Well Name: NINA CORTELL FED COM
Well Location: T22S / R32E / SEC 10 / SESW / 32.3997151 / -103.6659417
County or Parish/State: LEA / NM

Well Number: 221H
Type of Well: OIL WELL
Allottee or Tribe Name:

Lease Number: NMNM135247
Unit or CA Name:
Unit or CA Number:

US Well Number: 3002551190
Operator: MATADOR PRODUCTION COMPANY

Notice of Intent

Sundry ID: 2778230

Type of Submission: Notice of Intent
Type of Action: APD Change

Date Sundry Submitted: 03/07/2024
Time Sundry Submitted: 06:40

Date proposed operation will begin: 07/01/2024

Procedure Description: BLM Bond NMB001079 Surety Bond No.: RLB0015172 Matador request the option to amend the well design of the Nina Cortell Fed Com #221H and make the following changes to the current APD: - Changed the well name from Nina Cortell Fed Com #221H to the Nina Cortell Fed Com #241H - Change BHL from 60' FNL & 990' FWL to 110' FNL & 330' FWL. All perforations will be within the setback requirements as previously approved. - Amend casing and cementing plan by adding an additional intermediate string of casing and revising set depths as described within the attached Sundry Info attachment.

NOI Attachments

Procedure Description

Nina_Cortell_Fed_Com_241H_Offline_Cementing___Surface_20240306155938.pdf

Nina_Cortell_Fed_Com_241H_Directional_Well_Plan_20240306155936.pdf

Nina_Cortell_Fed_Com_241H_Offline_Cementing___Int_20240306155937.pdf

Nina_Cortell_Fed_Com_241H_Sundry_Info_20240306155938.pdf

Nina_Cortell_Fed_Com_241H_Directional_Wall_Plot_20240306155935.pdf

Nina_Cortell_Fed_Com_241H_Directional_AC_20240306155930.pdf

Nina_Cortell_Fed_Com_241H_Break_Testing_Sundry_20240306155930.pdf

LO_NINA_CORTELL_FED_COM_241H_REV1_S_20240306155931.pdf

Well Name: NINA CORTELL FED COM	**Well Location:** T22S / R32E / SEC 10 / SESW / 32.3997151 / -103.6659417	**County or Parish/State:** LEA / NM
Well Number: 221H	**Type of Well:** OIL WELL	**Allottee or Tribe Name:**
Lease Number: NMNM135247	**Unit or CA Name:**	**Unit or CA Number:**
US Well Number: 3002551190	**Operator:** MATADOR PRODUCTION COMPANY	

Nina_Cortell_Fed_Com_241H_Csg_Specs_10.75in_45.5_BUTT_SC_20240306155930.pdf

Nina_Cortell_Fed_Com_241H_4_String_Wellhead_Diagram_20240306155930.pdf

Nina_Cortell_Fed_Com_241H_Casing_Design_Criteria_20240306155930.pdf

Conditions of Approval

Additional

NINA_CORTELL_FED_COM_241H_ENG_COA_20240319090737.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:** MAR 07, 2024 06:25 AM

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:** 03/19/2024

Signature: Chris Walls

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: SESW / 272 FSL / 1601 FWL / TWSP: 22S / RANGE: 32E / SECTION: 10 / LAT: 32.3997151 / LONG: -103.6659417 (TVD: 0 feet, MD: 0 feet)

PPP: SWSW / 100 FSL / 991 FWL / TWSP: 22S / RANGE: 32E / SECTION: 10 / LAT: 32.3992328 / LONG: -103.6679177 (TVD: 12273 feet, MD: 12329 feet)

PPP: SWNW / 2635 FNL / 988 FWL / TWSP: 22S / RANGE: 32E / SECTION: 3 / LAT: 32.4207309 / LONG: -103.6679594 (TVD: 12434 feet, MD: 20300 feet)

PPP: SWNW / 2640 FNL / 989 FWL / TWSP: 22S / RANGE: 32E / SECTION: 10 / LAT: 32.4062149 / LONG: -103.6679313 (TVD: 12512 feet, MD: 15000 feet)

BHL: LOT 4 / 60 FNL / 990 FWL / TWSP: 22S / RANGE: 32E / SECTION: 3 / LAT: 32.4278094 / LONG: -103.6679732 (TVD: 12398 feet, MD: 22787 feet)

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MATADOR PRODUCTION COMPANY
WELL NAME & NO.:	NINA CORTELL FED COM 241H
APD ID:	10400082269
SURFACE HOLE FOOTAGE:	272'/S & 1601'/W
BOTTOM HOLE FOOTAGE	110'/N & 330'/W
SURFACE LOCATION:	Section 10, T.22 S., R.32 E. NMP.
COUNTY:	Lea 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	☑ Offline Cementing	☐ Pilot Hole	☑ BOPE Break testing
Special Requirements	☐ Water Disposal	☑ 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 **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 **975 ft.** (a minimum of 25 feet (Lea 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 **24 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 between casing-coupling and hole. This option is granted; adjust cement volume accordingly.

2. The **10-3/4** inch 1st intermediate casing shall be set at approximately **4,900 ft.** The minimum required fill of cement behind the **10-3/4** 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/karst or potash.

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.

- **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.
- **Second stage above DV tool: 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/karst or potash.

Note: First intermediate casing must be kept fluid-filled to meet the CFO's minimum collapse design requirement.

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

❖ In Secretary Potash 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.

❖ Operator is responsible to report the following within two miles of mineworking to BLM Geologist jrutley@blm.gov:

- Any fluid flow outside of casing in the Salado Formation.
- Any well collision events.
- Sustained annuli pressures 500 psi above maximum allowable wellhead operating pressure (MAWOP) observed in monitored annuli.
- Sustained mud losses occur through the Salado interval for projects within one mile of mineworking and WIPP Boundary.

3. The **7-5/8** inch 2nd intermediate casing shall be set at approximately **12,561 ft.** (12,477 ft. TVD). 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/karst or potash.

   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.
   - **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.
   - **Second stage above DV tool: 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/karst or potash.

   Note: The 2nd intermediate casing must be kept fluid-filled to meet the CFO's minimum collapse design requirement.

   Note: Excess cement volume for both stages is below the CFO's recommendation of 25%. More cement might be needed.

4. Operator has proposed to set **5-1/2 in.** production casing at approximately **23,504 ft.** (13,200 ft. TVD). The minimum required fill of cement behind the **5-1/2 in.** production casing is:

   - Cement should tie-back **at least 500 feet** into previous casing string. Operator shall provide method of verification.

   Note: Excess cement volume is below the 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 **10,000 (10M)** psi. **Variance is approved to use a 5M annular preventer with a 10M BOP stacks.** 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.

BOPE Break Testing Variance (Note: For a minimum 5M BOPE or less (Utilizing a 10M BOPE system)

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted **(575-689-5981 Lea County)** 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per title 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

Offline cementing variance is approved for surface and intermediate casings only. Contact the BLM prior to the commencement of any offline cementing procedure.

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 03/19/2024

Offline Cementing - Surface Casing

Nina Cortell Fed Com 241H **Township/Range: 22S 32E**
SHL: 272' FSL & 1601' FWL Section 10 **Elevation Above Sea Level: 3790'**

Matador Production Company requests the option to cement the surface casing string offline as a prudent batch drilling efficiency of acreage development.

Cement Program

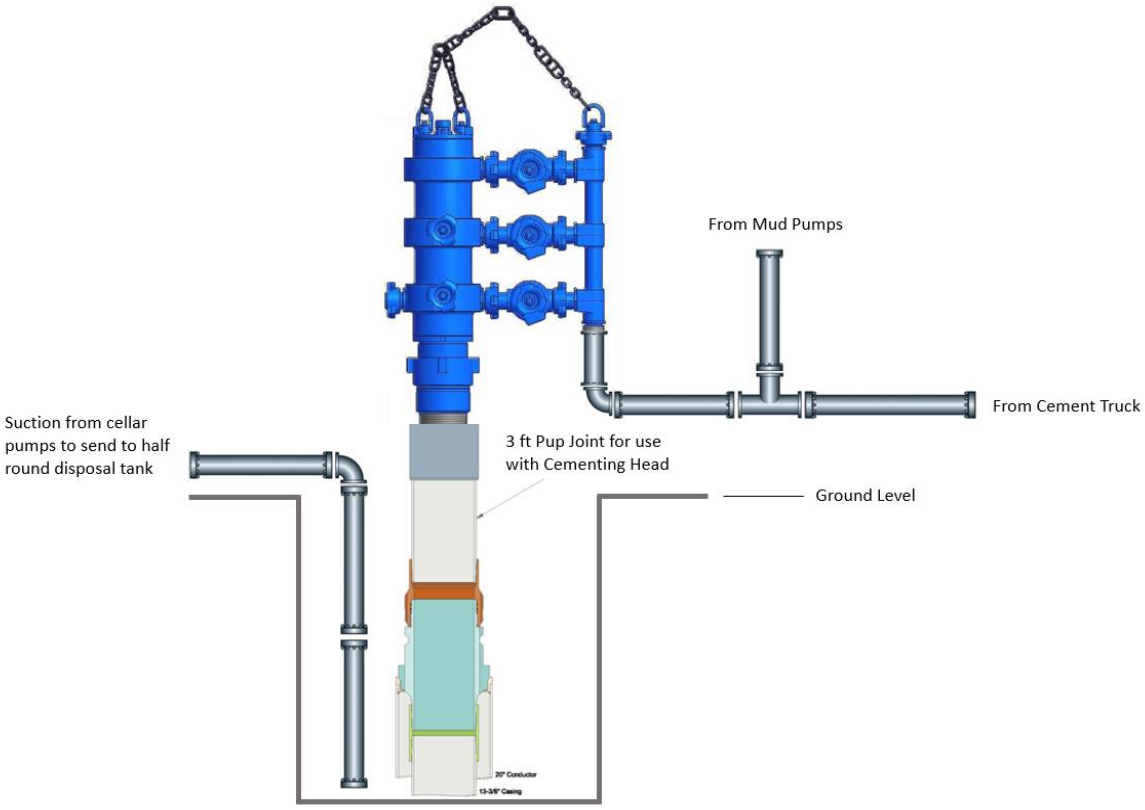
No changes to the cement program will take place for offline cementing.

Offline Cementing Procedure

The operational sequence will be as follows. Well must meet the below requirements to be a candidate for offline cementing, if wellbore conditions change, BLM will be notified.

- No noticeable wellbore instability.
- Casing installed successfully with no issues.
- No observed shallow gas or other anomalies

1. Run casing as per normal operations. While running casing, conduct a negative pressure test and confirm integrity of the float equipment (float collar and shoe).
2. Land casing with mandrel.
3. Nipple down BOP and install cap flange.
4. Skid rig to the next well on the pad.
5. Rig up on the well in accordance with the diagram shown below.



6. Circulate bottoms up with cement truck.
   - Max anticipated time before circulating with cement truck is 24 hours.
7. Perform cement job, taking returns in the cellar.
8. Confirm well is static and floats are holding following the cement job.
9. Remove cement equipment and install night cap with pressure gauge for monitoring.

Matador Production Company

Antelope Ridge
Nina Cortell
Nina Cortell Fed Com #241H

Wellbore #1

Plan: BLM Plan #1

Standard Planning Report

21 February, 2024

Planning Report

Database:	EDM 5000.14 Single User Db	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Project:	Antelope Ridge	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site:	Nina Cortell	**North Reference:**	Grid
Well:	Nina Cortell Fed Com #241H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Project Antelope Ridge

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 Nina Cortell

Site Position:		**Northing:**	509,698.48 usft	**Latitude:**	32° 23' 58.229 N
From:	Lat/Long	**Easting:**	705,998.14 usft	**Longitude:**	103° 39' 57.270 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.36 °

Well Nina Cortell Fed Com #241H

Well Position	**+N/-S**	31.5 usft	**Northing:**	509,729.98 usft	**Latitude:**	32° 23' 58.532 N
	+E/-W	139.9 usft	**Easting:**	706,138.05 usft	**Longitude:**	103° 39' 55.635 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,790.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/21/2024	6.28	60.12	47,341.91085728

Design BLM Plan #1

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.56

Plan Survey Tool Program **Date** 2/21/2024

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	23,504.9	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	
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
8,182.6	11.83	254.51	8,174.2	-32.5	-117.2	1.00	1.00	0.00	254.51	
11,523.5	11.83	254.51	11,444.2	-215.3	-777.0	0.00	0.00	0.00	0.00	
12,311.9	0.00	0.00	12,227.0	-237.0	-855.1	1.50	-1.50	0.00	180.00	
12,711.9	0.00	0.00	12,627.0	-237.0	-855.1	0.00	0.00	0.00	0.00	KOP - Nina Cortell Fe
13,611.9	90.00	338.05	13,200.0	294.4	-1,069.3	10.00	10.00	0.00	338.05	
14,687.2	90.00	359.56	13,200.0	1,343.1	-1,276.9	2.00	0.00	2.00	90.00	
23,504.9	90.00	359.56	13,200.0	10,160.5	-1,345.0	0.00	0.00	0.00	0.00	BHL - Nina Cortell Fe

Planning Report

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Project:	Antelope Ridge	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site:	Nina Cortell	**North Reference:**	Grid
Well:	Nina Cortell Fed Com #241H	**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
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
928.2	0.00	0.00	928.2	0.0	0.0	0.0	0.00	0.00	0.00
Z(Rustler)									
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,252.3	0.00	0.00	1,252.3	0.0	0.0	0.0	0.00	0.00	0.00
Z (Salado) (Top Salt)									
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,135.9	0.00	0.00	3,135.9	0.0	0.0	0.0	0.00	0.00	0.00
Z (Castile (T))									
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00

Planning Report

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Well:	Nina Cortell Fed Com #241H	**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)
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,846.8	0.00	0.00	4,846.8	0.0	0.0	0.0	0.00	0.00	0.00
Z (G30:CS14-CSB) (Base of Salt)									
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,113.3	0.00	0.00	5,113.3	0.0	0.0	0.0	0.00	0.00	0.00
Z (G26: Bell Cyn.)									
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,767.3	0.00	0.00	5,767.3	0.0	0.0	0.0	0.00	0.00	0.00
Z (G13: Cherry Cyn.)									
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,999.2	0.00	0.00	6,999.2	0.0	0.0	0.0	0.00	0.00	0.00
Z (G7: Brushy Cyn.) Antelope Ridge									
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 1.00									
7,100.0	1.00	254.51	7,100.0	-0.2	-0.8	-0.2	1.00	1.00	0.00
7,200.0	2.00	254.51	7,200.0	-0.9	-3.4	-0.9	1.00	1.00	0.00
7,300.0	3.00	254.51	7,299.9	-2.1	-7.6	-2.0	1.00	1.00	0.00
7,400.0	4.00	254.51	7,399.7	-3.7	-13.4	-3.6	1.00	1.00	0.00
7,500.0	5.00	254.51	7,499.4	-5.8	-21.0	-5.7	1.00	1.00	0.00
7,600.0	6.00	254.51	7,598.9	-8.4	-30.2	-8.2	1.00	1.00	0.00
7,700.0	7.00	254.51	7,698.3	-11.4	-41.2	-11.1	1.00	1.00	0.00
7,800.0	8.00	254.51	7,797.4	-14.9	-53.7	-14.5	1.00	1.00	0.00
7,900.0	9.00	254.51	7,896.3	-18.8	-68.0	-18.3	1.00	1.00	0.00
8,000.0	10.00	254.51	7,994.9	-23.2	-83.9	-22.6	1.00	1.00	0.00
8,100.0	11.00	254.51	8,093.3	-28.1	-101.4	-27.3	1.00	1.00	0.00
8,182.6	11.83	254.51	8,174.2	-32.5	-117.2	-31.6	1.00	1.00	0.00
Start 3340.9 hold at 8182.6 MD									
8,200.0	11.83	254.51	8,191.3	-33.4	-120.6	-32.5	0.00	0.00	0.00
8,300.0	11.83	254.51	8,289.1	-38.9	-140.4	-37.8	0.00	0.00	0.00
8,400.0	11.83	254.51	8,387.0	-44.4	-160.1	-43.1	0.00	0.00	0.00
8,500.0	11.83	254.51	8,484.9	-49.9	-179.9	-48.5	0.00	0.00	0.00
8,600.0	11.83	254.51	8,582.8	-55.3	-199.6	-53.8	0.00	0.00	0.00
8,700.0	11.83	254.51	8,680.6	-60.8	-219.4	-59.1	0.00	0.00	0.00
8,800.0	11.83	254.51	8,778.5	-66.3	-239.1	-64.4	0.00	0.00	0.00

Planning Report

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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)
8,810.9	11.83	254.51	8,789.2	-66.9	-241.3	-65.0	0.00	0.00	0.00
Z (G4: BSGL (CS9))									
8,900.0	11.83	254.51	8,876.4	-71.7	-258.9	-69.8	0.00	0.00	0.00
9,000.0	11.83	254.51	8,974.3	-77.2	-278.6	-75.1	0.00	0.00	0.00
9,100.0	11.83	254.51	9,072.1	-82.7	-298.4	-80.4	0.00	0.00	0.00
9,200.0	11.83	254.51	9,170.0	-88.2	-318.1	-85.7	0.00	0.00	0.00
9,300.0	11.83	254.51	9,267.9	-93.6	-337.9	-91.0	0.00	0.00	0.00
9,400.0	11.83	254.51	9,365.8	-99.1	-357.6	-96.4	0.00	0.00	0.00
9,500.0	11.83	254.51	9,463.7	-104.6	-377.4	-101.7	0.00	0.00	0.00
9,600.0	11.83	254.51	9,561.5	-110.1	-397.1	-107.0	0.00	0.00	0.00
9,700.0	11.83	254.51	9,659.4	-115.5	-416.9	-112.3	0.00	0.00	0.00
9,800.0	11.83	254.51	9,757.3	-121.0	-436.6	-117.7	0.00	0.00	0.00
9,900.0	11.83	254.51	9,855.2	-126.5	-456.4	-123.0	0.00	0.00	0.00
9,921.5	11.83	254.51	9,876.2	-127.7	-460.6	-124.1	0.00	0.00	0.00
Z (L5.1: FBSG)									
10,000.0	11.83	254.51	9,953.0	-132.0	-476.1	-128.3	0.00	0.00	0.00
10,100.0	11.83	254.51	10,050.9	-137.4	-495.9	-133.6	0.00	0.00	0.00
10,200.0	11.83	254.51	10,148.8	-142.9	-515.6	-138.9	0.00	0.00	0.00
10,218.5	11.83	254.51	10,166.9	-143.9	-519.3	-139.9	0.00	0.00	0.00
Z (L4.3: SBSC)									
10,300.0	11.83	254.51	10,246.7	-148.4	-535.4	-144.3	0.00	0.00	0.00
10,400.0	11.83	254.51	10,344.6	-153.9	-555.1	-149.6	0.00	0.00	0.00
10,500.0	11.83	254.51	10,442.4	-159.3	-574.9	-154.9	0.00	0.00	0.00
10,600.0	11.83	254.51	10,540.3	-164.8	-594.6	-160.2	0.00	0.00	0.00
10,605.1	11.83	254.51	10,545.3	-165.1	-595.6	-160.5	0.00	0.00	0.00
Z (L4.1: SBSG)									
10,700.0	11.83	254.51	10,638.2	-170.3	-614.4	-165.6	0.00	0.00	0.00
10,800.0	11.83	254.51	10,736.1	-175.7	-634.1	-170.9	0.00	0.00	0.00
10,900.0	11.83	254.51	10,833.9	-181.2	-653.9	-176.2	0.00	0.00	0.00
11,000.0	11.83	254.51	10,931.8	-186.7	-673.6	-181.5	0.00	0.00	0.00
11,026.4	11.83	254.51	10,957.6	-188.1	-678.8	-182.9	0.00	0.00	0.00
Z (L3.3: TBSC)									
11,100.0	11.83	254.51	11,029.7	-192.2	-693.4	-186.8	0.00	0.00	0.00
11,200.0	11.83	254.51	11,127.6	-197.6	-713.1	-192.2	0.00	0.00	0.00
11,300.0	11.83	254.51	11,225.5	-203.1	-732.9	-197.5	0.00	0.00	0.00
11,400.0	11.83	254.51	11,323.3	-208.6	-752.6	-202.8	0.00	0.00	0.00
11,500.0	11.83	254.51	11,421.2	-214.1	-772.4	-208.1	0.00	0.00	0.00
11,523.5	11.83	254.51	11,444.2	-215.3	-777.0	-209.4	0.00	0.00	0.00
Start Drop -1.50									
11,600.0	10.68	254.51	11,519.2	-219.3	-791.4	-213.3	1.50	-1.50	0.00
11,683.9	9.42	254.51	11,601.9	-223.2	-805.5	-217.1	1.50	-1.50	0.00
Z (L3.1: TBSG)									
11,700.0	9.18	254.51	11,617.7	-223.9	-808.0	-217.7	1.50	-1.50	0.00
11,800.0	7.68	254.51	11,716.7	-227.9	-822.1	-221.5	1.50	-1.50	0.00
11,900.0	6.18	254.51	11,815.9	-231.1	-833.7	-224.7	1.50	-1.50	0.00
12,000.0	4.68	254.51	11,915.5	-233.6	-842.9	-227.1	1.50	-1.50	0.00
12,088.6	3.35	254.51	12,003.9	-235.3	-848.8	-228.7	1.50	-1.50	0.00
Z (L2: WFMP A)									
12,100.0	3.18	254.51	12,015.2	-235.4	-849.5	-228.9	1.50	-1.50	0.00
12,200.0	1.68	254.51	12,115.1	-236.6	-853.5	-230.0	1.50	-1.50	0.00
12,300.0	0.18	254.51	12,215.1	-237.0	-855.1	-230.4	1.50	-1.50	0.00
12,311.9	0.00	0.00	12,227.0	-237.0	-855.1	-230.4	1.50	-1.50	888.43
Start 400.0 hold at 12311.9 MD									

Planning Report

Database:	EDM 5000.14 Single User Db	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Project:	Antelope Ridge	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site:	Nina Cortell	**North Reference:**	Grid
Well:	Nina Cortell Fed Com #241H	**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)
12,400.0	0.00	0.00	12,315.1	-237.0	-855.1	-230.4	0.00	0.00	0.00
12,419.0	0.00	0.00	12,334.1	-237.0	-855.1	-230.4	0.00	0.00	0.00
Z (WFMP B)									
12,500.0	0.00	0.00	12,415.1	-237.0	-855.1	-230.4	0.00	0.00	0.00
12,600.0	0.00	0.00	12,515.1	-237.0	-855.1	-230.4	0.00	0.00	0.00
12,700.0	0.00	0.00	12,615.1	-237.0	-855.1	-230.4	0.00	0.00	0.00
12,711.9	0.00	0.00	12,627.0	-237.0	-855.1	-230.4	0.00	0.00	0.00
Start Build 10.00 - KOP - Nina Cortell Fed Com #241H									
12,800.0	8.81	338.05	12,714.8	-230.7	-857.6	-224.1	10.00	10.00	0.00
12,806.2	9.44	338.05	12,720.9	-229.8	-858.0	-223.2	10.00	10.00	0.00
Z (WFMP C)									
12,900.0	18.81	338.05	12,811.8	-208.6	-866.6	-202.0	10.00	10.00	0.00
12,962.4	25.05	338.05	12,869.6	-187.0	-875.3	-180.3	10.00	10.00	0.00
FTP - Nina Cortell Fed Com #241H									
13,000.0	28.81	338.05	12,903.1	-171.2	-881.6	-164.4	10.00	10.00	0.00
13,100.0	38.81	338.05	12,986.1	-119.7	-902.4	-112.7	10.00	10.00	0.00
13,200.0	48.81	338.05	13,058.2	-55.5	-928.3	-48.4	10.00	10.00	0.00
13,210.0	49.81	338.05	13,064.7	-48.5	-931.1	-41.3	10.00	10.00	0.00
Z (WFMP D)									
13,300.0	58.81	338.05	13,117.2	19.2	-958.4	26.6	10.00	10.00	0.00
13,400.0	68.81	338.05	13,161.2	102.4	-991.9	110.0	10.00	10.00	0.00
13,500.0	78.81	338.05	13,189.1	191.3	-1,027.7	199.2	10.00	10.00	0.00
13,600.0	88.81	338.05	13,199.8	283.4	-1,064.9	291.6	10.00	10.00	0.00
13,611.9	90.00	338.05	13,200.0	294.4	-1,069.3	302.6	10.00	10.00	0.00
Start DLS 2.00 TFO 90.00									
13,700.0	90.00	339.81	13,200.0	376.7	-1,101.0	385.1	2.00	0.00	2.00
13,800.0	90.00	341.81	13,200.0	471.1	-1,133.8	479.8	2.00	0.00	2.00
13,900.0	90.00	343.81	13,200.0	566.6	-1,163.4	575.5	2.00	0.00	2.00
14,000.0	90.00	345.81	13,200.0	663.1	-1,189.6	672.2	2.00	0.00	2.00
14,100.0	90.00	347.81	13,200.0	760.5	-1,212.4	769.8	2.00	0.00	2.00
14,200.0	90.00	349.81	13,200.0	858.6	-1,231.8	868.0	2.00	0.00	2.00
14,300.0	90.00	351.81	13,200.0	957.3	-1,247.8	966.8	2.00	0.00	2.00
14,376.1	90.00	353.33	13,200.0	1,032.7	-1,257.6	1,042.3	2.00	0.00	2.00
BPP1 - Nina Cortell Fed Com #241H									
14,400.0	90.00	353.81	13,200.0	1,056.5	-1,260.3	1,066.1	2.00	0.00	2.00
14,500.0	90.00	355.81	13,200.0	1,156.1	-1,269.3	1,165.8	2.00	0.00	2.00
14,600.0	90.00	357.81	13,200.0	1,255.9	-1,274.9	1,265.7	2.00	0.00	2.00
14,687.2	90.00	359.56	13,200.0	1,343.1	-1,276.9	1,352.9	2.00	0.00	2.00
Start 8817.6 hold at 14687.2 MD									
14,700.0	90.00	359.56	13,200.0	1,355.9	-1,277.0	1,365.7	0.00	0.00	0.00
14,800.0	90.00	359.56	13,200.0	1,455.9	-1,277.7	1,465.7	0.00	0.00	0.00
14,900.0	90.00	359.56	13,200.0	1,555.9	-1,278.5	1,565.7	0.00	0.00	0.00
15,000.0	90.00	359.56	13,200.0	1,655.9	-1,279.3	1,665.7	0.00	0.00	0.00
15,100.0	90.00	359.56	13,200.0	1,755.9	-1,280.1	1,765.7	0.00	0.00	0.00
15,200.0	90.00	359.56	13,200.0	1,855.9	-1,280.8	1,865.7	0.00	0.00	0.00
15,300.0	90.00	359.56	13,200.0	1,955.9	-1,281.6	1,965.7	0.00	0.00	0.00
15,400.0	90.00	359.56	13,200.0	2,055.9	-1,282.4	2,065.7	0.00	0.00	0.00
15,500.0	90.00	359.56	13,200.0	2,155.9	-1,283.1	2,165.7	0.00	0.00	0.00
15,600.0	90.00	359.56	13,200.0	2,255.9	-1,283.9	2,265.7	0.00	0.00	0.00
15,697.6	90.00	359.56	13,200.0	2,353.4	-1,284.7	2,363.2	0.00	0.00	0.00
BPP2 - Nina Cortell Fed Com #241H									
15,700.0	90.00	359.56	13,200.0	2,355.9	-1,284.7	2,365.7	0.00	0.00	0.00
15,800.0	90.00	359.56	13,200.0	2,455.9	-1,285.5	2,465.7	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Single User Db	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Project:	Antelope Ridge	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site:	Nina Cortell	**North Reference:**	Grid
Well:	Nina Cortell Fed Com #241H	**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)
15,900.0	90.00	359.56	13,200.0	2,555.9	-1,286.2	2,565.7	0.00	0.00	0.00
16,000.0	90.00	359.56	13,200.0	2,655.9	-1,287.0	2,665.7	0.00	0.00	0.00
16,100.0	90.00	359.56	13,200.0	2,755.9	-1,287.8	2,765.7	0.00	0.00	0.00
16,200.0	90.00	359.56	13,200.0	2,855.9	-1,288.6	2,865.7	0.00	0.00	0.00
16,300.0	90.00	359.56	13,200.0	2,955.9	-1,289.3	2,965.7	0.00	0.00	0.00
16,400.0	90.00	359.56	13,200.0	3,055.8	-1,290.1	3,065.7	0.00	0.00	0.00
16,500.0	90.00	359.56	13,200.0	3,155.8	-1,290.9	3,165.7	0.00	0.00	0.00
16,600.0	90.00	359.56	13,200.0	3,255.8	-1,291.6	3,265.7	0.00	0.00	0.00
16,700.0	90.00	359.56	13,200.0	3,355.8	-1,292.4	3,365.7	0.00	0.00	0.00
16,800.0	90.00	359.56	13,200.0	3,455.8	-1,293.2	3,465.7	0.00	0.00	0.00
16,900.0	90.00	359.56	13,200.0	3,555.8	-1,294.0	3,565.7	0.00	0.00	0.00
17,000.0	90.00	359.56	13,200.0	3,655.8	-1,294.7	3,665.7	0.00	0.00	0.00
17,100.0	90.00	359.56	13,200.0	3,755.8	-1,295.5	3,765.7	0.00	0.00	0.00
17,200.0	90.00	359.56	13,200.0	3,855.8	-1,296.3	3,865.7	0.00	0.00	0.00
17,300.0	90.00	359.56	13,200.0	3,955.8	-1,297.1	3,965.7	0.00	0.00	0.00
17,400.0	90.00	359.56	13,200.0	4,055.8	-1,297.8	4,065.7	0.00	0.00	0.00
17,500.0	90.00	359.56	13,200.0	4,155.8	-1,298.6	4,165.7	0.00	0.00	0.00
17,600.0	90.00	359.56	13,200.0	4,255.8	-1,299.4	4,265.7	0.00	0.00	0.00
17,700.0	90.00	359.56	13,200.0	4,355.8	-1,300.1	4,365.7	0.00	0.00	0.00
17,800.0	90.00	359.56	13,200.0	4,455.8	-1,300.9	4,465.7	0.00	0.00	0.00
17,900.0	90.00	359.56	13,200.0	4,555.8	-1,301.7	4,565.7	0.00	0.00	0.00
18,000.0	90.00	359.56	13,200.0	4,655.8	-1,302.5	4,665.7	0.00	0.00	0.00
18,100.0	90.00	359.56	13,200.0	4,755.8	-1,303.2	4,765.7	0.00	0.00	0.00
18,200.0	90.00	359.56	13,200.0	4,855.8	-1,304.0	4,865.7	0.00	0.00	0.00
18,300.0	90.00	359.56	13,200.0	4,955.8	-1,304.8	4,965.7	0.00	0.00	0.00
18,337.0	90.00	359.56	13,200.0	4,992.8	-1,305.1	5,002.7	0.00	0.00	0.00
BPP3 - Nina Cortell Fed Com #241H									
18,400.0	90.00	359.56	13,200.0	5,055.8	-1,305.5	5,065.7	0.00	0.00	0.00
18,500.0	90.00	359.56	13,200.0	5,155.8	-1,306.3	5,165.7	0.00	0.00	0.00
18,600.0	90.00	359.56	13,200.0	5,255.8	-1,307.1	5,265.7	0.00	0.00	0.00
18,700.0	90.00	359.56	13,200.0	5,355.8	-1,307.9	5,365.7	0.00	0.00	0.00
18,800.0	90.00	359.56	13,200.0	5,455.8	-1,308.6	5,465.7	0.00	0.00	0.00
18,900.0	90.00	359.56	13,200.0	5,555.8	-1,309.4	5,565.7	0.00	0.00	0.00
19,000.0	90.00	359.56	13,200.0	5,655.8	-1,310.2	5,665.7	0.00	0.00	0.00
19,100.0	90.00	359.56	13,200.0	5,755.8	-1,311.0	5,765.7	0.00	0.00	0.00
19,200.0	90.00	359.56	13,200.0	5,855.8	-1,311.7	5,865.7	0.00	0.00	0.00
19,300.0	90.00	359.56	13,200.0	5,955.8	-1,312.5	5,965.7	0.00	0.00	0.00
19,400.0	90.00	359.56	13,200.0	6,055.8	-1,313.3	6,065.7	0.00	0.00	0.00
19,500.0	90.00	359.56	13,200.0	6,155.8	-1,314.0	6,165.7	0.00	0.00	0.00
19,600.0	90.00	359.56	13,200.0	6,255.8	-1,314.8	6,265.7	0.00	0.00	0.00
19,700.0	90.00	359.56	13,200.0	6,355.8	-1,315.6	6,365.7	0.00	0.00	0.00
19,800.0	90.00	359.56	13,200.0	6,455.7	-1,316.4	6,465.7	0.00	0.00	0.00
19,900.0	90.00	359.56	13,200.0	6,555.7	-1,317.1	6,565.7	0.00	0.00	0.00
20,000.0	90.00	359.56	13,200.0	6,655.7	-1,317.9	6,665.7	0.00	0.00	0.00
20,100.0	90.00	359.56	13,200.0	6,755.7	-1,318.7	6,765.7	0.00	0.00	0.00
20,200.0	90.00	359.56	13,200.0	6,855.7	-1,319.5	6,865.7	0.00	0.00	0.00
20,300.0	90.00	359.56	13,200.0	6,955.7	-1,320.2	6,965.7	0.00	0.00	0.00
20,400.0	90.00	359.56	13,200.0	7,055.7	-1,321.0	7,065.7	0.00	0.00	0.00
20,500.0	90.00	359.56	13,200.0	7,155.7	-1,321.8	7,165.7	0.00	0.00	0.00
20,600.0	90.00	359.56	13,200.0	7,255.7	-1,322.5	7,265.7	0.00	0.00	0.00
20,700.0	90.00	359.56	13,200.0	7,355.7	-1,323.3	7,365.7	0.00	0.00	0.00
20,800.0	90.00	359.56	13,200.0	7,455.7	-1,324.1	7,465.7	0.00	0.00	0.00
20,900.0	90.00	359.56	13,200.0	7,555.7	-1,324.9	7,565.7	0.00	0.00	0.00
20,977.5	90.00	359.56	13,200.0	7,633.2	-1,325.5	7,643.1	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Single User Db	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Project:	Antelope Ridge	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site:	Nina Cortell	**North Reference:**	Grid
Well:	Nina Cortell Fed Com #241H	**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)
BPP4 - Nina Cortell Fed Com #241H									
21,000.0	90.00	359.56	13,200.0	7,655.7	-1,325.6	7,665.7	0.00	0.00	0.00
21,100.0	90.00	359.56	13,200.0	7,755.7	-1,326.4	7,765.7	0.00	0.00	0.00
21,200.0	90.00	359.56	13,200.0	7,855.7	-1,327.2	7,865.7	0.00	0.00	0.00
21,300.0	90.00	359.56	13,200.0	7,955.7	-1,328.0	7,965.7	0.00	0.00	0.00
21,400.0	90.00	359.56	13,200.0	8,055.7	-1,328.7	8,065.7	0.00	0.00	0.00
21,500.0	90.00	359.56	13,200.0	8,155.7	-1,329.5	8,165.7	0.00	0.00	0.00
21,600.0	90.00	359.56	13,200.0	8,255.7	-1,330.3	8,265.7	0.00	0.00	0.00
21,700.0	90.00	359.56	13,200.0	8,355.7	-1,331.0	8,365.7	0.00	0.00	0.00
21,800.0	90.00	359.56	13,200.0	8,455.7	-1,331.8	8,465.7	0.00	0.00	0.00
21,900.0	90.00	359.56	13,200.0	8,555.7	-1,332.6	8,565.7	0.00	0.00	0.00
22,000.0	90.00	359.56	13,200.0	8,655.7	-1,333.4	8,665.7	0.00	0.00	0.00
22,100.0	90.00	359.56	13,200.0	8,755.7	-1,334.1	8,765.7	0.00	0.00	0.00
22,200.0	90.00	359.56	13,200.0	8,855.7	-1,334.9	8,865.7	0.00	0.00	0.00
22,300.0	90.00	359.56	13,200.0	8,955.7	-1,335.7	8,965.7	0.00	0.00	0.00
22,400.0	90.00	359.56	13,200.0	9,055.7	-1,336.4	9,065.7	0.00	0.00	0.00
22,500.0	90.00	359.56	13,200.0	9,155.7	-1,337.2	9,165.7	0.00	0.00	0.00
22,600.0	90.00	359.56	13,200.0	9,255.7	-1,338.0	9,265.7	0.00	0.00	0.00
22,700.0	90.00	359.56	13,200.0	9,355.7	-1,338.8	9,365.7	0.00	0.00	0.00
22,800.0	90.00	359.56	13,200.0	9,455.7	-1,339.5	9,465.7	0.00	0.00	0.00
22,900.0	90.00	359.56	13,200.0	9,555.7	-1,340.3	9,565.7	0.00	0.00	0.00
23,000.0	90.00	359.56	13,200.0	9,655.7	-1,341.1	9,665.7	0.00	0.00	0.00
23,100.0	90.00	359.56	13,200.0	9,755.6	-1,341.9	9,765.7	0.00	0.00	0.00
23,200.0	90.00	359.56	13,200.0	9,855.6	-1,342.6	9,865.7	0.00	0.00	0.00
23,300.0	90.00	359.56	13,200.0	9,955.6	-1,343.4	9,965.7	0.00	0.00	0.00
23,400.0	90.00	359.56	13,200.0	10,055.6	-1,344.2	10,065.7	0.00	0.00	0.00
23,500.0	90.00	359.56	13,200.0	10,155.6	-1,344.9	10,165.7	0.00	0.00	0.00
23,504.9	90.00	359.56	13,200.0	10,160.5	-1,345.0	10,170.5	0.00	0.00	0.00
TD at 23504.9 - BHL - Nina Cortell Fed Com #241H									

Planning Report

Database:	EDM 5000.14 Single User Db	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Project:	Antelope Ridge	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site:	Nina Cortell	**North Reference:**	Grid
Well:	Nina Cortell Fed Com #241H	**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 - Nina Cortell Fed C - plan hits target center - Point	0.00	0.00	12,627.0	-237.0	-855.1	509,493.00	705,283.00	32° 23' 56.240 N	103° 40' 5.625 W
FTP - Nina Cortell Fed C - plan misses target center by 0.2usft at 12962.4usft MD (12869.6 TVD, -187.0 N, -875.3 E) - Point	0.00	0.00	12,869.6	-187.0	-875.1	509,543.04	705,263.05	32° 23' 56.736 N	103° 40' 5.854 W
BPP2 - Nina Cortell Fed - plan misses target center by 0.3usft at 15697.6usft MD (13200.0 TVD, 2353.4 N, -1284.7 E) - Point	0.00	0.00	13,200.0	2,353.4	-1,284.4	512,083.34	704,853.72	32° 24' 21.899 N	103° 40' 10.444 W
BPP1 - Nina Cortell Fed - plan misses target center by 0.3usft at 14376.1usft MD (13200.0 TVD, 1032.7 N, -1257.6 E) - Point	0.00	0.00	13,200.0	1,032.8	-1,257.3	510,762.68	704,880.79	32° 24' 8.829 N	103° 40' 10.224 W
BPP3 - Nina Cortell Fed - plan misses target center by 0.3usft at 18337.0usft MD (13200.0 TVD, 4992.8 N, -1305.1 E) - Point	0.00	0.00	13,200.0	4,992.8	-1,304.8	514,722.80	704,833.28	32° 24' 48.019 N	103° 40' 10.492 W
BPP4 - Nina Cortell Fed - plan misses target center by 0.3usft at 20977.5usft MD (13200.0 TVD, 7633.2 N, -1325.5 E) - Point	0.00	0.00	13,200.0	7,633.2	-1,325.2	517,363.39	704,812.85	32° 25' 14.150 N	103° 40' 10.539 W
BHL - Nina Cortell Fed C - plan hits target center - Point	0.00	0.00	13,200.0	10,160.5	-1,345.0	519,891.00	704,793.00	32° 25' 39.163 N	103° 40' 10.587 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
928.2	928.2	Z(Rustler)		0.00	359.56
1,252.3	1,252.3	Z (Salado) (Top Salt)		0.00	359.56
3,135.9	3,135.9	Z (Castile (T))		0.00	359.56
4,846.8	4,846.8	Z (G30:CS14-CSB) (Base of Salt)		0.00	359.56
5,113.3	5,113.3	Z (G26: Bell Cyn.)		0.00	359.56
5,767.3	5,767.3	Z (G13: Cherry Cyn.)		0.00	359.56
6,999.2	6,999.2	Z (G7: Brushy Cyn.) Antelope Ridge		0.00	359.56
8,810.9	8,789.2	Z (G4: BSGL (CS9))		0.00	359.56
9,921.5	9,876.2	Z (L5.1: FBSG)		0.00	359.56
10,218.5	10,166.9	Z (L4.3: SBSC)		0.00	359.56
10,605.1	10,545.3	Z (L4.1: SBSG)		0.00	359.56
11,026.4	10,957.6	Z (L3.3: TBSC)		0.00	359.56
11,683.9	11,601.9	Z (L3.1: TBSG)		0.00	359.56
12,088.6	12,003.9	Z (L2: WFMP A)		0.00	359.56
12,419.0	12,334.1	Z (WFMP B)		0.00	359.56
12,806.2	12,720.9	Z (WFMP C)		0.00	359.56
13,210.0	13,064.7	Z (WFMP D)		0.00	359.56

Planning Report

Database:	EDM 5000.14 Single User Db	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Company:	Matador Production Company	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Project:	Antelope Ridge	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site:	Nina Cortell	**North Reference:**	Grid
Well:	Nina Cortell Fed Com #241H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
7,000.0	7,000.0	0.0	0.0	Start Build 1.00
8,182.6	8,174.2	-32.5	-117.2	Start 3340.9 hold at 8182.6 MD
11,523.5	11,444.3	-215.2	-776.6	Start Drop -1.50
12,311.9	12,227.1	-236.9	-854.7	Start 400.0 hold at 12311.9 MD
12,711.9	12,627.1	-236.9	-854.7	Start Build 10.00
13,611.9	13,200.0	294.6	-1,068.9	Start DLS 2.00 TFO 90.00
14,687.2	13,200.0	1,343.4	-1,276.4	Start 8817.6 hold at 14687.2 MD
23,504.9				TD at 23504.9

Offline Cementing - Intermediate Casing

Nina Cortell Fed Com 241H **Township/Range: 22S 32E**
SHL: 272' FSL & 1601' FWL Section 10 **Elevation Above Sea Level: 3790'**

Matador Production Company requests the option to cement the intermediate casing string offline as a prudent batch drilling efficiency of acreage development.

Cement Program

No changes to the cement program will take place for offline cementing.

Offline Cementing Procedure

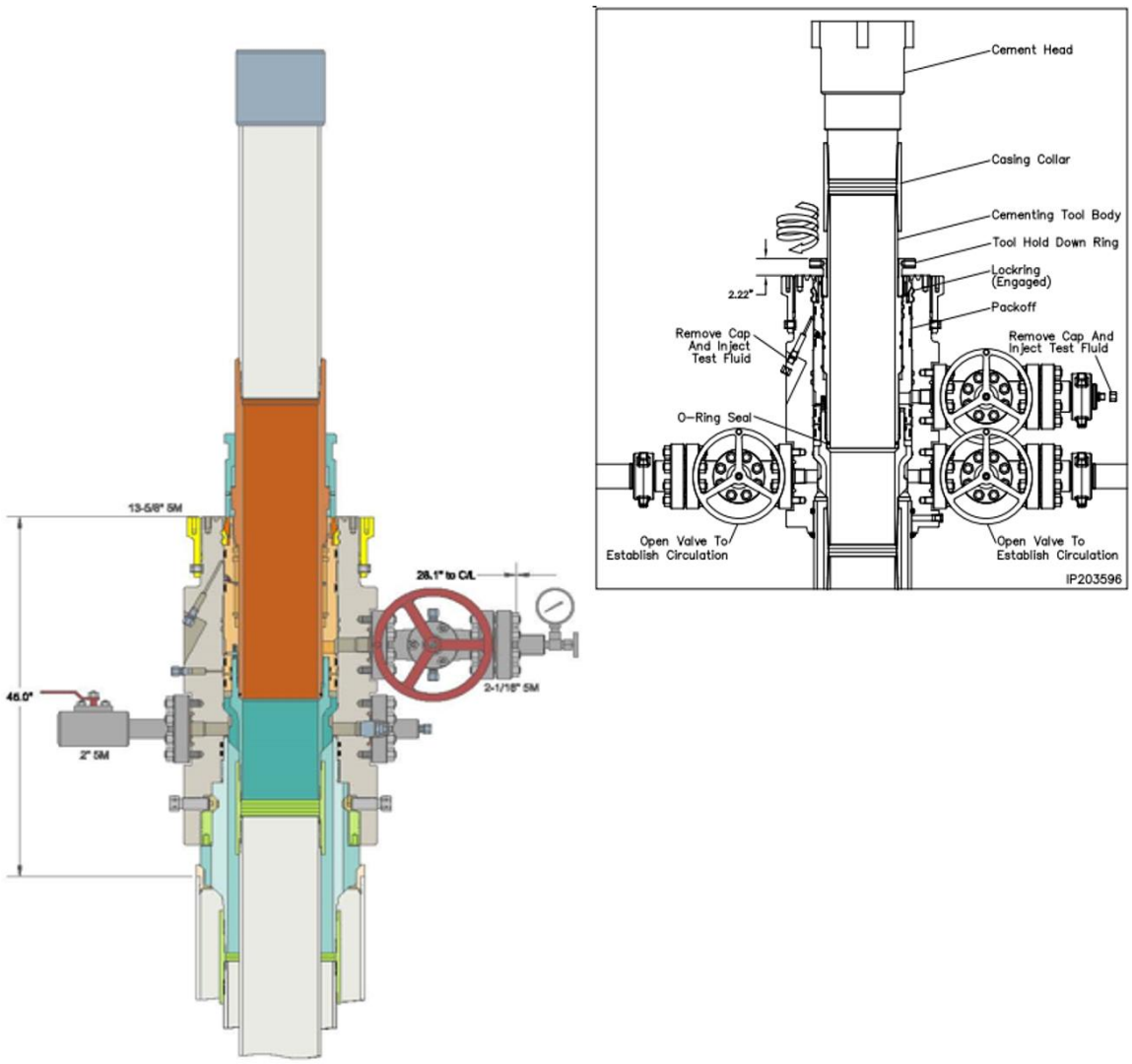
The operational sequence will be as follows. Well must meet the below requirements to be a candidate for offline cementing, if wellbore conditions change, BLM will be notified.

- No noticeable wellbore instability.
- Casing installed successfully with no issues.
- No observed shallow gas or other anomalies
- Intermediate hole section must have a MASP of 5,000 psi or lower.

1. Run casing as per normal operations. While running casing, confirm integrity of the float equipment (float collar and shoe).
2. Land Intermediate casing with fluted mandrel hanger through BOP stack.
3. Remove the landing joint and set packoff through BOP. Pressure test seals to 5,000 psi for 10 minutes. After the test, engage the lockring.
4. Notify the BLM 4 hours prior to N/D BOP and offline cementing. Confirm the following barriers are operational:
   a. Inside Casing: 2 float valves and mud weight sufficient to hold back pore pressure
   b. Annulus (outside) Casing: Packoff and mud weight sufficient to hold back pore pressure
5. Once the well is secure and BLM has been notified, proceed with nippling down BOP and installing cap flange.
6. Skid rig to the next well on the pad.
7. Rig up lines to take returns from wellhead through the cement choke manifold to the pits.
8. Attach a test pump with manifold to the open fitting and pump clean fluid until a stable test pressure of 5,000 psi is achieved. Hold pressure for 15 minutes. After a satisfactory test, bleed off test pressure, remove test pump and reinstall cap flange on the open fitting.
9. Attach the test pump to the upper outlet valve and pressure up the void area between the upper and lowermost O-rings until a stable test pressure of 5,000 psi is achieved. After a satisfactory test, bleed off all test pressure and leave the upper valve in the open position.
10. Place a mark across the top of the wellhead to monitor possible rotation of the tool during the cement job.
11. Install the casing hanger/packoff offline cementing tool. Rig up cement head and cementing lines. Pressure test lines against the cement head as per cement procedure.
12. Break circulation on well to confirm no restrictions. If shallow gas is encountered, shut in the well and reroute returns through the gas buster.
    a. Max anticipated time before circulating with cement truck is 24 hours.
13. Establish circulation and cement casing as per plan, taking returns through the two 2-1/16” 5M gate valves on the housing lower outlets. At plug bump, pressure test casing to 0.22 psi/ft per foot of casing string length or 1,500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield.
14. With cement in place, confirm well is static and floats are holding. Bleed off the cement pressure and remove cement head.
15. Remove the casing hanger/packoff offline cementing tool.
16. Install TA cap with pressure gauge for monitoring.

Offline Cementing - Intermediate Casing

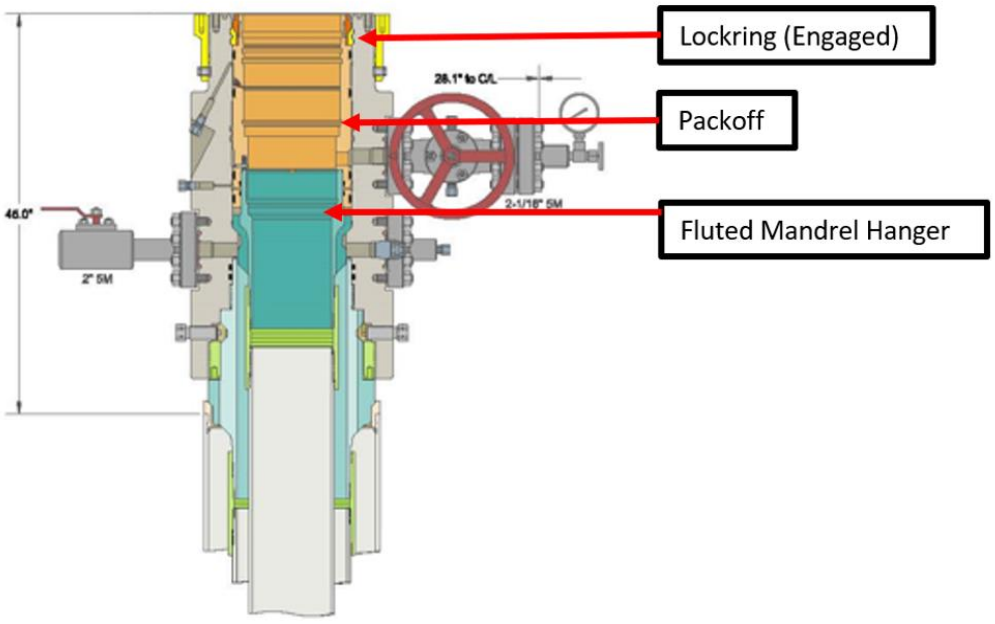
Figure 1: Cactus Offline Cementing Tool Schematic (5M tool)



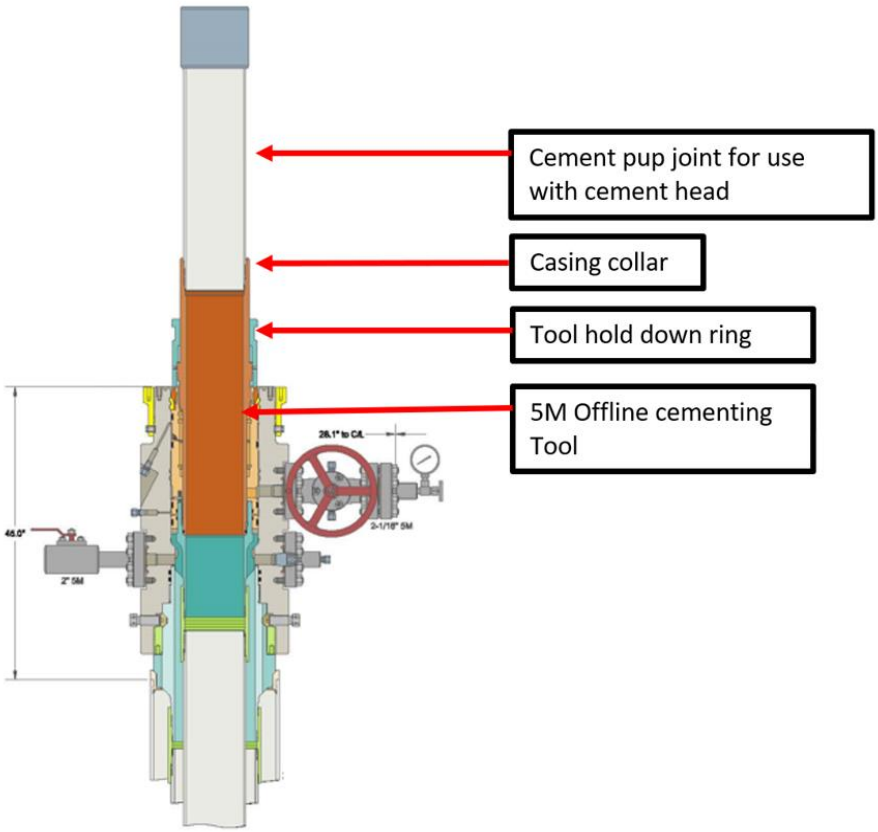
Offline Cementing - Intermediate Casing

Figure 2: Step-by-Step schematics procedure

Step 1: Landing the mandrel hanger and setting the packoff. The well is sealed with mud, two float valves, and packoff.

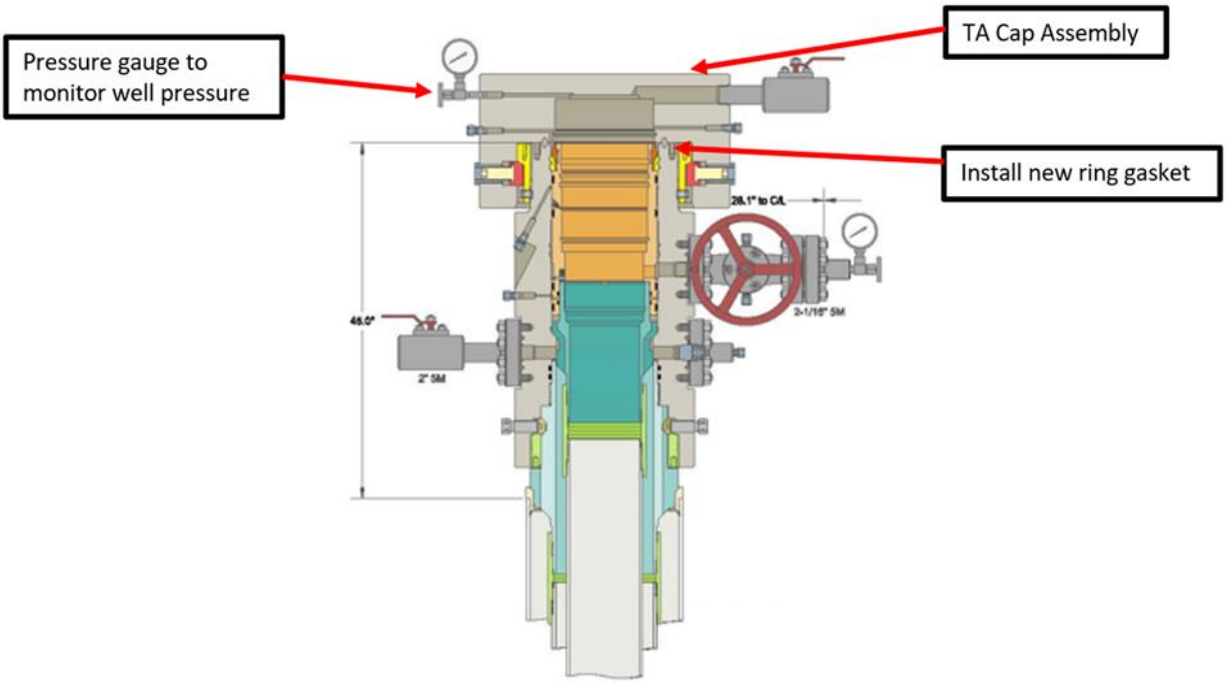


Step 2: Install casing hanger/packoff offline cementing tool.



Offline Cementing - Intermediate Casing

Step 3: Install TA cap with pressure gauge for monitoring.



Nina Cortell Fed Com 241H
SHL: 272' FSL & 1601' FWL Section 10
BHL: 110' FNL & 330' FWL Section 3
Township/Range: 22S 32E
Elevation Above Sea Level: 3790

Sundry Request

Matador request the option to amend the well design of the Nina Cortell Fed Com #221H and make the following changes to the current APD:

- Changed the well name from Nina Cortell Fed Com #221H to the Nina Cortell Fed Com #241H
- Change BHL from 60' FNL & 990' FWL to 110' FNL & 330' FWL. All perforations will be within the setback requirements as previously approved.
- Amend casing and cementing plan by adding an additional intermediate string of casing and revising set depths as described below.

Drilling Operation Plan

Proposed Drilling Depth: 23504' MD / 13200' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.3990862 N / -103.6700453 W
TD Lat/Long (NAD83): 32.4276692 N / -103.6700955 W

1. Estimated Tops

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	928	928	324	Anhydrite	Barren
Salado (Top of Salt)	1,252	1,252	1,883	Salt	Barren
Castile	3,135	3,135	1,711	Salt	Barren
Lamar (Base of Salt)	4,846	4,846	267	Limestone	Barren
Bell Canyon	5,113	5,113	654	Sandstone	Oil/Natural Gas
Cherry Canyon	5,767	5,767	1,232	Sandstone	Oil/Natural Gas
Brushy Canyon	6,999	6,999	1,790	Sandstone	Oil/Natural Gas
Bone Spring Lime	8,810	8,789	89,973	Limestone	Oil/Natural Gas
1st Bone Spring Sand	9,921	98,762	(88,596)	Sandstone	Oil/Natural Gas
2nd Bone Spring Carb	10,218	10,166	379	Carbonate	Oil/Natural Gas
2nd Bone Spring Sand	10,605	10,545	412	Sandstone	Oil/Natural Gas
3rd Bone Spring Carb	11,026	10,957	644	Carbonate	Oil/Natural Gas
3rd Bone Spring Sand	11,683	11,601	402	Sandstone	Oil/Natural Gas
Wolfcamp	12,088	12,003	-	Shale	Oil/Natural Gas
KOP	**12,711**	**12,627**	**-**	**Shale**	**Oil/Natural Gas**
TD	**23,504**	**13,200**	**-**	**Shale**	**Oil/Natural Gas**

2. Notable Zones

Drill Plan

Wolfcamp 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 375'.

3. Pressure Control

Equipment
Matador requests a variance for a 2M annular to be installed after running 16" casing.

A 18,000' 10,000-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 10M BOPE system will be installed. Test pressures will be 250 psi low and 10,000 psi high with the annular preventer being tested to 250 psi low and 5000 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 10M 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, Intermediate 2, 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 requests a variance to drill this well using a 5M annular preventer with a 10M BOP ram stack. The "Well Control Plan For 10M MASP Section of Wellbore" is attached.

Matador request the option to offline cement surface casing. The "Offline Cementing - Surface Casing" Procedure is attached for review. No changes in cement program are necessary.

Matador request the option to offline cement intermediate casing. The "Offline Cementing - Intermediate Casing" Procedure is attached for review. No changes in cement program are necessary.

Matador request the option to break test the BOP during batch drilling operations. The "Modified BOP Testing Procedure for Batch Drilling" Procedure is attached for review.

Matador request the option to utilize a spudder rig for setting surface and intermediate 1 casing strings.

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 - 975	0 - 975	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	12.25	0 - 5163	0 - 5163	10.75	45.5	HCL-80	BUTT-SC	1.125	1.125	1.8
Intermediate 2	9.875	0 - 12561	0 - 12477	7.625	29.7	P-110	BUTT	1.125	1.125	1.8
Production	6.75	0 - 23504	0 - 13200	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

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.

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	410	1.72	700	13.5	50%	0	C	5% NaCl + LCM
	Tail	250	1.38	347	14.8	50%	675	C	5% NaCl + LCM
Intermediate 1 w/ DV @ 1025'	Stg 2 Tail	140	1.78	242	13.5	10%	0	C	5% NaCl + LCM
	Stg 1 Lead	650	1.84	1197	12.5	50%	0	C	5% NaCl + LCM
	Stg 1 Tail	230	1.33	304	14.8	50%	4163	C	5% NaCl + LCM
Intermediate 2 w/ DV @ 5213'	Stg 2 Tail	650	1.78	1163	13.5	10%	0	C	5% NaCl + LCM
	Stg 1 Lead	360	3.66	1309	10.3	35%	0	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Stg 1 Tail	210	1.38	290	13.2	35%	11561	A/C	5% NaCl + LCM
Production	Tail	860	1.35	1163	13.2	25%	12361	A/C	Fluid Loss + Dispersant + Retarder

Matador Request option for approval of a contingency cement design utilizing backside bradenhead squeeze. First stage cement will be conventionally bringing tail cement to Brushy Canyon or Capitan based on area and casing string. Second stage will then be pumped down the backside with volumes sufficient to reach previous top of cement. If confidence is lacking in the squeeze job, a CBL will be ran to verify quality and results submitted to the BLM.

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 - 975	8.4 - 8.8	28-30	NC
Intermediate 1	12.25	Brine	1728 - 5163	9.8 - 10.2	28-30	NC
Intermediate 2	9.875	Cut Brine	5163 - 12561	8.6 - 9.4	28-30	NC
Production	6.75	OBM/Cut Brine	12561 - 23504	11.5 - 13.5	50-65	<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

7. Down Hole Conditions

No abnormal pressure or temperature is expected. Bottom hole pressure is 9266 psi. Maximum anticipated surface pressure is 6362 psi. Expected bottom hole temperature is 190 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.

Company: Matador Production Company
Well: Nina Cortell Fed Com #241H
County: Lea County, NM
Wellbore: Wellbore #1
Plan: BLM Plan #1
Date: 2/21/2024

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 5.92°
To convert a Magnetic Direction to a True Direction, Add 6.28° East
To convert a True Direction to a Grid Direction, Subtract 0.36°

Azimuths to Grid North
True North: -0.36°
Magnetic North: 5.92°

Magnetic Field
Strength: 47341.9snT
Dip Angle: 60.12°
Date: 2/21/2024
Model: IGRF2015

SURVEY PROGRAM

Depth From	Depth To	Survey/Plan	Tool
0.0	23504.9	BLM Plan #1 (Wellbore #1)	MWD

WELL DETAILS: Nina Cortell Fed Com #241H

GL @ 3790.0 KB @ 3818.5usft (Original Well Elev)

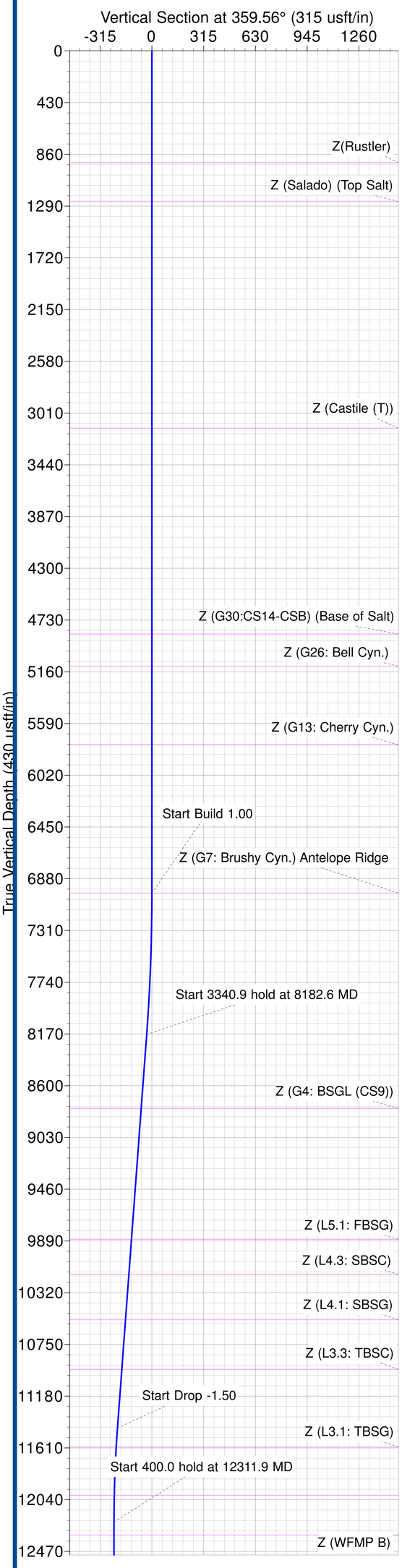
+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.0	0.0	509729.98	706138.05	32° 23' 58.532 N	103° 39' 55.635 W	

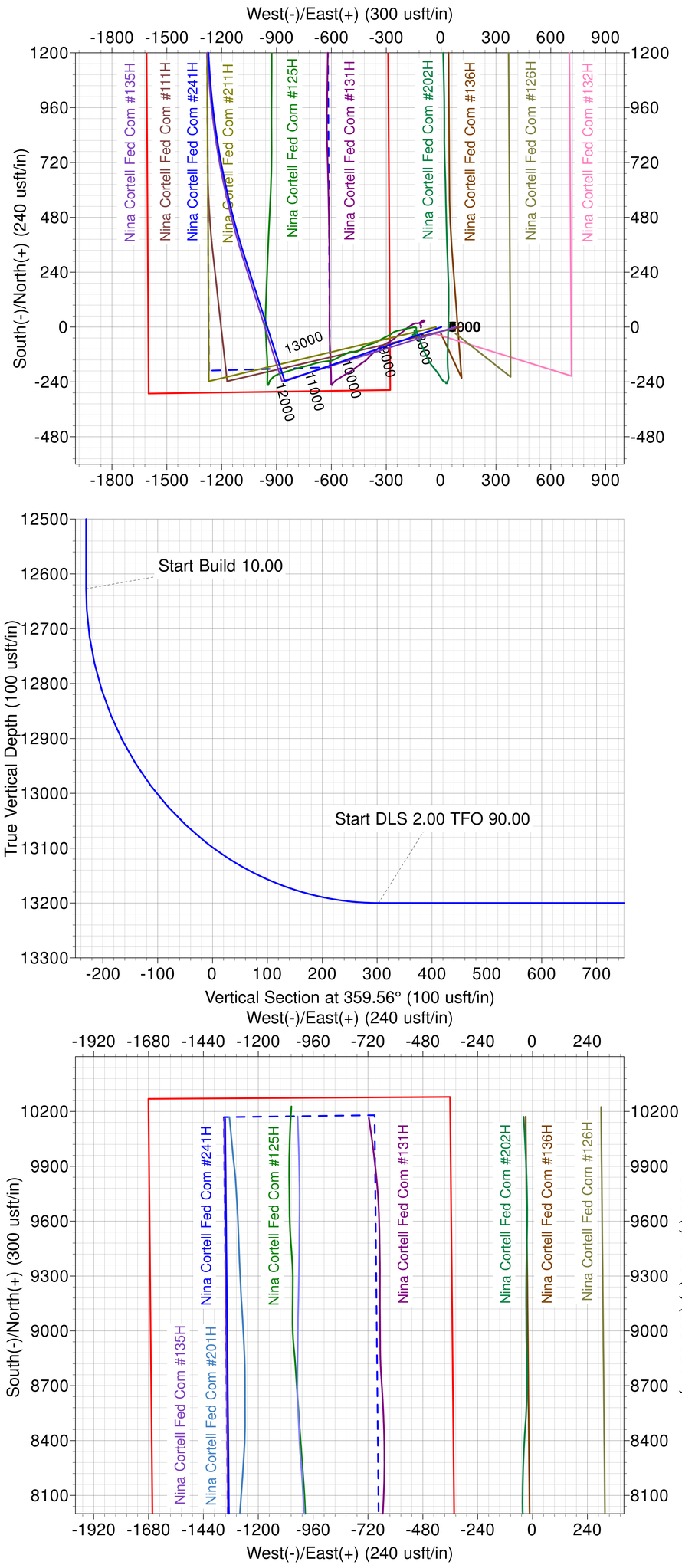
DESIGN TARGET DETAILS

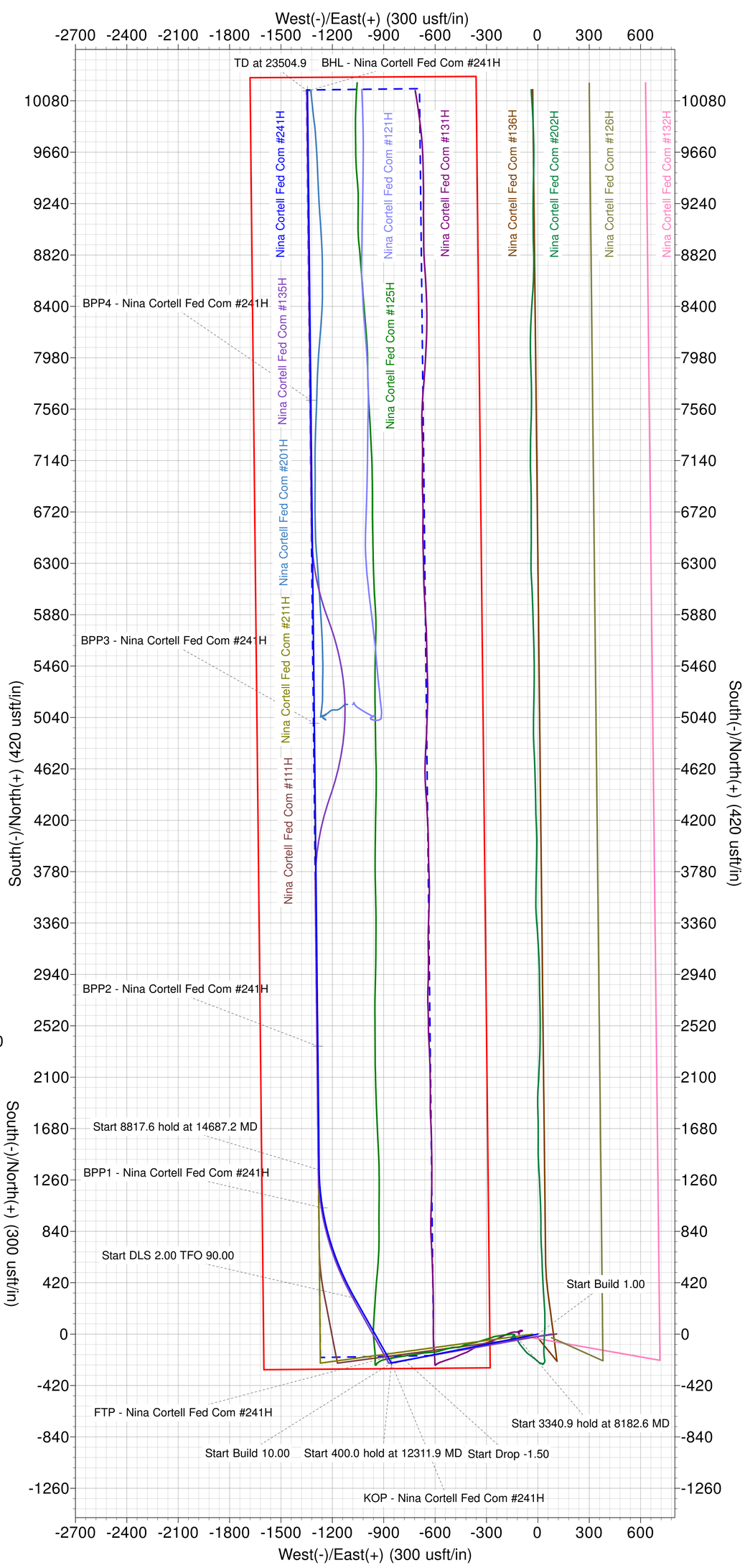
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
KOP - Nina Cortell Fed Com #241H	12627.0	-237.0	-855.1	509493.00	705283.00	32° 23' 56.240 N	103° 40' 5.625 W
BHL - Nina Cortell Fed Com #241H	13200.0	10160.5	-1345.0	519891.00	704793.00	32° 25' 39.163 N	103° 40' 10.587 W
BPP1 - Nina Cortell Fed Com #241H	13200.0	1032.8	-1257.3	510762.68	704880.79	32° 24' 8.829 N	103° 40' 10.224 W
BPP2 - Nina Cortell Fed Com #241H	13200.0	2353.4	-1284.4	512083.34	704853.72	32° 24' 21.899 N	103° 40' 10.444 W
BPP3 - Nina Cortell Fed Com #241H	13200.0	4992.8	-1304.8	514722.80	704833.29	32° 24' 48.019 N	103° 40' 10.492 W
BPP4 - Nina Cortell Fed Com #241H	13200.0	7633.2	-1325.2	517363.38	704812.85	32° 25' 14.150 N	103° 40' 10.539 W
FTP - Nina Cortell Fed Com #241H	12869.6	-187.0	-875.1	509543.04	705263.05	32° 23' 56.736 N	103° 40' 5.854 W

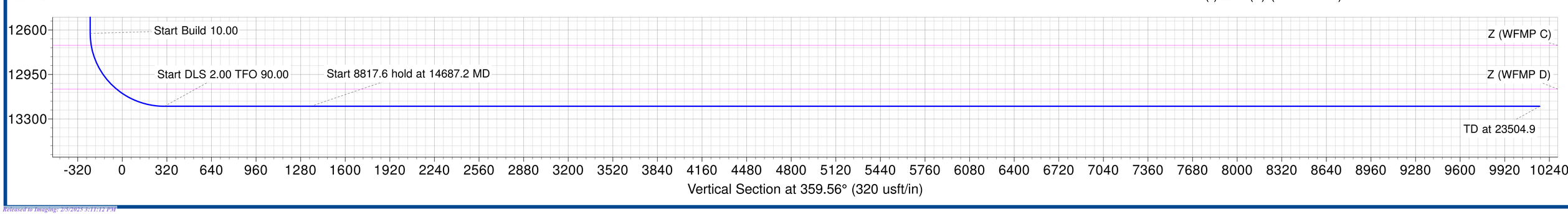
SECTION DETAILS

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	
7000.0	0.00	0.00	7000.0	0.0	0.0	0.00	0.00	0.0	Start Build 1.00
8182.6	11.83	254.51	8174.2	-32.5	-117.2	1.00	254.51	-31.6	Start 3340.9 hold at 8182.6 MD
11523.5	11.83	254.51	11444.2	-215.3	-777.0	0.00	0.00	-209.4	Start Drop -1.50
12311.9	0.00	0.00	12227.0	-237.0	-855.1	1.50	180.00	-230.4	Start 400.0 hold at 12311.9 MD
12711.9	0.00	0.00	12627.0	-237.0	-855.1	0.00	0.00	-230.4	Start Build 10.00
13611.9	90.00	338.05	13200.0	294.4	-1069.3	10.00	338.05	302.6	Start DLS 2.00 TFO 90.00
14687.2	90.00	359.56	13200.0	1343.1	-1276.9	2.00	90.00	1352.9	Start 8817.6 hold at 14687.2 MD
23504.9	90.00	359.56	13200.0	10160.5	-1345.0	0.00	0.00	10170.5	TD at 23504.9









Matador Production Company

Antelope Ridge
Nina Cortell
Nina Cortell Fed Com #241H

Wellbore #1
BLM Plan #2

Anticollision Report

21 February, 2024

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Reference BLM Plan #2

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

Survey Tool Program **Date** 2/21/2024

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	23,504.9	BLM Plan #2 (Wellbore #1)	MWD	OWSG MWD - Standard

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Nina Cortell						
Nina Cortell Fed Com #111H - Wellbore #1 - BLM Plan #	1,908.8	1,917.4	18.8	5.4	1.404	Level 3, CC, ES, SF
Nina Cortell Fed Com #113H - Wellbore #1 - BLM Plan #	7,282.7	7,416.0	1,828.1	1,775.5	34.700	CC
Nina Cortell Fed Com #113H - Wellbore #1 - BLM Plan #	7,300.0	7,428.0	1,828.2	1,775.4	34.635	ES
Nina Cortell Fed Com #113H - Wellbore #1 - BLM Plan #	23,504.9	20,223.2	4,365.2	4,102.8	16.635	SF
Nina Cortell Fed Com #114H - Wellbore #1 - BLM Plan #	1,500.0	1,499.0	2,533.3	2,523.0	246.192	CC
Nina Cortell Fed Com #114H - Wellbore #1 - BLM Plan #	1,600.0	1,570.8	2,533.8	2,523.0	232.543	ES
Nina Cortell Fed Com #114H - Wellbore #1 - BLM Plan #	23,504.9	20,209.1	5,355.5	5,060.4	18.144	SF
Nina Cortell Fed Com #121H - Wellbore #1 - Actual Surv	19,245.9	10,643.1	3,184.3	3,116.8	47.126	CC
Nina Cortell Fed Com #121H - Wellbore #1 - Actual Surv	20,200.0	20,200.0	3,203.4	3,074.2	24.797	ES, SF
Nina Cortell Fed Com #125H - Wellbore #1 - Actual	686.7	687.7	135.4	131.1	31.352	CC
Nina Cortell Fed Com #125H - Wellbore #1 - Actual	1,200.0	1,199.9	136.6	128.7	17.259	ES
Nina Cortell Fed Com #125H - Wellbore #1 - Actual	10,830.3	10,794.6	325.0	248.8	4.264	SF
Nina Cortell Fed Com #126H - Wellbore #1 - BLM Plan #	1,200.0	1,200.0	85.3	77.1	10.473	CC, ES
Nina Cortell Fed Com #126H - Wellbore #1 - BLM Plan #	7,500.0	7,522.0	453.7	400.9	8.598	SF
Nina Cortell Fed Com #127H - Wellbore #1 - BLM Plan #	7,358.0	7,507.8	1,736.0	1,682.7	32.578	CC, ES
Nina Cortell Fed Com #127H - Wellbore #1 - BLM Plan #	23,504.9	21,069.0	3,784.7	3,495.7	13.097	SF
Nina Cortell Fed Com #128H - Wellbore #1 - BLM Plan #	2,000.0	1,999.0	2,453.3	2,439.5	176.823	CC
Nina Cortell Fed Com #128H - Wellbore #1 - BLM Plan #	2,100.0	2,072.0	2,453.9	2,439.4	169.417	ES
Nina Cortell Fed Com #128H - Wellbore #1 - BLM Plan #	23,504.9	21,138.3	4,849.7	4,532.5	15.287	SF
Nina Cortell Fed Com #131H - Actual - Actual	10,737.9	10,710.0	84.1	6.6	1.085	Level 2, CC, ES, SF
Nina Cortell Fed Com #132H - Wellbore #1 - BLM Plan #	1,997.9	1,999.5	36.4	22.6	2.639	CC
Nina Cortell Fed Com #132H - Wellbore #1 - BLM Plan #	2,000.0	2,001.6	36.4	22.6	2.636	ES
Nina Cortell Fed Com #132H - Wellbore #1 - BLM Plan #	2,100.0	2,101.1	37.7	23.2	2.597	SF
Nina Cortell Fed Com #133H - Wellbore #1 - Wellbore #1	7,231.3	7,323.0	2,065.4	2,013.9	40.088	CC
Nina Cortell Fed Com #133H - Wellbore #1 - Wellbore #1	7,300.0	7,392.2	2,065.8	2,013.8	39.725	ES
Nina Cortell Fed Com #133H - Wellbore #1 - Wellbore #1	23,504.9	22,057.0	3,471.7	3,143.8	10.589	SF
Nina Cortell Fed Com #134H - Wellbore #1 - Wellbore #1	0.0	0.0	2,343.3			
Nina Cortell Fed Com #134H - Wellbore #1 - Wellbore #1	1,200.0	1,190.5	2,348.6	2,340.7	296.811	ES
Nina Cortell Fed Com #134H - Wellbore #1 - Wellbore #1	23,504.9	22,275.0	4,721.7	4,380.3	13.830	SF
Nina Cortell Fed Com #135H - Wellbore #1 - BLM Plan #	4,104.8	4,110.8	51.0	22.1	1.765	CC, ES, SF
Nina Cortell Fed Com #136H - Wellbore #1 - BLM Plan #	1,000.0	1,000.0	30.0	23.3	4.468	CC, ES
Nina Cortell Fed Com #136H - Wellbore #1 - BLM Plan #	1,200.0	1,199.0	33.0	24.9	4.081	SF
Nina Cortell Fed Com #137H (Previous #223H) - Wellbor	7,477.6	7,658.4	1,636.5	1,582.5	30.293	CC
Nina Cortell Fed Com #137H (Previous #223H) - Wellbor	7,500.0	7,674.8	1,636.6	1,582.5	30.218	ES
Nina Cortell Fed Com #137H (Previous #223H) - Wellbor	23,504.9	21,657.1	3,167.8	2,865.4	10.478	SF
Nina Cortell Fed Com #138H (Previous #224H) - Wellbor	2,500.0	2,500.0	2,423.3	2,405.8	138.765	CC
Nina Cortell Fed Com #138H (Previous #224H) - Wellbor	2,600.0	2,573.0	2,423.8	2,405.7	134.119	ES

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**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
Nina Cortell						
Nina Cortell Fed Com #138H (Previous #224H) - Wellbor	23,504.9	21,598.7	4,332.4	4,006.4	13.291	SF
Nina Cortell Fed Com #201H - Wellbore #1 - Actual Surv	23,504.9	17,013.0	1,001.2	872.8	7.798	CC, ES, SF
Nina Cortell Fed Com #202H - Wellbore #1 - Actual	5,629.3	5,631.4	129.1	89.8	3.283	CC
Nina Cortell Fed Com #202H - Wellbore #1 - Actual	5,700.0	5,701.8	129.3	89.5	3.246	ES
Nina Cortell Fed Com #202H - Wellbore #1 - Actual	6,100.0	6,101.1	135.6	93.0	3.178	SF
Nina Cortell Fed Com #203H - Sidetrack - Sidetrack	7,512.8	7,691.5	1,804.1	1,757.4	38.631	CC, ES
Nina Cortell Fed Com #203H - Sidetrack - Sidetrack	23,504.9	22,292.0	2,906.5	2,580.7	8.919	SF
Nina Cortell Fed Com #203H - Wellbore #1 - Wellbore #1	7,488.5	7,658.9	1,771.1	1,717.4	32.990	CC
Nina Cortell Fed Com #203H - Wellbore #1 - Wellbore #1	7,500.0	7,669.0	1,771.1	1,717.3	32.942	ES
Nina Cortell Fed Com #203H - Wellbore #1 - Wellbore #1	10,900.0	10,984.8	2,116.1	2,038.4	27.223	SF
Nina Cortell Fed Com #204H - Wellbore #1 - Wellbore #1	0.0	0.0	2,313.2			
Nina Cortell Fed Com #204H - Wellbore #1 - Wellbore #1	1,100.0	1,089.6	2,319.6	2,312.5	326.895	ES
Nina Cortell Fed Com #204H - Wellbore #1 - Wellbore #1	23,504.9	22,191.0	4,158.8	3,817.7	12.191	SF
Nina Cortell Fed Com #211H - Wellbore #1 - BLM Plan #	1,500.0	1,501.0	30.1	19.8	2.923	CC, ES
Nina Cortell Fed Com #211H - Wellbore #1 - BLM Plan #	1,600.0	1,600.5	31.0	20.0	2.815	SF

