	6,765.5	6,755.5	28.5	23.7	-163.95	276.5	-2,907.9	3,836.5	3,787.9	48.65	78.856	
6,900.0	6,815.4	6,868.1	6,858.1	29.0	24.1	-164.05	274.5	-2,907.0	3,852.3	3,803.0	49.37	78.033	
6,981.8	6,896.0	6,952.1	6,942.1	29.4	24.3	-164.14	273.0	-2,906.0	3,865.1	3,815.2	49.95	77.374	
7,000.0	6,913.9	6,969.5	6,959.5	29.5	24.4	-164.17	272.7	-2,905.8	3,867.9	3,817.8	50.08	77.236	
7,100.0	7,012.9	7,065.6	7,055.5	29.9	24.7	-164.34	271.2	-2,904.8	3,880.7	3,830.0	50.76	76.446	
7,200.0	7,112.3	7,161.8	7,151.7	30.3	25.0	-164.46	269.8	-2,903.9	3,889.5	3,838.1	51.44	75.610	
7,300.0	7,212.2	7,258.0	7,247.9	30.6	25.4	-164.53	268.4	-2,903.0	3,894.1	3,842.0	52.11	74.730	
7,381.8	7,294.0	7,336.4	7,326.4	30.9	25.6	-90.14	267.3	-2,902.4	3,894.9	3,842.3	52.64	73.986	
7,400.0	7,312.2	7,353.7	7,343.7	30.9	25.7	-90.14	267.1	-2,902.3	3,894.8	3,842.0	52.76	73.820	
7,500.0	7,412.2	7,449.2	7,439.1	31.2	26.0	-90.16	265.7	-2,901.6	3,894.1	3,840.7	53.40	72.920	
7,600.0	7,512.2	7,552.0	7,541.9	31.5	26.3	-90.19	263.9	-2,901.0	3,893.5	3,839.4	54.08	71.999	
7,633.8	7,546.0	7,588.4	7,578.3	31.6	26.5	-90.20	263.3	-2,900.7	3,893.2	3,838.9	54.31	71.683	
7,650.0	7,562.2	7,605.7	7,595.6	31.7	26.5	90.14	263.0	-2,900.6	3,893.1	3,838.7	54.42	71.535	
7,700.0	7,612.0	7,659.4	7,649.3	31.8	26.7	90.23	262.0	-2,900.1	3,892.7	3,837.9	54.76	71.091	
7,750.0	7,661.4	7,709.7	7,699.6	31.9	26.9	90.37	261.1	-2,899.7	3,892.3	3,837.2	55.07	70.679	
7,800.0	7,709.8	7,758.0	7,747.9	32.0	27.0	90.57	260.2	-2,899.2	3,891.9	3,836.6	55.37	70.292	
7,850.0	7,757.1	7,805.2	7,795.0	32.1	27.2	90.81	259.3	-2,898.8	3,891.7	3,836.0	55.65	69.926	
7,900.0	7,802.7	7,850.8	7,840.7	32.2	27.3	91.08	258.4	-2,898.4	3,891.5	3,835.6	55.93	69.582	
7,906.8	7,808.8	7,856.9	7,846.8	32.2	27.4	91.12	258.3	-2,898.4	3,891.5	3,835.6	55.96	69.537	
7,950.0	7,846.4	7,892.3	7,882.2	32.3	27.5	91.36	257.6	-2,898.1	3,891.6	3,835.5	56.18	69.272	
8,000.0	7,887.7	7,930.8	7,920.6	32.4	27.6	91.63	256.9	-2,897.8	3,892.0	3,835.6	56.41	68.991	
8,050.0	7,926.5	7,966.9	7,956.7	32.4	27.7	91.88	256.3	-2,897.5	3,892.8	3,836.2	56.64	68.734	
8,100.0	7,962.4	8,000.3	7,990.1	32.5	27.8	92.09	255.7	-2,897.3	3,894.0	3,837.2	56.85	68.501	
8,150.0	7,995.1	8,030.8	8,020.6	32.5	27.9	92.25	255.3	-2,897.1	3,895.8	3,838.7	57.05	68.293	
8,200.0	8,024.4	8,058.2	8,048.0	32.6	28.0	92.35	254.8	-2,897.0	3,898.1	3,840.9	57.23	68.110	
8,250.0	8,050.1	8,081.1	8,070.9	32.6	28.1	92.34	254.5	-2,896.9	3,901.0	3,843.6	57.40	67.958	
8,300.0	8,071.9	8,100.8	8,090.6	32.7	28.2	92.23	254.2	-2,896.9	3,904.7	3,847.1	57.56	67.831	
8,350.0	8,089.7	8,116.9	8,106.7	32.7	28.2	92.02	254.0	-2,896.8	3,909.0	3,851.3	57.71	67.730	
8,400.0	8,103.4	8,129.5	8,119.3	32.7	28.3	91.68	253.8	-2,896.8	3,914.1	3,856.2	57.85	67.655	
8,450.0	8,112.8	8,138.3	8,128.1	32.8	28.3	91.23	253.7	-2,896.8	3,919.9	3,861.9	57.98	67.607	
8,500.0	8,118.0	8,143.4	8,133.2	32.9	28.3	90.65	253.6	-2,896.8	3,926.3	3,868.3	58.09	67.586	
8,533.8	8,119.0	8,144.6	8,134.5	33.0	28.3	90.18	253.6	-2,896.8	3,931.1	3,873.0	58.16	67.587	
8,600.0	8,119.0	8,145.4	8,135.2	33.1	28.3	90.20	253.6	-2,896.8	3,941.3	3,883.0	58.31	67.597	
8,700.0	8,119.0	8,146.6	8,136.4	33.4	28.3	90.21	253.6	-2,896.8	3,958.7	3,900.2	58.56	67.597	
8,800.0	8,119.0	8,147.8	8,137.6	33.8	28.3	90.23	253.6	-2,896.8	3,978.6	3,919.7	58.87	67.584	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #111H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 234-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,900.0	8,119.0	8,149.0	8,138.8	34.3	28.3	90.25	253.5	-2,896.8	4,000.9	3,941.6	59.22	67.562	
9,000.0	8,119.0	9,800.5	9,044.0	34.9	34.3	103.24	-763.7	-2,919.8	4,025.2	3,958.9	66.31	60.701	
9,100.0	8,119.0	9,840.0	9,042.5	35.5	34.6	103.22	-803.2	-2,920.6	4,026.6	3,959.4	67.23	59.896	
9,200.0	8,119.0	10,107.7	9,025.9	36.3	36.7	102.98	-1,070.3	-2,922.4	4,026.2	3,955.8	70.39	57.199	
9,300.0	8,119.0	10,290.3	9,023.3	37.1	38.4	102.96	-1,252.8	-2,916.2	4,023.2	3,950.2	73.02	55.101	
9,400.0	8,119.0	10,347.1	9,023.6	37.9	38.9	102.97	-1,309.5	-2,913.5	4,019.3	3,944.9	74.41	54.016	
9,500.0	8,119.0	10,409.0	9,022.4	38.8	39.5	102.96	-1,371.3	-2,912.2	4,017.2	3,941.3	75.92	52.916	
9,586.4	8,119.0	10,409.0	9,022.4	39.6	39.5	102.96	-1,371.3	-2,912.2	4,016.3	3,939.7	76.63	52.415	
9,600.0	8,119.0	10,409.0	9,022.4	39.8	39.5	102.96	-1,371.3	-2,912.2	4,016.3	3,939.6	76.73	52.341	
9,700.0	8,119.0	10,454.3	9,021.1	40.8	40.0	102.94	-1,416.6	-2,912.6	4,017.1	3,939.0	78.12	51.423	
9,800.0	8,119.0	10,504.0	9,019.8	41.8	40.5	102.91	-1,466.3	-2,914.1	4,019.8	3,940.2	79.58	50.510	
9,900.0	8,119.0	10,585.6	9,017.9	42.9	41.4	102.87	-1,547.8	-2,917.2	4,023.4	3,941.9	81.50	49.367	
10,000.0	8,119.0	10,822.6	9,013.8	44.0	44.0	102.80	-1,784.7	-2,921.7	4,026.0	3,940.4	85.58	47.041	
10,100.0	8,119.0	10,999.7	9,007.6	45.2	46.1	102.71	-1,961.7	-2,919.9	4,024.5	3,935.5	89.02	45.211	
10,200.0	8,119.0	11,056.9	9,007.0	46.3	46.8	102.71	-2,018.9	-2,918.9	4,023.1	3,932.3	90.82	44.297	
10,300.0	8,119.0	11,141.3	9,008.7	47.5	47.9	102.74	-2,103.2	-2,917.6	4,022.6	3,929.6	93.04	43.233	
10,400.0	8,119.0	11,248.9	9,011.9	48.8	49.2	102.78	-2,210.7	-2,915.7	4,022.1	3,926.4	95.65	42.052	
10,493.9	8,119.0	11,317.0	9,014.8	50.0	50.1	102.83	-2,278.8	-2,914.3	4,021.7	3,924.1	97.64	41.191	
10,500.0	8,119.0	11,321.0	9,015.0	50.0	50.2	102.83	-2,282.8	-2,914.3	4,021.7	3,924.0	97.76	41.139	
10,600.0	8,119.0	11,360.0	9,016.5	51.3	50.7	102.85	-2,321.8	-2,913.8	4,022.3	3,923.0	99.38	40.474	
10,700.0	8,119.0	11,428.3	9,018.5	52.6	51.6	102.88	-2,390.0	-2,914.0	4,024.0	3,922.5	101.47	39.656	
10,800.0	8,119.0	11,496.6	9,019.7	54.0	52.5	102.89	-2,458.3	-2,915.4	4,026.9	3,923.3	103.58	38.877	
10,900.0	8,119.0	11,763.6	9,027.9	55.3	56.1	103.00	-2,725.2	-2,914.4	4,027.4	3,918.5	108.91	36.979	
11,000.0	8,119.0	11,837.0	9,029.2	56.7	57.1	103.02	-2,798.5	-2,913.3	4,026.9	3,915.7	111.19	36.216	
11,013.6	8,119.0	11,837.0	9,029.2	56.8	57.1	103.02	-2,798.5	-2,913.3	4,026.9	3,915.5	111.34	36.167	
11,100.0	8,119.0	11,889.4	9,028.6	58.0	57.8	103.01	-2,850.9	-2,913.4	4,027.3	3,914.1	113.15	35.592	
11,200.0	8,119.0	12,002.5	9,024.1	59.4	59.4	102.94	-2,963.9	-2,915.0	4,028.4	3,912.2	116.14	34.686	
11,300.0	8,119.0	12,184.6	9,014.1	60.8	61.9	102.80	-3,145.7	-2,914.0	4,026.6	3,906.3	120.33	33.463	
11,400.0	8,119.0	12,299.0	9,009.4	62.2	63.6	102.74	-3,260.0	-2,912.8	4,025.3	3,901.9	123.41	32.618	
11,500.0	8,119.0	12,447.3	9,003.7	63.6	65.7	102.67	-3,408.1	-2,909.4	4,022.8	3,895.7	127.07	31.657	
11,600.0	8,119.0	12,505.0	9,001.6	65.1	66.6	102.64	-3,465.8	-2,907.7	4,019.8	3,890.5	129.24	31.102	
11,700.0	8,119.0	12,567.5	9,000.2	66.5	67.5	102.63	-3,528.3	-2,906.1	4,017.8	3,886.3	131.50	30.555	
11,777.8	8,119.0	12,602.0	9,000.2	67.7	68.0	102.63	-3,562.7	-2,905.8	4,017.4	3,884.4	133.00	30.207	
11,800.0	8,119.0	12,619.0	9,000.4	68.0	68.2	102.63	-3,579.8	-2,905.7	4,017.4	3,883.9	133.55	30.082	
11,871.2	8,119.0	12,716.7	9,002.4	69.0	69.7	102.66	-3,677.4	-2,904.5	4,017.3	3,881.2	136.06	29.525	
11,900.0	8,119.0	12,697.0	9,001.9	69.4	69.4	102.65	-3,657.7	-2,904.8	4,017.4	3,881.4	136.06	29.527	
12,000.0	8,119.0	12,753.1	9,003.3	70.9	70.2	102.67	-3,713.8	-2,904.6	4,018.4	3,880.2	138.18	29.080	
12,100.0	8,119.0	12,793.4	9,004.3	72.4	70.8	102.68	-3,754.1	-2,905.2	4,020.9	3,880.9	140.01	28.718	
12,200.0	8,119.0	13,160.5	8,997.8	73.9	76.3	102.59	-4,121.0	-2,904.7	4,021.2	3,873.5	147.70	27.226	
12,300.0	8,119.0	13,309.5	9,000.3	75.4	78.6	102.64	-4,269.8	-2,896.7	4,016.8	3,865.3	151.48	26.518	
12,400.0	8,119.0	13,410.8	8,999.7	76.9	80.1	102.65	-4,370.9	-2,891.5	4,012.2	3,857.8	154.49	25.972	
12,500.0	8,119.0	13,443.0	8,998.2	78.4	80.6	102.63	-4,403.1	-2,890.1	4,008.2	3,851.8	156.34	25.637	
12,600.0	8,119.0	13,500.9	8,996.1	79.9	81.5	102.61	-4,460.9	-2,888.3	4,005.2	3,846.6	158.62	25.250	
12,700.0	8,119.0	13,535.0	8,995.8	81.4	82.0	102.61	-4,495.0	-2,887.8	4,004.2	3,843.7	160.46	24.955	
12,800.0	8,119.0	13,640.0	8,996.6	82.9	83.6	102.62	-4,599.9	-2,886.7	4,003.8	3,840.3	163.55	24.480	
12,803.2	8,119.0	13,628.0	8,996.5	83.0	83.4	102.62	-4,588.0	-2,886.8	4,003.9	3,840.5	163.38	24.507	
12,900.0	8,119.0	13,674.6	8,997.0	84.5	84.1	102.62	-4,634.5	-2,886.7	4,004.4	3,839.0	165.37	24.215	
13,000.0	8,119.0	13,720.0	8,997.5	86.0	84.8	102.63	-4,680.0	-2,887.2	4,006.4	3,839.0	167.35	23.940	
13,100.0	8,119.0	13,808.3	8,998.6	87.5	86.2	102.64	-4,768.3	-2,889.1	4,009.2	3,839.1	170.15	23.563	
13,200.0	8,119.0	13,946.0	8,998.4	89.1	88.3	102.62	-4,905.9	-2,891.1	4,011.0	3,837.1	173.91	23.064	
13,300.0	8,119.0	14,010.9	8,996.5	90.6	89.3	102.59	-4,970.7	-2,892.8	4,013.5	3,837.2	176.29	22.767	
13,400.0	8,119.0	14,249.2	8,985.3	92.2	93.0	102.42	-5,208.8	-2,897.4	4,015.3	3,833.3	182.01	22.061	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #111H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 234-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,500.0	8,119.0	14,397.3	8,978.5	93.7	95.3	102.32	-5,356.7	-2,895.9	4,013.8	3,827.9	185.99	21.581	
13,600.0	8,119.0	14,460.2	8,976.4	95.3	96.3	102.30	-5,419.6	-2,895.2	4,012.5	3,824.1	188.41	21.297	
13,700.0	8,119.0	14,645.3	8,970.7	96.8	99.2	102.23	-5,604.5	-2,890.8	4,009.7	3,816.6	193.04	20.771	
13,800.0	8,119.0	14,663.0	8,970.5	98.4	99.4	102.22	-5,622.2	-2,890.2	4,007.6	3,812.9	194.66	20.587	
13,879.6	8,119.0	14,705.3	8,970.0	99.6	100.1	102.22	-5,664.5	-2,889.4	4,006.8	3,810.3	196.43	20.398	
13,900.0	8,119.0	14,710.7	8,970.0	100.0	100.2	102.22	-5,669.9	-2,889.4	4,006.8	3,810.0	196.78	20.361	
14,000.0	8,119.0	14,757.0	8,969.4	101.5	100.9	102.21	-5,716.1	-2,890.2	4,008.3	3,809.4	198.85	20.157	
14,100.0	8,119.0	14,848.0	8,969.1	103.1	102.3	102.20	-5,807.1	-2,892.3	4,010.9	3,809.2	201.77	19.878	
14,200.0	8,119.0	14,924.5	8,968.4	104.7	103.5	102.18	-5,883.6	-2,893.7	4,013.1	3,808.7	204.41	19.632	
14,300.0	8,119.0	15,064.0	8,964.3	106.2	105.7	102.11	-6,023.0	-2,896.5	4,015.0	3,806.7	208.32	19.273	
14,400.0	8,119.0	15,115.1	8,964.5	107.8	106.5	102.11	-6,074.1	-2,897.3	4,017.1	3,806.7	210.46	19.087	
14,500.0	8,119.0	15,199.6	8,967.4	109.4	107.8	102.15	-6,158.6	-2,899.0	4,020.3	3,807.0	213.25	18.853	
14,600.0	8,119.0	15,407.8	8,975.0	111.0	111.1	102.24	-6,366.6	-2,900.2	4,022.3	3,803.9	218.43	18.414	
14,700.0	8,119.0	15,551.9	8,981.1	112.6	113.4	102.34	-6,510.5	-2,897.4	4,021.7	3,799.4	222.34	18.088	
14,776.0	8,119.0	15,602.3	8,983.3	113.8	114.2	102.37	-6,560.9	-2,896.4	4,021.5	3,797.3	224.22	17.935	
14,800.0	8,119.0	15,618.8	8,984.1	114.2	114.5	102.38	-6,577.4	-2,896.2	4,021.5	3,796.7	224.82	17.887	
14,900.0	8,119.0	15,692.1	8,987.8	115.7	115.7	102.43	-6,650.5	-2,895.4	4,022.0	3,794.6	227.41	17.686	
15,000.0	8,119.0	15,770.7	8,992.5	117.3	116.9	102.50	-6,729.0	-2,894.8	4,023.2	3,793.1	230.09	17.485	
15,100.0	8,119.0	15,863.9	8,997.0	118.9	118.4	102.56	-6,822.1	-2,894.7	4,024.7	3,791.7	233.05	17.270	
15,200.0	8,119.0	15,988.8	8,997.0	120.5	120.4	102.55	-6,946.9	-2,895.7	4,026.1	3,789.4	236.67	17.011	
15,300.0	8,119.0	16,180.3	8,988.3	122.1	123.4	102.43	-7,138.3	-2,895.6	4,025.3	3,783.7	241.61	16.661	
15,400.0	8,119.0	16,239.0	8,984.8	123.7	124.4	102.38	-7,196.9	-2,895.5	4,024.5	3,780.5	244.02	16.493	
15,428.0	8,119.0	16,255.1	8,984.0	124.2	124.6	102.37	-7,212.9	-2,895.6	4,024.4	3,779.8	244.68	16.448	
15,500.0	8,119.0	16,333.8	8,979.9	125.3	125.9	102.31	-7,291.5	-2,896.1	4,024.6	3,777.4	247.11	16.287	
15,568.7	8,119.0	16,393.9	8,976.1	126.4	126.8	102.25	-7,351.4	-2,896.4	4,024.4	3,775.2	249.14	16.153	
15,600.0	8,119.0	16,408.8	8,975.4	126.9	127.1	102.24	-7,366.3	-2,896.5	4,024.4	3,774.6	249.82	16.110	
15,700.0	8,119.0	15,700.0	8,973.1	128.5	115.7	102.21	-7,516.3	-2,896.2	4,024.5	3,784.1	240.42	16.740	
15,792.9	8,119.0	16,620.3	8,972.6	130.0	130.5	102.21	-7,577.8	-2,894.8	4,023.3	3,767.1	256.28	15.699	
15,800.0	8,119.0	16,622.3	8,972.6	130.1	130.5	102.21	-7,579.8	-2,894.8	4,023.4	3,766.9	256.40	15.691	
15,900.0	8,119.0	16,658.0	8,972.0	131.7	131.1	102.20	-7,615.5	-2,895.2	4,024.4	3,766.1	258.31	15.580	
16,000.0	8,119.0	16,714.7	8,972.0	133.3	132.0	102.19	-7,672.2	-2,896.4	4,026.8	3,766.3	260.59	15.453	
16,100.0	8,119.0	16,789.4	8,974.8	134.9	133.2	102.23	-7,746.8	-2,897.7	4,029.9	3,766.8	263.19	15.312	
16,200.0	8,119.0	16,876.1	8,977.4	136.5	134.6	102.25	-7,833.4	-2,900.0	4,033.7	3,767.6	266.05	15.162	
16,300.0	8,119.0	17,027.6	8,980.9	138.1	137.0	102.29	-7,984.9	-2,903.2	4,036.8	3,766.6	270.25	14.937	
16,400.0	8,119.0	17,357.8	8,986.5	139.7	142.3	102.37	-8,314.9	-2,898.6	4,036.2	3,758.5	277.69	14.535	
16,500.0	8,119.0	17,443.7	8,986.9	141.4	143.7	102.39	-8,400.7	-2,894.9	4,032.8	3,752.2	280.61	14.371	
16,600.0	8,119.0	17,483.0	8,987.4	143.0	144.3	102.40	-8,440.0	-2,893.8	4,030.7	3,748.0	282.70	14.258	
16,700.0	8,119.0	17,539.5	8,988.4	144.6	145.2	102.42	-8,496.5	-2,892.9	4,030.0	3,744.9	285.06	14.137	
16,800.0	8,119.0	17,797.0	8,990.6	146.2	149.4	102.46	-8,753.8	-2,885.9	4,028.7	3,737.7	290.98	13.845	
16,900.0	8,119.0	17,838.9	8,989.2	147.8	150.1	102.45	-8,795.7	-2,884.4	4,025.1	3,731.9	293.19	13.728	
17,000.0	8,119.0	17,892.0	8,987.7	149.4	150.9	102.43	-8,848.7	-2,883.6	4,023.3	3,727.7	295.56	13.613	
17,100.0	8,119.0	17,942.8	8,986.9	151.0	151.8	102.42	-8,899.6	-2,883.4	4,022.7	3,724.8	297.84	13.506	
17,200.0	8,119.0	17,200.0	8,988.3	152.7	139.7	102.44	-9,035.8	-2,880.9	4,021.6	3,733.9	287.69	13.979	
17,300.0	8,119.0	18,145.1	8,989.2	154.3	155.0	102.46	-9,101.8	-2,879.5	4,020.5	3,716.3	304.21	13.216	
17,323.2	8,119.0	18,156.6	8,989.3	154.6	155.2	102.46	-9,113.3	-2,879.4	4,020.4	3,715.7	304.73	13.194	
17,400.0	8,119.0	18,213.7	8,989.7	155.9	156.1	102.46	-9,170.3	-2,879.1	4,020.6	3,713.9	306.78	13.106	
17,500.0	8,119.0	18,408.8	8,990.3	157.5	159.3	102.48	-9,365.5	-2,876.4	4,020.0	3,708.2	311.73	12.896	
17,600.0	8,119.0	18,463.0	8,991.6	159.1	160.2	102.50	-9,419.6	-2,874.7	4,018.2	3,704.2	314.07	12.794	
17,673.8	8,119.0	18,502.1	8,992.3	160.3	160.8	102.51	-9,458.6	-2,873.9	4,017.7	3,701.9	315.75	12.724	
17,700.0	8,119.0	18,510.7	8,992.4	160.7	161.0	102.51	-9,467.2	-2,873.8	4,017.7	3,701.5	316.24	12.705	
17,800.0	8,119.0	18,558.0	8,991.7	162.4	161.7	102.50	-9,514.6	-2,874.5	4,019.1	3,700.7	318.38	12.624	
17,900.0	8,119.0	18,628.9	8,989.3	164.0	162.9	102.46	-9,585.4	-2,876.6	4,021.6	3,700.6	320.99	12.529	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #111H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 234-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,000.0	8,119.0	18,705.9	8,986.5	165.6	164.1	102.41	-9,662.3	-2,878.8	4,024.2	3,700.5	323.72	12.431	
18,100.0	8,119.0	18,786.7	8,985.4	167.2	165.4	102.39	-9,743.1	-2,881.4	4,027.6	3,701.1	326.50	12.336	
18,200.0	8,119.0	18,873.2	8,984.9	168.9	166.8	102.37	-9,829.5	-2,884.2	4,031.2	3,701.8	329.40	12.238	
18,300.0	8,119.0	18,943.6	8,986.7	170.5	167.9	102.39	-9,899.8	-2,886.5	4,035.5	3,703.6	331.90	12.159	
18,400.0	8,119.0	18,400.0	8,996.8	172.1	159.1	102.51	-10,147.7	-2,890.1	4,038.5	3,713.0	325.53	12.406	
18,500.0	8,119.0	19,304.6	8,995.0	173.7	173.8	102.48	-10,260.5	-2,890.2	4,038.7	3,697.1	341.61	11.823	
18,600.0	8,119.0	19,358.7	8,993.4	175.4	174.7	102.46	-10,314.5	-2,890.8	4,039.9	3,696.0	343.90	11.747	
18,700.0	8,119.0	19,410.8	8,993.1	177.0	175.5	102.45	-10,366.7	-2,891.8	4,042.2	3,696.1	346.09	11.680	
18,800.0	8,119.0	19,539.6	8,995.3	178.6	177.6	102.47	-10,495.4	-2,894.1	4,044.9	3,695.0	349.87	11.561	
18,900.0	8,119.0	19,687.0	8,999.9	180.2	180.0	102.53	-10,642.8	-2,894.6	4,046.4	3,692.4	353.99	11.431	
19,000.0	8,119.0	19,814.0	9,004.7	181.9	182.0	102.60	-10,769.7	-2,893.8	4,047.2	3,689.6	357.65	11.316	
19,100.0	8,119.0	19,933.7	9,008.4	183.5	184.0	102.65	-10,889.3	-2,892.2	4,047.1	3,685.9	361.18	11.205	
19,142.3	8,119.0	19,971.7	9,008.2	184.2	184.6	102.65	-10,927.3	-2,892.0	4,047.1	3,684.6	362.46	11.166	
19,200.0	8,119.0	20,007.8	9,007.5	185.1	185.2	102.64	-10,963.4	-2,892.1	4,047.2	3,683.4	363.89	11.122	
19,300.0	8,119.0	20,162.0	9,000.8	186.8	187.7	102.54	-11,117.4	-2,893.5	4,048.2	3,680.0	368.22	10.994	
19,400.0	8,119.0	20,241.5	8,998.1	188.4	189.0	102.50	-11,196.9	-2,893.2	4,047.6	3,676.5	371.07	10.908	
19,500.0	8,119.0	20,334.2	8,997.6	190.0	190.5	102.50	-11,289.6	-2,892.6	4,047.4	3,673.3	374.14	10.818	
19,600.0	8,119.0	20,621.4	9,001.6	191.6	195.2	102.58	-11,576.5	-2,882.2	4,044.3	3,663.8	380.47	10.630	
19,700.0	8,119.0	20,667.7	9,003.0	193.3	196.0	102.60	-11,622.7	-2,879.6	4,040.1	3,657.3	382.81	10.554	
19,800.0	8,119.0	20,703.0	9,003.8	194.9	196.5	102.62	-11,657.9	-2,878.2	4,037.5	3,652.6	384.91	10.489	
19,900.0	8,119.0	20,744.3	9,004.5	196.5	197.2	102.63	-11,699.3	-2,877.5	4,036.4	3,649.4	387.03	10.429	
19,946.2	8,119.0	20,776.2	9,005.0	197.3	197.7	102.64	-11,731.1	-2,877.1	4,036.4	3,648.1	388.23	10.397	
20,000.0	8,119.0	20,813.2	9,005.8	198.2	198.3	102.65	-11,768.1	-2,876.8	4,036.5	3,646.9	389.62	10.360	
20,100.0	8,119.0	20,905.2	9,008.0	199.8	199.8	102.68	-11,860.1	-2,876.3	4,037.0	3,644.4	392.63	10.282	
20,200.0	8,119.0	20,200.0	9,013.4	201.4	188.3	102.76	-12,042.5	-2,873.1	4,036.5	3,653.4	383.05	10.538	
20,300.0	8,119.0	21,250.1	9,019.0	203.1	205.5	102.85	-12,204.7	-2,866.8	4,033.8	3,632.3	401.50	10.047	
20,400.0	8,119.0	21,357.2	9,021.5	204.7	207.2	102.90	-12,311.6	-2,862.2	4,030.7	3,625.9	404.77	9.958	
20,500.0	8,119.0	21,446.0	9,023.8	206.3	208.7	102.94	-12,400.3	-2,858.3	4,027.6	3,619.8	407.75	9.878	
20,606.7	8,119.0	21,446.0	9,023.8	208.1	208.7	102.94	-12,400.3	-2,858.3	4,025.9	3,616.7	409.27	9.837	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #112H - Wellbore #1 - Actual Surveys — **Offset Site Error:** 0.0 usft

Survey Program: 29-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.38	-7.3	-1,105.4	1,105.4				
100.0	100.0	93.5	93.5	0.1	0.2	-90.37	-7.2	-1,105.4	1,105.4	1,105.0	0.36	3,062.496	
200.0	200.0	192.7	192.7	0.5	0.6	-90.36	-6.9	-1,105.5	1,105.5	1,104.4	1.07	1,028.543	
300.0	300.0	295.7	295.7	0.8	1.0	-90.33	-6.4	-1,105.5	1,105.6	1,103.8	1.80	613.750	
400.0	400.0	406.6	406.6	1.2	1.3	-90.31	-5.9	-1,104.7	1,104.7	1,102.2	2.55	432.981	
500.0	500.0	510.2	510.2	1.6	1.7	-90.26	-5.0	-1,103.4	1,103.5	1,100.3	3.28	336.951	
600.0	600.0	612.0	612.0	1.9	2.1	-90.24	-4.7	-1,101.7	1,101.8	1,097.8	3.99	276.065	
700.0	700.0	706.4	706.3	2.3	2.4	-90.25	-4.8	-1,100.4	1,100.5	1,095.8	4.68	235.152	
800.0	800.0	809.3	809.2	2.6	2.8	-90.25	-4.9	-1,099.3	1,099.4	1,094.0	5.40	203.550	
900.0	900.0	908.5	908.4	3.0	3.1	-90.26	-5.0	-1,097.7	1,097.8	1,091.7	6.11	179.694	
1,000.0	1,000.0	1,011.1	1,011.0	3.4	3.5	-90.30	-5.7	-1,096.4	1,096.6	1,089.8	6.83	160.587	
1,036.1	1,036.1	1,043.5	1,043.4	3.5	3.6	-164.73	-6.0	-1,095.9	1,096.3	1,089.2	7.07	155.093	CC, ES
1,100.0	1,100.0	1,094.6	1,094.6	3.7	3.8	-164.75	-6.1	-1,095.6	1,097.3	1,089.9	7.47	146.886	
1,200.0	1,199.8	1,173.9	1,173.8	4.1	4.0	-164.74	-5.3	-1,096.3	1,103.2	1,095.1	8.09	136.326	
1,300.0	1,299.5	1,255.0	1,254.9	4.4	4.3	-164.65	-2.9	-1,098.6	1,114.4	1,105.6	8.72	127.787	
1,400.0	1,398.7	1,343.3	1,342.9	4.8	4.6	-164.52	0.9	-1,102.0	1,130.0	1,120.6	9.38	120.518	
1,500.0	1,497.5	1,428.2	1,427.7	5.2	4.9	-164.36	5.3	-1,106.3	1,150.0	1,140.0	10.02	114.752	
1,600.0	1,595.9	1,510.0	1,509.3	5.5	5.2	-164.34	9.5	-1,111.4	1,172.8	1,162.2	10.65	110.111	
1,700.0	1,694.4	1,600.6	1,599.4	5.9	5.5	-164.34	13.8	-1,117.9	1,196.6	1,185.3	11.31	105.762	
1,800.0	1,792.9	1,700.2	1,698.7	6.3	5.9	-164.34	18.5	-1,125.2	1,220.5	1,208.5	12.02	101.551	
1,900.0	1,891.4	1,775.6	1,773.7	6.8	6.2	-164.33	22.0	-1,131.4	1,245.2	1,232.6	12.62	98.664	
2,000.0	1,989.9	1,848.4	1,846.1	7.2	6.4	-164.31	25.9	-1,138.6	1,271.6	1,258.4	13.21	96.277	
2,100.0	2,088.4	1,917.4	1,914.5	7.6	6.7	-164.28	29.8	-1,146.7	1,299.9	1,286.2	13.77	94.394	
2,200.0	2,186.8	1,984.3	1,980.7	8.0	6.9	-164.29	32.7	-1,156.1	1,330.3	1,316.0	14.32	92.923	
2,300.0	2,285.3	2,065.7	2,061.1	8.5	7.3	-164.34	35.4	-1,168.8	1,362.2	1,347.3	14.93	91.223	
2,400.0	2,383.8	2,156.3	2,150.4	8.9	7.6	-164.42	37.6	-1,183.5	1,394.7	1,379.1	15.60	89.411	
2,500.0	2,482.3	2,243.5	2,236.3	9.3	7.9	-164.51	39.4	-1,197.9	1,427.5	1,411.3	16.25	87.866	
2,600.0	2,580.8	2,339.7	2,331.2	9.8	8.3	-164.60	41.7	-1,214.1	1,460.7	1,443.7	16.95	86.177	
2,700.0	2,679.2	2,438.4	2,428.5	10.2	8.7	-164.62	45.4	-1,230.5	1,493.5	1,475.8	17.67	84.516	
2,800.0	2,777.7	2,546.2	2,534.7	10.6	9.2	-164.61	50.5	-1,247.8	1,525.8	1,507.4	18.45	82.704	
2,900.0	2,876.2	2,656.1	2,643.2	11.1	9.6	-164.61	55.3	-1,264.4	1,557.3	1,538.1	19.24	80.941	
3,000.0	2,974.7	2,785.5	2,771.3	11.5	10.1	-164.64	60.3	-1,282.1	1,587.4	1,567.2	20.14	78.825	
3,100.0	3,073.2	2,875.4	2,860.5	11.9	10.5	-164.67	63.6	-1,293.0	1,616.0	1,595.2	20.82	77.626	
3,200.0	3,171.6	2,954.4	2,938.7	12.4	10.8	-164.68	66.8	-1,303.7	1,645.9	1,624.5	21.44	76.779	
3,300.0	3,270.1	3,037.2	3,020.6	12.8	11.2	-164.68	70.5	-1,315.3	1,676.3	1,654.2	22.08	75.927	
3,400.0	3,368.6	3,105.0	3,087.5	13.3	11.4	-164.68	73.6	-1,325.9	1,708.1	1,685.5	22.63	75.492	
3,500.0	3,467.1	3,180.5	3,161.9	13.7	11.8	-164.68	76.8	-1,338.7	1,741.3	1,718.0	23.22	74.993	
3,600.0	3,565.6	3,302.5	3,282.1	14.2	12.3	-164.69	81.8	-1,358.7	1,774.0	1,749.9	24.10	73.611	
3,700.0	3,664.0	3,375.7	3,354.2	14.6	12.6	-164.71	84.6	-1,370.7	1,806.6	1,781.9	24.68	73.205	
3,800.0	3,762.5	3,452.9	3,430.2	15.1	12.9	-164.72	87.5	-1,384.1	1,840.1	1,814.8	25.28	72.790	
3,900.0	3,861.0	3,575.7	3,551.0	15.5	13.5	-164.73	92.6	-1,405.3	1,873.8	1,847.6	26.17	71.591	
4,000.0	3,959.5	3,686.9	3,660.8	16.0	13.9	-164.75	96.7	-1,422.7	1,905.7	1,878.7	26.99	70.609	
4,100.0	4,058.0	3,761.6	3,734.6	16.4	14.3	-164.78	99.0	-1,434.6	1,937.9	1,910.3	27.58	70.270	
4,200.0	4,156.4	3,854.4	3,826.0	16.8	14.7	-164.81	102.2	-1,449.9	1,970.6	1,942.4	28.28	69.682	
4,300.0	4,254.9	3,973.9	3,943.9	17.3	15.2	-164.82	106.9	-1,468.6	2,002.6	1,973.4	29.15	68.695	
4,400.0	4,353.4	4,055.6	4,024.6	17.7	15.5	-164.82	110.6	-1,481.3	2,034.4	2,004.6	29.79	68.297	
4,500.0	4,451.9	4,121.0	4,089.0	18.2	15.8	-164.79	114.3	-1,492.2	2,067.3	2,037.0	30.32	68.184	
4,600.0	4,550.4	4,216.7	4,182.9	18.6	16.3	-164.72	120.8	-1,508.9	2,101.0	2,070.0	31.05	67.666	
4,700.0	4,648.9	4,326.2	4,290.6	19.1	16.7	-164.64	128.5	-1,527.5	2,134.2	2,102.3	31.87	66.960	
4,800.0	4,747.3	4,399.9	4,363.0	19.5	17.1	-164.60	133.1	-1,540.0	2,167.5	2,135.0	32.46	66.778	
4,900.0	4,845.8	4,468.3	4,430.3	20.0	17.4	-164.60	136.3	-1,552.4	2,201.7	2,168.7	33.00	66.712	
5,000.0	4,944.3	5,000.0	4,542.3	20.4	19.8	-164.60	141.0	-1,573.3	2,236.2	2,200.8	35.44	63.103	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #112H - Wellbore #1 - Actual Surveys

Offset Site Error: 0.0 usft

Survey Program: 29-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	4,749.9	4,707.7	20.9	18.6	-164.64	147.0	-1,599.4	2,267.7	2,232.6	35.04	64.714	
5,200.0	5,141.3	4,861.9	4,818.5	21.3	19.1	-164.69	150.3	-1,615.3	2,298.3	2,262.4	35.86	64.085	
5,300.0	5,239.7	4,947.4	4,903.1	21.8	19.5	-164.71	153.0	-1,627.1	2,328.5	2,292.0	36.52	63.755	
5,400.0	5,338.2	5,022.9	4,977.8	22.2	19.8	-164.73	155.6	-1,638.2	2,359.6	2,322.4	37.12	63.562	
5,500.0	5,436.7	5,104.9	5,058.7	22.7	20.1	-164.74	158.8	-1,650.9	2,391.3	2,353.5	37.76	63.327	
5,600.0	5,535.2	5,210.9	5,163.4	23.1	20.6	-164.76	162.9	-1,667.3	2,423.1	2,384.6	38.55	62.851	
5,700.0	5,633.7	5,307.7	5,259.0	23.6	21.0	-164.77	166.5	-1,681.6	2,454.3	2,415.0	39.29	62.471	
5,800.0	5,732.1	5,379.5	5,329.8	24.0	21.3	-164.77	169.6	-1,692.8	2,486.2	2,446.3	39.86	62.371	
5,900.0	5,830.6	5,459.5	5,408.7	24.5	21.7	-164.76	173.5	-1,705.9	2,518.7	2,478.2	40.49	62.209	
6,000.0	5,929.1	5,553.3	5,501.1	24.9	22.1	-164.74	178.3	-1,721.4	2,551.6	2,510.4	41.21	61.921	
6,100.0	6,027.6	5,676.3	5,622.3	25.4	22.6	-164.73	184.1	-1,741.2	2,584.0	2,541.8	42.12	61.353	
6,200.0	6,126.1	5,799.8	5,744.3	25.8	23.2	-164.74	189.4	-1,759.6	2,615.2	2,572.2	43.02	60.787	
6,300.0	6,224.5	5,866.5	5,810.3	26.3	23.5	-164.74	192.2	-1,769.4	2,646.2	2,602.7	43.57	60.740	
6,400.0	6,323.0	5,926.0	5,868.8	26.7	23.7	-164.73	195.0	-1,779.3	2,678.9	2,634.9	44.06	60.805	
6,500.0	6,421.5	5,976.5	5,918.5	27.2	24.0	-164.72	197.6	-1,788.4	2,713.0	2,668.5	44.48	60.989	
6,600.0	6,520.0	6,060.9	6,001.3	27.6	24.4	-164.70	202.3	-1,804.2	2,747.9	2,702.7	45.14	60.874	
6,700.0	6,618.5	6,187.2	6,125.2	28.1	24.9	-164.67	209.2	-1,827.2	2,782.3	2,736.2	46.09	60.366	
6,800.0	6,716.9	6,308.9	6,244.9	28.5	25.5	-164.66	214.9	-1,848.0	2,815.6	2,768.6	47.00	59.905	
6,900.0	6,815.4	6,432.8	6,367.1	29.0	26.0	-164.66	220.2	-1,868.2	2,848.2	2,800.3	47.92	59.439	
6,981.8	6,896.0	6,581.5	6,514.2	29.4	26.7	-164.69	225.5	-1,889.4	2,873.3	2,824.3	48.96	58.690	
7,000.0	6,913.9	7,000.0	6,512.4	29.5	28.4	-164.73	225.4	-1,889.1	2,878.6	2,828.0	50.54	56.957	
7,100.0	7,012.9	6,644.1	6,576.2	29.9	26.9	-164.92	227.6	-1,898.1	2,906.3	2,856.8	49.49	58.721	
7,200.0	7,112.3	6,707.2	6,638.4	30.3	27.2	-165.07	230.2	-1,908.0	2,931.4	2,881.4	49.99	58.636	
7,300.0	7,212.2	6,818.2	6,747.8	30.6	27.7	-165.13	235.3	-1,925.8	2,952.8	2,902.0	50.80	58.130	
7,381.8	7,294.0	6,935.3	6,863.5	30.9	28.2	-90.71	240.1	-1,943.2	2,966.3	2,914.7	51.61	57.477	
7,400.0	7,312.2	6,959.2	6,887.2	30.9	28.3	-90.70	241.0	-1,946.6	2,968.9	2,917.1	51.77	57.345	
7,500.0	7,412.2	7,057.0	6,984.0	31.2	28.7	-90.63	244.4	-1,960.1	2,982.6	2,930.2	52.46	56.851	
7,600.0	7,512.2	7,120.5	7,046.8	31.5	29.0	-90.58	246.8	-1,969.2	2,997.1	2,944.2	52.94	56.614	
7,633.8	7,546.0	7,152.0	7,077.9	31.6	29.1	-90.55	248.2	-1,974.2	3,002.5	2,949.3	53.16	56.475	
7,650.0	7,562.2	7,152.0	7,077.9	31.7	29.1	89.52	248.2	-1,974.2	3,005.0	2,951.8	53.17	56.515	
7,700.0	7,612.0	7,176.5	7,102.0	31.8	29.3	88.76	249.4	-1,978.2	3,013.2	2,959.8	53.34	56.485	
7,750.0	7,661.4	7,208.3	7,133.3	31.9	29.4	88.04	251.0	-1,983.6	3,021.6	2,968.0	53.56	56.418	
7,800.0	7,709.8	7,246.0	7,170.4	32.0	29.6	87.39	253.0	-1,990.3	3,030.1	2,976.3	53.80	56.322	
7,850.0	7,757.1	7,289.0	7,212.6	32.1	29.8	86.85	255.4	-1,997.9	3,038.7	2,984.6	54.07	56.195	
7,900.0	7,802.7	7,342.6	7,265.3	32.2	30.0	86.47	258.1	-2,007.3	3,047.0	2,992.6	54.41	55.997	
7,950.0	7,846.4	7,393.9	7,315.8	32.3	30.2	86.17	260.5	-2,016.1	3,055.2	3,000.4	54.73	55.818	
8,000.0	7,887.7	7,444.5	7,365.6	32.4	30.5	85.94	262.7	-2,024.7	3,063.1	3,008.1	55.05	55.646	
8,050.0	7,926.5	7,500.0	7,420.3	32.4	30.7	85.85	265.1	-2,033.8	3,070.9	3,015.5	55.39	55.441	
8,100.0	7,962.4	7,551.1	7,470.7	32.5	30.9	85.77	267.2	-2,041.9	3,078.6	3,022.9	55.71	55.266	
8,150.0	7,995.1	7,597.4	7,516.4	32.5	31.1	85.68	269.1	-2,049.0	3,086.2	3,030.2	55.99	55.120	
8,200.0	8,024.4	7,638.6	7,557.1	32.6	31.3	85.55	270.7	-2,055.1	3,093.9	3,037.7	56.25	55.004	
8,250.0	8,050.1	7,670.8	7,588.9	32.6	31.5	85.29	271.9	-2,059.8	3,101.7	3,045.3	56.45	54.942	
8,300.0	8,071.9	7,698.7	7,616.5	32.7	31.6	84.95	273.0	-2,063.7	3,109.8	3,053.1	56.64	54.902	
8,350.0	8,089.7	7,720.9	7,638.6	32.7	31.7	84.51	273.8	-2,066.8	3,118.1	3,061.3	56.80	54.891	
8,400.0	8,103.4	7,737.4	7,654.9	32.7	31.7	83.94	274.5	-2,069.1	3,126.7	3,069.7	56.94	54.911	
8,450.0	8,112.8	7,747.7	7,665.1	32.8	31.8	83.23	274.8	-2,070.5	3,135.5	3,078.5	57.05	54.963	
8,500.0	8,118.0	7,752.2	7,669.5	32.9	31.8	82.40	275.0	-2,071.2	3,144.7	3,087.5	57.13	55.044	
8,533.8	8,119.0	7,751.8	7,669.1	33.0	31.8	81.76	275.0	-2,071.1	3,150.9	3,093.8	57.17	55.116	
8,600.0	8,119.0	7,748.3	7,665.7	33.1	31.8	81.69	274.9	-2,070.6	3,164.0	3,106.7	57.25	55.269	
8,700.0	8,119.0	7,743.0	7,660.4	33.4	31.8	81.59	274.7	-2,069.9	3,186.2	3,128.8	57.41	55.499	
8,800.0	8,119.0	7,737.7	7,655.1	33.8	31.7	81.49	274.5	-2,069.2	3,211.3	3,153.7	57.62	55.732	
8,900.0	8,119.0	7,732.3	7,649.8	34.3	31.7	81.40	274.3	-2,068.4	3,239.4	3,181.5	57.88	55.971	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #112H - Wellbore #1 - Actual Surveys

Offset Site Error: 0.0 usft

Survey Program: 29-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,000.0	8,119.0	7,726.8	7,644.4	34.9	31.7	81.29	274.1	-2,067.7	3,270.2	3,212.1	58.17	56.219	
9,100.0	8,119.0	7,721.4	7,639.0	35.5	31.7	81.19	273.9	-2,066.9	3,303.8	3,245.3	58.50	56.478	
9,200.0	8,119.0	7,715.8	7,633.5	36.3	31.7	81.09	273.7	-2,066.1	3,340.0	3,281.2	58.85	56.751	
9,300.0	8,119.0	7,710.3	7,628.1	37.1	31.6	80.99	273.4	-2,065.4	3,378.8	3,319.6	59.24	57.040	
9,400.0	8,119.0	7,704.7	7,622.5	37.9	31.6	80.89	273.2	-2,064.6	3,420.1	3,360.5	59.64	57.348	
9,500.0	8,119.0	7,699.1	7,617.0	38.8	31.6	80.78	273.0	-2,063.8	3,463.8	3,403.7	60.05	57.677	
9,600.0	8,119.0	7,693.5	7,611.5	39.8	31.6	80.68	272.8	-2,063.0	3,509.8	3,449.3	60.48	58.028	
9,700.0	8,119.0	7,687.9	7,605.9	40.8	31.5	80.57	272.6	-2,062.2	3,558.0	3,497.0	60.92	58.403	
9,800.0	8,119.0	7,682.2	7,600.3	41.8	31.5	80.47	272.4	-2,061.4	3,608.3	3,546.9	61.36	58.803	
9,900.0	8,119.0	7,676.5	7,594.6	42.9	31.5	80.36	272.2	-2,060.6	3,660.6	3,598.8	61.81	59.228	
10,000.0	8,119.0	7,670.8	7,589.0	44.0	31.5	80.26	271.9	-2,059.8	3,714.9	3,652.6	62.25	59.678	
10,100.0	8,119.0	7,665.0	7,583.3	45.2	31.4	80.15	271.7	-2,058.9	3,771.0	3,708.3	62.69	60.155	
10,200.0	8,119.0	7,659.3	7,577.6	46.3	31.4	80.05	271.5	-2,058.1	3,829.0	3,765.8	63.12	60.658	
10,300.0	8,119.0	7,653.4	7,571.8	47.5	31.4	79.94	271.3	-2,057.3	3,888.6	3,825.1	63.55	61.187	
10,400.0	8,119.0	12,690.3	10,462.5	48.8	53.6	127.08	-2,125.2	-2,102.7	3,897.2	3,813.6	83.61	46.614	
10,500.0	8,119.0	12,730.8	10,462.5	50.0	54.1	127.07	-2,165.8	-2,103.5	3,899.4	3,814.3	85.10	45.820	
10,600.0	8,119.0	12,782.0	10,464.3	51.3	54.7	127.08	-2,216.9	-2,104.3	3,903.1	3,816.4	86.70	45.018	
10,700.0	8,119.0	12,846.2	10,467.7	52.6	55.4	127.11	-2,281.0	-2,105.3	3,907.9	3,819.4	88.45	44.182	
10,800.0	8,119.0	12,914.6	10,471.5	54.0	56.2	127.14	-2,349.3	-2,106.7	3,913.3	3,823.1	90.26	43.355	
10,900.0	8,119.0	12,987.6	10,476.1	55.3	57.1	127.17	-2,422.1	-2,108.7	3,919.7	3,827.6	92.14	42.542	
11,000.0	8,119.0	13,300.6	10,477.6	56.7	61.0	127.09	-2,734.9	-2,118.1	3,921.3	3,824.3	96.93	40.456	
11,100.0	8,119.0	13,389.4	10,474.6	58.0	62.1	127.02	-2,823.5	-2,121.4	3,922.7	3,823.6	99.16	39.559	
11,200.0	8,119.0	13,637.6	10,462.2	59.4	65.3	126.80	-3,071.3	-2,128.1	3,922.4	3,819.0	103.41	37.932	
11,300.0	8,119.0	13,709.0	10,460.3	60.8	66.3	126.78	-3,142.6	-2,127.5	3,920.5	3,815.1	105.47	37.171	
11,400.0	8,119.0	13,801.2	10,458.5	62.2	67.5	126.76	-3,234.8	-2,126.8	3,919.2	3,811.4	107.80	36.356	
11,500.0	8,119.0	13,885.0	10,457.1	63.6	68.6	126.75	-3,318.5	-2,126.1	3,918.0	3,807.9	110.04	35.606	
11,600.0	8,119.0	11,600.0	10,453.7	65.1	42.7	126.73	-3,493.5	-2,123.2	3,915.9	3,832.5	83.38	46.964	
11,700.0	8,119.0	14,150.1	10,452.1	66.5	72.2	126.73	-3,583.5	-2,120.3	3,912.7	3,797.0	115.73	33.810	
11,800.0	8,119.0	14,227.3	10,452.7	68.0	73.3	126.76	-3,660.7	-2,117.2	3,910.5	3,792.6	117.90	33.167	
11,900.0	8,119.0	14,317.6	10,453.6	69.4	74.6	126.79	-3,750.9	-2,113.9	3,908.6	3,788.3	120.23	32.508	
12,000.0	8,119.0	14,362.0	10,453.4	70.9	75.2	126.80	-3,795.3	-2,112.8	3,907.2	3,785.1	122.04	32.015	
12,057.4	8,119.0	14,404.5	10,452.9	71.8	75.8	126.79	-3,837.8	-2,112.5	3,906.8	3,783.5	123.30	31.685	
12,100.0	8,119.0	14,421.1	10,452.7	72.4	76.0	126.79	-3,854.4	-2,112.6	3,906.9	3,782.9	124.04	31.497	
12,200.0	8,119.0	14,457.0	10,452.3	73.9	76.5	126.78	-3,890.3	-2,113.3	3,908.4	3,782.6	125.74	31.083	
12,300.0	8,119.0	14,493.0	10,451.8	75.4	77.0	126.76	-3,926.2	-2,114.8	3,911.5	3,784.0	127.43	30.695	
12,400.0	8,119.0	12,400.0	10,450.5	76.9	47.8	126.69	-4,001.0	-2,120.3	3,916.5	3,813.8	102.66	38.151	
12,500.0	8,119.0	14,770.3	10,448.0	78.4	81.0	126.59	-4,203.1	-2,127.4	3,918.2	3,784.5	133.72	29.302	
12,600.0	8,119.0	14,832.0	10,447.9	79.9	81.9	126.56	-4,264.8	-2,129.8	3,921.3	3,785.5	135.79	28.878	
12,700.0	8,119.0	15,114.0	10,445.4	81.4	86.0	126.51	-4,546.6	-2,130.8	3,920.9	3,780.1	140.79	27.848	
12,800.0	8,119.0	15,149.9	10,445.0	82.9	86.5	126.51	-4,582.5	-2,130.4	3,919.9	3,777.4	142.57	27.495	
12,803.0	8,119.0	15,150.9	10,445.0	83.0	86.5	126.51	-4,583.4	-2,130.4	3,919.9	3,777.3	142.62	27.485	
12,900.0	8,119.0	15,208.0	10,444.6	84.5	87.3	126.49	-4,640.5	-2,131.6	3,921.1	3,776.4	144.64	27.110	
13,000.0	8,119.0	15,231.6	10,444.5	86.0	87.7	126.48	-4,664.1	-2,132.4	3,923.3	3,777.1	146.21	26.833	
13,100.0	8,119.0	15,540.1	10,443.7	87.5	92.2	126.48	-4,972.5	-2,129.9	3,921.5	3,770.0	151.57	25.873	
13,200.0	8,119.0	15,679.0	10,442.9	89.1	94.3	126.49	-5,111.3	-2,126.0	3,919.7	3,765.1	154.65	25.346	
13,300.0	8,119.0	15,723.4	10,442.5	90.6	95.0	126.50	-5,155.7	-2,124.5	3,917.1	3,760.5	156.58	25.016	
13,400.0	8,119.0	15,773.0	10,442.1	92.2	95.7	126.50	-5,205.3	-2,123.9	3,915.9	3,757.3	158.57	24.695	
13,500.0	8,119.0	16,178.1	10,426.5	93.7	101.8	126.46	-5,609.4	-2,105.3	3,907.3	3,742.4	164.91	23.693	
13,600.0	8,119.0	16,243.0	10,425.2	95.3	102.8	126.49	-5,674.1	-2,099.9	3,899.7	3,732.6	167.15	23.330	
13,700.0	8,119.0	16,243.0	10,425.2	96.8	102.8	126.49	-5,674.1	-2,099.9	3,893.5	3,724.8	168.68	23.082	
13,800.0	8,119.0	16,288.2	10,425.5	98.4	103.5	126.51	-5,719.1	-2,096.7	3,888.9	3,718.2	170.65	22.789	
13,900.0	8,119.0	16,337.0	10,426.4	100.0	104.3	126.54	-5,767.9	-2,094.4	3,886.4	3,713.8	172.63	22.513	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #112H - Wellbore #1 - Actual Surveys

Offset Site Error: 0.0 usft

Survey Program: 29-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,000.0	8,119.0	14,000.0	10,426.6	101.5	69.0	126.56	-5,840.6	-2,092.4	3,884.7	3,742.0	142.74	27.215	
14,100.0	8,119.0	16,608.8	10,421.5	103.1	108.4	126.53	-6,039.5	-2,087.9	3,881.8	3,702.9	178.89	21.699	
14,200.0	8,119.0	16,712.0	10,417.8	104.7	110.0	126.51	-6,142.6	-2,084.2	3,877.2	3,695.5	181.64	21.345	
14,300.0	8,119.0	16,751.0	10,417.0	106.2	110.6	126.51	-6,181.6	-2,082.7	3,873.6	3,690.0	183.57	21.101	
14,400.0	8,119.0	16,806.0	10,418.1	107.8	111.5	126.54	-6,236.5	-2,080.9	3,872.2	3,686.5	185.64	20.859	
14,456.3	8,119.0	16,806.0	10,418.1	108.7	111.5	126.54	-6,236.5	-2,080.9	3,871.8	3,685.4	186.39	20.772	
14,500.0	8,119.0	16,820.4	10,418.7	109.4	111.7	126.55	-6,250.9	-2,080.5	3,872.0	3,684.8	187.15	20.690	
14,600.0	8,119.0	16,909.2	10,422.8	111.0	113.1	126.62	-6,339.6	-2,077.9	3,872.9	3,683.3	189.57	20.430	
14,700.0	8,119.0	16,990.1	10,425.6	112.6	114.3	126.66	-6,420.4	-2,076.7	3,874.2	3,682.3	191.92	20.186	
14,800.0	8,119.0	17,034.7	10,426.7	114.2	115.0	126.66	-6,465.0	-2,076.9	3,876.4	3,682.6	193.79	20.004	
14,900.0	8,119.0	17,090.0	10,428.4	115.7	115.9	126.67	-6,520.2	-2,078.0	3,880.2	3,684.4	195.78	19.819	
15,000.0	8,119.0	17,269.4	10,423.9	117.3	118.6	126.53	-6,699.3	-2,086.7	3,882.9	3,683.0	199.91	19.423	
15,100.0	8,119.0	15,100.0	10,416.0	118.9	85.0	126.36	-6,848.1	-2,094.9	3,884.7	3,712.2	172.49	22.521	
15,200.0	8,119.0	17,556.6	10,412.4	120.5	123.1	126.29	-6,986.0	-2,096.8	3,884.7	3,677.7	206.97	18.769	
15,221.4	8,119.0	17,571.0	10,412.4	120.9	123.3	126.29	-7,000.3	-2,096.7	3,884.6	3,677.2	207.45	18.725	
15,300.0	8,119.0	17,621.7	10,412.5	122.1	124.1	126.29	-7,051.1	-2,096.6	3,885.0	3,675.8	209.20	18.571	
15,400.0	8,119.0	17,713.9	10,412.8	123.7	125.6	126.29	-7,143.3	-2,097.0	3,886.0	3,674.2	211.82	18.346	
15,500.0	8,119.0	17,809.3	10,412.6	125.3	127.1	126.28	-7,238.6	-2,097.7	3,886.9	3,672.4	214.50	18.121	
15,600.0	8,119.0	17,891.4	10,412.6	126.9	128.3	126.26	-7,320.8	-2,098.6	3,888.2	3,671.2	216.98	17.919	
15,700.0	8,119.0	18,001.7	10,413.2	128.5	130.1	126.26	-7,431.0	-2,099.7	3,889.8	3,669.9	219.87	17.691	
15,800.0	8,119.0	18,159.7	10,412.8	130.1	132.6	126.24	-7,589.0	-2,100.1	3,890.4	3,666.9	223.45	17.410	
15,900.0	8,119.0	18,280.4	10,412.1	131.7	134.5	126.24	-7,709.7	-2,099.0	3,889.7	3,663.2	226.48	17.175	
16,000.0	8,119.0	18,352.4	10,411.4	133.3	135.6	126.23	-7,781.7	-2,098.5	3,889.2	3,660.3	228.85	16.995	
16,003.5	8,119.0	18,354.5	10,411.4	133.4	135.6	126.23	-7,783.8	-2,098.5	3,889.2	3,660.3	228.92	16.989	
16,100.0	8,119.0	18,418.7	10,411.3	134.9	136.6	126.22	-7,848.0	-2,098.7	3,889.6	3,658.5	231.12	16.829	
16,200.0	8,119.0	16,200.0	10,410.6	136.5	101.7	126.21	-8,003.7	-2,098.4	3,889.7	3,687.5	202.18	19.239	
16,300.0	8,119.0	18,688.0	10,410.1	138.1	140.9	126.21	-8,117.3	-2,096.4	3,888.4	3,650.8	237.59	16.366	
16,379.7	8,119.0	18,730.7	10,410.2	139.4	141.6	126.22	-8,160.0	-2,095.8	3,888.0	3,648.7	239.26	16.250	
16,400.0	8,119.0	18,741.1	10,410.3	139.7	141.7	126.22	-8,170.4	-2,095.7	3,888.0	3,648.3	239.67	16.222	
16,500.0	8,119.0	18,956.8	10,412.3	141.4	145.2	126.28	-8,386.0	-2,090.2	3,887.2	3,643.3	243.84	15.942	
16,600.0	8,119.0	19,082.0	10,411.9	143.0	147.2	126.32	-8,511.1	-2,084.8	3,884.0	3,637.2	246.82	15.736	
16,700.0	8,119.0	19,159.0	10,411.4	144.6	148.4	126.33	-8,588.0	-2,081.9	3,881.0	3,631.7	249.26	15.570	
16,800.0	8,119.0	19,336.6	10,404.0	146.2	151.2	126.27	-8,765.4	-2,078.1	3,877.3	3,624.2	253.07	15.321	
16,900.0	8,119.0	19,450.7	10,399.6	147.8	153.0	126.25	-8,879.3	-2,073.7	3,872.3	3,616.3	256.03	15.124	
17,000.0	8,119.0	19,538.0	10,398.5	149.4	154.4	126.28	-8,966.4	-2,067.8	3,866.7	3,608.1	258.58	14.954	
17,100.0	8,119.0	19,579.7	10,398.3	151.0	155.1	126.30	-9,008.0	-2,065.2	3,862.3	3,601.7	260.62	14.820	
17,200.0	8,119.0	19,632.0	10,400.1	152.7	155.9	126.34	-9,060.2	-2,062.6	3,860.3	3,597.6	262.69	14.695	
17,280.0	8,119.0	19,632.0	10,400.1	153.9	155.9	126.34	-9,060.2	-2,062.6	3,859.5	3,595.6	263.81	14.630	
17,300.0	8,119.0	19,632.0	10,400.1	154.3	155.9	126.34	-9,060.2	-2,062.6	3,859.5	3,595.4	264.08	14.615	
17,400.0	8,119.0	19,681.1	10,402.3	155.9	156.7	126.38	-9,109.2	-2,061.4	3,860.7	3,594.7	265.99	14.514	
17,500.0	8,119.0	19,733.9	10,403.8	157.5	157.6	126.39	-9,162.0	-2,061.7	3,863.2	3,595.2	267.98	14.416	
17,600.0	8,119.0	19,846.7	10,405.9	159.1	159.4	126.40	-9,274.7	-2,063.3	3,865.9	3,595.0	270.93	14.269	
17,700.0	8,119.0	19,950.6	10,408.1	160.7	161.0	126.40	-9,378.7	-2,065.0	3,868.9	3,595.2	273.73	14.134	
17,800.0	8,119.0	20,123.3	10,408.9	162.4	163.8	126.39	-9,551.2	-2,066.3	3,870.0	3,592.4	277.62	13.940	
17,900.0	8,119.0	20,206.9	10,408.5	164.0	165.1	126.38	-9,634.9	-2,067.1	3,870.9	3,590.8	280.18	13.816	
18,000.0	8,119.0	20,276.3	10,408.3	165.6	166.2	126.36	-9,704.2	-2,068.2	3,872.5	3,590.0	282.51	13.707	
18,100.0	8,119.0	20,368.1	10,407.8	167.2	167.7	126.33	-9,796.1	-2,070.5	3,874.6	3,589.4	285.23	13.584	
18,200.0	8,119.0	20,480.0	10,408.5	168.9	169.5	126.33	-9,907.9	-2,070.6	3,875.5	3,587.3	288.17	13.449	
18,300.0	8,119.0	20,536.6	10,408.4	170.5	170.4	126.32	-9,964.5	-2,071.2	3,877.2	3,586.9	290.27	13.357	
18,400.0	8,119.0	20,575.0	10,407.7	172.1	171.0	126.29	-10,002.8	-2,073.5	3,881.1	3,589.1	292.07	13.288	
18,500.0	8,119.0	21,043.0	10,407.9	173.7	178.5	126.32	-10,470.3	-2,067.7	3,879.4	3,579.5	299.94	12.934	
18,600.0	8,119.0	21,082.7	10,408.5	175.4	179.2	126.35	-10,509.9	-2,064.9	3,875.2	3,573.2	301.96	12.834	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #112H - Wellbore #1 - Actual Surveys

Offset Site Error: 0.0 usft

Survey Program: 29-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,700.0	8,119.0	21,138.0	10,409.2	177.0	180.1	126.37	-10,565.1	-2,062.8	3,872.8	3,568.7	304.12	12.734	
18,800.0	8,119.0	21,164.4	10,409.2	178.6	180.5	126.38	-10,591.5	-2,062.4	3,871.8	3,565.9	305.91	12.657	
18,830.2	8,119.0	21,183.2	10,409.1	179.1	180.8	126.37	-10,610.4	-2,062.4	3,871.8	3,565.2	306.59	12.628	
18,900.0	8,119.0	21,231.0	10,408.0	180.2	181.6	126.35	-10,658.1	-2,063.1	3,872.0	3,563.7	308.27	12.561	
19,000.0	8,119.0	21,372.4	10,409.0	181.9	183.8	126.37	-10,799.5	-2,061.9	3,872.2	3,560.6	311.59	12.427	
19,100.0	8,119.0	21,544.7	10,407.1	183.5	186.6	126.37	-10,971.7	-2,058.2	3,870.0	3,554.7	315.32	12.273	
19,200.0	8,119.0	21,607.0	10,407.7	185.1	187.6	126.39	-11,034.0	-2,056.3	3,868.4	3,550.8	317.56	12.182	
19,300.0	8,119.0	21,677.0	10,408.8	186.8	188.8	126.41	-11,104.0	-2,054.5	3,867.7	3,547.8	319.86	12.092	
19,400.0	8,119.0	21,836.6	10,409.7	188.4	191.3	126.45	-11,263.5	-2,050.3	3,866.4	3,543.1	323.32	11.958	
19,500.0	8,119.0	21,941.1	10,409.3	190.0	193.0	126.47	-11,367.9	-2,046.9	3,863.9	3,537.8	326.10	11.849	
19,600.0	8,119.0	22,026.2	10,409.2	191.6	194.4	126.49	-11,453.0	-2,044.4	3,861.9	3,533.3	328.64	11.751	
19,700.0	8,119.0	22,079.0	10,409.8	193.3	195.3	126.51	-11,505.7	-2,042.4	3,860.3	3,529.6	330.73	11.672	
19,778.3	8,119.0	22,131.7	10,410.5	194.5	196.1	126.53	-11,558.4	-2,041.0	3,859.8	3,527.3	332.49	11.609	
19,800.0	8,119.0	22,141.1	10,410.5	194.9	196.3	126.53	-11,567.8	-2,040.9	3,859.8	3,526.9	332.92	11.594	
19,900.0	8,119.0	22,174.0	10,410.5	196.5	196.8	126.53	-11,600.7	-2,041.1	3,860.9	3,526.2	334.68	11.536	
20,000.0	8,119.0	22,228.6	10,410.2	198.2	197.7	126.51	-11,655.3	-2,042.6	3,863.4	3,526.6	336.76	11.472	
20,100.0	8,119.0	22,268.0	10,409.9	199.8	198.3	126.49	-11,694.6	-2,044.5	3,867.3	3,528.8	338.53	11.424	
20,200.0	8,119.0	22,318.3	10,409.7	201.4	199.1	126.45	-11,744.8	-2,047.7	3,872.7	3,532.2	340.47	11.375	
20,300.0	8,119.0	22,487.4	10,408.6	203.1	201.8	126.33	-11,913.5	-2,059.2	3,878.5	3,533.7	344.88	11.246	
20,400.0	8,119.0	22,698.3	10,407.4	204.7	205.2	126.23	-12,124.3	-2,067.5	3,882.3	3,532.5	349.80	11.099	
20,500.0	8,119.0	22,784.5	10,409.0	206.3	206.6	126.25	-12,210.4	-2,067.6	3,884.0	3,531.6	352.32	11.024	
20,606.7	8,119.0	22,957.0	10,412.2	208.1	209.4	126.30	-12,382.8	-2,065.3	3,884.2	3,528.0	356.14	10.906	SF

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #113H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 228-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	-90.37	-0.6	-90.1	90.1				
100.0	100.0	101.1	101.1	0.1	0.2	-90.37	-0.6	-90.0	90.0	89.7	0.29	313.557	
200.0	200.0	201.3	201.3	0.5	0.3	-90.34	-0.5	-89.7	89.8	88.9	0.80	111.847	
300.0	300.0	301.5	301.5	0.8	0.6	-90.29	-0.5	-89.3	89.3	87.9	1.47	60.927	
400.0	400.0	401.7	401.7	1.2	1.0	-90.17	-0.3	-88.7	88.7	86.5	2.18	40.597	
500.0	500.0	501.6	501.6	1.6	1.3	-90.09	-0.1	-87.9	87.9	85.0	2.90	30.328	
600.0	600.0	601.5	601.5	1.9	1.7	-90.25	-0.4	-87.3	87.3	83.7	3.61	24.162	
700.0	700.0	701.5	701.4	2.3	2.0	-90.59	-0.9	-86.7	86.7	82.4	4.32	20.060	
800.0	800.0	801.4	801.4	2.6	2.4	-91.05	-1.6	-86.2	86.3	81.2	5.04	17.131	
900.0	900.0	901.2	901.1	3.0	2.7	-91.57	-2.4	-85.9	86.0	80.2	5.74	14.966	
967.4	967.4	968.4	968.4	3.2	3.0	-91.95	-2.9	-85.9	85.9	79.7	6.22	13.806	CC
1,000.0	1,000.0	1,000.6	1,000.6	3.4	3.1	-92.07	-3.1	-85.9	86.0	79.6	6.45	13.337	ES
1,100.0	1,100.0	1,099.3	1,099.3	3.7	3.4	-166.45	-2.7	-87.2	88.9	81.8	7.14	12.458	
1,200.0	1,199.8	1,198.2	1,198.1	4.1	3.8	-166.19	-1.2	-89.6	96.4	88.6	7.82	12.335	
1,300.0	1,299.5	1,296.2	1,296.0	4.4	4.1	-165.93	1.1	-93.0	108.3	99.8	8.50	12.737	
1,400.0	1,398.7	1,393.2	1,392.8	4.8	4.4	-164.91	5.9	-97.8	124.8	115.7	9.18	13.598	
1,500.0	1,497.5	1,489.0	1,488.2	5.2	4.8	-163.64	12.6	-103.8	146.1	136.2	9.86	14.815	
1,600.0	1,595.9	1,583.8	1,582.4	5.5	5.1	-162.54	20.4	-111.1	170.4	159.8	10.53	16.174	
1,700.0	1,694.4	1,678.8	1,676.6	5.9	5.5	-161.38	29.4	-119.4	195.8	184.6	11.22	17.462	
1,800.0	1,792.9	1,773.3	1,770.1	6.3	5.8	-160.24	39.3	-128.4	222.2	210.3	11.90	18.681	
1,900.0	1,891.4	1,869.9	1,865.6	6.8	6.2	-159.28	49.7	-138.1	249.1	236.5	12.60	19.766	
2,000.0	1,989.9	1,966.8	1,961.7	7.2	6.6	-158.67	59.3	-147.6	275.8	262.5	13.32	20.711	
2,100.0	2,088.4	2,064.2	2,058.2	7.6	6.9	-158.28	68.3	-157.0	302.2	288.2	14.04	21.529	
2,200.0	2,186.8	2,161.9	2,155.0	8.0	7.3	-158.04	76.8	-166.1	328.3	313.6	14.76	22.240	
2,300.0	2,285.3	2,260.9	2,253.3	8.5	7.7	-157.79	85.6	-174.7	353.9	338.4	15.50	22.827	
2,400.0	2,383.8	2,360.3	2,351.9	8.9	8.1	-157.46	95.2	-182.7	378.9	362.6	16.25	23.314	
2,500.0	2,482.3	2,455.1	2,446.0	9.3	8.5	-157.23	104.0	-190.3	403.8	386.8	16.96	23.807	
2,600.0	2,580.8	2,550.4	2,540.6	9.8	8.8	-157.18	111.7	-198.4	429.1	411.4	17.68	24.274	
2,700.0	2,679.2	2,646.8	2,636.3	10.2	9.2	-157.04	120.4	-206.7	454.6	436.2	18.41	24.697	
2,800.0	2,777.7	2,743.8	2,732.4	10.6	9.6	-156.68	130.9	-214.9	480.1	461.0	19.14	25.083	
2,900.0	2,876.2	2,844.5	2,832.2	11.1	10.0	-156.35	141.7	-222.9	505.2	485.3	19.91	25.373	
3,000.0	2,974.7	2,943.2	2,930.1	11.5	10.4	-156.18	151.1	-230.2	529.6	508.9	20.66	25.628	
3,100.0	3,073.2	3,035.8	3,022.0	11.9	10.8	-155.96	160.7	-237.3	554.3	533.0	21.37	25.938	
3,200.0	3,171.6	3,128.9	3,114.1	12.4	11.1	-155.64	171.6	-244.9	579.8	557.8	22.08	26.256	
3,300.0	3,270.1	3,224.4	3,208.6	12.8	11.5	-155.36	182.5	-253.2	605.7	582.9	22.82	26.544	
3,400.0	3,368.6	3,323.3	3,306.6	13.3	11.9	-155.20	192.8	-262.0	631.7	608.1	23.58	26.787	
3,500.0	3,467.1	3,432.3	3,414.6	13.7	12.4	-155.02	204.2	-270.2	656.4	632.0	24.42	26.876	
3,600.0	3,565.6	3,541.8	3,523.4	14.2	12.8	-154.82	215.6	-276.4	679.3	654.0	25.26	26.895	
3,700.0	3,664.0	3,651.8	3,633.0	14.6	13.2	-154.80	224.8	-281.0	700.4	674.4	26.08	26.853	
3,800.0	3,762.5	3,749.8	3,730.7	15.1	13.6	-154.92	231.2	-284.4	720.5	693.7	26.82	26.863	
3,900.0	3,861.0	3,844.8	3,825.5	15.5	13.9	-155.10	236.6	-288.1	741.0	713.5	27.54	26.906	
4,000.0	3,959.5	3,947.8	3,928.2	16.0	14.3	-155.35	241.5	-292.2	761.4	733.1	28.30	26.902	
4,100.0	4,058.0	4,052.4	4,032.7	16.4	14.7	-155.65	245.7	-295.6	781.0	751.9	29.07	26.864	
4,200.0	4,156.4	4,144.7	4,124.8	16.8	15.0	-155.87	249.8	-298.5	800.6	770.8	29.77	26.891	
4,300.0	4,254.9	4,237.7	4,217.6	17.3	15.4	-156.00	255.0	-301.9	820.8	790.4	30.47	26.935	
4,400.0	4,353.4	4,337.0	4,316.7	17.7	15.7	-156.13	260.8	-305.7	841.3	810.0	31.22	26.946	
4,500.0	4,451.9	4,436.4	4,415.9	18.2	16.1	-156.29	265.9	-309.4	861.5	829.6	31.96	26.952	
4,600.0	4,550.4	4,533.1	4,512.4	18.6	16.5	-156.48	270.4	-313.0	881.8	849.1	32.69	26.976	
4,700.0	4,648.9	4,631.6	4,610.7	19.1	16.8	-156.69	274.6	-316.9	902.1	868.7	33.42	26.992	
4,800.0	4,747.3	4,736.5	4,715.5	19.5	17.2	-156.90	278.9	-320.5	922.0	887.8	34.20	26.964	
4,900.0	4,845.8	4,839.1	4,817.9	20.0	17.6	-157.10	283.1	-323.4	941.2	906.3	34.95	26.929	
5,000.0	4,944.3	4,937.8	4,916.6	20.4	17.9	-157.30	286.8	-325.9	960.3	924.6	35.69	26.909	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #113H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 228-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	5,037.4	5,016.1	20.9	18.3	-157.52	290.2	-328.5	979.2	942.8	36.42	26.884	
5,200.0	5,141.3	5,137.9	5,116.5	21.3	18.6	-157.71	293.8	-330.8	998.0	960.8	37.17	26.852	
5,300.0	5,239.7	5,244.4	5,222.9	21.8	19.0	-157.90	297.8	-332.8	1,016.4	978.4	37.94	26.786	
5,400.0	5,338.2	5,355.2	5,333.6	22.2	19.4	-158.07	302.1	-333.6	1,033.6	994.9	38.74	26.681	
5,500.0	5,436.7	5,450.0	5,428.4	22.7	19.7	-158.21	305.7	-333.9	1,050.4	1,011.0	39.45	26.626	
5,600.0	5,535.2	5,543.1	5,521.4	23.1	20.1	-158.36	309.2	-334.6	1,067.7	1,027.5	40.15	26.591	
5,700.0	5,633.7	5,640.2	5,618.4	23.6	20.4	-158.52	312.6	-335.7	1,085.3	1,044.5	40.87	26.553	
5,800.0	5,732.1	5,737.7	5,715.9	24.0	20.8	-158.70	315.4	-336.9	1,103.0	1,061.5	41.60	26.517	
5,900.0	5,830.6	5,836.0	5,814.1	24.5	21.1	-158.91	317.8	-338.2	1,120.8	1,078.5	42.32	26.483	
6,000.0	5,929.1	5,934.4	5,912.4	24.9	21.5	-159.14	319.6	-339.6	1,138.6	1,095.6	43.04	26.451	
6,100.0	6,027.6	6,034.8	6,012.8	25.4	21.8	-159.38	321.0	-341.0	1,156.3	1,112.5	43.78	26.414	
6,200.0	6,126.1	6,135.2	6,113.3	25.8	22.2	-159.64	322.1	-342.1	1,173.9	1,129.3	44.51	26.374	
6,300.0	6,224.5	6,234.5	6,212.5	26.3	22.5	-159.89	322.9	-343.2	1,191.3	1,146.1	45.23	26.339	
6,400.0	6,323.0	6,333.4	6,311.5	26.7	22.8	-160.17	323.3	-344.2	1,208.7	1,162.7	45.95	26.307	
6,500.0	6,421.5	6,431.0	6,409.0	27.2	23.2	-160.49	322.3	-345.4	1,226.1	1,179.5	46.64	26.288	
6,600.0	6,520.0	6,529.3	6,507.3	27.6	23.5	-160.88	319.6	-346.6	1,243.7	1,196.3	47.34	26.273	
6,700.0	6,618.5	6,629.6	6,607.5	28.1	23.8	-161.28	316.8	-347.8	1,261.1	1,213.1	48.03	26.255	
6,800.0	6,716.9	6,728.0	6,705.8	28.5	24.1	-161.65	314.2	-348.8	1,278.5	1,229.8	48.72	26.241	
6,900.0	6,815.4	6,824.2	6,802.0	29.0	24.4	-162.00	311.7	-349.9	1,296.0	1,246.6	49.40	26.235	
6,981.8	6,896.0	6,905.3	6,883.1	29.4	24.7	-162.28	309.7	-350.9	1,310.5	1,260.5	49.97	26.226	
7,000.0	6,913.9	6,924.0	6,901.8	29.5	24.7	-162.37	309.3	-351.1	1,313.6	1,263.5	50.10	26.220	
7,100.0	7,012.9	7,027.4	7,005.2	29.9	25.1	-162.79	306.8	-352.0	1,328.2	1,277.4	50.81	26.140	
7,200.0	7,112.3	7,145.5	7,123.3	30.3	25.5	-163.11	304.3	-352.2	1,338.0	1,286.4	51.59	25.936	
7,300.0	7,212.2	7,269.9	7,247.6	30.6	25.9	-163.28	303.0	-350.1	1,341.8	1,289.5	52.37	25.620	
7,381.8	7,294.0	7,341.6	7,319.3	30.9	26.1	-88.90	302.4	-348.8	1,341.7	1,288.8	52.87	25.375	
7,400.0	7,312.2	7,358.9	7,336.6	30.9	26.1	-88.91	302.3	-348.5	1,341.4	1,288.4	52.99	25.314	
7,500.0	7,412.2	7,455.3	7,433.0	31.2	26.5	-88.94	301.4	-347.0	1,339.8	1,286.2	53.63	24.982	
7,600.0	7,512.2	7,554.0	7,531.6	31.5	26.8	-88.98	300.5	-345.6	1,338.3	1,284.1	54.28	24.656	
7,633.8	7,546.0	7,587.4	7,565.0	31.6	26.9	-88.99	300.2	-345.2	1,337.9	1,283.4	54.50	24.547	
7,650.0	7,562.2	7,603.3	7,581.0	31.7	26.9	91.36	300.1	-345.0	1,337.7	1,283.1	54.61	24.497	
7,700.0	7,612.0	7,650.7	7,628.4	31.8	27.1	91.54	299.6	-344.4	1,337.1	1,282.2	54.91	24.350	
7,750.0	7,661.4	7,696.9	7,674.6	31.9	27.2	91.85	298.9	-343.9	1,336.8	1,281.6	55.21	24.215	
7,769.8	7,680.7	7,715.1	7,692.7	32.0	27.3	92.01	298.6	-343.8	1,336.8	1,281.5	55.32	24.165	
7,800.0	7,709.8	7,742.5	7,720.1	32.0	27.4	92.29	298.1	-343.6	1,336.9	1,281.4	55.49	24.091	
7,850.0	7,757.1	7,787.0	7,764.7	32.1	27.5	92.83	297.0	-343.3	1,337.4	1,281.6	55.77	23.980	
7,900.0	7,802.7	7,836.4	7,814.0	32.2	27.7	93.55	295.7	-343.1	1,338.3	1,282.2	56.06	23.871	
7,950.0	7,846.4	7,888.5	7,866.1	32.3	27.9	94.46	294.7	-342.6	1,339.6	1,283.3	56.37	23.766	
8,000.0	7,887.7	7,937.6	7,915.2	32.4	28.0	95.42	294.0	-341.9	1,341.5	1,284.9	56.65	23.679	
8,050.0	7,926.5	7,983.3	7,960.9	32.4	28.2	96.36	293.6	-340.9	1,344.3	1,287.3	56.92	23.617	
8,100.0	7,962.4	8,025.2	8,002.7	32.5	28.3	97.21	293.5	-339.8	1,348.1	1,290.9	57.17	23.583	
8,150.0	7,995.1	8,046.9	8,024.5	32.5	28.4	97.37	293.4	-339.4	1,353.7	1,296.4	57.32	23.614	
8,200.0	8,024.4	8,072.8	8,050.4	32.6	28.5	97.53	293.3	-338.9	1,360.9	1,303.4	57.50	23.670	
8,250.0	8,050.1	8,095.6	8,073.1	32.6	28.5	97.44	293.2	-338.5	1,370.0	1,312.3	57.65	23.764	
8,300.0	8,071.9	8,115.0	8,092.5	32.7	28.6	97.06	293.1	-338.2	1,381.0	1,323.2	57.78	23.900	
8,350.0	8,089.7	8,130.9	8,108.5	32.7	28.7	96.35	293.0	-338.0	1,394.0	1,336.1	57.90	24.077	
8,400.0	8,103.4	8,143.2	8,120.8	32.7	28.7	95.30	292.9	-337.9	1,408.9	1,350.9	57.99	24.297	
8,450.0	8,112.8	8,151.8	8,129.3	32.8	28.7	93.88	292.9	-337.8	1,425.8	1,367.7	58.06	24.558	
8,500.0	8,118.0	8,156.6	8,134.1	32.9	28.7	92.08	292.8	-337.8	1,444.3	1,386.2	58.10	24.859	
8,533.8	8,119.0	8,157.6	8,135.2	33.0	28.8	90.66	292.8	-337.8	1,457.8	1,399.7	58.12	25.085	
8,600.0	8,119.0	8,158.0	8,135.5	33.1	28.8	90.67	292.8	-337.8	1,486.1	1,428.0	58.14	25.562	
8,700.0	8,119.0	8,158.5	8,136.1	33.4	28.8	90.69	292.8	-337.7	1,533.4	1,475.2	58.18	26.354	
8,800.0	8,119.0	8,159.1	8,136.6	33.8	28.8	90.72	292.8	-337.7	1,585.5	1,527.3	58.24	27.225	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #113H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 228-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,900.0	8,119.0	8,159.6	8,137.2	34.3	28.8	90.74	292.8	-337.7	1,642.1	1,583.8	58.29	28.168	
9,000.0	8,119.0	8,160.1	8,137.7	34.9	28.8	90.76	292.8	-337.7	1,702.6	1,644.3	58.36	29.176	
9,100.0	8,119.0	9,100.0	9,241.8	35.5	31.7	129.62	-907.2	-356.1	1,759.7	1,708.4	51.32	34.287	
9,200.0	8,119.0	10,393.1	9,231.3	36.3	37.8	129.49	-1,109.3	-348.5	1,753.2	1,692.5	60.65	28.909	
9,300.0	8,119.0	10,527.7	9,221.3	37.1	39.0	129.42	-1,243.2	-338.8	1,743.1	1,680.5	62.63	27.833	
9,400.0	8,119.0	10,591.0	9,219.0	37.9	39.6	129.47	-1,306.2	-333.3	1,734.4	1,670.6	63.84	27.168	
9,500.0	8,119.0	10,630.9	9,218.7	38.8	40.0	129.52	-1,346.0	-330.4	1,728.4	1,663.6	64.83	26.662	
9,600.0	8,119.0	10,685.0	9,218.8	39.8	40.6	129.56	-1,400.0	-328.3	1,725.7	1,659.7	66.00	26.148	
9,700.0	8,119.0	10,757.4	9,218.3	40.8	41.3	129.55	-1,472.4	-327.8	1,725.1	1,657.7	67.46	25.575	
9,800.0	8,119.0	10,861.2	9,215.3	41.8	42.4	129.42	-1,576.2	-329.5	1,725.0	1,655.6	69.42	24.847	
9,900.0	8,119.0	11,040.9	9,203.8	42.9	44.4	129.06	-1,755.5	-331.5	1,722.1	1,649.5	72.62	23.714	
10,000.0	8,119.0	11,173.3	9,193.9	44.0	45.9	128.85	-1,887.4	-328.4	1,716.0	1,640.8	75.19	22.823	
10,100.0	8,119.0	11,270.4	9,187.0	45.2	47.1	128.73	-1,984.2	-324.9	1,709.2	1,631.9	77.29	22.114	
10,200.0	8,119.0	11,343.0	9,182.7	46.3	48.0	128.67	-2,056.6	-321.9	1,702.9	1,623.8	79.05	21.542	
10,300.0	8,119.0	11,392.8	9,181.2	47.5	48.6	128.66	-2,106.4	-320.2	1,699.0	1,618.5	80.47	21.113	
10,346.3	8,119.0	11,412.2	9,181.2	48.1	48.8	128.67	-2,125.8	-319.8	1,698.4	1,617.3	81.06	20.951	
10,400.0	8,119.0	11,437.0	9,181.7	48.8	49.2	128.69	-2,150.6	-319.4	1,698.6	1,616.8	81.76	20.774	
10,500.0	8,119.0	11,546.9	9,184.9	50.0	50.5	128.80	-2,260.4	-317.6	1,699.6	1,615.6	84.01	20.232	
10,600.0	8,119.0	11,623.0	9,186.4	51.3	51.5	128.84	-2,336.5	-317.4	1,701.0	1,615.2	85.80	19.825	
10,700.0	8,119.0	11,715.1	9,187.7	52.6	52.7	128.84	-2,428.6	-318.4	1,703.2	1,615.3	87.90	19.377	
10,800.0	8,119.0	11,803.7	9,189.8	54.0	53.9	128.86	-2,517.1	-319.4	1,706.0	1,616.1	89.95	18.967	
10,900.0	8,119.0	11,971.0	9,188.5	55.3	56.1	128.73	-2,684.3	-322.9	1,707.9	1,614.4	93.45	18.276	
11,000.0	8,119.0	12,120.2	9,177.2	56.7	58.1	128.35	-2,833.1	-325.8	1,704.9	1,608.1	96.87	17.600	
11,100.0	8,119.0	12,226.8	9,169.8	58.0	59.6	128.14	-2,939.4	-326.1	1,701.4	1,601.8	99.52	17.095	
11,200.0	8,119.0	12,320.6	9,164.1	59.4	60.9	128.01	-3,033.0	-324.8	1,697.0	1,595.0	101.93	16.648	
11,300.0	8,119.0	12,392.8	9,161.2	60.8	61.9	127.93	-3,105.1	-324.1	1,694.2	1,590.2	103.96	16.296	
11,400.0	8,119.0	12,484.6	9,159.3	62.2	63.2	127.89	-3,196.9	-323.1	1,692.4	1,586.2	106.29	15.923	
11,500.0	8,119.0	12,579.2	9,157.9	63.6	64.6	127.88	-3,291.5	-321.5	1,690.7	1,582.0	108.66	15.560	
11,554.0	8,119.0	12,611.7	9,157.9	64.4	65.1	127.88	-3,324.0	-321.0	1,690.3	1,580.7	109.61	15.422	
11,600.0	8,119.0	12,639.4	9,158.3	65.1	65.4	127.90	-3,351.7	-320.8	1,690.6	1,580.2	110.40	15.314	
11,700.0	8,119.0	12,719.6	9,160.8	66.5	66.6	127.96	-3,431.9	-320.2	1,692.4	1,580.0	112.44	15.052	
11,800.0	8,119.0	12,854.0	9,164.7	68.0	68.6	128.08	-3,566.2	-318.9	1,693.9	1,578.5	115.42	14.676	
11,900.0	8,119.0	12,945.8	9,165.6	69.4	69.9	128.11	-3,657.9	-318.0	1,694.3	1,576.6	117.73	14.391	
12,000.0	8,119.0	13,018.3	9,167.5	70.9	71.0	128.16	-3,730.4	-317.5	1,695.8	1,576.2	119.67	14.171	
12,100.0	8,119.0	13,141.1	9,172.4	72.4	72.8	128.31	-3,853.2	-315.8	1,697.6	1,575.2	122.45	13.864	
12,200.0	8,119.0	13,252.5	9,175.4	73.9	74.4	128.43	-3,964.5	-313.6	1,698.3	1,573.2	125.05	13.580	
12,300.0	8,119.0	13,343.2	9,177.6	75.4	75.8	128.51	-4,055.1	-311.8	1,698.6	1,571.3	127.31	13.342	
12,400.0	8,119.0	13,423.5	9,181.3	76.9	77.0	128.64	-4,135.3	-310.0	1,700.2	1,570.9	129.33	13.146	
12,500.0	8,119.0	13,552.5	9,185.1	78.4	78.9	128.74	-4,264.3	-308.9	1,701.9	1,569.6	132.30	12.864	
12,600.0	8,119.0	13,714.7	9,186.8	79.9	81.4	128.88	-4,426.4	-303.6	1,700.5	1,564.7	135.76	12.525	
12,700.0	8,119.0	12,700.0	9,179.7	81.4	65.9	128.77	-4,565.4	-299.4	1,695.2	1,570.9	124.28	13.640	
12,800.0	8,119.0	13,904.2	9,176.8	82.9	84.3	128.71	-4,615.5	-298.4	1,690.8	1,549.8	140.94	11.996	
12,888.4	8,119.0	13,947.0	9,175.5	84.3	84.9	128.66	-4,658.3	-298.7	1,689.8	1,547.3	142.47	11.861	
12,900.0	8,119.0	13,947.0	9,175.5	84.5	84.9	128.66	-4,658.3	-298.7	1,689.8	1,547.3	142.55	11.854	
13,000.0	8,119.0	14,060.2	9,171.8	86.0	86.7	128.49	-4,771.4	-301.2	1,689.9	1,544.3	145.59	11.607	
13,006.1	8,119.0	14,064.9	9,171.6	86.1	86.7	128.49	-4,776.0	-301.3	1,689.9	1,544.2	145.73	11.596	
13,100.0	8,119.0	14,132.0	9,169.8	87.5	87.8	128.40	-4,843.1	-302.9	1,690.5	1,542.8	147.77	11.440	
13,200.0	8,119.0	14,194.3	9,170.3	89.1	88.7	128.38	-4,905.4	-304.2	1,693.1	1,543.5	149.61	11.317	
13,300.0	8,119.0	14,259.3	9,173.8	90.6	89.7	128.44	-4,970.3	-305.2	1,698.1	1,546.7	151.35	11.219	
13,400.0	8,119.0	14,331.2	9,180.0	92.2	90.8	128.58	-5,041.9	-305.9	1,704.7	1,551.6	153.09	11.135	
13,500.0	8,119.0	14,400.3	9,188.9	93.7	91.9	128.81	-5,110.4	-305.8	1,713.1	1,558.5	154.60	11.081	
13,600.0	8,119.0	14,712.1	9,211.9	95.3	96.7	129.51	-5,420.9	-299.1	1,717.2	1,556.6	160.63	10.690	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #113H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 228-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,661.4	8,119.0	14,722.5	9,212.5	96.2	96.9	129.53	-5,431.3	-298.8	1,716.6	1,555.3	161.31	10.642	
13,700.0	8,119.0	14,738.5	9,213.2	96.8	97.1	129.56	-5,447.3	-298.2	1,716.8	1,555.0	161.83	10.609	
13,800.0	8,119.0	14,789.0	9,218.0	98.4	97.9	129.72	-5,497.5	-296.2	1,719.9	1,556.8	163.15	10.542	
13,900.0	8,119.0	14,942.3	9,233.1	100.0	100.3	130.26	-5,649.8	-287.9	1,722.6	1,556.5	166.02	10.376	
14,000.0	8,119.0	15,057.5	9,239.3	101.5	102.2	130.51	-5,764.7	-283.1	1,723.3	1,554.8	168.52	10.226	
14,100.0	8,119.0	14,100.0	9,239.3	103.1	87.1	130.63	-5,943.5	-276.6	1,720.7	1,563.2	157.49	10.926	
14,200.0	8,119.0	15,348.4	9,236.5	104.7	106.7	130.67	-6,055.2	-270.6	1,715.4	1,540.4	174.97	9.804	
14,300.0	8,119.0	15,511.1	9,232.5	106.2	109.3	130.78	-6,217.5	-260.1	1,709.7	1,531.5	178.21	9.594	
14,400.0	8,119.0	15,593.8	9,229.9	107.8	110.6	130.88	-6,299.8	-252.0	1,700.9	1,520.5	180.43	9.427	
14,500.0	8,119.0	15,650.3	9,228.3	109.4	111.5	130.91	-6,356.2	-248.3	1,694.5	1,512.1	182.40	9.290	
14,600.0	8,119.0	15,704.0	9,227.6	111.0	112.4	130.94	-6,409.8	-245.9	1,690.8	1,506.5	184.23	9.178	
14,695.6	8,119.0	15,759.5	9,227.8	112.5	113.3	130.97	-6,465.3	-244.6	1,689.7	1,503.8	185.94	9.087	
14,700.0	8,119.0	15,762.2	9,227.8	112.6	113.3	130.97	-6,467.9	-244.6	1,689.7	1,503.7	186.02	9.084	
14,800.0	8,119.0	15,824.7	9,228.4	114.2	114.3	130.97	-6,530.5	-244.8	1,690.9	1,503.1	187.85	9.002	
14,900.0	8,119.0	15,920.0	9,230.0	115.7	115.8	130.98	-6,625.8	-245.9	1,693.4	1,503.0	190.34	8.897	
15,000.0	8,119.0	16,002.5	9,232.5	117.3	117.1	131.01	-6,708.2	-246.7	1,696.5	1,504.0	192.48	8.814	
15,100.0	8,119.0	16,186.4	9,226.9	118.9	120.0	130.74	-6,891.9	-251.6	1,696.3	1,499.0	197.32	8.597	
15,200.0	8,119.0	15,200.0	9,218.4	120.5	104.4	130.43	-7,007.9	-254.9	1,694.1	1,507.7	186.44	9.087	
15,287.7	8,119.0	16,352.4	9,215.4	121.9	122.6	130.32	-7,057.4	-256.2	1,692.9	1,490.3	202.62	8.355	
15,300.0	8,119.0	16,358.9	9,215.1	122.1	122.7	130.31	-7,063.8	-256.4	1,693.0	1,490.1	202.86	8.346	
15,400.0	8,119.0	16,456.9	9,212.0	123.7	124.3	130.14	-7,161.8	-260.0	1,694.1	1,488.3	205.78	8.233	
15,500.0	8,119.0	16,534.2	9,208.5	125.3	125.5	129.97	-7,238.9	-263.1	1,694.9	1,486.6	208.27	8.138	
15,600.0	8,119.0	16,593.7	9,208.6	126.9	126.5	129.93	-7,298.4	-264.9	1,697.8	1,487.8	210.08	8.082	
15,700.0	8,119.0	16,647.7	9,211.0	128.5	127.3	129.95	-7,352.3	-266.5	1,703.4	1,491.9	211.51	8.053	
15,800.0	8,119.0	16,721.5	9,217.1	130.1	128.5	130.05	-7,425.8	-268.7	1,711.3	1,498.1	213.22	8.026	
15,900.0	8,119.0	16,812.2	9,226.2	131.7	129.9	130.22	-7,516.0	-270.8	1,720.0	1,504.8	215.22	7.992	
16,000.0	8,119.0	16,901.0	9,236.4	133.3	131.3	130.44	-7,604.2	-272.3	1,729.2	1,512.1	217.08	7.966	
16,100.0	8,119.0	17,023.9	9,251.9	134.9	133.3	130.78	-7,726.1	-273.7	1,738.8	1,519.2	219.65	7.916	
16,200.0	8,119.0	17,189.9	9,265.7	136.5	136.0	131.08	-7,891.6	-274.9	1,745.4	1,522.0	223.37	7.814	
16,300.0	8,119.0	17,315.0	9,270.6	138.1	138.0	131.18	-8,016.5	-275.3	1,748.5	1,522.1	226.36	7.724	
16,400.0	8,119.0	17,411.8	9,274.5	139.7	139.5	131.26	-8,113.2	-275.4	1,751.6	1,522.9	228.74	7.658	
16,500.0	8,119.0	17,541.8	9,277.4	141.4	141.6	131.30	-8,243.2	-276.2	1,754.0	1,522.1	231.93	7.563	
16,600.0	8,119.0	17,644.4	9,279.0	143.0	143.3	131.32	-8,345.8	-276.3	1,755.6	1,521.0	234.56	7.485	
16,700.0	8,119.0	17,745.6	9,280.7	144.6	144.9	131.36	-8,446.9	-275.8	1,756.7	1,519.6	237.12	7.409	
16,800.0	8,119.0	17,828.3	9,285.2	146.2	146.2	131.51	-8,529.5	-273.3	1,758.5	1,519.5	239.03	7.357	
16,900.0	8,119.0	17,912.2	9,290.2	147.8	147.6	131.67	-8,613.2	-271.5	1,761.3	1,520.4	240.93	7.310	
17,000.0	8,119.0	18,018.5	9,294.4	149.4	149.3	131.76	-8,719.4	-271.4	1,764.3	1,520.8	243.48	7.246	
17,100.0	8,119.0	18,269.1	9,290.6	151.0	153.3	131.67	-8,969.8	-269.4	1,763.4	1,514.5	248.86	7.086	
17,200.0	8,119.0	18,335.8	9,287.6	152.7	154.4	131.64	-9,036.4	-267.1	1,758.5	1,507.3	251.14	7.002	
17,300.0	8,119.0	18,394.5	9,287.5	154.3	155.4	131.68	-9,095.1	-264.8	1,755.9	1,502.8	253.03	6.939	
17,358.8	8,119.0	18,428.0	9,288.2	155.2	155.9	131.72	-9,128.6	-263.7	1,755.4	1,501.4	254.04	6.910	
17,400.0	8,119.0	18,451.5	9,288.9	155.9	156.3	131.75	-9,152.1	-263.1	1,755.6	1,500.9	254.70	6.893	
17,500.0	8,119.0	18,547.9	9,292.4	157.5	157.8	131.86	-9,248.4	-261.3	1,757.1	1,500.1	256.97	6.838	
17,600.0	8,119.0	18,714.6	9,294.1	159.1	160.5	131.99	-9,415.0	-256.2	1,755.6	1,495.1	260.46	6.740	
17,700.0	8,119.0	18,796.0	9,296.9	160.7	161.9	132.17	-9,496.1	-250.6	1,753.3	1,491.0	262.32	6.684	
17,800.0	8,119.0	18,893.5	9,303.0	162.4	163.5	132.47	-9,593.2	-243.4	1,752.5	1,488.3	264.12	6.635	
17,900.0	8,119.0	18,995.4	9,308.1	164.0	165.1	132.75	-9,694.6	-235.6	1,750.5	1,484.5	266.01	6.581	
18,000.0	8,119.0	19,091.3	9,311.3	165.6	166.7	132.92	-9,790.3	-230.7	1,749.5	1,481.5	268.08	6.526	
18,100.0	8,119.0	19,268.3	9,302.7	167.2	169.6	132.75	-9,967.0	-228.1	1,745.1	1,472.8	272.25	6.410	
18,200.0	8,119.0	19,378.4	9,296.8	168.9	171.3	132.66	-10,076.9	-225.0	1,739.9	1,464.7	275.21	6.322	
18,300.0	8,119.0	19,450.8	9,291.8	170.5	172.5	132.57	-10,149.1	-223.2	1,734.0	1,456.2	277.76	6.243	
18,400.0	8,119.0	19,504.0	9,288.9	172.1	173.4	132.49	-10,202.2	-223.4	1,730.9	1,450.9	279.93	6.183	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #113H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 228-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,475.3	8,119.0	19,546.7	9,287.5	173.3	174.1	132.44	-10,244.9	-224.0	1,730.2	1,448.8	281.47	6.147	
18,500.0	8,119.0	19,562.2	9,287.2	173.7	174.3	132.42	-10,260.3	-224.2	1,730.3	1,448.3	281.97	6.136	
18,600.0	8,119.0	19,651.8	9,287.5	175.4	175.8	132.40	-10,350.0	-225.0	1,731.6	1,447.1	284.44	6.088	
18,700.0	8,119.0	19,736.5	9,286.7	177.0	177.1	132.33	-10,434.7	-226.6	1,732.8	1,445.8	286.92	6.039	
18,800.0	8,119.0	19,786.0	9,286.2	178.6	177.9	132.27	-10,484.1	-228.6	1,735.9	1,447.4	288.47	6.018	
18,900.0	8,119.0	19,854.3	9,288.0	180.2	179.0	132.25	-10,552.3	-231.3	1,741.3	1,451.0	290.27	5.999	
19,000.0	8,119.0	19,947.8	9,295.0	181.9	180.5	132.35	-10,645.5	-233.8	1,748.7	1,456.3	292.39	5.981	
19,100.0	8,119.0	20,175.1	9,301.5	183.5	184.2	132.36	-10,872.6	-239.2	1,753.6	1,455.5	298.11	5.882	
19,126.1	8,119.0	20,198.3	9,300.9	183.9	184.6	132.33	-10,895.7	-239.6	1,753.6	1,454.7	298.82	5.868	
19,200.0	8,119.0	20,264.6	9,301.0	185.1	185.7	132.33	-10,962.0	-239.3	1,753.7	1,453.1	300.61	5.834	
19,300.0	8,119.0	20,366.0	9,303.4	186.8	187.3	132.43	-11,063.4	-237.1	1,754.1	1,451.1	302.98	5.790	
19,400.0	8,119.0	20,463.2	9,306.8	188.4	188.9	132.57	-11,160.5	-233.8	1,754.4	1,449.3	305.11	5.750	
19,500.0	8,119.0	20,533.8	9,310.0	190.0	190.1	132.69	-11,230.9	-231.7	1,755.8	1,449.0	306.75	5.724	
19,600.0	8,119.0	20,750.2	9,311.4	191.6	193.6	132.78	-11,447.2	-227.8	1,756.0	1,444.9	311.09	5.645	
19,700.0	8,119.0	20,827.0	9,307.1	193.3	194.8	132.67	-11,523.9	-227.5	1,752.4	1,438.6	313.74	5.585	
19,800.0	8,119.0	20,898.9	9,304.5	194.9	196.0	132.60	-11,595.7	-227.4	1,750.2	1,434.0	316.16	5.536	
19,900.0	8,119.0	21,032.6	9,302.7	196.5	198.2	132.61	-11,729.3	-224.4	1,748.2	1,428.9	319.27	5.476	
20,000.0	8,119.0	21,077.1	9,302.3	198.2	198.9	132.60	-11,773.9	-223.9	1,746.7	1,425.7	321.02	5.441	
20,009.6	8,119.0	21,082.4	9,302.3	198.3	199.0	132.60	-11,779.1	-223.9	1,746.7	1,425.5	321.19	5.438	
20,100.0	8,119.0	21,159.1	9,302.0	199.8	200.2	132.57	-11,855.9	-224.7	1,747.4	1,424.0	323.40	5.403	
20,200.0	8,119.0	21,249.8	9,301.4	201.4	201.7	132.53	-11,946.6	-225.4	1,748.1	1,422.2	325.97	5.363	
20,300.0	8,119.0	21,321.2	9,304.3	203.1	202.9	132.60	-12,017.9	-224.5	1,750.3	1,422.6	327.67	5.342	
20,400.0	8,119.0	21,395.5	9,308.7	204.7	204.1	132.72	-12,092.1	-223.8	1,754.0	1,424.7	329.25	5.327	
20,500.0	8,119.0	21,558.1	9,318.3	206.3	206.7	132.97	-12,254.3	-221.7	1,758.1	1,425.6	332.50	5.287	
20,606.7	8,119.0	21,687.0	9,319.5	208.1	208.9	133.04	-12,383.2	-219.4	1,757.7	1,422.2	335.50	5.239	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #114H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 174-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	82.56	94.8	726.6	732.7				
100.0	100.0	99.7	99.7	0.1	0.1	82.57	94.8	726.5	732.7	732.4	0.28	2,639.522	
200.0	200.0	200.7	200.7	0.5	0.4	82.57	94.7	726.4	732.5	731.7	0.84	869.349	
300.0	300.0	303.0	303.0	0.8	0.7	82.56	94.8	726.0	732.2	730.6	1.57	467.776	
400.0	400.0	403.9	403.9	1.2	1.1	82.53	95.1	725.3	731.5	729.2	2.28	320.399	
500.0	500.0	504.4	504.4	1.6	1.4	82.50	95.4	724.5	730.8	727.8	3.00	243.624	
600.0	600.0	601.9	601.9	1.9	1.8	82.45	95.9	723.9	730.2	726.5	3.70	197.261	
700.0	700.0	699.2	699.2	2.3	2.1	82.37	96.9	723.6	730.0	725.6	4.40	165.785	
743.0	743.0	742.1	742.0	2.4	2.3	82.33	97.4	723.5	730.0	725.3	4.71	155.053	
800.0	800.0	798.8	798.7	2.6	2.5	82.27	98.2	723.4	730.0	724.9	5.11	142.818	
900.0	900.0	898.2	898.2	3.0	2.8	82.15	99.7	723.3	730.1	724.3	5.82	125.447	
1,000.0	1,000.0	997.5	997.4	3.4	3.2	82.01	101.5	723.2	730.3	723.7	6.53	111.845	
1,100.0	1,100.0	1,089.9	1,089.8	3.7	3.5	7.47	103.4	723.6	729.2	722.0	7.21	101.211	
1,200.0	1,199.8	1,192.0	1,191.9	4.1	3.9	7.41	105.2	724.9	725.6	717.7	7.91	91.705	
1,300.0	1,299.5	1,296.0	1,295.9	4.4	4.2	7.36	107.2	724.9	717.2	708.6	8.63	83.091	
1,400.0	1,398.7	1,393.3	1,393.2	4.8	4.6	7.38	109.0	725.2	705.7	696.4	9.33	75.635	
1,500.0	1,497.5	1,485.1	1,485.0	5.2	4.9	7.41	111.0	725.8	691.2	681.2	10.01	69.049	
1,600.0	1,595.9	1,576.9	1,576.7	5.5	5.2	7.31	114.4	727.4	676.2	665.5	10.69	63.255	
1,700.0	1,694.4	1,665.8	1,665.4	5.9	5.5	7.12	119.0	729.7	662.3	650.9	11.36	58.296	
1,800.0	1,792.9	1,753.8	1,753.1	6.3	5.9	6.75	125.7	733.3	650.1	638.1	12.03	54.038	
1,900.0	1,891.4	1,847.5	1,846.3	6.8	6.2	6.24	134.1	738.2	639.4	626.7	12.73	50.240	
2,000.0	1,989.9	1,947.8	1,946.0	7.2	6.6	5.67	143.3	743.7	629.0	615.5	13.45	46.748	
2,100.0	2,088.4	2,047.0	2,044.6	7.6	6.9	5.05	152.6	748.8	618.4	604.2	14.18	43.605	
2,200.0	2,186.8	2,144.4	2,141.4	8.0	7.3	4.36	162.5	753.9	608.1	593.2	14.91	40.799	
2,300.0	2,285.3	2,242.9	2,239.2	8.5	7.7	3.61	172.9	759.2	598.2	582.6	15.64	38.257	
2,400.0	2,383.8	2,349.2	2,344.8	8.9	8.1	2.76	184.0	764.5	587.9	571.5	16.40	35.847	
2,500.0	2,482.3	2,454.6	2,449.6	9.3	8.5	1.89	194.6	768.4	576.5	559.3	17.16	33.590	
2,600.0	2,580.8	2,543.5	2,538.0	9.8	8.8	1.21	203.0	772.2	565.5	547.6	17.86	31.663	
2,700.0	2,679.2	2,642.6	2,636.6	10.2	9.2	0.55	211.4	777.7	555.6	537.0	18.59	29.878	
2,800.0	2,777.7	2,743.8	2,737.3	10.6	9.6	-0.11	219.5	783.2	545.5	526.2	19.34	28.210	
2,900.0	2,876.2	2,845.3	2,838.4	11.1	10.0	-0.77	227.3	788.3	535.0	514.9	20.08	26.642	
3,000.0	2,974.7	2,939.1	2,931.8	11.5	10.3	-1.37	234.3	793.5	525.1	504.3	20.80	25.249	
3,100.0	3,073.2	3,038.2	3,030.4	11.9	10.7	-2.01	241.7	799.6	515.8	494.2	21.53	23.955	
3,200.0	3,171.6	3,141.7	3,133.5	12.4	11.1	-2.65	248.8	805.7	506.1	483.8	22.28	22.714	
3,300.0	3,270.1	3,246.1	3,237.6	12.8	11.5	-3.28	255.4	811.0	495.5	472.5	23.03	21.514	
3,400.0	3,368.6	3,346.8	3,338.0	13.3	11.8	-3.83	260.8	815.6	484.2	460.5	23.77	20.372	
3,500.0	3,467.1	3,443.5	3,434.5	13.7	12.2	-4.18	264.5	820.8	473.2	448.7	24.49	19.322	
3,600.0	3,565.6	3,541.8	3,532.5	14.2	12.6	-4.58	268.7	826.5	462.7	437.5	25.22	18.350	
3,700.0	3,664.0	3,643.3	3,633.7	14.6	12.9	-5.03	273.0	832.3	452.1	426.2	25.95	17.420	
3,800.0	3,762.5	3,740.1	3,730.4	15.1	13.3	-5.47	277.0	837.5	441.3	414.7	26.68	16.543	
3,900.0	3,861.0	3,850.8	3,840.8	15.5	13.7	-5.86	280.5	843.7	430.4	402.9	27.43	15.690	
4,000.0	3,959.5	3,957.3	3,947.2	16.0	14.1	-6.30	283.0	846.6	416.5	388.3	28.16	14.790	
4,100.0	4,058.0	4,057.0	4,046.9	16.4	14.4	-6.77	285.3	848.5	401.8	372.9	28.89	13.909	
4,200.0	4,156.4	4,156.6	4,146.5	16.8	14.8	-7.26	287.3	850.3	386.9	357.3	29.62	13.066	
4,300.0	4,254.9	4,256.6	4,246.5	17.3	15.1	-7.76	289.1	851.9	371.9	341.5	30.34	12.256	
4,400.0	4,353.4	4,357.0	4,346.8	17.7	15.5	-8.33	290.8	853.1	356.5	325.4	31.07	11.472	
4,500.0	4,451.9	4,457.8	4,447.6	18.2	15.9	-8.96	292.4	853.8	340.5	308.7	31.80	10.710	
4,600.0	4,550.4	4,557.9	4,547.7	18.6	16.2	-9.61	293.5	854.0	324.1	291.5	32.52	9.964	
4,700.0	4,648.9	4,656.5	4,646.2	19.1	16.5	-10.33	294.6	854.0	307.4	274.2	33.25	9.244	
4,800.0	4,747.3	4,754.7	4,744.5	19.5	16.9	-11.15	295.8	854.1	290.9	256.9	33.99	8.559	
4,900.0	4,845.8	4,853.5	4,843.3	20.0	17.2	-12.10	297.1	854.1	274.5	239.8	34.73	7.904	
5,000.0	4,944.3	4,952.3	4,942.0	20.4	17.6	-13.11	298.1	854.1	258.0	222.6	35.48	7.274	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #114H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 174-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	5,051.0	5,040.7	20.9	17.9	-14.18	298.8	854.3	241.6	205.4	36.22	6.671	
5,200.0	5,141.3	5,149.6	5,139.3	21.3	18.3	-15.40	299.5	854.3	225.2	188.2	36.98	6.091	
5,300.0	5,239.7	5,248.0	5,237.7	21.8	18.6	-16.79	300.1	854.5	209.0	171.2	37.75	5.536	
5,400.0	5,338.2	5,346.0	5,335.8	22.2	19.0	-18.28	300.4	854.9	193.0	154.4	38.52	5.009	
5,500.0	5,436.7	5,444.4	5,434.2	22.7	19.3	-20.00	300.8	855.7	177.4	138.1	39.31	4.512	
5,600.0	5,535.2	5,542.6	5,532.4	23.1	19.7	-22.12	301.4	856.4	162.1	122.0	40.12	4.039	
5,700.0	5,633.7	5,641.1	5,630.9	23.6	20.0	-24.73	302.3	857.2	147.3	106.3	40.97	3.595	
5,800.0	5,732.1	5,740.4	5,730.1	24.0	20.4	-27.88	303.0	858.0	132.7	90.9	41.83	3.172	
5,900.0	5,830.6	5,839.7	5,829.4	24.5	20.7	-31.78	303.2	858.4	118.1	75.3	42.75	2.762	
6,000.0	5,929.1	5,938.0	5,927.8	24.9	21.0	-36.73	303.3	858.7	103.8	60.1	43.76	2.373	
6,100.0	6,027.6	6,036.8	6,026.5	25.4	21.4	-43.35	303.6	858.7	90.7	45.8	44.89	2.020	
6,200.0	6,126.1	6,134.9	6,124.7	25.8	21.7	-52.04	303.9	858.7	79.2	33.0	46.18	1.714	
6,300.0	6,224.5	6,233.6	6,223.3	26.3	22.1	-63.32	304.3	858.7	70.1	22.6	47.57	1.474	Level 3
6,400.0	6,323.0	6,332.3	6,322.0	26.7	22.4	-77.23	304.5	858.6	64.3	15.4	48.88	1.316	Level 3
6,482.8	6,404.6	6,413.9	6,403.6	27.1	22.7	-90.01	304.5	858.5	62.7	13.0	49.71	1.261	Level 3, CC
6,500.0	6,421.5	6,430.8	6,420.5	27.2	22.7	-92.69	304.5	858.5	62.8	12.9	49.84	1.260	Level 3, ES, SF
6,600.0	6,520.0	6,529.1	6,518.8	27.6	23.1	-107.88	304.5	858.3	66.1	15.8	50.28	1.314	Level 3
6,700.0	6,618.5	6,627.5	6,617.2	28.1	23.4	-121.03	304.4	857.8	73.6	23.2	50.40	1.461	Level 3
6,800.0	6,716.9	6,725.9	6,715.6	28.5	23.7	-131.47	304.2	857.2	84.4	34.0	50.48	1.673	
6,900.0	6,815.4	6,824.4	6,814.1	29.0	24.1	-139.40	304.0	856.7	97.3	46.6	50.66	1.920	
6,981.8	6,896.0	6,904.8	6,894.5	29.4	24.3	-144.54	303.6	856.2	108.9	58.0	50.89	2.139	
7,000.0	6,913.9	6,922.6	6,912.3	29.5	24.4	-145.56	303.5	856.1	111.5	60.6	50.95	2.188	
7,100.0	7,012.9	7,021.5	7,011.3	29.9	24.7	-149.88	302.9	855.3	124.3	72.9	51.39	2.419	
7,200.0	7,112.3	7,121.2	7,110.9	30.3	25.0	-152.65	301.8	854.7	133.6	81.6	51.92	2.572	
7,300.0	7,212.2	7,221.3	7,211.0	30.6	25.4	-154.30	300.7	854.1	139.0	86.5	52.51	2.647	
7,381.8	7,294.0	7,303.3	7,293.0	30.9	25.6	-80.62	299.6	854.0	140.3	87.3	53.02	2.646	
7,400.0	7,312.2	7,321.5	7,311.2	30.9	25.7	-80.73	299.3	853.9	140.3	87.2	53.13	2.641	
7,500.0	7,412.2	7,421.5	7,411.2	31.2	26.0	-81.35	297.8	853.7	140.3	86.5	53.75	2.610	
7,546.7	7,458.9	7,468.2	7,457.9	31.4	26.2	-81.62	297.2	853.6	140.3	86.2	54.04	2.596	
7,600.0	7,512.2	7,521.3	7,511.0	31.5	26.3	-81.94	296.4	853.5	140.3	85.9	54.37	2.581	
7,633.8	7,546.0	7,555.1	7,544.7	31.6	26.5	-82.16	295.9	853.3	140.4	85.8	54.58	2.572	
7,650.0	7,562.2	7,571.2	7,560.8	31.7	26.5	98.16	295.6	853.3	140.4	85.7	54.68	2.568	
7,700.0	7,612.0	7,621.0	7,610.6	31.8	26.7	99.21	294.9	853.0	141.1	86.0	55.05	2.563	
7,750.0	7,661.4	7,670.5	7,660.1	31.9	26.8	101.86	294.1	852.8	142.7	87.2	55.51	2.570	
7,800.0	7,709.8	7,719.3	7,709.0	32.0	27.0	105.85	293.4	852.6	145.7	89.7	56.05	2.599	
7,850.0	7,757.1	7,766.8	7,756.5	32.1	27.2	110.75	292.5	852.4	151.0	94.4	56.67	2.665	
7,900.0	7,802.7	7,812.9	7,802.5	32.2	27.3	116.06	291.5	852.1	159.6	102.3	57.33	2.785	
7,950.0	7,846.4	7,856.9	7,846.5	32.3	27.5	121.30	290.5	851.8	172.2	114.3	57.97	2.971	
8,000.0	7,887.7	7,898.3	7,887.9	32.4	27.6	126.13	289.9	851.7	189.5	131.0	58.57	3.236	
8,050.0	7,926.5	7,936.7	7,926.3	32.4	27.7	130.22	289.7	851.7	211.8	152.7	59.07	3.585	
8,100.0	7,962.4	7,971.9	7,961.5	32.5	27.8	133.36	289.6	851.8	238.8	179.3	59.47	4.016	
8,150.0	7,995.1	8,003.8	7,993.4	32.5	28.0	135.48	289.7	851.8	270.3	210.5	59.78	4.522	
8,200.0	8,024.4	8,032.8	8,022.4	32.6	28.1	136.61	289.8	851.9	305.7	245.7	60.02	5.094	
8,250.0	8,050.1	8,058.6	8,048.2	32.6	28.1	136.64	289.9	851.8	344.5	284.3	60.20	5.723	
8,300.0	8,071.9	8,080.7	8,070.3	32.7	28.2	135.33	289.9	851.8	386.0	325.7	60.33	6.399	
8,350.0	8,089.7	8,098.8	8,088.4	32.7	28.3	132.28	289.9	851.7	429.9	369.5	60.42	7.115	
8,400.0	8,103.4	8,112.9	8,102.5	32.7	28.3	126.80	289.9	851.7	475.6	415.1	60.47	7.864	
8,450.0	8,112.8	8,122.7	8,112.3	32.8	28.4	117.69	289.9	851.6	522.7	462.2	60.50	8.639	
8,500.0	8,118.0	8,128.1	8,117.7	32.9	28.4	103.36	289.9	851.6	570.7	510.2	60.51	9.432	
8,533.8	8,119.0	8,129.3	8,118.9	33.0	28.4	90.37	289.9	851.6	603.5	543.0	60.50	9.976	
8,600.0	8,119.0	8,129.5	8,119.1	33.1	28.4	90.45	289.9	851.6	668.0	607.6	60.48	11.046	
8,700.0	8,119.0	8,129.8	8,119.4	33.4	28.4	90.58	289.9	851.6	766.1	705.6	60.45	12.673	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #114H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 174-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,800.0	8,119.0	8,130.1	8,119.7	33.8	28.4	90.71	289.8	851.6	864.6	804.2	60.43	14.308	
8,900.0	8,119.0	8,130.4	8,120.0	34.3	28.4	90.84	289.8	851.6	963.4	903.0	60.41	15.948	
9,000.0	8,119.0	8,130.7	8,120.3	34.9	28.4	90.97	289.8	851.6	1,062.4	1,002.0	60.40	17.591	
9,100.0	8,119.0	8,131.1	8,120.7	35.5	28.4	91.10	289.8	851.6	1,161.6	1,101.2	60.39	19.236	
9,200.0	8,119.0	9,200.0	9,373.2	36.3	32.2	178.88	-928.3	974.8	1,255.9	1,233.3	22.61	55.555	
9,300.0	8,119.0	10,487.6	9,370.7	37.1	38.8	178.99	-1,093.7	978.3	1,253.4	1,224.0	29.38	42.654	
9,400.0	8,119.0	10,571.2	9,369.4	37.9	39.6	179.05	-1,177.3	980.1	1,251.7	1,221.4	30.38	41.205	
9,500.0	8,119.0	10,671.7	9,368.3	38.8	40.5	179.12	-1,277.8	982.2	1,250.6	1,219.1	31.54	39.645	
9,600.0	8,119.0	10,760.7	9,367.3	39.8	41.4	179.17	-1,366.7	983.8	1,249.5	1,216.8	32.66	38.259	
9,616.0	8,119.0	10,772.4	9,367.3	39.9	41.5	179.18	-1,378.4	984.0	1,249.5	1,216.7	32.82	38.067	
9,700.0	8,119.0	10,835.1	9,367.9	40.8	42.2	179.25	-1,441.0	985.9	1,250.2	1,216.5	33.70	37.095	
9,800.0	8,119.0	10,914.0	9,370.0	41.8	43.0	179.37	-1,519.9	988.9	1,252.8	1,218.0	34.82	35.983	
9,900.0	8,119.0	11,128.2	9,366.7	42.9	45.4	179.26	-1,733.9	987.9	1,250.9	1,213.8	37.09	33.724	
10,000.0	8,119.0	11,198.0	9,363.6	44.0	46.2	179.19	-1,803.6	986.7	1,246.4	1,208.3	38.10	32.712	
10,100.0	8,119.0	11,277.7	9,361.6	45.2	47.1	179.12	-1,883.3	985.8	1,243.9	1,204.7	39.26	31.684	
10,200.0	8,119.0	11,367.2	9,360.5	46.3	48.2	179.06	-1,972.8	984.9	1,242.7	1,202.2	40.53	30.659	
10,244.0	8,119.0	11,400.9	9,360.3	46.9	48.6	179.05	-2,006.5	984.9	1,242.5	1,201.5	41.05	30.270	
10,300.0	8,119.0	11,435.5	9,360.6	47.5	49.0	179.06	-2,041.1	985.3	1,243.0	1,201.3	41.64	29.852	
10,400.0	8,119.0	11,500.7	9,362.7	48.8	49.8	179.12	-2,106.2	987.0	1,246.2	1,203.4	42.75	29.150	
10,500.0	8,119.0	11,576.0	9,367.0	50.0	50.8	179.21	-2,181.3	989.4	1,251.7	1,207.8	43.96	28.475	
10,600.0	8,119.0	11,734.0	9,370.7	51.3	52.8	179.40	-2,339.2	994.3	1,253.0	1,207.3	45.71	27.414	
10,700.0	8,119.0	11,923.7	9,365.5	52.6	55.3	179.41	-2,528.7	995.6	1,249.4	1,201.4	47.94	26.059	
10,800.0	8,119.0	12,013.9	9,361.3	54.0	56.5	179.35	-2,618.7	995.1	1,244.7	1,195.4	49.27	25.260	
10,900.0	8,119.0	12,085.9	9,358.5	55.3	57.5	179.33	-2,690.8	995.0	1,240.9	1,190.5	50.43	24.605	
10,963.6	8,119.0	12,123.4	9,358.0	56.2	58.0	179.32	-2,728.2	995.1	1,240.1	1,189.0	51.11	24.266	
11,000.0	8,119.0	12,146.8	9,358.1	56.7	58.3	179.32	-2,751.6	995.2	1,240.3	1,188.8	51.51	24.076	
11,100.0	8,119.0	12,225.0	9,359.5	58.0	59.4	179.30	-2,829.8	995.0	1,242.0	1,189.2	52.78	23.533	
11,200.0	8,119.0	12,414.3	9,360.4	59.4	62.0	179.10	-3,019.1	991.8	1,243.9	1,188.8	55.12	22.567	
11,300.0	8,119.0	12,487.4	9,357.6	60.8	63.0	179.06	-3,092.1	991.5	1,240.2	1,183.9	56.32	22.019	
11,386.7	8,119.0	12,544.5	9,356.9	62.0	63.8	179.12	-3,149.1	993.1	1,239.1	1,181.8	57.29	21.627	
11,400.0	8,119.0	12,553.1	9,357.0	62.2	64.0	179.14	-3,157.7	993.5	1,239.1	1,181.7	57.44	21.572	
11,500.0	8,119.0	12,646.7	9,358.6	63.6	65.3	179.31	-3,251.2	997.9	1,240.8	1,182.0	58.81	21.100	
11,600.0	8,119.0	12,762.5	9,357.5	65.1	67.0	179.42	-3,367.0	1,000.9	1,239.6	1,179.2	60.40	20.523	
11,615.6	8,119.0	12,773.5	9,357.5	65.3	67.1	179.43	-3,378.0	1,001.2	1,239.6	1,179.0	60.59	20.460	
11,700.0	8,119.0	12,833.1	9,358.1	66.5	68.0	179.48	-3,437.5	1,002.6	1,240.4	1,178.8	61.59	20.139	
11,800.0	8,119.0	12,920.3	9,360.9	68.0	69.3	179.43	-3,524.7	1,001.9	1,243.5	1,180.6	62.97	19.747	
11,900.0	8,119.0	13,031.9	9,362.6	69.4	70.9	179.37	-3,636.3	1,001.2	1,245.0	1,180.4	64.58	19.277	
12,000.0	8,119.0	13,123.8	9,365.5	70.9	72.2	179.33	-3,728.1	1,000.9	1,248.1	1,182.1	66.01	18.908	
12,100.0	8,119.0	12,100.0	9,366.3	72.4	57.2	179.27	-3,866.6	1,000.3	1,248.4	1,189.1	59.29	21.056	
12,155.6	8,119.0	13,313.8	9,365.8	73.2	75.0	179.25	-3,918.1	1,000.3	1,247.9	1,179.2	68.68	18.169	
12,200.0	8,119.0	13,341.9	9,366.0	73.9	75.5	179.27	-3,946.1	1,000.8	1,248.2	1,179.0	69.19	18.041	
12,300.0	8,119.0	13,437.4	9,367.8	75.4	76.9	179.38	-4,041.6	1,003.8	1,250.1	1,179.5	70.62	17.702	
12,400.0	8,119.0	13,638.7	9,363.3	76.9	79.9	179.59	-4,242.7	1,009.5	1,248.0	1,175.0	73.01	17.093	
12,500.0	8,119.0	13,744.8	9,355.8	78.4	81.5	179.72	-4,348.5	1,013.0	1,240.9	1,166.4	74.53	16.650	
12,600.0	8,119.0	13,808.8	9,352.3	79.9	82.5	179.81	-4,412.4	1,015.3	1,235.4	1,159.7	75.69	16.321	
12,700.0	8,119.0	13,898.3	9,349.3	81.4	83.9	179.91	-4,501.8	1,017.9	1,232.0	1,154.9	77.09	15.981	
12,786.3	8,119.0	13,945.2	9,348.3	82.7	84.6	179.95	-4,548.6	1,019.2	1,230.4	1,152.3	78.02	15.770	
12,800.0	8,119.0	13,951.4	9,348.3	82.9	84.7	179.96	-4,554.8	1,019.4	1,230.4	1,152.2	78.15	15.743	
12,900.0	8,119.0	14,006.0	9,350.1	84.5	85.5	179.99	-4,609.4	1,020.2	1,233.3	1,154.1	79.21	15.569	
13,000.0	8,119.0	14,128.0	9,354.1	86.0	87.4	-180.00	-4,731.3	1,021.3	1,236.5	1,155.5	80.95	15.274	
13,100.0	8,119.0	14,199.2	9,356.8	87.5	88.5	-179.97	-4,802.5	1,022.2	1,240.3	1,158.1	82.17	15.093	
13,200.0	8,119.0	14,308.4	9,361.5	89.1	90.2	-179.94	-4,911.6	1,023.6	1,244.6	1,160.8	83.79	14.855	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #114H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 174-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,300.0	8,119.0	14,409.7	9,365.8	90.6	91.7	-179.94	-5,012.8	1,024.3	1,248.8	1,163.5	85.32	14.636	
13,400.0	8,119.0	14,537.6	9,369.5	92.2	93.7	-179.94	-5,140.6	1,024.9	1,251.7	1,164.6	87.13	14.365	
13,500.0	8,119.0	14,704.7	9,367.9	93.7	96.3	-179.95	-5,307.7	1,025.6	1,250.8	1,161.5	89.28	14.010	
13,600.0	8,119.0	14,820.8	9,362.7	95.3	98.1	-179.96	-5,423.7	1,026.0	1,246.3	1,155.3	90.94	13.705	
13,700.0	8,119.0	14,888.2	9,359.8	96.8	99.1	-179.95	-5,491.0	1,026.8	1,242.1	1,149.9	92.19	13.474	
13,754.9	8,119.0	14,914.4	9,359.5	97.7	99.5	-179.93	-5,517.1	1,027.2	1,241.5	1,148.7	92.77	13.383	
13,800.0	8,119.0	14,952.0	9,360.1	98.4	100.1	-179.91	-5,554.7	1,028.0	1,242.1	1,148.8	93.38	13.302	
13,900.0	8,119.0	15,006.8	9,362.1	100.0	101.0	-179.85	-5,609.5	1,029.5	1,245.3	1,150.9	94.43	13.187	
14,000.0	8,119.0	15,173.3	9,365.2	101.5	103.6	-179.74	-5,775.8	1,032.8	1,247.3	1,150.7	96.62	12.910	
14,100.0	8,119.0	15,260.8	9,364.6	103.1	105.0	-179.71	-5,863.3	1,034.1	1,246.6	1,148.6	98.03	12.717	
14,106.2	8,119.0	15,265.9	9,364.6	103.2	105.1	-179.71	-5,868.5	1,034.2	1,246.6	1,148.5	98.12	12.706	
14,200.0	8,119.0	15,354.1	9,365.1	104.7	106.4	-179.65	-5,956.7	1,035.9	1,247.2	1,147.7	99.50	12.535	
14,300.0	8,119.0	15,485.1	9,363.8	106.2	108.5	-179.64	-6,087.6	1,036.9	1,246.1	1,144.8	101.31	12.300	
14,400.0	8,119.0	15,575.1	9,362.0	107.8	109.9	-179.61	-6,177.6	1,038.1	1,244.2	1,141.4	102.76	12.108	
14,471.8	8,119.0	15,631.5	9,361.7	109.0	110.8	-179.60	-6,234.0	1,038.6	1,243.7	1,140.0	103.72	11.991	
14,500.0	8,119.0	15,653.2	9,361.7	109.4	111.2	-179.59	-6,255.7	1,038.9	1,243.8	1,139.7	104.09	11.949	
14,600.0	8,119.0	15,764.2	9,362.7	111.0	112.9	-179.48	-6,366.7	1,041.9	1,244.8	1,139.1	105.72	11.775	
14,700.0	8,119.0	15,862.5	9,361.8	112.6	114.5	-179.35	-6,464.9	1,045.4	1,243.9	1,136.7	107.23	11.601	
14,800.0	8,119.0	14,800.0	9,360.7	114.2	97.6	-179.18	-6,578.0	1,049.6	1,243.0	1,143.1	99.85	12.449	
14,900.0	8,119.0	16,064.1	9,359.2	115.7	117.7	-178.99	-6,666.2	1,054.2	1,241.5	1,131.2	110.29	11.256	
14,912.0	8,119.0	16,072.5	9,359.2	115.9	117.8	-178.95	-6,674.5	1,055.1	1,241.4	1,131.0	110.44	11.241	
15,000.0	8,119.0	16,122.5	9,359.8	117.3	118.6	-178.69	-6,724.1	1,061.1	1,242.7	1,131.3	111.41	11.155	
15,100.0	8,119.0	16,208.5	9,363.9	118.9	120.0	-178.39	-6,809.8	1,068.3	1,247.5	1,134.7	112.80	11.060	
15,200.0	8,119.0	16,391.2	9,362.4	120.5	122.9	-178.54	-6,992.2	1,066.0	1,245.2	1,130.0	115.12	10.816	
15,267.2	8,119.0	16,428.5	9,362.0	121.6	123.5	-178.65	-7,029.5	1,063.8	1,244.3	1,128.4	115.92	10.735	
15,300.0	8,119.0	16,457.0	9,362.3	122.1	123.9	-178.72	-7,057.9	1,062.5	1,244.6	1,128.2	116.39	10.694	
15,400.0	8,119.0	16,567.7	9,363.0	123.7	125.7	-178.81	-7,168.6	1,061.1	1,245.3	1,127.3	118.04	10.550	
15,500.0	8,119.0	16,688.1	9,361.9	125.3	127.6	-178.64	-7,288.9	1,065.6	1,244.6	1,124.9	119.75	10.394	
15,600.0	8,119.0	16,790.3	9,358.9	126.9	129.2	-178.73	-7,391.0	1,064.1	1,241.6	1,120.3	121.32	10.234	
15,700.0	8,119.0	16,902.5	9,356.6	128.5	131.0	-178.77	-7,503.2	1,063.8	1,239.6	1,116.6	122.95	10.082	
15,800.0	8,119.0	16,986.4	9,353.9	130.1	132.4	-178.76	-7,587.0	1,064.4	1,236.5	1,112.1	124.38	9.941	
15,900.0	8,119.0	17,084.2	9,352.5	131.7	133.9	-178.83	-7,684.9	1,063.5	1,235.1	1,109.1	125.92	9.808	
16,000.0	8,119.0	17,166.1	9,351.3	133.3	135.2	-178.86	-7,766.8	1,063.2	1,233.5	1,106.2	127.32	9.689	
16,015.0	8,119.0	17,176.4	9,351.2	133.6	135.4	-178.87	-7,777.1	1,063.0	1,233.5	1,106.0	127.51	9.674	
16,100.0	8,119.0	17,277.9	9,351.4	134.9	137.0	-179.06	-7,878.4	1,059.7	1,233.8	1,104.8	128.98	9.565	
16,200.0	8,119.0	17,416.5	9,346.5	136.5	139.2	-179.38	-8,016.9	1,053.4	1,229.8	1,099.0	130.85	9.399	
16,300.0	8,119.0	17,477.3	9,344.8	138.1	140.2	-179.48	-8,077.6	1,051.7	1,227.0	1,094.9	132.12	9.287	
16,329.1	8,119.0	17,491.0	9,344.7	138.6	140.4	-179.49	-8,091.3	1,051.6	1,226.8	1,094.3	132.43	9.264	
16,400.0	8,119.0	17,525.6	9,345.1	139.7	140.9	-179.50	-8,125.8	1,051.4	1,227.7	1,094.6	133.14	9.222	
16,500.0	8,119.0	17,586.0	9,348.7	141.4	141.9	-179.51	-8,186.1	1,051.7	1,233.2	1,099.0	134.17	9.191	
16,600.0	8,119.0	17,674.0	9,355.9	143.0	143.3	-179.49	-8,273.9	1,052.7	1,241.1	1,105.6	135.54	9.157	
16,700.0	8,119.0	17,831.8	9,362.8	144.6	145.9	-179.46	-8,431.4	1,054.4	1,245.3	1,107.4	137.86	9.033	
16,800.0	8,119.0	17,945.6	9,364.8	146.2	147.7	-179.38	-8,545.2	1,056.7	1,247.1	1,107.5	139.56	8.936	
16,900.0	8,119.0	18,023.3	9,366.4	147.8	149.0	-179.34	-8,622.9	1,058.0	1,249.1	1,108.3	140.86	8.868	
17,000.0	8,119.0	18,163.5	9,369.9	149.4	151.2	-179.26	-8,763.0	1,060.7	1,252.0	1,109.2	142.84	8.765	
17,100.0	8,119.0	18,285.3	9,367.0	151.0	153.2	-179.21	-8,884.7	1,062.5	1,249.4	1,104.8	144.57	8.642	
17,155.0	8,119.0	18,317.7	9,366.7	151.9	153.7	-179.19	-8,917.1	1,063.1	1,248.9	1,103.7	145.23	8.599	
17,200.0	8,119.0	18,340.0	9,366.9	152.7	154.1	-179.17	-8,939.4	1,063.6	1,249.2	1,103.5	145.70	8.574	
17,300.0	8,119.0	18,398.0	9,368.7	154.3	155.0	-179.15	-8,997.4	1,064.4	1,252.6	1,105.8	146.73	8.536	
17,400.0	8,119.0	18,462.7	9,373.2	155.9	156.1	-179.18	-9,061.9	1,064.2	1,259.4	1,111.7	147.75	8.524	
17,500.0	8,119.0	18,630.6	9,384.5	157.5	158.8	-179.40	-9,229.3	1,060.5	1,267.1	1,116.8	150.27	8.432	
17,600.0	8,119.0	18,727.2	9,387.4	159.1	160.3	-179.55	-9,326.0	1,057.8	1,270.0	1,118.2	151.80	8.366	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #114H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 174-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
17,700.0	8,119.0	18,837.7	9,390.8	160.7	162.1	-179.67	-9,436.4	1,055.6	1,273.1	1,119.6	153.49	8.295	
17,800.0	8,119.0	18,970.7	9,390.2	162.4	164.2	-179.62	-9,569.3	1,057.6	1,272.3	1,117.0	155.37	8.189	
17,900.0	8,119.0	19,148.6	9,383.0	164.0	167.1	-179.64	-9,746.9	1,058.2	1,267.9	1,110.5	157.39	8.055	
18,000.0	8,119.0	19,221.9	9,378.5	165.6	168.3	-179.70	-9,820.1	1,057.2	1,261.9	1,103.0	158.85	7.944	
18,100.0	8,119.0	19,281.0	9,376.7	167.2	169.2	-179.76	-9,879.2	1,056.1	1,258.9	1,098.8	160.14	7.861	
18,139.3	8,119.0	19,300.5	9,376.6	167.9	169.6	-179.79	-9,898.7	1,055.7	1,258.7	1,098.1	160.58	7.838	
18,200.0	8,119.0	19,330.1	9,377.1	168.9	170.0	-179.82	-9,928.2	1,055.1	1,259.6	1,098.4	161.18	7.814	
18,300.0	8,119.0	19,381.8	9,379.6	170.5	170.9	-179.86	-9,979.9	1,054.5	1,264.3	1,102.2	162.06	7.802	
18,400.0	8,119.0	19,474.2	9,386.0	172.1	172.4	-179.92	-10,072.0	1,053.7	1,271.2	1,107.7	163.50	7.775	
18,500.0	8,119.0	19,621.5	9,391.7	173.7	174.8	-179.81	-10,219.1	1,057.0	1,274.5	1,108.7	165.75	7.689	
18,600.0	8,119.0	19,767.4	9,395.2	175.4	177.1	-179.59	-10,364.9	1,062.8	1,277.3	1,109.5	167.79	7.613	
18,602.5	8,119.0	18,602.5	9,394.9	175.4	158.1	-179.63	-10,335.4	1,061.8	1,277.3	1,118.6	158.66	8.050	
18,700.0	8,119.0	19,880.9	9,395.4	177.0	179.0	-179.40	-10,478.3	1,067.6	1,277.6	1,108.2	169.44	7.540	
18,800.0	8,119.0	20,049.8	9,387.1	178.6	181.7	-179.15	-10,646.8	1,074.1	1,272.1	1,100.8	171.32	7.426	
18,900.0	8,119.0	20,111.9	9,383.9	180.2	182.8	-179.12	-10,708.9	1,075.2	1,267.0	1,094.2	172.74	7.335	
19,000.0	8,119.0	20,189.5	9,381.9	181.9	184.0	-179.11	-10,786.4	1,075.8	1,264.3	1,090.1	174.16	7.260	
19,100.0	8,119.0	20,316.8	9,378.7	183.5	186.1	-179.09	-10,913.7	1,076.8	1,262.0	1,086.1	175.88	7.176	
19,200.0	8,119.0	20,409.0	9,374.4	185.1	187.6	-179.25	-11,005.7	1,073.7	1,257.3	1,079.9	177.40	7.087	
19,291.2	8,119.0	20,456.8	9,373.1	186.6	188.3	-179.38	-11,053.4	1,071.2	1,255.2	1,076.7	178.51	7.032	
19,300.0	8,119.0	20,460.3	9,373.1	186.8	188.4	-179.39	-11,056.9	1,071.1	1,255.2	1,076.6	178.60	7.028	
19,400.0	8,119.0	20,502.0	9,374.3	188.4	189.1	-179.48	-11,098.5	1,069.3	1,258.0	1,078.6	179.42	7.011	
19,500.0	8,119.0	20,580.0	9,379.0	190.0	190.3	-179.63	-11,176.4	1,066.5	1,264.0	1,083.4	180.63	6.998	
19,600.0	8,119.0	20,740.2	9,385.2	191.6	192.9	-179.79	-11,336.4	1,063.8	1,267.5	1,084.4	183.09	6.922	
19,700.0	8,119.0	20,900.6	9,385.5	193.3	195.5	-179.71	-11,496.7	1,066.5	1,268.1	1,082.9	185.20	6.847	
19,800.0	8,119.0	21,006.7	9,382.1	194.9	197.3	-179.61	-11,602.8	1,069.4	1,264.8	1,078.0	186.78	6.772	
19,900.0	8,119.0	21,087.6	9,379.9	196.5	198.6	-179.53	-11,683.5	1,071.7	1,262.2	1,074.0	188.20	6.707	
19,969.1	8,119.0	21,135.3	9,379.5	197.7	199.4	-179.46	-11,731.2	1,073.5	1,261.6	1,072.5	189.09	6.672	
20,000.0	8,119.0	21,161.0	9,379.6	198.2	199.8	-179.41	-11,756.9	1,074.7	1,261.7	1,072.2	189.52	6.657	
20,100.0	8,119.0	21,265.0	9,380.1	199.8	201.5	-179.31	-11,860.8	1,077.6	1,262.3	1,071.1	191.12	6.605	
20,200.0	8,119.0	21,337.1	9,381.1	201.4	202.7	-179.31	-11,933.0	1,078.0	1,263.6	1,071.2	192.37	6.569	
20,300.0	8,119.0	21,407.4	9,383.5	203.1	203.8	-179.32	-12,003.1	1,078.2	1,267.1	1,073.5	193.52	6.547	
20,400.0	8,119.0	21,484.3	9,388.0	204.7	205.1	-179.32	-12,080.0	1,078.7	1,272.8	1,078.1	194.70	6.537	
20,500.0	8,119.0	21,562.8	9,393.5	206.3	206.3	-179.32	-12,158.2	1,079.2	1,279.9	1,084.0	195.86	6.535	
20,606.7	8,119.0	21,632.0	9,400.1	208.1	207.5	-179.30	-12,227.1	1,080.1	1,290.0	1,093.3	196.72	6.558	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #121H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 228-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.9	1.9	0.0	0.0	-89.77	11.8	-2,941.7	2,941.7				
100.0	100.0	99.2	99.2	0.1	0.2	-89.77	11.9	-2,941.7	2,941.7	2,941.5	0.28	N/A	
200.0	200.0	196.5	196.5	0.5	0.3	-89.76	12.2	-2,941.8	2,941.9	2,941.1	0.79	3,701.011	
300.0	300.0	302.4	302.4	0.8	0.6	-89.75	12.7	-2,942.0	2,942.0	2,940.5	1.46	2,010.220	
400.0	400.0	412.3	412.3	1.2	1.0	-89.75	12.9	-2,941.8	2,941.8	2,939.6	2.21	1,332.600	
500.0	500.0	514.6	514.6	1.6	1.4	-89.75	13.0	-2,941.4	2,941.4	2,938.5	2.93	1,005.028	
600.0	600.0	617.0	617.0	1.9	1.7	-89.74	13.1	-2,940.9	2,941.0	2,937.3	3.65	806.545	
700.0	700.0	713.0	713.0	2.3	2.1	-89.74	13.1	-2,940.5	2,940.5	2,936.2	4.34	677.091	
800.0	800.0	808.2	808.1	2.6	2.4	-89.75	13.0	-2,940.2	2,940.2	2,935.2	5.04	583.947	
860.3	860.3	862.3	862.3	2.9	2.6	-89.75	12.9	-2,940.1	2,940.2	2,934.7	5.44	540.713	CC
900.0	900.0	898.0	898.0	3.0	2.7	-89.75	12.8	-2,940.2	2,940.2	2,934.5	5.70	515.593	
1,000.0	1,000.0	987.7	987.7	3.4	3.0	-89.76	12.5	-2,940.4	2,940.5	2,934.1	6.37	461.660	ES
1,100.0	1,100.0	1,077.2	1,077.2	3.7	3.3	-164.18	12.2	-2,941.0	2,942.9	2,935.8	7.03	418.768	
1,200.0	1,199.8	1,163.0	1,162.9	4.1	3.6	-164.18	11.7	-2,942.0	2,949.0	2,941.3	7.67	384.409	
1,300.0	1,299.5	1,250.4	1,250.4	4.4	3.9	-164.17	11.2	-2,943.3	2,958.9	2,950.6	8.32	355.438	
1,400.0	1,398.7	1,368.4	1,368.3	4.8	4.3	-164.20	10.2	-2,945.0	2,972.0	2,962.9	9.09	326.984	
1,500.0	1,497.5	1,478.3	1,478.3	5.2	4.7	-164.22	9.3	-2,945.9	2,987.9	2,978.1	9.83	303.997	
1,600.0	1,595.9	1,581.0	1,580.9	5.5	5.1	-164.32	8.8	-2,946.6	3,005.3	2,994.7	10.54	285.026	
1,700.0	1,694.4	1,675.7	1,675.7	5.9	5.4	-164.41	8.8	-2,947.1	3,022.6	3,011.4	11.23	269.112	
1,800.0	1,792.9	1,766.6	1,766.6	6.3	5.7	-164.49	8.8	-2,947.9	3,040.2	3,028.2	11.91	255.293	
1,900.0	1,891.4	1,859.6	1,859.6	6.8	6.1	-164.57	9.0	-2,948.8	3,057.9	3,045.3	12.59	242.789	
2,000.0	1,989.9	1,954.1	1,954.0	7.2	6.4	-164.64	9.4	-2,949.9	3,075.8	3,062.5	13.29	231.462	
2,100.0	2,088.4	2,064.8	2,064.7	7.6	6.8	-164.73	10.0	-2,951.2	3,093.7	3,079.7	14.04	220.313	
2,200.0	2,186.8	2,187.7	2,187.6	8.0	7.2	-164.81	10.9	-2,951.7	3,110.9	3,096.1	14.84	209.607	
2,300.0	2,285.3	2,289.6	2,289.5	8.5	7.6	-164.89	11.4	-2,951.7	3,127.7	3,112.1	15.56	200.980	
2,400.0	2,383.8	2,392.0	2,391.9	8.9	7.9	-164.98	11.2	-2,951.6	3,144.4	3,128.1	16.29	193.069	
2,500.0	2,482.3	2,489.6	2,489.5	9.3	8.3	-165.07	10.9	-2,951.4	3,161.0	3,144.0	16.99	186.036	
2,600.0	2,580.8	2,585.4	2,585.3	9.8	8.6	-165.14	10.9	-2,951.3	3,177.6	3,159.9	17.69	179.615	
2,700.0	2,679.2	2,673.8	2,673.7	10.2	8.9	-165.22	10.9	-2,951.4	3,194.5	3,176.1	18.37	173.929	
2,800.0	2,777.7	2,763.7	2,763.6	10.6	9.2	-165.29	11.0	-2,951.7	3,211.7	3,192.7	19.05	168.612	
2,900.0	2,876.2	2,864.9	2,864.8	11.1	9.6	-165.36	11.1	-2,952.2	3,229.0	3,209.2	19.78	163.278	
3,000.0	2,974.7	2,965.5	2,965.4	11.5	9.9	-165.44	11.1	-2,952.6	3,246.2	3,225.7	20.50	158.333	
3,100.0	3,073.2	3,064.3	3,064.2	11.9	10.3	-165.52	11.3	-2,952.9	3,263.3	3,242.1	21.22	153.776	
3,200.0	3,171.6	3,175.9	3,175.8	12.4	10.7	-165.59	11.9	-2,953.2	3,280.4	3,258.4	21.99	149.191	
3,300.0	3,270.1	3,314.1	3,314.0	12.8	11.1	-165.68	12.6	-2,952.3	3,296.6	3,273.7	22.85	144.254	
3,400.0	3,368.6	3,396.4	3,396.3	13.3	11.4	-165.74	12.8	-2,951.4	3,312.4	3,288.9	23.51	140.916	
3,500.0	3,467.1	3,475.1	3,475.0	13.7	11.7	-165.80	12.7	-2,951.0	3,328.8	3,304.6	24.14	137.866	
3,600.0	3,565.6	3,595.1	3,595.0	14.2	12.1	-165.91	11.7	-2,950.7	3,345.4	3,320.5	24.94	134.129	
3,700.0	3,664.0	3,721.8	3,721.6	14.6	12.6	-166.05	8.8	-2,948.7	3,360.8	3,335.0	25.76	130.442	
3,800.0	3,762.5	3,787.4	3,787.2	15.1	12.8	-166.13	7.4	-2,947.9	3,376.5	3,350.1	26.36	128.111	
3,900.0	3,861.0	3,852.9	3,852.7	15.5	13.0	-166.19	6.4	-2,947.8	3,393.2	3,366.2	26.94	125.937	
4,000.0	3,959.5	3,928.7	3,928.5	16.0	13.3	-166.25	5.9	-2,948.3	3,410.8	3,383.2	27.57	123.709	
4,100.0	4,058.0	4,018.2	4,018.0	16.4	13.6	-166.33	5.1	-2,949.3	3,428.7	3,400.5	28.25	121.354	
4,200.0	4,156.4	4,110.9	4,110.7	16.8	13.9	-166.41	4.2	-2,950.5	3,446.9	3,418.0	28.95	119.065	
4,300.0	4,254.9	4,211.1	4,210.9	17.3	14.3	-166.49	3.3	-2,951.8	3,465.2	3,435.5	29.68	116.759	
4,400.0	4,353.4	4,308.9	4,308.6	17.7	14.6	-166.56	2.7	-2,953.1	3,483.4	3,453.0	30.40	114.601	
4,500.0	4,451.9	4,402.9	4,402.7	18.2	15.0	-166.63	2.2	-2,954.4	3,501.7	3,470.6	31.10	112.600	
4,600.0	4,550.4	4,513.9	4,513.7	18.6	15.3	-166.71	1.8	-2,955.9	3,520.0	3,488.1	31.87	110.440	
4,700.0	4,648.9	4,651.6	4,651.3	19.1	15.8	-166.81	1.6	-2,956.7	3,537.4	3,504.7	32.76	107.991	
4,800.0	4,747.3	4,738.7	4,738.4	19.5	16.1	-166.86	1.6	-2,956.8	3,554.5	3,521.1	33.43	106.320	
4,900.0	4,845.8	4,826.3	4,826.1	20.0	16.5	-166.92	1.8	-2,957.2	3,571.9	3,537.8	34.11	104.720	
5,000.0	4,944.3	4,932.0	4,931.8	20.4	16.8	-166.98	1.9	-2,957.8	3,589.3	3,554.5	34.86	102.964	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #121H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 228-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	5,041.2	5,040.9	20.9	17.2	-167.05	2.1	-2,958.1	3,606.5	3,570.9	35.63	101.234	
5,200.0	5,141.3	5,140.5	5,140.2	21.3	17.6	-167.11	2.1	-2,958.2	3,623.6	3,587.2	36.35	99.687	
5,300.0	5,239.7	5,242.6	5,242.3	21.8	17.9	-167.17	1.9	-2,958.2	3,640.6	3,603.5	37.08	98.171	
5,400.0	5,338.2	5,350.5	5,350.2	22.2	18.3	-167.24	1.7	-2,958.1	3,657.4	3,619.5	37.84	96.655	
5,500.0	5,436.7	5,458.5	5,458.2	22.7	18.7	-167.32	1.4	-2,957.6	3,673.9	3,635.3	38.59	95.197	
5,600.0	5,535.2	5,566.5	5,566.2	23.1	19.0	-167.38	1.4	-2,956.9	3,690.2	3,650.9	39.34	93.794	
5,700.0	5,633.7	5,692.5	5,692.2	23.6	19.5	-167.44	2.4	-2,955.6	3,706.1	3,665.9	40.17	92.268	
5,800.0	5,732.1	6,238.7	6,235.0	24.0	21.4	-167.19	41.2	-2,918.1	3,717.2	3,674.8	42.39	87.690	
5,900.0	5,830.6	6,346.7	6,341.5	24.5	21.7	-167.09	53.0	-2,904.0	3,720.5	3,677.4	43.14	86.242	
6,000.0	5,929.1	6,415.5	6,409.3	24.9	22.0	-167.02	60.2	-2,895.2	3,724.2	3,680.4	43.78	85.058	
6,100.0	6,027.6	6,481.5	6,474.5	25.4	22.2	-166.97	66.7	-2,887.4	3,728.8	3,684.4	44.42	83.950	
6,200.0	6,126.1	6,548.7	6,541.0	25.8	22.5	-166.92	73.0	-2,880.0	3,734.3	3,689.3	45.05	82.893	
6,300.0	6,224.5	6,649.6	6,640.9	26.3	22.8	-166.84	82.3	-2,869.2	3,740.2	3,694.4	45.79	81.687	
6,400.0	6,323.0	6,750.4	6,740.6	26.7	23.2	-166.76	92.2	-2,858.5	3,746.1	3,699.6	46.52	80.518	
6,500.0	6,421.5	6,822.7	6,812.2	27.2	23.4	-166.70	99.1	-2,851.1	3,752.4	3,705.2	47.17	79.544	
6,600.0	6,520.0	6,899.0	6,887.8	27.6	23.7	-166.65	106.0	-2,843.7	3,759.3	3,711.5	47.83	78.592	
6,700.0	6,618.5	7,012.8	7,000.7	28.1	24.1	-166.57	116.0	-2,833.0	3,766.5	3,717.9	48.62	77.473	
6,800.0	6,716.9	7,146.2	7,132.8	28.5	24.6	-166.47	128.8	-2,819.5	3,772.9	3,723.5	49.47	76.274	
6,900.0	6,815.4	7,225.7	7,211.5	29.0	24.9	-166.39	137.3	-2,811.5	3,779.3	3,729.2	50.14	75.370	
6,981.8	6,896.0	7,299.0	7,283.9	29.4	25.2	-166.31	145.9	-2,804.2	3,784.8	3,734.0	50.72	74.614	
7,000.0	6,913.9	7,314.3	7,299.0	29.5	25.3	-166.30	147.8	-2,802.7	3,785.9	3,735.1	50.85	74.452	
7,100.0	7,012.9	7,396.4	7,380.1	29.9	25.6	-166.22	157.5	-2,795.0	3,790.1	3,738.6	51.53	73.551	
7,200.0	7,112.3	7,478.5	7,461.4	30.3	25.9	-166.12	166.6	-2,787.6	3,790.5	3,738.3	52.20	72.616	
7,300.0	7,212.2	7,562.4	7,544.5	30.6	26.2	-165.99	175.3	-2,780.4	3,787.1	3,734.3	52.86	71.641	
7,381.8	7,294.0	7,631.2	7,612.8	30.9	26.4	-91.44	182.2	-2,774.7	3,781.6	3,728.2	53.39	70.823	
7,400.0	7,312.2	7,646.5	7,627.9	30.9	26.5	-91.42	183.6	-2,773.5	3,780.0	3,726.5	53.51	70.641	
7,500.0	7,412.2	7,727.9	7,708.7	31.2	26.8	-91.30	191.2	-2,767.1	3,772.0	3,717.8	54.14	69.672	
7,600.0	7,512.2	7,807.2	7,787.5	31.5	27.1	-91.20	197.9	-2,761.3	3,764.4	3,709.7	54.76	68.746	
7,633.8	7,546.0	7,834.1	7,814.2	31.6	27.2	-91.17	200.1	-2,759.4	3,762.0	3,707.0	54.97	68.440	
7,650.0	7,562.2	7,846.9	7,827.0	31.7	27.2	89.29	201.1	-2,758.5	3,760.9	3,705.8	55.07	68.297	
7,700.0	7,612.0	7,873.0	7,853.0	31.8	27.3	89.69	203.1	-2,756.8	3,757.4	3,702.1	55.31	67.932	
7,750.0	7,661.4	7,920.0	7,899.7	31.9	27.5	90.18	206.6	-2,753.8	3,754.1	3,698.5	55.63	67.486	
7,800.0	7,709.8	7,954.2	7,933.8	32.0	27.6	90.65	209.0	-2,751.7	3,751.1	3,695.2	55.89	67.117	
7,850.0	7,757.1	7,987.5	7,966.9	32.1	27.8	91.12	211.3	-2,749.8	3,748.3	3,692.2	56.14	66.771	
7,900.0	7,802.7	8,019.5	7,998.8	32.2	27.9	91.59	213.3	-2,748.1	3,745.9	3,689.5	56.37	66.449	
7,950.0	7,846.4	8,050.0	8,029.2	32.3	28.0	92.04	215.2	-2,746.6	3,743.9	3,687.3	56.60	66.151	
8,000.0	7,887.7	8,080.1	8,059.2	32.4	28.1	92.47	216.9	-2,745.2	3,742.4	3,685.6	56.81	65.871	
8,050.0	7,926.5	8,109.3	8,088.4	32.4	28.2	92.86	218.5	-2,743.9	3,741.5	3,684.5	57.02	65.612	
8,098.9	7,961.6	8,135.6	8,114.7	32.5	28.3	93.19	219.9	-2,742.7	3,741.2	3,684.0	57.22	65.384	
8,100.0	7,962.4	8,136.2	8,115.2	32.5	28.3	93.20	220.0	-2,742.7	3,741.2	3,684.0	57.22	65.379	
8,150.0	7,995.1	8,160.6	8,139.6	32.5	28.4	93.45	221.2	-2,741.7	3,741.5	3,684.1	57.41	65.172	
8,200.0	8,024.4	8,182.4	8,161.3	32.6	28.5	93.62	222.3	-2,740.8	3,742.7	3,685.1	57.59	64.991	
8,250.0	8,050.1	8,201.2	8,180.1	32.6	28.5	93.68	223.2	-2,740.1	3,744.6	3,686.8	57.75	64.836	
8,300.0	8,071.9	8,217.0	8,195.9	32.7	28.6	93.63	223.9	-2,739.5	3,747.4	3,689.5	57.91	64.709	
8,350.0	8,089.7	8,229.7	8,208.5	32.7	28.6	93.45	224.5	-2,739.1	3,751.0	3,692.9	58.06	64.609	
8,400.0	8,103.4	8,239.0	8,217.8	32.7	28.7	93.13	224.9	-2,738.8	3,755.5	3,697.3	58.19	64.537	
8,450.0	8,112.8	8,244.9	8,223.7	32.8	28.7	92.68	225.2	-2,738.6	3,760.9	3,702.6	58.31	64.494	
8,500.0	8,118.0	8,247.3	8,226.2	32.9	28.7	92.09	225.3	-2,738.5	3,767.2	3,708.8	58.42	64.479	
8,533.8	8,119.0	8,247.0	8,225.8	33.0	28.7	91.61	225.2	-2,738.5	3,771.9	3,713.4	58.49	64.486	
8,600.0	8,119.0	8,244.7	8,223.5	33.1	28.7	91.57	225.1	-2,738.6	3,782.0	3,723.3	58.63	64.509	
8,700.0	8,119.0	8,241.1	8,220.0	33.4	28.7	91.52	225.0	-2,738.7	3,799.3	3,740.5	58.87	64.535	
8,800.0	8,119.0	8,237.5	8,216.4	33.8	28.7	91.46	224.8	-2,738.8	3,819.3	3,760.1	59.16	64.554	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #121H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 228-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,900.0	8,119.0	8,233.9	8,212.7	34.3	28.7	91.41	224.7	-2,738.9	3,841.7	3,782.2	59.50	64.570	
9,000.0	8,119.0	8,230.2	8,209.1	34.9	28.6	91.35	224.5	-2,739.1	3,866.5	3,806.7	59.87	64.587	
9,100.0	8,119.0	8,226.5	8,205.3	35.5	28.6	91.30	224.3	-2,739.2	3,893.8	3,833.6	60.27	64.609	
9,200.0	8,119.0	8,222.7	8,201.5	36.3	28.6	91.24	224.2	-2,739.3	3,923.5	3,862.8	60.70	64.639	
9,300.0	8,119.0	8,218.8	8,197.7	37.1	28.6	91.18	224.0	-2,739.5	3,955.4	3,894.2	61.15	64.681	
9,400.0	8,119.0	8,214.9	8,193.8	37.9	28.6	91.12	223.8	-2,739.6	3,989.6	3,927.9	61.63	64.738	
9,500.0	8,119.0	8,210.9	8,189.8	38.8	28.6	91.06	223.6	-2,739.8	4,025.9	3,963.8	62.12	64.812	
9,600.0	8,119.0	8,206.9	8,185.8	39.8	28.6	91.00	223.5	-2,739.9	4,064.4	4,001.8	62.62	64.906	
9,700.0	8,119.0	11,224.3	9,864.8	40.8	41.9	115.33	-1,364.0	-2,681.8	4,077.2	4,000.8	76.46	53.323	
9,800.0	8,119.0	11,312.1	9,864.8	41.8	42.7	115.32	-1,451.7	-2,684.3	4,080.4	4,002.1	78.25	52.143	
9,900.0	8,119.0	11,572.6	9,858.9	42.9	45.4	115.21	-1,712.1	-2,687.1	4,079.7	3,997.4	82.29	49.580	
9,995.0	8,119.0	11,641.0	9,858.4	43.9	46.1	115.21	-1,780.5	-2,686.8	4,079.4	3,995.4	83.96	48.586	
10,000.0	8,119.0	11,641.0	9,858.4	44.0	46.1	115.21	-1,780.5	-2,686.8	4,079.4	3,995.4	84.00	48.562	
10,100.0	8,119.0	11,714.4	9,859.2	45.2	47.0	115.22	-1,853.9	-2,686.2	4,079.8	3,994.0	85.82	47.538	
10,200.0	8,119.0	11,799.2	9,861.8	46.3	47.9	115.25	-1,938.7	-2,685.5	4,080.8	3,992.9	87.82	46.467	
10,300.0	8,119.0	11,944.9	9,865.9	47.5	49.7	115.31	-2,084.2	-2,683.8	4,081.5	3,990.8	90.69	45.003	
10,400.0	8,119.0	12,158.4	9,869.1	48.8	52.3	115.38	-2,297.6	-2,677.9	4,080.3	3,985.7	94.60	43.133	
10,500.0	8,119.0	12,256.2	9,870.8	50.0	53.5	115.42	-2,395.3	-2,673.4	4,077.4	3,980.4	96.94	42.060	
10,600.0	8,119.0	12,335.6	9,868.7	51.3	54.5	115.40	-2,474.6	-2,671.8	4,074.9	3,975.9	99.08	41.129	
10,700.0	8,119.0	12,436.4	9,865.4	52.6	55.9	115.37	-2,575.4	-2,670.3	4,072.7	3,971.1	101.57	40.098	
10,800.0	8,119.0	12,530.1	9,863.6	54.0	57.1	115.35	-2,669.0	-2,668.3	4,070.5	3,966.5	103.97	39.150	
10,900.0	8,119.0	12,620.5	9,863.9	55.3	58.3	115.37	-2,759.4	-2,665.8	4,068.6	3,962.2	106.34	38.262	
11,000.0	8,119.0	12,775.2	9,863.8	56.7	60.4	115.39	-2,914.0	-2,660.7	4,066.2	3,956.5	109.71	37.062	
11,100.0	8,119.0	12,835.6	9,863.5	58.0	61.2	115.40	-2,974.3	-2,658.6	4,063.4	3,951.7	111.67	36.387	
11,200.0	8,119.0	12,900.3	9,862.8	59.4	62.1	115.40	-3,039.1	-2,657.4	4,061.7	3,948.0	113.71	35.719	
11,300.0	8,119.0	13,064.0	9,860.4	60.8	64.4	115.38	-3,202.7	-2,653.7	4,059.5	3,942.2	117.35	34.593	
11,400.0	8,119.0	13,275.9	9,853.2	62.2	67.4	115.33	-3,414.3	-2,645.3	4,054.8	3,933.0	121.79	33.292	
11,500.0	8,119.0	13,354.0	9,851.2	63.6	68.5	115.34	-3,492.2	-2,640.5	4,048.9	3,924.7	124.13	32.617	
11,600.0	8,119.0	13,399.5	9,850.5	65.1	69.2	115.34	-3,537.6	-2,638.0	4,044.1	3,918.1	125.96	32.106	
11,700.0	8,119.0	13,447.0	9,850.3	66.5	69.9	115.35	-3,585.1	-2,636.6	4,041.3	3,913.5	127.81	31.619	
11,800.0	8,119.0	13,487.8	9,850.7	68.0	70.4	115.35	-3,625.9	-2,635.7	4,039.8	3,910.2	129.54	31.186	
11,900.0	8,119.0	13,538.0	9,851.7	69.4	71.2	115.37	-3,676.1	-2,634.3	4,039.0	3,907.6	131.40	30.737	
11,928.4	8,119.0	13,565.4	9,852.4	69.9	71.6	115.38	-3,703.5	-2,633.7	4,038.9	3,906.8	132.16	30.562	
12,000.0	8,119.0	13,590.8	9,852.9	70.9	71.9	115.39	-3,728.8	-2,633.5	4,039.5	3,906.2	133.31	30.302	
12,100.0	8,119.0	13,631.0	9,853.6	72.4	72.5	115.40	-3,769.0	-2,634.0	4,041.6	3,906.7	134.99	29.941	
12,200.0	8,119.0	13,690.1	9,854.2	73.9	73.4	115.39	-3,828.1	-2,635.6	4,045.1	3,908.1	136.99	29.528	
12,300.0	8,119.0	13,777.6	9,855.0	75.4	74.6	115.38	-3,915.6	-2,638.8	4,049.2	3,909.7	139.52	29.022	
12,400.0	8,119.0	13,844.0	9,856.2	76.9	75.6	115.38	-3,981.9	-2,641.0	4,053.6	3,911.9	141.66	28.615	
12,500.0	8,119.0	13,908.0	9,856.7	78.4	76.5	115.36	-4,045.8	-2,644.6	4,059.3	3,915.5	143.76	28.236	
12,600.0	8,119.0	13,979.2	9,857.4	79.9	77.6	115.34	-4,116.9	-2,649.1	4,065.9	3,919.9	146.00	27.848	
12,700.0	8,119.0	14,154.7	9,855.6	81.4	80.1	115.25	-4,292.1	-2,659.3	4,071.0	3,920.7	150.29	27.087	
12,800.0	8,119.0	14,413.4	9,837.8	82.9	84.0	114.93	-4,549.5	-2,673.4	4,073.2	3,916.9	156.26	26.067	
12,900.0	8,119.0	14,636.4	9,825.2	84.5	87.3	114.75	-4,772.1	-2,675.8	4,072.0	3,910.6	161.39	25.231	
13,000.0	8,119.0	14,805.6	9,822.9	86.0	89.9	114.75	-4,941.1	-2,670.0	4,068.8	3,903.4	165.42	24.597	
13,100.0	8,119.0	14,916.9	9,826.5	87.5	91.6	114.83	-5,052.2	-2,662.9	4,064.8	3,896.4	168.41	24.137	
13,200.0	8,119.0	14,989.3	9,830.3	89.1	92.8	114.91	-5,124.3	-2,657.5	4,060.9	3,890.1	170.76	23.781	
13,300.0	8,119.0	15,052.0	9,834.3	90.6	93.7	114.98	-5,186.7	-2,653.3	4,058.0	3,885.0	172.95	23.464	
13,400.0	8,119.0	15,138.0	9,840.4	92.2	95.1	115.09	-5,272.2	-2,647.2	4,055.1	3,879.6	175.49	23.107	
13,500.0	8,119.0	15,202.0	9,844.8	93.7	96.1	115.17	-5,335.9	-2,643.0	4,053.0	3,875.3	177.68	22.811	
13,600.0	8,119.0	15,233.0	9,846.9	95.3	96.6	115.21	-5,366.8	-2,641.6	4,052.4	3,873.1	179.30	22.602	
13,607.2	8,119.0	15,251.0	9,848.1	95.4	96.8	115.23	-5,384.8	-2,641.0	4,052.4	3,872.7	179.69	22.552	
13,700.0	8,119.0	15,298.7	9,850.7	96.8	97.6	115.26	-5,432.4	-2,639.8	4,053.0	3,871.5	181.50	22.331	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #121H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 228-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,800.0	8,119.0	15,442.3	9,860.0	98.4	99.8	115.40	-5,575.6	-2,636.4	4,054.4	3,869.3	185.07	21.907	
13,900.0	8,119.0	15,487.1	9,862.6	100.0	100.5	115.44	-5,620.3	-2,635.6	4,055.4	3,868.5	186.90	21.698	
14,000.0	8,119.0	15,650.6	9,865.7	101.5	103.1	115.47	-5,783.8	-2,634.9	4,056.6	3,865.6	190.95	21.245	
14,100.0	8,119.0	15,773.6	9,865.9	103.1	105.0	115.48	-5,906.8	-2,633.7	4,056.3	3,862.0	194.27	20.880	
14,200.0	8,119.0	14,200.0	9,852.0	104.7	80.3	115.29	-6,120.0	-2,633.8	4,053.7	3,880.2	173.44	23.372	
14,300.0	8,119.0	16,046.1	9,848.5	106.2	109.2	115.25	-6,178.7	-2,633.0	4,050.6	3,849.0	201.63	20.089	
14,400.0	8,119.0	16,095.5	9,847.1	107.8	110.0	115.24	-6,228.0	-2,632.5	4,048.9	3,845.2	203.68	19.879	
14,500.0	8,119.0	16,211.0	9,845.6	109.4	111.8	115.22	-6,343.6	-2,630.9	4,047.7	3,840.8	206.91	19.563	
14,600.0	8,119.0	16,358.1	9,844.1	111.0	114.1	115.22	-6,490.6	-2,627.4	4,045.6	3,835.0	210.67	19.203	
14,700.0	8,119.0	16,468.0	9,843.7	112.6	115.9	115.23	-6,600.4	-2,623.2	4,042.5	3,828.7	213.77	18.910	
14,800.0	8,119.0	16,468.0	9,843.7	114.2	115.9	115.23	-6,600.4	-2,623.2	4,040.8	3,825.9	214.94	18.800	
14,877.4	8,119.0	16,528.3	9,845.4	115.4	116.8	115.27	-6,660.7	-2,620.9	4,039.7	3,822.8	216.86	18.628	
14,900.0	8,119.0	16,535.0	9,845.8	115.7	116.9	115.27	-6,667.3	-2,620.7	4,039.8	3,822.5	217.22	18.597	
15,000.0	8,119.0	16,587.0	9,850.0	117.3	117.8	115.33	-6,719.1	-2,619.5	4,041.2	3,822.1	219.18	18.438	
15,100.0	8,119.0	16,604.8	9,851.7	118.9	118.1	115.36	-6,736.8	-2,619.3	4,044.0	3,823.6	220.46	18.344	
15,200.0	8,119.0	16,688.6	9,857.3	120.5	119.4	115.42	-6,820.4	-2,619.7	4,047.9	3,824.9	222.99	18.153	
15,300.0	8,119.0	16,821.6	9,862.1	122.1	121.5	115.46	-6,953.4	-2,622.2	4,051.7	3,825.1	226.56	17.884	
15,400.0	8,119.0	16,979.0	9,866.0	123.7	124.0	115.50	-7,110.7	-2,623.5	4,054.0	3,823.4	230.60	17.580	
15,500.0	8,119.0	17,064.7	9,867.6	125.3	125.3	115.51	-7,196.4	-2,624.2	4,055.9	3,822.7	233.25	17.389	
15,600.0	8,119.0	17,340.5	9,866.2	126.9	129.7	115.48	-7,471.9	-2,624.4	4,057.0	3,817.5	239.52	16.938	
15,700.0	8,119.0	17,378.1	9,863.7	128.5	130.3	115.45	-7,509.5	-2,624.7	4,055.5	3,814.1	241.41	16.799	
15,738.7	8,119.0	17,390.6	9,863.1	129.1	130.5	115.44	-7,522.0	-2,624.9	4,055.4	3,813.3	242.09	16.752	
15,800.0	8,119.0	17,410.6	9,862.4	130.1	130.8	115.43	-7,541.9	-2,625.2	4,055.7	3,812.6	243.13	16.681	
15,900.0	8,119.0	17,441.0	9,862.0	131.7	131.3	115.42	-7,572.4	-2,625.9	4,057.6	3,812.8	244.74	16.579	
16,000.0	8,119.0	17,516.9	9,861.8	133.3	132.5	115.40	-7,648.3	-2,628.0	4,060.6	3,813.3	247.24	16.424	
16,100.0	8,119.0	17,606.2	9,862.5	134.9	133.9	115.39	-7,737.5	-2,630.7	4,064.1	3,814.1	249.99	16.257	
16,200.0	8,119.0	17,742.1	9,866.4	136.5	136.1	115.42	-7,873.3	-2,632.8	4,067.2	3,813.6	253.65	16.035	
16,300.0	8,119.0	17,840.5	9,871.3	138.1	137.6	115.48	-7,971.6	-2,633.0	4,070.1	3,813.6	256.51	15.868	
16,400.0	8,119.0	17,951.1	9,875.9	139.7	139.4	115.54	-8,082.1	-2,632.8	4,072.2	3,812.6	259.61	15.686	
16,500.0	8,119.0	18,012.0	9,878.8	141.4	140.4	115.57	-8,142.9	-2,633.2	4,075.3	3,813.6	261.74	15.570	
16,600.0	8,119.0	18,092.8	9,882.3	143.0	141.7	115.60	-8,223.7	-2,634.6	4,079.2	3,814.9	264.26	15.436	
16,700.0	8,119.0	18,492.2	9,880.6	144.6	148.1	115.57	-8,622.7	-2,634.2	4,079.5	3,806.5	272.93	14.947	
16,800.0	8,119.0	18,560.4	9,878.4	146.2	149.2	115.55	-8,690.9	-2,632.7	4,076.5	3,801.1	275.42	14.801	
16,900.0	8,119.0	18,693.1	9,876.9	147.8	151.3	115.55	-8,823.5	-2,628.2	4,073.5	3,794.6	278.95	14.603	
17,000.0	8,119.0	18,770.0	9,875.6	149.4	152.6	115.55	-8,900.4	-2,625.6	4,070.3	3,788.8	281.56	14.456	
17,100.0	8,119.0	18,819.4	9,875.1	151.0	153.4	115.55	-8,949.8	-2,624.3	4,068.0	3,784.4	283.68	14.340	
17,200.0	8,119.0	18,865.0	9,875.6	152.7	154.1	115.56	-8,995.3	-2,623.3	4,067.1	3,781.4	285.66	14.237	
17,251.7	8,119.0	18,904.7	9,876.5	153.5	154.7	115.57	-9,035.0	-2,622.6	4,067.0	3,780.0	286.96	14.173	
17,300.0	8,119.0	18,939.4	9,877.4	154.3	155.3	115.59	-9,069.7	-2,622.0	4,067.0	3,778.9	288.12	14.116	
17,400.0	8,119.0	19,011.7	9,880.3	155.9	156.5	115.63	-9,141.9	-2,620.8	4,067.7	3,777.2	290.51	14.002	
17,500.0	8,119.0	19,209.0	9,889.3	157.5	159.7	115.77	-9,338.9	-2,615.3	4,067.9	3,772.8	295.09	13.785	
17,600.0	8,119.0	19,300.4	9,892.3	159.1	161.1	115.82	-9,430.2	-2,611.9	4,066.5	3,768.7	297.84	13.653	
17,700.0	8,119.0	19,374.8	9,895.1	160.7	162.3	115.87	-9,504.5	-2,609.4	4,065.7	3,765.4	300.28	13.539	
17,769.2	8,119.0	19,424.5	9,897.7	161.9	163.2	115.91	-9,554.1	-2,607.7	4,065.5	3,763.6	301.92	13.466	
17,800.0	8,119.0	19,446.8	9,899.0	162.4	163.5	115.94	-9,576.4	-2,607.0	4,065.5	3,762.8	302.64	13.433	
17,900.0	8,119.0	19,525.0	9,902.7	164.0	164.8	115.99	-9,654.5	-2,605.2	4,066.0	3,760.9	305.12	13.326	
18,000.0	8,119.0	19,680.4	9,908.7	165.6	167.3	116.09	-9,809.6	-2,600.4	4,065.1	3,756.2	308.98	13.157	
18,100.0	8,119.0	19,763.1	9,910.0	167.2	168.6	116.11	-9,892.3	-2,599.0	4,064.8	3,753.2	311.61	13.044	
18,155.2	8,119.0	19,815.6	9,909.1	168.1	169.5	116.10	-9,944.8	-2,599.0	4,064.7	3,751.4	313.24	12.976	
18,200.0	8,119.0	19,809.0	9,909.3	168.9	169.4	116.10	-9,938.2	-2,599.0	4,064.9	3,751.4	313.58	12.963	
18,300.0	8,119.0	19,860.5	9,908.2	170.5	170.2	116.08	-9,989.7	-2,599.8	4,066.3	3,750.7	315.63	12.883	
18,400.0	8,119.0	19,902.0	9,907.8	172.1	170.9	116.06	-10,031.2	-2,601.3	4,069.4	3,752.0	317.41	12.821	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #121H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 228-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,500.0	8,119.0	19,966.2	9,907.2	173.7	171.9	116.04	-10,095.3	-2,604.4	4,073.8	3,754.1	319.66	12.744	
18,600.0	8,119.0	20,102.1	9,904.7	175.4	174.1	115.96	-10,231.0	-2,611.4	4,078.2	3,754.6	323.59	12.603	
18,700.0	8,119.0	20,185.5	9,903.3	177.0	175.4	115.91	-10,314.3	-2,615.3	4,082.2	3,755.9	326.30	12.511	
18,800.0	8,119.0	20,375.7	9,895.1	178.6	178.5	115.75	-10,504.2	-2,623.9	4,084.6	3,753.1	331.50	12.321	
18,900.0	8,119.0	20,524.2	9,886.9	180.2	180.8	115.61	-10,652.3	-2,629.4	4,086.1	3,750.3	335.74	12.170	
19,000.0	8,119.0	20,655.6	9,884.0	181.9	183.0	115.56	-10,783.6	-2,630.3	4,086.3	3,746.9	339.43	12.039	
19,100.0	8,119.0	20,970.7	9,868.7	183.5	188.1	115.38	-11,098.1	-2,626.7	4,083.7	3,737.3	346.42	11.788	
19,200.0	8,119.0	21,012.9	9,865.8	185.1	188.8	115.34	-11,140.1	-2,625.7	4,079.2	3,730.6	348.62	11.701	
19,300.0	8,119.0	21,077.2	9,863.3	186.8	189.8	115.32	-11,204.4	-2,624.3	4,076.0	3,724.8	351.11	11.609	
19,400.0	8,119.0	21,166.4	9,862.7	188.4	191.3	115.33	-11,293.5	-2,621.2	4,073.0	3,719.1	353.94	11.508	
19,500.0	8,119.0	21,229.0	9,864.0	190.0	192.3	115.36	-11,356.0	-2,618.6	4,070.7	3,714.4	356.26	11.426	
19,600.0	8,119.0	21,287.2	9,865.6	191.6	193.2	115.39	-11,414.2	-2,616.5	4,069.3	3,710.9	358.46	11.352	
19,700.0	8,119.0	21,368.3	9,867.6	193.3	194.6	115.42	-11,495.2	-2,615.0	4,069.1	3,708.0	361.07	11.270	
19,800.0	8,119.0	21,615.9	9,873.2	194.9	198.6	115.54	-11,742.6	-2,606.2	4,067.9	3,701.5	366.40	11.102	
19,900.0	8,119.0	21,746.0	9,871.8	196.5	200.7	115.55	-11,872.6	-2,600.2	4,063.9	3,694.1	369.86	10.988	
20,000.0	8,119.0	21,878.8	9,870.5	198.2	202.9	115.58	-12,005.1	-2,592.3	4,058.6	3,685.2	373.31	10.872	
20,100.0	8,119.0	21,963.7	9,871.4	199.8	204.3	115.62	-12,089.8	-2,586.4	4,053.2	3,677.2	376.02	10.779	
20,200.0	8,119.0	22,086.1	9,873.8	201.4	206.3	115.70	-12,211.9	-2,577.4	4,048.0	3,668.8	379.20	10.675	
20,300.0	8,119.0	22,180.0	9,876.1	203.1	207.9	115.77	-12,305.4	-2,570.0	4,042.5	3,660.5	381.98	10.583	
20,400.0	8,119.0	22,282.9	9,879.1	204.7	209.5	115.86	-12,407.9	-2,561.6	4,036.9	3,652.1	384.85	10.489	
20,500.0	8,119.0	22,296.0	9,879.5	206.3	209.8	115.87	-12,421.0	-2,560.5	4,032.3	3,645.7	386.53	10.432	
20,606.7	8,119.0	22,296.0	9,879.5	208.1	209.8	115.87	-12,421.0	-2,560.5	4,030.0	3,642.1	387.90	10.389	SF

