

Well Name: NINA CORTELL FED COM	Well Location: T22S / R32E / SEC 10 / SESW / 32.3996328 / -103.6659419	County or Parish/State: LEA / NM
Well Number: 222H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM135247	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002551191	Operator: MATADOR PRODUCTION COMPANY	

Notice of Intent

Sundry ID: 2778255

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 03/07/2024	Time Sundry Submitted: 07:04
Date proposed operation will begin: 07/01/2024	

Procedure Description: Matador request the option to amend the well design of the Nina Cortell Fed Com #222H and make the following changes to the current APD: - Change well name from the Nina Cortell Fed Com #222H to the Nina Cortell Fed Com #136H - Change BHL from 60' FNL & 2309' FWL to 110' FNL & 1650' FWL. All perforations will be within the setback requirements as previously approved. - Change target zone from Wolfcamp to Third Bone Spring - Amend casing and cementing plan by changing intermediate 1 casing from 7-5/8" to 9-5/8" and revising set depths as described below.

NOI Attachments

Procedure Description

- Nina_Cortell_Fed_Com_136H_Offline_Cementing___Surface_20240307070130.pdf
- Nina_Cortell_Fed_Com_136H_Directional_AC_20240307070127.pdf
- Nina_Cortell_Fed_Com_136H_Offline_Cementing___Int_20240307070127.pdf
- Nina_Cortell_Fed_Com_136H_Break_Testing_Sundry_20240307070127.pdf
- Nina_Cortell_Fed_Com_136H_Directional_Well_Plan_20240307070127.pdf
- Nina_Cortell_Fed_Com_136H_Directional_Wall_Plot_20240307070127.pdf
- Nina_Cortell_Fed_Com_136H_3_String_Wellhead_Diagram_20240307070127.pdf
- Nina_Cortell_Fed_Com_136H_Sundry_Info_20240307070056.pdf

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LO_NINA_CORTELL_FED_COM_136H_S_20240307070018.pdf

Conditions of Approval

Additional

NINA_CORTELL_FED_COM_136H_ENG_COA_20240318153527.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 06:58 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.

5. Lease Serial No.	
6. If Indian, Allottee or Tribe Name	
7. If Unit of CA/Agreement, Name and/or No.	
8. Well Name and No.	
9. API Well No.	
10. Field and Pool or Exploratory Area	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	
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity	
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other	
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon		
	☐ 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 recompleate 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 OFFICE 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 of this form to U.S. Department of the Interior, Bureau of Land 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 / 242 FSL / 1601 FWL / TWSP: 22S / RANGE: 32E / SECTION: 10 / LAT: 32.3996328 / LONG: -103.6659419 (TVD: 0 feet, MD: 0 feet)
PPP: SESW / 100 FSL / 2313 FWL / TWSP: 22S / RANGE: 32E / SECTION: 10 / LAT: 32.3992519 / LONG: -103.6636368 (TVD: 12273 feet, MD: 12346 feet)
PPP: SENW / 2632 FNL / 1648 FWL / TWSP: 22S / RANGE: 32E / SECTION: 3 / LAT: 32.4207451 / LONG: -103.6636817 (TVD: 12442 feet, MD: 20300 feet)
PPP: NENW / 1320 FNL / 2308 FWL / TWSP: 22S / RANGE: 32E / SECTION: 10 / LAT: 32.4098586 / LONG: -103.663659 (TVD: 12503 feet, MD: 16300 feet)
PPP: SENW / 2639 FNL / 2310 FWL / TWSP: 22S / RANGE: 32E / SECTION: 10 / LAT: 32.4062313 / LONG: -103.6636514 (TVD: 12522 feet, MD: 15000 feet)
BHL: LOT 3 / 60 FNL / 2309 FWL / TWSP: 22S / RANGE: 32E / SECTION: 3 / LAT: 32.4278154 / LONG: -103.6636965 (TVD: 12404 feet, MD: 22813 feet)

CONFIDENTIAL

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MATADOR PRODUCTION COMPANY
WELL NAME & NO.:	NINA CORTELL FED COM 136H
APD ID:	10400081833
SURFACE HOLE FOOTAGE:	242'/S & 1601'/W
BOTTOM HOLE FOOTAGE:	110'/N & 1650'/W
SURFACE LOCATION:	Section 10, T.22 S., R.32 E. NMP.
COUNTY:	Lea County, New Mexico

COA

H ₂ S	☒ 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 (H₂S) 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 9-5/8 inch intermediate casing shall be set at approximately **4,910 ft. (4,896 ft. TVD)**. The minimum required fill of cement behind the 9-5/8 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 intermediate casing must be kept fluid-filled to meet the CFO's minimum collapse design requirement.

Note: Excess cement volume for 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.

Note: Intermediate casing must be kept fluid-filled to meet CFO's collapse design requirement.

3. Operator has proposed to set **5-1/2 in.** production casing at approximately **21,614 ft.** (11,450 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 **5000 (5M) psi**. 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 03/18/2024

Offline Cementing - Surface Casing

Nina Cortell Fed Com 136H

Township/Range: 22S 32E

SHL: 242' FSL & 1601' FWL Section 10

Elevation Above Sea Level: 3,790"

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

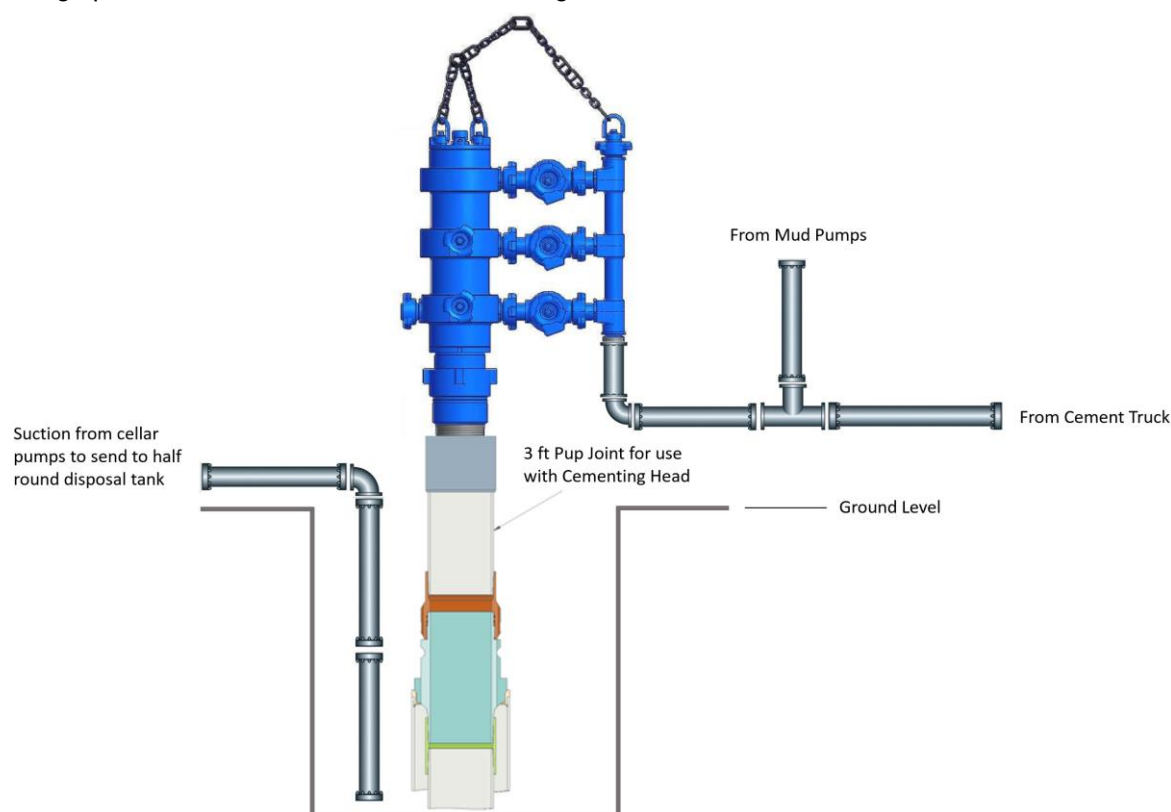
Cement Program

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, confirm integrity of the float equipment (float collar and shoe).
 2. Land casing with mandrel.
 3. 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 #136H

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 #136H
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 #136H	Survey 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	21,613.8	BLM Plan #2 (Wellbore #1)	MWD	OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Nina Cortell						
Nina Cortell Fed Com #111H - Wellbore #1 - BLM Plan #	1,666.4	1,674.9	53.5	42.1	4.683	CC, ES
Nina Cortell Fed Com #111H - Wellbore #1 - BLM Plan #	1,700.0	1,707.6	54.1	42.4	4.632	SF
Nina Cortell Fed Com #113H - Wellbore #1 - BLM Plan #	9,926.9	10,030.5	1,678.0	1,608.0	23.966	CC, ES
Nina Cortell Fed Com #113H - Wellbore #1 - BLM Plan #	21,614.7	20,231.3	2,199.4	1,918.4	7.826	SF
Nina Cortell Fed Com #114H - Wellbore #1 - BLM Plan #	2,082.0	1,915.6	2,507.6	2,493.9	182.642	CC
Nina Cortell Fed Com #114H - Wellbore #1 - BLM Plan #	2,100.0	1,928.5	2,507.6	2,493.8	181.162	ES
Nina Cortell Fed Com #114H - Wellbore #1 - BLM Plan #	21,614.7	20,222.7	3,311.4	2,990.7	10.325	SF
Nina Cortell Fed Com #121H - Wellbore #1 - Actual Surv	17,137.6	10,425.5	1,712.8	1,620.4	18.535	CC
Nina Cortell Fed Com #121H - Wellbore #1 - Actual Surv	21,300.0	14,544.7	1,768.3	1,595.8	10.253	ES
Nina Cortell Fed Com #121H - Wellbore #1 - Actual Surv	21,614.7	14,777.4	1,785.1	1,607.6	10.052	SF
Nina Cortell Fed Com #125H - Wellbore #1 - Actual	703.1	704.2	137.8	133.4	31.085	CC
Nina Cortell Fed Com #125H - Wellbore #1 - Actual	1,100.0	1,100.9	139.2	132.0	19.352	ES
Nina Cortell Fed Com #125H - Wellbore #1 - Actual	21,614.7	21,172.8	1,213.8	907.7	3.965	SF
Nina Cortell Fed Com #126H - Wellbore #1 - BLM Plan #	1,397.3	1,395.0	76.8	67.4	8.151	CC
Nina Cortell Fed Com #126H - Wellbore #1 - BLM Plan #	1,500.0	1,496.6	77.3	67.2	7.638	ES
Nina Cortell Fed Com #126H - Wellbore #1 - BLM Plan #	21,614.7	21,038.3	683.2	460.6	3.069	SF
Nina Cortell Fed Com #127H - Wellbore #1 - BLM Plan #	10,300.1	10,337.9	1,592.1	1,519.4	21.893	CC
Nina Cortell Fed Com #127H - Wellbore #1 - BLM Plan #	21,614.7	21,076.0	1,757.7	1,426.7	5.310	ES, SF
Nina Cortell Fed Com #128H - Wellbore #1 - BLM Plan #	2,569.0	2,412.9	2,396.4	2,379.0	137.653	CC
Nina Cortell Fed Com #128H - Wellbore #1 - BLM Plan #	2,600.0	2,435.7	2,396.4	2,378.8	136.103	ES
Nina Cortell Fed Com #128H - Wellbore #1 - BLM Plan #	21,614.7	21,145.2	3,017.2	2,673.5	8.778	SF
Nina Cortell Fed Com #131H - Actual - Actual	204.6	204.7	113.4	112.4	108.150	CC
Nina Cortell Fed Com #131H - Actual - Actual	800.0	799.2	115.8	110.5	21.881	ES
Nina Cortell Fed Com #131H - Actual - Actual	21,614.7	22,059.5	792.1	482.4	2.558	SF
Nina Cortell Fed Com #132H - Wellbore #1 - BLM Plan #	1,000.0	1,001.0	30.0	23.3	4.470	CC
Nina Cortell Fed Com #132H - Wellbore #1 - BLM Plan #	1,100.0	1,101.0	30.4	23.0	4.108	ES
Nina Cortell Fed Com #132H - Wellbore #1 - BLM Plan #	21,614.7	22,149.7	789.2	485.7	2.600	SF
Nina Cortell Fed Com #133H - Wellbore #1 - Wellbore #1	10,080.2	10,082.1	1,868.9	1,797.8	26.292	CC
Nina Cortell Fed Com #133H - Wellbore #1 - Wellbore #1	21,544.3	22,057.0	1,947.0	1,606.1	5.711	ES
Nina Cortell Fed Com #133H - Wellbore #1 - Wellbore #1	21,614.7	22,057.0	1,948.2	1,606.6	5.703	SF
Nina Cortell Fed Com #134H - Wellbore #1 - Wellbore #1	0.0	0.0	2,343.7			
Nina Cortell Fed Com #134H - Wellbore #1 - Wellbore #1	1,409.7	1,329.0	2,346.0	2,336.9	258.782	ES
Nina Cortell Fed Com #134H - Wellbore #1 - Wellbore #1	21,614.7	22,275.0	3,275.7	2,930.3	9.485	SF
Nina Cortell Fed Com #135H - Wellbore #1 - BLM Plan #	1,392.3	1,408.0	84.7	75.2	8.921	CC
Nina Cortell Fed Com #135H - Wellbore #1 - BLM Plan #	1,500.0	1,500.6	85.1	74.9	8.345	ES
Nina Cortell Fed Com #135H - Wellbore #1 - BLM Plan #	21,614.7	21,769.2	1,319.0	970.0	3.779	SF
Nina Cortell Fed Com #137H (Previous #223H) - Wellbor	10,891.2	10,941.9	1,266.8	1,189.1	16.320	CC

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Nina Cortell						
Nina Cortell Fed Com #137H (Previous #223H) - Wellbor	21,614.7	21,658.1	1,326.2	977.2	3.800	ES, SF
Nina Cortell Fed Com #138H (Previous #224H) - Wellbor	2,888.9	2,780.9	2,339.7	2,319.7	116.809	CC
Nina Cortell Fed Com #138H (Previous #224H) - Wellbor	21,614.7	21,599.7	2,648.2	2,300.2	7.610	ES, SF
Nina Cortell Fed Com #201H - Wellbore #1 - Actual Surv	16,496.4	11,463.9	1,278.0	1,144.5	9.569	CC
Nina Cortell Fed Com #201H - Wellbore #1 - Actual Surv	16,500.0	11,463.9	1,278.0	1,144.4	9.566	ES
Nina Cortell Fed Com #201H - Wellbore #1 - Actual Surv	21,614.7	16,870.0	1,489.8	1,251.5	6.253	SF
Nina Cortell Fed Com #202H - Wellbore #1 - Actual	10,926.0	10,925.9	83.0	6.3	1.082	Level 2, CC
Nina Cortell Fed Com #202H - Wellbore #1 - Actual	10,950.0	10,949.9	83.1	6.2	1.081	Level 2, ES, SF
Nina Cortell Fed Com #203H - Sidetrack - Sidetrack	11,046.3	11,113.2	1,399.7	1,329.6	19.972	CC
Nina Cortell Fed Com #203H - Sidetrack - Sidetrack	21,614.7	22,292.0	1,497.6	1,173.0	4.614	ES, SF
Nina Cortell Fed Com #203H - Wellbore #1 - Wellbore #1	11,028.3	11,087.1	1,345.4	1,267.0	17.165	CC
Nina Cortell Fed Com #203H - Wellbore #1 - Wellbore #1	11,050.0	11,107.4	1,345.5	1,266.9	17.134	ES
Nina Cortell Fed Com #203H - Wellbore #1 - Wellbore #1	11,250.0	11,266.0	1,353.9	1,274.2	16.982	SF
Nina Cortell Fed Com #204H - Wellbore #1 - Wellbore #1	2,901.7	2,797.2	2,302.1	2,282.2	115.538	CC, ES
Nina Cortell Fed Com #204H - Wellbore #1 - Wellbore #1	21,614.7	22,191.0	2,779.8	2,438.8	8.152	SF
Nina Cortell Fed Com #211H - Wellbore #1 - BLM Plan #	1,000.0	1,001.0	42.3	35.6	6.303	CC, ES
Nina Cortell Fed Com #211H - Wellbore #1 - BLM Plan #	1,200.0	1,201.0	45.7	37.6	5.639	SF
Nina Cortell Fed Com #241H - Wellbore #1 - BLM Plan #	1,000.0	1,000.0	30.0	23.3	4.468	CC, ES
Nina Cortell Fed Com #241H - Wellbore #1 - BLM Plan #	1,200.0	1,200.0	33.0	24.9	4.081	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		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	74.09	31.3	109.8	114.2				
100.0	100.0	100.0	100.0	0.1	0.1	74.09	31.3	109.8	114.2	114.0	0.26	445.658	
200.0	200.0	200.0	200.0	0.5	0.5	74.09	31.3	109.8	114.2	113.3	0.97	117.365	
300.0	300.0	300.0	300.0	0.8	0.8	74.09	31.3	109.8	114.2	112.5	1.69	67.581	
400.0	400.0	400.0	400.0	1.2	1.2	74.09	31.3	109.8	114.2	111.8	2.41	47.453	
500.0	500.0	500.0	500.0	1.6	1.6	74.09	31.3	109.8	114.2	111.1	3.12	36.563	
600.0	600.0	600.0	600.0	1.9	1.9	74.09	31.3	109.8	114.2	110.4	3.84	29.738	
700.0	700.0	700.0	700.0	2.3	2.3	74.09	31.3	109.8	114.2	109.7	4.56	25.061	
800.0	800.0	800.0	800.0	2.6	2.6	74.09	31.3	109.8	114.2	109.0	5.27	21.654	
900.0	900.0	900.0	900.0	3.0	3.0	74.09	31.3	109.8	114.2	108.2	5.99	19.063	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	74.09	31.3	109.8	114.2	107.5	6.71	17.026	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	-76.12	31.3	109.8	114.0	106.6	7.41	15.388	
1,200.0	1,200.0	1,208.3	1,208.2	4.0	4.1	-77.82	30.6	105.8	109.7	101.6	8.11	13.521	
1,300.0	1,299.9	1,315.0	1,314.2	4.4	4.5	-81.56	28.4	94.0	97.7	89.0	8.78	11.129	
1,400.0	1,399.7	1,414.7	1,412.6	4.7	4.8	-88.27	25.4	77.9	81.2	71.7	9.45	8.589	
1,500.0	1,499.4	1,512.6	1,509.1	5.0	5.2	-99.48	22.4	61.9	66.2	56.1	10.15	6.528	
1,600.0	1,598.9	1,610.2	1,605.3	5.4	5.6	-117.35	19.4	45.9	55.8	44.9	10.90	5.123	
1,666.4	1,664.9	1,674.9	1,669.1	5.6	5.8	-132.65	17.5	35.4	53.5	42.1	11.42	4.683	CC, ES
1,700.0	1,698.3	1,707.6	1,701.3	5.8	6.0	-140.75	16.5	30.0	54.1	42.4	11.69	4.632	SF
1,800.0	1,797.4	1,804.6	1,797.0	6.1	6.4	-162.32	13.5	14.2	63.2	50.8	12.44	5.084	
1,900.0	1,896.4	1,901.5	1,892.5	6.5	6.7	-177.19	10.6	-1.7	79.8	66.7	13.15	6.073	
2,000.0	1,995.5	2,001.7	1,988.0	6.9	7.2	173.34	7.6	-17.5	99.9	86.1	13.86	7.211	
2,100.0	2,094.5	2,104.8	2,083.6	7.3	7.6	167.10	4.7	-33.4	121.8	107.2	14.59	8.348	
2,200.0	2,193.5	2,192.1	2,179.1	7.7	8.0	162.77	1.7	-49.2	144.6	129.3	15.26	9.474	
2,300.0	2,292.5	2,288.9	2,274.6	8.1	8.4	159.62	-1.2	-65.1	167.9	152.0	15.98	10.511	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
2,400.0	2,391.6	2,385.8	2,370.1	8.5	8.8	157.24	-4.2	-80.9	191.7	175.0	16.70	11.477		
2,500.0	2,490.6	2,482.7	2,465.6	8.9	9.2	155.39	-7.1	-96.7	215.7	198.3	17.43	12.372		
2,600.0	2,589.6	2,579.5	2,561.1	9.3	9.6	153.90	-10.1	-112.6	239.8	221.7	18.17	13.201		
2,700.0	2,688.6	2,676.4	2,656.7	9.7	10.0	152.69	-13.0	-128.4	264.1	245.2	18.91	13.970		
2,729.0	2,717.4	2,704.5	2,684.4	9.8	10.2	152.38	-13.9	-133.0	271.2	252.1	19.12	14.183		
2,800.0	2,787.8	2,773.4	2,752.3	10.1	10.5	151.74	-16.0	-144.3	288.0	268.3	19.65	14.657		
2,900.0	2,887.2	2,870.8	2,848.4	10.5	10.9	150.77	-19.0	-160.2	309.7	289.3	20.38	15.194		
3,000.0	2,986.8	2,968.6	2,944.8	10.9	11.3	149.69	-21.9	-176.2	329.4	308.3	21.12	15.597		
3,100.0	3,086.7	3,066.8	3,041.6	11.2	11.7	148.52	-24.9	-192.3	347.0	325.1	21.85	15.881		
3,200.0	3,186.6	3,165.2	3,138.6	11.6	12.2	147.24	-27.9	-208.3	362.6	340.0	22.57	16.061		
3,262.3	3,249.0	3,226.6	3,199.2	11.8	12.4	-63.84	-29.8	-218.4	371.3	348.3	23.02	16.131		
3,300.0	3,286.6	3,263.8	3,235.8	11.9	12.6	-64.40	-30.9	-224.5	376.4	353.1	23.28	16.166		
3,400.0	3,386.6	3,362.4	3,333.1	12.2	13.0	-65.84	-33.9	-240.6	390.0	366.0	23.98	16.260		
3,500.0	3,486.6	3,461.0	3,430.3	12.6	13.5	-67.18	-36.9	-256.7	403.8	379.1	24.69	16.358		
3,600.0	3,586.6	3,559.6	3,527.5	12.9	13.9	-68.43	-39.9	-272.8	417.9	392.5	25.39	16.458		
3,700.0	3,686.6	3,658.2	3,624.8	13.2	14.3	-69.60	-42.9	-289.0	432.1	406.0	26.09	16.560		
3,800.0	3,786.6	3,756.8	3,722.0	13.5	14.8	-70.69	-45.9	-305.1	446.5	419.7	26.80	16.663		
3,900.0	3,886.6	3,855.4	3,819.2	13.9	15.2	-71.72	-48.9	-321.2	461.0	433.5	27.50	16.766		
4,000.0	3,986.6	3,954.0	3,916.5	14.2	15.6	-72.68	-51.9	-337.3	475.7	447.5	28.20	16.868		
4,100.0	4,086.6	4,052.6	4,013.7	14.6	16.1	-73.58	-54.9	-353.5	490.5	461.6	28.91	16.969		
4,200.0	4,186.6	4,151.2	4,110.9	14.9	16.5	-74.44	-57.9	-369.6	505.5	475.9	29.61	17.069		
4,300.0	4,286.6	4,249.8	4,208.2	15.2	17.0	-75.24	-60.9	-385.7	520.5	490.2	30.32	17.168		
4,400.0	4,386.6	4,348.4	4,305.4	15.6	17.4	-76.00	-64.0	-401.8	535.6	504.6	31.02	17.264		
4,500.0	4,486.6	4,447.0	4,402.6	15.9	17.8	-76.72	-67.0	-418.0	550.8	519.1	31.73	17.359		
4,600.0	4,586.6	4,545.6	4,499.9	16.2	18.3	-77.40	-70.0	-434.1	566.1	533.7	32.44	17.452		
4,700.0	4,686.6	4,644.2	4,597.1	16.6	18.7	-78.04	-73.0	-450.2	581.5	548.3	33.14	17.543		
4,800.0	4,786.6	4,742.9	4,694.3	16.9	19.2	-78.65	-76.0	-466.4	596.9	563.1	33.85	17.632		
4,900.0	4,886.6	4,841.5	4,791.6	17.3	19.6	-79.23	-79.0	-482.5	612.4	577.8	34.56	17.719		
5,000.0	4,986.6	4,940.1	4,888.8	17.6	20.0	-79.78	-82.0	-498.6	628.0	592.7	35.27	17.804		
5,100.0	5,086.6	5,038.7	4,986.0	18.0	20.5	-80.30	-85.0	-514.7	643.6	607.6	35.98	17.887		
5,200.0	5,186.6	5,137.3	5,083.3	18.3	20.9	-80.80	-88.0	-530.9	659.2	622.5	36.69	17.967		
5,300.0	5,286.6	5,235.9	5,180.5	18.6	21.3	-81.28	-91.0	-547.0	674.9	637.5	37.40	18.046		
5,400.0	5,386.6	5,334.5	5,277.7	19.0	21.8	-81.73	-94.0	-563.1	690.7	652.6	38.11	18.123		
5,500.0	5,486.6	5,433.1	5,375.0	19.3	22.2	-82.17	-97.0	-579.2	706.5	667.6	38.82	18.197		
5,600.0	5,586.6	5,531.7	5,472.2	19.7	22.7	-82.58	-100.0	-595.4	722.3	682.8	39.53	18.270		
5,700.0	5,686.6	5,630.3	5,569.4	20.0	23.1	-82.98	-103.0	-611.5	738.1	697.9	40.25	18.341		
5,800.0	5,786.6	5,728.9	5,666.7	20.4	23.5	-83.36	-106.0	-627.6	754.0	713.1	40.96	18.410		
5,900.0	5,886.6	5,827.5	5,763.9	20.7	24.0	-83.73	-109.0	-643.7	770.0	728.3	41.67	18.477		
6,000.0	5,986.6	5,926.1	5,861.1	21.1	24.4	-84.08	-112.0	-659.9	785.9	743.5	42.38	18.543		
6,100.0	6,086.6	6,024.7	5,958.4	21.4	24.9	-84.41	-115.0	-676.0	801.9	758.8	43.10	18.606		
6,200.0	6,186.6	6,123.4	6,055.6	21.8	25.3	-84.74	-118.0	-692.1	817.9	774.1	43.81	18.669		
6,300.0	6,286.6	6,222.0	6,152.8	22.1	25.8	-85.05	-121.0	-708.2	833.9	789.4	44.53	18.729		
6,400.0	6,386.6	6,320.6	6,250.1	22.5	26.2	-85.35	-124.0	-724.4	850.0	804.8	45.24	18.788		
6,500.0	6,486.6	6,419.2	6,347.3	22.8	26.6	-85.64	-127.0	-740.5	866.1	820.1	45.96	18.846		
6,600.0	6,586.6	6,517.8	6,444.5	23.2	27.1	-85.91	-130.0	-756.6	882.2	835.5	46.67	18.902		
6,700.0	6,686.6	6,616.4	6,541.8	23.5	27.5	-86.18	-133.0	-772.7	898.3	850.9	47.39	18.956		
6,800.0	6,786.6	6,715.0	6,639.0	23.9	28.0	-86.44	-136.0	-788.9	914.4	866.3	48.10	19.010		
6,900.0	6,886.6	6,813.6	6,736.2	24.2	28.4	-86.69	-139.0	-805.0	930.6	881.8	48.82	19.062		
7,000.0	6,986.6	6,912.2	6,833.5	24.6	28.8	-86.93	-142.0	-821.1	946.8	897.2	49.54	19.112		
7,100.0	7,086.6	7,010.8	6,930.7	24.9	29.3	-87.16	-145.0	-837.2	963.0	912.7	50.25	19.162		
7,200.0	7,186.6	7,109.4	7,027.9	25.3	29.7	-87.39	-148.0	-853.4	979.2	928.2	50.97	19.210		
7,300.0	7,286.6	7,208.0	7,125.2	25.6	30.2	-87.61	-151.0	-869.5	995.4	943.7	51.69	19.257		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
7,400.0	7,386.6	7,306.6	7,222.4	26.0	30.6	-87.82	-154.0	-885.6	1,011.6	959.2	52.41	19.303		
7,500.0	7,486.6	7,405.2	7,319.6	26.3	31.0	-88.02	-157.0	-901.7	1,027.8	974.7	53.12	19.348		
7,600.0	7,586.6	7,503.8	7,416.8	26.7	31.5	-88.22	-160.0	-917.9	1,044.1	990.3	53.84	19.392		
7,700.0	7,686.6	7,602.5	7,514.1	27.0	31.9	-88.41	-163.0	-934.0	1,060.4	1,005.8	54.56	19.435		
7,800.0	7,786.6	7,701.1	7,611.3	27.4	32.4	-88.60	-166.0	-950.1	1,076.6	1,021.4	55.28	19.477		
7,900.0	7,886.6	7,800.3	7,708.5	27.7	32.8	-88.78	-169.0	-966.2	1,092.9	1,036.9	56.00	19.517		
8,000.0	7,986.6	7,901.7	7,805.8	28.1	33.3	-88.95	-172.0	-982.4	1,109.2	1,052.5	56.73	19.553		
8,100.0	8,086.6	8,003.1	7,903.0	28.4	33.7	-89.12	-175.0	-998.5	1,125.5	1,068.1	57.46	19.588		
8,200.0	8,186.6	8,104.5	8,000.2	28.8	34.2	-89.29	-178.0	-1,014.6	1,141.9	1,083.7	58.19	19.623		
8,300.0	8,286.6	8,205.9	8,097.5	29.1	34.6	-89.45	-181.0	-1,030.7	1,158.2	1,099.3	58.92	19.657		
8,400.0	8,386.6	8,307.3	8,194.7	29.5	35.1	-89.61	-184.0	-1,046.9	1,174.5	1,114.9	59.65	19.690		
8,500.0	8,486.6	8,391.3	8,291.9	29.8	35.5	-89.76	-187.0	-1,063.0	1,190.9	1,130.5	60.31	19.744		
8,600.0	8,586.6	8,489.9	8,389.2	30.2	35.9	-89.90	-190.1	-1,079.1	1,207.2	1,146.2	61.04	19.779		
8,700.0	8,686.6	8,588.5	8,486.4	30.6	36.3	-90.05	-193.1	-1,095.2	1,223.6	1,161.8	61.76	19.813		
8,800.0	8,786.6	8,687.1	8,583.6	30.9	36.8	-90.19	-196.1	-1,111.4	1,239.9	1,177.5	62.48	19.847		
8,900.0	8,886.6	8,785.7	8,680.9	31.3	37.2	-90.32	-199.1	-1,127.5	1,256.3	1,193.1	63.20	19.879		
9,000.0	8,986.6	8,884.3	8,778.1	31.6	37.7	-90.46	-202.1	-1,143.6	1,272.7	1,208.8	63.92	19.912		
9,100.0	9,086.6	9,205.4	9,086.6	32.0	38.9	-90.67	-207.0	-1,170.4	1,282.3	1,216.7	65.57	19.957		
9,200.0	9,186.6	9,305.4	9,186.6	32.3	39.2	-90.67	-207.0	-1,170.4	1,282.3	1,216.0	66.24	19.957		
9,300.0	9,286.6	9,405.4	9,286.6	32.7	39.4	-90.67	-207.0	-1,170.4	1,282.3	1,215.4	66.92	19.961		
9,400.0	9,386.6	9,505.4	9,386.6	33.0	39.7	-90.67	-207.0	-1,170.4	1,282.3	1,214.7	67.60	19.969		
9,404.0	9,390.6	9,501.4	9,390.6	33.0	39.7	-90.67	-207.0	-1,170.4	1,282.3	1,214.7	67.60	18.968		
9,500.0	9,486.6	9,585.7	9,477.7	33.4	40.0	-90.63	-206.2	-1,170.5	1,282.4	1,214.2	68.24	18.793		
9,600.0	9,586.6	9,662.4	9,553.8	33.7	40.2	-90.22	-196.9	-1,171.8	1,284.0	1,215.1	68.90	18.636		
9,700.0	9,686.6	9,735.4	9,624.4	34.1	40.4	-89.41	-178.8	-1,174.3	1,287.7	1,218.2	69.53	18.520		
9,800.0	9,786.6	9,800.0	9,684.5	34.5	40.5	-88.38	-155.5	-1,177.5	1,293.9	1,223.8	70.09	18.460		
9,900.0	9,886.6	9,863.7	9,740.8	34.8	40.7	-87.08	-126.2	-1,181.6	1,303.3	1,232.7	70.58	18.466		
10,000.0	9,986.6	9,917.6	9,785.7	35.2	40.8	-85.79	-96.5	-1,185.7	1,316.5	1,245.6	70.91	18.565		
10,100.0	10,086.6	9,965.0	9,822.7	35.5	40.9	-84.52	-67.2	-1,189.8	1,334.0	1,262.9	71.07	18.769		
10,200.0	10,186.6	10,000.0	9,848.3	35.9	41.0	-83.51	-43.6	-1,193.0	1,356.2	1,285.2	70.98	19.108		
10,300.0	10,286.6	10,050.0	9,882.3	36.2	41.0	-81.97	-7.3	-1,198.1	1,383.3	1,312.4	70.87	19.519		
10,400.0	10,386.6	10,074.2	9,897.6	36.6	41.1	-81.20	11.3	-1,200.7	1,415.3	1,345.0	70.34	20.120		
10,500.0	10,486.6	10,100.0	9,913.0	36.9	41.1	-80.35	31.7	-1,203.5	1,452.3	1,382.6	69.69	20.840		
10,600.0	10,586.6	10,126.3	9,927.8	37.3	41.2	-79.46	53.3	-1,206.5	1,494.1	1,425.2	68.92	21.679		
10,700.0	10,686.6	10,150.0	9,940.2	37.6	41.2	-78.64	73.3	-1,209.3	1,540.4	1,472.4	68.03	22.644		
10,800.0	10,786.6	10,166.9	9,948.5	38.0	41.2	-78.06	87.8	-1,211.3	1,591.0	1,524.1	66.98	23.755		
10,890.4	10,877.0	10,182.4	9,955.8	38.3	41.2	-77.51	101.4	-1,213.2	1,640.2	1,574.2	66.00	24.852		
10,900.0	10,886.6	10,183.9	9,956.5	38.4	41.3	-71.44	102.8	-1,213.4	1,645.6	1,579.8	65.89	24.974		
10,950.0	10,936.5	10,200.0	9,963.6	38.5	41.3	-67.77	117.0	-1,215.3	1,673.6	1,608.1	65.44	25.576		
11,000.0	10,986.0	10,200.0	9,963.6	38.7	41.3	-64.77	117.0	-1,215.3	1,701.0	1,636.2	64.74	26.273		
11,050.0	11,034.6	10,200.0	9,963.6	38.9	41.3	-61.93	117.0	-1,215.3	1,727.8	1,663.8	64.03	26.983		
11,100.0	11,082.0	10,223.4	9,973.2	39.0	41.3	-58.73	138.2	-1,218.3	1,753.5	1,689.8	63.65	27.549		
11,150.0	11,127.8	10,250.0	9,983.0	39.2	41.4	-55.80	162.6	-1,221.7	1,778.4	1,715.1	63.29	28.101		
11,200.0	11,171.8	10,250.0	9,983.0	39.3	41.4	-53.66	162.6	-1,221.7	1,801.6	1,739.0	62.60	28.780		
11,250.0	11,213.5	10,250.0	9,983.0	39.4	41.4	-51.71	162.6	-1,221.7	1,823.6	1,761.6	61.93	29.444		
11,300.0	11,252.6	10,272.0	9,990.3	39.5	41.4	-49.69	183.2	-1,224.5	1,843.8	1,782.3	61.57	29.945		
11,350.0	11,288.9	10,300.0	9,998.4	39.7	41.4	-47.88	209.8	-1,228.2	1,862.6	1,801.3	61.30	30.385		
11,400.0	11,322.0	10,300.0	9,998.4	39.8	41.4	-46.60	209.8	-1,228.2	1,879.1	1,818.3	60.75	30.931		
11,450.0	11,351.8	10,300.0	9,998.4	39.9	41.4	-45.48	209.8	-1,228.2	1,894.0	1,833.7	60.26	31.428		
11,500.0	11,377.9	10,325.8	10,004.7	40.0	41.5	-44.40	234.5	-1,231.6	1,906.5	1,846.4	60.10	31.720		
11,550.0	11,400.3	10,350.0	10,009.5	40.1	41.5	-43.55	258.0	-1,234.9	1,917.1	1,857.1	59.97	31.966		
11,600.0	11,418.6	10,350.0	10,009.5	40.3	41.5	-42.98	258.0	-1,234.9	1,925.4	1,865.7	59.70	32.253		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
11,650.0	11,432.8	10,367.9	10,012.5	40.4	41.6	-42.53	275.5	-1,237.3	1,931.4	1,871.8	59.65	32.379		
11,700.0	11,442.8	10,382.1	10,014.5	40.5	41.6	-42.27	289.5	-1,239.3	1,935.2	1,875.6	59.65	32.443		
11,750.0	11,448.5	10,400.0	10,016.4	40.7	41.6	-42.19	307.1	-1,241.7	1,936.7	1,877.0	59.75	32.412		
11,790.4	11,450.0	10,400.0	10,016.4	40.8	41.6	-42.22	307.1	-1,241.7	1,936.3	1,876.5	59.81	32.373		
11,800.0	11,450.0	10,400.0	10,016.4	40.8	41.6	-42.22	307.1	-1,241.7	1,936.1	1,876.2	59.83	32.357		
11,840.8	11,450.0	10,422.2	10,018.1	40.9	41.7	-42.28	328.9	-1,244.7	1,935.4	1,875.4	60.08	32.216		
11,900.0	11,450.0	10,454.7	10,019.0	41.1	41.8	-42.34	361.2	-1,249.2	1,936.7	1,876.3	60.44	32.043		
12,000.0	11,450.0	10,537.0	10,018.9	41.5	42.0	-42.43	442.8	-1,259.3	1,942.3	1,881.1	61.25	31.711		
12,037.8	11,450.0	10,606.6	10,018.8	41.7	42.2	-42.52	512.1	-1,266.1	1,944.4	1,882.7	61.70	31.515		
12,100.0	11,450.0	10,721.7	10,018.6	41.9	42.6	-42.66	626.9	-1,273.5	1,946.9	1,884.4	62.45	31.177		
12,200.0	11,450.0	10,871.7	10,018.5	42.4	43.2	-42.69	776.9	-1,276.6	1,947.7	1,884.1	63.53	30.657		
12,300.0	11,450.0	10,971.7	10,018.3	43.0	43.7	-42.69	876.9	-1,277.3	1,947.7	1,883.1	64.53	30.180		
12,400.0	11,450.0	11,071.7	10,018.2	43.6	44.2	-42.68	976.9	-1,278.0	1,947.7	1,882.1	65.62	29.682		
12,500.0	11,450.0	11,171.7	10,018.1	44.3	44.8	-42.68	1,076.9	-1,278.7	1,947.7	1,880.9	66.78	29.165		
12,600.0	11,450.0	11,271.7	10,018.0	45.0	45.5	-42.68	1,176.9	-1,279.3	1,947.7	1,879.7	68.02	28.635		
12,700.0	11,450.0	11,371.7	10,017.9	45.8	46.2	-42.67	1,276.9	-1,280.0	1,947.7	1,878.4	69.32	28.096		
12,800.0	11,450.0	11,471.7	10,017.7	46.6	46.9	-42.67	1,376.9	-1,280.7	1,947.7	1,877.0	70.70	27.551		
12,900.0	11,450.0	11,571.7	10,017.6	47.4	47.8	-42.66	1,476.9	-1,281.4	1,947.8	1,875.6	72.13	27.004		
13,000.0	11,450.0	11,671.7	10,017.5	48.3	48.6	-42.66	1,576.9	-1,282.0	1,947.8	1,874.1	73.62	26.457		
13,100.0	11,450.0	11,771.7	10,017.4	49.3	49.5	-42.65	1,676.9	-1,282.7	1,947.8	1,872.6	75.17	25.912		
13,200.0	11,450.0	11,871.7	10,017.3	50.3	50.5	-42.65	1,776.9	-1,283.4	1,947.8	1,871.0	76.77	25.373		
13,300.0	11,450.0	11,971.7	10,017.2	51.3	51.5	-42.64	1,876.9	-1,284.1	1,947.8	1,869.4	78.41	24.840		
13,400.0	11,450.0	12,071.7	10,017.0	52.3	52.5	-42.64	1,976.9	-1,284.8	1,947.8	1,867.7	80.11	24.315		
13,500.0	11,450.0	12,171.7	10,016.9	53.4	53.6	-42.63	2,076.9	-1,285.4	1,947.8	1,866.0	81.84	23.800		
13,600.0	11,450.0	12,271.7	10,016.8	54.5	54.7	-42.63	2,176.9	-1,286.1	1,947.9	1,864.2	83.62	23.295		
13,700.0	11,450.0	12,371.7	10,016.7	55.6	55.8	-42.62	2,276.9	-1,286.8	1,947.9	1,862.4	85.43	22.801		
13,800.0	11,450.0	12,471.7	10,016.6	56.8	56.9	-42.62	2,376.9	-1,287.5	1,947.9	1,860.6	87.28	22.318		
13,900.0	11,450.0	12,571.7	10,016.4	58.0	58.1	-42.61	2,476.9	-1,288.2	1,947.9	1,858.7	89.16	21.848		
14,000.0	11,450.0	12,671.7	10,016.3	59.2	59.3	-42.61	2,576.9	-1,288.8	1,947.9	1,856.8	91.07	21.390		
14,100.0	11,450.0	12,771.7	10,016.2	60.4	60.5	-42.60	2,676.9	-1,289.5	1,947.9	1,854.9	93.01	20.944		
14,200.0	11,450.0	12,871.7	10,016.1	61.7	61.7	-42.60	2,776.9	-1,290.2	1,947.9	1,853.0	94.98	20.510		
14,300.0	11,450.0	12,971.7	10,016.0	62.9	63.0	-42.59	2,876.9	-1,290.9	1,947.9	1,851.0	96.97	20.089		
14,400.0	11,450.0	13,071.7	10,015.9	64.2	64.3	-42.59	2,976.9	-1,291.6	1,948.0	1,849.0	98.98	19.680		
14,500.0	11,450.0	13,171.7	10,015.7	65.5	65.6	-42.59	3,076.9	-1,292.2	1,948.0	1,847.0	101.02	19.282		
14,600.0	11,450.0	13,271.7	10,015.6	66.8	66.9	-42.58	3,176.9	-1,292.9	1,948.0	1,844.9	103.08	18.897		
14,700.0	11,450.0	13,371.7	10,015.5	68.2	68.2	-42.58	3,276.9	-1,293.6	1,948.0	1,842.8	105.16	18.524		
14,800.0	11,450.0	13,471.7	10,015.4	69.5	69.5	-42.57	3,376.9	-1,294.3	1,948.0	1,840.8	107.26	18.162		
14,900.0	11,450.0	13,571.7	10,015.3	70.9	70.9	-42.57	3,476.9	-1,295.0	1,948.0	1,838.7	109.38	17.810		
15,000.0	11,450.0	13,671.7	10,015.1	72.2	72.2	-42.56	3,576.9	-1,295.6	1,948.0	1,836.5	111.51	17.470		
15,100.0	11,450.0	13,771.7	10,015.0	73.6	73.6	-42.56	3,676.9	-1,296.3	1,948.1	1,834.4	113.66	17.140		
15,200.0	11,450.0	13,871.7	10,014.9	75.0	75.0	-42.55	3,776.9	-1,297.0	1,948.1	1,832.3	115.82	16.820		
15,300.0	11,450.0	13,971.7	10,014.8	76.4	76.4	-42.55	3,876.9	-1,297.7	1,948.1	1,830.1	117.99	16.510		
15,400.0	11,450.0	14,071.7	10,014.7	77.8	77.8	-42.54	3,976.9	-1,298.4	1,948.1	1,827.9	120.18	16.209		
15,500.0	11,450.0	14,171.7	10,014.6	79.3	79.2	-42.54	4,076.9	-1,299.0	1,948.1	1,825.7	122.39	15.918		
15,600.0	11,450.0	14,271.7	10,014.4	80.7	80.7	-42.53	4,176.9	-1,299.7	1,948.1	1,823.5	124.60	15.635		
15,700.0	11,450.0	14,371.7	10,014.3	82.1	82.1	-42.53	4,276.9	-1,300.4	1,948.1	1,821.3	126.82	15.361		
15,800.0	11,450.0	14,471.7	10,014.2	83.6	83.5	-42.52	4,376.9	-1,301.1	1,948.2	1,819.1	129.06	15.095		
15,900.0	11,450.0	14,571.7	10,014.1	85.0	85.0	-42.52	4,476.8	-1,301.8	1,948.2	1,816.9	131.30	14.837		
16,000.0	11,450.0	14,671.7	10,014.0	86.5	86.4	-42.51	4,576.8	-1,302.4	1,948.2	1,814.6	133.56	14.587		
16,100.0	11,450.0	14,771.7	10,013.8	88.0	87.9	-42.51	4,676.8	-1,303.1	1,948.2	1,812.4	135.82	14.344		
16,200.0	11,450.0	14,871.7	10,013.7	89.4	89.4	-42.51	4,776.8	-1,303.8	1,948.2	1,810.1	138.09	14.108		
16,300.0	11,450.0	14,971.7	10,013.6	90.9	90.9	-42.50	4,876.8	-1,304.5	1,948.2	1,807.9	140.37	13.879		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
16,304.9	11,450.0	14,976.6	10,013.6	91.0	90.9	-42.50	4,881.7	-1,304.5	1,948.2	1,807.7	140.48	13.868		
16,400.0	11,450.0	15,059.0	10,013.5	92.4	92.2	-42.50	4,964.1	-1,305.1	1,948.3	1,805.7	142.61	13.661		
16,500.0	11,450.0	15,059.0	10,013.5	93.9	92.2	-42.50	4,964.1	-1,305.1	1,951.5	1,807.1	144.40	13.515		
16,600.0	11,450.0	15,059.0	10,013.5	95.4	92.2	-42.50	4,964.1	-1,305.1	1,959.8	1,813.9	145.92	13.431		
16,700.0	11,450.0	15,059.0	10,013.5	96.9	92.2	-42.50	4,964.1	-1,305.1	1,973.2	1,826.1	147.16	13.409		
16,800.0	11,450.0	15,059.0	10,013.5	98.4	92.2	-42.50	4,964.1	-1,305.1	1,991.5	1,843.4	148.13	13.444		
16,900.0	11,450.0	15,059.0	10,013.5	100.0	92.2	-42.50	4,964.1	-1,305.1	2,014.6	1,865.8	148.84	13.536		
17,000.0	11,450.0	15,059.0	10,013.5	101.5	92.2	-42.50	4,964.1	-1,305.1	2,042.4	1,893.1	149.28	13.681		
17,100.0	11,450.0	15,059.0	10,013.5	103.0	92.2	-42.50	4,964.1	-1,305.1	2,074.6	1,925.1	149.49	13.878		
17,200.0	11,450.0	15,059.0	10,013.5	104.5	92.2	-42.50	4,964.1	-1,305.1	2,111.1	1,961.6	149.47	14.123		
17,300.0	11,450.0	15,059.0	10,013.5	106.1	92.2	-42.50	4,964.1	-1,305.1	2,151.6	2,002.3	149.26	14.415		
17,400.0	11,450.0	15,059.0	10,013.5	107.6	92.2	-42.50	4,964.1	-1,305.1	2,195.9	2,047.0	148.87	14.750		
17,500.0	11,450.0	15,059.0	10,013.5	109.1	92.2	-42.50	4,964.1	-1,305.1	2,243.7	2,095.4	148.33	15.126		
17,600.0	11,450.0	15,059.0	10,013.5	110.7	92.2	-42.50	4,964.1	-1,305.1	2,295.0	2,147.3	147.67	15.542		
17,700.0	11,450.0	15,059.0	10,013.5	112.2	92.2	-42.50	4,964.1	-1,305.1	2,349.4	2,202.5	146.89	15.994		
17,800.0	11,450.0	15,059.0	10,013.5	113.8	92.2	-42.50	4,964.1	-1,305.1	2,406.7	2,260.7	146.04	16.480		
17,900.0	11,450.0	15,059.0	10,013.5	115.3	92.2	-42.50	4,964.1	-1,305.1	2,466.7	2,321.6	145.11	16.998		
18,000.0	11,450.0	15,059.0	10,013.5	116.9	92.2	-42.50	4,964.1	-1,305.1	2,529.3	2,385.2	144.14	17.547		
18,100.0	11,450.0	15,059.0	10,013.5	118.4	92.2	-42.50	4,964.1	-1,305.1	2,594.2	2,451.1	143.13	18.125		
18,200.0	11,450.0	15,059.0	10,013.5	120.0	92.2	-42.50	4,964.1	-1,305.1	2,661.3	2,519.2	142.10	18.728		
18,300.0	11,450.0	15,059.0	10,013.5	121.6	92.2	-42.50	4,964.1	-1,305.1	2,730.4	2,589.4	141.05	19.357		
18,400.0	11,450.0	15,059.0	10,013.5	123.1	92.2	-42.50	4,964.1	-1,305.1	2,801.4	2,661.4	140.00	20.009		
18,500.0	11,450.0	15,059.0	10,013.5	124.7	92.2	-42.50	4,964.1	-1,305.1	2,874.1	2,735.1	138.96	20.683		
18,600.0	11,450.0	15,059.0	10,013.5	126.3	92.2	-42.50	4,964.1	-1,305.1	2,948.4	2,810.5	137.92	21.377		
18,700.0	11,450.0	15,059.0	10,013.5	127.8	92.2	-42.50	4,964.1	-1,305.1	3,024.2	2,887.3	136.90	22.090		
18,800.0	11,450.0	15,059.0	10,013.5	129.4	92.2	-42.50	4,964.1	-1,305.1	3,101.3	2,965.4	135.90	22.821		
18,900.0	11,450.0	15,059.0	10,013.5	131.0	92.2	-42.50	4,964.1	-1,305.1	3,179.7	3,044.8	134.92	23.568		
19,000.0	11,450.0	15,059.0	10,013.5	132.6	92.2	-42.50	4,964.1	-1,305.1	3,259.3	3,125.4	133.96	24.331		
19,100.0	11,450.0	15,059.0	10,013.5	134.2	92.2	-42.50	4,964.1	-1,305.1	3,340.0	3,207.0	133.03	25.108		
19,200.0	11,450.0	15,059.0	10,013.5	135.7	92.2	-42.50	4,964.1	-1,305.1	3,421.8	3,289.6	132.12	25.898		
19,300.0	11,450.0	15,059.0	10,013.5	137.3	92.2	-42.50	4,964.1	-1,305.1	3,504.4	3,373.2	131.25	26.701		
19,400.0	11,450.0	15,059.0	10,013.5	138.9	92.2	-42.50	4,964.1	-1,305.1	3,588.0	3,457.6	130.40	27.515		
19,500.0	11,450.0	15,059.0	10,013.5	140.5	92.2	-42.50	4,964.1	-1,305.1	3,672.4	3,542.8	129.58	28.341		
19,600.0	11,450.0	15,059.0	10,013.5	142.1	92.2	-42.50	4,964.1	-1,305.1	3,757.5	3,628.7	128.79	29.176		
19,700.0	11,450.0	15,059.0	10,013.5	143.7	92.2	-42.50	4,964.1	-1,305.1	3,843.4	3,715.3	128.02	30.021		
19,800.0	11,450.0	15,059.0	10,013.5	145.3	92.2	-42.50	4,964.1	-1,305.1	3,929.9	3,802.6	127.29	30.874		
19,900.0	11,450.0	15,059.0	10,013.5	146.9	92.2	-42.50	4,964.1	-1,305.1	4,017.0	3,890.5	126.58	31.736		
20,000.0	11,450.0	15,059.0	10,013.5	148.5	92.2	-42.50	4,964.1	-1,305.1	4,104.8	3,978.9	125.90	32.605		
20,100.0	11,450.0	15,059.0	10,013.5	150.1	92.2	-42.50	4,964.1	-1,305.1	4,193.1	4,067.8	125.24	33.481		
20,200.0	11,450.0	15,059.0	10,013.5	151.7	92.2	-42.50	4,964.1	-1,305.1	4,281.9	4,157.3	124.61	34.363		
20,300.0	11,450.0	15,059.0	10,013.5	153.3	92.2	-42.50	4,964.1	-1,305.1	4,371.2	4,247.2	124.00	35.251		
20,400.0	11,450.0	15,059.0	10,013.5	154.9	92.2	-42.50	4,964.1	-1,305.1	4,460.9	4,337.5	123.42	36.145		
20,500.0	11,450.0	15,059.0	10,013.5	156.5	92.2	-42.50	4,964.1	-1,305.1	4,551.1	4,428.2	122.85	37.044		
20,600.0	11,450.0	15,059.0	10,013.5	158.1	92.2	-42.50	4,964.1	-1,305.1	4,641.6	4,519.3	122.31	37.948		
20,700.0	11,450.0	15,059.0	10,013.5	159.7	92.2	-42.50	4,964.1	-1,305.1	4,732.6	4,610.8	121.80	38.856		
20,800.0	11,450.0	15,059.0	10,013.5	161.3	92.2	-42.50	4,964.1	-1,305.1	4,823.9	4,702.6	121.30	39.769		
20,900.0	11,450.0	15,059.0	10,013.5	162.9	92.2	-42.50	4,964.1	-1,305.1	4,915.5	4,794.7	120.82	40.684		
21,000.0	11,450.0	15,059.0	10,013.5	164.5	92.2	-42.50	4,964.1	-1,305.1	5,007.5	4,887.2	120.36	41.604		
21,100.0	11,450.0	15,059.0	10,013.5	166.1	92.2	-42.50	4,964.1	-1,305.1	5,099.8	4,979.9	119.92	42.526		
21,200.0	11,450.0	15,059.0	10,013.5	167.7	92.2	-42.50	4,964.1	-1,305.1	5,192.3	5,072.8	119.50	43.451		
21,300.0	11,450.0	15,059.0	10,013.5	169.3	92.2	-42.50	4,964.1	-1,305.1	5,285.2	5,166.1	119.09	44.379		
21,400.0	11,450.0	15,059.0	10,013.5	170.9	92.2	-42.50	4,964.1	-1,305.1	5,378.2	5,259.5	118.70	45.309		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
21,500.0	11,450.0	15,059.0	10,013.5	172.5	92.2	-42.50	4,964.1	-1,305.1	5,471.6	5,353.2	118.33	46.241	
21,600.0	11,450.0	15,059.0	10,013.5	174.2	92.2	-42.50	4,964.1	-1,305.1	5,565.1	5,447.2	117.97	47.175	
21,614.7	11,450.0	15,059.0	10,013.5	174.4	92.2	-42.50	4,964.1	-1,305.1	5,578.9	5,459.3	119.57	46.656	