Offset Design Nina Cortell - Nina Cortell Fed Com #111H - 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	0.0	0.0	0.0	0.0	89.30	1.3	110.0	110.0				
100.0	100.0	100.0	100.0	0.1	0.1	89.30	1.3	110.0	110.0	109.7	0.26	429.099	
200.0	200.0	200.0	200.0	0.5	0.5	89.30	1.3	110.0	110.0	109.0	0.97	113.004	
300.0	300.0	300.0	300.0	0.8	0.8	89.30	1.3	110.0	110.0	108.3	1.69	65.070	
400.0	400.0	400.0	400.0	1.2	1.2	89.30	1.3	110.0	110.0	107.6	2.41	45.690	
500.0	500.0	500.0	500.0	1.6	1.6	89.30	1.3	110.0	110.0	106.9	3.12	35.204	
600.0	600.0	600.0	600.0	1.9	1.9	89.30	1.3	110.0	110.0	106.1	3.84	28.633	
700.0	700.0	700.0	700.0	2.3	2.3	89.30	1.3	110.0	110.0	105.4	4.56	24.129	
800.0	800.0	800.0	800.0	2.6	2.6	89.30	1.3	110.0	110.0	104.7	5.27	20.850	
900.0	900.0	900.0	900.0	3.0	3.0	89.30	1.3	110.0	110.0	104.0	5.99	18.355	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	89.30	1.3	110.0	110.0	103.3	6.71	16.394	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	89.30	1.3	110.0	110.0	102.6	7.43	14.811	
1,200.0	1,200.0	1,204.1	1,204.1	4.1	4.1	89.39	1.2	109.0	109.1	100.9	8.15	13.380	
1,300.0	1,300.0	1,311.6	1,311.2	4.4	4.4	90.18	-0.3	101.0	101.6	92.8	8.86	11.479	
1,400.0	1,400.0	1,415.7	1,414.3	4.8	4.8	92.08	-3.1	86.0	87.2	77.7	9.53	9.152	
1,500.0	1,500.0	1,514.3	1,511.5	5.1	5.2	95.03	-6.1	69.8	71.0	60.8	10.23	6.942	
1,600.0	1,600.0	1,612.9	1,608.7	5.5	5.6	99.71	-9.2	53.6	55.0	44.1	10.93	5.034	
1,700.0	1,700.0	1,711.5	1,705.9	5.9	6.0	108.07	-12.2	37.3	39.7	28.0	11.66	3.406	
1,800.0	1,800.0	1,810.1	1,803.1	6.2	6.3	125.77	-15.2	21.1	26.2	13.7	12.45	2.104	
1,900.0	1,900.0	1,908.7	1,900.2	6.6	6.7	165.02	-18.2	4.9	18.9	5.5	13.33	1.416	Level 3
1,908.8	1,908.8	1,917.4	1,908.8	6.6	6.8	169.45	-18.5	3.4	18.8	5.4	13.39	1.404	Level 3, CC, ES, SF
2,000.0	2,000.0	2,007.3	1,997.4	6.9	7.2	-151.89	-21.2	-11.4	24.2	10.3	13.94	1.738	
2,100.0	2,100.0	2,105.9	2,094.6	7.3	7.6	-131.35	-24.3	-27.6	37.1	22.6	14.54	2.554	
2,200.0	2,200.0	2,204.5	2,191.8	7.7	8.0	-121.92	-27.3	-43.8	52.3	37.1	15.20	3.438	
2,300.0	2,300.0	2,303.0	2,289.0	8.0	8.4	-116.79	-30.3	-60.0	68.1	52.3	15.89	4.289	
2,400.0	2,400.0	2,401.6	2,386.2	8.4	8.8	-113.61	-33.3	-76.3	84.4	67.8	16.59	5.086	
2,500.0	2,500.0	2,500.2	2,483.4	8.7	9.2	-111.46	-36.4	-92.5	100.8	83.5	17.29	5.826	
2,600.0	2,600.0	2,601.2	2,580.6	9.1	9.7	-109.91	-39.4	-108.7	117.2	99.2	18.01	6.508	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #111H - 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
2,700.0	2,700.0	2,702.6	2,677.8	9.4	10.1	-108.74	-42.4	-124.9	133.8	115.1	18.74	7.141	
2,800.0	2,800.0	2,804.0	2,775.0	9.8	10.5	-107.83	-45.4	-141.2	150.4	130.9	19.46	7.728	
2,900.0	2,900.0	2,905.4	2,872.2	10.2	11.0	-107.11	-48.4	-157.4	167.0	146.8	20.19	8.273	
3,000.0	3,000.0	3,006.8	2,969.4	10.5	11.4	-106.51	-51.5	-173.6	183.7	162.7	20.91	8.782	
3,100.0	3,100.0	3,108.2	3,066.6	10.9	11.9	-106.01	-54.5	-189.9	200.3	178.7	21.64	9.256	
3,200.0	3,200.0	3,190.3	3,163.8	11.2	12.2	-105.59	-57.5	-206.1	217.0	194.7	22.30	9.732	
3,300.0	3,300.0	3,288.9	3,261.0	11.6	12.7	-105.23	-60.5	-222.3	233.7	210.7	23.02	10.153	
3,400.0	3,400.0	3,387.5	3,358.2	12.0	13.1	-104.92	-63.5	-238.5	250.4	226.6	23.74	10.548	
3,500.0	3,500.0	3,486.1	3,455.4	12.3	13.5	-104.64	-66.6	-254.8	267.1	242.6	24.46	10.921	
3,600.0	3,600.0	3,584.7	3,552.6	12.7	14.0	-104.40	-69.6	-271.0	283.8	258.6	25.18	11.272	
3,700.0	3,700.0	3,683.3	3,649.8	13.0	14.4	-104.19	-72.6	-287.2	300.5	274.6	25.90	11.604	
3,800.0	3,800.0	3,781.9	3,747.0	13.4	14.8	-104.00	-75.6	-303.4	317.2	290.6	26.62	11.917	
3,900.0	3,900.0	3,880.5	3,844.2	13.8	15.3	-103.82	-78.7	-319.7	333.9	306.6	27.34	12.214	
4,000.0	4,000.0	3,979.0	3,941.4	14.1	15.7	-103.67	-81.7	-335.9	350.6	322.6	28.06	12.496	
4,100.0	4,100.0	4,077.6	4,038.6	14.5	16.2	-103.52	-84.7	-352.1	367.3	338.6	28.78	12.764	
4,200.0	4,200.0	4,176.2	4,135.8	14.8	16.6	-103.39	-87.7	-368.4	384.1	354.6	29.50	13.018	
4,300.0	4,300.0	4,274.8	4,233.0	15.2	17.0	-103.28	-90.7	-384.6	400.8	370.6	30.22	13.261	
4,400.0	4,400.0	4,373.4	4,330.2	15.5	17.5	-103.17	-93.8	-400.8	417.5	386.6	30.95	13.491	
4,500.0	4,500.0	4,472.0	4,427.4	15.9	17.9	-103.07	-96.8	-417.0	434.2	402.6	31.67	13.712	
4,600.0	4,600.0	4,570.6	4,524.6	16.3	18.3	-102.97	-99.8	-433.3	451.0	418.6	32.39	13.922	
4,700.0	4,700.0	4,669.2	4,621.8	16.6	18.8	-102.88	-102.8	-449.5	467.7	434.6	33.12	14.124	
4,800.0	4,800.0	4,767.8	4,719.0	17.0	19.2	-102.80	-105.8	-465.7	484.4	450.6	33.84	14.316	
4,900.0	4,900.0	4,866.3	4,816.1	17.3	19.7	-102.73	-108.9	-482.0	501.2	466.6	34.56	14.501	
5,000.0	5,000.0	4,964.9	4,913.3	17.7	20.1	-102.66	-111.9	-498.2	517.9	482.6	35.28	14.678	
5,100.0	5,100.0	5,063.5	5,010.5	18.1	20.5	-102.59	-114.9	-514.4	534.6	498.6	36.01	14.847	
5,200.0	5,200.0	5,162.1	5,107.7	18.4	21.0	-102.53	-117.9	-530.6	551.4	514.6	36.73	15.010	
5,300.0	5,300.0	5,260.7	5,204.9	18.8	21.4	-102.47	-121.0	-546.9	568.1	530.6	37.46	15.167	
5,400.0	5,400.0	5,359.3	5,302.1	19.1	21.9	-102.42	-124.0	-563.1	584.8	546.6	38.18	15.318	
5,500.0	5,500.0	5,457.9	5,399.3	19.5	22.3	-102.36	-127.0	-579.3	601.6	562.7	38.90	15.463	
5,600.0	5,600.0	5,556.5	5,496.5	19.8	22.7	-102.32	-130.0	-595.5	618.3	578.7	39.63	15.603	
5,700.0	5,700.0	5,655.1	5,593.7	20.2	23.2	-102.27	-133.0	-611.8	635.0	594.7	40.35	15.737	
5,800.0	5,800.0	5,753.6	5,690.9	20.6	23.6	-102.22	-136.1	-628.0	651.8	610.7	41.08	15.867	
5,900.0	5,900.0	5,852.2	5,788.1	20.9	24.1	-102.18	-139.1	-644.2	668.5	626.7	41.80	15.993	
6,000.0	6,000.0	5,950.8	5,885.3	21.3	24.5	-102.14	-142.1	-660.5	685.2	642.7	42.53	16.114	
6,100.0	6,100.0	6,049.4	5,982.5	21.6	24.9	-102.10	-145.1	-676.7	702.0	658.7	43.25	16.231	
6,200.0	6,200.0	6,148.0	6,079.7	22.0	25.4	-102.07	-148.1	-692.9	718.7	674.7	43.97	16.344	
6,300.0	6,300.0	6,246.6	6,176.9	22.4	25.8	-102.03	-151.2	-709.1	735.5	690.8	44.70	16.453	
6,400.0	6,400.0	6,345.2	6,274.1	22.7	26.3	-102.00	-154.2	-725.4	752.2	706.8	45.42	16.559	
6,500.0	6,500.0	6,443.8	6,371.3	23.1	26.7	-101.97	-157.2	-741.6	768.9	722.8	46.15	16.662	
6,600.0	6,600.0	6,542.3	6,468.5	23.4	27.2	-101.94	-160.2	-757.8	785.7	738.8	46.87	16.761	
6,700.0	6,700.0	6,640.9	6,565.7	23.8	27.6	-101.91	-163.3	-774.1	802.4	754.8	47.60	16.858	
6,800.0	6,800.0	6,739.5	6,662.9	24.1	28.0	-101.88	-166.3	-790.3	819.1	770.8	48.32	16.951	
6,900.0	6,900.0	6,838.1	6,760.1	24.5	28.5	-101.85	-169.3	-806.5	835.9	786.8	49.05	17.042	
7,000.0	7,000.0	6,936.7	6,857.3	24.9	28.9	-101.83	-172.3	-822.7	852.6	802.8	49.77	17.130	
7,100.0	7,100.0	7,035.4	6,954.6	25.2	29.4	3.68	-175.3	-839.0	868.5	818.0	50.49	17.202	
7,200.0	7,200.0	7,134.4	7,052.2	25.5	29.8	3.71	-178.4	-855.3	882.7	831.5	51.19	17.241	
7,300.0	7,299.9	7,233.6	7,150.0	25.9	30.3	3.74	-181.4	-871.6	895.1	843.2	51.90	17.246	
7,400.0	7,399.7	7,333.1	7,248.0	26.2	30.7	3.78	-184.5	-888.0	905.8	853.2	52.61	17.217	
7,500.0	7,499.4	7,432.7	7,346.2	26.6	31.2	3.83	-187.5	-904.4	914.8	861.4	53.32	17.156	
7,600.0	7,598.9	7,532.4	7,444.6	26.9	31.6	3.88	-190.6	-920.8	922.0	868.0	54.03	17.064	
7,700.0	7,698.3	7,632.2	7,543.0	27.2	32.0	3.94	-193.6	-937.2	927.5	872.7	54.74	16.942	
7,800.0	7,797.4	7,732.1	7,641.5	27.6	32.5	4.01	-196.7	-953.7	931.3	875.8	55.46	16.792	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #111H - 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
7,900.0	7,896.3	7,832.1	7,740.1	27.9	32.9	4.09	-199.8	-970.1	933.3	877.1	56.17	16.614	
8,000.0	7,994.9	7,932.1	7,838.6	28.3	33.4	4.18	-202.8	-986.6	933.6	876.7	56.89	16.411	
8,100.0	8,093.3	8,032.1	7,937.2	28.6	33.8	4.28	-205.9	-1,003.0	932.1	874.5	57.60	16.182	
8,182.6	8,174.2	8,114.6	8,018.6	28.9	34.2	4.36	-208.4	-1,016.6	929.6	871.4	58.19	15.974	
8,200.0	8,191.3	8,132.0	8,035.7	29.0	34.3	4.38	-208.9	-1,019.5	928.9	870.6	58.32	15.929	
8,300.0	8,289.1	8,231.9	8,134.2	29.4	34.7	4.49	-212.0	-1,035.9	925.2	866.2	59.03	15.672	
8,400.0	8,387.0	8,331.8	8,232.7	29.7	35.2	4.60	-215.1	-1,052.4	921.4	861.7	59.75	15.421	
8,500.0	8,484.9	8,431.8	8,331.2	30.1	35.6	4.71	-218.1	-1,068.8	917.7	857.2	60.47	15.176	
8,600.0	8,582.8	8,531.7	8,429.7	30.5	36.1	4.82	-221.2	-1,085.3	913.9	852.8	61.19	14.936	
8,700.0	8,680.6	8,631.6	8,528.2	30.9	36.5	4.93	-224.3	-1,101.7	910.2	848.3	61.91	14.702	
8,800.0	8,778.5	8,731.5	8,626.7	31.2	37.0	5.04	-227.3	-1,118.2	906.5	843.8	62.63	14.473	
8,900.0	8,876.4	8,831.4	8,725.3	31.6	37.4	5.15	-230.4	-1,134.6	902.7	839.4	63.36	14.248	
9,000.0	8,974.3	8,931.3	8,823.8	32.0	37.9	5.27	-233.4	-1,151.1	899.0	834.9	64.08	14.029	
9,100.0	9,072.1	9,180.9	9,072.1	32.4	38.8	5.57	-237.0	-1,170.2	885.4	820.1	65.28	13.563	
9,200.0	9,170.0	9,278.7	9,170.0	32.8	39.1	5.70	-237.0	-1,170.2	865.0	799.1	65.94	13.118	
9,300.0	9,267.9	9,376.6	9,267.9	33.2	39.4	5.84	-237.0	-1,170.2	844.6	778.0	66.61	12.681	
9,400.0	9,365.8	9,474.5	9,365.8	33.6	39.6	5.99	-237.0	-1,170.2	824.2	757.0	67.27	12.252	
9,500.0	9,463.7	9,573.1	9,464.4	34.0	39.9	6.16	-236.7	-1,170.3	803.8	735.9	67.94	11.832	
9,600.0	9,561.5	9,672.6	9,563.1	34.4	40.2	7.20	-225.0	-1,171.9	783.3	714.7	68.61	11.416	
9,700.0	9,659.4	9,764.6	9,651.3	34.8	40.5	9.36	-199.3	-1,175.5	763.3	693.9	69.34	11.007	
9,800.0	9,757.3	9,845.9	9,724.8	35.2	40.6	12.23	-165.3	-1,180.2	745.6	675.5	70.12	10.634	
9,900.0	9,855.2	9,915.5	9,783.4	35.6	40.8	15.36	-128.2	-1,185.3	732.5	661.7	70.81	10.344	
10,000.0	9,953.0	9,974.1	9,828.9	36.0	40.9	18.44	-91.6	-1,190.4	726.1	654.9	71.22	10.195	
10,027.5	9,979.9	9,988.5	9,839.5	36.1	40.9	19.25	-82.0	-1,191.7	725.8	654.5	71.25	10.186	
10,100.0	10,050.9	10,023.2	9,864.0	36.4	41.0	21.28	-57.6	-1,195.1	728.2	657.1	71.12	10.239	
10,200.0	10,148.8	10,064.4	9,891.1	36.9	41.1	23.80	-26.9	-1,199.4	739.9	669.5	70.36	10.515	
10,300.0	10,246.7	10,100.0	9,912.6	37.3	41.1	26.06	1.2	-1,203.3	761.6	692.7	68.96	11.044	
10,400.0	10,344.6	10,128.5	9,928.6	37.7	41.2	27.91	24.6	-1,206.5	793.2	726.3	66.94	11.850	
10,500.0	10,442.4	10,150.0	9,939.8	38.1	41.2	29.32	42.7	-1,209.1	834.0	769.6	64.44	12.944	
10,600.0	10,540.3	10,175.2	9,952.1	38.5	41.2	30.97	64.5	-1,212.1	883.1	821.1	61.93	14.259	
10,700.0	10,638.2	10,200.0	9,963.3	39.0	41.3	32.59	86.4	-1,215.1	939.3	879.9	59.47	15.795	
10,800.0	10,736.1	10,200.0	9,963.3	39.4	41.3	32.59	86.4	-1,215.1	1,001.8	945.4	56.37	17.771	
10,900.0	10,833.9	10,224.9	9,973.5	39.8	41.3	34.22	108.9	-1,218.2	1,069.2	1,014.9	54.29	19.692	
11,000.0	10,931.8	10,250.0	9,982.8	40.2	41.4	35.84	132.0	-1,221.4	1,141.2	1,088.8	52.44	21.760	
11,100.0	11,029.7	10,250.0	9,982.8	40.7	41.4	35.84	132.0	-1,221.4	1,216.6	1,166.5	50.09	24.287	
11,200.0	11,127.6	10,250.0	9,982.8	41.1	41.4	35.84	132.0	-1,221.4	1,295.2	1,247.2	48.01	26.978	
11,300.0	11,225.5	10,268.5	9,989.0	41.5	41.4	37.02	149.3	-1,223.8	1,376.3	1,329.6	46.72	29.460	
11,400.0	11,323.3	10,276.9	9,991.6	42.0	41.4	37.54	157.2	-1,224.9	1,459.6	1,414.3	45.35	32.189	
11,500.0	11,421.2	10,300.0	9,998.2	42.4	41.4	38.98	179.1	-1,228.0	1,545.0	1,500.5	44.56	34.677	
11,523.5	11,444.2	10,300.0	9,998.2	42.5	41.4	38.98	179.1	-1,228.0	1,565.2	1,521.0	44.25	35.371	
11,600.0	11,519.2	10,300.0	9,998.2	42.8	41.4	40.28	179.1	-1,228.0	1,631.9	1,588.5	43.34	37.649	
11,700.0	11,617.7	10,300.0	9,998.2	43.3	41.4	42.22	179.1	-1,228.0	1,721.0	1,678.6	42.34	40.648	
11,800.0	11,716.7	10,300.0	9,998.2	43.7	41.4	44.49	179.1	-1,228.0	1,812.0	1,770.5	41.51	43.650	
11,900.0	11,815.9	10,300.0	9,998.2	44.1	41.4	47.15	179.1	-1,228.0	1,904.7	1,863.8	40.84	46.633	
12,000.0	11,915.5	10,300.0	9,998.2	44.4	41.4	50.25	179.1	-1,228.0	1,998.7	1,958.3	40.31	49.579	
12,100.0	12,015.2	10,320.0	10,003.2	44.8	41.5	55.10	198.3	-1,230.6	2,093.3	2,053.0	40.29	51.957	
12,200.0	12,115.1	10,324.7	10,004.3	45.2	41.5	59.54	202.9	-1,231.3	2,189.0	2,148.9	40.05	54.660	
12,300.0	12,215.1	10,329.2	10,005.3	45.5	41.5	64.58	207.2	-1,231.9	2,285.3	2,245.4	39.88	57.302	
12,311.9	12,227.0	10,329.8	10,005.4	45.5	41.5	-40.28	207.7	-1,231.9	2,296.8	2,256.9	39.87	57.611	
12,400.0	12,315.1	10,350.0	10,009.4	45.8	41.5	-39.26	227.4	-1,234.7	2,382.4	2,342.4	40.05	59.481	
12,500.0	12,415.1	10,350.0	10,009.4	46.2	41.5	-39.26	227.4	-1,234.7	2,479.3	2,439.4	39.91	62.124	
12,600.0	12,515.1	10,350.0	10,009.4	46.5	41.5	-39.26	227.4	-1,234.7	2,576.5	2,536.7	39.81	64.717	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #111H - 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
12,700.0	12,615.1	10,350.0	10,009.4	46.9	41.5	-39.26	227.4	-1,234.7	2,673.8	2,634.1	39.75	67.260	
12,711.9	12,627.0	10,350.0	10,009.4	46.9	41.5	-39.26	227.4	-1,234.7	2,685.4	2,645.7	39.75	67.558	
12,750.0	12,665.1	10,350.0	10,009.4	47.0	41.5	-13.44	227.4	-1,234.7	2,722.3	2,682.6	39.72	68.534	
12,800.0	12,714.8	10,350.0	10,009.4	47.2	41.5	-10.39	227.4	-1,234.7	2,769.7	2,730.0	39.65	69.861	
12,850.0	12,763.8	10,350.0	10,009.4	47.4	41.5	-8.48	227.4	-1,234.7	2,815.6	2,776.1	39.53	71.229	
12,900.0	12,811.8	10,350.0	10,009.4	47.5	41.5	-7.18	227.4	-1,234.7	2,859.8	2,820.5	39.38	72.626	
12,950.0	12,858.3	10,350.0	10,009.4	47.7	41.5	-6.25	227.4	-1,234.7	2,902.2	2,863.0	39.20	74.038	
13,000.0	12,903.1	10,350.0	10,009.4	47.8	41.5	-5.56	227.4	-1,234.7	2,942.3	2,903.3	38.99	75.454	
13,050.0	12,945.8	10,350.0	10,009.4	48.0	41.5	-5.03	227.4	-1,234.7	2,980.0	2,941.3	38.77	76.860	
13,100.0	12,986.1	10,375.3	10,013.5	48.1	41.6	-4.42	252.1	-1,238.1	3,014.6	2,975.7	38.81	77.665	
13,150.0	13,023.7	10,400.0	10,016.3	48.3	41.6	-3.94	276.4	-1,241.5	3,047.0	3,008.2	38.82	78.490	
13,200.0	13,058.2	10,400.0	10,016.3	48.4	41.6	-3.71	276.4	-1,241.5	3,075.9	3,037.3	38.55	79.795	
13,250.0	13,089.4	10,400.0	10,016.3	48.5	41.6	-3.52	276.4	-1,241.5	3,101.7	3,063.4	38.28	81.030	
13,300.0	13,117.2	10,400.0	10,016.3	48.7	41.6	-3.36	276.4	-1,241.5	3,124.3	3,086.3	38.02	82.176	
13,350.0	13,141.1	10,400.0	10,016.3	48.8	41.6	-3.24	276.4	-1,241.5	3,143.6	3,105.8	37.78	83.214	
13,400.0	13,161.2	10,400.0	10,016.3	48.9	41.6	-3.15	276.4	-1,241.5	3,159.6	3,122.0	37.56	84.124	
13,450.0	13,177.2	10,421.7	10,018.0	49.1	41.7	-2.98	297.8	-1,244.4	3,171.6	3,134.1	37.51	84.546	
13,500.0	13,189.1	10,429.0	10,018.4	49.2	41.7	-2.90	305.0	-1,245.4	3,180.2	3,142.8	37.38	85.072	
13,550.0	13,196.6	10,450.0	10,018.9	49.4	41.7	-2.78	325.8	-1,248.3	3,185.3	3,148.0	37.35	85.275	
13,600.0	13,199.8	10,450.0	10,018.9	49.6	41.7	-2.78	325.8	-1,248.3	3,186.5	3,149.2	37.23	85.584	
13,611.9	13,200.0	10,450.0	10,018.9	49.6	41.7	-2.78	325.8	-1,248.3	3,186.2	3,149.0	37.21	85.629	
13,700.0	13,200.0	10,477.4	10,018.9	50.0	41.8	-2.70	353.0	-1,252.0	3,184.7	3,147.5	37.23	85.532	
13,800.0	13,200.0	10,580.0	10,018.8	50.4	42.1	-2.31	454.9	-1,263.5	3,183.8	3,146.2	37.61	84.647	
13,900.0	13,200.0	10,681.8	10,018.7	50.9	42.4	-1.92	556.4	-1,271.3	3,183.1	3,145.1	38.05	83.666	
14,000.0	13,200.0	10,782.8	10,018.6	51.4	42.8	-1.53	657.3	-1,275.5	3,182.6	3,144.0	38.53	82.593	
14,100.0	13,200.0	10,881.8	10,018.4	52.0	43.2	-1.15	756.3	-1,276.5	3,182.2	3,143.1	39.07	81.445	
14,200.0	13,200.0	10,980.0	10,018.3	52.6	43.7	-0.82	854.5	-1,277.2	3,182.0	3,142.3	39.68	80.184	
14,300.0	13,200.0	11,078.8	10,018.2	53.2	44.2	-0.55	953.3	-1,277.9	3,181.9	3,141.5	40.37	78.816	
14,312.5	13,200.0	11,108.8	10,018.2	53.2	44.4	-0.52	965.7	-1,278.0	3,181.9	3,141.3	40.55	78.468	
14,400.0	13,200.0	11,178.1	10,018.1	53.8	44.8	-0.34	1,052.6	-1,278.6	3,181.9	3,140.8	41.13	77.360	
14,500.0	13,200.0	11,277.7	10,018.0	54.5	45.5	-0.18	1,152.3	-1,279.2	3,182.0	3,140.0	41.96	75.834	
14,600.0	13,200.0	11,377.6	10,017.9	55.1	46.2	-0.09	1,252.1	-1,279.9	3,182.1	3,139.3	42.85	74.257	
14,687.2	13,200.0	11,464.8	10,017.8	55.7	46.9	-0.07	1,339.4	-1,280.5	3,182.2	3,138.5	43.68	72.849	
14,700.0	13,200.0	11,477.6	10,017.7	55.8	47.0	-0.07	1,352.1	-1,280.6	3,182.2	3,138.4	43.81	72.643	
14,800.0	13,200.0	11,577.6	10,017.6	56.5	47.8	-0.06	1,452.1	-1,281.3	3,182.3	3,137.5	44.80	71.029	
14,900.0	13,200.0	11,677.6	10,017.5	57.3	48.7	-0.06	1,552.1	-1,282.0	3,182.5	3,136.6	45.83	69.439	
15,000.0	13,200.0	11,777.6	10,017.4	58.1	49.6	-0.06	1,652.1	-1,282.6	3,182.6	3,135.7	46.89	67.876	
15,100.0	13,200.0	11,877.6	10,017.3	58.9	50.5	-0.06	1,752.1	-1,283.3	3,182.7	3,134.7	47.97	66.344	
15,200.0	13,200.0	11,977.6	10,017.1	59.7	51.5	-0.06	1,852.1	-1,284.0	3,182.8	3,133.7	49.08	64.847	
15,300.0	13,200.0	12,077.6	10,017.0	60.6	52.6	-0.06	1,952.1	-1,284.7	3,182.9	3,132.7	50.22	63.385	
15,400.0	13,200.0	12,177.6	10,016.9	61.6	53.6	-0.05	2,052.1	-1,285.4	3,183.1	3,131.7	51.37	61.962	
15,500.0	13,200.0	12,277.6	10,016.8	62.5	54.7	-0.05	2,152.1	-1,286.0	3,183.2	3,130.6	52.55	60.578	
15,600.0	13,200.0	12,377.6	10,016.7	63.5	55.8	-0.05	2,252.1	-1,286.7	3,183.3	3,129.6	53.74	59.232	
15,700.0	13,200.0	12,477.6	10,016.6	64.5	57.0	-0.05	2,352.1	-1,287.4	3,183.4	3,128.5	54.96	57.926	
15,800.0	13,200.0	12,577.6	10,016.4	65.5	58.1	-0.05	2,452.1	-1,288.1	3,183.5	3,127.3	56.19	56.660	
15,900.0	13,200.0	12,677.6	10,016.3	66.6	59.3	-0.05	2,552.1	-1,288.8	3,183.6	3,126.2	57.43	55.432	
16,000.0	13,200.0	12,777.6	10,016.2	67.7	60.6	-0.04	2,652.1	-1,289.4	3,183.8	3,125.1	58.69	54.243	
16,100.0	13,200.0	12,877.6	10,016.1	68.8	61.8	-0.04	2,752.1	-1,290.1	3,183.9	3,123.9	59.97	53.092	
16,200.0	13,200.0	12,977.6	10,016.0	69.9	63.1	-0.04	2,852.1	-1,290.8	3,184.0	3,122.7	61.26	51.977	
16,300.0	13,200.0	13,077.6	10,015.8	71.1	64.3	-0.04	2,952.1	-1,291.5	3,184.1	3,121.6	62.56	50.898	
16,400.0	13,200.0	13,177.6	10,015.7	72.3	65.6	-0.04	3,052.1	-1,292.1	3,184.2	3,120.4	63.87	49.854	
16,500.0	13,200.0	13,277.6	10,015.6	73.5	66.9	-0.04	3,152.1	-1,292.8	3,184.4	3,119.2	65.19	48.844	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #111H - 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
16,600.0	13,200.0	13,377.6	10,015.5	74.7	68.3	-0.03	3,252.1	-1,293.5	3,184.5	3,118.0	66.53	47.866	
16,700.0	13,200.0	13,477.6	10,015.4	75.9	69.6	-0.03	3,352.1	-1,294.2	3,184.6	3,116.7	67.87	46.921	
16,800.0	13,200.0	13,577.6	10,015.3	77.1	70.9	-0.03	3,452.1	-1,294.9	3,184.7	3,115.5	69.22	46.006	
16,900.0	13,200.0	13,677.6	10,015.1	78.4	72.3	-0.03	3,552.1	-1,295.5	3,184.8	3,114.3	70.59	45.120	
17,000.0	13,200.0	13,777.6	10,015.0	79.7	73.7	-0.03	3,652.1	-1,296.2	3,185.0	3,113.0	71.96	44.263	
17,100.0	13,200.0	13,877.6	10,014.9	81.0	75.1	-0.03	3,752.0	-1,296.9	3,185.1	3,111.7	73.33	43.433	
17,200.0	13,200.0	13,977.6	10,014.8	82.3	76.5	-0.02	3,852.0	-1,297.6	3,185.2	3,110.5	74.72	42.630	
17,300.0	13,200.0	14,077.6	10,014.7	83.6	77.9	-0.02	3,952.0	-1,298.3	3,185.3	3,109.2	76.11	41.852	
17,400.0	13,200.0	14,177.6	10,014.5	84.9	79.3	-0.02	4,052.0	-1,298.9	3,185.4	3,107.9	77.51	41.099	
17,500.0	13,200.0	14,277.6	10,014.4	86.3	80.7	-0.02	4,152.0	-1,299.6	3,185.5	3,106.6	78.91	40.369	
17,600.0	13,200.0	14,377.6	10,014.3	87.6	82.2	-0.02	4,252.0	-1,300.3	3,185.7	3,105.3	80.32	39.662	
17,700.0	13,200.0	14,477.6	10,014.2	89.0	83.6	-0.02	4,352.0	-1,301.0	3,185.8	3,104.1	81.74	38.976	
17,800.0	13,200.0	14,577.6	10,014.1	90.3	85.1	-0.01	4,452.0	-1,301.7	3,185.9	3,102.7	83.16	38.311	
17,900.0	13,200.0	14,677.6	10,014.0	91.7	86.5	-0.01	4,552.0	-1,302.3	3,186.0	3,101.4	84.58	37.667	
18,000.0	13,200.0	14,777.6	10,013.8	93.1	88.0	-0.01	4,652.0	-1,303.0	3,186.1	3,100.1	86.02	37.041	
18,100.0	13,200.0	14,877.6	10,013.7	94.5	89.5	-0.01	4,752.0	-1,303.7	3,186.3	3,098.8	87.45	36.435	
18,200.0	13,200.0	14,977.6	10,013.6	95.9	90.9	-0.01	4,852.0	-1,304.4	3,186.4	3,097.5	88.89	35.846	
18,300.0	13,200.0	15,060.4	10,013.5	97.3	92.3	-0.01	4,934.9	-1,304.9	3,186.5	3,096.3	90.23	35.316	
18,400.0	13,200.0	15,060.4	10,013.5	98.7	92.3	-0.01	4,934.9	-1,304.9	3,188.8	3,097.7	91.08	35.010	
18,500.0	13,200.0	15,060.4	10,013.5	100.2	92.3	-0.01	4,934.9	-1,304.9	3,194.1	3,102.2	91.94	34.740	
18,600.0	13,200.0	15,060.4	10,013.5	101.6	92.3	-0.01	4,934.9	-1,304.9	3,202.6	3,109.8	92.81	34.505	
18,700.0	13,200.0	15,060.4	10,013.5	103.0	92.3	-0.01	4,934.9	-1,304.9	3,214.2	3,120.5	93.68	34.308	
18,800.0	13,200.0	15,060.4	10,013.5	104.5	92.3	-0.01	4,934.9	-1,304.9	3,228.8	3,134.2	94.55	34.148	
18,900.0	13,200.0	15,060.4	10,013.5	105.9	92.3	-0.01	4,934.9	-1,304.9	3,246.4	3,151.0	95.41	34.026	
19,000.0	13,200.0	15,060.4	10,013.5	107.4	92.3	-0.01	4,934.9	-1,304.9	3,267.0	3,170.8	96.26	33.940	
19,100.0	13,200.0	15,060.4	10,013.5	108.9	92.3	-0.01	4,934.9	-1,304.9	3,290.5	3,193.4	97.09	33.892	
19,200.0	13,200.0	15,060.4	10,013.5	110.3	92.3	-0.01	4,934.9	-1,304.9	3,316.9	3,219.0	97.90	33.880	
19,300.0	13,200.0	15,060.4	10,013.5	111.8	92.3	-0.01	4,934.9	-1,304.9	3,346.0	3,247.3	98.69	33.904	
19,400.0	13,200.0	15,060.4	10,013.5	113.3	92.3	-0.01	4,934.9	-1,304.9	3,377.9	3,278.4	99.46	33.963	
19,500.0	13,200.0	15,060.4	10,013.5	114.8	92.3	-0.01	4,934.9	-1,304.9	3,412.4	3,312.2	100.20	34.056	
19,600.0	13,200.0	15,060.4	10,013.5	116.3	92.3	-0.01	4,934.9	-1,304.9	3,449.4	3,348.5	100.91	34.182	
19,700.0	13,200.0	15,060.4	10,013.5	117.8	92.3	-0.01	4,934.9	-1,304.9	3,488.9	3,387.3	101.60	34.341	
19,800.0	13,200.0	15,060.4	10,013.5	119.3	92.3	-0.01	4,934.9	-1,304.9	3,530.8	3,428.6	102.26	34.530	
19,900.0	13,200.0	15,060.4	10,013.5	120.8	92.3	-0.01	4,934.9	-1,304.9	3,575.1	3,472.2	102.88	34.749	
20,000.0	13,200.0	15,060.4	10,013.5	122.3	92.3	-0.01	4,934.9	-1,304.9	3,621.5	3,518.0	103.48	34.996	
20,100.0	13,200.0	15,060.4	10,013.5	123.8	92.3	-0.01	4,934.9	-1,304.9	3,670.1	3,566.0	104.05	35.271	
20,200.0	13,200.0	15,060.4	10,013.5	125.3	92.3	-0.01	4,934.9	-1,304.9	3,720.7	3,616.1	104.60	35.572	
20,300.0	13,200.0	15,060.4	10,013.5	126.8	92.3	-0.01	4,934.9	-1,304.9	3,773.3	3,668.2	105.11	35.899	
20,400.0	13,200.0	15,060.4	10,013.5	128.4	92.3	-0.01	4,934.9	-1,304.9	3,827.8	3,722.2	105.60	36.249	
20,500.0	13,200.0	15,060.4	10,013.5	129.9	92.3	-0.01	4,934.9	-1,304.9	3,884.1	3,778.0	106.06	36.622	
20,600.0	13,200.0	15,060.4	10,013.5	131.4	92.3	-0.01	4,934.9	-1,304.9	3,942.1	3,835.6	106.49	37.017	
20,700.0	13,200.0	15,060.4	10,013.5	132.9	92.3	-0.01	4,934.9	-1,304.9	4,001.8	3,894.9	106.91	37.433	
20,800.0	13,200.0	15,060.4	10,013.5	134.5	92.3	-0.01	4,934.9	-1,304.9	4,063.1	3,955.8	107.30	37.868	
20,900.0	13,200.0	15,060.4	10,013.5	136.0	92.3	-0.01	4,934.9	-1,304.9	4,125.9	4,018.2	107.66	38.323	
21,000.0	13,200.0	15,060.4	10,013.5	137.6	92.3	-0.01	4,934.9	-1,304.9	4,190.1	4,082.1	108.01	38.794	
21,100.0	13,200.0	15,060.4	10,013.5	139.1	92.3	-0.01	4,934.9	-1,304.9	4,255.7	4,147.4	108.33	39.283	
21,200.0	13,200.0	15,060.4	10,013.5	140.7	92.3	-0.01	4,934.9	-1,304.9	4,322.7	4,214.0	108.64	39.788	
21,300.0	13,200.0	15,060.4	10,013.5	142.2	92.3	-0.01	4,934.9	-1,304.9	4,390.9	4,281.9	108.93	40.308	
21,400.0	13,200.0	15,060.4	10,013.5	143.8	92.3	-0.01	4,934.9	-1,304.9	4,460.3	4,351.0	109.21	40.842	
21,500.0	13,200.0	15,060.4	10,013.5	145.3	92.3	-0.01	4,934.9	-1,304.9	4,530.8	4,421.3	109.47	41.390	
21,600.0	13,200.0	15,060.4	10,013.5	146.9	92.3	-0.01	4,934.9	-1,304.9	4,602.4	4,492.7	109.71	41.951	
21,700.0	13,200.0	15,060.4	10,013.5	148.4	92.3	-0.01	4,934.9	-1,304.9	4,675.1	4,565.1	109.94	42.524	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #111H - 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
21,800.0	13,200.0	15,060.4	10,013.5	150.0	92.3	-0.01	4,934.9	-1,304.9	4,748.7	4,638.6	110.16	43.108	
21,900.0	13,200.0	15,060.4	10,013.5	151.5	92.3	-0.01	4,934.9	-1,304.9	4,823.4	4,713.0	110.37	43.703	
22,000.0	13,200.0	15,060.4	10,013.5	153.1	92.3	-0.01	4,934.9	-1,304.9	4,898.9	4,788.3	110.56	44.309	
22,100.0	13,200.0	15,060.4	10,013.5	154.7	92.3	-0.01	4,934.9	-1,304.9	4,975.3	4,864.5	110.75	44.925	
22,200.0	13,200.0	15,060.4	10,013.5	156.2	92.3	-0.01	4,934.9	-1,304.9	5,052.5	4,941.5	110.92	45.549	
22,300.0	13,200.0	15,060.4	10,013.5	157.8	92.3	-0.01	4,934.9	-1,304.9	5,130.5	5,019.4	111.09	46.183	
22,400.0	13,200.0	15,060.4	10,013.5	159.4	92.3	-0.01	4,934.9	-1,304.9	5,209.2	5,097.9	111.25	46.825	
22,500.0	13,200.0	15,060.4	10,013.5	161.0	92.3	-0.01	4,934.9	-1,304.9	5,288.7	5,177.3	111.40	47.474	
22,600.0	13,200.0	15,060.4	10,013.5	162.5	92.3	-0.01	4,934.9	-1,304.9	5,368.8	5,257.3	111.54	48.131	
22,700.0	13,200.0	15,060.4	10,013.5	164.1	92.3	-0.01	4,934.9	-1,304.9	5,449.6	5,337.9	111.68	48.795	
22,800.0	13,200.0	15,060.4	10,013.5	165.7	92.3	-0.01	4,934.9	-1,304.9	5,531.0	5,419.2	111.82	49.466	
22,900.0	13,200.0	15,060.4	10,013.5	167.3	92.3	-0.01	4,934.9	-1,304.9	5,613.1	5,501.1	111.94	50.142	
23,000.0	13,200.0	15,060.4	10,013.5	168.9	92.3	-0.01	4,934.9	-1,304.9	5,695.7	5,583.6	112.06	50.825	
23,100.0	13,200.0	15,060.4	10,013.5	170.4	92.3	-0.01	4,934.9	-1,304.9	5,778.8	5,666.7	112.18	51.513	
23,200.0	13,200.0	15,060.4	10,013.5	172.0	92.3	-0.01	4,934.9	-1,304.9	5,862.5	5,750.2	112.30	52.206	
23,300.0	13,200.0	15,060.4	10,013.5	173.6	92.3	-0.01	4,934.9	-1,304.9	5,946.7	5,834.3	112.40	52.905	
23,400.0	13,200.0	15,060.4	10,013.5	175.2	92.3	-0.01	4,934.9	-1,304.9	6,031.4	5,918.9	112.51	53.607	
23,504.9	13,200.0	15,060.4	10,013.5	176.9	92.3	-0.01	4,934.9	-1,304.9	6,120.7	6,008.1	112.62	54.349	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #113H - 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	1.0	-1.0	0.0	0.0	90.03	-1.3	2,533.3	2,533.3				
100.0	100.0	101.0	99.0	0.1	0.1	90.03	-1.3	2,533.3	2,533.3	2,533.0	0.26	9,747.352	
200.0	200.0	201.0	199.0	0.5	0.5	90.03	-1.3	2,533.3	2,533.3	2,532.3	0.98	2,593.335	
300.0	300.0	301.0	299.0	0.8	0.8	90.03	-1.3	2,533.3	2,533.3	2,531.6	1.69	1,495.627	
400.0	400.0	401.0	399.0	1.2	1.2	90.03	-1.3	2,533.3	2,533.3	2,530.9	2.41	1,050.831	
500.0	500.0	501.0	499.0	1.6	1.6	90.03	-1.3	2,533.3	2,533.3	2,530.1	3.13	809.953	
600.0	600.0	601.0	599.0	1.9	1.9	90.03	-1.3	2,533.3	2,533.3	2,529.4	3.84	658.913	
700.0	700.0	701.0	699.0	2.3	2.3	90.03	-1.3	2,533.3	2,533.3	2,528.7	4.56	555.351	
800.0	800.0	801.0	799.0	2.6	2.6	90.03	-1.3	2,533.3	2,533.3	2,528.0	5.28	479.921	
900.0	900.0	901.0	899.0	3.0	3.0	90.03	-1.3	2,533.3	2,533.3	2,527.3	6.00	422.531	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	90.03	-1.3	2,533.3	2,533.3	2,526.5	6.71	377.401	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	90.03	-1.3	2,533.3	2,533.3	2,525.8	7.43	340.981	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	90.03	-1.3	2,533.3	2,533.3	2,525.1	8.15	310.972	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	90.03	-1.3	2,533.3	2,533.3	2,524.4	8.86	285.818	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	90.03	-1.3	2,533.3	2,533.3	2,523.7	9.58	264.428	
1,500.0	1,500.0	1,499.0	1,499.0	5.1	5.1	90.03	-1.3	2,533.3	2,533.3	2,523.0	10.29	246.188	
1,600.0	1,600.0	1,672.4	1,672.4	5.5	5.7	90.05	-2.0	2,530.8	2,531.8	2,520.6	11.24	225.243	
1,700.0	1,700.0	1,846.2	1,846.0	5.9	6.3	90.09	-4.1	2,523.2	2,527.5	2,515.3	12.18	207.523	
1,800.0	1,800.0	2,019.4	2,018.7	6.2	6.9	90.17	-7.6	2,510.6	2,520.2	2,507.1	13.11	192.209	
1,900.0	1,900.0	2,191.7	2,190.0	6.6	7.6	90.29	-12.5	2,493.1	2,510.0	2,496.0	14.04	178.834	
2,000.0	2,000.0	2,336.4	2,333.4	6.9	8.1	90.41	-17.6	2,474.7	2,497.2	2,482.3	14.87	167.904	
2,100.0	2,100.0	2,435.4	2,431.5	7.3	8.5	90.50	-21.3	2,461.4	2,483.8	2,468.2	15.58	159.452	
2,200.0	2,200.0	2,534.4	2,529.6	7.7	8.8	90.58	-25.0	2,448.1	2,470.4	2,454.2	16.28	151.711	
2,300.0	2,300.0	2,633.5	2,627.6	8.0	9.2	90.67	-28.7	2,434.8	2,457.1	2,440.1	16.99	144.599	
2,400.0	2,400.0	2,732.5	2,725.7	8.4	9.6	90.77	-32.4	2,421.5	2,443.7	2,426.0	17.70	138.043	
2,500.0	2,500.0	2,831.5	2,823.7	8.7	10.0	90.86	-36.1	2,408.3	2,430.3	2,411.9	18.41	131.982	
2,600.0	2,600.0	2,930.5	2,921.8	9.1	10.4	90.95	-39.8	2,395.0	2,417.0	2,397.8	19.13	126.364	
2,700.0	2,700.0	3,029.6	3,019.9	9.4	10.8	91.04	-43.4	2,381.7	2,403.6	2,383.8	19.84	121.142	
2,800.0	2,800.0	3,128.6	3,117.9	9.8	11.2	91.14	-47.1	2,368.4	2,390.3	2,369.7	20.56	116.277	
2,900.0	2,900.0	3,227.6	3,216.0	10.2	11.6	91.24	-50.8	2,355.2	2,376.9	2,355.7	21.27	111.734	
3,000.0	3,000.0	3,326.6	3,314.1	10.5	12.0	91.33	-54.5	2,341.9	2,363.6	2,341.6	21.99	107.483	
3,100.0	3,100.0	3,425.7	3,412.1	10.9	12.4	91.43	-58.2	2,328.6	2,350.3	2,327.6	22.71	103.496	
3,200.0	3,200.0	3,524.7	3,510.2	11.2	12.8	91.53	-61.9	2,315.3	2,337.0	2,313.5	23.43	99.751	
3,300.0	3,300.0	3,623.7	3,608.2	11.6	13.2	91.63	-65.6	2,302.0	2,323.6	2,299.5	24.15	96.226	
3,400.0	3,400.0	3,722.8	3,706.3	12.0	13.6	91.73	-69.3	2,288.8	2,310.3	2,285.5	24.87	92.903	
3,500.0	3,500.0	3,821.8	3,804.4	12.3	14.0	91.84	-73.0	2,275.5	2,297.0	2,271.4	25.59	89.765	
3,600.0	3,600.0	3,920.8	3,902.4	12.7	14.4	91.94	-76.7	2,262.2	2,283.7	2,257.4	26.31	86.797	
3,700.0	3,700.0	4,019.8	4,000.5	13.0	14.8	92.05	-80.3	2,248.9	2,270.5	2,243.4	27.03	83.986	
3,800.0	3,800.0	4,118.9	4,098.6	13.4	15.2	92.15	-84.0	2,235.6	2,257.2	2,229.4	27.76	81.321	
3,900.0	3,900.0	4,217.9	4,196.6	13.8	15.6	92.26	-87.7	2,222.4	2,243.9	2,215.4	28.48	78.789	
4,000.0	4,000.0	4,316.9	4,294.7	14.1	16.0	92.37	-91.4	2,209.1	2,230.7	2,201.5	29.20	76.381	
4,100.0	4,100.0	4,415.9	4,392.8	14.5	16.4	92.48	-95.1	2,195.8	2,217.4	2,187.5	29.93	74.090	
4,200.0	4,200.0	4,515.0	4,490.8	14.8	16.8	92.59	-98.8	2,182.5	2,204.2	2,173.5	30.65	71.905	
4,300.0	4,300.0	4,614.0	4,588.9	15.2	17.2	92.70	-102.5	2,169.3	2,190.9	2,159.6	31.38	69.821	
4,400.0	4,400.0	4,713.0	4,686.9	15.5	17.6	92.82	-106.2	2,156.0	2,177.7	2,145.6	32.11	67.830	
4,500.0	4,500.0	4,812.0	4,785.0	15.9	18.0	92.94	-109.9	2,142.7	2,164.5	2,131.7	32.83	65.927	
4,600.0	4,600.0	4,911.1	4,883.1	16.3	18.4	93.05	-113.6	2,129.4	2,151.3	2,117.7	33.56	64.106	
4,700.0	4,700.0	5,010.1	4,981.1	16.6	18.9	93.17	-117.2	2,116.1	2,138.1	2,103.8	34.29	62.361	
4,800.0	4,800.0	5,109.1	5,079.2	17.0	19.3	93.29	-120.9	2,102.9	2,124.9	2,089.9	35.01	60.689	
4,900.0	4,900.0	5,208.2	5,177.3	17.3	19.7	93.41	-124.6	2,089.6	2,111.7	2,076.0	35.74	59.084	
5,000.0	5,000.0	5,307.2	5,275.3	17.7	20.1	93.54	-128.3	2,076.3	2,098.5	2,062.1	36.47	57.543	
5,100.0	5,100.0	5,406.2	5,373.4	18.1	20.5	93.66	-132.0	2,063.0	2,085.4	2,048.2	37.20	56.062	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #113H - 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
5,200.0	5,200.0	5,505.2	5,471.4	18.4	20.9	93.79	-135.7	2,049.7	2,072.2	2,034.3	37.93	54.637	
5,300.0	5,300.0	5,604.3	5,569.5	18.8	21.3	93.92	-139.4	2,036.5	2,059.1	2,020.4	38.66	53.266	
5,400.0	5,400.0	5,703.3	5,667.6	19.1	21.7	94.05	-143.1	2,023.2	2,045.9	2,006.6	39.39	51.946	
5,500.0	5,500.0	5,802.3	5,765.6	19.5	22.2	94.18	-146.8	2,009.9	2,032.8	1,992.7	40.12	50.673	
5,600.0	5,600.0	5,901.3	5,863.7	19.8	22.6	94.31	-150.5	1,996.6	2,019.7	1,978.9	40.85	49.446	
5,700.0	5,700.0	6,000.4	5,961.8	20.2	23.0	94.44	-154.2	1,983.4	2,006.6	1,965.0	41.58	48.261	
5,800.0	5,800.0	6,100.6	6,059.8	20.6	23.4	94.58	-157.8	1,970.1	1,993.5	1,951.2	42.31	47.113	
5,900.0	5,900.0	6,201.6	6,157.9	20.9	23.8	94.72	-161.5	1,956.8	1,980.4	1,937.4	43.05	46.000	
6,000.0	6,000.0	6,302.5	6,256.0	21.3	24.2	94.86	-165.2	1,943.5	1,967.4	1,923.6	43.79	44.925	
6,100.0	6,100.0	6,403.5	6,354.0	21.6	24.7	95.00	-168.9	1,930.2	1,954.3	1,909.8	44.53	43.886	
6,200.0	6,200.0	6,504.5	6,452.1	22.0	25.1	95.15	-172.6	1,917.0	1,941.3	1,896.0	45.27	42.880	
6,300.0	6,300.0	6,594.5	6,550.1	22.4	25.5	95.29	-176.3	1,903.7	1,928.2	1,882.3	45.97	41.945	
6,400.0	6,400.0	6,693.6	6,648.2	22.7	25.9	95.44	-180.0	1,890.4	1,915.2	1,868.5	46.70	41.007	
6,500.0	6,500.0	6,807.4	6,746.3	23.1	26.4	95.59	-183.7	1,877.1	1,902.2	1,854.7	47.49	40.051	
6,600.0	6,600.0	6,908.4	6,844.3	23.4	26.8	95.74	-187.4	1,863.8	1,889.2	1,841.0	48.24	39.166	
6,700.0	6,700.0	6,990.6	6,942.4	23.8	27.1	95.89	-191.1	1,850.6	1,876.3	1,827.3	48.91	38.363	
6,800.0	6,800.0	7,083.9	7,034.8	24.1	27.5	96.04	-194.5	1,838.1	1,863.3	1,813.7	49.63	37.543	
6,900.0	6,900.0	7,152.2	7,102.5	24.5	27.8	96.14	-196.8	1,829.7	1,851.5	1,801.2	50.30	36.806	
7,000.0	7,000.0	7,220.8	7,170.7	24.9	28.1	96.23	-198.9	1,822.5	1,841.3	1,790.4	50.96	36.132	
7,100.0	7,100.0	7,289.7	7,239.2	25.2	28.3	-158.24	-200.5	1,816.4	1,833.7	1,782.1	51.59	35.541	
7,200.0	7,200.0	7,358.8	7,308.2	25.5	28.6	-158.22	-201.9	1,811.6	1,829.3	1,777.1	52.20	35.046	
7,282.7	7,282.6	7,416.0	7,365.3	25.8	28.8	-158.22	-202.8	1,808.4	1,828.1	1,775.5	52.68	34.700 CC	
7,300.0	7,299.9	7,428.0	7,377.3	25.9	28.8	-158.22	-202.9	1,807.9	1,828.2	1,775.4	52.78	34.635 ES	
7,400.0	7,399.7	7,500.0	7,449.3	26.2	29.1	-158.23	-203.6	1,805.3	1,830.4	1,777.1	53.37	34.300	
7,500.0	7,499.4	7,566.2	7,515.5	26.6	29.3	-158.26	-204.0	1,804.1	1,835.9	1,782.0	53.90	34.063	
7,600.0	7,598.9	7,648.7	7,597.9	26.9	29.6	-158.31	-204.0	1,803.9	1,844.6	1,790.1	54.49	33.854	
7,700.0	7,698.3	7,748.0	7,697.3	27.2	29.9	-158.40	-204.0	1,803.9	1,855.1	1,800.0	55.15	33.639	
7,800.0	7,797.4	7,847.2	7,796.4	27.6	30.2	-158.51	-204.0	1,803.9	1,867.3	1,811.5	55.81	33.459	
7,900.0	7,896.3	7,946.1	7,895.3	27.9	30.5	-158.62	-204.0	1,803.9	1,881.1	1,824.6	56.47	33.313	
8,000.0	7,994.9	8,044.7	7,993.9	28.3	30.8	-158.74	-204.0	1,803.9	1,896.5	1,839.3	57.13	33.198	
8,100.0	8,093.3	8,143.0	8,092.3	28.6	31.1	-158.88	-204.0	1,803.9	1,913.5	1,855.7	57.78	33.115	
8,182.6	8,174.2	8,224.0	8,173.2	28.9	31.4	-159.00	-204.0	1,803.9	1,928.8	1,870.4	58.33	33.069	
8,200.0	8,191.3	8,241.0	8,190.3	29.0	31.5	-159.04	-204.0	1,803.9	1,932.1	1,873.7	58.44	33.062	
8,300.0	8,289.1	8,338.9	8,288.1	29.4	31.8	-159.25	-204.0	1,803.9	1,951.3	1,892.2	59.10	33.019	
8,400.0	8,387.0	8,436.8	8,386.0	29.7	32.1	-159.46	-204.0	1,803.9	1,970.5	1,910.8	59.76	32.976	
8,500.0	8,484.9	8,534.6	8,483.9	30.1	32.4	-159.67	-204.0	1,803.9	1,989.8	1,929.4	60.42	32.934	
8,600.0	8,582.8	8,632.5	8,581.8	30.5	32.7	-159.87	-204.0	1,803.9	2,009.1	1,948.0	61.08	32.891	
8,700.0	8,680.6	8,730.4	8,679.6	30.9	33.0	-160.07	-204.0	1,803.9	2,028.4	1,966.6	61.75	32.849	
8,800.0	8,778.5	8,828.3	8,777.5	31.2	33.3	-160.26	-204.0	1,803.9	2,047.7	1,985.3	62.42	32.808	
8,900.0	8,876.4	8,926.2	8,875.4	31.6	33.6	-160.46	-204.0	1,803.9	2,067.1	2,004.0	63.09	32.766	
9,000.0	8,974.3	9,024.0	8,973.3	32.0	34.0	-160.64	-204.0	1,803.9	2,086.4	2,022.7	63.76	32.725	
9,100.0	9,072.1	9,121.9	9,071.1	32.4	34.3	-160.83	-204.0	1,803.9	2,105.8	2,041.4	64.43	32.684	
9,200.0	9,170.0	9,219.8	9,169.0	32.8	34.6	-161.01	-204.0	1,803.9	2,125.2	2,060.1	65.10	32.644	
9,300.0	9,267.9	9,317.7	9,266.9	33.2	34.9	-161.19	-204.0	1,803.9	2,144.7	2,078.9	65.78	32.604	
9,400.0	9,365.8	9,415.5	9,364.8	33.6	35.2	-161.36	-204.0	1,803.9	2,164.1	2,097.6	66.46	32.564	
9,500.0	9,463.7	9,513.4	9,462.7	34.0	35.6	-161.53	-204.0	1,803.9	2,183.6	2,116.4	67.14	32.525	
9,600.0	9,561.5	9,807.1	9,743.7	34.4	36.4	-163.90	-131.3	1,793.7	2,198.6	2,130.2	68.40	32.143	
9,700.0	9,659.4	9,993.3	9,888.5	34.8	36.8	-167.10	-16.7	1,777.6	2,208.7	2,139.6	69.14	31.943	
9,800.0	9,757.3	10,099.9	9,952.1	35.2	37.0	-169.38	67.9	1,765.7	2,219.1	2,149.3	69.81	31.787	
9,900.0	9,855.2	10,164.7	9,982.7	35.6	37.1	-170.89	124.4	1,757.8	2,232.0	2,161.6	70.38	31.716	
10,000.0	9,953.0	10,207.3	9,999.2	36.0	37.2	-171.92	163.3	1,752.3	2,248.4	2,177.6	70.81	31.752	
10,100.0	10,050.9	10,237.1	10,008.9	36.4	37.2	-172.66	191.2	1,748.4	2,268.6	2,197.5	71.11	31.903	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #113H - 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
10,200.0	10,148.8	10,259.0	10,015.2	36.9	37.2	-173.20	212.0	1,745.5	2,292.6	2,221.3	71.28	32.165	
10,300.0	10,246.7	10,275.7	10,019.4	37.3	37.3	-173.63	228.0	1,743.2	2,320.5	2,249.2	71.32	32.536	
10,400.0	10,344.6	10,288.9	10,022.4	37.7	37.3	-173.96	240.7	1,741.4	2,352.2	2,281.0	71.26	33.011	
10,500.0	10,442.4	10,300.0	10,024.7	38.1	37.3	-174.24	251.5	1,739.9	2,387.6	2,316.5	71.09	33.584	
10,600.0	10,540.3	10,300.0	10,024.7	38.5	37.3	-174.24	251.5	1,739.9	2,426.6	2,355.8	70.80	34.275	
10,700.0	10,638.2	10,315.7	10,027.6	39.0	37.4	-174.64	266.7	1,737.8	2,468.8	2,398.3	70.51	35.013	
10,800.0	10,736.1	10,321.9	10,028.6	39.4	37.4	-174.80	272.8	1,736.9	2,514.4	2,444.3	70.12	35.859	
10,900.0	10,833.9	10,327.3	10,029.4	39.8	37.4	-174.94	278.1	1,736.2	2,563.0	2,493.3	69.67	36.786	
11,000.0	10,931.8	10,332.0	10,030.1	40.2	37.4	-175.06	282.6	1,735.5	2,614.5	2,545.3	69.18	37.791	
11,100.0	11,029.7	10,350.0	10,032.4	40.7	37.5	-175.52	300.4	1,733.1	2,668.8	2,600.1	68.73	38.829	
11,200.0	11,127.6	10,350.0	10,032.4	41.1	37.5	-175.52	300.4	1,733.1	2,725.6	2,657.4	68.16	39.986	
11,300.0	11,225.5	10,350.0	10,032.4	41.5	37.5	-175.52	300.4	1,733.1	2,784.8	2,717.2	67.58	41.208	
11,400.0	11,323.3	10,350.0	10,032.4	42.0	37.5	-175.52	300.4	1,733.1	2,846.3	2,779.3	66.98	42.492	
11,500.0	11,421.2	10,350.0	10,032.4	42.4	37.5	-175.52	300.4	1,733.1	2,909.9	2,843.5	66.39	43.833	
11,523.5	11,444.2	10,350.0	10,032.4	42.5	37.5	-175.52	300.4	1,733.1	2,925.2	2,858.9	66.25	44.156	
11,600.0	11,519.2	10,350.0	10,032.4	42.8	37.5	-175.60	300.4	1,733.1	2,975.0	2,909.2	65.79	45.223	
11,700.0	11,617.7	10,350.0	10,032.4	43.3	37.5	-175.69	300.4	1,733.1	3,040.1	2,974.9	65.17	46.648	
11,800.0	11,716.7	10,350.0	10,032.4	43.7	37.5	-175.79	300.4	1,733.1	3,105.0	3,040.5	64.54	48.108	
11,900.0	11,815.9	10,350.0	10,032.4	44.1	37.5	-175.88	300.4	1,733.1	3,169.9	3,106.0	63.91	49.602	
12,000.0	11,915.5	10,350.0	10,032.4	44.4	37.5	-175.97	300.4	1,733.1	3,234.6	3,171.3	63.26	51.130	
12,100.0	12,015.2	10,350.0	10,032.4	44.8	37.5	-176.06	300.4	1,733.1	3,299.1	3,236.5	62.61	52.692	
12,200.0	12,115.1	10,350.0	10,032.4	45.2	37.5	-176.15	300.4	1,733.1	3,363.4	3,301.4	61.96	54.287	
12,300.0	12,215.1	10,350.0	10,032.4	45.5	37.5	-176.23	300.4	1,733.1	3,427.4	3,366.1	61.29	55.917	
12,311.9	12,227.0	10,350.0	10,032.4	45.5	37.5	78.27	300.4	1,733.1	3,435.0	3,373.8	61.22	56.113	
12,400.0	12,315.1	10,350.0	10,032.4	45.8	37.5	78.27	300.4	1,733.1	3,491.9	3,431.3	60.64	57.581	
12,500.0	12,415.1	10,350.0	10,032.4	46.2	37.5	78.27	300.4	1,733.1	3,558.1	3,498.1	60.02	59.287	
12,600.0	12,515.1	10,369.6	10,034.3	46.5	37.5	77.85	319.7	1,730.3	3,625.5	3,566.0	59.50	60.935	
12,700.0	12,615.1	10,371.0	10,034.4	46.9	37.5	77.82	321.1	1,730.1	3,694.6	3,635.7	58.92	62.707	
12,711.9	12,627.0	10,371.2	10,034.4	46.9	37.5	77.82	321.2	1,730.1	3,702.9	3,644.1	58.85	62.919	
12,750.0	12,665.1	10,371.9	10,034.4	47.0	37.5	95.99	321.9	1,730.0	3,729.8	3,671.2	58.64	63.605	
12,800.0	12,714.8	10,373.5	10,034.5	47.2	37.5	90.82	323.5	1,729.8	3,765.7	3,707.3	58.38	64.508	
12,850.0	12,763.8	10,375.7	10,034.7	47.4	37.5	85.53	325.7	1,729.5	3,801.9	3,743.8	58.13	65.409	
12,900.0	12,811.8	10,378.6	10,034.9	47.5	37.5	80.25	328.5	1,729.1	3,838.2	3,780.3	57.89	66.301	
12,950.0	12,858.3	10,400.0	10,035.8	47.7	37.6	74.81	349.7	1,726.1	3,874.5	3,816.7	57.74	67.099	
13,000.0	12,903.1	10,400.0	10,035.8	47.8	37.6	70.01	349.7	1,726.1	3,909.9	3,852.4	57.53	67.969	
13,050.0	12,945.8	10,400.0	10,035.8	48.0	37.6	65.54	349.7	1,726.1	3,944.7	3,887.4	57.33	68.811	
13,100.0	12,986.1	10,400.0	10,035.8	48.1	37.6	61.45	349.7	1,726.1	3,978.4	3,921.3	57.15	69.615	
13,150.0	13,023.7	10,400.0	10,035.8	48.3	37.6	57.75	349.7	1,726.1	4,011.0	3,954.0	57.00	70.373	
13,200.0	13,058.2	10,406.5	10,035.9	48.4	37.6	54.40	356.2	1,725.2	4,042.1	3,985.2	56.89	71.050	
13,250.0	13,089.4	10,416.0	10,036.0	48.5	37.6	51.45	365.5	1,723.9	4,071.5	4,014.7	56.82	71.655	
13,300.0	13,117.2	10,416.0	10,036.0	48.7	37.6	48.91	365.5	1,723.9	4,099.0	4,042.3	56.75	72.227	
13,350.0	13,141.1	10,447.3	10,035.8	48.8	37.7	46.64	396.6	1,719.7	4,124.4	4,067.5	56.81	72.593	
13,400.0	13,161.2	10,469.9	10,035.7	48.9	37.8	44.75	419.0	1,716.9	4,147.3	4,090.4	56.88	72.910	
13,450.0	13,177.2	10,500.0	10,035.6	49.1	37.9	43.19	448.9	1,713.4	4,167.7	4,110.7	57.01	73.104	
13,500.0	13,189.1	10,500.0	10,035.6	49.2	37.9	41.91	448.9	1,713.4	4,185.5	4,128.4	57.07	73.335	
13,550.0	13,196.6	10,541.2	10,035.5	49.4	38.1	40.93	489.9	1,709.2	4,200.3	4,143.0	57.33	73.263	
13,600.0	13,199.8	10,565.5	10,035.4	49.6	38.2	40.19	514.1	1,707.0	4,212.3	4,154.8	57.56	73.178	
13,611.9	13,200.0	10,571.2	10,035.4	49.6	38.2	40.04	519.8	1,706.5	4,214.7	4,157.1	57.62	73.144	
13,700.0	13,200.0	10,600.0	10,035.2	50.0	38.3	40.40	548.5	1,704.2	4,231.7	4,173.7	58.03	72.919	
13,800.0	13,200.0	10,662.4	10,035.0	50.4	38.6	40.85	610.8	1,700.1	4,249.9	4,191.2	58.67	72.437	
13,900.0	13,200.0	10,700.0	10,034.9	50.9	38.8	41.21	648.3	1,698.4	4,267.1	4,207.9	59.21	72.072	
14,000.0	13,200.0	10,759.5	10,034.6	51.4	39.1	41.60	707.7	1,696.6	4,283.1	4,223.2	59.89	71.516	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #113H - 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
14,100.0	13,200.0	10,822.5	10,034.4	52.0	39.5	41.95	770.8	1,695.9	4,298.0	4,237.4	60.62	70.898	
14,200.0	13,200.0	10,920.8	10,034.0	52.6	40.0	42.33	869.1	1,695.1	4,310.9	4,249.3	61.61	69.973	
14,300.0	13,200.0	11,019.6	10,033.6	53.2	40.7	42.63	967.9	1,694.3	4,321.5	4,258.9	62.66	68.971	
14,400.0	13,200.0	11,118.9	10,033.2	53.8	41.4	42.86	1,067.2	1,693.6	4,329.8	4,266.0	63.76	67.905	
14,500.0	13,200.0	11,218.6	10,032.8	54.5	42.2	43.02	1,166.8	1,692.8	4,335.7	4,270.8	64.92	66.787	
14,600.0	13,200.0	11,318.4	10,032.4	55.1	43.0	43.12	1,266.7	1,692.0	4,339.3	4,273.2	66.12	65.627	
14,687.2	13,200.0	11,405.7	10,032.1	55.7	43.7	43.15	1,353.9	1,691.3	4,340.4	4,273.2	67.20	64.593	
14,700.0	13,200.0	11,418.4	10,032.1	55.8	43.8	43.14	1,366.7	1,691.2	4,340.5	4,273.1	67.36	64.438	
14,800.0	13,200.0	11,518.4	10,031.7	56.5	44.7	43.14	1,466.7	1,690.5	4,340.7	4,272.1	68.65	63.226	
14,900.0	13,200.0	11,618.4	10,031.3	57.3	45.7	43.14	1,566.7	1,689.7	4,341.0	4,271.0	70.02	61.999	
15,000.0	13,200.0	11,718.4	10,030.9	58.1	46.7	43.13	1,666.7	1,688.9	4,341.3	4,269.9	71.45	60.764	
15,100.0	13,200.0	11,818.4	10,030.5	58.9	47.7	43.13	1,766.7	1,688.1	4,341.6	4,268.7	72.93	59.528	
15,200.0	13,200.0	11,918.4	10,030.1	59.7	48.8	43.13	1,866.7	1,687.3	4,341.9	4,267.4	74.48	58.298	
15,300.0	13,200.0	12,018.4	10,029.7	60.6	49.9	43.12	1,966.7	1,686.6	4,342.1	4,266.1	76.07	57.078	
15,400.0	13,200.0	12,118.4	10,029.3	61.6	51.0	43.12	2,066.7	1,685.8	4,342.4	4,264.7	77.72	55.873	
15,500.0	13,200.0	12,218.4	10,028.9	62.5	52.2	43.12	2,166.7	1,685.0	4,342.7	4,263.3	79.41	54.686	
15,600.0	13,200.0	12,318.4	10,028.6	63.5	53.3	43.11	2,266.6	1,684.2	4,343.0	4,261.8	81.15	53.520	
15,700.0	13,200.0	12,418.4	10,028.2	64.5	54.5	43.11	2,366.6	1,683.4	4,343.3	4,260.3	82.92	52.377	
15,800.0	13,200.0	12,518.4	10,027.8	65.5	55.8	43.11	2,466.6	1,682.7	4,343.5	4,258.8	84.74	51.259	
15,900.0	13,200.0	12,618.4	10,027.4	66.6	57.0	43.10	2,566.6	1,681.9	4,343.8	4,257.2	86.59	50.167	
16,000.0	13,200.0	12,718.4	10,027.0	67.7	58.3	43.10	2,666.6	1,681.1	4,344.1	4,255.6	88.47	49.102	
16,100.0	13,200.0	12,818.4	10,026.6	68.8	59.6	43.09	2,766.6	1,680.3	4,344.4	4,254.0	90.38	48.065	
16,200.0	13,200.0	12,918.4	10,026.2	69.9	60.9	43.09	2,866.6	1,679.5	4,344.7	4,252.3	92.33	47.057	
16,300.0	13,200.0	13,018.4	10,025.8	71.1	62.2	43.09	2,966.6	1,678.8	4,344.9	4,250.6	94.30	46.076	
16,400.0	13,200.0	13,118.4	10,025.4	72.3	63.5	43.08	3,066.6	1,678.0	4,345.2	4,248.9	96.30	45.123	
16,500.0	13,200.0	13,218.4	10,025.0	73.5	64.9	43.08	3,166.6	1,677.2	4,345.5	4,247.2	98.32	44.198	
16,600.0	13,200.0	13,318.4	10,024.7	74.7	66.3	43.08	3,266.6	1,676.4	4,345.8	4,245.4	100.36	43.301	
16,700.0	13,200.0	13,418.4	10,024.3	75.9	67.6	43.07	3,366.6	1,675.7	4,346.1	4,243.6	102.43	42.430	
16,800.0	13,200.0	13,518.4	10,023.9	77.1	69.0	43.07	3,466.6	1,674.9	4,346.3	4,241.8	104.51	41.586	
16,900.0	13,200.0	13,618.4	10,023.5	78.4	70.4	43.07	3,566.6	1,674.1	4,346.6	4,240.0	106.62	40.768	
17,000.0	13,200.0	13,718.4	10,023.1	79.7	71.9	43.06	3,666.6	1,673.3	4,346.9	4,238.2	108.74	39.974	
17,100.0	13,200.0	13,818.4	10,022.7	81.0	73.3	43.06	3,766.6	1,672.5	4,347.2	4,236.3	110.88	39.206	
17,200.0	13,200.0	13,918.4	10,022.3	82.3	74.7	43.06	3,866.6	1,671.8	4,347.5	4,234.4	113.04	38.460	
17,300.0	13,200.0	14,018.4	10,021.9	83.6	76.2	43.05	3,966.6	1,671.0	4,347.7	4,232.5	115.21	37.738	
17,400.0	13,200.0	14,118.4	10,021.5	84.9	77.6	43.05	4,066.6	1,670.2	4,348.0	4,230.6	117.39	37.038	
17,500.0	13,200.0	14,218.4	10,021.1	86.3	79.1	43.04	4,166.6	1,669.4	4,348.3	4,228.7	119.59	36.360	
17,600.0	13,200.0	14,318.4	10,020.8	87.6	80.5	43.04	4,266.6	1,668.6	4,348.6	4,226.8	121.80	35.702	
17,700.0	13,200.0	14,418.4	10,020.4	89.0	82.0	43.04	4,366.6	1,667.9	4,348.9	4,224.8	124.02	35.065	
17,800.0	13,200.0	14,518.4	10,020.0	90.3	83.5	43.03	4,466.5	1,667.1	4,349.2	4,222.9	126.26	34.446	
17,900.0	13,200.0	14,618.4	10,019.6	91.7	85.0	43.03	4,566.5	1,666.3	4,349.4	4,220.9	128.50	33.847	
18,000.0	13,200.0	14,718.4	10,019.2	93.1	86.5	43.03	4,666.5	1,665.5	4,349.7	4,219.0	130.76	33.265	
18,100.0	13,200.0	14,818.4	10,018.8	94.5	88.0	43.02	4,766.5	1,664.7	4,350.0	4,217.0	133.02	32.701	
18,200.0	13,200.0	14,918.4	10,018.4	95.9	89.5	43.02	4,866.5	1,664.0	4,350.3	4,215.0	135.30	32.153	
18,300.0	13,200.0	15,018.4	10,018.0	97.3	91.0	43.02	4,966.5	1,663.2	4,350.6	4,213.0	137.58	31.622	
18,400.0	13,200.0	15,118.4	10,017.6	98.7	92.5	43.01	5,066.5	1,662.4	4,350.8	4,211.0	139.87	31.106	
18,500.0	13,200.0	15,218.4	10,017.3	100.2	94.0	43.01	5,166.5	1,661.6	4,351.1	4,208.9	142.17	30.605	
18,600.0	13,200.0	15,318.4	10,016.9	101.6	95.6	43.01	5,266.5	1,660.8	4,351.4	4,206.9	144.48	30.118	
18,700.0	13,200.0	15,418.4	10,016.5	103.0	97.1	43.00	5,366.5	1,660.1	4,351.7	4,204.9	146.79	29.646	
18,800.0	13,200.0	15,518.4	10,016.1	104.5	98.6	43.00	5,466.5	1,659.3	4,352.0	4,202.8	149.11	29.186	
18,900.0	13,200.0	15,618.4	10,015.7	105.9	100.2	42.99	5,566.5	1,658.5	4,352.2	4,200.8	151.44	28.740	
19,000.0	13,200.0	15,718.4	10,015.3	107.4	101.7	42.99	5,666.5	1,657.7	4,352.5	4,198.7	153.77	28.305	
19,100.0	13,200.0	15,818.4	10,014.9	108.9	103.2	42.99	5,766.5	1,657.0	4,352.8	4,196.7	156.11	27.883	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #113H - 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
19,200.0	13,200.0	15,918.4	10,014.5	110.3	104.8	42.98	5,866.5	1,656.2	4,353.1	4,194.6	158.45	27.472	
19,300.0	13,200.0	16,018.4	10,014.1	111.8	106.3	42.98	5,966.5	1,655.4	4,353.4	4,192.6	160.80	27.073	
19,400.0	13,200.0	16,118.4	10,013.7	113.3	107.9	42.98	6,066.5	1,654.6	4,353.6	4,190.5	163.16	26.683	
19,500.0	13,200.0	16,218.4	10,013.4	114.8	109.5	42.97	6,166.5	1,653.8	4,353.9	4,188.4	165.52	26.305	
19,600.0	13,200.0	16,318.4	10,013.0	116.3	111.0	42.97	6,266.5	1,653.1	4,354.2	4,186.3	167.88	25.936	
19,700.0	13,200.0	16,418.4	10,012.6	117.8	112.6	42.97	6,366.5	1,652.3	4,354.5	4,184.2	170.25	25.577	
19,800.0	13,200.0	16,518.4	10,012.2	119.3	114.1	42.96	6,466.5	1,651.5	4,354.8	4,182.1	172.63	25.227	
19,900.0	13,200.0	16,618.4	10,011.8	120.8	115.7	42.96	6,566.5	1,650.7	4,355.0	4,180.0	175.00	24.885	
20,000.0	13,200.0	16,718.4	10,011.4	122.3	117.3	42.96	6,666.4	1,649.9	4,355.3	4,177.9	177.39	24.553	
20,100.0	13,200.0	16,818.4	10,011.0	123.8	118.9	42.95	6,766.4	1,649.2	4,355.6	4,175.8	179.77	24.229	
20,200.0	13,200.0	16,918.4	10,010.6	125.3	120.4	42.95	6,866.4	1,648.4	4,355.9	4,173.7	182.16	23.912	
20,300.0	13,200.0	17,018.4	10,010.2	126.8	122.0	42.94	6,966.4	1,647.6	4,356.2	4,171.6	184.55	23.604	
20,400.0	13,200.0	17,118.4	10,009.9	128.4	123.6	42.94	7,066.4	1,646.8	4,356.5	4,169.5	186.95	23.303	
20,500.0	13,200.0	17,218.4	10,009.5	129.9	125.2	42.94	7,166.4	1,646.0	4,356.7	4,167.4	189.35	23.009	
20,600.0	13,200.0	17,318.4	10,009.1	131.4	126.8	42.93	7,266.4	1,645.3	4,357.0	4,165.3	191.75	22.722	
20,700.0	13,200.0	17,418.4	10,008.7	132.9	128.3	42.93	7,366.4	1,644.5	4,357.3	4,163.1	194.16	22.442	
20,800.0	13,200.0	17,518.4	10,008.3	134.5	129.9	42.93	7,466.4	1,643.7	4,357.6	4,161.0	196.56	22.169	
20,900.0	13,200.0	17,618.4	10,007.9	136.0	131.5	42.92	7,566.4	1,642.9	4,357.9	4,158.9	198.97	21.902	
21,000.0	13,200.0	17,718.4	10,007.5	137.6	133.1	42.92	7,666.4	1,642.2	4,358.1	4,156.7	201.39	21.641	
21,100.0	13,200.0	17,818.4	10,007.1	139.1	134.7	42.92	7,766.4	1,641.4	4,358.4	4,154.6	203.80	21.385	
21,200.0	13,200.0	17,918.4	10,006.7	140.7	136.3	42.91	7,866.4	1,640.6	4,358.7	4,152.5	206.22	21.136	
21,300.0	13,200.0	18,018.4	10,006.3	142.2	137.9	42.91	7,966.4	1,639.8	4,359.0	4,150.3	208.64	20.892	
21,400.0	13,200.0	18,118.4	10,006.0	143.8	139.5	42.91	8,066.4	1,639.0	4,359.3	4,148.2	211.06	20.654	
21,500.0	13,200.0	18,218.4	10,005.6	145.3	141.1	42.90	8,166.4	1,638.3	4,359.5	4,146.1	213.49	20.420	
21,600.0	13,200.0	18,318.4	10,005.2	146.9	142.7	42.90	8,266.4	1,637.5	4,359.8	4,143.9	215.92	20.192	
21,700.0	13,200.0	18,418.4	10,004.8	148.4	144.3	42.90	8,366.4	1,636.7	4,360.1	4,141.8	218.35	19.969	
21,800.0	13,200.0	18,518.4	10,004.4	150.0	145.9	42.89	8,466.4	1,635.9	4,360.4	4,139.6	220.78	19.750	
21,900.0	13,200.0	18,618.4	10,004.0	151.5	147.5	42.89	8,566.4	1,635.1	4,360.7	4,137.5	223.21	19.536	
22,000.0	13,200.0	18,718.4	10,003.6	153.1	149.1	42.88	8,666.4	1,634.4	4,360.9	4,135.3	225.65	19.327	
22,100.0	13,200.0	18,818.4	10,003.2	154.7	150.7	42.88	8,766.4	1,633.6	4,361.2	4,133.1	228.08	19.121	
22,200.0	13,200.0	18,918.4	10,002.8	156.2	152.3	42.88	8,866.3	1,632.8	4,361.5	4,131.0	230.52	18.920	
22,300.0	13,200.0	19,018.4	10,002.5	157.8	153.9	42.87	8,966.3	1,632.0	4,361.8	4,128.8	232.96	18.723	
22,400.0	13,200.0	19,118.4	10,002.1	159.4	155.5	42.87	9,066.3	1,631.2	4,362.1	4,126.7	235.40	18.530	
22,500.0	13,200.0	19,218.4	10,001.7	161.0	157.1	42.87	9,166.3	1,630.5	4,362.4	4,124.5	237.84	18.341	
22,600.0	13,200.0	19,318.4	10,001.3	162.5	158.7	42.86	9,266.3	1,629.7	4,362.6	4,122.3	240.29	18.156	
22,700.0	13,200.0	19,418.4	10,000.9	164.1	160.4	42.86	9,366.3	1,628.9	4,362.9	4,120.2	242.73	17.974	
22,800.0	13,200.0	19,518.4	10,000.5	165.7	162.0	42.86	9,466.3	1,628.1	4,363.2	4,118.0	245.18	17.796	
22,900.0	13,200.0	19,618.4	10,000.1	167.3	163.6	42.85	9,566.3	1,627.3	4,363.5	4,115.8	247.63	17.621	
23,000.0	13,200.0	19,718.4	9,999.7	168.9	165.2	42.85	9,666.3	1,626.6	4,363.8	4,113.7	250.08	17.449	
23,100.0	13,200.0	19,818.4	9,999.3	170.4	166.8	42.85	9,766.3	1,625.8	4,364.0	4,111.5	252.53	17.281	
23,200.0	13,200.0	19,918.4	9,998.9	172.0	168.4	42.84	9,866.3	1,625.0	4,364.3	4,109.3	254.98	17.116	
23,300.0	13,200.0	20,018.4	9,998.6	173.6	170.0	42.84	9,966.3	1,624.2	4,364.6	4,107.2	257.44	16.954	
23,400.0	13,200.0	20,118.4	9,998.2	175.2	171.7	42.83	10,066.3	1,623.5	4,364.9	4,105.0	259.89	16.795	
23,504.9	13,200.0	20,223.2	9,997.8	176.9	173.3	42.83	10,171.2	1,622.6	4,365.2	4,102.8	262.41	16.635 SF	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #114H - 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	1.0	-1.0	0.0	0.0	89.35	28.7	2,533.1	2,533.3				
100.0	100.0	101.0	99.0	0.1	0.1	89.35	28.7	2,533.1	2,533.3	2,533.0	0.26	9,747.483	
200.0	200.0	201.0	199.0	0.5	0.5	89.35	28.7	2,533.1	2,533.3	2,532.3	0.98	2,593.370	
300.0	300.0	301.0	299.0	0.8	0.8	89.35	28.7	2,533.1	2,533.3	2,531.6	1.69	1,495.647	
400.0	400.0	401.0	399.0	1.2	1.2	89.35	28.7	2,533.1	2,533.3	2,530.9	2.41	1,050.845	
500.0	500.0	501.0	499.0	1.6	1.6	89.35	28.7	2,533.1	2,533.3	2,530.2	3.13	809.964	
600.0	600.0	601.0	599.0	1.9	1.9	89.35	28.7	2,533.1	2,533.3	2,529.5	3.84	658.922	
700.0	700.0	701.0	699.0	2.3	2.3	89.35	28.7	2,533.1	2,533.3	2,528.7	4.56	555.358	
800.0	800.0	801.0	799.0	2.6	2.6	89.35	28.7	2,533.1	2,533.3	2,528.0	5.28	479.928	
900.0	900.0	901.0	899.0	3.0	3.0	89.35	28.7	2,533.1	2,533.3	2,527.3	6.00	422.537	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	89.35	28.7	2,533.1	2,533.3	2,526.6	6.71	377.406	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	89.35	28.7	2,533.1	2,533.3	2,525.9	7.43	340.986	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	89.35	28.7	2,533.1	2,533.3	2,525.1	8.15	310.976	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	89.35	28.7	2,533.1	2,533.3	2,524.4	8.86	285.821	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	89.35	28.7	2,533.1	2,533.3	2,523.7	9.58	264.432	
1,500.0	1,500.0	1,499.0	1,499.0	5.1	5.1	89.35	28.7	2,533.1	2,533.3	2,523.0	10.29	246.192	CC
1,600.0	1,600.0	1,570.8	1,570.8	5.5	5.4	89.35	28.5	2,533.5	2,533.8	2,523.0	10.90	232.543	ES
1,700.0	1,700.0	1,642.3	1,642.2	5.9	5.6	89.37	28.0	2,534.7	2,535.5	2,524.0	11.50	220.561	
1,800.0	1,800.0	1,713.7	1,713.6	6.2	5.9	89.39	27.0	2,536.7	2,538.3	2,526.2	12.09	209.933	
1,900.0	1,900.0	1,785.1	1,784.9	6.6	6.1	89.42	25.7	2,539.6	2,542.2	2,529.6	12.69	200.395	
2,000.0	2,000.0	1,856.3	1,856.1	6.9	6.4	89.46	24.0	2,543.2	2,547.3	2,534.0	13.28	191.806	
2,100.0	2,100.0	1,927.5	1,927.1	7.3	6.6	89.51	22.0	2,547.6	2,553.5	2,539.6	13.87	184.054	
2,200.0	2,200.0	2,000.0	1,999.4	7.7	6.9	89.56	19.5	2,552.9	2,560.8	2,546.3	14.47	176.964	
2,300.0	2,300.0	2,069.4	2,068.5	8.0	7.1	89.62	16.8	2,558.8	2,569.2	2,554.1	15.06	170.650	
2,400.0	2,400.0	2,140.1	2,138.8	8.4	7.4	89.70	13.6	2,565.5	2,578.7	2,563.1	15.64	164.843	
2,500.0	2,500.0	2,210.6	2,208.8	8.7	7.6	89.77	10.1	2,573.0	2,589.4	2,573.1	16.23	159.548	
2,600.0	2,600.0	2,280.9	2,278.5	9.1	7.9	89.86	6.3	2,581.3	2,601.1	2,584.3	16.81	154.706	
2,700.0	2,700.0	2,372.1	2,368.8	9.4	8.2	89.98	0.9	2,592.8	2,613.7	2,596.2	17.48	149.483	
2,800.0	2,800.0	2,471.1	2,466.9	9.8	8.6	90.11	-4.9	2,605.3	2,626.3	2,608.1	18.19	144.367	
2,900.0	2,900.0	2,570.2	2,564.9	10.2	9.0	90.23	-10.7	2,617.7	2,639.0	2,620.1	18.90	139.619	
3,000.0	3,000.0	2,669.2	2,663.0	10.5	9.3	90.36	-16.6	2,630.2	2,651.7	2,632.0	19.61	135.201	
3,100.0	3,100.0	2,768.2	2,761.1	10.9	9.7	90.49	-22.4	2,642.7	2,664.3	2,644.0	20.33	131.083	
3,200.0	3,200.0	2,867.3	2,859.1	11.2	10.1	90.61	-28.2	2,655.2	2,677.0	2,656.0	21.04	127.235	
3,300.0	3,300.0	2,966.3	2,957.2	11.6	10.5	90.73	-34.0	2,667.7	2,689.7	2,668.0	21.76	123.633	
3,400.0	3,400.0	3,065.3	3,055.3	12.0	10.9	90.85	-39.9	2,680.2	2,702.4	2,680.0	22.47	120.255	
3,500.0	3,500.0	3,164.3	3,153.3	12.3	11.3	90.97	-45.7	2,692.7	2,715.2	2,692.0	23.19	117.081	
3,600.0	3,600.0	3,263.4	3,251.4	12.7	11.7	91.09	-51.5	2,705.2	2,727.9	2,704.0	23.91	114.094	
3,700.0	3,700.0	3,362.4	3,349.4	13.0	12.1	91.21	-57.3	2,717.7	2,740.7	2,716.0	24.63	111.278	
3,800.0	3,800.0	3,461.4	3,447.5	13.4	12.5	91.33	-63.2	2,730.2	2,753.4	2,728.1	25.35	108.619	
3,900.0	3,900.0	3,560.4	3,545.6	13.8	12.9	91.44	-69.0	2,742.6	2,766.2	2,740.1	26.07	106.105	
4,000.0	4,000.0	3,659.5	3,643.6	14.1	13.3	91.56	-74.8	2,755.1	2,779.0	2,752.2	26.79	103.724	
4,100.0	4,100.0	3,758.5	3,741.7	14.5	13.7	91.67	-80.6	2,767.6	2,791.8	2,764.2	27.51	101.467	
4,200.0	4,200.0	3,857.5	3,839.8	14.8	14.1	91.78	-86.5	2,780.1	2,804.6	2,776.3	28.24	99.324	
4,300.0	4,300.0	3,956.5	3,937.8	15.2	14.5	91.89	-92.3	2,792.6	2,817.4	2,788.4	28.96	97.287	
4,400.0	4,400.0	4,055.6	4,035.9	15.5	14.9	92.00	-98.1	2,805.1	2,830.2	2,800.5	29.68	95.348	
4,500.0	4,500.0	4,154.6	4,134.0	15.9	15.3	92.11	-103.9	2,817.6	2,843.0	2,812.6	30.41	93.501	
4,600.0	4,600.0	4,253.6	4,232.0	16.3	15.7	92.22	-109.8	2,830.1	2,855.9	2,824.7	31.13	91.739	
4,700.0	4,700.0	4,352.7	4,330.1	16.6	16.1	92.33	-115.6	2,842.6	2,868.7	2,836.9	31.85	90.056	
4,800.0	4,800.0	4,451.7	4,428.1	17.0	16.5	92.44	-121.4	2,855.1	2,881.6	2,849.0	32.58	88.448	
4,900.0	4,900.0	4,550.7	4,526.2	17.3	16.9	92.54	-127.2	2,867.5	2,894.5	2,861.2	33.30	86.910	
5,000.0	5,000.0	4,649.7	4,624.3	17.7	17.3	92.65	-133.1	2,880.0	2,907.4	2,873.3	34.03	85.437	
5,100.0	5,100.0	4,748.8	4,722.3	18.1	17.7	92.75	-138.9	2,892.5	2,920.3	2,885.5	34.75	84.025	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #114H - 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
5,200.0	5,200.0	4,847.8	4,820.4	18.4	18.1	92.85	-144.7	2,905.0	2,933.2	2,897.7	35.48	82.671	
5,300.0	5,300.0	4,946.8	4,918.5	18.8	18.6	92.95	-150.5	2,917.5	2,946.1	2,909.9	36.21	81.371	
5,400.0	5,400.0	5,045.8	5,016.5	19.1	19.0	93.05	-156.4	2,930.0	2,959.0	2,922.1	36.93	80.122	
5,500.0	5,500.0	5,144.9	5,114.6	19.5	19.4	93.16	-162.2	2,942.5	2,971.9	2,934.3	37.66	78.921	
5,600.0	5,600.0	5,243.9	5,212.6	19.8	19.8	93.25	-168.0	2,955.0	2,984.9	2,946.5	38.38	77.765	
5,700.0	5,700.0	5,342.9	5,310.7	20.2	20.2	93.35	-173.8	2,967.5	2,997.8	2,958.7	39.11	76.653	
5,800.0	5,800.0	5,693.0	5,659.0	20.6	21.6	93.59	-188.0	2,997.8	3,007.0	2,966.1	40.90	73.523	
5,900.0	5,900.0	5,933.0	5,899.0	20.9	22.4	93.62	-190.0	3,002.1	3,008.1	2,966.1	42.05	71.533	
6,000.0	6,000.0	6,033.0	5,999.0	21.3	22.7	93.62	-190.0	3,002.1	3,008.1	2,965.4	42.75	70.374	
6,100.0	6,100.0	6,133.0	6,099.0	21.6	23.0	93.62	-190.0	3,002.1	3,008.1	2,964.7	43.44	69.251	
6,200.0	6,200.0	6,233.0	6,199.0	22.0	23.3	93.62	-190.0	3,002.1	3,008.1	2,964.0	44.13	68.162	
6,300.0	6,300.0	6,333.0	6,299.0	22.4	23.7	93.62	-190.0	3,002.1	3,008.1	2,963.3	44.83	67.105	
6,400.0	6,400.0	6,433.0	6,399.0	22.7	24.0	93.62	-190.0	3,002.1	3,008.1	2,962.6	45.52	66.080	
6,500.0	6,500.0	6,533.0	6,499.0	23.1	24.3	93.62	-190.0	3,002.1	3,008.1	2,961.9	46.22	65.085	
6,600.0	6,600.0	6,633.0	6,599.0	23.4	24.6	93.62	-190.0	3,002.1	3,008.1	2,961.2	46.92	64.119	
6,700.0	6,700.0	6,733.0	6,699.0	23.8	25.0	93.62	-190.0	3,002.1	3,008.1	2,960.5	47.61	63.180	
6,800.0	6,800.0	6,833.0	6,799.0	24.1	25.3	93.62	-190.0	3,002.1	3,008.1	2,959.8	48.31	62.267	
6,900.0	6,900.0	6,933.0	6,899.0	24.5	25.6	93.62	-190.0	3,002.1	3,008.1	2,959.1	49.01	61.380	
7,000.0	7,000.0	7,033.0	6,999.0	24.9	25.9	93.62	-190.0	3,002.1	3,008.1	2,958.4	49.71	60.517	
7,100.0	7,100.0	7,133.0	7,099.0	25.2	26.3	-160.89	-190.0	3,002.1	3,009.0	2,958.6	50.40	59.707	
7,200.0	7,200.0	7,233.0	7,199.0	25.5	26.6	-160.90	-190.0	3,002.1	3,011.4	2,960.4	51.07	58.964	
7,300.0	7,299.9	7,332.9	7,298.9	25.9	26.9	-160.91	-190.0	3,002.1	3,015.6	2,963.8	51.75	58.272	
7,400.0	7,399.7	7,432.7	7,398.7	26.2	27.3	-160.93	-190.0	3,002.1	3,021.3	2,968.9	52.43	57.628	
7,500.0	7,499.4	7,532.4	7,498.4	26.6	27.6	-160.96	-190.0	3,002.1	3,028.8	2,975.6	53.11	57.032	
7,600.0	7,598.9	7,631.9	7,597.9	26.9	27.9	-160.98	-190.0	3,002.1	3,037.8	2,984.0	53.78	56.481	
7,700.0	7,698.3	7,731.3	7,697.3	27.2	28.3	-161.02	-190.0	3,002.1	3,048.5	2,994.1	54.46	55.975	
7,800.0	7,797.4	7,830.4	7,796.4	27.6	28.6	-161.06	-190.0	3,002.1	3,060.9	3,005.7	55.14	55.511	
7,900.0	7,896.3	7,929.3	7,895.3	27.9	28.9	-161.10	-190.0	3,002.1	3,074.9	3,019.1	55.82	55.088	
8,000.0	7,994.9	8,027.9	7,993.9	28.3	29.3	-161.15	-190.0	3,002.1	3,090.5	3,034.0	56.49	54.705	
8,100.0	8,093.3	8,126.3	8,092.3	28.6	29.6	-161.20	-190.0	3,002.1	3,107.8	3,050.6	57.17	54.361	
8,182.6	8,174.2	8,207.2	8,173.2	28.9	29.9	-161.25	-190.0	3,002.1	3,123.3	3,065.6	57.73	54.105	
8,200.0	8,191.3	8,224.3	8,190.3	29.0	29.9	-161.27	-190.0	3,002.1	3,126.7	3,068.8	57.84	54.053	
8,300.0	8,289.1	8,322.1	8,288.1	29.4	30.2	-161.39	-190.0	3,002.1	3,146.1	3,087.6	58.52	53.762	
8,400.0	8,387.0	8,420.0	8,386.0	29.7	30.6	-161.51	-190.0	3,002.1	3,165.6	3,106.4	59.20	53.477	
8,500.0	8,484.9	8,517.9	8,483.9	30.1	30.9	-161.62	-190.0	3,002.1	3,185.1	3,125.2	59.87	53.196	
8,600.0	8,582.8	8,615.8	8,581.8	30.5	31.2	-161.74	-190.0	3,002.1	3,204.6	3,144.0	60.55	52.921	
8,700.0	8,680.6	8,713.7	8,679.6	30.9	31.6	-161.85	-190.0	3,002.1	3,224.1	3,162.9	61.24	52.651	
8,800.0	8,778.5	8,811.5	8,777.5	31.2	31.9	-161.96	-190.0	3,002.1	3,243.6	3,181.7	61.92	52.385	
8,900.0	8,876.4	8,909.4	8,875.4	31.6	32.2	-162.08	-190.0	3,002.1	3,263.2	3,200.6	62.60	52.125	
9,000.0	8,974.3	9,007.3	8,973.3	32.0	32.6	-162.19	-190.0	3,002.1	3,282.7	3,219.4	63.29	51.869	
9,100.0	9,072.1	9,105.2	9,071.1	32.4	32.9	-162.29	-190.0	3,002.1	3,302.3	3,238.3	63.97	51.618	
9,200.0	9,170.0	9,203.0	9,169.0	32.8	33.2	-162.40	-190.0	3,002.1	3,321.8	3,257.2	64.66	51.372	
9,300.0	9,267.9	9,300.9	9,266.9	33.2	33.6	-162.51	-190.0	3,002.1	3,341.4	3,276.0	65.35	51.129	
9,400.0	9,365.8	9,401.2	9,364.8	33.6	33.9	-162.61	-190.0	3,002.1	3,361.0	3,294.9	66.05	50.885	
9,500.0	9,463.7	9,496.7	9,462.7	34.0	34.2	-162.72	-190.0	3,002.1	3,380.6	3,313.9	66.73	50.658	
9,600.0	9,561.5	9,593.0	9,558.8	34.4	34.6	-162.90	-185.4	3,002.3	3,400.2	3,332.8	67.41	50.438	
9,700.0	9,659.4	9,683.4	9,647.2	34.8	34.8	-163.30	-166.9	3,002.7	3,420.0	3,352.0	68.05	50.255	
9,800.0	9,757.3	9,764.7	9,723.3	35.2	35.1	-163.86	-138.6	3,003.5	3,440.3	3,371.7	68.64	50.120	
9,900.0	9,855.2	9,835.4	9,785.7	35.6	35.2	-164.48	-105.4	3,004.3	3,461.5	3,392.3	69.18	50.037	
10,000.0	9,953.0	9,895.7	9,835.3	36.0	35.4	-165.10	-71.3	3,005.2	3,483.8	3,414.2	69.66	50.009	
10,100.0	10,050.9	9,950.0	9,876.7	36.4	35.5	-165.73	-36.2	3,006.2	3,507.8	3,437.7	70.11	50.032	
10,200.0	10,148.8	9,989.6	9,904.8	36.9	35.5	-166.23	-8.1	3,006.9	3,533.5	3,463.0	70.49	50.129	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #114H - 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
10,300.0	10,246.7	10,026.0	9,928.8	37.3	35.6	-166.70	19.2	3,007.6	3,561.1	3,490.2	70.82	50.280	
10,400.0	10,344.6	10,050.0	9,943.6	37.7	35.6	-167.03	38.0	3,008.1	3,590.7	3,519.6	71.09	50.510	
10,500.0	10,442.4	10,083.5	9,963.0	38.1	35.6	-167.50	65.4	3,008.8	3,622.5	3,551.1	71.35	50.767	
10,600.0	10,540.3	10,100.0	9,971.9	38.5	35.6	-167.74	79.2	3,009.2	3,656.3	3,584.8	71.53	51.118	
10,700.0	10,638.2	10,126.3	9,985.3	39.0	35.7	-168.12	101.8	3,009.8	3,692.3	3,620.6	71.70	51.494	
10,800.0	10,736.1	10,150.0	9,996.5	39.4	35.7	-168.48	122.7	3,010.3	3,730.5	3,658.6	71.84	51.927	
10,900.0	10,833.9	10,150.0	9,996.5	39.8	35.7	-168.48	122.7	3,010.3	3,770.7	3,698.9	71.86	52.477	
11,000.0	10,931.8	10,172.6	10,006.4	40.2	35.7	-168.82	143.0	3,010.9	3,813.0	3,741.0	71.93	53.010	
11,100.0	11,029.7	10,184.7	10,011.3	40.7	35.7	-169.01	154.1	3,011.1	3,857.2	3,785.3	71.94	53.621	
11,200.0	11,127.6	10,200.0	10,017.2	41.1	35.7	-169.25	168.2	3,011.5	3,903.5	3,831.6	71.93	54.266	
11,300.0	11,225.5	10,200.0	10,017.2	41.5	35.7	-169.25	168.2	3,011.5	3,951.7	3,879.8	71.84	55.005	
11,400.0	11,323.3	10,200.0	10,017.2	42.0	35.7	-169.25	168.2	3,011.5	4,001.7	3,930.0	71.73	55.790	
11,500.0	11,421.2	10,222.2	10,025.1	42.4	35.7	-169.59	188.9	3,012.1	4,053.4	3,981.7	71.70	56.536	
11,523.5	11,444.2	10,223.9	10,025.7	42.5	35.7	-169.62	190.5	3,012.1	4,065.9	3,994.2	71.67	56.729	
11,600.0	11,519.2	10,229.6	10,027.6	42.8	35.7	-169.84	195.8	3,012.2	4,106.3	4,034.7	71.58	57.367	
11,700.0	11,617.7	10,250.0	10,033.9	43.3	35.7	-170.31	215.3	3,012.7	4,158.9	4,087.4	71.49	58.171	
11,800.0	11,716.7	10,250.0	10,033.9	43.7	35.7	-170.46	215.3	3,012.7	4,210.8	4,139.5	71.30	59.054	
11,900.0	11,815.9	10,250.0	10,033.9	44.1	35.7	-170.61	215.3	3,012.7	4,262.2	4,191.1	71.09	59.952	
12,000.0	11,915.5	10,250.0	10,033.9	44.4	35.7	-170.76	215.3	3,012.7	4,313.2	4,242.3	70.86	60.866	
12,100.0	12,015.2	10,250.0	10,033.9	44.8	35.7	-170.90	215.3	3,012.7	4,363.6	4,293.0	70.62	61.794	
12,200.0	12,115.1	10,250.0	10,033.9	45.2	35.7	-171.03	215.3	3,012.7	4,413.6	4,343.2	70.35	62.739	
12,300.0	12,215.1	10,272.0	10,039.9	45.5	35.8	-171.47	236.4	3,013.3	4,462.7	4,392.5	70.16	63.603	
12,311.9	12,227.0	10,272.6	10,040.1	45.5	35.8	83.01	237.0	3,013.3	4,468.5	4,398.4	70.13	63.716	
12,400.0	12,315.1	10,277.0	10,041.2	45.8	35.8	82.95	241.3	3,013.4	4,512.3	4,442.4	69.89	64.559	
12,500.0	12,415.1	10,300.0	10,046.4	46.2	35.8	82.63	263.6	3,014.0	4,563.6	4,493.9	69.69	65.480	
12,600.0	12,515.1	10,300.0	10,046.4	46.5	35.8	82.63	263.6	3,014.0	4,616.3	4,546.9	69.39	66.523	
12,700.0	12,615.1	10,300.0	10,046.4	46.9	35.8	82.63	263.6	3,014.0	4,670.5	4,601.4	69.09	67.599	
12,711.9	12,627.0	10,300.0	10,046.4	46.9	35.8	82.63	263.6	3,014.0	4,677.1	4,608.0	69.06	67.729	
12,750.0	12,665.1	10,300.0	10,046.4	47.0	35.8	102.06	263.6	3,014.0	4,698.5	4,629.5	68.94	68.152	
12,800.0	12,714.8	10,300.0	10,046.4	47.2	35.8	98.56	263.6	3,014.0	4,727.5	4,658.7	68.79	68.718	
12,850.0	12,763.8	10,300.0	10,046.4	47.4	35.8	94.86	263.6	3,014.0	4,757.3	4,688.7	68.65	69.296	
12,900.0	12,811.8	10,300.0	10,046.4	47.5	35.8	91.02	263.6	3,014.0	4,787.8	4,719.3	68.52	69.879	
12,950.0	12,858.3	10,300.0	10,046.4	47.7	35.8	87.09	263.6	3,014.0	4,818.7	4,750.3	68.39	70.463	
13,000.0	12,903.1	10,300.0	10,046.4	47.8	35.8	83.15	263.6	3,014.0	4,849.8	4,781.5	68.27	71.042	
13,050.0	12,945.8	10,300.0	10,046.4	48.0	35.8	79.25	263.6	3,014.0	4,880.7	4,812.6	68.16	71.611	
13,100.0	12,986.1	10,321.9	10,050.6	48.1	35.9	75.33	285.2	3,014.6	4,911.0	4,842.9	68.15	72.060	
13,150.0	13,023.7	10,327.7	10,051.5	48.3	35.9	71.71	290.9	3,014.7	4,940.9	4,872.8	68.09	72.561	
13,200.0	13,058.2	10,350.0	10,054.7	48.4	35.9	68.25	312.9	3,015.3	4,970.2	4,902.0	68.12	72.966	
13,250.0	13,089.4	10,350.0	10,054.7	48.5	35.9	65.16	312.9	3,015.3	4,998.1	4,930.0	68.07	73.427	
13,300.0	13,117.2	10,350.0	10,054.7	48.7	35.9	62.32	312.9	3,015.3	5,024.8	4,956.8	68.04	73.849	
13,350.0	13,141.1	10,350.0	10,054.7	48.8	35.9	59.74	312.9	3,015.3	5,050.2	4,982.2	68.04	74.225	
13,400.0	13,161.2	10,350.0	10,054.7	48.9	35.9	57.43	312.9	3,015.3	5,074.1	5,006.0	68.06	74.551	
13,450.0	13,177.2	10,350.0	10,054.7	49.1	35.9	55.37	312.9	3,015.3	5,096.2	5,028.1	68.11	74.823	
13,500.0	13,189.1	10,374.1	10,057.1	49.2	36.0	53.61	336.9	3,015.9	5,116.2	5,047.9	68.28	74.929	
13,550.0	13,196.6	10,400.0	10,058.6	49.4	36.1	52.12	362.7	3,016.6	5,134.5	5,066.0	68.48	74.979	
13,600.0	13,199.8	10,400.0	10,058.6	49.6	36.1	50.82	362.7	3,016.6	5,150.3	5,081.7	68.61	75.062	
13,611.9	13,200.0	10,400.0	10,058.6	49.6	36.1	50.54	362.7	3,016.6	5,153.7	5,085.1	68.65	75.074	
13,700.0	13,200.0	10,400.0	10,058.6	50.0	36.1	50.87	362.7	3,016.6	5,178.5	5,109.5	68.94	75.117	
13,800.0	13,200.0	10,424.0	10,058.9	50.4	36.1	51.29	386.7	3,017.2	5,205.6	5,136.2	69.37	75.036	
13,900.0	13,200.0	10,614.4	10,057.6	50.9	36.9	51.98	577.1	3,017.4	5,229.5	5,159.0	70.50	74.172	
14,000.0	13,200.0	10,711.1	10,056.9	51.4	37.3	52.40	673.8	3,016.7	5,250.2	5,178.8	71.38	73.557	
14,100.0	13,200.0	10,808.6	10,056.2	52.0	37.9	52.77	771.3	3,015.9	5,268.3	5,196.0	72.34	72.832	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #114H - 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
14,200.0	13,200.0	10,906.8	10,055.5	52.6	38.5	53.07	869.5	3,015.1	5,283.7	5,210.3	73.38	72.008	
14,300.0	13,200.0	11,005.7	10,054.9	53.2	39.1	53.31	968.3	3,014.4	5,296.3	5,221.8	74.49	71.097	
14,400.0	13,200.0	11,105.0	10,054.2	53.8	39.8	53.50	1,067.6	3,013.6	5,306.2	5,230.5	75.69	70.108	
14,500.0	13,200.0	11,204.6	10,053.5	54.5	40.6	53.63	1,167.3	3,012.8	5,313.3	5,236.3	76.94	69.055	
14,600.0	13,200.0	11,304.5	10,052.7	55.1	41.4	53.71	1,267.2	3,012.0	5,317.5	5,239.3	78.26	67.947	
14,687.2	13,200.0	11,408.3	10,052.1	55.7	42.3	53.73	1,354.4	3,011.4	5,319.0	5,239.4	79.59	66.834	
14,700.0	13,200.0	11,404.5	10,052.0	55.8	42.3	53.73	1,367.1	3,011.3	5,319.0	5,239.4	79.63	66.796	
14,800.0	13,200.0	11,504.5	10,051.3	56.5	43.2	53.72	1,467.1	3,010.5	5,319.4	5,238.4	81.06	65.620	
14,900.0	13,200.0	11,604.5	10,050.6	57.3	44.2	53.71	1,567.1	3,009.7	5,319.9	5,237.3	82.57	64.426	
15,000.0	13,200.0	11,704.5	10,049.9	58.1	45.2	53.71	1,667.1	3,008.9	5,320.3	5,236.1	84.15	63.226	
15,100.0	13,200.0	11,804.5	10,049.2	58.9	46.2	53.70	1,767.1	3,008.1	5,320.7	5,234.9	85.79	62.023	
15,200.0	13,200.0	11,904.5	10,048.5	59.7	47.3	53.70	1,867.1	3,007.4	5,321.1	5,233.6	87.48	60.824	
15,300.0	13,200.0	12,004.5	10,047.8	60.6	48.4	53.69	1,967.1	3,006.6	5,321.5	5,232.3	89.24	59.633	
15,400.0	13,200.0	12,104.5	10,047.1	61.6	49.5	53.68	2,067.1	3,005.8	5,321.9	5,230.9	91.05	58.454	
15,500.0	13,200.0	12,204.5	10,046.4	62.5	50.7	53.68	2,167.1	3,005.0	5,322.3	5,229.4	92.90	57.289	
15,600.0	13,200.0	12,304.4	10,045.7	63.5	51.9	53.67	2,267.1	3,004.2	5,322.7	5,227.9	94.81	56.142	
15,700.0	13,200.0	12,404.4	10,045.0	64.5	53.1	53.67	2,367.1	3,003.5	5,323.2	5,226.4	96.76	55.016	
15,800.0	13,200.0	12,504.4	10,044.3	65.5	54.3	53.66	2,467.0	3,002.7	5,323.6	5,224.8	98.75	53.911	
15,900.0	13,200.0	12,604.4	10,043.6	66.6	55.6	53.65	2,567.0	3,001.9	5,324.0	5,223.2	100.78	52.829	
16,000.0	13,200.0	12,704.4	10,042.9	67.7	56.9	53.65	2,667.0	3,001.1	5,324.4	5,221.5	102.85	51.771	
16,100.0	13,200.0	12,804.4	10,042.2	68.8	58.2	53.64	2,767.0	3,000.4	5,324.8	5,219.9	104.95	50.738	
16,200.0	13,200.0	12,904.4	10,041.5	69.9	59.5	53.63	2,867.0	2,999.6	5,325.2	5,218.1	107.08	49.730	
16,300.0	13,200.0	13,004.4	10,040.8	71.1	60.8	53.63	2,967.0	2,998.8	5,325.6	5,216.4	109.25	48.749	
16,400.0	13,200.0	13,104.4	10,040.1	72.3	62.2	53.62	3,067.0	2,998.0	5,326.0	5,214.6	111.44	47.792	
16,500.0	13,200.0	13,204.4	10,039.4	73.5	63.5	53.62	3,167.0	2,997.2	5,326.5	5,212.8	113.66	46.862	
16,600.0	13,200.0	13,304.4	10,038.7	74.7	64.9	53.61	3,267.0	2,996.5	5,326.9	5,211.0	115.91	45.957	
16,700.0	13,200.0	13,404.4	10,038.0	75.9	66.3	53.60	3,367.0	2,995.7	5,327.3	5,209.1	118.18	45.077	
16,800.0	13,200.0	13,504.4	10,037.3	77.1	67.7	53.60	3,467.0	2,994.9	5,327.7	5,207.2	120.48	44.222	
16,900.0	13,200.0	13,604.4	10,036.6	78.4	69.1	53.59	3,567.0	2,994.1	5,328.1	5,205.3	122.79	43.392	
17,000.0	13,200.0	13,704.4	10,035.9	79.7	70.5	53.59	3,667.0	2,993.4	5,328.5	5,203.4	125.13	42.585	
17,100.0	13,200.0	13,804.4	10,035.2	81.0	72.0	53.58	3,766.9	2,992.6	5,328.9	5,201.4	127.48	41.801	
17,200.0	13,200.0	13,904.4	10,034.4	82.3	73.4	53.57	3,866.9	2,991.8	5,329.3	5,199.5	129.86	41.040	
17,300.0	13,200.0	14,004.4	10,033.7	83.6	74.8	53.57	3,966.9	2,991.0	5,329.8	5,197.5	132.25	40.302	
17,400.0	13,200.0	14,104.4	10,033.0	84.9	76.3	53.56	4,066.9	2,990.2	5,330.2	5,195.5	134.65	39.584	
17,500.0	13,200.0	14,204.4	10,032.3	86.3	77.8	53.55	4,166.9	2,989.5	5,330.6	5,193.5	137.08	38.888	
17,600.0	13,200.0	14,304.4	10,031.6	87.6	79.3	53.55	4,266.9	2,988.7	5,331.0	5,191.5	139.51	38.212	
17,700.0	13,200.0	14,404.4	10,030.9	89.0	80.7	53.54	4,366.9	2,987.9	5,331.4	5,189.4	141.96	37.555	
17,800.0	13,200.0	14,504.4	10,030.2	90.3	82.2	53.54	4,466.9	2,987.1	5,331.8	5,187.4	144.43	36.917	
17,900.0	13,200.0	14,604.4	10,029.5	91.7	83.7	53.53	4,566.9	2,986.3	5,332.2	5,185.3	146.90	36.298	
18,000.0	13,200.0	14,704.4	10,028.8	93.1	85.2	53.52	4,666.9	2,985.6	5,332.7	5,183.3	149.39	35.696	
18,100.0	13,200.0	14,804.4	10,028.1	94.5	86.7	53.52	4,766.9	2,984.8	5,333.1	5,181.2	151.89	35.111	
18,200.0	13,200.0	14,904.4	10,027.4	95.9	88.2	53.51	4,866.9	2,984.0	5,333.5	5,179.1	154.40	34.543	
18,300.0	13,200.0	15,004.4	10,026.7	97.3	89.8	53.51	4,966.8	2,983.2	5,333.9	5,177.0	156.92	33.991	
18,400.0	13,200.0	15,104.4	10,026.0	98.7	91.3	53.50	5,066.8	2,982.5	5,334.3	5,174.9	159.45	33.454	
18,500.0	13,200.0	15,204.4	10,025.3	100.2	92.8	53.49	5,166.8	2,981.7	5,334.7	5,172.7	161.99	32.933	
18,600.0	13,200.0	15,304.4	10,024.6	101.6	94.3	53.49	5,266.8	2,980.9	5,335.1	5,170.6	164.54	32.425	
18,700.0	13,200.0	15,404.4	10,023.9	103.0	95.9	53.48	5,366.8	2,980.1	5,335.5	5,168.5	167.09	31.932	
18,800.0	13,200.0	15,504.4	10,023.2	104.5	97.4	53.48	5,466.8	2,979.3	5,336.0	5,166.3	169.66	31.452	
18,900.0	13,200.0	15,604.4	10,022.5	105.9	99.0	53.47	5,566.8	2,978.6	5,336.4	5,164.1	172.23	30.984	
19,000.0	13,200.0	15,704.4	10,021.8	107.4	100.5	53.46	5,666.8	2,977.8	5,336.8	5,162.0	174.81	30.530	
19,100.0	13,200.0	15,804.4	10,021.1	108.9	102.1	53.46	5,766.8	2,977.0	5,337.2	5,159.8	177.39	30.087	
19,200.0	13,200.0	15,904.4	10,020.4	110.3	103.6	53.45	5,866.8	2,976.2	5,337.6	5,157.6	179.98	29.656	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #114H - 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
19,300.0	13,200.0	16,004.4	10,019.7	111.8	105.2	53.44	5,966.8	2,975.4	5,338.0	5,155.5	182.58	29.236	
19,400.0	13,200.0	16,104.4	10,019.0	113.3	106.7	53.44	6,066.8	2,974.7	5,338.4	5,153.3	185.19	28.827	
19,500.0	13,200.0	16,204.4	10,018.3	114.8	108.3	53.43	6,166.8	2,973.9	5,338.9	5,151.1	187.80	28.429	
19,600.0	13,200.0	16,304.3	10,017.6	116.3	109.9	53.43	6,266.7	2,973.1	5,339.3	5,148.9	190.41	28.041	
19,700.0	13,200.0	16,404.3	10,016.9	117.8	111.4	53.42	6,366.7	2,972.3	5,339.7	5,146.7	193.03	27.662	
19,800.0	13,200.0	16,504.3	10,016.1	119.3	113.0	53.41	6,466.7	2,971.6	5,340.1	5,144.4	195.66	27.293	
19,900.0	13,200.0	16,604.3	10,015.4	120.8	114.6	53.41	6,566.7	2,970.8	5,340.5	5,142.2	198.29	26.933	
20,000.0	13,200.0	16,704.3	10,014.7	122.3	116.1	53.40	6,666.7	2,970.0	5,340.9	5,140.0	200.92	26.582	
20,100.0	13,200.0	16,804.3	10,014.0	123.8	117.7	53.40	6,766.7	2,969.2	5,341.4	5,137.8	203.56	26.239	
20,200.0	13,200.0	16,904.3	10,013.3	125.3	119.3	53.39	6,866.7	2,968.4	5,341.8	5,135.6	206.21	25.905	
20,300.0	13,200.0	17,004.3	10,012.6	126.8	120.9	53.38	6,966.7	2,967.7	5,342.2	5,133.3	208.86	25.578	
20,400.0	13,200.0	17,104.3	10,011.9	128.4	122.5	53.38	7,066.7	2,966.9	5,342.6	5,131.1	211.51	25.259	
20,500.0	13,200.0	17,204.3	10,011.2	129.9	124.0	53.37	7,166.7	2,966.1	5,343.0	5,128.8	214.16	24.948	
20,600.0	13,200.0	17,304.3	10,010.5	131.4	125.6	53.37	7,266.7	2,965.3	5,343.4	5,126.6	216.82	24.644	
20,700.0	13,200.0	17,404.3	10,009.8	132.9	127.2	53.36	7,366.7	2,964.5	5,343.8	5,124.4	219.49	24.347	
20,800.0	13,200.0	17,504.3	10,009.1	134.5	128.8	53.35	7,466.7	2,963.8	5,344.3	5,122.1	222.15	24.057	
20,900.0	13,200.0	17,604.3	10,008.4	136.0	130.4	53.35	7,566.6	2,963.0	5,344.7	5,119.9	224.82	23.773	
21,000.0	13,200.0	17,704.3	10,007.7	137.6	132.0	53.34	7,666.6	2,962.2	5,345.1	5,117.6	227.50	23.495	
21,100.0	13,200.0	17,804.3	10,007.0	139.1	133.6	53.33	7,766.6	2,961.4	5,345.5	5,115.3	230.17	23.224	
21,200.0	13,200.0	17,904.3	10,006.3	140.7	135.2	53.33	7,866.6	2,960.7	5,345.9	5,113.1	232.85	22.959	
21,300.0	13,200.0	18,004.3	10,005.6	142.2	136.8	53.32	7,966.6	2,959.9	5,346.3	5,110.8	235.53	22.699	
21,400.0	13,200.0	18,104.3	10,004.9	143.8	138.4	53.32	8,066.6	2,959.1	5,346.8	5,108.5	238.21	22.445	
21,500.0	13,200.0	18,204.3	10,004.2	145.3	140.0	53.31	8,166.6	2,958.3	5,347.2	5,106.3	240.90	22.197	
21,600.0	13,200.0	18,304.3	10,003.5	146.9	141.6	53.30	8,266.6	2,957.5	5,347.6	5,104.0	243.59	21.953	
21,700.0	13,200.0	18,404.3	10,002.8	148.4	143.2	53.30	8,366.6	2,956.8	5,348.0	5,101.7	246.28	21.715	
21,800.0	13,200.0	18,504.3	10,002.1	150.0	144.8	53.29	8,466.6	2,956.0	5,348.4	5,099.4	248.97	21.482	
21,900.0	13,200.0	18,604.3	10,001.4	151.5	146.4	53.29	8,566.6	2,955.2	5,348.8	5,097.2	251.67	21.254	
22,000.0	13,200.0	18,704.3	10,000.7	153.1	148.0	53.28	8,666.6	2,954.4	5,349.3	5,094.9	254.37	21.030	
22,100.0	13,200.0	18,804.3	10,000.0	154.7	149.6	53.27	8,766.5	2,953.6	5,349.7	5,092.6	257.07	20.811	
22,200.0	13,200.0	18,904.3	9,999.3	156.2	151.2	53.27	8,866.5	2,952.9	5,350.1	5,090.3	259.77	20.596	
22,300.0	13,200.0	19,004.3	9,998.6	157.8	152.9	53.26	8,966.5	2,952.1	5,350.5	5,088.0	262.47	20.385	
22,400.0	13,200.0	19,104.3	9,997.9	159.4	154.5	53.26	9,066.5	2,951.3	5,350.9	5,085.7	265.18	20.179	
22,500.0	13,200.0	19,204.3	9,997.1	161.0	156.1	53.25	9,166.5	2,950.5	5,351.3	5,083.4	267.88	19.976	
22,600.0	13,200.0	19,304.3	9,996.4	162.5	157.7	53.24	9,266.5	2,949.8	5,351.7	5,081.2	270.59	19.778	
22,700.0	13,200.0	19,404.3	9,995.7	164.1	159.3	53.24	9,366.5	2,949.0	5,352.2	5,078.9	273.30	19.583	
22,800.0	13,200.0	19,504.3	9,995.0	165.7	160.9	53.23	9,466.5	2,948.2	5,352.6	5,076.6	276.01	19.392	
22,900.0	13,200.0	19,604.3	9,994.3	167.3	162.5	53.23	9,566.5	2,947.4	5,353.0	5,074.3	278.73	19.205	
23,000.0	13,200.0	19,704.3	9,993.6	168.9	164.2	53.22	9,666.5	2,946.6	5,353.4	5,072.0	281.44	19.021	
23,100.0	13,200.0	19,804.3	9,992.9	170.4	165.8	53.21	9,766.5	2,945.9	5,353.8	5,069.7	284.16	18.841	
23,200.0	13,200.0	19,904.3	9,992.2	172.0	167.4	53.21	9,866.5	2,945.1	5,354.2	5,067.4	286.88	18.664	
23,300.0	13,200.0	20,004.3	9,991.5	173.6	169.0	53.20	9,966.5	2,944.3	5,354.7	5,065.1	289.59	18.490	
23,400.0	13,200.0	20,104.3	9,990.8	175.2	170.6	53.19	10,066.4	2,943.5	5,355.1	5,062.8	292.32	18.320	
23,504.9	13,200.0	20,209.1	9,990.1	176.9	172.3	53.19	10,171.3	2,942.7	5,355.5	5,060.4	295.17	18.144	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #121H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 206-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	13.0	13.0	0.0	0.0	-11.87	5,146.2	-1,081.2	5,258.5				
100.0	100.0	94.6	94.6	0.1	0.1	-11.86	5,146.4	-1,081.0	5,258.8	5,258.5	0.28	N/A	
200.0	200.0	176.1	176.1	0.5	0.3	-11.85	5,147.0	-1,080.4	5,259.4	5,258.6	0.76	6,916.334	
300.0	300.0	263.1	263.1	0.8	0.5	-11.84	5,148.0	-1,079.5	5,260.3	5,258.9	1.37	3,837.844	
400.0	400.0	353.1	353.1	1.2	0.8	-11.83	5,149.2	-1,078.6	5,261.4	5,259.3	2.05	2,564.487	
500.0	500.0	449.6	449.5	1.6	1.2	-11.82	5,150.7	-1,077.7	5,262.6	5,259.9	2.76	1,909.565	
600.0	600.0	548.8	548.7	1.9	1.5	-11.80	5,152.1	-1,076.8	5,263.9	5,260.4	3.47	1,516.956	
700.0	700.0	638.9	638.8	2.3	1.9	-11.79	5,153.5	-1,076.0	5,265.2	5,261.1	4.15	1,268.186	
800.0	800.0	727.1	727.0	2.6	2.2	-11.78	5,155.1	-1,075.3	5,266.8	5,262.0	4.83	1,091.199	
900.0	900.0	820.6	820.5	3.0	2.5	-11.77	5,157.0	-1,074.6	5,268.6	5,263.1	5.52	954.381	
1,000.0	1,000.0	916.7	916.6	3.4	2.9	-11.76	5,158.9	-1,073.9	5,270.4	5,264.2	6.22	846.877	
1,100.0	1,100.0	1,012.8	1,012.7	3.7	3.2	-11.75	5,160.9	-1,073.2	5,272.4	5,265.4	6.93	761.217	
1,200.0	1,200.0	1,485.7	1,485.3	4.1	4.8	-11.76	5,153.2	-1,072.9	5,270.6	5,261.7	8.88	593.779	
1,300.0	1,300.0	1,650.3	1,649.7	4.4	5.4	-11.74	5,144.3	-1,068.7	5,264.7	5,254.9	9.80	537.457	
1,400.0	1,400.0	1,768.2	1,767.3	4.8	5.8	-11.71	5,137.3	-1,064.5	5,258.2	5,247.6	10.56	497.943	
1,500.0	1,500.0	1,878.1	1,876.9	5.1	6.2	-11.67	5,130.6	-1,060.0	5,251.4	5,240.1	11.30	464.658	
1,600.0	1,600.0	1,987.7	1,986.2	5.5	6.6	-11.63	5,124.0	-1,054.2	5,244.4	5,232.4	12.04	435.421	
1,700.0	1,700.0	2,102.2	2,100.2	5.9	7.0	-11.57	5,117.1	-1,047.2	5,237.2	5,224.4	12.81	408.900	
1,800.0	1,800.0	2,208.5	2,206.0	6.2	7.4	-11.50	5,110.5	-1,039.8	5,229.8	5,216.3	13.55	386.097	
1,900.0	1,900.0	2,306.9	2,304.0	6.6	7.8	-11.44	5,104.5	-1,032.9	5,222.4	5,208.1	14.26	366.301	
2,000.0	2,000.0	2,404.1	2,400.8	6.9	8.1	-11.38	5,098.5	-1,026.2	5,214.9	5,200.0	14.97	348.462	
2,100.0	2,100.0	2,500.5	2,496.8	7.3	8.5	-11.32	5,092.6	-1,019.7	5,207.6	5,191.9	15.67	332.288	
2,200.0	2,200.0	2,587.4	2,583.4	7.7	8.8	-11.27	5,087.4	-1,013.8	5,200.4	5,184.0	16.35	318.129	
2,300.0	2,300.0	2,668.9	2,664.5	8.0	9.1	-11.22	5,082.8	-1,008.2	5,193.5	5,176.5	17.00	305.441	
2,400.0	2,400.0	2,757.1	2,752.3	8.4	9.4	-11.16	5,078.1	-1,002.1	5,186.9	5,169.3	17.68	293.316	
2,500.0	2,500.0	2,860.1	2,855.0	8.7	9.8	-11.10	5,072.7	-994.9	5,180.4	5,162.0	18.42	281.280	
2,600.0	2,600.0	2,957.0	2,951.5	9.1	10.2	-11.03	5,067.5	-988.2	5,173.9	5,154.7	19.13	270.467	
2,700.0	2,700.0	3,047.3	3,041.5	9.4	10.5	-10.98	5,062.9	-982.1	5,167.5	5,147.7	19.82	260.732	
2,800.0	2,800.0	3,129.1	3,123.0	9.8	10.8	-10.93	5,058.8	-976.7	5,161.3	5,140.8	20.48	252.043	
2,900.0	2,900.0	3,197.4	3,191.2	10.2	11.1	-10.89	5,055.5	-973.0	5,155.7	5,134.6	21.09	244.498	
3,000.0	3,000.0	3,265.9	3,259.5	10.5	11.3	-10.87	5,052.5	-970.5	5,150.6	5,128.9	21.70	237.405	
3,100.0	3,100.0	3,292.0	3,285.6	10.9	11.4	-10.87	5,051.4	-969.9	5,146.5	5,124.3	22.15	232.300	
3,200.0	3,200.0	3,370.9	3,364.5	11.2	11.7	-10.85	5,048.8	-968.1	5,142.9	5,120.1	22.79	225.617	
3,300.0	3,300.0	3,419.8	3,413.3	11.6	11.9	-10.84	5,047.8	-967.0	5,140.5	5,117.2	23.33	220.356	
3,400.0	3,400.0	3,482.0	3,475.5	12.0	12.1	-10.83	5,047.3	-965.6	5,139.2	5,115.3	23.91	214.958	
3,500.0	3,500.0	3,527.8	3,521.2	12.3	12.3	-10.82	5,047.3	-964.5	5,138.7	5,114.2	24.43	210.372	
3,514.2	3,514.2	3,536.8	3,530.2	12.4	12.3	-10.82	5,047.4	-964.2	5,138.6	5,114.1	24.51	209.663	
3,600.0	3,600.0	3,590.9	3,584.3	12.7	12.5	-10.80	5,047.9	-962.6	5,138.9	5,113.9	25.01	205.504	
3,700.0	3,700.0	3,671.0	3,664.4	13.0	12.8	-10.76	5,049.3	-959.6	5,139.9	5,114.3	25.65	200.404	
3,800.0	3,800.0	3,749.6	3,742.9	13.4	13.1	-10.73	5,051.0	-956.8	5,141.3	5,115.1	26.28	195.632	
3,900.0	3,900.0	3,857.5	3,850.8	13.8	13.4	-10.70	5,052.9	-954.5	5,142.7	5,115.7	27.02	190.324	
4,000.0	4,000.0	3,977.2	3,970.4	14.1	13.8	-10.68	5,054.5	-953.0	5,143.8	5,116.0	27.80	185.028	
4,100.0	4,100.0	4,093.2	4,086.4	14.5	14.2	-10.67	5,055.5	-952.2	5,144.5	5,115.9	28.56	180.119	
4,200.0	4,200.0	4,203.5	4,196.7	14.8	14.6	-10.67	5,056.0	-952.4	5,145.0	5,115.7	29.30	175.618	
4,300.0	4,300.0	4,287.1	4,280.3	15.2	14.9	-10.67	5,056.3	-953.0	5,145.4	5,115.5	29.94	171.876	
4,400.0	4,400.0	4,359.1	4,352.3	15.5	15.1	-10.67	5,056.9	-953.1	5,146.4	5,115.8	30.54	168.538	
4,500.0	4,500.0	4,616.6	4,609.8	15.9	16.0	-10.69	5,057.6	-954.6	5,147.7	5,116.0	31.78	161.989	
4,600.0	4,600.0	4,721.2	4,714.3	16.3	16.3	-10.72	5,055.1	-957.0	5,145.9	5,113.4	32.49	158.393	
4,700.0	4,700.0	4,825.7	4,818.8	16.6	16.7	-10.75	5,052.6	-959.5	5,143.9	5,110.7	33.20	154.949	
4,800.0	4,800.0	4,916.4	4,909.4	17.0	17.0	-10.78	5,050.4	-961.7	5,142.0	5,108.2	33.86	151.846	
4,900.0	4,900.0	5,022.6	5,015.6	17.3	17.4	-10.81	5,048.0	-964.0	5,140.2	5,105.6	34.58	148.642	
5,000.0	5,000.0	5,133.1	5,126.0	17.7	17.7	-10.84	5,045.2	-966.3	5,138.1	5,102.8	35.32	145.493	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #121H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 206-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	5,100.0	5,228.5	5,221.4	18.1	18.1	-10.87	5,042.8	-968.4	5,136.0	5,100.0	36.00	142.668	
5,200.0	5,200.0	5,310.3	5,303.1	18.4	18.3	-10.89	5,040.8	-970.1	5,134.1	5,097.4	36.64	140.122	
5,300.0	5,300.0	5,378.0	5,370.8	18.8	18.6	-10.90	5,039.7	-970.9	5,132.7	5,095.5	37.23	137.848	
5,400.0	5,400.0	5,445.7	5,438.5	19.1	18.8	-10.91	5,039.2	-971.1	5,131.9	5,094.1	37.83	135.667	
5,500.0	5,500.0	5,533.8	5,526.6	19.5	19.1	-10.90	5,039.0	-970.8	5,131.7	5,093.2	38.50	133.307	
5,600.0	5,600.0	5,630.6	5,623.4	19.8	19.5	-10.90	5,038.9	-970.5	5,131.5	5,092.3	39.20	130.921	
5,700.0	5,700.0	5,729.9	5,722.7	20.2	19.8	-10.90	5,038.8	-970.4	5,131.4	5,091.5	39.90	128.601	
5,800.0	5,800.0	5,829.9	5,822.7	20.6	20.2	-10.90	5,038.6	-970.4	5,131.2	5,090.6	40.61	126.355	
5,900.0	5,900.0	5,934.6	5,927.4	20.9	20.5	-10.90	5,038.5	-970.5	5,131.1	5,089.7	41.33	124.141	
6,000.0	6,000.0	6,040.0	6,032.8	21.3	20.9	-10.90	5,038.1	-970.6	5,130.8	5,088.7	42.06	121.995	
6,099.9	6,099.9	6,123.2	6,115.9	21.6	21.2	-10.91	5,038.0	-970.7	5,130.7	5,088.0	42.70	120.154	
6,100.0	6,100.0	6,123.2	6,116.0	21.6	21.2	-10.91	5,038.0	-970.7	5,130.7	5,088.0	42.70	120.153	
6,200.0	6,200.0	6,208.2	6,201.0	22.0	21.5	-10.91	5,038.1	-971.0	5,130.8	5,087.5	43.35	118.356	
6,300.0	6,300.0	6,305.8	6,298.6	22.4	21.8	-10.91	5,038.3	-971.5	5,131.1	5,087.1	44.04	116.506	
6,400.0	6,400.0	6,405.3	6,398.1	22.7	22.1	-10.92	5,038.6	-971.9	5,131.5	5,086.7	44.74	114.697	
6,500.0	6,500.0	6,503.2	6,496.0	23.1	22.5	-10.92	5,038.8	-972.4	5,131.9	5,086.4	45.43	112.956	
6,600.0	6,600.0	6,601.3	6,594.1	23.4	22.8	-10.93	5,039.1	-973.0	5,132.3	5,086.1	46.13	111.267	
6,700.0	6,700.0	6,702.7	6,695.5	23.8	23.1	-10.93	5,039.5	-973.5	5,132.7	5,085.8	46.83	109.598	
6,800.0	6,800.0	6,805.1	6,797.9	24.1	23.5	-10.94	5,039.8	-974.0	5,133.1	5,085.5	47.54	107.970	
6,900.0	6,900.0	6,911.5	6,904.3	24.5	23.9	-10.94	5,040.0	-974.5	5,133.3	5,085.1	48.27	106.354	
7,000.0	7,000.0	7,043.3	7,036.1	24.9	24.3	-10.95	5,039.9	-975.2	5,133.4	5,084.3	49.08	104.587	
7,100.0	7,100.0	7,203.7	7,196.5	25.2	24.9	94.55	5,038.0	-976.4	5,132.4	5,082.5	49.99	102.678	
7,200.0	7,200.0	7,346.0	7,338.8	25.5	25.4	94.60	5,035.1	-976.8	5,130.7	5,079.9	50.82	100.966	
7,300.0	7,299.9	7,463.9	7,456.6	25.9	25.8	94.67	5,032.0	-976.6	5,128.5	5,076.9	51.56	99.457	
7,400.0	7,399.7	7,540.0	7,532.7	26.2	26.1	94.74	5,029.8	-976.3	5,126.2	5,074.0	52.17	98.251	
7,500.0	7,499.4	7,617.1	7,609.7	26.6	26.3	94.82	5,028.0	-976.1	5,124.5	5,071.7	52.79	97.078	
7,600.0	7,598.9	7,674.1	7,666.7	26.9	26.5	94.89	5,027.2	-975.9	5,123.9	5,070.6	53.33	96.075	
7,612.2	7,611.0	7,681.1	7,673.7	26.9	26.6	94.90	5,027.2	-975.8	5,123.9	5,070.5	53.40	95.956	
7,700.0	7,698.3	7,733.7	7,726.3	27.2	26.7	94.96	5,026.9	-975.7	5,124.3	5,070.4	53.88	95.098	
7,800.0	7,797.4	7,865.5	7,858.1	27.6	27.2	95.15	5,026.3	-975.1	5,124.9	5,070.2	54.70	93.699	
7,900.0	7,896.3	7,978.4	7,971.0	27.9	27.6	95.34	5,025.2	-974.3	5,125.1	5,069.7	55.44	92.442	
8,000.0	7,994.9	8,078.6	8,071.2	28.3	28.0	95.53	5,024.1	-973.5	5,125.5	5,069.4	56.15	91.287	
8,100.0	8,093.3	8,151.5	8,144.1	28.6	28.2	95.67	5,023.5	-972.9	5,126.3	5,069.6	56.76	90.318	
8,182.6	8,174.2	8,203.2	8,195.8	28.9	28.4	95.78	5,023.4	-972.5	5,127.7	5,070.4	57.23	89.590	
8,200.0	8,191.3	8,214.0	8,206.6	29.0	28.4	95.80	5,023.4	-972.4	5,128.0	5,070.7	57.34	89.439	
8,300.0	8,289.1	8,295.0	8,287.6	29.4	28.7	95.99	5,023.8	-972.0	5,130.6	5,072.6	57.98	88.488	
8,400.0	8,387.0	8,379.8	8,372.4	29.7	29.0	96.19	5,024.5	-971.7	5,133.5	5,074.9	58.64	87.542	
8,500.0	8,484.9	8,562.7	8,555.3	30.1	29.6	96.63	5,024.9	-970.0	5,136.1	5,076.5	59.66	86.092	
8,600.0	8,582.8	8,844.0	8,836.1	30.5	30.6	97.41	5,017.7	-955.7	5,134.6	5,073.6	60.99	84.187	
8,700.0	8,680.6	8,896.5	8,888.0	30.9	30.8	97.60	5,016.5	-948.1	5,132.9	5,071.3	61.58	83.360	
8,782.2	8,761.1	8,928.0	8,918.8	31.2	31.0	97.74	5,016.4	-941.8	5,132.5	5,070.5	62.02	82.761	
8,800.0	8,778.5	8,928.0	8,918.8	31.2	31.0	97.74	5,016.4	-941.8	5,132.5	5,070.4	62.09	82.667	
8,900.0	8,876.4	8,928.0	8,918.8	31.6	31.0	97.74	5,016.4	-941.8	5,133.8	5,071.3	62.48	82.172	
9,000.0	8,974.3	8,973.0	8,963.0	32.0	31.1	97.93	5,017.4	-933.4	5,136.6	5,073.6	63.02	81.506	
9,100.0	9,072.1	8,973.0	8,963.0	32.4	31.1	97.93	5,017.4	-933.4	5,141.0	5,077.6	63.38	81.109	
9,200.0	9,170.0	9,004.0	8,993.7	32.8	31.2	98.05	5,018.8	-929.1	5,147.0	5,083.2	63.86	80.603	
9,300.0	9,267.9	9,022.0	9,011.5	33.2	31.3	98.12	5,019.8	-926.8	5,154.5	5,090.2	64.27	80.206	
9,400.0	9,365.8	9,072.4	9,061.5	33.6	31.5	98.30	5,023.2	-921.4	5,163.2	5,098.4	64.80	79.673	
9,500.0	9,463.7	9,401.0	9,389.4	34.0	32.6	99.12	5,038.5	-915.2	5,171.9	5,105.5	66.47	77.810	
9,600.0	9,561.5	9,401.0	9,389.4	34.4	32.6	99.12	5,038.5	-915.2	5,178.0	5,111.2	66.83	77.481	
9,700.0	9,659.4	9,401.0	9,389.4	34.8	32.6	99.12	5,038.5	-915.2	5,186.0	5,118.8	67.17	77.207	
9,800.0	9,757.3	9,442.1	9,430.5	35.2	32.7	99.21	5,040.1	-915.2	5,194.6	5,126.9	67.67	76.766	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #121H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 206-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
9,900.0	9,855.2	9,454.5	9,442.9	35.6	32.8	99.24	5,041.0	-915.1	5,205.5	5,137.5	68.03	76.514	
10,000.0	9,953.0	9,495.0	9,483.1	36.0	32.9	99.34	5,045.5	-914.8	5,218.7	5,150.2	68.51	76.169	
10,100.0	10,050.9	9,495.0	9,483.1	36.4	32.9	99.34	5,045.5	-914.8	5,232.5	5,163.7	68.79	76.059	
10,200.0	10,148.8	9,495.0	9,483.1	36.9	32.9	99.34	5,045.5	-914.8	5,248.2	5,179.1	69.06	76.000	
10,300.0	10,246.7	9,495.0	9,483.1	37.3	32.9	99.34	5,045.5	-914.8	5,265.7	5,196.4	69.30	75.989	
10,400.0	10,344.6	9,495.0	9,483.1	37.7	32.9	99.34	5,045.5	-914.8	5,285.1	5,215.6	69.52	76.026	
10,500.0	10,442.4	9,495.0	9,483.1	38.1	32.9	99.34	5,045.5	-914.8	5,306.3	5,236.6	69.72	76.110	
10,600.0	10,540.3	9,520.0	9,507.7	38.5	33.0	99.41	5,049.7	-914.3	5,328.5	5,258.4	70.05	76.069	
10,700.0	10,638.2	9,542.0	9,529.2	39.0	33.1	99.47	5,054.6	-913.8	5,353.0	5,282.7	70.35	76.093	
10,800.0	10,736.1	9,542.0	9,529.2	39.4	33.1	99.47	5,054.6	-913.8	5,378.7	5,308.2	70.50	76.289	
10,900.0	10,833.9	9,542.0	9,529.2	39.8	33.1	99.47	5,054.6	-913.8	5,406.1	5,335.5	70.64	76.527	
11,000.0	10,931.8	9,542.0	9,529.2	40.2	33.1	99.47	5,054.6	-913.8	5,435.2	5,364.5	70.76	76.807	
11,100.0	11,029.7	9,589.0	9,574.5	40.7	33.2	99.59	5,067.1	-912.7	5,465.5	5,394.4	71.18	76.783	
11,200.0	11,127.6	9,589.0	9,574.5	41.1	33.2	99.59	5,067.1	-912.7	5,497.2	5,425.9	71.28	77.121	
11,300.0	11,225.5	9,589.0	9,574.5	41.5	33.2	99.59	5,067.1	-912.7	5,530.5	5,459.1	71.36	77.498	
11,400.0	11,323.3	9,589.0	9,574.5	42.0	33.2	99.59	5,067.1	-912.7	5,565.3	5,493.9	71.43	77.913	
11,500.0	11,421.2	9,612.9	9,597.3	42.4	33.3	99.65	5,074.3	-912.4	5,601.1	5,529.4	71.66	78.166	
11,523.5	11,444.2	9,614.5	9,598.8	42.5	33.3	99.66	5,074.8	-912.4	5,609.7	5,538.1	71.68	78.262	
11,600.0	11,519.2	9,636.0	9,618.9	42.8	33.3	100.16	5,082.5	-912.5	5,638.8	5,566.9	71.87	78.464	
11,700.0	11,617.7	9,636.0	9,618.9	43.3	33.3	100.77	5,082.5	-912.5	5,677.0	5,605.1	71.88	78.975	
11,800.0	11,716.7	9,636.0	9,618.9	43.7	33.3	101.40	5,082.5	-912.5	5,716.3	5,644.4	71.88	79.528	
11,900.0	11,815.9	9,636.0	9,618.9	44.1	33.3	102.05	5,082.5	-912.5	5,756.5	5,684.7	71.85	80.124	
12,000.0	11,915.5	9,655.7	9,637.0	44.4	33.4	102.73	5,090.1	-912.8	5,797.5	5,725.5	71.94	80.586	
12,100.0	12,015.2	9,675.3	9,654.9	44.8	33.5	103.41	5,098.0	-913.2	5,839.2	5,767.2	72.02	81.079	
12,200.0	12,115.1	9,683.0	9,662.0	45.2	33.5	104.09	5,101.2	-913.5	5,881.5	5,809.5	71.98	81.705	
12,300.0	12,215.1	9,683.0	9,662.0	45.5	33.5	104.78	5,101.2	-913.5	5,924.6	5,852.7	71.87	82.436	
12,311.9	12,227.0	9,683.0	9,662.0	45.5	33.5	-0.63	5,101.2	-913.5	5,929.7	5,857.9	71.85	82.525	
12,400.0	12,315.1	9,683.0	9,662.0	45.8	33.5	-0.63	5,101.2	-913.5	5,968.6	5,896.9	71.74	83.194	
12,500.0	12,415.1	9,730.0	9,703.9	46.2	33.6	-0.64	5,122.3	-915.0	6,013.6	5,941.6	72.00	83.527	
12,600.0	12,515.1	9,730.0	9,703.9	46.5	33.6	-0.64	5,122.3	-915.0	6,059.6	5,987.7	71.86	84.322	
12,700.0	12,615.1	9,730.0	9,703.9	46.9	33.6	-0.64	5,122.3	-915.0	6,106.9	6,035.1	71.72	85.143	
12,711.9	12,627.0	9,730.0	9,703.9	46.9	33.6	-0.64	5,122.3	-915.0	6,112.6	6,040.9	71.71	85.242	
12,750.0	12,665.1	9,730.0	9,703.9	47.0	33.6	20.61	5,122.3	-915.0	6,129.9	6,058.3	71.65	85.552	
12,800.0	12,714.8	9,730.0	9,703.9	47.2	33.6	19.86	5,122.3	-915.0	6,149.8	6,078.2	71.57	85.922	
12,850.0	12,763.8	9,730.0	9,703.9	47.4	33.6	19.28	5,122.3	-915.0	6,166.1	6,094.6	71.49	86.250	
12,900.0	12,811.8	9,730.0	9,703.9	47.5	33.6	18.85	5,122.3	-915.0	6,178.9	6,107.5	71.40	86.535	
12,950.0	12,858.3	9,730.0	9,703.9	47.7	33.6	18.55	5,122.3	-915.0	6,188.1	6,116.7	71.31	86.777	
13,000.0	12,903.1	9,754.2	9,725.0	47.8	33.7	18.41	5,134.3	-916.0	6,192.9	6,121.5	71.42	86.714	
13,050.0	12,945.8	9,777.0	9,744.2	48.0	33.7	18.40	5,146.4	-917.1	6,194.8	6,123.3	71.51	86.630	
13,100.0	12,986.1	9,777.0	9,744.2	48.1	33.7	18.47	5,146.4	-917.1	6,192.4	6,121.0	71.40	86.728	
13,150.0	13,023.7	9,777.0	9,744.2	48.3	33.7	18.67	5,146.4	-917.1	6,186.3	6,115.0	71.29	86.781	
13,200.0	13,058.2	9,777.0	9,744.2	48.4	33.7	18.99	5,146.4	-917.1	6,176.5	6,105.3	71.17	86.787	
13,250.0	13,089.4	9,777.0	9,744.2	48.5	33.7	19.45	5,146.4	-917.1	6,163.1	6,092.0	71.05	86.746	
13,300.0	13,117.2	9,777.0	9,744.2	48.7	33.7	20.06	5,146.4	-917.1	6,146.1	6,075.2	70.92	86.658	
13,350.0	13,141.1	9,777.0	9,744.2	48.8	33.7	20.84	5,146.4	-917.1	6,125.7	6,054.9	70.80	86.521	
13,400.0	13,161.2	9,777.0	9,744.2	48.9	33.7	21.82	5,146.4	-917.1	6,102.0	6,031.3	70.68	86.336	
13,450.0	13,177.2	9,777.0	9,744.2	49.1	33.7	23.04	5,146.4	-917.1	6,075.0	6,004.5	70.56	86.101	
13,500.0	13,189.1	9,799.2	9,762.5	49.2	33.8	24.67	5,158.8	-918.2	6,044.8	5,974.1	70.65	85.565	
13,550.0	13,196.6	9,803.9	9,766.4	49.4	33.8	26.60	5,161.5	-918.4	6,011.9	5,941.3	70.58	85.175	
13,600.0	13,199.8	9,824.0	9,782.7	49.6	33.9	29.11	5,173.2	-919.4	5,976.4	5,905.8	70.67	84.566	
13,611.9	13,200.0	9,824.0	9,782.7	49.6	33.9	29.76	5,173.2	-919.4	5,967.6	5,897.0	70.65	84.463	
13,700.0	13,200.0	9,824.0	9,782.7	50.0	33.9	28.00	5,173.2	-919.4	5,901.5	5,831.0	70.49	83.722	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #121H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 206-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	13,200.0	9,824.0	9,782.7	50.4	33.9	25.96	5,173.2	-919.4	5,826.1	5,755.8	70.29	82.891	
13,900.0	13,200.0	9,824.0	9,782.7	50.9	33.9	23.86	5,173.2	-919.4	5,750.4	5,680.4	70.06	82.075	
14,000.0	13,200.0	9,824.0	9,782.7	51.4	33.9	21.72	5,173.2	-919.4	5,674.6	5,604.8	69.82	81.276	
14,100.0	13,200.0	9,848.0	9,801.9	52.0	33.9	19.66	5,187.7	-920.5	5,598.3	5,528.5	69.79	80.211	
14,200.0	13,200.0	9,871.0	9,819.8	52.6	34.0	17.54	5,202.0	-921.4	5,522.2	5,452.5	69.74	79.185	
14,300.0	13,200.0	9,871.0	9,819.8	53.2	34.0	15.28	5,202.0	-921.4	5,445.9	5,376.4	69.43	78.440	
14,400.0	13,200.0	9,871.0	9,819.8	53.8	34.0	12.99	5,202.0	-921.4	5,369.7	5,300.6	69.09	77.722	
14,500.0	13,200.0	9,871.0	9,819.8	54.5	34.0	10.71	5,202.0	-921.4	5,293.7	5,225.0	68.72	77.033	
14,600.0	13,200.0	9,871.0	9,819.8	55.1	34.0	8.44	5,202.0	-921.4	5,218.2	5,149.9	68.32	76.375	
14,687.2	13,200.0	9,871.0	9,819.8	55.7	34.0	6.47	5,202.0	-921.4	5,152.7	5,084.8	67.95	75.828	
14,700.0	13,200.0	9,871.0	9,819.8	55.8	34.0	6.47	5,202.0	-921.4	5,143.2	5,075.3	67.90	75.750	
14,800.0	13,200.0	9,897.0	9,839.5	56.5	34.1	6.49	5,218.9	-922.4	5,068.2	5,000.4	67.75	74.813	
14,900.0	13,200.0	9,918.0	9,854.8	57.3	34.1	6.51	5,233.3	-923.3	4,994.6	4,927.1	67.53	73.963	
15,000.0	13,200.0	9,918.0	9,854.8	58.1	34.1	6.51	5,233.3	-923.3	4,921.5	4,854.4	67.08	73.368	
15,100.0	13,200.0	9,918.0	9,854.8	58.9	34.1	6.51	5,233.3	-923.3	4,849.4	4,782.8	66.63	72.786	
15,200.0	13,200.0	9,918.0	9,854.8	59.7	34.1	6.51	5,233.3	-923.3	4,778.2	4,712.1	66.16	72.217	
15,300.0	13,200.0	9,938.1	9,869.0	60.6	34.2	6.52	5,247.5	-924.3	4,707.9	4,641.9	65.93	71.409	
15,400.0	13,200.0	9,966.0	9,888.2	61.6	34.3	6.54	5,267.7	-925.9	4,638.7	4,572.9	65.79	70.507	
15,500.0	13,200.0	9,966.0	9,888.2	62.5	34.3	6.54	5,267.7	-925.9	4,570.1	4,504.7	65.32	69.960	
15,600.0	13,200.0	9,966.0	9,888.2	63.5	34.3	6.54	5,267.7	-925.9	4,502.6	4,437.8	64.86	69.426	
15,700.0	13,200.0	9,966.0	9,888.2	64.5	34.3	6.54	5,267.7	-925.9	4,436.4	4,372.0	64.39	68.904	
15,800.0	13,200.0	9,989.0	9,903.3	65.5	34.4	6.54	5,284.9	-927.4	4,371.0	4,306.8	64.19	68.098	
15,900.0	13,200.0	10,013.0	9,918.4	66.6	34.5	6.55	5,303.6	-928.9	4,307.1	4,243.1	64.01	67.290	
16,000.0	13,200.0	10,013.0	9,918.4	67.7	34.5	6.55	5,303.6	-928.9	4,244.1	4,180.6	63.55	66.788	
16,100.0	13,200.0	10,013.0	9,918.4	68.8	34.5	6.55	5,303.6	-928.9	4,182.5	4,119.4	63.09	66.297	
16,200.0	13,200.0	10,013.0	9,918.4	69.9	34.5	6.55	5,303.6	-928.9	4,122.5	4,059.8	62.64	65.816	
16,300.0	13,200.0	10,033.9	9,930.9	71.1	34.5	6.55	5,320.3	-930.2	4,063.4	4,001.0	62.44	65.078	
16,400.0	13,200.0	10,060.0	9,945.4	72.3	34.6	6.56	5,341.9	-931.8	4,006.4	3,944.1	62.32	64.291	
16,500.0	13,200.0	10,060.0	9,945.4	73.5	34.6	6.56	5,341.9	-931.8	3,950.3	3,888.4	61.89	63.823	
16,600.0	13,200.0	10,060.0	9,945.4	74.7	34.6	6.56	5,341.9	-931.8	3,895.9	3,834.4	61.49	63.363	
16,700.0	13,200.0	10,060.0	9,945.4	75.9	34.6	6.56	5,341.9	-931.8	3,843.3	3,782.3	61.09	62.908	
16,800.0	13,200.0	10,107.0	9,969.3	77.1	34.8	6.56	5,382.3	-934.5	3,792.2	3,730.9	61.26	61.899	
16,900.0	13,200.0	10,107.0	9,969.3	78.4	34.8	6.56	5,382.3	-934.5	3,742.5	3,681.5	60.91	61.443	
17,000.0	13,200.0	10,125.0	9,977.8	79.7	34.8	6.57	5,398.1	-935.5	3,694.6	3,633.8	60.78	60.786	
17,100.0	13,200.0	10,125.0	9,977.8	81.0	34.8	6.57	5,398.1	-935.5	3,648.6	3,588.1	60.47	60.332	
17,200.0	13,200.0	10,155.0	9,991.1	82.3	35.0	6.57	5,424.9	-937.2	3,604.3	3,543.8	60.52	59.553	
17,300.0	13,200.0	10,155.0	9,991.1	83.6	35.0	6.57	5,424.9	-937.2	3,562.0	3,501.7	60.27	59.097	
17,400.0	13,200.0	10,155.0	9,991.1	84.9	35.0	6.57	5,424.9	-937.2	3,522.0	3,462.0	60.06	58.642	
17,500.0	13,200.0	10,181.4	10,001.4	86.3	35.1	6.56	5,449.2	-938.8	3,483.7	3,423.5	60.15	57.917	
17,600.0	13,200.0	10,202.0	10,008.5	87.6	35.1	6.56	5,468.5	-940.0	3,447.8	3,387.6	60.21	57.264	
17,700.0	13,200.0	10,202.0	10,008.5	89.0	35.1	6.56	5,468.5	-940.0	3,414.0	3,353.9	60.11	56.797	
17,800.0	13,200.0	10,202.0	10,008.5	90.3	35.1	6.56	5,468.5	-940.0	3,382.8	3,322.7	60.06	56.325	
17,900.0	13,200.0	10,226.1	10,015.8	91.7	35.2	6.55	5,491.3	-941.5	3,353.5	3,293.3	60.26	55.648	
18,000.0	13,200.0	10,249.0	10,021.5	93.1	35.3	6.54	5,513.5	-943.0	3,327.1	3,266.6	60.50	54.999	
18,100.0	13,200.0	10,249.0	10,021.5	94.5	35.3	6.54	5,513.5	-943.0	3,302.9	3,242.3	60.60	54.507	
18,200.0	13,200.0	10,271.5	10,026.2	95.9	35.4	6.53	5,535.5	-944.4	3,281.2	3,220.2	60.92	53.863	
18,300.0	13,200.0	10,296.0	10,030.9	97.3	35.5	6.52	5,559.5	-945.7	3,261.6	3,200.3	61.30	53.209	
18,400.0	13,200.0	10,344.0	10,039.0	98.7	35.7	6.49	5,606.7	-948.1	3,244.2	3,182.3	61.87	52.431	
18,500.0	13,200.0	10,344.0	10,039.0	100.2	35.7	6.49	5,606.7	-948.1	3,228.8	3,166.6	62.20	51.911	
18,600.0	13,200.0	10,391.0	10,044.8	101.6	35.9	6.45	5,653.2	-951.6	3,215.7	3,152.8	62.84	51.175	
18,700.0	13,200.0	10,391.0	10,044.8	103.0	35.9	6.45	5,653.2	-951.6	3,204.9	3,141.6	63.29	50.642	
18,800.0	13,200.0	10,419.9	10,047.1	104.5	36.0	6.41	5,681.9	-954.2	3,196.7	3,132.7	63.92	50.007	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #121H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 206-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
18,900.0	13,200.0	10,438.0	10,048.0	105.9	36.1	6.39	5,699.9	-955.8	3,190.9	3,126.3	64.57	49.416	
19,000.0	13,200.0	10,488.4	10,049.5	107.4	36.4	6.32	5,750.2	-960.1	3,187.1	3,121.8	65.38	48.750	
19,100.0	13,200.0	10,532.0	10,050.0	108.9	36.6	6.27	5,793.6	-963.6	3,185.2	3,119.0	66.19	48.122	
19,200.0	13,200.0	10,608.1	10,050.0	110.3	37.0	6.16	5,869.4	-970.0	3,184.4	3,117.3	67.13	47.436	
19,245.9	13,200.0	10,643.1	10,049.7	111.0	37.2	6.11	5,904.3	-973.0	3,184.3	3,116.8	67.57	47.126	CC
19,300.0	13,200.0	10,685.2	10,049.3	111.8	37.5	6.05	5,946.2	-976.7	3,184.4	3,116.3	68.10	46.761	
19,400.0	13,200.0	10,777.6	10,048.0	113.3	38.1	5.92	6,038.3	-984.7	3,185.0	3,115.9	69.15	46.063	
19,500.0	13,200.0	10,874.4	10,046.7	114.8	38.8	5.80	6,134.8	-991.8	3,185.7	3,115.4	70.24	45.352	
19,600.0	13,200.0	10,946.0	10,045.5	116.3	39.3	5.71	6,206.1	-997.3	3,186.8	3,115.5	71.28	44.709	
19,700.0	13,200.0	11,010.3	10,043.7	117.8	39.8	5.66	6,270.4	-1,000.8	3,189.0	3,116.7	72.31	44.099	
19,800.0	13,200.0	11,117.4	10,040.5	119.3	40.8	5.58	6,377.2	-1,005.6	3,191.7	3,118.1	73.54	43.400	
19,900.0	13,200.0	11,220.8	10,037.8	120.8	41.7	5.56	6,480.7	-1,007.3	3,194.1	3,119.3	74.80	42.702	
20,000.0	13,200.0	11,312.0	10,035.8	122.3	42.5	5.60	6,571.8	-1,005.5	3,196.6	3,120.5	76.05	42.035	
20,100.0	13,200.0	11,387.9	10,033.7	123.8	43.3	5.64	6,647.6	-1,003.5	3,199.7	3,122.4	77.24	41.426	
20,200.0	13,200.0	20,200.0	10,029.6	125.3	134.5	5.70	6,771.2	-1,000.8	3,203.4	3,074.2	129.18	24.797	ES, SF
20,300.0	13,200.0	11,634.8	10,027.6	126.8	45.8	5.76	6,894.4	-998.3	3,205.2	3,125.0	80.17	39.982	
20,400.0	13,200.0	11,816.4	10,027.1	128.4	47.8	5.83	7,076.0	-995.4	3,205.5	3,123.5	82.02	39.083	
20,500.0	13,200.0	11,899.4	10,027.6	129.9	48.8	5.86	7,158.9	-994.6	3,205.1	3,121.8	83.31	38.474	
20,502.8	13,200.0	11,901.5	10,027.6	129.9	48.8	5.86	7,161.1	-994.6	3,205.1	3,121.8	83.34	38.457	
20,600.0	13,200.0	11,985.2	10,027.5	131.4	49.8	5.88	7,244.7	-994.0	3,205.4	3,120.8	84.62	37.878	
20,700.0	13,200.0	12,070.2	10,027.1	132.9	50.8	5.91	7,329.7	-993.3	3,206.0	3,120.1	85.95	37.303	
20,800.0	13,200.0	12,146.8	10,026.3	134.5	51.7	5.93	7,406.3	-992.5	3,207.3	3,120.0	87.22	36.770	
20,900.0	13,200.0	12,219.0	10,025.0	136.0	52.6	5.95	7,478.5	-991.6	3,209.2	3,120.8	88.48	36.270	
21,000.0	13,200.0	12,291.6	10,023.1	137.6	53.5	5.97	7,551.1	-990.7	3,212.1	3,122.3	89.75	35.790	
21,100.0	13,200.0	12,345.0	10,021.2	139.1	54.2	5.99	7,604.4	-990.3	3,216.0	3,125.1	90.90	35.381	
21,200.0	13,200.0	12,694.4	10,015.9	140.7	58.8	5.91	7,953.6	-996.6	3,218.6	3,124.7	93.88	34.283	
21,300.0	13,200.0	12,780.0	10,017.9	142.2	59.9	5.86	8,039.1	-1,000.3	3,215.9	3,120.6	95.23	33.770	
21,400.0	13,200.0	12,880.9	10,020.1	143.8	61.3	5.79	8,139.8	-1,005.4	3,213.3	3,116.7	96.67	33.242	
21,500.0	13,200.0	12,978.7	10,022.1	145.3	62.6	5.71	8,237.4	-1,010.7	3,210.8	3,112.7	98.09	32.734	
21,600.0	13,200.0	13,057.9	10,023.4	146.9	63.7	5.64	8,316.5	-1,015.4	3,208.7	3,109.3	99.40	32.282	
21,700.0	13,200.0	13,142.9	10,024.4	148.4	64.9	5.58	8,401.3	-1,019.7	3,207.1	3,106.3	100.75	31.833	
21,800.0	13,200.0	13,254.8	10,025.7	150.0	66.5	5.52	8,513.2	-1,023.7	3,205.6	3,103.3	102.28	31.340	
21,900.0	13,200.0	13,334.1	10,026.6	151.5	67.6	5.48	8,592.4	-1,026.9	3,204.2	3,100.6	103.62	30.924	
21,998.0	13,200.0	13,397.8	10,026.8	153.1	68.6	5.46	8,656.1	-1,028.7	3,203.7	3,098.8	104.84	30.557	
22,000.0	13,200.0	13,399.0	10,026.8	153.1	68.6	5.46	8,657.3	-1,028.8	3,203.7	3,098.8	104.87	30.550	
22,100.0	13,200.0	13,439.0	10,026.7	154.7	69.1	5.46	8,697.3	-1,029.1	3,204.4	3,098.5	105.96	30.242	
22,200.0	13,200.0	13,502.6	10,025.5	156.2	70.1	5.47	8,760.8	-1,028.8	3,206.5	3,099.3	107.21	29.909	
22,300.0	13,200.0	13,559.7	10,023.4	157.8	70.9	5.48	8,817.9	-1,028.2	3,210.3	3,101.9	108.42	29.611	
22,400.0	13,200.0	13,641.0	10,019.7	159.4	72.0	5.50	8,899.1	-1,027.3	3,215.0	3,105.2	109.79	29.283	
22,500.0	13,200.0	13,876.0	10,012.4	161.0	75.5	5.56	9,134.0	-1,024.9	3,218.8	3,106.5	112.27	28.671	
22,600.0	13,200.0	13,963.4	10,011.9	162.5	76.8	5.60	9,221.3	-1,023.6	3,219.7	3,106.0	113.71	28.314	
22,700.0	13,200.0	14,036.7	10,011.0	164.1	77.8	5.63	9,294.6	-1,022.4	3,221.2	3,106.1	115.06	27.996	
22,800.0	13,200.0	14,099.0	10,009.5	165.7	78.8	5.65	9,356.9	-1,021.6	3,223.7	3,107.4	116.32	27.715	
22,900.0	13,200.0	14,177.7	10,007.0	167.3	79.9	5.67	9,435.5	-1,020.9	3,227.1	3,109.4	117.69	27.420	
23,000.0	13,200.0	14,405.5	10,004.6	168.9	83.3	5.72	9,663.3	-1,019.4	3,227.5	3,107.3	120.14	26.863	
23,020.5	13,200.0	14,420.8	10,004.6	169.2	83.6	5.72	9,678.6	-1,019.3	3,227.5	3,107.0	120.42	26.801	
23,100.0	13,200.0	14,477.0	10,004.5	170.4	84.4	5.73	9,734.8	-1,019.3	3,227.7	3,106.2	121.48	26.569	
23,200.0	13,200.0	14,525.6	10,003.8	172.0	85.1	5.73	9,783.4	-1,019.5	3,229.2	3,106.5	122.65	26.329	