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #122H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 172-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-88.99	22.0	-1,245.5	1,245.7				
100.0	100.0	87.7	87.7	0.1	0.1	-88.99	21.9	-1,245.6	1,245.8	1,245.6	0.26	4,774.550	
200.0	200.0	183.1	183.1	0.5	0.3	-89.01	21.4	-1,246.3	1,246.5	1,245.7	0.79	1,587.727	
300.0	300.0	287.7	287.7	0.8	0.7	-89.04	21.0	-1,246.9	1,247.1	1,245.6	1.52	821.424	
400.0	400.0	394.0	394.0	1.2	1.0	-89.05	20.8	-1,247.1	1,247.3	1,245.1	2.25	554.458	
500.0	500.0	501.0	501.0	1.6	1.4	-89.06	20.5	-1,246.8	1,246.9	1,244.0	2.98	418.418	
600.0	600.0	602.3	602.3	1.9	1.8	-89.07	20.2	-1,246.1	1,246.3	1,242.6	3.69	337.842	
700.0	700.0	703.5	703.4	2.3	2.1	-89.08	19.9	-1,245.3	1,245.5	1,241.1	4.40	283.228	
800.0	800.0	797.4	797.3	2.6	2.5	-89.11	19.4	-1,244.8	1,244.9	1,239.8	5.09	244.628	
894.5	894.5	887.6	887.5	3.0	2.8	-89.15	18.5	-1,244.6	1,244.8	1,239.0	5.75	216.585	CC
900.0	900.0	892.9	892.8	3.0	2.8	-89.15	18.5	-1,244.6	1,244.8	1,239.0	5.79	215.149	
1,000.0	1,000.0	989.7	989.7	3.4	3.1	-89.19	17.7	-1,244.8	1,244.9	1,238.4	6.49	191.865	ES
1,100.0	1,100.0	1,087.1	1,087.0	3.7	3.5	-163.64	17.1	-1,245.2	1,247.0	1,239.8	7.19	173.526	
1,200.0	1,199.8	1,187.7	1,187.7	4.1	3.8	-163.70	16.7	-1,245.6	1,252.5	1,244.6	7.89	158.747	
1,300.0	1,299.5	1,289.7	1,289.7	4.4	4.2	-163.78	16.4	-1,246.0	1,261.2	1,252.6	8.60	146.628	
1,400.0	1,398.7	1,391.3	1,391.3	4.8	4.6	-163.91	15.4	-1,246.1	1,273.0	1,263.7	9.31	136.672	
1,500.0	1,497.5	1,494.9	1,494.8	5.2	4.9	-164.11	13.7	-1,246.0	1,287.9	1,277.9	10.04	128.298	
1,600.0	1,595.9	1,599.0	1,598.9	5.5	5.3	-164.43	11.5	-1,245.4	1,304.1	1,293.3	10.77	121.133	
1,700.0	1,694.4	1,701.1	1,701.0	5.9	5.7	-164.74	9.2	-1,244.5	1,320.0	1,308.5	11.49	114.917	
1,800.0	1,792.9	1,803.2	1,803.1	6.3	6.0	-165.04	6.8	-1,243.3	1,335.6	1,323.4	12.21	109.391	
1,900.0	1,891.4	1,886.2	1,886.1	6.8	6.3	-165.22	6.5	-1,242.8	1,351.9	1,339.0	12.85	105.190	
2,000.0	1,989.9	1,974.3	1,974.2	7.2	6.6	-165.31	8.2	-1,243.1	1,369.0	1,355.5	13.51	101.322	
2,100.0	2,088.4	2,065.9	2,065.7	7.6	6.9	-165.38	10.6	-1,244.0	1,386.6	1,372.5	14.18	97.795	
2,200.0	2,186.8	2,158.3	2,158.0	8.0	7.2	-165.43	13.5	-1,245.3	1,404.8	1,390.0	14.85	94.588	
2,300.0	2,285.3	2,252.7	2,252.4	8.5	7.6	-165.47	16.5	-1,247.0	1,423.3	1,407.8	15.54	91.611	
2,400.0	2,383.8	2,347.8	2,347.4	8.9	7.9	-165.51	19.7	-1,248.9	1,442.0	1,425.8	16.23	88.872	
2,500.0	2,482.3	2,444.7	2,444.2	9.3	8.2	-165.61	21.4	-1,250.9	1,460.9	1,444.0	16.93	86.301	
2,600.0	2,580.8	2,542.6	2,542.2	9.8	8.6	-165.78	21.1	-1,253.0	1,479.9	1,462.3	17.64	83.909	
2,700.0	2,679.2	2,642.9	2,642.4	10.2	8.9	-165.96	20.7	-1,255.1	1,498.8	1,480.4	18.36	81.637	
2,800.0	2,777.7	2,747.9	2,747.4	10.6	9.3	-166.14	20.4	-1,257.0	1,517.5	1,498.4	19.10	79.440	
2,900.0	2,876.2	2,858.5	2,858.0	11.1	9.7	-166.32	20.3	-1,258.3	1,535.5	1,515.6	19.87	77.278	
3,000.0	2,974.7	2,957.4	2,956.9	11.5	10.0	-166.47	20.3	-1,258.9	1,553.0	1,532.4	20.59	75.430	
3,100.0	3,073.2	3,051.9	3,051.4	11.9	10.4	-166.62	20.1	-1,259.6	1,570.7	1,549.4	21.29	73.778	
3,200.0	3,171.6	3,158.5	3,158.0	12.4	10.7	-166.79	19.6	-1,260.4	1,588.3	1,566.3	22.04	72.062	
3,300.0	3,270.1	3,270.4	3,269.9	12.8	11.1	-166.99	18.5	-1,260.4	1,605.3	1,582.5	22.82	70.359	
3,400.0	3,368.6	3,407.3	3,406.8	13.3	11.6	-167.28	15.9	-1,258.1	1,620.6	1,596.9	23.68	68.426	
3,500.0	3,467.1	3,517.5	3,516.8	13.7	12.0	-167.56	12.4	-1,254.1	1,634.2	1,609.8	24.44	66.855	
3,600.0	3,565.6	3,612.7	3,611.9	14.2	12.3	-167.78	9.8	-1,250.8	1,647.9	1,622.7	25.15	65.530	
3,700.0	3,664.0	3,709.9	3,709.0	14.6	12.7	-167.98	8.0	-1,247.6	1,661.7	1,635.9	25.86	64.270	
3,800.0	3,762.5	3,808.3	3,807.4	15.1	13.0	-168.11	7.9	-1,244.5	1,675.7	1,649.1	26.57	63.070	
3,900.0	3,861.0	3,901.8	3,900.9	15.5	13.3	-168.18	9.3	-1,241.8	1,689.7	1,662.5	27.26	61.984	
4,000.0	3,959.5	3,993.5	3,992.5	16.0	13.6	-168.24	11.1	-1,239.6	1,704.2	1,676.3	27.94	60.986	
4,100.0	4,058.0	4,086.9	4,085.8	16.4	13.9	-168.27	13.5	-1,237.7	1,719.1	1,690.4	28.63	60.034	
4,200.0	4,156.4	4,181.1	4,180.0	16.8	14.3	-168.28	16.6	-1,236.2	1,734.2	1,704.9	29.33	59.129	
4,300.0	4,254.9	4,278.9	4,277.7	17.3	14.6	-168.27	20.5	-1,234.8	1,749.6	1,719.5	30.04	58.242	
4,400.0	4,353.4	4,378.7	4,377.4	17.7	14.9	-168.24	25.0	-1,233.4	1,764.9	1,734.1	30.76	57.377	
4,500.0	4,451.9	4,471.6	4,470.1	18.2	15.3	-168.21	29.6	-1,232.2	1,780.2	1,748.8	31.45	56.604	
4,600.0	4,550.4	4,561.6	4,560.0	18.6	15.6	-168.15	34.4	-1,231.4	1,796.1	1,764.0	32.13	55.901	
4,700.0	4,648.9	4,664.7	4,662.9	19.1	15.9	-168.07	40.6	-1,230.9	1,812.2	1,779.3	32.87	55.135	
4,800.0	4,747.3	4,776.1	4,774.0	19.5	16.3	-167.94	48.8	-1,229.8	1,827.7	1,794.1	33.65	54.323	
4,900.0	4,845.8	4,870.3	4,867.9	20.0	16.7	-167.78	57.4	-1,228.7	1,843.0	1,808.6	34.35	53.652	
5,000.0	4,944.3	4,962.8	4,959.7	20.4	17.0	-167.57	67.8	-1,228.0	1,858.6	1,823.5	35.05	53.028	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #122H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 172-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	5,055.1	5,051.4	20.9	17.3	-167.32	79.3	-1,227.7	1,874.5	1,838.8	35.75	52.435	
5,200.0	5,141.3	5,147.4	5,143.0	21.3	17.6	-167.09	90.4	-1,227.7	1,890.8	1,854.4	36.45	51.874	
5,300.0	5,239.7	5,242.8	5,237.7	21.8	18.0	-166.86	101.6	-1,227.9	1,907.4	1,870.3	37.17	51.318	
5,400.0	5,338.2	5,338.9	5,333.1	22.2	18.3	-166.64	112.6	-1,228.2	1,924.2	1,886.3	37.89	50.782	
5,500.0	5,436.7	5,437.0	5,430.6	22.7	18.7	-166.42	123.7	-1,228.6	1,941.0	1,902.4	38.62	50.253	
5,600.0	5,535.2	5,535.5	5,528.5	23.1	19.0	-166.22	134.4	-1,228.9	1,957.9	1,918.5	39.36	49.741	
5,700.0	5,633.7	5,647.8	5,640.2	23.6	19.5	-165.99	146.9	-1,229.0	1,974.4	1,934.2	40.17	49.152	
5,800.0	5,732.1	5,761.6	5,753.1	24.0	19.9	-165.73	160.5	-1,228.2	1,990.2	1,949.2	40.98	48.560	
5,900.0	5,830.6	5,855.0	5,845.9	24.5	20.2	-165.53	171.5	-1,227.4	2,006.0	1,964.2	41.70	48.099	
6,000.0	5,929.1	5,954.9	5,945.1	24.9	20.6	-165.33	182.8	-1,226.6	2,021.7	1,979.2	42.46	47.618	
6,100.0	6,027.6	6,060.2	6,049.6	25.4	21.0	-165.10	195.6	-1,225.5	2,037.2	1,994.0	43.24	47.117	
6,200.0	6,126.1	6,158.7	6,147.2	25.8	21.3	-164.86	208.7	-1,224.2	2,052.6	2,008.6	43.99	46.661	
6,300.0	6,224.5	6,250.8	6,238.6	26.3	21.7	-164.64	220.6	-1,223.2	2,068.2	2,023.5	44.71	46.258	
6,400.0	6,323.0	6,342.1	6,329.2	26.7	22.0	-164.44	231.8	-1,222.5	2,084.1	2,038.7	45.42	45.881	
6,500.0	6,421.5	6,432.5	6,419.1	27.2	22.4	-164.29	241.6	-1,222.1	2,100.4	2,054.3	46.13	45.532	
6,600.0	6,520.0	6,526.5	6,512.6	27.6	22.7	-164.17	250.3	-1,222.1	2,117.1	2,070.2	46.85	45.186	
6,700.0	6,618.5	6,627.1	6,612.9	28.1	23.1	-164.07	258.8	-1,222.1	2,133.8	2,086.2	47.61	44.821	
6,800.0	6,716.9	6,725.8	6,711.3	28.5	23.4	-163.99	266.4	-1,222.0	2,150.4	2,102.1	48.35	44.476	
6,900.0	6,815.4	6,822.3	6,807.6	29.0	23.8	-163.93	273.1	-1,221.9	2,167.1	2,118.0	49.08	44.156	
6,981.8	6,896.0	6,902.3	6,887.4	29.4	24.1	-163.90	278.2	-1,222.0	2,180.8	2,131.2	49.68	43.898	
7,000.0	6,913.9	6,920.4	6,905.5	29.5	24.2	-163.91	279.3	-1,222.0	2,183.8	2,134.0	49.81	43.839	
7,100.0	7,012.9	7,020.3	7,005.2	29.9	24.5	-163.96	285.1	-1,222.0	2,197.7	2,147.2	50.55	43.475	
7,200.0	7,112.3	7,115.5	7,100.3	30.3	24.9	-163.98	289.8	-1,222.0	2,207.5	2,156.3	51.25	43.076	
7,300.0	7,212.2	7,208.0	7,192.7	30.6	25.2	-164.00	292.1	-1,222.4	2,213.5	2,161.5	51.91	42.637	
7,381.8	7,294.0	7,286.8	7,271.6	30.9	25.5	-89.60	292.3	-1,222.9	2,215.4	2,162.9	52.46	42.231	
7,400.0	7,312.2	7,305.0	7,289.7	30.9	25.5	-89.60	292.3	-1,223.0	2,215.5	2,162.9	52.58	42.135	
7,500.0	7,412.2	7,405.0	7,389.8	31.2	25.9	-89.60	292.3	-1,223.7	2,216.2	2,163.0	53.25	41.615	
7,600.0	7,512.2	7,506.8	7,491.6	31.5	26.2	-89.60	292.1	-1,224.4	2,216.9	2,163.0	53.94	41.102	
7,633.8	7,546.0	7,541.6	7,526.3	31.6	26.3	-89.61	292.0	-1,224.6	2,217.1	2,162.9	54.17	40.930	
7,650.0	7,562.2	7,558.2	7,542.9	31.7	26.4	90.72	291.9	-1,224.7	2,217.2	2,162.9	54.28	40.849	
7,700.0	7,612.0	7,609.4	7,594.1	31.8	26.6	90.78	291.6	-1,225.0	2,217.5	2,162.9	54.61	40.607	
7,750.0	7,661.4	7,659.6	7,644.3	31.9	26.7	90.94	291.2	-1,225.2	2,217.9	2,162.9	54.93	40.378	
7,800.0	7,709.8	7,708.7	7,693.4	32.0	26.9	91.19	290.8	-1,225.4	2,218.3	2,163.1	55.24	40.161	
7,850.0	7,757.1	7,756.6	7,741.3	32.1	27.1	91.52	290.4	-1,225.6	2,218.9	2,163.4	55.53	39.958	
7,900.0	7,802.7	7,802.9	7,787.7	32.2	27.2	91.91	289.9	-1,225.8	2,219.8	2,164.0	55.82	39.770	
7,950.0	7,846.4	7,847.6	7,832.3	32.3	27.4	92.33	289.3	-1,226.0	2,221.0	2,165.0	56.09	39.599	
8,000.0	7,887.7	7,890.0	7,874.7	32.4	27.5	92.76	288.8	-1,226.2	2,222.7	2,166.4	56.35	39.447	
8,050.0	7,926.5	7,929.9	7,914.6	32.4	27.7	93.17	288.3	-1,226.3	2,225.0	2,168.4	56.59	39.316	
8,100.0	7,962.4	7,966.8	7,951.6	32.5	27.8	93.53	287.8	-1,226.4	2,228.0	2,171.2	56.82	39.210	
8,150.0	7,995.1	8,000.7	7,985.4	32.5	27.9	93.80	287.4	-1,226.5	2,231.8	2,174.8	57.04	39.128	
8,200.0	8,024.4	8,030.2	8,014.9	32.6	28.0	93.93	287.0	-1,226.6	2,236.6	2,179.3	57.23	39.078	
8,250.0	8,050.1	8,055.9	8,040.7	32.6	28.1	93.91	286.7	-1,226.6	2,242.4	2,185.0	57.41	39.058	
8,300.0	8,071.9	8,077.9	8,062.6	32.7	28.2	93.71	286.4	-1,226.7	2,249.3	2,191.7	57.57	39.069	
8,350.0	8,089.7	8,095.9	8,080.6	32.7	28.2	93.32	286.2	-1,226.7	2,257.4	2,199.7	57.72	39.113	
8,400.0	8,103.4	8,109.7	8,094.4	32.7	28.3	92.71	286.1	-1,226.8	2,266.8	2,208.9	57.84	39.190	
8,450.0	8,112.8	8,119.4	8,104.1	32.8	28.3	91.88	286.0	-1,226.8	2,277.3	2,219.4	57.95	39.301	
8,500.0	8,118.0	8,124.8	8,109.5	32.9	28.3	90.82	286.0	-1,226.8	2,289.0	2,231.0	58.03	39.446	
8,533.8	8,119.0	8,126.1	8,110.8	33.0	28.3	89.97	285.9	-1,226.8	2,297.5	2,239.4	58.07	39.563	
8,600.0	8,119.0	8,126.7	8,111.4	33.1	28.3	89.99	285.9	-1,226.8	2,315.5	2,257.4	58.15	39.816	
8,700.0	8,119.0	8,127.5	8,112.2	33.4	28.3	90.01	285.9	-1,226.8	2,346.0	2,287.7	58.30	40.238	
8,800.0	8,119.0	8,128.4	8,113.1	33.8	28.3	90.03	285.9	-1,226.8	2,380.4	2,321.9	58.48	40.706	
8,900.0	8,119.0	8,129.2	8,113.9	34.3	28.3	90.05	285.9	-1,226.8	2,418.3	2,359.7	58.67	41.220	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #122H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 172-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,000.0	8,119.0	8,130.1	8,114.8	34.9	28.3	90.07	285.9	-1,226.8	2,459.8	2,400.9	58.88	41.779	
9,100.0	8,119.0	8,130.9	8,115.6	35.5	28.3	90.09	285.9	-1,226.8	2,504.5	2,445.4	59.10	42.382	
9,200.0	8,119.0	8,131.7	8,116.4	36.3	28.3	90.12	285.9	-1,226.8	2,552.4	2,493.1	59.32	43.026	
9,300.0	8,119.0	8,132.5	8,117.2	37.1	28.3	90.14	285.9	-1,226.9	2,603.3	2,543.7	59.56	43.712	
9,400.0	8,119.0	8,133.3	8,118.1	37.9	28.3	90.16	285.9	-1,226.9	2,656.9	2,597.2	59.79	44.437	
9,500.0	8,119.0	8,134.2	8,118.9	38.8	28.4	90.18	285.9	-1,226.9	2,713.2	2,653.2	60.03	45.200	
9,600.0	8,119.0	8,135.0	8,119.7	39.8	28.4	90.20	285.9	-1,226.9	2,772.0	2,711.7	60.26	45.999	
9,700.0	8,119.0	8,135.8	8,120.5	40.8	28.4	90.22	285.9	-1,226.9	2,833.0	2,772.5	60.49	46.832	
9,800.0	8,119.0	8,136.5	8,121.3	41.8	28.4	90.24	285.9	-1,226.9	2,896.2	2,835.5	60.72	47.698	
9,900.0	8,119.0	8,137.3	8,122.0	42.9	28.4	90.26	285.9	-1,226.9	2,961.5	2,900.5	60.94	48.595	
10,000.0	8,119.0	11,738.9	9,947.6	44.0	46.5	127.78	-1,773.8	-1,363.9	2,996.2	2,919.6	76.58	39.127	
10,100.0	8,119.0	11,853.6	9,945.7	45.2	47.8	127.74	-1,888.4	-1,364.2	2,995.8	2,917.1	78.77	38.033	
10,200.0	8,119.0	11,942.1	9,945.1	46.3	48.8	127.73	-1,976.9	-1,363.9	2,995.6	2,915.0	80.67	37.133	
10,300.0	8,119.0	12,132.2	9,943.3	47.5	51.1	127.72	-2,167.0	-1,361.3	2,994.7	2,910.8	83.90	35.694	
10,400.0	8,119.0	12,226.5	9,942.1	48.8	52.2	127.73	-2,261.2	-1,358.3	2,991.8	2,905.9	85.96	34.803	
10,500.0	8,119.0	12,329.0	9,942.4	50.0	53.5	127.79	-2,363.6	-1,353.5	2,988.8	2,900.7	88.14	33.911	
10,600.0	8,119.0	12,420.3	9,940.2	51.3	54.6	127.77	-2,454.9	-1,351.6	2,986.1	2,895.9	90.25	33.088	
10,700.0	8,119.0	12,521.6	9,939.1	52.6	55.9	127.78	-2,556.1	-1,348.3	2,983.3	2,890.8	92.50	32.254	
10,800.0	8,119.0	12,602.8	9,936.8	54.0	57.0	127.76	-2,637.3	-1,347.2	2,981.0	2,886.4	94.53	31.534	
10,900.0	8,119.0	12,710.4	9,933.9	55.3	58.4	127.72	-2,744.8	-1,346.2	2,979.1	2,882.1	96.97	30.723	
11,000.0	8,119.0	12,856.4	9,928.6	56.7	60.4	127.66	-2,890.7	-1,343.3	2,975.6	2,875.7	99.98	29.763	
11,100.0	8,119.0	12,959.0	9,924.0	58.0	61.8	127.62	-2,993.1	-1,340.4	2,971.1	2,868.7	102.41	29.012	
11,200.0	8,119.0	13,015.6	9,921.5	59.4	62.6	127.59	-3,049.6	-1,339.2	2,967.5	2,863.3	104.20	28.479	
11,300.0	8,119.0	13,053.0	9,920.2	60.8	63.1	127.57	-3,087.0	-1,339.3	2,966.0	2,860.3	105.70	28.062	
11,343.5	8,119.0	13,075.5	9,919.7	61.4	63.4	127.55	-3,109.5	-1,339.5	2,966.0	2,859.5	106.44	27.866	
11,400.0	8,119.0	13,100.4	9,919.6	62.2	63.7	127.55	-3,134.5	-1,339.7	2,966.5	2,859.1	107.32	27.640	
11,500.0	8,119.0	13,148.0	9,920.7	63.6	64.4	127.56	-3,182.0	-1,340.0	2,968.8	2,859.9	108.91	27.259	
11,600.0	8,119.0	13,394.1	9,924.9	65.1	67.9	127.62	-3,428.0	-1,339.2	2,970.8	2,857.2	113.53	26.167	
11,700.0	8,119.0	13,484.9	9,923.6	66.5	69.2	127.61	-3,518.8	-1,337.8	2,969.1	2,853.3	115.86	25.627	
11,800.0	8,119.0	13,598.0	9,923.2	68.0	70.8	127.62	-3,631.8	-1,335.3	2,967.6	2,849.1	118.51	25.041	
11,900.0	8,119.0	13,762.2	9,920.6	69.4	73.2	127.63	-3,795.9	-1,329.9	2,964.4	2,842.5	121.93	24.312	
12,000.0	8,119.0	13,885.0	9,916.2	70.9	75.0	127.63	-3,918.5	-1,323.9	2,958.6	2,833.9	124.78	23.711	
12,100.0	8,119.0	13,944.1	9,913.9	72.4	75.8	127.62	-3,977.4	-1,321.2	2,953.6	2,826.9	126.71	23.311	
12,200.0	8,119.0	13,976.0	9,913.1	73.9	76.3	127.61	-4,009.3	-1,320.8	2,951.3	2,823.1	128.21	23.020	
12,300.0	8,119.0	14,046.6	9,912.2	75.4	77.3	127.60	-4,080.0	-1,320.5	2,950.7	2,820.4	130.29	22.647	
12,400.0	8,119.0	14,159.2	9,912.4	76.9	79.0	127.61	-4,192.6	-1,319.4	2,950.6	2,817.5	133.02	22.181	
12,454.4	8,119.0	14,196.8	9,912.6	77.7	79.6	127.61	-4,230.1	-1,318.9	2,950.4	2,816.3	134.13	21.997	
12,500.0	8,119.0	14,228.1	9,913.0	78.4	80.0	127.62	-4,261.4	-1,318.5	2,950.5	2,815.5	135.05	21.847	
12,600.0	8,119.0	14,310.7	9,914.5	79.9	81.3	127.64	-4,344.0	-1,317.8	2,951.4	2,814.1	137.30	21.497	
12,700.0	8,119.0	14,390.4	9,916.9	81.4	82.5	127.69	-4,423.7	-1,316.9	2,952.7	2,813.3	139.47	21.171	
12,800.0	8,119.0	14,492.7	9,920.7	82.9	84.0	127.75	-4,525.9	-1,316.0	2,954.8	2,812.8	142.00	20.808	
12,900.0	8,119.0	14,592.9	9,919.9	84.5	85.5	127.71	-4,626.0	-1,317.9	2,956.3	2,811.6	144.63	20.440	
13,000.0	8,119.0	14,692.9	9,920.0	86.0	87.0	127.68	-4,726.0	-1,319.5	2,958.0	2,810.8	147.25	20.089	
13,100.0	8,119.0	14,845.4	9,918.6	87.5	89.3	127.63	-4,878.5	-1,321.2	2,958.8	2,808.1	150.78	19.623	
13,200.0	8,119.0	15,013.9	9,914.5	89.1	91.9	127.56	-5,046.9	-1,321.2	2,958.0	2,803.4	154.58	19.135	
13,300.0	8,119.0	15,128.0	9,911.1	90.6	93.6	127.53	-5,161.0	-1,318.6	2,954.7	2,797.3	157.46	18.766	
13,400.0	8,119.0	15,188.0	9,909.1	92.2	94.6	127.50	-5,220.9	-1,318.3	2,952.6	2,793.1	159.49	18.512	
13,500.0	8,119.0	15,273.6	9,906.7	93.7	95.9	127.45	-5,306.5	-1,318.4	2,951.5	2,789.5	161.95	18.225	
13,600.0	8,119.0	15,367.0	9,905.7	95.3	97.3	127.44	-5,399.9	-1,317.5	2,950.5	2,786.1	164.49	17.937	
13,700.0	8,119.0	15,463.6	9,904.3	96.8	98.8	127.42	-5,496.5	-1,317.1	2,949.8	2,782.7	167.11	17.652	
13,800.0	8,119.0	15,564.5	9,900.6	98.4	100.4	127.34	-5,597.3	-1,318.5	2,949.1	2,779.2	169.88	17.360	
13,900.0	8,119.0	15,661.0	9,896.0	100.0	101.9	127.25	-5,693.7	-1,319.7	2,947.7	2,775.1	172.61	17.077	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #122H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 172-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,966.3	8,119.0	15,709.5	9,894.0	101.0	102.6	127.21	-5,742.1	-1,320.3	2,947.1	2,773.0	174.13	16.925	
14,000.0	8,119.0	15,724.3	9,893.6	101.5	102.8	127.20	-5,756.9	-1,320.6	2,947.2	2,772.5	174.72	16.868	
14,100.0	8,119.0	15,791.4	9,892.9	103.1	103.9	127.16	-5,824.0	-1,322.1	2,948.7	2,771.9	176.86	16.673	
14,200.0	8,119.0	15,952.8	9,890.7	104.7	106.4	127.09	-5,985.3	-1,324.7	2,949.8	2,769.1	180.69	16.325	
14,232.0	8,119.0	15,975.2	9,890.4	105.2	106.7	127.08	-6,007.8	-1,324.7	2,949.7	2,768.3	181.40	16.261	
14,300.0	8,119.0	16,033.6	9,890.3	106.2	107.7	127.07	-6,066.2	-1,324.7	2,949.8	2,766.8	183.06	16.114	
14,400.0	8,119.0	16,165.7	9,885.8	107.8	109.7	126.98	-6,198.1	-1,325.6	2,948.6	2,762.2	186.42	15.817	
14,440.2	8,119.0	16,183.6	9,885.2	108.5	110.0	126.97	-6,216.1	-1,325.8	2,948.4	2,761.3	187.14	15.755	
14,500.0	8,119.0	16,227.0	9,884.9	109.4	110.7	126.96	-6,259.4	-1,326.4	2,948.9	2,760.4	188.49	15.645	
14,600.0	8,119.0	16,284.0	9,885.6	111.0	111.6	126.96	-6,316.4	-1,326.9	2,950.5	2,760.1	190.41	15.496	
14,700.0	8,119.0	16,434.8	9,884.2	112.6	113.9	126.90	-6,467.1	-1,329.1	2,951.6	2,757.5	194.09	15.208	
14,800.0	8,119.0	16,490.1	9,884.7	114.2	114.8	126.90	-6,522.4	-1,329.1	2,952.6	2,756.7	195.99	15.066	
14,900.0	8,119.0	16,560.1	9,889.3	115.7	115.9	126.99	-6,592.2	-1,327.4	2,955.1	2,757.1	197.98	14.926	
15,000.0	8,119.0	16,690.7	9,898.2	117.3	118.0	127.16	-6,722.5	-1,324.4	2,957.9	2,756.9	200.96	14.719	
15,100.0	8,119.0	16,909.6	9,889.6	118.9	121.4	126.98	-6,941.1	-1,326.8	2,955.9	2,749.9	205.98	14.351	
15,200.0	8,119.0	16,965.7	9,886.7	120.5	122.3	126.92	-6,997.1	-1,327.6	2,954.4	2,746.4	208.07	14.199	
15,256.4	8,119.0	16,997.1	9,885.5	121.4	122.8	126.89	-7,028.5	-1,328.2	2,954.3	2,745.0	209.22	14.120	
15,300.0	8,119.0	17,021.3	9,884.9	122.1	123.2	126.88	-7,052.6	-1,328.7	2,954.5	2,744.4	210.10	14.062	
15,400.0	8,119.0	17,077.2	9,884.3	123.7	124.1	126.85	-7,108.6	-1,329.9	2,956.0	2,744.0	212.06	13.940	
15,500.0	8,119.0	17,177.3	9,886.2	125.3	125.7	126.86	-7,208.6	-1,330.8	2,958.3	2,743.5	214.74	13.776	
15,600.0	8,119.0	17,310.4	9,888.8	126.9	127.8	126.89	-7,341.7	-1,331.6	2,960.5	2,742.5	218.02	13.579	
15,700.0	8,119.0	17,479.5	9,884.2	128.5	130.5	126.79	-7,510.7	-1,332.5	2,959.3	2,737.2	222.11	13.324	
15,765.3	8,119.0	17,510.2	9,884.4	129.6	131.0	126.80	-7,541.4	-1,332.0	2,958.9	2,735.6	223.29	13.251	
15,800.0	8,119.0	17,547.0	9,885.8	130.1	131.5	126.83	-7,578.1	-1,331.0	2,959.2	2,735.0	224.21	13.198	
15,802.2	8,119.0	17,547.0	9,885.8	130.1	131.5	126.83	-7,578.1	-1,331.0	2,959.2	2,734.9	224.23	13.197	
15,900.0	8,119.0	17,660.1	9,890.2	131.7	133.3	126.93	-7,691.1	-1,327.5	2,959.6	2,732.7	226.96	13.040	
16,000.0	8,119.0	17,780.9	9,893.8	133.3	135.3	127.04	-7,811.7	-1,322.6	2,958.6	2,728.8	229.83	12.873	
16,100.0	8,119.0	18,047.0	9,895.4	134.9	139.6	127.20	-8,077.2	-1,309.0	2,956.6	2,721.9	234.63	12.601	
16,200.0	8,119.0	18,081.2	9,893.3	136.5	140.1	127.18	-8,111.3	-1,308.0	2,950.9	2,714.3	236.53	12.476	
16,300.0	8,119.0	18,119.1	9,891.6	138.1	140.7	127.16	-8,149.2	-1,307.4	2,947.4	2,709.0	238.39	12.364	
16,400.0	8,119.0	18,206.5	9,889.0	139.7	142.1	127.12	-8,236.6	-1,306.4	2,945.1	2,704.1	240.99	12.221	
16,500.0	8,119.0	18,273.2	9,887.6	141.4	143.2	127.10	-8,303.2	-1,305.8	2,943.6	2,700.4	243.22	12.103	
16,557.2	8,119.0	18,303.0	9,887.0	142.3	143.7	127.09	-8,333.0	-1,305.8	2,943.3	2,698.9	244.33	12.046	
16,600.0	8,119.0	18,328.2	9,886.7	143.0	144.1	127.08	-8,358.3	-1,305.9	2,943.4	2,698.1	245.21	12.003	
16,700.0	8,119.0	18,374.0	9,887.1	144.6	144.8	127.08	-8,404.0	-1,306.3	2,944.9	2,697.9	246.94	11.926	
16,800.0	8,119.0	18,467.7	9,889.5	146.2	146.3	127.10	-8,497.7	-1,307.4	2,947.8	2,698.3	249.50	11.815	
16,900.0	8,119.0	18,543.6	9,891.4	147.8	147.5	127.11	-8,573.6	-1,308.2	2,950.7	2,699.0	251.73	11.722	
17,000.0	8,119.0	18,693.2	9,902.9	149.4	149.9	127.32	-8,722.6	-1,304.9	2,954.4	2,699.4	254.97	11.587	
17,100.0	8,119.0	18,884.7	9,912.2	151.0	153.0	127.52	-8,913.7	-1,298.9	2,955.9	2,697.0	258.86	11.419	
17,200.0	8,119.0	19,051.7	9,913.7	152.7	155.7	127.62	-9,080.7	-1,292.0	2,953.7	2,691.3	262.42	11.256	
17,300.0	8,119.0	19,127.4	9,912.5	154.3	156.9	127.62	-9,156.3	-1,289.4	2,950.5	2,685.7	264.77	11.143	
17,400.0	8,119.0	19,214.2	9,910.6	155.9	158.3	127.61	-9,243.0	-1,287.7	2,948.1	2,680.8	267.34	11.028	
17,500.0	8,119.0	19,305.3	9,909.1	157.5	159.8	127.60	-9,334.0	-1,285.8	2,945.9	2,676.0	269.94	10.913	
17,600.0	8,119.0	19,409.5	9,908.5	159.1	161.5	127.62	-9,438.2	-1,283.2	2,944.0	2,671.3	272.71	10.795	
17,700.0	8,119.0	19,515.8	9,908.3	160.7	163.2	127.65	-9,544.5	-1,279.6	2,941.7	2,666.2	275.47	10.679	
17,800.0	8,119.0	19,630.0	9,906.4	162.4	165.0	127.66	-9,658.6	-1,275.9	2,938.5	2,660.1	278.41	10.555	
17,900.0	8,119.0	19,685.9	9,905.1	164.0	165.9	127.65	-9,714.4	-1,274.6	2,936.0	2,655.5	280.47	10.468	
18,000.0	8,119.0	19,819.0	9,902.1	165.6	168.1	127.59	-9,847.5	-1,274.8	2,935.6	2,651.7	283.87	10.341	
18,100.0	8,119.0	19,877.0	9,901.8	167.2	169.0	127.60	-9,905.5	-1,273.3	2,933.8	2,647.9	285.91	10.261	
18,166.6	8,119.0	19,914.0	9,904.9	168.3	169.6	127.68	-9,942.2	-1,270.5	2,933.5	2,646.4	287.03	10.220	
18,200.0	8,119.0	19,947.0	9,908.8	168.9	170.2	127.77	-9,974.9	-1,267.4	2,933.5	2,645.8	287.69	10.197	
18,300.0	8,119.0	20,101.0	9,921.8	170.5	172.7	128.12	-10,127.6	-1,254.5	2,932.5	2,642.0	290.45	10.096	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #122H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 172-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,400.0	8,119.0	20,157.7	9,921.9	172.1	173.6	128.13	-10,184.3	-1,252.8	2,931.0	2,638.6	292.41	10.024	
18,414.8	8,119.0	20,163.6	9,921.8	172.3	173.7	128.13	-10,190.3	-1,252.8	2,931.0	2,638.3	292.66	10.015	
18,500.0	8,119.0	20,201.3	9,921.2	173.7	174.3	128.11	-10,227.9	-1,253.6	2,931.7	2,637.6	294.16	9.966	
18,600.0	8,119.0	20,304.7	9,918.7	175.4	176.0	128.03	-10,331.2	-1,256.9	2,933.3	2,636.1	297.18	9.870	
18,700.0	8,119.0	20,396.9	9,915.9	177.0	177.4	127.93	-10,423.3	-1,260.6	2,935.0	2,635.0	300.00	9.783	
18,800.0	8,119.0	20,520.4	9,910.9	178.6	179.4	127.78	-10,546.6	-1,265.8	2,936.3	2,632.7	303.57	9.673	
18,900.0	8,119.0	20,610.3	9,906.6	180.2	180.9	127.66	-10,636.3	-1,269.7	2,937.3	2,630.8	306.44	9.585	
19,000.0	8,119.0	20,685.0	9,904.1	181.9	182.1	127.58	-10,710.8	-1,273.1	2,939.2	2,630.3	308.92	9.514	
19,100.0	8,119.0	20,802.3	9,898.5	183.5	184.0	127.42	-10,827.9	-1,278.7	2,940.5	2,628.0	312.44	9.411	
19,200.0	8,119.0	20,861.3	9,897.3	185.1	184.9	127.37	-10,886.8	-1,281.1	2,942.8	2,628.3	314.50	9.357	
19,300.0	8,119.0	20,974.7	9,896.1	186.8	186.7	127.29	-11,000.2	-1,285.1	2,945.5	2,627.7	317.73	9.270	
19,400.0	8,119.0	21,058.3	9,895.5	188.4	188.1	127.25	-11,083.7	-1,288.1	2,948.3	2,628.1	320.28	9.205	
19,500.0	8,119.0	21,145.0	9,896.0	190.0	189.5	127.22	-11,170.4	-1,290.5	2,951.4	2,628.6	322.83	9.142	
19,600.0	8,119.0	21,219.8	9,897.2	191.6	190.7	127.21	-11,245.1	-1,292.7	2,955.2	2,630.2	325.07	9.091	
19,700.0	8,119.0	19,700.0	9,901.3	193.3	166.0	127.22	-11,422.2	-1,295.9	2,958.6	2,652.6	306.04	9.667	
19,800.0	8,119.0	21,559.0	9,902.3	194.9	196.2	127.23	-11,584.3	-1,295.3	2,959.1	2,625.8	333.26	8.879	
19,900.0	8,119.0	21,725.6	9,897.3	196.5	198.9	127.15	-11,750.7	-1,295.0	2,957.5	2,620.1	337.34	8.767	
20,000.0	8,119.0	21,794.1	9,895.7	198.2	200.0	127.13	-11,819.3	-1,294.1	2,955.5	2,615.8	339.68	8.701	
20,100.0	8,119.0	21,877.7	9,895.6	199.8	201.4	127.14	-11,902.8	-1,292.5	2,954.3	2,612.2	342.14	8.635	
20,200.0	8,119.0	21,997.5	9,894.6	201.4	203.3	127.13	-12,022.5	-1,290.9	2,953.2	2,608.0	345.24	8.554	
20,300.0	8,119.0	22,125.6	9,892.1	203.1	205.4	127.11	-12,150.6	-1,288.7	2,951.1	2,602.6	348.51	8.468	
20,400.0	8,119.0	22,223.3	9,890.4	204.7	207.0	127.11	-12,248.3	-1,286.1	2,948.5	2,597.2	351.26	8.394	
20,500.0	8,119.0	22,322.7	9,888.5	206.3	208.6	127.10	-12,347.7	-1,284.2	2,946.2	2,592.2	354.06	8.321	
20,606.7	8,119.0	22,419.0	9,887.3	208.1	210.2	127.10	-12,443.9	-1,281.4	2,943.5	2,586.6	356.83	8.249	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #123H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 143-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-81.86	28.6	-200.2	202.2				
100.0	100.0	99.4	99.4	0.1	0.1	-81.79	28.9	-200.1	202.1	201.9	0.27	745.949	
200.0	200.0	199.7	199.7	0.5	0.4	-81.62	29.4	-199.7	201.9	201.0	0.90	225.496	
300.0	300.0	300.0	300.0	0.8	0.8	-81.43	30.0	-199.2	201.5	199.9	1.61	124.908	
400.0	400.0	400.7	400.7	1.2	1.1	-81.24	30.6	-198.5	200.8	198.5	2.33	86.155	
500.0	500.0	501.6	501.6	1.6	1.5	-81.09	30.9	-197.4	199.8	196.7	3.05	65.510	
600.0	600.0	601.1	601.1	1.9	1.8	-81.03	31.0	-196.1	198.6	194.8	3.76	52.834	
700.0	700.0	700.5	700.5	2.3	2.2	-81.09	30.6	-195.3	197.7	193.2	4.47	44.258	
800.0	800.0	800.5	800.5	2.6	2.5	-81.24	30.0	-194.6	196.9	191.7	5.17	38.055	
900.0	900.0	900.5	900.4	3.0	2.9	-81.44	29.2	-194.0	196.2	190.3	5.88	33.349	
1,000.0	1,000.0	999.4	999.4	3.4	3.2	-81.69	28.3	-193.7	195.8	189.2	6.58	29.737	
1,005.0	1,005.0	1,004.4	1,004.3	3.4	3.2	-156.12	28.2	-193.7	195.7	189.1	6.62	29.579	CC, ES
1,100.0	1,100.0	1,098.8	1,098.7	3.7	3.6	-156.60	27.3	-193.9	197.4	190.1	7.28	27.117	
1,200.0	1,199.8	1,197.9	1,197.9	4.1	3.9	-157.56	25.9	-194.2	202.4	194.4	7.97	25.395	
1,300.0	1,299.5	1,295.7	1,295.6	4.4	4.3	-158.80	24.4	-195.3	211.4	202.7	8.66	24.415	
1,400.0	1,398.7	1,393.7	1,393.6	4.8	4.6	-160.30	22.7	-197.0	224.5	215.1	9.35	24.004	
1,500.0	1,497.5	1,491.2	1,491.0	5.2	4.9	-162.17	19.8	-199.2	241.3	231.3	10.04	24.024	
1,600.0	1,595.9	1,587.2	1,586.9	5.5	5.3	-164.18	16.0	-201.7	260.5	249.8	10.73	24.276	
1,700.0	1,694.4	1,682.6	1,682.2	5.9	5.6	-165.90	12.3	-205.1	280.8	269.4	11.42	24.599	
1,800.0	1,792.9	1,784.8	1,784.3	6.3	6.0	-167.45	8.5	-208.4	301.1	289.0	12.14	24.810	
1,900.0	1,891.4	1,889.4	1,888.8	6.8	6.3	-168.76	5.2	-209.8	319.6	306.8	12.87	24.829	
2,000.0	1,989.9	1,992.2	1,991.5	7.2	6.7	-169.68	3.4	-209.5	336.6	323.0	13.60	24.755	
2,100.0	2,088.4	2,093.9	2,093.2	7.6	7.1	-170.18	3.6	-208.1	352.3	338.0	14.32	24.607	
2,200.0	2,186.8	2,190.9	2,190.3	8.0	7.4	-170.62	3.8	-206.8	368.0	353.0	15.02	24.503	
2,300.0	2,285.3	2,287.8	2,287.2	8.5	7.7	-171.14	3.3	-205.7	384.2	368.5	15.72	24.438	
2,400.0	2,383.8	2,384.7	2,384.1	8.9	8.1	-171.70	2.0	-205.1	400.9	384.4	16.43	24.400	
2,500.0	2,482.3	2,482.0	2,481.4	9.3	8.4	-172.31	0.1	-204.7	417.9	400.8	17.14	24.386	
2,600.0	2,580.8	2,580.2	2,579.5	9.8	8.8	-172.92	-2.2	-204.4	435.2	417.3	17.85	24.374	
2,700.0	2,679.2	2,680.0	2,679.3	10.2	9.1	-173.49	-4.4	-204.0	452.4	433.9	18.57	24.359	
2,800.0	2,777.7	2,782.1	2,781.4	10.6	9.5	-173.74	-4.3	-203.4	469.1	449.8	19.30	24.303	
2,900.0	2,876.2	2,881.1	2,880.3	11.1	9.8	-173.70	-1.9	-202.6	485.2	465.2	20.01	24.249	
3,000.0	2,974.7	2,977.7	2,976.9	11.5	10.2	-173.63	0.6	-202.2	501.6	480.9	20.70	24.230	
3,100.0	3,073.2	3,076.0	3,075.1	11.9	10.5	-173.57	3.1	-202.1	518.4	497.0	21.41	24.215	
3,200.0	3,171.6	3,175.1	3,174.3	12.4	10.8	-173.57	5.1	-201.8	535.0	512.9	22.12	24.191	
3,300.0	3,270.1	3,278.5	3,277.6	12.8	11.2	-173.64	6.6	-201.0	551.3	528.4	22.85	24.123	
3,400.0	3,368.6	3,383.7	3,382.8	13.3	11.5	-173.83	7.0	-198.8	566.4	542.9	23.60	24.005	
3,500.0	3,467.1	3,480.1	3,479.2	13.7	11.9	-174.06	7.0	-196.3	581.2	556.9	24.30	23.915	
3,600.0	3,565.6	3,575.9	3,575.0	14.2	12.2	-174.26	7.0	-194.4	596.6	571.5	25.01	23.854	
3,700.0	3,664.0	3,676.4	3,675.4	14.6	12.6	-174.47	6.8	-192.4	612.0	586.3	25.74	23.778	
3,800.0	3,762.5	3,777.1	3,776.1	15.1	12.9	-174.72	6.2	-190.1	627.1	600.7	26.47	23.694	
3,900.0	3,861.0	3,874.8	3,873.8	15.5	13.3	-174.83	7.0	-188.0	642.2	615.1	27.18	23.630	
4,000.0	3,959.5	3,972.8	3,971.7	16.0	13.6	-174.70	10.3	-186.6	657.5	629.6	27.89	23.572	
4,100.0	4,058.0	4,070.1	4,068.9	16.4	14.0	-174.54	14.0	-185.4	672.9	644.3	28.60	23.529	
4,200.0	4,156.4	4,167.1	4,165.9	16.8	14.3	-174.45	16.9	-184.3	688.6	659.3	29.30	23.497	
4,300.0	4,254.9	4,263.3	4,262.1	17.3	14.6	-174.39	19.4	-183.4	704.5	674.5	30.01	23.480	
4,400.0	4,353.4	4,359.9	4,358.6	17.7	15.0	-174.35	21.7	-182.9	720.9	690.1	30.71	23.474	
4,500.0	4,451.9	4,457.6	4,456.3	18.2	15.3	-174.33	23.8	-182.4	737.4	705.9	31.42	23.468	
4,600.0	4,550.4	4,555.0	4,553.7	18.6	15.6	-174.32	25.7	-182.1	754.0	721.9	32.13	23.468	
4,700.0	4,648.9	4,652.0	4,650.5	19.1	16.0	-174.16	29.4	-182.3	770.8	738.0	32.83	23.476	
4,800.0	4,747.3	4,749.0	4,747.4	19.5	16.3	-173.84	35.5	-183.1	787.9	754.3	33.54	23.489	
4,900.0	4,845.8	4,846.6	4,844.8	20.0	16.7	-173.52	41.6	-184.1	805.1	770.8	34.25	23.503	
5,000.0	4,944.3	4,945.8	4,943.8	20.4	17.0	-173.23	47.5	-185.0	822.3	787.4	34.98	23.512	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #123H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 143-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	5,046.9	5,044.6	20.9	17.4	-172.81	55.6	-186.1	839.4	803.7	35.71	23.503	
5,200.0	5,141.3	5,145.3	5,142.5	21.3	17.7	-172.26	65.7	-187.2	856.2	819.8	36.44	23.499	
5,300.0	5,239.7	5,241.6	5,238.1	21.8	18.0	-171.64	77.3	-188.6	873.3	836.2	37.15	23.509	
5,400.0	5,338.2	5,338.6	5,334.1	22.2	18.4	-170.95	90.1	-190.4	890.7	852.9	37.87	23.520	
5,500.0	5,436.7	5,436.1	5,430.8	22.7	18.7	-170.30	102.7	-192.3	908.3	869.7	38.60	23.533	
5,600.0	5,535.2	5,530.7	5,524.7	23.1	19.1	-169.73	114.5	-194.1	926.1	886.8	39.31	23.562	
5,700.0	5,633.7	5,623.8	5,617.1	23.6	19.4	-169.22	125.4	-196.4	944.5	904.5	40.01	23.610	
5,800.0	5,732.1	5,722.0	5,714.7	24.0	19.8	-168.72	136.7	-199.1	963.3	922.6	40.74	23.644	
5,900.0	5,830.6	5,823.1	5,814.9	24.5	20.2	-168.16	149.3	-201.6	981.9	940.4	41.50	23.659	
6,000.0	5,929.1	5,920.4	5,911.3	24.9	20.5	-167.61	162.1	-203.9	1,000.5	958.2	42.24	23.684	
6,100.0	6,027.6	6,016.5	6,006.7	25.4	20.9	-167.12	174.1	-206.3	1,019.2	976.2	42.97	23.718	
6,200.0	6,126.1	6,136.1	6,125.3	25.8	21.3	-166.53	189.1	-208.4	1,037.3	993.4	43.87	23.644	
6,300.0	6,224.5	6,262.1	6,250.1	26.3	21.8	-165.87	206.2	-207.4	1,052.9	1,008.1	44.79	23.506	
6,400.0	6,323.0	6,346.8	6,334.1	26.7	22.1	-165.47	217.3	-206.7	1,068.5	1,023.0	45.47	23.500	
6,500.0	6,421.5	6,441.5	6,428.1	27.2	22.4	-165.06	228.9	-206.0	1,084.4	1,038.2	46.20	23.472	
6,600.0	6,520.0	6,537.6	6,523.6	27.6	22.8	-164.71	240.0	-205.6	1,100.7	1,053.7	46.94	23.448	
6,700.0	6,618.5	6,634.4	6,619.8	28.1	23.2	-164.40	250.2	-205.4	1,117.1	1,069.5	47.68	23.429	
6,800.0	6,716.9	6,732.4	6,717.3	28.5	23.5	-164.16	259.6	-205.3	1,133.7	1,085.3	48.43	23.410	
6,900.0	6,815.4	6,830.3	6,814.9	29.0	23.9	-163.97	267.9	-205.2	1,150.3	1,101.2	49.17	23.395	
6,981.8	6,896.0	6,910.2	6,894.6	29.4	24.2	-163.86	274.0	-205.1	1,164.0	1,114.2	49.77	23.386	
7,000.0	6,913.9	6,928.0	6,912.3	29.5	24.2	-163.86	275.2	-205.1	1,167.0	1,117.1	49.91	23.383	
7,100.0	7,012.9	7,025.9	7,010.0	29.9	24.6	-163.84	281.6	-205.2	1,181.0	1,130.3	50.64	23.322	
7,200.0	7,112.3	7,124.1	7,108.0	30.3	25.0	-163.76	287.5	-205.4	1,190.9	1,139.5	51.36	23.188	
7,300.0	7,212.2	7,232.9	7,216.7	30.6	25.4	-163.61	293.1	-205.4	1,196.5	1,144.4	52.13	22.951	
7,381.8	7,294.0	7,328.6	7,312.4	30.9	25.7	-89.10	295.6	-204.3	1,197.0	1,144.3	52.78	22.678	
7,400.0	7,312.2	7,349.9	7,333.6	30.9	25.8	-89.08	295.8	-204.0	1,196.7	1,143.8	52.93	22.611	
7,500.0	7,412.2	7,446.9	7,430.6	31.2	26.1	-89.05	296.5	-202.2	1,194.9	1,141.3	53.59	22.298	
7,600.0	7,512.2	7,542.5	7,526.2	31.5	26.4	-89.02	297.1	-200.8	1,193.5	1,139.2	54.25	22.001	
7,633.8	7,546.0	7,576.1	7,559.8	31.6	26.6	-89.01	297.3	-200.4	1,193.1	1,138.6	54.47	21.901	
7,650.0	7,562.2	7,592.2	7,575.9	31.7	26.6	91.35	297.4	-200.2	1,192.9	1,138.3	54.58	21.854	
7,700.0	7,612.0	7,641.8	7,625.5	31.8	26.8	91.59	297.6	-199.6	1,192.3	1,137.4	54.91	21.714	
7,750.0	7,661.4	7,691.0	7,674.7	31.9	27.0	92.01	297.8	-199.0	1,192.0	1,136.7	55.24	21.580	
7,792.5	7,702.7	7,732.2	7,715.9	32.0	27.1	92.49	297.9	-198.5	1,191.9	1,136.4	55.51	21.473	
7,800.0	7,709.8	7,739.3	7,723.0	32.0	27.1	92.59	297.9	-198.4	1,191.9	1,136.3	55.55	21.455	
7,850.0	7,757.1	7,785.5	7,769.2	32.1	27.3	93.29	298.0	-197.9	1,192.2	1,136.3	55.86	21.344	
7,900.0	7,802.7	7,830.2	7,813.8	32.2	27.4	94.09	298.1	-197.4	1,193.0	1,136.9	56.15	21.248	
7,950.0	7,846.4	7,872.9	7,856.6	32.3	27.6	94.92	298.2	-197.0	1,194.7	1,138.2	56.43	21.171	
8,000.0	7,887.7	7,913.5	7,897.2	32.4	27.7	95.75	298.2	-196.6	1,197.3	1,140.6	56.70	21.117	
8,050.0	7,926.5	7,951.4	7,935.1	32.4	27.9	96.51	298.2	-196.3	1,201.1	1,144.1	56.95	21.089	
8,100.0	7,962.4	7,986.5	7,970.2	32.5	28.0	97.15	298.3	-196.0	1,206.3	1,149.1	57.19	21.093	
8,150.0	7,995.1	8,018.4	8,002.1	32.5	28.1	97.61	298.3	-195.8	1,213.2	1,155.8	57.41	21.131	
8,200.0	8,024.4	8,047.1	8,030.7	32.6	28.2	97.84	298.3	-195.6	1,221.8	1,164.2	57.61	21.207	
8,250.0	8,050.1	8,072.1	8,055.8	32.6	28.3	97.78	298.3	-195.4	1,232.4	1,174.6	57.79	21.324	
8,300.0	8,071.9	8,093.4	8,077.0	32.7	28.4	97.39	298.4	-195.3	1,245.1	1,187.1	57.95	21.484	
8,350.0	8,089.7	8,110.8	8,094.4	32.7	28.4	96.63	298.4	-195.2	1,259.8	1,201.7	58.09	21.689	
8,400.0	8,103.4	8,125.4	8,109.0	32.7	28.5	95.53	298.4	-195.1	1,276.6	1,218.4	58.20	21.935	
8,450.0	8,112.8	8,135.5	8,119.1	32.8	28.5	93.99	298.4	-195.1	1,295.4	1,237.1	58.28	22.226	
8,500.0	8,118.0	8,140.9	8,124.6	32.9	28.5	91.98	298.4	-195.0	1,316.0	1,257.7	58.33	22.560	
8,533.8	8,119.0	8,142.0	8,125.6	33.0	28.5	90.37	298.4	-195.0	1,331.0	1,272.6	58.35	22.809	
8,600.0	8,119.0	8,141.8	8,125.5	33.1	28.5	90.36	298.4	-195.0	1,362.1	1,303.8	58.37	23.336	
8,700.0	8,119.0	8,141.7	8,125.3	33.4	28.5	90.36	298.4	-195.0	1,413.8	1,355.4	58.40	24.208	
8,800.0	8,119.0	8,141.5	8,125.2	33.8	28.5	90.35	298.4	-195.0	1,470.5	1,412.1	58.44	25.164	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #123H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 143-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,900.0	8,119.0	8,141.3	8,125.0	34.3	28.5	90.34	298.4	-195.0	1,531.7	1,473.2	58.47	26.195	
9,000.0	8,119.0	8,141.2	8,124.8	34.9	28.5	90.33	298.4	-195.0	1,596.7	1,538.2	58.50	27.292	
9,100.0	8,119.0	8,141.0	8,124.7	35.5	28.5	90.32	298.4	-195.0	1,665.2	1,606.7	58.54	28.447	
9,200.0	8,119.0	8,140.8	8,124.5	36.3	28.5	90.32	298.4	-195.0	1,736.8	1,678.3	58.57	29.654	
9,300.0	8,119.0	8,140.7	8,124.3	37.1	28.5	90.31	298.4	-195.0	1,811.1	1,752.5	58.60	30.905	
9,400.0	8,119.0	8,140.5	8,124.2	37.9	28.5	90.30	298.4	-195.0	1,887.8	1,829.1	58.63	32.196	
9,500.0	8,119.0	8,140.3	8,124.0	38.8	28.5	90.29	298.4	-195.0	1,966.5	1,907.8	58.66	33.522	
9,600.0	8,119.0	8,140.2	8,123.8	39.8	28.5	90.28	298.4	-195.0	2,047.1	1,988.4	58.69	34.879	
9,700.0	8,119.0	11,472.6	9,901.4	40.8	44.1	150.39	-1,496.6	-10.9	2,051.4	1,996.9	54.50	37.639	
9,800.0	8,119.0	11,571.9	9,901.4	41.8	45.1	150.43	-1,595.8	-8.8	2,050.8	1,994.8	55.96	36.644	
9,900.0	8,119.0	11,686.6	9,899.4	42.9	46.4	150.44	-1,710.5	-6.7	2,048.5	1,990.8	57.68	35.517	
10,000.0	8,119.0	11,775.5	9,898.6	44.0	47.4	150.47	-1,799.4	-4.4	2,046.7	1,987.6	59.09	34.637	
10,100.0	8,119.0	11,855.4	9,898.7	45.2	48.3	150.52	-1,879.2	-1.9	2,045.6	1,985.2	60.40	33.870	
10,143.9	8,119.0	11,888.3	9,899.1	45.7	48.6	150.55	-1,912.1	-0.9	2,045.5	1,984.6	60.95	33.562	
10,200.0	8,119.0	11,900.0	9,899.2	46.3	48.8	150.55	-1,923.8	-0.5	2,046.0	1,984.7	61.28	33.386	
10,300.0	8,119.0	11,949.3	9,901.0	47.5	49.4	150.60	-1,973.1	0.5	2,048.9	1,986.7	62.24	32.921	
10,400.0	8,119.0	11,994.0	9,904.4	48.8	49.9	150.64	-2,017.6	0.7	2,055.2	1,992.1	63.13	32.553	
10,500.0	8,119.0	12,157.0	9,913.9	50.0	51.8	150.67	-2,180.3	-2.6	2,061.9	1,996.3	65.63	31.419	
10,600.0	8,119.0	12,332.0	9,916.3	51.3	54.0	150.65	-2,355.3	-3.9	2,063.3	1,994.9	68.39	30.168	
10,700.0	8,119.0	12,426.8	9,917.3	52.6	55.2	150.66	-2,450.0	-3.1	2,064.1	1,994.0	70.05	29.464	
10,800.0	8,119.0	12,638.2	9,914.9	54.0	58.0	150.68	-2,661.3	0.2	2,063.0	1,989.6	73.38	28.113	
10,900.0	8,119.0	12,746.2	9,909.9	55.3	59.4	150.66	-2,769.2	2.8	2,058.1	1,982.7	75.32	27.323	
11,000.0	8,119.0	12,801.9	9,908.2	56.7	60.2	150.68	-2,824.8	4.6	2,054.1	1,977.7	76.50	26.853	
11,100.0	8,119.0	12,860.6	9,908.1	58.0	61.0	150.72	-2,883.5	6.6	2,052.5	1,974.8	77.68	26.422	
11,200.0	8,119.0	12,949.4	9,909.1	59.4	62.2	150.80	-2,972.2	9.9	2,052.0	1,972.7	79.26	25.888	
11,213.6	8,119.0	12,958.9	9,909.3	59.6	62.3	150.81	-2,981.7	10.4	2,052.0	1,972.5	79.44	25.830	
11,300.0	8,119.0	13,019.3	9,911.4	60.8	63.2	150.91	-3,042.0	13.6	2,052.5	1,972.0	80.54	25.486	
11,400.0	8,119.0	13,140.6	9,916.9	62.2	64.9	151.16	-3,162.9	21.7	2,053.6	1,971.2	82.42	24.915	
11,500.0	8,119.0	13,215.7	9,919.1	63.6	65.9	151.26	-3,237.9	24.7	2,054.6	1,970.8	83.80	24.517	
11,600.0	8,119.0	13,298.1	9,921.6	65.1	67.1	151.32	-3,320.3	26.3	2,056.5	1,971.1	85.33	24.101	
11,700.0	8,119.0	13,397.4	9,925.1	66.5	68.5	151.40	-3,419.5	28.4	2,058.9	1,971.8	87.09	23.641	
11,800.0	8,119.0	13,554.1	9,924.8	68.0	70.7	151.34	-3,576.2	26.9	2,059.2	1,969.2	89.94	22.894	
11,900.0	8,119.0	13,745.6	9,917.8	69.4	73.5	151.17	-3,767.5	25.0	2,056.9	1,963.4	93.44	22.013	
12,000.0	8,119.0	13,831.0	9,913.1	70.9	74.7	151.11	-3,852.7	25.6	2,052.1	1,956.9	95.22	21.550	
12,100.0	8,119.0	13,907.2	9,910.2	72.4	75.9	151.07	-3,928.9	26.1	2,048.7	1,951.8	96.85	21.154	
12,200.0	8,119.0	13,989.6	9,907.3	73.9	77.1	151.01	-4,011.3	25.8	2,046.0	1,947.4	98.59	20.752	
12,300.0	8,119.0	14,062.5	9,905.5	75.4	78.1	150.96	-4,084.1	25.1	2,044.6	1,944.4	100.19	20.408	
12,400.0	8,119.0	14,154.8	9,903.1	76.9	79.5	150.85	-4,176.3	22.4	2,044.0	1,941.8	102.17	20.006	
12,419.9	8,119.0	14,166.4	9,902.7	77.2	79.7	150.83	-4,187.9	21.9	2,044.0	1,941.5	102.45	19.951	
12,500.0	8,119.0	14,218.8	9,901.7	78.4	80.4	150.76	-4,240.3	19.7	2,044.5	1,940.8	103.67	19.721	
12,600.0	8,119.0	14,337.3	9,900.3	79.9	82.2	150.60	-4,358.6	14.6	2,045.9	1,939.7	106.17	19.269	
12,700.0	8,119.0	14,435.7	9,898.7	81.4	83.6	150.48	-4,457.0	11.5	2,046.4	1,938.1	108.29	18.897	
12,800.0	8,119.0	14,517.0	9,899.4	82.9	84.9	150.48	-4,538.3	11.4	2,047.4	1,937.4	109.97	18.618	
12,900.0	8,119.0	14,616.8	9,902.2	84.5	86.4	150.56	-4,638.0	13.9	2,048.9	1,937.1	111.82	18.323	
13,000.0	8,119.0	14,705.2	9,905.5	86.0	87.7	150.68	-4,726.3	17.2	2,050.7	1,937.2	113.44	18.077	
13,100.0	8,119.0	14,809.6	9,910.4	87.5	89.3	150.85	-4,830.4	22.0	2,052.7	1,937.5	115.24	17.813	
13,200.0	8,119.0	14,931.9	9,912.5	89.1	91.2	150.92	-4,952.6	24.6	2,053.4	1,935.9	117.49	17.477	
13,300.0	8,119.0	15,037.3	9,914.3	90.6	92.8	150.96	-5,058.1	25.8	2,054.6	1,935.1	119.51	17.191	
13,400.0	8,119.0	15,207.5	9,911.5	92.2	95.4	150.93	-5,228.2	26.9	2,053.0	1,930.3	122.70	16.732	
13,500.0	8,119.0	15,332.6	9,906.2	93.7	97.3	150.85	-5,353.2	27.3	2,049.4	1,924.2	125.22	16.367	
13,600.0	8,119.0	15,415.7	9,902.4	95.3	98.6	150.80	-5,436.2	27.8	2,045.4	1,918.4	127.07	16.097	
13,700.0	8,119.0	15,484.9	9,900.4	96.8	99.7	150.77	-5,505.3	28.3	2,042.9	1,914.2	128.65	15.880	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #123H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 143-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,800.0	8,119.0	15,557.0	9,899.6	98.4	100.8	150.77	-5,577.5	29.1	2,041.7	1,911.5	130.22	15.679	
13,849.0	8,119.0	15,596.5	9,899.6	99.2	101.4	150.78	-5,617.0	29.6	2,041.5	1,910.5	131.04	15.580	
13,900.0	8,119.0	15,635.2	9,899.9	100.0	102.0	150.79	-5,655.6	30.1	2,041.7	1,909.8	131.84	15.486	
14,000.0	8,119.0	15,738.5	9,901.1	101.5	103.6	150.82	-5,758.9	31.4	2,042.4	1,908.5	133.86	15.258	
14,100.0	8,119.0	15,874.6	9,900.4	103.1	105.7	150.81	-5,895.0	32.3	2,041.8	1,905.3	136.50	14.959	
14,200.0	8,119.0	15,967.7	9,898.6	104.7	107.2	150.78	-5,988.1	32.5	2,040.4	1,901.9	138.48	14.734	
14,264.1	8,119.0	16,011.7	9,898.3	105.7	107.9	150.77	-6,032.1	32.5	2,040.1	1,900.6	139.47	14.628	
14,300.0	8,119.0	16,037.7	9,898.3	106.2	108.3	150.77	-6,058.1	32.5	2,040.2	1,900.1	140.04	14.569	
14,400.0	8,119.0	16,124.0	9,899.3	107.8	109.6	150.79	-6,144.4	33.3	2,041.0	1,899.2	141.79	14.395	
14,500.0	8,119.0	16,205.0	9,901.3	109.4	110.9	150.84	-6,225.3	34.7	2,042.6	1,899.2	143.39	14.245	
14,600.0	8,119.0	16,303.5	9,904.0	111.0	112.5	150.89	-6,323.8	35.8	2,044.8	1,899.5	145.30	14.073	
14,700.0	8,119.0	14,700.0	9,905.0	112.6	87.2	150.92	-6,500.4	37.7	2,045.0	1,914.5	130.50	15.670	
14,800.0	8,119.0	16,560.6	9,904.0	114.2	116.5	150.95	-6,580.8	39.7	2,043.2	1,893.0	150.25	13.598	
14,824.5	8,119.0	16,572.2	9,904.2	114.5	116.7	150.96	-6,592.4	40.1	2,043.1	1,892.6	150.51	13.574	
14,900.0	8,119.0	16,600.0	9,905.0	115.7	117.1	151.00	-6,620.2	41.3	2,043.9	1,892.8	151.13	13.524	
15,000.0	8,119.0	16,657.1	9,908.3	117.3	118.0	151.10	-6,677.1	44.1	2,047.0	1,894.9	152.13	13.455	
15,100.0	8,119.0	16,904.3	9,910.1	118.9	122.0	151.18	-6,923.9	47.9	2,046.2	1,889.6	156.58	13.068	
15,200.0	8,119.0	16,970.0	9,908.1	120.5	123.0	151.13	-6,989.5	47.2	2,044.3	1,886.1	158.19	12.924	
15,300.0	8,119.0	15,300.0	9,906.6	122.1	96.3	151.17	-7,140.6	50.5	2,043.0	1,900.7	142.32	14.355	
15,400.0	8,119.0	17,233.4	9,904.3	123.7	127.2	151.30	-7,252.6	57.6	2,038.4	1,875.5	162.89	12.514	
15,500.0	8,119.0	17,285.9	9,904.1	125.3	128.0	151.37	-7,305.0	60.9	2,035.3	1,871.3	164.05	12.407	
15,567.8	8,119.0	17,316.6	9,904.4	126.4	128.5	151.40	-7,335.6	62.3	2,034.7	1,870.0	164.74	12.351	
15,600.0	8,119.0	17,331.2	9,904.7	126.9	128.8	151.42	-7,350.2	62.7	2,034.8	1,869.8	165.05	12.328	
15,700.0	8,119.0	17,386.8	9,906.3	128.5	129.6	151.45	-7,405.8	63.4	2,037.0	1,870.8	166.20	12.256	
15,800.0	8,119.0	17,459.1	9,907.8	130.1	130.8	151.39	-7,478.0	60.9	2,040.7	1,872.9	167.82	12.160	
15,900.0	8,119.0	17,536.3	9,909.2	131.7	132.0	151.28	-7,555.1	55.9	2,045.7	1,876.0	169.66	12.057	
16,000.0	8,119.0	17,794.8	9,903.2	133.3	136.1	150.96	-7,813.1	47.6	2,042.5	1,867.2	175.37	11.647	
16,100.0	8,119.0	17,887.2	9,901.4	134.9	137.5	150.95	-7,905.4	48.9	2,040.5	1,863.2	177.33	11.507	
16,200.0	8,119.0	17,979.4	9,900.1	136.5	139.0	150.95	-7,997.7	50.1	2,038.9	1,859.6	179.27	11.373	
16,300.0	8,119.0	18,072.6	9,898.8	138.1	140.5	150.94	-8,090.8	50.9	2,037.5	1,856.2	181.25	11.241	
16,395.3	8,119.0	18,145.0	9,898.3	139.7	141.7	150.93	-8,163.2	51.3	2,036.9	1,854.1	182.85	11.140	
16,400.0	8,119.0	18,145.0	9,898.3	139.7	141.7	150.93	-8,163.2	51.3	2,036.9	1,854.1	182.86	11.139	
16,500.0	8,119.0	18,208.6	9,898.9	141.4	142.7	150.93	-8,226.8	51.5	2,037.9	1,853.7	184.26	11.060	
16,600.0	8,119.0	18,273.9	9,900.8	143.0	143.7	150.95	-8,292.1	51.3	2,040.9	1,855.3	185.61	10.996	
16,700.0	8,119.0	18,489.2	9,905.0	144.6	147.2	151.05	-8,507.3	54.3	2,042.7	1,853.2	189.50	10.780	
16,800.0	8,119.0	18,567.9	9,904.8	146.2	148.5	151.10	-8,585.9	57.0	2,041.1	1,850.0	191.08	10.682	
16,852.5	8,119.0	18,602.4	9,905.3	147.0	149.0	151.14	-8,620.4	58.4	2,040.9	1,849.1	191.76	10.643	
16,900.0	8,119.0	18,644.2	9,906.2	147.8	149.7	151.18	-8,662.1	60.0	2,041.0	1,848.5	192.52	10.602	
17,000.0	8,119.0	18,806.9	9,905.2	149.4	152.3	151.19	-8,824.8	61.7	2,040.5	1,845.0	195.59	10.433	
17,100.0	8,119.0	18,890.8	9,902.1	151.0	153.7	151.11	-8,908.6	60.7	2,038.2	1,840.5	197.62	10.313	
17,200.0	8,119.0	18,967.1	9,900.2	152.7	154.9	151.06	-8,984.9	60.1	2,036.7	1,837.3	199.44	10.212	
17,300.0	8,119.0	19,097.5	9,897.4	154.3	157.0	150.97	-9,115.2	59.0	2,035.6	1,833.4	202.23	10.066	
17,400.0	8,119.0	19,194.5	9,894.6	155.9	158.5	150.91	-9,212.2	58.7	2,033.5	1,829.0	204.43	9.947	
17,466.0	8,119.0	19,212.8	9,894.6	157.0	158.8	150.92	-9,230.4	59.2	2,032.9	1,827.9	204.98	9.918	
17,500.0	8,119.0	19,225.0	9,894.9	157.5	159.0	150.94	-9,242.6	59.6	2,033.1	1,827.9	205.25	9.906	
17,600.0	8,119.0	19,280.0	9,899.3	159.1	159.9	151.09	-9,297.3	63.6	2,036.2	1,830.2	206.01	9.884	
17,700.0	8,119.0	17,700.0	9,906.7	160.7	134.1	151.34	-9,373.3	70.2	2,040.7	1,850.9	189.75	10.755	
17,800.0	8,119.0	19,576.6	9,913.2	162.4	164.7	151.58	-9,592.7	77.9	2,041.3	1,830.9	210.48	9.698	
17,900.0	8,119.0	19,674.6	9,910.3	164.0	166.3	151.48	-9,690.7	75.7	2,040.0	1,827.2	212.82	9.586	
18,000.0	8,119.0	19,751.0	9,908.4	165.6	167.5	151.38	-9,767.0	73.4	2,039.5	1,824.8	214.76	9.497	
18,046.6	8,119.0	19,810.8	9,906.8	166.4	168.5	151.30	-9,826.8	71.3	2,039.4	1,823.2	216.19	9.433	
18,100.0	8,119.0	19,846.0	9,905.7	167.2	169.0	151.25	-9,861.9	70.0	2,039.1	1,822.0	217.13	9.391	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #123H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 143-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,126.2	8,119.0	19,869.2	9,905.1	167.7	169.4	151.22	-9,885.2	69.2	2,039.0	1,821.3	217.72	9.366	
18,200.0	8,119.0	19,901.7	9,904.9	168.9	169.9	151.19	-9,917.6	68.1	2,040.1	1,821.5	218.57	9.334	
18,300.0	8,119.0	18,300.0	9,906.0	170.5	144.3	151.10	-10,021.3	64.5	2,042.9	1,839.6	203.39	10.045	
18,400.0	8,119.0	20,181.6	9,901.3	172.1	174.4	150.85	-10,197.2	58.2	2,042.1	1,817.0	225.16	9.070	
18,500.0	8,119.0	20,274.2	9,898.5	173.7	175.9	150.77	-10,289.7	56.7	2,040.6	1,813.2	227.40	8.974	
18,582.5	8,119.0	20,332.7	9,898.8	175.1	176.9	150.80	-10,348.3	58.1	2,040.1	1,811.5	228.61	8.924	
18,600.0	8,119.0	20,343.1	9,899.0	175.4	177.0	150.81	-10,358.6	58.6	2,040.2	1,811.4	228.81	8.916	
18,700.0	8,119.0	20,414.0	9,902.3	177.0	178.2	150.94	-10,429.3	62.4	2,041.7	1,811.7	229.94	8.879	
18,800.0	8,119.0	20,553.0	9,908.0	178.6	180.5	151.20	-10,567.9	70.6	2,042.8	1,810.9	231.92	8.808	
18,900.0	8,119.0	20,665.8	9,909.1	180.2	182.3	151.27	-10,680.7	73.8	2,042.5	1,808.6	233.97	8.730	
19,000.0	8,119.0	20,772.9	9,909.5	181.9	184.0	151.34	-10,787.8	77.1	2,041.7	1,805.7	235.93	8.654	
19,100.0	8,119.0	20,879.4	9,910.1	183.5	185.8	151.44	-10,894.1	81.4	2,040.5	1,802.8	237.78	8.582	
19,200.0	8,119.0	20,962.2	9,910.8	185.1	187.1	151.52	-10,976.9	84.6	2,039.6	1,800.3	239.31	8.523	
19,242.1	8,119.0	20,995.2	9,910.9	185.8	187.7	151.53	-11,009.9	85.3	2,039.5	1,799.6	239.98	8.499	
19,300.0	8,119.0	21,038.5	9,911.5	186.8	188.4	151.56	-11,053.2	86.2	2,039.8	1,798.9	240.84	8.469	
19,400.0	8,119.0	21,139.5	9,913.3	188.4	190.0	151.61	-11,154.1	88.0	2,040.8	1,798.0	242.75	8.407	
19,500.0	8,119.0	21,226.6	9,912.8	190.0	191.4	151.55	-11,241.2	86.2	2,041.5	1,796.7	244.78	8.340	
19,600.0	8,119.0	21,348.3	9,913.3	191.6	193.4	151.50	-11,362.9	84.7	2,042.9	1,795.5	247.41	8.257	
19,700.0	8,119.0	21,438.1	9,913.1	193.3	194.8	151.48	-11,452.7	84.3	2,043.2	1,793.8	249.39	8.193	
19,800.0	8,119.0	21,535.2	9,913.6	194.9	196.4	151.46	-11,549.8	83.9	2,044.1	1,792.7	251.46	8.129	
19,900.0	8,119.0	21,692.1	9,911.9	196.5	199.0	151.41	-11,706.7	83.9	2,043.3	1,788.7	254.66	8.024	
20,000.0	8,119.0	21,800.8	9,908.9	198.2	200.7	151.36	-11,815.3	83.8	2,041.2	1,784.1	257.07	7.940	
20,100.0	8,119.0	21,912.0	9,904.8	199.8	202.5	151.27	-11,926.5	83.1	2,038.6	1,779.0	259.63	7.852	
20,200.0	8,119.0	21,977.4	9,902.6	201.4	203.6	151.21	-11,991.8	82.5	2,036.4	1,775.0	261.37	7.791	
20,255.0	8,119.0	22,008.4	9,902.1	202.3	204.1	151.19	-12,022.8	82.2	2,036.1	1,773.9	262.18	7.766	
20,300.0	8,119.0	22,036.8	9,902.0	203.1	204.5	151.18	-12,051.2	81.9	2,036.3	1,773.4	262.86	7.747	
20,400.0	8,119.0	22,112.5	9,902.7	204.7	205.8	151.17	-12,126.9	81.4	2,037.7	1,773.2	264.52	7.703	
20,500.0	8,119.0	22,227.7	9,904.4	206.3	207.6	151.16	-12,242.1	81.0	2,039.4	1,772.5	266.92	7.641	
20,606.7	8,119.0	22,273.0	9,906.1	208.1	208.4	151.19	-12,287.3	81.4	2,042.6	1,774.8	267.75	7.629	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #124H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 216-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	83.69	95.8	866.6	871.9				
100.0	100.0	97.4	97.4	0.1	0.2	83.69	95.9	866.8	872.1	871.8	0.28	3,109.685	
200.0	200.0	194.8	194.8	0.5	0.3	83.68	96.1	867.2	872.5	871.7	0.79	1,104.035	
300.0	300.0	294.8	294.8	0.8	0.6	83.66	96.4	867.8	873.1	871.7	1.46	596.731	
400.0	400.0	395.5	395.5	1.2	1.0	83.62	97.1	868.3	873.7	871.5	2.18	400.551	
500.0	500.0	483.0	483.0	1.6	1.3	83.56	98.1	869.2	874.9	872.0	2.86	306.428	
600.0	600.0	569.6	569.5	1.9	1.6	83.47	99.8	871.4	877.6	874.1	3.53	248.837	
700.0	700.0	662.3	662.1	2.3	1.9	83.33	102.3	874.8	881.5	877.3	4.22	208.930	
800.0	800.0	756.4	756.2	2.6	2.3	83.19	105.0	878.8	886.2	881.2	4.92	180.268	
900.0	900.0	851.0	850.5	3.0	2.6	83.04	107.8	883.5	891.4	885.8	5.61	158.778	
1,000.0	1,000.0	945.5	944.9	3.4	3.0	82.90	110.7	888.7	897.3	890.9	6.31	142.162	
1,100.0	1,100.0	1,043.9	1,043.1	3.7	3.3	8.34	113.8	894.5	901.8	894.8	7.01	128.554	
1,200.0	1,199.8	1,142.8	1,141.7	4.1	3.7	8.24	116.8	900.5	903.0	895.3	7.72	116.998	
1,300.0	1,299.5	1,225.4	1,224.1	4.4	4.0	8.21	119.0	906.4	901.8	893.4	8.36	107.858	
1,400.0	1,398.7	1,309.0	1,307.3	4.8	4.3	8.26	120.9	914.0	899.0	890.0	9.01	99.804	
1,500.0	1,497.5	1,410.2	1,408.0	5.2	4.7	8.39	122.7	924.2	893.7	884.0	9.73	91.874	
1,600.0	1,595.9	1,514.2	1,511.5	5.5	5.1	8.57	123.8	934.3	886.2	875.8	10.46	84.712	
1,700.0	1,694.4	1,608.5	1,605.3	5.9	5.5	8.68	125.7	943.4	878.9	867.7	11.16	78.754	
1,800.0	1,792.9	1,704.8	1,701.0	6.3	5.8	8.67	129.5	953.1	872.0	860.2	11.87	73.473	
1,900.0	1,891.4	1,808.7	1,804.3	6.8	6.2	8.63	134.2	963.3	865.1	852.5	12.61	68.585	
2,000.0	1,989.9	1,913.6	1,908.7	7.2	6.6	8.61	138.5	973.1	857.7	844.3	13.36	64.178	
2,100.0	2,088.4	2,020.9	2,015.4	7.6	7.1	8.48	144.3	982.1	849.5	835.3	14.12	60.140	
2,200.0	2,186.8	2,129.3	2,123.3	8.0	7.5	8.22	151.9	990.0	840.3	825.4	14.89	56.439	
2,300.0	2,285.3	2,238.9	2,232.4	8.5	7.9	7.96	159.3	996.7	830.0	814.4	15.66	53.016	
2,400.0	2,383.8	2,332.5	2,325.7	8.9	8.2	7.77	165.1	1,002.1	819.3	802.9	16.37	50.058	
2,500.0	2,482.3	2,421.9	2,414.8	9.3	8.6	7.66	169.6	1,008.4	809.7	792.7	17.06	47.457	
2,600.0	2,580.8	2,522.9	2,515.3	9.8	9.0	7.62	173.6	1,016.5	800.9	783.1	17.80	44.996	
2,700.0	2,679.2	2,629.5	2,621.6	10.2	9.4	7.65	176.9	1,024.3	791.4	772.8	18.56	42.644	
2,800.0	2,777.7	2,733.6	2,725.5	10.6	9.8	7.72	179.3	1,031.3	781.1	761.8	19.30	40.462	
2,900.0	2,876.2	2,837.3	2,829.0	11.1	10.1	7.80	181.5	1,037.7	770.2	750.2	20.05	38.418	
3,000.0	2,974.7	2,938.2	2,929.6	11.5	10.5	7.87	183.8	1,043.6	759.0	738.2	20.78	36.519	
3,100.0	3,073.2	3,039.1	3,030.3	11.9	10.9	7.91	186.5	1,049.2	747.6	726.1	21.52	34.740	
3,200.0	3,171.6	3,139.7	3,130.7	12.4	11.3	7.96	189.0	1,054.5	736.0	713.7	22.25	33.071	
3,300.0	3,270.1	3,238.7	3,229.6	12.8	11.6	8.04	191.1	1,059.8	724.2	701.2	22.98	31.508	
3,400.0	3,368.6	3,333.6	3,324.4	13.3	12.0	8.12	193.1	1,065.1	712.9	689.1	23.71	30.072	
3,500.0	3,467.1	3,428.2	3,418.8	13.7	12.3	8.20	195.2	1,071.1	702.1	677.7	24.43	28.746	
3,600.0	3,565.6	3,521.7	3,512.0	14.2	12.7	8.28	197.5	1,077.7	692.2	667.0	25.14	27.530	
3,700.0	3,664.0	3,616.2	3,606.2	14.6	13.0	8.36	199.9	1,085.1	683.1	657.2	25.86	26.413	
3,800.0	3,762.5	3,713.5	3,703.1	15.1	13.4	8.48	202.0	1,093.3	674.5	647.9	26.59	25.365	
3,900.0	3,861.0	3,813.7	3,802.8	15.5	13.8	8.68	203.4	1,102.2	666.2	638.8	27.33	24.374	
4,000.0	3,959.5	3,920.9	3,909.7	16.0	14.2	8.86	205.2	1,110.8	657.1	629.0	28.09	23.390	
4,100.0	4,058.0	4,022.6	4,011.2	16.4	14.6	8.96	207.6	1,117.9	647.1	618.2	28.84	22.440	
4,200.0	4,156.4	4,119.1	4,107.3	16.8	14.9	8.93	211.3	1,124.7	637.3	607.8	29.57	21.556	
4,300.0	4,254.9	4,218.3	4,206.1	17.3	15.3	8.80	216.4	1,131.9	627.9	597.6	30.30	20.723	
4,400.0	4,353.4	4,319.8	4,307.2	17.7	15.7	8.65	221.5	1,139.1	618.3	587.3	31.05	19.917	
4,500.0	4,451.9	4,421.2	4,408.3	18.2	16.1	8.53	226.4	1,145.9	608.4	576.6	31.79	19.140	
4,600.0	4,550.4	4,522.6	4,509.4	18.6	16.5	8.41	231.0	1,152.5	598.2	565.6	32.53	18.389	
4,700.0	4,648.9	4,622.5	4,609.0	19.1	16.9	8.30	235.5	1,158.8	587.7	554.5	33.27	17.667	
4,800.0	4,747.3	4,722.1	4,708.2	19.5	17.2	8.17	240.1	1,165.0	577.2	543.2	34.00	16.976	
4,900.0	4,845.8	4,823.5	4,809.3	20.0	17.6	8.02	245.0	1,171.1	566.6	531.9	34.74	16.308	
5,000.0	4,944.3	4,925.0	4,910.6	20.4	18.0	7.87	249.7	1,176.9	555.6	520.1	35.48	15.658	
5,100.0	5,042.8	5,025.3	5,010.6	20.9	18.4	7.76	253.9	1,182.3	544.3	508.1	36.22	15.029	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #124H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 216-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,141.3	5,125.5	5,110.7	21.3	18.7	7.71	257.4	1,187.7	532.9	495.9	36.95	14.420	
5,300.0	5,239.7	5,222.1	5,207.0	21.8	19.1	7.73	260.3	1,193.2	521.6	484.0	37.69	13.841	
5,400.0	5,338.2	5,320.2	5,304.9	22.2	19.5	7.80	262.8	1,199.3	510.8	472.4	38.42	13.295	
5,500.0	5,436.7	5,422.1	5,406.6	22.7	19.8	7.89	265.3	1,205.4	499.9	460.7	39.16	12.764	
5,600.0	5,535.2	5,521.6	5,506.0	23.1	20.2	7.97	267.8	1,210.9	488.4	448.5	39.90	12.242	
5,700.0	5,633.7	5,616.9	5,601.0	23.6	20.6	7.97	270.9	1,216.7	477.6	437.0	40.63	11.754	
5,800.0	5,732.1	5,714.6	5,698.4	24.0	20.9	7.86	275.1	1,223.2	467.5	426.1	41.37	11.301	
5,900.0	5,830.6	5,816.7	5,800.2	24.5	21.3	7.75	279.3	1,229.8	457.2	415.1	42.11	10.858	
6,000.0	5,929.1	5,917.8	5,901.1	24.9	21.7	7.68	283.1	1,235.8	446.3	403.5	42.84	10.418	
6,100.0	6,027.6	6,018.1	6,001.1	25.4	22.1	7.64	286.5	1,241.6	435.2	391.7	43.58	9.987	
6,200.0	6,126.1	6,117.5	6,100.4	25.8	22.4	7.65	289.6	1,247.2	424.0	379.7	44.32	9.568	
6,300.0	6,224.5	6,216.5	6,199.1	26.3	22.8	7.74	292.0	1,253.0	412.8	367.8	45.05	9.163	
6,400.0	6,323.0	6,316.5	6,298.9	26.7	23.2	7.92	293.9	1,258.9	401.7	355.9	45.79	8.772	
6,500.0	6,421.5	6,416.9	6,399.2	27.2	23.5	8.12	295.8	1,264.6	390.3	343.8	46.53	8.388	
6,600.0	6,520.0	6,515.1	6,497.2	27.6	23.9	8.31	297.7	1,270.1	378.8	331.6	47.27	8.015	
6,700.0	6,618.5	6,612.8	6,594.7	28.1	24.3	8.45	300.0	1,275.9	367.8	319.8	48.01	7.662	
6,800.0	6,716.9	6,711.0	6,692.7	28.5	24.6	8.56	302.6	1,282.2	357.2	308.5	48.75	7.328	
6,900.0	6,815.4	6,809.4	6,790.8	29.0	25.0	8.69	305.2	1,288.7	347.0	297.5	49.49	7.010	
6,981.8	6,896.0	6,892.3	6,873.5	29.4	25.3	8.83	307.3	1,294.2	338.5	288.4	50.10	6.757	
7,000.0	6,913.9	6,910.8	6,892.0	29.5	25.4	8.85	307.7	1,295.4	336.6	286.4	50.23	6.702	
7,100.0	7,012.9	7,012.6	6,993.6	29.9	25.8	8.94	310.1	1,301.5	328.6	277.6	50.96	6.447	
7,200.0	7,112.3	7,113.3	7,094.0	30.3	26.1	8.94	312.2	1,307.1	324.3	272.6	51.68	6.275	
7,253.9	7,166.2	7,167.6	7,148.3	30.4	26.3	8.91	313.3	1,310.0	323.7	271.7	52.07	6.218	CC, ES
7,300.0	7,212.2	7,214.1	7,194.7	30.6	26.5	8.86	314.1	1,312.5	324.2	271.8	52.39	6.187	
7,381.8	7,294.0	7,296.9	7,277.3	30.9	26.8	83.16	315.6	1,316.7	327.0	274.1	52.96	6.175	SF
7,400.0	7,312.2	7,315.2	7,295.7	30.9	26.9	83.13	315.9	1,317.6	327.9	274.9	53.08	6.178	
7,500.0	7,412.2	7,416.6	7,397.0	31.2	27.2	82.97	317.4	1,322.3	332.8	279.0	53.76	6.190	
7,600.0	7,512.2	7,519.0	7,499.3	31.5	27.6	83.00	317.7	1,326.6	337.0	282.5	54.43	6.191	
7,633.8	7,546.0	7,553.7	7,533.9	31.6	27.7	83.08	317.5	1,327.9	338.2	283.6	54.66	6.188	
7,650.0	7,562.2	7,570.3	7,550.5	31.7	27.8	-96.53	317.3	1,328.5	338.8	284.0	54.77	6.187	
7,700.0	7,612.0	7,621.7	7,601.8	31.8	28.0	-96.80	316.6	1,330.3	340.8	285.8	55.07	6.189	
7,750.0	7,661.4	7,672.6	7,652.8	31.9	28.1	-97.76	315.9	1,331.8	343.2	287.9	55.35	6.201	
7,800.0	7,709.8	7,722.8	7,702.9	32.0	28.3	-99.33	315.3	1,333.0	346.3	290.7	55.62	6.225	
7,850.0	7,757.1	7,771.7	7,751.8	32.1	28.5	-101.41	314.7	1,334.0	350.3	294.4	55.90	6.267	
7,900.0	7,802.7	7,818.3	7,798.4	32.2	28.6	-103.78	314.1	1,334.9	355.9	299.7	56.19	6.334	
7,950.0	7,846.4	7,863.1	7,843.2	32.3	28.8	-106.30	313.5	1,335.5	363.7	307.1	56.53	6.433	
8,000.0	7,887.7	7,905.6	7,885.7	32.4	28.9	-108.80	313.0	1,336.1	374.1	317.2	56.93	6.571	
8,050.0	7,926.5	7,945.6	7,925.6	32.4	29.1	-111.09	312.5	1,336.5	387.7	330.4	57.39	6.756	
8,100.0	7,962.4	7,982.2	7,962.2	32.5	29.2	-112.96	312.0	1,336.8	405.0	347.0	57.91	6.993	
8,150.0	7,995.1	8,015.5	7,995.6	32.5	29.3	-114.29	311.6	1,337.1	426.0	367.5	58.47	7.286	
8,200.0	8,024.4	8,045.4	8,025.5	32.6	29.4	-114.95	311.2	1,337.3	450.9	391.8	59.04	7.637	
8,250.0	8,050.1	8,071.7	8,051.8	32.6	29.5	-114.82	310.9	1,337.5	479.5	419.9	59.61	8.045	
8,300.0	8,071.9	8,094.2	8,074.3	32.7	29.6	-113.75	310.6	1,337.7	511.7	451.5	60.14	8.508	
8,350.0	8,089.7	8,112.7	8,092.8	32.7	29.6	-111.56	310.3	1,337.8	546.9	486.3	60.63	9.021	
8,400.0	8,103.4	8,127.0	8,107.1	32.7	29.7	-108.07	310.2	1,337.9	584.9	523.8	61.06	9.579	
8,450.0	8,112.8	8,137.1	8,117.2	32.8	29.7	-103.06	310.0	1,338.0	625.1	563.6	61.44	10.174	
8,500.0	8,118.0	8,142.9	8,122.9	32.9	29.7	-96.38	310.0	1,338.0	667.0	605.3	61.77	10.799	
8,533.8	8,119.0	8,144.3	8,124.4	33.0	29.7	-90.90	310.0	1,338.0	696.2	634.2	61.96	11.237	
8,600.0	8,119.0	8,145.2	8,125.2	33.1	29.7	-91.03	309.9	1,338.0	754.3	692.0	62.27	12.112	
8,700.0	8,119.0	8,146.4	8,126.5	33.4	29.7	-91.24	309.9	1,338.0	844.4	781.7	62.67	13.474	
8,800.0	8,119.0	8,147.7	8,127.7	33.8	29.7	-91.45	309.9	1,338.0	936.5	873.6	62.98	14.870	
8,900.0	8,119.0	8,149.0	8,129.0	34.3	29.7	-91.66	309.9	1,338.0	1,030.1	966.9	63.23	16.291	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #124H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 216-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,000.0	8,119.0	8,150.2	8,130.3	34.9	29.7	-91.87	309.9	1,338.0	1,124.8	1,061.4	63.44	17.731	
9,100.0	8,119.0	8,151.5	8,131.5	35.5	29.7	-92.08	309.9	1,338.0	1,220.4	1,156.7	63.61	19.186	
9,200.0	8,119.0	8,152.8	8,132.8	36.3	29.7	-92.29	309.8	1,338.1	1,316.6	1,252.8	63.75	20.651	
9,300.0	8,119.0	8,154.0	8,134.1	37.1	29.7	-92.50	309.8	1,338.1	1,413.3	1,349.4	63.88	22.125	
9,400.0	8,119.0	8,155.3	8,135.3	37.9	29.8	-92.71	309.8	1,338.1	1,510.4	1,446.4	63.99	23.605	
9,500.0	8,119.0	8,156.5	8,136.6	38.8	29.8	-92.92	309.8	1,338.1	1,607.9	1,543.8	64.08	25.091	
9,600.0	8,119.0	8,157.8	8,137.8	39.8	29.8	-93.13	309.8	1,338.1	1,705.7	1,641.5	64.17	26.581	
9,700.0	8,119.0	8,159.1	8,139.1	40.8	29.8	-93.33	309.8	1,338.1	1,803.7	1,739.5	64.25	28.075	
9,800.0	8,119.0	11,643.5	9,973.1	41.8	45.9	-170.93	-1,620.8	1,299.4	1,878.6	1,842.7	35.92	52.304	
9,900.0	8,119.0	11,730.2	9,970.9	42.9	46.8	-170.96	-1,707.6	1,298.3	1,875.8	1,838.6	37.14	50.501	
10,000.0	8,119.0	11,804.2	9,969.6	44.0	47.6	-170.98	-1,781.5	1,298.1	1,874.0	1,835.6	38.33	48.896	
10,100.0	8,119.0	11,908.1	9,968.3	45.2	48.8	-170.93	-1,885.4	1,300.0	1,872.9	1,833.2	39.71	47.160	
10,200.0	8,119.0	11,996.2	9,966.7	46.3	49.8	-170.80	-1,973.4	1,304.7	1,871.9	1,830.8	41.05	45.599	
10,243.4	8,119.0	12,026.9	9,966.3	46.9	50.2	-170.75	-2,004.0	1,306.3	1,871.7	1,830.1	41.60	44.995	
10,300.0	8,119.0	12,063.7	9,966.2	47.5	50.6	-170.70	-2,040.7	1,308.3	1,872.0	1,829.7	42.30	44.254	
10,400.0	8,119.0	12,214.0	9,965.4	48.8	52.5	-170.48	-2,190.8	1,316.2	1,872.5	1,828.4	44.03	42.523	
10,500.0	8,119.0	12,291.0	9,964.2	50.0	53.4	-170.38	-2,267.7	1,319.9	1,871.6	1,826.2	45.36	41.261	
10,600.0	8,119.0	12,463.4	9,957.3	51.3	55.6	-170.24	-2,439.9	1,324.4	1,867.0	1,819.8	47.28	39.492	
10,700.0	8,119.0	12,519.3	9,955.2	52.6	56.3	-170.19	-2,495.8	1,325.8	1,863.8	1,815.4	48.47	38.452	
10,769.4	8,119.0	12,553.5	9,954.7	53.5	56.8	-170.16	-2,529.9	1,326.8	1,863.2	1,813.9	49.30	37.793	
10,800.0	8,119.0	12,576.0	9,954.8	54.0	57.0	-170.14	-2,552.4	1,327.7	1,863.3	1,813.6	49.71	37.483	
10,900.0	8,119.0	12,703.7	9,954.5	55.3	58.7	-170.09	-2,680.1	1,330.0	1,863.4	1,812.1	51.37	36.278	
11,000.0	8,119.0	12,898.1	9,948.5	56.7	61.3	-170.25	-2,874.3	1,324.9	1,859.8	1,806.4	53.40	34.827	
11,100.0	8,119.0	12,981.8	9,944.1	58.0	62.4	-170.34	-2,957.8	1,321.7	1,853.9	1,799.1	54.76	33.855	
11,200.0	8,119.0	13,050.0	9,941.5	59.4	63.3	-170.39	-3,025.9	1,320.0	1,849.7	1,793.6	56.04	33.006	
11,300.0	8,119.0	13,116.2	9,940.1	60.8	64.3	-170.42	-3,092.1	1,319.3	1,847.2	1,789.8	57.33	32.217	
11,400.0	8,119.0	13,193.4	9,939.4	62.2	65.3	-170.43	-3,169.3	1,319.2	1,846.1	1,787.4	58.71	31.443	
11,445.4	8,119.0	13,230.1	9,939.3	62.9	65.8	-170.43	-3,206.0	1,319.2	1,846.0	1,786.7	59.35	31.103	
11,500.0	8,119.0	13,268.2	9,939.5	63.6	66.4	-170.44	-3,244.1	1,319.2	1,846.3	1,786.2	60.09	30.727	
11,600.0	8,119.0	13,336.9	9,940.7	65.1	67.3	-170.45	-3,312.8	1,319.5	1,848.0	1,786.6	61.43	30.083	
11,700.0	8,119.0	13,409.2	9,943.2	66.5	68.3	-170.48	-3,385.1	1,319.6	1,851.3	1,788.5	62.80	29.481	
11,800.0	8,119.0	13,522.8	9,947.6	68.0	70.0	-170.48	-3,498.6	1,320.9	1,855.2	1,790.8	64.42	28.801	
11,900.0	8,119.0	13,748.3	9,951.3	69.4	73.2	-170.42	-3,723.8	1,324.6	1,859.3	1,792.6	66.74	27.859	
12,000.0	8,119.0	13,840.3	9,948.0	70.9	74.5	-170.44	-3,815.8	1,324.2	1,855.7	1,787.4	68.23	27.195	
12,100.0	8,119.0	13,917.3	9,946.5	72.4	75.7	-170.46	-3,892.8	1,323.7	1,853.4	1,783.8	69.64	26.614	
12,200.0	8,119.0	12,200.0	9,944.0	73.9	50.8	-170.53	-4,016.5	1,321.5	1,851.1	1,793.9	57.23	32.347	
12,300.0	8,119.0	14,166.4	9,939.3	75.4	79.3	-170.63	-4,141.7	1,318.2	1,846.7	1,773.7	72.98	25.305	
12,400.0	8,119.0	14,306.8	9,932.9	76.9	81.4	-170.74	-4,281.9	1,314.4	1,841.9	1,767.2	74.73	24.648	
12,500.0	8,119.0	14,409.9	9,925.1	78.4	82.9	-170.67	-4,384.6	1,315.9	1,834.5	1,758.2	76.33	24.033	
12,600.0	8,119.0	14,480.8	9,920.6	79.9	84.0	-170.61	-4,455.4	1,317.5	1,828.5	1,750.8	77.75	23.517	
12,700.0	8,119.0	14,575.4	9,916.6	81.4	85.4	-170.64	-4,549.9	1,316.4	1,824.0	1,744.8	79.27	23.009	
12,800.0	8,119.0	14,675.0	9,911.6	82.9	86.9	-170.77	-4,649.3	1,311.9	1,818.3	1,737.5	80.78	22.510	
12,900.0	8,119.0	14,728.0	9,910.0	84.5	87.6	-170.85	-4,702.2	1,309.5	1,814.6	1,732.6	82.03	22.121	
13,000.0	8,119.0	14,797.9	9,909.4	86.0	88.7	-170.96	-4,772.1	1,306.4	1,813.0	1,729.6	83.36	21.749	
13,036.4	8,119.0	14,823.0	9,909.5	86.6	89.1	-171.00	-4,797.1	1,305.3	1,812.9	1,729.1	83.84	21.623	
13,100.0	8,119.0	14,867.2	9,910.1	87.5	89.7	-171.06	-4,841.3	1,303.8	1,813.3	1,728.6	84.69	21.412	
13,200.0	8,119.0	14,938.8	9,911.6	89.1	90.8	-171.11	-4,912.8	1,302.8	1,815.1	1,729.1	86.04	21.096	
13,300.0	8,119.0	13,300.0	9,913.9	90.6	65.5	-170.93	-5,040.7	1,309.6	1,817.8	1,743.7	74.08	24.539	
13,400.0	8,119.0	15,150.3	9,913.5	92.2	94.1	-170.77	-5,123.9	1,315.1	1,818.4	1,729.0	89.48	20.322	
13,500.0	8,119.0	15,202.0	9,915.4	93.7	94.9	-170.70	-5,175.5	1,318.1	1,822.4	1,731.6	90.77	20.076	
13,600.0	8,119.0	15,317.6	9,921.3	95.3	96.7	-170.65	-5,290.8	1,321.2	1,828.0	1,735.5	92.51	19.760	
13,700.0	8,119.0	15,565.1	9,924.9	96.8	100.5	-170.54	-5,537.9	1,326.7	1,832.4	1,737.3	95.10	19.268	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #124H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 216-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,800.0	8,119.0	15,624.3	9,922.5	98.4	101.4	-170.46	-5,597.0	1,329.4	1,829.2	1,732.7	96.52	18.951	
13,866.9	8,119.0	15,659.5	9,921.8	99.4	102.0	-170.40	-5,632.1	1,331.5	1,828.4	1,731.0	97.44	18.764	
13,900.0	8,119.0	15,677.0	9,921.6	100.0	102.2	-170.36	-5,649.6	1,332.7	1,828.5	1,730.6	97.90	18.678	
14,000.0	8,119.0	15,717.7	9,922.0	101.5	102.9	-170.27	-5,690.1	1,336.0	1,830.7	1,731.6	99.16	18.463	
14,100.0	8,119.0	15,923.3	9,917.6	103.1	106.1	-169.75	-5,894.6	1,353.1	1,828.2	1,726.3	101.83	17.953	
14,200.0	8,119.0	16,106.9	9,909.9	104.7	109.0	-169.41	-6,077.6	1,363.9	1,825.7	1,721.6	104.12	17.536	
14,300.0	8,119.0	16,162.7	9,906.3	106.2	109.9	-169.27	-6,133.1	1,367.9	1,820.6	1,715.0	105.65	17.233	
14,400.0	8,119.0	16,239.2	9,902.7	107.8	111.1	-169.09	-6,209.3	1,373.5	1,817.3	1,709.9	107.31	16.935	
14,500.0	8,119.0	16,384.9	9,893.8	109.4	113.4	-168.74	-6,354.3	1,384.1	1,812.2	1,702.7	109.46	16.556	
14,600.0	8,119.0	16,451.8	9,890.3	111.0	114.4	-168.63	-6,421.1	1,387.2	1,807.9	1,696.8	111.04	16.281	
14,700.0	8,119.0	16,515.1	9,888.5	112.6	115.4	-168.57	-6,484.3	1,389.1	1,805.5	1,693.0	112.55	16.042	
14,800.0	8,119.0	14,800.0	9,886.4	114.2	88.4	-168.51	-6,592.1	1,391.2	1,803.9	1,704.4	99.47	18.135	
14,897.2	8,119.0	16,688.3	9,885.3	115.7	118.2	-168.48	-6,657.4	1,392.3	1,802.7	1,686.9	115.74	15.575	
14,900.0	8,119.0	16,689.8	9,885.3	115.7	118.2	-168.48	-6,658.9	1,392.3	1,802.7	1,686.9	115.78	15.570	
15,000.0	8,119.0	16,857.8	9,882.5	117.3	120.8	-168.43	-6,826.9	1,394.3	1,801.4	1,683.6	117.82	15.290	
15,100.0	8,119.0	16,933.8	9,879.8	118.9	122.0	-168.39	-6,902.8	1,395.4	1,798.1	1,678.8	119.39	15.061	
15,200.0	8,119.0	16,991.5	9,879.0	120.5	123.0	-168.37	-6,960.5	1,396.4	1,797.0	1,676.1	120.84	14.871	
15,200.8	8,119.0	16,991.9	9,879.0	120.5	123.0	-168.37	-6,960.9	1,396.4	1,797.0	1,676.1	120.85	14.870	
15,300.0	8,119.0	17,088.0	9,879.1	122.1	124.5	-168.33	-7,057.0	1,398.3	1,797.3	1,674.8	122.50	14.671	
15,400.0	8,119.0	17,187.4	9,879.1	123.7	126.1	-168.31	-7,156.3	1,399.4	1,797.5	1,673.3	124.17	14.476	
15,500.0	8,119.0	17,302.0	9,879.1	125.3	127.9	-168.34	-7,270.9	1,399.2	1,797.3	1,671.5	125.87	14.279	
15,600.0	8,119.0	17,388.0	9,878.8	126.9	129.2	-168.34	-7,357.0	1,399.6	1,797.0	1,669.5	127.44	14.101	
15,606.5	8,119.0	17,397.7	9,878.8	127.0	129.4	-168.34	-7,366.7	1,399.7	1,797.0	1,669.4	127.56	14.087	
15,700.0	8,119.0	17,462.0	9,879.2	128.5	130.4	-168.31	-7,430.9	1,400.9	1,797.7	1,668.8	128.95	13.941	
15,800.0	8,119.0	17,560.2	9,880.9	130.1	132.0	-168.29	-7,529.2	1,402.5	1,799.7	1,669.0	130.62	13.778	
15,900.0	8,119.0	17,648.2	9,882.8	131.7	133.4	-168.32	-7,617.1	1,402.4	1,801.6	1,669.5	132.15	13.633	
16,000.0	8,119.0	17,800.4	9,884.1	133.3	135.8	-168.31	-7,769.3	1,403.8	1,802.5	1,668.4	134.14	13.438	
16,100.0	8,119.0	17,913.4	9,883.2	134.9	137.6	-168.28	-7,882.3	1,405.6	1,802.0	1,666.1	135.91	13.259	
16,200.0	8,119.0	18,034.7	9,880.8	136.5	139.5	-168.27	-8,003.6	1,406.0	1,799.9	1,662.3	137.67	13.074	
16,300.0	8,119.0	18,138.7	9,878.6	138.1	141.2	-168.33	-8,107.5	1,404.2	1,797.4	1,658.1	139.27	12.906	
16,391.6	8,119.0	18,182.9	9,878.0	139.6	141.9	-168.34	-8,151.7	1,403.8	1,796.1	1,655.5	140.52	12.782	
16,400.0	8,119.0	18,186.5	9,878.0	139.7	142.0	-168.35	-8,155.3	1,403.8	1,796.1	1,655.4	140.63	12.772	
16,500.0	8,119.0	18,243.0	9,879.6	141.4	142.9	-168.39	-8,211.7	1,403.1	1,798.1	1,656.2	141.93	12.669	
16,600.0	8,119.0	18,357.5	9,883.8	143.0	144.7	-168.48	-8,326.2	1,401.5	1,801.4	1,657.9	143.56	12.548	
16,700.0	8,119.0	18,419.4	9,886.1	144.6	145.7	-168.51	-8,388.0	1,401.4	1,804.7	1,659.9	144.88	12.457	
16,800.0	8,119.0	18,515.5	9,890.3	146.2	147.2	-168.53	-8,484.0	1,402.1	1,809.0	1,662.5	146.47	12.350	
16,900.0	8,119.0	18,681.3	9,893.3	147.8	149.9	-168.49	-8,649.7	1,405.2	1,810.8	1,662.1	148.67	12.180	
17,000.0	8,119.0	18,790.6	9,892.9	149.4	151.6	-168.37	-8,759.0	1,409.6	1,811.1	1,660.5	150.55	12.030	
17,100.0	8,119.0	18,882.5	9,892.5	151.0	153.1	-168.29	-8,850.8	1,412.7	1,811.3	1,659.0	152.27	11.895	
17,200.0	8,119.0	18,958.9	9,893.4	152.7	154.3	-168.31	-8,927.2	1,412.7	1,812.4	1,658.6	153.75	11.788	
17,300.0	8,119.0	19,032.3	9,895.5	154.3	155.5	-168.34	-9,000.6	1,412.5	1,815.0	1,659.8	155.16	11.697	
17,400.0	8,119.0	19,107.0	9,898.5	155.9	156.7	-168.35	-9,075.2	1,413.2	1,818.9	1,662.3	156.59	11.616	
17,500.0	8,119.0	19,177.3	9,902.2	157.5	157.9	-168.35	-9,145.4	1,414.4	1,824.4	1,666.4	157.96	11.549	
17,600.0	8,119.0	19,338.4	9,909.9	159.1	160.5	-168.42	-9,306.2	1,414.6	1,829.0	1,668.9	160.06	11.427	
17,700.0	8,119.0	19,457.4	9,913.7	160.7	162.4	-168.58	-9,425.1	1,410.9	1,831.4	1,669.7	161.62	11.331	
17,800.0	8,119.0	19,697.4	9,911.5	162.4	166.2	-168.93	-9,664.8	1,400.2	1,829.5	1,666.1	163.40	11.196	
17,900.0	8,119.0	19,821.7	9,904.5	164.0	168.2	-169.12	-9,788.8	1,393.4	1,822.7	1,657.9	164.81	11.059	
18,000.0	8,119.0	19,859.0	9,902.1	165.6	168.7	-169.17	-9,825.9	1,391.7	1,816.7	1,650.5	166.24	10.928	
18,100.0	8,119.0	19,909.0	9,900.5	167.2	169.6	-169.22	-9,875.9	1,390.2	1,813.6	1,646.0	167.60	10.821	
18,122.5	8,119.0	19,915.9	9,900.5	167.6	169.7	-169.22	-9,882.8	1,390.1	1,813.5	1,645.7	167.87	10.803	
18,200.0	8,119.0	19,954.0	9,901.5	168.9	170.3	-169.24	-9,920.9	1,389.8	1,814.8	1,646.0	168.84	10.749	
18,300.0	8,119.0	19,996.2	9,903.7	170.5	171.0	-169.26	-9,963.0	1,390.0	1,819.1	1,649.2	169.94	10.705	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #124H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 216-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,400.0	8,119.0	20,070.4	9,908.1	172.1	172.2	-169.27	-10,037.1	1,390.8	1,825.1	1,653.8	171.29	10.655	
18,500.0	8,119.0	20,142.0	9,913.6	173.7	173.3	-169.28	-10,108.4	1,392.0	1,832.8	1,660.2	172.59	10.620	
18,600.0	8,119.0	20,295.9	9,923.3	175.4	175.8	-169.28	-10,262.0	1,394.8	1,839.1	1,664.2	174.85	10.518	
18,700.0	8,119.0	20,622.1	9,921.7	177.0	181.1	-169.36	-10,587.8	1,393.7	1,838.7	1,661.1	177.60	10.353	
18,800.0	8,119.0	20,721.4	9,914.7	178.6	182.7	-169.31	-10,686.8	1,394.5	1,831.8	1,652.5	179.31	10.216	
18,900.0	8,119.0	20,782.5	9,911.1	180.2	183.7	-169.28	-10,747.8	1,395.2	1,826.1	1,645.1	180.94	10.092	
19,000.0	8,119.0	20,893.8	9,905.7	181.9	185.5	-169.23	-10,859.0	1,396.3	1,821.4	1,638.8	182.68	9.971	
19,100.0	8,119.0	20,936.2	9,903.8	183.5	186.2	-169.21	-10,901.4	1,396.8	1,817.5	1,633.3	184.18	9.868	
19,165.5	8,119.0	20,960.6	9,903.5	184.6	186.6	-169.21	-10,925.8	1,397.1	1,816.7	1,631.6	185.06	9.817	
19,200.0	8,119.0	20,997.0	9,904.1	185.1	187.2	-169.20	-10,962.1	1,397.6	1,817.3	1,631.7	185.65	9.789	
19,201.9	8,119.0	20,997.0	9,904.1	185.2	187.2	-169.20	-10,962.1	1,397.6	1,817.3	1,631.7	185.67	9.788	
19,300.0	8,119.0	21,030.2	9,905.2	186.8	187.7	-169.20	-10,995.3	1,398.0	1,819.6	1,632.8	186.79	9.742	
19,400.0	8,119.0	21,125.2	9,908.8	188.4	189.2	-169.20	-11,090.2	1,399.3	1,823.4	1,635.0	188.40	9.679	
19,500.0	8,119.0	21,213.9	9,912.0	190.0	190.7	-169.18	-11,178.8	1,400.9	1,827.3	1,637.4	189.96	9.619	
19,600.0	8,119.0	19,600.0	9,916.5	191.6	164.6	-169.23	-11,409.9	1,401.8	1,830.5	1,653.2	177.29	10.325	
19,700.0	8,119.0	21,567.2	9,912.1	193.3	196.4	-169.28	-11,531.8	1,399.9	1,826.4	1,632.4	194.06	9.411	
19,800.0	8,119.0	21,605.6	9,911.4	194.9	197.0	-169.29	-11,570.2	1,399.6	1,824.2	1,628.8	195.44	9.334	
19,816.5	8,119.0	21,612.1	9,911.4	195.2	197.1	-169.29	-11,576.8	1,399.6	1,824.2	1,628.5	195.65	9.324	
19,900.0	8,119.0	21,660.0	9,912.4	196.5	197.9	-169.30	-11,624.6	1,399.7	1,825.5	1,628.7	196.75	9.278	
20,000.0	8,119.0	21,769.3	9,915.3	198.2	199.7	-169.33	-11,733.9	1,400.1	1,828.1	1,629.7	198.43	9.213	
20,100.0	8,119.0	21,865.8	9,916.7	199.8	201.3	-169.33	-11,830.3	1,400.8	1,829.6	1,629.5	200.05	9.146	
20,200.0	8,119.0	21,992.9	9,918.7	201.4	203.3	-169.30	-11,957.5	1,402.8	1,831.6	1,629.6	201.93	9.070	
20,296.4	8,119.0	22,092.1	9,917.3	203.0	204.9	-169.23	-12,056.6	1,405.6	1,830.6	1,626.9	203.68	8.988	
20,300.0	8,119.0	22,094.2	9,917.3	203.1	205.0	-169.22	-12,058.7	1,405.7	1,830.6	1,626.9	203.74	8.985	
20,400.0	8,119.0	22,168.5	9,917.1	204.7	206.2	-169.05	-12,132.8	1,411.8	1,831.7	1,626.2	205.53	8.912	
20,500.0	8,119.0	22,316.8	9,916.0	206.3	208.6	-168.73	-12,280.7	1,422.8	1,832.5	1,624.4	208.10	8.806	
20,606.7	8,119.0	22,412.0	9,913.5	208.1	210.2	-168.53	-12,375.5	1,429.5	1,831.2	1,621.0	210.20	8.711	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #131H - Wellbore #1 - Actual Surveys — **Offset Site Error:** 0.0 usft