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
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	9,747.491		
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	2,593.372		
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	1,495.648		
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	1,050.846		
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	555.359		
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	422.538		
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	377.407		
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	-60.45	28.7	2,533.1	2,532.9	2,525.5	7.41	341.694		
1,200.0	1,200.0	1,201.0	1,199.0	4.0	4.1	-60.51	28.7	2,533.1	2,531.6	2,523.5	8.10	312.507		
1,300.0	1,299.9	1,301.1	1,298.9	4.4	4.4	-60.62	28.7	2,533.1	2,529.4	2,520.6	8.79	287.614		
1,400.0	1,399.7	1,401.3	1,398.7	4.7	4.8	-60.77	28.7	2,533.1	2,526.4	2,516.9	9.49	266.119		
1,500.0	1,499.4	1,498.4	1,498.4	5.0	5.1	-60.95	28.7	2,533.1	2,522.6	2,512.4	10.19	247.633		
1,600.0	1,598.9	1,670.5	1,670.5	5.4	5.7	-61.32	28.0	2,530.7	2,516.5	2,505.4	11.13	226.193		
1,700.0	1,698.3	1,842.9	1,842.7	5.8	6.3	-61.76	25.9	2,523.3	2,506.8	2,494.7	12.06	207.897		
1,800.0	1,797.4	2,014.0	2,013.3	6.1	6.9	-62.27	22.5	2,510.9	2,493.3	2,480.3	12.99	191.983		
1,900.0	1,896.4	2,183.5	2,181.9	6.5	7.5	-62.66	17.7	2,493.9	2,476.7	2,462.8	13.91	178.040		
2,000.0	1,995.5	2,330.0	2,327.1	6.9	8.1	-62.99	12.6	2,475.4	2,457.4	2,442.7	14.76	166.445		
2,100.0	2,094.5	2,427.6	2,423.8	7.3	8.4	-63.20	9.0	2,462.3	2,437.5	2,422.0	15.48	157.451		
2,200.0	2,193.5	2,525.2	2,520.4	7.7	8.8	-63.42	5.3	2,449.2	2,417.6	2,401.4	16.20	149.202		
2,300.0	2,292.5	2,622.7	2,617.0	8.1	9.2	-63.65	1.7	2,436.1	2,397.8	2,380.9	16.93	141.619		
2,400.0	2,391.6	2,720.3	2,713.6	8.5	9.6	-63.88	-1.9	2,423.1	2,378.0	2,360.3	17.66	134.629		
2,500.0	2,490.6	2,817.9	2,810.3	8.9	9.9	-64.11	-5.6	2,410.0	2,358.2	2,339.8	18.40	128.171		
2,600.0	2,589.6	2,915.5	2,906.9	9.3	10.3	-64.34	-9.2	2,396.9	2,338.5	2,319.4	19.14	122.190		
2,700.0	2,688.6	3,013.0	3,003.5	9.7	10.7	-64.58	-12.8	2,383.8	2,318.8	2,298.9	19.88	116.638		
2,729.0	2,717.4	3,041.3	3,031.5	9.8	10.8	-64.65	-13.9	2,380.0	2,313.1	2,293.0	20.10	115.101		
2,800.0	2,787.8	3,110.7	3,100.2	10.1	11.1	-64.62	-16.5	2,370.7	2,299.4	2,278.8	20.62	111.500		
2,900.0	2,887.2	3,208.8	3,197.3	10.5	11.5	-64.55	-20.1	2,357.6	2,281.1	2,259.8	21.36	106.804		
3,000.0	2,986.8	3,307.2	3,294.8	10.9	11.9	-64.43	-23.8	2,344.4	2,264.0	2,241.9	22.09	102.510		
3,100.0	3,086.7	3,405.9	3,392.5	11.2	12.3	-64.27	-27.5	2,331.1	2,247.9	2,225.1	22.80	98.577		
3,200.0	3,186.6	3,504.7	3,490.4	11.6	12.7	-64.06	-31.2	2,317.9	2,233.0	2,209.5	23.51	94.970		
3,262.3	3,249.0	3,566.5	3,551.5	11.8	12.9	85.87	-33.5	2,309.6	2,224.3	2,200.3	23.95	92.890		
3,300.0	3,286.6	3,603.7	3,588.5	11.9	13.1	85.90	-34.9	2,304.6	2,219.1	2,194.9	24.20	91.690		
3,400.0	3,386.6	3,702.8	3,686.5	12.2	13.5	85.97	-38.6	2,291.3	2,205.5	2,180.6	24.89	88.615		
3,500.0	3,486.6	3,801.8	3,784.6	12.6	13.9	86.04	-42.2	2,278.0	2,191.8	2,166.3	25.58	85.697		
3,600.0	3,586.6	3,900.8	3,882.7	12.9	14.3	86.12	-45.9	2,264.8	2,178.2	2,151.9	26.27	82.926		
3,700.0	3,686.6	3,999.9	3,980.7	13.2	14.7	86.19	-49.6	2,251.5	2,164.6	2,137.6	26.96	80.290		
3,800.0	3,786.6	4,101.1	4,078.8	13.5	15.1	86.27	-53.3	2,238.2	2,150.9	2,123.3	27.66	77.759		
3,900.0	3,886.6	4,202.1	4,176.8	13.9	15.5	86.34	-57.0	2,224.9	2,137.3	2,109.0	28.36	75.351		
4,000.0	3,986.6	4,303.1	4,274.9	14.2	15.9	86.42	-60.7	2,211.6	2,123.7	2,094.6	29.07	73.056		
4,100.0	4,086.6	4,404.0	4,373.0	14.6	16.3	86.50	-64.4	2,198.4	2,110.1	2,080.3	29.78	70.866		
4,200.0	4,186.6	4,505.0	4,471.0	14.9	16.8	86.58	-68.1	2,185.1	2,096.5	2,066.0	30.48	68.774		
4,300.0	4,286.6	4,606.0	4,569.1	15.2	17.2	86.66	-71.8	2,171.8	2,082.9	2,051.7	31.19	66.775		
4,400.0	4,386.6	4,707.0	4,667.2	15.6	17.6	86.74	-75.5	2,158.5	2,069.2	2,037.3	31.90	64.862		
4,500.0	4,486.6	4,807.9	4,765.2	15.9	18.0	86.82	-79.1	2,145.2	2,055.6	2,023.0	32.61	63.030		
4,600.0	4,586.6	4,908.9	4,863.3	16.2	18.4	86.91	-82.8	2,132.0	2,042.0	2,008.7	33.33	61.274		
4,700.0	4,686.6	4,990.1	4,961.3	16.6	18.8	86.99	-86.5	2,118.7	2,028.4	1,994.5	33.97	59.719		
4,800.0	4,786.6	5,089.2	5,059.4	16.9	19.2	87.08	-90.2	2,105.4	2,014.9	1,980.2	34.67	58.109		
4,900.0	4,886.6	5,188.2	5,157.5	17.3	19.6	87.16	-93.9	2,092.1	2,001.3	1,965.9	35.38	56.562		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.0	4,986.6	5,287.2	5,255.5	17.6	20.0	87.25	-97.6	2,078.9	1,987.7	1,951.6	36.09	55.074		
5,100.0	5,086.6	5,386.2	5,353.6	18.0	20.4	87.34	-101.3	2,065.6	1,974.1	1,937.3	36.80	53.643		
5,200.0	5,186.6	5,485.3	5,451.7	18.3	20.8	87.43	-105.0	2,052.3	1,960.5	1,923.0	37.51	52.264		
5,300.0	5,286.6	5,584.3	5,549.7	18.6	21.2	87.52	-108.7	2,039.0	1,947.0	1,908.8	38.22	50.937		
5,400.0	5,386.6	5,683.3	5,647.8	19.0	21.7	87.62	-112.4	2,025.7	1,933.4	1,894.5	38.94	49.656		
5,500.0	5,486.6	5,782.3	5,745.9	19.3	22.1	87.71	-116.0	2,012.5	1,919.9	1,880.2	39.65	48.422		
5,600.0	5,586.6	5,881.4	5,843.9	19.7	22.5	87.81	-119.7	1,999.2	1,906.3	1,865.9	40.36	47.230		
5,700.0	5,686.6	5,980.4	5,942.0	20.0	22.9	87.90	-123.4	1,985.9	1,892.8	1,851.7	41.08	46.078		
5,800.0	5,786.6	6,079.4	6,040.0	20.4	23.3	88.00	-127.1	1,972.6	1,879.2	1,837.4	41.79	44.966		
5,900.0	5,886.6	6,178.4	6,138.1	20.7	23.7	88.10	-130.8	1,959.3	1,865.7	1,823.2	42.51	43.891		
6,000.0	5,986.6	6,277.5	6,236.2	21.1	24.1	88.20	-134.5	1,946.1	1,852.2	1,808.9	43.22	42.850		
6,100.0	6,086.6	6,376.5	6,334.2	21.4	24.6	88.31	-138.2	1,932.8	1,838.6	1,794.7	43.94	41.844		
6,200.0	6,186.6	6,475.5	6,432.3	21.8	25.0	88.41	-141.9	1,919.5	1,825.1	1,780.5	44.66	40.869		
6,300.0	6,286.6	6,574.6	6,530.4	22.1	25.4	88.52	-145.6	1,906.2	1,811.6	1,766.2	45.38	39.924		
6,400.0	6,386.6	6,673.6	6,628.4	22.5	25.8	88.62	-149.3	1,893.0	1,798.1	1,752.0	46.09	39.009		
6,500.0	6,486.6	6,772.6	6,726.5	22.8	26.2	88.73	-153.0	1,879.7	1,784.6	1,737.8	46.81	38.122		
6,600.0	6,586.6	6,871.6	6,824.5	23.2	26.6	88.84	-156.6	1,866.4	1,771.1	1,723.6	47.53	37.261		
6,700.0	6,686.6	6,970.7	6,922.6	23.5	27.0	88.96	-160.3	1,853.1	1,757.6	1,709.4	48.25	36.425		
6,800.0	6,786.6	7,069.7	7,020.7	23.9	27.5	89.07	-164.0	1,839.8	1,744.1	1,695.2	48.97	35.614		
6,900.0	6,886.6	7,139.0	7,089.4	24.2	27.7	89.15	-166.4	1,831.1	1,731.5	1,681.9	49.65	34.875		
7,000.0	6,986.6	7,200.0	7,150.0	24.6	28.0	89.21	-168.3	1,824.4	1,720.6	1,670.3	50.29	34.212		
7,100.0	7,086.6	7,277.5	7,227.2	24.9	28.3	89.27	-170.3	1,817.3	1,711.5	1,660.5	50.96	33.586		
7,200.0	7,186.6	7,347.1	7,296.6	25.3	28.6	89.32	-171.7	1,812.2	1,704.1	1,652.5	51.59	33.032		
7,300.0	7,286.6	7,416.9	7,366.2	25.6	28.8	89.35	-172.8	1,808.3	1,698.4	1,646.2	52.20	32.535		
7,400.0	7,386.6	7,486.8	7,436.1	26.0	29.1	89.37	-173.5	1,805.6	1,694.6	1,641.8	52.80	32.094		
7,500.0	7,486.6	7,556.8	7,506.1	26.3	29.3	89.39	-174.0	1,804.1	1,692.5	1,639.1	53.38	31.709		
7,600.0	7,586.6	7,636.4	7,585.6	26.7	29.5	89.39	-174.0	1,803.8	1,692.1	1,638.1	53.98	31.349		
7,700.0	7,686.6	7,736.4	7,685.6	27.0	29.9	89.39	-174.0	1,803.8	1,692.1	1,637.4	54.66	30.956		
7,800.0	7,786.6	7,836.4	7,785.6	27.4	30.2	89.39	-174.0	1,803.8	1,692.1	1,636.7	55.35	30.572		
7,900.0	7,886.6	7,936.4	7,885.6	27.7	30.5	89.39	-174.0	1,803.8	1,692.1	1,636.0	56.03	30.198		
8,000.0	7,986.6	8,036.4	7,985.6	28.1	30.8	89.39	-174.0	1,803.8	1,692.1	1,635.4	56.72	29.832		
8,100.0	8,086.6	8,136.4	8,085.6	28.4	31.1	89.39	-174.0	1,803.8	1,692.1	1,634.7	57.41	29.474		
8,200.0	8,186.6	8,236.4	8,185.6	28.8	31.4	89.39	-174.0	1,803.8	1,692.1	1,634.0	58.10	29.125		
8,300.0	8,286.6	8,336.4	8,285.6	29.1	31.8	89.39	-174.0	1,803.8	1,692.1	1,633.3	58.79	28.783		
8,400.0	8,386.6	8,436.4	8,385.6	29.5	32.1	89.39	-174.0	1,803.8	1,692.1	1,632.6	59.48	28.449		
8,500.0	8,486.6	8,536.4	8,485.6	29.8	32.4	89.39	-174.0	1,803.8	1,692.1	1,631.9	60.17	28.122		
8,600.0	8,586.6	8,636.4	8,585.6	30.2	32.7	89.39	-174.0	1,803.8	1,692.1	1,631.2	60.86	27.803		
8,700.0	8,686.6	8,736.4	8,685.6	30.6	33.0	89.39	-174.0	1,803.8	1,692.1	1,630.5	61.55	27.490		
8,800.0	8,786.6	8,836.4	8,785.6	30.9	33.4	89.39	-174.0	1,803.8	1,692.1	1,629.8	62.24	27.184		
8,900.0	8,886.6	8,936.4	8,885.6	31.3	33.7	89.39	-174.0	1,803.8	1,692.1	1,629.1	62.94	26.885		
9,000.0	8,986.6	9,036.4	8,985.6	31.6	34.0	89.39	-174.0	1,803.8	1,692.1	1,628.4	63.63	26.592		
9,100.0	9,086.6	9,136.4	9,085.6	32.0	34.3	89.39	-174.0	1,803.8	1,692.1	1,627.7	64.32	26.305		
9,200.0	9,186.6	9,236.4	9,185.6	32.3	34.7	89.39	-174.0	1,803.8	1,692.1	1,627.1	65.02	26.024		
9,300.0	9,286.6	9,336.4	9,285.6	32.7	35.0	89.39	-174.0	1,803.8	1,692.1	1,626.4	65.71	25.749		
9,400.0	9,386.6	9,436.4	9,385.6	33.0	35.3	89.39	-174.0	1,803.8	1,692.1	1,625.7	66.41	25.479		
9,500.0	9,486.6	9,550.2	9,499.4	33.4	35.7	89.35	-172.9	1,803.7	1,692.0	1,624.8	67.17	25.191		
9,600.0	9,586.6	9,704.2	9,649.9	33.7	36.2	88.34	-143.0	1,799.5	1,689.5	1,621.5	68.01	24.843		
9,700.0	9,686.6	9,834.5	9,767.2	34.1	36.5	86.44	-87.4	1,791.6	1,685.0	1,616.3	68.71	24.524		
9,800.0	9,786.6	9,936.2	9,848.2	34.5	36.7	84.35	-26.7	1,783.1	1,680.6	1,611.3	69.34	24.237		
9,900.0	9,886.6	10,013.2	9,901.6	34.8	36.8	82.46	28.2	1,775.4	1,678.1	1,608.3	69.89	24.012		
9,926.9	9,913.5	10,030.5	9,912.5	34.9	36.9	82.00	41.5	1,773.5	1,678.0	1,608.0	70.02	23.966 CC, ES		
10,000.0	9,986.6	10,071.7	9,936.8	35.2	36.9	80.87	74.4	1,768.9	1,679.1	1,608.7	70.31	23.880		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,100.0	10,086.6	10,116.7	9,960.6	35.5	37.0	79.57	112.1	1,763.6	1,684.2	1,613.6	70.56	23.869		
10,200.0	10,186.6	10,150.0	9,976.3	35.9	37.1	78.56	141.3	1,759.5	1,694.0	1,623.4	70.60	23.994		
10,300.0	10,286.6	10,180.2	9,989.0	36.2	37.1	77.63	168.4	1,755.7	1,708.8	1,638.4	70.47	24.250		
10,400.0	10,386.6	10,200.0	9,996.5	36.6	37.1	77.01	186.5	1,753.1	1,728.7	1,658.6	70.11	24.659		
10,500.0	10,486.6	10,222.2	10,004.2	36.9	37.2	76.31	207.1	1,750.2	1,753.7	1,684.1	69.61	25.194		
10,600.0	10,586.6	10,238.1	10,009.3	37.3	37.2	75.80	222.1	1,748.1	1,783.6	1,714.7	68.93	25.876		
10,700.0	10,686.6	10,250.0	10,012.7	37.6	37.2	75.41	233.4	1,746.6	1,818.3	1,750.2	68.10	26.701		
10,800.0	10,786.6	10,263.4	10,016.3	38.0	37.3	74.98	246.1	1,744.8	1,857.5	1,790.3	67.18	27.648		
10,890.4	10,877.0	10,272.6	10,018.7	38.3	37.3	74.68	255.0	1,743.5	1,896.6	1,830.4	66.27	28.620		
10,900.0	10,886.6	10,273.6	10,018.9	38.4	37.3	79.57	255.9	1,743.4	1,901.0	1,834.8	66.17	28.729		
10,950.0	10,936.5	10,279.2	10,020.2	38.5	37.3	76.88	261.4	1,742.6	1,923.8	1,858.1	65.64	29.309		
11,000.0	10,986.0	10,300.0	10,024.7	38.7	37.3	73.77	281.4	1,739.8	1,946.8	1,881.6	65.21	29.853		
11,050.0	11,034.6	10,300.0	10,024.7	38.9	37.3	71.35	281.4	1,739.8	1,969.4	1,904.8	64.60	30.485		
11,100.0	11,082.0	10,300.0	10,024.7	39.0	37.3	68.99	281.4	1,739.8	1,991.9	1,927.9	63.99	31.128		
11,150.0	11,127.8	10,300.0	10,024.7	39.2	37.3	66.72	281.4	1,739.8	2,013.9	1,950.5	63.38	31.774		
11,200.0	11,171.8	10,322.7	10,028.7	39.3	37.4	64.06	303.5	1,736.7	2,035.0	1,972.0	62.96	32.323		
11,250.0	11,213.5	10,333.7	10,030.4	39.4	37.4	61.85	314.3	1,735.2	2,055.3	1,992.8	62.46	32.907		
11,300.0	11,252.6	10,350.0	10,032.4	39.5	37.5	59.73	330.3	1,732.9	2,074.6	2,012.5	62.02	33.452		
11,350.0	11,288.9	10,350.0	10,032.4	39.7	37.5	58.06	330.3	1,732.9	2,092.6	2,031.1	61.50	34.025		
11,400.0	11,322.0	10,369.6	10,034.3	39.8	37.5	56.27	349.7	1,730.2	2,109.3	2,048.2	61.15	34.495		
11,450.0	11,351.8	10,382.4	10,035.1	39.9	37.5	54.78	362.3	1,728.4	2,124.5	2,063.7	60.80	34.945		
11,500.0	11,377.9	10,400.0	10,035.8	40.0	37.6	53.43	379.7	1,726.0	2,138.2	2,077.7	60.51	35.334		
11,550.0	11,400.3	10,409.0	10,035.9	40.1	37.6	52.36	388.6	1,724.7	2,150.1	2,089.9	60.25	35.686		
11,600.0	11,418.6	10,430.4	10,035.9	40.3	37.7	51.37	409.9	1,721.8	2,160.3	2,100.2	60.10	35.944		
11,650.0	11,432.8	10,460.7	10,035.8	40.4	37.8	50.54	439.9	1,717.9	2,168.2	2,108.2	60.05	36.106		
11,700.0	11,442.8	10,500.0	10,035.6	40.5	37.9	49.93	478.9	1,713.3	2,173.9	2,113.8	60.11	36.167		
11,750.0	11,448.5	10,523.1	10,035.5	40.7	38.0	49.63	501.9	1,710.8	2,177.2	2,117.0	60.18	36.176		
11,790.4	11,450.0	10,548.7	10,035.4	40.8	38.1	49.54	527.3	1,708.3	2,178.1	2,117.8	60.33	36.105		
11,800.0	11,450.0	10,554.8	10,035.4	40.8	38.1	49.54	533.4	1,707.8	2,178.1	2,117.8	60.37	36.081		
11,900.0	11,450.0	10,618.1	10,035.2	41.1	38.4	49.52	596.5	1,702.7	2,177.9	2,117.1	60.81	35.812		
12,000.0	11,450.0	10,681.5	10,034.9	41.5	38.7	49.48	659.8	1,699.0	2,176.6	2,115.3	61.31	35.500		
12,037.8	11,450.0	10,700.0	10,034.9	41.7	38.8	49.46	678.3	1,698.2	2,175.9	2,114.5	61.48	35.391		
12,100.0	11,450.0	10,744.9	10,034.7	41.9	39.0	49.44	723.1	1,696.8	2,175.0	2,113.1	61.87	35.154		
12,158.0	11,450.0	10,781.6	10,034.5	42.2	39.2	49.43	759.9	1,696.1	2,174.6	2,112.4	62.24	34.942		
12,200.0	11,450.0	10,816.7	10,034.4	42.4	39.4	49.42	795.0	1,695.8	2,174.7	2,112.2	62.56	34.761		
12,300.0	11,450.0	10,916.7	10,034.0	43.0	40.0	49.42	895.0	1,695.0	2,175.0	2,111.5	63.52	34.240		
12,400.0	11,450.0	11,016.7	10,033.6	43.6	40.7	49.41	995.0	1,694.2	2,175.2	2,110.7	64.58	33.681		
12,500.0	11,450.0	11,116.7	10,033.2	44.3	41.4	49.40	1,095.0	1,693.5	2,175.5	2,109.8	65.74	33.093		
12,600.0	11,450.0	11,216.7	10,032.8	45.0	42.1	49.39	1,195.0	1,692.7	2,175.8	2,108.8	66.99	32.481		
12,700.0	11,450.0	11,316.7	10,032.5	45.8	43.0	49.39	1,294.9	1,691.9	2,176.0	2,107.7	68.32	31.851		
12,800.0	11,450.0	11,416.7	10,032.1	46.6	43.8	49.38	1,394.9	1,691.1	2,176.3	2,106.6	69.73	31.210		
12,900.0	11,450.0	11,516.7	10,031.7	47.4	44.7	49.37	1,494.9	1,690.3	2,176.5	2,105.3	71.22	30.561		
13,000.0	11,450.0	11,616.7	10,031.3	48.3	45.7	49.36	1,594.9	1,689.6	2,176.8	2,104.0	72.78	29.910		
13,100.0	11,450.0	11,716.7	10,030.9	49.3	46.7	49.36	1,694.9	1,688.8	2,177.1	2,102.7	74.40	29.260		
13,200.0	11,450.0	11,816.7	10,030.5	50.3	47.7	49.35	1,794.9	1,688.0	2,177.3	2,101.2	76.09	28.615		
13,300.0	11,450.0	11,916.7	10,030.1	51.3	48.8	49.34	1,894.9	1,687.2	2,177.6	2,099.8	77.84	27.977		
13,400.0	11,450.0	12,016.7	10,029.7	52.3	49.9	49.33	1,994.9	1,686.4	2,177.8	2,098.2	79.64	27.348		
13,500.0	11,450.0	12,116.7	10,029.3	53.4	51.0	49.32	2,094.9	1,685.7	2,178.1	2,096.6	81.48	26.730		
13,600.0	11,450.0	12,216.7	10,028.9	54.5	52.1	49.32	2,194.9	1,684.9	2,178.4	2,095.0	83.38	26.126		
13,700.0	11,450.0	12,316.7	10,028.6	55.6	53.3	49.31	2,294.9	1,684.1	2,178.6	2,093.3	85.32	25.535		
13,800.0	11,450.0	12,416.7	10,028.2	56.8	54.5	49.30	2,394.9	1,683.3	2,178.9	2,091.6	87.30	24.958		
13,900.0	11,450.0	12,516.7	10,027.8	58.0	55.8	49.29	2,494.9	1,682.6	2,179.2	2,089.8	89.32	24.397		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,000.0	11,450.0	12,616.7	10,027.4	59.2	57.0	49.29	2,594.9	1,681.8	2,179.4	2,088.0	91.37	23.852		
14,100.0	11,450.0	12,716.7	10,027.0	60.4	58.3	49.28	2,694.9	1,681.0	2,179.7	2,086.2	93.46	23.322		
14,200.0	11,450.0	12,816.7	10,026.6	61.7	59.6	49.27	2,794.9	1,680.2	2,179.9	2,084.4	95.58	22.808		
14,300.0	11,450.0	12,916.7	10,026.2	62.9	60.9	49.26	2,894.9	1,679.4	2,180.2	2,082.5	97.72	22.310		
14,400.0	11,450.0	13,016.7	10,025.8	64.2	62.2	49.26	2,994.9	1,678.7	2,180.5	2,080.6	99.90	21.827		
14,500.0	11,450.0	13,116.7	10,025.4	65.5	63.5	49.25	3,094.9	1,677.9	2,180.7	2,078.6	102.10	21.359		
14,600.0	11,450.0	13,216.7	10,025.1	66.8	64.9	49.24	3,194.9	1,677.1	2,181.0	2,076.7	104.32	20.907		
14,700.0	11,450.0	13,316.7	10,024.7	68.2	66.2	49.23	3,294.9	1,676.3	2,181.2	2,074.7	106.56	20.469		
14,800.0	11,450.0	13,416.7	10,024.3	69.5	67.6	49.23	3,394.9	1,675.5	2,181.5	2,072.7	108.83	20.046		
14,900.0	11,450.0	13,516.7	10,023.9	70.9	69.0	49.22	3,494.8	1,674.8	2,181.8	2,070.7	111.11	19.636		
15,000.0	11,450.0	13,616.7	10,023.5	72.2	70.4	49.21	3,594.8	1,674.0	2,182.0	2,068.6	113.41	19.240		
15,100.0	11,450.0	13,716.7	10,023.1	73.6	71.8	49.20	3,694.8	1,673.2	2,182.3	2,066.6	115.73	18.856		
15,200.0	11,450.0	13,816.7	10,022.7	75.0	73.3	49.20	3,794.8	1,672.4	2,182.6	2,064.5	118.07	18.486		
15,300.0	11,450.0	13,916.7	10,022.3	76.4	74.7	49.19	3,894.8	1,671.6	2,182.8	2,062.4	120.42	18.127		
15,400.0	11,450.0	14,016.7	10,021.9	77.8	76.1	49.18	3,994.8	1,670.9	2,183.1	2,060.3	122.78	17.780		
15,500.0	11,450.0	14,116.7	10,021.5	79.3	77.6	49.17	4,094.8	1,670.1	2,183.3	2,058.2	125.16	17.445		
15,600.0	11,450.0	14,216.7	10,021.2	80.7	79.0	49.16	4,194.8	1,669.3	2,183.6	2,056.0	127.55	17.120		
15,700.0	11,450.0	14,316.7	10,020.8	82.1	80.5	49.16	4,294.8	1,668.5	2,183.9	2,053.9	129.95	16.805		
15,800.0	11,450.0	14,416.7	10,020.4	83.6	82.0	49.15	4,394.8	1,667.7	2,184.1	2,051.8	132.36	16.501		
15,900.0	11,450.0	14,516.7	10,020.0	85.0	83.5	49.14	4,494.8	1,667.0	2,184.4	2,049.6	134.79	16.206		
16,000.0	11,450.0	14,616.7	10,019.6	86.5	85.0	49.13	4,594.8	1,666.2	2,184.6	2,047.4	137.22	15.921		
16,100.0	11,450.0	14,716.7	10,019.2	88.0	86.5	49.13	4,694.8	1,665.4	2,184.9	2,045.2	139.66	15.644		
16,200.0	11,450.0	14,816.7	10,018.8	89.4	88.0	49.12	4,794.8	1,664.6	2,185.2	2,043.1	142.12	15.376		
16,300.0	11,450.0	14,916.7	10,018.4	90.9	89.5	49.11	4,894.8	1,663.9	2,185.4	2,040.9	144.58	15.116		
16,400.0	11,450.0	15,016.7	10,018.0	92.4	91.0	49.10	4,994.8	1,663.1	2,185.7	2,038.6	147.04	14.864		
16,500.0	11,450.0	15,116.7	10,017.7	93.9	92.5	49.10	5,094.8	1,662.3	2,186.0	2,036.4	149.52	14.620		
16,600.0	11,450.0	15,216.7	10,017.3	95.4	94.0	49.09	5,194.8	1,661.5	2,186.2	2,034.2	152.00	14.383		
16,700.0	11,450.0	15,316.7	10,016.9	96.9	95.5	49.08	5,294.8	1,660.7	2,186.5	2,032.0	154.49	14.153		
16,800.0	11,450.0	15,416.7	10,016.5	98.4	97.1	49.07	5,394.8	1,660.0	2,186.7	2,029.8	156.99	13.929		
16,900.0	11,450.0	15,516.7	10,016.1	100.0	98.6	49.07	5,494.8	1,659.2	2,187.0	2,027.5	159.49	13.712		
17,000.0	11,450.0	15,616.7	10,015.7	101.5	100.1	49.06	5,594.8	1,658.4	2,187.3	2,025.3	162.00	13.502		
17,100.0	11,450.0	15,716.7	10,015.3	103.0	101.7	49.05	5,694.7	1,657.6	2,187.5	2,023.0	164.52	13.297		
17,200.0	11,450.0	15,816.7	10,014.9	104.5	103.2	49.04	5,794.7	1,656.8	2,187.8	2,020.8	167.04	13.098		
17,300.0	11,450.0	15,916.7	10,014.5	106.1	104.8	49.04	5,894.7	1,656.1	2,188.1	2,018.5	169.56	12.904		
17,400.0	11,450.0	16,016.7	10,014.1	107.6	106.3	49.03	5,994.7	1,655.3	2,188.3	2,016.2	172.09	12.716		
17,500.0	11,450.0	16,116.7	10,013.8	109.1	107.9	49.02	6,094.7	1,654.5	2,188.6	2,014.0	174.62	12.533		
17,600.0	11,450.0	16,216.7	10,013.4	110.7	109.4	49.01	6,194.7	1,653.7	2,188.8	2,011.7	177.16	12.355		
17,700.0	11,450.0	16,316.7	10,013.0	112.2	111.0	49.01	6,294.7	1,652.9	2,189.1	2,009.4	179.70	12.182		
17,800.0	11,450.0	16,416.7	10,012.6	113.8	112.6	49.00	6,394.7	1,652.2	2,189.4	2,007.1	182.25	12.013		
17,900.0	11,450.0	16,516.7	10,012.2	115.3	114.1	48.99	6,494.7	1,651.4	2,189.6	2,004.8	184.80	11.849		
18,000.0	11,450.0	16,616.7	10,011.8	116.9	115.7	48.98	6,594.7	1,650.6	2,189.9	2,002.5	187.35	11.689		
18,100.0	11,450.0	16,716.7	10,011.4	118.4	117.3	48.98	6,694.7	1,649.8	2,190.2	2,000.2	189.91	11.533		
18,200.0	11,450.0	16,816.7	10,011.0	120.0	118.8	48.97	6,794.7	1,649.1	2,190.4	1,997.9	192.47	11.381		
18,300.0	11,450.0	16,916.7	10,010.6	121.6	120.4	48.96	6,894.7	1,648.3	2,190.7	1,995.6	195.03	11.232		
18,400.0	11,450.0	17,016.7	10,010.2	123.1	122.0	48.95	6,994.7	1,647.5	2,190.9	1,993.3	197.60	11.088		
18,500.0	11,450.0	17,116.7	10,009.9	124.7	123.6	48.95	7,094.7	1,646.7	2,191.2	1,991.0	200.17	10.947		
18,600.0	11,450.0	17,216.7	10,009.5	126.3	125.1	48.94	7,194.7	1,645.9	2,191.5	1,988.7	202.74	10.809		
18,700.0	11,450.0	17,316.7	10,009.1	127.8	126.7	48.93	7,294.7	1,645.2	2,191.7	1,986.4	205.32	10.675		
18,800.0	11,450.0	17,416.7	10,008.7	129.4	128.3	48.92	7,394.7	1,644.4	2,192.0	1,984.1	207.89	10.544		
18,900.0	11,450.0	17,516.7	10,008.3	131.0	129.9	48.92	7,494.7	1,643.6	2,192.3	1,981.8	210.47	10.416		
19,000.0	11,450.0	17,616.7	10,007.9	132.6	131.5	48.91	7,594.7	1,642.8	2,192.5	1,979.5	213.06	10.291		
19,100.0	11,450.0	17,716.7	10,007.5	134.2	133.1	48.90	7,694.7	1,642.0	2,192.8	1,977.1	215.64	10.169		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,200.0	11,450.0	17,816.7	10,007.1	135.7	134.7	48.89	7,794.7	1,641.3	2,193.0	1,974.8	218.23	10.049		
19,300.0	11,450.0	17,916.7	10,006.7	137.3	136.3	48.89	7,894.6	1,640.5	2,193.3	1,972.5	220.81	9.933		
19,400.0	11,450.0	18,016.7	10,006.4	138.9	137.9	48.88	7,994.6	1,639.7	2,193.6	1,970.2	223.41	9.819		
19,500.0	11,450.0	18,116.7	10,006.0	140.5	139.5	48.87	8,094.6	1,638.9	2,193.8	1,967.8	226.00	9.707		
19,600.0	11,450.0	18,216.7	10,005.6	142.1	141.1	48.86	8,194.6	1,638.1	2,194.1	1,965.5	228.59	9.598		
19,700.0	11,450.0	18,316.7	10,005.2	143.7	142.7	48.86	8,294.6	1,637.4	2,194.4	1,963.2	231.19	9.492		
19,800.0	11,450.0	18,416.7	10,004.8	145.3	144.3	48.85	8,394.6	1,636.6	2,194.6	1,960.8	233.78	9.387		
19,900.0	11,450.0	18,516.6	10,004.4	146.9	145.9	48.84	8,494.6	1,635.8	2,194.9	1,958.5	236.38	9.285		
20,000.0	11,450.0	18,616.6	10,004.0	148.5	147.5	48.83	8,594.6	1,635.0	2,195.2	1,956.2	238.98	9.185		
20,100.0	11,450.0	18,716.6	10,003.6	150.1	149.1	48.83	8,694.6	1,634.2	2,195.4	1,953.8	241.59	9.088		
20,200.0	11,450.0	18,816.6	10,003.2	151.7	150.7	48.82	8,794.6	1,633.5	2,195.7	1,951.5	244.19	8.992		
20,300.0	11,450.0	18,916.6	10,002.8	153.3	152.3	48.81	8,894.6	1,632.7	2,195.9	1,949.1	246.79	8.898		
20,400.0	11,450.0	19,016.6	10,002.5	154.9	153.9	48.80	8,994.6	1,631.9	2,196.2	1,946.8	249.40	8.806		
20,500.0	11,450.0	19,116.6	10,002.1	156.5	155.5	48.80	9,094.6	1,631.1	2,196.5	1,944.5	252.01	8.716		
20,600.0	11,450.0	19,216.6	10,001.7	158.1	157.1	48.79	9,194.6	1,630.4	2,196.7	1,942.1	254.62	8.628		
20,700.0	11,450.0	19,316.6	10,001.3	159.7	158.7	48.78	9,294.6	1,629.6	2,197.0	1,939.8	257.22	8.541		
20,800.0	11,450.0	19,416.6	10,000.9	161.3	160.3	48.77	9,394.6	1,628.8	2,197.3	1,937.4	259.83	8.456		
20,900.0	11,450.0	19,516.6	10,000.5	162.9	161.9	48.77	9,494.6	1,628.0	2,197.5	1,935.1	262.45	8.373		
21,000.0	11,450.0	19,616.6	10,000.1	164.5	163.6	48.76	9,594.6	1,627.2	2,197.8	1,932.7	265.06	8.292		
21,100.0	11,450.0	19,716.6	9,999.7	166.1	165.2	48.75	9,694.6	1,626.5	2,198.1	1,930.4	267.67	8.212		
21,200.0	11,450.0	19,816.6	9,999.3	167.7	166.8	48.74	9,794.6	1,625.7	2,198.3	1,928.0	270.29	8.133		
21,300.0	11,450.0	19,916.6	9,999.0	169.3	168.4	48.74	9,894.6	1,624.9	2,198.6	1,925.7	272.90	8.056		
21,400.0	11,450.0	20,016.6	9,998.6	170.9	170.0	48.73	9,994.6	1,624.1	2,198.8	1,923.3	275.52	7.981		
21,500.0	11,450.0	20,116.6	9,998.2	172.5	171.6	48.72	10,094.5	1,623.3	2,199.1	1,921.0	278.14	7.907		
21,600.0	11,450.0	20,216.6	9,997.8	174.2	173.2	48.71	10,194.5	1,622.6	2,199.4	1,918.7	280.72	7.835		
21,614.7	11,450.0	20,231.3	9,997.7	174.4	173.4	48.71	10,209.2	1,622.4	2,199.4	1,918.4	281.03	7.826 SF		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	1.0	-1.0	0.0	0.0	88.67	58.7	2,533.0	2,533.7					
100.0	100.0	101.0	99.0	0.1	0.1	88.67	58.7	2,533.0	2,533.7	2,533.4	0.26	9,748.991		
200.0	200.0	201.0	199.0	0.5	0.5	88.67	58.7	2,533.0	2,533.7	2,532.7	0.98	2,593.771		
300.0	300.0	301.0	299.0	0.8	0.8	88.67	58.7	2,533.0	2,533.7	2,532.0	1.69	1,495.879		
400.0	400.0	401.0	399.0	1.2	1.2	88.67	58.7	2,533.0	2,533.7	2,531.3	2.41	1,051.008		
500.0	500.0	501.0	499.0	1.6	1.6	88.67	58.7	2,533.0	2,533.7	2,530.6	3.13	810.089		
600.0	600.0	601.0	599.0	1.9	1.9	88.67	58.7	2,533.0	2,533.7	2,529.8	3.84	659.024		
700.0	700.0	701.0	699.0	2.3	2.3	88.67	58.7	2,533.0	2,533.7	2,529.1	4.56	555.444		
800.0	800.0	801.0	799.0	2.6	2.6	88.67	58.7	2,533.0	2,533.7	2,528.4	5.28	480.002		
900.0	900.0	901.0	899.0	3.0	3.0	88.67	58.7	2,533.0	2,533.7	2,527.7	6.00	422.603		
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	88.67	58.7	2,533.0	2,533.7	2,527.0	6.71	377.465		
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	-61.13	58.7	2,533.0	2,533.3	2,525.9	7.41	341.748		
1,200.0	1,200.0	1,201.0	1,199.0	4.0	4.1	-61.19	58.7	2,533.0	2,532.0	2,523.9	8.10	312.559		
1,300.0	1,299.9	1,301.1	1,298.9	4.4	4.4	-61.30	58.7	2,533.0	2,529.9	2,521.1	8.79	287.667		
1,400.0	1,399.7	1,401.3	1,398.7	4.7	4.8	-61.45	58.7	2,533.0	2,527.0	2,517.5	9.49	266.174		
1,500.0	1,499.4	1,498.4	1,498.4	5.0	5.1	-61.64	58.7	2,533.0	2,523.2	2,513.0	10.19	247.691		
1,600.0	1,598.9	1,570.3	1,570.3	5.4	5.4	-61.80	58.5	2,533.4	2,519.2	2,508.4	10.79	233.538		
1,700.0	1,698.3	1,641.9	1,641.8	5.8	5.6	-61.99	58.0	2,534.6	2,515.5	2,504.1	11.39	220.907		
1,800.0	1,797.4	1,713.4	1,713.3	6.1	5.9	-62.18	57.0	2,536.6	2,512.1	2,500.1	11.99	209.498		
1,900.0	1,896.4	1,785.0	1,784.9	6.5	6.1	-62.35	55.7	2,539.4	2,509.5	2,496.9	12.60	199.119		
2,000.0	1,995.5	1,856.7	1,856.5	6.9	6.4	-62.51	54.0	2,543.1	2,508.0	2,494.8	13.22	189.707		
2,082.0	2,076.6	1,915.6	1,915.2	7.2	6.6	-62.63	52.3	2,546.7	2,507.6	2,493.9	13.73	182.642 CC		
2,100.0	2,094.5	1,928.5	1,928.1	7.3	6.6	-62.66	51.9	2,547.5	2,507.6	2,493.8	13.84	181.162 ES		
2,200.0	2,193.5	2,000.0	1,999.4	7.7	6.9	-62.80	49.5	2,552.8	2,508.4	2,493.9	14.47	173.405		
2,300.0	2,292.5	2,072.3	2,071.4	8.1	7.1	-62.93	46.6	2,558.9	2,510.3	2,495.2	15.10	166.292		
2,400.0	2,391.6	2,144.3	2,143.0	8.5	7.4	-63.05	43.4	2,565.8	2,513.3	2,497.6	15.73	159.814		
2,500.0	2,490.6	2,216.3	2,214.4	8.9	7.6	-63.17	39.8	2,573.5	2,517.5	2,501.1	16.36	153.889		
2,600.0	2,589.6	2,288.2	2,285.7	9.3	7.9	-63.27	35.8	2,582.1	2,522.7	2,505.7	16.99	148.457		
2,700.0	2,688.6	2,383.3	2,379.9	9.7	8.2	-63.39	30.2	2,594.1	2,528.7	2,511.0	17.72	142.663		
2,729.0	2,717.4	2,412.2	2,408.6	9.8	8.4	-63.43	28.5	2,597.7	2,530.4	2,512.5	17.94	141.022		
2,800.0	2,787.8	2,483.0	2,478.6	10.1	8.6	-63.57	24.4	2,606.6	2,535.0	2,516.5	18.48	137.194		
2,900.0	2,887.2	2,582.7	2,577.3	10.5	9.0	-63.74	18.5	2,619.2	2,542.4	2,523.2	19.22	132.261		
3,000.0	2,986.8	2,682.3	2,676.0	10.9	9.4	-63.86	12.6	2,631.8	2,551.0	2,531.0	19.96	127.816		
3,100.0	3,086.7	2,781.8	2,774.5	11.2	9.8	-63.95	6.8	2,644.3	2,560.7	2,540.1	20.68	123.805		
3,200.0	3,186.6	2,881.1	2,872.9	11.6	10.2	-64.01	0.9	2,656.8	2,571.6	2,550.2	21.40	120.183		
3,262.3	3,249.0	2,942.9	2,934.1	11.8	10.4	85.76	-2.7	2,664.6	2,579.0	2,557.1	21.83	118.128		
3,300.0	3,286.6	2,980.2	2,971.0	11.9	10.5	85.81	-4.9	2,669.3	2,583.6	2,561.5	22.09	116.955		
3,400.0	3,386.6	3,079.2	3,069.1	12.2	10.9	85.96	-10.7	2,681.8	2,595.8	2,573.0	22.78	113.960		
3,500.0	3,486.6	3,178.3	3,167.1	12.6	11.3	86.11	-16.5	2,694.3	2,608.0	2,584.5	23.47	111.128		
3,600.0	3,586.6	3,277.3	3,265.2	12.9	11.7	86.26	-22.4	2,706.8	2,620.2	2,596.0	24.16	108.447		
3,700.0	3,686.6	3,376.3	3,363.3	13.2	12.1	86.40	-28.2	2,719.3	2,632.4	2,607.6	24.86	105.906		
3,800.0	3,786.6	3,475.4	3,461.3	13.5	12.5	86.55	-34.0	2,731.8	2,644.7	2,619.1	25.55	103.496		
3,900.0	3,886.6	3,574.4	3,559.4	13.9	12.9	86.69	-39.8	2,744.3	2,656.9	2,630.7	26.25	101.206		
4,000.0	3,986.6	3,673.4	3,657.4	14.2	13.3	86.83	-45.7	2,756.8	2,669.2	2,642.3	26.95	99.030		
4,100.0	4,086.6	3,772.4	3,755.5	14.6	13.7	86.97	-51.5	2,769.3	2,681.5	2,653.9	27.66	96.959		
4,200.0	4,186.6	3,871.5	3,853.6	14.9	14.1	87.11	-57.3	2,781.7	2,693.8	2,665.5	28.36	94.986		
4,300.0	4,286.6	3,970.5	3,951.6	15.2	14.5	87.25	-63.1	2,794.2	2,706.2	2,677.1	29.07	93.104		
4,400.0	4,386.6	4,069.5	4,049.7	15.6	14.9	87.39	-69.0	2,806.7	2,718.5	2,688.8	29.77	91.309		
4,500.0	4,486.6	4,168.5	4,147.8	15.9	15.3	87.52	-74.8	2,819.2	2,730.9	2,700.4	30.48	89.593		
4,600.0	4,586.6	4,267.6	4,245.8	16.2	15.8	87.65	-80.6	2,831.7	2,743.3	2,712.1	31.19	87.954		
4,700.0	4,686.6	4,366.6	4,343.9	16.6	16.2	87.79	-86.4	2,844.2	2,755.7	2,723.8	31.90	86.384		
4,800.0	4,786.6	4,465.6	4,441.9	16.9	16.6	87.92	-92.3	2,856.7	2,768.1	2,735.5	32.61	84.881		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,900.0	4,886.6	4,564.6	4,540.0	17.3	17.0	88.05	-98.1	2,869.2	2,780.5	2,747.2	33.32	83.441		
5,000.0	4,986.6	4,663.7	4,638.1	17.6	17.4	88.18	-103.9	2,881.7	2,792.9	2,758.9	34.04	82.059		
5,100.0	5,086.6	4,762.7	4,736.1	18.0	17.8	88.31	-109.7	2,894.2	2,805.4	2,770.6	34.75	80.732		
5,200.0	5,186.6	4,861.7	4,834.2	18.3	18.2	88.43	-115.6	2,906.6	2,817.9	2,782.4	35.46	79.458		
5,300.0	5,286.6	4,960.8	4,932.3	18.6	18.6	88.56	-121.4	2,919.1	2,830.3	2,794.2	36.18	78.233		
5,400.0	5,386.6	5,059.8	5,030.3	19.0	19.0	88.68	-127.2	2,931.6	2,842.8	2,805.9	36.89	77.055		
5,500.0	5,486.6	5,158.8	5,128.4	19.3	19.4	88.81	-133.0	2,944.1	2,855.3	2,817.7	37.61	75.920		
5,600.0	5,586.6	5,257.8	5,226.5	19.7	19.8	88.93	-138.9	2,956.6	2,867.8	2,829.5	38.33	74.828		
5,700.0	5,686.6	5,370.0	5,337.5	20.0	20.3	89.07	-145.4	2,970.7	2,880.4	2,841.3	39.10	73.658		
5,800.0	5,786.6	5,681.7	5,647.8	20.4	21.5	89.32	-157.8	2,997.2	2,888.8	2,848.1	40.69	70.994		
5,900.0	5,886.6	5,919.6	5,885.6	20.7	22.3	89.37	-160.0	3,002.0	2,890.3	2,848.5	41.81	69.124		
6,000.0	5,986.6	6,019.6	5,985.6	21.1	22.6	89.37	-160.0	3,002.0	2,890.3	2,847.9	42.50	68.016		
6,100.0	6,086.6	6,119.6	6,085.6	21.4	23.0	89.37	-160.0	3,002.0	2,890.3	2,847.2	43.18	66.941		
6,200.0	6,186.6	6,219.6	6,185.6	21.8	23.3	89.37	-160.0	3,002.0	2,890.3	2,846.5	43.86	65.897		
6,300.0	6,286.6	6,319.6	6,285.6	22.1	23.6	89.37	-160.0	3,002.0	2,890.3	2,845.8	44.55	64.885		
6,400.0	6,386.6	6,419.6	6,385.6	22.5	23.9	89.37	-160.0	3,002.0	2,890.3	2,845.1	45.23	63.901		
6,500.0	6,486.6	6,519.6	6,485.6	22.8	24.3	89.37	-160.0	3,002.0	2,890.3	2,844.4	45.92	62.946		
6,600.0	6,586.6	6,619.6	6,585.6	23.2	24.6	89.37	-160.0	3,002.0	2,890.3	2,843.7	46.61	62.018		
6,700.0	6,686.6	6,719.6	6,685.6	23.5	24.9	89.37	-160.0	3,002.0	2,890.3	2,843.1	47.29	61.115		
6,800.0	6,786.6	6,819.6	6,785.6	23.9	25.2	89.37	-160.0	3,002.0	2,890.3	2,842.4	47.98	60.237		
6,900.0	6,886.6	6,919.6	6,885.6	24.2	25.6	89.37	-160.0	3,002.0	2,890.3	2,841.7	48.67	59.383		
7,000.0	6,986.6	7,019.6	6,985.6	24.6	25.9	89.37	-160.0	3,002.0	2,890.3	2,841.0	49.36	58.553		
7,100.0	7,086.6	7,119.6	7,085.6	24.9	26.2	89.37	-160.0	3,002.0	2,890.3	2,840.3	50.05	57.744		
7,200.0	7,186.6	7,219.6	7,185.6	25.3	26.6	89.37	-160.0	3,002.0	2,890.3	2,839.6	50.75	56.956		
7,300.0	7,286.6	7,319.6	7,285.6	25.6	26.9	89.37	-160.0	3,002.0	2,890.3	2,838.9	51.44	56.189		
7,400.0	7,386.6	7,419.6	7,385.6	26.0	27.2	89.37	-160.0	3,002.0	2,890.3	2,838.2	52.13	55.442		
7,500.0	7,486.6	7,519.6	7,485.6	26.3	27.6	89.37	-160.0	3,002.0	2,890.3	2,837.5	52.83	54.713		
7,600.0	7,586.6	7,619.6	7,585.6	26.7	27.9	89.37	-160.0	3,002.0	2,890.3	2,836.8	53.52	54.003		
7,700.0	7,686.6	7,719.6	7,685.6	27.0	28.2	89.37	-160.0	3,002.0	2,890.3	2,836.1	54.22	53.311		
7,800.0	7,786.6	7,819.6	7,785.6	27.4	28.6	89.37	-160.0	3,002.0	2,890.3	2,835.4	54.91	52.635		
7,900.0	7,886.6	7,919.6	7,885.6	27.7	28.9	89.37	-160.0	3,002.0	2,890.3	2,834.7	55.61	51.976		
8,000.0	7,986.6	8,019.6	7,985.6	28.1	29.2	89.37	-160.0	3,002.0	2,890.3	2,834.0	56.31	51.333		
8,100.0	8,086.6	8,119.6	8,085.6	28.4	29.6	89.37	-160.0	3,002.0	2,890.3	2,833.3	57.00	50.705		
8,200.0	8,186.6	8,219.6	8,185.6	28.8	29.9	89.37	-160.0	3,002.0	2,890.3	2,832.6	57.70	50.092		
8,300.0	8,286.6	8,319.6	8,285.6	29.1	30.2	89.37	-160.0	3,002.0	2,890.3	2,831.9	58.40	49.493		
8,400.0	8,386.6	8,419.6	8,385.6	29.5	30.6	89.37	-160.0	3,002.0	2,890.3	2,831.2	59.10	48.908		
8,500.0	8,486.6	8,519.6	8,485.6	29.8	30.9	89.37	-160.0	3,002.0	2,890.3	2,830.5	59.80	48.336		
8,600.0	8,586.6	8,619.6	8,585.6	30.2	31.3	89.37	-160.0	3,002.0	2,890.3	2,829.8	60.50	47.777		
8,700.0	8,686.6	8,719.6	8,685.6	30.6	31.6	89.37	-160.0	3,002.0	2,890.3	2,829.1	61.20	47.230		
8,800.0	8,786.6	8,819.6	8,785.6	30.9	31.9	89.37	-160.0	3,002.0	2,890.3	2,828.4	61.90	46.696		
8,900.0	8,886.6	8,919.6	8,885.6	31.3	32.3	89.37	-160.0	3,002.0	2,890.3	2,827.7	62.60	46.173		
9,000.0	8,986.6	9,019.6	8,985.6	31.6	32.6	89.37	-160.0	3,002.0	2,890.3	2,827.0	63.30	45.662		
9,100.0	9,086.6	9,119.6	9,085.6	32.0	33.0	89.37	-160.0	3,002.0	2,890.3	2,826.3	64.00	45.161		
9,200.0	9,186.6	9,219.6	9,185.6	32.3	33.3	89.37	-160.0	3,002.0	2,890.3	2,825.6	64.70	44.672		
9,300.0	9,286.6	9,319.6	9,285.6	32.7	33.6	89.37	-160.0	3,002.0	2,890.3	2,824.9	65.40	44.192		
9,400.0	9,386.6	9,419.6	9,385.6	33.0	34.0	89.37	-160.0	3,002.0	2,890.3	2,824.2	66.11	43.722		
9,500.0	9,486.6	9,519.6	9,485.6	33.4	34.3	89.37	-160.0	3,002.0	2,890.3	2,823.5	66.81	43.263		
9,600.0	9,586.6	9,603.3	9,569.0	33.7	34.6	89.25	-154.0	3,002.2	2,890.6	2,823.2	67.46	42.851		
9,700.0	9,686.6	9,683.5	9,647.3	34.1	34.8	88.91	-136.9	3,002.6	2,891.6	2,823.5	68.08	42.475		
9,800.0	9,786.6	9,757.6	9,716.9	34.5	35.0	88.40	-111.5	3,003.3	2,893.4	2,824.7	68.66	42.140		
9,900.0	9,886.6	9,824.2	9,776.1	34.8	35.2	87.81	-81.2	3,004.1	2,896.4	2,827.2	69.20	41.855		
10,000.0	9,986.6	9,882.8	9,825.1	35.2	35.3	87.17	-49.0	3,004.9	2,901.1	2,831.4	69.69	41.625		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,100.0	10,086.6	9,933.8	9,864.8	35.5	35.4	86.54	-17.0	3,005.8	2,907.6	2,837.5	70.13	41.457		
10,200.0	10,186.6	9,977.9	9,896.7	35.9	35.5	85.94	13.3	3,006.5	2,916.3	2,845.8	70.52	41.357		
10,300.0	10,286.6	10,016.0	9,922.3	36.2	35.5	85.39	41.5	3,007.3	2,927.5	2,856.6	70.83	41.328		
10,400.0	10,386.6	10,050.0	9,943.6	36.6	35.6	84.87	68.0	3,008.0	2,941.2	2,870.1	71.09	41.372		
10,500.0	10,486.6	10,077.5	9,959.6	36.9	35.6	84.43	90.4	3,008.6	2,957.6	2,886.3	71.27	41.496		
10,600.0	10,586.6	10,100.0	9,971.9	37.3	35.6	84.06	109.2	3,009.1	2,976.8	2,905.4	71.38	41.701		
10,700.0	10,686.6	10,124.3	9,984.3	37.6	35.7	83.66	130.1	3,009.6	2,998.8	2,927.3	71.45	41.970		
10,800.0	10,786.6	10,150.0	9,996.5	38.0	35.7	83.22	152.7	3,010.2	3,023.6	2,952.1	71.47	42.304		
10,890.4	10,877.0	10,150.0	9,996.5	38.3	35.7	83.22	152.7	3,010.2	3,048.4	2,977.1	71.34	42.731		
10,900.0	10,886.6	10,150.0	9,996.5	38.4	35.7	88.33	152.7	3,010.2	3,051.2	2,979.9	71.32	42.780		
10,950.0	10,936.5	10,169.5	10,005.1	38.5	35.7	86.45	170.2	3,010.7	3,065.9	2,994.6	71.32	42.987		
11,000.0	10,986.0	10,179.1	10,009.1	38.7	35.7	84.72	178.9	3,010.9	3,081.0	3,009.7	71.26	43.239		
11,050.0	11,034.6	10,200.0	10,017.2	38.9	35.7	82.80	198.1	3,011.4	3,096.4	3,025.2	71.24	43.468		
11,100.0	11,082.0	10,200.0	10,017.2	39.0	35.7	81.19	198.1	3,011.4	3,111.9	3,040.8	71.10	43.766		
11,150.0	11,127.8	10,200.0	10,017.2	39.2	35.7	79.58	198.1	3,011.4	3,127.4	3,056.5	70.96	44.071		
11,200.0	11,171.8	10,224.1	10,025.8	39.3	35.7	77.71	220.7	3,012.0	3,142.7	3,071.7	70.95	44.297		
11,250.0	11,213.5	10,250.0	10,033.9	39.4	35.7	75.91	245.2	3,012.6	3,157.7	3,086.8	70.93	44.520		
11,300.0	11,252.6	10,250.0	10,033.9	39.5	35.7	74.45	245.2	3,012.6	3,172.2	3,101.4	70.80	44.806		
11,350.0	11,288.9	10,250.0	10,033.9	39.7	35.7	73.05	245.2	3,012.6	3,186.2	3,115.5	70.68	45.079		
11,400.0	11,322.0	10,276.3	10,041.0	39.8	35.8	71.54	270.6	3,013.3	3,199.4	3,128.7	70.70	45.252		
11,450.0	11,351.8	10,300.0	10,046.4	39.9	35.8	70.19	293.6	3,013.9	3,211.9	3,141.2	70.73	45.414		
11,500.0	11,377.9	10,300.0	10,046.4	40.0	35.8	69.07	293.6	3,013.9	3,223.5	3,152.8	70.67	45.613		
11,550.0	11,400.3	10,318.2	10,049.9	40.1	35.9	67.99	311.5	3,014.4	3,234.1	3,163.3	70.72	45.730		
11,600.0	11,418.6	10,332.5	10,052.3	40.3	35.9	67.06	325.6	3,014.7	3,243.6	3,172.8	70.78	45.824		
11,650.0	11,432.8	10,350.0	10,054.7	40.4	35.9	66.25	342.9	3,015.2	3,252.0	3,181.1	70.89	45.875		
11,700.0	11,442.8	10,350.0	10,054.7	40.5	35.9	65.59	342.9	3,015.2	3,259.2	3,188.3	70.96	45.930		
11,750.0	11,448.5	10,375.8	10,057.2	40.7	36.0	65.05	368.5	3,015.8	3,265.1	3,193.9	71.16	45.881		
11,790.4	11,450.0	10,400.0	10,058.6	40.8	36.1	64.74	392.7	3,016.5	3,269.0	3,197.6	71.36	45.811		
11,800.0	11,450.0	10,400.0	10,058.6	40.8	36.1	64.75	392.7	3,016.5	3,269.8	3,198.4	71.39	45.802		
11,900.0	11,450.0	10,424.0	10,058.9	41.1	36.1	64.84	416.7	3,017.1	3,277.6	3,205.8	71.81	45.644		
12,000.0	11,450.0	10,608.3	10,057.6	41.5	36.9	64.91	601.0	3,017.3	3,281.1	3,208.3	72.84	45.044		
12,037.8	11,450.0	10,646.1	10,057.4	41.7	37.0	64.91	638.8	3,017.0	3,281.4	3,208.3	73.16	44.851		
12,100.0	11,450.0	10,708.3	10,056.9	41.9	37.3	64.90	701.0	3,016.6	3,281.6	3,207.9	73.71	44.518		
12,200.0	11,450.0	10,808.3	10,056.2	42.4	37.9	64.89	800.9	3,015.8	3,281.9	3,207.2	74.70	43.933		
12,300.0	11,450.0	10,908.3	10,055.5	43.0	38.5	64.88	900.9	3,015.0	3,282.3	3,206.5	75.80	43.299		
12,400.0	11,450.0	11,008.3	10,054.8	43.6	39.1	64.87	1,000.9	3,014.2	3,282.6	3,205.6	77.01	42.624		
12,500.0	11,450.0	11,108.3	10,054.1	44.3	39.9	64.86	1,100.9	3,013.4	3,282.9	3,204.5	78.32	41.915		
12,600.0	11,450.0	11,208.3	10,053.4	45.0	40.6	64.85	1,200.9	3,012.7	3,283.2	3,203.4	79.73	41.180		
12,700.0	11,450.0	11,308.3	10,052.7	45.8	41.5	64.83	1,300.9	3,011.9	3,283.5	3,202.3	81.23	40.424		
12,800.0	11,450.0	11,408.3	10,052.0	46.6	42.3	64.82	1,400.9	3,011.1	3,283.8	3,201.0	82.81	39.655		
12,900.0	11,450.0	11,508.2	10,051.3	47.4	43.2	64.81	1,500.9	3,010.3	3,284.1	3,199.6	84.48	38.875		
13,000.0	11,450.0	11,608.2	10,050.6	48.3	44.2	64.80	1,600.9	3,009.5	3,284.4	3,198.2	86.22	38.092		
13,100.0	11,450.0	11,708.2	10,049.9	49.3	45.2	64.79	1,700.9	3,008.8	3,284.7	3,196.7	88.04	37.310		
13,200.0	11,450.0	11,808.2	10,049.2	50.3	46.2	64.78	1,800.9	3,008.0	3,285.0	3,195.1	89.92	36.531		
13,300.0	11,450.0	11,908.2	10,048.5	51.3	47.3	64.77	1,900.9	3,007.2	3,285.3	3,193.5	91.87	35.760		
13,400.0	11,450.0	12,008.2	10,047.8	52.3	48.4	64.76	2,000.8	3,006.4	3,285.6	3,191.8	93.88	34.999		
13,500.0	11,450.0	12,108.2	10,047.1	53.4	49.6	64.75	2,100.8	3,005.7	3,286.0	3,190.0	95.94	34.249		
13,600.0	11,450.0	12,208.2	10,046.4	54.5	50.7	64.74	2,200.8	3,004.9	3,286.3	3,188.2	98.06	33.513		
13,700.0	11,450.0	12,308.2	10,045.7	55.6	51.9	64.72	2,300.8	3,004.1	3,286.6	3,186.3	100.22	32.792		
13,800.0	11,450.0	12,408.2	10,045.0	56.8	53.1	64.71	2,400.8	3,003.3	3,286.9	3,184.4	102.43	32.088		
13,900.0	11,450.0	12,508.2	10,044.3	58.0	54.4	64.70	2,500.8	3,002.5	3,287.2	3,182.5	104.69	31.400		
14,000.0	11,450.0	12,608.2	10,043.6	59.2	55.6	64.69	2,600.8	3,001.8	3,287.5	3,180.5	106.98	30.730		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,100.0	11,450.0	12,708.2	10,042.9	60.4	56.9	64.68	2,700.8	3,001.0	3,287.8	3,178.5	109.31	30.077		
14,200.0	11,450.0	12,808.2	10,042.2	61.7	58.2	64.67	2,800.8	3,000.2	3,288.1	3,176.4	111.68	29.442		
14,300.0	11,450.0	12,908.2	10,041.5	62.9	59.5	64.66	2,900.8	2,999.4	3,288.4	3,174.4	114.08	28.826		
14,400.0	11,450.0	13,008.2	10,040.8	64.2	60.9	64.65	3,000.8	2,998.6	3,288.7	3,172.2	116.51	28.227		
14,500.0	11,450.0	13,108.2	10,040.1	65.5	62.2	64.64	3,100.8	2,997.9	3,289.1	3,170.1	118.97	27.646		
14,600.0	11,450.0	13,208.2	10,039.3	66.8	63.6	64.62	3,200.8	2,997.1	3,289.4	3,167.9	121.46	27.083		
14,700.0	11,450.0	13,308.2	10,038.6	68.2	64.9	64.61	3,300.7	2,996.3	3,289.7	3,165.7	123.97	26.537		
14,800.0	11,450.0	13,408.2	10,037.9	69.5	66.3	64.60	3,400.7	2,995.5	3,290.0	3,163.5	126.50	26.007		
14,900.0	11,450.0	13,508.2	10,037.2	70.9	67.7	64.59	3,500.7	2,994.8	3,290.3	3,161.2	129.06	25.494		
15,000.0	11,450.0	13,608.2	10,036.5	72.2	69.1	64.58	3,600.7	2,994.0	3,290.6	3,159.0	131.64	24.997		
15,100.0	11,450.0	13,708.2	10,035.8	73.6	70.6	64.57	3,700.7	2,993.2	3,290.9	3,156.7	134.24	24.515		
15,200.0	11,450.0	13,808.2	10,035.1	75.0	72.0	64.56	3,800.7	2,992.4	3,291.2	3,154.4	136.86	24.048		
15,300.0	11,450.0	13,908.2	10,034.4	76.4	73.5	64.55	3,900.7	2,991.6	3,291.5	3,152.0	139.50	23.596		
15,400.0	11,450.0	14,008.2	10,033.7	77.8	74.9	64.54	4,000.7	2,990.9	3,291.8	3,149.7	142.15	23.158		
15,500.0	11,450.0	14,108.2	10,033.0	79.3	76.4	64.53	4,100.7	2,990.1	3,292.2	3,147.3	144.82	22.733		
15,600.0	11,450.0	14,208.2	10,032.3	80.7	77.8	64.51	4,200.7	2,989.3	3,292.5	3,145.0	147.50	22.322		
15,700.0	11,450.0	14,308.2	10,031.6	82.1	79.3	64.50	4,300.7	2,988.5	3,292.8	3,142.6	150.20	21.923		
15,800.0	11,450.0	14,408.2	10,030.9	83.6	80.8	64.49	4,400.7	2,987.7	3,293.1	3,140.2	152.91	21.536		
15,900.0	11,450.0	14,508.2	10,030.2	85.0	82.3	64.48	4,500.6	2,987.0	3,293.4	3,137.8	155.63	21.161		
16,000.0	11,450.0	14,608.2	10,029.5	86.5	83.8	64.47	4,600.6	2,986.2	3,293.7	3,135.3	158.37	20.798		
16,100.0	11,450.0	14,708.2	10,028.8	88.0	85.3	64.46	4,700.6	2,985.4	3,294.0	3,132.9	161.11	20.445		
16,200.0	11,450.0	14,808.2	10,028.1	89.4	86.8	64.45	4,800.6	2,984.6	3,294.3	3,130.5	163.87	20.103		
16,300.0	11,450.0	14,908.2	10,027.4	90.9	88.3	64.44	4,900.6	2,983.9	3,294.7	3,128.0	166.64	19.771		
16,400.0	11,450.0	15,008.2	10,026.7	92.4	89.8	64.43	5,000.6	2,983.1	3,295.0	3,125.6	169.42	19.449		
16,500.0	11,450.0	15,108.2	10,026.0	93.9	91.3	64.42	5,100.6	2,982.3	3,295.3	3,123.1	172.20	19.136		
16,600.0	11,450.0	15,208.2	10,025.3	95.4	92.9	64.41	5,200.6	2,981.5	3,295.6	3,120.6	175.00	18.832		
16,700.0	11,450.0	15,308.2	10,024.6	96.9	94.4	64.39	5,300.6	2,980.7	3,295.9	3,118.1	177.80	18.537		
16,800.0	11,450.0	15,408.2	10,023.9	98.4	95.9	64.38	5,400.6	2,980.0	3,296.2	3,115.6	180.61	18.250		
16,900.0	11,450.0	15,508.2	10,023.2	100.0	97.5	64.37	5,500.6	2,979.2	3,296.5	3,113.1	183.43	17.972		
17,000.0	11,450.0	15,608.1	10,022.5	101.5	99.0	64.36	5,600.6	2,978.4	3,296.8	3,110.6	186.25	17.701		
17,100.0	11,450.0	15,708.1	10,021.8	103.0	100.6	64.35	5,700.6	2,977.6	3,297.2	3,108.1	189.09	17.437		
17,200.0	11,450.0	15,808.1	10,021.1	104.5	102.1	64.34	5,800.5	2,976.8	3,297.5	3,105.5	191.93	17.181		
17,300.0	11,450.0	15,908.1	10,020.3	106.1	103.7	64.33	5,900.5	2,976.1	3,297.8	3,103.0	194.77	16.932		
17,400.0	11,450.0	16,008.1	10,019.6	107.6	105.2	64.32	6,000.5	2,975.3	3,298.1	3,100.5	197.62	16.689		
17,500.0	11,450.0	16,108.1	10,018.9	109.1	106.8	64.31	6,100.5	2,974.5	3,298.4	3,097.9	200.48	16.453		
17,600.0	11,450.0	16,208.1	10,018.2	110.7	108.3	64.30	6,200.5	2,973.7	3,298.7	3,095.4	203.34	16.223		
17,700.0	11,450.0	16,308.1	10,017.5	112.2	109.9	64.28	6,300.5	2,973.0	3,299.0	3,092.8	206.20	15.999		
17,800.0	11,450.0	16,408.1	10,016.8	113.8	111.5	64.27	6,400.5	2,972.2	3,299.4	3,090.3	209.08	15.781		
17,900.0	11,450.0	16,508.1	10,016.1	115.3	113.1	64.26	6,500.5	2,971.4	3,299.7	3,087.7	211.95	15.568		
18,000.0	11,450.0	16,608.1	10,015.4	116.9	114.6	64.25	6,600.5	2,970.6	3,300.0	3,085.2	214.83	15.361		
18,100.0	11,450.0	16,708.1	10,014.7	118.4	116.2	64.24	6,700.5	2,969.8	3,300.3	3,082.6	217.72	15.159		
18,200.0	11,450.0	16,808.1	10,014.0	120.0	117.8	64.23	6,800.5	2,969.1	3,300.6	3,080.0	220.61	14.962		
18,300.0	11,450.0	16,908.1	10,013.3	121.6	119.4	64.22	6,900.5	2,968.3	3,300.9	3,077.4	223.50	14.769		
18,400.0	11,450.0	17,008.1	10,012.6	123.1	120.9	64.21	7,000.4	2,967.5	3,301.2	3,074.8	226.39	14.582		
18,500.0	11,450.0	17,108.1	10,011.9	124.7	122.5	64.20	7,100.4	2,966.7	3,301.6	3,072.3	229.29	14.399		
18,600.0	11,450.0	17,208.1	10,011.2	126.3	124.1	64.19	7,200.4	2,965.9	3,301.9	3,069.7	232.20	14.220		
18,700.0	11,450.0	17,308.1	10,010.5	127.8	125.7	64.18	7,300.4	2,965.2	3,302.2	3,067.1	235.10	14.046		
18,800.0	11,450.0	17,408.1	10,009.8	129.4	127.3	64.16	7,400.4	2,964.4	3,302.5	3,064.5	238.01	13.875		
18,900.0	11,450.0	17,508.1	10,009.1	131.0	128.9	64.15	7,500.4	2,963.6	3,302.8	3,061.9	240.93	13.709		
19,000.0	11,450.0	17,608.1	10,008.4	132.6	130.5	64.14	7,600.4	2,962.8	3,303.1	3,059.3	243.84	13.546		
19,100.0	11,450.0	17,708.1	10,007.7	134.2	132.1	64.13	7,700.4	2,962.1	3,303.5	3,056.7	246.76	13.387		
19,200.0	11,450.0	17,808.1	10,007.0	135.7	133.7	64.12	7,800.4	2,961.3	3,303.8	3,054.1	249.68	13.232		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
19,300.0	11,450.0	17,908.1	10,006.3	137.3	135.3	64.11	7,900.4	2,960.5	3,304.1	3,051.5	252.61	13.080	
19,400.0	11,450.0	18,008.1	10,005.6	138.9	136.9	64.10	8,000.4	2,959.7	3,304.4	3,048.9	255.53	12.931	
19,500.0	11,450.0	18,108.1	10,004.9	140.5	138.5	64.09	8,100.4	2,958.9	3,304.7	3,046.3	258.46	12.786	
19,600.0	11,450.0	18,208.1	10,004.2	142.1	140.1	64.08	8,200.4	2,958.2	3,305.0	3,043.6	261.39	12.644	
19,700.0	11,450.0	18,308.1	10,003.5	143.7	141.7	64.07	8,300.3	2,957.4	3,305.3	3,041.0	264.32	12.505	
19,800.0	11,450.0	18,408.1	10,002.8	145.3	143.3	64.06	8,400.3	2,956.6	3,305.7	3,038.4	267.26	12.369	
19,900.0	11,450.0	18,508.1	10,002.0	146.9	144.9	64.04	8,500.3	2,955.8	3,306.0	3,035.8	270.19	12.236	
20,000.0	11,450.0	18,608.1	10,001.3	148.5	146.5	64.03	8,600.3	2,955.0	3,306.3	3,033.2	273.13	12.105	
20,100.0	11,450.0	18,708.1	10,000.6	150.1	148.1	64.02	8,700.3	2,954.3	3,306.6	3,030.5	276.07	11.977	
20,200.0	11,450.0	18,808.1	9,999.9	151.7	149.7	64.01	8,800.3	2,953.5	3,306.9	3,027.9	279.02	11.852	
20,300.0	11,450.0	18,908.1	9,999.2	153.3	151.3	64.00	8,900.3	2,952.7	3,307.2	3,025.3	281.96	11.729	
20,400.0	11,450.0	19,008.1	9,998.5	154.9	152.9	63.99	9,000.3	2,951.9	3,307.6	3,022.7	284.91	11.609	
20,500.0	11,450.0	19,108.1	9,997.8	156.5	154.5	63.98	9,100.3	2,951.2	3,307.9	3,020.0	287.85	11.492	
20,600.0	11,450.0	19,208.1	9,997.1	158.1	156.1	63.97	9,200.3	2,950.4	3,308.2	3,017.4	290.80	11.376	
20,700.0	11,450.0	19,308.1	9,996.4	159.7	157.8	63.96	9,300.3	2,949.6	3,308.5	3,014.8	293.75	11.263	
20,800.0	11,450.0	19,408.1	9,995.7	161.3	159.4	63.95	9,400.3	2,948.8	3,308.8	3,012.1	296.70	11.152	
20,900.0	11,450.0	19,508.1	9,995.0	162.9	161.0	63.94	9,500.3	2,948.0	3,309.2	3,009.5	299.66	11.043	
21,000.0	11,450.0	19,608.0	9,994.3	164.5	162.6	63.92	9,600.2	2,947.3	3,309.5	3,006.9	302.61	10.936	
21,100.0	11,450.0	19,708.0	9,993.6	166.1	164.2	63.91	9,700.2	2,946.5	3,309.8	3,004.2	305.57	10.832	
21,200.0	11,450.0	19,808.0	9,992.9	167.7	165.8	63.90	9,800.2	2,945.7	3,310.1	3,001.6	308.52	10.729	
21,300.0	11,450.0	19,908.0	9,992.2	169.3	167.5	63.89	9,900.2	2,944.9	3,310.4	2,998.9	311.48	10.628	
21,400.0	11,450.0	20,008.0	9,991.5	170.9	169.1	63.88	10,000.2	2,944.1	3,310.7	2,996.3	314.44	10.529	
21,500.0	11,450.0	20,108.0	9,990.8	172.5	170.7	63.87	10,100.2	2,943.4	3,311.1	2,993.7	317.40	10.432	
21,600.0	11,450.0	20,208.0	9,990.1	174.2	172.3	63.86	10,200.2	2,942.6	3,311.4	2,991.0	320.36	10.336	
21,614.7	11,450.0	20,222.7	9,990.0	174.4	172.5	63.86	10,214.9	2,942.5	3,311.4	2,990.7	320.72	10.325 SF	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 206-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	13.0	13.0	0.0	0.0	-11.80	5,176.2	-1,081.3	5,287.9					
100.0	100.0	94.5	94.5	0.1	0.1	-11.80	5,176.4	-1,081.1	5,288.1	5,287.9	0.28	N/A		
200.0	200.0	175.9	175.9	0.5	0.3	-11.79	5,177.0	-1,080.5	5,288.7	5,288.0	0.76	6,958.276		
300.0	300.0	262.7	262.7	0.8	0.5	-11.78	5,178.0	-1,079.6	5,289.6	5,288.3	1.37	3,862.657		
400.0	400.0	352.7	352.7	1.2	0.8	-11.77	5,179.2	-1,078.7	5,290.7	5,288.7	2.05	2,580.524		
500.0	500.0	449.1	449.1	1.6	1.2	-11.75	5,180.6	-1,077.8	5,292.0	5,289.2	2.75	1,921.323		
600.0	600.0	548.3	548.3	1.9	1.5	-11.74	5,182.1	-1,076.9	5,293.3	5,289.8	3.47	1,526.119		
700.0	700.0	638.5	638.4	2.3	1.9	-11.73	5,183.5	-1,076.1	5,294.6	5,290.5	4.15	1,275.747		
800.0	800.0	726.6	726.5	2.6	2.2	-11.72	5,185.1	-1,075.4	5,296.2	5,291.4	4.82	1,097.690		
900.0	900.0	820.0	819.9	3.0	2.5	-11.71	5,186.9	-1,074.7	5,298.0	5,292.4	5.52	960.062		
1,000.0	1,000.0	916.1	916.0	3.4	2.9	-11.69	5,188.9	-1,074.0	5,299.8	5,293.6	6.22	851.891		
1,100.0	1,100.0	1,012.2	1,012.0	3.7	3.2	-161.46	5,190.9	-1,073.3	5,302.6	5,295.7	6.91	767.627		
1,200.0	1,200.0	1,489.1	1,488.7	4.0	4.8	-161.51	5,183.0	-1,073.0	5,303.3	5,294.4	8.84	599.756		
1,300.0	1,299.9	1,652.8	1,652.2	4.4	5.4	-161.52	5,174.1	-1,068.7	5,301.4	5,291.7	9.74	544.564		
1,400.0	1,399.7	1,771.1	1,770.2	4.7	5.8	-161.52	5,167.1	-1,064.5	5,300.7	5,290.2	10.48	505.702		
1,405.5	1,405.2	1,777.7	1,776.7	4.7	5.8	-161.52	5,166.7	-1,064.3	5,300.7	5,290.2	10.52	503.707		
1,500.0	1,499.4	1,881.2	1,880.0	5.0	6.2	-161.51	5,160.4	-1,059.9	5,301.4	5,290.2	11.21	472.939		
1,600.0	1,598.9	1,991.5	1,989.9	5.4	6.6	-161.49	5,153.8	-1,054.2	5,303.5	5,291.6	11.94	444.061		
1,700.0	1,698.3	2,106.5	2,104.5	5.8	7.0	-161.47	5,146.8	-1,047.0	5,307.0	5,294.3	12.70	417.849		
1,800.0	1,797.4	2,212.7	2,210.2	6.1	7.4	-161.43	5,140.3	-1,039.6	5,312.0	5,298.6	13.43	395.455		
1,900.0	1,896.4	2,311.3	2,308.4	6.5	7.8	-161.42	5,134.2	-1,032.7	5,317.8	5,303.6	14.14	376.013		
2,000.0	1,995.5	2,408.6	2,405.3	6.9	8.1	-161.41	5,128.2	-1,026.0	5,323.6	5,308.7	14.85	358.473		
2,100.0	2,094.5	2,505.1	2,501.4	7.3	8.5	-161.40	5,122.3	-1,019.5	5,329.4	5,313.9	15.56	342.538		
2,200.0	2,193.5	2,591.3	2,587.2	7.7	8.8	-161.39	5,117.1	-1,013.7	5,335.4	5,319.2	16.23	328.681		
2,300.0	2,292.5	2,672.5	2,668.1	8.1	9.1	-161.38	5,112.5	-1,008.1	5,341.7	5,324.8	16.89	316.240		
2,400.0	2,391.6	2,761.6	2,756.8	8.5	9.4	-161.37	5,107.8	-1,001.9	5,348.4	5,330.8	17.58	304.243		
2,500.0	2,490.6	2,864.9	2,859.7	8.9	9.8	-161.35	5,102.4	-994.7	5,355.0	5,336.7	18.32	292.302		
2,600.0	2,589.6	2,961.1	2,955.6	9.3	10.2	-161.34	5,097.3	-988.1	5,361.7	5,342.6	19.04	281.642		
2,700.0	2,688.6	3,051.2	3,045.4	9.7	10.5	-161.33	5,092.6	-981.9	5,368.4	5,348.7	19.73	272.054		
2,729.0	2,717.4	3,077.3	3,071.4	9.8	10.6	-161.33	5,091.3	-980.2	5,370.4	5,350.5	19.93	269.398		
2,800.0	2,787.8	3,131.4	3,125.3	10.1	10.8	-161.34	5,088.6	-976.6	5,374.8	5,354.4	20.39	263.585		
2,900.0	2,887.2	3,198.3	3,192.0	10.5	11.1	-161.36	5,085.5	-973.1	5,379.4	5,358.4	21.00	256.209		
3,000.0	2,986.8	3,265.2	3,258.9	10.9	11.3	-161.37	5,082.5	-970.7	5,382.0	5,360.4	21.60	249.203		
3,100.0	3,086.7	3,292.0	3,285.6	11.2	11.4	-161.38	5,081.4	-970.0	5,383.1	5,361.0	22.05	244.170		
3,200.0	3,186.6	3,368.4	3,361.9	11.6	11.7	-161.37	5,078.8	-968.3	5,382.3	5,359.6	22.67	237.421		
3,262.3	3,249.0	3,398.2	3,391.7	11.8	11.8	-11.58	5,078.2	-967.6	5,381.1	5,358.1	22.99	234.095		
3,300.0	3,286.6	3,416.2	3,409.7	11.9	11.9	-11.57	5,077.8	-967.2	5,380.3	5,357.1	23.18	232.156		
3,400.0	3,386.6	3,482.0	3,475.5	12.2	12.1	-11.56	5,077.3	-965.7	5,378.8	5,355.1	23.74	226.547		
3,500.0	3,486.6	3,520.8	3,514.2	12.6	12.2	-11.55	5,077.3	-964.8	5,378.2	5,354.0	24.21	222.159		
3,530.8	3,517.4	3,540.0	3,533.4	12.7	12.3	-11.54	5,077.4	-964.3	5,378.2	5,353.8	24.38	220.601		
3,600.0	3,586.6	3,583.1	3,576.6	12.9	12.5	-11.53	5,077.7	-962.9	5,378.3	5,353.6	24.76	217.192		
3,700.0	3,686.6	3,645.5	3,638.8	13.2	12.7	-11.50	5,078.7	-960.7	5,379.2	5,353.8	25.32	212.473		
3,800.0	3,786.6	3,734.1	3,727.4	13.5	13.0	-11.46	5,080.7	-957.4	5,380.5	5,354.6	25.97	207.184		
3,900.0	3,886.6	3,841.2	3,834.4	13.9	13.4	-11.43	5,082.6	-954.8	5,381.9	5,355.2	26.69	201.622		
4,000.0	3,986.6	3,959.5	3,952.7	14.2	13.8	-11.41	5,084.3	-953.3	5,383.0	5,355.5	27.46	196.062		
4,100.0	4,086.6	4,080.0	4,073.2	14.6	14.2	-11.40	5,085.4	-952.4	5,383.7	5,355.5	28.23	190.734		
4,200.0	4,186.6	4,187.4	4,180.6	14.9	14.6	-11.40	5,085.9	-952.4	5,384.2	5,355.3	28.94	186.072		
4,300.0	4,286.6	4,276.2	4,269.4	15.2	14.8	-11.41	5,086.2	-953.0	5,384.7	5,355.1	29.58	182.030		
4,400.0	4,386.6	4,347.5	4,340.8	15.6	15.1	-11.41	5,086.8	-953.3	5,385.5	5,355.4	30.16	178.554		
4,500.0	4,486.6	4,426.0	4,419.2	15.9	15.4	-11.40	5,088.0	-953.1	5,387.0	5,356.2	30.77	175.078		
4,600.0	4,586.6	4,710.0	4,703.1	16.2	16.3	-11.45	5,085.4	-956.9	5,385.5	5,353.4	32.12	167.691		
4,700.0	4,686.6	4,814.6	4,807.7	16.6	16.7	-11.48	5,082.8	-959.4	5,383.6	5,350.8	32.82	164.055		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 206-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,800.0	4,786.6	4,906.3	4,899.4	16.9	17.0	-11.51	5,080.7	-961.6	5,381.7	5,348.2	33.47	160.776		
4,900.0	4,886.6	5,009.4	5,002.4	17.3	17.3	-11.54	5,078.3	-963.9	5,379.9	5,345.8	34.17	157.440		
5,000.0	4,986.6	5,123.6	5,116.5	17.6	17.7	-11.57	5,075.5	-966.3	5,377.9	5,343.0	34.91	154.048		
5,100.0	5,086.6	5,218.8	5,211.6	18.0	18.0	-11.59	5,073.0	-968.3	5,375.8	5,340.2	35.58	151.072		
5,200.0	5,186.6	5,303.1	5,295.9	18.3	18.3	-11.62	5,071.0	-970.1	5,373.9	5,337.7	36.22	148.358		
5,300.0	5,286.6	5,370.3	5,363.1	18.6	18.6	-11.63	5,069.8	-971.0	5,372.4	5,335.6	36.80	145.981		
5,400.0	5,386.6	5,437.5	5,430.3	19.0	18.8	-11.63	5,069.2	-971.3	5,371.6	5,334.2	37.38	143.697		
5,500.0	5,486.6	5,521.6	5,514.4	19.3	19.1	-11.63	5,069.0	-970.9	5,371.3	5,333.3	38.03	141.258		
5,600.0	5,586.6	5,618.1	5,610.9	19.7	19.4	-11.63	5,068.9	-970.6	5,371.1	5,332.4	38.72	138.730		
5,700.0	5,686.6	5,716.8	5,709.6	20.0	19.8	-11.63	5,068.8	-970.5	5,371.0	5,331.6	39.41	136.271		
5,800.0	5,786.6	5,816.8	5,809.6	20.4	20.1	-11.63	5,068.6	-970.5	5,370.9	5,330.8	40.12	133.886		
5,900.0	5,886.6	5,921.0	5,913.7	20.7	20.5	-11.63	5,068.5	-970.6	5,370.7	5,329.9	40.83	131.537		
6,000.0	5,986.6	6,026.6	6,019.4	21.1	20.8	-11.63	5,068.2	-970.7	5,370.5	5,328.9	41.55	129.251		
6,100.0	6,086.6	6,111.8	6,104.6	21.4	21.1	-11.63	5,068.0	-970.8	5,370.3	5,328.1	42.19	127.277		
6,112.3	6,099.0	6,122.2	6,115.0	21.5	21.2	-11.63	5,068.0	-970.9	5,370.3	5,328.0	42.27	127.039		
6,200.0	6,186.6	6,196.1	6,188.9	21.8	21.4	-11.63	5,068.0	-971.1	5,370.4	5,327.6	42.83	125.379		
6,300.0	6,286.6	6,291.4	6,284.2	22.1	21.8	-11.64	5,068.2	-971.5	5,370.7	5,327.2	43.51	123.434		