23,300.0	13,200.0	14,571.0	10,002.4	173.6	85.8	5.73	9,828.8	-1,020.0	3,232.3	3,108.6	123.77	26.115	
23,400.0	13,200.0	14,625.2	9,999.8	175.2	86.7	5.72	9,882.9	-1,020.8	3,237.0	3,112.1	124.94	25.908	
23,504.9	13,200.0	14,690.7	9,995.7	176.9	87.7	5.70	9,948.3	-1,022.0	3,243.4	3,117.2	126.22	25.696	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #125H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 176-MWD, 11004-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	-90.70	-1.7	-140.0	140.0				
100.0	100.0	101.7	101.7	0.1	0.2	-90.73	-1.8	-139.8	139.8	139.5	0.28	493.356	
200.0	200.0	202.3	202.3	0.5	0.4	-90.81	-2.0	-139.0	139.1	138.2	0.85	164.066	
300.0	300.0	302.7	302.7	0.8	0.7	-90.97	-2.3	-137.9	138.0	136.4	1.57	88.084	
400.0	400.0	402.3	402.3	1.2	1.1	-91.30	-3.1	-136.8	136.8	134.5	2.28	60.000	
500.0	500.0	501.1	501.1	1.6	1.4	-91.59	-3.8	-136.2	136.3	133.3	2.99	45.599	
600.0	600.0	602.3	602.3	1.9	1.8	-91.75	-4.2	-135.7	135.8	132.1	3.71	36.647	
686.7	686.7	687.7	687.7	2.2	2.1	-91.90	-4.5	-135.3	135.4	131.1	4.32	31.352 CC	
700.0	700.0	700.9	700.9	2.3	2.1	-91.92	-4.5	-135.3	135.4	131.0	4.41	30.691	
800.0	800.0	800.5	800.5	2.6	2.5	-91.98	-4.7	-135.6	135.7	130.6	5.11	26.547	
900.0	900.0	900.6	900.6	3.0	2.8	-92.02	-4.8	-136.0	136.1	130.3	5.81	23.431	
1,000.0	1,000.0	1,001.1	1,001.1	3.4	3.2	-91.85	-4.4	-136.1	136.1	129.6	6.51	20.910	
1,027.5	1,027.5	1,028.5	1,028.5	3.5	3.3	-91.81	-4.3	-136.1	136.1	129.4	6.70	20.308	
1,100.0	1,100.0	1,100.9	1,100.9	3.7	3.5	-91.75	-4.2	-136.1	136.2	129.0	7.21	18.882	
1,200.0	1,200.0	1,199.9	1,199.9	4.1	3.8	-91.74	-4.2	-136.5	136.6	128.7	7.91	17.259 ES	
1,300.0	1,300.0	1,300.2	1,300.2	4.4	4.2	-91.60	-3.8	-137.3	137.3	128.7	8.62	15.937	
1,400.0	1,400.0	1,399.9	1,399.8	4.8	4.5	-91.38	-3.3	-138.0	138.1	128.8	9.32	14.812	
1,500.0	1,500.0	1,499.8	1,499.7	5.1	4.9	-91.10	-2.7	-138.8	138.8	128.8	10.03	13.844	
1,600.0	1,600.0	1,597.4	1,597.3	5.5	5.2	-90.74	-1.8	-140.5	140.6	129.9	10.73	13.108	
1,700.0	1,700.0	1,695.2	1,695.1	5.9	5.6	-90.39	-1.0	-143.9	144.0	132.6	11.42	12.603	
1,800.0	1,800.0	1,792.3	1,792.0	6.2	5.9	-90.26	-0.7	-148.6	148.8	136.7	12.12	12.283	
1,900.0	1,900.0	1,888.8	1,888.3	6.6	6.3	-90.59	-1.6	-155.8	156.3	143.5	12.80	12.211	
2,000.0	2,000.0	1,987.1	1,986.2	6.9	6.6	-91.06	-3.0	-164.0	164.7	151.2	13.50	12.200	
2,100.0	2,100.0	2,083.0	2,081.6	7.3	7.0	-91.53	-4.6	-173.5	174.6	160.5	14.17	12.322	
2,200.0	2,200.0	2,179.8	2,177.7	7.7	7.3	-91.96	-6.3	-185.1	186.7	171.8	14.85	12.568	
2,300.0	2,300.0	2,278.4	2,275.5	8.0	7.7	-92.36	-8.1	-197.5	199.3	183.7	15.56	12.811	
2,400.0	2,400.0	2,377.5	2,373.8	8.4	8.1	-92.96	-10.9	-210.1	212.2	195.9	16.26	13.045	
2,500.0	2,500.0	2,478.6	2,474.1	8.7	8.4	-93.47	-13.5	-222.7	224.7	207.7	17.00	13.219	
2,600.0	2,600.0	2,579.4	2,574.1	9.1	8.8	-93.76	-15.4	-234.2	236.3	218.5	17.73	13.329	
2,700.0	2,700.0	2,679.5	2,673.6	9.4	9.2	-94.14	-17.8	-245.3	247.5	229.0	18.45	13.416	
2,800.0	2,800.0	2,780.6	2,774.1	9.8	9.6	-94.68	-21.0	-256.0	258.2	239.1	19.18	13.466	
2,900.0	2,900.0	2,877.8	2,870.7	10.2	10.0	-95.56	-25.9	-266.0	269.0	249.1	19.87	13.534	
3,000.0	3,000.0	2,974.0	2,966.0	10.5	10.4	-96.56	-31.8	-276.8	280.8	260.3	20.55	13.662	
3,100.0	3,100.0	3,065.6	3,056.8	10.9	10.7	-97.33	-37.1	-288.7	294.5	273.3	21.18	13.900	
3,200.0	3,200.0	3,158.3	3,148.1	11.2	11.1	-98.09	-43.1	-303.0	310.5	288.7	21.82	14.232	
3,300.0	3,300.0	3,258.1	3,246.4	11.6	11.5	-98.88	-49.9	-319.1	327.6	305.0	22.55	14.528	
3,400.0	3,400.0	3,361.2	3,348.0	12.0	11.9	-99.60	-56.7	-334.8	343.7	320.4	23.32	14.738	
3,500.0	3,500.0	3,465.1	3,450.8	12.3	12.4	-100.27	-63.3	-349.2	358.4	334.3	24.09	14.876	
3,600.0	3,600.0	3,557.0	3,541.5	12.7	12.7	-100.68	-68.3	-362.3	373.4	348.7	24.73	15.100	
3,700.0	3,700.0	3,650.6	3,633.8	13.0	13.1	-100.91	-72.7	-377.2	390.0	364.6	25.39	15.363	
3,800.0	3,800.0	3,747.1	3,728.9	13.4	13.6	-101.07	-77.0	-393.6	407.5	381.4	26.08	15.625	
3,900.0	3,900.0	3,844.3	3,824.5	13.8	14.0	-101.28	-81.8	-410.3	425.3	398.6	26.78	15.883	
4,000.0	4,000.0	3,946.7	3,925.3	14.1	14.4	-101.75	-88.8	-427.2	442.9	415.4	27.55	16.078	
4,100.0	4,100.0	4,054.1	4,031.0	14.5	14.9	-102.54	-98.6	-443.1	459.3	430.9	28.36	16.193	
4,200.0	4,200.0	4,168.3	4,144.1	14.8	15.3	-103.10	-106.3	-457.0	472.7	443.4	29.22	16.174	
4,300.0	4,300.0	4,277.7	4,252.8	15.2	15.8	-103.04	-108.6	-468.9	483.7	453.7	30.02	16.112	
4,400.0	4,400.0	4,376.4	4,351.0	15.5	16.2	-102.75	-108.3	-478.7	493.3	462.6	30.73	16.053	
4,500.0	4,500.0	4,466.4	4,440.4	15.9	16.5	-102.44	-107.9	-488.9	504.3	473.0	31.38	16.074	
4,600.0	4,600.0	4,558.3	4,531.5	16.3	16.9	-102.33	-109.4	-500.7	517.2	485.2	32.03	16.147	
4,700.0	4,700.0	4,664.1	4,636.4	16.6	17.3	-102.57	-114.6	-513.9	530.5	497.7	32.81	16.168	
4,800.0	4,800.0	4,763.5	4,735.1	17.0	17.7	-102.69	-118.3	-525.1	542.3	508.7	33.53	16.172	
4,900.0	4,900.0	4,858.2	4,829.0	17.3	18.1	-102.87	-122.5	-536.3	554.9	520.6	34.21	16.218	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #125H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 176-MWD, 11004-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	5,000.0	4,964.4	4,934.4	17.7	18.5	-103.07	-127.5	-549.0	567.5	532.5	34.99	16.217	
5,100.0	5,100.0	5,069.4	5,038.6	18.1	19.0	-103.27	-132.1	-559.9	578.7	542.9	35.76	16.184	
5,200.0	5,200.0	5,165.4	5,134.1	18.4	19.4	-103.45	-136.3	-569.8	589.7	553.2	36.45	16.178	
5,300.0	5,300.0	5,255.3	5,223.3	18.8	19.7	-103.60	-140.3	-580.0	601.8	564.7	37.09	16.224	
5,400.0	5,400.0	5,349.2	5,316.4	19.1	20.1	-103.71	-144.4	-592.0	615.2	577.4	37.77	16.289	
5,500.0	5,500.0	5,436.3	5,402.6	19.5	20.5	-103.70	-147.4	-604.4	629.8	591.4	38.37	16.413	
5,600.0	5,600.0	5,528.1	5,493.1	19.8	20.9	-103.52	-149.0	-619.3	646.1	607.1	39.02	16.558	
5,700.0	5,700.0	5,631.9	5,595.4	20.2	21.3	-103.31	-150.6	-636.5	662.6	622.8	39.79	16.651	
5,800.0	5,800.0	5,732.9	5,695.2	20.6	21.7	-103.15	-152.4	-652.4	678.3	637.8	40.54	16.733	
5,900.0	5,900.0	5,826.7	5,787.8	20.9	22.1	-103.06	-154.8	-667.2	694.2	653.0	41.21	16.847	
6,000.0	6,000.0	5,918.3	5,878.0	21.3	22.5	-103.01	-157.7	-682.3	711.0	669.2	41.85	16.988	
6,100.0	6,100.0	6,021.6	5,979.8	21.6	23.0	-103.00	-161.5	-699.5	728.1	685.5	42.63	17.080	
6,200.0	6,200.0	6,127.7	6,084.5	22.0	23.5	-103.03	-165.7	-716.2	744.2	700.8	43.43	17.138	
6,300.0	6,300.0	6,207.0	6,162.7	22.4	23.8	-103.02	-168.6	-729.4	761.3	717.4	43.95	17.324	
6,400.0	6,400.0	6,294.2	6,248.2	22.7	24.2	-102.97	-171.7	-745.6	780.2	735.7	44.54	17.517	
6,500.0	6,500.0	6,394.1	6,346.2	23.1	24.7	-102.94	-175.7	-764.8	799.8	754.5	45.28	17.662	
6,600.0	6,600.0	6,499.6	6,449.9	23.4	25.1	-102.93	-180.1	-784.2	818.7	772.6	46.09	17.764	
6,700.0	6,700.0	6,610.7	6,559.1	23.8	25.6	-102.94	-184.5	-803.4	836.4	789.5	46.95	17.817	
6,800.0	6,800.0	6,720.8	6,667.8	24.1	26.1	-102.95	-188.7	-820.8	852.7	804.9	47.78	17.846	
6,900.0	6,900.0	6,828.2	6,773.9	24.5	26.6	-102.96	-192.5	-836.6	867.8	819.2	48.58	17.863	
7,000.0	7,000.0	6,936.1	6,880.8	24.9	27.0	-102.99	-196.3	-851.4	882.0	832.6	49.38	17.861	
7,100.0	7,100.0	7,049.0	6,992.7	25.2	27.5	2.50	-199.7	-865.6	894.0	843.8	50.20	17.811	
7,200.0	7,200.0	7,161.2	7,104.2	25.5	28.0	2.49	-202.7	-878.0	902.8	851.8	50.98	17.708	
7,300.0	7,299.9	7,272.3	7,214.8	25.9	28.4	2.45	-206.0	-888.7	908.6	856.8	51.75	17.556	
7,400.0	7,399.7	7,380.4	7,322.4	26.2	28.8	2.42	-209.0	-898.0	911.5	859.0	52.50	17.363	
7,500.0	7,499.4	7,486.5	7,428.1	26.6	29.2	2.35	-212.4	-906.3	911.9	858.7	53.23	17.132	
7,600.0	7,598.9	7,591.7	7,533.0	26.9	29.6	2.25	-216.1	-913.6	909.9	856.0	53.95	16.866	
7,700.0	7,698.3	7,700.3	7,641.3	27.2	30.0	2.10	-220.6	-920.3	905.6	850.9	54.68	16.560	
7,800.0	7,797.4	7,806.3	7,747.0	27.6	30.4	1.93	-225.2	-925.7	898.5	843.1	55.40	16.218	
7,900.0	7,896.3	7,913.3	7,853.9	27.9	30.8	1.77	-229.6	-930.5	889.0	832.9	56.12	15.842	
8,000.0	7,994.9	8,014.0	7,954.4	28.3	31.1	1.62	-233.5	-934.5	877.2	820.4	56.81	15.441	
8,100.0	8,093.3	8,146.0	8,086.3	28.6	31.6	1.55	-236.0	-937.4	861.5	803.9	57.55	14.969	
8,182.6	8,174.2	8,232.7	8,173.0	28.9	31.9	1.57	-236.4	-937.7	845.5	787.4	58.11	14.551	
8,200.0	8,191.3	8,249.1	8,189.4	29.0	31.9	1.57	-236.5	-937.8	842.0	783.8	58.22	14.461	
8,300.0	8,289.1	8,346.4	8,286.7	29.4	32.2	1.57	-237.1	-938.1	822.0	763.1	58.89	13.957	
8,400.0	8,387.0	8,444.8	8,385.1	29.7	32.5	1.57	-237.7	-938.2	801.8	742.2	59.57	13.461	
8,500.0	8,484.9	8,540.7	8,481.1	30.1	32.9	1.58	-238.2	-938.6	781.8	721.5	60.24	12.977	
8,600.0	8,582.8	8,638.2	8,578.5	30.5	33.2	1.56	-239.1	-939.1	762.0	701.0	60.92	12.508	
8,700.0	8,680.6	8,735.5	8,675.8	30.9	33.5	1.53	-240.2	-939.5	742.2	680.6	61.60	12.049	
8,800.0	8,778.5	8,831.6	8,771.9	31.2	33.8	1.48	-241.5	-940.1	722.6	660.3	62.28	11.603	
8,900.0	8,876.4	8,928.8	8,869.1	31.6	34.1	1.42	-243.1	-940.8	703.2	640.2	62.96	11.170	
9,000.0	8,974.3	9,023.1	8,963.4	32.0	34.4	1.28	-245.4	-941.6	684.1	620.4	63.64	10.749	
9,100.0	9,072.1	9,118.7	9,058.9	32.4	34.8	1.10	-248.3	-942.9	665.6	601.2	64.33	10.346	
9,200.0	9,170.0	9,215.2	9,155.3	32.8	35.1	1.01	-250.2	-944.6	647.3	582.3	65.02	9.955	
9,300.0	9,267.9	9,328.4	9,268.6	33.2	35.5	0.89	-252.3	-946.0	628.5	562.8	65.68	9.569	
9,400.0	9,365.8	9,429.8	9,369.9	33.6	35.8	0.87	-252.7	-945.4	607.5	541.2	66.33	9.159	
9,500.0	9,463.7	9,524.5	9,464.7	34.0	36.1	0.81	-253.5	-944.9	586.8	519.8	67.01	8.756	
9,600.0	9,561.5	9,625.9	9,566.0	34.4	36.4	0.82	-253.6	-944.6	566.0	498.4	67.67	8.364	
9,700.0	9,659.4	9,718.8	9,658.9	34.8	36.7	1.02	-252.0	-944.9	545.3	477.0	68.37	7.977	
9,800.0	9,757.3	9,812.9	9,753.0	35.2	37.0	1.22	-250.8	-945.8	525.5	456.4	69.06	7.609	
9,900.0	9,855.2	9,914.5	9,854.6	35.6	37.3	1.33	-250.4	-946.6	505.7	436.0	69.74	7.251	
10,000.0	9,953.0	10,009.6	9,949.7	36.0	37.6	1.34	-250.9	-947.1	485.8	415.4	70.44	6.896	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #125H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 176-MWD, 11004-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
10,100.0	10,050.9	10,107.9	10,047.9	36.4	38.0	1.30	-251.9	-947.8	466.2	395.0	71.14	6.553	
10,200.0	10,148.8	10,205.2	10,145.3	36.9	38.3	1.26	-252.9	-948.4	446.6	374.7	71.83	6.216	
10,300.0	10,246.7	10,305.4	10,245.5	37.3	38.6	1.37	-252.8	-949.4	427.0	354.5	72.52	5.888	
10,400.0	10,344.6	10,417.9	10,357.5	37.7	39.0	2.67	-244.3	-950.5	405.7	332.7	73.08	5.552	
10,500.0	10,442.4	10,525.9	10,463.5	38.1	39.3	5.97	-223.5	-949.9	381.0	307.4	73.65	5.174	
10,600.0	10,540.3	10,620.2	10,553.5	38.5	39.5	10.84	-195.6	-949.3	356.2	281.7	74.51	4.780	
10,700.0	10,638.2	10,700.3	10,626.7	39.0	39.7	16.92	-163.1	-950.1	336.0	260.4	75.57	4.446	
10,800.0	10,736.1	10,773.6	10,689.8	39.4	39.9	24.14	-125.9	-952.5	325.7	249.5	76.22	4.273	
10,830.3	10,765.7	10,794.6	10,707.0	39.5	39.9	26.45	-113.9	-953.2	325.0	248.8	76.22	4.264	SF
10,900.0	10,833.9	10,838.6	10,741.9	39.8	40.0	31.56	-87.2	-954.9	328.8	253.2	75.64	4.347	
11,000.0	10,931.8	10,887.7	10,777.9	40.2	40.0	37.60	-54.0	-957.0	349.2	276.3	72.81	4.796	
11,100.0	11,029.7	10,920.1	10,799.4	40.7	40.1	41.71	-29.7	-958.5	387.6	319.9	67.69	5.726	
11,200.0	11,127.6	10,942.0	10,811.7	41.1	40.1	44.55	-11.7	-959.6	442.4	380.8	61.64	7.178	
11,300.0	11,225.5	10,942.0	10,811.7	41.5	40.1	44.55	-11.7	-959.6	510.0	455.2	54.82	9.302	
11,400.0	11,323.3	10,965.8	10,822.5	42.0	40.1	47.68	9.4	-960.4	585.3	534.2	51.03	11.469	
11,500.0	11,421.2	10,975.0	10,826.1	42.4	40.1	48.88	18.0	-960.6	666.8	619.4	47.36	14.079	
11,523.5	11,444.2	10,976.9	10,826.8	42.5	40.1	49.12	19.7	-960.6	686.6	640.0	46.63	14.725	
11,600.0	11,519.2	11,004.0	10,834.8	42.8	40.1	54.11	45.6	-960.2	754.0	708.3	45.72	16.492	
11,700.0	11,617.7	11,004.0	10,834.8	43.3	40.1	56.50	45.6	-960.2	842.9	799.6	43.23	19.496	
11,800.0	11,716.7	11,004.0	10,834.8	43.7	40.1	59.42	45.6	-960.2	934.5	893.1	41.40	22.571	
11,900.0	11,815.9	11,004.0	10,834.8	44.1	40.1	62.94	45.6	-960.2	1,028.2	988.1	40.07	25.661	
12,000.0	11,915.5	11,004.0	10,834.8	44.4	40.1	67.14	45.6	-960.2	1,123.3	1,084.2	39.10	28.728	
12,100.0	12,015.2	11,004.0	10,834.8	44.8	40.1	72.08	45.6	-960.2	1,219.5	1,181.1	38.41	31.748	
12,200.0	12,115.1	11,024.6	10,839.5	45.2	40.5	79.57	65.6	-959.6	1,316.2	1,277.7	38.49	34.199	
12,300.0	12,215.1	11,040.4	10,843.1	45.5	40.7	86.67	81.0	-959.0	1,413.2	1,374.8	38.45	36.759	
12,311.9	12,227.0	11,042.3	10,843.5	45.5	40.7	-17.98	82.8	-958.9	1,424.7	1,386.3	38.44	37.063	
12,400.0	12,315.1	11,055.8	10,846.5	45.8	41.0	-17.23	96.0	-958.4	1,510.4	1,472.0	38.44	39.297	
12,500.0	12,415.1	11,070.6	10,849.7	46.2	41.2	-16.45	110.4	-957.7	1,607.8	1,569.3	38.49	41.768	
12,600.0	12,515.1	11,084.8	10,852.7	46.5	41.4	-15.76	124.3	-957.1	1,705.3	1,666.7	38.61	44.169	
12,700.0	12,615.1	11,096.0	10,855.0	46.9	41.6	-15.24	135.2	-956.5	1,802.9	1,764.2	38.71	46.569	
12,711.9	12,627.0	11,096.0	10,855.0	46.9	41.6	-15.24	135.2	-956.5	1,814.5	1,775.8	38.70	46.889	
12,750.0	12,665.1	11,096.0	10,855.0	47.0	41.6	5.14	135.2	-956.5	1,851.5	1,812.9	38.63	47.934	
12,800.0	12,714.8	11,096.0	10,855.0	47.2	41.6	3.93	135.2	-956.5	1,899.0	1,860.5	38.47	49.359	
12,850.0	12,763.8	11,096.0	10,855.0	47.4	41.6	3.18	135.2	-956.5	1,945.2	1,906.9	38.27	50.832	
12,900.0	12,811.8	11,096.0	10,855.0	47.5	41.6	2.68	135.2	-956.5	1,989.8	1,951.8	38.02	52.338	
12,950.0	12,858.3	11,096.0	10,855.0	47.7	41.6	2.32	135.2	-956.5	2,032.5	1,994.8	37.74	53.863	
13,000.0	12,903.1	11,096.0	10,855.0	47.8	41.6	2.05	135.2	-956.5	2,073.3	2,035.9	37.43	55.388	
13,050.0	12,945.8	11,096.0	10,855.0	48.0	41.6	1.84	135.2	-956.5	2,111.8	2,074.7	37.12	56.897	
13,100.0	12,986.1	11,133.2	10,861.3	48.1	41.6	2.22	171.8	-954.6	2,146.3	2,109.1	37.22	57.667	
13,150.0	13,023.7	11,139.8	10,862.2	48.3	41.7	2.15	178.4	-954.3	2,179.3	2,142.4	36.94	59.001	
13,200.0	13,058.2	11,146.8	10,863.0	48.4	41.7	2.10	185.3	-954.0	2,209.5	2,172.9	36.66	60.270	
13,250.0	13,089.4	11,188.0	10,865.8	48.5	41.7	2.47	226.4	-952.1	2,238.2	2,201.5	36.71	60.966	
13,300.0	13,117.2	11,188.0	10,865.8	48.7	41.7	2.35	226.4	-952.1	2,261.9	2,225.5	36.37	62.191	
13,350.0	13,141.1	11,188.0	10,865.8	48.8	41.7	2.26	226.4	-952.1	2,282.5	2,246.5	36.07	63.275	
13,400.0	13,161.2	11,188.0	10,865.8	48.9	41.7	2.19	226.4	-952.1	2,300.1	2,264.3	35.83	64.188	
13,450.0	13,177.2	11,188.0	10,865.8	49.1	41.7	2.13	226.4	-952.1	2,314.6	2,278.9	35.66	64.905	
13,500.0	13,189.1	11,208.0	10,866.3	49.2	41.7	2.30	246.3	-951.2	2,325.7	2,290.0	35.62	65.294	
13,550.0	13,196.6	11,240.4	10,867.1	49.4	41.7	2.59	278.8	-949.8	2,332.9	2,297.3	35.64	65.464	
13,600.0	13,199.8	11,279.0	10,867.7	49.6	41.7	2.97	317.3	-948.0	2,336.3	2,300.6	35.69	65.470	
13,611.9	13,200.0	11,282.7	10,867.7	49.6	41.7	3.01	321.0	-947.9	2,336.5	2,300.8	35.69	65.473	
13,700.0	13,200.0	13,700.0	10,869.6	50.0	55.4	3.95	413.6	-942.9	2,337.0	2,298.1	38.90	60.083	
13,800.0	13,200.0	11,429.9	10,870.3	50.4	41.9	4.51	467.9	-939.4	2,338.7	2,302.6	36.15	64.697	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #125H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 176-MWD, 11004-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	13,200.0	11,486.7	10,870.0	50.9	42.0	5.07	524.6	-935.8	2,342.4	2,305.9	36.51	64.160	
14,000.0	13,200.0	11,553.3	10,868.8	51.4	42.1	5.68	591.0	-932.1	2,347.4	2,310.5	36.98	63.475	
14,100.0	13,200.0	11,630.3	10,866.5	52.0	42.3	6.30	667.9	-928.8	2,353.5	2,315.9	37.55	62.684	
14,200.0	13,200.0	11,732.0	10,863.5	52.6	42.6	6.93	769.6	-927.0	2,359.0	2,320.8	38.17	61.796	
14,300.0	13,200.0	11,794.9	10,861.1	53.2	42.9	7.29	832.4	-927.3	2,365.0	2,326.2	38.84	60.891	
14,400.0	13,200.0	11,841.9	10,858.0	53.8	43.1	7.58	879.4	-927.5	2,373.1	2,333.5	39.58	59.951	
14,500.0	13,200.0	11,893.8	10,853.6	54.5	43.3	7.87	931.1	-927.7	2,382.8	2,342.4	40.40	58.976	
14,600.0	13,200.0	11,955.4	10,847.1	55.1	43.6	8.15	992.3	-927.6	2,393.9	2,352.6	41.25	58.028	
14,687.2	13,200.0	12,019.6	10,839.7	55.7	43.9	8.38	1,056.0	-926.9	2,404.3	2,362.3	41.99	57.257	
14,700.0	13,200.0	12,032.7	10,838.1	55.8	44.0	8.38	1,069.1	-926.8	2,405.8	2,363.7	42.09	57.161	
14,800.0	13,200.0	12,539.5	10,829.0	56.5	47.7	8.28	1,574.5	-933.5	2,399.8	2,355.6	44.18	54.313	
14,900.0	13,200.0	12,603.1	10,831.1	57.3	48.3	8.25	1,638.0	-935.7	2,395.9	2,351.1	44.84	53.437	
15,000.0	13,200.0	12,697.3	10,833.7	58.1	49.2	8.20	1,732.1	-938.6	2,392.8	2,347.0	45.79	52.256	
15,100.0	13,200.0	12,810.9	10,837.2	58.9	50.3	8.16	1,845.6	-941.9	2,389.6	2,342.6	46.94	50.907	
15,200.0	13,200.0	12,888.5	10,839.7	59.7	51.0	8.13	1,923.1	-944.0	2,386.1	2,338.3	47.82	49.895	
15,300.0	13,200.0	12,945.0	10,840.6	60.6	51.6	8.11	1,979.6	-945.5	2,384.3	2,335.7	48.58	49.076	
15,349.9	13,200.0	12,973.8	10,840.7	61.1	51.9	8.10	2,008.4	-946.2	2,384.1	2,335.1	49.00	48.658	
15,400.0	13,200.0	13,002.9	10,840.5	61.6	52.2	8.09	2,037.5	-946.8	2,384.3	2,334.9	49.42	48.245	
15,500.0	13,200.0	13,073.4	10,839.1	62.5	53.0	8.07	2,108.0	-948.0	2,386.0	2,335.6	50.38	47.355	
15,600.0	13,200.0	13,158.6	10,837.0	63.5	53.9	8.04	2,193.2	-949.5	2,388.3	2,336.8	51.46	46.409	
15,700.0	13,200.0	13,229.0	10,834.7	64.5	54.7	8.03	2,263.5	-950.0	2,391.6	2,339.1	52.49	45.565	
15,800.0	13,200.0	13,496.4	10,835.8	65.5	57.8	8.07	2,530.9	-950.9	2,389.8	2,335.0	54.87	43.557	
15,900.0	13,200.0	13,598.2	10,839.1	66.6	59.0	8.09	2,632.6	-951.3	2,386.7	2,330.6	56.14	42.517	
16,000.0	13,200.0	13,669.1	10,841.1	67.7	59.9	8.10	2,703.4	-951.3	2,384.1	2,327.0	57.16	41.707	
16,100.0	13,200.0	13,703.0	10,841.7	68.8	60.3	8.12	2,737.3	-951.1	2,383.3	2,325.3	57.95	41.128	
16,114.6	13,200.0	13,728.9	10,841.8	69.0	60.6	8.13	2,763.2	-950.8	2,383.1	2,324.9	58.22	40.931	
16,200.0	13,200.0	13,763.2	10,841.4	69.9	61.0	8.15	2,797.5	-950.2	2,384.4	2,325.4	58.98	40.425	
16,300.0	13,200.0	16,300.0	10,838.9	71.1	93.3	8.21	2,898.8	-948.2	2,387.3	2,310.2	77.09	30.969	
16,400.0	13,200.0	14,081.4	10,839.5	72.3	65.1	8.31	3,115.7	-945.7	2,387.2	2,324.7	62.55	38.163	
16,500.0	13,200.0	14,178.0	10,842.4	73.5	66.3	8.34	3,212.2	-945.5	2,384.4	2,320.5	63.88	37.326	
16,600.0	13,200.0	14,248.7	10,844.1	74.7	67.3	8.37	3,282.9	-945.1	2,382.4	2,317.4	65.01	36.648	
16,700.0	13,200.0	14,485.4	10,853.6	75.9	70.4	8.42	3,519.3	-946.3	2,378.4	2,310.8	67.60	35.180	
16,800.0	13,200.0	14,534.4	10,856.4	77.1	71.1	8.42	3,568.3	-947.0	2,372.7	2,304.2	68.51	34.632	
16,900.0	13,200.0	14,592.8	10,858.4	78.4	71.9	8.42	3,626.6	-947.9	2,369.0	2,299.5	69.53	34.070	
17,000.0	13,200.0	14,652.0	10,859.7	79.7	72.7	8.41	3,685.7	-948.9	2,366.9	2,296.3	70.59	33.530	
17,088.1	13,200.0	14,712.9	10,860.2	80.8	73.6	8.40	3,746.6	-949.7	2,366.2	2,294.6	71.61	33.044	
17,100.0	13,200.0	14,720.2	10,860.1	81.0	73.7	8.40	3,753.9	-949.8	2,366.2	2,294.5	71.74	32.984	
17,200.0	13,200.0	14,779.6	10,859.5	82.3	74.5	8.40	3,813.4	-950.2	2,367.2	2,294.4	72.84	32.499	
17,300.0	13,200.0	14,842.0	10,857.8	83.6	75.4	8.40	3,875.7	-950.2	2,370.0	2,296.1	73.99	32.033	
17,400.0	13,200.0	14,926.5	10,854.6	84.9	76.6	8.42	3,960.2	-949.8	2,374.0	2,298.7	75.31	31.523	
17,500.0	13,200.0	15,034.6	10,850.5	86.3	78.1	8.45	4,068.2	-948.8	2,378.0	2,301.2	76.81	30.958	
17,600.0	13,200.0	15,097.1	10,847.7	87.6	79.0	8.47	4,130.6	-948.2	2,382.6	2,304.6	77.99	30.550	
17,700.0	13,200.0	15,169.5	10,843.5	89.0	80.0	8.48	4,202.8	-947.3	2,388.6	2,309.4	79.25	30.141	
17,800.0	13,200.0	15,255.5	10,837.8	90.3	81.2	8.51	4,288.7	-946.1	2,395.5	2,314.9	80.61	29.717	
17,900.0	13,200.0	15,446.2	10,827.8	91.7	84.0	8.56	4,479.1	-944.0	2,401.2	2,318.4	82.76	29.015	
18,000.0	13,200.0	15,589.6	10,823.7	93.1	86.1	8.57	4,622.4	-944.1	2,404.4	2,319.8	84.57	28.432	
18,100.0	13,200.0	15,685.7	10,822.2	94.5	87.5	8.54	4,718.5	-945.9	2,405.8	2,319.8	86.00	27.975	
18,200.0	13,200.0	15,758.3	10,820.5	95.9	88.6	8.52	4,791.1	-946.9	2,408.0	2,320.7	87.26	27.597	
18,300.0	13,200.0	18,300.0	10,817.6	97.3	126.4	8.50	4,903.0	-948.1	2,410.5	2,303.1	107.41	22.442	
18,400.0	13,200.0	15,957.3	10,815.7	98.7	91.5	8.49	4,990.0	-949.0	2,412.7	2,322.5	90.21	26.746	
18,500.0	13,200.0	16,135.6	10,812.6	100.2	94.2	8.47	5,168.2	-950.6	2,414.8	2,322.5	92.32	26.158	
18,600.0	13,200.0	16,228.1	10,813.3	101.6	95.6	8.48	5,260.7	-951.0	2,414.1	2,320.3	93.77	25.746	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #125H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 176-MWD, 11004-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
18,606.5	13,200.0	16,232.4	10,813.3	101.7	95.7	8.48	5,265.0	-951.0	2,414.1	2,320.2	93.85	25.724	
18,700.0	13,200.0	16,321.3	10,813.1	103.0	97.0	8.51	5,354.0	-950.6	2,414.5	2,319.2	95.23	25.353	
18,767.4	13,200.0	16,393.3	10,813.2	104.0	98.1	8.53	5,425.9	-950.4	2,414.4	2,318.1	96.30	25.072	
18,800.0	13,200.0	16,421.5	10,813.3	104.5	98.5	8.54	5,454.2	-950.2	2,414.4	2,317.7	96.76	24.952	
18,900.0	13,200.0	16,493.4	10,813.1	105.9	99.6	8.57	5,526.0	-949.3	2,415.1	2,317.0	98.07	24.626	
19,000.0	13,200.0	16,551.0	10,812.1	107.4	100.5	8.60	5,583.6	-948.4	2,417.2	2,318.0	99.26	24.352	
19,100.0	13,200.0	16,614.0	10,810.0	108.9	101.4	8.63	5,646.6	-947.2	2,421.0	2,320.5	100.50	24.089	
19,200.0	13,200.0	16,757.4	10,804.3	110.3	103.6	8.68	5,789.8	-945.2	2,425.5	2,323.0	102.41	23.683	
19,300.0	13,200.0	17,016.8	10,804.9	111.8	107.6	8.53	6,049.0	-953.8	2,424.6	2,319.5	105.11	23.067	
19,400.0	13,200.0	17,106.5	10,807.7	113.3	109.0	8.48	6,138.5	-956.9	2,421.1	2,314.5	106.53	22.727	
19,500.0	13,200.0	17,216.4	10,811.3	114.8	110.7	8.45	6,248.4	-959.6	2,417.6	2,309.5	108.12	22.362	
19,600.0	13,200.0	17,305.9	10,814.3	116.3	112.1	8.44	6,337.8	-961.2	2,414.1	2,304.6	109.56	22.035	
19,700.0	13,200.0	17,403.8	10,817.4	117.8	113.6	8.44	6,435.7	-962.6	2,410.9	2,299.8	111.08	21.704	
19,800.0	13,200.0	17,462.4	10,818.8	119.3	114.5	8.44	6,494.2	-963.3	2,408.5	2,296.2	112.29	21.449	
19,900.0	13,200.0	17,557.6	10,819.5	120.8	116.0	8.42	6,589.4	-964.8	2,407.7	2,293.9	113.79	21.159	
20,000.0	13,200.0	17,641.1	10,820.6	122.3	117.3	8.42	6,672.9	-965.7	2,406.3	2,291.1	115.20	20.889	
20,034.5	13,200.0	17,661.2	10,820.7	122.8	117.6	8.42	6,693.0	-965.8	2,406.2	2,290.6	115.62	20.812	
20,100.0	13,200.0	17,691.0	10,820.6	123.8	118.1	8.42	6,722.8	-966.0	2,406.6	2,290.3	116.34	20.686	
20,200.0	13,200.0	17,765.2	10,819.4	125.3	119.2	8.43	6,797.0	-966.0	2,408.4	2,290.7	117.68	20.466	
20,300.0	13,200.0	17,863.2	10,816.7	126.8	120.7	8.44	6,895.0	-965.9	2,411.2	2,292.0	119.22	20.226	
20,400.0	13,200.0	17,938.9	10,814.4	128.4	121.9	8.43	6,970.6	-966.7	2,414.3	2,293.7	120.55	20.027	
20,500.0	13,200.0	18,197.5	10,812.1	129.9	126.0	8.34	7,229.1	-972.1	2,415.4	2,292.1	123.31	19.587	
20,600.0	13,200.0	18,297.0	10,814.5	131.4	127.6	8.28	7,328.5	-975.6	2,412.7	2,287.9	124.82	19.330	
20,700.0	13,200.0	18,504.0	10,824.4	132.9	130.8	8.16	7,535.0	-983.9	2,407.4	2,280.4	127.01	18.954	
20,800.0	13,200.0	18,544.0	10,827.2	134.5	131.5	8.13	7,574.9	-985.7	2,400.7	2,272.6	128.14	18.736	
20,900.0	13,200.0	18,602.1	10,830.1	136.0	132.4	8.10	7,632.8	-988.0	2,396.0	2,266.6	129.36	18.522	
21,000.0	13,200.0	18,639.0	10,830.6	137.6	133.0	8.08	7,669.7	-989.2	2,394.2	2,263.8	130.42	18.358	
21,030.2	13,200.0	18,654.0	10,830.5	138.0	133.2	8.07	7,684.8	-989.7	2,394.2	2,263.4	130.77	18.309	
21,100.0	13,200.0	18,693.8	10,830.1	139.1	133.9	8.05	7,724.6	-990.7	2,394.7	2,263.1	131.59	18.198	
21,200.0	13,200.0	18,752.9	10,828.6	140.7	134.8	8.03	7,783.6	-992.0	2,397.0	2,264.2	132.78	18.052	
21,300.0	13,200.0	18,816.7	10,826.0	142.2	135.8	8.01	7,847.3	-993.1	2,400.9	2,266.9	134.00	17.917	
21,400.0	13,200.0	18,873.3	10,822.9	143.8	136.7	7.99	7,903.9	-993.7	2,406.4	2,271.2	135.14	17.806	
21,500.0	13,200.0	19,143.5	10,811.2	145.3	141.0	7.81	8,173.5	-1,001.9	2,412.2	2,274.2	138.01	17.478	
21,600.0	13,200.0	19,229.6	10,811.1	146.9	142.4	7.71	8,259.4	-1,006.8	2,411.7	2,272.4	139.37	17.304	
21,603.8	13,200.0	19,232.2	10,811.0	146.9	142.4	7.71	8,262.0	-1,006.9	2,411.7	2,272.3	139.42	17.298	
21,700.0	13,200.0	19,304.0	10,810.1	148.4	143.6	7.62	8,333.7	-1,011.1	2,412.3	2,271.7	140.65	17.151	
21,800.0	13,200.0	19,364.3	10,808.4	150.0	144.6	7.54	8,393.9	-1,014.6	2,414.3	2,272.5	141.82	17.024	
21,900.0	13,200.0	19,580.1	10,807.6	151.5	148.0	7.30	8,609.3	-1,026.5	2,413.5	2,269.4	144.06	16.753	
22,000.0	13,200.0	19,644.1	10,808.1	153.1	149.1	7.23	8,673.2	-1,030.1	2,412.1	2,266.8	145.30	16.601	
22,039.1	13,200.0	19,668.1	10,808.0	153.7	149.4	7.20	8,697.1	-1,031.5	2,412.0	2,266.2	145.77	16.546	
22,100.0	13,200.0	19,706.9	10,807.6	154.7	150.1	7.15	8,735.9	-1,033.6	2,412.2	2,265.7	146.51	16.464	
22,200.0	13,200.0	22,200.0	10,805.8	156.2	190.3	6.98	8,867.9	-1,041.6	2,413.1	2,246.3	166.82	14.465	
22,300.0	13,200.0	19,968.0	10,807.3	157.8	154.3	6.83	8,996.5	-1,049.1	2,411.1	2,261.3	149.81	16.095	
22,385.3	13,200.0	20,014.7	10,807.5	159.2	155.0	6.82	9,043.2	-1,050.0	2,410.6	2,259.7	150.85	15.980	
22,400.0	13,200.0	20,023.9	10,807.5	159.4	155.2	6.82	9,052.4	-1,050.0	2,410.6	2,259.5	151.04	15.960	
22,500.0	13,200.0	20,100.9	10,806.9	161.0	156.4	6.85	9,129.3	-1,049.6	2,411.5	2,259.0	152.44	15.819	
22,600.0	13,200.0	20,201.3	10,805.9	162.5	158.0	6.88	9,229.8	-1,049.0	2,412.7	2,258.6	154.04	15.663	
22,700.0	13,200.0	20,472.2	10,811.0	164.1	162.4	6.72	9,500.3	-1,058.4	2,410.7	2,254.2	156.58	15.396	
22,800.0	13,200.0	20,537.0	10,813.8	165.7	163.4	6.67	9,564.9	-1,061.3	2,405.8	2,247.9	157.90	15.236	
22,900.0	13,200.0	20,575.7	10,814.8	167.3	164.0	6.65	9,603.6	-1,062.4	2,402.8	2,243.7	159.07	15.105	
23,000.0	13,200.0	20,632.0	10,815.1	168.9	164.9	6.64	9,659.9	-1,063.3	2,402.0	2,241.7	160.32	14.983	
23,002.1	13,200.0	20,632.0	10,815.1	168.9	164.9	6.64	9,659.9	-1,063.3	2,402.0	2,241.7	160.34	14.981	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #125H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 176-MWD, 11004-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
23,100.0	13,200.0	20,700.1	10,814.5	170.4	166.0	6.64	9,728.0	-1,063.7	2,402.8	2,241.2	161.64	14.865	
23,200.0	13,200.0	20,786.9	10,813.1	172.0	167.4	6.63	9,814.8	-1,064.5	2,404.4	2,241.3	163.09	14.742	
23,300.0	13,200.0	20,863.8	10,811.5	173.6	168.7	6.63	9,891.7	-1,065.1	2,406.5	2,242.1	164.47	14.632	
23,400.0	13,200.0	20,964.6	10,808.4	175.2	170.3	6.68	9,992.5	-1,063.5	2,409.8	2,243.7	166.08	14.510	
23,504.9	13,200.0	21,069.5	10,806.6	176.9	172.0	6.75	10,097.3	-1,060.9	2,412.1	2,244.3	167.80	14.375	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #126H - 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	0.0	0.0	0.0	0.0	109.83	-28.9	80.2	85.3				
100.0	100.0	100.0	100.0	0.1	0.1	109.83	-28.9	80.2	85.3	85.0	0.26	332.719	
200.0	200.0	200.0	200.0	0.5	0.5	109.83	-28.9	80.2	85.3	84.3	0.97	87.622	
300.0	300.0	300.0	300.0	0.8	0.8	109.83	-28.9	80.2	85.3	83.6	1.69	50.455	
400.0	400.0	400.0	400.0	1.2	1.2	109.83	-28.9	80.2	85.3	82.9	2.41	35.427	
500.0	500.0	500.0	500.0	1.6	1.6	109.83	-28.9	80.2	85.3	82.2	3.12	27.297	
600.0	600.0	600.0	600.0	1.9	1.9	109.83	-28.9	80.2	85.3	81.4	3.84	22.202	
700.0	700.0	700.0	700.0	2.3	2.3	109.83	-28.9	80.2	85.3	80.7	4.56	18.710	
800.0	800.0	800.0	800.0	2.6	2.6	109.83	-28.9	80.2	85.3	80.0	5.27	16.167	
900.0	900.0	900.0	900.0	3.0	3.0	109.83	-28.9	80.2	85.3	79.3	5.99	14.232	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	109.83	-28.9	80.2	85.3	78.6	6.71	12.711	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	109.83	-28.9	80.2	85.3	77.9	7.43	11.484	
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	109.83	-28.9	80.2	85.3	77.1	8.14	10.473	CC, ES
1,300.0	1,300.0	1,298.6	1,298.6	4.4	4.4	109.95	-29.4	80.9	86.1	77.3	8.84	9.741	
1,400.0	1,400.0	1,397.1	1,397.0	4.8	4.7	110.30	-30.7	83.1	88.6	79.1	9.53	9.305	
1,500.0	1,500.0	1,495.4	1,495.3	5.1	5.1	110.84	-33.0	86.7	92.8	82.6	10.21	9.092	
1,600.0	1,600.0	1,593.6	1,593.3	5.5	5.4	111.52	-36.1	91.7	98.7	87.9	10.90	9.062	
1,700.0	1,700.0	1,691.6	1,691.0	5.9	5.8	112.28	-40.2	98.0	106.3	94.8	11.58	9.183	
1,800.0	1,800.0	1,789.3	1,788.3	6.2	6.1	113.07	-45.1	105.8	115.6	103.4	12.26	9.432	
1,900.0	1,900.0	1,886.7	1,885.0	6.6	6.5	113.86	-50.9	115.0	126.6	113.7	12.94	9.787	
2,000.0	2,000.0	1,983.6	1,981.2	6.9	6.8	114.61	-57.5	125.5	139.3	125.7	13.61	10.235	
2,100.0	2,100.0	2,082.2	2,078.8	7.3	7.2	115.30	-64.8	137.1	153.1	138.8	14.30	10.701	
2,200.0	2,200.0	2,181.3	2,176.9	7.7	7.6	115.88	-72.1	148.7	166.9	151.9	15.01	11.120	
2,300.0	2,300.0	2,280.3	2,275.0	8.0	7.9	116.36	-79.5	160.4	180.7	165.0	15.71	11.502	
2,400.0	2,400.0	2,379.3	2,373.0	8.4	8.3	116.78	-86.8	172.0	194.6	178.2	16.42	11.850	
2,500.0	2,500.0	2,478.4	2,471.1	8.7	8.7	117.15	-94.2	183.7	208.4	191.3	17.13	12.169	
2,600.0	2,600.0	2,577.4	2,569.2	9.1	9.1	117.47	-101.5	195.3	222.3	204.5	17.84	12.463	
2,700.0	2,700.0	2,676.4	2,667.2	9.4	9.5	117.75	-108.9	207.0	236.2	217.6	18.55	12.733	
2,800.0	2,800.0	2,775.4	2,765.3	9.8	9.9	118.00	-116.3	218.7	250.1	230.8	19.26	12.983	
2,900.0	2,900.0	2,874.5	2,863.4	10.2	10.3	118.22	-123.6	230.3	263.9	244.0	19.97	13.215	
3,000.0	3,000.0	2,973.5	2,961.4	10.5	10.7	118.42	-131.0	242.0	277.8	257.1	20.69	13.430	
3,100.0	3,100.0	3,072.5	3,059.5	10.9	11.1	118.60	-138.3	253.6	291.7	270.3	21.40	13.631	
3,200.0	3,200.0	3,171.5	3,157.5	11.2	11.5	118.77	-145.7	265.3	305.6	283.5	22.12	13.819	
3,300.0	3,300.0	3,270.6	3,255.6	11.6	11.9	118.92	-153.0	276.9	319.5	296.7	22.83	13.994	
3,400.0	3,400.0	3,369.6	3,353.7	12.0	12.3	119.06	-160.4	288.6	333.4	309.9	23.55	14.159	
3,500.0	3,500.0	3,468.6	3,451.7	12.3	12.7	119.19	-167.7	300.3	347.3	323.0	24.26	14.314	
3,600.0	3,600.0	3,567.6	3,549.8	12.7	13.1	119.30	-175.1	311.9	361.2	336.2	24.98	14.460	
3,700.0	3,700.0	3,666.7	3,647.9	13.0	13.5	119.41	-182.4	323.6	375.1	349.4	25.70	14.597	
3,800.0	3,800.0	3,765.7	3,745.9	13.4	13.9	119.51	-189.8	335.2	389.0	362.6	26.41	14.727	
3,900.0	3,900.0	3,864.7	3,844.0	13.8	14.3	119.61	-197.1	346.9	402.9	375.8	27.13	14.850	
4,000.0	4,000.0	3,974.1	3,952.5	14.1	14.8	119.70	-204.6	358.8	415.7	387.8	27.94	14.878	
4,100.0	4,100.0	4,085.9	4,063.7	14.5	15.2	119.76	-210.6	368.2	425.7	397.0	28.75	14.807	
4,200.0	4,200.0	4,198.3	4,175.8	14.8	15.6	119.81	-214.8	374.9	432.8	403.3	29.54	14.652	
4,300.0	4,300.0	4,311.0	4,288.4	15.2	16.0	119.84	-217.3	378.9	436.9	406.6	30.29	14.422	
4,400.0	4,400.0	4,422.6	4,400.0	15.5	16.4	119.84	-218.0	380.0	438.1	407.1	31.02	14.123	
4,500.0	4,500.0	4,522.6	4,500.0	15.9	16.7	119.84	-218.0	380.0	438.1	406.4	31.72	13.813	
4,600.0	4,600.0	4,622.6	4,600.0	16.3	17.1	119.84	-218.0	380.0	438.1	405.7	32.41	13.516	
4,700.0	4,700.0	4,722.6	4,700.0	16.6	17.4	119.84	-218.0	380.0	438.1	405.0	33.11	13.231	
4,800.0	4,800.0	4,822.6	4,800.0	17.0	17.7	119.84	-218.0	380.0	438.1	404.3	33.81	12.957	
4,900.0	4,900.0	4,922.6	4,900.0	17.3	18.0	119.84	-218.0	380.0	438.1	403.6	34.51	12.694	
5,000.0	5,000.0	5,022.6	5,000.0	17.7	18.4	119.84	-218.0	380.0	438.1	402.9	35.21	12.442	
5,100.0	5,100.0	5,122.6	5,100.0	18.1	18.7	119.84	-218.0	380.0	438.1	402.2	35.91	12.199	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #126H - 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
5,200.0	5,200.0	5,222.6	5,200.0	18.4	19.0	119.84	-218.0	380.0	438.1	401.5	36.61	11.965	
5,300.0	5,300.0	5,322.6	5,300.0	18.8	19.4	119.84	-218.0	380.0	438.1	400.8	37.32	11.740	
5,400.0	5,400.0	5,422.6	5,400.0	19.1	19.7	119.84	-218.0	380.0	438.1	400.1	38.02	11.523	
5,500.0	5,500.0	5,522.6	5,500.0	19.5	20.0	119.84	-218.0	380.0	438.1	399.4	38.72	11.314	
5,600.0	5,600.0	5,622.6	5,600.0	19.8	20.4	119.84	-218.0	380.0	438.1	398.7	39.43	11.112	
5,700.0	5,700.0	5,722.6	5,700.0	20.2	20.7	119.84	-218.0	380.0	438.1	398.0	40.13	10.917	
5,800.0	5,800.0	5,822.6	5,800.0	20.6	21.0	119.84	-218.0	380.0	438.1	397.3	40.83	10.729	
5,900.0	5,900.0	5,922.6	5,900.0	20.9	21.4	119.84	-218.0	380.0	438.1	396.6	41.54	10.546	
6,000.0	6,000.0	6,022.6	6,000.0	21.3	21.7	119.84	-218.0	380.0	438.1	395.9	42.25	10.370	
6,100.0	6,100.0	6,122.6	6,100.0	21.6	22.0	119.84	-218.0	380.0	438.1	395.1	42.95	10.200	
6,200.0	6,200.0	6,222.6	6,200.0	22.0	22.4	119.84	-218.0	380.0	438.1	394.4	43.66	10.035	
6,300.0	6,300.0	6,322.6	6,300.0	22.4	22.7	119.84	-218.0	380.0	438.1	393.7	44.36	9.875	
6,400.0	6,400.0	6,422.6	6,400.0	22.7	23.1	119.84	-218.0	380.0	438.1	393.0	45.07	9.720	
6,500.0	6,500.0	6,522.6	6,500.0	23.1	23.4	119.84	-218.0	380.0	438.1	392.3	45.78	9.570	
6,600.0	6,600.0	6,622.6	6,600.0	23.4	23.7	119.84	-218.0	380.0	438.1	391.6	46.49	9.424	
6,700.0	6,700.0	6,722.6	6,700.0	23.8	24.1	119.84	-218.0	380.0	438.1	390.9	47.19	9.283	
6,800.0	6,800.0	6,822.6	6,800.0	24.1	24.4	119.84	-218.0	380.0	438.1	390.2	47.90	9.146	
6,900.0	6,900.0	6,922.6	6,900.0	24.5	24.8	119.84	-218.0	380.0	438.1	389.5	48.61	9.013	
7,000.0	7,000.0	7,022.6	7,000.0	24.9	25.1	119.84	-218.0	380.0	438.1	388.8	49.32	8.883	
7,100.0	7,100.0	7,122.6	7,100.0	25.2	25.5	-134.74	-218.0	380.0	438.7	388.7	50.02	8.772	
7,200.0	7,200.0	7,222.6	7,200.0	25.5	25.8	-134.97	-218.0	380.0	440.6	389.9	50.70	8.689	
7,300.0	7,299.9	7,322.5	7,299.9	25.9	26.1	-135.35	-218.0	380.0	443.7	392.3	51.39	8.633	
7,400.0	7,399.7	7,422.3	7,399.7	26.2	26.5	-135.87	-218.0	380.0	448.0	395.9	52.08	8.603	
7,500.0	7,499.4	7,522.0	7,499.4	26.6	26.8	-136.52	-218.0	380.0	453.7	400.9	52.76	8.598	SF
7,600.0	7,598.9	7,621.5	7,598.9	26.9	27.2	-137.29	-218.0	380.0	460.7	407.2	53.45	8.619	
7,700.0	7,698.3	7,720.9	7,698.3	27.2	27.5	-138.17	-218.0	380.0	469.1	415.0	54.14	8.664	
7,800.0	7,797.4	7,820.0	7,797.4	27.6	27.9	-139.14	-218.0	380.0	478.9	424.1	54.83	8.735	
7,900.0	7,896.3	7,918.9	7,896.3	27.9	28.2	-140.19	-218.0	380.0	490.3	434.7	55.52	8.830	
8,000.0	7,994.9	8,017.5	7,994.9	28.3	28.5	-141.31	-218.0	380.0	503.1	446.9	56.21	8.951	
8,100.0	8,093.3	8,115.9	8,093.3	28.6	28.9	-142.47	-218.0	380.0	517.5	460.6	56.90	9.096	
8,182.6	8,174.2	8,203.2	8,174.2	28.9	29.2	-143.46	-218.0	380.0	530.7	473.2	57.49	9.231	
8,200.0	8,191.3	8,213.9	8,191.3	29.0	29.2	-143.69	-218.0	380.0	533.6	476.0	57.59	9.266	
8,300.0	8,289.1	8,311.7	8,289.1	29.4	29.6	-144.94	-218.0	380.0	550.3	492.1	58.28	9.444	
8,400.0	8,387.0	8,409.6	8,387.0	29.7	29.9	-146.12	-218.0	380.0	567.3	508.4	58.97	9.622	
8,500.0	8,484.9	8,507.5	8,484.9	30.1	30.2	-147.23	-218.0	380.0	584.6	524.9	59.66	9.799	
8,600.0	8,582.8	8,605.4	8,582.8	30.5	30.6	-148.28	-218.0	380.0	602.0	541.7	60.35	9.975	
8,700.0	8,680.6	8,703.3	8,680.6	30.9	30.9	-149.28	-218.0	380.0	619.6	558.6	61.04	10.151	
8,800.0	8,778.5	8,801.1	8,778.5	31.2	31.3	-150.21	-218.0	380.0	637.4	575.7	61.74	10.325	
8,900.0	8,876.4	8,901.0	8,876.4	31.6	31.6	-151.10	-218.0	380.0	655.4	593.0	62.44	10.496	
9,000.0	8,974.3	9,003.1	8,974.3	32.0	32.0	-151.94	-218.0	380.0	673.5	610.4	63.15	10.665	
9,100.0	9,072.1	9,105.2	9,072.1	32.4	32.3	-152.73	-218.0	380.0	691.7	627.9	63.86	10.831	
9,200.0	9,170.0	9,207.4	9,170.0	32.8	32.7	-153.49	-218.0	380.0	710.1	645.5	64.58	10.996	
9,300.0	9,267.9	9,309.5	9,267.9	33.2	33.0	-154.20	-218.0	380.0	728.6	663.3	65.29	11.159	
9,400.0	9,365.8	9,388.4	9,365.8	33.6	33.3	-154.88	-218.0	380.0	747.1	681.2	65.92	11.334	
9,500.0	9,463.7	9,486.3	9,463.7	34.0	33.7	-155.53	-218.0	380.0	765.8	699.2	66.62	11.496	
9,600.0	9,561.5	9,584.2	9,561.5	34.4	34.0	-156.15	-218.0	380.0	784.6	717.3	67.32	11.655	
9,700.0	9,659.4	9,682.0	9,659.4	34.8	34.3	-156.74	-218.0	380.0	803.4	735.4	68.02	11.812	
9,800.0	9,757.3	9,779.9	9,757.3	35.2	34.7	-157.30	-218.0	380.0	822.4	753.6	68.72	11.967	
9,900.0	9,855.2	9,877.8	9,855.2	35.6	35.0	-157.84	-218.0	380.0	841.4	771.9	69.42	12.120	
10,000.0	9,953.0	9,975.7	9,953.0	36.0	35.4	-158.35	-218.0	380.0	860.4	790.3	70.12	12.271	
10,100.0	10,050.9	10,073.5	10,050.9	36.4	35.7	-158.84	-218.0	380.0	879.6	808.7	70.82	12.420	
10,200.0	10,148.8	10,171.4	10,148.8	36.9	36.1	-159.31	-218.0	380.0	898.8	827.2	71.52	12.566	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #126H - 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
10,300.0	10,246.7	10,269.3	10,246.7	37.3	36.4	-159.76	-218.0	380.0	918.0	845.8	72.23	12.710	
10,400.0	10,344.6	10,373.2	10,350.5	37.7	36.8	-160.35	-215.9	380.0	937.2	864.2	72.95	12.847	
10,500.0	10,442.4	10,479.5	10,455.0	38.1	37.1	-161.93	-197.1	379.8	955.5	881.9	73.65	12.975	
10,600.0	10,540.3	10,574.1	10,543.6	38.5	37.4	-164.23	-164.4	379.6	974.2	899.9	74.27	13.116	
10,700.0	10,638.2	10,654.6	10,613.9	39.0	37.6	-166.76	-125.3	379.3	995.0	920.2	74.80	13.301	
10,800.0	10,736.1	10,721.4	10,667.7	39.4	37.7	-169.22	-85.7	379.0	1,019.4	944.2	75.16	13.563	
10,900.0	10,833.9	10,776.4	10,708.2	39.8	37.8	-171.44	-48.6	378.7	1,048.6	973.3	75.27	13.931	
11,000.0	10,931.8	10,821.6	10,738.8	40.2	37.9	-173.38	-15.2	378.4	1,083.3	1,008.2	75.09	14.426	
11,100.0	11,029.7	10,859.1	10,762.1	40.7	38.0	-175.05	14.1	378.2	1,123.6	1,049.0	74.63	15.056	
11,200.0	11,127.6	10,890.4	10,780.0	41.1	38.0	-176.48	39.7	378.0	1,169.5	1,095.6	73.90	15.826	
11,300.0	11,225.5	10,916.7	10,793.9	41.5	38.0	-177.71	62.1	377.8	1,220.7	1,147.8	72.96	16.731	
11,400.0	11,323.3	10,939.1	10,805.0	42.0	38.0	-178.77	81.5	377.7	1,276.9	1,205.0	71.87	17.766	
11,500.0	11,421.2	10,950.0	10,810.1	42.4	38.0	-179.28	91.2	377.6	1,337.5	1,267.0	70.57	18.953	
11,523.5	11,444.2	10,962.5	10,815.7	42.5	38.1	-179.88	102.3	377.5	1,352.3	1,281.9	70.40	19.210	
11,600.0	11,519.2	10,975.1	10,821.2	42.8	38.1	179.53	113.7	377.5	1,401.5	1,332.1	69.44	20.185	
11,700.0	11,617.7	11,000.0	10,831.2	43.3	38.1	178.39	136.5	377.3	1,467.5	1,399.2	68.27	21.494	
11,800.0	11,716.7	11,000.0	10,831.2	43.7	38.1	178.43	136.5	377.3	1,534.7	1,468.0	66.76	22.988	
11,900.0	11,815.9	11,015.6	10,836.9	44.1	38.2	177.78	151.0	377.2	1,603.3	1,537.9	65.48	24.488	
12,000.0	11,915.5	11,026.7	10,840.8	44.4	38.2	177.36	161.4	377.1	1,673.1	1,608.9	64.14	26.083	
12,100.0	12,015.2	11,050.0	10,848.2	44.8	38.3	176.45	183.5	376.9	1,744.0	1,681.0	62.99	27.687	
12,200.0	12,115.1	11,050.0	10,848.2	45.2	38.3	176.54	183.5	376.9	1,815.4	1,753.8	61.57	29.483	
12,300.0	12,215.1	11,050.0	10,848.2	45.5	38.3	176.64	183.5	376.9	1,887.6	1,827.4	60.20	31.356	
12,311.9	12,227.0	11,050.0	10,848.2	45.5	38.3	71.16	183.5	376.9	1,896.3	1,836.2	60.04	31.584	
12,400.0	12,315.1	11,050.0	10,848.2	45.8	38.3	71.16	183.5	376.9	1,961.3	1,902.4	58.89	33.301	
12,500.0	12,415.1	11,070.0	10,853.9	46.2	38.3	70.36	202.7	376.8	2,036.8	1,978.8	57.92	35.164	
12,600.0	12,515.1	11,076.7	10,855.6	46.5	38.3	70.09	209.1	376.7	2,114.4	2,057.5	56.88	37.174	
12,700.0	12,615.1	11,100.0	10,861.1	46.9	38.4	69.16	231.8	376.5	2,194.0	2,137.9	56.11	39.105	
12,711.9	12,627.0	11,100.0	10,861.1	46.9	38.4	69.16	231.8	376.5	2,203.5	2,147.5	55.99	39.356	
12,750.0	12,665.1	11,100.0	10,861.1	47.0	38.4	85.96	231.8	376.5	2,234.1	2,178.5	55.62	40.167	
12,800.0	12,714.8	11,100.0	10,861.1	47.2	38.4	79.17	231.8	376.5	2,274.5	2,219.3	55.16	41.232	
12,850.0	12,763.8	11,100.0	10,861.1	47.4	38.4	72.58	231.8	376.5	2,314.8	2,260.1	54.73	42.292	
12,900.0	12,811.8	11,100.0	10,861.1	47.5	38.4	66.39	231.8	376.5	2,354.7	2,300.3	54.33	43.336	
12,950.0	12,858.3	11,100.0	10,861.1	47.7	38.4	60.73	231.8	376.5	2,393.9	2,339.9	53.97	44.356	
13,000.0	12,903.1	11,100.0	10,861.1	47.8	38.4	55.68	231.8	376.5	2,432.2	2,378.5	53.64	45.342	
13,050.0	12,945.8	11,118.7	10,864.8	48.0	38.5	51.05	250.1	376.4	2,469.0	2,415.4	53.52	46.134	
13,100.0	12,986.1	11,125.9	10,866.1	48.1	38.5	47.20	257.2	376.3	2,504.4	2,451.0	53.32	46.966	
13,150.0	13,023.7	11,150.0	10,869.7	48.3	38.5	43.84	281.0	376.2	2,538.3	2,485.0	53.30	47.621	
13,200.0	13,058.2	11,150.0	10,869.7	48.4	38.5	41.09	281.0	376.2	2,569.9	2,516.8	53.13	48.374	
13,250.0	13,089.4	11,150.0	10,869.7	48.5	38.5	38.74	281.0	376.2	2,599.5	2,546.5	53.00	49.047	
13,300.0	13,117.2	11,150.0	10,869.7	48.7	38.5	36.73	281.0	376.2	2,626.9	2,574.0	52.93	49.633	
13,350.0	13,141.1	11,150.0	10,869.7	48.8	38.5	35.02	281.0	376.2	2,652.1	2,599.2	52.91	50.124	
13,400.0	13,161.2	11,175.7	10,872.4	48.9	38.6	33.69	306.6	376.0	2,674.2	2,621.1	53.10	50.365	
13,450.0	13,177.2	11,200.0	10,874.0	49.1	38.7	32.62	330.8	375.8	2,694.2	2,640.8	53.31	50.540	
13,500.0	13,189.1	11,200.0	10,874.0	49.2	38.7	31.67	330.8	375.8	2,710.9	2,657.5	53.45	50.721	
13,550.0	13,196.6	11,200.0	10,874.0	49.4	38.7	30.91	330.8	375.8	2,725.0	2,671.3	53.65	50.791	
13,600.0	13,199.8	11,212.2	10,874.3	49.6	38.7	30.40	343.0	375.7	2,736.2	2,682.2	53.96	50.708	
13,611.9	13,200.0	11,214.3	10,874.4	49.6	38.7	30.30	345.2	375.7	2,738.4	2,684.4	54.04	50.676	
13,700.0	13,200.0	11,251.8	10,874.4	50.0	38.9	30.83	382.6	375.4	2,754.6	2,699.9	54.71	50.353	
13,800.0	13,200.0	11,346.6	10,874.2	50.4	39.2	31.68	477.4	374.7	2,772.2	2,716.5	55.64	49.821	
13,900.0	13,200.0	11,442.3	10,874.0	50.9	39.6	32.44	573.2	373.9	2,788.1	2,731.5	56.61	49.253	
14,000.0	13,200.0	11,539.0	10,873.7	51.4	40.0	33.11	669.9	373.2	2,802.4	2,744.8	57.61	48.648	
14,100.0	13,200.0	11,636.6	10,873.5	52.0	40.6	33.68	767.4	372.4	2,815.0	2,756.3	58.64	48.007	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #126H - 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
14,200.0	13,200.0	11,734.8	10,873.3	52.6	41.1	34.17	865.6	371.7	2,825.7	2,766.0	59.69	47.336	
14,300.0	13,200.0	11,833.6	10,873.1	53.2	41.8	34.57	964.4	370.9	2,834.5	2,773.7	60.78	46.637	
14,400.0	13,200.0	11,932.9	10,872.8	53.8	42.5	34.87	1,063.7	370.2	2,841.4	2,779.6	61.88	45.916	
14,500.0	13,200.0	12,032.6	10,872.6	54.5	43.2	35.09	1,163.4	369.4	2,846.4	2,783.4	63.01	45.177	
14,600.0	13,200.0	12,132.5	10,872.4	55.1	44.0	35.21	1,263.3	368.6	2,849.3	2,785.2	64.14	44.425	
14,687.2	13,200.0	12,219.7	10,872.2	55.7	44.7	35.25	1,350.5	368.0	2,850.3	2,785.1	65.13	43.763	
14,700.0	13,200.0	12,232.5	10,872.2	55.8	44.8	35.25	1,363.3	367.9	2,850.3	2,785.0	65.28	43.666	
14,800.0	13,200.0	12,332.5	10,871.9	56.5	45.7	35.24	1,463.2	367.1	2,850.5	2,784.0	66.45	42.896	
14,900.0	13,200.0	12,432.5	10,871.7	57.3	46.7	35.24	1,563.2	366.3	2,850.7	2,783.0	67.68	42.117	
15,000.0	13,200.0	12,532.5	10,871.5	58.1	47.6	35.24	1,663.2	365.6	2,850.8	2,781.9	68.97	41.334	
15,100.0	13,200.0	12,632.5	10,871.3	58.9	48.6	35.24	1,763.2	364.8	2,851.0	2,780.7	70.31	40.550	
15,200.0	13,200.0	12,732.5	10,871.0	59.7	49.7	35.23	1,863.2	364.0	2,851.2	2,779.5	71.70	39.768	
15,300.0	13,200.0	12,832.5	10,870.8	60.6	50.7	35.23	1,963.2	363.2	2,851.4	2,778.3	73.13	38.991	
15,400.0	13,200.0	12,932.5	10,870.6	61.6	51.8	35.23	2,063.2	362.5	2,851.6	2,777.0	74.60	38.223	
15,500.0	13,200.0	13,032.5	10,870.4	62.5	53.0	35.22	2,163.2	361.7	2,851.8	2,775.7	76.12	37.464	
15,600.0	13,200.0	13,132.5	10,870.1	63.5	54.1	35.22	2,263.2	360.9	2,852.0	2,774.3	77.68	36.716	
15,700.0	13,200.0	13,232.5	10,869.9	64.5	55.3	35.22	2,363.2	360.2	2,852.2	2,772.9	79.27	35.982	
15,800.0	13,200.0	13,332.5	10,869.7	65.5	56.5	35.22	2,463.2	359.4	2,852.4	2,771.5	80.89	35.262	
15,900.0	13,200.0	13,432.5	10,869.4	66.6	57.8	35.21	2,563.2	358.6	2,852.5	2,770.0	82.55	34.556	
16,000.0	13,200.0	13,532.5	10,869.2	67.7	59.0	35.21	2,663.2	357.9	2,852.7	2,768.5	84.23	33.867	
16,100.0	13,200.0	13,632.5	10,869.0	68.8	60.3	35.21	2,763.2	357.1	2,852.9	2,767.0	85.95	33.193	
16,200.0	13,200.0	13,732.5	10,868.8	69.9	61.6	35.21	2,863.2	356.3	2,853.1	2,765.4	87.69	32.536	
16,300.0	13,200.0	13,832.5	10,868.5	71.1	62.9	35.20	2,963.2	355.6	2,853.3	2,763.8	89.46	31.896	
16,400.0	13,200.0	13,932.5	10,868.3	72.3	64.2	35.20	3,063.2	354.8	2,853.5	2,762.2	91.25	31.273	
16,500.0	13,200.0	14,032.5	10,868.1	73.5	65.5	35.20	3,163.2	354.0	2,853.7	2,760.6	93.06	30.666	
16,600.0	13,200.0	14,132.5	10,867.9	74.7	66.9	35.20	3,263.2	353.3	2,853.9	2,759.0	94.89	30.075	
16,700.0	13,200.0	14,232.5	10,867.6	75.9	68.3	35.19	3,363.2	352.5	2,854.0	2,757.3	96.74	29.501	
16,800.0	13,200.0	14,332.5	10,867.4	77.1	69.6	35.19	3,463.2	351.7	2,854.2	2,755.6	98.61	28.943	
16,900.0	13,200.0	14,432.5	10,867.2	78.4	71.0	35.19	3,563.2	351.0	2,854.4	2,753.9	100.50	28.401	
17,000.0	13,200.0	14,532.5	10,867.0	79.7	72.4	35.19	3,663.2	350.2	2,854.6	2,752.2	102.41	27.875	
17,100.0	13,200.0	14,632.5	10,866.7	81.0	73.8	35.18	3,763.2	349.4	2,854.8	2,750.5	104.33	27.363	
17,200.0	13,200.0	14,732.5	10,866.5	82.3	75.3	35.18	3,863.2	348.7	2,855.0	2,748.7	106.27	26.867	
17,300.0	13,200.0	14,832.5	10,866.3	83.6	76.7	35.18	3,963.2	347.9	2,855.2	2,747.0	108.22	26.384	
17,400.0	13,200.0	14,932.5	10,866.0	84.9	78.1	35.18	4,063.2	347.1	2,855.4	2,745.2	110.18	25.916	
17,500.0	13,200.0	15,032.5	10,865.8	86.3	79.6	35.17	4,163.2	346.4	2,855.6	2,743.4	112.15	25.461	
17,600.0	13,200.0	15,132.5	10,865.6	87.6	81.0	35.17	4,263.1	345.6	2,855.7	2,741.6	114.14	25.019	
17,700.0	13,200.0	15,232.5	10,865.4	89.0	82.5	35.17	4,363.1	344.8	2,855.9	2,739.8	116.14	24.590	
17,800.0	13,200.0	15,332.5	10,865.1	90.3	84.0	35.17	4,463.1	344.0	2,856.1	2,738.0	118.15	24.174	
17,900.0	13,200.0	15,432.5	10,864.9	91.7	85.4	35.16	4,563.1	343.3	2,856.3	2,736.1	120.17	23.769	
18,000.0	13,200.0	15,532.5	10,864.7	93.1	86.9	35.16	4,663.1	342.5	2,856.5	2,734.3	122.20	23.376	
18,100.0	13,200.0	15,632.5	10,864.5	94.5	88.4	35.16	4,763.1	341.7	2,856.7	2,732.4	124.24	22.994	
18,200.0	13,200.0	15,732.5	10,864.2	95.9	89.9	35.16	4,863.1	341.0	2,856.9	2,730.6	126.29	22.622	
18,300.0	13,200.0	15,832.5	10,864.0	97.3	91.4	35.15	4,963.1	340.2	2,857.1	2,728.7	128.34	22.261	
18,400.0	13,200.0	15,932.5	10,863.8	98.7	92.9	35.15	5,063.1	339.4	2,857.3	2,726.8	130.41	21.910	
18,500.0	13,200.0	16,032.5	10,863.5	100.2	94.4	35.15	5,163.1	338.7	2,857.4	2,725.0	132.48	21.569	
18,600.0	13,200.0	16,132.5	10,863.3	101.6	96.0	35.15	5,263.1	337.9	2,857.6	2,723.1	134.56	21.238	
18,700.0	13,200.0	16,232.5	10,863.1	103.0	97.5	35.14	5,363.1	337.1	2,857.8	2,721.2	136.64	20.915	
18,800.0	13,200.0	16,332.5	10,862.9	104.5	99.0	35.14	5,463.1	336.4	2,858.0	2,719.3	138.73	20.601	
18,900.0	13,200.0	16,432.5	10,862.6	105.9	100.5	35.14	5,563.1	335.6	2,858.2	2,717.4	140.83	20.295	
19,000.0	13,200.0	16,532.5	10,862.4	107.4	102.1	35.14	5,663.1	334.8	2,858.4	2,715.4	142.93	19.998	
19,100.0	13,200.0	16,632.5	10,862.2	108.9	103.6	35.13	5,763.1	334.1	2,858.6	2,713.5	145.04	19.708	
19,200.0	13,200.0	16,732.5	10,862.0	110.3	105.2	35.13	5,863.1	333.3	2,858.8	2,711.6	147.16	19.426	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #126H - 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
19,300.0	13,200.0	16,832.5	10,861.7	111.8	106.7	35.13	5,963.1	332.5	2,858.9	2,709.7	149.28	19.152	
19,400.0	13,200.0	16,932.5	10,861.5	113.3	108.2	35.13	6,063.1	331.8	2,859.1	2,707.7	151.41	18.884	
19,500.0	13,200.0	17,032.5	10,861.3	114.8	109.8	35.12	6,163.1	331.0	2,859.3	2,705.8	153.54	18.623	
19,600.0	13,200.0	17,132.5	10,861.1	116.3	111.4	35.12	6,263.1	330.2	2,859.5	2,703.8	155.67	18.369	
19,700.0	13,200.0	17,232.5	10,860.8	117.8	112.9	35.12	6,363.1	329.5	2,859.7	2,701.9	157.81	18.121	
19,800.0	13,200.0	17,332.5	10,860.6	119.3	114.5	35.11	6,463.1	328.7	2,859.9	2,699.9	159.95	17.880	
19,900.0	13,200.0	17,432.5	10,860.4	120.8	116.0	35.11	6,563.1	327.9	2,860.1	2,698.0	162.10	17.644	
20,000.0	13,200.0	17,532.5	10,860.1	122.3	117.6	35.11	6,663.1	327.2	2,860.3	2,696.0	164.25	17.414	
20,100.0	13,200.0	17,632.5	10,859.9	123.8	119.2	35.11	6,763.1	326.4	2,860.5	2,694.1	166.41	17.190	
20,200.0	13,200.0	17,732.5	10,859.7	125.3	120.7	35.10	6,863.1	325.6	2,860.6	2,692.1	168.56	16.971	
20,300.0	13,200.0	17,832.5	10,859.5	126.8	122.3	35.10	6,963.1	324.9	2,860.8	2,690.1	170.73	16.757	
20,400.0	13,200.0	17,932.5	10,859.2	128.4	123.9	35.10	7,063.1	324.1	2,861.0	2,688.1	172.89	16.548	
20,500.0	13,200.0	18,032.5	10,859.0	129.9	125.5	35.10	7,163.0	323.3	2,861.2	2,686.2	175.06	16.344	
20,600.0	13,200.0	18,132.5	10,858.8	131.4	127.0	35.09	7,263.0	322.5	2,861.4	2,684.2	177.23	16.145	
20,700.0	13,200.0	18,232.4	10,858.6	132.9	128.6	35.09	7,363.0	321.8	2,861.6	2,682.2	179.40	15.951	
20,800.0	13,200.0	18,332.4	10,858.3	134.5	130.2	35.09	7,463.0	321.0	2,861.8	2,680.2	181.58	15.760	
20,900.0	13,200.0	18,432.4	10,858.1	136.0	131.8	35.09	7,563.0	320.2	2,862.0	2,678.2	183.76	15.574	
21,000.0	13,200.0	18,532.4	10,857.9	137.6	133.4	35.08	7,663.0	319.5	2,862.2	2,676.2	185.94	15.393	
21,100.0	13,200.0	18,632.4	10,857.6	139.1	135.0	35.08	7,763.0	318.7	2,862.3	2,674.2	188.13	15.215	
21,200.0	13,200.0	18,732.4	10,857.4	140.7	136.6	35.08	7,863.0	317.9	2,862.5	2,672.2	190.31	15.041	
21,300.0	13,200.0	18,832.4	10,857.2	142.2	138.1	35.08	7,963.0	317.2	2,862.7	2,670.2	192.50	14.871	
21,400.0	13,200.0	18,932.4	10,857.0	143.8	139.7	35.07	8,063.0	316.4	2,862.9	2,668.2	194.70	14.705	
21,500.0	13,200.0	19,032.4	10,856.7	145.3	141.3	35.07	8,163.0	315.6	2,863.1	2,666.2	196.89	14.542	
21,600.0	13,200.0	19,132.4	10,856.5	146.9	142.9	35.07	8,263.0	314.9	2,863.3	2,664.2	199.08	14.382	
21,700.0	13,200.0	19,232.4	10,856.3	148.4	144.5	35.07	8,363.0	314.1	2,863.5	2,662.2	201.28	14.226	
21,800.0	13,200.0	19,332.4	10,856.1	150.0	146.1	35.06	8,463.0	313.3	2,863.7	2,660.2	203.48	14.073	
21,900.0	13,200.0	19,432.4	10,855.8	151.5	147.7	35.06	8,563.0	312.6	2,863.9	2,658.2	205.68	13.924	
22,000.0	13,200.0	19,532.4	10,855.6	153.1	149.3	35.06	8,663.0	311.8	2,864.0	2,656.2	207.89	13.777	
22,100.0	13,200.0	19,632.4	10,855.4	154.7	150.9	35.06	8,763.0	311.0	2,864.2	2,654.1	210.09	13.633	
22,200.0	13,200.0	19,732.4	10,855.2	156.2	152.5	35.05	8,863.0	310.3	2,864.4	2,652.1	212.30	13.492	
22,300.0	13,200.0	19,832.4	10,854.9	157.8	154.1	35.05	8,963.0	309.5	2,864.6	2,650.1	214.51	13.354	
22,400.0	13,200.0	19,932.4	10,854.7	159.4	155.7	35.05	9,063.0	308.7	2,864.8	2,648.1	216.72	13.219	
22,500.0	13,200.0	20,032.4	10,854.5	161.0	157.4	35.05	9,163.0	308.0	2,865.0	2,646.1	218.93	13.086	
22,600.0	13,200.0	20,132.4	10,854.2	162.5	159.0	35.04	9,263.0	307.2	2,865.2	2,644.0	221.14	12.956	
22,700.0	13,200.0	20,232.4	10,854.0	164.1	160.6	35.04	9,363.0	306.4	2,865.4	2,642.0	223.36	12.829	
22,800.0	13,200.0	20,332.4	10,853.8	165.7	162.2	35.04	9,463.0	305.7	2,865.6	2,640.0	225.57	12.703	
22,900.0	13,200.0	20,432.4	10,853.6	167.3	163.8	35.04	9,563.0	304.9	2,865.7	2,637.9	227.79	12.581	
23,000.0	13,200.0	20,532.4	10,853.3	168.9	165.4	35.03	9,663.0	304.1	2,865.9	2,635.9	230.01	12.460	
23,100.0	13,200.0	20,632.4	10,853.1	170.4	167.0	35.03	9,763.0	303.3	2,866.1	2,633.9	232.23	12.342	
23,200.0	13,200.0	20,732.4	10,852.9	172.0	168.6	35.03	9,863.0	302.6	2,866.3	2,631.9	234.45	12.226	
23,300.0	13,200.0	20,832.4	10,852.7	173.6	170.2	35.03	9,963.0	301.8	2,866.5	2,629.8	236.67	12.112	
23,400.0	13,200.0	20,932.4	10,852.4	175.2	171.9	35.02	10,062.9	301.0	2,866.7	2,627.8	238.90	12.000	
23,504.9	13,200.0	21,019.0	10,852.1	176.9	173.3	35.02	10,149.5	300.4	2,867.1	2,626.1	240.97	11.898	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #127H - 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	1.0	-1.0	0.0	0.0	90.05	-2.1	2,453.4	2,453.4				
100.0	100.0	101.0	99.0	0.1	0.1	90.05	-2.1	2,453.4	2,453.4	2,453.1	0.26	9,439.992	
200.0	200.0	201.0	199.0	0.5	0.5	90.05	-2.1	2,453.4	2,453.4	2,452.4	0.98	2,511.560	
300.0	300.0	301.0	299.0	0.8	0.8	90.05	-2.1	2,453.4	2,453.4	2,451.7	1.69	1,448.466	
400.0	400.0	401.0	399.0	1.2	1.2	90.05	-2.1	2,453.4	2,453.4	2,451.0	2.41	1,017.696	
500.0	500.0	501.0	499.0	1.6	1.6	90.05	-2.1	2,453.4	2,453.4	2,450.3	3.13	784.413	
600.0	600.0	601.0	599.0	1.9	1.9	90.05	-2.1	2,453.4	2,453.4	2,449.5	3.84	638.135	
700.0	700.0	701.0	699.0	2.3	2.3	90.05	-2.1	2,453.4	2,453.4	2,448.8	4.56	537.839	
800.0	800.0	801.0	799.0	2.6	2.6	90.05	-2.1	2,453.4	2,453.4	2,448.1	5.28	464.788	
900.0	900.0	901.0	899.0	3.0	3.0	90.05	-2.1	2,453.4	2,453.4	2,447.4	6.00	409.208	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	90.05	-2.1	2,453.4	2,453.4	2,446.7	6.71	365.501	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	90.05	-2.1	2,453.4	2,453.4	2,446.0	7.43	330.229	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	90.05	-2.1	2,453.4	2,453.4	2,445.2	8.15	301.166	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	90.05	-2.1	2,453.4	2,453.4	2,444.5	8.86	276.805	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	90.05	-2.1	2,453.4	2,453.4	2,443.8	9.58	256.090	
1,500.0	1,500.0	1,499.0	1,499.0	5.1	5.1	90.05	-2.1	2,453.4	2,453.4	2,443.1	10.29	238.425	
1,600.0	1,600.0	1,668.7	1,668.7	5.5	5.7	90.06	-2.7	2,451.0	2,452.0	2,440.7	11.23	218.375	
1,700.0	1,700.0	1,838.8	1,838.6	5.9	6.3	90.11	-4.7	2,443.7	2,447.7	2,435.5	12.15	201.376	
1,800.0	1,800.0	2,008.3	2,007.7	6.2	6.9	90.19	-7.9	2,431.6	2,440.6	2,427.5	13.08	186.655	
1,900.0	1,900.0	2,177.0	2,175.4	6.6	7.5	90.30	-12.5	2,414.8	2,430.6	2,416.6	13.99	173.767	
2,000.0	2,000.0	2,326.4	2,323.5	6.9	8.1	90.42	-17.5	2,396.0	2,417.9	2,403.1	14.84	162.960	
2,100.0	2,100.0	2,425.4	2,421.6	7.3	8.4	90.51	-21.1	2,382.7	2,404.5	2,389.0	15.54	154.713	
2,200.0	2,200.0	2,524.4	2,519.6	7.7	8.8	90.60	-24.7	2,369.4	2,391.1	2,374.9	16.25	147.162	
2,300.0	2,300.0	2,623.4	2,617.7	8.0	9.2	90.69	-28.3	2,356.1	2,377.7	2,360.7	16.96	140.225	
2,400.0	2,400.0	2,722.5	2,715.8	8.4	9.6	90.78	-31.9	2,342.8	2,364.3	2,346.6	17.67	133.832	
2,500.0	2,500.0	2,821.5	2,813.8	8.7	9.9	90.87	-35.5	2,329.5	2,350.9	2,332.5	18.38	127.923	
2,600.0	2,600.0	2,920.5	2,911.9	9.1	10.3	90.97	-39.1	2,316.2	2,337.5	2,318.4	19.09	122.445	
2,700.0	2,700.0	3,019.5	3,009.9	9.4	10.7	91.06	-42.6	2,302.8	2,324.1	2,304.3	19.80	117.355	
2,800.0	2,800.0	3,118.6	3,108.0	9.8	11.1	91.16	-46.2	2,289.5	2,310.8	2,290.2	20.52	112.613	
2,900.0	2,900.0	3,217.6	3,206.1	10.2	11.5	91.25	-49.8	2,276.2	2,297.4	2,276.2	21.24	108.186	
3,000.0	3,000.0	3,316.6	3,304.1	10.5	11.9	91.35	-53.4	2,262.9	2,284.0	2,262.1	21.95	104.043	
3,100.0	3,100.0	3,415.6	3,402.2	10.9	12.3	91.45	-57.0	2,249.6	2,270.7	2,248.0	22.67	100.159	
3,200.0	3,200.0	3,514.7	3,500.3	11.2	12.7	91.55	-60.6	2,236.3	2,257.3	2,233.9	23.39	96.510	
3,300.0	3,300.0	3,613.7	3,598.3	11.6	13.1	91.65	-64.2	2,223.0	2,244.0	2,219.9	24.11	93.076	
3,400.0	3,400.0	3,712.7	3,696.4	12.0	13.5	91.76	-67.7	2,209.7	2,230.6	2,205.8	24.83	89.839	
3,500.0	3,500.0	3,811.8	3,794.4	12.3	13.9	91.86	-71.3	2,196.4	2,217.3	2,191.8	25.55	86.782	
3,600.0	3,600.0	3,910.8	3,892.5	12.7	14.3	91.97	-74.9	2,183.1	2,204.0	2,177.7	26.27	83.891	
3,700.0	3,700.0	4,009.8	3,990.6	13.0	14.7	92.07	-78.5	2,169.8	2,190.7	2,163.7	26.99	81.154	
3,800.0	3,800.0	4,108.8	4,088.6	13.4	15.1	92.18	-82.1	2,156.5	2,177.4	2,149.7	27.72	78.558	
3,900.0	3,900.0	4,207.9	4,186.7	13.8	15.5	92.29	-85.7	2,143.2	2,164.1	2,135.6	28.44	76.092	
4,000.0	4,000.0	4,306.9	4,284.8	14.1	15.9	92.40	-89.3	2,129.9	2,150.8	2,121.6	29.16	73.748	
4,100.0	4,100.0	4,405.9	4,382.8	14.5	16.4	92.51	-92.8	2,116.5	2,137.5	2,107.6	29.89	71.517	
4,200.0	4,200.0	4,504.9	4,480.9	14.8	16.8	92.62	-96.4	2,103.2	2,124.2	2,093.6	30.61	69.390	
4,300.0	4,300.0	4,604.0	4,578.9	15.2	17.2	92.74	-100.0	2,089.9	2,111.0	2,079.6	31.34	67.361	
4,400.0	4,400.0	4,703.0	4,677.0	15.5	17.6	92.86	-103.6	2,076.6	2,097.7	2,065.6	32.06	65.423	
4,500.0	4,500.0	4,802.0	4,775.1	15.9	18.0	92.97	-107.2	2,063.3	2,084.5	2,051.7	32.79	63.570	
4,600.0	4,600.0	4,901.0	4,873.1	16.3	18.4	93.09	-110.8	2,050.0	2,071.2	2,037.7	33.52	61.797	
4,700.0	4,700.0	5,000.1	4,971.2	16.6	18.8	93.21	-114.4	2,036.7	2,058.0	2,023.7	34.24	60.099	
4,800.0	4,800.0	5,100.9	5,069.3	17.0	19.2	93.34	-117.9	2,023.4	2,044.8	2,009.8	34.98	58.460	
4,900.0	4,900.0	5,201.9	5,167.3	17.3	19.7	93.46	-121.5	2,010.1	2,031.6	1,995.8	35.71	56.887	
5,000.0	5,000.0	5,302.8	5,265.4	17.7	20.1	93.59	-125.1	1,996.8	2,018.4	1,981.9	36.45	55.377	
5,100.0	5,100.0	5,403.8	5,363.5	18.1	20.5	93.71	-128.7	1,983.5	2,005.2	1,968.0	37.18	53.926	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #127H - 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
5,200.0	5,200.0	5,504.8	5,461.5	18.4	20.9	93.84	-132.3	1,970.2	1,992.0	1,954.1	37.92	52.532	
5,300.0	5,300.0	5,594.2	5,559.6	18.8	21.3	93.97	-135.9	1,956.9	1,978.8	1,940.2	38.61	51.247	
5,400.0	5,400.0	5,706.7	5,657.6	19.1	21.8	94.10	-139.5	1,943.6	1,965.6	1,926.2	39.39	49.898	
5,500.0	5,500.0	5,807.7	5,755.7	19.5	22.2	94.24	-143.0	1,930.2	1,952.5	1,912.4	40.13	48.654	
5,600.0	5,600.0	5,908.7	5,853.8	19.8	22.6	94.37	-146.6	1,916.9	1,939.3	1,898.5	40.87	47.454	
5,700.0	5,700.0	6,009.7	5,951.8	20.2	23.0	94.51	-150.2	1,903.6	1,926.2	1,884.6	41.61	46.296	
5,800.0	5,800.0	6,089.4	6,049.9	20.6	23.4	94.65	-153.8	1,890.3	1,913.1	1,870.8	42.26	45.265	
5,900.0	5,900.0	6,188.4	6,148.0	20.9	23.8	94.79	-157.4	1,877.0	1,900.0	1,857.0	43.00	44.190	
6,000.0	6,000.0	6,287.4	6,246.0	21.3	24.2	94.94	-161.0	1,863.7	1,886.9	1,843.2	43.73	43.151	
6,100.0	6,100.0	6,386.5	6,344.1	21.6	24.6	95.08	-164.6	1,850.4	1,873.8	1,829.3	44.46	42.146	
6,200.0	6,200.0	6,485.5	6,442.1	22.0	25.0	95.23	-168.1	1,837.1	1,860.7	1,815.5	45.19	41.173	
6,300.0	6,300.0	6,584.5	6,540.2	22.4	25.4	95.38	-171.7	1,823.8	1,847.7	1,801.7	45.93	40.232	
6,400.0	6,400.0	6,683.5	6,638.3	22.7	25.8	95.53	-175.3	1,810.5	1,834.6	1,788.0	46.66	39.320	
6,500.0	6,500.0	6,782.6	6,736.3	23.1	26.3	95.68	-178.9	1,797.2	1,821.6	1,774.2	47.39	38.436	
6,600.0	6,600.0	6,881.6	6,834.4	23.4	26.7	95.84	-182.5	1,783.9	1,808.6	1,760.4	48.13	37.579	
6,700.0	6,700.0	6,980.6	6,932.5	23.8	27.1	96.00	-186.1	1,770.6	1,795.5	1,746.7	48.86	36.748	
6,800.0	6,800.0	7,079.6	7,030.5	24.1	27.5	96.16	-189.6	1,757.2	1,782.6	1,733.0	49.60	35.942	
6,900.0	6,900.0	7,178.7	7,128.6	24.5	27.9	96.32	-193.2	1,743.9	1,769.6	1,719.2	50.33	35.159	
7,000.0	7,000.0	7,257.1	7,206.3	24.9	28.2	96.45	-196.0	1,733.7	1,757.0	1,706.0	51.03	34.431	
7,100.0	7,100.0	7,326.8	7,275.5	25.2	28.5	-158.01	-198.1	1,725.8	1,746.9	1,695.2	51.69	33.795	
7,200.0	7,200.0	7,400.0	7,348.4	25.5	28.8	-157.97	-200.0	1,718.8	1,740.0	1,687.7	52.33	33.250	
7,300.0	7,299.9	7,467.0	7,415.2	25.9	29.1	-157.95	-201.4	1,713.5	1,736.5	1,683.6	52.94	32.803	
7,358.0	7,357.8	7,507.8	7,455.9	26.1	29.2	-157.95	-202.1	1,710.9	1,736.0	1,682.7	53.29	32.578	CC, ES
7,400.0	7,399.7	7,537.3	7,485.3	26.2	29.3	-157.95	-202.6	1,709.3	1,736.3	1,682.8	53.54	32.433	
7,500.0	7,499.4	7,600.0	7,547.9	26.6	29.6	-157.96	-203.3	1,706.5	1,739.5	1,685.4	54.08	32.162	
7,600.0	7,598.9	7,677.6	7,625.5	26.9	29.8	-158.01	-203.9	1,704.5	1,745.9	1,691.3	54.67	31.934	
7,700.0	7,698.3	7,749.4	7,697.3	27.2	30.0	-158.06	-204.0	1,703.9	1,755.7	1,700.5	55.22	31.796	
7,800.0	7,797.4	7,848.5	7,796.4	27.6	30.4	-158.18	-204.0	1,703.9	1,767.8	1,712.0	55.88	31.639	
7,900.0	7,896.3	7,947.4	7,895.3	27.9	30.7	-158.30	-204.0	1,703.9	1,781.6	1,725.0	56.53	31.514	
8,000.0	7,994.9	8,046.0	7,993.9	28.3	31.0	-158.44	-204.0	1,703.9	1,796.9	1,739.8	57.19	31.421	
8,100.0	8,093.3	8,144.4	8,092.3	28.6	31.3	-158.59	-204.0	1,703.9	1,813.9	1,756.1	57.85	31.358	
8,182.6	8,174.2	8,225.3	8,173.2	28.9	31.5	-158.72	-204.0	1,703.9	1,829.2	1,770.8	58.39	31.329	
8,200.0	8,191.3	8,242.4	8,190.3	29.0	31.6	-158.76	-204.0	1,703.9	1,832.5	1,774.0	58.50	31.325	
8,300.0	8,289.1	8,340.2	8,288.1	29.4	31.9	-158.99	-204.0	1,703.9	1,851.7	1,792.5	59.16	31.302	
8,400.0	8,387.0	8,438.1	8,386.0	29.7	32.2	-159.21	-204.0	1,703.9	1,870.9	1,811.1	59.81	31.278	
8,500.0	8,484.9	8,536.0	8,483.9	30.1	32.5	-159.43	-204.0	1,703.9	1,890.1	1,829.7	60.47	31.255	
8,600.0	8,582.8	8,633.9	8,581.8	30.5	32.8	-159.65	-204.0	1,703.9	1,909.4	1,848.2	61.14	31.231	
8,700.0	8,680.6	8,731.7	8,679.6	30.9	33.2	-159.86	-204.0	1,703.9	1,928.7	1,866.8	61.80	31.207	
8,800.0	8,778.5	8,829.6	8,777.5	31.2	33.5	-160.06	-204.0	1,703.9	1,948.0	1,885.5	62.47	31.183	
8,900.0	8,876.4	8,927.5	8,875.4	31.6	33.8	-160.27	-204.0	1,703.9	1,967.3	1,904.1	63.14	31.160	
9,000.0	8,974.3	9,025.4	8,973.3	32.0	34.1	-160.47	-204.0	1,703.9	1,986.6	1,922.8	63.81	31.136	
9,100.0	9,072.1	9,123.3	9,071.1	32.4	34.4	-160.66	-204.0	1,703.9	2,006.0	1,941.5	64.48	31.112	
9,200.0	9,170.0	9,221.1	9,169.0	32.8	34.7	-160.85	-204.0	1,703.9	2,025.4	1,960.2	65.15	31.088	
9,300.0	9,267.9	9,319.0	9,266.9	33.2	35.1	-161.04	-204.0	1,703.9	2,044.8	1,979.0	65.82	31.064	
9,400.0	9,365.8	9,416.9	9,364.8	33.6	35.4	-161.22	-204.0	1,703.9	2,064.2	1,997.7	66.50	31.041	
9,500.0	9,463.7	9,514.8	9,462.7	34.0	35.7	-161.41	-204.0	1,703.9	2,083.7	2,016.5	67.18	31.017	
9,600.0	9,561.5	9,612.6	9,560.5	34.4	36.0	-161.58	-204.0	1,703.9	2,103.2	2,035.3	67.86	30.994	
9,700.0	9,659.4	9,710.5	9,658.4	34.8	36.3	-161.76	-204.0	1,703.9	2,122.7	2,054.1	68.54	30.971	
9,800.0	9,757.3	9,808.4	9,756.3	35.2	36.6	-161.93	-204.0	1,703.9	2,142.2	2,073.0	69.22	30.947	
9,900.0	9,855.2	9,906.3	9,854.2	35.6	37.0	-162.10	-204.0	1,703.9	2,161.7	2,091.8	69.90	30.924	
10,000.0	9,953.0	10,004.2	9,952.0	36.0	37.3	-162.26	-204.0	1,703.9	2,181.3	2,110.7	70.59	30.902	
10,100.0	10,050.9	10,102.0	10,049.9	36.4	37.6	-162.42	-204.0	1,703.9	2,200.8	2,129.5	71.27	30.879	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #127H - 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
10,200.0	10,148.8	10,200.1	10,147.8	36.9	37.9	-162.58	-204.0	1,703.9	2,220.4	2,148.4	71.96	30.856	
10,300.0	10,246.7	10,302.2	10,245.7	37.3	38.3	-162.74	-204.0	1,703.9	2,240.0	2,167.3	72.66	30.828	
10,400.0	10,344.6	10,400.2	10,348.0	37.7	38.6	-162.94	-202.7	1,703.9	2,259.6	2,186.2	73.36	30.803	
10,500.0	10,442.4	10,506.5	10,452.9	38.1	38.9	-163.53	-185.8	1,703.8	2,278.9	2,204.8	74.05	30.776	
10,600.0	10,540.3	10,601.8	10,542.7	38.5	39.2	-164.46	-154.4	1,703.6	2,298.2	2,223.6	74.64	30.790	
10,700.0	10,638.2	10,683.3	10,614.5	39.0	39.4	-165.53	-116.1	1,703.3	2,318.4	2,243.2	75.14	30.854	
10,800.0	10,736.1	10,751.2	10,669.7	39.4	39.5	-166.59	-76.6	1,702.9	2,340.1	2,264.5	75.55	30.974	
10,900.0	10,833.9	10,807.1	10,711.5	39.8	39.6	-167.57	-39.3	1,702.7	2,363.9	2,288.0	75.86	31.160	
11,000.0	10,931.8	10,850.0	10,740.9	40.2	39.6	-168.38	-8.2	1,702.4	2,390.3	2,314.2	76.07	31.423	
11,100.0	11,029.7	10,891.4	10,767.0	40.7	39.7	-169.20	24.0	1,702.2	2,419.4	2,343.2	76.21	31.748	
11,200.0	11,127.6	10,923.3	10,785.5	41.1	39.7	-169.86	50.0	1,702.0	2,451.6	2,375.3	76.24	32.157	
11,300.0	11,225.5	10,950.0	10,799.8	41.5	39.8	-170.43	72.5	1,701.8	2,486.7	2,410.5	76.18	32.644	
11,400.0	11,323.3	10,973.0	10,811.3	42.0	39.8	-170.93	92.4	1,701.6	2,524.9	2,448.8	76.04	33.206	
11,500.0	11,421.2	11,000.0	10,823.8	42.4	39.8	-171.53	116.3	1,701.4	2,566.0	2,490.2	75.86	33.827	
11,523.5	11,444.2	11,000.0	10,823.8	42.5	39.8	-171.53	116.3	1,701.4	2,576.1	2,500.3	75.77	33.998	
11,600.0	11,519.2	11,000.0	10,823.8	42.8	39.8	-171.61	116.3	1,701.4	2,609.4	2,534.0	75.46	34.579	
11,700.0	11,617.7	11,024.9	10,834.2	43.3	39.8	-172.26	138.9	1,701.3	2,653.4	2,578.2	75.16	35.302	
11,800.0	11,716.7	11,050.0	10,843.8	43.7	39.8	-172.91	162.1	1,701.1	2,697.9	2,623.1	74.82	36.056	
11,900.0	11,815.9	11,050.0	10,843.8	44.1	39.8	-173.00	162.1	1,701.1	2,742.8	2,668.5	74.27	36.930	
12,000.0	11,915.5	11,050.0	10,843.8	44.4	39.8	-173.09	162.1	1,701.1	2,788.3	2,714.6	73.67	37.848	
12,100.0	12,015.2	11,072.4	10,851.5	44.8	39.9	-173.66	183.2	1,700.9	2,834.0	2,760.8	73.18	38.728	
12,200.0	12,115.1	11,081.9	10,854.5	45.2	39.9	-173.95	192.1	1,700.8	2,880.2	2,807.6	72.56	39.694	
12,300.0	12,215.1	11,100.0	10,859.8	45.5	39.9	-174.41	209.5	1,700.7	2,926.7	2,854.7	71.97	40.668	
12,311.9	12,227.0	11,100.0	10,859.8	45.5	39.9	80.09	209.5	1,700.7	2,932.2	2,860.4	71.88	40.794	
12,400.0	12,315.1	11,100.0	10,859.8	45.8	39.9	80.09	209.5	1,700.7	2,974.3	2,903.1	71.23	41.755	
12,500.0	12,415.1	11,100.0	10,859.8	46.2	39.9	80.09	209.5	1,700.7	3,024.5	2,954.0	70.49	42.906	
12,600.0	12,515.1	11,100.0	10,859.8	46.5	39.9	80.09	209.5	1,700.7	3,077.1	3,007.3	69.75	44.119	
12,700.0	12,615.1	11,119.0	10,864.8	46.9	39.9	79.69	227.8	1,700.6	3,131.7	3,062.6	69.12	45.306	
12,711.9	12,627.0	11,119.7	10,865.0	46.9	39.9	79.68	228.5	1,700.6	3,138.4	3,069.3	69.04	45.457	
12,750.0	12,665.1	11,122.2	10,865.6	47.0	39.9	98.97	230.9	1,700.5	3,160.1	3,091.3	68.78	45.948	
12,800.0	12,714.8	11,126.1	10,866.5	47.2	39.9	95.28	234.7	1,700.5	3,189.5	3,121.1	68.44	46.603	
12,850.0	12,763.8	11,130.7	10,867.6	47.4	39.9	91.40	239.2	1,700.5	3,219.8	3,151.7	68.12	47.267	
12,900.0	12,811.8	11,150.0	10,871.6	47.5	39.9	87.16	258.0	1,700.3	3,250.7	3,182.8	67.90	47.875	
12,950.0	12,858.3	11,150.0	10,871.6	47.7	39.9	83.23	258.0	1,700.3	3,281.6	3,214.1	67.58	48.560	
13,000.0	12,903.1	11,150.0	10,871.6	47.8	39.9	79.32	258.0	1,700.3	3,312.7	3,245.4	67.28	49.238	
13,050.0	12,945.8	11,150.0	10,871.6	48.0	39.9	75.50	258.0	1,700.3	3,343.5	3,276.5	67.00	49.902	
13,100.0	12,986.1	11,150.0	10,871.6	48.1	39.9	71.81	258.0	1,700.3	3,374.0	3,307.2	66.75	50.544	
13,150.0	13,023.7	11,170.0	10,875.2	48.3	40.0	68.16	277.7	1,700.2	3,403.5	3,336.9	66.64	51.073	
13,200.0	13,058.2	11,178.0	10,876.4	48.4	40.0	64.88	285.6	1,700.1	3,432.3	3,365.8	66.49	51.619	
13,250.0	13,089.4	11,200.0	10,879.1	48.5	40.0	61.82	307.4	1,699.9	3,460.0	3,393.6	66.44	52.074	
13,300.0	13,117.2	11,200.0	10,879.1	48.7	40.0	59.14	307.4	1,699.9	3,486.2	3,419.9	66.33	52.559	
13,350.0	13,141.1	11,200.0	10,879.1	48.8	40.0	56.72	307.4	1,699.9	3,511.0	3,444.8	66.26	52.991	
13,400.0	13,161.2	11,200.0	10,879.1	48.9	40.0	54.55	307.4	1,699.9	3,534.3	3,468.1	66.23	53.365	
13,450.0	13,177.2	11,221.4	10,881.0	49.1	40.0	52.66	328.8	1,699.8	3,555.5	3,489.2	66.33	53.604	
13,500.0	13,189.1	11,230.5	10,881.6	49.2	40.0	51.02	337.9	1,699.7	3,574.9	3,508.5	66.42	53.820	
13,550.0	13,196.6	11,250.0	10,882.3	49.4	40.1	49.66	357.3	1,699.5	3,592.3	3,525.7	66.60	53.943	
13,600.0	13,199.8	11,250.0	10,882.3	49.6	40.1	48.46	357.3	1,699.5	3,607.4	3,540.7	66.75	54.044	
13,611.9	13,200.0	11,250.0	10,882.3	49.6	40.1	48.21	357.3	1,699.5	3,610.7	3,543.9	66.79	54.058	
13,700.0	13,200.0	11,283.6	10,882.4	50.0	40.1	48.66	391.0	1,699.3	3,634.3	3,567.1	67.23	54.057	
13,800.0	13,200.0	11,378.3	10,882.1	50.4	40.4	49.32	485.7	1,698.5	3,659.3	3,591.4	67.93	53.869	
13,900.0	13,200.0	11,474.1	10,881.8	50.9	40.7	49.90	581.4	1,697.8	3,681.8	3,613.1	68.71	53.583	
14,000.0	13,200.0	11,570.8	10,881.4	51.4	41.1	50.41	678.1	1,697.0	3,701.8	3,632.3	69.57	53.210	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #127H - 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
14,100.0	13,200.0	11,668.3	10,881.1	52.0	41.6	50.84	775.6	1,696.3	3,719.3	3,648.8	70.50	52.753	
14,200.0	13,200.0	11,766.6	10,880.8	52.6	42.2	51.21	873.9	1,695.5	3,734.0	3,662.5	71.51	52.218	
14,300.0	13,200.0	11,865.4	10,880.5	53.2	42.8	51.50	972.7	1,694.7	3,746.2	3,673.6	72.58	51.612	
14,400.0	13,200.0	11,964.7	10,880.1	53.8	43.5	51.72	1,072.0	1,693.9	3,755.6	3,681.9	73.72	50.944	
14,500.0	13,200.0	12,064.4	10,879.8	54.5	44.2	51.88	1,171.7	1,693.1	3,762.3	3,687.4	74.92	50.221	
14,600.0	13,200.0	12,164.2	10,879.5	55.1	45.0	51.97	1,271.5	1,692.4	3,766.3	3,690.1	76.16	49.451	
14,687.2	13,200.0	12,251.5	10,879.2	55.7	45.7	51.99	1,358.8	1,691.7	3,767.5	3,690.2	77.29	48.748	
14,700.0	13,200.0	12,264.2	10,879.1	55.8	45.8	51.99	1,371.5	1,691.6	3,767.5	3,690.1	77.45	48.643	
14,800.0	13,200.0	12,364.2	10,878.8	56.5	46.7	51.99	1,471.5	1,690.8	3,767.7	3,688.9	78.81	47.810	
14,900.0	13,200.0	12,464.2	10,878.5	57.3	47.6	51.99	1,571.5	1,690.0	3,767.9	3,687.7	80.23	46.961	
15,000.0	13,200.0	12,564.2	10,878.1	58.1	48.5	51.98	1,671.5	1,689.2	3,768.1	3,686.4	81.73	46.103	
15,100.0	13,200.0	12,664.2	10,877.8	58.9	49.5	51.98	1,771.5	1,688.4	3,768.3	3,685.0	83.30	45.240	
15,200.0	13,200.0	12,764.2	10,877.5	59.7	50.5	51.97	1,871.5	1,687.6	3,768.5	3,683.6	84.92	44.376	
15,300.0	13,200.0	12,864.2	10,877.1	60.6	51.6	51.97	1,971.5	1,686.9	3,768.7	3,682.1	86.61	43.515	
15,400.0	13,200.0	12,964.2	10,876.8	61.6	52.7	51.97	2,071.5	1,686.1	3,768.9	3,680.5	88.35	42.660	
15,500.0	13,200.0	13,064.2	10,876.5	62.5	53.8	51.96	2,171.5	1,685.3	3,769.1	3,678.9	90.14	41.814	
15,600.0	13,200.0	13,164.2	10,876.2	63.5	54.9	51.96	2,271.5	1,684.5	3,769.3	3,677.3	91.98	40.980	
15,700.0	13,200.0	13,264.2	10,875.8	64.5	56.1	51.95	2,371.5	1,683.7	3,769.4	3,675.6	93.87	40.158	
15,800.0	13,200.0	13,364.2	10,875.5	65.5	57.3	51.95	2,471.5	1,682.9	3,769.6	3,673.8	95.80	39.351	
15,900.0	13,200.0	13,464.2	10,875.2	66.6	58.5	51.94	2,571.5	1,682.2	3,769.8	3,672.1	97.77	38.560	
16,000.0	13,200.0	13,564.2	10,874.8	67.7	59.7	51.94	2,671.5	1,681.4	3,770.0	3,670.3	99.77	37.785	
16,100.0	13,200.0	13,664.2	10,874.5	68.8	61.0	51.94	2,771.5	1,680.6	3,770.2	3,668.4	101.82	37.028	
16,200.0	13,200.0	13,764.2	10,874.2	69.9	62.3	51.93	2,871.5	1,679.8	3,770.4	3,666.5	103.90	36.290	
16,300.0	13,200.0	13,864.2	10,873.8	71.1	63.5	51.93	2,971.5	1,679.0	3,770.6	3,664.6	106.01	35.569	
16,400.0	13,200.0	13,964.2	10,873.5	72.3	64.9	51.92	3,071.5	1,678.2	3,770.8	3,662.7	108.15	34.867	
16,500.0	13,200.0	14,064.2	10,873.2	73.5	66.2	51.92	3,171.4	1,677.4	3,771.0	3,660.7	110.32	34.183	
16,600.0	13,200.0	14,164.2	10,872.8	74.7	67.5	51.92	3,271.4	1,676.7	3,771.2	3,658.7	112.51	33.518	
16,700.0	13,200.0	14,264.2	10,872.5	75.9	68.9	51.91	3,371.4	1,675.9	3,771.4	3,656.7	114.73	32.871	
16,800.0	13,200.0	14,364.2	10,872.2	77.1	70.2	51.91	3,471.4	1,675.1	3,771.6	3,654.6	116.98	32.242	
16,900.0	13,200.0	14,464.2	10,871.8	78.4	71.6	51.90	3,571.4	1,674.3	3,771.8	3,652.5	119.24	31.631	
17,000.0	13,200.0	14,564.2	10,871.5	79.7	73.0	51.90	3,671.4	1,673.5	3,772.0	3,650.4	121.53	31.037	
17,100.0	13,200.0	14,664.2	10,871.2	81.0	74.4	51.90	3,771.4	1,672.7	3,772.2	3,648.3	123.84	30.460	
17,200.0	13,200.0	14,764.2	10,870.8	82.3	75.8	51.89	3,871.4	1,671.9	3,772.4	3,646.2	126.16	29.900	
17,300.0	13,200.0	14,864.2	10,870.5	83.6	77.2	51.89	3,971.4	1,671.2	3,772.6	3,644.1	128.51	29.357	
17,400.0	13,200.0	14,964.2	10,870.2	84.9	78.7	51.88	4,071.4	1,670.4	3,772.8	3,641.9	130.87	28.829	
17,500.0	13,200.0	15,064.2	10,869.9	86.3	80.1	51.88	4,171.4	1,669.6	3,772.9	3,639.7	133.24	28.316	
17,600.0	13,200.0	15,164.2	10,869.5	87.6	81.5	51.88	4,271.4	1,668.8	3,773.1	3,637.5	135.64	27.818	
17,700.0	13,200.0	15,264.2	10,869.2	89.0	83.0	51.87	4,371.4	1,668.0	3,773.3	3,635.3	138.04	27.335	
17,800.0	13,200.0	15,364.2	10,868.9	90.3	84.4	51.87	4,471.4	1,667.2	3,773.5	3,633.1	140.46	26.866	
17,900.0	13,200.0	15,464.2	10,868.5	91.7	85.9	51.86	4,571.4	1,666.4	3,773.7	3,630.8	142.89	26.410	
18,000.0	13,200.0	15,564.2	10,868.2	93.1	87.4	51.86	4,671.4	1,665.7	3,773.9	3,628.6	145.34	25.967	
18,100.0	13,200.0	15,664.2	10,867.9	94.5	88.9	51.85	4,771.4	1,664.9	3,774.1	3,626.3	147.79	25.537	
18,200.0	13,200.0	15,764.2	10,867.5	95.9	90.4	51.85	4,871.4	1,664.1	3,774.3	3,624.1	150.26	25.119	
18,300.0	13,200.0	15,864.2	10,867.2	97.3	91.9	51.85	4,971.4	1,663.3	3,774.5	3,621.8	152.73	24.713	
18,400.0	13,200.0	15,964.2	10,866.9	98.7	93.4	51.84	5,071.4	1,662.5	3,774.7	3,619.5	155.22	24.318	
18,500.0	13,200.0	16,064.2	10,866.5	100.2	94.9	51.84	5,171.4	1,661.7	3,774.9	3,617.2	157.72	23.935	
18,600.0	13,200.0	16,164.2	10,866.2	101.6	96.4	51.83	5,271.4	1,660.9	3,775.1	3,614.9	160.22	23.562	
18,700.0	13,200.0	16,264.2	10,865.9	103.0	97.9	51.83	5,371.4	1,660.2	3,775.3	3,612.6	162.74	23.199	
18,800.0	13,200.0	16,364.2	10,865.5	104.5	99.4	51.83	5,471.4	1,659.4	3,775.5	3,610.2	165.26	22.846	
18,900.0	13,200.0	16,464.2	10,865.2	105.9	100.9	51.82	5,571.3	1,658.6	3,775.7	3,607.9	167.79	22.503	
19,000.0	13,200.0	16,564.2	10,864.9	107.4	102.4	51.82	5,671.3	1,657.8	3,775.9	3,605.5	170.32	22.169	
19,100.0	13,200.0	16,664.2	10,864.5	108.9	104.0	51.81	5,771.3	1,657.0	3,776.1	3,603.2	172.87	21.844	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #127H - 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
19,200.0	13,200.0	16,764.2	10,864.2	110.3	105.5	51.81	5,871.3	1,656.2	3,776.3	3,600.8	175.42	21.527	
19,300.0	13,200.0	16,864.2	10,863.9	111.8	107.1	51.81	5,971.3	1,655.4	3,776.5	3,598.5	177.98	21.219	
19,400.0	13,200.0	16,964.2	10,863.6	113.3	108.6	51.80	6,071.3	1,654.7	3,776.7	3,596.1	180.54	20.919	
19,500.0	13,200.0	17,064.2	10,863.2	114.8	110.1	51.80	6,171.3	1,653.9	3,776.8	3,593.7	183.11	20.626	
19,600.0	13,200.0	17,164.2	10,862.9	116.3	111.7	51.79	6,271.3	1,653.1	3,777.0	3,591.4	185.69	20.341	
19,700.0	13,200.0	17,264.2	10,862.6	117.8	113.2	51.79	6,371.3	1,652.3	3,777.2	3,589.0	188.27	20.063	
19,800.0	13,200.0	17,364.2	10,862.2	119.3	114.8	51.79	6,471.3	1,651.5	3,777.4	3,586.6	190.85	19.792	
19,900.0	13,200.0	17,464.2	10,861.9	120.8	116.4	51.78	6,571.3	1,650.7	3,777.6	3,584.2	193.44	19.528	
20,000.0	13,200.0	17,564.2	10,861.6	122.3	117.9	51.78	6,671.3	1,650.0	3,777.8	3,581.8	196.04	19.271	
20,100.0	13,200.0	17,664.2	10,861.2	123.8	119.5	51.77	6,771.3	1,649.2	3,778.0	3,579.4	198.64	19.019	
20,200.0	13,200.0	17,764.2	10,860.9	125.3	121.0	51.77	6,871.3	1,648.4	3,778.2	3,577.0	201.24	18.774	
20,300.0	13,200.0	17,864.2	10,860.6	126.8	122.6	51.76	6,971.3	1,647.6	3,778.4	3,574.6	203.85	18.535	
20,400.0	13,200.0	17,964.2	10,860.2	128.4	124.2	51.76	7,071.3	1,646.8	3,778.6	3,572.1	206.47	18.301	
20,500.0	13,200.0	18,064.2	10,859.9	129.9	125.7	51.76	7,171.3	1,646.0	3,778.8	3,569.7	209.08	18.073	
20,600.0	13,200.0	18,164.2	10,859.6	131.4	127.3	51.75	7,271.3	1,645.2	3,779.0	3,567.3	211.70	17.850	
20,700.0	13,200.0	18,264.2	10,859.2	132.9	128.9	51.75	7,371.3	1,644.5	3,779.2	3,564.9	214.33	17.633	
20,800.0	13,200.0	18,364.2	10,858.9	134.5	130.5	51.74	7,471.3	1,643.7	3,779.4	3,562.4	216.96	17.420	
20,900.0	13,200.0	18,464.2	10,858.6	136.0	132.1	51.74	7,571.3	1,642.9	3,779.6	3,560.0	219.59	17.212	
21,000.0	13,200.0	18,564.2	10,858.2	137.6	133.6	51.74	7,671.3	1,642.1	3,779.8	3,557.6	222.22	17.009	
21,100.0	13,200.0	18,664.2	10,857.9	139.1	135.2	51.73	7,771.3	1,641.3	3,780.0	3,555.1	224.86	16.810	
21,200.0	13,200.0	18,764.2	10,857.6	140.7	136.8	51.73	7,871.3	1,640.5	3,780.2	3,552.7	227.50	16.616	
21,300.0	13,200.0	18,864.2	10,857.3	142.2	138.4	51.72	7,971.2	1,639.7	3,780.4	3,550.2	230.14	16.426	
21,400.0	13,200.0	18,964.2	10,856.9	143.8	140.0	51.72	8,071.2	1,639.0	3,780.6	3,547.8	232.79	16.240	
21,500.0	13,200.0	19,064.2	10,856.6	145.3	141.6	51.72	8,171.2	1,638.2	3,780.8	3,545.3	235.44	16.058	
21,600.0	13,200.0	19,164.2	10,856.3	146.9	143.2	51.71	8,271.2	1,637.4	3,781.0	3,542.9	238.09	15.880	
21,700.0	13,200.0	19,264.2	10,855.9	148.4	144.8	51.71	8,371.2	1,636.6	3,781.1	3,540.4	240.74	15.706	
21,800.0	13,200.0	19,364.2	10,855.6	150.0	146.4	51.70	8,471.2	1,635.8	3,781.3	3,537.9	243.40	15.536	
21,900.0	13,200.0	19,464.2	10,855.3	151.5	148.0	51.70	8,571.2	1,635.0	3,781.5	3,535.5	246.06	15.369	
22,000.0	13,200.0	19,564.2	10,854.9	153.1	149.6	51.70	8,671.2	1,634.2	3,781.7	3,533.0	248.72	15.205	
22,100.0	13,200.0	19,664.2	10,854.6	154.7	151.2	51.69	8,771.2	1,633.5	3,781.9	3,530.6	251.38	15.045	
22,200.0	13,200.0	19,764.2	10,854.3	156.2	152.8	51.69	8,871.2	1,632.7	3,782.1	3,528.1	254.04	14.888	
22,300.0	13,200.0	19,864.2	10,853.9	157.8	154.4	51.68	8,971.2	1,631.9	3,782.3	3,525.6	256.71	14.734	
22,400.0	13,200.0	19,964.2	10,853.6	159.4	156.0	51.68	9,071.2	1,631.1	3,782.5	3,523.1	259.38	14.583	
22,500.0	13,200.0	20,064.2	10,853.3	161.0	157.6	51.68	9,171.2	1,630.3	3,782.7	3,520.7	262.05	14.435	
22,600.0	13,200.0	20,164.2	10,852.9	162.5	159.2	51.67	9,271.2	1,629.5	3,782.9	3,518.2	264.72	14.290	
22,700.0	13,200.0	20,264.2	10,852.6	164.1	160.8	51.67	9,371.2	1,628.7	3,783.1	3,515.7	267.40	14.148	
22,800.0	13,200.0	20,364.2	10,852.3	165.7	162.4	51.66	9,471.2	1,628.0	3,783.3	3,513.2	270.07	14.008	
22,900.0	13,200.0	20,464.2	10,851.9	167.3	164.0	51.66	9,571.2	1,627.2	3,783.5	3,510.7	272.75	13.872	
23,000.0	13,200.0	20,564.2	10,851.6	168.9	165.6	51.65	9,671.2	1,626.4	3,783.7	3,508.3	275.43	13.737	
23,100.0	13,200.0	20,664.2	10,851.3	170.4	167.2	51.65	9,771.2	1,625.6	3,783.9	3,505.8	278.11	13.606	
23,200.0	13,200.0	20,764.2	10,851.0	172.0	168.8	51.65	9,871.2	1,624.8	3,784.1	3,503.3	280.79	13.476	
23,300.0	13,200.0	20,864.2	10,850.6	173.6	170.4	51.64	9,971.2	1,624.0	3,784.3	3,500.8	283.48	13.350	
23,400.0	13,200.0	20,964.2	10,850.3	175.2	172.0	51.64	10,071.2	1,623.2	3,784.5	3,498.3	286.16	13.225	
23,504.9	13,200.0	21,069.0	10,849.9	176.9	173.7	51.63	10,176.0	1,622.4	3,784.7	3,495.7	288.98	13.097	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #128H - 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	1.0	-1.0	0.0	0.0	89.35	28.0	2,453.2	2,453.3				
100.0	100.0	101.0	99.0	0.1	0.1	89.35	28.0	2,453.2	2,453.3	2,453.1	0.26	9,439.871	
200.0	200.0	201.0	199.0	0.5	0.5	89.35	28.0	2,453.2	2,453.3	2,452.4	0.98	2,511.528	
300.0	300.0	301.0	299.0	0.8	0.8	89.35	28.0	2,453.2	2,453.3	2,451.7	1.69	1,448.448	
400.0	400.0	401.0	399.0	1.2	1.2	89.35	28.0	2,453.2	2,453.3	2,450.9	2.41	1,017.682	
500.0	500.0	501.0	499.0	1.6	1.6	89.35	28.0	2,453.2	2,453.3	2,450.2	3.13	784.403	
600.0	600.0	601.0	599.0	1.9	1.9	89.35	28.0	2,453.2	2,453.3	2,449.5	3.84	638.127	
700.0	700.0	701.0	699.0	2.3	2.3	89.35	28.0	2,453.2	2,453.3	2,448.8	4.56	537.832	
800.0	800.0	801.0	799.0	2.6	2.6	89.35	28.0	2,453.2	2,453.3	2,448.1	5.28	464.782	
900.0	900.0	901.0	899.0	3.0	3.0	89.35	28.0	2,453.2	2,453.3	2,447.4	6.00	409.203	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	89.35	28.0	2,453.2	2,453.3	2,446.6	6.71	365.496	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	89.35	28.0	2,453.2	2,453.3	2,445.9	7.43	330.225	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	89.35	28.0	2,453.2	2,453.3	2,445.2	8.15	301.162	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	89.35	28.0	2,453.2	2,453.3	2,444.5	8.86	276.801	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	89.35	28.0	2,453.2	2,453.3	2,443.8	9.58	256.087	
1,500.0	1,500.0	1,501.0	1,499.0	5.1	5.2	89.35	28.0	2,453.2	2,453.3	2,443.1	10.30	238.256	
1,600.0	1,600.0	1,601.0	1,599.0	5.5	5.5	89.35	28.0	2,453.2	2,453.3	2,442.3	11.01	222.747	
1,700.0	1,700.0	1,701.0	1,699.0	5.9	5.9	89.35	28.0	2,453.2	2,453.3	2,441.6	11.73	209.134	
1,800.0	1,800.0	1,801.0	1,799.0	6.2	6.2	89.35	28.0	2,453.2	2,453.3	2,440.9	12.45	197.089	
1,900.0	1,900.0	1,901.0	1,899.0	6.6	6.6	89.35	28.0	2,453.2	2,453.3	2,440.2	13.16	186.356	
2,000.0	2,000.0	1,999.0	1,999.0	6.9	6.9	89.35	28.0	2,453.2	2,453.3	2,439.5	13.87	176.823	CC
2,100.0	2,100.0	2,072.0	2,072.0	7.3	7.2	89.35	27.8	2,453.6	2,453.9	2,439.4	14.48	169.417	ES
2,200.0	2,200.0	2,144.6	2,144.6	7.7	7.4	89.37	27.1	2,454.8	2,455.6	2,440.5	15.09	162.770	
2,300.0	2,300.0	2,217.3	2,217.2	8.0	7.7	89.39	26.0	2,456.8	2,458.3	2,442.6	15.68	156.753	
2,400.0	2,400.0	2,289.8	2,289.7	8.4	7.9	89.43	24.5	2,459.7	2,462.2	2,445.9	16.28	151.256	
2,500.0	2,500.0	2,362.3	2,362.0	8.7	8.2	89.47	22.6	2,463.3	2,467.2	2,450.3	16.87	146.225	
2,600.0	2,600.0	2,434.6	2,434.2	9.1	8.4	89.53	20.2	2,467.7	2,473.3	2,455.8	17.47	141.614	
2,700.0	2,700.0	2,506.8	2,506.2	9.4	8.7	89.60	17.4	2,473.0	2,480.5	2,462.5	18.06	137.383	
2,800.0	2,800.0	2,578.9	2,577.9	9.8	8.9	89.67	14.2	2,479.0	2,488.9	2,470.2	18.64	133.494	
2,900.0	2,900.0	2,650.7	2,649.4	10.2	9.2	89.76	10.6	2,485.8	2,498.3	2,479.1	19.23	129.916	
3,000.0	3,000.0	2,722.4	2,720.5	10.5	9.4	89.85	6.6	2,493.3	2,508.8	2,489.0	19.81	126.624	
3,100.0	3,100.0	2,808.6	2,788.9	10.9	9.7	89.95	2.3	2,501.3	2,520.5	2,500.0	20.44	123.293	
3,200.0	3,200.0	2,909.5	2,887.0	11.2	10.1	90.10	-4.2	2,513.5	2,532.8	2,511.6	21.15	119.742	
3,300.0	3,300.0	2,989.5	2,985.1	11.6	10.4	90.24	-10.7	2,525.7	2,545.1	2,523.3	21.79	116.806	
3,400.0	3,400.0	3,088.5	3,083.1	12.0	10.8	90.39	-17.2	2,537.8	2,557.5	2,535.0	22.50	113.688	
3,500.0	3,500.0	3,187.6	3,181.2	12.3	11.1	90.53	-23.6	2,550.0	2,569.8	2,546.6	23.20	110.750	
3,600.0	3,600.0	3,286.6	3,279.2	12.7	11.5	90.67	-30.1	2,562.2	2,582.2	2,558.3	23.91	107.980	
3,700.0	3,700.0	3,385.6	3,377.3	13.0	11.9	90.81	-36.6	2,574.3	2,594.6	2,570.0	24.63	105.363	
3,800.0	3,800.0	3,484.6	3,475.4	13.4	12.3	90.95	-43.1	2,586.5	2,607.0	2,581.7	25.34	102.888	
3,900.0	3,900.0	3,583.7	3,573.4	13.8	12.7	91.09	-49.6	2,598.6	2,619.4	2,593.4	26.05	100.545	
4,000.0	4,000.0	3,682.7	3,671.5	14.1	13.1	91.23	-56.0	2,610.8	2,631.9	2,605.1	26.77	98.323	
4,100.0	4,100.0	3,781.7	3,769.6	14.5	13.4	91.37	-62.5	2,623.0	2,644.3	2,616.8	27.48	96.213	
4,200.0	4,200.0	3,880.7	3,867.6	14.8	13.8	91.50	-69.0	2,635.1	2,656.8	2,628.6	28.20	94.208	
4,300.0	4,300.0	3,979.8	3,965.7	15.2	14.2	91.63	-75.5	2,647.3	2,669.3	2,640.3	28.92	92.300	
4,400.0	4,400.0	4,078.8	4,063.8	15.5	14.6	91.77	-82.0	2,659.4	2,681.7	2,652.1	29.64	90.483	
4,500.0	4,500.0	4,177.8	4,161.8	15.9	15.0	91.90	-88.5	2,671.6	2,694.3	2,663.9	30.36	88.751	
4,600.0	4,600.0	4,276.8	4,259.9	16.3	15.4	92.03	-94.9	2,683.8	2,706.8	2,675.7	31.08	87.097	
4,700.0	4,700.0	4,375.9	4,357.9	16.6	15.8	92.15	-101.4	2,695.9	2,719.3	2,687.5	31.80	85.517	
4,800.0	4,800.0	4,474.9	4,456.0	17.0	16.2	92.28	-107.9	2,708.1	2,731.9	2,699.3	32.52	84.006	
4,900.0	4,900.0	4,573.9	4,554.1	17.3	16.6	92.41	-114.4	2,720.3	2,744.4	2,711.2	33.24	82.560	
5,000.0	5,000.0	4,673.0	4,652.1	17.7	17.0	92.53	-120.9	2,732.4	2,757.0	2,723.0	33.96	81.175	
5,100.0	5,100.0	4,772.0	4,750.2	18.1	17.4	92.66	-127.4	2,744.6	2,769.6	2,734.9	34.69	79.846	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #128H - 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
5,200.0	5,200.0	4,871.0	4,848.3	18.4	17.8	92.78	-133.8	2,756.7	2,782.2	2,746.8	35.41	78.572	
5,300.0	5,300.0	4,970.0	4,946.3	18.8	18.2	92.90	-140.3	2,768.9	2,794.8	2,758.7	36.13	77.348	
5,400.0	5,400.0	5,069.1	5,044.4	19.1	18.6	93.02	-146.8	2,781.1	2,807.4	2,770.6	36.86	76.172	
5,500.0	5,500.0	5,168.1	5,142.4	19.5	19.0	93.14	-153.3	2,793.2	2,820.1	2,782.5	37.58	75.041	
5,600.0	5,600.0	5,267.1	5,240.5	19.8	19.4	93.26	-159.8	2,805.4	2,832.7	2,794.4	38.30	73.953	
5,700.0	5,700.0	5,366.1	5,338.6	20.2	19.8	93.38	-166.3	2,817.6	2,845.4	2,806.3	39.03	72.905	
5,800.0	5,800.0	5,472.3	5,443.7	20.6	20.3	93.50	-173.2	2,830.6	2,858.0	2,818.3	39.79	71.831	
5,900.0	5,900.0	5,786.3	5,756.1	20.9	21.5	93.75	-187.3	2,857.1	2,866.8	2,825.3	41.45	69.170	
6,000.0	6,000.0	6,029.2	5,999.0	21.3	22.3	93.80	-190.0	2,862.1	2,868.4	2,825.8	42.63	67.288	
6,100.0	6,100.0	6,129.2	6,099.0	21.6	22.6	93.80	-190.0	2,862.1	2,868.4	2,825.1	43.33	66.207	
6,200.0	6,200.0	6,229.2	6,199.0	22.0	23.0	93.80	-190.0	2,862.1	2,868.4	2,824.4	44.02	65.158	
6,300.0	6,300.0	6,329.2	6,299.0	22.4	23.3	93.80	-190.0	2,862.1	2,868.4	2,823.7	44.72	64.142	
6,400.0	6,400.0	6,429.2	6,399.0	22.7	23.6	93.80	-190.0	2,862.1	2,868.4	2,823.0	45.42	63.156	
6,500.0	6,500.0	6,529.2	6,499.0	23.1	24.0	93.80	-190.0	2,862.1	2,868.4	2,822.3	46.12	62.199	
6,600.0	6,600.0	6,629.2	6,599.0	23.4	24.3	93.80	-190.0	2,862.1	2,868.4	2,821.6	46.82	61.269	
6,700.0	6,700.0	6,729.2	6,699.0	23.8	24.6	93.80	-190.0	2,862.1	2,868.4	2,820.9	47.52	60.367	
6,800.0	6,800.0	6,829.2	6,799.0	24.1	25.0	93.80	-190.0	2,862.1	2,868.4	2,820.2	48.22	59.490	
6,900.0	6,900.0	6,929.2	6,899.0	24.5	25.3	93.80	-190.0	2,862.1	2,868.4	2,819.5	48.92	58.638	
7,000.0	7,000.0	7,029.2	6,999.0	24.9	25.6	93.80	-190.0	2,862.1	2,868.4	2,818.8	49.62	57.809	
7,100.0	7,100.0	7,129.2	7,099.0	25.2	26.0	-160.71	-190.0	2,862.1	2,869.2	2,818.9	50.31	57.032	
7,200.0	7,200.0	7,229.2	7,199.0	25.5	26.3	-160.72	-190.0	2,862.1	2,871.7	2,820.7	50.99	56.321	
7,300.0	7,299.9	7,329.1	7,298.9	25.9	26.6	-160.74	-190.0	2,862.1	2,875.8	2,824.2	51.67	55.660	
7,400.0	7,399.7	7,428.9	7,398.7	26.2	27.0	-160.76	-190.0	2,862.1	2,881.6	2,829.2	52.35	55.047	
7,500.0	7,499.4	7,528.6	7,498.4	26.6	27.3	-160.79	-190.0	2,862.1	2,889.0	2,836.0	53.03	54.480	
7,600.0	7,598.9	7,628.1	7,597.9	26.9	27.6	-160.82	-190.0	2,862.1	2,898.1	2,844.3	53.71	53.959	
7,700.0	7,698.3	7,727.5	7,697.3	27.2	28.0	-160.86	-190.0	2,862.1	2,908.8	2,854.4	54.39	53.481	
7,800.0	7,797.4	7,826.6	7,796.4	27.6	28.3	-160.90	-190.0	2,862.1	2,921.1	2,866.0	55.07	53.045	
7,900.0	7,896.3	7,925.5	7,895.3	27.9	28.6	-160.95	-190.0	2,862.1	2,935.1	2,879.3	55.75	52.650	
8,000.0	7,994.9	8,024.2	7,993.9	28.3	29.0	-161.00	-190.0	2,862.1	2,950.7	2,894.3	56.43	52.294	
8,100.0	8,093.3	8,122.5	8,092.3	28.6	29.3	-161.06	-190.0	2,862.1	2,968.0	2,910.9	57.10	51.976	
8,182.6	8,174.2	8,203.4	8,173.2	28.9	29.6	-161.11	-190.0	2,862.1	2,983.5	2,925.8	57.66	51.741	
8,200.0	8,191.3	8,220.5	8,190.3	29.0	29.6	-161.13	-190.0	2,862.1	2,986.9	2,929.1	57.78	51.694	
8,300.0	8,289.1	8,318.4	8,288.1	29.4	30.0	-161.26	-190.0	2,862.1	3,006.3	2,947.8	58.46	51.428	
8,400.0	8,387.0	8,416.2	8,386.0	29.7	30.3	-161.38	-190.0	2,862.1	3,025.7	2,966.6	59.13	51.167	
8,500.0	8,484.9	8,514.1	8,483.9	30.1	30.6	-161.50	-190.0	2,862.1	3,045.2	2,985.4	59.81	50.911	
8,600.0	8,582.8	8,612.0	8,581.8	30.5	31.0	-161.63	-190.0	2,862.1	3,064.7	3,004.2	60.50	50.660	
8,700.0	8,680.6	8,709.9	8,679.6	30.9	31.3	-161.75	-190.0	2,862.1	3,084.2	3,023.0	61.18	50.413	
8,800.0	8,778.5	8,807.7	8,777.5	31.2	31.7	-161.86	-190.0	2,862.1	3,103.7	3,041.8	61.86	50.171	
8,900.0	8,876.4	8,905.6	8,875.4	31.6	32.0	-161.98	-190.0	2,862.1	3,123.2	3,060.7	62.55	49.933	
9,000.0	8,974.3	9,003.5	8,973.3	32.0	32.3	-162.10	-190.0	2,862.1	3,142.8	3,079.5	63.23	49.700	
9,100.0	9,072.1	9,101.4	9,071.1	32.4	32.7	-162.21	-190.0	2,862.1	3,162.3	3,098.4	63.92	49.471	
9,200.0	9,170.0	9,200.7	9,169.0	32.8	33.0	-162.32	-190.0	2,862.1	3,181.9	3,117.2	64.62	49.242	
9,300.0	9,267.9	9,302.9	9,266.9	33.2	33.4	-162.43	-190.0	2,862.1	3,201.4	3,136.1	65.32	49.010	
9,400.0	9,365.8	9,405.0	9,364.8	33.6	33.7	-162.54	-190.0	2,862.1	3,221.0	3,155.0	66.03	48.782	
9,500.0	9,463.7	9,507.1	9,462.7	34.0	34.1	-162.65	-190.0	2,862.1	3,240.6	3,173.9	66.74	48.558	
9,600.0	9,561.5	9,609.2	9,560.5	34.4	34.4	-162.76	-190.0	2,862.1	3,260.2	3,192.8	67.45	48.339	
9,700.0	9,659.4	9,688.6	9,658.4	34.8	34.7	-162.86	-190.0	2,862.1	3,279.8	3,211.8	68.08	48.179	
9,800.0	9,757.3	9,786.5	9,756.3	35.2	35.0	-162.97	-190.0	2,862.1	3,299.5	3,230.7	68.77	47.977	
9,900.0	9,855.2	9,884.4	9,854.2	35.6	35.4	-163.07	-190.0	2,862.1	3,319.1	3,249.6	69.47	47.779	
10,000.0	9,953.0	9,982.3	9,952.0	36.0	35.7	-163.18	-190.0	2,862.1	3,338.7	3,268.6	70.16	47.584	
10,100.0	10,050.9	10,080.2	10,049.9	36.4	36.0	-163.28	-190.0	2,862.1	3,358.4	3,287.5	70.86	47.393	
10,200.0	10,148.8	10,178.0	10,147.8	36.9	36.4	-163.38	-190.0	2,862.1	3,378.1	3,306.5	71.56	47.204	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #128H - 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
10,300.0	10,246.7	10,275.9	10,245.7	37.3	36.7	-163.47	-190.0	2,862.1	3,397.7	3,325.5	72.26	47.019	
10,400.0	10,344.6	10,373.8	10,343.6	37.7	37.1	-163.57	-190.0	2,862.1	3,417.4	3,344.5	72.96	46.837	
10,500.0	10,442.4	10,450.0	10,419.8	38.1	37.3	-163.66	-189.3	2,862.2	3,437.3	3,363.7	73.59	46.712	
10,600.0	10,540.3	10,500.0	10,469.5	38.5	37.5	-163.79	-184.8	2,863.1	3,458.5	3,384.4	74.10	46.675	
10,700.0	10,638.2	10,538.7	10,507.6	39.0	37.6	-163.93	-178.3	2,864.3	3,481.1	3,406.5	74.54	46.699	
10,800.0	10,736.1	10,582.0	10,549.7	39.4	37.8	-164.14	-168.1	2,866.2	3,505.2	3,430.2	74.98	46.747	
10,900.0	10,833.9	10,622.9	10,588.6	39.8	37.9	-164.39	-155.6	2,868.5	3,530.9	3,455.5	75.39	46.835	
11,000.0	10,931.8	10,650.0	10,613.8	40.2	38.0	-164.58	-145.9	2,870.3	3,558.3	3,482.6	75.71	46.998	
11,100.0	11,029.7	10,700.0	10,659.0	40.7	38.1	-164.97	-124.9	2,874.2	3,587.3	3,511.2	76.11	47.133	
11,200.0	11,127.6	10,730.0	10,685.1	41.1	38.2	-165.23	-110.4	2,876.9	3,618.1	3,541.7	76.39	47.362	
11,300.0	11,225.5	10,750.0	10,702.1	41.5	38.2	-165.42	-100.1	2,878.8	3,650.7	3,574.1	76.60	47.660	
11,400.0	11,323.3	10,800.0	10,742.9	42.0	38.3	-165.92	-71.6	2,884.1	3,685.1	3,608.2	76.92	47.906	
11,500.0	11,421.2	10,800.0	10,742.9	42.4	38.3	-165.92	-71.6	2,884.1	3,721.3	3,644.4	76.97	48.345	
11,523.5	11,444.2	10,820.0	10,758.5	42.5	38.4	-166.14	-59.3	2,886.3	3,730.0	3,653.0	77.08	48.389	
11,600.0	11,519.2	10,850.0	10,781.0	42.8	38.4	-166.58	-39.8	2,889.9	3,758.7	3,681.5	77.25	48.655	
11,700.0	11,617.7	10,850.0	10,781.0	43.3	38.4	-166.72	-39.8	2,889.9	3,795.7	3,718.4	77.24	49.140	
11,800.0	11,716.7	10,881.1	10,803.2	43.7	38.5	-167.21	-18.4	2,893.9	3,832.1	3,754.8	77.36	49.534	
11,900.0	11,815.9	10,900.0	10,816.1	44.1	38.5	-167.55	-4.9	2,896.4	3,868.2	3,790.8	77.39	49.981	
12,000.0	11,915.5	10,918.9	10,828.6	44.4	38.5	-167.90	9.1	2,899.0	3,903.8	3,826.4	77.39	50.442	
12,100.0	12,015.2	10,950.0	10,848.0	44.8	38.6	-168.38	33.0	2,903.4	3,939.1	3,861.6	77.43	50.873	
12,200.0	12,115.1	10,950.0	10,848.0	45.2	38.6	-168.49	33.0	2,903.4	3,973.7	3,896.5	77.26	51.430	
12,300.0	12,215.1	10,967.5	10,858.4	45.5	38.6	-168.81	46.8	2,906.0	4,008.1	3,930.9	77.17	51.940	
12,311.9	12,227.0	10,969.2	10,859.4	45.5	38.6	85.66	48.2	2,906.3	4,012.1	3,934.9	77.15	52.003	
12,400.0	12,315.1	10,981.8	10,866.5	45.8	38.6	85.51	58.4	2,908.1	4,042.9	3,965.9	77.03	52.485	
12,500.0	12,415.1	11,000.0	10,876.5	46.2	38.7	85.29	73.4	2,910.9	4,079.7	4,002.8	76.90	53.054	
12,600.0	12,515.1	11,000.0	10,876.5	46.5	38.7	85.29	73.4	2,910.9	4,118.4	4,041.8	76.64	53.739	
12,700.0	12,615.1	11,019.2	10,886.4	46.9	38.7	85.05	89.5	2,913.9	4,159.0	4,082.5	76.47	54.385	
12,711.9	12,627.0	11,020.5	10,887.1	46.9	38.7	85.03	90.6	2,914.1	4,163.9	4,087.5	76.45	54.468	
12,750.0	12,665.1	11,024.9	10,889.3	47.0	38.7	105.19	94.4	2,914.8	4,180.3	4,104.0	76.37	54.741	
12,800.0	12,714.8	11,031.1	10,892.3	47.2	38.7	102.63	99.6	2,915.8	4,203.1	4,126.8	76.26	55.115	
12,850.0	12,763.8	11,050.0	10,901.2	47.4	38.7	99.74	116.1	2,918.8	4,227.2	4,151.0	76.23	55.452	
12,900.0	12,811.8	11,050.0	10,901.2	47.5	38.7	96.88	116.1	2,918.8	4,252.2	4,176.1	76.09	55.883	
12,950.0	12,858.3	11,050.0	10,901.2	47.7	38.7	93.87	116.1	2,918.8	4,278.1	4,202.1	75.95	56.324	
13,000.0	12,903.1	11,050.0	10,901.2	47.8	38.7	90.74	116.1	2,918.8	4,304.6	4,228.8	75.82	56.771	
13,050.0	12,945.8	11,050.0	10,901.2	48.0	38.7	87.53	116.1	2,918.8	4,331.6	4,255.9	75.70	57.220	
13,100.0	12,986.1	11,075.3	10,912.3	48.1	38.8	84.18	138.4	2,923.0	4,358.5	4,282.8	75.74	57.547	
13,150.0	13,023.7	11,100.0	10,922.1	48.3	38.8	80.91	160.7	2,927.1	4,385.7	4,310.0	75.78	57.874	
13,200.0	13,058.2	11,100.0	10,922.1	48.4	38.8	77.81	160.7	2,927.1	4,412.4	4,336.7	75.70	58.289	
13,250.0	13,089.4	11,100.0	10,922.1	48.5	38.8	74.81	160.7	2,927.1	4,438.7	4,363.1	75.64	58.685	
13,300.0	13,117.2	11,100.0	10,922.1	48.7	38.8	71.93	160.7	2,927.1	4,464.4	4,388.8	75.59	59.058	
13,350.0	13,141.1	11,100.0	10,922.1	48.8	38.8	69.21	160.7	2,927.1	4,489.4	4,413.8	75.58	59.403	
13,400.0	13,161.2	11,125.4	10,931.1	48.9	38.8	66.76	184.0	2,931.4	4,513.1	4,437.4	75.72	59.601	
13,450.0	13,177.2	11,150.0	10,938.9	49.1	38.9	64.54	207.0	2,935.7	4,535.9	4,460.0	75.89	59.773	
13,500.0	13,189.1	11,150.0	10,938.9	49.2	38.9	62.44	207.0	2,935.7	4,557.2	4,481.2	75.95	60.004	
13,550.0	13,196.6	11,150.0	10,938.9	49.4	38.9	60.54	207.0	2,935.7	4,577.0	4,501.0	76.04	60.193	
13,600.0	13,199.8	11,150.0	10,938.9	49.6	38.9	58.83	207.0	2,935.7	4,595.4	4,519.2	76.16	60.339	
13,611.9	13,200.0	11,150.0	10,938.9	49.6	38.9	58.46	207.0	2,935.7	4,599.5	4,523.3	76.19	60.368	
13,700.0	13,200.0	11,174.5	10,945.6	50.0	38.9	58.95	230.1	2,940.0	4,629.1	4,552.5	76.58	60.448	
13,800.0	13,200.0	11,200.0	10,951.6	50.4	39.0	59.45	254.6	2,944.5	4,661.6	4,584.6	77.03	60.517	
13,900.0	13,200.0	11,200.0	10,951.6	50.9	39.0	59.78	254.6	2,944.5	4,692.9	4,615.5	77.38	60.647	
14,000.0	13,200.0	11,226.2	10,956.5	51.4	39.1	60.22	279.9	2,949.2	4,722.8	4,644.9	77.88	60.644	
14,100.0	13,200.0	11,250.0	10,960.0	52.0	39.1	60.61	303.0	2,953.5	4,751.5	4,673.1	78.38	60.621	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #128H - 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
14,200.0	13,200.0	11,250.0	10,960.0	52.6	39.1	60.89	303.0	2,953.5	4,778.9	4,700.1	78.79	60.653	
14,300.0	13,200.0	11,300.0	10,964.0	53.2	39.3	61.29	352.0	2,962.6	4,805.0	4,725.6	79.44	60.486	
14,400.0	13,200.0	12,033.9	10,962.1	53.8	42.9	62.25	1,082.6	3,013.5	4,823.8	4,739.8	84.01	57.421	
14,500.0	13,200.0	12,133.6	10,961.8	54.5	43.6	62.36	1,182.2	3,012.7	4,831.3	4,746.0	85.28	56.652	
14,600.0	13,200.0	12,233.5	10,961.5	55.1	44.4	62.43	1,282.1	3,011.9	4,835.7	4,749.0	86.62	55.825	
14,687.2	13,200.0	12,320.7	10,961.2	55.7	45.1	62.44	1,369.3	3,011.3	4,837.0	4,749.1	87.84	55.065	
14,700.0	13,200.0	12,333.4	10,961.2	55.8	45.2	62.44	1,382.1	3,011.2	4,837.0	4,749.0	88.03	54.950	
14,800.0	13,200.0	12,433.4	10,960.8	56.5	46.0	62.44	1,482.1	3,010.4	4,837.1	4,747.6	89.50	54.046	
14,900.0	13,200.0	12,533.4	10,960.5	57.3	46.9	62.44	1,582.1	3,009.6	4,837.3	4,746.2	91.05	53.126	
15,000.0	13,200.0	12,633.4	10,960.2	58.1	47.9	62.43	1,682.1	3,008.8	4,837.4	4,744.7	92.68	52.196	
15,100.0	13,200.0	12,733.4	10,959.9	58.9	48.8	62.43	1,782.1	3,008.0	4,837.6	4,743.2	94.37	51.261	
15,200.0	13,200.0	12,833.4	10,959.5	59.7	49.8	62.43	1,882.1	3,007.3	4,837.7	4,741.6	96.13	50.325	
15,300.0	13,200.0	12,933.4	10,959.2	60.6	50.9	62.42	1,982.0	3,006.5	4,837.8	4,739.9	97.95	49.391	
15,400.0	13,200.0	13,033.4	10,958.9	61.6	52.0	62.42	2,082.0	3,005.7	4,838.0	4,738.2	99.83	48.463	
15,500.0	13,200.0	13,133.4	10,958.6	62.5	53.1	62.41	2,182.0	3,004.9	4,838.1	4,736.4	101.76	47.543	
15,600.0	13,200.0	13,233.4	10,958.3	63.5	54.2	62.41	2,282.0	3,004.1	4,838.3	4,734.5	103.75	46.635	
15,700.0	13,200.0	13,333.4	10,957.9	64.5	55.4	62.41	2,382.0	3,003.4	4,838.4	4,732.6	105.78	45.739	
15,800.0	13,200.0	13,433.4	10,957.6	65.5	56.5	62.40	2,482.0	3,002.6	4,838.6	4,730.7	107.86	44.858	
15,900.0	13,200.0	13,533.4	10,957.3	66.6	57.7	62.40	2,582.0	3,001.8	4,838.7	4,728.7	109.99	43.993	
16,000.0	13,200.0	13,633.4	10,957.0	67.7	59.0	62.40	2,682.0	3,001.0	4,838.9	4,726.7	112.15	43.145	
16,100.0	13,200.0	13,733.4	10,956.6	68.8	60.2	62.39	2,782.0	3,000.2	4,839.0	4,724.6	114.36	42.315	
16,200.0	13,200.0	13,833.4	10,956.3	69.9	61.5	62.39	2,882.0	2,999.5	4,839.1	4,722.5	116.60	41.502	
16,300.0	13,200.0	13,933.4	10,956.0	71.1	62.8	62.39	2,982.0	2,998.7	4,839.3	4,720.4	118.87	40.709	
16,400.0	13,200.0	14,033.4	10,955.7	72.3	64.1	62.38	3,082.0	2,997.9	4,839.4	4,718.3	121.18	39.935	
16,500.0	13,200.0	14,133.4	10,955.3	73.5	65.4	62.38	3,182.0	2,997.1	4,839.6	4,716.1	123.52	39.180	
16,600.0	13,200.0	14,233.4	10,955.0	74.7	66.7	62.38	3,282.0	2,996.4	4,839.7	4,713.8	125.89	38.444	
16,700.0	13,200.0	14,333.4	10,954.7	75.9	68.1	62.37	3,382.0	2,995.6	4,839.9	4,711.6	128.28	37.728	
16,800.0	13,200.0	14,433.4	10,954.4	77.1	69.4	62.37	3,482.0	2,994.8	4,840.0	4,709.3	130.70	37.030	
16,900.0	13,200.0	14,533.4	10,954.1	78.4	70.8	62.37	3,582.0	2,994.0	4,840.2	4,707.0	133.15	36.351	
17,000.0	13,200.0	14,633.4	10,953.7	79.7	72.2	62.36	3,682.0	2,993.2	4,840.3	4,704.7	135.62	35.690	
17,100.0	13,200.0	14,733.4	10,953.4	81.0	73.6	62.36	3,782.0	2,992.5	4,840.4	4,702.3	138.11	35.048	
17,200.0	13,200.0	14,833.4	10,953.1	82.3	75.0	62.36	3,882.0	2,991.7	4,840.6	4,700.0	140.62	34.423	
17,300.0	13,200.0	14,933.4	10,952.8	83.6	76.4	62.35	3,982.0	2,990.9	4,840.7	4,697.6	143.15	33.815	
17,400.0	13,200.0	15,033.4	10,952.4	84.9	77.8	62.35	4,082.0	2,990.1	4,840.9	4,695.2	145.70	33.225	
17,500.0	13,200.0	15,133.4	10,952.1	86.3	79.3	62.35	4,182.0	2,989.3	4,841.0	4,692.8	148.27	32.650	
17,600.0	13,200.0	15,233.4	10,951.8	87.6	80.7	62.34	4,282.0	2,988.6	4,841.2	4,690.3	150.85	32.092	
17,700.0	13,200.0	15,333.4	10,951.5	89.0	82.2	62.34	4,381.9	2,987.8	4,841.3	4,687.9	153.45	31.549	
17,800.0	13,200.0	15,433.4	10,951.1	90.3	83.6	62.34	4,481.9	2,987.0	4,841.5	4,685.4	156.07	31.022	
17,900.0	13,200.0	15,533.4	10,950.8	91.7	85.1	62.33	4,581.9	2,986.2	4,841.6	4,682.9	158.70	30.509	
18,000.0	13,200.0	15,633.4	10,950.5	93.1	86.6	62.33	4,681.9	2,985.5	4,841.7	4,680.4	161.34	30.010	
18,100.0	13,200.0	15,733.4	10,950.2	94.5	88.0	62.33	4,781.9	2,984.7	4,841.9	4,677.9	164.00	29.525	
18,200.0	13,200.0	15,833.4	10,949.9	95.9	89.5	62.32	4,881.9	2,983.9	4,842.0	4,675.4	166.66	29.053	
18,300.0	13,200.0	15,933.4	10,949.5	97.3	91.0	62.32	4,981.9	2,983.1	4,842.2	4,672.8	169.34	28.594	
18,400.0	13,200.0	16,033.4	10,949.2	98.7	92.5	62.32	5,081.9	2,982.3	4,842.3	4,670.3	172.03	28.147	
18,500.0	13,200.0	16,133.4	10,948.9	100.2	94.0	62.31	5,181.9	2,981.6	4,842.5	4,667.7	174.74	27.713	
18,600.0	13,200.0	16,233.4	10,948.6	101.6	95.5	62.31	5,281.9	2,980.8	4,842.6	4,665.2	177.45	27.290	
18,700.0	13,200.0	16,333.4	10,948.2	103.0	97.1	62.31	5,381.9	2,980.0	4,842.8	4,662.6	180.17	26.879	
18,800.0	13,200.0	16,433.4	10,947.9	104.5	98.6	62.30	5,481.9	2,979.2	4,842.9	4,660.0	182.90	26.478	
18,900.0	13,200.0	16,533.4	10,947.6	105.9	100.1	62.30	5,581.9	2,978.4	4,843.0	4,657.4	185.64	26.088	
19,000.0	13,200.0	16,633.4	10,947.3	107.4	101.6	62.29	5,681.9	2,977.7	4,843.2	4,654.8	188.39	25.708	
19,100.0	13,200.0	16,733.4	10,946.9	108.9	103.1	62.29	5,781.9	2,976.9	4,843.3	4,652.2	191.15	25.338	
19,200.0	13,200.0	16,833.4	10,946.6	110.3	104.7	62.29	5,881.9	2,976.1	4,843.5	4,649.6	193.91	24.978	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #128H - 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
19,300.0	13,200.0	16,933.4	10,946.3	111.8	106.2	62.28	5,981.9	2,975.3	4,843.6	4,646.9	196.68	24.627	
19,400.0	13,200.0	17,033.4	10,946.0	113.3	107.8	62.28	6,081.9	2,974.5	4,843.8	4,644.3	199.46	24.284	
19,500.0	13,200.0	17,133.4	10,945.7	114.8	109.3	62.28	6,181.9	2,973.8	4,843.9	4,641.7	202.25	23.951	
19,600.0	13,200.0	17,233.4	10,945.3	116.3	110.9	62.27	6,281.9	2,973.0	4,844.1	4,639.0	205.04	23.625	
19,700.0	13,200.0	17,333.4	10,945.0	117.8	112.4	62.27	6,381.9	2,972.2	4,844.2	4,636.4	207.84	23.308	
19,800.0	13,200.0	17,433.4	10,944.7	119.3	114.0	62.27	6,481.9	2,971.4	4,844.3	4,633.7	210.64	22.998	
19,900.0	13,200.0	17,533.4	10,944.4	120.8	115.5	62.26	6,581.9	2,970.7	4,844.5	4,631.0	213.45	22.696	
20,000.0	13,200.0	17,633.4	10,944.0	122.3	117.1	62.26	6,681.9	2,969.9	4,844.6	4,628.4	216.27	22.401	
20,100.0	13,200.0	17,733.4	10,943.7	123.8	118.6	62.26	6,781.9	2,969.1	4,844.8	4,625.7	219.09	22.113	
20,200.0	13,200.0	17,833.4	10,943.4	125.3	120.2	62.25	6,881.8	2,968.3	4,844.9	4,623.0	221.91	21.832	
20,300.0	13,200.0	17,933.4	10,943.1	126.8	121.8	62.25	6,981.8	2,967.5	4,845.1	4,620.3	224.75	21.558	
20,400.0	13,200.0	18,033.4	10,942.7	128.4	123.3	62.25	7,081.8	2,966.8	4,845.2	4,617.6	227.58	21.290	
20,500.0	13,200.0	18,133.4	10,942.4	129.9	124.9	62.24	7,181.8	2,966.0	4,845.4	4,614.9	230.42	21.028	
20,600.0	13,200.0	18,233.4	10,942.1	131.4	126.5	62.24	7,281.8	2,965.2	4,845.5	4,612.2	233.27	20.772	
20,700.0	13,200.0	18,333.4	10,941.8	132.9	128.1	62.24	7,381.8	2,964.4	4,845.7	4,609.5	236.11	20.522	
20,800.0	13,200.0	18,433.4	10,941.5	134.5	129.6	62.23	7,481.8	2,963.6	4,845.8	4,606.8	238.97	20.278	
20,900.0	13,200.0	18,533.4	10,941.1	136.0	131.2	62.23	7,581.8	2,962.9	4,845.9	4,604.1	241.82	20.039	
21,000.0	13,200.0	18,633.4	10,940.8	137.6	132.8	62.23	7,681.8	2,962.1	4,846.1	4,601.4	244.69	19.805	
21,100.0	13,200.0	18,733.4	10,940.5	139.1	134.4	62.22	7,781.8	2,961.3	4,846.2	4,598.7	247.55	19.577	
21,200.0	13,200.0	18,833.4	10,940.2	140.7	136.0	62.22	7,881.8	2,960.5	4,846.4	4,596.0	250.42	19.353	
21,300.0	13,200.0	18,933.4	10,939.8	142.2	137.6	62.22	7,981.8	2,959.7	4,846.5	4,593.2	253.29	19.134	
21,400.0	13,200.0	19,033.4	10,939.5	143.8	139.2	62.21	8,081.8	2,959.0	4,846.7	4,590.5	256.16	18.920	
21,500.0	13,200.0	19,133.4	10,939.2	145.3	140.7	62.21	8,181.8	2,958.2	4,846.8	4,587.8	259.04	18.711	
21,600.0	13,200.0	19,233.4	10,938.9	146.9	142.3	62.21	8,281.8	2,957.4	4,847.0	4,585.0	261.92	18.505	
21,700.0	13,200.0	19,333.4	10,938.5	148.4	143.9	62.20	8,381.8	2,956.6	4,847.1	4,582.3	264.80	18.305	
21,800.0	13,200.0	19,433.4	10,938.2	150.0	145.5	62.20	8,481.8	2,955.9	4,847.2	4,579.6	267.69	18.108	
21,900.0	13,200.0	19,533.4	10,937.9	151.5	147.1	62.20	8,581.8	2,955.1	4,847.4	4,576.8	270.58	17.915	
22,000.0	13,200.0	19,633.4	10,937.6	153.1	148.7	62.19	8,681.8	2,954.3	4,847.5	4,574.1	273.47	17.726	
22,100.0	13,200.0	19,733.4	10,937.3	154.7	150.3	62.19	8,781.8	2,953.5	4,847.7	4,571.3	276.36	17.541	
22,200.0	13,200.0	19,833.4	10,936.9	156.2	151.9	62.19	8,881.8	2,952.7	4,847.8	4,568.6	279.26	17.359	
22,300.0	13,200.0	19,933.4	10,936.6	157.8	153.5	62.18	8,981.8	2,952.0	4,848.0	4,565.8	282.16	17.182	
22,400.0	13,200.0	20,033.4	10,936.3	159.4	155.1	62.18	9,081.8	2,951.2	4,848.1	4,563.1	285.06	17.007	
22,500.0	13,200.0	20,133.4	10,936.0	161.0	156.7	62.18	9,181.8	2,950.4	4,848.3	4,560.3	287.96	16.836	
22,600.0	13,200.0	20,233.4	10,935.6	162.5	158.3	62.17	9,281.7	2,949.6	4,848.4	4,557.5	290.87	16.669	
22,700.0	13,200.0	20,333.4	10,935.3	164.1	159.9	62.17	9,381.7	2,948.8	4,848.6	4,554.8	293.78	16.504	
22,800.0	13,200.0	20,433.4	10,935.0	165.7	161.6	62.16	9,481.7	2,948.1	4,848.7	4,552.0	296.69	16.343	
22,900.0	13,200.0	20,533.4	10,934.7	167.3	163.2	62.16	9,581.7	2,947.3	4,848.8	4,549.2	299.60	16.184	
23,000.0	13,200.0	20,633.4	10,934.3	168.9	164.8	62.16	9,681.7	2,946.5	4,849.0	4,546.5	302.51	16.029	
23,100.0	13,200.0	20,733.4	10,934.0	170.4	166.4	62.15	9,781.7	2,945.7	4,849.1	4,543.7	305.43	15.876	
23,200.0	13,200.0	20,833.4	10,933.7	172.0	168.0	62.15	9,881.7	2,944.9	4,849.3	4,540.9	308.35	15.727	
23,300.0	13,200.0	20,933.4	10,933.4	173.6	169.6	62.15	9,981.7	2,944.2	4,849.4	4,538.2	311.27	15.580	
23,400.0	13,200.0	21,033.4	10,933.1	175.2	171.2	62.14	10,081.7	2,943.4	4,849.6	4,535.4	314.19	15.435	
23,504.9	13,200.0	21,138.3	10,932.7	176.9	172.9	62.14	10,186.6	2,942.6	4,849.7	4,532.5	317.25	15.287	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #131H - Actual - Actual