Survey Program: 227-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	-90.36	-17.8	-2,861.4	2,861.5				
100.0	100.0	101.9	101.9	0.1	0.2	-90.35	-17.6	-2,861.4	2,861.4	2,861.2	0.29	9,941.101	
200.0	200.0	202.8	202.8	0.5	0.3	-90.34	-17.1	-2,861.3	2,861.4	2,860.6	0.80	3,557.168	
300.0	300.0	311.0	311.0	0.8	0.7	-90.33	-16.3	-2,861.2	2,861.2	2,859.7	1.50	1,905.569	
400.0	400.0	421.5	421.5	1.2	1.1	-90.31	-15.3	-2,860.6	2,860.7	2,858.4	2.26	1,268.170	
500.0	500.0	516.3	516.2	1.6	1.4	-90.29	-14.4	-2,860.0	2,860.1	2,857.1	2.95	968.512	
600.0	600.0	612.4	612.4	1.9	1.7	-90.27	-13.6	-2,859.6	2,859.6	2,856.0	3.66	782.256	
700.0	700.0	709.2	709.1	2.3	2.1	-90.26	-12.9	-2,859.2	2,859.3	2,854.9	4.36	655.681	
800.0	800.0	805.1	805.0	2.6	2.4	-90.25	-12.3	-2,859.0	2,859.1	2,854.0	5.06	564.743	
862.3	862.3	863.4	863.3	2.9	2.6	-90.24	-11.8	-2,859.0	2,859.0	2,853.5	5.49	520.365	CC
900.0	900.0	898.6	898.6	3.0	2.8	-90.23	-11.4	-2,859.0	2,859.0	2,853.3	5.76	496.776	
1,000.0	1,000.0	994.4	994.3	3.4	3.1	-90.21	-10.4	-2,859.2	2,859.2	2,852.8	6.46	442.908	ES
1,100.0	1,100.0	1,094.6	1,094.6	3.7	3.5	-164.60	-9.2	-2,859.4	2,861.1	2,854.0	7.17	399.301	
1,200.0	1,199.8	1,096.0	1,096.0	4.1	3.5	-164.56	-9.1	-2,859.4	2,868.1	2,860.6	7.52	381.457	
1,300.0	1,299.5	1,096.0	1,096.0	4.4	3.5	-164.49	-9.1	-2,859.4	2,881.8	2,874.0	7.87	366.375	
1,400.0	1,398.7	1,096.0	1,096.0	4.8	3.5	-164.38	-9.1	-2,859.4	2,902.3	2,894.1	8.21	353.619	
1,500.0	1,497.5	1,096.0	1,096.0	5.2	3.5	-164.23	-9.1	-2,859.4	2,929.2	2,920.7	8.54	342.983	
1,600.0	1,595.9	1,096.0	1,096.0	5.5	3.5	-164.23	-9.1	-2,859.4	2,960.9	2,952.0	8.86	334.221	
1,700.0	1,694.4	1,096.0	1,096.0	5.9	3.5	-164.23	-9.1	-2,859.4	2,995.6	2,986.4	9.16	326.928	
1,800.0	1,792.9	1,096.0	1,096.0	6.3	3.5	-164.23	-9.1	-2,859.4	3,033.1	3,023.7	9.46	320.777	
1,900.0	1,891.4	1,096.0	1,096.0	6.8	3.5	-164.23	-9.1	-2,859.4	3,073.5	3,063.8	9.74	315.653	
2,000.0	1,989.9	1,096.0	1,096.0	7.2	3.5	-164.23	-9.1	-2,859.4	3,116.6	3,106.6	10.01	311.453	
2,100.0	2,088.4	1,096.0	1,096.0	7.6	3.5	-164.23	-9.1	-2,859.4	3,162.2	3,151.9	10.26	308.082	
2,200.0	2,186.8	1,096.0	1,096.0	8.0	3.5	-164.23	-9.1	-2,859.4	3,210.3	3,199.8	10.51	305.458	
2,300.0	2,285.3	1,096.0	1,096.0	8.5	3.5	-164.23	-9.1	-2,859.4	3,260.8	3,250.0	10.74	303.507	
2,400.0	2,383.8	1,096.0	1,096.0	8.9	3.5	-164.23	-9.1	-2,859.4	3,313.5	3,302.5	10.97	302.163	
2,500.0	2,482.3	1,096.0	1,096.0	9.3	3.5	-164.23	-9.1	-2,859.4	3,368.3	3,357.2	11.18	301.368	
2,600.0	2,580.8	1,096.0	1,096.0	9.8	3.5	-164.23	-9.1	-2,859.4	3,425.2	3,413.8	11.38	301.068	
2,700.0	2,679.2	1,096.0	1,096.0	10.2	3.5	-164.23	-9.1	-2,859.4	3,484.1	3,472.5	11.57	301.218	
2,800.0	2,777.7	1,096.0	1,096.0	10.6	3.5	-164.23	-9.1	-2,859.4	3,544.7	3,533.0	11.75	301.775	
2,900.0	2,876.2	1,096.0	1,096.0	11.1	3.5	-164.23	-9.1	-2,859.4	3,607.2	3,595.3	11.92	302.702	
3,000.0	2,974.7	1,096.0	1,096.0	11.5	3.5	-164.23	-9.1	-2,859.4	3,671.3	3,659.2	12.08	303.965	
3,100.0	3,073.2	1,096.0	1,096.0	11.9	3.5	-164.23	-9.1	-2,859.4	3,737.0	3,724.7	12.23	305.533	
3,200.0	3,171.6	1,096.0	1,096.0	12.4	3.5	-164.23	-9.1	-2,859.4	3,804.1	3,791.8	12.38	307.378	
3,300.0	3,270.1	1,096.0	1,096.0	12.8	3.5	-164.23	-9.1	-2,859.4	3,872.7	3,860.2	12.51	309.477	
3,400.0	3,368.6	1,096.0	1,096.0	13.3	3.5	-164.23	-9.1	-2,859.4	3,942.6	3,930.0	12.64	311.804	
3,500.0	3,467.1	1,096.0	1,096.0	13.7	3.5	-164.23	-9.1	-2,859.4	4,013.8	4,001.1	12.77	314.340	
3,600.0	3,565.6	1,096.0	1,096.0	14.2	3.5	-164.23	-9.1	-2,859.4	4,086.3	4,073.4	12.89	317.066	
3,700.0	3,664.0	1,096.0	1,096.0	14.6	3.5	-164.23	-9.1	-2,859.4	4,159.8	4,146.8	13.00	319.963	
3,800.0	3,762.5	1,096.0	1,096.0	15.1	3.5	-164.23	-9.1	-2,859.4	4,234.5	4,221.3	13.11	323.015	
3,900.0	3,861.0	1,096.0	1,096.0	15.5	3.5	-164.23	-9.1	-2,859.4	4,310.1	4,296.9	13.21	326.206	
4,000.0	3,959.5	1,096.0	1,096.0	16.0	3.5	-164.23	-9.1	-2,859.4	4,386.8	4,373.4	13.31	329.524	
4,100.0	4,058.0	1,096.0	1,096.0	16.4	3.5	-164.23	-9.1	-2,859.4	4,464.3	4,450.9	13.41	332.954	
4,200.0	4,156.4	1,096.0	1,096.0	16.8	3.5	-164.23	-9.1	-2,859.4	4,542.8	4,529.3	13.50	336.484	
4,300.0	4,254.9	1,096.0	1,096.0	17.3	3.5	-164.23	-9.1	-2,859.4	4,622.0	4,608.4	13.59	340.102	
4,400.0	4,353.4	1,096.0	1,096.0	17.7	3.5	-164.23	-9.1	-2,859.4	4,702.1	4,688.4	13.68	343.798	
4,500.0	4,451.9	1,096.0	1,096.0	18.2	3.5	-164.23	-9.1	-2,859.4	4,782.9	4,769.2	13.76	347.560	
4,600.0	4,550.4	1,096.0	1,096.0	18.6	3.5	-164.23	-9.1	-2,859.4	4,864.4	4,850.6	13.84	351.380	
4,700.0	4,648.9	1,096.0	1,096.0	19.1	3.5	-164.23	-9.1	-2,859.4	4,946.7	4,932.7	13.92	355.248	
4,800.0	4,747.3	1,096.0	1,096.0	19.5	3.5	-164.23	-9.1	-2,859.4	5,029.5	5,015.5	14.00	359.154	
4,900.0	4,845.8	1,096.0	1,096.0	20.0	3.5	-164.23	-9.1	-2,859.4	5,113.0	5,098.9	14.08	363.091	
5,000.0	4,944.3	1,096.0	1,096.0	20.4	3.5	-164.23	-9.1	-2,859.4	5,197.0	5,182.9	14.16	367.049	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #131H - Wellbore #1 - Actual Surveys

Offset Site Error: 0.0 usft

Survey Program: 227-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	1,096.0	1,096.0	20.9	3.5	-164.23	-9.1	-2,859.4	5,281.6	5,267.4	14.24	371.022	
5,200.0	5,141.3	1,096.0	1,096.0	21.3	3.5	-164.23	-9.1	-2,859.4	5,366.8	5,352.4	14.31	375.002	
5,300.0	5,239.7	1,096.0	1,096.0	21.8	3.5	-164.23	-9.1	-2,859.4	5,452.4	5,438.0	14.39	378.981	
5,400.0	5,338.2	1,096.0	1,096.0	22.2	3.5	-164.23	-9.1	-2,859.4	5,538.5	5,524.0	14.46	382.952	
5,500.0	5,436.7	1,096.0	1,096.0	22.7	3.5	-164.23	-9.1	-2,859.4	5,625.1	5,610.6	14.54	386.909	
5,600.0	5,535.2	1,096.0	1,096.0	23.1	3.5	-164.23	-9.1	-2,859.4	5,712.1	5,697.5	14.61	390.846	
5,700.0	5,633.7	1,096.0	1,096.0	23.6	3.5	-164.23	-9.1	-2,859.4	5,799.5	5,784.9	14.69	394.755	
5,800.0	5,732.1	1,096.0	1,096.0	24.0	3.5	-164.23	-9.1	-2,859.4	5,887.4	5,872.6	14.77	398.631	
5,900.0	5,830.6	1,096.0	1,096.0	24.5	3.5	-164.23	-9.1	-2,859.4	5,975.6	5,960.8	14.85	402.468	
6,000.0	5,929.1	1,096.0	1,096.0	24.9	3.5	-164.23	-9.1	-2,859.4	6,064.2	6,049.3	14.93	406.261	
6,100.0	6,027.6	1,096.0	1,096.0	25.4	3.5	-164.23	-9.1	-2,859.4	6,153.1	6,138.1	15.01	410.004	
6,200.0	6,126.1	1,096.0	1,096.0	25.8	3.5	-164.23	-9.1	-2,859.4	6,242.4	6,227.3	15.09	413.693	
6,300.0	6,224.5	1,096.0	1,096.0	26.3	3.5	-164.23	-9.1	-2,859.4	6,332.0	6,316.8	15.17	417.321	
6,400.0	6,323.0	1,096.0	1,096.0	26.7	3.5	-164.23	-9.1	-2,859.4	6,421.9	6,406.6	15.26	420.885	
6,500.0	6,421.5	1,096.0	1,096.0	27.2	3.5	-164.23	-9.1	-2,859.4	6,512.1	6,496.7	15.34	424.380	
6,600.0	6,520.0	1,096.0	1,096.0	27.6	3.5	-164.23	-9.1	-2,859.4	6,602.5	6,587.1	15.43	427.801	
6,700.0	6,618.5	1,096.0	1,096.0	28.1	3.5	-164.23	-9.1	-2,859.4	6,693.3	6,677.8	15.52	431.146	
6,800.0	6,716.9	1,096.0	1,096.0	28.5	3.5	-164.23	-9.1	-2,859.4	6,784.3	6,768.7	15.62	434.409	
6,900.0	6,815.4	1,096.0	1,096.0	29.0	3.5	-164.23	-9.1	-2,859.4	6,875.5	6,859.8	15.71	437.587	
6,981.8	6,896.0	1,096.0	1,096.0	29.4	3.5	-164.23	-9.1	-2,859.4	6,950.4	6,934.6	15.79	440.123	
7,000.0	6,913.9	1,096.0	1,096.0	29.5	3.5	-164.50	-9.1	-2,859.4	6,967.0	6,951.2	15.81	440.694	
7,100.0	7,012.9	1,096.0	1,096.0	29.9	3.5	-165.87	-9.1	-2,859.4	7,057.6	7,041.7	15.90	443.791	
7,200.0	7,112.3	1,096.0	1,096.0	30.3	3.5	-167.01	-9.1	-2,859.4	7,146.5	7,130.5	15.99	446.865	
7,300.0	7,212.2	1,096.0	1,096.0	30.6	3.5	-167.98	-9.1	-2,859.4	7,233.8	7,217.7	16.08	449.862	
7,381.8	7,294.0	1,096.0	1,096.0	30.9	3.5	-94.24	-9.1	-2,859.4	7,303.9	7,287.7	16.15	452.322	
7,400.0	7,312.2	1,096.0	1,096.0	30.9	3.5	-94.24	-9.1	-2,859.4	7,319.3	7,303.1	16.16	452.914	
7,500.0	7,412.2	1,096.0	1,096.0	31.2	3.5	-94.24	-9.1	-2,859.4	7,404.4	7,388.2	16.25	455.625	
7,600.0	7,512.2	1,096.0	1,096.0	31.5	3.5	-94.24	-9.1	-2,859.4	7,489.9	7,473.6	16.35	458.228	
7,633.8	7,546.0	1,096.0	1,096.0	31.6	3.5	-94.24	-9.1	-2,859.4	7,518.9	7,502.5	16.38	459.084	
7,650.0	7,562.2	1,096.0	1,096.0	31.7	3.5	83.40	-9.1	-2,859.4	7,532.8	7,516.4	16.39	459.516	
7,700.0	7,612.0	1,096.0	1,096.0	31.8	3.5	75.33	-9.1	-2,859.4	7,575.5	7,559.1	16.43	460.984	
7,750.0	7,661.4	1,096.0	1,096.0	31.9	3.5	67.85	-9.1	-2,859.4	7,617.7	7,601.3	16.47	462.598	
7,800.0	7,709.8	1,096.0	1,096.0	32.0	3.5	61.17	-9.1	-2,859.4	7,659.2	7,642.7	16.49	464.355	
7,850.0	7,757.1	1,096.0	1,096.0	32.1	3.5	55.36	-9.1	-2,859.4	7,699.5	7,683.0	16.51	466.246	
7,900.0	7,802.7	1,096.0	1,096.0	32.2	3.5	50.41	-9.1	-2,859.4	7,738.4	7,721.9	16.53	468.251	
7,950.0	7,846.4	1,096.0	1,096.0	32.3	3.5	46.23	-9.1	-2,859.4	7,775.7	7,759.2	16.53	470.337	
8,000.0	7,887.7	1,096.0	1,096.0	32.4	3.5	42.72	-9.1	-2,859.4	7,811.1	7,794.6	16.53	472.459	
8,050.0	7,926.5	1,096.0	1,096.0	32.4	3.5	39.79	-9.1	-2,859.4	7,844.3	7,827.8	16.53	474.559	
8,100.0	7,962.4	1,096.0	1,096.0	32.5	3.5	37.35	-9.1	-2,859.4	7,875.1	7,858.6	16.52	476.569	
8,150.0	7,995.1	1,096.0	1,096.0	32.5	3.5	35.32	-9.1	-2,859.4	7,903.4	7,886.8	16.52	478.407	
8,200.0	8,024.4	1,096.0	1,096.0	32.6	3.5	33.65	-9.1	-2,859.4	7,928.8	7,912.3	16.52	479.986	
8,250.0	8,050.1	1,096.0	1,096.0	32.6	3.5	32.27	-9.1	-2,859.4	7,951.3	7,934.8	16.52	481.214	
8,300.0	8,071.9	1,096.0	1,096.0	32.7	3.5	31.17	-9.1	-2,859.4	7,970.8	7,954.2	16.54	482.000	
8,350.0	8,089.7	1,096.0	1,096.0	32.7	3.5	30.29	-9.1	-2,859.4	7,987.0	7,970.4	16.56	482.261	
8,400.0	8,103.4	1,096.0	1,096.0	32.7	3.5	29.62	-9.1	-2,859.4	7,999.9	7,983.3	16.60	481.925	
8,450.0	8,112.8	1,096.0	1,096.0	32.8	3.5	29.15	-9.1	-2,859.4	8,009.4	7,992.7	16.65	480.940	
8,500.0	8,118.0	1,096.0	1,096.0	32.9	3.5	28.85	-9.1	-2,859.4	8,015.4	7,998.7	16.72	479.276	
8,533.8	8,119.0	1,096.0	1,096.0	33.0	3.5	28.75	-9.1	-2,859.4	8,017.5	8,000.8	16.78	477.775	
8,600.0	8,119.0	1,096.0	1,096.0	33.1	3.5	28.75	-9.1	-2,859.4	8,020.4	8,003.4	16.92	474.075	
8,700.0	8,119.0	1,096.0	1,096.0	33.4	3.5	28.75	-9.1	-2,859.4	8,025.7	8,008.5	17.18	467.041	
8,800.0	8,119.0	1,096.0	1,096.0	33.8	3.5	28.75	-9.1	-2,859.4	8,032.2	8,014.7	17.52	458.575	
8,900.0	8,119.0	1,096.0	1,096.0	34.3	3.5	28.75	-9.1	-2,859.4	8,040.0	8,022.1	17.91	448.976	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #131H - Wellbore #1 - Actual Surveys

Offset Site Error: 0.0 usft

Survey Program: 227-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,000.0	8,119.0	1,096.0	1,096.0	34.9	3.5	28.75	-9.1	-2,859.4	8,049.0	8,030.7	18.35	438.540	
9,100.0	8,119.0	1,096.0	1,096.0	35.5	3.5	28.75	-9.1	-2,859.4	8,059.3	8,040.4	18.85	427.544	
9,200.0	8,119.0	1,096.0	1,096.0	36.3	3.5	28.75	-9.1	-2,859.4	8,070.7	8,051.3	19.39	416.229	
9,300.0	8,119.0	1,096.0	1,096.0	37.1	3.5	28.75	-9.1	-2,859.4	8,083.4	8,063.5	19.97	404.803	
9,400.0	8,119.0	1,096.0	1,096.0	37.9	3.5	28.75	-9.1	-2,859.4	8,097.3	8,076.8	20.58	393.431	
9,500.0	8,119.0	1,096.0	1,096.0	38.8	3.5	28.75	-9.1	-2,859.4	8,112.5	8,091.2	21.22	382.245	
9,600.0	8,119.0	1,096.0	1,096.0	39.8	3.5	28.75	-9.1	-2,859.4	8,128.8	8,106.9	21.89	371.341	
9,700.0	8,119.0	1,096.0	1,096.0	40.8	3.5	28.75	-9.1	-2,859.4	8,146.3	8,123.7	22.58	360.791	
9,800.0	8,119.0	1,096.0	1,096.0	41.8	3.5	28.75	-9.1	-2,859.4	8,165.0	8,141.7	23.29	350.642	
9,900.0	8,119.0	1,096.0	1,096.0	42.9	3.5	28.75	-9.1	-2,859.4	8,184.9	8,160.9	24.01	340.924	
10,000.0	8,119.0	1,096.0	1,096.0	44.0	3.5	28.75	-9.1	-2,859.4	8,205.9	8,181.2	24.74	331.652	
10,100.0	8,119.0	1,096.0	1,096.0	45.2	3.5	28.75	-9.1	-2,859.4	8,228.2	8,202.7	25.49	322.832	
10,200.0	8,119.0	1,096.0	1,096.0	46.3	3.5	28.75	-9.1	-2,859.4	8,251.5	8,225.3	26.24	314.459	
10,300.0	8,119.0	1,096.0	1,096.0	47.5	3.5	28.75	-9.1	-2,859.4	8,276.0	8,249.0	27.00	306.525	
10,400.0	8,119.0	1,096.0	1,096.0	48.8	3.5	28.75	-9.1	-2,859.4	8,301.7	8,273.9	27.76	299.017	
10,500.0	8,119.0	1,096.0	1,096.0	50.0	3.5	28.75	-9.1	-2,859.4	8,328.4	8,299.9	28.53	291.920	
10,600.0	8,119.0	1,096.0	1,096.0	51.3	3.5	28.75	-9.1	-2,859.4	8,356.3	8,327.0	29.30	285.216	
10,700.0	8,119.0	1,096.0	1,096.0	52.6	3.5	28.75	-9.1	-2,859.4	8,385.3	8,355.2	30.07	278.886	
10,800.0	8,119.0	1,096.0	1,096.0	54.0	3.5	28.75	-9.1	-2,859.4	8,415.4	8,384.5	30.84	272.912	
10,900.0	8,119.0	1,096.0	1,096.0	55.3	3.5	28.75	-9.1	-2,859.4	8,446.5	8,414.9	31.60	267.277	
11,000.0	8,119.0	1,096.0	1,096.0	56.7	3.5	28.75	-9.1	-2,859.4	8,478.7	8,446.3	32.37	261.960	
11,100.0	8,119.0	1,096.0	1,096.0	58.0	3.5	28.75	-9.1	-2,859.4	8,512.0	8,478.8	33.13	256.945	
11,200.0	8,119.0	1,096.0	1,096.0	59.4	3.5	28.75	-9.1	-2,859.4	8,546.3	8,512.4	33.88	252.215	
11,300.0	8,119.0	1,096.0	1,096.0	60.8	3.5	28.75	-9.1	-2,859.4	8,581.6	8,547.0	34.64	247.754	
11,400.0	8,119.0	1,096.0	1,096.0	62.2	3.5	28.75	-9.1	-2,859.4	8,617.9	8,582.5	35.39	243.545	
11,500.0	8,119.0	1,096.0	1,096.0	63.6	3.5	28.75	-9.1	-2,859.4	8,655.3	8,619.2	36.13	239.576	
11,600.0	8,119.0	1,096.0	1,096.0	65.1	3.5	28.75	-9.1	-2,859.4	8,693.6	8,656.8	36.86	235.831	
11,700.0	8,119.0	1,096.0	1,096.0	66.5	3.5	28.75	-9.1	-2,859.4	8,732.9	8,695.3	37.59	232.299	
11,800.0	8,119.0	1,096.0	1,096.0	68.0	3.5	28.75	-9.1	-2,859.4	8,773.2	8,734.9	38.32	228.966	
11,900.0	8,119.0	1,096.0	1,096.0	69.4	3.5	28.75	-9.1	-2,859.4	8,814.4	8,775.4	39.03	225.822	
12,000.0	8,119.0	1,096.0	1,096.0	70.9	3.5	28.75	-9.1	-2,859.4	8,856.6	8,816.9	39.74	222.856	
12,100.0	8,119.0	1,096.0	1,096.0	72.4	3.5	28.75	-9.1	-2,859.4	8,899.7	8,859.2	40.44	220.058	
12,200.0	8,119.0	1,096.0	1,096.0	73.9	3.5	28.75	-9.1	-2,859.4	8,943.7	8,902.5	41.14	217.418	
12,300.0	8,119.0	1,096.0	1,096.0	75.4	3.5	28.75	-9.1	-2,859.4	8,988.6	8,946.8	41.82	214.929	
12,400.0	8,119.0	1,096.0	1,096.0	76.9	3.5	28.75	-9.1	-2,859.4	9,034.4	8,991.9	42.50	212.581	
12,500.0	8,119.0	1,096.0	1,096.0	78.4	3.5	28.75	-9.1	-2,859.4	9,081.0	9,037.8	43.17	210.368	
12,600.0	8,119.0	1,096.0	1,096.0	79.9	3.5	28.75	-9.1	-2,859.4	9,128.5	9,084.7	43.83	208.281	
12,700.0	8,119.0	1,096.0	1,096.0	81.4	3.5	28.75	-9.1	-2,859.4	9,176.9	9,132.4	44.48	206.315	
12,800.0	8,119.0	1,096.0	1,096.0	82.9	3.5	28.75	-9.1	-2,859.4	9,226.0	9,180.9	45.12	204.462	
12,900.0	8,119.0	1,096.0	1,096.0	84.5	3.5	28.75	-9.1	-2,859.4	9,276.0	9,230.3	45.76	202.718	
13,000.0	8,119.0	1,096.0	1,096.0	86.0	3.5	28.75	-9.1	-2,859.4	9,326.9	9,280.5	46.38	201.076	
13,100.0	8,119.0	1,096.0	1,096.0	87.5	3.5	28.75	-9.1	-2,859.4	9,378.4	9,331.4	47.00	199.532	
13,200.0	8,119.0	1,096.0	1,096.0	89.1	3.5	28.75	-9.1	-2,859.4	9,430.8	9,383.2	47.61	198.080	
13,300.0	8,119.0	1,096.0	1,096.0	90.6	3.5	28.75	-9.1	-2,859.4	9,484.0	9,435.7	48.21	196.716	
13,400.0	8,119.0	1,096.0	1,096.0	92.2	3.5	28.75	-9.1	-2,859.4	9,537.8	9,489.0	48.80	195.436	
13,500.0	8,119.0	1,096.0	1,096.0	93.7	3.5	28.75	-9.1	-2,859.4	9,592.5	9,543.1	49.39	194.236	
13,600.0	8,119.0	1,096.0	1,096.0	95.3	3.5	28.75	-9.1	-2,859.4	9,647.8	9,597.9	49.96	193.111	
13,700.0	8,119.0	1,096.0	1,096.0	96.8	3.5	28.75	-9.1	-2,859.4	9,703.9	9,653.4	50.53	192.059	
13,800.0	8,119.0	1,096.0	1,096.0	98.4	3.5	28.75	-9.1	-2,859.4	9,760.7	9,709.6	51.08	191.076	
13,900.0	8,119.0	1,096.0	1,096.0	100.0	3.5	28.75	-9.1	-2,859.4	9,818.1	9,766.5	51.63	190.158	
14,000.0	8,119.0	1,096.0	1,096.0	101.5	3.5	28.75	-9.1	-2,859.4	9,876.3	9,824.1	52.17	189.304	
14,100.0	8,119.0	1,096.0	1,096.0	103.1	3.5	28.75	-9.1	-2,859.4	9,935.1	9,882.4	52.70	188.509	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #131H - Wellbore #1 - Actual Surveys

Offset Site Error: 0.0 usft

Survey Program: 227-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,200.0	8,119.0	1,096.0	1,096.0	104.7	3.5	28.75	-9.1	-2,859.4	9,994.6	9,941.3	53.23	187.772 SF	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #132H - Wellbore #1 - Actual Surveys — **Offset Site Error:** 0.0 usft

Survey Program: 29-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-88.85	22.7	-1,135.5	1,135.8				
100.0	100.0	89.9	89.9	0.1	0.2	-88.86	22.6	-1,135.6	1,135.9	1,135.5	0.35	3,291.126	
200.0	200.0	184.2	184.2	0.5	0.5	-88.88	22.2	-1,136.3	1,136.5	1,135.5	1.04	1,096.020	
300.0	300.0	284.2	284.2	0.8	0.9	-88.90	21.9	-1,137.2	1,137.5	1,135.7	1.75	650.188	
400.0	400.0	387.6	387.6	1.2	1.3	-88.88	22.2	-1,138.0	1,138.2	1,135.7	2.47	460.070	
500.0	500.0	498.6	498.6	1.6	1.7	-88.87	22.5	-1,137.9	1,138.1	1,134.9	3.22	353.960	
600.0	600.0	598.0	598.0	1.9	2.0	-88.86	22.6	-1,137.5	1,137.8	1,133.9	3.91	290.688	
700.0	700.0	700.2	700.2	2.3	2.3	-88.93	21.3	-1,137.1	1,137.4	1,132.7	4.63	245.880	
800.0	800.0	799.1	799.1	2.6	2.7	-88.96	20.6	-1,136.5	1,136.7	1,131.4	5.33	213.341	
900.0	900.0	896.9	896.9	3.0	3.0	-88.98	20.2	-1,136.3	1,136.5	1,130.5	6.03	188.501	
1,000.0	1,000.0	998.5	998.5	3.4	3.4	-89.03	19.3	-1,136.0	1,136.1	1,129.4	6.75	168.425	
1,011.8	1,011.8	1,010.4	1,010.3	3.4	3.4	-163.45	19.2	-1,135.9	1,136.1	1,129.3	6.83	166.363	ES
1,100.0	1,100.0	1,092.6	1,092.5	3.7	3.7	-163.52	18.2	-1,135.8	1,137.6	1,130.2	7.43	153.102	
1,200.0	1,199.8	1,193.1	1,193.1	4.1	4.1	-163.64	16.7	-1,136.1	1,142.9	1,134.8	8.13	140.546	
1,300.0	1,299.5	1,320.9	1,320.8	4.4	4.5	-163.59	20.0	-1,134.9	1,150.4	1,141.5	8.92	128.952	
1,400.0	1,398.7	1,409.9	1,409.6	4.8	4.8	-163.39	26.0	-1,133.0	1,160.2	1,150.6	9.58	121.052	
1,500.0	1,497.5	1,487.6	1,487.0	5.2	5.1	-163.15	32.6	-1,132.5	1,174.6	1,164.4	10.21	115.022	
1,600.0	1,595.9	1,575.9	1,574.9	5.5	5.4	-162.96	40.8	-1,133.2	1,192.2	1,181.3	10.88	109.599	
1,700.0	1,694.4	1,655.8	1,654.4	5.9	5.7	-162.79	48.4	-1,134.5	1,210.6	1,199.1	11.51	105.159	
1,800.0	1,792.9	1,735.7	1,733.9	6.3	6.0	-162.64	55.8	-1,137.3	1,230.9	1,218.7	12.15	101.329	
1,900.0	1,891.4	1,826.7	1,824.4	6.8	6.3	-162.48	64.0	-1,141.3	1,252.1	1,239.3	12.83	97.597	
2,000.0	1,989.9	1,913.2	1,910.6	7.2	6.6	-162.35	71.5	-1,145.4	1,273.6	1,260.1	13.49	94.385	
2,100.0	2,088.4	1,982.1	1,979.1	7.6	6.9	-162.26	77.2	-1,150.0	1,296.9	1,282.9	14.08	92.133	
2,200.0	2,186.8	2,066.4	2,062.7	8.0	7.2	-162.15	84.3	-1,156.9	1,321.8	1,307.1	14.73	89.745	
2,300.0	2,285.3	2,154.7	2,150.4	8.5	7.5	-162.04	91.7	-1,164.8	1,347.4	1,332.0	15.40	87.494	
2,400.0	2,383.8	2,261.7	2,256.7	8.9	7.9	-161.97	99.5	-1,174.5	1,373.0	1,356.9	16.17	84.937	
2,500.0	2,482.3	2,352.3	2,346.7	9.3	8.3	-161.91	106.0	-1,182.4	1,398.4	1,381.6	16.85	82.991	
2,600.0	2,580.8	2,441.8	2,435.5	9.8	8.6	-161.81	113.6	-1,190.7	1,424.3	1,406.8	17.53	81.231	
2,700.0	2,679.2	2,557.3	2,550.0	10.2	9.0	-161.67	123.6	-1,200.9	1,449.8	1,431.5	18.36	78.989	
2,800.0	2,777.7	2,627.8	2,620.0	10.6	9.3	-161.58	129.9	-1,207.4	1,475.7	1,456.8	18.94	77.904	
2,900.0	2,876.2	2,719.8	2,711.1	11.1	9.7	-161.47	138.3	-1,216.7	1,502.5	1,482.9	19.64	76.486	
3,000.0	2,974.7	2,826.8	2,817.3	11.5	10.1	-161.40	146.4	-1,227.4	1,529.1	1,508.6	20.43	74.862	
3,100.0	3,073.2	2,930.2	2,920.0	11.9	10.5	-161.36	153.7	-1,237.1	1,555.1	1,533.9	21.19	73.398	
3,200.0	3,171.6	3,039.9	3,028.9	12.4	10.9	-161.25	163.0	-1,246.6	1,580.5	1,558.5	21.99	71.884	
3,300.0	3,270.1	3,142.3	3,130.6	12.8	11.3	-161.18	171.0	-1,254.6	1,605.0	1,582.2	22.75	70.555	
3,400.0	3,368.6	3,234.5	3,222.1	13.3	11.7	-161.08	179.4	-1,262.2	1,630.0	1,606.5	23.46	69.487	
3,500.0	3,467.1	3,400.5	3,387.2	13.7	12.3	-160.96	192.7	-1,272.6	1,653.0	1,628.5	24.55	67.341	
3,600.0	3,565.6	3,476.0	3,462.5	14.2	12.6	-160.96	197.3	-1,276.3	1,674.6	1,649.4	25.17	66.533	
3,700.0	3,664.0	3,560.2	3,546.4	14.6	12.9	-160.96	202.2	-1,281.4	1,697.3	1,671.4	25.83	65.703	
3,800.0	3,762.5	3,647.2	3,633.1	15.1	13.2	-161.00	206.3	-1,287.2	1,720.4	1,693.9	26.50	64.911	
3,900.0	3,861.0	3,720.8	3,706.5	15.5	13.5	-161.03	209.8	-1,292.7	1,744.5	1,717.4	27.10	64.362	
4,000.0	3,959.5	3,799.2	3,784.4	16.0	13.8	-161.03	214.8	-1,299.6	1,770.0	1,742.2	27.73	63.830	
4,100.0	4,058.0	3,892.8	3,877.3	16.4	14.2	-160.99	221.7	-1,308.4	1,795.9	1,767.5	28.44	63.141	
4,200.0	4,156.4	3,995.5	3,979.3	16.8	14.6	-160.96	228.8	-1,317.9	1,821.8	1,792.6	29.21	62.367	
4,300.0	4,254.9	4,095.6	4,078.6	17.3	15.0	-160.88	237.4	-1,326.7	1,847.3	1,817.3	29.97	61.642	
4,400.0	4,353.4	4,195.5	4,177.6	17.7	15.4	-160.75	247.8	-1,335.3	1,872.7	1,842.0	30.73	60.941	
4,500.0	4,451.9	4,296.4	4,277.6	18.2	15.8	-160.63	257.9	-1,343.7	1,897.9	1,866.4	31.50	60.255	
4,600.0	4,550.4	4,401.6	4,382.0	18.6	16.2	-160.52	268.0	-1,352.3	1,922.8	1,890.5	32.29	59.549	
4,700.0	4,648.9	4,504.4	4,484.1	19.1	16.6	-160.43	277.4	-1,360.2	1,947.3	1,914.3	33.07	58.890	
4,800.0	4,747.3	4,648.3	4,627.4	19.5	17.2	-160.41	287.1	-1,369.2	1,970.2	1,936.1	34.06	57.849	
4,900.0	4,845.8	4,789.5	4,768.4	20.0	17.7	-160.61	288.9	-1,376.4	1,991.9	1,956.9	34.99	56.931	
5,000.0	4,944.3	4,990.5	4,969.3	20.4	18.3	-160.99	287.3	-1,377.2	2,007.9	1,971.8	36.10	55.618	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #132H - Wellbore #1 - Actual Surveys

Offset Site Error: 0.0 usft

Survey Program: 29-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	5,060.8	5,039.6	20.9	18.5	-161.11	287.1	-1,376.7	2,023.6	1,986.9	36.70	55.137	
5,200.0	5,141.3	5,145.4	5,124.2	21.3	18.8	-161.23	287.7	-1,376.9	2,040.3	2,003.0	37.36	54.613	
5,300.0	5,239.7	5,238.9	5,217.7	21.8	19.2	-161.36	288.5	-1,377.5	2,057.5	2,019.4	38.06	54.062	
5,400.0	5,338.2	5,334.9	5,313.7	22.2	19.5	-161.48	289.3	-1,378.3	2,074.8	2,036.0	38.77	53.518	
5,500.0	5,436.7	5,431.0	5,409.8	22.7	19.8	-161.61	290.1	-1,379.1	2,092.2	2,052.8	39.48	52.997	
5,600.0	5,535.2	5,524.1	5,502.9	23.1	20.1	-161.73	290.8	-1,380.1	2,109.8	2,069.7	40.18	52.516	
5,700.0	5,633.7	5,620.9	5,599.7	23.6	20.5	-161.86	291.6	-1,381.4	2,127.7	2,086.8	40.89	52.036	
5,800.0	5,732.1	5,716.1	5,694.9	24.0	20.8	-161.98	292.1	-1,382.7	2,145.5	2,103.9	41.59	51.584	
5,900.0	5,830.6	5,812.4	5,791.1	24.5	21.1	-162.11	292.5	-1,384.1	2,163.6	2,121.3	42.30	51.146	
6,000.0	5,929.1	5,907.1	5,885.8	24.9	21.5	-162.25	292.7	-1,385.6	2,181.7	2,138.7	43.00	50.736	
6,100.0	6,027.6	6,001.4	5,980.1	25.4	21.8	-162.38	292.7	-1,387.3	2,200.1	2,156.4	43.70	50.346	
6,200.0	6,126.1	6,158.4	6,137.1	25.8	22.3	-162.57	293.7	-1,387.9	2,216.9	2,172.3	44.67	49.627	
6,300.0	6,224.5	6,253.8	6,232.5	26.3	22.6	-162.67	294.7	-1,387.1	2,232.8	2,187.4	45.37	49.208	
6,400.0	6,323.0	6,344.1	6,322.8	26.7	23.0	-162.76	296.0	-1,386.7	2,249.0	2,202.9	46.06	48.830	
6,500.0	6,421.5	6,437.3	6,415.9	27.2	23.3	-162.85	297.1	-1,386.6	2,265.4	2,218.7	46.75	48.456	
6,600.0	6,520.0	6,533.1	6,511.8	27.6	23.6	-162.96	297.9	-1,386.6	2,282.1	2,234.7	47.46	48.085	
6,700.0	6,618.5	6,629.7	6,608.4	28.1	23.9	-163.07	298.4	-1,386.7	2,298.9	2,250.7	48.17	47.722	
6,800.0	6,716.9	6,723.3	6,702.0	28.5	24.3	-163.19	298.6	-1,387.0	2,315.8	2,266.9	48.87	47.388	
6,900.0	6,815.4	6,818.6	6,797.3	29.0	24.6	-163.31	298.4	-1,387.4	2,332.9	2,283.3	49.57	47.064	
6,981.8	6,896.0	6,898.9	6,877.6	29.4	24.9	-163.41	298.1	-1,387.9	2,346.9	2,296.8	50.15	46.799	
7,000.0	6,913.9	6,916.9	6,895.6	29.5	24.9	-163.46	298.0	-1,388.0	2,350.0	2,299.7	50.28	46.740	
7,100.0	7,012.9	7,018.1	6,996.7	29.9	25.3	-163.68	297.5	-1,388.5	2,364.3	2,313.3	50.99	46.367	
7,200.0	7,112.3	7,118.6	7,097.2	30.3	25.6	-163.83	296.9	-1,388.8	2,374.4	2,322.7	51.69	45.934	
7,300.0	7,212.2	7,221.0	7,199.6	30.6	25.9	-163.93	296.1	-1,389.2	2,380.3	2,327.9	52.39	45.435	
7,381.8	7,294.0	7,303.3	7,282.0	30.9	26.2	-89.55	295.4	-1,389.4	2,381.9	2,329.0	52.94	44.992	
7,400.0	7,312.2	7,321.3	7,300.0	30.9	26.3	-89.55	295.2	-1,389.5	2,381.9	2,328.9	53.06	44.891	
7,500.0	7,412.2	7,422.9	7,401.5	31.2	26.6	-89.58	294.2	-1,389.7	2,382.2	2,328.4	53.73	44.336	
7,600.0	7,512.2	7,526.2	7,504.8	31.5	26.9	-89.61	293.1	-1,389.9	2,382.3	2,327.9	54.41	43.786	
7,633.8	7,546.0	7,560.3	7,538.9	31.6	27.1	-89.62	292.6	-1,389.9	2,382.3	2,327.7	54.63	43.605	
7,650.0	7,562.2	7,576.5	7,555.2	31.7	27.1	90.71	292.4	-1,389.9	2,382.3	2,327.6	54.74	43.521	
7,700.0	7,612.0	7,626.6	7,605.3	31.8	27.3	90.78	291.8	-1,389.9	2,382.4	2,327.3	55.06	43.269	
7,750.0	7,661.4	7,675.8	7,654.4	31.9	27.4	90.94	291.2	-1,389.9	2,382.5	2,327.2	55.37	43.031	
7,800.0	7,709.8	7,724.1	7,702.8	32.0	27.6	91.18	290.5	-1,390.0	2,382.8	2,327.1	55.67	42.805	
7,850.0	7,757.1	7,768.2	7,746.8	32.1	27.7	91.46	289.8	-1,390.0	2,383.3	2,327.3	55.94	42.605	
7,900.0	7,802.7	7,811.2	7,789.8	32.2	27.9	91.79	289.1	-1,390.1	2,384.0	2,327.8	56.20	42.420	
7,950.0	7,846.4	7,854.8	7,833.4	32.3	28.0	92.17	288.4	-1,390.3	2,385.2	2,328.7	56.46	42.246	
8,000.0	7,887.7	7,896.3	7,874.9	32.4	28.2	92.56	287.7	-1,390.5	2,386.7	2,330.0	56.70	42.090	
8,050.0	7,926.5	7,934.8	7,913.4	32.4	28.3	92.91	286.9	-1,390.6	2,388.9	2,331.9	56.93	41.958	
8,100.0	7,962.4	7,970.4	7,949.0	32.5	28.4	93.21	286.3	-1,390.8	2,391.7	2,334.5	57.15	41.850	
8,150.0	7,995.1	8,002.9	7,981.5	32.5	28.5	93.43	285.6	-1,390.9	2,395.3	2,337.9	57.35	41.767	
8,200.0	8,024.4	8,032.5	8,011.1	32.6	28.6	93.55	285.0	-1,391.1	2,399.7	2,342.2	57.54	41.709	
8,250.0	8,050.1	8,058.5	8,037.1	32.6	28.7	93.53	284.6	-1,391.2	2,405.2	2,347.5	57.71	41.680	
8,300.0	8,071.9	8,080.6	8,059.2	32.7	28.8	93.35	284.2	-1,391.3	2,411.7	2,353.8	57.86	41.681	
8,350.0	8,089.7	8,099.0	8,077.5	32.7	28.8	92.99	283.9	-1,391.4	2,419.3	2,361.3	58.00	41.712	
8,400.0	8,103.4	8,113.9	8,092.5	32.7	28.9	92.45	283.7	-1,391.5	2,428.0	2,369.9	58.12	41.773	
8,450.0	8,112.8	8,124.5	8,103.1	32.8	28.9	91.70	283.5	-1,391.5	2,437.8	2,379.6	58.23	41.867	
8,500.0	8,118.0	8,130.6	8,109.2	32.9	28.9	90.73	283.5	-1,391.6	2,448.7	2,390.4	58.31	41.994	
8,533.8	8,119.0	8,132.2	8,110.8	33.0	29.0	89.95	283.4	-1,391.6	2,456.6	2,398.3	58.35	42.098	
8,600.0	8,119.0	8,133.2	8,111.8	33.1	29.0	89.97	283.4	-1,391.6	2,473.4	2,415.0	58.44	42.326	
8,700.0	8,119.0	8,134.8	8,113.3	33.4	29.0	90.01	283.4	-1,391.6	2,502.0	2,443.4	58.59	42.700	
8,800.0	8,119.0	8,136.3	8,114.9	33.8	29.0	90.05	283.4	-1,391.6	2,534.1	2,475.3	58.78	43.113	
8,900.0	8,119.0	8,137.9	8,116.5	34.3	29.0	90.08	283.3	-1,391.6	2,569.8	2,510.8	58.99	43.565	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #132H - Wellbore #1 - Actual Surveys

Offset Site Error: 0.0 usft

Survey Program: 29-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,000.0	8,119.0	8,139.5	8,118.0	34.9	29.0	90.12	283.3	-1,391.6	2,608.7	2,549.5	59.22	44.055	
9,100.0	8,119.0	8,141.0	8,119.6	35.5	29.0	90.16	283.3	-1,391.6	2,650.9	2,591.5	59.46	44.583	
9,200.0	8,119.0	8,142.6	8,121.2	36.3	29.0	90.20	283.3	-1,391.6	2,696.2	2,636.4	59.72	45.148	
9,300.0	8,119.0	8,144.2	8,122.7	37.1	29.0	90.24	283.3	-1,391.6	2,744.3	2,684.3	59.98	45.750	
9,400.0	8,119.0	8,145.7	8,124.3	37.9	29.0	90.27	283.2	-1,391.6	2,795.2	2,734.9	60.26	46.388	
9,500.0	8,119.0	8,147.3	8,125.9	38.8	29.0	90.31	283.2	-1,391.6	2,848.7	2,788.1	60.53	47.060	
9,600.0	8,119.0	8,148.9	8,127.5	39.8	29.0	90.35	283.2	-1,391.7	2,904.6	2,843.8	60.81	47.767	
9,700.0	8,119.0	8,150.5	8,129.0	40.8	29.0	90.39	283.2	-1,391.7	2,962.9	2,901.8	61.08	48.506	
9,800.0	8,119.0	8,152.1	8,130.6	41.8	29.0	90.42	283.1	-1,391.7	3,023.3	2,962.0	61.35	49.276	
9,900.0	8,119.0	8,153.6	8,132.2	42.9	29.0	90.46	283.1	-1,391.7	3,085.8	3,024.2	61.62	50.076	
10,000.0	8,119.0	8,155.2	8,133.8	44.0	29.0	90.50	283.1	-1,391.7	3,150.3	3,088.4	61.89	50.905	
10,100.0	8,119.0	8,156.8	8,135.4	45.2	29.0	90.54	283.1	-1,391.7	3,216.5	3,154.4	62.14	51.761	
10,200.0	8,119.0	8,158.4	8,136.9	46.3	29.0	90.58	283.0	-1,391.7	3,284.5	3,222.1	62.39	52.643	
10,300.0	8,119.0	12,715.9	10,523.4	47.5	52.0	137.00	-2,076.2	-1,242.2	3,296.1	3,219.8	76.34	43.175	
10,305.7	8,119.0	12,720.8	10,523.6	47.6	52.0	137.00	-2,081.0	-1,242.0	3,296.1	3,219.7	76.44	43.120	
10,400.0	8,119.0	12,797.3	10,525.9	48.8	52.9	137.05	-2,157.4	-1,239.4	3,296.3	3,218.3	77.99	42.264	
10,500.0	8,119.0	12,872.0	10,529.1	50.0	53.8	137.13	-2,232.0	-1,236.4	3,297.3	3,217.7	79.57	41.437	
10,600.0	8,119.0	12,972.0	10,532.0	51.3	55.0	137.17	-2,331.9	-1,234.8	3,298.7	3,217.1	81.51	40.470	
10,700.0	8,119.0	13,268.2	10,520.1	52.6	58.7	136.98	-2,627.7	-1,237.6	3,296.2	3,210.0	86.18	38.246	
10,800.0	8,119.0	13,337.0	10,516.4	54.0	59.6	136.93	-2,696.4	-1,237.4	3,292.4	3,204.5	87.90	37.455	
10,900.0	8,119.0	13,381.1	10,515.2	55.3	60.2	136.92	-2,740.5	-1,236.9	3,289.7	3,200.5	89.28	36.848	
11,000.0	8,119.0	13,469.8	10,515.0	56.7	61.3	136.94	-2,829.1	-1,234.7	3,288.2	3,197.0	91.22	36.048	
11,100.0	8,119.0	11,100.0	10,513.7	58.0	36.6	136.97	-2,968.1	-1,230.2	3,285.6	3,218.0	67.56	48.629	
11,200.0	8,119.0	13,656.7	10,513.2	59.4	63.8	136.98	-3,016.0	-1,228.8	3,283.4	3,188.2	95.27	34.464	
11,257.7	8,119.0	13,679.4	10,513.3	60.2	64.1	136.98	-3,038.7	-1,228.3	3,283.0	3,187.0	96.03	34.187	
11,300.0	8,119.0	13,704.0	10,513.8	60.8	64.5	136.99	-3,063.3	-1,227.8	3,283.1	3,186.4	96.69	33.956	
11,400.0	8,119.0	13,812.4	10,516.0	62.2	66.0	137.04	-3,171.6	-1,225.7	3,283.7	3,184.8	98.93	33.193	
11,500.0	8,119.0	13,870.6	10,517.6	63.6	66.8	137.07	-3,229.8	-1,224.5	3,284.6	3,184.1	100.49	32.685	
11,600.0	8,119.0	14,150.8	10,519.7	65.1	70.7	137.20	-3,509.7	-1,214.7	3,283.1	3,178.0	105.06	31.249	
11,700.0	8,119.0	14,195.6	10,519.4	66.5	71.3	137.22	-3,554.5	-1,212.5	3,279.7	3,173.2	106.51	30.794	
11,800.0	8,119.0	14,231.4	10,519.8	68.0	71.8	137.24	-3,590.2	-1,211.1	3,278.3	3,170.5	107.81	30.408	
11,809.0	8,119.0	14,234.6	10,519.8	68.1	71.9	137.24	-3,593.4	-1,211.0	3,278.2	3,170.3	107.93	30.375	
11,900.0	8,119.0	14,263.0	10,520.6	69.4	72.3	137.26	-3,621.8	-1,210.3	3,278.8	3,169.8	109.03	30.071	
12,000.0	8,119.0	14,327.3	10,522.0	70.9	73.2	137.27	-3,686.0	-1,210.3	3,280.9	3,170.1	110.73	29.630	
12,100.0	8,119.0	14,431.3	10,521.7	72.4	74.6	137.20	-3,789.9	-1,214.6	3,283.9	3,170.8	113.12	29.030	
12,200.0	8,119.0	14,515.1	10,519.8	73.9	75.8	137.11	-3,873.6	-1,219.4	3,286.6	3,171.3	115.25	28.518	
12,300.0	8,119.0	14,734.7	10,517.3	75.4	79.0	136.99	-4,093.1	-1,225.4	3,288.2	3,168.7	119.47	27.523	
12,341.1	8,119.0	14,758.0	10,517.1	76.0	79.3	136.98	-4,116.3	-1,225.5	3,288.1	3,167.9	120.16	27.364	
12,400.0	8,119.0	14,793.0	10,517.0	76.9	79.8	136.98	-4,151.4	-1,225.5	3,288.3	3,167.1	121.16	27.139	
12,500.0	8,119.0	12,500.0	10,517.5	78.4	46.2	136.98	-4,258.3	-1,225.5	3,289.0	3,192.8	96.23	34.179	
12,600.0	8,119.0	15,181.0	10,513.7	79.9	85.6	137.05	-4,539.0	-1,214.6	3,283.9	3,155.5	128.41	25.574	
12,700.0	8,119.0	15,204.0	10,513.2	81.4	85.9	137.06	-4,562.0	-1,213.3	3,279.9	3,150.2	129.65	25.298	
12,800.0	8,119.0	15,253.5	10,512.4	82.9	86.7	137.07	-4,611.5	-1,211.8	3,277.5	3,146.3	131.24	24.974	
12,842.8	8,119.0	15,266.5	10,512.3	83.6	86.9	137.06	-4,624.4	-1,211.8	3,277.2	3,145.4	131.79	24.866	
12,900.0	8,119.0	15,298.0	10,511.9	84.5	87.3	137.05	-4,655.9	-1,212.4	3,277.6	3,144.8	132.76	24.688	
13,000.0	8,119.0	15,350.7	10,511.5	86.0	88.1	137.02	-4,708.6	-1,214.1	3,279.2	3,144.8	134.41	24.397	
13,100.0	8,119.0	15,588.4	10,510.0	87.5	91.7	137.01	-4,946.3	-1,211.9	3,277.7	3,138.8	138.87	23.603	
13,200.0	8,119.0	15,694.4	10,509.3	89.1	93.3	137.04	-5,052.2	-1,208.4	3,275.3	3,134.0	141.28	23.183	
13,300.0	8,119.0	15,768.0	10,508.2	90.6	94.4	137.04	-5,125.7	-1,207.1	3,273.4	3,130.1	143.26	22.849	
13,400.0	8,119.0	15,893.8	10,505.5	92.2	96.3	137.02	-5,251.5	-1,205.5	3,271.3	3,125.3	146.05	22.399	
13,500.0	8,119.0	15,956.0	10,504.1	93.7	97.3	137.01	-5,313.7	-1,204.7	3,269.3	3,121.4	147.88	22.107	
13,600.0	8,119.0	16,020.4	10,503.5	95.3	98.3	137.00	-5,378.0	-1,203.9	3,268.4	3,118.6	149.72	21.829	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #132H - Wellbore #1 - Actual Surveys

Offset Site Error: 0.0 usft

Survey Program: 29-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,605.8	8,119.0	16,023.2	10,503.5	95.4	98.3	137.01	-5,380.9	-1,203.9	3,268.4	3,118.5	149.81	21.816	
13,700.0	8,119.0	16,073.0	10,504.2	96.8	99.1	137.02	-5,430.6	-1,203.3	3,269.0	3,117.7	151.34	21.601	
13,800.0	8,119.0	16,144.0	10,505.5	98.4	100.1	137.02	-5,501.6	-1,203.8	3,271.1	3,117.8	153.25	21.345	
13,900.0	8,119.0	16,258.5	10,506.2	100.0	101.9	136.98	-5,616.0	-1,206.7	3,273.7	3,117.8	155.94	20.994	
14,000.0	8,119.0	16,475.8	10,506.5	101.5	105.2	137.01	-5,833.3	-1,203.4	3,272.6	3,112.4	160.12	20.438	
14,100.0	8,119.0	16,614.0	10,504.9	103.1	107.4	137.04	-5,971.4	-1,198.9	3,269.7	3,106.7	163.04	20.054	
14,200.0	8,119.0	16,671.4	10,504.3	104.7	108.3	137.06	-6,028.7	-1,196.4	3,266.9	3,102.1	164.79	19.825	
14,289.2	8,119.0	16,707.0	10,504.5	106.1	108.8	137.07	-6,064.3	-1,195.7	3,266.2	3,100.1	166.09	19.665	
14,300.0	8,119.0	16,707.0	10,504.5	106.2	108.8	137.07	-6,064.3	-1,195.7	3,266.2	3,100.0	166.18	19.654	
14,400.0	8,119.0	16,760.1	10,505.3	107.8	109.7	137.08	-6,117.4	-1,195.4	3,267.3	3,099.5	167.82	19.469	
14,500.0	8,119.0	16,828.3	10,506.8	109.4	110.7	137.09	-6,185.6	-1,195.8	3,269.7	3,100.0	169.68	19.270	
14,600.0	8,119.0	17,117.3	10,496.9	111.0	115.2	136.86	-6,474.2	-1,202.8	3,268.6	3,093.1	175.50	18.624	
14,700.0	8,119.0	17,178.0	10,493.3	112.6	116.2	136.80	-6,534.7	-1,204.1	3,266.2	3,088.7	177.47	18.404	
14,800.0	8,119.0	17,227.3	10,492.0	114.2	116.9	136.77	-6,584.0	-1,204.5	3,265.1	3,085.9	179.17	18.223	
14,817.3	8,119.0	17,235.7	10,492.0	114.4	117.1	136.77	-6,592.4	-1,204.4	3,265.1	3,085.6	179.45	18.195	
14,900.0	8,119.0	17,296.1	10,493.7	115.7	118.0	136.81	-6,652.8	-1,202.9	3,265.6	3,084.6	181.04	18.038	
15,000.0	8,119.0	17,421.4	10,493.8	117.3	120.0	136.82	-6,778.0	-1,201.6	3,265.3	3,081.4	183.87	17.759	
15,010.3	8,119.0	17,428.8	10,493.9	117.5	120.1	136.82	-6,785.4	-1,201.5	3,265.3	3,081.2	184.07	17.739	
15,100.0	8,119.0	17,527.2	10,495.1	118.9	121.6	136.85	-6,883.8	-1,199.8	3,265.4	3,079.0	186.34	17.524	
15,174.5	8,119.0	17,593.0	10,494.1	120.1	122.7	136.82	-6,949.6	-1,200.2	3,265.2	3,077.1	188.06	17.362	
15,200.0	8,119.0	17,610.7	10,493.9	120.5	123.0	136.82	-6,967.3	-1,200.3	3,265.2	3,076.6	188.57	17.315	
15,300.0	8,119.0	17,698.7	10,493.6	122.1	124.3	136.80	-7,055.3	-1,200.9	3,265.8	3,074.9	190.86	17.111	
15,400.0	8,119.0	17,867.7	10,490.7	123.7	127.0	136.74	-7,224.2	-1,202.2	3,265.5	3,071.0	194.53	16.787	
15,500.0	8,119.0	17,958.2	10,487.4	125.3	128.4	136.68	-7,314.7	-1,202.9	3,263.9	3,066.9	196.95	16.572	
15,600.0	8,119.0	18,025.0	10,486.8	126.9	129.5	136.67	-7,381.5	-1,202.8	3,263.4	3,064.5	198.91	16.406	
15,606.4	8,119.0	18,025.0	10,486.8	127.0	129.5	136.67	-7,381.5	-1,202.8	3,263.4	3,064.4	198.97	16.402	
15,700.0	8,119.0	18,086.2	10,487.8	128.5	130.5	136.69	-7,442.7	-1,202.2	3,264.0	3,063.3	200.71	16.263	
15,800.0	8,119.0	18,180.6	10,489.8	130.1	132.0	136.72	-7,537.0	-1,201.1	3,265.2	3,062.2	203.00	16.085	
15,900.0	8,119.0	18,402.0	10,489.7	131.7	135.5	136.77	-7,758.3	-1,195.3	3,262.9	3,055.6	207.25	15.744	
16,000.0	8,119.0	18,448.7	10,490.0	133.3	136.2	136.80	-7,805.0	-1,193.1	3,260.8	3,052.0	208.84	15.614	
16,043.5	8,119.0	18,462.6	10,490.0	134.0	136.4	136.80	-7,818.8	-1,192.9	3,260.6	3,051.2	209.43	15.569	
16,100.0	8,119.0	18,496.0	10,490.1	134.9	137.0	136.80	-7,852.3	-1,193.1	3,261.0	3,050.6	210.46	15.495	
16,200.0	8,119.0	18,524.2	10,490.2	136.5	137.4	136.79	-7,880.5	-1,193.9	3,263.1	3,051.3	211.71	15.413	
16,300.0	8,119.0	18,589.0	10,490.8	138.1	138.4	136.76	-7,945.2	-1,196.4	3,266.7	3,053.1	213.60	15.293	
16,400.0	8,119.0	18,708.0	10,489.0	139.7	140.3	136.64	-8,064.0	-1,203.8	3,270.2	3,053.5	216.70	15.091	
16,500.0	8,119.0	18,778.0	10,488.8	141.4	141.4	136.57	-8,133.8	-1,207.9	3,274.3	3,055.5	218.76	14.967	
16,600.0	8,119.0	19,212.2	10,483.6	143.0	148.3	136.43	-8,567.5	-1,212.1	3,277.7	3,050.9	226.81	14.451	
16,700.0	8,119.0	19,280.4	10,480.5	144.6	149.4	136.42	-8,635.6	-1,209.2	3,272.1	3,043.2	228.91	14.295	
16,800.0	8,119.0	19,344.0	10,479.5	146.2	150.4	136.44	-8,699.1	-1,206.5	3,268.1	3,037.3	230.86	14.156	
16,900.0	8,119.0	19,416.8	10,479.7	147.8	151.6	136.48	-8,771.7	-1,202.9	3,265.2	3,032.3	232.86	14.022	
17,000.0	8,119.0	17,000.0	10,479.7	149.4	158.7	136.56	-8,895.4	-1,195.8	3,261.6	3,063.5	198.07	16.467	
17,100.0	8,119.0	19,597.4	10,479.4	151.0	154.5	136.59	-8,952.1	-1,193.0	3,258.4	3,021.1	237.27	13.733	
17,200.0	8,119.0	19,692.1	10,479.1	152.7	156.0	136.61	-9,046.8	-1,190.4	3,256.5	3,016.9	239.62	13.590	
17,300.0	8,119.0	19,778.0	10,477.7	154.3	157.4	136.61	-9,132.6	-1,188.5	3,254.3	3,012.4	241.89	13.453	
17,400.0	8,119.0	19,852.7	10,478.4	155.9	158.6	136.65	-9,207.3	-1,185.9	3,253.0	3,009.1	243.89	13.338	
17,500.0	8,119.0	19,943.9	10,477.3	157.5	160.1	136.64	-9,298.5	-1,185.5	3,252.2	3,005.9	246.28	13.205	
17,600.0	8,119.0	20,035.2	10,476.0	159.1	161.6	136.62	-9,389.8	-1,185.4	3,251.5	3,002.8	248.69	13.075	
17,648.6	8,119.0	20,069.1	10,475.8	159.9	162.1	136.61	-9,423.7	-1,185.3	3,251.4	3,001.7	249.67	13.023	
17,700.0	8,119.0	20,132.3	10,475.7	160.7	163.1	136.61	-9,486.8	-1,185.1	3,251.5	3,000.3	251.15	12.946	
17,800.0	8,119.0	20,235.2	10,474.3	162.4	164.8	136.59	-9,589.7	-1,184.4	3,250.4	2,996.7	253.73	12.810	
17,829.7	8,119.0	20,250.3	10,474.3	162.9	165.0	136.59	-9,604.8	-1,184.3	3,250.3	2,996.1	254.23	12.785	
17,900.0	8,119.0	20,287.0	10,474.9	164.0	165.6	136.60	-9,641.5	-1,183.7	3,250.7	2,995.3	255.39	12.728	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #132H - Wellbore #1 - Actual Surveys

Offset Site Error: 0.0 usft

Survey Program: 29-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,000.0	8,119.0	20,434.9	10,475.8	165.6	168.0	136.62	-9,789.4	-1,182.2	3,250.7	2,992.1	258.62	12.569	
18,097.3	8,119.0	20,517.8	10,476.3	167.2	169.3	136.64	-9,872.3	-1,180.7	3,250.4	2,989.6	260.76	12.465	
18,100.0	8,119.0	20,519.8	10,476.2	167.2	169.4	136.64	-9,874.3	-1,180.7	3,250.4	2,989.6	260.82	12.462	
18,200.0	8,119.0	20,595.8	10,474.8	168.9	170.6	136.60	-9,950.3	-1,182.3	3,250.8	2,987.8	263.04	12.359	
18,300.0	8,119.0	20,697.1	10,475.5	170.5	172.2	136.60	-10,051.5	-1,182.3	3,251.7	2,986.2	265.55	12.245	
18,400.0	8,119.0	20,792.0	10,474.6	172.1	173.7	136.57	-10,146.5	-1,183.3	3,252.2	2,984.1	268.05	12.133	
18,500.0	8,119.0	18,500.0	10,475.4	173.7	136.7	136.57	-10,259.4	-1,183.6	3,253.3	3,012.5	240.80	13.510	
18,600.0	8,119.0	21,074.0	10,477.2	175.4	178.3	136.65	-10,428.3	-1,178.1	3,251.9	2,977.8	274.14	11.862	
18,700.0	8,119.0	21,161.6	10,478.7	177.0	179.7	136.71	-10,515.8	-1,174.0	3,250.4	2,974.1	276.26	11.766	
18,800.0	8,119.0	21,235.5	10,481.1	178.6	180.9	136.78	-10,589.6	-1,170.1	3,249.5	2,971.4	278.12	11.684	
18,900.0	8,119.0	21,323.4	10,482.3	180.2	182.4	136.82	-10,677.4	-1,168.1	3,249.3	2,969.0	280.31	11.592	
19,000.0	8,119.0	19,000.0	10,479.3	181.9	144.7	136.81	-10,862.1	-1,165.2	3,247.0	2,994.2	252.87	12.841	
19,100.0	8,119.0	21,563.0	10,478.8	183.5	186.2	136.82	-10,916.9	-1,163.5	3,244.8	2,958.9	285.94	11.348	
19,181.9	8,119.0	21,603.0	10,479.5	184.8	186.9	136.84	-10,956.9	-1,162.2	3,244.4	2,957.1	287.25	11.295	
19,200.0	8,119.0	21,603.0	10,479.5	185.1	186.9	136.84	-10,956.9	-1,162.2	3,244.4	2,957.0	287.40	11.289	
19,300.0	8,119.0	21,825.2	10,481.8	186.8	190.5	136.92	-11,179.0	-1,156.8	3,244.8	2,953.3	291.52	11.131	
19,400.0	8,119.0	21,885.0	10,480.3	188.4	191.5	136.92	-11,238.7	-1,155.5	3,242.1	2,948.7	293.46	11.048	
19,500.0	8,119.0	21,931.4	10,479.8	190.0	192.2	136.91	-11,285.2	-1,154.9	3,240.9	2,945.7	295.12	10.981	
19,517.5	8,119.0	21,938.6	10,479.9	190.3	192.3	136.92	-11,292.3	-1,154.7	3,240.8	2,945.5	295.38	10.972	
19,600.0	8,119.0	21,980.0	10,481.4	191.6	193.0	136.95	-11,333.7	-1,153.4	3,241.5	2,944.9	296.63	10.928	
19,700.0	8,119.0	22,032.7	10,484.1	193.3	193.9	136.99	-11,386.3	-1,152.1	3,243.6	2,945.5	298.11	10.881	
19,800.0	8,119.0	22,095.0	10,486.6	194.9	194.9	137.02	-11,448.6	-1,152.0	3,246.9	2,947.1	299.79	10.831	
19,900.0	8,119.0	22,152.2	10,488.8	196.5	195.8	137.03	-11,505.6	-1,153.1	3,251.5	2,950.1	301.38	10.789	
20,000.0	8,119.0	22,271.2	10,491.7	198.2	197.7	136.99	-11,624.5	-1,158.4	3,256.7	2,952.3	304.41	10.698	
20,100.0	8,119.0	22,616.0	10,476.9	199.8	203.2	136.50	-11,968.0	-1,180.4	3,260.2	2,947.5	312.75	10.424	
20,200.0	8,119.0	22,714.8	10,474.9	201.4	204.8	136.50	-12,066.7	-1,177.6	3,257.2	2,942.0	315.24	10.333	
20,300.0	8,119.0	22,833.7	10,475.1	203.1	206.8	136.58	-12,185.5	-1,171.6	3,254.2	2,936.5	317.77	10.241	
20,400.0	8,119.0	23,001.6	10,473.1	204.7	209.5	136.66	-12,353.0	-1,161.8	3,249.7	2,928.9	320.82	10.130	
20,500.0	8,119.0	23,055.0	10,472.2	206.3	210.4	136.69	-12,406.3	-1,158.2	3,244.6	2,922.0	322.66	10.056	
20,606.7	8,119.0	23,055.0	10,472.2	208.1	210.4	136.69	-12,406.3	-1,158.2	3,242.1	2,918.3	323.80	10.013	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #133H - Wellbore #1 - Actual Survey — **Offset Site Error:** 0.0 usft