6,400.0	6,386.6	6,390.9	6,383.7	22.5	22.1	-11.64	5,068.5	-972.0	5,371.1	5,326.9	44.20	121.511		
6,500.0	6,486.6	6,488.9	6,481.7	22.8	22.4	-11.65	5,068.8	-972.5	5,371.4	5,326.5	44.89	119.658		
6,600.0	6,586.6	6,586.6	6,579.4	23.2	22.8	-11.65	5,069.1	-973.0	5,371.8	5,326.3	45.58	117.864		
6,700.0	6,686.6	6,687.9	6,680.6	23.5	23.1	-11.66	5,069.4	-973.6	5,372.3	5,326.0	46.28	116.089		
6,800.0	6,786.6	6,789.7	6,782.4	23.9	23.4	-11.66	5,069.7	-974.1	5,372.7	5,325.7	46.98	114.360		
6,900.0	6,886.6	6,896.4	6,889.1	24.2	23.8	-11.67	5,069.9	-974.6	5,373.0	5,325.3	47.70	112.636		
7,000.0	6,986.6	7,021.0	7,013.8	24.6	24.2	-11.67	5,070.0	-975.2	5,373.1	5,324.6	48.49	110.806		
7,100.0	7,086.6	7,193.6	7,186.4	24.9	24.8	-11.69	5,068.1	-976.5	5,372.2	5,322.8	49.45	108.634		
7,200.0	7,186.6	7,334.6	7,327.3	25.3	25.3	-11.70	5,065.3	-977.0	5,370.3	5,320.0	50.30	106.762		
7,300.0	7,286.6	7,455.8	7,448.4	25.6	25.8	-11.70	5,062.2	-976.7	5,367.8	5,316.7	51.08	105.083		
7,400.0	7,386.6	7,573.8	7,566.4	26.0	26.2	-11.71	5,058.8	-976.3	5,364.9	5,313.1	51.85	103.470		
7,500.0	7,486.6	7,612.4	7,605.0	26.3	26.3	-11.71	5,058.1	-976.2	5,362.6	5,310.3	52.34	102.456		
7,600.0	7,586.6	7,668.6	7,661.3	26.7	26.5	-11.71	5,057.3	-976.0	5,361.1	5,308.3	52.89	101.363		
7,700.0	7,686.6	7,729.0	7,721.6	27.0	26.7	-11.71	5,056.9	-975.8	5,360.5	5,307.0	53.45	100.286		
7,800.0	7,786.6	7,854.4	7,847.0	27.4	27.2	-11.70	5,056.3	-975.3	5,360.0	5,305.7	54.25	98.797		
7,900.0	7,886.6	7,972.0	7,964.6	27.7	27.6	-11.70	5,055.2	-974.5	5,358.9	5,303.9	55.02	97.391		
8,000.0	7,986.6	8,074.0	8,066.6	28.1	27.9	-11.69	5,054.2	-973.7	5,357.7	5,302.0	55.74	96.120		
8,100.0	8,086.6	8,149.1	8,141.7	28.4	28.2	-11.68	5,053.5	-973.0	5,356.7	5,300.3	56.36	95.052		
8,200.0	8,186.6	8,211.9	8,204.5	28.8	28.4	-11.68	5,053.3	-972.6	5,356.3	5,299.4	56.92	94.097		
8,205.0	8,191.6	8,215.0	8,207.6	28.8	28.4	-11.68	5,053.3	-972.6	5,356.3	5,299.3	56.95	94.050		
8,300.0	8,286.6	8,295.0	8,287.6	29.1	28.7	-11.68	5,053.8	-972.2	5,356.7	5,299.1	57.56	93.054		
8,400.0	8,386.6	8,379.4	8,372.0	29.5	29.0	-11.67	5,054.5	-971.8	5,357.3	5,299.1	58.21	92.035		
8,500.0	8,486.6	8,653.9	8,646.4	29.8	30.0	-11.62	5,053.6	-967.2	5,357.4	5,297.9	59.55	89.970		
8,600.0	8,586.6	8,880.2	8,871.9	30.2	30.8	-11.47	5,046.7	-951.0	5,352.3	5,291.6	60.68	88.200		
8,700.0	8,686.6	8,928.0	8,918.8	30.6	31.0	-11.37	5,046.4	-941.9	5,347.7	5,286.5	61.23	87.344		
8,800.0	8,786.6	8,928.0	8,918.8	30.9	31.0	-11.37	5,046.4	-941.9	5,344.6	5,283.0	61.59	86.774		
8,900.0	8,886.6	8,973.0	8,963.0	31.3	31.1	-11.28	5,047.4	-933.5	5,343.0	5,280.9	62.11	86.026		
8,960.4	8,947.0	8,973.0	8,963.0	31.5	31.1	-11.28	5,047.4	-933.5	5,342.7	5,280.3	62.31	85.737		
9,000.0	8,986.6	8,973.0	8,963.0	31.6	31.1	-11.28	5,047.4	-933.5	5,342.8	5,280.4	62.44	85.560		
9,100.0	9,086.6	8,995.0	8,984.7	32.0	31.2	-11.25	5,048.3	-930.4	5,344.3	5,281.5	62.85	85.032		
9,200.0	9,186.6	9,022.0	9,011.5	32.3	31.3	-11.21	5,049.8	-926.9	5,347.2	5,283.9	63.27	84.521		
9,300.0	9,286.6	9,056.9	9,046.2	32.7	31.4	-11.16	5,052.1	-923.0	5,351.4	5,287.7	63.70	84.007		
9,400.0	9,386.6	9,117.0	9,105.8	33.0	31.6	-11.10	5,056.6	-918.0	5,357.0	5,292.7	64.24	83.390		
9,500.0	9,486.6	9,401.0	9,389.4	33.4	32.6	-11.05	5,068.5	-915.4	5,361.1	5,295.4	65.69	81.611		
9,600.0	9,586.6	9,401.0	9,389.4	33.7	32.6	-11.05	5,068.5	-915.4	5,364.1	5,298.1	65.99	81.283		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 206-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,700.0	9,686.6	9,401.0	9,389.4	34.1	32.6	-11.05	5,068.5	-915.4	5,369.0	5,302.7	66.27	81.012		
9,800.0	9,786.6	9,445.3	9,433.7	34.5	32.7	-11.04	5,070.3	-915.3	5,374.3	5,307.6	66.73	80.537		
9,900.0	9,886.6	9,495.0	9,483.1	34.8	32.9	-11.03	5,075.5	-914.9	5,383.0	5,315.8	67.21	80.097		
10,000.0	9,986.6	9,495.0	9,483.1	35.2	32.9	-11.03	5,075.5	-914.9	5,391.7	5,324.3	67.44	79.943		
10,100.0	10,086.6	9,495.0	9,483.1	35.5	32.9	-11.03	5,075.5	-914.9	5,402.3	5,334.6	67.66	79.842		
10,200.0	10,186.6	9,495.0	9,483.1	35.9	32.9	-11.03	5,075.5	-914.9	5,414.6	5,346.8	67.86	79.792		
10,300.0	10,286.6	9,495.0	9,483.1	36.2	32.9	-11.03	5,075.5	-914.9	5,428.8	5,360.8	68.04	79.793		
10,400.0	10,386.6	9,495.0	9,483.1	36.6	32.9	-11.03	5,075.5	-914.9	5,444.8	5,376.6	68.19	79.844		
10,500.0	10,486.6	9,516.5	9,504.3	36.9	33.0	-11.02	5,079.0	-914.5	5,462.0	5,393.6	68.45	79.793		
10,600.0	10,586.6	9,542.0	9,529.2	37.3	33.1	-11.00	5,084.6	-913.9	5,481.6	5,412.8	68.72	79.763		
10,700.0	10,686.6	9,542.0	9,529.2	37.6	33.1	-11.00	5,084.6	-913.9	5,502.0	5,433.2	68.83	79.934		
10,800.0	10,786.6	9,542.0	9,529.2	38.0	33.1	-11.00	5,084.6	-913.9	5,524.2	5,455.3	68.92	80.151		
10,890.4	10,877.0	9,542.0	9,529.2	38.3	33.1	-11.00	5,084.6	-913.9	5,545.7	5,476.7	68.99	80.385		
10,900.0	10,886.6	9,542.0	9,529.2	38.4	33.1	-5.58	5,084.6	-913.9	5,548.0	5,479.0	69.00	80.412		
10,950.0	10,936.5	9,560.4	9,546.9	38.5	33.1	-5.47	5,089.3	-913.4	5,557.6	5,488.4	69.14	80.383		
11,000.0	10,986.0	9,572.1	9,558.3	38.7	33.2	-5.41	5,092.5	-913.1	5,563.2	5,493.9	69.23	80.352		
11,050.0	11,034.6	9,589.0	9,574.5	38.9	33.2	-5.39	5,097.0	-912.8	5,564.8	5,495.4	69.36	80.235		
11,100.0	11,082.0	9,589.0	9,574.5	39.0	33.2	-5.41	5,097.0	-912.8	5,562.4	5,493.0	69.36	80.196		
11,150.0	11,127.8	9,589.0	9,574.5	39.2	33.2	-5.47	5,097.0	-912.8	5,556.1	5,486.7	69.35	80.114		
11,200.0	11,171.8	9,589.0	9,574.5	39.3	33.2	-5.57	5,097.0	-912.8	5,546.0	5,476.7	69.33	79.990		
11,250.0	11,213.5	9,589.0	9,574.5	39.4	33.2	-5.71	5,097.0	-912.8	5,532.1	5,462.8	69.30	79.824		
11,300.0	11,252.6	9,589.0	9,574.5	39.5	33.2	-5.90	5,097.0	-912.8	5,514.5	5,445.2	69.26	79.618		
11,350.0	11,288.9	9,589.0	9,574.5	39.7	33.2	-6.15	5,097.0	-912.8	5,493.2	5,424.0	69.21	79.372		
11,400.0	11,322.0	9,611.2	9,595.7	39.8	33.3	-6.47	5,103.7	-912.5	5,467.9	5,398.6	69.30	78.900		
11,450.0	11,351.8	9,614.2	9,598.5	39.9	33.3	-6.86	5,104.7	-912.5	5,439.7	5,370.4	69.25	78.548		
11,500.0	11,377.9	9,636.0	9,618.9	40.0	33.3	-7.38	5,112.4	-912.6	5,408.7	5,339.3	69.33	78.012		
11,550.0	11,400.3	9,636.0	9,618.9	40.1	33.3	-8.02	5,112.4	-912.6	5,374.1	5,304.8	69.25	77.605		
11,600.0	11,418.6	9,636.0	9,618.9	40.3	33.3	-8.85	5,112.4	-912.6	5,336.7	5,267.6	69.16	77.161		
11,650.0	11,432.8	9,636.0	9,618.9	40.4	33.3	-9.93	5,112.4	-912.6	5,296.9	5,227.8	69.08	76.682		
11,700.0	11,442.8	9,636.0	9,618.9	40.5	33.3	-11.38	5,112.4	-912.6	5,254.7	5,185.7	68.99	76.167		
11,750.0	11,448.5	9,636.0	9,618.9	40.7	33.3	-13.42	5,112.4	-912.6	5,210.5	5,141.6	68.91	75.618		
11,790.4	11,450.0	9,636.0	9,618.9	40.8	33.3	-15.74	5,112.4	-912.6	5,173.5	5,104.6	68.84	75.149		
11,800.0	11,450.0	9,636.0	9,618.9	40.8	33.3	-16.21	5,112.4	-912.6	5,164.5	5,095.7	68.83	75.034		
11,900.0	11,450.0	9,636.0	9,618.9	41.1	33.3	-20.81	5,112.4	-912.6	5,072.1	5,003.4	68.67	73.861		
12,000.0	11,450.0	9,636.0	9,618.9	41.5	33.3	-25.04	5,112.4	-912.6	4,980.4	4,911.9	68.51	72.695		
12,037.8	11,450.0	9,636.0	9,618.9	41.7	33.3	-26.54	5,112.4	-912.6	4,946.0	4,877.5	68.45	72.256		
12,100.0	11,450.0	9,636.0	9,618.9	41.9	33.3	-26.54	5,112.4	-912.6	4,889.5	4,821.2	68.35	71.534		
12,200.0	11,450.0	9,636.0	9,618.9	42.4	33.3	-26.54	5,112.4	-912.6	4,799.1	4,730.9	68.19	70.374		
12,300.0	11,450.0	9,653.6	9,635.1	43.0	33.4	-26.75	5,119.2	-912.9	4,708.8	4,640.6	68.18	69.065		
12,400.0	11,450.0	9,675.3	9,654.9	43.6	33.5	-27.01	5,128.0	-913.4	4,619.1	4,550.9	68.20	67.724		
12,500.0	11,450.0	9,675.3	9,654.9	44.3	33.5	-27.01	5,128.0	-913.4	4,529.5	4,461.5	68.05	66.563		
12,600.0	11,450.0	9,675.3	9,654.9	45.0	33.5	-27.01	5,128.0	-913.4	4,440.4	4,372.5	67.89	65.405		
12,700.0	11,450.0	9,683.0	9,662.0	45.8	33.5	-27.10	5,131.2	-913.6	4,351.7	4,283.9	67.80	64.181		
12,800.0	11,450.0	9,683.0	9,662.0	46.6	33.5	-27.10	5,131.2	-913.6	4,263.4	4,195.8	67.65	63.026		
12,900.0	11,450.0	9,683.0	9,662.0	47.4	33.5	-27.10	5,131.2	-913.6	4,175.7	4,108.2	67.49	61.872		
13,000.0	11,450.0	9,683.0	9,662.0	48.3	33.5	-27.10	5,131.2	-913.6	4,088.6	4,021.2	67.33	60.720		
13,100.0	11,450.0	9,708.6	9,685.0	49.3	33.6	-27.42	5,142.3	-914.4	4,001.5	3,934.1	67.43	59.342		
13,200.0	11,450.0	9,730.0	9,703.9	50.3	33.6	-27.69	5,152.2	-915.2	3,915.4	3,847.9	67.50	58.009		
13,300.0	11,450.0	9,730.0	9,703.9	51.3	33.6	-27.69	5,152.2	-915.2	3,829.7	3,762.3	67.36	56.854		
13,400.0	11,450.0	9,730.0	9,703.9	52.3	33.6	-27.69	5,152.2	-915.2	3,744.6	3,677.4	67.23	55.702		
13,500.0	11,450.0	9,730.0	9,703.9	53.4	33.6	-27.69	5,152.2	-915.2	3,660.3	3,593.2	67.10	54.552		
13,600.0	11,450.0	9,730.0	9,703.9	54.5	33.6	-27.69	5,152.2	-915.2	3,576.7	3,509.8	66.97	53.405		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 206-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,700.0	11,450.0	9,749.9	9,721.2	55.6	33.7	-27.94	5,162.0	-916.0	3,493.7	3,426.6	67.08	52.085		
13,800.0	11,450.0	9,756.7	9,727.1	56.8	33.7	-28.03	5,165.5	-916.3	3,411.6	3,344.5	67.05	50.880		
13,900.0	11,450.0	9,777.0	9,744.2	58.0	33.7	-28.29	5,176.4	-917.2	3,330.6	3,263.4	67.19	49.567		
14,000.0	11,450.0	9,777.0	9,744.2	59.2	33.7	-28.29	5,176.4	-917.2	3,250.2	3,183.0	67.12	48.421		
14,100.0	11,450.0	9,777.0	9,744.2	60.4	33.7	-28.29	5,176.4	-917.2	3,170.8	3,103.8	67.07	47.279		
14,200.0	11,450.0	9,794.8	9,758.9	61.7	33.8	-28.52	5,186.3	-918.1	3,092.5	3,025.3	67.24	45.990		
14,300.0	11,450.0	9,824.0	9,782.7	62.9	33.9	-28.89	5,203.2	-919.5	3,015.4	2,947.8	67.58	44.618		
14,400.0	11,450.0	9,824.0	9,782.7	64.2	33.9	-28.89	5,203.2	-919.5	2,939.0	2,871.4	67.60	43.478		
14,500.0	11,450.0	9,840.4	9,795.9	65.5	33.9	-29.10	5,213.0	-920.3	2,864.0	2,796.1	67.85	42.212		
14,600.0	11,450.0	9,871.0	9,819.8	66.8	34.0	-29.48	5,231.9	-921.5	2,790.2	2,721.9	68.30	40.851		
14,700.0	11,450.0	9,871.0	9,819.8	68.2	34.0	-29.48	5,231.9	-921.5	2,717.6	2,649.1	68.42	39.721		
14,800.0	11,450.0	9,871.0	9,819.8	69.5	34.0	-29.48	5,231.9	-921.5	2,646.6	2,578.1	68.56	38.602		
14,900.0	11,450.0	9,894.9	9,838.0	70.9	34.1	-29.77	5,247.5	-922.5	2,577.0	2,508.0	69.07	37.313		
15,000.0	11,450.0	9,918.0	9,854.8	72.2	34.1	-30.05	5,263.2	-923.5	2,509.5	2,439.9	69.59	36.059		
15,100.0	11,450.0	9,918.0	9,854.8	73.6	34.1	-30.05	5,263.2	-923.5	2,443.5	2,373.7	69.88	34.970		
15,200.0	11,450.0	9,938.0	9,869.0	75.0	34.2	-30.29	5,277.4	-924.4	2,379.6	2,309.2	70.47	33.768		
15,300.0	11,450.0	9,966.0	9,888.2	76.4	34.3	-30.64	5,297.7	-926.0	2,317.8	2,246.6	71.24	32.537		
15,400.0	11,450.0	9,966.0	9,888.2	77.8	34.3	-30.64	5,297.7	-926.0	2,258.0	2,186.4	71.68	31.502		
15,500.0	11,450.0	9,991.5	9,904.9	79.3	34.4	-30.95	5,316.9	-927.6	2,200.6	2,128.0	72.53	30.340		
15,600.0	11,450.0	10,013.0	9,918.4	80.7	34.5	-31.20	5,333.5	-929.0	2,145.6	2,072.2	73.39	29.237		
15,700.0	11,450.0	10,013.0	9,918.4	82.1	34.5	-31.20	5,333.5	-929.0	2,093.6	2,019.6	74.01	28.288		
15,800.0	11,450.0	10,060.0	9,945.4	83.6	34.6	-31.72	5,371.9	-931.9	2,044.3	1,969.0	75.33	27.139		
15,900.0	11,450.0	10,060.0	9,945.4	85.0	34.6	-31.72	5,371.9	-931.9	1,997.7	1,921.6	76.07	26.260		
16,000.0	11,450.0	10,090.8	9,961.3	86.5	34.7	-32.03	5,398.2	-933.7	1,954.4	1,877.1	77.28	25.289		
16,100.0	11,450.0	10,125.0	9,977.8	88.0	34.8	-32.36	5,428.1	-935.6	1,914.0	1,835.4	78.58	24.359		
16,200.0	11,450.0	10,143.1	9,986.0	89.4	34.9	-32.53	5,444.1	-936.6	1,876.8	1,797.1	79.72	23.542		
16,300.0	11,450.0	10,155.0	9,991.1	90.9	35.0	-32.64	5,454.9	-937.3	1,843.4	1,762.5	80.84	22.804		
16,400.0	11,450.0	10,202.0	10,008.5	92.4	35.1	-33.02	5,498.4	-940.2	1,813.8	1,731.4	82.38	22.016		
16,500.0	11,450.0	10,202.0	10,008.5	93.9	35.1	-33.02	5,498.4	-940.2	1,787.7	1,704.3	83.44	21.424		
16,600.0	11,450.0	10,229.6	10,016.7	95.4	35.2	-33.20	5,524.7	-941.9	1,766.0	1,681.2	84.81	20.823		
16,700.0	11,450.0	10,249.0	10,021.5	96.9	35.3	-33.32	5,543.5	-943.1	1,748.7	1,662.6	86.10	20.310		
16,800.0	11,450.0	10,296.0	10,030.9	98.4	35.5	-33.56	5,589.5	-945.8	1,734.8	1,647.2	87.61	19.801		
16,900.0	11,450.0	10,344.0	10,039.0	100.0	35.7	-33.77	5,636.7	-948.3	1,723.7	1,634.6	89.11	19.343		
17,000.0	11,450.0	10,391.0	10,044.8	101.5	35.9	-33.96	5,683.2	-951.7	1,716.5	1,625.9	90.61	18.944		
17,100.0	11,450.0	10,410.7	10,046.5	103.0	36.0	-34.04	5,702.8	-953.5	1,713.1	1,621.2	91.88	18.644		
17,137.6	11,450.0	10,425.5	10,047.4	103.6	36.1	-34.09	5,717.5	-954.8	1,712.8	1,620.4	92.41	18.535 CC		
17,200.0	11,450.0	10,458.6	10,048.7	104.5	36.2	-34.18	5,750.4	-957.7	1,713.5	1,620.1	93.33	18.360		
17,300.0	11,450.0	10,532.0	10,050.0	106.1	36.6	-34.36	5,823.6	-963.8	1,716.2	1,621.3	94.89	18.086		
17,400.0	11,450.0	10,605.8	10,050.0	107.6	37.0	-34.51	5,897.1	-969.9	1,720.4	1,623.9	96.45	17.836		
17,500.0	11,450.0	10,690.0	10,049.2	109.1	37.5	-34.68	5,981.0	-977.3	1,725.7	1,627.6	98.12	17.588		
17,600.0	11,450.0	10,809.0	10,047.6	110.7	38.3	-34.89	6,099.6	-987.2	1,731.2	1,631.1	100.06	17.301		
17,700.0	11,450.0	10,895.2	10,046.4	112.2	38.9	-35.03	6,185.5	-993.6	1,736.2	1,634.4	101.78	17.058		
17,800.0	11,450.0	11,010.6	10,043.7	113.8	39.8	-35.15	6,300.7	-1,000.9	1,741.3	1,637.6	103.69	16.792		
17,900.0	11,450.0	11,121.2	10,040.4	115.3	40.8	-35.20	6,411.0	-1,005.8	1,745.9	1,640.3	105.53	16.544		
18,000.0	11,450.0	11,293.7	10,036.2	116.9	42.4	-35.09	6,583.5	-1,006.1	1,747.3	1,639.7	107.57	16.244		
18,026.9	11,450.0	11,316.7	10,035.7	117.3	42.6	-35.06	6,606.4	-1,005.5	1,747.3	1,639.3	107.97	16.182		
18,100.0	11,450.0	11,378.7	10,034.0	118.4	43.2	-34.97	6,668.5	-1,003.9	1,747.5	1,638.4	109.07	16.022		
18,200.0	11,450.0	11,458.6	10,031.1	120.0	44.0	-34.85	6,748.3	-1,002.1	1,748.7	1,638.2	110.55	15.819		
18,300.0	11,450.0	11,600.5	10,028.1	121.6	45.4	-34.68	6,890.1	-999.1	1,748.6	1,636.2	112.41	15.556		
18,400.0	11,450.0	11,709.2	10,026.5	123.1	46.6	-34.58	6,998.8	-997.2	1,748.4	1,634.2	114.16	15.315		
18,500.0	11,450.0	11,819.5	10,027.2	124.7	47.9	-34.52	7,109.0	-995.5	1,746.6	1,630.5	116.03	15.053		
18,600.0	11,450.0	11,906.9	10,027.6	126.3	48.9	-34.49	7,196.4	-994.7	1,745.2	1,627.4	117.79	14.816		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 206-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
18,700.0	11,450.0	12,001.7	10,027.4	127.8	50.0	-34.45	7,291.2	-994.0	1,744.5	1,624.9	119.60	14.585		
18,800.0	11,450.0	12,094.1	10,026.9	129.4	51.1	-34.40	7,383.6	-993.2	1,744.0	1,622.6	121.40	14.366		
18,838.8	11,450.0	12,128.9	10,026.5	130.0	51.5	-34.37	7,418.5	-992.8	1,743.9	1,621.9	122.08	14.285		
18,900.0	11,450.0	12,184.8	10,025.7	131.0	52.2	-34.33	7,474.3	-992.2	1,744.0	1,620.9	123.16	14.161		
19,000.0	11,450.0	12,268.2	10,023.8	132.6	53.2	-34.24	7,557.7	-991.1	1,744.7	1,619.9	124.84	13.975		
19,100.0	11,450.0	12,345.0	10,021.2	134.2	54.2	-34.16	7,634.4	-990.4	1,746.6	1,620.2	126.46	13.811		
19,200.0	11,450.0	12,424.0	10,017.2	135.7	55.2	-34.06	7,713.3	-990.0	1,750.0	1,621.9	128.07	13.665		
19,300.0	11,450.0	12,606.9	10,013.9	137.3	57.6	-34.06	7,896.1	-993.6	1,752.8	1,622.0	130.84	13.397		
19,400.0	11,450.0	12,696.8	10,016.0	138.9	58.8	-34.16	7,985.9	-996.8	1,752.4	1,619.4	132.98	13.178		
19,438.8	11,450.0	12,729.4	10,016.8	139.5	59.2	-34.21	8,018.5	-998.1	1,752.3	1,618.5	133.80	13.096		
19,500.0	11,450.0	12,780.7	10,018.0	140.5	59.9	-34.28	8,069.7	-1,000.5	1,752.5	1,617.4	135.10	12.972		
19,600.0	11,450.0	12,876.9	10,020.0	142.1	61.2	-34.43	8,165.7	-1,005.4	1,753.2	1,615.8	137.41	12.759		
19,700.0	11,450.0	12,974.9	10,022.0	143.7	62.6	-34.59	8,263.6	-1,010.6	1,754.0	1,614.3	139.77	12.550		
19,800.0	11,450.0	13,054.1	10,023.4	145.3	63.7	-34.72	8,342.6	-1,015.3	1,755.6	1,613.7	141.90	12.371		
19,900.0	11,450.0	13,181.5	10,024.8	146.9	65.5	-34.88	8,469.9	-1,021.1	1,756.8	1,612.2	144.58	12.151		
20,000.0	11,450.0	13,276.5	10,026.0	148.5	66.8	-34.98	8,564.8	-1,024.7	1,757.5	1,610.6	146.84	11.968		
20,100.0	11,450.0	13,376.7	10,026.8	150.1	68.2	-35.07	8,664.9	-1,028.4	1,758.5	1,609.3	149.15	11.790		
20,200.0	11,450.0	13,475.6	10,026.2	151.7	69.7	-35.06	8,763.8	-1,029.1	1,759.0	1,607.7	151.23	11.631		
20,300.0	11,450.0	13,551.5	10,023.7	153.3	70.8	-34.98	8,839.7	-1,028.4	1,760.6	1,607.6	152.94	11.511		
20,400.0	11,450.0	13,639.6	10,019.8	154.9	72.0	-34.86	8,927.8	-1,027.4	1,763.2	1,608.5	154.69	11.398		
20,500.0	11,450.0	13,734.5	10,015.0	156.5	73.4	-34.73	9,022.5	-1,026.8	1,766.5	1,610.0	156.49	11.288		
20,600.0	11,450.0	13,907.6	10,012.3	158.1	75.9	-34.59	9,195.5	-1,024.6	1,765.8	1,606.8	159.05	11.102		
20,700.0	11,450.0	13,998.0	10,011.5	159.7	77.3	-34.51	9,285.9	-1,023.2	1,765.2	1,604.2	160.95	10.967		
20,733.3	11,450.0	14,024.9	10,011.2	160.2	77.7	-34.49	9,312.8	-1,022.7	1,765.1	1,603.6	161.55	10.926		
20,800.0	11,450.0	14,077.1	10,010.1	161.3	78.4	-34.44	9,365.0	-1,022.0	1,765.4	1,602.7	162.72	10.849		
20,900.0	11,450.0	14,157.0	10,007.7	162.9	79.6	-34.36	9,444.9	-1,021.1	1,766.8	1,602.3	164.47	10.743		
21,000.0	11,450.0	14,304.7	10,004.4	164.5	81.8	-34.24	9,592.5	-1,020.1	1,768.0	1,601.2	166.82	10.599		
21,100.0	11,450.0	14,406.8	10,004.6	166.1	83.4	-34.20	9,694.6	-1,019.5	1,767.1	1,598.2	168.90	10.462		
21,178.6	11,450.0	14,470.4	10,004.5	167.4	84.3	-34.19	9,758.2	-1,019.4	1,766.7	1,596.3	170.42	10.367		
21,200.0	11,450.0	14,477.0	10,004.5	167.7	84.4	-34.18	9,764.8	-1,019.4	1,766.8	1,596.1	170.72	10.349		
21,300.0	11,450.0	14,544.7	10,003.3	169.3	85.4	-34.16	9,832.4	-1,019.8	1,768.3	1,595.8	172.46	10.253 ES		
21,400.0	11,450.0	14,609.7	10,000.6	170.9	86.4	-34.12	9,897.4	-1,020.7	1,772.0	1,597.9	174.09	10.179		
21,500.0	11,450.0	14,681.8	9,996.3	172.5	87.5	-34.06	9,969.4	-1,021.9	1,777.5	1,601.8	175.71	10.116		
21,600.0	11,450.0	14,765.9	9,990.4	174.2	88.8	-33.99	10,053.3	-1,023.9	1,784.1	1,606.6	177.46	10.053		
21,614.7	11,450.0	14,777.4	9,989.6	174.4	89.0	-33.98	10,064.7	-1,024.2	1,785.1	1,607.6	177.59	10.052 SF		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 176-MWD, 11004-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	1.0	1.0	0.0	0.0	-78.60	28.3	-140.1	143.0					
100.0	100.0	101.7	101.7	0.1	0.2	-78.60	28.2	-139.9	142.7	142.4	0.28	503.321		
200.0	200.0	202.4	202.4	0.5	0.4	-78.62	28.0	-139.2	142.0	141.1	0.85	167.430		
300.0	300.0	302.9	302.9	0.8	0.7	-78.68	27.6	-138.0	140.8	139.2	1.57	89.852		
400.0	400.0	402.6	402.6	1.2	1.1	-78.89	26.9	-136.9	139.5	137.2	2.28	61.162		
500.0	500.0	501.2	501.2	1.6	1.4	-79.13	26.2	-136.3	138.8	135.8	2.99	46.458		
600.0	600.0	602.4	602.4	1.9	1.8	-79.24	25.8	-135.9	138.3	134.6	3.71	37.320		
700.0	700.0	701.0	701.0	2.3	2.1	-79.37	25.4	-135.5	137.8	133.4	4.41	31.240		
703.1	703.1	704.2	704.1	2.3	2.1	-79.37	25.4	-135.5	137.8	133.4	4.43	31.085 CC		
800.0	800.0	800.5	800.5	2.6	2.5	-79.44	25.3	-135.7	138.1	132.9	5.11	27.015		
900.0	900.0	900.6	900.6	3.0	2.8	-79.52	25.2	-136.1	138.5	132.6	5.81	23.837		
1,000.0	1,000.0	1,001.0	1,000.9	3.4	3.2	-79.36	25.6	-136.2	138.6	132.1	6.51	21.287		
1,100.0	1,100.0	1,100.9	1,100.8	3.7	3.5	131.22	25.8	-136.2	139.2	132.0	7.19	19.352 ES		
1,200.0	1,200.0	1,199.9	1,199.8	4.0	3.8	131.96	25.8	-136.6	141.4	133.5	7.87	17.969		
1,300.0	1,299.9	1,299.8	1,299.8	4.4	4.2	133.27	26.1	-137.4	145.1	136.6	8.55	16.982		
1,400.0	1,399.7	1,399.3	1,399.3	4.7	4.5	135.05	26.7	-138.2	150.3	141.0	9.23	16.276		
1,500.0	1,499.4	1,498.7	1,498.6	5.0	4.9	137.18	27.3	-138.9	156.8	146.9	9.92	15.810		
1,600.0	1,598.9	1,595.4	1,595.4	5.4	5.2	139.42	28.2	-140.6	166.0	155.4	10.60	15.650		
1,700.0	1,698.3	1,692.2	1,692.1	5.8	5.6	141.55	29.0	-143.9	178.1	166.9	11.29	15.778		
1,800.0	1,797.4	1,788.4	1,788.1	6.1	5.9	143.39	29.3	-148.5	193.0	181.1	11.98	16.118		
1,900.0	1,896.4	1,883.6	1,883.1	6.5	6.2	144.59	28.5	-155.5	210.7	198.0	12.66	16.642		
2,000.0	1,995.5	1,980.6	1,979.7	6.9	6.6	145.40	27.0	-163.5	228.9	215.6	13.36	17.141		
2,100.0	2,094.5	2,074.5	2,073.2	7.3	6.9	145.89	25.5	-172.7	248.4	234.4	14.03	17.707		
2,200.0	2,193.5	2,168.7	2,166.7	7.7	7.3	146.09	23.8	-183.9	269.8	255.1	14.71	18.339		
2,300.0	2,292.5	2,266.1	2,263.3	8.1	7.6	146.21	22.1	-196.0	291.7	276.2	15.42	18.910		
2,400.0	2,391.6	2,364.4	2,360.8	8.5	8.0	146.15	19.5	-208.6	313.4	297.3	16.15	19.407		
2,500.0	2,490.6	2,463.2	2,458.8	8.9	8.4	146.11	16.8	-221.0	334.9	318.0	16.88	19.835		
2,600.0	2,589.6	2,562.9	2,557.8	9.3	8.8	146.26	14.9	-232.5	355.9	338.3	17.63	20.192		
2,700.0	2,688.6	2,662.7	2,657.0	9.7	9.2	146.37	12.6	-243.6	376.4	358.0	18.37	20.487		
2,729.0	2,717.4	2,691.6	2,685.7	9.8	9.3	146.39	11.9	-246.8	382.2	363.7	18.59	20.563		
2,800.0	2,787.8	2,765.6	2,759.2	10.1	9.5	146.47	9.6	-254.6	395.6	376.5	19.14	20.668		
2,900.0	2,887.2	2,866.8	2,859.8	10.5	9.9	146.19	4.7	-264.9	411.6	391.7	19.90	20.686		
3,000.0	2,986.8	2,961.3	2,953.4	10.9	10.3	145.54	-1.1	-275.4	425.7	405.1	20.60	20.665		
3,100.0	3,086.7	3,051.4	3,042.8	11.2	10.7	144.77	-6.3	-286.9	439.3	418.0	21.26	20.664		
3,200.0	3,186.6	3,143.0	3,133.1	11.6	11.0	143.68	-12.1	-300.6	452.9	431.0	21.92	20.660		
3,262.3	3,249.0	3,203.2	3,192.3	11.8	11.3	-67.39	-16.2	-310.4	461.1	438.7	22.36	20.622		
3,300.0	3,286.6	3,241.6	3,230.1	11.9	11.4	-67.99	-18.8	-316.6	465.7	443.1	22.64	20.573		
3,400.0	3,386.6	3,345.0	3,332.1	12.2	11.9	-69.47	-25.6	-332.6	477.8	454.4	23.40	20.420		
3,500.0	3,486.6	3,450.5	3,436.3	12.6	12.3	-70.83	-32.4	-347.4	488.9	464.7	24.17	20.226		
3,600.0	3,586.6	3,539.4	3,524.2	12.9	12.7	-71.86	-37.5	-359.7	500.3	475.5	24.79	20.182		
3,700.0	3,686.6	3,630.4	3,614.0	13.2	13.1	-72.82	-41.8	-374.0	513.9	488.5	25.42	20.215		
3,800.0	3,786.6	3,725.2	3,707.3	13.5	13.5	-73.78	-46.1	-389.9	528.7	502.6	26.09	20.264		
3,900.0	3,886.6	3,823.5	3,804.1	13.9	13.9	-74.76	-50.8	-406.9	544.0	517.2	26.80	20.299		
4,000.0	3,986.6	3,932.1	3,910.9	14.2	14.3	-75.95	-57.7	-425.0	558.7	531.1	27.62	20.230		
4,100.0	4,086.6	4,045.1	4,022.1	14.6	14.8	-77.36	-67.8	-442.0	571.3	542.9	28.47	20.068		
4,200.0	4,186.6	4,152.1	4,128.0	14.9	15.3	-78.40	-75.6	-455.3	582.0	552.8	29.25	19.899		
4,300.0	4,286.6	4,252.6	4,227.9	15.2	15.7	-78.89	-78.5	-466.4	592.3	562.4	29.96	19.767		
4,400.0	4,386.6	4,352.2	4,327.0	15.6	16.1	-79.07	-78.5	-476.3	602.1	571.4	30.67	19.633		
4,500.0	4,486.6	4,442.3	4,416.5	15.9	16.4	-79.19	-77.9	-486.2	612.9	581.6	31.29	19.587		
4,600.0	4,586.6	4,537.5	4,510.9	16.2	16.8	-79.48	-78.8	-498.1	625.1	593.2	31.96	19.558		
4,700.0	4,686.6	4,645.1	4,617.5	16.6	17.2	-80.15	-83.8	-511.8	636.9	604.1	32.75	19.449		
4,800.0	4,786.6	4,747.3	4,719.0	16.9	17.7	-80.67	-87.6	-523.3	647.4	613.9	33.48	19.335		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 176-MWD, 11004-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,900.0	4,886.6	4,842.4	4,813.3	17.3	18.0	-81.19	-91.8	-534.5	658.3	624.2	34.16	19.272		
5,000.0	4,986.6	4,946.6	4,916.7	17.6	18.5	-81.77	-96.7	-547.1	669.6	634.6	34.91	19.178		
5,100.0	5,086.6	5,053.6	5,023.0	18.0	18.9	-82.30	-101.4	-558.5	679.5	643.8	35.68	19.043		
5,200.0	5,186.6	5,150.9	5,119.7	18.3	19.3	-82.77	-105.7	-568.4	689.1	652.7	36.38	18.941		
5,300.0	5,286.6	5,240.2	5,208.3	18.6	19.7	-83.20	-109.7	-578.3	699.6	662.6	37.01	18.901		
5,400.0	5,386.6	5,331.9	5,299.2	19.0	20.0	-83.63	-113.7	-589.8	711.5	673.9	37.66	18.892		
5,500.0	5,486.6	5,415.7	5,382.1	19.3	20.4	-83.99	-116.9	-601.3	724.8	686.6	38.24	18.957		
5,600.0	5,586.6	5,501.5	5,466.9	19.7	20.8	-84.23	-118.6	-615.0	740.5	701.7	38.82	19.077		
5,700.0	5,686.6	5,601.6	5,565.5	20.0	21.2	-84.48	-120.1	-631.8	757.0	717.5	39.54	19.144		
5,800.0	5,786.6	5,706.1	5,668.7	20.4	21.6	-84.73	-121.9	-648.4	772.6	732.3	40.31	19.166		
5,900.0	5,886.6	5,803.1	5,764.5	20.7	22.0	-84.99	-124.1	-663.6	788.1	747.1	41.01	19.217		
6,000.0	5,986.6	5,895.6	5,855.7	21.1	22.5	-85.29	-127.0	-678.6	804.0	762.4	41.66	19.300		
6,100.0	6,086.6	5,996.8	5,955.4	21.4	22.9	-85.65	-130.6	-695.6	820.5	778.1	42.40	19.351		
6,200.0	6,186.6	6,104.6	6,061.7	21.8	23.4	-86.03	-134.8	-712.8	836.1	792.9	43.21	19.352		
6,300.0	6,286.6	6,186.8	6,142.8	22.1	23.7	-86.30	-137.9	-726.0	852.0	808.2	43.76	19.470		
6,400.0	6,386.6	6,270.9	6,225.5	22.5	24.1	-86.57	-140.9	-741.3	869.9	825.6	44.32	19.628		
6,500.0	6,486.6	6,367.5	6,320.2	22.8	24.5	-86.89	-144.7	-759.8	888.9	843.9	45.02	19.745		
6,600.0	6,586.6	6,473.2	6,423.9	23.2	25.0	-87.24	-149.0	-779.6	907.4	861.5	45.82	19.804		
6,700.0	6,686.6	6,584.5	6,533.4	23.5	25.5	-87.58	-153.5	-799.2	924.8	878.1	46.67	19.816		
6,800.0	6,786.6	6,696.9	6,644.2	23.9	26.0	-87.89	-157.8	-817.3	940.7	893.2	47.52	19.799		
6,900.0	6,886.6	6,805.0	6,751.0	24.2	26.5	-88.16	-161.7	-833.4	955.5	907.2	48.31	19.777		
7,000.0	6,986.6	6,913.3	6,858.2	24.6	26.9	-88.42	-165.6	-848.5	969.3	920.2	49.11	19.739		
7,100.0	7,086.6	7,024.8	6,968.7	24.9	27.4	-88.65	-169.0	-862.8	982.1	932.2	49.92	19.674		
7,200.0	7,186.6	7,140.0	7,083.2	25.3	27.9	-88.84	-172.1	-875.9	993.5	942.7	50.75	19.576		
7,300.0	7,286.6	7,252.4	7,194.9	25.6	28.3	-89.05	-175.5	-887.0	1,003.3	951.8	51.54	19.465		
7,400.0	7,386.6	7,362.0	7,304.1	26.0	28.7	-89.23	-178.5	-896.7	1,012.0	959.7	52.31	19.346		
7,500.0	7,486.6	7,470.2	7,411.9	26.3	29.2	-89.43	-181.9	-905.2	1,019.9	966.8	53.07	19.217		
7,600.0	7,586.6	7,577.2	7,518.6	26.7	29.6	-89.64	-185.6	-912.8	1,027.0	973.1	53.82	19.081		
7,700.0	7,686.6	7,687.8	7,628.8	27.0	30.0	-89.89	-190.1	-919.7	1,033.3	978.7	54.58	18.931		
7,800.0	7,786.6	7,795.7	7,736.5	27.4	30.4	-90.15	-194.8	-925.3	1,038.4	983.1	55.32	18.771		
7,900.0	7,886.6	7,903.7	7,844.3	27.7	30.8	-90.40	-199.2	-930.3	1,043.0	987.0	56.06	18.606		
8,000.0	7,986.6	8,005.4	7,945.8	28.1	31.1	-90.61	-203.2	-934.3	1,047.1	990.3	56.77	18.443		
8,100.0	8,086.6	8,137.9	8,078.2	28.4	31.6	-90.76	-206.0	-937.5	1,049.5	991.9	57.56	18.233		
8,200.0	8,186.6	8,245.0	8,185.4	28.8	31.9	-90.79	-206.5	-937.9	1,049.8	991.5	58.27	18.017		
8,300.0	8,286.6	8,344.4	8,284.7	29.1	32.2	-90.82	-207.2	-938.2	1,050.1	991.2	58.96	17.811		
8,400.0	8,386.6	8,444.7	8,385.0	29.5	32.5	-90.86	-207.8	-938.4	1,050.3	990.7	59.66	17.606		
8,500.0	8,486.6	8,542.4	8,482.7	29.8	32.9	-90.89	-208.3	-938.7	1,050.7	990.4	60.35	17.409		
8,600.0	8,586.6	8,642.3	8,582.6	30.2	33.2	-90.94	-209.2	-939.2	1,051.2	990.2	61.05	17.218		
8,700.0	8,686.6	8,741.8	8,682.1	30.6	33.5	-90.99	-210.3	-939.7	1,051.7	989.9	61.75	17.031		
8,800.0	8,786.6	8,839.1	8,779.4	30.9	33.8	-91.07	-211.7	-940.3	1,052.3	989.9	62.44	16.852		
8,900.0	8,886.6	8,939.6	8,879.9	31.3	34.2	-91.16	-213.3	-941.0	1,053.1	990.0	63.15	16.678		
9,000.0	8,986.6	9,034.8	8,975.1	31.6	34.5	-91.29	-215.8	-941.8	1,054.0	990.2	63.84	16.511		
9,100.0	9,086.6	9,129.3	9,069.5	32.0	34.8	-91.44	-218.5	-943.2	1,055.5	991.0	64.53	16.357		
9,200.0	9,186.6	9,226.2	9,166.4	32.3	35.1	-91.54	-220.5	-944.9	1,057.4	992.1	65.23	16.210		
9,300.0	9,286.6	9,357.5	9,297.6	32.7	35.6	-91.65	-222.5	-946.0	1,058.3	992.3	65.97	16.042		
9,400.0	9,386.6	9,453.5	9,393.7	33.0	35.8	-91.67	-222.8	-945.4	1,057.7	991.1	66.65	15.870		
9,500.0	9,486.6	9,550.3	9,490.5	33.4	36.1	-91.72	-223.8	-945.0	1,057.3	990.0	67.33	15.704		
9,600.0	9,586.6	9,648.6	9,588.7	33.7	36.4	-91.69	-223.3	-944.7	1,057.0	989.0	68.01	15.542		
9,610.0	9,596.6	9,657.5	9,597.6	33.8	36.5	-91.69	-223.1	-944.7	1,057.0	989.0	68.08	15.526		
9,700.0	9,686.6	9,738.6	9,678.8	34.1	36.7	-91.61	-221.7	-945.1	1,057.4	988.8	68.69	15.395		
9,800.0	9,786.6	9,836.0	9,776.1	34.5	37.1	-91.55	-220.6	-946.2	1,058.5	989.1	69.38	15.257		
9,900.0	9,886.6	9,943.1	9,883.2	34.8	37.4	-91.54	-220.5	-946.9	1,059.1	989.0	70.09	15.110		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 176-MWD, 11004-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,000.0	9,986.6	10,040.1	9,980.2	35.2	37.7	-91.58	-221.2	-947.4	1,059.7	988.9	70.79	14.969		
10,100.0	10,086.6	10,140.9	10,080.9	35.5	38.1	-91.63	-222.2	-948.1	1,060.4	988.9	71.50	14.831		
10,200.0	10,186.6	10,237.2	10,177.3	35.9	38.4	-91.68	-223.2	-948.8	1,061.2	989.0	72.20	14.698		
10,300.0	10,286.6	10,335.0	10,275.1	36.2	38.7	-91.60	-221.7	-949.9	1,062.2	989.3	72.89	14.573		
10,400.0	10,386.6	10,456.8	10,396.0	36.6	39.1	-90.87	-208.1	-950.5	1,062.5	988.9	73.61	14.435		
10,500.0	10,486.6	10,558.5	10,495.0	36.9	39.4	-89.62	-185.1	-949.7	1,061.6	987.3	74.29	14.290		
10,538.1	10,524.7	10,590.7	10,525.7	37.1	39.4	-89.10	-175.4	-949.5	1,061.5	986.9	74.54	14.240		
10,600.0	10,586.6	10,639.3	10,571.3	37.3	39.6	-88.20	-158.7	-949.4	1,061.9	986.9	74.94	14.170		
10,700.0	10,686.6	10,701.8	10,628.0	37.6	39.7	-86.79	-132.5	-950.2	1,065.4	989.9	75.48	14.115		
10,800.0	10,786.6	10,764.8	10,682.4	38.0	39.8	-85.10	-100.8	-952.3	1,073.2	997.3	75.90	14.139		
10,890.4	10,877.0	10,822.7	10,729.5	38.3	39.9	-83.32	-67.2	-954.4	1,083.8	1,007.6	76.17	14.228		
10,900.0	10,886.6	10,828.5	10,734.0	38.4	40.0	-77.61	-63.6	-954.6	1,085.1	1,008.9	76.19	14.242		
10,950.0	10,936.5	10,853.8	10,753.4	38.5	40.0	-76.12	-47.3	-955.6	1,092.2	1,015.9	76.21	14.331		
11,000.0	10,986.0	10,878.1	10,771.2	38.7	40.0	-74.69	-30.8	-956.7	1,099.5	1,023.4	76.16	14.438		
11,050.0	11,034.6	10,901.0	10,787.1	38.9	40.1	-73.33	-14.3	-957.7	1,107.0	1,031.0	76.03	14.561		
11,100.0	11,082.0	10,919.6	10,799.1	39.0	40.1	-72.09	-0.2	-958.6	1,114.8	1,039.0	75.79	14.708		
11,150.0	11,127.8	10,934.7	10,807.8	39.2	40.1	-70.94	12.0	-959.4	1,122.7	1,047.2	75.45	14.879		
11,200.0	11,171.8	10,955.0	10,817.9	39.3	40.1	-69.64	29.7	-960.3	1,130.8	1,055.7	75.11	15.056		
11,250.0	11,213.5	10,982.4	10,828.7	39.4	40.1	-68.15	54.8	-960.7	1,138.6	1,063.8	74.77	15.228		
11,300.0	11,252.6	11,009.5	10,836.1	39.5	40.2	-66.67	80.9	-960.2	1,146.0	1,071.6	74.36	15.411		
11,350.0	11,288.9	11,056.2	10,846.6	39.7	41.0	-64.79	126.4	-958.5	1,152.4	1,078.4	74.03	15.568		
11,400.0	11,322.0	11,104.4	10,856.7	39.8	41.8	-63.14	173.4	-956.2	1,157.5	1,083.7	73.72	15.702		
11,450.0	11,351.8	11,121.4	10,859.6	39.9	41.6	-62.40	190.2	-955.3	1,161.5	1,088.3	73.24	15.860		
11,500.0	11,377.9	11,143.1	10,862.6	40.0	41.7	-61.65	211.7	-954.3	1,164.9	1,092.1	72.81	15.999		
11,550.0	11,400.3	11,164.9	10,864.6	40.1	41.7	-61.02	233.3	-953.3	1,167.5	1,095.0	72.43	16.118		
11,600.0	11,418.6	11,188.0	10,865.8	40.3	41.7	-60.48	256.4	-952.2	1,169.2	1,097.1	72.11	16.214		
11,650.0	11,432.8	11,229.7	10,866.8	40.4	41.7	-59.85	298.0	-950.4	1,169.6	1,097.7	71.91	16.265		
11,700.0	11,442.8	11,274.9	10,867.6	40.5	41.7	-59.48	343.2	-948.3	1,168.2	1,096.4	71.80	16.270		
11,750.0	11,448.5	11,339.3	10,868.7	40.7	41.8	-59.32	407.5	-945.1	1,164.4	1,092.5	71.83	16.210		
11,790.4	11,450.0	11,384.1	10,869.8	40.8	41.9	-59.56	452.2	-942.4	1,159.2	1,087.3	71.92	16.118		
11,800.0	11,450.0	11,392.2	10,869.9	40.8	41.9	-59.55	460.2	-941.9	1,157.9	1,085.9	71.95	16.093		
11,900.0	11,450.0	11,475.2	10,870.2	41.1	42.0	-59.39	543.1	-936.7	1,146.0	1,073.7	72.27	15.857		
12,000.0	11,450.0	11,554.6	10,868.8	41.5	42.1	-59.21	622.4	-932.2	1,138.7	1,066.0	72.72	15.660		
12,037.8	11,450.0	11,584.7	10,867.9	41.7	42.2	-59.14	652.4	-930.8	1,137.2	1,064.3	72.93	15.594		
12,100.0	11,450.0	11,634.2	10,866.3	41.9	42.3	-59.01	701.8	-928.7	1,135.7	1,062.4	73.30	15.494		
12,190.0	11,450.0	11,702.4	10,864.2	42.4	42.5	-58.86	769.9	-927.2	1,134.8	1,060.9	73.94	15.347		
12,200.0	11,450.0	11,709.9	10,864.0	42.4	42.6	-58.85	777.5	-927.1	1,134.8	1,060.8	74.02	15.331		
12,300.0	11,450.0	11,786.4	10,861.5	43.0	42.8	-58.74	853.9	-927.4	1,136.1	1,061.2	74.87	15.175		
12,400.0	11,450.0	11,866.8	10,856.0	43.6	43.2	-58.49	934.2	-927.7	1,139.3	1,063.6	75.73	15.044		
12,500.0	11,450.0	11,959.3	10,846.7	44.3	43.6	-58.07	1,026.2	-927.7	1,143.9	1,067.3	76.60	14.933		
12,600.0	11,450.0	12,054.1	10,835.6	45.0	44.1	-57.56	1,120.3	-926.7	1,148.7	1,071.2	77.50	14.822		
12,700.0	11,450.0	12,179.0	10,822.9	45.8	44.9	-57.00	1,244.5	-926.6	1,153.6	1,075.1	78.50	14.696		
12,800.0	11,450.0	12,306.5	10,817.4	46.6	45.8	-56.75	1,371.9	-927.0	1,155.6	1,075.7	79.81	14.479		
12,900.0	11,450.0	12,433.2	10,821.9	47.4	46.8	-56.99	1,498.4	-929.9	1,154.8	1,073.3	81.53	14.164		
13,000.0	11,450.0	12,521.8	10,828.1	48.3	47.6	-57.31	1,586.8	-933.0	1,153.4	1,070.1	83.29	13.848		
13,029.8	11,450.0	12,544.8	10,829.2	48.6	47.8	-57.37	1,609.7	-933.8	1,153.3	1,069.5	83.80	13.763		
13,100.0	11,450.0	12,609.0	10,831.3	49.3	48.3	-57.51	1,673.8	-936.0	1,153.6	1,068.5	85.03	13.567		
13,200.0	11,450.0	12,711.3	10,834.1	50.3	49.3	-57.69	1,776.1	-939.2	1,154.1	1,067.2	86.87	13.284		
13,300.0	11,450.0	12,817.0	10,837.4	51.3	50.3	-57.88	1,881.6	-942.2	1,154.2	1,065.4	88.81	12.996		
13,354.9	11,450.0	12,870.1	10,839.2	51.8	50.9	-57.99	1,934.8	-943.6	1,154.0	1,064.2	89.88	12.840		
13,400.0	11,450.0	12,908.3	10,840.2	52.3	51.2	-58.05	1,972.9	-944.6	1,154.2	1,063.5	90.73	12.720		
13,500.0	11,450.0	12,997.5	10,840.5	53.4	52.2	-58.10	2,062.1	-946.8	1,155.3	1,062.7	92.63	12.473		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 176-MWD, 11004-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,600.0	11,450.0	13,091.5	10,838.7	54.5	53.2	-58.05	2,156.0	-948.4	1,157.2	1,062.7	94.51	12.243		
13,700.0	11,450.0	13,195.4	10,835.9	55.6	54.3	-57.95	2,259.9	-950.0	1,159.2	1,062.8	96.45	12.019		
13,800.0	11,450.0	13,315.5	10,832.7	56.8	55.7	-57.80	2,380.0	-950.3	1,160.2	1,061.7	98.45	11.785		
13,900.0	11,450.0	13,437.9	10,834.2	58.0	57.1	-57.85	2,502.3	-950.8	1,159.2	1,058.6	100.65	11.518		
14,000.0	11,450.0	13,539.3	10,837.2	59.2	58.3	-57.97	2,603.7	-951.2	1,157.3	1,054.4	102.88	11.249		
14,100.0	11,450.0	13,639.6	10,840.4	60.4	59.5	-58.09	2,703.9	-951.5	1,155.3	1,050.1	105.15	10.987		
14,200.0	11,450.0	13,734.9	10,841.8	61.7	60.7	-58.11	2,799.2	-950.8	1,153.2	1,045.8	107.35	10.742		
14,300.0	11,450.0	13,824.7	10,839.3	62.9	61.8	-57.93	2,889.0	-949.0	1,152.2	1,042.8	109.40	10.531		
14,400.0	11,450.0	13,936.4	10,838.3	64.2	63.2	-57.82	3,000.7	-947.3	1,150.8	1,039.2	111.61	10.310		
14,500.0	11,450.0	14,039.4	10,838.7	65.5	64.5	-57.78	3,103.6	-946.0	1,148.8	1,034.9	113.88	10.088		
14,600.0	11,450.0	14,145.1	10,841.3	66.8	65.9	-57.87	3,209.3	-945.7	1,146.6	1,030.3	116.30	9.859		
14,700.0	11,450.0	14,239.3	10,844.0	68.2	67.1	-57.95	3,303.4	-945.3	1,144.1	1,025.3	118.71	9.638		
14,800.0	11,450.0	14,338.2	10,845.4	69.5	68.4	-57.98	3,402.3	-944.9	1,142.2	1,021.1	121.11	9.431		
14,900.0	11,450.0	14,454.7	10,851.4	70.9	70.0	-58.24	3,518.7	-946.0	1,139.7	1,015.9	123.81	9.205		
15,000.0	11,450.0	14,535.9	10,856.5	72.2	71.1	-58.47	3,599.7	-947.1	1,137.0	1,010.6	126.42	8.994		
15,100.0	11,450.0	14,620.6	10,859.1	73.6	72.3	-58.60	3,684.3	-948.5	1,136.0	1,007.0	128.95	8.809		
15,134.6	11,450.0	14,650.8	10,859.7	74.1	72.7	-58.63	3,714.5	-949.0	1,135.9	1,006.1	129.82	8.750		
15,200.0	11,450.0	14,712.8	10,860.2	75.0	73.6	-58.66	3,776.6	-949.9	1,136.0	1,004.6	131.46	8.642		
15,300.0	11,450.0	14,807.8	10,858.9	76.4	74.9	-58.60	3,871.5	-950.4	1,136.5	1,002.7	133.87	8.490		
15,400.0	11,450.0	14,906.5	10,855.4	77.8	76.3	-58.42	3,970.1	-950.0	1,137.4	1,001.2	136.19	8.352		
15,500.0	11,450.0	15,011.5	10,851.3	79.3	77.8	-58.20	4,075.0	-949.2	1,138.1	999.6	138.50	8.217		
15,600.0	11,450.0	15,103.2	10,847.4	80.7	79.1	-57.99	4,166.7	-948.2	1,138.8	998.0	140.76	8.090		
15,700.0	11,450.0	15,197.5	10,841.7	82.1	80.4	-57.70	4,260.8	-947.0	1,140.3	997.3	142.94	7.977		
15,800.0	11,450.0	15,298.8	10,834.8	83.6	81.9	-57.34	4,361.9	-945.5	1,141.9	996.9	145.08	7.871		
15,900.0	11,450.0	15,407.7	10,829.0	85.0	83.4	-57.04	4,470.5	-944.2	1,143.2	995.9	147.33	7.759		
16,000.0	11,450.0	15,508.5	10,825.8	86.5	84.9	-56.87	4,571.3	-943.8	1,144.0	994.3	149.70	7.642		
16,100.0	11,450.0	15,598.2	10,823.5	88.0	86.2	-56.77	4,661.0	-944.4	1,145.2	993.1	152.10	7.529		
16,200.0	11,450.0	15,695.7	10,822.0	89.4	87.6	-56.73	4,758.5	-946.2	1,147.0	992.3	154.63	7.418		
16,300.0	11,450.0	15,796.4	10,819.3	90.9	89.1	-56.63	4,859.1	-947.4	1,148.8	991.7	157.10	7.312		
16,400.0	11,450.0	15,902.0	10,816.9	92.4	90.7	-56.55	4,964.7	-948.6	1,150.3	990.7	159.63	7.206		
16,500.0	11,450.0	15,999.3	10,814.3	93.9	92.2	-56.44	5,061.9	-949.4	1,151.8	989.8	162.09	7.106		
16,600.0	11,450.0	16,115.5	10,812.5	95.4	93.9	-56.37	5,178.1	-950.5	1,152.9	988.1	164.71	6.999		
16,700.0	11,450.0	16,227.3	10,813.3	96.9	95.6	-56.40	5,289.9	-951.1	1,152.2	984.8	167.42	6.882		
16,800.0	11,450.0	16,328.0	10,813.1	98.4	97.1	-56.35	5,390.6	-950.7	1,151.3	981.3	170.01	6.772		
16,900.0	11,450.0	16,434.4	10,813.3	100.0	98.7	-56.32	5,497.0	-950.2	1,150.2	977.6	172.63	6.663		
17,000.0	11,450.0	16,528.7	10,812.6	101.5	100.1	-56.24	5,591.3	-948.9	1,148.8	973.7	175.14	6.560		
17,090.7	11,450.0	16,608.2	10,810.2	102.9	101.3	-56.08	5,670.7	-947.4	1,148.3	971.1	177.27	6.478		
17,100.0	11,450.0	16,616.1	10,809.9	103.0	101.4	-56.06	5,678.7	-947.3	1,148.4	970.9	177.48	6.470		
17,200.0	11,450.0	16,712.8	10,805.6	104.5	102.9	-55.82	5,775.2	-945.6	1,148.8	969.0	179.76	6.391		
17,300.0	11,450.0	16,792.5	10,803.3	106.1	104.1	-55.70	5,854.9	-945.6	1,149.8	967.7	182.12	6.314		
17,400.0	11,450.0	16,890.9	10,801.2	107.6	105.6	-55.68	5,953.2	-948.5	1,152.8	968.1	184.73	6.240		
17,500.0	11,450.0	17,008.6	10,804.6	109.1	107.5	-55.94	6,070.7	-953.6	1,154.0	966.1	187.94	6.140		
17,600.0	11,450.0	17,118.6	10,808.1	110.7	109.2	-56.16	6,180.6	-957.3	1,154.4	963.4	191.04	6.043		
17,700.0	11,450.0	17,229.5	10,811.7	112.2	110.9	-56.36	6,291.4	-960.0	1,153.9	959.8	194.10	5.945		
17,800.0	11,450.0	17,331.5	10,815.1	113.8	112.5	-56.52	6,393.4	-961.7	1,152.9	955.8	197.09	5.849		
17,900.0	11,450.0	17,428.9	10,818.1	115.3	114.0	-56.66	6,490.7	-963.0	1,151.6	951.6	200.02	5.757		
17,955.5	11,450.0	17,473.6	10,818.9	116.2	114.7	-56.70	6,535.4	-963.6	1,151.3	949.8	201.56	5.712		
18,000.0	11,450.0	17,513.3	10,819.1	116.9	115.3	-56.72	6,575.1	-964.2	1,151.5	948.7	202.77	5.679		
18,100.0	11,450.0	17,623.4	10,820.5	118.4	117.0	-56.79	6,685.2	-965.7	1,151.2	945.5	205.67	5.597		
18,160.3	11,450.0	17,678.4	10,820.7	119.4	117.9	-56.80	6,740.1	-966.1	1,151.1	943.8	207.31	5.552		
18,200.0	11,450.0	17,716.1	10,820.3	120.0	118.4	-56.78	6,777.8	-966.2	1,151.1	942.8	208.35	5.525		
18,300.0	11,450.0	17,809.8	10,818.2	121.6	119.9	-56.66	6,871.5	-965.9	1,151.5	940.6	210.85	5.461		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 176-MWD, 11004-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
18,400.0	11,450.0	17,896.4	10,815.8	123.1	121.3	-56.56	6,958.1	-966.4	1,152.8	939.5	213.32	5.404		
18,500.0	11,450.0	17,992.2	10,812.2	124.7	122.8	-56.41	7,053.9	-967.3	1,155.0	939.2	215.78	5.353		
18,600.0	11,450.0	18,104.7	10,810.3	126.3	124.5	-56.36	7,166.3	-969.1	1,156.6	938.1	218.52	5.293		
18,700.0	11,450.0	18,206.9	10,812.4	127.8	126.1	-56.52	7,268.5	-972.5	1,157.6	936.0	221.57	5.225		
18,800.0	11,450.0	18,308.6	10,814.8	129.4	127.8	-56.69	7,370.0	-976.1	1,158.6	933.9	224.66	5.157		
18,900.0	11,450.0	18,420.5	10,819.0	131.0	129.5	-56.96	7,481.8	-980.3	1,159.1	931.1	227.98	5.084		
19,000.0	11,450.0	18,526.6	10,826.0	132.6	131.2	-57.35	7,587.5	-985.0	1,158.5	927.0	231.52	5.004		
19,050.5	11,450.0	18,569.5	10,828.8	133.4	131.9	-57.51	7,630.2	-986.9	1,158.3	925.1	233.19	4.967		
19,100.0	11,450.0	18,607.1	10,830.2	134.2	132.5	-57.60	7,667.8	-988.3	1,158.5	923.9	234.66	4.937		
19,200.0	11,450.0	18,692.4	10,830.1	135.7	133.8	-57.64	7,753.0	-990.8	1,160.4	922.9	237.43	4.887		
19,300.0	11,450.0	18,785.7	10,827.4	137.3	135.3	-57.56	7,846.3	-992.7	1,163.0	923.0	240.01	4.846		
19,400.0	11,450.0	18,877.4	10,822.6	138.9	136.8	-57.37	7,937.9	-993.8	1,166.1	923.8	242.35	4.812		
19,500.0	11,450.0	18,967.1	10,816.0	140.5	138.2	-57.10	8,027.4	-994.6	1,170.2	925.7	244.49	4.786		
19,600.0	11,450.0	19,069.4	10,811.6	142.1	139.8	-57.00	8,129.5	-998.2	1,174.8	927.7	247.10	4.754		
19,700.0	11,450.0	19,171.1	10,811.2	143.7	141.4	-57.10	8,231.0	-1,003.5	1,178.8	928.6	250.12	4.713		
19,800.0	11,450.0	19,261.7	10,810.8	145.3	142.9	-57.20	8,321.5	-1,008.8	1,183.3	930.2	253.01	4.677		
19,900.0	11,450.0	19,349.6	10,808.9	146.9	144.3	-57.24	8,409.2	-1,013.9	1,188.6	932.9	255.72	4.648		
20,000.0	11,450.0	19,487.4	10,806.0	148.5	146.5	-57.30	8,546.8	-1,021.7	1,194.2	935.1	259.15	4.608		
20,100.0	11,450.0	19,579.9	10,807.6	150.1	148.0	-57.47	8,639.1	-1,026.6	1,197.1	934.9	262.24	4.565		
20,200.0	11,450.0	19,668.9	10,808.0	151.7	149.5	-57.60	8,728.0	-1,031.6	1,200.9	935.7	265.20	4.528		
20,300.0	11,450.0	19,756.1	10,806.6	153.3	150.9	-57.64	8,815.0	-1,036.4	1,205.7	937.8	267.94	4.500		
20,400.0	11,450.0	19,860.2	10,805.4	154.9	152.5	-57.74	8,918.8	-1,043.0	1,211.1	940.0	271.05	4.468		
20,500.0	11,450.0	20,020.9	10,807.5	156.5	155.1	-57.97	9,079.4	-1,050.1	1,213.5	938.5	274.98	4.413		
20,600.0	11,450.0	20,129.8	10,806.6	158.1	156.9	-57.90	9,188.2	-1,049.5	1,212.7	935.0	277.68	4.367		
20,700.0	11,450.0	20,225.6	10,805.6	159.7	158.4	-57.83	9,284.0	-1,049.0	1,212.1	931.8	280.35	4.324		
20,741.1	11,450.0	20,261.5	10,805.2	160.3	159.0	-57.81	9,320.0	-1,048.9	1,212.0	930.6	281.44	4.307		
20,800.0	11,450.0	20,303.1	10,805.1	161.3	159.6	-57.81	9,361.5	-1,049.6	1,212.5	929.5	283.01	4.284		
20,900.0	11,450.0	20,395.5	10,806.8	162.9	161.1	-57.97	9,453.8	-1,053.9	1,214.8	928.7	286.14	4.245		
21,000.0	11,450.0	20,511.3	10,812.9	164.5	163.0	-58.35	9,569.3	-1,060.4	1,216.1	926.1	289.97	4.194		
21,100.0	11,450.0	20,618.5	10,815.2	166.1	164.7	-58.49	9,676.4	-1,063.3	1,216.6	923.4	293.19	4.149		
21,200.0	11,450.0	20,711.8	10,814.3	167.7	166.2	-58.46	9,769.7	-1,064.0	1,217.0	921.1	295.93	4.112		
21,300.0	11,450.0	20,806.4	10,812.8	169.3	167.8	-58.40	9,864.3	-1,064.9	1,218.0	919.4	298.62	4.079		
21,400.0	11,450.0	20,931.1	10,809.3	170.9	169.8	-58.22	9,988.9	-1,064.3	1,218.5	917.3	301.19	4.045		
21,500.0	11,450.0	21,047.7	10,807.0	172.5	171.6	-58.04	10,105.5	-1,061.7	1,216.9	913.3	303.64	4.008		
21,600.0	11,450.0	21,158.1	10,803.9	174.2	173.4	-57.78	10,215.7	-1,057.2	1,214.3	908.4	305.85	3.970		
21,614.7	11,450.0	21,172.8	10,803.5	174.4	173.6	-57.74	10,230.4	-1,056.5	1,213.8	907.7	306.16	3.965 SF		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.25	1.0	80.1	80.1					
100.0	100.0	100.0	100.0	0.1	0.1	89.25	1.0	80.1	80.1	79.8	0.26	312.523		
200.0	200.0	200.0	200.0	0.5	0.5	89.25	1.0	80.1	80.1	79.1	0.97	82.304		
300.0	300.0	300.0	300.0	0.8	0.8	89.25	1.0	80.1	80.1	78.4	1.69	47.392		
400.0	400.0	400.0	400.0	1.2	1.2	89.25	1.0	80.1	80.1	77.7	2.41	33.277		
500.0	500.0	500.0	500.0	1.6	1.6	89.25	1.0	80.1	80.1	77.0	3.12	25.640		
600.0	600.0	600.0	600.0	1.9	1.9	89.25	1.0	80.1	80.1	76.3	3.84	20.854		
700.0	700.0	700.0	700.0	2.3	2.3	89.25	1.0	80.1	80.1	75.5	4.56	17.574		
800.0	800.0	800.0	800.0	2.6	2.6	89.25	1.0	80.1	80.1	74.8	5.27	15.185		
900.0	900.0	900.0	900.0	3.0	3.0	89.25	1.0	80.1	80.1	74.1	5.99	13.368		
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	89.25	1.0	80.1	80.1	73.4	6.71	11.940		
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	-61.08	1.0	80.1	79.7	72.3	7.41	10.754		
1,200.0	1,200.0	1,200.0	1,200.0	4.0	4.1	-62.77	1.0	80.1	78.4	70.3	8.10	9.688		
1,300.0	1,299.9	1,298.8	1,298.8	4.4	4.4	-65.26	0.6	80.8	77.2	68.5	8.77	8.803		
1,397.3	1,396.9	1,395.0	1,395.0	4.7	4.7	-68.10	-0.7	82.9	76.8	67.4	9.42	8.151 CC		
1,400.0	1,399.7	1,397.7	1,397.7	4.7	4.7	-68.19	-0.8	83.0	76.8	67.4	9.44	8.136		
1,500.0	1,499.4	1,496.6	1,496.5	5.0	5.1	-71.47	-3.0	86.6	77.3	67.2	10.12	7.638 ES		
1,600.0	1,598.9	1,595.6	1,595.2	5.4	5.4	-74.99	-6.2	91.6	78.8	67.9	10.81	7.285		
1,700.0	1,698.3	1,694.5	1,693.9	5.8	5.8	-78.62	-10.3	98.1	81.2	69.7	11.51	7.057		
1,800.0	1,797.4	1,793.4	1,792.4	6.1	6.1	-82.22	-15.3	106.1	84.8	72.6	12.23	6.934		
1,900.0	1,896.4	1,892.4	1,890.7	6.5	6.5	-85.18	-21.2	115.4	89.5	76.5	12.96	6.908		
2,000.0	1,995.5	2,008.7	1,988.8	6.9	6.9	-86.95	-28.1	126.2	95.3	81.5	13.76	6.924		
2,100.0	2,094.5	2,108.9	2,087.6	7.3	7.3	-88.02	-35.5	138.0	101.7	87.1	14.52	6.999		
2,200.0	2,193.5	2,209.2	2,186.4	7.7	7.7	-88.96	-42.9	149.7	108.0	92.7	15.29	7.064		
2,300.0	2,292.5	2,309.4	2,285.2	8.1	8.1	-89.80	-50.3	161.5	114.5	98.4	16.07	7.122		
2,400.0	2,391.6	2,409.6	2,384.0	8.5	8.4	-90.55	-57.7	173.2	120.9	104.0	16.86	7.172		
2,500.0	2,490.6	2,509.8	2,482.8	8.9	8.8	-91.23	-65.1	185.0	127.4	109.7	17.65	7.217		
2,600.0	2,589.6	2,590.0	2,581.6	9.3	9.2	-91.84	-72.5	196.7	133.8	115.5	18.36	7.288		
2,700.0	2,688.6	2,689.7	2,680.4	9.7	9.5	-92.39	-79.9	208.4	140.3	121.2	19.16	7.324		
2,729.0	2,717.4	2,718.7	2,709.1	9.8	9.7	-92.54	-82.1	211.9	142.2	122.8	19.39	7.333		
2,800.0	2,787.8	2,789.5	2,779.2	10.1	9.9	-92.71	-87.3	220.2	146.8	126.8	19.96	7.355		
2,900.0	2,887.2	2,889.3	2,878.1	10.5	10.3	-92.09	-94.7	231.9	153.2	132.4	20.74	7.385		
3,000.0	2,986.8	2,989.0	2,976.8	10.9	10.8	-90.59	-102.1	243.7	159.5	138.0	21.51	7.417		
3,100.0	3,086.7	3,088.6	3,075.4	11.2	11.2	-88.31	-109.5	255.4	166.0	143.8	22.25	7.462		
3,200.0	3,186.6	3,187.9	3,173.7	11.6	11.6	-85.37	-116.9	267.1	173.0	150.0	22.97	7.532		
3,262.3	3,249.0	3,249.7	3,234.9	11.8	11.8	66.54	-121.5	274.4	177.7	154.3	23.40	7.596		
3,300.0	3,286.6	3,287.0	3,271.9	11.9	12.0	67.90	-124.3	278.8	180.8	157.1	23.65	7.643		
3,400.0	3,386.6	3,386.0	3,369.9	12.2	12.4	71.31	-131.6	290.4	189.3	164.9	24.32	7.782		
3,500.0	3,486.6	3,485.0	3,468.0	12.6	12.8	74.41	-139.0	302.1	198.4	173.4	24.99	7.938		
3,600.0	3,586.6	3,584.1	3,566.1	12.9	13.2	77.24	-146.3	313.7	208.0	182.4	25.66	8.108		
3,700.0	3,686.6	3,683.1	3,664.1	13.2	13.6	79.81	-153.7	325.4	218.1	191.8	26.33	8.286		
3,800.0	3,786.6	3,782.1	3,762.2	13.5	14.0	82.16	-161.0	337.0	228.6	201.6	27.00	8.469		
3,900.0	3,886.6	3,881.3	3,860.4	13.9	14.4	84.30	-168.4	348.7	239.5	211.8	27.67	8.656		
4,000.0	3,986.6	3,985.9	3,964.1	14.2	14.8	86.15	-175.4	359.8	249.5	221.1	28.40	8.787		
4,100.0	4,086.6	4,091.1	4,068.8	14.6	15.2	87.50	-180.8	368.5	257.5	228.4	29.12	8.843		
4,200.0	4,186.6	4,196.8	4,174.3	14.9	15.6	88.42	-184.8	374.7	263.3	233.5	29.83	8.827		
4,300.0	4,286.6	4,302.8	4,280.2	15.2	16.0	88.96	-187.2	378.5	266.8	236.3	30.52	8.741		
4,400.0	4,386.6	4,409.1	4,386.4	15.6	16.4	89.15	-188.0	379.9	268.1	236.9	31.21	8.590		
4,500.0	4,486.6	4,509.2	4,486.6	15.9	16.7	89.15	-188.0	379.9	268.1	236.2	31.88	8.409		
4,600.0	4,586.6	4,609.2	4,586.6	16.2	17.0	89.15	-188.0	379.9	268.1	235.5	32.55	8.235		
4,700.0	4,686.6	4,709.2	4,686.6	16.6	17.3	89.15	-188.0	379.9	268.1	234.8	33.23	8.067		
4,800.0	4,786.6	4,809.2	4,786.6	16.9	17.7	89.15	-188.0	379.9	268.1	234.2	33.91	7.906		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,900.0	4,886.6	4,909.2	4,886.6	17.3	18.0	89.15	-188.0	379.9	268.1	233.5	34.58	7.751		
5,000.0	4,986.6	5,009.2	4,986.6	17.6	18.3	89.15	-188.0	379.9	268.1	232.8	35.26	7.601		
5,100.0	5,086.6	5,109.2	5,086.6	18.0	18.7	89.15	-188.0	379.9	268.1	232.1	35.95	7.457		
5,200.0	5,186.6	5,209.2	5,186.6	18.3	19.0	89.15	-188.0	379.9	268.1	231.4	36.63	7.318		
5,300.0	5,286.6	5,309.2	5,286.6	18.6	19.3	89.15	-188.0	379.9	268.1	230.7	37.31	7.184		
5,400.0	5,386.6	5,409.2	5,386.6	19.0	19.7	89.15	-188.0	379.9	268.1	230.1	38.00	7.054		
5,500.0	5,486.6	5,509.2	5,486.6	19.3	20.0	89.15	-188.0	379.9	268.1	229.4	38.69	6.929		
5,600.0	5,586.6	5,609.2	5,586.6	19.7	20.3	89.15	-188.0	379.9	268.1	228.7	39.38	6.808		
5,700.0	5,686.6	5,709.2	5,686.6	20.0	20.7	89.15	-188.0	379.9	268.1	228.0	40.06	6.691		
5,800.0	5,786.6	5,809.2	5,786.6	20.4	21.0	89.15	-188.0	379.9	268.1	227.3	40.75	6.578		
5,900.0	5,886.6	5,909.2	5,886.6	20.7	21.3	89.15	-188.0	379.9	268.1	226.6	41.44	6.468		
6,000.0	5,986.6	6,009.2	5,986.6	21.1	21.7	89.15	-188.0	379.9	268.1	225.9	42.14	6.362		
6,100.0	6,086.6	6,109.2	6,086.6	21.4	22.0	89.15	-188.0	379.9	268.1	225.2	42.83	6.259		
6,200.0	6,186.6	6,209.2	6,186.6	21.8	22.3	89.15	-188.0	379.9	268.1	224.5	43.52	6.159		
6,300.0	6,286.6	6,309.2	6,286.6	22.1	22.7	89.15	-188.0	379.9	268.1	223.8	44.22	6.063		
6,400.0	6,386.6	6,409.2	6,386.6	22.5	23.0	89.15	-188.0	379.9	268.1	223.2	44.91	5.969		
6,500.0	6,486.6	6,509.2	6,486.6	22.8	23.4	89.15	-188.0	379.9	268.1	222.5	45.61	5.878		
6,600.0	6,586.6	6,609.2	6,586.6	23.2	23.7	89.15	-188.0	379.9	268.1	221.8	46.30	5.789		
6,700.0	6,686.6	6,709.2	6,686.6	23.5	24.0	89.15	-188.0	379.9	268.1	221.1	47.00	5.704		
6,800.0	6,786.6	6,809.2	6,786.6	23.9	24.4	89.15	-188.0	379.9	268.1	220.4	47.70	5.620		
6,900.0	6,886.6	6,909.2	6,886.6	24.2	24.7	89.15	-188.0	379.9	268.1	219.7	48.39	5.539		
7,000.0	6,986.6	7,009.2	6,986.6	24.6	25.1	89.15	-188.0	379.9	268.1	219.0	49.09	5.460		
7,100.0	7,086.6	7,109.2	7,086.6	24.9	25.4	89.15	-188.0	379.9	268.1	218.3	49.79	5.384		
7,200.0	7,186.6	7,209.2	7,186.6	25.3	25.8	89.15	-188.0	379.9	268.1	217.6	50.49	5.309		
7,300.0	7,286.6	7,309.2	7,286.6	25.6	26.1	89.15	-188.0	379.9	268.1	216.9	51.19	5.236		
7,400.0	7,386.6	7,409.2	7,386.6	26.0	26.4	89.15	-188.0	379.9	268.1	216.2	51.89	5.166		
7,500.0	7,486.6	7,509.2	7,486.6	26.3	26.8	89.15	-188.0	379.9	268.1	215.5	52.59	5.097		
7,600.0	7,586.6	7,609.2	7,586.6	26.7	27.1	89.15	-188.0	379.9	268.1	214.8	53.29	5.030		
7,700.0	7,686.6	7,709.2	7,686.6	27.0	27.5	89.15	-188.0	379.9	268.1	214.1	54.00	4.964		
7,800.0	7,786.6	7,809.2	7,786.6	27.4	27.8	89.15	-188.0	379.9	268.1	213.4	54.70	4.901		
7,900.0	7,886.6	7,909.2	7,886.6	27.7	28.2	89.15	-188.0	379.9	268.1	212.7	55.40	4.839		
8,000.0	7,986.6	8,009.2	7,986.6	28.1	28.5	89.15	-188.0	379.9	268.1	212.0	56.10	4.778		
8,100.0	8,086.6	8,109.2	8,086.6	28.4	28.9	89.15	-188.0	379.9	268.1	211.3	56.81	4.719		
8,200.0	8,186.6	8,209.2	8,186.6	28.8	29.2	89.15	-188.0	379.9	268.1	210.6	57.51	4.661		
8,300.0	8,286.6	8,309.2	8,286.6	29.1	29.6	89.15	-188.0	379.9	268.1	209.8	58.21	4.605		
8,400.0	8,386.6	8,409.2	8,386.6	29.5	29.9	89.15	-188.0	379.9	268.1	209.1	58.92	4.550		
8,500.0	8,486.6	8,509.2	8,486.6	29.8	30.3	89.15	-188.0	379.9	268.1	208.4	59.62	4.496		
8,600.0	8,586.6	8,609.2	8,586.6	30.2	30.6	89.15	-188.0	379.9	268.1	207.7	60.33	4.443		
8,700.0	8,686.6	8,709.2	8,686.6	30.6	30.9	89.15	-188.0	379.9	268.1	207.0	61.03	4.392		
8,800.0	8,786.6	8,809.2	8,786.6	30.9	31.3	89.15	-188.0	379.9	268.1	206.3	61.74	4.342		
8,900.0	8,886.6	8,909.2	8,886.6	31.3	31.6	89.15	-188.0	379.9	268.1	205.6	62.44	4.293		
9,000.0	8,986.6	9,009.2	8,986.6	31.6	32.0	89.15	-188.0	379.9	268.1	204.9	63.15	4.245		
9,100.0	9,086.6	9,109.2	9,086.6	32.0	32.3	89.15	-188.0	379.9	268.1	204.2	63.86	4.198		
9,200.0	9,186.6	9,209.2	9,186.6	32.3	32.7	89.15	-188.0	379.9	268.1	203.5	64.56	4.152		
9,300.0	9,286.6	9,309.2	9,286.6	32.7	33.0	89.15	-188.0	379.9	268.1	202.8	65.27	4.107		
9,400.0	9,386.6	9,409.2	9,386.6	33.0	33.4	89.15	-188.0	379.9	268.1	202.1	65.98	4.063		
9,500.0	9,486.6	9,509.2	9,486.6	33.4	33.7	89.15	-188.0	379.9	268.1	201.4	66.68	4.020		
9,600.0	9,586.6	9,609.2	9,586.6	33.7	34.1	89.15	-188.0	379.9	268.1	200.7	67.39	3.978		
9,700.0	9,686.6	9,709.2	9,686.6	34.1	34.4	89.15	-188.0	379.9	268.1	200.0	68.10	3.936		
9,800.0	9,786.6	9,809.2	9,786.6	34.5	34.8	89.15	-188.0	379.9	268.1	199.3	68.80	3.896		
9,900.0	9,886.6	9,909.2	9,886.6	34.8	35.1	89.15	-188.0	379.9	268.1	198.5	69.51	3.856		
10,000.0	9,986.6	10,009.2	9,986.6	35.2	35.5	89.15	-188.0	379.9	268.1	197.8	70.22	3.817		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,100.0	10,086.6	10,109.2	10,086.6	35.5	35.8	89.15	-188.0	379.9	268.1	197.1	70.93	3.779		
10,200.0	10,186.6	10,209.2	10,186.6	35.9	36.2	89.15	-188.0	379.9	268.1	196.4	71.64	3.742		
10,300.0	10,286.6	10,309.2	10,286.6	36.2	36.5	89.15	-188.0	379.9	268.1	195.7	72.35	3.705		
10,309.2	10,295.8	10,318.4	10,295.8	36.3	36.6	89.15	-188.0	379.9	268.1	195.7	72.41	3.702		
10,400.0	10,386.6	10,408.3	10,385.4	36.6	36.9	87.82	-181.9	379.8	268.2	195.1	73.06	3.671		
10,500.0	10,486.6	10,502.6	10,477.1	36.9	37.2	83.28	-160.5	379.7	269.8	196.1	73.76	3.658		
10,600.0	10,586.6	10,587.9	10,556.1	37.3	37.4	76.62	-128.4	379.4	276.7	202.6	74.15	3.732		
10,700.0	10,686.6	10,662.3	10,620.4	37.6	37.6	69.31	-91.1	379.1	293.3	219.7	73.57	3.987		
10,800.0	10,786.6	10,725.7	10,671.0	38.0	37.7	62.49	-53.0	378.8	322.5	250.9	71.55	4.507		
10,890.4	10,877.0	10,774.4	10,706.9	38.3	37.8	57.18	-20.0	378.6	360.1	291.5	68.65	5.246		
10,900.0	10,886.6	10,779.2	10,710.2	38.4	37.8	61.61	-16.6	378.6	364.7	296.4	68.30	5.339		
10,950.0	10,936.5	10,800.0	10,724.5	38.5	37.9	57.20	-1.5	378.4	389.0	322.8	66.17	5.878		
11,000.0	10,986.0	10,829.0	10,743.5	38.7	37.9	52.51	20.4	378.3	413.6	349.0	64.59	6.404		
11,050.0	11,034.6	10,850.0	10,756.6	38.9	37.9	48.89	36.8	378.1	438.3	375.8	62.45	7.018		
11,100.0	11,082.0	10,878.8	10,773.5	39.0	38.0	45.27	60.1	378.0	462.5	401.6	60.89	7.595		
11,150.0	11,127.8	10,900.0	10,785.2	39.2	38.0	42.47	77.8	377.8	485.9	427.1	58.86	8.255		
11,200.0	11,171.8	10,928.5	10,799.9	39.3	38.0	39.78	102.3	377.6	508.4	451.0	57.39	8.859		
11,250.0	11,213.5	10,950.0	10,810.1	39.4	38.0	37.68	121.1	377.5	529.7	474.2	55.54	9.538		
11,300.0	11,252.6	10,978.3	10,822.5	39.5	38.1	35.73	146.6	377.3	549.7	495.5	54.21	10.141		
11,350.0	11,288.9	11,000.0	10,831.2	39.7	38.1	34.20	166.5	377.2	568.3	515.7	52.62	10.800		