Offset Site Error: 0.0 usft

Survey Program: 76-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	-90.66	-1.3	-110.2	110.2				
100.0	100.0	100.6	100.6	0.1	0.2	-90.54	-1.0	-109.8	109.8	109.5	0.31	359.245	
200.0	200.0	200.4	200.4	0.5	0.5	-90.09	-0.2	-109.3	109.3	108.3	1.02	107.490	
300.0	300.0	300.3	300.2	0.8	0.9	-89.17	1.6	-109.0	109.0	107.3	1.73	62.948	
400.0	400.0	400.2	400.2	1.2	1.2	-88.17	3.5	-108.8	108.8	106.4	2.45	44.452	
466.5	466.5	466.6	466.5	1.4	1.5	-87.52	4.7	-108.6	108.7	105.8	2.92	37.193	
500.0	500.0	499.8	499.8	1.6	1.6	-87.27	5.2	-108.7	108.8	105.6	3.16	34.403	
600.0	600.0	599.9	599.8	1.9	2.0	-86.86	6.0	-108.9	109.1	105.2	3.88	28.149	
700.0	700.0	699.7	699.6	2.3	2.3	-86.36	6.9	-109.0	109.2	104.6	4.59	23.809	
800.0	800.0	799.3	799.2	2.6	2.7	-86.22	7.2	-109.6	109.8	104.5	5.29	20.741	
900.0	900.0	898.7	898.6	3.0	3.0	-86.12	7.5	-110.4	110.7	104.7	6.00	18.451	
1,000.0	1,000.0	998.6	998.5	3.4	3.4	-85.66	8.5	-111.8	112.1	105.4	6.71	16.701	
1,100.0	1,100.0	1,099.0	1,098.9	3.7	3.7	-85.22	9.4	-112.8	113.2	105.8	7.43	15.244	
1,200.0	1,200.0	1,199.3	1,199.2	4.1	4.1	-84.75	10.4	-113.6	114.1	105.9	8.14	14.007	
1,300.0	1,300.0	1,299.6	1,299.5	4.4	4.4	-84.22	11.5	-114.1	114.7	105.8	8.86	12.939	
1,400.0	1,400.0	1,400.0	1,399.9	4.8	4.8	-83.70	12.6	-114.2	114.9	105.3	9.58	11.998	
1,500.0	1,500.0	1,500.0	1,499.9	5.1	5.1	-83.21	13.6	-114.2	115.0	104.7	10.29	11.172	
1,600.0	1,600.0	1,600.0	1,599.9	5.5	5.5	-82.82	14.4	-114.2	115.1	104.1	11.01	10.452	
1,700.0	1,700.0	1,700.3	1,700.2	5.9	5.9	-82.49	15.0	-114.0	115.0	103.3	11.72	9.811	
1,800.0	1,800.0	1,800.6	1,800.5	6.2	6.2	-82.19	15.6	-113.7	114.7	102.3	12.44	9.224	
1,900.0	1,900.0	1,900.7	1,900.6	6.6	6.6	-81.94	16.0	-113.1	114.2	101.1	13.14	8.692	
2,000.0	2,000.0	2,000.9	2,000.7	6.9	6.9	-81.76	16.3	-112.5	113.7	99.8	13.85	8.205	
2,100.0	2,100.0	2,101.1	2,100.9	7.3	7.3	-81.58	16.5	-111.7	112.9	98.4	14.56	7.756	
2,200.0	2,200.0	2,201.2	2,201.1	7.7	7.6	-81.38	16.8	-110.7	112.0	96.7	15.26	7.337	
2,300.0	2,300.0	2,301.2	2,301.0	8.0	8.0	-81.14	17.1	-109.7	111.1	95.1	15.97	6.953	
2,400.0	2,400.0	2,401.1	2,401.0	8.4	8.3	-80.86	17.5	-108.7	110.1	93.5	16.68	6.603	
2,500.0	2,500.0	2,501.2	2,501.0	8.7	8.7	-80.52	18.0	-107.7	109.2	91.8	17.39	6.281	
2,600.0	2,600.0	2,601.3	2,601.1	9.1	9.0	-80.10	18.6	-106.7	108.3	90.2	18.10	5.981	
2,700.0	2,700.0	2,701.6	2,701.4	9.4	9.4	-79.61	19.3	-105.3	107.1	88.3	18.82	5.691	
2,800.0	2,800.0	2,801.7	2,801.5	9.8	9.7	-79.04	20.1	-103.8	105.7	86.2	19.53	5.413	
2,900.0	2,900.0	2,901.6	2,901.4	10.2	10.1	-78.37	21.0	-102.2	104.3	84.1	20.24	5.154	
3,000.0	3,000.0	3,001.4	3,001.2	10.5	10.4	-77.71	21.9	-100.7	103.1	82.1	20.95	4.918	
3,100.0	3,100.0	3,101.1	3,100.9	10.9	10.8	-77.34	22.4	-99.6	102.1	80.4	21.67	4.711	
3,200.0	3,200.0	3,202.0	3,201.8	11.2	11.1	-77.06	22.6	-98.3	100.8	78.5	22.38	4.506	
3,300.0	3,300.0	3,303.1	3,302.8	11.6	11.5	-76.44	23.1	-95.8	98.5	75.5	23.09	4.269	
3,400.0	3,400.0	3,402.1	3,401.8	12.0	11.9	-75.36	24.3	-93.0	96.2	72.4	23.80	4.041	
3,500.0	3,500.0	3,501.2	3,500.8	12.3	12.2	-73.70	26.6	-91.0	94.8	70.3	24.52	3.868	
3,526.8	3,526.8	3,527.2	3,526.8	12.4	12.3	-73.27	27.3	-90.7	94.7	70.0	24.70	3.835	
3,600.0	3,600.0	3,598.6	3,598.2	12.7	12.5	-72.52	28.7	-91.0	95.4	70.2	25.21	3.785	
3,700.0	3,700.0	3,697.4	3,697.0	13.0	12.9	-72.42	29.6	-93.6	98.2	72.3	25.90	3.791	
3,800.0	3,800.0	3,797.6	3,797.1	13.4	13.2	-72.71	30.0	-96.5	101.2	74.6	26.60	3.802	
3,900.0	3,900.0	3,898.0	3,897.5	13.8	13.6	-73.25	29.9	-99.4	103.8	76.5	27.31	3.802	
4,000.0	4,000.0	3,998.3	3,997.7	14.1	13.9	-74.03	29.2	-102.0	106.1	78.1	28.00	3.788	
4,100.0	4,100.0	4,098.5	4,097.9	14.5	14.2	-75.12	27.8	-104.5	108.2	79.5	28.70	3.768	
4,200.0	4,200.0	4,198.6	4,198.0	14.8	14.6	-76.40	25.9	-106.9	110.0	80.6	29.40	3.743	
4,300.0	4,300.0	4,298.2	4,297.5	15.2	14.9	-77.73	23.8	-109.5	112.1	82.0	30.09	3.724	
4,400.0	4,400.0	4,397.3	4,396.5	15.5	15.3	-79.07	21.7	-112.4	114.6	83.8	30.78	3.722	
4,500.0	4,500.0	4,495.9	4,495.0	15.9	15.6	-80.51	19.5	-116.5	118.2	86.7	31.46	3.756	
4,600.0	4,600.0	4,595.8	4,594.8	16.3	15.9	-81.86	17.4	-121.2	122.6	90.4	32.16	3.811	
4,700.0	4,700.0	4,696.5	4,695.4	16.6	16.3	-82.51	16.5	-125.3	126.5	93.6	32.87	3.848	
4,800.0	4,800.0	4,796.7	4,795.6	17.0	16.6	-82.68	16.5	-128.8	130.0	96.4	33.58	3.870	
4,900.0	4,900.0	4,896.8	4,895.6	17.3	17.0	-82.84	16.6	-132.2	133.3	99.0	34.29	3.888	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #131H - Actual - Actual

Offset Site Error: 0.0 usft

Survey Program: 76-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	5,000.0	4,996.9	4,995.7	17.7	17.3	-82.95	16.8	-135.5	136.6	101.6	35.00	3.902	
5,100.0	5,100.0	5,095.9	5,094.5	18.1	17.7	-83.06	16.9	-138.8	140.0	104.3	35.69	3.922	
5,200.0	5,200.0	5,193.9	5,192.4	18.4	18.0	-83.57	16.2	-143.4	144.5	108.1	36.37	3.973	
5,300.0	5,300.0	5,290.7	5,289.1	18.8	18.4	-84.56	14.2	-149.6	150.7	113.7	37.02	4.071	
5,400.0	5,400.0	5,387.9	5,385.8	19.1	18.7	-86.00	11.0	-157.9	158.9	121.3	37.67	4.219	
5,500.0	5,500.0	5,486.6	5,484.0	19.5	19.1	-87.76	6.5	-167.2	168.1	129.8	38.35	4.385	
5,600.0	5,600.0	5,585.5	5,582.2	19.8	19.4	-89.71	0.9	-177.1	178.0	138.9	39.03	4.559	
5,700.0	5,700.0	5,684.8	5,680.9	20.2	19.8	-91.63	-5.3	-187.0	188.0	148.3	39.73	4.733	
5,800.0	5,800.0	5,784.3	5,779.6	20.6	20.1	-93.42	-11.8	-196.9	198.3	157.8	40.42	4.905	
5,900.0	5,900.0	5,884.0	5,878.6	20.9	20.5	-95.00	-18.1	-206.7	208.5	167.4	41.13	5.071	
6,000.0	6,000.0	5,982.0	5,976.0	21.3	20.8	-96.37	-24.1	-216.3	219.0	177.2	41.80	5.239	
6,100.0	6,100.0	6,078.4	6,071.6	21.6	21.2	-97.73	-30.8	-226.8	230.6	188.2	42.43	5.435	
6,200.0	6,200.0	6,176.4	6,168.6	22.0	21.5	-99.11	-38.2	-238.3	243.4	200.3	43.10	5.647	
6,300.0	6,300.0	6,276.0	6,267.3	22.4	21.9	-100.37	-45.8	-250.0	256.2	212.4	43.82	5.848	
6,400.0	6,400.0	6,374.6	6,364.9	22.7	22.3	-101.46	-53.0	-261.5	269.1	224.6	44.50	6.046	
6,500.0	6,500.0	6,472.7	6,462.0	23.1	22.6	-102.28	-59.5	-273.4	282.3	237.1	45.18	6.248	
6,600.0	6,600.0	6,572.3	6,560.7	23.4	23.0	-102.89	-65.4	-285.7	295.8	249.9	45.90	6.444	
6,700.0	6,700.0	6,672.5	6,660.0	23.8	23.4	-103.36	-70.8	-298.0	308.9	262.3	46.63	6.624	
6,800.0	6,800.0	6,772.5	6,759.2	24.1	23.8	-103.73	-75.8	-310.0	321.7	274.3	47.36	6.793	
6,900.0	6,900.0	6,872.6	6,858.5	24.5	24.1	-104.06	-80.5	-321.7	334.2	286.2	48.08	6.952	
7,000.0	7,000.0	6,973.2	6,958.3	24.9	24.5	-104.47	-85.9	-333.0	346.5	297.7	48.81	7.098	
7,100.0	7,100.0	7,074.1	7,058.4	25.2	24.9	0.38	-92.8	-343.6	357.4	307.9	49.53	7.216	
7,200.0	7,200.0	7,175.8	7,159.3	25.5	25.3	-0.32	-100.1	-353.5	366.2	316.0	50.26	7.287	
7,300.0	7,299.9	7,276.0	7,258.9	25.9	25.7	-0.95	-107.0	-362.9	372.7	321.8	50.95	7.315	
7,400.0	7,399.7	7,370.2	7,352.3	26.2	26.0	-1.58	-114.0	-372.3	378.4	326.9	51.55	7.341	
7,500.0	7,499.4	7,466.2	7,447.3	26.6	26.4	-2.30	-122.1	-383.1	383.8	331.7	52.17	7.357	
7,600.0	7,598.9	7,568.5	7,548.7	26.9	26.8	-3.13	-131.3	-394.3	387.5	334.6	52.90	7.325	
7,700.0	7,698.3	7,670.0	7,649.2	27.2	27.2	-4.01	-140.4	-404.8	389.0	335.3	53.62	7.254	
7,800.0	7,797.4	7,770.0	7,748.4	27.6	27.6	-4.68	-148.1	-415.5	388.6	334.2	54.32	7.154	
7,900.0	7,896.3	7,871.6	7,849.2	27.9	28.0	-5.16	-154.3	-426.7	386.3	331.3	55.04	7.019	
8,000.0	7,994.9	7,974.6	7,951.4	28.3	28.4	-5.65	-160.2	-437.5	381.6	325.9	55.79	6.841	
8,100.0	8,093.3	8,073.3	8,049.5	28.6	28.7	-6.18	-165.8	-447.3	374.8	318.3	56.46	6.638	
8,182.6	8,174.2	8,153.0	8,128.5	28.9	29.0	-6.69	-170.7	-455.7	368.4	311.4	56.99	6.465	
8,200.0	8,191.3	8,169.8	8,145.2	29.0	29.1	-6.81	-171.8	-457.5	367.0	309.9	57.10	6.428	
8,300.0	8,289.1	8,267.7	8,242.2	29.4	29.5	-7.51	-178.4	-468.3	359.5	301.7	57.77	6.223	
8,400.0	8,387.0	8,366.2	8,339.8	29.7	29.9	-8.25	-185.2	-479.6	352.3	293.8	58.44	6.028	
8,500.0	8,484.9	8,465.9	8,438.7	30.1	30.3	-8.99	-192.0	-491.2	345.3	286.2	59.14	5.839	
8,600.0	8,582.8	8,566.1	8,538.0	30.5	30.7	-9.62	-198.0	-503.1	338.3	278.5	59.86	5.653	
8,700.0	8,680.6	8,667.3	8,638.4	30.9	31.1	-10.20	-203.4	-515.1	331.1	270.5	60.59	5.464	
8,800.0	8,778.5	8,768.7	8,738.9	31.2	31.5	-10.82	-208.7	-526.7	323.3	262.0	61.33	5.272	
8,900.0	8,876.4	8,869.9	8,839.4	31.6	31.9	-11.51	-214.0	-537.6	315.1	253.1	62.06	5.077	
9,000.0	8,974.3	8,971.0	8,939.8	32.0	32.3	-12.32	-219.4	-547.9	306.5	243.7	62.80	4.880	
9,100.0	9,072.1	9,071.1	9,039.3	32.4	32.6	-13.12	-224.4	-557.9	297.5	234.0	63.52	4.684	
9,200.0	9,170.0	9,172.1	9,139.7	32.8	33.0	-13.92	-229.0	-567.9	288.4	224.1	64.26	4.488	
9,300.0	9,267.9	9,274.8	9,241.8	33.2	33.4	-14.98	-234.1	-576.8	278.3	213.3	65.02	4.281	
9,400.0	9,365.8	9,377.5	9,344.2	33.6	33.8	-16.41	-239.6	-583.9	267.3	201.5	65.78	4.063	
9,500.0	9,463.7	9,480.7	9,447.1	34.0	34.2	-17.96	-244.3	-589.9	254.9	188.3	66.55	3.830	
9,600.0	9,561.5	9,584.5	9,550.7	34.4	34.6	-19.60	-247.7	-594.6	240.9	173.6	67.30	3.580	
9,700.0	9,659.4	9,688.4	9,654.6	34.8	34.9	-21.36	-249.4	-597.6	225.0	156.9	68.03	3.307	
9,800.0	9,757.3	9,789.1	9,755.2	35.2	35.3	-23.30	-249.8	-599.1	207.4	138.6	68.75	3.016	
9,900.0	9,855.2	9,888.5	9,854.7	35.6	35.6	-25.72	-250.0	-599.7	189.3	119.8	69.49	2.724	
10,000.0	9,953.0	9,986.1	9,952.3	36.0	36.0	-28.76	-250.4	-599.8	171.2	101.0	70.26	2.437	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #131H - Actual - Actual — **Offset Site Error:** 0.0 usft

Survey Program: 76-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
10,100.0	10,050.9	10,083.5	10,049.6	36.4	36.3	-32.66	-251.3	-599.7	154.1	83.1	71.07	2.169	
10,200.0	10,148.8	10,181.9	10,148.0	36.9	36.6	-37.63	-252.5	-599.5	138.0	66.0	71.92	1.918	
10,300.0	10,246.7	10,280.3	10,246.4	37.3	37.0	-43.86	-253.2	-599.0	122.6	49.8	72.83	1.684	
10,400.0	10,344.6	10,378.7	10,344.9	37.7	37.3	-51.86	-253.7	-598.0	108.6	34.8	73.84	1.471	Level 3
10,500.0	10,442.4	10,476.8	10,443.0	38.1	37.6	-62.21	-253.7	-596.4	96.8	21.9	74.96	1.292	Level 3
10,600.0	10,540.3	10,574.8	10,540.9	38.5	37.9	-74.53	-253.3	-595.2	88.6	12.4	76.10	1.164	Level 2
10,700.0	10,638.2	10,673.2	10,639.3	39.0	38.2	-87.94	-252.4	-595.0	84.4	7.3	77.12	1.094	Level 2
10,737.9	10,675.2	10,710.0	10,676.1	39.1	38.4	-92.94	-252.1	-595.3	84.1	6.6	77.46	1.085	Level 2, CC, ES, SF
10,800.0	10,736.1	10,771.0	10,737.1	39.4	38.6	-100.84	-251.8	-596.3	84.9	7.0	77.92	1.090	Level 2
10,900.0	10,833.9	10,869.5	10,835.6	39.8	38.9	-112.11	-251.8	-599.1	89.3	10.8	78.50	1.138	Level 2
11,000.0	10,931.8	10,967.3	10,933.3	40.2	39.3	-122.58	-251.1	-600.9	97.1	18.2	78.93	1.230	Level 2
11,100.0	11,029.7	11,064.5	11,030.5	40.7	39.6	-132.18	-249.4	-601.0	108.6	29.3	79.25	1.370	Level 3
11,200.0	11,127.6	11,162.0	11,128.0	41.1	39.9	-139.68	-248.2	-601.0	123.0	43.4	79.62	1.545	
11,300.0	11,225.5	11,259.4	11,225.4	41.5	40.3	-145.11	-248.0	-601.2	139.1	59.1	80.07	1.738	
11,400.0	11,323.3	11,356.5	11,322.5	42.0	40.6	-148.95	-249.1	-601.2	156.8	76.2	80.59	1.945	
11,500.0	11,421.2	11,461.9	11,427.2	42.4	40.9	-155.79	-239.4	-601.1	173.2	92.1	81.10	2.136	
11,523.5	11,444.2	11,485.5	11,450.1	42.5	41.0	-158.21	-233.9	-601.2	176.8	95.7	81.15	2.179	
11,600.0	11,519.2	11,557.0	11,517.5	42.8	41.2	-167.08	-210.0	-601.8	189.8	108.6	81.22	2.337	
11,700.0	11,617.7	11,639.9	11,590.8	43.3	41.4	-178.82	-171.5	-603.2	213.1	132.5	80.62	2.643	
11,800.0	11,716.7	11,718.4	11,656.2	43.7	41.6	170.34	-128.1	-605.7	245.9	166.7	79.25	3.103	
11,900.0	11,815.9	11,780.1	11,704.7	44.1	41.7	162.66	-90.2	-608.1	288.3	212.1	76.26	3.781	
12,000.0	11,915.5	11,831.8	11,742.4	44.4	41.7	156.88	-54.9	-609.6	341.0	268.6	72.43	4.709	
12,100.0	12,015.2	11,879.9	11,775.2	44.8	41.8	152.30	-19.8	-610.4	401.6	332.7	68.82	5.835	
12,200.0	12,115.1	11,919.0	11,800.5	45.2	41.9	149.28	10.1	-610.5	467.8	402.7	65.15	7.180	
12,300.0	12,215.1	11,961.3	11,826.3	45.5	41.9	146.48	43.6	-610.3	538.4	475.8	62.51	8.613	
12,311.9	12,227.0	11,965.6	11,828.8	45.5	41.9	40.75	47.1	-610.3	547.0	484.8	62.17	8.798	
12,400.0	12,315.1	11,995.3	11,845.7	45.8	41.9	38.45	71.6	-610.1	612.9	553.0	59.87	10.237	
12,500.0	12,415.1	12,014.0	11,855.8	46.2	41.9	37.09	87.3	-610.0	691.4	634.6	56.83	12.166	
12,600.0	12,515.1	12,046.8	11,872.5	46.5	42.0	34.84	115.5	-609.8	773.0	717.6	55.38	13.958	
12,700.0	12,615.1	12,066.8	11,881.8	46.9	42.0	33.54	133.2	-609.7	857.4	803.8	53.58	16.001	
12,711.9	12,627.0	12,069.0	11,882.8	46.9	42.0	33.40	135.1	-609.7	867.5	814.1	53.39	16.249	
12,750.0	12,665.1	12,076.2	11,886.0	47.0	42.0	50.03	141.7	-609.7	900.0	847.2	52.78	17.052	
12,800.0	12,714.8	12,109.0	11,899.4	47.2	42.0	43.40	171.6	-609.9	942.4	889.3	53.13	17.738	
12,850.0	12,763.8	12,109.0	11,899.4	47.4	42.0	39.02	171.6	-609.9	982.4	930.6	51.77	18.976	
12,900.0	12,811.8	12,109.0	11,899.4	47.5	42.0	35.29	171.6	-609.9	1,021.2	970.8	50.46	20.240	
12,950.0	12,858.3	12,109.0	11,899.4	47.7	42.0	32.13	171.6	-609.9	1,058.8	1,009.6	49.21	21.517	
13,000.0	12,903.1	12,109.0	11,899.4	47.8	42.0	29.45	171.6	-609.9	1,094.9	1,046.9	48.04	22.794	
13,050.0	12,945.8	12,142.1	11,911.0	48.0	42.0	27.32	202.5	-610.1	1,128.0	1,079.8	48.15	23.426	
13,100.0	12,986.1	12,153.8	11,914.6	48.1	42.0	25.56	213.7	-610.1	1,159.6	1,112.2	47.47	24.428	
13,150.0	13,023.7	12,165.8	11,918.0	48.3	42.1	24.11	225.2	-610.2	1,189.1	1,142.3	46.85	25.379	
13,200.0	13,058.2	12,204.0	11,926.9	48.4	42.2	23.15	262.3	-610.4	1,217.3	1,170.2	47.09	25.851	
13,250.0	13,089.4	12,204.0	11,926.9	48.5	42.2	22.09	262.3	-610.4	1,241.5	1,195.3	46.22	26.860	
13,300.0	13,117.2	12,204.0	11,926.9	48.7	42.2	21.18	262.3	-610.4	1,263.7	1,218.2	45.51	27.764	
13,350.0	13,141.1	12,204.0	11,926.9	48.8	42.2	20.40	262.3	-610.4	1,283.8	1,238.8	44.99	28.536	
13,400.0	13,161.2	12,244.5	11,934.0	48.9	42.3	20.27	302.1	-610.7	1,300.5	1,255.1	45.37	28.662	
13,450.0	13,177.2	12,266.1	11,937.2	49.1	42.4	20.04	323.5	-610.9	1,314.5	1,269.1	45.44	28.926	
13,500.0	13,189.1	12,297.0	11,941.0	49.2	42.5	20.07	354.2	-611.4	1,325.7	1,279.9	45.74	28.982	
13,550.0	13,196.6	12,314.2	11,942.8	49.4	42.6	20.04	371.3	-611.6	1,333.7	1,287.8	45.92	29.047	
13,600.0	13,199.8	12,343.8	11,945.6	49.6	42.7	20.31	400.8	-612.2	1,338.6	1,292.2	46.35	28.881	
13,611.9	13,200.0	12,350.8	11,946.2	49.6	42.7	20.40	407.8	-612.3	1,339.2	1,292.8	46.46	28.825	
13,700.0	13,200.0	12,403.7	11,950.0	50.0	42.9	21.27	460.5	-613.4	1,344.4	1,297.0	47.35	28.392	
13,800.0	13,200.0	12,466.4	11,952.8	50.4	43.1	22.21	523.1	-614.8	1,351.9	1,303.5	48.42	27.922	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #131H - Actual - Actual

Offset Site Error: 0.0 usft

Survey Program: 76-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	13,200.0	12,544.3	11,954.4	50.9	43.5	23.22	601.0	-616.9	1,360.6	1,311.0	49.57	27.447	
14,000.0	13,200.0	12,635.7	11,955.4	51.4	43.9	24.21	692.3	-619.7	1,369.2	1,318.4	50.76	26.972	
14,100.0	13,200.0	12,744.5	11,956.4	52.0	44.5	25.16	801.1	-623.5	1,376.5	1,324.5	52.03	26.458	
14,200.0	13,200.0	12,821.6	11,957.7	52.6	44.9	25.78	878.1	-625.5	1,382.5	1,329.4	53.07	26.048	
14,300.0	13,200.0	12,902.6	11,958.7	53.2	45.4	26.44	959.1	-624.3	1,389.1	1,334.9	54.21	25.626	
14,400.0	13,200.0	12,994.9	11,959.7	53.8	46.0	27.06	1,051.4	-622.4	1,394.7	1,339.3	55.39	25.177	
14,500.0	13,200.0	13,082.9	11,959.6	54.5	46.6	27.50	1,139.4	-620.7	1,399.8	1,343.3	56.48	24.784	
14,600.0	13,200.0	13,184.8	11,959.2	55.1	47.4	27.82	1,241.2	-619.2	1,403.4	1,345.8	57.61	24.362	
14,687.2	13,200.0	13,266.6	11,958.4	55.7	48.0	27.92	1,323.0	-618.7	1,405.4	1,346.9	58.45	24.043	
14,700.0	13,200.0	13,278.3	11,958.2	55.8	48.1	27.92	1,334.7	-618.7	1,405.6	1,347.1	58.57	24.000	
14,800.0	13,200.0	13,367.5	11,956.0	56.5	48.8	27.88	1,423.9	-619.3	1,407.8	1,348.4	59.45	23.681	
14,900.0	13,200.0	13,535.8	11,953.1	57.3	50.3	27.81	1,592.1	-621.1	1,410.0	1,348.9	61.13	23.065	
15,000.0	13,200.0	13,621.1	11,953.6	58.1	51.1	27.78	1,677.4	-622.9	1,408.8	1,346.7	62.07	22.695	
15,100.0	13,200.0	13,709.4	11,953.1	58.9	52.0	27.68	1,765.7	-626.0	1,408.0	1,345.0	63.03	22.339	
15,115.7	13,200.0	13,720.4	11,953.0	59.0	52.1	27.67	1,776.6	-626.4	1,408.0	1,344.8	63.15	22.295	
15,200.0	13,200.0	13,780.8	11,952.0	59.7	52.7	27.62	1,837.0	-627.7	1,408.7	1,344.8	63.87	22.056	
15,300.0	13,200.0	13,867.1	11,950.1	60.6	53.5	27.61	1,923.3	-627.6	1,411.0	1,346.1	64.97	21.719	
15,400.0	13,200.0	13,965.0	11,947.3	61.6	54.6	27.58	2,021.1	-627.7	1,413.8	1,347.6	66.20	21.358	
15,500.0	13,200.0	14,099.4	11,944.5	62.5	56.0	27.51	2,155.5	-629.3	1,415.5	1,347.7	67.86	20.861	
15,600.0	13,200.0	14,193.7	11,943.3	63.5	57.0	27.45	2,249.8	-631.1	1,416.1	1,347.0	69.09	20.495	
15,700.0	13,200.0	14,288.1	11,940.9	64.5	58.1	27.32	2,344.1	-634.1	1,417.3	1,347.0	70.30	20.161	
15,800.0	13,200.0	14,415.9	11,939.2	65.5	59.6	27.17	2,471.8	-638.5	1,417.2	1,345.3	71.93	19.701	
15,900.0	13,200.0	14,527.0	11,940.6	66.6	60.9	27.19	2,582.9	-639.4	1,416.1	1,342.5	73.58	19.245	
16,000.0	13,200.0	14,627.6	11,941.7	67.7	62.1	27.16	2,683.5	-641.6	1,414.4	1,339.3	75.05	18.845	
16,083.5	13,200.0	14,688.5	11,941.9	68.6	62.9	27.12	2,744.3	-643.2	1,413.5	1,337.6	75.96	18.608	
16,100.0	13,200.0	14,699.1	11,941.9	68.8	63.0	27.13	2,755.0	-643.2	1,413.6	1,337.4	76.14	18.567	
16,200.0	13,200.0	14,772.9	11,941.8	69.9	63.9	27.21	2,828.7	-641.4	1,415.2	1,337.8	77.41	18.283	
16,300.0	13,200.0	14,869.0	11,940.6	71.1	65.1	27.29	2,924.8	-639.2	1,417.6	1,338.6	79.00	17.944	
16,400.0	13,200.0	14,966.7	11,938.4	72.3	66.3	27.30	3,022.4	-638.7	1,420.2	1,339.7	80.55	17.631	
16,500.0	13,200.0	15,067.5	11,935.4	73.5	67.6	27.25	3,123.2	-639.4	1,422.9	1,340.8	82.11	17.330	
16,600.0	13,200.0	15,163.5	11,932.2	74.7	68.9	27.17	3,219.1	-640.7	1,425.6	1,342.0	83.58	17.057	
16,700.0	13,200.0	15,260.5	11,930.0	75.9	70.1	27.22	3,316.1	-638.9	1,428.8	1,343.6	85.23	16.764	
16,800.0	13,200.0	15,437.9	11,931.1	77.1	72.5	27.42	3,493.4	-635.1	1,429.8	1,341.6	88.28	16.196	
16,900.0	13,200.0	15,539.0	11,935.6	78.4	73.9	27.59	3,594.4	-633.5	1,427.0	1,336.8	90.21	15.819	
17,000.0	13,200.0	15,623.3	11,937.1	79.7	75.0	27.63	3,678.6	-634.0	1,425.5	1,333.8	91.72	15.542	
17,100.0	13,200.0	15,721.3	11,938.1	81.0	76.3	27.61	3,776.6	-635.7	1,424.1	1,330.7	93.39	15.248	
17,200.0	13,200.0	15,805.6	11,937.9	82.3	77.5	27.56	3,860.9	-637.7	1,423.6	1,328.7	94.81	15.014	
17,200.2	13,200.0	15,805.8	11,937.9	82.3	77.5	27.56	3,861.1	-637.7	1,423.6	1,328.7	94.82	15.014	
17,300.0	13,200.0	15,894.9	11,937.4	83.6	78.8	27.54	3,950.2	-638.5	1,424.0	1,327.6	96.37	14.775	
17,400.0	13,200.0	15,987.8	11,936.2	84.9	80.1	27.51	4,043.1	-639.6	1,424.9	1,327.0	97.97	14.544	
17,500.0	13,200.0	16,077.6	11,933.8	86.3	81.3	27.41	4,132.9	-641.7	1,426.6	1,327.1	99.44	14.346	
17,600.0	13,200.0	16,175.9	11,930.1	87.6	82.7	27.24	4,231.0	-645.3	1,428.7	1,327.7	100.95	14.152	
17,700.0	13,200.0	16,286.2	11,926.4	89.0	84.3	27.07	4,341.2	-649.0	1,430.5	1,327.8	102.66	13.934	
17,800.0	13,200.0	16,399.4	11,922.9	90.3	86.0	26.84	4,454.1	-654.7	1,431.3	1,327.0	104.31	13.721	
17,900.0	13,200.0	16,501.6	11,921.1	91.7	87.4	26.70	4,556.3	-658.4	1,431.6	1,325.7	105.94	13.513	
18,000.0	13,200.0	16,589.0	11,920.6	93.1	88.7	26.70	4,643.6	-658.8	1,432.2	1,324.7	107.54	13.318	
18,100.0	13,200.0	16,687.8	11,920.8	94.5	90.1	26.84	4,742.5	-655.8	1,433.8	1,324.3	109.53	13.090	
18,200.0	13,200.0	16,774.5	11,921.5	95.9	91.4	27.00	4,829.0	-652.4	1,435.2	1,323.8	111.38	12.886	
18,300.0	13,200.0	16,854.5	11,920.6	97.3	92.5	27.12	4,909.0	-649.2	1,438.3	1,325.2	113.05	12.722	
18,400.0	13,200.0	16,950.5	11,918.5	98.7	94.0	27.21	5,004.9	-646.3	1,442.0	1,327.0	114.97	12.542	
18,500.0	13,200.0	17,046.4	11,915.5	100.2	95.4	27.25	5,100.8	-644.3	1,446.0	1,329.2	116.81	12.379	
18,600.0	13,200.0	17,152.2	11,911.6	101.6	96.9	27.24	5,206.5	-643.3	1,450.2	1,331.4	118.75	12.212	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #131H - Actual - Actual

Offset Site Error: 0.0 usft

Survey Program: 76-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	13,200.0	17,253.5	11,907.9	103.0	98.4	27.20	5,307.7	-643.4	1,453.7	1,333.1	120.56	12.057	
18,800.0	13,200.0	17,427.1	11,904.4	104.5	101.1	27.06	5,481.2	-646.9	1,455.1	1,331.6	123.42	11.790	
18,900.0	13,200.0	17,526.9	11,905.5	105.9	102.6	27.05	5,580.9	-648.6	1,453.6	1,328.3	125.27	11.604	
19,000.0	13,200.0	17,612.3	11,906.4	107.4	103.8	27.05	5,666.3	-649.6	1,452.5	1,325.6	126.92	11.445	
19,021.8	13,200.0	17,628.6	11,906.3	107.7	104.1	27.05	5,682.7	-649.9	1,452.5	1,325.3	127.23	11.416	
19,100.0	13,200.0	17,710.4	11,905.3	108.9	105.3	26.99	5,764.4	-651.7	1,452.8	1,324.2	128.65	11.293	
19,200.0	13,200.0	17,833.8	11,905.3	110.3	107.2	26.84	5,887.7	-656.9	1,451.2	1,320.6	130.64	11.108	
19,300.0	13,200.0	17,946.2	11,906.5	111.8	108.9	26.75	6,000.0	-660.8	1,449.1	1,316.5	132.57	10.931	
19,400.0	13,200.0	18,030.8	11,907.4	113.3	110.2	26.68	6,084.6	-663.9	1,446.8	1,312.7	134.09	10.790	
19,500.0	13,200.0	18,120.1	11,907.8	114.8	111.6	26.63	6,173.8	-666.2	1,445.6	1,309.9	135.73	10.651	
19,593.2	13,200.0	18,200.2	11,908.1	116.2	112.8	26.63	6,254.0	-667.1	1,445.1	1,307.9	137.27	10.527	
19,600.0	13,200.0	18,205.9	11,908.1	116.3	112.9	26.63	6,259.7	-667.2	1,445.1	1,307.8	137.38	10.519	
19,700.0	13,200.0	18,279.9	11,907.3	117.8	114.0	26.60	6,333.6	-668.1	1,446.0	1,307.2	138.79	10.418	
19,800.0	13,200.0	18,367.3	11,903.8	119.3	115.4	26.50	6,421.0	-669.9	1,448.8	1,308.6	140.27	10.329	
19,900.0	13,200.0	18,473.2	11,901.2	120.8	117.0	26.43	6,526.7	-671.4	1,450.7	1,308.5	142.14	10.206	
20,000.0	13,200.0	18,550.3	11,899.1	122.3	118.2	26.43	6,603.9	-670.8	1,453.9	1,310.2	143.64	10.121	
20,100.0	13,200.0	18,640.2	11,895.2	123.8	119.6	26.40	6,693.7	-670.4	1,458.3	1,313.0	145.30	10.036	
20,200.0	13,200.0	18,755.3	11,889.9	125.3	121.4	26.31	6,808.6	-671.4	1,462.4	1,315.1	147.29	9.928	
20,300.0	13,200.0	18,869.0	11,885.2	126.8	123.1	26.17	6,922.2	-673.9	1,465.5	1,316.3	149.16	9.825	
20,400.0	13,200.0	18,960.3	11,882.5	128.4	124.6	26.13	7,013.4	-674.4	1,468.2	1,317.3	150.84	9.733	
20,500.0	13,200.0	19,055.4	11,879.6	129.9	126.0	26.14	7,108.5	-673.4	1,471.7	1,319.1	152.69	9.639	
20,600.0	13,200.0	19,173.0	11,876.1	131.4	127.9	26.12	7,226.1	-673.2	1,474.8	1,320.0	154.88	9.523	
20,700.0	13,200.0	19,294.7	11,873.6	132.9	129.8	26.04	7,347.7	-675.1	1,476.3	1,319.3	157.00	9.404	
20,800.0	13,200.0	19,389.6	11,871.8	134.5	131.3	25.95	7,442.6	-677.6	1,477.2	1,318.6	158.64	9.312	
20,900.0	13,200.0	19,464.0	11,870.5	136.0	132.4	25.96	7,517.0	-677.3	1,479.3	1,319.2	160.12	9.239	
21,000.0	13,200.0	19,541.7	11,868.7	137.6	133.6	26.03	7,594.6	-675.0	1,483.0	1,321.2	161.78	9.167	
21,100.0	13,200.0	19,697.9	11,868.8	139.1	136.1	26.35	7,750.6	-667.0	1,485.6	1,320.2	165.44	8.980	
21,200.0	13,200.0	19,807.4	11,871.8	140.7	137.7	26.63	7,859.9	-661.2	1,485.8	1,317.6	168.19	8.834	
21,300.0	13,200.0	19,940.9	11,876.6	142.2	139.8	26.96	7,993.1	-655.1	1,485.1	1,313.7	171.44	8.663	
21,400.0	13,200.0	20,034.8	11,880.6	143.8	141.3	27.18	8,086.9	-651.6	1,483.3	1,309.5	173.83	8.533	
21,500.0	13,200.0	20,181.2	11,888.8	145.3	143.6	27.48	8,233.0	-648.2	1,479.6	1,302.5	177.19	8.351	
21,600.0	13,200.0	20,279.0	11,894.8	146.9	145.1	27.61	8,330.6	-648.2	1,474.6	1,295.1	179.48	8.216	
21,700.0	13,200.0	20,353.3	11,898.2	148.4	146.3	27.67	8,404.8	-648.9	1,470.6	1,289.3	181.26	8.113	
21,800.0	13,200.0	20,428.6	11,899.1	150.0	147.5	27.65	8,480.1	-650.6	1,468.6	1,285.8	182.82	8.033	
21,900.0	13,200.0	20,521.6	11,899.3	151.5	149.0	27.57	8,573.0	-653.6	1,467.3	1,282.8	184.50	7.953	
21,940.1	13,200.0	20,549.6	11,899.0	152.2	149.4	27.53	8,601.0	-654.7	1,467.2	1,282.2	185.00	7.931	
22,000.0	13,200.0	20,593.0	11,897.9	153.1	150.1	27.46	8,644.4	-656.6	1,467.5	1,281.8	185.72	7.902	
22,100.0	13,200.0	20,686.2	11,894.3	154.7	151.6	27.26	8,737.4	-661.3	1,469.0	1,281.9	187.05	7.853	
22,200.0	13,200.0	20,761.7	11,890.8	156.2	152.8	27.10	8,812.8	-664.7	1,471.4	1,283.2	188.15	7.820	
22,300.0	13,200.0	20,845.3	11,886.5	157.8	154.1	26.98	8,896.2	-666.6	1,475.3	1,285.8	189.48	7.786	
22,400.0	13,200.0	20,935.5	11,881.9	159.4	155.6	26.91	8,986.3	-666.9	1,480.0	1,289.0	191.06	7.746	
22,500.0	13,200.0	21,028.1	11,876.5	161.0	157.0	26.82	9,078.8	-667.4	1,485.3	1,292.7	192.65	7.710	
22,600.0	13,200.0	21,166.4	11,869.5	162.5	159.2	26.72	9,216.8	-667.9	1,490.2	1,295.1	195.14	7.637	
22,700.0	13,200.0	21,268.7	11,866.7	164.1	160.9	26.71	9,319.1	-667.7	1,493.1	1,296.0	197.12	7.575	
22,800.0	13,200.0	21,379.4	11,863.1	165.7	162.6	26.64	9,429.7	-668.7	1,496.0	1,296.8	199.11	7.513	
22,900.0	13,200.0	21,510.0	11,862.1	167.3	164.7	26.60	9,560.3	-670.3	1,496.3	1,294.8	201.52	7.425	
23,000.0	13,200.0	21,610.9	11,861.1	168.9	166.3	26.53	9,661.2	-672.8	1,496.4	1,293.1	203.29	7.361	
23,100.0	13,200.0	21,721.6	11,859.4	170.4	168.1	26.35	9,771.8	-678.0	1,496.1	1,291.1	204.93	7.300	
23,200.0	13,200.0	21,849.0	11,857.8	172.0	170.2	26.01	9,898.7	-688.0	1,494.0	1,287.7	206.34	7.240	
23,300.0	13,200.0	21,931.9	11,856.0	173.6	171.5	25.74	9,981.3	-695.7	1,492.1	1,284.9	207.27	7.199	
23,400.0	13,200.0	22,036.2	11,853.0	175.2	173.2	25.33	10,084.9	-706.8	1,490.5	1,282.4	208.11	7.162	
23,503.7	13,200.0	22,116.0	11,850.3	176.8	174.5	24.99	10,164.2	-715.8	1,489.1	1,280.3	208.78	7.132	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #131H - Actual - Actual

Offset Site Error: 0.0 usft

Survey Program: 76-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
23,504.9	13,200.0	22,116.0	11,850.3	176.9	174.5	24.99	10,164.2	-715.8	1,489.1	1,280.3	208.79	7.132	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #132H - 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	1.0	1.0	0.0	0.0	-135.24	-30.1	-29.9	42.4				
100.0	100.0	101.0	101.0	0.1	0.1	-135.24	-30.1	-29.9	42.4	42.2	0.26	163.264	
200.0	200.0	201.0	201.0	0.5	0.5	-135.24	-30.1	-29.9	42.4	41.5	0.98	43.437	
300.0	300.0	301.0	301.0	0.8	0.8	-135.24	-30.1	-29.9	42.4	40.7	1.69	25.051	
400.0	400.0	401.0	401.0	1.2	1.2	-135.24	-30.1	-29.9	42.4	40.0	2.41	17.601	
500.0	500.0	501.0	501.0	1.6	1.6	-135.24	-30.1	-29.9	42.4	39.3	3.13	13.566	
600.0	600.0	601.0	601.0	1.9	1.9	-135.24	-30.1	-29.9	42.4	38.6	3.84	11.036	
700.0	700.0	701.0	701.0	2.3	2.3	-135.24	-30.1	-29.9	42.4	37.9	4.56	9.302	
800.0	800.0	801.0	801.0	2.6	2.6	-135.24	-30.1	-29.9	42.4	37.2	5.28	8.038	
900.0	900.0	901.0	901.0	3.0	3.0	-135.24	-30.1	-29.9	42.4	36.4	6.00	7.077	
1,000.0	1,000.0	1,001.0	1,001.0	3.4	3.4	-135.24	-30.1	-29.9	42.4	35.7	6.71	6.321	
1,100.0	1,100.0	1,101.0	1,101.0	3.7	3.7	-135.24	-30.1	-29.9	42.4	35.0	7.43	5.711	
1,200.0	1,200.0	1,201.0	1,201.0	4.1	4.1	-135.24	-30.1	-29.9	42.4	34.3	8.15	5.209	
1,300.0	1,300.0	1,301.0	1,301.0	4.4	4.4	-135.24	-30.1	-29.9	42.4	33.6	8.86	4.787	
1,400.0	1,400.0	1,401.0	1,401.0	4.8	4.8	-135.24	-30.1	-29.9	42.4	32.9	9.58	4.429	
1,500.0	1,500.0	1,501.0	1,501.0	5.1	5.2	-135.24	-30.1	-29.9	42.4	32.1	10.30	4.121	
1,600.0	1,600.0	1,601.4	1,601.4	5.5	5.5	-136.29	-30.3	-29.0	42.0	31.0	11.00	3.815	
1,700.0	1,700.0	1,701.7	1,701.6	5.9	5.8	-139.53	-31.0	-26.4	40.7	29.0	11.70	3.481	
1,800.0	1,800.0	1,801.9	1,801.7	6.2	6.2	-145.33	-32.0	-22.2	39.0	26.6	12.40	3.142	
1,900.0	1,900.0	1,901.9	1,901.5	6.6	6.5	-154.20	-33.5	-16.2	37.2	24.1	13.11	2.840	
1,997.9	1,997.9	1,999.5	1,998.9	6.9	6.9	-166.10	-35.4	-8.8	36.4	22.6	13.80	2.639	CC
2,000.0	2,000.0	2,001.6	2,001.0	6.9	6.9	-166.38	-35.4	-8.6	36.4	22.6	13.82	2.636	ES
2,100.0	2,100.0	2,101.1	2,100.0	7.3	7.2	178.94	-37.7	0.7	37.7	23.2	14.52	2.597	SF
2,200.0	2,200.0	2,200.2	2,198.4	7.7	7.6	163.98	-40.4	11.6	42.1	26.9	15.21	2.768	
2,300.0	2,300.0	2,301.2	2,296.2	8.0	8.0	151.01	-43.5	24.1	49.9	34.0	15.89	3.142	
2,400.0	2,400.0	2,402.1	2,394.3	8.4	8.3	141.32	-46.8	37.5	60.3	43.7	16.58	3.638	
2,500.0	2,500.0	2,503.1	2,492.4	8.7	8.7	134.58	-50.1	50.8	71.9	54.6	17.28	4.162	
2,600.0	2,600.0	2,604.1	2,590.4	9.1	9.1	129.75	-53.4	64.2	84.2	66.2	17.98	4.683	
2,700.0	2,700.0	2,705.1	2,688.5	9.4	9.5	126.17	-56.7	77.6	96.9	78.3	18.69	5.188	
2,800.0	2,800.0	2,794.0	2,786.6	9.8	9.8	123.42	-60.0	91.0	110.0	90.6	19.35	5.682	
2,900.0	2,900.0	2,907.0	2,884.6	10.2	10.3	121.26	-63.4	104.4	123.2	103.1	20.11	6.126	
3,000.0	3,000.0	3,008.0	2,982.7	10.5	10.7	119.52	-66.7	117.7	136.5	115.7	20.82	6.558	
3,100.0	3,100.0	3,109.0	3,080.7	10.9	11.1	118.09	-70.0	131.1	150.0	128.5	21.54	6.965	
3,200.0	3,200.0	3,209.9	3,178.8	11.2	11.5	116.89	-73.3	144.5	163.5	141.3	22.25	7.349	
3,300.0	3,300.0	3,289.1	3,276.9	11.6	11.8	115.88	-76.6	157.9	177.1	154.2	22.89	7.738	
3,400.0	3,400.0	3,388.1	3,374.9	12.0	12.2	115.01	-79.9	171.3	190.8	167.2	23.60	8.083	
3,500.0	3,500.0	3,487.2	3,473.0	12.3	12.6	114.26	-83.2	184.6	204.4	180.1	24.31	8.408	
3,600.0	3,600.0	3,586.2	3,571.1	12.7	13.0	113.61	-86.5	198.0	218.2	193.1	25.03	8.717	
3,700.0	3,700.0	3,685.2	3,669.1	13.0	13.4	113.03	-89.8	211.4	231.9	206.1	25.74	9.008	
3,800.0	3,800.0	3,784.2	3,767.2	13.4	13.8	112.51	-93.2	224.8	245.6	219.2	26.46	9.285	
3,900.0	3,900.0	3,883.3	3,865.3	13.8	14.2	112.05	-96.5	238.1	259.4	232.2	27.17	9.548	
4,000.0	4,000.0	3,982.3	3,963.3	14.1	14.6	111.64	-99.8	251.5	273.2	245.3	27.89	9.797	
4,100.0	4,100.0	4,081.3	4,061.4	14.5	15.0	111.26	-103.1	264.9	287.0	258.4	28.60	10.034	
4,200.0	4,200.0	4,180.3	4,159.4	14.8	15.4	110.92	-106.4	278.3	300.8	271.5	29.32	10.260	
4,300.0	4,300.0	4,279.4	4,257.5	15.2	15.8	110.61	-109.7	291.7	314.6	284.6	30.03	10.476	
4,400.0	4,400.0	4,378.4	4,355.6	15.5	16.2	110.33	-113.0	305.0	328.5	297.7	30.75	10.681	
4,500.0	4,500.0	4,477.4	4,453.6	15.9	16.6	110.07	-116.3	318.4	342.3	310.8	31.47	10.877	
4,600.0	4,600.0	4,576.4	4,551.7	16.3	17.1	109.83	-119.6	331.8	356.1	323.9	32.19	11.065	
4,700.0	4,700.0	4,675.5	4,649.8	16.6	17.5	109.61	-123.0	345.2	370.0	337.1	32.90	11.244	
4,800.0	4,800.0	4,774.5	4,747.8	17.0	17.9	109.40	-126.3	358.5	383.8	350.2	33.62	11.416	
4,900.0	4,900.0	4,873.5	4,845.9	17.3	18.3	109.21	-129.6	371.9	397.7	363.3	34.34	11.581	
5,000.0	5,000.0	4,972.6	4,943.9	17.7	18.7	109.03	-132.9	385.3	411.5	376.5	35.06	11.738	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #132H - 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
5,100.0	5,100.0	5,071.6	5,042.0	18.1	19.1	108.86	-136.2	398.7	425.4	389.6	35.78	11.890	
5,200.0	5,200.0	5,170.6	5,140.1	18.4	19.5	108.70	-139.5	412.1	439.3	402.8	36.50	12.036	
5,300.0	5,300.0	5,269.6	5,238.1	18.8	19.9	108.56	-142.8	425.4	453.2	415.9	37.22	12.176	
5,400.0	5,400.0	5,368.7	5,336.2	19.1	20.3	108.42	-146.1	438.8	467.0	429.1	37.94	12.311	
5,500.0	5,500.0	5,467.7	5,434.3	19.5	20.7	108.29	-149.4	452.2	480.9	442.2	38.66	12.440	
5,600.0	5,600.0	5,566.7	5,532.3	19.8	21.2	108.16	-152.8	465.6	494.8	455.4	39.38	12.566	
5,700.0	5,700.0	5,665.7	5,630.4	20.2	21.6	108.05	-156.1	479.0	508.7	468.6	40.10	12.686	
5,800.0	5,800.0	5,764.8	5,728.5	20.6	22.0	107.94	-159.4	492.3	522.5	481.7	40.82	12.802	
5,900.0	5,900.0	5,863.8	5,826.5	20.9	22.4	107.83	-162.7	505.7	536.4	494.9	41.54	12.915	
6,000.0	6,000.0	5,962.8	5,924.6	21.3	22.8	107.73	-166.0	519.1	550.3	508.1	42.26	13.023	
6,100.0	6,100.0	6,061.8	6,022.6	21.6	23.2	107.64	-169.3	532.5	564.2	521.2	42.98	13.128	
6,200.0	6,200.0	6,160.9	6,120.7	22.0	23.6	107.55	-172.6	545.8	578.1	534.4	43.70	13.229	
6,300.0	6,300.0	6,259.9	6,218.8	22.4	24.1	107.46	-175.9	559.2	592.0	547.6	44.42	13.327	
6,400.0	6,400.0	6,358.9	6,316.8	22.7	24.5	107.38	-179.2	572.6	605.9	560.7	45.14	13.422	
6,500.0	6,500.0	6,458.0	6,414.9	23.1	24.9	107.30	-182.6	586.0	619.8	573.9	45.86	13.514	
6,600.0	6,600.0	6,557.0	6,513.0	23.4	25.3	107.23	-185.9	599.4	633.7	587.1	46.58	13.603	
6,700.0	6,700.0	6,656.0	6,611.0	23.8	25.7	107.16	-189.2	612.7	647.6	600.3	47.30	13.689	
6,800.0	6,800.0	6,755.0	6,709.1	24.1	26.1	107.09	-192.5	626.1	661.4	613.4	48.02	13.773	
6,900.0	6,900.0	6,854.1	6,807.1	24.5	26.5	107.02	-195.8	639.5	675.3	626.6	48.75	13.854	
7,000.0	7,000.0	6,953.1	6,905.2	24.9	27.0	106.96	-199.1	652.9	689.2	639.8	49.47	13.933	
7,100.0	7,100.0	7,052.0	7,003.2	25.2	27.4	-147.57	-202.4	666.2	703.9	653.7	50.18	14.028	
7,200.0	7,200.0	7,155.2	7,105.3	25.5	27.8	-147.66	-205.9	680.1	719.9	669.0	50.92	14.139	
7,300.0	7,299.9	7,277.1	7,226.5	25.9	28.3	-147.86	-209.3	694.0	735.3	683.5	51.80	14.195	
7,400.0	7,399.7	7,400.0	7,348.9	26.2	28.8	-148.13	-211.8	704.1	748.9	696.3	52.63	14.230	
7,500.0	7,499.4	7,523.6	7,472.3	26.6	29.2	-148.47	-213.4	710.5	760.9	707.5	53.41	14.246	
7,600.0	7,598.9	7,647.9	7,596.5	26.9	29.6	-148.89	-214.0	713.0	771.2	717.0	54.13	14.245	
7,700.0	7,698.3	7,750.6	7,699.3	27.2	29.9	-149.28	-214.0	713.0	780.9	726.1	54.81	14.249	
7,800.0	7,797.4	7,849.7	7,798.4	27.6	30.3	-149.71	-214.0	713.0	792.2	736.7	55.48	14.280	
7,900.0	7,896.3	7,948.6	7,897.3	27.9	30.6	-150.17	-214.0	713.0	805.0	748.9	56.15	14.337	
8,000.0	7,994.9	8,047.3	7,995.9	28.3	30.9	-150.67	-214.0	713.0	819.4	762.6	56.82	14.422	
8,100.0	8,093.3	8,145.6	8,094.3	28.6	31.2	-151.21	-214.0	713.0	835.4	777.9	57.49	14.532	
8,182.6	8,174.2	8,226.5	8,175.2	28.9	31.4	-151.67	-214.0	713.0	849.8	791.8	58.04	14.641	
8,200.0	8,191.3	8,243.6	8,192.3	29.0	31.5	-151.78	-214.0	713.0	853.0	794.8	58.16	14.666	
8,300.0	8,289.1	8,341.5	8,290.1	29.4	31.8	-152.41	-214.0	713.0	871.2	812.4	58.83	14.808	
8,400.0	8,387.0	8,439.4	8,388.0	29.7	32.1	-153.02	-214.0	713.0	889.5	830.0	59.51	14.947	
8,500.0	8,484.9	8,537.2	8,485.9	30.1	32.4	-153.61	-214.0	713.0	907.9	847.7	60.18	15.085	
8,600.0	8,582.8	8,635.1	8,583.8	30.5	32.8	-154.17	-214.0	713.0	926.4	865.5	60.86	15.221	
8,700.0	8,680.6	8,733.0	8,681.6	30.9	33.1	-154.71	-214.0	713.0	944.9	883.4	61.54	15.354	
8,800.0	8,778.5	8,830.9	8,779.5	31.2	33.4	-155.23	-214.0	713.0	963.6	901.3	62.22	15.486	
8,900.0	8,876.4	8,928.7	8,877.4	31.6	33.7	-155.72	-214.0	713.0	982.3	919.4	62.90	15.615	
9,000.0	8,974.3	9,026.6	8,975.3	32.0	34.0	-156.21	-214.0	713.0	1,001.0	937.5	63.59	15.743	
9,100.0	9,072.1	9,124.5	9,073.1	32.4	34.3	-156.67	-214.0	713.0	1,019.9	955.6	64.27	15.868	
9,200.0	9,170.0	9,222.4	9,171.0	32.8	34.7	-157.11	-214.0	713.0	1,038.8	973.8	64.96	15.992	
9,300.0	9,267.9	9,320.3	9,268.9	33.2	35.0	-157.54	-214.0	713.0	1,057.8	992.1	65.65	16.113	
9,400.0	9,365.8	9,418.1	9,366.8	33.6	35.3	-157.96	-214.0	713.0	1,076.8	1,010.5	66.33	16.233	
9,500.0	9,463.7	9,516.0	9,464.7	34.0	35.6	-158.36	-214.0	713.0	1,095.9	1,028.9	67.02	16.351	
9,600.0	9,561.5	9,613.9	9,562.5	34.4	35.9	-158.75	-214.0	713.0	1,115.0	1,047.3	67.71	16.466	
9,700.0	9,659.4	9,711.8	9,660.4	34.8	36.3	-159.12	-214.0	713.0	1,134.2	1,065.8	68.41	16.580	
9,800.0	9,757.3	9,809.6	9,758.3	35.2	36.6	-159.48	-214.0	713.0	1,153.4	1,084.3	69.10	16.693	
9,900.0	9,855.2	9,907.5	9,856.2	35.6	36.9	-159.83	-214.0	713.0	1,172.7	1,102.9	69.79	16.803	
10,000.0	9,953.0	10,005.4	9,954.0	36.0	37.2	-160.17	-214.0	713.0	1,192.0	1,121.5	70.48	16.911	
10,100.0	10,050.9	10,103.3	10,051.9	36.4	37.5	-160.50	-214.0	713.0	1,211.3	1,140.1	71.18	17.018	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #132H - 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
10,200.0	10,148.8	10,201.1	10,149.8	36.9	37.9	-160.82	-214.0	713.0	1,230.7	1,158.8	71.87	17.123	
10,300.0	10,246.7	10,301.0	10,247.7	37.3	38.2	-161.13	-214.0	713.0	1,250.1	1,177.5	72.58	17.225	
10,400.0	10,344.6	10,403.1	10,345.6	37.7	38.5	-161.43	-214.0	713.0	1,269.6	1,196.3	73.29	17.323	
10,500.0	10,442.4	10,505.2	10,443.4	38.1	38.9	-161.71	-214.0	713.0	1,289.1	1,215.1	74.00	17.420	
10,600.0	10,540.3	10,607.3	10,541.3	38.5	39.2	-162.00	-214.0	713.0	1,308.6	1,233.9	74.71	17.515	
10,700.0	10,638.2	10,709.5	10,639.2	39.0	39.6	-162.27	-214.0	713.0	1,328.1	1,252.7	75.42	17.608	
10,800.0	10,736.1	10,788.4	10,737.1	39.4	39.8	-162.53	-214.0	713.0	1,347.7	1,271.6	76.06	17.719	
10,900.0	10,833.9	10,886.3	10,834.9	39.8	40.2	-162.79	-214.0	713.0	1,367.3	1,290.5	76.76	17.813	
11,000.0	10,931.8	10,984.2	10,932.8	40.2	40.5	-163.04	-214.0	713.0	1,386.9	1,309.5	77.46	17.905	
11,100.0	11,029.7	11,082.0	11,030.7	40.7	40.8	-163.28	-214.0	713.0	1,406.6	1,328.4	78.16	17.996	
11,200.0	11,127.6	11,179.9	11,128.6	41.1	41.1	-163.52	-214.0	713.0	1,426.2	1,347.4	78.86	18.085	
11,300.0	11,225.5	11,277.8	11,226.5	41.5	41.5	-163.75	-214.0	713.0	1,445.9	1,366.4	79.56	18.173	
11,400.0	11,323.3	11,375.7	11,324.3	42.0	41.8	-163.97	-214.0	713.0	1,465.6	1,385.4	80.27	18.260	
11,500.0	11,421.2	11,474.4	11,423.0	42.4	42.1	-164.27	-212.1	713.0	1,485.4	1,404.4	80.97	18.345	
11,523.5	11,444.2	11,497.5	11,446.0	42.5	42.2	-164.41	-209.8	713.0	1,490.0	1,408.9	81.13	18.365	
11,600.0	11,519.2	11,570.3	11,517.5	42.8	42.4	-165.13	-196.4	712.9	1,504.4	1,422.8	81.64	18.427	
11,700.0	11,617.7	11,657.8	11,600.4	43.3	42.7	-166.40	-168.5	712.7	1,521.8	1,439.5	82.26	18.500	
11,800.0	11,716.7	11,734.9	11,669.1	43.7	42.9	-167.86	-133.7	712.4	1,538.2	1,455.4	82.80	18.576	
11,900.0	11,815.9	11,800.0	11,723.0	44.1	43.0	-169.32	-97.3	712.1	1,554.5	1,471.2	83.24	18.675	
12,000.0	11,915.5	11,857.3	11,766.9	44.4	43.1	-170.76	-60.4	711.8	1,571.4	1,487.9	83.55	18.809	
12,100.0	12,015.2	11,900.0	11,797.0	44.8	43.2	-171.92	-30.2	711.6	1,589.6	1,506.0	83.65	19.003	
12,200.0	12,115.1	11,950.0	11,829.3	45.2	43.2	-173.35	7.9	711.3	1,609.5	1,525.9	83.67	19.237	
12,300.0	12,215.1	11,979.9	11,847.0	45.5	43.3	-174.25	32.0	711.1	1,631.4	1,548.0	83.39	19.563	
12,311.9	12,227.0	11,983.7	11,849.2	45.5	43.3	80.14	35.1	711.0	1,634.1	1,550.8	83.35	19.605	
12,400.0	12,315.1	12,009.5	11,863.3	45.8	43.3	79.38	56.7	710.9	1,656.4	1,573.4	82.96	19.966	
12,500.0	12,415.1	12,034.9	11,876.2	46.2	43.3	78.61	78.6	710.7	1,686.1	1,603.7	82.36	20.473	
12,600.0	12,515.1	12,050.0	11,883.4	46.5	43.3	78.14	91.9	710.6	1,720.4	1,638.9	81.53	21.101	
12,700.0	12,615.1	12,075.8	11,894.9	46.9	43.3	77.33	115.0	710.4	1,759.2	1,678.5	80.71	21.797	
12,711.9	12,627.0	12,077.9	11,895.8	46.9	43.3	77.26	116.9	710.4	1,764.1	1,683.5	80.60	21.889	
12,750.0	12,665.1	12,084.9	11,898.7	47.0	43.3	97.21	123.2	710.3	1,780.4	1,700.2	80.23	22.192	
12,800.0	12,714.8	12,100.0	11,904.7	47.2	43.4	94.23	137.1	710.2	1,803.1	1,723.3	79.79	22.597	
12,850.0	12,763.8	12,100.0	11,904.7	47.4	43.4	91.51	137.1	710.2	1,827.0	1,747.8	79.21	23.064	
12,900.0	12,811.8	12,116.6	11,911.0	47.5	43.4	88.21	152.5	710.1	1,851.9	1,773.1	78.81	23.499	
12,950.0	12,858.3	12,128.4	11,915.1	47.7	43.4	84.96	163.5	710.0	1,877.4	1,799.1	78.36	23.959	
13,000.0	12,903.1	12,150.0	11,922.1	47.8	43.4	81.49	183.9	709.8	1,903.5	1,825.5	78.03	24.396	
13,050.0	12,945.8	12,150.0	11,922.1	48.0	43.4	78.47	183.9	709.8	1,929.6	1,852.1	77.53	24.889	
13,100.0	12,986.1	12,166.6	11,926.9	48.1	43.4	75.23	199.8	709.7	1,955.8	1,878.5	77.22	25.327	
13,150.0	13,023.7	12,180.0	11,930.5	48.3	43.4	72.15	212.7	709.6	1,981.6	1,904.7	76.92	25.761	
13,200.0	13,058.2	12,200.0	11,935.3	48.4	43.4	69.18	232.2	709.5	2,007.0	1,930.3	76.72	26.158	
13,250.0	13,089.4	12,200.0	11,935.3	48.5	43.4	66.55	232.2	709.5	2,031.7	1,955.3	76.43	26.582	
13,300.0	13,117.2	12,221.7	11,939.7	48.7	43.5	63.98	253.4	709.3	2,055.4	1,979.1	76.36	26.919	
13,350.0	13,141.1	12,250.0	11,944.2	48.8	43.5	61.64	281.3	709.1	2,078.3	2,002.0	76.37	27.213	
13,400.0	13,161.2	12,250.0	11,944.2	48.9	43.5	59.57	281.3	709.1	2,099.7	2,023.5	76.28	27.527	
13,450.0	13,177.2	12,250.0	11,944.2	49.1	43.5	57.67	281.3	709.1	2,120.1	2,043.9	76.26	27.801	
13,500.0	13,189.1	12,279.4	11,947.4	49.2	43.5	56.05	310.6	708.8	2,138.7	2,062.2	76.47	27.969	
13,550.0	13,196.6	12,300.0	11,948.8	49.4	43.6	54.63	331.1	708.7	2,155.9	2,079.2	76.69	28.114	
13,600.0	13,199.8	12,300.0	11,948.8	49.6	43.6	53.31	331.1	708.7	2,171.5	2,094.6	76.88	28.244	
13,611.9	13,200.0	12,312.1	11,949.2	49.6	43.6	53.10	343.2	708.6	2,174.8	2,097.9	76.99	28.250	
13,700.0	13,200.0	12,353.0	11,949.3	50.0	43.7	53.65	384.1	708.2	2,200.0	2,122.4	77.57	28.360	
13,800.0	13,200.0	12,447.5	11,948.8	50.4	43.9	54.44	478.6	707.5	2,226.7	2,148.3	78.43	28.392	
13,900.0	13,200.0	12,543.0	11,948.2	50.9	44.2	55.13	574.1	706.7	2,250.9	2,171.6	79.34	28.370	
14,000.0	13,200.0	12,639.4	11,947.6	51.4	44.6	55.73	670.5	705.9	2,272.4	2,192.1	80.32	28.293	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #132H - 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
14,100.0	13,200.0	12,736.7	11,947.0	52.0	45.1	56.24	767.7	705.2	2,291.2	2,209.8	81.35	28.163	
14,200.0	13,200.0	12,834.7	11,946.4	52.6	45.6	56.66	865.8	704.4	2,307.1	2,224.7	82.45	27.984	
14,300.0	13,200.0	12,933.5	11,945.7	53.2	46.1	56.99	964.6	703.6	2,320.2	2,236.6	83.60	27.753	
14,400.0	13,200.0	13,032.8	11,945.0	53.8	46.8	57.25	1,063.9	702.8	2,330.4	2,245.6	84.81	27.479	
14,500.0	13,200.0	13,132.5	11,944.4	54.5	47.4	57.42	1,163.5	702.0	2,337.7	2,251.7	86.06	27.163	
14,600.0	13,200.0	13,232.4	11,943.7	55.1	48.2	57.52	1,263.4	701.2	2,342.1	2,254.8	87.36	26.810	
14,687.2	13,200.0	13,319.6	11,943.1	55.7	48.9	57.54	1,350.6	700.5	2,343.5	2,255.0	88.52	26.475	
14,700.0	13,200.0	13,332.4	11,943.0	55.8	49.0	57.54	1,363.4	700.4	2,343.6	2,254.9	88.69	26.424	
14,800.0	13,200.0	13,432.3	11,942.4	56.5	49.8	57.52	1,463.4	699.6	2,343.9	2,253.8	90.08	26.019	
14,900.0	13,200.0	13,532.3	11,941.7	57.3	50.6	57.51	1,563.4	698.8	2,344.2	2,252.7	91.55	25.607	
15,000.0	13,200.0	13,632.3	11,941.0	58.1	51.5	57.49	1,663.4	698.0	2,344.6	2,251.5	93.08	25.189	
15,100.0	13,200.0	13,732.3	11,940.4	58.9	52.5	57.48	1,763.4	697.2	2,344.9	2,250.2	94.67	24.768	
15,200.0	13,200.0	13,832.3	11,939.7	59.7	53.4	57.47	1,863.3	696.4	2,345.2	2,248.9	96.33	24.345	
15,300.0	13,200.0	13,932.3	11,939.0	60.6	54.4	57.45	1,963.3	695.6	2,345.6	2,247.5	98.05	23.923	
15,400.0	13,200.0	14,032.3	11,938.4	61.6	55.5	57.44	2,063.3	694.7	2,345.9	2,246.1	99.82	23.502	
15,500.0	13,200.0	14,132.3	11,937.7	62.5	56.5	57.42	2,163.3	693.9	2,346.2	2,244.6	101.64	23.083	
15,600.0	13,200.0	14,232.3	11,937.0	63.5	57.6	57.41	2,263.3	693.1	2,346.6	2,243.1	103.51	22.669	
15,700.0	13,200.0	14,332.3	11,936.4	64.5	58.7	57.40	2,363.3	692.3	2,346.9	2,241.5	105.43	22.260	
15,800.0	13,200.0	14,432.3	11,935.7	65.5	59.9	57.38	2,463.3	691.5	2,347.2	2,239.8	107.40	21.856	
15,900.0	13,200.0	14,532.3	11,935.0	66.6	61.0	57.37	2,563.3	690.7	2,347.6	2,238.2	109.40	21.458	
16,000.0	13,200.0	14,632.3	11,934.4	67.7	62.2	57.35	2,663.3	689.9	2,347.9	2,236.5	111.45	21.068	
16,100.0	13,200.0	14,732.3	11,933.7	68.8	63.4	57.34	2,763.3	689.1	2,348.2	2,234.7	113.53	20.684	
16,200.0	13,200.0	14,832.3	11,933.0	69.9	64.7	57.32	2,863.3	688.3	2,348.6	2,232.9	115.64	20.309	
16,300.0	13,200.0	14,932.3	11,932.4	71.1	65.9	57.31	2,963.3	687.5	2,348.9	2,231.1	117.79	19.941	
16,400.0	13,200.0	15,032.3	11,931.7	72.3	67.2	57.30	3,063.3	686.7	2,349.2	2,229.3	119.98	19.581	
16,500.0	13,200.0	15,132.3	11,931.0	73.5	68.5	57.28	3,163.2	685.9	2,349.6	2,227.4	122.19	19.229	
16,600.0	13,200.0	15,232.3	11,930.4	74.7	69.7	57.27	3,263.2	685.1	2,349.9	2,225.5	124.43	18.886	
16,700.0	13,200.0	15,332.3	11,929.7	75.9	71.1	57.25	3,363.2	684.3	2,350.2	2,223.6	126.69	18.551	
16,800.0	13,200.0	15,432.3	11,929.0	77.1	72.4	57.24	3,463.2	683.5	2,350.6	2,221.6	128.98	18.224	
16,900.0	13,200.0	15,532.3	11,928.4	78.4	73.7	57.23	3,563.2	682.7	2,350.9	2,219.6	131.30	17.905	
17,000.0	13,200.0	15,632.3	11,927.7	79.7	75.1	57.21	3,663.2	681.9	2,351.3	2,217.6	133.64	17.594	
17,100.0	13,200.0	15,732.3	11,927.0	81.0	76.4	57.20	3,763.2	681.1	2,351.6	2,215.6	136.00	17.292	
17,200.0	13,200.0	15,832.3	11,926.4	82.3	77.8	57.18	3,863.2	680.3	2,351.9	2,213.6	138.37	16.997	
17,300.0	13,200.0	15,932.3	11,925.7	83.6	79.2	57.17	3,963.2	679.5	2,352.3	2,211.5	140.77	16.710	
17,400.0	13,200.0	16,032.3	11,925.0	84.9	80.6	57.16	4,063.2	678.7	2,352.6	2,209.4	143.19	16.430	
17,500.0	13,200.0	16,132.3	11,924.4	86.3	82.0	57.14	4,163.2	677.9	2,352.9	2,207.3	145.62	16.158	
17,600.0	13,200.0	16,232.3	11,923.7	87.6	83.4	57.13	4,263.2	677.1	2,353.3	2,205.2	148.07	15.893	
17,700.0	13,200.0	16,332.3	11,923.0	89.0	84.8	57.11	4,363.2	676.3	2,353.6	2,203.1	150.54	15.635	
17,800.0	13,200.0	16,432.3	11,922.4	90.3	86.3	57.10	4,463.1	675.5	2,353.9	2,200.9	153.02	15.384	
17,900.0	13,200.0	16,532.3	11,921.7	91.7	87.7	57.09	4,563.1	674.7	2,354.3	2,198.8	155.51	15.139	
18,000.0	13,200.0	16,632.3	11,921.0	93.1	89.2	57.07	4,663.1	673.9	2,354.6	2,196.6	158.02	14.901	
18,100.0	13,200.0	16,732.3	11,920.4	94.5	90.6	57.06	4,763.1	673.1	2,355.0	2,194.4	160.53	14.669	
18,200.0	13,200.0	16,832.3	11,919.7	95.9	92.1	57.04	4,863.1	672.3	2,355.3	2,192.2	163.07	14.444	
18,300.0	13,200.0	16,932.3	11,919.0	97.3	93.5	57.03	4,963.1	671.5	2,355.6	2,190.0	165.61	14.224	
18,400.0	13,200.0	17,032.3	11,918.4	98.7	95.0	57.02	5,063.1	670.7	2,356.0	2,187.8	168.16	14.010	
18,500.0	13,200.0	17,132.3	11,917.7	100.2	96.5	57.00	5,163.1	669.9	2,356.3	2,185.6	170.73	13.802	
18,600.0	13,200.0	17,232.3	11,917.0	101.6	98.0	56.99	5,263.1	669.1	2,356.6	2,183.3	173.30	13.599	
18,700.0	13,200.0	17,332.3	11,916.3	103.0	99.5	56.97	5,363.1	668.3	2,357.0	2,181.1	175.88	13.401	
18,800.0	13,200.0	17,432.3	11,915.7	104.5	101.0	56.96	5,463.1	667.4	2,357.3	2,178.8	178.47	13.208	
18,900.0	13,200.0	17,532.3	11,915.0	105.9	102.5	56.94	5,563.1	666.6	2,357.7	2,176.6	181.07	13.020	
19,000.0	13,200.0	17,632.3	11,914.3	107.4	104.0	56.93	5,663.1	665.8	2,358.0	2,174.3	183.68	12.837	
19,100.0	13,200.0	17,732.3	11,913.7	108.9	105.5	56.92	5,763.0	665.0	2,358.3	2,172.0	186.30	12.659	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #132H - 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
19,200.0	13,200.0	17,832.2	11,913.0	110.3	107.0	56.90	5,863.0	664.2	2,358.7	2,169.8	188.92	12.485	
19,300.0	13,200.0	17,932.2	11,912.3	111.8	108.5	56.89	5,963.0	663.4	2,359.0	2,167.5	191.55	12.315	
19,400.0	13,200.0	18,032.2	11,911.7	113.3	110.0	56.88	6,063.0	662.6	2,359.4	2,165.2	194.19	12.150	
19,500.0	13,200.0	18,132.2	11,911.0	114.8	111.6	56.86	6,163.0	661.8	2,359.7	2,162.9	196.83	11.988	
19,600.0	13,200.0	18,232.2	11,910.3	116.3	113.1	56.85	6,263.0	661.0	2,360.0	2,160.5	199.48	11.831	
19,700.0	13,200.0	18,332.2	11,909.7	117.8	114.6	56.83	6,363.0	660.2	2,360.4	2,158.2	202.14	11.677	
19,800.0	13,200.0	18,432.2	11,909.0	119.3	116.2	56.82	6,463.0	659.4	2,360.7	2,155.9	204.80	11.527	
19,900.0	13,200.0	18,532.2	11,908.3	120.8	117.7	56.81	6,563.0	658.6	2,361.1	2,153.6	207.47	11.380	
20,000.0	13,200.0	18,632.2	11,907.7	122.3	119.3	56.79	6,663.0	657.8	2,361.4	2,151.3	210.14	11.237	
20,100.0	13,200.0	18,732.2	11,907.0	123.8	120.8	56.78	6,763.0	657.0	2,361.7	2,148.9	212.82	11.098	
20,200.0	13,200.0	18,832.2	11,906.3	125.3	122.4	56.76	6,863.0	656.2	2,362.1	2,146.6	215.50	10.961	
20,300.0	13,200.0	18,932.2	11,905.7	126.8	123.9	56.75	6,963.0	655.4	2,362.4	2,144.2	218.18	10.828	
20,400.0	13,200.0	19,032.2	11,905.0	128.4	125.5	56.74	7,062.9	654.6	2,362.8	2,141.9	220.87	10.697	
20,500.0	13,200.0	19,132.2	11,904.3	129.9	127.0	56.72	7,162.9	653.8	2,363.1	2,139.5	223.57	10.570	
20,600.0	13,200.0	19,232.2	11,903.7	131.4	128.6	56.71	7,262.9	653.0	2,363.4	2,137.2	226.27	10.445	
20,700.0	13,200.0	19,332.2	11,903.0	132.9	130.1	56.69	7,362.9	652.2	2,363.8	2,134.8	228.97	10.324	
20,800.0	13,200.0	19,432.2	11,902.3	134.5	131.7	56.68	7,462.9	651.4	2,364.1	2,132.4	231.67	10.204	
20,900.0	13,200.0	19,532.2	11,901.7	136.0	133.3	56.67	7,562.9	650.6	2,364.5	2,130.1	234.38	10.088	
21,000.0	13,200.0	19,632.2	11,901.0	137.6	134.8	56.65	7,662.9	649.8	2,364.8	2,127.7	237.10	9.974	
21,100.0	13,200.0	19,732.2	11,900.3	139.1	136.4	56.64	7,762.9	649.0	2,365.1	2,125.3	239.81	9.862	
21,200.0	13,200.0	19,832.2	11,899.7	140.7	138.0	56.62	7,862.9	648.2	2,365.5	2,122.9	242.53	9.753	
21,300.0	13,200.0	19,932.2	11,899.0	142.2	139.6	56.61	7,962.9	647.4	2,365.8	2,120.6	245.25	9.646	
21,400.0	13,200.0	20,032.2	11,898.3	143.8	141.1	56.60	8,062.9	646.6	2,366.2	2,118.2	247.98	9.542	
21,500.0	13,200.0	20,132.2	11,897.7	145.3	142.7	56.58	8,162.9	645.8	2,366.5	2,115.8	250.71	9.439	
21,600.0	13,200.0	20,232.2	11,897.0	146.9	144.3	56.57	8,262.9	645.0	2,366.8	2,113.4	253.44	9.339	
21,700.0	13,200.0	20,332.2	11,896.3	148.4	145.9	56.55	8,362.8	644.2	2,367.2	2,111.0	256.17	9.241	
21,800.0	13,200.0	20,432.2	11,895.7	150.0	147.5	56.54	8,462.8	643.4	2,367.5	2,108.6	258.90	9.144	
21,900.0	13,200.0	20,532.2	11,895.0	151.5	149.1	56.53	8,562.8	642.6	2,367.9	2,106.2	261.64	9.050	
22,000.0	13,200.0	20,632.2	11,894.3	153.1	150.6	56.51	8,662.8	641.8	2,368.2	2,103.8	264.38	8.958	
22,100.0	13,200.0	20,732.2	11,893.7	154.7	152.2	56.50	8,762.8	640.9	2,368.6	2,101.4	267.12	8.867	
22,200.0	13,200.0	20,832.2	11,893.0	156.2	153.8	56.49	8,862.8	640.1	2,368.9	2,099.0	269.87	8.778	
22,300.0	13,200.0	20,932.2	11,892.3	157.8	155.4	56.47	8,962.8	639.3	2,369.2	2,096.6	272.61	8.691	
22,400.0	13,200.0	21,032.2	11,891.7	159.4	157.0	56.46	9,062.8	638.5	2,369.6	2,094.2	275.36	8.605	
22,500.0	13,200.0	21,132.2	11,891.0	161.0	158.6	56.44	9,162.8	637.7	2,369.9	2,091.8	278.11	8.522	
22,600.0	13,200.0	21,232.2	11,890.3	162.5	160.2	56.43	9,262.8	636.9	2,370.3	2,089.4	280.86	8.439	
22,700.0	13,200.0	21,332.2	11,889.7	164.1	161.8	56.42	9,362.8	636.1	2,370.6	2,087.0	283.61	8.359	
22,800.0	13,200.0	21,432.2	11,889.0	165.7	163.4	56.40	9,462.8	635.3	2,371.0	2,084.6	286.37	8.279	
22,900.0	13,200.0	21,532.2	11,888.3	167.3	165.0	56.39	9,562.8	634.5	2,371.3	2,082.2	289.12	8.202	
23,000.0	13,200.0	21,632.2	11,887.7	168.9	166.6	56.37	9,662.7	633.7	2,371.7	2,079.8	291.88	8.125	
23,100.0	13,200.0	21,732.2	11,887.0	170.4	168.2	56.36	9,762.7	632.9	2,372.0	2,077.4	294.64	8.050	
23,200.0	13,200.0	21,832.2	11,886.3	172.0	169.8	56.35	9,862.7	632.1	2,372.3	2,074.9	297.40	7.977	
23,300.0	13,200.0	21,932.2	11,885.7	173.6	171.4	56.33	9,962.7	631.3	2,372.7	2,072.5	300.16	7.905	
23,400.0	13,200.0	22,032.2	11,885.0	175.2	173.0	56.32	10,062.7	630.5	2,373.0	2,070.1	302.92	7.834	
23,504.9	13,200.0	22,137.0	11,884.3	176.9	174.7	56.30	10,167.6	629.7	2,373.4	2,067.6	305.82	7.761	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #133H - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 161-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	90.08	-3.2	2,343.4	2,343.4				
100.0	100.0	103.3	103.3	0.1	0.2	90.08	-3.1	2,343.3	2,343.3	2,343.0	0.28	8,347.513	
200.0	200.0	203.8	203.8	0.5	0.4	90.07	-2.9	2,343.1	2,343.1	2,342.2	0.88	2,670.066	
300.0	300.0	308.8	308.8	0.8	0.8	90.07	-2.8	2,342.9	2,342.9	2,341.3	1.61	1,455.700	
370.8	370.8	370.8	370.8	1.1	1.0	90.07	-2.8	2,342.7	2,342.7	2,340.7	2.08	1,128.279	
400.0	400.0	396.3	396.3	1.2	1.1	90.07	-2.8	2,342.8	2,342.8	2,340.5	2.27	1,032.371	
500.0	500.0	496.5	496.5	1.6	1.4	90.07	-2.8	2,342.9	2,342.9	2,340.0	2.97	789.089	
600.0	600.0	601.2	601.2	1.9	1.8	90.07	-3.0	2,343.0	2,343.0	2,339.3	3.69	635.058	
633.8	633.8	633.8	633.8	2.0	1.9	90.07	-3.0	2,343.0	2,343.0	2,339.0	3.92	597.091	
700.0	700.0	697.1	697.1	2.3	2.1	90.08	-3.1	2,343.0	2,343.0	2,338.6	4.38	534.677	
800.0	800.0	795.3	795.3	2.6	2.4	90.08	-3.2	2,343.2	2,343.2	2,338.1	5.08	460.940	
900.0	900.0	897.0	897.0	3.0	2.8	90.08	-3.2	2,343.3	2,343.3	2,337.5	5.80	404.224	
1,000.0	1,000.0	1,004.1	1,004.1	3.4	3.2	90.08	-3.2	2,343.4	2,343.4	2,336.8	6.53	358.862	
1,100.0	1,100.0	1,104.0	1,104.0	3.7	3.5	90.08	-3.5	2,343.2	2,343.2	2,336.0	7.24	323.682	
1,200.0	1,200.0	1,254.0	1,253.9	4.1	4.1	90.11	-4.5	2,341.9	2,342.5	2,334.4	8.13	288.286	
1,300.0	1,300.0	1,443.0	1,442.7	4.4	4.7	90.20	-8.1	2,334.0	2,338.3	2,329.2	9.15	255.645	
1,400.0	1,400.0	1,625.5	1,624.4	4.8	5.4	90.36	-14.6	2,318.5	2,329.4	2,319.2	10.14	229.713	
1,500.0	1,500.0	1,695.7	1,694.4	5.1	5.6	90.44	-17.7	2,312.1	2,320.3	2,309.6	10.75	215.749	
1,600.0	1,600.0	1,763.1	1,761.4	5.5	5.9	90.52	-20.8	2,306.9	2,312.7	2,301.3	11.36	203.560	
1,700.0	1,700.0	1,831.3	1,829.5	5.9	6.1	90.59	-23.9	2,302.6	2,306.4	2,294.4	11.97	192.675	
1,800.0	1,800.0	1,907.6	1,905.6	6.2	6.4	90.67	-27.1	2,298.7	2,301.3	2,288.7	12.61	182.539	
1,900.0	1,900.0	1,979.0	1,976.9	6.6	6.7	90.73	-29.3	2,295.8	2,297.3	2,284.1	13.23	173.705	
2,000.0	2,000.0	2,064.1	2,061.9	6.9	7.0	90.76	-30.4	2,293.4	2,294.4	2,280.5	13.89	165.200	
2,100.0	2,100.0	2,180.6	2,178.4	7.3	7.4	90.76	-30.5	2,290.0	2,291.5	2,276.9	14.66	156.323	
2,200.0	2,200.0	2,316.6	2,314.3	7.7	7.9	90.74	-29.5	2,284.1	2,287.1	2,271.6	15.49	147.622	
2,300.0	2,300.0	2,403.9	2,401.5	8.0	8.2	90.75	-29.7	2,279.9	2,282.3	2,266.2	16.16	141.193	
2,400.0	2,400.0	2,479.0	2,476.5	8.4	8.5	90.78	-30.9	2,277.0	2,278.5	2,261.7	16.80	135.658	
2,500.0	2,500.0	2,565.7	2,563.1	8.7	8.8	90.85	-33.9	2,274.3	2,275.5	2,258.0	17.47	130.267	
2,600.0	2,600.0	2,653.3	2,650.6	9.1	9.1	90.95	-37.7	2,272.1	2,273.0	2,254.8	18.14	125.283	
2,700.0	2,700.0	2,750.4	2,747.6	9.4	9.5	91.03	-40.9	2,270.0	2,270.8	2,252.0	18.85	120.467	
2,800.0	2,800.0	2,881.1	2,878.2	9.8	9.9	91.14	-45.0	2,266.2	2,268.0	2,248.4	19.68	115.263	
2,900.0	2,900.0	2,974.6	2,971.5	10.2	10.3	91.22	-48.3	2,262.8	2,264.5	2,244.1	20.37	111.143	
3,000.0	3,000.0	3,043.0	3,039.9	10.5	10.5	91.26	-49.7	2,261.2	2,262.1	2,241.1	20.98	107.809	
3,100.0	3,100.0	3,113.6	3,110.6	10.9	10.8	91.27	-49.9	2,260.4	2,261.0	2,239.4	21.58	104.750	
3,167.6	3,167.6	3,171.7	3,168.6	11.1	11.0	91.25	-49.2	2,260.4	2,260.9	2,238.9	22.02	102.658	
3,200.0	3,200.0	3,203.2	3,200.1	11.2	11.1	91.23	-48.6	2,260.4	2,260.9	2,238.6	22.25	101.636	
3,300.0	3,300.0	3,338.0	3,334.8	11.6	11.5	91.13	-44.5	2,259.7	2,260.4	2,237.3	23.06	98.021	
3,400.0	3,400.0	3,496.8	3,493.4	12.0	12.1	90.98	-38.4	2,255.0	2,257.3	2,233.3	23.96	94.225	
3,500.0	3,500.0	3,605.4	3,601.9	12.3	12.5	90.88	-34.7	2,250.3	2,252.9	2,228.2	24.69	91.245	
3,600.0	3,600.0	3,686.0	3,682.4	12.7	12.7	90.83	-32.6	2,247.0	2,248.8	2,223.4	25.34	88.752	
3,700.0	3,700.0	3,766.9	3,763.3	13.0	13.0	90.82	-32.2	2,244.4	2,245.5	2,219.5	25.99	86.410	
3,800.0	3,800.0	3,853.9	3,850.2	13.4	13.3	90.88	-34.6	2,242.2	2,243.0	2,216.4	26.66	84.143	
3,900.0	3,900.0	3,949.5	3,945.5	13.8	13.7	91.05	-41.1	2,240.1	2,241.0	2,213.6	27.36	81.909	
4,000.0	4,000.0	4,045.8	4,041.3	14.1	14.0	91.31	-51.0	2,238.0	2,239.0	2,210.9	28.07	79.778	
4,100.0	4,100.0	4,157.4	4,152.3	14.5	14.4	91.60	-62.4	2,235.6	2,237.1	2,208.2	28.83	77.600	
4,200.0	4,200.0	4,310.9	4,305.3	14.8	15.0	91.88	-73.3	2,230.0	2,233.6	2,203.9	29.73	75.130	
4,300.0	4,300.0	4,500.6	4,494.4	15.2	15.7	92.12	-82.2	2,217.1	2,227.1	2,196.4	30.72	72.502	
4,400.0	4,400.0	4,618.3	4,611.2	15.5	16.2	92.32	-89.5	2,205.7	2,217.5	2,186.1	31.49	70.423	
4,500.0	4,500.0	4,698.4	4,690.8	15.9	16.5	92.46	-94.5	2,198.1	2,208.4	2,176.2	32.16	68.663	
4,600.0	4,600.0	4,822.3	4,814.1	16.3	16.9	92.64	-100.8	2,187.0	2,199.7	2,166.8	32.95	66.760	
4,700.0	4,700.0	4,933.8	4,924.8	16.6	17.4	92.80	-106.5	2,175.5	2,189.7	2,156.0	33.70	64.969	
4,800.0	4,800.0	5,015.9	5,006.4	17.0	17.7	92.93	-110.8	2,167.3	2,179.9	2,145.5	34.39	63.395	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #133H - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 161-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
4,900.0	4,900.0	5,085.1	5,075.2	17.3	17.9	93.02	-114.0	2,161.0	2,171.1	2,136.1	35.03	61.976	
5,000.0	5,000.0	5,170.3	5,160.1	17.7	18.3	93.12	-117.4	2,154.4	2,163.5	2,127.8	35.72	60.576	
5,100.0	5,100.0	5,263.5	5,252.9	18.1	18.6	93.23	-121.1	2,147.4	2,156.3	2,119.8	36.42	59.203	
5,200.0	5,200.0	5,355.9	5,345.1	18.4	19.0	93.33	-124.5	2,140.8	2,149.3	2,112.2	37.12	57.896	
5,300.0	5,300.0	5,450.9	5,439.7	18.8	19.3	93.43	-128.0	2,134.4	2,142.7	2,104.9	37.83	56.636	
5,400.0	5,400.0	5,562.7	5,551.2	19.1	19.7	93.55	-132.0	2,126.5	2,135.9	2,097.3	38.59	55.347	
5,500.0	5,500.0	5,656.9	5,645.2	19.5	20.1	93.65	-135.2	2,119.5	2,128.8	2,089.5	39.30	54.169	
5,600.0	5,600.0	5,730.0	5,718.0	19.8	20.4	93.72	-137.5	2,114.9	2,122.6	2,082.7	39.94	53.139	
5,700.0	5,700.0	5,808.8	5,796.7	20.2	20.7	93.78	-139.6	2,110.7	2,117.5	2,076.9	40.60	52.154	
5,800.0	5,800.0	5,912.1	5,899.8	20.6	21.0	93.87	-142.5	2,105.8	2,113.0	2,071.7	41.33	51.120	
5,900.0	5,900.0	6,019.7	6,007.2	20.9	21.4	93.96	-145.6	2,100.3	2,108.1	2,066.0	42.08	50.098	
6,000.0	6,000.0	6,086.3	6,073.8	21.3	21.7	94.01	-147.1	2,097.4	2,103.9	2,061.2	42.69	49.277	
6,100.0	6,100.0	6,177.7	6,165.1	21.6	22.0	94.06	-148.7	2,094.4	2,100.7	2,057.3	43.38	48.420	
6,200.0	6,200.0	6,279.2	6,266.6	22.0	22.4	94.12	-150.6	2,091.1	2,097.6	2,053.5	44.11	47.554	
6,300.0	6,300.0	6,377.4	6,364.7	22.4	22.7	94.17	-152.4	2,087.9	2,094.4	2,049.6	44.82	46.728	
6,400.0	6,400.0	6,486.2	6,473.4	22.7	23.1	94.23	-154.3	2,084.2	2,091.2	2,045.6	45.57	45.889	
6,500.0	6,500.0	6,582.3	6,569.4	23.1	23.5	94.28	-155.9	2,080.8	2,087.8	2,041.5	46.28	45.115	
6,600.0	6,600.0	6,683.0	6,670.0	23.4	23.9	94.34	-157.6	2,077.3	2,084.4	2,037.4	47.00	44.352	
6,700.0	6,700.0	6,787.2	6,774.2	23.8	24.2	94.39	-159.2	2,073.6	2,081.0	2,033.2	47.73	43.599	
6,800.0	6,800.0	6,890.5	6,877.4	24.1	24.6	94.44	-160.8	2,069.7	2,077.3	2,028.9	48.46	42.867	
6,900.0	6,900.0	6,992.3	6,979.1	24.5	25.0	94.49	-162.2	2,065.7	2,073.5	2,024.4	49.18	42.159	
7,000.0	7,000.0	7,089.4	7,076.1	24.9	25.3	94.54	-163.6	2,061.9	2,069.8	2,019.9	49.89	41.484	
7,100.0	7,100.0	7,191.7	7,178.3	25.2	25.7	-159.94	-165.2	2,058.0	2,067.0	2,016.3	50.61	40.843	
7,200.0	7,200.0	7,293.1	7,279.7	25.5	26.1	-159.91	-166.9	2,053.9	2,065.5	2,014.2	51.31	40.256	
7,231.3	7,231.2	7,323.0	7,309.5	25.7	26.2	-159.91	-167.3	2,052.7	2,065.4	2,013.9	51.52	40.088	CC
7,300.0	7,299.9	7,392.2	7,378.6	25.9	26.4	-159.90	-168.3	2,050.0	2,065.8	2,013.8	52.00	39.725	ES
7,400.0	7,399.7	7,486.7	7,473.1	26.2	26.8	-159.91	-169.7	2,046.4	2,067.8	2,015.1	52.68	39.252	
7,500.0	7,499.4	7,587.5	7,573.7	26.6	27.2	-159.92	-171.0	2,042.7	2,071.7	2,018.3	53.38	38.811	
7,600.0	7,598.9	7,691.3	7,677.5	26.9	27.5	-159.95	-172.5	2,038.8	2,077.0	2,022.9	54.09	38.401	
7,700.0	7,698.3	7,795.8	7,781.9	27.2	27.9	-159.97	-174.6	2,034.5	2,083.8	2,029.0	54.80	38.025	
7,800.0	7,797.4	7,894.1	7,880.1	27.6	28.3	-159.96	-178.1	2,030.3	2,092.1	2,036.6	55.49	37.698	
7,900.0	7,896.3	7,997.0	7,982.7	27.9	28.7	-159.94	-182.5	2,025.7	2,101.8	2,045.6	56.21	37.395	
8,000.0	7,994.9	8,067.2	8,052.9	28.3	28.9	-159.93	-185.2	2,023.1	2,114.0	2,057.2	56.81	37.213	
8,100.0	8,093.3	8,157.0	8,142.5	28.6	29.2	-159.95	-188.1	2,020.7	2,128.7	2,071.2	57.47	37.042	
8,182.6	8,174.2	8,235.3	8,220.8	28.9	29.5	-159.97	-190.5	2,018.7	2,142.3	2,084.2	58.03	36.918	
8,200.0	8,191.3	8,251.8	8,237.3	29.0	29.6	-159.99	-191.0	2,018.3	2,145.3	2,087.1	58.15	36.894	
8,300.0	8,289.1	8,345.2	8,330.6	29.4	29.9	-160.09	-193.9	2,016.2	2,162.6	2,103.7	58.82	36.767	
8,400.0	8,387.0	8,458.5	8,443.9	29.7	30.3	-160.21	-196.8	2,013.5	2,179.8	2,120.2	59.57	36.594	
8,500.0	8,484.9	8,564.1	8,549.4	30.1	30.7	-160.35	-198.8	2,010.5	2,196.4	2,136.1	60.28	36.433	
8,600.0	8,582.8	8,658.5	8,643.7	30.5	31.1	-160.47	-200.7	2,007.7	2,212.9	2,152.0	60.97	36.298	
8,700.0	8,680.6	8,757.4	8,742.5	30.9	31.4	-160.58	-202.9	2,004.8	2,229.6	2,167.9	61.66	36.158	
8,800.0	8,778.5	8,867.1	8,852.2	31.2	31.8	-160.72	-204.9	2,001.4	2,246.0	2,183.6	62.40	35.993	
8,900.0	8,876.4	8,966.2	8,951.2	31.6	32.2	-160.84	-206.5	1,997.9	2,262.0	2,198.9	63.10	35.847	
9,000.0	8,974.3	9,055.0	9,039.9	32.0	32.5	-160.94	-208.6	1,995.1	2,278.4	2,214.7	63.77	35.730	
9,100.0	9,072.1	9,152.2	9,137.1	32.4	32.8	-161.03	-211.4	1,992.1	2,295.0	2,230.6	64.47	35.600	
9,200.0	9,170.0	9,240.2	9,225.0	32.8	33.2	-161.15	-212.4	1,989.7	2,311.8	2,246.7	65.13	35.497	
9,300.0	9,267.9	9,318.2	9,303.0	33.2	33.4	-161.27	-212.5	1,988.2	2,329.4	2,263.6	65.74	35.431	
9,400.0	9,365.8	9,411.2	9,396.0	33.6	33.8	-161.42	-212.3	1,986.9	2,347.4	2,281.0	66.42	35.345	
9,500.0	9,463.7	9,496.6	9,481.4	34.0	34.1	-161.57	-212.0	1,986.0	2,365.9	2,298.9	67.05	35.284	
9,600.0	9,561.5	9,599.8	9,584.6	34.4	34.4	-161.73	-211.9	1,985.2	2,384.6	2,316.8	67.77	35.187	
9,700.0	9,659.4	9,704.6	9,689.3	34.8	34.8	-161.88	-212.6	1,983.9	2,403.0	2,334.5	68.50	35.081	
9,800.0	9,757.3	9,802.4	9,787.1	35.2	35.1	-161.99	-214.2	1,982.6	2,421.2	2,352.0	69.20	34.990	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #133H - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 161-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
9,900.0	9,855.2	9,892.1	9,876.9	35.6	35.5	-162.09	-215.6	1,981.6	2,439.7	2,369.8	69.86	34.921	
10,000.0	9,953.0	9,979.2	9,963.9	36.0	35.8	-162.22	-215.6	1,981.0	2,458.6	2,388.1	70.51	34.869	
10,100.0	10,050.9	10,067.0	10,051.7	36.4	36.1	-162.36	-215.2	1,980.9	2,477.9	2,406.8	71.15	34.828	
10,200.0	10,148.8	10,160.5	10,145.3	36.9	36.4	-162.49	-215.3	1,980.9	2,497.6	2,425.8	71.81	34.778	
10,300.0	10,246.7	10,242.6	10,227.3	37.3	36.6	-162.60	-215.7	1,981.3	2,517.6	2,445.2	72.43	34.760	
10,400.0	10,344.6	10,332.7	10,317.4	37.7	36.9	-162.72	-216.3	1,982.1	2,538.1	2,465.0	73.08	34.733	
10,500.0	10,442.4	10,408.3	10,393.0	38.1	37.2	-162.81	-216.7	1,983.2	2,559.2	2,485.5	73.65	34.748	
10,600.0	10,540.3	10,514.3	10,499.0	38.5	37.5	-162.97	-216.2	1,985.3	2,580.8	2,506.4	74.36	34.705	
10,700.0	10,638.2	10,619.9	10,604.6	39.0	37.9	-163.14	-215.0	1,986.8	2,601.8	2,526.7	75.07	34.656	
10,800.0	10,736.1	10,717.4	10,702.1	39.4	38.2	-163.28	-214.6	1,988.1	2,622.7	2,546.9	75.75	34.624	
10,900.0	10,833.9	10,827.6	10,812.3	39.8	38.5	-163.42	-214.7	1,989.3	2,643.4	2,566.9	76.49	34.561	
11,000.0	10,931.8	10,936.4	10,921.0	40.2	38.9	-163.57	-214.2	1,989.8	2,663.6	2,586.4	77.22	34.494	
11,100.0	11,029.7	11,019.4	11,004.0	40.7	39.2	-163.70	-213.3	1,990.4	2,683.9	2,606.1	77.83	34.484	
11,200.0	11,127.6	11,103.2	11,087.8	41.1	39.4	-163.83	-212.0	1,991.4	2,704.8	2,626.4	78.45	34.480	
11,300.0	11,225.5	11,193.3	11,177.9	41.5	39.7	-163.97	-210.6	1,992.9	2,726.1	2,647.0	79.09	34.470	
11,400.0	11,323.3	11,284.8	11,269.4	42.0	40.0	-164.11	-209.2	1,994.6	2,747.7	2,668.0	79.74	34.459	
11,500.0	11,421.2	11,525.2	11,507.7	42.4	40.8	-164.87	-186.6	1,994.8	2,768.6	2,687.6	81.00	34.180	
11,523.5	11,444.2	11,543.6	11,525.2	42.5	40.8	-165.01	-180.9	1,994.2	2,772.6	2,691.4	81.14	34.172	
11,600.0	11,519.2	11,586.0	11,564.8	42.8	41.0	-165.41	-165.9	1,993.0	2,785.3	2,703.8	81.51	34.172	
11,700.0	11,617.7	11,624.0	11,599.4	43.3	41.1	-165.83	-150.2	1,992.3	2,801.4	2,719.4	81.90	34.203	
11,800.0	11,716.7	11,668.4	11,638.7	43.7	41.2	-166.34	-129.6	1,992.2	2,817.1	2,734.8	82.28	34.237	
11,900.0	11,815.9	11,718.0	11,681.3	44.1	41.3	-166.94	-104.1	1,993.1	2,832.9	2,750.3	82.65	34.277	
12,000.0	11,915.5	11,718.0	11,681.3	44.4	41.3	-166.99	-104.1	1,993.1	2,848.6	2,765.8	82.73	34.432	
12,100.0	12,015.2	11,718.0	11,681.3	44.8	41.3	-167.05	-104.1	1,993.1	2,865.1	2,782.4	82.73	34.632	
12,200.0	12,115.1	11,767.6	11,721.8	45.2	41.4	-167.69	-75.5	1,995.7	2,880.8	2,797.9	82.95	34.729	
12,300.0	12,215.1	11,812.0	11,755.5	45.5	41.5	-168.31	-47.1	1,999.9	2,898.0	2,814.9	83.10	34.874	
12,311.9	12,227.0	11,812.0	11,755.5	45.5	41.5	86.19	-47.1	1,999.9	2,899.9	2,816.8	83.08	34.904	
12,400.0	12,315.1	12,256.8	11,976.5	45.8	42.5	78.79	325.4	1,983.3	2,913.4	2,828.2	85.16	34.209	
12,500.0	12,415.1	12,281.0	11,978.2	46.2	42.6	78.32	349.1	1,979.0	2,926.8	2,841.7	85.16	34.369	
12,600.0	12,515.1	12,281.0	11,978.2	46.5	42.6	78.32	349.1	1,979.0	2,943.4	2,858.4	85.00	34.628	
12,700.0	12,615.1	12,281.0	11,978.2	46.9	42.6	78.32	349.1	1,979.0	2,963.3	2,878.5	84.77	34.956	
12,711.9	12,627.0	12,281.0	11,978.2	46.9	42.6	78.32	349.1	1,979.0	2,965.9	2,881.1	84.74	34.999	
12,750.0	12,665.1	12,281.0	11,978.2	47.0	42.6	99.38	349.1	1,979.0	2,974.7	2,890.0	84.64	35.147	
12,800.0	12,714.8	12,281.0	11,978.2	47.2	42.6	98.07	349.1	1,979.0	2,987.5	2,903.0	84.48	35.362	
12,850.0	12,763.8	12,281.0	11,978.2	47.4	42.6	96.60	349.1	1,979.0	3,001.7	2,917.3	84.32	35.599	
12,900.0	12,811.8	12,281.0	11,978.2	47.5	42.6	94.98	349.1	1,979.0	3,017.1	2,932.9	84.15	35.855	
12,950.0	12,858.3	12,281.0	11,978.2	47.7	42.6	93.24	349.1	1,979.0	3,033.6	2,949.6	83.97	36.127	
13,000.0	12,903.1	12,281.0	11,978.2	47.8	42.6	91.37	349.1	1,979.0	3,051.1	2,967.3	83.79	36.413	
13,050.0	12,945.8	12,311.8	11,979.5	48.0	42.7	88.92	379.4	1,973.6	3,069.0	2,985.3	83.72	36.656	
13,100.0	12,986.1	12,324.8	11,980.1	48.1	42.7	86.73	392.2	1,971.5	3,087.6	3,004.0	83.60	36.932	
13,150.0	13,023.7	12,339.0	11,980.7	48.3	42.8	84.50	406.2	1,969.2	3,106.5	3,023.0	83.50	37.205	
13,200.0	13,058.2	12,374.0	11,982.2	48.4	42.9	82.04	440.8	1,964.1	3,125.7	3,042.2	83.49	37.439	
13,250.0	13,089.4	12,374.0	11,982.2	48.5	42.9	80.03	440.8	1,964.1	3,144.6	3,061.2	83.37	37.719	
13,300.0	13,117.2	12,374.0	11,982.2	48.7	42.9	78.04	440.8	1,964.1	3,163.4	3,080.1	83.27	37.988	
13,350.0	13,141.1	12,403.9	11,983.3	48.8	43.0	75.89	470.4	1,960.2	3,181.7	3,098.4	83.33	38.180	
13,400.0	13,161.2	12,421.2	11,983.9	48.9	43.1	73.96	487.5	1,958.1	3,199.5	3,116.2	83.37	38.377	
13,450.0	13,177.2	12,438.8	11,984.4	49.1	43.2	72.15	505.1	1,956.1	3,216.7	3,133.2	83.44	38.549	
13,500.0	13,189.1	12,467.0	11,985.1	49.2	43.3	70.46	533.1	1,953.2	3,233.0	3,149.4	83.60	38.673	
13,550.0	13,196.6	12,467.0	11,985.1	49.4	43.3	68.95	533.1	1,953.2	3,248.4	3,164.7	83.67	38.825	
13,600.0	13,199.8	12,467.0	11,985.1	49.6	43.3	67.54	533.1	1,953.2	3,262.9	3,179.2	83.77	38.951	
13,611.9	13,200.0	12,467.0	11,985.1	49.6	43.3	67.22	533.1	1,953.2	3,266.3	3,182.5	83.80	38.977	
13,700.0	13,200.0	12,507.1	11,985.9	50.0	43.5	67.50	573.1	1,950.1	3,289.7	3,205.4	84.24	39.052	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #133H - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 161-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	13,200.0	12,560.0	11,986.7	50.4	43.7	67.83	625.9	1,948.5	3,316.1	3,231.3	84.81	39.101	
13,900.0	13,200.0	12,560.0	11,986.7	50.9	43.7	68.01	625.9	1,948.5	3,340.5	3,255.4	85.13	39.241	
14,000.0	13,200.0	12,625.3	11,987.3	51.4	44.0	68.31	691.2	1,948.1	3,364.0	3,278.1	85.84	39.187	
14,100.0	13,200.0	12,686.4	11,987.0	52.0	44.3	68.55	752.3	1,947.6	3,384.8	3,298.3	86.57	39.099	
14,200.0	13,200.0	12,748.0	11,985.5	52.6	44.7	68.74	813.9	1,947.8	3,404.0	3,316.6	87.33	38.977	
14,300.0	13,200.0	12,788.9	11,984.0	53.2	44.9	68.89	854.7	1,948.4	3,421.2	3,333.2	87.99	38.880	
14,400.0	13,200.0	12,875.2	11,980.2	53.8	45.4	69.01	941.0	1,950.3	3,436.4	3,347.4	89.01	38.609	
14,500.0	13,200.0	13,037.9	11,978.2	54.5	46.5	69.16	1,103.6	1,953.2	3,446.8	3,356.0	90.75	37.980	
14,600.0	13,200.0	13,172.2	11,977.2	55.1	47.5	69.24	1,237.9	1,954.4	3,453.1	3,360.7	92.40	37.370	
14,687.2	13,200.0	13,271.6	11,976.5	55.7	48.3	69.26	1,337.3	1,954.4	3,455.1	3,361.4	93.75	36.854	
14,700.0	13,200.0	13,283.5	11,976.4	55.8	48.3	69.26	1,349.3	1,954.4	3,455.2	3,361.3	93.92	36.787	
14,800.0	13,200.0	13,364.5	11,975.4	56.5	49.0	69.25	1,430.2	1,954.3	3,456.4	3,361.2	95.20	36.306	
14,900.0	13,200.0	13,454.7	11,974.3	57.3	49.8	69.24	1,520.4	1,954.9	3,458.1	3,361.5	96.64	35.782	
15,000.0	13,200.0	13,576.5	11,972.8	58.1	50.9	69.22	1,642.2	1,955.4	3,459.6	3,361.1	98.52	35.115	
15,100.0	13,200.0	13,720.7	11,973.1	58.9	52.3	69.23	1,786.3	1,954.6	3,459.7	3,358.9	100.79	34.325	
15,116.3	13,200.0	13,731.5	11,973.1	59.0	52.4	69.23	1,797.2	1,954.5	3,459.6	3,358.6	101.02	34.248	
15,200.0	13,200.0	13,792.1	11,972.9	59.7	53.0	69.23	1,857.8	1,954.3	3,460.0	3,357.8	102.22	33.848	
15,300.0	13,200.0	13,933.8	11,971.5	60.6	54.4	69.20	1,999.5	1,952.7	3,460.0	3,355.4	104.62	33.072	
15,400.0	13,200.0	14,085.1	11,969.5	61.6	56.1	69.16	2,150.7	1,948.5	3,458.5	3,351.3	107.24	32.251	
15,500.0	13,200.0	14,160.0	11,968.5	62.5	56.9	69.13	2,225.6	1,946.3	3,457.0	3,348.2	108.87	31.753	
15,570.4	13,200.0	14,185.7	11,968.1	63.2	57.2	69.12	2,251.2	1,945.9	3,456.6	3,347.0	109.67	31.520	
15,600.0	13,200.0	14,199.8	11,967.9	63.5	57.4	69.12	2,265.3	1,945.7	3,456.7	3,346.7	110.04	31.412	
15,700.0	13,200.0	14,253.0	11,967.3	64.5	58.0	69.11	2,318.5	1,945.8	3,457.9	3,346.5	111.42	31.034	
15,800.0	13,200.0	14,366.8	11,967.1	65.5	59.3	69.12	2,432.3	1,947.0	3,459.7	3,345.9	113.75	30.415	
15,900.0	13,200.0	15,900.0	11,966.4	66.6	77.5	69.12	2,577.2	1,946.7	3,460.3	3,328.0	132.34	26.148	
15,950.4	13,200.0	14,565.7	11,966.2	67.2	61.6	69.11	2,631.3	1,946.0	3,460.2	3,342.4	117.78	29.380	
16,000.0	13,200.0	14,591.6	11,965.9	67.7	61.9	69.11	2,657.1	1,945.8	3,460.4	3,341.9	118.50	29.200	
16,100.0	13,200.0	14,716.8	11,962.8	68.8	63.5	69.06	2,782.3	1,944.9	3,461.5	3,340.3	121.14	28.575	
16,200.0	13,200.0	14,837.5	11,958.8	69.9	65.0	68.99	2,902.9	1,942.1	3,461.2	3,337.4	123.73	27.973	
16,300.0	13,200.0	14,944.4	11,954.5	71.1	66.4	68.90	3,009.6	1,938.3	3,460.0	3,333.9	126.13	27.431	
16,370.1	13,200.0	14,985.7	11,953.5	71.9	66.9	68.88	3,050.9	1,937.4	3,459.7	3,332.4	127.31	27.175	
16,400.0	13,200.0	15,006.0	11,953.3	72.3	67.2	68.88	3,071.2	1,937.2	3,459.8	3,331.9	127.86	27.060	
16,500.0	13,200.0	15,093.6	11,952.3	73.5	68.3	68.87	3,158.8	1,936.7	3,460.3	3,330.3	130.04	26.609	
16,600.0	13,200.0	15,150.7	11,951.5	74.7	69.0	68.85	3,215.8	1,936.6	3,461.5	3,329.8	131.72	26.279	
16,700.0	13,200.0	15,209.4	11,950.8	75.9	69.8	68.85	3,274.5	1,937.5	3,464.0	3,330.6	133.44	25.959	
16,800.0	13,200.0	15,294.8	11,948.9	77.1	70.9	68.84	3,360.0	1,939.2	3,467.4	3,331.7	135.64	25.564	
16,900.0	13,200.0	16,900.0	11,943.9	78.4	92.6	68.77	3,521.9	1,940.3	3,469.7	3,312.0	157.73	21.998	
17,000.0	13,200.0	15,711.0	11,945.5	79.7	76.6	68.79	3,776.0	1,937.1	3,468.8	3,324.4	144.47	24.011	
17,100.0	13,200.0	15,837.7	11,949.1	81.0	78.4	68.83	3,902.5	1,932.9	3,465.4	3,317.9	147.54	23.488	
17,200.0	13,200.0	15,896.2	11,951.0	82.3	79.2	68.85	3,961.0	1,931.3	3,462.4	3,312.9	149.45	23.168	
17,300.0	13,200.0	15,951.0	11,953.0	83.6	80.0	68.88	4,015.8	1,930.7	3,460.8	3,309.5	151.29	22.876	
17,383.7	13,200.0	15,999.8	11,954.4	84.7	80.6	68.90	4,064.5	1,930.7	3,460.5	3,307.6	152.88	22.635	
17,400.0	13,200.0	16,010.9	11,954.6	84.9	80.8	68.91	4,075.7	1,930.8	3,460.5	3,307.3	153.22	22.585	
17,500.0	13,200.0	16,068.9	11,955.2	86.3	81.6	68.92	4,133.6	1,930.9	3,461.2	3,306.1	155.09	22.317	
17,600.0	13,200.0	16,116.1	11,955.3	87.6	82.3	68.93	4,180.9	1,931.7	3,463.3	3,306.6	156.75	22.094	
17,700.0	13,200.0	16,190.4	11,955.1	89.0	83.3	68.94	4,255.1	1,933.8	3,466.7	3,307.8	158.93	21.813	
17,800.0	13,200.0	16,278.7	11,954.6	90.3	84.6	68.95	4,343.3	1,936.5	3,470.5	3,309.1	161.39	21.504	
17,900.0	13,200.0	16,394.2	11,953.2	91.7	86.2	68.96	4,458.8	1,940.0	3,474.5	3,310.1	164.39	21.136	
18,000.0	13,200.0	16,538.7	11,952.1	93.1	88.3	68.96	4,603.3	1,942.8	3,477.3	3,309.3	167.99	20.700	
18,100.0	13,200.0	18,100.0	11,952.8	94.5	111.1	68.99	4,746.5	1,944.3	3,478.8	3,287.5	191.27	18.188	
18,200.0	13,200.0	16,792.4	11,953.9	95.9	92.0	69.01	4,856.9	1,944.4	3,479.2	3,304.7	174.56	19.931	
18,300.0	13,200.0	16,884.7	11,954.7	97.3	93.4	69.03	4,949.3	1,944.8	3,480.0	3,302.8	177.20	19.639	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #133H - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 161-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	13,200.0	16,969.5	11,955.8	98.7	94.6	69.06	5,034.0	1,945.6	3,481.2	3,301.5	179.70	19.372	
18,500.0	13,200.0	17,177.0	11,960.4	100.2	97.7	69.14	5,241.4	1,945.6	3,481.2	3,296.6	184.63	18.855	
18,600.0	13,200.0	17,293.0	11,963.4	101.6	99.5	69.17	5,357.4	1,943.0	3,478.9	3,291.1	187.79	18.526	
18,700.0	13,200.0	17,504.5	11,971.0	103.0	102.7	69.26	5,568.6	1,936.6	3,475.9	3,283.2	192.71	18.037	
18,800.0	13,200.0	17,555.0	11,971.7	104.5	103.4	69.26	5,619.0	1,934.1	3,471.4	3,276.7	194.69	17.831	
18,900.0	13,200.0	17,603.2	11,972.0	105.9	104.2	69.26	5,667.2	1,932.3	3,468.3	3,271.7	196.59	17.642	
19,000.0	13,200.0	17,702.2	11,973.0	107.4	105.7	69.26	5,766.1	1,929.8	3,466.3	3,266.8	199.44	17.380	
19,100.0	13,200.0	17,743.0	11,973.8	108.9	106.3	69.27	5,806.9	1,928.5	3,464.2	3,263.0	201.19	17.219	
19,167.9	13,200.0	17,784.8	11,974.6	109.9	106.9	69.28	5,848.7	1,927.8	3,463.4	3,260.8	202.63	17.092	
19,200.0	13,200.0	17,793.7	11,974.8	110.3	107.1	69.28	5,857.6	1,927.8	3,463.5	3,260.4	203.10	17.054	
19,300.0	13,200.0	17,839.0	11,975.1	111.8	107.7	69.30	5,902.9	1,928.8	3,465.4	3,260.5	204.86	16.916	
19,400.0	13,200.0	17,923.6	11,975.3	113.3	109.0	69.32	5,987.4	1,931.2	3,468.6	3,261.2	207.44	16.721	
19,500.0	13,200.0	17,994.8	11,975.1	114.8	110.1	69.33	6,058.7	1,932.9	3,471.6	3,261.9	209.72	16.554	
19,600.0	13,200.0	18,088.4	11,973.7	116.3	111.5	69.32	6,152.2	1,935.5	3,475.5	3,263.0	212.46	16.358	
19,700.0	13,200.0	18,271.7	11,973.5	117.8	114.3	69.34	6,335.4	1,937.6	3,476.7	3,259.6	217.14	16.011	
19,800.0	13,200.0	18,333.6	11,972.5	119.3	115.3	69.33	6,397.4	1,937.9	3,478.6	3,259.3	219.24	15.866	
19,900.0	13,200.0	18,404.0	11,970.2	120.8	116.4	69.30	6,467.7	1,938.7	3,481.5	3,260.0	221.49	15.718	
20,000.0	13,200.0	18,582.3	11,966.0	122.3	119.1	69.25	6,645.9	1,939.8	3,483.6	3,257.6	226.00	15.414	
20,100.0	13,200.0	18,714.0	11,963.1	123.8	121.2	69.21	6,777.7	1,938.6	3,484.3	3,254.8	229.52	15.181	
20,200.0	13,200.0	18,854.5	11,961.2	125.3	123.4	69.17	6,918.0	1,935.4	3,483.2	3,250.0	233.21	14.936	
20,300.0	13,200.0	18,923.5	11,959.8	126.8	124.4	69.14	6,987.0	1,933.9	3,482.5	3,247.0	235.51	14.787	
20,316.2	13,200.0	18,933.6	11,959.6	127.1	124.6	69.13	6,997.1	1,933.7	3,482.5	3,246.7	235.86	14.765	
20,400.0	13,200.0	18,985.9	11,958.0	128.4	125.4	69.11	7,049.4	1,932.9	3,482.9	3,245.2	237.66	14.655	
20,500.0	13,200.0	19,049.2	11,955.8	129.9	126.4	69.07	7,112.7	1,932.6	3,484.3	3,244.5	239.79	14.530	
20,600.0	13,200.0	19,206.5	11,951.7	131.4	128.9	69.01	7,269.9	1,931.8	3,485.5	3,241.7	243.86	14.293	
20,700.0	13,200.0	19,334.0	11,951.0	132.9	130.9	69.00	7,397.4	1,930.4	3,485.5	3,238.1	247.36	14.091	
20,800.0	13,200.0	19,513.8	11,953.6	134.5	133.7	69.03	7,577.1	1,926.4	3,483.3	3,231.4	251.90	13.828	
20,900.0	13,200.0	19,632.0	11,957.6	136.0	135.6	69.07	7,695.2	1,922.2	3,479.5	3,224.2	255.27	13.631	
21,000.0	13,200.0	19,688.2	11,959.6	137.6	136.4	69.09	7,751.3	1,920.5	3,476.3	3,218.9	257.46	13.502	
21,100.0	13,200.0	19,726.0	11,960.3	139.1	137.0	69.10	7,789.1	1,920.0	3,475.2	3,216.0	259.23	13.406	
21,108.3	13,200.0	19,726.0	11,960.3	139.2	137.0	69.10	7,789.1	1,920.0	3,475.2	3,215.9	259.31	13.402	
21,200.0	13,200.0	19,799.7	11,961.0	140.7	138.2	69.11	7,862.7	1,919.9	3,475.5	3,213.8	261.69	13.281	
21,300.0	13,200.0	19,915.0	11,962.7	142.2	140.0	69.14	7,978.1	1,919.5	3,475.3	3,210.2	265.03	13.113	
21,332.6	13,200.0	19,950.3	11,963.3	142.7	140.6	69.15	8,013.3	1,919.3	3,475.0	3,209.0	266.08	13.060	
21,332.6	13,200.0	19,950.3	11,963.3	142.7	140.6	69.15	8,013.3	1,919.3	3,475.0	3,209.0	266.08	13.060	
21,400.0	13,200.0	19,980.6	11,963.7	143.8	141.1	69.16	8,043.6	1,919.3	3,475.4	3,208.1	267.33	13.000	
21,500.0	13,200.0	20,137.4	11,966.0	145.3	143.5	69.21	8,200.4	1,920.1	3,476.3	3,204.7	271.56	12.801	
21,600.0	13,200.0	20,228.0	11,968.7	146.9	145.0	69.25	8,291.0	1,919.8	3,475.7	3,201.3	274.43	12.665	
21,629.5	13,200.0	20,247.3	11,969.1	147.3	145.3	69.26	8,310.3	1,919.8	3,475.6	3,200.5	275.12	12.633	
21,700.0	13,200.0	20,294.0	11,969.6	148.4	146.0	69.27	8,356.9	1,919.8	3,475.9	3,199.1	276.75	12.560	
21,800.0	13,200.0	20,376.2	11,968.6	150.0	147.3	69.26	8,439.2	1,919.6	3,476.8	3,197.5	279.36	12.446	
21,900.0	13,200.0	20,482.2	11,965.7	151.5	149.0	69.21	8,545.1	1,919.0	3,478.0	3,195.6	282.43	12.314	
22,000.0	13,200.0	20,568.6	11,963.0	153.1	150.4	69.17	8,631.5	1,918.5	3,479.2	3,194.1	285.09	12.204	
22,100.0	13,200.0	20,645.0	11,960.0	154.7	151.6	69.13	8,707.8	1,918.1	3,481.0	3,193.4	287.52	12.107	
22,200.0	13,200.0	20,759.8	11,954.0	156.2	153.4	69.04	8,822.5	1,917.5	3,483.0	3,192.3	290.72	11.981	
22,300.0	13,200.0	20,841.1	11,949.0	157.8	154.7	68.96	8,903.6	1,916.6	3,485.0	3,191.7	293.21	11.886	
22,400.0	13,200.0	21,062.7	11,938.6	159.4	158.3	68.79	9,124.9	1,912.8	3,486.2	3,187.7	298.50	11.679	
22,500.0	13,200.0	21,137.4	11,935.8	161.0	159.5	68.73	9,199.5	1,910.4	3,485.3	3,184.3	300.94	11.581	
22,600.0	13,200.0	21,223.1	11,931.0	162.5	160.8	68.65	9,285.0	1,907.6	3,485.0	3,181.4	303.53	11.481	
22,700.0	13,200.0	21,332.0	11,923.5	164.1	162.6	68.51	9,393.6	1,903.6	3,484.8	3,178.2	306.52	11.369	
22,800.0	13,200.0	21,461.2	11,914.4	165.7	164.7	68.34	9,522.4	1,897.6	3,483.7	3,173.8	309.85	11.243	
22,900.0	13,200.0	21,569.5	11,908.9	167.3	166.4	68.24	9,630.4	1,893.3	3,482.7	3,169.8	312.87	11.132	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #133H - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 161-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
23,000.0	13,200.0	21,670.2	11,906.0	168.9	168.1	68.17	9,731.0	1,889.5	3,480.9	3,165.1	315.80	11.023	
23,100.0	13,200.0	21,820.6	11,900.6	170.4	170.5	68.06	9,881.2	1,883.3	3,479.4	3,159.8	319.59	10.887	
23,200.0	13,200.0	21,914.1	11,895.5	172.0	172.0	67.95	9,974.3	1,877.9	3,476.8	3,154.5	322.32	10.787	
23,300.0	13,200.0	22,044.1	11,886.6	173.6	174.1	67.77	10,103.7	1,869.0	3,473.7	3,148.1	325.57	10.670	
23,400.0	13,200.0	22,057.0	11,885.7	175.2	174.3	67.75	10,116.6	1,868.0	3,471.2	3,144.3	326.92	10.618	
23,436.1	13,200.0	22,057.0	11,885.7	175.8	174.3	67.75	10,116.6	1,868.0	3,471.0	3,143.7	327.28	10.606	
23,504.9	13,200.0	22,057.0	11,885.7	176.9	174.3	67.75	10,116.6	1,868.0	3,471.7	3,143.8	327.87	10.589	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #134H - Wellbore #1 - Wellbore #1