Survey Program: 229-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	2.0	2.0	0.0	0.0	-76.35	29.2	-120.2	123.7				
100.0	100.0	101.5	101.5	0.1	0.2	-76.32	29.3	-120.4	123.9	123.6	0.29	429.334	
200.0	200.0	201.1	201.1	0.5	0.3	-76.23	29.6	-120.9	124.5	123.7	0.80	154.968	
300.0	300.0	301.1	301.1	0.8	0.6	-76.09	30.1	-121.6	125.2	123.8	1.46	85.582	
400.0	400.0	401.3	401.3	1.2	1.0	-75.91	30.6	-122.1	125.9	123.7	2.18	57.739	
500.0	500.0	501.2	501.2	1.6	1.3	-75.74	31.1	-122.6	126.5	123.6	2.90	43.660	
600.0	600.0	601.1	601.1	1.9	1.7	-75.64	31.5	-123.1	127.1	123.5	3.61	35.184	
700.0	700.0	701.0	701.0	2.3	2.1	-75.59	31.8	-123.8	127.8	123.5	4.33	29.536	
800.0	800.0	801.1	801.1	2.6	2.4	-75.58	32.0	-124.6	128.7	123.6	5.04	25.511	
900.0	900.0	902.4	902.4	3.0	2.8	-75.22	32.9	-124.6	128.9	123.1	5.76	22.389	
1,000.0	1,000.0	1,003.5	1,003.4	3.4	3.1	-74.30	34.7	-123.3	128.1	121.6	6.47	19.807	
1,044.0	1,044.0	1,047.7	1,047.6	3.5	3.3	-148.19	35.8	-122.4	127.8	121.0	6.77	18.871	ES
1,100.0	1,100.0	1,104.0	1,103.9	3.7	3.5	-147.56	37.6	-121.0	128.2	121.1	7.17	17.893	
1,200.0	1,199.8	1,203.3	1,203.1	4.1	3.8	-146.84	41.4	-118.4	131.2	123.3	7.86	16.688	
1,300.0	1,299.5	1,301.6	1,301.3	4.4	4.2	-147.41	44.3	-117.1	138.1	129.5	8.56	16.131	
1,400.0	1,398.7	1,399.8	1,399.5	4.8	4.5	-148.47	47.7	-116.6	149.0	139.7	9.27	16.072	
1,500.0	1,497.5	1,497.8	1,497.2	5.2	4.9	-148.72	54.7	-115.8	163.5	153.5	9.98	16.382	
1,600.0	1,595.9	1,596.1	1,595.0	5.5	5.2	-148.37	64.6	-114.6	179.9	169.2	10.70	16.807	
1,700.0	1,694.4	1,694.3	1,692.5	5.9	5.6	-147.43	76.8	-113.0	196.5	185.0	11.43	17.188	
1,800.0	1,792.9	1,791.9	1,789.1	6.3	6.0	-146.31	90.0	-111.3	213.4	201.3	12.17	17.538	
1,900.0	1,891.4	1,889.3	1,885.5	6.8	6.3	-145.32	103.6	-110.0	230.9	218.0	12.91	17.885	
2,000.0	1,989.9	1,987.5	1,982.8	7.2	6.7	-144.51	117.1	-109.0	248.7	235.0	13.67	18.195	
2,100.0	2,088.4	2,086.0	2,080.5	7.6	7.1	-143.93	130.1	-108.2	266.5	252.1	14.43	18.470	
2,200.0	2,186.8	2,185.9	2,179.5	8.0	7.5	-143.41	143.3	-107.1	284.1	268.9	15.21	18.680	
2,300.0	2,285.3	2,285.0	2,277.7	8.5	7.9	-142.88	156.5	-105.4	301.2	285.2	15.98	18.844	
2,400.0	2,383.8	2,380.9	2,372.8	8.9	8.3	-142.52	169.0	-104.3	318.7	301.9	16.74	19.040	
2,500.0	2,482.3	2,477.0	2,468.1	9.3	8.6	-142.36	180.8	-104.3	337.0	319.5	17.49	19.265	
2,600.0	2,580.8	2,574.3	2,564.7	9.8	9.0	-142.25	192.8	-104.7	355.7	337.4	18.25	19.484	
2,700.0	2,679.2	2,672.6	2,662.2	10.2	9.4	-142.13	205.1	-105.4	374.6	355.6	19.03	19.688	
2,800.0	2,777.7	2,773.7	2,762.4	10.6	9.8	-141.97	217.9	-105.4	393.1	373.3	19.83	19.827	
2,900.0	2,876.2	2,874.4	2,862.3	11.1	10.2	-141.78	230.6	-104.7	410.9	390.3	20.62	19.925	
3,000.0	2,974.7	2,974.4	2,961.7	11.5	10.6	-141.76	242.1	-104.0	428.3	406.9	21.41	20.005	
3,100.0	3,073.2	3,075.2	3,062.0	11.9	11.0	-141.95	252.1	-103.5	445.3	423.1	22.19	20.063	
3,200.0	3,171.6	3,176.9	3,163.3	12.4	11.4	-142.29	260.6	-102.9	461.6	438.7	22.98	20.093	
3,300.0	3,270.1	3,281.6	3,267.8	12.8	11.8	-142.80	267.8	-102.0	477.2	453.4	23.76	20.080	
3,400.0	3,368.6	3,388.5	3,374.5	13.3	12.2	-143.45	273.1	-100.0	491.2	466.6	24.55	20.007	
3,500.0	3,467.1	3,491.2	3,477.1	13.7	12.5	-144.19	276.6	-97.4	504.0	478.7	25.30	19.922	
3,600.0	3,565.6	3,593.1	3,579.0	14.2	12.9	-145.01	278.8	-94.5	516.4	490.3	26.04	19.830	
3,700.0	3,664.0	3,704.7	3,690.5	14.6	13.2	-146.08	278.8	-90.5	527.3	500.5	26.78	19.689	
3,800.0	3,762.5	3,809.4	3,795.0	15.1	13.6	-147.31	275.6	-85.3	536.3	508.8	27.49	19.509	
3,900.0	3,861.0	3,897.6	3,883.1	15.5	13.8	-148.37	272.8	-81.9	546.4	518.3	28.14	19.419	
4,000.0	3,959.5	3,987.5	3,973.0	16.0	14.1	-149.37	270.7	-79.9	558.6	529.8	28.78	19.410	
4,100.0	4,058.0	4,086.4	4,071.8	16.4	14.4	-150.36	269.2	-78.2	571.6	542.2	29.47	19.399	
4,200.0	4,156.4	4,182.1	4,167.5	16.8	14.8	-151.19	268.5	-76.4	584.8	554.7	30.14	19.402	
4,300.0	4,254.9	4,268.4	4,253.8	17.3	15.1	-151.83	269.0	-75.8	599.7	568.9	30.78	19.483	
4,400.0	4,353.4	4,354.9	4,340.3	17.7	15.3	-152.37	270.6	-76.8	616.6	585.2	31.40	19.635	
4,500.0	4,451.9	4,449.5	4,434.8	18.2	15.7	-152.89	273.1	-79.0	634.7	602.7	32.09	19.782	
4,600.0	4,550.4	4,544.1	4,529.3	18.6	16.0	-153.38	275.7	-81.7	653.5	620.8	32.77	19.942	
4,700.0	4,648.9	4,642.0	4,627.2	19.1	16.4	-153.86	278.4	-84.7	672.6	639.1	33.48	20.088	
4,800.0	4,747.3	4,740.0	4,725.1	19.5	16.7	-154.33	280.9	-87.7	691.8	657.6	34.19	20.230	
4,900.0	4,845.8	4,839.1	4,824.1	20.0	17.0	-154.80	283.1	-90.8	710.9	675.9	34.91	20.362	
5,000.0	4,944.3	4,937.5	4,922.4	20.4	17.4	-155.27	285.1	-93.8	729.9	694.2	35.62	20.488	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #133H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 229-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	5,033.8	5,018.7	20.9	17.7	-155.63	287.9	-96.6	749.0	712.7	36.33	20.619	
5,200.0	5,141.3	5,130.8	5,115.6	21.3	18.1	-155.88	292.0	-99.5	768.4	731.4	37.04	20.746	
5,300.0	5,239.7	5,229.8	5,214.4	21.8	18.4	-156.12	296.3	-102.5	787.8	750.1	37.77	20.857	
5,400.0	5,338.2	5,328.6	5,313.1	22.2	18.8	-156.38	300.0	-105.4	807.1	768.6	38.50	20.962	
5,500.0	5,436.7	5,427.3	5,411.7	22.7	19.1	-156.66	303.4	-108.2	826.4	787.1	39.23	21.065	
5,600.0	5,535.2	5,526.2	5,510.5	23.1	19.5	-156.94	306.5	-111.0	845.5	805.6	39.96	21.162	
5,700.0	5,633.7	5,625.5	5,609.7	23.6	19.8	-157.25	309.1	-113.8	864.6	823.9	40.68	21.253	
5,800.0	5,732.1	5,722.6	5,706.8	24.0	20.2	-157.56	311.2	-116.5	883.6	842.2	41.39	21.349	
5,900.0	5,830.6	5,817.6	5,801.7	24.5	20.5	-157.89	312.8	-119.4	903.0	860.9	42.08	21.460	
6,000.0	5,929.1	5,914.8	5,898.9	24.9	20.8	-158.24	313.9	-122.7	922.6	879.8	42.78	21.567	
6,100.0	6,027.6	6,014.5	5,998.5	25.4	21.2	-158.59	315.0	-126.0	942.1	898.6	43.50	21.659	
6,200.0	6,126.1	6,122.0	6,106.0	25.8	21.5	-158.98	315.7	-129.2	961.2	917.0	44.27	21.715	
6,300.0	6,224.5	6,234.5	6,218.4	26.3	21.9	-159.49	314.4	-131.0	979.0	934.0	45.05	21.730	
6,400.0	6,323.0	6,350.3	6,334.2	26.7	22.3	-160.03	312.1	-131.2	995.3	949.5	45.84	21.711	
6,500.0	6,421.5	6,467.2	6,451.0	27.2	22.7	-160.51	310.4	-129.1	1,009.9	963.3	46.63	21.658	
6,600.0	6,520.0	6,558.2	6,542.0	27.6	23.0	-160.87	309.3	-127.5	1,024.4	977.1	47.28	21.665	
6,700.0	6,618.5	6,658.2	6,642.0	28.1	23.3	-161.24	308.3	-125.6	1,038.9	991.0	47.99	21.651	
6,800.0	6,716.9	6,763.0	6,746.8	28.5	23.7	-161.61	307.3	-123.2	1,053.1	1,004.4	48.71	21.617	
6,900.0	6,815.4	6,865.1	6,848.8	29.0	24.0	-161.95	306.4	-120.3	1,066.8	1,017.4	49.43	21.581	
6,981.8	6,896.0	6,947.1	6,930.8	29.4	24.3	-162.21	305.8	-117.9	1,077.9	1,027.9	50.01	21.553	
7,000.0	6,913.9	6,965.3	6,949.0	29.5	24.3	-162.29	305.7	-117.3	1,080.3	1,030.2	50.14	21.546	
7,100.0	7,012.9	7,063.5	7,047.1	29.9	24.7	-162.63	305.0	-114.3	1,091.0	1,040.2	50.83	21.463	
7,200.0	7,112.3	7,161.1	7,144.7	30.3	25.0	-162.86	304.4	-111.6	1,097.8	1,046.3	51.52	21.311	
7,300.0	7,212.2	7,258.7	7,242.3	30.6	25.3	-163.00	303.7	-109.0	1,100.7	1,048.5	52.19	21.090	
7,381.8	7,294.0	7,338.5	7,322.1	30.9	25.6	-88.63	303.0	-107.0	1,100.1	1,047.3	52.73	20.863	
7,400.0	7,312.2	7,356.3	7,339.8	30.9	25.7	-88.64	302.9	-106.6	1,099.6	1,046.8	52.85	20.808	
7,500.0	7,412.2	7,453.4	7,436.9	31.2	26.0	-88.68	302.1	-104.5	1,097.4	1,043.9	53.50	20.514	
7,600.0	7,512.2	7,550.5	7,534.0	31.5	26.3	-88.72	301.3	-102.6	1,095.5	1,041.3	54.15	20.232	
7,633.8	7,546.0	7,583.9	7,567.4	31.6	26.4	-88.73	301.0	-102.0	1,094.9	1,040.5	54.37	20.137	
7,650.0	7,562.2	7,599.9	7,583.4	31.7	26.5	91.64	300.9	-101.8	1,094.6	1,040.1	54.48	20.093	
7,700.0	7,612.0	7,649.4	7,632.9	31.8	26.7	91.88	300.5	-100.9	1,093.8	1,039.0	54.80	19.961	
7,750.0	7,661.4	7,698.5	7,681.9	31.9	26.8	92.32	300.1	-100.1	1,093.3	1,038.1	55.12	19.835	
7,800.0	7,709.8	7,746.7	7,730.1	32.0	27.0	92.94	299.6	-99.3	1,093.0	1,037.5	55.43	19.718	
7,812.4	7,721.7	7,758.4	7,741.9	32.1	27.0	93.12	299.5	-99.1	1,093.0	1,037.5	55.51	19.691	
7,850.0	7,757.1	7,792.0	7,775.5	32.1	27.1	93.68	299.1	-98.6	1,093.1	1,037.4	55.73	19.617	
7,900.0	7,802.7	7,835.8	7,819.2	32.2	27.3	94.51	298.7	-98.0	1,094.0	1,038.0	56.01	19.531	
7,950.0	7,846.4	7,877.7	7,861.1	32.3	27.4	95.39	298.3	-97.5	1,095.7	1,039.4	56.29	19.466	
8,000.0	7,887.7	7,917.5	7,900.9	32.4	27.6	96.26	297.9	-97.1	1,098.5	1,041.9	56.55	19.424	
8,050.0	7,926.5	7,954.7	7,938.2	32.4	27.7	97.06	297.6	-96.8	1,102.6	1,045.8	56.80	19.411	
8,100.0	7,962.4	7,989.2	7,972.6	32.5	27.8	97.72	297.3	-96.6	1,108.2	1,051.2	57.04	19.429	
8,150.0	7,995.1	8,020.5	8,003.9	32.5	27.9	98.19	297.1	-96.4	1,115.6	1,058.4	57.26	19.485	
8,200.0	8,024.4	8,048.6	8,032.0	32.6	28.0	98.41	296.9	-96.3	1,125.0	1,067.6	57.46	19.580	
8,250.0	8,050.1	8,073.2	8,056.6	32.6	28.1	98.33	296.8	-96.2	1,136.5	1,078.9	57.64	19.718	
8,300.0	8,071.9	8,094.0	8,077.4	32.7	28.2	97.89	296.7	-96.2	1,150.2	1,092.4	57.80	19.900	
8,350.0	8,089.7	8,111.1	8,094.5	32.7	28.2	97.05	296.6	-96.1	1,166.0	1,108.1	57.93	20.129	
8,400.0	8,103.4	8,124.2	8,107.6	32.7	28.3	95.78	296.6	-96.1	1,184.1	1,126.1	58.03	20.404	
8,450.0	8,112.8	8,133.5	8,116.9	32.8	28.3	94.06	296.5	-96.1	1,204.3	1,146.2	58.11	20.723	
8,500.0	8,118.0	8,138.7	8,122.1	32.9	28.3	91.87	296.5	-96.1	1,226.4	1,168.2	58.16	21.085	
8,533.8	8,119.0	8,139.8	8,123.2	33.0	28.3	90.12	296.5	-96.1	1,242.3	1,184.2	58.18	21.353	
8,600.0	8,119.0	8,140.1	8,123.5	33.1	28.3	90.13	296.5	-96.1	1,275.5	1,217.3	58.20	21.917	
8,700.0	8,119.0	8,140.4	8,123.9	33.4	28.3	90.15	296.5	-96.1	1,330.4	1,272.2	58.23	22.848	
8,800.0	8,119.0	8,140.8	8,124.2	33.8	28.3	90.17	296.5	-96.1	1,390.4	1,332.1	58.26	23.865	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #133H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 229-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,900.0	8,119.0	8,141.2	8,124.6	34.3	28.3	90.19	296.5	-96.1	1,454.7	1,396.4	58.29	24.957	
9,000.0	8,119.0	8,141.6	8,125.0	34.9	28.3	90.21	296.5	-96.1	1,522.9	1,464.6	58.31	26.115	
9,100.0	8,119.0	8,142.0	8,125.4	35.5	28.3	90.24	296.5	-96.1	1,594.4	1,536.1	58.34	27.330	
9,200.0	8,119.0	8,142.4	8,125.8	36.3	28.3	90.26	296.5	-96.1	1,668.9	1,610.5	58.36	28.595	
9,300.0	8,119.0	8,142.8	8,126.2	37.1	28.3	90.28	296.5	-96.1	1,745.9	1,687.5	58.39	29.903	
9,400.0	8,119.0	8,143.2	8,126.6	37.9	28.3	90.30	296.5	-96.1	1,825.2	1,766.8	58.41	31.248	
9,500.0	8,119.0	8,143.7	8,127.1	38.8	28.3	90.32	296.5	-96.1	1,906.4	1,848.0	58.43	32.626	
9,600.0	8,119.0	8,144.1	8,127.5	39.8	28.3	90.34	296.5	-96.1	1,989.3	1,930.9	58.45	34.033	
9,700.0	8,119.0	8,144.5	8,127.9	40.8	28.3	90.37	296.5	-96.1	2,073.7	2,015.3	58.47	35.464	
9,800.0	8,119.0	8,144.9	8,128.3	41.8	28.3	90.39	296.5	-96.1	2,159.5	2,101.0	58.50	36.917	
9,900.0	8,119.0	8,145.3	8,128.7	42.9	28.3	90.41	296.5	-96.1	2,246.4	2,187.9	58.52	38.388	
10,000.0	8,119.0	8,145.8	8,129.2	44.0	28.3	90.43	296.5	-96.1	2,334.4	2,275.9	58.54	39.877	
10,100.0	8,119.0	8,146.2	8,129.6	45.2	28.3	90.45	296.5	-96.1	2,423.3	2,364.8	58.56	41.380	
10,200.0	8,119.0	8,146.6	8,130.0	46.3	28.3	90.48	296.5	-96.1	2,513.1	2,454.5	58.59	42.895	
10,300.0	8,119.0	8,147.1	8,130.5	47.5	28.3	90.50	296.5	-96.1	2,603.6	2,545.0	58.61	44.422	
10,400.0	8,119.0	8,147.5	8,130.9	48.8	28.3	90.52	296.5	-96.1	2,694.7	2,636.1	58.63	45.958	
10,500.0	8,119.0	12,849.4	10,503.0	50.0	53.3	150.81	-2,237.4	-324.0	2,728.8	2,661.9	66.84	40.825	
10,600.0	8,119.0	12,901.7	10,502.9	51.3	53.9	150.75	-2,289.6	-326.6	2,731.1	2,663.0	68.07	40.120	
10,700.0	8,119.0	12,984.6	10,503.6	52.6	54.9	150.67	-2,372.3	-331.1	2,734.7	2,665.0	69.68	39.249	
10,800.0	8,119.0	13,081.2	10,503.6	54.0	56.1	150.54	-2,468.7	-337.6	2,738.3	2,666.8	71.50	38.300	
10,900.0	8,119.0	13,242.5	10,504.4	55.3	58.1	150.43	-2,629.9	-343.1	2,740.7	2,666.6	74.05	37.012	
11,000.0	8,119.0	13,342.9	10,504.8	56.7	59.4	150.40	-2,730.3	-344.7	2,742.0	2,666.1	75.87	36.141	
11,100.0	8,119.0	11,100.0	10,504.7	58.0	36.6	150.42	-2,925.0	-342.0	2,741.4	2,684.0	57.38	47.775	
11,200.0	8,119.0	13,646.3	10,503.4	59.4	63.4	150.47	-3,033.5	-338.0	2,738.8	2,658.2	80.60	33.981	
11,300.0	8,119.0	13,733.3	10,501.0	60.8	64.5	150.44	-3,120.4	-338.0	2,736.7	2,654.4	82.32	33.245	
11,400.0	8,119.0	13,900.2	10,493.6	62.2	66.8	150.35	-3,287.2	-337.8	2,732.6	2,647.6	85.06	32.127	
11,500.0	8,119.0	13,976.8	10,491.0	63.6	67.9	150.35	-3,363.6	-335.8	2,728.7	2,642.1	86.65	31.489	
11,600.0	8,119.0	14,072.6	10,488.8	65.1	69.2	150.37	-3,459.4	-333.0	2,725.6	2,637.1	88.47	30.809	
11,700.0	8,119.0	14,195.7	10,485.4	66.5	70.9	150.39	-3,582.4	-329.0	2,721.9	2,631.3	90.60	30.043	
11,800.0	8,119.0	14,198.8	10,485.3	68.0	71.0	150.39	-3,585.5	-328.9	2,719.5	2,628.1	91.34	29.774	
11,861.7	8,119.0	14,245.1	10,484.9	68.9	71.6	150.41	-3,631.8	-327.4	2,718.5	2,626.2	92.30	29.452	
11,900.0	8,119.0	14,256.2	10,485.2	69.4	71.8	150.42	-3,642.9	-327.1	2,718.7	2,626.0	92.68	29.333	
12,000.0	8,119.0	14,293.3	10,486.9	70.9	72.3	150.46	-3,679.9	-325.8	2,721.0	2,627.3	93.74	29.027	
12,100.0	8,119.0	14,349.9	10,490.8	72.4	73.1	150.53	-3,736.4	-323.9	2,725.4	2,630.4	95.00	28.689	
12,200.0	8,119.0	14,672.1	10,490.6	73.9	77.8	150.56	-4,058.0	-319.9	2,722.3	2,622.6	99.69	27.307	
12,300.0	8,119.0	14,710.0	10,489.8	75.4	78.3	150.55	-4,095.9	-319.9	2,720.5	2,619.6	100.89	26.965	
12,356.4	8,119.0	14,740.5	10,489.6	76.2	78.8	150.55	-4,126.4	-319.7	2,720.2	2,618.5	101.66	26.757	
12,400.0	8,119.0	14,764.5	10,489.8	76.9	79.1	150.55	-4,150.4	-319.5	2,720.3	2,618.1	102.25	26.604	
12,500.0	8,119.0	14,921.3	10,488.6	78.4	81.4	150.54	-4,307.2	-318.7	2,719.6	2,614.6	104.95	25.914	
12,600.0	8,119.0	15,026.9	10,485.9	79.9	83.0	150.48	-4,412.7	-319.7	2,718.1	2,611.0	107.06	25.388	
12,700.0	8,119.0	15,141.4	10,482.0	81.4	84.7	150.39	-4,527.1	-321.8	2,716.3	2,606.9	109.34	24.842	
12,800.0	8,119.0	15,254.7	10,476.8	82.9	86.4	150.28	-4,640.3	-324.2	2,713.6	2,602.0	111.65	24.304	
12,900.0	8,119.0	15,314.6	10,475.2	84.5	87.2	150.25	-4,700.1	-324.5	2,711.8	2,598.6	113.18	23.960	
13,000.0	8,119.0	15,441.8	10,473.6	86.0	89.2	150.26	-4,827.4	-322.6	2,710.3	2,594.8	115.51	23.464	
13,100.0	8,119.0	15,527.6	10,473.1	87.5	90.4	150.29	-4,913.1	-319.9	2,708.4	2,591.2	117.27	23.097	
13,200.0	8,119.0	15,642.2	10,472.6	89.1	92.2	150.35	-5,027.6	-315.8	2,706.6	2,587.3	119.36	22.677	
13,300.0	8,119.0	15,736.6	10,471.7	90.6	93.6	150.39	-5,122.0	-312.5	2,704.3	2,583.1	121.22	22.309	
13,400.0	8,119.0	15,801.4	10,472.0	92.2	94.6	150.43	-5,186.7	-309.9	2,703.1	2,580.4	122.70	22.030	
13,455.5	8,119.0	15,840.2	10,472.7	93.0	95.2	150.47	-5,225.5	-308.1	2,702.9	2,579.3	123.53	21.880	
13,500.0	8,119.0	15,870.8	10,473.5	93.7	95.6	150.50	-5,256.0	-306.8	2,703.0	2,578.8	124.19	21.765	
13,600.0	8,119.0	16,036.1	10,473.2	95.3	98.2	150.55	-5,421.2	-302.7	2,701.7	2,574.7	126.96	21.280	
13,700.0	8,119.0	16,111.2	10,472.7	96.8	99.3	150.57	-5,496.3	-301.4	2,700.4	2,571.8	128.63	20.993	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #133H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 229-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,800.0	8,119.0	16,214.7	10,471.5	98.4	100.9	150.56	-5,599.8	-300.5	2,699.3	2,568.6	130.71	20.651	
13,900.0	8,119.0	16,311.0	10,469.9	100.0	102.4	150.52	-5,696.1	-300.9	2,698.3	2,565.5	132.74	20.328	
14,000.0	8,119.0	16,446.7	10,468.6	101.5	104.5	150.54	-5,831.8	-298.7	2,697.0	2,561.8	135.20	19.948	
14,100.0	8,119.0	16,560.0	10,464.9	103.1	106.2	150.51	-5,944.9	-297.5	2,693.9	2,556.5	137.45	19.599	
14,200.0	8,119.0	16,629.3	10,463.3	104.7	107.3	150.51	-6,014.2	-296.2	2,691.4	2,552.3	139.09	19.350	
14,300.0	8,119.0	16,734.2	10,463.6	106.2	108.9	150.57	-6,119.1	-292.3	2,690.1	2,549.0	141.06	19.070	
14,400.0	8,119.0	16,845.3	10,463.2	107.8	110.7	150.65	-6,230.0	-287.5	2,688.0	2,544.9	143.10	18.784	
14,500.0	8,119.0	16,913.2	10,463.9	109.4	111.7	150.72	-6,297.8	-283.6	2,686.3	2,541.8	144.57	18.581	
14,600.0	8,119.0	16,993.0	10,465.6	111.0	113.0	150.81	-6,377.5	-279.3	2,685.8	2,539.6	146.16	18.376	
14,660.6	8,119.0	17,046.0	10,466.5	111.9	113.8	150.85	-6,430.4	-277.1	2,685.7	2,538.5	147.20	18.246	
14,700.0	8,119.0	17,079.4	10,467.0	112.6	114.3	150.87	-6,463.8	-276.1	2,685.7	2,537.8	147.88	18.162	
14,800.0	8,119.0	17,186.8	10,467.7	114.2	116.0	150.89	-6,571.2	-274.9	2,686.1	2,536.1	149.98	17.910	
14,900.0	8,119.0	17,340.6	10,467.7	115.7	118.4	150.96	-6,724.9	-270.5	2,684.9	2,532.3	152.59	17.595	
15,000.0	8,119.0	17,429.1	10,466.8	117.3	119.8	150.98	-6,813.4	-268.2	2,683.0	2,528.6	154.43	17.374	
15,100.0	8,119.0	17,510.3	10,466.0	118.9	121.1	150.98	-6,894.6	-267.1	2,681.8	2,525.5	156.21	17.167	
15,165.9	8,119.0	17,551.4	10,466.0	120.0	121.7	150.99	-6,935.7	-266.5	2,681.4	2,524.2	157.20	17.057	
15,200.0	8,119.0	17,572.3	10,466.3	120.5	122.1	151.00	-6,956.6	-266.0	2,681.5	2,523.8	157.70	17.004	
15,300.0	8,119.0	17,630.1	10,467.9	122.1	123.0	151.05	-7,014.3	-264.1	2,682.8	2,523.7	159.03	16.870	
15,400.0	8,119.0	17,682.8	10,469.7	123.7	123.8	151.06	-7,067.0	-263.8	2,685.7	2,525.4	160.30	16.754	
15,500.0	8,119.0	17,754.8	10,472.2	125.3	125.0	151.05	-7,139.0	-265.5	2,690.2	2,528.3	161.93	16.614	
15,600.0	8,119.0	18,129.7	10,467.6	126.9	130.9	150.75	-7,513.4	-277.0	2,693.4	2,525.0	168.42	15.992	
15,700.0	8,119.0	18,216.2	10,461.6	128.5	132.2	150.64	-7,599.6	-278.7	2,688.6	2,518.0	170.57	15.763	
15,800.0	8,119.0	18,273.0	10,457.3	130.1	133.1	150.57	-7,656.3	-280.2	2,684.0	2,511.7	172.30	15.578	
15,900.0	8,119.0	18,336.6	10,453.5	131.7	134.1	150.49	-7,719.6	-282.0	2,680.8	2,506.7	174.09	15.399	
16,000.0	8,119.0	18,395.6	10,451.9	133.3	135.1	150.43	-7,778.6	-283.6	2,679.9	2,504.2	175.73	15.250	
16,095.6	8,119.0	18,481.5	10,450.0	134.9	136.4	150.37	-7,864.5	-285.7	2,679.5	2,501.8	177.74	15.075	
16,100.0	8,119.0	18,483.6	10,449.9	134.9	136.5	150.36	-7,866.6	-285.7	2,679.5	2,501.7	177.80	15.070	
16,200.0	8,119.0	18,532.8	10,449.8	136.5	137.2	150.34	-7,915.8	-286.7	2,680.6	2,501.4	179.19	14.959	
16,300.0	8,119.0	16,300.0	10,450.9	138.1	101.8	150.31	-8,018.7	-288.5	2,682.6	2,525.3	157.29	17.055	
16,400.0	8,119.0	18,703.5	10,451.5	139.7	139.9	150.28	-8,086.5	-289.8	2,684.8	2,501.7	183.04	14.668	
16,500.0	8,119.0	18,757.5	10,453.2	141.4	140.8	150.27	-8,140.4	-291.0	2,688.9	2,504.5	184.39	14.583	
16,600.0	8,119.0	18,977.6	10,454.1	143.0	144.3	150.13	-8,360.3	-298.1	2,690.7	2,502.0	188.70	14.259	
16,700.0	8,119.0	19,029.6	10,454.8	144.6	145.1	150.13	-8,412.3	-298.0	2,692.1	2,502.0	190.07	14.164	
16,800.0	8,119.0	19,198.1	10,456.5	146.2	147.8	150.20	-8,580.7	-294.3	2,691.5	2,498.5	192.98	13.947	
16,900.0	8,119.0	19,421.7	10,453.6	147.8	151.4	150.34	-8,804.0	-283.7	2,687.7	2,491.5	196.21	13.698	
17,000.0	8,119.0	19,501.8	10,451.4	149.4	152.7	150.39	-8,884.0	-279.5	2,683.0	2,485.1	197.96	13.554	
17,100.0	8,119.0	19,554.8	10,450.2	151.0	153.6	150.40	-8,936.9	-277.6	2,679.6	2,480.1	199.43	13.436	
17,200.0	8,119.0	19,606.8	10,449.8	152.7	154.4	150.42	-8,988.9	-276.3	2,678.0	2,477.2	200.85	13.334	
17,262.5	8,119.0	19,650.3	10,449.6	153.7	155.1	150.42	-9,032.4	-276.1	2,677.8	2,475.9	201.89	13.264	
17,300.0	8,119.0	19,676.3	10,449.5	154.3	155.5	150.41	-9,058.4	-276.3	2,677.9	2,475.3	202.53	13.222	
17,400.0	8,119.0	19,737.0	10,449.3	155.9	156.5	150.38	-9,119.1	-277.6	2,679.0	2,474.9	204.12	13.125	
17,500.0	8,119.0	19,802.0	10,450.6	157.5	157.5	150.36	-9,184.1	-278.5	2,681.6	2,476.0	205.68	13.038	
17,600.0	8,119.0	19,921.2	10,454.3	159.1	159.4	150.40	-9,303.2	-278.1	2,684.5	2,476.5	207.98	12.907	
17,700.0	8,119.0	19,980.0	10,456.7	160.7	160.4	150.43	-9,361.9	-277.5	2,687.8	2,478.5	209.31	12.841	
17,800.0	8,119.0	20,042.3	10,460.1	162.4	161.4	150.46	-9,424.1	-277.4	2,692.6	2,481.9	210.65	12.782	
17,900.0	8,119.0	17,900.0	10,466.5	164.0	126.9	150.52	-9,540.2	-277.3	2,697.6	2,508.2	189.37	14.245	
18,000.0	8,119.0	20,240.1	10,470.2	165.6	164.6	150.53	-9,621.6	-277.9	2,702.3	2,487.7	214.56	12.594	
18,100.0	8,119.0	20,676.3	10,467.9	167.2	171.6	150.66	-10,057.2	-267.5	2,698.9	2,478.1	220.84	12.221	
18,200.0	8,119.0	20,827.9	10,457.1	168.9	174.1	150.64	-10,208.2	-261.5	2,691.0	2,467.6	223.41	12.045	
18,300.0	8,119.0	20,866.5	10,454.4	170.5	174.7	150.63	-10,246.8	-260.0	2,683.3	2,458.3	224.99	11.926	
18,400.0	8,119.0	20,925.0	10,452.4	172.1	175.6	150.65	-10,305.2	-257.6	2,678.1	2,451.5	226.60	11.818	
18,500.0	8,119.0	20,925.0	10,452.4	173.7	175.6	150.65	-10,305.2	-257.6	2,674.9	2,447.4	227.51	11.757	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #133H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 229-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,595.0	8,119.0	20,984.7	10,452.7	175.3	176.6	150.70	-10,364.8	-254.8	2,673.8	2,444.9	228.85	11.684	
18,600.0	8,119.0	20,986.8	10,452.8	175.4	176.6	150.70	-10,366.9	-254.7	2,673.8	2,444.9	228.91	11.681	
18,700.0	8,119.0	21,131.1	10,455.4	177.0	179.0	150.83	-10,511.0	-248.8	2,674.0	2,442.8	231.22	11.565	
18,800.0	8,119.0	21,194.5	10,455.9	178.6	180.0	150.86	-10,574.4	-246.6	2,673.1	2,440.5	232.68	11.489	
18,819.2	8,119.0	21,209.0	10,456.1	178.9	180.2	150.88	-10,588.9	-246.0	2,673.1	2,440.2	232.97	11.474	
18,900.0	8,119.0	21,253.4	10,457.2	180.2	180.9	150.91	-10,633.2	-244.6	2,673.7	2,439.7	234.01	11.426	
19,000.0	8,119.0	21,329.9	10,458.9	181.9	182.2	150.92	-10,709.7	-244.6	2,675.8	2,440.1	235.69	11.353	
19,100.0	8,119.0	21,430.4	10,458.5	183.5	183.8	150.84	-10,810.1	-247.9	2,677.4	2,439.3	238.03	11.248	
19,200.0	8,119.0	19,200.0	10,460.8	185.1	147.7	150.83	-10,923.8	-249.4	2,680.2	2,464.2	216.02	12.407	
19,300.0	8,119.0	21,721.3	10,459.9	186.8	188.5	150.83	-11,101.0	-247.7	2,678.8	2,435.2	243.58	10.998	
19,400.0	8,119.0	21,829.1	10,459.3	188.4	190.3	150.84	-11,208.7	-246.0	2,677.9	2,432.1	245.72	10.898	
19,500.0	8,119.0	21,940.2	10,454.1	190.0	192.0	150.70	-11,319.6	-250.2	2,675.9	2,427.5	248.44	10.771	
19,600.0	8,119.0	22,024.0	10,450.5	191.6	193.4	150.59	-11,403.2	-253.4	2,674.3	2,423.6	250.68	10.668	
19,700.0	8,119.0	22,128.9	10,447.8	193.3	195.1	150.52	-11,508.1	-255.3	2,673.2	2,420.1	253.10	10.562	
19,800.0	8,119.0	22,295.7	10,440.2	194.9	197.8	150.38	-11,674.7	-257.4	2,670.0	2,413.5	256.48	10.410	
19,900.0	8,119.0	22,345.0	10,437.4	196.5	198.6	150.33	-11,723.9	-258.3	2,666.6	2,408.4	258.17	10.329	
20,000.0	8,119.0	22,401.6	10,435.3	198.2	199.5	150.28	-11,780.4	-259.3	2,664.9	2,405.1	259.86	10.255	
20,017.5	8,119.0	22,408.5	10,435.2	198.5	199.6	150.28	-11,787.3	-259.4	2,664.9	2,404.8	260.09	10.246	
20,100.0	8,119.0	22,440.0	10,435.2	199.8	200.1	150.26	-11,818.9	-259.9	2,665.7	2,404.6	261.10	10.209	
20,200.0	8,119.0	22,518.9	10,436.5	201.4	201.4	150.25	-11,897.7	-260.8	2,667.9	2,405.0	262.89	10.148	
20,300.0	8,119.0	22,590.7	10,438.9	203.1	202.6	150.27	-11,969.5	-260.7	2,671.1	2,406.7	264.45	10.101	
20,400.0	8,119.0	22,694.2	10,444.4	204.7	204.3	150.35	-12,072.9	-258.9	2,675.2	2,408.9	266.32	10.045	
20,500.0	8,119.0	22,779.8	10,449.2	206.3	205.6	150.45	-12,158.2	-256.2	2,678.8	2,411.0	267.82	10.002	
20,606.7	8,119.0	22,854.7	10,454.7	208.1	206.9	150.55	-12,232.9	-253.3	2,683.9	2,414.8	269.09	9.974	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #134H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 14-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	85.08	65.2	756.8	759.6				
100.0	100.0	101.6	101.4	0.1	0.3	85.08	65.1	756.8	759.6	759.2	0.39	1,950.660	
200.0	200.0	201.3	201.3	0.5	0.6	85.09	65.1	756.8	759.6	758.5	1.10	687.458	
219.1	219.1	220.1	220.1	0.6	0.7	85.09	65.1	756.8	759.6	758.3	1.24	612.215	
300.0	300.0	300.0	300.0	0.8	1.0	85.09	65.0	756.8	759.6	757.8	1.81	420.305	
400.0	400.0	400.0	400.0	1.2	1.3	85.09	65.0	757.0	759.8	757.3	2.51	302.472	
500.0	500.0	500.2	500.2	1.6	1.7	85.09	65.0	757.1	759.9	756.7	3.22	235.878	
600.0	600.0	596.5	596.5	1.9	2.0	85.07	65.3	757.4	760.2	756.3	3.91	194.205	
700.0	700.0	692.5	692.5	2.3	2.3	85.01	66.2	758.1	761.1	756.5	4.61	165.139	
800.0	800.0	788.6	788.6	2.6	2.7	84.93	67.3	759.4	762.4	757.1	5.31	143.702	
900.0	900.0	887.6	887.5	3.0	3.0	84.85	68.6	760.9	764.1	758.1	6.01	127.052	
1,000.0	1,000.0	985.7	985.6	3.4	3.4	84.75	70.0	762.7	766.0	759.3	6.72	113.973	
1,100.0	1,100.0	1,085.7	1,085.6	3.7	3.7	10.27	71.4	764.6	766.3	758.9	7.43	103.157	
1,200.0	1,199.8	1,181.9	1,181.8	4.1	4.1	10.31	72.0	766.6	763.3	755.2	8.12	94.006	
1,300.0	1,299.5	1,276.1	1,275.9	4.4	4.4	10.45	72.3	769.4	757.7	748.9	8.81	86.048	
1,400.0	1,398.7	1,359.3	1,359.0	4.8	4.7	10.58	73.0	772.7	749.8	740.3	9.45	79.334	
1,500.0	1,497.5	1,440.2	1,439.7	5.2	5.0	10.68	74.9	777.8	740.9	730.8	10.09	73.455	
1,600.0	1,595.9	1,526.2	1,525.4	5.5	5.3	10.69	78.3	784.9	732.3	721.6	10.74	68.181	
1,700.0	1,694.4	1,624.3	1,622.9	5.9	5.7	10.58	83.6	794.2	725.1	713.7	11.45	63.322	
1,800.0	1,792.9	1,727.0	1,725.1	6.3	6.1	10.47	89.1	803.8	717.8	705.7	12.19	58.904	
1,900.0	1,891.4	1,832.2	1,829.6	6.8	6.5	10.25	95.9	812.9	709.9	696.9	12.94	54.879	
2,000.0	1,989.9	1,933.3	1,930.0	7.2	6.8	9.90	104.1	821.0	701.5	687.8	13.67	51.323	
2,100.0	2,088.4	2,046.1	2,042.2	7.6	7.3	9.51	113.1	829.1	692.3	677.9	14.45	47.906	
2,200.0	2,186.8	2,152.7	2,148.3	8.0	7.7	9.06	122.1	834.6	681.2	666.0	15.21	44.792	
2,300.0	2,285.3	2,254.4	2,249.5	8.5	8.0	8.63	130.4	839.0	669.3	653.3	15.94	41.977	
2,400.0	2,383.8	2,349.1	2,343.8	8.9	8.4	8.25	138.0	844.2	658.4	641.8	16.66	39.522	
2,500.0	2,482.3	2,437.3	2,431.6	9.3	8.7	7.99	143.9	850.5	649.1	631.7	17.35	37.410	
2,600.0	2,580.8	2,545.3	2,539.1	9.8	9.1	7.73	150.4	857.6	639.1	621.0	18.12	35.279	
2,700.0	2,679.2	2,635.3	2,628.8	10.2	9.5	7.52	155.6	863.1	628.7	609.9	18.81	33.418	
2,800.0	2,777.7	2,723.1	2,716.1	10.6	9.8	7.26	161.6	870.8	621.1	601.6	19.50	31.849	
2,900.0	2,876.2	2,829.3	2,821.6	11.1	10.2	6.93	168.9	880.2	613.6	593.3	20.27	30.271	
3,000.0	2,974.7	2,937.6	2,929.4	11.5	10.6	6.64	175.5	888.2	604.5	583.5	21.04	28.734	
3,100.0	3,073.2	3,027.8	3,019.3	11.9	11.0	6.46	180.2	894.5	595.0	573.3	21.74	27.371	
3,200.0	3,171.6	3,129.3	3,120.2	12.4	11.4	6.21	186.2	903.1	587.0	564.5	22.48	26.105	
3,300.0	3,270.1	3,235.8	3,226.2	12.8	11.8	5.97	191.9	911.1	577.9	554.7	23.25	24.862	
3,400.0	3,368.6	3,320.9	3,311.0	13.3	12.1	5.74	196.9	917.4	569.0	545.1	23.93	23.783	
3,500.0	3,467.1	3,417.5	3,407.0	13.7	12.5	5.54	202.2	927.0	562.4	537.7	24.65	22.813	
3,600.0	3,565.6	3,519.6	3,508.4	14.2	12.9	5.54	205.8	937.4	555.7	530.3	25.40	21.877	
3,700.0	3,664.0	3,617.1	3,605.4	14.6	13.3	5.55	209.2	947.2	548.9	522.7	26.13	21.008	
3,800.0	3,762.5	3,715.4	3,703.1	15.1	13.6	5.49	213.2	957.6	542.6	515.8	26.86	20.203	
3,900.0	3,861.0	3,820.8	3,807.8	15.5	14.0	5.36	218.1	968.0	535.8	508.2	27.62	19.396	
4,000.0	3,959.5	3,918.9	3,905.3	16.0	14.4	5.18	223.1	977.5	528.9	500.6	28.36	18.653	
4,100.0	4,058.0	4,027.0	4,012.9	16.4	14.9	5.09	227.5	987.4	521.3	492.2	29.13	17.897	
4,200.0	4,156.4	4,134.7	4,120.0	16.8	15.3	4.47	236.1	994.2	511.7	481.8	29.89	17.118	
4,300.0	4,254.9	4,234.8	4,219.6	17.3	15.6	3.73	245.1	999.9	501.6	471.0	30.63	16.377	
4,400.0	4,353.4	4,337.0	4,321.2	17.7	16.0	3.00	253.8	1,005.3	491.2	459.8	31.37	15.658	
4,500.0	4,451.9	4,438.2	4,421.9	18.2	16.4	2.27	262.0	1,010.2	480.3	448.2	32.11	14.959	
4,600.0	4,550.4	4,528.0	4,511.4	18.6	16.8	1.66	268.9	1,014.8	469.8	437.0	32.83	14.311	
4,700.0	4,648.9	4,625.3	4,608.2	19.1	17.1	1.08	276.0	1,022.2	461.6	428.0	33.56	13.754	
4,800.0	4,747.3	4,727.9	4,710.2	19.5	17.5	0.44	283.5	1,029.5	452.9	418.5	34.31	13.199	
4,900.0	4,845.8	4,830.3	4,812.1	20.0	17.9	-0.24	290.8	1,036.1	443.6	408.5	35.06	12.654	
5,000.0	4,944.3	4,940.2	4,921.7	20.4	18.3	-0.87	297.3	1,042.0	433.0	397.2	35.80	12.094	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #134H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 14-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	5,043.6	5,024.9	20.9	18.7	-1.29	301.5	1,046.1	420.5	383.9	36.53	11.510	
5,200.0	5,141.3	5,144.5	5,125.6	21.3	19.1	-1.75	305.4	1,049.4	407.4	370.1	37.26	10.933	
5,300.0	5,239.7	5,246.5	5,227.5	21.8	19.5	-2.23	309.1	1,052.2	393.7	355.7	37.99	10.365	
5,400.0	5,338.2	5,352.0	5,333.0	22.2	19.8	-2.43	310.4	1,054.2	378.5	339.8	38.69	9.785	
5,500.0	5,436.7	5,451.1	5,432.2	22.7	20.2	-2.52	310.8	1,055.8	362.7	323.3	39.40	9.205	
5,600.0	5,535.2	5,551.1	5,532.1	23.1	20.5	-2.67	311.3	1,057.1	346.7	306.6	40.12	8.643	
5,700.0	5,633.7	5,650.9	5,631.9	23.6	20.9	-2.84	311.8	1,058.0	330.4	289.6	40.83	8.091	
5,800.0	5,732.1	5,750.8	5,731.8	24.0	21.2	-3.07	312.3	1,058.4	313.7	272.1	41.55	7.550	
5,900.0	5,830.6	5,850.7	5,831.7	24.5	21.5	-3.34	312.8	1,058.5	296.5	254.3	42.25	7.018	
6,000.0	5,929.1	5,949.4	5,930.4	24.9	21.9	-3.64	313.2	1,058.3	279.1	236.2	42.96	6.498	
6,100.0	6,027.6	6,048.7	6,029.7	25.4	22.2	-3.96	313.4	1,057.9	261.5	217.9	43.65	5.991	
6,200.0	6,126.1	6,147.3	6,128.3	25.8	22.5	-4.28	313.4	1,057.4	243.7	199.4	44.34	5.496	
6,300.0	6,224.5	6,245.7	6,226.7	26.3	22.8	-4.62	313.3	1,056.9	225.9	180.9	45.04	5.016	
6,400.0	6,323.0	6,344.4	6,325.4	26.7	23.1	-4.98	313.0	1,056.4	208.0	162.3	45.73	4.548	
6,500.0	6,421.5	6,442.5	6,423.5	27.2	23.4	-5.44	312.8	1,055.9	190.2	143.7	46.43	4.096	
6,600.0	6,520.0	6,541.4	6,522.3	27.6	23.8	-5.97	312.6	1,055.3	172.2	125.1	47.12	3.655	
6,700.0	6,618.5	6,639.9	6,620.9	28.1	24.1	-6.63	312.2	1,054.5	154.1	106.3	47.82	3.222	
6,800.0	6,716.9	6,738.3	6,719.3	28.5	24.4	-7.36	311.6	1,053.7	135.9	87.4	48.53	2.801	
6,900.0	6,815.4	6,836.7	6,817.7	29.0	24.7	-8.24	310.8	1,052.9	117.7	68.4	49.24	2.390	
6,981.8	6,896.0	6,917.0	6,898.0	29.4	25.0	-9.09	310.0	1,052.4	102.8	53.0	49.84	2.063	
7,000.0	6,913.9	6,934.9	6,915.9	29.5	25.0	-9.29	309.9	1,052.3	99.6	49.6	49.97	1.993	
7,100.0	7,012.9	7,033.8	7,014.7	29.9	25.3	-10.35	308.9	1,051.7	84.4	33.7	50.69	1.666	
7,200.0	7,112.3	7,133.1	7,114.0	30.3	25.7	-11.26	307.9	1,051.0	73.5	22.1	51.42	1.429	Level 3
7,300.0	7,212.2	7,232.9	7,213.8	30.6	26.0	-11.58	306.9	1,050.6	67.0	14.9	52.11	1.285	Level 3
7,381.8	7,294.0	7,314.7	7,295.6	30.9	26.3	63.15	306.0	1,050.1	64.7	12.1	52.65	1.229	Level 2
7,400.0	7,312.2	7,332.9	7,313.8	30.9	26.3	63.28	305.7	1,050.0	64.5	11.8	52.77	1.223	Level 2
7,500.0	7,412.2	7,432.9	7,413.8	31.2	26.6	64.12	304.5	1,049.5	63.5	10.1	53.41	1.190	Level 2
7,600.0	7,512.2	7,532.9	7,513.8	31.5	27.0	65.06	303.1	1,049.1	62.5	8.5	54.05	1.157	Level 2
7,633.8	7,546.0	7,566.7	7,547.6	31.6	27.1	65.36	302.7	1,048.9	62.2	7.9	54.27	1.146	Level 2
7,647.9	7,560.0	7,580.8	7,561.7	31.7	27.1	-114.33	302.5	1,048.8	62.1	7.8	54.36	1.143	Level 2, CC
7,650.0	7,562.2	7,582.9	7,563.8	31.7	27.1	-114.36	302.4	1,048.8	62.1	7.7	54.37	1.142	Level 2, ES, SF
7,700.0	7,612.0	7,632.7	7,613.7	31.8	27.3	-116.76	301.8	1,048.6	63.2	8.4	54.77	1.153	Level 2
7,750.0	7,661.4	7,682.2	7,663.1	31.9	27.5	-122.09	301.1	1,048.4	66.6	11.3	55.30	1.203	Level 2
7,800.0	7,709.8	7,730.9	7,711.8	32.0	27.6	-129.19	300.4	1,048.1	73.2	17.2	56.03	1.306	Level 3
7,850.0	7,757.1	7,778.4	7,759.3	32.1	27.8	-136.66	299.7	1,047.9	84.0	27.1	56.90	1.477	Level 3
7,900.0	7,802.7	7,824.4	7,805.3	32.2	27.9	-143.41	299.0	1,047.7	99.5	41.7	57.77	1.722	
7,950.0	7,846.4	7,868.6	7,849.5	32.3	28.1	-148.97	298.3	1,047.4	119.7	61.2	58.54	2.045	
8,000.0	7,887.7	7,910.7	7,891.5	32.4	28.2	-153.30	297.6	1,047.0	144.4	85.2	59.19	2.440	
8,050.0	7,926.5	7,950.0	7,930.9	32.4	28.3	-156.51	296.9	1,046.7	173.3	113.5	59.71	2.902	
8,100.0	7,962.4	7,986.5	7,967.3	32.5	28.5	-158.80	296.3	1,046.3	205.9	145.8	60.13	3.424	
8,150.0	7,995.1	8,017.1	7,998.0	32.5	28.6	-159.99	295.8	1,046.2	242.1	181.6	60.49	4.002	
8,200.0	8,024.4	8,046.4	8,027.3	32.6	28.7	-160.61	295.6	1,046.3	281.5	220.7	60.77	4.632	
8,250.0	8,050.1	8,072.4	8,053.2	32.6	28.7	-160.56	295.4	1,046.5	323.5	262.5	60.99	5.305	
8,300.0	8,071.9	8,094.5	8,075.3	32.7	28.8	-159.67	295.2	1,046.6	367.8	306.6	61.17	6.013	
8,350.0	8,089.7	8,112.6	8,093.4	32.7	28.9	-157.59	295.1	1,046.7	413.9	352.6	61.32	6.751	
8,400.0	8,103.4	8,126.6	8,107.5	32.7	28.9	-153.45	295.0	1,046.8	461.5	400.1	61.43	7.514	
8,450.0	8,112.8	8,136.4	8,117.3	32.8	29.0	-144.82	294.9	1,046.8	510.2	448.7	61.51	8.295	
8,500.0	8,118.0	8,141.9	8,122.8	32.9	29.0	-123.91	294.9	1,046.9	559.7	498.1	61.57	9.091	
8,533.8	8,119.0	8,143.2	8,124.0	33.0	29.0	-94.24	294.9	1,046.9	593.3	531.7	61.59	9.633	
8,600.0	8,119.0	8,143.6	8,124.5	33.1	29.0	-94.74	294.9	1,046.9	659.2	597.6	61.63	10.697	
8,700.0	8,119.0	8,144.4	8,125.2	33.4	29.0	-95.50	294.9	1,046.9	758.9	697.3	61.67	12.306	
8,800.0	8,119.0	8,145.1	8,125.9	33.8	29.0	-96.26	294.9	1,046.9	858.7	797.0	61.71	13.916	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #134H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 14-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,900.0	8,119.0	8,145.8	8,126.7	34.3	29.0	-97.01	294.9	1,046.9	958.5	896.8	61.74	15.526	
9,000.0	8,119.0	8,146.5	8,127.4	34.9	29.0	-97.76	294.9	1,046.9	1,058.4	996.6	61.76	17.136	
9,100.0	8,119.0	8,147.3	8,128.1	35.5	29.0	-98.50	294.9	1,046.9	1,158.2	1,096.5	61.79	18.746	
9,200.0	8,119.0	8,148.0	8,128.8	36.3	29.0	-99.24	294.8	1,046.9	1,258.1	1,196.3	61.81	20.355	
9,300.0	8,119.0	8,148.7	8,129.6	37.1	29.0	-99.98	294.8	1,046.9	1,358.0	1,296.2	61.83	21.963	
9,400.0	8,119.0	8,149.4	8,130.3	37.9	29.0	-100.71	294.8	1,046.9	1,458.0	1,396.1	61.85	23.571	
9,500.0	8,119.0	8,150.2	8,131.0	38.8	29.0	-101.44	294.8	1,046.9	1,557.9	1,496.0	61.87	25.178	
9,600.0	8,119.0	8,150.9	8,131.7	39.8	29.0	-102.17	294.8	1,046.9	1,657.8	1,595.9	61.90	26.784	
9,700.0	8,119.0	8,151.6	8,132.5	40.8	29.0	-102.89	294.8	1,046.9	1,757.8	1,695.9	61.92	28.390	
9,800.0	8,119.0	8,152.3	8,133.2	41.8	29.0	-103.61	294.8	1,046.9	1,857.7	1,795.8	61.94	29.994	
9,900.0	8,119.0	8,153.1	8,133.9	42.9	29.0	-104.32	294.8	1,046.9	1,957.7	1,895.7	61.96	31.596	
10,000.0	8,119.0	8,153.8	8,134.6	44.0	29.0	-105.03	294.8	1,046.9	2,057.7	1,995.7	61.98	33.198	
10,100.0	8,119.0	8,154.5	8,135.4	45.2	29.0	-105.75	294.8	1,046.9	2,157.6	2,095.6	62.00	34.798	
10,200.0	8,119.0	8,155.3	8,136.1	46.3	29.0	-106.46	294.8	1,046.9	2,257.6	2,195.6	62.03	36.397	
10,300.0	8,119.0	8,156.0	8,136.8	47.5	29.0	-107.16	294.8	1,046.9	2,357.6	2,295.5	62.05	37.994	
10,400.0	8,119.0	8,156.7	8,137.6	48.8	29.0	-107.87	294.8	1,046.9	2,457.5	2,395.5	62.07	39.590	
10,500.0	8,119.0	12,899.8	10,579.9	50.0	53.9	179.89	-2,233.9	1,002.0	2,460.1	2,413.9	46.18	53.271	
10,600.0	8,119.0	13,021.7	10,580.6	51.3	55.4	179.97	-2,355.7	1,006.3	2,460.6	2,412.9	47.68	51.606	
10,700.0	8,119.0	13,107.5	10,581.1	52.6	56.5	-179.96	-2,441.5	1,009.7	2,461.2	2,412.3	48.92	50.309	
10,800.0	8,119.0	13,345.9	10,576.7	54.0	59.5	-179.87	-2,679.7	1,015.1	2,459.5	2,408.1	51.44	47.813	
10,900.0	8,119.0	13,383.7	10,575.1	55.3	60.0	-179.86	-2,717.4	1,015.4	2,455.8	2,403.5	52.29	46.967	
11,000.0	8,119.0	13,442.6	10,574.2	56.7	60.8	-179.84	-2,776.3	1,016.8	2,454.3	2,401.0	53.34	46.016	
11,017.3	8,119.0	13,445.9	10,574.2	56.9	60.8	-179.84	-2,779.6	1,016.9	2,454.3	2,400.8	53.46	45.906	
11,100.0	8,119.0	13,469.6	10,574.6	58.0	61.1	-179.83	-2,803.3	1,017.6	2,455.3	2,401.2	54.15	45.343	
11,200.0	8,119.0	13,550.0	10,576.8	59.4	62.2	-179.78	-2,883.6	1,019.9	2,458.1	2,402.7	55.40	44.369	
11,300.0	8,119.0	13,850.2	10,577.3	60.8	66.2	-179.98	-3,183.4	1,013.2	2,460.3	2,401.7	58.57	42.009	
11,400.0	8,119.0	13,953.4	10,571.6	62.2	67.6	179.85	-3,286.2	1,006.7	2,454.7	2,394.7	60.07	40.867	
11,500.0	8,119.0	14,050.1	10,567.3	63.6	69.0	179.76	-3,382.8	1,003.3	2,450.3	2,388.8	61.50	39.843	
11,600.0	8,119.0	14,092.1	10,565.6	65.1	69.5	179.73	-3,424.7	1,002.2	2,446.4	2,384.0	62.43	39.184	
11,700.0	8,119.0	14,181.8	10,563.6	66.5	70.8	179.70	-3,514.4	1,001.4	2,444.3	2,380.5	63.80	38.310	
11,800.0	8,119.0	14,286.5	10,560.1	68.0	72.3	179.66	-3,619.0	1,000.5	2,440.9	2,375.5	65.31	37.374	
11,900.0	8,119.0	14,340.1	10,559.6	69.4	73.0	179.66	-3,672.7	1,000.8	2,439.7	2,373.4	66.36	36.766	
11,929.6	8,119.0	14,359.4	10,559.6	69.9	73.3	179.67	-3,692.0	1,001.2	2,439.7	2,373.0	66.70	36.577	
12,000.0	8,119.0	14,407.3	10,559.8	70.9	74.0	179.70	-3,739.8	1,002.8	2,440.0	2,372.5	67.53	36.135	
12,100.0	8,119.0	14,475.6	10,560.7	72.4	75.0	179.75	-3,808.1	1,005.2	2,441.4	2,372.7	68.70	35.535	
12,200.0	8,119.0	14,503.7	10,561.9	73.9	75.4	179.76	-3,836.1	1,006.0	2,445.2	2,375.7	69.54	35.164	
12,300.0	8,119.0	14,843.6	10,560.5	75.4	80.3	179.79	-4,175.7	1,009.2	2,443.2	2,370.1	73.14	33.404	
12,400.0	8,119.0	14,870.4	10,559.7	76.9	80.7	179.79	-4,202.5	1,009.4	2,440.1	2,366.1	73.97	32.987	
12,467.0	8,119.0	14,897.3	10,559.4	77.9	81.1	179.80	-4,229.4	1,010.0	2,439.5	2,364.9	74.60	32.699	
12,500.0	8,119.0	14,905.8	10,559.5	78.4	81.2	179.81	-4,237.9	1,010.3	2,439.6	2,364.8	74.87	32.584	
12,600.0	8,119.0	14,941.0	10,560.3	79.9	81.8	179.85	-4,273.0	1,012.1	2,442.0	2,366.3	75.76	32.233	
12,700.0	8,119.0	15,145.6	10,561.5	81.4	84.8	179.96	-4,477.4	1,018.1	2,441.6	2,363.4	78.18	31.231	
12,800.0	8,119.0	15,263.3	10,560.2	82.9	86.5	179.99	-4,595.1	1,020.1	2,440.5	2,360.6	79.83	30.572	
12,900.0	8,119.0	15,368.2	10,559.0	84.5	88.1	-179.95	-4,699.9	1,023.3	2,439.3	2,357.9	81.35	29.983	
13,000.0	8,119.0	15,449.9	10,557.6	86.0	89.3	-179.87	-4,781.5	1,027.1	2,437.7	2,355.1	82.67	29.487	
13,036.7	8,119.0	15,467.3	10,557.5	86.6	89.6	-179.85	-4,798.9	1,028.1	2,437.6	2,354.6	83.05	29.352	
13,100.0	8,119.0	15,520.2	10,557.8	87.5	90.4	-179.79	-4,851.7	1,030.7	2,437.9	2,354.0	83.89	29.060	
13,200.0	8,119.0	15,650.3	10,556.6	89.1	92.4	-179.72	-4,981.8	1,034.4	2,436.8	2,351.1	85.66	28.448	
13,300.0	8,119.0	15,746.7	10,555.7	90.6	93.8	-179.73	-5,078.2	1,034.6	2,435.8	2,348.7	87.13	27.955	
13,400.0	8,119.0	15,889.6	10,554.3	92.2	96.0	-179.76	-5,221.1	1,034.1	2,435.1	2,346.0	89.04	27.349	
13,500.0	8,119.0	15,946.3	10,553.3	93.7	96.9	-179.77	-5,277.7	1,034.1	2,433.5	2,343.3	90.16	26.990	
13,525.8	8,119.0	15,956.6	10,553.3	94.1	97.0	-179.77	-5,288.0	1,034.2	2,433.4	2,343.0	90.41	26.915	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #134H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 14-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,600.0	8,119.0	15,992.9	10,553.6	95.3	97.6	-179.76	-5,324.4	1,035.0	2,434.0	2,342.8	91.18	26.695	
13,700.0	8,119.0	16,070.1	10,555.4	96.8	98.8	-179.72	-5,401.5	1,037.2	2,436.2	2,343.8	92.47	26.346	
13,800.0	8,119.0	16,435.2	10,548.3	98.4	104.3	-179.98	-5,765.7	1,028.2	2,436.8	2,340.5	96.35	25.291	
13,900.0	8,119.0	16,524.1	10,541.2	100.0	105.7	179.93	-5,854.3	1,024.7	2,428.9	2,331.1	97.80	24.835	
14,000.0	8,119.0	16,545.0	10,540.0	101.5	106.0	179.92	-5,875.1	1,024.6	2,422.7	2,324.0	98.67	24.553	
14,100.0	8,119.0	16,609.3	10,537.3	103.1	107.0	179.92	-5,939.3	1,025.0	2,418.6	2,318.7	99.88	24.214	
14,199.3	8,119.0	16,631.6	10,537.0	104.7	107.4	179.93	-5,961.6	1,025.2	2,417.0	2,316.3	100.70	24.003	
14,200.0	8,119.0	16,631.6	10,537.0	104.7	107.4	179.93	-5,961.6	1,025.2	2,417.0	2,316.3	100.70	24.002	
14,300.0	8,119.0	16,724.5	10,537.5	106.2	108.8	179.94	-6,054.6	1,026.4	2,417.6	2,315.4	102.16	23.665	
14,400.0	8,119.0	16,812.6	10,537.9	107.8	110.2	179.95	-6,142.6	1,027.3	2,418.1	2,314.5	103.57	23.347	
14,500.0	8,119.0	16,936.8	10,538.8	109.4	112.1	179.95	-6,266.8	1,028.1	2,418.9	2,313.5	105.33	22.966	
14,600.0	8,119.0	17,111.2	10,534.1	111.0	114.8	179.88	-6,441.2	1,026.1	2,415.4	2,307.9	107.54	22.460	
14,700.0	8,119.0	17,168.9	10,532.6	112.6	115.7	179.86	-6,498.8	1,025.5	2,412.9	2,304.2	108.70	22.198	
14,757.1	8,119.0	17,189.5	10,532.4	113.5	116.0	179.85	-6,519.4	1,025.4	2,412.5	2,303.3	109.24	22.085	
14,800.0	8,119.0	17,212.6	10,532.6	114.2	116.4	179.85	-6,542.5	1,025.5	2,412.7	2,303.0	109.70	21.993	
14,900.0	8,119.0	17,287.2	10,533.6	115.7	117.6	179.86	-6,617.1	1,026.1	2,414.1	2,303.1	110.98	21.752	
15,000.0	8,119.0	17,370.1	10,535.5	117.3	118.9	179.87	-6,699.9	1,027.1	2,416.3	2,304.0	112.34	21.508	
15,100.0	8,119.0	17,447.9	10,537.8	118.9	120.1	179.88	-6,777.7	1,027.8	2,419.3	2,305.7	113.65	21.288	
15,200.0	8,119.0	17,528.6	10,541.0	120.5	121.4	179.88	-6,858.4	1,028.6	2,423.3	2,308.3	114.98	21.076	
15,300.0	8,119.0	17,789.0	10,543.1	122.1	125.5	-180.00	-7,118.6	1,035.2	2,423.8	2,305.7	118.05	20.531	
15,400.0	8,119.0	17,902.1	10,540.3	123.7	127.3	-179.90	-7,231.5	1,040.0	2,421.4	2,301.7	119.68	20.232	
15,500.0	8,119.0	17,996.5	10,537.3	125.3	128.8	-179.81	-7,325.8	1,044.3	2,418.2	2,297.1	121.15	19.961	
15,598.2	8,119.0	18,031.1	10,536.7	126.9	129.3	-179.77	-7,360.4	1,046.0	2,416.7	2,294.6	122.08	19.796	
15,600.0	8,119.0	18,031.1	10,536.7	126.9	129.3	-179.77	-7,360.4	1,046.0	2,416.7	2,294.6	122.09	19.795	
15,700.0	8,119.0	18,058.0	10,537.2	128.5	129.8	-179.76	-7,387.2	1,046.8	2,418.4	2,295.5	122.90	19.678	
15,800.0	8,119.0	18,148.5	10,540.2	130.1	131.2	-179.72	-7,477.7	1,049.0	2,421.8	2,297.5	124.33	19.478	
15,900.0	8,119.0	18,367.9	10,542.1	131.7	134.7	-179.69	-7,696.9	1,051.5	2,422.4	2,295.3	127.04	19.069	
15,967.8	8,119.0	18,401.0	10,541.8	132.8	135.2	-179.67	-7,730.0	1,052.2	2,421.9	2,294.1	127.76	18.957	
16,000.0	8,119.0	18,418.0	10,541.9	133.3	135.5	-179.66	-7,747.0	1,053.0	2,422.0	2,293.9	128.11	18.906	
16,100.0	8,119.0	18,556.9	10,541.2	134.9	137.7	-179.50	-7,885.6	1,060.4	2,421.4	2,291.4	129.99	18.628	
16,200.0	8,119.0	18,625.9	10,541.0	136.5	138.8	-179.43	-7,954.6	1,063.9	2,421.2	2,290.0	131.24	18.449	
16,215.6	8,119.0	18,734.9	10,539.4	136.8	140.5	-179.35	-8,063.4	1,067.8	2,421.1	2,288.8	132.29	18.301	
16,300.0	8,119.0	18,837.2	10,535.4	138.1	142.2	-179.42	-8,165.7	1,065.4	2,417.7	2,284.0	133.74	18.078	
16,400.0	8,119.0	18,925.8	10,531.6	139.7	143.6	-179.47	-8,254.2	1,063.7	2,413.5	2,278.3	135.20	17.851	
16,500.0	8,119.0	18,972.4	10,530.1	141.4	144.3	-179.48	-8,300.7	1,063.5	2,410.6	2,274.3	136.30	17.686	
16,545.3	8,119.0	18,979.1	10,530.1	142.1	144.4	-179.48	-8,307.4	1,063.5	2,410.2	2,273.6	136.65	17.639	
16,600.0	8,119.0	18,989.0	10,530.2	143.0	144.6	-179.49	-8,317.3	1,063.5	2,410.8	2,273.7	137.05	17.590	
16,700.0	8,119.0	19,067.2	10,532.1	144.6	145.8	-179.50	-8,395.5	1,063.6	2,413.2	2,274.8	138.37	17.440	
16,800.0	8,119.0	19,166.9	10,534.9	146.2	147.4	-179.50	-8,495.2	1,064.2	2,415.9	2,276.0	139.92	17.267	
16,900.0	8,119.0	19,410.4	10,535.7	147.8	151.3	-179.50	-8,738.6	1,065.5	2,417.1	2,274.3	142.81	16.925	
17,000.0	8,119.0	19,457.4	10,534.8	149.4	152.1	-179.48	-8,785.5	1,066.3	2,415.0	2,271.1	143.90	16.783	
17,040.0	8,119.0	19,473.9	10,534.7	150.1	152.3	-179.47	-8,802.0	1,066.9	2,414.9	2,270.6	144.30	16.735	
17,100.0	8,119.0	19,505.8	10,534.9	151.0	152.8	-179.44	-8,833.9	1,068.3	2,415.2	2,270.3	144.95	16.662	
17,200.0	8,119.0	17,200.0	10,532.7	152.7	116.1	-179.41	-9,092.3	1,071.1	2,416.4	2,288.2	128.18	18.851	
17,300.0	8,119.0	19,906.0	10,523.2	154.3	159.3	-179.53	-9,233.4	1,067.0	2,409.5	2,259.8	149.68	16.097	
17,400.0	8,119.0	19,931.9	10,521.8	155.9	159.7	-179.55	-9,259.3	1,066.3	2,403.9	2,253.2	150.72	15.950	
17,500.0	8,119.0	20,021.3	10,518.4	157.5	161.1	-179.62	-9,348.6	1,063.9	2,400.0	2,247.9	152.19	15.770	
17,600.0	8,119.0	20,110.0	10,514.9	159.1	162.5	-179.69	-9,437.2	1,061.4	2,396.2	2,242.5	153.66	15.594	
17,700.0	8,119.0	20,174.4	10,513.5	160.7	163.5	-179.71	-9,501.5	1,060.9	2,393.8	2,238.9	154.91	15.453	
17,790.6	8,119.0	20,225.5	10,513.0	162.2	164.4	-179.72	-9,552.7	1,060.8	2,393.1	2,237.1	155.96	15.345	
17,800.0	8,119.0	20,230.4	10,513.0	162.4	164.4	-179.72	-9,557.5	1,060.8	2,393.1	2,237.0	156.06	15.335	
17,900.0	8,119.0	20,262.7	10,513.6	164.0	165.0	-179.72	-9,589.9	1,061.1	2,394.7	2,237.8	156.90	15.263	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #134H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 14-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,000.0	8,119.0	20,526.6	10,512.4	165.6	169.2	-179.75	-9,853.6	1,061.4	2,394.2	2,234.2	160.00	14.963	
18,100.0	8,119.0	20,624.9	10,508.2	167.2	170.8	-179.78	-9,951.8	1,060.4	2,390.0	2,228.4	161.55	14.794	
18,200.0	8,119.0	20,665.1	10,507.1	168.9	171.4	-179.80	-9,992.0	1,060.0	2,387.3	2,224.7	162.60	14.682	
18,243.3	8,119.0	20,678.6	10,507.0	169.6	171.7	-179.80	-10,005.5	1,059.9	2,387.0	2,224.0	162.99	14.645	
18,300.0	8,119.0	20,703.6	10,507.2	170.5	172.1	-179.80	-10,030.5	1,059.9	2,387.5	2,223.9	163.56	14.597	
18,400.0	8,119.0	20,821.8	10,508.5	172.1	174.0	-179.82	-10,148.7	1,060.1	2,388.6	2,223.3	165.30	14.450	
18,500.0	8,119.0	20,947.1	10,508.1	173.7	176.0	-179.85	-10,274.0	1,059.5	2,388.2	2,221.1	167.10	14.292	
18,570.6	8,119.0	21,005.9	10,508.0	174.9	176.9	-179.87	-10,332.8	1,058.8	2,388.0	2,219.9	168.09	14.207	
18,600.0	8,119.0	21,026.1	10,508.0	175.4	177.2	-179.88	-10,353.0	1,058.4	2,388.1	2,219.6	168.46	14.176	
18,700.0	8,119.0	21,047.1	10,508.4	177.0	177.6	-179.90	-10,374.0	1,058.1	2,390.0	2,220.9	169.16	14.129	
18,800.0	8,119.0	21,097.9	10,511.1	178.6	178.4	-179.92	-10,424.7	1,057.4	2,395.1	2,225.0	170.11	14.080	
18,900.0	8,119.0	21,256.5	10,518.2	180.2	181.0	179.99	-10,583.1	1,054.6	2,399.6	2,227.2	172.40	13.919	
19,000.0	8,119.0	21,380.9	10,521.4	181.9	183.0	179.93	-10,707.4	1,052.9	2,402.1	2,227.8	174.24	13.786	
19,100.0	8,119.0	21,446.6	10,523.4	183.5	184.0	179.96	-10,773.1	1,054.2	2,405.1	2,229.7	175.40	13.712	
19,200.0	8,119.0	21,524.5	10,526.7	185.1	185.3	-179.99	-10,850.9	1,056.9	2,409.3	2,232.6	176.67	13.637	
19,300.0	8,119.0	21,767.3	10,529.1	186.8	189.2	-179.93	-11,093.5	1,061.0	2,409.3	2,229.6	179.74	13.405	
19,349.6	8,119.0	21,784.5	10,529.0	187.6	189.5	-179.92	-11,110.7	1,061.4	2,409.0	2,228.8	180.20	13.368	
19,400.0	8,119.0	21,803.8	10,529.1	188.4	189.8	-179.91	-11,129.9	1,062.0	2,409.4	2,228.7	180.67	13.336	
19,500.0	8,119.0	21,992.4	10,529.0	190.0	192.9	-179.84	-11,318.4	1,065.9	2,409.7	2,226.7	183.05	13.165	
19,600.0	8,119.0	22,075.1	10,527.3	191.6	194.2	-179.86	-11,401.2	1,065.4	2,407.6	2,223.2	184.46	13.052	
19,688.5	8,119.0	22,124.5	10,526.8	193.1	195.0	-179.84	-11,450.5	1,066.8	2,406.9	2,221.4	185.47	12.977	
19,700.0	8,119.0	22,134.1	10,526.8	193.3	195.2	-179.82	-11,460.0	1,067.4	2,406.9	2,221.3	185.63	12.966	
19,800.0	8,119.0	22,284.3	10,526.1	194.9	197.6	-179.53	-11,609.7	1,080.7	2,406.7	2,219.1	187.60	12.829	
19,886.5	8,119.0	22,323.2	10,525.6	196.3	198.3	-179.48	-11,648.5	1,082.9	2,405.7	2,217.2	188.51	12.762	
19,900.0	8,119.0	22,331.3	10,525.6	196.5	198.4	-179.47	-11,656.6	1,083.3	2,405.8	2,217.1	188.67	12.751	
20,000.0	8,119.0	22,371.6	10,526.3	198.2	199.1	-179.44	-11,696.8	1,085.1	2,407.4	2,217.8	189.60	12.697	
20,100.0	8,119.0	22,546.1	10,526.0	199.8	201.9	-179.48	-11,871.3	1,084.0	2,406.1	2,214.2	191.93	12.537	
20,122.7	8,119.0	22,559.6	10,525.9	200.2	202.1	-179.49	-11,884.8	1,083.9	2,406.1	2,213.9	192.19	12.519	
20,200.0	8,119.0	22,602.3	10,526.3	201.4	202.8	-179.50	-11,927.5	1,083.8	2,406.7	2,213.6	193.05	12.467	
20,300.0	8,119.0	22,871.5	10,521.2	203.1	207.1	-179.76	-12,196.2	1,074.3	2,405.0	2,209.0	196.04	12.268	
20,400.0	8,119.0	23,083.4	10,504.7	204.7	210.5	179.88	-12,407.1	1,060.5	2,397.3	2,199.1	198.16	12.098	
20,500.0	8,119.0	23,110.0	10,501.9	206.3	211.0	179.83	-12,433.4	1,058.6	2,388.1	2,188.7	199.44	11.974	
20,606.7	8,119.0	23,110.0	10,501.9	208.1	211.0	179.83	-12,433.4	1,058.6	2,382.8	2,182.4	200.42	11.889	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #201H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 235-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	2.8	2.8	0.0	0.0	-90.35	-18.4	-2,971.5	2,971.5				
100.0	100.0	95.3	95.3	0.1	0.2	-90.35	-18.3	-2,971.6	2,971.7	2,971.4	0.28	N/A	
200.0	200.0	187.8	187.8	0.5	0.3	-90.35	-18.2	-2,972.0	2,972.1	2,971.3	0.78	3,796.508	ES
300.0	300.0	281.0	281.0	0.8	0.5	-90.35	-17.9	-2,972.6	2,972.7	2,971.3	1.38	2,153.116	
400.0	400.0	375.0	375.0	1.2	0.9	-90.34	-17.7	-2,973.3	2,973.5	2,971.5	2.08	1,432.532	
500.0	500.0	470.6	470.6	1.6	1.2	-90.34	-17.6	-2,974.3	2,974.6	2,971.8	2.78	1,071.238	
600.0	600.0	567.8	567.8	1.9	1.6	-90.34	-17.5	-2,975.4	2,975.7	2,972.2	3.48	854.260	
700.0	700.0	665.4	665.4	2.3	1.9	-90.34	-17.5	-2,976.6	2,976.9	2,972.7	4.19	710.290	
800.0	800.0	763.3	763.3	2.6	2.3	-90.34	-17.6	-2,977.9	2,978.2	2,973.3	4.90	607.857	
900.0	900.0	865.1	865.0	3.0	2.6	-90.35	-18.0	-2,979.2	2,979.5	2,973.9	5.62	530.012	
1,000.0	1,000.0	968.1	968.1	3.4	3.0	-90.35	-18.4	-2,980.5	2,980.8	2,974.4	6.35	469.539	
1,100.0	1,100.0	1,057.2	1,057.1	3.7	3.3	-164.77	-18.7	-2,981.7	2,983.8	2,976.8	7.02	425.072	
1,200.0	1,199.8	1,140.6	1,140.5	4.1	3.6	-164.76	-18.8	-2,983.2	2,990.6	2,982.9	7.67	390.048	
1,300.0	1,299.5	1,219.8	1,219.7	4.4	3.9	-164.74	-19.1	-2,985.1	3,001.4	2,993.1	8.30	361.534	
1,400.0	1,398.7	1,386.6	1,386.4	4.8	4.5	-164.73	-16.8	-2,988.2	3,015.2	3,006.0	9.24	326.325	
1,500.0	1,497.5	1,506.8	1,506.5	5.2	4.9	-164.63	-10.9	-2,988.2	3,030.2	3,020.2	10.01	302.667	
1,600.0	1,595.9	1,607.3	1,606.7	5.5	5.3	-164.59	-4.2	-2,988.0	3,046.7	3,036.0	10.71	284.369	
1,700.0	1,694.4	1,713.8	1,712.9	5.9	5.6	-164.52	4.2	-2,987.7	3,063.1	3,051.7	11.45	267.633	
1,800.0	1,792.9	1,820.9	1,819.6	6.3	6.0	-164.44	13.7	-2,987.0	3,079.2	3,067.1	12.18	252.763	
1,900.0	1,891.4	1,911.0	1,909.4	6.8	6.3	-164.37	21.6	-2,986.5	3,095.4	3,082.5	12.87	240.560	
2,000.0	1,989.9	2,004.8	2,002.9	7.2	6.7	-164.30	29.5	-2,986.2	3,111.8	3,098.2	13.57	229.361	
2,100.0	2,088.4	2,115.5	2,113.1	7.6	7.1	-164.23	38.5	-2,985.6	3,128.0	3,113.7	14.33	218.235	
2,200.0	2,186.8	2,218.8	2,216.1	8.0	7.4	-164.17	46.7	-2,984.8	3,143.9	3,128.8	15.07	208.556	
2,300.0	2,285.3	2,309.2	2,306.3	8.5	7.8	-164.12	53.6	-2,984.1	3,159.9	3,144.2	15.77	200.379	
2,400.0	2,383.8	2,401.9	2,398.7	8.9	8.1	-164.08	60.3	-2,983.7	3,176.2	3,159.7	16.47	192.800	
2,500.0	2,482.3	2,500.9	2,497.5	9.3	8.5	-164.05	66.9	-2,983.3	3,192.5	3,175.3	17.20	185.581	
2,600.0	2,580.8	2,604.3	2,600.7	9.8	8.8	-164.02	73.2	-2,982.9	3,208.9	3,190.9	17.95	178.767	
2,700.0	2,679.2	2,715.8	2,712.0	10.2	9.2	-163.99	80.1	-2,982.0	3,224.9	3,206.1	18.73	172.190	
2,800.0	2,777.7	2,821.1	2,817.0	10.6	9.6	-163.96	87.2	-2,980.9	3,240.5	3,221.0	19.49	166.293	
2,900.0	2,876.2	2,923.1	2,918.7	11.1	10.0	-163.90	95.1	-2,979.7	3,256.1	3,235.8	20.23	160.915	
3,000.0	2,974.7	3,020.3	3,015.6	11.5	10.4	-163.84	103.2	-2,978.5	3,271.6	3,250.6	20.97	156.032	
3,100.0	3,073.2	3,116.3	3,111.3	11.9	10.7	-163.78	111.1	-2,977.3	3,287.2	3,265.5	21.70	151.509	
3,200.0	3,171.6	3,236.5	3,231.1	12.4	11.2	-163.73	120.1	-2,975.7	3,302.6	3,280.0	22.52	146.673	
3,300.0	3,270.1	3,362.0	3,356.3	12.8	11.6	-163.71	127.4	-2,973.0	3,317.2	3,293.8	23.36	142.022	
3,400.0	3,368.6	3,482.9	3,477.0	13.3	12.1	-163.67	135.5	-2,969.5	3,331.1	3,306.9	24.18	137.778	
3,500.0	3,467.1	3,651.2	3,644.7	13.7	12.7	-163.61	147.0	-2,962.5	3,343.8	3,318.6	25.17	132.834	
3,600.0	3,565.6	3,744.2	3,737.4	14.2	13.0	-163.59	152.6	-2,957.3	3,355.0	3,329.1	25.89	129.584	
3,700.0	3,664.0	3,801.6	3,794.5	14.6	13.2	-163.57	156.7	-2,954.7	3,367.3	3,340.8	26.48	127.185	
3,800.0	3,762.5	3,858.6	3,851.3	15.1	13.4	-163.53	161.6	-2,952.8	3,380.8	3,353.8	27.05	124.962	
3,900.0	3,861.0	3,924.3	3,916.7	15.5	13.7	-163.47	168.1	-2,951.5	3,395.5	3,367.9	27.67	122.726	
4,000.0	3,959.5	4,002.5	3,994.5	16.0	14.0	-163.41	175.8	-2,950.4	3,411.0	3,382.6	28.33	120.389	
4,100.0	4,058.0	4,082.0	4,073.6	16.4	14.3	-163.35	183.2	-2,949.8	3,427.0	3,398.0	29.00	118.163	
4,200.0	4,156.4	4,170.9	4,162.2	16.8	14.6	-163.29	191.3	-2,949.5	3,443.5	3,413.8	29.71	115.902	
4,300.0	4,254.9	4,261.4	4,252.3	17.3	15.0	-163.23	199.3	-2,949.4	3,460.2	3,429.7	30.42	113.729	
4,400.0	4,353.4	4,348.1	4,338.7	17.7	15.3	-163.18	206.8	-2,949.6	3,477.1	3,446.0	31.12	111.730	
4,500.0	4,451.9	4,434.2	4,424.5	18.2	15.6	-163.13	213.9	-2,950.0	3,494.5	3,462.6	31.81	109.840	
4,600.0	4,550.4	4,579.0	4,568.8	18.6	16.1	-163.05	225.9	-2,950.4	3,511.6	3,478.8	32.76	107.175	
4,700.0	4,648.9	4,702.7	4,691.9	19.1	16.6	-162.97	237.2	-2,948.9	3,527.1	3,493.5	33.62	104.899	
4,800.0	4,747.3	4,791.0	4,779.9	19.5	17.0	-162.91	245.3	-2,947.9	3,542.8	3,508.4	34.33	103.189	
4,900.0	4,845.8	4,881.5	4,870.0	20.0	17.3	-162.85	253.4	-2,947.0	3,558.7	3,523.7	35.05	101.535	
5,000.0	4,944.3	4,974.9	4,963.1	20.4	17.6	-162.80	261.2	-2,946.4	3,574.8	3,539.0	35.78	99.920	
5,100.0	5,042.8	5,065.7	5,053.7	20.9	18.0	-162.77	268.1	-2,945.9	3,591.1	3,554.6	36.49	98.409	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #201H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 235-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,141.3	5,152.8	5,140.5	21.3	18.3	-162.73	274.7	-2,945.7	3,607.6	3,570.4	37.19	97.010	
5,300.0	5,239.7	5,242.0	5,229.4	21.8	18.6	-162.70	281.5	-2,945.7	3,624.5	3,586.6	37.89	95.650	
5,400.0	5,338.2	5,338.8	5,326.0	22.2	19.0	-162.67	288.1	-2,945.9	3,641.5	3,602.8	38.63	94.268	
5,500.0	5,436.7	5,428.7	5,415.8	22.7	19.3	-162.66	293.2	-2,946.2	3,658.5	3,619.2	39.33	93.021	
5,600.0	5,535.2	5,500.5	5,487.5	23.1	19.6	-162.68	296.1	-2,946.9	3,676.1	3,636.2	39.94	92.043	
5,700.0	5,633.7	5,571.9	5,558.9	23.6	19.8	-162.71	297.6	-2,948.1	3,694.4	3,653.9	40.54	91.122	
5,800.0	5,732.1	5,666.0	5,652.9	24.0	20.2	-162.78	298.4	-2,950.2	3,713.3	3,672.0	41.24	90.041	
5,900.0	5,830.6	5,773.2	5,760.2	24.5	20.5	-162.85	299.2	-2,952.4	3,732.0	3,690.0	41.99	88.874	
6,000.0	5,929.1	5,937.7	5,924.6	24.9	21.1	-162.97	299.8	-2,954.3	3,749.7	3,706.8	42.97	87.260	
6,100.0	6,027.6	6,057.6	6,044.5	25.4	21.5	-163.08	299.0	-2,954.1	3,766.1	3,722.4	43.75	86.077	
6,200.0	6,126.1	6,162.4	6,149.2	25.8	21.8	-163.18	297.5	-2,953.6	3,782.3	3,737.9	44.47	85.054	
6,300.0	6,224.5	6,265.2	6,252.0	26.3	22.1	-163.29	295.8	-2,953.0	3,798.4	3,753.2	45.18	84.073	
6,400.0	6,323.0	6,368.0	6,354.8	26.7	22.5	-163.39	294.4	-2,952.3	3,814.4	3,768.5	45.89	83.120	
6,500.0	6,421.5	6,455.0	6,441.9	27.2	22.7	-163.47	293.5	-2,951.8	3,830.4	3,783.9	46.54	82.301	
6,600.0	6,520.0	6,543.7	6,530.5	27.6	23.0	-163.55	292.6	-2,951.6	3,846.8	3,799.6	47.20	81.501	
6,700.0	6,618.5	6,640.8	6,627.6	28.1	23.4	-163.63	291.8	-2,951.4	3,863.3	3,815.4	47.89	80.666	
6,800.0	6,716.9	6,738.1	6,725.0	28.5	23.7	-163.71	291.0	-2,951.3	3,879.8	3,831.3	48.59	79.855	
6,900.0	6,815.4	6,832.4	6,819.2	29.0	24.0	-163.79	290.1	-2,951.2	3,896.5	3,847.2	49.27	79.084	
6,981.8	6,896.0	6,909.6	6,896.4	29.4	24.2	-163.86	289.5	-2,951.2	3,910.1	3,860.3	49.83	78.472	
7,000.0	6,913.9	6,926.8	6,913.6	29.5	24.3	-163.90	289.3	-2,951.2	3,913.1	3,863.2	49.95	78.336	
7,100.0	7,012.9	7,025.0	7,011.8	29.9	24.6	-164.06	288.6	-2,951.3	3,927.1	3,876.4	50.65	77.536	
7,200.0	7,112.3	7,124.0	7,110.9	30.3	25.0	-164.18	288.2	-2,951.4	3,936.9	3,885.6	51.34	76.686	
7,300.0	7,212.2	7,226.8	7,213.6	30.6	25.3	-164.24	287.8	-2,951.5	3,942.5	3,890.5	52.04	75.766	
7,381.8	7,294.0	7,311.0	7,297.8	30.9	25.6	-89.84	287.5	-2,951.5	3,943.9	3,891.3	52.60	74.987	
7,396.1	7,308.2	7,325.7	7,312.5	30.9	25.6	-89.84	287.5	-2,951.5	3,943.9	3,891.2	52.69	74.850	
7,400.0	7,312.2	7,328.0	7,314.8	30.9	25.6	-89.84	287.5	-2,951.5	3,943.9	3,891.2	52.71	74.822	
7,500.0	7,412.2	7,423.8	7,410.6	31.2	26.0	-89.85	287.0	-2,951.6	3,944.0	3,890.6	53.36	73.917	
7,600.0	7,512.2	7,520.0	7,506.9	31.5	26.3	-89.86	286.4	-2,951.8	3,944.2	3,890.2	54.01	73.031	
7,633.8	7,546.0	7,553.0	7,539.8	31.6	26.4	-89.86	286.2	-2,951.8	3,944.2	3,890.0	54.23	72.734	
7,650.0	7,562.2	7,568.7	7,555.6	31.7	26.4	90.46	286.0	-2,951.9	3,944.3	3,890.0	54.33	72.595	
7,700.0	7,612.0	7,617.3	7,604.1	31.8	26.6	90.49	285.6	-2,952.0	3,944.4	3,889.8	54.65	72.181	
7,750.0	7,661.4	7,665.5	7,652.3	31.9	26.8	90.58	285.2	-2,952.1	3,944.7	3,889.7	54.95	71.784	
7,800.0	7,709.8	7,714.8	7,701.6	32.0	26.9	90.71	284.7	-2,952.3	3,945.0	3,889.7	55.25	71.397	
7,850.0	7,757.1	7,764.2	7,751.0	32.1	27.1	90.90	284.2	-2,952.4	3,945.3	3,889.8	55.55	71.024	
7,900.0	7,802.7	7,811.9	7,798.7	32.2	27.3	91.13	283.6	-2,952.5	3,945.9	3,890.0	55.83	70.674	
7,950.0	7,846.4	7,857.7	7,844.5	32.3	27.4	91.37	283.1	-2,952.6	3,946.6	3,890.5	56.10	70.348	
8,000.0	7,887.7	7,897.6	7,884.4	32.4	27.6	91.60	282.6	-2,952.7	3,947.5	3,891.2	56.34	70.065	
8,050.0	7,926.5	7,932.9	7,919.7	32.4	27.7	91.78	282.3	-2,952.8	3,948.8	3,892.3	56.56	69.818	
8,100.0	7,962.4	7,965.6	7,952.4	32.5	27.8	91.93	281.9	-2,952.9	3,950.6	3,893.9	56.77	69.596	
8,150.0	7,995.1	7,995.4	7,982.2	32.5	27.9	92.03	281.7	-2,953.0	3,952.9	3,895.9	56.96	69.399	
8,200.0	8,024.4	8,022.1	8,008.9	32.6	28.0	92.05	281.5	-2,953.1	3,955.7	3,898.6	57.14	69.227	
8,250.0	8,050.1	8,045.4	8,032.2	32.6	28.1	92.00	281.3	-2,953.2	3,959.2	3,901.9	57.31	69.081	
8,300.0	8,071.9	8,065.3	8,052.1	32.7	28.1	91.84	281.2	-2,953.4	3,963.3	3,905.8	57.47	68.961	
8,350.0	8,089.7	8,081.6	8,068.4	32.7	28.2	91.58	281.1	-2,953.5	3,968.1	3,910.4	57.62	68.866	
8,400.0	8,103.4	8,094.1	8,080.9	32.7	28.2	91.21	281.0	-2,953.6	3,973.5	3,915.8	57.76	68.797	
8,450.0	8,112.8	8,102.9	8,089.7	32.8	28.2	90.72	281.0	-2,953.6	3,979.7	3,921.8	57.88	68.756	
8,500.0	8,118.0	8,107.7	8,094.5	32.9	28.3	90.10	280.9	-2,953.7	3,986.4	3,928.4	57.99	68.741	
8,533.8	8,119.0	8,108.8	8,095.6	33.0	28.3	89.62	280.9	-2,953.7	3,991.4	3,933.3	58.06	68.748	
8,600.0	8,119.0	8,109.1	8,095.9	33.1	28.3	89.62	280.9	-2,953.7	4,001.9	3,943.7	58.19	68.767	
8,700.0	8,119.0	8,109.6	8,096.4	33.4	28.3	89.63	280.9	-2,953.7	4,019.7	3,961.3	58.44	68.778	
8,800.0	8,119.0	8,110.1	8,096.9	33.8	28.3	89.64	280.9	-2,953.7	4,040.0	3,981.2	58.74	68.774	
8,900.0	8,119.0	8,110.6	8,097.4	34.3	28.3	89.64	280.9	-2,953.7	4,062.6	4,003.5	59.08	68.760	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #201H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 235-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,000.0	8,119.0	8,111.1	8,097.9	34.9	28.3	89.65	280.9	-2,953.7	4,087.5	4,028.1	59.46	68.739	
9,100.0	8,119.0	8,111.6	8,098.4	35.5	28.3	89.66	280.9	-2,953.7	4,114.7	4,054.8	59.88	68.715	
9,200.0	8,119.0	8,112.1	8,098.9	36.3	28.3	89.67	280.9	-2,953.7	4,144.2	4,083.8	60.33	68.693	
9,300.0	8,119.0	8,112.6	8,099.4	37.1	28.3	89.67	280.9	-2,953.7	4,175.8	4,115.0	60.80	68.678	
9,400.0	8,119.0	8,113.1	8,099.9	37.9	28.3	89.68	280.9	-2,953.7	4,209.6	4,148.3	61.30	68.672	
9,500.0	8,119.0	8,113.6	8,100.4	38.8	28.3	89.69	280.9	-2,953.7	4,245.4	4,183.6	61.82	68.679	
9,600.0	8,119.0	8,114.1	8,100.9	39.8	28.3	89.69	280.9	-2,953.7	4,283.3	4,221.0	62.35	68.701	
9,700.0	8,119.0	8,114.6	8,101.4	40.8	28.3	89.70	280.9	-2,953.7	4,323.2	4,260.3	62.89	68.743	
9,800.0	8,119.0	8,115.1	8,101.9	41.8	28.3	89.71	280.9	-2,953.7	4,365.0	4,301.6	63.44	68.804	
9,900.0	8,119.0	8,115.5	8,102.3	42.9	28.3	89.72	280.9	-2,953.7	4,408.7	4,344.7	64.00	68.888	
10,000.0	8,119.0	8,116.0	8,102.8	44.0	28.3	89.72	280.9	-2,953.7	4,454.2	4,389.6	64.56	68.996	
10,100.0	8,119.0	8,116.5	8,103.3	45.2	28.3	89.73	280.9	-2,953.7	4,501.4	4,436.3	65.12	69.128	
10,200.0	8,119.0	8,117.0	8,103.8	46.3	28.3	89.74	280.9	-2,953.7	4,550.4	4,484.7	65.68	69.285	
10,300.0	8,119.0	8,117.5	8,104.3	47.5	28.3	89.74	280.9	-2,953.7	4,601.0	4,534.8	66.23	69.468	
10,400.0	8,119.0	8,118.0	8,104.8	48.8	28.3	89.75	280.9	-2,953.7	4,653.2	4,586.5	66.78	69.678	
10,500.0	8,119.0	8,118.5	8,105.3	50.0	28.3	89.76	280.9	-2,953.7	4,707.0	4,639.7	67.33	69.913	
10,600.0	8,119.0	8,119.0	8,105.8	51.3	28.3	89.76	280.9	-2,953.7	4,762.2	4,694.4	67.86	70.174	
10,700.0	8,119.0	8,119.4	8,106.2	52.6	28.3	89.77	280.9	-2,953.7	4,818.9	4,750.5	68.39	70.461	
10,800.0	8,119.0	8,119.9	8,106.7	54.0	28.3	89.78	280.9	-2,953.8	4,877.0	4,808.1	68.91	70.773	
10,900.0	8,119.0	8,120.4	8,107.2	55.3	28.3	89.79	280.9	-2,953.8	4,936.5	4,867.0	69.42	71.110	
11,000.0	8,119.0	8,120.9	8,107.7	56.7	28.3	89.79	280.9	-2,953.8	4,997.2	4,927.3	69.92	71.471	
11,100.0	8,119.0	14,199.0	11,225.0	58.0	63.9	128.32	-2,980.3	-2,915.8	5,005.8	4,901.9	103.87	48.194	
11,200.0	8,119.0	14,245.4	11,224.2	59.4	64.5	128.31	-3,026.7	-2,914.9	5,004.1	4,898.6	105.47	47.447	
11,257.8	8,119.0	14,261.1	11,224.1	60.2	64.7	128.31	-3,042.4	-2,914.8	5,003.8	4,897.6	106.24	47.097	
11,300.0	8,119.0	14,293.0	11,223.9	60.8	65.1	128.31	-3,074.3	-2,915.1	5,004.1	4,897.0	107.09	46.729	
11,400.0	8,119.0	14,323.7	11,223.7	62.2	65.5	128.30	-3,105.0	-2,915.7	5,005.3	4,896.8	108.48	46.139	
11,500.0	8,119.0	14,459.2	11,220.9	63.6	67.3	128.24	-3,240.4	-2,919.4	5,006.6	4,895.2	111.37	44.955	
11,600.0	8,119.0	14,590.1	11,220.1	65.1	69.1	128.22	-3,371.3	-2,920.2	5,007.1	4,893.0	114.18	43.851	
11,700.0	8,119.0	14,705.0	11,220.5	66.5	70.7	128.23	-3,486.2	-2,919.2	5,007.1	4,890.3	116.78	42.877	
11,705.4	8,119.0	14,709.2	11,220.5	66.6	70.7	128.23	-3,490.4	-2,919.2	5,007.1	4,890.2	116.89	42.835	
11,800.0	8,119.0	14,768.0	11,220.6	68.0	71.5	128.23	-3,549.2	-2,918.9	5,007.3	4,888.7	118.66	42.197	
11,900.0	8,119.0	14,836.4	11,220.0	69.4	72.5	128.22	-3,617.6	-2,919.7	5,008.2	4,887.6	120.65	41.511	
12,000.0	8,119.0	14,905.3	11,218.8	70.9	73.4	128.19	-3,686.5	-2,921.8	5,009.9	4,887.3	122.66	40.845	
12,100.0	8,119.0	14,976.8	11,217.6	72.4	74.4	128.16	-3,757.9	-2,924.3	5,012.1	4,887.4	124.71	40.189	
12,200.0	8,119.0	15,034.0	11,217.0	73.9	75.2	128.13	-3,815.1	-2,926.6	5,015.1	4,888.6	126.56	39.627	
12,300.0	8,119.0	15,090.0	11,216.7	75.4	76.0	128.11	-3,871.0	-2,929.2	5,018.9	4,890.6	128.38	39.094	
12,400.0	8,119.0	12,400.0	11,213.2	76.9	41.4	127.99	-4,085.8	-2,940.6	5,023.1	4,925.5	97.60	51.468	
12,500.0	8,119.0	12,500.0	11,210.4	78.4	38.4	127.93	-4,269.2	-2,944.5	5,024.4	4,924.4	99.95	50.268	
12,600.0	8,119.0	15,605.9	11,211.1	79.9	83.4	127.94	-4,386.4	-2,942.9	5,024.0	4,884.8	139.27	36.074	
12,603.1	8,119.0	15,607.7	11,211.1	79.9	83.4	127.94	-4,388.2	-2,942.9	5,024.0	4,884.7	139.33	36.059	
12,700.0	8,119.0	15,672.9	11,211.7	81.4	84.4	127.95	-4,453.4	-2,942.3	5,024.3	4,883.0	141.30	35.558	
12,800.0	8,119.0	16,042.6	11,213.1	82.9	89.9	128.04	-4,822.8	-2,928.8	5,021.8	4,874.2	147.64	34.014	
12,900.0	8,119.0	16,148.5	11,212.4	84.5	91.5	128.08	-4,928.4	-2,922.2	5,016.9	4,866.7	150.24	33.393	
13,000.0	8,119.0	16,253.4	11,213.6	86.0	93.0	128.14	-5,033.0	-2,914.2	5,012.1	4,859.3	152.80	32.802	
13,100.0	8,119.0	16,287.0	11,213.7	87.5	93.6	128.16	-5,066.5	-2,911.8	5,007.6	4,853.2	154.40	32.432	
13,200.0	8,119.0	16,337.0	11,213.6	89.1	94.3	128.17	-5,116.4	-2,909.2	5,004.1	4,847.8	156.24	32.029	
13,300.0	8,119.0	16,383.0	11,213.1	90.6	95.0	128.17	-5,162.5	-2,908.5	5,002.3	4,844.2	158.02	31.656	
13,400.0	8,119.0	16,410.2	11,212.8	92.2	95.4	128.17	-5,189.7	-2,908.4	5,001.6	4,842.1	159.51	31.356	
13,413.0	8,119.0	16,418.5	11,212.7	92.4	95.5	128.17	-5,197.9	-2,908.4	5,001.6	4,841.8	159.77	31.305	
13,500.0	8,119.0	16,478.0	11,212.9	93.7	96.4	128.17	-5,257.5	-2,908.2	5,001.9	4,840.3	161.60	30.953	
13,600.0	8,119.0	16,543.6	11,213.6	95.3	97.4	128.17	-5,323.1	-2,908.1	5,002.8	4,839.2	163.64	30.571	
13,700.0	8,119.0	16,618.8	11,214.3	96.8	98.6	128.17	-5,398.3	-2,908.6	5,004.3	4,838.5	165.85	30.174	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #201H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 235-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,800.0	8,119.0	16,732.1	11,213.4	98.4	100.3	128.14	-5,511.5	-2,911.2	5,006.1	4,837.4	168.70	29.675	
13,900.0	8,119.0	16,829.0	11,212.3	100.0	101.7	128.11	-5,608.4	-2,913.2	5,007.5	4,836.2	171.29	29.234	
14,000.0	8,119.0	17,143.0	11,200.1	101.5	106.5	127.97	-5,921.8	-2,916.6	5,005.3	4,827.9	177.40	28.215	
14,100.0	8,119.0	17,205.1	11,195.1	103.1	107.5	127.91	-5,983.8	-2,917.8	5,002.7	4,823.1	179.55	27.862	
14,200.0	8,119.0	17,261.9	11,192.1	104.7	108.4	127.87	-6,040.4	-2,918.9	5,001.2	4,819.7	181.58	27.543	
14,300.0	8,119.0	17,369.6	11,189.1	106.2	110.0	127.84	-6,148.1	-2,918.9	5,000.0	4,815.6	184.39	27.117	
14,400.0	8,119.0	17,462.4	11,189.8	107.8	111.5	127.86	-6,240.9	-2,916.5	4,998.8	4,811.9	186.89	26.748	
14,500.0	8,119.0	17,614.8	11,192.0	109.4	113.8	127.91	-6,393.1	-2,911.1	4,997.5	4,807.3	190.25	26.269	
14,600.0	8,119.0	17,712.0	11,194.5	111.0	115.4	127.97	-6,490.2	-2,905.8	4,995.2	4,802.5	192.77	25.913	
14,700.0	8,119.0	17,764.3	11,196.2	112.6	116.2	128.00	-6,542.3	-2,903.0	4,993.5	4,798.9	194.64	25.655	
14,800.0	8,119.0	17,809.7	11,197.6	114.2	116.9	128.02	-6,587.7	-2,901.3	4,992.9	4,796.5	196.40	25.422	
14,900.0	8,119.0	17,916.4	11,200.8	115.7	118.6	128.07	-6,694.3	-2,898.0	4,992.8	4,793.8	199.08	25.079	
15,000.0	8,119.0	18,021.7	11,203.2	117.3	120.2	128.11	-6,799.6	-2,894.9	4,992.3	4,790.5	201.76	24.744	
15,027.6	8,119.0	18,034.7	11,203.4	117.8	120.4	128.12	-6,812.5	-2,894.6	4,992.3	4,790.0	202.25	24.683	
15,100.0	8,119.0	18,068.6	11,203.8	118.9	120.9	128.12	-6,846.4	-2,894.3	4,992.5	4,789.0	203.56	24.527	
15,200.0	8,119.0	18,144.1	11,204.3	120.5	122.1	128.12	-6,921.9	-2,894.6	4,993.7	4,787.9	205.82	24.263	
15,300.0	8,119.0	18,240.3	11,205.6	122.1	123.6	128.13	-7,018.1	-2,894.6	4,995.0	4,786.6	208.41	23.968	
15,400.0	8,119.0	18,316.5	11,207.3	123.7	124.8	128.14	-7,094.3	-2,894.2	4,996.5	4,785.8	210.65	23.719	
15,500.0	8,119.0	18,516.4	11,209.2	125.3	128.0	128.16	-7,294.1	-2,893.4	4,997.1	4,782.2	214.91	23.252	
15,515.1	8,119.0	18,522.5	11,209.2	125.5	128.1	128.16	-7,300.2	-2,893.4	4,997.1	4,781.9	215.17	23.223	
15,600.0	8,119.0	18,567.0	11,209.6	126.9	128.8	128.16	-7,344.7	-2,893.2	4,997.5	4,780.7	216.78	23.053	
15,700.0	8,119.0	15,700.0	11,210.0	128.5	83.7	128.16	-7,441.9	-2,893.3	4,998.4	4,818.2	180.19	27.739	
15,800.0	8,119.0	18,703.5	11,209.6	130.1	130.9	128.15	-7,481.2	-2,894.0	4,999.8	4,778.7	221.10	22.613	
15,900.0	8,119.0	18,756.0	11,209.8	131.7	131.7	128.14	-7,533.7	-2,895.7	5,002.6	4,779.6	222.99	22.434	
16,000.0	8,119.0	19,104.2	11,210.9	133.3	137.2	128.11	-7,881.6	-2,898.3	5,005.6	4,775.9	229.73	21.789	
16,100.0	8,119.0	19,333.5	11,211.0	134.9	140.9	128.18	-8,110.5	-2,888.0	5,002.8	4,768.6	234.20	21.361	
16,200.0	8,119.0	19,371.8	11,209.7	136.5	141.5	128.17	-8,148.8	-2,887.0	4,998.9	4,762.9	236.01	21.181	
16,300.0	8,119.0	19,420.0	11,208.7	138.1	142.2	128.17	-8,197.0	-2,885.9	4,996.2	4,758.3	237.93	20.998	
16,400.0	8,119.0	19,456.6	11,208.4	139.7	142.8	128.17	-8,233.7	-2,885.2	4,994.6	4,755.0	239.65	20.842	
16,500.0	8,119.0	19,511.0	11,208.3	141.4	143.7	128.17	-8,288.0	-2,884.8	4,994.3	4,752.7	241.61	20.671	
16,503.2	8,119.0	19,511.0	11,208.3	141.4	143.7	128.17	-8,288.0	-2,884.8	4,994.3	4,752.7	241.65	20.668	
16,600.0	8,119.0	19,543.3	11,208.4	143.0	144.2	128.17	-8,320.3	-2,885.0	4,995.0	4,751.8	243.20	20.539	
16,700.0	8,119.0	19,605.0	11,208.6	144.6	145.2	128.16	-8,382.0	-2,886.0	4,996.8	4,751.6	245.26	20.373	
16,800.0	8,119.0	19,656.8	11,208.3	146.2	146.0	128.14	-8,433.7	-2,887.7	4,999.5	4,752.3	247.16	20.228	
16,900.0	8,119.0	19,722.8	11,207.0	147.8	147.0	128.10	-8,499.7	-2,891.2	5,002.9	4,753.5	249.34	20.065	
17,000.0	8,119.0	19,795.0	11,206.4	149.4	148.2	128.07	-8,571.8	-2,894.9	5,006.9	4,755.3	251.61	19.900	
17,100.0	8,119.0	19,873.0	11,207.0	151.0	149.4	128.04	-8,649.7	-2,898.6	5,011.4	4,757.5	253.96	19.733	
17,200.0	8,119.0	20,024.2	11,209.4	152.7	151.8	128.03	-8,800.8	-2,903.3	5,015.2	4,757.6	257.62	19.468	
17,300.0	8,119.0	20,267.5	11,208.8	154.3	155.7	127.97	-9,044.0	-2,908.7	5,017.0	4,754.1	262.90	19.083	
17,400.0	8,119.0	20,306.9	11,208.2	155.9	156.3	127.96	-9,083.3	-2,909.7	5,018.4	4,753.8	264.62	18.965	
17,500.0	8,119.0	21,002.3	11,221.3	157.5	167.5	128.35	-9,776.0	-2,867.3	5,019.4	4,744.5	274.92	18.258	
17,600.0	8,119.0	21,027.0	11,221.6	159.1	167.9	128.38	-9,800.5	-2,863.9	5,010.2	4,733.5	276.68	18.108	
17,700.0	8,119.0	21,071.7	11,222.2	160.7	168.6	128.42	-9,844.9	-2,858.4	5,002.1	4,723.5	278.61	17.954	
17,800.0	8,119.0	21,113.0	11,222.5	162.4	169.3	128.44	-9,886.0	-2,854.7	4,995.7	4,715.3	280.49	17.811	
17,900.0	8,119.0	21,113.0	11,222.5	164.0	169.3	128.44	-9,886.0	-2,854.7	4,990.7	4,708.9	281.83	17.708	
18,000.0	8,119.0	21,168.8	11,222.4	165.6	170.2	128.46	-9,941.8	-2,851.6	4,986.9	4,703.0	283.86	17.568	
18,100.0	8,119.0	21,210.0	11,221.8	167.2	170.9	128.46	-9,982.9	-2,850.5	4,984.4	4,698.7	285.68	17.447	
18,200.0	8,119.0	21,303.5	11,220.4	168.9	172.4	128.46	-10,076.4	-2,848.8	4,982.4	4,694.1	288.31	17.282	
18,300.0	8,119.0	21,376.6	11,219.8	170.5	173.6	128.46	-10,149.4	-2,847.4	4,980.9	4,690.3	290.59	17.140	
18,400.0	8,119.0	21,441.5	11,219.4	172.1	174.6	128.46	-10,214.4	-2,846.5	4,979.9	4,687.2	292.75	17.011	
18,500.0	8,119.0	21,512.8	11,218.3	173.7	175.7	128.45	-10,285.6	-2,846.8	4,979.7	4,684.6	295.04	16.878	
18,600.0	8,119.0	21,658.8	11,213.7	175.4	178.1	128.39	-10,431.5	-2,848.8	4,979.3	4,680.6	298.65	16.672	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #201H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 235-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,700.0	8,119.0	21,720.6	11,210.9	177.0	179.1	128.35	-10,493.3	-2,850.0	4,978.5	4,677.7	300.85	16.548	
18,800.0	8,119.0	21,970.0	11,204.7	178.6	183.1	128.30	-10,742.5	-2,847.5	4,976.3	4,670.3	306.01	16.262	
18,900.0	8,119.0	22,019.0	11,204.1	180.2	183.9	128.30	-10,791.4	-2,846.5	4,974.0	4,666.1	307.97	16.151	
19,000.0	8,119.0	22,215.3	11,197.2	181.9	187.1	128.26	-10,987.5	-2,842.7	4,970.7	4,658.5	312.22	15.920	
19,100.0	8,119.0	22,294.4	11,192.5	183.5	188.3	128.22	-11,066.5	-2,842.0	4,966.8	4,652.0	314.77	15.779	
19,200.0	8,119.0	22,359.0	11,189.6	185.1	189.4	128.19	-11,131.1	-2,841.2	4,963.5	4,646.4	317.04	15.655	
19,300.0	8,119.0	22,481.3	11,185.2	186.8	191.4	128.16	-11,253.2	-2,839.3	4,960.5	4,640.3	320.19	15.492	
19,400.0	8,119.0	22,531.1	11,182.8	188.4	192.2	128.14	-11,303.0	-2,839.1	4,957.6	4,635.4	322.24	15.385	
19,500.0	8,119.0	22,631.5	11,177.5	190.0	193.8	128.08	-11,403.2	-2,840.0	4,955.5	4,630.4	325.14	15.241	
19,600.0	8,119.0	22,662.0	11,175.7	191.6	194.3	128.06	-11,433.7	-2,840.2	4,953.6	4,626.7	326.85	15.155	
19,700.0	8,119.0	22,721.6	11,172.9	193.3	195.2	128.03	-11,493.3	-2,841.1	4,952.5	4,623.5	329.03	15.052	
19,712.8	8,119.0	22,725.8	11,172.7	193.5	195.3	128.03	-11,497.4	-2,841.1	4,952.5	4,623.2	329.25	15.042	
19,800.0	8,119.0	22,756.0	11,171.9	194.9	195.8	128.01	-11,527.6	-2,841.9	4,953.0	4,622.3	330.71	14.977	
19,900.0	8,119.0	19,900.0	11,169.7	196.5	149.7	127.96	-11,661.2	-2,844.8	4,954.3	4,660.8	293.51	16.879	
20,000.0	8,119.0	22,978.0	11,168.6	198.2	199.4	127.95	-11,749.6	-2,845.4	4,954.6	4,617.9	336.74	14.714	
20,100.0	8,119.0	23,009.8	11,168.6	199.8	199.9	127.94	-11,781.3	-2,845.9	4,956.0	4,617.7	338.30	14.650	
20,200.0	8,119.0	23,041.0	11,168.8	201.4	200.4	127.94	-11,812.5	-2,846.6	4,958.8	4,619.0	339.79	14.594	
20,300.0	8,119.0	23,122.1	11,169.8	203.1	201.7	127.92	-11,893.6	-2,849.1	4,962.4	4,620.2	342.21	14.501	
20,400.0	8,119.0	23,282.6	11,171.4	204.7	204.3	127.90	-12,054.0	-2,853.6	4,965.7	4,619.6	346.14	14.346	
20,500.0	8,119.0	23,407.8	11,171.5	206.3	206.3	127.88	-12,179.2	-2,856.5	4,968.1	4,618.7	349.40	14.219	
20,606.7	8,119.0	23,500.0	11,171.7	208.1	207.8	127.86	-12,271.3	-2,858.3	4,970.3	4,618.2	352.11	14.116	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #202H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 166-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.37	-8.0	-1,245.2	1,245.3				
100.0	100.0	90.3	90.3	0.1	0.1	-90.37	-8.0	-1,245.4	1,245.4	1,245.2	0.26	4,728.984	
200.0	200.0	186.7	186.7	0.5	0.3	-90.37	-8.0	-1,246.0	1,246.0	1,245.2	0.81	1,541.902	
300.0	300.0	288.4	288.4	0.8	0.7	-90.37	-8.0	-1,246.6	1,246.6	1,245.1	1.53	814.661	
400.0	400.0	388.2	388.2	1.2	1.0	-90.36	-7.8	-1,247.1	1,247.1	1,244.9	2.24	555.536	
500.0	500.0	487.0	487.0	1.6	1.4	-90.36	-7.9	-1,247.7	1,247.7	1,244.8	2.96	422.041	
600.0	600.0	588.8	588.8	1.9	1.8	-90.37	-8.1	-1,248.3	1,248.3	1,244.6	3.68	339.347	
700.0	700.0	691.1	691.1	2.3	2.1	-90.38	-8.3	-1,248.7	1,248.7	1,244.3	4.40	283.625	
800.0	800.0	786.8	786.8	2.6	2.5	-90.40	-8.7	-1,249.2	1,249.2	1,244.1	5.10	244.855	ES
900.0	900.0	882.3	882.3	3.0	2.8	-90.44	-9.5	-1,249.9	1,250.0	1,244.2	5.80	215.494	
1,000.0	1,000.0	975.1	975.1	3.4	3.1	-90.47	-10.3	-1,251.1	1,251.3	1,244.8	6.49	192.786	
1,100.0	1,100.0	1,065.9	1,065.9	3.7	3.5	-164.91	-10.7	-1,252.8	1,254.9	1,247.7	7.17	175.084	
1,200.0	1,199.8	1,149.3	1,149.2	4.1	3.8	-164.94	-11.1	-1,255.4	1,263.0	1,255.2	7.81	161.619	
1,300.0	1,299.5	1,241.0	1,240.8	4.4	4.1	-164.96	-11.1	-1,259.0	1,275.3	1,266.8	8.49	150.171	
1,400.0	1,398.7	1,332.1	1,331.8	4.8	4.4	-164.97	-10.3	-1,263.1	1,291.6	1,282.4	9.17	140.865	
1,500.0	1,497.5	1,420.9	1,420.5	5.2	4.7	-164.93	-8.3	-1,267.7	1,311.8	1,301.9	9.83	133.389	
1,600.0	1,595.9	1,509.2	1,508.6	5.5	5.1	-164.95	-4.8	-1,272.9	1,334.3	1,323.8	10.50	127.126	
1,700.0	1,694.4	1,598.8	1,597.8	5.9	5.4	-164.91	0.0	-1,278.8	1,357.4	1,346.2	11.16	121.631	
1,800.0	1,792.9	1,688.0	1,686.7	6.3	5.7	-164.83	6.0	-1,285.1	1,381.1	1,369.2	11.82	116.796	
1,900.0	1,891.4	1,788.1	1,786.2	6.8	6.1	-164.67	14.2	-1,292.4	1,404.9	1,392.4	12.54	112.033	
2,000.0	1,989.9	1,890.1	1,887.3	7.2	6.4	-164.44	24.4	-1,299.7	1,428.6	1,415.3	13.27	107.678	
2,100.0	2,088.4	2,001.6	1,998.1	7.6	6.9	-164.19	35.7	-1,306.8	1,451.6	1,437.5	14.04	103.369	
2,200.0	2,186.8	2,095.6	2,091.5	8.0	7.2	-164.01	44.6	-1,312.1	1,473.9	1,459.1	14.75	99.954	
2,300.0	2,285.3	2,168.2	2,163.6	8.5	7.5	-163.89	51.2	-1,317.1	1,497.4	1,482.0	15.35	97.526	
2,400.0	2,383.8	2,240.2	2,235.0	8.9	7.8	-163.78	57.5	-1,323.3	1,522.5	1,506.6	15.95	95.431	
2,500.0	2,482.3	2,332.1	2,326.2	9.3	8.1	-163.65	65.2	-1,332.1	1,548.7	1,532.1	16.65	93.006	
2,600.0	2,580.8	2,427.7	2,421.1	9.8	8.5	-163.55	72.7	-1,341.4	1,575.0	1,557.6	17.37	90.682	
2,700.0	2,679.2	2,523.7	2,516.3	10.2	8.9	-163.46	79.8	-1,350.8	1,601.3	1,583.2	18.09	88.531	
2,800.0	2,777.7	2,619.8	2,611.7	10.6	9.2	-163.40	86.5	-1,360.2	1,627.6	1,608.8	18.81	86.541	
2,900.0	2,876.2	2,726.8	2,718.0	11.1	9.7	-163.35	93.2	-1,370.4	1,653.7	1,634.1	19.58	84.446	
3,000.0	2,974.7	2,835.3	2,825.9	11.5	10.1	-163.33	99.2	-1,380.0	1,679.1	1,658.7	20.37	82.446	
3,100.0	3,073.2	2,932.8	2,922.9	11.9	10.5	-163.28	105.8	-1,388.3	1,704.2	1,683.1	21.10	80.776	
3,200.0	3,171.6	3,033.0	3,022.4	12.4	10.8	-163.16	114.4	-1,396.6	1,729.1	1,707.2	21.84	79.154	
3,300.0	3,270.1	3,136.8	3,125.3	12.8	11.3	-162.99	124.7	-1,404.9	1,753.7	1,731.1	22.62	77.543	
3,400.0	3,368.6	3,264.6	3,252.0	13.3	11.8	-162.77	137.9	-1,414.1	1,777.7	1,754.2	23.51	75.629	
3,500.0	3,467.1	3,407.0	3,393.9	13.7	12.3	-162.66	148.7	-1,420.5	1,798.8	1,774.4	24.46	73.554	
3,600.0	3,565.6	3,483.9	3,470.6	14.2	12.6	-162.62	154.2	-1,423.8	1,819.7	1,794.6	25.09	72.517	
3,700.0	3,664.0	3,560.4	3,546.7	14.6	12.9	-162.55	160.3	-1,427.8	1,841.7	1,816.0	25.73	71.592	
3,800.0	3,762.5	3,647.5	3,633.3	15.1	13.2	-162.44	168.4	-1,433.2	1,864.7	1,838.2	26.42	70.589	
3,900.0	3,861.0	3,737.3	3,722.3	15.5	13.6	-162.28	178.6	-1,439.1	1,888.0	1,860.9	27.12	69.612	
4,000.0	3,959.5	3,844.2	3,828.1	16.0	14.0	-162.05	191.9	-1,446.1	1,911.4	1,883.5	27.92	68.460	
4,100.0	4,058.0	3,959.4	3,942.4	16.4	14.5	-161.84	205.1	-1,452.7	1,934.0	1,905.2	28.76	67.238	
4,200.0	4,156.4	4,006.6	3,989.2	16.8	14.6	-161.76	210.4	-1,455.8	1,957.4	1,928.2	29.25	66.930	
4,300.0	4,254.9	4,055.7	4,037.7	17.3	14.9	-161.67	216.3	-1,460.2	1,983.3	1,953.5	29.72	66.733	
4,400.0	4,353.4	4,104.0	4,085.3	17.7	15.1	-161.57	222.5	-1,465.7	2,011.4	1,981.2	30.17	66.669	
4,500.0	4,451.9	4,157.7	4,137.9	18.2	15.3	-161.45	229.8	-1,473.0	2,041.8	2,011.2	30.64	66.640	
4,600.0	4,550.4	4,256.3	4,234.5	18.6	15.7	-161.22	243.6	-1,487.2	2,073.0	2,041.5	31.41	65.991	
4,700.0	4,648.9	4,355.0	4,331.2	19.1	16.1	-161.00	257.5	-1,501.2	2,104.0	2,071.8	32.19	65.368	
4,800.0	4,747.3	4,439.3	4,414.0	19.5	16.5	-160.83	268.9	-1,513.4	2,135.2	2,102.4	32.86	64.973	
4,900.0	4,845.8	4,525.9	4,498.8	20.0	16.9	-160.68	280.1	-1,526.2	2,166.8	2,133.3	33.55	64.579	
5,000.0	4,944.3	4,720.3	4,690.8	20.4	17.7	-160.58	296.4	-1,551.7	2,196.5	2,161.6	34.92	62.896	
5,100.0	5,042.8	4,881.5	4,851.1	20.9	18.3	-160.77	299.3	-1,567.4	2,222.6	2,186.6	35.99	61.755	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #202H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 166-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,141.3	5,038.1	5,007.3	21.3	18.9	-161.12	295.7	-1,578.7	2,246.0	2,209.0	36.98	60.733	
5,300.0	5,239.7	5,300.0	5,202.7	21.8	19.7	-161.66	286.0	-1,584.1	2,263.9	2,225.6	38.28	59.135	
5,400.0	5,338.2	5,400.3	5,368.8	22.2	20.0	-162.09	278.0	-1,583.0	2,279.1	2,240.1	39.00	58.438	
5,500.0	5,436.7	5,491.9	5,460.5	22.7	20.2	-162.25	276.6	-1,581.8	2,294.3	2,254.6	39.66	57.847	
5,600.0	5,535.2	5,584.5	5,553.0	23.1	20.5	-162.38	276.1	-1,580.8	2,309.8	2,269.4	40.33	57.268	
5,700.0	5,633.7	5,677.4	5,645.9	23.6	20.8	-162.51	275.7	-1,580.0	2,325.5	2,284.5	41.00	56.714	
5,800.0	5,732.1	5,772.9	5,741.5	24.0	21.1	-162.64	275.4	-1,579.3	2,341.4	2,299.7	41.69	56.166	
5,900.0	5,830.6	5,868.5	5,837.0	24.5	21.4	-162.77	275.2	-1,578.8	2,357.5	2,315.1	42.37	55.639	
6,000.0	5,929.1	5,962.7	5,931.2	24.9	21.7	-162.89	275.0	-1,578.5	2,373.7	2,330.6	43.05	55.135	
6,100.0	6,027.6	6,057.3	6,025.9	25.4	22.0	-163.02	274.7	-1,578.3	2,390.1	2,346.4	43.74	54.648	
6,200.0	6,126.1	6,154.0	6,122.6	25.8	22.3	-163.14	274.4	-1,578.2	2,406.6	2,362.2	44.43	54.166	
6,300.0	6,224.5	6,250.9	6,219.5	26.3	22.6	-163.27	274.0	-1,578.2	2,423.3	2,378.1	45.13	53.698	
6,400.0	6,323.0	6,348.8	6,317.3	26.7	23.0	-163.40	273.5	-1,578.2	2,439.9	2,394.1	45.83	53.240	
6,500.0	6,421.5	6,446.3	6,414.9	27.2	23.3	-163.54	272.5	-1,578.2	2,456.6	2,410.1	46.53	52.797	
6,600.0	6,520.0	6,543.3	6,511.8	27.6	23.6	-163.67	271.4	-1,578.3	2,473.4	2,426.2	47.23	52.371	
6,700.0	6,618.5	6,639.5	6,608.0	28.1	23.9	-163.81	270.3	-1,578.5	2,490.3	2,442.3	47.92	51.962	
6,800.0	6,716.9	6,734.1	6,702.7	28.5	24.2	-163.94	269.2	-1,578.8	2,507.3	2,458.6	48.62	51.573	
6,900.0	6,815.4	6,831.7	6,800.2	29.0	24.5	-164.08	268.1	-1,579.2	2,524.4	2,475.1	49.32	51.185	
6,981.8	6,896.0	6,917.2	6,885.7	29.4	24.8	-164.20	266.8	-1,579.5	2,538.3	2,488.4	49.92	50.850	
7,000.0	6,913.9	6,936.2	6,904.7	29.5	24.9	-164.24	266.5	-1,579.5	2,541.3	2,491.3	50.05	50.775	
7,100.0	7,012.9	7,037.3	7,005.8	29.9	25.2	-164.47	264.7	-1,579.6	2,555.3	2,504.6	50.76	50.339	
7,200.0	7,112.3	7,135.0	7,103.5	30.3	25.5	-164.63	263.1	-1,579.7	2,565.2	2,513.7	51.45	49.858	
7,300.0	7,212.2	7,235.9	7,204.4	30.6	25.9	-164.74	261.6	-1,579.8	2,570.9	2,518.7	52.14	49.306	
7,381.8	7,294.0	7,320.3	7,288.8	30.9	26.1	-90.37	260.2	-1,579.9	2,572.3	2,519.6	52.70	48.808	
7,400.0	7,312.2	7,339.1	7,307.5	30.9	26.2	-90.38	259.8	-1,579.9	2,572.3	2,519.5	52.83	48.694	
7,500.0	7,412.2	7,453.6	7,422.0	31.2	26.6	-90.42	257.8	-1,579.6	2,572.1	2,518.5	53.55	48.031	
7,600.0	7,512.2	7,574.9	7,543.4	31.5	27.0	-90.46	256.1	-1,578.4	2,571.1	2,516.8	54.30	47.350	
7,633.8	7,546.0	7,622.3	7,590.7	31.6	27.1	-90.47	255.6	-1,577.6	2,570.6	2,516.0	54.58	47.100	
7,650.0	7,562.2	7,644.8	7,613.2	31.7	27.2	89.90	255.4	-1,577.2	2,570.2	2,515.5	54.71	46.982	
7,700.0	7,612.0	7,714.5	7,682.9	31.8	27.4	90.13	255.1	-1,575.4	2,569.0	2,513.9	55.10	46.625	
7,750.0	7,661.4	7,783.5	7,751.8	31.9	27.7	90.54	255.1	-1,573.1	2,567.3	2,511.8	55.48	46.278	
7,800.0	7,709.8	7,813.6	7,781.9	32.0	27.8	90.86	255.0	-1,572.2	2,565.9	2,510.2	55.71	46.060	
7,850.0	7,757.1	7,855.7	7,824.0	32.1	27.9	91.28	254.9	-1,571.0	2,564.7	2,508.7	55.97	45.819	
7,900.0	7,802.7	7,896.5	7,864.8	32.2	28.0	91.74	254.8	-1,569.9	2,563.8	2,507.6	56.23	45.597	
7,950.0	7,846.4	7,935.5	7,903.8	32.3	28.2	92.21	254.7	-1,568.9	2,563.3	2,506.9	56.47	45.394	
7,979.4	7,871.0	7,962.3	7,930.6	32.4	28.2	92.55	254.7	-1,568.3	2,563.3	2,506.7	56.62	45.270	
8,000.0	7,887.7	7,980.5	7,948.8	32.4	28.3	92.78	254.8	-1,567.8	2,563.3	2,506.6	56.73	45.186	
8,050.0	7,926.5	8,022.2	7,990.5	32.4	28.4	93.33	255.2	-1,566.7	2,563.8	2,506.8	56.97	45.003	
8,100.0	7,962.4	8,060.2	8,028.4	32.5	28.6	93.82	255.9	-1,565.6	2,564.9	2,507.7	57.19	44.846	
8,150.0	7,995.1	8,094.0	8,062.2	32.5	28.7	94.21	256.8	-1,564.6	2,566.8	2,509.4	57.40	44.719	
8,200.0	8,024.4	8,123.7	8,091.9	32.6	28.8	94.47	257.7	-1,563.7	2,569.7	2,512.1	57.59	44.622	
8,250.0	8,050.1	8,148.9	8,117.1	32.6	28.9	94.58	258.7	-1,562.9	2,573.6	2,515.8	57.76	44.558	
8,300.0	8,071.9	8,161.9	8,130.0	32.7	28.9	94.34	259.1	-1,562.5	2,578.6	2,520.7	57.88	44.550	
8,350.0	8,089.7	8,175.5	8,143.6	32.7	29.0	94.01	259.7	-1,562.1	2,584.8	2,526.8	58.00	44.562	
8,400.0	8,103.4	8,185.5	8,153.6	32.7	29.0	93.48	260.1	-1,561.8	2,592.2	2,534.1	58.11	44.607	
8,450.0	8,112.8	8,191.8	8,159.9	32.8	29.0	92.75	260.3	-1,561.7	2,600.8	2,542.6	58.20	44.685	
8,500.0	8,118.0	8,194.4	8,162.5	32.9	29.0	91.82	260.4	-1,561.6	2,610.4	2,552.2	58.28	44.795	
8,533.8	8,119.0	8,194.1	8,162.2	33.0	29.0	91.08	260.4	-1,561.6	2,617.6	2,559.3	58.31	44.888	
8,600.0	8,119.0	8,191.9	8,159.9	33.1	29.0	91.03	260.3	-1,561.7	2,632.8	2,574.4	58.39	45.089	
8,700.0	8,119.0	8,188.5	8,156.6	33.4	29.0	90.96	260.2	-1,561.7	2,658.8	2,600.3	58.54	45.419	
8,800.0	8,119.0	8,185.1	8,153.2	33.8	29.0	90.88	260.0	-1,561.8	2,688.3	2,629.5	58.72	45.781	
8,900.0	8,119.0	8,181.9	8,150.0	34.3	29.0	90.81	259.9	-1,561.9	2,721.1	2,662.1	58.93	46.177	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #202H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 166-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,000.0	8,119.0	8,178.6	8,146.7	34.9	29.0	90.74	259.8	-1,562.0	2,757.1	2,697.9	59.16	46.606	
9,100.0	8,119.0	8,175.4	8,143.6	35.5	29.0	90.66	259.7	-1,562.1	2,796.2	2,736.8	59.41	47.068	
9,200.0	8,119.0	8,172.3	8,140.4	36.3	28.9	90.59	259.5	-1,562.2	2,838.4	2,778.7	59.67	47.564	
9,300.0	8,119.0	8,169.2	8,137.3	37.1	28.9	90.52	259.4	-1,562.3	2,883.3	2,823.4	59.95	48.094	
9,400.0	8,119.0	8,166.1	8,134.3	37.9	28.9	90.46	259.3	-1,562.4	2,931.0	2,870.8	60.24	48.658	
9,500.0	8,119.0	8,163.1	8,131.3	38.8	28.9	90.39	259.2	-1,562.5	2,981.3	2,920.8	60.53	49.254	
9,600.0	8,119.0	8,160.2	8,128.3	39.8	28.9	90.32	259.1	-1,562.6	3,034.0	2,973.2	60.82	49.883	
9,700.0	8,119.0	8,157.2	8,125.4	40.8	28.9	90.26	259.0	-1,562.7	3,089.1	3,028.0	61.12	50.543	
9,800.0	8,119.0	8,154.3	8,122.5	41.8	28.9	90.19	258.8	-1,562.7	3,146.4	3,085.0	61.41	51.235	
9,900.0	8,119.0	8,151.5	8,119.6	42.9	28.9	90.13	258.7	-1,562.8	3,205.8	3,144.1	61.70	51.956	
10,000.0	8,119.0	8,148.7	8,116.8	44.0	28.9	90.06	258.6	-1,562.9	3,267.1	3,205.1	61.99	52.706	
10,100.0	8,119.0	8,145.9	8,114.1	45.2	28.9	90.00	258.5	-1,563.0	3,330.4	3,268.1	62.27	53.484	
10,200.0	8,119.0	8,143.2	8,111.3	46.3	28.8	89.94	258.4	-1,563.1	3,395.3	3,332.8	62.54	54.289	
10,300.0	8,119.0	8,140.5	8,108.6	47.5	28.8	89.88	258.3	-1,563.2	3,462.0	3,399.2	62.81	55.119	
10,400.0	8,119.0	8,137.8	8,106.0	48.8	28.8	89.82	258.2	-1,563.2	3,530.2	3,467.2	63.07	55.974	
10,500.0	8,119.0	8,125.0	8,093.2	50.0	28.8	89.53	257.8	-1,563.6	3,600.0	3,536.7	63.28	56.890	
10,600.0	8,119.0	8,125.0	8,093.2	51.3	28.8	89.53	257.8	-1,563.6	3,671.1	3,607.5	63.54	57.780	
10,700.0	8,119.0	8,125.0	8,093.2	52.6	28.8	89.53	257.8	-1,563.6	3,743.5	3,679.7	63.78	58.692	
10,800.0	8,119.0	8,125.0	8,093.2	54.0	28.8	89.53	257.8	-1,563.6	3,817.2	3,753.1	64.02	59.623	
10,900.0	8,119.0	8,125.0	8,093.2	55.3	28.8	89.53	257.8	-1,563.6	3,892.0	3,827.7	64.25	60.574	
11,000.0	8,119.0	8,125.0	8,093.2	56.7	28.8	89.53	257.8	-1,563.6	3,968.0	3,903.5	64.48	61.542	
11,100.0	8,119.0	8,125.0	8,093.2	58.0	28.8	89.53	257.8	-1,563.6	4,044.9	3,980.3	64.69	62.528	
11,200.0	8,119.0	14,210.2	11,243.3	59.4	63.6	139.47	-2,916.4	-1,664.5	4,117.4	4,025.8	91.65	44.927	
11,300.0	8,119.0	14,408.9	11,242.6	60.8	66.1	139.44	-3,115.0	-1,665.5	4,118.0	4,023.1	94.89	43.397	
11,400.0	8,119.0	14,568.0	11,238.8	62.2	68.3	139.41	-3,274.1	-1,664.7	4,116.2	4,018.5	97.71	42.125	
11,500.0	8,119.0	14,623.0	11,237.2	63.6	69.0	139.40	-3,329.0	-1,664.2	4,114.0	4,014.7	99.31	41.425	
11,600.0	8,119.0	14,685.0	11,236.3	65.1	69.9	139.39	-3,391.0	-1,663.5	4,112.9	4,011.9	100.99	40.725	
11,700.0	8,119.0	14,870.1	11,233.7	66.5	72.4	139.38	-3,576.0	-1,661.0	4,111.1	4,007.0	104.16	39.468	
11,800.0	8,119.0	14,942.9	11,233.2	68.0	73.4	139.39	-3,648.8	-1,659.1	4,109.2	4,003.2	105.98	38.773	
11,900.0	8,119.0	15,030.3	11,233.9	69.4	74.6	139.43	-3,736.1	-1,655.5	4,107.5	3,999.6	107.95	38.050	
12,000.0	8,119.0	15,096.0	11,233.3	70.9	75.5	139.43	-3,801.8	-1,654.8	4,106.5	3,996.8	109.71	37.430	
12,100.0	8,119.0	15,174.5	11,232.1	72.4	76.6	139.41	-3,880.3	-1,655.3	4,106.1	3,994.5	111.66	36.774	
12,200.0	8,119.0	15,378.8	11,228.2	73.9	79.5	139.37	-4,084.6	-1,654.2	4,104.6	3,989.4	115.20	35.632	
12,300.0	8,119.0	15,455.3	11,226.0	75.4	80.6	139.36	-4,161.0	-1,653.6	4,102.3	3,985.2	117.15	35.018	
12,400.0	8,119.0	15,526.7	11,224.7	76.9	81.7	139.35	-4,232.4	-1,652.9	4,100.6	3,981.6	119.03	34.450	
12,500.0	8,119.0	15,609.8	11,224.1	78.4	82.9	139.35	-4,315.4	-1,651.8	4,099.6	3,978.5	121.05	33.868	
12,600.0	8,119.0	15,829.6	11,213.1	79.9	86.1	139.21	-4,534.9	-1,654.2	4,096.4	3,971.5	124.97	32.779	
12,700.0	8,119.0	16,029.0	11,196.7	81.4	89.0	139.02	-4,733.6	-1,656.3	4,091.2	3,962.5	128.68	31.793	
12,800.0	8,119.0	16,113.9	11,190.6	82.9	90.3	138.98	-4,818.3	-1,654.9	4,085.1	3,954.2	130.85	31.220	
12,900.0	8,119.0	16,164.2	11,187.3	84.5	91.0	138.95	-4,868.4	-1,654.2	4,079.7	3,947.1	132.57	30.773	
13,000.0	8,119.0	16,227.0	11,184.3	86.0	91.9	138.92	-4,931.2	-1,653.8	4,075.9	3,941.4	134.45	30.316	
13,100.0	8,119.0	16,227.0	11,184.3	87.5	91.9	138.92	-4,931.2	-1,653.8	4,073.3	3,937.8	135.48	30.066	
13,200.0	8,119.0	16,290.8	11,183.2	89.1	92.9	138.91	-4,994.9	-1,653.4	4,072.1	3,934.8	137.32	29.653	
13,212.5	8,119.0	16,296.1	11,183.2	89.3	93.0	138.91	-5,000.3	-1,653.3	4,072.0	3,934.5	137.51	29.612	
13,300.0	8,119.0	16,341.3	11,183.7	90.6	93.7	138.92	-5,045.5	-1,652.7	4,072.3	3,933.4	138.95	29.308	
13,400.0	8,119.0	16,415.0	11,184.9	92.2	94.8	138.94	-5,119.1	-1,652.3	4,073.5	3,932.7	140.88	28.915	
13,500.0	8,119.0	16,464.5	11,185.9	93.7	95.5	138.94	-5,168.6	-1,652.6	4,075.7	3,933.2	142.48	28.604	
13,600.0	8,119.0	16,522.0	11,187.1	95.3	96.4	138.93	-5,226.1	-1,653.6	4,078.9	3,934.7	144.20	28.287	
13,700.0	8,119.0	16,589.8	11,189.3	96.8	97.4	138.94	-5,293.8	-1,655.0	4,083.0	3,936.9	146.05	27.957	
13,800.0	8,119.0	16,724.6	11,193.1	98.4	99.4	138.93	-5,428.6	-1,658.3	4,087.1	3,938.2	148.88	27.452	
13,900.0	8,119.0	16,822.3	11,195.2	100.0	100.9	138.92	-5,526.2	-1,660.8	4,090.8	3,939.6	151.19	27.057	
14,000.0	8,119.0	17,072.0	11,197.0	101.5	104.7	138.87	-5,775.8	-1,665.2	4,093.2	3,937.5	155.69	26.290	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #202H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 166-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,100.0	8,119.0	17,153.8	11,197.1	103.1	105.9	138.87	-5,857.7	-1,664.8	4,093.4	3,935.6	157.79	25.943	
14,200.0	8,119.0	17,264.6	11,198.2	104.7	107.6	138.88	-5,968.4	-1,663.7	4,093.8	3,933.6	160.25	25.546	
14,300.0	8,119.0	17,408.8	11,198.8	106.2	109.8	138.90	-6,112.6	-1,661.6	4,093.6	3,930.4	163.16	25.090	
14,400.0	8,119.0	17,560.6	11,198.1	107.8	112.2	138.92	-6,264.3	-1,658.1	4,092.1	3,926.0	166.15	24.629	
14,500.0	8,119.0	17,641.0	11,197.0	109.4	113.4	138.94	-6,344.7	-1,655.7	4,089.7	3,921.4	168.23	24.309	
14,600.0	8,119.0	17,704.6	11,196.6	111.0	114.4	138.95	-6,408.2	-1,653.9	4,088.0	3,917.9	170.09	24.034	
14,661.6	8,119.0	17,736.0	11,197.5	112.0	114.9	138.97	-6,439.6	-1,652.6	4,087.8	3,916.7	171.10	23.891	
14,700.0	8,119.0	17,786.6	11,199.3	112.6	115.7	139.00	-6,490.2	-1,650.3	4,087.9	3,915.8	172.10	23.753	
14,800.0	8,119.0	17,892.7	11,202.0	114.2	117.3	139.07	-6,596.1	-1,645.5	4,087.2	3,912.8	174.41	23.434	
14,900.0	8,119.0	17,977.3	11,205.7	115.7	118.7	139.15	-6,680.5	-1,640.5	4,087.0	3,910.6	176.41	23.168	
15,000.0	8,119.0	18,081.6	11,210.7	117.3	120.3	139.26	-6,784.4	-1,634.1	4,086.9	3,908.3	178.61	22.882	
15,100.0	8,119.0	18,233.1	11,212.2	118.9	122.7	139.32	-6,935.8	-1,629.6	4,086.1	3,904.6	181.56	22.506	
15,200.0	8,119.0	18,347.2	11,212.1	120.5	124.5	139.34	-7,049.8	-1,626.4	4,084.6	3,900.6	184.06	22.192	
15,300.0	8,119.0	18,477.5	11,212.1	122.1	126.5	139.39	-7,180.1	-1,621.2	4,082.4	3,895.7	186.72	21.864	
15,400.0	8,119.0	18,557.7	11,212.0	123.7	127.8	139.42	-7,260.2	-1,618.0	4,080.1	3,891.3	188.77	21.614	
15,500.0	8,119.0	18,634.7	11,209.9	125.3	129.0	139.39	-7,337.2	-1,618.0	4,078.4	3,887.5	190.90	21.364	
15,600.0	8,119.0	18,717.9	11,207.7	126.9	130.3	139.36	-7,420.3	-1,618.6	4,077.1	3,884.0	193.11	21.113	
15,700.0	8,119.0	18,805.6	11,205.8	128.5	131.7	139.33	-7,508.0	-1,619.0	4,076.2	3,880.8	195.38	20.863	
15,800.0	8,119.0	18,887.9	11,205.1	130.1	132.9	139.33	-7,590.3	-1,618.6	4,075.7	3,878.1	197.54	20.633	
15,846.9	8,119.0	18,922.1	11,205.2	130.9	133.5	139.33	-7,624.5	-1,618.2	4,075.6	3,877.1	198.47	20.535	
15,900.0	8,119.0	18,960.7	11,205.6	131.7	134.1	139.34	-7,663.1	-1,617.7	4,075.7	3,876.2	199.52	20.428	
16,000.0	8,119.0	19,039.9	11,207.0	133.3	135.3	139.36	-7,742.2	-1,616.3	4,076.3	3,874.8	201.55	20.225	
16,100.0	8,119.0	19,304.5	11,200.7	134.9	139.5	139.28	-8,006.7	-1,616.7	4,074.7	3,868.4	206.33	19.748	
16,200.0	8,119.0	19,346.0	11,198.2	136.5	140.2	139.25	-8,048.1	-1,617.4	4,072.0	3,863.9	208.05	19.572	
16,300.0	8,119.0	19,403.5	11,195.2	138.1	141.1	139.20	-8,105.5	-1,618.9	4,070.3	3,860.4	209.98	19.385	
16,326.6	8,119.0	19,413.1	11,194.8	138.6	141.2	139.19	-8,115.1	-1,619.2	4,070.2	3,859.8	210.40	19.345	
16,400.0	8,119.0	19,442.0	11,194.1	139.7	141.7	139.18	-8,144.0	-1,620.0	4,070.4	3,858.9	211.57	19.239	
16,500.0	8,119.0	19,491.4	11,193.6	141.4	142.5	139.15	-8,193.4	-1,621.5	4,071.9	3,858.6	213.28	19.092	
16,600.0	8,119.0	19,547.2	11,194.1	143.0	143.4	139.14	-8,249.1	-1,622.9	4,074.6	3,859.5	215.03	18.949	
16,700.0	8,119.0	19,619.5	11,194.2	144.6	144.5	139.10	-8,321.3	-1,626.1	4,078.0	3,861.0	217.09	18.785	
16,800.0	8,119.0	19,786.8	11,193.0	146.2	147.1	139.00	-8,488.4	-1,634.1	4,081.0	3,860.2	220.79	18.484	
16,900.0	8,119.0	19,850.6	11,191.4	147.8	148.1	138.94	-8,552.1	-1,637.8	4,083.4	3,860.6	222.79	18.329	
17,000.0	8,119.0	19,914.0	11,192.3	149.4	149.1	138.92	-8,615.5	-1,640.4	4,087.3	3,862.6	224.68	18.192	
17,100.0	8,119.0	19,996.1	11,195.4	151.0	150.4	138.92	-8,697.5	-1,642.4	4,092.0	3,865.2	226.79	18.043	
17,200.0	8,119.0	20,411.3	11,198.5	152.7	157.1	138.94	-9,112.4	-1,640.6	4,093.0	3,859.3	233.65	17.518	
17,300.0	8,119.0	20,457.0	11,196.9	154.3	157.8	138.93	-9,158.1	-1,640.3	4,090.4	3,854.9	235.41	17.375	
17,400.0	8,119.0	20,481.0	11,196.2	155.9	158.2	138.92	-9,182.1	-1,640.4	4,089.2	3,852.4	236.82	17.267	
17,446.4	8,119.0	20,523.0	11,195.5	156.6	158.9	138.91	-9,224.1	-1,640.6	4,088.9	3,851.0	237.92	17.186	
17,500.0	8,119.0	20,547.0	11,195.4	157.5	159.2	138.90	-9,248.1	-1,640.6	4,089.1	3,850.3	238.80	17.124	
17,600.0	8,119.0	20,617.6	11,196.5	159.1	160.4	138.91	-9,318.6	-1,640.5	4,090.4	3,849.6	240.76	16.989	
17,700.0	8,119.0	20,785.0	11,197.0	160.7	163.0	138.90	-9,486.1	-1,640.9	4,091.3	3,847.1	244.18	16.755	
17,800.0	8,119.0	20,923.5	11,194.5	162.4	165.3	138.87	-9,624.5	-1,641.3	4,090.4	3,843.2	247.23	16.545	
17,900.0	8,119.0	21,102.1	11,194.6	164.0	168.1	138.92	-9,803.0	-1,634.8	4,088.6	3,838.1	250.50	16.321	
18,000.0	8,119.0	21,178.3	11,192.4	165.6	169.4	138.92	-9,879.2	-1,633.2	4,085.5	3,832.8	252.65	16.170	
18,100.0	8,119.0	21,239.0	11,192.4	167.2	170.3	138.93	-9,939.8	-1,631.5	4,083.8	3,829.3	254.52	16.045	
18,200.0	8,119.0	21,293.0	11,193.4	168.9	171.2	138.95	-9,993.8	-1,629.7	4,083.2	3,826.9	256.25	15.934	
18,294.0	8,119.0	21,370.9	11,195.2	170.4	172.5	139.00	-10,071.6	-1,626.9	4,082.9	3,824.7	258.18	15.814	
18,300.0	8,119.0	21,375.0	11,195.2	170.5	172.5	139.00	-10,075.7	-1,626.8	4,082.9	3,824.6	258.30	15.807	
18,400.0	8,119.0	21,446.5	11,196.0	172.1	173.7	139.01	-10,147.2	-1,626.0	4,083.3	3,823.0	260.28	15.688	
18,500.0	8,119.0	21,534.2	11,196.3	173.7	175.1	139.00	-10,234.9	-1,626.3	4,084.2	3,821.7	262.54	15.557	
18,600.0	8,119.0	21,672.3	11,197.4	175.4	177.3	139.01	-10,372.9	-1,625.8	4,085.0	3,819.5	265.49	15.386	
18,700.0	8,119.0	21,851.1	11,198.3	177.0	180.2	139.05	-10,551.7	-1,621.6	4,084.3	3,815.4	268.86	15.191	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #202H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 166-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,800.0	8,119.0	18,800.0	11,196.2	178.6	131.0	139.16	-10,788.2	-1,608.6	4,079.9	3,847.4	232.52	17.546	
18,900.0	8,119.0	22,130.3	11,195.6	180.2	184.7	139.18	-10,830.4	-1,606.0	4,075.3	3,800.9	274.33	14.856	
19,000.0	8,119.0	22,190.0	11,194.7	181.9	185.7	139.18	-10,890.1	-1,604.8	4,072.8	3,796.5	276.26	14.743	
19,100.0	8,119.0	22,190.0	11,194.7	183.5	185.7	139.18	-10,890.1	-1,604.8	4,071.2	3,793.9	277.35	14.679	
19,200.0	8,119.0	19,200.0	11,192.6	185.1	137.5	139.14	-10,994.2	-1,606.1	4,070.8	3,828.2	242.64	16.777	
19,240.4	8,119.0	22,309.0	11,192.2	185.8	187.6	139.13	-11,009.0	-1,606.4	4,070.8	3,790.2	280.61	14.507	
19,300.0	8,119.0	22,334.0	11,191.9	186.8	188.0	139.12	-11,034.1	-1,606.8	4,071.2	3,789.6	281.58	14.458	
19,400.0	8,119.0	22,379.0	11,192.2	188.4	188.7	139.11	-11,079.1	-1,607.5	4,072.9	3,789.8	283.19	14.383	
19,500.0	8,119.0	22,443.6	11,192.9	190.0	189.7	139.10	-11,143.6	-1,609.2	4,075.8	3,790.8	285.09	14.297	
19,600.0	8,119.0	22,505.5	11,193.4	191.6	190.7	139.07	-11,205.4	-1,611.7	4,079.6	3,792.6	286.97	14.216	
19,700.0	8,119.0	22,568.0	11,195.5	193.3	191.7	139.07	-11,267.9	-1,613.6	4,084.3	3,795.6	288.77	14.144	
19,800.0	8,119.0	22,656.1	11,199.6	194.9	193.2	139.08	-11,355.9	-1,615.6	4,089.7	3,798.8	290.95	14.056	
19,900.0	8,119.0	22,893.3	11,206.1	196.5	197.0	139.06	-11,592.9	-1,621.4	4,094.2	3,798.5	295.72	13.845	
20,000.0	8,119.0	23,007.7	11,207.8	198.2	198.8	139.06	-11,707.2	-1,622.5	4,096.3	3,797.9	298.38	13.728	
20,100.0	8,119.0	20,100.0	11,212.2	199.8	152.2	139.39	-12,189.9	-1,592.5	4,093.2	3,830.9	262.34	15.603	
20,200.0	8,119.0	23,575.0	11,213.2	201.4	208.1	139.52	-12,272.3	-1,580.3	4,085.1	3,778.9	306.16	13.343	
20,300.0	8,119.0	23,575.0	11,213.2	203.1	208.1	139.52	-12,272.3	-1,580.3	4,079.1	3,771.5	307.57	13.262	
20,400.0	8,119.0	23,575.0	11,213.2	204.7	208.1	139.52	-12,272.3	-1,580.3	4,075.5	3,766.7	308.81	13.198	
20,494.9	8,119.0	23,575.0	11,213.2	206.2	208.1	139.52	-12,272.3	-1,580.3	4,074.4	3,764.6	309.83	13.151	
20,500.0	8,119.0	23,575.0	11,213.2	206.3	208.1	139.52	-12,272.3	-1,580.3	4,074.4	3,764.6	309.88	13.148	
20,606.7	8,119.0	23,575.0	11,213.2	208.1	208.1	139.52	-12,272.3	-1,580.3	4,076.0	3,765.1	310.83	13.113	SF