11,400.0	11,322.0	11,028.0	10,841.2	39.8	38.2	32.82	192.6	376.9	585.3	533.8	51.50	11.364		
11,450.0	11,351.8	11,050.0	10,848.2	39.9	38.3	31.74	213.5	376.8	600.6	550.4	50.23	11.957		
11,500.0	11,377.9	11,077.7	10,855.9	40.0	38.3	30.81	240.1	376.6	614.3	564.9	49.39	12.437		
11,550.0	11,400.3	11,100.0	10,861.1	40.1	38.4	30.10	261.8	376.4	626.2	577.6	48.54	12.901		
11,600.0	11,418.6	11,127.5	10,866.3	40.3	38.5	29.55	288.7	376.2	636.2	588.1	48.05	13.239		
11,650.0	11,432.8	11,150.0	10,869.7	40.4	38.5	29.15	311.0	376.0	644.4	596.7	47.67	13.519		
11,700.0	11,442.8	11,177.2	10,872.5	40.5	38.6	28.90	338.0	375.8	650.7	603.1	47.61	13.669		
11,750.0	11,448.5	11,200.0	10,874.0	40.7	38.7	28.79	360.8	375.7	655.1	607.4	47.72	13.728		
11,790.4	11,450.0	11,225.4	10,874.5	40.8	38.8	28.84	386.2	375.5	657.3	609.3	48.03	13.686		
11,800.0	11,450.0	11,228.3	10,874.4	40.8	38.8	28.86	389.1	375.4	657.7	609.6	48.11	13.672		
11,900.0	11,450.0	11,328.1	10,874.2	41.1	39.1	29.41	488.9	374.7	661.1	612.1	49.04	13.483		
12,000.0	11,450.0	11,428.0	10,874.0	41.5	39.5	29.66	588.8	373.9	662.8	613.0	49.82	13.305		
12,037.8	11,450.0	11,465.8	10,873.9	41.7	39.7	29.68	626.6	373.6	663.0	613.0	50.08	13.241		
12,100.0	11,450.0	11,528.0	10,873.8	41.9	40.0	29.68	688.8	373.1	663.2	612.7	50.50	13.133		
12,200.0	11,450.0	11,628.0	10,873.5	42.4	40.5	29.67	788.8	372.4	663.4	612.1	51.24	12.946		
12,300.0	11,450.0	11,728.0	10,873.3	43.0	41.1	29.66	888.8	371.6	663.6	611.5	52.07	12.745		
12,400.0	11,450.0	11,828.0	10,873.1	43.6	41.7	29.65	988.8	370.8	663.8	610.8	52.96	12.534		
12,500.0	11,450.0	11,928.0	10,872.9	44.3	42.4	29.64	1,088.8	370.1	664.0	610.1	53.93	12.313		
12,600.0	11,450.0	12,028.0	10,872.6	45.0	43.2	29.64	1,188.8	369.3	664.2	609.3	54.96	12.086		
12,700.0	11,450.0	12,128.0	10,872.4	45.8	44.0	29.63	1,288.8	368.5	664.4	608.4	56.05	11.855		
12,800.0	11,450.0	12,228.0	10,872.2	46.6	44.8	29.62	1,388.8	367.8	664.6	607.4	57.20	11.620		
12,900.0	11,450.0	12,328.0	10,872.0	47.4	45.7	29.61	1,488.8	367.0	664.8	606.4	58.40	11.384		
13,000.0	11,450.0	12,428.0	10,871.7	48.3	46.6	29.60	1,588.8	366.2	665.0	605.4	59.66	11.147		
13,100.0	11,450.0	12,528.0	10,871.5	49.3	47.6	29.59	1,688.8	365.5	665.3	604.3	60.96	10.912		
13,200.0	11,450.0	12,628.0	10,871.3	50.3	48.6	29.59	1,788.8	364.7	665.5	603.1	62.31	10.679		
13,300.0	11,450.0	12,728.0	10,871.0	51.3	49.6	29.58	1,888.8	363.9	665.7	602.0	63.70	10.449		
13,400.0	11,450.0	12,828.0	10,870.8	52.3	50.7	29.57	1,988.8	363.2	665.9	600.7	65.14	10.223		
13,500.0	11,450.0	12,928.0	10,870.6	53.4	51.8	29.56	2,088.8	362.4	666.1	599.5	66.60	10.001		
13,600.0	11,450.0	13,028.0	10,870.4	54.5	52.9	29.55	2,188.8	361.6	666.3	598.2	68.11	9.783		
13,700.0	11,450.0	13,128.0	10,870.1	55.6	54.1	29.55	2,288.8	360.9	666.5	596.9	69.64	9.570		
13,800.0	11,450.0	13,228.0	10,869.9	56.8	55.3	29.54	2,388.8	360.1	666.7	595.5	71.21	9.363		
13,900.0	11,450.0	13,328.0	10,869.7	58.0	56.5	29.53	2,488.8	359.3	666.9	594.1	72.80	9.161		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,000.0	11,450.0	13,428.0	10,869.5	59.2	57.7	29.52	2,588.8	358.5	667.1	592.7	74.42	8.965		
14,100.0	11,450.0	13,528.0	10,869.2	60.4	59.0	29.51	2,688.8	357.8	667.3	591.3	76.06	8.774		
14,200.0	11,450.0	13,628.0	10,869.0	61.7	60.2	29.50	2,788.8	357.0	667.5	589.8	77.73	8.588		
14,300.0	11,450.0	13,728.0	10,868.8	62.9	61.5	29.50	2,888.8	356.2	667.7	588.3	79.41	8.408		
14,400.0	11,450.0	13,828.0	10,868.5	64.2	62.8	29.49	2,988.7	355.5	668.0	586.8	81.12	8.234		
14,500.0	11,450.0	13,928.0	10,868.3	65.5	64.1	29.48	3,088.7	354.7	668.2	585.3	82.85	8.065		
14,600.0	11,450.0	14,028.0	10,868.1	66.8	65.5	29.47	3,188.7	353.9	668.4	583.8	84.59	7.901		
14,700.0	11,450.0	14,128.0	10,867.9	68.2	66.8	29.46	3,288.7	353.2	668.6	582.2	86.35	7.742		
14,800.0	11,450.0	14,228.0	10,867.6	69.5	68.2	29.46	3,388.7	352.4	668.8	580.7	88.13	7.589		
14,900.0	11,450.0	14,328.0	10,867.4	70.9	69.6	29.45	3,488.7	351.6	669.0	579.1	89.92	7.440		
15,000.0	11,450.0	14,428.0	10,867.2	72.2	71.0	29.44	3,588.7	350.9	669.2	577.5	91.73	7.296		
15,100.0	11,450.0	14,528.0	10,867.0	73.6	72.4	29.43	3,688.7	350.1	669.4	575.9	93.54	7.156		
15,200.0	11,450.0	14,628.0	10,866.7	75.0	73.8	29.42	3,788.7	349.3	669.6	574.2	95.37	7.021		
15,300.0	11,450.0	14,728.0	10,866.5	76.4	75.2	29.42	3,888.7	348.6	669.8	572.6	97.21	6.890		
15,400.0	11,450.0	14,828.0	10,866.3	77.8	76.6	29.41	3,988.7	347.8	670.0	571.0	99.06	6.764		
15,500.0	11,450.0	14,928.0	10,866.1	79.3	78.1	29.40	4,088.7	347.0	670.2	569.3	100.93	6.641		
15,600.0	11,450.0	15,028.0	10,865.8	80.7	79.5	29.39	4,188.7	346.3	670.4	567.6	102.80	6.522		
15,700.0	11,450.0	15,128.0	10,865.6	82.1	81.0	29.38	4,288.7	345.5	670.7	566.0	104.68	6.407		
15,800.0	11,450.0	15,228.0	10,865.4	83.6	82.4	29.38	4,388.7	344.7	670.9	564.3	106.56	6.295		
15,900.0	11,450.0	15,328.0	10,865.1	85.0	83.9	29.37	4,488.7	344.0	671.1	562.6	108.46	6.187		
16,000.0	11,450.0	15,428.0	10,864.9	86.5	85.4	29.36	4,588.7	343.2	671.3	560.9	110.36	6.082		
16,100.0	11,450.0	15,528.0	10,864.7	88.0	86.9	29.35	4,688.7	342.4	671.5	559.2	112.27	5.981		
16,200.0	11,450.0	15,628.0	10,864.5	89.4	88.4	29.34	4,788.7	341.7	671.7	557.5	114.19	5.882		
16,300.0	11,450.0	15,728.0	10,864.2	90.9	89.9	29.34	4,888.7	340.9	671.9	555.8	116.12	5.786		
16,400.0	11,450.0	15,828.0	10,864.0	92.4	91.4	29.33	4,988.7	340.1	672.1	554.1	118.05	5.694		
16,500.0	11,450.0	15,928.0	10,863.8	93.9	92.9	29.32	5,088.7	339.4	672.3	552.3	119.98	5.603		
16,600.0	11,450.0	16,028.0	10,863.6	95.4	94.4	29.31	5,188.7	338.6	672.5	550.6	121.92	5.516		
16,700.0	11,450.0	16,128.0	10,863.3	96.9	95.9	29.30	5,288.7	337.8	672.7	548.9	123.87	5.431		
16,800.0	11,450.0	16,228.0	10,863.1	98.4	97.4	29.30	5,388.7	337.0	672.9	547.1	125.82	5.348		
16,900.0	11,450.0	16,328.0	10,862.9	100.0	98.9	29.29	5,488.7	336.3	673.1	545.4	127.78	5.268		
17,000.0	11,450.0	16,428.0	10,862.7	101.5	100.5	29.28	5,588.7	335.5	673.4	543.6	129.74	5.190		
17,100.0	11,450.0	16,528.0	10,862.4	103.0	102.0	29.27	5,688.7	334.7	673.6	541.9	131.70	5.114		
17,200.0	11,450.0	16,628.0	10,862.2	104.5	103.5	29.26	5,788.7	334.0	673.8	540.1	133.67	5.041		
17,300.0	11,450.0	16,728.0	10,862.0	106.1	105.1	29.26	5,888.6	333.2	674.0	538.3	135.64	4.969		
17,400.0	11,450.0	16,828.0	10,861.7	107.6	106.6	29.25	5,988.6	332.4	674.2	536.6	137.62	4.899		
17,500.0	11,450.0	16,928.0	10,861.5	109.1	108.2	29.24	6,088.6	331.7	674.4	534.8	139.60	4.831		
17,600.0	11,450.0	17,028.0	10,861.3	110.7	109.7	29.23	6,188.6	330.9	674.6	533.0	141.58	4.765		
17,700.0	11,450.0	17,128.0	10,861.1	112.2	111.3	29.22	6,288.6	330.1	674.8	531.2	143.57	4.700		
17,800.0	11,450.0	17,228.0	10,860.8	113.8	112.8	29.22	6,388.6	329.4	675.0	529.5	145.56	4.638		
17,900.0	11,450.0	17,328.0	10,860.6	115.3	114.4	29.21	6,488.6	328.6	675.2	527.7	147.55	4.576		
18,000.0	11,450.0	17,428.0	10,860.4	116.9	116.0	29.20	6,588.6	327.8	675.4	525.9	149.54	4.517		
18,100.0	11,450.0	17,528.0	10,860.2	118.4	117.5	29.19	6,688.6	327.1	675.6	524.1	151.54	4.459		
18,200.0	11,450.0	17,628.0	10,859.9	120.0	119.1	29.18	6,788.6	326.3	675.9	522.3	153.54	4.402		
18,300.0	11,450.0	17,728.0	10,859.7	121.6	120.7	29.18	6,888.6	325.5	676.1	520.5	155.54	4.347		
18,400.0	11,450.0	17,828.0	10,859.5	123.1	122.2	29.17	6,988.6	324.8	676.3	518.7	157.54	4.293		
18,500.0	11,450.0	17,928.0	10,859.2	124.7	123.8	29.16	7,088.6	324.0	676.5	516.9	159.55	4.240		
18,600.0	11,450.0	18,028.0	10,859.0	126.3	125.4	29.15	7,188.6	323.2	676.7	515.1	161.56	4.189		
18,700.0	11,450.0	18,128.0	10,858.8	127.8	127.0	29.14	7,288.6	322.5	676.9	513.3	163.57	4.138		
18,800.0	11,450.0	18,228.0	10,858.6	129.4	128.6	29.14	7,388.6	321.7	677.1	511.5	165.58	4.089		
18,900.0	11,450.0	18,328.0	10,858.3	131.0	130.1	29.13	7,488.6	320.9	677.3	509.7	167.59	4.041		
19,000.0	11,450.0	18,428.0	10,858.1	132.6	131.7	29.12	7,588.6	320.2	677.5	507.9	169.61	3.995		
19,100.0	11,450.0	18,528.0	10,857.9	134.2	133.3	29.11	7,688.6	319.4	677.7	506.1	171.62	3.949		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,200.0	11,450.0	18,628.0	10,857.7	135.7	134.9	29.11	7,788.6	318.6	677.9	504.3	173.64	3.904		
19,300.0	11,450.0	18,728.0	10,857.4	137.3	136.5	29.10	7,888.6	317.8	678.1	502.5	175.66	3.860		
19,400.0	11,450.0	18,828.0	10,857.2	138.9	138.1	29.09	7,988.6	317.1	678.4	500.7	177.68	3.818		
19,500.0	11,450.0	18,928.0	10,857.0	140.5	139.7	29.08	8,088.6	316.3	678.6	498.9	179.71	3.776		
19,600.0	11,450.0	19,028.0	10,856.8	142.1	141.3	29.07	8,188.6	315.5	678.8	497.0	181.73	3.735		
19,700.0	11,450.0	19,128.0	10,856.5	143.7	142.9	29.07	8,288.6	314.8	679.0	495.2	183.76	3.695		
19,800.0	11,450.0	19,228.0	10,856.3	145.3	144.5	29.06	8,388.6	314.0	679.2	493.4	185.78	3.656		
19,900.0	11,450.0	19,328.0	10,856.1	146.9	146.1	29.05	8,488.6	313.2	679.4	491.6	187.81	3.617		
20,000.0	11,450.0	19,428.0	10,855.8	148.5	147.7	29.04	8,588.6	312.5	679.6	489.8	189.84	3.580		
20,100.0	11,450.0	19,528.0	10,855.6	150.1	149.3	29.03	8,688.6	311.7	679.8	487.9	191.87	3.543		
20,200.0	11,450.0	19,628.0	10,855.4	151.7	150.9	29.03	8,788.5	310.9	680.0	486.1	193.90	3.507		
20,300.0	11,450.0	19,728.0	10,855.2	153.3	152.5	29.02	8,888.5	310.2	680.2	484.3	195.93	3.472		
20,400.0	11,450.0	19,828.0	10,854.9	154.9	154.1	29.01	8,988.5	309.4	680.4	482.5	197.96	3.437		
20,500.0	11,450.0	19,928.0	10,854.7	156.5	155.7	29.00	9,088.5	308.6	680.6	480.7	200.00	3.403		
20,600.0	11,450.0	20,028.0	10,854.5	158.1	157.3	29.00	9,188.5	307.9	680.9	478.8	202.03	3.370		
20,700.0	11,450.0	20,128.0	10,854.3	159.7	158.9	28.99	9,288.5	307.1	681.1	477.0	204.06	3.337		
20,800.0	11,450.0	20,228.0	10,854.0	161.3	160.5	28.98	9,388.5	306.3	681.3	475.2	206.10	3.306		
20,900.0	11,450.0	20,328.0	10,853.8	162.9	162.1	28.97	9,488.5	305.6	681.5	473.3	208.14	3.274		
21,000.0	11,450.0	20,428.0	10,853.6	164.5	163.7	28.96	9,588.5	304.8	681.7	471.5	210.17	3.243		
21,100.0	11,450.0	20,528.0	10,853.3	166.1	165.3	28.96	9,688.5	304.0	681.9	469.7	212.21	3.213		
21,200.0	11,450.0	20,628.0	10,853.1	167.7	166.9	28.95	9,788.5	303.3	682.1	467.9	214.25	3.184		
21,300.0	11,450.0	20,728.0	10,852.9	169.3	168.6	28.94	9,888.5	302.5	682.3	466.0	216.29	3.155		
21,400.0	11,450.0	20,828.0	10,852.7	170.9	170.2	28.93	9,988.5	301.7	682.5	464.2	218.33	3.126		
21,500.0	11,450.0	20,928.0	10,852.4	172.5	171.8	28.93	10,088.5	301.0	682.7	462.4	220.37	3.098		
21,600.0	11,450.0	21,028.6	10,852.1	174.2	173.3	28.92	10,184.1	300.3	683.1	460.7	222.39	3.072		
21,614.7	11,450.0	21,038.3	10,852.0	174.4	173.6	28.92	10,198.8	300.2	683.2	460.6	222.64	3.069 SF		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	1.0	-1.0	0.0	0.0	89.35	27.9	2,453.3	2,453.4					
100.0	100.0	101.0	99.0	0.1	0.1	89.35	27.9	2,453.3	2,453.4	2,453.2	0.26	9,440.116		
200.0	200.0	201.0	199.0	0.5	0.5	89.35	27.9	2,453.3	2,453.4	2,452.4	0.98	2,511.593		
300.0	300.0	301.0	299.0	0.8	0.8	89.35	27.9	2,453.3	2,453.4	2,451.7	1.69	1,448.485		
400.0	400.0	401.0	399.0	1.2	1.2	89.35	27.9	2,453.3	2,453.4	2,451.0	2.41	1,017.709		
500.0	500.0	501.0	499.0	1.6	1.6	89.35	27.9	2,453.3	2,453.4	2,450.3	3.13	784.423		
600.0	600.0	601.0	599.0	1.9	1.9	89.35	27.9	2,453.3	2,453.4	2,449.6	3.84	638.144		
700.0	700.0	701.0	699.0	2.3	2.3	89.35	27.9	2,453.3	2,453.4	2,448.9	4.56	537.846		
800.0	800.0	801.0	799.0	2.6	2.6	89.35	27.9	2,453.3	2,453.4	2,448.1	5.28	464.794		
900.0	900.0	901.0	899.0	3.0	3.0	89.35	27.9	2,453.3	2,453.4	2,447.4	6.00	409.213		
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	89.35	27.9	2,453.3	2,453.4	2,446.7	6.71	365.506		
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	-60.46	27.9	2,453.3	2,453.0	2,445.6	7.41	330.917		
1,200.0	1,200.0	1,201.0	1,199.0	4.0	4.1	-60.52	27.9	2,453.3	2,451.7	2,443.6	8.10	302.645		
1,300.0	1,299.9	1,301.1	1,298.9	4.4	4.4	-60.63	27.9	2,453.3	2,449.5	2,440.8	8.79	278.531		
1,400.0	1,399.7	1,401.3	1,398.7	4.7	4.8	-60.78	27.9	2,453.3	2,446.6	2,437.1	9.49	257.704		
1,500.0	1,499.4	1,498.4	1,498.4	5.0	5.1	-60.97	27.9	2,453.3	2,442.7	2,432.5	10.19	239.792		
1,600.0	1,598.9	1,666.8	1,666.8	5.4	5.7	-61.34	27.3	2,450.9	2,436.7	2,425.6	11.11	219.255		
1,700.0	1,698.3	1,835.5	1,835.3	5.8	6.3	-61.79	25.3	2,443.8	2,427.0	2,415.0	12.03	201.688		
1,800.0	1,797.4	2,002.9	2,002.3	6.1	6.9	-62.30	22.2	2,432.0	2,413.7	2,400.8	12.95	186.372		
1,900.0	1,896.4	2,168.9	2,167.4	6.5	7.5	-62.70	17.7	2,415.6	2,397.3	2,383.4	13.86	172.920		
2,000.0	1,995.5	2,319.9	2,317.1	6.9	8.0	-63.06	12.7	2,396.7	2,378.2	2,363.5	14.73	161.467		
2,100.0	2,094.5	2,417.4	2,413.7	7.3	8.4	-63.28	9.1	2,383.6	2,358.3	2,342.8	15.45	152.685		
2,200.0	2,193.5	2,515.0	2,510.3	7.7	8.8	-63.52	5.6	2,370.5	2,338.4	2,322.2	16.17	144.632		
2,300.0	2,292.5	2,612.6	2,606.9	8.1	9.1	-63.75	2.1	2,357.4	2,318.5	2,301.6	16.90	137.231		
2,400.0	2,391.6	2,710.1	2,703.5	8.5	9.5	-63.99	-1.5	2,344.3	2,298.7	2,281.1	17.63	130.410		
2,500.0	2,490.6	2,807.7	2,800.1	8.9	9.9	-64.23	-5.0	2,331.2	2,279.0	2,260.6	18.36	124.109		
2,600.0	2,589.6	2,905.2	2,896.7	9.3	10.3	-64.48	-8.5	2,318.1	2,259.2	2,240.1	19.10	118.275		
2,700.0	2,688.6	3,002.8	2,993.3	9.7	10.7	-64.73	-12.1	2,305.0	2,239.5	2,219.7	19.84	112.859		
2,729.0	2,717.4	3,031.1	3,021.4	9.8	10.8	-64.81	-13.1	2,301.2	2,233.8	2,213.8	20.06	111.361		
2,800.0	2,787.8	3,100.5	3,090.1	10.1	11.0	-64.78	-15.6	2,291.8	2,220.2	2,199.6	20.59	107.849		
2,900.0	2,887.2	3,201.5	3,187.2	10.5	11.5	-64.72	-19.1	2,278.7	2,201.9	2,180.5	21.33	103.220		
3,000.0	2,986.8	3,303.1	3,284.6	10.9	11.9	-64.61	-22.7	2,265.4	2,184.7	2,162.6	22.07	98.986		
3,100.0	3,086.7	3,404.4	3,382.3	11.2	12.3	-64.45	-26.3	2,252.2	2,168.6	2,145.8	22.80	95.121		
3,200.0	3,186.6	3,494.4	3,480.2	11.6	12.6	-64.25	-29.9	2,238.9	2,153.7	2,130.2	23.48	91.743		
3,262.3	3,249.0	3,556.2	3,541.3	11.8	12.9	85.68	-32.1	2,230.6	2,145.0	2,121.0	23.91	89.719		
3,300.0	3,286.6	3,606.5	3,578.3	11.9	13.1	85.71	-33.4	2,225.6	2,139.8	2,115.6	24.21	88.376		
3,400.0	3,386.6	3,692.5	3,676.3	12.2	13.4	85.78	-37.0	2,212.3	2,126.1	2,101.3	24.85	85.557		
3,500.0	3,486.6	3,808.5	3,774.4	12.6	13.9	85.85	-40.6	2,199.0	2,112.5	2,086.9	25.60	82.516		
3,600.0	3,586.6	3,890.5	3,872.5	12.9	14.2	85.92	-44.2	2,185.7	2,098.8	2,072.6	26.23	80.020		
3,700.0	3,686.6	3,989.6	3,970.5	13.2	14.6	86.00	-47.8	2,172.4	2,085.1	2,058.2	26.92	77.456		
3,800.0	3,786.6	4,088.6	4,068.6	13.5	15.1	86.07	-51.4	2,159.1	2,071.5	2,043.9	27.61	75.015		
3,900.0	3,886.6	4,187.6	4,166.6	13.9	15.5	86.14	-55.0	2,145.8	2,057.8	2,029.5	28.31	72.689		
4,000.0	3,986.6	4,286.6	4,264.7	14.2	15.9	86.22	-58.5	2,132.4	2,044.2	2,015.1	29.01	70.471		
4,100.0	4,086.6	4,385.7	4,362.8	14.6	16.3	86.30	-62.1	2,119.1	2,030.5	2,000.8	29.71	68.354		
4,200.0	4,186.6	4,484.7	4,460.8	14.9	16.7	86.38	-65.7	2,105.8	2,016.9	1,986.4	30.41	66.332		
4,300.0	4,286.6	4,583.7	4,558.9	15.2	17.1	86.45	-69.3	2,092.5	2,003.2	1,972.1	31.11	64.397		
4,400.0	4,386.6	4,682.7	4,657.0	15.6	17.5	86.53	-72.9	2,079.2	1,989.6	1,957.8	31.81	62.546		
4,500.0	4,486.6	4,781.8	4,755.0	15.9	17.9	86.62	-76.5	2,065.9	1,975.9	1,943.4	32.51	60.773		
4,600.0	4,586.6	4,880.8	4,853.1	16.2	18.3	86.70	-80.1	2,052.6	1,962.3	1,929.1	33.22	59.073		
4,700.0	4,686.6	4,979.8	4,951.2	16.6	18.7	86.78	-83.6	2,039.3	1,948.7	1,914.8	33.92	57.442		
4,800.0	4,786.6	5,078.9	5,049.2	16.9	19.1	86.87	-87.2	2,026.0	1,935.1	1,900.4	34.63	55.876		
4,900.0	4,886.6	5,177.9	5,147.3	17.3	19.6	86.95	-90.8	2,012.7	1,921.4	1,886.1	35.34	54.371		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.0	4,986.6	5,276.9	5,245.3	17.6	20.0	87.04	-94.4	1,999.4	1,907.8	1,871.8	36.05	52.925		
5,100.0	5,086.6	5,375.9	5,343.4	18.0	20.4	87.13	-98.0	1,986.1	1,894.2	1,857.4	36.76	51.533		
5,200.0	5,186.6	5,475.0	5,441.5	18.3	20.8	87.22	-101.6	1,972.8	1,880.6	1,843.1	37.47	50.192		
5,300.0	5,286.6	5,574.0	5,539.5	18.6	21.2	87.31	-105.2	1,959.5	1,867.0	1,828.8	38.18	48.901		
5,400.0	5,386.6	5,673.0	5,637.6	19.0	21.6	87.40	-108.7	1,946.1	1,853.4	1,814.5	38.89	47.657		
5,500.0	5,486.6	5,772.0	5,735.7	19.3	22.0	87.49	-112.3	1,932.8	1,839.8	1,800.2	39.60	46.456		
5,600.0	5,586.6	5,871.1	5,833.7	19.7	22.4	87.59	-115.9	1,919.5	1,826.2	1,785.9	40.32	45.297		
5,700.0	5,686.6	5,970.1	5,931.8	20.0	22.9	87.69	-119.5	1,906.2	1,812.6	1,771.6	41.03	44.178		
5,800.0	5,786.6	6,069.1	6,029.8	20.4	23.3	87.78	-123.1	1,892.9	1,799.1	1,757.3	41.75	43.096		
5,900.0	5,886.6	6,168.2	6,127.9	20.7	23.7	87.88	-126.7	1,879.6	1,785.5	1,743.0	42.46	42.051		
6,000.0	5,986.6	6,267.2	6,226.0	21.1	24.1	87.98	-130.3	1,866.3	1,771.9	1,728.7	43.18	41.039		
6,100.0	6,086.6	6,366.2	6,324.0	21.4	24.5	88.09	-133.8	1,853.0	1,758.4	1,714.5	43.89	40.061		
6,200.0	6,186.6	6,465.2	6,422.1	21.8	24.9	88.19	-137.4	1,839.7	1,744.8	1,700.2	44.61	39.113		
6,300.0	6,286.6	6,564.3	6,520.2	22.1	25.3	88.30	-141.0	1,826.4	1,731.3	1,685.9	45.33	38.195		
6,400.0	6,386.6	6,663.3	6,618.2	22.5	25.8	88.40	-144.6	1,813.1	1,717.7	1,671.7	46.05	37.305		
6,500.0	6,486.6	6,762.3	6,716.3	22.8	26.2	88.51	-148.2	1,799.8	1,704.2	1,657.4	46.76	36.442		
6,600.0	6,586.6	6,861.3	6,814.4	23.2	26.6	88.62	-151.8	1,786.5	1,690.6	1,643.2	47.48	35.606		
6,700.0	6,686.6	6,960.4	6,912.4	23.5	27.0	88.74	-155.4	1,773.2	1,677.1	1,628.9	48.20	34.793		
6,800.0	6,786.6	7,059.4	7,010.5	23.9	27.4	88.85	-158.9	1,759.8	1,663.6	1,614.7	48.92	34.005		
6,900.0	6,886.6	7,158.4	7,108.5	24.2	27.8	88.97	-162.5	1,746.5	1,650.1	1,600.4	49.64	33.239		
7,000.0	6,986.6	7,243.3	7,192.6	24.6	28.2	89.07	-166.6	1,735.3	1,636.8	1,586.4	50.35	32.511		
7,100.0	7,086.6	7,313.5	7,262.3	24.9	28.5	89.14	-167.8	1,727.1	1,625.0	1,574.0	51.02	31.850		
7,200.0	7,186.6	7,383.9	7,332.4	25.3	28.8	89.20	-169.7	1,720.1	1,615.1	1,563.4	51.68	31.250		
7,300.0	7,286.6	7,454.7	7,402.8	25.6	29.0	89.26	-171.2	1,714.3	1,606.9	1,554.5	52.32	30.709		
7,400.0	7,386.6	7,525.6	7,473.6	26.0	29.3	89.30	-172.4	1,709.8	1,600.5	1,547.5	52.95	30.225		
7,500.0	7,486.6	7,600.0	7,547.9	26.3	29.6	89.33	-173.3	1,706.4	1,595.9	1,542.3	53.57	29.789		
7,600.0	7,586.6	7,667.9	7,615.8	26.7	29.8	89.35	-173.8	1,704.5	1,593.1	1,538.9	54.15	29.419		
7,700.0	7,686.6	7,747.3	7,685.6	27.0	30.0	89.35	-174.0	1,703.8	1,592.1	1,537.3	54.75	29.082		
7,800.0	7,786.6	7,837.7	7,785.6	27.4	30.3	89.35	-174.0	1,703.8	1,592.1	1,536.7	55.40	28.739		
7,900.0	7,886.6	7,937.7	7,885.6	27.7	30.6	89.35	-174.0	1,703.8	1,592.1	1,536.0	56.08	28.387		
8,000.0	7,986.6	8,037.7	7,985.6	28.1	31.0	89.35	-174.0	1,703.8	1,592.1	1,535.3	56.77	28.044		
8,100.0	8,086.6	8,137.7	8,085.6	28.4	31.3	89.35	-174.0	1,703.8	1,592.1	1,534.6	57.46	27.709		
8,200.0	8,186.6	8,237.7	8,185.6	28.8	31.6	89.35	-174.0	1,703.8	1,592.1	1,533.9	58.15	27.381		
8,300.0	8,286.6	8,337.7	8,285.6	29.1	31.9	89.35	-174.0	1,703.8	1,592.1	1,533.3	58.83	27.061		
8,400.0	8,386.6	8,437.7	8,385.6	29.5	32.2	89.35	-174.0	1,703.8	1,592.1	1,532.6	59.52	26.747		
8,500.0	8,486.6	8,537.7	8,485.6	29.8	32.5	89.35	-174.0	1,703.8	1,592.1	1,531.9	60.21	26.441		
8,600.0	8,586.6	8,637.7	8,585.6	30.2	32.9	89.35	-174.0	1,703.8	1,592.1	1,531.2	60.90	26.141		
8,700.0	8,686.6	8,737.7	8,685.6	30.6	33.2	89.35	-174.0	1,703.8	1,592.1	1,530.5	61.59	25.848		
8,800.0	8,786.6	8,837.7	8,785.6	30.9	33.5	89.35	-174.0	1,703.8	1,592.1	1,529.8	62.29	25.561		
8,900.0	8,886.6	8,937.7	8,885.6	31.3	33.8	89.35	-174.0	1,703.8	1,592.1	1,529.1	62.98	25.280		
9,000.0	8,986.6	9,037.7	8,985.6	31.6	34.1	89.35	-174.0	1,703.8	1,592.1	1,528.4	63.67	25.005		
9,100.0	9,086.6	9,137.7	9,085.6	32.0	34.5	89.35	-174.0	1,703.8	1,592.1	1,527.7	64.36	24.735		
9,200.0	9,186.6	9,237.7	9,185.6	32.3	34.8	89.35	-174.0	1,703.8	1,592.1	1,527.0	65.06	24.472		
9,300.0	9,286.6	9,337.7	9,285.6	32.7	35.1	89.35	-174.0	1,703.8	1,592.1	1,526.3	65.75	24.213		
9,400.0	9,386.6	9,437.7	9,385.6	33.0	35.4	89.35	-174.0	1,703.8	1,592.1	1,525.6	66.45	23.960		
9,500.0	9,486.6	9,537.7	9,485.6	33.4	35.8	89.35	-174.0	1,703.8	1,592.1	1,524.9	67.14	23.712		
9,600.0	9,586.6	9,637.7	9,585.6	33.7	36.1	89.35	-174.0	1,703.8	1,592.1	1,524.2	67.84	23.469		
9,700.0	9,686.6	9,737.7	9,685.6	34.1	36.4	89.35	-174.0	1,703.8	1,592.1	1,523.6	68.53	23.230		
9,800.0	9,786.6	9,837.7	9,785.6	34.5	36.7	89.35	-174.0	1,703.8	1,592.1	1,522.9	69.23	22.997		
9,900.0	9,886.6	9,937.7	9,885.6	34.8	37.1	89.35	-174.0	1,703.8	1,592.1	1,522.2	69.93	22.768		
10,000.0	9,986.6	10,037.7	9,985.6	35.2	37.4	89.35	-174.0	1,703.8	1,592.1	1,521.5	70.63	22.543		
10,100.0	10,086.6	10,137.7	10,085.6	35.5	37.7	89.35	-174.0	1,703.8	1,592.1	1,520.8	71.32	22.322		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,200.0	10,186.6	10,237.7	10,185.6	35.9	38.1	89.35	-174.0	1,703.8	1,592.1	1,520.1	72.02	22.106		
10,300.0	10,286.6	10,337.7	10,285.6	36.2	38.4	89.35	-174.0	1,703.8	1,592.1	1,519.4	72.72	21.894		
10,300.1	10,286.8	10,337.9	10,285.8	36.2	38.4	89.35	-174.0	1,703.8	1,592.1	1,519.4	72.72	21.893 CC		
10,400.0	10,386.6	10,436.6	10,384.3	36.6	38.7	89.18	-169.1	1,703.8	1,592.1	1,518.7	73.40	21.690		
10,500.0	10,486.6	10,531.0	10,476.4	36.9	39.0	88.46	-149.2	1,703.6	1,592.4	1,518.4	74.03	21.510		
10,600.0	10,586.6	10,616.8	10,566.3	37.3	39.2	87.34	-118.1	1,703.4	1,593.5	1,518.9	74.59	21.365		
10,700.0	10,686.6	10,691.9	10,621.8	37.6	39.4	86.02	-81.4	1,703.1	1,596.4	1,521.3	75.05	21.272		
10,800.0	10,786.6	10,756.2	10,673.6	38.0	39.5	84.66	-43.5	1,702.8	1,601.8	1,526.4	75.39	21.247		
10,890.4	10,877.0	10,805.6	10,710.4	38.3	39.6	83.49	-10.4	1,702.5	1,609.6	1,534.0	75.58	21.297		
10,900.0	10,886.6	10,810.5	10,713.9	38.4	39.6	88.67	-7.0	1,702.5	1,610.6	1,535.0	75.59	21.307		
10,950.0	10,936.5	10,835.7	10,731.4	38.5	39.6	87.48	11.2	1,702.4	1,616.3	1,540.7	75.63	21.371		
11,000.0	10,986.0	10,861.0	10,748.0	38.7	39.7	86.25	30.2	1,702.2	1,622.8	1,547.1	75.64	21.454		
11,050.0	11,034.6	10,886.2	10,763.8	38.9	39.7	85.00	49.8	1,702.1	1,629.9	1,554.3	75.62	21.554		
11,100.0	11,082.0	10,911.4	10,778.7	39.0	39.7	83.73	70.1	1,701.9	1,637.5	1,561.9	75.57	21.669		
11,150.0	11,127.8	10,936.5	10,792.7	39.2	39.7	82.46	91.0	1,701.7	1,645.5	1,570.0	75.49	21.796		
11,200.0	11,171.8	10,961.7	10,805.7	39.3	39.8	81.20	112.5	1,701.6	1,653.7	1,578.3	75.40	21.932		
11,250.0	11,213.5	10,986.8	10,817.8	39.4	39.8	79.97	134.5	1,701.4	1,662.1	1,586.8	75.30	22.073		
11,300.0	11,252.6	11,011.9	10,828.9	39.5	39.8	78.77	157.1	1,701.2	1,670.6	1,595.4	75.19	22.219		
11,350.0	11,288.9	11,037.0	10,839.0	39.7	39.8	77.63	180.0	1,701.0	1,678.9	1,603.9	75.08	22.362		
11,400.0	11,322.0	11,062.1	10,848.1	39.8	39.8	76.54	203.4	1,700.9	1,687.2	1,612.2	74.99	22.498		
11,450.0	11,351.8	11,087.2	10,856.1	39.9	39.9	75.52	227.2	1,700.7	1,695.1	1,620.2	74.91	22.627		
11,500.0	11,377.9	11,112.3	10,863.1	40.0	39.9	74.58	251.3	1,700.5	1,702.7	1,627.8	74.86	22.744		
11,550.0	11,400.3	11,137.3	10,869.0	40.1	39.9	73.72	275.6	1,700.3	1,709.9	1,635.0	74.84	22.847		
11,600.0	11,418.6	11,162.4	10,873.9	40.3	39.9	72.95	300.2	1,700.1	1,716.6	1,641.7	74.86	22.931		
11,650.0	11,432.8	11,187.4	10,877.7	40.4	40.0	72.27	325.0	1,699.9	1,722.7	1,647.8	74.91	22.997		
11,700.0	11,442.8	11,212.5	10,880.4	40.5	40.0	71.69	349.9	1,699.7	1,728.2	1,653.2	75.01	23.040		
11,750.0	11,448.5	11,237.5	10,882.0	40.7	40.1	71.21	374.9	1,699.5	1,733.1	1,657.9	75.15	23.061		
11,790.4	11,450.0	11,257.8	10,882.4	40.8	40.1	70.90	395.1	1,699.4	1,736.5	1,661.2	75.30	23.061		
11,800.0	11,450.0	11,265.3	10,882.5	40.8	40.1	70.91	399.0	1,699.3	1,737.3	1,661.9	75.35	23.057		
11,900.0	11,450.0	11,361.5	10,882.1	41.1	40.3	71.01	498.8	1,698.5	1,743.6	1,667.6	75.95	22.957		
12,000.0	11,450.0	11,461.4	10,881.8	41.5	40.7	71.05	598.7	1,697.8	1,746.6	1,669.9	76.68	22.779		
12,037.8	11,450.0	11,500.8	10,881.7	41.7	40.8	71.05	636.5	1,697.5	1,746.9	1,669.9	76.98	22.694		
12,100.0	11,450.0	11,561.4	10,881.5	41.9	41.1	71.04	698.7	1,697.0	1,746.9	1,669.4	77.51	22.540		
12,200.0	11,450.0	11,661.4	10,881.1	42.4	41.6	71.03	798.7	1,696.2	1,747.1	1,668.6	78.45	22.269		
12,300.0	11,450.0	11,761.4	10,880.8	43.0	42.2	71.02	898.7	1,695.4	1,747.2	1,667.6	79.52	21.972		
12,400.0	11,450.0	11,861.4	10,880.5	43.6	42.8	71.01	998.7	1,694.6	1,747.3	1,666.6	80.69	21.654		
12,500.0	11,450.0	11,961.4	10,880.1	44.3	43.4	71.00	1,098.7	1,693.8	1,747.4	1,665.4	81.97	21.317		
12,600.0	11,450.0	12,061.4	10,879.8	45.0	44.2	70.99	1,198.7	1,693.0	1,747.5	1,664.1	83.36	20.964		
12,700.0	11,450.0	12,161.4	10,879.5	45.8	44.9	70.98	1,298.7	1,692.3	1,747.6	1,662.8	84.83	20.600		
12,800.0	11,450.0	12,261.4	10,879.1	46.6	45.8	70.97	1,398.7	1,691.5	1,747.7	1,661.3	86.40	20.227		
12,900.0	11,450.0	12,361.4	10,878.8	47.4	46.6	70.96	1,498.7	1,690.7	1,747.8	1,659.8	88.06	19.848		
13,000.0	11,450.0	12,461.4	10,878.5	48.3	47.5	70.95	1,598.7	1,689.9	1,747.9	1,658.1	89.80	19.465		
13,100.0	11,450.0	12,561.4	10,878.2	49.3	48.5	70.94	1,698.7	1,689.1	1,748.1	1,656.4	91.61	19.081		
13,200.0	11,450.0	12,661.4	10,877.8	50.3	49.5	70.93	1,798.7	1,688.3	1,748.2	1,654.7	93.50	18.697		
13,300.0	11,450.0	12,761.4	10,877.5	51.3	50.5	70.92	1,898.7	1,687.5	1,748.3	1,652.8	95.46	18.315		
13,400.0	11,450.0	12,861.4	10,877.2	52.3	51.6	70.91	1,998.7	1,686.8	1,748.4	1,650.9	97.48	17.937		
13,500.0	11,450.0	12,961.4	10,876.8	53.4	52.6	70.90	2,098.6	1,686.0	1,748.5	1,648.9	99.56	17.563		
13,600.0	11,450.0	13,061.4	10,876.5	54.5	53.7	70.89	2,198.6	1,685.2	1,748.6	1,646.9	101.69	17.195		
13,700.0	11,450.0	13,161.4	10,876.2	55.6	54.9	70.88	2,298.6	1,684.4	1,748.7	1,644.8	103.88	16.834		
13,800.0	11,450.0	13,261.4	10,875.8	56.8	56.1	70.87	2,398.6	1,683.6	1,748.8	1,642.7	106.12	16.480		
13,900.0	11,450.0	13,361.4	10,875.5	58.0	57.2	70.86	2,498.6	1,682.8	1,748.9	1,640.5	108.40	16.134		
14,000.0	11,450.0	13,461.4	10,875.2	59.2	58.5	70.85	2,598.6	1,682.0	1,749.1	1,638.3	110.73	15.796		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,100.0	11,450.0	13,561.4	10,874.8	60.4	59.7	70.84	2,698.6	1,681.3	1,749.2	1,636.1	113.10	15.466		
14,200.0	11,450.0	13,661.4	10,874.5	61.7	60.9	70.83	2,798.6	1,680.5	1,749.3	1,633.8	115.50	15.145		
14,300.0	11,450.0	13,761.4	10,874.2	62.9	62.2	70.82	2,898.6	1,679.7	1,749.4	1,631.4	117.95	14.832		
14,400.0	11,450.0	13,861.4	10,873.8	64.2	63.5	70.81	2,998.6	1,678.9	1,749.5	1,629.1	120.42	14.528		
14,500.0	11,450.0	13,961.4	10,873.5	65.5	64.8	70.80	3,098.6	1,678.1	1,749.6	1,626.7	122.93	14.233		
14,600.0	11,450.0	14,061.4	10,873.2	66.8	66.1	70.79	3,198.6	1,677.3	1,749.7	1,624.3	125.47	13.946		
14,700.0	11,450.0	14,161.4	10,872.8	68.2	67.5	70.78	3,298.6	1,676.6	1,749.8	1,621.8	128.03	13.667		
14,800.0	11,450.0	14,261.4	10,872.5	69.5	68.8	70.77	3,398.6	1,675.8	1,749.9	1,619.3	130.62	13.397		
14,900.0	11,450.0	14,361.4	10,872.2	70.9	70.2	70.76	3,498.6	1,675.0	1,750.1	1,616.8	133.24	13.135		
15,000.0	11,450.0	14,461.4	10,871.9	72.2	71.6	70.75	3,598.6	1,674.2	1,750.2	1,614.3	135.88	12.880		
15,100.0	11,450.0	14,561.4	10,871.5	73.6	73.0	70.74	3,698.6	1,673.4	1,750.3	1,611.7	138.54	12.634		
15,200.0	11,450.0	14,661.4	10,871.2	75.0	74.4	70.73	3,798.6	1,672.6	1,750.4	1,609.2	141.22	12.394		
15,300.0	11,450.0	14,761.4	10,870.9	76.4	75.8	70.72	3,898.6	1,671.8	1,750.5	1,606.6	143.93	12.163		
15,400.0	11,450.0	14,861.4	10,870.5	77.8	77.2	70.71	3,998.6	1,671.1	1,750.6	1,604.0	146.65	11.938		
15,500.0	11,450.0	14,961.4	10,870.2	79.3	78.6	70.70	4,098.6	1,670.3	1,750.7	1,601.3	149.38	11.720		
15,600.0	11,450.0	15,061.4	10,869.9	80.7	80.0	70.69	4,198.6	1,669.5	1,750.8	1,598.7	152.14	11.508		
15,700.0	11,450.0	15,161.4	10,869.5	82.1	81.5	70.67	4,298.6	1,668.7	1,751.0	1,596.1	154.90	11.303		
15,800.0	11,450.0	15,261.4	10,869.2	83.6	82.9	70.66	4,398.6	1,667.9	1,751.1	1,593.4	157.69	11.105		
15,900.0	11,450.0	15,361.4	10,868.9	85.0	84.4	70.65	4,498.5	1,667.1	1,751.2	1,590.7	160.49	10.912		
16,000.0	11,450.0	15,461.4	10,868.5	86.5	85.9	70.64	4,598.5	1,666.3	1,751.3	1,588.0	163.30	10.725		
16,100.0	11,450.0	15,561.4	10,868.2	88.0	87.4	70.63	4,698.5	1,665.6	1,751.4	1,585.3	166.12	10.543		
16,200.0	11,450.0	15,661.4	10,867.9	89.4	88.8	70.62	4,798.5	1,664.8	1,751.5	1,582.6	168.95	10.367		
16,300.0	11,450.0	15,761.4	10,867.5	90.9	90.3	70.61	4,898.5	1,664.0	1,751.6	1,579.8	171.80	10.196		
16,400.0	11,450.0	15,861.4	10,867.2	92.4	91.8	70.60	4,998.5	1,663.2	1,751.7	1,577.1	174.66	10.030		
16,500.0	11,450.0	15,961.4	10,866.9	93.9	93.3	70.59	5,098.5	1,662.4	1,751.9	1,574.3	177.52	9.868		
16,600.0	11,450.0	16,061.4	10,866.5	95.4	94.8	70.58	5,198.5	1,661.6	1,752.0	1,571.6	180.40	9.711		
16,700.0	11,450.0	16,161.4	10,866.2	96.9	96.3	70.57	5,298.5	1,660.8	1,752.1	1,568.8	183.29	9.559		
16,800.0	11,450.0	16,261.4	10,865.9	98.4	97.8	70.56	5,398.5	1,660.1	1,752.2	1,566.0	186.18	9.411		
16,900.0	11,450.0	16,361.4	10,865.6	100.0	99.4	70.55	5,498.5	1,659.3	1,752.3	1,563.2	189.08	9.267		
17,000.0	11,450.0	16,461.4	10,865.2	101.5	100.9	70.54	5,598.5	1,658.5	1,752.4	1,560.4	192.00	9.127		
17,100.0	11,450.0	16,561.4	10,864.9	103.0	102.4	70.53	5,698.5	1,657.7	1,752.5	1,557.6	194.91	8.991		
17,200.0	11,450.0	16,661.4	10,864.6	104.5	103.9	70.52	5,798.5	1,656.9	1,752.6	1,554.8	197.84	8.859		
17,300.0	11,450.0	16,761.4	10,864.2	106.1	105.5	70.51	5,898.5	1,656.1	1,752.8	1,552.0	200.77	8.730		
17,400.0	11,450.0	16,861.4	10,863.9	107.6	107.0	70.50	5,998.5	1,655.3	1,752.9	1,549.2	203.71	8.605		
17,500.0	11,450.0	16,961.4	10,863.6	109.1	108.6	70.49	6,098.5	1,654.6	1,753.0	1,546.3	206.65	8.483		
17,600.0	11,450.0	17,061.4	10,863.2	110.7	110.1	70.48	6,198.5	1,653.8	1,753.1	1,543.5	209.61	8.364		
17,700.0	11,450.0	17,161.4	10,862.9	112.2	111.6	70.47	6,298.5	1,653.0	1,753.2	1,540.7	212.56	8.248		
17,800.0	11,450.0	17,261.4	10,862.6	113.8	113.2	70.46	6,398.5	1,652.2	1,753.3	1,537.8	215.52	8.135		
17,900.0	11,450.0	17,361.4	10,862.2	115.3	114.8	70.45	6,498.5	1,651.4	1,753.4	1,534.9	218.49	8.025		
18,000.0	11,450.0	17,461.4	10,861.9	116.9	116.3	70.44	6,598.5	1,650.6	1,753.6	1,532.1	221.46	7.918		
18,100.0	11,450.0	17,561.4	10,861.6	118.4	117.9	70.43	6,698.5	1,649.8	1,753.7	1,529.2	224.44	7.813		
18,200.0	11,450.0	17,661.4	10,861.2	120.0	119.4	70.42	6,798.5	1,649.1	1,753.8	1,526.4	227.42	7.712		
18,300.0	11,450.0	17,761.4	10,860.9	121.6	121.0	70.41	6,898.4	1,648.3	1,753.9	1,523.5	230.41	7.612		
18,400.0	11,450.0	17,861.4	10,860.6	123.1	122.6	70.40	6,998.4	1,647.5	1,754.0	1,520.6	233.40	7.515		
18,500.0	11,450.0	17,961.4	10,860.2	124.7	124.1	70.39	7,098.4	1,646.7	1,754.1	1,517.7	236.39	7.420		
18,600.0	11,450.0	18,061.4	10,859.9	126.3	125.7	70.38	7,198.4	1,645.9	1,754.2	1,514.8	239.39	7.328		
18,700.0	11,450.0	18,161.4	10,859.6	127.8	127.3	70.37	7,298.4	1,645.1	1,754.4	1,512.0	242.39	7.238		
18,800.0	11,450.0	18,261.4	10,859.3	129.4	128.9	70.36	7,398.4	1,644.3	1,754.5	1,509.1	245.40	7.149		
18,900.0	11,450.0	18,361.4	10,858.9	131.0	130.4	70.35	7,498.4	1,643.6	1,754.6	1,506.2	248.41	7.063		
19,000.0	11,450.0	18,461.4	10,858.6	132.6	132.0	70.34	7,598.4	1,642.8	1,754.7	1,503.3	251.42	6.979		
19,100.0	11,450.0	18,561.4	10,858.3	134.2	133.6	70.33	7,698.4	1,642.0	1,754.8	1,500.4	254.44	6.897		
19,200.0	11,450.0	18,661.4	10,857.9	135.7	135.2	70.32	7,798.4	1,641.2	1,754.9	1,497.5	257.46	6.816		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,300.0	11,450.0	18,761.4	10,857.6	137.3	136.8	70.31	7,898.4	1,640.4	1,755.0	1,494.6	260.48	6.738		
19,400.0	11,450.0	18,861.4	10,857.3	138.9	138.4	70.30	7,998.4	1,639.6	1,755.2	1,491.6	263.50	6.661		
19,500.0	11,450.0	18,961.4	10,856.9	140.5	139.9	70.29	8,098.4	1,638.9	1,755.3	1,488.7	266.53	6.586		
19,600.0	11,450.0	19,061.4	10,856.6	142.1	141.5	70.28	8,198.4	1,638.1	1,755.4	1,485.8	269.56	6.512		
19,700.0	11,450.0	19,161.4	10,856.3	143.7	143.1	70.27	8,298.4	1,637.3	1,755.5	1,482.9	272.59	6.440		
19,800.0	11,450.0	19,261.4	10,855.9	145.3	144.7	70.26	8,398.4	1,636.5	1,755.6	1,480.0	275.63	6.370		
19,900.0	11,450.0	19,361.4	10,855.6	146.9	146.3	70.25	8,498.4	1,635.7	1,755.7	1,477.1	278.66	6.301		
20,000.0	11,450.0	19,461.4	10,855.3	148.5	147.9	70.24	8,598.4	1,634.9	1,755.8	1,474.1	281.70	6.233		
20,100.0	11,450.0	19,561.4	10,854.9	150.1	149.5	70.23	8,698.4	1,634.1	1,756.0	1,471.2	284.74	6.167		
20,200.0	11,450.0	19,661.4	10,854.6	151.7	151.1	70.22	8,798.4	1,633.4	1,756.1	1,468.3	287.79	6.102		
20,300.0	11,450.0	19,761.4	10,854.3	153.3	152.7	70.21	8,898.4	1,632.6	1,756.2	1,465.4	290.83	6.038		
20,400.0	11,450.0	19,861.4	10,853.9	154.9	154.3	70.20	8,998.4	1,631.8	1,756.3	1,462.4	293.88	5.976		
20,500.0	11,450.0	19,961.4	10,853.6	156.5	155.9	70.19	9,098.4	1,631.0	1,756.4	1,459.5	296.93	5.915		
20,600.0	11,450.0	20,061.4	10,853.3	158.1	157.5	70.18	9,198.4	1,630.2	1,756.5	1,456.5	299.98	5.855		
20,700.0	11,450.0	20,161.4	10,853.0	159.7	159.1	70.17	9,298.3	1,629.4	1,756.6	1,453.6	303.03	5.797		
20,800.0	11,450.0	20,261.4	10,852.6	161.3	160.7	70.16	9,398.3	1,628.6	1,756.8	1,450.7	306.09	5.739		
20,900.0	11,450.0	20,361.4	10,852.3	162.9	162.3	70.14	9,498.3	1,627.9	1,756.9	1,447.7	309.14	5.683		
21,000.0	11,450.0	20,461.4	10,852.0	164.5	163.9	70.13	9,598.3	1,627.1	1,757.0	1,444.8	312.20	5.628		
21,100.0	11,450.0	20,561.4	10,851.6	166.1	165.5	70.12	9,698.3	1,626.3	1,757.1	1,441.8	315.26	5.573		
21,200.0	11,450.0	20,661.4	10,851.3	167.7	167.2	70.11	9,798.3	1,625.5	1,757.2	1,438.9	318.32	5.520		
21,300.0	11,450.0	20,761.4	10,851.0	169.3	168.8	70.10	9,898.3	1,624.7	1,757.3	1,436.0	321.38	5.468		
21,400.0	11,450.0	20,861.4	10,850.6	170.9	170.4	70.09	9,998.3	1,623.9	1,757.5	1,433.0	324.45	5.417		
21,500.0	11,450.0	20,961.4	10,850.3	172.5	172.0	70.08	10,098.3	1,623.1	1,757.6	1,430.1	327.51	5.366		
21,600.0	11,450.0	21,061.4	10,850.0	174.2	173.6	70.07	10,198.3	1,622.4	1,757.7	1,427.1	330.58	5.317		
21,614.7	11,450.0	21,076.0	10,849.9	174.4	173.8	70.07	10,213.0	1,622.2	1,757.7	1,426.7	331.00	5.310 ES, SF		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	1.0	-1.0	0.0	0.0	88.65	57.9	2,453.1	2,453.7					
100.0	100.0	101.0	99.0	0.1	0.1	88.65	57.9	2,453.1	2,453.7	2,453.5	0.26	9,441.408		
200.0	200.0	201.0	199.0	0.5	0.5	88.65	57.9	2,453.1	2,453.7	2,452.8	0.98	2,511.937		
300.0	300.0	301.0	299.0	0.8	0.8	88.65	57.9	2,453.1	2,453.7	2,452.1	1.69	1,448.683		
400.0	400.0	401.0	399.0	1.2	1.2	88.65	57.9	2,453.1	2,453.7	2,451.3	2.41	1,017.848		
500.0	500.0	501.0	499.0	1.6	1.6	88.65	57.9	2,453.1	2,453.7	2,450.6	3.13	784.531		
600.0	600.0	601.0	599.0	1.9	1.9	88.65	57.9	2,453.1	2,453.7	2,449.9	3.84	638.231		
700.0	700.0	701.0	699.0	2.3	2.3	88.65	57.9	2,453.1	2,453.7	2,449.2	4.56	537.920		
800.0	800.0	801.0	799.0	2.6	2.6	88.65	57.9	2,453.1	2,453.7	2,448.5	5.28	464.858		
900.0	900.0	901.0	899.0	3.0	3.0	88.65	57.9	2,453.1	2,453.7	2,447.8	6.00	409.269		
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	88.65	57.9	2,453.1	2,453.7	2,447.0	6.71	365.556		
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	-61.16	57.9	2,453.1	2,453.3	2,445.9	7.41	330.964		
1,200.0	1,200.0	1,201.0	1,199.0	4.0	4.1	-61.22	57.9	2,453.1	2,452.1	2,444.0	8.10	302.691		
1,300.0	1,299.9	1,301.1	1,298.9	4.4	4.4	-61.33	57.9	2,453.1	2,450.0	2,441.2	8.79	278.578		
1,400.0	1,399.7	1,401.3	1,398.7	4.7	4.8	-61.48	57.9	2,453.1	2,447.0	2,437.5	9.49	257.754		
1,500.0	1,499.4	1,501.6	1,498.4	5.0	5.2	-61.68	57.9	2,453.1	2,443.3	2,433.1	10.20	239.570		
1,600.0	1,598.9	1,602.1	1,597.9	5.4	5.5	-61.91	57.9	2,453.1	2,438.8	2,427.8	10.91	223.529		
1,700.0	1,698.3	1,702.7	1,697.3	5.8	5.9	-62.19	57.9	2,453.1	2,433.4	2,421.8	11.63	209.252		
1,800.0	1,797.4	1,803.6	1,796.4	6.1	6.2	-62.52	57.9	2,453.1	2,427.3	2,415.0	12.36	196.442		
1,900.0	1,896.4	1,904.6	1,895.4	6.5	6.6	-62.81	57.9	2,453.1	2,420.9	2,407.8	13.09	184.928		
2,000.0	1,995.5	1,994.5	1,994.5	6.9	6.9	-63.10	57.9	2,453.1	2,414.5	2,400.7	13.79	175.083		
2,100.0	2,094.5	2,068.8	2,068.8	7.3	7.2	-63.32	57.7	2,453.4	2,408.7	2,394.2	14.43	166.915		
2,200.0	2,193.5	2,141.9	2,141.9	7.7	7.4	-63.52	57.1	2,454.6	2,404.0	2,388.9	15.06	159.592		
2,300.0	2,292.5	2,215.1	2,215.1	8.1	7.7	-63.71	56.0	2,456.6	2,400.4	2,384.7	15.70	152.939		
2,400.0	2,391.6	2,288.6	2,288.4	8.5	7.9	-63.88	54.5	2,459.5	2,398.0	2,381.6	16.33	146.841		
2,500.0	2,490.6	2,362.1	2,361.9	8.9	8.2	-64.05	52.6	2,463.2	2,396.6	2,379.7	16.97	141.245		
2,569.0	2,558.9	2,412.9	2,412.5	9.2	8.3	-64.16	50.9	2,466.2	2,396.4	2,379.0	17.41	137.653 CC		
2,600.0	2,589.6	2,435.7	2,435.3	9.3	8.4	-64.21	50.2	2,467.7	2,396.4	2,378.8	17.61	136.103 ES		
2,700.0	2,688.6	2,509.5	2,508.8	9.7	8.7	-64.35	47.3	2,473.0	2,397.3	2,379.1	18.25	131.373		
2,729.0	2,717.4	2,530.9	2,530.1	9.8	8.7	-64.39	46.4	2,474.8	2,397.8	2,379.3	18.43	130.072		
2,800.0	2,787.8	2,583.3	2,582.3	10.1	8.9	-64.49	44.0	2,479.2	2,399.6	2,380.7	18.89	127.049		
2,900.0	2,887.2	2,657.1	2,655.7	10.5	9.2	-64.62	40.2	2,486.3	2,404.1	2,384.5	19.52	123.184		
3,000.0	2,986.8	2,730.9	2,729.0	10.9	9.5	-64.73	36.0	2,494.2	2,410.7	2,390.6	20.13	119.747		
3,100.0	3,086.7	2,806.1	2,803.5	11.2	9.7	-64.81	31.3	2,503.0	2,419.6	2,398.8	20.74	116.661		
3,200.0	3,186.6	2,905.5	2,901.8	11.6	10.1	-64.83	24.8	2,515.2	2,430.0	2,408.5	21.44	113.337		
3,262.3	3,249.0	2,967.2	2,963.0	11.8	10.3	84.96	20.8	2,522.8	2,437.1	2,415.2	21.87	111.448		
3,300.0	3,286.6	3,004.5	3,000.0	11.9	10.5	85.02	18.3	2,527.4	2,441.5	2,419.3	22.12	110.369		
3,400.0	3,386.6	3,103.6	3,098.0	12.2	10.8	85.20	11.8	2,539.6	2,453.2	2,430.4	22.80	107.609		
3,500.0	3,486.6	3,202.6	3,196.1	12.6	11.2	85.37	5.4	2,551.7	2,464.9	2,441.4	23.48	104.991		
3,600.0	3,586.6	3,301.6	3,294.1	12.9	11.6	85.55	-1.1	2,563.9	2,476.7	2,452.5	24.16	102.508		
3,700.0	3,686.6	3,400.7	3,392.2	13.2	12.0	85.72	-7.6	2,576.0	2,488.4	2,463.6	24.85	100.149		
3,800.0	3,786.6	3,500.3	3,490.3	13.5	12.3	85.89	-14.1	2,588.2	2,500.3	2,474.7	25.54	97.898		
3,900.0	3,886.6	3,598.7	3,588.3	13.9	12.7	86.06	-20.6	2,600.4	2,512.1	2,485.8	26.23	95.774		
4,000.0	3,986.6	3,702.3	3,686.4	14.2	13.1	86.23	-27.1	2,612.5	2,523.9	2,497.0	26.94	93.685		
4,100.0	4,086.6	3,803.2	3,784.5	14.6	13.5	86.39	-33.5	2,624.7	2,535.8	2,508.1	27.64	91.729		
4,200.0	4,186.6	3,904.2	3,882.5	14.9	13.9	86.55	-40.0	2,636.8	2,547.7	2,519.3	28.35	89.864		
4,300.0	4,286.6	4,005.2	3,980.6	15.2	14.3	86.72	-46.5	2,649.0	2,559.6	2,530.5	29.06	88.085		
4,400.0	4,386.6	4,106.2	4,078.7	15.6	14.7	86.88	-53.0	2,661.2	2,571.5	2,541.7	29.77	86.386		
4,500.0	4,486.6	4,207.1	4,176.7	15.9	15.1	87.04	-59.5	2,673.3	2,583.5	2,553.0	30.48	84.762		
4,600.0	4,586.6	4,291.9	4,274.8	16.2	15.5	87.20	-66.0	2,685.5	2,595.4	2,564.3	31.13	83.371		
4,700.0	4,686.6	4,409.1	4,372.8	16.6	15.9	87.35	-72.4	2,697.7	2,607.4	2,575.5	31.91	81.723		
4,800.0	4,786.6	4,489.9	4,470.9	16.9	16.3	87.51	-78.9	2,709.8	2,619.4	2,586.9	32.55	80.485		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,900.0	4,886.6	4,589.0	4,569.0	17.3	16.7	87.66	-85.4	2,722.0	2,631.4	2,598.2	33.25	79.131		
5,000.0	4,986.6	4,688.0	4,667.0	17.6	17.1	87.81	-91.9	2,734.1	2,643.5	2,609.5	33.96	77.831		
5,100.0	5,086.6	4,787.0	4,765.1	18.0	17.5	87.96	-98.4	2,746.3	2,655.5	2,620.9	34.68	76.583		
5,200.0	5,186.6	4,886.1	4,863.2	18.3	17.9	88.11	-104.9	2,758.5	2,667.6	2,632.2	35.39	75.384		
5,300.0	5,286.6	4,985.1	4,961.2	18.6	18.3	88.26	-111.3	2,770.6	2,679.7	2,643.6	36.10	74.231		
5,400.0	5,386.6	5,084.1	5,059.3	19.0	18.7	88.41	-117.8	2,782.8	2,691.8	2,655.0	36.81	73.121		
5,500.0	5,486.6	5,183.1	5,157.3	19.3	19.1	88.55	-124.3	2,795.0	2,704.0	2,666.4	37.53	72.053		
5,600.0	5,586.6	5,282.2	5,255.4	19.7	19.5	88.70	-130.8	2,807.1	2,716.1	2,677.9	38.24	71.024		
5,700.0	5,686.6	5,381.2	5,353.5	20.0	19.9	88.84	-137.3	2,819.3	2,728.3	2,689.3	38.96	70.031		
5,800.0	5,786.6	5,800.0	5,463.4	20.4	21.6	89.00	-144.5	2,832.8	2,740.4	2,699.5	40.89	67.016		
5,900.0	5,886.6	5,780.2	5,750.1	20.7	21.5	89.27	-157.2	2,856.6	2,748.4	2,707.1	41.24	66.645		
6,000.0	5,986.6	6,015.9	5,985.6	21.1	22.3	89.33	-160.0	2,862.0	2,750.3	2,708.0	42.37	64.909		
6,100.0	6,086.6	6,115.9	6,085.6	21.4	22.6	89.33	-160.0	2,862.0	2,750.3	2,707.3	43.06	63.876		
6,200.0	6,186.6	6,215.9	6,185.6	21.8	22.9	89.33	-160.0	2,862.0	2,750.3	2,706.6	43.74	62.873		
6,300.0	6,286.6	6,315.9	6,285.6	22.1	23.3	89.33	-160.0	2,862.0	2,750.3	2,705.9	44.43	61.900		
6,400.0	6,386.6	6,415.9	6,385.6	22.5	23.6	89.33	-160.0	2,862.0	2,750.3	2,705.2	45.12	60.955		
6,500.0	6,486.6	6,515.9	6,485.6	22.8	23.9	89.33	-160.0	2,862.0	2,750.3	2,704.5	45.81	60.038		
6,600.0	6,586.6	6,615.9	6,585.6	23.2	24.2	89.33	-160.0	2,862.0	2,750.3	2,703.8	46.50	59.147		
6,700.0	6,686.6	6,715.9	6,685.6	23.5	24.6	89.33	-160.0	2,862.0	2,750.3	2,703.1	47.19	58.281		
6,800.0	6,786.6	6,815.9	6,785.6	23.9	24.9	89.33	-160.0	2,862.0	2,750.3	2,702.5	47.88	57.439		
6,900.0	6,886.6	6,915.9	6,885.6	24.2	25.2	89.33	-160.0	2,862.0	2,750.3	2,701.8	48.58	56.620		
7,000.0	6,986.6	7,015.9	6,985.6	24.6	25.6	89.33	-160.0	2,862.0	2,750.3	2,701.1	49.27	55.824		
7,100.0	7,086.6	7,115.9	7,085.6	24.9	25.9	89.33	-160.0	2,862.0	2,750.3	2,700.4	49.96	55.048		
7,200.0	7,186.6	7,215.9	7,185.6	25.3	26.3	89.33	-160.0	2,862.0	2,750.3	2,699.7	50.66	54.294		
7,300.0	7,286.6	7,315.9	7,285.6	25.6	26.6	89.33	-160.0	2,862.0	2,750.3	2,699.0	51.35	53.559		
7,400.0	7,386.6	7,415.9	7,385.6	26.0	26.9	89.33	-160.0	2,862.0	2,750.3	2,698.3	52.05	52.843		
7,500.0	7,486.6	7,515.9	7,485.6	26.3	27.3	89.33	-160.0	2,862.0	2,750.3	2,697.6	52.74	52.145		
7,600.0	7,586.6	7,615.9	7,585.6	26.7	27.6	89.33	-160.0	2,862.0	2,750.3	2,696.9	53.44	51.465		
7,700.0	7,686.6	7,715.9	7,685.6	27.0	27.9	89.33	-160.0	2,862.0	2,750.3	2,696.2	54.14	50.802		
7,800.0	7,786.6	7,815.9	7,785.6	27.4	28.3	89.33	-160.0	2,862.0	2,750.3	2,695.5	54.84	50.156		
7,900.0	7,886.6	7,915.9	7,885.6	27.7	28.6	89.33	-160.0	2,862.0	2,750.3	2,694.8	55.53	49.525		
8,000.0	7,986.6	8,015.9	7,985.6	28.1	29.0	89.33	-160.0	2,862.0	2,750.3	2,694.1	56.23	48.910		
8,100.0	8,086.6	8,115.9	8,085.6	28.4	29.3	89.33	-160.0	2,862.0	2,750.3	2,693.4	56.93	48.309		
8,200.0	8,186.6	8,215.9	8,185.6	28.8	29.6	89.33	-160.0	2,862.0	2,750.3	2,692.7	57.63	47.723		
8,300.0	8,286.6	8,315.9	8,285.6	29.1	30.0	89.33	-160.0	2,862.0	2,750.3	2,692.0	58.33	47.150		
8,400.0	8,386.6	8,415.9	8,385.6	29.5	30.3	89.33	-160.0	2,862.0	2,750.3	2,691.3	59.03	46.590		
8,500.0	8,486.6	8,515.9	8,485.6	29.8	30.7	89.33	-160.0	2,862.0	2,750.3	2,690.6	59.73	46.044		
8,600.0	8,586.6	8,615.9	8,585.6	30.2	31.0	89.33	-160.0	2,862.0	2,750.3	2,689.9	60.43	45.510		
8,700.0	8,686.6	8,715.9	8,685.6	30.6	31.3	89.33	-160.0	2,862.0	2,750.3	2,689.2	61.14	44.987		
8,800.0	8,786.6	8,815.9	8,785.6	30.9	31.7	89.33	-160.0	2,862.0	2,750.3	2,688.5	61.84	44.477		
8,900.0	8,886.6	8,915.9	8,885.6	31.3	32.0	89.33	-160.0	2,862.0	2,750.3	2,687.8	62.54	43.977		
9,000.0	8,986.6	9,015.9	8,985.6	31.6	32.4	89.33	-160.0	2,862.0	2,750.3	2,687.1	63.24	43.489		
9,100.0	9,086.6	9,115.9	9,085.6	32.0	32.7	89.33	-160.0	2,862.0	2,750.3	2,686.4	63.95	43.010		
9,200.0	9,186.6	9,215.9	9,185.6	32.3	33.1	89.33	-160.0	2,862.0	2,750.3	2,685.7	64.65	42.543		
9,300.0	9,286.6	9,315.9	9,285.6	32.7	33.4	89.33	-160.0	2,862.0	2,750.3	2,685.0	65.35	42.085		
9,400.0	9,386.6	9,415.9	9,385.6	33.0	33.7	89.33	-160.0	2,862.0	2,750.3	2,684.3	66.06	41.636		
9,500.0	9,486.6	9,515.9	9,485.6	33.4	34.1	89.33	-160.0	2,862.0	2,750.3	2,683.6	66.76	41.197		
9,600.0	9,586.6	9,615.9	9,585.6	33.7	34.4	89.33	-160.0	2,862.0	2,750.3	2,682.9	67.46	40.767		
9,700.0	9,686.6	9,715.9	9,685.6	34.1	34.8	89.33	-160.0	2,862.0	2,750.3	2,682.2	68.17	40.346		
9,800.0	9,786.6	9,815.9	9,785.6	34.5	35.1	89.33	-160.0	2,862.0	2,750.3	2,681.5	68.87	39.933		
9,900.0	9,886.6	9,915.9	9,885.6	34.8	35.5	89.33	-160.0	2,862.0	2,750.3	2,680.8	69.58	39.528		
10,000.0	9,986.6	10,015.9	9,985.6	35.2	35.8	89.33	-160.0	2,862.0	2,750.3	2,680.0	70.28	39.131		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,100.0	10,086.6	10,115.9	10,085.6	35.5	36.2	89.33	-160.0	2,862.0	2,750.3	2,679.3	70.99	38.742		
10,200.0	10,186.6	10,215.9	10,185.6	35.9	36.5	89.33	-160.0	2,862.0	2,750.3	2,678.6	71.70	38.361		
10,300.0	10,286.6	10,315.9	10,285.6	36.2	36.9	89.33	-160.0	2,862.0	2,750.3	2,677.9	72.40	37.987		
10,400.0	10,386.6	10,415.9	10,385.6	36.6	37.2	89.33	-160.0	2,862.0	2,750.3	2,677.2	73.11	37.620		
10,500.0	10,486.6	10,470.4	10,440.1	36.9	37.4	89.29	-158.0	2,862.4	2,751.1	2,677.4	73.67	37.343		
10,600.0	10,586.6	10,521.3	10,490.6	37.3	37.6	89.16	-151.5	2,863.6	2,753.7	2,679.5	74.20	37.112		
10,700.0	10,686.6	10,570.7	10,538.8	37.6	37.7	88.94	-141.1	2,865.5	2,758.0	2,683.3	74.69	36.926		
10,800.0	10,786.6	10,617.9	10,583.9	38.0	37.9	88.66	-127.3	2,868.0	2,764.3	2,689.2	75.14	36.787		
10,890.4	10,877.0	10,650.0	10,613.8	38.3	38.0	88.42	-115.9	2,870.2	2,771.8	2,696.3	75.48	36.723		
10,900.0	10,886.6	10,662.6	10,625.3	38.4	38.0	93.63	-111.0	2,871.1	2,772.7	2,697.1	75.55	36.699		
10,950.0	10,936.5	10,684.3	10,645.0	38.5	38.1	92.95	-101.9	2,872.8	2,777.8	2,702.1	75.74	36.677		
11,000.0	10,986.0	10,700.0	10,659.0	38.7	38.1	92.25	-94.9	2,874.1	2,783.7	2,707.8	75.88	36.688		
11,050.0	11,034.6	10,728.0	10,683.4	38.9	38.2	91.44	-81.4	2,876.6	2,790.3	2,714.2	76.06	36.686		
11,100.0	11,082.0	10,750.0	10,702.1	39.0	38.2	90.61	-70.1	2,878.7	2,797.4	2,721.2	76.20	36.712		
11,150.0	11,127.8	10,771.8	10,720.2	39.2	38.3	89.76	-58.1	2,880.9	2,805.2	2,728.8	76.33	36.752		
11,200.0	11,171.8	10,800.0	10,742.9	39.3	38.3	88.87	-41.7	2,883.9	2,813.4	2,736.9	76.48	36.786		
11,250.0	11,213.5	10,815.4	10,754.9	39.4	38.4	87.98	-32.2	2,885.7	2,821.9	2,745.4	76.56	36.859		
11,300.0	11,252.6	10,837.2	10,771.5	39.5	38.4	87.07	-18.3	2,888.3	2,830.8	2,754.2	76.67	36.922		
11,350.0	11,288.9	10,850.0	10,781.0	39.7	38.4	86.15	-9.8	2,889.8	2,840.0	2,763.3	76.74	37.010		
11,400.0	11,322.0	10,880.5	10,802.8	39.8	38.5	85.26	11.1	2,893.7	2,849.4	2,772.5	76.90	37.053		
11,450.0	11,351.8	10,900.0	10,816.1	39.9	38.5	84.35	25.1	2,896.3	2,858.8	2,781.8	77.01	37.122		
11,500.0	11,377.9	10,923.4	10,831.5	40.0	38.6	83.48	42.5	2,899.5	2,868.4	2,791.2	77.16	37.177		
11,550.0	11,400.3	10,950.0	10,848.0	40.1	38.6	82.65	62.9	2,903.3	2,877.9	2,800.6	77.33	37.217		
11,600.0	11,418.6	10,965.9	10,857.4	40.3	38.6	81.79	75.5	2,905.6	2,887.4	2,809.9	77.46	37.275		
11,650.0	11,432.8	10,986.9	10,869.4	40.4	38.6	81.00	92.5	2,908.8	2,896.8	2,819.1	77.64	37.310		
11,700.0	11,442.8	11,000.0	10,876.5	40.5	38.7	80.18	103.3	2,910.8	2,906.0	2,828.2	77.80	37.353		
11,750.0	11,448.5	11,028.4	10,891.0	40.7	38.7	79.53	127.4	2,915.3	2,914.9	2,836.9	78.05	37.349		
11,790.4	11,450.0	11,050.0	10,901.2	40.8	38.7	79.03	146.1	2,918.7	2,922.0	2,843.8	78.25	37.343		
11,800.0	11,450.0	11,050.0	10,901.2	40.8	38.7	79.04	146.1	2,918.7	2,923.7	2,845.4	78.27	37.352		
11,900.0	11,450.0	11,100.0	10,922.1	41.1	38.8	79.55	190.7	2,927.0	2,940.2	2,861.4	78.80	37.311		
12,000.0	11,450.0	11,138.1	10,935.3	41.5	38.9	79.89	225.8	2,933.5	2,955.2	2,875.9	79.33	37.253		
12,037.8	11,450.0	11,150.0	10,938.9	41.7	38.9	79.98	237.0	2,935.6	2,960.5	2,881.0	79.53	37.225		
12,100.0	11,450.0	11,187.2	10,948.7	41.9	39.0	80.19	272.3	2,942.1	2,969.4	2,889.4	79.94	37.143		
12,200.0	11,450.0	11,238.5	10,958.4	42.4	39.1	80.41	321.8	2,951.3	2,984.9	2,904.3	80.61	37.028		
12,300.0	11,450.0	11,291.1	10,963.6	43.0	39.3	80.54	373.3	2,960.8	3,002.1	2,920.7	81.33	36.912		
12,400.0	11,450.0	11,930.6	10,962.5	43.6	42.3	80.70	1,009.2	3,014.2	3,011.4	2,926.6	84.73	35.539		
12,500.0	11,450.0	12,030.6	10,962.1	44.3	42.9	80.70	1,109.2	3,013.4	3,011.4	2,925.4	86.05	34.995		
12,600.0	11,450.0	12,130.6	10,961.8	45.0	43.6	80.69	1,209.2	3,012.6	3,011.5	2,924.0	87.48	34.427		
12,700.0	11,450.0	12,230.6	10,961.5	45.8	44.4	80.68	1,309.2	3,011.8	3,011.5	2,922.5	89.00	33.839		
12,800.0	11,450.0	12,330.6	10,961.2	46.6	45.2	80.68	1,409.2	3,011.1	3,011.6	2,921.0	90.61	33.237		
12,900.0	11,450.0	12,430.6	10,960.8	47.4	46.0	80.67	1,509.2	3,010.3	3,011.7	2,919.4	92.31	32.625		
13,000.0	11,450.0	12,530.6	10,960.5	48.3	46.9	80.67	1,609.2	3,009.5	3,011.7	2,917.6	94.10	32.007		
13,100.0	11,450.0	12,630.5	10,960.2	49.3	47.8	80.66	1,709.2	3,008.7	3,011.8	2,915.8	95.96	31.385		
13,200.0	11,450.0	12,730.5	10,959.9	50.3	48.8	80.65	1,809.1	3,007.9	3,011.9	2,914.0	97.90	30.764		
13,300.0	11,450.0	12,830.5	10,959.6	51.3	49.8	80.65	1,909.1	3,007.2	3,011.9	2,912.0	99.91	30.146		
13,400.0	11,450.0	12,930.5	10,959.2	52.3	50.9	80.64	2,009.1	3,006.4	3,012.0	2,910.0	101.99	29.533		
13,500.0	11,450.0	13,030.5	10,958.9	53.4	51.9	80.64	2,109.1	3,005.6	3,012.0	2,907.9	104.12	28.928		
13,600.0	11,450.0	13,130.5	10,958.6	54.5	53.0	80.63	2,209.1	3,004.8	3,012.1	2,905.8	106.32	28.331		
13,700.0	11,450.0	13,230.5	10,958.3	55.6	54.2	80.62	2,309.1	3,004.0	3,012.2	2,903.6	108.57	27.744		
13,800.0	11,450.0	13,330.5	10,957.9	56.8	55.3	80.62	2,409.1	3,003.3	3,012.2	2,901.4	110.87	27.169		
13,900.0	11,450.0	13,430.5	10,957.6	58.0	56.5	80.61	2,509.1	3,002.5	3,012.3	2,899.1	113.22	26.605		
14,000.0	11,450.0	13,530.5	10,957.3	59.2	57.7	80.61	2,609.1	3,001.7	3,012.3	2,896.7	115.62	26.055		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,100.0	11,450.0	13,630.5	10,957.0	60.4	58.9	80.60	2,709.1	3,000.9	3,012.4	2,894.4	118.05	25.517		
14,200.0	11,450.0	13,730.5	10,956.6	61.7	60.2	80.59	2,809.1	3,000.1	3,012.5	2,891.9	120.53	24.993		
14,300.0	11,450.0	13,830.5	10,956.3	62.9	61.4	80.59	2,909.1	2,999.4	3,012.5	2,889.5	123.05	24.483		
14,400.0	11,450.0	13,930.5	10,956.0	64.2	62.7	80.58	3,009.1	2,998.6	3,012.6	2,887.0	125.60	23.986		
14,500.0	11,450.0	14,030.5	10,955.7	65.5	64.0	80.58	3,109.1	2,997.8	3,012.7	2,884.5	128.18	23.503		
14,600.0	11,450.0	14,130.5	10,955.4	66.8	65.3	80.57	3,209.1	2,997.0	3,012.7	2,881.9	130.80	23.034		
14,700.0	11,450.0	14,230.5	10,955.0	68.2	66.7	80.56	3,309.1	2,996.3	3,012.8	2,879.3	133.44	22.578		
14,800.0	11,450.0	14,330.5	10,954.7	69.5	68.0	80.56	3,409.1	2,995.5	3,012.8	2,876.7	136.11	22.135		
14,900.0	11,450.0	14,430.5	10,954.4	70.9	69.4	80.55	3,509.1	2,994.7	3,012.9	2,874.1	138.81	21.705		
15,000.0	11,450.0	14,530.5	10,954.1	72.2	70.8	80.55	3,609.1	2,993.9	3,013.0	2,871.4	141.53	21.288		
15,100.0	11,450.0	14,630.5	10,953.7	73.6	72.1	80.54	3,709.1	2,993.1	3,013.0	2,868.8	144.28	20.884		
15,200.0	11,450.0	14,730.5	10,953.4	75.0	73.5	80.53	3,809.1	2,992.4	3,013.1	2,866.0	147.04	20.491		
15,300.0	11,450.0	14,830.5	10,953.1	76.4	74.9	80.53	3,909.1	2,991.6	3,013.2	2,863.3	149.83	20.110		
15,400.0	11,450.0	14,930.5	10,952.8	77.8	76.4	80.52	4,009.1	2,990.8	3,013.2	2,860.6	152.64	19.741		
15,500.0	11,450.0	15,030.5	10,952.4	79.3	77.8	80.52	4,109.1	2,990.0	3,013.3	2,857.8	155.46	19.382		
15,600.0	11,450.0	15,130.5	10,952.1	80.7	79.2	80.51	4,209.0	2,989.2	3,013.3	2,855.0	158.31	19.035		
15,700.0	11,450.0	15,230.5	10,951.8	82.1	80.7	80.50	4,309.0	2,988.5	3,013.4	2,852.2	161.17	18.697		
15,800.0	11,450.0	15,330.5	10,951.5	83.6	82.1	80.50	4,409.0	2,987.7	3,013.5	2,849.4	164.04	18.370		
15,900.0	11,450.0	15,430.5	10,951.2	85.0	83.6	80.49	4,509.0	2,986.9	3,013.5	2,846.6	166.93	18.052		
16,000.0	11,450.0	15,530.5	10,950.8	86.5	85.1	80.49	4,609.0	2,986.1	3,013.6	2,843.8	169.84	17.744		
16,100.0	11,450.0	15,630.5	10,950.5	88.0	86.5	80.48	4,709.0	2,985.3	3,013.7	2,840.9	172.75	17.445		
16,200.0	11,450.0	15,730.5	10,950.2	89.4	88.0	80.47	4,809.0	2,984.6	3,013.7	2,838.0	175.68	17.154		
16,300.0	11,450.0	15,830.5	10,949.9	90.9	89.5	80.47	4,909.0	2,983.8	3,013.8	2,835.2	178.62	16.872		
16,400.0	11,450.0	15,930.5	10,949.5	92.4	91.0	80.46	5,009.0	2,983.0	3,013.8	2,832.3	181.58	16.598		
16,500.0	11,450.0	16,030.5	10,949.2	93.9	92.5	80.46	5,109.0	2,982.2	3,013.9	2,829.4	184.54	16.332		
16,600.0	11,450.0	16,130.5	10,948.9	95.4	94.0	80.45	5,209.0	2,981.5	3,014.0	2,826.4	187.52	16.073		
16,700.0	11,450.0	16,230.5	10,948.6	96.9	95.5	80.44	5,309.0	2,980.7	3,014.0	2,823.5	190.50	15.822		
16,800.0	11,450.0	16,330.5	10,948.2	98.4	97.0	80.44	5,409.0	2,979.9	3,014.1	2,820.6	193.50	15.577		
16,900.0	11,450.0	16,430.5	10,947.9	100.0	98.5	80.43	5,509.0	2,979.1	3,014.2	2,817.7	196.50	15.339		
17,000.0	11,450.0	16,530.5	10,947.6	101.5	100.0	80.43	5,609.0	2,978.3	3,014.2	2,814.7	199.51	15.108		
17,100.0	11,450.0	16,630.5	10,947.3	103.0	101.6	80.42	5,709.0	2,977.6	3,014.3	2,811.7	202.53	14.883		
17,200.0	11,450.0	16,730.5	10,947.0	104.5	103.1	80.41	5,809.0	2,976.8	3,014.3	2,808.8	205.56	14.664		
17,300.0	11,450.0	16,830.5	10,946.6	106.1	104.6	80.41	5,909.0	2,976.0	3,014.4	2,805.8	208.59	14.451		
17,400.0	11,450.0	16,930.5	10,946.3	107.6	106.2	80.40	6,009.0	2,975.2	3,014.5	2,802.8	211.64	14.244		
17,500.0	11,450.0	17,030.5	10,946.0	109.1	107.7	80.39	6,109.0	2,974.4	3,014.5	2,799.8	214.68	14.042		
17,600.0	11,450.0	17,130.5	10,945.7	110.7	109.3	80.39	6,209.0	2,973.7	3,014.6	2,796.9	217.74	13.845		
17,700.0	11,450.0	17,230.5	10,945.3	112.2	110.8	80.38	6,309.0	2,972.9	3,014.7	2,793.9	220.80	13.653		