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	89.34	26.9	2,343.1	2,343.3				
100.0	100.0	92.2	92.2	0.1	0.1	89.34	26.9	2,343.3	2,343.4	2,343.2	0.27	8,760.882	
200.0	200.0	183.7	183.7	0.5	0.3	89.35	26.8	2,343.7	2,343.9	2,343.2	0.78	2,991.521	
300.0	300.0	280.7	280.7	0.8	0.6	89.35	26.8	2,344.6	2,344.8	2,343.3	1.49	1,574.741	
400.0	400.0	376.3	376.3	1.2	1.0	89.34	26.9	2,345.4	2,345.7	2,343.5	2.19	1,071.142	
500.0	500.0	471.5	471.5	1.6	1.3	89.34	27.0	2,346.5	2,346.8	2,343.9	2.89	812.128	
600.0	600.0	576.0	576.0	1.9	1.7	89.33	27.3	2,347.7	2,347.9	2,344.3	3.62	648.287	
700.0	700.0	686.7	686.6	2.3	2.1	89.33	27.4	2,348.5	2,348.7	2,344.3	4.38	536.725	
800.0	800.0	786.2	786.2	2.6	2.5	89.33	27.4	2,349.1	2,349.3	2,344.2	5.09	461.503	
900.0	900.0	896.6	896.5	3.0	2.8	89.34	27.1	2,349.6	2,349.7	2,343.9	5.84	402.570	
1,000.0	1,000.0	1,013.9	1,013.8	3.4	3.2	89.35	26.8	2,349.3	2,349.5	2,342.9	6.59	356.420	
1,100.0	1,100.0	1,114.0	1,113.9	3.7	3.6	89.37	25.9	2,348.6	2,348.8	2,341.5	7.29	322.281	
1,167.5	1,167.5	1,167.5	1,167.5	4.0	3.8	89.38	25.2	2,348.4	2,348.5	2,340.8	7.72	304.398	
1,200.0	1,200.0	1,190.5	1,190.5	4.1	3.8	89.39	24.9	2,348.4	2,348.6	2,340.7	7.91	296.811 ES	
1,300.0	1,300.0	1,257.2	1,257.1	4.4	4.1	89.42	23.7	2,349.1	2,349.7	2,341.1	8.51	276.224	
1,400.0	1,400.0	1,329.0	1,328.9	4.8	4.3	89.46	22.2	2,351.2	2,352.4	2,343.3	9.12	257.936	
1,500.0	1,500.0	1,372.6	1,372.4	5.1	4.5	89.49	21.1	2,353.3	2,356.8	2,347.2	9.63	244.732	
1,600.0	1,600.0	1,420.0	1,419.7	5.5	4.7	89.52	19.9	2,356.2	2,363.2	2,353.0	10.15	232.841	
1,700.0	1,700.0	1,475.5	1,475.0	5.9	4.9	89.55	18.5	2,360.8	2,371.6	2,360.9	10.70	221.746	
1,800.0	1,800.0	1,511.0	1,510.3	6.2	5.0	89.57	17.7	2,364.5	2,382.2	2,371.1	11.16	213.514	
1,900.0	1,900.0	1,577.2	1,576.0	6.6	5.2	89.61	16.0	2,372.6	2,394.7	2,383.0	11.74	204.050	
2,000.0	2,000.0	1,632.7	1,630.9	6.9	5.5	89.66	14.3	2,380.7	2,409.2	2,396.9	12.26	196.430	
2,100.0	2,100.0	1,697.0	1,694.3	7.3	5.7	89.71	12.2	2,391.1	2,425.3	2,412.5	12.83	189.042	
2,200.0	2,200.0	1,788.9	1,784.8	7.7	6.1	89.77	9.5	2,406.8	2,442.3	2,428.8	13.51	180.782	
2,300.0	2,300.0	1,909.5	1,903.7	8.0	6.5	89.86	5.9	2,427.0	2,459.1	2,444.8	14.32	171.753	
2,400.0	2,400.0	2,072.8	2,065.1	8.4	7.2	90.01	-0.3	2,450.7	2,473.5	2,458.2	15.31	161.526	
2,500.0	2,500.0	2,150.2	2,141.7	8.7	7.5	90.06	-2.8	2,461.5	2,487.5	2,471.5	15.94	156.064	
2,600.0	2,600.0	2,235.4	2,225.9	9.1	7.9	90.13	-5.4	2,474.0	2,502.2	2,485.6	16.60	150.758	
2,700.0	2,700.0	2,373.8	2,362.8	9.4	8.4	90.24	-10.5	2,493.8	2,516.5	2,499.0	17.49	143.876	
2,800.0	2,800.0	2,468.3	2,456.4	9.8	8.8	90.32	-14.2	2,506.5	2,530.0	2,511.8	18.19	139.065	
2,900.0	2,900.0	2,558.9	2,546.1	10.2	9.2	90.40	-17.4	2,519.0	2,543.8	2,524.9	18.88	134.754	
3,000.0	3,000.0	2,668.9	2,655.0	10.5	9.6	90.45	-20.0	2,533.8	2,557.2	2,537.6	19.65	130.166	
3,100.0	3,100.0	2,749.6	2,734.9	10.9	10.0	90.48	-21.1	2,545.0	2,571.2	2,550.9	20.28	126.757	
3,200.0	3,200.0	2,866.0	2,850.2	11.2	10.5	90.52	-23.2	2,561.1	2,585.0	2,563.9	21.08	122.617	
3,300.0	3,300.0	2,954.5	2,937.9	11.6	10.8	90.57	-25.7	2,573.0	2,598.5	2,576.8	21.76	119.434	
3,400.0	3,400.0	3,018.0	3,000.6	12.0	11.1	90.62	-28.1	2,582.3	2,613.1	2,590.8	22.32	117.093	
3,500.0	3,500.0	3,097.6	3,079.2	12.3	11.4	90.68	-30.9	2,594.7	2,628.8	2,605.9	22.95	114.546	
3,600.0	3,600.0	3,231.7	3,211.7	12.7	12.0	90.71	-32.6	2,615.4	2,644.2	2,620.4	23.83	110.943	
3,700.0	3,700.0	3,700.0	3,351.9	13.0	13.9	90.69	-31.7	2,634.9	2,658.0	2,632.0	25.94	102.470	
3,800.0	3,800.0	3,504.6	3,482.3	13.4	13.1	90.69	-32.0	2,650.7	2,669.8	2,644.2	25.60	104.271	
3,900.0	3,900.0	3,577.3	3,554.4	13.8	13.4	90.70	-32.7	2,659.7	2,682.2	2,656.0	26.21	102.345	
4,000.0	4,000.0	3,637.1	3,613.7	14.1	13.6	90.72	-33.4	2,667.8	2,695.8	2,669.1	26.75	100.780	
4,100.0	4,100.0	3,696.4	3,672.3	14.5	13.9	90.73	-34.0	2,676.7	2,710.9	2,683.6	27.28	99.365	
4,200.0	4,200.0	3,758.4	3,733.4	14.8	14.2	90.74	-34.5	2,686.9	2,727.3	2,699.5	27.82	98.025	
4,300.0	4,300.0	3,912.7	3,885.6	15.2	14.8	90.80	-37.7	2,712.2	2,743.9	2,715.1	28.82	95.212	
4,400.0	4,400.0	4,079.9	4,051.0	15.5	15.5	90.96	-45.6	2,734.9	2,757.4	2,727.6	29.86	92.330	
4,500.0	4,500.0	4,171.6	4,142.0	15.9	15.9	90.99	-47.5	2,746.5	2,770.2	2,739.6	30.55	90.666	
4,600.0	4,600.0	4,261.2	4,230.8	16.3	16.3	91.00	-48.2	2,758.3	2,783.3	2,752.1	31.23	89.121	
4,700.0	4,700.0	4,373.0	4,341.7	16.6	16.7	91.02	-49.2	2,772.9	2,796.3	2,764.3	32.01	87.357	
4,800.0	4,800.0	4,471.2	4,439.1	17.0	17.1	91.03	-50.2	2,785.4	2,809.1	2,776.4	32.73	85.832	
4,900.0	4,900.0	4,687.0	4,653.5	17.3	18.0	91.15	-56.4	2,808.7	2,820.0	2,786.1	33.96	83.046	
5,000.0	5,000.0	4,800.6	4,766.6	17.7	18.4	91.21	-59.7	2,818.2	2,828.5	2,793.8	34.74	81.429	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #134H - Wellbore #1 - Wellbore #1

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	5,100.0	4,887.3	4,853.0	18.1	18.8	91.25	-61.8	2,825.5	2,837.0	2,801.6	35.40	80.132	
5,200.0	5,200.0	4,957.9	4,923.2	18.4	19.1	91.28	-63.3	2,832.0	2,846.2	2,810.2	36.00	79.052	
5,300.0	5,300.0	5,032.1	4,997.1	18.8	19.3	91.31	-65.0	2,839.5	2,856.4	2,819.8	36.62	78.008	
5,400.0	5,400.0	5,110.9	5,075.3	19.1	19.7	91.35	-66.9	2,848.1	2,867.3	2,830.1	37.25	76.980	
5,500.0	5,500.0	5,182.0	5,145.9	19.5	20.0	91.38	-68.9	2,856.4	2,879.1	2,841.2	37.84	76.083	
5,600.0	5,600.0	5,257.2	5,220.5	19.8	20.3	91.43	-71.4	2,865.8	2,891.7	2,853.3	38.45	75.203	
5,700.0	5,700.0	5,335.9	5,298.4	20.2	20.6	91.48	-74.5	2,876.4	2,905.2	2,866.2	39.08	74.342	
5,800.0	5,800.0	5,415.8	5,377.5	20.6	20.9	91.54	-77.8	2,887.6	2,919.4	2,879.7	39.71	73.517	
5,900.0	5,900.0	5,495.0	5,455.8	20.9	21.3	91.60	-81.1	2,899.2	2,934.2	2,893.9	40.34	72.743	
6,000.0	6,000.0	5,572.8	5,532.5	21.3	21.6	91.65	-84.1	2,911.2	2,949.7	2,908.7	40.95	72.025	
6,100.0	6,100.0	5,650.0	5,608.7	21.6	21.9	91.71	-87.1	2,923.6	2,965.9	2,924.3	41.57	71.354	
6,200.0	6,200.0	5,735.0	5,692.4	22.0	22.3	91.76	-90.4	2,937.8	2,982.7	2,940.5	42.22	70.648	
6,300.0	6,300.0	5,813.7	5,769.9	22.4	22.7	91.82	-93.7	2,951.3	3,000.0	2,957.2	42.84	70.033	
6,400.0	6,400.0	5,893.2	5,848.0	22.7	23.0	91.88	-97.1	2,965.5	3,018.0	2,974.5	43.46	69.446	
6,500.0	6,500.0	5,966.2	5,919.7	23.1	23.4	91.93	-100.2	2,979.0	3,036.7	2,992.6	44.04	68.951	
6,600.0	6,600.0	6,600.0	6,111.6	23.4	26.2	92.07	-108.9	3,013.8	3,055.0	3,008.1	46.97	65.041	
6,700.0	6,700.0	6,323.9	6,272.2	23.8	25.0	92.21	-117.3	3,037.5	3,069.7	3,023.3	46.36	66.212	
6,800.0	6,800.0	6,456.4	6,403.4	24.1	25.5	92.29	-122.3	3,054.8	3,082.8	3,035.6	47.25	65.244	
6,900.0	6,900.0	6,563.5	6,509.6	24.5	26.0	92.34	-125.5	3,068.3	3,095.6	3,047.5	48.01	64.474	
7,000.0	7,000.0	6,670.4	6,615.6	24.9	26.4	92.39	-128.7	3,081.5	3,108.0	3,059.3	48.77	63.724	
7,100.0	7,100.0	6,752.7	6,697.2	25.2	26.7	-162.04	-131.4	3,091.8	3,121.5	3,072.1	49.41	63.181	
7,200.0	7,200.0	6,835.7	6,779.5	25.5	27.1	-161.96	-134.1	3,102.6	3,137.1	3,087.1	50.03	62.706	
7,300.0	7,299.9	6,910.7	6,853.7	25.9	27.4	-161.88	-137.0	3,112.8	3,155.0	3,104.4	50.61	62.336	
7,400.0	7,399.7	6,987.0	6,929.2	26.2	27.7	-161.79	-140.0	3,123.8	3,175.2	3,124.0	51.20	62.016	
7,500.0	7,499.4	7,073.9	7,015.1	26.6	28.1	-161.70	-143.7	3,136.7	3,197.6	3,145.7	51.84	61.679	
7,600.0	7,598.9	7,163.7	7,103.7	26.9	28.5	-161.61	-147.8	3,150.1	3,221.7	3,169.2	52.50	61.366	
7,700.0	7,698.3	7,234.0	7,173.1	27.2	28.8	-161.52	-151.3	3,161.0	3,248.0	3,194.9	53.05	61.222	
7,800.0	7,797.4	7,404.9	7,342.0	27.6	29.5	-161.44	-158.8	3,185.8	3,274.5	3,220.4	54.14	60.486	
7,900.0	7,896.3	7,497.4	7,433.5	27.9	29.9	-161.37	-162.8	3,198.5	3,302.2	3,247.4	54.81	60.251	
8,000.0	7,994.9	7,574.6	7,509.9	28.3	30.3	-161.29	-166.1	3,209.3	3,331.8	3,276.4	55.40	60.141	
8,100.0	8,093.3	7,650.7	7,585.1	28.6	30.6	-161.21	-169.4	3,220.5	3,363.5	3,307.5	55.99	60.079	
8,182.6	8,174.2	7,712.9	7,646.5	28.9	30.9	-161.14	-172.4	3,229.9	3,391.3	3,334.8	56.46	60.060	
8,200.0	8,191.3	7,724.5	7,658.0	29.0	30.9	-161.15	-173.0	3,231.7	3,397.3	3,340.8	56.56	60.068	
8,300.0	8,289.1	7,796.0	7,728.5	29.4	31.2	-161.18	-176.7	3,243.0	3,432.3	3,375.2	57.12	60.094	
8,400.0	8,387.0	8,400.0	7,971.5	29.7	33.8	-161.37	-183.7	3,278.3	3,466.3	3,406.4	59.90	57.866	
8,500.0	8,484.9	8,516.9	8,445.5	30.1	34.0	-161.90	-184.2	3,306.3	3,489.0	3,428.3	60.70	57.482	
8,600.0	8,582.8	8,622.1	8,550.8	30.5	34.3	-162.00	-185.2	3,307.3	3,509.5	3,448.1	61.40	57.159	
8,700.0	8,680.6	8,728.9	8,657.6	30.9	34.7	-162.09	-186.3	3,308.2	3,529.8	3,467.7	62.10	56.838	
8,800.0	8,778.5	8,828.7	8,757.3	31.2	35.0	-162.17	-187.6	3,308.7	3,550.0	3,487.2	62.79	56.540	
8,900.0	8,876.4	8,933.4	8,862.0	31.6	35.3	-162.26	-189.0	3,309.2	3,570.0	3,506.5	63.49	56.234	
9,000.0	8,974.3	9,034.9	8,963.5	32.0	35.6	-162.34	-190.3	3,309.6	3,590.0	3,525.8	64.17	55.943	
9,100.0	9,072.1	9,173.2	9,101.8	32.4	36.0	-162.47	-190.8	3,309.1	3,609.2	3,544.3	64.94	55.580	
9,200.0	9,170.0	9,284.3	9,212.9	32.8	36.4	-162.60	-189.5	3,308.0	3,627.8	3,562.2	65.62	55.281	
9,300.0	9,267.9	9,381.5	9,310.0	33.2	36.6	-162.72	-187.8	3,306.9	3,646.2	3,579.9	66.28	55.011	
9,400.0	9,365.8	9,468.0	9,396.5	33.6	36.9	-162.83	-186.7	3,306.0	3,664.8	3,597.9	66.91	54.769	
9,500.0	9,463.7	9,579.2	9,507.7	34.0	37.2	-162.94	-186.0	3,305.0	3,683.5	3,615.9	67.61	54.485	
9,600.0	9,561.5	9,707.7	9,636.2	34.4	37.6	-163.08	-185.0	3,303.0	3,701.6	3,633.3	68.34	54.166	
9,700.0	9,659.4	9,821.3	9,749.8	34.8	37.9	-163.20	-183.8	3,300.3	3,718.9	3,649.9	69.03	53.871	
9,800.0	9,757.3	9,903.5	9,832.0	35.2	38.1	-163.29	-182.9	3,298.5	3,736.3	3,666.7	69.66	53.635	
9,900.0	9,855.2	9,976.7	9,905.2	35.6	38.3	-163.37	-182.3	3,297.3	3,754.4	3,684.1	70.27	53.429	
10,000.0	9,953.0	10,079.4	10,007.8	36.0	38.6	-163.47	-181.8	3,295.9	3,772.7	3,701.8	70.95	53.176	
10,100.0	10,050.9	10,186.1	10,114.5	36.4	39.0	-163.56	-182.0	3,294.1	3,790.8	3,719.2	71.64	52.916	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #134H - Wellbore #1 - Wellbore #1

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
10,200.0	10,148.8	10,274.8	10,203.2	36.9	39.2	-163.64	-182.1	3,292.8	3,809.0	3,736.7	72.29	52.693	
10,300.0	10,246.7	10,362.3	10,290.7	37.3	39.5	-163.71	-182.1	3,291.6	3,827.4	3,754.4	72.93	52.479	
10,400.0	10,344.6	10,439.5	10,367.8	37.7	39.7	-163.78	-182.2	3,290.9	3,846.2	3,772.7	73.55	52.293	
10,500.0	10,442.4	10,563.5	10,491.9	38.1	40.1	-163.87	-183.0	3,289.6	3,864.9	3,790.6	74.30	52.017	
10,600.0	10,540.3	10,645.1	10,573.5	38.5	40.3	-163.93	-183.8	3,288.7	3,883.5	3,808.5	74.94	51.822	
10,700.0	10,638.2	10,698.9	10,627.2	39.0	40.5	-163.97	-184.3	3,288.5	3,902.9	3,827.4	75.50	51.695	
10,800.0	10,736.1	10,781.7	10,710.1	39.4	40.8	-164.03	-185.3	3,289.0	3,923.2	3,847.1	76.15	51.520	
10,900.0	10,833.9	10,896.7	10,825.1	39.8	41.1	-164.10	-187.0	3,289.6	3,943.5	3,866.6	76.91	51.277	
11,000.0	10,931.8	11,000.0	10,936.1	40.2	41.5	-164.16	-189.0	3,289.5	3,963.1	3,885.5	77.62	51.060	
11,100.0	11,029.7	11,062.1	10,990.4	40.7	41.7	-164.19	-189.8	3,289.7	3,983.2	3,905.0	78.20	50.934	
11,200.0	11,127.6	11,124.1	11,052.4	41.1	41.9	-164.24	-190.0	3,290.7	4,004.5	3,925.7	78.78	50.829	
11,300.0	11,225.5	11,215.3	11,143.6	41.5	42.2	-164.31	-190.0	3,292.5	4,026.2	3,946.8	79.47	50.665	
11,400.0	11,323.3	11,324.7	11,253.0	42.0	42.6	-164.40	-190.0	3,294.6	4,047.8	3,967.6	80.22	50.462	
11,500.0	11,421.2	11,856.9	11,754.1	42.4	44.0	-166.44	-73.8	3,276.8	4,065.2	3,983.3	81.88	49.651	
11,523.5	11,444.2	11,867.7	11,762.2	42.5	44.0	-166.55	-66.7	3,275.9	4,068.0	3,986.0	82.01	49.604	
11,600.0	11,519.2	11,902.3	11,787.4	42.8	44.0	-166.93	-43.1	3,273.1	4,077.1	3,994.7	82.44	49.455	
11,700.0	11,617.7	11,969.7	11,834.6	43.3	44.1	-167.67	4.7	3,267.9	4,088.1	4,005.0	83.02	49.241	
11,800.0	11,716.7	11,993.0	11,850.5	43.7	44.1	-167.95	21.7	3,266.1	4,098.0	4,014.5	83.52	49.068	
11,900.0	11,815.9	11,993.0	11,850.5	44.1	44.1	-167.98	21.7	3,266.1	4,107.8	4,023.8	83.93	48.941	
12,000.0	11,915.5	11,993.0	11,850.5	44.4	44.1	-168.01	21.7	3,266.1	4,117.4	4,033.1	84.31	48.838	
12,100.0	12,015.2	11,993.0	11,850.5	44.8	44.1	-168.04	21.7	3,266.1	4,126.9	4,042.2	84.64	48.760	
12,200.0	12,115.1	11,993.0	11,850.5	45.2	44.1	-168.07	21.7	3,266.1	4,136.2	4,051.3	84.92	48.707	
12,300.0	12,215.1	11,993.0	11,850.5	45.5	44.1	-168.10	21.7	3,266.1	4,145.4	4,060.2	85.16	48.677	
12,311.9	12,227.0	11,993.0	11,850.5	45.5	44.1	86.41	21.7	3,266.1	4,146.5	4,061.3	85.19	48.675	
12,400.0	12,315.1	11,993.0	11,850.5	45.8	44.1	86.41	21.7	3,266.1	4,155.4	4,070.0	85.36	48.679	
12,500.0	12,415.1	11,993.0	11,850.5	46.2	44.1	86.41	21.7	3,266.1	4,167.8	4,082.2	85.53	48.731	
12,600.0	12,515.1	12,037.8	11,880.9	46.5	44.2	85.95	54.4	3,265.6	4,179.4	4,093.5	85.84	48.689	
12,700.0	12,615.1	12,043.0	11,884.5	46.9	44.2	85.90	58.3	3,265.9	4,195.7	4,109.7	85.96	48.809	
12,711.9	12,627.0	12,043.7	11,884.9	46.9	44.2	85.90	58.7	3,265.9	4,197.8	4,111.8	85.97	48.826	
12,750.0	12,665.1	12,086.0	11,913.7	47.0	44.3	106.75	89.3	3,271.5	4,207.5	4,121.3	86.19	48.815	
12,800.0	12,714.8	12,086.0	11,913.7	47.2	44.3	105.69	89.3	3,271.5	4,218.3	4,132.1	86.23	48.922	
12,850.0	12,763.8	12,086.0	11,913.7	47.4	44.3	104.44	89.3	3,271.5	4,230.8	4,144.5	86.25	49.054	
12,900.0	12,811.8	12,086.0	11,913.7	47.5	44.3	103.02	89.3	3,271.5	4,244.9	4,158.6	86.26	49.211	
12,950.0	12,858.3	12,086.0	11,913.7	47.7	44.3	101.42	89.3	3,271.5	4,260.4	4,174.2	86.26	49.391	
13,000.0	12,903.1	12,086.0	11,913.7	47.8	44.3	99.65	89.3	3,271.5	4,277.3	4,191.1	86.25	49.590	
13,050.0	12,945.8	12,086.0	11,913.7	48.0	44.3	97.73	89.3	3,271.5	4,295.4	4,209.2	86.24	49.806	
13,100.0	12,986.1	12,086.0	11,913.7	48.1	44.3	95.68	89.3	3,271.5	4,314.6	4,228.3	86.23	50.036	
13,150.0	13,023.7	12,086.0	11,913.7	48.3	44.3	93.50	89.3	3,271.5	4,334.6	4,248.4	86.21	50.277	
13,200.0	13,058.2	12,086.0	11,913.7	48.4	44.3	91.22	89.3	3,271.5	4,355.3	4,269.1	86.20	50.525	
13,250.0	13,089.4	12,086.0	11,913.7	48.5	44.3	88.86	89.3	3,271.5	4,376.6	4,290.4	86.19	50.777	
13,300.0	13,117.2	12,086.0	11,913.7	48.7	44.3	86.46	89.3	3,271.5	4,398.3	4,312.1	86.19	51.030	
13,350.0	13,141.1	12,086.0	11,913.7	48.8	44.3	84.03	89.3	3,271.5	4,420.2	4,334.0	86.20	51.279	
13,400.0	13,161.2	12,086.0	11,913.7	48.9	44.3	81.61	89.3	3,271.5	4,442.2	4,356.0	86.22	51.521	
13,450.0	13,177.2	12,086.0	11,913.7	49.1	44.3	79.21	89.3	3,271.5	4,464.0	4,377.8	86.26	51.753	
13,500.0	13,189.1	12,086.0	11,913.7	49.2	44.3	76.87	89.3	3,271.5	4,485.6	4,399.3	86.31	51.973	
13,550.0	13,196.6	12,086.0	11,913.7	49.4	44.3	74.62	89.3	3,271.5	4,506.7	4,420.3	86.37	52.178	
13,600.0	13,199.8	12,086.0	11,913.7	49.6	44.3	72.46	89.3	3,271.5	4,527.2	4,440.8	86.45	52.366	
13,611.9	13,200.0	12,086.0	11,913.7	49.6	44.3	71.96	89.3	3,271.5	4,532.0	4,445.5	86.48	52.408	
13,700.0	13,200.0	12,086.0	11,913.7	50.0	44.3	72.19	89.3	3,271.5	4,566.8	4,480.1	86.66	52.700	
13,800.0	13,200.0	12,086.0	11,913.7	50.4	44.3	72.45	89.3	3,271.5	4,605.2	4,518.3	86.89	52.997	
13,900.0	13,200.0	12,086.0	11,913.7	50.9	44.3	72.69	89.3	3,271.5	4,642.3	4,555.1	87.16	53.260	
14,000.0	13,200.0	13,113.0	12,014.2	51.4	47.6	75.09	1,047.5	3,306.4	4,665.6	4,572.9	92.61	50.377	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #134H - Wellbore #1 - Wellbore #1

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
14,100.0	13,200.0	13,113.0	12,014.2	52.0	47.6	75.17	1,047.5	3,306.4	4,680.6	4,587.5	93.11	50.271	
14,200.0	13,200.0	13,173.0	12,009.5	52.6	48.0	75.20	1,107.1	3,301.5	4,693.5	4,599.5	94.02	49.920	
14,300.0	13,200.0	13,208.0	12,007.2	53.2	48.2	75.24	1,141.9	3,299.1	4,704.3	4,609.5	94.80	49.622	
14,400.0	13,200.0	13,266.8	12,003.8	53.8	48.6	75.26	1,200.6	3,295.9	4,712.8	4,617.0	95.80	49.194	
14,500.0	13,200.0	13,322.3	12,001.2	54.5	49.0	75.27	1,255.9	3,293.8	4,719.0	4,622.2	96.81	48.744	
14,600.0	13,200.0	13,405.0	11,997.0	55.1	49.6	75.24	1,338.5	3,291.1	4,722.4	4,624.4	98.08	48.149	
14,687.2	13,200.0	13,466.0	11,994.2	55.7	50.1	75.21	1,399.4	3,289.4	4,723.1	4,624.0	99.14	47.640	
14,700.0	13,200.0	13,474.9	11,993.8	55.8	50.1	75.20	1,408.3	3,289.2	4,723.0	4,623.8	99.30	47.564	
14,800.0	13,200.0	13,591.4	11,988.6	56.5	51.1	75.14	1,524.6	3,286.4	4,722.6	4,621.7	100.98	46.769	
14,881.9	13,200.0	13,639.9	11,986.1	57.1	51.5	75.10	1,573.0	3,285.2	4,722.4	4,620.4	102.00	46.299	
14,900.0	13,200.0	13,651.2	11,985.5	57.3	51.6	75.10	1,584.4	3,284.9	4,722.4	4,620.2	102.23	46.194	
15,000.0	13,200.0	13,828.2	11,981.2	58.1	53.2	75.04	1,761.2	3,281.5	4,722.0	4,617.4	104.66	45.118	
15,100.0	13,200.0	13,897.6	11,980.6	58.9	53.8	75.03	1,830.6	3,279.8	4,720.6	4,614.5	106.13	44.479	
15,165.1	13,200.0	13,923.3	11,980.3	59.4	54.1	75.03	1,856.3	3,279.4	4,720.4	4,613.4	106.92	44.149	
15,200.0	13,200.0	13,937.0	11,980.2	59.7	54.2	75.02	1,870.0	3,279.3	4,720.4	4,613.1	107.34	43.977	
15,300.0	13,200.0	14,017.9	11,979.3	60.6	55.0	75.02	1,950.8	3,279.3	4,721.4	4,612.4	109.02	43.308	
15,400.0	13,200.0	14,129.3	11,978.2	61.6	56.1	75.00	2,062.3	3,278.8	4,722.0	4,610.9	111.08	42.509	
15,500.0	13,200.0	14,252.6	11,974.5	62.5	57.4	74.96	2,185.5	3,277.4	4,722.4	4,609.1	113.34	41.667	
15,600.0	13,200.0	14,339.0	11,971.0	63.5	58.4	74.92	2,271.8	3,276.0	4,722.6	4,607.4	115.24	40.982	
15,700.0	13,200.0	14,397.2	11,968.7	64.5	59.0	74.89	2,329.9	3,275.3	4,723.4	4,606.6	116.85	40.423	
15,800.0	13,200.0	14,584.5	11,968.9	65.5	61.1	74.90	2,517.2	3,275.5	4,724.6	4,604.5	120.07	39.348	
15,900.0	13,200.0	14,679.9	11,970.7	66.6	62.2	74.92	2,612.6	3,274.5	4,723.8	4,601.6	122.25	38.641	
15,988.6	13,200.0	14,747.0	11,970.4	67.6	63.0	74.91	2,679.7	3,273.8	4,723.7	4,599.7	123.98	38.099	
16,000.0	13,200.0	14,757.0	11,970.3	67.7	63.1	74.91	2,689.7	3,273.7	4,723.7	4,599.5	124.22	38.025	
16,100.0	13,200.0	14,867.0	11,969.0	68.8	64.4	74.89	2,799.7	3,272.5	4,723.7	4,597.1	126.65	37.298	
16,200.0	13,200.0	14,977.2	11,967.4	69.9	65.8	74.87	2,909.8	3,270.8	4,723.4	4,594.2	129.12	36.583	
16,300.0	13,200.0	15,112.9	11,965.9	71.1	67.5	74.85	3,045.5	3,268.4	4,722.7	4,590.7	131.96	35.789	
16,400.0	13,200.0	15,188.0	11,965.2	72.3	68.4	74.84	3,120.6	3,266.5	4,721.4	4,587.3	134.05	35.221	
16,480.7	13,200.0	15,239.2	11,964.8	73.2	69.1	74.83	3,171.8	3,265.5	4,720.8	4,585.2	135.63	34.807	
16,500.0	13,200.0	15,246.3	11,964.7	73.5	69.1	74.83	3,178.9	3,265.4	4,720.8	4,584.9	135.94	34.728	
16,600.0	13,200.0	15,283.9	11,964.5	74.7	69.6	74.83	3,216.4	3,265.4	4,721.7	4,584.2	137.56	34.326	
16,700.0	13,200.0	15,391.7	11,963.9	75.9	71.0	74.83	3,324.3	3,266.0	4,723.2	4,583.0	140.16	33.699	
16,800.0	13,200.0	15,465.4	11,963.4	77.1	72.0	74.83	3,398.0	3,266.6	4,724.9	4,582.5	142.31	33.200	
16,900.0	13,200.0	15,621.0	11,962.2	78.4	74.0	74.82	3,553.5	3,267.2	4,726.1	4,580.5	145.65	32.449	
17,000.0	13,200.0	17,000.0	11,960.9	79.7	92.6	74.80	3,685.8	3,266.2	4,726.4	4,561.3	165.12	28.624	
17,100.0	13,200.0	15,827.6	11,960.4	81.0	76.8	74.80	3,760.1	3,265.6	4,726.6	4,575.6	150.93	31.316	
17,200.0	13,200.0	15,897.3	11,959.7	82.3	77.7	74.79	3,829.8	3,265.6	4,727.6	4,574.5	153.12	30.875	
17,300.0	13,200.0	15,965.3	11,957.4	83.6	78.7	74.76	3,897.7	3,265.6	4,729.2	4,573.9	155.29	30.454	
17,400.0	13,200.0	16,019.9	11,956.2	84.9	79.4	74.75	3,952.4	3,266.2	4,731.6	4,574.3	157.27	30.086	
17,500.0	13,200.0	16,117.3	11,956.5	86.3	80.8	74.77	4,049.7	3,268.7	4,734.7	4,574.8	159.92	29.607	
17,600.0	13,200.0	16,367.1	11,962.7	87.6	84.3	74.85	4,299.4	3,271.5	4,735.5	4,570.6	164.92	28.715	
17,700.0	13,200.0	16,477.1	11,962.1	89.0	85.8	74.85	4,409.4	3,270.0	4,735.1	4,567.3	167.80	28.219	
17,800.0	13,200.0	16,560.2	11,960.4	90.3	87.0	74.82	4,492.5	3,268.7	4,734.9	4,564.6	170.30	27.804	
17,806.2	13,200.0	16,565.0	11,960.3	90.4	87.1	74.82	4,497.3	3,268.6	4,734.9	4,564.4	170.45	27.779	
17,900.0	13,200.0	16,651.1	11,958.8	91.7	88.3	74.80	4,583.4	3,267.7	4,735.0	4,562.1	172.92	27.382	
18,000.0	13,200.0	16,744.8	11,956.2	93.1	89.7	74.77	4,677.0	3,266.4	4,735.2	4,559.6	175.60	26.966	
18,100.0	13,200.0	16,819.7	11,954.2	94.5	90.7	74.75	4,751.9	3,265.7	4,735.7	4,557.7	178.00	26.605	
18,200.0	13,200.0	16,888.0	11,953.4	95.9	91.7	74.74	4,820.2	3,265.8	4,736.9	4,556.6	180.32	26.270	
18,300.0	13,200.0	17,007.3	11,953.0	97.3	93.5	74.74	4,939.4	3,266.3	4,738.2	4,554.7	183.44	25.830	
18,400.0	13,200.0	17,126.6	11,951.8	98.7	95.2	74.73	5,058.8	3,266.6	4,739.4	4,552.9	186.57	25.403	
18,500.0	13,200.0	17,267.2	11,954.2	100.2	97.3	74.76	5,199.3	3,266.2	4,739.4	4,549.3	190.06	24.936	
18,600.0	13,200.0	17,418.0	11,955.0	101.6	99.5	74.77	5,350.1	3,264.0	4,738.5	4,544.8	193.71	24.462	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #134H - Wellbore #1 - Wellbore #1

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
18,700.0	13,200.0	17,527.3	11,954.8	103.0	101.1	74.76	5,459.4	3,261.5	4,737.2	4,540.4	196.73	24.080	
18,800.0	13,200.0	17,620.2	11,954.3	104.5	102.5	74.75	5,552.3	3,259.3	4,735.8	4,536.3	199.51	23.738	
18,900.0	13,200.0	17,692.8	11,953.7	105.9	103.6	74.74	5,624.8	3,257.8	4,734.7	4,532.7	201.98	23.441	
19,000.0	13,200.0	17,764.9	11,954.3	107.4	104.7	74.75	5,696.9	3,257.2	4,734.3	4,529.9	204.46	23.155	
19,033.8	13,200.0	17,792.8	11,954.5	107.9	105.1	74.75	5,724.8	3,257.0	4,734.3	4,529.0	205.36	23.054	
19,100.0	13,200.0	17,854.0	11,954.6	108.9	106.0	74.75	5,786.0	3,256.6	4,734.4	4,527.2	207.21	22.848	
19,200.0	13,200.0	19,200.0	11,958.0	110.3	126.4	74.78	6,014.0	3,253.5	4,733.8	4,505.1	228.72	20.697	
19,300.0	13,200.0	18,160.6	11,960.3	111.8	110.7	74.81	6,092.5	3,251.2	4,731.0	4,516.2	214.76	22.029	
19,400.0	13,200.0	18,208.0	11,961.3	113.3	111.4	74.82	6,139.9	3,250.5	4,729.6	4,512.7	216.92	21.803	
19,500.0	13,200.0	18,290.3	11,963.0	114.8	112.6	74.84	6,222.1	3,249.9	4,729.1	4,509.5	219.61	21.534	
19,600.0	13,200.0	18,397.5	11,965.4	116.3	114.3	74.86	6,329.3	3,248.9	4,728.3	4,505.6	222.71	21.231	
19,700.0	13,200.0	18,501.8	11,967.7	117.8	115.9	74.89	6,433.6	3,247.8	4,727.5	4,501.7	225.77	20.940	
19,762.5	13,200.0	18,521.9	11,967.9	118.7	116.2	74.89	6,453.7	3,247.6	4,727.2	4,500.3	226.96	20.829	
19,800.0	13,200.0	18,537.8	11,968.0	119.3	116.4	74.89	6,469.6	3,247.6	4,727.3	4,499.6	227.73	20.759	
19,900.0	13,200.0	18,586.0	11,967.8	120.8	117.1	74.89	6,517.8	3,247.7	4,728.4	4,498.5	229.86	20.571	
20,000.0	13,200.0	18,646.1	11,966.8	122.3	118.1	74.88	6,577.9	3,248.3	4,730.4	4,498.3	232.16	20.375	
20,100.0	13,200.0	20,100.0	11,965.4	123.8	140.4	74.88	6,691.1	3,249.7	4,732.7	4,477.2	255.47	18.525	
20,200.0	13,200.0	18,853.7	11,965.2	125.3	121.3	74.88	6,785.4	3,250.8	4,734.6	4,496.3	238.27	19.871	
20,300.0	13,200.0	19,011.7	11,966.0	126.8	123.7	74.90	6,943.4	3,252.1	4,736.0	4,493.7	242.25	19.550	
20,400.0	13,200.0	19,107.8	11,966.8	128.4	125.2	74.91	7,039.5	3,252.8	4,737.1	4,491.9	245.20	19.319	
20,500.0	13,200.0	19,221.2	11,967.8	129.9	126.9	74.93	7,152.9	3,253.2	4,738.0	4,489.6	248.45	19.070	
20,600.0	13,200.0	19,316.1	11,968.1	131.4	128.4	74.93	7,247.9	3,253.4	4,738.8	4,487.5	251.39	18.850	
20,700.0	13,200.0	19,402.8	11,967.7	132.9	129.8	74.93	7,334.5	3,253.5	4,739.9	4,485.7	254.19	18.647	
20,800.0	13,200.0	19,651.6	11,967.8	134.5	133.6	74.93	7,583.3	3,250.2	4,739.1	4,479.4	259.61	18.255	
20,900.0	13,200.0	19,757.6	11,968.0	136.0	135.3	74.92	7,689.3	3,247.4	4,737.2	4,474.5	262.74	18.030	
21,000.0	13,200.0	19,863.0	11,969.6	137.6	137.0	74.93	7,794.5	3,244.4	4,734.8	4,468.9	265.88	17.808	
21,100.0	13,200.0	19,939.3	11,970.2	139.1	138.1	74.94	7,870.8	3,242.5	4,732.9	4,464.4	268.57	17.623	
21,200.0	13,200.0	20,042.8	11,970.5	140.7	139.8	74.94	7,974.3	3,240.1	4,731.3	4,459.7	271.68	17.415	
21,300.0	13,200.0	20,135.3	11,970.8	142.2	141.2	74.93	8,066.8	3,237.6	4,729.4	4,454.8	274.62	17.222	
21,400.0	13,200.0	20,196.8	11,969.6	143.8	142.2	74.92	8,128.3	3,236.1	4,728.3	4,451.2	277.06	17.066	
21,500.0	13,200.0	20,278.2	11,967.6	145.3	143.5	74.89	8,209.6	3,234.4	4,727.7	4,447.9	279.80	16.897	
21,600.0	13,200.0	20,390.0	11,967.0	146.9	145.2	74.88	8,321.4	3,232.8	4,727.2	4,444.1	283.05	16.701	
21,700.0	13,200.0	20,494.2	11,969.2	148.4	146.9	74.91	8,425.6	3,231.8	4,726.4	4,440.2	286.21	16.514	
21,800.0	13,200.0	20,581.3	11,970.9	150.0	148.3	74.93	8,512.6	3,231.1	4,725.9	4,436.8	289.09	16.347	
21,900.0	13,200.0	20,685.7	11,972.0	151.5	149.9	74.94	8,617.0	3,230.1	4,725.5	4,433.2	292.25	16.169	
22,000.0	13,200.0	20,885.1	11,976.7	153.1	153.1	74.99	8,816.3	3,226.3	4,723.6	4,426.7	296.94	15.908	
22,100.0	13,200.0	20,978.3	11,979.5	154.7	154.6	75.01	8,909.5	3,223.8	4,721.0	4,421.1	299.95	15.739	
22,200.0	13,200.0	21,069.8	11,980.9	156.2	156.0	75.02	9,000.9	3,221.2	4,718.6	4,415.7	302.93	15.577	
22,300.0	13,200.0	21,138.0	11,981.1	157.8	157.1	75.02	9,069.1	3,219.1	4,716.4	4,410.9	305.53	15.437	
22,400.0	13,200.0	21,207.8	11,980.3	159.4	158.2	75.01	9,138.8	3,217.1	4,714.8	4,406.7	308.13	15.301	
22,500.0	13,200.0	21,315.7	11,977.6	161.0	159.9	74.97	9,246.7	3,214.6	4,714.0	4,402.7	311.32	15.142	
22,600.0	13,200.0	21,366.1	11,976.3	162.5	160.7	74.95	9,297.0	3,213.5	4,713.3	4,399.7	313.60	15.030	
22,611.0	13,200.0	21,370.8	11,976.2	162.7	160.8	74.95	9,301.8	3,213.4	4,713.3	4,399.4	313.83	15.018	
22,700.0	13,200.0	21,421.0	11,974.3	164.1	161.6	74.93	9,351.9	3,212.9	4,713.8	4,397.9	315.91	14.921	
22,800.0	13,200.0	21,467.6	11,972.0	165.7	162.4	74.90	9,398.4	3,212.7	4,715.3	4,397.3	318.05	14.826	
22,900.0	13,200.0	21,547.6	11,967.0	167.3	163.6	74.84	9,478.3	3,212.6	4,717.6	4,396.9	320.73	14.709	
23,000.0	13,200.0	21,644.2	11,960.2	168.9	165.2	74.77	9,574.7	3,212.3	4,719.9	4,396.2	323.69	14.582	
23,100.0	13,200.0	21,815.3	11,952.1	170.4	167.9	74.68	9,745.5	3,212.5	4,722.2	4,394.3	327.94	14.400	
23,200.0	13,200.0	21,944.6	11,950.3	172.0	170.0	74.66	9,874.8	3,212.2	4,723.2	4,391.7	331.53	14.247	
23,300.0	13,200.0	22,089.5	11,949.3	173.6	172.3	74.64	10,019.7	3,210.4	4,722.9	4,387.5	335.36	14.083	
23,400.0	13,200.0	22,187.9	11,948.6	175.2	173.9	74.63	10,118.0	3,208.9	4,722.4	4,383.9	338.44	13.953	
23,504.9	13,200.0	22,275.0	11,947.8	176.9	175.3	74.62	10,205.2	3,207.4	4,721.7	4,380.3	341.40	13.830 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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #135H - Wellbore #1 - BLM Plan #2

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	0.0	0.0	0.0	0.0	104.65	-28.8	110.1	113.8				
100.0	100.0	100.0	100.0	0.1	0.1	104.65	-28.8	110.1	113.8	113.5	0.26	443.996	
200.0	200.0	200.0	200.0	0.5	0.5	104.65	-28.8	110.1	113.8	112.8	0.97	116.927	
300.0	300.0	300.0	300.0	0.8	0.8	104.65	-28.8	110.1	113.8	112.1	1.69	67.329	
400.0	400.0	400.0	400.0	1.2	1.2	104.65	-28.8	110.1	113.8	111.4	2.41	47.276	
500.0	500.0	500.0	500.0	1.6	1.6	104.65	-28.8	110.1	113.8	110.7	3.12	36.427	
600.0	600.0	600.0	600.0	1.9	1.9	104.65	-28.8	110.1	113.8	110.0	3.84	29.627	
700.0	700.0	700.0	700.0	2.3	2.3	104.65	-28.8	110.1	113.8	109.2	4.56	24.967	
800.0	800.0	800.0	800.0	2.6	2.6	104.65	-28.8	110.1	113.8	108.5	5.27	21.574	
900.0	900.0	900.0	900.0	3.0	3.0	104.65	-28.8	110.1	113.8	107.8	5.99	18.992	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	104.65	-28.8	110.1	113.8	107.1	6.71	16.963	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	104.65	-28.8	110.1	113.8	106.4	7.43	15.325	
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	104.65	-28.8	110.1	113.8	105.7	8.14	13.976	
1,300.0	1,300.0	1,300.0	1,300.0	4.4	4.4	104.65	-28.8	110.1	113.8	104.9	8.86	12.845	
1,400.0	1,400.0	1,400.0	1,400.0	4.8	4.8	104.65	-28.8	110.1	113.8	104.2	9.58	11.883	
1,500.0	1,500.0	1,500.0	1,500.0	5.1	5.1	104.65	-28.8	110.1	113.8	103.5	10.29	11.055	
1,600.0	1,600.0	1,600.0	1,600.0	5.5	5.5	104.65	-28.8	110.1	113.8	102.8	11.01	10.336	
1,700.0	1,700.0	1,700.0	1,700.0	5.9	5.9	104.65	-28.8	110.1	113.8	102.1	11.73	9.704	
1,800.0	1,800.0	1,800.0	1,800.0	6.2	6.2	104.65	-28.8	110.1	113.8	101.4	12.44	9.145	
1,900.0	1,900.0	1,900.0	1,900.0	6.6	6.6	104.65	-28.8	110.1	113.8	100.6	13.16	8.647	
2,000.0	2,000.0	2,000.0	2,000.0	6.9	6.9	104.65	-28.8	110.1	113.8	99.9	13.88	8.200	
2,100.0	2,100.0	2,100.0	2,100.0	7.3	7.3	104.65	-28.8	110.1	113.8	99.2	14.60	7.797	
2,200.0	2,200.0	2,200.0	2,200.0	7.7	7.7	104.65	-28.8	110.1	113.8	98.5	15.31	7.432	
2,300.0	2,300.0	2,300.0	2,300.0	8.0	8.0	104.65	-28.8	110.1	113.8	97.8	16.03	7.100	
2,400.0	2,400.0	2,400.0	2,400.0	8.4	8.4	104.65	-28.8	110.1	113.8	97.1	16.75	6.796	
2,500.0	2,500.0	2,500.0	2,500.0	8.7	8.7	104.65	-28.8	110.1	113.8	96.3	17.46	6.517	
2,600.0	2,600.0	2,600.0	2,600.0	9.1	9.1	104.65	-28.8	110.1	113.8	95.6	18.18	6.260	
2,700.0	2,700.0	2,700.0	2,700.0	9.4	9.4	104.65	-28.8	110.1	113.8	94.9	18.90	6.022	
2,800.0	2,800.0	2,800.0	2,800.0	9.8	9.8	104.65	-28.8	110.1	113.8	94.2	19.61	5.802	
2,900.0	2,900.0	2,900.0	2,900.0	10.2	10.2	104.65	-28.8	110.1	113.8	93.5	20.33	5.597	
3,000.0	3,000.0	3,000.0	3,000.0	10.5	10.5	104.65	-28.8	110.1	113.8	92.8	21.05	5.407	
3,100.0	3,100.0	3,101.8	3,101.8	10.9	10.9	104.86	-29.0	109.2	113.0	91.2	21.76	5.194	
3,200.0	3,200.0	3,203.5	3,203.5	11.2	11.2	105.49	-29.5	106.6	110.6	88.2	22.45	4.928	
3,300.0	3,300.0	3,305.1	3,305.0	11.6	11.6	106.61	-30.5	102.2	106.7	83.6	23.14	4.612	
3,400.0	3,400.0	3,406.5	3,406.2	12.0	11.9	108.32	-31.8	96.0	101.3	77.5	23.83	4.252	
3,500.0	3,500.0	3,507.7	3,507.0	12.3	12.3	110.79	-33.5	88.1	94.5	70.0	24.51	3.856	
3,600.0	3,600.0	3,608.5	3,607.4	12.7	12.6	114.32	-35.5	78.5	86.5	61.3	25.19	3.433	
3,700.0	3,700.0	3,709.0	3,707.2	13.0	13.0	119.40	-37.9	67.2	77.5	51.6	25.88	2.995	
3,800.0	3,800.0	3,809.0	3,806.4	13.4	13.3	126.80	-40.6	54.3	68.1	41.5	26.59	2.562	
3,900.0	3,900.0	3,908.3	3,904.5	13.8	13.7	137.46	-43.7	40.1	59.4	32.1	27.35	2.173	
4,000.0	4,000.0	4,007.2	4,002.3	14.1	14.0	151.21	-46.7	25.7	53.4	25.2	28.12	1.897	
4,100.0	4,100.0	4,106.1	4,100.1	14.5	14.4	167.22	-49.8	11.3	51.0	22.2	28.88	1.767	
4,104.8	4,104.8	4,110.8	4,104.8	14.5	14.4	168.01	-49.9	10.6	51.0	22.1	28.91	1.765	CC, ES, SF
4,200.0	4,200.0	4,205.0	4,197.9	14.8	14.8	-176.64	-52.8	-3.1	53.0	23.4	29.58	1.790	
4,300.0	4,300.0	4,303.8	4,295.7	15.2	15.2	-162.62	-55.9	-17.5	58.7	28.5	30.23	1.942	
4,400.0	4,400.0	4,402.7	4,393.5	15.5	15.5	-151.60	-58.9	-31.9	67.3	36.5	30.87	2.181	
4,500.0	4,500.0	4,501.6	4,491.3	15.9	15.9	-143.27	-62.0	-46.3	77.8	46.3	31.52	2.470	
4,600.0	4,600.0	4,600.5	4,589.0	16.3	16.3	-137.01	-65.1	-60.6	89.6	57.4	32.18	2.784	
4,700.0	4,700.0	4,700.6	4,686.8	16.6	16.7	-132.23	-68.1	-75.0	102.2	69.3	32.86	3.110	
4,800.0	4,800.0	4,801.7	4,784.6	17.0	17.1	-128.51	-71.2	-89.4	115.3	81.8	33.55	3.437	
4,900.0	4,900.0	4,902.8	4,882.4	17.3	17.5	-125.56	-74.2	-103.8	128.8	94.6	34.25	3.762	
5,000.0	5,000.0	4,996.1	4,980.2	17.7	17.8	-123.18	-77.3	-118.2	142.6	107.7	34.92	4.084	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #135H - Wellbore #1 - BLM Plan #2

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
5,100.0	5,100.0	5,105.1	5,078.0	18.1	18.3	-121.21	-80.3	-132.6	156.6	120.9	35.65	4.392	
5,200.0	5,200.0	5,193.8	5,175.8	18.4	18.6	-119.57	-83.4	-147.0	170.7	134.4	36.31	4.701	
5,300.0	5,300.0	5,307.3	5,273.6	18.8	19.1	-118.18	-86.4	-161.4	185.0	147.9	37.07	4.989	
5,400.0	5,400.0	5,408.4	5,371.3	19.1	19.5	-116.99	-89.5	-175.7	199.3	161.5	37.78	5.275	
5,500.0	5,500.0	5,509.5	5,469.1	19.5	19.9	-115.96	-92.6	-190.1	213.7	175.2	38.49	5.551	
5,600.0	5,600.0	5,589.4	5,566.9	19.8	20.2	-115.06	-95.6	-204.5	228.2	189.0	39.13	5.831	
5,700.0	5,700.0	5,688.3	5,664.7	20.2	20.6	-114.26	-98.7	-218.9	242.7	202.9	39.84	6.092	
5,800.0	5,800.0	5,787.2	5,762.5	20.6	21.0	-113.56	-101.7	-233.3	257.3	216.7	40.55	6.344	
5,900.0	5,900.0	5,886.0	5,860.3	20.9	21.4	-112.93	-104.8	-247.7	271.8	230.6	41.26	6.589	
6,000.0	6,000.0	5,984.9	5,958.1	21.3	21.8	-112.37	-107.8	-262.1	286.5	244.5	41.97	6.826	
6,100.0	6,100.0	6,083.8	6,055.9	21.6	22.2	-111.86	-110.9	-276.5	301.1	258.4	42.68	7.055	
6,200.0	6,200.0	6,182.7	6,153.7	22.0	22.6	-111.39	-113.9	-290.8	315.8	272.4	43.39	7.277	
6,300.0	6,300.0	6,281.6	6,251.4	22.4	23.0	-110.97	-117.0	-305.2	330.5	286.4	44.10	7.493	
6,400.0	6,400.0	6,380.5	6,349.2	22.7	23.4	-110.59	-120.1	-319.6	345.2	300.4	44.82	7.702	
6,500.0	6,500.0	6,479.4	6,447.0	23.1	23.8	-110.23	-123.1	-334.0	359.9	314.4	45.53	7.904	
6,600.0	6,600.0	6,578.3	6,544.8	23.4	24.2	-109.91	-126.2	-348.4	374.6	328.4	46.24	8.101	
6,700.0	6,700.0	6,677.1	6,642.6	23.8	24.6	-109.61	-129.2	-362.8	389.4	342.4	46.96	8.292	
6,800.0	6,800.0	6,776.0	6,740.4	24.1	25.0	-109.33	-132.3	-377.2	404.1	356.4	47.67	8.477	
6,900.0	6,900.0	6,874.9	6,838.2	24.5	25.4	-109.07	-135.3	-391.5	418.9	370.5	48.39	8.656	
7,000.0	7,000.0	6,973.8	6,936.0	24.9	25.9	-108.83	-138.4	-405.9	433.6	384.5	49.10	8.831	
7,100.0	7,100.0	7,072.8	7,033.9	25.2	26.3	-3.11	-141.5	-420.3	447.5	397.7	49.81	8.985	
7,200.0	7,200.0	7,172.1	7,132.0	25.5	26.7	-2.91	-144.5	-434.8	459.7	409.2	50.50	9.103	
7,300.0	7,299.9	7,271.5	7,230.3	25.9	27.1	-2.72	-147.6	-449.2	470.2	419.0	51.20	9.183	
7,400.0	7,399.7	7,371.1	7,328.8	26.2	27.5	-2.56	-150.7	-463.7	478.9	427.0	51.90	9.228	
7,500.0	7,499.4	7,470.9	7,427.5	26.6	27.9	-2.42	-153.8	-478.2	485.9	433.3	52.60	9.238	
7,600.0	7,598.9	7,570.7	7,526.2	26.9	28.3	-2.28	-156.8	-492.8	491.2	437.9	53.30	9.215	
7,700.0	7,698.3	7,670.6	7,625.0	27.2	28.8	-2.16	-159.9	-507.3	494.7	440.7	54.01	9.160	
7,800.0	7,797.4	7,770.6	7,723.9	27.6	29.2	-2.05	-163.0	-521.9	496.5	441.8	54.71	9.075	
7,900.0	7,896.3	7,870.6	7,822.8	27.9	29.6	-1.94	-166.1	-536.4	496.5	441.1	55.41	8.960	
8,000.0	7,994.9	7,970.6	7,921.7	28.3	30.0	-1.84	-169.2	-551.0	494.8	438.7	56.12	8.817	
8,100.0	8,093.3	8,070.5	8,020.5	28.6	30.4	-1.75	-172.3	-565.5	491.3	434.5	56.82	8.647	
8,182.6	8,174.2	8,153.0	8,102.0	28.9	30.8	-1.68	-174.8	-577.5	487.2	429.8	57.41	8.487	
8,200.0	8,191.3	8,170.4	8,119.2	29.0	30.9	-1.66	-175.4	-580.0	486.2	428.7	57.53	8.451	
8,300.0	8,289.1	8,270.2	8,218.0	29.4	31.3	-1.58	-178.5	-594.5	480.4	422.2	58.23	8.250	
8,400.0	8,387.0	8,370.1	8,316.7	29.7	31.7	-1.48	-181.5	-609.1	474.7	415.7	58.94	8.053	
8,500.0	8,484.9	8,469.9	8,415.4	30.1	32.1	-1.39	-184.6	-623.6	468.9	409.3	59.65	7.861	
8,600.0	8,582.8	8,569.7	8,514.1	30.5	32.5	-1.30	-187.7	-638.1	463.2	402.8	60.36	7.673	
8,700.0	8,680.6	8,669.6	8,612.8	30.9	33.0	-1.20	-190.8	-652.6	457.4	396.3	61.07	7.490	
8,800.0	8,778.5	8,769.4	8,711.6	31.2	33.4	-1.10	-193.9	-667.2	451.6	389.9	61.78	7.310	
8,900.0	8,876.4	8,869.2	8,810.3	31.6	33.8	-1.00	-197.0	-681.7	445.9	383.4	62.49	7.135	
9,000.0	8,974.3	8,969.0	8,909.0	32.0	34.2	-0.89	-200.1	-696.2	440.1	376.9	63.21	6.963	
9,100.0	9,072.1	9,068.9	9,007.7	32.4	34.6	-0.78	-203.1	-710.7	434.4	370.5	63.92	6.796	
9,200.0	9,170.0	9,168.7	9,106.4	32.8	35.1	-0.67	-206.2	-725.3	428.7	364.0	64.64	6.632	
9,300.0	9,267.9	9,268.5	9,205.2	33.2	35.5	-0.56	-209.3	-739.8	422.9	357.6	65.36	6.471	
9,400.0	9,365.8	9,368.4	9,303.9	33.6	35.9	-0.44	-212.4	-754.3	417.2	351.1	66.07	6.314	
9,500.0	9,463.7	9,468.2	9,402.6	34.0	36.3	-0.32	-215.5	-768.8	411.4	344.6	66.79	6.160	
9,600.0	9,561.5	9,568.0	9,501.3	34.4	36.8	-0.20	-218.6	-783.4	405.7	338.2	67.51	6.009	
9,700.0	9,659.4	9,667.9	9,600.0	34.8	37.2	-0.07	-221.7	-797.9	399.9	331.7	68.23	5.862	
9,800.0	9,757.3	9,767.7	9,698.8	35.2	37.6	0.06	-224.7	-812.4	394.2	325.3	68.95	5.717	
9,900.0	9,855.2	9,867.5	9,797.5	35.6	38.0	0.19	-227.8	-826.9	388.5	318.8	69.67	5.576	
10,000.0	9,953.0	9,977.2	9,906.1	36.0	38.5	0.34	-231.0	-841.7	381.6	311.1	70.54	5.410	
10,100.0	10,050.9	10,087.6	10,015.8	36.4	38.9	0.46	-233.5	-853.4	371.9	300.5	71.37	5.211	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #135H - Wellbore #1 - BLM Plan #2

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
10,200.0	10,148.8	10,197.2	10,125.1	36.9	39.3	0.56	-235.3	-862.0	359.3	287.2	72.14	4.981	
10,300.0	10,246.7	10,306.1	10,233.8	37.3	39.7	0.65	-236.4	-867.5	343.9	271.1	72.84	4.721	
10,400.0	10,344.6	10,413.8	10,341.5	37.7	40.1	0.72	-237.0	-870.0	325.7	252.2	73.49	4.432	
10,500.0	10,442.4	10,514.7	10,442.4	38.1	40.4	0.77	-237.0	-870.2	305.3	231.2	74.14	4.118	
10,600.0	10,540.3	10,612.6	10,540.3	38.5	40.7	0.82	-237.0	-870.2	284.9	210.0	74.83	3.807	
10,700.0	10,638.2	10,710.5	10,638.2	39.0	41.0	0.89	-237.0	-870.2	264.4	188.9	75.51	3.501	
10,800.0	10,736.1	10,808.4	10,736.1	39.4	41.3	0.96	-237.0	-870.2	243.9	167.7	76.20	3.201	
10,900.0	10,833.9	10,906.2	10,833.9	39.8	41.7	1.05	-237.0	-870.2	223.4	146.5	76.89	2.905	
11,000.0	10,931.8	11,001.6	10,929.3	40.2	42.0	1.84	-234.8	-871.0	203.2	125.6	77.62	2.618	
11,100.0	11,029.7	11,092.9	11,019.1	40.7	42.3	6.82	-220.4	-876.8	185.8	107.4	78.44	2.369	
11,200.0	11,127.6	11,178.0	11,099.7	41.1	42.6	16.12	-195.1	-886.7	175.9	96.8	79.08	2.224	
11,224.5	11,151.5	11,197.5	11,117.5	41.2	42.6	18.84	-187.8	-889.6	175.4	96.3	79.08	2.218	
11,300.0	11,225.5	11,254.1	11,167.7	41.5	42.8	27.58	-163.4	-899.3	180.6	102.3	78.28	2.307	
11,400.0	11,323.3	11,320.5	11,222.8	42.0	43.0	38.35	-129.1	-912.9	205.2	130.2	75.01	2.736	
11,500.0	11,421.2	11,377.3	11,266.3	42.4	43.2	46.88	-95.1	-926.3	248.7	178.4	70.26	3.539	
11,523.5	11,444.2	11,389.4	11,275.1	42.5	43.2	48.54	-87.4	-929.3	261.1	192.0	69.12	3.778	
11,600.0	11,519.2	11,425.7	11,300.4	42.8	43.3	53.74	-63.2	-938.9	306.7	241.1	65.56	4.678	
11,700.0	11,617.7	11,466.9	11,327.0	43.3	43.4	59.20	-34.0	-950.5	375.4	313.8	61.53	6.100	
11,800.0	11,716.7	11,500.0	11,346.7	43.7	43.5	63.49	-9.3	-960.2	451.3	393.3	58.00	7.781	
11,900.0	11,815.9	11,531.9	11,364.3	44.1	43.6	67.46	15.5	-970.0	532.3	476.8	55.51	9.589	
12,000.0	11,915.5	11,550.0	11,373.6	44.4	43.7	70.65	30.0	-975.8	617.1	564.5	52.65	11.722	
12,100.0	12,015.2	11,579.6	11,387.7	44.8	43.8	74.36	54.2	-985.3	704.4	652.9	51.50	13.678	
12,200.0	12,115.1	11,600.0	11,396.6	45.2	43.8	77.77	71.2	-992.1	793.9	743.8	50.09	15.849	
12,300.0	12,215.1	11,615.5	11,402.9	45.5	43.9	81.22	84.4	-997.3	885.0	836.2	48.80	18.134	
12,311.9	12,227.0	11,617.3	11,403.6	45.5	43.9	-23.85	85.9	-997.9	895.9	847.2	48.67	18.406	
12,400.0	12,315.1	11,630.2	11,408.6	45.8	43.9	-23.78	97.0	-1,002.3	977.3	929.4	47.81	20.438	
12,500.0	12,415.1	11,650.0	11,415.6	46.2	44.0	-23.67	114.2	-1,009.1	1,070.5	1,023.2	47.33	22.617	
12,600.0	12,515.1	11,650.0	11,415.6	46.5	44.0	-23.67	114.2	-1,009.1	1,164.4	1,118.3	46.13	25.243	
12,700.0	12,615.1	11,650.0	11,415.6	46.9	44.0	-23.67	114.2	-1,009.1	1,259.3	1,214.1	45.20	27.860	
12,711.9	12,627.0	11,666.4	11,421.0	46.9	44.0	-23.59	128.6	-1,014.8	1,270.3	1,224.5	45.74	27.772	
12,750.0	12,665.1	11,670.4	11,422.3	47.0	44.1	-1.35	132.1	-1,016.2	1,306.1	1,260.5	45.54	28.681	
12,800.0	12,714.8	11,676.5	11,424.1	47.2	44.1	-1.09	137.5	-1,018.3	1,351.8	1,306.6	45.22	29.895	
12,850.0	12,763.8	11,683.4	11,426.1	47.4	44.1	-0.92	143.7	-1,020.7	1,395.8	1,351.0	44.84	31.127	
12,900.0	12,811.8	11,700.0	11,430.6	47.5	44.2	-0.78	158.5	-1,026.6	1,438.0	1,393.3	44.71	32.165	
12,950.0	12,858.3	11,700.0	11,430.6	47.7	44.2	-0.69	158.5	-1,026.6	1,478.0	1,434.0	43.98	33.606	
13,000.0	12,903.1	11,700.0	11,430.6	47.8	44.2	-0.63	158.5	-1,026.6	1,515.9	1,472.7	43.24	35.058	
13,050.0	12,945.8	11,718.3	11,435.0	48.0	44.2	-0.56	175.0	-1,033.1	1,551.2	1,508.3	42.99	36.081	
13,100.0	12,986.1	11,728.3	11,437.2	48.1	44.3	-0.51	184.1	-1,036.7	1,584.1	1,541.6	42.49	37.280	
13,150.0	13,023.7	11,750.0	11,441.4	48.3	44.4	-0.47	203.9	-1,044.6	1,614.4	1,572.1	42.26	38.201	
13,200.0	13,058.2	11,750.0	11,441.4	48.4	44.4	-0.44	203.9	-1,044.6	1,641.6	1,600.1	41.51	39.546	
13,250.0	13,089.4	11,750.0	11,441.4	48.5	44.4	-0.42	203.9	-1,044.6	1,666.2	1,625.4	40.82	40.815	
13,300.0	13,117.2	11,772.5	11,444.8	48.7	44.4	-0.40	224.6	-1,052.7	1,687.5	1,646.9	40.61	41.557	
13,350.0	13,141.1	11,800.0	11,447.8	48.8	44.6	-0.38	250.0	-1,062.8	1,706.2	1,665.7	40.48	42.150	
13,400.0	13,161.2	11,800.0	11,447.8	48.9	44.6	-0.37	250.0	-1,062.8	1,721.2	1,681.3	39.93	43.108	
13,450.0	13,177.2	11,800.0	11,447.8	49.1	44.6	-0.36	250.0	-1,062.8	1,733.3	1,693.8	39.49	43.895	
13,500.0	13,189.1	11,820.4	11,449.2	49.2	44.6	-0.35	268.9	-1,070.3	1,742.1	1,702.7	39.37	44.251	
13,550.0	13,196.6	11,849.3	11,450.0	49.4	44.8	-0.34	295.8	-1,080.9	1,748.0	1,708.6	39.36	44.406	
13,600.0	13,199.8	11,849.3	11,450.0	49.6	44.8	-0.34	295.8	-1,080.9	1,750.0	1,710.8	39.18	44.666	
13,611.9	13,200.0	11,849.3	11,450.0	49.6	44.8	-0.34	295.8	-1,080.9	1,750.0	1,710.9	39.16	44.693	
13,643.6	13,200.0	11,875.6	11,450.0	49.7	44.9	-0.33	320.3	-1,090.5	1,750.0	1,710.8	39.26	44.579	
13,700.0	13,200.0	11,932.2	11,450.0	50.0	45.1	-0.32	373.3	-1,110.3	1,750.0	1,710.5	39.50	44.310	
13,800.0	13,200.0	12,032.5	11,450.0	50.4	45.7	-0.31	468.2	-1,142.8	1,750.0	1,710.1	39.96	43.791	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #135H - Wellbore #1 - BLM Plan #2

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
13,900.0	13,200.0	12,132.8	11,450.0	50.9	46.2	-0.29	564.2	-1,172.0	1,750.0	1,709.5	40.49	43.225	
14,000.0	13,200.0	12,233.1	11,450.0	51.4	46.8	-0.28	661.1	-1,197.8	1,750.0	1,709.0	41.06	42.618	
14,100.0	13,200.0	12,333.4	11,450.0	52.0	47.5	-0.26	758.9	-1,220.2	1,750.0	1,708.3	41.69	41.976	
14,200.0	13,200.0	12,433.7	11,450.0	52.6	48.1	-0.24	857.3	-1,239.1	1,750.0	1,707.6	42.37	41.305	
14,300.0	13,200.0	12,534.0	11,450.0	53.2	48.8	-0.23	956.4	-1,254.6	1,750.0	1,706.9	43.09	40.612	
14,400.0	13,200.0	12,634.2	11,450.0	53.8	49.5	-0.21	1,055.9	-1,266.6	1,750.0	1,706.1	43.86	39.901	
14,500.0	13,200.0	12,734.4	11,450.0	54.5	50.3	-0.19	1,155.7	-1,275.1	1,750.0	1,705.3	44.67	39.179	
14,600.0	13,200.0	12,834.6	11,450.0	55.1	51.0	-0.17	1,255.8	-1,280.2	1,750.0	1,704.5	45.52	38.449	
14,687.2	13,200.0	12,922.0	11,450.0	55.7	51.7	-0.16	1,343.2	-1,281.7	1,750.0	1,703.7	46.28	37.809	
14,700.0	13,200.0	12,934.7	11,450.0	55.8	51.8	-0.16	1,355.9	-1,281.8	1,750.0	1,703.6	46.40	37.715	
14,800.0	13,200.0	13,034.7	11,450.0	56.5	52.5	-0.16	1,455.9	-1,282.6	1,750.0	1,702.7	47.33	36.977	
14,900.0	13,200.0	13,134.7	11,450.0	57.3	53.4	-0.16	1,555.9	-1,283.4	1,750.0	1,701.7	48.29	36.243	
15,000.0	13,200.0	13,234.7	11,450.0	58.1	54.2	-0.16	1,655.9	-1,284.1	1,750.0	1,700.7	49.28	35.514	
15,100.0	13,200.0	13,334.7	11,450.0	58.9	55.1	-0.16	1,755.9	-1,284.9	1,750.0	1,699.7	50.29	34.795	
15,200.0	13,200.0	13,434.7	11,450.0	59.7	56.1	-0.16	1,855.9	-1,285.7	1,750.0	1,698.6	51.34	34.085	
15,300.0	13,200.0	13,534.7	11,450.0	60.6	57.1	-0.16	1,955.9	-1,286.5	1,750.0	1,697.6	52.41	33.388	
15,400.0	13,200.0	13,634.7	11,450.0	61.6	58.1	-0.16	2,055.9	-1,287.2	1,750.0	1,696.5	53.51	32.703	
15,500.0	13,200.0	13,734.7	11,450.0	62.5	59.1	-0.16	2,155.9	-1,288.0	1,750.0	1,695.3	54.63	32.033	
15,600.0	13,200.0	13,834.7	11,450.0	63.5	60.2	-0.16	2,255.9	-1,288.8	1,750.0	1,694.2	55.77	31.377	
15,700.0	13,200.0	13,934.7	11,450.0	64.5	61.2	-0.16	2,355.9	-1,289.5	1,750.0	1,693.0	56.93	30.737	
15,800.0	13,200.0	14,034.7	11,450.0	65.5	62.4	-0.16	2,455.9	-1,290.3	1,750.0	1,691.9	58.11	30.113	
15,900.0	13,200.0	14,134.7	11,450.0	66.6	63.5	-0.16	2,555.9	-1,291.1	1,750.0	1,690.7	59.31	29.504	
16,000.0	13,200.0	14,234.7	11,450.0	67.7	64.6	-0.16	2,655.9	-1,291.8	1,750.0	1,689.4	60.53	28.912	
16,100.0	13,200.0	14,334.7	11,450.0	68.8	65.8	-0.16	2,755.9	-1,292.6	1,750.0	1,688.2	61.76	28.336	
16,200.0	13,200.0	14,434.7	11,450.0	69.9	67.0	-0.16	2,855.9	-1,293.4	1,750.0	1,687.0	63.00	27.775	
16,300.0	13,200.0	14,534.7	11,450.0	71.1	68.2	-0.16	2,955.9	-1,294.2	1,750.0	1,685.7	64.26	27.231	
16,400.0	13,200.0	14,634.7	11,450.0	72.3	69.5	-0.16	3,055.9	-1,294.9	1,750.0	1,684.4	65.54	26.702	
16,500.0	13,200.0	14,734.7	11,450.0	73.5	70.7	-0.16	3,155.9	-1,295.7	1,750.0	1,683.1	66.82	26.188	
16,600.0	13,200.0	14,834.7	11,450.0	74.7	72.0	-0.16	3,255.9	-1,296.5	1,749.9	1,681.8	68.12	25.689	
16,700.0	13,200.0	14,934.7	11,450.0	75.9	73.3	-0.16	3,355.9	-1,297.2	1,749.9	1,680.5	69.43	25.205	
16,800.0	13,200.0	15,034.7	11,450.0	77.1	74.6	-0.16	3,455.8	-1,298.0	1,749.9	1,679.2	70.75	24.735	
16,900.0	13,200.0	15,134.7	11,450.0	78.4	75.9	-0.16	3,555.8	-1,298.8	1,749.9	1,677.9	72.08	24.279	
17,000.0	13,200.0	15,234.7	11,450.0	79.7	77.2	-0.16	3,655.8	-1,299.5	1,749.9	1,676.5	73.41	23.836	
17,100.0	13,200.0	15,334.9	11,450.0	81.0	78.6	-0.12	3,755.9	-1,299.1	1,749.9	1,675.2	74.75	23.411	
17,189.1	13,200.0	15,423.9	11,450.0	82.1	79.7	0.02	3,844.9	-1,295.7	1,749.9	1,674.0	75.91	23.052	
17,200.0	13,200.0	15,434.8	11,450.0	82.3	79.9	0.04	3,855.8	-1,295.1	1,749.9	1,673.9	76.05	23.009	
17,300.0	13,200.0	15,534.3	11,450.0	83.6	81.2	0.30	3,955.0	-1,287.8	1,750.0	1,672.6	77.33	22.629	
17,400.0	13,200.0	15,633.1	11,450.0	84.9	82.5	0.68	4,053.2	-1,277.0	1,750.1	1,671.5	78.59	22.267	
17,500.0	13,200.0	15,731.0	11,450.0	86.3	83.7	1.16	4,150.1	-1,263.1	1,750.3	1,670.5	79.85	21.921	
17,600.0	13,200.0	15,827.7	11,450.0	87.6	84.9	1.74	4,245.3	-1,246.0	1,750.8	1,669.7	81.10	21.588	
17,700.0	13,200.0	15,923.2	11,450.0	89.0	86.1	2.42	4,338.7	-1,226.1	1,751.6	1,669.2	82.37	21.264	
17,800.0	13,200.0	16,019.8	11,450.0	90.3	87.2	3.19	4,432.6	-1,203.2	1,752.8	1,669.1	83.69	20.945	
17,900.0	13,200.0	16,121.3	11,450.0	91.7	88.5	3.92	4,531.7	-1,181.5	1,754.2	1,669.1	85.08	20.618	
18,000.0	13,200.0	16,224.3	11,450.0	93.1	89.8	4.55	4,633.0	-1,163.1	1,755.6	1,669.1	86.54	20.287	
18,100.0	13,200.0	16,328.6	11,450.0	94.5	91.2	5.06	4,736.2	-1,148.2	1,756.9	1,668.9	88.04	19.956	
18,200.0	13,200.0	16,433.9	11,450.0	95.9	92.7	5.45	4,840.9	-1,136.9	1,758.0	1,668.4	89.56	19.629	
18,300.0	13,200.0	16,539.9	11,450.0	97.3	94.2	5.72	4,946.7	-1,129.4	1,758.7	1,667.6	91.09	19.307	
18,400.0	13,200.0	16,646.4	11,450.0	98.7	95.7	5.86	5,053.2	-1,125.9	1,759.1	1,666.5	92.62	18.993	
18,500.0	13,200.0	16,753.1	11,450.0	100.2	97.3	5.87	5,159.9	-1,126.3	1,759.2	1,665.0	94.13	18.689	
18,600.0	13,200.0	16,859.7	11,450.0	101.6	98.9	5.76	5,266.4	-1,130.7	1,758.8	1,663.2	95.61	18.395	
18,700.0	13,200.0	16,965.9	11,450.0	103.0	100.5	5.51	5,372.2	-1,139.0	1,758.1	1,661.1	97.07	18.112	
18,800.0	13,200.0	17,071.4	11,450.0	104.5	102.1	5.15	5,477.0	-1,151.2	1,757.1	1,658.6	98.50	17.839	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #135H - Wellbore #1 - BLM Plan #2

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
18,900.0	13,200.0	17,175.9	11,450.0	105.9	103.7	4.66	5,580.3	-1,167.0	1,755.9	1,656.0	99.91	17.574	
19,000.0	13,200.0	17,279.1	11,450.0	107.4	105.4	4.06	5,681.7	-1,186.3	1,754.5	1,653.2	101.33	17.315	
19,100.0	13,200.0	17,380.9	11,450.0	108.9	107.0	3.34	5,780.9	-1,208.9	1,753.1	1,650.3	102.76	17.060	
19,200.0	13,200.0	17,478.8	11,450.0	110.3	108.5	2.57	5,875.6	-1,233.5	1,751.8	1,647.6	104.23	16.807	
19,300.0	13,200.0	17,574.0	11,450.0	111.8	110.1	1.87	5,968.3	-1,255.3	1,750.9	1,645.2	105.74	16.559	
19,400.0	13,200.0	17,670.5	11,450.0	113.3	111.6	1.27	6,062.9	-1,274.4	1,750.4	1,643.1	107.29	16.315	
19,500.0	13,200.0	17,768.2	11,450.0	114.8	113.1	0.77	6,159.3	-1,290.4	1,750.1	1,641.2	108.86	16.077	
19,600.0	13,200.0	17,866.8	11,450.0	116.3	114.7	0.38	6,257.1	-1,303.2	1,750.0	1,639.5	110.43	15.847	
19,700.0	13,200.0	17,966.2	11,450.0	117.8	116.3	0.09	6,356.0	-1,312.8	1,749.9	1,638.0	111.99	15.627	
19,737.6	13,200.0	18,003.7	11,450.0	118.3	116.8	0.01	6,393.4	-1,315.5	1,749.9	1,637.4	112.57	15.546	
19,800.0	13,200.0	18,066.0	11,450.0	119.3	117.8	-0.08	6,455.6	-1,318.9	1,749.9	1,636.4	113.52	15.416	
19,900.0	13,200.0	18,166.1	11,450.0	120.8	119.4	-0.14	6,555.7	-1,321.5	1,749.9	1,634.9	115.02	15.215	
20,000.0	13,200.0	18,266.1	11,450.0	122.3	120.9	-0.14	6,655.7	-1,322.3	1,749.9	1,633.4	116.50	15.021	
20,100.0	13,200.0	18,366.1	11,450.0	123.8	122.4	-0.14	6,755.7	-1,323.0	1,749.9	1,632.0	117.98	14.832	
20,200.0	13,200.0	18,466.1	11,450.0	125.3	124.0	-0.14	6,855.7	-1,323.8	1,750.0	1,630.5	119.47	14.648	
20,300.0	13,200.0	18,566.1	11,450.0	126.8	125.5	-0.14	6,955.7	-1,324.6	1,750.0	1,629.0	120.96	14.468	
20,400.0	13,200.0	18,666.1	11,450.0	128.4	127.0	-0.14	7,055.7	-1,325.3	1,750.0	1,627.5	122.45	14.291	
20,500.0	13,200.0	18,766.1	11,450.0	129.9	128.6	-0.14	7,155.7	-1,326.1	1,750.0	1,626.0	123.94	14.119	
20,600.0	13,200.0	18,866.1	11,450.0	131.4	130.1	-0.14	7,255.7	-1,326.8	1,750.0	1,624.5	125.43	13.951	
20,700.0	13,200.0	18,966.1	11,450.0	132.9	131.7	-0.14	7,355.7	-1,327.6	1,750.0	1,623.0	126.93	13.787	
20,800.0	13,200.0	19,066.1	11,450.0	134.5	133.3	-0.14	7,455.7	-1,328.4	1,750.0	1,621.5	128.43	13.626	
20,900.0	13,200.0	19,166.1	11,450.0	136.0	134.8	-0.14	7,555.7	-1,329.1	1,750.0	1,620.0	129.93	13.469	
21,000.0	13,200.0	19,266.1	11,450.0	137.6	136.4	-0.14	7,655.7	-1,329.9	1,750.0	1,618.5	131.43	13.315	
21,100.0	13,200.0	19,366.1	11,450.0	139.1	137.9	-0.14	7,755.7	-1,330.7	1,750.0	1,617.0	132.93	13.165	
21,200.0	13,200.0	19,466.1	11,450.0	140.7	139.5	-0.14	7,855.7	-1,331.4	1,750.0	1,615.5	134.43	13.017	
21,300.0	13,200.0	19,566.1	11,450.0	142.2	141.1	-0.14	7,955.6	-1,332.2	1,750.0	1,614.0	135.94	12.873	
21,400.0	13,200.0	19,666.1	11,450.0	143.8	142.6	-0.14	8,055.6	-1,333.0	1,750.0	1,612.5	137.45	12.732	
21,500.0	13,200.0	19,766.1	11,450.0	145.3	144.2	-0.14	8,155.6	-1,333.7	1,750.0	1,611.0	138.96	12.594	
21,600.0	13,200.0	19,866.1	11,450.0	146.9	145.8	-0.14	8,255.6	-1,334.5	1,750.0	1,609.5	140.46	12.458	
21,700.0	13,200.0	19,966.1	11,450.0	148.4	147.3	-0.14	8,355.6	-1,335.2	1,750.0	1,608.0	141.98	12.326	
21,800.0	13,200.0	20,066.1	11,450.0	150.0	148.9	-0.14	8,455.6	-1,336.0	1,750.0	1,606.5	143.49	12.196	
21,900.0	13,200.0	20,166.1	11,450.0	151.5	150.5	-0.14	8,555.6	-1,336.8	1,750.0	1,605.0	145.00	12.069	
22,000.0	13,200.0	20,266.1	11,450.0	153.1	152.1	-0.14	8,655.6	-1,337.5	1,750.0	1,603.5	146.52	11.944	
22,100.0	13,200.0	20,366.1	11,450.0	154.7	153.7	-0.14	8,755.6	-1,338.3	1,750.0	1,601.9	148.03	11.822	
22,200.0	13,200.0	20,466.1	11,450.0	156.2	155.2	-0.14	8,855.6	-1,339.1	1,750.0	1,600.4	149.55	11.702	
22,300.0	13,200.0	20,566.1	11,450.0	157.8	156.8	-0.14	8,955.6	-1,339.8	1,750.0	1,598.9	151.07	11.584	
22,400.0	13,200.0	20,666.1	11,450.0	159.4	158.4	-0.14	9,055.6	-1,340.6	1,750.0	1,597.4	152.59	11.469	
22,500.0	13,200.0	20,766.1	11,450.0	161.0	160.0	-0.14	9,155.6	-1,341.4	1,750.0	1,595.9	154.11	11.356	
22,600.0	13,200.0	20,866.1	11,450.0	162.5	161.6	-0.14	9,255.6	-1,342.1	1,750.0	1,594.4	155.63	11.245	
22,700.0	13,200.0	20,966.1	11,450.0	164.1	163.2	-0.14	9,355.6	-1,342.9	1,750.0	1,592.8	157.15	11.136	
22,800.0	13,200.0	21,066.1	11,450.0	165.7	164.8	-0.13	9,455.6	-1,343.7	1,750.0	1,591.3	158.67	11.029	
22,900.0	13,200.0	21,166.1	11,450.0	167.3	166.4	-0.13	9,555.6	-1,344.4	1,750.0	1,589.8	160.20	10.924	
23,000.0	13,200.0	21,266.1	11,450.0	168.9	168.0	-0.13	9,655.6	-1,345.2	1,750.0	1,588.3	161.72	10.821	
23,100.0	13,200.0	21,366.1	11,450.0	170.4	169.6	-0.13	9,755.6	-1,345.9	1,750.0	1,586.8	163.25	10.720	
23,200.0	13,200.0	21,466.1	11,450.0	172.0	171.2	-0.13	9,855.6	-1,346.7	1,750.0	1,585.2	164.77	10.621	
23,300.0	13,200.0	21,566.1	11,450.0	173.6	172.7	-0.13	9,955.6	-1,347.5	1,750.0	1,583.7	166.30	10.523	
23,400.0	13,200.0	21,666.1	11,450.0	175.2	174.3	-0.13	10,055.6	-1,348.2	1,750.0	1,582.2	167.83	10.427	
23,504.9	13,200.0	21,771.0	11,450.0	176.9	176.0	-0.13	10,160.5	-1,349.0	1,750.0	1,580.6	169.43	10.329	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #136H - Wellbore #1 - BLM Plan #2

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	0.0	0.0	0.0	0.0	179.76	-30.0	0.1	30.0				
100.0	100.0	100.0	100.0	0.1	0.1	179.76	-30.0	0.1	30.0	29.7	0.26	116.962	
200.0	200.0	200.0	200.0	0.5	0.5	179.76	-30.0	0.1	30.0	29.0	0.97	30.802	
300.0	300.0	300.0	300.0	0.8	0.8	179.76	-30.0	0.1	30.0	28.3	1.69	17.737	
400.0	400.0	400.0	400.0	1.2	1.2	179.76	-30.0	0.1	30.0	27.6	2.41	12.454	
500.0	500.0	500.0	500.0	1.6	1.6	179.76	-30.0	0.1	30.0	26.9	3.12	9.596	
600.0	600.0	600.0	600.0	1.9	1.9	179.76	-30.0	0.1	30.0	26.1	3.84	7.805	
700.0	700.0	700.0	700.0	2.3	2.3	179.76	-30.0	0.1	30.0	25.4	4.56	6.577	
800.0	800.0	800.0	800.0	2.6	2.6	179.76	-30.0	0.1	30.0	24.7	5.27	5.683	
900.0	900.0	900.0	900.0	3.0	3.0	179.76	-30.0	0.1	30.0	24.0	5.99	5.003	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	179.76	-30.0	0.1	30.0	23.3	6.71	4.468	CC, ES
1,100.0	1,100.0	1,099.5	1,099.5	3.7	3.7	178.95	-30.7	0.6	30.7	23.3	7.41	4.149	
1,200.0	1,200.0	1,199.0	1,199.0	4.1	4.0	176.76	-33.0	1.9	33.0	24.9	8.09	4.081	SF
1,300.0	1,300.0	1,298.4	1,298.2	4.4	4.4	173.72	-36.7	4.0	37.0	28.2	8.78	4.208	
1,400.0	1,400.0	1,397.6	1,397.2	4.8	4.7	170.43	-41.9	7.1	42.6	33.1	9.47	4.495	
1,500.0	1,500.0	1,496.5	1,495.9	5.1	5.0	167.30	-48.6	10.9	49.9	39.8	10.16	4.916	
1,600.0	1,600.0	1,595.1	1,594.1	5.5	5.4	164.54	-56.7	15.7	59.1	48.2	10.85	5.448	
1,700.0	1,700.0	1,693.4	1,691.7	5.9	5.7	162.23	-66.2	21.2	70.0	58.5	11.53	6.072	
1,800.0	1,800.0	1,808.8	1,788.7	6.2	6.2	160.32	-77.1	27.6	82.7	70.4	12.27	6.739	
1,900.0	1,900.0	1,909.8	1,886.7	6.6	6.6	158.81	-89.0	34.5	96.4	83.4	12.97	7.429	
2,000.0	2,000.0	1,989.3	1,984.8	6.9	6.9	157.67	-100.9	41.4	110.2	96.5	13.61	8.094	
2,100.0	2,100.0	2,088.3	2,082.9	7.3	7.2	156.79	-112.8	48.4	124.0	109.6	14.31	8.660	
2,200.0	2,200.0	2,187.3	2,180.9	7.7	7.6	156.09	-124.7	55.3	137.8	122.8	15.02	9.173	
2,300.0	2,300.0	2,286.3	2,279.0	8.0	8.0	155.51	-136.6	62.3	151.6	135.9	15.73	9.639	
2,400.0	2,400.0	2,385.4	2,377.1	8.4	8.4	155.03	-148.6	69.2	165.5	149.0	16.44	10.066	
2,500.0	2,500.0	2,484.4	2,475.1	8.7	8.8	154.62	-160.5	76.1	179.3	162.2	17.15	10.457	
2,600.0	2,600.0	2,583.4	2,573.2	9.1	9.2	154.27	-172.4	83.1	193.2	175.4	17.86	10.817	
2,700.0	2,700.0	2,682.4	2,671.3	9.4	9.6	153.97	-184.3	90.0	207.1	188.5	18.58	11.149	
2,800.0	2,800.0	2,784.7	2,772.5	9.8	10.0	153.71	-196.2	97.0	220.6	201.3	19.33	11.415	
2,900.0	2,900.0	2,890.3	2,877.5	10.2	10.4	153.51	-206.4	102.9	231.7	211.6	20.10	11.526	
3,000.0	3,000.0	2,996.5	2,983.3	10.5	10.8	153.37	-214.0	107.3	240.0	219.1	20.86	11.504	
3,100.0	3,100.0	3,103.1	3,089.8	10.9	11.2	153.28	-219.1	110.3	245.5	223.9	21.61	11.363	
3,200.0	3,200.0	3,210.0	3,196.6	11.2	11.6	153.24	-221.7	111.8	248.3	226.0	22.34	11.116	
3,300.0	3,300.0	3,313.4	3,300.0	11.6	11.9	153.24	-222.0	112.0	248.6	225.6	23.04	10.791	
3,400.0	3,400.0	3,413.4	3,400.0	12.0	12.3	153.24	-222.0	112.0	248.6	224.9	23.74	10.474	
3,500.0	3,500.0	3,513.4	3,500.0	12.3	12.6	153.24	-222.0	112.0	248.6	224.2	24.44	10.174	
3,600.0	3,600.0	3,613.4	3,600.0	12.7	12.9	153.24	-222.0	112.0	248.6	223.5	25.14	9.891	
3,700.0	3,700.0	3,713.4	3,700.0	13.0	13.3	153.24	-222.0	112.0	248.6	222.8	25.84	9.623	
3,800.0	3,800.0	3,813.4	3,800.0	13.4	13.6	153.24	-222.0	112.0	248.6	222.1	26.54	9.369	
3,900.0	3,900.0	3,913.4	3,900.0	13.8	13.9	153.24	-222.0	112.0	248.6	221.4	27.24	9.127	
4,000.0	4,000.0	4,013.4	4,000.0	14.1	14.3	153.24	-222.0	112.0	248.6	220.7	27.95	8.897	
4,100.0	4,100.0	4,113.4	4,100.0	14.5	14.6	153.24	-222.0	112.0	248.6	220.0	28.65	8.679	
4,200.0	4,200.0	4,213.4	4,200.0	14.8	14.9	153.24	-222.0	112.0	248.6	219.3	29.35	8.470	
4,300.0	4,300.0	4,313.4	4,300.0	15.2	15.3	153.24	-222.0	112.0	248.6	218.6	30.06	8.272	
4,400.0	4,400.0	4,413.4	4,400.0	15.5	15.6	153.24	-222.0	112.0	248.6	217.9	30.77	8.082	
4,500.0	4,500.0	4,513.4	4,500.0	15.9	15.9	153.24	-222.0	112.0	248.6	217.2	31.47	7.901	
4,600.0	4,600.0	4,613.4	4,600.0	16.3	16.3	153.24	-222.0	112.0	248.6	216.5	32.18	7.727	
4,700.0	4,700.0	4,713.4	4,700.0	16.6	16.6	153.24	-222.0	112.0	248.6	215.8	32.88	7.561	
4,800.0	4,800.0	4,813.4	4,800.0	17.0	17.0	153.24	-222.0	112.0	248.6	215.1	33.59	7.402	
4,900.0	4,900.0	4,913.4	4,900.0	17.3	17.3	153.24	-222.0	112.0	248.6	214.3	34.30	7.249	
5,000.0	5,000.0	5,013.4	5,000.0	17.7	17.7	153.24	-222.0	112.0	248.6	213.6	35.01	7.102	
5,100.0	5,100.0	5,113.4	5,100.0	18.1	18.0	153.24	-222.0	112.0	248.6	212.9	35.72	6.962	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #136H - Wellbore #1 - BLM Plan #2

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
5,200.0	5,200.0	5,213.4	5,200.0	18.4	18.3	153.24	-222.0	112.0	248.6	212.2	36.43	6.826	
5,300.0	5,300.0	5,313.4	5,300.0	18.8	18.7	153.24	-222.0	112.0	248.6	211.5	37.14	6.696	
5,400.0	5,400.0	5,413.4	5,400.0	19.1	19.0	153.24	-222.0	112.0	248.6	210.8	37.84	6.570	
5,500.0	5,500.0	5,513.4	5,500.0	19.5	19.4	153.24	-222.0	112.0	248.6	210.1	38.55	6.449	
5,600.0	5,600.0	5,613.4	5,600.0	19.8	19.7	153.24	-222.0	112.0	248.6	209.4	39.26	6.333	
5,700.0	5,700.0	5,713.4	5,700.0	20.2	20.1	153.24	-222.0	112.0	248.6	208.7	39.97	6.220	
5,800.0	5,800.0	5,813.4	5,800.0	20.6	20.4	153.24	-222.0	112.0	248.6	208.0	40.69	6.111	
5,900.0	5,900.0	5,913.4	5,900.0	20.9	20.8	153.24	-222.0	112.0	248.6	207.2	41.40	6.006	
6,000.0	6,000.0	6,013.4	6,000.0	21.3	21.1	153.24	-222.0	112.0	248.6	206.5	42.11	5.905	
6,100.0	6,100.0	6,113.4	6,100.0	21.6	21.5	153.24	-222.0	112.0	248.6	205.8	42.82	5.807	
6,200.0	6,200.0	6,213.4	6,200.0	22.0	21.8	153.24	-222.0	112.0	248.6	205.1	43.53	5.712	
6,300.0	6,300.0	6,313.4	6,300.0	22.4	22.2	153.24	-222.0	112.0	248.6	204.4	44.24	5.620	
6,400.0	6,400.0	6,413.4	6,400.0	22.7	22.5	153.24	-222.0	112.0	248.6	203.7	44.95	5.531	
6,500.0	6,500.0	6,513.4	6,500.0	23.1	22.9	153.24	-222.0	112.0	248.6	203.0	45.66	5.445	
6,600.0	6,600.0	6,613.4	6,600.0	23.4	23.2	153.24	-222.0	112.0	248.6	202.3	46.38	5.361	
6,700.0	6,700.0	6,713.4	6,700.0	23.8	23.6	153.24	-222.0	112.0	248.6	201.6	47.09	5.280	
6,800.0	6,800.0	6,813.4	6,800.0	24.1	23.9	153.24	-222.0	112.0	248.6	200.8	47.80	5.202	
6,900.0	6,900.0	6,913.4	6,900.0	24.5	24.3	153.24	-222.0	112.0	248.6	200.1	48.51	5.125	
7,000.0	7,000.0	7,013.4	7,000.0	24.9	24.6	153.24	-222.0	112.0	248.6	199.4	49.23	5.051	
7,100.0	7,100.0	7,113.4	7,100.0	25.2	25.0	-101.47	-222.0	112.0	248.8	198.9	49.93	4.984	
7,200.0	7,200.0	7,213.3	7,200.0	25.5	25.3	-102.05	-222.0	112.0	249.4	198.7	50.62	4.926	
7,300.0	7,299.9	7,313.2	7,299.9	25.9	25.7	-103.02	-222.0	112.0	250.3	199.0	51.31	4.878	
7,400.0	7,399.7	7,413.0	7,399.7	26.2	26.0	-104.36	-222.0	112.0	251.7	199.7	52.00	4.841	
7,500.0	7,499.4	7,512.7	7,499.4	26.6	26.4	-106.05	-222.0	112.0	253.8	201.1	52.69	4.817	
7,600.0	7,598.9	7,612.3	7,598.9	26.9	26.7	-108.07	-222.0	112.0	256.6	203.3	53.38	4.807	
7,700.0	7,698.3	7,711.6	7,698.3	27.2	27.1	-110.39	-222.0	112.0	260.4	206.3	54.08	4.815	
7,800.0	7,797.4	7,810.8	7,797.4	27.6	27.4	-112.97	-222.0	112.0	265.2	210.5	54.77	4.843	
7,900.0	7,896.3	7,909.7	7,896.3	27.9	27.8	-115.76	-222.0	112.0	271.4	215.9	55.47	4.893	
8,000.0	7,994.9	8,008.3	7,994.9	28.3	28.1	-118.72	-222.0	112.0	279.0	222.9	56.17	4.968	
8,100.0	8,093.3	8,106.6	8,093.3	28.6	28.5	-121.77	-222.0	112.0	288.3	231.5	56.86	5.071	
8,182.6	8,174.2	8,187.6	8,174.2	28.9	28.7	-124.34	-222.0	112.0	297.4	239.9	57.44	5.177	
8,200.0	8,191.3	8,204.6	8,191.3	29.0	28.8	-124.90	-222.0	112.0	299.4	241.9	57.56	5.202	
8,300.0	8,289.1	8,302.5	8,289.1	29.4	29.2	-127.95	-222.0	112.0	311.8	253.5	58.26	5.351	
8,400.0	8,387.0	8,400.4	8,387.0	29.7	29.5	-130.76	-222.0	112.0	324.9	266.0	58.96	5.511	
8,500.0	8,484.9	8,501.7	8,484.9	30.1	29.9	-133.36	-222.0	112.0	338.8	279.2	59.67	5.678	
8,600.0	8,582.8	8,603.9	8,582.8	30.5	30.2	-135.75	-222.0	112.0	353.4	293.0	60.39	5.852	
8,700.0	8,680.6	8,706.0	8,680.6	30.9	30.6	-137.95	-222.0	112.0	368.5	307.4	61.10	6.031	
8,800.0	8,778.5	8,808.1	8,778.5	31.2	30.9	-139.98	-222.0	112.0	384.1	322.3	61.81	6.213	
8,900.0	8,876.4	8,889.8	8,876.4	31.6	31.2	-141.86	-222.0	112.0	400.1	337.7	62.46	6.407	
9,000.0	8,974.3	8,987.6	8,974.3	32.0	31.6	-143.58	-222.0	112.0	416.6	353.4	63.15	6.596	
9,100.0	9,072.1	9,085.5	9,072.1	32.4	31.9	-145.18	-222.0	112.0	433.3	369.5	63.85	6.787	
9,200.0	9,170.0	9,183.4	9,170.0	32.8	32.3	-146.66	-222.0	112.0	450.4	385.9	64.55	6.978	
9,300.0	9,267.9	9,281.3	9,267.9	33.2	32.6	-148.03	-222.0	112.0	467.8	402.5	65.25	7.169	
9,400.0	9,365.8	9,379.2	9,365.8	33.6	33.0	-149.31	-222.0	112.0	485.4	419.5	65.95	7.360	
9,500.0	9,463.7	9,477.0	9,463.7	34.0	33.3	-150.49	-222.0	112.0	503.2	436.6	66.65	7.551	
9,600.0	9,561.5	9,574.9	9,561.5	34.4	33.7	-151.60	-222.0	112.0	521.2	453.9	67.34	7.740	
9,700.0	9,659.4	9,672.8	9,659.4	34.8	34.0	-152.63	-222.0	112.0	539.4	471.4	68.04	7.928	
9,800.0	9,757.3	9,770.7	9,757.3	35.2	34.3	-153.59	-222.0	112.0	557.8	489.1	68.74	8.114	
9,900.0	9,855.2	9,868.5	9,855.2	35.6	34.7	-154.49	-222.0	112.0	576.3	506.9	69.44	8.299	
10,000.0	9,953.0	9,966.4	9,953.0	36.0	35.0	-155.34	-222.0	112.0	594.9	524.8	70.14	8.482	
10,100.0	10,050.9	10,064.3	10,050.9	36.4	35.4	-156.14	-222.0	112.0	613.7	542.8	70.84	8.663	
10,200.0	10,148.8	10,162.2	10,148.8	36.9	35.7	-156.88	-222.0	112.0	632.5	561.0	71.54	8.841	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #136H - Wellbore #1 - BLM Plan #2

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
10,300.0	10,246.7	10,260.0	10,246.7	37.3	36.1	-157.59	-222.0	112.0	651.5	579.3	72.25	9.018	
10,400.0	10,344.6	10,357.9	10,344.6	37.7	36.4	-158.26	-222.0	112.0	670.6	597.6	72.95	9.192	
10,500.0	10,442.4	10,455.8	10,442.4	38.1	36.8	-158.88	-222.0	112.0	689.7	616.0	73.65	9.364	
10,600.0	10,540.3	10,553.7	10,540.3	38.5	37.1	-159.48	-222.0	112.0	708.9	634.5	74.35	9.534	
10,700.0	10,638.2	10,651.6	10,638.2	39.0	37.5	-160.04	-222.0	112.0	728.2	653.1	75.06	9.702	
10,800.0	10,736.1	10,749.4	10,736.1	39.4	37.8	-160.58	-222.0	112.0	747.5	671.7	75.76	9.867	
10,900.0	10,833.9	10,847.3	10,833.9	39.8	38.2	-161.09	-222.0	112.0	766.9	690.4	76.46	10.030	
11,000.0	10,931.8	10,957.8	10,944.2	40.2	38.6	-161.92	-218.1	111.6	785.9	708.7	77.22	10.178	
11,100.0	11,029.7	11,071.3	11,054.9	40.7	38.9	-164.17	-193.8	109.3	803.1	725.1	77.92	10.307	
11,200.0	11,127.6	11,170.5	11,146.1	41.1	39.2	-167.27	-155.2	105.6	820.1	741.5	78.54	10.442	
11,300.0	11,225.5	11,253.2	11,216.1	41.5	39.4	-170.56	-111.4	101.5	839.4	760.4	79.05	10.619	
11,400.0	11,323.3	11,320.6	11,267.9	42.0	39.6	-173.64	-68.6	97.5	863.3	784.0	79.33	10.882	
11,500.0	11,421.2	11,375.2	11,306.0	42.4	39.7	-176.35	-29.7	93.8	893.0	813.7	79.27	11.266	
11,523.5	11,444.2	11,386.4	11,313.4	42.5	39.7	-176.93	-21.3	93.0	900.9	821.7	79.19	11.376	
11,600.0	11,519.2	11,419.6	11,334.1	42.8	39.8	-178.68	4.5	90.6	928.5	849.7	78.80	11.784	
11,700.0	11,617.7	11,456.4	11,355.4	43.3	39.9	179.36	34.5	87.7	968.5	890.5	77.92	12.428	
11,800.0	11,716.7	11,487.3	11,371.6	43.7	40.0	177.73	60.5	85.3	1,012.7	936.0	76.69	13.204	
11,900.0	11,815.9	11,513.4	11,384.3	44.1	40.0	176.37	83.2	83.1	1,061.0	985.8	75.17	14.114	
12,000.0	11,915.5	11,535.7	11,394.3	44.4	40.1	175.25	103.1	81.2	1,113.1	1,039.6	73.44	15.157	
12,100.0	12,015.2	11,550.0	11,400.3	44.8	40.1	174.58	116.1	80.0	1,168.6	1,097.1	71.47	16.350	
12,200.0	12,115.1	11,571.8	11,408.8	45.2	40.2	173.56	136.1	78.1	1,227.1	1,157.5	69.60	17.631	
12,300.0	12,215.1	11,586.7	11,414.1	45.5	40.2	172.93	149.8	76.8	1,288.3	1,220.7	67.61	19.054	
12,311.9	12,227.0	11,600.0	11,418.6	45.5	40.3	66.78	162.3	75.6	1,295.9	1,228.3	67.57	19.177	
12,400.0	12,315.1	11,600.0	11,418.6	45.8	40.3	66.78	162.3	75.6	1,352.6	1,286.9	65.66	20.599	
12,500.0	12,415.1	11,600.0	11,418.6	46.2	40.3	66.78	162.3	75.6	1,420.8	1,357.2	63.61	22.336	
12,600.0	12,515.1	11,621.6	11,425.3	46.5	40.3	65.68	182.8	73.7	1,492.2	1,430.2	62.06	24.045	
12,700.0	12,615.1	11,630.8	11,427.9	46.9	40.3	65.21	191.6	72.9	1,566.7	1,506.2	60.45	25.915	
12,711.9	12,627.0	11,631.9	11,428.2	46.9	40.3	65.16	192.6	72.8	1,575.7	1,515.4	60.27	26.143	
12,750.0	12,665.1	11,650.0	11,432.8	47.0	40.4	81.74	210.1	71.1	1,605.0	1,545.1	59.92	26.784	
12,800.0	12,714.8	11,650.0	11,432.8	47.2	40.4	75.92	210.1	71.1	1,643.2	1,584.1	59.14	27.787	
12,850.0	12,763.8	11,650.0	11,432.8	47.4	40.4	70.27	210.1	71.1	1,681.4	1,623.0	58.39	28.794	
12,900.0	12,811.8	11,650.0	11,432.8	47.5	40.4	64.91	210.1	71.1	1,719.3	1,661.6	57.70	29.798	
12,950.0	12,858.3	11,650.0	11,432.8	47.7	40.4	59.96	210.1	71.1	1,756.6	1,699.5	57.06	30.787	
13,000.0	12,903.1	11,670.9	11,437.5	47.8	40.4	55.05	230.3	69.2	1,792.6	1,735.8	56.73	31.599	
13,050.0	12,945.8	11,679.9	11,439.3	48.0	40.5	50.99	239.1	68.4	1,827.5	1,771.2	56.30	32.463	
13,100.0	12,986.1	11,700.0	11,442.8	48.1	40.5	47.34	258.8	66.5	1,861.1	1,805.1	56.04	33.213	
13,150.0	13,023.7	11,700.0	11,442.8	48.3	40.5	44.39	258.8	66.5	1,892.8	1,837.2	55.62	34.035	
13,200.0	13,058.2	11,700.0	11,442.8	48.4	40.5	41.81	258.8	66.5	1,922.9	1,867.7	55.27	34.792	
13,250.0	13,089.4	11,720.3	11,445.7	48.5	40.6	39.53	278.8	64.6	1,950.8	1,895.7	55.17	35.359	
13,300.0	13,117.2	11,731.2	11,446.9	48.7	40.6	37.62	289.6	63.6	1,976.7	1,921.6	55.06	35.903	
13,350.0	13,141.1	11,750.0	11,448.5	48.8	40.7	36.03	308.2	61.8	2,000.3	1,945.2	55.06	36.331	
13,400.0	13,161.2	11,750.0	11,448.5	48.9	40.7	34.68	308.2	61.8	2,021.4	1,966.4	55.01	36.745	
13,450.0	13,177.2	11,765.3	11,449.4	49.1	40.7	33.60	323.4	60.4	2,040.0	1,984.9	55.13	37.003	
13,500.0	13,189.1	11,790.4	11,450.0	49.2	40.8	32.77	348.4	58.0	2,056.2	2,000.9	55.35	37.146	
13,550.0	13,196.6	11,790.4	11,450.0	49.4	40.8	32.04	348.4	58.0	2,069.4	2,013.9	55.56	37.250	
13,600.0	13,199.8	11,819.8	11,450.0	49.6	40.9	31.65	377.7	55.4	2,079.9	2,024.0	55.93	37.187	
13,611.9	13,200.0	11,827.9	11,450.0	49.6	40.9	31.60	385.8	54.8	2,081.9	2,025.9	56.03	37.155	
13,700.0	13,200.0	11,888.2	11,450.0	50.0	41.1	32.26	445.9	50.5	2,096.0	2,039.2	56.82	36.887	
13,800.0	13,200.0	11,956.3	11,450.0	50.4	41.3	32.98	514.0	47.2	2,111.7	2,053.9	57.75	36.569	
13,900.0	13,200.0	12,024.2	11,450.0	50.9	41.6	33.66	581.9	45.6	2,127.0	2,068.3	58.69	36.244	
14,000.0	13,200.0	12,115.2	11,450.0	51.4	42.0	34.42	672.9	44.8	2,141.6	2,081.8	59.76	35.838	
14,100.0	13,200.0	12,212.8	11,450.0	52.0	42.5	35.11	770.4	44.0	2,154.3	2,093.5	60.87	35.395	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #136H - Wellbore #1 - BLM Plan #2

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
14,200.0	13,200.0	12,311.0	11,450.0	52.6	43.1	35.68	868.6	43.3	2,165.3	2,103.3	61.99	34.929	
14,300.0	13,200.0	12,409.8	11,450.0	53.2	43.7	36.15	967.5	42.5	2,174.2	2,111.1	63.13	34.443	
14,400.0	13,200.0	12,509.1	11,450.0	53.8	44.3	36.51	1,066.8	41.7	2,181.2	2,117.0	64.27	33.939	
14,500.0	13,200.0	12,608.8	11,450.0	54.5	45.1	36.76	1,166.4	40.9	2,186.2	2,120.7	65.41	33.420	
14,600.0	13,200.0	12,708.7	11,450.0	55.1	45.8	36.91	1,266.3	40.1	2,189.0	2,122.5	66.56	32.890	
14,687.2	13,200.0	12,804.1	11,450.0	55.7	46.6	36.95	1,353.5	39.4	2,189.8	2,122.2	67.60	32.394	
14,700.0	13,200.0	12,808.7	11,450.0	55.8	46.6	36.95	1,366.3	39.3	2,189.8	2,122.1	67.69	32.349	
14,800.0	13,200.0	12,908.7	11,450.0	56.5	47.5	36.95	1,466.3	38.6	2,189.8	2,120.9	68.86	31.800	
14,900.0	13,200.0	13,008.7	11,450.0	57.3	48.4	36.95	1,566.3	37.8	2,189.8	2,119.7	70.09	31.243	
15,000.0	13,200.0	13,108.7	11,450.0	58.1	49.4	36.95	1,666.3	37.0	2,189.8	2,118.4	71.37	30.681	
15,100.0	13,200.0	13,208.7	11,450.0	58.9	50.3	36.95	1,766.3	36.2	2,189.8	2,117.1	72.71	30.116	
15,200.0	13,200.0	13,308.7	11,450.0	59.7	51.3	36.95	1,866.3	35.4	2,189.8	2,115.7	74.10	29.552	
15,300.0	13,200.0	13,408.7	11,450.0	60.6	52.4	36.95	1,966.3	34.6	2,189.8	2,114.2	75.54	28.990	
15,400.0	13,200.0	13,508.7	11,450.0	61.6	53.5	36.95	2,066.3	33.8	2,189.7	2,112.7	77.01	28.433	
15,500.0	13,200.0	13,608.7	11,450.0	62.5	54.6	36.95	2,166.3	33.0	2,189.7	2,111.2	78.54	27.880	
15,600.0	13,200.0	13,708.7	11,450.0	63.5	55.7	36.95	2,266.3	32.3	2,189.7	2,109.6	80.10	27.336	
15,700.0	13,200.0	13,808.7	11,450.0	64.5	56.9	36.95	2,366.3	31.5	2,189.7	2,108.0	81.71	26.800	
15,800.0	13,200.0	13,908.7	11,450.0	65.5	58.1	36.95	2,466.2	30.7	2,189.7	2,106.4	83.34	26.274	
15,900.0	13,200.0	14,008.7	11,450.0	66.6	59.3	36.95	2,566.2	29.9	2,189.7	2,104.7	85.01	25.757	
16,000.0	13,200.0	14,108.7	11,450.0	67.7	60.5	36.95	2,666.2	29.1	2,189.7	2,103.0	86.72	25.251	
16,100.0	13,200.0	14,208.7	11,450.0	68.8	61.7	36.95	2,766.2	28.3	2,189.7	2,101.2	88.45	24.757	
16,200.0	13,200.0	14,308.7	11,450.0	69.9	63.0	36.95	2,866.2	27.5	2,189.7	2,099.5	90.21	24.273	
16,300.0	13,200.0	14,408.7	11,450.0	71.1	64.3	36.95	2,966.2	26.7	2,189.7	2,097.7	92.00	23.802	
16,400.0	13,200.0	14,508.7	11,450.0	72.3	65.6	36.95	3,066.2	25.9	2,189.7	2,095.8	93.81	23.342	
16,500.0	13,200.0	14,608.7	11,450.0	73.5	66.9	36.94	3,166.2	25.2	2,189.6	2,094.0	95.64	22.894	
16,600.0	13,200.0	14,708.7	11,450.0	74.7	68.2	36.94	3,266.2	24.4	2,189.6	2,092.1	97.50	22.458	
16,700.0	13,200.0	14,808.7	11,450.0	75.9	69.6	36.94	3,366.2	23.6	2,189.6	2,090.2	99.38	22.033	
16,800.0	13,200.0	14,908.7	11,450.0	77.1	70.9	36.94	3,466.2	22.8	2,189.6	2,088.3	101.28	21.620	
16,900.0	13,200.0	15,008.7	11,450.0	78.4	72.3	36.94	3,566.2	22.0	2,189.6	2,086.4	103.20	21.218	
17,000.0	13,200.0	15,108.7	11,450.0	79.7	73.7	36.94	3,666.2	21.2	2,189.6	2,084.5	105.13	20.827	
17,100.0	13,200.0	15,208.7	11,450.0	81.0	75.1	36.94	3,766.2	20.4	2,189.6	2,082.5	107.08	20.448	
17,200.0	13,200.0	15,308.7	11,450.0	82.3	76.5	36.94	3,866.2	19.6	2,189.6	2,080.5	109.05	20.079	
17,300.0	13,200.0	15,408.7	11,450.0	83.6	77.9	36.94	3,966.2	18.9	2,189.6	2,078.5	111.03	19.720	
17,400.0	13,200.0	15,508.7	11,450.0	84.9	79.3	36.94	4,066.2	18.1	2,189.6	2,076.5	113.03	19.371	
17,500.0	13,200.0	15,608.7	11,450.0	86.3	80.8	36.94	4,166.2	17.3	2,189.6	2,074.5	115.04	19.033	
17,600.0	13,200.0	15,708.7	11,450.0	87.6	82.2	36.94	4,266.2	16.5	2,189.5	2,072.5	117.06	18.704	
17,700.0	13,200.0	15,808.7	11,450.0	89.0	83.7	36.94	4,366.2	15.7	2,189.5	2,070.4	119.10	18.384	
17,800.0	13,200.0	15,908.7	11,450.0	90.3	85.1	36.94	4,466.2	14.9	2,189.5	2,068.4	121.15	18.073	
17,900.0	13,200.0	16,008.7	11,450.0	91.7	86.6	36.94	4,566.2	14.1	2,189.5	2,066.3	123.21	17.771	
18,000.0	13,200.0	16,108.7	11,450.0	93.1	88.1	36.94	4,666.2	13.3	2,189.5	2,064.2	125.27	17.478	
18,100.0	13,200.0	16,208.7	11,450.0	94.5	89.5	36.94	4,766.2	12.6	2,189.5	2,062.1	127.35	17.192	
18,200.0	13,200.0	16,308.7	11,450.0	95.9	91.0	36.94	4,866.2	11.8	2,189.5	2,060.0	129.44	16.915	
18,300.0	13,200.0	16,408.7	11,450.0	97.3	92.5	36.94	4,966.2	11.0	2,189.5	2,057.9	131.54	16.645	
18,400.0	13,200.0	16,508.7	11,450.0	98.7	94.0	36.94	5,066.2	10.2	2,189.5	2,055.8	133.64	16.383	
18,500.0	13,200.0	16,608.7	11,450.0	100.2	95.5	36.94	5,166.2	9.4	2,189.5	2,053.7	135.76	16.128	
18,600.0	13,200.0	16,708.7	11,450.0	101.6	97.0	36.94	5,266.2	8.6	2,189.4	2,051.6	137.88	15.880	
18,700.0	13,200.0	16,808.7	11,450.0	103.0	98.5	36.94	5,366.2	7.8	2,189.4	2,049.4	140.01	15.638	
18,800.0	13,200.0	16,908.7	11,450.0	104.5	100.0	36.94	5,466.2	7.0	2,189.4	2,047.3	142.14	15.403	
18,900.0	13,200.0	17,008.7	11,450.0	105.9	101.5	36.94	5,566.2	6.2	2,189.4	2,045.1	144.29	15.174	
19,000.0	13,200.0	17,108.7	11,450.0	107.4	103.1	36.94	5,666.1	5.5	2,189.4	2,043.0	146.43	14.951	
19,100.0	13,200.0	17,208.7	11,450.0	108.9	104.6	36.94	5,766.1	4.7	2,189.4	2,040.8	148.59	14.735	
19,200.0	13,200.0	17,308.7	11,450.0	110.3	106.1	36.94	5,866.1	3.9	2,189.4	2,038.6	150.75	14.523	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #136H - Wellbore #1 - BLM Plan #2