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #203H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 147-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.37	-1.5	-230.1	230.1				
100.0	100.0	98.5	98.5	0.1	0.1	-90.32	-1.3	-230.2	230.2	230.0	0.27	850.204	
200.0	200.0	198.3	198.3	0.5	0.4	-90.17	-0.7	-230.5	230.5	229.7	0.88	261.093	
300.0	300.0	298.3	298.3	0.8	0.8	-89.97	0.1	-230.9	230.9	229.3	1.60	144.306	
400.0	400.0	398.3	398.3	1.2	1.1	-89.72	1.1	-231.2	231.2	228.8	2.32	99.777	
500.0	500.0	498.4	498.4	1.6	1.5	-89.50	2.0	-231.4	231.4	228.4	3.03	76.288	
600.0	600.0	597.7	597.7	1.9	1.8	-89.32	2.8	-231.8	231.8	228.1	3.75	61.883	ES
700.0	700.0	696.8	696.8	2.3	2.2	-89.18	3.3	-232.6	232.6	228.1	4.46	52.174	
800.0	800.0	795.8	795.8	2.6	2.5	-89.09	3.7	-233.7	233.8	228.6	5.17	45.239	
900.0	900.0	894.9	894.9	3.0	2.9	-89.04	3.9	-235.3	235.3	229.5	5.88	40.049	
1,000.0	1,000.0	994.4	994.4	3.4	3.2	-89.01	4.1	-237.1	237.2	230.6	6.59	36.010	
1,100.0	1,100.0	1,093.4	1,093.3	3.7	3.6	-163.51	4.2	-239.2	240.9	233.6	7.29	33.053	
1,200.0	1,199.8	1,191.3	1,191.2	4.1	3.9	-163.74	4.5	-241.8	248.7	240.7	7.99	31.137	
1,300.0	1,299.5	1,289.5	1,289.4	4.4	4.3	-164.10	5.0	-245.1	260.4	251.7	8.69	29.977	
1,400.0	1,398.7	1,388.0	1,387.7	4.8	4.6	-164.68	5.2	-248.6	275.7	266.3	9.39	29.361	
1,500.0	1,497.5	1,486.1	1,485.8	5.2	5.0	-165.44	4.9	-252.2	294.4	284.3	10.09	29.173	
1,600.0	1,595.9	1,584.0	1,583.6	5.5	5.3	-166.33	4.3	-255.7	314.8	304.0	10.79	29.174	
1,700.0	1,694.4	1,686.6	1,686.2	5.9	5.7	-167.22	3.3	-258.8	334.7	323.2	11.50	29.096	
1,800.0	1,792.9	1,791.4	1,791.0	6.3	6.1	-168.10	1.9	-260.0	352.9	340.7	12.23	28.864	
1,900.0	1,891.4	1,893.9	1,893.4	6.8	6.4	-168.90	0.5	-259.6	369.6	356.7	12.93	28.589	
2,000.0	1,989.9	1,996.7	1,996.3	7.2	6.8	-169.57	-0.4	-258.1	385.4	371.7	13.64	28.261	
2,100.0	2,088.4	2,098.9	2,098.4	7.6	7.1	-170.18	-1.2	-255.7	400.2	385.8	14.34	27.907	
2,200.0	2,186.8	2,199.4	2,198.8	8.0	7.4	-170.76	-2.0	-252.4	414.3	399.2	15.04	27.542	
2,300.0	2,285.3	2,296.6	2,296.0	8.5	7.8	-171.31	-3.0	-249.5	428.5	412.8	15.73	27.234	
2,400.0	2,383.8	2,393.5	2,392.8	8.9	8.1	-171.84	-4.3	-246.9	443.2	426.8	16.43	26.979	
2,500.0	2,482.3	2,490.0	2,489.3	9.3	8.4	-172.36	-5.7	-244.7	458.5	441.3	17.12	26.773	
2,600.0	2,580.8	2,586.2	2,585.5	9.8	8.7	-172.85	-7.3	-243.0	474.2	456.4	17.82	26.613	
2,700.0	2,679.2	2,681.9	2,681.1	10.2	9.1	-173.32	-9.1	-241.9	490.6	472.1	18.51	26.499	
2,800.0	2,777.7	2,776.3	2,775.5	10.6	9.4	-173.72	-10.6	-241.4	507.6	488.4	19.20	26.436	
2,900.0	2,876.2	2,869.4	2,868.7	11.1	9.7	-173.80	-9.7	-242.3	525.6	505.7	19.88	26.435	
3,000.0	2,974.7	2,964.7	2,963.9	11.5	10.1	-173.60	-6.3	-244.4	544.5	523.9	20.58	26.461	
3,100.0	3,073.2	3,062.6	3,061.7	11.9	10.4	-173.44	-3.2	-246.7	563.5	542.2	21.29	26.473	
3,200.0	3,171.6	3,162.3	3,161.3	12.4	10.8	-173.33	-0.4	-249.0	582.5	560.5	22.01	26.468	
3,300.0	3,270.1	3,263.5	3,262.4	12.8	11.1	-173.07	4.0	-251.1	601.1	578.4	22.74	26.433	
3,400.0	3,368.6	3,363.1	3,361.8	13.3	11.5	-172.71	9.8	-252.9	619.3	595.9	23.47	26.392	
3,500.0	3,467.1	3,461.9	3,460.4	13.7	11.8	-172.32	16.0	-254.7	637.5	613.3	24.19	26.355	
3,600.0	3,565.6	3,561.8	3,560.0	14.2	12.2	-171.88	23.0	-256.5	655.5	630.5	24.92	26.306	
3,700.0	3,664.0	3,661.9	3,659.8	14.6	12.5	-171.34	31.6	-258.2	673.2	647.6	25.65	26.247	
3,800.0	3,762.5	3,755.5	3,752.9	15.1	12.9	-170.74	40.9	-260.1	691.2	664.8	26.35	26.232	
3,900.0	3,861.0	3,847.8	3,844.6	15.5	13.2	-170.11	51.0	-262.7	710.0	682.9	27.04	26.259	
4,000.0	3,959.5	3,938.7	3,934.8	16.0	13.5	-169.46	61.5	-266.2	729.7	702.0	27.72	26.325	
4,100.0	4,058.0	4,028.9	4,024.3	16.4	13.9	-168.84	71.9	-270.5	750.5	722.1	28.40	26.430	
4,200.0	4,156.4	4,118.9	4,113.5	16.8	14.2	-168.20	82.9	-275.7	772.4	743.3	29.07	26.566	
4,300.0	4,254.9	4,208.2	4,201.7	17.3	14.5	-167.47	95.5	-281.9	795.2	765.5	29.75	26.735	
4,400.0	4,353.4	4,302.4	4,294.4	17.7	14.9	-166.64	110.2	-289.1	819.0	788.5	30.46	26.886	
4,500.0	4,451.9	4,399.3	4,389.9	18.2	15.3	-165.84	125.1	-296.5	842.9	811.7	31.20	27.013	
4,600.0	4,550.4	4,492.2	4,481.5	18.6	15.6	-165.16	138.8	-303.7	867.0	835.1	31.91	27.170	
4,700.0	4,648.9	4,583.6	4,571.8	19.1	16.0	-164.63	150.7	-311.4	891.8	859.2	32.61	27.351	
4,800.0	4,747.3	4,677.7	4,664.9	19.5	16.3	-164.21	161.5	-319.6	917.2	883.8	33.32	27.523	
4,900.0	4,845.8	4,773.3	4,759.5	20.0	16.7	-163.84	171.8	-328.2	942.7	908.6	34.05	27.683	
5,000.0	4,944.3	4,876.5	4,861.9	20.4	17.1	-163.51	182.3	-337.2	968.0	933.2	34.85	27.779	
5,100.0	5,042.8	4,984.4	4,969.0	20.9	17.5	-163.25	192.1	-345.6	992.4	956.7	35.68	27.816	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #203H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 147-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,141.3	5,083.7	5,067.7	21.3	17.9	-163.06	200.3	-352.6	1,016.1	979.7	36.43	27.890	
5,300.0	5,239.7	5,182.1	5,165.5	21.8	18.3	-162.90	208.2	-359.4	1,039.7	1,002.5	37.18	27.963	
5,400.0	5,338.2	5,278.8	5,261.7	22.2	18.6	-162.77	215.6	-366.1	1,063.2	1,025.3	37.91	28.045	
5,500.0	5,436.7	5,375.5	5,357.8	22.7	19.0	-162.66	222.8	-372.8	1,086.9	1,048.2	38.64	28.124	
5,600.0	5,535.2	5,471.3	5,453.2	23.1	19.4	-162.57	229.7	-379.5	1,110.5	1,071.2	39.37	28.209	
5,700.0	5,633.7	5,567.3	5,548.7	23.6	19.7	-162.49	236.4	-386.4	1,134.3	1,094.3	40.10	28.291	
5,800.0	5,732.1	5,669.4	5,650.4	24.0	20.1	-162.44	242.9	-393.6	1,158.0	1,117.1	40.87	28.336	
5,900.0	5,830.6	5,771.7	5,752.3	24.5	20.5	-162.43	248.5	-400.3	1,181.2	1,139.6	41.64	28.369	
6,000.0	5,929.1	5,873.7	5,854.0	24.9	20.9	-162.46	253.5	-406.7	1,204.0	1,161.6	42.40	28.396	
6,100.0	6,027.6	5,976.5	5,956.5	25.4	21.3	-162.51	257.9	-412.7	1,226.5	1,183.3	43.17	28.411	
6,200.0	6,126.1	6,080.5	6,060.2	25.8	21.6	-162.58	262.1	-418.3	1,248.4	1,204.5	43.94	28.410	
6,300.0	6,224.5	6,199.9	6,179.4	26.3	22.1	-162.66	266.8	-423.6	1,269.5	1,224.7	44.82	28.326	
6,400.0	6,323.0	6,334.6	6,313.9	26.7	22.6	-162.65	273.9	-426.2	1,288.2	1,242.4	45.78	28.141	
6,500.0	6,421.5	6,466.9	6,446.1	27.2	23.0	-162.74	278.9	-425.2	1,304.1	1,257.5	46.67	27.945	
6,600.0	6,520.0	6,574.0	6,553.1	27.6	23.4	-162.93	280.0	-422.4	1,318.2	1,270.8	47.42	27.799	
6,700.0	6,618.5	6,668.9	6,648.0	28.1	23.7	-163.11	280.7	-420.1	1,332.4	1,284.3	48.11	27.696	
6,800.0	6,716.9	6,765.9	6,745.1	28.5	24.0	-163.30	281.1	-417.9	1,346.9	1,298.0	48.81	27.596	
6,900.0	6,815.4	6,863.9	6,843.0	29.0	24.3	-163.50	281.1	-415.8	1,361.4	1,311.9	49.51	27.499	
6,981.8	6,896.0	6,943.1	6,922.2	29.4	24.6	-163.68	280.9	-414.2	1,373.4	1,323.3	50.08	27.426	
7,000.0	6,913.9	6,960.6	6,939.7	29.5	24.7	-163.73	280.8	-413.9	1,376.0	1,325.8	50.20	27.410	
7,100.0	7,012.9	7,057.3	7,036.3	29.9	25.0	-164.00	280.2	-412.1	1,388.0	1,337.2	50.89	27.277	
7,200.0	7,112.3	7,149.4	7,128.5	30.3	25.3	-164.19	279.5	-410.7	1,396.2	1,344.7	51.54	27.089	
7,300.0	7,212.2	7,240.9	7,219.9	30.6	25.6	-164.30	279.1	-409.8	1,400.9	1,348.7	52.18	26.844	
7,381.8	7,294.0	7,318.9	7,298.0	30.9	25.9	-89.91	279.0	-409.5	1,401.9	1,349.2	52.71	26.594	
7,400.0	7,312.2	7,336.5	7,315.6	30.9	25.9	-89.91	278.9	-409.4	1,401.8	1,349.0	52.83	26.534	
7,500.0	7,412.2	7,433.4	7,412.4	31.2	26.2	-89.92	278.6	-409.2	1,401.6	1,348.1	53.48	26.208	
7,600.0	7,512.2	7,534.1	7,513.1	31.5	26.6	-89.94	278.2	-409.1	1,401.5	1,347.4	54.15	25.883	
7,633.8	7,546.0	7,568.5	7,547.5	31.6	26.7	-89.95	278.0	-409.1	1,401.5	1,347.1	54.38	25.774	
7,650.0	7,562.2	7,584.9	7,563.9	31.7	26.7	90.39	277.9	-409.1	1,401.5	1,347.0	54.48	25.722	
7,700.0	7,612.0	7,635.6	7,614.6	31.8	26.9	90.53	277.5	-408.9	1,401.4	1,346.6	54.81	25.568	
7,725.8	7,637.6	7,661.6	7,640.6	31.9	27.0	90.67	277.3	-408.9	1,401.3	1,346.4	54.97	25.491	
7,750.0	7,661.4	7,682.4	7,661.4	31.9	27.1	90.82	277.2	-408.9	1,401.4	1,346.3	55.11	25.427	
7,800.0	7,709.8	7,727.8	7,706.9	32.0	27.2	91.25	277.1	-408.9	1,401.6	1,346.2	55.41	25.298	
7,850.0	7,757.1	7,772.0	7,751.0	32.1	27.4	91.78	277.2	-409.0	1,402.2	1,346.5	55.69	25.180	
7,900.0	7,802.7	7,814.5	7,793.5	32.2	27.5	92.39	277.6	-409.2	1,403.3	1,347.3	55.96	25.079	
7,950.0	7,846.4	7,856.8	7,835.8	32.3	27.7	93.08	278.0	-409.4	1,405.0	1,348.8	56.22	24.989	
8,000.0	7,887.7	7,897.7	7,876.7	32.4	27.8	93.78	278.4	-409.7	1,407.4	1,351.0	56.48	24.918	
8,050.0	7,926.5	7,936.0	7,915.0	32.4	27.9	94.43	278.7	-409.9	1,410.8	1,354.1	56.73	24.870	
8,100.0	7,962.4	7,971.5	7,950.5	32.5	28.1	94.99	279.1	-410.2	1,415.3	1,358.4	56.96	24.850	
8,150.0	7,995.1	8,003.8	7,982.8	32.5	28.2	95.40	279.3	-410.4	1,421.2	1,364.0	57.17	24.860	
8,200.0	8,024.4	8,032.9	8,011.9	32.6	28.3	95.62	279.6	-410.6	1,428.5	1,371.1	57.36	24.904	
8,250.0	8,050.1	8,058.5	8,037.5	32.6	28.4	95.62	279.7	-410.7	1,437.3	1,379.8	57.53	24.983	
8,300.0	8,071.9	8,080.3	8,059.3	32.7	28.4	95.33	279.9	-410.9	1,447.9	1,390.3	57.69	25.101	
8,350.0	8,089.7	8,098.1	8,077.1	32.7	28.5	94.74	280.0	-411.0	1,460.3	1,402.5	57.81	25.258	
8,400.0	8,103.4	8,111.7	8,090.7	32.7	28.6	93.80	280.1	-411.1	1,474.4	1,416.5	57.92	25.456	
8,450.0	8,112.8	8,121.0	8,100.0	32.8	28.6	92.50	280.1	-411.2	1,490.3	1,432.3	58.00	25.695	
8,500.0	8,118.0	8,126.0	8,105.0	32.9	28.6	90.84	280.1	-411.2	1,507.7	1,449.7	58.05	25.974	
8,533.8	8,119.0	8,126.8	8,105.8	33.0	28.6	89.50	280.1	-411.2	1,520.4	1,462.4	58.07	26.184	
8,600.0	8,119.0	8,126.5	8,105.5	33.1	28.6	89.49	280.1	-411.2	1,547.1	1,489.0	58.10	26.630	
8,700.0	8,119.0	8,125.9	8,104.9	33.4	28.6	89.47	280.1	-411.2	1,591.7	1,533.6	58.15	27.374	
8,800.0	8,119.0	8,125.4	8,104.4	33.8	28.6	89.45	280.1	-411.2	1,641.2	1,583.0	58.21	28.196	
8,900.0	8,119.0	8,124.9	8,103.9	34.3	28.6	89.43	280.1	-411.2	1,695.2	1,636.9	58.27	29.090	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #203H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 147-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,000.0	8,119.0	8,124.4	8,103.4	34.9	28.6	89.40	280.1	-411.2	1,753.3	1,694.9	58.34	30.050	
9,100.0	8,119.0	8,123.8	8,102.8	35.5	28.6	89.38	280.1	-411.2	1,814.9	1,756.5	58.42	31.069	
9,200.0	8,119.0	8,123.3	8,102.3	36.3	28.6	89.36	280.1	-411.2	1,879.9	1,821.4	58.49	32.141	
9,300.0	8,119.0	8,122.7	8,101.7	37.1	28.6	89.34	280.1	-411.2	1,947.9	1,889.3	58.56	33.262	
9,400.0	8,119.0	8,122.2	8,101.2	37.9	28.6	89.32	280.1	-411.2	2,018.5	1,959.9	58.63	34.426	
9,500.0	8,119.0	8,121.7	8,100.7	38.8	28.6	89.29	280.1	-411.2	2,091.5	2,032.8	58.70	35.628	
9,600.0	8,119.0	8,121.1	8,100.1	39.8	28.6	89.27	280.1	-411.2	2,166.7	2,107.9	58.77	36.866	
9,700.0	8,119.0	8,120.5	8,099.6	40.8	28.6	89.25	280.1	-411.2	2,243.8	2,185.0	58.84	38.135	
9,800.0	8,119.0	8,120.0	8,099.0	41.8	28.6	89.23	280.1	-411.2	2,322.7	2,263.8	58.90	39.433	
9,900.0	8,119.0	8,119.4	8,098.4	42.9	28.6	89.20	280.1	-411.2	2,403.1	2,344.1	58.96	40.756	
10,000.0	8,119.0	8,118.9	8,097.9	44.0	28.6	89.18	280.1	-411.2	2,485.0	2,425.9	59.02	42.101	
10,100.0	8,119.0	8,118.3	8,097.3	45.2	28.6	89.16	280.1	-411.1	2,568.1	2,509.0	59.08	43.467	
10,200.0	8,119.0	8,117.7	8,096.7	46.3	28.6	89.13	280.1	-411.1	2,652.4	2,593.3	59.14	44.851	
10,300.0	8,119.0	8,117.2	8,096.2	47.5	28.6	89.11	280.1	-411.1	2,737.8	2,678.6	59.19	46.252	
10,400.0	8,119.0	8,116.6	8,095.6	48.8	28.6	89.09	280.1	-411.1	2,824.1	2,764.9	59.25	47.667	
10,500.0	8,119.0	8,116.0	8,095.0	50.0	28.6	89.06	280.1	-411.1	2,911.3	2,852.0	59.30	49.096	
10,600.0	8,119.0	8,115.4	8,094.4	51.3	28.6	89.04	280.1	-411.1	2,999.3	2,939.9	59.35	50.537	
10,700.0	8,119.0	8,114.9	8,093.9	52.6	28.6	89.02	280.1	-411.1	3,088.0	3,028.6	59.40	51.988	
10,800.0	8,119.0	8,114.3	8,093.3	54.0	28.6	88.99	280.1	-411.1	3,177.4	3,118.0	59.45	53.449	
10,900.0	8,119.0	8,113.7	8,092.7	55.3	28.6	88.97	280.1	-411.1	3,267.4	3,207.9	59.50	54.919	
11,000.0	8,119.0	8,113.1	8,092.1	56.7	28.6	88.94	280.1	-411.1	3,358.0	3,298.5	59.54	56.397	
11,100.0	8,119.0	14,306.8	11,278.2	58.0	63.4	158.12	-2,898.8	-258.6	3,405.7	3,334.4	71.28	47.779	
11,200.0	8,119.0	14,423.1	11,278.4	59.4	65.0	158.18	-3,015.0	-254.3	3,404.7	3,331.7	73.04	46.617	
11,300.0	8,119.0	14,489.0	11,278.0	60.8	65.8	158.18	-3,080.9	-253.4	3,403.9	3,329.6	74.30	45.813	
11,400.0	8,119.0	14,733.1	11,273.8	62.2	69.1	158.17	-3,324.9	-250.9	3,403.1	3,325.6	77.58	43.865	
11,500.0	8,119.0	14,809.3	11,270.5	63.6	70.1	158.15	-3,401.1	-250.4	3,399.0	3,320.0	79.02	43.017	
11,600.0	8,119.0	14,911.1	11,266.4	65.1	71.5	158.14	-3,502.7	-249.1	3,395.0	3,314.3	80.74	42.049	
11,700.0	8,119.0	14,997.1	11,263.6	66.5	72.7	158.14	-3,588.7	-247.1	3,391.3	3,309.1	82.27	41.221	
11,800.0	8,119.0	15,079.0	11,261.4	68.0	73.9	158.16	-3,670.5	-244.8	3,388.0	3,304.3	83.76	40.452	
11,900.0	8,119.0	15,148.9	11,260.1	69.4	74.9	158.18	-3,740.4	-242.7	3,385.5	3,300.4	85.10	39.782	
12,000.0	8,119.0	15,233.3	11,259.5	70.9	76.1	158.21	-3,824.7	-239.7	3,383.7	3,297.1	86.60	39.074	
12,100.0	8,119.0	15,336.6	11,259.1	72.4	77.5	158.26	-3,927.9	-235.7	3,382.1	3,293.8	88.30	38.302	
12,200.0	8,119.0	15,396.1	11,259.2	73.9	78.4	158.31	-3,987.4	-232.8	3,380.8	3,291.2	89.50	37.772	
12,230.9	8,119.0	15,409.4	11,259.3	74.3	78.6	158.31	-4,000.6	-232.3	3,380.7	3,290.8	89.82	37.638	
12,300.0	8,119.0	15,458.0	11,260.1	75.4	79.3	158.33	-4,049.2	-231.4	3,381.2	3,290.4	90.76	37.255	
12,400.0	8,119.0	15,554.2	11,260.9	76.9	80.6	158.31	-4,145.4	-232.2	3,382.5	3,290.0	92.47	36.578	
12,500.0	8,119.0	15,625.2	11,261.1	78.4	81.7	158.29	-4,216.4	-233.4	3,383.6	3,289.7	93.90	36.034	
12,600.0	8,119.0	15,797.9	11,259.7	79.9	84.2	158.21	-4,389.1	-237.0	3,383.6	3,287.0	96.64	35.012	
12,700.0	8,119.0	15,895.9	11,257.9	81.4	85.6	158.14	-4,487.0	-239.8	3,383.2	3,284.8	98.47	34.359	
12,800.0	8,119.0	15,979.3	11,256.7	82.9	86.8	158.10	-4,570.3	-241.2	3,382.8	3,282.7	100.09	33.799	
12,802.4	8,119.0	15,980.9	11,256.7	83.0	86.8	158.10	-4,572.0	-241.2	3,382.8	3,282.7	100.12	33.788	
12,900.0	8,119.0	16,136.0	11,255.6	84.5	89.1	158.07	-4,727.1	-241.9	3,382.8	3,280.2	102.59	32.974	
12,997.8	8,119.0	16,176.3	11,255.4	86.0	89.7	158.07	-4,767.3	-241.7	3,382.2	3,278.5	103.64	32.634	
13,000.0	8,119.0	16,177.5	11,255.4	86.0	89.7	158.07	-4,768.5	-241.7	3,382.2	3,278.5	103.67	32.626	
13,100.0	8,119.0	16,335.7	11,255.0	87.5	92.1	158.07	-4,926.7	-240.8	3,382.2	3,276.1	106.17	31.858	
13,200.0	8,119.0	16,439.9	11,252.2	89.1	93.6	158.03	-5,030.9	-241.6	3,380.3	3,272.3	108.07	31.280	
13,300.0	8,119.0	16,531.5	11,250.4	90.6	95.0	158.01	-5,122.4	-241.8	3,378.8	3,269.0	109.79	30.774	
13,400.0	8,119.0	16,636.8	11,248.5	92.2	96.6	158.00	-5,227.7	-241.0	3,377.0	3,265.3	111.67	30.241	
13,500.0	8,119.0	16,715.0	11,247.5	93.7	97.8	158.00	-5,306.0	-239.8	3,375.5	3,262.3	113.20	29.819	
13,600.0	8,119.0	16,785.0	11,247.4	95.3	98.8	158.01	-5,375.9	-238.7	3,375.0	3,260.4	114.62	29.445	
13,606.4	8,119.0	16,785.0	11,247.4	95.4	98.8	158.01	-5,375.9	-238.7	3,375.0	3,260.3	114.66	29.436	
13,700.0	8,119.0	16,864.0	11,248.0	96.8	100.0	158.03	-5,454.9	-237.6	3,375.2	3,259.1	116.14	29.061	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #203H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 147-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,800.0	8,119.0	16,933.8	11,248.9	98.4	101.1	158.04	-5,524.7	-236.4	3,376.1	3,258.5	117.54	28.722	
13,900.0	8,119.0	16,999.9	11,250.7	100.0	102.1	158.07	-5,590.7	-234.8	3,377.9	3,259.0	118.86	28.418	
14,000.0	8,119.0	17,208.6	11,252.8	101.5	105.3	158.07	-5,799.3	-234.5	3,379.4	3,257.3	122.07	27.684	
14,100.0	8,119.0	17,293.3	11,251.9	103.1	106.6	158.05	-5,884.0	-235.4	3,379.0	3,255.3	123.75	27.306	
14,200.0	8,119.0	17,404.5	11,250.7	104.7	108.3	158.03	-5,995.2	-235.2	3,378.1	3,252.4	125.73	26.867	
14,300.0	8,119.0	17,481.9	11,250.7	106.2	109.5	158.05	-6,072.6	-233.7	3,377.7	3,250.4	127.25	26.544	
14,312.4	8,119.0	17,491.2	11,250.8	106.4	109.6	158.05	-6,081.9	-233.5	3,377.7	3,250.2	127.43	26.506	
14,400.0	8,119.0	17,583.5	11,252.0	107.8	111.0	158.10	-6,174.2	-230.5	3,377.9	3,248.9	129.01	26.183	
14,500.0	8,119.0	17,720.4	11,252.1	109.4	113.2	158.16	-6,311.0	-226.0	3,376.8	3,245.6	131.20	25.739	
14,600.0	8,119.0	17,848.3	11,252.0	111.0	115.2	158.24	-6,438.8	-220.0	3,375.2	3,242.0	133.22	25.335	
14,700.0	8,119.0	17,909.9	11,251.8	112.6	116.1	158.26	-6,500.3	-218.1	3,373.9	3,239.4	134.53	25.079	
14,800.0	8,119.0	18,061.6	11,248.1	114.2	118.5	158.20	-6,651.9	-219.6	3,372.2	3,235.1	137.12	24.594	
14,900.0	8,119.0	18,251.0	11,238.7	115.7	121.4	158.07	-6,841.1	-223.3	3,368.6	3,228.4	140.25	24.018	
15,000.0	8,119.0	18,304.0	11,235.0	117.3	122.2	158.01	-6,893.9	-224.8	3,363.8	3,222.1	141.65	23.747	
15,100.0	8,119.0	18,367.7	11,231.2	118.9	123.2	157.95	-6,957.5	-226.9	3,360.1	3,216.9	143.18	23.468	
15,200.0	8,119.0	18,420.5	11,229.5	120.5	124.0	157.91	-7,010.2	-228.6	3,358.3	3,213.8	144.53	23.236	
15,300.0	8,119.0	18,493.0	11,227.3	122.1	125.2	157.84	-7,082.6	-231.4	3,357.3	3,211.1	146.16	22.970	
15,338.5	8,119.0	18,518.5	11,226.7	122.7	125.6	157.82	-7,108.1	-232.5	3,357.2	3,210.4	146.75	22.876	
15,400.0	8,119.0	18,545.8	11,226.2	123.7	126.0	157.79	-7,135.4	-233.8	3,357.5	3,210.0	147.50	22.763	
15,500.0	8,119.0	15,500.0	11,225.2	125.3	79.4	157.69	-7,238.3	-239.3	3,358.8	3,238.1	120.68	27.831	
15,600.0	8,119.0	18,756.2	11,223.2	126.9	129.3	157.59	-7,345.4	-244.4	3,359.0	3,207.3	151.77	22.132	
15,700.0	8,119.0	18,809.0	11,223.3	128.5	130.1	157.56	-7,398.3	-245.7	3,360.4	3,207.4	153.05	21.957	
15,800.0	8,119.0	18,871.0	11,225.0	130.1	131.1	157.56	-7,460.2	-246.3	3,363.4	3,209.0	154.39	21.784	
15,900.0	8,119.0	18,921.2	11,227.2	131.7	131.8	157.57	-7,510.3	-246.4	3,367.6	3,212.0	155.53	21.653	
16,000.0	8,119.0	19,019.6	11,232.2	133.3	133.4	157.59	-7,608.6	-246.6	3,372.6	3,215.3	157.32	21.437	
16,100.0	8,119.0	19,133.3	11,236.8	134.9	135.2	157.58	-7,722.2	-248.2	3,377.0	3,217.6	159.41	21.185	
16,200.0	8,119.0	19,206.7	11,239.9	136.5	136.3	157.58	-7,795.5	-249.2	3,381.7	3,220.8	160.89	21.019	
16,300.0	8,119.0	16,300.0	11,243.2	138.1	90.1	157.64	-8,219.5	-244.0	3,382.6	3,246.6	135.95	24.881	
16,400.0	8,119.0	19,675.0	11,241.6	139.7	143.8	157.64	-8,263.4	-243.5	3,378.9	3,210.8	168.10	20.101	
16,500.0	8,119.0	19,722.0	11,240.7	141.4	144.5	157.64	-8,310.4	-243.0	3,377.0	3,207.7	169.33	19.944	
16,580.7	8,119.0	19,761.9	11,240.7	142.7	145.2	157.64	-8,350.3	-242.5	3,376.6	3,206.3	170.31	19.827	
16,600.0	8,119.0	19,773.7	11,240.8	143.0	145.3	157.64	-8,362.1	-242.2	3,376.6	3,206.1	170.56	19.797	
16,700.0	8,119.0	19,837.0	11,241.9	144.6	146.4	157.67	-8,425.3	-240.5	3,377.4	3,205.6	171.88	19.650	
16,800.0	8,119.0	19,911.0	11,244.4	146.2	147.5	157.73	-8,499.2	-237.5	3,379.2	3,205.9	173.27	19.503	
16,900.0	8,119.0	20,176.5	11,246.0	147.8	151.8	157.90	-8,764.4	-225.7	3,377.4	3,200.5	176.86	19.096	
17,000.0	8,119.0	17,000.0	11,243.9	149.4	100.8	157.97	-8,883.6	-219.7	3,374.1	3,226.0	148.09	22.783	
17,100.0	8,119.0	20,345.3	11,243.5	151.0	154.5	158.01	-8,932.9	-216.5	3,371.2	3,191.3	179.95	18.735	
17,200.0	8,119.0	20,391.5	11,244.5	152.7	155.3	158.08	-8,978.9	-212.5	3,370.2	3,189.3	180.98	18.623	
17,300.0	8,119.0	20,516.9	11,245.1	154.3	157.3	158.15	-9,104.2	-207.8	3,369.5	3,186.5	183.00	18.412	
17,400.0	8,119.0	20,642.3	11,242.7	155.9	159.3	158.10	-9,229.5	-208.7	3,368.2	3,182.9	185.29	18.178	
17,500.0	8,119.0	20,839.3	11,233.8	157.5	162.4	158.00	-9,426.3	-210.7	3,364.2	3,175.7	188.56	17.842	
17,600.0	8,119.0	20,888.6	11,231.2	159.1	163.2	157.97	-9,475.5	-211.4	3,360.2	3,170.3	189.94	17.691	
17,700.0	8,119.0	20,951.0	11,229.6	160.7	164.2	157.94	-9,537.9	-212.3	3,358.2	3,166.7	191.45	17.541	
17,800.0	8,119.0	17,800.0	11,227.6	162.4	114.0	157.89	-9,614.5	-213.9	3,356.7	3,193.6	163.09	20.582	
17,900.0	8,119.0	21,100.3	11,225.7	164.0	166.6	157.85	-9,687.1	-215.4	3,355.4	3,160.6	194.80	17.225	
17,932.9	8,119.0	21,115.6	11,225.5	164.5	166.8	157.84	-9,702.4	-215.6	3,355.4	3,160.2	195.20	17.189	
18,000.0	8,119.0	21,153.1	11,225.6	165.6	167.4	157.84	-9,739.9	-215.8	3,355.7	3,159.6	196.08	17.114	
18,100.0	8,119.0	21,245.8	11,226.4	167.2	168.9	157.83	-9,832.6	-216.0	3,356.7	3,158.9	197.88	16.964	
18,200.0	8,119.0	21,424.3	11,226.0	168.9	171.8	157.80	-10,011.1	-216.5	3,357.0	3,156.1	200.87	16.713	
18,300.0	8,119.0	21,524.0	11,224.1	170.5	173.4	157.77	-10,110.7	-217.1	3,355.8	3,152.9	202.83	16.545	
18,400.0	8,119.0	21,620.2	11,222.5	172.1	174.9	157.75	-10,206.9	-217.6	3,354.6	3,149.8	204.75	16.384	
18,500.0	8,119.0	21,710.0	11,221.1	173.7	176.4	157.73	-10,296.7	-217.6	3,353.4	3,146.8	206.55	16.235	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #203H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 147-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,600.0	8,119.0	21,784.5	11,220.4	175.4	177.6	157.72	-10,371.2	-217.4	3,352.7	3,144.6	208.13	16.109	
18,700.0	8,119.0	21,939.9	11,217.2	177.0	180.0	157.65	-10,526.6	-219.4	3,351.4	3,140.5	210.92	15.890	
18,800.0	8,119.0	22,033.6	11,216.0	178.6	181.6	157.64	-10,620.2	-219.0	3,350.2	3,137.5	212.76	15.747	
18,900.0	8,119.0	22,175.7	11,214.8	180.2	183.9	157.74	-10,762.1	-211.8	3,347.6	3,132.7	214.89	15.579	
19,000.0	8,119.0	22,185.0	11,214.8	181.9	184.0	157.74	-10,771.4	-211.2	3,346.1	3,130.4	215.62	15.518	
19,037.8	8,119.0	22,221.0	11,214.9	182.5	184.6	157.77	-10,807.3	-209.3	3,345.6	3,129.3	216.22	15.473	
19,100.0	8,119.0	22,238.3	11,215.4	183.5	184.9	157.79	-10,824.7	-208.4	3,346.0	3,129.2	216.74	15.438	
19,200.0	8,119.0	22,280.0	11,217.4	185.1	185.6	157.83	-10,866.3	-206.4	3,348.5	3,130.8	217.66	15.384	
19,300.0	8,119.0	22,308.2	11,219.3	186.8	186.0	157.86	-10,894.3	-205.2	3,352.9	3,134.5	218.33	15.357	
19,400.0	8,119.0	22,580.6	11,231.5	188.4	190.4	158.04	-11,166.2	-197.1	3,357.1	3,134.9	222.21	15.108	
19,500.0	8,119.0	22,679.4	11,232.2	190.0	192.0	158.07	-11,265.0	-195.1	3,357.2	3,133.2	224.00	14.988	
19,600.0	8,119.0	22,762.7	11,233.0	191.6	193.4	158.09	-11,348.3	-193.3	3,357.5	3,132.0	225.58	14.884	
19,700.0	8,119.0	22,843.0	11,234.5	193.3	194.7	158.13	-11,428.5	-191.2	3,358.5	3,131.4	227.08	14.790	
19,800.0	8,119.0	22,925.6	11,236.6	194.9	196.0	158.17	-11,511.1	-188.7	3,360.0	3,131.4	228.57	14.700	
19,900.0	8,119.0	23,005.4	11,239.3	196.5	197.3	158.23	-11,590.7	-185.8	3,361.9	3,132.0	229.98	14.618	
20,000.0	8,119.0	23,078.0	11,242.4	198.2	198.5	158.29	-11,663.3	-183.0	3,364.7	3,133.5	231.27	14.549	
20,100.0	8,119.0	23,229.7	11,246.9	199.8	201.0	158.36	-11,814.8	-179.6	3,366.8	3,133.1	233.69	14.407	
20,200.0	8,119.0	23,309.6	11,248.8	201.4	202.3	158.38	-11,894.8	-178.4	3,368.6	3,133.4	235.21	14.322	
20,300.0	8,119.0	23,380.5	11,251.1	203.1	203.4	158.41	-11,965.5	-177.1	3,371.2	3,134.7	236.56	14.251	
20,400.0	8,119.0	23,457.3	11,254.4	204.7	204.7	158.45	-12,042.3	-175.5	3,374.7	3,136.7	237.95	14.182	
20,500.0	8,119.0	23,543.4	11,258.6	206.3	206.1	158.49	-12,128.2	-173.7	3,378.6	3,139.2	239.45	14.110	
20,606.7	8,119.0	23,611.2	11,262.3	208.1	207.2	158.53	-12,193.5	-172.3	3,383.7	3,143.0	240.68	14.059	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #204H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 216-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	83.48	95.7	836.6	842.0				
100.0	100.0	103.2	103.2	0.1	0.2	83.48	95.6	836.3	841.8	841.5	0.29	2,895.489	
200.0	200.0	207.4	207.4	0.5	0.3	83.49	95.4	835.6	841.0	840.2	0.81	1,036.974	
300.0	300.0	310.6	310.6	0.8	0.7	83.49	95.2	834.4	839.9	838.3	1.52	551.675	
400.0	400.0	413.7	413.7	1.2	1.0	83.47	95.3	832.7	838.3	836.0	2.25	372.588	
500.0	500.0	510.2	510.2	1.6	1.4	83.43	95.7	831.2	836.8	833.8	2.95	283.587	
600.0	600.0	607.5	607.5	1.9	1.7	83.36	96.6	830.0	835.6	832.0	3.65	228.650	
700.0	700.0	705.0	705.0	2.3	2.1	83.27	97.8	829.0	834.8	830.4	4.36	191.557	
800.0	800.0	803.3	803.2	2.6	2.4	83.15	99.5	828.2	834.2	829.1	5.06	164.737	
900.0	900.0	903.0	903.0	3.0	2.8	83.02	101.4	827.5	833.7	827.9	5.78	144.355	
1,000.0	1,000.0	1,004.4	1,004.3	3.4	3.1	82.87	103.4	826.7	833.2	826.7	6.49	128.302	
1,100.0	1,100.0	1,107.5	1,107.3	3.7	3.5	8.30	105.9	825.6	830.6	823.4	7.21	115.147	
1,200.0	1,199.8	1,207.8	1,207.6	4.1	3.9	8.17	108.6	824.1	824.4	816.5	7.92	104.067	
1,300.0	1,299.5	1,307.0	1,306.8	4.4	4.2	8.09	111.2	822.7	814.7	806.1	8.63	94.427	
1,400.0	1,398.7	1,391.8	1,391.5	4.8	4.5	8.06	113.4	822.2	802.4	793.1	9.28	86.474	
1,500.0	1,497.5	1,474.9	1,474.6	5.2	4.8	8.04	116.2	823.3	788.7	778.8	9.92	79.472	
1,600.0	1,595.9	1,566.5	1,566.0	5.5	5.1	7.96	119.9	826.0	774.9	764.3	10.60	73.110	
1,700.0	1,694.4	1,662.2	1,661.6	5.9	5.5	7.83	124.5	829.2	761.6	750.3	11.29	67.461	
1,800.0	1,792.9	1,757.6	1,756.8	6.3	5.8	7.63	129.9	832.7	748.7	736.8	11.99	62.473	
1,900.0	1,891.4	1,852.8	1,851.7	6.8	6.2	7.34	136.4	836.6	736.4	723.8	12.68	58.060	
2,000.0	1,989.9	1,953.4	1,951.9	7.2	6.5	6.97	143.9	840.8	724.4	711.0	13.41	54.030	
2,100.0	2,088.4	2,055.9	2,054.1	7.6	6.9	6.66	150.6	844.8	712.0	697.9	14.14	50.353	
2,200.0	2,186.8	2,161.6	2,159.5	8.0	7.3	6.36	156.9	848.4	699.0	684.1	14.89	46.952	
2,300.0	2,285.3	2,267.4	2,265.2	8.5	7.7	6.03	163.4	850.8	685.0	669.3	15.63	43.815	
2,400.0	2,383.8	2,363.1	2,360.6	8.9	8.0	5.74	168.8	852.9	670.7	654.4	16.35	41.035	
2,500.0	2,482.3	2,459.5	2,456.9	9.3	8.4	5.52	173.5	855.5	656.9	639.9	17.06	38.503	
2,600.0	2,580.8	2,552.3	2,549.6	9.8	8.7	5.37	177.5	858.8	643.8	626.1	17.76	36.248	
2,700.0	2,679.2	2,646.2	2,643.3	10.2	9.0	5.26	181.0	863.0	631.6	613.1	18.47	34.205	
2,800.0	2,777.7	2,746.5	2,743.4	10.6	9.4	5.16	184.5	867.9	619.7	600.5	19.19	32.293	
2,900.0	2,876.2	2,847.6	2,844.4	11.1	9.7	5.05	188.2	872.7	607.7	587.7	19.92	30.506	
3,000.0	2,974.7	2,952.9	2,949.5	11.5	10.1	4.95	191.7	876.9	594.9	574.2	20.66	28.793	
3,100.0	3,073.2	3,055.8	3,052.3	11.9	10.5	4.87	194.7	880.2	581.2	559.8	21.39	27.163	
3,200.0	3,171.6	3,155.1	3,151.5	12.4	10.9	4.67	198.7	882.8	567.2	545.1	22.12	25.640	
3,300.0	3,270.1	3,251.3	3,247.5	12.8	11.2	4.33	203.8	885.2	553.3	530.5	22.84	24.224	
3,400.0	3,368.6	3,344.0	3,340.0	13.3	11.5	4.03	208.6	888.5	540.5	516.9	23.55	22.946	
3,500.0	3,467.1	3,437.5	3,433.3	13.7	11.9	3.78	213.1	893.0	528.8	504.5	24.27	21.790	
3,600.0	3,565.6	3,532.2	3,527.7	14.2	12.2	3.48	218.0	898.4	518.0	493.1	24.98	20.737	
3,700.0	3,664.0	3,626.9	3,622.1	14.6	12.6	3.14	223.5	904.6	508.2	482.5	25.69	19.780	
3,800.0	3,762.5	3,721.8	3,716.6	15.1	12.9	2.94	227.8	911.9	499.3	472.9	26.40	18.912	
3,900.0	3,861.0	3,819.8	3,814.1	15.5	13.3	2.92	230.8	920.6	491.3	464.2	27.13	18.111	
4,000.0	3,959.5	3,922.4	3,916.3	16.0	13.7	2.78	234.9	929.2	482.9	455.0	27.87	17.328	
4,100.0	4,058.0	4,025.3	4,018.8	16.4	14.1	2.44	240.4	936.8	473.9	445.3	28.61	16.563	
4,200.0	4,156.4	4,128.5	4,121.6	16.8	14.4	2.02	246.2	943.6	464.2	434.8	29.36	15.810	
4,300.0	4,254.9	4,230.3	4,223.0	17.3	14.8	1.52	252.3	949.4	453.8	423.7	30.10	15.074	
4,400.0	4,353.4	4,331.2	4,323.6	17.7	15.2	0.84	259.4	954.5	443.0	412.2	30.84	14.362	
4,500.0	4,451.9	4,433.4	4,425.3	18.2	15.6	0.01	267.3	959.0	431.8	400.2	31.59	13.670	
4,600.0	4,550.4	4,535.7	4,527.3	18.6	16.0	-0.86	274.9	962.7	420.0	387.7	32.33	12.989	
4,700.0	4,648.9	4,635.3	4,626.6	19.1	16.3	-1.78	282.4	965.9	407.8	374.7	33.08	12.329	
4,800.0	4,747.3	4,734.8	4,725.7	19.5	16.7	-2.80	290.1	968.9	395.6	361.8	33.82	11.698	
4,900.0	4,845.8	4,834.9	4,825.5	20.0	17.1	-3.87	297.6	971.7	383.3	348.8	34.56	11.091	
5,000.0	4,944.3	4,936.2	4,926.5	20.4	17.5	-4.96	304.7	974.4	370.9	335.6	35.31	10.504	
5,100.0	5,042.8	5,043.4	5,033.5	20.9	17.9	-6.06	310.8	976.0	357.0	320.9	36.04	9.905	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #204H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 216-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,141.3	5,150.0	5,140.0	21.3	18.2	-7.11	315.2	975.6	340.9	304.2	36.75	9.277	
5,300.0	5,239.7	5,255.7	5,245.7	21.8	18.6	-8.26	318.5	973.0	322.7	285.2	37.43	8.621	
5,400.0	5,338.2	5,352.5	5,342.4	22.2	18.9	-9.44	321.0	969.3	303.1	264.9	38.18	7.939	
5,500.0	5,436.7	5,444.6	5,434.4	22.7	19.3	-10.53	323.2	967.6	285.4	246.4	38.97	7.323	
5,600.0	5,535.2	5,541.4	5,531.1	23.1	19.6	-11.63	325.5	967.6	269.4	229.7	39.73	6.781	
5,700.0	5,633.7	5,641.4	5,631.2	23.6	19.9	-12.88	327.6	967.5	253.3	212.8	40.47	6.258	
5,800.0	5,732.1	5,741.1	5,730.9	24.0	20.3	-14.28	329.4	966.9	236.7	195.5	41.22	5.742	
5,900.0	5,830.6	5,840.6	5,830.4	24.5	20.6	-15.87	330.8	965.9	219.8	177.8	41.98	5.236	
6,000.0	5,929.1	5,939.2	5,928.9	24.9	21.0	-17.59	331.8	964.9	202.8	160.0	42.75	4.743	
6,100.0	6,027.6	6,037.6	6,027.3	25.4	21.3	-19.27	331.7	964.4	185.9	142.4	43.53	4.271	
6,200.0	6,126.1	6,136.1	6,125.8	25.8	21.6	-21.03	331.1	964.4	169.2	124.9	44.30	3.819	
6,300.0	6,224.5	6,234.7	6,224.4	26.3	21.9	-23.19	330.4	964.3	152.6	107.4	45.10	3.382	
6,400.0	6,323.0	6,333.2	6,322.9	26.7	22.3	-25.95	329.8	964.0	136.1	90.2	45.95	2.962	
6,500.0	6,421.5	6,431.6	6,421.3	27.2	22.6	-29.57	329.4	963.5	120.0	73.2	46.86	2.562	
6,600.0	6,520.0	6,530.1	6,519.8	27.6	22.9	-34.36	329.0	962.9	104.5	56.7	47.87	2.184	
6,700.0	6,618.5	6,628.5	6,618.2	28.1	23.2	-40.75	328.6	962.2	89.9	40.9	49.01	1.834	
6,800.0	6,716.9	6,726.9	6,716.6	28.5	23.6	-49.43	328.1	961.4	76.7	26.3	50.34	1.523	
6,900.0	6,815.4	6,825.3	6,815.0	29.0	23.9	-61.24	327.5	960.7	65.8	13.9	51.85	1.269	Level 3
6,981.8	6,896.0	6,905.9	6,895.6	29.4	24.2	-73.66	326.8	960.0	59.5	6.4	53.09	1.120	Level 2
7,000.0	6,913.9	6,923.8	6,913.5	29.5	24.2	-76.65	326.6	959.8	58.5	5.1	53.33	1.096	Level 2
7,100.0	7,012.9	7,022.7	7,012.4	29.9	24.6	-91.98	325.5	958.9	56.1	1.8	54.31	1.032	Level 2
7,112.6	7,025.4	7,035.1	7,024.8	29.9	24.6	-93.67	325.4	958.7	56.0	1.7	54.39	1.030	Level 2, CC, ES, SF
7,200.0	7,112.3	7,121.9	7,111.5	30.3	24.9	-103.60	324.4	957.7	56.9	2.0	54.82	1.037	Level 2
7,300.0	7,212.2	7,221.4	7,211.0	30.6	25.2	-110.76	323.4	956.3	58.5	3.2	55.22	1.059	Level 2
7,381.8	7,294.0	7,302.9	7,292.5	30.9	25.5	-39.02	322.9	955.0	59.4	3.8	55.62	1.069	Level 2
7,400.0	7,312.2	7,321.0	7,310.6	30.9	25.6	-39.30	322.9	954.6	59.6	3.9	55.72	1.070	Level 2
7,500.0	7,412.2	7,420.7	7,410.3	31.2	25.9	-40.80	322.8	952.6	60.9	4.6	56.28	1.082	Level 2
7,600.0	7,512.2	7,520.9	7,510.5	31.5	26.2	-42.27	322.7	950.6	62.1	5.3	56.84	1.093	Level 2
7,633.8	7,546.0	7,554.8	7,544.3	31.6	26.4	-42.77	322.6	950.0	62.5	5.4	57.03	1.095	Level 2
7,650.0	7,562.2	7,570.9	7,560.5	31.7	26.4	137.44	322.5	949.7	62.8	5.7	57.13	1.099	Level 2
7,700.0	7,612.0	7,621.1	7,610.6	31.8	26.6	138.71	322.3	948.8	65.9	8.4	57.52	1.145	Level 2
7,750.0	7,661.4	7,670.7	7,660.3	31.9	26.7	142.02	322.1	948.3	72.2	14.2	57.99	1.245	Level 2
7,800.0	7,709.8	7,719.6	7,709.1	32.0	26.9	146.40	321.8	948.0	82.1	23.7	58.47	1.405	Level 3
7,850.0	7,757.1	7,767.2	7,756.7	32.1	27.1	150.95	321.5	947.9	96.1	37.2	58.89	1.632	
7,900.0	7,802.7	7,812.9	7,802.5	32.2	27.2	154.97	321.2	948.0	114.3	55.1	59.23	1.929	
7,950.0	7,846.4	7,856.8	7,846.3	32.3	27.4	158.25	320.8	948.0	136.7	77.2	59.51	2.298	
8,000.0	7,887.7	7,898.4	7,888.0	32.4	27.5	160.79	320.5	947.9	163.2	103.5	59.75	2.732	
8,050.0	7,926.5	7,937.5	7,927.0	32.4	27.6	162.67	320.2	947.9	193.4	133.5	59.94	3.227	
8,100.0	7,962.4	7,973.6	7,963.2	32.5	27.8	163.98	319.9	947.8	227.2	167.1	60.12	3.779	
8,150.0	7,995.1	8,006.6	7,996.1	32.5	27.9	164.78	319.6	947.7	264.1	203.8	60.27	4.382	
8,200.0	8,024.4	8,036.1	8,025.7	32.6	28.0	165.10	319.4	947.6	303.9	243.5	60.39	5.031	
8,250.0	8,050.1	8,062.1	8,051.6	32.6	28.1	164.90	319.1	947.5	346.2	285.7	60.50	5.722	
8,300.0	8,071.9	8,084.2	8,073.7	32.7	28.1	164.05	319.0	947.4	390.6	330.0	60.59	6.448	
8,350.0	8,089.7	8,102.3	8,091.8	32.7	28.2	162.24	318.8	947.3	436.9	376.3	60.65	7.204	
8,400.0	8,103.4	8,116.3	8,105.8	32.7	28.2	158.66	318.7	947.2	484.7	424.0	60.70	7.985	
8,450.0	8,112.8	8,126.1	8,115.6	32.8	28.3	151.02	318.6	947.1	533.5	472.8	60.72	8.786	
8,500.0	8,118.0	8,131.6	8,121.1	32.9	28.3	130.49	318.6	947.1	583.0	522.3	60.73	9.600	
8,533.8	8,119.0	8,132.8	8,122.4	33.0	28.3	95.58	318.6	947.1	616.7	556.0	60.73	10.155	
8,600.0	8,119.0	8,133.3	8,122.9	33.1	28.3	96.21	318.6	947.1	682.7	622.0	60.72	11.244	
8,700.0	8,119.0	8,134.1	8,123.6	33.4	28.3	97.17	318.6	947.1	782.5	721.8	60.71	12.890	
8,800.0	8,119.0	8,134.8	8,124.4	33.8	28.3	98.12	318.6	947.1	882.4	821.7	60.70	14.537	
8,900.0	8,119.0	8,135.6	8,125.1	34.3	28.3	99.06	318.6	947.1	982.3	921.6	60.70	16.183	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #204H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 216-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,000.0	8,119.0	8,136.4	8,125.9	34.9	28.3	100.00	318.6	947.1	1,082.2	1,021.5	60.70	17.829	
9,100.0	8,119.0	8,137.1	8,126.7	35.5	28.3	100.93	318.6	947.1	1,182.1	1,121.4	60.70	19.475	
9,200.0	8,119.0	8,137.9	8,127.4	36.3	28.3	101.86	318.5	947.1	1,282.0	1,221.3	60.70	21.120	
9,300.0	8,119.0	8,138.6	8,128.2	37.1	28.3	102.78	318.5	947.1	1,382.0	1,321.3	60.71	22.764	
9,400.0	8,119.0	8,139.4	8,128.9	37.9	28.3	103.69	318.5	947.0	1,481.9	1,421.2	60.72	24.407	
9,500.0	8,119.0	8,140.2	8,129.7	38.8	28.3	104.59	318.5	947.0	1,581.9	1,521.1	60.73	26.049	
9,600.0	8,119.0	8,140.9	8,130.5	39.8	28.3	105.48	318.5	947.0	1,681.8	1,621.1	60.74	27.690	
9,700.0	8,119.0	8,141.7	8,131.2	40.8	28.3	106.36	318.5	947.0	1,781.8	1,721.0	60.75	29.330	
9,800.0	8,119.0	8,142.4	8,132.0	41.8	28.3	107.26	318.5	947.0	1,881.8	1,821.0	60.76	30.969	
9,900.0	8,119.0	8,143.2	8,132.8	42.9	28.3	108.17	318.5	947.0	1,981.7	1,920.9	60.78	32.607	
10,000.0	8,119.0	8,144.0	8,133.6	44.0	28.3	109.06	318.5	947.0	2,081.7	2,020.9	60.79	34.243	
10,100.0	8,119.0	8,144.8	8,134.3	45.2	28.3	109.95	318.5	947.0	2,181.7	2,120.9	60.81	35.878	
10,200.0	8,119.0	8,145.6	8,135.1	46.3	28.3	110.84	318.5	947.0	2,281.6	2,220.8	60.83	37.511	
10,300.0	8,119.0	8,146.4	8,135.9	47.5	28.3	111.71	318.5	947.0	2,381.6	2,320.8	60.84	39.143	
10,400.0	8,119.0	8,147.2	8,136.7	48.8	28.4	112.58	318.5	947.0	2,481.6	2,420.7	60.86	40.773	
10,500.0	8,119.0	8,148.0	8,137.5	50.0	28.4	113.44	318.5	947.0	2,581.6	2,520.7	60.89	42.401	
10,600.0	8,119.0	8,148.8	8,138.3	51.3	28.4	114.29	318.5	947.0	2,681.6	2,620.7	60.91	44.027	
10,700.0	8,119.0	8,149.6	8,139.2	52.6	28.4	115.14	318.5	947.0	2,781.6	2,720.6	60.93	45.652	
10,800.0	8,119.0	8,150.4	8,140.0	54.0	28.4	115.97	318.5	947.0	2,881.5	2,820.6	60.95	47.275	
10,900.0	8,119.0	8,151.2	8,140.8	55.3	28.4	116.79	318.4	947.0	2,981.5	2,920.5	60.98	48.896	
11,000.0	8,119.0	8,152.1	8,141.6	56.7	28.4	117.61	318.4	947.0	3,081.5	3,020.5	61.00	50.514	
11,100.0	8,119.0	14,355.5	11,287.5	58.0	65.1	179.87	-2,971.9	1,004.2	3,171.4	3,114.9	56.57	56.063	
11,200.0	8,119.0	14,420.0	11,285.5	59.4	66.0	179.90	-3,036.3	1,006.2	3,168.4	3,110.8	57.66	54.948	
11,300.0	8,119.0	14,470.7	11,284.7	60.8	66.6	179.93	-3,087.0	1,008.1	3,166.8	3,108.1	58.66	53.987	
11,346.0	8,119.0	14,492.1	11,284.6	61.5	66.9	179.95	-3,108.4	1,009.1	3,166.6	3,107.5	59.10	53.576	
11,400.0	8,119.0	14,516.0	11,284.7	62.2	67.2	179.97	-3,132.2	1,010.4	3,166.9	3,107.3	59.62	53.117	
11,500.0	8,119.0	14,583.0	11,285.6	63.6	68.2	-179.97	-3,199.1	1,014.1	3,168.3	3,107.6	60.76	52.143	
11,600.0	8,119.0	11,600.0	11,287.2	65.1	38.4	-179.92	-3,384.5	1,017.9	3,169.3	3,127.8	41.48	76.412	
11,700.0	8,119.0	14,912.1	11,284.6	66.5	72.7	-179.99	-3,528.0	1,015.1	3,167.3	3,102.7	64.66	48.983	
11,800.0	8,119.0	14,990.0	11,283.3	68.0	73.7	179.97	-3,605.9	1,012.9	3,165.7	3,099.7	65.92	48.020	
11,900.0	8,119.0	15,107.2	11,281.3	69.4	75.4	179.87	-3,723.0	1,008.5	3,163.9	3,096.4	67.53	46.853	
12,000.0	8,119.0	15,187.4	11,280.0	70.9	76.5	179.80	-3,803.1	1,005.1	3,162.3	3,093.5	68.82	45.947	
12,100.0	8,119.0	15,261.5	11,279.3	72.4	77.5	179.74	-3,877.1	1,001.9	3,161.4	3,091.4	70.07	45.117	
12,145.3	8,119.0	15,290.2	11,279.2	73.1	77.9	179.71	-3,905.8	1,000.7	3,161.3	3,090.7	70.60	44.780	
12,200.0	8,119.0	15,321.3	11,279.4	73.9	78.4	179.69	-3,936.9	999.5	3,161.6	3,090.4	71.20	44.404	
12,300.0	8,119.0	15,384.4	11,280.3	75.4	79.3	179.64	-4,000.0	997.2	3,163.0	3,090.7	72.36	43.715	
12,400.0	8,119.0	15,575.7	11,282.5	76.9	82.0	179.45	-4,191.0	987.6	3,164.9	3,090.2	74.65	42.397	
12,402.6	8,119.0	12,402.6	11,282.4	76.9	41.0	179.52	-4,138.5	991.0	3,164.7	3,112.5	52.16	60.674	
12,500.0	8,119.0	15,609.0	11,282.8	78.4	82.5	179.41	-4,224.2	985.7	3,165.3	3,089.7	75.55	41.896	
12,600.0	8,119.0	15,851.9	11,281.6	79.9	86.0	179.31	-4,466.9	981.5	3,165.6	3,087.3	78.28	40.438	
12,700.0	8,119.0	15,914.2	11,280.0	81.4	86.9	179.32	-4,529.3	982.5	3,163.0	3,083.6	79.43	39.820	
12,800.0	8,119.0	15,976.7	11,279.1	82.9	87.9	179.34	-4,591.7	984.0	3,161.5	3,080.9	80.58	39.233	
12,900.0	8,119.0	12,900.0	11,278.2	84.5	42.0	179.40	-4,704.8	988.1	3,160.7	3,101.5	59.21	53.383	
13,000.0	8,119.0	16,183.8	11,276.5	86.0	90.9	179.44	-4,798.6	990.8	3,158.9	3,075.4	83.59	37.791	
13,075.4	8,119.0	16,223.0	11,276.4	87.2	91.5	179.46	-4,837.9	992.0	3,158.5	3,074.2	84.39	37.428	
13,100.0	8,119.0	16,237.8	11,276.4	87.5	91.7	179.47	-4,852.7	992.5	3,158.6	3,073.9	84.67	37.305	
13,200.0	8,119.0	16,312.3	11,276.9	89.1	92.9	179.51	-4,927.1	995.3	3,159.3	3,073.4	85.92	36.769	
13,300.0	8,119.0	16,449.4	11,277.4	90.6	94.9	179.60	-5,064.1	1,001.2	3,159.5	3,071.8	87.73	36.015	
13,400.0	8,119.0	16,603.0	11,276.7	92.2	97.3	179.71	-5,217.5	1,008.2	3,159.3	3,069.6	89.67	35.232	
13,500.0	8,119.0	16,655.7	11,276.0	93.7	98.1	179.73	-5,270.2	1,009.6	3,158.1	3,067.4	90.75	34.800	
13,514.2	8,119.0	16,662.1	11,276.0	93.9	98.2	179.74	-5,276.6	1,009.8	3,158.1	3,067.2	90.89	34.745	
13,600.0	8,119.0	16,698.0	11,276.3	95.3	98.7	179.75	-5,312.4	1,011.0	3,158.8	3,067.0	91.73	34.435	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #204H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 216-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,700.0	8,119.0	16,763.1	11,277.6	96.8	99.7	179.79	-5,377.4	1,013.4	3,160.8	3,067.9	92.91	34.020	
13,800.0	8,119.0	16,955.8	11,280.0	98.4	102.6	179.85	-5,570.1	1,017.8	3,162.1	3,066.9	95.24	33.200	
13,900.0	8,119.0	17,190.5	11,274.3	100.0	106.2	179.63	-5,804.4	1,007.3	3,159.6	3,061.6	97.96	32.252	
14,000.0	8,119.0	17,269.0	11,271.1	101.5	107.4	179.55	-5,882.7	1,003.3	3,155.5	3,056.2	99.31	31.774	
14,100.0	8,119.0	17,336.2	11,268.9	103.1	108.4	179.51	-5,949.8	1,001.0	3,152.3	3,051.7	100.55	31.350	
14,200.0	8,119.0	17,503.2	11,262.4	104.7	111.0	179.45	-6,116.7	999.1	3,148.4	3,045.7	102.65	30.672	
14,300.0	8,119.0	17,582.8	11,258.7	106.2	112.2	179.45	-6,196.2	999.7	3,143.7	3,039.7	103.99	30.231	
14,400.0	8,119.0	17,650.0	11,256.2	107.8	113.3	179.46	-6,263.3	1,000.7	3,140.0	3,034.8	105.22	29.842	
14,500.0	8,119.0	17,748.5	11,253.1	109.4	114.8	179.50	-6,361.8	1,003.2	3,136.8	3,030.1	106.72	29.394	
14,600.0	8,119.0	17,848.5	11,250.0	111.0	116.3	179.55	-6,461.6	1,006.6	3,133.7	3,025.5	108.22	28.956	
14,700.0	8,119.0	17,924.3	11,247.9	112.6	117.5	179.60	-6,537.4	1,009.7	3,130.9	3,021.4	109.52	28.587	
14,800.0	8,119.0	18,047.4	11,244.7	114.2	119.5	179.70	-6,660.2	1,016.2	3,128.3	3,017.1	111.22	28.127	
14,900.0	8,119.0	18,094.7	11,243.8	115.7	120.2	179.74	-6,707.5	1,018.6	3,126.2	3,013.9	112.27	27.844	
15,000.0	8,119.0	18,221.1	11,242.0	117.3	122.2	179.80	-6,833.8	1,022.3	3,124.9	3,010.9	114.02	27.407	
15,100.0	8,119.0	18,301.7	11,240.4	118.9	123.4	179.80	-6,914.4	1,022.7	3,122.9	3,007.5	115.38	27.067	
15,200.0	8,119.0	18,379.9	11,239.4	120.5	124.7	179.78	-6,992.5	1,022.4	3,121.6	3,004.9	116.71	26.746	
15,300.0	8,119.0	18,483.4	11,238.5	122.1	126.3	179.71	-7,096.0	1,019.3	3,120.7	3,002.4	118.29	26.383	
15,400.0	8,119.0	18,557.4	11,237.8	123.7	127.4	179.64	-7,169.9	1,015.4	3,119.9	3,000.3	119.60	26.087	
15,420.7	8,119.0	18,570.6	11,237.8	124.0	127.6	179.62	-7,183.1	1,014.8	3,119.9	3,000.1	119.85	26.032	
15,500.0	8,119.0	18,621.5	11,238.0	125.3	128.4	179.57	-7,233.9	1,012.3	3,120.3	2,999.5	120.81	25.829	
15,600.0	8,119.0	18,725.1	11,238.9	126.9	130.0	179.49	-7,337.4	1,008.5	3,121.2	2,998.8	122.39	25.501	
15,700.0	8,119.0	18,836.8	11,239.2	128.5	131.8	179.45	-7,449.1	1,006.7	3,121.4	2,997.4	124.05	25.163	
15,800.0	8,119.0	18,905.0	11,240.0	130.1	132.9	179.45	-7,517.3	1,007.1	3,122.5	2,997.2	125.28	24.925	
15,900.0	8,119.0	19,016.1	11,241.8	131.7	134.6	179.47	-7,628.4	1,009.2	3,124.1	2,997.2	126.91	24.616	
16,000.0	8,119.0	19,206.8	11,240.7	133.3	137.6	179.51	-7,819.1	1,012.5	3,123.4	2,994.1	129.28	24.160	
16,100.0	8,119.0	19,286.0	11,239.5	134.9	138.9	179.54	-7,898.2	1,014.6	3,121.8	2,991.2	130.62	23.900	
16,200.0	8,119.0	19,359.5	11,238.9	136.5	140.1	179.59	-7,971.7	1,017.8	3,121.1	2,989.2	131.90	23.662	
16,300.0	8,119.0	19,528.2	11,236.6	138.1	142.8	179.76	-8,140.1	1,027.6	3,119.6	2,985.6	134.02	23.278	
16,400.0	8,119.0	19,571.0	11,235.5	139.7	143.5	179.81	-8,182.7	1,030.7	3,117.6	2,982.6	135.03	23.088	
16,458.1	8,119.0	19,608.7	11,235.0	140.7	144.1	179.86	-8,220.3	1,033.5	3,117.1	2,981.3	135.73	22.965	
16,500.0	8,119.0	19,621.9	11,235.1	141.4	144.3	179.87	-8,233.5	1,034.5	3,117.3	2,981.2	136.10	22.904	
16,600.0	8,119.0	19,666.0	11,236.2	143.0	145.0	179.92	-8,277.4	1,037.6	3,119.4	2,982.3	137.08	22.756	
16,700.0	8,119.0	19,812.7	11,239.3	144.6	147.3	-179.93	-8,423.8	1,046.4	3,121.6	2,982.5	139.06	22.448	
16,800.0	8,119.0	19,906.7	11,240.5	146.2	148.8	-179.83	-8,517.7	1,052.4	3,122.9	2,982.3	140.52	22.223	
16,900.0	8,119.0	19,975.0	11,241.6	147.8	149.9	-179.75	-8,585.8	1,057.1	3,124.6	2,982.9	141.74	22.045	
17,000.0	8,119.0	20,021.7	11,243.2	149.4	150.7	-179.71	-8,632.4	1,059.4	3,127.9	2,985.2	142.73	21.915	
17,100.0	8,119.0	20,072.2	11,245.7	151.0	151.5	-179.69	-8,682.8	1,060.7	3,132.9	2,989.2	143.73	21.797	
17,200.0	8,119.0	20,141.0	11,250.2	152.7	152.6	-179.66	-8,751.4	1,062.8	3,139.4	2,994.5	144.92	21.663	
17,300.0	8,119.0	20,488.4	11,258.2	154.3	158.2	-179.63	-9,098.4	1,066.5	3,140.5	2,991.5	148.97	21.081	
17,400.0	8,119.0	20,645.1	11,255.2	155.9	160.7	-179.72	-9,254.9	1,062.9	3,138.6	2,987.6	151.01	20.784	
17,500.0	8,119.0	20,685.3	11,254.4	157.5	161.3	-179.73	-9,295.1	1,062.1	3,136.6	2,984.6	152.05	20.629	
17,600.0	8,119.0	20,805.0	11,252.9	159.1	163.2	-179.79	-9,414.8	1,059.6	3,135.4	2,981.7	153.77	20.390	
17,700.0	8,119.0	20,864.1	11,252.0	160.7	164.1	-179.82	-9,473.8	1,058.2	3,134.0	2,979.1	154.96	20.225	
17,720.0	8,119.0	20,872.5	11,251.9	161.1	164.3	-179.83	-9,482.2	1,058.0	3,134.0	2,978.8	155.16	20.198	
17,800.0	8,119.0	20,933.3	11,252.4	162.4	165.3	-179.85	-9,543.1	1,057.0	3,134.5	2,978.3	156.22	20.065	
17,884.6	8,119.0	21,037.1	11,252.3	163.7	166.9	-179.90	-9,646.8	1,054.9	3,134.4	2,976.7	157.72	19.873	
17,900.0	8,119.0	21,048.1	11,252.3	164.0	167.1	-179.91	-9,657.8	1,054.7	3,134.4	2,976.5	157.92	19.849	
18,000.0	8,119.0	21,174.5	11,252.5	165.6	169.1	180.00	-9,784.1	1,050.2	3,134.6	2,974.9	159.72	19.625	
18,098.7	8,119.0	21,251.5	11,252.1	167.2	170.3	179.91	-9,861.0	1,045.6	3,134.2	2,973.1	161.07	19.459	
18,100.0	8,119.0	21,252.4	11,252.1	167.2	170.3	179.90	-9,861.9	1,045.6	3,134.2	2,973.1	161.08	19.457	
18,200.0	8,119.0	21,374.7	11,252.0	168.9	172.3	179.82	-9,984.1	1,041.9	3,134.2	2,971.3	162.86	19.245	
18,212.3	8,119.0	21,393.6	11,251.9	169.1	172.6	179.81	-10,003.0	1,041.5	3,134.1	2,970.9	163.11	19.215	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #204H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 216-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,300.0	8,119.0	21,405.8	11,252.2	170.5	172.8	179.81	-10,015.2	1,041.1	3,134.6	2,970.8	163.75	19.142	
18,400.0	8,119.0	21,437.5	11,253.0	172.1	173.3	179.79	-10,046.9	1,040.2	3,137.2	2,972.6	164.59	19.060	
18,500.0	8,119.0	21,788.4	11,249.3	173.7	178.9	179.72	-10,397.4	1,038.3	3,134.2	2,965.8	168.47	18.604	
18,600.0	8,119.0	21,848.0	11,247.3	175.4	179.9	179.73	-10,457.0	1,039.6	3,130.9	2,961.2	169.70	18.449	
18,700.0	8,119.0	21,848.0	11,247.3	177.0	179.9	179.73	-10,457.0	1,039.6	3,129.4	2,959.1	170.37	18.369	
18,731.1	8,119.0	21,878.5	11,247.1	177.5	180.4	179.75	-10,487.5	1,040.7	3,129.1	2,958.3	170.84	18.316	
18,731.5	8,119.0	21,878.6	11,247.1	177.5	180.4	179.75	-10,487.6	1,040.7	3,129.1	2,958.3	170.84	18.316	
18,800.0	8,119.0	21,899.1	11,247.3	178.6	180.7	179.76	-10,508.0	1,041.6	3,129.8	2,958.4	171.43	18.257	
18,900.0	8,119.0	22,090.2	11,249.5	180.2	183.8	179.88	-10,698.8	1,049.1	3,131.8	2,958.0	173.82	18.017	
19,000.0	8,119.0	22,322.0	11,240.1	181.9	187.6	179.92	-10,930.4	1,052.8	3,126.7	2,950.2	176.41	17.724	
19,100.0	8,119.0	22,365.3	11,238.2	183.5	188.3	179.94	-10,973.6	1,053.7	3,122.2	2,944.7	177.54	17.586	
19,200.0	8,119.0	22,417.0	11,236.9	185.1	189.1	179.96	-11,025.3	1,055.1	3,119.5	2,940.8	178.69	17.458	
19,300.0	8,119.0	22,535.6	11,234.0	186.8	191.0	179.99	-11,143.9	1,057.8	3,117.2	2,936.8	180.39	17.280	
19,400.0	8,119.0	22,607.0	11,232.5	188.4	192.2	-179.99	-11,215.2	1,059.3	3,115.0	2,933.3	181.69	17.144	
19,489.8	8,119.0	22,643.7	11,232.3	189.8	192.8	-179.97	-11,251.9	1,060.3	3,114.3	2,931.7	182.61	17.055	
19,500.0	8,119.0	22,648.1	11,232.3	190.0	192.8	-179.97	-11,256.3	1,060.5	3,114.3	2,931.6	182.71	17.045	
19,600.0	8,119.0	22,701.0	11,233.0	191.6	193.7	-179.93	-11,309.1	1,063.0	3,115.4	2,931.7	183.79	16.951	
19,700.0	8,119.0	22,923.1	11,231.4	193.3	197.3	-179.73	-11,530.9	1,074.9	3,114.2	2,927.8	186.45	16.703	
19,800.0	8,119.0	22,987.0	11,230.5	194.9	198.4	-179.69	-11,594.7	1,077.6	3,112.7	2,925.0	187.69	16.585	
19,900.0	8,119.0	23,122.3	11,227.1	196.5	200.6	-179.56	-11,729.7	1,085.2	3,110.0	2,920.4	189.53	16.409	
20,000.0	8,119.0	23,177.0	11,226.5	198.2	201.4	-179.52	-11,784.4	1,087.9	3,108.7	2,918.0	190.68	16.303	
20,100.0	8,119.0	23,325.0	11,223.3	199.8	203.9	-179.46	-11,932.2	1,092.0	3,106.3	2,913.6	192.65	16.124	
20,200.0	8,119.0	23,384.2	11,222.3	201.4	204.8	-179.42	-11,991.4	1,094.3	3,104.7	2,910.8	193.85	16.016	
20,275.8	8,119.0	23,430.6	11,222.1	202.7	205.6	-179.39	-12,037.7	1,096.6	3,104.3	2,909.6	194.76	15.940	
20,300.0	8,119.0	23,445.4	11,222.1	203.1	205.8	-179.37	-12,052.6	1,097.4	3,104.4	2,909.3	195.04	15.916	
20,400.0	8,119.0	23,591.0	11,221.4	204.7	208.2	-179.24	-12,197.9	1,105.4	3,103.9	2,906.9	197.01	15.755	
20,474.9	8,119.0	23,630.0	11,220.9	205.9	208.8	-179.20	-12,236.8	1,107.5	3,103.2	2,905.4	197.85	15.685	
20,500.0	8,119.0	23,630.0	11,220.9	206.3	208.8	-179.20	-12,236.8	1,107.5	3,103.3	2,905.3	198.00	15.673	
20,606.7	8,119.0	23,630.0	11,220.9	208.1	208.8	-179.20	-12,236.8	1,107.5	3,106.0	2,907.5	198.52	15.646	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #215H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 235-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	2.1	2.1	0.0	0.0	-90.35	-18.2	-2,941.5	2,941.5				
100.0	100.0	108.9	108.9	0.1	0.2	-90.35	-18.0	-2,941.4	2,941.4	2,941.1	0.30	9,800.002	
200.0	200.0	215.7	215.7	0.5	0.3	-90.34	-17.5	-2,941.0	2,941.1	2,940.2	0.83	3,557.583	
300.0	300.0	310.3	310.3	0.8	0.6	-90.33	-16.9	-2,940.6	2,940.7	2,939.2	1.48	1,982.427	
400.0	400.0	402.1	402.1	1.2	1.0	-90.32	-16.6	-2,940.5	2,940.5	2,938.4	2.17	1,355.805	
500.0	500.0	507.5	507.5	1.6	1.3	-90.32	-16.3	-2,940.4	2,940.5	2,937.6	2.90	1,013.111	
600.0	600.0	616.0	616.0	1.9	1.7	-90.31	-15.8	-2,940.1	2,940.1	2,936.5	3.65	806.017	
700.0	700.0	710.4	710.4	2.3	2.1	-90.30	-15.1	-2,939.7	2,939.8	2,935.4	4.34	676.763	
800.0	800.0	804.7	804.7	2.6	2.4	-90.28	-14.3	-2,939.5	2,939.6	2,934.5	5.04	583.372	
821.1	821.1	823.1	823.1	2.7	2.5	-90.27	-14.1	-2,939.5	2,939.6	2,934.4	5.18	567.524	CC
900.0	900.0	892.1	892.0	3.0	2.7	-90.26	-13.4	-2,939.7	2,939.7	2,934.0	5.71	515.119	
1,000.0	1,000.0	979.5	979.5	3.4	3.0	-90.25	-12.7	-2,940.1	2,940.3	2,933.9	6.37	461.229	ES
1,100.0	1,100.0	1,070.2	1,070.1	3.7	3.3	-164.65	-12.1	-2,941.0	2,942.9	2,935.8	7.04	417.724	
1,200.0	1,199.8	1,162.2	1,162.2	4.1	3.7	-164.63	-11.5	-2,942.1	2,949.1	2,941.4	7.72	382.243	
1,300.0	1,299.5	1,254.6	1,254.5	4.4	4.0	-164.61	-11.2	-2,943.5	2,959.0	2,950.6	8.39	352.764	
1,400.0	1,398.7	1,345.7	1,345.6	4.8	4.3	-164.59	-11.1	-2,945.0	2,972.5	2,963.4	9.06	328.202	
1,500.0	1,497.5	1,451.7	1,451.6	5.2	4.7	-164.59	-11.2	-2,947.1	2,989.5	2,979.7	9.78	305.752	
1,600.0	1,595.9	1,737.3	1,737.1	5.5	5.6	-164.93	-15.6	-2,943.6	3,005.6	2,994.5	11.10	270.817	
1,700.0	1,694.4	1,700.0	1,950.6	5.9	5.5	-165.13	-16.3	-2,927.5	3,013.8	3,002.5	11.30	266.610	
1,800.0	1,792.9	2,144.3	2,142.4	6.3	7.1	-165.26	-14.1	-2,907.4	3,019.8	3,006.6	13.18	229.050	
1,900.0	1,891.4	2,240.2	2,237.6	6.8	7.4	-165.29	-11.1	-2,896.3	3,025.1	3,011.2	13.89	217.794	
2,000.0	1,989.9	2,321.8	2,318.7	7.2	7.7	-165.31	-8.9	-2,887.3	3,030.8	3,016.3	14.55	208.288	
2,100.0	2,088.4	2,513.5	2,509.0	7.6	8.4	-165.39	-4.3	-2,864.9	3,036.5	3,021.0	15.57	195.044	
2,200.0	2,186.8	2,632.8	2,627.0	8.0	8.9	-165.44	-1.2	-2,847.6	3,038.7	3,022.4	16.36	185.779	
2,300.0	2,285.3	2,714.0	2,707.3	8.5	9.2	-165.47	0.9	-2,836.2	3,041.5	3,024.4	17.03	178.618	
2,400.0	2,383.8	2,793.6	2,786.2	8.9	9.5	-165.50	3.1	-2,825.5	3,044.8	3,027.1	17.69	172.076	
2,500.0	2,482.3	2,871.8	2,863.7	9.3	9.8	-165.53	5.1	-2,815.5	3,048.9	3,030.5	18.36	166.085	
2,600.0	2,580.8	2,957.6	2,948.9	9.8	10.2	-165.56	7.2	-2,805.2	3,053.7	3,034.6	19.05	160.336	
2,700.0	2,679.2	3,111.1	3,101.0	10.2	10.8	-165.59	13.0	-2,785.6	3,057.7	3,037.7	19.96	153.213	
2,800.0	2,777.7	3,205.7	3,194.7	10.6	11.1	-165.58	17.6	-2,772.6	3,060.7	3,040.1	20.68	148.010	
2,900.0	2,876.2	3,291.6	3,279.7	11.1	11.5	-165.59	21.3	-2,761.3	3,064.3	3,042.9	21.37	143.367	
3,000.0	2,974.7	3,405.2	3,392.2	11.5	11.9	-165.60	25.7	-2,746.4	3,068.0	3,045.8	22.16	138.446	
3,100.0	3,073.2	3,534.8	3,520.4	11.9	12.5	-165.61	31.5	-2,728.3	3,070.8	3,047.8	23.00	133.522	
3,200.0	3,171.6	3,671.4	3,655.4	12.4	13.0	-165.64	35.9	-2,707.8	3,072.6	3,048.7	23.86	128.785	
3,300.0	3,270.1	3,765.5	3,748.3	12.8	13.4	-165.69	37.9	-2,693.0	3,073.7	3,049.1	24.58	125.024	
3,400.0	3,368.6	3,847.9	3,829.7	13.3	13.8	-165.70	41.2	-2,680.6	3,075.3	3,050.1	25.27	121.675	
3,500.0	3,467.1	3,922.8	3,903.7	13.7	14.1	-165.68	45.4	-2,669.7	3,077.6	3,051.7	25.94	118.639	
3,600.0	3,565.6	3,989.9	3,970.1	14.2	14.3	-165.67	49.1	-2,660.7	3,080.9	3,054.3	26.58	115.911	
3,700.0	3,664.0	4,057.0	4,036.6	14.6	14.6	-165.66	52.6	-2,652.3	3,085.2	3,058.0	27.21	113.365	
3,800.0	3,762.5	4,154.5	4,133.3	15.1	15.0	-165.65	57.7	-2,641.0	3,090.3	3,062.3	27.95	110.545	
3,900.0	3,861.0	4,267.9	4,245.6	15.5	15.5	-165.61	65.2	-2,627.3	3,095.0	3,066.3	28.75	107.649	
4,000.0	3,959.5	4,356.2	4,333.0	16.0	15.8	-165.56	71.8	-2,616.7	3,099.7	3,070.2	29.46	105.209	
4,100.0	4,058.0	4,444.0	4,419.9	16.4	16.2	-165.51	78.5	-2,606.5	3,104.8	3,074.6	30.17	102.905	
4,200.0	4,156.4	4,525.5	4,500.7	16.8	16.5	-165.46	85.1	-2,597.5	3,110.3	3,079.5	30.86	100.793	
4,300.0	4,254.9	4,605.5	4,579.9	17.3	16.8	-165.39	92.2	-2,589.1	3,116.5	3,085.0	31.54	98.812	
4,400.0	4,353.4	4,704.1	4,677.5	17.7	17.2	-165.30	101.6	-2,579.2	3,123.2	3,090.9	32.29	96.724	
4,500.0	4,451.9	4,826.2	4,798.5	18.2	17.7	-165.22	111.6	-2,566.4	3,129.4	3,096.3	33.13	94.465	
4,600.0	4,550.4	4,937.6	4,908.9	18.6	18.2	-165.16	120.3	-2,554.0	3,135.0	3,101.1	33.93	92.404	
4,700.0	4,648.9	5,047.5	5,017.6	19.1	18.6	-165.05	131.1	-2,541.5	3,140.3	3,105.6	34.72	90.439	
4,800.0	4,747.3	5,127.8	5,096.9	19.5	18.9	-164.97	139.4	-2,532.6	3,145.9	3,110.5	35.41	88.831	
4,900.0	4,845.8	5,212.4	5,180.6	20.0	19.3	-164.88	148.3	-2,523.6	3,151.9	3,115.8	36.12	87.262	
5,000.0	4,944.3	5,293.2	5,260.5	20.4	19.6	-164.79	156.7	-2,515.4	3,158.5	3,121.7	36.81	85.804	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #215H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 235-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	5,373.6	5,340.1	20.9	19.9	-164.71	165.1	-2,507.7	3,165.7	3,128.2	37.50	84.423	
5,200.0	5,141.3	5,456.9	5,422.6	21.3	20.3	-164.62	173.8	-2,500.3	3,173.4	3,135.2	38.19	83.086	
5,300.0	5,239.7	5,542.2	5,507.2	21.8	20.6	-164.54	182.3	-2,493.0	3,181.7	3,142.8	38.90	81.794	
5,400.0	5,338.2	5,625.1	5,589.4	22.2	20.9	-164.46	190.3	-2,486.4	3,190.4	3,150.8	39.59	80.586	
5,500.0	5,436.7	5,703.6	5,667.5	22.7	21.2	-164.41	197.1	-2,480.5	3,199.7	3,159.4	40.26	79.479	
5,600.0	5,535.2	5,785.0	5,748.4	23.1	21.5	-164.37	203.1	-2,475.0	3,209.7	3,168.7	40.94	78.405	
5,700.0	5,633.7	5,879.5	5,842.5	23.6	21.9	-164.33	209.5	-2,468.9	3,220.0	3,178.3	41.67	77.280	
5,800.0	5,732.1	5,977.6	5,940.2	24.0	22.3	-164.30	215.9	-2,462.6	3,230.4	3,188.0	42.41	76.168	
5,900.0	5,830.6	6,065.9	6,028.2	24.5	22.6	-164.28	221.3	-2,457.2	3,241.0	3,197.9	43.11	75.177	
6,000.0	5,929.1	6,154.5	6,116.5	24.9	22.9	-164.26	226.2	-2,452.0	3,251.9	3,208.1	43.81	74.224	
6,100.0	6,027.6	6,244.4	6,206.1	25.4	23.3	-164.26	230.8	-2,447.0	3,263.1	3,218.6	44.51	73.304	
6,200.0	6,126.1	6,334.4	6,295.9	25.8	23.6	-164.26	235.1	-2,442.2	3,274.6	3,229.4	45.22	72.420	
6,300.0	6,224.5	6,444.4	6,405.6	26.3	24.0	-164.26	240.3	-2,436.5	3,286.2	3,240.2	46.01	71.427	
6,400.0	6,323.0	6,560.1	6,521.0	26.7	24.4	-164.25	246.4	-2,429.9	3,297.2	3,250.4	46.82	70.419	
6,500.0	6,421.5	6,636.8	6,597.4	27.2	24.7	-164.24	250.4	-2,425.7	3,308.5	3,261.0	47.47	69.698	
6,600.0	6,520.0	6,718.1	6,678.6	27.6	25.0	-164.23	254.6	-2,421.6	3,320.3	3,272.2	48.13	68.981	
6,700.0	6,618.5	6,820.2	6,780.4	28.1	25.4	-164.23	259.5	-2,416.8	3,332.4	3,283.5	48.89	68.163	
6,800.0	6,716.9	6,928.1	6,888.1	28.5	25.8	-164.24	264.2	-2,411.5	3,344.2	3,294.6	49.67	67.331	
6,900.0	6,815.4	7,061.4	7,021.1	29.0	26.3	-164.26	269.1	-2,404.1	3,355.4	3,304.9	50.56	66.371	
6,981.8	6,896.0	7,150.9	7,110.4	29.4	26.6	-164.29	271.8	-2,398.4	3,364.0	3,312.8	51.20	65.708	
7,000.0	6,913.9	7,166.8	7,126.2	29.5	26.7	-164.30	272.3	-2,397.4	3,365.8	3,314.5	51.32	65.585	
7,100.0	7,012.9	7,254.1	7,213.3	29.9	27.0	-164.38	274.6	-2,392.1	3,373.7	3,321.7	52.00	64.879	
7,200.0	7,112.3	7,342.8	7,301.9	30.3	27.3	-164.41	276.6	-2,387.1	3,377.7	3,325.1	52.67	64.125	
7,300.0	7,212.2	7,433.2	7,392.1	30.6	27.7	-164.40	278.5	-2,382.2	3,377.9	3,324.5	53.34	63.322	
7,381.8	7,294.0	7,505.9	7,464.7	30.9	27.9	-89.95	279.9	-2,378.4	3,375.1	3,321.2	53.87	62.647	
7,400.0	7,312.2	7,520.9	7,479.6	30.9	28.0	-89.94	280.1	-2,377.7	3,374.2	3,320.2	53.98	62.502	
7,500.0	7,412.2	7,603.1	7,561.8	31.2	28.3	-89.92	281.6	-2,373.9	3,369.5	3,314.9	54.59	61.721	
7,600.0	7,512.2	7,685.5	7,644.1	31.5	28.6	-89.89	282.9	-2,370.5	3,365.4	3,310.2	55.20	60.966	
7,633.8	7,546.0	7,713.8	7,672.3	31.6	28.7	-89.89	283.3	-2,369.4	3,364.1	3,308.7	55.41	60.716	
7,650.0	7,562.2	7,727.3	7,685.8	31.7	28.7	90.51	283.5	-2,368.9	3,363.5	3,308.0	55.51	60.598	
7,700.0	7,612.0	7,768.9	7,727.4	31.8	28.9	90.74	284.1	-2,367.5	3,361.8	3,306.0	55.80	60.249	
7,750.0	7,661.4	7,810.1	7,768.6	31.9	29.0	91.01	284.6	-2,366.1	3,360.3	3,304.2	56.08	59.915	
7,800.0	7,709.8	7,850.5	7,809.0	32.0	29.2	91.32	285.1	-2,364.9	3,359.0	3,302.6	56.36	59.599	
7,850.0	7,757.1	7,890.2	7,848.6	32.1	29.3	91.65	285.5	-2,363.8	3,358.0	3,301.3	56.63	59.300	
7,900.0	7,802.7	7,928.8	7,887.2	32.2	29.4	91.99	285.9	-2,362.8	3,357.3	3,300.4	56.88	59.021	
7,950.0	7,846.4	7,965.7	7,924.1	32.3	29.6	92.33	286.2	-2,361.9	3,357.0	3,299.9	57.13	58.762	
7,957.6	7,852.8	7,971.1	7,929.6	32.3	29.6	92.38	286.3	-2,361.8	3,357.0	3,299.8	57.16	58.725	
8,000.0	7,887.7	8,000.7	7,959.1	32.4	29.7	92.66	286.5	-2,361.2	3,357.2	3,299.8	57.36	58.525	
8,050.0	7,926.5	8,033.4	7,991.9	32.4	29.8	92.94	286.8	-2,360.5	3,357.9	3,300.3	57.59	58.310	
8,100.0	7,962.4	8,063.9	8,022.3	32.5	29.9	93.17	287.0	-2,359.9	3,359.2	3,301.4	57.80	58.119	
8,150.0	7,995.1	8,095.0	8,053.4	32.5	30.0	93.37	287.3	-2,359.4	3,361.2	3,303.2	58.02	57.935	
8,200.0	8,024.4	8,122.9	8,081.3	32.6	30.1	93.49	287.5	-2,358.9	3,364.0	3,305.7	58.22	57.776	
8,250.0	8,050.1	8,147.3	8,105.7	32.6	30.2	93.49	287.6	-2,358.5	3,367.5	3,309.1	58.42	57.645	
8,300.0	8,071.9	8,168.0	8,126.4	32.7	30.3	93.37	287.7	-2,358.2	3,371.9	3,313.3	58.60	57.541	
8,350.0	8,089.7	8,184.9	8,143.3	32.7	30.3	93.11	287.8	-2,357.9	3,377.1	3,318.3	58.77	57.465	
8,400.0	8,103.4	8,197.9	8,156.3	32.7	30.4	92.71	287.9	-2,357.7	3,383.3	3,324.3	58.92	57.419	
8,450.0	8,112.8	8,206.7	8,165.1	32.8	30.4	92.15	287.9	-2,357.5	3,390.3	3,331.2	59.06	57.402	
8,500.0	8,118.0	8,211.4	8,169.8	32.9	30.4	91.43	288.0	-2,357.5	3,398.2	3,339.0	59.19	57.415	
8,533.8	8,119.0	8,212.2	8,170.6	33.0	30.4	90.85	288.0	-2,357.5	3,404.0	3,344.8	59.26	57.442	
8,600.0	8,119.0	8,211.9	8,170.3	33.1	30.4	90.84	288.0	-2,357.5	3,416.4	3,357.0	59.41	57.507	
8,700.0	8,119.0	8,211.5	8,169.9	33.4	30.4	90.84	288.0	-2,357.5	3,437.4	3,377.7	59.67	57.606	
8,800.0	8,119.0	8,211.0	8,169.4	33.8	30.4	90.83	288.0	-2,357.5	3,461.1	3,401.2	59.97	57.710	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #215H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 235-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,900.0	8,119.0	8,210.5	8,168.9	34.3	30.4	90.82	288.0	-2,357.5	3,487.6	3,427.3	60.32	57.822	
9,000.0	8,119.0	8,210.1	8,168.4	34.9	30.4	90.81	288.0	-2,357.5	3,516.7	3,456.0	60.69	57.945	
9,100.0	8,119.0	8,209.6	8,168.0	35.5	30.4	90.80	287.9	-2,357.5	3,548.4	3,487.3	61.09	58.082	
9,200.0	8,119.0	8,209.1	8,167.5	36.3	30.4	90.80	287.9	-2,357.5	3,582.6	3,521.1	61.52	58.235	
9,300.0	8,119.0	8,208.6	8,167.0	37.1	30.4	90.79	287.9	-2,357.5	3,619.3	3,557.3	61.97	58.407	
9,400.0	8,119.0	8,208.2	8,166.5	37.9	30.4	90.78	287.9	-2,357.5	3,658.3	3,595.9	62.43	58.600	
9,500.0	8,119.0	8,207.7	8,166.1	38.8	30.4	90.77	287.9	-2,357.5	3,699.6	3,636.7	62.90	58.815	
9,600.0	8,119.0	8,207.2	8,165.6	39.8	30.4	90.76	287.9	-2,357.5	3,743.1	3,679.7	63.38	59.054	
9,700.0	8,119.0	8,206.7	8,165.1	40.8	30.4	90.75	287.9	-2,357.5	3,788.8	3,724.9	63.87	59.318	
9,800.0	8,119.0	8,206.2	8,164.6	41.8	30.4	90.75	287.9	-2,357.6	3,836.5	3,772.1	64.36	59.609	
9,900.0	8,119.0	8,205.7	8,164.1	42.9	30.4	90.74	287.9	-2,357.6	3,886.2	3,821.4	64.85	59.925	
10,000.0	8,119.0	8,205.2	8,163.6	44.0	30.4	90.73	287.9	-2,357.6	3,937.8	3,872.5	65.34	60.269	
10,100.0	8,119.0	8,204.8	8,163.2	45.2	30.4	90.72	287.9	-2,357.6	3,991.3	3,925.5	65.82	60.639	
10,200.0	8,119.0	8,204.3	8,162.7	46.3	30.4	90.71	287.9	-2,357.6	4,046.5	3,980.2	66.30	61.036	
10,300.0	8,119.0	8,203.8	8,162.2	47.5	30.4	90.70	287.9	-2,357.6	4,103.4	4,036.7	66.77	61.460	
10,400.0	8,119.0	8,203.3	8,161.7	48.8	30.4	90.70	287.9	-2,357.6	4,162.0	4,094.8	67.23	61.910	
10,500.0	8,119.0	8,202.8	8,161.2	50.0	30.4	90.69	287.9	-2,357.6	4,222.1	4,154.4	67.68	62.385	
10,600.0	8,119.0	8,202.3	8,160.7	51.3	30.4	90.68	287.9	-2,357.6	4,283.7	4,215.6	68.12	62.885	
10,700.0	8,119.0	8,201.8	8,160.2	52.6	30.4	90.67	287.9	-2,357.6	4,346.7	4,278.2	68.55	63.409	
10,800.0	8,119.0	8,201.3	8,159.7	54.0	30.4	90.66	287.9	-2,357.6	4,411.1	4,342.1	68.97	63.957	
10,900.0	8,119.0	8,200.8	8,159.2	55.3	30.4	90.65	287.9	-2,357.6	4,476.8	4,407.4	69.38	64.528	
11,000.0	8,119.0	8,200.3	8,158.7	56.7	30.4	90.65	287.9	-2,357.7	4,543.8	4,474.0	69.77	65.120	
11,100.0	8,119.0	8,199.8	8,158.2	58.0	30.4	90.64	287.9	-2,357.7	4,611.9	4,541.7	70.16	65.734	
11,200.0	8,119.0	8,199.3	8,157.7	59.4	30.4	90.63	287.9	-2,357.7	4,681.2	4,610.7	70.53	66.368	
11,300.0	8,119.0	8,198.8	8,157.1	60.8	30.4	90.62	287.9	-2,357.7	4,751.6	4,680.7	70.90	67.021	
11,400.0	8,119.0	8,198.2	8,156.6	62.2	30.4	90.61	287.9	-2,357.7	4,823.0	4,751.8	71.25	67.694	
11,500.0	8,119.0	15,029.3	11,622.1	63.6	69.5	136.36	-3,313.3	-2,325.9	4,838.1	4,731.8	106.36	45.490	
11,597.9	8,119.0	15,095.4	11,621.0	65.1	70.4	136.34	-3,379.4	-2,326.2	4,837.7	4,729.6	108.06	44.767	
11,600.0	8,119.0	15,096.5	11,621.0	65.1	70.4	136.34	-3,380.6	-2,326.2	4,837.7	4,729.6	108.09	44.754	
11,700.0	8,119.0	15,143.0	11,620.7	66.5	71.0	136.34	-3,427.0	-2,326.5	4,838.2	4,728.6	109.53	44.170	
11,800.0	8,119.0	15,207.0	11,621.0	68.0	71.9	136.33	-3,491.0	-2,327.1	4,839.6	4,728.4	111.23	43.511	
11,900.0	8,119.0	15,303.4	11,622.0	69.4	73.2	136.32	-3,587.4	-2,328.5	4,841.7	4,728.3	113.39	42.699	
12,000.0	8,119.0	15,380.8	11,623.1	70.9	74.2	136.32	-3,664.8	-2,329.1	4,843.8	4,728.5	115.29	42.015	
12,100.0	8,119.0	15,522.0	11,627.1	72.4	76.2	136.35	-3,805.9	-2,328.8	4,846.2	4,728.1	118.09	41.037	
12,200.0	8,119.0	15,906.0	11,617.5	73.9	81.6	136.24	-4,189.4	-2,330.4	4,845.8	4,721.2	124.58	38.896	
12,300.0	8,119.0	15,969.9	11,613.8	75.4	82.5	136.21	-4,253.2	-2,330.4	4,841.9	4,715.5	126.40	38.306	
12,400.0	8,119.0	16,023.5	11,611.4	76.9	83.2	136.19	-4,306.8	-2,330.2	4,838.8	4,710.7	128.06	37.786	
12,500.0	8,119.0	16,068.0	11,610.3	78.4	83.9	136.18	-4,351.2	-2,329.8	4,836.8	4,707.2	129.56	37.332	
12,600.0	8,119.0	12,600.0	11,602.1	79.9	40.4	136.18	-4,647.6	-2,319.9	4,832.1	4,739.6	92.43	52.280	
12,700.0	8,119.0	16,425.0	11,600.2	81.4	89.1	136.19	-4,707.8	-2,316.8	4,826.8	4,690.3	136.47	35.369	
12,800.0	8,119.0	16,473.0	11,599.7	82.9	89.8	136.20	-4,755.8	-2,314.3	4,822.7	4,684.7	138.03	34.939	
12,900.0	8,119.0	16,575.6	11,600.9	84.5	91.3	136.27	-4,858.1	-2,307.3	4,819.2	4,678.9	140.32	34.344	
13,000.0	8,119.0	16,626.9	11,602.1	86.0	92.1	136.31	-4,909.2	-2,303.5	4,816.1	4,674.2	141.90	33.941	
13,100.0	8,119.0	16,686.2	11,603.6	87.5	93.0	136.35	-4,968.4	-2,299.7	4,813.9	4,670.3	143.58	33.528	
13,200.0	8,119.0	16,758.0	11,605.6	89.1	94.1	136.40	-5,040.1	-2,295.6	4,812.4	4,667.0	145.43	33.090	
13,300.0	8,119.0	16,860.3	11,606.1	90.6	95.6	136.42	-5,142.3	-2,292.8	4,811.3	4,663.5	147.79	32.554	
13,400.0	8,119.0	17,004.2	11,602.8	92.2	97.7	136.39	-5,286.2	-2,291.9	4,809.6	4,658.7	150.86	31.881	
13,500.0	8,119.0	13,500.0	11,598.3	93.7	46.4	136.36	-5,423.9	-2,290.3	4,806.7	4,694.9	111.84	42.979	
13,600.0	8,119.0	17,198.2	11,597.2	95.3	100.7	136.37	-5,480.1	-2,288.9	4,804.1	4,648.5	155.57	30.881	
13,700.0	8,119.0	17,253.6	11,597.1	96.8	101.5	136.37	-5,535.5	-2,287.5	4,802.6	4,645.3	157.25	30.541	
13,800.0	8,119.0	13,800.0	11,594.3	98.4	50.9	136.35	-5,664.7	-2,287.4	4,801.4	4,682.8	118.60	40.484	
13,900.0	8,119.0	17,484.3	11,588.7	100.0	105.0	136.28	-5,765.9	-2,289.6	4,799.3	4,636.6	162.66	29.505	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #215H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 235-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,000.0	8,119.0	14,000.0	11,583.2	101.5	53.6	136.20	-5,874.3	-2,291.9	4,797.5	4,674.1	123.40	38.878	
14,100.0	8,119.0	17,714.8	11,575.7	103.1	108.5	136.11	-5,995.9	-2,294.8	4,795.0	4,626.8	168.21	28.507	
14,200.0	8,119.0	17,876.3	11,563.4	104.7	110.9	135.96	-6,156.9	-2,299.6	4,792.0	4,620.2	171.81	27.891	
14,300.0	8,119.0	17,930.1	11,558.9	106.2	111.7	135.91	-6,210.5	-2,301.2	4,788.7	4,615.1	173.63	27.581	
14,400.0	8,119.0	17,993.0	11,556.4	107.8	112.7	135.87	-6,273.3	-2,302.1	4,786.8	4,611.3	175.53	27.270	
14,500.0	8,119.0	17,993.0	11,556.4	109.4	112.7	135.87	-6,273.3	-2,302.1	4,786.0	4,609.6	176.38	27.134	
14,516.3	8,119.0	18,014.8	11,556.1	109.7	113.0	135.87	-6,295.2	-2,302.2	4,785.9	4,609.0	176.87	27.058	
14,600.0	8,119.0	18,053.3	11,555.7	111.0	113.6	135.86	-6,333.6	-2,302.7	4,786.4	4,608.2	178.19	26.861	
14,700.0	8,119.0	18,119.3	11,555.3	112.6	114.6	135.84	-6,399.6	-2,304.2	4,787.9	4,607.8	180.09	26.585	
14,800.0	8,119.0	18,206.4	11,552.9	114.2	116.0	135.78	-6,486.6	-2,308.1	4,789.5	4,607.1	182.42	26.255	
14,900.0	8,119.0	18,253.0	11,553.5	115.7	116.7	135.78	-6,533.2	-2,309.0	4,792.0	4,608.1	183.96	26.049	
15,000.0	8,119.0	15,000.0	11,543.3	117.3	66.0	135.70	-7,014.6	-2,305.7	4,787.8	4,640.2	147.58	32.442	
15,100.0	8,119.0	18,806.7	11,540.1	118.9	125.3	135.69	-7,086.3	-2,303.6	4,783.0	4,588.3	194.72	24.564	
15,200.0	8,119.0	18,846.0	11,539.3	120.5	125.9	135.69	-7,125.5	-2,302.0	4,779.3	4,583.0	196.25	24.353	
15,300.0	8,119.0	18,887.9	11,539.3	122.1	126.5	135.70	-7,167.4	-2,300.2	4,776.8	4,579.0	197.79	24.151	
15,400.0	8,119.0	18,941.0	11,540.6	123.7	127.4	135.73	-7,220.4	-2,298.0	4,775.7	4,576.3	199.45	23.945	
15,439.0	8,119.0	18,941.0	11,540.6	124.3	127.4	135.73	-7,220.4	-2,298.0	4,775.6	4,575.8	199.77	23.905	
15,500.0	8,119.0	18,995.5	11,542.3	125.3	128.2	135.76	-7,274.9	-2,296.1	4,775.7	4,574.6	201.11	23.746	
15,600.0	8,119.0	19,101.6	11,544.7	126.9	129.9	135.80	-7,380.9	-2,293.1	4,775.7	4,572.2	203.59	23.457	
15,700.0	8,119.0	19,273.5	11,546.6	128.5	132.6	135.85	-7,552.7	-2,287.4	4,774.4	4,567.2	207.11	23.052	
15,800.0	8,119.0	19,429.9	11,549.6	130.1	135.1	135.94	-7,708.8	-2,279.9	4,773.1	4,562.8	210.29	22.698	
15,900.0	8,119.0	19,415.0	11,549.8	131.7	134.8	135.94	-7,693.9	-2,280.2	4,771.8	4,560.8	210.92	22.623	
15,950.0	8,119.0	19,448.5	11,549.4	132.5	135.4	135.93	-7,727.4	-2,279.9	4,771.4	4,559.5	211.89	22.518	
16,000.0	8,119.0	19,459.5	11,549.3	133.3	135.5	135.93	-7,738.4	-2,280.1	4,771.6	4,559.1	212.48	22.457	
16,100.0	8,119.0	19,506.0	11,548.6	134.9	136.3	135.91	-7,784.8	-2,282.2	4,773.6	4,559.5	214.09	22.297	
16,200.0	8,119.0	19,506.0	11,548.6	136.5	136.3	135.91	-7,784.8	-2,282.2	4,776.7	4,561.9	214.79	22.238	
16,300.0	8,119.0	20,167.0	11,523.1	138.1	146.6	135.54	-8,442.0	-2,295.7	4,780.0	4,553.1	226.92	21.065	
16,400.0	8,119.0	20,182.9	11,522.0	139.7	146.8	135.54	-8,457.9	-2,295.3	4,773.5	4,545.2	228.26	20.912	
16,500.0	8,119.0	20,239.6	11,519.0	141.4	147.7	135.52	-8,514.5	-2,293.8	4,768.1	4,538.0	230.17	20.716	
16,600.0	8,119.0	20,262.0	11,518.1	143.0	148.1	135.52	-8,536.9	-2,293.0	4,763.9	4,532.4	231.51	20.577	
16,700.0	8,119.0	20,317.2	11,516.3	144.6	149.0	135.51	-8,592.1	-2,291.9	4,760.8	4,527.4	233.33	20.403	
16,800.0	8,119.0	20,357.0	11,515.2	146.2	149.6	135.50	-8,631.8	-2,292.0	4,759.1	4,524.2	234.90	20.260	
16,850.4	8,119.0	20,357.0	11,515.2	147.0	149.6	135.50	-8,631.8	-2,292.0	4,758.9	4,523.5	235.33	20.222	
16,900.0	8,119.0	20,357.0	11,515.2	147.8	149.6	135.50	-8,631.8	-2,292.0	4,759.1	4,523.4	235.73	20.189	
17,000.0	8,119.0	20,394.3	11,514.4	149.4	150.2	135.48	-8,669.0	-2,292.9	4,760.5	4,523.3	237.17	20.072	
17,100.0	8,119.0	20,414.4	11,514.3	151.0	150.5	135.47	-8,689.2	-2,293.9	4,763.7	4,525.5	238.25	19.995	
17,200.0	8,119.0	20,452.0	11,514.6	152.7	151.1	135.45	-8,726.7	-2,296.4	4,768.7	4,529.1	239.62	19.901	
17,300.0	8,119.0	20,481.5	11,515.0	154.3	151.5	135.43	-8,756.1	-2,298.7	4,775.1	4,534.3	240.80	19.830	
17,400.0	8,119.0	20,609.5	11,517.0	155.9	153.5	135.37	-8,883.8	-2,307.4	4,781.3	4,537.3	244.00	19.595	
17,500.0	8,119.0	20,667.0	11,518.3	157.5	154.4	135.35	-8,941.1	-2,311.1	4,787.9	4,542.1	245.72	19.485	
17,600.0	8,119.0	20,708.1	11,518.6	159.1	155.1	135.31	-8,982.1	-2,315.0	4,795.6	4,548.5	247.12	19.406	
17,700.0	8,119.0	20,735.0	11,518.5	160.7	155.5	135.28	-9,008.7	-2,318.3	4,804.6	4,556.4	248.17	19.360	
17,800.0	8,119.0	20,771.6	11,518.7	162.4	156.1	135.24	-9,045.0	-2,323.1	4,814.9	4,565.5	249.41	19.305	
17,900.0	8,119.0	21,491.0	11,541.7	164.0	167.4	135.25	-9,761.7	-2,340.7	4,817.3	4,553.7	263.55	18.278	
17,980.0	8,119.0	21,491.0	11,541.7	165.3	167.4	135.25	-9,761.7	-2,340.7	4,816.6	4,552.3	264.27	18.226	
18,000.0	8,119.0	21,491.0	11,541.7	165.6	167.4	135.25	-9,761.7	-2,340.7	4,816.6	4,552.2	264.44	18.214	
18,100.0	8,119.0	21,806.0	11,551.7	167.2	172.5	135.47	-10,075.9	-2,322.5	4,816.1	4,546.3	269.74	17.855	
18,200.0	8,119.0	21,902.5	11,552.1	168.9	174.1	135.53	-10,172.3	-2,315.9	4,812.0	4,539.9	272.06	17.688	
18,300.0	8,119.0	21,993.7	11,552.0	170.5	175.6	135.57	-10,263.2	-2,310.6	4,808.2	4,533.9	274.33	17.527	
18,400.0	8,119.0	22,125.0	11,548.3	172.1	177.7	135.57	-10,394.4	-2,305.9	4,804.1	4,526.8	277.30	17.324	
18,500.0	8,119.0	22,204.3	11,543.9	173.7	179.0	135.54	-10,473.6	-2,304.9	4,799.8	4,520.1	279.61	17.166	
18,600.0	8,119.0	22,269.9	11,540.4	175.4	180.0	135.51	-10,539.1	-2,304.7	4,796.1	4,514.4	281.71	17.025	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #215H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 235-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,700.0	8,119.0	22,346.0	11,536.4	177.0	181.2	135.47	-10,615.1	-2,305.2	4,793.2	4,509.2	283.99	16.878	
18,800.0	8,119.0	22,393.6	11,534.9	178.6	182.0	135.45	-10,662.6	-2,305.0	4,791.0	4,505.2	285.74	16.767	
18,900.0	8,119.0	22,441.0	11,535.2	180.2	182.8	135.47	-10,710.0	-2,303.6	4,789.8	4,502.4	287.37	16.667	
18,928.5	8,119.0	22,441.0	11,535.2	180.7	182.8	135.47	-10,710.0	-2,303.6	4,789.7	4,502.1	287.62	16.653	
19,000.0	8,119.0	22,475.9	11,535.8	181.9	183.3	135.48	-10,744.9	-2,302.8	4,789.8	4,501.1	288.77	16.587	
19,100.0	8,119.0	22,536.0	11,535.3	183.5	184.3	135.45	-10,805.0	-2,304.7	4,791.6	4,500.9	290.67	16.485	
19,200.0	8,119.0	22,536.0	11,535.3	185.1	184.3	135.45	-10,805.0	-2,304.7	4,794.2	4,502.8	291.36	16.454	
19,300.0	8,119.0	22,576.1	11,535.0	186.8	184.9	135.43	-10,845.0	-2,307.2	4,798.5	4,505.6	292.81	16.388	
19,400.0	8,119.0	22,631.0	11,537.0	188.4	185.8	135.42	-10,899.8	-2,309.5	4,804.2	4,509.7	294.45	16.316	
19,500.0	8,119.0	23,392.0	11,542.5	190.0	198.1	135.69	-11,658.8	-2,279.3	4,796.6	4,489.7	306.87	15.631	
19,600.0	8,119.0	23,447.9	11,540.4	191.6	199.0	135.70	-11,714.5	-2,275.0	4,789.1	4,480.3	308.79	15.509	
19,700.0	8,119.0	23,487.0	11,539.7	193.3	199.7	135.72	-11,753.5	-2,271.9	4,782.7	4,472.2	310.46	15.405	
19,800.0	8,119.0	23,527.6	11,539.6	194.9	200.3	135.75	-11,794.0	-2,268.7	4,777.5	4,465.5	312.08	15.309	
19,900.0	8,119.0	23,580.0	11,540.3	196.5	201.2	135.78	-11,846.2	-2,265.1	4,773.9	4,460.1	313.80	15.213	
20,000.0	8,119.0	23,781.0	11,538.5	198.2	204.5	135.86	-12,046.9	-2,253.2	4,769.7	4,452.2	317.51	15.022	
20,100.0	8,119.0	23,968.5	11,533.4	199.8	207.5	135.93	-12,233.8	-2,238.9	4,762.5	4,441.5	320.94	14.839	
20,200.0	8,119.0	23,992.0	11,533.1	201.4	207.9	135.95	-12,257.1	-2,236.6	4,755.7	4,433.3	322.42	14.750	
20,300.0	8,119.0	23,992.0	11,533.1	203.1	207.9	135.95	-12,257.1	-2,236.6	4,750.9	4,427.4	323.53	14.685	
20,400.0	8,119.0	23,992.0	11,533.1	204.7	207.9	135.95	-12,257.1	-2,236.6	4,748.3	4,423.8	324.52	14.632	
20,475.9	8,119.0	23,992.0	11,533.1	205.9	207.9	135.95	-12,257.1	-2,236.6	4,747.7	4,422.5	325.17	14.600	
20,500.0	8,119.0	23,992.0	11,533.1	206.3	207.9	135.95	-12,257.1	-2,236.6	4,747.7	4,422.4	325.36	14.592	
20,606.7	8,119.0	23,992.0	11,533.1	208.1	207.9	135.95	-12,257.1	-2,236.6	4,749.5	4,423.3	326.12	14.563	SF