17,800.0	11,450.0	17,330.5	10,945.0	113.8	112.4	80.38	6,409.0	2,972.1	3,014.7	2,790.9	223.87	13.466		
17,900.0	11,450.0	17,430.5	10,944.7	115.3	113.9	80.37	6,509.0	2,971.3	3,014.8	2,787.8	226.94	13.284		
18,000.0	11,450.0	17,530.5	10,944.4	116.9	115.5	80.36	6,609.0	2,970.5	3,014.8	2,784.8	230.02	13.107		
18,100.0	11,450.0	17,630.5	10,944.0	118.4	117.0	80.36	6,708.9	2,969.8	3,014.9	2,781.8	233.11	12.934		
18,200.0	11,450.0	17,730.5	10,943.7	120.0	118.6	80.35	6,808.9	2,969.0	3,015.0	2,778.8	236.20	12.765		
18,300.0	11,450.0	17,830.5	10,943.4	121.6	120.2	80.35	6,908.9	2,968.2	3,015.0	2,775.7	239.29	12.600		
18,400.0	11,450.0	17,930.5	10,943.1	123.1	121.7	80.34	7,008.9	2,967.4	3,015.1	2,772.7	242.39	12.439		
18,500.0	11,450.0	18,030.5	10,942.8	124.7	123.3	80.33	7,108.9	2,966.7	3,015.2	2,769.7	245.49	12.282		
18,600.0	11,450.0	18,130.5	10,942.4	126.3	124.9	80.33	7,208.9	2,965.9	3,015.2	2,766.6	248.60	12.129		
18,700.0	11,450.0	18,230.5	10,942.1	127.8	126.4	80.32	7,308.9	2,965.1	3,015.3	2,763.6	251.71	11.979		
18,800.0	11,450.0	18,330.5	10,941.8	129.4	128.0	80.32	7,408.9	2,964.3	3,015.4	2,760.5	254.83	11.833		
18,900.0	11,450.0	18,430.5	10,941.5	131.0	129.6	80.31	7,508.9	2,963.5	3,015.4	2,757.5	257.95	11.690		
19,000.0	11,450.0	18,530.5	10,941.1	132.6	131.2	80.30	7,608.9	2,962.8	3,015.5	2,754.4	261.07	11.550		
19,100.0	11,450.0	18,630.5	10,940.8	134.2	132.8	80.30	7,708.9	2,962.0	3,015.5	2,751.3	264.20	11.414		
19,200.0	11,450.0	18,730.5	10,940.5	135.7	134.4	80.29	7,808.9	2,961.2	3,015.6	2,748.3	267.33	11.280		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
19,300.0	11,450.0	18,830.5	10,940.2	137.3	135.9	80.29	7,908.9	2,960.4	3,015.7	2,745.2	270.47	11.150	
19,400.0	11,450.0	18,930.5	10,939.8	138.9	137.5	80.28	8,008.9	2,959.6	3,015.7	2,742.1	273.60	11.022	
19,500.0	11,450.0	19,030.5	10,939.5	140.5	139.1	80.27	8,108.9	2,958.9	3,015.8	2,739.1	276.75	10.897	
19,600.0	11,450.0	19,130.5	10,939.2	142.1	140.7	80.27	8,208.9	2,958.1	3,015.9	2,736.0	279.89	10.775	
19,700.0	11,450.0	19,230.5	10,938.9	143.7	142.3	80.26	8,308.9	2,957.3	3,015.9	2,732.9	283.04	10.656	
19,800.0	11,450.0	19,330.5	10,938.6	145.3	143.9	80.26	8,408.9	2,956.5	3,016.0	2,729.8	286.18	10.539	
19,900.0	11,450.0	19,430.5	10,938.2	146.9	145.5	80.25	8,508.9	2,955.7	3,016.1	2,726.7	289.34	10.424	
20,000.0	11,450.0	19,530.5	10,937.9	148.5	147.1	80.24	8,608.9	2,955.0	3,016.1	2,723.6	292.49	10.312	
20,100.0	11,450.0	19,630.5	10,937.6	150.1	148.7	80.24	8,708.9	2,954.2	3,016.2	2,720.5	295.65	10.202	
20,200.0	11,450.0	19,730.5	10,937.3	151.7	150.3	80.23	8,808.9	2,953.4	3,016.2	2,717.4	298.81	10.094	
20,300.0	11,450.0	19,830.5	10,936.9	153.3	151.9	80.23	8,908.9	2,952.6	3,016.3	2,714.3	301.97	9.989	
20,400.0	11,450.0	19,930.5	10,936.6	154.9	153.5	80.22	9,008.9	2,951.9	3,016.4	2,711.2	305.13	9.885	
20,500.0	11,450.0	20,030.5	10,936.3	156.5	155.1	80.21	9,108.8	2,951.1	3,016.4	2,708.1	308.30	9.784	
20,600.0	11,450.0	20,130.5	10,936.0	158.1	156.7	80.21	9,208.8	2,950.3	3,016.5	2,705.0	311.47	9.685	
20,700.0	11,450.0	20,230.5	10,935.6	159.7	158.3	80.20	9,308.8	2,949.5	3,016.6	2,701.9	314.64	9.587	
20,800.0	11,450.0	20,330.5	10,935.3	161.3	159.9	80.20	9,408.8	2,948.7	3,016.6	2,698.8	317.81	9.492	
20,900.0	11,450.0	20,430.5	10,935.0	162.9	161.5	80.19	9,508.8	2,948.0	3,016.7	2,695.7	320.99	9.398	
21,000.0	11,450.0	20,530.5	10,934.7	164.5	163.1	80.18	9,608.8	2,947.2	3,016.8	2,692.6	324.16	9.306	
21,100.0	11,450.0	20,630.5	10,934.4	166.1	164.7	80.18	9,708.8	2,946.4	3,016.8	2,689.5	327.34	9.216	
21,200.0	11,450.0	20,730.5	10,934.0	167.7	166.3	80.17	9,808.8	2,945.6	3,016.9	2,686.4	330.52	9.128	
21,300.0	11,450.0	20,830.5	10,933.7	169.3	167.9	80.17	9,908.8	2,944.8	3,016.9	2,683.2	333.70	9.041	
21,400.0	11,450.0	20,930.5	10,933.4	170.9	169.6	80.16	10,008.8	2,944.1	3,017.0	2,680.1	336.89	8.956	
21,500.0	11,450.0	21,030.5	10,933.1	172.5	171.2	80.15	10,108.8	2,943.3	3,017.1	2,677.0	340.07	8.872	
21,600.0	11,450.0	21,130.5	10,932.7	174.2	172.8	80.15	10,208.8	2,942.5	3,017.1	2,673.9	343.26	8.790	
21,614.7	11,450.0	21,145.2	10,932.7	174.4	173.0	80.15	10,223.5	2,942.4	3,017.2	2,673.5	343.70	8.778 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 #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 76-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-75.41	28.7	-110.3	114.0					
100.0	100.0	100.5	100.5	0.1	0.2	-75.25	28.9	-109.9	113.7	113.4	0.30	374.200		
200.0	200.0	200.0	200.0	0.5	0.5	-74.76	29.8	-109.4	113.4	112.4	1.02	111.687		
204.6	204.6	204.7	204.6	0.5	0.5	-74.73	29.9	-109.4	113.4	112.4	1.05	108.150 CC		
300.0	300.0	299.7	299.7	0.8	0.9	-73.88	31.5	-109.1	113.6	111.9	1.73	65.650		
400.0	400.0	399.6	399.6	1.2	1.2	-72.93	33.4	-108.9	113.9	111.5	2.45	46.561		
500.0	500.0	499.5	499.4	1.6	1.6	-72.09	35.2	-108.8	114.3	111.2	3.16	36.166		
600.0	600.0	599.6	599.5	1.9	2.0	-71.76	35.9	-109.1	114.8	111.0	3.87	29.635		
700.0	700.0	699.5	699.4	2.3	2.3	-71.31	36.9	-109.1	115.2	110.6	4.59	25.115		
800.0	800.0	799.2	799.1	2.6	2.7	-71.26	37.2	-109.7	115.8	110.5	5.29	21.881 ES		
900.0	900.0	898.5	898.4	3.0	3.0	-71.28	37.5	-110.6	116.7	110.7	6.00	19.461		
1,000.0	1,000.0	998.3	998.2	3.4	3.4	-71.03	38.5	-111.9	118.3	111.6	6.71	17.631		
1,100.0	1,100.0	1,098.7	1,098.6	3.7	3.7	139.71	39.4	-112.9	120.3	112.9	7.41	16.235		
1,200.0	1,200.0	1,198.9	1,198.8	4.0	4.1	140.80	40.4	-113.7	123.4	115.3	8.10	15.237		
1,300.0	1,299.9	1,299.1	1,299.0	4.4	4.4	142.40	41.5	-114.2	127.6	118.8	8.79	14.521		
1,400.0	1,399.7	1,399.2	1,399.1	4.7	4.8	144.38	42.6	-114.4	133.1	123.6	9.49	14.032		
1,500.0	1,499.4	1,499.0	1,498.8	5.0	5.1	146.58	43.6	-114.3	140.0	129.8	10.19	13.742		
1,600.0	1,598.9	1,598.6	1,598.4	5.4	5.5	148.85	44.4	-114.3	148.4	137.5	10.89	13.634		
1,700.0	1,698.3	1,698.2	1,698.1	5.8	5.9	151.16	45.0	-114.2	158.5	146.9	11.59	13.673		
1,800.0	1,797.4	1,797.8	1,797.6	6.1	6.2	153.45	45.5	-113.8	170.0	157.7	12.29	13.830		
1,900.0	1,896.4	1,897.0	1,896.9	6.5	6.6	155.61	46.0	-113.3	182.4	169.4	12.99	14.040		
2,000.0	1,995.5	1,996.4	1,996.2	6.9	6.9	157.48	46.3	-112.6	194.9	181.2	13.69	14.232		
2,100.0	2,094.5	2,095.7	2,095.6	7.3	7.2	159.14	46.5	-111.9	207.4	193.0	14.39	14.408		
2,200.0	2,193.5	2,195.0	2,194.8	7.7	7.6	160.64	46.8	-110.9	219.9	204.8	15.09	14.567		
2,300.0	2,292.5	2,293.9	2,293.7	8.1	7.9	161.99	47.1	-109.9	232.5	216.7	15.80	14.720		
2,400.0	2,391.6	2,392.7	2,392.6	8.5	8.3	163.21	47.4	-109.0	245.4	228.9	16.50	14.870		
2,500.0	2,490.6	2,491.6	2,491.5	8.9	8.6	164.33	47.9	-108.0	258.4	241.2	17.21	15.015		
2,600.0	2,589.6	2,590.7	2,590.6	9.3	9.0	165.37	48.5	-106.9	271.5	253.6	17.92	15.153		
2,700.0	2,688.6	2,690.2	2,690.0	9.7	9.3	166.37	49.2	-105.6	284.6	265.9	18.63	15.277		
2,729.0	2,717.4	2,719.0	2,718.8	9.8	9.4	166.65	49.4	-105.2	288.4	269.5	18.83	15.311		
2,800.0	2,787.8	2,789.3	2,789.1	10.1	9.7	167.32	50.0	-104.1	297.0	277.7	19.34	15.359		
2,900.0	2,887.2	2,888.4	2,888.2	10.5	10.0	168.12	50.9	-102.5	307.1	287.1	20.05	15.322		
3,000.0	2,986.8	2,988.1	2,987.9	10.9	10.4	168.77	51.8	-101.0	314.8	294.1	20.75	15.170		
3,100.0	3,086.7	3,088.4	3,088.2	11.2	10.7	169.19	52.3	-99.8	319.9	298.4	21.46	14.904		
3,200.0	3,186.6	3,189.7	3,189.5	11.6	11.1	169.49	52.5	-98.6	322.1	300.0	22.18	14.526		
3,262.3	3,249.0	3,253.2	3,252.9	11.8	11.3	-40.50	52.8	-97.3	322.0	299.4	22.62	14.237		
3,300.0	3,286.6	3,291.5	3,291.2	11.9	11.5	-40.34	53.0	-96.2	321.5	298.6	22.88	14.052		
3,400.0	3,386.6	3,388.1	3,387.8	12.2	11.8	-39.85	54.0	-93.5	320.5	297.0	23.55	13.608		
3,427.7	3,414.4	3,414.7	3,414.4	12.3	11.9	-39.70	54.5	-92.9	320.5	296.7	23.74	13.499		
3,500.0	3,486.6	3,484.0	3,483.6	12.6	12.1	-39.32	56.1	-91.4	320.8	296.6	24.22	13.244		
3,600.0	3,586.6	3,580.8	3,580.4	12.9	12.5	-39.00	58.3	-90.9	322.2	297.3	24.89	12.946		
3,700.0	3,686.6	3,679.0	3,678.6	13.2	12.8	-39.18	59.5	-93.1	324.6	299.0	25.57	12.695		
3,800.0	3,786.6	3,780.3	3,779.9	13.5	13.2	-39.53	60.0	-96.2	326.8	300.6	26.26	12.447		
3,900.0	3,886.6	3,882.2	3,881.7	13.9	13.5	-39.93	60.0	-99.1	328.7	301.7	26.96	12.192		
4,000.0	3,986.6	3,984.2	3,983.6	14.2	13.9	-40.36	59.3	-101.7	329.8	302.2	27.65	11.928		
4,100.0	4,086.6	4,085.9	4,085.3	14.6	14.2	-40.85	58.0	-104.3	330.5	302.1	28.35	11.659		
4,200.0	4,186.6	4,187.3	4,186.6	14.9	14.5	-41.39	56.1	-106.8	330.7	301.7	29.04	11.389		
4,206.0	4,192.6	4,193.3	4,192.7	14.9	14.6	-41.42	56.0	-106.9	330.7	301.6	29.08	11.372		
4,300.0	4,286.6	4,286.5	4,285.8	15.2	14.9	-41.95	54.0	-109.3	330.8	301.1	29.72	11.132		
4,400.0	4,386.6	4,385.2	4,384.4	15.6	15.2	-42.55	52.0	-112.2	331.2	300.8	30.40	10.896		
4,500.0	4,486.6	4,482.9	4,482.1	15.9	15.6	-43.30	49.8	-116.0	332.2	301.2	31.07	10.693		
4,600.0	4,586.6	4,581.1	4,580.1	16.2	15.9	-44.14	47.6	-120.7	333.9	302.2	31.75	10.517		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 76-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,700.0	4,686.6	4,679.7	4,678.6	16.6	16.2	-44.78	46.5	-124.8	336.1	303.7	32.44	10.363		
4,800.0	4,786.6	4,779.3	4,778.2	16.9	16.6	-45.20	46.5	-128.4	338.6	305.5	33.13	10.221		
4,900.0	4,886.6	4,879.6	4,878.4	17.3	16.9	-45.59	46.6	-131.8	341.1	307.3	33.83	10.083		
5,000.0	4,986.6	4,979.4	4,978.1	17.6	17.3	-45.96	46.7	-135.0	343.5	309.0	34.53	9.949		
5,100.0	5,086.6	5,078.8	5,077.5	18.0	17.6	-46.31	46.9	-138.3	346.1	310.8	35.22	9.825		
5,200.0	5,186.6	5,177.8	5,176.4	18.3	18.0	-46.87	46.3	-142.7	348.8	312.9	35.91	9.713		
5,300.0	5,286.6	5,275.2	5,273.6	18.6	18.3	-47.74	44.6	-148.6	352.2	315.6	36.59	9.624		
5,400.0	5,386.6	5,372.9	5,370.9	19.0	18.7	-48.97	41.6	-156.7	356.3	319.0	37.27	9.558		
5,500.0	5,486.6	5,473.8	5,471.2	19.3	19.0	-50.49	37.2	-166.1	360.6	322.6	37.98	9.494		
5,600.0	5,586.6	5,574.4	5,571.2	19.7	19.4	-52.17	31.5	-176.1	364.8	326.2	38.69	9.429		
5,700.0	5,686.6	5,674.5	5,670.6	20.0	19.7	-53.89	25.3	-186.1	369.1	329.7	39.40	9.368		
5,800.0	5,786.6	5,774.3	5,769.7	20.4	20.1	-55.59	18.8	-196.0	373.5	333.4	40.11	9.313		
5,900.0	5,886.6	5,873.5	5,868.2	20.7	20.4	-57.21	12.5	-205.8	378.2	337.4	40.81	9.268		
6,000.0	5,986.6	5,971.9	5,965.9	21.1	20.8	-58.76	6.5	-215.4	383.3	341.8	41.50	9.236		
6,100.0	6,086.6	6,068.8	6,062.0	21.4	21.1	-60.39	-0.1	-225.8	389.2	347.0	42.18	9.226		
6,200.0	6,186.6	6,166.8	6,159.1	21.8	21.5	-62.14	-7.5	-237.3	395.9	353.0	42.87	9.234		
6,300.0	6,286.6	6,266.5	6,257.8	22.1	21.9	-63.87	-15.1	-249.0	402.9	359.3	43.58	9.245		
6,400.0	6,386.6	6,364.0	6,354.4	22.5	22.2	-65.48	-22.3	-260.3	410.3	366.1	44.27	9.269		
6,500.0	6,486.6	6,459.9	6,449.3	22.8	22.6	-66.94	-28.7	-271.9	418.7	373.8	44.93	9.319		
6,600.0	6,586.6	6,557.7	6,546.3	23.2	23.0	-68.31	-34.6	-284.1	428.0	382.4	45.62	9.381		
6,700.0	6,686.6	6,657.0	6,644.7	23.5	23.3	-69.57	-40.0	-296.2	437.5	391.2	46.33	9.443		
6,800.0	6,786.6	6,756.7	6,743.5	23.9	23.7	-70.71	-45.0	-308.2	447.1	400.1	47.04	9.505		
6,900.0	6,886.6	6,856.6	6,842.6	24.2	24.1	-71.77	-49.8	-320.0	456.8	409.0	47.76	9.564		
7,000.0	6,986.6	6,960.6	6,945.8	24.6	24.5	-72.86	-55.2	-331.8	466.0	417.5	48.53	9.603		
7,100.0	7,086.6	7,065.7	7,050.0	24.9	24.9	-74.06	-62.2	-342.9	474.3	425.0	49.30	9.619		
7,200.0	7,186.6	7,166.8	7,150.4	25.3	25.3	-75.23	-69.5	-352.8	481.9	431.9	50.03	9.631		
7,300.0	7,286.6	7,268.2	7,251.1	25.6	25.6	-76.30	-76.4	-362.3	489.3	438.5	50.77	9.638		
7,400.0	7,386.6	7,361.7	7,344.0	26.0	26.0	-77.33	-83.3	-371.6	497.3	445.9	51.41	9.673		
7,500.0	7,486.6	7,457.1	7,438.4	26.3	26.4	-78.48	-91.3	-382.2	506.5	454.4	52.08	9.725		
7,600.0	7,586.6	7,560.2	7,540.5	26.7	26.8	-79.74	-100.5	-393.6	515.7	462.9	52.83	9.761		
7,700.0	7,686.6	7,660.9	7,640.2	27.0	27.1	-80.92	-109.6	-404.0	524.4	470.9	53.56	9.792		
7,800.0	7,786.6	7,756.0	7,734.4	27.4	27.5	-81.89	-117.1	-414.0	533.8	479.5	54.22	9.844		
7,900.0	7,886.6	7,853.7	7,831.3	27.7	27.9	-82.70	-123.3	-424.9	543.9	489.0	54.91	9.905		
8,000.0	7,986.6	7,957.1	7,934.0	28.1	28.3	-83.46	-129.2	-435.8	553.7	498.1	55.67	9.947		
8,100.0	8,086.6	8,057.0	8,033.2	28.4	28.7	-84.14	-134.8	-445.8	563.1	506.7	56.39	9.985		
8,200.0	8,186.6	8,152.9	8,128.4	28.8	29.0	-84.83	-140.7	-455.8	572.9	515.8	57.06	10.040		
8,300.0	8,286.6	8,249.6	8,224.3	29.1	29.4	-85.57	-147.2	-466.4	583.3	525.6	57.74	10.103		
8,400.0	8,386.6	8,347.2	8,321.0	29.5	29.8	-86.30	-153.9	-477.5	594.2	535.8	58.43	10.169		
8,500.0	8,486.6	8,444.6	8,417.6	29.8	30.2	-87.01	-160.7	-488.8	605.4	546.3	59.12	10.241		
8,600.0	8,586.6	8,542.0	8,514.1	30.2	30.6	-87.63	-166.6	-500.4	617.0	557.2	59.81	10.316		
8,700.0	8,686.6	8,642.6	8,613.8	30.6	31.0	-88.17	-172.1	-512.4	628.8	568.2	60.54	10.386		
8,800.0	8,786.6	8,745.0	8,715.4	30.9	31.4	-88.69	-177.5	-524.1	640.1	578.8	61.29	10.444		
8,900.0	8,886.6	8,848.2	8,817.8	31.3	31.8	-89.19	-182.9	-535.4	651.0	588.9	62.05	10.492		
9,000.0	8,986.6	8,951.7	8,920.6	31.6	32.2	-89.68	-188.4	-546.1	661.3	598.5	62.81	10.529		
9,100.0	9,086.6	9,051.3	9,019.6	32.0	32.6	-90.13	-193.5	-556.0	671.2	607.7	63.52	10.567		
9,200.0	9,186.6	9,151.5	9,119.2	32.3	33.0	-90.52	-198.1	-566.0	681.2	617.0	64.24	10.604		
9,300.0	9,286.6	9,263.8	9,231.0	32.7	33.4	-90.96	-203.5	-576.0	690.2	625.1	65.08	10.606		
9,400.0	9,386.6	9,374.7	9,341.4	33.0	33.8	-91.44	-209.5	-583.9	697.4	631.5	65.88	10.585		
9,500.0	9,486.6	9,483.1	9,449.5	33.4	34.2	-91.83	-214.4	-590.1	703.3	636.6	66.66	10.551		
9,600.0	9,586.6	9,594.4	9,560.6	33.7	34.6	-92.10	-218.0	-595.0	707.8	640.4	67.43	10.497		
9,700.0	9,686.6	9,707.5	9,673.6	34.1	35.0	-92.22	-219.5	-598.1	710.6	642.4	68.20	10.419		
9,800.0	9,786.6	9,814.5	9,780.7	34.5	35.4	-92.24	-219.9	-599.5	711.9	643.0	68.93	10.329		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 76-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,900.0	9,886.6	9,921.2	9,887.3	34.8	35.8	-92.26	-220.1	-599.9	712.3	642.6	69.65	10.227		
9,904.7	9,891.3	9,926.2	9,892.3	34.8	35.8	-92.26	-220.1	-599.9	712.3	642.6	69.68	10.222		
10,000.0	9,986.6	10,020.7	9,986.8	35.2	36.1	-92.30	-220.7	-599.9	712.3	642.0	70.34	10.126		
10,100.0	10,086.6	10,121.7	10,087.8	35.5	36.4	-92.40	-221.8	-599.8	712.2	641.2	71.04	10.025		
10,200.0	10,186.6	10,223.6	10,189.7	35.9	36.8	-92.48	-222.8	-599.4	711.9	640.2	71.74	9.923		
10,300.0	10,286.6	10,327.0	10,293.2	36.2	37.1	-92.54	-223.5	-598.7	711.3	638.9	72.44	9.819		
10,400.0	10,386.6	10,432.3	10,398.5	36.6	37.5	-92.56	-223.8	-597.4	710.0	636.9	73.14	9.708		
10,500.0	10,486.6	10,529.3	10,495.4	36.9	37.8	-92.56	-223.6	-595.8	708.4	634.5	73.83	9.595		
10,600.0	10,586.6	10,622.0	10,588.2	37.3	38.1	-92.51	-223.0	-595.1	707.6	633.1	74.51	9.497		
10,621.0	10,607.6	10,641.5	10,607.6	37.4	38.1	-92.49	-222.8	-595.1	707.6	633.0	74.66	9.478		
10,700.0	10,686.6	10,712.6	10,678.7	37.6	38.4	-92.44	-222.1	-595.5	708.0	632.8	75.19	9.416		
10,800.0	10,786.6	10,801.9	10,768.0	38.0	38.7	-92.40	-221.8	-597.2	709.9	634.0	75.86	9.358		
10,890.4	10,877.0	10,894.5	10,860.5	38.3	39.0	-92.39	-221.7	-599.9	712.5	636.0	76.50	9.314		
10,900.0	10,886.6	10,905.7	10,871.7	38.4	39.1	-86.97	-221.7	-600.1	712.7	636.1	76.57	9.308		
10,950.0	10,936.5	10,963.7	10,929.7	38.5	39.3	-87.14	-221.1	-601.0	713.3	636.4	76.94	9.271		
11,000.0	10,986.0	11,021.3	10,987.3	38.7	39.5	-87.76	-220.2	-601.3	713.2	635.9	77.30	9.227		
11,050.0	11,034.6	11,070.8	11,036.8	38.9	39.6	-88.67	-219.3	-601.2	712.6	635.0	77.62	9.181		
11,100.0	11,082.0	11,117.2	11,083.2	39.0	39.8	-89.83	-218.6	-601.1	712.3	634.4	77.92	9.141		
11,113.6	11,094.6	11,129.5	11,095.5	39.1	39.8	-90.19	-218.5	-601.1	712.3	634.3	78.00	9.132		
11,150.0	11,127.8	11,161.9	11,127.9	39.2	39.9	-91.22	-218.2	-601.1	712.4	634.2	78.21	9.110		
11,200.0	11,171.8	11,204.6	11,170.6	39.3	40.1	-92.74	-218.0	-601.2	713.4	634.9	78.48	9.091		
11,250.0	11,213.5	11,245.6	11,211.6	39.4	40.2	-94.33	-218.0	-601.3	715.6	636.9	78.74	9.089		
11,300.0	11,252.6	11,284.2	11,250.2	39.5	40.4	-95.88	-218.2	-601.3	719.3	640.4	78.98	9.108		
11,350.0	11,288.9	11,319.8	11,285.8	39.7	40.5	-97.28	-218.7	-601.3	725.0	645.8	79.21	9.153		
11,400.0	11,322.0	11,355.0	11,321.0	39.8	40.6	-98.58	-219.1	-601.3	733.0	653.6	79.43	9.228		
11,450.0	11,351.8	11,415.1	11,381.0	39.9	40.8	-101.25	-216.9	-601.2	743.1	663.4	79.63	9.331		
11,500.0	11,377.9	11,502.2	11,466.2	40.0	41.0	-105.06	-199.3	-601.4	753.8	674.3	79.51	9.480		
11,550.0	11,400.3	11,588.6	11,546.0	40.1	41.3	-108.26	-166.6	-602.3	764.5	685.5	79.02	9.675		
11,600.0	11,418.6	11,656.2	11,604.6	40.3	41.4	-110.24	-132.9	-603.7	775.7	697.1	78.54	9.877		
11,650.0	11,432.8	11,702.9	11,643.5	40.4	41.5	-111.12	-107.1	-605.2	788.7	710.4	78.26	10.077		
11,700.0	11,442.8	11,817.8	11,732.5	40.5	41.7	-114.92	-34.8	-609.4	803.3	726.7	76.51	10.498		
11,750.0	11,448.5	11,750.0	11,785.7	40.7	41.7	-116.86	23.5	-610.4	815.1	740.2	74.88	10.886		
11,790.4	11,450.0	12,057.8	11,877.7	40.8	42.0	-121.95	155.2	-609.9	823.8	751.8	71.99	11.444		
11,800.0	11,450.0	12,092.5	11,892.8	40.8	42.0	-122.98	186.4	-609.9	825.6	754.2	71.37	11.568		
11,900.0	11,450.0	12,346.0	11,945.8	41.1	42.7	-126.75	432.9	-612.3	828.9	759.6	69.37	11.949		
12,000.0	11,450.0	12,469.1	11,952.9	41.5	43.2	-127.25	555.8	-615.0	831.1	761.4	69.69	11.924		
12,037.8	11,450.0	12,511.0	11,953.8	41.7	43.3	-127.29	597.7	-616.1	831.9	762.0	69.94	11.895		
12,100.0	11,450.0	12,575.9	11,954.8	41.9	43.6	-127.29	662.5	-617.9	833.5	763.1	70.40	11.839		
12,200.0	11,450.0	12,674.3	11,955.7	42.4	44.1	-127.24	760.8	-621.1	836.0	764.7	71.26	11.731		
12,300.0	11,450.0	12,766.7	11,956.8	43.0	44.6	-127.19	853.2	-624.5	839.0	766.8	72.20	11.620		
12,400.0	11,450.0	12,908.9	11,958.7	43.6	45.5	-127.35	995.4	-624.3	838.7	765.4	73.25	11.450		
12,500.0	11,450.0	13,013.2	11,959.8	44.3	46.2	-127.53	1,099.6	-622.2	837.1	762.9	74.25	11.274		
12,600.0	11,450.0	13,113.5	11,959.5	45.0	46.9	-127.63	1,199.9	-620.2	834.8	759.4	75.37	11.075		
12,700.0	11,450.0	13,210.8	11,959.0	45.8	47.6	-127.68	1,297.2	-619.1	832.9	756.3	76.60	10.873		
12,800.0	11,450.0	13,308.8	11,957.6	46.6	48.4	-127.64	1,395.2	-618.9	831.2	753.3	77.99	10.659		
12,900.0	11,450.0	13,413.4	11,954.5	47.4	49.2	-127.47	1,499.8	-619.9	829.5	749.9	79.60	10.421		
12,990.6	11,450.0	13,486.7	11,952.6	48.3	49.9	-127.36	1,573.0	-620.7	828.4	747.5	80.96	10.232		
13,000.0	11,450.0	13,494.0	11,952.6	48.3	50.0	-127.36	1,580.3	-620.8	828.4	747.3	81.10	10.215		
13,100.0	11,450.0	13,583.3	11,953.4	49.3	50.8	-127.37	1,669.6	-622.1	829.6	747.0	82.60	10.043		
13,200.0	11,450.0	13,681.0	11,953.5	50.3	51.7	-127.28	1,767.2	-625.0	831.3	747.0	84.30	9.861		
13,300.0	11,450.0	13,820.2	11,951.2	51.3	53.1	-127.09	1,906.4	-627.7	831.4	745.0	86.41	9.622		
13,400.0	11,450.0	13,914.9	11,948.8	52.3	54.0	-127.00	2,001.1	-627.6	829.2	740.9	88.23	9.398		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 76-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,500.0	11,450.0	14,007.9	11,945.9	53.4	55.0	-126.84	2,094.0	-628.3	827.3	737.1	90.15	9.177		
13,600.0	11,450.0	14,096.6	11,944.5	54.5	56.0	-126.75	2,182.7	-629.3	826.6	734.6	92.02	8.983		
13,607.7	11,450.0	14,104.0	11,944.5	54.6	56.1	-126.74	2,190.1	-629.4	826.6	734.4	92.17	8.968		
13,700.0	11,450.0	14,193.2	11,943.4	55.6	57.0	-126.64	2,279.2	-631.2	826.8	732.8	94.02	8.794		
13,800.0	11,450.0	14,291.0	11,940.8	56.8	58.1	-126.40	2,377.0	-634.3	827.2	731.0	96.19	8.599		
13,900.0	11,450.0	14,382.6	11,939.2	58.0	59.2	-126.20	2,468.5	-637.8	828.6	730.2	98.33	8.426		
14,000.0	11,450.0	14,490.4	11,940.0	59.2	60.5	-126.22	2,576.3	-639.2	829.4	728.9	100.43	8.259		
14,100.0	11,450.0	14,580.8	11,941.3	60.4	61.6	-126.27	2,666.6	-640.4	830.7	728.3	102.39	8.114		
14,200.0	11,450.0	14,707.4	11,941.9	61.7	63.1	-126.23	2,793.2	-643.3	832.5	727.7	104.76	7.946		
14,300.0	11,450.0	14,822.4	11,941.3	62.9	64.5	-126.36	2,908.2	-640.2	829.2	722.3	106.88	7.759		
14,400.0	11,450.0	14,916.4	11,939.7	64.2	65.7	-126.35	3,002.2	-638.9	826.5	717.4	109.03	7.580		
14,500.0	11,450.0	15,012.6	11,937.1	65.5	66.9	-126.23	3,098.3	-639.0	824.3	713.0	111.34	7.403		
14,600.0	11,450.0	15,106.1	11,934.1	66.8	68.1	-126.05	3,191.8	-640.1	822.7	709.0	113.74	7.234		
14,700.0	11,450.0	15,235.7	11,930.5	68.2	69.8	-125.91	3,321.3	-639.5	820.2	703.8	116.34	7.050		
14,800.0	11,450.0	15,319.7	11,928.9	69.5	70.9	-125.91	3,405.3	-637.9	816.8	698.2	118.54	6.890		
14,900.0	11,450.0	15,402.3	11,929.7	70.9	72.0	-126.06	3,487.8	-636.2	815.1	694.5	120.57	6.760		
14,943.9	11,450.0	15,440.8	11,931.2	71.5	72.5	-126.20	3,526.3	-635.2	814.9	693.5	121.40	6.713		
15,000.0	11,450.0	15,490.2	11,933.5	72.2	73.2	-126.38	3,575.6	-634.2	815.1	692.7	122.44	6.658		
15,100.0	11,450.0	15,590.2	11,936.7	73.6	74.5	-126.62	3,675.5	-633.7	816.0	691.5	124.51	6.554		
15,200.0	11,450.0	15,683.8	11,937.8	75.0	75.8	-126.65	3,769.1	-635.1	817.3	690.5	126.78	6.446		
15,300.0	11,450.0	15,789.8	11,938.0	76.4	77.3	-126.60	3,875.1	-637.5	818.6	689.3	129.29	6.331		
15,400.0	11,450.0	15,902.3	11,937.4	77.8	78.9	-126.55	3,987.6	-638.7	818.4	686.6	131.87	6.207		
15,500.0	11,450.0	15,999.8	11,936.0	79.3	80.2	-126.45	4,085.1	-639.9	818.0	683.6	134.39	6.087		
15,600.0	11,450.0	16,097.9	11,933.1	80.7	81.6	-126.22	4,183.1	-642.5	817.7	680.6	137.12	5.964		
15,616.9	11,450.0	16,114.0	11,932.5	80.9	81.8	-126.17	4,199.2	-643.0	817.7	680.1	137.59	5.943		
15,700.0	11,450.0	16,196.1	11,929.3	82.1	83.0	-125.88	4,281.1	-646.2	817.8	677.8	140.00	5.842		
15,762.9	11,450.0	16,261.3	11,927.2	83.0	84.0	-125.69	4,346.3	-648.3	817.8	676.0	141.82	5.767		
15,800.0	11,450.0	16,291.1	11,926.2	83.6	84.4	-125.61	4,376.0	-649.3	818.0	675.2	142.79	5.729		
15,900.0	11,450.0	16,381.6	11,923.4	85.0	85.7	-125.29	4,466.4	-653.9	819.6	674.0	145.61	5.629		
16,000.0	11,450.0	16,492.1	11,921.2	86.5	87.3	-125.02	4,576.8	-658.3	821.1	672.5	148.60	5.525		
16,100.0	11,450.0	16,623.0	11,920.6	88.0	89.2	-125.03	4,707.6	-658.2	820.2	668.8	151.35	5.419		
16,200.0	11,450.0	16,722.8	11,921.2	89.4	90.6	-125.24	4,807.4	-654.6	816.9	663.3	153.60	5.319		
16,300.0	11,450.0	16,836.1	11,920.9	90.9	92.3	-125.45	4,920.6	-650.1	812.9	657.0	155.90	5.214		
16,400.0	11,450.0	16,932.9	11,919.0	92.4	93.7	-125.50	5,017.3	-646.9	808.4	650.0	158.38	5.104		
16,500.0	11,450.0	17,029.8	11,916.1	93.9	95.1	-125.45	5,114.2	-644.7	804.2	643.3	161.00	4.995		
16,600.0	11,450.0	17,125.4	11,912.5	95.4	96.5	-125.32	5,209.7	-643.6	800.5	636.8	163.74	4.889		
16,700.0	11,450.0	17,217.5	11,909.4	96.9	97.9	-125.18	5,301.8	-643.3	797.6	631.1	166.50	4.790		
16,800.0	11,450.0	17,308.3	11,905.3	98.4	99.3	-124.92	5,392.4	-644.6	795.6	626.2	169.43	4.696		
16,846.9	11,450.0	17,345.1	11,904.2	99.2	99.8	-124.83	5,429.2	-645.4	795.3	624.6	170.70	4.659		
16,900.0	11,450.0	17,387.0	11,904.0	100.0	100.4	-124.80	5,471.1	-646.2	795.7	623.7	172.02	4.626		
17,000.0	11,450.0	17,486.7	11,905.0	101.5	101.9	-124.82	5,570.7	-648.1	797.1	622.5	174.61	4.565		
17,100.0	11,450.0	17,592.1	11,906.3	103.0	103.5	-124.87	5,676.2	-649.5	798.3	621.0	177.23	4.504		
17,200.0	11,450.0	17,691.7	11,905.6	104.5	105.0	-124.78	5,775.7	-651.3	798.7	618.7	180.00	4.437		
17,300.0	11,450.0	17,771.9	11,905.1	106.1	106.3	-124.65	5,855.8	-654.4	800.9	618.3	182.59	4.386		
17,400.0	11,450.0	17,877.2	11,905.6	107.6	107.9	-124.55	5,961.1	-658.4	803.7	618.2	185.48	4.333		
17,500.0	11,450.0	17,972.3	11,906.8	109.1	109.3	-124.51	6,056.1	-662.0	806.8	618.6	188.14	4.288		
17,600.0	11,450.0	18,086.0	11,907.6	110.7	111.1	-124.44	6,169.7	-665.7	809.2	618.1	191.12	4.234		
17,700.0	11,450.0	18,197.1	11,908.1	112.2	112.8	-124.45	6,280.9	-667.2	809.9	616.0	193.92	4.177		
17,800.0	11,450.0	18,307.1	11,906.4	113.8	114.5	-124.32	6,390.7	-668.7	809.5	612.6	196.90	4.111		
17,900.0	11,450.0	18,403.3	11,902.7	115.3	115.9	-124.05	6,486.9	-670.8	808.5	608.5	200.03	4.042		
18,000.0	11,450.0	18,527.7	11,899.8	116.9	117.9	-123.91	6,611.2	-671.2	806.9	603.8	203.11	3.973		
18,100.0	11,450.0	18,627.0	11,895.8	118.4	119.4	-123.73	6,710.5	-670.5	803.4	597.3	206.12	3.898		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 76-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
18,200.0	11,450.0	18,716.7	11,891.6	120.0	120.8	-123.49	6,800.1	-671.0	800.6	591.4	209.23	3.827		
18,300.0	11,450.0	18,805.2	11,887.6	121.6	122.2	-123.21	6,888.5	-672.7	799.1	586.7	212.37	3.763		
18,400.0	11,450.0	18,912.1	11,883.9	123.1	123.8	-122.94	6,995.3	-674.5	798.0	582.4	215.63	3.701		
18,500.0	11,450.0	19,025.4	11,880.6	124.7	125.6	-122.81	7,108.5	-673.8	795.2	576.5	218.68	3.636		
18,600.0	11,450.0	19,118.0	11,877.7	126.3	127.0	-122.69	7,201.1	-673.1	792.2	570.6	221.62	3.575		
18,700.0	11,450.0	19,205.8	11,875.3	127.8	128.4	-122.55	7,288.8	-673.7	790.6	566.0	224.56	3.521		
18,763.5	11,450.0	19,262.6	11,874.1	128.8	129.3	-122.46	7,345.6	-674.6	790.3	563.9	226.43	3.490		
18,800.0	11,450.0	19,296.5	11,873.5	129.4	129.8	-122.40	7,379.5	-675.3	790.4	562.9	227.51	3.474		
18,900.0	11,450.0	19,406.4	11,871.5	131.0	131.5	-122.21	7,489.4	-677.9	790.8	560.1	230.74	3.427		
19,000.0	11,450.0	19,540.1	11,868.8	132.6	133.6	-122.19	7,622.9	-675.2	787.2	553.6	233.63	3.369		
19,100.0	11,450.0	19,637.6	11,867.5	134.2	135.1	-122.31	7,720.3	-670.7	782.0	545.8	236.17	3.311		
19,200.0	11,450.0	19,728.8	11,869.5	135.7	136.5	-122.68	7,811.4	-665.4	777.6	539.4	238.26	3.264		
19,300.0	11,450.0	19,826.5	11,872.4	137.3	138.0	-123.09	7,908.9	-660.3	774.1	533.9	240.22	3.222		
19,400.0	11,450.0	19,912.8	11,875.3	138.9	139.4	-123.47	7,995.0	-656.3	771.5	529.3	242.19	3.185		
19,500.0	11,450.0	20,011.8	11,879.7	140.5	140.9	-123.92	8,093.9	-652.6	770.1	526.1	244.03	3.156		
19,583.6	11,450.0	20,084.0	11,883.0	141.8	142.1	-124.25	8,166.0	-650.0	769.3	523.8	245.55	3.133		
19,600.0	11,450.0	20,097.4	11,883.7	142.1	142.3	-124.32	8,179.3	-649.7	769.4	523.5	245.83	3.130		
19,700.0	11,450.0	20,182.6	11,888.9	143.7	143.6	-124.72	8,264.4	-648.3	770.8	523.3	247.52	3.114		
19,800.0	11,450.0	20,278.4	11,894.8	145.3	145.1	-125.11	8,360.0	-648.3	773.7	524.3	249.36	3.103		
19,900.0	11,450.0	20,385.6	11,898.9	146.9	146.8	-125.34	8,467.1	-649.6	776.2	524.5	251.72	3.084		
20,000.0	11,450.0	20,483.3	11,899.3	148.5	148.4	-125.28	8,564.8	-652.4	778.2	523.6	254.56	3.057		
20,100.0	11,450.0	20,592.2	11,897.9	150.1	150.1	-125.05	8,673.6	-656.7	780.0	522.0	257.96	3.024		
20,200.0	11,450.0	20,689.7	11,894.2	151.7	151.7	-124.65	8,770.9	-661.6	781.3	519.7	261.59	2.987		
20,300.0	11,450.0	20,817.1	11,888.0	153.3	153.7	-124.12	8,898.0	-666.3	780.9	515.1	265.81	2.938		
20,400.0	11,450.0	20,927.6	11,882.3	154.9	155.4	-123.78	9,008.4	-667.0	777.9	508.5	269.38	2.888		
20,500.0	11,450.0	21,028.4	11,876.5	156.5	157.1	-123.43	9,109.0	-667.6	774.5	501.6	272.95	2.838		
20,600.0	11,450.0	21,124.6	11,870.9	158.1	158.6	-123.10	9,205.0	-668.1	771.2	494.7	276.51	2.789		
20,700.0	11,450.0	21,219.7	11,868.0	159.7	160.1	-122.96	9,300.1	-667.8	768.6	489.0	279.62	2.749		
20,800.0	11,450.0	21,315.1	11,865.3	161.3	161.6	-122.81	9,395.4	-668.0	766.6	483.8	282.76	2.711		
20,900.0	11,450.0	21,406.4	11,862.6	162.9	163.1	-122.62	9,486.7	-669.1	765.3	479.4	285.95	2.676		
20,941.5	11,450.0	21,443.5	11,862.3	163.6	163.7	-122.60	9,523.8	-669.5	765.2	478.1	287.13	2.665		
21,000.0	11,450.0	21,498.4	11,862.1	164.5	164.5	-122.58	9,578.7	-670.2	765.4	476.6	288.79	2.650		
21,100.0	11,450.0	21,592.1	11,861.4	166.1	166.0	-122.47	9,672.4	-672.4	766.2	474.4	291.79	2.626		
21,200.0	11,450.0	21,681.0	11,860.1	167.7	167.5	-122.29	9,761.2	-675.8	768.1	473.2	294.88	2.605		
21,300.0	11,450.0	21,765.0	11,858.6	169.3	168.8	-122.01	9,845.0	-681.2	771.9	473.8	298.01	2.590		
21,400.0	11,450.0	21,853.3	11,857.7	170.9	170.3	-121.69	9,933.0	-688.5	777.7	476.4	301.27	2.581		
21,500.0	11,450.0	21,951.8	11,855.5	172.5	171.9	-121.22	10,031.0	-697.8	783.9	478.7	305.19	2.569		
21,600.0	11,450.0	22,044.8	11,852.7	174.2	173.4	-120.70	10,123.5	-707.9	791.0	481.9	309.06	2.559		
21,614.7	11,450.0	22,059.5	11,852.2	174.4	173.6	-120.61	10,138.0	-709.5	792.1	482.4	309.70	2.558 SF		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Nina Cortell - Nina Cortell Fed Com #132H - Wellbore #1 - BLM Plan #1													Offset Well Error:	0.0 usft
Survey Program: 0-MWD														
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	1.0	1.0	0.0	0.0	-90.29	-0.2	-30.0	30.0					
100.0	100.0	101.0	101.0	0.1	0.1	-90.29	-0.2	-30.0	30.0	29.7	0.26	115.443		
200.0	200.0	201.0	201.0	0.5	0.5	-90.29	-0.2	-30.0	30.0	29.0	0.98	30.714		
300.0	300.0	301.0	301.0	0.8	0.8	-90.29	-0.2	-30.0	30.0	28.3	1.69	17.714		
400.0	400.0	401.0	401.0	1.2	1.2	-90.29	-0.2	-30.0	30.0	27.6	2.41	12.446		
500.0	500.0	501.0	501.0	1.6	1.6	-90.29	-0.2	-30.0	30.0	26.9	3.13	9.593		
600.0	600.0	601.0	601.0	1.9	1.9	-90.29	-0.2	-30.0	30.0	26.2	3.84	7.804		
700.0	700.0	701.0	701.0	2.3	2.3	-90.29	-0.2	-30.0	30.0	25.4	4.56	6.577		
800.0	800.0	801.0	801.0	2.6	2.6	-90.29	-0.2	-30.0	30.0	24.7	5.28	5.684		
900.0	900.0	901.0	901.0	3.0	3.0	-90.29	-0.2	-30.0	30.0	24.0	6.00	5.004		
1,000.0	1,000.0	1,001.0	1,001.0	3.4	3.4	-90.29	-0.2	-30.0	30.0	23.3	6.71	4.470 CC		
1,100.0	1,100.0	1,101.0	1,101.0	3.7	3.7	121.35	-0.2	-30.0	30.4	23.0	7.41	4.108 ES		
1,200.0	1,200.0	1,201.0	1,201.0	4.0	4.1	125.36	-0.2	-30.0	31.9	23.8	8.10	3.937		
1,300.0	1,299.9	1,300.9	1,300.9	4.4	4.4	131.23	-0.2	-30.0	34.6	25.8	8.79	3.934		
1,400.0	1,399.7	1,400.7	1,400.7	4.7	4.8	137.98	-0.2	-30.0	38.9	29.4	9.49	4.098		
1,500.0	1,499.4	1,500.4	1,500.4	5.0	5.1	144.63	-0.2	-30.0	45.0	34.8	10.19	4.419		
1,600.0	1,598.9	1,600.8	1,600.8	5.4	5.5	150.90	-0.4	-29.1	52.3	41.4	10.88	4.806		
1,700.0	1,698.3	1,701.2	1,701.2	5.8	5.8	156.91	-1.0	-26.6	60.0	48.5	11.57	5.188		
1,800.0	1,797.4	1,801.7	1,801.6	6.1	6.2	162.66	-2.1	-22.3	68.4	56.1	12.26	5.577		
1,900.0	1,896.4	1,902.2	1,901.9	6.5	6.5	168.01	-3.5	-16.3	76.6	63.7	12.95	5.917		
2,000.0	1,995.5	2,002.8	2,002.2	6.9	6.9	173.03	-5.4	-8.6	84.0	70.4	13.65	6.158		
2,100.0	2,094.5	2,103.5	2,102.4	7.3	7.2	177.97	-7.8	0.8	90.7	76.3	14.35	6.321		
2,200.0	2,193.5	2,204.1	2,202.3	7.7	7.6	-177.02	-10.5	11.9	96.8	81.7	15.06	6.425		
2,300.0	2,292.5	2,304.7	2,302.0	8.1	8.0	-171.85	-13.7	24.8	102.4	86.6	15.79	6.488		
2,400.0	2,391.6	2,404.0	2,400.4	8.5	8.3	-166.96	-17.0	38.2	108.4	91.9	16.53	6.558		
2,500.0	2,490.6	2,503.4	2,498.8	8.9	8.7	-162.59	-20.3	51.6	115.1	97.8	17.29	6.659		
2,600.0	2,589.6	2,602.8	2,597.3	9.3	9.1	-158.72	-23.7	65.0	122.4	104.4	18.05	6.782		
2,700.0	2,688.6	2,702.2	2,695.7	9.7	9.5	-155.30	-27.0	78.5	130.2	111.4	18.82	6.918		
2,729.0	2,717.4	2,731.1	2,724.3	9.8	9.6	-154.39	-28.0	82.4	132.5	113.5	19.04	6.959		
2,800.0	2,787.8	2,801.7	2,794.2	10.1	9.9	-152.18	-30.3	91.9	137.8	118.2	19.59	7.032		
2,900.0	2,887.2	2,901.2	2,892.7	10.5	10.3	-148.90	-33.6	105.3	143.6	123.3	20.38	7.048		
3,000.0	2,986.8	3,000.7	2,991.2	10.9	10.7	-145.32	-37.0	118.8	147.8	126.6	21.16	6.981		
3,100.0	3,086.7	3,100.1	3,089.7	11.2	11.0	-141.33	-40.3	132.2	150.4	128.4	21.95	6.851		
3,200.0	3,186.6	3,200.7	3,188.0	11.6	11.4	-136.83	-43.6	145.6	151.8	129.1	22.75	6.675		
3,262.3	3,249.0	3,261.1	3,249.2	11.8	11.7	16.06	-45.7	154.0	152.3	129.1	23.22	6.557		
3,300.0	3,286.6	3,301.6	3,286.1	11.9	11.9	18.01	-46.9	159.0	152.6	129.1	23.53	6.486		
3,400.0	3,386.6	3,402.6	3,384.2	12.2	12.3	23.12	-50.2	172.4	154.2	129.9	24.29	6.348		
3,500.0	3,486.6	3,503.5	3,482.2	12.6	12.7	28.09	-53.6	185.8	157.1	132.0	25.05	6.271		
3,600.0	3,586.6	3,595.5	3,580.3	12.9	13.0	32.86	-56.9	199.1	161.1	135.3	25.75	6.255		
3,700.0	3,686.6	3,705.5	3,678.3	13.2	13.5	37.36	-60.2	212.5	166.2	139.6	26.52	6.265		
3,800.0	3,786.6	3,806.5	3,776.4	13.5	13.9	41.58	-63.5	225.9	172.2	145.0	27.24	6.323		
3,900.0	3,886.6	3,907.4	3,874.5	13.9	14.3	45.50	-66.8	239.3	179.2	151.2	27.95	6.410		
4,000.0	3,986.6	3,991.6	3,972.5	14.2	14.6	49.11	-70.1	252.7	186.9	158.3	28.58	6.538		
4,100.0	4,086.6	4,109.4	4,070.6	14.6	15.1	52.43	-73.4	266.0	195.3	165.9	29.35	6.654		
4,200.0	4,186.6	4,189.7	4,168.7	14.9	15.5	55.47	-76.7	279.4	204.3	174.3	29.96	6.820		
4,300.0	4,286.6	4,288.7	4,266.7	15.2	15.9	58.25	-80.0	292.8	213.8	183.2	30.64	6.979		
4,400.0	4,386.6	4,387.7	4,364.8	15.6	16.3	60.78	-83.4	306.2	223.8	192.5	31.32	7.146		
4,500.0	4,486.6	4,486.7	4,462.9	15.9	16.7	63.10	-86.7	319.5	234.2	202.2	32.00	7.319		
4,600.0	4,586.6	4,585.8	4,560.9	16.2	17.1	65.22	-90.0	332.9	245.0	212.3	32.68	7.495		
4,700.0	4,686.6	4,684.8	4,659.0	16.6	17.5	67.16	-93.3	346.3	256.0	222.6	33.37	7.673		
4,800.0	4,786.6	4,783.8	4,757.0	16.9	17.9	68.94	-96.6	359.7	267.3	233.3	34.05	7.851		
4,900.0	4,886.6	4,882.8	4,855.1	17.3	18.3	70.57	-99.9	373.1	278.9	244.2	34.74	8.029		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.0	4,986.6	4,981.9	4,953.2	17.6	18.7	72.08	-103.2	386.4	290.6	255.2	35.42	8.205		
5,100.0	5,086.6	5,080.9	5,051.2	18.0	19.1	73.46	-106.5	399.8	302.6	266.5	36.11	8.380		
5,200.0	5,186.6	5,179.9	5,149.3	18.3	19.6	74.74	-109.8	413.2	314.7	277.9	36.80	8.552		
5,300.0	5,286.6	5,278.9	5,247.4	18.6	20.0	75.93	-113.2	426.6	327.0	289.5	37.49	8.721		
5,400.0	5,386.6	5,378.0	5,345.4	19.0	20.4	77.03	-116.5	439.9	339.3	301.1	38.18	8.887		
5,500.0	5,486.6	5,477.0	5,443.5	19.3	20.8	78.05	-119.8	453.3	351.8	312.9	38.88	9.049		
5,600.0	5,586.6	5,576.0	5,541.5	19.7	21.2	79.01	-123.1	466.7	364.4	324.9	39.57	9.209		
5,700.0	5,686.6	5,675.1	5,639.6	20.0	21.6	79.89	-126.4	480.1	377.1	336.8	40.27	9.365		
5,800.0	5,786.6	5,774.1	5,737.7	20.4	22.0	80.73	-129.7	493.5	389.9	348.9	40.97	9.517		
5,900.0	5,886.6	5,873.1	5,835.7	20.7	22.4	81.50	-133.0	506.8	402.7	361.1	41.67	9.665		
6,000.0	5,986.6	5,972.1	5,933.8	21.1	22.8	82.23	-136.3	520.2	415.7	373.3	42.37	9.811		
6,100.0	6,086.6	6,071.2	6,031.9	21.4	23.3	82.92	-139.6	533.6	428.6	385.6	43.07	9.952		
6,200.0	6,186.6	6,170.2	6,129.9	21.8	23.7	83.57	-143.0	547.0	441.7	397.9	43.77	10.090		
6,300.0	6,286.6	6,269.2	6,228.0	22.1	24.1	84.17	-146.3	560.4	454.8	410.3	44.48	10.225		
6,400.0	6,386.6	6,368.2	6,326.1	22.5	24.5	84.75	-149.6	573.7	467.9	422.7	45.18	10.357		
6,500.0	6,486.6	6,467.3	6,424.1	22.8	24.9	85.29	-152.9	587.1	481.1	435.2	45.88	10.485		
6,600.0	6,586.6	6,566.3	6,522.2	23.2	25.3	85.81	-156.2	600.5	494.3	447.7	46.59	10.610		
6,700.0	6,686.6	6,665.3	6,620.2	23.5	25.7	86.29	-159.5	613.9	507.6	460.3	47.30	10.732		
6,800.0	6,786.6	6,764.3	6,718.3	23.9	26.2	86.76	-162.8	627.2	520.9	472.9	48.00	10.850		
6,900.0	6,886.6	6,863.4	6,816.4	24.2	26.6	87.20	-166.1	640.6	534.2	485.5	48.71	10.966		
7,000.0	6,986.6	6,962.4	6,914.4	24.6	27.0	87.61	-169.4	654.0	547.5	498.1	49.42	11.079		
7,100.0	7,086.6	7,061.4	7,012.5	24.9	27.4	88.01	-172.8	667.4	560.9	510.8	50.13	11.190		
7,200.0	7,186.6	7,165.4	7,115.5	25.3	27.8	88.41	-176.2	681.3	574.2	523.3	50.89	11.284		
7,300.0	7,286.6	7,281.8	7,231.1	25.6	28.3	88.76	-179.4	694.3	585.3	533.6	51.74	11.314		
7,400.0	7,386.6	7,398.9	7,347.7	26.0	28.8	89.01	-181.8	703.9	593.5	541.0	52.54	11.296		
7,500.0	7,486.6	7,516.5	7,465.2	26.3	29.2	89.17	-183.3	710.1	598.8	545.5	53.31	11.233		
7,600.0	7,586.6	7,634.4	7,583.0	26.7	29.6	89.23	-184.0	712.8	601.0	547.0	54.02	11.127		
7,700.0	7,686.6	7,739.0	7,687.6	27.0	29.9	89.24	-184.0	712.9	601.1	546.4	54.70	10.989		
7,800.0	7,786.6	7,839.0	7,787.6	27.4	30.2	89.24	-184.0	712.9	601.1	545.7	55.39	10.853		
7,900.0	7,886.6	7,939.0	7,887.6	27.7	30.5	89.24	-184.0	712.9	601.1	545.0	56.07	10.720		
8,000.0	7,986.6	8,039.0	7,987.6	28.1	30.9	89.24	-184.0	712.9	601.1	544.4	56.76	10.591		
8,100.0	8,086.6	8,139.0	8,087.6	28.4	31.2	89.24	-184.0	712.9	601.1	543.7	57.45	10.464		
8,200.0	8,186.6	8,239.0	8,187.6	28.8	31.5	89.24	-184.0	712.9	601.1	543.0	58.14	10.340		
8,300.0	8,286.6	8,339.0	8,287.6	29.1	31.8	89.24	-184.0	712.9	601.1	542.3	58.83	10.219		
8,400.0	8,386.6	8,439.0	8,387.6	29.5	32.1	89.24	-184.0	712.9	601.1	541.6	59.52	10.100		
8,500.0	8,486.6	8,539.0	8,487.6	29.8	32.4	89.24	-184.0	712.9	601.1	540.9	60.21	9.984		
8,600.0	8,586.6	8,639.0	8,587.6	30.2	32.8	89.24	-184.0	712.9	601.1	540.2	60.90	9.871		
8,700.0	8,686.6	8,739.0	8,687.6	30.6	33.1	89.24	-184.0	712.9	601.1	539.5	61.59	9.760		
8,800.0	8,786.6	8,839.0	8,787.6	30.9	33.4	89.24	-184.0	712.9	601.1	538.8	62.28	9.651		
8,900.0	8,886.6	8,939.0	8,887.6	31.3	33.7	89.24	-184.0	712.9	601.1	538.1	62.98	9.545		
9,000.0	8,986.6	9,039.0	8,987.6	31.6	34.1	89.24	-184.0	712.9	601.1	537.5	63.67	9.441		
9,100.0	9,086.6	9,139.0	9,087.6	32.0	34.4	89.24	-184.0	712.9	601.1	536.8	64.36	9.339		
9,200.0	9,186.6	9,239.0	9,187.6	32.3	34.7	89.24	-184.0	712.9	601.1	536.1	65.06	9.240		
9,300.0	9,286.6	9,339.0	9,287.6	32.7	35.0	89.24	-184.0	712.9	601.1	535.4	65.75	9.142		
9,400.0	9,386.6	9,439.0	9,387.6	33.0	35.4	89.24	-184.0	712.9	601.1	534.7	66.45	9.046		
9,500.0	9,486.6	9,539.0	9,487.6	33.4	35.7	89.24	-184.0	712.9	601.1	534.0	67.14	8.953		
9,600.0	9,586.6	9,639.0	9,587.6	33.7	36.0	89.24	-184.0	712.9	601.1	533.3	67.84	8.861		
9,700.0	9,686.6	9,739.0	9,687.6	34.1	36.3	89.24	-184.0	712.9	601.1	532.6	68.54	8.771		
9,800.0	9,786.6	9,839.0	9,787.6	34.5	36.7	89.24	-184.0	712.9	601.1	531.9	69.23	8.682		
9,900.0	9,886.6	9,939.0	9,887.6	34.8	37.0	89.24	-184.0	712.9	601.1	531.2	69.93	8.596		
10,000.0	9,986.6	10,039.0	9,987.6	35.2	37.3	89.24	-184.0	712.9	601.1	530.5	70.63	8.511		
10,100.0	10,086.6	10,139.0	10,087.6	35.5	37.7	89.24	-184.0	712.9	601.1	529.8	71.33	8.427		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,200.0	10,186.6	10,239.0	10,187.6	35.9	38.0	89.24	-184.0	712.9	601.1	529.1	72.03	8.346		
10,300.0	10,286.6	10,339.0	10,287.6	36.2	38.3	89.24	-184.0	712.9	601.1	528.4	72.73	8.266		
10,400.0	10,386.6	10,439.0	10,387.6	36.6	38.7	89.24	-184.0	712.9	601.1	527.7	73.43	8.187		
10,500.0	10,486.6	10,539.0	10,487.6	36.9	39.0	89.24	-184.0	712.9	601.1	527.0	74.13	8.110		
10,600.0	10,586.6	10,639.0	10,587.6	37.3	39.3	89.24	-184.0	712.9	601.1	526.3	74.83	8.034		
10,700.0	10,686.6	10,739.0	10,687.6	37.6	39.7	89.24	-184.0	712.9	601.1	525.6	75.53	7.959		
10,800.0	10,786.6	10,839.0	10,787.6	38.0	40.0	89.24	-184.0	712.9	601.1	524.9	76.23	7.886		
10,890.4	10,877.0	10,929.3	10,878.0	38.3	40.3	89.24	-184.0	712.9	601.1	524.3	76.86	7.821		
10,900.0	10,886.6	10,939.0	10,887.6	38.4	40.3	94.64	-184.0	712.9	601.1	524.2	76.93	7.814		
10,950.0	10,936.5	10,988.9	10,937.5	38.5	40.5	94.90	-184.0	712.9	601.4	524.1	77.27	7.783		
11,000.0	10,986.0	11,038.3	10,987.0	38.7	40.7	95.53	-184.0	712.9	602.1	524.5	77.59	7.759		
11,050.0	11,034.6	11,086.9	11,035.6	38.9	40.8	96.47	-184.0	712.9	603.3	525.4	77.90	7.745		
11,100.0	11,082.0	11,134.3	11,083.0	39.0	41.0	97.68	-184.0	712.9	605.4	527.2	78.19	7.742		
11,150.0	11,127.8	11,180.2	11,128.8	39.2	41.1	99.07	-184.0	712.9	608.5	530.1	78.47	7.755		
11,200.0	11,171.8	11,224.1	11,172.8	39.3	41.3	100.56	-184.0	712.9	613.1	534.4	78.74	7.787		
11,250.0	11,213.5	11,265.8	11,214.5	39.4	41.4	102.03	-184.0	712.9	619.6	540.6	78.99	7.844		
11,300.0	11,252.6	11,305.0	11,253.6	39.5	41.6	103.39	-184.0	712.9	628.2	549.0	79.24	7.929		
11,350.0	11,288.9	11,341.2	11,289.9	39.7	41.7	104.52	-184.0	712.9	639.4	559.9	79.47	8.045		
11,400.0	11,322.0	11,374.4	11,323.0	39.8	41.8	105.32	-184.0	712.9	653.4	573.7	79.71	8.198		
11,450.0	11,351.8	11,404.1	11,352.8	39.9	41.9	105.70	-184.0	712.9	670.4	590.5	79.93	8.388		
11,500.0	11,377.9	11,432.8	11,381.5	40.0	42.0	105.74	-184.0	712.9	690.6	610.5	80.15	8.616		
11,550.0	11,400.3	11,487.3	11,435.9	40.1	42.2	107.45	-180.9	712.9	713.3	633.0	80.27	8.887		
11,600.0	11,418.6	11,554.7	11,502.4	40.3	42.4	109.74	-170.0	712.8	737.8	657.6	80.11	9.209		
11,650.0	11,432.8	11,645.3	11,588.8	40.4	42.6	113.14	-143.2	712.6	763.2	683.9	79.31	9.623		
11,700.0	11,442.8	11,781.3	11,707.9	40.5	43.0	118.32	-78.4	712.1	788.3	711.3	77.00	10.239		
11,750.0	11,448.5	12,008.7	11,862.8	40.7	43.3	124.90	86.0	710.7	809.7	738.1	71.67	11.298		
11,790.4	11,450.0	12,287.1	11,948.0	40.8	43.5	127.62	348.2	708.6	819.4	751.8	67.63	12.115		
11,800.0	11,450.0	11,800.0	11,949.2	40.8	43.4	127.55	382.5	708.4	820.1	753.4	66.72	12.292		
11,900.0	11,450.0	12,434.8	11,948.9	41.1	43.9	127.15	495.9	707.4	825.0	756.6	68.36	12.068		
12,000.0	11,450.0	12,534.9	11,948.3	41.5	44.2	126.96	595.9	706.6	827.1	758.0	69.07	11.974		
12,037.8	11,450.0	12,572.7	11,948.0	41.7	44.3	126.94	633.8	706.3	827.1	757.8	69.34	11.928		
12,100.0	11,450.0	12,635.0	11,947.6	41.9	44.6	126.92	696.0	705.8	826.9	757.1	69.81	11.846		
12,200.0	11,450.0	12,735.1	11,947.0	42.4	45.0	126.88	796.1	705.0	826.5	755.9	70.64	11.701		
12,300.0	11,450.0	12,835.2	11,946.4	43.0	45.6	126.85	896.2	704.2	826.1	754.5	71.57	11.543		
12,400.0	11,450.0	12,935.2	11,945.7	43.6	46.1	126.81	996.2	703.4	825.7	753.1	72.60	11.373		
12,500.0	11,450.0	13,035.2	11,945.0	44.3	46.8	126.77	1,096.2	702.6	825.3	751.5	73.73	11.193		
12,600.0	11,450.0	13,135.2	11,944.3	45.0	47.5	126.74	1,196.2	701.8	824.8	749.9	74.95	11.006		
12,700.0	11,450.0	13,235.2	11,943.7	45.8	48.2	126.70	1,296.2	701.0	824.4	748.2	76.25	10.812		
12,800.0	11,450.0	13,335.2	11,943.0	46.6	49.0	126.67	1,396.2	700.2	824.0	746.4	77.64	10.614		
12,900.0	11,450.0	13,435.2	11,942.3	47.4	49.8	126.63	1,496.2	699.4	823.6	744.5	79.10	10.412		
13,000.0	11,450.0	13,535.2	11,941.7	48.3	50.7	126.59	1,596.2	698.6	823.2	742.6	80.64	10.209		
13,100.0	11,450.0	13,635.2	11,941.0	49.3	51.6	126.56	1,696.2	697.8	822.8	740.6	82.25	10.004		
13,200.0	11,450.0	13,735.2	11,940.3	50.3	52.5	126.52	1,796.2	697.0	822.4	738.5	83.92	9.799		
13,300.0	11,450.0	13,835.2	11,939.7	51.3	53.5	126.48	1,896.1	696.2	822.0	736.3	85.66	9.596		
13,400.0	11,450.0	13,935.2	11,939.0	52.3	54.5	126.44	1,996.1	695.4	821.6	734.1	87.45	9.394		
13,500.0	11,450.0	14,035.2	11,938.3	53.4	55.5	126.41	2,096.1	694.6	821.2	731.9	89.31	9.195		
13,600.0	11,450.0	14,135.2	11,937.7	54.5	56.6	126.37	2,196.1	693.8	820.8	729.5	91.21	8.998		
13,700.0	11,450.0	14,235.1	11,937.0	55.6	57.6	126.33	2,296.1	693.0	820.3	727.2	93.16	8.805		
13,800.0	11,450.0	14,335.1	11,936.3	56.8	58.8	126.30	2,396.1	692.2	819.9	724.8	95.16	8.616		
13,900.0	11,450.0	14,435.1	11,935.7	58.0	59.9	126.26	2,496.1	691.4	819.5	722.3	97.21	8.431		
14,000.0	11,450.0	14,535.1	11,935.0	59.2	61.1	126.22	2,596.1	690.6	819.1	719.8	99.29	8.250		
14,100.0	11,450.0	14,635.1	11,934.3	60.4	62.3	126.19	2,696.1	689.8	818.7	717.3	101.42	8.073		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,200.0	11,450.0	14,735.1	11,933.7	61.7	63.5	126.15	2,796.1	689.0	818.3	714.7	103.58	7.900		
14,300.0	11,450.0	14,835.1	11,933.0	62.9	64.7	126.11	2,896.1	688.2	817.9	712.1	105.77	7.733		
14,400.0	11,450.0	14,935.1	11,932.3	64.2	65.9	126.07	2,996.1	687.4	817.5	709.5	108.00	7.569		
14,500.0	11,450.0	15,035.1	11,931.7	65.5	67.2	126.04	3,096.1	686.6	817.1	706.8	110.26	7.411		
14,600.0	11,450.0	15,135.1	11,931.0	66.8	68.5	126.00	3,196.0	685.8	816.7	704.1	112.55	7.256		
14,700.0	11,450.0	15,235.1	11,930.3	68.2	69.8	125.96	3,296.0	685.0	816.3	701.4	114.86	7.107		
14,800.0	11,450.0	15,335.1	11,929.7	69.5	71.1	125.93	3,396.0	684.2	815.9	698.7	117.20	6.961		
14,900.0	11,450.0	15,435.1	11,929.0	70.9	72.4	125.89	3,496.0	683.4	815.5	695.9	119.57	6.820		
15,000.0	11,450.0	15,535.1	11,928.3	72.2	73.8	125.85	3,596.0	682.6	815.1	693.1	121.96	6.683		
15,100.0	11,450.0	15,635.1	11,927.7	73.6	75.1	125.81	3,696.0	681.8	814.7	690.3	124.37	6.551		
15,200.0	11,450.0	15,735.1	11,927.0	75.0	76.5	125.78	3,796.0	680.9	814.3	687.5	126.80	6.422		
15,300.0	11,450.0	15,835.1	11,926.3	76.4	77.9	125.74	3,896.0	680.1	813.9	684.6	129.25	6.297		
15,400.0	11,450.0	15,935.1	11,925.7	77.8	79.2	125.70	3,996.0	679.3	813.5	681.7	131.72	6.176		
15,500.0	11,450.0	16,035.1	11,925.0	79.3	80.6	125.66	4,096.0	678.5	813.1	678.9	134.21	6.058		
15,600.0	11,450.0	16,135.1	11,924.3	80.7	82.0	125.63	4,196.0	677.7	812.7	675.9	136.72	5.944		
15,700.0	11,450.0	16,235.1	11,923.7	82.1	83.5	125.59	4,296.0	676.9	812.3	673.0	139.24	5.834		
15,800.0	11,450.0	16,335.1	11,923.0	83.6	84.9	125.55	4,396.0	676.1	811.9	670.1	141.78	5.726		
15,900.0	11,450.0	16,435.1	11,922.3	85.0	86.3	125.51	4,495.9	675.3	811.5	667.1	144.33	5.622		
16,000.0	11,450.0	16,535.1	11,921.7	86.5	87.8	125.47	4,595.9	674.5	811.1	664.2	146.89	5.521		
16,100.0	11,450.0	16,635.1	11,921.0	88.0	89.2	125.44	4,695.9	673.7	810.7	661.2	149.47	5.423		
16,200.0	11,450.0	16,735.1	11,920.3	89.4	90.7	125.40	4,795.9	672.9	810.3	658.2	152.07	5.328		
16,300.0	11,450.0	16,835.1	11,919.7	90.9	92.1	125.36	4,895.9	672.1	809.9	655.2	154.67	5.236		
16,400.0	11,450.0	16,935.1	11,919.0	92.4	93.6	125.32	4,995.9	671.3	809.5	652.2	157.29	5.146		
16,500.0	11,450.0	17,035.1	11,918.3	93.9	95.1	125.29	5,095.9	670.5	809.1	649.1	159.92	5.059		
16,600.0	11,450.0	17,135.1	11,917.7	95.4	96.5	125.25	5,195.9	669.7	808.7	646.1	162.56	4.975		
16,700.0	11,450.0	17,235.1	11,917.0	96.9	98.0	125.21	5,295.9	668.9	808.3	643.1	165.21	4.892		
16,800.0	11,450.0	17,335.1	11,916.3	98.4	99.5	125.17	5,395.9	668.1	807.9	640.0	167.87	4.813		
16,900.0	11,450.0	17,435.1	11,915.7	100.0	101.0	125.13	5,495.9	667.3	807.5	636.9	170.54	4.735		
17,000.0	11,450.0	17,535.1	11,915.0	101.5	102.5	125.10	5,595.9	666.5	807.1	633.9	173.22	4.659		
17,100.0	11,450.0	17,635.1	11,914.3	103.0	104.0	125.06	5,695.9	665.7	806.7	630.8	175.91	4.586		
17,200.0	11,450.0	17,735.1	11,913.7	104.5	105.5	125.02	5,795.8	664.9	806.3	627.7	178.61	4.514		
17,300.0	11,450.0	17,835.1	11,913.0	106.1	107.0	124.98	5,895.8	664.1	805.9	624.6	181.31	4.445		
17,400.0	11,450.0	17,935.1	11,912.3	107.6	108.6	124.94	5,995.8	663.3	805.5	621.5	184.03	4.377		
17,500.0	11,450.0	18,035.1	11,911.7	109.1	110.1	124.90	6,095.8	662.5	805.1	618.4	186.75	4.311		
17,600.0	11,450.0	18,135.1	11,911.0	110.7	111.6	124.87	6,195.8	661.7	804.7	615.2	189.48	4.247		
17,700.0	11,450.0	18,235.1	11,910.3	112.2	113.1	124.83	6,295.8	660.9	804.3	612.1	192.21	4.184		
17,800.0	11,450.0	18,335.1	11,909.7	113.8	114.7	124.79	6,395.8	660.1	803.9	609.0	194.96	4.124		
17,900.0	11,450.0	18,435.1	11,909.0	115.3	116.2	124.75	6,495.8	659.3	803.5	605.8	197.71	4.064		
18,000.0	11,450.0	18,535.1	11,908.3	116.9	117.8	124.71	6,595.8	658.5	803.1	602.7	200.47	4.006		
18,100.0	11,450.0	18,635.0	11,907.7	118.4	119.3	124.67	6,695.8	657.7	802.7	599.5	203.23	3.950		
18,200.0	11,450.0	18,735.0	11,907.0	120.0	120.8	124.63	6,795.8	656.9	802.4	596.4	206.00	3.895		
18,300.0	11,450.0	18,835.0	11,906.3	121.6	122.4	124.60	6,895.8	656.1	802.0	593.2	208.78	3.841		
18,400.0	11,450.0	18,935.0	11,905.7	123.1	123.9	124.56	6,995.8	655.3	801.6	590.0	211.56	3.789		
18,500.0	11,450.0	19,035.0	11,905.0	124.7	125.5	124.52	7,095.7	654.5	801.2	586.8	214.35	3.738		
18,600.0	11,450.0	19,135.0	11,904.3	126.3	127.1	124.48	7,195.7	653.6	800.8	583.6	217.15	3.688		
18,700.0	11,450.0	19,235.0	11,903.7	127.8	128.6	124.44	7,295.7	652.8	800.4	580.5	219.95	3.639		
18,800.0	11,450.0	19,335.0	11,903.0	129.4	130.2	124.40	7,395.7	652.0	800.0	577.3	222.76	3.591		
18,900.0	11,450.0	19,435.0	11,902.3	131.0	131.7	124.36	7,495.7	651.2	799.6	574.1	225.57	3.545		
19,000.0	11,450.0	19,535.0	11,901.7	132.6	133.3	124.32	7,595.7	650.4	799.2	570.9	228.38	3.500		
19,100.0	11,450.0	19,635.0	11,901.0	134.2	134.9	124.29	7,695.7	649.6	798.8	567.6	231.20	3.455		
19,200.0	11,450.0	19,735.0	11,900.3	135.7	136.5	124.25	7,795.7	648.8	798.5	564.4	234.03	3.412		
19,300.0	11,450.0	19,835.0	11,899.7	137.3	138.0	124.21	7,895.7	648.0	798.1	561.2	236.86	3.369		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,400.0	11,450.0	19,935.0	11,899.0	138.9	139.6	124.17	7,995.7	647.2	797.7	558.0	239.70	3.328		
19,500.0	11,450.0	20,035.0	11,898.3	140.5	141.2	124.13	8,095.7	646.4	797.3	554.8	242.54	3.287		
19,600.0	11,450.0	20,135.0	11,897.7	142.1	142.8	124.09	8,195.7	645.6	796.9	551.5	245.39	3.248		
19,700.0	11,450.0	20,235.0	11,897.0	143.7	144.3	124.05	8,295.7	644.8	796.5	548.3	248.24	3.209		
19,800.0	11,450.0	20,335.0	11,896.3	145.3	145.9	124.01	8,395.6	644.0	796.1	545.0	251.09	3.171		
19,900.0	11,450.0	20,435.0	11,895.6	146.9	147.5	123.97	8,495.6	643.2	795.8	541.8	253.95	3.134		
20,000.0	11,450.0	20,535.0	11,895.0	148.5	149.1	123.93	8,595.6	642.4	795.4	538.6	256.81	3.097		
20,100.0	11,450.0	20,635.0	11,894.3	150.1	150.7	123.89	8,695.6	641.6	795.0	535.3	259.68	3.061		
20,200.0	11,450.0	20,735.0	11,893.6	151.7	152.3	123.85	8,795.6	640.8	794.6	532.0	262.55	3.026		
20,300.0	11,450.0	20,835.0	11,893.0	153.3	153.9	123.82	8,895.6	640.0	794.2	528.8	265.42	2.992		
20,400.0	11,450.0	20,935.0	11,892.3	154.9	155.5	123.78	8,995.6	639.2	793.8	525.5	268.30	2.959		
20,500.0	11,450.0	21,035.0	11,891.6	156.5	157.0	123.74	9,095.6	638.4	793.4	522.3	271.19	2.926		
20,600.0	11,450.0	21,135.0	11,891.0	158.1	158.6	123.70	9,195.6	637.6	793.1	519.0	274.07	2.894		
20,700.0	11,450.0	21,235.0	11,890.3	159.7	160.2	123.66	9,295.6	636.8	792.7	515.7	276.96	2.862		
20,800.0	11,450.0	21,335.0	11,889.6	161.3	161.8	123.62	9,395.6	636.0	792.3	512.4	279.86	2.831		
20,900.0	11,450.0	21,435.0	11,889.0	162.9	163.4	123.58	9,495.6	635.2	791.9	509.2	282.76	2.801		
21,000.0	11,450.0	21,535.0	11,888.3	164.5	165.0	123.54	9,595.6	634.4	791.5	505.9	285.66	2.771		
21,100.0	11,450.0	21,635.0	11,887.6	166.1	166.6	123.50	9,695.5	633.6	791.2	502.6	288.56	2.742		
21,200.0	11,450.0	21,735.0	11,887.0	167.7	168.2	123.46	9,795.5	632.8	790.8	499.3	291.47	2.713		
21,300.0	11,450.0	21,835.0	11,886.3	169.3	169.8	123.42	9,895.5	632.0	790.4	496.0	294.38	2.685		
21,400.0	11,450.0	21,935.0	11,885.6	170.9	171.4	123.38	9,995.5	631.2	790.0	492.7	297.30	2.657		
21,500.0	11,450.0	22,035.0	11,885.0	172.5	173.0	123.34	10,095.5	630.4	789.6	489.4	300.22	2.630		
21,600.0	11,450.0	22,135.0	11,884.3	174.2	174.6	123.30	10,195.5	629.6	789.3	486.1	303.14	2.604		
21,614.7	11,450.0	22,149.7	11,884.2	174.4	174.9	123.29	10,210.2	629.4	789.2	485.7	303.54	2.600 SF		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 161-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.34	26.8	2,343.2	2,343.4					
100.0	100.0	103.3	103.3	0.1	0.2	89.34	26.9	2,343.2	2,343.3	2,343.1	0.28	8,349.730		
200.0	200.0	203.7	203.7	0.5	0.4	89.34	27.1	2,343.0	2,343.1	2,342.3	0.88	2,670.713		
300.0	300.0	308.9	308.9	0.8	0.8	89.34	27.1	2,342.7	2,342.9	2,341.3	1.61	1,455.648		
370.7	370.7	370.7	370.7	1.1	1.0	89.34	27.1	2,342.6	2,342.8	2,340.7	2.08	1,128.476		
400.0	400.0	396.3	396.3	1.2	1.1	89.34	27.1	2,342.6	2,342.8	2,340.5	2.27	1,032.410		
500.0	500.0	496.5	496.5	1.6	1.4	89.34	27.1	2,342.8	2,343.0	2,340.0	2.97	789.077		
600.0	600.0	601.2	601.2	1.9	1.8	89.34	27.0	2,342.8	2,343.0	2,339.3	3.69	635.033		
634.9	634.9	634.9	634.9	2.0	1.9	89.34	26.9	2,342.8	2,343.0	2,339.1	3.93	595.860		
700.0	700.0	697.1	697.1	2.3	2.1	89.34	26.9	2,342.9	2,343.0	2,338.6	4.38	534.674		
800.0	800.0	795.3	795.3	2.6	2.4	89.34	26.8	2,343.1	2,343.2	2,338.2	5.08	460.942		
900.0	900.0	897.0	897.0	3.0	2.8	89.34	26.8	2,343.2	2,343.3	2,337.5	5.80	404.229		
1,000.0	1,000.0	1,004.1	1,004.1	3.4	3.2	89.35	26.7	2,343.2	2,343.4	2,336.9	6.53	358.856		
1,100.0	1,100.0	1,104.1	1,104.1	3.7	3.5	-60.46	26.5	2,343.1	2,342.8	2,335.6	7.22	324.359		
1,200.0	1,200.0	1,254.6	1,254.6	4.0	4.1	-60.54	25.5	2,341.8	2,340.8	2,332.8	8.08	289.609		
1,300.0	1,299.9	1,445.4	1,445.1	4.4	4.7	-60.68	21.8	2,333.7	2,334.4	2,325.4	9.09	256.908		
1,400.0	1,399.7	1,626.4	1,625.4	4.7	5.4	-60.86	15.3	2,318.3	2,322.4	2,312.4	10.06	230.934		
1,500.0	1,499.4	1,696.2	1,694.8	5.0	5.6	-61.02	12.2	2,312.0	2,309.5	2,298.8	10.65	216.752		
1,600.0	1,598.9	1,763.3	1,761.7	5.4	5.9	-61.20	9.2	2,306.8	2,297.0	2,285.8	11.25	204.146		
1,700.0	1,698.3	1,831.3	1,829.5	5.8	6.1	-61.40	6.1	2,302.5	2,285.2	2,273.3	11.86	192.703		
1,800.0	1,797.4	1,906.9	1,904.9	6.1	6.4	-61.64	2.9	2,298.6	2,273.7	2,261.2	12.50	181.914		
1,900.0	1,896.4	1,977.1	1,975.0	6.5	6.7	-61.81	0.8	2,295.8	2,262.9	2,249.8	13.13	172.408		
2,000.0	1,995.5	2,059.5	2,057.3	6.9	7.0	-62.04	-0.4	2,293.4	2,253.3	2,239.5	13.80	163.316		
2,100.0	2,094.5	2,170.5	2,168.3	7.3	7.4	-62.39	-0.6	2,290.2	2,243.9	2,229.3	14.57	154.013		
2,200.0	2,193.5	2,307.3	2,305.0	7.7	7.9	-62.85	0.4	2,284.4	2,233.2	2,217.8	15.43	144.741		
2,300.0	2,292.5	2,397.1	2,394.7	8.1	8.2	-63.15	0.4	2,280.1	2,222.0	2,205.8	16.14	137.691		
2,400.0	2,391.6	2,471.4	2,468.9	8.5	8.5	-63.36	-0.7	2,277.1	2,211.6	2,194.8	16.80	131.647		
2,500.0	2,490.6	2,561.8	2,559.2	8.9	8.8	-63.58	-3.8	2,274.3	2,202.1	2,184.5	17.52	125.697		
2,600.0	2,589.6	2,648.5	2,645.8	9.3	9.1	-63.77	-7.5	2,272.1	2,193.0	2,174.7	18.23	120.309		
2,700.0	2,688.6	2,742.3	2,739.5	9.7	9.4	-64.00	-10.7	2,270.0	2,184.4	2,165.4	18.96	115.192		
2,729.0	2,717.4	2,774.7	2,771.9	9.8	9.6	-64.09	-11.5	2,269.3	2,181.9	2,162.7	19.19	113.677		
2,800.0	2,787.8	2,871.6	2,868.7	10.1	9.9	-64.22	-14.7	2,266.5	2,175.6	2,155.8	19.82	109.788		
2,900.0	2,887.2	2,968.0	2,965.0	10.5	10.3	-64.27	-18.2	2,262.9	2,167.0	2,146.4	20.55	105.443		
3,000.0	2,986.8	3,043.0	3,039.9	10.9	10.5	-64.29	-19.8	2,261.0	2,160.7	2,139.5	21.20	101.901		