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
19,300.0	13,200.0	17,408.7	11,450.0	111.8	107.7	36.94	5,966.1	3.1	2,189.4	2,036.5	152.92	14.317	
19,400.0	13,200.0	17,508.7	11,450.0	113.3	109.2	36.94	6,066.1	2.3	2,189.4	2,034.3	155.09	14.117	
19,500.0	13,200.0	17,608.7	11,450.0	114.8	110.7	36.93	6,166.1	1.5	2,189.4	2,032.1	157.27	13.921	
19,600.0	13,200.0	17,708.7	11,450.0	116.3	112.3	36.93	6,266.1	0.7	2,189.4	2,029.9	159.45	13.731	
19,700.0	13,200.0	17,808.7	11,450.0	117.8	113.8	36.93	6,366.1	-0.1	2,189.3	2,027.7	161.64	13.545	
19,800.0	13,200.0	17,908.7	11,450.0	119.3	115.4	36.93	6,466.1	-0.8	2,189.3	2,025.5	163.83	13.363	
19,900.0	13,200.0	18,008.7	11,450.0	120.8	117.0	36.93	6,566.1	-1.6	2,189.3	2,023.3	166.03	13.186	
20,000.0	13,200.0	18,108.7	11,450.0	122.3	118.5	36.93	6,666.1	-2.4	2,189.3	2,021.1	168.23	13.014	
20,100.0	13,200.0	18,208.7	11,450.0	123.8	120.1	36.93	6,766.1	-3.2	2,189.3	2,018.9	170.43	12.845	
20,200.0	13,200.0	18,308.7	11,450.0	125.3	121.6	36.93	6,866.1	-4.0	2,189.3	2,016.7	172.64	12.681	
20,300.0	13,200.0	18,408.7	11,450.0	126.8	123.2	36.93	6,966.1	-4.8	2,189.3	2,014.4	174.86	12.521	
20,400.0	13,200.0	18,508.7	11,450.0	128.4	124.8	36.93	7,066.1	-5.6	2,189.3	2,012.2	177.07	12.364	
20,500.0	13,200.0	18,608.7	11,450.0	129.9	126.3	36.93	7,166.1	-6.4	2,189.3	2,010.0	179.29	12.211	
20,600.0	13,200.0	18,708.7	11,450.0	131.4	127.9	36.93	7,266.1	-7.1	2,189.3	2,007.7	181.52	12.061	
20,700.0	13,200.0	18,808.7	11,450.0	132.9	129.5	36.93	7,366.1	-7.9	2,189.3	2,005.5	183.74	11.915	
20,800.0	13,200.0	18,908.7	11,450.0	134.5	131.1	36.93	7,466.1	-8.7	2,189.2	2,003.3	185.97	11.772	
20,900.0	13,200.0	19,008.7	11,450.0	136.0	132.6	36.93	7,566.1	-9.5	2,189.2	2,001.0	188.20	11.632	
21,000.0	13,200.0	19,108.7	11,450.0	137.6	134.2	36.93	7,666.1	-10.3	2,189.2	1,998.8	190.44	11.496	
21,100.0	13,200.0	19,208.7	11,450.0	139.1	135.8	36.93	7,766.1	-11.1	2,189.2	1,996.5	192.68	11.362	
21,200.0	13,200.0	19,308.7	11,450.0	140.7	137.4	36.93	7,866.1	-11.9	2,189.2	1,994.3	194.92	11.231	
21,300.0	13,200.0	19,408.7	11,450.0	142.2	139.0	36.93	7,966.1	-12.7	2,189.2	1,992.0	197.16	11.103	
21,400.0	13,200.0	19,508.7	11,450.0	143.8	140.6	36.93	8,066.1	-13.5	2,189.2	1,989.8	199.41	10.978	
21,500.0	13,200.0	19,608.7	11,450.0	145.3	142.1	36.93	8,166.1	-14.2	2,189.2	1,987.5	201.66	10.856	
21,600.0	13,200.0	19,708.7	11,450.0	146.9	143.7	36.93	8,266.1	-15.0	2,189.2	1,985.3	203.91	10.736	
21,700.0	13,200.0	19,808.7	11,450.0	148.4	145.3	36.93	8,366.1	-15.8	2,189.2	1,983.0	206.16	10.619	
21,800.0	13,200.0	19,908.7	11,450.0	150.0	146.9	36.93	8,466.1	-16.6	2,189.1	1,980.7	208.42	10.504	
21,900.0	13,200.0	20,008.7	11,450.0	151.5	148.5	36.93	8,566.1	-17.4	2,189.1	1,978.5	210.68	10.391	
22,000.0	13,200.0	20,108.7	11,450.0	153.1	150.1	36.93	8,666.1	-18.2	2,189.1	1,976.2	212.94	10.281	
22,100.0	13,200.0	20,208.7	11,450.0	154.7	151.7	36.93	8,766.1	-19.0	2,189.1	1,973.9	215.20	10.173	
22,200.0	13,200.0	20,308.7	11,450.0	156.2	153.3	36.93	8,866.0	-19.8	2,189.1	1,971.6	217.46	10.067	
22,300.0	13,200.0	20,408.7	11,450.0	157.8	154.9	36.93	8,966.0	-20.5	2,189.1	1,969.4	219.73	9.963	
22,400.0	13,200.0	20,508.7	11,450.0	159.4	156.5	36.93	9,066.0	-21.3	2,189.1	1,967.1	222.00	9.861	
22,500.0	13,200.0	20,608.7	11,450.0	161.0	158.1	36.93	9,166.0	-22.1	2,189.1	1,964.8	224.26	9.761	
22,600.0	13,200.0	20,708.7	11,450.0	162.5	159.7	36.92	9,266.0	-22.9	2,189.1	1,962.5	226.54	9.663	
22,700.0	13,200.0	20,808.7	11,450.0	164.1	161.3	36.92	9,366.0	-23.7	2,189.1	1,960.3	228.81	9.567	
22,800.0	13,200.0	20,908.7	11,450.0	165.7	162.9	36.92	9,466.0	-24.5	2,189.1	1,958.0	231.08	9.473	
22,900.0	13,200.0	21,008.7	11,450.0	167.3	164.5	36.92	9,566.0	-25.3	2,189.0	1,955.7	233.36	9.381	
23,000.0	13,200.0	21,108.7	11,450.0	168.9	166.1	36.92	9,666.0	-26.1	2,189.0	1,953.4	235.64	9.290	
23,100.0	13,200.0	21,208.7	11,450.0	170.4	167.7	36.92	9,766.0	-26.9	2,189.0	1,951.1	237.91	9.201	
23,200.0	13,200.0	21,308.7	11,450.0	172.0	169.4	36.92	9,866.0	-27.6	2,189.0	1,948.8	240.20	9.114	
23,300.0	13,200.0	21,408.7	11,450.0	173.6	171.0	36.92	9,966.0	-28.4	2,189.0	1,946.5	242.48	9.028	
23,400.0	13,200.0	21,508.7	11,450.0	175.2	172.6	36.92	10,066.0	-29.2	2,189.0	1,944.2	244.76	8.943	
23,504.9	13,200.0	21,613.5	11,450.0	176.9	174.2	36.92	10,170.9	-30.0	2,189.0	1,941.9	247.12	8.858	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #137H (Previous #223H) - 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	1.0	-1.0	0.0	0.0	90.06	-2.3	2,423.2	2,423.2				
100.0	100.0	101.0	99.0	0.1	0.1	90.06	-2.3	2,423.2	2,423.2	2,423.0	0.26	9,323.960	
200.0	200.0	201.0	199.0	0.5	0.5	90.06	-2.3	2,423.2	2,423.2	2,422.2	0.98	2,480.689	
300.0	300.0	301.0	299.0	0.8	0.8	90.06	-2.3	2,423.2	2,423.2	2,421.5	1.69	1,430.662	
400.0	400.0	401.0	399.0	1.2	1.2	90.06	-2.3	2,423.2	2,423.2	2,420.8	2.41	1,005.186	
500.0	500.0	501.0	499.0	1.6	1.6	90.06	-2.3	2,423.2	2,423.2	2,420.1	3.13	774.771	
600.0	600.0	601.0	599.0	1.9	1.9	90.06	-2.3	2,423.2	2,423.2	2,419.4	3.84	630.292	
700.0	700.0	701.0	699.0	2.3	2.3	90.06	-2.3	2,423.2	2,423.2	2,418.7	4.56	531.228	
800.0	800.0	801.0	799.0	2.6	2.6	90.06	-2.3	2,423.2	2,423.2	2,417.9	5.28	459.075	
900.0	900.0	901.0	899.0	3.0	3.0	90.06	-2.3	2,423.2	2,423.2	2,417.2	6.00	404.178	
1,000.0	1,000.0	999.0	999.0	3.4	3.4	90.06	-2.3	2,423.2	2,423.2	2,416.5	6.71	361.394	
1,100.0	1,100.0	1,171.4	1,171.4	3.7	3.9	90.06	-2.4	2,420.7	2,421.7	2,414.1	7.66	316.104	
1,200.0	1,200.0	1,344.3	1,344.1	4.1	4.6	90.06	-2.7	2,412.9	2,417.2	2,408.6	8.61	280.654	
1,300.0	1,300.0	1,516.5	1,515.8	4.4	5.2	90.07	-3.1	2,400.0	2,409.7	2,400.2	9.56	252.025	
1,400.0	1,400.0	1,687.8	1,686.2	4.8	5.8	90.09	-3.6	2,382.0	2,399.3	2,388.8	10.50	228.425	
1,500.0	1,500.0	1,810.6	1,807.9	5.1	6.3	90.10	-4.1	2,366.4	2,386.5	2,375.2	11.28	211.481	
1,600.0	1,600.0	1,909.8	1,906.3	5.5	6.6	90.11	-4.5	2,353.6	2,373.5	2,361.5	11.99	197.941	
1,700.0	1,700.0	2,008.9	2,004.6	5.9	7.0	90.12	-4.9	2,340.7	2,360.6	2,347.9	12.70	185.881	
1,800.0	1,800.0	2,108.1	2,102.9	6.2	7.4	90.13	-5.3	2,327.9	2,347.6	2,334.2	13.41	175.076	
1,900.0	1,900.0	2,207.2	2,201.2	6.6	7.8	90.14	-5.7	2,315.0	2,334.7	2,320.6	14.12	165.343	
2,000.0	2,000.0	2,306.4	2,299.6	6.9	8.2	90.15	-6.1	2,302.2	2,321.7	2,306.9	14.83	156.531	
2,100.0	2,100.0	2,405.5	2,397.9	7.3	8.6	90.16	-6.5	2,289.4	2,308.8	2,293.3	15.55	148.518	
2,200.0	2,200.0	2,504.7	2,496.2	7.7	9.0	90.17	-6.9	2,276.5	2,295.9	2,279.6	16.26	141.200	
2,300.0	2,300.0	2,603.9	2,594.5	8.0	9.4	90.19	-7.3	2,263.7	2,282.9	2,265.9	16.97	134.493	
2,400.0	2,400.0	2,703.0	2,692.8	8.4	9.8	90.20	-7.7	2,250.9	2,270.0	2,252.3	17.69	128.322	
2,500.0	2,500.0	2,802.2	2,791.2	8.7	10.2	90.21	-8.1	2,238.0	2,257.0	2,238.6	18.41	122.627	
2,600.0	2,600.0	2,901.3	2,889.5	9.1	10.6	90.22	-8.5	2,225.2	2,244.1	2,225.0	19.12	117.356	
2,700.0	2,700.0	3,000.5	2,987.8	9.4	11.0	90.23	-8.9	2,212.3	2,231.1	2,211.3	19.84	112.463	
2,800.0	2,800.0	3,099.6	3,086.1	9.8	11.4	90.24	-9.3	2,199.5	2,218.2	2,197.6	20.56	107.909	
2,900.0	2,900.0	3,201.2	3,184.5	10.2	11.8	90.26	-9.7	2,186.7	2,205.2	2,184.0	21.28	103.617	
3,000.0	3,000.0	3,302.0	3,282.8	10.5	12.2	90.27	-10.1	2,173.8	2,192.3	2,170.3	22.01	99.619	
3,100.0	3,100.0	3,402.9	3,381.1	10.9	12.6	90.28	-10.5	2,161.0	2,179.4	2,156.6	22.73	95.875	
3,200.0	3,200.0	3,503.7	3,479.4	11.2	13.0	90.29	-10.9	2,148.2	2,166.4	2,143.0	23.46	92.360	
3,300.0	3,300.0	3,604.6	3,577.7	11.6	13.4	90.30	-11.3	2,135.3	2,153.5	2,129.3	24.18	89.056	
3,400.0	3,400.0	3,705.4	3,676.1	12.0	13.8	90.32	-11.7	2,122.5	2,140.5	2,115.6	24.91	85.942	
3,500.0	3,500.0	3,806.3	3,774.4	12.3	14.2	90.33	-12.1	2,109.6	2,127.6	2,101.9	25.63	83.005	
3,600.0	3,600.0	3,907.1	3,872.7	12.7	14.6	90.34	-12.5	2,096.8	2,114.6	2,088.3	26.36	80.228	
3,700.0	3,700.0	4,007.9	3,971.0	13.0	15.1	90.36	-12.9	2,084.0	2,101.7	2,074.6	27.08	77.600	
3,800.0	3,800.0	4,108.8	4,069.4	13.4	15.5	90.37	-13.4	2,071.1	2,088.7	2,060.9	27.81	75.108	
3,900.0	3,900.0	4,209.6	4,167.7	13.8	15.9	90.38	-13.8	2,058.3	2,075.8	2,047.3	28.54	72.743	
4,000.0	4,000.0	4,289.5	4,266.0	14.1	16.2	90.40	-14.2	2,045.5	2,062.9	2,033.7	29.19	70.681	
4,100.0	4,100.0	4,388.7	4,364.3	14.5	16.6	90.41	-14.6	2,032.6	2,049.9	2,020.0	29.91	68.546	
4,200.0	4,200.0	4,487.8	4,462.6	14.8	17.0	90.42	-15.0	2,019.8	2,037.0	2,006.3	30.63	66.511	
4,300.0	4,300.0	4,587.0	4,561.0	15.2	17.4	90.44	-15.4	2,006.9	2,024.0	1,992.7	31.35	64.569	
4,400.0	4,400.0	4,686.2	4,659.3	15.5	17.8	90.45	-15.8	1,994.1	2,011.1	1,979.0	32.07	62.714	
4,500.0	4,500.0	4,785.3	4,757.6	15.9	18.2	90.47	-16.2	1,981.3	1,998.1	1,965.4	32.79	60.941	
4,600.0	4,600.0	4,884.5	4,855.9	16.3	18.6	90.48	-16.6	1,968.4	1,985.2	1,951.7	33.51	59.243	
4,700.0	4,700.0	4,983.6	4,954.3	16.6	19.1	90.50	-17.0	1,955.6	1,972.3	1,938.0	34.23	57.617	
4,800.0	4,800.0	5,082.8	5,052.6	17.0	19.5	90.51	-17.4	1,942.8	1,959.3	1,924.4	34.95	56.058	
4,900.0	4,900.0	5,182.0	5,150.9	17.3	19.9	90.53	-17.8	1,929.9	1,946.4	1,910.7	35.67	54.562	
5,000.0	5,000.0	5,281.1	5,249.2	17.7	20.3	90.54	-18.2	1,917.1	1,933.4	1,897.0	36.39	53.125	
5,100.0	5,100.0	5,380.3	5,347.5	18.1	20.7	90.56	-18.6	1,904.3	1,920.5	1,883.4	37.12	51.744	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #137H (Previous #223H) - 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
5,200.0	5,200.0	5,479.4	5,445.9	18.4	21.1	90.57	-19.0	1,891.4	1,907.6	1,869.7	37.84	50.415	
5,300.0	5,300.0	5,578.6	5,544.2	18.8	21.5	90.59	-19.4	1,878.6	1,894.6	1,856.1	38.56	49.136	
5,400.0	5,400.0	5,677.7	5,642.5	19.1	21.9	90.61	-19.8	1,865.7	1,881.7	1,842.4	39.28	47.904	
5,500.0	5,500.0	5,776.9	5,740.8	19.5	22.3	90.62	-20.2	1,852.9	1,868.7	1,828.7	40.00	46.716	
5,600.0	5,600.0	5,876.1	5,839.2	19.8	22.7	90.64	-20.6	1,840.1	1,855.8	1,815.1	40.72	45.571	
5,700.0	5,700.0	5,975.2	5,937.5	20.2	23.1	90.66	-21.0	1,827.2	1,842.8	1,801.4	41.45	44.465	
5,800.0	5,800.0	6,074.4	6,035.8	20.6	23.6	90.67	-21.4	1,814.4	1,829.9	1,787.7	42.17	43.396	
5,900.0	5,900.0	6,173.5	6,134.1	20.9	24.0	90.69	-21.8	1,801.6	1,817.0	1,774.1	42.89	42.364	
6,000.0	6,000.0	6,272.7	6,232.4	21.3	24.4	90.71	-22.2	1,788.7	1,804.0	1,760.4	43.61	41.366	
6,100.0	6,100.0	6,371.8	6,330.8	21.6	24.8	90.73	-22.6	1,775.9	1,791.1	1,746.7	44.33	40.401	
6,200.0	6,200.0	6,471.0	6,429.1	22.0	25.2	90.75	-23.0	1,763.0	1,778.1	1,733.1	45.06	39.466	
6,300.0	6,300.0	6,570.2	6,527.4	22.4	25.6	90.77	-23.4	1,750.2	1,765.2	1,719.4	45.78	38.561	
6,400.0	6,400.0	6,669.3	6,625.7	22.7	26.0	90.78	-23.8	1,737.4	1,752.3	1,705.8	46.50	37.683	
6,500.0	6,500.0	6,768.5	6,724.1	23.1	26.4	90.80	-24.2	1,724.5	1,739.3	1,692.1	47.22	36.833	
6,600.0	6,600.0	6,867.6	6,822.4	23.4	26.8	90.82	-24.6	1,711.7	1,726.4	1,678.4	47.94	36.008	
6,700.0	6,700.0	6,966.8	6,920.7	23.8	27.2	90.84	-25.0	1,698.9	1,713.4	1,664.8	48.67	35.208	
6,800.0	6,800.0	7,065.9	7,019.0	24.1	27.6	90.86	-25.4	1,686.0	1,700.5	1,651.1	49.39	34.431	
6,900.0	6,900.0	7,165.1	7,117.3	24.5	28.1	90.88	-25.8	1,673.2	1,687.6	1,637.5	50.11	33.676	
7,000.0	7,000.0	7,264.3	7,215.7	24.9	28.5	90.90	-26.2	1,660.3	1,674.6	1,623.8	50.83	32.943	
7,100.0	7,100.0	7,363.5	7,314.1	25.2	28.9	-163.63	-26.6	1,647.5	1,662.5	1,611.0	51.55	32.253	
7,200.0	7,200.0	7,463.0	7,412.7	25.5	29.3	-163.66	-27.0	1,634.6	1,652.1	1,599.8	52.25	31.621	
7,300.0	7,299.9	7,551.0	7,500.0	25.9	29.7	-163.70	-27.3	1,623.2	1,643.3	1,590.4	52.93	31.046	
7,400.0	7,399.7	7,614.3	7,562.9	26.2	29.9	-163.72	-28.4	1,615.9	1,637.8	1,584.3	53.56	30.577	
7,477.6	7,477.0	7,658.4	7,606.8	26.5	30.1	-163.69	-30.2	1,611.9	1,636.5	1,582.5	54.02	30.293	CC
7,500.0	7,499.4	7,674.8	7,623.1	26.6	30.1	-163.67	-31.0	1,610.7	1,636.6	1,582.5	54.16	30.218	ES
7,600.0	7,598.9	7,768.4	7,716.3	26.9	30.5	-163.57	-36.2	1,603.8	1,638.6	1,583.8	54.84	29.880	
7,700.0	7,698.3	7,868.3	7,815.7	27.2	30.8	-163.48	-41.7	1,596.5	1,642.3	1,586.7	55.54	29.570	
7,800.0	7,797.4	7,968.1	7,915.2	27.6	31.2	-163.39	-47.2	1,589.3	1,647.6	1,591.4	56.23	29.298	
7,900.0	7,896.3	8,067.9	8,014.5	27.9	31.6	-163.33	-52.7	1,582.0	1,654.6	1,597.7	56.93	29.062	
8,000.0	7,994.9	8,167.5	8,113.7	28.3	32.0	-163.27	-58.2	1,574.7	1,663.3	1,605.6	57.63	28.861	
8,100.0	8,093.3	8,266.9	8,212.7	28.6	32.3	-163.22	-63.7	1,567.4	1,673.6	1,615.3	58.33	28.693	
8,182.6	8,174.2	8,348.9	8,294.4	28.9	32.6	-163.20	-68.2	1,561.4	1,683.4	1,624.5	58.90	28.579	
8,200.0	8,191.3	8,366.2	8,311.6	29.0	32.7	-163.20	-69.2	1,560.2	1,685.5	1,626.5	59.02	28.557	
8,300.0	8,289.1	8,465.4	8,410.4	29.4	33.1	-163.21	-74.6	1,552.9	1,698.1	1,638.4	59.72	28.434	
8,400.0	8,387.0	8,564.7	8,509.2	29.7	33.4	-163.22	-80.1	1,545.7	1,710.6	1,650.2	60.42	28.312	
8,500.0	8,484.9	8,663.9	8,608.0	30.1	33.8	-163.23	-85.6	1,538.4	1,723.1	1,662.0	61.12	28.192	
8,600.0	8,582.8	8,763.1	8,706.8	30.5	34.2	-163.23	-91.1	1,531.2	1,735.7	1,673.9	61.82	28.075	
8,700.0	8,680.6	8,862.3	8,805.6	30.9	34.5	-163.24	-96.5	1,523.9	1,748.2	1,685.7	62.53	27.959	
8,800.0	8,778.5	8,961.5	8,904.4	31.2	34.9	-163.25	-102.0	1,516.7	1,760.7	1,697.5	63.23	27.846	
8,900.0	8,876.4	9,060.7	9,003.2	31.6	35.3	-163.26	-107.5	1,509.4	1,773.3	1,709.3	63.94	27.734	
9,000.0	8,974.3	9,159.9	9,102.0	32.0	35.7	-163.27	-113.0	1,502.2	1,785.8	1,721.2	64.65	27.624	
9,100.0	9,072.1	9,259.1	9,200.7	32.4	36.0	-163.28	-118.4	1,494.9	1,798.3	1,733.0	65.36	27.516	
9,200.0	9,170.0	9,358.3	9,299.5	32.8	36.4	-163.28	-123.9	1,487.7	1,810.9	1,744.8	66.07	27.409	
9,300.0	9,267.9	9,457.6	9,398.3	33.2	36.8	-163.29	-129.4	1,480.4	1,823.4	1,756.6	66.78	27.304	
9,400.0	9,365.8	9,556.8	9,497.1	33.6	37.1	-163.30	-134.9	1,473.2	1,835.9	1,768.4	67.49	27.201	
9,500.0	9,463.7	9,656.0	9,595.9	34.0	37.5	-163.31	-140.3	1,465.9	1,848.5	1,780.2	68.21	27.100	
9,600.0	9,561.5	9,755.2	9,694.7	34.4	37.9	-163.31	-145.8	1,458.7	1,861.0	1,792.1	68.92	27.001	
9,700.0	9,659.4	9,854.4	9,793.5	34.8	38.3	-163.32	-151.3	1,451.4	1,873.5	1,803.9	69.64	26.902	
9,800.0	9,757.3	9,953.6	9,892.3	35.2	38.6	-163.33	-156.8	1,444.2	1,886.1	1,815.7	70.36	26.806	
9,900.0	9,855.2	10,052.8	9,991.1	35.6	39.0	-163.34	-162.2	1,436.9	1,898.6	1,827.5	71.08	26.711	
10,000.0	9,953.0	10,152.0	10,089.9	36.0	39.4	-163.34	-167.7	1,429.7	1,911.1	1,839.3	71.80	26.618	
10,100.0	10,050.9	10,251.2	10,188.7	36.4	39.8	-163.35	-173.2	1,422.4	1,923.6	1,851.1	72.52	26.526	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #137H (Previous #223H) - 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
10,200.0	10,148.8	10,350.5	10,287.5	36.9	40.1	-163.36	-178.7	1,415.2	1,936.2	1,862.9	73.24	26.435	
10,300.0	10,246.7	10,449.7	10,386.3	37.3	40.5	-163.36	-184.1	1,407.9	1,948.7	1,874.7	73.96	26.346	
10,400.0	10,344.6	10,548.9	10,485.1	37.7	40.9	-163.37	-189.6	1,400.7	1,961.2	1,886.6	74.69	26.259	
10,500.0	10,442.4	10,648.1	10,583.9	38.1	41.2	-163.38	-195.1	1,393.4	1,973.8	1,898.4	75.41	26.173	
10,600.0	10,540.3	10,747.3	10,682.7	38.5	41.6	-163.38	-200.6	1,386.2	1,986.3	1,910.2	76.14	26.088	
10,700.0	10,638.2	10,800.0	10,735.2	39.0	41.8	-163.40	-203.2	1,382.7	1,999.7	1,923.0	76.67	26.082	
10,800.0	10,736.1	10,863.0	10,798.1	39.4	42.0	-163.44	-205.3	1,379.9	2,015.2	1,938.0	77.21	26.099	
10,900.0	10,833.9	10,917.6	10,852.6	39.8	42.2	-163.51	-206.2	1,378.7	2,032.9	1,955.2	77.68	26.168	
11,000.0	10,931.8	10,999.2	10,934.1	40.2	42.5	-163.72	-203.4	1,378.6	2,052.3	1,974.0	78.27	26.221	
11,100.0	11,029.7	11,098.2	11,031.3	40.7	42.8	-164.39	-185.1	1,378.5	2,071.8	1,992.9	78.91	26.257	
11,200.0	11,127.6	11,186.9	11,114.6	41.1	43.0	-165.37	-154.7	1,378.2	2,091.8	2,012.4	79.45	26.329	
11,300.0	11,225.5	11,263.3	11,181.8	41.5	43.2	-166.47	-118.5	1,377.9	2,112.9	2,033.0	79.89	26.448	
11,400.0	11,323.3	11,327.7	11,234.3	42.0	43.3	-167.57	-81.2	1,377.6	2,135.9	2,055.6	80.23	26.621	
11,500.0	11,421.2	11,381.4	11,274.6	42.4	43.3	-168.59	-45.9	1,377.4	2,161.2	2,080.7	80.47	26.858	
11,523.5	11,444.2	11,392.6	11,282.6	42.5	43.4	-168.81	-38.0	1,377.3	2,167.5	2,087.0	80.51	26.924	
11,600.0	11,519.2	11,426.2	11,305.6	42.8	43.4	-169.57	-13.5	1,377.1	2,188.6	2,108.0	80.59	27.156	
11,700.0	11,617.7	11,464.2	11,329.9	43.3	43.4	-170.45	15.7	1,376.9	2,216.6	2,136.0	80.60	27.501	
11,800.0	11,716.7	11,500.0	11,350.9	43.7	43.5	-171.31	44.7	1,376.6	2,245.4	2,164.9	80.52	27.887	
11,900.0	11,815.9	11,524.5	11,364.3	44.1	43.5	-171.92	65.3	1,376.5	2,275.1	2,194.8	80.28	28.339	
12,000.0	11,915.5	11,550.0	11,377.2	44.4	43.5	-172.57	87.2	1,376.3	2,305.7	2,225.7	79.96	28.836	
12,100.0	12,015.2	11,570.0	11,386.6	44.8	43.5	-173.08	104.8	1,376.2	2,337.3	2,257.8	79.53	29.390	
12,200.0	12,115.1	11,600.0	11,399.6	45.2	43.6	-173.83	131.9	1,375.9	2,370.0	2,290.9	79.08	29.970	
12,300.0	12,215.1	11,600.0	11,399.6	45.5	43.6	-173.89	131.9	1,375.9	2,403.5	2,325.2	78.33	30.685	
12,311.9	12,227.0	11,600.0	11,399.6	45.5	43.6	80.61	131.9	1,375.9	2,407.6	2,329.4	78.23	30.774	
12,400.0	12,315.1	11,620.1	11,407.6	45.8	43.6	80.15	150.4	1,375.8	2,439.0	2,361.4	77.67	31.401	
12,500.0	12,415.1	11,633.3	11,412.4	46.2	43.6	79.84	162.6	1,375.7	2,477.8	2,400.9	76.92	32.213	
12,600.0	12,515.1	11,650.0	11,418.1	46.5	43.6	79.45	178.3	1,375.6	2,519.9	2,443.7	76.16	33.086	
12,700.0	12,615.1	11,650.0	11,418.1	46.9	43.6	79.45	178.3	1,375.6	2,564.9	2,489.7	75.24	34.091	
12,711.9	12,627.0	11,650.0	11,418.1	46.9	43.6	79.45	178.3	1,375.6	2,570.5	2,495.4	75.13	34.216	
12,750.0	12,665.1	11,650.0	11,418.1	47.0	43.6	99.35	178.3	1,375.6	2,588.8	2,514.1	74.77	34.624	
12,800.0	12,714.8	11,666.8	11,423.4	47.2	43.6	96.08	194.2	1,375.4	2,613.9	2,539.4	74.44	35.114	
12,850.0	12,763.8	11,673.6	11,425.4	47.4	43.6	92.88	200.8	1,375.4	2,640.1	2,566.0	74.03	35.660	
12,900.0	12,811.8	11,681.1	11,427.5	47.5	43.6	89.52	208.0	1,375.3	2,667.0	2,593.4	73.65	36.214	
12,950.0	12,858.3	11,700.0	11,432.5	47.7	43.6	85.89	226.2	1,375.2	2,694.6	2,621.2	73.36	36.733	
13,000.0	12,903.1	11,700.0	11,432.5	47.8	43.6	82.58	226.2	1,375.2	2,722.3	2,649.4	72.95	37.320	
13,050.0	12,945.8	11,700.0	11,432.5	48.0	43.6	79.26	226.2	1,375.2	2,750.2	2,677.7	72.56	37.901	
13,100.0	12,986.1	11,700.0	11,432.5	48.1	43.6	75.98	226.2	1,375.2	2,778.1	2,705.9	72.21	38.470	
13,150.0	13,023.7	11,726.7	11,438.4	48.3	43.7	72.55	252.2	1,375.0	2,805.2	2,733.1	72.08	38.918	
13,200.0	13,058.2	11,750.0	11,442.6	48.4	43.7	69.38	275.1	1,374.8	2,832.0	2,760.1	71.95	39.361	
13,250.0	13,089.4	11,750.0	11,442.6	48.5	43.7	66.60	275.1	1,374.8	2,857.8	2,786.1	71.72	39.848	
13,300.0	13,117.2	11,750.0	11,442.6	48.7	43.7	63.98	275.1	1,374.8	2,882.7	2,811.2	71.53	40.299	
13,350.0	13,141.1	11,769.4	11,445.4	48.8	43.7	61.53	294.3	1,374.7	2,906.4	2,834.9	71.51	40.645	
13,400.0	13,161.2	11,780.6	11,446.7	48.9	43.7	59.34	305.4	1,374.6	2,928.7	2,857.3	71.48	40.971	
13,450.0	13,177.2	11,800.0	11,448.4	49.1	43.8	57.40	324.8	1,374.4	2,949.7	2,878.1	71.55	41.227	
13,500.0	13,189.1	11,800.0	11,448.4	49.2	43.8	55.66	324.8	1,374.4	2,968.9	2,897.3	71.58	41.477	
13,550.0	13,196.6	11,800.0	11,448.4	49.4	43.8	54.11	324.8	1,374.4	2,986.6	2,914.9	71.67	41.669	
13,600.0	13,199.8	11,826.2	11,449.7	49.6	43.8	52.88	350.9	1,374.2	3,002.1	2,930.2	71.92	41.744	
13,611.9	13,200.0	11,841.9	11,450.0	49.6	43.8	52.67	366.7	1,374.1	3,005.7	2,933.7	72.01	41.740	
13,700.0	13,200.0	11,871.6	11,450.0	50.0	43.9	53.10	396.3	1,373.8	3,030.5	2,958.1	72.44	41.833	
13,800.0	13,200.0	11,966.3	11,450.0	50.4	44.1	53.78	491.0	1,373.1	3,056.8	2,983.6	73.17	41.777	
13,900.0	13,200.0	12,062.1	11,450.0	50.9	44.4	54.38	586.8	1,372.3	3,080.5	3,006.5	73.97	41.645	
14,000.0	13,200.0	12,158.8	11,450.0	51.4	44.7	54.89	683.5	1,371.6	3,101.4	3,026.6	74.85	41.437	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #137H (Previous #223H) - 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
14,100.0	13,200.0	12,256.3	11,450.0	52.0	45.2	55.34	781.0	1,370.8	3,119.6	3,043.8	75.80	41.156	
14,200.0	13,200.0	12,354.6	11,450.0	52.6	45.7	55.71	879.3	1,370.0	3,135.1	3,058.3	76.82	40.808	
14,300.0	13,200.0	12,453.4	11,450.0	53.2	46.3	56.00	978.1	1,369.2	3,147.7	3,069.8	77.92	40.398	
14,400.0	13,200.0	12,552.7	11,450.0	53.8	46.9	56.23	1,077.4	1,368.4	3,157.4	3,078.4	79.07	39.931	
14,500.0	13,200.0	12,652.3	11,450.0	54.5	47.6	56.39	1,177.0	1,367.6	3,164.3	3,084.0	80.29	39.413	
14,600.0	13,200.0	12,752.2	11,450.0	55.1	48.3	56.48	1,276.9	1,366.8	3,168.3	3,086.7	81.55	38.850	
14,687.2	13,200.0	12,839.5	11,450.0	55.7	49.0	56.51	1,364.2	1,366.2	3,169.4	3,086.7	82.69	38.328	
14,700.0	13,200.0	12,852.2	11,450.0	55.8	49.1	56.51	1,376.9	1,366.0	3,169.4	3,086.5	82.86	38.249	
14,800.0	13,200.0	12,952.2	11,450.0	56.5	49.9	56.51	1,476.9	1,365.3	3,169.4	3,085.1	84.24	37.624	
14,900.0	13,200.0	13,052.2	11,450.0	57.3	50.8	56.51	1,576.9	1,364.5	3,169.3	3,083.7	85.69	36.987	
15,000.0	13,200.0	13,152.2	11,450.0	58.1	51.7	56.51	1,676.9	1,363.7	3,169.3	3,082.1	87.21	36.340	
15,100.0	13,200.0	13,252.2	11,450.0	58.9	52.7	56.51	1,776.9	1,362.9	3,169.3	3,080.5	88.80	35.689	
15,200.0	13,200.0	13,352.2	11,450.0	59.7	53.6	56.51	1,876.9	1,362.1	3,169.3	3,078.8	90.46	35.035	
15,300.0	13,200.0	13,452.2	11,450.0	60.6	54.6	56.51	1,976.9	1,361.3	3,169.3	3,077.1	92.18	34.381	
15,400.0	13,200.0	13,552.2	11,450.0	61.6	55.7	56.50	2,076.9	1,360.5	3,169.3	3,075.3	93.96	33.731	
15,500.0	13,200.0	13,652.2	11,450.0	62.5	56.8	56.50	2,176.9	1,359.7	3,169.2	3,073.4	95.79	33.086	
15,600.0	13,200.0	13,752.2	11,450.0	63.5	57.9	56.50	2,276.9	1,358.9	3,169.2	3,071.5	97.67	32.448	
15,700.0	13,200.0	13,852.2	11,450.0	64.5	59.0	56.50	2,376.9	1,358.1	3,169.2	3,069.6	99.60	31.819	
15,800.0	13,200.0	13,952.2	11,450.0	65.5	60.1	56.50	2,476.9	1,357.3	3,169.2	3,067.6	101.58	31.200	
15,900.0	13,200.0	14,052.2	11,450.0	66.6	61.3	56.50	2,576.9	1,356.5	3,169.2	3,065.6	103.60	30.591	
16,000.0	13,200.0	14,152.2	11,450.0	67.7	62.5	56.50	2,676.9	1,355.7	3,169.1	3,063.5	105.66	29.994	
16,100.0	13,200.0	14,252.2	11,450.0	68.8	63.7	56.50	2,776.9	1,354.9	3,169.1	3,061.4	107.76	29.410	
16,200.0	13,200.0	14,352.2	11,450.0	69.9	65.0	56.50	2,876.9	1,354.1	3,169.1	3,059.2	109.89	28.838	
16,300.0	13,200.0	14,452.2	11,450.0	71.1	66.2	56.50	2,976.9	1,353.3	3,169.1	3,057.0	112.06	28.280	
16,400.0	13,200.0	14,552.2	11,450.0	72.3	67.5	56.50	3,076.9	1,352.5	3,169.1	3,054.8	114.26	27.735	
16,500.0	13,200.0	14,652.2	11,450.0	73.5	68.8	56.50	3,176.9	1,351.7	3,169.0	3,052.6	116.50	27.203	
16,600.0	13,200.0	14,752.2	11,450.0	74.7	70.1	56.50	3,276.9	1,351.0	3,169.0	3,050.3	118.76	26.685	
16,700.0	13,200.0	14,852.2	11,450.0	75.9	71.4	56.50	3,376.8	1,350.2	3,169.0	3,048.0	121.04	26.181	
16,800.0	13,200.0	14,952.2	11,450.0	77.1	72.7	56.50	3,476.8	1,349.4	3,169.0	3,045.6	123.36	25.690	
16,900.0	13,200.0	15,052.2	11,450.0	78.4	74.1	56.50	3,576.8	1,348.6	3,169.0	3,043.3	125.69	25.212	
17,000.0	13,200.0	15,152.2	11,450.0	79.7	75.4	56.50	3,676.8	1,347.8	3,169.0	3,040.9	128.06	24.747	
17,100.0	13,200.0	15,252.2	11,450.0	81.0	76.8	56.50	3,776.8	1,347.0	3,168.9	3,038.5	130.44	24.295	
17,200.0	13,200.0	15,352.2	11,450.0	82.3	78.2	56.50	3,876.8	1,346.2	3,168.9	3,036.1	132.84	23.855	
17,300.0	13,200.0	15,452.2	11,450.0	83.6	79.5	56.50	3,976.8	1,345.4	3,168.9	3,033.6	135.26	23.428	
17,400.0	13,200.0	15,552.2	11,450.0	84.9	80.9	56.50	4,076.8	1,344.6	3,168.9	3,031.2	137.70	23.013	
17,500.0	13,200.0	15,652.2	11,450.0	86.3	82.4	56.50	4,176.8	1,343.8	3,168.9	3,028.7	140.16	22.609	
17,600.0	13,200.0	15,752.2	11,450.0	87.6	83.8	56.50	4,276.8	1,343.0	3,168.8	3,026.2	142.63	22.217	
17,700.0	13,200.0	15,852.2	11,450.0	89.0	85.2	56.50	4,376.8	1,342.2	3,168.8	3,023.7	145.12	21.836	
17,800.0	13,200.0	15,952.2	11,450.0	90.3	86.6	56.50	4,476.8	1,341.4	3,168.8	3,021.2	147.63	21.465	
17,900.0	13,200.0	16,052.2	11,450.0	91.7	88.1	56.50	4,576.8	1,340.6	3,168.8	3,018.6	150.14	21.105	
18,000.0	13,200.0	16,152.2	11,450.0	93.1	89.5	56.50	4,676.8	1,339.8	3,168.8	3,016.1	152.68	20.755	
18,100.0	13,200.0	16,252.2	11,450.0	94.5	91.0	56.50	4,776.8	1,339.0	3,168.8	3,013.5	155.22	20.415	
18,200.0	13,200.0	16,352.2	11,450.0	95.9	92.5	56.50	4,876.8	1,338.2	3,168.7	3,011.0	157.78	20.084	
18,300.0	13,200.0	16,452.2	11,450.0	97.3	93.9	56.50	4,976.8	1,337.4	3,168.7	3,008.4	160.35	19.762	
18,400.0	13,200.0	16,552.2	11,450.0	98.7	95.4	56.50	5,076.8	1,336.6	3,168.7	3,005.8	162.92	19.449	
18,500.0	13,200.0	16,652.2	11,450.0	100.2	96.9	56.50	5,176.8	1,335.9	3,168.7	3,003.2	165.51	19.144	
18,600.0	13,200.0	16,752.2	11,450.0	101.6	98.4	56.50	5,276.8	1,335.1	3,168.7	3,000.5	168.11	18.848	
18,700.0	13,200.0	16,852.2	11,450.0	103.0	99.9	56.50	5,376.8	1,334.3	3,168.6	2,997.9	170.72	18.560	
18,800.0	13,200.0	16,952.2	11,450.0	104.5	101.4	56.50	5,476.8	1,333.5	3,168.6	2,995.3	173.34	18.280	
18,900.0	13,200.0	17,052.2	11,450.0	105.9	102.9	56.50	5,576.8	1,332.7	3,168.6	2,992.6	175.97	18.007	
19,000.0	13,200.0	17,152.2	11,450.0	107.4	104.4	56.50	5,676.8	1,331.9	3,168.6	2,990.0	178.60	17.741	
19,100.0	13,200.0	17,252.2	11,450.0	108.9	105.9	56.50	5,776.8	1,331.1	3,168.6	2,987.3	181.25	17.482	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #137H (Previous #223H) - 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
19,200.0	13,200.0	17,352.2	11,450.0	110.3	107.4	56.50	5,876.8	1,330.3	3,168.5	2,984.7	183.90	17.230	
19,300.0	13,200.0	17,452.2	11,450.0	111.8	108.9	56.50	5,976.8	1,329.5	3,168.5	2,982.0	186.56	16.984	
19,400.0	13,200.0	17,552.2	11,450.0	113.3	110.4	56.50	6,076.8	1,328.7	3,168.5	2,979.3	189.22	16.745	
19,500.0	13,200.0	17,652.2	11,450.0	114.8	112.0	56.50	6,176.8	1,327.9	3,168.5	2,976.6	191.90	16.512	
19,600.0	13,200.0	17,752.2	11,450.0	116.3	113.5	56.50	6,276.8	1,327.1	3,168.5	2,973.9	194.57	16.284	
19,700.0	13,200.0	17,852.2	11,450.0	117.8	115.0	56.50	6,376.8	1,326.3	3,168.5	2,971.2	197.26	16.062	
19,800.0	13,200.0	17,952.2	11,450.0	119.3	116.6	56.50	6,476.7	1,325.5	3,168.4	2,968.5	199.95	15.846	
19,900.0	13,200.0	18,052.2	11,450.0	120.8	118.1	56.49	6,576.7	1,324.7	3,168.4	2,965.8	202.65	15.635	
20,000.0	13,200.0	18,152.2	11,450.0	122.3	119.7	56.49	6,676.7	1,323.9	3,168.4	2,963.1	205.35	15.429	
20,100.0	13,200.0	18,252.2	11,450.0	123.8	121.2	56.49	6,776.7	1,323.1	3,168.4	2,960.3	208.05	15.229	
20,200.0	13,200.0	18,352.2	11,450.0	125.3	122.8	56.49	6,876.7	1,322.3	3,168.4	2,957.6	210.77	15.033	
20,300.0	13,200.0	18,452.2	11,450.0	126.8	124.3	56.49	6,976.7	1,321.5	3,168.3	2,954.9	213.48	14.841	
20,400.0	13,200.0	18,552.2	11,450.0	128.4	125.9	56.49	7,076.7	1,320.8	3,168.3	2,952.1	216.21	14.654	
20,500.0	13,200.0	18,652.2	11,450.0	129.9	127.4	56.49	7,176.7	1,320.0	3,168.3	2,949.4	218.93	14.472	
20,600.0	13,200.0	18,752.2	11,450.0	131.4	129.0	56.49	7,276.7	1,319.2	3,168.3	2,946.6	221.66	14.293	
20,700.0	13,200.0	18,852.2	11,450.0	132.9	130.5	56.49	7,376.7	1,318.4	3,168.3	2,943.9	224.40	14.119	
20,800.0	13,200.0	18,952.2	11,450.0	134.5	132.1	56.49	7,476.7	1,317.6	3,168.3	2,941.1	227.14	13.949	
20,900.0	13,200.0	19,052.2	11,450.0	136.0	133.7	56.49	7,576.7	1,316.8	3,168.2	2,938.4	229.88	13.782	
21,000.0	13,200.0	19,152.2	11,450.0	137.6	135.3	56.49	7,676.7	1,316.0	3,168.2	2,935.6	232.62	13.619	
21,100.0	13,200.0	19,252.2	11,450.0	139.1	136.8	56.49	7,776.7	1,315.2	3,168.2	2,932.8	235.37	13.460	
21,200.0	13,200.0	19,352.2	11,450.0	140.7	138.4	56.49	7,876.7	1,314.4	3,168.2	2,930.1	238.13	13.305	
21,300.0	13,200.0	19,452.2	11,450.0	142.2	140.0	56.49	7,976.7	1,313.6	3,168.2	2,927.3	240.88	13.152	
21,400.0	13,200.0	19,552.2	11,450.0	143.8	141.6	56.49	8,076.7	1,312.8	3,168.1	2,924.5	243.64	13.003	
21,500.0	13,200.0	19,652.2	11,450.0	145.3	143.1	56.49	8,176.7	1,312.0	3,168.1	2,921.7	246.41	12.857	
21,600.0	13,200.0	19,752.2	11,450.0	146.9	144.7	56.49	8,276.7	1,311.2	3,168.1	2,918.9	249.17	12.714	
21,700.0	13,200.0	19,852.2	11,450.0	148.4	146.3	56.49	8,376.7	1,310.4	3,168.1	2,916.1	251.94	12.575	
21,800.0	13,200.0	19,952.2	11,450.0	150.0	147.9	56.49	8,476.7	1,309.6	3,168.1	2,913.4	254.71	12.438	
21,900.0	13,200.0	20,052.2	11,450.0	151.5	149.5	56.49	8,576.7	1,308.8	3,168.0	2,910.6	257.49	12.304	
22,000.0	13,200.0	20,152.2	11,450.0	153.1	151.1	56.49	8,676.7	1,308.0	3,168.0	2,907.8	260.27	12.172	
22,100.0	13,200.0	20,252.2	11,450.0	154.7	152.6	56.49	8,776.7	1,307.2	3,168.0	2,905.0	263.05	12.044	
22,200.0	13,200.0	20,352.2	11,450.0	156.2	154.2	56.49	8,876.7	1,306.5	3,168.0	2,902.2	265.83	11.917	
22,300.0	13,200.0	20,452.2	11,450.0	157.8	155.8	56.49	8,976.7	1,305.7	3,168.0	2,899.4	268.61	11.794	
22,400.0	13,200.0	20,552.2	11,450.0	159.4	157.4	56.49	9,076.7	1,304.9	3,168.0	2,896.6	271.40	11.673	
22,500.0	13,200.0	20,652.2	11,450.0	161.0	159.0	56.49	9,176.7	1,304.1	3,167.9	2,893.7	274.19	11.554	
22,600.0	13,200.0	20,752.2	11,450.0	162.5	160.6	56.49	9,276.7	1,303.3	3,167.9	2,890.9	276.98	11.437	
22,700.0	13,200.0	20,852.2	11,450.0	164.1	162.2	56.49	9,376.7	1,302.5	3,167.9	2,888.1	279.78	11.323	
22,800.0	13,200.0	20,952.2	11,450.0	165.7	163.8	56.49	9,476.7	1,301.7	3,167.9	2,885.3	282.57	11.211	
22,900.0	13,200.0	21,052.2	11,450.0	167.3	165.4	56.49	9,576.7	1,300.9	3,167.9	2,882.5	285.37	11.101	
23,000.0	13,200.0	21,152.2	11,450.0	168.9	167.0	56.49	9,676.6	1,300.1	3,167.8	2,879.7	288.17	10.993	
23,100.0	13,200.0	21,252.2	11,450.0	170.4	168.6	56.49	9,776.6	1,299.3	3,167.8	2,876.9	290.97	10.887	
23,200.0	13,200.0	21,352.2	11,450.0	172.0	170.2	56.49	9,876.6	1,298.5	3,167.8	2,874.0	293.78	10.783	
23,300.0	13,200.0	21,452.2	11,450.0	173.6	171.8	56.49	9,976.6	1,297.7	3,167.8	2,871.2	296.58	10.681	
23,400.0	13,200.0	21,552.2	11,450.0	175.2	173.4	56.49	10,076.6	1,296.9	3,167.8	2,868.4	299.39	10.581	
23,504.9	13,200.0	21,657.1	11,450.0	176.9	175.1	56.49	10,181.5	1,296.1	3,167.8	2,865.4	302.33	10.478	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #138H (Previous #224H) - 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	0.0	0.0	0.0	0.0	89.35	27.6	2,423.1	2,423.3				
100.0	100.0	100.0	100.0	0.1	0.1	89.35	27.6	2,423.1	2,423.3	2,423.0	0.26	9,454.475	
200.0	200.0	200.0	200.0	0.5	0.5	89.35	27.6	2,423.1	2,423.3	2,422.3	0.97	2,489.855	
300.0	300.0	300.0	300.0	0.8	0.8	89.35	27.6	2,423.1	2,423.3	2,421.6	1.69	1,433.713	
400.0	400.0	400.0	400.0	1.2	1.2	89.35	27.6	2,423.1	2,423.3	2,420.8	2.41	1,006.695	
500.0	500.0	500.0	500.0	1.6	1.6	89.35	27.6	2,423.1	2,423.3	2,420.1	3.12	775.669	
600.0	600.0	600.0	600.0	1.9	1.9	89.35	27.6	2,423.1	2,423.3	2,419.4	3.84	630.887	
700.0	700.0	700.0	700.0	2.3	2.3	89.35	27.6	2,423.1	2,423.3	2,418.7	4.56	531.652	
800.0	800.0	800.0	800.0	2.6	2.6	89.35	27.6	2,423.1	2,423.3	2,418.0	5.27	459.392	
900.0	900.0	900.0	900.0	3.0	3.0	89.35	27.6	2,423.1	2,423.3	2,417.3	5.99	404.425	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	89.35	27.6	2,423.1	2,423.3	2,416.5	6.71	361.205	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	89.35	27.6	2,423.1	2,423.3	2,415.8	7.43	326.332	
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	89.35	27.6	2,423.1	2,423.3	2,415.1	8.14	297.599	
1,300.0	1,300.0	1,300.0	1,300.0	4.4	4.4	89.35	27.6	2,423.1	2,423.3	2,414.4	8.86	273.516	
1,400.0	1,400.0	1,400.0	1,400.0	4.8	4.8	89.35	27.6	2,423.1	2,423.3	2,413.7	9.58	253.040	
1,500.0	1,500.0	1,500.0	1,500.0	5.1	5.1	89.35	27.6	2,423.1	2,423.3	2,413.0	10.29	235.416	
1,600.0	1,600.0	1,600.0	1,600.0	5.5	5.5	89.35	27.6	2,423.1	2,423.3	2,412.2	11.01	220.087	
1,700.0	1,700.0	1,700.0	1,700.0	5.9	5.9	89.35	27.6	2,423.1	2,423.3	2,411.5	11.73	206.632	
1,800.0	1,800.0	1,800.0	1,800.0	6.2	6.2	89.35	27.6	2,423.1	2,423.3	2,410.8	12.44	194.727	
1,900.0	1,900.0	1,900.0	1,900.0	6.6	6.6	89.35	27.6	2,423.1	2,423.3	2,410.1	13.16	184.120	
2,000.0	2,000.0	2,000.0	2,000.0	6.9	6.9	89.35	27.6	2,423.1	2,423.3	2,409.4	13.88	174.608	
2,100.0	2,100.0	2,100.0	2,100.0	7.3	7.3	89.35	27.6	2,423.1	2,423.3	2,408.7	14.60	166.031	
2,200.0	2,200.0	2,200.0	2,200.0	7.7	7.7	89.35	27.6	2,423.1	2,423.3	2,407.9	15.31	158.257	
2,300.0	2,300.0	2,300.0	2,300.0	8.0	8.0	89.35	27.6	2,423.1	2,423.3	2,407.2	16.03	151.179	
2,400.0	2,400.0	2,400.0	2,400.0	8.4	8.4	89.35	27.6	2,423.1	2,423.3	2,406.5	16.75	144.706	
2,500.0	2,500.0	2,500.0	2,500.0	8.7	8.7	89.35	27.6	2,423.1	2,423.3	2,405.8	17.46	138.765	CC
2,600.0	2,600.0	2,573.0	2,573.0	9.1	9.0	89.35	27.3	2,423.5	2,423.8	2,405.7	18.07	134.119	ES
2,700.0	2,700.0	2,645.9	2,645.9	9.4	9.2	89.37	26.7	2,424.7	2,425.5	2,406.8	18.67	129.889	
2,800.0	2,800.0	2,718.8	2,718.7	9.8	9.5	89.40	25.6	2,426.8	2,428.3	2,409.0	19.27	126.018	
2,900.0	2,900.0	2,791.6	2,791.5	10.2	9.7	89.43	24.1	2,429.6	2,432.2	2,412.3	19.86	122.446	
3,000.0	3,000.0	2,864.3	2,864.1	10.5	10.0	89.48	22.1	2,433.3	2,437.2	2,416.7	20.46	119.148	
3,100.0	3,100.0	2,936.9	2,936.5	10.9	10.2	89.54	19.7	2,437.8	2,443.3	2,422.3	21.04	116.102	
3,200.0	3,200.0	3,009.4	3,008.7	11.2	10.5	89.60	16.9	2,443.0	2,450.6	2,428.9	21.63	113.288	
3,300.0	3,300.0	3,081.7	3,080.7	11.6	10.7	89.68	13.6	2,449.1	2,458.9	2,436.7	22.22	110.686	
3,400.0	3,400.0	3,153.8	3,152.4	12.0	11.0	89.77	10.0	2,455.9	2,468.4	2,445.6	22.80	108.280	
3,500.0	3,500.0	3,225.7	3,223.8	12.3	11.2	89.86	5.9	2,463.6	2,479.0	2,455.6	23.37	106.056	
3,600.0	3,600.0	3,303.6	3,293.9	12.7	11.5	89.97	1.5	2,471.8	2,490.7	2,466.7	23.97	103.914	
3,700.0	3,700.0	3,404.5	3,391.9	13.0	11.9	90.12	-5.0	2,484.0	2,503.0	2,478.3	24.67	101.440	
3,800.0	3,800.0	3,494.5	3,490.0	13.4	12.2	90.27	-11.5	2,496.1	2,515.3	2,490.0	25.34	99.246	
3,900.0	3,900.0	3,593.5	3,588.1	13.8	12.5	90.41	-18.1	2,508.3	2,527.6	2,501.6	26.05	97.041	
4,000.0	4,000.0	3,692.5	3,686.1	14.1	12.9	90.56	-24.6	2,520.4	2,540.0	2,513.2	26.75	94.945	
4,100.0	4,100.0	3,791.6	3,784.2	14.5	13.3	90.70	-31.1	2,532.6	2,552.4	2,524.9	27.46	92.952	
4,200.0	4,200.0	3,909.4	3,882.2	14.8	13.7	90.85	-37.6	2,544.7	2,564.7	2,536.5	28.23	90.838	
4,300.0	4,300.0	3,989.6	3,980.3	15.2	14.0	90.99	-44.1	2,556.9	2,577.1	2,548.3	28.88	89.247	
4,400.0	4,400.0	4,088.6	4,078.4	15.5	14.4	91.13	-50.6	2,569.0	2,589.6	2,560.0	29.59	87.523	
4,500.0	4,500.0	4,187.7	4,176.4	15.9	14.8	91.27	-57.1	2,581.2	2,602.0	2,571.7	30.30	85.876	
4,600.0	4,600.0	4,286.7	4,274.5	16.3	15.2	91.40	-63.6	2,593.3	2,614.4	2,583.4	31.01	84.303	
4,700.0	4,700.0	4,385.7	4,372.6	16.6	15.6	91.54	-70.1	2,605.5	2,626.9	2,595.2	31.73	82.798	
4,800.0	4,800.0	4,484.7	4,470.6	17.0	16.0	91.68	-76.6	2,617.6	2,639.4	2,606.9	32.44	81.358	
4,900.0	4,900.0	4,583.8	4,568.7	17.3	16.3	91.81	-83.1	2,629.7	2,651.8	2,618.7	33.16	79.979	
5,000.0	5,000.0	4,682.8	4,666.7	17.7	16.7	91.94	-89.6	2,641.9	2,664.3	2,630.5	33.87	78.656	
5,100.0	5,100.0	4,781.8	4,764.8	18.1	17.1	92.07	-96.1	2,654.0	2,676.9	2,642.3	34.59	77.387	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #138H (Previous #224H) - 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
5,200.0	5,200.0	4,880.9	4,862.9	18.4	17.5	92.20	-102.6	2,666.2	2,689.4	2,654.1	35.31	76.168	
5,300.0	5,300.0	4,979.9	4,960.9	18.8	17.9	92.33	-109.2	2,678.3	2,701.9	2,665.9	36.03	74.998	
5,400.0	5,400.0	5,078.9	5,059.0	19.1	18.3	92.46	-115.7	2,690.5	2,714.5	2,677.7	36.75	73.872	
5,500.0	5,500.0	5,177.9	5,157.1	19.5	18.7	92.59	-122.2	2,702.6	2,727.1	2,689.6	37.47	72.789	
5,600.0	5,600.0	5,277.0	5,255.1	19.8	19.1	92.71	-128.7	2,714.8	2,739.6	2,701.4	38.19	71.746	
5,700.0	5,700.0	5,376.0	5,353.2	20.2	19.5	92.84	-135.2	2,726.9	2,752.2	2,713.3	38.91	70.741	
5,800.0	5,800.0	5,475.0	5,451.3	20.6	19.9	92.96	-141.7	2,739.1	2,764.8	2,725.2	39.63	69.772	
5,900.0	5,900.0	5,574.0	5,549.3	20.9	20.3	93.08	-148.2	2,751.2	2,777.5	2,737.1	40.35	68.838	
6,000.0	6,000.0	5,770.3	5,744.0	21.3	21.1	93.30	-159.8	2,772.9	2,789.2	2,747.7	41.53	67.154	
6,100.0	6,100.0	6,067.3	6,040.3	21.6	22.2	93.46	-168.5	2,789.2	2,794.9	2,751.9	43.03	64.952	
6,200.0	6,200.0	6,226.9	6,200.0	22.0	22.7	93.47	-169.0	2,790.1	2,795.2	2,751.3	43.92	63.640	
6,300.0	6,300.0	6,326.9	6,300.0	22.4	23.0	93.47	-169.0	2,790.1	2,795.2	2,750.6	44.62	62.640	
6,400.0	6,400.0	6,426.9	6,400.0	22.7	23.4	93.47	-169.0	2,790.1	2,795.2	2,749.9	45.32	61.671	
6,500.0	6,500.0	6,526.9	6,500.0	23.1	23.7	93.47	-169.0	2,790.1	2,795.2	2,749.2	46.03	60.730	
6,600.0	6,600.0	6,626.9	6,600.0	23.4	24.0	93.47	-169.0	2,790.1	2,795.2	2,748.5	46.73	59.818	
6,700.0	6,700.0	6,726.9	6,700.0	23.8	24.4	93.47	-169.0	2,790.1	2,795.2	2,747.8	47.43	58.932	
6,800.0	6,800.0	6,826.9	6,800.0	24.1	24.7	93.47	-169.0	2,790.1	2,795.2	2,747.1	48.13	58.071	
6,900.0	6,900.0	6,926.9	6,900.0	24.5	25.1	93.47	-169.0	2,790.1	2,795.2	2,746.4	48.84	57.234	
7,000.0	7,000.0	7,026.9	7,000.0	24.9	25.4	93.47	-169.0	2,790.1	2,795.2	2,745.7	49.54	56.421	
7,100.0	7,100.0	7,126.9	7,100.0	25.2	25.7	-161.05	-169.0	2,790.1	2,796.0	2,745.8	50.23	55.660	
7,200.0	7,200.0	7,226.9	7,200.0	25.5	26.1	-161.06	-169.0	2,790.1	2,798.5	2,747.6	50.92	54.963	
7,300.0	7,299.9	7,326.8	7,299.9	25.9	26.4	-161.07	-169.0	2,790.1	2,802.6	2,751.0	51.60	54.317	
7,400.0	7,399.7	7,426.6	7,399.7	26.2	26.8	-161.09	-169.0	2,790.1	2,808.4	2,756.1	52.28	53.718	
7,500.0	7,499.4	7,526.3	7,499.4	26.6	27.1	-161.12	-169.0	2,790.1	2,815.8	2,762.9	52.96	53.166	
7,600.0	7,598.9	7,625.8	7,598.9	26.9	27.4	-161.15	-169.0	2,790.1	2,824.9	2,771.3	53.65	52.659	
7,700.0	7,698.3	7,725.2	7,698.3	27.2	27.8	-161.19	-169.0	2,790.1	2,835.6	2,781.3	54.33	52.195	
7,800.0	7,797.4	7,824.3	7,797.4	27.6	28.1	-161.24	-169.0	2,790.1	2,848.0	2,793.0	55.01	51.774	
7,900.0	7,896.3	7,923.2	7,896.3	27.9	28.4	-161.29	-169.0	2,790.1	2,862.0	2,806.3	55.69	51.392	
8,000.0	7,994.9	8,021.9	7,994.9	28.3	28.8	-161.34	-169.0	2,790.1	2,877.7	2,821.3	56.37	51.050	
8,100.0	8,093.3	8,120.2	8,093.3	28.6	29.1	-161.40	-169.0	2,790.1	2,895.0	2,837.9	57.05	50.746	
8,182.6	8,174.2	8,201.1	8,174.2	28.9	29.4	-161.45	-169.0	2,790.1	2,910.5	2,852.9	57.61	50.522	
8,200.0	8,191.3	8,218.2	8,191.3	29.0	29.5	-161.48	-169.0	2,790.1	2,913.9	2,856.2	57.73	50.477	
8,300.0	8,289.1	8,316.1	8,289.1	29.4	29.8	-161.60	-169.0	2,790.1	2,933.4	2,875.0	58.40	50.225	
8,400.0	8,387.0	8,413.9	8,387.0	29.7	30.1	-161.73	-169.0	2,790.1	2,952.9	2,893.8	59.08	49.977	
8,500.0	8,484.9	8,511.8	8,484.9	30.1	30.5	-161.85	-169.0	2,790.1	2,972.4	2,912.6	59.77	49.734	
8,600.0	8,582.8	8,609.7	8,582.8	30.5	30.8	-161.97	-169.0	2,790.1	2,991.9	2,931.4	60.45	49.495	
8,700.0	8,680.6	8,707.6	8,680.6	30.9	31.1	-162.09	-169.0	2,790.1	3,011.4	2,950.3	61.13	49.261	
8,800.0	8,778.5	8,805.5	8,778.5	31.2	31.5	-162.21	-169.0	2,790.1	3,031.0	2,969.2	61.82	49.031	
8,900.0	8,876.4	8,903.3	8,876.4	31.6	31.8	-162.33	-169.0	2,790.1	3,050.5	2,988.0	62.50	48.805	
9,000.0	8,974.3	9,001.2	8,974.3	32.0	32.2	-162.45	-169.0	2,790.1	3,070.1	3,006.9	63.19	48.583	
9,100.0	9,072.1	9,100.9	9,072.1	32.4	32.5	-162.56	-169.0	2,790.1	3,089.7	3,025.8	63.89	48.361	
9,200.0	9,170.0	9,203.0	9,170.0	32.8	32.9	-162.67	-169.0	2,790.1	3,109.3	3,044.7	64.59	48.136	
9,300.0	9,267.9	9,305.2	9,267.9	33.2	33.2	-162.78	-169.0	2,790.1	3,128.9	3,063.6	65.30	47.916	
9,400.0	9,365.8	9,407.3	9,365.8	33.6	33.6	-162.89	-169.0	2,790.1	3,148.5	3,082.5	66.01	47.699	
9,500.0	9,463.7	9,509.4	9,463.7	34.0	33.9	-163.00	-169.0	2,790.1	3,168.1	3,101.4	66.72	47.487	
9,600.0	9,561.5	9,588.5	9,561.5	34.4	34.2	-163.11	-169.0	2,790.1	3,187.8	3,120.4	67.34	47.335	
9,700.0	9,659.4	9,686.4	9,659.4	34.8	34.5	-163.22	-169.0	2,790.1	3,207.4	3,139.4	68.04	47.140	
9,800.0	9,757.3	9,784.2	9,757.3	35.2	34.9	-163.32	-169.0	2,790.1	3,227.1	3,158.3	68.74	46.948	
9,900.0	9,855.2	9,882.1	9,855.2	35.6	35.2	-163.43	-169.0	2,790.1	3,246.7	3,177.3	69.43	46.760	
10,000.0	9,953.0	9,980.0	9,953.0	36.0	35.6	-163.53	-169.0	2,790.1	3,266.4	3,196.3	70.13	46.575	
10,100.0	10,050.9	10,077.9	10,050.9	36.4	35.9	-163.63	-169.0	2,790.1	3,286.1	3,215.3	70.83	46.393	
10,200.0	10,148.8	10,175.7	10,148.8	36.9	36.2	-163.73	-169.0	2,790.1	3,305.8	3,234.3	71.53	46.214	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #138H (Previous #224H) - 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
10,300.0	10,246.7	10,273.6	10,246.7	37.3	36.6	-163.83	-169.0	2,790.1	3,325.5	3,253.3	72.23	46.039	
10,400.0	10,344.6	10,371.5	10,344.6	37.7	36.9	-163.93	-169.0	2,790.1	3,345.2	3,272.3	72.93	45.866	
10,500.0	10,442.4	10,469.4	10,442.4	38.1	37.3	-164.02	-169.0	2,790.1	3,365.0	3,291.3	73.64	45.697	
10,600.0	10,540.3	10,567.3	10,540.3	38.5	37.6	-164.12	-169.0	2,790.1	3,384.7	3,310.4	74.34	45.530	
10,700.0	10,638.2	10,665.1	10,638.2	39.0	38.0	-164.21	-169.0	2,790.1	3,404.5	3,329.4	75.04	45.366	
10,800.0	10,736.1	10,763.0	10,736.1	39.4	38.3	-164.30	-169.0	2,790.1	3,424.2	3,348.5	75.75	45.205	
10,900.0	10,833.9	10,860.9	10,833.9	39.8	38.6	-164.40	-169.0	2,790.1	3,444.0	3,367.5	76.45	45.047	
11,000.0	10,931.8	11,148.8	11,114.4	40.2	39.6	-165.51	-118.0	2,783.1	3,462.2	3,384.5	77.69	44.567	
11,100.0	11,029.7	11,100.0	11,305.7	40.7	39.6	-168.01	22.6	2,763.9	3,474.9	3,397.0	77.87	44.625	
11,200.0	11,127.6	11,537.2	11,389.0	41.1	40.2	-170.09	143.8	2,747.3	3,487.0	3,407.7	79.27	43.990	
11,300.0	11,225.5	11,601.3	11,414.5	41.5	40.3	-171.08	202.1	2,739.3	3,500.8	3,420.9	79.85	43.843	
11,400.0	11,323.3	11,639.9	11,426.6	42.0	40.3	-171.69	238.4	2,734.3	3,516.9	3,436.6	80.35	43.772	
11,500.0	11,421.2	11,665.5	11,433.3	42.4	40.4	-172.10	262.8	2,730.9	3,535.6	3,454.9	80.77	43.772	
11,523.5	11,444.2	11,670.3	11,434.4	42.5	40.4	-172.18	267.4	2,730.3	3,540.4	3,459.5	80.86	43.782	
11,600.0	11,519.2	11,683.7	11,437.4	42.8	40.4	-172.43	280.4	2,728.5	3,556.2	3,475.0	81.13	43.831	
11,700.0	11,617.7	11,697.6	11,440.1	43.3	40.5	-172.69	293.9	2,726.7	3,576.8	3,495.4	81.43	43.923	
11,800.0	11,716.7	11,708.6	11,442.0	43.7	40.5	-172.91	304.6	2,725.2	3,597.6	3,515.9	81.68	44.047	
11,900.0	11,815.9	11,717.6	11,443.5	44.1	40.5	-173.09	313.4	2,724.0	3,618.4	3,536.5	81.86	44.202	
12,000.0	11,915.5	11,725.0	11,444.5	44.4	40.5	-173.25	320.7	2,723.0	3,639.3	3,557.3	81.99	44.386	
12,100.0	12,015.2	11,731.4	11,445.4	44.8	40.6	-173.39	327.0	2,722.2	3,660.3	3,578.2	82.07	44.599	
12,200.0	12,115.1	11,737.0	11,446.0	45.2	40.6	-173.51	332.4	2,721.4	3,681.3	3,599.2	82.10	44.840	
12,300.0	12,215.1	11,750.0	11,447.4	45.5	40.6	-173.76	345.3	2,719.7	3,702.3	3,620.2	82.10	45.096	
12,311.9	12,227.0	11,750.0	11,447.4	45.5	40.6	80.75	345.3	2,719.7	3,704.8	3,622.7	82.09	45.131	
12,400.0	12,315.1	11,750.0	11,447.4	45.8	40.6	80.75	345.3	2,719.7	3,724.4	3,642.4	82.02	45.408	
12,500.0	12,415.1	11,750.0	11,447.4	46.2	40.6	80.75	345.3	2,719.7	3,748.9	3,667.0	81.90	45.773	
12,600.0	12,515.1	11,750.0	11,447.4	46.5	40.6	80.75	345.3	2,719.7	3,776.0	3,694.2	81.75	46.191	
12,700.0	12,615.1	11,750.0	11,447.4	46.9	40.6	80.75	345.3	2,719.7	3,805.5	3,723.9	81.56	46.660	
12,711.9	12,627.0	11,750.0	11,447.4	46.9	40.6	80.75	345.3	2,719.7	3,809.1	3,727.6	81.53	46.719	
12,750.0	12,665.1	11,750.0	11,447.4	47.0	40.6	101.44	345.3	2,719.7	3,821.4	3,739.9	81.45	46.916	
12,800.0	12,714.8	11,750.0	11,447.4	47.2	40.6	99.63	345.3	2,719.7	3,838.6	3,757.3	81.34	47.193	
12,850.0	12,763.8	11,750.0	11,447.4	47.4	40.6	97.66	345.3	2,719.7	3,857.1	3,775.9	81.22	47.489	
12,900.0	12,811.8	11,769.7	11,448.9	47.5	40.7	95.25	364.7	2,717.0	3,876.6	3,795.4	81.16	47.766	
12,950.0	12,858.3	11,775.5	11,449.3	47.7	40.7	92.94	370.5	2,716.2	3,897.0	3,815.9	81.05	48.079	
13,000.0	12,903.1	11,782.2	11,449.5	47.8	40.7	90.52	377.1	2,715.3	3,918.1	3,837.1	80.95	48.399	
13,050.0	12,945.8	11,803.9	11,450.0	48.0	40.7	87.84	398.7	2,712.3	3,939.8	3,858.9	80.90	48.701	
13,100.0	12,986.1	11,803.9	11,450.0	48.1	40.7	85.41	398.7	2,712.3	3,961.7	3,880.9	80.79	49.036	
13,150.0	13,023.7	11,803.9	11,450.0	48.3	40.7	82.97	398.7	2,712.3	3,983.7	3,903.0	80.70	49.368	
13,200.0	13,058.2	11,803.9	11,450.0	48.4	40.7	80.53	398.7	2,712.3	4,005.8	3,925.2	80.61	49.692	
13,250.0	13,089.4	11,803.9	11,450.0	48.5	40.7	78.13	398.7	2,712.3	4,027.8	3,947.2	80.55	50.005	
13,300.0	13,117.2	11,845.6	11,450.0	48.7	40.9	75.52	440.0	2,707.1	4,048.8	3,968.2	80.63	50.216	
13,350.0	13,141.1	11,860.0	11,450.0	48.8	40.9	73.25	454.3	2,705.5	4,069.5	3,988.8	80.65	50.460	
13,400.0	13,161.2	11,900.0	11,450.0	48.9	41.0	71.03	494.1	2,701.7	4,089.6	4,008.8	80.77	50.630	
13,450.0	13,177.2	11,900.0	11,450.0	49.1	41.0	69.13	494.1	2,701.7	4,108.3	4,027.5	80.80	50.843	
13,500.0	13,189.1	11,900.0	11,450.0	49.2	41.0	67.36	494.1	2,701.7	4,126.1	4,045.3	80.86	51.028	
13,550.0	13,196.6	11,900.0	11,450.0	49.4	41.0	65.72	494.1	2,701.7	4,142.9	4,062.0	80.95	51.181	
13,600.0	13,199.8	11,938.0	11,450.0	49.6	41.2	64.30	532.0	2,698.8	4,158.0	4,076.8	81.21	51.202	
13,611.9	13,200.0	11,941.8	11,450.0	49.6	41.2	63.98	535.8	2,698.6	4,161.4	4,080.2	81.25	51.215	
13,700.0	13,200.0	11,969.9	11,450.0	50.0	41.3	64.26	563.8	2,697.0	4,185.9	4,104.3	81.62	51.284	
13,800.0	13,200.0	12,000.0	11,450.0	50.4	41.4	64.55	593.9	2,695.7	4,212.3	4,130.2	82.07	51.328	
13,900.0	13,200.0	12,033.7	11,450.0	50.9	41.6	64.82	627.6	2,694.9	4,237.1	4,154.5	82.57	51.315	
14,000.0	13,200.0	12,100.4	11,450.0	51.4	41.9	65.12	694.3	2,694.3	4,260.1	4,176.8	83.28	51.156	
14,100.0	13,200.0	12,202.1	11,450.0	52.0	42.3	65.41	791.8	2,693.5	4,280.2	4,195.9	84.24	50.808	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #138H (Previous #224H) - 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
14,200.0	13,200.0	12,303.8	11,450.0	52.6	42.9	65.66	890.1	2,692.7	4,297.1	4,211.8	85.30	50.376	
14,300.0	13,200.0	12,405.0	11,450.0	53.2	43.5	65.86	988.9	2,692.0	4,311.0	4,224.6	86.44	49.871	
14,400.0	13,200.0	12,505.7	11,450.0	53.8	44.2	66.01	1,088.2	2,691.2	4,321.7	4,234.1	87.67	49.298	
14,500.0	13,200.0	12,606.0	11,450.0	54.5	44.9	66.11	1,187.9	2,690.4	4,329.3	4,240.3	88.96	48.665	
14,600.0	13,200.0	12,706.1	11,450.0	55.1	45.7	66.17	1,287.7	2,689.6	4,333.6	4,243.3	90.32	47.980	
14,687.2	13,200.0	12,781.1	11,450.0	55.7	46.3	66.19	1,375.0	2,688.9	4,334.8	4,243.3	91.47	47.392	
14,700.0	13,200.0	12,806.1	11,450.0	55.8	46.5	66.19	1,387.7	2,688.8	4,334.8	4,243.1	91.75	47.248	
14,800.0	13,200.0	12,906.1	11,450.0	56.5	47.3	66.19	1,487.7	2,688.0	4,334.8	4,241.5	93.24	46.488	
14,900.0	13,200.0	13,006.1	11,450.0	57.3	48.2	66.19	1,587.7	2,687.1	4,334.7	4,239.9	94.82	45.716	
15,000.0	13,200.0	13,106.1	11,450.0	58.1	49.1	66.19	1,687.7	2,686.3	4,334.7	4,238.2	96.47	44.934	
15,100.0	13,200.0	13,193.9	11,450.0	58.9	50.0	66.19	1,787.7	2,685.5	4,334.7	4,236.6	98.07	44.198	
15,200.0	13,200.0	13,306.1	11,450.0	59.7	51.1	66.19	1,887.7	2,684.7	4,334.7	4,234.7	99.97	43.358	
15,300.0	13,200.0	13,406.1	11,450.0	60.6	52.2	66.19	1,987.7	2,683.9	4,334.6	4,232.8	101.82	42.571	
15,400.0	13,200.0	13,506.1	11,450.0	61.6	53.2	66.19	2,087.7	2,683.1	4,334.6	4,230.9	103.73	41.787	
15,500.0	13,200.0	13,606.1	11,450.0	62.5	54.3	66.19	2,187.7	2,682.3	4,334.6	4,228.9	105.69	41.011	
15,600.0	13,200.0	13,706.1	11,450.0	63.5	55.5	66.19	2,287.7	2,681.5	4,334.5	4,226.8	107.71	40.242	
15,700.0	13,200.0	13,806.1	11,450.0	64.5	56.6	66.19	2,387.7	2,680.7	4,334.5	4,224.7	109.78	39.484	
15,800.0	13,200.0	13,906.1	11,450.0	65.5	57.8	66.19	2,487.7	2,679.9	4,334.5	4,222.6	111.89	38.737	
15,900.0	13,200.0	14,006.1	11,450.0	66.6	59.0	66.19	2,587.7	2,679.1	4,334.5	4,220.4	114.05	38.003	
16,000.0	13,200.0	14,106.1	11,450.0	67.7	60.2	66.19	2,687.7	2,678.3	4,334.4	4,218.2	116.26	37.283	
16,100.0	13,200.0	14,206.1	11,450.0	68.8	61.4	66.19	2,787.7	2,677.5	4,334.4	4,215.9	118.50	36.577	
16,200.0	13,200.0	14,306.1	11,450.0	69.9	62.7	66.19	2,887.7	2,676.7	4,334.4	4,213.6	120.78	35.887	
16,300.0	13,200.0	14,406.1	11,450.0	71.1	64.0	66.19	2,987.7	2,675.9	4,334.4	4,211.3	123.10	35.211	
16,400.0	13,200.0	14,506.1	11,450.0	72.3	65.3	66.19	3,087.7	2,675.1	4,334.3	4,208.9	125.45	34.552	
16,500.0	13,200.0	14,606.1	11,450.0	73.5	66.6	66.19	3,187.7	2,674.3	4,334.3	4,206.5	127.83	33.908	
16,600.0	13,200.0	14,706.1	11,450.0	74.7	67.9	66.19	3,287.7	2,673.5	4,334.3	4,204.0	130.24	33.279	
16,700.0	13,200.0	14,806.1	11,450.0	75.9	69.3	66.19	3,387.7	2,672.7	4,334.2	4,201.6	132.68	32.667	
16,800.0	13,200.0	14,906.1	11,450.0	77.1	70.6	66.19	3,487.7	2,671.9	4,334.2	4,199.1	135.15	32.071	
16,900.0	13,200.0	15,006.1	11,450.0	78.4	72.0	66.19	3,587.7	2,671.1	4,334.2	4,196.6	137.64	31.490	
17,000.0	13,200.0	15,106.1	11,450.0	79.7	73.4	66.19	3,687.7	2,670.3	4,334.2	4,194.0	140.16	30.924	
17,100.0	13,200.0	15,206.1	11,450.0	81.0	74.7	66.19	3,787.7	2,669.5	4,334.1	4,191.4	142.69	30.374	
17,200.0	13,200.0	15,306.1	11,450.0	82.3	76.2	66.19	3,887.7	2,668.7	4,334.1	4,188.9	145.26	29.838	
17,300.0	13,200.0	15,406.1	11,450.0	83.6	77.6	66.19	3,987.6	2,667.9	4,334.1	4,186.2	147.84	29.316	
17,400.0	13,200.0	15,506.1	11,450.0	84.9	79.0	66.19	4,087.6	2,667.1	4,334.1	4,183.6	150.44	28.809	
17,500.0	13,200.0	15,606.1	11,450.0	86.3	80.4	66.19	4,187.6	2,666.3	4,334.0	4,181.0	153.06	28.316	
17,600.0	13,200.0	15,706.1	11,450.0	87.6	81.9	66.19	4,287.6	2,665.5	4,334.0	4,178.3	155.70	27.836	
17,700.0	13,200.0	15,806.1	11,450.0	89.0	83.3	66.18	4,387.6	2,664.7	4,334.0	4,175.6	158.35	27.370	
17,800.0	13,200.0	15,906.1	11,450.0	90.3	84.8	66.18	4,487.6	2,663.9	4,333.9	4,172.9	161.02	26.916	
17,900.0	13,200.0	16,006.1	11,450.0	91.7	86.2	66.18	4,587.6	2,663.1	4,333.9	4,170.2	163.71	26.474	
18,000.0	13,200.0	16,106.1	11,450.0	93.1	87.7	66.18	4,687.6	2,662.3	4,333.9	4,167.5	166.40	26.044	
18,100.0	13,200.0	16,206.1	11,450.0	94.5	89.2	66.18	4,787.6	2,661.5	4,333.9	4,164.7	169.12	25.626	
18,200.0	13,200.0	16,306.1	11,450.0	95.9	90.6	66.18	4,887.6	2,660.7	4,333.8	4,162.0	171.84	25.220	
18,300.0	13,200.0	16,406.1	11,450.0	97.3	92.1	66.18	4,987.6	2,659.9	4,333.8	4,159.2	174.58	24.824	
18,400.0	13,200.0	16,506.1	11,450.0	98.7	93.6	66.18	5,087.6	2,659.1	4,333.8	4,156.4	177.33	24.439	
18,500.0	13,200.0	16,606.1	11,450.0	100.2	95.1	66.18	5,187.6	2,658.3	4,333.8	4,153.7	180.09	24.064	
18,600.0	13,200.0	16,706.1	11,450.0	101.6	96.6	66.18	5,287.6	2,657.5	4,333.7	4,150.9	182.87	23.699	
18,700.0	13,200.0	16,806.1	11,450.0	103.0	98.1	66.18	5,387.6	2,656.7	4,333.7	4,148.0	185.65	23.343	
18,800.0	13,200.0	16,906.1	11,450.0	104.5	99.6	66.18	5,487.6	2,655.9	4,333.7	4,145.2	188.44	22.997	
18,900.0	13,200.0	17,006.1	11,450.0	105.9	101.2	66.18	5,587.6	2,655.0	4,333.6	4,142.4	191.24	22.660	
19,000.0	13,200.0	17,106.1	11,450.0	107.4	102.7	66.18	5,687.6	2,654.2	4,333.6	4,139.6	194.06	22.332	
19,100.0	13,200.0	17,193.9	11,450.0	108.9	104.0	66.18	5,787.6	2,653.4	4,333.6	4,136.9	196.70	22.032	
19,200.0	13,200.0	17,306.1	11,450.0	110.3	105.7	66.18	5,887.6	2,652.6	4,333.6	4,133.9	199.70	21.700	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #138H (Previous #224H) - 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
19,300.0	13,200.0	17,406.1	11,450.0	111.8	107.3	66.18	5,987.6	2,651.8	4,333.5	4,131.0	202.54	21.396	
19,400.0	13,200.0	17,506.1	11,450.0	113.3	108.8	66.18	6,087.6	2,651.0	4,333.5	4,128.1	205.38	21.100	
19,500.0	13,200.0	17,606.1	11,450.0	114.8	110.4	66.18	6,187.6	2,650.2	4,333.5	4,125.2	208.23	20.811	
19,600.0	13,200.0	17,706.1	11,450.0	116.3	111.9	66.18	6,287.6	2,649.4	4,333.5	4,122.4	211.09	20.529	
19,700.0	13,200.0	17,806.1	11,450.0	117.8	113.4	66.18	6,387.6	2,648.6	4,333.4	4,119.5	213.96	20.254	
19,800.0	13,200.0	17,906.1	11,450.0	119.3	115.0	66.18	6,487.6	2,647.8	4,333.4	4,116.6	216.83	19.986	
19,900.0	13,200.0	18,006.1	11,450.0	120.8	116.5	66.18	6,587.6	2,647.0	4,333.4	4,113.7	219.70	19.724	
20,000.0	13,200.0	18,106.1	11,450.0	122.3	118.1	66.18	6,687.6	2,646.2	4,333.3	4,110.8	222.59	19.468	
20,100.0	13,200.0	18,206.1	11,450.0	123.8	119.7	66.18	6,787.6	2,645.4	4,333.3	4,107.8	225.48	19.219	
20,200.0	13,200.0	18,306.1	11,450.0	125.3	121.2	66.18	6,887.6	2,644.6	4,333.3	4,104.9	228.37	18.975	
20,300.0	13,200.0	18,406.1	11,450.0	126.8	122.8	66.18	6,987.6	2,643.8	4,333.3	4,102.0	231.27	18.737	
20,400.0	13,200.0	18,506.1	11,450.0	128.4	124.4	66.18	7,087.5	2,643.0	4,333.2	4,099.1	234.17	18.504	
20,500.0	13,200.0	18,606.1	11,450.0	129.9	125.9	66.18	7,187.5	2,642.2	4,333.2	4,096.1	237.08	18.277	
20,600.0	13,200.0	18,706.1	11,450.0	131.4	127.5	66.18	7,287.5	2,641.4	4,333.2	4,093.2	240.00	18.055	
20,700.0	13,200.0	18,806.1	11,450.0	132.9	129.1	66.18	7,387.5	2,640.6	4,333.1	4,090.2	242.92	17.838	
20,800.0	13,200.0	18,906.1	11,450.0	134.5	130.6	66.18	7,487.5	2,639.8	4,333.1	4,087.3	245.84	17.626	
20,900.0	13,200.0	19,006.1	11,450.0	136.0	132.2	66.18	7,587.5	2,639.0	4,333.1	4,084.3	248.77	17.418	
21,000.0	13,200.0	19,106.1	11,450.0	137.6	133.8	66.18	7,687.5	2,638.2	4,333.1	4,081.4	251.70	17.215	
21,100.0	13,200.0	19,206.1	11,450.0	139.1	135.4	66.18	7,787.5	2,637.4	4,333.0	4,078.4	254.64	17.017	
21,200.0	13,200.0	19,306.1	11,450.0	140.7	137.0	66.18	7,887.5	2,636.6	4,333.0	4,075.4	257.57	16.822	
21,300.0	13,200.0	19,406.1	11,450.0	142.2	138.5	66.18	7,987.5	2,635.8	4,333.0	4,072.5	260.52	16.632	
21,400.0	13,200.0	19,506.1	11,450.0	143.8	140.1	66.18	8,087.5	2,635.0	4,333.0	4,069.5	263.46	16.446	
21,500.0	13,200.0	19,606.1	11,450.0	145.3	141.7	66.18	8,187.5	2,634.2	4,332.9	4,066.5	266.41	16.264	
21,600.0	13,200.0	19,706.1	11,450.0	146.9	143.3	66.18	8,287.5	2,633.4	4,332.9	4,063.5	269.37	16.085	
21,700.0	13,200.0	19,806.1	11,450.0	148.4	144.9	66.18	8,387.5	2,632.6	4,332.9	4,060.5	272.32	15.911	
21,800.0	13,200.0	19,906.1	11,450.0	150.0	146.5	66.18	8,487.5	2,631.8	4,332.8	4,057.6	275.28	15.740	
21,900.0	13,200.0	20,006.1	11,450.0	151.5	148.1	66.18	8,587.5	2,631.0	4,332.8	4,054.6	278.25	15.572	
22,000.0	13,200.0	20,106.1	11,450.0	153.1	149.7	66.18	8,687.5	2,630.2	4,332.8	4,051.6	281.21	15.407	
22,100.0	13,200.0	20,206.1	11,450.0	154.7	151.3	66.18	8,787.5	2,629.4	4,332.8	4,048.6	284.18	15.246	
22,200.0	13,200.0	20,306.1	11,450.0	156.2	152.9	66.18	8,887.5	2,628.6	4,332.7	4,045.6	287.15	15.089	
22,300.0	13,200.0	20,406.1	11,450.0	157.8	154.5	66.18	8,987.5	2,627.8	4,332.7	4,042.6	290.13	14.934	
22,400.0	13,200.0	20,506.1	11,450.0	159.4	156.1	66.18	9,087.5	2,627.0	4,332.7	4,039.6	293.10	14.782	
22,500.0	13,200.0	20,606.1	11,450.0	161.0	157.7	66.18	9,187.5	2,626.2	4,332.7	4,036.6	296.08	14.633	
22,600.0	13,200.0	20,706.1	11,450.0	162.5	159.3	66.18	9,287.5	2,625.4	4,332.6	4,033.6	299.06	14.487	
22,700.0	13,200.0	20,806.1	11,450.0	164.1	160.9	66.18	9,387.5	2,624.6	4,332.6	4,030.6	302.05	14.344	
22,800.0	13,200.0	20,906.1	11,450.0	165.7	162.5	66.18	9,487.5	2,623.8	4,332.6	4,027.5	305.03	14.204	
22,900.0	13,200.0	21,006.1	11,450.0	167.3	164.1	66.18	9,587.5	2,623.0	4,332.5	4,024.5	308.02	14.066	
23,000.0	13,200.0	21,106.1	11,450.0	168.9	165.7	66.18	9,687.5	2,622.1	4,332.5	4,021.5	311.01	13.930	
23,100.0	13,200.0	21,206.1	11,450.0	170.4	167.3	66.18	9,787.5	2,621.3	4,332.5	4,018.5	314.01	13.797	
23,200.0	13,200.0	21,306.1	11,450.0	172.0	168.9	66.18	9,887.5	2,620.5	4,332.5	4,015.5	317.00	13.667	
23,300.0	13,200.0	21,406.1	11,450.0	173.6	170.5	66.18	9,987.5	2,619.7	4,332.4	4,012.4	320.00	13.539	
23,400.0	13,200.0	21,506.1	11,450.0	175.2	172.1	66.18	10,087.5	2,618.9	4,332.4	4,009.4	323.00	13.413	
23,504.9	13,200.0	21,598.7	11,450.0	176.9	173.6	66.18	10,192.3	2,618.1	4,332.4	4,006.4	325.96	13.291	SF

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #201H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 199-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	13.8	13.8	0.0	0.0	-12.19	5,146.0	-1,111.3	5,264.6				
100.0	100.0	95.0	95.0	0.1	0.2	-12.19	5,146.1	-1,111.8	5,264.9	5,264.6	0.28	N/A	
200.0	200.0	176.2	176.2	0.5	0.3	-12.21	5,146.3	-1,113.3	5,265.5	5,264.7	0.76	6,922.149	
300.0	300.0	268.2	268.1	0.8	0.6	-12.23	5,146.6	-1,115.5	5,266.3	5,264.9	1.40	3,752.615	
400.0	400.0	364.3	364.2	1.2	0.9	-12.25	5,147.1	-1,117.5	5,267.3	5,265.2	2.11	2,499.295	
500.0	500.0	461.6	461.5	1.6	1.3	-12.27	5,147.8	-1,119.2	5,268.3	5,265.5	2.82	1,871.458	
600.0	600.0	559.1	559.0	1.9	1.6	-12.28	5,148.5	-1,120.6	5,269.4	5,265.9	3.52	1,495.568	
700.0	700.0	657.2	657.1	2.3	2.0	-12.29	5,149.4	-1,122.0	5,270.5	5,266.3	4.23	1,244.978	
800.0	800.0	755.3	755.1	2.6	2.3	-12.31	5,150.2	-1,123.4	5,271.7	5,266.7	4.94	1,066.363	
900.0	900.0	847.9	847.7	3.0	2.6	-12.32	5,151.1	-1,124.8	5,272.9	5,267.3	5.63	935.827	
1,000.0	1,000.0	945.7	945.5	3.4	3.0	-12.33	5,152.1	-1,126.3	5,274.3	5,268.0	6.34	831.607	
1,100.0	1,100.0	1,131.1	1,131.0	3.7	3.6	-12.34	5,153.0	-1,127.1	5,274.9	5,267.5	7.33	719.269	
1,200.0	1,200.0	1,360.1	1,359.9	4.1	4.4	-12.34	5,149.7	-1,126.2	5,273.3	5,264.8	8.46	623.282	
1,300.0	1,300.0	1,542.1	1,541.7	4.4	5.0	-12.39	5,142.3	-1,129.8	5,269.7	5,260.3	9.45	557.611	
1,400.0	1,400.0	1,685.7	1,684.9	4.8	5.5	-12.48	5,134.1	-1,135.9	5,265.0	5,254.7	10.32	510.311	
1,500.0	1,500.0	1,781.9	1,780.8	5.1	5.9	-12.54	5,127.9	-1,141.0	5,260.0	5,249.0	11.02	477.201	
1,600.0	1,600.0	1,876.6	1,875.1	5.5	6.2	-12.62	5,122.0	-1,146.3	5,255.0	5,243.3	11.72	448.231	
1,700.0	1,700.0	1,979.4	1,977.6	5.9	6.6	-12.70	5,115.4	-1,152.4	5,250.1	5,237.6	12.46	421.420	
1,800.0	1,800.0	2,082.4	2,080.1	6.2	7.0	-12.78	5,108.7	-1,159.0	5,245.1	5,231.9	13.19	397.554	
1,900.0	1,900.0	2,068.0	2,065.8	6.6	6.9	-12.77	5,109.6	-1,158.0	5,241.3	5,227.8	13.51	388.075	
2,000.0	2,000.0	2,154.3	2,151.8	6.9	7.3	-12.84	5,105.0	-1,163.5	5,237.7	5,223.5	14.18	369.318	
2,100.0	2,100.0	2,194.7	2,192.1	7.3	7.4	-12.87	5,103.6	-1,166.0	5,235.7	5,221.0	14.69	356.395	
2,200.0	2,200.0	2,257.0	2,254.3	7.7	7.6	-12.91	5,102.4	-1,169.8	5,234.9	5,219.6	15.28	342.634	
2,237.3	2,237.3	2,257.0	2,254.3	7.8	7.6	-12.91	5,102.4	-1,169.8	5,234.8	5,219.4	15.41	339.663	
2,300.0	2,300.0	2,294.0	2,291.2	8.0	7.8	-12.94	5,102.0	-1,172.0	5,235.0	5,219.2	15.77	331.938	
2,400.0	2,400.0	2,374.5	2,371.6	8.4	8.1	-12.99	5,101.5	-1,176.7	5,235.7	5,219.3	16.42	318.796	
2,500.0	2,500.0	2,455.0	2,451.9	8.7	8.4	-13.04	5,101.4	-1,181.1	5,236.7	5,219.7	17.07	306.697	
2,600.0	2,600.0	2,534.5	2,531.3	9.1	8.7	-13.08	5,101.6	-1,185.3	5,238.2	5,220.5	17.72	295.596	
2,700.0	2,700.0	2,614.0	2,610.7	9.4	8.9	-13.12	5,102.1	-1,189.4	5,240.0	5,221.6	18.37	285.301	
2,800.0	2,800.0	2,800.0	2,948.3	9.8	9.6	-13.34	5,096.0	-1,208.2	5,238.9	5,219.5	19.41	269.932	
2,900.0	2,900.0	3,117.1	3,112.8	10.2	10.8	-13.44	5,088.4	-1,215.7	5,235.3	5,214.4	20.92	250.230	
3,000.0	3,000.0	3,200.2	3,195.8	10.5	11.1	-13.48	5,084.7	-1,218.6	5,231.7	5,210.1	21.58	242.384	
3,100.0	3,100.0	3,325.6	3,320.9	10.9	11.6	-13.55	5,078.7	-1,223.7	5,228.0	5,205.7	22.40	233.407	
3,200.0	3,200.0	3,432.5	3,427.6	11.2	12.0	-13.62	5,072.9	-1,229.6	5,224.0	5,200.8	23.15	225.648	
3,300.0	3,300.0	3,519.2	3,513.9	11.6	12.3	-13.70	5,068.0	-1,235.1	5,220.1	5,196.3	23.84	219.008	
3,400.0	3,400.0	3,601.0	3,595.4	12.0	12.6	-13.77	5,063.6	-1,240.8	5,216.5	5,192.0	24.50	212.906	
3,500.0	3,500.0	3,671.7	3,665.9	12.3	12.9	-13.83	5,060.2	-1,245.3	5,213.3	5,188.2	25.13	207.495	
3,600.0	3,600.0	3,742.5	3,736.6	12.7	13.1	-13.87	5,057.5	-1,248.8	5,210.7	5,185.0	25.75	202.368	
3,700.0	3,700.0	3,819.9	3,813.8	13.0	13.4	-13.91	5,055.1	-1,251.9	5,208.7	5,182.3	26.39	197.359	
3,800.0	3,800.0	3,900.9	3,894.8	13.4	13.7	-13.94	5,053.0	-1,254.7	5,207.0	5,180.0	27.05	192.526	
3,900.0	3,900.0	3,981.4	3,975.2	13.8	14.0	-13.97	5,051.3	-1,257.0	5,205.7	5,178.0	27.70	187.960	
4,000.0	4,000.0	4,060.6	4,054.4	14.1	14.3	-13.99	5,050.2	-1,258.7	5,204.8	5,176.5	28.34	183.671	
4,100.0	4,100.0	4,139.9	4,133.7	14.5	14.6	-14.01	5,049.5	-1,259.5	5,204.3	5,175.3	28.98	179.588	
4,200.0	4,200.0	4,246.7	4,240.5	14.8	14.9	-14.01	5,049.0	-1,259.8	5,203.9	5,174.2	29.70	175.193	
4,300.0	4,300.0	4,355.4	4,349.2	15.2	15.3	-14.01	5,048.5	-1,259.5	5,203.4	5,172.9	30.43	170.970	
4,400.0	4,400.0	4,435.7	4,429.4	15.5	15.5	-14.00	5,048.4	-1,258.6	5,203.0	5,171.9	31.05	167.559	
4,481.2	4,481.2	4,504.4	4,498.2	15.8	15.8	-13.99	5,048.6	-1,257.5	5,202.9	5,171.3	31.57	164.820	
4,500.0	4,500.0	4,520.4	4,514.1	15.9	15.8	-13.98	5,048.7	-1,257.1	5,202.9	5,171.2	31.69	164.198	
4,600.0	4,600.0	4,609.5	4,603.2	16.3	16.1	-13.96	5,049.4	-1,255.2	5,203.1	5,170.7	32.33	160.922	
4,700.0	4,700.0	4,698.7	4,692.4	16.6	16.4	-13.94	5,050.2	-1,253.1	5,203.4	5,170.4	32.98	157.778	
4,800.0	4,800.0	4,791.8	4,785.4	17.0	16.7	-13.91	5,051.3	-1,251.0	5,204.0	5,170.3	33.64	154.693	
4,900.0	4,900.0	4,885.6	4,879.2	17.3	17.0	-13.89	5,052.3	-1,249.3	5,204.6	5,170.3	34.31	151.716	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #201H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 199-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	5,000.0	4,990.7	4,984.3	17.7	17.4	-13.87	5,053.4	-1,248.0	5,205.3	5,170.3	35.01	148.680	
5,100.0	5,100.0	5,094.5	5,088.2	18.1	17.7	-13.86	5,054.3	-1,246.7	5,205.9	5,170.2	35.71	145.771	
5,200.0	5,200.0	5,195.4	5,189.0	18.4	18.0	-13.84	5,055.2	-1,245.4	5,206.5	5,170.1	36.41	143.009	
5,300.0	5,300.0	5,296.3	5,289.9	18.8	18.4	-13.82	5,056.1	-1,244.1	5,207.0	5,169.9	37.10	140.348	
5,400.0	5,400.0	5,385.9	5,379.5	19.1	18.7	-13.81	5,056.9	-1,243.1	5,207.6	5,169.9	37.76	137.917	
5,500.0	5,500.0	5,478.0	5,471.6	19.5	19.0	-13.80	5,057.9	-1,242.4	5,208.4	5,170.0	38.43	135.544	
5,600.0	5,600.0	5,580.0	5,573.6	19.8	19.3	-13.79	5,058.9	-1,242.0	5,209.3	5,170.2	39.13	133.125	
5,700.0	5,700.0	5,685.2	5,678.8	20.2	19.7	-13.79	5,059.8	-1,241.7	5,210.1	5,170.2	39.85	130.752	
5,800.0	5,800.0	5,800.6	5,794.2	20.6	20.1	-13.78	5,060.6	-1,241.5	5,210.7	5,170.1	40.60	128.342	
5,900.0	5,900.0	5,906.8	5,900.4	20.9	20.4	-13.78	5,061.0	-1,241.1	5,211.0	5,169.7	41.32	126.113	
6,000.0	6,000.0	6,007.1	6,000.7	21.3	20.8	-13.77	5,061.5	-1,240.7	5,211.3	5,169.3	42.02	124.021	
6,100.0	6,100.0	6,109.0	6,102.5	21.6	21.1	-13.77	5,061.9	-1,240.1	5,211.6	5,168.9	42.72	121.982	
6,200.0	6,200.0	6,211.4	6,205.0	22.0	21.5	-13.75	5,062.4	-1,239.1	5,211.9	5,168.5	43.43	120.002	
6,300.0	6,300.0	6,347.0	6,340.5	22.4	21.9	-13.74	5,062.7	-1,237.7	5,211.8	5,167.6	44.25	117.773	
6,400.0	6,400.0	6,464.5	6,458.1	22.7	22.3	-13.73	5,062.0	-1,237.0	5,211.1	5,166.1	45.02	115.758	
6,500.0	6,500.0	6,563.6	6,557.1	23.1	22.7	-13.75	5,060.8	-1,238.5	5,210.3	5,164.6	45.72	113.956	
6,600.0	6,600.0	6,656.5	6,650.0	23.4	23.0	-13.79	5,059.4	-1,241.6	5,209.6	5,163.2	46.41	112.252	
6,700.0	6,700.0	6,745.9	6,739.3	23.8	23.3	-13.82	5,058.2	-1,244.5	5,209.1	5,162.0	47.09	110.624	
6,800.0	6,800.0	6,846.3	6,839.6	24.1	23.7	-13.86	5,057.0	-1,247.6	5,208.7	5,160.9	47.80	108.958	
6,900.0	6,900.0	6,956.3	6,949.6	24.5	24.1	-13.90	5,055.6	-1,250.7	5,208.2	5,159.6	48.56	107.263	
7,000.0	7,000.0	7,112.3	7,105.5	24.9	24.6	-13.95	5,052.8	-1,254.9	5,207.1	5,157.6	49.47	105.265	
7,100.0	7,100.0	7,277.5	7,270.6	25.2	25.2	91.53	5,047.9	-1,258.7	5,204.8	5,154.4	50.39	103.296	
7,200.0	7,200.0	7,386.4	7,379.4	25.5	25.6	91.57	5,044.1	-1,259.2	5,201.5	5,150.4	51.10	101.784	
7,300.0	7,299.9	7,445.7	7,438.7	25.9	25.8	91.63	5,042.5	-1,259.0	5,198.9	5,147.3	51.66	100.647	
7,400.0	7,399.7	7,504.9	7,497.9	26.2	26.0	91.68	5,041.4	-1,258.7	5,197.2	5,145.0	52.20	99.554	
7,500.0	7,499.4	7,577.9	7,570.9	26.6	26.3	91.76	5,040.6	-1,258.1	5,196.2	5,143.4	52.80	98.416	
7,600.0	7,598.9	7,675.8	7,668.8	26.9	26.6	91.88	5,039.9	-1,257.1	5,195.4	5,142.0	53.47	97.157	
7,700.0	7,698.3	7,776.8	7,769.8	27.2	26.9	92.03	5,039.1	-1,255.7	5,194.8	5,140.6	54.16	95.910	
7,800.0	7,797.4	7,882.2	7,875.1	27.6	27.3	92.20	5,038.3	-1,254.1	5,194.2	5,139.3	54.87	94.665	
7,900.0	7,896.3	7,991.8	7,984.8	27.9	27.7	92.40	5,037.3	-1,252.5	5,193.5	5,137.9	55.59	93.421	
8,000.0	7,994.9	8,103.9	8,096.8	28.3	28.1	92.63	5,035.9	-1,251.0	5,192.7	5,136.4	56.33	92.187	
8,100.0	8,093.3	8,216.2	8,209.0	28.6	28.5	92.87	5,034.2	-1,249.4	5,191.8	5,134.7	57.07	90.975	
8,182.6	8,174.2	8,308.5	8,301.4	28.9	28.8	93.09	5,032.7	-1,247.9	5,191.0	5,133.3	57.68	89.993	
8,200.0	8,191.3	8,327.9	8,320.8	29.0	28.8	93.14	5,032.3	-1,247.5	5,190.8	5,133.0	57.81	89.788	
8,300.0	8,289.1	8,437.6	8,430.4	29.4	29.2	93.40	5,030.2	-1,245.7	5,189.7	5,131.1	58.55	88.632	
8,400.0	8,387.0	8,543.6	8,536.4	29.7	29.6	93.66	5,027.9	-1,243.8	5,188.4	5,129.1	59.29	87.515	
8,500.0	8,484.9	8,646.4	8,639.2	30.1	30.0	93.90	5,025.5	-1,242.0	5,187.1	5,127.1	60.01	86.435	
8,600.0	8,582.8	8,731.5	8,724.2	30.5	30.3	94.11	5,023.6	-1,240.5	5,186.0	5,125.3	60.68	85.458	
8,700.0	8,680.6	8,810.1	8,802.8	30.9	30.5	94.29	5,022.0	-1,239.4	5,185.2	5,123.9	61.34	84.534	
8,776.9	8,755.9	8,862.0	8,854.7	31.2	30.7	94.42	5,021.1	-1,238.8	5,185.0	5,123.2	61.82	83.879	
8,800.0	8,778.5	8,862.0	8,854.7	31.2	30.7	94.42	5,021.1	-1,238.8	5,185.0	5,123.1	61.91	83.758	
8,900.0	8,876.4	8,926.1	8,918.7	31.6	30.9	94.56	5,020.5	-1,238.4	5,185.6	5,123.1	62.51	82.954	
9,000.0	8,974.3	8,973.9	8,966.6	32.0	31.1	94.67	5,020.5	-1,238.4	5,187.3	5,124.3	63.06	82.258	
9,100.0	9,072.1	9,051.0	9,043.7	32.4	31.4	94.84	5,021.3	-1,239.1	5,190.2	5,126.5	63.72	81.459	
9,200.0	9,170.0	9,107.0	9,099.7	32.8	31.6	94.96	5,022.2	-1,239.9	5,193.6	5,129.3	64.29	80.780	
9,300.0	9,267.9	9,249.6	9,242.2	33.2	32.1	95.26	5,023.7	-1,241.9	5,196.7	5,131.6	65.19	79.714	
9,400.0	9,365.8	9,311.3	9,303.9	33.6	32.3	95.39	5,024.3	-1,242.8	5,199.9	5,134.1	65.80	79.030	
9,500.0	9,463.7	9,378.0	9,370.6	34.0	32.5	95.53	5,025.4	-1,243.8	5,203.8	5,137.4	66.42	78.348	
9,600.0	9,561.5	9,448.5	9,441.0	34.4	32.7	95.68	5,026.9	-1,244.9	5,208.3	5,141.2	67.06	77.670	
9,700.0	9,659.4	9,530.8	9,523.3	34.8	33.0	95.85	5,029.0	-1,246.7	5,213.2	5,145.5	67.74	76.959	
9,800.0	9,757.3	9,613.4	9,605.9	35.2	33.3	96.01	5,031.1	-1,249.3	5,218.5	5,150.1	68.43	76.264	
9,900.0	9,855.2	9,745.7	9,738.0	35.6	33.8	96.28	5,034.5	-1,252.7	5,223.8	5,154.5	69.31	75.369	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #201H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 199-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
10,000.0	9,953.0	9,852.5	9,844.8	36.0	34.1	96.51	5,036.9	-1,253.5	5,228.5	5,158.4	70.09	74.594	
10,100.0	10,050.9	9,937.8	9,930.1	36.4	34.4	96.70	5,039.0	-1,253.9	5,233.5	5,162.7	70.79	73.926	
10,200.0	10,148.8	10,031.0	10,023.3	36.9	34.8	96.91	5,041.6	-1,254.2	5,238.7	5,167.2	71.53	73.242	
10,300.0	10,246.7	10,139.7	10,131.9	37.3	35.1	97.15	5,044.4	-1,254.4	5,244.0	5,171.7	72.32	72.510	
10,400.0	10,344.6	10,243.8	10,236.0	37.7	35.5	97.39	5,046.9	-1,254.6	5,249.1	5,176.0	73.10	71.807	
10,500.0	10,442.4	10,345.1	10,337.2	38.1	35.8	97.61	5,049.3	-1,255.3	5,254.3	5,180.4	73.87	71.128	
10,600.0	10,540.3	10,445.1	10,437.2	38.5	36.2	97.82	5,051.4	-1,256.3	5,259.4	5,184.8	74.64	70.466	
10,700.0	10,638.2	10,544.5	10,536.6	39.0	36.5	98.04	5,053.6	-1,257.1	5,264.6	5,189.2	75.41	69.818	
10,800.0	10,736.1	10,812.7	10,804.8	39.4	37.5	98.61	5,054.6	-1,259.5	5,267.9	5,191.1	76.79	68.598	
10,900.0	10,833.9	10,941.1	10,933.1	39.8	37.9	98.87	5,052.8	-1,261.2	5,269.8	5,192.1	77.67	67.850	
11,000.0	10,931.8	11,032.7	11,024.8	40.2	38.2	99.05	5,051.2	-1,262.5	5,271.5	5,193.1	78.42	67.224	
11,100.0	11,029.7	11,123.5	11,115.5	40.7	38.6	99.24	5,049.9	-1,263.7	5,273.4	5,194.2	79.16	66.615	
11,200.0	11,127.6	11,234.7	11,226.7	41.1	39.0	99.47	5,048.1	-1,265.1	5,275.4	5,195.4	79.98	65.958	
11,300.0	11,225.5	11,348.3	11,340.2	41.5	39.4	99.70	5,046.0	-1,266.5	5,277.1	5,196.3	80.81	65.304	
11,400.0	11,323.3	11,444.9	11,436.9	42.0	39.7	99.90	5,044.2	-1,267.5	5,278.8	5,197.3	81.58	64.709	
11,500.0	11,421.2	11,521.7	11,513.6	42.4	40.0	100.06	5,042.8	-1,268.1	5,280.7	5,198.4	82.28	64.179	
11,523.5	11,444.2	11,537.0	11,529.0	42.5	40.0	100.09	5,042.6	-1,268.2	5,281.3	5,198.8	82.44	64.064	
11,600.0	11,519.2	11,549.0	11,540.9	42.8	40.1	100.15	5,042.4	-1,268.3	5,283.3	5,200.5	82.80	63.805	
11,700.0	11,617.7	11,549.0	11,540.9	43.3	40.1	100.20	5,042.4	-1,268.3	5,287.3	5,204.1	83.20	63.550	
11,800.0	11,716.7	11,549.0	11,540.9	43.7	40.1	100.28	5,042.4	-1,268.3	5,292.6	5,209.1	83.56	63.342	
11,900.0	11,815.9	11,549.0	11,540.9	44.1	40.1	100.38	5,042.4	-1,268.3	5,299.4	5,215.6	83.88	63.182	
12,000.0	11,915.5	11,549.0	11,540.9	44.4	40.1	100.51	5,042.4	-1,268.3	5,307.6	5,223.5	84.16	63.068	
12,100.0	12,015.2	11,597.6	11,589.5	44.8	40.2	100.68	5,044.2	-1,268.2	5,314.7	5,230.0	84.63	62.800	
12,200.0	12,115.1	11,643.0	11,634.5	45.2	40.4	100.85	5,050.0	-1,267.5	5,326.1	5,241.0	85.06	62.612	
12,300.0	12,215.1	11,643.0	11,634.5	45.5	40.4	101.01	5,050.0	-1,267.5	5,336.7	5,251.4	85.26	62.596	
12,311.9	12,227.0	11,643.0	11,634.5	45.5	40.4	-4.46	5,050.0	-1,267.5	5,338.0	5,252.7	85.28	62.597	
12,400.0	12,315.1	11,643.0	11,634.5	45.8	40.4	-4.46	5,050.0	-1,267.5	5,348.8	5,263.4	85.42	62.618	
12,500.0	12,415.1	11,643.0	11,634.5	46.2	40.4	-4.46	5,050.0	-1,267.5	5,362.8	5,277.2	85.56	62.678	
12,600.0	12,515.1	11,643.0	11,634.5	46.5	40.4	-4.46	5,050.0	-1,267.5	5,378.5	5,292.9	85.68	62.776	
12,700.0	12,615.1	11,643.0	11,634.5	46.9	40.4	-4.46	5,050.0	-1,267.5	5,396.1	5,310.4	85.77	62.911	
12,711.9	12,627.0	11,643.0	11,634.5	46.9	40.4	-4.46	5,050.0	-1,267.5	5,398.3	5,312.6	85.78	62.930	
12,750.0	12,665.1	11,643.0	11,634.5	47.0	40.4	17.31	5,050.0	-1,267.5	5,404.4	5,318.6	85.81	62.978	
12,800.0	12,714.8	11,643.0	11,634.5	47.2	40.4	17.17	5,050.0	-1,267.5	5,409.1	5,323.3	85.85	63.006	
12,850.0	12,763.8	11,643.0	11,634.5	47.4	40.4	17.14	5,050.0	-1,267.5	5,410.1	5,324.3	85.88	62.993	
12,900.0	12,811.8	11,643.0	11,634.5	47.5	40.4	17.22	5,050.0	-1,267.5	5,407.5	5,321.5	85.91	62.941	
12,950.0	12,858.3	11,643.0	11,634.5	47.7	40.4	17.41	5,050.0	-1,267.5	5,401.1	5,315.1	85.94	62.849	
13,000.0	12,903.1	11,667.0	11,658.0	47.8	40.5	17.77	5,055.0	-1,267.0	5,390.2	5,304.1	86.11	62.597	
13,050.0	12,945.8	11,690.0	11,680.1	48.0	40.5	18.27	5,061.1	-1,266.5	5,376.9	5,290.7	86.27	62.324	
13,100.0	12,986.1	11,690.0	11,680.1	48.1	40.5	18.86	5,061.1	-1,266.5	5,359.4	5,273.1	86.28	62.115	
13,150.0	13,023.7	11,690.0	11,680.1	48.3	40.5	19.63	5,061.1	-1,266.5	5,338.4	5,252.1	86.28	61.870	
13,200.0	13,058.2	11,690.0	11,680.1	48.4	40.5	20.58	5,061.1	-1,266.5	5,314.2	5,227.9	86.28	61.591	
13,250.0	13,089.4	11,690.0	11,680.1	48.5	40.5	21.76	5,061.1	-1,266.5	5,286.8	5,200.5	86.27	61.278	
13,300.0	13,117.2	11,690.0	11,680.1	48.7	40.5	23.23	5,061.1	-1,266.5	5,256.4	5,170.1	86.26	60.933	
13,350.0	13,141.1	11,690.0	11,680.1	48.8	40.5	25.05	5,061.1	-1,266.5	5,223.2	5,136.9	86.25	60.557	
13,400.0	13,161.2	11,690.0	11,680.1	48.9	40.5	27.31	5,061.1	-1,266.5	5,187.4	5,101.1	86.24	60.150	
13,450.0	13,177.2	11,690.0	11,680.1	49.1	40.5	30.16	5,061.1	-1,266.5	5,149.2	5,062.9	86.23	59.713	
13,500.0	13,189.1	11,690.0	11,680.1	49.2	40.5	33.78	5,061.1	-1,266.5	5,108.8	5,022.6	86.23	59.249	
13,550.0	13,196.6	11,690.0	11,680.1	49.4	40.5	38.42	5,061.1	-1,266.5	5,066.6	4,980.4	86.23	58.758	
13,600.0	13,199.8	11,690.0	11,680.1	49.6	40.5	44.45	5,061.1	-1,266.5	5,022.8	4,936.5	86.24	58.242	
13,611.9	13,200.0	11,690.0	11,680.1	49.6	40.5	46.13	5,061.1	-1,266.5	5,012.2	4,925.9	86.25	58.115	
13,700.0	13,200.0	11,690.0	11,680.1	50.0	40.5	43.56	5,061.1	-1,266.5	4,932.9	4,846.6	86.27	57.178	
13,800.0	13,200.0	11,690.0	11,680.1	50.4	40.5	40.37	5,061.1	-1,266.5	4,842.2	4,756.0	86.29	56.118	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #201H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 199-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	13,200.0	11,690.0	11,680.1	50.9	40.5	36.90	5,061.1	-1,266.5	4,751.1	4,664.8	86.28	55.063	
14,000.0	13,200.0	11,690.0	11,680.1	51.4	40.5	33.14	5,061.1	-1,266.5	4,659.4	4,573.1	86.26	54.015	
14,100.0	13,200.0	11,690.0	11,680.1	52.0	40.5	29.09	5,061.1	-1,266.5	4,567.3	4,481.0	86.21	52.976	
14,200.0	13,200.0	11,690.0	11,680.1	52.6	40.5	24.77	5,061.1	-1,266.5	4,474.8	4,388.7	86.14	51.948	
14,300.0	13,200.0	11,712.8	11,701.7	53.2	40.6	20.53	5,068.4	-1,265.9	4,381.5	4,295.2	86.25	50.801	
14,400.0	13,200.0	11,715.9	11,704.6	53.8	40.6	15.77	5,069.5	-1,265.8	4,288.5	4,202.3	86.15	49.778	
14,500.0	13,200.0	11,738.0	11,725.1	54.5	40.7	11.02	5,077.8	-1,265.2	4,195.9	4,109.7	86.21	48.673	
14,600.0	13,200.0	11,738.0	11,725.1	55.1	40.7	5.95	5,077.8	-1,265.2	4,102.7	4,016.7	86.02	47.695	
14,687.2	13,200.0	11,738.0	11,725.1	55.7	40.7	1.56	5,077.8	-1,265.2	4,021.6	3,935.8	85.83	46.856	
14,700.0	13,200.0	11,738.0	11,725.1	55.8	40.7	1.56	5,077.8	-1,265.2	4,009.8	3,924.0	85.80	46.734	
14,800.0	13,200.0	11,738.0	11,725.1	56.5	40.7	1.56	5,077.8	-1,265.2	3,917.1	3,831.6	85.56	45.785	
14,900.0	13,200.0	11,738.0	11,725.1	57.3	40.7	1.56	5,077.8	-1,265.2	3,824.9	3,739.6	85.30	44.841	
15,000.0	13,200.0	11,738.0	11,725.1	58.1	40.7	1.56	5,077.8	-1,265.2	3,733.0	3,648.0	85.03	43.904	
15,100.0	13,200.0	11,738.0	11,725.1	58.9	40.7	1.56	5,077.8	-1,265.2	3,641.6	3,556.8	84.74	42.974	
15,200.0	13,200.0	11,738.0	11,725.1	59.7	40.7	1.56	5,077.8	-1,265.2	3,550.6	3,466.2	84.43	42.053	
15,300.0	13,200.0	11,760.8	11,745.9	60.6	40.8	1.61	5,087.2	-1,264.5	3,459.7	3,375.3	84.38	41.002	
15,400.0	13,200.0	11,777.4	11,760.7	61.6	40.8	1.65	5,094.4	-1,263.9	3,369.5	3,285.2	84.24	39.996	
15,500.0	13,200.0	11,777.4	11,760.7	62.5	40.8	1.65	5,094.4	-1,263.9	3,279.6	3,195.7	83.89	39.092	
15,600.0	13,200.0	11,777.4	11,760.7	63.5	40.8	1.65	5,094.4	-1,263.9	3,190.3	3,106.8	83.52	38.199	
15,700.0	13,200.0	11,797.8	11,779.0	64.5	40.9	1.71	5,103.6	-1,263.0	3,101.4	3,018.0	83.39	37.190	
15,800.0	13,200.0	11,808.1	11,788.1	65.5	40.9	1.74	5,108.5	-1,262.6	3,013.1	2,929.9	83.12	36.251	
15,900.0	13,200.0	11,832.0	11,808.9	66.6	41.0	1.82	5,120.1	-1,261.4	2,925.5	2,842.4	83.01	35.241	
16,000.0	13,200.0	11,832.0	11,808.9	67.7	41.0	1.82	5,120.1	-1,261.4	2,838.2	2,755.7	82.55	34.381	
16,100.0	13,200.0	11,832.0	11,808.9	68.8	41.0	1.82	5,120.1	-1,261.4	2,751.9	2,669.8	82.06	33.536	
16,200.0	13,200.0	11,832.0	11,808.9	69.9	41.0	1.82	5,120.1	-1,261.4	2,666.5	2,584.9	81.53	32.707	
16,300.0	13,200.0	11,832.0	11,808.9	71.1	41.0	1.82	5,120.1	-1,261.4	2,582.1	2,501.1	80.95	31.896	
16,400.0	13,200.0	11,868.7	11,840.1	72.3	41.0	1.93	5,139.3	-1,259.7	2,497.5	2,416.5	80.95	30.850	
16,500.0	13,200.0	11,879.6	11,849.1	73.5	41.1	1.97	5,145.3	-1,259.3	2,414.6	2,334.1	80.50	29.993	
16,600.0	13,200.0	11,891.0	11,858.5	74.7	41.1	2.00	5,151.9	-1,258.9	2,332.7	2,252.7	80.03	29.149	
16,700.0	13,200.0	11,927.0	11,887.1	75.9	41.2	2.10	5,173.7	-1,257.8	2,252.7	2,172.7	79.96	28.171	
16,800.0	13,200.0	11,927.0	11,887.1	77.1	41.2	2.10	5,173.7	-1,257.8	2,172.8	2,093.6	79.21	27.431	
16,900.0	13,200.0	11,927.0	11,887.1	78.4	41.2	2.10	5,173.7	-1,257.8	2,094.6	2,016.2	78.40	26.718	
17,000.0	13,200.0	11,927.0	11,887.1	79.7	41.2	2.10	5,173.7	-1,257.8	2,018.4	1,940.9	77.52	26.036	
17,100.0	13,200.0	11,964.2	11,915.3	81.0	41.3	2.18	5,197.9	-1,257.0	1,943.0	1,865.7	77.36	25.118	
17,200.0	13,200.0	11,982.8	11,929.0	82.3	41.4	2.22	5,210.6	-1,256.8	1,869.7	1,792.9	76.77	24.354	
17,300.0	13,200.0	12,021.0	11,955.9	83.6	41.5	2.28	5,237.6	-1,256.7	1,798.5	1,722.0	76.56	23.491	
17,400.0	13,200.0	12,021.0	11,955.9	84.9	41.5	2.28	5,237.6	-1,256.7	1,728.7	1,653.2	75.48	22.902	
17,500.0	13,200.0	12,021.0	11,955.9	86.3	41.5	2.28	5,237.6	-1,256.7	1,662.0	1,587.6	74.34	22.358	
17,600.0	13,200.0	12,073.8	11,991.0	87.6	41.6	2.35	5,277.1	-1,257.0	1,596.2	1,521.8	74.35	21.470	
17,700.0	13,200.0	12,116.0	12,017.2	89.0	41.8	2.40	5,310.2	-1,257.1	1,533.7	1,459.6	74.09	20.700	
17,800.0	13,200.0	12,116.0	12,017.2	90.3	41.8	2.40	5,310.2	-1,257.1	1,473.6	1,400.8	72.81	20.238	
17,900.0	13,200.0	12,161.6	12,043.6	91.7	41.9	2.49	5,347.3	-1,256.9	1,416.1	1,343.5	72.57	19.512	
18,000.0	13,200.0	12,211.0	12,070.1	93.1	42.1	2.61	5,389.0	-1,255.8	1,362.0	1,289.5	72.43	18.803	
18,100.0	13,200.0	12,211.0	12,070.1	94.5	42.1	2.61	5,389.0	-1,255.8	1,310.9	1,239.8	71.09	18.440	
18,200.0	13,200.0	12,251.4	12,089.6	95.9	42.2	2.72	5,424.3	-1,254.9	1,263.6	1,192.9	70.70	17.871	
18,300.0	13,200.0	12,305.0	12,111.4	97.3	42.4	2.77	5,473.3	-1,255.2	1,221.7	1,151.0	70.62	17.298	
18,400.0	13,200.0	12,305.0	12,111.4	98.7	42.4	2.77	5,473.3	-1,255.2	1,182.8	1,113.4	69.42	17.039	
18,500.0	13,200.0	12,331.3	12,120.1	100.2	42.5	2.78	5,498.1	-1,255.7	1,150.1	1,081.2	68.90	16.694	
18,600.0	13,200.0	12,368.0	12,129.3	101.6	42.6	2.79	5,533.6	-1,256.3	1,123.7	1,055.0	68.70	16.357	
18,700.0	13,200.0	12,397.0	12,135.3	103.0	42.7	2.79	5,561.9	-1,256.8	1,102.3	1,033.7	68.57	16.075	
18,800.0	13,200.0	12,458.3	12,146.5	104.5	42.9	2.78	5,622.2	-1,258.0	1,084.5	1,015.5	69.01	15.715	
18,900.0	13,200.0	12,512.1	12,153.5	105.9	43.1	2.75	5,675.5	-1,259.2	1,071.4	1,001.9	69.49	15.417	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #201H - Wellbore #1 - Actual Survey