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #216H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 166-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.37	-7.8	-1,215.3	1,215.4				
100.0	100.0	94.1	94.1	0.1	0.1	-90.37	-7.9	-1,215.3	1,215.4	1,215.1	0.27	4,535.897	
186.4	186.4	180.6	180.6	0.4	0.3	-90.38	-8.1	-1,215.3	1,215.3	1,214.6	0.71	1,720.909	CC
200.0	200.0	192.4	192.4	0.5	0.3	-90.38	-8.2	-1,215.3	1,215.4	1,214.5	0.83	1,470.128	
300.0	300.0	286.0	286.0	0.8	0.7	-90.40	-8.4	-1,215.7	1,215.8	1,214.2	1.52	801.279	
400.0	400.0	384.4	384.4	1.2	1.0	-90.41	-8.7	-1,216.5	1,216.5	1,214.3	2.23	546.651	
500.0	500.0	485.4	485.4	1.6	1.4	-90.44	-9.3	-1,217.2	1,217.3	1,214.3	2.94	413.549	
600.0	600.0	587.7	587.7	1.9	1.7	-90.48	-10.3	-1,217.9	1,217.9	1,214.2	3.67	332.060	
700.0	700.0	690.2	690.2	2.3	2.1	-90.54	-11.5	-1,218.3	1,218.3	1,213.9	4.39	277.322	
800.0	800.0	788.8	788.8	2.6	2.5	-90.62	-13.2	-1,218.6	1,218.7	1,213.6	5.11	238.711	
900.0	900.0	888.0	888.0	3.0	2.8	-90.72	-15.4	-1,219.1	1,219.2	1,213.4	5.82	209.483	
1,000.0	1,000.0	989.2	989.1	3.4	3.2	-90.83	-17.7	-1,219.5	1,219.6	1,213.1	6.54	186.431	ES
1,100.0	1,100.0	1,085.6	1,085.5	3.7	3.5	-165.35	-19.7	-1,219.9	1,221.8	1,214.5	7.24	168.725	
1,200.0	1,199.8	1,183.0	1,182.9	4.1	3.9	-165.48	-21.8	-1,220.8	1,227.8	1,219.9	7.94	154.625	
1,300.0	1,299.5	1,289.1	1,288.9	4.4	4.3	-165.65	-24.2	-1,221.4	1,236.9	1,228.2	8.67	142.613	
1,400.0	1,398.7	1,392.1	1,391.9	4.8	4.6	-165.84	-26.5	-1,221.5	1,248.9	1,239.5	9.40	132.915	
1,500.0	1,497.5	1,493.3	1,493.1	5.2	5.0	-166.05	-28.6	-1,221.4	1,264.0	1,253.9	10.11	124.980	
1,600.0	1,595.9	1,606.4	1,606.2	5.5	5.4	-166.33	-30.2	-1,220.7	1,280.3	1,269.4	10.86	117.888	
1,700.0	1,694.4	1,722.7	1,722.4	5.9	5.8	-166.53	-29.7	-1,218.4	1,295.3	1,283.6	11.61	111.516	
1,800.0	1,792.9	1,816.7	1,816.4	6.3	6.1	-166.67	-29.1	-1,216.4	1,310.0	1,297.7	12.29	106.615	
1,900.0	1,891.4	1,914.1	1,913.8	6.8	6.4	-166.82	-28.6	-1,214.2	1,324.7	1,311.7	12.98	102.074	
2,000.0	1,989.9	2,009.8	2,009.4	7.2	6.8	-166.99	-28.6	-1,212.3	1,339.6	1,325.9	13.67	98.001	
2,100.0	2,088.4	2,104.5	2,104.2	7.6	7.1	-167.18	-29.1	-1,210.6	1,354.8	1,340.4	14.36	94.333	
2,200.0	2,186.8	2,198.2	2,197.8	8.0	7.4	-167.36	-29.8	-1,209.2	1,370.3	1,355.3	15.06	91.021	
2,300.0	2,285.3	2,289.2	2,288.9	8.5	7.7	-167.54	-30.6	-1,208.2	1,386.3	1,370.6	15.74	88.091	
2,400.0	2,383.8	2,377.0	2,376.6	8.9	8.0	-167.69	-30.9	-1,208.0	1,403.0	1,386.6	16.40	85.529	
2,500.0	2,482.3	2,466.5	2,466.1	9.3	8.4	-167.83	-30.9	-1,208.4	1,420.4	1,403.3	17.08	83.183	
2,600.0	2,580.8	2,561.5	2,561.1	9.8	8.7	-167.97	-31.0	-1,209.2	1,438.2	1,420.4	17.77	80.940	
2,700.0	2,679.2	2,657.3	2,656.9	10.2	9.0	-168.12	-31.4	-1,210.1	1,456.2	1,437.8	18.47	78.864	
2,800.0	2,777.7	2,755.6	2,755.3	10.6	9.4	-168.22	-30.5	-1,211.3	1,474.4	1,455.2	19.17	76.905	
2,900.0	2,876.2	2,852.9	2,852.5	11.1	9.7	-168.25	-28.0	-1,212.6	1,492.5	1,472.6	19.87	75.106	
3,000.0	2,974.7	2,947.7	2,947.3	11.5	10.0	-168.29	-25.5	-1,214.0	1,510.8	1,490.2	20.56	73.483	
3,100.0	3,073.2	3,043.4	3,042.9	11.9	10.3	-168.33	-23.5	-1,215.6	1,529.3	1,508.0	21.25	71.958	
3,200.0	3,171.6	3,140.8	3,140.2	12.4	10.7	-168.40	-21.9	-1,217.3	1,547.9	1,525.9	21.96	70.503	
3,300.0	3,270.1	3,242.7	3,242.1	12.8	11.0	-168.47	-20.5	-1,219.0	1,566.5	1,543.8	22.68	69.066	
3,400.0	3,368.6	3,351.4	3,350.8	13.3	11.4	-168.62	-20.9	-1,220.2	1,584.6	1,561.1	23.44	67.597	
3,500.0	3,467.1	3,458.3	3,457.7	13.7	11.8	-168.82	-22.7	-1,220.5	1,602.1	1,577.9	24.20	66.211	
3,600.0	3,565.6	3,564.4	3,563.8	14.2	12.2	-169.02	-24.6	-1,220.3	1,619.1	1,594.2	24.95	64.894	
3,700.0	3,664.0	3,677.3	3,676.6	14.6	12.6	-169.23	-26.8	-1,219.4	1,635.5	1,609.8	25.73	63.561	
3,800.0	3,762.5	3,791.5	3,790.8	15.1	13.0	-169.47	-29.7	-1,217.3	1,651.0	1,624.5	26.52	62.262	
3,900.0	3,861.0	3,884.9	3,884.2	15.5	13.3	-169.64	-31.6	-1,215.5	1,666.3	1,639.1	27.21	61.231	
4,000.0	3,959.5	3,979.7	3,979.0	16.0	13.6	-169.78	-32.6	-1,213.8	1,681.8	1,653.8	27.92	60.245	
4,100.0	4,058.0	4,067.5	4,066.7	16.4	13.9	-169.86	-32.0	-1,212.8	1,697.7	1,669.1	28.58	59.398	
4,200.0	4,156.4	4,156.0	4,155.2	16.8	14.2	-169.88	-29.8	-1,212.5	1,714.2	1,685.0	29.25	58.608	
4,300.0	4,254.9	4,255.3	4,254.5	17.3	14.6	-169.87	-26.6	-1,212.5	1,731.0	1,701.1	29.96	57.776	
4,400.0	4,353.4	4,354.7	4,353.8	17.7	14.9	-169.87	-23.4	-1,212.5	1,747.8	1,717.1	30.67	56.980	
4,500.0	4,451.9	4,450.5	4,449.5	18.2	15.2	-169.87	-20.5	-1,212.5	1,764.6	1,733.3	31.37	56.249	
4,600.0	4,550.4	4,546.5	4,545.5	18.6	15.6	-169.87	-17.6	-1,212.6	1,781.6	1,749.5	32.07	55.550	
4,700.0	4,648.9	4,642.0	4,641.0	19.1	15.9	-169.88	-15.0	-1,212.9	1,798.7	1,766.0	32.77	54.890	
4,800.0	4,747.3	4,737.4	4,736.4	19.5	16.2	-169.90	-12.6	-1,213.3	1,816.0	1,782.5	33.47	54.261	
4,900.0	4,845.8	4,833.0	4,831.9	20.0	16.5	-169.92	-10.4	-1,213.9	1,833.5	1,799.3	34.17	53.661	
5,000.0	4,944.3	4,929.1	4,928.0	20.4	16.9	-169.94	-8.3	-1,214.6	1,851.1	1,816.2	34.87	53.085	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #216H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 166-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	5,027.5	5,026.4	20.9	17.2	-169.97	-6.3	-1,215.3	1,868.7	1,833.1	35.58	52.516	
5,200.0	5,141.3	5,125.4	5,124.3	21.3	17.6	-170.00	-4.4	-1,216.1	1,886.4	1,850.1	36.30	51.972	
5,300.0	5,239.7	5,222.4	5,221.2	21.8	17.9	-170.03	-2.4	-1,216.9	1,904.1	1,867.1	37.00	51.457	
5,400.0	5,338.2	5,318.9	5,317.7	22.2	18.2	-170.05	-0.4	-1,217.8	1,921.9	1,884.2	37.71	50.965	
5,500.0	5,436.7	5,414.6	5,413.4	22.7	18.6	-170.09	1.2	-1,218.7	1,939.8	1,901.4	38.41	50.499	
5,600.0	5,535.2	5,516.1	5,514.9	23.1	18.9	-170.13	2.7	-1,219.8	1,957.8	1,918.7	39.14	50.015	
5,700.0	5,633.7	5,629.0	5,627.7	23.6	19.3	-170.16	5.1	-1,220.5	1,975.3	1,935.4	39.93	49.466	
5,800.0	5,732.1	5,731.5	5,730.2	24.0	19.7	-170.16	7.9	-1,220.6	1,992.2	1,951.6	40.67	48.985	
5,900.0	5,830.6	5,828.8	5,827.5	24.5	20.0	-170.16	10.8	-1,220.7	2,009.2	1,967.8	41.38	48.551	
6,000.0	5,929.1	5,960.9	5,959.4	24.9	20.5	-170.13	15.8	-1,220.1	2,025.6	1,983.3	42.26	47.930	
6,100.0	6,027.6	6,083.6	6,081.9	25.4	20.9	-170.05	22.6	-1,217.6	2,040.0	1,996.9	43.09	47.344	
6,200.0	6,126.1	6,175.8	6,174.0	25.8	21.2	-169.99	27.7	-1,215.5	2,054.4	2,010.6	43.78	46.920	
6,300.0	6,224.5	6,274.8	6,272.8	26.3	21.6	-169.93	33.0	-1,213.5	2,069.0	2,024.5	44.51	46.484	
6,400.0	6,323.0	6,384.9	6,382.7	26.7	22.0	-169.86	39.5	-1,211.0	2,083.2	2,038.0	45.28	46.003	
6,500.0	6,421.5	6,493.7	6,491.2	27.2	22.3	-169.76	46.5	-1,208.0	2,097.0	2,050.9	46.05	45.533	
6,600.0	6,520.0	6,601.8	6,599.0	27.6	22.7	-169.67	53.7	-1,204.5	2,110.3	2,063.5	46.82	45.071	
6,700.0	6,618.5	6,695.4	6,692.4	28.1	23.1	-169.58	60.0	-1,201.4	2,123.5	2,076.0	47.53	44.679	
6,800.0	6,716.9	6,787.7	6,784.4	28.5	23.4	-169.51	65.9	-1,198.6	2,137.0	2,088.8	48.23	44.312	
6,900.0	6,815.4	6,894.2	6,890.7	29.0	23.8	-169.42	72.9	-1,195.4	2,150.6	2,101.6	48.99	43.898	
6,981.8	6,896.0	6,983.3	6,979.4	29.4	24.1	-169.33	79.4	-1,192.5	2,161.4	2,111.7	49.62	43.555	
7,000.0	6,913.9	7,003.0	6,999.1	29.5	24.2	-169.32	81.0	-1,191.8	2,163.6	2,113.9	49.76	43.478	
7,100.0	7,012.9	7,100.5	7,096.3	29.9	24.5	-169.25	88.1	-1,188.4	2,173.7	2,123.2	50.48	43.057	
7,200.0	7,112.3	7,205.4	7,200.9	30.3	24.9	-169.15	95.2	-1,184.6	2,179.5	2,128.3	51.23	42.546	
7,300.0	7,212.2	7,332.4	7,327.3	30.6	25.3	-168.91	106.4	-1,179.2	2,180.2	2,128.2	52.06	41.881	
7,381.8	7,294.0	7,416.8	7,411.1	30.9	25.6	-94.25	115.8	-1,175.1	2,177.0	2,124.3	52.65	41.351	
7,400.0	7,312.2	7,433.3	7,427.4	30.9	25.7	-94.20	117.6	-1,174.3	2,175.9	2,123.2	52.77	41.238	
7,500.0	7,412.2	7,523.8	7,517.3	31.2	26.0	-93.96	127.1	-1,170.2	2,170.6	2,117.2	53.42	40.629	
7,600.0	7,512.2	7,614.8	7,607.8	31.5	26.4	-93.73	135.8	-1,166.3	2,165.7	2,111.6	54.09	40.042	
7,633.8	7,546.0	7,645.7	7,638.6	31.6	26.5	-93.66	138.6	-1,165.1	2,164.1	2,109.8	54.31	39.848	
7,650.0	7,562.2	7,660.5	7,653.3	31.7	26.5	86.78	139.9	-1,164.5	2,163.4	2,109.0	54.42	39.757	
7,700.0	7,612.0	7,705.8	7,698.4	31.8	26.7	87.20	143.8	-1,162.7	2,161.0	2,106.3	54.73	39.482	
7,750.0	7,661.4	7,750.4	7,742.9	31.9	26.9	87.73	147.4	-1,161.1	2,158.5	2,103.5	55.04	39.216	
7,800.0	7,709.8	7,792.1	7,784.4	32.0	27.0	88.32	150.6	-1,159.6	2,156.1	2,100.8	55.33	38.966	
7,850.0	7,757.1	7,832.6	7,824.8	32.1	27.2	88.98	153.6	-1,158.3	2,153.8	2,098.2	55.61	38.729	
7,900.0	7,802.7	7,871.6	7,863.7	32.2	27.3	89.67	156.3	-1,157.1	2,151.7	2,095.9	55.88	38.507	
7,950.0	7,846.4	7,908.8	7,900.7	32.3	27.4	90.38	158.8	-1,156.1	2,150.1	2,093.9	56.13	38.303	
8,000.0	7,887.7	7,943.9	7,935.8	32.4	27.6	91.07	161.1	-1,155.2	2,148.9	2,092.5	56.37	38.118	
8,050.0	7,926.5	7,976.7	7,968.4	32.4	27.7	91.71	163.0	-1,154.4	2,148.4	2,091.8	56.60	37.956	
8,060.4	7,934.3	7,983.2	7,974.9	32.5	27.7	91.84	163.4	-1,154.2	2,148.3	2,091.7	56.65	37.925	
8,100.0	7,962.4	8,006.9	7,998.6	32.5	27.8	92.28	164.8	-1,153.7	2,148.6	2,091.8	56.82	37.817	
8,150.0	7,995.1	8,034.3	8,026.0	32.5	27.9	92.74	166.2	-1,153.1	2,149.8	2,092.7	57.02	37.704	
8,200.0	8,024.4	8,058.7	8,050.4	32.6	28.0	93.07	167.5	-1,152.7	2,151.9	2,094.7	57.20	37.619	
8,250.0	8,050.1	8,080.0	8,071.6	32.6	28.1	93.24	168.5	-1,152.3	2,155.2	2,097.8	57.37	37.564	
8,300.0	8,071.9	8,097.9	8,089.4	32.7	28.1	93.23	169.4	-1,152.0	2,159.7	2,102.2	57.53	37.539	
8,350.0	8,089.7	8,112.2	8,103.7	32.7	28.2	93.01	170.0	-1,151.8	2,165.4	2,107.8	57.67	37.547	
8,400.0	8,103.4	8,122.8	8,114.3	32.7	28.2	92.58	170.5	-1,151.6	2,172.5	2,114.7	57.80	37.589	
8,450.0	8,112.8	8,129.6	8,121.1	32.8	28.2	91.92	170.8	-1,151.5	2,180.8	2,122.9	57.90	37.665	
8,500.0	8,118.0	8,132.3	8,123.9	32.9	28.2	91.02	170.9	-1,151.5	2,190.3	2,132.3	57.98	37.775	
8,533.8	8,119.0	8,131.9	8,123.4	33.0	28.2	90.28	170.9	-1,151.5	2,197.4	2,139.4	58.03	37.869	
8,600.0	8,119.0	8,129.3	8,120.8	33.1	28.2	90.21	170.8	-1,151.5	2,212.8	2,154.7	58.11	38.079	
8,700.0	8,119.0	8,125.3	8,116.8	33.4	28.2	90.10	170.6	-1,151.6	2,239.6	2,181.3	58.26	38.441	
8,800.0	8,119.0	8,121.2	8,112.7	33.8	28.2	89.99	170.4	-1,151.7	2,270.4	2,212.0	58.43	38.857	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #216H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 166-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,900.0	8,119.0	8,117.0	8,108.6	34.3	28.2	89.88	170.2	-1,151.7	2,305.1	2,246.5	58.62	39.325	
9,000.0	8,119.0	8,112.7	8,104.3	34.9	28.2	89.77	170.0	-1,151.8	2,343.6	2,284.8	58.82	39.845	
9,100.0	8,119.0	8,108.4	8,099.9	35.5	28.2	89.65	169.9	-1,151.8	2,385.7	2,326.7	59.03	40.415	
9,200.0	8,119.0	8,103.9	8,095.5	36.3	28.1	89.53	169.7	-1,151.9	2,431.1	2,371.9	59.25	41.033	
9,300.0	8,119.0	8,099.4	8,091.0	37.1	28.1	89.41	169.4	-1,152.0	2,479.8	2,420.3	59.47	41.699	
9,400.0	8,119.0	8,094.8	8,086.3	37.9	28.1	89.29	169.2	-1,152.1	2,531.4	2,471.7	59.69	42.410	
9,500.0	8,119.0	8,090.0	8,081.6	38.8	28.1	89.16	169.0	-1,152.1	2,585.9	2,526.0	59.91	43.164	
9,600.0	8,119.0	8,085.2	8,076.8	39.8	28.1	89.03	168.8	-1,152.2	2,643.0	2,582.9	60.13	43.959	
9,700.0	8,119.0	8,080.2	8,071.8	40.8	28.1	88.90	168.5	-1,152.3	2,702.7	2,642.3	60.34	44.793	
9,800.0	8,119.0	8,075.2	8,066.8	41.8	28.0	88.77	168.3	-1,152.4	2,764.6	2,704.0	60.54	45.665	
9,900.0	8,119.0	8,070.0	8,061.6	42.9	28.0	88.63	168.1	-1,152.5	2,828.7	2,768.0	60.74	46.571	
10,000.0	8,119.0	8,064.7	8,056.3	44.0	28.0	88.49	167.8	-1,152.6	2,894.8	2,833.9	60.93	47.511	
10,100.0	8,119.0	8,059.3	8,050.9	45.2	28.0	88.34	167.5	-1,152.7	2,962.9	2,901.8	61.11	48.482	
10,200.0	8,119.0	8,053.7	8,045.4	46.3	28.0	88.20	167.2	-1,152.8	3,032.7	2,971.4	61.29	49.483	
10,300.0	8,119.0	8,048.0	8,039.7	47.5	27.9	88.04	167.0	-1,152.9	3,104.1	3,042.6	61.45	50.511	
10,400.0	8,119.0	8,042.2	8,033.9	48.8	27.9	87.89	166.7	-1,153.0	3,177.1	3,115.4	61.61	51.565	
10,500.0	8,119.0	8,036.3	8,027.9	50.0	27.9	87.73	166.3	-1,153.1	3,251.4	3,189.7	61.76	52.644	
10,600.0	8,119.0	8,030.2	8,021.8	51.3	27.9	87.57	166.0	-1,153.2	3,327.2	3,265.3	61.91	53.745	
10,700.0	8,119.0	8,023.9	8,015.6	52.6	27.8	87.40	165.7	-1,153.4	3,404.1	3,342.1	62.04	54.868	
10,800.0	8,119.0	8,017.5	8,009.2	54.0	27.8	87.23	165.3	-1,153.5	3,482.3	3,420.1	62.17	56.011	
10,900.0	8,119.0	8,010.9	8,002.6	55.3	27.8	87.06	165.0	-1,153.6	3,561.5	3,499.2	62.29	57.173	
11,000.0	8,119.0	8,004.2	7,995.9	56.7	27.8	86.88	164.6	-1,153.8	3,641.7	3,579.3	62.41	58.352	
11,100.0	8,119.0	7,997.2	7,989.0	58.0	27.8	86.69	164.2	-1,153.9	3,722.9	3,660.4	62.52	59.548	
11,200.0	8,119.0	7,990.1	7,981.9	59.4	27.7	86.51	163.8	-1,154.1	3,805.0	3,742.3	62.62	60.759	
11,300.0	8,119.0	7,982.8	7,974.6	60.8	27.7	86.31	163.4	-1,154.2	3,887.9	3,825.1	62.72	61.985	
11,400.0	8,119.0	7,975.3	7,967.1	62.2	27.7	86.11	163.0	-1,154.4	3,971.5	3,908.7	62.82	63.225	
11,500.0	8,119.0	15,132.1	11,594.1	63.6	71.5	149.50	-3,470.2	-1,036.5	4,044.8	3,953.7	91.12	44.391	
11,600.0	8,119.0	15,191.0	11,591.4	65.1	72.3	149.47	-3,529.0	-1,036.7	4,041.0	3,948.5	92.54	43.666	
11,700.0	8,119.0	15,226.8	11,590.4	66.5	72.7	149.47	-3,564.7	-1,036.6	4,038.3	3,944.6	93.67	43.110	
11,800.0	8,119.0	15,328.8	11,587.9	68.0	74.1	149.46	-3,666.7	-1,035.4	4,035.9	3,940.3	95.61	42.214	
11,900.0	8,119.0	15,426.7	11,587.7	69.4	75.5	149.50	-3,764.6	-1,031.2	4,033.8	3,936.3	97.43	41.401	
12,000.0	8,119.0	15,501.7	11,586.3	70.9	76.6	149.50	-3,839.5	-1,029.7	4,031.6	3,932.6	99.03	40.709	
12,100.0	8,119.0	15,567.0	11,585.5	72.4	77.5	149.49	-3,904.8	-1,029.8	4,030.7	3,930.2	100.54	40.091	
12,130.7	8,119.0	15,567.0	11,585.5	72.9	77.5	149.49	-3,904.8	-1,029.8	4,030.6	3,929.9	100.75	40.006	
12,200.0	8,119.0	15,615.8	11,585.0	73.9	78.2	149.47	-3,953.6	-1,030.7	4,030.8	3,929.0	101.85	39.576	
12,300.0	8,119.0	15,660.0	11,584.3	75.4	78.8	149.45	-3,997.7	-1,032.2	4,031.8	3,928.7	103.11	39.102	
12,400.0	8,119.0	16,080.1	11,577.1	76.9	84.8	149.37	-4,417.3	-1,031.6	4,033.1	3,924.0	109.14	36.955	
12,500.0	8,119.0	16,143.7	11,574.3	78.4	85.7	149.38	-4,480.9	-1,029.3	4,027.6	3,917.0	110.66	36.397	
12,600.0	8,119.0	16,228.0	11,570.2	79.9	86.9	149.38	-4,565.0	-1,026.0	4,022.0	3,909.5	112.44	35.771	
12,700.0	8,119.0	16,274.9	11,568.1	81.4	87.6	149.38	-4,611.8	-1,024.8	4,017.5	3,903.7	113.76	35.314	
12,800.0	8,119.0	16,321.0	11,566.9	82.9	88.3	149.36	-4,657.9	-1,024.8	4,015.1	3,900.0	115.09	34.888	
12,900.0	8,119.0	16,391.0	11,565.5	84.5	89.3	149.34	-4,727.9	-1,025.6	4,014.0	3,897.2	116.73	34.387	
13,000.0	8,119.0	13,000.0	11,557.8	86.0	41.0	149.25	-4,930.5	-1,027.3	4,011.6	3,926.2	85.34	47.006	
13,100.0	8,119.0	16,660.9	11,553.4	87.5	93.3	149.20	-4,997.4	-1,028.3	4,007.3	3,885.5	121.84	32.891	
13,200.0	8,119.0	16,699.0	11,552.0	89.1	93.9	149.18	-5,035.5	-1,028.9	4,005.1	3,882.0	123.08	32.540	
13,287.6	8,119.0	16,723.4	11,551.6	90.4	94.2	149.17	-5,059.9	-1,029.3	4,004.6	3,880.5	124.03	32.287	
13,300.0	8,119.0	16,728.4	11,551.5	90.6	94.3	149.17	-5,064.9	-1,029.4	4,004.6	3,880.4	124.19	32.247	
13,400.0	8,119.0	16,769.0	11,551.5	92.2	94.9	149.16	-5,105.5	-1,029.9	4,005.6	3,880.1	125.41	31.939	
13,500.0	8,119.0	16,832.2	11,552.7	93.7	95.8	149.15	-5,168.7	-1,030.6	4,007.9	3,881.0	126.93	31.575	
13,600.0	8,119.0	16,919.6	11,554.6	95.3	97.2	149.15	-5,256.0	-1,031.6	4,010.6	3,881.8	128.79	31.141	
13,700.0	8,119.0	17,321.6	11,555.0	96.8	103.2	149.22	-5,657.6	-1,023.8	4,010.6	3,875.9	134.69	29.776	
13,800.0	8,119.0	17,359.0	11,554.6	98.4	103.8	149.24	-5,694.9	-1,021.7	4,007.0	3,871.0	135.90	29.484	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #216H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 166-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,900.0	8,119.0	17,596.9	11,548.6	100.0	107.5	149.39	-5,931.9	-1,004.2	4,000.0	3,860.6	139.38	28.699	
14,000.0	8,119.0	17,642.0	11,548.7	101.5	108.2	149.44	-5,976.9	-1,000.4	3,995.2	3,854.5	140.67	28.401	
14,100.0	8,119.0	17,642.0	11,548.7	103.1	108.2	149.44	-5,976.9	-1,000.4	3,991.3	3,849.9	141.44	28.218	
14,200.0	8,119.0	17,736.0	11,549.1	104.7	109.6	149.50	-6,070.7	-995.2	3,989.2	3,845.9	143.30	27.838	
14,300.0	8,119.0	17,799.7	11,548.9	106.2	110.6	149.53	-6,134.4	-992.3	3,987.0	3,842.2	144.81	27.533	
14,400.0	8,119.0	17,898.7	11,550.7	107.8	112.1	149.61	-6,233.2	-986.4	3,985.9	3,839.2	146.69	27.172	
14,500.0	8,119.0	17,981.0	11,549.7	109.4	113.4	149.61	-6,315.5	-985.3	3,984.4	3,835.9	148.50	26.831	
14,600.0	8,119.0	18,113.5	11,543.9	111.0	115.4	149.48	-6,447.6	-991.6	3,983.4	3,832.2	151.24	26.338	
14,700.0	8,119.0	18,207.0	11,538.0	112.6	116.8	149.36	-6,540.8	-997.0	3,981.3	3,827.9	153.44	25.946	
14,800.0	8,119.0	18,276.2	11,533.7	114.2	117.9	149.27	-6,609.7	-1,001.5	3,979.7	3,824.5	155.28	25.630	
14,900.0	8,119.0	18,356.4	11,529.5	115.7	119.1	149.16	-6,689.6	-1,007.5	3,979.3	3,822.0	157.30	25.297	
14,950.5	8,119.0	18,410.1	11,526.5	116.5	119.9	149.08	-6,743.0	-1,011.8	3,979.1	3,820.5	158.56	25.096	
15,000.0	8,119.0	18,422.2	11,525.9	117.3	120.1	149.06	-6,755.0	-1,012.8	3,979.1	3,820.0	159.10	25.010	
15,100.0	8,119.0	18,462.9	11,524.4	118.9	120.7	149.01	-6,795.6	-1,016.1	3,980.3	3,819.9	160.45	24.808	
15,200.0	8,119.0	18,509.9	11,523.5	120.5	121.5	148.95	-6,842.4	-1,019.9	3,983.0	3,821.2	161.86	24.608	
15,300.0	8,119.0	18,572.6	11,524.4	122.1	122.4	148.92	-6,905.1	-1,022.5	3,986.8	3,823.4	163.44	24.392	
15,400.0	8,119.0	18,625.2	11,526.9	123.7	123.2	148.93	-6,957.6	-1,022.9	3,991.6	3,826.8	164.77	24.225	
15,500.0	8,119.0	18,872.2	11,536.4	125.3	127.1	149.00	-7,204.3	-1,021.6	3,994.5	3,825.6	168.93	23.646	
15,600.0	8,119.0	19,061.0	11,537.4	126.9	130.1	149.02	-7,393.1	-1,019.8	3,994.5	3,822.2	172.24	23.191	
15,668.8	8,119.0	19,110.7	11,537.1	128.0	130.8	149.02	-7,442.8	-1,019.1	3,994.0	3,820.6	173.41	23.032	
15,700.0	8,119.0	19,123.3	11,537.3	128.5	131.0	149.02	-7,455.4	-1,018.8	3,994.0	3,820.3	173.79	22.982	
15,800.0	8,119.0	19,210.5	11,539.7	130.1	132.4	149.07	-7,542.5	-1,016.3	3,995.1	3,819.5	175.60	22.751	
15,900.0	8,119.0	15,900.0	11,532.0	131.7	80.8	148.93	-7,775.6	-1,021.4	3,993.0	3,849.7	143.31	27.864	
16,000.0	8,119.0	19,483.2	11,530.5	133.3	136.7	148.90	-7,815.0	-1,022.2	3,991.2	3,810.0	181.19	22.027	
16,064.1	8,119.0	19,506.4	11,530.0	134.3	137.1	148.89	-7,838.2	-1,022.7	3,990.9	3,808.9	182.00	21.928	
16,100.0	8,119.0	19,535.0	11,529.8	134.9	137.5	148.88	-7,866.7	-1,023.2	3,991.0	3,808.4	182.67	21.848	
16,200.0	8,119.0	19,575.6	11,530.1	136.5	138.1	148.88	-7,907.3	-1,023.7	3,992.2	3,808.3	183.94	21.704	
16,300.0	8,119.0	20,008.0	11,526.5	138.1	145.0	148.95	-8,339.2	-1,012.7	3,993.0	3,802.8	190.22	20.992	
16,400.0	8,119.0	20,052.7	11,523.7	139.7	145.7	148.94	-8,383.8	-1,011.6	3,986.9	3,795.2	191.70	20.798	
16,500.0	8,119.0	20,103.0	11,521.3	141.4	146.5	148.93	-8,434.1	-1,011.4	3,982.6	3,789.3	193.25	20.609	
16,600.0	8,119.0	20,103.0	11,521.3	143.0	146.5	148.93	-8,434.1	-1,011.4	3,979.8	3,785.8	194.05	20.509	
16,700.0	8,119.0	20,154.5	11,519.8	144.6	147.3	148.90	-8,485.6	-1,011.9	3,978.5	3,783.0	195.55	20.345	
16,716.8	8,119.0	20,160.1	11,519.7	144.9	147.4	148.90	-8,491.1	-1,012.0	3,978.5	3,782.8	195.75	20.324	
16,800.0	8,119.0	20,197.0	11,519.6	146.2	148.0	148.89	-8,528.0	-1,012.6	3,979.1	3,782.3	196.87	20.212	
16,900.0	8,119.0	20,297.9	11,520.5	147.8	149.6	148.88	-8,628.9	-1,013.5	3,980.6	3,781.6	199.03	20.001	
17,000.0	8,119.0	20,406.4	11,523.6	149.4	151.3	148.94	-8,737.3	-1,010.1	3,981.7	3,780.6	201.11	19.798	
17,100.0	8,119.0	20,610.6	11,524.4	151.0	154.6	149.01	-8,941.3	-1,003.4	3,980.0	3,775.5	204.50	19.462	
17,189.6	8,119.0	20,632.9	11,524.2	152.5	154.9	149.01	-8,963.6	-1,003.1	3,979.2	3,773.7	205.46	19.368	
17,200.0	8,119.0	20,635.5	11,524.2	152.7	155.0	149.01	-8,966.2	-1,003.1	3,979.2	3,773.6	205.56	19.358	
17,300.0	8,119.0	20,670.0	11,525.0	154.3	155.5	149.02	-9,000.7	-1,002.7	3,980.4	3,773.7	206.69	19.258	
17,400.0	8,119.0	20,718.1	11,526.9	155.9	156.3	149.04	-9,048.8	-1,002.1	3,983.1	3,775.2	207.96	19.153	
17,500.0	8,119.0	20,830.8	11,531.4	157.5	158.1	149.08	-9,161.3	-1,000.8	3,986.4	3,776.2	210.16	18.968	
17,600.0	8,119.0	20,933.8	11,534.2	159.1	159.7	149.09	-9,264.3	-1,000.9	3,989.0	3,776.7	212.29	18.791	
17,700.0	8,119.0	21,094.1	11,536.4	160.7	162.3	149.08	-9,424.5	-1,002.3	3,990.9	3,775.5	215.36	18.532	
17,800.0	8,119.0	21,217.5	11,539.2	162.4	164.3	149.13	-9,547.9	-999.5	3,992.0	3,774.3	217.69	18.338	
17,900.0	8,119.0	21,410.3	11,542.7	164.0	167.4	149.23	-9,740.5	-991.7	3,992.1	3,771.3	220.79	18.081	
18,000.0	8,119.0	21,518.0	11,542.8	165.6	169.1	149.29	-9,848.1	-987.0	3,990.1	3,767.3	222.86	17.904	
18,100.0	8,119.0	18,100.0	11,537.9	167.2	114.1	149.37	-10,140.1	-975.5	3,989.1	3,801.0	188.08	21.210	
18,200.0	8,119.0	21,843.2	11,536.1	168.9	174.4	149.37	-10,172.8	-974.3	3,983.2	3,754.8	228.42	17.438	
18,300.0	8,119.0	21,869.4	11,535.2	170.5	174.8	149.37	-10,199.0	-973.6	3,979.1	3,749.5	229.63	17.329	
18,400.0	8,119.0	21,905.0	11,534.5	172.1	175.3	149.37	-10,234.5	-973.3	3,976.9	3,746.0	230.90	17.223	
18,500.0	8,119.0	22,021.3	11,533.1	173.7	177.2	149.37	-10,350.8	-971.9	3,975.7	3,742.4	233.25	17.045	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #216H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 166-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,600.0	8,119.0	22,094.0	11,531.6	175.4	178.4	149.36	-10,423.5	-971.0	3,973.7	3,738.6	235.01	16.908	
18,692.7	8,119.0	22,137.1	11,530.8	176.9	179.1	149.35	-10,466.6	-971.0	3,972.8	3,736.5	236.31	16.812	
18,700.0	8,119.0	22,139.4	11,530.8	177.0	179.1	149.35	-10,468.9	-971.0	3,972.8	3,736.4	236.39	16.806	
18,800.0	8,119.0	22,189.0	11,531.1	178.6	179.9	149.34	-10,518.5	-971.8	3,974.0	3,736.2	237.80	16.711	
18,900.0	8,119.0	18,900.0	11,531.9	180.2	127.3	149.33	-10,589.8	-973.0	3,976.0	3,771.8	204.17	19.474	
19,000.0	8,119.0	22,344.5	11,533.2	181.9	182.4	149.32	-10,673.9	-973.4	3,978.0	3,736.6	241.40	16.479	
19,100.0	8,119.0	22,404.0	11,535.5	183.5	183.4	149.34	-10,733.3	-972.8	3,981.1	3,738.2	242.81	16.396	
19,200.0	8,119.0	22,474.0	11,538.8	185.1	184.5	149.37	-10,803.3	-972.4	3,985.0	3,740.7	244.36	16.308	
19,300.0	8,119.0	22,556.0	11,542.8	186.8	185.8	149.39	-10,885.3	-972.6	3,989.6	3,743.5	246.11	16.211	
19,400.0	8,119.0	22,610.0	11,545.7	188.4	186.7	149.40	-10,939.1	-972.9	3,994.9	3,747.5	247.38	16.148	
19,500.0	8,119.0	22,979.7	11,558.4	190.0	192.6	149.47	-11,308.4	-972.8	4,000.1	3,746.6	253.52	15.778	
19,555.3	8,119.0	23,000.5	11,558.5	190.9	193.0	149.48	-11,329.2	-972.3	3,999.9	3,745.7	254.19	15.736	
19,600.0	8,119.0	23,041.0	11,559.2	191.6	193.6	149.49	-11,369.7	-971.6	4,000.2	3,745.2	255.04	15.685	
19,700.0	8,119.0	23,071.8	11,559.8	193.3	194.1	149.49	-11,400.5	-971.4	4,001.4	3,745.3	256.11	15.624	
19,800.0	8,119.0	23,135.0	11,560.7	194.9	195.1	149.48	-11,463.7	-972.1	4,003.5	3,745.8	257.68	15.537	
19,900.0	8,119.0	23,381.4	11,550.7	196.5	199.0	149.12	-11,708.7	-994.5	4,005.7	3,742.5	263.25	15.217	
19,972.1	8,119.0	23,419.0	11,549.0	197.7	199.6	149.07	-11,746.1	-997.0	4,005.6	3,741.1	264.46	15.146	
20,000.0	8,119.0	23,419.0	11,549.0	198.2	199.6	149.07	-11,746.1	-997.0	4,005.7	3,741.0	264.65	15.136	
20,100.0	8,119.0	23,475.0	11,547.4	199.8	200.5	149.01	-11,801.9	-1,000.8	4,006.9	3,740.6	266.34	15.044	
20,200.0	8,119.0	23,833.1	11,529.1	201.4	206.2	148.61	-12,159.0	-1,020.5	4,006.1	3,732.7	273.40	14.653	
20,300.0	8,119.0	23,923.5	11,521.0	203.1	207.7	148.49	-12,248.8	-1,024.7	4,001.3	3,725.4	275.87	14.504	
20,400.0	8,119.0	23,935.0	11,520.1	204.7	207.9	148.48	-12,260.3	-1,025.3	3,997.9	3,720.9	276.98	14.434	
20,486.1	8,119.0	23,935.0	11,520.1	206.1	207.9	148.48	-12,260.3	-1,025.3	3,997.0	3,719.3	277.65	14.396	
20,500.0	8,119.0	23,935.0	11,520.1	206.3	207.9	148.48	-12,260.3	-1,025.3	3,997.0	3,719.3	277.75	14.391	
20,606.7	8,119.0	23,935.0	11,520.1	208.1	207.9	148.48	-12,260.3	-1,025.3	3,998.8	3,720.4	278.40	14.364	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #217H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 140-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.35	-1.2	-200.2	200.2				
100.0	100.0	99.7	99.7	0.1	0.1	-90.30	-1.1	-200.0	200.0	199.7	0.27	737.004	
200.0	200.0	199.9	199.9	0.5	0.4	-90.18	-0.6	-199.6	199.6	198.7	0.90	221.451	
300.0	300.0	299.7	299.7	0.8	0.8	-90.11	-0.4	-199.2	199.2	197.5	1.62	123.240	
400.0	400.0	399.5	399.5	1.2	1.1	-90.13	-0.5	-198.8	198.8	196.5	2.32	85.529	
500.0	500.0	499.3	499.3	1.6	1.5	-90.29	-1.0	-198.6	198.6	195.6	3.03	65.521	
596.3	596.3	595.3	595.3	1.9	1.8	-90.56	-1.9	-198.6	198.6	194.9	3.71	53.507	CC
600.0	600.0	599.0	599.0	1.9	1.8	-90.57	-2.0	-198.6	198.6	194.8	3.74	53.133	
700.0	700.0	698.7	698.7	2.3	2.2	-90.93	-3.2	-198.6	198.7	194.2	4.44	44.719	
800.0	800.0	798.2	798.2	2.6	2.5	-91.34	-4.7	-198.9	198.9	193.8	5.15	38.623	
900.0	900.0	897.9	897.8	3.0	2.9	-91.80	-6.3	-199.3	199.4	193.6	5.86	34.038	
1,000.0	1,000.0	997.8	997.7	3.4	3.2	-92.16	-7.5	-199.9	200.1	193.5	6.57	30.457	ES
1,100.0	1,100.0	1,097.4	1,097.4	3.7	3.6	-166.88	-8.3	-200.6	202.4	195.2	7.27	27.843	
1,200.0	1,199.8	1,195.4	1,195.3	4.1	3.9	-167.41	-9.2	-201.7	208.7	200.7	7.96	26.206	
1,300.0	1,299.5	1,297.3	1,297.3	4.4	4.3	-168.27	-10.7	-203.2	218.8	210.2	8.68	25.226	
1,400.0	1,398.7	1,403.6	1,403.5	4.8	4.6	-169.73	-14.0	-201.9	229.9	220.5	9.40	24.443	
1,500.0	1,497.5	1,510.3	1,510.0	5.2	5.0	-171.43	-17.9	-197.1	241.3	231.1	10.13	23.817	
1,600.0	1,595.9	1,608.6	1,608.0	5.5	5.4	-172.87	-21.0	-191.3	253.1	242.2	10.84	23.357	
1,700.0	1,694.4	1,706.7	1,706.0	5.9	5.7	-173.83	-22.5	-186.2	265.5	253.9	11.54	23.001	
1,800.0	1,792.9	1,805.6	1,804.7	6.3	6.1	-174.47	-23.0	-181.4	278.1	265.9	12.25	22.710	
1,900.0	1,891.4	1,904.3	1,903.4	6.8	6.4	-174.87	-22.6	-176.9	290.9	277.9	12.95	22.456	
2,000.0	1,989.9	2,002.6	2,001.6	7.2	6.8	-175.20	-22.0	-172.7	303.9	290.3	13.66	22.246	
2,100.0	2,088.4	2,101.4	2,100.3	7.6	7.1	-175.53	-21.6	-168.7	317.2	302.8	14.37	22.070	
2,200.0	2,186.8	2,201.4	2,200.2	8.0	7.5	-175.84	-21.2	-164.4	330.3	315.2	15.09	21.891	
2,300.0	2,285.3	2,298.9	2,297.6	8.5	7.8	-176.13	-20.8	-160.2	343.4	327.6	15.80	21.734	
2,400.0	2,383.8	2,393.1	2,391.7	8.9	8.2	-176.40	-20.8	-157.2	357.6	341.1	16.50	21.676	
2,500.0	2,482.3	2,488.5	2,487.1	9.3	8.5	-176.65	-21.0	-155.2	373.0	355.8	17.20	21.691	
2,600.0	2,580.8	2,585.3	2,584.0	9.8	8.8	-176.86	-21.1	-153.9	389.0	371.1	17.90	21.730	
2,700.0	2,679.2	2,682.9	2,681.5	10.2	9.2	-177.02	-21.1	-153.0	405.5	386.9	18.61	21.786	
2,800.0	2,777.7	2,781.1	2,779.7	10.6	9.5	-177.14	-20.9	-152.3	422.1	402.8	19.33	21.841	
2,900.0	2,876.2	2,880.3	2,878.9	11.1	9.9	-177.23	-20.6	-151.6	438.7	418.7	20.04	21.888	
3,000.0	2,974.7	2,980.2	2,978.8	11.5	10.2	-177.32	-20.2	-150.7	455.1	434.3	20.77	21.914	
3,100.0	3,073.2	3,078.7	3,077.3	11.9	10.6	-177.40	-19.8	-149.6	471.3	449.8	21.48	21.939	
3,200.0	3,171.6	3,176.5	3,175.1	12.4	10.9	-177.44	-19.2	-148.8	487.7	465.5	22.19	21.974	
3,300.0	3,270.1	3,276.8	3,275.4	12.8	11.3	-177.51	-18.8	-147.8	504.0	481.1	22.92	21.989	
3,400.0	3,368.6	3,377.9	3,376.5	13.3	11.6	-177.72	-19.6	-146.1	519.9	496.3	23.66	21.979	
3,500.0	3,467.1	3,477.8	3,476.4	13.7	12.0	-178.00	-20.9	-143.9	535.5	511.1	24.39	21.958	
3,600.0	3,565.6	3,577.8	3,576.3	14.2	12.4	-178.23	-22.1	-141.5	550.8	525.7	25.12	21.930	
3,700.0	3,664.0	3,680.1	3,678.6	14.6	12.7	-178.52	-23.7	-138.6	565.8	539.9	25.86	21.876	
3,800.0	3,762.5	3,782.5	3,780.9	15.1	13.1	-178.93	-26.4	-134.7	580.1	553.5	26.61	21.802	
3,900.0	3,861.0	3,882.4	3,880.7	15.5	13.4	-179.09	-26.9	-131.1	594.2	566.8	27.34	21.736	
4,000.0	3,959.5	3,982.1	3,980.3	16.0	13.8	-178.95	-24.2	-128.1	608.0	579.9	28.06	21.668	
4,100.0	4,058.0	4,080.1	4,078.2	16.4	14.1	-178.70	-20.5	-125.5	621.9	593.1	28.77	21.615	
4,200.0	4,156.4	4,182.5	4,180.5	16.8	14.5	-178.43	-16.3	-122.9	635.8	606.3	29.51	21.550	
4,300.0	4,254.9	4,292.8	4,290.6	17.3	14.9	-178.08	-10.7	-118.8	648.5	618.2	30.27	21.419	
4,400.0	4,353.4	4,405.4	4,402.8	17.7	15.3	-177.69	-4.0	-112.8	659.3	628.2	31.05	21.234	
4,500.0	4,451.9	4,519.4	4,516.3	18.2	15.7	-177.37	2.7	-104.1	668.0	636.2	31.82	20.995	
4,600.0	4,550.4	4,623.8	4,620.0	18.6	16.1	-177.02	9.9	-94.9	675.3	642.7	32.55	20.743	
4,700.0	4,648.9	4,728.0	4,723.3	19.1	16.4	-176.49	19.4	-85.6	681.9	648.6	33.29	20.480	
4,800.0	4,747.3	4,823.8	4,818.3	19.5	16.8	-175.97	28.6	-77.1	688.6	654.6	34.02	20.243	
4,900.0	4,845.8	4,921.7	4,915.4	20.0	17.2	-175.47	37.7	-68.7	695.8	661.0	34.75	20.024	
5,000.0	4,944.3	5,022.3	5,015.2	20.4	17.5	-174.96	47.1	-60.1	702.9	667.5	35.48	19.810	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #217H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 140-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	5,122.0	5,114.1	20.9	17.9	-174.46	56.6	-51.5	710.0	673.8	36.22	19.604	
5,200.0	5,141.3	5,220.0	5,211.2	21.3	18.3	-173.94	66.4	-43.2	717.3	680.4	36.95	19.412	
5,300.0	5,239.7	5,317.8	5,308.2	21.8	18.6	-173.37	76.8	-35.3	724.9	687.2	37.69	19.234	
5,400.0	5,338.2	5,415.7	5,405.2	22.2	19.0	-172.80	87.3	-27.6	732.8	694.4	38.43	19.070	
5,500.0	5,436.7	5,512.3	5,500.9	22.7	19.3	-172.25	97.7	-20.2	741.0	701.8	39.16	18.922	
5,600.0	5,535.2	5,607.6	5,595.5	23.1	19.7	-171.75	107.5	-13.4	749.8	709.9	39.89	18.796	
5,700.0	5,633.7	5,707.0	5,694.2	23.6	20.1	-171.27	117.2	-6.7	759.0	718.4	40.64	18.679	
5,800.0	5,732.1	5,810.8	5,797.3	24.0	20.5	-170.84	126.7	0.9	767.9	726.5	41.40	18.548	
5,900.0	5,830.6	5,908.0	5,893.9	24.5	20.8	-170.49	135.0	8.4	776.5	734.4	42.14	18.428	
6,000.0	5,929.1	6,001.9	5,987.2	24.9	21.2	-170.20	142.4	15.1	785.8	742.9	42.86	18.333	
6,100.0	6,027.6	6,105.2	6,089.9	25.4	21.6	-169.91	150.3	22.1	795.4	751.8	43.62	18.233	
6,200.0	6,126.1	6,213.3	6,197.4	25.8	22.0	-169.59	158.9	30.5	804.1	759.7	44.41	18.107	
6,300.0	6,224.5	6,313.3	6,296.7	26.3	22.4	-169.28	167.1	38.8	812.2	767.0	45.16	17.984	
6,400.0	6,323.0	6,412.7	6,395.4	26.7	22.8	-168.96	175.7	47.0	820.3	774.4	45.91	17.867	
6,500.0	6,421.5	6,514.0	6,496.0	27.2	23.1	-168.62	184.6	55.5	828.4	781.7	46.68	17.748	
6,600.0	6,520.0	6,615.4	6,596.6	27.6	23.5	-168.29	193.5	64.2	836.3	788.9	47.44	17.629	
6,700.0	6,618.5	6,711.5	6,692.0	28.1	23.9	-168.01	201.7	72.3	844.4	796.2	48.18	17.524	
6,800.0	6,716.9	6,809.4	6,789.3	28.5	24.3	-167.75	209.6	80.3	852.7	803.8	48.93	17.427	
6,900.0	6,815.4	6,911.2	6,890.4	29.0	24.7	-167.50	217.6	88.7	861.1	811.4	49.70	17.326	
6,981.8	6,896.0	6,994.6	6,973.2	29.4	25.0	-167.31	224.0	95.8	867.7	817.4	50.32	17.243	
7,000.0	6,913.9	7,013.1	6,991.7	29.5	25.1	-167.27	225.4	97.4	869.1	818.6	50.46	17.222	
7,100.0	7,012.9	7,115.4	7,093.2	29.9	25.5	-167.05	232.9	106.4	874.0	822.8	51.22	17.062	
7,200.0	7,112.3	7,224.6	7,201.7	30.3	25.9	-166.73	240.8	116.6	874.2	822.2	52.00	16.811	
7,300.0	7,212.2	7,339.6	7,315.6	30.6	26.3	-166.18	250.5	129.1	868.6	815.8	52.79	16.454	
7,381.8	7,294.0	7,418.9	7,394.0	30.9	26.7	-91.27	257.7	138.4	860.1	806.8	53.38	16.114	
7,400.0	7,312.2	7,435.9	7,410.8	30.9	26.7	-91.18	259.2	140.4	858.0	804.5	53.51	16.035	
7,500.0	7,412.2	7,529.7	7,503.7	31.2	27.1	-90.67	267.0	150.8	846.8	792.5	54.22	15.618	
7,600.0	7,512.2	7,624.4	7,597.6	31.5	27.5	-90.18	274.1	160.8	836.1	781.2	54.92	15.223	
7,633.8	7,546.0	7,656.6	7,629.6	31.6	27.6	-90.02	276.4	164.0	832.7	777.5	55.16	15.094	
7,650.0	7,562.2	7,671.9	7,644.8	31.7	27.7	90.56	277.4	165.6	831.0	775.7	55.28	15.034	
7,700.0	7,612.0	7,719.1	7,691.6	31.8	27.8	91.51	280.6	170.3	826.1	770.5	55.62	14.852	
7,750.0	7,661.4	7,760.8	7,733.0	31.9	28.0	92.60	283.3	174.2	821.7	765.7	55.95	14.685	
7,800.0	7,709.8	7,799.3	7,771.3	32.0	28.2	93.76	285.4	177.5	818.1	761.8	56.27	14.540	
7,850.0	7,757.1	7,836.8	7,808.7	32.1	28.3	94.99	287.2	180.2	815.7	759.1	56.57	14.419	
7,900.0	7,802.7	7,873.2	7,845.0	32.2	28.4	96.24	288.8	182.5	814.7	757.8	56.87	14.325	
7,907.5	7,809.4	7,878.5	7,850.3	32.2	28.4	96.43	289.0	182.8	814.7	757.8	56.91	14.314	
7,950.0	7,846.4	7,908.1	7,879.9	32.3	28.6	97.46	290.0	184.3	815.3	758.1	57.16	14.263	
8,000.0	7,887.7	7,943.1	7,914.8	32.4	28.7	98.65	291.0	185.7	817.8	760.3	57.46	14.233 SF	
8,050.0	7,926.5	7,977.4	7,949.0	32.4	28.8	99.76	291.8	187.0	822.3	764.5	57.75	14.238	
8,100.0	7,962.4	8,009.1	7,980.8	32.5	28.9	100.66	292.6	188.0	829.0	771.0	58.03	14.285	
8,150.0	7,995.1	8,038.2	8,009.8	32.5	29.0	101.27	293.1	188.8	838.2	779.9	58.30	14.378	
8,200.0	8,024.4	8,064.2	8,035.8	32.6	29.1	101.54	293.6	189.4	850.2	791.6	58.55	14.519	
8,250.0	8,050.1	8,087.1	8,058.7	32.6	29.2	101.39	293.9	189.8	864.9	806.1	58.78	14.713	
8,300.0	8,071.9	8,106.6	8,078.2	32.7	29.3	100.77	294.2	190.1	882.4	823.4	58.99	14.959	
8,350.0	8,089.7	8,122.5	8,094.1	32.7	29.3	99.61	294.3	190.3	902.8	843.6	59.16	15.259	
8,400.0	8,103.4	8,134.6	8,106.1	32.7	29.4	97.86	294.5	190.5	925.7	866.4	59.30	15.611	
8,450.0	8,112.8	8,142.8	8,114.3	32.8	29.4	95.49	294.6	190.5	951.2	891.8	59.41	16.011	
8,500.0	8,118.0	8,147.0	8,118.6	32.9	29.4	92.48	294.6	190.6	978.8	919.4	59.48	16.457	
8,533.8	8,119.0	8,147.6	8,119.2	33.0	29.4	90.09	294.6	190.6	998.6	939.1	59.51	16.781	
8,600.0	8,119.0	8,147.0	8,118.5	33.1	29.4	90.04	294.6	190.6	1,039.4	979.9	59.55	17.455	
8,700.0	8,119.0	8,146.0	8,117.6	33.4	29.4	89.97	294.6	190.6	1,105.8	1,046.2	59.59	18.556	
8,800.0	8,119.0	8,145.0	8,116.6	33.8	29.4	89.90	294.6	190.6	1,176.9	1,117.3	59.62	19.739	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #217H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 140-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,900.0	8,119.0	8,144.1	8,115.7	34.3	29.4	89.84	294.6	190.6	1,252.0	1,192.3	59.64	20.993	
9,000.0	8,119.0	8,143.1	8,114.7	34.9	29.4	89.77	294.6	190.5	1,330.3	1,270.7	59.65	22.303	
9,100.0	8,119.0	8,142.1	8,113.7	35.5	29.4	89.70	294.6	190.5	1,411.4	1,351.7	59.65	23.662	
9,200.0	8,119.0	8,141.1	8,112.7	36.3	29.4	89.63	294.5	190.5	1,494.8	1,435.1	59.65	25.060	
9,300.0	8,119.0	8,140.1	8,111.7	37.1	29.4	89.55	294.5	190.5	1,580.1	1,520.4	59.65	26.491	
9,400.0	8,119.0	8,139.2	8,110.7	37.9	29.4	89.48	294.5	190.5	1,667.0	1,607.4	59.64	27.950	
9,500.0	8,119.0	8,138.2	8,109.7	38.8	29.4	89.41	294.5	190.5	1,755.3	1,695.7	59.64	29.433	
9,600.0	8,119.0	8,137.1	8,108.7	39.8	29.4	89.34	294.5	190.5	1,844.9	1,785.2	59.63	30.936	
9,700.0	8,119.0	8,138.1	8,109.7	40.8	29.4	89.41	294.5	190.5	1,935.4	1,875.8	59.65	32.449	
9,800.0	8,119.0	8,137.1	8,108.7	41.8	29.4	89.34	294.5	190.5	2,026.8	1,967.2	59.64	33.983	
9,900.0	8,119.0	8,136.1	8,107.7	42.9	29.4	89.27	294.5	190.5	2,119.1	2,059.4	59.64	35.529	
10,000.0	8,119.0	8,135.1	8,106.7	44.0	29.4	89.20	294.5	190.5	2,211.9	2,152.3	59.64	37.087	
10,100.0	8,119.0	8,134.1	8,105.7	45.2	29.4	89.12	294.5	190.4	2,305.4	2,245.8	59.64	38.653	
10,200.0	8,119.0	8,133.1	8,104.7	46.3	29.4	89.05	294.4	190.4	2,399.4	2,339.8	59.65	40.227	
10,300.0	8,119.0	8,132.0	8,103.6	47.5	29.4	88.97	294.4	190.4	2,493.9	2,434.3	59.65	41.808	
10,400.0	8,119.0	8,130.9	8,102.5	48.8	29.4	88.90	294.4	190.4	2,588.8	2,529.1	59.66	43.395	
10,500.0	8,119.0	8,129.8	8,101.4	50.0	29.4	88.82	294.4	190.4	2,684.1	2,624.4	59.66	44.987	
10,600.0	8,119.0	8,128.7	8,100.3	51.3	29.4	88.74	294.4	190.4	2,779.6	2,720.0	59.67	46.583	
10,700.0	8,119.0	8,127.6	8,099.1	52.6	29.3	88.66	294.4	190.4	2,875.5	2,815.9	59.68	48.182	
10,800.0	8,119.0	8,126.4	8,098.0	54.0	29.3	88.57	294.4	190.4	2,971.7	2,912.0	59.69	49.784	
10,900.0	8,119.0	8,125.2	8,096.8	55.3	29.3	88.49	294.4	190.3	3,068.1	3,008.4	59.70	51.389	
11,000.0	8,119.0	8,124.0	8,095.6	56.7	29.3	88.40	294.4	190.3	3,164.7	3,105.0	59.72	52.996	
11,100.0	8,119.0	8,122.7	8,094.3	58.0	29.3	88.31	294.3	190.3	3,261.6	3,201.8	59.73	54.604	
11,200.0	8,119.0	8,121.5	8,093.0	59.4	29.3	88.22	294.3	190.3	3,358.6	3,298.8	59.75	56.214	
11,300.0	8,119.0	8,120.2	8,091.7	60.8	29.3	88.13	294.3	190.3	3,455.8	3,396.0	59.76	57.825	
11,400.0	8,119.0	14,806.0	11,569.5	62.2	69.0	167.97	-3,259.1	277.1	3,530.3	3,461.8	68.43	51.591	
11,500.0	8,119.0	14,864.8	11,567.9	63.6	69.8	167.97	-3,317.9	278.2	3,527.7	3,458.2	69.50	50.756	
11,587.5	8,119.0	14,901.0	11,567.7	64.9	70.3	167.98	-3,354.0	278.6	3,527.2	3,456.9	70.30	50.173	
11,600.0	8,119.0	14,901.0	11,567.7	65.1	70.3	167.98	-3,354.0	278.6	3,527.2	3,456.8	70.36	50.128	
11,700.0	8,119.0	14,967.3	11,568.4	66.5	71.2	167.99	-3,420.3	279.6	3,528.0	3,456.5	71.52	49.330	
11,800.0	8,119.0	15,089.0	11,570.5	68.0	72.8	168.03	-3,541.9	282.7	3,529.3	3,456.1	73.20	48.217	
11,900.0	8,119.0	11,900.0	11,568.3	69.4	39.8	168.09	-3,786.6	288.2	3,528.3	3,476.9	51.44	68.595	
12,000.0	8,119.0	15,471.0	11,562.0	70.9	78.1	168.10	-3,923.7	290.7	3,523.2	3,445.2	78.01	45.164	
12,100.0	8,119.0	15,505.9	11,560.5	72.4	78.6	168.10	-3,958.5	291.4	3,519.4	3,440.5	78.87	44.620	
12,200.0	8,119.0	15,528.8	11,560.3	73.9	79.0	168.11	-3,981.4	292.2	3,517.9	3,438.3	79.61	44.189	
12,206.6	8,119.0	15,530.3	11,560.3	74.0	79.0	168.11	-3,982.9	292.2	3,517.8	3,438.2	79.66	44.162	
12,300.0	8,119.0	15,565.0	11,561.1	75.4	79.5	168.14	-4,017.6	293.9	3,518.6	3,438.2	80.46	43.732	
12,400.0	8,119.0	12,400.0	11,549.5	76.9	41.6	168.03	-4,396.5	292.0	3,515.3	3,456.4	58.96	59.621	
12,500.0	8,119.0	15,996.8	11,546.0	78.4	85.7	168.00	-4,448.6	291.2	3,509.3	3,423.2	86.08	40.769	
12,600.0	8,119.0	16,039.0	11,544.1	79.9	86.3	168.00	-4,490.7	291.4	3,504.9	3,417.9	87.05	40.265	
12,700.0	8,119.0	16,079.6	11,543.1	81.4	86.9	168.00	-4,531.3	292.2	3,502.2	3,414.2	87.99	39.804	
12,800.0	8,119.0	16,134.0	11,543.0	82.9	87.7	168.03	-4,585.7	294.0	3,501.3	3,412.2	89.04	39.321	
12,819.2	8,119.0	16,134.0	11,543.0	83.2	87.7	168.03	-4,585.7	294.0	3,501.2	3,412.1	89.14	39.277	
12,900.0	8,119.0	16,233.1	11,543.8	84.5	89.1	168.09	-4,684.7	298.1	3,501.3	3,410.7	90.54	38.672	
12,938.7	8,119.0	16,253.6	11,543.9	85.1	89.4	168.10	-4,705.2	299.1	3,501.2	3,410.3	90.94	38.501	
13,000.0	8,119.0	16,290.2	11,544.4	86.0	90.0	168.13	-4,741.6	300.9	3,501.4	3,409.8	91.61	38.223	
13,100.0	8,119.0	16,376.4	11,546.3	87.5	91.3	168.20	-4,827.8	305.7	3,502.5	3,409.6	92.95	37.682	
13,200.0	8,119.0	16,482.4	11,548.3	89.1	92.8	168.28	-4,933.6	310.8	3,503.5	3,409.0	94.50	37.073	
13,300.0	8,119.0	16,633.7	11,549.0	90.6	95.1	168.31	-5,084.9	313.2	3,503.8	3,407.2	96.61	36.269	
13,400.0	8,119.0	16,830.2	11,542.4	92.2	98.0	168.16	-5,281.0	306.3	3,500.8	3,401.4	99.38	35.225	
13,500.0	8,119.0	16,859.7	11,541.5	93.7	98.4	168.14	-5,310.6	305.4	3,498.6	3,398.3	100.25	34.899	
13,577.4	8,119.0	16,893.0	11,541.4	94.9	98.9	168.13	-5,343.8	305.2	3,498.2	3,397.2	101.01	34.633	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #217H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 140-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,600.0	8,119.0	16,893.0	11,541.4	95.3	98.9	168.13	-5,343.8	305.2	3,498.3	3,397.2	101.12	34.596	
13,700.0	8,119.0	16,932.8	11,542.1	96.8	99.5	168.14	-5,383.6	305.6	3,499.9	3,397.8	102.04	34.300	
13,800.0	8,119.0	16,988.0	11,544.2	98.4	100.4	168.16	-5,438.7	307.0	3,503.1	3,400.0	103.09	33.979	
13,900.0	8,119.0	17,261.4	11,547.4	100.0	104.5	168.21	-5,712.0	311.2	3,503.6	3,397.0	106.56	32.880	
14,000.0	8,119.0	14,000.0	11,537.3	101.5	57.6	167.93	-5,914.2	296.7	3,499.8	3,417.1	82.73	42.304	
14,100.0	8,119.0	17,522.0	11,534.4	103.1	108.4	167.87	-5,971.7	294.3	3,496.0	3,385.2	110.83	31.543	
14,200.0	8,119.0	17,616.0	11,531.9	104.7	109.9	167.85	-6,065.6	293.8	3,493.6	3,381.2	112.41	31.078	
14,300.0	8,119.0	17,722.2	11,528.5	106.2	111.5	167.84	-6,171.7	294.7	3,490.4	3,376.3	114.10	30.590	
14,400.0	8,119.0	17,781.9	11,527.0	107.8	112.4	167.84	-6,231.4	295.5	3,487.8	3,372.6	115.28	30.255	
14,500.0	8,119.0	17,842.0	11,526.6	109.4	113.3	167.86	-6,291.5	296.8	3,486.7	3,370.3	116.44	29.944	
14,541.0	8,119.0	17,858.0	11,526.7	110.1	113.6	167.86	-6,307.5	297.3	3,486.6	3,369.8	116.82	29.847	
14,600.0	8,119.0	17,904.3	11,527.0	111.0	114.3	167.88	-6,353.8	298.7	3,486.7	3,369.1	117.60	29.648	
14,700.0	8,119.0	17,972.2	11,527.9	112.6	115.3	167.92	-6,421.6	301.0	3,487.5	3,368.7	118.81	29.353	
14,800.0	8,119.0	18,283.0	11,525.1	114.2	120.2	168.08	-6,732.1	313.2	3,486.2	3,363.7	122.51	28.457	
14,900.0	8,119.0	18,342.6	11,522.6	115.7	121.1	168.09	-6,791.6	314.9	3,481.8	3,358.1	123.69	28.150	
15,000.0	8,119.0	18,383.6	11,521.7	117.3	121.8	168.10	-6,832.6	316.1	3,479.1	3,354.4	124.66	27.909	
15,100.0	8,119.0	18,446.5	11,521.4	118.9	122.7	168.13	-6,895.4	318.3	3,477.9	3,352.1	125.83	27.639	
15,200.0	8,119.0	18,547.1	11,521.1	120.5	124.3	168.18	-6,996.0	321.8	3,477.0	3,349.6	127.40	27.293	
15,300.0	8,119.0	18,636.7	11,521.1	122.1	125.7	168.23	-7,085.5	325.4	3,476.3	3,347.5	128.83	26.983	
15,393.7	8,119.0	18,709.8	11,521.3	123.6	126.9	168.26	-7,158.6	328.1	3,476.0	3,345.9	130.07	26.724	
15,400.0	8,119.0	18,713.5	11,521.3	123.7	126.9	168.26	-7,162.3	328.2	3,476.0	3,345.9	130.14	26.710	
15,500.0	8,119.0	18,772.7	11,522.0	125.3	127.9	168.29	-7,221.4	330.0	3,476.7	3,345.5	131.26	26.488	
15,600.0	8,119.0	18,854.0	11,523.8	126.9	129.1	168.32	-7,302.7	332.1	3,478.4	3,345.8	132.62	26.228	
15,700.0	8,119.0	15,700.0	11,525.8	128.5	79.6	168.36	-7,429.4	334.7	3,479.6	3,371.4	108.21	32.156	
15,800.0	8,119.0	19,033.1	11,526.6	130.1	132.0	168.37	-7,481.7	335.6	3,481.1	3,345.5	135.55	25.682	
15,900.0	8,119.0	19,076.7	11,528.1	131.7	132.6	168.38	-7,525.2	336.1	3,484.4	3,347.9	136.47	25.532	
16,000.0	8,119.0	19,170.8	11,532.2	133.3	134.1	168.40	-7,619.3	336.9	3,488.5	3,350.5	138.00	25.279	
16,100.0	8,119.0	19,271.7	11,536.5	134.9	135.7	168.42	-7,720.1	337.8	3,492.7	3,353.1	139.61	25.017	
16,200.0	8,119.0	19,453.4	11,542.4	136.5	138.6	168.40	-7,901.6	336.6	3,496.4	3,354.1	142.27	24.576	
16,300.0	8,119.0	19,518.2	11,543.8	138.1	139.6	168.38	-7,966.4	335.6	3,498.9	3,355.4	143.51	24.381	
16,400.0	8,119.0	19,692.6	11,545.5	139.7	142.3	168.32	-8,140.8	332.6	3,500.1	3,353.9	146.12	23.953	
16,500.0	8,119.0	19,773.5	11,546.0	141.4	143.6	168.30	-8,221.7	331.7	3,501.0	3,353.5	147.57	23.725	
16,600.0	8,119.0	19,861.6	11,547.3	143.0	145.0	168.30	-8,309.7	331.8	3,502.6	3,353.5	149.07	23.497	
16,700.0	8,119.0	19,946.1	11,549.1	144.6	146.3	168.33	-8,394.2	333.9	3,504.3	3,353.8	150.46	23.290	
16,800.0	8,119.0	20,008.0	11,551.1	146.2	147.3	168.37	-8,456.1	336.0	3,506.8	3,355.2	151.58	23.135	
16,900.0	8,119.0	20,083.9	11,554.3	147.8	148.5	168.42	-8,531.8	339.2	3,510.3	3,357.4	152.83	22.969	
17,000.0	8,119.0	20,269.6	11,559.3	149.4	151.5	168.53	-8,717.3	345.8	3,511.8	3,356.5	155.33	22.608	
17,100.0	8,119.0	20,395.4	11,561.3	151.0	153.5	168.57	-8,843.1	349.0	3,513.0	3,355.8	157.19	22.348	
17,200.0	8,119.0	20,488.0	11,562.4	152.7	155.0	168.60	-8,935.6	351.1	3,513.8	3,355.1	158.70	22.141	
17,300.0	8,119.0	20,546.2	11,563.5	154.3	155.9	168.63	-8,993.8	352.9	3,515.3	3,355.5	159.79	21.999	
17,400.0	8,119.0	20,781.0	11,565.8	155.9	159.7	168.68	-9,228.3	357.0	3,516.8	3,353.9	162.88	21.591	
17,500.0	8,119.0	20,859.0	11,563.8	157.5	160.9	168.64	-9,306.3	355.3	3,515.0	3,350.6	164.35	21.387	
17,600.0	8,119.0	20,921.2	11,563.2	159.1	161.9	168.64	-9,368.5	355.9	3,514.0	3,348.5	165.56	21.225	
17,604.2	8,119.0	20,923.1	11,563.2	159.2	161.9	168.64	-9,370.4	355.9	3,514.0	3,348.4	165.60	21.219	
17,700.0	8,119.0	20,986.2	11,564.0	160.7	162.9	168.67	-9,433.4	357.9	3,514.7	3,347.9	166.75	21.078	
17,800.0	8,119.0	21,255.2	11,559.2	162.4	167.2	168.56	-9,702.3	353.3	3,513.7	3,343.3	170.43	20.616	
17,900.0	8,119.0	21,319.9	11,556.6	164.0	168.3	168.52	-9,766.9	351.6	3,510.3	3,338.5	171.79	20.434	
18,000.0	8,119.0	18,000.0	11,552.5	165.6	115.5	168.46	-9,877.1	349.4	3,507.2	3,361.4	145.79	24.056	
18,100.0	8,119.0	21,485.2	11,550.8	167.2	170.9	168.43	-9,932.1	348.7	3,504.6	3,329.7	174.86	20.042	
18,200.0	8,119.0	21,538.2	11,550.0	168.9	171.7	168.42	-9,985.1	348.3	3,503.4	3,327.4	176.02	19.904	
18,297.4	8,119.0	21,616.8	11,549.7	170.4	173.0	168.41	-10,063.7	348.0	3,503.2	3,325.7	177.43	19.744	
18,300.0	8,119.0	21,619.0	11,549.7	170.5	173.0	168.41	-10,065.9	348.0	3,503.2	3,325.7	177.47	19.739	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #217H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 140-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,400.0	8,119.0	21,704.0	11,549.8	172.1	174.4	168.40	-10,150.9	348.1	3,503.4	3,324.4	178.96	19.577	
18,500.0	8,119.0	21,986.4	11,541.1	173.7	178.9	168.24	-10,433.0	341.6	3,500.4	3,317.6	182.86	19.142	
18,600.0	8,119.0	18,600.0	11,535.2	175.4	124.4	168.23	-10,546.4	342.8	3,495.3	3,339.2	156.08	22.395	
18,700.0	8,119.0	22,094.0	11,535.6	177.0	180.6	168.23	-10,540.4	342.7	3,491.8	3,306.5	185.25	18.849	
18,800.0	8,119.0	22,150.2	11,533.9	178.6	181.5	168.24	-10,596.6	344.0	3,489.3	3,302.9	186.40	18.720	
18,823.3	8,119.0	22,156.3	11,533.9	179.0	181.6	168.24	-10,602.6	344.2	3,489.2	3,302.6	186.58	18.701	
18,900.0	8,119.0	22,189.0	11,534.5	180.2	182.2	168.26	-10,635.4	345.4	3,489.6	3,302.3	187.29	18.632	
19,000.0	8,119.0	22,237.6	11,536.0	181.9	183.0	168.30	-10,683.9	347.7	3,491.6	3,303.3	188.24	18.549	
19,100.0	8,119.0	22,329.8	11,539.2	183.5	184.4	168.38	-10,775.9	352.6	3,494.0	3,304.4	189.62	18.426	
19,200.0	8,119.0	22,447.0	11,543.3	185.1	186.4	168.47	-10,892.9	358.1	3,496.6	3,305.3	191.30	18.278	
19,300.0	8,119.0	22,561.3	11,546.1	186.8	188.2	168.54	-11,007.1	362.5	3,498.4	3,305.4	192.99	18.128	
19,400.0	8,119.0	22,635.4	11,548.2	188.4	189.4	168.59	-11,081.1	365.4	3,500.4	3,306.2	194.22	18.023	
19,500.0	8,119.0	22,863.9	11,550.1	190.0	193.1	168.69	-11,309.4	372.8	3,500.3	3,303.2	197.17	17.753	
19,600.0	8,119.0	22,955.3	11,549.6	191.6	194.6	168.74	-11,400.8	376.3	3,499.2	3,300.6	198.63	17.617	
19,700.0	8,119.0	23,199.8	11,542.6	193.3	198.5	168.66	-11,645.0	374.5	3,497.4	3,295.5	201.90	17.323	
19,800.0	8,119.0	23,313.8	11,535.5	194.9	200.3	168.56	-11,758.6	370.0	3,492.1	3,288.3	203.90	17.127	
19,900.0	8,119.0	23,426.9	11,528.0	196.5	202.2	168.46	-11,871.4	366.2	3,486.4	3,280.6	205.87	16.935	
20,000.0	8,119.0	23,478.3	11,525.0	198.2	203.0	168.43	-11,922.7	364.9	3,481.3	3,274.1	207.16	16.805	
20,100.0	8,119.0	23,534.3	11,522.7	199.8	203.9	168.41	-11,978.7	364.4	3,477.4	3,269.0	208.43	16.684	
20,200.0	8,119.0	23,591.3	11,521.2	201.4	204.8	168.41	-12,035.6	365.2	3,474.8	3,265.2	209.63	16.576	
20,300.0	8,119.0	23,708.7	11,518.7	203.1	206.7	168.43	-12,153.0	367.6	3,472.4	3,261.0	211.42	16.424	
20,400.0	8,119.0	23,739.1	11,518.2	204.7	207.2	168.43	-12,183.3	368.2	3,470.8	3,258.5	212.30	16.348	
20,433.5	8,119.0	23,755.0	11,518.4	205.2	207.5	168.44	-12,199.3	368.8	3,470.8	3,258.2	212.64	16.323	
20,500.0	8,119.0	23,793.6	11,519.0	206.3	208.1	168.47	-12,237.8	370.4	3,471.2	3,257.9	213.35	16.270	
20,606.7	8,119.0	23,808.0	11,519.2	208.1	208.3	168.47	-12,252.2	371.0	3,473.3	3,259.4	213.91	16.237	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #218H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 216-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	85.65	65.9	866.8	869.3				
100.0	100.0	93.8	93.8	0.1	0.1	85.65	66.0	867.1	869.6	869.3	0.28	3,137.082	
200.0	200.0	188.6	188.6	0.5	0.3	85.64	66.2	867.9	870.5	869.7	0.78	1,112.290	
300.0	300.0	286.6	286.5	0.8	0.6	85.62	66.6	869.2	871.8	870.4	1.44	606.754	
400.0	400.0	385.8	385.8	1.2	0.9	85.60	67.0	870.6	873.3	871.2	2.15	406.184	
500.0	500.0	480.6	480.6	1.6	1.3	85.57	67.5	872.3	875.1	872.2	2.85	307.136	
600.0	600.0	574.6	574.5	1.9	1.6	85.53	68.3	874.5	877.5	874.0	3.55	247.524	
700.0	700.0	672.8	672.6	2.3	2.0	85.49	69.1	877.3	880.5	876.2	4.26	206.894	
800.0	800.0	771.6	771.4	2.6	2.3	85.47	69.8	880.3	883.5	878.6	4.97	177.841	
900.0	900.0	872.6	872.4	3.0	2.7	85.46	70.1	883.4	886.6	880.9	5.69	155.870	
1,000.0	1,000.0	974.7	974.5	3.4	3.1	85.49	69.9	886.4	889.5	883.1	6.41	138.746	
1,100.0	1,100.0	1,081.4	1,081.1	3.7	3.4	11.16	69.1	889.0	890.2	883.0	7.14	124.642	
1,200.0	1,199.8	1,176.8	1,176.5	4.1	3.8	11.30	68.2	891.0	887.0	879.2	7.83	113.283	
1,300.0	1,299.5	1,260.5	1,260.1	4.4	4.1	11.41	68.5	893.8	881.9	873.4	8.48	104.033	
1,400.0	1,398.7	1,344.6	1,344.1	4.8	4.4	11.48	70.1	898.1	875.2	866.0	9.13	95.895	
1,500.0	1,497.5	1,429.5	1,428.8	5.2	4.7	11.55	72.6	903.9	866.8	857.0	9.78	88.614	
1,600.0	1,595.9	1,514.4	1,513.3	5.5	5.0	11.56	75.9	911.0	858.3	847.9	10.44	82.249	
1,700.0	1,694.4	1,598.4	1,596.7	5.9	5.3	11.55	79.7	919.5	851.7	840.6	11.09	76.811	
1,800.0	1,792.9	1,682.5	1,680.2	6.3	5.7	11.51	84.0	929.6	846.9	835.1	11.74	72.133	
1,900.0	1,891.4	1,777.8	1,774.5	6.8	6.0	11.45	89.0	942.1	843.4	830.9	12.45	67.753	
2,000.0	1,989.9	1,874.5	1,870.2	7.2	6.4	11.39	94.2	955.3	840.2	827.1	13.16	63.831	
2,100.0	2,088.4	1,979.9	1,974.5	7.6	6.8	11.33	99.8	969.5	837.0	823.1	13.92	60.113	
2,200.0	2,186.8	2,085.9	2,079.5	8.0	7.3	11.26	105.4	983.0	833.1	818.4	14.69	56.716	
2,300.0	2,285.3	2,189.1	2,181.7	8.5	7.7	11.14	111.5	995.5	828.6	813.1	15.44	53.659	
2,400.0	2,383.8	2,286.9	2,278.6	8.9	8.1	10.97	118.2	1,007.0	823.7	807.6	16.17	50.940	
2,500.0	2,482.3	2,371.5	2,362.2	9.3	8.4	10.82	124.1	1,018.1	820.2	803.4	16.84	48.708	
2,600.0	2,580.8	2,457.5	2,447.1	9.8	8.8	10.70	129.7	1,030.9	818.6	801.1	17.51	46.747	
2,700.0	2,679.2	2,564.3	2,552.4	10.2	9.2	10.59	136.1	1,047.3	817.3	799.0	18.29	44.680	
2,800.0	2,777.7	2,670.9	2,657.7	10.6	9.7	10.53	141.8	1,062.8	815.2	796.1	19.07	42.743	
2,900.0	2,876.2	2,776.9	2,762.6	11.1	10.1	10.49	147.0	1,077.5	812.3	792.5	19.85	40.928	
3,000.0	2,974.7	2,874.2	2,858.9	11.5	10.5	10.47	151.6	1,090.5	808.9	788.4	20.58	39.306	
3,100.0	3,073.2	2,962.5	2,946.2	11.9	10.9	10.46	155.7	1,103.4	806.7	785.5	21.27	37.930	
3,200.0	3,171.6	3,060.3	3,042.6	12.4	11.3	10.46	160.1	1,118.8	805.8	783.8	22.01	36.617	
3,300.0	3,270.1	3,176.4	3,157.4	12.8	11.8	10.48	165.1	1,135.7	803.6	780.7	22.84	35.189	
3,400.0	3,368.6	3,275.4	3,255.4	13.3	12.2	10.50	169.0	1,148.9	800.1	776.5	23.58	33.931	
3,500.0	3,467.1	3,366.9	3,345.9	13.7	12.6	10.51	173.0	1,161.9	797.5	773.2	24.29	32.838	
3,600.0	3,565.6	3,466.9	3,444.7	14.2	13.0	10.52	177.4	1,176.9	795.7	770.7	25.04	31.782	
3,700.0	3,664.0	3,572.1	3,548.8	14.6	13.5	10.56	181.5	1,192.1	793.3	767.5	25.81	30.734	
3,800.0	3,762.5	3,667.8	3,643.4	15.1	13.9	10.65	184.6	1,205.8	790.8	764.3	26.54	29.794	
3,900.0	3,861.0	3,761.2	3,735.7	15.5	14.3	10.76	187.2	1,220.0	789.1	761.8	27.26	28.947	
4,000.0	3,959.5	3,875.1	3,848.2	16.0	14.7	10.82	191.6	1,236.9	787.2	759.1	28.08	28.031	
4,100.0	4,058.0	3,994.6	3,966.5	16.4	15.2	10.51	200.9	1,251.4	782.8	753.9	28.91	27.075	
4,200.0	4,156.4	4,098.1	4,068.9	16.8	15.7	10.17	209.8	1,262.5	777.2	747.5	29.67	26.193	
4,300.0	4,254.9	4,202.1	4,172.0	17.3	16.1	9.84	218.5	1,273.0	770.9	740.4	30.43	25.330	
4,400.0	4,353.4	4,303.3	4,272.5	17.7	16.5	9.53	226.6	1,282.8	764.2	733.0	31.18	24.508	
4,500.0	4,451.9	4,403.9	4,372.3	18.2	16.9	9.24	234.4	1,292.5	757.4	725.5	31.93	23.722	
4,600.0	4,550.4	4,503.8	4,471.5	18.6	17.3	8.98	241.8	1,302.1	750.6	717.9	32.67	22.973	
4,700.0	4,648.9	4,599.5	4,566.4	19.1	17.7	8.75	248.4	1,311.4	743.9	710.5	33.40	22.270	
4,800.0	4,747.3	4,692.6	4,658.8	19.5	18.1	8.54	254.9	1,321.3	738.1	704.0	34.13	21.629	
4,900.0	4,845.8	4,787.4	4,752.8	20.0	18.4	8.32	261.4	1,332.2	733.1	698.3	34.85	21.035	
5,000.0	4,944.3	4,883.4	4,847.8	20.4	18.8	8.11	268.1	1,343.7	728.7	693.1	35.58	20.479	
5,100.0	5,042.8	4,984.8	4,948.2	20.9	19.3	7.89	275.0	1,356.3	724.6	688.3	36.34	19.941	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #218H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 216-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,141.3	5,089.6	5,052.0	21.3	19.7	7.65	282.3	1,368.6	719.9	682.8	37.10	19.403	
5,300.0	5,239.7	5,189.9	5,151.4	21.8	20.1	7.41	289.2	1,379.9	714.8	677.0	37.85	18.885	
5,400.0	5,338.2	5,289.0	5,249.6	22.2	20.5	7.16	296.2	1,391.2	709.8	671.2	38.60	18.391	
5,500.0	5,436.7	5,381.5	5,341.3	22.7	20.9	6.92	302.8	1,402.1	705.4	666.1	39.31	17.942	
5,600.0	5,535.2	5,473.5	5,432.2	23.1	21.3	6.65	309.9	1,414.0	702.0	662.0	40.02	17.541	
5,700.0	5,633.7	5,573.5	5,531.0	23.6	21.7	6.36	317.7	1,427.6	699.4	658.6	40.77	17.153	
5,800.0	5,732.1	5,675.0	5,631.4	24.0	22.2	6.12	324.8	1,441.2	696.5	655.0	41.53	16.771	
5,900.0	5,830.6	5,792.9	5,748.2	24.5	22.6	5.99	331.1	1,455.8	692.3	649.9	42.35	16.346	
6,000.0	5,929.1	5,915.0	5,869.5	24.9	23.1	6.09	334.2	1,468.0	685.3	642.1	43.15	15.883	
6,100.0	6,027.6	6,043.4	5,997.7	25.4	23.6	6.24	336.1	1,476.1	674.4	630.5	43.88	15.368	
6,200.0	6,126.1	6,150.7	6,105.0	25.8	23.9	6.45	336.5	1,479.8	660.6	616.0	44.59	14.815	
6,300.0	6,224.5	6,255.1	6,209.2	26.3	24.3	6.86	334.4	1,482.9	645.9	600.6	45.30	14.259	
6,400.0	6,323.0	6,359.0	6,313.0	26.7	24.6	7.39	331.1	1,485.3	630.5	584.5	45.99	13.708	
6,500.0	6,421.5	6,461.7	6,415.7	27.2	24.9	7.98	327.4	1,487.0	614.3	567.6	46.69	13.157	
6,600.0	6,520.0	6,561.7	6,515.6	27.6	25.2	8.59	323.6	1,488.1	597.8	550.4	47.40	12.612	
6,700.0	6,618.5	6,661.0	6,614.8	28.1	25.5	9.23	319.9	1,489.0	581.1	532.9	48.11	12.078	
6,800.0	6,716.9	6,759.0	6,712.8	28.5	25.8	9.89	316.2	1,489.9	564.4	515.6	48.83	11.558	
6,900.0	6,815.4	6,857.7	6,811.4	29.0	26.1	10.60	312.5	1,490.9	547.9	498.4	49.56	11.056	
6,981.8	6,896.0	6,939.3	6,892.9	29.4	26.4	11.23	309.4	1,491.5	534.3	484.2	50.15	10.656	
7,000.0	6,913.9	6,957.4	6,911.0	29.5	26.4	11.36	308.7	1,491.7	531.4	481.1	50.28	10.569	
7,100.0	7,012.9	7,056.7	7,010.2	29.9	26.7	12.03	304.8	1,492.2	517.5	466.5	51.00	10.148	
7,200.0	7,112.3	7,155.7	7,109.2	30.3	27.0	12.62	301.4	1,492.8	508.0	456.3	51.72	9.823	
7,300.0	7,212.2	7,260.0	7,213.5	30.6	27.4	13.10	298.2	1,493.1	502.6	450.2	52.39	9.594	
7,381.8	7,294.0	7,348.1	7,301.5	30.9	27.6	87.82	295.8	1,492.3	500.3	447.4	52.89	9.460	
7,400.0	7,312.2	7,367.7	7,321.1	30.9	27.7	87.88	295.2	1,491.9	500.0	447.0	52.99	9.435	
7,500.0	7,412.2	7,471.3	7,424.6	31.2	28.0	88.18	292.5	1,489.5	497.6	444.0	53.62	9.280	
7,600.0	7,512.2	7,574.0	7,527.2	31.5	28.3	88.51	289.6	1,486.6	494.6	440.4	54.25	9.117	
7,633.8	7,546.0	7,606.9	7,560.1	31.6	28.4	88.62	288.6	1,485.5	493.5	439.0	54.49	9.058	
7,650.0	7,562.2	7,622.7	7,575.8	31.7	28.4	-91.08	288.2	1,485.1	493.0	438.5	54.60	9.031	
7,700.0	7,612.0	7,671.2	7,624.4	31.8	28.6	-91.48	287.0	1,483.7	491.7	436.8	54.91	8.955	
7,750.0	7,661.4	7,719.4	7,672.5	31.9	28.7	-92.36	285.9	1,482.5	490.7	435.5	55.18	8.892	
7,800.0	7,709.8	7,766.9	7,720.0	32.0	28.9	-93.67	285.0	1,481.4	490.1	434.7	55.43	8.842	
7,818.0	7,727.0	7,784.4	7,737.5	32.1	28.9	-94.25	284.7	1,481.1	490.1	434.5	55.50	8.829	CC, ES
7,850.0	7,757.1	7,815.1	7,768.2	32.1	29.0	-95.40	284.1	1,480.4	490.2	434.6	55.64	8.811	
7,900.0	7,802.7	7,861.7	7,814.8	32.2	29.1	-97.42	283.2	1,479.3	491.3	435.5	55.84	8.798	SF
7,950.0	7,846.4	7,906.5	7,859.6	32.3	29.3	-99.60	282.3	1,478.2	493.9	437.8	56.06	8.809	
8,000.0	7,887.7	7,949.2	7,902.2	32.4	29.4	-101.82	281.3	1,477.1	498.3	442.0	56.31	8.849	
8,050.0	7,926.5	7,988.5	7,941.5	32.4	29.5	-103.87	280.4	1,476.0	505.3	448.7	56.62	8.924	
8,100.0	7,962.4	8,025.0	7,978.0	32.5	29.6	-105.66	279.6	1,475.1	515.2	458.3	57.00	9.040	
8,150.0	7,995.1	8,058.4	8,011.3	32.5	29.7	-107.07	278.9	1,474.2	528.5	471.1	57.43	9.203	
8,200.0	8,024.4	8,088.4	8,041.3	32.6	29.8	-107.97	278.2	1,473.4	545.4	487.5	57.92	9.417	
8,250.0	8,050.1	8,114.8	8,067.8	32.6	29.9	-108.25	277.6	1,472.8	566.0	507.5	58.45	9.683	
8,300.0	8,071.9	8,137.5	8,090.4	32.7	30.0	-107.81	277.1	1,472.2	590.2	531.2	59.00	10.004	
8,350.0	8,089.7	8,156.2	8,109.1	32.7	30.0	-106.52	276.7	1,471.7	618.0	558.4	59.55	10.377	
8,400.0	8,103.4	8,169.6	8,122.5	32.7	30.1	-104.15	276.4	1,471.4	648.9	588.8	60.09	10.799	
8,450.0	8,112.8	8,179.4	8,132.3	32.8	30.1	-100.78	276.2	1,471.2	682.7	622.1	60.59	11.267	
8,500.0	8,118.0	8,185.2	8,138.1	32.9	30.1	-96.29	276.1	1,471.1	718.8	657.7	61.04	11.774	
8,533.8	8,119.0	8,186.8	8,139.7	33.0	30.1	-92.60	276.1	1,471.0	744.3	683.0	61.32	12.137	
8,600.0	8,119.0	8,188.1	8,141.0	33.1	30.1	-92.75	276.1	1,471.0	796.1	734.2	61.81	12.878	
8,700.0	8,119.0	8,189.9	8,142.8	33.4	30.1	-92.97	276.0	1,471.0	878.0	815.5	62.45	14.059	
8,800.0	8,119.0	8,191.8	8,144.7	33.8	30.1	-93.20	276.0	1,470.9	963.3	900.3	62.97	15.297	
8,900.0	8,119.0	8,193.7	8,146.5	34.3	30.1	-93.42	275.9	1,470.9	1,051.2	987.8	63.41	16.579	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #218H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 216-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,000.0	8,119.0	8,195.5	8,148.4	34.9	30.1	-93.64	275.9	1,470.9	1,141.1	1,077.4	63.77	17.896	
9,100.0	8,119.0	8,197.3	8,150.2	35.5	30.1	-93.86	275.9	1,470.8	1,232.6	1,168.5	64.07	19.239	
9,200.0	8,119.0	8,199.1	8,152.0	36.3	30.2	-94.07	275.8	1,470.8	1,325.3	1,261.0	64.32	20.604	
9,300.0	8,119.0	8,200.9	8,153.8	37.1	30.2	-94.29	275.8	1,470.7	1,419.0	1,354.4	64.54	21.985	
9,400.0	8,119.0	8,202.7	8,155.6	37.9	30.2	-94.50	275.8	1,470.7	1,513.5	1,448.7	64.73	23.380	
9,500.0	8,119.0	8,204.5	8,157.4	38.8	30.2	-94.71	275.7	1,470.7	1,608.6	1,543.7	64.90	24.787	
9,600.0	8,119.0	8,206.3	8,159.1	39.8	30.2	-94.92	275.7	1,470.6	1,704.3	1,639.3	65.05	26.202	
9,700.0	8,119.0	8,208.0	8,160.9	40.8	30.2	-95.13	275.7	1,470.6	1,800.5	1,735.3	65.18	27.625	
9,800.0	8,119.0	8,209.8	8,162.6	41.8	30.2	-95.34	275.6	1,470.6	1,897.1	1,831.8	65.29	29.054	
9,900.0	8,119.0	8,211.5	8,164.4	42.9	30.2	-95.54	275.6	1,470.5	1,994.0	1,928.6	65.40	30.488	
10,000.0	8,119.0	8,213.2	8,166.1	44.0	30.2	-95.75	275.6	1,470.5	2,091.2	2,025.7	65.50	31.926	
10,100.0	8,119.0	8,214.9	8,167.8	45.2	30.2	-95.95	275.5	1,470.5	2,188.6	2,123.0	65.59	33.368	
10,200.0	8,119.0	8,216.6	8,169.5	46.3	30.2	-96.15	275.5	1,470.4	2,286.3	2,220.6	65.67	34.812	
10,300.0	8,119.0	8,218.3	8,171.2	47.5	30.2	-96.35	275.5	1,470.4	2,384.1	2,318.4	65.75	36.259	
10,400.0	8,119.0	8,220.0	8,172.8	48.8	30.2	-96.55	275.4	1,470.4	2,482.1	2,416.3	65.83	37.707	
10,500.0	8,119.0	8,221.6	8,174.5	50.0	30.2	-96.75	275.4	1,470.3	2,580.3	2,514.4	65.90	39.157	
10,600.0	8,119.0	8,223.3	8,176.2	51.3	30.2	-96.94	275.4	1,470.3	2,678.6	2,612.7	65.96	40.608	
10,700.0	8,119.0	8,224.9	8,177.8	52.6	30.2	-97.14	275.3	1,470.3	2,777.1	2,711.0	66.03	42.060	
10,800.0	8,119.0	8,226.6	8,179.4	54.0	30.2	-97.33	275.3	1,470.3	2,875.6	2,809.5	66.09	43.512	
10,900.0	8,119.0	8,228.2	8,181.1	55.3	30.2	-97.52	275.3	1,470.2	2,974.2	2,908.1	66.15	44.964	
11,000.0	8,119.0	8,229.8	8,182.7	56.7	30.2	-97.71	275.3	1,470.2	3,072.9	3,006.7	66.20	46.416	
11,100.0	8,119.0	8,231.4	8,184.3	58.0	30.3	-97.90	275.2	1,470.2	3,171.7	3,105.5	66.26	47.868	
11,200.0	8,119.0	8,233.0	8,185.9	59.4	30.3	-98.09	275.2	1,470.1	3,270.6	3,204.3	66.31	49.320	
11,300.0	8,119.0	8,234.6	8,187.4	60.8	30.3	-98.28	275.2	1,470.1	3,369.6	3,303.2	66.37	50.771	
11,400.0	8,119.0	8,236.1	8,189.0	62.2	30.3	-98.46	275.1	1,470.1	3,468.6	3,402.1	66.42	52.221	
11,500.0	8,119.0	14,915.0	11,601.5	63.6	70.5	-170.09	-3,267.3	1,621.2	3,536.3	3,473.6	62.72	56.381	
11,508.5	8,119.0	14,915.0	11,601.5	63.8	70.5	-170.09	-3,267.3	1,621.2	3,536.3	3,473.5	62.80	56.313	
11,600.0	8,119.0	14,915.0	11,601.5	65.1	70.5	-170.09	-3,267.3	1,621.2	3,537.5	3,473.9	63.62	55.607	
11,700.0	8,119.0	14,962.5	11,602.6	66.5	71.1	-170.08	-3,314.8	1,622.8	3,540.5	3,475.6	64.81	54.627	
11,800.0	8,119.0	15,324.2	11,603.8	68.0	76.0	-170.05	-3,675.6	1,626.5	3,541.0	3,473.1	67.90	52.151	
11,900.0	8,119.0	15,359.3	11,602.9	69.4	76.5	-170.05	-3,710.8	1,627.0	3,538.6	3,469.6	69.00	51.280	
11,981.9	8,119.0	15,390.0	11,602.6	70.6	76.9	-170.03	-3,741.4	1,627.8	3,538.0	3,468.1	69.93	50.593	
12,000.0	8,119.0	15,390.0	11,602.6	70.9	76.9	-170.03	-3,741.4	1,627.8	3,538.0	3,467.9	70.09	50.476	
12,100.0	8,119.0	15,390.0	11,602.6	72.4	76.9	-170.03	-3,741.4	1,627.8	3,539.9	3,468.9	71.00	49.860	
12,200.0	8,119.0	15,446.4	11,603.4	73.9	77.7	-170.00	-3,797.7	1,630.7	3,543.0	3,470.7	72.27	49.023	
12,300.0	8,119.0	15,485.0	11,605.3	75.4	78.3	-169.95	-3,836.1	1,633.9	3,548.6	3,475.2	73.44	48.321	
12,400.0	8,119.0	16,091.4	11,599.0	76.9	86.9	-169.93	-4,440.3	1,637.9	3,546.7	3,468.6	78.13	45.393	
12,500.0	8,119.0	16,149.0	11,595.7	78.4	87.8	-169.97	-4,497.8	1,635.2	3,539.8	3,460.4	79.39	44.590	
12,600.0	8,119.0	16,149.0	11,595.7	79.9	87.8	-169.97	-4,497.8	1,635.2	3,534.5	3,454.2	80.30	44.014	
12,700.0	8,119.0	16,149.0	11,595.7	81.4	87.8	-169.97	-4,497.8	1,635.2	3,531.9	3,450.7	81.22	43.487	
12,780.4	8,119.0	16,190.4	11,594.9	82.6	88.4	-170.00	-4,539.2	1,633.2	3,530.6	3,448.4	82.20	42.953	
12,800.0	8,119.0	16,194.0	11,595.0	82.9	88.4	-170.00	-4,542.7	1,633.0	3,530.7	3,448.3	82.40	42.849	
12,900.0	8,119.0	16,244.0	11,597.2	84.5	89.1	-170.05	-4,592.6	1,631.0	3,533.1	3,449.5	83.60	42.261	
13,000.0	8,119.0	16,244.0	11,597.2	86.0	89.1	-170.05	-4,592.6	1,631.0	3,536.4	3,451.9	84.50	41.852	
13,100.0	8,119.0	16,851.5	11,584.6	87.5	98.0	-170.23	-5,199.2	1,621.0	3,534.2	3,445.0	89.17	39.633	
13,200.0	8,119.0	16,910.0	11,579.9	89.1	98.9	-170.24	-5,257.6	1,619.8	3,525.5	3,435.0	90.47	38.969	
13,300.0	8,119.0	16,956.3	11,576.7	90.6	99.6	-170.25	-5,303.8	1,618.9	3,518.0	3,426.3	91.70	38.365	
13,400.0	8,119.0	17,005.0	11,573.6	92.2	100.3	-170.26	-5,352.4	1,618.0	3,511.5	3,418.6	92.94	37.783	
13,500.0	8,119.0	17,057.1	11,570.9	93.7	101.1	-170.27	-5,404.4	1,617.2	3,506.4	3,412.2	94.20	37.223	
13,600.0	8,119.0	17,100.0	11,569.6	95.3	101.7	-170.27	-5,447.3	1,617.1	3,503.1	3,407.7	95.40	36.719	
13,700.0	8,119.0	17,130.7	11,569.2	96.8	102.2	-170.27	-5,478.0	1,617.3	3,501.7	3,405.1	96.52	36.278	
13,729.8	8,119.0	17,141.4	11,569.2	97.3	102.4	-170.27	-5,488.7	1,617.4	3,501.6	3,404.7	96.87	36.149	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #218H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 216-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,800.0	8,119.0	17,166.7	11,569.3	98.4	102.8	-170.27	-5,514.0	1,617.6	3,502.0	3,404.4	97.67	35.856	
13,900.0	8,119.0	17,195.0	11,569.9	100.0	103.2	-170.27	-5,542.2	1,618.0	3,504.3	3,405.5	98.75	35.488	
14,000.0	8,119.0	17,437.0	11,574.7	101.5	106.9	-170.22	-5,784.1	1,623.2	3,507.8	3,406.4	101.34	34.613	
14,100.0	8,119.0	17,605.6	11,571.7	103.1	109.4	-170.25	-5,952.6	1,621.9	3,505.7	3,402.3	103.35	33.919	
14,200.0	8,119.0	17,671.0	11,570.8	104.7	110.4	-170.26	-6,018.0	1,621.6	3,503.9	3,399.2	104.71	33.464	
14,300.0	8,119.0	17,817.1	11,566.7	106.2	112.7	-170.22	-6,164.0	1,624.0	3,501.1	3,394.5	106.62	32.839	
14,400.0	8,119.0	17,885.3	11,564.5	107.8	113.7	-170.18	-6,232.1	1,626.8	3,498.6	3,390.6	108.03	32.385	
14,500.0	8,119.0	17,964.8	11,562.4	109.4	114.9	-170.11	-6,311.5	1,630.9	3,496.8	3,387.3	109.54	31.924	
14,600.0	8,119.0	18,050.6	11,560.7	111.0	116.3	-170.05	-6,397.2	1,635.0	3,495.5	3,384.4	111.09	31.467	
14,700.0	8,119.0	18,114.5	11,559.8	112.6	117.3	-170.00	-6,461.0	1,638.1	3,495.0	3,382.5	112.48	31.072	
14,800.0	8,119.0	18,293.3	11,556.7	114.2	120.0	-169.93	-6,639.7	1,642.9	3,493.4	3,378.8	114.66	30.469	
14,900.0	8,119.0	18,393.2	11,554.3	115.7	121.6	-169.91	-6,739.6	1,644.6	3,491.3	3,375.1	116.28	30.027	
15,000.0	8,119.0	18,432.0	11,553.3	117.3	122.2	-169.89	-6,778.3	1,645.4	3,489.5	3,372.0	117.49	29.702	
15,062.0	8,119.0	18,474.4	11,552.5	118.3	122.9	-169.87	-6,820.7	1,646.8	3,488.9	3,370.5	118.37	29.476	
15,100.0	8,119.0	18,486.5	11,552.4	118.9	123.1	-169.86	-6,832.7	1,647.4	3,489.0	3,370.2	118.80	29.368	
15,200.0	8,119.0	18,526.0	11,552.9	120.5	123.7	-169.83	-6,872.2	1,649.7	3,490.8	3,370.8	120.01	29.089	
15,300.0	8,119.0	18,781.6	11,551.9	122.1	127.7	-169.76	-7,127.5	1,655.6	3,490.2	3,367.5	122.75	28.433	
15,400.0	8,119.0	15,400.0	11,550.5	123.7	75.4	-169.76	-7,217.3	1,655.8	3,488.7	3,391.9	96.74	36.062	
15,500.0	8,119.0	15,500.0	11,546.3	125.3	77.0	-169.77	-7,388.0	1,655.3	3,486.1	3,387.9	98.22	35.492	
15,600.0	8,119.0	19,151.3	11,542.1	126.9	133.4	-169.80	-7,496.9	1,653.0	3,481.9	3,353.9	127.96	27.210	
15,700.0	8,119.0	19,206.7	11,540.5	128.5	134.3	-169.82	-7,552.3	1,651.9	3,478.6	3,349.3	129.28	26.907	
15,800.0	8,119.0	19,268.6	11,539.4	130.1	135.3	-169.83	-7,614.2	1,651.3	3,476.4	3,345.8	130.64	26.611	
15,900.0	8,119.0	19,415.7	11,535.6	131.7	137.6	-169.87	-7,761.2	1,649.2	3,473.3	3,340.8	132.51	26.211	
16,000.0	8,119.0	19,475.0	11,534.9	133.3	138.5	-169.91	-7,820.5	1,647.2	3,471.2	3,337.4	133.83	25.938	
16,061.8	8,119.0	19,475.0	11,534.9	134.3	138.5	-169.91	-7,820.5	1,647.2	3,470.7	3,336.3	134.41	25.822	
16,100.0	8,119.0	19,475.0	11,534.9	134.9	138.5	-169.91	-7,820.5	1,647.2	3,470.9	3,336.1	134.76	25.757	
16,200.0	8,119.0	19,534.7	11,535.8	136.5	139.4	-169.95	-7,880.1	1,645.0	3,472.0	3,336.0	136.02	25.525	
16,300.0	8,119.0	19,570.0	11,537.2	138.1	140.0	-169.98	-7,915.4	1,643.7	3,475.2	3,338.1	137.10	25.348	
16,400.0	8,119.0	19,629.7	11,540.5	139.7	140.9	-170.03	-7,974.9	1,641.6	3,479.9	3,341.5	138.33	25.156	
16,500.0	8,119.0	19,797.6	11,549.0	141.4	143.5	-170.13	-8,142.6	1,638.0	3,484.6	3,344.2	140.39	24.821	
16,600.0	8,119.0	19,875.4	11,552.1	143.0	144.7	-170.17	-8,220.3	1,636.6	3,488.1	3,346.3	141.78	24.602	
16,700.0	8,119.0	19,931.0	11,554.8	144.6	145.6	-170.18	-8,275.9	1,636.3	3,492.7	3,349.7	143.01	24.423	
16,800.0	8,119.0	16,800.0	11,562.1	146.2	96.0	-170.18	-8,468.2	1,639.1	3,496.5	3,377.7	118.78	29.438	
16,900.0	8,119.0	20,214.3	11,564.2	147.8	150.1	-170.18	-8,559.0	1,640.1	3,498.9	3,352.0	146.93	23.814	
17,000.0	8,119.0	20,359.5	11,567.4	149.4	152.4	-170.19	-8,704.1	1,640.5	3,501.0	3,352.1	148.87	23.517	
17,100.0	8,119.0	20,459.8	11,569.4	151.0	154.0	-170.20	-8,804.4	1,641.1	3,503.0	3,352.5	150.49	23.277	
17,200.0	8,119.0	20,570.0	11,570.5	152.7	155.8	-170.22	-8,914.6	1,640.6	3,503.7	3,351.6	152.16	23.027	
17,300.0	8,119.0	20,774.3	11,571.1	154.3	159.0	-170.25	-9,118.9	1,640.0	3,504.3	3,349.8	154.47	22.686	
17,400.0	8,119.0	20,849.1	11,570.0	155.9	160.2	-170.26	-9,193.7	1,639.4	3,502.7	3,346.8	155.90	22.468	
17,484.7	8,119.0	20,899.0	11,569.9	157.3	161.0	-170.27	-9,243.6	1,638.9	3,502.3	3,345.3	157.02	22.305	
17,500.0	8,119.0	20,899.0	11,569.9	157.5	161.0	-170.27	-9,243.6	1,638.9	3,502.3	3,345.2	157.15	22.286	
17,600.0	8,119.0	20,966.2	11,570.5	159.1	162.1	-170.28	-9,310.7	1,639.0	3,503.1	3,344.6	158.52	22.099	
17,700.0	8,119.0	21,247.7	11,569.6	160.7	166.5	-170.35	-9,592.2	1,636.1	3,503.7	3,342.4	161.27	21.726	
17,800.0	8,119.0	21,318.8	11,567.7	162.4	167.7	-170.42	-9,663.0	1,631.9	3,500.1	3,337.4	162.63	21.522	
17,900.0	8,119.0	21,373.0	11,566.8	164.0	168.5	-170.45	-9,717.2	1,630.3	3,497.8	3,333.9	163.92	21.339	
18,000.0	8,119.0	21,456.0	11,565.9	165.6	169.8	-170.46	-9,800.2	1,630.0	3,496.5	3,331.1	165.41	21.138	
18,100.0	8,119.0	21,529.0	11,565.2	167.2	171.0	-170.45	-9,873.2	1,630.7	3,495.7	3,328.8	166.85	20.951	
18,147.3	8,119.0	21,562.0	11,565.1	168.0	171.5	-170.45	-9,906.2	1,631.2	3,495.6	3,328.1	167.52	20.866	
18,200.0	8,119.0	21,562.0	11,565.1	168.9	171.5	-170.45	-9,906.2	1,631.2	3,496.0	3,328.0	167.98	20.811	
18,300.0	8,119.0	21,562.0	11,565.1	170.5	171.5	-170.45	-9,906.2	1,631.2	3,498.9	3,330.1	168.78	20.730	
18,400.0	8,119.0	21,617.7	11,566.4	172.1	172.4	-170.43	-9,961.8	1,632.7	3,502.7	3,332.7	170.02	20.601	
18,500.0	8,119.0	21,657.0	11,569.2	173.7	173.1	-170.41	-10,001.0	1,634.6	3,509.6	3,338.5	171.09	20.514	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #218H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 216-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,600.0	8,119.0	22,090.4	11,574.4	175.4	180.1	-170.21	-10,433.5	1,650.7	3,508.3	3,332.6	175.68	19.970	
18,700.0	8,119.0	22,132.0	11,573.2	177.0	180.7	-170.17	-10,475.0	1,653.1	3,506.8	3,329.8	176.97	19.815	
18,751.8	8,119.0	22,167.9	11,572.6	177.8	181.3	-170.14	-10,510.8	1,655.1	3,506.5	3,328.7	177.75	19.727	
18,800.0	8,119.0	22,186.5	11,572.6	178.6	181.6	-170.13	-10,529.3	1,655.9	3,506.7	3,328.3	178.33	19.664	
18,900.0	8,119.0	22,227.0	11,573.0	180.2	182.3	-170.11	-10,569.9	1,657.5	3,508.4	3,328.8	179.53	19.542	
19,000.0	8,119.0	22,337.0	11,575.7	181.9	184.0	-170.10	-10,679.8	1,658.9	3,510.9	3,329.7	181.24	19.371	
19,100.0	8,119.0	22,606.0	11,572.9	183.5	188.4	-170.17	-10,948.7	1,655.5	3,507.5	3,323.5	183.95	19.068	
19,200.0	8,119.0	22,655.4	11,571.7	185.1	189.1	-170.20	-10,998.0	1,653.8	3,505.0	3,319.8	185.21	18.925	
19,247.5	8,119.0	22,667.9	11,571.7	185.9	189.3	-170.21	-11,010.5	1,653.4	3,504.7	3,319.0	185.73	18.870	
19,300.0	8,119.0	22,700.0	11,572.2	186.8	189.9	-170.23	-11,042.6	1,652.6	3,505.2	3,318.7	186.41	18.803	
19,400.0	8,119.0	22,746.3	11,573.4	188.4	190.6	-170.25	-11,088.9	1,651.8	3,506.8	3,319.2	187.60	18.693	
19,500.0	8,119.0	23,029.6	11,571.1	190.0	195.2	-170.21	-11,372.1	1,655.1	3,506.0	3,315.5	190.53	18.401	
19,600.0	8,119.0	23,081.0	11,570.3	191.6	196.0	-170.22	-11,423.4	1,654.9	3,503.9	3,312.0	191.85	18.263	
19,700.0	8,119.0	23,405.7	11,554.3	193.3	201.2	-170.35	-11,747.4	1,645.8	3,497.6	3,303.2	194.38	17.994	
19,800.0	8,119.0	23,458.0	11,550.8	194.9	202.0	-170.36	-11,799.5	1,645.1	3,490.3	3,294.5	195.81	17.825	
19,900.0	8,119.0	23,486.0	11,549.3	196.5	202.5	-170.36	-11,827.5	1,645.2	3,484.6	3,287.5	197.11	17.679	
20,000.0	8,119.0	23,551.0	11,546.6	198.2	203.5	-170.32	-11,892.4	1,647.1	3,480.7	3,282.1	198.60	17.526	
20,100.0	8,119.0	23,582.8	11,545.6	199.8	204.1	-170.30	-11,924.2	1,648.7	3,478.0	3,278.1	199.86	17.402	
20,200.0	8,119.0	20,200.0	11,542.7	201.4	148.9	-170.19	-12,036.3	1,655.5	3,476.4	3,303.0	173.45	20.043	
20,300.0	8,119.0	23,741.0	11,541.3	203.1	206.6	-170.15	-12,082.0	1,658.1	3,474.6	3,271.5	203.08	17.109	
20,368.7	8,119.0	23,786.5	11,540.0	204.2	207.4	-170.11	-12,127.4	1,660.4	3,473.6	3,269.5	204.10	17.019	
20,400.0	8,119.0	23,794.2	11,539.9	204.7	207.5	-170.10	-12,135.1	1,660.9	3,473.7	3,269.3	204.45	16.990	
20,500.0	8,119.0	23,836.0	11,540.5	206.3	208.2	-170.06	-12,176.8	1,663.9	3,475.7	3,270.0	205.70	16.897	
20,606.7	8,119.0	23,871.8	11,541.6	208.1	208.8	-170.02	-12,212.5	1,666.7	3,479.6	3,272.7	206.88	16.819	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #221H - Wellbore #1 - Actual Surveys — **Offset Site Error:** 0.0 usft

Survey Program: 227-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	2.0	2.0	0.0	0.0	-89.76	12.2	-2,861.7	2,861.7				
100.0	100.0	102.4	102.4	0.1	0.2	-89.76	12.0	-2,861.7	2,861.7	2,861.4	0.29	9,909.494	
200.0	200.0	202.7	202.7	0.5	0.3	-89.77	11.6	-2,861.7	2,861.7	2,860.9	0.80	3,556.073	
247.2	247.2	250.1	250.1	0.7	0.4	-89.78	11.2	-2,861.6	2,861.7	2,860.6	1.05	2,730.080	CC
300.0	300.0	298.6	298.6	0.8	0.6	-89.78	10.9	-2,861.7	2,861.7	2,860.3	1.46	1,963.286	
400.0	400.0	393.1	393.1	1.2	1.0	-89.79	10.3	-2,861.9	2,861.9	2,859.8	2.15	1,328.515	
500.0	500.0	491.5	491.5	1.6	1.3	-89.81	9.7	-2,862.2	2,862.3	2,859.4	2.87	999.016	
600.0	600.0	590.8	590.8	1.9	1.7	-89.82	8.8	-2,862.6	2,862.7	2,859.1	3.58	799.729	ES
700.0	700.0	672.9	672.9	2.3	1.9	-89.83	8.3	-2,863.2	2,863.3	2,859.1	4.23	677.630	
800.0	800.0	754.0	754.0	2.6	2.2	-89.83	8.5	-2,864.3	2,864.7	2,859.8	4.87	588.511	
900.0	900.0	842.8	842.7	3.0	2.5	-89.81	9.3	-2,866.0	2,866.6	2,861.1	5.53	517.969	
1,000.0	1,000.0	935.2	935.1	3.4	2.9	-89.80	10.2	-2,868.0	2,868.8	2,862.6	6.21	461.784	
1,100.0	1,100.0	1,022.7	1,022.6	3.7	3.2	-164.18	11.2	-2,870.2	2,873.0	2,866.1	6.87	418.193	
1,200.0	1,199.8	1,113.9	1,113.7	4.1	3.5	-164.13	12.8	-2,872.9	2,881.0	2,873.5	7.54	382.226	
1,300.0	1,299.5	1,239.1	1,238.9	4.4	3.9	-164.05	16.8	-2,876.2	2,892.0	2,883.7	8.33	347.371	
1,400.0	1,398.7	1,331.9	1,331.6	4.8	4.2	-163.96	20.4	-2,878.3	2,906.0	2,897.0	9.00	322.784	
1,500.0	1,497.5	1,426.3	1,425.9	5.2	4.6	-163.88	23.8	-2,880.6	2,923.5	2,913.8	9.69	301.769	
1,600.0	1,595.9	1,519.9	1,519.4	5.5	4.9	-163.91	26.8	-2,883.0	2,942.8	2,932.4	10.37	283.700	
1,700.0	1,694.4	1,619.7	1,619.1	5.9	5.3	-163.95	29.7	-2,885.8	2,962.2	2,951.1	11.08	267.345	
1,800.0	1,792.9	1,757.3	1,756.6	6.3	5.8	-163.98	34.5	-2,888.4	2,980.8	2,968.9	11.93	249.901	
1,900.0	1,891.4	1,863.7	1,862.9	6.8	6.1	-164.00	38.7	-2,889.5	2,998.5	2,985.9	12.67	236.749	
2,000.0	1,989.9	1,961.8	1,960.9	7.2	6.5	-164.02	42.2	-2,890.5	3,016.2	3,002.9	13.37	225.517	
2,100.0	2,088.4	2,060.0	2,059.1	7.6	6.8	-164.05	45.3	-2,891.5	3,034.0	3,019.9	14.09	215.373	
2,200.0	2,186.8	2,158.2	2,157.2	8.0	7.2	-164.09	47.9	-2,892.5	3,051.7	3,036.9	14.80	206.185	
2,300.0	2,285.3	2,222.0	2,221.0	8.5	7.4	-164.11	49.9	-2,893.5	3,070.0	3,054.6	15.39	199.509	
2,400.0	2,383.8	2,282.8	2,281.7	8.9	7.6	-164.11	53.0	-2,895.2	3,089.4	3,073.4	15.96	193.549	
2,500.0	2,482.3	2,354.0	2,352.6	9.3	7.9	-164.07	58.2	-2,898.1	3,110.1	3,093.5	16.58	187.621	
2,600.0	2,580.8	2,411.5	2,409.8	9.8	8.1	-164.03	63.5	-2,901.1	3,131.8	3,114.7	17.14	182.759	
2,700.0	2,679.2	2,477.5	2,475.4	10.2	8.3	-163.96	70.1	-2,905.0	3,154.4	3,136.6	17.73	177.920	
2,800.0	2,777.7	2,543.0	2,540.3	10.6	8.6	-163.89	77.0	-2,909.7	3,178.1	3,159.8	18.32	173.490	
2,900.0	2,876.2	2,623.4	2,620.0	11.1	8.9	-163.80	85.8	-2,916.0	3,202.5	3,183.6	18.97	168.782	
3,000.0	2,974.7	2,712.6	2,708.4	11.5	9.2	-163.71	95.4	-2,923.2	3,227.3	3,207.6	19.67	164.075	
3,100.0	3,073.2	2,804.7	2,799.6	11.9	9.6	-163.61	105.2	-2,930.9	3,252.2	3,231.8	20.38	159.583	
3,200.0	3,171.6	2,897.7	2,891.8	12.4	10.0	-163.52	114.9	-2,938.7	3,277.2	3,256.1	21.09	155.363	
3,300.0	3,270.1	3,012.8	3,005.9	12.8	10.4	-163.41	126.7	-2,948.2	3,302.1	3,280.2	21.91	150.693	
3,400.0	3,368.6	3,136.7	3,128.7	13.3	10.9	-163.29	139.9	-2,957.5	3,326.3	3,303.5	22.77	146.064	
3,500.0	3,467.1	3,231.7	3,222.9	13.7	11.3	-163.18	150.5	-2,964.4	3,350.2	3,326.7	23.51	142.526	
3,600.0	3,565.6	3,452.7	3,442.3	14.2	12.1	-162.98	173.3	-2,977.4	3,373.5	3,348.7	24.80	136.031	
3,700.0	3,664.0	3,563.6	3,552.9	14.6	12.5	-162.94	181.4	-2,980.7	3,393.2	3,367.6	25.60	132.572	
3,800.0	3,762.5	3,640.8	3,629.8	15.1	12.8	-162.91	187.1	-2,983.4	3,413.4	3,387.1	26.24	130.066	
3,900.0	3,861.0	3,731.9	3,720.6	15.5	13.2	-162.88	194.0	-2,987.1	3,434.1	3,407.1	26.95	127.418	
4,000.0	3,959.5	3,838.5	3,826.9	16.0	13.6	-162.85	201.4	-2,991.2	3,454.7	3,426.9	27.73	124.595	
4,100.0	4,058.0	3,922.0	3,910.1	16.4	13.9	-162.83	206.8	-2,994.4	3,475.2	3,446.8	28.40	122.357	
4,200.0	4,156.4	3,995.6	3,983.4	16.8	14.2	-162.80	212.2	-2,997.7	3,496.4	3,467.4	29.03	120.429	
4,300.0	4,254.9	4,072.8	4,060.2	17.3	14.5	-162.77	218.4	-3,001.7	3,518.3	3,488.6	29.68	118.546	
4,400.0	4,353.4	4,178.2	4,165.2	17.7	14.9	-162.72	226.8	-3,007.3	3,540.3	3,509.8	30.45	116.247	
4,500.0	4,451.9	4,284.4	4,271.0	18.2	15.3	-162.68	234.7	-3,012.7	3,562.0	3,530.8	31.23	114.047	
4,600.0	4,550.4	4,392.0	4,378.2	18.6	15.7	-162.66	241.8	-3,017.9	3,583.6	3,551.5	32.02	111.933	
4,700.0	4,648.9	4,492.1	4,478.0	19.1	16.1	-162.65	247.8	-3,022.5	3,604.9	3,572.1	32.76	110.035	
4,800.0	4,747.3	4,586.3	4,572.0	19.5	16.4	-162.64	252.9	-3,026.9	3,626.2	3,592.7	33.48	108.312	
4,900.0	4,845.8	4,683.2	4,668.6	20.0	16.8	-162.65	257.8	-3,031.6	3,647.7	3,613.4	34.21	106.631	
5,000.0	4,944.3	4,782.4	4,767.6	20.4	17.1	-162.66	262.6	-3,036.3	3,669.1	3,634.1	34.95	104.990	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #221H - Wellbore #1 - Actual Surveys — **Offset Site Error:** 0.0 usft

Survey Program: 227-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	4,890.0	4,874.9	20.9	17.5	-162.67	267.4	-3,041.3	3,690.4	3,654.6	35.72	103.311	
5,200.0	5,141.3	5,002.5	4,987.3	21.3	18.0	-162.70	271.6	-3,046.2	3,711.3	3,674.8	36.52	101.634	
5,300.0	5,239.7	5,094.0	5,078.6	21.8	18.3	-162.73	274.6	-3,050.0	3,732.1	3,694.9	37.21	100.285	
5,400.0	5,338.2	5,184.3	5,168.8	22.2	18.6	-162.75	277.5	-3,054.0	3,753.1	3,715.2	37.91	99.005	
5,500.0	5,436.7	5,283.3	5,267.7	22.7	19.0	-162.79	280.7	-3,058.4	3,774.2	3,735.6	38.64	97.675	
5,600.0	5,535.2	5,383.7	5,367.9	23.1	19.3	-162.82	283.9	-3,062.9	3,795.2	3,755.8	39.38	96.376	
5,700.0	5,633.7	5,477.0	5,461.1	23.6	19.7	-162.85	286.9	-3,067.0	3,816.3	3,776.2	40.09	95.202	
5,800.0	5,732.1	5,570.2	5,554.2	24.0	20.0	-162.88	289.8	-3,071.3	3,837.5	3,796.7	40.79	94.074	
5,900.0	5,830.6	5,683.9	5,667.7	24.5	20.4	-162.92	293.2	-3,076.3	3,858.5	3,816.9	41.59	92.773	
6,000.0	5,929.1	5,808.5	5,792.1	24.9	20.9	-162.96	296.5	-3,081.2	3,879.1	3,836.6	42.44	91.409	
6,100.0	6,027.6	5,957.0	5,940.5	25.4	21.4	-163.04	299.1	-3,085.5	3,898.6	3,855.2	43.38	89.869	
6,200.0	6,126.1	6,146.5	6,130.0	25.8	22.1	-163.17	299.7	-3,087.7	3,916.3	3,871.9	44.46	88.093	
6,300.0	6,224.5	6,300.0	6,280.3	26.3	22.5	-163.30	298.9	-3,085.6	3,931.2	3,885.9	45.35	86.679	
6,400.0	6,323.0	6,406.3	6,389.8	26.7	22.9	-163.38	298.5	-3,083.5	3,945.9	3,899.9	46.09	85.616	
6,500.0	6,421.5	6,469.0	6,452.5	27.2	23.1	-163.42	298.7	-3,082.7	3,961.4	3,914.8	46.66	84.898	
6,600.0	6,520.0	6,538.0	6,521.5	27.6	23.3	-163.46	299.3	-3,082.5	3,977.8	3,930.6	47.26	84.175	
6,700.0	6,618.5	6,635.5	6,619.0	28.1	23.7	-163.52	300.2	-3,082.5	3,994.5	3,946.5	47.97	83.265	
6,800.0	6,716.9	6,732.8	6,716.2	28.5	24.0	-163.58	300.7	-3,082.6	4,011.2	3,962.5	48.69	82.387	
6,900.0	6,815.4	6,829.3	6,812.7	29.0	24.3	-163.65	301.0	-3,082.7	4,028.0	3,978.6	49.40	81.546	
6,981.8	6,896.0	6,908.8	6,892.2	29.4	24.6	-163.70	301.0	-3,082.8	4,041.8	3,991.8	49.98	80.874	
7,000.0	6,913.9	6,927.5	6,911.0	29.5	24.7	-163.74	301.0	-3,082.8	4,044.7	3,994.6	50.11	80.721	
7,100.0	7,012.9	7,031.3	7,014.7	29.9	25.0	-163.90	300.9	-3,082.9	4,058.7	4,007.9	50.83	79.852	
7,200.0	7,112.3	7,135.1	7,118.6	30.3	25.4	-164.01	300.7	-3,082.8	4,068.3	4,016.8	51.54	78.942	
7,300.0	7,212.2	7,238.7	7,222.1	30.6	25.7	-164.07	300.5	-3,082.6	4,073.7	4,021.5	52.23	77.998	
7,381.8	7,294.0	7,321.5	7,304.9	30.9	26.0	-89.67	300.3	-3,082.5	4,074.9	4,022.2	52.78	77.211	
7,400.0	7,312.2	7,339.4	7,322.9	30.9	26.0	-89.67	300.2	-3,082.4	4,074.9	4,022.0	52.90	77.037	
7,500.0	7,412.2	7,438.4	7,421.9	31.2	26.3	-89.68	299.8	-3,082.2	4,074.7	4,021.1	53.55	76.093	
7,600.0	7,512.2	7,537.2	7,520.6	31.5	26.7	-89.68	299.3	-3,082.1	4,074.5	4,020.3	54.20	75.170	
7,633.8	7,546.0	7,570.5	7,554.0	31.6	26.8	-89.68	299.2	-3,082.0	4,074.5	4,020.0	54.43	74.863	
7,650.0	7,562.2	7,586.5	7,569.9	31.7	26.8	90.65	299.1	-3,082.0	4,074.4	4,019.9	54.53	74.719	
7,694.2	7,606.3	7,630.0	7,613.4	31.8	27.0	90.69	298.9	-3,081.9	4,074.4	4,019.6	54.81	74.340	
7,700.0	7,612.0	7,635.6	7,619.1	31.8	27.0	90.70	298.8	-3,081.9	4,074.4	4,019.6	54.84	74.291	
7,750.0	7,661.4	7,684.6	7,668.1	31.9	27.1	90.80	298.6	-3,081.9	4,074.5	4,019.3	55.15	73.881	
7,800.0	7,709.8	7,733.0	7,716.5	32.0	27.3	90.95	298.3	-3,081.8	4,074.6	4,019.2	55.44	73.491	
7,850.0	7,757.1	7,780.2	7,763.6	32.1	27.5	91.14	298.0	-3,081.8	4,074.9	4,019.1	55.73	73.124	
7,900.0	7,802.7	7,825.8	7,809.2	32.2	27.6	91.35	297.7	-3,081.7	4,075.3	4,019.3	55.99	72.781	
7,950.0	7,846.4	7,869.0	7,852.4	32.3	27.8	91.58	297.4	-3,081.7	4,075.9	4,019.7	56.25	72.466	
8,000.0	7,887.7	7,909.6	7,893.0	32.4	27.9	91.80	297.2	-3,081.7	4,076.9	4,020.4	56.48	72.177	
8,050.0	7,926.5	7,947.6	7,931.1	32.4	28.0	92.00	297.1	-3,081.6	4,078.2	4,021.5	56.71	71.915	
8,100.0	7,962.4	7,983.0	7,966.5	32.5	28.1	92.18	297.0	-3,081.6	4,079.9	4,023.0	56.92	71.677	
8,150.0	7,995.1	8,015.4	7,998.8	32.5	28.2	92.29	296.8	-3,081.6	4,082.2	4,025.0	57.12	71.466	
8,200.0	8,024.4	8,044.4	8,027.9	32.6	28.3	92.35	296.7	-3,081.6	4,084.9	4,027.6	57.31	71.282	
8,250.0	8,050.1	8,069.9	8,053.3	32.6	28.4	92.31	296.6	-3,081.6	4,088.3	4,030.8	57.48	71.125	
8,300.0	8,071.9	8,091.6	8,075.0	32.7	28.5	92.18	296.5	-3,081.6	4,092.3	4,034.7	57.64	70.996	
8,350.0	8,089.7	8,109.4	8,092.8	32.7	28.6	91.95	296.4	-3,081.6	4,097.0	4,039.2	57.79	70.894	
8,400.0	8,103.4	8,123.1	8,106.6	32.7	28.6	91.59	296.3	-3,081.6	4,102.4	4,044.5	57.93	70.820	
8,450.0	8,112.8	8,132.9	8,116.4	32.8	28.6	91.11	296.3	-3,081.6	4,108.5	4,050.4	58.05	70.774	
8,500.0	8,118.0	8,138.6	8,122.0	32.9	28.6	90.51	296.2	-3,081.6	4,115.2	4,057.0	58.16	70.757	
8,533.8	8,119.0	8,139.8	8,123.2	33.0	28.7	90.03	296.2	-3,081.6	4,120.1	4,061.9	58.22	70.763	
8,600.0	8,119.0	8,140.2	8,123.6	33.1	28.7	90.04	296.2	-3,081.6	4,130.5	4,072.2	58.36	70.783	
8,700.0	8,119.0	8,140.7	8,124.2	33.4	28.7	90.04	296.2	-3,081.6	4,148.2	4,089.6	58.60	70.791	
8,800.0	8,119.0	8,141.2	8,124.7	33.8	28.7	90.05	296.2	-3,081.6	4,168.2	4,109.3	58.89	70.779	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #221H - Wellbore #1 - Actual Surveys

Offset Site Error: 0.0 usft

Survey Program: 227-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,900.0	8,119.0	8,141.8	8,125.2	34.3	28.7	90.06	296.2	-3,081.6	4,190.5	4,131.3	59.23	70.752	
9,000.0	8,119.0	8,142.3	8,125.8	34.9	28.7	90.07	296.2	-3,081.6	4,215.1	4,155.5	59.61	70.715	
9,100.0	8,119.0	8,142.9	8,126.3	35.5	28.7	90.08	296.2	-3,081.6	4,241.9	4,181.8	60.02	70.671	
9,200.0	8,119.0	8,143.4	8,126.9	36.3	28.7	90.08	296.2	-3,081.6	4,270.8	4,210.3	60.47	70.625	
9,300.0	8,119.0	8,144.0	8,127.4	37.1	28.7	90.09	296.2	-3,081.6	4,301.9	4,240.9	60.95	70.582	
9,400.0	8,119.0	8,144.5	8,128.0	37.9	28.7	90.10	296.2	-3,081.6	4,335.0	4,273.6	61.45	70.545	
9,500.0	8,119.0	8,145.1	8,128.5	38.8	28.7	90.11	296.2	-3,081.6	4,370.2	4,308.3	61.97	70.519	
9,600.0	8,119.0	8,145.6	8,129.1	39.8	28.7	90.11	296.2	-3,081.6	4,407.4	4,344.9	62.51	70.506	
9,700.0	8,119.0	8,146.2	8,129.6	40.8	28.7	90.12	296.2	-3,081.6	4,446.6	4,383.5	63.06	70.509	
9,800.0	8,119.0	8,146.7	8,130.1	41.8	28.7	90.13	296.2	-3,081.6	4,487.6	4,423.9	63.63	70.531	
9,900.0	8,119.0	8,147.2	8,130.7	42.9	28.7	90.14	296.2	-3,081.6	4,530.4	4,466.2	64.19	70.573	
10,000.0	8,119.0	8,147.8	8,131.2	44.0	28.7	90.14	296.2	-3,081.6	4,575.1	4,510.3	64.77	70.637	
10,100.0	8,119.0	8,148.3	8,131.8	45.2	28.7	90.15	296.2	-3,081.6	4,621.4	4,556.1	65.34	70.725	
10,200.0	8,119.0	8,148.9	8,132.3	46.3	28.7	90.16	296.2	-3,081.6	4,669.5	4,603.5	65.92	70.837	
10,300.0	8,119.0	8,149.4	8,132.9	47.5	28.7	90.17	296.2	-3,081.6	4,719.1	4,652.7	66.49	70.974	
10,400.0	8,119.0	8,150.0	8,133.4	48.8	28.7	90.18	296.2	-3,081.6	4,770.4	4,703.3	67.06	71.136	
10,500.0	8,119.0	8,150.5	8,133.9	50.0	28.7	90.18	296.2	-3,081.6	4,823.2	4,755.6	67.62	71.323	
10,600.0	8,119.0	8,151.0	8,134.5	51.3	28.7	90.19	296.2	-3,081.6	4,877.5	4,809.3	68.18	71.536	
10,700.0	8,119.0	8,151.6	8,135.0	52.6	28.7	90.20	296.2	-3,081.6	4,933.1	4,864.4	68.73	71.775	
10,800.0	8,119.0	8,152.1	8,135.6	54.0	28.7	90.21	296.2	-3,081.6	4,990.2	4,921.0	69.27	72.038	
10,900.0	8,119.0	8,152.7	8,136.1	55.3	28.7	90.21	296.2	-3,081.6	5,048.6	4,978.8	69.80	72.326	
11,000.0	8,119.0	8,153.2	8,136.7	56.7	28.7	90.22	296.2	-3,081.6	5,108.3	5,038.0	70.33	72.638	
11,100.0	8,119.0	8,153.7	8,137.2	58.0	28.7	90.23	296.2	-3,081.6	5,169.3	5,098.5	70.84	72.974	
11,200.0	8,119.0	8,154.3	8,137.7	59.4	28.7	90.24	296.2	-3,081.6	5,231.4	5,160.1	71.34	73.333	
11,300.0	8,119.0	8,154.8	8,138.3	60.8	28.7	90.24	296.2	-3,081.6	5,294.7	5,222.9	71.83	73.714	
11,400.0	8,119.0	8,155.4	8,138.8	62.2	28.7	90.25	296.2	-3,081.6	5,359.2	5,286.9	72.31	74.117	
11,500.0	8,119.0	8,155.9	8,139.4	63.6	28.7	90.26	296.2	-3,081.6	5,424.7	5,351.9	72.77	74.541	
11,600.0	8,119.0	8,156.4	8,139.9	65.1	28.7	90.27	296.1	-3,081.6	5,491.2	5,418.0	73.23	74.985	
11,700.0	8,119.0	15,631.0	11,979.3	66.5	73.4	134.38	-3,529.0	-2,928.5	5,516.7	5,404.9	111.77	49.358	
11,800.0	8,119.0	15,707.3	11,976.7	68.0	74.4	134.35	-3,605.2	-2,930.1	5,516.2	5,402.4	113.75	48.493	
11,900.0	8,119.0	11,900.0	11,972.0	69.4	40.9	134.31	-3,808.8	-2,929.2	5,514.5	5,441.6	72.86	75.690	
12,000.0	8,119.0	15,977.7	11,971.4	70.9	78.2	134.32	-3,875.5	-2,927.3	5,512.4	5,393.1	119.26	46.223	
12,100.0	8,119.0	16,045.1	11,971.0	72.4	79.1	134.32	-3,942.9	-2,926.2	5,511.1	5,390.0	121.13	45.498	
12,200.0	8,119.0	16,106.0	11,972.3	73.9	80.0	134.34	-4,003.7	-2,923.8	5,510.2	5,387.3	122.89	44.840	
12,256.0	8,119.0	16,143.3	11,973.3	74.7	80.5	134.36	-4,041.0	-2,922.3	5,510.0	5,386.1	123.91	44.467	
12,300.0	8,119.0	16,161.0	11,973.6	75.4	80.7	134.36	-4,058.6	-2,921.9	5,510.1	5,385.5	124.57	44.232	
12,400.0	8,119.0	16,419.2	11,969.4	76.9	84.4	134.32	-4,316.8	-2,922.7	5,510.3	5,381.2	129.08	42.689	
12,500.0	8,119.0	16,483.0	11,968.4	78.4	85.3	134.31	-4,380.6	-2,921.6	5,508.3	5,377.4	130.95	42.066	
12,600.0	8,119.0	12,600.0	11,961.1	79.9	46.3	134.25	-4,545.2	-2,922.6	5,506.1	5,417.6	88.47	62.240	
12,700.0	8,119.0	16,722.3	11,955.5	81.4	88.8	134.19	-4,619.5	-2,924.5	5,503.2	5,366.8	136.36	40.358	
12,800.0	8,119.0	16,766.0	11,952.6	82.9	89.4	134.15	-4,663.0	-2,925.9	5,501.3	5,363.2	138.02	39.858	
12,900.0	8,119.0	16,809.8	11,950.3	84.5	90.0	134.12	-4,706.7	-2,927.4	5,500.4	5,360.7	139.67	39.380	
12,937.7	8,119.0	16,825.9	11,949.5	85.0	90.3	134.11	-4,722.8	-2,927.9	5,500.3	5,360.0	140.29	39.207	
13,000.0	8,119.0	16,861.0	11,948.2	86.0	90.8	134.09	-4,757.8	-2,929.2	5,500.5	5,359.1	141.42	38.894	
13,100.0	8,119.0	16,994.2	11,946.9	87.5	92.7	134.07	-4,891.0	-2,930.1	5,500.7	5,356.4	144.31	38.116	
13,200.0	8,119.0	17,230.5	11,953.1	89.1	96.3	134.20	-5,126.8	-2,917.5	5,498.8	5,350.4	148.42	37.048	
13,300.0	8,119.0	17,320.3	11,950.2	90.6	97.6	134.18	-5,216.6	-2,916.8	5,496.3	5,345.6	150.73	36.465	
13,400.0	8,119.0	17,462.1	11,943.6	92.2	99.7	134.12	-5,358.2	-2,916.6	5,493.4	5,339.6	153.80	35.717	
13,500.0	8,119.0	17,582.8	11,938.5	93.7	101.5	134.09	-5,478.8	-2,915.7	5,490.4	5,333.8	156.58	35.065	
13,600.0	8,119.0	17,664.7	11,934.7	95.3	102.8	134.06	-5,560.6	-2,914.8	5,486.8	5,328.0	158.81	34.550	
13,700.0	8,119.0	17,712.0	11,933.1	96.8	103.5	134.05	-5,607.9	-2,914.2	5,484.0	5,323.5	160.54	34.159	
13,800.0	8,119.0	17,774.8	11,932.3	98.4	104.4	134.05	-5,670.7	-2,912.9	5,482.0	5,319.6	162.47	33.741	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #221H - Wellbore #1 - Actual Surveys — **Offset Site Error:** 0.0 usft

Survey Program: 227-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,900.0	8,119.0	17,856.7	11,933.1	100.0	105.7	134.08	-5,752.5	-2,910.2	5,480.8	5,316.1	164.63	33.291	
14,000.0	8,119.0	18,069.9	11,930.8	101.5	108.9	134.09	-5,965.6	-2,904.6	5,478.6	5,309.9	168.64	32.486	
14,100.0	8,119.0	18,092.0	11,930.5	103.1	109.3	134.09	-5,987.7	-2,903.7	5,475.8	5,305.8	170.02	32.207	
14,200.0	8,119.0	18,146.2	11,929.6	104.7	110.1	134.09	-6,041.9	-2,902.5	5,473.9	5,302.1	171.84	31.856	
14,296.7	8,119.0	18,186.0	11,928.7	106.2	110.7	134.08	-6,081.6	-2,903.1	5,473.6	5,300.1	173.42	31.562	
14,300.0	8,119.0	18,186.0	11,928.7	106.2	110.7	134.08	-6,081.6	-2,903.1	5,473.6	5,300.1	173.46	31.556	
14,400.0	8,119.0	18,273.9	11,925.9	107.8	112.0	134.03	-6,169.4	-2,905.9	5,474.0	5,298.2	175.82	31.133	
14,500.0	8,119.0	18,321.2	11,924.5	109.4	112.8	134.01	-6,216.7	-2,907.5	5,474.8	5,297.2	177.56	30.833	
14,600.0	8,119.0	18,375.0	11,924.0	111.0	113.6	133.99	-6,270.5	-2,909.0	5,476.5	5,297.2	179.37	30.532	
14,700.0	8,119.0	18,419.1	11,924.3	112.6	114.3	133.98	-6,314.6	-2,910.2	5,479.2	5,298.2	181.01	30.270	
14,800.0	8,119.0	18,586.2	11,925.6	114.2	116.8	133.96	-6,481.6	-2,914.5	5,482.2	5,297.6	184.57	29.703	
14,900.0	8,119.0	18,639.6	11,925.6	115.7	117.6	133.94	-6,535.0	-2,915.9	5,484.5	5,298.2	186.36	29.429	
15,000.0	8,119.0	18,659.0	11,925.7	117.3	117.9	133.94	-6,554.4	-2,916.5	5,487.9	5,300.3	187.60	29.253	
15,100.0	8,119.0	18,989.2	11,925.1	118.9	123.0	133.86	-6,884.4	-2,924.3	5,489.7	5,295.9	193.76	28.333	
15,200.0	8,119.0	19,055.3	11,924.1	120.5	124.0	133.85	-6,950.5	-2,925.3	5,490.1	5,294.3	195.79	28.040	
15,300.0	8,119.0	19,133.0	11,923.4	122.1	125.2	133.83	-7,028.1	-2,926.1	5,490.6	5,292.6	197.99	27.732	
15,400.0	8,119.0	19,190.0	11,924.1	123.7	126.1	133.84	-7,085.2	-2,925.9	5,491.8	5,292.0	199.84	27.482	
15,500.0	8,119.0	19,365.9	11,929.5	125.3	128.9	133.90	-7,260.9	-2,922.5	5,493.0	5,289.7	203.38	27.009	
15,600.0	8,119.0	19,422.9	11,930.1	126.9	129.8	133.90	-7,317.8	-2,922.3	5,493.9	5,288.6	205.24	26.768	
15,700.0	8,119.0	19,655.8	11,928.7	128.5	133.4	133.88	-7,550.8	-2,922.7	5,494.2	5,284.4	209.78	26.191	
15,800.0	8,119.0	19,882.8	11,922.5	130.1	137.0	133.83	-7,777.5	-2,921.1	5,492.6	5,278.4	214.18	25.644	
15,900.0	8,119.0	19,930.4	11,921.3	131.7	137.7	133.83	-7,825.2	-2,919.9	5,489.5	5,273.6	215.99	25.416	
16,000.0	8,119.0	19,981.0	11,920.5	133.3	138.5	133.83	-7,875.7	-2,919.0	5,487.5	5,269.7	217.82	25.193	
16,100.0	8,119.0	20,046.8	11,918.9	134.9	139.5	133.81	-7,941.5	-2,919.0	5,486.2	5,266.3	219.88	24.950	
16,200.0	8,119.0	20,119.4	11,916.4	136.5	140.7	133.78	-8,014.1	-2,920.2	5,485.4	5,263.4	222.09	24.700	
16,300.0	8,119.0	20,315.7	11,910.3	138.1	143.8	133.74	-8,210.2	-2,919.2	5,482.7	5,256.6	226.12	24.247	
16,400.0	8,119.0	20,359.0	11,911.1	139.7	144.5	133.75	-8,253.5	-2,917.4	5,481.1	5,253.3	227.81	24.060	
16,500.0	8,119.0	20,428.9	11,913.4	141.4	145.6	133.79	-8,323.3	-2,914.3	5,480.4	5,250.6	229.82	23.846	
16,600.0	8,119.0	20,533.0	11,915.6	143.0	147.2	133.83	-8,427.2	-2,910.4	5,479.6	5,247.3	232.33	23.585	
16,700.0	8,119.0	20,630.4	11,916.7	144.6	148.8	133.85	-8,524.7	-2,907.8	5,478.9	5,244.1	234.78	23.336	
16,800.0	8,119.0	20,772.9	11,915.6	146.2	151.0	133.85	-8,667.1	-2,906.0	5,477.9	5,240.0	237.95	23.021	
16,900.0	8,119.0	20,902.0	11,912.5	147.8	153.1	133.83	-8,796.2	-2,904.8	5,476.0	5,235.0	240.96	22.725	
17,000.0	8,119.0	20,966.3	11,911.4	149.4	154.1	133.83	-8,860.4	-2,903.9	5,474.2	5,231.2	243.01	22.527	
17,100.0	8,119.0	21,019.8	11,912.0	151.0	155.0	133.84	-8,913.9	-2,902.3	5,473.2	5,228.4	244.84	22.355	
17,200.0	8,119.0	21,104.1	11,914.8	152.7	156.3	133.88	-8,998.0	-2,898.7	5,472.8	5,225.8	247.04	22.153	
17,300.0	8,119.0	21,419.1	11,920.3	154.3	161.4	134.04	-9,312.5	-2,881.8	5,470.5	5,218.3	252.28	21.684	
17,400.0	8,119.0	21,494.0	11,919.2	155.9	162.6	134.06	-9,387.3	-2,877.7	5,466.1	5,211.7	254.45	21.482	
17,500.0	8,119.0	21,534.1	11,918.6	157.5	163.2	134.06	-9,427.4	-2,876.0	5,462.7	5,206.6	256.15	21.326	
17,600.0	8,119.0	21,589.0	11,917.7	159.1	164.1	134.05	-9,482.2	-2,875.8	5,461.2	5,203.1	258.08	21.161	
17,697.4	8,119.0	21,589.0	11,917.7	160.7	164.1	134.05	-9,482.2	-2,875.8	5,460.3	5,201.2	259.12	21.073	
17,700.0	8,119.0	21,589.0	11,917.7	160.7	164.1	134.05	-9,482.2	-2,875.8	5,460.3	5,201.2	259.14	21.071	
17,800.0	8,119.0	21,666.5	11,916.7	162.4	165.3	134.03	-9,559.7	-2,876.8	5,460.8	5,199.4	261.40	20.891	
17,900.0	8,119.0	21,866.5	11,913.7	164.0	168.5	134.00	-9,759.7	-2,877.4	5,460.4	5,194.9	265.55	20.563	
18,000.0	8,119.0	21,956.3	11,911.7	165.6	169.9	133.98	-9,849.5	-2,877.2	5,459.1	5,191.1	268.00	20.370	
18,100.0	8,119.0	22,022.9	11,910.4	167.2	171.0	133.97	-9,916.1	-2,877.2	5,458.2	5,188.1	270.10	20.208	
18,200.0	8,119.0	22,112.1	11,909.2	168.9	172.4	133.96	-10,005.2	-2,877.4	5,457.9	5,185.3	272.53	20.027	
18,300.0	8,119.0	22,248.0	11,905.2	170.5	174.6	133.91	-10,141.1	-2,878.6	5,456.7	5,180.9	275.75	19.789	
18,400.0	8,119.0	22,307.6	11,903.3	172.1	175.6	133.89	-10,200.6	-2,879.1	5,455.7	5,177.9	277.76	19.641	
18,425.1	8,119.0	22,316.9	11,903.1	172.5	175.7	133.89	-10,210.0	-2,879.2	5,455.7	5,177.5	278.18	19.612	
18,500.0	8,119.0	18,500.0	11,901.4	173.7	114.3	133.87	-10,380.9	-2,878.8	5,455.7	5,225.1	230.66	23.653	
18,600.0	8,119.0	22,669.2	11,898.5	175.4	181.4	133.88	-10,562.1	-2,873.9	5,453.1	5,167.8	285.28	19.115	
18,700.0	8,119.0	22,722.0	11,897.2	177.0	182.2	133.88	-10,614.9	-2,872.4	5,449.9	5,162.7	287.19	18.977	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #221H - Wellbore #1 - Actual Surveys

Offset Site Error: 0.0 usft

Survey Program: 227-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,800.0	8,119.0	22,761.4	11,896.3	178.6	182.9	133.87	-10,654.2	-2,871.6	5,447.8	5,158.9	288.89	18.858	
18,888.6	8,119.0	22,782.0	11,896.1	180.1	183.2	133.87	-10,674.8	-2,871.5	5,447.2	5,157.1	290.15	18.774	
18,900.0	8,119.0	22,816.0	11,896.1	180.2	183.7	133.87	-10,708.9	-2,871.8	5,447.6	5,156.8	290.80	18.734	
18,924.0	8,119.0	22,816.0	11,896.1	180.6	183.7	133.87	-10,708.9	-2,871.8	5,447.6	5,156.5	291.05	18.717	
19,000.0	8,119.0	22,816.0	11,896.1	181.9	183.7	133.87	-10,708.9	-2,871.8	5,448.1	5,156.3	291.81	18.670	
19,100.0	8,119.0	22,893.9	11,896.9	183.5	185.0	133.86	-10,786.7	-2,872.6	5,450.0	5,155.9	294.02	18.536	
19,200.0	8,119.0	22,978.8	11,898.9	185.1	186.3	133.88	-10,871.6	-2,872.5	5,451.8	5,155.5	296.31	18.399	
19,300.0	8,119.0	23,381.0	11,899.1	186.8	192.8	133.88	-11,273.6	-2,869.9	5,453.9	5,150.5	303.41	17.976	
19,400.0	8,119.0	23,414.3	11,898.1	188.4	193.4	133.88	-11,306.9	-2,869.2	5,451.0	5,145.9	305.07	17.868	
19,500.0	8,119.0	23,473.0	11,898.9	190.0	194.3	133.89	-11,365.5	-2,867.4	5,449.6	5,142.6	306.99	17.752	
19,580.7	8,119.0	23,473.0	11,898.9	191.3	194.3	133.89	-11,365.5	-2,867.4	5,449.0	5,141.2	307.86	17.700	
19,600.0	8,119.0	23,473.0	11,898.9	191.6	194.3	133.89	-11,365.5	-2,867.4	5,449.1	5,141.0	308.06	17.689	
19,700.0	8,119.0	23,505.7	11,900.1	193.3	194.8	133.91	-11,398.2	-2,866.4	5,450.0	5,140.5	309.51	17.608	
19,800.0	8,119.0	23,535.7	11,901.2	194.9	195.3	133.92	-11,428.1	-2,866.1	5,452.2	5,141.4	310.89	17.537	
19,900.0	8,119.0	23,567.0	11,902.4	196.5	195.8	133.92	-11,459.4	-2,866.3	5,455.8	5,143.5	312.27	17.472	
20,000.0	8,119.0	23,958.2	11,897.5	198.2	202.1	133.80	-11,850.4	-2,876.1	5,456.8	5,136.9	319.94	17.056	
20,087.3	8,119.0	23,980.0	11,897.4	199.6	202.5	133.80	-11,872.2	-2,876.2	5,456.4	5,135.2	321.22	16.987	
20,100.0	8,119.0	23,985.3	11,897.4	199.8	202.6	133.80	-11,877.5	-2,876.1	5,456.4	5,135.0	321.43	16.976	
20,200.0	8,119.0	24,036.0	11,898.4	201.4	203.4	133.81	-11,928.2	-2,875.4	5,457.1	5,133.9	323.20	16.885	
20,300.0	8,119.0	24,285.9	11,900.1	203.1	207.4	133.84	-12,178.0	-2,871.4	5,457.0	5,129.0	327.96	16.639	
20,400.0	8,119.0	24,369.0	11,896.2	204.7	208.8	133.80	-12,261.0	-2,872.4	5,455.1	5,124.7	330.43	16.509	
20,476.1	8,119.0	24,369.0	11,896.2	205.9	208.8	133.80	-12,261.0	-2,872.4	5,454.6	5,123.3	331.25	16.467	
20,500.0	8,119.0	24,369.0	11,896.2	206.3	208.8	133.80	-12,261.0	-2,872.4	5,454.6	5,123.1	331.49	16.455	
20,606.7	8,119.0	24,369.0	11,896.2	208.1	208.8	133.80	-12,261.0	-2,872.4	5,456.1	5,123.6	332.52	16.408	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #222H - Wellbore #1 - Actual Survey — **Offset Site Error:** 0.0 usft