3,100.0	3,086.7	3,102.9	3,099.8	11.2	10.7	-64.31	-20.0	2,260.4	2,156.9	2,135.2	21.78	99.021		
3,200.0	3,186.6	3,185.9	3,182.8	11.6	11.0	-64.38	-19.0	2,260.2	2,155.6	2,133.2	22.42	96.147		
3,237.5	3,224.1	3,221.1	3,218.0	11.7	11.1	-64.41	-18.2	2,260.3	2,155.5	2,132.8	22.66	95.106		
3,262.3	3,249.0	3,250.9	3,247.8	11.8	11.2	85.35	-17.4	2,260.3	2,155.5	2,132.7	22.85	94.340		
3,300.0	3,286.6	3,303.0	3,299.8	11.9	11.4	85.31	-15.7	2,260.0	2,155.4	2,132.2	23.15	93.120		
3,400.0	3,386.6	3,461.4	3,458.2	12.2	12.0	85.14	-9.7	2,256.3	2,153.3	2,129.3	24.00	89.704		
3,500.0	3,486.6	3,578.5	3,575.0	12.6	12.4	85.02	-5.6	2,251.4	2,149.5	2,124.7	24.73	86.900		
3,600.0	3,586.6	3,668.0	3,664.5	12.9	12.7	84.94	-3.0	2,247.6	2,145.5	2,120.1	25.38	84.521		
3,700.0	3,686.6	3,754.3	3,750.6	13.2	13.0	84.91	-2.1	2,244.6	2,142.2	2,116.2	26.03	82.309		
3,800.0	3,786.6	3,848.3	3,844.6	13.5	13.3	84.97	-4.4	2,242.2	2,139.4	2,112.7	26.70	80.140		
3,900.0	3,886.6	3,954.0	3,950.0	13.9	13.7	85.15	-11.5	2,239.9	2,136.6	2,109.2	27.40	77.966		
4,000.0	3,986.6	4,053.6	4,049.1	14.2	14.1	85.42	-21.9	2,237.8	2,133.6	2,105.5	28.10	75.938		
4,100.0	4,086.6	4,162.3	4,157.2	14.6	14.5	85.71	-32.9	2,235.3	2,130.6	2,101.8	28.82	73.924		
4,200.0	4,186.6	4,300.3	4,294.7	14.9	15.0	85.97	-42.7	2,230.3	2,126.5	2,096.9	29.64	71.750		
4,300.0	4,286.6	4,478.2	4,472.0	15.2	15.6	86.17	-51.1	2,218.9	2,119.9	2,089.3	30.55	69.392		
4,400.0	4,386.6	4,609.0	4,602.0	15.6	16.1	86.36	-58.9	2,206.4	2,109.8	2,078.5	31.32	67.354		
4,500.0	4,486.6	4,690.3	4,682.8	15.9	16.4	86.49	-64.0	2,198.7	2,100.0	2,068.0	31.99	65.652		
4,600.0	4,586.6	4,800.6	4,792.4	16.2	16.9	86.63	-69.7	2,189.0	2,090.9	2,058.2	32.71	63.912		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 161-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,700.0	4,686.6	4,919.1	4,910.2	16.6	17.3	86.78	-75.8	2,176.9	2,080.4	2,046.9	33.46	62.175		
4,800.0	4,786.6	5,004.8	4,995.4	16.9	17.6	86.89	-80.2	2,168.2	2,070.0	2,035.8	34.14	60.637		
4,900.0	4,886.6	5,076.0	5,066.2	17.3	17.9	86.97	-83.6	2,161.7	2,060.5	2,025.7	34.78	59.245		
5,000.0	4,986.6	5,157.8	5,147.7	17.6	18.2	87.06	-87.0	2,155.2	2,052.4	2,016.9	35.44	57.907		
5,100.0	5,086.6	5,251.3	5,240.8	18.0	18.6	87.15	-90.6	2,148.2	2,044.7	2,008.5	36.13	56.585		
5,200.0	5,186.6	5,343.8	5,333.1	18.3	18.9	87.24	-94.1	2,141.5	2,037.3	2,000.5	36.82	55.325		
5,300.0	5,286.6	5,436.4	5,425.4	18.6	19.3	87.32	-97.5	2,135.2	2,030.3	1,992.8	37.51	54.121		
5,400.0	5,386.6	5,549.1	5,537.7	19.0	19.7	87.43	-101.5	2,127.3	2,023.2	1,984.9	38.26	52.885		
5,500.0	5,486.6	5,646.7	5,635.0	19.3	20.1	87.52	-104.9	2,120.1	2,015.7	1,976.7	38.96	51.737		
5,600.0	5,586.6	5,720.2	5,708.2	19.7	20.3	87.58	-107.2	2,115.3	2,009.0	1,969.4	39.60	50.730		
5,700.0	5,686.6	5,798.7	5,786.6	20.0	20.6	87.63	-109.4	2,111.1	2,003.5	1,963.2	40.25	49.774		
5,800.0	5,786.6	5,898.5	5,886.2	20.4	21.0	87.71	-112.1	2,106.4	1,998.6	1,957.7	40.96	48.795		
5,900.0	5,886.6	6,005.8	5,993.4	20.7	21.4	87.79	-115.2	2,100.9	1,993.4	1,951.8	41.69	47.815		
6,000.0	5,986.6	6,077.2	6,064.7	21.1	21.7	87.84	-117.0	2,097.6	1,988.8	1,946.4	42.32	46.996		
6,100.0	6,086.6	6,164.7	6,152.1	21.4	22.0	87.88	-118.5	2,094.7	1,985.3	1,942.3	42.99	46.184		
6,200.0	6,186.6	6,266.0	6,253.3	21.8	22.3	87.93	-120.4	2,091.4	1,982.0	1,938.3	43.70	45.355		
6,300.0	6,286.6	6,364.7	6,352.0	22.1	22.7	87.98	-122.2	2,088.2	1,978.7	1,934.2	44.41	44.559		
6,400.0	6,386.6	6,471.3	6,458.5	22.5	23.1	88.03	-124.1	2,084.6	1,975.2	1,930.1	45.14	43.762		
6,500.0	6,486.6	6,568.9	6,556.0	22.8	23.4	88.07	-125.7	2,081.1	1,971.6	1,925.8	45.84	43.013		
6,600.0	6,586.6	6,668.9	6,656.0	23.2	23.8	88.12	-127.3	2,077.7	1,968.1	1,921.6	46.55	42.282		
6,700.0	6,686.6	6,772.8	6,759.8	23.5	24.2	88.16	-129.0	2,074.0	1,964.5	1,917.2	47.27	41.559		
6,800.0	6,786.6	6,875.6	6,862.5	23.9	24.6	88.20	-130.6	2,070.1	1,960.7	1,912.7	47.99	40.858		
6,900.0	6,886.6	6,977.7	6,964.5	24.2	24.9	88.24	-132.0	2,066.1	1,956.8	1,908.0	48.70	40.176		
7,000.0	6,986.6	7,075.8	7,062.6	24.6	25.3	88.28	-133.5	2,062.3	1,952.8	1,903.4	49.41	39.522		
7,100.0	7,086.6	7,175.9	7,162.5	24.9	25.7	88.32	-135.0	2,058.5	1,949.0	1,898.9	50.12	38.885		
7,200.0	7,186.6	7,279.3	7,265.9	25.3	26.0	88.37	-136.7	2,054.3	1,944.9	1,894.1	50.84	38.253		
7,300.0	7,286.6	7,377.3	7,363.7	25.6	26.4	88.41	-138.2	2,050.5	1,940.9	1,889.4	51.55	37.652		
7,400.0	7,386.6	7,473.2	7,459.6	26.0	26.7	88.45	-139.5	2,046.7	1,937.0	1,884.7	52.25	37.073		
7,500.0	7,486.6	7,572.1	7,558.4	26.3	27.1	88.48	-140.9	2,043.2	1,933.3	1,880.4	52.96	36.508		
7,600.0	7,586.6	7,675.8	7,662.0	26.7	27.5	88.52	-142.3	2,039.2	1,929.5	1,875.8	53.68	35.946		
7,700.0	7,686.6	7,782.8	7,768.9	27.0	27.9	88.58	-144.2	2,034.9	1,925.5	1,871.0	54.41	35.387		
7,800.0	7,786.6	7,884.8	7,870.7	27.4	28.2	88.68	-147.7	2,030.6	1,921.1	1,866.0	55.13	34.845		
7,900.0	7,886.6	7,992.8	7,978.6	27.7	28.6	88.81	-152.3	2,025.8	1,916.5	1,860.7	55.87	34.301		
8,000.0	7,986.6	8,061.9	8,047.6	28.1	28.9	88.89	-155.0	2,023.1	1,912.6	1,856.1	56.50	33.851		
8,100.0	8,086.6	8,151.2	8,136.8	28.4	29.2	88.98	-157.9	2,020.7	1,909.8	1,852.6	57.18	33.400		
8,200.0	8,186.6	8,247.6	8,233.1	28.8	29.6	89.06	-160.9	2,018.3	1,907.3	1,849.4	57.88	32.950		
8,300.0	8,286.6	8,343.0	8,328.4	29.1	29.9	89.15	-163.8	2,016.1	1,905.0	1,846.4	58.58	32.517		
8,400.0	8,386.6	8,453.4	8,438.7	29.5	30.3	89.24	-166.7	2,013.6	1,902.6	1,843.3	59.33	32.067		
8,500.0	8,486.6	8,559.8	8,545.1	29.8	30.7	89.30	-168.7	2,010.5	1,899.7	1,839.6	60.07	31.627		
8,600.0	8,586.6	8,657.0	8,642.2	30.2	31.0	89.35	-170.7	2,007.6	1,896.7	1,835.9	60.77	31.210		
8,700.0	8,686.6	8,757.2	8,742.4	30.6	31.4	89.42	-172.9	2,004.7	1,893.8	1,832.3	61.49	30.800		
8,800.0	8,786.6	8,865.6	8,850.7	30.9	31.8	89.48	-174.9	2,001.3	1,890.6	1,828.4	62.23	30.383		
8,900.0	8,886.6	8,966.6	8,951.6	31.3	32.2	89.53	-176.5	1,997.7	1,887.1	1,824.1	62.94	29.980		
9,000.0	8,986.6	9,059.5	9,044.4	31.6	32.5	89.60	-178.8	1,994.8	1,883.9	1,820.3	63.64	29.603		
9,100.0	9,086.6	9,157.3	9,142.2	32.0	32.9	89.68	-181.6	1,991.8	1,880.9	1,816.5	64.35	29.230		
9,200.0	9,186.6	9,245.7	9,230.5	32.3	33.2	89.71	-182.4	1,989.4	1,878.1	1,813.1	65.02	28.884		
9,300.0	9,286.6	9,329.7	9,314.5	32.7	33.5	89.71	-182.5	1,987.9	1,876.3	1,810.6	65.68	28.568		
9,400.0	9,386.6	9,424.1	9,408.9	33.0	33.8	89.70	-182.3	1,986.6	1,874.9	1,808.6	66.36	28.252		
9,500.0	9,486.6	9,516.4	9,501.2	33.4	34.1	89.69	-182.0	1,985.8	1,874.0	1,807.0	67.04	27.953		
9,600.0	9,586.6	9,621.6	9,606.4	33.7	34.5	89.69	-182.0	1,984.8	1,873.1	1,805.3	67.77	27.640		
9,700.0	9,686.6	9,726.7	9,711.4	34.1	34.9	89.72	-182.9	1,983.5	1,871.9	1,803.4	68.50	27.328		
9,800.0	9,786.6	9,824.8	9,809.6	34.5	35.2	89.77	-184.6	1,982.2	1,870.5	1,801.3	69.20	27.029		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 161-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,900.0	9,886.6	9,916.5	9,901.2	34.8	35.6	89.81	-185.8	1,981.3	1,869.5	1,799.6	69.88	26.752		
10,000.0	9,986.6	10,007.2	9,992.0	35.2	35.9	89.80	-185.4	1,980.8	1,869.0	1,798.4	70.55	26.493		
10,080.2	10,066.8	10,082.1	10,066.8	35.4	36.1	89.79	-185.2	1,980.7	1,868.9	1,797.8	71.08	26.292 CC		
10,100.0	10,086.6	10,101.3	10,086.0	35.5	36.2	89.79	-185.2	1,980.7	1,868.9	1,797.7	71.22	26.242		
10,200.0	10,186.6	10,194.5	10,179.3	35.9	36.5	89.80	-185.5	1,980.9	1,869.1	1,797.2	71.89	26.001		
10,300.0	10,286.6	10,284.8	10,269.6	36.2	36.8	89.81	-186.0	1,981.5	1,869.7	1,797.2	72.54	25.776		
10,400.0	10,386.6	10,374.4	10,359.1	36.6	37.1	89.83	-186.6	1,982.5	1,870.8	1,797.7	73.18	25.564		
10,500.0	10,486.6	10,461.9	10,446.6	36.9	37.4	89.84	-186.7	1,984.2	1,872.8	1,799.0	73.81	25.372		
10,600.0	10,586.6	10,576.2	10,560.9	37.3	37.7	89.80	-185.5	1,986.1	1,874.4	1,799.9	74.56	25.141		
10,700.0	10,686.6	10,677.6	10,662.3	37.6	38.1	89.78	-184.7	1,987.4	1,875.8	1,800.5	75.24	24.929		
10,800.0	10,786.6	10,782.5	10,767.2	38.0	38.4	89.77	-184.6	1,988.7	1,877.0	1,801.0	75.95	24.714		
10,890.4	10,877.0	10,883.9	10,868.6	38.3	38.7	89.77	-184.6	1,989.5	1,877.7	1,801.1	76.61	24.509		
10,900.0	10,886.6	10,894.9	10,879.5	38.4	38.8	95.17	-184.6	1,989.5	1,877.7	1,801.1	76.68	24.487		
10,950.0	10,936.5	10,943.2	10,927.8	38.5	38.9	95.20	-184.2	1,989.7	1,878.2	1,801.2	77.02	24.387		
11,000.0	10,986.0	10,987.1	10,971.8	38.7	39.1	95.28	-183.7	1,990.0	1,879.2	1,801.8	77.33	24.302		
11,050.0	11,034.6	11,030.6	11,015.3	38.9	39.2	95.42	-183.1	1,990.4	1,880.7	1,803.1	77.63	24.227		
11,100.0	11,082.0	11,073.3	11,057.9	39.0	39.3	95.59	-182.5	1,990.9	1,883.0	1,805.0	77.92	24.165		
11,150.0	11,127.8	11,115.4	11,100.0	39.2	39.5	95.79	-181.9	1,991.5	1,885.9	1,807.7	78.21	24.113		
11,200.0	11,171.8	11,157.3	11,141.9	39.3	39.6	96.01	-181.2	1,992.1	1,889.5	1,811.0	78.49	24.074		
11,250.0	11,213.5	11,197.2	11,181.8	39.4	39.7	96.21	-180.5	1,992.8	1,894.0	1,815.2	78.76	24.048		
11,300.0	11,252.6	11,234.9	11,219.5	39.5	39.9	96.36	-179.9	1,993.5	1,899.4	1,820.4	79.02	24.038		
11,350.0	11,288.9	11,269.9	11,254.5	39.7	40.0	96.42	-179.4	1,994.1	1,905.9	1,826.6	79.27	24.044		
11,400.0	11,322.0	11,299.6	11,284.1	39.8	40.1	96.32	-179.1	1,994.7	1,913.5	1,834.0	79.49	24.072		
11,450.0	11,351.8	11,326.0	11,310.6	39.9	40.2	96.05	-178.7	1,995.3	1,922.4	1,842.7	79.71	24.119		
11,500.0	11,377.9	11,546.3	11,527.8	40.0	40.9	100.26	-150.1	1,994.0	1,932.2	1,851.8	80.40	24.031		
11,550.0	11,400.3	11,585.9	11,564.8	40.1	41.0	100.20	-135.9	1,992.9	1,940.7	1,860.1	80.61	24.076		
11,600.0	11,418.6	11,626.9	11,602.1	40.3	41.1	100.06	-118.9	1,992.2	1,950.4	1,869.6	80.80	24.138		
11,650.0	11,432.8	11,649.2	11,621.9	40.4	41.1	99.41	-108.8	1,992.0	1,961.5	1,880.6	80.97	24.224		
11,700.0	11,442.8	11,671.8	11,641.7	40.5	41.2	98.63	-98.0	1,992.1	1,974.2	1,893.0	81.14	24.331		
11,750.0	11,448.5	12,436.9	11,984.4	40.7	43.2	105.65	533.2	1,956.2	1,978.4	1,897.0	81.44	24.292		
11,790.4	11,450.0	12,467.0	11,985.1	40.8	43.3	105.70	563.1	1,953.1	1,977.9	1,896.3	81.67	24.218		
11,800.0	11,450.0	12,467.0	11,985.1	40.8	43.3	105.70	563.1	1,953.1	1,977.9	1,896.2	81.70	24.211		
11,900.0	11,450.0	12,501.4	11,985.8	41.1	43.4	105.72	597.3	1,950.4	1,977.8	1,895.7	82.13	24.082		
11,954.0	11,450.0	12,520.3	11,986.1	41.3	43.5	105.73	616.2	1,949.3	1,977.7	1,895.3	82.39	24.004		
12,000.0	11,450.0	12,560.0	11,986.7	41.5	43.7	105.75	655.9	1,948.4	1,978.0	1,895.3	82.72	23.911		
12,037.8	11,450.0	12,560.0	11,986.7	41.7	43.7	105.75	655.9	1,948.4	1,977.6	1,894.7	82.86	23.867		
12,053.3	11,450.0	12,560.0	11,986.7	41.7	43.7	105.75	655.9	1,948.4	1,977.5	1,894.6	82.92	23.850		
12,100.0	11,450.0	12,601.2	11,987.2	41.9	43.9	105.76	697.1	1,948.1	1,977.7	1,894.4	83.31	23.741		
12,169.6	11,450.0	12,676.3	11,987.1	42.3	44.3	105.76	772.2	1,947.5	1,977.7	1,893.7	84.01	23.541		
12,200.0	11,450.0	12,701.3	11,986.7	42.4	44.4	105.75	797.2	1,947.5	1,977.7	1,893.4	84.29	23.464		
12,300.0	11,450.0	12,783.0	11,984.2	43.0	44.9	105.67	878.9	1,948.2	1,978.5	1,893.2	85.29	23.197		
12,400.0	11,450.0	12,867.1	11,980.5	43.6	45.4	105.55	962.9	1,950.0	1,980.1	1,893.7	86.41	22.917		
12,500.0	11,450.0	12,963.4	11,978.7	44.3	46.0	105.47	1,059.1	1,951.9	1,982.3	1,894.6	87.68	22.609		
12,600.0	11,450.0	13,073.4	11,977.9	45.0	46.7	105.43	1,169.1	1,953.6	1,984.3	1,895.2	89.14	22.260		
12,700.0	11,450.0	13,193.9	11,977.0	45.8	47.6	105.39	1,289.6	1,954.4	1,985.5	1,894.7	90.80	21.867		
12,800.0	11,450.0	13,301.6	11,976.2	46.6	48.5	105.36	1,397.2	1,954.2	1,985.9	1,893.5	92.45	21.481		
12,900.0	11,450.0	13,387.9	11,975.1	47.4	49.2	105.33	1,483.6	1,954.3	1,986.5	1,892.5	93.99	21.135		
13,000.0	11,450.0	13,488.2	11,973.8	48.3	50.1	105.28	1,583.9	1,955.0	1,987.5	1,891.8	95.74	20.759		
13,100.0	11,450.0	13,597.4	11,972.6	49.3	51.1	105.24	1,693.0	1,955.2	1,988.3	1,890.6	97.66	20.359		
13,200.0	11,450.0	13,704.4	11,973.0	50.3	52.1	105.25	1,800.1	1,954.6	1,988.5	1,888.9	99.62	19.961		
13,300.0	11,450.0	13,806.1	11,972.8	51.3	53.1	105.24	1,901.7	1,954.1	1,988.7	1,887.1	101.60	19.574		
13,400.0	11,450.0	13,934.9	11,971.5	52.3	54.5	105.21	2,030.5	1,952.6	1,988.1	1,884.1	103.97	19.123		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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												Offset Site Error:	0.0 usft
Survey Program: 161-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
13,500.0	11,450.0	14,066.7	11,969.7	53.4	55.9	105.18	2,162.3	1,949.0	1,985.9	1,879.5	106.44	18.658	
13,600.0	11,450.0	14,147.9	11,968.7	54.5	56.8	105.16	2,243.4	1,946.5	1,983.4	1,875.0	108.38	18.300	
13,700.0	11,450.0	14,207.7	11,967.8	55.6	57.4	105.14	2,303.2	1,945.6	1,982.2	1,872.2	110.09	18.005	
13,701.2	11,450.0	14,208.3	11,967.8	55.6	57.5	105.14	2,303.8	1,945.5	1,982.2	1,872.1	110.11	18.002	
13,800.0	11,450.0	14,272.5	11,967.2	56.8	58.2	105.12	2,368.0	1,946.0	1,983.3	1,871.4	111.88	17.727	
13,900.0	11,450.0	14,382.5	11,967.0	58.0	59.4	105.10	2,478.0	1,947.0	1,984.9	1,870.6	114.30	17.366	
14,000.0	11,450.0	14,521.4	11,966.4	59.2	61.1	105.08	2,616.9	1,946.6	1,985.3	1,868.1	117.15	16.946	
14,091.8	11,450.0	14,599.0	11,965.8	60.3	62.0	105.06	2,694.5	1,945.7	1,984.8	1,865.7	119.15	16.658	
14,100.0	11,450.0	14,605.3	11,965.7	60.4	62.1	105.06	2,700.8	1,945.7	1,984.8	1,865.5	119.32	16.635	
14,200.0	11,450.0	14,754.4	11,961.5	61.7	63.9	104.95	2,849.8	1,943.9	1,983.8	1,861.3	122.45	16.201	
14,300.0	11,450.0	14,884.3	11,957.0	62.9	65.6	104.84	2,979.6	1,940.4	1,981.1	1,855.8	125.36	15.804	
14,400.0	11,450.0	14,954.9	11,954.2	64.2	66.5	104.77	3,050.1	1,937.9	1,977.6	1,850.1	127.50	15.510	
14,500.0	11,450.0	15,007.1	11,953.3	65.5	67.2	104.75	3,102.3	1,937.1	1,976.4	1,847.0	129.37	15.277	
14,549.8	11,450.0	15,060.1	11,952.8	66.2	67.9	104.74	3,155.3	1,936.8	1,976.4	1,845.7	130.70	15.122	
14,600.0	11,450.0	15,113.5	11,952.0	66.8	68.5	104.72	3,208.7	1,936.4	1,976.3	1,844.2	132.03	14.968	
14,605.3	11,450.0	15,112.0	11,952.1	66.9	68.5	104.72	3,207.1	1,936.4	1,976.3	1,844.2	132.07	14.964	
14,700.0	11,450.0	15,172.6	11,951.2	68.2	69.3	104.69	3,267.8	1,936.7	1,977.1	1,843.1	134.01	14.754	
14,800.0	11,450.0	15,269.4	11,949.6	69.5	70.6	104.62	3,364.5	1,938.6	1,979.3	1,842.7	136.59	14.491	
14,900.0	11,450.0	15,399.3	11,945.4	70.9	72.3	104.49	3,494.3	1,940.3	1,980.5	1,840.8	139.75	14.172	
15,000.0	11,450.0	15,514.3	11,942.7	72.2	73.9	104.41	3,609.3	1,939.8	1,980.3	1,837.6	142.68	13.879	
15,100.0	11,450.0	15,609.5	11,943.1	73.6	75.2	104.42	3,704.5	1,938.9	1,980.2	1,834.9	145.29	13.630	
15,200.0	11,450.0	15,739.3	11,946.2	75.0	77.0	104.52	3,834.2	1,936.1	1,979.5	1,831.1	148.40	13.340	
15,300.0	11,450.0	15,840.0	11,949.1	76.4	78.4	104.62	3,934.8	1,932.7	1,977.8	1,826.7	151.09	13.090	
15,395.0	11,450.0	15,902.8	11,951.2	77.8	79.3	104.69	3,997.6	1,931.0	1,976.9	1,823.7	153.18	12.906	
15,400.0	11,450.0	15,905.8	11,951.3	77.8	79.3	104.69	4,000.6	1,931.0	1,976.9	1,823.6	153.28	12.897	
15,500.0	11,450.0	15,978.3	11,953.8	79.3	80.3	104.76	4,073.0	1,930.6	1,977.9	1,822.4	155.56	12.715	
15,600.0	11,450.0	16,071.9	11,955.2	80.7	81.7	104.79	4,166.6	1,930.8	1,979.3	1,821.1	158.21	12.511	
15,700.0	11,450.0	16,138.5	11,955.2	82.1	82.6	104.78	4,233.2	1,932.1	1,982.0	1,821.5	160.42	12.355	
15,800.0	11,450.0	16,237.0	11,954.9	83.6	84.0	104.74	4,331.7	1,935.1	1,985.5	1,822.3	163.21	12.165	
15,900.0	11,450.0	16,339.3	11,953.9	85.0	85.5	104.69	4,433.9	1,938.3	1,989.1	1,823.0	166.10	11.976	
16,000.0	11,450.0	16,459.9	11,952.3	86.5	87.2	104.61	4,554.5	1,941.2	1,991.8	1,822.5	169.34	11.762	
16,100.0	11,450.0	16,561.6	11,952.1	88.0	88.7	104.59	4,656.1	1,943.0	1,994.2	1,822.0	172.23	11.579	
16,200.0	11,450.0	16,686.1	11,952.8	89.4	90.5	104.59	4,780.6	1,944.3	1,996.2	1,820.7	175.52	11.373	
16,300.0	11,450.0	16,784.5	11,953.8	90.9	91.9	104.61	4,879.0	1,944.3	1,997.2	1,818.8	178.35	11.198	
16,400.0	11,450.0	16,876.1	11,954.6	92.4	93.3	104.63	4,970.6	1,944.7	1,998.6	1,817.5	181.09	11.037	
16,500.0	11,450.0	16,964.9	11,955.7	93.9	94.6	104.65	5,059.4	1,945.4	2,000.5	1,816.7	183.78	10.885	
16,600.0	11,450.0	17,079.1	11,957.8	95.4	96.3	104.69	5,173.6	1,946.3	2,002.4	1,815.5	186.91	10.713	
16,700.0	11,450.0	17,221.7	11,961.5	96.9	98.4	104.80	5,316.2	1,944.6	2,002.7	1,812.2	190.49	10.514	
16,799.9	11,450.0	17,308.3	11,963.8	98.4	99.7	104.87	5,402.6	1,942.6	2,002.0	1,808.8	193.15	10.365	
16,800.0	11,450.0	17,308.3	11,963.8	98.4	99.7	104.87	5,402.7	1,942.6	2,002.0	1,808.8	193.15	10.365	
16,900.0	11,450.0	17,492.6	11,970.6	100.0	102.5	105.09	5,586.7	1,937.1	2,001.6	1,804.4	197.23	10.149	
17,000.0	11,450.0	17,566.9	11,971.8	101.5	103.6	105.15	5,660.9	1,933.5	1,998.0	1,798.2	199.79	10.001	
17,100.0	11,450.0	17,637.0	11,972.3	103.0	104.7	105.17	5,731.0	1,931.2	1,995.9	1,793.6	202.28	9.867	
17,200.0	11,450.0	17,742.2	11,973.8	104.5	106.3	105.23	5,836.1	1,928.4	1,994.5	1,789.2	205.29	9.715	
17,261.1	11,450.0	17,769.8	11,974.4	105.5	106.7	105.25	5,863.7	1,927.8	1,993.9	1,787.4	206.55	9.654	
17,300.0	11,450.0	17,787.1	11,974.7	106.1	107.0	105.26	5,881.0	1,927.7	1,994.2	1,786.8	207.32	9.619	
17,400.0	11,450.0	17,839.0	11,975.1	107.6	107.7	105.26	5,932.9	1,928.6	1,996.7	1,787.3	209.38	9.536	
17,500.0	11,450.0	17,951.4	11,975.4	109.1	109.4	105.23	6,045.3	1,931.7	2,000.1	1,787.5	212.62	9.407	
17,600.0	11,450.0	18,048.1	11,974.4	110.7	110.9	105.18	6,141.9	1,934.2	2,003.2	1,787.6	215.57	9.292	
17,700.0	11,450.0	18,170.4	11,972.8	112.2	112.8	105.11	6,264.2	1,937.0	2,005.8	1,786.7	219.05	9.157	
17,800.0	11,450.0	18,290.0	11,973.4	113.8	114.6	105.12	6,383.8	1,937.5	2,007.1	1,784.7	222.41	9.024	
17,900.0	11,450.0	18,388.4	11,970.8	115.3	116.1	105.03	6,482.1	1,938.4	2,008.0	1,782.5	225.46	8.906	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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												Offset Site Error:	0.0 usft
Survey Program: 161-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
18,000.0	11,450.0	18,493.0	11,967.5	116.9	117.7	104.93	6,586.6	1,939.5	2,009.0	1,780.3	228.65	8.786	
18,100.0	11,450.0	18,610.4	11,965.7	118.4	119.6	104.87	6,704.0	1,939.6	2,009.4	1,777.4	232.02	8.660	
18,200.0	11,450.0	18,741.7	11,962.5	120.0	121.6	104.79	6,835.3	1,938.0	2,008.4	1,772.7	235.64	8.523	
18,300.0	11,450.0	18,849.5	11,961.2	121.6	123.3	104.76	6,943.0	1,935.4	2,006.5	1,767.7	238.82	8.402	
18,400.0	11,450.0	18,940.6	11,959.4	123.1	124.7	104.72	7,034.1	1,933.4	2,004.6	1,762.9	241.77	8.292	
18,500.0	11,450.0	19,021.2	11,956.8	124.7	126.0	104.65	7,114.6	1,932.5	2,003.5	1,758.9	244.56	8.192	
18,600.0	11,450.0	19,116.0	11,953.6	126.3	127.4	104.56	7,209.4	1,932.4	2,003.3	1,755.7	247.61	8.090	
18,700.0	11,450.0	19,218.8	11,951.6	127.8	129.1	104.50	7,312.2	1,931.5	2,002.7	1,752.0	250.77	7.986	
18,800.0	11,450.0	19,317.9	11,951.0	129.4	130.6	104.49	7,411.3	1,930.5	2,002.3	1,748.5	253.83	7.888	
18,900.0	11,450.0	19,434.2	11,951.9	131.0	132.4	104.52	7,527.5	1,928.4	2,001.6	1,744.5	257.14	7.784	
19,000.0	11,450.0	19,539.9	11,954.2	132.6	134.1	104.60	7,633.1	1,925.5	2,000.2	1,740.0	260.24	7.686	
19,100.0	11,450.0	19,645.3	11,958.2	134.2	135.8	104.73	7,738.4	1,921.6	1,998.3	1,735.0	263.29	7.590	
19,196.4	11,450.0	19,706.0	11,960.0	135.7	136.7	104.79	7,799.1	1,920.1	1,997.4	1,731.8	265.61	7.520	
19,200.0	11,450.0	19,708.2	11,960.0	135.7	136.8	104.79	7,801.3	1,920.0	1,997.4	1,731.7	265.70	7.518	
19,300.0	11,450.0	19,788.1	11,960.9	137.3	138.0	104.81	7,881.2	1,919.8	1,998.1	1,729.7	268.39	7.445	
19,400.0	11,450.0	19,905.2	11,962.5	138.9	139.9	104.85	7,998.3	1,919.5	1,999.1	1,727.3	271.75	7.356	
19,500.0	11,450.0	19,976.7	11,963.7	140.5	141.0	104.89	8,069.8	1,919.2	1,999.9	1,725.6	274.27	7.292	
19,600.0	11,450.0	20,085.9	11,964.8	142.1	142.7	104.90	8,178.9	1,920.1	2,001.8	1,724.3	277.52	7.213	
19,700.0	11,450.0	20,183.6	11,967.3	143.7	144.3	104.97	8,276.6	1,919.8	2,002.9	1,722.4	280.50	7.140	
19,800.0	11,450.0	20,290.7	11,969.6	145.3	146.0	105.03	8,383.7	1,919.7	2,004.1	1,720.4	283.67	7.065	
19,900.0	11,450.0	20,420.6	11,967.4	146.9	148.0	104.96	8,513.5	1,919.3	2,004.0	1,716.7	287.37	6.974	
20,000.0	11,450.0	20,522.3	11,964.6	148.5	149.6	104.88	8,615.2	1,918.6	2,003.5	1,712.9	290.58	6.895	
20,100.0	11,450.0	20,623.1	11,960.9	150.1	151.2	104.78	8,715.9	1,918.1	2,002.8	1,709.0	293.81	6.817	
20,200.0	11,450.0	20,743.7	11,954.9	151.7	153.2	104.61	8,836.4	1,917.5	2,001.9	1,704.5	297.42	6.731	
20,300.0	11,450.0	20,842.6	11,948.9	153.3	154.7	104.45	8,935.1	1,916.4	2,000.1	1,699.4	300.69	6.652	
20,400.0	11,450.0	20,946.4	11,942.9	154.9	156.4	104.28	9,038.7	1,915.4	1,998.4	1,694.4	304.04	6.573	
20,500.0	11,450.0	21,072.1	11,938.3	156.5	158.4	104.17	9,164.3	1,912.4	1,995.9	1,688.3	307.65	6.488	
20,600.0	11,450.0	21,187.3	11,933.2	158.1	160.3	104.05	9,279.3	1,908.7	1,992.5	1,681.4	311.11	6.405	
20,700.0	11,450.0	21,303.4	11,925.5	159.7	162.1	103.85	9,395.1	1,904.5	1,988.2	1,673.6	314.64	6.319	
20,800.0	11,450.0	21,428.9	11,916.6	161.3	164.2	103.63	9,520.1	1,899.0	1,983.0	1,664.7	318.27	6.231	
20,900.0	11,450.0	21,498.5	11,912.2	162.9	165.3	103.53	9,589.5	1,895.9	1,977.9	1,656.7	321.20	6.158	
21,000.0	11,450.0	21,585.5	11,908.3	164.5	166.7	103.44	9,676.3	1,892.6	1,973.9	1,649.6	324.29	6.087	
21,100.0	11,450.0	21,676.4	11,905.8	166.1	168.2	103.38	9,767.2	1,889.2	1,970.4	1,643.0	327.38	6.019	
21,200.0	11,450.0	21,819.3	11,900.6	167.7	170.5	103.27	9,909.8	1,883.3	1,966.4	1,635.3	331.14	5.938	
21,300.0	11,450.0	21,953.8	11,892.9	169.3	172.6	103.09	10,043.8	1,875.3	1,960.1	1,625.3	334.77	5.855	
21,400.0	11,450.0	22,057.0	11,885.7	170.9	174.3	102.93	10,146.6	1,867.9	1,952.3	1,614.2	338.12	5.774	
21,500.0	11,450.0	22,057.0	11,885.7	172.5	174.3	102.93	10,146.6	1,867.9	1,947.5	1,607.2	340.22	5.724	
21,544.3	11,450.0	22,057.0	11,885.7	173.3	174.3	102.93	10,146.6	1,867.9	1,947.0	1,606.1	340.89	5.711 ES	
21,600.0	11,450.0	22,057.0	11,885.7	174.2	174.3	102.93	10,146.6	1,867.9	1,947.8	1,606.3	341.50	5.704	
21,614.7	11,450.0	22,057.0	11,885.7	174.4	174.3	102.93	10,146.6	1,867.9	1,948.2	1,606.6	341.60	5.703 SF	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 174-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	88.61	56.9	2,343.0	2,343.7					
100.0	100.0	92.2	92.2	0.1	0.1	88.61	56.9	2,343.2	2,343.9	2,343.6	0.27	8,761.649		
200.0	200.0	183.8	183.8	0.5	0.3	88.61	56.8	2,343.6	2,344.4	2,343.6	0.78	2,991.669		
300.0	300.0	280.6	280.6	0.8	0.6	88.61	56.8	2,344.4	2,345.2	2,343.7	1.49	1,575.109		
400.0	400.0	376.2	376.2	1.2	1.0	88.61	56.9	2,345.3	2,346.1	2,343.9	2.19	1,071.365		
500.0	500.0	471.4	471.4	1.6	1.3	88.61	57.0	2,346.3	2,347.2	2,344.3	2.89	812.317		
600.0	600.0	575.9	575.8	1.9	1.7	88.60	57.3	2,347.5	2,348.4	2,344.7	3.62	648.473		
700.0	700.0	686.7	686.7	2.3	2.1	88.60	57.4	2,348.4	2,349.1	2,344.7	4.38	536.807		
800.0	800.0	786.3	786.2	2.6	2.5	88.60	57.3	2,349.0	2,349.7	2,344.6	5.09	461.570		
900.0	900.0	896.7	896.6	3.0	2.8	88.61	57.1	2,349.4	2,350.1	2,344.3	5.84	402.617		
1,000.0	1,000.0	1,014.0	1,014.0	3.4	3.2	88.62	56.7	2,349.1	2,349.9	2,343.3	6.59	356.450		
1,100.0	1,100.0	1,114.3	1,114.2	3.7	3.6	-61.17	55.9	2,348.5	2,348.7	2,341.5	7.27	322.969		
1,200.0	1,200.0	1,190.9	1,190.8	4.0	3.8	-61.20	54.9	2,348.3	2,347.3	2,339.4	7.87	298.320		
1,300.0	1,299.9	1,257.6	1,257.5	4.4	4.1	-61.25	53.7	2,349.0	2,346.2	2,337.8	8.44	278.040		
1,400.0	1,399.7	1,329.0	1,328.9	4.7	4.3	-61.30	52.1	2,351.1	2,346.0	2,337.0	9.03	259.732		
1,409.7	1,409.4	1,329.0	1,328.9	4.7	4.3	-61.30	52.1	2,351.1	2,346.0	2,336.9	9.07	258.782 ES		
1,500.0	1,499.4	1,373.3	1,373.1	5.0	4.5	-61.35	51.1	2,353.2	2,346.6	2,337.1	9.53	246.175		
1,600.0	1,598.9	1,420.0	1,419.7	5.4	4.7	-61.40	49.9	2,356.1	2,348.4	2,338.4	10.04	233.826		
1,700.0	1,698.3	1,476.4	1,476.0	5.8	4.9	-61.47	48.5	2,360.8	2,351.4	2,340.8	10.59	221.944		
1,800.0	1,797.4	1,511.0	1,510.3	6.1	5.0	-61.50	47.7	2,364.3	2,355.8	2,344.7	11.06	212.933		
1,900.0	1,896.4	1,579.3	1,578.0	6.5	5.3	-61.65	45.9	2,372.8	2,361.7	2,350.0	11.67	202.400		
2,000.0	1,995.5	1,635.8	1,633.9	6.9	5.5	-61.77	44.2	2,381.0	2,369.6	2,357.4	12.23	193.813		
2,100.0	2,094.5	1,697.0	1,694.3	7.3	5.7	-61.90	42.2	2,391.0	2,379.2	2,366.4	12.81	185.778		
2,200.0	2,193.5	1,795.6	1,791.4	7.7	6.1	-62.10	39.3	2,407.8	2,389.7	2,376.1	13.55	176.391		
2,300.0	2,292.5	1,928.5	1,922.4	8.1	6.6	-62.37	35.2	2,429.9	2,399.9	2,385.4	14.44	166.165		
2,400.0	2,391.6	2,081.0	2,073.2	8.5	7.2	-62.66	29.4	2,451.7	2,407.5	2,392.0	15.43	156.067		
2,500.0	2,490.6	2,155.4	2,146.8	8.9	7.5	-62.81	27.1	2,462.1	2,415.0	2,398.9	16.08	150.182		
2,600.0	2,589.6	2,242.7	2,233.2	9.3	7.9	-62.98	24.3	2,475.0	2,423.2	2,406.4	16.79	144.309		
2,700.0	2,688.6	2,381.7	2,370.7	9.7	8.5	-63.24	19.2	2,494.7	2,430.9	2,413.2	17.73	137.106		
2,729.0	2,717.4	2,410.1	2,398.7	9.8	8.6	-63.29	18.1	2,498.5	2,432.9	2,415.0	17.95	135.530		
2,800.0	2,787.8	2,475.9	2,463.9	10.1	8.8	-63.47	15.5	2,507.4	2,438.2	2,419.7	18.48	131.972		
2,900.0	2,887.2	2,569.2	2,556.3	10.5	9.2	-63.70	12.3	2,520.3	2,447.0	2,427.8	19.21	127.407		
3,000.0	2,986.8	2,672.8	2,658.9	10.9	9.7	-63.93	9.9	2,534.2	2,456.6	2,436.7	19.97	123.024		
3,100.0	3,086.7	2,755.9	2,741.2	11.2	10.0	-64.14	8.8	2,545.8	2,468.0	2,447.4	20.63	119.638		
3,200.0	3,186.6	2,874.2	2,858.3	11.6	10.5	-64.30	6.6	2,562.1	2,480.4	2,458.9	21.43	115.732		
3,262.3	3,249.0	2,936.6	2,920.1	11.8	10.7	85.42	4.8	2,570.4	2,488.3	2,466.4	21.87	113.764		
3,300.0	3,286.6	2,961.0	2,944.3	11.9	10.8	85.45	4.0	2,573.8	2,493.4	2,471.3	22.08	112.940		
3,400.0	3,386.6	3,027.5	3,010.0	12.2	11.1	85.52	1.5	2,583.6	2,507.8	2,485.2	22.62	110.846		
3,500.0	3,486.6	3,106.5	3,088.0	12.6	11.5	85.61	-1.2	2,596.0	2,523.2	2,500.0	23.23	108.628		
3,600.0	3,586.6	3,234.8	3,214.8	12.9	12.0	85.67	-2.6	2,615.7	2,538.4	2,514.4	24.06	105.520		
3,700.0	3,686.6	3,370.0	3,351.9	13.2	13.9	85.69	-1.8	2,634.8	2,552.1	2,526.0	26.12	97.709		
3,800.0	3,786.6	3,506.1	3,483.7	13.5	13.1	85.72	-2.0	2,650.7	2,563.9	2,538.2	25.76	99.524		
3,900.0	3,886.6	3,585.0	3,562.0	13.9	13.4	85.75	-2.8	2,660.5	2,576.2	2,549.9	26.37	97.690		
4,000.0	3,986.6	3,640.2	3,616.7	14.2	13.7	85.78	-3.5	2,668.1	2,589.8	2,562.9	26.87	96.365		
4,100.0	4,086.6	3,700.5	3,676.3	14.6	13.9	85.81	-4.0	2,677.2	2,604.8	2,577.4	27.39	95.086		
4,200.0	4,186.6	3,774.0	3,748.8	14.9	14.2	85.84	-4.6	2,689.5	2,621.3	2,593.3	27.97	93.702		
4,300.0	4,286.6	3,943.0	3,915.5	15.2	15.0	85.98	-9.1	2,716.5	2,637.4	2,608.3	29.02	90.893		
4,400.0	4,386.6	4,087.8	4,058.9	15.6	15.6	86.16	-15.9	2,735.7	2,650.1	2,620.2	29.93	88.536		
4,500.0	4,486.6	4,174.6	4,144.9	15.9	15.9	86.21	-17.6	2,746.8	2,662.7	2,632.1	30.58	87.064		
4,600.0	4,586.6	4,264.8	4,234.3	16.2	16.3	86.24	-18.3	2,758.7	2,675.8	2,644.6	31.25	85.632		
4,700.0	4,686.6	4,376.3	4,344.9	16.6	16.8	86.28	-19.2	2,773.1	2,688.7	2,656.7	32.01	83.998		
4,800.0	4,786.6	4,475.7	4,443.5	16.9	17.2	86.32	-20.3	2,785.8	2,701.4	2,668.7	32.72	82.568		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 174-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,900.0	4,886.6	4,691.0	4,657.4	17.3	18.0	86.49	-26.6	2,808.9	2,711.8	2,677.9	33.92	79.954		
5,000.0	4,986.6	4,802.4	4,768.4	17.6	18.5	86.57	-29.8	2,818.3	2,720.0	2,685.4	34.67	78.453		
5,100.0	5,086.6	4,888.4	4,854.1	18.0	18.8	86.62	-31.8	2,825.5	2,728.3	2,693.0	35.32	77.235		
5,200.0	5,186.6	4,959.6	4,924.9	18.3	19.1	86.66	-33.4	2,832.0	2,737.3	2,701.4	35.92	76.211		
5,300.0	5,286.6	5,035.2	5,000.1	18.6	19.4	86.71	-35.1	2,839.7	2,747.4	2,710.8	36.53	75.215		
5,400.0	5,386.6	5,114.7	5,079.1	19.0	19.7	86.76	-37.0	2,848.4	2,758.1	2,721.0	37.15	74.240		
5,500.0	5,486.6	5,190.1	5,154.0	19.3	20.0	86.81	-39.1	2,857.3	2,769.7	2,732.0	37.76	73.356		
5,600.0	5,586.6	5,264.3	5,227.6	19.7	20.3	86.88	-41.7	2,866.6	2,782.2	2,743.8	38.36	72.535		
5,700.0	5,686.6	5,345.1	5,307.5	20.0	20.6	86.95	-44.9	2,877.5	2,795.4	2,756.4	38.99	71.705		
5,800.0	5,786.6	5,425.6	5,387.2	20.4	21.0	87.04	-48.2	2,888.9	2,809.3	2,769.7	39.61	70.921		
5,900.0	5,886.6	5,505.0	5,465.7	20.7	21.3	87.11	-51.5	2,900.6	2,823.9	2,783.6	40.23	70.189		
6,000.0	5,986.6	5,582.8	5,542.4	21.1	21.7	87.19	-54.5	2,912.6	2,839.1	2,798.3	40.84	69.513		
6,100.0	6,086.6	5,662.2	5,620.7	21.4	22.0	87.26	-57.6	2,925.5	2,855.2	2,813.7	41.46	68.864		
6,200.0	6,186.6	5,746.9	5,704.1	21.8	22.4	87.35	-60.9	2,939.7	2,871.7	2,829.6	42.11	68.202		
6,300.0	6,286.6	5,826.7	5,782.7	22.1	22.7	87.43	-64.3	2,953.5	2,888.8	2,846.1	42.72	67.615		
6,400.0	6,386.6	5,906.8	5,861.4	22.5	23.1	87.51	-67.7	2,967.9	2,906.6	2,863.2	43.34	67.060		
6,500.0	6,486.6	5,978.6	5,931.9	22.8	23.4	87.58	-70.7	2,981.3	2,925.1	2,881.2	43.91	66.609		
6,600.0	6,586.6	6,000.0	6,126.9	23.2	26.2	87.78	-79.7	3,016.1	2,942.6	2,895.8	46.80	62.873		
6,700.0	6,686.6	6,344.9	6,292.9	23.5	25.0	87.97	-88.3	3,040.2	2,956.5	2,910.3	46.25	63.925		
6,800.0	6,786.6	6,464.9	6,411.9	23.9	25.6	88.07	-92.6	3,055.7	2,969.3	2,922.2	47.07	63.084		
6,900.0	6,886.6	6,571.1	6,517.1	24.2	26.0	88.13	-95.7	3,069.1	2,981.8	2,934.0	47.82	62.356		
7,000.0	6,986.6	6,679.0	6,624.1	24.6	26.4	88.21	-99.0	3,082.4	2,994.1	2,945.5	48.58	61.635		
7,100.0	7,086.6	6,759.3	6,703.8	24.9	26.8	88.26	-101.6	3,092.5	3,006.5	2,957.3	49.21	61.099		
7,200.0	7,186.6	6,844.5	6,788.2	25.3	27.1	88.32	-104.5	3,103.6	3,019.5	2,969.6	49.86	60.560		
7,300.0	7,286.6	6,919.7	6,862.6	25.6	27.4	88.38	-107.3	3,113.9	3,033.1	2,982.6	50.46	60.105		
7,400.0	7,386.6	6,999.3	6,941.3	26.0	27.8	88.45	-110.5	3,125.4	3,047.4	2,996.3	51.09	59.652		
7,500.0	7,486.6	7,091.5	7,032.4	26.3	28.2	88.53	-114.5	3,139.2	3,062.2	3,010.4	51.77	59.145		
7,600.0	7,586.6	7,178.2	7,118.1	26.7	28.6	88.62	-118.5	3,152.2	3,077.1	3,024.7	52.43	58.685		
7,700.0	7,686.6	7,300.7	7,238.9	27.0	29.1	88.74	-124.5	3,171.1	3,092.6	3,039.3	53.28	58.043		
7,800.0	7,786.6	7,428.4	7,365.3	27.4	29.6	88.84	-129.8	3,188.9	3,106.3	3,052.2	54.15	57.368		
7,900.0	7,886.6	7,519.9	7,455.8	27.7	30.0	88.92	-133.8	3,201.5	3,120.1	3,065.2	54.83	56.901		
8,000.0	7,986.6	7,597.0	7,532.0	28.1	30.4	88.98	-137.1	3,212.4	3,134.2	3,078.8	55.44	56.529		
8,100.0	8,086.6	7,679.5	7,613.6	28.4	30.7	89.06	-140.8	3,224.7	3,149.0	3,092.9	56.08	56.149		
8,200.0	8,186.6	7,754.2	7,687.3	28.8	31.1	89.13	-144.6	3,236.2	3,164.4	3,107.7	56.68	55.829		
8,300.0	8,286.6	7,853.8	7,785.5	29.1	31.5	89.22	-149.4	3,252.2	3,180.4	3,123.0	57.41	55.399		
8,400.0	8,386.6	8,287.2	8,215.9	29.5	33.2	89.32	-154.1	3,299.7	3,192.7	3,133.1	59.58	53.586		
8,500.0	8,486.6	8,523.8	8,452.4	29.8	34.0	89.32	-154.3	3,306.3	3,194.9	3,134.2	60.68	52.647		
8,600.0	8,586.6	8,630.7	8,559.3	30.2	34.4	89.34	-155.3	3,307.3	3,195.8	3,134.4	61.40	52.048		
8,700.0	8,686.6	8,739.8	8,668.4	30.6	34.7	89.36	-156.4	3,308.1	3,196.5	3,134.4	62.12	51.457		
8,800.0	8,786.6	8,841.4	8,770.1	30.9	35.0	89.39	-157.8	3,308.7	3,197.1	3,134.2	62.82	50.893		
8,900.0	8,886.6	8,946.4	8,874.9	31.3	35.4	89.41	-159.2	3,309.1	3,197.5	3,134.0	63.52	50.334		
9,000.0	8,986.6	9,056.6	8,985.2	31.6	35.7	89.44	-160.6	3,309.5	3,197.8	3,133.6	64.24	49.781		
9,100.0	9,086.6	9,185.5	9,114.1	32.0	36.1	89.44	-160.7	3,308.9	3,197.3	3,132.3	64.97	49.212		
9,200.0	9,186.6	9,294.3	9,222.8	32.3	36.4	89.41	-159.3	3,307.7	3,196.3	3,130.6	65.65	48.684		
9,300.0	9,286.6	9,392.9	9,321.5	32.7	36.7	89.38	-157.6	3,306.6	3,195.2	3,128.8	66.32	48.177		
9,400.0	9,386.6	9,482.1	9,410.7	33.0	36.9	89.36	-156.6	3,305.8	3,194.2	3,127.3	66.97	47.697		
9,500.0	9,486.6	9,599.5	9,528.1	33.4	37.3	89.35	-155.9	3,304.6	3,193.3	3,125.6	67.67	47.188		
9,600.0	9,586.6	9,725.5	9,654.0	33.7	37.6	89.33	-154.8	3,302.5	3,191.6	3,123.2	68.38	46.672		
9,700.0	9,686.6	9,834.0	9,762.4	34.1	37.9	89.31	-153.7	3,299.9	3,189.2	3,120.1	69.06	46.177		
9,800.0	9,786.6	9,916.5	9,844.9	34.5	38.2	89.29	-152.8	3,298.1	3,187.0	3,117.3	69.71	45.721		
9,900.0	9,886.6	10,000.4	9,928.9	34.8	38.4	89.28	-152.1	3,296.9	3,185.5	3,115.2	70.35	45.283		
10,000.0	9,986.6	10,108.4	10,036.9	35.2	38.7	89.28	-151.8	3,295.3	3,184.1	3,113.1	71.04	44.825		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 174-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,100.0	10,086.6	10,209.4	10,137.8	35.5	39.0	89.28	-152.0	3,293.6	3,182.5	3,110.7	71.71	44.379		
10,200.0	10,186.6	10,301.9	10,230.3	35.9	39.3	89.28	-152.1	3,292.3	3,181.0	3,108.6	72.37	43.954		
10,300.0	10,286.6	10,388.7	10,317.1	36.2	39.6	89.28	-152.1	3,291.2	3,179.8	3,106.7	73.02	43.545		
10,400.0	10,386.6	10,489.7	10,418.1	36.6	39.9	89.29	-152.5	3,290.4	3,179.0	3,105.3	73.70	43.132		
10,500.0	10,486.6	10,598.7	10,527.0	36.9	40.2	89.30	-153.3	3,289.1	3,177.7	3,103.3	74.40	42.710		
10,600.0	10,586.6	10,669.5	10,597.9	37.3	40.4	89.32	-154.1	3,288.4	3,176.8	3,101.8	75.03	42.340		
10,628.4	10,615.0	10,686.5	10,614.9	37.4	40.5	89.32	-154.2	3,288.4	3,176.7	3,101.5	75.20	42.244		
10,700.0	10,686.6	10,735.7	10,664.0	37.6	40.6	89.33	-154.7	3,288.6	3,177.1	3,101.4	75.65	42.000		
10,800.0	10,786.6	10,843.7	10,772.0	38.0	41.0	89.35	-156.2	3,289.3	3,177.7	3,101.3	76.37	41.610		
10,890.4	10,877.0	10,952.3	10,880.6	38.3	41.3	89.39	-157.9	3,289.5	3,177.9	3,100.8	77.04	41.247		
10,900.0	10,886.6	10,964.1	10,892.5	38.4	41.4	94.79	-158.2	3,289.5	3,177.8	3,100.7	77.12	41.209		
10,906.0	10,892.6	10,971.6	10,899.9	38.4	41.4	94.80	-158.3	3,289.5	3,177.8	3,100.7	77.16	41.185		
10,950.0	10,936.5	11,002.0	10,930.3	38.5	41.5	94.82	-158.9	3,289.4	3,178.0	3,100.6	77.43	41.043		
11,000.0	10,986.0	11,041.5	10,969.8	38.7	41.6	94.86	-159.6	3,289.4	3,178.7	3,100.9	77.74	40.889		
11,050.0	11,034.6	11,069.5	10,997.8	38.9	41.7	94.84	-159.9	3,289.6	3,180.1	3,102.1	78.01	40.766		
11,100.0	11,082.0	11,097.0	11,025.3	39.0	41.8	94.78	-160.0	3,290.1	3,182.3	3,104.0	78.27	40.660		
11,150.0	11,127.8	11,138.2	11,066.5	39.2	41.9	94.79	-160.0	3,290.8	3,185.1	3,106.6	78.55	40.548		
11,200.0	11,171.8	11,178.0	11,106.3	39.3	42.1	94.79	-160.0	3,291.6	3,188.5	3,109.7	78.82	40.451		
11,250.0	11,213.5	11,221.0	11,149.3	39.4	42.2	94.82	-160.0	3,292.5	3,192.5	3,113.4	79.10	40.362		
11,300.0	11,252.6	11,264.5	11,192.8	39.5	42.4	94.84	-159.9	3,293.3	3,197.1	3,117.7	79.36	40.284		
11,350.0	11,288.9	11,303.8	11,232.0	39.7	42.5	94.80	-160.0	3,294.1	3,202.3	3,122.7	79.61	40.223		
11,400.0	11,322.0	11,338.2	11,266.5	39.8	42.6	94.67	-160.0	3,294.7	3,208.3	3,128.4	79.84	40.182		
11,450.0	11,351.8	11,368.9	11,297.2	39.9	42.7	94.43	-160.2	3,295.2	3,215.0	3,135.0	80.06	40.157		
11,500.0	11,377.9	11,944.9	11,817.5	40.0	44.1	100.23	16.9	3,269.7	3,216.9	3,136.1	80.75	39.836		
11,550.0	11,400.3	12,005.7	11,859.0	40.1	44.1	100.31	61.0	3,265.0	3,219.1	3,138.2	80.94	39.770		
11,600.0	11,418.6	11,993.0	11,850.5	40.3	44.1	99.90	51.6	3,266.0	3,222.6	3,141.5	81.14	39.718		
11,650.0	11,432.8	11,993.0	11,850.5	40.4	44.1	99.40	51.6	3,266.0	3,227.7	3,146.3	81.32	39.693		
11,700.0	11,442.8	11,993.0	11,850.5	40.5	44.1	98.75	51.6	3,266.0	3,234.2	3,152.7	81.48	39.693		
11,750.0	11,448.5	11,993.0	11,850.5	40.7	44.1	97.96	51.6	3,266.0	3,242.1	3,160.4	81.63	39.717		
11,790.4	11,450.0	11,993.0	11,850.5	40.8	44.1	97.22	51.6	3,266.0	3,249.4	3,167.7	81.74	39.753		
11,800.0	11,450.0	11,993.0	11,850.5	40.8	44.1	97.21	51.6	3,266.0	3,251.3	3,169.5	81.77	39.763		
11,900.0	11,450.0	11,993.0	11,850.5	41.1	44.1	97.16	51.6	3,266.0	3,270.3	3,188.3	82.07	39.850		
12,000.0	11,450.0	11,993.0	11,850.5	41.5	44.1	97.12	51.6	3,266.0	3,288.9	3,206.5	82.42	39.903		
12,037.8	11,450.0	11,993.0	11,850.5	41.7	44.1	97.10	51.6	3,266.0	3,295.8	3,213.2	82.57	39.916		
12,100.0	11,450.0	12,035.3	11,879.2	41.9	44.2	97.60	82.6	3,265.3	3,304.9	3,222.0	82.86	39.886		
12,200.0	11,450.0	13,139.4	12,012.0	42.4	47.8	99.78	1,103.7	3,304.0	3,323.1	3,236.4	86.71	38.324		
12,300.0	11,450.0	13,187.4	12,008.5	43.0	48.1	99.73	1,151.4	3,300.3	3,315.2	3,227.5	87.64	37.826		
12,400.0	11,450.0	13,234.9	12,005.6	43.6	48.4	99.68	1,198.7	3,297.4	3,308.8	3,220.1	88.64	37.327		
12,500.0	11,450.0	13,302.0	12,002.2	44.3	48.8	99.63	1,265.6	3,294.4	3,304.1	3,214.3	89.82	36.785		
12,600.0	11,450.0	13,361.5	11,999.3	45.0	49.3	99.59	1,325.0	3,292.4	3,300.5	3,209.4	91.04	36.254		
12,700.0	11,450.0	13,438.3	11,995.4	45.8	49.8	99.52	1,401.7	3,289.9	3,297.3	3,204.9	92.43	35.673		
12,800.0	11,450.0	13,518.4	11,992.1	46.6	50.5	99.47	1,481.8	3,288.1	3,295.1	3,201.2	93.92	35.086		
12,900.0	11,450.0	13,628.0	11,986.7	47.4	51.4	99.38	1,591.1	3,285.3	3,292.5	3,196.8	95.69	34.408		
13,000.0	11,450.0	13,700.2	11,983.1	48.3	52.0	99.33	1,663.3	3,284.0	3,290.6	3,193.3	97.28	33.828		
13,100.0	11,450.0	13,800.1	11,981.3	49.3	52.9	99.30	1,763.1	3,282.1	3,289.2	3,190.1	99.11	33.187		
13,200.0	11,450.0	13,894.7	11,980.6	50.3	53.8	99.29	1,857.7	3,279.7	3,287.4	3,186.4	100.97	32.557		
13,300.0	11,450.0	13,963.0	11,979.9	51.3	54.5	99.28	1,926.0	3,279.1	3,287.0	3,184.3	102.69	32.008		
13,312.8	11,450.0	13,963.0	11,979.9	51.4	54.5	99.28	1,926.0	3,279.1	3,286.9	3,184.1	102.85	31.959		
13,400.0	11,450.0	14,034.7	11,979.2	52.3	55.2	99.26	1,997.6	3,279.1	3,287.4	3,182.9	104.49	31.462		
13,500.0	11,450.0	14,167.7	11,977.3	53.4	56.5	99.23	2,130.6	3,278.4	3,287.5	3,180.6	106.86	30.765		
13,600.0	11,450.0	14,300.4	11,972.6	54.5	57.9	99.15	2,263.2	3,276.5	3,286.2	3,176.9	109.32	30.060		
13,700.0	11,450.0	14,375.0	11,969.5	55.6	58.8	99.10	2,337.8	3,275.4	3,284.9	3,173.6	111.33	29.506		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 174-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,757.6	11,450.0	14,408.0	11,968.3	56.3	59.1	99.08	2,370.7	3,275.2	3,284.7	3,172.3	112.42	29.219		
13,800.0	11,450.0	14,433.0	11,967.4	56.8	59.4	99.06	2,395.7	3,275.2	3,284.8	3,171.6	113.22	29.012		
13,900.0	11,450.0	14,507.7	11,966.8	58.0	60.2	99.05	2,470.5	3,275.4	3,285.7	3,170.5	115.29	28.499		
14,000.0	11,450.0	14,654.7	11,970.5	59.2	61.9	99.11	2,617.4	3,274.7	3,286.5	3,168.4	118.06	27.838		
14,100.0	11,450.0	14,762.8	11,970.2	60.4	63.2	99.11	2,725.4	3,273.5	3,286.1	3,165.6	120.53	27.264		
14,200.0	11,450.0	14,875.3	11,968.9	61.7	64.5	99.09	2,837.9	3,272.3	3,285.7	3,162.6	123.09	26.693		
14,300.0	11,450.0	14,987.3	11,967.3	62.9	65.9	99.06	2,949.9	3,270.6	3,284.7	3,159.0	125.69	26.133		
14,400.0	11,450.0	15,089.0	11,966.0	64.2	67.2	99.04	3,051.6	3,268.8	3,283.5	3,155.3	128.23	25.606		
14,500.0	11,450.0	15,188.0	11,965.2	65.5	68.4	99.03	3,150.5	3,266.4	3,281.8	3,151.0	130.77	25.095		
14,595.9	11,450.0	15,246.5	11,964.7	66.8	69.1	99.03	3,209.0	3,265.3	3,280.9	3,148.0	132.87	24.692		
14,600.0	11,450.0	15,248.2	11,964.7	66.8	69.2	99.03	3,210.7	3,265.3	3,280.9	3,147.9	132.95	24.677		
14,700.0	11,450.0	15,305.4	11,964.4	68.2	69.9	99.02	3,267.9	3,265.5	3,281.8	3,146.7	135.11	24.290		
14,800.0	11,450.0	15,407.7	11,963.8	69.5	71.2	99.01	3,370.3	3,266.0	3,283.0	3,145.2	137.76	23.831		
14,900.0	11,450.0	15,502.7	11,963.2	70.9	72.5	98.99	3,465.3	3,266.9	3,284.6	3,144.2	140.37	23.400		
15,000.0	11,450.0	15,639.9	11,962.0	72.2	74.3	98.97	3,602.4	3,267.0	3,285.3	3,141.8	143.46	22.900		
15,100.0	11,450.0	15,768.7	11,960.8	73.6	76.0	98.95	3,731.2	3,265.9	3,285.0	3,138.5	146.49	22.425		
15,150.0	11,450.0	15,800.6	11,960.6	74.3	76.4	98.94	3,763.1	3,265.6	3,284.9	3,137.2	147.66	22.246		
15,200.0	11,450.0	15,832.5	11,960.4	75.0	76.9	98.94	3,795.0	3,265.5	3,285.0	3,136.2	148.83	22.072		
15,300.0	11,450.0	15,957.6	11,957.6	76.4	78.6	98.89	3,920.0	3,265.4	3,285.4	3,133.5	151.88	21.631		
15,304.0	11,450.0	15,963.5	11,957.3	76.5	78.7	98.88	3,925.9	3,265.4	3,285.4	3,133.4	152.02	21.612		
15,400.0	11,450.0	15,995.0	11,956.6	77.8	79.1	98.87	3,957.4	3,265.7	3,286.3	3,132.3	153.96	21.345		
15,500.0	11,450.0	16,044.4	11,956.1	79.3	79.8	98.86	4,006.9	3,266.7	3,288.8	3,132.7	156.16	21.061		
15,600.0	11,450.0	16,126.5	11,956.7	80.7	80.9	98.86	4,088.9	3,268.8	3,292.3	3,133.6	158.74	20.741		
15,700.0	11,450.0	16,200.0	11,961.5	82.1	74.9	98.93	4,253.3	3,271.4	3,295.1	3,141.1	154.03	21.393		
15,800.0	11,450.0	16,490.4	11,961.9	83.6	86.0	98.94	4,452.7	3,269.7	3,294.7	3,128.4	166.28	19.814		
15,900.0	11,450.0	16,573.5	11,960.1	85.0	87.2	98.91	4,535.7	3,268.4	3,293.6	3,124.6	168.98	19.491		
16,000.0	11,450.0	16,684.1	11,958.0	86.5	88.8	98.87	4,646.3	3,267.1	3,293.0	3,121.0	172.00	19.146		
16,100.0	11,450.0	16,774.8	11,955.4	88.0	90.1	98.83	4,737.0	3,266.0	3,292.1	3,117.3	174.82	18.832		
16,169.6	11,450.0	16,820.5	11,954.2	89.0	90.8	98.81	4,782.7	3,265.6	3,291.8	3,115.2	176.58	18.642		
16,200.0	11,450.0	16,837.7	11,953.9	89.4	91.0	98.81	4,799.8	3,265.5	3,291.8	3,114.5	177.31	18.565		
16,300.0	11,450.0	16,902.1	11,953.4	90.9	91.9	98.79	4,864.2	3,265.8	3,292.9	3,113.1	179.81	18.313		
16,400.0	11,450.0	17,024.3	11,952.9	92.4	93.7	98.78	4,986.4	3,266.2	3,293.9	3,110.9	183.01	17.999		
16,500.0	11,450.0	17,121.3	11,951.8	93.9	95.1	98.76	5,083.5	3,266.4	3,294.7	3,108.8	185.93	17.720		
16,600.0	11,450.0	17,232.1	11,953.7	95.4	96.8	98.79	5,194.2	3,266.3	3,295.7	3,106.7	189.00	17.438		
16,700.0	11,450.0	17,384.8	11,954.9	96.9	99.0	98.81	5,346.9	3,264.5	3,295.4	3,102.9	192.57	17.113		
16,800.0	11,450.0	17,501.9	11,954.8	98.4	100.8	98.82	5,464.0	3,262.0	3,294.0	3,098.3	195.74	16.829		
16,900.0	11,450.0	17,607.7	11,954.4	100.0	102.3	98.81	5,569.7	3,259.5	3,292.4	3,093.6	198.80	16.562		
17,000.0	11,450.0	17,681.6	11,953.7	101.5	103.4	98.80	5,643.6	3,257.9	3,290.9	3,089.4	201.51	16.332		
17,065.9	11,450.0	17,719.3	11,953.8	102.5	104.0	98.81	5,681.3	3,257.4	3,290.6	3,087.4	203.16	16.197		
17,100.0	11,450.0	17,740.4	11,954.1	103.0	104.3	98.81	5,702.4	3,257.2	3,290.7	3,086.6	204.03	16.129		
17,200.0	11,450.0	17,844.5	11,954.6	104.5	105.9	98.82	5,806.5	3,256.5	3,290.9	3,083.8	207.08	15.892		
17,300.0	11,450.0	17,942.6	11,955.4	106.1	107.4	98.83	5,904.6	3,256.0	3,291.2	3,081.1	210.07	15.667		
17,400.0	11,450.0	17,400.0	11,958.5	107.6	99.1	98.89	6,064.7	3,252.8	3,290.2	3,080.7	203.14	16.197		
17,500.0	11,450.0	18,172.5	11,960.6	109.1	110.8	98.93	6,134.3	3,250.8	3,288.8	3,072.3	216.45	15.194		
17,532.2	11,450.0	18,188.4	11,961.0	109.6	111.1	98.94	6,150.2	3,250.5	3,288.6	3,071.4	217.23	15.139		
17,600.0	11,450.0	18,238.0	11,961.9	110.7	111.8	98.95	6,199.8	3,250.2	3,288.8	3,069.7	219.07	15.013		
17,700.0	11,450.0	18,344.1	11,964.2	112.2	113.4	99.00	6,305.9	3,249.3	3,289.1	3,066.9	222.17	14.804		
17,800.0	11,450.0	18,449.7	11,966.6	113.8	115.1	99.04	6,411.5	3,248.2	3,289.2	3,064.0	225.27	14.601		
17,900.0	11,450.0	18,532.5	11,968.0	115.3	116.3	99.06	6,494.3	3,247.5	3,289.4	3,061.3	228.11	14.420		
18,000.0	11,450.0	18,604.7	11,967.5	116.9	117.4	99.05	6,566.5	3,247.7	3,290.5	3,059.6	230.83	14.255		
18,100.0	11,450.0	18,692.2	11,965.8	118.4	118.8	99.02	6,653.9	3,248.8	3,292.1	3,058.3	233.75	14.084		
18,200.0	11,450.0	18,789.1	11,965.3	120.0	120.3	99.00	6,750.9	3,249.9	3,293.9	3,057.1	236.80	13.910		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 174-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
18,300.0	11,450.0	18,890.0	11,964.9	121.6	121.8	98.99	6,851.7	3,251.1	3,295.8	3,055.9	239.89	13.739		
18,400.0	11,450.0	19,000.1	11,965.8	123.1	123.5	99.00	6,961.8	3,251.9	3,297.5	3,054.4	243.11	13.564		
18,500.0	11,450.0	19,102.0	11,966.8	124.7	125.1	99.01	7,063.7	3,252.6	3,299.0	3,052.8	246.22	13.399		
18,600.0	11,450.0	19,214.6	11,967.7	126.3	126.8	99.03	7,176.3	3,253.1	3,300.4	3,050.9	249.47	13.230		
18,700.0	11,450.0	19,318.5	11,968.1	127.8	128.5	99.03	7,280.2	3,253.3	3,301.4	3,048.8	252.62	13.069		
18,800.0	11,450.0	19,433.0	11,967.2	129.4	130.2	99.01	7,394.7	3,253.4	3,302.2	3,046.3	255.92	12.903		
18,900.0	11,450.0	19,598.7	11,967.4	131.0	132.8	99.02	7,560.3	3,251.4	3,301.8	3,042.0	259.82	12.708		
19,000.0	11,450.0	19,710.5	11,967.9	132.6	134.6	99.03	7,672.1	3,248.5	3,300.1	3,037.0	263.07	12.545		
19,100.0	11,450.0	19,810.0	11,968.7	134.2	136.1	99.05	7,771.6	3,245.8	3,298.3	3,032.1	266.17	12.391		
19,200.0	11,450.0	19,903.2	11,970.0	135.7	137.6	99.08	7,864.8	3,243.3	3,296.6	3,027.4	269.21	12.245		
19,300.0	11,450.0	19,998.4	11,970.4	137.3	139.1	99.09	7,959.9	3,241.0	3,295.1	3,022.8	272.28	12.102		
19,400.0	11,450.0	20,115.4	11,970.9	138.9	140.9	99.10	8,076.9	3,238.0	3,293.4	3,017.8	275.60	11.950		
19,500.0	11,450.0	20,212.3	11,969.2	140.5	142.4	99.08	8,173.7	3,235.6	3,291.4	3,012.7	278.72	11.809		
19,600.0	11,450.0	20,286.0	11,967.5	142.1	143.6	99.05	8,247.4	3,234.1	3,289.9	3,008.4	281.59	11.684		
19,700.0	11,450.0	20,364.7	11,966.8	143.7	144.8	99.04	8,326.1	3,233.0	3,289.2	3,004.7	284.48	11.562		
19,766.0	11,450.0	20,417.6	11,967.4	144.7	145.7	99.05	8,378.9	3,232.4	3,289.0	3,002.7	286.39	11.484		
19,800.0	11,450.0	20,445.7	11,967.9	145.3	146.1	99.06	8,407.0	3,232.1	3,289.1	3,001.7	287.38	11.445		
19,900.0	11,450.0	20,543.4	11,970.3	146.9	147.7	99.10	8,504.8	3,231.3	3,289.4	2,998.9	290.47	11.324		
20,000.0	11,450.0	20,651.3	11,971.7	148.5	149.4	99.13	8,612.6	3,230.3	3,289.5	2,995.8	293.71	11.200		
20,100.0	11,450.0	20,772.9	11,973.3	150.1	151.3	99.16	8,734.2	3,228.8	3,289.2	2,992.1	297.11	11.071		
20,200.0	11,450.0	20,893.9	11,977.0	151.7	153.2	99.22	8,855.1	3,225.9	3,288.2	2,987.7	300.46	10.944		
20,300.0	11,450.0	21,007.9	11,980.1	153.3	155.0	99.28	8,969.0	3,222.9	3,286.8	2,983.0	303.74	10.821		
20,400.0	11,450.0	21,129.9	11,981.1	154.9	157.0	99.31	9,091.0	3,219.2	3,284.7	2,977.6	307.13	10.695		
20,500.0	11,450.0	21,212.6	11,980.2	156.5	158.3	99.30	9,173.6	3,216.9	3,282.5	2,972.4	310.12	10.585		
20,600.0	11,450.0	21,325.2	11,977.4	158.1	160.1	99.25	9,286.2	3,214.3	3,280.6	2,967.2	313.46	10.466		
20,700.0	11,450.0	21,386.5	11,975.6	159.7	161.1	99.23	9,347.5	3,213.0	3,279.0	2,962.7	316.22	10.369		
20,800.0	11,450.0	21,462.1	11,972.3	161.3	162.3	99.17	9,423.0	3,212.6	3,278.4	2,959.3	319.15	10.272		
20,900.0	11,450.0	21,571.3	11,965.3	162.9	164.0	99.05	9,531.9	3,212.5	3,278.1	2,955.6	322.53	10.164		
21,000.0	11,450.0	21,663.6	11,958.8	164.5	165.5	98.93	9,624.0	3,212.2	3,277.5	2,951.8	325.71	10.063		
21,050.8	11,450.0	21,703.3	11,955.9	165.3	166.1	98.88	9,663.6	3,212.3	3,277.4	2,950.2	327.22	10.016		
21,100.0	11,450.0	21,744.0	11,953.6	166.1	166.8	98.84	9,704.2	3,212.4	3,277.5	2,948.7	328.71	9.971		
21,200.0	11,450.0	21,834.7	11,951.9	167.7	168.2	98.81	9,794.8	3,212.4	3,277.9	2,946.1	331.79	9.879		
21,300.0	11,450.0	21,965.5	11,950.1	169.3	170.3	98.77	9,925.7	3,211.9	3,278.2	2,942.8	335.40	9.774		
21,400.0	11,450.0	22,074.7	11,949.4	170.9	172.1	98.76	10,034.9	3,210.5	3,277.6	2,938.9	338.70	9.677		
21,500.0	11,450.0	22,184.4	11,948.6	172.5	173.8	98.75	10,144.6	3,208.9	3,276.8	2,934.8	342.02	9.581		
21,600.0	11,450.0	22,275.0	11,947.8	174.2	175.3	98.74	10,235.1	3,207.3	3,275.7	2,930.6	345.11	9.492		
21,614.7	11,450.0	22,275.0	11,947.8	174.4	175.3	98.74	10,235.1	3,207.3	3,275.7	2,930.3	345.37	9.485 SF		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	68.79	31.0	79.9	85.7					
100.0	100.0	100.0	100.0	0.1	0.1	68.79	31.0	79.9	85.7	85.5	0.26	334.550		
200.0	200.0	200.0	200.0	0.5	0.5	68.79	31.0	79.9	85.7	84.8	0.97	88.105		
300.0	300.0	300.0	300.0	0.8	0.8	68.79	31.0	79.9	85.7	84.1	1.69	50.733		
400.0	400.0	400.0	400.0	1.2	1.2	68.79	31.0	79.9	85.7	83.3	2.41	35.622		
500.0	500.0	500.0	500.0	1.6	1.6	68.79	31.0	79.9	85.7	82.6	3.12	27.447		
600.0	600.0	600.0	600.0	1.9	1.9	68.79	31.0	79.9	85.7	81.9	3.84	22.324		
700.0	700.0	700.0	700.0	2.3	2.3	68.79	31.0	79.9	85.7	81.2	4.56	18.813		
800.0	800.0	800.0	800.0	2.6	2.6	68.79	31.0	79.9	85.7	80.5	5.27	16.256		
900.0	900.0	900.0	900.0	3.0	3.0	68.79	31.0	79.9	85.7	79.8	5.99	14.311		
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	68.79	31.0	79.9	85.7	79.0	6.71	12.781		
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	-81.57	31.0	79.9	85.6	78.2	7.41	11.555		
1,200.0	1,200.0	1,200.0	1,200.0	4.0	4.1	-83.32	31.0	79.9	85.3	77.2	8.10	10.531		
1,300.0	1,299.9	1,300.1	1,299.9	4.4	4.4	-86.24	31.0	79.9	84.9	76.1	8.79	9.654		
1,392.3	1,392.0	1,408.0	1,392.0	4.7	4.8	-90.00	31.0	79.9	84.7	75.2	9.49	8.921 CC		
1,400.0	1,399.7	1,400.3	1,399.7	4.7	4.8	-90.36	31.0	79.9	84.7	75.2	9.49	8.923		
1,500.0	1,499.4	1,500.6	1,499.4	5.0	5.1	-95.63	31.0	79.9	85.1	74.9	10.20	8.345 ES		
1,600.0	1,598.9	1,601.1	1,598.9	5.4	5.5	-101.91	31.0	79.9	86.6	75.7	10.91	7.934		
1,700.0	1,698.3	1,701.7	1,698.3	5.8	5.9	-108.94	31.0	79.9	89.6	78.0	11.63	7.703		
1,800.0	1,797.4	1,802.6	1,797.4	6.1	6.2	-116.34	31.0	79.9	94.7	82.3	12.36	7.662		
1,900.0	1,896.4	1,903.6	1,896.4	6.5	6.6	-123.34	31.0	79.9	101.7	88.6	13.08	7.771		
2,000.0	1,995.5	2,004.5	1,995.5	6.9	7.0	-129.37	31.0	79.9	110.0	96.2	13.81	7.966		
2,100.0	2,094.5	2,105.5	2,094.5	7.3	7.3	-134.52	31.0	79.9	119.3	104.8	14.53	8.214		
2,200.0	2,193.5	2,206.5	2,193.5	7.7	7.7	-138.89	31.0	79.9	129.5	114.3	15.25	8.494		
2,300.0	2,292.5	2,307.5	2,292.5	8.1	8.0	-142.62	31.0	79.9	140.4	124.4	15.97	8.789		
2,400.0	2,391.6	2,408.4	2,391.6	8.5	8.4	-145.80	31.0	79.9	151.7	135.0	16.69	9.090		
2,500.0	2,490.6	2,509.4	2,490.6	8.9	8.8	-148.54	31.0	79.9	163.4	146.0	17.41	9.388		
2,600.0	2,589.6	2,589.6	2,589.6	9.3	9.1	-150.90	31.0	79.9	175.5	157.4	18.05	9.721		
2,700.0	2,688.6	2,688.6	2,688.6	9.7	9.4	-152.96	31.0	79.9	187.8	169.0	18.76	10.008		
2,729.0	2,717.4	2,717.4	2,717.4	9.8	9.5	-153.51	31.0	79.9	191.4	172.4	18.97	10.089		
2,800.0	2,787.8	2,787.8	2,787.8	10.1	9.8	-154.75	31.0	79.9	199.7	180.2	19.48	10.254		
2,900.0	2,887.2	2,887.2	2,887.2	10.5	10.1	-156.06	31.0	79.9	209.5	189.3	20.19	10.378		
3,000.0	2,986.8	2,986.8	2,986.8	10.9	10.5	-156.98	31.0	79.9	217.0	196.1	20.90	10.384		
3,100.0	3,086.7	3,087.0	3,087.0	11.2	10.8	-157.74	30.9	79.3	222.1	200.5	21.60	10.280		
3,200.0	3,186.6	3,187.3	3,187.3	11.6	11.2	-158.65	30.3	77.0	224.6	202.3	22.29	10.075		
3,262.3	3,249.0	3,249.8	3,249.7	11.8	11.4	-9.52	29.7	74.7	224.8	202.1	22.71	9.899		
3,300.0	3,286.6	3,287.6	3,287.4	11.9	11.5	-9.97	29.3	72.9	224.7	201.7	22.96	9.785		
3,400.0	3,386.6	3,387.6	3,387.3	12.2	11.8	-11.47	27.8	67.2	224.4	200.7	23.64	9.492		
3,500.0	3,486.6	3,487.4	3,486.8	12.6	12.2	-13.42	26.0	59.8	224.1	199.8	24.31	9.221		
3,529.1	3,515.8	3,516.5	3,515.8	12.7	12.3	-14.06	25.4	57.4	224.1	199.6	24.50	9.147		
3,600.0	3,586.6	3,587.0	3,585.9	12.9	12.5	-15.80	23.7	50.8	224.2	199.2	24.98	8.976		
3,700.0	3,686.6	3,686.1	3,684.5	13.2	12.9	-18.60	21.1	40.1	224.8	199.2	25.65	8.765		
3,800.0	3,786.6	3,784.9	3,782.4	13.5	13.2	-21.79	18.0	27.9	226.2	199.9	26.33	8.593		
3,900.0	3,886.6	3,883.6	3,880.1	13.9	13.6	-25.30	14.6	14.2	228.6	201.6	27.00	8.465		
4,000.0	3,986.6	3,982.5	3,978.0	14.2	14.0	-28.78	11.1	0.3	231.9	204.2	27.69	8.375		
4,100.0	4,086.6	4,081.5	4,075.9	14.6	14.3	-32.16	7.6	-13.7	236.0	207.6	28.38	8.317		
4,200.0	4,186.6	4,180.4	4,173.8	14.9	14.7	-35.41	4.1	-27.6	241.0	211.9	29.07	8.289		
4,300.0	4,286.6	4,279.3	4,271.7	15.2	15.1	-38.52	0.6	-41.5	246.7	216.9	29.77	8.287		
4,400.0	4,386.6	4,378.3	4,369.6	15.6	15.4	-41.49	-2.9	-55.4	253.1	222.6	30.47	8.307		
4,500.0	4,486.6	4,477.2	4,467.5	15.9	15.8	-44.30	-6.4	-69.4	260.1	229.0	31.17	8.347		
4,600.0	4,586.6	4,576.2	4,565.4	16.2	16.2	-46.97	-9.9	-83.3	267.8	235.9	31.87	8.403		
4,700.0	4,686.6	4,675.1	4,663.3	16.6	16.6	-49.48	-13.4	-97.2	276.0	243.4	32.57	8.474		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,800.0	4,786.6	4,774.0	4,761.2	16.9	16.9	-51.84	-16.8	-111.1	284.7	251.4	33.27	8.557		
4,900.0	4,886.6	4,873.0	4,859.1	17.3	17.3	-54.07	-20.3	-125.1	293.9	259.9	33.98	8.649		
5,000.0	4,986.6	4,971.9	4,956.9	17.6	17.7	-56.15	-23.8	-139.0	303.5	268.8	34.68	8.750		
5,100.0	5,086.6	5,070.9	5,054.8	18.0	18.1	-58.11	-27.3	-152.9	313.4	278.0	35.38	8.858		
5,200.0	5,186.6	5,169.8	5,152.7	18.3	18.5	-59.95	-30.8	-166.8	323.7	287.6	36.09	8.970		
5,300.0	5,286.6	5,268.8	5,250.6	18.6	18.9	-61.67	-34.3	-180.8	334.3	297.6	36.79	9.087		
5,400.0	5,386.6	5,367.7	5,348.5	19.0	19.3	-63.29	-37.8	-194.7	345.3	307.8	37.50	9.207		
5,500.0	5,486.6	5,466.6	5,446.4	19.3	19.7	-64.80	-41.3	-208.6	356.4	318.2	38.20	9.329		
5,600.0	5,586.6	5,565.6	5,544.3	19.7	20.1	-66.23	-44.8	-222.5	367.8	328.9	38.91	9.453		
5,700.0	5,686.6	5,664.5	5,642.2	20.0	20.5	-67.57	-48.2	-236.4	379.4	339.8	39.61	9.578		
5,800.0	5,786.6	5,763.5	5,740.1	20.4	20.9	-68.83	-51.7	-250.4	391.2	350.9	40.32	9.703		
5,900.0	5,886.6	5,862.4	5,838.0	20.7	21.3	-70.01	-55.2	-264.3	403.2	362.2	41.03	9.828		
6,000.0	5,986.6	5,961.4	5,935.9	21.1	21.7	-71.13	-58.7	-278.2	415.3	373.6	41.73	9.952		
6,100.0	6,086.6	6,060.3	6,033.8	21.4	22.1	-72.18	-62.2	-292.1	427.6	385.2	42.44	10.076		
6,200.0	6,186.6	6,159.2	6,131.7	21.8	22.5	-73.18	-65.7	-306.1	440.0	396.9	43.15	10.199		
6,300.0	6,286.6	6,258.2	6,229.6	22.1	22.9	-74.12	-69.2	-320.0	452.6	408.7	43.85	10.320		
6,400.0	6,386.6	6,357.1	6,327.5	22.5	23.3	-75.01	-72.7	-333.9	465.2	420.7	44.56	10.441		
6,500.0	6,486.6	6,456.1	6,425.4	22.8	23.7	-75.85	-76.1	-347.8	478.0	432.7	45.27	10.559		
6,600.0	6,586.6	6,555.0	6,523.3	23.2	24.1	-76.65	-79.6	-361.8	490.9	444.9	45.98	10.676		