Offset Site Error: 0.0 usft

Survey Program: 199-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	13,200.0	12,570.0	12,158.5	107.4	43.4	2.68	5,733.2	-1,261.2	1,062.5	992.3	70.14	15.149	
19,100.0	13,200.0	12,651.2	12,163.0	108.9	43.7	2.54	5,814.2	-1,264.6	1,056.6	985.6	70.98	14.886	
19,200.0	13,200.0	12,745.4	12,167.8	110.3	44.2	2.36	5,908.2	-1,268.9	1,051.4	979.5	71.90	14.622	
19,300.0	13,200.0	12,814.6	12,170.3	111.8	44.6	2.22	5,977.2	-1,272.1	1,047.7	974.9	72.82	14.388	
19,360.5	13,200.0	12,854.0	12,170.6	112.7	44.8	2.14	6,016.6	-1,273.9	1,047.1	973.7	73.41	14.263	
19,400.0	13,200.0	12,892.4	12,170.5	113.3	45.0	2.06	6,054.9	-1,275.6	1,047.1	973.3	73.81	14.187	
19,500.0	13,200.0	12,988.2	12,170.2	114.8	45.6	1.85	6,150.6	-1,280.2	1,047.4	972.5	74.84	13.995	
19,600.0	13,200.0	13,083.9	12,169.3	116.3	46.2	1.64	6,246.3	-1,284.8	1,048.2	972.3	75.90	13.810	
19,700.0	13,200.0	13,181.4	12,168.2	117.8	46.9	1.39	6,343.6	-1,290.0	1,049.2	972.2	76.99	13.627	
19,800.0	13,200.0	13,281.1	12,166.8	119.3	47.7	1.14	6,443.1	-1,295.5	1,050.5	972.4	78.11	13.449	
19,900.0	13,200.0	13,389.3	12,165.8	120.8	48.5	1.00	6,551.3	-1,298.7	1,051.4	972.1	79.24	13.269	
20,000.0	13,200.0	13,485.8	12,165.4	122.3	49.4	0.97	6,647.7	-1,300.0	1,051.8	971.4	80.39	13.084	
20,100.0	13,200.0	13,581.5	12,164.4	123.8	50.2	0.96	6,743.5	-1,301.0	1,052.9	971.3	81.56	12.909	
20,200.0	13,200.0	13,679.5	12,163.1	125.3	51.1	1.01	6,841.4	-1,300.8	1,054.1	971.4	82.75	12.739	
20,300.0	13,200.0	13,777.7	12,161.7	126.8	52.0	1.07	6,939.6	-1,300.5	1,055.6	971.6	83.95	12.574	
20,400.0	13,200.0	13,897.2	12,160.6	128.4	53.2	1.12	7,059.1	-1,300.4	1,056.6	971.4	85.17	12.406	
20,500.0	13,200.0	14,014.6	12,162.4	129.9	54.4	1.13	7,176.5	-1,301.1	1,055.0	968.6	86.42	12.207	
20,575.9	13,200.0	14,069.9	12,162.9	131.0	55.0	1.17	7,231.8	-1,300.8	1,054.3	966.9	87.37	12.067	
20,600.0	13,200.0	14,087.5	12,162.9	131.4	55.2	1.19	7,249.4	-1,300.6	1,054.4	966.7	87.67	12.026	
20,700.0	13,200.0	14,202.9	12,162.8	132.9	56.4	1.36	7,364.8	-1,298.3	1,054.5	965.5	88.95	11.855	
20,800.0	13,200.0	14,313.2	12,164.2	134.5	57.7	1.58	7,475.1	-1,295.2	1,053.4	963.1	90.25	11.672	
20,900.0	13,200.0	14,409.5	12,166.6	136.0	58.8	1.78	7,571.2	-1,292.3	1,051.0	959.5	91.55	11.480	
20,943.3	13,200.0	14,437.5	12,166.8	136.7	59.1	1.83	7,599.3	-1,291.7	1,050.7	958.6	92.11	11.408	
21,000.0	13,200.0	14,474.9	12,166.5	137.6	59.5	1.89	7,636.6	-1,290.9	1,051.2	958.4	92.84	11.323	
21,100.0	13,200.0	14,569.6	12,164.6	139.1	60.6	2.01	7,731.3	-1,289.2	1,053.4	959.2	94.16	11.186	
21,200.0	13,200.0	14,673.1	12,162.4	140.7	61.9	2.18	7,834.7	-1,286.9	1,055.5	960.0	95.51	11.052	
21,300.0	13,200.0	14,769.4	12,160.5	142.2	63.0	2.41	7,930.9	-1,283.4	1,057.7	960.9	96.86	10.920	
21,400.0	13,200.0	14,863.0	12,158.2	143.8	64.2	2.67	8,024.5	-1,279.0	1,060.4	962.2	98.23	10.795	
21,500.0	13,200.0	14,964.0	12,155.2	145.3	65.4	3.03	8,125.2	-1,273.1	1,063.7	964.1	99.64	10.676	
21,600.0	13,200.0	15,107.7	12,155.1	146.9	67.3	3.51	8,268.7	-1,265.3	1,063.9	962.7	101.19	10.514	
21,700.0	13,200.0	15,229.3	12,158.2	148.4	68.8	3.88	8,390.1	-1,259.4	1,061.8	959.1	102.72	10.336	
21,800.0	13,200.0	15,317.7	12,160.7	150.0	70.0	4.02	8,478.5	-1,257.7	1,059.2	955.0	104.14	10.171	
21,900.0	13,200.0	15,412.1	12,162.4	151.5	71.2	4.06	8,572.8	-1,257.9	1,057.3	951.8	105.55	10.018	
22,000.0	13,200.0	15,511.6	12,164.0	153.1	72.6	4.09	8,672.3	-1,258.1	1,055.8	948.8	106.98	9.870	
22,100.0	13,200.0	15,618.0	12,166.4	154.7	74.0	4.12	8,778.7	-1,258.5	1,053.6	945.2	108.43	9.717	
22,165.0	13,200.0	15,660.6	12,166.8	155.7	74.6	4.11	8,821.3	-1,259.2	1,052.9	943.6	109.30	9.634	
22,200.0	13,200.0	15,683.5	12,166.6	156.2	74.9	4.09	8,844.2	-1,259.8	1,053.1	943.4	109.76	9.595	
22,300.0	13,200.0	15,794.5	12,165.2	157.8	76.5	3.91	8,955.1	-1,263.7	1,054.3	943.1	111.17	9.483	
22,400.0	13,200.0	15,898.7	12,165.0	159.4	77.9	3.71	9,059.2	-1,268.3	1,054.2	941.6	112.56	9.365	
22,440.0	13,200.0	15,935.8	12,165.0	160.0	78.4	3.63	9,096.2	-1,270.1	1,054.1	941.0	113.11	9.319	
22,500.0	13,200.0	15,991.4	12,164.7	161.0	79.2	3.49	9,151.7	-1,273.0	1,054.2	940.3	113.93	9.253	
22,600.0	13,200.0	16,074.4	12,163.5	162.5	80.4	3.32	9,234.6	-1,276.8	1,055.5	940.2	115.29	9.154	
22,700.0	13,200.0	16,187.8	12,161.5	164.1	82.0	3.13	9,348.0	-1,281.0	1,057.2	940.4	116.74	9.056	
22,800.0	13,200.0	16,359.4	12,165.6	165.7	84.5	2.92	9,519.4	-1,286.4	1,054.6	936.4	118.24	8.920	
22,900.0	13,200.0	16,463.0	12,171.9	167.3	86.0	2.80	9,622.8	-1,289.8	1,048.5	928.8	119.67	8.762	
23,000.0	13,200.0	16,581.6	12,180.3	168.9	87.7	2.58	9,740.9	-1,295.1	1,041.2	920.1	121.07	8.600	
23,100.0	13,200.0	16,708.2	12,191.8	170.4	89.5	2.26	9,866.8	-1,302.3	1,032.0	909.6	122.42	8.430	
23,200.0	13,200.0	16,789.4	12,200.1	172.0	90.7	1.91	9,947.3	-1,309.5	1,021.6	897.7	123.87	8.247	
23,300.0	13,200.0	16,869.0	12,205.8	173.6	91.9	1.61	10,026.4	-1,315.5	1,014.0	888.7	125.34	8.090	
23,400.0	13,200.0	16,974.3	12,213.2	175.2	93.5	1.22	10,131.2	-1,323.3	1,006.8	880.0	126.78	7.942	
23,504.9	13,200.0	17,013.0	12,216.1	176.9	94.1	1.07	10,169.6	-1,326.3	1,001.2	872.8	128.39	7.798	CC, ES, 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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #202H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 23-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	-102.69	-31.5	-139.9	143.4				
100.0	100.0	100.4	100.4	0.1	0.1	-102.69	-31.5	-139.8	143.3	143.0	0.26	549.072	
200.0	200.0	200.3	200.3	0.5	0.4	-102.70	-31.4	-139.5	142.9	142.0	0.90	158.364	
300.0	300.0	300.2	300.2	0.8	0.8	-102.74	-31.5	-139.3	142.8	141.2	1.62	88.311	
400.0	400.0	400.1	400.1	1.2	1.1	-102.79	-31.6	-139.2	142.7	140.4	2.33	61.175	
462.4	462.4	462.4	462.4	1.4	1.3	-102.83	-31.7	-139.1	142.7	139.9	2.78	51.378	
500.0	500.0	499.9	499.9	1.6	1.5	-102.89	-31.8	-139.1	142.7	139.7	3.04	46.868	
600.0	600.0	599.8	599.8	1.9	1.8	-103.01	-32.1	-139.1	142.8	139.0	3.75	38.066	
700.0	700.0	699.3	699.3	2.3	2.2	-103.00	-32.2	-139.4	143.1	138.6	4.45	32.158	
800.0	800.0	798.8	798.8	2.6	2.5	-102.92	-32.2	-140.1	143.8	138.6	5.15	27.928	
900.0	900.0	898.1	898.1	3.0	2.9	-102.78	-32.0	-141.2	144.8	139.0	5.85	24.762	
1,000.0	1,000.0	997.0	997.0	3.4	3.2	-102.58	-31.9	-143.0	146.5	140.0	6.55	22.364	
1,100.0	1,100.0	1,096.6	1,096.5	3.7	3.5	-102.28	-31.6	-145.3	148.7	141.5	7.26	20.492	
1,200.0	1,200.0	1,196.2	1,196.1	4.1	3.9	-102.13	-31.8	-147.8	151.2	143.2	7.97	18.977	
1,300.0	1,300.0	1,296.0	1,295.9	4.4	4.3	-102.14	-32.3	-150.3	153.8	145.1	8.68	17.725	
1,400.0	1,400.0	1,395.8	1,395.7	4.8	4.6	-102.17	-33.0	-153.0	156.5	147.2	9.39	16.671	
1,500.0	1,500.0	1,498.0	1,497.8	5.1	5.0	-102.41	-34.1	-155.0	158.8	148.7	10.11	15.704	
1,600.0	1,600.0	1,600.7	1,600.5	5.5	5.3	-103.25	-36.5	-155.1	159.3	148.5	10.83	14.710	
1,700.0	1,700.0	1,703.7	1,703.4	5.9	5.7	-104.41	-39.3	-153.1	158.1	146.5	11.54	13.695	
1,800.0	1,800.0	1,806.5	1,806.2	6.2	6.0	-105.60	-41.7	-149.2	155.0	142.8	12.25	12.653	
1,900.0	1,900.0	1,902.9	1,902.5	6.6	6.4	-105.89	-41.8	-146.7	152.6	139.6	12.95	11.781	
2,000.0	2,000.0	2,000.9	2,000.4	6.9	6.7	-104.90	-39.0	-146.7	151.8	138.2	13.65	11.124	
2,100.0	2,100.0	2,102.2	2,101.6	7.3	7.1	-103.52	-35.3	-146.9	151.1	136.8	14.35	10.529	
2,200.0	2,200.0	2,202.5	2,202.0	7.7	7.4	-102.26	-31.8	-146.3	149.7	134.7	15.06	9.944	
2,300.0	2,300.0	2,301.0	2,300.4	8.0	7.7	-101.36	-29.3	-146.0	148.9	133.2	15.76	9.451	
2,328.9	2,328.9	2,329.5	2,328.9	8.1	7.8	-101.17	-28.8	-146.1	148.9	132.9	15.96	9.328	
2,400.0	2,400.0	2,400.3	2,399.6	8.4	8.1	-100.84	-28.0	-146.4	149.1	132.6	16.46	9.054	
2,500.0	2,500.0	2,500.5	2,499.9	8.7	8.4	-100.50	-27.2	-146.7	149.2	132.0	17.17	8.690	
2,600.0	2,600.0	2,601.1	2,600.4	9.1	8.8	-100.27	-26.6	-146.8	149.2	131.3	17.88	8.342	
2,700.0	2,700.0	2,701.9	2,701.2	9.4	9.1	-99.99	-25.8	-146.3	148.6	130.0	18.59	7.993	
2,800.0	2,800.0	2,802.9	2,802.2	9.8	9.5	-99.63	-24.7	-145.3	147.4	128.1	19.30	7.640	
2,900.0	2,900.0	2,904.0	2,903.3	10.2	9.8	-99.27	-23.4	-143.6	145.6	125.5	20.01	7.275	
3,000.0	3,000.0	3,001.1	3,000.4	10.5	10.2	-98.80	-22.0	-142.3	143.9	123.2	20.71	6.951	
3,009.9	3,009.9	3,010.6	3,009.9	10.6	10.2	-98.74	-21.9	-142.3	143.9	123.2	20.78	6.927	
3,100.0	3,100.0	3,097.0	3,096.3	10.9	10.5	-97.99	-20.2	-143.6	145.1	123.7	21.40	6.781	
3,200.0	3,200.0	3,199.0	3,198.2	11.2	10.9	-96.98	-17.9	-146.3	147.4	125.3	22.12	6.665	
3,300.0	3,300.0	3,302.6	3,301.8	11.6	11.2	-96.19	-15.9	-146.5	147.4	124.6	22.84	6.454	
3,400.0	3,400.0	3,404.6	3,403.8	12.0	11.6	-95.62	-14.2	-144.8	145.5	122.0	23.55	6.179	
3,500.0	3,500.0	3,506.5	3,505.6	12.3	12.0	-95.21	-12.9	-141.6	142.3	118.0	24.25	5.865	
3,600.0	3,600.0	3,604.6	3,603.6	12.7	12.3	-94.91	-11.9	-138.6	139.2	114.2	24.97	5.574	
3,700.0	3,700.0	3,703.2	3,702.2	13.0	12.6	-94.65	-11.1	-136.6	137.1	111.4	25.67	5.338	
3,800.0	3,800.0	3,801.8	3,800.9	13.4	13.0	-94.46	-10.6	-135.5	135.9	109.6	26.38	5.152	
3,864.5	3,864.5	3,865.5	3,864.5	13.6	13.2	-94.40	-10.4	-135.3	135.7	108.9	26.84	5.057	
3,900.0	3,900.0	3,900.9	3,899.9	13.8	13.3	-94.38	-10.4	-135.4	135.8	108.7	27.09	5.012	
4,000.0	4,000.0	4,000.8	3,999.8	14.1	13.7	-94.39	-10.4	-135.5	135.9	108.1	27.79	4.888	
4,100.0	4,100.0	4,100.8	4,099.8	14.5	14.0	-94.53	-10.7	-135.6	136.0	107.5	28.50	4.772	
4,200.0	4,200.0	4,200.9	4,199.9	14.8	14.4	-94.89	-11.6	-135.6	136.1	106.9	29.20	4.660	
4,300.0	4,300.0	4,301.2	4,300.2	15.2	14.7	-95.48	-13.0	-135.5	136.1	106.2	29.91	4.550	
4,400.0	4,400.0	4,401.7	4,400.7	15.5	15.1	-96.30	-14.9	-135.0	135.8	105.2	30.62	4.435	
4,500.0	4,500.0	4,501.8	4,500.8	15.9	15.4	-97.31	-17.2	-134.1	135.2	103.9	31.32	4.317	
4,600.0	4,600.0	4,601.8	4,600.7	16.3	15.8	-98.42	-19.7	-133.2	134.7	102.6	32.03	4.205	
4,700.0	4,700.0	4,701.6	4,700.5	16.6	16.1	-99.48	-22.1	-132.4	134.2	101.5	32.73	4.100	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #202H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 23-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
4,800.0	4,800.0	4,801.4	4,800.3	17.0	16.5	-100.21	-23.7	-131.8	133.9	100.5	33.44	4.004	
4,900.0	4,900.0	4,901.3	4,900.1	17.3	16.8	-100.75	-24.9	-131.4	133.8	99.6	34.15	3.917	
4,982.0	4,982.0	4,983.1	4,982.0	17.6	17.1	-101.22	-26.0	-131.2	133.7	99.0	34.73	3.851	
5,000.0	5,000.0	5,001.1	5,000.0	17.7	17.2	-101.32	-26.3	-131.1	133.7	98.9	34.86	3.837	
5,100.0	5,100.0	5,101.3	5,100.1	18.1	17.5	-101.88	-27.5	-130.8	133.7	98.1	35.56	3.759	
5,200.0	5,200.0	5,201.7	5,200.6	18.4	17.9	-102.37	-28.6	-130.4	133.5	97.2	36.27	3.680	
5,300.0	5,300.0	5,302.9	5,301.7	18.8	18.2	-103.57	-31.1	-128.9	132.6	95.6	36.99	3.586	
5,400.0	5,400.0	5,403.4	5,402.1	19.1	18.6	-105.81	-35.7	-126.1	131.1	93.4	37.70	3.477	
5,500.0	5,500.0	5,502.9	5,501.3	19.5	18.9	-108.95	-42.1	-122.7	129.7	91.3	38.41	3.378	
5,600.0	5,600.0	5,602.3	5,600.3	19.8	19.3	-112.88	-50.2	-119.0	129.1	90.0	39.12	3.301	
5,629.3	5,629.3	5,631.4	5,629.3	19.9	19.4	-114.06	-52.6	-117.9	129.1	89.8	39.33	3.283	CC
5,700.0	5,700.0	5,701.8	5,699.4	20.2	19.6	-116.88	-58.4	-115.3	129.3	89.5	39.83	3.246	ES
5,800.0	5,800.0	5,801.3	5,798.5	20.6	20.0	-120.76	-66.6	-111.8	130.1	89.6	40.54	3.210	
5,900.0	5,900.0	5,900.9	5,897.7	20.9	20.3	-124.50	-74.5	-108.4	131.6	90.3	41.25	3.190	
6,000.0	6,000.0	6,000.9	5,997.3	21.3	20.7	-128.13	-82.5	-105.0	133.6	91.6	41.97	3.183	
6,100.0	6,100.0	6,101.1	6,097.1	21.6	21.1	-131.85	-90.5	-101.0	135.6	93.0	42.68	3.178	SF
6,200.0	6,200.0	6,200.9	6,196.5	22.0	21.4	-135.54	-98.4	-96.6	138.0	94.6	43.40	3.179	
6,300.0	6,300.0	6,300.6	6,295.9	22.4	21.8	-138.96	-106.1	-92.3	140.7	96.6	44.11	3.190	
6,400.0	6,400.0	6,400.3	6,395.1	22.7	22.1	-142.29	-113.8	-87.9	143.9	99.0	44.82	3.210	
6,500.0	6,500.0	6,499.7	6,494.0	23.1	22.5	-145.84	-122.0	-82.8	147.6	102.1	45.52	3.242	
6,600.0	6,600.0	6,599.2	6,593.1	23.4	22.9	-149.27	-130.4	-77.5	151.9	105.7	46.23	3.286	
6,700.0	6,700.0	6,698.9	6,692.4	23.8	23.2	-152.26	-138.5	-72.8	156.6	109.7	46.94	3.337	
6,800.0	6,800.0	6,799.5	6,792.6	24.1	23.6	-154.87	-145.9	-68.5	161.4	113.7	47.66	3.386	
6,900.0	6,900.0	6,900.3	6,893.0	24.5	24.0	-157.14	-152.6	-64.3	165.8	117.4	48.39	3.426	
7,000.0	7,000.0	7,001.1	6,993.5	24.9	24.3	-159.50	-158.9	-59.4	169.8	120.7	49.11	3.457	
7,100.0	7,100.0	7,101.5	7,093.5	25.2	24.7	-56.85	-165.0	-53.2	173.0	123.2	49.81	3.473	
7,200.0	7,200.0	7,201.0	7,192.7	25.5	25.1	-60.00	-170.8	-47.2	175.6	125.1	50.50	3.478	
7,300.0	7,299.9	7,300.1	7,291.4	25.9	25.4	-63.37	-176.5	-41.6	177.9	126.7	51.17	3.476	
7,400.0	7,399.7	7,398.1	7,389.1	26.2	25.8	-67.27	-182.7	-35.7	180.6	128.8	51.83	3.485	
7,500.0	7,499.4	7,496.3	7,486.8	26.6	26.2	-71.72	-189.5	-29.1	184.3	131.8	52.49	3.511	
7,600.0	7,598.9	7,594.8	7,584.9	26.9	26.5	-76.49	-196.5	-22.6	188.8	135.7	53.15	3.553	
7,700.0	7,698.3	7,693.5	7,683.1	27.2	26.9	-81.45	-203.6	-16.1	194.4	140.6	53.82	3.612	
7,800.0	7,797.4	7,792.4	7,781.5	27.6	27.3	-86.47	-210.4	-10.2	201.0	146.5	54.50	3.687	
7,900.0	7,896.3	7,891.3	7,880.1	27.9	27.6	-91.48	-217.0	-4.7	208.6	153.4	55.20	3.780	
8,000.0	7,994.9	7,990.3	7,978.8	28.3	28.0	-96.44	-223.2	0.1	217.5	161.6	55.90	3.891	
8,100.0	8,093.3	8,089.8	8,078.0	28.6	28.4	-101.40	-228.9	4.6	227.6	171.0	56.62	4.020	
8,182.6	8,174.2	8,171.9	8,160.0	28.9	28.7	-105.54	-232.9	8.2	236.8	179.6	57.22	4.139	
8,200.0	8,191.3	8,189.2	8,177.2	29.0	28.7	-106.43	-233.6	9.0	238.9	181.5	57.35	4.165	
8,300.0	8,289.1	8,290.4	8,278.2	29.4	29.1	-111.36	-237.1	13.1	250.9	192.8	58.09	4.319	
8,400.0	8,387.0	8,392.3	8,380.1	29.7	29.5	-115.90	-239.1	16.2	262.8	204.0	58.83	4.467	
8,500.0	8,484.9	8,492.0	8,479.8	30.1	29.8	-120.01	-240.0	18.5	274.8	215.3	59.54	4.616	
8,600.0	8,582.8	8,591.8	8,579.6	30.5	30.2	-123.82	-240.0	20.4	287.3	227.1	60.25	4.768	
8,700.0	8,680.6	8,688.5	8,676.3	30.9	30.5	-127.20	-240.0	22.1	300.7	239.8	60.95	4.934	
8,800.0	8,778.5	8,785.6	8,773.3	31.2	30.8	-130.25	-240.3	23.7	315.3	253.6	61.65	5.114	
8,900.0	8,876.4	8,883.3	8,871.0	31.6	31.2	-133.03	-240.7	25.4	330.7	268.3	62.35	5.304	
9,000.0	8,974.3	8,981.5	8,969.2	32.0	31.5	-135.57	-241.1	26.9	346.8	283.7	63.05	5.500	
9,100.0	9,072.1	9,082.0	9,069.7	32.4	31.9	-137.94	-241.3	28.1	362.9	299.1	63.76	5.692	
9,200.0	9,170.0	9,181.8	9,169.5	32.8	32.2	-140.08	-241.1	28.5	378.9	314.4	64.47	5.877	
9,300.0	9,267.9	9,279.8	9,267.5	33.2	32.6	-141.99	-241.1	28.6	395.0	329.9	65.16	6.062	
9,400.0	9,365.8	9,377.5	9,365.2	33.6	32.9	-143.72	-241.2	28.7	411.6	345.7	65.86	6.249	
9,500.0	9,463.7	9,474.4	9,462.1	34.0	33.3	-145.27	-241.6	28.8	428.6	362.1	66.56	6.440	
9,600.0	9,561.5	9,572.2	9,559.9	34.4	33.6	-146.70	-242.2	29.0	446.2	378.9	67.26	6.634	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #202H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 23-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	9,659.4	9,671.1	9,658.8	34.8	33.9	-148.04	-242.7	29.2	463.8	395.8	67.96	6.824	
9,800.0	9,757.3	9,770.0	9,757.7	35.2	34.3	-149.28	-243.2	29.1	481.4	412.8	68.67	7.011	
9,900.0	9,855.2	9,869.0	9,856.7	35.6	34.6	-150.40	-243.8	28.7	499.0	429.7	69.37	7.194	
10,000.0	9,953.0	9,968.8	9,956.5	36.0	35.0	-151.43	-244.7	28.0	516.6	446.5	70.07	7.372	
10,100.0	10,050.9	10,069.1	10,056.8	36.4	35.3	-152.44	-245.0	27.0	533.9	463.1	70.77	7.544	
10,200.0	10,148.8	10,164.0	10,151.7	36.9	35.7	-153.37	-245.1	26.1	551.3	479.8	71.46	7.715	
10,300.0	10,246.7	10,256.7	10,244.4	37.3	36.0	-154.21	-245.4	26.0	569.7	497.5	72.13	7.898	
10,400.0	10,344.6	10,350.7	10,338.4	37.7	36.3	-155.00	-245.9	26.6	589.0	516.2	72.80	8.091	
10,500.0	10,442.4	10,445.1	10,432.7	38.1	36.6	-155.80	-246.0	27.9	609.0	535.5	73.48	8.288	
10,600.0	10,540.3	10,543.8	10,531.5	38.5	37.0	-156.60	-245.9	29.5	629.4	555.2	74.19	8.484	
10,700.0	10,638.2	10,644.9	10,632.5	39.0	37.3	-157.31	-246.4	30.6	649.5	574.6	74.91	8.670	
10,800.0	10,736.1	10,745.7	10,733.3	39.4	37.7	-157.99	-246.6	31.2	669.1	593.5	75.62	8.848	
10,900.0	10,833.9	10,846.3	10,834.0	39.8	38.0	-158.78	-245.0	31.6	688.4	612.1	76.33	9.019	
11,000.0	10,931.8	10,941.1	10,928.7	40.2	38.4	-159.55	-242.8	32.0	707.8	630.8	77.00	9.193	
11,100.0	11,029.7	11,035.6	11,023.2	40.7	38.7	-160.23	-241.1	32.7	727.8	650.1	77.67	9.370	
11,200.0	11,127.6	11,134.9	11,122.5	41.1	39.0	-160.86	-239.9	33.6	747.9	669.6	78.37	9.544	
11,300.0	11,225.5	11,234.5	11,222.1	41.5	39.4	-161.44	-239.1	34.2	767.9	688.8	79.07	9.712	
11,400.0	11,323.3	11,333.4	11,321.0	42.0	39.7	-161.95	-238.6	34.6	787.8	708.0	79.77	9.876	
11,500.0	11,421.2	11,433.0	11,420.5	42.4	40.0	-162.43	-238.4	34.8	807.5	727.1	80.47	10.035	
11,523.5	11,444.2	11,456.9	11,444.5	42.5	40.1	-162.54	-238.4	34.8	812.1	731.5	80.64	10.071	
11,600.0	11,519.2	11,526.8	11,514.3	42.8	40.4	-162.92	-237.9	34.9	826.5	745.4	81.14	10.186	
11,700.0	11,617.7	11,608.1	11,595.6	43.3	40.6	-163.49	-235.0	36.1	844.5	762.8	81.72	10.334	
11,800.0	11,716.7	11,697.9	11,685.1	43.7	40.9	-164.17	-229.7	39.7	862.4	780.1	82.33	10.475	
11,900.0	11,815.9	11,857.4	11,838.3	44.1	41.4	-167.09	-191.3	37.6	872.5	789.2	83.27	10.477	
12,000.0	11,915.5	11,917.7	11,889.5	44.4	41.6	-169.28	-159.4	35.5	881.8	798.2	83.66	10.541	
12,100.0	12,015.2	11,970.0	11,931.8	44.8	41.7	-171.34	-128.6	34.8	894.6	810.9	83.74	10.683	
12,200.0	12,115.1	12,012.4	11,963.8	45.2	41.8	-173.16	-100.8	35.2	911.7	828.3	83.39	10.933	
12,300.0	12,215.1	12,049.0	11,989.4	45.5	41.9	-174.82	-74.8	36.2	933.6	851.1	82.58	11.306	
12,311.9	12,227.0	12,049.0	11,989.4	45.5	41.9	79.68	-74.8	36.2	936.6	854.2	82.39	11.368	
12,400.0	12,315.1	12,084.7	12,012.2	45.8	42.0	78.00	-47.3	37.4	961.5	880.1	81.39	11.813	
12,500.0	12,415.1	12,113.1	12,028.3	46.2	42.0	76.59	-23.9	38.4	996.7	916.9	79.77	12.495	
12,600.0	12,515.1	12,144.0	12,043.7	46.5	42.1	74.99	2.8	39.3	1,039.0	961.1	77.97	13.327	
12,700.0	12,615.1	12,144.0	12,043.7	46.9	42.1	74.99	2.8	39.3	1,088.1	1,012.6	75.45	14.420	
12,711.9	12,627.0	12,144.0	12,043.7	46.9	42.1	74.99	2.8	39.3	1,094.3	1,019.2	75.15	14.562	
12,750.0	12,665.1	12,167.0	12,053.9	47.0	42.1	93.30	23.4	39.9	1,114.7	1,040.1	74.63	14.937	
12,800.0	12,714.8	12,177.9	12,058.4	47.2	42.1	89.33	33.3	40.1	1,143.1	1,069.5	73.59	15.533	
12,850.0	12,763.8	12,189.4	12,062.9	47.4	42.2	85.16	43.9	40.4	1,172.6	1,100.0	72.60	16.151	
12,900.0	12,811.8	12,201.4	12,067.3	47.5	42.2	80.90	55.1	40.7	1,202.8	1,131.2	71.67	16.784	
12,950.0	12,858.3	12,235.0	12,078.2	47.7	42.3	75.94	86.9	41.3	1,234.0	1,162.9	71.15	17.343	
13,000.0	12,903.1	12,235.0	12,078.2	47.8	42.3	72.24	86.9	41.3	1,264.5	1,194.3	70.15	18.026	
13,050.0	12,945.8	12,235.0	12,078.2	48.0	42.3	68.59	86.9	41.3	1,295.1	1,225.9	69.25	18.704	
13,100.0	12,986.1	12,266.5	12,086.8	48.1	42.3	64.50	117.1	41.6	1,325.1	1,256.2	68.89	19.234	
13,150.0	13,023.7	12,290.0	12,092.5	48.3	42.4	60.96	140.0	41.5	1,354.2	1,285.7	68.50	19.769	
13,200.0	13,058.2	12,314.1	12,097.8	48.4	42.5	57.79	163.5	41.1	1,382.1	1,313.9	68.19	20.267	
13,250.0	13,089.4	12,345.1	12,103.6	48.5	42.5	54.95	193.9	40.3	1,408.5	1,340.5	68.04	20.702	
13,300.0	13,117.2	12,386.8	12,110.7	48.7	42.6	52.49	235.0	38.5	1,433.0	1,364.9	68.07	21.051	
13,350.0	13,141.1	12,429.8	12,117.2	48.8	42.8	50.46	277.4	36.0	1,455.1	1,386.9	68.18	21.344	
13,400.0	13,161.2	12,424.0	12,116.4	48.9	42.7	48.74	271.7	36.4	1,475.7	1,407.8	67.94	21.719	
13,450.0	13,177.2	12,456.0	12,120.2	49.1	42.8	47.33	303.3	34.5	1,494.0	1,425.9	68.14	21.926	
13,500.0	13,189.1	12,471.1	12,121.5	49.2	42.9	46.10	318.3	33.7	1,510.8	1,442.5	68.30	22.119	
13,550.0	13,196.6	12,486.1	12,122.4	49.4	42.9	45.08	333.4	33.1	1,525.8	1,457.2	68.58	22.250	
13,600.0	13,199.8	12,515.0	12,123.2	49.6	43.0	44.39	362.2	32.1	1,539.1	1,470.0	69.01	22.301	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #202H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 23-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
13,611.9	13,200.0	12,515.0	12,123.2	49.6	43.0	44.19	362.2	32.1	1,541.8	1,472.7	69.10	22.313	
13,700.0	13,200.0	12,612.1	12,124.5	50.0	43.3	45.34	459.3	28.3	1,561.6	1,491.4	70.19	22.248	
13,800.0	13,200.0	12,657.0	12,124.9	50.4	43.5	45.99	504.1	26.6	1,582.2	1,511.1	71.11	22.250	
13,900.0	13,200.0	12,721.2	12,124.1	50.9	43.8	46.71	568.3	25.4	1,603.3	1,531.2	72.10	22.238	
14,000.0	13,200.0	12,845.9	12,121.1	51.4	44.4	47.60	692.8	21.4	1,622.1	1,548.8	73.33	22.121	
14,100.0	13,200.0	12,920.0	12,119.7	52.0	44.8	48.11	766.9	18.4	1,637.6	1,563.3	74.32	22.036	
14,200.0	13,200.0	12,972.6	12,118.2	52.6	45.1	48.51	819.5	17.8	1,653.2	1,578.0	75.19	21.988	
14,300.0	13,200.0	13,137.1	12,114.9	53.2	46.1	49.18	983.9	17.4	1,666.9	1,590.1	76.86	21.689	
14,400.0	13,200.0	13,273.9	12,116.9	53.8	47.0	49.62	1,120.7	13.9	1,673.5	1,595.1	78.48	21.325	
14,500.0	13,200.0	13,366.1	12,119.4	54.5	47.7	49.85	1,212.8	10.9	1,676.2	1,596.5	79.73	21.024	
14,600.0	13,200.0	13,429.0	12,119.2	55.1	48.2	49.91	1,275.6	9.2	1,678.4	1,597.8	80.63	20.816	
14,687.2	13,200.0	13,566.0	12,120.5	55.7	49.3	49.87	1,412.4	2.9	1,675.7	1,593.4	82.23	20.378	
14,700.0	13,200.0	13,572.3	12,120.7	55.8	49.4	49.87	1,418.7	2.7	1,675.2	1,592.9	82.33	20.348	
14,800.0	13,200.0	13,618.0	12,121.4	56.5	49.8	49.88	1,464.5	1.9	1,673.6	1,590.5	83.08	20.146	
14,812.4	13,200.0	13,630.5	12,121.5	56.6	49.9	49.88	1,476.9	1.9	1,673.6	1,590.3	83.25	20.102	
14,900.0	13,200.0	13,684.6	12,121.3	57.3	50.4	49.88	1,531.0	2.0	1,674.5	1,590.4	84.10	19.911	
15,000.0	13,200.0	13,776.7	12,118.6	58.1	51.2	49.84	1,623.1	2.4	1,677.2	1,591.8	85.41	19.638	
15,100.0	13,200.0	13,906.4	12,115.2	58.9	52.5	49.75	1,752.7	1.4	1,679.0	1,591.8	87.18	19.259	
15,180.1	13,200.0	14,014.7	12,113.6	59.6	53.6	49.68	1,861.0	-0.8	1,678.9	1,590.2	88.72	18.924	
15,200.0	13,200.0	14,015.4	12,113.6	59.7	53.6	49.68	1,861.7	-0.7	1,679.0	1,590.2	88.80	18.908	
15,300.0	13,200.0	14,074.5	12,112.5	60.6	54.2	49.66	1,920.8	-0.9	1,680.5	1,590.6	89.87	18.699	
15,400.0	13,200.0	14,131.2	12,110.9	61.6	54.8	49.65	1,977.5	0.2	1,684.4	1,593.4	90.95	18.520	
15,500.0	13,200.0	14,309.1	12,109.0	62.5	56.7	49.78	2,155.2	7.0	1,689.6	1,595.8	93.83	18.008	
15,600.0	13,200.0	14,409.4	12,113.2	63.5	57.8	49.98	2,255.3	10.3	1,690.0	1,594.2	95.79	17.643	
15,700.0	13,200.0	14,501.3	12,115.4	64.5	58.8	50.10	2,347.1	12.6	1,691.0	1,593.4	97.61	17.324	
15,800.0	13,200.0	14,600.9	12,115.4	65.5	60.0	50.13	2,446.7	13.3	1,692.1	1,592.6	99.50	17.007	
15,900.0	13,200.0	14,777.1	12,118.2	66.6	62.1	50.23	2,622.9	13.1	1,692.0	1,589.4	102.62	16.488	
16,000.0	13,200.0	14,877.1	12,123.9	67.7	63.3	50.36	2,722.8	11.5	1,687.8	1,583.0	104.72	16.116	
16,100.0	13,200.0	14,937.0	12,125.2	68.8	64.1	50.39	2,782.6	10.7	1,685.8	1,579.7	106.14	15.883	
16,128.0	13,200.0	14,948.3	12,125.2	69.1	64.2	50.39	2,793.9	10.6	1,685.7	1,579.3	106.44	15.837	
16,200.0	13,200.0	15,003.0	12,124.5	69.9	64.9	50.37	2,848.6	10.0	1,686.1	1,578.5	107.61	15.669	
16,300.0	13,200.0	15,096.3	12,122.1	71.1	66.1	50.30	2,941.9	9.0	1,687.5	1,578.1	109.47	15.416	
16,400.0	13,200.0	15,307.3	12,123.1	72.3	68.8	50.24	3,152.7	3.7	1,686.1	1,572.9	113.22	14.893	
16,500.0	13,200.0	15,370.3	12,124.5	73.5	69.6	50.23	3,215.7	0.8	1,681.9	1,567.1	114.75	14.657	
16,600.0	13,200.0	15,459.3	12,123.4	74.7	70.8	50.13	3,304.5	-2.9	1,679.9	1,563.3	116.61	14.407	
16,700.0	13,200.0	15,556.1	12,121.8	75.9	72.1	49.99	3,401.2	-8.4	1,677.2	1,558.7	118.55	14.148	
16,800.0	13,200.0	15,625.3	12,120.8	77.1	73.0	49.91	3,470.3	-11.0	1,675.9	1,555.8	120.13	13.952	
16,812.8	13,200.0	15,633.5	12,120.6	77.3	73.1	49.91	3,478.5	-11.2	1,675.9	1,555.6	120.32	13.929	
16,900.0	13,200.0	15,691.0	12,119.8	78.4	73.9	49.89	3,536.0	-11.7	1,676.7	1,555.0	121.70	13.778	
17,000.0	13,200.0	15,784.3	12,118.6	79.7	75.2	49.89	3,629.3	-10.9	1,678.8	1,555.0	123.78	13.562	
17,100.0	13,200.0	15,875.9	12,117.4	81.0	76.4	49.90	3,720.9	-9.8	1,681.2	1,555.3	125.87	13.356	
17,200.0	13,200.0	15,990.6	12,116.3	82.3	78.0	49.92	3,835.6	-8.2	1,683.4	1,555.0	128.41	13.110	
17,300.0	13,200.0	16,093.5	12,115.8	83.6	79.5	49.96	3,938.4	-6.8	1,685.3	1,554.6	130.77	12.887	
17,400.0	13,200.0	17,400.0	12,116.7	84.9	97.9	50.00	4,084.5	-7.2	1,685.2	1,537.7	147.50	11.425	
17,500.0	13,200.0	16,355.0	12,119.3	86.3	83.2	50.02	4,199.9	-10.1	1,682.3	1,545.7	136.53	12.321	
17,600.0	13,200.0	16,425.1	12,119.8	87.6	84.2	50.01	4,269.9	-11.8	1,680.7	1,542.4	138.33	12.151	
17,610.0	13,200.0	16,430.9	12,119.7	87.7	84.2	50.01	4,275.8	-11.9	1,680.7	1,542.2	138.48	12.137	
17,700.0	13,200.0	16,513.0	12,118.6	89.0	85.4	49.97	4,357.8	-12.9	1,681.2	1,540.8	140.39	11.975	
17,800.0	13,200.0	16,623.5	12,117.4	90.3	87.0	49.92	4,468.3	-14.5	1,681.4	1,538.5	142.86	11.769	
17,900.0	13,200.0	16,747.3	12,117.1	91.7	88.8	49.88	4,592.1	-17.0	1,680.6	1,535.0	145.59	11.544	
18,000.0	13,200.0	16,922.9	12,120.7	93.1	91.4	49.89	4,767.5	-21.9	1,678.4	1,529.2	149.21	11.248	
18,100.0	13,200.0	16,979.1	12,123.0	94.5	92.2	49.92	4,823.6	-23.8	1,673.7	1,522.7	150.97	11.087	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #202H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 23-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
18,200.0	13,200.0	17,035.6	12,123.8	95.9	93.1	49.92	4,880.2	-25.2	1,671.5	1,518.9	152.63	10.952	
18,231.0	13,200.0	17,052.1	12,123.8	96.3	93.3	49.92	4,896.6	-25.5	1,671.4	1,518.3	153.10	10.917	
18,300.0	13,200.0	17,088.8	12,123.2	97.3	93.8	49.90	4,933.4	-25.8	1,672.0	1,517.9	154.13	10.848	
18,400.0	13,200.0	17,155.0	12,120.9	98.7	94.8	49.86	4,999.5	-25.5	1,675.1	1,519.3	155.79	10.752	
18,500.0	13,200.0	17,234.4	12,116.9	100.2	96.0	49.79	5,078.8	-24.6	1,679.8	1,522.1	157.67	10.654	
18,600.0	13,200.0	18,600.0	12,111.6	101.6	116.3	49.71	5,207.6	-22.7	1,684.2	1,508.5	175.77	9.582	
18,700.0	13,200.0	17,493.4	12,110.2	103.0	99.9	49.73	5,337.6	-21.5	1,686.0	1,522.4	163.65	10.303	
18,800.0	13,200.0	17,664.7	12,111.6	104.5	102.4	49.79	5,508.9	-21.7	1,686.3	1,518.8	167.51	10.067	
18,900.0	13,200.0	17,746.8	12,114.0	105.9	103.7	49.84	5,590.9	-22.8	1,684.1	1,514.3	169.75	9.921	
19,000.0	13,200.0	17,881.7	12,117.5	107.4	105.7	49.90	5,725.8	-25.3	1,681.6	1,508.6	172.92	9.724	
19,100.0	13,200.0	17,944.3	12,118.7	108.9	106.7	49.91	5,788.3	-26.8	1,679.1	1,504.3	174.79	9.606	
19,181.1	13,200.0	18,002.8	12,118.3	110.1	107.6	49.88	5,846.8	-28.0	1,678.6	1,502.3	176.35	9.519	
19,200.0	13,200.0	18,017.2	12,118.0	110.3	107.8	49.87	5,861.2	-28.3	1,678.6	1,501.9	176.71	9.499	
19,300.0	13,200.0	18,109.2	12,115.5	111.8	109.2	49.77	5,953.2	-30.3	1,679.4	1,500.5	178.89	9.388	
19,400.0	13,200.0	18,222.7	12,112.3	113.3	110.9	49.64	6,066.6	-33.3	1,679.8	1,498.4	181.41	9.259	
19,500.0	13,200.0	19,500.0	12,109.7	114.8	130.6	49.50	6,183.5	-37.7	1,678.8	1,480.2	198.66	8.451	
19,563.2	13,200.0	18,385.1	12,109.0	115.7	113.4	49.45	6,228.8	-39.3	1,678.3	1,493.2	185.14	9.065	
19,600.0	13,200.0	18,407.0	12,108.6	116.3	113.8	49.44	6,250.8	-39.7	1,678.5	1,492.7	185.74	9.037	
19,700.0	13,200.0	18,475.3	12,106.9	117.8	114.8	49.40	6,319.0	-39.8	1,680.4	1,492.9	187.54	8.960	
19,800.0	13,200.0	18,565.3	12,104.1	119.3	116.2	49.37	6,409.0	-38.9	1,683.8	1,494.0	189.76	8.873	
19,900.0	13,200.0	18,687.1	12,100.6	120.8	118.1	49.31	6,530.7	-38.5	1,686.5	1,493.8	192.63	8.755	
20,000.0	13,200.0	18,833.7	12,100.3	122.3	120.4	49.32	6,677.2	-38.8	1,687.0	1,490.9	196.08	8.604	
20,099.4	13,200.0	18,921.5	12,101.7	123.8	121.7	49.37	6,765.1	-38.7	1,686.6	1,488.1	198.48	8.497	
20,100.0	13,200.0	18,922.0	12,101.7	123.8	121.7	49.37	6,765.5	-38.7	1,686.6	1,488.1	198.49	8.497	
20,200.0	13,200.0	19,006.2	12,101.3	125.3	123.0	49.37	6,849.8	-39.0	1,687.2	1,486.4	200.72	8.406	
20,300.0	13,200.0	19,140.5	12,100.6	126.8	125.1	49.33	6,984.1	-41.0	1,687.0	1,483.2	203.83	8.276	
20,400.0	13,200.0	19,223.9	12,100.5	128.4	126.4	49.30	7,067.4	-43.0	1,685.9	1,479.9	206.00	8.184	
20,404.5	13,200.0	19,226.6	12,100.5	128.4	126.5	49.29	7,070.1	-43.0	1,685.9	1,479.9	206.08	8.181	
20,500.0	13,200.0	19,280.0	12,099.5	129.9	127.3	49.27	7,123.5	-43.5	1,687.0	1,479.4	207.59	8.127	
20,600.0	13,200.0	19,350.4	12,096.9	131.4	128.4	49.22	7,193.9	-43.3	1,690.3	1,480.9	209.37	8.073	
20,700.0	13,200.0	19,452.7	12,091.8	132.9	130.0	49.12	7,296.1	-42.4	1,694.8	1,483.1	211.77	8.003	
20,800.0	13,200.0	19,533.1	12,088.1	134.5	131.3	49.07	7,376.3	-41.4	1,699.3	1,485.6	213.73	7.951	
20,900.0	13,200.0	19,721.1	12,086.4	136.0	134.2	49.14	7,564.3	-37.3	1,702.3	1,484.0	218.37	7.796	
21,000.0	13,200.0	19,836.3	12,088.6	137.6	136.0	49.23	7,679.4	-37.1	1,701.8	1,480.4	221.39	7.687	
21,100.0	13,200.0	19,941.0	12,089.7	139.1	137.7	49.25	7,784.1	-38.2	1,700.8	1,476.8	224.09	7.590	
21,199.6	13,200.0	20,022.2	12,089.3	140.6	138.9	49.22	7,865.3	-39.8	1,700.3	1,474.1	226.25	7.515	
21,200.0	13,200.0	20,022.5	12,089.3	140.7	139.0	49.22	7,865.6	-39.8	1,700.3	1,474.1	226.25	7.515	
21,300.0	13,200.0	20,116.7	12,087.3	142.2	140.4	49.13	7,959.7	-41.9	1,700.5	1,472.0	228.53	7.441	
21,400.0	13,200.0	20,215.1	12,085.8	143.8	142.0	49.08	8,058.0	-43.5	1,700.9	1,470.0	230.93	7.366	
21,500.0	13,200.0	20,286.5	12,085.3	145.3	143.1	49.08	8,129.5	-43.3	1,702.2	1,469.2	232.93	7.308	
21,600.0	13,200.0	20,382.1	12,084.2	146.9	144.6	49.10	8,225.0	-41.7	1,704.8	1,469.3	235.47	7.240	
21,700.0	13,200.0	20,465.0	12,084.4	148.4	145.9	49.18	8,307.9	-39.3	1,707.4	1,469.6	237.83	7.179	
21,800.0	13,200.0	20,534.6	12,083.6	150.0	147.0	49.22	8,377.4	-36.7	1,711.6	1,471.8	239.79	7.138	
21,900.0	13,200.0	20,613.9	12,081.3	151.5	148.3	49.26	8,456.6	-32.8	1,717.8	1,475.8	241.94	7.100	
22,000.0	13,200.0	20,817.2	12,084.6	153.1	151.5	49.56	8,659.7	-24.8	1,719.4	1,471.8	247.63	6.944	
22,100.0	13,200.0	20,921.5	12,086.1	154.7	153.1	49.64	8,764.0	-23.4	1,720.2	1,469.6	250.52	6.866	
22,200.0	13,200.0	21,042.6	12,086.6	156.2	155.1	49.63	8,885.1	-25.3	1,719.1	1,465.6	253.51	6.781	
22,285.8	13,200.0	21,109.1	12,086.4	157.6	156.1	49.61	8,951.6	-26.7	1,718.5	1,463.2	255.33	6.730	
22,300.0	13,200.0	21,118.8	12,086.4	157.8	156.3	49.61	8,961.3	-26.8	1,718.5	1,462.9	255.61	6.723	
22,400.0	13,200.0	21,242.9	12,085.9	159.4	158.3	49.60	9,085.4	-27.4	1,719.2	1,460.5	258.66	6.647	
22,500.0	13,200.0	21,337.6	12,088.1	161.0	159.8	49.67	9,180.0	-27.9	1,717.9	1,456.6	261.34	6.573	
22,562.9	13,200.0	21,386.3	12,089.0	162.0	160.6	49.70	9,228.7	-27.8	1,717.6	1,454.8	262.80	6.536	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #202H - Wellbore #1 - Actual

Offset Site Error: 0.0 usft

Survey Program: 23-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
22,600.0	13,200.0	21,413.9	12,089.2	162.5	161.0	49.71	9,256.3	-27.7	1,717.7	1,454.1	263.63	6.516	
22,700.0	13,200.0	21,495.9	12,089.3	164.1	162.3	49.74	9,338.3	-27.0	1,718.9	1,453.0	265.96	6.463	
22,800.0	13,200.0	21,587.1	12,089.1	165.7	163.8	49.78	9,429.5	-25.6	1,720.8	1,452.3	268.49	6.409	
22,900.0	13,200.0	21,701.3	12,088.7	167.3	165.6	49.83	9,543.6	-23.9	1,722.8	1,451.3	271.54	6.345	
23,000.0	13,200.0	21,793.7	12,088.8	168.9	167.1	49.86	9,636.0	-23.1	1,724.0	1,449.9	274.11	6.290	
23,100.0	13,200.0	21,890.1	12,085.3	170.4	168.6	49.77	9,732.4	-24.2	1,726.1	1,449.7	276.40	6.245	
23,200.0	13,200.0	22,036.2	12,081.1	172.0	171.0	49.62	9,878.4	-27.3	1,727.0	1,447.4	279.55	6.178	
23,300.0	13,200.0	22,179.0	12,080.9	173.6	173.2	49.53	10,021.1	-32.3	1,725.0	1,442.4	282.64	6.103	
23,400.0	13,200.0	22,296.8	12,082.9	175.2	175.1	49.48	10,138.7	-37.5	1,721.1	1,435.7	285.40	6.030	
23,504.9	13,200.0	22,329.0	12,083.5	176.9	175.7	49.47	10,170.9	-39.1	1,718.2	1,431.2	286.95	5.988	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #203H - Sidetrack - Sidetrack — **Offset Site Error:** 0.0 usft

Survey Program: 220-MWD, 3018-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	90.09	-3.5	2,313.3	2,313.3				
100.0	100.0	90.3	90.3	0.1	0.1	90.09	-3.5	2,313.5	2,313.5	2,313.3	0.27	8,536.171	
200.0	200.0	180.6	180.6	0.5	0.3	90.08	-3.4	2,314.1	2,314.2	2,313.4	0.77	3,005.477	
300.0	300.0	272.4	272.4	0.8	0.5	90.08	-3.2	2,315.0	2,315.2	2,313.8	1.38	1,679.910	
400.0	400.0	370.3	370.3	1.2	0.9	90.08	-3.3	2,316.3	2,316.5	2,314.4	2.09	1,110.090	
500.0	500.0	481.7	481.7	1.6	1.3	90.09	-3.6	2,317.5	2,317.6	2,314.7	2.84	815.283	
600.0	600.0	603.7	603.7	1.9	1.7	90.10	-3.8	2,317.9	2,317.9	2,314.3	3.63	639.229	
700.0	700.0	716.8	716.8	2.3	2.1	90.11	-4.4	2,317.3	2,317.4	2,313.0	4.37	530.223	
800.0	800.0	824.5	824.5	2.6	2.5	90.13	-5.2	2,316.4	2,316.5	2,311.4	5.10	454.310	
900.0	900.0	922.2	922.1	3.0	2.8	90.14	-5.8	2,315.3	2,315.4	2,309.6	5.80	399.512	
1,000.0	1,000.0	1,017.1	1,017.1	3.4	3.1	90.16	-6.3	2,314.5	2,314.5	2,308.1	6.48	356.990	
1,100.0	1,100.0	1,345.4	1,344.7	3.7	4.3	90.10	-3.9	2,299.5	2,312.5	2,304.5	7.98	289.771	
1,200.0	1,200.0	1,442.3	1,441.1	4.1	4.6	90.06	-2.5	2,289.1	2,301.8	2,293.1	8.67	265.360	
1,300.0	1,300.0	1,536.7	1,534.9	4.4	5.0	90.04	-1.6	2,279.4	2,291.5	2,282.1	9.36	244.753	
1,400.0	1,400.0	1,631.0	1,628.8	4.8	5.3	90.02	-0.9	2,269.8	2,281.3	2,271.3	10.05	226.920	
1,500.0	1,500.0	1,715.3	1,712.7	5.1	5.6	90.02	-0.9	2,261.6	2,271.6	2,260.9	10.71	212.057	
1,600.0	1,600.0	1,804.1	1,801.1	5.5	6.0	90.07	-2.6	2,253.6	2,262.5	2,251.1	11.39	198.684	
1,700.0	1,700.0	1,894.4	1,891.1	5.9	6.3	90.11	-4.5	2,245.7	2,253.8	2,241.7	12.07	186.732	
1,800.0	1,800.0	1,981.6	1,977.9	6.2	6.6	90.16	-6.4	2,238.5	2,245.6	2,232.9	12.74	176.234	
1,900.0	1,900.0	2,090.7	2,086.7	6.6	7.0	90.23	-9.0	2,229.9	2,237.8	2,224.3	13.49	165.893	
2,000.0	2,000.0	2,199.5	2,195.0	6.9	7.4	90.32	-12.5	2,220.4	2,229.0	2,214.8	14.24	156.580	
2,100.0	2,100.0	2,292.5	2,287.6	7.3	7.8	90.41	-15.8	2,212.4	2,220.4	2,205.5	14.93	148.708	
2,200.0	2,200.0	2,379.0	2,373.8	7.7	8.1	90.50	-19.2	2,205.3	2,212.2	2,196.6	15.61	141.755	
2,300.0	2,300.0	2,462.3	2,456.7	8.0	8.4	90.58	-22.3	2,199.0	2,204.7	2,188.4	16.27	135.510	
2,400.0	2,400.0	2,546.4	2,540.5	8.4	8.8	90.66	-25.4	2,193.3	2,198.0	2,181.0	16.94	129.781	
2,500.0	2,500.0	2,687.2	2,680.9	8.7	9.3	90.81	-30.7	2,183.8	2,191.5	2,173.7	17.79	123.176	
2,600.0	2,600.0	2,775.1	2,768.5	9.1	9.6	90.90	-34.1	2,176.6	2,183.4	2,164.9	18.47	118.188	
2,700.0	2,700.0	2,855.6	2,848.6	9.4	9.9	90.99	-37.7	2,170.7	2,176.1	2,156.9	19.13	113.743	
2,800.0	2,800.0	2,930.1	2,922.9	9.8	10.2	91.09	-41.3	2,165.9	2,169.8	2,150.0	19.77	109.761	
2,900.0	2,900.0	3,074.0	3,066.4	10.2	10.5	91.30	-48.8	2,156.8	2,163.7	2,143.4	20.37	106.222	
3,000.0	3,000.0	3,168.9	3,160.7	10.5	10.5	91.48	-55.7	2,149.6	2,156.3	2,135.5	20.75	103.905	
3,100.0	3,100.0	3,265.4	3,256.5	10.9	10.6	91.72	-64.2	2,142.2	2,148.9	2,127.8	21.15	101.596	
3,200.0	3,200.0	3,351.8	3,342.3	11.2	10.7	91.96	-72.9	2,136.0	2,141.9	2,120.4	21.56	99.326	
3,300.0	3,300.0	3,441.7	3,431.5	11.6	10.7	92.21	-82.3	2,129.9	2,135.6	2,113.6	21.99	97.111	
3,400.0	3,400.0	3,522.6	3,511.8	12.0	10.8	92.45	-90.9	2,124.9	2,129.8	2,107.4	22.42	94.980	
3,500.0	3,500.0	3,626.4	3,615.0	12.3	10.9	92.73	-101.1	2,119.2	2,124.7	2,101.8	22.88	92.863	
3,600.0	3,600.0	3,749.0	3,736.9	12.7	11.1	92.98	-110.0	2,111.5	2,118.8	2,095.4	23.36	90.708	
3,700.0	3,700.0	3,875.7	3,863.2	13.0	11.3	93.16	-116.2	2,102.4	2,111.9	2,088.0	23.85	88.553	
3,800.0	3,800.0	4,064.1	4,050.2	13.4	11.6	93.52	-128.1	2,083.1	2,102.0	2,077.6	24.39	86.175	
3,900.0	3,900.0	4,163.7	4,148.7	13.8	11.8	93.73	-135.0	2,070.5	2,089.8	2,064.9	24.91	83.909	
4,000.0	4,000.0	4,237.9	4,222.3	14.1	11.9	93.85	-138.6	2,061.9	2,078.4	2,053.0	25.41	81.805	
4,100.0	4,100.0	4,309.6	4,293.6	14.5	12.1	93.91	-140.6	2,054.6	2,068.4	2,042.5	25.90	79.850	
4,200.0	4,200.0	4,401.0	4,384.6	14.8	12.2	93.97	-142.1	2,046.1	2,059.3	2,032.9	26.42	77.957	
4,300.0	4,300.0	4,549.1	4,531.9	15.2	12.5	94.06	-144.2	2,030.2	2,048.5	2,021.5	26.98	75.919	
4,400.0	4,400.0	4,633.9	4,616.1	15.5	12.7	94.11	-145.3	2,020.7	2,037.4	2,009.9	27.51	74.059	
4,500.0	4,500.0	4,724.7	4,706.4	15.9	12.9	94.15	-146.0	2,011.4	2,027.2	1,999.1	28.05	72.278	
4,600.0	4,600.0	4,820.7	4,801.9	16.3	13.2	94.21	-147.2	2,001.4	2,016.9	1,988.3	28.60	70.529	
4,700.0	4,700.0	4,904.9	4,885.7	16.6	13.4	94.28	-149.1	1,993.1	2,007.3	1,978.2	29.14	68.874	
4,800.0	4,800.0	5,007.8	4,988.1	17.0	13.6	94.39	-152.2	1,983.6	1,998.3	1,968.6	29.72	67.232	
4,900.0	4,900.0	5,117.8	5,097.4	17.3	13.9	94.52	-155.9	1,972.3	1,988.3	1,958.0	30.32	65.582	
5,000.0	5,000.0	5,199.0	5,178.2	17.7	14.1	94.62	-158.7	1,964.3	1,978.7	1,947.9	30.88	64.072	
5,100.0	5,100.0	5,285.6	5,264.4	18.1	14.3	94.71	-161.2	1,956.8	1,970.3	1,938.8	31.46	62.632	

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

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Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #203H - Sidetrack - Sidetrack — **Offset Site Error:** 0.0 usft

Survey Program: 220-MWD, 3018-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	5,200.0	5,396.0	5,374.4	18.4	14.6	94.83	-164.4	1,947.0	1,961.7	1,929.6	32.07	61.165	
5,300.0	5,300.0	5,531.9	5,509.5	18.8	15.0	95.00	-169.2	1,933.4	1,952.1	1,919.3	32.73	59.640	
5,400.0	5,400.0	5,600.6	5,577.8	19.1	15.2	95.10	-172.0	1,926.4	1,942.2	1,908.9	33.30	58.317	
5,500.0	5,500.0	5,684.4	5,661.2	19.5	15.5	95.20	-174.6	1,918.9	1,933.5	1,899.6	33.89	57.046	
5,600.0	5,600.0	5,770.4	5,746.9	19.8	15.7	95.26	-176.0	1,911.8	1,925.5	1,891.0	34.49	55.836	
5,700.0	5,700.0	5,863.1	5,839.4	20.2	15.9	95.31	-177.0	1,904.9	1,918.2	1,883.1	35.09	54.668	
5,800.0	5,800.0	5,964.1	5,940.0	20.6	16.2	95.36	-178.2	1,897.4	1,910.9	1,875.2	35.71	53.514	
5,900.0	5,900.0	6,061.8	6,037.4	20.9	16.5	95.41	-179.1	1,890.1	1,903.6	1,867.3	36.33	52.402	
6,000.0	6,000.0	6,160.1	6,135.5	21.3	16.8	95.47	-180.3	1,882.9	1,896.4	1,859.5	36.95	51.323	
6,100.0	6,100.0	6,259.0	6,234.2	21.6	17.1	95.52	-181.3	1,875.8	1,889.3	1,851.7	37.58	50.276	
6,200.0	6,200.0	6,362.3	6,337.1	22.0	17.4	95.58	-182.5	1,868.2	1,882.1	1,843.9	38.22	49.245	
6,300.0	6,300.0	6,456.3	6,430.9	22.4	17.7	95.63	-183.6	1,861.4	1,875.0	1,836.1	38.85	48.267	
6,400.0	6,400.0	6,557.4	6,531.7	22.7	18.0	95.68	-184.4	1,854.2	1,868.0	1,828.5	39.49	47.306	
6,500.0	6,500.0	6,659.4	6,633.5	23.1	18.3	95.73	-185.3	1,846.8	1,860.9	1,820.7	40.13	46.367	
6,600.0	6,600.0	6,750.4	6,724.3	23.4	18.5	95.78	-186.3	1,840.4	1,853.9	1,813.2	40.76	45.482	
6,700.0	6,700.0	6,858.2	6,831.7	23.8	18.9	95.83	-187.3	1,832.7	1,847.0	1,805.5	41.43	44.584	
6,800.0	6,800.0	6,953.5	6,926.8	24.1	19.2	95.88	-188.0	1,825.9	1,839.9	1,797.9	42.07	43.737	
6,900.0	6,900.0	7,041.5	7,014.6	24.5	19.4	95.92	-188.6	1,820.0	1,833.3	1,790.7	42.69	42.941	
7,000.0	7,000.0	7,131.8	7,104.8	24.9	19.7	95.96	-189.4	1,814.6	1,827.4	1,784.1	43.33	42.178	
7,100.0	7,100.0	7,293.4	7,265.8	25.2	20.2	-158.53	-190.1	1,802.2	1,820.6	1,776.5	44.09	41.288	
7,200.0	7,200.0	7,391.2	7,363.2	25.5	20.6	-158.56	-189.8	1,793.1	1,813.7	1,769.0	44.73	40.553	
7,300.0	7,299.9	7,497.6	7,469.2	25.9	20.9	-158.61	-189.5	1,783.4	1,808.7	1,763.3	45.37	39.863	
7,400.0	7,399.7	7,585.6	7,556.8	26.2	21.2	-158.68	-188.8	1,775.5	1,805.3	1,759.3	45.99	39.253	
7,500.0	7,499.4	7,679.4	7,650.3	26.6	21.5	-158.77	-188.1	1,767.5	1,804.1	1,757.5	46.62	38.698	
7,512.8	7,512.1	7,691.5	7,662.4	26.6	21.5	-158.78	-188.0	1,766.5	1,804.1	1,757.4	46.70	38.631	CC, ES
7,600.0	7,598.9	7,778.3	7,748.9	26.9	21.8	-158.86	-187.6	1,759.3	1,804.7	1,757.5	47.26	38.188	
7,700.0	7,698.3	7,867.7	7,837.9	27.2	22.1	-158.96	-187.4	1,752.1	1,807.3	1,759.4	47.88	37.744	
7,800.0	7,797.4	7,970.5	7,940.4	27.6	22.5	-159.08	-187.0	1,744.1	1,811.7	1,763.2	48.53	37.330	
7,900.0	7,896.3	8,064.3	8,034.0	27.9	22.8	-159.20	-186.7	1,736.9	1,817.8	1,768.7	49.17	36.974	
8,000.0	7,994.9	8,173.3	8,142.6	28.3	23.1	-159.35	-186.8	1,728.3	1,825.5	1,775.7	49.83	36.632	
8,100.0	8,093.3	8,265.8	8,234.8	28.6	23.4	-159.48	-186.8	1,721.0	1,834.8	1,784.4	50.47	36.357	
8,182.6	8,174.2	8,349.0	8,317.8	28.9	23.7	-159.61	-186.9	1,714.5	1,843.8	1,792.8	51.01	36.149	
8,200.0	8,191.3	8,365.0	8,333.7	29.0	23.8	-159.64	-187.0	1,713.3	1,845.8	1,794.7	51.12	36.110	
8,300.0	8,289.1	8,458.5	8,427.0	29.4	24.1	-159.83	-187.1	1,706.2	1,857.6	1,805.9	51.76	35.893	
8,400.0	8,387.0	8,557.9	8,526.1	29.7	24.4	-160.01	-187.8	1,698.8	1,869.6	1,817.2	52.41	35.672	
8,500.0	8,484.9	8,660.6	8,628.5	30.1	24.8	-160.18	-188.7	1,690.9	1,881.4	1,828.3	53.08	35.446	
8,600.0	8,582.8	8,754.7	8,722.3	30.5	25.1	-160.34	-189.4	1,683.7	1,893.3	1,839.5	53.73	35.238	
8,700.0	8,680.6	8,841.3	8,808.6	30.9	25.4	-160.49	-190.3	1,677.5	1,905.6	1,851.2	54.36	35.056	
8,800.0	8,778.5	8,927.7	8,894.9	31.2	25.7	-160.63	-190.9	1,672.1	1,918.8	1,863.8	54.99	34.895	
8,900.0	8,876.4	9,051.6	9,018.4	31.6	26.1	-160.84	-191.9	1,663.3	1,931.2	1,875.5	55.72	34.658	
9,000.0	8,974.3	9,138.5	9,105.1	32.0	26.4	-160.97	-193.1	1,657.0	1,943.5	1,887.2	56.36	34.485	
9,100.0	9,072.1	9,270.1	9,236.4	32.4	26.9	-161.15	-195.1	1,647.9	1,956.4	1,899.3	57.12	34.253	
9,200.0	9,170.0	9,361.2	9,327.2	32.8	27.2	-161.28	-196.2	1,640.0	1,967.4	1,909.6	57.77	34.054	
9,300.0	9,267.9	9,438.1	9,403.8	33.2	27.4	-161.39	-197.4	1,634.2	1,979.5	1,921.1	58.39	33.900	
9,400.0	9,365.8	9,400.0	9,522.3	33.6	27.3	-161.56	-198.8	1,625.3	1,991.6	1,933.0	58.60	33.986	
9,500.0	9,463.7	9,666.0	9,630.9	34.0	28.2	-161.75	-198.9	1,615.7	2,002.3	1,942.5	59.83	33.468	
9,600.0	9,561.5	9,739.7	9,704.5	34.4	28.5	-161.88	-198.7	1,610.0	2,014.2	1,953.7	60.44	33.326	
9,700.0	9,659.4	9,877.5	9,841.8	34.8	29.0	-162.10	-199.3	1,599.3	2,026.1	1,964.9	61.22	33.095	
9,800.0	9,757.3	9,987.2	9,951.0	35.2	29.4	-162.25	-200.5	1,588.8	2,036.2	1,974.2	61.94	32.876	
9,900.0	9,855.2	10,070.9	10,034.3	35.6	29.7	-162.35	-201.9	1,581.1	2,046.7	1,984.1	62.59	32.701	
10,000.0	9,953.0	10,154.1	10,117.2	36.0	30.0	-162.45	-203.3	1,574.0	2,057.9	1,994.7	63.24	32.544	
10,100.0	10,050.9	10,228.6	10,191.5	36.4	30.3	-162.54	-204.4	1,568.5	2,070.2	2,006.4	63.85	32.421	

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

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Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #203H - Sidetrack - Sidetrack — **Offset Site Error:** 0.0 usft

Survey Program: 220-MWD, 3018-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
10,200.0	10,148.8	10,301.9	10,264.7	36.9	30.5	-162.63	-205.7	1,563.9	2,083.7	2,019.2	64.46	32.325	
10,300.0	10,246.7	10,446.1	10,408.5	37.3	31.0	-162.79	-208.5	1,554.5	2,097.0	2,031.7	65.30	32.114	
10,400.0	10,344.6	10,530.4	10,492.6	37.7	31.3	-162.88	-209.9	1,548.2	2,109.3	2,043.3	65.95	31.985	
10,500.0	10,442.4	10,614.9	10,576.8	38.1	31.6	-162.98	-211.3	1,542.6	2,122.3	2,055.7	66.59	31.870	
10,600.0	10,540.3	10,746.4	10,707.9	38.5	32.1	-163.12	-213.8	1,532.7	2,134.5	2,067.1	67.39	31.672	
10,700.0	10,638.2	10,837.3	10,798.6	39.0	32.4	-163.20	-216.3	1,525.8	2,146.6	2,078.5	68.07	31.535	
10,800.0	10,736.1	10,931.5	10,892.4	39.4	32.8	-163.26	-219.2	1,518.7	2,158.9	2,090.2	68.76	31.399	
10,900.0	10,833.9	11,007.5	10,968.2	39.8	33.0	-163.32	-221.4	1,513.4	2,171.8	2,102.4	69.38	31.301	
11,000.0	10,931.8	11,060.6	11,021.2	40.2	33.2	-163.38	-222.4	1,510.6	2,186.4	2,116.5	69.91	31.275	
11,100.0	11,029.7	11,134.4	11,095.0	40.7	33.5	-163.47	-223.2	1,508.2	2,202.8	2,132.3	70.50	31.246	
11,200.0	11,127.6	11,228.0	11,188.6	41.1	33.8	-163.58	-224.3	1,505.6	2,219.7	2,148.5	71.17	31.189	
11,300.0	11,225.5	11,315.0	11,275.5	41.5	34.1	-163.68	-225.5	1,503.3	2,236.8	2,165.0	71.81	31.149	
11,400.0	11,323.3	11,389.8	11,350.3	42.0	34.3	-163.75	-227.1	1,502.0	2,254.8	2,182.4	72.39	31.147	
11,500.0	11,421.2	11,466.5	11,426.9	42.4	34.5	-163.81	-229.0	1,501.5	2,273.9	2,200.9	72.97	31.161	
11,523.5	11,444.2	11,486.4	11,446.8	42.5	34.6	-163.83	-229.5	1,501.4	2,278.5	2,205.4	73.12	31.162	
11,600.0	11,519.2	11,546.0	11,506.4	42.8	34.8	-163.94	-230.9	1,501.5	2,292.9	2,219.4	73.56	31.172	
11,700.0	11,617.7	11,600.9	11,561.3	43.3	34.9	-164.14	-228.4	1,502.2	2,310.9	2,236.9	73.99	31.233	
11,800.0	11,716.7	11,646.6	11,606.6	43.7	35.0	-164.39	-223.3	1,503.9	2,328.6	2,254.3	74.33	31.328	
11,900.0	11,815.9	11,695.2	11,654.3	44.1	35.2	-164.71	-214.7	1,506.6	2,346.0	2,271.4	74.65	31.428	
12,000.0	11,915.5	11,740.8	11,698.4	44.4	35.3	-165.09	-203.2	1,510.0	2,363.1	2,288.2	74.90	31.549	
12,100.0	12,015.2	11,782.3	11,736.9	44.8	35.3	-165.53	-188.5	1,513.8	2,380.1	2,305.0	75.08	31.701	
12,200.0	12,115.1	11,864.8	11,808.0	45.2	35.4	-166.59	-147.7	1,522.0	2,397.0	2,321.5	75.44	31.772	
12,300.0	12,215.1	12,233.9	12,012.6	45.5	35.8	-173.85	152.3	1,511.1	2,406.6	2,329.6	77.01	31.252	
12,311.9	12,227.0	12,238.8	12,014.5	45.5	35.8	80.55	156.8	1,510.6	2,407.6	2,330.6	77.02	31.258	
12,400.0	12,315.1	12,274.8	12,029.1	45.8	35.8	79.76	189.4	1,506.4	2,416.7	2,339.6	77.15	31.325	
12,500.0	12,415.1	12,281.0	12,031.6	46.2	35.9	79.63	195.0	1,505.7	2,430.5	2,353.5	77.02	31.557	
12,600.0	12,515.1	12,307.9	12,042.0	46.5	35.9	79.04	219.6	1,502.8	2,447.9	2,370.9	76.93	31.818	
12,700.0	12,615.1	12,320.8	12,046.7	46.9	35.9	78.75	231.6	1,501.5	2,469.1	2,392.4	76.69	32.196	
12,711.9	12,627.0	12,322.3	12,047.2	46.9	35.9	78.72	233.0	1,501.3	2,471.8	2,395.2	76.65	32.247	
12,750.0	12,665.1	12,327.4	12,049.0	47.0	35.9	99.60	237.7	1,500.8	2,481.2	2,404.7	76.54	32.419	
12,800.0	12,714.8	12,334.9	12,051.6	47.2	36.0	98.03	244.7	1,500.1	2,495.0	2,418.6	76.38	32.666	
12,850.0	12,763.8	12,343.4	12,054.5	47.4	36.0	96.28	252.6	1,499.4	2,510.1	2,433.9	76.22	32.935	
12,900.0	12,811.8	12,374.0	12,064.2	47.5	36.0	93.97	281.6	1,496.9	2,526.8	2,450.6	76.20	33.161	
12,950.0	12,858.3	12,374.0	12,064.2	47.7	36.0	92.13	281.6	1,496.9	2,544.1	2,468.2	75.96	33.492	
13,000.0	12,903.1	12,374.0	12,064.2	47.8	36.0	90.16	281.6	1,496.9	2,562.4	2,486.7	75.72	33.839	
13,050.0	12,945.8	12,374.0	12,064.2	48.0	36.0	88.09	281.6	1,496.9	2,581.6	2,506.1	75.49	34.198	
13,100.0	12,986.1	12,374.0	12,064.2	48.1	36.0	85.93	281.6	1,496.9	2,601.4	2,526.2	75.27	34.563	
13,150.0	13,023.7	12,413.0	12,075.1	48.3	36.1	83.31	318.9	1,494.2	2,620.9	2,545.6	75.34	34.790	
13,200.0	13,058.2	12,427.0	12,078.6	48.4	36.2	81.01	332.5	1,493.4	2,640.9	2,565.7	75.25	35.097	
13,250.0	13,089.4	12,467.0	12,087.4	48.5	36.3	78.58	371.4	1,491.4	2,661.2	2,585.9	75.36	35.315	
13,300.0	13,117.2	12,467.0	12,087.4	48.7	36.3	76.53	371.4	1,491.4	2,680.6	2,605.4	75.22	35.639	
13,350.0	13,141.1	12,467.0	12,087.4	48.8	36.3	74.51	371.4	1,491.4	2,699.9	2,624.8	75.11	35.946	
13,400.0	13,161.2	12,492.8	12,092.1	48.9	36.4	72.51	396.8	1,490.2	2,718.5	2,643.3	75.21	36.144	
13,450.0	13,177.2	12,513.5	12,095.3	49.1	36.4	70.67	417.2	1,489.3	2,736.5	2,661.2	75.31	36.334	
13,500.0	13,189.1	12,534.2	12,098.0	49.2	36.5	68.98	437.7	1,488.3	2,753.5	2,678.0	75.45	36.494	
13,550.0	13,196.6	12,559.0	12,100.6	49.4	36.6	67.46	462.4	1,487.2	2,769.5	2,693.8	75.65	36.611	
13,600.0	13,199.8	12,584.9	12,102.6	49.6	36.7	66.12	488.2	1,485.9	2,784.3	2,708.4	75.89	36.687	
13,611.9	13,200.0	12,592.6	12,103.1	49.6	36.8	65.84	495.8	1,485.5	2,787.6	2,711.6	75.97	36.696	
13,700.0	13,200.0	12,653.0	12,105.4	50.0	37.0	66.24	556.1	1,482.1	2,811.1	2,734.6	76.54	36.729	
13,800.0	13,200.0	12,717.1	12,106.1	50.4	37.4	66.60	620.0	1,478.4	2,835.9	2,758.7	77.20	36.733	
13,900.0	13,200.0	12,818.9	12,106.5	50.9	37.9	66.99	721.7	1,473.0	2,858.3	2,780.1	78.19	36.555	
14,000.0	13,200.0	12,945.1	12,108.1	51.4	38.7	67.37	847.7	1,465.4	2,876.7	2,797.1	79.52	36.177	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #203H - Sidetrack - Sidetrack — **Offset Site Error:** 0.0 usft

Survey Program: 220-MWD, 3018-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	13,200.0	13,018.7	12,109.1	52.0	39.3	67.60	921.2	1,461.0	2,891.9	2,811.4	80.47	35.938	
14,200.0	13,200.0	13,084.5	12,109.5	52.6	39.8	67.78	986.9	1,457.6	2,904.9	2,823.6	81.39	35.690	
14,300.0	13,200.0	13,235.2	12,110.1	53.2	41.0	67.99	1,137.4	1,449.8	2,915.0	2,831.7	83.29	34.999	
14,400.0	13,200.0	13,346.0	12,109.4	53.8	42.0	68.06	1,247.9	1,442.4	2,920.7	2,835.8	84.85	34.422	
14,500.0	13,200.0	13,495.9	12,109.5	54.5	43.4	68.08	1,397.2	1,429.9	2,921.1	2,834.1	87.00	33.574	
14,600.0	13,200.0	13,556.0	12,109.6	55.1	44.0	68.05	1,457.2	1,425.0	2,918.6	2,830.6	88.07	33.141	
14,687.2	13,200.0	13,593.0	12,110.3	55.7	44.3	68.03	1,494.1	1,422.7	2,915.1	2,826.3	88.80	32.829	
14,700.0	13,200.0	13,593.0	12,110.3	55.8	44.3	68.03	1,494.1	1,422.7	2,914.5	2,825.7	88.83	32.812	
14,800.0	13,200.0	13,655.3	12,111.4	56.5	45.0	68.03	1,556.3	1,419.9	2,910.8	2,820.8	89.97	32.353	
14,900.0	13,200.0	13,707.8	12,111.9	57.3	45.5	68.03	1,608.8	1,418.7	2,908.9	2,817.9	91.00	31.966	
15,000.0	13,200.0	13,783.0	12,111.1	58.1	46.3	68.01	1,684.0	1,417.4	2,908.3	2,815.9	92.39	31.479	
15,100.0	13,200.0	13,936.4	12,109.5	58.9	48.0	67.96	1,837.3	1,412.4	2,906.1	2,811.0	95.04	30.576	
15,200.0	13,200.0	14,097.1	12,110.3	59.7	49.8	67.93	1,997.8	1,405.7	2,902.6	2,804.6	97.96	29.631	
15,300.0	13,200.0	14,160.0	12,112.0	60.6	50.5	67.95	2,060.7	1,403.8	2,899.3	2,800.0	99.36	29.179	
15,400.0	13,200.0	14,215.0	12,113.7	61.6	51.2	67.98	2,115.7	1,403.0	2,897.4	2,796.7	100.66	28.783	
15,500.0	13,200.0	14,252.0	12,114.6	62.5	51.6	68.00	2,152.6	1,402.7	2,896.8	2,795.2	101.65	28.498	
15,513.5	13,200.0	14,276.5	12,115.0	62.6	51.9	68.00	2,177.2	1,402.6	2,896.7	2,794.6	102.14	28.361	
15,600.0	13,200.0	14,311.0	12,115.2	63.5	52.3	68.01	2,211.6	1,402.9	2,897.9	2,794.8	103.04	28.124	
15,700.0	13,200.0	14,346.0	12,114.8	64.5	52.7	68.01	2,246.6	1,403.7	2,901.2	2,797.2	103.99	27.898	
15,800.0	13,200.0	14,593.0	12,109.1	65.5	55.8	67.94	2,493.5	1,405.8	2,904.2	2,795.4	108.86	26.680	
15,900.0	13,200.0	14,748.3	12,109.1	66.6	57.8	67.92	2,648.7	1,402.4	2,903.0	2,790.9	112.15	25.884	
16,000.0	13,200.0	14,816.0	12,110.2	67.7	58.7	67.93	2,716.4	1,400.8	2,901.0	2,787.1	113.87	25.476	
16,075.5	13,200.0	14,851.8	12,111.0	68.5	59.1	67.95	2,752.1	1,400.5	2,900.4	2,785.5	114.89	25.246	
16,100.0	13,200.0	14,862.1	12,111.3	68.8	59.3	67.95	2,762.5	1,400.6	2,900.5	2,785.3	115.19	25.180	
16,200.0	13,200.0	14,911.0	12,112.8	69.9	59.9	67.99	2,811.3	1,401.7	2,902.0	2,785.4	116.57	24.895	
16,300.0	13,200.0	14,911.0	12,112.8	71.1	59.9	67.99	2,811.3	1,401.7	2,905.9	2,789.0	116.92	24.855	
16,400.0	13,200.0	14,964.3	12,113.5	72.3	60.6	68.03	2,864.5	1,404.4	2,911.7	2,793.3	118.35	24.601	
16,500.0	13,200.0	15,006.0	12,112.2	73.5	61.1	68.03	2,906.1	1,407.7	2,920.2	2,800.7	119.52	24.434	
16,600.0	13,200.0	15,107.2	12,107.7	74.7	62.4	68.02	3,006.8	1,416.0	2,930.3	2,808.3	121.95	24.029	
16,700.0	13,200.0	15,134.3	12,106.2	75.9	62.8	68.01	3,033.8	1,418.3	2,940.8	2,818.0	122.77	23.953	
16,800.0	13,200.0	15,667.0	12,089.7	77.1	70.1	67.85	3,564.1	1,433.0	2,945.6	2,811.3	134.37	21.922	
16,900.0	13,200.0	15,735.1	12,092.4	78.4	71.1	67.89	3,632.1	1,431.7	2,943.1	2,806.7	136.35	21.585	
17,000.0	13,200.0	16,001.7	12,100.3	79.7	75.0	67.96	3,898.3	1,419.3	2,938.4	2,796.1	142.33	20.644	
17,100.0	13,200.0	16,096.5	12,104.0	81.0	76.4	67.98	3,992.7	1,412.3	2,930.8	2,785.9	144.91	20.224	
17,200.0	13,200.0	16,166.7	12,107.5	82.3	77.4	68.01	4,062.6	1,407.9	2,923.8	2,776.8	147.04	19.885	
17,300.0	13,200.0	16,233.0	12,109.3	83.6	78.4	68.02	4,128.8	1,404.1	2,918.2	2,769.1	149.07	19.576	
17,400.0	13,200.0	16,309.8	12,110.7	84.9	79.6	68.02	4,205.6	1,400.2	2,913.5	2,762.2	151.30	19.256	
17,500.0	13,200.0	16,440.4	12,114.2	86.3	81.5	68.04	4,335.9	1,393.5	2,908.4	2,753.7	154.66	18.804	
17,600.0	13,200.0	16,499.8	12,116.1	87.6	82.4	68.06	4,395.2	1,390.7	2,903.6	2,747.0	156.59	18.543	
17,700.0	13,200.0	16,517.0	12,116.7	89.0	82.7	68.07	4,412.4	1,390.1	2,900.7	2,743.1	157.57	18.409	
17,787.7	13,200.0	16,568.9	12,117.2	90.2	83.4	68.07	4,464.2	1,388.9	2,899.5	2,740.3	159.20	18.214	
17,800.0	13,200.0	16,572.9	12,117.1	90.3	83.5	68.07	4,468.3	1,388.8	2,899.6	2,740.2	159.35	18.196	
17,900.0	13,200.0	16,611.0	12,115.4	91.7	84.1	68.04	4,506.3	1,388.5	2,901.0	2,740.4	160.66	18.057	
18,000.0	13,200.0	16,810.2	12,113.4	93.1	87.1	68.01	4,705.4	1,388.4	2,902.4	2,736.8	165.64	17.522	
18,100.0	13,200.0	16,931.7	12,120.0	94.5	88.9	68.13	4,826.7	1,387.0	2,899.8	2,730.8	169.01	17.158	
18,200.0	13,200.0	16,989.0	12,122.6	95.9	89.7	68.19	4,883.9	1,387.5	2,899.2	2,728.3	170.91	16.964	
18,207.4	13,200.0	16,989.0	12,122.6	96.0	89.7	68.19	4,883.9	1,387.5	2,899.2	2,728.3	170.95	16.960	
18,300.0	13,200.0	17,071.8	12,125.1	97.3	91.0	68.24	4,966.7	1,388.5	2,899.9	2,726.5	173.38	16.726	
18,400.0	13,200.0	17,192.1	12,126.0	98.7	92.8	68.26	5,087.0	1,388.0	2,899.9	2,723.3	176.67	16.414	
18,500.0	13,200.0	17,313.6	12,126.4	100.2	94.7	68.26	5,208.5	1,385.8	2,898.8	2,718.8	179.99	16.106	
18,600.0	13,200.0	17,437.8	12,125.2	101.6	96.6	68.23	5,332.6	1,383.0	2,897.9	2,714.5	183.33	15.807	
18,700.0	13,200.0	17,570.2	12,126.7	103.0	98.6	68.23	5,465.0	1,378.6	2,895.0	2,708.1	186.89	15.490	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #203H - Sidetrack - Sidetrack — **Offset Site Error:** 0.0 usft

Survey Program: 220-MWD, 3018-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	13,200.0	17,635.8	12,128.0	104.5	99.6	68.24	5,530.5	1,376.9	2,892.5	2,703.5	189.02	15.303	
18,894.9	13,200.0	17,651.0	12,128.4	105.9	99.9	68.25	5,545.7	1,376.6	2,891.9	2,702.0	189.92	15.226	
18,900.0	13,200.0	17,678.1	12,128.8	105.9	100.3	68.26	5,572.8	1,376.4	2,891.6	2,701.0	190.59	15.172	
19,000.0	13,200.0	17,713.4	12,128.5	107.4	100.8	68.25	5,608.1	1,376.4	2,892.8	2,700.9	191.92	15.073	
19,100.0	13,200.0	17,879.0	12,123.8	108.9	103.4	68.18	5,773.6	1,376.6	2,895.1	2,698.8	196.27	14.750	
19,200.0	13,200.0	17,989.4	12,122.8	110.3	105.1	68.16	5,884.0	1,375.6	2,895.3	2,695.9	199.38	14.522	
19,273.1	13,200.0	18,050.7	12,122.3	111.4	106.0	68.15	5,945.3	1,374.6	2,895.0	2,693.8	201.20	14.389	
19,300.0	13,200.0	18,062.7	12,122.2	111.8	106.2	68.14	5,957.2	1,374.5	2,895.1	2,693.5	201.63	14.359	
19,400.0	13,200.0	18,122.0	12,121.1	113.3	107.2	68.13	6,016.6	1,374.8	2,896.8	2,693.3	203.53	14.233	
19,500.0	13,200.0	18,285.2	12,119.8	114.8	109.7	68.11	6,179.8	1,374.3	2,897.4	2,689.4	207.91	13.935	
19,600.0	13,200.0	19,600.0	12,119.8	116.3	130.4	68.09	6,357.1	1,370.5	2,896.2	2,666.7	229.53	12.618	
19,700.0	13,200.0	18,565.5	12,121.1	117.8	114.1	68.09	6,459.9	1,366.6	2,892.9	2,677.4	215.55	13.421	
19,800.0	13,200.0	18,633.7	12,121.3	119.3	115.2	68.09	6,528.1	1,364.5	2,890.6	2,672.9	217.77	13.274	
19,900.0	13,200.0	18,689.0	12,122.1	120.8	116.0	68.10	6,583.4	1,363.5	2,889.4	2,669.7	219.69	13.152	
19,906.9	13,200.0	18,689.0	12,122.1	120.9	116.0	68.10	6,583.4	1,363.5	2,889.4	2,669.7	219.73	13.150	
20,000.0	13,200.0	18,722.0	12,122.2	122.3	116.6	68.10	6,616.4	1,363.5	2,890.2	2,669.2	221.00	13.078	
20,100.0	13,200.0	18,748.8	12,121.6	123.8	117.0	68.09	6,643.2	1,364.0	2,893.5	2,671.5	222.04	13.031	
20,200.0	13,200.0	18,784.0	12,119.7	125.3	117.5	68.07	6,678.3	1,365.4	2,899.4	2,676.3	223.18	12.991	
20,300.0	13,200.0	18,994.8	12,116.4	126.8	120.8	68.08	6,888.8	1,372.6	2,903.5	2,674.4	229.08	12.675	
20,400.0	13,200.0	19,066.0	12,117.5	128.4	121.9	68.12	6,960.0	1,375.4	2,907.1	2,675.8	231.33	12.567	
20,500.0	13,200.0	19,261.1	12,113.2	129.9	125.0	68.06	7,155.0	1,376.7	2,909.1	2,672.5	236.60	12.295	
20,600.0	13,200.0	19,402.9	12,105.8	131.4	127.2	67.91	7,296.5	1,373.0	2,909.4	2,669.1	240.34	12.105	
20,700.0	13,200.0	19,524.7	12,102.8	132.9	129.2	67.83	7,418.2	1,369.1	2,908.1	2,664.4	243.71	11.933	
20,800.0	13,200.0	19,615.1	12,101.0	134.5	130.6	67.78	7,508.5	1,366.4	2,906.8	2,660.4	246.40	11.797	
20,900.0	13,200.0	19,736.0	12,100.9	136.0	132.5	67.77	7,629.4	1,363.7	2,905.4	2,655.6	249.82	11.630	
21,000.0	13,200.0	19,832.6	12,103.5	137.6	134.1	67.81	7,726.0	1,362.1	2,903.7	2,650.9	252.79	11.487	
21,100.0	13,200.0	19,931.8	12,105.9	139.1	135.7	67.85	7,825.1	1,360.6	2,902.1	2,646.3	255.80	11.345	
21,200.0	13,200.0	20,037.4	12,107.4	140.7	137.4	67.86	7,930.7	1,358.0	2,899.9	2,641.0	258.94	11.199	
21,300.0	13,200.0	20,105.0	12,107.3	142.2	138.4	67.86	7,998.3	1,356.7	2,898.8	2,637.6	261.17	11.099	
21,400.0	13,200.0	21,400.0	12,106.0	143.8	159.2	67.82	8,095.3	1,354.7	2,898.2	2,616.0	282.18	10.271	
21,450.4	13,200.0	20,234.0	12,105.5	144.5	140.5	67.81	8,127.2	1,354.1	2,897.9	2,632.8	265.10	10.932	
21,500.0	13,200.0	20,260.2	12,105.0	145.3	140.9	67.80	8,153.4	1,353.8	2,898.1	2,632.1	266.00	10.895	
21,600.0	13,200.0	20,323.3	12,103.7	146.9	141.9	67.78	8,216.5	1,353.9	2,899.7	2,631.6	268.04	10.818	
21,700.0	13,200.0	20,421.6	12,100.5	148.4	143.5	67.73	8,314.7	1,354.3	2,902.0	2,631.1	270.91	10.712	
21,800.0	13,200.0	20,550.6	12,097.5	150.0	145.6	67.68	8,443.8	1,354.0	2,903.3	2,628.7	274.56	10.574	
21,900.0	13,200.0	20,642.0	12,094.7	151.5	147.0	67.63	8,535.0	1,353.3	2,904.5	2,627.3	277.26	10.476	
22,000.0	13,200.0	20,714.8	12,092.2	153.1	148.2	67.59	8,607.8	1,353.2	2,906.3	2,626.8	279.50	10.398	
22,100.0	13,200.0	20,800.5	12,090.1	154.7	149.6	67.56	8,693.5	1,354.4	2,909.2	2,627.2	282.08	10.313	
22,200.0	13,200.0	20,927.3	12,090.8	156.2	151.6	67.60	8,820.3	1,356.6	2,911.3	2,625.5	285.84	10.185	
22,300.0	13,200.0	21,014.9	12,090.9	157.8	153.0	67.62	8,907.8	1,357.9	2,913.4	2,624.9	288.54	10.097	
22,400.0	13,200.0	21,175.3	12,091.2	159.4	155.5	67.64	9,068.2	1,359.4	2,915.0	2,621.9	293.10	9.945	
22,500.0	13,200.0	21,268.5	12,092.5	161.0	157.0	67.67	9,161.4	1,359.6	2,915.3	2,619.3	296.00	9.849	
22,600.0	13,200.0	21,362.2	12,092.3	162.5	158.5	67.67	9,255.1	1,359.4	2,916.0	2,617.2	298.86	9.757	
22,700.0	13,200.0	21,455.4	12,090.6	164.1	160.0	67.64	9,348.3	1,358.7	2,916.7	2,615.1	301.66	9.669	
22,800.0	13,200.0	21,593.4	12,086.4	165.7	162.2	67.57	9,486.2	1,357.6	2,918.1	2,612.6	305.47	9.553	
22,900.0	13,200.0	21,732.3	12,085.9	167.3	164.5	67.54	9,625.1	1,354.3	2,916.6	2,607.3	309.34	9.428	
23,000.0	13,200.0	21,827.0	12,084.3	168.9	166.0	67.49	9,719.7	1,351.4	2,915.2	2,603.0	312.17	9.338	
23,100.0	13,200.0	21,944.6	12,083.0	170.4	167.9	67.45	9,837.2	1,347.3	2,913.1	2,597.6	315.51	9.233	
23,200.0	13,200.0	22,032.4	12,081.1	172.0	169.4	67.39	9,924.9	1,344.1	2,911.2	2,593.1	318.18	9.150	
23,300.0	13,200.0	22,141.2	12,077.2	173.6	171.1	67.30	10,033.6	1,339.7	2,909.6	2,588.4	321.23	9.058	
23,400.0	13,200.0	22,232.6	12,074.0	175.2	172.6	67.21	10,113.7	1,336.0	2,907.7	2,583.9	323.84	8.979	
23,504.9	13,200.0	22,292.0	12,070.4	176.9	173.6	67.13	10,184.1	1,333.0	2,906.5	2,580.7	325.88	8.919 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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #203H - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 220-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	90.09	-3.5	2,313.3	2,313.3				
100.0	100.0	90.3	90.3	0.1	0.1	90.09	-3.5	2,313.5	2,313.5	2,313.3	0.27	8,536.162	
200.0	200.0	180.6	180.6	0.5	0.3	90.08	-3.4	2,314.1	2,314.2	2,313.4	0.77	3,005.474	
300.0	300.0	272.4	272.4	0.8	0.5	90.08	-3.2	2,315.0	2,315.2	2,313.8	1.38	1,679.909	
400.0	400.0	370.3	370.3	1.2	0.9	90.08	-3.3	2,316.3	2,316.5	2,314.4	2.09	1,110.090	
500.0	500.0	481.7	481.7	1.6	1.3	90.09	-3.6	2,317.5	2,317.6	2,314.7	2.84	815.283	
600.0	600.0	603.7	603.7	1.9	1.7	90.10	-3.8	2,317.9	2,317.9	2,314.3	3.63	639.229	
700.0	700.0	716.8	716.8	2.3	2.1	90.11	-4.4	2,317.3	2,317.4	2,313.0	4.37	530.224	
800.0	800.0	824.5	824.5	2.6	2.5	90.13	-5.2	2,316.4	2,316.5	2,311.4	5.10	454.310	
900.0	900.0	922.2	922.1	3.0	2.8	90.14	-5.8	2,315.3	2,315.4	2,309.6	5.80	399.512	
1,000.0	1,000.0	1,017.1	1,017.1	3.4	3.1	90.16	-6.3	2,314.5	2,314.5	2,308.1	6.48	356.990	
1,100.0	1,100.0	1,345.4	1,344.7	3.7	4.3	90.10	-3.9	2,299.5	2,312.5	2,304.5	7.98	289.771	
1,200.0	1,200.0	1,442.3	1,441.1	4.1	4.6	90.06	-2.5	2,289.1	2,301.8	2,293.1	8.67	265.360	
1,300.0	1,300.0	1,536.7	1,534.9	4.4	5.0	90.04	-1.6	2,279.4	2,291.5	2,282.1	9.36	244.752	
1,400.0	1,400.0	1,631.0	1,628.8	4.8	5.3	90.02	-0.9	2,269.8	2,281.3	2,271.3	10.05	226.919	
1,500.0	1,500.0	1,715.3	1,712.7	5.1	5.6	90.02	-0.9	2,261.6	2,271.6	2,260.9	10.71	212.057	
1,600.0	1,600.0	1,804.1	1,801.1	5.5	6.0	90.07	-2.6	2,253.6	2,262.5	2,251.1	11.39	198.683	
1,700.0	1,700.0	1,894.4	1,891.1	5.9	6.3	90.11	-4.5	2,245.7	2,253.8	2,241.7	12.07	186.732	
1,800.0	1,800.0	1,981.6	1,977.9	6.2	6.6	90.16	-6.4	2,238.5	2,245.6	2,232.9	12.74	176.234	
1,900.0	1,900.0	2,090.7	2,086.7	6.6	7.0	90.23	-9.0	2,229.9	2,237.8	2,224.3	13.49	165.893	
2,000.0	2,000.0	2,199.5	2,195.0	6.9	7.4	90.32	-12.5	2,220.4	2,229.0	2,214.8	14.24	156.579	
2,100.0	2,100.0	2,292.5	2,287.6	7.3	7.8	90.41	-15.8	2,212.4	2,220.4	2,205.5	14.93	148.708	
2,200.0	2,200.0	2,379.0	2,373.8	7.7	8.1	90.50	-19.2	2,205.3	2,212.2	2,196.6	15.61	141.754	
2,300.0	2,300.0	2,462.3	2,456.7	8.0	8.4	90.58	-22.3	2,199.0	2,204.7	2,188.4	16.27	135.509	
2,400.0	2,400.0	2,546.4	2,540.5	8.4	8.8	90.66	-25.4	2,193.3	2,198.0	2,181.0	16.94	129.780	
2,500.0	2,500.0	2,687.2	2,680.9	8.7	9.3	90.81	-30.7	2,183.8	2,191.5	2,173.7	17.79	123.175	
2,600.0	2,600.0	2,775.1	2,768.5	9.1	9.6	90.90	-34.1	2,176.6	2,183.4	2,164.9	18.47	118.187	
2,700.0	2,700.0	2,855.6	2,848.6	9.4	9.9	90.99	-37.7	2,170.7	2,176.1	2,156.9	19.13	113.742	
2,800.0	2,800.0	2,930.1	2,922.9	9.8	10.2	91.09	-41.3	2,165.9	2,169.8	2,150.0	19.77	109.760	
2,900.0	2,900.0	3,010.6	3,003.2	10.2	10.5	91.19	-45.0	2,161.8	2,164.7	2,144.3	20.42	105.993	
3,000.0	3,000.0	3,135.6	3,128.1	10.5	11.0	91.28	-48.1	2,155.4	2,159.7	2,138.5	21.23	101.739	
3,100.0	3,100.0	3,230.3	3,222.6	10.9	11.3	91.31	-49.2	2,149.5	2,153.6	2,131.6	21.93	98.209	
3,200.0	3,200.0	3,320.8	3,312.9	11.2	11.6	91.32	-49.4	2,144.7	2,148.2	2,125.6	22.61	95.002	
3,300.0	3,300.0	3,489.8	3,481.5	11.6	12.3	91.21	-45.0	2,133.1	2,141.3	2,117.8	23.54	90.971	
3,400.0	3,400.0	3,635.0	3,625.9	12.0	12.8	91.06	-39.4	2,120.0	2,132.3	2,108.0	24.38	87.478	
3,500.0	3,500.0	3,719.4	3,709.9	12.3	13.1	91.05	-38.6	2,111.3	2,122.0	2,097.0	25.05	84.714	
3,600.0	3,600.0	3,794.1	3,784.2	12.7	13.4	91.08	-39.7	2,104.3	2,112.7	2,087.0	25.70	82.218	
3,700.0	3,700.0	3,933.3	3,922.8	13.0	13.9	91.22	-44.5	2,091.4	2,103.7	2,077.2	26.53	79.297	
3,800.0	3,800.0	4,037.4	4,026.0	13.4	14.4	91.43	-51.9	2,080.2	2,093.1	2,065.8	27.27	76.757	
3,900.0	3,900.0	4,124.1	4,111.9	13.8	14.7	91.63	-59.1	2,070.9	2,082.5	2,054.6	27.96	74.478	
4,000.0	4,000.0	4,202.0	4,189.2	14.1	15.0	91.80	-64.7	2,063.3	2,073.0	2,044.3	28.63	72.412	
4,100.0	4,100.0	4,294.9	4,281.6	14.5	15.4	91.92	-69.1	2,055.0	2,064.2	2,034.8	29.33	70.370	
4,200.0	4,200.0	4,378.9	4,365.3	14.8	15.7	91.99	-71.3	2,047.8	2,055.7	2,025.7	30.01	68.503	
4,300.0	4,300.0	4,519.0	4,504.8	15.2	16.2	92.08	-74.0	2,035.0	2,046.6	2,015.7	30.84	66.352	
4,400.0	4,400.0	4,616.5	4,601.7	15.5	16.6	92.15	-75.9	2,025.1	2,036.5	2,005.0	31.56	64.529	
4,500.0	4,500.0	4,705.1	4,689.9	15.9	17.0	92.21	-77.6	2,016.5	2,026.9	1,994.6	32.25	62.845	
4,600.0	4,600.0	4,791.7	4,776.1	16.3	17.3	92.26	-79.3	2,008.6	2,017.8	1,984.9	32.94	61.262	
4,700.0	4,700.0	4,879.6	4,863.7	16.6	17.6	92.32	-81.1	2,001.1	2,009.4	1,975.8	33.63	59.757	
4,800.0	4,800.0	4,996.2	4,979.9	17.0	18.1	92.40	-83.5	1,991.5	2,001.4	1,967.0	34.40	58.188	
4,900.0	4,900.0	5,150.1	5,132.9	17.3	18.7	92.51	-86.4	1,974.9	1,990.5	1,955.2	35.25	56.466	
5,000.0	5,000.0	5,246.8	5,228.9	17.7	19.1	92.57	-88.2	1,963.6	1,978.9	1,942.9	35.97	55.019	
5,100.0	5,100.0	5,340.3	5,321.7	18.1	19.4	92.64	-89.9	1,952.9	1,967.5	1,930.8	36.68	53.644	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