Survey Program: 29-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.37	-7.3	-1,135.3	1,135.4				
100.0	100.0	94.0	94.0	0.1	0.2	-90.37	-7.3	-1,135.3	1,135.3	1,135.0	0.36	3,154.667	
200.0	200.0	195.9	195.9	0.5	0.6	-90.37	-7.3	-1,135.2	1,135.3	1,134.2	1.08	1,049.651	
300.0	300.0	301.0	301.0	0.8	1.0	-90.38	-7.6	-1,134.8	1,134.9	1,133.1	1.81	625.684	
400.0	400.0	414.2	414.1	1.2	1.4	-90.41	-8.2	-1,133.5	1,133.7	1,131.1	2.58	439.783	
500.0	500.0	513.4	513.4	1.6	1.7	-90.44	-8.7	-1,131.8	1,132.0	1,128.7	3.29	343.937	
600.0	600.0	605.7	605.7	1.9	2.1	-90.45	-8.8	-1,130.5	1,130.6	1,126.6	3.98	284.167	
700.0	700.0	703.8	703.8	2.3	2.4	-90.47	-9.2	-1,129.5	1,129.6	1,124.9	4.69	241.024	
800.0	800.0	795.5	795.5	2.6	2.7	-90.51	-10.1	-1,129.1	1,129.2	1,123.8	5.37	210.373	
900.0	900.0	900.0	900.0	3.0	3.1	-90.57	-11.3	-1,128.7	1,128.7	1,122.6	6.09	185.221	
983.0	983.0	977.1	977.0	3.3	3.4	-90.62	-12.1	-1,128.5	1,128.5	1,121.9	6.66	169.359	CC
1,000.0	1,000.0	993.1	993.1	3.4	3.4	-90.63	-12.3	-1,128.5	1,128.5	1,121.7	6.78	166.443	ES
1,100.0	1,100.0	1,092.2	1,092.1	3.7	3.8	-165.12	-13.5	-1,128.7	1,130.4	1,123.0	7.48	151.153	
1,200.0	1,199.8	1,179.9	1,179.8	4.1	4.1	-165.17	-13.9	-1,128.9	1,135.9	1,127.7	8.13	139.650	
1,300.0	1,299.5	1,252.8	1,252.6	4.4	4.3	-165.25	-15.0	-1,130.7	1,146.7	1,137.9	8.73	131.283	
1,400.0	1,398.7	1,324.0	1,323.8	4.8	4.6	-165.38	-17.1	-1,134.0	1,163.2	1,153.9	9.32	124.759	
1,500.0	1,497.5	1,416.2	1,415.7	5.2	4.9	-165.62	-20.7	-1,139.7	1,184.4	1,174.5	9.99	118.546	
1,600.0	1,595.9	1,515.5	1,514.8	5.5	5.2	-166.03	-24.9	-1,145.8	1,207.5	1,196.8	10.69	112.969	
1,700.0	1,694.4	1,619.1	1,618.0	5.9	5.6	-166.44	-29.5	-1,151.8	1,230.2	1,218.8	11.41	107.864	
1,800.0	1,792.9	1,714.2	1,712.9	6.3	5.9	-166.82	-33.8	-1,157.0	1,252.7	1,240.6	12.09	103.592	
1,900.0	1,891.4	1,798.4	1,796.9	6.8	6.2	-167.10	-36.9	-1,162.3	1,275.9	1,263.2	12.74	100.191	
2,000.0	1,989.9	1,881.6	1,879.8	7.2	6.5	-167.35	-39.4	-1,168.4	1,300.2	1,286.9	13.37	97.243	
2,100.0	2,088.4	1,985.7	1,983.6	7.6	6.9	-167.66	-42.9	-1,176.2	1,324.8	1,310.7	14.10	93.945	
2,200.0	2,186.8	2,077.6	2,075.1	8.0	7.3	-167.95	-46.5	-1,183.0	1,349.3	1,334.5	14.78	91.285	
2,300.0	2,285.3	2,166.0	2,163.3	8.5	7.6	-168.18	-49.0	-1,190.1	1,374.2	1,358.8	15.44	88.987	
2,400.0	2,383.8	2,257.5	2,254.5	8.9	7.9	-168.37	-50.8	-1,197.9	1,399.7	1,383.6	16.12	86.837	
2,500.0	2,482.3	2,347.4	2,343.9	9.3	8.2	-168.55	-52.7	-1,205.9	1,425.6	1,408.8	16.79	84.922	
2,600.0	2,580.8	2,481.6	2,477.7	9.8	8.7	-168.79	-54.8	-1,216.2	1,450.1	1,432.5	17.67	82.074	
2,700.0	2,679.2	2,579.6	2,575.5	10.2	9.1	-168.97	-56.5	-1,222.4	1,473.6	1,455.2	18.38	80.170	
2,800.0	2,777.7	2,675.2	2,670.9	10.6	9.4	-169.15	-58.3	-1,228.8	1,497.3	1,478.2	19.08	78.469	
2,900.0	2,876.2	2,786.9	2,782.4	11.1	9.9	-169.32	-59.8	-1,235.8	1,520.6	1,500.7	19.86	76.570	
3,000.0	2,974.7	2,913.3	2,908.5	11.5	10.3	-169.47	-60.3	-1,242.0	1,542.5	1,521.8	20.70	74.517	
3,100.0	3,073.2	2,988.8	2,984.0	11.9	10.6	-169.56	-60.5	-1,245.4	1,564.1	1,542.7	21.31	73.395	
3,200.0	3,171.6	3,064.9	3,060.0	12.4	10.9	-169.65	-61.0	-1,249.9	1,587.0	1,565.1	21.92	72.405	
3,300.0	3,270.1	3,155.0	3,149.8	12.8	11.2	-169.77	-62.0	-1,256.3	1,611.1	1,588.5	22.59	71.303	
3,400.0	3,368.6	3,251.3	3,245.9	13.3	11.5	-169.90	-63.4	-1,262.9	1,635.1	1,611.8	23.30	70.166	
3,500.0	3,467.1	3,350.5	3,344.9	13.7	11.9	-170.01	-64.1	-1,270.0	1,659.2	1,635.2	24.02	69.062	
3,600.0	3,565.6	3,426.5	3,420.7	14.2	12.2	-170.09	-64.7	-1,275.5	1,683.5	1,658.9	24.63	68.359	
3,700.0	3,664.0	3,482.0	3,475.9	14.6	12.4	-170.15	-65.2	-1,280.6	1,709.7	1,684.6	25.11	68.089	
3,800.0	3,762.5	3,551.3	3,544.7	15.1	12.7	-170.20	-65.5	-1,288.4	1,737.9	1,712.2	25.66	67.725	
3,900.0	3,861.0	3,647.3	3,640.0	15.5	13.0	-170.23	-64.7	-1,300.6	1,767.2	1,740.8	26.37	67.025	
4,000.0	3,959.5	3,757.6	3,749.5	16.0	13.5	-170.23	-62.7	-1,313.8	1,795.8	1,768.6	27.15	66.130	
4,100.0	4,058.0	3,872.2	3,863.0	16.4	13.9	-170.03	-54.8	-1,327.1	1,823.5	1,795.5	27.96	65.214	
4,200.0	4,156.4	3,974.4	3,963.8	16.8	14.3	-169.70	-42.7	-1,338.8	1,850.6	1,821.9	28.69	64.496	
4,300.0	4,254.9	4,069.3	4,057.5	17.3	14.6	-169.41	-31.5	-1,349.3	1,877.4	1,848.0	29.39	63.882	
4,400.0	4,353.4	4,139.0	4,126.2	17.7	14.9	-169.21	-23.4	-1,357.6	1,905.1	1,875.2	29.94	63.632	
4,500.0	4,451.9	4,198.2	4,184.3	18.2	15.1	-169.02	-16.0	-1,365.6	1,934.4	1,904.0	30.42	63.587	
4,600.0	4,550.4	4,271.3	4,255.9	18.6	15.4	-168.75	-6.0	-1,376.9	1,965.4	1,934.5	30.99	63.431	
4,700.0	4,648.9	4,370.1	4,352.5	19.1	15.7	-168.41	7.6	-1,392.4	1,996.7	1,965.0	31.72	62.957	
4,800.0	4,747.3	4,454.1	4,434.7	19.5	16.1	-168.13	18.7	-1,405.4	2,028.0	1,995.6	32.35	62.681	
4,900.0	4,845.8	4,520.9	4,500.1	20.0	16.4	-167.95	26.6	-1,416.4	2,060.4	2,027.5	32.88	62.672	
5,000.0	4,944.3	4,602.6	4,580.1	20.4	16.7	-167.76	35.0	-1,430.7	2,093.7	2,060.2	33.50	62.501	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #222H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 29-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	4,696.4	4,672.0	20.9	17.1	-167.58	43.8	-1,447.3	2,127.3	2,093.1	34.21	62.190	
5,200.0	5,141.3	4,793.9	4,767.6	21.3	17.5	-167.41	52.4	-1,464.5	2,160.9	2,125.9	34.94	61.841	
5,300.0	5,239.7	4,900.7	4,872.5	21.8	17.9	-167.25	61.0	-1,482.8	2,194.1	2,158.4	35.74	61.384	
5,400.0	5,338.2	5,001.6	4,971.5	22.2	18.4	-167.09	69.8	-1,499.7	2,226.9	2,190.4	36.50	61.002	
5,500.0	5,436.7	5,080.0	5,048.5	22.7	18.7	-166.95	77.5	-1,512.9	2,259.8	2,222.6	37.11	60.891	
5,600.0	5,535.2	5,146.5	5,113.5	23.1	19.0	-166.82	84.4	-1,524.8	2,293.6	2,256.0	37.63	60.948	
5,700.0	5,633.7	5,209.2	5,174.7	23.6	19.3	-166.68	91.5	-1,536.9	2,328.8	2,290.6	38.12	61.087	
5,800.0	5,732.1	5,274.8	5,238.3	24.0	19.6	-166.53	99.4	-1,550.3	2,365.1	2,326.5	38.63	61.227	
5,900.0	5,830.6	5,363.3	5,324.2	24.5	20.0	-166.32	110.1	-1,569.1	2,402.1	2,362.8	39.31	61.102	
6,000.0	5,929.1	5,455.9	5,414.0	24.9	20.4	-166.13	120.9	-1,588.7	2,439.2	2,399.1	40.03	60.934	
6,100.0	6,027.6	5,542.9	5,498.6	25.4	20.8	-165.96	130.4	-1,607.3	2,476.4	2,435.7	40.70	60.838	
6,200.0	6,126.1	5,656.6	5,609.1	25.8	21.3	-165.78	141.8	-1,631.2	2,513.4	2,471.8	41.59	60.438	
6,300.0	6,224.5	5,769.4	5,719.1	26.3	21.9	-165.63	152.1	-1,654.0	2,549.6	2,507.1	42.46	60.052	
6,400.0	6,323.0	5,875.6	5,822.7	26.7	22.4	-165.48	162.4	-1,674.7	2,585.1	2,541.8	43.28	59.736	
6,500.0	6,421.5	5,976.3	5,921.0	27.2	22.8	-165.33	172.6	-1,694.0	2,620.4	2,576.3	44.06	59.479	
6,600.0	6,520.0	6,079.7	6,021.9	27.6	23.3	-165.16	184.2	-1,713.5	2,655.3	2,610.5	44.86	59.195	
6,700.0	6,618.5	6,188.1	6,127.7	28.1	23.8	-164.97	197.0	-1,733.6	2,689.9	2,644.2	45.70	58.864	
6,800.0	6,716.9	6,310.2	6,247.1	28.5	24.4	-164.79	210.1	-1,755.1	2,723.8	2,677.2	46.63	58.410	
6,900.0	6,815.4	6,408.1	6,343.1	29.0	24.8	-164.67	219.7	-1,771.9	2,757.1	2,709.7	47.39	58.178	
6,981.8	6,896.0	6,561.4	6,493.9	29.4	25.5	-164.53	232.9	-1,795.9	2,783.3	2,734.8	48.51	57.380	
7,000.0	6,913.9	6,599.1	6,531.1	29.5	25.6	-164.53	236.5	-1,801.2	2,788.7	2,740.0	48.77	57.178	
7,100.0	7,012.9	6,726.8	6,657.0	29.9	26.2	-164.54	249.1	-1,817.8	2,815.5	2,765.8	49.71	56.640	
7,200.0	7,112.3	6,852.4	6,781.3	30.3	26.7	-164.53	260.3	-1,832.8	2,837.0	2,786.4	50.61	56.054	
7,300.0	7,212.2	6,975.1	6,902.8	30.6	27.2	-164.49	269.7	-1,846.3	2,853.5	2,802.0	51.48	55.433	
7,381.8	7,294.0	7,381.8	7,042.4	30.9	28.8	-89.97	278.4	-1,859.9	2,862.8	2,809.4	53.37	53.638	
7,400.0	7,312.2	7,181.7	7,108.2	30.9	28.0	-89.90	281.6	-1,865.1	2,864.3	2,811.6	52.77	54.276	
7,500.0	7,412.2	7,507.8	7,433.8	31.2	29.1	-89.75	289.1	-1,875.8	2,868.4	2,814.0	54.42	52.707	
7,600.0	7,512.2	7,603.1	7,529.2	31.5	29.4	-89.75	289.2	-1,874.8	2,867.4	2,812.3	55.06	52.080	
7,633.8	7,546.0	7,633.8	7,559.8	31.6	29.5	-89.75	289.3	-1,874.6	2,867.1	2,811.8	55.27	51.878	
7,650.0	7,562.2	7,650.8	7,576.9	31.7	29.6	90.60	289.3	-1,874.5	2,867.0	2,811.6	55.37	51.775	
7,700.0	7,612.0	7,703.5	7,629.5	31.8	29.7	90.71	289.4	-1,874.1	2,866.7	2,811.0	55.69	51.471	
7,750.0	7,661.4	7,752.1	7,678.1	31.9	29.9	90.89	289.5	-1,873.7	2,866.3	2,810.4	55.99	51.191	
7,800.0	7,709.8	7,798.4	7,724.4	32.0	30.0	91.14	289.5	-1,873.3	2,866.2	2,809.9	56.27	50.934	
7,819.1	7,728.1	7,815.8	7,741.8	32.1	30.1	91.24	289.6	-1,873.2	2,866.2	2,809.8	56.37	50.841	
7,850.0	7,757.1	7,841.8	7,767.9	32.1	30.1	91.42	289.6	-1,873.1	2,866.2	2,809.7	56.53	50.700	
7,900.0	7,802.7	7,883.1	7,809.2	32.2	30.3	91.72	289.6	-1,872.8	2,866.6	2,809.8	56.78	50.488	
7,950.0	7,846.4	7,924.0	7,850.1	32.3	30.4	92.05	289.5	-1,872.7	2,867.3	2,810.2	57.01	50.292	
8,000.0	7,887.7	7,964.8	7,890.9	32.4	30.5	92.39	289.5	-1,872.6	2,868.4	2,811.1	57.24	50.112	
8,050.0	7,926.5	8,003.1	7,929.2	32.4	30.6	92.71	289.4	-1,872.4	2,870.0	2,812.5	57.45	49.954	
8,100.0	7,962.4	8,036.2	7,962.2	32.5	30.7	92.95	289.4	-1,872.4	2,872.2	2,814.6	57.64	49.827	
8,150.0	7,995.1	8,066.4	7,992.5	32.5	30.8	93.11	289.3	-1,872.3	2,875.2	2,817.3	57.82	49.725	
8,200.0	8,024.4	8,093.5	8,019.6	32.6	30.9	93.17	289.3	-1,872.3	2,878.9	2,820.9	57.99	49.648	
8,250.0	8,050.1	8,119.9	8,046.0	32.6	31.0	93.16	289.2	-1,872.3	2,883.5	2,825.3	58.15	49.589	
8,300.0	8,071.9	8,142.7	8,068.7	32.7	31.1	93.02	289.2	-1,872.3	2,888.9	2,830.6	58.30	49.557	
8,350.0	8,089.7	8,161.4	8,087.4	32.7	31.1	92.72	289.1	-1,872.3	2,895.3	2,836.9	58.43	49.554	
8,400.0	8,103.4	8,175.8	8,101.9	32.7	31.2	92.26	289.0	-1,872.3	2,902.7	2,844.1	58.54	49.581	
8,450.0	8,112.8	8,185.9	8,112.0	32.8	31.2	91.61	289.0	-1,872.3	2,911.0	2,852.4	58.65	49.637	
8,500.0	8,118.0	8,191.5	8,117.6	32.9	31.2	90.78	288.9	-1,872.2	2,920.3	2,861.5	58.73	49.725	
8,533.8	8,119.0	8,192.8	8,118.9	33.0	31.2	90.12	288.9	-1,872.2	2,927.0	2,868.3	58.77	49.801	
8,600.0	8,119.0	8,193.1	8,119.2	33.1	31.2	90.13	288.9	-1,872.2	2,941.3	2,882.5	58.87	49.967	
8,700.0	8,119.0	8,193.7	8,119.8	33.4	31.2	90.14	288.9	-1,872.2	2,965.6	2,906.6	59.04	50.229	
8,800.0	8,119.0	8,194.2	8,120.3	33.8	31.2	90.15	288.9	-1,872.2	2,993.1	2,933.8	59.26	50.508	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #222H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 29-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,900.0	8,119.0	8,194.8	8,120.9	34.3	31.2	90.16	288.9	-1,872.2	3,023.6	2,964.1	59.51	50.805	
9,000.0	8,119.0	8,195.4	8,121.4	34.9	31.2	90.17	288.9	-1,872.2	3,057.1	2,997.3	59.80	51.122	
9,100.0	8,119.0	8,195.9	8,122.0	35.5	31.2	90.18	288.9	-1,872.2	3,093.4	3,033.3	60.11	51.461	
9,200.0	8,119.0	8,196.5	8,122.6	36.3	31.2	90.19	288.9	-1,872.2	3,132.5	3,072.1	60.45	51.822	
9,300.0	8,119.0	8,197.1	8,123.2	37.1	31.2	90.20	288.9	-1,872.2	3,174.3	3,113.5	60.80	52.207	
9,400.0	8,119.0	8,197.7	8,123.8	37.9	31.2	90.22	288.9	-1,872.2	3,218.7	3,157.5	61.17	52.618	
9,500.0	8,119.0	8,198.3	8,124.3	38.8	31.2	90.23	288.9	-1,872.2	3,265.5	3,204.0	61.55	53.054	
9,600.0	8,119.0	8,198.9	8,124.9	39.8	31.2	90.24	288.9	-1,872.2	3,314.7	3,252.7	61.94	53.517	
9,700.0	8,119.0	8,199.5	8,125.5	40.8	31.2	90.25	288.9	-1,872.2	3,366.1	3,303.8	62.33	54.006	
9,800.0	8,119.0	8,200.1	8,126.1	41.8	31.2	90.26	288.9	-1,872.2	3,419.7	3,357.0	62.72	54.522	
9,900.0	8,119.0	8,200.7	8,126.8	42.9	31.2	90.28	288.9	-1,872.2	3,475.3	3,412.2	63.11	55.064	
10,000.0	8,119.0	8,201.3	8,127.4	44.0	31.2	90.29	288.9	-1,872.2	3,532.9	3,469.4	63.50	55.632	
10,100.0	8,119.0	8,201.9	8,128.0	45.2	31.2	90.30	288.9	-1,872.2	3,592.3	3,528.4	63.89	56.227	
10,200.0	8,119.0	8,202.5	8,128.6	46.3	31.3	90.31	288.9	-1,872.2	3,653.5	3,589.3	64.27	56.846	
10,300.0	8,119.0	8,203.2	8,129.2	47.5	31.3	90.33	288.9	-1,872.2	3,716.4	3,651.8	64.64	57.490	
10,400.0	8,119.0	8,203.8	8,129.9	48.8	31.3	90.34	288.9	-1,872.2	3,780.9	3,715.9	65.01	58.158	
10,500.0	8,119.0	8,204.4	8,130.5	50.0	31.3	90.35	288.9	-1,872.2	3,847.0	3,781.6	65.37	58.850	
10,600.0	8,119.0	8,205.1	8,131.2	51.3	31.3	90.36	288.9	-1,872.2	3,914.4	3,848.7	65.72	59.563	
10,700.0	8,119.0	8,205.7	8,131.8	52.6	31.3	90.38	288.9	-1,872.2	3,983.2	3,917.2	66.06	60.298	
10,800.0	8,119.0	8,206.4	8,132.5	54.0	31.3	90.39	288.9	-1,872.2	4,053.4	3,987.0	66.39	61.053	
10,900.0	8,119.0	8,207.1	8,133.1	55.3	31.3	90.40	288.9	-1,872.2	4,124.7	4,058.0	66.71	61.828	
11,000.0	8,119.0	8,207.7	8,133.8	56.7	31.3	90.42	288.9	-1,872.2	4,197.2	4,130.2	67.03	62.621	
11,100.0	8,119.0	8,208.4	8,134.5	58.0	31.3	90.43	288.8	-1,872.2	4,270.9	4,203.5	67.33	63.433	
11,200.0	8,119.0	8,206.9	8,133.0	59.4	31.3	90.40	288.9	-1,872.2	4,345.6	4,278.0	67.61	64.270	
11,300.0	8,119.0	8,207.4	8,133.5	60.8	31.3	90.41	288.9	-1,872.2	4,421.3	4,353.4	67.90	65.115	
11,400.0	8,119.0	8,208.0	8,134.0	62.2	31.3	90.42	288.9	-1,872.2	4,497.9	4,429.7	68.17	65.976	
11,500.0	8,119.0	8,208.5	8,134.5	63.6	31.3	90.43	288.9	-1,872.2	4,575.4	4,507.0	68.44	66.852	
11,600.0	8,119.0	8,209.0	8,135.1	65.1	31.3	90.44	288.9	-1,872.2	4,653.8	4,585.1	68.70	67.742	
11,700.0	8,119.0	15,580.0	11,968.6	66.5	73.0	145.26	-3,462.4	-1,660.1	4,692.1	4,595.6	96.55	48.599	
11,800.0	8,119.0	15,660.0	11,968.8	68.0	74.0	145.25	-3,542.4	-1,660.2	4,692.7	4,594.4	98.31	47.734	
11,900.0	8,119.0	15,792.5	11,969.4	69.4	75.8	145.26	-3,674.9	-1,659.1	4,692.9	4,592.2	100.66	46.619	
12,000.0	8,119.0	15,861.0	11,968.9	70.9	76.8	145.24	-3,743.3	-1,660.1	4,693.5	4,591.1	102.33	45.865	
12,100.0	8,119.0	15,915.4	11,968.9	72.4	77.5	145.23	-3,797.7	-1,661.3	4,694.8	4,591.0	103.84	45.212	
12,200.0	8,119.0	16,247.6	11,955.4	73.9	82.1	144.99	-4,129.2	-1,673.6	4,693.7	4,584.8	108.84	43.124	
12,300.0	8,119.0	16,363.4	11,950.3	75.4	83.8	144.96	-4,244.9	-1,672.9	4,690.0	4,578.9	111.13	42.204	
12,400.0	8,119.0	16,426.0	11,949.4	76.9	84.7	144.97	-4,307.4	-1,670.4	4,686.8	4,574.1	112.75	41.570	
12,500.0	8,119.0	16,462.1	11,949.8	78.4	85.2	144.99	-4,343.4	-1,668.3	4,684.7	4,570.7	114.05	41.075	
12,600.0	8,119.0	16,520.0	11,952.7	79.9	86.0	145.06	-4,401.0	-1,663.6	4,684.2	4,568.7	115.55	40.540	
12,700.0	8,119.0	16,678.6	11,959.4	81.4	88.3	145.23	-4,558.9	-1,650.0	4,683.1	4,565.0	118.07	39.663	
12,800.0	8,119.0	16,801.0	11,958.1	82.9	90.1	145.25	-4,681.2	-1,646.2	4,680.7	4,560.3	120.39	38.879	
12,900.0	8,119.0	16,856.9	11,956.7	84.5	90.9	145.25	-4,737.1	-1,645.6	4,678.7	4,556.7	121.98	38.356	
13,000.0	8,119.0	16,896.0	11,956.7	86.0	91.5	145.25	-4,776.2	-1,645.0	4,678.1	4,554.7	123.34	37.928	
13,047.6	8,119.0	17,027.6	11,955.8	86.7	93.4	145.25	-4,907.7	-1,643.8	4,677.8	4,552.4	125.35	37.317	
13,100.0	8,119.0	13,100.0	11,953.5	87.5	42.1	145.22	-4,966.7	-1,644.4	4,676.6	4,591.8	84.82	55.133	
13,200.0	8,119.0	17,145.1	11,951.2	89.1	95.1	145.19	-5,025.1	-1,645.6	4,674.9	4,546.7	128.24	36.454	
13,300.0	8,119.0	17,201.6	11,949.9	90.6	96.0	145.17	-5,081.6	-1,646.7	4,674.5	4,544.6	129.87	35.994	
13,400.0	8,119.0	17,427.6	11,941.2	92.2	99.3	145.04	-5,307.4	-1,651.7	4,672.7	4,539.0	133.71	34.947	
13,500.0	8,119.0	13,500.0	11,936.5	93.7	43.1	145.00	-5,418.9	-1,652.2	4,669.8	4,576.7	93.11	50.152	
13,600.0	8,119.0	17,620.3	11,933.2	95.3	102.2	144.97	-5,499.9	-1,652.0	4,666.8	4,528.8	138.02	33.812	
13,700.0	8,119.0	17,676.2	11,931.8	96.8	103.0	144.97	-5,555.8	-1,651.5	4,664.6	4,525.0	139.66	33.401	
13,800.0	8,119.0	13,800.0	11,931.4	98.4	46.9	144.99	-5,677.3	-1,648.2	4,663.2	4,564.2	98.99	47.106	
13,900.0	8,119.0	17,937.0	11,928.6	100.0	107.0	145.01	-5,816.4	-1,643.7	4,659.7	4,515.1	144.62	32.220	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #222H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 29-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,000.0	8,119.0	17,979.6	11,928.0	101.5	107.6	145.02	-5,859.0	-1,642.1	4,657.2	4,511.1	146.08	31.881	
14,100.0	8,119.0	18,031.0	11,928.3	103.1	108.4	145.03	-5,910.4	-1,641.0	4,656.3	4,508.7	147.63	31.541	
14,132.7	8,119.0	18,031.0	11,928.3	103.6	108.4	145.03	-5,910.4	-1,641.0	4,656.2	4,508.3	147.93	31.477	
14,200.0	8,119.0	18,031.0	11,928.3	104.7	108.4	145.03	-5,910.4	-1,641.0	4,656.7	4,508.2	148.53	31.353	
14,300.0	8,119.0	18,284.3	11,925.8	106.2	112.2	144.95	-6,163.5	-1,645.6	4,658.4	4,505.7	152.76	30.495	
14,400.0	8,119.0	14,400.0	11,919.9	107.8	53.1	144.87	-6,285.4	-1,648.6	4,656.2	4,544.0	112.17	41.509	
14,500.0	8,119.0	18,451.4	11,918.0	109.4	114.8	144.84	-6,330.4	-1,649.5	4,654.4	4,497.4	156.91	29.662	
14,600.0	8,119.0	18,502.0	11,917.0	111.0	115.6	144.82	-6,380.9	-1,650.5	4,654.0	4,495.5	158.51	29.360	
14,603.2	8,119.0	18,502.0	11,917.0	111.0	115.6	144.82	-6,380.9	-1,650.5	4,654.0	4,495.5	158.54	29.355	
14,700.0	8,119.0	18,570.7	11,916.6	112.6	116.6	144.80	-6,449.6	-1,651.6	4,654.6	4,494.2	160.34	29.030	
14,800.0	8,119.0	18,671.4	11,916.1	114.2	118.1	144.78	-6,550.3	-1,652.7	4,655.1	4,492.6	162.58	28.633	
14,900.0	8,119.0	18,940.3	11,915.3	115.7	122.3	144.80	-6,819.1	-1,648.6	4,655.2	4,488.3	166.83	27.904	
15,000.0	8,119.0	19,045.1	11,914.6	117.3	123.9	144.84	-6,923.8	-1,643.6	4,652.1	4,483.1	169.00	27.527	
15,100.0	8,119.0	19,172.6	11,913.5	118.9	125.9	144.90	-7,051.1	-1,636.8	4,648.7	4,477.3	171.41	27.120	
15,200.0	8,119.0	19,233.7	11,912.6	120.5	126.9	144.91	-7,112.1	-1,634.3	4,645.5	4,472.3	173.12	26.833	
15,300.0	8,119.0	15,300.0	11,908.6	122.1	65.8	144.89	-7,233.1	-1,632.6	4,642.2	4,511.1	131.13	35.402	
15,400.0	8,119.0	19,407.9	11,907.1	123.7	129.6	144.89	-7,286.2	-1,631.5	4,639.2	4,461.9	177.27	26.170	
15,500.0	8,119.0	19,463.2	11,906.9	125.3	130.4	144.91	-7,341.5	-1,629.7	4,637.4	4,458.5	178.90	25.922	
15,600.0	8,119.0	19,540.0	11,906.1	126.9	131.6	144.91	-7,418.3	-1,628.3	4,635.9	4,455.1	180.81	25.640	
15,700.0	8,119.0	19,600.9	11,905.7	128.5	132.6	144.91	-7,479.1	-1,627.5	4,635.1	4,452.6	182.51	25.396	
15,702.5	8,119.0	19,601.9	11,905.7	128.5	132.6	144.91	-7,480.1	-1,627.5	4,635.1	4,452.6	182.55	25.391	
15,800.0	8,119.0	19,666.7	11,906.8	130.1	133.6	144.93	-7,544.9	-1,626.3	4,635.7	4,451.4	184.24	25.161	
15,900.0	8,119.0	19,848.2	11,899.2	131.7	136.4	144.78	-7,726.0	-1,634.6	4,635.0	4,447.1	187.85	24.674	
15,982.2	8,119.0	19,882.1	11,897.6	133.0	137.0	144.75	-7,759.9	-1,636.3	4,634.5	4,445.4	189.13	24.505	
16,000.0	8,119.0	19,889.5	11,897.3	133.3	137.1	144.74	-7,767.2	-1,636.7	4,634.5	4,445.1	189.40	24.470	
16,100.0	8,119.0	19,960.9	11,896.0	134.9	138.2	144.70	-7,838.6	-1,639.1	4,635.3	4,444.0	191.34	24.226	
16,200.0	8,119.0	16,200.0	11,893.2	136.5	79.4	144.64	-7,979.8	-1,642.8	4,635.4	4,484.2	151.20	30.657	
16,212.0	8,119.0	16,212.0	11,892.9	136.7	79.6	144.63	-7,991.8	-1,643.2	4,635.4	4,484.0	151.48	30.600	
16,300.0	8,119.0	20,147.3	11,892.0	138.1	141.1	144.61	-8,024.9	-1,644.5	4,635.8	4,440.0	195.83	23.673	
16,400.0	8,119.0	20,198.0	11,891.8	139.7	141.9	144.59	-8,075.5	-1,646.3	4,637.8	4,440.3	197.45	23.489	
16,500.0	8,119.0	20,378.8	11,893.1	141.4	144.7	144.57	-8,256.3	-1,648.3	4,639.5	4,438.7	200.82	23.103	
16,600.0	8,119.0	20,439.0	11,893.1	143.0	145.7	144.56	-8,316.4	-1,648.8	4,640.3	4,437.8	202.55	22.910	
16,700.0	8,119.0	20,604.4	11,895.2	144.6	148.3	144.58	-8,481.8	-1,647.2	4,641.3	4,435.7	205.60	22.575	
16,708.8	8,119.0	20,609.1	11,895.2	144.7	148.4	144.58	-8,486.5	-1,647.2	4,641.3	4,435.5	205.74	22.559	
16,800.0	8,119.0	20,671.0	11,894.9	146.2	149.4	144.57	-8,548.4	-1,647.9	4,641.7	4,434.3	207.43	22.377	
16,900.0	8,119.0	20,766.7	11,894.8	147.8	150.9	144.55	-8,644.1	-1,649.0	4,642.7	4,433.0	209.66	22.144	
17,000.0	8,119.0	20,859.3	11,894.9	149.4	152.3	144.54	-8,736.7	-1,649.7	4,643.5	4,431.7	211.83	21.921	
17,100.0	8,119.0	20,914.3	11,895.5	151.0	153.2	144.54	-8,791.7	-1,649.8	4,644.9	4,431.4	213.46	21.760	
17,200.0	8,119.0	20,974.9	11,897.2	152.7	154.2	144.55	-8,852.2	-1,649.6	4,647.2	4,432.1	215.13	21.602	
17,300.0	8,119.0	21,046.0	11,898.7	154.3	155.3	144.54	-8,923.3	-1,650.7	4,650.2	4,433.2	216.97	21.432	
17,400.0	8,119.0	21,327.0	11,900.0	155.9	159.8	144.54	-9,204.2	-1,650.1	4,649.4	4,427.7	221.69	20.973	
17,475.8	8,119.0	21,376.3	11,899.9	157.1	160.5	144.54	-9,253.5	-1,649.5	4,649.0	4,425.9	223.04	20.844	
17,500.0	8,119.0	21,387.2	11,899.9	157.5	160.7	144.55	-9,264.5	-1,649.4	4,649.0	4,425.6	223.41	20.809	
17,600.0	8,119.0	21,444.1	11,900.6	159.1	161.6	144.55	-9,321.3	-1,648.9	4,649.8	4,424.8	225.06	20.660	
17,700.0	8,119.0	21,532.3	11,903.2	160.7	163.0	144.59	-9,409.4	-1,646.8	4,651.2	4,424.1	227.05	20.485	
17,800.0	8,119.0	21,609.7	11,906.4	162.4	164.3	144.63	-9,486.7	-1,644.1	4,652.9	4,424.0	228.86	20.331	
17,900.0	8,119.0	21,717.3	11,911.9	164.0	166.0	144.71	-9,594.0	-1,639.2	4,654.7	4,423.8	230.98	20.152	
18,000.0	8,119.0	18,000.0	11,918.9	165.6	106.6	144.83	-9,739.4	-1,631.8	4,656.0	4,466.0	190.05	24.499	
18,100.0	8,119.0	22,099.9	11,924.7	167.2	172.1	144.97	-9,975.9	-1,620.2	4,655.8	4,418.7	237.09	19.637	
18,200.0	8,119.0	22,218.0	11,925.5	168.9	174.0	145.04	-10,093.9	-1,613.7	4,653.5	4,414.2	239.36	19.442	
18,300.0	8,119.0	22,504.7	11,925.5	170.5	178.7	145.24	-10,379.7	-1,592.2	4,650.5	4,407.4	243.08	19.132	
18,400.0	8,119.0	22,552.0	11,923.5	172.1	179.4	145.25	-10,426.8	-1,589.3	4,644.3	4,399.6	244.73	18.977	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #222H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 29-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,500.0	8,119.0	22,613.5	11,921.1	173.7	180.4	145.26	-10,488.2	-1,586.4	4,639.0	4,392.5	246.52	18.818	
18,600.0	8,119.0	22,647.0	11,920.1	175.4	181.0	145.26	-10,521.7	-1,585.4	4,635.1	4,387.1	248.00	18.690	
18,700.0	8,119.0	22,719.0	11,918.1	177.0	182.1	145.26	-10,593.7	-1,584.0	4,632.2	4,382.2	249.92	18.535	
18,800.0	8,119.0	22,768.4	11,916.9	178.6	182.9	145.25	-10,643.0	-1,583.7	4,630.1	4,378.6	251.56	18.406	
18,900.0	8,119.0	22,810.8	11,916.3	180.2	183.6	145.24	-10,685.4	-1,583.7	4,629.3	4,376.3	253.08	18.292	
18,902.3	8,119.0	22,811.7	11,916.3	180.3	183.6	145.24	-10,686.4	-1,583.7	4,629.3	4,376.2	253.12	18.289	
19,000.0	8,119.0	22,872.7	11,916.1	181.9	184.6	145.23	-10,747.3	-1,584.2	4,629.7	4,374.9	254.85	18.166	
19,100.0	8,119.0	22,983.2	11,916.3	183.5	186.4	145.22	-10,857.8	-1,584.5	4,630.4	4,373.1	257.26	17.999	
19,200.0	8,119.0	23,104.6	11,916.3	185.1	188.3	145.22	-10,979.2	-1,584.1	4,630.5	4,370.7	259.80	17.823	
19,300.0	8,119.0	23,270.4	11,913.8	186.8	191.0	145.20	-11,145.0	-1,583.4	4,629.2	4,366.2	262.96	17.604	
19,400.0	8,119.0	23,447.5	11,909.4	188.4	193.8	145.17	-11,322.1	-1,582.0	4,627.1	4,360.8	266.24	17.380	
19,500.0	8,119.0	23,496.0	11,907.2	190.0	194.6	145.15	-11,370.5	-1,582.2	4,624.2	4,356.3	267.94	17.258	
19,600.0	8,119.0	23,537.1	11,905.8	191.6	195.3	145.14	-11,411.6	-1,582.6	4,622.5	4,353.0	269.50	17.152	
19,645.9	8,119.0	23,548.8	11,905.6	192.4	195.4	145.13	-11,423.3	-1,582.7	4,622.4	4,352.3	270.10	17.114	
19,700.0	8,119.0	23,590.0	11,905.9	193.3	196.1	145.13	-11,464.4	-1,583.0	4,622.9	4,351.8	271.15	17.049	
19,800.0	8,119.0	23,590.0	11,905.9	194.9	196.1	145.13	-11,464.4	-1,583.0	4,624.3	4,352.3	272.00	17.001	
19,900.0	8,119.0	23,644.9	11,907.4	196.5	197.0	145.13	-11,519.3	-1,583.3	4,627.3	4,353.7	273.57	16.915	
20,000.0	8,119.0	23,809.4	11,911.4	198.2	199.6	145.13	-11,683.7	-1,585.5	4,630.5	4,353.7	276.78	16.730	
20,100.0	8,119.0	23,965.8	11,911.1	199.8	202.1	145.08	-11,840.1	-1,589.2	4,632.1	4,352.1	279.99	16.544	
20,200.0	8,119.0	24,034.1	11,910.7	201.4	203.2	145.06	-11,908.4	-1,590.7	4,633.3	4,351.4	281.89	16.437	
20,300.0	8,119.0	24,128.1	11,911.8	203.1	204.8	145.06	-12,002.4	-1,591.3	4,634.9	4,350.9	284.07	16.316	
20,400.0	8,119.0	24,290.2	11,912.5	204.7	207.4	145.05	-12,164.5	-1,591.0	4,635.3	4,348.1	287.19	16.140	
20,500.0	8,119.0	24,328.9	11,913.2	206.3	208.0	145.06	-12,203.1	-1,590.5	4,636.3	4,347.7	288.57	16.066	
20,606.7	8,119.0	24,400.0	11,915.9	208.1	209.2	145.10	-12,274.2	-1,588.7	4,638.4	4,348.1	290.34	15.976	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #223H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 228-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.39	-0.8	-120.1	120.1				
100.0	100.0	99.8	99.8	0.1	0.2	-90.41	-0.8	-120.1	120.1	119.8	0.28	421.615	
200.0	200.0	199.7	199.7	0.5	0.3	-90.45	-1.0	-120.3	120.3	119.5	0.80	150.421	
300.0	300.0	299.7	299.7	0.8	0.6	-90.54	-1.1	-120.6	120.6	119.2	1.46	82.690	
400.0	400.0	399.9	399.9	1.2	1.0	-90.66	-1.4	-120.8	120.8	118.6	2.17	55.559	
500.0	500.0	499.7	499.7	1.6	1.3	-90.82	-1.7	-120.9	121.0	118.1	2.89	41.864	
600.0	600.0	599.5	599.5	1.9	1.7	-90.97	-2.1	-121.3	121.3	117.7	3.60	33.650	
700.0	700.0	699.1	699.1	2.3	2.0	-90.89	-1.9	-121.8	121.9	117.6	4.31	28.269	ES
800.0	800.0	798.7	798.7	2.6	2.4	-90.37	-0.8	-122.8	122.8	117.7	5.02	24.466	
900.0	900.0	896.3	896.2	3.0	2.7	-89.08	2.0	-124.9	124.9	119.2	5.72	21.858	
1,000.0	1,000.0	994.4	994.1	3.4	3.1	-86.98	6.8	-128.5	128.8	122.4	6.42	20.080	
1,100.0	1,100.0	1,093.4	1,092.9	3.7	3.4	-159.38	12.2	-133.0	135.4	128.3	7.12	19.018	
1,200.0	1,199.8	1,192.1	1,191.3	4.1	3.8	-158.03	17.7	-138.0	145.8	138.0	7.82	18.650	
1,300.0	1,299.5	1,290.4	1,289.3	4.4	4.1	-157.33	23.2	-143.4	159.9	151.4	8.52	18.773	
1,400.0	1,398.7	1,387.9	1,386.5	4.8	4.5	-157.05	29.0	-149.2	177.7	168.5	9.22	19.276	
1,500.0	1,497.5	1,483.3	1,481.5	5.2	4.8	-157.13	34.8	-155.6	199.5	189.6	9.92	20.117	
1,600.0	1,595.9	1,577.6	1,575.3	5.5	5.2	-157.54	40.5	-163.1	224.0	213.4	10.60	21.127	
1,700.0	1,694.4	1,675.4	1,672.5	5.9	5.6	-157.99	46.1	-171.4	249.0	237.7	11.31	22.015	
1,800.0	1,792.9	1,773.7	1,770.4	6.3	5.9	-158.56	50.7	-179.4	273.5	261.5	12.03	22.743	
1,900.0	1,891.4	1,872.8	1,869.2	6.8	6.3	-159.24	54.3	-186.8	297.4	284.7	12.75	23.334	
2,000.0	1,989.9	1,972.3	1,968.4	7.2	6.7	-160.00	56.8	-193.7	320.7	307.2	13.47	23.806	
2,100.0	2,088.4	2,073.5	2,069.5	7.6	7.1	-160.78	58.7	-199.8	343.1	328.9	14.21	24.151	
2,200.0	2,186.8	2,175.3	2,171.1	8.0	7.4	-161.53	60.1	-204.7	364.4	349.4	14.94	24.385	
2,300.0	2,285.3	2,269.4	2,265.1	8.5	7.8	-162.17	61.4	-209.4	385.8	370.2	15.64	24.677	
2,400.0	2,383.8	2,366.0	2,361.5	8.9	8.1	-162.75	62.6	-214.6	407.8	391.5	16.34	24.952	
2,500.0	2,482.3	2,466.6	2,462.0	9.3	8.5	-163.19	64.7	-219.7	429.4	412.4	17.08	25.146	
2,600.0	2,580.8	2,566.7	2,561.9	9.8	8.9	-163.43	67.9	-224.1	450.4	432.6	17.81	25.288	
2,700.0	2,679.2	2,665.2	2,660.3	10.2	9.2	-163.58	71.7	-228.1	471.1	452.6	18.54	25.416	
2,800.0	2,777.7	2,765.4	2,760.3	10.6	9.6	-163.69	75.7	-231.9	491.6	472.3	19.27	25.510	
2,900.0	2,876.2	2,867.7	2,862.6	11.1	10.0	-163.95	78.5	-235.1	511.3	491.3	20.02	25.546	
3,000.0	2,974.7	2,971.4	2,966.2	11.5	10.3	-164.36	79.7	-237.3	530.2	509.5	20.76	25.538	
3,100.0	3,073.2	3,076.1	3,070.9	11.9	10.7	-164.86	79.9	-238.4	548.0	526.5	21.50	25.482	
3,200.0	3,171.6	3,174.7	3,169.5	12.4	11.0	-165.39	79.2	-238.6	565.0	542.8	22.21	25.441	
3,300.0	3,270.1	3,271.4	3,266.2	12.8	11.3	-165.97	77.7	-239.1	582.4	559.5	22.90	25.429	
3,400.0	3,368.6	3,379.9	3,374.7	13.3	11.7	-166.58	75.9	-239.0	599.3	575.6	23.65	25.342	
3,500.0	3,467.1	3,492.0	3,486.7	13.7	12.1	-167.05	75.5	-236.7	614.1	589.7	24.40	25.168	
3,600.0	3,565.6	3,590.7	3,585.3	14.2	12.4	-167.51	74.6	-233.6	628.1	603.0	25.10	25.026	
3,700.0	3,664.0	3,689.6	3,684.1	14.6	12.7	-168.09	72.0	-230.3	641.9	616.1	25.79	24.887	
3,800.0	3,762.5	3,785.2	3,779.7	15.1	13.0	-168.57	70.2	-227.4	656.1	629.6	26.48	24.777	
3,900.0	3,861.0	3,880.1	3,874.6	15.5	13.3	-168.87	70.1	-225.1	670.8	643.6	27.16	24.693	
4,000.0	3,959.5	3,972.9	3,967.3	16.0	13.6	-169.05	71.2	-223.7	686.3	658.4	27.85	24.644	
4,100.0	4,058.0	4,067.1	4,061.5	16.4	14.0	-169.13	73.4	-223.2	702.6	674.1	28.54	24.621	
4,200.0	4,156.4	4,167.7	4,162.1	16.8	14.3	-169.19	76.0	-222.8	719.0	689.8	29.26	24.569	
4,300.0	4,254.9	4,267.2	4,261.6	17.3	14.7	-169.26	78.4	-222.1	735.2	705.2	29.99	24.517	
4,400.0	4,353.4	4,364.0	4,358.3	17.7	15.0	-169.33	80.7	-221.6	751.5	720.8	30.69	24.483	
4,500.0	4,451.9	4,460.2	4,454.5	18.2	15.3	-169.42	82.7	-221.2	768.1	736.7	31.40	24.460	
4,600.0	4,550.4	4,555.4	4,549.7	18.6	15.7	-169.51	84.5	-221.3	785.0	752.9	32.10	24.454	
4,700.0	4,648.9	4,652.1	4,646.4	19.1	16.0	-169.61	86.2	-221.7	802.3	769.5	32.81	24.453	
4,800.0	4,747.3	4,751.2	4,745.5	19.5	16.4	-169.70	87.9	-222.1	819.7	786.2	33.54	24.442	
4,900.0	4,845.8	4,848.7	4,842.9	20.0	16.7	-169.78	89.7	-222.5	837.0	802.8	34.25	24.438	
5,000.0	4,944.3	4,944.4	4,938.6	20.4	17.0	-169.89	91.1	-223.1	854.6	819.7	34.96	24.448	
5,100.0	5,042.8	5,040.5	5,034.7	20.9	17.4	-170.01	92.1	-224.0	872.5	836.9	35.66	24.465	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #223H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 228-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,141.3	5,136.9	5,131.1	21.3	17.7	-170.14	92.9	-225.1	890.7	854.3	36.37	24.487	
5,300.0	5,239.7	5,235.2	5,229.5	21.8	18.1	-170.29	93.4	-226.3	908.9	871.8	37.09	24.504	
5,400.0	5,338.2	5,335.3	5,329.5	22.2	18.4	-170.43	93.9	-227.4	927.1	889.3	37.83	24.510	
5,500.0	5,436.7	5,434.5	5,428.7	22.7	18.8	-170.58	94.4	-228.3	945.1	906.5	38.55	24.515	
5,600.0	5,535.2	5,533.3	5,527.5	23.1	19.1	-170.72	94.7	-229.2	963.0	923.7	39.27	24.520	
5,700.0	5,633.7	5,629.5	5,623.7	23.6	19.5	-170.86	94.9	-230.0	981.0	941.0	39.98	24.537	
5,800.0	5,732.1	5,724.8	5,719.0	24.0	19.8	-171.01	94.9	-231.2	999.3	958.7	40.68	24.565	
5,900.0	5,830.6	5,821.2	5,815.4	24.5	20.1	-171.17	94.5	-232.5	1,017.9	976.5	41.39	24.595	
6,000.0	5,929.1	5,918.1	5,912.2	24.9	20.5	-171.34	93.9	-233.9	1,036.6	994.5	42.09	24.627	
6,100.0	6,027.6	6,018.4	6,012.5	25.4	20.8	-171.52	93.0	-235.4	1,055.3	1,012.5	42.82	24.646	
6,200.0	6,126.1	6,119.5	6,113.7	25.8	21.2	-171.73	91.6	-236.5	1,073.8	1,030.2	43.55	24.657	
6,300.0	6,224.5	6,220.7	6,214.8	26.3	21.5	-171.95	90.0	-237.4	1,092.0	1,047.7	44.28	24.663	
6,400.0	6,323.0	6,322.0	6,316.1	26.7	21.9	-172.15	88.6	-237.9	1,109.9	1,064.9	45.00	24.663	
6,500.0	6,421.5	6,419.8	6,413.9	27.2	22.2	-172.31	87.6	-238.5	1,127.8	1,082.1	45.71	24.670	
6,600.0	6,520.0	6,518.4	6,512.5	27.6	22.6	-172.44	87.4	-239.1	1,145.7	1,099.2	46.43	24.674	
6,700.0	6,618.5	6,620.6	6,614.7	28.1	22.9	-172.55	87.4	-239.6	1,163.4	1,116.2	47.18	24.660	
6,800.0	6,716.9	6,720.2	6,714.3	28.5	23.3	-172.65	87.5	-239.8	1,180.8	1,132.9	47.90	24.649	
6,900.0	6,815.4	6,813.6	6,807.7	29.0	23.6	-172.76	87.3	-240.2	1,198.4	1,149.8	48.59	24.663	
6,981.8	6,896.0	6,891.1	6,885.2	29.4	23.9	-172.85	86.9	-240.8	1,213.2	1,164.0	49.16	24.677	
7,000.0	6,913.9	6,909.9	6,904.0	29.5	23.9	-172.88	86.9	-241.0	1,216.4	1,167.1	49.30	24.674	
7,100.0	7,012.9	7,014.1	7,008.2	29.9	24.3	-172.98	87.7	-241.7	1,231.3	1,181.3	50.05	24.603	
7,200.0	7,112.3	7,116.6	7,110.7	30.3	24.7	-172.96	90.0	-242.3	1,241.5	1,190.8	50.78	24.450	
7,300.0	7,212.2	7,216.7	7,210.7	30.6	25.0	-172.90	92.3	-242.7	1,247.4	1,195.9	51.49	24.227	
7,381.8	7,294.0	7,300.5	7,294.6	30.9	25.3	-98.41	94.0	-243.0	1,248.9	1,196.8	52.07	23.987	
7,400.0	7,312.2	7,319.6	7,313.6	30.9	25.4	-98.40	94.3	-243.1	1,248.9	1,196.7	52.19	23.927	
7,500.0	7,412.2	7,424.3	7,418.3	31.2	25.8	-98.34	95.6	-243.0	1,248.6	1,195.7	52.90	23.601	
7,600.0	7,512.2	7,524.2	7,518.2	31.5	26.1	-98.31	96.3	-242.5	1,248.0	1,194.4	53.58	23.292	
7,633.8	7,546.0	7,557.5	7,551.5	31.6	26.2	-98.30	96.5	-242.4	1,247.9	1,194.1	53.81	23.191	
7,650.0	7,562.2	7,573.4	7,567.4	31.7	26.3	82.05	96.6	-242.3	1,247.8	1,193.9	53.91	23.143	
7,700.0	7,612.0	7,622.5	7,616.5	31.8	26.4	82.29	96.9	-242.2	1,247.1	1,192.8	54.24	22.992	
7,750.0	7,661.4	7,671.7	7,665.7	31.9	26.6	82.77	97.1	-242.0	1,245.9	1,191.3	54.56	22.835	
7,800.0	7,709.8	7,720.1	7,714.1	32.0	26.8	83.49	97.2	-241.9	1,244.2	1,189.3	54.87	22.675	
7,850.0	7,757.1	7,767.3	7,761.3	32.1	26.9	84.40	97.3	-241.7	1,242.2	1,187.0	55.17	22.513	
7,900.0	7,802.7	7,813.0	7,807.0	32.2	27.1	85.47	97.3	-241.6	1,240.0	1,184.5	55.47	22.355	
7,950.0	7,846.4	7,856.0	7,850.0	32.3	27.2	86.65	97.3	-241.4	1,237.9	1,182.2	55.75	22.206	
8,000.0	7,887.7	7,896.6	7,890.6	32.4	27.4	87.87	97.3	-241.3	1,236.2	1,180.1	56.01	22.069	
8,050.0	7,926.5	7,934.6	7,928.6	32.4	27.5	89.10	97.4	-241.3	1,235.0	1,178.7	56.27	21.949	
8,091.9	7,956.8	7,964.2	7,958.2	32.5	27.6	90.09	97.4	-241.2	1,234.6	1,178.1	56.47	21.864	
8,100.0	7,962.4	7,969.7	7,963.7	32.5	27.6	90.27	97.4	-241.2	1,234.6	1,178.1	56.51	21.849	
8,150.0	7,995.1	8,001.7	7,995.7	32.5	27.7	91.32	97.5	-241.2	1,235.4	1,178.7	56.73	21.776	
8,200.0	8,024.4	8,030.3	8,024.3	32.6	27.8	92.18	97.5	-241.2	1,237.5	1,180.6	56.94	21.733	
8,250.0	8,050.1	8,054.4	8,048.4	32.6	27.9	92.76	97.5	-241.2	1,241.3	1,184.1	57.13	21.726	
8,300.0	8,071.9	8,075.2	8,069.2	32.7	28.0	93.08	97.6	-241.2	1,246.8	1,189.5	57.31	21.756	
8,350.0	8,089.7	8,092.2	8,086.2	32.7	28.1	93.06	97.6	-241.3	1,254.2	1,196.7	57.46	21.827	
8,400.0	8,103.4	8,105.2	8,099.2	32.7	28.1	92.69	97.6	-241.3	1,263.5	1,205.9	57.59	21.941	
8,450.0	8,112.8	8,114.2	8,108.2	32.8	28.1	91.93	97.6	-241.3	1,274.9	1,217.2	57.69	22.097	
8,500.0	8,118.0	8,119.1	8,113.1	32.9	28.1	90.78	97.6	-241.4	1,288.2	1,230.4	57.77	22.298	
8,533.8	8,119.0	8,120.0	8,114.0	33.0	28.1	89.77	97.6	-241.4	1,298.2	1,240.4	57.81	22.457	
8,600.0	8,119.0	8,120.0	8,114.0	33.1	28.1	89.77	97.6	-241.4	1,320.2	1,262.3	57.87	22.812	
8,700.0	8,119.0	8,119.9	8,113.9	33.4	28.1	89.76	97.6	-241.4	1,358.8	1,300.8	57.97	23.439	
8,800.0	8,119.0	8,119.8	8,113.8	33.8	28.1	89.76	97.6	-241.4	1,403.5	1,345.4	58.07	24.170	
8,900.0	8,119.0	8,119.8	8,113.7	34.3	28.1	89.76	97.6	-241.4	1,453.7	1,395.5	58.16	24.993	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #223H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 228-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,000.0	8,119.0	8,119.7	8,113.7	34.9	28.1	89.75	97.6	-241.4	1,508.8	1,450.6	58.25	25.902	
9,100.0	8,119.0	8,119.6	8,113.6	35.5	28.1	89.75	97.6	-241.4	1,568.4	1,510.1	58.34	26.886	
9,200.0	8,119.0	8,119.5	8,113.5	36.3	28.1	89.75	97.6	-241.4	1,632.0	1,573.6	58.42	27.938	
9,300.0	8,119.0	8,119.5	8,113.5	37.1	28.1	89.74	97.6	-241.4	1,699.1	1,640.6	58.49	29.049	
9,400.0	8,119.0	8,119.4	8,113.4	37.9	28.1	89.74	97.6	-241.4	1,769.2	1,710.7	58.56	30.214	
9,500.0	8,119.0	8,119.3	8,113.3	38.8	28.1	89.74	97.6	-241.4	1,842.2	1,783.6	58.62	31.426	
9,600.0	8,119.0	8,119.2	8,113.2	39.8	28.1	89.73	97.6	-241.4	1,917.6	1,858.9	58.68	32.680	
9,700.0	8,119.0	8,119.2	8,113.2	40.8	28.1	89.73	97.6	-241.4	1,995.1	1,936.4	58.73	33.971	
9,800.0	8,119.0	8,119.1	8,113.1	41.8	28.1	89.73	97.6	-241.4	2,074.6	2,015.8	58.78	35.294	
9,900.0	8,119.0	8,119.0	8,113.0	42.9	28.1	89.72	97.6	-241.4	2,155.8	2,096.9	58.83	36.646	
10,000.0	8,119.0	8,118.9	8,112.9	44.0	28.1	89.72	97.6	-241.4	2,238.5	2,179.6	58.87	38.023	
10,100.0	8,119.0	8,118.9	8,112.9	45.2	28.1	89.72	97.6	-241.4	2,322.5	2,263.6	58.91	39.423	
10,200.0	8,119.0	8,118.8	8,112.8	46.3	28.1	89.71	97.6	-241.4	2,407.8	2,348.9	58.95	40.843	
10,300.0	8,119.0	8,118.7	8,112.7	47.5	28.1	89.71	97.6	-241.4	2,494.2	2,435.2	58.99	42.281	
10,400.0	8,119.0	8,118.6	8,112.6	48.8	28.1	89.71	97.6	-241.4	2,581.6	2,522.5	59.03	43.734	
10,500.0	8,119.0	8,118.6	8,112.6	50.0	28.1	89.70	97.6	-241.4	2,669.8	2,610.7	59.06	45.201	
10,600.0	8,119.0	8,118.5	8,112.5	51.3	28.1	89.70	97.6	-241.4	2,758.9	2,699.8	59.10	46.681	
10,700.0	8,119.0	8,118.4	8,112.4	52.6	28.1	89.70	97.6	-241.4	2,848.6	2,789.5	59.13	48.172	
10,800.0	8,119.0	8,118.3	8,112.3	54.0	28.1	89.69	97.6	-241.4	2,939.1	2,879.9	59.17	49.673	
10,900.0	8,119.0	8,118.3	8,112.3	55.3	28.1	89.69	97.6	-241.4	3,030.1	2,970.9	59.20	51.182	
11,000.0	8,119.0	8,118.2	8,112.2	56.7	28.1	89.69	97.6	-241.4	3,121.7	3,062.5	59.24	52.699	
11,100.0	8,119.0	8,118.1	8,112.1	58.0	28.1	89.68	97.6	-241.4	3,213.8	3,154.5	59.27	54.222	
11,200.0	8,119.0	8,118.0	8,112.0	59.4	28.1	89.68	97.6	-241.4	3,306.3	3,247.0	59.30	55.752	
11,300.0	8,119.0	8,118.0	8,112.0	60.8	28.1	89.68	97.6	-241.4	3,399.3	3,340.0	59.34	57.287	
11,400.0	8,119.0	8,117.9	8,111.9	62.2	28.1	89.67	97.6	-241.4	3,492.7	3,433.3	59.37	58.826	
11,500.0	8,119.0	8,117.8	8,111.8	63.6	28.1	89.67	97.6	-241.4	3,586.4	3,527.0	59.41	60.369	
11,600.0	8,119.0	8,117.7	8,111.7	65.1	28.1	89.66	97.6	-241.4	3,680.4	3,621.0	59.44	61.916	
11,700.0	8,119.0	8,117.7	8,111.7	66.5	28.1	89.66	97.6	-241.4	3,774.8	3,715.3	59.48	63.466	
11,800.0	8,119.0	8,117.6	8,111.6	68.0	28.1	89.66	97.6	-241.4	3,869.4	3,809.9	59.51	65.018	
11,900.0	8,119.0	8,117.5	8,111.5	69.4	28.1	89.65	97.6	-241.4	3,964.3	3,904.8	59.55	66.572	
12,000.0	8,119.0	8,117.4	8,111.4	70.9	28.1	89.65	97.6	-241.3	4,059.5	3,999.9	59.59	68.127	
12,100.0	8,119.0	16,055.0	11,989.6	72.4	78.0	161.02	-3,891.1	-315.2	4,093.3	4,008.1	85.24	48.024	
12,130.0	8,119.0	16,063.9	11,989.4	72.8	78.2	161.01	-3,900.0	-315.7	4,093.3	4,007.7	85.52	47.863	
12,200.0	8,119.0	16,096.0	11,989.0	73.9	78.6	160.98	-3,932.0	-317.6	4,093.7	4,007.4	86.31	47.429	
12,300.0	8,119.0	16,146.3	11,988.9	75.4	79.3	160.93	-3,982.3	-320.6	4,095.5	4,008.0	87.50	46.807	
12,400.0	8,119.0	16,319.3	11,988.8	76.9	81.7	160.83	-4,155.0	-327.8	4,097.1	4,007.1	90.06	45.495	
12,500.0	8,119.0	16,572.0	11,984.1	78.4	85.3	160.82	-4,407.7	-325.0	4,094.5	4,001.2	93.33	43.871	
12,600.0	8,119.0	16,632.7	11,982.7	79.9	86.2	160.84	-4,468.3	-322.6	4,091.5	3,996.9	94.58	43.260	
12,700.0	8,119.0	16,667.0	11,982.4	81.4	86.7	160.86	-4,502.6	-321.3	4,089.8	3,994.2	95.56	42.800	
12,776.6	8,119.0	16,711.1	11,982.4	82.6	87.3	160.87	-4,546.6	-320.1	4,089.3	3,992.8	96.49	42.382	
12,800.0	8,119.0	16,720.6	11,982.4	82.9	87.5	160.87	-4,556.2	-319.9	4,089.3	3,992.6	96.73	42.275	
12,900.0	8,119.0	16,763.0	11,982.9	84.5	88.1	160.87	-4,598.6	-319.7	4,090.4	3,992.6	97.80	41.825	
13,000.0	8,119.0	13,000.0	11,983.7	86.0	41.6	160.89	-4,856.9	-317.2	4,091.1	4,023.4	67.75	60.388	
13,100.0	8,119.0	17,089.1	11,982.4	87.5	92.8	160.90	-4,924.6	-315.3	4,088.9	3,986.3	102.52	39.882	
13,174.0	8,119.0	17,108.6	11,982.3	88.7	93.1	160.90	-4,944.0	-315.2	4,088.4	3,985.2	103.20	39.616	
13,200.0	8,119.0	17,143.0	11,982.6	89.1	93.6	160.90	-4,978.5	-315.5	4,088.8	3,985.0	103.74	39.413	
13,208.4	8,119.0	17,143.0	11,982.6	89.2	93.6	160.90	-4,978.5	-315.5	4,088.8	3,985.0	103.79	39.393	
13,300.0	8,119.0	17,143.0	11,982.6	90.6	93.6	160.90	-4,978.5	-315.5	4,089.8	3,985.4	104.35	39.193	
13,400.0	8,119.0	17,219.0	11,984.1	92.2	94.7	160.88	-5,054.4	-316.6	4,092.4	3,986.6	105.81	38.676	
13,500.0	8,119.0	17,502.9	11,983.0	93.7	98.9	160.79	-5,338.2	-321.4	4,092.4	3,982.7	109.70	37.307	
13,600.0	8,119.0	17,581.8	11,981.6	95.3	100.1	160.78	-5,417.2	-321.2	4,090.8	3,979.6	111.21	36.785	
13,683.3	8,119.0	17,618.0	11,981.1	96.6	100.7	160.77	-5,453.3	-321.5	4,090.2	3,978.1	112.15	36.472	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #223H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 228-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,700.0	8,119.0	17,618.0	11,981.1	96.8	100.7	160.77	-5,453.3	-321.5	4,090.3	3,978.0	112.25	36.439	
13,800.0	8,119.0	17,659.5	11,980.8	98.4	101.3	160.75	-5,494.8	-322.7	4,091.2	3,977.8	113.36	36.091	
13,900.0	8,119.0	17,955.8	11,976.8	100.0	105.7	160.62	-5,790.6	-329.6	4,091.3	3,973.8	117.46	34.831	
14,000.0	8,119.0	18,056.4	11,977.2	101.5	107.3	160.75	-5,890.6	-319.1	4,088.4	3,969.4	119.00	34.356	
14,100.0	8,119.0	18,176.7	11,974.6	103.1	109.1	160.80	-6,010.7	-314.2	4,085.2	3,964.3	120.89	33.793	
14,200.0	8,119.0	18,297.1	11,967.9	104.7	110.9	160.69	-6,130.8	-319.2	4,081.5	3,958.5	123.02	33.177	
14,300.0	8,119.0	18,315.1	11,967.3	106.2	111.2	160.68	-6,148.8	-319.9	4,078.8	3,954.8	123.92	32.916	
14,400.0	8,119.0	18,375.0	11,966.4	107.8	112.1	160.65	-6,208.7	-321.5	4,078.0	3,952.7	125.28	32.552	
14,438.6	8,119.0	18,375.0	11,966.4	108.4	112.1	160.65	-6,208.7	-321.5	4,077.8	3,952.3	125.52	32.486	
14,500.0	8,119.0	14,500.0	11,966.2	109.4	52.9	160.64	-6,265.1	-322.0	4,077.9	3,985.3	92.57	44.054	
14,600.0	8,119.0	18,689.9	11,957.6	111.0	116.9	160.52	-6,523.3	-326.3	4,074.6	3,944.3	130.26	31.280	
14,700.0	8,119.0	18,753.0	11,955.5	112.6	117.9	160.52	-6,586.4	-325.6	4,071.3	3,939.7	131.64	30.927	
14,800.0	8,119.0	14,800.0	11,953.8	114.2	59.4	160.60	-6,727.5	-317.6	4,068.7	3,970.9	97.76	41.620	
14,900.0	8,119.0	18,996.4	11,951.6	115.7	121.7	160.69	-6,829.2	-309.6	4,064.2	3,928.9	135.33	30.032	
15,000.0	8,119.0	19,036.0	11,951.3	117.3	122.3	160.73	-6,868.7	-306.3	4,061.1	3,924.7	136.38	29.778	
15,100.0	8,119.0	19,082.9	11,951.6	118.9	123.0	160.78	-6,915.4	-302.6	4,059.3	3,921.8	137.47	29.528	
15,200.0	8,119.0	19,131.0	11,952.6	120.5	123.8	160.83	-6,963.4	-299.0	4,058.8	3,920.3	138.56	29.292	
15,235.7	8,119.0	19,393.7	11,951.3	121.1	127.9	161.03	-7,225.4	-281.7	4,058.4	3,917.1	141.28	28.725	
15,300.0	8,119.0	19,468.3	11,948.2	122.1	129.1	161.07	-7,299.8	-277.5	4,054.7	3,912.3	142.46	28.463	
15,400.0	8,119.0	19,508.0	11,946.6	123.7	129.7	161.09	-7,339.4	-274.9	4,049.5	3,906.0	143.55	28.209	
15,500.0	8,119.0	19,553.8	11,945.6	125.3	130.4	161.13	-7,385.1	-271.5	4,045.7	3,901.0	144.67	27.965	
15,600.0	8,119.0	19,602.0	11,946.3	126.9	131.2	161.18	-7,433.1	-267.3	4,043.9	3,898.1	145.76	27.743	
15,663.3	8,119.0	19,602.0	11,946.3	127.9	131.2	161.18	-7,433.1	-267.3	4,043.4	3,897.2	146.16	27.664	
15,700.0	8,119.0	19,602.0	11,946.3	128.5	131.2	161.18	-7,433.1	-267.3	4,043.5	3,897.2	146.38	27.624	
15,800.0	8,119.0	19,651.0	11,948.1	130.1	131.9	161.24	-7,481.9	-263.3	4,044.9	3,897.5	147.42	27.437	
15,900.0	8,119.0	19,697.0	11,950.4	131.7	132.7	161.28	-7,527.8	-260.7	4,047.9	3,899.4	148.44	27.269	
16,000.0	8,119.0	19,804.9	11,955.8	133.3	134.4	161.35	-7,635.5	-256.7	4,051.6	3,901.4	150.17	26.980	
16,100.0	8,119.0	20,047.9	11,960.0	134.9	138.2	161.45	-7,878.2	-249.9	4,051.6	3,898.1	153.48	26.399	
16,117.8	8,119.0	20,057.1	11,960.0	135.2	138.3	161.45	-7,887.5	-249.7	4,051.6	3,897.9	153.69	26.363	
16,200.0	8,119.0	20,115.5	11,960.5	136.5	139.3	161.46	-7,945.8	-248.6	4,051.9	3,897.1	154.84	26.169	
16,300.0	8,119.0	20,200.2	11,961.8	138.1	140.6	161.49	-8,030.5	-246.4	4,052.7	3,896.3	156.37	25.918	
16,400.0	8,119.0	20,267.0	11,963.3	139.7	141.6	161.52	-8,097.2	-244.0	4,053.9	3,896.2	157.67	25.712	
16,500.0	8,119.0	20,523.9	11,963.6	141.4	145.7	161.52	-8,354.0	-242.8	4,054.6	3,893.3	161.26	25.143	
16,600.0	8,119.0	20,596.4	11,962.4	143.0	146.8	161.52	-8,426.4	-242.3	4,052.9	3,890.2	162.74	24.905	
16,700.0	8,119.0	20,645.0	11,961.9	144.6	147.6	161.52	-8,475.1	-241.5	4,051.9	3,888.0	163.91	24.720	
16,705.4	8,119.0	20,645.0	11,961.9	144.7	147.6	161.52	-8,475.1	-241.5	4,051.9	3,887.9	163.94	24.715	
16,800.0	8,119.0	20,686.1	11,962.2	146.2	148.3	161.53	-8,516.1	-240.7	4,052.3	3,887.3	164.97	24.564	
16,900.0	8,119.0	20,740.0	11,964.1	147.8	149.1	161.55	-8,570.0	-239.6	4,054.7	3,888.6	166.13	24.406	
17,000.0	8,119.0	20,740.0	11,964.1	149.4	149.1	161.55	-8,570.0	-239.6	4,058.4	3,891.8	166.62	24.357	
17,100.0	8,119.0	20,775.7	11,966.2	151.0	149.7	161.56	-8,605.6	-239.3	4,064.0	3,896.5	167.51	24.262	
17,200.0	8,119.0	20,834.0	11,970.6	152.7	150.6	161.55	-8,663.8	-240.8	4,071.7	3,903.0	168.71	24.134	
17,300.0	8,119.0	20,834.0	11,970.6	154.3	150.6	161.55	-8,663.8	-240.8	4,080.4	3,911.4	169.04	24.139	
17,400.0	8,119.0	21,275.8	11,987.2	155.9	157.6	161.27	-9,104.2	-265.3	4,085.1	3,909.0	176.10	23.198	
17,500.0	8,119.0	21,386.4	11,987.7	157.5	159.3	161.22	-9,214.8	-268.6	4,086.7	3,908.5	178.13	22.942	
17,600.0	8,119.0	21,491.7	11,989.4	159.1	161.0	161.24	-9,320.0	-267.0	4,087.9	3,908.0	179.93	22.720	
17,700.0	8,119.0	21,706.5	11,990.2	160.7	164.4	161.29	-9,534.7	-262.5	4,087.9	3,904.9	182.94	22.346	
17,800.0	8,119.0	21,902.4	11,986.7	162.4	167.6	161.34	-9,730.5	-255.9	4,085.4	3,899.8	185.61	22.010	
17,900.0	8,119.0	21,970.0	11,984.8	164.0	168.6	161.38	-9,798.0	-252.5	4,081.5	3,894.5	186.99	21.828	
18,000.0	8,119.0	22,027.9	11,983.8	165.6	169.6	161.40	-9,855.9	-249.6	4,078.6	3,890.4	188.25	21.666	
18,100.0	8,119.0	22,084.4	11,983.5	167.2	170.5	161.42	-9,912.3	-247.7	4,077.2	3,887.7	189.50	21.515	
18,200.0	8,119.0	22,348.0	11,974.3	168.9	174.7	161.40	-10,175.7	-244.6	4,072.9	3,879.8	193.07	21.095	
18,300.0	8,119.0	22,391.3	11,972.1	170.5	175.4	161.40	-10,218.9	-244.2	4,068.4	3,874.1	194.31	20.938	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #223H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 228-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,400.0	8,119.0	22,443.0	11,971.0	172.1	176.2	161.40	-10,270.6	-243.4	4,065.6	3,870.1	195.58	20.788	
18,500.0	8,119.0	22,477.6	11,970.9	173.7	176.8	161.41	-10,305.1	-242.4	4,064.2	3,867.6	196.62	20.671	
18,600.0	8,119.0	22,553.5	11,971.7	175.4	178.0	161.46	-10,381.0	-238.2	4,063.6	3,865.6	197.99	20.524	
18,632.9	8,119.0	22,575.1	11,972.1	175.9	178.4	161.48	-10,402.5	-236.9	4,063.6	3,865.2	198.40	20.482	
18,700.0	8,119.0	22,619.2	11,972.9	177.0	179.1	161.51	-10,446.6	-234.5	4,063.7	3,864.5	199.24	20.396	
18,800.0	8,119.0	22,918.0	11,969.9	178.6	183.9	161.53	-10,744.9	-230.4	4,063.9	3,860.7	203.17	20.002	
18,900.0	8,119.0	22,918.0	11,969.9	180.2	183.9	161.53	-10,744.9	-230.4	4,060.8	3,856.9	203.91	19.914	
19,000.0	8,119.0	22,970.2	11,967.7	181.9	184.7	161.50	-10,797.1	-231.5	4,058.5	3,853.3	205.24	19.775	
19,100.0	8,119.0	23,202.0	11,961.7	183.5	188.4	161.44	-11,028.7	-232.4	4,056.6	3,848.0	208.61	19.446	
19,200.0	8,119.0	23,259.1	11,959.5	185.1	189.3	161.45	-11,085.7	-230.8	4,052.7	3,842.7	209.94	19.304	
19,300.0	8,119.0	23,297.0	11,959.0	186.8	190.0	161.46	-11,123.6	-230.0	4,050.6	3,839.6	211.03	19.194	
19,400.0	8,119.0	23,346.1	11,958.9	188.4	190.7	161.46	-11,172.7	-229.3	4,050.0	3,837.8	212.22	19.084	
19,407.5	8,119.0	23,350.5	11,958.9	188.5	190.8	161.46	-11,177.1	-229.2	4,050.0	3,837.7	212.32	19.075	
19,500.0	8,119.0	23,393.0	11,959.1	190.0	191.5	161.46	-11,219.6	-228.9	4,050.5	3,837.1	213.37	18.983	
19,600.0	8,119.0	23,393.0	11,959.1	191.6	191.5	161.46	-11,219.6	-228.9	4,053.0	3,839.1	213.87	18.951	
19,700.0	8,119.0	23,441.8	11,960.3	193.3	192.3	161.46	-11,268.4	-229.2	4,056.6	3,841.6	214.96	18.871	
19,800.0	8,119.0	23,844.6	11,960.1	194.9	198.7	161.22	-11,670.3	-244.8	4,058.4	3,837.2	221.20	18.347	
19,900.0	8,119.0	23,901.5	11,957.7	196.5	199.6	161.16	-11,727.1	-248.1	4,056.4	3,833.7	222.70	18.214	
20,000.0	8,119.0	23,962.0	11,955.8	198.2	200.6	161.10	-11,787.4	-251.8	4,055.5	3,831.3	224.24	18.086	
20,017.7	8,119.0	23,962.0	11,955.8	198.5	200.6	161.10	-11,787.4	-251.8	4,055.5	3,831.2	224.35	18.077	
20,100.0	8,119.0	24,001.6	11,955.1	199.8	201.2	161.06	-11,827.0	-254.1	4,055.9	3,830.5	225.43	17.992	
20,200.0	8,119.0	24,056.0	11,955.2	201.4	202.1	161.02	-11,881.3	-256.7	4,057.7	3,830.9	226.77	17.893	
20,300.0	8,119.0	24,168.7	11,956.0	203.1	203.9	160.95	-11,993.9	-261.6	4,060.0	3,831.0	228.96	17.732	
20,400.0	8,119.0	24,251.4	11,956.4	204.7	205.2	160.90	-12,076.5	-265.2	4,062.1	3,831.4	230.71	17.607	
20,500.0	8,119.0	24,338.5	11,957.1	206.3	206.6	160.84	-12,163.5	-269.5	4,064.5	3,832.0	232.54	17.479	
20,606.7	8,119.0	24,421.0	11,957.7	208.1	208.0	160.78	-12,245.9	-273.6	4,067.4	3,833.1	234.33	17.358	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #224H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 174-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	82.84	95.1	756.7	762.6				
100.0	100.0	98.5	98.5	0.1	0.1	82.83	95.1	756.8	762.7	762.5	0.28	2,762.190	
200.0	200.0	196.6	196.6	0.5	0.3	82.83	95.3	757.1	763.0	762.2	0.83	920.737	
300.0	300.0	292.9	292.9	0.8	0.7	82.80	95.7	757.7	763.7	762.2	1.53	498.152	
400.0	400.0	391.1	391.1	1.2	1.0	82.75	96.4	758.6	764.8	762.6	2.24	340.948	
500.0	500.0	490.3	490.3	1.6	1.4	82.68	97.6	759.7	766.0	763.1	2.96	259.101	
600.0	600.0	587.7	587.6	1.9	1.7	82.59	99.0	760.9	767.4	763.8	3.66	209.446	
700.0	700.0	684.6	684.5	2.3	2.1	82.47	100.7	762.5	769.3	764.9	4.37	176.027	
800.0	800.0	782.3	782.2	2.6	2.4	82.34	102.8	764.3	771.4	766.3	5.08	151.881	
900.0	900.0	880.0	879.8	3.0	2.8	82.17	105.4	766.4	773.9	768.1	5.79	133.700	
1,000.0	1,000.0	979.4	979.2	3.4	3.2	81.99	108.2	768.7	776.5	770.0	6.50	119.398	
1,100.0	1,100.0	1,079.0	1,078.7	3.7	3.5	7.41	110.9	771.0	777.5	770.3	7.21	107.794	
1,200.0	1,199.8	1,189.0	1,188.7	4.1	3.9	7.35	112.9	773.5	774.8	766.9	7.96	97.401	
1,300.0	1,299.5	1,304.3	1,304.0	4.4	4.3	7.44	113.3	773.6	766.3	757.6	8.71	88.017	
1,400.0	1,398.7	1,404.6	1,404.2	4.8	4.6	7.60	113.1	772.8	753.4	744.0	9.39	80.227	
1,500.0	1,497.5	1,505.4	1,505.0	5.2	5.0	7.85	112.5	772.1	737.1	727.0	10.08	73.144	
1,600.0	1,595.9	1,606.0	1,605.6	5.5	5.3	8.09	111.7	771.0	718.7	708.0	10.77	66.765	
1,700.0	1,694.4	1,706.2	1,705.8	5.9	5.6	8.36	110.9	769.6	700.1	688.6	11.45	61.120	
1,800.0	1,792.9	1,805.2	1,804.9	6.3	6.0	8.63	109.9	768.0	681.2	669.1	12.14	56.094	
1,900.0	1,891.4	1,903.4	1,903.0	6.8	6.3	8.92	109.0	766.4	662.3	649.5	12.84	51.597	
2,000.0	1,989.9	1,995.8	1,995.3	7.2	6.6	9.18	108.5	765.3	644.0	630.5	13.52	47.635	
2,100.0	2,088.4	2,095.6	2,095.1	7.6	7.0	9.43	108.5	764.3	625.9	611.7	14.23	43.997	
2,200.0	2,186.8	2,196.5	2,196.0	8.0	7.3	9.66	108.8	763.1	607.5	592.6	14.94	40.672	
2,300.0	2,285.3	2,297.8	2,297.4	8.5	7.7	9.89	109.3	761.0	588.4	572.8	15.65	37.597	
2,400.0	2,383.8	2,390.3	2,389.8	8.9	8.0	10.09	109.8	759.5	569.8	553.5	16.35	34.852	
2,500.0	2,482.3	2,485.5	2,485.0	9.3	8.3	10.35	110.2	758.8	552.1	535.0	17.06	32.368	
2,600.0	2,580.8	2,585.6	2,585.1	9.8	8.7	10.67	110.4	758.2	534.4	516.6	17.77	30.064	
2,700.0	2,679.2	2,679.9	2,679.5	10.2	9.0	10.99	110.5	757.4	516.5	498.0	18.48	27.950	
2,800.0	2,777.7	2,769.1	2,768.7	10.6	9.3	11.33	110.6	758.4	500.6	481.4	19.17	26.107	
2,900.0	2,876.2	2,867.5	2,866.9	11.1	9.7	11.72	110.8	760.3	485.4	465.5	19.89	24.408	
3,000.0	2,974.7	2,967.8	2,967.3	11.5	10.0	12.11	111.3	762.1	470.2	449.6	20.61	22.818	
3,100.0	3,073.2	3,068.7	3,068.1	11.9	10.4	12.54	111.7	763.3	454.5	433.2	21.33	21.307	
3,200.0	3,171.6	3,167.1	3,166.6	12.4	10.7	13.00	112.0	764.4	438.6	416.6	22.05	19.893	
3,300.0	3,270.1	3,266.5	3,266.0	12.8	11.1	13.52	112.1	765.5	422.8	400.1	22.77	18.569	
3,400.0	3,368.6	3,364.4	3,363.8	13.3	11.4	14.10	112.1	766.4	406.9	383.4	23.49	17.320	
3,500.0	3,467.1	3,461.1	3,460.5	13.7	11.8	14.82	111.4	767.8	391.5	367.3	24.21	16.167	
3,600.0	3,565.6	3,558.9	3,558.3	14.2	12.1	15.69	110.1	769.7	376.5	351.6	24.94	15.097	
3,700.0	3,664.0	3,654.5	3,653.9	14.6	12.4	16.69	108.3	771.8	362.1	336.4	25.67	14.105	
3,800.0	3,762.5	3,755.7	3,755.0	15.1	12.8	17.93	105.9	774.5	348.2	321.8	26.41	13.184	
3,900.0	3,861.0	3,861.5	3,860.8	15.5	13.1	18.88	106.0	775.8	332.9	305.7	27.15	12.263	
4,000.0	3,959.5	3,961.3	3,960.6	16.0	13.5	19.37	109.0	775.7	316.2	288.4	27.88	11.345	
4,100.0	4,058.0	4,059.5	4,058.7	16.4	13.8	19.86	112.1	775.6	299.6	270.9	28.61	10.470	
4,200.0	4,156.4	4,158.4	4,157.6	16.8	14.2	20.48	115.0	775.5	282.9	253.6	29.35	9.640	
4,300.0	4,254.9	4,257.4	4,256.5	17.3	14.5	21.24	117.5	775.3	266.2	236.1	30.09	8.846	
4,400.0	4,353.4	4,356.2	4,355.4	17.7	14.9	22.39	118.8	774.7	249.3	218.4	30.84	8.083	
4,500.0	4,451.9	4,453.6	4,452.7	18.2	15.2	23.93	119.2	774.2	232.7	201.1	31.61	7.363	
4,600.0	4,550.4	4,551.6	4,550.7	18.6	15.6	25.70	119.5	774.0	216.7	184.3	32.39	6.691	
4,700.0	4,648.9	4,650.0	4,649.1	19.1	15.9	27.71	120.0	773.9	201.0	167.8	33.18	6.057	
4,800.0	4,747.3	4,748.5	4,747.6	19.5	16.3	29.99	120.6	774.0	185.6	151.6	33.99	5.460	
4,900.0	4,845.8	4,847.1	4,846.2	20.0	16.6	32.57	121.6	774.0	170.5	135.6	34.82	4.895	
5,000.0	4,944.3	4,945.6	4,944.7	20.4	17.0	35.62	122.7	774.1	155.8	120.1	35.69	4.365	
5,100.0	5,042.8	5,044.2	5,043.2	20.9	17.3	39.41	123.4	774.0	141.6	105.0	36.59	3.869	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #224H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 174-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,141.3	5,142.8	5,141.9	21.3	17.7	44.06	124.1	774.0	128.2	90.6	37.55	3.413	
5,300.0	5,239.7	5,241.4	5,240.5	21.8	18.0	49.83	124.7	773.6	115.6	77.0	38.58	2.996	
5,400.0	5,338.2	5,340.1	5,339.1	22.2	18.4	56.89	125.3	773.3	104.4	64.7	39.68	2.631	
5,500.0	5,436.7	5,438.5	5,437.6	22.7	18.7	65.44	126.1	772.7	94.9	54.1	40.82	2.325	
5,600.0	5,535.2	5,536.7	5,535.8	23.1	19.1	75.65	126.7	772.1	88.2	46.3	41.96	2.103	
5,700.0	5,633.7	5,635.0	5,634.1	23.6	19.4	87.13	127.0	771.5	85.0	42.0	42.96	1.978	
5,736.4	5,669.5	5,670.8	5,669.9	23.7	19.5	91.49	127.1	771.2	84.7	41.4	43.27	1.958	CC, ES
5,800.0	5,732.1	5,733.3	5,732.4	24.0	19.7	99.06	127.3	770.7	85.5	41.8	43.73	1.956	SF
5,900.0	5,830.6	5,831.5	5,830.5	24.5	20.1	110.31	127.3	770.0	89.9	45.7	44.26	2.031	
6,000.0	5,929.1	5,929.5	5,928.5	24.9	20.4	120.29	127.2	769.1	97.8	53.2	44.63	2.191	
6,100.0	6,027.6	6,027.7	6,026.8	25.4	20.8	128.67	126.9	768.0	108.4	63.5	44.97	2.411	
6,200.0	6,126.1	6,125.8	6,124.8	25.8	21.1	135.40	126.4	767.0	121.0	75.7	45.33	2.670	
6,300.0	6,224.5	6,224.1	6,223.1	26.3	21.4	140.77	125.8	766.0	135.1	89.4	45.75	2.953	
6,400.0	6,323.0	6,322.5	6,321.5	26.7	21.8	144.96	125.0	765.4	150.1	103.8	46.24	3.245	
6,500.0	6,421.5	6,420.4	6,419.4	27.2	22.1	148.22	123.9	765.0	165.8	119.0	46.77	3.544	
6,600.0	6,520.0	6,518.2	6,517.2	27.6	22.5	150.96	122.6	764.3	182.2	134.8	47.33	3.849	
6,700.0	6,618.5	6,616.0	6,615.0	28.1	22.8	153.32	121.4	763.3	199.2	151.3	47.91	4.158	
6,800.0	6,716.9	6,714.7	6,713.7	28.5	23.1	155.32	120.1	762.3	216.5	168.0	48.54	4.460	
6,900.0	6,815.4	6,812.7	6,811.7	29.0	23.5	156.95	118.7	761.5	234.0	184.8	49.17	4.758	
6,981.8	6,896.0	6,893.2	6,892.2	29.4	23.8	158.08	117.4	760.9	248.4	198.7	49.71	4.997	
7,000.0	6,913.9	6,911.1	6,910.1	29.5	23.8	158.34	117.1	760.7	251.5	201.7	49.83	5.048	
7,100.0	7,012.9	7,010.1	7,009.1	29.9	24.2	159.50	115.8	759.9	266.5	216.0	50.50	5.277	
7,200.0	7,112.3	7,111.6	7,110.5	30.3	24.5	160.26	114.8	759.1	277.2	226.0	51.21	5.414	
7,300.0	7,212.2	7,215.0	7,214.0	30.6	24.9	160.54	114.2	759.7	282.4	230.5	51.95	5.436	
7,381.8	7,294.0	7,296.8	7,295.7	30.9	25.1	-125.12	113.8	760.7	283.2	230.7	52.51	5.393	
7,400.0	7,312.2	7,314.7	7,313.6	30.9	25.2	-125.17	113.7	761.0	283.1	230.5	52.63	5.379	
7,500.0	7,412.2	7,413.9	7,412.8	31.2	25.6	-125.44	112.7	762.0	282.8	229.5	53.31	5.305	
7,600.0	7,512.2	7,513.7	7,512.6	31.5	25.9	-125.76	111.6	763.0	282.6	228.6	53.99	5.235	
7,633.8	7,546.0	7,547.5	7,546.4	31.6	26.0	-125.87	111.1	763.4	282.6	228.4	54.23	5.211	
7,650.0	7,562.2	7,563.6	7,562.4	31.7	26.1	54.45	110.9	763.6	282.4	228.1	54.33	5.198	
7,700.0	7,612.0	7,613.2	7,612.1	31.8	26.2	55.04	110.2	764.1	280.3	225.7	54.64	5.130	
7,750.0	7,661.4	7,662.8	7,661.7	31.9	26.4	56.58	109.5	764.6	275.8	220.9	54.92	5.022	
7,800.0	7,709.8	7,712.3	7,711.2	32.0	26.6	59.18	109.0	765.2	269.0	213.8	55.17	4.876	
7,850.0	7,757.1	7,760.1	7,759.0	32.1	26.7	62.82	108.7	765.7	260.4	205.0	55.38	4.702	
7,900.0	7,802.7	7,805.8	7,804.7	32.2	26.9	67.48	108.4	766.3	250.7	195.2	55.56	4.513	
7,950.0	7,846.4	7,849.5	7,848.4	32.3	27.1	73.07	108.2	766.8	241.1	185.3	55.72	4.326	
8,000.0	7,887.7	7,890.9	7,889.8	32.4	27.2	79.36	107.9	767.2	232.6	176.7	55.90	4.161	
8,050.0	7,926.5	7,929.8	7,928.6	32.4	27.3	85.97	107.7	767.6	226.9	170.8	56.14	4.042	
8,087.0	7,953.4	7,956.7	7,955.5	32.5	27.4	90.76	107.5	767.9	225.5	169.1	56.38	4.000	
8,100.0	7,962.4	7,965.7	7,964.6	32.5	27.5	92.39	107.4	768.0	225.7	169.2	56.48	3.996	
8,150.0	7,995.1	7,998.5	7,997.4	32.5	27.6	98.13	107.2	768.2	230.4	173.5	56.93	4.047	
8,200.0	8,024.4	8,028.0	8,026.8	32.6	27.7	102.80	107.0	768.5	241.9	184.5	57.45	4.212	
8,250.0	8,050.1	8,053.6	8,052.5	32.6	27.8	106.09	106.8	768.7	260.6	202.6	57.96	4.496	
8,300.0	8,071.9	8,075.5	8,074.3	32.7	27.8	107.87	106.7	768.8	285.8	227.4	58.41	4.893	
8,350.0	8,089.7	8,093.3	8,092.2	32.7	27.9	107.97	106.6	768.9	316.7	257.9	58.77	5.388	
8,400.0	8,103.4	8,107.1	8,105.9	32.7	28.0	106.23	106.5	769.0	352.1	293.1	59.04	5.965	
8,450.0	8,112.8	8,116.7	8,115.5	32.8	28.0	102.41	106.4	769.0	391.2	331.9	59.22	6.605	
8,500.0	8,118.0	8,122.1	8,120.9	32.9	28.0	96.31	106.4	769.1	432.8	373.4	59.34	7.293	
8,533.8	8,119.0	8,123.2	8,122.1	33.0	28.0	90.79	106.4	769.1	462.0	402.6	59.39	7.779	
8,600.0	8,119.0	8,123.6	8,122.4	33.1	28.0	90.88	106.4	769.1	520.9	461.4	59.46	8.761	
8,700.0	8,119.0	8,124.1	8,122.9	33.4	28.0	91.01	106.4	769.1	612.6	553.1	59.51	10.294	
8,800.0	8,119.0	8,124.6	8,123.4	33.8	28.0	91.14	106.4	769.1	706.6	647.1	59.54	11.868	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #224H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 174-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,900.0	8,119.0	8,125.1	8,123.9	34.3	28.0	91.27	106.4	769.1	802.1	742.5	59.56	13.467	
9,000.0	8,119.0	8,125.6	8,124.4	34.9	28.0	91.40	106.4	769.1	898.5	839.0	59.57	15.083	
9,100.0	8,119.0	8,126.1	8,124.9	35.5	28.0	91.53	106.4	769.1	995.7	936.1	59.58	16.711	
9,200.0	8,119.0	8,126.6	8,125.4	36.3	28.0	91.66	106.4	769.1	1,093.3	1,033.8	59.59	18.348	
9,300.0	8,119.0	8,127.1	8,126.0	37.1	28.0	91.79	106.4	769.1	1,191.4	1,131.8	59.60	19.990	
9,400.0	8,119.0	8,127.6	8,126.5	37.9	28.0	91.92	106.4	769.1	1,289.7	1,230.1	59.61	21.637	
9,500.0	8,119.0	8,128.1	8,127.0	38.8	28.0	92.05	106.4	769.1	1,388.3	1,328.7	59.62	23.287	
9,600.0	8,119.0	8,128.7	8,127.5	39.8	28.0	92.18	106.4	769.1	1,487.1	1,427.5	59.63	24.940	
9,700.0	8,119.0	8,129.2	8,128.0	40.8	28.0	92.31	106.4	769.1	1,586.0	1,526.4	59.64	26.594	
9,800.0	8,119.0	8,129.7	8,128.5	41.8	28.0	92.44	106.4	769.1	1,685.1	1,625.4	59.65	28.249	
9,900.0	8,119.0	8,130.2	8,129.0	42.9	28.0	92.58	106.4	769.1	1,784.2	1,724.6	59.66	29.904	
10,000.0	8,119.0	8,130.7	8,129.6	44.0	28.0	92.71	106.4	769.1	1,883.5	1,823.8	59.68	31.560	
10,100.0	8,119.0	8,131.2	8,130.1	45.2	28.0	92.84	106.4	769.1	1,982.8	1,923.1	59.69	33.216	
10,200.0	8,119.0	8,131.8	8,130.6	46.3	28.0	92.97	106.4	769.1	2,082.2	2,022.5	59.71	34.871	
10,300.0	8,119.0	8,132.3	8,131.1	47.5	28.0	93.11	106.4	769.1	2,181.6	2,121.9	59.73	36.525	
10,400.0	8,119.0	8,132.8	8,131.7	48.8	28.0	93.24	106.4	769.1	2,281.1	2,221.4	59.75	38.179	
10,500.0	8,119.0	8,133.3	8,132.2	50.0	28.0	93.38	106.4	769.1	2,380.7	2,320.9	59.77	39.832	
10,600.0	8,119.0	8,133.9	8,132.7	51.3	28.0	93.51	106.4	769.1	2,480.2	2,420.4	59.79	41.483	
10,700.0	8,119.0	8,134.4	8,133.2	52.6	28.0	93.65	106.4	769.1	2,579.8	2,520.0	59.81	43.134	
10,800.0	8,119.0	8,134.9	8,133.8	54.0	28.0	93.78	106.4	769.1	2,679.5	2,619.6	59.83	44.782	
10,900.0	8,119.0	8,135.5	8,134.3	55.3	28.1	93.92	106.4	769.1	2,779.1	2,719.3	59.86	46.430	
11,000.0	8,119.0	8,136.0	8,134.8	56.7	28.1	94.05	106.4	769.1	2,878.8	2,818.9	59.88	48.075	
11,100.0	8,119.0	8,136.5	8,135.4	58.0	28.1	94.19	106.3	769.1	2,978.5	2,918.6	59.91	49.719	
11,200.0	8,119.0	8,137.1	8,135.9	59.4	28.1	94.32	106.3	769.1	3,078.2	3,018.3	59.93	51.361	
11,300.0	8,119.0	8,137.6	8,136.4	60.8	28.1	94.46	106.3	769.1	3,178.0	3,118.0	59.96	53.001	
11,400.0	8,119.0	8,138.1	8,137.0	62.2	28.1	94.60	106.3	769.1	3,277.7	3,217.8	59.99	54.638	
11,500.0	8,119.0	8,138.7	8,137.5	63.6	28.1	94.73	106.3	769.1	3,377.5	3,317.5	60.02	56.274	
11,600.0	8,119.0	8,139.2	8,138.1	65.1	28.1	94.87	106.3	769.1	3,477.3	3,417.2	60.05	57.907	
11,700.0	8,119.0	8,139.8	8,138.6	66.5	28.1	95.01	106.3	769.1	3,577.1	3,517.0	60.08	59.538	
11,800.0	8,119.0	8,140.3	8,139.1	68.0	28.1	95.14	106.3	769.2	3,676.9	3,616.8	60.11	61.166	
11,900.0	8,119.0	8,140.8	8,139.7	69.4	28.1	95.28	106.3	769.2	3,776.7	3,716.6	60.15	62.792	
12,000.0	8,119.0	8,141.4	8,140.2	70.9	28.1	95.42	106.3	769.2	3,876.5	3,816.4	60.18	64.416	
12,100.0	8,119.0	16,106.4	12,010.7	72.4	80.7	179.75	-3,980.6	999.9	3,893.5	3,821.6	71.97	54.098	
12,200.0	8,119.0	16,175.0	12,009.1	73.9	81.7	179.72	-4,049.1	998.4	3,891.2	3,818.0	73.16	53.187	
12,300.0	8,119.0	16,175.0	12,009.1	75.4	81.7	179.72	-4,049.1	998.4	3,890.3	3,816.5	73.79	52.719	
12,315.2	8,119.0	16,203.0	12,008.9	75.6	82.1	179.72	-4,077.1	998.3	3,890.0	3,815.9	74.12	52.485	
12,400.0	8,119.0	16,231.8	12,009.2	76.9	82.5	179.71	-4,105.9	998.3	3,890.7	3,815.8	74.89	51.952	
12,500.0	8,119.0	16,434.8	12,008.9	78.4	85.4	179.71	-4,308.9	998.8	3,890.3	3,813.1	77.18	50.405	
12,600.0	8,119.0	16,515.7	12,008.3	79.9	86.5	179.71	-4,389.8	999.5	3,889.5	3,811.0	78.48	49.561	
12,700.0	8,119.0	12,700.0	12,006.9	81.4	40.8	179.74	-4,513.6	1,002.1	3,888.3	3,835.6	52.68	73.808	
12,800.0	8,119.0	16,699.8	12,006.2	82.9	89.2	179.76	-4,573.8	1,004.2	3,887.3	3,806.0	81.26	47.839	
12,821.2	8,119.0	16,709.6	12,006.2	83.3	89.3	179.77	-4,583.6	1,004.7	3,887.3	3,805.8	81.47	47.713	
12,900.0	8,119.0	16,738.0	12,006.3	84.5	89.8	179.79	-4,611.9	1,006.5	3,887.7	3,805.5	82.20	47.295	
13,000.0	8,119.0	16,769.6	12,006.9	86.0	90.2	179.82	-4,643.5	1,008.5	3,889.8	3,806.7	83.09	46.814	
13,100.0	8,119.0	17,040.1	12,011.5	87.5	94.2	179.87	-4,913.7	1,013.4	3,892.9	3,806.9	85.99	45.274	
13,200.0	8,119.0	17,115.0	12,010.6	89.1	95.3	179.85	-4,988.6	1,012.7	3,891.8	3,804.5	87.26	44.602	
13,258.4	8,119.0	17,147.7	12,010.5	90.0	95.8	179.85	-5,021.2	1,012.4	3,891.5	3,803.6	87.91	44.269	
13,300.0	8,119.0	17,166.4	12,010.5	90.6	96.1	179.84	-5,039.9	1,012.3	3,891.6	3,803.3	88.33	44.058	
13,400.0	8,119.0	17,438.3	12,007.4	92.2	100.1	179.75	-5,311.6	1,007.4	3,891.3	3,800.0	91.27	42.635	
13,500.0	8,119.0	17,490.0	12,006.1	93.7	100.9	179.72	-5,363.3	1,006.1	3,888.5	3,796.2	92.36	42.102	
13,600.0	8,119.0	17,585.0	12,004.2	95.3	102.3	179.64	-5,458.2	1,001.3	3,886.5	3,792.7	93.82	41.423	
13,700.0	8,119.0	17,639.6	12,003.0	96.8	103.1	179.59	-5,512.7	998.2	3,884.5	3,789.5	94.94	40.913	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #224H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 174-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,789.5	8,119.0	17,679.0	12,002.8	98.2	103.7	179.58	-5,552.1	997.8	3,883.9	3,788.1	95.85	40.519	
13,800.0	8,119.0	17,679.0	12,002.8	98.4	103.7	179.58	-5,552.1	997.8	3,883.9	3,788.0	95.92	40.491	
13,900.0	8,119.0	17,740.7	12,003.1	100.0	104.6	179.59	-5,613.7	998.5	3,884.6	3,787.5	97.08	40.014	
14,000.0	8,119.0	17,804.2	12,004.3	101.5	105.6	179.60	-5,677.3	999.8	3,886.4	3,788.1	98.26	39.554	
14,100.0	8,119.0	17,882.0	12,006.3	103.1	106.8	179.65	-5,754.9	1,003.2	3,888.9	3,789.3	99.55	39.066	
14,200.0	8,119.0	17,990.1	12,009.3	104.7	108.4	179.74	-5,862.7	1,010.2	3,891.6	3,790.5	101.10	38.492	
14,300.0	8,119.0	18,387.3	12,002.7	106.2	114.5	179.96	-6,259.3	1,027.2	3,888.7	3,783.6	105.09	37.003	
14,400.0	8,119.0	18,457.8	11,999.2	107.8	115.6	-180.00	-6,329.7	1,030.6	3,883.9	3,777.5	106.35	36.520	
14,500.0	8,119.0	18,502.7	11,997.6	109.4	116.3	-179.98	-6,374.5	1,032.3	3,880.3	3,772.9	107.40	36.130	
14,600.0	8,119.0	18,556.9	11,996.4	111.0	117.1	-179.96	-6,428.7	1,033.6	3,878.0	3,769.5	108.52	35.736	
14,700.0	8,119.0	18,621.0	11,995.6	112.6	118.1	-179.95	-6,492.8	1,034.9	3,876.8	3,767.0	109.72	35.334	
14,761.9	8,119.0	18,646.2	11,995.5	113.6	118.5	-179.94	-6,518.0	1,035.5	3,876.6	3,766.2	110.33	35.134	
14,800.0	8,119.0	18,660.9	11,995.6	114.2	118.8	-179.94	-6,532.7	1,035.9	3,876.7	3,766.0	110.70	35.019	
14,900.0	8,119.0	18,858.1	11,994.4	115.7	121.8	-179.86	-6,729.7	1,041.9	3,876.1	3,763.0	113.05	34.286	
15,000.0	8,119.0	18,903.0	11,994.2	117.3	122.5	-179.85	-6,774.6	1,043.1	3,875.3	3,761.2	114.09	33.967	
15,100.0	8,119.0	19,036.6	11,993.1	118.9	124.6	-179.66	-6,907.4	1,056.7	3,874.5	3,758.6	115.87	33.439	
15,200.0	8,119.0	19,092.0	11,992.6	120.5	125.5	-179.56	-6,962.3	1,063.8	3,873.8	3,756.8	116.99	33.114	
15,219.2	8,119.0	19,111.0	11,992.6	120.8	125.8	-179.53	-6,981.2	1,066.1	3,873.8	3,756.5	117.27	33.032	
15,300.0	8,119.0	19,154.1	11,992.8	122.1	126.5	-179.46	-7,024.0	1,070.7	3,874.2	3,756.0	118.16	32.788	
15,400.0	8,119.0	19,213.8	11,993.6	123.7	127.4	-179.39	-7,083.6	1,075.9	3,875.7	3,756.4	119.31	32.484	
15,500.0	8,119.0	19,410.0	11,994.7	125.3	130.5	-179.32	-7,279.6	1,082.0	3,876.1	3,754.4	121.68	31.854	
15,525.1	8,119.0	19,417.6	11,994.7	125.7	130.6	-179.31	-7,287.1	1,082.4	3,876.0	3,754.1	121.91	31.794	
15,600.0	8,119.0	19,469.0	11,995.5	126.9	131.4	-179.26	-7,338.4	1,086.5	3,876.9	3,754.1	122.84	31.560	
15,700.0	8,119.0	19,727.0	11,992.1	128.5	135.5	-179.07	-7,595.8	1,100.4	3,875.9	3,750.3	125.69	30.837	
15,800.0	8,119.0	19,865.0	11,986.7	130.1	137.6	-179.17	-7,733.5	1,094.5	3,871.9	3,744.4	127.53	30.361	
15,900.0	8,119.0	19,846.0	11,987.5	131.7	137.3	-179.15	-7,714.6	1,095.9	3,869.3	3,741.3	128.08	30.211	
16,000.0	8,119.0	19,904.0	11,986.2	133.3	138.2	-179.21	-7,772.4	1,091.8	3,867.7	3,738.4	129.25	29.925	
16,100.0	8,119.0	20,065.2	11,984.8	134.9	140.7	-179.45	-7,932.9	1,076.8	3,866.7	3,735.4	131.32	29.444	
16,196.9	8,119.0	20,091.4	11,984.6	136.5	141.1	-179.48	-7,959.0	1,074.8	3,865.8	3,733.6	132.20	29.243	
16,200.0	8,119.0	20,092.2	11,984.6	136.5	141.1	-179.48	-7,959.8	1,074.7	3,865.8	3,733.6	132.22	29.237	
16,300.0	8,119.0	20,126.0	11,985.1	138.1	141.6	-179.51	-7,993.5	1,073.0	3,866.9	3,733.7	133.15	29.040	
16,400.0	8,119.0	20,126.0	11,985.1	139.7	141.6	-179.51	-7,993.5	1,073.0	3,869.9	3,736.2	133.73	28.938	
16,500.0	8,119.0	20,184.3	11,987.4	141.4	142.6	-179.54	-8,051.8	1,071.7	3,874.2	3,739.4	134.85	28.731	
16,600.0	8,119.0	20,221.0	11,989.7	143.0	143.1	-179.54	-8,088.4	1,071.7	3,880.5	3,744.8	135.73	28.591	
16,700.0	8,119.0	20,286.3	11,994.7	144.6	144.2	-179.53	-8,153.5	1,072.4	3,888.1	3,751.2	136.89	28.403	
16,800.0	8,119.0	20,676.7	12,009.7	146.2	150.4	-179.45	-8,543.3	1,080.8	3,891.0	3,749.7	141.28	27.540	
16,900.0	8,119.0	20,767.5	12,010.3	147.8	151.8	-179.43	-8,634.1	1,082.3	3,891.6	3,748.9	142.74	27.265	
17,000.0	8,119.0	20,947.7	12,008.6	149.4	154.7	-179.42	-8,814.2	1,084.4	3,890.2	3,745.2	144.98	26.833	
17,100.0	8,119.0	20,972.0	12,008.3	151.0	155.1	-179.43	-8,838.6	1,083.8	3,889.6	3,743.7	145.85	26.669	
17,128.8	8,119.0	21,002.4	12,008.2	151.5	155.5	-179.44	-8,868.9	1,083.0	3,889.5	3,743.2	146.31	26.585	
17,200.0	8,119.0	21,025.3	12,008.5	152.7	155.9	-179.45	-8,891.8	1,082.6	3,890.3	3,743.4	146.96	26.473	
17,300.0	8,119.0	21,066.0	12,009.7	154.3	156.5	-179.46	-8,932.5	1,082.4	3,893.0	3,745.1	147.93	26.317	
17,400.0	8,119.0	21,138.4	12,012.6	155.9	157.7	-179.45	-9,004.9	1,083.3	3,897.0	3,747.8	149.19	26.120	
17,500.0	8,119.0	21,203.3	12,015.4	157.5	158.7	-179.42	-9,069.6	1,085.4	3,901.4	3,751.0	150.38	25.944	
17,600.0	8,119.0	21,261.9	12,018.6	159.1	159.7	-179.39	-9,128.1	1,087.9	3,906.9	3,755.4	151.49	25.790	
17,700.0	8,119.0	21,356.3	12,024.3	160.7	161.2	-179.38	-9,222.3	1,089.5	3,912.9	3,759.9	152.97	25.580	
17,800.0	8,119.0	21,589.4	12,032.7	162.4	164.9	-179.43	-9,455.1	1,087.1	3,915.4	3,759.6	155.86	25.122	
17,900.0	8,119.0	21,631.0	12,034.5	164.0	165.6	-179.44	-9,496.7	1,087.0	3,919.2	3,762.4	156.82	24.991	
18,000.0	8,119.0	18,000.0	12,038.0	165.6	107.7	-179.45	-9,567.3	1,086.5	3,924.1	3,794.3	129.78	30.236	
18,100.0	8,119.0	22,064.5	12,043.4	167.2	172.4	-179.82	-9,929.2	1,063.4	3,925.1	3,762.9	162.11	24.212	
18,200.0	8,119.0	22,178.1	12,041.3	168.9	174.2	-179.96	-10,042.4	1,054.8	3,923.2	3,759.4	163.79	23.952	
18,300.0	8,119.0	22,254.3	12,039.9	170.5	175.4	179.97	-10,118.4	1,050.1	3,921.4	3,756.2	165.15	23.745	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #224H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 174-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,400.0	8,119.0	22,320.8	12,039.3	172.1	176.4	179.95	-10,184.9	1,048.9	3,920.4	3,754.0	166.40	23.559	
18,462.0	8,119.0	22,360.2	12,039.1	173.1	177.1	179.94	-10,224.3	1,048.6	3,920.2	3,753.0	167.16	23.451	
18,500.0	8,119.0	22,384.7	12,039.2	173.7	177.5	179.93	-10,248.8	1,048.4	3,920.3	3,752.6	167.63	23.387	
18,600.0	8,119.0	22,522.3	12,038.7	175.4	179.7	179.93	-10,386.4	1,049.1	3,919.8	3,750.3	169.51	23.125	
18,700.0	8,119.0	18,700.0	12,037.4	177.0	118.0	179.98	-10,513.6	1,053.3	3,918.8	3,777.7	141.07	27.778	
18,800.0	8,119.0	22,735.5	12,036.1	178.6	183.1	-180.00	-10,599.5	1,055.4	3,917.4	3,744.7	172.70	22.683	
18,900.0	8,119.0	22,808.5	12,035.8	180.2	184.3	179.99	-10,672.5	1,054.7	3,916.8	3,742.8	174.01	22.509	
18,957.8	8,119.0	22,856.0	12,035.7	181.2	185.0	179.98	-10,720.0	1,054.1	3,916.8	3,741.9	174.82	22.405	
19,000.0	8,119.0	22,886.9	12,035.8	181.9	185.5	179.97	-10,750.9	1,053.8	3,916.8	3,741.4	175.37	22.335	
19,100.0	8,119.0	22,974.8	12,036.3	183.5	186.9	179.95	-10,838.8	1,053.0	3,917.4	3,740.6	176.81	22.156	
19,200.0	8,119.0	23,084.4	12,036.5	185.1	188.7	179.92	-10,948.4	1,051.3	3,917.6	3,739.1	178.45	21.953	
19,300.0	8,119.0	23,152.9	12,037.0	186.8	189.8	179.90	-11,016.8	1,050.7	3,918.3	3,738.6	179.71	21.804	
19,400.0	8,119.0	23,232.0	12,038.2	188.4	191.1	179.90	-11,095.9	1,051.3	3,919.8	3,738.7	181.06	21.649	
19,500.0	8,119.0	23,284.3	12,039.4	190.0	191.9	179.91	-11,148.2	1,052.3	3,922.1	3,740.0	182.13	21.534	
19,600.0	8,119.0	19,600.0	12,043.9	191.6	132.5	179.96	-11,338.2	1,056.6	3,925.0	3,770.2	154.78	25.359	
19,700.0	8,119.0	23,610.0	12,043.6	193.3	197.2	179.96	-11,473.8	1,057.2	3,924.6	3,738.2	186.42	21.053	
19,711.6	8,119.0	23,610.0	12,043.6	193.5	197.2	179.96	-11,473.8	1,057.2	3,924.6	3,738.1	186.50	21.044	
19,800.0	8,119.0	23,650.1	12,043.8	194.9	197.8	179.97	-11,513.9	1,058.0	3,925.1	3,737.7	187.42	20.943	
19,900.0	8,119.0	23,703.0	12,045.0	196.5	198.7	179.99	-11,566.7	1,060.1	3,927.2	3,738.7	188.50	20.833	
20,000.0	8,119.0	23,847.7	12,047.0	198.2	201.0	-179.94	-11,711.3	1,065.4	3,928.3	3,737.9	190.48	20.623	
20,100.0	8,119.0	23,904.5	12,048.1	199.8	201.9	-179.91	-11,768.0	1,068.0	3,930.2	3,738.6	191.60	20.512	
20,200.0	8,119.0	23,977.2	12,050.0	201.4	203.1	-179.85	-11,840.6	1,072.4	3,933.0	3,740.1	192.87	20.392	
20,300.0	8,119.0	24,073.9	12,053.1	203.1	204.7	-179.76	-11,936.9	1,079.5	3,936.1	3,741.8	194.38	20.250	
20,400.0	8,119.0	24,321.4	12,058.6	204.7	208.7	-179.48	-12,183.6	1,099.8	3,939.9	3,742.6	197.31	19.968	
20,465.0	8,119.0	24,365.0	12,058.4	205.8	209.5	-179.43	-12,227.0	1,103.4	3,939.6	3,741.5	198.13	19.884	
20,500.0	8,119.0	24,365.0	12,058.4	206.3	209.5	-179.43	-12,227.0	1,103.4	3,939.8	3,741.4	198.35	19.863	
20,606.7	8,119.0	24,365.0	12,058.4	208.1	209.5	-179.43	-12,227.0	1,103.4	3,942.2	3,743.2	198.95	19.815	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #226H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 218-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.37	-7.0	-1,075.3	1,075.3				
100.0	100.0	92.2	92.2	0.1	0.1	-90.36	-6.8	-1,075.4	1,075.4	1,075.1	0.27	3,951.735	
200.0	200.0	190.4	190.4	0.5	0.3	-90.33	-6.2	-1,075.6	1,075.6	1,074.9	0.78	1,372.898	
300.0	300.0	291.4	291.4	0.8	0.6	-90.28	-5.3	-1,076.0	1,076.0	1,074.5	1.45	743.155	
400.0	400.0	393.5	393.5	1.2	1.0	-90.26	-4.9	-1,076.1	1,076.1	1,073.9	2.17	495.411	
500.0	500.0	492.8	492.7	1.6	1.3	-90.25	-4.7	-1,076.2	1,076.2	1,073.3	2.89	372.933	
600.0	600.0	591.8	591.7	1.9	1.7	-90.24	-4.4	-1,076.3	1,076.3	1,072.8	3.60	299.113	
700.0	700.0	689.3	689.3	2.3	2.0	-90.24	-4.6	-1,076.7	1,076.7	1,072.4	4.29	250.803	
800.0	800.0	789.5	789.5	2.6	2.4	-90.29	-5.5	-1,077.2	1,077.2	1,072.2	5.00	215.579	
900.0	900.0	903.4	903.4	3.0	2.8	-90.30	-5.6	-1,076.9	1,077.0	1,071.2	5.75	187.411	
1,000.0	1,000.0	1,028.3	1,028.2	3.4	3.2	-90.17	-3.1	-1,074.6	1,075.2	1,068.6	6.54	164.422	
1,100.0	1,100.0	1,133.3	1,133.1	3.7	3.6	-164.41	0.8	-1,071.1	1,073.5	1,066.2	7.26	147.859	
1,117.4	1,117.4	1,154.0	1,153.8	3.8	3.6	-164.37	1.7	-1,070.3	1,073.5	1,066.1	7.39	145.170	CC
1,200.0	1,199.8	1,252.0	1,251.4	4.1	4.0	-164.12	7.8	-1,065.8	1,074.0	1,066.0	8.03	133.773	ES
1,300.0	1,299.5	1,362.3	1,361.1	4.4	4.4	-163.72	17.6	-1,059.1	1,076.4	1,067.6	8.78	122.661	
1,400.0	1,398.7	1,465.9	1,463.9	4.8	4.8	-163.30	28.5	-1,052.3	1,081.7	1,072.2	9.51	113.759	
1,500.0	1,497.5	1,569.2	1,566.3	5.2	5.2	-162.87	40.3	-1,045.1	1,090.0	1,079.7	10.25	106.326	
1,600.0	1,595.9	1,672.4	1,668.6	5.5	5.6	-162.52	52.0	-1,037.6	1,099.6	1,088.6	11.00	99.977	
1,700.0	1,694.4	1,761.0	1,756.3	5.9	5.9	-162.21	62.4	-1,031.3	1,109.5	1,097.8	11.70	94.803	
1,800.0	1,792.9	1,847.5	1,842.0	6.3	6.3	-161.88	73.3	-1,026.1	1,120.6	1,108.2	12.40	90.345	
1,900.0	1,891.4	1,941.1	1,934.6	6.8	6.6	-161.48	85.8	-1,021.4	1,132.6	1,119.5	13.14	86.208	
2,000.0	1,989.9	2,037.3	2,029.7	7.2	7.0	-161.06	99.3	-1,016.7	1,145.0	1,131.1	13.89	82.446	
2,100.0	2,088.4	2,133.1	2,124.4	7.6	7.4	-160.63	113.0	-1,012.2	1,157.6	1,143.0	14.64	79.066	
2,200.0	2,186.8	2,228.7	2,219.0	8.0	7.8	-160.22	126.5	-1,008.0	1,170.6	1,155.2	15.40	76.026	
2,300.0	2,285.3	2,318.8	2,308.2	8.5	8.1	-159.87	138.8	-1,004.5	1,184.0	1,167.9	16.13	73.417	
2,400.0	2,383.8	2,407.4	2,396.0	8.9	8.5	-159.57	150.2	-1,001.9	1,198.4	1,181.6	16.85	71.117	
2,500.0	2,482.3	2,511.3	2,499.1	9.3	8.9	-159.28	162.3	-999.4	1,213.2	1,195.6	17.64	68.785	
2,600.0	2,580.8	2,623.2	2,610.4	9.8	9.3	-159.04	174.0	-995.6	1,227.1	1,208.7	18.46	66.481	
2,700.0	2,679.2	2,715.8	2,702.5	10.2	9.7	-158.90	182.5	-992.4	1,240.7	1,221.5	19.19	64.670	
2,800.0	2,777.7	2,807.8	2,794.2	10.6	10.1	-158.81	190.0	-989.8	1,254.9	1,235.0	19.91	63.031	
2,900.0	2,876.2	2,915.0	2,901.1	11.1	10.5	-158.73	198.1	-986.8	1,269.1	1,248.4	20.70	61.319	
3,000.0	2,974.7	3,023.7	3,009.4	11.5	10.9	-158.64	206.7	-982.9	1,282.5	1,261.0	21.49	59.678	
3,100.0	3,073.2	3,121.2	3,106.5	11.9	11.2	-158.54	214.7	-979.2	1,295.7	1,273.5	22.24	58.259	
3,200.0	3,171.6	3,220.7	3,205.5	12.4	11.6	-158.44	222.9	-975.3	1,308.9	1,285.9	23.00	56.912	
3,300.0	3,270.1	3,320.3	3,304.7	12.8	12.0	-158.37	230.7	-971.5	1,322.0	1,298.3	23.75	55.653	
3,400.0	3,368.6	3,421.9	3,406.1	13.3	12.4	-158.32	237.9	-967.6	1,335.1	1,310.6	24.52	54.446	
3,500.0	3,467.1	3,526.5	3,510.2	13.7	12.8	-158.22	246.5	-963.1	1,347.9	1,322.6	25.30	53.265	
3,600.0	3,565.6	3,638.3	3,621.3	14.2	13.2	-158.08	256.5	-957.5	1,360.1	1,333.9	26.12	52.071	
3,700.0	3,664.0	3,755.0	3,737.6	14.6	13.7	-158.01	265.0	-950.5	1,371.1	1,344.1	26.95	50.873	
3,800.0	3,762.5	3,831.2	3,813.5	15.1	14.0	-157.99	269.9	-946.2	1,382.2	1,354.6	27.61	50.065	
3,900.0	3,861.0	3,906.8	3,888.8	15.5	14.2	-157.97	275.1	-943.1	1,395.1	1,366.9	28.26	49.375	
4,000.0	3,959.5	3,991.1	3,972.9	16.0	14.5	-157.95	281.0	-941.0	1,409.5	1,380.6	28.94	48.712	
4,100.0	4,058.0	4,084.0	4,065.6	16.4	14.9	-157.94	287.1	-939.3	1,424.5	1,394.9	29.65	48.037	
4,200.0	4,156.4	4,176.3	4,157.7	16.8	15.2	-157.96	292.5	-938.0	1,439.9	1,409.5	30.36	47.420	
4,300.0	4,254.9	4,267.8	4,249.1	17.3	15.6	-158.02	297.0	-937.3	1,455.8	1,424.7	31.06	46.864	
4,400.0	4,353.4	4,358.9	4,340.1	17.7	15.9	-158.12	300.4	-937.1	1,472.2	1,440.4	31.75	46.368	
4,500.0	4,451.9	4,449.2	4,430.5	18.2	16.2	-158.28	302.0	-937.7	1,489.1	1,456.7	32.41	45.940	
4,600.0	4,550.4	4,544.4	4,525.6	18.6	16.5	-158.53	302.0	-938.9	1,506.5	1,473.4	33.09	45.523	
4,700.0	4,648.9	4,651.5	4,632.7	19.1	16.8	-158.81	301.5	-939.9	1,523.6	1,489.8	33.82	45.052	
4,800.0	4,747.3	4,751.9	4,733.1	19.5	17.1	-159.06	301.2	-940.5	1,540.4	1,505.9	34.52	44.628	
4,900.0	4,845.8	4,846.8	4,828.0	20.0	17.5	-159.29	301.1	-941.1	1,557.3	1,522.1	35.19	44.255	
5,000.0	4,944.3	4,942.8	4,923.9	20.4	17.8	-159.51	301.0	-941.9	1,574.4	1,538.5	35.87	43.893	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #226H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 218-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,042.8	5,039.5	5,020.7	20.9	18.1	-159.73	300.9	-942.9	1,591.7	1,555.1	36.56	43.541	
5,200.0	5,141.3	5,138.2	5,119.4	21.3	18.4	-159.95	301.0	-943.9	1,609.0	1,571.7	37.25	43.189	
5,300.0	5,239.7	5,238.0	5,219.2	21.8	18.7	-160.16	301.0	-944.8	1,626.3	1,588.3	37.96	42.841	
5,400.0	5,338.2	5,334.7	5,315.9	22.2	19.1	-160.36	301.2	-945.7	1,643.6	1,604.9	38.65	42.522	
5,500.0	5,436.7	5,430.0	5,411.2	22.7	19.4	-160.55	301.2	-946.7	1,661.0	1,621.7	39.34	42.226	
5,600.0	5,535.2	5,527.7	5,508.9	23.1	19.7	-160.75	301.3	-947.9	1,678.6	1,638.6	40.04	41.929	
5,700.0	5,633.7	5,626.2	5,607.4	23.6	20.0	-160.94	301.5	-949.1	1,696.2	1,655.5	40.74	41.637	
5,800.0	5,732.1	5,723.1	5,704.2	24.0	20.4	-161.12	301.8	-950.3	1,713.9	1,672.5	41.44	41.363	
5,900.0	5,830.6	5,819.5	5,800.7	24.5	20.7	-161.29	302.0	-951.5	1,731.7	1,689.6	42.13	41.103	
6,000.0	5,929.1	5,922.0	5,903.1	24.9	21.0	-161.48	302.0	-952.8	1,749.4	1,706.6	42.86	40.821	
6,100.0	6,027.6	6,025.4	6,006.5	25.4	21.4	-161.67	302.0	-953.9	1,766.9	1,723.3	43.59	40.538	
6,200.0	6,126.1	6,125.5	6,106.6	25.8	21.7	-161.86	301.9	-954.7	1,784.2	1,739.9	44.30	40.277	
6,300.0	6,224.5	6,226.3	6,207.5	26.3	22.0	-162.04	301.8	-955.4	1,801.5	1,756.4	45.01	40.019	
6,400.0	6,323.0	6,330.1	6,311.2	26.7	22.4	-162.22	301.6	-955.9	1,818.5	1,772.7	45.74	39.752	
6,500.0	6,421.5	6,430.1	6,411.2	27.2	22.7	-162.39	301.5	-956.1	1,835.2	1,788.8	46.46	39.505	
6,600.0	6,520.0	6,522.5	6,503.6	27.6	23.0	-162.55	301.3	-956.5	1,852.2	1,805.1	47.13	39.303	
6,700.0	6,618.5	6,617.3	6,598.4	28.1	23.4	-162.72	301.0	-957.2	1,869.5	1,821.7	47.81	39.103	
6,800.0	6,716.9	6,718.4	6,699.5	28.5	23.7	-162.89	300.5	-957.9	1,886.8	1,838.3	48.53	38.882	
6,900.0	6,815.4	6,819.3	6,800.4	29.0	24.0	-163.07	299.8	-958.4	1,903.9	1,854.7	49.24	38.667	
6,981.8	6,896.0	6,901.6	6,882.7	29.4	24.3	-163.22	299.1	-958.8	1,917.9	1,868.1	49.82	38.496	
7,000.0	6,913.9	6,919.9	6,901.0	29.5	24.4	-163.27	298.9	-958.8	1,920.9	1,871.0	49.95	38.457	
7,100.0	7,012.9	7,022.5	7,003.6	29.9	24.7	-163.53	297.9	-959.2	1,935.1	1,884.4	50.66	38.194	
7,200.0	7,112.3	7,127.0	7,108.1	30.3	25.0	-163.72	296.9	-959.2	1,944.8	1,893.4	51.38	37.852	
7,300.0	7,212.2	7,226.8	7,207.9	30.6	25.4	-163.84	295.9	-959.1	1,950.2	1,898.1	52.06	37.460	
7,381.8	7,294.0	7,307.0	7,288.1	30.9	25.6	-89.46	295.2	-959.1	1,951.5	1,898.9	52.60	37.102	
7,385.7	7,297.9	7,310.8	7,291.9	30.9	25.7	-89.46	295.2	-959.1	1,951.5	1,898.9	52.62	37.085	
7,400.0	7,312.2	7,324.8	7,305.9	30.9	25.7	-89.46	295.1	-959.1	1,951.5	1,898.8	52.72	37.019	
7,500.0	7,412.2	7,426.8	7,407.9	31.2	26.0	-89.48	294.3	-959.1	1,951.5	1,898.1	53.39	36.552	
7,600.0	7,512.2	7,529.9	7,511.0	31.5	26.4	-89.52	293.2	-958.9	1,951.4	1,897.3	54.07	36.090	
7,633.8	7,546.0	7,564.0	7,545.0	31.6	26.5	-89.53	292.8	-958.8	1,951.3	1,897.0	54.29	35.939	
7,650.0	7,562.2	7,580.1	7,561.2	31.7	26.6	90.81	292.6	-958.8	1,951.2	1,896.8	54.40	35.868	
7,700.0	7,612.0	7,630.0	7,611.0	31.8	26.7	90.91	292.1	-958.6	1,951.2	1,896.4	54.72	35.656	
7,720.5	7,632.3	7,650.3	7,631.3	31.8	26.8	90.98	292.0	-958.6	1,951.2	1,896.3	54.85	35.572	
7,750.0	7,661.4	7,679.3	7,660.4	31.9	26.9	91.12	291.7	-958.5	1,951.2	1,896.1	55.04	35.453	
7,800.0	7,709.8	7,727.9	7,709.0	32.0	27.0	91.44	291.4	-958.4	1,951.3	1,896.0	55.34	35.259	
7,850.0	7,757.1	7,777.3	7,758.4	32.1	27.2	91.88	291.0	-958.3	1,951.7	1,896.0	55.65	35.071	
7,900.0	7,802.7	7,825.0	7,806.1	32.2	27.4	92.38	290.7	-958.1	1,952.3	1,896.3	55.94	34.896	
7,950.0	7,846.4	7,870.7	7,851.8	32.3	27.5	92.93	290.5	-957.8	1,953.2	1,897.0	56.23	34.739	
8,000.0	7,887.7	7,914.0	7,895.1	32.4	27.7	93.48	290.2	-957.6	1,954.8	1,898.3	56.50	34.600	
8,050.0	7,926.5	7,951.9	7,932.9	32.4	27.8	93.95	290.0	-957.3	1,957.0	1,900.2	56.74	34.492	
8,100.0	7,962.4	7,987.1	7,968.1	32.5	27.9	94.35	289.7	-957.1	1,960.1	1,903.1	56.96	34.409	
8,150.0	7,995.1	8,019.3	8,000.3	32.5	28.0	94.65	289.5	-957.0	1,964.2	1,907.0	57.18	34.352	
8,200.0	8,024.4	8,048.2	8,029.2	32.6	28.1	94.81	289.2	-956.8	1,969.4	1,912.0	57.37	34.325	
8,250.0	8,050.1	8,073.6	8,054.7	32.6	28.2	94.79	289.0	-956.7	1,975.8	1,918.3	57.56	34.328	
8,300.0	8,071.9	8,095.4	8,076.4	32.7	28.3	94.58	288.8	-956.7	1,983.6	1,925.8	57.72	34.365	
8,350.0	8,089.7	8,113.9	8,094.9	32.7	28.3	94.16	288.6	-956.6	1,992.7	1,934.8	57.87	34.434	
8,400.0	8,103.4	8,128.4	8,109.4	32.7	28.4	93.49	288.5	-956.5	2,003.2	1,945.2	58.00	34.538	
8,450.0	8,112.8	8,138.6	8,119.6	32.8	28.4	92.57	288.4	-956.5	2,015.0	1,956.9	58.11	34.678	
8,500.0	8,118.0	8,144.3	8,125.3	32.9	28.4	91.37	288.3	-956.5	2,028.2	1,970.0	58.19	34.855	
8,533.8	8,119.0	8,145.6	8,126.6	33.0	28.5	90.40	288.3	-956.5	2,037.8	1,979.6	58.23	34.995	
8,600.0	8,119.0	8,146.2	8,127.2	33.1	28.5	90.42	288.3	-956.5	2,058.1	1,999.8	58.31	35.298	
8,700.0	8,119.0	8,147.1	8,128.1	33.4	28.5	90.45	288.3	-956.5	2,092.5	2,034.0	58.44	35.804	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #226H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 218-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,800.0	8,119.0	8,147.9	8,129.0	33.8	28.5	90.47	288.3	-956.5	2,130.9	2,072.3	58.59	36.368	
8,900.0	8,119.0	8,148.8	8,129.9	34.3	28.5	90.50	288.3	-956.4	2,173.3	2,114.5	58.76	36.989	
9,000.0	8,119.0	8,149.7	8,130.7	34.9	28.5	90.52	288.3	-956.4	2,219.3	2,160.4	58.93	37.662	
9,100.0	8,119.0	8,150.5	8,131.6	35.5	28.5	90.55	288.3	-956.4	2,268.9	2,209.8	59.11	38.387	
9,200.0	8,119.0	8,151.4	8,132.4	36.3	28.5	90.57	288.3	-956.4	2,321.7	2,262.4	59.29	39.160	
9,300.0	8,119.0	8,152.3	8,133.3	37.1	28.5	90.60	288.3	-956.4	2,377.5	2,318.1	59.47	39.978	
9,400.0	8,119.0	8,153.1	8,134.1	37.9	28.5	90.62	288.3	-956.4	2,436.2	2,376.5	59.65	40.840	
9,500.0	8,119.0	8,153.9	8,135.0	38.8	28.5	90.65	288.2	-956.4	2,497.5	2,437.6	59.83	41.741	
9,600.0	8,119.0	8,154.8	8,135.8	39.8	28.5	90.67	288.2	-956.4	2,561.2	2,501.2	60.01	42.680	
9,700.0	8,119.0	8,155.6	8,136.7	40.8	28.5	90.70	288.2	-956.4	2,627.2	2,567.0	60.18	43.655	
9,800.0	8,119.0	8,156.4	8,137.5	41.8	28.5	90.72	288.2	-956.4	2,695.3	2,634.9	60.35	44.662	
9,900.0	8,119.0	8,157.3	8,138.3	42.9	28.5	90.75	288.2	-956.4	2,765.3	2,704.8	60.51	45.700	
10,000.0	8,119.0	8,158.1	8,139.1	44.0	28.5	90.77	288.2	-956.4	2,837.1	2,776.4	60.67	46.767	
10,100.0	8,119.0	8,158.9	8,140.0	45.2	28.5	90.79	288.2	-956.4	2,910.6	2,849.8	60.82	47.859	
10,200.0	8,119.0	8,159.7	8,140.8	46.3	28.5	90.82	288.2	-956.4	2,985.6	2,924.7	60.96	48.977	
10,300.0	8,119.0	8,160.5	8,141.6	47.5	28.5	90.84	288.2	-956.4	3,062.1	3,001.0	61.10	50.116	
10,400.0	8,119.0	8,161.3	8,142.4	48.8	28.5	90.86	288.2	-956.4	3,139.8	3,078.6	61.23	51.277	
10,500.0	8,119.0	8,162.1	8,143.2	50.0	28.5	90.89	288.2	-956.4	3,218.9	3,157.5	61.36	52.458	
10,600.0	8,119.0	8,162.9	8,144.0	51.3	28.5	90.91	288.2	-956.4	3,299.0	3,237.5	61.48	53.656	
10,700.0	8,119.0	8,163.7	8,144.8	52.6	28.5	90.94	288.2	-956.4	3,380.2	3,318.6	61.60	54.870	
10,800.0	8,119.0	8,164.5	8,145.5	54.0	28.5	90.96	288.2	-956.4	3,462.4	3,400.7	61.72	56.101	
10,900.0	8,119.0	8,165.3	8,146.3	55.3	28.5	90.98	288.2	-956.4	3,545.5	3,483.7	61.83	57.345	
11,000.0	8,119.0	8,166.1	8,147.1	56.7	28.5	91.00	288.1	-956.4	3,629.4	3,567.5	61.93	58.602	
11,100.0	8,119.0	8,166.8	8,147.9	58.0	28.5	91.03	288.1	-956.4	3,714.2	3,652.1	62.04	59.871	
11,200.0	8,119.0	8,167.6	8,148.7	59.4	28.5	91.05	288.1	-956.4	3,799.7	3,737.5	62.14	61.152	
11,300.0	8,119.0	8,168.4	8,149.4	60.8	28.5	91.07	288.1	-956.4	3,885.8	3,823.6	62.23	62.442	
11,400.0	8,119.0	8,169.1	8,150.2	62.2	28.5	91.09	288.1	-956.4	3,972.7	3,910.4	62.32	63.742	
11,500.0	8,119.0	8,169.9	8,150.9	63.6	28.5	91.12	288.1	-956.4	4,060.1	3,997.7	62.41	65.051	
11,600.0	8,119.0	8,170.6	8,151.7	65.1	28.5	91.14	288.1	-956.3	4,148.1	4,085.6	62.50	66.368	
11,700.0	8,119.0	8,171.4	8,152.4	66.5	28.5	91.16	288.1	-956.3	4,236.7	4,174.1	62.59	67.691	
11,800.0	8,119.0	8,172.1	8,153.2	68.0	28.5	91.18	288.1	-956.3	4,325.7	4,263.0	62.67	69.022	
11,900.0	8,119.0	8,172.9	8,153.9	69.4	28.5	91.20	288.1	-956.3	4,415.2	4,352.4	62.75	70.359	
12,000.0	8,119.0	8,173.6	8,154.7	70.9	28.5	91.23	288.1	-956.3	4,505.1	4,442.3	62.83	71.701	
12,100.0	8,119.0	8,174.4	8,155.4	72.4	28.6	91.25	288.1	-956.3	4,595.5	4,532.6	62.91	73.049	
12,200.0	8,119.0	8,175.1	8,156.1	73.9	28.6	91.27	288.1	-956.3	4,686.2	4,623.3	62.99	74.401	
12,300.0	8,119.0	8,175.8	8,156.9	75.4	28.6	91.29	288.1	-956.3	4,777.4	4,714.3	63.06	75.757	
12,400.0	8,119.0	16,504.3	12,458.0	76.9	80.6	155.02	-4,048.4	-1,007.1	4,795.1	4,697.1	97.93	48.963	
12,500.0	8,119.0	16,635.9	12,458.9	78.4	82.4	154.97	-4,179.9	-1,011.6	4,797.5	4,697.3	100.14	47.908	
12,600.0	8,119.0	16,795.7	12,457.6	79.9	84.7	154.89	-4,339.6	-1,017.6	4,798.5	4,695.7	102.71	46.718	
12,700.0	8,119.0	17,055.4	12,456.6	81.4	88.4	154.93	-4,599.1	-1,011.3	4,797.0	4,690.7	106.21	45.163	
12,800.0	8,119.0	17,141.9	12,456.9	82.9	89.6	155.00	-4,685.3	-1,005.1	4,794.5	4,686.7	107.79	44.479	
12,900.0	8,119.0	17,233.1	12,457.5	84.5	91.0	155.06	-4,776.3	-998.5	4,792.3	4,682.9	109.41	43.799	
13,000.0	8,119.0	17,318.5	12,457.8	86.0	92.2	155.12	-4,861.6	-993.3	4,790.3	4,679.3	111.00	43.155	
13,100.0	8,119.0	17,398.4	12,458.5	87.5	93.4	155.17	-4,941.3	-988.4	4,788.7	4,676.2	112.53	42.556	
13,200.0	8,119.0	17,571.5	12,458.1	89.1	95.9	155.26	-5,114.1	-979.0	4,786.4	4,671.3	115.04	41.607	
13,300.0	8,119.0	17,621.0	12,457.4	90.6	96.7	155.27	-5,163.6	-977.2	4,783.9	4,667.6	116.29	41.137	
13,400.0	8,119.0	17,678.0	12,456.9	92.2	97.5	155.27	-5,220.6	-976.6	4,782.7	4,665.1	117.65	40.653	
13,500.0	8,119.0	17,735.9	12,456.6	93.7	98.4	155.26	-5,278.5	-976.7	4,782.4	4,663.4	119.02	40.182	
13,544.8	8,119.0	17,778.1	12,456.5	94.4	99.0	155.26	-5,320.7	-976.5	4,782.4	4,662.5	119.82	39.914	
13,600.0	8,119.0	17,818.3	12,456.6	95.3	99.6	155.27	-5,360.9	-976.2	4,782.4	4,661.8	120.66	39.635	
13,700.0	8,119.0	17,906.0	12,457.4	96.8	100.9	155.28	-5,448.6	-975.1	4,782.9	4,660.6	122.35	39.091	
13,800.0	8,119.0	18,084.7	12,457.3	98.4	103.5	155.28	-5,627.3	-973.4	4,782.8	4,657.7	125.11	38.229	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #226H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 218-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,900.0	8,119.0	18,186.5	12,456.5	100.0	105.1	155.29	-5,729.0	-971.6	4,781.6	4,654.6	126.98	37.657	
14,000.0	8,119.0	18,250.0	12,456.1	101.5	106.0	155.30	-5,792.5	-970.6	4,780.6	4,652.2	128.41	37.230	
14,074.0	8,119.0	18,305.3	12,456.0	102.7	106.9	155.30	-5,847.8	-969.8	4,780.4	4,650.8	129.56	36.896	
14,100.0	8,119.0	18,319.9	12,456.1	103.1	107.1	155.30	-5,862.5	-969.6	4,780.4	4,650.5	129.91	36.797	
14,200.0	8,119.0	18,438.7	12,456.6	104.7	108.9	155.31	-5,981.2	-968.5	4,780.7	4,648.7	131.99	36.220	
14,300.0	8,119.0	18,539.7	12,456.7	106.2	110.4	155.32	-6,082.2	-967.4	4,780.5	4,646.7	133.87	35.712	
14,400.0	8,119.0	18,638.6	12,457.1	107.8	111.9	155.33	-6,181.1	-965.4	4,780.3	4,644.6	135.70	35.228	
14,434.1	8,119.0	18,665.4	12,457.2	108.4	112.3	155.34	-6,207.9	-965.0	4,780.3	4,644.1	136.24	35.086	
14,500.0	8,119.0	18,718.0	12,457.2	109.4	113.1	155.34	-6,260.5	-964.9	4,780.4	4,643.1	137.33	34.810	
14,600.0	8,119.0	18,856.0	12,456.5	111.0	115.2	155.32	-6,398.5	-964.8	4,780.2	4,640.5	139.68	34.222	
14,700.0	8,119.0	18,994.0	12,456.2	112.6	117.3	155.34	-6,536.4	-962.2	4,779.4	4,637.4	141.98	33.663	
14,800.0	8,119.0	19,053.5	12,455.9	114.2	118.2	155.35	-6,595.9	-961.0	4,778.5	4,635.1	143.37	33.329	
14,847.5	8,119.0	19,078.8	12,455.8	114.9	118.6	155.35	-6,621.2	-961.1	4,778.4	4,634.3	144.01	33.180	
14,900.0	8,119.0	19,097.0	12,455.6	115.7	118.9	155.34	-6,639.4	-961.3	4,778.5	4,633.9	144.60	33.046	
15,000.0	8,119.0	19,160.6	12,455.3	117.3	119.9	155.32	-6,703.0	-963.0	4,779.5	4,633.4	146.09	32.715	
15,100.0	8,119.0	19,215.9	12,455.3	118.9	120.7	155.29	-6,758.2	-965.3	4,781.4	4,633.9	147.49	32.419	
15,200.0	8,119.0	15,200.0	12,455.6	120.5	60.5	155.22	-6,874.4	-971.3	4,784.1	4,672.7	111.36	42.962	
15,300.0	8,119.0	19,595.0	12,454.4	122.1	126.5	155.18	-7,137.1	-972.8	4,783.7	4,630.0	153.69	31.126	
15,400.0	8,119.0	19,705.4	12,454.5	123.7	128.3	155.22	-7,247.4	-968.3	4,782.3	4,626.7	155.62	30.730	
15,500.0	8,119.0	19,899.8	12,455.4	125.3	131.3	155.39	-7,441.2	-952.3	4,779.3	4,621.0	158.26	30.199	
15,600.0	8,119.0	20,002.3	12,454.6	126.9	132.9	155.45	-7,543.5	-945.6	4,776.0	4,616.0	160.06	29.840	
15,700.0	8,119.0	20,118.7	12,451.2	128.5	134.7	155.47	-7,659.7	-941.5	4,772.1	4,610.0	162.10	29.439	
15,800.0	8,119.0	20,217.5	12,447.2	130.1	136.3	155.46	-7,758.4	-940.5	4,768.3	4,604.2	164.03	29.070	
15,900.0	8,119.0	15,900.0	12,439.5	131.7	68.8	155.40	-7,910.0	-941.4	4,764.3	4,639.5	124.80	38.175	
16,000.0	8,119.0	20,554.9	12,425.9	133.3	141.6	155.32	-8,095.1	-941.2	4,757.4	4,587.7	169.64	28.044	
16,100.0	8,119.0	20,606.0	12,422.5	134.9	142.4	155.31	-8,146.1	-940.6	4,751.1	4,580.0	171.07	27.773	
16,200.0	8,119.0	20,606.0	12,422.5	136.5	142.4	155.31	-8,146.1	-940.6	4,746.4	4,574.5	171.89	27.613	
16,300.0	8,119.0	20,650.7	12,420.3	138.1	143.1	155.29	-8,190.7	-940.7	4,742.8	4,569.6	173.21	27.382	
16,400.0	8,119.0	20,700.0	12,419.0	139.7	143.8	155.26	-8,240.0	-942.4	4,741.6	4,567.0	174.60	27.157	
16,466.3	8,119.0	20,700.0	12,419.0	140.8	143.8	155.26	-8,240.0	-942.4	4,741.1	4,566.0	175.07	27.081	
16,500.0	8,119.0	20,700.0	12,419.0	141.4	143.8	155.26	-8,240.0	-942.4	4,741.2	4,565.9	175.30	27.046	
16,600.0	8,119.0	20,756.1	12,418.6	143.0	144.7	155.23	-8,296.0	-945.1	4,742.6	4,565.8	176.75	26.832	
16,700.0	8,119.0	20,841.9	12,418.7	144.6	146.0	155.19	-8,381.7	-948.0	4,744.4	4,565.8	178.58	26.567	
16,800.0	8,119.0	21,110.9	12,418.0	146.2	150.3	155.19	-8,650.6	-946.3	4,743.4	4,560.8	182.61	25.976	
16,900.0	8,119.0	21,174.0	12,418.6	147.8	151.3	155.23	-8,713.6	-942.8	4,742.2	4,558.2	184.00	25.773	
16,939.9	8,119.0	21,174.0	12,418.6	148.5	151.3	155.23	-8,713.6	-942.8	4,742.0	4,557.7	184.28	25.732	
17,000.0	8,119.0	21,174.0	12,418.6	149.4	151.3	155.23	-8,713.6	-942.8	4,742.4	4,557.7	184.69	25.678	
17,100.0	8,119.0	21,231.9	12,419.7	151.0	152.2	155.25	-8,771.4	-941.1	4,743.5	4,557.5	186.02	25.500	
17,200.0	8,119.0	17,200.0	12,420.8	152.7	89.7	155.22	-8,856.2	-943.9	4,746.2	4,597.6	148.65	31.928	
17,300.0	8,119.0	21,497.7	12,419.8	154.3	156.4	155.13	-9,036.9	-950.2	4,747.1	4,556.0	191.03	24.850	
17,400.0	8,119.0	21,611.3	12,420.1	155.9	158.2	155.12	-9,150.5	-950.9	4,747.9	4,554.7	193.17	24.579	
17,500.0	8,119.0	21,701.7	12,419.3	157.5	159.6	155.09	-9,240.8	-953.0	4,748.3	4,553.2	195.07	24.341	
17,600.0	8,119.0	21,801.1	12,419.9	159.1	161.2	155.08	-9,340.3	-953.1	4,749.2	4,552.2	197.02	24.105	
17,700.0	8,119.0	21,834.0	12,420.3	160.7	161.7	155.09	-9,373.2	-952.7	4,750.3	4,552.2	198.08	23.981	
17,800.0	8,119.0	21,894.3	12,420.4	162.4	162.6	155.06	-9,433.5	-954.6	4,752.4	4,552.8	199.56	23.814	
17,900.0	8,119.0	17,900.0	12,419.5	164.0	101.8	154.95	-9,535.8	-963.5	4,755.5	4,593.1	162.49	29.267	
18,000.0	8,119.0	22,077.4	12,419.7	165.6	165.5	154.91	-9,616.0	-967.4	4,758.2	4,554.6	203.64	23.365	
18,100.0	8,119.0	22,118.0	12,420.5	167.2	166.1	154.89	-9,656.5	-969.4	4,762.2	4,557.4	204.83	23.250	
18,200.0	8,119.0	22,507.7	12,422.4	168.9	172.3	154.84	-10,045.4	-972.6	4,761.8	4,551.1	210.68	22.602	
18,300.0	8,119.0	22,587.5	12,425.6	170.5	173.6	154.95	-10,124.5	-962.9	4,760.5	4,548.5	212.05	22.450	
18,400.0	8,119.0	22,650.5	12,427.4	172.1	174.6	155.02	-10,187.3	-957.7	4,759.8	4,546.5	213.37	22.308	
18,500.0	8,119.0	18,500.0	12,427.3	173.7	108.3	155.02	-10,297.5	-956.3	4,759.5	4,585.2	174.29	27.308	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #226H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 218-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,600.0	8,119.0	22,884.4	12,428.5	175.4	178.4	155.09	-10,420.9	-950.2	4,758.4	4,541.0	217.47	21.881	
18,700.0	8,119.0	22,984.8	12,429.1	177.0	180.0	155.13	-10,521.2	-945.8	4,757.4	4,538.2	219.29	21.695	
18,800.0	8,119.0	23,096.2	12,429.9	178.6	181.8	155.18	-10,632.6	-940.9	4,756.4	4,535.2	221.22	21.501	
18,900.0	8,119.0	23,281.7	12,430.1	180.2	184.8	155.31	-10,817.6	-928.7	4,753.8	4,530.0	223.79	21.242	
19,000.0	8,119.0	23,346.0	12,430.6	181.9	185.8	155.36	-10,881.7	-923.8	4,751.4	4,526.2	225.17	21.101	
19,100.0	8,119.0	23,448.8	12,430.8	183.5	187.5	155.42	-10,984.3	-917.8	4,749.4	4,522.4	226.96	20.926	
19,200.0	8,119.0	23,535.0	12,430.6	185.1	188.9	155.47	-11,070.4	-912.6	4,747.0	4,518.4	228.59	20.767	
19,300.0	8,119.0	23,593.8	12,430.4	186.8	189.8	155.49	-11,129.1	-910.0	4,745.2	4,515.2	229.96	20.634	
19,391.8	8,119.0	23,630.0	12,430.0	188.2	190.4	155.49	-11,165.3	-910.1	4,744.6	4,513.5	231.08	20.532	
19,400.0	8,119.0	23,630.0	12,430.0	188.4	190.4	155.49	-11,165.3	-910.1	4,744.6	4,513.5	231.13	20.528	
19,500.0	8,119.0	23,687.4	12,429.4	190.0	191.3	155.47	-11,222.7	-911.6	4,745.1	4,512.5	232.61	20.400	
19,600.0	8,119.0	23,785.6	12,428.8	191.6	192.9	155.41	-11,320.8	-915.9	4,746.6	4,511.9	234.71	20.223	
19,675.5	8,119.0	19,675.5	12,426.2	192.9	127.5	155.33	-11,457.5	-921.1	4,746.4	4,550.1	196.35	24.174	
19,700.0	8,119.0	23,913.0	12,426.4	193.3	194.9	155.34	-11,448.1	-920.8	4,746.5	4,509.3	237.25	20.006	
19,800.0	8,119.0	23,958.9	12,425.8	194.9	195.6	155.31	-11,493.9	-922.2	4,747.3	4,508.7	238.56	19.900	
19,900.0	8,119.0	24,007.0	12,427.0	196.5	196.4	155.31	-11,542.0	-922.9	4,749.9	4,510.1	239.82	19.806	
20,000.0	8,119.0	24,229.9	12,429.3	198.2	200.0	155.30	-11,764.9	-924.0	4,751.2	4,507.8	243.45	19.516	
20,100.0	8,119.0	24,341.4	12,430.1	199.8	201.8	155.32	-11,876.4	-921.7	4,751.2	4,505.7	245.48	19.355	
20,200.0	8,119.0	24,518.1	12,430.5	201.4	204.6	155.37	-12,053.0	-916.1	4,750.3	4,502.1	248.19	19.140	
20,300.0	8,119.0	24,613.0	12,430.5	203.1	206.2	155.41	-12,147.8	-911.8	4,748.7	4,498.8	249.94	19.000	
20,377.2	8,119.0	24,616.0	12,430.5	204.3	206.2	155.41	-12,150.8	-911.6	4,748.1	4,497.6	250.53	18.952	
20,400.0	8,119.0	24,616.0	12,430.5	204.7	206.2	155.41	-12,150.8	-911.6	4,748.2	4,497.5	250.68	18.941	
20,500.0	8,119.0	24,616.0	12,430.5	206.3	206.2	155.41	-12,150.8	-911.6	4,749.7	4,498.4	251.30	18.900	
20,606.7	8,119.0	24,616.0	12,430.5	208.1	206.2	155.41	-12,150.8	-911.6	4,753.7	4,501.8	251.85	18.875	SF