6,700.0	6,686.6	6,653.9	6,621.2	23.5	24.5	-77.41	-83.1	-375.7	503.8	457.1	46.69	10.792		
6,800.0	6,786.6	6,752.9	6,719.1	23.9	24.9	-78.13	-86.6	-389.6	516.9	469.5	47.39	10.905		
6,900.0	6,886.6	6,851.8	6,817.0	24.2	25.3	-78.81	-90.1	-403.5	530.0	481.9	48.10	11.017		
7,000.0	6,986.6	6,950.8	6,914.9	24.6	25.7	-79.46	-93.6	-417.5	543.1	494.3	48.81	11.127		
7,100.0	7,086.6	7,049.7	7,012.7	24.9	26.1	-80.09	-97.1	-431.4	556.4	506.9	49.52	11.235		
7,200.0	7,186.6	7,148.7	7,110.6	25.3	26.5	-80.68	-100.6	-445.3	569.7	519.5	50.23	11.341		
7,300.0	7,286.6	7,247.6	7,208.5	25.6	26.9	-81.24	-104.1	-459.2	583.1	532.1	50.94	11.446		
7,400.0	7,386.6	7,346.5	7,306.4	26.0	27.3	-81.78	-107.5	-473.2	596.5	544.8	51.65	11.548		
7,500.0	7,486.6	7,445.5	7,404.3	26.3	27.7	-82.30	-111.0	-487.1	610.0	557.6	52.36	11.648		
7,600.0	7,586.6	7,544.4	7,502.2	26.7	28.1	-82.79	-114.5	-501.0	623.5	570.4	53.07	11.747		
7,700.0	7,686.6	7,643.4	7,600.1	27.0	28.6	-83.26	-118.0	-514.9	637.0	583.2	53.79	11.844		
7,800.0	7,786.6	7,742.3	7,698.0	27.4	29.0	-83.72	-121.5	-528.9	650.6	596.1	54.50	11.939		
7,900.0	7,886.6	7,841.2	7,795.9	27.7	29.4	-84.15	-125.0	-542.8	664.3	609.1	55.21	12.032		
8,000.0	7,986.6	7,940.2	7,893.8	28.1	29.8	-84.57	-128.5	-556.7	677.9	622.0	55.92	12.123		
8,100.0	8,086.6	8,039.1	7,991.7	28.4	30.2	-84.97	-132.0	-570.6	691.7	635.0	56.64	12.212		
8,200.0	8,186.6	8,138.1	8,089.6	28.8	30.6	-85.35	-135.4	-584.6	705.4	648.0	57.35	12.300		
8,300.0	8,286.6	8,237.0	8,187.5	29.1	31.0	-85.73	-138.9	-598.5	719.2	661.1	58.06	12.386		
8,400.0	8,386.6	8,336.0	8,285.4	29.5	31.4	-86.08	-142.4	-612.4	733.0	674.2	58.77	12.471		
8,500.0	8,486.6	8,434.9	8,383.3	29.8	31.9	-86.43	-145.9	-626.3	746.8	687.3	59.49	12.554		
8,600.0	8,586.6	8,533.8	8,481.2	30.2	32.3	-86.76	-149.4	-640.3	760.6	700.4	60.20	12.635		
8,700.0	8,686.6	8,632.8	8,579.1	30.6	32.7	-87.07	-152.9	-654.2	774.5	713.6	60.92	12.714		
8,800.0	8,786.6	8,731.7	8,677.0	30.9	33.1	-87.38	-156.4	-668.1	788.4	726.8	61.63	12.793		
8,900.0	8,886.6	8,830.7	8,774.9	31.3	33.5	-87.68	-159.9	-682.0	802.3	740.0	62.35	12.869		
9,000.0	8,986.6	8,929.6	8,872.8	31.6	33.9	-87.97	-163.4	-695.9	816.3	753.2	63.06	12.944		
9,100.0	9,086.6	9,028.6	8,970.7	32.0	34.3	-88.24	-166.8	-709.9	830.2	766.5	63.78	13.018		
9,200.0	9,186.6	9,127.5	9,068.5	32.3	34.8	-88.51	-170.3	-723.8	844.2	779.7	64.49	13.090		
9,300.0	9,286.6	9,226.4	9,166.4	32.7	35.2	-88.77	-173.8	-737.7	858.2	793.0	65.21	13.161		
9,400.0	9,386.6	9,325.4	9,264.3	33.0	35.6	-89.02	-177.3	-751.6	872.2	806.3	65.92	13.231		
9,500.0	9,486.6	9,424.3	9,362.2	33.4	36.0	-89.27	-180.8	-765.6	886.3	819.6	66.64	13.299		
9,600.0	9,586.6	9,523.3	9,460.1	33.7	36.4	-89.50	-184.3	-779.5	900.3	832.9	67.35	13.367		
9,700.0	9,686.6	9,622.2	9,558.0	34.1	36.8	-89.73	-187.8	-793.4	914.4	846.3	68.07	13.432		
9,800.0	9,786.6	9,721.1	9,655.9	34.5	37.3	-89.95	-191.3	-807.3	928.4	859.6	68.79	13.497		
9,900.0	9,886.6	9,820.1	9,753.8	34.8	37.7	-90.17	-194.8	-821.3	942.5	873.0	69.50	13.561		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,000.0	9,986.6	9,928.4	9,861.0	35.2	38.1	-90.39	-198.5	-836.3	956.5	886.2	70.32	13.603		
10,100.0	10,086.6	10,059.9	9,991.6	35.5	38.7	-90.61	-202.3	-851.4	967.9	896.6	71.31	13.574		
10,200.0	10,186.6	10,192.4	10,123.6	35.9	39.2	-90.76	-205.0	-862.1	976.1	903.9	72.23	13.514		
10,300.0	10,286.6	10,325.5	10,256.5	36.2	39.6	-90.85	-206.6	-868.4	980.9	907.8	73.07	13.423		
10,400.0	10,386.6	10,455.6	10,386.6	36.6	40.1	-90.88	-207.0	-870.3	982.2	908.4	73.83	13.304		
10,500.0	10,486.6	10,555.6	10,486.6	36.9	40.4	-90.88	-207.0	-870.3	982.2	907.7	74.52	13.180		
10,600.0	10,586.6	10,655.6	10,586.6	37.3	40.7	-90.88	-207.0	-870.3	982.2	907.0	75.22	13.059		
10,700.0	10,686.6	10,755.6	10,686.6	37.6	41.0	-90.88	-207.0	-870.3	982.2	906.3	75.91	12.939		
10,800.0	10,786.6	10,855.6	10,786.6	38.0	41.4	-90.88	-207.0	-870.3	982.2	905.6	76.60	12.822		
10,860.2	10,846.9	10,915.9	10,846.9	38.2	41.5	-90.88	-207.0	-870.3	982.2	905.2	77.02	12.753		
10,890.4	10,877.0	10,946.0	10,877.0	38.3	41.6	-90.88	-207.0	-870.3	982.2	905.0	77.23	12.718		
10,900.0	10,886.6	10,950.0	10,881.0	38.4	41.7	-85.47	-207.0	-870.3	982.3	905.0	77.29	12.708		
10,950.0	10,936.5	10,983.1	10,914.1	38.5	41.8	-85.48	-205.9	-870.7	982.7	905.1	77.60	12.663		
11,000.0	10,986.0	11,014.2	10,945.1	38.7	41.9	-85.48	-203.3	-871.8	983.7	905.8	77.87	12.632		
11,050.0	11,034.6	11,050.0	10,980.5	38.9	42.0	-85.52	-198.3	-873.8	985.4	907.3	78.14	12.611		
11,100.0	11,082.0	11,076.6	11,006.5	39.0	42.1	-85.51	-193.3	-875.7	987.7	909.3	78.32	12.610		
11,150.0	11,127.8	11,107.7	11,036.6	39.2	42.2	-85.52	-185.9	-878.6	990.6	912.1	78.51	12.618		
11,200.0	11,171.8	11,139.0	11,066.4	39.3	42.3	-85.53	-177.1	-882.1	994.1	915.4	78.67	12.636		
11,250.0	11,213.5	11,170.2	11,095.6	39.4	42.4	-85.54	-166.7	-886.2	998.3	919.5	78.83	12.664		
11,300.0	11,252.6	11,200.0	11,122.8	39.5	42.5	-85.52	-155.5	-890.7	1,003.1	924.1	78.98	12.701		
11,350.0	11,288.9	11,232.9	11,152.1	39.7	42.6	-85.55	-141.6	-896.2	1,008.5	929.4	79.15	12.742		
11,400.0	11,322.0	11,264.4	11,179.3	39.8	42.7	-85.54	-126.8	-902.0	1,014.6	935.3	79.33	12.790		
11,450.0	11,351.8	11,300.0	11,208.9	39.9	42.8	-85.61	-108.5	-909.3	1,021.4	941.8	79.56	12.837		
11,500.0	11,377.9	11,327.8	11,231.2	40.0	42.9	-85.49	-93.1	-915.4	1,028.7	949.0	79.75	12.899		
11,550.0	11,400.3	11,359.7	11,255.7	40.1	42.9	-85.44	-74.1	-922.9	1,036.8	956.8	80.00	12.959		
11,600.0	11,418.6	11,391.9	11,279.2	40.3	43.0	-85.38	-53.7	-930.9	1,045.4	965.1	80.28	13.022		
11,650.0	11,432.8	11,424.3	11,301.7	40.4	43.1	-85.31	-31.9	-939.6	1,054.7	974.1	80.58	13.089		
11,700.0	11,442.8	11,457.1	11,323.0	40.5	43.2	-85.22	-8.7	-948.7	1,064.6	983.7	80.90	13.159		
11,750.0	11,448.5	11,490.3	11,343.1	40.7	43.3	-85.12	15.8	-958.4	1,075.1	993.8	81.23	13.235		
11,790.4	11,450.0	11,517.5	11,358.3	40.8	43.4	-85.02	36.7	-966.7	1,084.0	1,002.5	81.50	13.300		
11,800.0	11,450.0	11,524.0	11,361.9	40.8	43.4	-85.22	41.9	-968.7	1,086.2	1,004.6	81.57	13.316		
11,900.0	11,450.0	11,597.5	11,396.9	41.1	43.6	-87.14	101.9	-992.5	1,112.6	1,030.3	82.23	13.529		
12,000.0	11,450.0	11,679.8	11,426.0	41.5	43.9	-88.73	173.4	-1,020.8	1,144.5	1,061.5	82.94	13.798		
12,037.8	11,450.0	11,712.8	11,434.6	41.7	44.0	-89.18	203.0	-1,032.5	1,157.7	1,074.5	83.23	13.910		
12,100.0	11,450.0	11,768.9	11,444.8	41.9	44.2	-89.73	254.3	-1,052.7	1,180.0	1,096.3	83.72	14.094		
12,200.0	11,450.0	11,873.2	11,450.0	42.4	44.6	-90.00	351.2	-1,090.9	1,216.0	1,131.3	84.65	14.364		
12,300.0	11,450.0	12,039.2	11,450.0	43.0	45.4	-90.00	507.7	-1,146.0	1,248.4	1,162.5	85.96	14.523		
12,400.0	11,450.0	12,211.5	11,450.0	43.6	46.4	-90.00	673.3	-1,193.4	1,275.2	1,187.8	87.43	14.585		
12,500.0	11,450.0	12,388.9	11,450.0	44.3	47.5	-90.00	846.5	-1,231.8	1,296.1	1,207.0	89.05	14.555		
12,600.0	11,450.0	12,570.4	11,450.0	45.0	48.7	-90.00	1,025.8	-1,259.9	1,310.8	1,220.0	90.76	14.443		
12,700.0	11,450.0	12,754.7	11,450.0	45.8	50.0	-90.00	1,209.2	-1,276.8	1,319.2	1,226.7	92.51	14.259		
12,800.0	11,450.0	12,923.0	11,450.0	46.6	51.3	-90.00	1,377.4	-1,281.9	1,321.2	1,227.0	94.24	14.019		
12,900.0	11,450.0	13,023.0	11,450.0	47.4	52.1	-90.00	1,477.4	-1,282.7	1,321.2	1,225.3	95.95	13.770		
13,000.0	11,450.0	13,123.0	11,450.0	48.3	52.9	-90.00	1,577.4	-1,283.4	1,321.2	1,223.5	97.73	13.518		
13,100.0	11,450.0	13,223.0	11,450.0	49.3	53.8	-90.00	1,677.4	-1,284.2	1,321.2	1,221.6	99.60	13.265		
13,200.0	11,450.0	13,323.0	11,450.0	50.3	54.6	-90.00	1,777.4	-1,285.0	1,321.2	1,219.6	101.54	13.011		
13,300.0	11,450.0	13,423.0	11,450.0	51.3	55.6	-90.00	1,877.4	-1,285.7	1,321.1	1,217.6	103.55	12.759		
13,400.0	11,450.0	13,523.0	11,450.0	52.3	56.5	-90.00	1,977.4	-1,286.5	1,321.1	1,215.5	105.62	12.508		
13,500.0	11,450.0	13,623.0	11,450.0	53.4	57.5	-90.00	2,077.4	-1,287.3	1,321.1	1,213.3	107.76	12.260		
13,600.0	11,450.0	13,723.0	11,450.0	54.5	58.6	-90.00	2,177.4	-1,288.1	1,321.1	1,211.1	109.95	12.015		
13,700.0	11,450.0	13,823.0	11,450.0	55.6	59.6	-90.00	2,277.4	-1,288.8	1,321.1	1,208.9	112.20	11.774		
13,800.0	11,450.0	13,923.0	11,450.0	56.8	60.7	-90.00	2,377.4	-1,289.6	1,321.0	1,206.5	114.51	11.537		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,900.0	11,450.0	14,023.0	11,450.0	58.0	61.8	-90.00	2,477.4	-1,290.4	1,321.0	1,204.2	116.86	11.304		
14,000.0	11,450.0	14,123.0	11,450.0	59.2	63.0	-90.00	2,577.4	-1,291.1	1,321.0	1,201.8	119.26	11.077		
14,100.0	11,450.0	14,223.0	11,450.0	60.4	64.1	-90.00	2,677.4	-1,291.9	1,321.0	1,199.3	121.70	10.855		
14,200.0	11,450.0	14,323.0	11,450.0	61.7	65.3	-90.00	2,777.4	-1,292.7	1,321.0	1,196.8	124.18	10.638		
14,300.0	11,450.0	14,423.0	11,450.0	62.9	66.5	-90.00	2,877.4	-1,293.4	1,321.0	1,194.3	126.70	10.426		
14,400.0	11,450.0	14,523.0	11,450.0	64.2	67.7	-90.00	2,977.4	-1,294.2	1,320.9	1,191.7	129.25	10.220		
14,500.0	11,450.0	14,623.0	11,450.0	65.5	69.0	-90.00	3,077.4	-1,295.0	1,320.9	1,189.1	131.84	10.019		
14,600.0	11,450.0	14,723.0	11,450.0	66.8	70.2	-90.00	3,177.4	-1,295.8	1,320.9	1,186.4	134.46	9.824		
14,700.0	11,450.0	14,823.0	11,450.0	68.2	71.5	-90.00	3,277.4	-1,296.5	1,320.9	1,183.8	137.11	9.634		
14,800.0	11,450.0	14,923.0	11,450.0	69.5	72.8	-90.00	3,377.4	-1,297.3	1,320.9	1,181.1	139.79	9.449		
14,900.0	11,450.0	15,023.0	11,450.0	70.9	74.1	-90.00	3,477.4	-1,298.1	1,320.8	1,178.3	142.50	9.269		
15,000.0	11,450.0	15,123.0	11,450.0	72.2	75.4	-90.00	3,577.4	-1,298.8	1,320.8	1,175.6	145.23	9.095		
15,100.0	11,450.0	15,223.0	11,450.0	73.6	76.7	-90.00	3,677.4	-1,299.6	1,320.8	1,172.8	147.98	8.925		
15,200.0	11,450.0	15,388.1	11,450.0	75.0	78.9	-90.00	3,842.4	-1,297.4	1,318.9	1,168.1	150.76	8.748		
15,300.0	11,450.0	15,572.3	11,450.0	76.4	81.3	-90.00	4,026.2	-1,283.8	1,310.7	1,157.6	153.11	8.561		
15,400.0	11,450.0	15,753.9	11,450.0	77.8	83.6	-90.00	4,206.0	-1,258.9	1,296.2	1,141.3	154.97	8.364		
15,500.0	11,450.0	15,931.5	11,450.0	79.3	85.8	-90.00	4,380.0	-1,223.6	1,275.5	1,119.2	156.34	8.159		
15,600.0	11,450.0	16,026.7	11,450.0	80.7	87.0	-90.00	4,472.5	-1,201.0	1,251.1	1,092.1	159.07	7.866		
15,700.0	11,450.0	16,100.0	11,450.0	82.1	87.9	-90.00	4,544.1	-1,185.2	1,228.8	1,066.5	162.27	7.572		
15,800.0	11,450.0	16,163.5	11,450.0	83.6	88.7	-90.00	4,606.3	-1,173.1	1,208.7	1,043.0	165.68	7.295		
15,900.0	11,450.0	16,232.8	11,450.0	85.0	89.6	-90.00	4,674.7	-1,161.3	1,191.0	1,022.0	168.97	7.049		
16,000.0	11,450.0	16,300.0	11,450.0	86.5	90.5	-90.00	4,741.2	-1,151.6	1,175.7	1,003.4	172.27	6.825		
16,100.0	11,450.0	16,373.2	11,450.0	88.0	91.5	-90.00	4,813.8	-1,142.7	1,162.8	987.4	175.47	6.627		
16,200.0	11,450.0	16,444.0	11,450.0	89.4	92.5	-90.00	4,884.3	-1,135.8	1,152.4	973.8	178.66	6.450		
16,300.0	11,450.0	16,515.2	11,450.0	90.9	93.5	-90.00	4,955.3	-1,130.8	1,144.5	962.7	181.80	6.295		
16,400.0	11,450.0	16,586.6	11,450.0	92.4	94.5	-90.00	5,026.6	-1,127.4	1,139.0	954.1	184.88	6.161		
16,500.0	11,450.0	16,658.1	11,450.0	93.9	95.5	-90.00	5,098.1	-1,125.8	1,136.0	948.1	187.89	6.046		
16,569.1	11,450.0	16,707.6	11,450.0	95.0	96.3	-90.00	5,147.6	-1,125.8	1,135.4	945.5	189.93	5.978		
16,600.0	11,450.0	16,729.7	11,450.0	95.4	96.6	-90.00	5,169.7	-1,126.1	1,135.5	944.7	190.83	5.951		
16,700.0	11,450.0	16,800.0	11,450.0	96.9	97.6	-90.00	5,240.0	-1,128.0	1,137.6	943.9	193.67	5.874		
16,800.0	11,450.0	16,872.8	11,450.0	98.4	98.7	-90.00	5,312.7	-1,131.9	1,142.1	945.6	196.45	5.814		
16,900.0	11,450.0	16,944.0	11,450.0	100.0	99.8	-90.00	5,383.7	-1,137.4	1,149.1	950.0	199.12	5.771		
17,000.0	11,450.0	17,015.0	11,450.0	101.5	100.9	-90.00	5,454.3	-1,144.7	1,158.6	956.9	201.69	5.744		
17,100.0	11,450.0	17,085.6	11,450.0	103.0	102.0	-90.00	5,524.3	-1,153.7	1,170.5	966.4	204.16	5.733		
17,200.0	11,450.0	17,155.7	11,450.0	104.5	103.1	-90.00	5,593.6	-1,164.3	1,184.9	978.4	206.52	5.737		
17,300.0	11,450.0	17,225.3	11,450.0	106.1	104.2	-90.00	5,662.1	-1,176.5	1,201.7	992.9	208.77	5.756		
17,400.0	11,450.0	17,300.0	11,450.0	107.6	105.4	-90.00	5,735.3	-1,191.5	1,220.8	1,009.7	211.09	5.783		
17,500.0	11,450.0	17,362.6	11,450.0	109.1	106.4	-90.00	5,796.3	-1,205.5	1,242.3	1,029.4	212.93	5.834		
17,600.0	11,450.0	17,430.2	11,450.0	110.7	107.4	-90.00	5,861.8	-1,222.1	1,266.1	1,051.3	214.84	5.893		
17,700.0	11,450.0	17,595.9	11,450.0	112.2	110.1	-90.00	6,022.9	-1,260.8	1,288.9	1,068.5	220.37	5.849		
17,800.0	11,450.0	17,776.1	11,450.0	113.8	112.9	-90.00	6,200.4	-1,292.2	1,305.5	1,079.8	225.71	5.784		
17,900.0	11,450.0	17,959.5	11,450.0	115.3	115.8	-90.00	6,382.6	-1,312.6	1,315.9	1,085.6	230.35	5.713		
18,000.0	11,450.0	18,144.6	11,450.0	116.9	118.7	-90.00	6,567.4	-1,321.4	1,319.9	1,085.7	234.18	5.636		
18,100.0	11,450.0	18,254.5	11,450.0	118.4	120.4	-90.00	6,677.3	-1,322.3	1,319.9	1,082.6	237.32	5.562		
18,200.0	11,450.0	18,354.5	11,450.0	120.0	121.9	-90.00	6,777.3	-1,323.1	1,319.9	1,079.4	240.44	5.489		
18,300.0	11,450.0	18,454.5	11,450.0	121.6	123.5	-90.00	6,877.3	-1,323.8	1,319.8	1,076.3	243.56	5.419		
18,400.0	11,450.0	18,554.5	11,450.0	123.1	125.0	-90.00	6,977.3	-1,324.6	1,319.8	1,073.1	246.69	5.350		
18,500.0	11,450.0	18,654.5	11,450.0	124.7	126.6	-90.00	7,077.3	-1,325.4	1,319.8	1,070.0	249.82	5.283		
18,600.0	11,450.0	18,754.5	11,450.0	126.3	128.1	-90.00	7,177.3	-1,326.1	1,319.8	1,066.8	252.96	5.217		
18,700.0	11,450.0	18,854.5	11,450.0	127.8	129.7	-90.00	7,277.3	-1,326.9	1,319.7	1,063.6	256.10	5.153		
18,800.0	11,450.0	18,954.5	11,450.0	129.4	131.2	-90.00	7,377.3	-1,327.7	1,319.7	1,060.5	259.25	5.091		
18,900.0	11,450.0	19,054.5	11,450.0	131.0	132.8	-90.00	7,477.3	-1,328.4	1,319.7	1,057.3	262.40	5.029		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,000.0	11,450.0	19,154.5	11,450.0	132.6	134.3	-90.00	7,577.3	-1,329.2	1,319.7	1,054.1	265.55	4.970		
19,100.0	11,450.0	19,254.5	11,450.0	134.2	135.9	-90.00	7,677.3	-1,330.0	1,319.6	1,050.9	268.71	4.911		
19,200.0	11,450.0	19,354.5	11,450.0	135.7	137.4	-90.00	7,777.3	-1,330.7	1,319.6	1,047.7	271.87	4.854		
19,300.0	11,450.0	19,454.5	11,450.0	137.3	139.0	-90.00	7,877.3	-1,331.5	1,319.6	1,044.6	275.04	4.798		
19,400.0	11,450.0	19,554.5	11,450.0	138.9	140.6	-90.00	7,977.3	-1,332.3	1,319.6	1,041.4	278.21	4.743		
19,500.0	11,450.0	19,654.5	11,450.0	140.5	142.1	-90.00	8,077.3	-1,333.0	1,319.5	1,038.2	281.38	4.690		
19,600.0	11,450.0	19,754.5	11,450.0	142.1	143.7	-90.00	8,177.3	-1,333.8	1,319.5	1,035.0	284.56	4.637		
19,700.0	11,450.0	19,854.5	11,450.0	143.7	145.3	-90.00	8,277.3	-1,334.5	1,319.5	1,031.8	287.73	4.586		
19,800.0	11,450.0	19,954.5	11,450.0	145.3	146.9	-90.00	8,377.3	-1,335.3	1,319.5	1,028.6	290.92	4.536		
19,900.0	11,450.0	20,054.5	11,450.0	146.9	148.4	-90.00	8,477.3	-1,336.1	1,319.5	1,025.3	294.10	4.486		
20,000.0	11,450.0	20,154.5	11,450.0	148.5	150.0	-90.00	8,577.3	-1,336.8	1,319.4	1,022.1	297.29	4.438		
20,100.0	11,450.0	20,254.5	11,450.0	150.1	151.6	-90.00	8,677.3	-1,337.6	1,319.4	1,018.9	300.48	4.391		
20,200.0	11,450.0	20,354.5	11,450.0	151.7	153.2	-90.00	8,777.3	-1,338.4	1,319.4	1,015.7	303.67	4.345		
20,300.0	11,450.0	20,454.5	11,450.0	153.3	154.8	-90.00	8,877.3	-1,339.1	1,319.4	1,012.5	306.87	4.299		
20,400.0	11,450.0	20,554.5	11,450.0	154.9	156.4	-90.00	8,977.3	-1,339.9	1,319.3	1,009.3	310.07	4.255		
20,500.0	11,450.0	20,654.5	11,450.0	156.5	157.9	-90.00	9,077.3	-1,340.7	1,319.3	1,006.0	313.27	4.211		
20,600.0	11,450.0	20,754.5	11,450.0	158.1	159.5	-90.00	9,177.3	-1,341.4	1,319.3	1,002.8	316.47	4.169		
20,700.0	11,450.0	20,854.5	11,450.0	159.7	161.1	-90.00	9,277.3	-1,342.2	1,319.3	999.6	319.68	4.127		
20,800.0	11,450.0	20,954.5	11,450.0	161.3	162.7	-90.00	9,377.3	-1,343.0	1,319.2	996.3	322.89	4.086		
20,900.0	11,450.0	21,054.5	11,450.0	162.9	164.3	-90.00	9,477.3	-1,343.7	1,319.2	993.1	326.10	4.045		
21,000.0	11,450.0	21,154.5	11,450.0	164.5	165.9	-90.00	9,577.3	-1,344.5	1,319.2	989.9	329.31	4.006		
21,100.0	11,450.0	21,254.5	11,450.0	166.1	167.5	-90.00	9,677.3	-1,345.2	1,319.2	986.6	332.52	3.967		
21,200.0	11,450.0	21,354.5	11,450.0	167.7	169.1	-90.00	9,777.2	-1,346.0	1,319.1	983.4	335.74	3.929		
21,300.0	11,450.0	21,454.5	11,450.0	169.3	170.7	-90.00	9,877.2	-1,346.8	1,319.1	980.2	338.96	3.892		
21,400.0	11,450.0	21,554.5	11,450.0	170.9	172.3	-90.00	9,977.2	-1,347.5	1,319.1	976.9	342.18	3.855		
21,500.0	11,450.0	21,654.5	11,450.0	172.5	173.9	-90.00	10,077.2	-1,348.3	1,319.1	973.7	345.40	3.819		
21,600.0	11,450.0	21,754.5	11,450.0	174.2	175.5	-90.00	10,177.2	-1,349.1	1,319.0	970.4	348.62	3.784		
21,614.7	11,450.0	21,769.2	11,450.0	174.4	175.7	-90.00	10,191.9	-1,349.2	1,319.0	970.0	349.07	3.779 SF		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	1.0	-1.0	0.0	0.0	89.35	27.6	2,423.1	2,423.3					
100.0	100.0	101.0	99.0	0.1	0.1	89.35	27.6	2,423.1	2,423.3	2,423.0	0.26	9,324.078		
200.0	200.0	201.0	199.0	0.5	0.5	89.35	27.6	2,423.1	2,423.3	2,422.3	0.98	2,480.721		
300.0	300.0	301.0	299.0	0.8	0.8	89.35	27.6	2,423.1	2,423.3	2,421.6	1.69	1,430.680		
400.0	400.0	401.0	399.0	1.2	1.2	89.35	27.6	2,423.1	2,423.3	2,420.8	2.41	1,005.199		
500.0	500.0	501.0	499.0	1.6	1.6	89.35	27.6	2,423.1	2,423.3	2,420.1	3.13	774.781		
600.0	600.0	601.0	599.0	1.9	1.9	89.35	27.6	2,423.1	2,423.3	2,419.4	3.84	630.300		
700.0	700.0	701.0	699.0	2.3	2.3	89.35	27.6	2,423.1	2,423.3	2,418.7	4.56	531.235		
800.0	800.0	801.0	799.0	2.6	2.6	89.35	27.6	2,423.1	2,423.3	2,418.0	5.28	459.081		
900.0	900.0	901.0	899.0	3.0	3.0	89.35	27.6	2,423.1	2,423.3	2,417.3	6.00	404.183		
1,000.0	1,000.0	999.0	999.0	3.4	3.4	89.35	27.6	2,423.1	2,423.3	2,416.6	6.71	361.399		
1,100.0	1,100.0	1,171.5	1,171.4	3.7	3.9	-60.48	27.6	2,420.5	2,421.3	2,413.7	7.64	316.733		
1,200.0	1,200.0	1,344.1	1,343.9	4.0	4.6	-60.62	27.3	2,412.8	2,415.6	2,407.0	8.57	281.943		
1,300.0	1,299.9	1,515.8	1,515.1	4.4	5.2	-60.86	26.9	2,399.9	2,405.9	2,396.4	9.49	253.488		
1,400.0	1,399.7	1,686.1	1,684.4	4.7	5.8	-61.19	26.3	2,382.1	2,392.5	2,382.1	10.41	229.800		
1,500.0	1,499.4	1,808.7	1,806.1	5.0	6.2	-61.54	25.9	2,366.5	2,376.0	2,364.8	11.18	212.564		
1,600.0	1,598.9	1,906.8	1,903.4	5.4	6.6	-61.90	25.5	2,353.8	2,358.5	2,346.6	11.87	198.666		
1,700.0	1,698.3	2,004.7	2,000.4	5.8	7.0	-62.30	25.1	2,341.1	2,340.2	2,327.6	12.57	186.141		
1,800.0	1,797.4	2,102.2	2,097.1	6.1	7.4	-62.76	24.7	2,328.5	2,321.2	2,307.9	13.28	174.784		
1,900.0	1,896.4	2,200.5	2,193.6	6.5	7.8	-63.07	24.3	2,315.9	2,301.8	2,287.8	14.00	164.432		
2,000.0	1,995.5	2,303.2	2,290.1	6.9	8.2	-63.38	23.9	2,303.3	2,282.5	2,267.8	14.74	154.871		
2,100.0	2,094.5	2,405.8	2,386.6	7.3	8.6	-63.70	23.5	2,290.7	2,263.3	2,247.8	15.48	146.175		
2,200.0	2,193.5	2,508.5	2,483.1	7.7	9.0	-64.02	23.1	2,278.1	2,244.1	2,227.9	16.23	138.242		
2,300.0	2,292.5	2,588.8	2,579.6	8.1	9.3	-64.35	22.7	2,265.5	2,225.0	2,208.1	16.91	131.609		
2,400.0	2,391.6	2,686.2	2,676.1	8.5	9.7	-64.69	22.3	2,252.9	2,206.0	2,188.4	17.65	125.022		
2,500.0	2,490.6	2,783.5	2,772.7	8.9	10.1	-65.03	21.9	2,240.3	2,187.1	2,168.7	18.39	118.948		
2,600.0	2,589.6	2,880.8	2,869.2	9.3	10.5	-65.38	21.5	2,227.7	2,168.2	2,149.1	19.13	113.331		
2,700.0	2,688.6	2,978.2	2,965.7	9.7	10.9	-65.73	21.1	2,215.1	2,149.5	2,129.6	19.88	108.124		
2,729.0	2,717.4	3,006.4	2,993.7	9.8	11.0	-65.83	21.0	2,211.5	2,144.0	2,123.9	20.10	106.684		
2,800.0	2,787.8	3,075.6	3,062.3	10.1	11.3	-65.89	20.7	2,202.5	2,131.0	2,110.4	20.63	103.311		
2,900.0	2,887.2	3,173.5	3,159.4	10.5	11.7	-65.94	20.3	2,189.8	2,113.7	2,092.3	21.37	98.919		
3,000.0	2,986.8	3,271.9	3,256.9	10.9	12.0	-65.94	19.9	2,177.1	2,097.4	2,075.3	22.10	94.908		
3,100.0	3,086.7	3,370.5	3,354.7	11.2	12.5	-65.89	19.5	2,164.3	2,082.2	2,059.4	22.82	91.240		
3,200.0	3,186.6	3,469.5	3,452.8	11.6	12.9	-65.80	19.1	2,151.5	2,068.1	2,044.6	23.53	87.879		
3,262.3	3,249.0	3,531.2	3,514.1	11.8	13.1	84.07	18.9	2,143.5	2,059.8	2,035.9	23.97	85.944		
3,300.0	3,286.6	3,568.6	3,551.1	11.9	13.3	84.06	18.7	2,138.7	2,055.0	2,030.8	24.23	84.827		
3,400.0	3,386.6	3,667.7	3,649.4	12.2	13.7	84.04	18.3	2,125.8	2,042.1	2,017.2	24.91	81.968		
3,500.0	3,486.6	3,766.9	3,747.8	12.6	14.1	84.01	17.9	2,113.0	2,029.1	2,003.5	25.60	79.255		
3,600.0	3,586.6	3,866.0	3,846.1	12.9	14.5	83.98	17.5	2,100.2	2,016.2	1,989.9	26.29	76.680		
3,700.0	3,686.6	3,965.2	3,944.4	13.2	14.9	83.96	17.1	2,087.3	2,003.3	1,976.3	26.99	74.233		
3,800.0	3,786.6	4,064.4	4,042.7	13.5	15.3	83.93	16.7	2,074.5	1,990.4	1,962.7	27.68	71.903		
3,900.0	3,886.6	4,163.5	4,141.1	13.9	15.7	83.90	16.3	2,061.6	1,977.5	1,949.1	28.38	69.685		
4,000.0	3,986.6	4,262.7	4,239.4	14.2	16.1	83.87	15.9	2,048.8	1,964.6	1,935.5	29.07	67.569		
4,100.0	4,086.6	4,361.8	4,337.7	14.6	16.5	83.84	15.5	2,036.0	1,951.6	1,921.9	29.77	65.550		
4,200.0	4,186.6	4,461.0	4,436.0	14.9	16.9	83.81	15.1	2,023.1	1,938.7	1,908.3	30.47	63.621		
4,300.0	4,286.6	4,560.2	4,534.3	15.2	17.3	83.78	14.7	2,010.3	1,925.8	1,894.6	31.17	61.777		
4,400.0	4,386.6	4,659.3	4,632.7	15.6	17.7	83.75	14.3	1,997.5	1,912.9	1,881.0	31.88	60.012		
4,500.0	4,486.6	4,758.5	4,731.0	15.9	18.1	83.72	13.9	1,984.6	1,900.0	1,867.4	32.58	58.321		
4,600.0	4,586.6	4,857.6	4,829.3	16.2	18.5	83.69	13.5	1,971.8	1,887.1	1,853.8	33.28	56.700		
4,700.0	4,686.6	4,956.8	4,927.6	16.6	18.9	83.66	13.1	1,959.0	1,874.2	1,840.2	33.99	55.145		
4,800.0	4,786.6	5,055.9	5,026.0	16.9	19.4	83.63	12.7	1,946.1	1,861.2	1,826.6	34.69	53.652		
4,900.0	4,886.6	5,155.1	5,124.3	17.3	19.8	83.60	12.3	1,933.3	1,848.3	1,812.9	35.40	52.217		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.0	4,986.6	5,254.3	5,222.6	17.6	20.2	83.57	11.9	1,920.4	1,835.4	1,799.3	36.10	50.837		
5,100.0	5,086.6	5,353.4	5,320.9	18.0	20.6	83.53	11.5	1,907.6	1,822.5	1,785.7	36.81	49.510		
5,200.0	5,186.6	5,452.6	5,419.2	18.3	21.0	83.50	11.1	1,894.8	1,809.6	1,772.1	37.52	48.232		
5,300.0	5,286.6	5,551.7	5,517.6	18.6	21.4	83.47	10.7	1,881.9	1,796.7	1,758.5	38.23	47.000		
5,400.0	5,386.6	5,650.9	5,615.9	19.0	21.8	83.43	10.3	1,869.1	1,783.8	1,744.8	38.94	45.812		
5,500.0	5,486.6	5,750.0	5,714.2	19.3	22.2	83.40	9.9	1,856.3	1,770.9	1,731.2	39.65	44.667		
5,600.0	5,586.6	5,849.2	5,812.5	19.7	22.6	83.36	9.5	1,843.4	1,758.0	1,717.6	40.36	43.561		
5,700.0	5,686.6	5,948.4	5,910.9	20.0	23.0	83.33	9.1	1,830.6	1,745.1	1,704.0	41.07	42.493		
5,800.0	5,786.6	6,047.5	6,009.2	20.4	23.4	83.29	8.7	1,817.7	1,732.2	1,690.4	41.78	41.461		
5,900.0	5,886.6	6,146.7	6,107.5	20.7	23.8	83.25	8.3	1,804.9	1,719.3	1,676.8	42.49	40.463		
6,000.0	5,986.6	6,245.8	6,205.8	21.1	24.3	83.21	7.9	1,792.1	1,706.3	1,663.1	43.20	39.498		
6,100.0	6,086.6	6,345.0	6,304.1	21.4	24.7	83.18	7.5	1,779.2	1,693.4	1,649.5	43.91	38.563		
6,200.0	6,186.6	6,444.1	6,402.5	21.8	25.1	83.14	7.1	1,766.4	1,680.5	1,635.9	44.63	37.658		
6,300.0	6,286.6	6,543.3	6,500.8	22.1	25.5	83.10	6.7	1,753.6	1,667.6	1,622.3	45.34	36.781		
6,400.0	6,386.6	6,642.5	6,599.1	22.5	25.9	83.06	6.3	1,740.7	1,654.7	1,608.7	46.05	35.931		
6,500.0	6,486.6	6,741.6	6,697.4	22.8	26.3	83.02	5.9	1,727.9	1,641.8	1,595.1	46.77	35.107		
6,600.0	6,586.6	6,840.8	6,795.8	23.2	26.7	82.98	5.5	1,715.0	1,628.9	1,581.5	47.48	34.308		
6,700.0	6,686.6	6,939.9	6,894.1	23.5	27.1	82.93	5.1	1,702.2	1,616.0	1,567.8	48.19	33.532		
6,800.0	6,786.6	7,039.1	6,992.4	23.9	27.5	82.89	4.7	1,689.4	1,603.1	1,554.2	48.91	32.778		
6,900.0	6,886.6	7,138.3	7,090.7	24.2	27.9	82.85	4.3	1,676.5	1,590.2	1,540.6	49.62	32.046		
7,000.0	6,986.6	7,237.4	7,189.0	24.6	28.4	82.80	3.9	1,663.7	1,577.3	1,527.0	50.34	31.334		
7,100.0	7,086.6	7,336.6	7,287.4	24.9	28.8	82.76	3.5	1,650.9	1,564.5	1,513.4	51.05	30.643		
7,200.0	7,186.6	7,435.7	7,385.7	25.3	29.2	82.71	3.1	1,638.0	1,551.6	1,499.8	51.77	29.970		
7,300.0	7,286.6	7,534.9	7,484.0	25.6	29.6	82.67	2.7	1,625.2	1,538.7	1,486.2	52.49	29.315		
7,400.0	7,386.6	7,600.0	7,548.6	26.0	29.8	82.66	1.9	1,617.3	1,526.6	1,473.5	53.15	28.721		
7,500.0	7,486.6	7,664.3	7,612.7	26.3	30.1	82.72	-0.5	1,611.3	1,517.0	1,463.2	53.79	28.202		
7,600.0	7,586.6	7,757.6	7,705.5	26.7	30.4	82.88	-5.6	1,604.5	1,509.0	1,454.6	54.48	27.699		
7,700.0	7,686.6	7,857.1	7,804.6	27.0	30.8	83.06	-11.1	1,597.2	1,501.1	1,445.9	55.18	27.202		
7,800.0	7,786.6	7,956.7	7,903.8	27.4	31.2	83.23	-16.6	1,590.0	1,493.2	1,437.3	55.89	26.717		
7,900.0	7,886.6	8,056.3	8,003.0	27.7	31.5	83.41	-22.1	1,582.7	1,485.3	1,428.7	56.59	26.244		
8,000.0	7,986.6	8,155.9	8,102.1	28.1	31.9	83.59	-27.6	1,575.4	1,477.4	1,420.1	57.30	25.783		
8,100.0	8,086.6	8,255.5	8,201.3	28.4	32.3	83.77	-33.1	1,568.1	1,469.5	1,411.5	58.01	25.333		
8,200.0	8,186.6	8,355.0	8,300.5	28.8	32.7	83.95	-38.6	1,560.9	1,461.6	1,402.9	58.72	24.893		
8,300.0	8,286.6	8,454.6	8,399.6	29.1	33.0	84.14	-44.1	1,553.6	1,453.8	1,394.4	59.42	24.464		
8,400.0	8,386.6	8,554.2	8,498.8	29.5	33.4	84.33	-49.6	1,546.3	1,446.0	1,385.8	60.13	24.045		
8,500.0	8,486.6	8,653.8	8,597.9	29.8	33.8	84.52	-55.1	1,539.0	1,438.1	1,377.3	60.84	23.636		
8,600.0	8,586.6	8,753.4	8,697.1	30.2	34.1	84.71	-60.6	1,531.8	1,430.3	1,368.8	61.56	23.237		
8,700.0	8,686.6	8,852.9	8,796.3	30.6	34.5	84.90	-66.0	1,524.5	1,422.6	1,360.3	62.27	22.846		
8,800.0	8,786.6	8,952.5	8,895.4	30.9	34.9	85.10	-71.5	1,517.2	1,414.8	1,351.8	62.98	22.464		
8,900.0	8,886.6	9,052.1	8,994.6	31.3	35.2	85.30	-77.0	1,509.9	1,407.0	1,343.3	63.69	22.091		
9,000.0	8,986.6	9,151.7	9,093.7	31.6	35.6	85.50	-82.5	1,502.6	1,399.3	1,334.9	64.41	21.726		
9,100.0	9,086.6	9,251.3	9,192.9	32.0	36.0	85.70	-88.0	1,495.4	1,391.6	1,326.5	65.12	21.369		
9,200.0	9,186.6	9,350.8	9,292.1	32.3	36.4	85.91	-93.5	1,488.1	1,383.9	1,318.0	65.83	21.020		
9,300.0	9,286.6	9,450.4	9,391.2	32.7	36.7	86.11	-99.0	1,480.8	1,376.2	1,309.6	66.55	20.679		
9,400.0	9,386.6	9,550.0	9,490.4	33.0	37.1	86.32	-104.5	1,473.5	1,368.5	1,301.3	67.27	20.345		
9,500.0	9,486.6	9,649.6	9,589.6	33.4	37.5	86.53	-110.0	1,466.3	1,360.9	1,292.9	67.98	20.018		
9,600.0	9,586.6	9,749.2	9,688.7	33.7	37.9	86.75	-115.5	1,459.0	1,353.3	1,284.6	68.70	19.698		
9,700.0	9,686.6	9,848.7	9,787.9	34.1	38.2	86.97	-121.0	1,451.7	1,345.7	1,276.2	69.42	19.384		
9,800.0	9,786.6	9,948.3	9,887.0	34.5	38.6	87.18	-126.5	1,444.4	1,338.1	1,267.9	70.14	19.078		
9,900.0	9,886.6	10,047.9	9,986.2	34.8	39.0	87.41	-132.0	1,437.2	1,330.5	1,259.6	70.86	18.777		
10,000.0	9,986.6	10,147.5	10,085.4	35.2	39.4	87.63	-137.5	1,429.9	1,322.9	1,251.4	71.58	18.483		
10,100.0	10,086.6	10,247.1	10,184.5	35.5	39.7	87.86	-143.0	1,422.6	1,315.4	1,243.1	72.30	18.194		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,200.0	10,186.6	10,346.6	10,283.7	35.9	40.1	88.09	-148.5	1,415.3	1,307.9	1,234.9	73.02	17.912		
10,300.0	10,286.6	10,446.2	10,382.8	36.2	40.5	88.32	-154.0	1,408.1	1,300.4	1,226.7	73.74	17.635		
10,400.0	10,386.6	10,545.8	10,482.0	36.6	40.9	88.55	-159.5	1,400.8	1,293.0	1,218.5	74.46	17.363		
10,500.0	10,486.6	10,645.4	10,581.2	36.9	41.2	88.79	-165.0	1,393.5	1,285.5	1,210.3	75.19	17.097		
10,600.0	10,586.6	10,745.0	10,680.3	37.3	41.6	89.03	-170.5	1,386.2	1,278.1	1,202.2	75.91	16.837		
10,700.0	10,686.6	10,815.6	10,750.8	37.6	41.9	89.18	-173.9	1,381.7	1,271.7	1,195.1	76.55	16.611		
10,800.0	10,786.6	10,881.6	10,816.6	38.0	42.1	89.26	-175.7	1,379.2	1,267.9	1,190.7	77.14	16.437		
10,890.4	10,877.0	10,941.9	10,877.0	38.3	42.3	89.29	-176.3	1,378.5	1,266.8	1,189.1	77.62	16.321		
10,891.2	10,877.8	10,941.9	10,877.0	38.3	42.3	94.69	-176.3	1,378.5	1,266.8	1,189.1	77.62	16.320 CC		
10,900.0	10,886.6	10,950.5	10,885.5	38.4	42.3	94.69	-176.2	1,378.5	1,266.8	1,189.1	77.68	16.308		
10,950.0	10,936.5	11,000.0	10,935.0	38.5	42.5	94.67	-173.4	1,378.5	1,267.0	1,189.0	78.01	16.242		
11,000.0	10,986.0	11,049.5	10,984.0	38.7	42.6	94.61	-166.2	1,378.4	1,267.7	1,189.3	78.33	16.183		
11,050.0	11,034.6	11,099.1	11,032.1	38.9	42.8	94.52	-154.9	1,378.3	1,268.7	1,190.0	78.64	16.132		
11,100.0	11,082.0	11,148.6	11,079.2	39.0	42.9	94.39	-139.4	1,378.2	1,270.0	1,191.1	78.94	16.089		
11,150.0	11,127.8	11,198.1	11,124.7	39.2	43.0	94.23	-120.0	1,378.1	1,271.7	1,192.5	79.22	16.053		
11,200.0	11,171.8	11,247.7	11,168.4	39.3	43.1	94.03	-96.6	1,377.9	1,273.8	1,194.3	79.49	16.024		
11,250.0	11,213.5	11,297.2	11,209.9	39.4	43.2	93.81	-69.6	1,377.7	1,276.2	1,196.4	79.76	16.001		
11,300.0	11,252.6	11,346.8	11,249.0	39.5	43.3	93.56	-39.1	1,377.4	1,278.8	1,198.8	80.01	15.983		
11,350.0	11,288.9	11,396.4	11,285.3	39.7	43.4	93.28	-5.3	1,377.1	1,281.8	1,201.6	80.26	15.971		
11,400.0	11,322.0	11,446.0	11,318.5	39.8	43.4	92.97	31.5	1,376.9	1,285.0	1,204.5	80.50	15.962		
11,450.0	11,351.8	11,495.6	11,348.4	39.9	43.5	92.64	71.0	1,376.5	1,288.5	1,207.7	80.75	15.957		
11,500.0	11,377.9	11,545.2	11,374.8	40.0	43.5	92.30	113.0	1,376.2	1,292.2	1,211.2	80.99	15.954		
11,550.0	11,400.3	11,594.9	11,397.5	40.1	43.6	91.93	157.2	1,375.9	1,296.0	1,214.8	81.24	15.953		
11,600.0	11,418.6	11,644.5	11,416.3	40.3	43.6	91.55	203.1	1,375.5	1,300.0	1,218.5	81.50	15.952		
11,650.0	11,432.8	11,694.3	11,431.0	40.4	43.6	91.16	250.6	1,375.1	1,304.2	1,222.4	81.76	15.952		
11,700.0	11,442.8	11,744.0	11,441.6	40.5	43.7	90.77	299.2	1,374.7	1,308.4	1,226.4	82.02	15.952		
11,750.0	11,448.5	11,793.9	11,447.9	40.7	43.7	90.37	348.6	1,374.3	1,312.7	1,230.4	82.29	15.951		
11,790.4	11,450.0	11,834.1	11,449.9	40.8	43.8	90.04	388.8	1,374.0	1,316.1	1,233.6	82.52	15.950		
11,800.0	11,450.0	11,843.7	11,450.0	40.8	43.8	90.04	398.4	1,373.9	1,316.9	1,234.4	82.57	15.949		
11,900.0	11,450.0	11,943.5	11,450.0	41.1	44.0	90.04	498.2	1,373.1	1,323.5	1,240.3	83.21	15.906		
12,000.0	11,450.0	12,043.5	11,450.0	41.5	44.3	90.04	598.2	1,372.4	1,326.6	1,242.6	83.96	15.799		
12,037.8	11,450.0	12,081.3	11,450.0	41.7	44.4	90.04	636.0	1,372.0	1,326.8	1,242.5	84.28	15.743		
12,100.0	11,450.0	12,143.5	11,450.0	41.9	44.7	90.04	698.2	1,371.6	1,326.8	1,242.0	84.84	15.639		
12,200.0	11,450.0	12,243.5	11,450.0	42.4	45.1	90.04	798.2	1,370.8	1,326.8	1,241.0	85.83	15.458		
12,300.0	11,450.0	12,343.5	11,450.0	43.0	45.6	90.04	898.2	1,370.0	1,326.8	1,239.8	86.94	15.261		
12,400.0	11,450.0	12,443.5	11,450.0	43.6	46.2	90.04	998.1	1,369.2	1,326.8	1,238.6	88.16	15.049		
12,500.0	11,450.0	12,543.5	11,450.0	44.3	46.8	90.04	1,098.1	1,368.4	1,326.8	1,237.3	89.49	14.826		
12,600.0	11,450.0	12,643.5	11,450.0	45.0	47.5	90.04	1,198.1	1,367.6	1,326.8	1,235.8	90.92	14.593		
12,700.0	11,450.0	12,743.5	11,450.0	45.8	48.2	90.04	1,298.1	1,366.8	1,326.8	1,234.3	92.44	14.352		
12,800.0	11,450.0	12,843.5	11,450.0	46.6	49.0	90.04	1,398.1	1,366.0	1,326.7	1,232.7	94.06	14.106		
12,900.0	11,450.0	12,943.5	11,450.0	47.4	49.9	90.04	1,498.1	1,365.2	1,326.7	1,231.0	95.76	13.854		
13,000.0	11,450.0	13,043.5	11,450.0	48.3	50.7	90.04	1,598.1	1,364.4	1,326.7	1,229.2	97.55	13.601		
13,100.0	11,450.0	13,143.5	11,450.0	49.3	51.6	90.04	1,698.1	1,363.6	1,326.7	1,227.3	99.42	13.345		
13,200.0	11,450.0	13,243.5	11,450.0	50.3	52.6	90.04	1,798.1	1,362.8	1,326.7	1,225.4	101.36	13.090		
13,300.0	11,450.0	13,343.5	11,450.0	51.3	53.5	90.04	1,898.1	1,362.0	1,326.7	1,223.3	103.37	12.835		
13,400.0	11,450.0	13,443.5	11,450.0	52.3	54.6	90.04	1,998.1	1,361.2	1,326.7	1,221.3	105.44	12.582		
13,500.0	11,450.0	13,543.5	11,450.0	53.4	55.6	90.04	2,098.1	1,360.4	1,326.7	1,219.1	107.58	12.332		
13,600.0	11,450.0	13,643.5	11,450.0	54.5	56.7	90.04	2,198.1	1,359.6	1,326.7	1,216.9	109.78	12.085		
13,700.0	11,450.0	13,743.5	11,450.0	55.6	57.8	90.04	2,298.1	1,358.8	1,326.7	1,214.7	112.03	11.842		
13,800.0	11,450.0	13,843.5	11,450.0	56.8	58.9	90.04	2,398.1	1,358.0	1,326.7	1,212.3	114.33	11.604		
13,900.0	11,450.0	13,943.5	11,450.0	58.0	60.0	90.04	2,498.1	1,357.3	1,326.7	1,210.0	116.69	11.370		
14,000.0	11,450.0	14,043.5	11,450.0	59.2	61.2	90.04	2,598.1	1,356.5	1,326.7	1,207.6	119.08	11.141		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,100.0	11,450.0	14,143.5	11,450.0	60.4	62.4	90.04	2,698.1	1,355.7	1,326.7	1,205.1	121.53	10.917		
14,200.0	11,450.0	14,243.5	11,450.0	61.7	63.6	90.04	2,798.1	1,354.9	1,326.7	1,202.6	124.01	10.698		
14,300.0	11,450.0	14,343.5	11,450.0	62.9	64.8	90.04	2,898.1	1,354.1	1,326.6	1,200.1	126.53	10.485		
14,400.0	11,450.0	14,443.5	11,450.0	64.2	66.1	90.04	2,998.1	1,353.3	1,326.6	1,197.6	129.08	10.277		
14,500.0	11,450.0	14,543.5	11,450.0	65.5	67.4	90.04	3,098.1	1,352.5	1,326.6	1,195.0	131.67	10.075		
14,600.0	11,450.0	14,643.5	11,450.0	66.8	68.7	90.04	3,198.1	1,351.7	1,326.6	1,192.3	134.30	9.878		
14,700.0	11,450.0	14,743.5	11,450.0	68.2	70.0	90.04	3,298.1	1,350.9	1,326.6	1,189.7	136.95	9.687		
14,800.0	11,450.0	14,843.5	11,450.0	69.5	71.3	90.04	3,398.1	1,350.1	1,326.6	1,187.0	139.63	9.501		
14,900.0	11,450.0	14,943.5	11,450.0	70.9	72.6	90.04	3,498.1	1,349.3	1,326.6	1,184.3	142.34	9.320		
15,000.0	11,450.0	15,043.5	11,450.0	72.2	73.9	90.04	3,598.1	1,348.5	1,326.6	1,181.5	145.07	9.145		
15,100.0	11,450.0	15,143.5	11,450.0	73.6	75.3	90.04	3,698.1	1,347.7	1,326.6	1,178.8	147.82	8.974		
15,200.0	11,450.0	15,243.5	11,450.0	75.0	76.7	90.04	3,798.1	1,346.9	1,326.6	1,176.0	150.60	8.808		
15,300.0	11,450.0	15,343.5	11,450.0	76.4	78.0	90.04	3,898.1	1,346.1	1,326.6	1,173.2	153.40	8.648		
15,400.0	11,450.0	15,443.5	11,450.0	77.8	79.4	90.04	3,998.1	1,345.3	1,326.6	1,170.4	156.22	8.491		
15,500.0	11,450.0	15,543.5	11,450.0	79.3	80.8	90.04	4,098.0	1,344.5	1,326.6	1,167.5	159.06	8.340		
15,600.0	11,450.0	15,643.5	11,450.0	80.7	82.2	90.04	4,198.0	1,343.7	1,326.6	1,164.6	161.92	8.193		
15,700.0	11,450.0	15,743.5	11,450.0	82.1	83.7	90.04	4,298.0	1,342.9	1,326.6	1,161.8	164.80	8.050		
15,800.0	11,450.0	15,843.5	11,450.0	83.6	85.1	90.04	4,398.0	1,342.2	1,326.5	1,158.9	167.69	7.911		
15,900.0	11,450.0	15,943.5	11,450.0	85.0	86.5	90.04	4,498.0	1,341.4	1,326.5	1,155.9	170.59	7.776		
16,000.0	11,450.0	16,043.5	11,450.0	86.5	88.0	90.04	4,598.0	1,340.6	1,326.5	1,153.0	173.51	7.645		
16,100.0	11,450.0	16,143.5	11,450.0	88.0	89.4	90.04	4,698.0	1,339.8	1,326.5	1,150.1	176.45	7.518		
16,200.0	11,450.0	16,243.5	11,450.0	89.4	90.9	90.04	4,798.0	1,339.0	1,326.5	1,147.1	179.40	7.394		
16,300.0	11,450.0	16,343.5	11,450.0	90.9	92.3	90.04	4,898.0	1,338.2	1,326.5	1,144.2	182.36	7.274		
16,400.0	11,450.0	16,443.5	11,450.0	92.4	93.8	90.04	4,998.0	1,337.4	1,326.5	1,141.2	185.33	7.157		
16,500.0	11,450.0	16,543.5	11,450.0	93.9	95.3	90.04	5,098.0	1,336.6	1,326.5	1,138.2	188.32	7.044		
16,600.0	11,450.0	16,643.5	11,450.0	95.4	96.7	90.04	5,198.0	1,335.8	1,326.5	1,135.2	191.31	6.934		
16,700.0	11,450.0	16,743.5	11,450.0	96.9	98.2	90.04	5,298.0	1,335.0	1,326.5	1,132.2	194.32	6.826		
16,800.0	11,450.0	16,843.5	11,450.0	98.4	99.7	90.04	5,398.0	1,334.2	1,326.5	1,129.2	197.33	6.722		
16,900.0	11,450.0	16,943.5	11,450.0	100.0	101.2	90.04	5,498.0	1,333.4	1,326.5	1,126.1	200.36	6.621		
17,000.0	11,450.0	17,043.5	11,450.0	101.5	102.7	90.04	5,598.0	1,332.6	1,326.5	1,123.1	203.39	6.522		
17,100.0	11,450.0	17,143.5	11,450.0	103.0	104.2	90.04	5,698.0	1,331.8	1,326.5	1,120.0	206.43	6.426		
17,200.0	11,450.0	17,243.5	11,450.0	104.5	105.7	90.04	5,798.0	1,331.0	1,326.5	1,117.0	209.49	6.332		
17,300.0	11,450.0	17,343.5	11,450.0	106.1	107.3	90.04	5,898.0	1,330.2	1,326.5	1,113.9	212.54	6.241		
17,400.0	11,450.0	17,443.5	11,450.0	107.6	108.8	90.04	5,998.0	1,329.4	1,326.4	1,110.8	215.61	6.152		
17,500.0	11,450.0	17,543.5	11,450.0	109.1	110.3	90.04	6,098.0	1,328.6	1,326.4	1,107.8	218.69	6.066		
17,600.0	11,450.0	17,643.5	11,450.0	110.7	111.8	90.04	6,198.0	1,327.9	1,326.4	1,104.7	221.77	5.981		
17,700.0	11,450.0	17,743.5	11,450.0	112.2	113.4	90.04	6,298.0	1,327.1	1,326.4	1,101.6	224.85	5.899		
17,800.0	11,450.0	17,843.5	11,450.0	113.8	114.9	90.04	6,398.0	1,326.3	1,326.4	1,098.5	227.95	5.819		
17,900.0	11,450.0	17,943.5	11,450.0	115.3	116.4	90.04	6,498.0	1,325.5	1,326.4	1,095.4	231.05	5.741		
18,000.0	11,450.0	18,043.5	11,450.0	116.9	118.0	90.04	6,598.0	1,324.7	1,326.4	1,092.3	234.15	5.665		
18,100.0	11,450.0	18,143.5	11,450.0	118.4	119.5	90.04	6,698.0	1,323.9	1,326.4	1,089.1	237.27	5.590		
18,200.0	11,450.0	18,243.5	11,450.0	120.0	121.1	90.04	6,798.0	1,323.1	1,326.4	1,086.0	240.38	5.518		
18,300.0	11,450.0	18,343.5	11,450.0	121.6	122.6	90.04	6,898.0	1,322.3	1,326.4	1,082.9	243.50	5.447		
18,400.0	11,450.0	18,443.5	11,450.0	123.1	124.2	90.04	6,998.0	1,321.5	1,326.4	1,079.7	246.63	5.378		
18,500.0	11,450.0	18,543.5	11,450.0	124.7	125.7	90.04	7,098.0	1,320.7	1,326.4	1,076.6	249.76	5.310		
18,600.0	11,450.0	18,643.5	11,450.0	126.3	127.3	90.04	7,198.0	1,319.9	1,326.4	1,073.5	252.90	5.245		
18,700.0	11,450.0	18,743.5	11,450.0	127.8	128.8	90.04	7,297.9	1,319.1	1,326.4	1,070.3	256.04	5.180		
18,800.0	11,450.0	18,843.5	11,450.0	129.4	130.4	90.04	7,397.9	1,318.3	1,326.4	1,067.2	259.19	5.117		
18,900.0	11,450.0	18,943.5	11,450.0	131.0	132.0	90.04	7,497.9	1,317.5	1,326.3	1,064.0	262.34	5.056		
19,000.0	11,450.0	19,043.5	11,450.0	132.6	133.5	90.04	7,597.9	1,316.7	1,326.3	1,060.8	265.49	4.996		
19,100.0	11,450.0	19,143.5	11,450.0	134.2	135.1	90.04	7,697.9	1,315.9	1,326.3	1,057.7	268.65	4.937		
19,200.0	11,450.0	19,243.5	11,450.0	135.7	136.7	90.04	7,797.9	1,315.1	1,326.3	1,054.5	271.81	4.880		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,300.0	11,450.0	19,343.5	11,450.0	137.3	138.3	90.04	7,897.9	1,314.3	1,326.3	1,051.3	274.98	4.823		
19,400.0	11,450.0	19,443.5	11,450.0	138.9	139.8	90.04	7,997.9	1,313.5	1,326.3	1,048.2	278.15	4.768		
19,500.0	11,450.0	19,543.5	11,450.0	140.5	141.4	90.04	8,097.9	1,312.8	1,326.3	1,045.0	281.32	4.715		
19,600.0	11,450.0	19,643.5	11,450.0	142.1	143.0	90.04	8,197.9	1,312.0	1,326.3	1,041.8	284.49	4.662		
19,700.0	11,450.0	19,743.5	11,450.0	143.7	144.6	90.04	8,297.9	1,311.2	1,326.3	1,038.6	287.67	4.610		
19,800.0	11,450.0	19,843.5	11,450.0	145.3	146.2	90.04	8,397.9	1,310.4	1,326.3	1,035.4	290.85	4.560		
19,900.0	11,450.0	19,943.5	11,450.0	146.9	147.7	90.04	8,497.9	1,309.6	1,326.3	1,032.2	294.04	4.511		
20,000.0	11,450.0	20,043.5	11,450.0	148.5	149.3	90.04	8,597.9	1,308.8	1,326.3	1,029.0	297.23	4.462		
20,100.0	11,450.0	20,143.5	11,450.0	150.1	150.9	90.04	8,697.9	1,308.0	1,326.3	1,025.8	300.42	4.415		
20,200.0	11,450.0	20,243.5	11,450.0	151.7	152.5	90.04	8,797.9	1,307.2	1,326.3	1,022.7	303.61	4.368		
20,300.0	11,450.0	20,343.5	11,450.0	153.3	154.1	90.04	8,897.9	1,306.4	1,326.3	1,019.4	306.80	4.323		
20,400.0	11,450.0	20,443.5	11,450.0	154.9	155.7	90.04	8,997.9	1,305.6	1,326.2	1,016.2	310.00	4.278		
20,500.0	11,450.0	20,543.5	11,450.0	156.5	157.3	90.04	9,097.9	1,304.8	1,326.2	1,013.0	313.20	4.234		
20,600.0	11,450.0	20,643.5	11,450.0	158.1	158.9	90.04	9,197.9	1,304.0	1,326.2	1,009.8	316.41	4.192		
20,700.0	11,450.0	20,743.5	11,450.0	159.7	160.5	90.04	9,297.9	1,303.2	1,326.2	1,006.6	319.61	4.150		
20,800.0	11,450.0	20,843.5	11,450.0	161.3	162.1	90.04	9,397.9	1,302.4	1,326.2	1,003.4	322.82	4.108		
20,900.0	11,450.0	20,943.5	11,450.0	162.9	163.7	90.04	9,497.9	1,301.6	1,326.2	1,000.2	326.03	4.068		
21,000.0	11,450.0	21,043.5	11,450.0	164.5	165.3	90.04	9,597.9	1,300.8	1,326.2	997.0	329.24	4.028		
21,100.0	11,450.0	21,143.5	11,450.0	166.1	166.9	90.04	9,697.9	1,300.0	1,326.2	993.7	332.45	3.989		
21,200.0	11,450.0	21,243.5	11,450.0	167.7	168.5	90.04	9,797.9	1,299.2	1,326.2	990.5	335.67	3.951		
21,300.0	11,450.0	21,343.5	11,450.0	169.3	170.1	90.04	9,897.9	1,298.4	1,326.2	987.3	338.89	3.913		
21,400.0	11,450.0	21,443.5	11,450.0	170.9	171.7	90.04	9,997.9	1,297.7	1,326.2	984.1	342.11	3.877		
21,500.0	11,450.0	21,543.5	11,450.0	172.5	173.3	90.04	10,097.9	1,296.9	1,326.2	980.8	345.33	3.840		
21,600.0	11,450.0	21,643.5	11,450.0	174.2	174.9	90.04	10,197.9	1,296.1	1,326.2	977.6	348.55	3.805		
21,614.7	11,450.0	21,658.1	11,450.0	174.4	175.1	90.04	10,212.5	1,295.9	1,326.2	977.2	349.00	3.800 ES, SF		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	88.64	57.5	2,423.0	2,423.7					
100.0	100.0	100.0	100.0	0.1	0.1	88.64	57.5	2,423.0	2,423.7	2,423.4	0.26	9,456.039		
200.0	200.0	200.0	200.0	0.5	0.5	88.64	57.5	2,423.0	2,423.7	2,422.7	0.97	2,490.267		
300.0	300.0	300.0	300.0	0.8	0.8	88.64	57.5	2,423.0	2,423.7	2,422.0	1.69	1,433.950		
400.0	400.0	400.0	400.0	1.2	1.2	88.64	57.5	2,423.0	2,423.7	2,421.2	2.41	1,006.862		
500.0	500.0	500.0	500.0	1.6	1.6	88.64	57.5	2,423.0	2,423.7	2,420.5	3.12	775.798		
600.0	600.0	600.0	600.0	1.9	1.9	88.64	57.5	2,423.0	2,423.7	2,419.8	3.84	630.992		
700.0	700.0	700.0	700.0	2.3	2.3	88.64	57.5	2,423.0	2,423.7	2,419.1	4.56	531.740		
800.0	800.0	800.0	800.0	2.6	2.6	88.64	57.5	2,423.0	2,423.7	2,418.4	5.27	459.468		
900.0	900.0	900.0	900.0	3.0	3.0	88.64	57.5	2,423.0	2,423.7	2,417.7	5.99	404.492		
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	88.64	57.5	2,423.0	2,423.7	2,416.9	6.71	361.265		
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	-61.17	57.5	2,423.0	2,423.2	2,415.8	7.41	327.062		
1,200.0	1,200.0	1,200.0	1,200.0	4.0	4.1	-61.23	57.5	2,423.0	2,422.0	2,413.9	8.10	299.109		
1,300.0	1,299.9	1,300.1	1,299.9	4.4	4.4	-61.34	57.5	2,423.0	2,419.9	2,411.1	8.79	275.268		
1,400.0	1,399.7	1,400.3	1,399.7	4.7	4.8	-61.49	57.5	2,423.0	2,416.9	2,407.5	9.49	254.681		
1,500.0	1,499.4	1,500.6	1,499.4	5.0	5.1	-61.69	57.5	2,423.0	2,413.2	2,403.0	10.20	236.702		
1,600.0	1,598.9	1,601.1	1,598.9	5.4	5.5	-61.93	57.5	2,423.0	2,408.7	2,397.8	10.91	220.844		
1,700.0	1,698.3	1,701.7	1,698.3	5.8	5.9	-62.21	57.5	2,423.0	2,403.3	2,391.7	11.63	206.728		
1,800.0	1,797.4	1,802.6	1,797.4	6.1	6.2	-62.54	57.5	2,423.0	2,397.2	2,384.9	12.35	194.063		
1,900.0	1,896.4	1,903.6	1,896.4	6.5	6.6	-62.83	57.5	2,423.0	2,390.8	2,377.7	13.09	182.680		
2,000.0	1,995.5	2,004.5	1,995.5	6.9	7.0	-63.13	57.5	2,423.0	2,384.4	2,370.6	13.83	172.449		
2,100.0	2,094.5	2,105.5	2,094.5	7.3	7.3	-63.43	57.5	2,423.0	2,378.1	2,363.6	14.57	163.213		
2,200.0	2,193.5	2,206.5	2,193.5	7.7	7.7	-63.72	57.5	2,423.0	2,371.9	2,356.6	15.32	154.839		
2,300.0	2,292.5	2,307.5	2,292.5	8.1	8.0	-64.02	57.5	2,423.0	2,365.7	2,349.6	16.07	147.218		
2,400.0	2,391.6	2,408.4	2,391.6	8.5	8.4	-64.33	57.5	2,423.0	2,359.6	2,342.8	16.82	140.257		
2,500.0	2,490.6	2,499.4	2,490.6	8.9	8.7	-64.63	57.5	2,423.0	2,353.6	2,336.0	17.51	134.392		
2,600.0	2,589.6	2,566.7	2,566.7	9.3	9.0	-64.86	57.4	2,423.3	2,348.0	2,329.8	18.17	129.190		
2,700.0	2,688.6	2,640.6	2,640.6	9.7	9.2	-65.07	56.7	2,424.5	2,343.6	2,324.8	18.82	124.500		
2,729.0	2,717.4	2,662.1	2,662.1	9.8	9.3	-65.13	56.5	2,425.0	2,342.5	2,323.5	19.01	123.218		
2,800.0	2,787.8	2,714.8	2,714.7	10.1	9.5	-65.23	55.6	2,426.5	2,340.6	2,321.1	19.47	120.233		
2,888.9	2,876.1	2,780.9	2,780.8	10.4	9.7	-65.34	54.3	2,429.0	2,339.7	2,319.7	20.03	116.809 CC		
2,900.0	2,887.2	2,789.2	2,789.1	10.5	9.7	-65.35	54.1	2,429.4	2,339.7	2,319.6	20.10	116.402		
3,000.0	2,986.8	2,863.8	2,863.6	10.9	10.0	-65.45	52.1	2,433.1	2,341.1	2,320.3	20.72	112.975		
3,100.0	3,086.7	2,938.4	2,938.0	11.2	10.2	-65.52	49.6	2,437.8	2,344.6	2,323.2	21.33	109.918		
3,200.0	3,186.6	3,012.9	3,012.2	11.6	10.5	-65.56	46.7	2,443.2	2,350.2	2,328.3	21.92	107.199		
3,262.3	3,249.0	3,059.2	3,058.3	11.8	10.6	84.21	44.7	2,447.0	2,354.9	2,332.6	22.28	105.683		
3,300.0	3,286.6	3,087.2	3,086.1	11.9	10.7	84.25	43.3	2,449.5	2,358.0	2,335.5	22.49	104.828		
3,400.0	3,386.6	3,161.2	3,159.7	12.2	11.0	84.36	39.5	2,456.6	2,367.0	2,344.0	23.05	102.669		
3,500.0	3,486.6	3,235.0	3,233.0	12.6	11.2	84.48	35.3	2,464.5	2,377.2	2,353.5	23.61	100.664		
3,600.0	3,586.6	3,311.5	3,308.8	12.9	11.5	84.62	30.5	2,473.5	2,388.4	2,364.2	24.19	98.748		
3,700.0	3,686.6	3,410.5	3,406.9	13.2	11.9	84.80	23.9	2,485.7	2,400.0	2,375.2	24.86	96.543		
3,800.0	3,786.6	3,509.6	3,504.9	13.5	12.2	84.98	17.4	2,497.8	2,411.7	2,386.1	25.54	94.441		
3,900.0	3,886.6	3,608.6	3,603.0	13.9	12.6	85.16	10.9	2,510.0	2,423.4	2,397.2	26.22	92.436		
4,000.0	3,986.6	3,707.6	3,701.1	14.2	13.0	85.34	4.4	2,522.1	2,435.1	2,408.2	26.90	90.523		
4,100.0	4,086.6	3,806.6	3,799.1	14.6	13.3	85.52	-2.1	2,534.3	2,446.8	2,419.2	27.59	88.696		
4,200.0	4,186.6	3,905.7	3,897.2	14.9	13.7	85.69	-8.6	2,546.4	2,458.6	2,430.3	28.28	86.951		
4,300.0	4,286.6	4,004.7	3,995.2	15.2	14.1	85.86	-15.1	2,558.6	2,470.4	2,441.4	28.97	85.282		
4,400.0	4,386.6	4,103.7	4,093.3	15.6	14.5	86.04	-21.6	2,570.7	2,482.2	2,452.5	29.66	83.685		
4,500.0	4,486.6	4,202.8	4,191.4	15.9	14.9	86.20	-28.1	2,582.9	2,494.0	2,463.7	30.36	82.156		
4,600.0	4,586.6	4,301.8	4,289.4	16.2	15.2	86.37	-34.6	2,595.0	2,505.9	2,474.8	31.05	80.692		
4,700.0	4,686.6	4,400.8	4,387.5	16.6	15.6	86.54	-41.1	2,607.2	2,517.7	2,486.0	31.75	79.288		
4,800.0	4,786.6	4,499.8	4,485.6	16.9	16.0	86.70	-47.6	2,619.3	2,529.6	2,497.2	32.46	77.942		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,900.0	4,886.6	4,601.1	4,583.6	17.3	16.4	86.87	-54.1	2,631.5	2,541.5	2,508.4	33.17	76.630		
5,000.0	4,986.6	4,702.1	4,681.7	17.6	16.8	87.03	-60.6	2,643.6	2,553.5	2,519.6	33.88	75.374		
5,100.0	5,086.6	4,803.1	4,779.7	18.0	17.2	87.19	-67.2	2,655.8	2,565.4	2,530.8	34.59	74.166		
5,200.0	5,186.6	4,904.1	4,877.8	18.3	17.6	87.35	-73.7	2,667.9	2,577.4	2,542.1	35.30	73.006		
5,300.0	5,286.6	5,005.0	4,975.9	18.6	18.0	87.51	-80.2	2,680.1	2,589.4	2,553.4	36.02	71.890		
5,400.0	5,386.6	5,094.0	5,073.9	19.0	18.4	87.66	-86.7	2,692.2	2,601.4	2,564.7	36.69	70.901		
5,500.0	5,486.6	5,193.0	5,172.0	19.3	18.8	87.82	-93.2	2,704.4	2,613.4	2,576.0	37.40	69.878		
5,600.0	5,586.6	5,292.0	5,270.1	19.7	19.2	87.97	-99.7	2,716.5	2,625.5	2,587.4	38.11	68.891		
5,700.0	5,686.6	5,391.1	5,368.1	20.0	19.6	88.12	-106.2	2,728.7	2,637.5	2,598.7	38.82	67.939		
5,800.0	5,786.6	5,509.9	5,466.2	20.4	20.0	88.27	-112.7	2,740.8	2,649.6	2,610.0	39.61	66.896		
5,900.0	5,886.6	5,589.1	5,564.3	20.7	20.4	88.42	-119.2	2,753.0	2,661.7	2,621.5	40.25	66.134		
6,000.0	5,986.6	5,788.9	5,762.5	21.1	21.1	88.68	-130.7	2,774.3	2,672.6	2,631.2	41.43	64.515		
6,100.0	6,086.6	6,045.2	6,018.3	21.4	22.1	88.85	-138.3	2,788.5	2,678.1	2,635.4	42.73	62.674		
6,200.0	6,186.6	6,213.6	6,186.6	21.8	22.7	88.87	-139.0	2,790.0	2,678.7	2,635.0	43.64	61.387		
6,300.0	6,286.6	6,313.6	6,286.6	22.1	23.0	88.87	-139.0	2,790.0	2,678.7	2,634.3	44.33	60.431		
6,400.0	6,386.6	6,413.6	6,386.6	22.5	23.3	88.87	-139.0	2,790.0	2,678.7	2,633.6	45.02	59.502		
6,500.0	6,486.6	6,513.6	6,486.6	22.8	23.7	88.87	-139.0	2,790.0	2,678.7	2,633.0	45.71	58.601		
6,600.0	6,586.6	6,613.6	6,586.6	23.2	24.0	88.87	-139.0	2,790.0	2,678.7	2,632.3	46.40	57.725		
6,700.0	6,686.6	6,713.6	6,686.6	23.5	24.3	88.87	-139.0	2,790.0	2,678.7	2,631.6	47.10	56.875		
6,800.0	6,786.6	6,813.6	6,786.6	23.9	24.7	88.87	-139.0	2,790.0	2,678.7	2,630.9	47.79	56.048		
6,900.0	6,886.6	6,913.6	6,886.6	24.2	25.0	88.87	-139.0	2,790.0	2,678.7	2,630.2	48.49	55.245		
7,000.0	6,986.6	7,013.6	6,986.6	24.6	25.4	88.87	-139.0	2,790.0	2,678.7	2,629.5	49.18	54.463		
7,100.0	7,086.6	7,113.6	7,086.6	24.9	25.7	88.87	-139.0	2,790.0	2,678.7	2,628.8	49.88	53.703		
7,200.0	7,186.6	7,213.6	7,186.6	25.3	26.0	88.87	-139.0	2,790.0	2,678.7	2,628.1	50.58	52.963		
7,300.0	7,286.6	7,313.6	7,286.6	25.6	26.4	88.87	-139.0	2,790.0	2,678.7	2,627.4	51.27	52.242		
7,400.0	7,386.6	7,413.6	7,386.6	26.0	26.7	88.87	-139.0	2,790.0	2,678.7	2,626.7	51.97	51.540		
7,500.0	7,486.6	7,513.6	7,486.6	26.3	27.0	88.87	-139.0	2,790.0	2,678.7	2,626.0	52.67	50.857		
7,600.0	7,586.6	7,613.6	7,586.6	26.7	27.4	88.87	-139.0	2,790.0	2,678.7	2,625.3	53.37	50.191		
7,700.0	7,686.6	7,713.6	7,686.6	27.0	27.7	88.87	-139.0	2,790.0	2,678.7	2,624.6	54.07	49.541		
7,800.0	7,786.6	7,813.6	7,786.6	27.4	28.1	88.87	-139.0	2,790.0	2,678.7	2,623.9	54.77	48.908		
7,900.0	7,886.6	7,913.6	7,886.6	27.7	28.4	88.87	-139.0	2,790.0	2,678.7	2,623.2	55.47	48.290		
8,000.0	7,986.6	8,013.6	7,986.6	28.1	28.8	88.87	-139.0	2,790.0	2,678.7	2,622.5	56.17	47.688		
8,100.0	8,086.6	8,113.6	8,086.6	28.4	29.1	88.87	-139.0	2,790.0	2,678.7	2,621.8	56.87	47.100		
8,200.0	8,186.6	8,213.6	8,186.6	28.8	29.4	88.87	-139.0	2,790.0	2,678.7	2,621.1	57.57	46.526		
8,300.0	8,286.6	8,313.6	8,286.6	29.1	29.8	88.87	-139.0	2,790.0	2,678.7	2,620.4	58.28	45.965		
8,400.0	8,386.6	8,413.6	8,386.6	29.5	30.1	88.87	-139.0	2,790.0	2,678.7	2,619.7	58.98	45.418		
8,500.0	8,486.6	8,513.6	8,486.6	29.8	30.5	88.87	-139.0	2,790.0	2,678.7	2,619.0	59.68	44.883		
8,600.0	8,586.6	8,613.6	8,586.6	30.2	30.8	88.87	-139.0	2,790.0	2,678.7	2,618.3	60.38	44.361		
8,700.0	8,686.6	8,713.6	8,686.6	30.6	31.2	88.87	-139.0	2,790.0	2,678.7	2,617.6	61.09	43.850		
8,800.0	8,786.6	8,813.6	8,786.6	30.9	31.5	88.87	-139.0	2,790.0	2,678.7	2,616.9	61.79	43.351		
8,900.0	8,886.6	8,913.6	8,886.6	31.3	31.9	88.87	-139.0	2,790.0	2,678.7	2,616.2	62.49	42.862		
9,000.0	8,986.6	9,013.6	8,986.6	31.6	32.2	88.87	-139.0	2,790.0	2,678.7	2,615.5	63.20	42.385		
9,100.0	9,086.6	9,113.6	9,086.6	32.0	32.6	88.87	-139.0	2,790.0	2,678.7	2,614.8	63.90	41.917		
9,200.0	9,186.6	9,213.6	9,186.6	32.3	32.9	88.87	-139.0	2,790.0	2,678.7	2,614.1	64.61	41.460		
9,300.0	9,286.6	9,313.6	9,286.6	32.7	33.2	88.87	-139.0	2,790.0	2,678.7	2,613.3	65.31	41.012		
9,400.0	9,386.6	9,413.6	9,386.6	33.0	33.6	88.87	-139.0	2,790.0	2,678.7	2,612.6	66.02	40.574		
9,500.0	9,486.6	9,513.6	9,486.6	33.4	33.9	88.87	-139.0	2,790.0	2,678.7	2,611.9	66.72	40.145		
9,600.0	9,586.6	9,613.6	9,586.6	33.7	34.3	88.87	-139.0	2,790.0	2,678.7	2,611.2	67.43	39.725		
9,700.0	9,686.6	9,713.6	9,686.6	34.1	34.6	88.87	-139.0	2,790.0	2,678.7	2,610.5	68.14	39.313		
9,800.0	9,786.6	9,813.6	9,786.6	34.5	35.0	88.87	-139.0	2,790.0	2,678.7	2,609.8	68.84	38.910		
9,900.0	9,886.6	9,913.6	9,886.6	34.8	35.3	88.87	-139.0	2,790.0	2,678.7	2,609.1	69.55	38.515		
10,000.0	9,986.6	10,013.6	9,986.6	35.2	35.7	88.87	-139.0	2,790.0	2,678.7	2,608.4	70.26	38.127		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,100.0	10,086.6	10,113.6	10,086.6	35.5	36.0	88.87	-139.0	2,790.0	2,678.7	2,607.7	70.96	37.747		
10,200.0	10,186.6	10,213.6	10,186.6	35.9	36.4	88.87	-139.0	2,790.0	2,678.7	2,607.0	71.67	37.375		
10,300.0	10,286.6	10,313.6	10,286.6	36.2	36.7	88.87	-139.0	2,790.0	2,678.7	2,606.3	72.38	37.010		
10,400.0	10,386.6	10,413.6	10,386.6	36.6	37.1	88.87	-139.0	2,790.0	2,678.7	2,605.6	73.08	36.651		
10,500.0	10,486.6	10,513.6	10,486.6	36.9	37.4	88.87	-139.0	2,790.0	2,678.7	2,604.9	73.79	36.300		
10,600.0	10,586.6	10,613.6	10,586.6	37.3	37.8	88.87	-139.0	2,790.0	2,678.7	2,604.2	74.50	35.955		
10,700.0	10,686.6	10,713.6	10,686.6	37.6	38.1	88.87	-139.0	2,790.0	2,678.7	2,603.5	75.21	35.617		
10,800.0	10,786.6	10,813.6	10,786.6	38.0	38.5	88.87	-139.0	2,790.0	2,678.7	2,602.7	75.92	35.284		
10,890.4	10,877.0	10,903.9	10,877.0	38.3	38.8	88.87	-139.0	2,790.0	2,678.7	2,602.1	76.56	34.989		
10,900.0	10,886.6	10,925.0	10,886.6	38.4	38.9	94.26	-138.6	2,789.9	2,678.6	2,602.0	76.66	34.943		
10,950.0	10,936.5	11,033.4	11,005.4	38.5	39.2	94.15	-124.6	2,788.0	2,678.1	2,601.0	77.14	34.717		
11,000.0	10,986.0	11,138.1	11,104.7	38.7	39.5	93.90	-92.3	2,783.6	2,676.8	2,599.3	77.56	34.513		
11,050.0	11,034.6	11,236.9	11,191.5	38.9	39.8	93.55	-45.9	2,777.2	2,674.9	2,597.0	77.93	34.326		
11,100.0	11,082.0	11,328.4	11,263.7	39.0	39.9	93.14	9.8	2,769.6	2,672.6	2,594.3	78.27	34.147		
11,150.0	11,127.8	11,412.4	11,321.3	39.2	40.1	92.71	70.2	2,761.3	2,669.8	2,591.2	78.59	33.970		
11,200.0	11,171.8	11,489.2	11,365.7	39.3	40.2	92.28	132.3	2,752.8	2,666.8	2,587.9	78.92	33.793		
11,250.0	11,213.5	11,559.6	11,398.6	39.4	40.2	91.87	193.8	2,744.4	2,663.8	2,584.5	79.24	33.616		
11,300.0	11,252.6	11,624.2	11,422.0	39.5	40.3	91.48	253.5	2,736.2	2,660.6	2,581.1	79.56	33.441		
11,350.0	11,288.9	11,684.0	11,437.5	39.7	40.4	91.11	310.7	2,728.4	2,657.6	2,577.7	79.88	33.270		
11,400.0	11,322.0	11,739.7	11,446.4	39.8	40.6	90.77	365.1	2,720.9	2,654.6	2,574.4	80.19	33.104		
11,450.0	11,351.8	11,791.9	11,449.8	39.9	40.7	90.44	416.7	2,713.8	2,651.8	2,571.3	80.49	32.946		
11,500.0	11,377.9	11,803.9	11,450.0	40.0	40.7	90.54	428.6	2,712.2	2,649.4	2,568.7	80.68	32.837		
11,550.0	11,400.3	11,836.3	11,450.0	40.1	40.8	90.40	460.8	2,708.1	2,647.5	2,566.5	80.93	32.712		
11,600.0	11,418.6	11,855.8	11,450.0	40.3	40.9	90.37	480.1	2,705.9	2,646.2	2,565.1	81.14	32.615		
11,650.0	11,432.8	11,875.9	11,450.0	40.4	41.0	90.30	500.1	2,703.8	2,645.7	2,564.3	81.34	32.526		
11,687.8	11,440.8	11,900.0	11,450.0	40.5	41.0	90.20	524.1	2,701.6	2,645.7	2,564.1	81.52	32.455		
11,700.0	11,442.8	11,900.0	11,450.0	40.5	41.0	90.20	524.1	2,701.6	2,645.7	2,564.1	81.55	32.441		
11,750.0	11,448.5	11,900.0	11,450.0	40.7	41.0	90.13	524.1	2,701.6	2,646.4	2,564.7	81.70	32.392		
11,790.4	11,450.0	11,934.2	11,450.0	40.8	41.2	90.00	558.1	2,699.0	2,647.1	2,565.2	81.93	32.308		
11,800.0	11,450.0	11,938.2	11,450.0	40.8	41.2	90.00	562.2	2,698.7	2,647.4	2,565.4	81.98	32.294		
11,900.0	11,450.0	12,000.0	11,450.0	41.1	41.4	90.00	623.9	2,695.6	2,649.4	2,566.9	82.52	32.105		
12,000.0	11,450.0	12,022.0	11,450.0	41.5	41.5	90.00	645.9	2,695.0	2,649.8	2,566.8	83.00	31.926		