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

Survey Program: 220-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	5,200.0	5,429.0	5,409.9	18.4	19.8	92.69	-91.5	1,943.1	1,956.5	1,919.1	37.37	52.348	
5,300.0	5,300.0	5,513.2	5,493.6	18.8	20.1	92.75	-92.9	1,934.3	1,946.2	1,908.1	38.06	51.134	
5,400.0	5,400.0	5,608.9	5,588.9	19.1	20.5	92.81	-94.4	1,924.8	1,936.3	1,897.5	38.77	49.940	
5,500.0	5,500.0	5,699.0	5,678.5	19.5	20.8	92.86	-95.7	1,916.1	1,926.8	1,887.3	39.47	48.816	
5,600.0	5,600.0	5,791.0	5,770.1	19.8	21.2	92.91	-96.9	1,907.7	1,917.7	1,877.6	40.17	47.738	
5,700.0	5,700.0	5,884.4	5,863.1	20.2	21.6	92.95	-97.8	1,899.5	1,909.0	1,868.2	40.88	46.702	
5,800.0	5,800.0	5,979.5	5,957.9	20.6	21.9	92.99	-98.7	1,891.5	1,900.6	1,859.0	41.59	45.704	
5,900.0	5,900.0	6,069.8	6,047.9	20.9	22.3	93.02	-99.5	1,884.1	1,892.5	1,850.3	42.28	44.762	
6,000.0	6,000.0	6,166.1	6,143.9	21.3	22.6	93.06	-100.2	1,876.7	1,884.8	1,841.9	42.99	43.844	
6,100.0	6,100.0	6,261.2	6,238.7	21.6	23.0	93.09	-100.8	1,869.5	1,877.3	1,833.6	43.70	42.963	
6,200.0	6,200.0	6,417.0	6,393.8	22.0	23.6	93.15	-102.2	1,855.3	1,868.2	1,823.7	44.55	41.932	
6,300.0	6,300.0	6,521.5	6,497.7	22.4	24.0	93.21	-103.5	1,844.1	1,857.6	1,812.3	45.29	41.019	
6,400.0	6,400.0	6,614.1	6,589.9	22.7	24.4	93.25	-104.3	1,834.3	1,847.1	1,801.1	45.99	40.160	
6,500.0	6,500.0	6,707.3	6,682.6	23.1	24.7	93.30	-105.4	1,824.9	1,837.0	1,790.3	46.70	39.334	
6,600.0	6,600.0	6,803.1	6,777.8	23.4	25.1	93.40	-107.7	1,815.3	1,827.2	1,779.8	47.42	38.533	
6,700.0	6,700.0	6,896.4	6,870.6	23.8	25.5	93.49	-110.2	1,806.2	1,817.6	1,769.4	48.13	37.765	
6,800.0	6,800.0	6,988.8	6,962.6	24.1	25.8	93.58	-112.5	1,797.6	1,808.4	1,759.6	48.84	37.029	
6,900.0	6,900.0	7,082.8	7,056.2	24.5	26.2	93.66	-114.6	1,789.1	1,799.6	1,750.0	49.55	36.320	
7,000.0	7,000.0	7,178.3	7,151.3	24.9	26.6	93.75	-116.6	1,780.8	1,791.0	1,740.8	50.26	35.634	
7,100.0	7,100.0	7,271.6	7,244.3	25.2	26.9	-160.71	-118.6	1,772.9	1,783.5	1,732.6	50.96	35.000	
7,200.0	7,200.0	7,360.9	7,333.3	25.5	27.3	-160.67	-120.8	1,765.8	1,778.2	1,726.5	51.63	34.439	
7,300.0	7,299.9	7,473.5	7,445.5	25.9	27.7	-160.63	-123.6	1,757.1	1,774.8	1,722.4	52.37	33.891	
7,400.0	7,399.7	7,579.5	7,551.1	26.2	28.1	-160.60	-126.3	1,747.8	1,772.0	1,718.9	53.09	33.380	
7,488.5	7,487.9	7,658.9	7,630.1	26.5	28.4	-160.59	-128.3	1,741.0	1,771.1	1,717.4	53.69	32.990	CC
7,500.0	7,499.4	7,669.0	7,640.2	26.6	28.5	-160.59	-128.6	1,740.2	1,771.1	1,717.3	53.76	32.942	ES
7,600.0	7,598.9	7,762.2	7,733.1	26.9	28.8	-160.59	-130.8	1,732.8	1,772.4	1,718.0	54.45	32.552	
7,700.0	7,698.3	7,859.1	7,829.7	27.2	29.2	-160.61	-133.1	1,725.4	1,775.6	1,720.5	55.14	32.200	
7,800.0	7,797.4	7,951.6	7,921.9	27.6	29.5	-160.64	-135.1	1,718.6	1,780.8	1,724.9	55.83	31.899	
7,900.0	7,896.3	8,059.7	8,029.7	27.9	29.9	-160.68	-137.9	1,710.7	1,787.6	1,731.1	56.55	31.612	
8,000.0	7,994.9	8,152.4	8,122.0	28.3	30.3	-160.71	-140.6	1,703.7	1,796.0	1,738.7	57.23	31.381	
8,100.0	8,093.3	8,285.0	8,254.2	28.6	30.8	-160.83	-143.2	1,693.4	1,805.7	1,747.7	58.01	31.125	
8,182.6	8,174.2	8,412.0	8,380.5	28.9	31.3	-161.00	-144.8	1,679.8	1,812.3	1,753.6	58.68	30.886	
8,200.0	8,191.3	8,431.9	8,400.2	29.0	31.4	-161.03	-145.0	1,677.5	1,813.7	1,754.9	58.80	30.843	
8,300.0	8,289.1	8,516.8	8,484.6	29.4	31.7	-161.16	-146.0	1,667.9	1,822.0	1,762.5	59.48	30.630	
8,400.0	8,387.0	8,603.0	8,570.3	29.7	32.1	-161.29	-147.0	1,659.0	1,831.2	1,771.0	60.16	30.437	
8,500.0	8,484.9	8,688.9	8,655.8	30.1	32.4	-161.42	-148.2	1,650.6	1,841.1	1,780.2	60.84	30.262	
8,600.0	8,582.8	8,774.3	8,740.9	30.5	32.7	-161.54	-149.4	1,642.9	1,851.7	1,790.2	61.51	30.105	
8,700.0	8,680.6	8,859.2	8,825.4	30.9	33.1	-161.66	-150.7	1,635.9	1,863.1	1,800.9	62.18	29.965	
8,800.0	8,778.5	8,969.1	8,935.0	31.2	33.5	-161.79	-153.0	1,627.4	1,875.1	1,812.2	62.91	29.806	
8,900.0	8,876.4	9,066.9	9,032.4	31.6	33.8	-161.89	-155.8	1,618.7	1,885.9	1,822.3	63.62	29.646	
9,000.0	8,974.3	9,163.5	9,128.6	32.0	34.2	-161.99	-158.4	1,610.9	1,897.6	1,833.3	64.32	29.503	
9,100.0	9,072.1	9,249.8	9,214.6	32.4	34.5	-162.10	-159.7	1,603.9	1,909.2	1,844.2	64.99	29.376	
9,200.0	9,170.0	9,362.7	9,327.2	32.8	35.0	-162.27	-160.9	1,595.6	1,921.5	1,855.8	65.74	29.231	
9,300.0	9,267.9	9,453.8	9,418.0	33.2	35.3	-162.37	-163.2	1,588.0	1,932.9	1,866.5	66.43	29.100	
9,400.0	9,365.8	9,580.1	9,543.8	33.6	35.8	-162.50	-166.1	1,577.6	1,944.6	1,877.3	67.21	28.932	
9,500.0	9,463.7	9,657.4	9,620.9	34.0	36.1	-162.61	-167.1	1,571.0	1,955.7	1,887.8	67.87	28.817	
9,600.0	9,561.5	9,773.2	9,736.2	34.4	36.6	-162.75	-169.0	1,561.3	1,967.0	1,898.4	68.62	28.664	
9,700.0	9,659.4	9,873.6	9,836.1	34.8	36.9	-162.85	-171.6	1,552.3	1,977.9	1,908.5	69.35	28.522	
9,800.0	9,757.3	9,969.9	9,932.0	35.2	37.3	-162.93	-174.4	1,543.6	1,988.6	1,918.6	70.06	28.386	
9,900.0	9,855.2	10,053.9	10,015.7	35.6	37.6	-163.00	-176.9	1,536.5	2,000.0	1,929.3	70.73	28.276	
10,000.0	9,953.0	10,168.8	10,130.1	36.0	38.1	-163.09	-180.4	1,526.5	2,011.0	1,939.5	71.50	28.127	
10,100.0	10,050.9	10,263.3	10,224.2	36.4	38.5	-163.16	-183.3	1,518.5	2,022.3	1,950.1	72.21	28.007	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #203H - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 220-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
10,200.0	10,148.8	10,367.5	10,327.9	36.9	38.9	-163.25	-186.2	1,508.9	2,032.9	1,959.9	72.94	27.870	
10,300.0	10,246.7	10,445.9	10,406.0	37.3	39.2	-163.31	-188.4	1,502.5	2,044.5	1,970.9	73.60	27.778	
10,400.0	10,344.6	10,562.9	10,522.7	37.7	39.6	-163.43	-190.9	1,493.0	2,056.2	1,981.8	74.38	27.646	
10,500.0	10,442.4	10,680.7	10,639.9	38.1	40.1	-163.54	-193.9	1,482.0	2,066.6	1,991.5	75.15	27.500	
10,600.0	10,540.3	10,766.6	10,725.4	38.5	40.4	-163.60	-196.3	1,474.0	2,077.1	2,001.2	75.84	27.388	
10,700.0	10,638.2	10,835.7	10,794.1	39.0	40.7	-163.64	-198.8	1,468.2	2,088.5	2,012.1	76.47	27.312	
10,800.0	10,736.1	10,897.3	10,855.6	39.4	40.9	-163.67	-201.2	1,464.1	2,101.8	2,024.7	77.06	27.275	
10,900.0	10,833.9	10,984.8	10,942.9	39.8	41.2	-163.71	-204.7	1,459.3	2,116.1	2,038.4	77.73	27.223 SF	
11,000.0	10,931.8	11,046.9	11,004.9	40.2	41.5	-163.76	-206.7	1,456.6	2,131.6	2,053.3	78.29	27.226	
11,100.0	11,029.7	11,120.1	11,078.0	40.7	41.7	-163.84	-208.0	1,454.7	2,148.7	2,069.8	78.88	27.238	
11,200.0	11,127.6	11,206.1	11,164.0	41.1	42.0	-163.94	-209.1	1,452.9	2,166.3	2,086.8	79.53	27.239	
11,300.0	11,225.5	11,281.8	11,239.7	41.5	42.3	-164.04	-209.5	1,452.1	2,185.0	2,104.8	80.12	27.271	
11,400.0	11,323.3	11,370.7	11,328.6	42.0	42.6	-164.16	-209.9	1,451.7	2,204.3	2,123.5	80.77	27.290	
11,500.0	11,421.2	11,461.2	11,419.1	42.4	42.9	-164.27	-211.0	1,451.7	2,224.0	2,142.6	81.42	27.314	
11,523.5	11,444.2	11,468.0	11,425.9	42.5	42.9	-164.28	-211.1	1,451.7	2,228.8	2,147.3	81.50	27.348	
11,600.0	11,519.2	11,468.0	11,425.9	42.8	42.9	-164.34	-211.1	1,451.7	2,245.0	2,163.5	81.56	27.527	
11,700.0	11,617.7	11,468.0	11,425.9	43.3	42.9	-164.44	-211.1	1,451.7	2,267.9	2,186.3	81.52	27.818	
11,800.0	11,716.7	11,468.0	11,425.9	43.7	42.9	-164.54	-211.1	1,451.7	2,292.4	2,211.0	81.37	28.173	
11,900.0	11,815.9	11,468.0	11,425.9	44.1	42.9	-164.65	-211.1	1,451.7	2,318.6	2,237.5	81.10	28.590	
12,000.0	11,915.5	11,468.0	11,425.9	44.4	42.9	-164.76	-211.1	1,451.7	2,346.3	2,265.6	80.72	29.068	
12,100.0	12,015.2	11,468.0	11,425.9	44.8	42.9	-164.88	-211.1	1,451.7	2,375.5	2,295.3	80.24	29.607	
12,200.0	12,115.1	11,468.0	11,425.9	45.2	42.9	-165.01	-211.1	1,451.7	2,406.2	2,326.5	79.66	30.205	
12,300.0	12,215.1	11,468.0	11,425.9	45.5	42.9	-165.14	-211.1	1,451.7	2,438.2	2,359.2	79.00	30.862	
12,311.9	12,227.0	11,468.0	11,425.9	45.5	42.9	89.36	-211.1	1,451.7	2,442.1	2,363.2	78.92	30.944	
12,400.0	12,315.1	11,468.0	11,425.9	45.8	42.9	89.36	-211.1	1,451.7	2,472.4	2,394.1	78.27	31.587	
12,500.0	12,415.1	11,468.0	11,425.9	46.2	42.9	89.36	-211.1	1,451.7	2,510.1	2,432.6	77.49	32.393	
12,600.0	12,515.1	11,468.0	11,425.9	46.5	42.9	89.36	-211.1	1,451.7	2,551.2	2,474.5	76.66	33.279	
12,700.0	12,615.1	11,468.0	11,425.9	46.9	42.9	89.36	-211.1	1,451.7	2,595.4	2,519.6	75.80	34.242	
12,711.9	12,627.0	11,468.0	11,425.9	46.9	42.9	89.36	-211.1	1,451.7	2,600.9	2,525.2	75.69	34.361	
12,750.0	12,665.1	11,468.0	11,425.9	47.0	42.9	109.36	-211.1	1,451.7	2,619.1	2,543.8	75.36	34.754	
12,800.0	12,714.8	11,468.0	11,425.9	47.2	42.9	106.52	-211.1	1,451.7	2,644.7	2,569.8	74.94	35.293	
12,850.0	12,763.8	11,468.0	11,425.9	47.4	42.9	103.37	-211.1	1,451.7	2,672.1	2,597.6	74.52	35.855	
12,900.0	12,811.8	11,468.0	11,425.9	47.5	42.9	99.91	-211.1	1,451.7	2,700.9	2,626.8	74.13	36.434	
12,950.0	12,858.3	11,468.0	11,425.9	47.7	42.9	96.19	-211.1	1,451.7	2,730.9	2,657.2	73.76	37.022	
13,000.0	12,903.1	11,468.0	11,425.9	47.8	42.9	92.26	-211.1	1,451.7	2,761.9	2,688.5	73.43	37.615	
13,050.0	12,945.8	11,468.0	11,425.9	48.0	42.9	88.17	-211.1	1,451.7	2,793.6	2,720.5	73.12	38.204	
13,100.0	12,986.1	11,468.0	11,425.9	48.1	42.9	83.99	-211.1	1,451.7	2,825.7	2,752.8	72.86	38.783	
13,150.0	13,023.7	11,468.0	11,425.9	48.3	42.9	79.81	-211.1	1,451.7	2,857.9	2,785.3	72.64	39.346	
13,200.0	13,058.2	11,468.0	11,425.9	48.4	42.9	75.71	-211.1	1,451.7	2,890.1	2,817.6	72.46	39.886	
13,250.0	13,089.4	11,468.0	11,425.9	48.5	42.9	71.74	-211.1	1,451.7	2,922.0	2,849.6	72.33	40.397	
13,300.0	13,117.2	11,468.0	11,425.9	48.7	42.9	67.97	-211.1	1,451.7	2,953.3	2,881.0	72.25	40.874	
13,350.0	13,141.1	11,468.0	11,425.9	48.8	42.9	64.44	-211.1	1,451.7	2,983.8	2,911.6	72.23	41.311	
13,400.0	13,161.2	11,468.0	11,425.9	48.9	42.9	61.17	-211.1	1,451.7	3,013.4	2,941.2	72.26	41.703	
13,450.0	13,177.2	11,468.0	11,425.9	49.1	42.9	58.19	-211.1	1,451.7	3,041.8	2,969.5	72.34	42.048	
13,500.0	13,189.1	11,468.0	11,425.9	49.2	42.9	55.50	-211.1	1,451.7	3,068.9	2,996.4	72.48	42.341	
13,550.0	13,196.6	11,468.0	11,425.9	49.4	42.9	53.08	-211.1	1,451.7	3,094.5	3,021.8	72.67	42.581	
13,600.0	13,199.8	11,468.0	11,425.9	49.6	42.9	50.93	-211.1	1,451.7	3,118.4	3,045.5	72.92	42.766	
13,611.9	13,200.0	11,468.0	11,425.9	49.6	42.9	50.46	-211.1	1,451.7	3,123.8	3,050.8	72.98	42.803	
13,700.0	13,200.0	11,468.0	11,425.9	50.0	42.9	51.03	-211.1	1,451.7	3,163.7	3,090.2	73.48	43.052	
13,800.0	13,200.0	11,468.0	11,425.9	50.4	42.9	51.66	-211.1	1,451.7	3,209.0	3,134.9	74.06	43.328	
13,900.0	13,200.0	11,468.0	11,425.9	50.9	42.9	52.29	-211.1	1,451.7	3,254.3	3,179.7	74.64	43.598	
14,000.0	13,200.0	11,468.0	11,425.9	51.4	42.9	52.91	-211.1	1,451.7	3,299.7	3,224.4	75.23	43.862	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #203H - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 220-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	13,200.0	11,468.0	11,425.9	52.0	42.9	53.52	-211.1	1,451.7	3,344.9	3,269.1	75.81	44.122	
14,200.0	13,200.0	11,468.0	11,425.9	52.6	42.9	54.11	-211.1	1,451.7	3,390.1	3,313.7	76.39	44.377	
14,300.0	13,200.0	11,468.0	11,425.9	53.2	42.9	54.70	-211.1	1,451.7	3,435.0	3,358.1	76.97	44.629	
14,400.0	13,200.0	11,468.0	11,425.9	53.8	42.9	55.27	-211.1	1,451.7	3,479.8	3,402.2	77.54	44.877	
14,500.0	13,200.0	11,468.0	11,425.9	54.5	42.9	55.84	-211.1	1,451.7	3,524.2	3,446.1	78.10	45.122	
14,600.0	13,200.0	11,468.0	11,425.9	55.1	42.9	56.38	-211.1	1,451.7	3,568.4	3,489.7	78.66	45.364	
14,687.2	13,200.0	11,468.0	11,425.9	55.7	42.9	56.85	-211.1	1,451.7	3,606.6	3,527.5	79.14	45.572	
14,700.0	13,200.0	11,468.0	11,425.9	55.8	42.9	56.85	-211.1	1,451.7	3,612.2	3,533.0	79.21	45.603	
14,800.0	13,200.0	11,468.0	11,425.9	56.5	42.9	56.85	-211.1	1,451.7	3,657.3	3,577.5	79.76	45.852	
14,900.0	13,200.0	11,468.0	11,425.9	57.3	42.9	56.85	-211.1	1,451.7	3,704.5	3,624.2	80.32	46.121	
15,000.0	13,200.0	11,468.0	11,425.9	58.1	42.9	56.85	-211.1	1,451.7	3,753.8	3,672.9	80.88	46.411	
15,100.0	13,200.0	11,468.0	11,425.9	58.9	42.9	56.85	-211.1	1,451.7	3,805.1	3,723.6	81.44	46.721	
15,200.0	13,200.0	11,468.0	11,425.9	59.7	42.9	56.85	-211.1	1,451.7	3,858.3	3,776.3	82.00	47.052	
15,300.0	13,200.0	11,468.0	11,425.9	60.6	42.9	56.85	-211.1	1,451.7	3,913.3	3,830.7	82.55	47.404	
15,400.0	13,200.0	11,468.0	11,425.9	61.6	42.9	56.85	-211.1	1,451.7	3,970.1	3,887.0	83.10	47.775	
15,500.0	13,200.0	11,468.0	11,425.9	62.5	42.9	56.85	-211.1	1,451.7	4,028.5	3,944.9	83.64	48.167	
15,600.0	13,200.0	11,468.0	11,425.9	63.5	42.9	56.85	-211.1	1,451.7	4,088.6	4,004.4	84.17	48.578	
15,700.0	13,200.0	11,468.0	11,425.9	64.5	42.9	56.85	-211.1	1,451.7	4,150.2	4,065.5	84.69	49.008	
15,800.0	13,200.0	11,468.0	11,425.9	65.5	42.9	56.85	-211.1	1,451.7	4,213.3	4,128.1	85.19	49.456	
15,900.0	13,200.0	11,468.0	11,425.9	66.6	42.9	56.85	-211.1	1,451.7	4,277.8	4,192.1	85.69	49.922	
16,000.0	13,200.0	11,468.0	11,425.9	67.7	42.9	56.85	-211.1	1,451.7	4,343.6	4,257.5	86.17	50.405	
16,100.0	13,200.0	11,468.0	11,425.9	68.8	42.9	56.85	-211.1	1,451.7	4,410.7	4,324.1	86.65	50.906	
16,200.0	13,200.0	11,468.0	11,425.9	69.9	42.9	56.85	-211.1	1,451.7	4,479.1	4,392.0	87.11	51.422	
16,300.0	13,200.0	11,468.0	11,425.9	71.1	42.9	56.85	-211.1	1,451.7	4,548.6	4,461.1	87.55	51.953	
16,400.0	13,200.0	11,468.0	11,425.9	72.3	42.9	56.85	-211.1	1,451.7	4,619.3	4,531.3	87.99	52.500	
16,500.0	13,200.0	11,468.0	11,425.9	73.5	42.9	56.85	-211.1	1,451.7	4,691.0	4,602.6	88.41	53.061	
16,600.0	13,200.0	11,468.0	11,425.9	74.7	42.9	56.85	-211.1	1,451.7	4,763.7	4,674.9	88.82	53.635	
16,700.0	13,200.0	11,468.0	11,425.9	75.9	42.9	56.85	-211.1	1,451.7	4,837.4	4,748.2	89.21	54.222	
16,800.0	13,200.0	11,468.0	11,425.9	77.1	42.9	56.85	-211.1	1,451.7	4,912.0	4,822.4	89.60	54.822	
16,900.0	13,200.0	11,468.0	11,425.9	78.4	42.9	56.85	-211.1	1,451.7	4,987.5	4,897.6	89.97	55.434	
17,000.0	13,200.0	11,468.0	11,425.9	79.7	42.9	56.85	-211.1	1,451.7	5,063.9	4,973.6	90.34	56.057	
17,100.0	13,200.0	11,468.0	11,425.9	81.0	42.9	56.85	-211.1	1,451.7	5,141.1	5,050.4	90.69	56.690	
17,200.0	13,200.0	11,468.0	11,425.9	82.3	42.9	56.85	-211.1	1,451.7	5,219.0	5,128.0	91.03	57.335	
17,300.0	13,200.0	11,468.0	11,425.9	83.6	42.9	56.85	-211.1	1,451.7	5,297.7	5,206.4	91.36	57.988	
17,400.0	13,200.0	11,468.0	11,425.9	84.9	42.9	56.85	-211.1	1,451.7	5,377.1	5,285.4	91.68	58.652	
17,500.0	13,200.0	11,468.0	11,425.9	86.3	42.9	56.85	-211.1	1,451.7	5,457.2	5,365.2	91.99	59.324	
17,600.0	13,200.0	11,468.0	11,425.9	87.6	42.9	56.85	-211.1	1,451.7	5,537.9	5,445.6	92.29	60.004	
17,700.0	13,200.0	11,468.0	11,425.9	89.0	42.9	56.85	-211.1	1,451.7	5,619.3	5,526.7	92.59	60.693	
17,800.0	13,200.0	11,468.0	11,425.9	90.3	42.9	56.85	-211.1	1,451.7	5,701.2	5,608.3	92.87	61.389	
17,900.0	13,200.0	11,468.0	11,425.9	91.7	42.9	56.85	-211.1	1,451.7	5,783.7	5,690.6	93.15	62.092	
18,000.0	13,200.0	11,468.0	11,425.9	93.1	42.9	56.85	-211.1	1,451.7	5,866.8	5,773.4	93.42	62.802	
18,100.0	13,200.0	11,468.0	11,425.9	94.5	42.9	56.85	-211.1	1,451.7	5,950.4	5,856.7	93.68	63.519	
18,200.0	13,200.0	11,468.0	11,425.9	95.9	42.9	56.85	-211.1	1,451.7	6,034.4	5,940.5	93.93	64.242	
18,300.0	13,200.0	11,468.0	11,425.9	97.3	42.9	56.85	-211.1	1,451.7	6,119.0	6,024.8	94.18	64.971	
18,400.0	13,200.0	11,468.0	11,425.9	98.7	42.9	56.85	-211.1	1,451.7	6,204.0	6,109.6	94.42	65.705	
18,500.0	13,200.0	11,468.0	11,425.9	100.2	42.9	56.85	-211.1	1,451.7	6,289.4	6,194.8	94.66	66.444	
18,600.0	13,200.0	11,468.0	11,425.9	101.6	42.9	56.85	-211.1	1,451.7	6,375.3	6,280.4	94.89	67.189	
18,700.0	13,200.0	11,468.0	11,425.9	103.0	42.9	56.85	-211.1	1,451.7	6,461.6	6,366.5	95.11	67.938	
18,800.0	13,200.0	11,468.0	11,425.9	104.5	42.9	56.85	-211.1	1,451.7	6,548.3	6,452.9	95.33	68.692	
18,900.0	13,200.0	11,468.0	11,425.9	105.9	42.9	56.85	-211.1	1,451.7	6,635.3	6,539.8	95.54	69.449	
19,000.0	13,200.0	11,468.0	11,425.9	107.4	42.9	56.85	-211.1	1,451.7	6,722.7	6,627.0	95.75	70.211	
19,100.0	13,200.0	11,468.0	11,425.9	108.9	42.9	56.85	-211.1	1,451.7	6,810.5	6,714.5	95.95	70.976	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #203H - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 220-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
19,200.0	13,200.0	11,468.0	11,425.9	110.3	42.9	56.85	-211.1	1,451.7	6,898.6	6,802.4	96.15	71.745	
19,300.0	13,200.0	11,468.0	11,425.9	111.8	42.9	56.85	-211.1	1,451.7	6,987.0	6,890.6	96.35	72.517	
19,400.0	13,200.0	11,468.0	11,425.9	113.3	42.9	56.85	-211.1	1,451.7	7,075.7	6,979.2	96.54	73.293	
19,500.0	13,200.0	11,468.0	11,425.9	114.8	42.9	56.85	-211.1	1,451.7	7,164.7	7,068.0	96.73	74.071	
19,600.0	13,200.0	11,468.0	11,425.9	116.3	42.9	56.85	-211.1	1,451.7	7,254.0	7,157.1	96.91	74.852	
19,700.0	13,200.0	11,468.0	11,425.9	117.8	42.9	56.85	-211.1	1,451.7	7,343.6	7,246.5	97.09	75.635	
19,800.0	13,200.0	11,468.0	11,425.9	119.3	42.9	56.85	-211.1	1,451.7	7,433.4	7,336.2	97.27	76.421	
19,900.0	13,200.0	11,468.0	11,425.9	120.8	42.9	56.85	-211.1	1,451.7	7,523.5	7,426.1	97.44	77.209	
20,000.0	13,200.0	11,468.0	11,425.9	122.3	42.9	56.85	-211.1	1,451.7	7,613.9	7,516.3	97.62	77.999	
20,100.0	13,200.0	11,468.0	11,425.9	123.8	42.9	56.85	-211.1	1,451.7	7,704.5	7,606.7	97.78	78.791	
20,200.0	13,200.0	11,468.0	11,425.9	125.3	42.9	56.85	-211.1	1,451.7	7,795.3	7,697.3	97.95	79.585	
20,300.0	13,200.0	11,468.0	11,425.9	126.8	42.9	56.85	-211.1	1,451.7	7,886.3	7,788.2	98.11	80.380	
20,400.0	13,200.0	11,468.0	11,425.9	128.4	42.9	56.85	-211.1	1,451.7	7,977.6	7,879.3	98.27	81.177	
20,500.0	13,200.0	11,468.0	11,425.9	129.9	42.9	56.85	-211.1	1,451.7	8,069.0	7,970.6	98.43	81.975	
20,600.0	13,200.0	11,468.0	11,425.9	131.4	42.9	56.85	-211.1	1,451.7	8,160.7	8,062.1	98.59	82.775	
20,700.0	13,200.0	11,468.0	11,425.9	132.9	42.9	56.85	-211.1	1,451.7	8,252.5	8,153.8	98.74	83.575	
20,800.0	13,200.0	11,468.0	11,425.9	134.5	42.9	56.85	-211.1	1,451.7	8,344.6	8,245.7	98.90	84.377	
20,900.0	13,200.0	11,468.0	11,425.9	136.0	42.9	56.85	-211.1	1,451.7	8,436.8	8,337.8	99.05	85.180	
21,000.0	13,200.0	11,468.0	11,425.9	137.6	42.9	56.85	-211.1	1,451.7	8,529.2	8,430.0	99.20	85.983	
21,100.0	13,200.0	11,468.0	11,425.9	139.1	42.9	56.85	-211.1	1,451.7	8,621.8	8,522.4	99.34	86.787	
21,200.0	13,200.0	11,468.0	11,425.9	140.7	42.9	56.85	-211.1	1,451.7	8,714.5	8,615.0	99.49	87.592	
21,300.0	13,200.0	11,468.0	11,425.9	142.2	42.9	56.85	-211.1	1,451.7	8,807.4	8,707.7	99.63	88.397	
21,400.0	13,200.0	11,468.0	11,425.9	143.8	42.9	56.85	-211.1	1,451.7	8,900.4	8,800.6	99.78	89.203	
21,500.0	13,200.0	11,468.0	11,425.9	145.3	42.9	56.85	-211.1	1,451.7	8,993.6	8,893.7	99.92	90.009	
21,600.0	13,200.0	11,468.0	11,425.9	146.9	42.9	56.85	-211.1	1,451.7	9,087.0	8,986.9	100.06	90.815	
21,700.0	13,200.0	11,468.0	11,425.9	148.4	42.9	56.85	-211.1	1,451.7	9,180.4	9,080.2	100.20	91.622	
21,800.0	13,200.0	11,468.0	11,425.9	150.0	42.9	56.85	-211.1	1,451.7	9,274.0	9,173.7	100.34	92.428	
21,900.0	13,200.0	11,468.0	11,425.9	151.5	42.9	56.85	-211.1	1,451.7	9,367.8	9,267.3	100.48	93.235	
22,000.0	13,200.0	11,468.0	11,425.9	153.1	42.9	56.85	-211.1	1,451.7	9,461.7	9,361.1	100.61	94.042	
22,100.0	13,200.0	11,468.0	11,425.9	154.7	42.9	56.85	-211.1	1,451.7	9,555.7	9,454.9	100.75	94.848	
22,200.0	13,200.0	11,468.0	11,425.9	156.2	42.9	56.85	-211.1	1,451.7	9,649.8	9,548.9	100.88	95.655	
22,300.0	13,200.0	11,468.0	11,425.9	157.8	42.9	56.85	-211.1	1,451.7	9,744.0	9,643.0	101.02	96.461	
22,400.0	13,200.0	11,468.0	11,425.9	159.4	42.9	56.85	-211.1	1,451.7	9,838.4	9,737.2	101.15	97.266	
22,500.0	13,200.0	11,468.0	11,425.9	161.0	42.9	56.85	-211.1	1,451.7	9,932.8	9,831.6	101.28	98.072	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #204H - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 220-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	89.34	26.5	2,313.1	2,313.2				
100.0	100.0	86.9	86.9	0.1	0.1	89.35	26.2	2,313.3	2,313.5	2,313.3	0.27	8,629.752	
200.0	200.0	173.9	173.8	0.5	0.3	89.37	25.4	2,314.1	2,314.4	2,313.6	0.76	3,036.802	
300.0	300.0	265.4	265.4	0.8	0.5	89.40	24.1	2,315.4	2,315.7	2,314.4	1.36	1,707.091	
400.0	400.0	364.5	364.4	1.2	0.9	89.44	22.6	2,316.9	2,317.3	2,315.2	2.07	1,119.311	
500.0	500.0	467.0	466.9	1.6	1.2	89.47	21.4	2,318.4	2,318.8	2,316.0	2.80	829.182	
600.0	600.0	578.8	578.7	1.9	1.6	89.50	20.4	2,319.8	2,320.0	2,316.4	3.56	652.499	
700.0	700.0	698.6	698.5	2.3	2.1	89.51	19.9	2,320.3	2,320.4	2,316.1	4.34	534.872	
800.0	800.0	805.9	805.8	2.6	2.4	89.51	19.8	2,320.2	2,320.3	2,315.3	5.06	458.752	
900.0	900.0	913.3	913.2	3.0	2.8	89.50	20.1	2,319.8	2,319.9	2,314.1	5.77	401.760	
1,000.0	1,000.0	1,004.0	1,003.9	3.4	3.1	89.50	20.3	2,319.4	2,319.4	2,313.0	6.44	360.062	
1,027.3	1,027.3	1,027.4	1,027.3	3.5	3.2	89.50	20.4	2,319.3	2,319.4	2,312.8	6.62	350.346	
1,100.0	1,100.0	1,089.6	1,089.5	3.7	3.4	89.49	20.5	2,319.5	2,319.6	2,312.5	7.10	326.895 ES	
1,200.0	1,200.0	1,177.2	1,177.1	4.1	3.7	89.48	20.9	2,320.1	2,320.3	2,312.6	7.76	299.103	
1,300.0	1,300.0	1,267.4	1,267.3	4.4	4.0	89.47	21.4	2,321.1	2,321.5	2,313.0	8.43	275.320	
1,400.0	1,400.0	1,345.0	1,344.9	4.8	4.3	89.46	21.8	2,322.7	2,323.4	2,314.4	9.06	256.372	
1,500.0	1,500.0	1,406.7	1,406.5	5.1	4.5	89.46	21.8	2,324.7	2,326.7	2,317.0	9.64	241.428	
1,600.0	1,600.0	1,471.3	1,471.1	5.5	4.7	89.47	21.5	2,327.8	2,331.4	2,321.2	10.22	228.118	
1,700.0	1,700.0	1,536.7	1,536.3	5.9	5.0	89.48	21.0	2,331.9	2,337.7	2,326.9	10.80	216.371	
1,800.0	1,800.0	1,615.0	1,614.4	6.2	5.2	89.51	19.8	2,337.7	2,345.2	2,333.7	11.44	205.074	
1,900.0	1,900.0	1,752.3	1,751.3	6.6	5.7	89.62	15.6	2,348.0	2,352.7	2,340.4	12.29	191.375	
2,000.0	2,000.0	1,929.9	1,928.6	6.9	6.4	89.77	9.3	2,355.8	2,356.9	2,343.6	13.30	177.193	
2,100.0	2,100.0	2,028.0	2,026.6	7.3	6.7	89.85	6.0	2,358.6	2,359.8	2,345.8	14.01	168.424	
2,200.0	2,200.0	2,099.0	2,097.5	7.7	7.0	89.93	3.0	2,361.2	2,363.4	2,348.8	14.62	161.645	
2,300.0	2,300.0	2,173.1	2,171.4	8.0	7.3	90.02	-1.0	2,364.7	2,368.2	2,352.9	15.24	155.369	
2,400.0	2,400.0	2,255.4	2,253.4	8.4	7.6	90.15	-6.1	2,369.5	2,374.1	2,358.2	15.89	149.360	
2,500.0	2,500.0	2,361.7	2,359.3	8.7	8.0	90.31	-12.9	2,376.1	2,380.3	2,363.6	16.64	143.020	
2,600.0	2,600.0	2,492.5	2,489.7	9.1	8.5	90.49	-20.3	2,382.9	2,385.6	2,368.1	17.49	136.426	
2,700.0	2,700.0	2,587.2	2,584.1	9.4	8.8	90.60	-24.9	2,387.5	2,390.4	2,372.3	18.19	131.429	
2,800.0	2,800.0	2,693.9	2,690.6	9.8	9.2	90.71	-29.6	2,392.5	2,395.2	2,376.2	18.94	126.486	
2,900.0	2,900.0	2,794.5	2,791.0	10.2	9.6	90.81	-33.8	2,396.9	2,399.6	2,379.9	19.66	122.050	
3,000.0	3,000.0	2,879.4	2,875.8	10.5	9.9	90.91	-38.1	2,400.9	2,404.4	2,384.1	20.33	118.296	
3,100.0	3,100.0	2,960.0	2,956.1	10.9	10.2	91.01	-42.6	2,405.3	2,410.0	2,389.0	20.97	114.913	
3,200.0	3,200.0	3,040.0	3,035.8	11.2	10.5	91.12	-46.9	2,410.3	2,416.4	2,394.8	21.62	111.786	
3,300.0	3,300.0	3,131.6	3,127.1	11.6	10.8	91.21	-51.2	2,416.6	2,423.3	2,401.0	22.31	108.644	
3,400.0	3,400.0	3,254.1	3,249.3	12.0	11.3	91.28	-54.2	2,424.6	2,429.9	2,406.7	23.12	105.116	
3,500.0	3,500.0	3,337.8	3,332.9	12.3	11.6	91.29	-54.6	2,429.9	2,436.2	2,412.5	23.77	102.512	
3,600.0	3,600.0	3,396.4	3,391.3	12.7	11.8	91.28	-54.2	2,434.4	2,443.9	2,419.6	24.31	100.545	
3,700.0	3,700.0	3,459.8	3,454.3	13.0	12.1	91.25	-53.2	2,440.3	2,453.3	2,428.4	24.86	98.678	
3,800.0	3,800.0	3,534.7	3,528.8	13.4	12.3	91.21	-51.8	2,448.4	2,463.9	2,438.4	25.46	96.770	
3,900.0	3,900.0	3,668.5	3,661.9	13.8	12.8	91.20	-51.6	2,462.6	2,474.6	2,448.3	26.33	93.997	
4,000.0	4,000.0	3,811.7	3,804.5	14.1	13.4	91.27	-54.7	2,474.8	2,483.2	2,455.9	27.23	91.183	
4,100.0	4,100.0	3,938.6	3,931.0	14.5	13.9	91.35	-58.3	2,484.1	2,490.5	2,462.5	28.07	88.737	
4,200.0	4,200.0	4,067.5	4,059.6	14.8	14.3	91.39	-60.5	2,492.0	2,496.7	2,467.8	28.90	86.382	
4,300.0	4,300.0	4,189.0	4,181.0	15.2	14.8	91.45	-63.2	2,498.2	2,501.8	2,472.1	29.71	84.215	
4,400.0	4,400.0	4,293.5	4,285.3	15.5	15.2	91.49	-65.0	2,503.1	2,506.5	2,476.1	30.44	82.335	
4,500.0	4,500.0	4,396.0	4,387.7	15.9	15.5	91.49	-65.3	2,507.6	2,511.0	2,479.8	31.17	80.560	
4,600.0	4,600.0	4,494.8	4,486.4	16.3	15.9	91.50	-65.6	2,512.2	2,515.6	2,483.7	31.88	78.910	
4,700.0	4,700.0	4,621.2	4,612.7	16.6	16.3	91.52	-66.8	2,517.2	2,519.6	2,486.9	32.70	77.061	
4,800.0	4,800.0	4,737.4	4,728.8	17.0	16.8	91.59	-70.1	2,520.8	2,522.7	2,489.3	33.48	75.361	
4,900.0	4,900.0	4,841.9	4,833.2	17.3	17.1	91.68	-73.9	2,523.5	2,525.5	2,491.3	34.21	73.821	
5,000.0	5,000.0	4,945.7	4,936.9	17.7	17.5	91.76	-77.5	2,526.0	2,528.0	2,493.1	34.94	72.346	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #204H - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 220-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	5,100.0	5,043.7	5,034.8	18.1	17.9	91.83	-80.8	2,528.4	2,530.6	2,494.9	35.65	70.975	
5,200.0	5,200.0	5,144.6	5,135.6	18.4	18.2	91.90	-84.2	2,530.9	2,533.1	2,496.7	36.38	69.636	
5,300.0	5,300.0	5,246.6	5,237.6	18.8	18.6	91.98	-87.5	2,533.4	2,535.6	2,498.5	37.10	68.341	
5,400.0	5,400.0	5,353.7	5,344.5	19.1	19.0	92.06	-91.0	2,535.7	2,538.0	2,500.1	37.85	67.060	
5,500.0	5,500.0	5,450.0	5,440.8	19.5	19.3	92.12	-94.0	2,537.7	2,540.1	2,501.6	38.55	65.890	
5,600.0	5,600.0	5,558.9	5,549.6	19.8	19.7	92.19	-97.3	2,540.0	2,542.3	2,503.0	39.30	64.688	
5,700.0	5,700.0	5,655.0	5,645.7	20.2	20.1	92.26	-100.1	2,541.9	2,544.4	2,504.4	40.01	63.601	
5,800.0	5,800.0	5,757.5	5,748.1	20.6	20.4	92.33	-103.3	2,543.9	2,546.5	2,505.8	40.73	62.518	
5,900.0	5,900.0	5,856.8	5,847.4	20.9	20.8	92.39	-106.4	2,545.6	2,548.4	2,506.9	41.45	61.483	
6,000.0	6,000.0	5,920.8	5,911.3	21.3	21.0	92.43	-108.2	2,547.3	2,551.2	2,509.1	42.03	60.695	
6,100.0	6,100.0	5,994.0	5,984.3	21.6	21.3	92.47	-110.0	2,550.2	2,555.2	2,512.6	42.65	59.915	
6,200.0	6,200.0	6,087.7	6,078.0	22.0	21.6	92.52	-112.4	2,554.6	2,560.0	2,516.7	43.34	59.066	
6,300.0	6,300.0	6,188.5	6,178.6	22.4	22.0	92.57	-115.0	2,559.3	2,564.7	2,520.6	44.06	58.203	
6,400.0	6,400.0	6,292.0	6,282.0	22.7	22.4	92.62	-117.5	2,564.0	2,569.4	2,524.6	44.80	57.354	
6,500.0	6,500.0	6,387.5	6,377.3	23.1	22.8	92.67	-119.9	2,568.3	2,574.1	2,528.6	45.50	56.572	
6,600.0	6,600.0	6,495.2	6,484.9	23.4	23.1	92.72	-122.2	2,573.3	2,578.7	2,532.5	46.25	55.755	
6,700.0	6,700.0	6,603.9	6,593.5	23.8	23.5	92.75	-124.0	2,577.8	2,583.0	2,536.0	47.00	54.953	
6,800.0	6,800.0	6,706.7	6,696.2	24.1	23.9	92.79	-125.6	2,582.0	2,587.1	2,539.4	47.73	54.200	
6,900.0	6,900.0	6,811.9	6,801.3	24.5	24.3	92.82	-127.3	2,586.0	2,591.0	2,542.5	48.47	53.453	
7,000.0	7,000.0	6,914.0	6,903.3	24.9	24.7	92.85	-128.8	2,589.8	2,594.8	2,545.6	49.20	52.743	
7,100.0	7,100.0	7,023.3	7,012.6	25.2	25.1	-161.62	-130.4	2,593.6	2,599.1	2,549.2	49.94	52.045	
7,200.0	7,200.0	7,129.4	7,118.6	25.5	25.5	-161.60	-131.9	2,597.0	2,604.9	2,554.2	50.66	51.422	
7,300.0	7,299.9	7,234.0	7,223.1	25.9	25.8	-161.57	-133.6	2,600.0	2,612.0	2,560.7	51.37	50.848	
7,400.0	7,399.7	7,334.0	7,323.1	26.2	26.2	-161.56	-135.1	2,602.9	2,620.7	2,568.7	52.07	50.336	
7,500.0	7,499.4	7,446.8	7,435.8	26.6	26.6	-161.55	-137.0	2,605.8	2,630.9	2,578.1	52.81	49.820	
7,600.0	7,598.9	7,545.1	7,534.1	26.9	27.0	-161.54	-138.7	2,608.1	2,642.4	2,588.9	53.50	49.394	
7,700.0	7,698.3	7,644.8	7,633.8	27.2	27.3	-161.54	-140.6	2,610.5	2,655.6	2,601.4	54.19	49.004	
7,800.0	7,797.4	7,752.7	7,741.6	27.6	27.7	-161.54	-142.9	2,612.8	2,670.2	2,615.2	54.92	48.623	
7,900.0	7,896.3	7,850.6	7,839.5	27.9	28.1	-161.55	-144.9	2,614.8	2,686.4	2,630.8	55.60	48.314	
8,000.0	7,994.9	7,955.7	7,944.5	28.3	28.4	-161.56	-147.2	2,616.7	2,703.9	2,647.6	56.32	48.013	
8,100.0	8,093.3	8,054.3	8,043.1	28.6	28.8	-161.58	-149.4	2,618.5	2,723.1	2,666.1	57.00	47.770	
8,182.6	8,174.2	8,135.0	8,123.7	28.9	29.1	-161.59	-151.4	2,619.8	2,740.1	2,682.5	57.57	47.595	
8,200.0	8,191.3	8,149.4	8,138.1	29.0	29.1	-161.60	-151.7	2,620.1	2,743.8	2,686.1	57.68	47.569	
8,300.0	8,289.1	8,240.5	8,229.2	29.4	29.5	-161.68	-153.9	2,621.9	2,765.4	2,707.0	58.34	47.399	
8,400.0	8,387.0	8,329.1	8,317.8	29.7	29.8	-161.78	-155.2	2,623.8	2,787.0	2,728.0	58.99	47.243	
8,500.0	8,484.9	8,409.0	8,397.7	30.1	30.1	-161.88	-155.4	2,626.1	2,809.4	2,749.7	59.61	47.130	
8,600.0	8,582.8	8,512.8	8,501.4	30.5	30.4	-162.03	-155.1	2,629.3	2,831.8	2,771.5	60.32	46.949	
8,700.0	8,680.6	8,621.3	8,609.8	30.9	30.8	-162.18	-154.7	2,632.2	2,854.0	2,793.0	61.04	46.754	
8,800.0	8,778.5	8,728.3	8,716.8	31.2	31.2	-162.32	-154.4	2,634.7	2,875.8	2,814.0	61.77	46.560	
8,900.0	8,876.4	8,849.3	8,837.7	31.6	31.6	-162.47	-155.0	2,636.8	2,897.2	2,834.6	62.54	46.323	
9,000.0	8,974.3	8,963.3	8,951.7	32.0	32.0	-162.57	-156.8	2,638.0	2,917.8	2,854.5	63.30	46.098	
9,100.0	9,072.1	9,042.3	9,030.7	32.4	32.3	-162.63	-158.9	2,638.8	2,938.5	2,874.6	63.92	45.971	
9,200.0	9,170.0	9,103.9	9,092.3	32.8	32.5	-162.66	-160.9	2,640.0	2,960.0	2,895.6	64.48	45.909	
9,300.0	9,267.9	9,177.1	9,165.4	33.2	32.8	-162.70	-163.7	2,642.3	2,982.7	2,917.7	65.07	45.836	
9,400.0	9,365.8	9,263.9	9,252.0	33.6	33.1	-162.73	-167.3	2,645.3	3,005.8	2,940.1	65.73	45.729	
9,500.0	9,463.7	9,338.1	9,326.2	34.0	33.4	-162.75	-170.7	2,648.3	3,029.5	2,963.2	66.33	45.673	
9,600.0	9,561.5	9,417.0	9,404.9	34.4	33.7	-162.79	-173.8	2,652.0	3,053.8	2,986.9	66.95	45.615	
9,700.0	9,659.4	9,506.5	9,494.2	34.8	34.0	-162.84	-176.4	2,656.7	3,078.6	3,011.0	67.61	45.531	
9,800.0	9,757.3	9,618.0	9,605.6	35.2	34.4	-162.93	-179.0	2,662.4	3,103.3	3,034.9	68.38	45.380	
9,900.0	9,855.2	9,728.1	9,715.5	35.6	34.8	-163.01	-181.3	2,667.5	3,127.4	3,058.3	69.14	45.230	
10,000.0	9,953.0	9,833.3	9,820.5	36.0	35.2	-163.07	-184.3	2,672.0	3,151.4	3,081.5	69.88	45.094	
10,100.0	10,050.9	9,935.9	9,923.0	36.4	35.6	-163.15	-186.6	2,676.1	3,174.9	3,104.3	70.61	44.962	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #204H - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 220-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
10,200.0	10,148.8	10,023.7	10,010.8	36.9	35.9	-163.21	-188.1	2,679.8	3,198.7	3,127.4	71.28	44.878	
10,300.0	10,246.7	10,135.4	10,122.4	37.3	36.3	-163.31	-189.8	2,684.4	3,222.5	3,150.4	72.05	44.729	
10,400.0	10,344.6	10,247.3	10,234.1	37.7	36.7	-163.40	-191.3	2,688.4	3,245.6	3,172.8	72.81	44.573	
10,500.0	10,442.4	10,344.8	10,331.6	38.1	37.1	-163.48	-192.7	2,691.7	3,268.6	3,195.0	73.52	44.457	
10,600.0	10,540.3	10,437.8	10,424.5	38.5	37.4	-163.56	-193.7	2,694.8	3,291.6	3,217.4	74.21	44.356	
10,700.0	10,638.2	10,536.2	10,522.8	39.0	37.8	-163.64	-194.7	2,698.3	3,314.8	3,239.8	74.92	44.244	
10,800.0	10,736.1	10,620.9	10,607.5	39.4	38.1	-163.71	-195.7	2,701.3	3,338.0	3,262.4	75.57	44.170	
10,900.0	10,833.9	10,711.6	10,698.1	39.8	38.4	-163.79	-196.4	2,705.0	3,361.6	3,285.4	76.25	44.088	
11,000.0	10,931.8	10,830.7	10,817.1	40.2	38.8	-163.88	-198.1	2,709.5	3,385.1	3,308.0	77.06	43.930	
11,100.0	11,029.7	10,945.2	10,931.6	40.7	39.3	-163.96	-200.3	2,713.1	3,407.9	3,330.0	77.84	43.779	
11,200.0	11,127.6	11,044.4	11,030.7	41.1	39.6	-164.03	-201.8	2,715.9	3,430.4	3,351.9	78.56	43.666	
11,300.0	11,225.5	11,312.7	11,298.9	41.5	40.5	-164.28	-202.1	2,716.9	3,450.5	3,370.6	79.88	43.197	
11,400.0	11,323.3	11,394.9	11,381.1	42.0	40.8	-164.39	-199.9	2,715.1	3,468.2	3,387.7	80.51	43.079	
11,500.0	11,421.2	11,456.9	11,442.7	42.4	41.0	-164.56	-193.3	2,714.5	3,487.0	3,405.9	81.07	43.014	
11,523.5	11,444.2	11,478.7	11,464.2	42.5	41.0	-164.64	-189.5	2,714.3	3,491.5	3,410.3	81.22	42.989	
11,600.0	11,519.2	11,518.0	11,502.5	42.8	41.2	-164.88	-180.8	2,714.1	3,505.7	3,424.1	81.61	42.958	
11,700.0	11,617.7	11,578.8	11,560.4	43.3	41.3	-165.29	-162.4	2,714.1	3,523.1	3,441.0	82.12	42.901	
11,800.0	11,716.7	11,611.0	11,590.2	43.7	41.4	-165.57	-150.2	2,714.5	3,539.8	3,457.3	82.52	42.895	
11,900.0	11,815.9	11,658.0	11,632.5	44.1	41.5	-165.99	-129.8	2,715.9	3,555.8	3,472.9	82.94	42.871	
12,000.0	11,915.5	11,743.0	11,706.1	44.4	41.7	-166.75	-87.4	2,719.1	3,571.1	3,487.6	83.49	42.775	
12,100.0	12,015.2	11,854.1	11,795.1	44.8	41.9	-167.88	-21.2	2,720.9	3,583.5	3,499.4	84.10	42.608	
12,200.0	12,115.1	11,912.0	11,837.8	45.2	42.0	-168.55	17.9	2,721.1	3,594.4	3,509.9	84.51	42.533	
12,300.0	12,215.1	11,959.4	11,870.9	45.5	42.1	-169.12	51.9	2,721.2	3,604.5	3,519.6	84.85	42.482	
12,311.9	12,227.0	11,963.5	11,873.7	45.5	42.1	85.33	54.9	2,721.3	3,605.6	3,520.7	84.88	42.480	
12,400.0	12,315.1	12,006.0	11,901.2	45.8	42.2	84.82	87.3	2,721.6	3,615.1	3,530.0	85.15	42.454	
12,500.0	12,415.1	12,034.2	11,918.6	46.2	42.2	84.47	109.5	2,721.8	3,627.8	3,542.5	85.36	42.501	
12,600.0	12,515.1	12,083.2	11,947.8	46.5	42.3	83.84	148.9	2,722.1	3,642.5	3,556.8	85.62	42.540	
12,700.0	12,615.1	12,214.4	12,022.9	46.9	42.7	82.15	256.3	2,720.9	3,658.2	3,571.9	86.28	42.399	
12,711.9	12,627.0	12,218.1	12,025.0	46.9	42.8	82.10	259.5	2,720.8	3,660.1	3,573.8	86.30	42.411	
12,750.0	12,665.1	12,230.5	12,031.8	47.0	42.8	103.22	269.8	2,720.6	3,666.8	3,580.5	86.37	42.456	
12,800.0	12,714.8	12,247.6	12,040.9	47.2	42.9	102.00	284.2	2,720.2	3,677.0	3,590.5	86.45	42.532	
12,850.0	12,763.8	12,265.5	12,050.3	47.4	42.9	100.63	299.5	2,719.8	3,688.5	3,601.9	86.53	42.626	
12,900.0	12,811.8	12,289.0	12,062.1	47.5	43.0	99.08	319.8	2,719.2	3,701.2	3,614.6	86.63	42.724	
12,950.0	12,858.3	12,289.0	12,062.1	47.7	43.0	97.65	319.8	2,719.2	3,715.2	3,628.6	86.60	42.899	
13,000.0	12,903.1	12,289.0	12,062.1	47.8	43.0	96.07	319.8	2,719.2	3,730.2	3,643.7	86.57	43.090	
13,050.0	12,945.8	12,289.0	12,062.1	48.0	43.0	94.38	319.8	2,719.2	3,746.4	3,659.8	86.53	43.295	
13,100.0	12,986.1	12,330.5	12,081.2	48.1	43.2	92.32	356.6	2,718.5	3,762.6	3,675.8	86.73	43.384	
13,150.0	13,023.7	12,342.2	12,086.1	48.3	43.2	90.41	367.2	2,718.4	3,779.8	3,693.0	86.76	43.566	
13,200.0	13,058.2	12,383.0	12,101.8	48.4	43.4	88.34	404.9	2,718.4	3,798.0	3,711.0	86.95	43.677	
13,250.0	13,089.4	12,383.0	12,101.8	48.5	43.4	86.44	404.9	2,718.4	3,815.7	3,728.8	86.94	43.889	
13,300.0	13,117.2	12,383.0	12,101.8	48.7	43.4	84.50	404.9	2,718.4	3,833.8	3,746.9	86.93	44.100	
13,350.0	13,141.1	12,383.0	12,101.8	48.8	43.4	82.55	404.9	2,718.4	3,852.1	3,765.1	86.94	44.306	
13,400.0	13,161.2	12,383.0	12,101.8	48.9	43.4	80.61	404.9	2,718.4	3,870.4	3,783.4	86.97	44.504	
13,450.0	13,177.2	12,383.0	12,101.8	49.1	43.4	78.69	404.9	2,718.4	3,888.6	3,801.6	87.01	44.691	
13,500.0	13,189.1	12,426.2	12,115.8	49.2	43.5	76.96	445.8	2,718.9	3,905.6	3,818.3	87.32	44.728	
13,550.0	13,196.6	12,438.1	12,119.2	49.4	43.6	75.25	457.1	2,719.1	3,922.6	3,835.2	87.47	44.846	
13,600.0	13,199.8	12,478.0	12,129.2	49.6	43.8	73.77	495.8	2,720.3	3,939.4	3,851.6	87.79	44.872	
13,611.9	13,200.0	12,478.0	12,129.2	49.6	43.8	73.39	495.8	2,720.3	3,943.1	3,855.3	87.82	44.900	
13,700.0	13,200.0	12,478.0	12,129.2	50.0	43.8	73.55	495.8	2,720.3	3,970.3	3,882.2	88.05	45.092	
13,800.0	13,200.0	12,504.3	12,134.3	50.4	43.9	73.84	521.5	2,721.3	4,000.0	3,911.5	88.48	45.208	
13,900.0	13,200.0	12,538.5	12,139.2	50.9	44.0	74.12	555.4	2,722.4	4,028.0	3,939.0	88.98	45.267	
14,000.0	13,200.0	12,571.0	12,141.9	51.4	44.1	74.34	587.7	2,723.5	4,054.3	3,964.8	89.50	45.299	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #204H - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 220-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	13,200.0	12,626.0	12,143.2	52.0	44.4	74.55	642.7	2,725.1	4,078.6	3,988.4	90.17	45.233	
14,200.0	13,200.0	12,712.5	12,140.0	52.6	44.8	74.70	729.1	2,727.3	4,100.6	4,009.6	91.04	45.040	
14,300.0	13,200.0	12,897.2	12,132.6	53.2	45.8	74.81	913.7	2,729.2	4,117.9	4,025.3	92.63	44.454	
14,400.0	13,200.0	13,001.5	12,129.2	53.8	46.5	74.88	1,017.8	2,729.2	4,130.8	4,037.0	93.84	44.019	
14,500.0	13,200.0	13,131.2	12,125.8	54.5	47.3	74.92	1,147.5	2,729.3	4,140.4	4,045.1	95.34	43.429	
14,600.0	13,200.0	13,269.8	12,123.9	55.1	48.3	74.95	1,286.1	2,728.5	4,145.5	4,048.5	97.04	42.722	
14,687.2	13,200.0	13,359.2	12,121.2	55.7	49.0	74.92	1,375.5	2,726.9	4,146.6	4,048.3	98.31	42.178	
14,691.7	13,200.0	13,362.3	12,121.1	55.7	49.1	74.92	1,378.6	2,726.8	4,146.6	4,048.3	98.37	42.155	
14,700.0	13,200.0	13,368.0	12,120.9	55.8	49.1	74.92	1,384.3	2,726.7	4,146.6	4,048.2	98.46	42.113	
14,800.0	13,200.0	13,438.5	12,117.7	56.5	49.7	74.87	1,454.6	2,725.6	4,147.1	4,047.4	99.70	41.597	
14,900.0	13,200.0	13,517.0	12,115.0	57.3	50.4	74.84	1,533.1	2,725.2	4,148.1	4,047.1	101.06	41.045	
15,000.0	13,200.0	13,570.1	12,114.2	58.1	50.8	74.83	1,586.2	2,725.6	4,150.0	4,047.8	102.24	40.592	
15,100.0	13,200.0	13,643.5	12,114.2	58.9	51.5	74.84	1,659.5	2,727.3	4,152.9	4,049.3	103.67	40.061	
15,200.0	13,200.0	13,747.9	12,114.8	59.7	52.5	74.86	1,764.0	2,729.7	4,155.8	4,050.3	105.50	39.393	
15,300.0	13,200.0	13,844.4	12,115.1	60.6	53.4	74.87	1,860.4	2,732.2	4,158.9	4,051.6	107.30	38.759	
15,400.0	13,200.0	13,976.0	12,117.6	61.6	54.7	74.92	1,992.0	2,735.5	4,161.6	4,052.0	109.61	37.969	
15,500.0	13,200.0	14,190.4	12,122.0	62.5	57.0	74.99	2,206.3	2,736.0	4,161.5	4,048.5	113.03	36.818	
15,504.2	13,200.0	14,175.0	12,121.9	62.5	56.8	74.99	2,190.9	2,736.1	4,161.5	4,048.6	112.87	36.869	
15,600.0	13,200.0	14,220.0	12,121.8	63.5	57.3	74.99	2,235.9	2,736.0	4,162.0	4,047.8	114.21	36.441	
15,700.0	13,200.0	14,268.0	12,120.7	64.5	57.8	74.97	2,283.9	2,736.3	4,164.0	4,048.3	115.64	36.009	
15,800.0	13,200.0	14,350.4	12,117.8	65.5	58.7	74.94	2,366.2	2,737.4	4,166.9	4,049.3	117.53	35.454	
15,900.0	13,200.0	14,486.7	12,115.1	66.6	60.3	74.91	2,502.5	2,738.9	4,169.1	4,049.0	120.20	34.686	
16,000.0	13,200.0	15,020.0	12,115.9	67.7	66.8	74.88	3,034.8	2,721.0	4,169.3	4,041.0	128.28	32.502	
16,100.0	13,200.0	16,100.0	12,116.8	68.8	80.6	74.87	3,110.4	2,714.5	4,161.4	4,018.5	142.93	29.115	
16,200.0	13,200.0	15,158.9	12,119.3	69.9	68.6	74.88	3,173.1	2,709.3	4,153.5	4,021.2	132.26	31.404	
16,300.0	13,200.0	15,207.0	12,121.4	71.1	69.2	74.90	3,221.1	2,706.9	4,147.7	4,013.7	133.99	30.955	
16,400.0	13,200.0	15,207.0	12,121.4	72.3	69.2	74.90	3,221.1	2,706.9	4,143.3	4,008.3	135.04	30.682	
16,500.0	13,200.0	15,207.0	12,121.4	73.5	69.2	74.90	3,221.1	2,706.9	4,141.3	4,005.2	136.05	30.439	
16,583.0	13,200.0	15,207.0	12,121.4	74.5	69.2	74.90	3,221.1	2,706.9	4,141.4	4,004.5	136.87	30.258	
16,600.0	13,200.0	15,244.3	12,122.5	74.7	69.7	74.92	3,258.4	2,706.4	4,140.7	4,003.1	137.61	30.090	
16,700.0	13,200.0	15,262.0	12,122.9	75.9	69.9	74.92	3,276.0	2,706.7	4,142.4	4,003.5	138.85	29.834	
16,800.0	13,200.0	16,800.0	12,124.1	77.1	90.1	74.95	3,359.2	2,709.7	4,146.1	3,986.3	159.72	25.959	
16,900.0	13,200.0	15,489.0	12,125.9	78.4	72.9	74.99	3,502.9	2,711.8	4,147.6	4,003.2	144.38	28.728	
17,000.0	13,200.0	15,489.0	12,125.9	79.7	72.9	74.99	3,502.9	2,711.8	4,150.8	4,005.5	145.34	28.559	
17,100.0	13,200.0	15,551.3	12,124.5	81.0	73.7	74.98	3,565.1	2,713.7	4,155.4	4,008.1	147.30	28.210	
17,200.0	13,200.0	15,600.6	12,123.3	82.3	74.4	74.97	3,614.4	2,716.2	4,161.4	4,012.3	149.05	27.920	
17,300.0	13,200.0	15,678.0	12,123.1	83.6	75.4	74.99	3,691.6	2,721.0	4,168.2	4,017.0	151.28	27.552	
17,400.0	13,200.0	16,113.9	12,121.2	84.9	81.4	75.01	4,127.2	2,729.4	4,169.8	4,010.3	159.51	26.142	
17,500.0	13,200.0	16,451.3	12,142.6	86.3	86.2	75.26	4,463.1	2,717.9	4,164.7	3,998.7	166.01	25.087	
17,600.0	13,200.0	16,495.9	12,147.7	87.6	86.9	75.32	4,507.3	2,716.2	4,158.7	3,990.7	167.98	24.757	
17,700.0	13,200.0	16,523.0	12,150.3	89.0	87.3	75.35	4,534.3	2,715.2	4,154.2	3,984.5	169.65	24.486	
17,800.0	13,200.0	16,560.3	12,152.9	90.3	87.8	75.39	4,571.5	2,714.4	4,151.2	3,979.7	171.46	24.210	
17,900.0	13,200.0	16,618.0	12,154.8	91.7	88.6	75.41	4,629.1	2,714.4	4,150.5	3,976.9	173.58	23.910	
17,942.3	13,200.0	16,618.0	12,154.8	92.3	88.6	75.41	4,629.1	2,714.4	4,150.2	3,976.2	174.07	23.842	
18,000.0	13,200.0	16,618.0	12,154.8	93.1	88.6	75.41	4,629.1	2,714.4	4,150.6	3,975.9	174.71	23.757	
18,100.0	13,200.0	16,681.8	12,155.0	94.5	89.6	75.42	4,692.9	2,715.2	4,152.6	3,975.7	176.90	23.475	
18,200.0	13,200.0	18,200.0	12,151.7	95.9	111.9	75.37	4,977.8	2,711.5	4,151.9	3,951.4	200.52	20.706	
18,300.0	13,200.0	17,037.9	12,150.8	97.3	94.8	75.35	5,048.9	2,709.0	4,149.7	3,964.5	185.15	22.413	
18,400.0	13,200.0	17,210.7	12,151.3	98.7	97.3	75.35	5,221.6	2,704.8	4,148.5	3,959.4	189.18	21.929	
18,500.0	13,200.0	17,276.0	12,152.0	100.2	98.3	75.36	5,286.9	2,703.0	4,146.1	3,954.6	191.50	21.651	
18,600.0	13,200.0	17,276.0	12,152.0	101.6	98.3	75.36	5,286.9	2,703.0	4,144.9	3,952.2	192.71	21.508	
18,635.0	13,200.0	17,310.9	12,152.3	102.1	98.8	75.36	5,321.8	2,702.6	4,144.7	3,950.9	193.72	21.395	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #204H - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 220-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	13,200.0	17,337.0	12,152.6	103.0	99.2	75.36	5,347.8	2,702.6	4,145.0	3,950.0	194.92	21.265	
18,800.0	13,200.0	17,388.7	12,153.1	104.5	100.0	75.37	5,399.6	2,703.2	4,146.6	3,949.6	196.97	21.052	
18,900.0	13,200.0	17,595.8	12,149.6	105.9	103.1	75.33	5,606.6	2,702.1	4,147.1	3,945.4	201.71	20.560	
18,939.0	13,200.0	17,614.9	12,149.5	106.5	103.4	75.33	5,625.7	2,701.9	4,147.0	3,944.5	202.50	20.479	
19,000.0	13,200.0	17,652.0	12,149.6	107.4	103.9	75.33	5,662.8	2,701.8	4,147.2	3,943.4	203.87	20.343	
19,100.0	13,200.0	17,652.0	12,149.6	108.9	103.9	75.33	5,662.8	2,701.8	4,149.0	3,944.0	204.99	20.240	
19,200.0	13,200.0	17,711.8	12,149.8	110.3	104.8	75.34	5,722.6	2,702.9	4,151.9	3,944.7	207.16	20.042	
19,300.0	13,200.0	17,745.0	12,149.8	111.8	105.3	75.34	5,755.8	2,704.3	4,156.6	3,947.8	208.81	19.906	
19,400.0	13,200.0	18,121.0	12,146.2	113.3	111.0	75.31	6,131.5	2,706.3	4,156.1	3,939.3	216.77	19.173	
19,482.8	13,200.0	18,159.2	12,146.6	114.5	111.6	75.32	6,169.7	2,705.9	4,155.6	3,937.2	218.45	19.023	
19,500.0	13,200.0	18,166.4	12,146.6	114.8	111.7	75.32	6,176.8	2,705.8	4,155.6	3,936.9	218.79	18.994	
19,600.0	13,200.0	18,216.0	12,146.9	116.3	112.5	75.32	6,226.4	2,706.1	4,156.6	3,935.8	220.85	18.821	
19,700.0	13,200.0	18,258.6	12,147.2	117.8	113.1	75.33	6,269.0	2,706.9	4,158.8	3,936.1	222.77	18.669	
19,800.0	13,200.0	18,308.0	12,147.8	119.3	113.9	75.34	6,318.4	2,708.3	4,162.2	3,937.5	224.78	18.517	
19,900.0	13,200.0	18,541.2	12,155.2	120.8	117.4	75.48	6,551.3	2,716.0	4,166.3	3,935.9	230.34	18.088	
20,000.0	13,200.0	18,595.1	12,157.2	122.3	118.3	75.51	6,605.1	2,716.9	4,167.7	3,935.2	232.51	17.924	
20,100.0	13,200.0	18,687.0	12,158.4	123.8	119.7	75.53	6,697.0	2,718.2	4,169.5	3,934.2	235.38	17.714	
20,200.0	13,200.0	18,756.5	12,157.6	125.3	120.8	75.52	6,766.5	2,719.2	4,171.9	3,934.1	237.80	17.544	
20,300.0	13,200.0	18,961.0	12,147.6	126.8	123.9	75.39	6,970.7	2,717.6	4,172.7	3,930.1	242.63	17.198	
20,400.0	13,200.0	19,190.4	12,140.2	128.4	127.5	75.28	7,199.8	2,711.7	4,172.1	3,924.3	247.77	16.838	
20,500.0	13,200.0	19,252.0	12,140.1	129.9	128.5	75.27	7,261.4	2,709.9	4,170.0	3,919.9	250.16	16.670	
20,600.0	13,200.0	19,301.2	12,139.6	131.4	129.2	75.26	7,310.6	2,708.9	4,169.0	3,916.7	252.31	16.523	
20,668.5	13,200.0	19,346.0	12,138.5	132.5	129.9	75.25	7,355.4	2,708.2	4,168.8	3,914.8	253.95	16.416	
20,700.0	13,200.0	19,362.0	12,138.0	132.9	130.2	75.24	7,371.4	2,708.0	4,168.9	3,914.2	254.62	16.373	
20,800.0	13,200.0	19,418.0	12,136.6	134.5	131.1	75.22	7,427.4	2,707.7	4,169.8	3,912.9	256.84	16.235	
20,900.0	13,200.0	19,472.2	12,135.7	136.0	131.9	75.21	7,481.5	2,708.1	4,171.7	3,912.7	259.00	16.107	
21,000.0	13,200.0	19,835.4	12,142.3	137.6	137.6	75.30	7,844.4	2,704.8	4,171.2	3,904.5	266.74	15.638	
21,100.0	13,200.0	19,939.7	12,144.2	139.1	139.3	75.31	7,948.6	2,700.3	4,167.3	3,897.4	269.88	15.441	
21,200.0	13,200.0	20,007.0	12,144.1	140.7	140.3	75.30	8,015.8	2,697.2	4,163.7	3,891.3	272.41	15.285	
21,300.0	13,200.0	20,055.1	12,143.5	142.2	141.1	75.29	8,063.8	2,695.3	4,161.1	3,886.5	274.60	15.153	
21,400.0	13,200.0	20,101.0	12,142.5	143.8	141.8	75.27	8,109.7	2,694.2	4,159.9	3,883.2	276.71	15.034	
21,500.0	13,200.0	20,253.5	12,141.0	145.3	144.2	75.24	8,262.2	2,689.8	4,157.9	3,877.2	280.66	14.814	
21,600.0	13,200.0	20,291.0	12,140.9	146.9	144.8	75.24	8,299.7	2,688.9	4,156.6	3,874.0	282.64	14.706	
21,656.4	13,200.0	20,334.5	12,140.7	147.7	145.5	75.23	8,343.1	2,688.3	4,156.3	3,872.2	284.14	14.628	
21,700.0	13,200.0	20,354.6	12,140.5	148.4	145.8	75.23	8,363.3	2,688.1	4,156.5	3,871.4	285.05	14.582	
21,800.0	13,200.0	20,406.9	12,139.9	150.0	146.6	75.23	8,415.6	2,688.2	4,157.6	3,870.4	287.22	14.475	
21,900.0	13,200.0	21,900.0	12,137.0	151.5	170.3	75.19	8,532.5	2,688.8	4,159.6	3,847.7	311.84	13.339	
22,000.0	13,200.0	20,712.8	12,134.7	153.1	151.5	75.16	8,721.3	2,686.5	4,159.1	3,863.9	295.26	14.087	
22,100.0	13,200.0	20,785.5	12,133.9	154.7	152.6	75.14	8,794.1	2,685.2	4,158.5	3,860.7	297.84	13.962	
22,116.1	13,200.0	20,794.2	12,133.8	154.9	152.8	75.14	8,802.8	2,685.1	4,158.5	3,860.3	298.20	13.945	
22,200.0	13,200.0	20,839.8	12,133.5	156.2	153.5	75.14	8,848.4	2,684.9	4,158.9	3,858.8	300.08	13.859	
22,300.0	13,200.0	22,300.0	12,133.9	157.8	176.8	75.14	9,129.1	2,680.8	4,159.1	3,834.4	324.70	12.809	
22,400.0	13,200.0	21,196.0	12,133.9	159.4	159.2	75.13	9,204.4	2,677.0	4,155.2	3,846.2	309.01	13.447	
22,500.0	13,200.0	22,500.0	12,132.3	161.0	180.1	75.10	9,281.1	2,674.3	4,153.1	3,822.2	330.85	12.553	
22,600.0	13,200.0	21,329.0	12,131.3	162.5	161.3	75.08	9,337.2	2,672.3	4,151.0	3,837.0	314.03	13.219	
22,700.0	13,200.0	21,385.1	12,130.7	164.1	162.2	75.07	9,393.3	2,670.6	4,149.6	3,833.3	316.33	13.118	
22,709.1	13,200.0	21,387.6	12,130.6	164.3	162.2	75.07	9,395.8	2,670.5	4,149.6	3,833.1	316.50	13.111	
22,800.0	13,200.0	21,424.0	12,129.3	165.7	162.8	75.05	9,432.2	2,670.3	4,150.4	3,832.1	318.28	13.040	
22,900.0	13,200.0	21,471.6	12,127.6	167.3	163.6	75.03	9,479.8	2,670.7	4,152.6	3,832.3	320.33	12.964	
23,000.0	13,200.0	21,543.6	12,126.0	168.9	164.7	75.01	9,551.8	2,671.8	4,155.4	3,832.6	322.85	12.871	
23,100.0	13,200.0	21,742.0	12,124.6	170.4	167.9	75.01	9,750.0	2,674.9	4,158.2	3,830.4	327.88	12.682	
23,200.0	13,200.0	21,800.0	12,123.6	172.0	168.8	75.00	9,808.0	2,675.2	4,159.8	3,829.6	330.17	12.599	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #204H - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 usft

Survey Program: 220-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
23,300.0	13,200.0	22,002.0	12,119.5	173.6	172.1	74.95	10,009.9	2,673.6	4,160.1	3,825.0	335.14	12.413	
23,400.0	13,200.0	22,107.8	12,117.1	175.2	173.8	74.91	10,115.7	2,671.6	4,159.6	3,821.3	338.31	12.295	
23,504.9	13,200.0	22,191.0	12,113.6	176.9	175.1	74.86	10,198.8	2,669.2	4,158.8	3,817.7	341.13	12.191 SF	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #211H - 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	1.0	1.0	0.0	0.0	-90.70	-0.4	-30.1	30.1				
100.0	100.0	101.0	101.0	0.1	0.1	-90.70	-0.4	-30.1	30.1	29.8	0.26	115.802	
200.0	200.0	201.0	201.0	0.5	0.5	-90.70	-0.4	-30.1	30.1	29.1	0.98	30.810	
300.0	300.0	301.0	301.0	0.8	0.8	-90.70	-0.4	-30.1	30.1	28.4	1.69	17.769	
400.0	400.0	401.0	401.0	1.2	1.2	-90.70	-0.4	-30.1	30.1	27.7	2.41	12.484	
500.0	500.0	501.0	501.0	1.6	1.6	-90.70	-0.4	-30.1	30.1	27.0	3.13	9.623	
600.0	600.0	601.0	601.0	1.9	1.9	-90.70	-0.4	-30.1	30.1	26.3	3.84	7.828	
700.0	700.0	701.0	701.0	2.3	2.3	-90.70	-0.4	-30.1	30.1	25.5	4.56	6.598	
800.0	800.0	801.0	801.0	2.6	2.6	-90.70	-0.4	-30.1	30.1	24.8	5.28	5.702	
900.0	900.0	901.0	901.0	3.0	3.0	-90.70	-0.4	-30.1	30.1	24.1	6.00	5.020	
1,000.0	1,000.0	1,001.0	1,001.0	3.4	3.4	-90.70	-0.4	-30.1	30.1	23.4	6.71	4.484	
1,100.0	1,100.0	1,101.0	1,101.0	3.7	3.7	-90.70	-0.4	-30.1	30.1	22.7	7.43	4.051	
1,200.0	1,200.0	1,201.0	1,201.0	4.1	4.1	-90.70	-0.4	-30.1	30.1	21.9	8.15	3.694	
1,300.0	1,300.0	1,301.0	1,301.0	4.4	4.4	-90.70	-0.4	-30.1	30.1	21.2	8.86	3.396	
1,400.0	1,400.0	1,401.0	1,401.0	4.8	4.8	-90.70	-0.4	-30.1	30.1	20.5	9.58	3.141	
1,500.0	1,500.0	1,501.0	1,501.0	5.1	5.2	-90.70	-0.4	-30.1	30.1	19.8	10.30	2.923	CC, ES
1,600.0	1,600.0	1,600.5	1,600.5	5.5	5.5	-90.99	-0.5	-31.0	31.0	20.0	11.00	2.815	SF
1,700.0	1,700.0	1,699.9	1,699.8	5.9	5.8	-91.75	-1.0	-33.5	33.6	21.9	11.69	2.870	
1,800.0	1,800.0	1,799.2	1,799.0	6.2	6.2	-92.78	-1.8	-37.8	37.9	25.5	12.38	3.058	
1,900.0	1,900.0	1,898.3	1,898.0	6.6	6.5	-93.88	-3.0	-43.7	43.9	30.8	13.07	3.358	
2,000.0	2,000.0	1,997.2	1,996.5	6.9	6.9	-94.92	-4.4	-51.3	51.7	37.9	13.75	3.755	
2,100.0	2,100.0	2,095.8	2,094.7	7.3	7.2	-95.82	-6.2	-60.5	61.1	46.7	14.43	4.235	
2,200.0	2,200.0	2,194.0	2,192.3	7.7	7.6	-96.59	-8.2	-71.3	72.3	57.2	15.11	4.787	
2,300.0	2,300.0	2,308.3	2,289.2	8.0	8.0	-97.22	-10.6	-83.7	85.2	69.4	15.83	5.383	
2,400.0	2,400.0	2,409.3	2,387.2	8.4	8.4	-97.72	-13.2	-97.3	99.1	82.6	16.54	5.992	
2,500.0	2,500.0	2,489.7	2,485.3	8.7	8.7	-98.10	-15.8	-110.8	113.0	95.8	17.18	6.579	
2,600.0	2,600.0	2,588.8	2,583.4	9.1	9.1	-98.40	-18.4	-124.3	126.9	109.0	17.89	7.096	
2,700.0	2,700.0	2,687.8	2,681.4	9.4	9.4	-98.63	-20.9	-137.9	140.8	122.2	18.59	7.575	
2,800.0	2,800.0	2,786.8	2,779.5	9.8	9.8	-98.83	-23.5	-151.4	154.7	135.4	19.30	8.017	
2,900.0	2,900.0	2,885.8	2,877.5	10.2	10.2	-98.99	-26.1	-165.0	168.6	148.6	20.01	8.428	
3,000.0	3,000.0	2,984.9	2,975.6	10.5	10.6	-99.13	-28.7	-178.5	182.6	161.8	20.72	8.811	
3,100.0	3,100.0	3,083.9	3,073.7	10.9	11.0	-99.25	-31.3	-192.0	196.5	175.0	21.43	9.168	
3,200.0	3,200.0	3,182.9	3,171.7	11.2	11.4	-99.35	-33.9	-205.6	210.4	188.2	22.14	9.501	
3,300.0	3,300.0	3,281.9	3,269.8	11.6	11.8	-99.44	-36.4	-219.1	224.3	201.4	22.86	9.814	
3,400.0	3,400.0	3,381.0	3,367.9	12.0	12.2	-99.52	-39.0	-232.6	238.2	214.6	23.57	10.107	
3,500.0	3,500.0	3,480.0	3,465.9	12.3	12.6	-99.59	-41.6	-246.2	252.1	227.8	24.28	10.383	
3,600.0	3,600.0	3,579.0	3,564.0	12.7	13.0	-99.66	-44.2	-259.7	266.0	241.0	25.00	10.642	
3,700.0	3,700.0	3,678.1	3,662.0	13.0	13.4	-99.71	-46.8	-273.3	280.0	254.2	25.71	10.888	
3,800.0	3,800.0	3,777.1	3,760.1	13.4	13.8	-99.76	-49.4	-286.8	293.9	267.4	26.43	11.119	
3,900.0	3,900.0	3,876.1	3,858.2	13.8	14.2	-99.81	-51.9	-300.3	307.8	280.6	27.14	11.339	
4,000.0	4,000.0	3,975.1	3,956.2	14.1	14.6	-99.85	-54.5	-313.9	321.7	293.8	27.86	11.547	
4,100.0	4,100.0	4,074.2	4,054.3	14.5	15.0	-99.89	-57.1	-327.4	335.6	307.0	28.58	11.744	
4,200.0	4,200.0	4,173.2	4,152.4	14.8	15.4	-99.93	-59.7	-340.9	349.5	320.2	29.29	11.931	
4,300.0	4,300.0	4,272.2	4,250.4	15.2	15.8	-99.96	-62.3	-354.5	363.4	333.4	30.01	12.110	
4,400.0	4,400.0	4,371.2	4,348.5	15.5	16.2	-99.99	-64.9	-368.0	377.4	346.6	30.73	12.280	
4,500.0	4,500.0	4,470.3	4,446.5	15.9	16.6	-100.02	-67.4	-381.6	391.3	359.8	31.45	12.442	
4,600.0	4,600.0	4,569.3	4,544.6	16.3	17.0	-100.05	-70.0	-395.1	405.2	373.0	32.17	12.597	
4,700.0	4,700.0	4,668.3	4,642.7	16.6	17.5	-100.07	-72.6	-408.6	419.1	386.2	32.88	12.745	
4,800.0	4,800.0	4,767.3	4,740.7	17.0	17.9	-100.10	-75.2	-422.2	433.0	399.4	33.60	12.886	
4,900.0	4,900.0	4,866.4	4,838.8	17.3	18.3	-100.12	-77.8	-435.7	446.9	412.6	34.32	13.022	
5,000.0	5,000.0	4,965.4	4,936.9	17.7	18.7	-100.14	-80.4	-449.2	460.9	425.8	35.04	13.152	
5,100.0	5,100.0	5,064.4	5,034.9	18.1	19.1	-100.16	-82.9	-462.8	474.8	439.0	35.76	13.276	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #211H - 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
5,200.0	5,200.0	5,163.5	5,133.0	18.4	19.5	-100.18	-85.5	-476.3	488.7	452.2	36.48	13.396	
5,300.0	5,300.0	5,262.5	5,231.1	18.8	19.9	-100.20	-88.1	-489.9	502.6	465.4	37.20	13.511	
5,400.0	5,400.0	5,361.5	5,329.1	19.1	20.3	-100.21	-90.7	-503.4	516.5	478.6	37.92	13.621	
5,500.0	5,500.0	5,460.5	5,427.2	19.5	20.7	-100.23	-93.3	-516.9	530.4	491.8	38.64	13.728	
5,600.0	5,600.0	5,559.6	5,525.2	19.8	21.2	-100.24	-95.9	-530.5	544.4	505.0	39.36	13.830	
5,700.0	5,700.0	5,658.6	5,623.3	20.2	21.6	-100.26	-98.4	-544.0	558.3	518.2	40.08	13.929	
5,800.0	5,800.0	5,757.6	5,721.4	20.6	22.0	-100.27	-101.0	-557.5	572.2	531.4	40.80	14.024	
5,900.0	5,900.0	5,856.6	5,819.4	20.9	22.4	-100.28	-103.6	-571.1	586.1	544.6	41.52	14.116	
6,000.0	6,000.0	5,955.7	5,917.5	21.3	22.8	-100.29	-106.2	-584.6	600.0	557.8	42.24	14.204	
6,100.0	6,100.0	6,054.7	6,015.6	21.6	23.2	-100.31	-108.8	-598.2	613.9	571.0	42.96	14.290	
6,200.0	6,200.0	6,153.7	6,113.6	22.0	23.6	-100.32	-111.4	-611.7	627.9	584.2	43.68	14.373	
6,300.0	6,300.0	6,252.8	6,211.7	22.4	24.0	-100.33	-113.9	-625.2	641.8	597.4	44.41	14.453	
6,400.0	6,400.0	6,351.8	6,309.7	22.7	24.5	-100.34	-116.5	-638.8	655.7	610.6	45.13	14.530	
6,500.0	6,500.0	6,450.8	6,407.8	23.1	24.9	-100.35	-119.1	-652.3	669.6	623.8	45.85	14.605	
6,600.0	6,600.0	6,549.8	6,505.9	23.4	25.3	-100.36	-121.7	-665.8	683.5	637.0	46.57	14.678	
6,700.0	6,700.0	6,648.9	6,603.9	23.8	25.7	-100.37	-124.3	-679.4	697.4	650.2	47.29	14.748	
6,800.0	6,800.0	6,747.9	6,702.0	24.1	26.1	-100.37	-126.9	-692.9	711.4	663.3	48.01	14.816	
6,900.0	6,900.0	6,846.9	6,800.1	24.5	26.5	-100.38	-129.4	-706.5	725.3	676.5	48.73	14.882	
7,000.0	7,000.0	6,945.9	6,898.1	24.9	27.0	-100.39	-132.0	-720.0	739.2	689.7	49.46	14.947	
7,100.0	7,100.0	7,045.1	6,996.3	25.2	27.4	5.09	-134.6	-733.5	752.2	702.1	50.17	14.995	
7,200.0	7,200.0	7,144.4	7,094.7	25.5	27.8	5.09	-137.2	-747.1	763.6	712.7	50.87	15.011	
7,300.0	7,299.9	7,244.0	7,193.3	25.9	28.2	5.10	-139.8	-760.7	773.2	721.6	51.57	14.993	
7,400.0	7,399.7	7,343.7	7,292.0	26.2	28.6	5.13	-142.4	-774.4	781.0	728.8	52.27	14.942	
7,500.0	7,499.4	7,443.5	7,390.8	26.6	29.0	5.16	-145.0	-788.0	787.2	734.2	52.98	14.858	
7,600.0	7,598.9	7,543.4	7,489.7	26.9	29.5	5.21	-147.6	-801.7	791.6	737.9	53.69	14.745	
7,700.0	7,698.3	7,643.3	7,588.7	27.2	29.9	5.28	-150.2	-815.3	794.2	739.9	54.39	14.602	
7,800.0	7,797.4	7,743.3	7,687.7	27.6	30.3	5.35	-152.8	-829.0	795.2	740.1	55.10	14.431	
7,900.0	7,896.3	7,843.3	7,786.8	27.9	30.7	5.44	-155.4	-842.7	794.4	738.6	55.81	14.234	
8,000.0	7,994.9	7,943.3	7,885.7	28.3	31.1	5.54	-158.0	-856.3	791.8	735.3	56.52	14.010	
8,100.0	8,093.3	8,043.2	7,984.7	28.6	31.6	5.66	-160.6	-870.0	787.6	730.3	57.23	13.762	
8,182.6	8,174.2	8,125.6	8,066.3	28.9	31.9	5.77	-162.8	-881.3	782.7	724.9	57.81	13.539	
8,200.0	8,191.3	8,143.0	8,083.5	29.0	32.0	5.79	-163.2	-883.6	781.6	723.6	57.93	13.491	
8,300.0	8,289.1	8,242.7	8,182.3	29.4	32.4	5.92	-165.8	-897.3	775.0	716.4	58.64	13.216	
8,400.0	8,387.0	8,342.5	8,281.1	29.7	32.8	6.06	-168.4	-910.9	768.4	709.1	59.35	12.947	
8,500.0	8,484.9	8,442.3	8,379.9	30.1	33.2	6.20	-171.1	-924.6	761.9	701.8	60.07	12.684	
8,600.0	8,582.8	8,542.0	8,478.7	30.5	33.7	6.34	-173.7	-938.2	755.3	694.5	60.78	12.427	
8,700.0	8,680.6	8,641.8	8,577.5	30.9	34.1	6.48	-176.3	-951.8	748.8	687.3	61.49	12.177	
8,800.0	8,778.5	8,741.6	8,676.3	31.2	34.5	6.63	-178.9	-965.5	742.2	680.0	62.21	11.931	
8,900.0	8,876.4	8,841.3	8,775.1	31.6	34.9	6.78	-181.5	-979.1	735.7	672.8	62.93	11.691	
9,000.0	8,974.3	8,941.1	8,873.9	32.0	35.3	6.93	-184.1	-992.7	729.2	665.5	63.64	11.457	
9,100.0	9,072.1	9,040.9	8,972.7	32.4	35.8	7.08	-186.7	-1,006.4	722.6	658.3	64.36	11.227	
9,200.0	9,170.0	9,140.6	9,071.5	32.8	36.2	7.24	-189.3	-1,020.0	716.1	651.0	65.08	11.003	
9,300.0	9,267.9	9,240.4	9,170.3	33.2	36.6	7.40	-191.9	-1,033.7	709.6	643.8	65.80	10.783	
9,400.0	9,365.8	9,340.2	9,269.1	33.6	37.0	7.56	-194.5	-1,047.3	703.1	636.5	66.53	10.568	
9,500.0	9,463.7	9,439.9	9,367.9	34.0	37.4	7.73	-197.1	-1,060.9	696.6	629.3	67.25	10.358	
9,600.0	9,561.5	9,539.7	9,466.7	34.4	37.9	7.89	-199.7	-1,074.6	690.1	622.1	67.98	10.151	
9,700.0	9,659.4	9,639.5	9,565.4	34.8	38.3	8.07	-202.3	-1,088.2	683.6	614.9	68.70	9.950	
9,800.0	9,757.3	9,739.2	9,664.2	35.2	38.7	8.24	-204.9	-1,101.9	677.1	607.6	69.43	9.752	
9,900.0	9,855.2	9,839.0	9,763.0	35.6	39.1	8.42	-207.5	-1,115.5	670.6	600.4	70.16	9.558	
10,000.0	9,953.0	9,938.8	9,861.8	36.0	39.6	8.60	-210.1	-1,129.1	664.1	593.2	70.89	9.369	
10,100.0	10,050.9	10,038.5	9,960.6	36.4	40.0	8.79	-212.7	-1,142.8	657.6	586.0	71.62	9.183	
10,200.0	10,148.8	10,138.3	10,059.4	36.9	40.4	8.98	-215.3	-1,156.4	651.2	578.8	72.35	9.000	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #211H - 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
10,300.0	10,246.7	10,238.1	10,158.2	37.3	40.8	9.17	-217.9	-1,170.1	644.7	571.6	73.08	8.822	
10,400.0	10,344.6	10,337.8	10,257.0	37.7	41.2	9.37	-220.5	-1,183.7	638.3	564.5	73.82	8.647	
10,500.0	10,442.4	10,437.6	10,355.8	38.1	41.7	9.57	-223.1	-1,197.3	631.8	557.3	74.55	8.475	
10,600.0	10,540.3	10,537.4	10,454.6	38.5	42.1	9.77	-225.7	-1,211.0	625.4	550.1	75.29	8.307	
10,700.0	10,638.2	10,637.1	10,553.4	39.0	42.5	9.98	-228.3	-1,224.6	619.0	542.9	76.02	8.142	
10,800.0	10,736.1	10,743.3	10,658.5	39.4	42.9	10.21	-231.0	-1,238.9	612.4	535.6	76.82	7.972	
10,900.0	10,833.9	10,861.6	10,776.1	39.8	43.4	10.50	-233.6	-1,252.1	603.4	525.7	77.69	7.767	
11,000.0	10,931.8	10,979.1	10,893.2	40.2	43.9	10.83	-235.4	-1,261.6	591.4	512.9	78.48	7.535	
11,100.0	11,029.7	11,095.6	11,009.5	40.7	44.3	11.22	-236.5	-1,267.6	576.4	497.2	79.20	7.277	
11,200.0	11,127.6	11,210.9	11,124.8	41.1	44.7	11.68	-237.0	-1,270.1	558.4	478.5	79.85	6.993	
11,300.0	11,225.5	11,312.6	11,226.5	41.5	45.0	12.13	-237.0	-1,270.2	538.4	457.9	80.53	6.686	
11,400.0	11,323.3	11,410.4	11,324.3	42.0	45.3	12.61	-237.0	-1,270.2	518.4	437.1	81.23	6.381	
11,500.0	11,421.2	11,508.3	11,422.2	42.4	45.6	13.12	-237.0	-1,270.2	498.4	416.4	81.94	6.082	
11,523.5	11,444.2	11,531.3	11,445.2	42.5	45.6	13.25	-237.0	-1,270.2	493.7	411.6	82.10	6.013	
11,600.0	11,519.2	11,606.3	11,520.2	42.8	45.9	13.60	-237.0	-1,270.2	479.1	396.5	82.65	5.797	
11,700.0	11,617.7	11,705.7	11,619.1	43.3	46.2	15.09	-228.6	-1,270.2	462.3	378.9	83.40	5.543	
11,800.0	11,716.7	11,798.6	11,709.0	43.7	46.4	18.46	-205.5	-1,270.4	448.9	364.6	84.33	5.323	
11,900.0	11,815.9	11,881.7	11,785.3	44.1	46.6	23.05	-172.7	-1,270.6	441.8	356.5	85.34	5.177	
11,927.0	11,842.8	11,902.3	11,803.3	44.2	46.6	24.40	-162.9	-1,270.6	441.5	355.9	85.59	5.158	
12,000.0	11,915.5	11,953.8	11,847.0	44.4	46.7	28.12	-135.6	-1,270.8	444.5	358.5	86.04	5.166	
12,100.0	12,015.2	12,015.2	11,895.6	44.8	46.8	33.11	-98.0	-1,271.0	459.5	373.7	85.84	5.353	
12,200.0	12,115.1	12,067.2	11,933.4	45.2	46.9	37.73	-62.4	-1,271.2	488.1	403.6	84.46	5.779	
12,300.0	12,215.1	12,111.2	11,962.7	45.5	47.0	41.91	-29.6	-1,271.4	529.7	447.6	82.05	6.455	
12,311.9	12,227.0	12,116.0	11,965.7	45.5	47.0	-63.11	-25.9	-1,271.5	535.4	453.7	81.72	6.552	
12,400.0	12,315.1	12,150.0	11,986.4	45.8	47.0	-60.24	1.1	-1,271.6	582.1	503.0	79.12	7.358	
12,500.0	12,415.1	12,180.1	12,003.4	46.2	47.0	-57.74	26.0	-1,271.8	642.8	567.0	75.78	8.481	
12,600.0	12,515.1	12,200.0	12,013.8	46.5	47.0	-56.11	42.9	-1,271.9	710.2	637.9	72.23	9.831	
12,700.0	12,615.1	12,230.3	12,028.6	46.9	47.0	-53.69	69.3	-1,272.0	782.8	713.2	69.59	11.249	
12,711.9	12,627.0	12,232.8	12,029.8	46.9	47.0	-53.50	71.6	-1,272.1	791.8	722.5	69.25	11.433	
12,750.0	12,665.1	12,250.0	12,037.5	47.0	47.1	-28.19	86.9	-1,272.2	820.3	751.7	68.57	11.962	
12,800.0	12,714.8	12,250.0	12,037.5	47.2	47.1	-25.86	86.9	-1,272.2	856.0	789.4	66.62	12.850	
12,850.0	12,763.8	12,265.1	12,043.9	47.4	47.1	-23.09	100.6	-1,272.2	890.2	824.9	65.28	13.637	
12,900.0	12,811.8	12,278.0	12,049.1	47.5	47.1	-20.89	112.4	-1,272.3	922.5	858.7	63.80	14.458	
12,950.0	12,858.3	12,300.0	12,057.3	47.7	47.1	-18.68	132.8	-1,272.4	952.9	890.2	62.66	15.208	
13,000.0	12,903.1	12,300.0	12,057.3	47.8	47.1	-17.62	132.8	-1,272.4	981.0	920.4	60.64	16.179	
13,050.0	12,945.8	12,319.6	12,063.9	48.0	47.1	-16.08	151.2	-1,272.5	1,007.0	947.6	59.36	16.965	
13,100.0	12,986.1	12,334.1	12,068.4	48.1	47.1	-14.92	165.1	-1,272.6	1,030.6	972.7	57.89	17.804	
13,150.0	13,023.7	12,350.0	12,072.9	48.3	47.1	-13.89	180.3	-1,272.7	1,051.9	995.5	56.46	18.631	
13,200.0	13,058.2	12,350.0	12,072.9	48.4	47.1	-13.40	180.3	-1,272.7	1,071.0	1,016.4	54.60	19.616	
13,250.0	13,089.4	12,379.3	12,080.2	48.5	47.1	-12.30	208.7	-1,272.9	1,087.0	1,033.4	53.64	20.265	
13,300.0	13,117.2	12,400.0	12,084.4	48.7	47.1	-11.53	229.0	-1,273.0	1,100.8	1,048.3	52.46	20.983	
13,350.0	13,141.1	12,400.0	12,084.4	48.8	47.1	-11.31	229.0	-1,273.0	1,111.9	1,061.1	50.86	21.862	
13,400.0	13,161.2	12,426.0	12,088.7	48.9	47.2	-10.60	254.6	-1,273.2	1,120.2	1,070.3	49.93	22.434	
13,450.0	13,177.2	12,450.0	12,091.6	49.1	47.2	-10.02	278.4	-1,273.3	1,126.0	1,077.0	49.02	22.971	
13,500.0	13,189.1	12,450.0	12,091.6	49.2	47.2	-9.97	278.4	-1,273.3	1,129.0	1,081.1	47.85	23.595	
13,550.0	13,196.6	12,473.4	12,093.4	49.4	47.2	-9.52	301.8	-1,273.5	1,129.2	1,082.0	47.14	23.955	
13,600.0	13,199.8	12,500.0	12,094.4	49.6	47.2	-9.06	328.3	-1,273.6	1,126.8	1,080.3	46.54	24.213	
13,611.9	13,200.0	12,500.0	12,094.4	49.6	47.2	-9.08	328.3	-1,273.6	1,125.8	1,079.4	46.37	24.277	
13,700.0	13,200.0	12,544.1	12,094.2	50.0	47.3	-8.42	372.4	-1,273.9	1,120.2	1,074.6	45.60	24.565	
13,800.0	13,200.0	12,639.0	12,093.9	50.4	47.4	-6.95	467.3	-1,274.6	1,115.9	1,070.9	45.08	24.757	
13,900.0	13,200.0	12,734.7	12,093.7	50.9	47.6	-5.59	563.0	-1,275.2	1,112.9	1,068.1	44.75	24.867	
14,000.0	13,200.0	12,831.4	12,093.4	51.4	47.9	-4.36	659.7	-1,275.9	1,110.9	1,066.2	44.63	24.892	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #211H - 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
14,100.0	13,200.0	12,928.9	12,093.2	52.0	48.2	-3.27	757.2	-1,276.5	1,109.6	1,064.9	44.68	24.833	
14,200.0	13,200.0	13,027.1	12,092.9	52.6	48.7	-2.34	855.4	-1,277.2	1,108.9	1,064.0	44.90	24.699	
14,300.0	13,200.0	13,125.9	12,092.7	53.2	49.1	-1.56	954.2	-1,277.9	1,108.7	1,063.4	45.26	24.495	
14,349.6	13,200.0	13,175.2	12,092.6	53.5	49.4	-1.24	1,003.5	-1,278.2	1,108.7	1,063.2	45.49	24.369	
14,400.0	13,200.0	13,225.2	12,092.4	53.8	49.7	-0.95	1,053.5	-1,278.5	1,108.7	1,062.9	45.76	24.230	
14,500.0	13,200.0	13,324.9	12,092.2	54.5	50.3	-0.52	1,153.2	-1,279.2	1,108.8	1,062.5	46.37	23.914	
14,600.0	13,200.0	13,424.7	12,091.9	55.1	50.9	-0.26	1,253.1	-1,279.9	1,109.0	1,062.0	47.09	23.553	
14,687.2	13,200.0	13,512.0	12,091.7	55.7	51.6	-0.19	1,340.3	-1,280.5	1,109.3	1,061.5	47.80	23.208	
14,700.0	13,200.0	13,524.7	12,091.7	55.8	51.7	-0.19	1,353.0	-1,280.6	1,109.3	1,061.4	47.91	23.155	
14,800.0	13,200.0	13,624.7	12,091.4	56.5	52.4	-0.18	1,453.0	-1,281.2	1,109.6	1,060.8	48.79	22.742	
14,900.0	13,200.0	13,724.7	12,091.2	57.3	53.2	-0.18	1,553.0	-1,281.9	1,109.8	1,060.1	49.70	22.329	
15,000.0	13,200.0	13,824.7	12,090.9	58.1	54.1	-0.17	1,653.0	-1,282.6	1,110.1	1,059.4	50.65	21.917	
15,100.0	13,200.0	13,924.7	12,090.6	58.9	54.9	-0.17	1,753.0	-1,283.3	1,110.3	1,058.7	51.63	21.507	
15,200.0	13,200.0	14,024.7	12,090.4	59.7	55.9	-0.16	1,853.0	-1,284.0	1,110.6	1,057.9	52.63	21.101	
15,300.0	13,200.0	14,124.7	12,090.1	60.6	56.8	-0.16	1,953.0	-1,284.6	1,110.8	1,057.2	53.66	20.700	
15,400.0	13,200.0	14,224.7	12,089.9	61.6	57.8	-0.15	2,053.0	-1,285.3	1,111.1	1,056.4	54.72	20.304	
15,500.0	13,200.0	14,324.7	12,089.6	62.5	58.8	-0.15	2,153.0	-1,286.0	1,111.3	1,055.5	55.80	19.915	
15,600.0	13,200.0	14,424.7	12,089.4	63.5	59.8	-0.14	2,253.0	-1,286.7	1,111.6	1,054.7	56.91	19.533	
15,700.0	13,200.0	14,524.7	12,089.1	64.5	60.9	-0.14	2,353.0	-1,287.3	1,111.9	1,053.8	58.03	19.159	
15,800.0	13,200.0	14,624.7	12,088.9	65.5	62.0	-0.13	2,453.0	-1,288.0	1,112.1	1,052.9	59.18	18.792	
15,900.0	13,200.0	14,724.7	12,088.6	66.6	63.1	-0.13	2,553.0	-1,288.7	1,112.4	1,052.0	60.34	18.434	
16,000.0	13,200.0	14,824.7	12,088.3	67.7	64.3	-0.12	2,653.0	-1,289.4	1,112.6	1,051.1	61.53	18.084	
16,100.0	13,200.0	14,924.7	12,088.1	68.8	65.4	-0.12	2,753.0	-1,290.1	1,112.9	1,050.2	62.73	17.742	
16,200.0	13,200.0	15,024.7	12,087.8	69.9	66.6	-0.11	2,853.0	-1,290.7	1,113.1	1,049.2	63.94	17.409	
16,300.0	13,200.0	15,124.7	12,087.6	71.1	67.8	-0.11	2,953.0	-1,291.4	1,113.4	1,048.2	65.17	17.084	
16,400.0	13,200.0	15,224.7	12,087.3	72.3	69.1	-0.10	3,053.0	-1,292.1	1,113.7	1,047.2	66.42	16.768	
16,500.0	13,200.0	15,324.7	12,087.1	73.5	70.3	-0.10	3,153.0	-1,292.8	1,113.9	1,046.2	67.67	16.460	
16,600.0	13,200.0	15,424.7	12,086.8	74.7	71.6	-0.09	3,253.0	-1,293.5	1,114.2	1,045.2	68.95	16.160	
16,700.0	13,200.0	15,524.7	12,086.5	75.9	72.8	-0.09	3,353.0	-1,294.1	1,114.4	1,044.2	70.23	15.869	
16,800.0	13,200.0	15,624.7	12,086.3	77.1	74.1	-0.08	3,453.0	-1,294.8	1,114.7	1,043.2	71.52	15.585	
16,900.0	13,200.0	15,724.7	12,086.0	78.4	75.4	-0.08	3,553.0	-1,295.5	1,114.9	1,042.1	72.83	15.310	
17,000.0	13,200.0	15,824.7	12,085.8	79.7	76.8	-0.07	3,653.0	-1,296.2	1,115.2	1,041.1	74.14	15.041	
17,100.0	13,200.0	15,924.7	12,085.5	81.0	78.1	-0.07	3,753.0	-1,296.8	1,115.5	1,040.0	75.47	14.781	
17,200.0	13,200.0	16,024.7	12,085.3	82.3	79.4	-0.07	3,853.0	-1,297.5	1,115.7	1,038.9	76.80	14.528	
17,300.0	13,200.0	16,124.7	12,085.0	83.6	80.8	-0.06	3,953.0	-1,298.2	1,116.0	1,037.8	78.14	14.281	
17,400.0	13,200.0	16,224.7	12,084.8	84.9	82.2	-0.06	4,053.0	-1,298.9	1,116.2	1,036.7	79.49	14.042	
17,500.0	13,200.0	16,324.7	12,084.5	86.3	83.5	-0.05	4,153.0	-1,299.6	1,116.5	1,035.6	80.85	13.809	
17,600.0	13,200.0	16,424.7	12,084.2	87.6	84.9	-0.05	4,252.9	-1,300.2	1,116.7	1,034.5	82.22	13.583	
17,700.0	13,200.0	16,524.7	12,084.0	89.0	86.3	-0.04	4,352.9	-1,300.9	1,117.0	1,033.4	83.59	13.363	
17,800.0	13,200.0	16,624.7	12,083.7	90.3	87.7	-0.04	4,452.9	-1,301.6	1,117.2	1,032.3	84.97	13.149	
17,900.0	13,200.0	16,724.7	12,083.5	91.7	89.1	-0.03	4,552.9	-1,302.3	1,117.5	1,031.1	86.36	12.941	
18,000.0	13,200.0	16,824.7	12,083.2	93.1	90.6	-0.03	4,652.9	-1,303.0	1,117.8	1,030.0	87.75	12.738	
18,100.0	13,200.0	16,924.7	12,083.0	94.5	92.0	-0.02	4,752.9	-1,303.6	1,118.0	1,028.9	89.15	12.541	
18,200.0	13,200.0	17,024.7	12,082.7	95.9	93.4	-0.02	4,852.9	-1,304.3	1,118.3	1,027.7	90.55	12.350	
18,200.0	13,200.0	17,024.7	12,082.7	95.9	93.4	-0.02	4,852.9	-1,304.3	1,118.3	1,027.7	90.55	12.350	
18,300.0	13,200.0	17,105.7	12,082.5	97.3	94.6	-0.01	4,933.9	-1,304.9	1,118.7	1,026.7	91.97	12.164	
18,400.0	13,200.0	17,105.7	12,082.5	98.7	94.6	-0.01	4,933.9	-1,304.9	1,125.1	1,031.6	93.50	12.034	
18,500.0	13,200.0	17,105.7	12,082.5	100.2	94.6	-0.01	4,933.9	-1,304.9	1,140.3	1,045.2	95.08	11.993	
18,600.0	13,200.0	17,105.7	12,082.5	101.6	94.6	-0.01	4,933.9	-1,304.9	1,163.9	1,067.2	96.63	12.044	
18,700.0	13,200.0	17,105.7	12,082.5	103.0	94.6	-0.01	4,933.9	-1,304.9	1,195.4	1,097.3	98.11	12.185	
18,800.0	13,200.0	17,105.7	12,082.5	104.5	94.6	-0.01	4,933.9	-1,304.9	1,234.2	1,134.8	99.46	12.410	
18,900.0	13,200.0	17,105.7	12,082.5	105.9	94.6	-0.01	4,933.9	-1,304.9	1,279.7	1,179.1	100.66	12.713	

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 Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #211H - Wellbore #1 - BLM Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

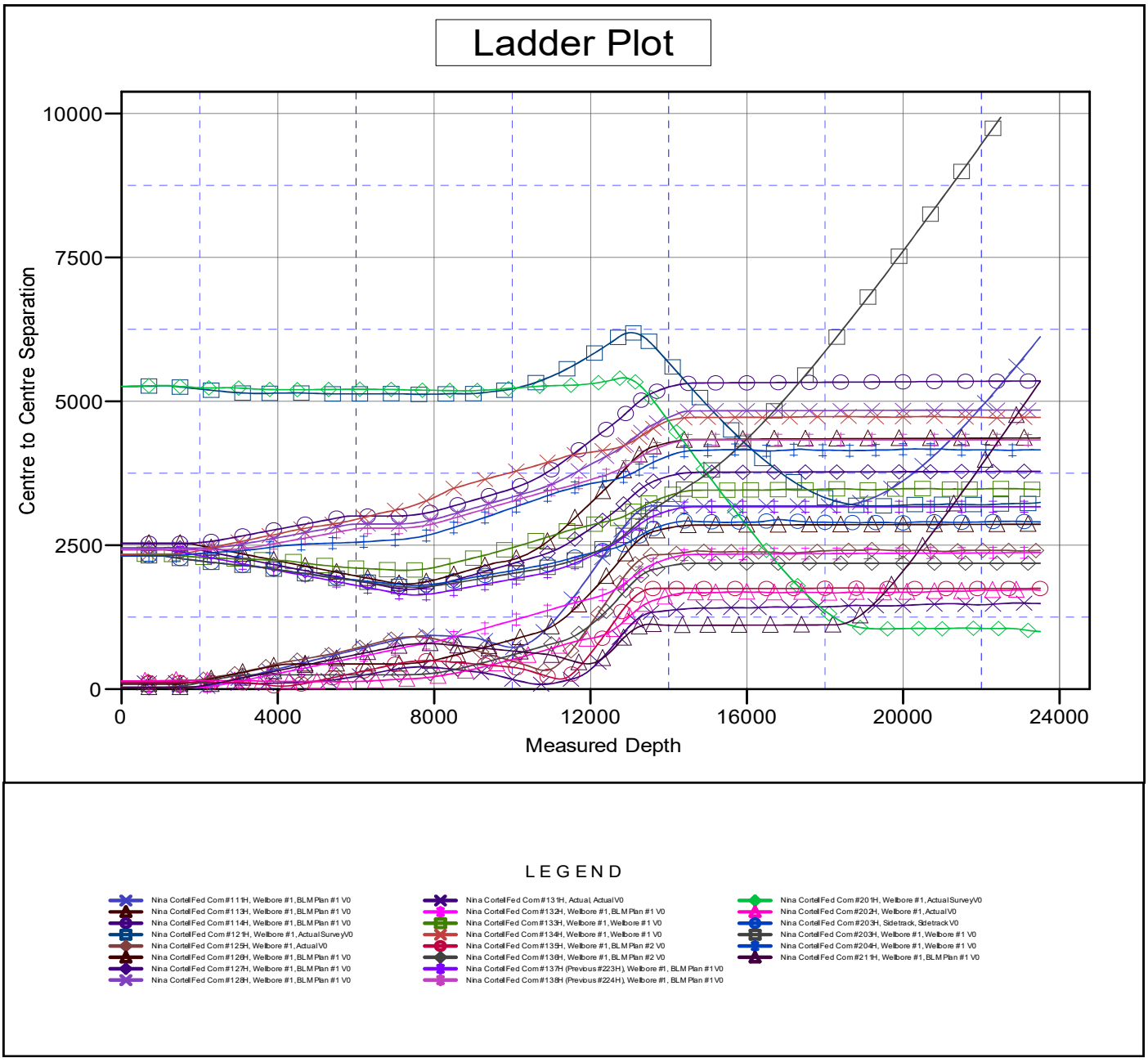
Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,000.0	13,200.0	17,105.7	12,082.5	107.4	94.6	-0.01	4,933.9	-1,304.9	1,331.2	1,229.5	101.71	13.089	
19,100.0	13,200.0	17,105.7	12,082.5	108.9	94.6	-0.01	4,933.9	-1,304.9	1,388.0	1,285.4	102.60	13.528	
19,200.0	13,200.0	17,105.7	12,082.5	110.3	94.6	-0.01	4,933.9	-1,304.9	1,449.4	1,346.1	103.36	14.023	
19,300.0	13,200.0	17,105.7	12,082.5	111.8	94.6	-0.01	4,933.9	-1,304.9	1,515.0	1,411.0	103.99	14.568	
19,400.0	13,200.0	17,105.7	12,082.5	113.3	94.6	-0.01	4,933.9	-1,304.9	1,584.2	1,479.7	104.52	15.157	
19,500.0	13,200.0	17,105.7	12,082.5	114.8	94.6	-0.01	4,933.9	-1,304.9	1,656.5	1,551.6	104.95	15.784	
19,600.0	13,200.0	17,105.7	12,082.5	116.3	94.6	-0.01	4,933.9	-1,304.9	1,731.6	1,626.3	105.31	16.443	
19,700.0	13,200.0	17,105.7	12,082.5	117.8	94.6	-0.01	4,933.9	-1,304.9	1,809.1	1,703.5	105.60	17.132	
19,800.0	13,200.0	17,105.7	12,082.5	119.3	94.6	-0.01	4,933.9	-1,304.9	1,888.7	1,782.9	105.84	17.845	
19,900.0	13,200.0	17,105.7	12,082.5	120.8	94.6	-0.01	4,933.9	-1,304.9	1,970.2	1,864.1	106.03	18.581	
20,000.0	13,200.0	17,105.7	12,082.5	122.3	94.6	-0.01	4,933.9	-1,304.9	2,053.3	1,947.1	106.19	19.335	
20,100.0	13,200.0	17,105.7	12,082.5	123.8	94.6	-0.01	4,933.9	-1,304.9	2,137.8	2,031.5	106.33	20.106	
20,200.0	13,200.0	17,105.7	12,082.5	125.3	94.6	-0.01	4,933.9	-1,304.9	2,223.7	2,117.2	106.44	20.892	
20,300.0	13,200.0	17,105.7	12,082.5	126.8	94.6	-0.01	4,933.9	-1,304.9	2,310.6	2,204.1	106.53	21.690	
20,400.0	13,200.0	17,105.7	12,082.5	128.4	94.6	-0.01	4,933.9	-1,304.9	2,398.6	2,292.0	106.61	22.500	
20,500.0	13,200.0	17,105.7	12,082.5	129.9	94.6	-0.01	4,933.9	-1,304.9	2,487.5	2,380.9	106.67	23.320	
20,600.0	13,200.0	17,105.7	12,082.5	131.4	94.6	-0.01	4,933.9	-1,304.9	2,577.2	2,470.5	106.73	24.148	
20,700.0	13,200.0	17,105.7	12,082.5	132.9	94.6	-0.01	4,933.9	-1,304.9	2,667.7	2,560.9	106.78	24.984	
20,800.0	13,200.0	17,105.7	12,082.5	134.5	94.6	-0.01	4,933.9	-1,304.9	2,758.8	2,652.0	106.82	25.826	
20,900.0	13,200.0	17,105.7	12,082.5	136.0	94.6	-0.01	4,933.9	-1,304.9	2,850.5	2,743.6	106.86	26.675	
21,000.0	13,200.0	17,105.7	12,082.5	137.6	94.6	-0.01	4,933.9	-1,304.9	2,942.7	2,835.8	106.90	27.529	
21,100.0	13,200.0	17,105.7	12,082.5	139.1	94.6	-0.01	4,933.9	-1,304.9	3,035.5	2,928.5	106.93	28.387	
21,200.0	13,200.0	17,105.7	12,082.5	140.7	94.6	-0.01	4,933.9	-1,304.9	3,128.7	3,021.7	106.97	29.249	
21,300.0	13,200.0	17,105.7	12,082.5	142.2	94.6	-0.01	4,933.9	-1,304.9	3,222.2	3,115.2	107.00	30.115	
21,400.0	13,200.0	17,105.7	12,082.5	143.8	94.6	-0.01	4,933.9	-1,304.9	3,316.2	3,209.2	107.03	30.984	
21,500.0	13,200.0	17,105.7	12,082.5	145.3	94.6	-0.01	4,933.9	-1,304.9	3,410.5	3,303.5	107.06	31.855	
21,600.0	13,200.0	17,105.7	12,082.5	146.9	94.6	-0.01	4,933.9	-1,304.9	3,505.1	3,398.0	107.09	32.729	
21,700.0	13,200.0	17,105.7	12,082.5	148.4	94.6	-0.01	4,933.9	-1,304.9	3,600.1	3,492.9	107.13	33.605	
21,800.0	13,200.0	17,105.7	12,082.5	150.0	94.6	-0.01	4,933.9	-1,304.9	3,695.2	3,588.1	107.16	34.482	
21,900.0	13,200.0	17,105.7	12,082.5	151.5	94.6	-0.01	4,933.9	-1,304.9	3,790.7	3,683.5	107.20	35.361	
22,000.0	13,200.0	17,105.7	12,082.5	153.1	94.6	-0.01	4,933.9	-1,304.9	3,886.3	3,779.1	107.23	36.241	
22,100.0	13,200.0	17,105.7	12,082.5	154.7	94.6	-0.01	4,933.9	-1,304.9	3,982.2	3,874.9	107.27	37.122	
22,200.0	13,200.0	17,105.7	12,082.5	156.2	94.6	-0.01	4,933.9	-1,304.9	4,078.3	3,971.0	107.31	38.004	
22,300.0	13,200.0	17,105.7	12,082.5	157.8	94.6	-0.01	4,933.9	-1,304.9	4,174.5	4,067.2	107.35	38.886	
22,400.0	13,200.0	17,105.7	12,082.5	159.4	94.6	-0.01	4,933.9	-1,304.9	4,271.0	4,163.6	107.40	39.768	
22,500.0	13,200.0	17,105.7	12,082.5	161.0	94.6	-0.01	4,933.9	-1,304.9	4,367.5	4,260.1	107.44	40.651	
22,600.0	13,200.0	17,105.7	12,082.5	162.5	94.6	-0.01	4,933.9	-1,304.9	4,464.3	4,356.8	107.49	41.534	
22,700.0	13,200.0	17,105.7	12,082.5	164.1	94.6	-0.01	4,933.9	-1,304.9	4,561.2	4,453.6	107.53	42.417	
22,800.0	13,200.0	17,105.7	12,082.5	165.7	94.6	-0.01	4,933.9	-1,304.9	4,658.2	4,550.6	107.58	43.299	
22,900.0	13,200.0	17,105.7	12,082.5	167.3	94.6	-0.01	4,933.9	-1,304.9	4,755.3	4,647.7	107.63	44.181	
23,000.0	13,200.0	17,105.7	12,082.5	168.9	94.6	-0.01	4,933.9	-1,304.9	4,852.6	4,744.9	107.68	45.063	
23,100.0	13,200.0	17,105.7	12,082.5	170.4	94.6	-0.01	4,933.9	-1,304.9	4,949.9	4,842.2	107.74	45.944	
23,200.0	13,200.0	17,105.7	12,082.5	172.0	94.6	-0.01	4,933.9	-1,304.9	5,047.4	4,939.6	107.79	46.825	
23,300.0	13,200.0	17,105.7	12,082.5	173.6	94.6	-0.01	4,933.9	-1,304.9	5,144.9	5,037.1	107.85	47.705	
23,400.0	13,200.0	17,105.7	12,082.5	175.2	94.6	-0.01	4,933.9	-1,304.9	5,242.6	5,134.7	107.91	48.584	
23,504.9	13,200.0	17,105.7	12,082.5	176.9	94.6	-0.01	4,933.9	-1,304.9	5,345.1	5,237.1	107.97	49.505	

Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KB @ 3818.5usft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Nina Cortell Fed Com #241H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.36°



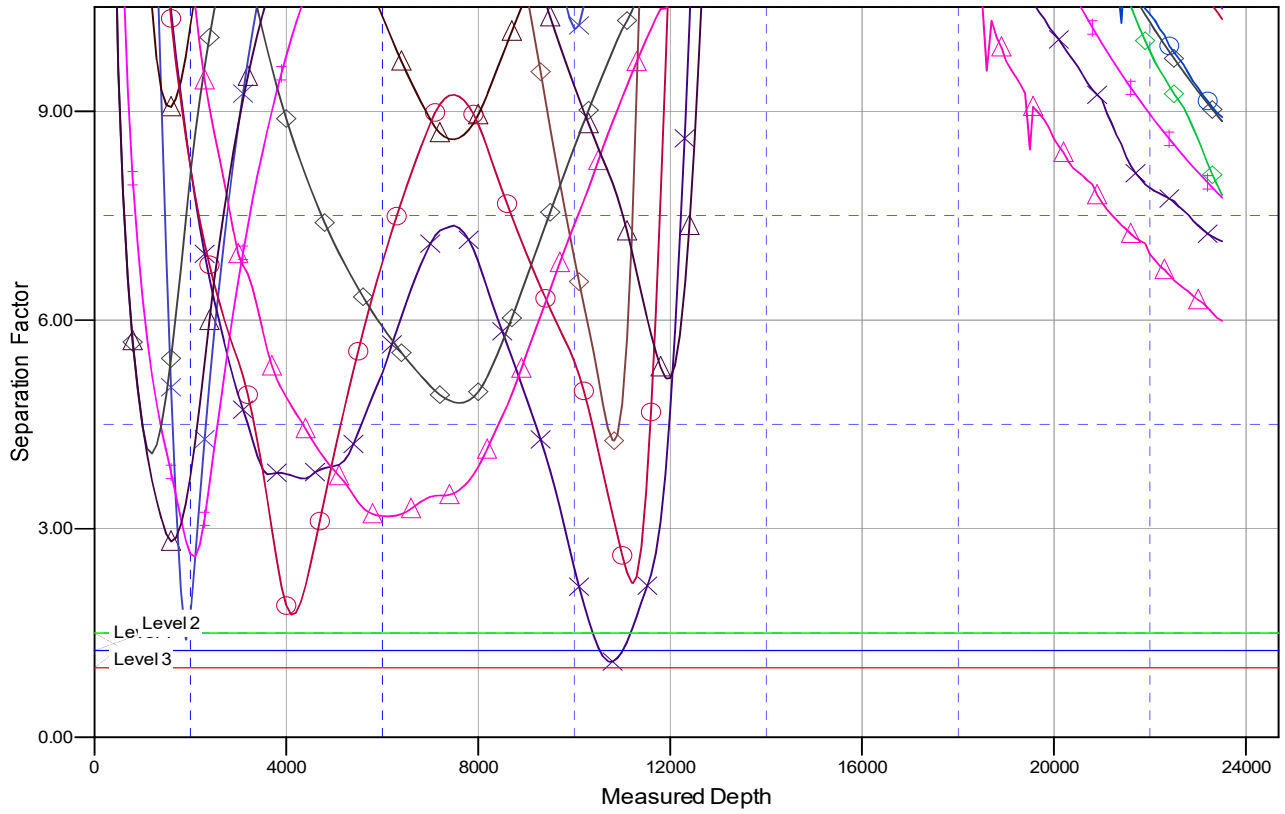
Anticollision Report

Company:	Matador Production Company	**Local Co-ordinate Reference:**	Well Nina Cortell Fed Com #241H
Project:	Antelope Ridge	**TVD Reference:**	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	**MD Reference:**	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	Nina Cortell Fed Com #241H	**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 Single User Db
Reference Design:	BLM Plan #2	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KB @ 3818.5usft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Nina Cortell Fed Com #241H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.36°

Separation Factor Plot



LEGEND

Nina CortellFed Com#111H, Wellbore #1, BLM Plan #1 V0
Nina CortellFed Com#113H, Wellbore #1, BLM Plan #1 V0
Nina CortellFed Com#114H, Wellbore #1, BLM Plan #1 V0
Nina CortellFed Com#121H, Wellbore #1, Actual Survey V0
Nina CortellFed Com#125H, Wellbore #1, Actual V0
Nina CortellFed Com#126H, Wellbore #1, BLM Plan #1 V0
Nina CortellFed Com#127H, Wellbore #1, BLM Plan #1 V0
Nina CortellFed Com#128H, Wellbore #1, BLM Plan #1 V0
Nina CortellFed Com#131H, Actual, Actual V0
Nina CortellFed Com#132H, Wellbore #1, BLM Plan #1 V0
Nina CortellFed Com#133H, Wellbore #1, Wellbore #1 V0
Nina CortellFed Com#134H, Wellbore #1, Wellbore #1 V0
Nina CortellFed Com#135H, Wellbore #1, BLM Plan #2 V0
Nina CortellFed Com#136H, Wellbore #1, BLM Plan #2 V0
Nina CortellFed Com#137H (Previous#223H), Wellbore #1, BLM Plan #1 V0
Nina CortellFed Com#138H (Previous#224H), Wellbore #1, BLM Plan #1 V0
Nina CortellFed Com#201H, Wellbore #1, Actual Survey V0
Nina CortellFed Com#202H, Wellbore #1, Actual V0
Nina CortellFed Com#203H, Sidetrack, Sidetrack V0
Nina CortellFed Com#203H, Wellbore #1, Wellbore #1 V0
Nina CortellFed Com#204H, Wellbore #1, Wellbore #1 V0
Nina CortellFed Com#211H, Wellbore #1, BLM Plan #1 V0

Modified BOP Testing Procedure for Batch Drilling

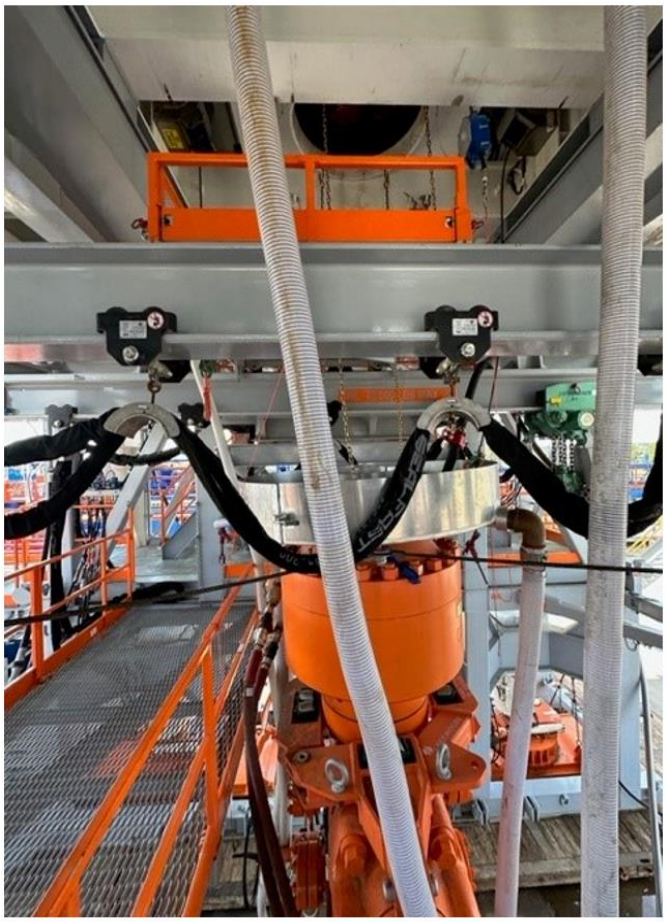
Nina Cortell Fed Com 241H **Township/Range: 22S 32E**
SHL: 272' FSL & 1601' FWL Section 10 **Elevation Above Sea Level: 3790'**

Matador Production Company requests a variance to allow break testing the Blowout Preventer Equipment (BOPE) as prudent in batch drilling operations. Matador requests a variance from 43 CFR 3172.6(b)(9)(iv)(C) to only test broken pressure seals on the BOPE during batch (skid) drilling operations with multiple wells on the same pad.

Justification

The Bureau of Land Management began issuing and revising Onshore Orders pertaining the exploration and development of oil and gas operations on federal onshore and Indian leases in 1983. These orders were later published in 1988, specifically OOGO No. 2 “Drilling Operations on Federal and Indian Oil and Gas Leases” was published November 18, 1988, and has since been the governing standard for over 30 years. This order was later codified in 43 CFR Subpart 3172 on June 16, 2023 with no substantive changes to the content. During which time, the oil and gas industry has seen significant advancements in technology and processes that facilitate safer and more efficient operations, some of those being improvements in rig and wellhead design. The improvements in rig design allow for the BOP stack to remain connected and intact while skidding and the changes in wellhead design complement this feature by utilizing quick connects from BOP to wellhead. The combination of these technologies allow for the rig to skid to the next well while only breaking two pressure sealing connections.

American Petroleum Institute (API) standards, specifications and recommended practices are considered an industry standard and are commonly referenced in 43 CFR 3172 and routinely used in APD COA’s. API Standard 53 “Well Control Equipment Systems for Drilling Wells” recognizes break testing as an acceptable practice during batch drilling operations, specifically in API Std 53 Section 5.3.7.1.



Figures 1 & 2: BOP winch system picture with walking capabilities.

Modified BOP Testing Procedure for Batch Drilling

With these enhancements to operations, Matador Production Company believes that break testing during batch drilling operations meets, and in most cases, exceeds the BLM's intent of 43 CFR 3172.6(b)(9)(iv)(C).

This variance request will be referenced and attached in all APDs seeking approval for break testing and will receive approval prior to implementing this variance.

Procedure

1. Matador Production Company will follow the below guidelines prior to implementing break testing variance:
   a. A full BOP test will be conducted on the first well on the pad.
      i. Full BOP test will be conducted every 21 days per API Std 53, which is above 43 CFR 3172.6(b)(9)(iv)(D) 30 day requirement.
      ii. Annular type preventers tested to 70% RWP per API Std 53, which is above 43 CFR 3172.6(b)(9)(iii) 50% requirement.
      iii. Full BOP test will be conducted prior to drilling out any production hole sections.
   b. The deepest first intermediate hole section will be drilled first.
      i. All subsequent intermediate hole sections will be at same depth or shallower.
      ii. The calculated maximum anticipated surface pressure (MASP) for intermediate hole section will be below 4500 psi.
      iii. If any well control events are encountered, a full BOP test will be performed on subsequent well.
2. After performing a full BOP test on first well, the intermediate hole section will be drilled and cased per design, two breaks will be made on the BOP equipment:
   a. One between the BOP quick connect adapter and wellhead.
   b. One between the HCR valve and choke line connection.
3. Following that, the BOP will be lifted up from the wellhead using a hydraulic or winch system. The two connections will be broken as seen in **Figure 3.**
4. Once skidding to subsequent well is complete, the BOP will be installed on wellhead and the HCR-to-Choke line break will be reconnected.
5. The test plug will then be installed into wellhead.
6. A shell test will then be performed, testing both connections broken as seen in **Figure 4.**
   a. The test will consist of a 250 psi low test and a high test equal to the BOP rating value submitted in the APD and as approved in COAs.
   a. Break test procedure is the same for both 5M and 10M systems, only test pressures change.
7. Following a successful shell test, a function test of the lower pipe rams, blind rams, and annular preventer will be performed.
8. For multi-well pads, the same procedure will be followed for subsequent wells only if the next intermediate hole section can be drilled and cased with the 21-day BOP test window. If unable to be drilled in that time, a full BOP test will be performed.

Modified BOP Testing Procedure for Batch Drilling

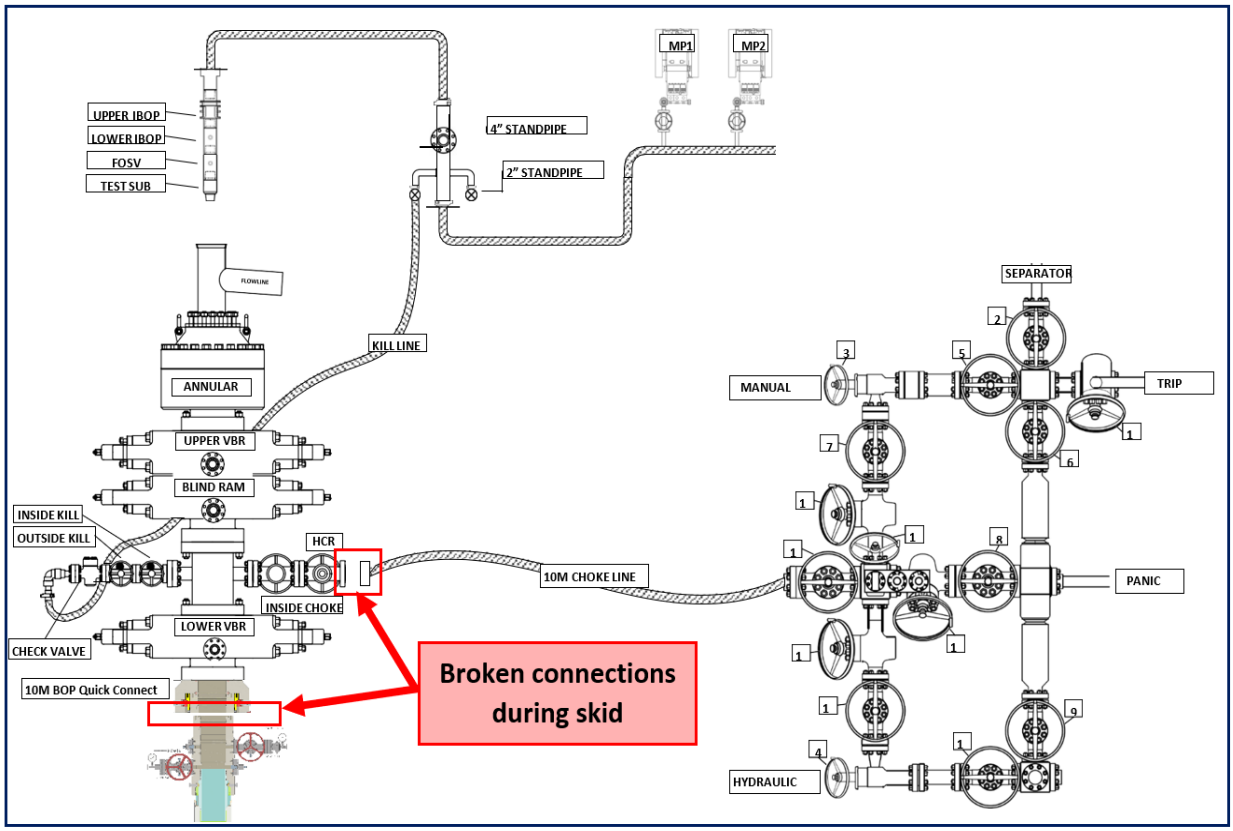


Figure 3: Shows which connections are broken during the skidding process

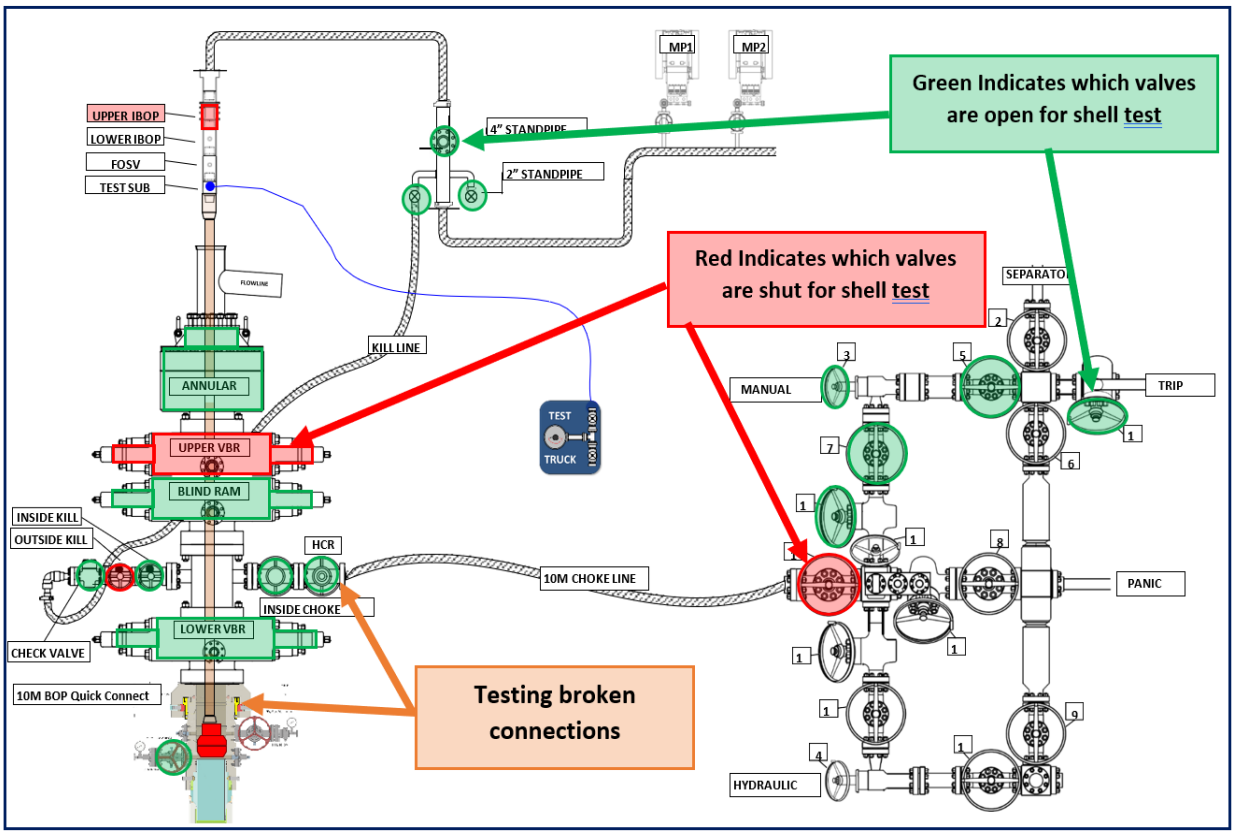


Figure 4: Shows which valves are shut/open for the shell test, testing both broken connections

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
30-025-51190	98166	WC-025 G-09 S233216K; UPR WOLFCAMP

[4]Property Code	[5]Property Name	[6]Well Number
320841	NINA CORTELL FED COM	241H

[7]OGRID No.	[8]Operator Name	[9]Elevation
228937	MATADOR PRODUCTION COMPANY	3790'

[10]Surface Location

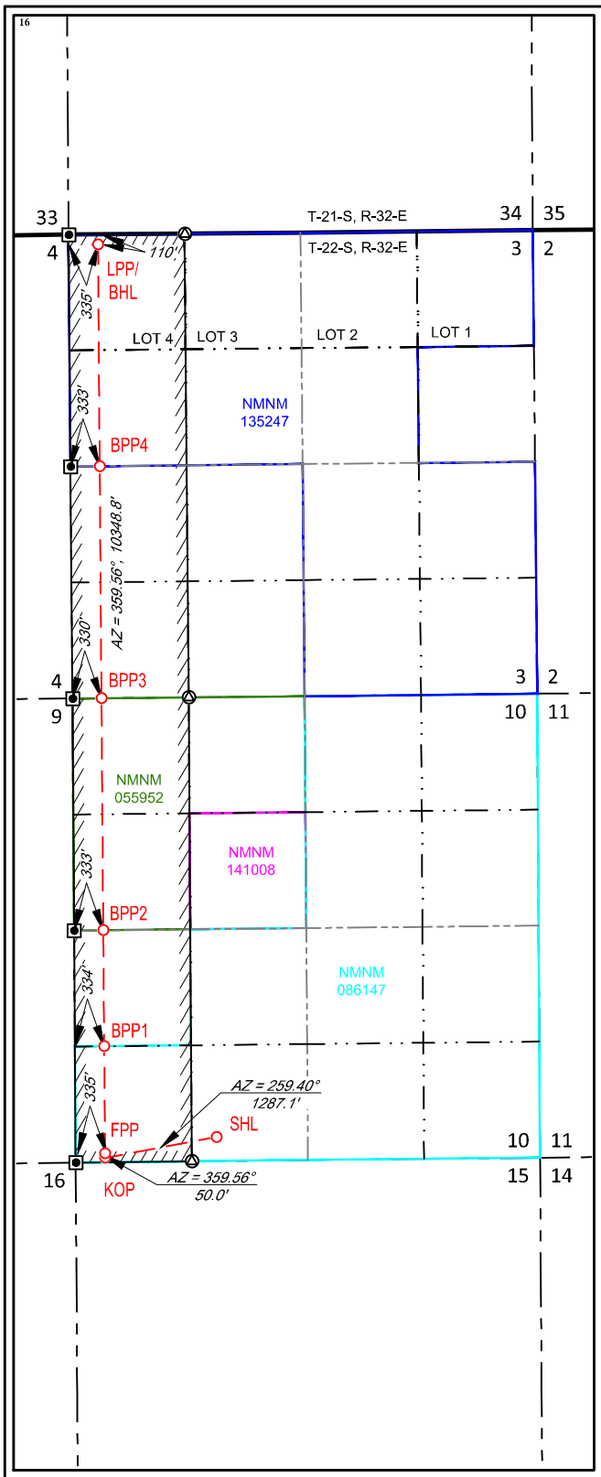
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	10	22-S	32-E	–	272'	SOUTH	1601'	WEST	LEA

[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
4	3	22-S	32-E	–	110'	NORTH	330'	WEST	LEA

[12]Dedicated Acres	[13]Joint or Infill	[14]Consolidation Code	[15]Order No.
319.92			

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)
272' FSL - SEC. 10
1601' FWL - SEC. 10
X=747320 Y=509791
LAT.: N 32.3997151
LONG.: W 103.6659417

KICK OFF POINT (KOP)
50' FSL - SEC. 10
335' FWL - SEC. 10
X=746051 Y=509554
LAT.: N 32.3990862
LONG.: W 103.6700453

FIRST PERF. POINT (FPP)
100' FSL - SEC. 10
335' FWL - SEC. 10
X=746055 Y=509604
LAT.: N 32.3992237
LONG.: W 103.6700455

BLM PERF. POINT (BPP1)
1320' FSL - SEC. 10
334' FWL - SEC. 10
X=746045 Y=510824
LAT.: N 32.4025776
LONG.: W 103.6700514

BLM PERF. POINT (BPP2)
2641' FNL - SEC. 10
333' FWL - SEC. 10
X=746035 Y=512144
LAT.: N 32.4062067
LONG.: W 103.6700578

BLM PERF. POINT (BPP3)
0' FSL - SEC. 3
330' FWL - SEC. 3
X=746015 Y=514784
LAT.: N 32.4134636
LONG.: W 103.6700705

BLM PERF. POINT (BPP4)
2637' FNL - SEC. 3
333' FWL - SEC. 3
X=745995 Y=517426
LAT.: N 32.4207238
LONG.: W 103.6700833

LAST PERF. POINT (LPP)
BOTTOM HOLE LOCATION (BHL)
110' FNL - SEC. 3
335' FWL - SEC. 3
X=745975 Y=519952
LAT.: N 32.4276692
LONG.: W 103.6700955

[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 3/6/2024
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.

03/21/2023
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=706138 Y=509730
LAT.: N 32.3995923
LONG.: W 103.6654543

KICK OFF POINT (KOP)
X=704873 Y=509493
LAT.: N 32.3989634
LONG.: W 103.6695577

FIRST PERF. POINT (FPP)
X=704873 Y=509543
LAT.: N 32.3991008
LONG.: W 103.6695580

BLM PERF. POINT (BPP1)
X=704863 Y=510763
LAT.: N 32.4024547
LONG.: W 103.6695638

BLM PERF. POINT (BPP2)
X=704853 Y=512084
LAT.: N 32.4060839
LONG.: W 103.6695700

BLM PERF. POINT (BPP3)
X=704833 Y=514724
LAT.: N 32.4133411
LONG.: W 103.6695825

BLM PERF. POINT (BPP4)
X=704813 Y=517365
LAT.: N 32.4206010
LONG.: W 103.6695950

LAST PERF. POINT (LPP)
BOTTOM HOLE LOCATION (BHL)
X=704793 Y=519891
LAT.: N 32.4275465
LONG.: W 103.6696069

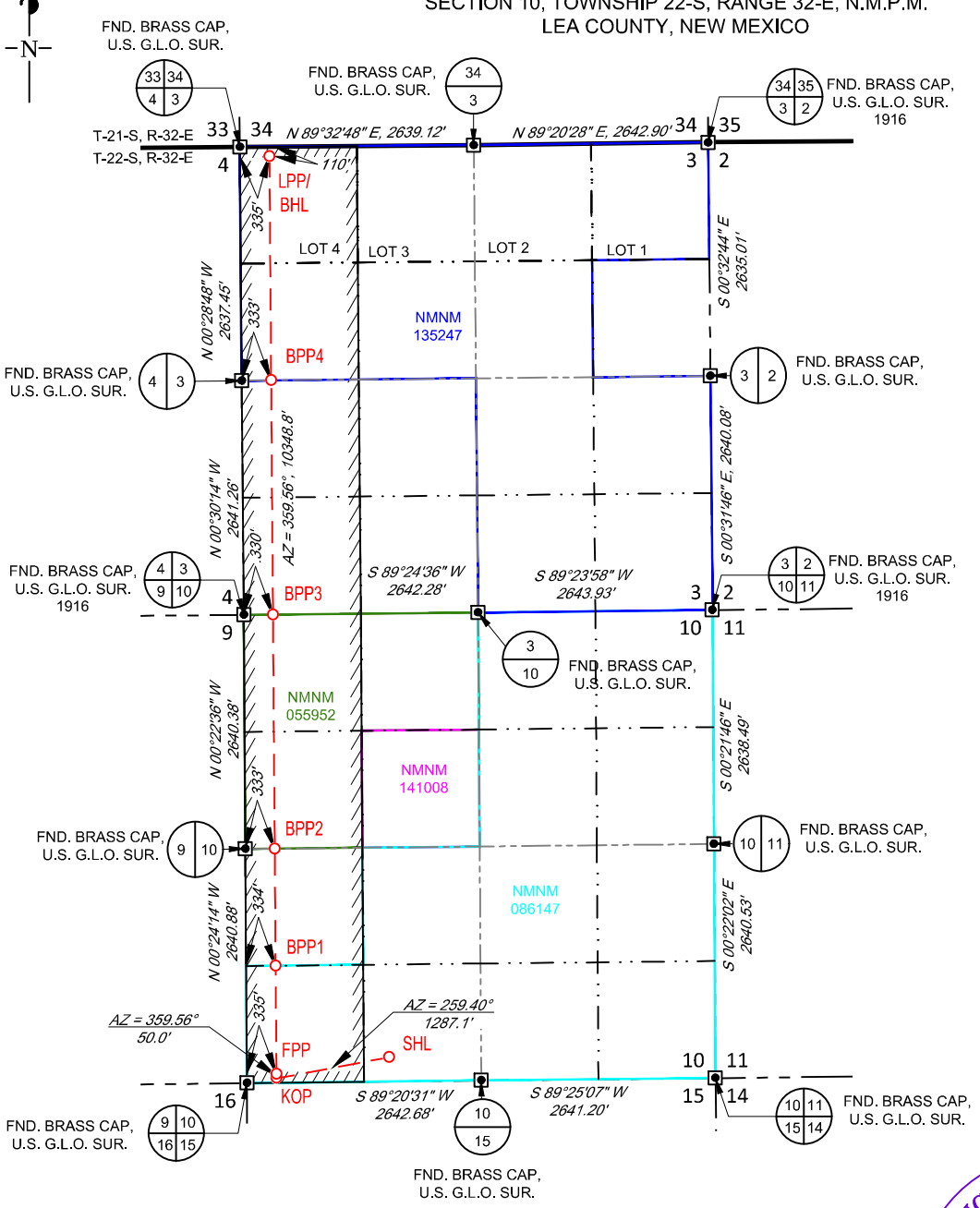
SCALE: 1" = 2000'

0' 1000' 2000'

N

Matador PRODUCTION COMPANY

SECTION 10, TOWNSHIP 22-S, RANGE 32-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



NEW MEXICO EAST
NAD 1983

SURFACE LOCATION (SHL)
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1601' FWL - SEC. 10
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50' FSL - SEC. 10
335' FWL - SEC. 10
X=746051 Y=509554
LAT.: N 32.3990862
LONG.: W 103.6700453

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335' FWL - SEC. 10
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LONG.: W 103.6700578

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X=745995 Y=517426
LAT.: N 32.4207238
LONG.: W 103.6700833

LAST PERF. POINT (LPP)
BOTTOM HOLE LOCATION (BHL)
110' FNL - SEC. 3
335' FWL - SEC. 3
X=745975 Y=519952
LAT.: N 32.4276692
LONG.: W 103.6700955

LEASE NAME & WELL NO.: NINA CORTELL FED COM 241H

SECTION 10 TWP 22-S RGE 32-E SURVEY N.M.P.M.

COUNTY LEA STATE NM

DESCRIPTION 272' FSL & 1601' FWL

DISTANCE & DIRECTION

FROM INT. OF US-180 W/US-62 W & NM-176 W. GO SOUTHWEST ON US-180 W/US-62 W ±1.2 MILES, THENCE SOUTH (LEFT) ON CAMPBELL RD. ±10.5 MILES, THENCE NORTHEAST (LEFT) ON A LEASE RD. ±2.8 MILES, THENCE SOUTH (RIGHT) ON A LEASE RD. ±1.1 MILES, THENCE EAST (LEFT) ON A PROPOSED RD. ±4549 FEET TO A POINT ±355 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
May 4, 2023

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
481 WINSCOTT ROAD, Ste. 200 • BENBROOK, TEXAS 76126
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
TEXAS FIRM REGISTRATION NO. 10042504
WWW.TOPOGRAPHIC.COM

S:\SURVEY\MATADOR_RESOURCES\NINA_CORTELL_10-22S-32E\FINAL_PRODUCTS\LO_NINA_CORTELL_FED_COM_241H_REV1.DWG 5/11/2023 1:01:58 PM juliana.franklin

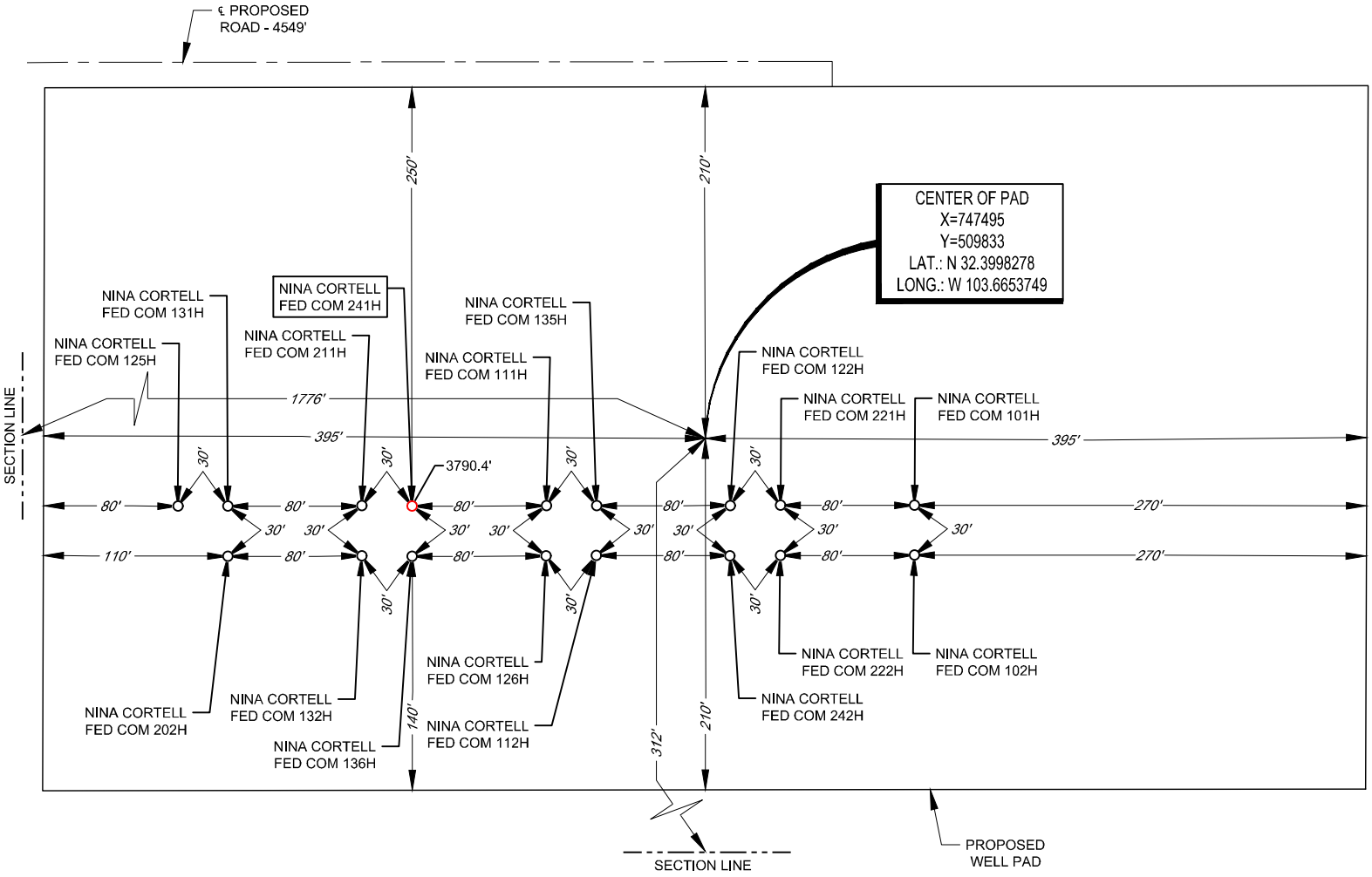
Matador PRODUCTION COMPANY

LEGEND

SECTION LINE
PROPOSED ROAD

SECTION 10, TOWNSHIP 22-S, RANGE 32-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 100'



LEASE NAME & WELL NO.: NINA CORTELL FED COM 241H

241H LATITUDE N 32.3997151 241H LONGITUDE W 103.6659417

CENTER OF PAD IS 312' FSL & 1776' FWL

ANGEL M. BAEZA NEW MEXICO 25116 PROFESSIONAL SURVEYOR

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

May 4, 2023

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"

N

SCALE: 1" = 100'

0' 50' 100'

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TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
TEXAS FIRM REGISTRATION NO. 10042504
WWW.TOPOGRAPHIC.COM

Casing Specs - 10.75" 45.5lb BUTT-SC

Nina Cortell Fed Com 241H **Township/Range: 22S 32E**
SHL: 272' FSL & 1601' FWL Section 10 **Elevation Above Sea Level: 3790'**

BORUSAN MANNESMANN

API 5CT 10.750" 45.50lb/ft HCL80 Casing Performance Data Sheet

Manufactured to specifications of API 5CT 9th edition and bears the API monogram.

Grade	HCL80

	Pipe Body Mechanical Properties
Minimum Yield Strength	80,000 psi
Maximum Yield Strength	95,000 psi
Minimum Tensile Strength	95,000 psi
Maximum Hardness	23.0 HRC

	Sizes
OD	10 3/4
Nominal Wall Thickness	.400 in
Nominal Weight, T&C	45.50 lb/ft
Nominal Weight, PE	44.26 lb/ft
Nominal ID	9.950 in
Standard Drift	9.794 in
Alternate Drift	9.875 in

Coupling Special Clearance	**Size**
OD	11.25 in
Min. Length	10.625 in
Diameter of Counter Bore	10.890 in
Width of bearing face	.375 in

	Minimum Performance
Collapse Pressure	2,940 psi
Internal Pressure Yield	5,210 psi
Pipe body Tension Yield	1,040,000 lbs
Joint Strength STC	692,000 lbs
Joint Strength LTC	N/A
Joint Strength BTC	1,063,000 lbs

	Inspection and Testing
Visual	OD Longitidunal and independent 3rd party SEA
NDT	Independent 3rd party full body EMI and End Area Inspection after hydrotest Calibration notch sensitivity: 10% of specified wall thickness

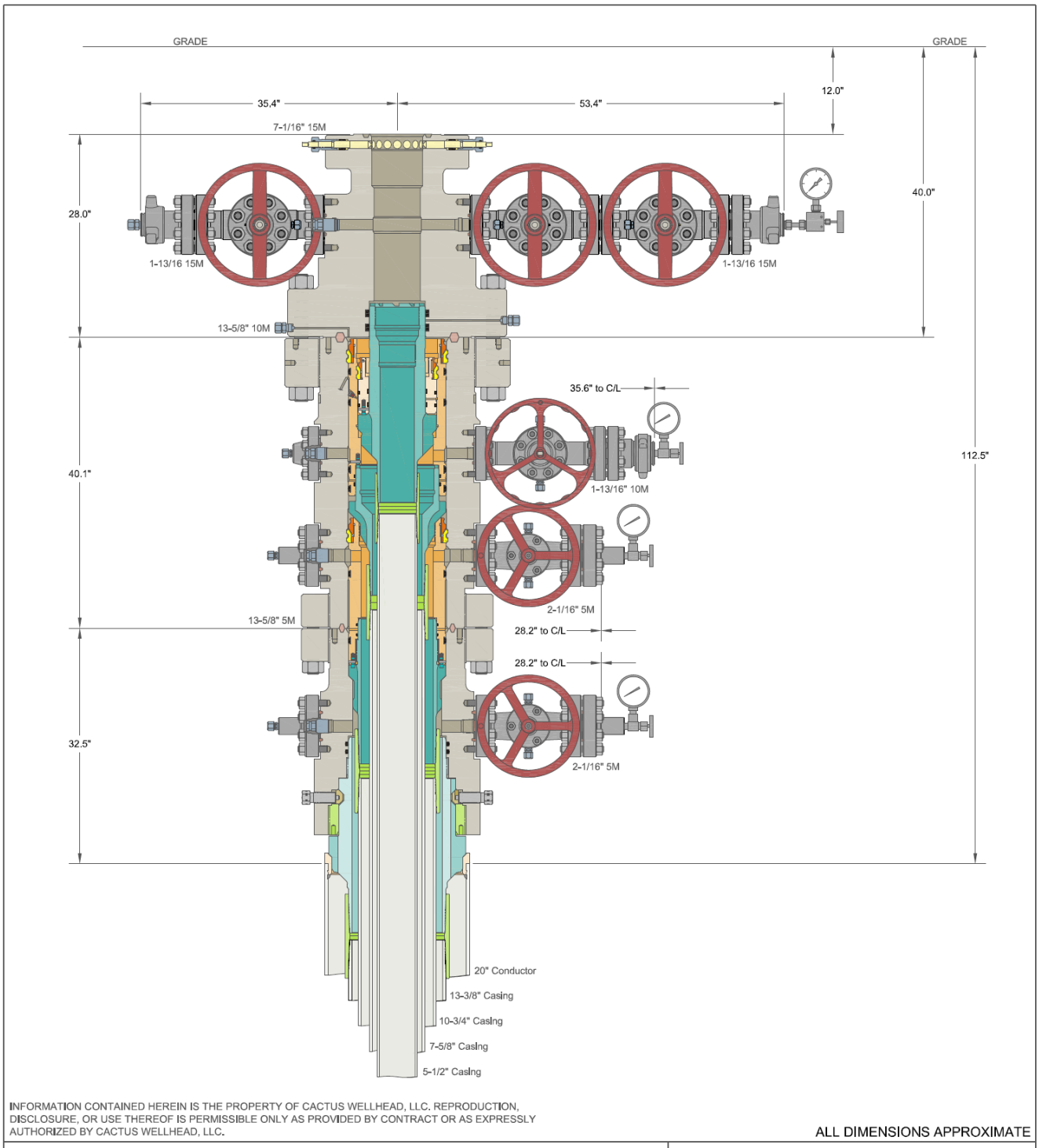
	Color code
Pipe ends	One red, one brown and one blue band
Couplings	Red with one brown band

Matador Production Company

4-String Wellhead Diagram

Nina Cortell Fed Com 241H **Township/Range: 22S 32E**

SHL: 272' FSL & 1601' FWL Section 10 **Elevation Above Sea Level: 3790'**



ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC	MATADOR PRODUCTION COMPANY NEW MEXICO		
20" x 13-3/8" x 10-3/4" x 7-5/8" x 5-1/2" MBU-4T-CFL-R-DBLO System With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head And 10-3/4" & 7-5/8" & 5-1/2" Fluted Mandrel Casing Hangers	DRAWN	DLE	01AUG23
	APPRV		
	DRAWING NO.	HBE0000957	

Matador Production Company

Casing Design Criteria and Load Case Assumptions

Nina Cortell Fed Com 241H **Township/Range: 22S 32E**
SHL: 272' FSL & 1601' FWL Section 10 **Elevation Above Sea Level: 3790'**

Surface Casing

Collapse: $DF_c = 1.125$

a. Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.43 psi/ft). The effects of axial load on collapse will be considered.
b. Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.52 psi/ft).

Bust: $DF_b = 1.125$

a. Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.43 psi/ft), which is a more conservative backup force than pore pressure.

Tensile: $DF_f = 1.8$

a. Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy.

Intermediate #1 Casing

Collapse: $DF_c = 1.125$

a. Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.52 psi/ft). The effects of axial load on collapse will be considered.
b. Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Bust: $DF_b = 1.125$

a. Pressure Test: Casing test per Title 43 CFR 3172 with an external force equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
b. Gas Kick Profile: Internal burst force at the shoe will be Fracture Pressure at that depth. Surface burst pressure will be fracture gradient at setting depth less a gas gradient to equivalent height of 50 bbl kick with Drill Pipe inside casing and mud gradient with which the next hole section will be run above that (0.47 psi/ft). External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
c. Fracture at Shoe with 1/3 BHP at Surface: Internal burst force at the shoe will be Fracture Pressure at setting depth. Internal burst force at surface will be 1/3 of pore pressure at setting depth. External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft) which is a more conservative backup force than pore pressure.

Tensile: $DF_f = 1.8$

a. Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy.

Intermediate #2 Casing

Collapse: $DF_c = 1.125$

a. Partial Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.47 psi/ft). The effects of axial load on collapse will be considered. Internal force equal to gas gradient over half of setting depth and mud gradient with which the next hole section will be run below that (0.65 psi/ft).
b. Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that (0.47 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Casing Design Criteria and Load Case Assumptions

Bust: $DF_b = 1.125$

a. Pressure Test: Casing test per Title 43 CFR 3172 with an external force equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.
b. Gas Kick Profile: Internal burst force at the shoe will be Fracture Pressure at that depth. Surface burst pressure will be fracture gradient at setting depth less a gas gradient to equivalent height of 100 bbl kick with Drill Pipe inside casing and mud gradient with which the next hole section will be run above that (0.65 psi/ft). External force will be equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.
c. Fracture at Shoe with 1/3 BHP at Surface: Internal burst force at the shoe will be Fracture Pressure at setting depth. Internal burst force at surface will be 1/3 of pore pressure at setting depth. External force will be equal to the mud gradient in which the casing will be run (0.47 psi/ft) which is a more conservative backup force than pore pressure.

Tensile: $DF_f = 1.8$

a. Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy.

Production Casing

Collapse: $DF_c = 1.125$

a. Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.65 psi/ft). The effects of axial load on collapse will be considered.
b. Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that (0.65 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Bust: $DF_b = 1.125$

a. Pressure Test: 8000 psi casing test with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.
b. Injection Down Casing: 9500 psi surface injection pressure plus an internal pressure gradient of 0.65 psi/ft with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.

Tensile: $DF_f = 1.8$

a. Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy.

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CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 335338
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
dmcclure	If cement is not circulated to surface during cementing operations, a Cement Bond Log (CBL) is required.	2/5/2025