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #228H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 213-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	82.27	94.6	696.6	703.0				
100.0	100.0	100.0	100.0	0.1	0.2	82.27	94.6	696.6	703.0	702.7	0.28	2,480.404	
200.0	200.0	200.0	200.0	0.5	0.3	82.27	94.6	696.6	703.0	702.2	0.80	881.867	
300.0	300.0	303.6	303.6	0.8	0.6	82.27	94.5	696.3	702.7	701.3	1.49	471.449	
400.0	400.0	402.1	402.1	1.2	1.0	82.26	94.6	695.9	702.3	700.2	2.19	320.955	
500.0	500.0	503.1	503.1	1.6	1.3	82.25	94.6	695.5	701.9	699.0	2.90	241.967	
587.7	587.7	587.7	587.7	1.9	1.6	82.24	94.8	695.3	701.7	698.2	3.51	199.853	
600.0	600.0	599.6	599.6	1.9	1.7	82.23	94.8	695.3	701.7	698.1	3.60	195.080	
700.0	700.0	697.0	697.0	2.3	2.0	82.21	95.2	695.5	702.0	697.7	4.29	163.465	
800.0	800.0	795.1	795.1	2.6	2.4	82.17	95.7	696.0	702.5	697.5	5.00	140.639	
900.0	900.0	892.8	892.8	3.0	2.7	82.13	96.3	696.7	703.4	697.7	5.70	123.481	
1,000.0	1,000.0	989.8	989.8	3.4	3.0	82.07	97.2	697.8	704.6	698.2	6.40	110.150	
1,100.0	1,100.0	1,093.5	1,093.5	3.7	3.4	7.64	97.7	699.1	704.2	697.1	7.11	98.994	
1,200.0	1,199.8	1,187.7	1,187.6	4.1	3.7	7.79	96.9	700.2	700.1	692.3	7.79	89.872	
1,300.0	1,299.5	1,277.1	1,277.0	4.4	4.1	8.11	94.6	702.8	693.9	685.5	8.45	82.109	
1,400.0	1,398.7	1,360.8	1,360.6	4.8	4.3	8.51	92.0	706.7	686.1	677.1	9.09	75.452	
1,500.0	1,497.5	1,447.5	1,447.0	5.2	4.7	9.00	89.4	712.8	677.3	667.5	9.75	69.472	
1,600.0	1,595.9	1,538.3	1,537.4	5.5	5.0	9.52	86.6	720.6	668.2	657.8	10.42	64.110	
1,700.0	1,694.4	1,626.9	1,625.5	5.9	5.3	10.12	83.1	729.4	660.5	649.4	11.09	59.563	
1,800.0	1,792.9	1,711.4	1,709.3	6.3	5.6	10.79	79.0	739.5	654.9	643.2	11.74	55.791	
1,900.0	1,891.4	1,796.0	1,792.9	6.8	6.0	11.51	74.6	751.7	651.9	639.5	12.39	52.623	
2,000.0	1,989.9	1,888.5	1,884.1	7.2	6.3	12.32	69.6	766.8	650.8	637.7	13.08	49.759	
2,100.0	2,088.4	1,988.6	1,982.7	7.6	6.7	13.15	64.8	783.2	650.0	636.2	13.82	47.048	
2,200.0	2,186.8	2,087.4	2,080.0	8.0	7.1	13.74	62.8	799.5	649.6	635.0	14.55	44.658	
2,300.0	2,285.3	2,196.6	2,187.8	8.5	7.6	14.16	63.1	816.9	648.7	633.4	15.33	42.311	
2,400.0	2,383.8	2,298.8	2,289.0	8.9	8.0	14.43	64.8	831.7	646.4	630.3	16.08	40.199	
2,500.0	2,482.3	2,393.2	2,382.2	9.3	8.4	14.44	69.0	845.9	644.6	627.8	16.78	38.409	
2,600.0	2,580.8	2,488.6	2,476.2	9.8	8.7	14.30	75.0	860.9	643.7	626.2	17.49	36.802	
2,695.4	2,674.7	2,580.2	2,566.3	10.2	9.1	14.10	81.5	875.9	643.4	625.2	18.17	35.410	
2,700.0	2,679.2	2,584.6	2,570.7	10.2	9.1	14.09	81.8	876.6	643.4	625.2	18.20	35.346	
2,800.0	2,777.7	2,685.1	2,669.5	10.6	9.6	13.85	89.2	893.4	643.5	624.5	18.94	33.969	
2,826.7	2,804.0	2,712.4	2,696.3	10.7	9.7	13.79	91.2	898.0	643.5	624.3	19.14	33.611	
2,900.0	2,876.2	2,773.3	2,756.1	11.1	9.9	13.68	95.2	908.7	644.2	624.6	19.61	32.847	
3,000.0	2,974.7	2,873.7	2,854.6	11.5	10.4	13.58	101.1	927.5	646.3	625.9	20.36	31.741	
3,100.0	3,073.2	2,986.0	2,965.0	11.9	10.8	13.51	107.2	947.2	647.1	625.9	21.18	30.548	
3,200.0	3,171.6	3,093.4	3,070.9	12.4	11.3	13.46	112.7	964.4	646.4	624.4	21.97	29.417	
3,269.6	3,240.2	3,154.5	3,131.0	12.7	11.6	13.45	115.7	974.3	646.0	623.6	22.44	28.785	
3,300.0	3,270.1	3,182.4	3,158.6	12.8	11.7	13.44	117.1	979.0	646.1	623.4	22.66	28.517	
3,400.0	3,368.6	3,278.7	3,253.3	13.3	12.1	13.44	121.6	995.9	646.9	623.5	23.38	27.662	
3,500.0	3,467.1	3,385.7	3,358.6	13.7	12.6	13.49	126.0	1,014.0	647.0	622.8	24.18	26.760	
3,510.4	3,477.4	3,395.3	3,368.1	13.8	12.6	13.50	126.4	1,015.6	647.0	622.8	24.25	26.678	
3,600.0	3,565.6	3,478.0	3,449.5	14.2	13.0	13.64	128.6	1,029.9	647.5	622.6	24.89	26.019	
3,700.0	3,664.0	3,571.4	3,541.2	14.6	13.4	13.79	131.4	1,047.2	649.2	623.6	25.60	25.363	
3,800.0	3,762.5	3,675.1	3,643.1	15.1	13.9	14.01	133.8	1,066.3	650.9	624.5	26.38	24.675	
3,900.0	3,861.0	3,776.8	3,743.1	15.5	14.3	14.36	134.5	1,085.0	652.4	625.3	27.15	24.030	
4,000.0	3,959.5	3,887.1	3,851.7	16.0	14.8	14.80	134.8	1,104.2	653.1	625.1	27.97	23.346	
4,100.0	4,058.0	3,996.0	3,959.2	16.4	15.3	15.02	137.3	1,121.2	652.0	623.2	28.78	22.652	
4,200.0	4,156.4	4,104.7	4,066.7	16.8	15.7	15.13	141.1	1,137.0	649.7	620.1	29.58	21.965	
4,300.0	4,254.9	4,196.0	4,157.0	17.3	16.1	15.19	144.6	1,150.0	647.2	616.9	30.29	21.368	
4,400.0	4,353.4	4,285.3	4,245.1	17.7	16.5	15.22	148.5	1,164.3	646.4	615.4	30.99	20.861	
4,400.2	4,353.6	4,285.5	4,245.3	17.7	16.5	15.22	148.5	1,164.3	646.4	615.4	30.99	20.861	
4,500.0	4,451.9	4,383.4	4,341.6	18.2	17.0	15.23	152.9	1,181.0	646.7	615.0	31.73	20.380	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #228H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 213-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,600.0	4,550.4	4,490.5	4,447.2	18.6	17.4	15.26	157.6	1,198.7	646.5	614.0	32.53	19.874	
4,700.0	4,648.9	4,593.9	4,549.2	19.1	17.9	15.26	162.4	1,214.9	645.5	612.1	33.31	19.378	
4,777.2	4,724.8	4,662.5	4,616.8	19.4	18.2	15.21	166.1	1,225.9	645.0	611.1	33.84	19.058	
4,800.0	4,747.3	4,683.0	4,636.9	19.5	18.3	15.19	167.4	1,229.4	645.0	611.0	34.00	18.971	
4,900.0	4,845.8	4,775.1	4,727.4	20.0	18.7	15.03	173.5	1,245.7	646.0	611.3	34.71	18.613	
5,000.0	4,944.3	4,878.0	4,828.3	20.4	19.2	14.80	180.8	1,264.3	647.4	611.9	35.48	18.245	
5,100.0	5,042.8	4,986.1	4,934.5	20.9	19.6	14.57	188.5	1,282.9	648.0	611.7	36.29	17.854	
5,200.0	5,141.3	5,095.1	5,041.9	21.3	20.1	14.36	196.0	1,300.1	647.1	610.0	37.10	17.442	
5,300.0	5,239.7	5,198.0	5,143.5	21.8	20.6	14.15	203.1	1,315.4	645.3	607.4	37.86	17.041	
5,400.0	5,338.2	5,297.6	5,241.7	22.2	21.0	13.93	210.2	1,330.1	643.3	604.7	38.61	16.660	
5,500.0	5,436.7	5,394.5	5,337.2	22.7	21.4	13.71	217.1	1,344.6	641.6	602.3	39.35	16.305	
5,600.0	5,535.2	5,491.2	5,432.5	23.1	21.8	13.46	224.4	1,359.6	640.6	600.5	40.09	15.979	
5,700.0	5,633.7	5,592.3	5,532.1	23.6	22.3	13.20	231.9	1,375.6	639.7	598.9	40.85	15.661	
5,800.0	5,732.1	5,689.3	5,627.5	24.0	22.7	12.95	239.2	1,390.7	638.7	597.1	41.58	15.360	
5,846.5	5,777.9	5,732.5	5,670.0	24.2	22.9	12.81	242.7	1,397.7	638.6	596.7	41.91	15.236	
5,900.0	5,830.6	5,781.2	5,717.9	24.5	23.1	12.66	246.7	1,405.9	638.8	596.5	42.28	15.106	
6,000.0	5,929.1	5,874.2	5,809.1	24.9	23.6	12.40	254.0	1,422.5	640.1	597.1	42.99	14.889	
6,100.0	6,027.6	5,973.3	5,906.3	25.4	24.0	12.29	259.9	1,441.0	642.1	598.4	43.74	14.680	
6,200.0	6,126.1	6,076.5	6,007.6	25.8	24.5	12.29	264.9	1,460.0	643.9	599.3	44.53	14.459	
6,300.0	6,224.5	6,180.2	6,109.5	26.3	25.0	12.31	269.5	1,478.6	645.0	599.7	45.32	14.233	
6,400.0	6,323.0	6,284.2	6,211.8	26.7	25.4	12.33	274.2	1,496.6	645.6	599.5	46.11	14.003	
6,500.0	6,421.5	6,399.1	6,325.1	27.2	26.0	12.32	279.6	1,514.9	644.8	597.9	46.95	13.735	
6,600.0	6,520.0	6,513.7	6,438.6	27.6	26.4	12.30	285.0	1,530.4	641.6	593.8	47.76	13.434	
6,700.0	6,618.5	6,621.3	6,545.3	28.1	26.9	12.31	289.6	1,543.0	636.5	587.9	48.53	13.115	
6,800.0	6,716.9	6,720.9	6,644.2	28.5	27.3	12.49	291.9	1,554.3	630.9	581.6	49.28	12.801	
6,900.0	6,815.4	6,825.1	6,747.8	29.0	27.7	12.83	292.8	1,566.1	625.3	575.3	50.05	12.493	
6,981.8	6,896.0	6,913.7	6,835.8	29.4	28.0	13.16	293.1	1,575.2	619.8	569.1	50.68	12.229	
7,000.0	6,913.9	6,933.1	6,855.2	29.5	28.1	13.23	293.2	1,577.0	618.5	567.7	50.82	12.171	
7,100.0	7,012.9	7,039.3	6,960.9	29.9	28.5	13.56	293.2	1,586.5	613.4	561.8	51.57	11.895	
7,191.7	7,104.1	7,133.5	7,054.9	30.2	28.9	13.81	292.9	1,594.3	611.8	559.5	52.24	11.711 CC	
7,200.0	7,112.3	7,142.0	7,063.3	30.3	28.9	13.83	292.9	1,595.0	611.8	559.5	52.30	11.697 ES	
7,300.0	7,212.2	7,247.8	7,168.8	30.6	29.3	14.03	292.6	1,603.0	613.8	560.7	53.01	11.577	
7,381.8	7,294.0	7,329.2	7,250.0	30.9	29.6	88.55	292.3	1,608.8	618.2	564.6	53.58	11.536	
7,400.0	7,312.2	7,347.2	7,268.0	30.9	29.6	88.57	292.2	1,610.1	619.5	565.8	53.71	11.534	
7,500.0	7,412.2	7,447.8	7,368.3	31.2	30.0	88.65	291.5	1,617.3	626.7	572.3	54.40	11.520	
7,600.0	7,512.2	7,557.2	7,477.5	31.5	30.4	88.77	290.3	1,624.2	632.9	577.8	55.06	11.494	
7,633.8	7,546.0	7,594.4	7,514.6	31.6	30.5	88.82	289.8	1,626.2	634.7	579.4	55.29	11.479	
7,650.0	7,562.2	7,612.2	7,532.3	31.7	30.6	-90.77	289.5	1,627.0	635.5	580.1	55.39	11.472	
7,700.0	7,612.0	7,663.9	7,584.0	31.8	30.8	-90.79	288.7	1,629.4	637.8	582.1	55.70	11.450	
7,750.0	7,661.4	7,714.9	7,635.0	31.9	30.9	-91.21	287.9	1,631.6	640.1	584.1	55.98	11.434	
7,800.0	7,709.8	7,768.3	7,688.4	32.0	31.1	-92.06	287.0	1,633.6	642.3	586.1	56.22	11.426	
7,850.0	7,757.1	7,820.4	7,740.4	32.1	31.3	-93.26	286.1	1,635.2	644.7	588.3	56.44	11.422 SF	
7,900.0	7,802.7	7,868.7	7,788.7	32.2	31.4	-94.66	285.4	1,636.4	647.6	590.9	56.67	11.428	
7,950.0	7,846.4	7,916.8	7,836.7	32.3	31.6	-96.28	284.7	1,637.4	651.3	594.4	56.89	11.449	
8,000.0	7,887.7	7,965.9	7,885.8	32.4	31.7	-98.13	283.7	1,638.1	656.1	599.0	57.10	11.490	
8,050.0	7,926.5	8,012.6	7,932.5	32.4	31.9	-99.97	282.4	1,638.2	662.3	604.9	57.34	11.550	
8,100.0	7,962.4	8,050.0	7,969.9	32.5	32.0	-101.32	281.3	1,638.1	670.5	612.8	57.67	11.626	
8,150.0	7,995.1	8,085.7	8,005.6	32.5	32.1	-102.48	280.2	1,638.0	681.2	623.1	58.04	11.736	
8,200.0	8,024.4	8,116.7	8,036.5	32.6	32.2	-103.19	279.2	1,637.8	694.6	636.1	58.48	11.877	
8,250.0	8,050.1	8,143.7	8,063.5	32.6	32.2	-103.41	278.4	1,637.6	711.1	652.1	58.98	12.057	
8,300.0	8,071.9	8,166.9	8,086.7	32.7	32.3	-103.06	277.8	1,637.4	730.7	671.1	59.52	12.277	
8,350.0	8,089.7	8,186.0	8,105.9	32.7	32.4	-102.08	277.2	1,637.3	753.3	693.2	60.08	12.538	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #228H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 213-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,400.0	8,103.4	8,200.9	8,120.8	32.7	32.4	-100.37	276.8	1,637.2	778.9	718.3	60.66	12.841	
8,450.0	8,112.8	8,211.7	8,131.5	32.8	32.4	-97.88	276.5	1,637.1	807.2	746.0	61.23	13.184	
8,500.0	8,118.0	8,218.1	8,137.9	32.9	32.5	-94.57	276.3	1,637.1	838.0	776.2	61.77	13.565	
8,533.8	8,119.0	8,220.0	8,139.9	33.0	32.5	-91.86	276.2	1,637.0	859.9	797.8	62.13	13.841	
8,600.0	8,119.0	8,221.9	8,141.7	33.1	32.5	-92.02	276.2	1,637.0	905.0	842.3	62.78	14.416	
8,700.0	8,119.0	8,224.6	8,144.5	33.4	32.5	-92.27	276.1	1,637.0	977.8	914.1	63.68	15.354	
8,800.0	8,119.0	8,227.4	8,147.2	33.8	32.5	-92.51	276.0	1,637.0	1,055.0	990.5	64.47	16.365	
8,900.0	8,119.0	8,230.1	8,149.9	34.3	32.5	-92.75	276.0	1,637.0	1,135.8	1,070.6	65.15	17.434	
9,000.0	8,119.0	8,232.8	8,152.7	34.9	32.5	-92.99	275.9	1,636.9	1,219.4	1,153.6	65.73	18.551	
9,100.0	8,119.0	8,235.5	8,155.4	35.5	32.5	-93.23	275.8	1,636.9	1,305.3	1,239.1	66.23	19.708	
9,200.0	8,119.0	8,238.2	8,158.1	36.3	32.5	-93.47	275.7	1,636.9	1,393.1	1,326.4	66.66	20.897	
9,300.0	8,119.0	8,240.9	8,160.8	37.1	32.5	-93.71	275.7	1,636.9	1,482.4	1,415.4	67.04	22.113	
9,400.0	8,119.0	8,243.6	8,163.5	37.9	32.5	-93.95	275.6	1,636.9	1,573.0	1,505.7	67.36	23.351	
9,500.0	8,119.0	8,246.3	8,166.1	38.8	32.5	-94.19	275.5	1,636.8	1,664.7	1,597.1	67.65	24.608	
9,600.0	8,119.0	8,249.0	8,168.8	39.8	32.5	-94.42	275.4	1,636.8	1,757.3	1,689.4	67.90	25.880	
9,700.0	8,119.0	8,251.6	8,171.4	40.8	32.6	-94.66	275.4	1,636.8	1,850.6	1,782.5	68.13	27.165	
9,800.0	8,119.0	8,254.3	8,174.1	41.8	32.6	-94.89	275.3	1,636.8	1,944.7	1,876.3	68.33	28.461	
9,900.0	8,119.0	8,256.9	8,176.7	42.9	32.6	-95.12	275.2	1,636.8	2,039.2	1,970.7	68.51	29.767	
10,000.0	8,119.0	8,259.5	8,179.4	44.0	32.6	-95.36	275.1	1,636.7	2,134.3	2,065.6	68.67	31.080	
10,100.0	8,119.0	8,262.2	8,182.0	45.2	32.6	-95.59	275.1	1,636.7	2,229.8	2,161.0	68.82	32.400	
10,200.0	8,119.0	8,264.8	8,184.6	46.3	32.6	-95.82	275.0	1,636.7	2,325.7	2,256.7	68.96	33.726	
10,300.0	8,119.0	8,267.4	8,187.2	47.5	32.6	-96.05	274.9	1,636.7	2,421.9	2,352.8	69.09	35.056	
10,400.0	8,119.0	8,270.0	8,189.8	48.8	32.6	-96.27	274.9	1,636.7	2,518.4	2,449.2	69.20	36.391	
10,500.0	8,119.0	8,272.5	8,192.4	50.0	32.6	-96.50	274.8	1,636.6	2,615.1	2,545.8	69.31	37.729	
10,600.0	8,119.0	8,275.1	8,194.9	51.3	32.6	-96.73	274.7	1,636.6	2,712.1	2,642.7	69.42	39.071	
10,700.0	8,119.0	8,277.7	8,197.5	52.6	32.6	-96.95	274.7	1,636.6	2,809.3	2,739.8	69.51	40.414	
10,800.0	8,119.0	8,280.2	8,200.0	54.0	32.6	-97.17	274.6	1,636.6	2,906.7	2,837.1	69.60	41.760	
10,900.0	8,119.0	8,283.6	8,203.4	55.3	32.6	-97.47	274.5	1,636.6	3,004.3	2,934.6	69.69	43.107	
11,000.0	8,119.0	8,287.4	8,207.2	56.7	32.7	-97.80	274.4	1,636.5	3,102.0	3,032.2	69.78	44.455	
11,100.0	8,119.0	8,291.3	8,211.1	58.0	32.7	-98.14	274.3	1,636.5	3,199.8	3,129.9	69.86	45.803	
11,200.0	8,119.0	8,295.3	8,215.1	59.4	32.7	-98.49	274.2	1,636.5	3,297.8	3,227.8	69.94	47.152	
11,300.0	8,119.0	8,299.4	8,219.2	60.8	32.7	-98.85	274.0	1,636.4	3,395.9	3,325.8	70.02	48.501	
11,400.0	8,119.0	8,303.7	8,223.5	62.2	32.7	-99.22	273.9	1,636.4	3,494.1	3,424.0	70.09	49.850	
11,500.0	8,119.0	8,308.0	8,227.8	63.6	32.7	-99.60	273.8	1,636.4	3,592.3	3,522.2	70.16	51.199	
11,600.0	8,119.0	8,312.5	8,232.3	65.1	32.7	-99.99	273.7	1,636.3	3,690.7	3,620.5	70.24	52.548	
11,700.0	8,119.0	8,317.2	8,237.0	66.5	32.7	-100.38	273.5	1,636.3	3,789.2	3,718.9	70.31	53.896	
11,800.0	8,119.0	8,321.9	8,241.7	68.0	32.8	-100.79	273.4	1,636.3	3,887.7	3,817.3	70.38	55.243	
11,900.0	8,119.0	8,326.8	8,246.6	69.4	32.8	-101.22	273.2	1,636.2	3,986.3	3,915.9	70.44	56.589	
12,000.0	8,119.0	8,331.9	8,251.7	70.9	32.8	-101.65	273.1	1,636.2	4,085.0	4,014.5	70.51	57.934	
12,100.0	8,119.0	8,337.1	8,256.9	72.4	32.8	-102.09	272.9	1,636.2	4,183.7	4,113.1	70.58	59.277	
12,200.0	8,119.0	8,342.5	8,262.3	73.9	32.8	-102.55	272.7	1,636.1	4,282.5	4,211.8	70.65	60.619	
12,300.0	8,119.0	8,348.1	8,267.8	75.4	32.8	-103.02	272.5	1,636.1	4,381.3	4,310.6	70.71	61.960	
12,400.0	8,119.0	16,763.9	12,476.1	76.9	85.1	-172.34	-4,207.4	1,604.0	4,396.6	4,319.6	77.01	57.095	
12,500.0	8,119.0	16,853.0	12,475.2	78.4	86.3	-172.34	-4,296.5	1,604.7	4,395.7	4,317.3	78.42	56.053	
12,600.0	8,119.0	16,943.7	12,474.1	79.9	87.6	-172.30	-4,387.1	1,608.1	4,394.8	4,315.0	79.86	55.031	
12,700.0	8,119.0	17,017.0	12,473.7	81.4	88.6	-172.28	-4,460.4	1,610.2	4,394.6	4,313.4	81.18	54.131	
12,800.0	8,119.0	17,132.0	12,473.0	82.9	90.3	-172.24	-4,575.3	1,613.9	4,394.4	4,311.6	82.80	53.072	
12,845.2	8,119.0	17,160.8	12,472.8	83.6	90.7	-172.22	-4,604.1	1,615.0	4,394.3	4,310.9	83.37	52.705	
12,900.0	8,119.0	17,195.7	12,472.8	84.5	91.2	-172.21	-4,639.0	1,616.1	4,394.4	4,310.3	84.07	52.272	
13,000.0	8,119.0	17,296.6	12,473.3	86.0	92.7	-172.21	-4,739.9	1,617.0	4,394.9	4,309.3	85.58	51.351	
13,100.0	8,119.0	17,420.4	12,473.0	87.5	94.4	-172.20	-4,863.6	1,618.7	4,394.8	4,307.5	87.27	50.360	
13,111.4	8,119.0	17,427.0	12,473.0	87.7	94.5	-172.19	-4,870.3	1,619.0	4,394.8	4,307.4	87.41	50.279	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #228H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 213-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,200.0	8,119.0	17,489.0	12,472.7	89.1	95.5	-172.14	-4,932.1	1,623.5	4,395.2	4,306.6	88.59	49.613	
13,300.0	8,119.0	17,706.4	12,471.2	90.6	98.7	-172.02	-5,149.1	1,633.5	4,395.6	4,304.7	90.96	48.324	
13,400.0	8,119.0	17,771.0	12,470.2	92.2	99.6	-172.01	-5,213.7	1,635.0	4,394.3	4,302.0	92.25	47.633	
13,500.0	8,119.0	17,852.6	12,469.5	93.7	100.8	-171.99	-5,295.3	1,636.7	4,393.6	4,299.9	93.66	46.908	
13,600.0	8,119.0	18,035.9	12,467.0	95.3	103.5	-172.01	-5,478.6	1,635.8	4,392.3	4,296.5	95.76	45.869	
13,700.0	8,119.0	18,107.2	12,465.5	96.8	104.6	-172.05	-5,549.8	1,633.0	4,389.7	4,292.6	97.08	45.217	
13,800.0	8,119.0	18,166.5	12,464.9	98.4	105.4	-172.08	-5,609.1	1,631.1	4,388.1	4,289.8	98.32	44.630	
13,900.0	8,119.0	18,250.8	12,463.7	100.0	106.7	-172.04	-5,693.3	1,634.4	4,387.2	4,287.4	99.77	43.973	
14,000.0	8,119.0	18,326.9	12,462.4	101.5	107.9	-171.95	-5,769.0	1,641.1	4,386.7	4,285.5	101.19	43.353	
14,079.6	8,119.0	18,396.5	12,461.4	102.8	108.9	-171.87	-5,838.3	1,648.2	4,386.6	4,284.2	102.39	42.843	
14,100.0	8,119.0	18,414.9	12,461.1	103.1	109.2	-171.84	-5,856.6	1,650.2	4,386.6	4,283.9	102.70	42.711	
14,200.0	8,119.0	18,503.3	12,459.8	104.7	110.6	-171.70	-5,944.2	1,661.5	4,386.8	4,282.5	104.25	42.081	
14,300.0	8,119.0	18,599.1	12,458.8	106.2	112.0	-171.58	-6,039.5	1,671.4	4,387.2	4,281.3	105.84	41.452	
14,400.0	8,119.0	18,741.4	12,458.9	107.8	114.2	-171.59	-6,181.8	1,671.3	4,387.2	4,279.5	107.69	40.740	
14,500.0	8,119.0	18,906.0	12,459.3	109.4	116.6	-171.82	-6,345.5	1,654.7	4,385.9	4,276.3	109.57	40.030	
14,600.0	8,119.0	18,946.7	12,459.3	111.0	117.2	-171.88	-6,385.9	1,650.1	4,384.4	4,273.7	110.67	39.616	
14,638.9	8,119.0	18,958.5	12,459.5	111.6	117.4	-171.90	-6,397.6	1,648.8	4,384.3	4,273.2	111.08	39.471	
14,700.0	8,119.0	19,001.0	12,460.6	112.6	118.0	-171.96	-6,439.9	1,644.2	4,384.8	4,272.9	111.86	39.200	
14,800.0	8,119.0	19,001.0	12,460.6	114.2	118.0	-171.96	-6,439.9	1,644.2	4,386.4	4,273.7	112.68	38.928	
14,900.0	8,119.0	19,052.9	12,462.9	115.7	118.8	-172.03	-6,491.5	1,639.3	4,389.5	4,275.7	113.83	38.562	
15,000.0	8,119.0	19,096.6	12,465.4	117.3	119.4	-172.08	-6,535.0	1,636.0	4,394.0	4,279.0	114.92	38.235	
15,100.0	8,119.0	19,430.4	12,473.7	118.9	124.5	-172.31	-6,868.2	1,621.4	4,394.3	4,276.2	118.11	37.205	
15,124.5	8,119.0	19,445.6	12,473.7	119.3	124.7	-172.31	-6,883.4	1,621.4	4,394.2	4,275.8	118.42	37.106	
15,200.0	8,119.0	19,515.1	12,473.8	120.5	125.8	-172.30	-6,952.8	1,622.7	4,394.4	4,274.8	119.57	36.753	
15,293.9	8,119.0	19,615.0	12,473.5	122.0	127.3	-172.29	-7,052.8	1,624.4	4,394.3	4,273.3	121.09	36.291	
15,300.0	8,119.0	19,620.2	12,473.5	122.1	127.4	-172.29	-7,058.0	1,624.4	4,394.3	4,273.2	121.18	36.264	
15,400.0	8,119.0	19,756.0	12,473.0	123.7	129.5	-172.30	-7,193.8	1,624.2	4,393.8	4,270.8	122.99	35.724	
15,473.9	8,119.0	19,795.0	12,472.7	124.9	130.1	-172.31	-7,232.7	1,623.8	4,393.3	4,269.4	123.89	35.462	
15,500.0	8,119.0	19,803.9	12,472.8	125.3	130.2	-172.31	-7,241.6	1,623.8	4,393.4	4,269.2	124.17	35.382	
15,600.0	8,119.0	19,851.0	12,473.4	126.9	131.0	-172.30	-7,288.7	1,624.4	4,394.6	4,269.2	125.34	35.060	
15,700.0	8,119.0	20,047.4	12,473.2	128.5	134.0	-172.15	-7,484.6	1,637.6	4,395.5	4,267.8	127.73	34.413	
15,800.0	8,119.0	15,800.0	12,471.3	130.1	68.7	-172.06	-7,636.9	1,644.8	4,395.1	4,299.4	95.73	45.912	
15,900.0	8,119.0	20,230.0	12,470.8	131.7	136.9	-172.06	-7,666.9	1,645.0	4,393.9	4,263.1	130.81	33.591	
15,955.1	8,119.0	20,277.0	12,470.0	132.6	137.6	-172.08	-7,713.8	1,643.5	4,392.9	4,261.3	131.60	33.381	
16,000.0	8,119.0	20,285.9	12,470.1	133.3	137.8	-172.09	-7,722.8	1,643.3	4,393.1	4,261.1	132.04	33.272	
16,100.0	8,119.0	16,100.0	12,471.6	134.9	73.6	-172.10	-7,781.8	1,642.7	4,395.0	4,294.6	100.35	43.797	
16,200.0	8,119.0	20,582.7	12,471.4	136.5	142.4	-172.16	-8,019.5	1,639.8	4,393.9	4,258.1	135.84	32.346	
16,300.0	8,119.0	20,671.9	12,470.1	138.1	143.8	-172.15	-8,108.7	1,641.0	4,392.7	4,255.3	137.35	31.982	
16,400.0	8,119.0	20,740.4	12,469.3	139.7	144.9	-172.12	-8,177.2	1,643.2	4,391.8	4,253.1	138.72	31.660	
16,443.8	8,119.0	20,765.8	12,469.1	140.5	145.3	-172.11	-8,202.5	1,644.3	4,391.7	4,252.4	139.28	31.531	
16,500.0	8,119.0	20,797.0	12,469.0	141.4	145.8	-172.09	-8,233.7	1,645.9	4,391.9	4,251.9	140.00	31.371	
16,600.0	8,119.0	20,797.0	12,469.0	143.0	145.8	-172.09	-8,233.7	1,645.9	4,393.6	4,252.8	140.80	31.203	
16,700.0	8,119.0	20,837.4	12,469.7	144.6	146.4	-172.07	-8,274.0	1,647.9	4,396.6	4,254.7	141.92	30.980	
16,800.0	8,119.0	20,892.0	12,473.1	146.2	147.3	-172.05	-8,328.5	1,650.0	4,402.4	4,259.3	143.13	30.757	
16,900.0	8,119.0	20,892.0	12,473.1	147.8	147.3	-172.05	-8,328.5	1,650.0	4,408.8	4,265.0	143.84	30.650	
17,000.0	8,119.0	20,916.2	12,475.3	149.4	147.7	-172.05	-8,352.6	1,650.7	4,417.3	4,272.6	144.73	30.521	
17,100.0	8,119.0	21,027.0	12,485.3	151.0	149.4	-172.04	-8,462.8	1,653.1	4,426.6	4,280.1	146.42	30.232	
17,200.0	8,119.0	21,144.4	12,495.2	152.7	151.3	-172.03	-8,579.8	1,656.1	4,435.1	4,286.9	148.18	29.932	
17,300.0	8,119.0	21,241.0	12,503.4	154.3	152.8	-172.03	-8,676.1	1,657.7	4,443.7	4,294.0	149.73	29.679	
17,400.0	8,119.0	21,329.3	12,511.0	155.9	154.2	-172.03	-8,764.0	1,659.3	4,452.4	4,301.2	151.20	29.447	
17,500.0	8,119.0	21,517.7	12,525.5	157.5	157.2	-172.03	-8,951.8	1,662.7	4,460.2	4,306.6	153.60	29.037	
17,600.0	8,119.0	21,667.2	12,535.0	159.1	159.6	-172.04	-9,101.0	1,664.2	4,466.5	4,310.9	155.62	28.702	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #228H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 213-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
17,700.0	8,119.0	21,743.0	12,539.7	160.7	160.8	-172.05	-9,176.6	1,663.9	4,472.5	4,315.5	156.97	28.492	
17,800.0	8,119.0	17,800.0	12,548.9	162.4	98.6	-172.09	-9,320.1	1,662.9	4,478.8	4,352.1	126.77	35.332	
17,900.0	8,119.0	22,035.5	12,555.5	164.0	165.4	-172.11	-9,468.7	1,663.6	4,483.0	4,322.1	160.90	27.862	
18,000.0	8,119.0	22,357.1	12,559.8	165.6	170.5	-172.25	-9,789.9	1,654.9	4,481.9	4,317.8	164.08	27.316	
18,051.3	8,119.0	22,377.2	12,559.8	166.4	170.8	-172.26	-9,810.1	1,654.3	4,481.7	4,317.0	164.66	27.219	
18,100.0	8,119.0	22,404.0	12,560.0	167.2	171.2	-172.27	-9,836.8	1,653.7	4,481.9	4,316.6	165.26	27.121	
18,200.0	8,119.0	22,498.0	12,560.4	168.9	172.7	-172.30	-9,930.8	1,651.7	4,481.9	4,315.1	166.77	26.875	
18,224.5	8,119.0	22,528.1	12,560.4	169.3	173.2	-172.31	-9,960.9	1,651.2	4,481.8	4,314.6	167.19	26.806	
18,300.0	8,119.0	22,552.3	12,560.7	170.5	173.6	-172.31	-9,985.1	1,651.0	4,482.6	4,314.6	167.99	26.683	
18,400.0	8,119.0	22,592.0	12,561.8	172.1	174.2	-172.32	-10,024.8	1,651.1	4,485.0	4,315.9	169.09	26.524	
18,500.0	8,119.0	22,650.2	12,563.9	173.7	175.1	-172.32	-10,082.9	1,651.6	4,488.6	4,318.3	170.33	26.352	
18,600.0	8,119.0	22,924.5	12,569.3	175.4	179.5	-172.33	-10,357.2	1,652.8	4,490.5	4,317.2	173.29	25.913	
18,700.0	8,119.0	22,969.0	12,569.7	177.0	180.2	-172.34	-10,401.6	1,652.5	4,491.1	4,316.7	174.46	25.744	
18,800.0	8,119.0	23,253.0	12,566.0	178.6	184.7	-172.39	-10,685.5	1,649.9	4,488.4	4,311.1	177.31	25.313	
18,900.0	8,119.0	23,253.0	12,566.0	180.2	184.7	-172.39	-10,685.5	1,649.9	4,486.7	4,308.5	178.21	25.176	
18,977.6	8,119.0	23,304.0	12,564.8	181.5	185.6	-172.39	-10,736.4	1,649.5	4,485.3	4,306.1	179.24	25.023	
19,000.0	8,119.0	23,308.0	12,564.8	181.9	185.6	-172.39	-10,740.5	1,649.5	4,485.4	4,305.9	179.46	24.993	
19,100.0	8,119.0	23,348.0	12,565.8	183.5	186.3	-172.40	-10,780.4	1,649.8	4,487.0	4,306.4	180.59	24.846	
19,200.0	8,119.0	23,348.0	12,565.8	185.1	186.3	-172.40	-10,780.4	1,649.8	4,489.8	4,308.5	181.35	24.758	
19,300.0	8,119.0	23,633.0	12,568.4	186.8	190.8	-172.33	-11,065.2	1,657.0	4,489.6	4,305.1	184.49	24.335	
19,306.5	8,119.0	23,633.0	12,568.4	186.9	190.8	-172.33	-11,065.2	1,657.0	4,489.6	4,305.0	184.55	24.327	
19,400.0	8,119.0	23,669.3	12,568.5	188.4	191.4	-172.31	-11,101.4	1,658.9	4,490.3	4,304.7	185.63	24.190	
19,500.0	8,119.0	23,727.0	12,569.1	190.0	192.4	-172.27	-11,159.1	1,662.5	4,492.1	4,305.1	186.93	24.031	
19,600.0	8,119.0	23,855.0	12,570.2	191.6	194.4	-172.16	-11,286.6	1,672.1	4,493.8	4,304.9	188.88	23.792	
19,700.0	8,119.0	23,942.3	12,570.8	193.3	195.9	-172.06	-11,373.6	1,680.1	4,495.7	4,305.2	190.48	23.602	
19,800.0	8,119.0	24,050.5	12,571.2	194.9	197.6	-171.95	-11,481.4	1,689.8	4,497.2	4,304.9	192.28	23.388	
19,900.0	8,119.0	24,124.3	12,571.8	196.5	198.8	-171.86	-11,554.8	1,697.3	4,499.3	4,305.5	193.78	23.218	
20,000.0	8,119.0	24,335.4	12,573.7	198.2	202.2	-171.83	-11,765.8	1,701.1	4,500.4	4,304.1	196.28	22.929	
20,025.0	8,119.0	24,353.1	12,573.7	198.6	202.5	-171.83	-11,783.5	1,701.1	4,500.4	4,303.8	196.62	22.889	
20,100.0	8,119.0	24,390.0	12,573.8	199.8	203.1	-171.84	-11,820.4	1,701.2	4,500.6	4,303.1	197.54	22.784	
20,200.0	8,119.0	24,437.1	12,574.3	201.4	203.9	-171.83	-11,867.4	1,701.7	4,501.9	4,303.2	198.73	22.654	
20,300.0	8,119.0	24,485.0	12,575.6	203.1	204.6	-171.83	-11,915.3	1,702.7	4,504.7	4,304.8	199.91	22.534	
20,400.0	8,119.0	24,695.3	12,579.9	204.7	208.0	-171.89	-12,125.5	1,699.6	4,506.1	4,303.8	202.32	22.273	
20,500.0	8,119.0	24,704.0	12,580.0	206.3	208.2	-171.89	-12,134.2	1,699.4	4,507.8	4,304.6	203.19	22.185	
20,606.7	8,119.0	24,704.0	12,580.0	208.1	208.2	-171.89	-12,134.2	1,699.4	4,512.0	4,308.0	203.96	22.122	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #242H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 218-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.37	-6.8	-1,045.3	1,045.3				
100.0	100.0	93.9	93.9	0.1	0.1	-90.36	-6.6	-1,045.3	1,045.3	1,045.0	0.27	3,807.818	CC
200.0	200.0	193.9	193.9	0.5	0.3	-90.33	-6.0	-1,045.3	1,045.3	1,044.5	0.79	1,325.392	
300.0	300.0	291.7	291.7	0.8	0.6	-90.28	-5.2	-1,045.4	1,045.4	1,044.0	1.45	721.622	
400.0	400.0	389.0	389.0	1.2	1.0	-90.24	-4.3	-1,045.7	1,045.8	1,043.6	2.16	485.226	
500.0	500.0	488.8	488.8	1.6	1.3	-90.19	-3.5	-1,046.3	1,046.3	1,043.4	2.87	364.715	
600.0	600.0	589.0	589.0	1.9	1.7	-90.17	-3.1	-1,046.7	1,046.8	1,043.2	3.58	292.121	
700.0	700.0	685.2	685.2	2.3	2.0	-90.19	-3.4	-1,047.4	1,047.4	1,043.1	4.28	244.988	ES
800.0	800.0	781.5	781.5	2.6	2.3	-90.25	-4.5	-1,048.3	1,048.4	1,043.5	4.97	211.055	
900.0	900.0	876.6	876.6	3.0	2.7	-90.33	-6.0	-1,049.7	1,049.9	1,044.2	5.66	185.620	
1,000.0	1,000.0	974.6	974.5	3.4	3.0	-90.42	-7.6	-1,051.5	1,051.7	1,045.4	6.35	165.500	
1,100.0	1,100.0	1,079.6	1,079.5	3.7	3.4	-164.94	-9.4	-1,053.1	1,054.9	1,047.9	7.08	149.090	
1,200.0	1,199.8	1,172.2	1,172.0	4.1	3.7	-165.05	-10.8	-1,054.5	1,061.5	1,053.8	7.75	136.938	
1,300.0	1,299.5	1,257.6	1,257.5	4.4	4.0	-165.18	-12.5	-1,056.8	1,072.6	1,064.2	8.41	127.610	
1,400.0	1,398.7	1,337.4	1,337.2	4.8	4.3	-165.33	-14.4	-1,060.0	1,088.5	1,079.5	9.04	120.416	
1,500.0	1,497.5	1,409.5	1,409.0	5.2	4.6	-165.50	-16.8	-1,064.5	1,109.8	1,100.2	9.64	115.095	
1,600.0	1,595.9	1,487.0	1,486.2	5.5	4.8	-165.85	-20.3	-1,071.1	1,135.1	1,124.8	10.26	110.647	
1,700.0	1,694.4	1,555.2	1,553.9	5.9	5.1	-166.16	-23.8	-1,078.3	1,162.4	1,151.5	10.83	107.321	
1,800.0	1,792.9	1,629.8	1,627.8	6.3	5.4	-166.51	-27.9	-1,087.4	1,191.4	1,180.0	11.42	104.283	
1,900.0	1,891.4	1,713.4	1,710.4	6.8	5.7	-166.89	-32.8	-1,099.0	1,222.0	1,210.0	12.06	101.329	
2,000.0	1,989.9	1,812.3	1,808.2	7.2	6.1	-167.36	-39.3	-1,112.6	1,252.8	1,240.0	12.77	98.069	
2,100.0	2,088.4	1,910.9	1,905.6	7.6	6.5	-167.84	-46.5	-1,125.8	1,283.3	1,269.8	13.49	95.116	
2,200.0	2,186.8	2,009.1	2,002.7	8.0	6.9	-168.33	-54.6	-1,138.7	1,313.6	1,299.4	14.21	92.438	
2,300.0	2,285.3	2,103.1	2,095.6	8.5	7.3	-168.82	-63.1	-1,150.7	1,343.8	1,328.9	14.91	90.123	
2,400.0	2,383.8	2,193.8	2,185.0	8.9	7.7	-169.27	-71.5	-1,162.6	1,374.4	1,358.8	15.60	88.125	
2,500.0	2,482.3	2,281.9	2,272.0	9.3	8.0	-169.70	-79.8	-1,174.3	1,405.3	1,389.1	16.27	86.389	
2,600.0	2,580.8	2,367.3	2,356.2	9.8	8.4	-170.09	-87.4	-1,186.3	1,436.9	1,420.0	16.92	84.903	
2,700.0	2,679.2	2,454.3	2,442.0	10.2	8.8	-170.44	-94.7	-1,199.0	1,469.1	1,451.5	17.59	83.530	
2,800.0	2,777.7	2,547.2	2,533.6	10.6	9.2	-170.72	-100.7	-1,213.1	1,501.6	1,483.3	18.28	82.134	
2,900.0	2,876.2	2,642.8	2,627.9	11.1	9.6	-170.91	-104.5	-1,227.9	1,534.2	1,515.2	18.99	80.780	
3,000.0	2,974.7	2,747.4	2,731.3	11.5	10.0	-171.05	-107.1	-1,243.9	1,566.4	1,546.7	19.75	79.312	
3,100.0	3,073.2	2,852.0	2,834.7	11.9	10.4	-171.14	-108.5	-1,259.4	1,598.0	1,577.5	20.51	77.931	
3,200.0	3,171.6	2,956.2	2,937.8	12.4	10.8	-171.16	-108.1	-1,274.4	1,629.0	1,607.8	21.26	76.640	
3,300.0	3,270.1	3,053.9	3,034.5	12.8	11.2	-171.12	-106.0	-1,288.3	1,659.7	1,637.7	21.97	75.549	
3,400.0	3,368.6	3,146.9	3,126.5	13.3	11.6	-171.03	-102.7	-1,301.7	1,690.4	1,667.7	22.65	74.619	
3,500.0	3,467.1	3,273.5	3,251.7	13.7	12.1	-170.89	-97.1	-1,319.4	1,720.7	1,697.1	23.52	73.143	
3,600.0	3,565.6	3,404.0	3,381.3	14.2	12.6	-170.82	-93.2	-1,334.1	1,748.3	1,723.9	24.41	71.620	
3,700.0	3,664.0	3,488.7	3,465.4	14.6	12.9	-170.77	-90.5	-1,343.4	1,775.7	1,750.7	25.06	70.867	
3,800.0	3,762.5	3,572.1	3,548.2	15.1	13.3	-170.70	-87.2	-1,353.1	1,803.8	1,778.1	25.70	70.199	
3,900.0	3,861.0	3,646.9	3,622.3	15.5	13.6	-170.64	-84.3	-1,362.6	1,832.7	1,806.4	26.29	69.721	
4,000.0	3,959.5	3,721.2	3,695.9	16.0	13.9	-170.59	-81.9	-1,372.8	1,862.8	1,835.9	26.87	69.324	
4,100.0	4,058.0	3,808.4	3,782.2	16.4	14.2	-170.53	-79.0	-1,385.6	1,893.7	1,866.2	27.53	68.791	
4,200.0	4,156.4	3,905.1	3,877.6	16.8	14.6	-170.41	-73.7	-1,400.0	1,924.7	1,896.5	28.24	68.146	
4,300.0	4,254.9	4,004.8	3,975.9	17.3	15.0	-170.22	-66.3	-1,414.8	1,955.5	1,926.6	28.98	67.486	
4,400.0	4,353.4	4,106.4	4,076.2	17.7	15.4	-170.05	-59.2	-1,429.7	1,986.1	1,956.4	29.72	66.822	
4,500.0	4,451.9	4,194.0	4,162.7	18.2	15.8	-169.90	-53.0	-1,442.4	2,016.6	1,986.2	30.39	66.366	
4,600.0	4,550.4	4,277.5	4,244.8	18.6	16.1	-169.74	-46.1	-1,455.1	2,047.7	2,016.7	31.02	66.001	
4,700.0	4,648.9	4,370.1	4,335.9	19.1	16.5	-169.53	-37.6	-1,469.6	2,079.2	2,047.5	31.72	65.546	
4,800.0	4,747.3	4,472.4	4,436.5	19.5	16.9	-169.31	-27.9	-1,485.5	2,110.5	2,078.0	32.48	64.983	
4,900.0	4,845.8	4,565.3	4,527.9	20.0	17.3	-169.11	-19.2	-1,499.6	2,141.6	2,108.4	33.18	64.546	
5,000.0	4,944.3	4,653.3	4,614.5	20.4	17.7	-168.94	-11.2	-1,513.3	2,173.0	2,139.1	33.85	64.193	
5,100.0	5,042.8	4,738.2	4,698.0	20.9	18.0	-168.79	-4.0	-1,526.7	2,204.7	2,170.2	34.50	63.898	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #242H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 218-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,141.3	4,820.3	4,778.8	21.3	18.4	-168.68	1.6	-1,540.0	2,237.0	2,201.8	35.14	63.661	
5,300.0	5,239.7	4,905.5	4,862.7	21.8	18.8	-168.61	5.9	-1,554.2	2,269.8	2,234.0	35.79	63.412	
5,400.0	5,338.2	5,002.3	4,958.0	22.2	19.2	-168.56	10.1	-1,570.3	2,302.6	2,266.1	36.52	63.043	
5,500.0	5,436.7	5,094.8	5,049.2	22.7	19.6	-168.51	14.0	-1,585.7	2,335.4	2,298.2	37.23	62.733	
5,600.0	5,535.2	5,177.2	5,130.3	23.1	20.0	-168.46	17.7	-1,599.7	2,368.6	2,330.7	37.86	62.554	
5,700.0	5,633.7	5,259.3	5,211.0	23.6	20.3	-168.40	21.8	-1,614.1	2,402.2	2,363.7	38.50	62.394	
5,800.0	5,732.1	5,360.7	5,310.7	24.0	20.8	-168.33	27.0	-1,631.9	2,435.9	2,396.7	39.27	62.035	
5,900.0	5,830.6	5,463.3	5,411.7	24.5	21.2	-168.27	31.7	-1,649.7	2,469.4	2,429.3	40.04	61.670	
6,000.0	5,929.1	5,571.6	5,518.4	24.9	21.7	-168.21	36.5	-1,667.9	2,502.4	2,461.5	40.85	61.253	
6,100.0	6,027.6	5,688.0	5,633.0	25.4	22.2	-168.15	41.8	-1,686.7	2,534.8	2,493.1	41.71	60.765	
6,200.0	6,126.1	5,816.7	5,760.2	25.8	22.8	-168.10	47.3	-1,706.0	2,566.1	2,523.4	42.65	60.166	
6,300.0	6,224.5	5,912.1	5,854.6	26.3	23.2	-168.07	50.9	-1,719.6	2,596.7	2,553.3	43.37	59.869	
6,400.0	6,323.0	6,004.9	5,946.3	26.7	23.6	-168.05	54.3	-1,732.9	2,627.4	2,583.3	44.08	59.606	
6,500.0	6,421.5	6,094.0	6,034.4	27.2	24.0	-168.03	57.5	-1,745.8	2,658.2	2,613.5	44.76	59.385	
6,600.0	6,520.0	6,182.5	6,121.8	27.6	24.3	-168.00	61.1	-1,758.9	2,689.3	2,643.9	45.44	59.180	
6,700.0	6,618.5	6,298.3	6,236.3	28.1	24.8	-167.95	66.1	-1,775.8	2,720.3	2,674.0	46.29	58.759	
6,800.0	6,716.9	6,423.7	6,360.4	28.5	25.4	-167.93	70.8	-1,792.8	2,750.2	2,703.0	47.20	58.263	
6,900.0	6,815.4	6,478.0	6,414.2	29.0	25.6	-167.91	72.8	-1,800.6	2,780.6	2,733.0	47.67	58.327	
6,981.8	6,896.0	6,533.9	6,469.4	29.4	25.8	-167.90	75.1	-1,809.0	2,806.2	2,758.1	48.12	58.311	
7,000.0	6,913.9	6,546.3	6,481.7	29.5	25.9	-167.93	75.6	-1,810.9	2,811.9	2,763.6	48.22	58.309	
7,100.0	7,012.9	6,646.7	6,580.7	29.9	26.3	-168.03	79.8	-1,826.6	2,841.0	2,792.0	48.97	58.011	
7,200.0	7,112.3	6,782.0	6,714.4	30.3	26.9	-168.07	85.7	-1,846.4	2,865.1	2,815.1	49.94	57.372	
7,300.0	7,212.2	6,915.1	6,846.2	30.6	27.5	-168.06	91.4	-1,864.2	2,883.7	2,832.9	50.87	56.690	
7,381.8	7,294.0	6,995.7	6,926.1	30.9	27.8	-93.63	94.8	-1,874.3	2,895.2	2,843.8	51.44	56.279	
7,400.0	7,312.2	7,009.4	6,939.7	30.9	27.8	-93.62	95.4	-1,876.1	2,897.5	2,845.9	51.54	56.213	
7,500.0	7,412.2	7,084.8	7,014.3	31.2	28.2	-93.54	98.7	-1,886.1	2,910.5	2,858.4	52.10	55.865	
7,600.0	7,512.2	7,167.3	7,095.9	31.5	28.5	-93.45	102.4	-1,897.8	2,924.4	2,871.7	52.70	55.493	
7,633.8	7,546.0	7,207.1	7,135.3	31.6	28.7	-93.41	104.2	-1,903.5	2,929.1	2,876.1	52.98	55.291	
7,650.0	7,562.2	7,226.2	7,154.1	31.7	28.8	86.72	105.0	-1,906.1	2,931.3	2,878.2	53.11	55.197	
7,700.0	7,612.0	7,284.7	7,212.1	31.8	29.0	86.20	107.4	-1,914.2	2,937.9	2,884.4	53.50	54.912	
7,750.0	7,661.4	7,342.6	7,269.3	31.9	29.3	85.81	109.7	-1,922.0	2,944.0	2,890.2	53.88	54.636	
7,800.0	7,709.8	7,387.3	7,313.6	32.0	29.4	85.48	111.5	-1,928.0	2,949.9	2,895.7	54.18	54.447	
7,850.0	7,757.1	7,432.0	7,357.9	32.1	29.6	85.24	113.3	-1,934.0	2,955.5	2,901.1	54.47	54.261	
7,900.0	7,802.7	7,474.9	7,400.4	32.2	29.8	85.08	115.1	-1,939.8	2,961.0	2,906.2	54.74	54.090	
7,950.0	7,846.4	7,515.8	7,440.8	32.3	30.0	84.97	116.9	-1,945.4	2,966.2	2,911.2	55.00	53.933	
8,000.0	7,887.7	7,554.1	7,478.7	32.4	30.1	84.89	118.5	-1,950.6	2,971.4	2,916.2	55.24	53.793	
8,050.0	7,926.5	7,589.7	7,514.0	32.4	30.3	84.84	120.1	-1,955.4	2,976.6	2,921.1	55.46	53.669	
8,100.0	7,962.4	7,622.4	7,546.4	32.5	30.4	84.78	121.5	-1,959.9	2,981.8	2,926.1	55.67	53.561	
8,150.0	7,995.1	7,652.1	7,575.7	32.5	30.6	84.70	122.7	-1,964.0	2,987.0	2,931.2	55.86	53.470	
8,200.0	8,024.4	7,678.3	7,601.7	32.6	30.7	84.58	123.8	-1,967.6	2,992.5	2,936.4	56.04	53.396	
8,250.0	8,050.1	7,701.1	7,624.2	32.6	30.8	84.40	124.8	-1,970.7	2,998.1	2,941.9	56.21	53.341	
8,300.0	8,071.9	7,722.1	7,645.0	32.7	30.9	84.18	125.7	-1,973.6	3,004.0	2,947.6	56.37	53.290	
8,350.0	8,089.7	7,741.7	7,664.4	32.7	30.9	83.92	126.5	-1,976.3	3,010.2	2,953.6	56.54	53.243	
8,400.0	8,103.4	7,756.2	7,678.7	32.7	31.0	83.55	127.0	-1,978.3	3,016.6	2,959.9	56.68	53.221	
8,450.0	8,112.8	7,765.4	7,687.9	32.8	31.0	83.05	127.4	-1,979.5	3,023.3	2,966.5	56.80	53.225	
8,500.0	8,118.0	7,769.4	7,691.8	32.9	31.1	82.42	127.6	-1,980.1	3,030.3	2,973.4	56.90	53.254	
8,533.8	8,119.0	7,768.9	7,691.4	33.0	31.0	81.93	127.5	-1,980.0	3,035.1	2,978.2	56.96	53.290	
8,600.0	8,119.0	7,765.6	7,688.1	33.1	31.0	81.87	127.4	-1,979.6	3,045.5	2,988.4	57.06	53.371	
8,700.0	8,119.0	7,760.5	7,683.0	33.4	31.0	81.77	127.2	-1,978.9	3,063.7	3,006.4	57.27	53.498	
8,800.0	8,119.0	7,755.3	7,677.9	33.8	31.0	81.67	127.0	-1,978.2	3,085.0	3,027.5	57.52	53.635	
8,900.0	8,119.0	7,750.1	7,672.7	34.3	31.0	81.57	126.8	-1,977.5	3,109.5	3,051.6	57.81	53.784	
9,000.0	8,119.0	7,744.8	7,667.5	34.9	30.9	81.47	126.6	-1,976.7	3,136.9	3,078.7	58.15	53.949	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #242H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 218-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,100.0	8,119.0	7,739.4	7,662.2	35.5	30.9	81.37	126.4	-1,976.0	3,167.2	3,108.7	58.51	54.132	
9,200.0	8,119.0	7,734.0	7,656.8	36.3	30.9	81.26	126.1	-1,975.3	3,200.4	3,141.5	58.90	54.336	
9,300.0	8,119.0	7,728.5	7,651.3	37.1	30.9	81.16	125.9	-1,974.5	3,236.3	3,177.0	59.31	54.563	
9,400.0	8,119.0	7,722.9	7,645.8	37.9	30.9	81.05	125.7	-1,973.7	3,274.8	3,215.1	59.74	54.815	
9,500.0	8,119.0	7,717.2	7,640.2	38.8	30.8	80.94	125.5	-1,973.0	3,315.9	3,255.8	60.19	55.095	
9,600.0	8,119.0	7,711.9	7,634.9	39.8	30.8	80.84	125.2	-1,972.2	3,359.5	3,298.9	60.64	55.401	
9,700.0	8,119.0	7,707.7	7,630.8	40.8	30.8	80.76	125.1	-1,971.6	3,405.5	3,344.4	61.11	55.729	
9,800.0	8,119.0	7,703.6	7,626.7	41.8	30.8	80.68	124.9	-1,971.1	3,453.7	3,392.2	61.58	56.088	
9,900.0	8,119.0	7,699.4	7,622.5	42.9	30.8	80.60	124.7	-1,970.5	3,504.2	3,442.1	62.05	56.476	
10,000.0	8,119.0	7,695.2	7,618.4	44.0	30.7	80.52	124.5	-1,969.9	3,556.7	3,494.2	62.51	56.895	
10,100.0	8,119.0	7,691.0	7,614.3	45.2	30.7	80.44	124.4	-1,969.3	3,611.2	3,548.2	62.97	57.345	
10,200.0	8,119.0	7,686.8	7,610.1	46.3	30.7	80.36	124.2	-1,968.8	3,667.6	3,604.2	63.43	57.825	
10,300.0	8,119.0	7,682.6	7,605.9	47.5	30.7	80.28	124.0	-1,968.2	3,725.9	3,662.0	63.87	58.334	
10,400.0	8,119.0	7,678.4	7,601.8	48.8	30.7	80.20	123.8	-1,967.6	3,785.9	3,721.6	64.31	58.873	
10,500.0	8,119.0	7,674.2	7,597.6	50.0	30.7	80.12	123.7	-1,967.0	3,847.5	3,782.8	64.73	59.439	
10,600.0	8,119.0	7,669.9	7,593.4	51.3	30.6	80.04	123.5	-1,966.4	3,910.8	3,845.6	65.14	60.033	
10,700.0	8,119.0	7,665.7	7,589.2	52.6	30.6	79.96	123.3	-1,965.9	3,975.5	3,910.0	65.54	60.654	
10,800.0	8,119.0	7,661.4	7,585.0	54.0	30.6	79.88	123.1	-1,965.3	4,041.7	3,975.7	65.93	61.300	
10,900.0	8,119.0	7,657.2	7,580.8	55.3	30.6	79.80	122.9	-1,964.7	4,109.2	4,042.9	66.31	61.970	
11,000.0	8,119.0	7,652.9	7,576.6	56.7	30.6	79.72	122.8	-1,964.1	4,178.1	4,111.4	66.67	62.664	
11,100.0	8,119.0	7,648.6	7,572.3	58.0	30.5	79.64	122.6	-1,963.5	4,248.1	4,181.1	67.03	63.381	
11,200.0	8,119.0	7,644.4	7,568.1	59.4	30.5	79.56	122.4	-1,962.9	4,319.4	4,252.0	67.36	64.119	
11,300.0	8,119.0	7,640.1	7,563.8	60.8	30.5	79.48	122.2	-1,962.3	4,391.7	4,324.0	67.69	64.878	
11,400.0	8,119.0	7,635.8	7,559.6	62.2	30.5	79.39	122.0	-1,961.7	4,465.1	4,397.1	68.01	65.657	
11,500.0	8,119.0	7,631.5	7,555.3	63.6	30.5	79.31	121.8	-1,961.2	4,539.6	4,471.3	68.31	66.455	
11,600.0	8,119.0	7,627.2	7,551.1	65.1	30.5	79.23	121.7	-1,960.6	4,615.0	4,546.4	68.60	67.270	
11,700.0	8,119.0	7,622.8	7,546.8	66.5	30.4	79.15	121.5	-1,960.0	4,691.3	4,622.4	68.89	68.103	
11,800.0	8,119.0	7,618.5	7,542.5	68.0	30.4	79.06	121.3	-1,959.4	4,768.5	4,699.3	69.16	68.952	
11,900.0	8,119.0	7,614.2	7,538.2	69.4	30.4	78.98	121.1	-1,958.8	4,846.5	4,777.1	69.42	69.817	
12,000.0	8,119.0	7,609.8	7,533.9	70.9	30.4	78.90	120.9	-1,958.2	4,925.3	4,855.6	69.67	70.696	
12,100.0	8,119.0	7,605.4	7,529.6	72.4	30.4	78.82	120.7	-1,957.6	5,004.9	4,935.0	69.91	71.590	
12,200.0	8,119.0	7,601.1	7,525.2	73.9	30.3	78.73	120.5	-1,957.0	5,085.1	5,015.0	70.14	72.497	
12,300.0	8,119.0	7,596.7	7,520.9	75.4	30.3	78.65	120.4	-1,956.4	5,166.1	5,095.7	70.37	73.416	
12,400.0	8,119.0	7,592.3	7,516.6	76.9	30.3	78.57	120.2	-1,955.8	5,247.7	5,177.1	70.58	74.348	
12,500.0	8,119.0	7,587.9	7,512.2	78.4	30.3	78.48	120.0	-1,955.2	5,330.0	5,259.2	70.79	75.291	
12,600.0	8,119.0	16,735.0	12,314.2	79.9	86.7	141.62	-4,329.7	-2,308.4	5,359.5	5,241.2	118.28	45.311	
12,700.0	8,119.0	12,700.0	12,314.3	81.4	47.4	141.61	-4,415.1	-2,309.6	5,360.7	5,285.6	75.08	71.398	
12,800.0	8,119.0	16,879.9	12,313.9	82.9	88.7	141.59	-4,474.6	-2,310.6	5,361.9	5,239.8	122.06	43.928	
12,900.0	8,119.0	16,923.0	12,315.0	84.5	89.3	141.60	-4,517.7	-2,311.0	5,364.6	5,241.0	123.62	43.396	
13,000.0	8,119.0	16,968.1	12,316.8	86.0	90.0	141.60	-4,562.7	-2,311.4	5,368.4	5,243.2	125.19	42.882	
13,100.0	8,119.0	17,096.5	12,321.6	87.5	91.8	141.62	-4,691.1	-2,312.9	5,372.4	5,244.8	127.66	42.083	
13,200.0	8,119.0	17,208.0	12,324.5	89.1	93.4	141.62	-4,802.5	-2,314.3	5,375.6	5,245.6	129.97	41.359	
13,300.0	8,119.0	17,554.4	12,323.9	90.6	98.3	141.57	-5,148.7	-2,317.1	5,375.5	5,240.6	134.87	39.856	
13,400.0	8,119.0	17,616.3	12,323.0	92.2	99.2	141.57	-5,210.6	-2,316.5	5,374.4	5,237.7	136.69	39.317	
13,444.3	8,119.0	17,631.5	12,323.0	92.9	99.4	141.57	-5,225.9	-2,316.3	5,374.3	5,236.9	137.37	39.123	
13,500.0	8,119.0	17,650.7	12,323.3	93.7	99.7	141.57	-5,245.0	-2,316.0	5,374.5	5,236.3	138.21	38.886	
13,600.0	8,119.0	13,600.0	12,325.1	95.3	50.8	141.59	-5,347.2	-2,314.5	5,375.3	5,281.5	93.82	57.294	
13,700.0	8,119.0	17,842.1	12,325.1	96.8	102.5	141.59	-5,436.3	-2,314.4	5,375.6	5,233.1	142.54	37.714	
13,800.0	8,119.0	17,896.6	12,324.9	98.4	103.3	141.58	-5,490.9	-2,315.5	5,376.9	5,232.6	144.29	37.264	
13,900.0	8,119.0	17,965.0	12,324.5	100.0	104.3	141.55	-5,559.2	-2,317.9	5,378.9	5,232.7	146.22	36.786	
14,000.0	8,119.0	18,184.7	12,325.5	101.5	107.6	141.54	-5,778.9	-2,319.0	5,379.9	5,230.1	149.80	35.913	
14,100.0	8,119.0	18,247.0	12,325.2	103.1	108.5	141.53	-5,841.2	-2,319.6	5,380.4	5,228.7	151.66	35.477	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #242H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 218-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,200.0	8,119.0	18,311.5	12,325.7	104.7	109.4	141.53	-5,905.7	-2,319.8	5,381.5	5,228.0	153.52	35.053	
14,300.0	8,119.0	18,468.0	12,327.2	106.2	111.8	141.53	-6,062.2	-2,319.1	5,382.3	5,225.9	156.39	34.416	
14,400.0	8,119.0	14,400.0	12,328.0	107.8	56.2	141.54	-6,181.8	-2,318.1	5,382.7	5,271.4	111.21	48.399	
14,500.0	8,119.0	18,759.3	12,326.3	109.4	116.1	141.54	-6,353.4	-2,316.2	5,381.2	5,219.3	161.90	33.239	
14,600.0	8,119.0	18,834.6	12,326.1	111.0	117.3	141.55	-6,428.7	-2,314.7	5,380.1	5,216.2	163.89	32.828	
14,700.0	8,119.0	19,051.7	12,326.7	112.6	120.5	141.61	-6,645.6	-2,306.0	5,378.4	5,211.1	167.27	32.154	
14,800.0	8,119.0	19,093.0	12,326.8	114.2	121.2	141.63	-6,686.8	-2,303.8	5,375.7	5,206.8	168.90	31.828	
14,900.0	8,119.0	19,152.2	12,326.9	115.7	122.1	141.65	-6,746.0	-2,301.5	5,373.9	5,203.2	170.71	31.480	
15,000.0	8,119.0	19,188.0	12,326.7	117.3	122.6	141.65	-6,781.8	-2,301.1	5,373.2	5,200.9	172.29	31.187	
15,018.9	8,119.0	19,206.6	12,326.6	117.6	122.9	141.65	-6,800.4	-2,301.0	5,373.2	5,200.5	172.72	31.109	
15,100.0	8,119.0	19,250.2	12,326.7	118.9	123.6	141.65	-6,844.0	-2,301.0	5,373.5	5,199.3	174.16	30.855	
15,200.0	8,119.0	19,312.4	12,327.3	120.5	124.5	141.65	-6,906.2	-2,300.9	5,374.6	5,198.6	176.01	30.536	
15,300.0	8,119.0	19,457.5	12,327.8	122.1	126.7	141.63	-7,051.2	-2,302.6	5,376.1	5,197.3	178.85	30.060	
15,400.0	8,119.0	19,523.2	12,326.2	123.7	127.7	141.59	-7,116.9	-2,305.1	5,376.9	5,196.1	180.82	29.736	
15,500.0	8,119.0	19,565.0	12,325.9	125.3	128.4	141.58	-7,158.7	-2,306.3	5,378.6	5,196.1	182.47	29.476	
15,600.0	8,119.0	19,621.5	12,326.2	126.9	129.2	141.57	-7,215.2	-2,307.8	5,381.1	5,196.9	184.28	29.200	
15,700.0	8,119.0	19,659.0	12,326.7	128.5	129.8	141.56	-7,252.6	-2,309.0	5,384.7	5,198.9	185.84	28.975	
15,800.0	8,119.0	19,715.5	12,327.6	130.1	130.7	141.54	-7,309.0	-2,311.7	5,389.3	5,201.7	187.64	28.722	
15,900.0	8,119.0	19,765.8	12,328.2	131.7	131.5	141.51	-7,359.2	-2,315.1	5,394.8	5,205.5	189.37	28.488	
16,000.0	8,119.0	16,000.0	12,330.5	133.3	76.7	141.55	-8,167.6	-2,308.3	5,399.5	5,253.7	145.76	37.043	
16,100.0	8,119.0	20,600.0	12,329.5	134.9	144.4	141.55	-8,192.1	-2,306.6	5,392.8	5,191.8	200.99	26.831	
16,200.0	8,119.0	20,659.2	12,327.8	136.5	145.3	141.57	-8,251.1	-2,302.2	5,386.8	5,184.0	202.87	26.554	
16,300.0	8,119.0	16,300.0	12,328.2	138.1	80.9	141.62	-8,321.9	-2,296.5	5,382.4	5,229.6	152.84	35.217	
16,400.0	8,119.0	20,790.0	12,328.2	139.7	147.3	141.66	-8,381.5	-2,291.9	5,378.1	5,171.5	206.61	26.030	
16,500.0	8,119.0	20,831.0	12,327.7	141.4	148.0	141.67	-8,422.4	-2,289.5	5,374.5	5,166.2	208.29	25.804	
16,600.0	8,119.0	20,884.0	12,328.5	143.0	148.8	141.69	-8,475.4	-2,287.6	5,373.1	5,163.1	210.06	25.579	
16,693.9	8,119.0	20,884.0	12,328.5	144.5	148.8	141.69	-8,475.4	-2,287.6	5,372.3	5,161.1	211.20	25.437	
16,700.0	8,119.0	20,884.0	12,328.5	144.6	148.8	141.69	-8,475.4	-2,287.6	5,372.3	5,161.1	211.27	25.428	
16,800.0	8,119.0	16,800.0	12,329.1	146.2	85.8	141.70	-8,568.4	-2,286.7	5,372.6	5,207.5	165.05	32.550	
16,900.0	8,119.0	21,038.0	12,328.1	147.8	151.2	141.68	-8,629.3	-2,287.7	5,372.9	5,157.4	215.41	24.942	
17,000.0	8,119.0	21,074.0	12,327.5	149.4	151.8	141.66	-8,665.3	-2,289.1	5,374.4	5,157.4	217.02	24.765	
17,100.0	8,119.0	21,120.8	12,327.3	151.0	152.5	141.64	-8,712.0	-2,291.0	5,377.0	5,158.3	218.74	24.582	
17,200.0	8,119.0	21,169.0	12,328.4	152.7	153.3	141.64	-8,760.2	-2,292.2	5,380.7	5,160.3	220.43	24.410	
17,300.0	8,119.0	21,234.4	12,330.7	154.3	154.3	141.64	-8,825.6	-2,293.7	5,385.2	5,162.9	222.31	24.224	
17,400.0	8,119.0	21,314.7	12,333.8	155.9	155.6	141.64	-8,905.8	-2,295.8	5,390.2	5,165.8	224.38	24.023	
17,500.0	8,119.0	17,500.0	12,344.2	157.5	96.9	141.77	-9,509.0	-2,284.4	5,391.2	5,210.8	180.32	29.897	
17,600.0	8,119.0	21,965.0	12,343.9	159.1	165.8	141.79	-9,555.1	-2,281.5	5,387.3	5,153.4	233.87	23.035	
17,700.0	8,119.0	22,019.0	12,344.4	160.7	166.7	141.82	-9,609.1	-2,278.5	5,384.8	5,149.2	235.65	22.850	
17,800.0	8,119.0	22,019.0	12,344.4	162.4	166.7	141.82	-9,609.1	-2,278.5	5,383.4	5,146.5	236.90	22.724	
17,860.6	8,119.0	22,052.0	12,345.2	163.4	167.2	141.83	-9,642.0	-2,277.0	5,383.1	5,145.1	237.95	22.623	
17,900.0	8,119.0	22,064.8	12,345.6	164.0	167.4	141.84	-9,654.8	-2,276.5	5,383.2	5,144.6	238.55	22.567	
18,000.0	8,119.0	22,113.0	12,347.6	165.6	168.2	141.86	-9,702.9	-2,274.9	5,384.4	5,144.2	240.20	22.417	
18,100.0	8,119.0	22,150.7	12,349.3	167.2	168.8	141.88	-9,740.6	-2,273.9	5,386.6	5,144.9	241.71	22.285	
18,200.0	8,119.0	22,447.5	12,354.8	168.9	173.5	141.97	-10,037.2	-2,266.2	5,385.7	5,139.6	246.10	21.884	
18,299.3	8,119.0	22,491.0	12,354.9	170.5	174.2	141.97	-10,080.7	-2,265.7	5,385.3	5,137.5	247.78	21.734	
18,300.0	8,119.0	22,491.0	12,354.9	170.5	174.2	141.97	-10,080.7	-2,265.7	5,385.3	5,137.5	247.79	21.733	
18,400.0	8,119.0	22,529.8	12,355.5	172.1	174.8	141.98	-10,119.5	-2,265.3	5,386.0	5,136.6	249.39	21.597	
18,500.0	8,119.0	22,587.0	12,357.6	173.7	175.7	142.00	-10,176.6	-2,263.6	5,387.5	5,136.4	251.13	21.453	
18,600.0	8,119.0	22,681.0	12,358.4	175.4	177.2	141.99	-10,270.5	-2,264.5	5,389.1	5,135.7	253.41	21.267	
18,700.0	8,119.0	22,738.1	12,357.1	177.0	178.1	141.96	-10,327.5	-2,267.7	5,391.3	5,136.0	255.32	21.116	
18,800.0	8,119.0	22,787.9	12,357.1	178.6	178.9	141.93	-10,377.2	-2,270.2	5,394.7	5,137.6	257.08	20.985	
18,900.0	8,119.0	22,897.5	12,355.6	180.2	180.6	141.86	-10,486.5	-2,277.5	5,398.1	5,138.3	259.78	20.779	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #242H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 218-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,000.0	8,119.0	23,151.0	12,357.9	181.9	184.7	141.84	-10,739.9	-2,280.3	5,399.1	5,135.0	264.08	20.445	
19,100.0	8,119.0	23,245.0	12,360.8	183.5	186.2	141.88	-10,833.8	-2,276.8	5,399.6	5,133.4	266.21	20.283	
19,200.0	8,119.0	23,305.2	12,361.3	185.1	187.1	141.88	-10,894.0	-2,276.5	5,400.6	5,132.5	268.07	20.146	
19,300.0	8,119.0	23,340.0	12,361.8	186.8	187.7	141.88	-10,928.7	-2,276.9	5,402.8	5,133.2	269.60	20.040	
19,400.0	8,119.0	23,756.1	12,363.9	188.4	194.3	141.89	-11,344.7	-2,275.5	5,405.4	5,129.8	275.53	19.618	
19,500.0	8,119.0	19,500.0	12,364.0	190.0	126.8	141.92	-11,445.7	-2,270.5	5,402.7	5,176.3	226.47	23.857	
19,600.0	8,119.0	24,053.9	12,363.2	191.6	199.1	142.02	-11,641.9	-2,256.8	5,398.2	5,117.5	280.71	19.230	
19,700.0	8,119.0	24,127.9	12,362.6	193.3	200.3	142.06	-11,715.6	-2,251.5	5,393.4	5,110.8	282.68	19.079	
19,800.0	8,119.0	24,192.0	12,361.8	194.9	201.3	142.08	-11,779.7	-2,248.2	5,389.6	5,105.0	284.61	18.936	
19,900.0	8,119.0	24,231.6	12,361.7	196.5	202.0	142.10	-11,819.2	-2,246.2	5,386.6	5,100.3	286.30	18.815	
20,000.0	8,119.0	24,419.7	12,362.0	198.2	205.0	142.19	-12,006.8	-2,233.8	5,382.8	5,093.6	289.18	18.614	
20,100.0	8,119.0	24,474.0	12,363.0	199.8	205.9	142.23	-12,060.9	-2,229.5	5,379.4	5,088.5	290.93	18.490	
20,200.0	8,119.0	24,496.5	12,364.0	201.4	206.2	142.25	-12,083.3	-2,227.4	5,377.0	5,084.6	292.39	18.390	
20,300.0	8,119.0	24,570.0	12,366.8	203.1	207.4	142.32	-12,156.5	-2,221.0	5,375.1	5,080.9	294.19	18.271	
20,375.4	8,119.0	24,570.0	12,366.8	204.3	207.4	142.32	-12,156.5	-2,221.0	5,374.6	5,079.5	295.11	18.212	
20,400.0	8,119.0	24,570.0	12,366.8	204.7	207.4	142.32	-12,156.5	-2,221.0	5,374.7	5,079.3	295.40	18.195	
20,500.0	8,119.0	24,570.0	12,366.8	206.3	207.4	142.32	-12,156.5	-2,221.0	5,376.0	5,079.5	296.50	18.132	
20,606.7	8,119.0	24,570.0	12,366.8	208.1	207.4	142.32	-12,156.5	-2,221.0	5,379.6	5,082.0	297.58	18.078	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #244H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 213-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	2.0	2.0	0.0	0.0	81.94	94.4	666.6	673.2				
100.0	100.0	103.6	103.6	0.1	0.2	81.96	94.2	666.5	673.1	672.8	0.29	2,323.772	
200.0	200.0	205.2	205.2	0.5	0.3	82.00	93.6	666.2	672.7	671.9	0.81	834.750	
300.0	300.0	305.7	305.7	0.8	0.7	82.06	92.8	665.8	672.2	670.7	1.51	445.412	
400.0	400.0	408.7	408.7	1.2	1.0	82.12	92.0	665.0	671.4	669.2	2.24	300.129	
500.0	500.0	507.2	507.2	1.6	1.4	82.19	91.1	664.3	670.5	667.6	2.95	227.436	
600.0	600.0	606.8	606.8	1.9	1.7	82.23	90.5	663.6	669.8	666.1	3.66	182.857	
700.0	700.0	704.6	704.6	2.3	2.1	82.25	90.2	663.1	669.2	664.9	4.37	153.105	
800.0	800.0	803.3	803.3	2.6	2.4	82.27	90.0	662.9	668.9	663.8	5.08	131.614	
876.4	876.4	878.5	878.4	2.9	2.7	82.28	89.8	662.8	668.9	663.2	5.62	118.933	
900.0	900.0	901.7	901.6	3.0	2.8	82.29	89.8	662.8	668.9	663.1	5.79	115.517	
1,000.0	1,000.0	1,001.6	1,001.5	3.4	3.1	82.32	89.4	663.0	669.0	662.5	6.50	102.928	
1,100.0	1,100.0	1,099.2	1,099.2	3.7	3.5	7.94	89.3	663.2	667.5	660.3	7.19	92.872	
1,200.0	1,199.8	1,208.6	1,208.6	4.1	3.9	7.91	90.5	662.9	662.2	654.3	7.91	83.765	
1,300.0	1,299.5	1,340.1	1,339.6	4.4	4.3	7.29	98.6	656.7	649.6	640.9	8.70	74.671	
1,400.0	1,398.7	1,441.6	1,440.5	4.8	4.7	6.56	107.6	648.9	631.3	621.9	9.40	67.146	
1,500.0	1,497.5	1,539.3	1,537.4	5.2	5.0	5.81	116.5	641.3	609.6	599.5	10.10	60.361	
1,600.0	1,595.9	1,634.9	1,632.3	5.5	5.4	4.96	125.5	633.8	586.4	575.6	10.80	54.314	
1,700.0	1,694.4	1,752.6	1,749.0	5.9	5.8	3.83	136.2	623.3	562.3	550.8	11.55	48.690	
1,800.0	1,792.9	1,853.0	1,848.3	6.3	6.2	2.73	145.0	611.2	535.3	523.1	12.26	43.648	
1,900.0	1,891.4	1,950.2	1,944.4	6.8	6.6	1.47	154.0	599.1	508.2	495.2	12.98	39.147	
2,000.0	1,989.9	2,051.8	2,044.7	7.2	7.0	0.08	162.7	585.9	480.6	466.9	13.71	35.059	
2,100.0	2,088.4	2,151.5	2,143.2	7.6	7.4	-1.24	169.3	572.3	452.2	437.8	14.43	31.336	
2,200.0	2,186.8	2,244.7	2,235.4	8.0	7.7	-2.51	174.6	559.7	423.9	408.7	15.15	27.973	
2,300.0	2,285.3	2,341.7	2,331.3	8.5	8.1	-4.02	180.0	546.6	395.8	379.9	15.88	24.917	
2,400.0	2,383.8	2,436.9	2,425.6	8.9	8.5	-5.72	185.3	533.5	367.8	351.1	16.62	22.125	
2,500.0	2,482.3	2,533.1	2,520.7	9.3	8.9	-7.70	190.6	520.3	340.0	322.6	17.37	19.577	
2,600.0	2,580.8	2,629.6	2,616.1	9.8	9.3	-10.01	195.5	506.8	312.4	294.3	18.12	17.235	
2,700.0	2,679.2	2,725.2	2,710.6	10.2	9.7	-12.69	200.2	493.3	285.1	266.2	18.90	15.084	
2,800.0	2,777.7	2,819.2	2,803.6	10.6	10.1	-15.79	204.5	480.3	258.5	238.8	19.70	13.124	
2,900.0	2,876.2	2,910.8	2,894.3	11.1	10.4	-19.52	209.6	468.3	234.1	213.6	20.54	11.395	
3,000.0	2,974.7	3,005.6	2,988.3	11.5	10.8	-24.10	215.2	456.9	211.9	190.5	21.41	9.896	
3,100.0	3,073.2	3,101.4	3,083.3	11.9	11.2	-29.46	220.4	446.2	191.6	169.2	22.31	8.587	
3,200.0	3,171.6	3,198.1	3,179.3	12.4	11.6	-35.77	225.0	435.8	173.2	149.9	23.24	7.450	
3,300.0	3,270.1	3,294.7	3,275.2	12.8	12.0	-43.61	229.7	424.7	157.0	132.8	24.23	6.480	
3,400.0	3,368.6	3,391.6	3,371.4	13.3	12.4	-52.76	233.9	414.0	144.2	119.0	25.23	5.716	
3,500.0	3,467.1	3,489.7	3,469.1	13.7	12.8	-62.12	235.9	405.9	134.2	108.0	26.18	5.126	
3,600.0	3,565.6	3,586.0	3,565.2	14.2	13.1	-71.42	237.9	400.1	128.4	101.4	27.06	4.747	
3,700.0	3,664.0	3,685.8	3,664.9	14.6	13.5	-80.77	239.5	396.1	125.9	98.1	27.84	4.524	
3,800.0	3,762.5	3,785.7	3,764.7	15.1	13.8	-90.12	238.8	393.0	124.4	95.9	28.53	4.361	
3,803.5	3,766.0	3,789.1	3,768.2	15.1	13.8	-90.43	238.7	392.9	124.4	95.9	28.56	4.357	CC, ES
3,900.0	3,861.0	3,879.5	3,858.5	15.5	14.1	-98.59	238.8	390.5	126.8	97.7	29.14	4.351	SF
4,000.0	3,959.5	3,971.0	3,949.9	16.0	14.5	-105.74	243.7	386.9	137.1	107.5	29.64	4.626	
4,100.0	4,058.0	4,066.5	4,044.9	16.4	14.8	-111.93	251.2	381.9	152.4	122.2	30.18	5.050	
4,200.0	4,156.4	4,163.8	4,141.7	16.8	15.2	-117.19	259.1	376.2	169.7	138.9	30.76	5.516	
4,300.0	4,254.9	4,261.5	4,238.9	17.3	15.6	-121.52	266.8	370.4	188.1	156.7	31.37	5.996	
4,400.0	4,353.4	4,359.6	4,336.5	17.7	15.9	-125.08	274.4	364.9	207.1	175.1	32.01	6.469	
4,500.0	4,451.9	4,456.1	4,432.6	18.2	16.3	-127.97	281.9	359.5	226.6	194.0	32.64	6.942	
4,600.0	4,550.4	4,551.8	4,527.8	18.6	16.7	-130.40	289.7	353.6	247.4	214.1	33.28	7.434	
4,700.0	4,648.9	4,648.4	4,623.9	19.1	17.0	-132.52	297.6	347.1	269.0	235.0	33.94	7.924	
4,800.0	4,747.3	4,752.0	4,727.0	19.5	17.4	-134.59	305.2	340.4	290.3	255.6	34.72	8.362	
4,900.0	4,845.8	4,854.0	4,828.7	20.0	17.8	-136.73	309.6	335.0	309.4	274.0	35.44	8.730	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #244H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 213-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,944.3	4,956.1	4,930.7	20.4	18.2	-138.77	312.9	330.3	327.9	291.7	36.16	9.067	
5,100.0	5,042.8	5,055.7	5,030.2	20.9	18.5	-140.68	314.8	326.4	345.6	308.7	36.85	9.378	
5,200.0	5,141.3	5,153.6	5,128.0	21.3	18.9	-142.43	316.3	322.5	363.4	325.9	37.53	9.684	
5,300.0	5,239.7	5,256.5	5,230.8	21.8	19.3	-144.05	317.8	319.2	381.0	342.7	38.25	9.959	
5,400.0	5,338.2	5,357.8	5,332.1	22.2	19.6	-145.46	319.3	317.1	397.7	358.7	38.97	10.205	
5,500.0	5,436.7	5,455.9	5,430.1	22.7	19.9	-146.73	320.5	315.3	414.2	374.5	39.66	10.444	
5,600.0	5,535.2	5,553.3	5,527.6	23.1	20.3	-147.93	321.5	313.4	431.0	390.7	40.35	10.683	
5,700.0	5,633.7	5,651.0	5,625.2	23.6	20.6	-149.06	322.4	311.4	448.1	407.1	41.04	10.920	
5,800.0	5,732.1	5,748.2	5,722.4	24.0	21.0	-150.13	323.2	309.1	465.6	423.9	41.73	11.159	
5,900.0	5,830.6	5,847.5	5,821.7	24.5	21.3	-151.16	323.8	306.8	483.2	440.7	42.44	11.386	
6,000.0	5,929.1	5,946.1	5,920.2	24.9	21.7	-152.15	324.0	304.6	500.7	457.6	43.14	11.608	
6,100.0	6,027.6	6,045.5	6,019.6	25.4	22.0	-153.11	324.0	302.5	518.2	474.4	43.84	11.820	
6,200.0	6,126.1	6,145.0	6,119.1	25.8	22.3	-154.04	323.6	300.6	535.6	491.0	44.55	12.023	
6,300.0	6,224.5	6,243.9	6,218.0	26.3	22.7	-154.95	322.7	298.9	552.9	507.6	45.25	12.219	
6,400.0	6,323.0	6,341.5	6,315.5	26.7	23.0	-155.85	321.4	297.2	570.2	524.3	45.93	12.415	
6,500.0	6,421.5	6,438.2	6,412.2	27.2	23.3	-156.71	319.8	295.2	588.0	541.3	46.61	12.614	
6,600.0	6,520.0	6,538.1	6,512.1	27.6	23.7	-157.55	318.1	293.1	605.9	558.5	47.32	12.804	
6,700.0	6,618.5	6,636.8	6,610.8	28.1	24.0	-158.33	316.4	291.5	623.4	575.4	48.01	12.985	
6,800.0	6,716.9	6,735.7	6,709.6	28.5	24.3	-159.09	314.7	289.7	641.2	592.5	48.71	13.163	
6,900.0	6,815.4	6,835.0	6,808.9	29.0	24.7	-159.79	312.9	288.2	658.8	609.4	49.41	13.333	
6,981.8	6,896.0	6,916.3	6,890.2	29.4	24.9	-160.35	311.4	287.1	673.2	623.2	49.99	13.467	
7,000.0	6,913.9	6,934.4	6,908.3	29.5	25.0	-160.50	311.0	286.9	676.3	626.2	50.12	13.495	
7,100.0	7,012.9	7,029.1	7,003.0	29.9	25.3	-161.19	308.9	285.5	691.3	640.5	50.78	13.614	
7,200.0	7,112.3	7,136.5	7,110.3	30.3	25.7	-161.73	307.0	284.0	702.2	650.7	51.52	13.629	
7,300.0	7,212.2	7,243.0	7,216.8	30.6	26.0	-161.99	306.2	283.8	707.8	655.5	52.24	13.548	
7,381.8	7,294.0	7,325.7	7,299.5	30.9	26.3	-87.61	306.2	284.2	708.8	656.0	52.79	13.427	
7,400.0	7,312.2	7,344.1	7,317.9	30.9	26.4	-87.61	306.3	284.3	708.7	655.8	52.91	13.394	
7,500.0	7,412.2	7,445.3	7,419.1	31.2	26.7	-87.63	306.0	284.9	708.1	654.5	53.57	13.217	
7,600.0	7,512.2	7,543.9	7,517.7	31.5	27.0	-87.63	305.9	285.5	707.5	653.3	54.22	13.048	
7,633.8	7,546.0	7,577.8	7,551.6	31.6	27.1	-87.63	306.0	285.7	707.3	652.9	54.45	12.991	
7,650.0	7,562.2	7,594.0	7,567.8	31.7	27.2	92.73	306.0	285.8	707.2	652.7	54.55	12.964	
7,694.0	7,606.0	7,638.1	7,611.9	31.8	27.3	92.97	305.9	286.0	707.2	652.3	54.84	12.896	
7,700.0	7,612.0	7,644.1	7,617.9	31.8	27.3	93.02	305.9	286.0	707.2	652.3	54.88	12.886	
7,750.0	7,661.4	7,693.9	7,667.7	31.9	27.5	93.62	305.6	286.3	707.3	652.1	55.20	12.814	
7,800.0	7,709.8	7,742.1	7,715.9	32.0	27.6	94.48	305.2	286.6	707.9	652.4	55.51	12.752	
7,850.0	7,757.1	7,788.6	7,762.4	32.1	27.8	95.54	304.7	286.8	709.1	653.3	55.82	12.704	
7,900.0	7,802.7	7,835.5	7,809.3	32.2	27.9	96.83	304.2	287.0	711.3	655.2	56.13	12.671	
7,950.0	7,846.4	7,882.0	7,855.8	32.3	28.1	98.29	303.7	287.3	714.5	658.0	56.45	12.657	
8,000.0	7,887.7	7,924.7	7,898.4	32.4	28.2	99.70	303.2	287.7	719.1	662.3	56.74	12.672	
8,050.0	7,926.5	7,963.3	7,937.1	32.4	28.4	100.95	302.8	288.1	725.5	668.5	57.02	12.724	
8,100.0	7,962.4	7,999.1	7,972.9	32.5	28.5	102.02	302.4	288.4	734.3	677.0	57.29	12.816	
8,150.0	7,995.1	8,030.9	8,004.7	32.5	28.6	102.74	302.0	288.7	745.6	688.0	57.54	12.956	
8,200.0	8,024.4	8,059.4	8,033.2	32.6	28.7	103.08	301.8	288.9	759.6	701.8	57.78	13.147	
8,250.0	8,050.1	8,084.4	8,058.2	32.6	28.8	102.97	301.6	289.0	776.6	718.6	57.99	13.392	
8,300.0	8,071.9	8,105.9	8,079.6	32.7	28.8	102.34	301.4	289.1	796.6	738.4	58.18	13.691	
8,350.0	8,089.7	8,123.6	8,097.4	32.7	28.9	101.11	301.3	289.2	819.4	761.1	58.34	14.045	
8,400.0	8,103.4	8,137.3	8,111.1	32.7	28.9	99.22	301.2	289.2	845.0	786.6	58.48	14.451	
8,450.0	8,112.8	8,146.9	8,120.6	32.8	29.0	96.59	301.1	289.3	873.2	814.6	58.58	14.907	
8,500.0	8,118.0	8,152.2	8,126.0	32.9	29.0	93.22	301.1	289.3	903.5	844.9	58.64	15.407	
8,533.8	8,119.0	8,153.4	8,127.2	33.0	29.0	90.51	301.1	289.3	925.1	866.4	58.67	15.768	
8,600.0	8,119.0	8,153.9	8,127.6	33.1	29.0	90.54	301.1	289.3	969.4	910.7	58.71	16.512	
8,700.0	8,119.0	8,154.5	8,128.3	33.4	29.0	90.60	301.1	289.3	1,040.8	982.0	58.76	17.712	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #244H - Wellbore #1 - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 213-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,800.0	8,119.0	8,155.2	8,129.0	33.8	29.0	90.65	301.1	289.3	1,116.6	1,057.8	58.80	18.988	
8,900.0	8,119.0	8,155.9	8,129.7	34.3	29.0	90.71	301.1	289.3	1,195.9	1,137.1	58.84	20.326	
9,000.0	8,119.0	8,156.6	8,130.3	34.9	29.0	90.76	301.1	289.3	1,278.2	1,219.3	58.87	21.712	
9,100.0	8,119.0	8,157.2	8,131.0	35.5	29.0	90.82	301.1	289.3	1,362.8	1,303.9	58.90	23.139	
9,200.0	8,119.0	8,157.9	8,131.7	36.3	29.0	90.87	301.1	289.3	1,449.4	1,390.5	58.92	24.600	
9,300.0	8,119.0	8,158.6	8,132.3	37.1	29.0	90.93	301.1	289.3	1,537.6	1,478.7	58.94	26.087	
9,400.0	8,119.0	8,159.2	8,133.0	37.9	29.0	90.98	301.0	289.3	1,627.2	1,568.2	58.96	27.598	
9,500.0	8,119.0	8,159.9	8,133.7	38.8	29.0	91.04	301.0	289.3	1,717.9	1,658.9	58.98	29.127	
9,600.0	8,119.0	8,160.6	8,134.3	39.8	29.0	91.09	301.0	289.3	1,809.6	1,750.6	59.00	30.672	
9,700.0	8,119.0	8,161.2	8,135.0	40.8	29.0	91.15	301.0	289.3	1,902.2	1,843.2	59.02	32.230	
9,800.0	8,119.0	8,161.9	8,135.7	41.8	29.0	91.20	301.0	289.3	1,995.4	1,936.4	59.04	33.799	
9,900.0	8,119.0	8,162.6	8,136.3	42.9	29.0	91.25	301.0	289.3	2,089.3	2,030.3	59.06	35.378	
10,000.0	8,119.0	8,163.2	8,137.0	44.0	29.0	91.31	301.0	289.3	2,183.7	2,124.7	59.08	36.964	
10,100.0	8,119.0	8,163.9	8,137.7	45.2	29.0	91.36	301.0	289.3	2,278.6	2,219.5	59.10	38.557	
10,200.0	8,119.0	8,164.6	8,138.3	46.3	29.0	91.42	301.0	289.3	2,374.0	2,314.8	59.12	40.156	
10,300.0	8,119.0	8,165.2	8,139.0	47.5	29.0	91.47	301.0	289.3	2,469.7	2,410.5	59.14	41.760	
10,400.0	8,119.0	8,165.9	8,139.6	48.8	29.0	91.52	301.0	289.3	2,565.7	2,506.5	59.16	43.367	
10,500.0	8,119.0	8,166.5	8,140.3	50.0	29.0	91.58	301.0	289.3	2,662.0	2,602.8	59.19	44.977	
10,600.0	8,119.0	8,167.2	8,141.0	51.3	29.0	91.63	301.0	289.3	2,758.6	2,699.4	59.21	46.590	
10,700.0	8,119.0	8,167.8	8,141.6	52.6	29.0	91.68	301.0	289.3	2,855.4	2,796.1	59.23	48.205	
10,800.0	8,119.0	8,168.5	8,142.3	54.0	29.0	91.74	301.0	289.3	2,952.4	2,893.1	59.26	49.822	
10,900.0	8,119.0	8,169.2	8,142.9	55.3	29.0	91.79	301.0	289.3	3,049.6	2,990.3	59.29	51.440	
11,000.0	8,119.0	8,169.8	8,143.6	56.7	29.0	91.84	301.0	289.3	3,147.0	3,087.7	59.31	53.058	
11,100.0	8,119.0	8,170.5	8,144.2	58.0	29.0	91.90	301.0	289.3	3,244.5	3,185.2	59.34	54.677	
11,200.0	8,119.0	8,171.1	8,144.9	59.4	29.0	91.95	301.0	289.3	3,342.2	3,282.9	59.37	56.296	
11,300.0	8,119.0	8,171.8	8,145.5	60.8	29.0	92.00	301.0	289.3	3,440.1	3,380.7	59.40	57.915	
11,400.0	8,119.0	8,172.4	8,146.2	62.2	29.0	92.06	301.0	289.3	3,538.0	3,478.6	59.43	59.533	
11,500.0	8,119.0	8,173.1	8,146.8	63.6	29.0	92.11	301.0	289.3	3,636.1	3,576.6	59.46	61.151	
11,600.0	8,119.0	8,173.7	8,147.5	65.1	29.0	92.16	300.9	289.3	3,734.2	3,674.7	59.49	62.767	
11,700.0	8,119.0	8,174.4	8,148.1	66.5	29.0	92.21	300.9	289.3	3,832.5	3,773.0	59.53	64.383	
11,800.0	8,119.0	8,175.0	8,148.8	68.0	29.0	92.27	300.9	289.3	3,930.8	3,871.3	59.56	65.997	
11,900.0	8,119.0	8,175.6	8,149.4	69.4	29.1	92.32	300.9	289.3	4,029.3	3,969.7	59.60	67.610	
12,000.0	8,119.0	8,176.3	8,150.1	70.9	29.1	92.37	300.9	289.3	4,127.8	4,068.1	59.63	69.221	
12,100.0	8,119.0	8,176.9	8,150.7	72.4	29.1	92.42	300.9	289.3	4,226.3	4,166.7	59.67	70.831	
12,200.0	8,119.0	8,177.6	8,151.3	73.9	29.1	92.48	300.9	289.3	4,325.0	4,265.3	59.71	72.438	
12,300.0	8,119.0	16,352.0	12,391.1	75.4	79.6	170.85	-3,857.2	328.4	4,330.2	4,253.4	76.84	56.357	
12,400.0	8,119.0	16,825.0	12,392.2	76.9	86.3	171.18	-4,328.6	356.4	4,325.4	4,244.1	81.31	53.194	
12,500.0	8,119.0	16,869.2	12,390.7	78.4	86.9	171.20	-4,372.7	358.2	4,321.9	4,239.6	82.30	52.512	
12,600.0	8,119.0	16,919.0	12,390.5	79.9	87.7	171.22	-4,422.5	359.8	4,320.6	4,237.2	83.34	51.842	
12,700.0	8,119.0	17,038.2	12,389.6	81.4	89.4	171.23	-4,541.7	361.8	4,319.8	4,234.8	85.00	50.820	
12,800.0	8,119.0	17,109.0	12,388.7	82.9	90.4	171.23	-4,612.5	361.8	4,318.5	4,232.3	86.25	50.069	
12,900.0	8,119.0	17,216.3	12,387.4	84.5	91.9	171.21	-4,719.8	361.6	4,317.5	4,229.7	87.84	49.154	
13,000.0	8,119.0	17,298.0	12,386.6	86.0	93.1	171.21	-4,801.4	361.7	4,316.5	4,227.3	89.19	48.397	
13,100.0	8,119.0	17,391.0	12,385.3	87.5	94.5	171.18	-4,894.4	360.6	4,315.4	4,224.7	90.66	47.598	
13,128.3	8,119.0	17,391.0	12,385.3	88.0	94.5	171.18	-4,894.4	360.6	4,315.3	4,224.5	90.84	47.506	
13,200.0	8,119.0	17,391.0	12,385.3	89.1	94.5	171.18	-4,894.4	360.6	4,315.9	4,224.6	91.27	47.286	
13,300.0	8,119.0	17,442.7	12,385.4	90.6	95.3	171.16	-4,946.1	359.4	4,317.3	4,225.0	92.36	46.742	
13,400.0	8,119.0	17,485.0	12,387.1	92.2	95.9	171.15	-4,988.4	358.6	4,321.2	4,227.9	93.36	46.287	
13,500.0	8,119.0	17,485.0	12,387.1	93.7	95.9	171.15	-4,988.4	358.6	4,326.5	4,232.5	93.94	46.058	
13,600.0	8,119.0	17,896.3	12,397.5	95.3	102.0	170.97	-5,398.9	345.8	4,330.3	4,231.7	98.54	43.943	
13,646.7	8,119.0	17,910.4	12,397.4	96.0	102.2	170.97	-5,412.9	345.5	4,330.1	4,231.1	98.97	43.753	
13,700.0	8,119.0	17,926.5	12,397.4	96.8	102.4	170.97	-5,429.0	345.3	4,330.3	4,230.9	99.45	43.544	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #244H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 213-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,800.0	8,119.0	18,191.7	12,394.9	98.4	106.4	171.07	-5,693.8	354.8	4,328.3	4,225.9	102.41	42.266	
13,900.0	8,119.0	18,245.0	12,395.5	100.0	107.2	171.12	-5,746.9	359.5	4,327.1	4,223.7	103.47	41.819	
13,980.8	8,119.0	18,245.0	12,395.5	101.2	107.2	171.12	-5,746.9	359.5	4,326.4	4,222.4	103.98	41.608	
14,000.0	8,119.0	18,245.0	12,395.5	101.5	107.2	171.12	-5,746.9	359.5	4,326.4	4,222.3	104.10	41.561	
14,100.0	8,119.0	18,245.9	12,395.6	103.1	107.2	171.13	-5,747.8	359.6	4,328.0	4,223.3	104.70	41.335	
14,200.0	8,119.0	18,730.7	12,390.2	104.7	114.6	171.45	-6,231.1	388.0	4,325.4	4,215.9	109.46	39.515	
14,300.0	8,119.0	18,716.0	12,391.2	106.2	114.4	171.46	-6,216.5	388.4	4,320.8	4,210.8	109.99	39.282	
14,400.0	8,119.0	18,767.9	12,388.8	107.8	115.2	171.44	-6,268.3	387.4	4,317.2	4,206.1	111.13	38.847	
14,500.0	8,119.0	18,811.0	12,388.3	109.4	115.9	171.42	-6,311.5	386.7	4,315.9	4,203.7	112.18	38.474	
14,600.0	8,119.0	18,952.8	12,385.1	111.0	118.0	171.34	-6,453.1	381.5	4,314.2	4,200.0	114.20	37.777	
14,700.0	8,119.0	19,001.0	12,384.0	112.6	118.7	171.31	-6,501.2	379.5	4,312.8	4,197.4	115.31	37.400	
14,735.2	8,119.0	19,001.0	12,384.0	113.1	118.7	171.31	-6,501.2	379.5	4,312.6	4,197.1	115.53	37.328	
14,800.0	8,119.0	19,001.0	12,384.0	114.2	118.7	171.31	-6,501.2	379.5	4,313.1	4,197.2	115.92	37.207	
14,900.0	8,119.0	19,056.2	12,384.1	115.7	119.6	171.28	-6,556.4	377.8	4,314.4	4,197.3	117.07	36.852	
15,000.0	8,119.0	19,096.0	12,385.5	117.3	120.2	171.27	-6,596.2	377.0	4,317.9	4,199.8	118.05	36.577	
15,100.0	8,119.0	19,119.1	12,386.7	118.9	120.6	171.26	-6,619.2	376.7	4,322.8	4,204.0	118.83	36.378	
15,200.0	8,119.0	19,166.9	12,389.6	120.5	121.3	171.26	-6,667.0	376.1	4,329.2	4,209.3	119.86	36.119	
15,300.0	8,119.0	19,850.0	12,394.2	122.1	131.9	171.41	-7,348.7	391.1	4,330.9	4,204.1	126.81	34.152	
15,400.0	8,119.0	19,915.8	12,390.4	123.7	132.9	171.45	-7,414.3	394.9	4,324.5	4,196.5	128.05	33.773	
15,500.0	8,119.0	19,967.5	12,387.9	125.3	133.8	171.46	-7,465.9	396.2	4,319.4	4,190.2	129.19	33.434	
15,600.0	8,119.0	20,022.5	12,385.6	126.9	134.6	171.46	-7,520.9	396.5	4,315.3	4,184.9	130.37	33.100	
15,700.0	8,119.0	20,067.5	12,384.2	128.5	135.3	171.45	-7,565.8	396.7	4,312.3	4,180.8	131.45	32.805	
15,800.0	8,119.0	20,107.6	12,383.8	130.1	136.0	171.47	-7,605.9	398.5	4,310.7	4,178.2	132.45	32.546	
15,900.0	8,119.0	20,233.8	12,384.2	131.7	137.9	171.58	-7,731.7	407.8	4,310.1	4,176.0	134.14	32.132	
16,000.0	8,119.0	20,279.9	12,383.9	133.3	138.7	171.59	-7,777.8	408.7	4,309.2	4,174.0	135.20	31.874	
16,023.4	8,119.0	20,291.4	12,383.8	133.7	138.8	171.59	-7,789.3	408.6	4,309.2	4,173.8	135.45	31.813	
16,100.0	8,119.0	20,347.5	12,383.7	134.9	139.7	171.55	-7,845.3	406.2	4,309.5	4,173.0	136.50	31.571	
16,200.0	8,119.0	20,516.2	12,380.1	136.5	142.3	171.30	-8,013.0	388.6	4,308.9	4,169.9	139.04	30.991	
16,300.0	8,119.0	20,569.7	12,378.9	138.1	143.1	171.23	-8,066.2	383.2	4,308.4	4,168.1	140.27	30.715	
16,400.0	8,119.0	16,400.0	12,377.4	139.7	78.5	171.10	-8,175.9	374.4	4,308.4	4,199.7	108.65	39.653	
16,500.0	8,119.0	20,772.6	12,375.8	141.4	146.3	171.00	-8,268.5	367.9	4,307.9	4,164.1	143.75	29.969	
16,505.9	8,119.0	20,776.1	12,375.8	141.5	146.3	171.00	-8,272.0	367.6	4,307.9	4,164.1	143.82	29.953	
16,600.0	8,119.0	20,872.9	12,374.9	143.0	147.8	170.91	-8,368.6	361.8	4,308.0	4,162.6	145.45	29.618	
16,700.0	8,119.0	20,976.4	12,374.2	144.6	149.5	170.86	-8,472.1	358.6	4,307.9	4,160.7	147.15	29.276	
16,800.0	8,119.0	21,081.0	12,373.1	146.2	151.1	170.81	-8,576.6	355.4	4,307.4	4,158.6	148.86	28.937	
16,810.5	8,119.0	21,081.0	12,373.1	146.4	151.1	170.81	-8,576.6	355.4	4,307.4	4,158.5	148.92	28.924	
16,900.0	8,119.0	21,116.9	12,373.2	147.8	151.7	170.81	-8,612.5	355.9	4,307.8	4,158.0	149.81	28.755	
17,000.0	8,119.0	21,176.0	12,375.6	149.4	152.6	170.87	-8,671.4	359.9	4,310.3	4,159.4	150.92	28.560	
17,100.0	8,119.0	21,176.0	12,375.6	151.0	152.6	170.87	-8,671.4	359.9	4,313.6	4,162.2	151.46	28.481	
17,200.0	8,119.0	17,200.0	12,384.8	152.7	90.2	171.07	-8,850.8	375.3	4,317.7	4,196.8	120.89	35.715	
17,300.0	8,119.0	21,405.0	12,386.3	154.3	156.3	171.12	-8,899.3	378.5	4,320.4	4,165.8	154.62	27.942	
17,400.0	8,119.0	21,458.0	12,390.4	155.9	157.1	171.18	-8,952.0	383.2	4,325.8	4,170.2	155.61	27.798	
17,500.0	8,119.0	21,458.0	12,390.4	157.5	157.1	171.18	-8,952.0	383.2	4,331.9	4,175.8	156.07	27.755	
17,600.0	8,119.0	21,458.0	12,390.4	159.1	157.1	171.18	-8,952.0	383.2	4,340.3	4,183.8	156.47	27.738	
17,700.0	8,119.0	21,493.0	12,394.3	160.7	157.7	171.23	-8,986.5	386.6	4,350.4	4,193.2	157.19	27.676	
17,800.0	8,119.0	21,518.8	12,397.7	162.4	158.1	171.27	-9,012.0	388.9	4,362.3	4,204.5	157.78	27.647	
17,900.0	8,119.0	21,554.0	12,403.1	164.0	158.7	171.31	-9,046.7	391.8	4,375.9	4,217.4	158.45	27.616	
18,000.0	8,119.0	22,174.7	12,458.1	165.6	168.5	171.57	-9,661.9	406.8	4,385.8	4,219.9	165.87	26.442	
18,100.0	8,119.0	22,258.4	12,458.9	167.2	169.8	171.45	-9,745.1	397.9	4,388.4	4,220.9	167.46	26.206	
18,200.0	8,119.0	22,422.6	12,459.5	168.9	172.4	171.19	-9,908.2	379.0	4,390.6	4,220.6	170.08	25.816	
18,300.0	8,119.0	22,498.0	12,459.7	170.5	173.6	171.11	-9,983.3	372.7	4,392.3	4,220.7	171.56	25.603	
18,400.0	8,119.0	22,611.0	12,460.0	172.1	175.3	170.96	-10,095.8	362.0	4,394.1	4,220.6	173.51	25.325	

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

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design Voni - Voni Fed Com #244H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 213-MWD

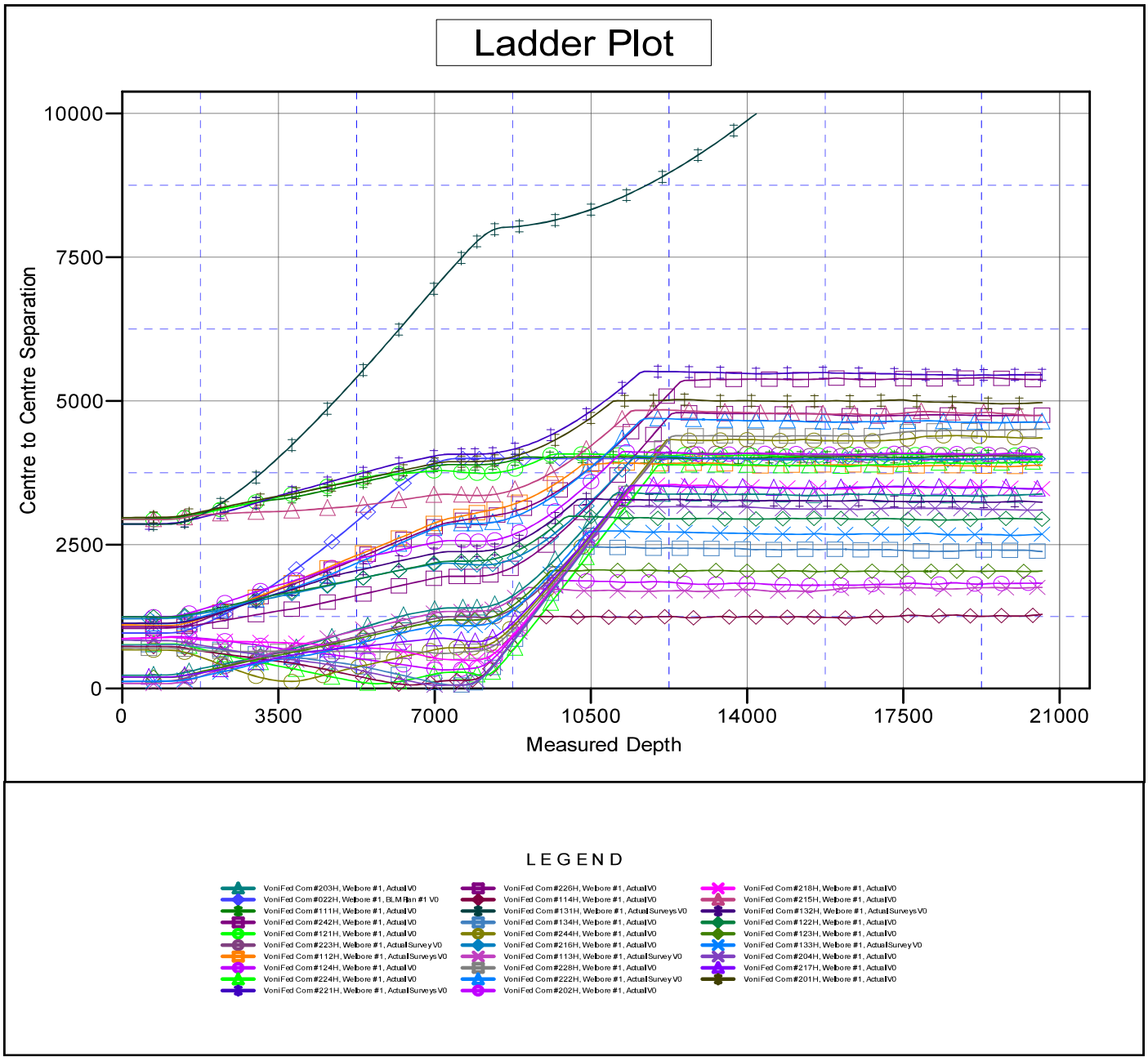
Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,500.0	8,119.0	22,723.9	12,459.4	173.7	177.1	170.79	-10,208.0	349.6	4,395.5	4,220.0	175.51	25.045	
18,600.0	8,119.0	22,832.8	12,459.5	175.4	178.8	170.67	-10,316.6	340.8	4,396.9	4,219.5	177.39	24.786	
18,700.0	8,119.0	22,934.1	12,460.7	177.0	180.4	170.70	-10,417.8	343.2	4,397.8	4,218.8	178.97	24.572	
18,800.0	8,119.0	23,151.0	12,461.9	178.6	183.9	170.90	-10,634.0	359.9	4,396.8	4,215.4	181.39	24.240	
18,900.0	8,119.0	23,298.3	12,460.0	180.2	186.3	171.07	-10,780.6	373.9	4,393.9	4,210.7	183.15	23.990	
19,000.0	8,119.0	23,351.0	12,459.5	181.9	187.2	171.11	-10,833.1	377.7	4,391.8	4,207.6	184.26	23.835	
19,100.0	8,119.0	23,533.1	12,459.9	183.5	190.1	171.46	-11,012.8	406.0	4,390.0	4,204.0	186.04	23.597	
19,200.0	8,119.0	23,647.2	12,459.6	185.1	191.9	171.78	-11,124.0	431.5	4,386.5	4,199.2	187.26	23.424	
19,300.0	8,119.0	23,731.0	12,458.9	186.8	193.3	172.01	-11,205.8	449.8	4,382.7	4,194.4	188.37	23.267	
19,400.0	8,119.0	23,795.0	12,458.5	188.4	194.3	172.16	-11,268.8	461.4	4,379.7	4,190.3	189.43	23.120	
19,500.0	8,119.0	23,855.5	12,458.3	190.0	195.3	172.24	-11,328.9	468.4	4,377.9	4,187.3	190.54	22.976	
19,600.0	8,119.0	23,989.4	12,457.9	191.6	197.5	172.40	-11,462.1	481.0	4,376.5	4,184.3	192.21	22.769	
19,700.0	8,119.0	24,092.9	12,457.6	193.3	199.2	172.61	-11,564.1	498.1	4,374.1	4,180.5	193.52	22.603	
19,800.0	8,119.0	24,267.6	12,458.0	194.9	202.0	173.27	-11,730.9	549.7	4,370.3	4,175.5	194.82	22.433	
19,900.0	8,119.0	24,365.8	12,457.9	196.5	203.5	173.65	-11,824.5	579.4	4,366.7	4,170.8	195.88	22.293	
20,000.0	8,119.0	24,478.7	12,457.0	198.2	205.3	174.03	-11,933.4	609.5	4,362.9	4,165.8	197.07	22.139	
20,100.0	8,119.0	24,591.2	12,455.3	199.8	207.2	174.38	-12,042.4	636.7	4,359.0	4,160.6	198.32	21.979	
20,200.0	8,119.0	24,613.1	12,455.2	201.4	207.5	174.44	-12,063.8	641.6	4,355.8	4,156.7	199.16	21.871	
20,300.0	8,119.0	24,646.9	12,455.4	203.1	208.1	174.53	-12,096.8	648.8	4,354.4	4,154.4	200.02	21.770	
20,372.5	8,119.0	24,688.0	12,455.9	204.2	208.8	174.64	-12,137.0	657.4	4,354.0	4,153.3	200.73	21.690	
20,400.0	8,119.0	24,688.0	12,455.9	204.7	208.8	174.64	-12,137.0	657.4	4,354.1	4,153.2	200.90	21.673	
20,500.0	8,119.0	24,688.0	12,455.9	206.3	208.8	174.64	-12,137.0	657.4	4,355.9	4,154.4	201.44	21.623	
20,606.7	8,119.0	24,688.0	12,455.9	208.1	208.8	174.64	-12,137.0	657.4	4,360.3	4,158.4	201.93	21.593	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KB @ 3220.5usft	Coordinates are relative to: Voni Fed Com #023H
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Central Meridian is 104° 20' 0.000 W	Grid Convergence at Surface is: 0.29°



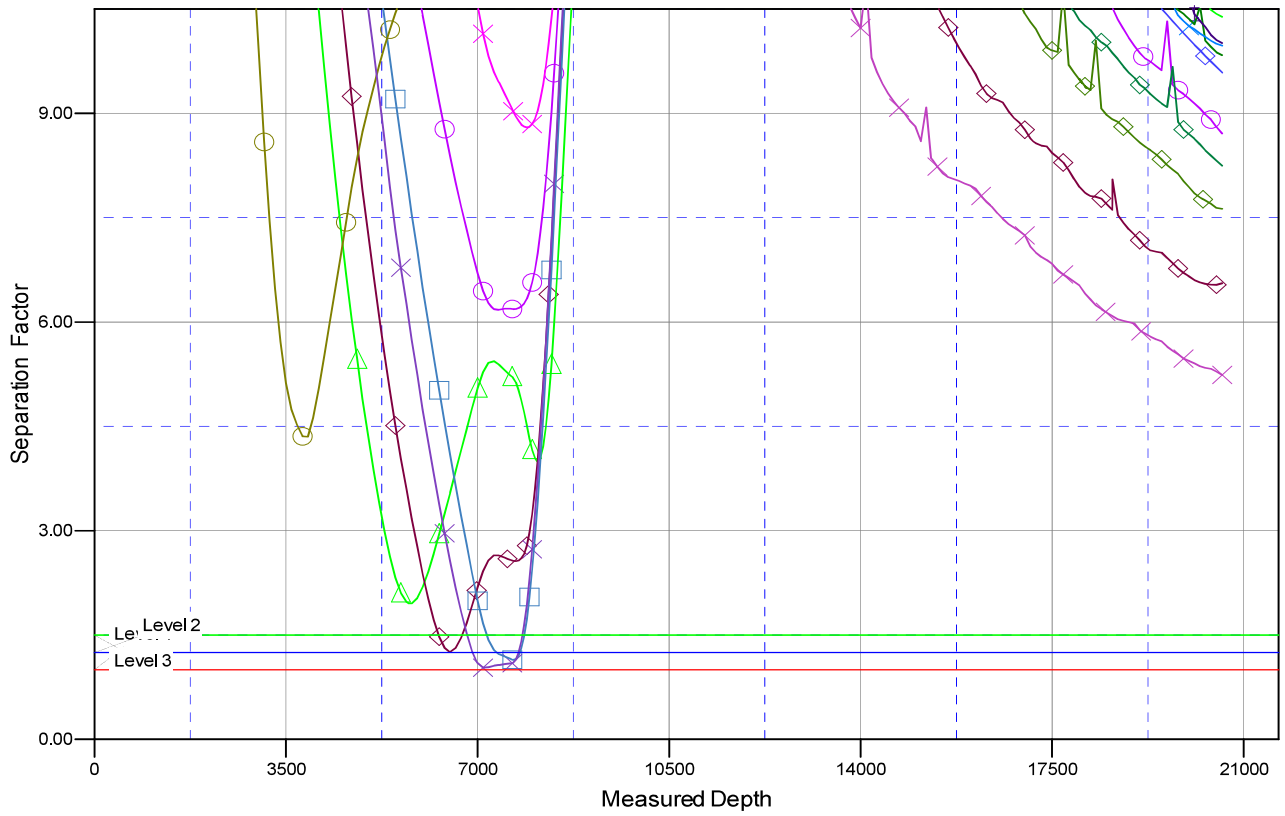
Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Voni Fed Com #023H
Project:	Rustler Breaks	**TVD Reference:**	KB @ 3220.5usft
Reference Site:	Voni	**MD Reference:**	KB @ 3220.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Voni Fed Com #023H	**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 #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KB @ 3220.5usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Voni Fed Com #023H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.29°

Separation Factor Plot



LEGEND

VoniFed Com#203H, Wellbore #1, ActualV0
VoniFed Com#022H, Wellbore #1, BLM Plan #1 V0
VoniFed Com#111H, Wellbore #1, ActualV0
VoniFed Com#242H, Wellbore #1, ActualV0
VoniFed Com#121H, Wellbore #1, ActualV0
VoniFed Com#223H, Wellbore #1, ActualSurveyV0
VoniFed Com#112H, Wellbore #1, ActualSurveysV0
VoniFed Com#124H, Wellbore #1, ActualV0
VoniFed Com#224H, Wellbore #1, ActualV0
VoniFed Com#221H, Wellbore #1, ActualSurveysV0
VoniFed Com#226H, Wellbore #1, ActualV0
VoniFed Com#114H, Wellbore #1, ActualV0
VoniFed Com#131H, Wellbore #1, ActualSurveysV0
VoniFed Com#134H, Wellbore #1, ActualV0
VoniFed Com#244H, Wellbore #1, ActualV0
VoniFed Com#216H, Wellbore #1, ActualV0
VoniFed Com#113H, Wellbore #1, ActualSurveyV0
VoniFed Com#228H, Wellbore #1, ActualV0
VoniFed Com#222H, Wellbore #1, ActualSurveyV0
VoniFed Com#202H, Wellbore #1, ActualV0
VoniFed Com#218H, Wellbore #1, ActualV0
VoniFed Com#215H, Wellbore #1, ActualV0
VoniFed Com#132H, Wellbore #1, ActualSurveysV0
VoniFed Com#122H, Wellbore #1, ActualV0
VoniFed Com#123H, Wellbore #1, ActualV0
VoniFed Com#133H, Wellbore #1, ActualSurveyV0
VoniFed Com#204H, Wellbore #1, ActualV0
VoniFed Com#217H, Wellbore #1, ActualV0
VoniFed Com#201H, Wellbore #1, ActualV0

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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

CONDITIONS

Action 285164

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 285164
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Work was performed without OCD approval.	10/25/2024