12,037.8	11,450.0	12,048.6	11,450.0	41.7	41.6	90.00	672.5	2,694.6	2,649.7	2,566.5	83.27	31.822		
12,100.0	11,450.0	12,085.0	11,450.0	41.9	41.8	90.00	708.9	2,694.3	2,649.6	2,565.9	83.71	31.653		
12,105.9	11,450.0	12,109.1	11,450.0	42.0	41.9	90.00	714.8	2,694.3	2,649.6	2,565.8	83.85	31.601		
12,200.0	11,450.0	12,185.0	11,450.0	42.4	42.3	90.00	808.9	2,693.5	2,649.6	2,564.9	84.68	31.288		
12,300.0	11,450.0	12,285.0	11,450.0	43.0	42.8	90.00	908.9	2,692.7	2,649.6	2,563.8	85.78	30.889		
12,400.0	11,450.0	12,385.0	11,450.0	43.6	43.4	90.00	1,008.9	2,691.9	2,649.6	2,562.6	86.98	30.460		
12,500.0	11,450.0	12,485.0	11,450.0	44.3	44.1	90.00	1,108.9	2,691.1	2,649.5	2,561.2	88.30	30.007		
12,600.0	11,450.0	12,585.0	11,450.0	45.0	44.8	90.00	1,208.9	2,690.3	2,649.5	2,559.8	89.71	29.533		
12,700.0	11,450.0	12,685.0	11,450.0	45.8	45.5	90.00	1,308.9	2,689.5	2,649.5	2,558.3	91.23	29.042		
12,800.0	11,450.0	12,785.0	11,450.0	46.6	46.3	90.00	1,408.9	2,688.7	2,649.5	2,556.7	92.84	28.538		
12,900.0	11,450.0	12,885.0	11,450.0	47.4	47.1	90.00	1,508.8	2,687.9	2,649.5	2,554.9	94.54	28.025		
13,000.0	11,450.0	12,985.0	11,450.0	48.3	48.0	90.00	1,608.8	2,687.1	2,649.5	2,553.1	96.32	27.507		
13,100.0	11,450.0	13,085.0	11,450.0	49.3	48.9	90.00	1,708.8	2,686.3	2,649.5	2,551.3	98.18	26.985		
13,200.0	11,450.0	13,185.0	11,450.0	50.3	49.9	90.00	1,808.8	2,685.5	2,649.4	2,549.3	100.12	26.462		
13,300.0	11,450.0	13,285.0	11,450.0	51.3	50.9	90.00	1,908.8	2,684.7	2,649.4	2,547.3	102.13	25.942		
13,400.0	11,450.0	13,385.0	11,450.0	52.3	51.9	90.00	2,008.8	2,683.9	2,649.4	2,545.2	104.20	25.425		
13,500.0	11,450.0	13,485.0	11,450.0	53.4	53.0	90.00	2,108.8	2,683.1	2,649.4	2,543.1	106.34	24.914		
13,600.0	11,450.0	13,585.0	11,450.0	54.5	54.1	90.00	2,208.8	2,682.3	2,649.4	2,540.8	108.54	24.409		
13,700.0	11,450.0	13,685.0	11,450.0	55.6	55.2	90.00	2,308.8	2,681.5	2,649.4	2,538.6	110.79	23.913		
13,800.0	11,450.0	13,785.0	11,450.0	56.8	56.4	90.00	2,408.8	2,680.7	2,649.4	2,536.3	113.10	23.425		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,900.0	11,450.0	13,885.0	11,450.0	58.0	57.5	90.00	2,508.8	2,679.9	2,649.3	2,533.9	115.45	22.947		
14,000.0	11,450.0	13,985.0	11,450.0	59.2	58.7	90.00	2,608.8	2,679.1	2,649.3	2,531.5	117.85	22.480		
14,100.0	11,450.0	14,085.0	11,450.0	60.4	59.9	90.00	2,708.8	2,678.3	2,649.3	2,529.0	120.30	22.023		
14,200.0	11,450.0	14,185.0	11,450.0	61.7	61.2	90.00	2,808.8	2,677.5	2,649.3	2,526.5	122.78	21.577		
14,300.0	11,450.0	14,285.0	11,450.0	62.9	62.4	90.00	2,908.8	2,676.7	2,649.3	2,524.0	125.31	21.142		
14,400.0	11,450.0	14,385.0	11,450.0	64.2	63.7	90.00	3,008.8	2,675.9	2,649.3	2,521.4	127.87	20.719		
14,500.0	11,450.0	14,485.0	11,450.0	65.5	65.0	90.00	3,108.8	2,675.1	2,649.3	2,518.8	130.46	20.307		
14,600.0	11,450.0	14,585.0	11,450.0	66.8	66.3	90.00	3,208.8	2,674.3	2,649.2	2,516.2	133.09	19.906		
14,700.0	11,450.0	14,685.0	11,450.0	68.2	67.6	90.00	3,308.8	2,673.5	2,649.2	2,513.5	135.74	19.517		
14,800.0	11,450.0	14,785.0	11,450.0	69.5	69.0	90.00	3,408.8	2,672.6	2,649.2	2,510.8	138.43	19.138		
14,900.0	11,450.0	14,885.0	11,450.0	70.9	70.3	90.00	3,508.8	2,671.8	2,649.2	2,508.1	141.14	18.770		
15,000.0	11,450.0	14,985.0	11,450.0	72.2	71.7	90.00	3,608.8	2,671.0	2,649.2	2,505.3	143.87	18.413		
15,100.0	11,450.0	15,085.0	11,450.0	73.6	73.1	90.00	3,708.8	2,670.2	2,649.2	2,502.5	146.64	18.066		
15,200.0	11,450.0	15,185.0	11,450.0	75.0	74.5	90.00	3,808.8	2,669.4	2,649.1	2,499.7	149.42	17.730		
15,300.0	11,450.0	15,285.0	11,450.0	76.4	75.9	90.00	3,908.8	2,668.6	2,649.1	2,496.9	152.22	17.403		
15,400.0	11,450.0	15,385.0	11,450.0	77.8	77.3	90.00	4,008.8	2,667.8	2,649.1	2,494.1	155.05	17.086		
15,500.0	11,450.0	15,485.0	11,450.0	79.3	78.7	90.00	4,108.8	2,667.0	2,649.1	2,491.2	157.89	16.778		
15,600.0	11,450.0	15,585.0	11,450.0	80.7	80.1	90.00	4,208.8	2,666.2	2,649.1	2,488.3	160.75	16.479		
15,700.0	11,450.0	15,685.0	11,450.0	82.1	81.5	90.00	4,308.8	2,665.4	2,649.1	2,485.4	163.63	16.189		
15,800.0	11,450.0	15,785.0	11,450.0	83.6	83.0	90.00	4,408.8	2,664.6	2,649.1	2,482.5	166.53	15.908		
15,900.0	11,450.0	15,885.0	11,450.0	85.0	84.4	90.00	4,508.8	2,663.8	2,649.0	2,479.6	169.44	15.634		
16,000.0	11,450.0	15,985.0	11,450.0	86.5	85.9	90.00	4,608.8	2,663.0	2,649.0	2,476.7	172.36	15.369		
16,100.0	11,450.0	16,085.0	11,450.0	88.0	87.4	90.00	4,708.7	2,662.2	2,649.0	2,473.7	175.30	15.111		
16,200.0	11,450.0	16,185.0	11,450.0	89.4	88.8	90.00	4,808.7	2,661.4	2,649.0	2,470.8	178.25	14.861		
16,300.0	11,450.0	16,285.0	11,450.0	90.9	90.3	90.00	4,908.7	2,660.6	2,649.0	2,467.8	181.22	14.618		
16,400.0	11,450.0	16,385.0	11,450.0	92.4	91.8	90.00	5,008.7	2,659.8	2,649.0	2,464.8	184.20	14.381		
16,500.0	11,450.0	16,485.0	11,450.0	93.9	93.3	90.00	5,108.7	2,659.0	2,649.0	2,461.8	187.18	14.152		
16,600.0	11,450.0	16,585.0	11,450.0	95.4	94.8	90.00	5,208.7	2,658.2	2,648.9	2,458.8	190.18	13.928		
16,700.0	11,450.0	16,685.0	11,450.0	96.9	96.3	90.00	5,308.7	2,657.4	2,648.9	2,455.7	193.19	13.711		
16,800.0	11,450.0	16,785.0	11,450.0	98.4	97.8	90.00	5,408.7	2,656.6	2,648.9	2,452.7	196.21	13.500		
16,900.0	11,450.0	16,885.0	11,450.0	100.0	99.3	90.00	5,508.7	2,655.8	2,648.9	2,449.7	199.24	13.295		
17,000.0	11,450.0	16,985.0	11,450.0	101.5	100.8	90.00	5,608.7	2,655.0	2,648.9	2,446.6	202.28	13.095		
17,100.0	11,450.0	17,085.0	11,450.0	103.0	102.4	90.00	5,708.7	2,654.2	2,648.9	2,443.5	205.33	12.901		
17,200.0	11,450.0	17,185.0	11,450.0	104.5	103.9	90.00	5,808.7	2,653.4	2,648.9	2,440.5	208.38	12.712		
17,300.0	11,450.0	17,285.0	11,450.0	106.1	105.4	90.00	5,908.7	2,652.6	2,648.8	2,437.4	211.44	12.527		
17,400.0	11,450.0	17,385.0	11,450.0	107.6	106.9	90.00	6,008.7	2,651.8	2,648.8	2,434.3	214.51	12.348		
17,500.0	11,450.0	17,485.0	11,450.0	109.1	108.5	90.00	6,108.7	2,651.0	2,648.8	2,431.2	217.59	12.173		
17,600.0	11,450.0	17,585.0	11,450.0	110.7	110.0	90.00	6,208.7	2,650.2	2,648.8	2,428.1	220.67	12.003		
17,700.0	11,450.0	17,685.0	11,450.0	112.2	111.6	90.00	6,308.7	2,649.4	2,648.8	2,425.0	223.76	11.837		
17,800.0	11,450.0	17,785.0	11,450.0	113.8	113.1	90.00	6,408.7	2,648.6	2,648.8	2,421.9	226.86	11.676		
17,900.0	11,450.0	17,885.0	11,450.0	115.3	114.7	90.00	6,508.7	2,647.8	2,648.8	2,418.8	229.96	11.518		
18,000.0	11,450.0	17,985.0	11,450.0	116.9	116.2	90.00	6,608.7	2,647.0	2,648.7	2,415.7	233.07	11.364		
18,100.0	11,450.0	18,085.0	11,450.0	118.4	117.8	90.00	6,708.7	2,646.2	2,648.7	2,412.5	236.19	11.214		
18,200.0	11,450.0	18,185.0	11,450.0	120.0	119.3	90.00	6,808.7	2,645.4	2,648.7	2,409.4	239.31	11.068		
18,300.0	11,450.0	18,285.0	11,450.0	121.6	120.9	90.00	6,908.7	2,644.6	2,648.7	2,406.3	242.43	10.925		
18,400.0	11,450.0	18,385.0	11,450.0	123.1	122.5	90.00	7,008.7	2,643.8	2,648.7	2,403.1	245.56	10.786		
18,500.0	11,450.0	18,485.0	11,450.0	124.7	124.0	90.00	7,108.7	2,643.0	2,648.7	2,400.0	248.70	10.650		
18,600.0	11,450.0	18,585.0	11,450.0	126.3	125.6	90.00	7,208.7	2,642.2	2,648.7	2,396.8	251.84	10.517		
18,700.0	11,450.0	18,685.0	11,450.0	127.8	127.2	90.00	7,308.7	2,641.4	2,648.6	2,393.7	254.98	10.388		
18,800.0	11,450.0	18,785.0	11,450.0	129.4	128.7	90.00	7,408.7	2,640.6	2,648.6	2,390.5	258.13	10.261		
18,900.0	11,450.0	18,885.0	11,450.0	131.0	130.3	90.00	7,508.7	2,639.7	2,648.6	2,387.3	261.28	10.137		
19,000.0	11,450.0	18,985.0	11,450.0	132.6	131.9	90.00	7,608.7	2,638.9	2,648.6	2,384.2	264.44	10.016		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,100.0	11,450.0	19,085.0	11,450.0	134.2	133.5	90.00	7,708.7	2,638.1	2,648.6	2,381.0	267.60	9.898		
19,200.0	11,450.0	19,185.0	11,450.0	135.7	135.0	90.00	7,808.6	2,637.3	2,648.6	2,377.8	270.76	9.782		
19,300.0	11,450.0	19,285.0	11,450.0	137.3	136.6	90.00	7,908.6	2,636.5	2,648.6	2,374.6	273.93	9.669		
19,400.0	11,450.0	19,385.0	11,450.0	138.9	138.2	90.00	8,008.6	2,635.7	2,648.5	2,371.4	277.10	9.558		
19,500.0	11,450.0	19,485.0	11,450.0	140.5	139.8	90.00	8,108.6	2,634.9	2,648.5	2,368.3	280.28	9.450		
19,600.0	11,450.0	19,585.0	11,450.0	142.1	141.4	90.00	8,208.6	2,634.1	2,648.5	2,365.1	283.46	9.344		
19,700.0	11,450.0	19,685.0	11,450.0	143.7	143.0	90.00	8,308.6	2,633.3	2,648.5	2,361.9	286.64	9.240		
19,800.0	11,450.0	19,785.0	11,450.0	145.3	144.6	90.00	8,408.6	2,632.5	2,648.5	2,358.7	289.82	9.138		
19,900.0	11,450.0	19,885.0	11,450.0	146.9	146.2	90.00	8,508.6	2,631.7	2,648.5	2,355.5	293.01	9.039		
20,000.0	11,450.0	19,985.0	11,450.0	148.5	147.8	90.00	8,608.6	2,630.9	2,648.5	2,352.3	296.20	8.942		
20,100.0	11,450.0	20,085.0	11,450.0	150.1	149.3	90.00	8,708.6	2,630.1	2,648.4	2,349.1	299.39	8.846		
20,200.0	11,450.0	20,185.0	11,450.0	151.7	150.9	90.00	8,808.6	2,629.3	2,648.4	2,345.8	302.58	8.753		
20,300.0	11,450.0	20,285.0	11,450.0	153.3	152.5	90.00	8,908.6	2,628.5	2,648.4	2,342.6	305.78	8.661		
20,400.0	11,450.0	20,385.0	11,450.0	154.9	154.1	90.00	9,008.6	2,627.7	2,648.4	2,339.4	308.98	8.571		
20,500.0	11,450.0	20,485.0	11,450.0	156.5	155.7	90.00	9,108.6	2,626.9	2,648.4	2,336.2	312.18	8.483		
20,600.0	11,450.0	20,585.0	11,450.0	158.1	157.3	90.00	9,208.6	2,626.1	2,648.4	2,333.0	315.39	8.397		
20,700.0	11,450.0	20,685.0	11,450.0	159.7	158.9	90.00	9,308.6	2,625.3	2,648.4	2,329.8	318.60	8.313		
20,800.0	11,450.0	20,785.0	11,450.0	161.3	160.5	90.00	9,408.6	2,624.5	2,648.3	2,326.5	321.81	8.230		
20,900.0	11,450.0	20,885.0	11,450.0	162.9	162.2	90.00	9,508.6	2,623.7	2,648.3	2,323.3	325.02	8.148		
21,000.0	11,450.0	20,985.0	11,450.0	164.5	163.8	90.00	9,608.6	2,622.9	2,648.3	2,320.1	328.23	8.068		
21,100.0	11,450.0	21,085.0	11,450.0	166.1	165.4	90.00	9,708.6	2,622.1	2,648.3	2,316.9	331.45	7.990		
21,200.0	11,450.0	21,185.0	11,450.0	167.7	167.0	90.00	9,808.6	2,621.3	2,648.3	2,313.6	334.66	7.913		
21,300.0	11,450.0	21,285.0	11,450.0	169.3	168.6	90.00	9,908.6	2,620.5	2,648.3	2,310.4	337.88	7.838		
21,400.0	11,450.0	21,385.0	11,450.0	170.9	170.2	90.00	10,008.6	2,619.7	2,648.3	2,307.2	341.10	7.764		
21,500.0	11,450.0	21,485.0	11,450.0	172.5	171.8	90.00	10,108.6	2,618.9	2,648.2	2,303.9	344.33	7.691		
21,600.0	11,450.0	21,585.0	11,450.0	174.2	173.4	90.00	10,208.6	2,618.1	2,648.2	2,300.7	347.55	7.620		
21,614.7	11,450.0	21,599.7	11,450.0	174.4	173.7	90.00	10,223.3	2,618.0	2,648.2	2,300.2	348.00	7.610 ES, SF		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 199-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	13.8	13.8	0.0	0.0	-12.12	5,176.0	-1,111.4	5,294.0					
100.0	100.0	95.0	95.0	0.1	0.2	-12.12	5,176.1	-1,112.0	5,294.2	5,293.9	0.28	N/A		
200.0	200.0	176.2	176.2	0.5	0.3	-12.14	5,176.2	-1,113.4	5,294.8	5,294.0	0.76	6,961.839		
300.0	300.0	268.0	268.0	0.8	0.6	-12.16	5,176.6	-1,115.6	5,295.7	5,294.3	1.40	3,774.819		
400.0	400.0	364.1	364.0	1.2	0.9	-12.18	5,177.1	-1,117.6	5,296.6	5,294.5	2.11	2,513.985		
500.0	500.0	461.4	461.3	1.6	1.3	-12.20	5,177.8	-1,119.3	5,297.7	5,294.8	2.81	1,882.391		
600.0	600.0	558.9	558.8	1.9	1.6	-12.21	5,178.5	-1,120.7	5,298.7	5,295.2	3.52	1,504.265		
700.0	700.0	656.9	656.8	2.3	2.0	-12.22	5,179.3	-1,122.1	5,299.8	5,295.6	4.23	1,252.170		
800.0	800.0	755.0	754.9	2.6	2.3	-12.24	5,180.2	-1,123.5	5,301.0	5,296.1	4.94	1,072.493		
900.0	900.0	847.6	847.5	3.0	2.6	-12.25	5,181.1	-1,124.9	5,302.2	5,296.6	5.63	941.199		
1,000.0	1,000.0	945.1	944.9	3.4	3.0	-12.26	5,182.1	-1,126.4	5,303.6	5,297.3	6.34	836.497		
1,100.0	1,100.0	1,131.2	1,131.1	3.7	3.6	-162.05	5,183.0	-1,127.2	5,305.0	5,297.7	7.32	724.964		
1,200.0	1,200.0	1,361.9	1,361.7	4.0	4.4	-162.07	5,179.6	-1,126.3	5,305.9	5,297.5	8.42	630.040		
1,300.0	1,299.9	1,544.4	1,544.0	4.4	5.0	-162.15	5,172.1	-1,130.0	5,306.5	5,297.1	9.39	565.123		
1,400.0	1,399.7	1,688.6	1,687.8	4.7	5.5	-162.26	5,163.9	-1,136.2	5,307.6	5,297.4	10.24	518.351		
1,500.0	1,499.4	1,783.6	1,782.5	5.0	5.9	-162.34	5,157.8	-1,141.2	5,310.0	5,299.1	10.93	486.020		
1,600.0	1,598.9	1,878.1	1,876.6	5.4	6.2	-162.43	5,151.8	-1,146.5	5,314.2	5,302.6	11.61	457.578		
1,700.0	1,698.3	1,980.7	1,978.9	5.8	6.6	-162.53	5,145.3	-1,152.6	5,320.1	5,307.7	12.34	431.191		
1,800.0	1,797.4	2,083.2	2,080.9	6.1	7.0	-162.64	5,138.6	-1,159.1	5,327.6	5,314.5	13.07	407.764		
1,900.0	1,896.4	2,068.0	2,065.8	6.5	6.9	-162.62	5,139.6	-1,158.1	5,337.1	5,323.8	13.37	399.259		
2,000.0	1,995.5	2,153.1	2,150.6	6.9	7.3	-162.72	5,135.1	-1,163.6	5,346.8	5,332.8	14.04	380.962		
2,100.0	2,094.5	2,192.6	2,190.0	7.3	7.4	-162.77	5,133.7	-1,166.0	5,358.1	5,343.6	14.54	368.619		
2,200.0	2,193.5	2,257.0	2,254.3	7.7	7.6	-162.84	5,132.4	-1,169.9	5,370.7	5,355.5	15.13	355.005		
2,300.0	2,292.5	2,285.9	2,283.2	8.1	7.7	-162.87	5,132.1	-1,171.7	5,384.0	5,368.4	15.59	345.411		
2,400.0	2,391.6	2,365.1	2,362.2	8.5	8.0	-162.96	5,131.6	-1,176.3	5,398.0	5,381.7	16.23	332.519		
2,500.0	2,490.6	2,445.0	2,442.0	8.9	8.3	-163.04	5,131.4	-1,180.7	5,412.3	5,395.4	16.88	320.572		
2,600.0	2,589.6	2,522.2	2,519.0	9.3	8.6	-163.11	5,131.5	-1,184.8	5,427.1	5,409.5	17.52	309.742		
2,700.0	2,688.6	2,600.1	2,596.8	9.7	8.9	-163.19	5,132.0	-1,188.8	5,442.2	5,424.0	18.16	299.645		
2,729.0	2,717.4	2,622.6	2,619.4	9.8	9.0	-163.21	5,132.2	-1,189.9	5,446.6	5,428.3	18.35	296.852		
2,800.0	2,787.8	3,028.9	3,024.8	10.1	10.5	-163.66	5,122.8	-1,212.3	5,454.9	5,434.8	20.13	271.026		
2,900.0	2,887.2	3,111.4	3,107.1	10.5	10.8	-163.75	5,118.7	-1,215.6	5,461.4	5,440.6	20.79	262.717		
3,000.0	2,986.8	3,194.0	3,189.7	10.9	11.1	-163.83	5,114.9	-1,218.5	5,465.7	5,444.2	21.45	254.840		
3,100.0	3,086.7	3,316.4	3,311.7	11.2	11.5	-163.92	5,109.2	-1,223.4	5,467.4	5,445.2	22.25	245.703		
3,200.0	3,186.6	3,425.9	3,421.0	11.6	11.9	-164.00	5,103.2	-1,229.3	5,466.3	5,443.3	23.01	237.566		
3,262.3	3,249.0	3,479.5	3,474.3	11.8	12.1	-14.25	5,100.2	-1,232.6	5,464.3	5,440.9	23.42	233.277		
3,300.0	3,286.6	3,511.8	3,506.5	11.9	12.3	-14.28	5,098.4	-1,234.7	5,462.9	5,439.2	23.67	230.775		
3,400.0	3,386.6	3,580.0	3,574.5	12.2	12.5	-14.34	5,094.7	-1,239.5	5,459.4	5,435.1	24.26	224.996		
3,500.0	3,486.6	3,664.6	3,658.8	12.6	12.8	-14.41	5,090.5	-1,245.0	5,456.2	5,431.3	24.92	218.977		
3,600.0	3,586.6	3,735.0	3,729.1	12.9	13.1	-14.45	5,087.7	-1,248.6	5,453.6	5,428.1	25.52	213.727		
3,700.0	3,686.6	3,810.9	3,804.8	13.2	13.4	-14.49	5,085.3	-1,251.7	5,451.6	5,425.5	26.13	208.597		
3,800.0	3,786.6	3,891.4	3,885.3	13.5	13.7	-14.52	5,083.2	-1,254.5	5,449.9	5,423.1	26.77	203.598		
3,900.0	3,886.6	3,971.7	3,965.6	13.9	14.0	-14.55	5,081.5	-1,256.9	5,448.6	5,421.2	27.40	198.853		
4,000.0	3,986.6	4,050.7	4,044.5	14.2	14.2	-14.57	5,080.3	-1,258.6	5,447.7	5,419.6	28.02	194.396		
4,100.0	4,086.6	4,129.7	4,123.4	14.6	14.5	-14.58	5,079.6	-1,259.6	5,447.1	5,418.4	28.65	190.143		
4,200.0	4,186.6	4,233.2	4,227.0	14.9	14.9	-14.59	5,079.1	-1,260.0	5,446.7	5,417.4	29.35	185.579		
4,300.0	4,286.6	4,342.7	4,336.5	15.2	15.2	-14.59	5,078.6	-1,259.7	5,446.2	5,416.2	30.07	181.104		
4,400.0	4,386.6	4,425.5	4,419.3	15.6	15.5	-14.58	5,078.4	-1,258.9	5,445.8	5,415.1	30.69	177.470		
4,500.0	4,486.6	4,510.0	4,503.7	15.9	15.8	-14.56	5,078.7	-1,257.5	5,445.7	5,414.3	31.31	173.945		
4,500.8	4,487.4	4,510.6	4,504.4	15.9	15.8	-14.56	5,078.7	-1,257.5	5,445.7	5,414.3	31.31	173.919		
4,600.0	4,586.6	4,598.2	4,591.9	16.2	16.1	-14.54	5,079.3	-1,255.5	5,445.8	5,413.8	31.94	170.510		
4,700.0	4,686.6	4,687.1	4,680.8	16.6	16.4	-14.52	5,080.1	-1,253.5	5,446.1	5,413.5	32.57	167.202		
4,800.0	4,786.6	4,779.1	4,772.8	16.9	16.7	-14.50	5,081.1	-1,251.4	5,446.6	5,413.4	33.22	163.962		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 199-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,900.0	4,886.6	4,872.4	4,866.1	17.3	17.0	-14.47	5,082.2	-1,249.7	5,447.2	5,413.3	33.87	160.821		
5,000.0	4,986.6	4,975.9	4,969.5	17.6	17.3	-14.46	5,083.2	-1,248.3	5,447.9	5,413.3	34.56	157.627		
5,100.0	5,086.6	5,080.1	5,073.7	18.0	17.6	-14.44	5,084.2	-1,247.0	5,448.5	5,413.2	35.26	154.535		
5,200.0	5,186.6	5,181.4	5,175.0	18.3	18.0	-14.43	5,085.1	-1,245.7	5,449.0	5,413.1	35.94	151.596		
5,300.0	5,286.6	5,282.3	5,275.9	18.6	18.3	-14.41	5,086.0	-1,244.4	5,449.5	5,412.9	36.63	148.770		
5,400.0	5,386.6	5,372.8	5,366.4	19.0	18.6	-14.40	5,086.8	-1,243.4	5,450.1	5,412.9	37.28	146.184		
5,500.0	5,486.6	5,463.4	5,457.0	19.3	18.9	-14.39	5,087.7	-1,242.6	5,450.9	5,413.0	37.94	143.688		
5,600.0	5,586.6	5,564.6	5,558.2	19.7	19.3	-14.38	5,088.7	-1,242.1	5,451.8	5,413.1	38.63	141.126		
5,700.0	5,686.6	5,667.8	5,661.4	20.0	19.6	-14.38	5,089.6	-1,241.9	5,452.6	5,413.2	39.33	138.626		
5,800.0	5,786.6	5,784.1	5,777.7	20.4	20.0	-14.37	5,090.5	-1,241.7	5,453.2	5,413.1	40.08	136.043		
5,900.0	5,886.6	5,892.9	5,886.5	20.7	20.4	-14.37	5,091.0	-1,241.3	5,453.6	5,412.7	40.81	133.638		
6,000.0	5,986.6	5,993.3	5,986.8	21.1	20.7	-14.36	5,091.4	-1,240.9	5,453.9	5,412.4	41.50	131.412		
6,100.0	6,086.6	6,095.0	6,088.6	21.4	21.1	-14.35	5,091.9	-1,240.3	5,454.2	5,412.0	42.20	129.243		
6,200.0	6,186.6	6,197.8	6,191.3	21.8	21.4	-14.34	5,092.3	-1,239.4	5,454.4	5,411.5	42.90	127.132		
6,300.0	6,286.6	6,330.2	6,323.8	22.1	21.9	-14.33	5,092.7	-1,238.0	5,454.4	5,410.7	43.71	124.778		
6,400.0	6,386.6	6,453.0	6,446.6	22.5	22.3	-14.32	5,092.1	-1,237.1	5,453.7	5,409.2	44.49	122.580		
6,500.0	6,486.6	6,550.7	6,544.3	22.8	22.6	-14.34	5,091.0	-1,238.3	5,453.0	5,407.8	45.19	120.678		
6,600.0	6,586.6	6,644.1	6,637.6	23.2	23.0	-14.37	5,089.5	-1,241.3	5,452.3	5,406.4	45.87	118.867		
6,700.0	6,686.6	6,733.3	6,726.7	23.5	23.3	-14.40	5,088.3	-1,244.2	5,451.7	5,405.2	46.54	117.144		
6,800.0	6,786.6	6,830.7	6,824.1	23.9	23.6	-14.44	5,087.2	-1,247.3	5,451.4	5,404.1	47.24	115.398		
6,900.0	6,886.6	6,941.4	6,934.7	24.2	24.0	-14.47	5,085.8	-1,250.4	5,450.9	5,402.9	47.99	113.585		
7,000.0	6,986.6	7,093.4	7,086.6	24.6	24.6	-14.52	5,083.2	-1,254.5	5,450.0	5,401.1	48.89	111.476		
7,100.0	7,086.6	7,264.9	7,258.1	24.9	25.2	-14.58	5,078.3	-1,258.6	5,447.8	5,398.0	49.85	109.284		
7,200.0	7,186.6	7,200.0	7,356.1	25.3	24.9	-14.59	5,074.9	-1,259.4	5,444.7	5,394.7	49.97	108.948		
7,300.0	7,286.6	7,441.2	7,434.2	25.6	25.8	-14.60	5,072.6	-1,259.2	5,441.8	5,390.6	51.18	106.332		
7,400.0	7,386.6	7,499.6	7,492.6	26.0	26.0	-14.60	5,071.4	-1,258.9	5,439.8	5,388.0	51.73	105.147		
7,500.0	7,486.6	7,568.4	7,561.4	26.3	26.2	-14.59	5,070.7	-1,258.3	5,438.5	5,386.1	52.33	103.935		
7,600.0	7,586.6	7,667.0	7,660.0	26.7	26.6	-14.58	5,069.9	-1,257.3	5,437.4	5,384.4	53.02	102.558		
7,700.0	7,686.6	7,768.4	7,761.4	27.0	26.9	-14.57	5,069.2	-1,255.9	5,436.4	5,382.7	53.72	101.198		
7,800.0	7,786.6	7,875.2	7,868.1	27.4	27.3	-14.56	5,068.3	-1,254.4	5,435.3	5,380.8	54.44	99.838		
7,900.0	7,886.6	7,986.2	7,979.2	27.7	27.7	-14.55	5,067.3	-1,252.7	5,434.0	5,378.8	55.18	98.482		
8,000.0	7,986.6	8,100.5	8,093.5	28.1	28.1	-14.53	5,065.9	-1,251.1	5,432.5	5,376.5	55.93	97.136		
8,100.0	8,086.6	8,215.9	8,208.8	28.4	28.5	-14.52	5,064.2	-1,249.5	5,430.7	5,374.0	56.68	95.813		
8,200.0	8,186.6	8,331.3	8,324.1	28.8	28.9	-14.51	5,062.2	-1,247.6	5,428.6	5,371.2	57.43	94.520		
8,300.0	8,286.6	8,444.1	8,436.9	29.1	29.3	-14.49	5,060.0	-1,245.7	5,426.3	5,368.1	58.18	93.270		
8,400.0	8,386.6	8,552.5	8,545.2	29.5	29.6	-14.48	5,057.6	-1,243.8	5,423.7	5,364.8	58.91	92.070		
8,500.0	8,486.6	8,658.1	8,650.8	29.8	30.0	-14.47	5,055.2	-1,241.9	5,421.1	5,361.4	59.63	90.912		
8,600.0	8,586.6	8,741.2	8,733.9	30.2	30.3	-14.46	5,053.4	-1,240.5	5,418.5	5,358.2	60.28	89.894		
8,700.0	8,686.6	8,820.5	8,813.1	30.6	30.6	-14.45	5,051.8	-1,239.4	5,416.3	5,355.3	60.91	88.925		
8,800.0	8,786.6	8,862.0	8,854.7	30.9	30.7	-14.45	5,051.1	-1,238.9	5,414.6	5,353.2	61.41	88.176		
8,900.0	8,886.6	8,931.6	8,924.3	31.3	30.9	-14.44	5,050.4	-1,238.5	5,413.6	5,351.6	62.00	87.315		
8,939.1	8,925.7	8,950.0	8,942.7	31.4	31.0	-14.44	5,050.4	-1,238.5	5,413.5	5,351.3	62.20	87.033		
9,000.0	8,986.6	8,978.8	8,971.4	31.6	31.1	-14.44	5,050.5	-1,238.6	5,413.7	5,351.2	62.51	86.605		
9,100.0	9,086.6	9,051.0	9,043.7	32.0	31.4	-14.45	5,051.3	-1,239.2	5,414.9	5,351.8	63.11	85.801		
9,200.0	9,186.6	9,119.7	9,112.4	32.3	31.6	-14.46	5,052.4	-1,240.2	5,416.7	5,353.0	63.70	85.041		
9,300.0	9,286.6	9,266.5	9,259.1	32.7	32.1	-14.47	5,053.8	-1,242.3	5,417.9	5,353.3	64.58	83.900		
9,400.0	9,386.6	9,319.6	9,312.2	33.0	32.3	-14.48	5,054.4	-1,243.0	5,419.3	5,354.2	65.10	83.243		
9,500.0	9,486.6	9,387.0	9,379.6	33.4	32.5	-14.49	5,055.5	-1,244.0	5,421.3	5,355.6	65.68	82.541		
9,600.0	9,586.6	9,459.3	9,451.9	33.7	32.8	-14.49	5,057.2	-1,245.2	5,423.9	5,357.6	66.28	81.838		
9,700.0	9,686.6	9,539.1	9,531.6	34.1	33.1	-14.51	5,059.1	-1,247.0	5,426.9	5,360.0	66.90	81.119		
9,800.0	9,786.6	9,620.7	9,613.1	34.5	33.3	-14.53	5,061.3	-1,249.7	5,430.2	5,362.7	67.53	80.412		
9,900.0	9,886.6	9,778.3	9,770.6	34.8	33.9	-14.56	5,065.2	-1,253.2	5,433.2	5,364.7	68.46	79.359		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 199-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,000.0	9,986.6	9,877.6	9,870.0	35.2	34.2	-14.56	5,067.5	-1,253.8	5,435.6	5,366.4	69.16	78.590		
10,100.0	10,086.6	9,965.1	9,957.4	35.5	34.5	-14.55	5,069.7	-1,254.1	5,438.1	5,368.3	69.82	77.892		
10,200.0	10,186.6	10,069.2	10,061.5	35.9	34.9	-14.55	5,072.6	-1,254.4	5,440.8	5,370.3	70.53	77.138		
10,300.0	10,286.6	10,181.6	10,173.8	36.2	35.3	-14.54	5,075.4	-1,254.6	5,443.3	5,372.1	71.28	76.362		
10,400.0	10,386.6	10,281.5	10,273.7	36.6	35.6	-14.54	5,077.8	-1,254.9	5,445.7	5,373.7	71.99	75.649		
10,500.0	10,486.6	10,381.6	10,373.8	36.9	36.0	-14.54	5,080.0	-1,255.8	5,448.1	5,375.4	72.69	74.949		
10,600.0	10,586.6	10,485.2	10,477.3	37.3	36.3	-14.55	5,082.3	-1,256.8	5,450.5	5,377.1	73.41	74.248		
10,700.0	10,686.6	10,703.2	10,695.3	37.6	37.1	-14.55	5,085.4	-1,258.4	5,452.5	5,377.9	74.56	73.127		
10,800.0	10,786.6	10,866.8	10,858.9	38.0	37.7	-14.58	5,083.9	-1,260.3	5,451.7	5,376.2	75.50	72.208		
10,890.4	10,877.0	10,983.3	10,975.3	38.3	38.1	-14.60	5,082.0	-1,262.0	5,450.6	5,374.4	76.23	71.499		
10,900.0	10,886.6	10,981.3	10,973.3	38.4	38.1	-9.20	5,082.1	-1,261.9	5,450.4	5,374.2	76.26	71.471		
10,950.0	10,936.5	11,027.6	11,019.6	38.5	38.2	-9.27	5,081.3	-1,262.6	5,446.8	5,370.2	76.60	71.106		
11,000.0	10,986.0	11,073.5	11,065.5	38.7	38.4	-9.42	5,080.6	-1,263.2	5,439.0	5,362.1	76.94	70.695		
11,050.0	11,034.6	11,118.5	11,110.5	38.9	38.5	-9.66	5,079.9	-1,263.8	5,427.0	5,349.7	77.26	70.240		
11,100.0	11,082.0	11,169.7	11,161.7	39.0	38.7	-9.99	5,079.2	-1,264.4	5,410.8	5,333.2	77.60	69.724		
11,150.0	11,127.8	11,222.5	11,214.5	39.2	38.9	-10.43	5,078.3	-1,265.1	5,390.6	5,312.7	77.94	69.164		
11,200.0	11,171.8	11,273.0	11,265.0	39.3	39.1	-11.01	5,077.4	-1,265.7	5,366.5	5,288.3	78.26	68.576		
11,250.0	11,213.5	11,320.7	11,312.7	39.4	39.3	-11.75	5,076.6	-1,266.3	5,338.7	5,260.2	78.55	67.965		
11,300.0	11,252.6	11,360.9	11,352.9	39.5	39.4	-12.68	5,075.8	-1,266.7	5,307.5	5,228.6	78.81	67.349		
11,350.0	11,288.9	11,398.0	11,389.9	39.7	39.5	-13.87	5,075.1	-1,267.1	5,273.0	5,193.9	79.04	66.717		
11,400.0	11,322.0	11,431.7	11,423.6	39.8	39.7	-15.41	5,074.4	-1,267.5	5,235.6	5,156.3	79.24	66.072		
11,450.0	11,351.8	11,461.8	11,453.8	39.9	39.8	-17.43	5,073.8	-1,267.7	5,195.5	5,116.1	79.42	65.419		
11,500.0	11,377.9	11,488.2	11,480.1	40.0	39.9	-20.18	5,073.3	-1,268.0	5,153.1	5,073.5	79.57	64.760		
11,550.0	11,400.3	11,499.6	11,491.5	40.1	39.9	-23.90	5,073.1	-1,268.0	5,108.7	5,029.0	79.66	64.130		
11,600.0	11,418.6	11,511.8	11,503.7	40.3	39.9	-29.35	5,072.9	-1,268.1	5,062.6	4,982.9	79.74	63.487		
11,650.0	11,432.8	11,521.1	11,513.1	40.4	40.0	-37.71	5,072.8	-1,268.2	5,015.3	4,935.5	79.80	62.845		
11,700.0	11,442.8	11,527.6	11,519.6	40.5	40.0	-51.10	5,072.7	-1,268.3	4,967.0	4,887.1	79.85	62.204		
11,750.0	11,448.5	11,531.1	11,523.1	40.7	40.0	-72.13	5,072.6	-1,268.3	4,918.0	4,838.1	79.88	61.569		
11,790.4	11,450.0	11,531.7	11,523.7	40.8	40.0	-93.69	5,072.6	-1,268.3	4,878.3	4,798.4	79.89	61.062		
11,800.0	11,450.0	11,531.6	11,523.6	40.8	40.0	-93.62	5,072.6	-1,268.3	4,868.9	4,789.0	79.89	60.942		
11,900.0	11,450.0	11,530.7	11,522.6	41.1	40.0	-93.01	5,072.7	-1,268.3	4,770.9	4,691.0	79.92	59.697		
12,000.0	11,450.0	11,529.7	11,521.6	41.5	40.0	-92.57	5,072.7	-1,268.3	4,673.9	4,594.0	79.96	58.457		
12,037.8	11,450.0	11,529.3	11,521.3	41.7	40.0	-92.43	5,072.7	-1,268.3	4,637.5	4,557.5	79.97	57.989		
12,100.0	11,450.0	11,528.7	11,520.6	41.9	40.0	-92.40	5,072.7	-1,268.3	4,577.8	4,497.8	80.00	57.220		
12,200.0	11,450.0	11,527.7	11,519.6	42.4	40.0	-92.36	5,072.7	-1,268.3	4,481.8	4,401.8	80.06	55.979		
12,300.0	11,450.0	11,526.6	11,518.6	43.0	40.0	-92.31	5,072.7	-1,268.2	4,386.1	4,306.0	80.13	54.736		
12,400.0	11,450.0	11,525.6	11,517.5	43.6	40.0	-92.26	5,072.7	-1,268.2	4,290.5	4,210.3	80.21	53.489		
12,500.0	11,450.0	11,524.5	11,516.4	44.3	40.0	-92.22	5,072.7	-1,268.2	4,195.2	4,114.9	80.31	52.238		
12,600.0	11,450.0	11,523.4	11,515.3	45.0	40.0	-92.17	5,072.8	-1,268.2	4,100.1	4,019.6	80.42	50.984		
12,700.0	11,450.0	11,522.3	11,514.2	45.8	40.0	-92.12	5,072.8	-1,268.2	4,005.2	3,924.6	80.54	49.726		
12,800.0	11,450.0	11,521.2	11,513.1	46.6	40.0	-92.07	5,072.8	-1,268.2	3,910.5	3,829.9	80.69	48.465		
12,900.0	11,450.0	11,520.0	11,512.0	47.4	40.0	-92.02	5,072.8	-1,268.2	3,816.2	3,735.3	80.85	47.200		
13,000.0	11,450.0	11,518.9	11,510.8	48.3	40.0	-91.96	5,072.8	-1,268.2	3,722.1	3,641.1	81.04	45.931		
13,100.0	11,450.0	11,517.7	11,509.7	49.3	40.0	-91.91	5,072.8	-1,268.2	3,628.4	3,547.1	81.25	44.659		
13,200.0	11,450.0	11,516.5	11,508.5	50.3	40.0	-91.86	5,072.9	-1,268.2	3,535.0	3,453.5	81.48	43.382		
13,300.0	11,450.0	11,515.3	11,507.3	51.3	40.0	-91.80	5,072.9	-1,268.2	3,441.9	3,360.2	81.75	42.102		
13,400.0	11,450.0	11,514.1	11,506.0	52.3	39.9	-91.75	5,072.9	-1,268.2	3,349.3	3,267.3	82.05	40.819		
13,500.0	11,450.0	11,512.8	11,504.8	53.4	39.9	-91.69	5,072.9	-1,268.1	3,257.1	3,174.7	82.39	39.533		
13,600.0	11,450.0	11,511.6	11,503.5	54.5	39.9	-91.64	5,072.9	-1,268.1	3,165.4	3,082.6	82.77	38.243		
13,700.0	11,450.0	11,510.3	11,502.2	55.6	39.9	-91.58	5,073.0	-1,268.1	3,074.2	2,991.0	83.19	36.952		
13,800.0	11,450.0	11,509.0	11,500.9	56.8	39.9	-91.52	5,073.0	-1,268.1	2,983.5	2,899.9	83.67	35.658		
13,900.0	11,450.0	11,507.7	11,499.6	58.0	39.9	-91.46	5,073.0	-1,268.1	2,893.5	2,809.3	84.20	34.363		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 199-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,000.0	11,450.0	11,506.3	11,498.3	59.2	39.9	-91.40	5,073.0	-1,268.1	2,804.1	2,719.3	84.80	33.067		
14,100.0	11,450.0	11,505.0	11,496.9	60.4	39.9	-91.34	5,073.0	-1,268.1	2,715.5	2,630.1	85.47	31.772		
14,200.0	11,450.0	11,503.6	11,495.5	61.7	39.9	-91.28	5,073.1	-1,268.1	2,627.7	2,541.5	86.21	30.480		
14,300.0	11,450.0	11,502.2	11,494.1	62.9	39.9	-91.22	5,073.1	-1,268.1	2,540.8	2,453.8	87.04	29.190		
14,400.0	11,450.0	11,500.7	11,492.7	64.2	39.9	-91.15	5,073.1	-1,268.1	2,454.9	2,367.0	87.97	27.907		
14,500.0	11,450.0	11,499.3	11,491.2	65.5	39.9	-91.09	5,073.1	-1,268.0	2,370.1	2,281.1	89.00	26.631		
14,600.0	11,450.0	11,497.8	11,489.7	66.8	39.9	-91.02	5,073.2	-1,268.0	2,286.6	2,196.4	90.14	25.366		
14,700.0	11,450.0	11,496.3	11,488.2	68.2	39.9	-90.95	5,073.2	-1,268.0	2,204.4	2,112.9	91.41	24.114		
14,800.0	11,450.0	11,494.7	11,486.7	69.5	39.9	-90.88	5,073.2	-1,268.0	2,123.7	2,030.9	92.82	22.879		
14,900.0	11,450.0	11,495.6	11,487.6	70.9	39.9	-90.92	5,073.2	-1,268.0	2,044.7	1,950.3	94.39	21.663		
15,000.0	11,450.0	11,493.6	11,485.6	72.2	39.9	-90.83	5,073.2	-1,268.0	1,967.7	1,871.6	96.10	20.475		
15,100.0	11,450.0	11,491.7	11,483.6	73.6	39.9	-90.74	5,073.3	-1,268.0	1,892.7	1,794.8	97.98	19.319		
15,200.0	11,450.0	11,489.7	11,481.6	75.0	39.9	-90.66	5,073.3	-1,268.0	1,820.2	1,720.2	100.03	18.198		
15,300.0	11,450.0	11,487.7	11,479.6	76.4	39.9	-90.57	5,073.3	-1,268.0	1,750.5	1,648.2	102.26	17.118		
15,400.0	11,450.0	11,485.7	11,477.6	77.8	39.8	-90.48	5,073.4	-1,267.9	1,683.7	1,579.1	104.66	16.087		
15,500.0	11,450.0	11,483.7	11,475.6	79.3	39.8	-90.39	5,073.4	-1,267.9	1,620.4	1,513.2	107.24	15.110		
15,600.0	11,450.0	11,481.7	11,473.7	80.7	39.8	-90.30	5,073.5	-1,267.9	1,560.9	1,451.0	109.98	14.193		
15,700.0	11,450.0	11,479.7	11,471.7	82.1	39.8	-90.21	5,073.5	-1,267.9	1,505.8	1,392.9	112.84	13.344		
15,800.0	11,450.0	11,477.7	11,469.7	83.6	39.8	-90.12	5,073.5	-1,267.9	1,455.4	1,339.6	115.81	12.567		
15,900.0	11,450.0	11,475.8	11,467.7	85.0	39.8	-90.03	5,073.6	-1,267.9	1,410.3	1,291.5	118.81	11.870		
16,000.0	11,450.0	11,473.8	11,465.7	86.5	39.8	-89.94	5,073.6	-1,267.8	1,371.0	1,249.2	121.79	11.257		
16,100.0	11,450.0	11,471.8	11,463.7	88.0	39.8	-89.85	5,073.7	-1,267.8	1,338.0	1,213.4	124.68	10.732		
16,200.0	11,450.0	11,469.8	11,461.7	89.4	39.8	-89.77	5,073.7	-1,267.8	1,311.9	1,184.5	127.39	10.298		
16,300.0	11,450.0	11,467.8	11,459.8	90.9	39.8	-89.68	5,073.7	-1,267.8	1,293.0	1,163.2	129.83	9.959		
16,400.0	11,450.0	11,465.8	11,457.8	92.4	39.8	-89.59	5,073.8	-1,267.8	1,281.6	1,149.7	131.92	9.715		
16,496.4	11,450.0	11,463.9	11,455.9	93.9	39.8	-89.50	5,073.8	-1,267.8	1,278.0	1,144.5	133.55	9.569 CC		
16,500.0	11,450.0	11,463.9	11,455.8	93.9	39.8	-89.50	5,073.8	-1,267.8	1,278.0	1,144.4	133.61	9.566 ES		
16,600.0	11,450.0	11,461.9	11,453.8	95.4	39.8	-89.41	5,073.8	-1,267.7	1,282.2	1,147.4	134.83	9.510		
16,700.0	11,450.0	11,459.9	11,451.8	96.9	39.8	-89.32	5,073.9	-1,267.7	1,294.1	1,158.5	135.58	9.545		
16,800.0	11,450.0	11,457.9	11,449.9	98.4	39.7	-89.23	5,073.9	-1,267.7	1,313.6	1,177.7	135.87	9.668		
16,900.0	11,450.0	11,455.9	11,447.9	100.0	39.7	-89.14	5,074.0	-1,267.7	1,340.2	1,204.5	135.73	9.874		
17,000.0	11,450.0	11,453.9	11,445.9	101.5	39.7	-89.05	5,074.0	-1,267.7	1,373.6	1,238.4	135.22	10.159		
17,100.0	11,450.0	11,452.0	11,443.9	103.0	39.7	-88.97	5,074.0	-1,267.7	1,413.3	1,278.9	134.39	10.517		
17,200.0	11,450.0	12,484.2	12,150.1	104.5	43.0	-118.39	5,677.8	-1,258.6	1,440.3	1,306.9	133.40	10.796		
17,300.0	11,450.0	12,603.1	12,160.4	106.1	43.5	-118.69	5,796.2	-1,262.7	1,446.8	1,311.8	135.01	10.716		
17,400.0	11,450.0	12,700.8	12,165.6	107.6	44.0	-118.80	5,893.7	-1,267.0	1,452.5	1,315.8	136.69	10.626		
17,500.0	11,450.0	12,830.8	12,170.5	109.1	44.7	-118.88	6,023.4	-1,273.0	1,457.8	1,319.1	138.70	10.510		
17,600.0	11,450.0	12,935.6	12,170.4	110.7	45.3	-118.80	6,128.1	-1,277.7	1,461.1	1,320.3	140.74	10.382		
17,700.0	11,450.0	13,041.8	12,169.7	112.2	45.9	-118.69	6,234.2	-1,282.8	1,464.3	1,321.4	142.86	10.250		
17,800.0	11,450.0	13,133.2	12,168.8	113.8	46.6	-118.59	6,325.4	-1,287.5	1,467.5	1,322.6	144.93	10.126		
17,900.0	11,450.0	13,229.7	12,167.5	115.3	47.3	-118.46	6,421.7	-1,292.9	1,471.2	1,324.1	147.11	10.001		
18,000.0	11,450.0	13,371.2	12,165.9	116.9	48.4	-118.32	6,563.1	-1,298.5	1,473.3	1,323.6	149.74	9.839		
18,100.0	11,450.0	13,483.4	12,165.4	118.4	49.3	-118.29	6,675.4	-1,300.1	1,473.7	1,321.7	152.05	9.692		
18,200.0	11,450.0	13,605.5	12,164.1	120.0	50.4	-118.24	6,797.4	-1,301.1	1,473.3	1,318.8	154.49	9.536		
18,300.0	11,450.0	13,710.0	12,162.7	121.6	51.4	-118.22	6,901.9	-1,300.9	1,471.7	1,314.9	156.82	9.385		
18,400.0	11,450.0	13,813.3	12,161.2	123.1	52.4	-118.19	7,005.1	-1,300.4	1,469.9	1,310.7	159.18	9.234		
18,500.0	11,450.0	13,887.3	12,160.6	124.7	53.1	-118.18	7,079.2	-1,300.4	1,468.9	1,307.6	161.31	9.106		
18,507.9	11,450.0	13,893.2	12,160.6	124.8	53.2	-118.18	7,085.1	-1,300.5	1,468.9	1,307.4	161.47	9.097		
18,600.0	11,450.0	13,975.8	12,161.5	126.3	54.0	-118.21	7,167.7	-1,301.0	1,469.3	1,305.8	163.52	8.985		
18,700.0	11,450.0	14,121.4	12,162.7	127.8	55.6	-118.29	7,313.3	-1,300.1	1,468.4	1,302.2	166.23	8.834		
18,800.0	11,450.0	14,222.1	12,163.0	129.4	56.7	-118.35	7,414.0	-1,298.0	1,466.0	1,297.4	168.58	8.696		
18,900.0	11,450.0	14,320.8	12,164.4	131.0	57.8	-118.47	7,512.6	-1,295.1	1,463.4	1,292.5	170.88	8.564		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 199-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,000.0	11,450.0	14,421.0	12,166.7	132.6	58.9	-118.62	7,612.8	-1,292.2	1,461.3	1,288.1	173.17	8.439		
19,100.0	11,450.0	14,532.0	12,165.4	134.2	60.2	-118.63	7,723.7	-1,290.0	1,458.2	1,282.5	175.74	8.298		
19,200.0	11,450.0	14,642.0	12,163.0	135.7	61.5	-118.61	7,833.6	-1,287.9	1,454.9	1,276.5	178.36	8.157		
19,300.0	11,450.0	14,765.4	12,160.6	137.3	63.0	-118.62	7,956.9	-1,283.7	1,450.2	1,269.2	181.04	8.010		
19,400.0	11,450.0	14,885.0	12,157.6	138.9	64.5	-118.64	8,076.3	-1,278.0	1,444.2	1,260.5	183.68	7.863		
19,500.0	11,450.0	14,982.8	12,154.8	140.5	65.7	-118.67	8,173.9	-1,272.1	1,436.9	1,250.7	186.20	7.717		
19,600.0	11,450.0	15,055.4	12,154.5	142.1	66.6	-118.75	8,246.4	-1,268.2	1,431.2	1,242.7	188.52	7.592		
19,700.0	11,450.0	15,146.7	12,155.9	143.7	67.8	-118.90	8,337.6	-1,263.4	1,426.6	1,235.8	190.85	7.475		
19,800.0	11,450.0	15,223.7	12,158.0	145.3	68.8	-119.06	8,414.5	-1,259.8	1,423.2	1,230.2	193.06	7.372		
19,900.0	11,450.0	15,293.0	12,160.1	146.9	69.7	-119.18	8,483.7	-1,257.9	1,421.7	1,226.5	195.20	7.283		
19,919.8	11,450.0	15,306.6	12,160.4	147.2	69.8	-119.19	8,497.4	-1,257.8	1,421.6	1,226.0	195.62	7.267		
20,000.0	11,450.0	15,380.9	12,161.9	148.5	70.8	-119.26	8,571.6	-1,257.9	1,422.0	1,224.4	197.58	7.197		
20,100.0	11,450.0	15,484.5	12,163.6	150.1	72.2	-119.32	8,675.2	-1,258.2	1,422.3	1,222.1	200.18	7.105		
20,200.0	11,450.0	15,574.2	12,165.2	151.7	73.4	-119.39	8,764.8	-1,258.4	1,422.7	1,220.1	202.61	7.022		
20,300.0	11,450.0	15,671.3	12,166.7	153.3	74.8	-119.44	8,861.9	-1,259.6	1,423.8	1,218.7	205.18	6.940		
20,400.0	11,450.0	15,757.0	12,165.5	154.9	75.9	-119.35	8,947.6	-1,262.4	1,425.3	1,217.5	207.79	6.859		
20,500.0	11,450.0	15,843.5	12,165.1	156.5	77.1	-119.28	9,034.1	-1,266.0	1,428.0	1,217.6	210.38	6.787		
20,600.0	11,450.0	15,936.5	12,165.0	158.1	78.4	-119.21	9,126.9	-1,270.2	1,431.3	1,218.2	213.09	6.717		
20,700.0	11,450.0	16,058.6	12,163.9	159.7	80.2	-119.07	9,248.8	-1,276.3	1,434.5	1,218.1	216.39	6.629		
20,800.0	11,450.0	16,162.3	12,161.8	161.3	81.6	-118.94	9,352.4	-1,280.2	1,436.2	1,216.8	219.39	6.546		
20,900.0	11,450.0	16,246.9	12,161.6	162.9	82.8	-118.89	9,437.0	-1,283.2	1,438.4	1,216.5	221.98	6.480		
21,000.0	11,450.0	16,328.3	12,164.0	164.5	84.0	-118.93	9,518.3	-1,285.6	1,441.9	1,217.5	224.33	6.427		
21,100.0	11,450.0	16,413.6	12,168.9	166.1	85.2	-119.07	9,603.4	-1,288.2	1,446.5	1,219.9	226.60	6.384		
21,200.0	11,450.0	16,496.8	12,174.1	167.7	86.4	-119.20	9,686.4	-1,291.2	1,452.1	1,223.3	228.80	6.347		
21,300.0	11,450.0	16,579.2	12,180.1	169.3	87.6	-119.35	9,768.5	-1,295.1	1,459.1	1,228.2	230.94	6.318		
21,400.0	11,450.0	16,644.0	12,185.6	170.9	88.6	-119.48	9,833.0	-1,298.2	1,467.1	1,234.5	232.61	6.307		
21,500.0	11,450.0	16,714.1	12,192.4	172.5	89.6	-119.64	9,902.7	-1,302.9	1,477.3	1,243.0	234.30	6.305		
21,600.0	11,450.0	16,855.7	12,204.9	174.2	91.7	-119.85	10,043.2	-1,314.7	1,488.5	1,250.6	237.86	6.258		
21,614.7	11,450.0	16,870.0	12,205.9	174.4	91.9	-119.87	10,057.4	-1,315.7	1,489.8	1,251.5	238.26	6.253 SF		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 23-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.63	-1.5	-140.0	140.0					
100.0	100.0	100.4	100.4	0.1	0.1	-90.62	-1.5	-139.9	139.9	139.7	0.26	536.348		
200.0	200.0	200.3	200.3	0.5	0.4	-90.59	-1.4	-139.6	139.6	138.7	0.90	154.639		
300.0	300.0	300.2	300.2	0.8	0.8	-90.63	-1.5	-139.4	139.4	137.8	1.62	86.217		
400.0	400.0	400.2	400.2	1.2	1.1	-90.66	-1.6	-139.3	139.3	137.0	2.33	59.714		
500.0	500.0	500.0	500.0	1.6	1.5	-90.76	-1.8	-139.2	139.2	136.2	3.04	45.727		
517.7	517.7	517.7	517.7	1.6	1.5	-90.79	-1.9	-139.2	139.2	136.1	3.17	43.919		
600.0	600.0	599.9	599.9	1.9	1.8	-90.89	-2.2	-139.3	139.3	135.5	3.75	37.126		
700.0	700.0	699.3	699.3	2.3	2.2	-90.91	-2.2	-139.6	139.6	135.1	4.45	31.366		
800.0	800.0	798.8	798.8	2.6	2.5	-90.89	-2.2	-140.2	140.3	135.1	5.15	27.248		
900.0	900.0	898.0	898.0	3.0	2.9	-90.84	-2.1	-141.4	141.4	135.5	5.85	24.173		
1,000.0	1,000.0	997.0	996.9	3.4	3.2	-90.77	-1.9	-143.1	143.1	136.6	6.55	21.848		
1,100.0	1,100.0	1,096.5	1,096.4	3.7	3.5	119.84	-1.7	-145.4	145.9	138.7	7.24	20.148		
1,200.0	1,200.0	1,196.3	1,196.2	4.0	3.9	120.63	-1.8	-147.9	149.7	141.8	7.92	18.897		
1,300.0	1,299.9	1,296.0	1,295.9	4.4	4.3	121.76	-2.3	-150.5	154.5	145.9	8.61	17.947		
1,400.0	1,399.7	1,395.6	1,395.4	4.7	4.6	123.30	-3.0	-153.1	160.4	151.1	9.30	17.245		
1,500.0	1,499.4	1,498.1	1,497.9	5.0	5.0	125.13	-4.2	-155.2	166.8	156.8	10.01	16.663		
1,600.0	1,598.9	1,601.5	1,601.2	5.4	5.3	126.99	-6.6	-155.2	172.2	161.5	10.72	16.062		
1,700.0	1,698.3	1,704.2	1,703.9	5.8	5.7	129.14	-9.4	-153.2	176.9	165.5	11.43	15.477		
1,800.0	1,797.4	1,806.9	1,806.5	6.1	6.0	131.86	-11.7	-149.3	181.3	169.2	12.14	14.933		
1,900.0	1,896.4	1,898.8	1,898.4	6.5	6.4	134.88	-11.8	-146.9	188.3	175.5	12.83	14.677		
2,000.0	1,995.5	1,992.1	1,991.7	6.9	6.7	138.24	-9.4	-146.8	199.1	185.6	13.50	14.740		
2,100.0	2,094.5	2,092.5	2,091.9	7.3	7.0	141.71	-5.7	-147.1	211.3	197.1	14.21	14.871		
2,200.0	2,193.5	2,192.5	2,191.9	7.7	7.4	144.85	-2.1	-146.5	223.4	208.5	14.91	14.978		
2,300.0	2,292.5	2,291.0	2,290.3	8.1	7.7	147.39	0.5	-146.1	235.8	220.2	15.61	15.103		
2,400.0	2,391.6	2,390.0	2,389.3	8.5	8.1	149.37	1.8	-146.5	248.7	232.4	16.32	15.238		
2,500.0	2,490.6	2,489.8	2,489.1	8.9	8.4	151.06	2.7	-146.8	261.5	244.5	17.03	15.356		
2,600.0	2,589.6	2,589.6	2,588.9	9.3	8.8	152.57	3.3	-146.9	274.2	256.4	17.74	15.455		
2,700.0	2,688.6	2,689.2	2,688.6	9.7	9.1	154.03	4.1	-146.5	286.8	268.3	18.45	15.543		
2,729.0	2,717.4	2,718.1	2,717.5	9.8	9.2	154.45	4.4	-146.3	290.4	271.7	18.66	15.566		
2,800.0	2,787.8	2,789.4	2,788.8	10.1	9.4	155.48	5.2	-145.6	298.7	279.5	19.16	15.587		
2,900.0	2,887.2	2,890.4	2,889.8	10.5	9.8	156.74	6.4	-144.0	307.9	288.1	19.87	15.495		
3,000.0	2,986.8	2,985.7	2,985.0	10.9	10.1	157.71	7.7	-142.4	315.0	294.4	20.55	15.327		
3,100.0	3,086.7	3,077.4	3,076.6	11.2	10.5	158.24	9.4	-143.3	322.0	300.8	21.20	15.189		
3,200.0	3,186.6	3,177.9	3,177.2	11.6	10.8	158.47	11.6	-146.1	328.3	306.4	21.91	14.987		
3,262.3	3,249.0	3,244.8	3,244.0	11.8	11.0	-51.60	13.0	-146.9	330.1	307.8	22.37	14.758		
3,300.0	3,286.6	3,285.2	3,284.4	11.9	11.2	-51.49	13.8	-146.8	330.5	307.9	22.64	14.597		
3,400.0	3,386.6	3,390.1	3,389.3	12.2	11.6	-51.08	15.5	-145.2	330.4	307.1	23.36	14.147		
3,500.0	3,486.6	3,494.4	3,493.5	12.6	11.9	-50.55	16.9	-142.1	329.0	304.9	24.06	13.672		
3,600.0	3,586.6	3,592.3	3,591.3	12.9	12.3	-50.07	18.0	-139.1	327.2	302.5	24.74	13.227		
3,700.0	3,686.6	3,690.3	3,689.3	13.2	12.6	-49.72	18.8	-136.9	326.1	300.7	25.42	12.830		
3,800.0	3,786.6	3,788.6	3,787.6	13.5	12.9	-49.51	19.3	-135.7	325.5	299.4	26.10	12.473		
3,854.7	3,841.3	3,842.3	3,841.3	13.7	13.1	-49.46	19.5	-135.5	325.5	299.0	26.47	12.294		
3,900.0	3,886.6	3,887.2	3,886.2	13.9	13.3	-49.45	19.6	-135.5	325.5	298.7	26.78	12.153		
4,000.0	3,986.6	3,987.7	3,986.7	14.2	13.6	-49.46	19.6	-135.6	325.6	298.1	27.48	11.849		
4,100.0	4,086.6	4,088.4	4,087.4	14.6	14.0	-49.51	19.3	-135.7	325.5	297.3	28.17	11.552		
4,200.0	4,186.6	4,189.9	4,188.9	14.9	14.3	-49.62	18.5	-135.7	325.0	296.1	28.87	11.257		
4,300.0	4,286.6	4,291.6	4,290.6	15.2	14.7	-49.80	17.1	-135.6	324.0	294.5	29.57	10.959		
4,400.0	4,386.6	4,393.7	4,392.7	15.6	15.0	-50.00	15.2	-135.1	322.5	292.2	30.27	10.653		
4,500.0	4,486.6	4,494.8	4,493.7	15.9	15.4	-50.22	12.9	-134.3	320.4	289.4	30.97	10.345		
4,600.0	4,586.6	4,595.2	4,594.1	16.2	15.7	-50.46	10.4	-133.4	318.1	286.4	31.66	10.046		
4,700.0	4,686.6	4,693.7	4,692.6	16.6	16.1	-50.69	8.0	-132.5	315.9	283.5	32.36	9.763		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 23-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,800.0	4,786.6	4,791.5	4,790.4	16.9	16.4	-50.86	6.4	-132.0	314.3	281.3	33.04	9.513		
4,900.0	4,886.6	4,891.0	4,889.9	17.3	16.8	-50.99	5.2	-131.6	313.3	279.6	33.74	9.286		
5,000.0	4,986.6	4,991.1	4,989.9	17.6	17.1	-51.14	3.9	-131.3	312.2	277.8	34.44	9.067		
5,100.0	5,086.6	5,090.9	5,089.7	18.0	17.5	-51.29	2.6	-131.0	311.2	276.1	35.13	8.858		
5,200.0	5,186.6	5,191.7	5,190.5	18.3	17.8	-51.40	1.5	-130.6	310.2	274.4	35.84	8.657		
5,300.0	5,286.6	5,299.6	5,298.4	18.6	18.2	-51.60	-1.0	-129.1	307.7	271.1	36.56	8.416		
5,400.0	5,386.6	5,406.1	5,404.7	19.0	18.6	-51.97	-5.9	-126.1	302.7	265.4	37.26	8.123		
5,500.0	5,486.6	5,510.4	5,508.7	19.3	19.0	-52.58	-12.7	-122.6	296.0	258.0	37.95	7.798		
5,600.0	5,586.6	5,611.7	5,609.6	19.7	19.3	-53.44	-21.0	-118.8	288.0	249.4	38.65	7.452		
5,700.0	5,686.6	5,710.7	5,708.2	20.0	19.7	-54.34	-29.2	-115.1	280.2	240.8	39.36	7.119		
5,800.0	5,786.6	5,809.8	5,806.9	20.4	20.0	-55.30	-37.3	-111.6	272.6	232.5	40.07	6.804		
5,900.0	5,886.6	5,908.8	5,905.6	20.7	20.4	-56.29	-45.2	-108.3	265.3	224.5	40.78	6.506		
6,000.0	5,986.6	6,009.5	6,005.9	21.1	20.7	-57.34	-53.2	-104.8	258.1	216.6	41.48	6.222		
6,100.0	6,086.6	6,110.6	6,106.6	21.4	21.1	-58.40	-61.3	-100.7	250.4	208.2	42.18	5.936		
6,200.0	6,186.6	6,209.8	6,205.3	21.8	21.5	-59.45	-69.1	-96.3	242.5	199.6	42.89	5.653		
6,300.0	6,286.6	6,308.6	6,303.8	22.1	21.8	-60.52	-76.7	-92.1	235.0	191.3	43.61	5.387		
6,400.0	6,386.6	6,410.3	6,405.1	22.5	22.2	-61.68	-84.6	-87.6	227.3	183.0	44.31	5.129		
6,500.0	6,486.6	6,512.0	6,506.3	22.8	22.5	-62.99	-93.1	-82.2	218.7	173.7	45.01	4.860		
6,600.0	6,586.6	6,609.7	6,603.5	23.2	22.9	-64.36	-101.3	-77.1	210.3	164.6	45.74	4.598		
6,700.0	6,686.6	6,707.9	6,701.3	23.5	23.3	-65.80	-109.2	-72.5	202.7	156.2	46.47	4.361		
6,800.0	6,786.6	6,806.4	6,799.5	23.9	23.6	-67.24	-116.5	-68.3	195.8	148.6	47.20	4.148		
6,900.0	6,886.6	6,905.8	6,898.6	24.2	24.0	-68.60	-123.0	-64.2	189.5	141.6	47.92	3.954		
7,000.0	6,986.6	7,007.8	7,000.2	24.6	24.4	-69.87	-129.4	-59.2	182.6	134.0	48.62	3.756		
7,100.0	7,086.6	7,108.5	7,100.5	24.9	24.7	-71.04	-135.4	-52.9	174.7	125.4	49.33	3.543		
7,200.0	7,186.6	7,207.1	7,198.7	25.3	25.1	-72.25	-141.2	-46.9	167.1	117.1	50.06	3.339		
7,300.0	7,286.6	7,306.9	7,298.2	25.6	25.5	-73.60	-146.9	-41.3	160.1	109.3	50.78	3.153		
7,400.0	7,386.6	7,407.8	7,398.8	26.0	25.8	-75.26	-153.4	-35.2	152.5	101.0	51.48	2.962		
7,500.0	7,486.6	7,507.9	7,498.3	26.3	26.2	-77.28	-160.4	-28.5	144.3	92.1	52.21	2.764		
7,600.0	7,586.6	7,607.3	7,597.3	26.7	26.6	-79.58	-167.5	-21.9	136.4	83.4	52.94	2.575		
7,700.0	7,686.6	7,706.3	7,695.8	27.0	26.9	-82.16	-174.5	-15.4	128.8	75.1	53.69	2.399		
7,800.0	7,786.6	7,805.1	7,794.3	27.4	27.3	-84.96	-181.3	-9.6	122.1	67.7	54.45	2.243		
7,900.0	7,886.6	7,904.1	7,892.9	27.7	27.7	-87.94	-187.9	-4.2	116.3	61.1	55.20	2.107		
8,000.0	7,986.6	8,003.1	7,991.6	28.1	28.0	-91.04	-194.0	0.6	111.4	55.4	55.95	1.991		
8,100.0	8,086.6	8,102.8	8,091.0	28.4	28.4	-94.07	-199.6	5.0	107.2	50.5	56.70	1.890		
8,200.0	8,186.6	8,202.7	8,190.7	28.8	28.8	-96.75	-204.2	9.5	103.2	45.7	57.43	1.796		
8,300.0	8,286.6	8,301.8	8,289.6	29.1	29.1	-98.87	-207.4	13.4	99.7	41.5	58.17	1.714		
8,400.0	8,386.6	8,401.0	8,388.8	29.5	29.5	-100.21	-209.2	16.3	97.1	38.2	58.89	1.649		
8,500.0	8,486.6	8,500.7	8,488.5	29.8	29.8	-100.91	-210.0	18.6	95.0	35.4	59.60	1.594		
8,600.0	8,586.6	8,600.5	8,588.2	30.2	30.2	-101.15	-210.0	20.4	93.2	32.9	60.31	1.545		
8,700.0	8,686.6	8,700.4	8,688.1	30.6	30.5	-101.35	-210.0	22.2	91.5	30.5	61.02	1.499 Level 3		
8,800.0	8,786.6	8,800.3	8,788.0	30.9	30.9	-101.77	-210.4	23.8	89.9	28.2	61.72	1.456 Level 3		
8,900.0	8,886.6	8,900.2	8,888.0	31.3	31.2	-102.26	-210.8	25.5	88.4	25.9	62.43	1.415 Level 3		
9,000.0	8,986.6	9,000.0	8,987.7	31.6	31.6	-102.72	-211.2	27.1	86.9	23.8	63.14	1.376 Level 3		
9,100.0	9,086.6	9,099.5	9,087.2	32.0	31.9	-102.94	-211.3	28.0	86.0	22.1	63.84	1.347 Level 3		
9,200.0	9,186.6	9,199.1	9,186.8	32.3	32.3	-102.89	-211.1	28.4	85.6	21.1	64.54	1.326 Level 3		
9,300.0	9,286.6	9,299.0	9,286.7	32.7	32.6	-102.89	-211.1	28.5	85.5	20.2	65.24	1.310 Level 3		
9,320.3	9,306.9	9,319.2	9,306.9	32.8	32.7	-102.91	-211.1	28.5	85.5	20.1	65.39	1.307 Level 3		
9,400.0	9,386.6	9,398.9	9,386.6	33.0	33.0	-103.03	-211.3	28.6	85.5	19.5	65.95	1.296 Level 3		
9,500.0	9,486.6	9,499.0	9,486.7	33.4	33.3	-103.34	-211.7	28.7	85.4	18.8	66.66	1.281 Level 3		
9,600.0	9,586.6	9,599.0	9,586.6	33.7	33.7	-103.76	-212.3	29.0	85.3	18.0	67.37	1.267 Level 3		
9,611.2	9,597.8	9,610.1	9,597.8	33.8	33.7	-103.81	-212.4	29.0	85.3	17.9	67.45	1.265 Level 3		
9,700.0	9,686.6	9,698.8	9,686.5	34.1	34.0	-104.10	-212.8	29.0	85.4	17.3	68.07	1.254 Level 3		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 23-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,800.0	9,786.6	9,798.5	9,786.2	34.5	34.4	-104.41	-213.3	28.9	85.7	16.9	68.78	1.246	Level 2	
9,900.0	9,886.6	9,898.2	9,885.9	34.8	34.7	-104.83	-214.1	28.4	86.3	16.8	69.48	1.242	Level 2	
10,000.0	9,986.6	9,998.1	9,985.8	35.2	35.1	-105.16	-214.8	27.6	87.2	17.1	70.18	1.243	Level 2	
10,100.0	10,086.6	10,097.9	10,085.6	35.5	35.4	-105.10	-215.0	26.6	88.3	17.5	70.87	1.246	Level 2	
10,200.0	10,186.6	10,198.7	10,186.4	35.9	35.8	-105.05	-215.2	25.8	89.1	17.5	71.58	1.244	Level 2	
10,300.0	10,286.6	10,299.4	10,287.1	36.2	36.1	-105.40	-215.7	26.1	89.0	16.7	72.29	1.230	Level 2	
10,400.0	10,386.6	10,400.1	10,387.7	36.6	36.5	-105.79	-216.0	27.1	88.1	15.1	73.00	1.206	Level 2	
10,500.0	10,486.6	10,500.4	10,488.0	36.9	36.8	-106.01	-215.9	28.7	86.5	12.8	73.71	1.173	Level 2	
10,600.0	10,586.6	10,599.7	10,587.4	37.3	37.2	-106.40	-216.1	30.1	85.2	10.8	74.42	1.145	Level 2	
10,700.0	10,686.6	10,699.4	10,687.1	37.6	37.5	-106.97	-216.8	30.8	84.7	9.6	75.13	1.127	Level 2	
10,800.0	10,786.6	10,799.7	10,787.3	38.0	37.9	-106.58	-216.0	31.3	84.0	8.2	75.83	1.108	Level 2	
10,890.4	10,877.0	10,890.2	10,877.8	38.3	38.2	-105.26	-213.9	31.6	83.2	6.7	76.45	1.088	Level 2	
10,900.0	10,886.6	10,899.9	10,887.5	38.4	38.2	-99.79	-213.7	31.6	83.1	6.6	76.52	1.086	Level 2	
10,926.0	10,912.6	10,925.9	10,913.5	38.4	38.3	-100.14	-213.1	31.8	83.0	6.3	76.70	1.082	Level 2, CC	
10,950.0	10,936.5	10,949.9	10,937.5	38.5	38.4	-101.18	-212.6	31.9	83.1	6.2	76.87	1.081	Level 2, ES, SF	
11,000.0	10,986.0	10,999.5	10,987.1	38.7	38.6	-105.44	-211.7	32.3	84.2	6.9	77.22	1.090	Level 2	
11,050.0	11,034.6	11,048.4	11,035.9	38.9	38.7	-112.04	-211.0	32.7	87.2	9.7	77.56	1.125	Level 2	
11,100.0	11,082.0	11,095.7	11,083.3	39.0	38.9	-119.90	-210.4	33.2	93.8	15.9	77.89	1.204	Level 2	
11,150.0	11,127.8	11,141.5	11,129.1	39.2	39.0	-127.85	-209.9	33.5	104.9	26.7	78.18	1.342	Level 3	
11,200.0	11,171.8	11,185.4	11,173.0	39.3	39.2	-134.97	-209.5	33.8	121.2	42.8	78.44	1.546		
11,250.0	11,213.5	11,227.0	11,214.6	39.4	39.3	-140.80	-209.2	34.0	142.9	64.2	78.67	1.816		
11,300.0	11,252.6	11,266.2	11,253.7	39.5	39.5	-145.30	-209.0	34.2	169.4	90.5	78.88	2.147		
11,350.0	11,288.9	11,302.4	11,290.0	39.7	39.6	-148.56	-208.8	34.4	200.2	121.1	79.08	2.532		
11,400.0	11,322.0	11,335.5	11,323.1	39.8	39.7	-150.73	-208.7	34.5	234.9	155.7	79.25	2.964		
11,450.0	11,351.8	11,365.2	11,352.7	39.9	39.8	-151.92	-208.6	34.6	273.0	193.6	79.40	3.438		
11,500.0	11,377.9	11,391.2	11,378.8	40.0	39.9	-152.13	-208.5	34.6	313.9	234.4	79.53	3.947		
11,550.0	11,400.3	11,413.5	11,401.0	40.1	40.0	-151.22	-208.4	34.7	357.4	277.7	79.64	4.487		
11,600.0	11,418.6	11,431.7	11,419.3	40.3	40.0	-148.82	-208.4	34.7	402.8	323.1	79.73	5.053		
11,650.0	11,432.8	11,445.8	11,433.4	40.4	40.1	-144.04	-208.4	34.7	449.9	370.1	79.79	5.639		
11,700.0	11,442.8	11,455.8	11,443.3	40.5	40.1	-134.78	-208.4	34.7	498.2	418.4	79.83	6.241		
11,750.0	11,448.5	11,461.4	11,449.0	40.7	40.1	-116.22	-208.4	34.7	547.3	467.4	79.85	6.854		
11,790.4	11,450.0	11,462.9	11,450.4	40.8	40.1	-90.34	-208.4	34.7	587.2	507.4	79.85	7.354		
11,800.0	11,450.0	11,462.9	11,450.4	40.8	40.1	-90.35	-208.4	34.7	596.8	516.9	79.85	7.473		
11,900.0	11,450.0	12,595.9	12,124.2	41.1	43.3	-178.17	473.1	28.9	674.7	639.7	35.00	19.278		
12,000.0	11,450.0	12,723.6	12,124.1	41.5	43.8	-178.27	600.7	25.2	674.6	639.0	35.57	18.965		
12,037.8	11,450.0	12,764.7	12,123.2	41.7	44.0	-178.22	641.7	24.2	673.7	637.9	35.80	18.820		
12,100.0	11,450.0	12,825.4	12,121.6	41.9	44.3	-178.08	702.4	22.1	672.2	636.0	36.14	18.599		
12,200.0	11,450.0	12,926.7	12,119.5	42.4	44.8	-177.79	803.5	18.1	670.3	633.5	36.79	18.219		
12,300.0	11,450.0	13,029.0	12,116.5	43.0	45.4	-177.83	905.8	17.8	667.3	629.9	37.46	17.815		
12,400.0	11,450.0	13,114.0	12,114.9	43.6	45.9	-177.86	990.8	17.6	665.4	627.4	37.99	17.515		
12,417.4	11,450.0	13,128.0	12,114.9	43.7	46.0	-177.86	1,004.8	17.4	665.4	627.3	38.09	17.467		
12,500.0	11,450.0	13,200.9	12,115.5	44.3	46.5	-177.77	1,077.7	15.8	666.1	627.5	38.67	17.228		
12,600.0	11,450.0	13,292.2	12,117.3	45.0	47.2	-177.61	1,168.9	13.2	668.2	628.7	39.45	16.939		
12,700.0	11,450.0	13,421.2	12,119.4	45.8	48.1	-177.37	1,297.8	9.3	670.2	629.6	40.56	16.523		
12,756.7	11,450.0	13,467.5	12,118.8	46.2	48.5	-177.28	1,344.1	7.9	669.6	628.6	40.97	16.344		
12,800.0	11,450.0	13,499.4	12,119.0	46.6	48.8	-177.18	1,376.0	6.4	670.0	628.7	41.28	16.229		
12,900.0	11,450.0	13,600.1	12,121.2	47.4	49.6	-176.88	1,476.5	2.0	672.3	630.0	42.27	15.903		
13,000.0	11,450.0	13,731.8	12,120.0	48.3	50.8	-176.98	1,608.2	2.2	671.3	627.7	43.59	15.400		
13,100.0	11,450.0	13,829.8	12,117.0	49.3	51.7	-177.02	1,706.1	2.1	668.2	623.7	44.55	15.000		
13,200.0	11,450.0	13,922.9	12,114.9	50.3	52.6	-176.99	1,799.2	1.1	665.9	620.4	45.49	14.639		
13,300.0	11,450.0	14,020.2	12,113.5	51.3	53.6	-176.88	1,896.5	-0.9	664.6	618.0	46.54	14.280		
13,400.0	11,450.0	14,137.1	12,110.7	52.3	54.8	-177.04	2,013.3	0.2	662.1	614.2	47.87	13.832		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 23-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,500.0	11,450.0	14,222.2	12,107.5	53.4	55.7	-177.41	2,098.4	4.0	658.3	609.6	48.66	13.529		
13,530.3	11,450.0	14,241.5	12,107.3	53.7	55.9	-177.49	2,117.6	4.7	658.0	609.2	48.83	13.476		
13,600.0	11,450.0	14,290.2	12,108.4	54.5	56.5	-177.67	2,166.2	6.3	659.3	609.9	49.36	13.357		
13,700.0	11,450.0	14,384.1	12,112.2	55.6	57.5	-178.01	2,260.0	9.4	663.2	612.8	50.40	13.158		
13,800.0	11,450.0	14,505.0	12,115.4	56.8	58.9	-178.37	2,380.8	12.5	665.7	614.0	51.74	12.866		
13,900.0	11,450.0	14,614.8	12,115.4	58.0	60.2	-178.51	2,490.6	13.3	665.6	612.6	53.06	12.545		
13,947.7	11,450.0	14,663.1	12,115.1	58.5	60.7	-178.55	2,538.9	13.4	665.4	611.7	53.64	12.404		
14,000.0	11,450.0	14,700.0	12,115.5	59.2	61.2	-178.58	2,575.8	13.4	665.8	611.7	54.07	12.313		
14,100.0	11,450.0	14,778.5	12,118.3	60.4	62.1	-178.60	2,654.3	12.9	669.3	614.2	55.08	12.152		
14,200.0	11,450.0	14,888.1	12,124.3	61.7	63.5	-178.54	2,763.7	11.2	675.0	618.5	56.44	11.959		
14,300.0	11,450.0	15,030.3	12,123.9	62.9	65.2	-178.49	2,905.8	9.6	674.4	616.1	58.31	11.565		
14,400.0	11,450.0	15,128.2	12,121.3	64.2	66.5	-178.47	3,003.7	8.6	671.8	612.2	59.57	11.278		
14,472.1	11,450.0	15,184.0	12,120.7	65.1	67.2	-178.43	3,059.5	7.7	670.9	610.7	60.25	11.135		
14,500.0	11,450.0	15,205.7	12,120.7	65.5	67.5	-178.40	3,081.2	7.2	671.1	610.5	60.53	11.087		
14,600.0	11,450.0	15,290.8	12,122.5	66.8	68.6	-178.22	3,166.3	4.3	673.2	611.5	61.67	10.916		
14,700.0	11,450.0	15,422.4	12,124.0	68.2	70.3	-177.83	3,297.7	-1.3	674.6	611.1	63.53	10.619		
14,800.0	11,450.0	15,521.7	12,122.4	69.5	71.6	-177.43	3,396.8	-6.7	673.2	608.2	64.95	10.365		
14,900.0	11,450.0	15,621.9	12,120.8	70.9	73.0	-177.12	3,496.9	-11.1	671.8	605.4	66.38	10.120		
15,000.0	11,450.0	15,721.7	12,119.4	72.2	74.3	-177.14	3,596.7	-11.6	670.3	602.6	67.73	9.897		
15,100.0	11,450.0	15,821.6	12,118.1	73.6	75.7	-177.28	3,696.5	-10.6	669.0	599.9	69.06	9.687		
15,200.0	11,450.0	15,920.1	12,116.8	75.0	77.1	-177.46	3,795.0	-9.2	667.6	597.2	70.36	9.488		
15,300.0	11,450.0	16,016.2	12,116.1	76.4	78.4	-177.63	3,891.2	-8.0	666.8	595.1	71.64	9.307		
15,400.0	11,450.0	16,114.6	12,115.8	77.8	79.8	-177.80	3,989.5	-6.8	666.3	593.3	72.96	9.132		
15,457.6	11,450.0	16,171.2	12,115.7	78.6	80.5	-177.86	4,046.2	-6.5	666.1	592.4	73.74	9.034		
15,500.0	11,450.0	16,204.6	12,115.9	79.3	81.0	-177.87	4,079.5	-6.6	666.4	592.2	74.18	8.984		
15,600.0	11,450.0	16,294.7	12,118.0	80.7	82.3	-177.79	4,169.6	-8.4	668.7	593.3	75.45	8.864		
15,700.0	11,450.0	16,413.7	12,119.8	82.1	84.0	-177.59	4,288.6	-11.7	670.5	593.2	77.22	8.683		
15,800.0	11,450.0	16,521.1	12,118.5	83.6	85.5	-177.54	4,395.9	-13.1	669.2	590.4	78.77	8.495		
15,900.0	11,450.0	16,618.1	12,117.4	85.0	86.9	-177.48	4,492.9	-14.5	668.1	587.9	80.16	8.334		
15,985.1	11,450.0	16,697.6	12,117.0	86.3	88.1	-177.41	4,572.4	-16.0	667.7	586.4	81.31	8.212		
16,000.0	11,450.0	16,711.3	12,117.0	86.5	88.3	-177.39	4,586.1	-16.3	667.7	586.2	81.50	8.193		
16,100.0	11,450.0	16,807.3	12,117.5	88.0	89.7	-177.27	4,682.1	-18.5	668.3	585.3	82.91	8.060		
16,200.0	11,450.0	16,885.9	12,119.0	89.4	90.8	-177.14	4,760.6	-20.7	670.4	586.3	84.02	7.978		
16,300.0	11,450.0	17,000.2	12,123.5	90.9	92.5	-176.91	4,874.7	-24.5	674.6	588.9	85.79	7.864		
16,400.0	11,450.0	17,140.0	12,121.5	92.4	94.6	-176.89	5,014.4	-25.7	673.1	585.2	87.92	7.656		
16,500.0	11,450.0	17,249.8	12,116.1	93.9	96.2	-177.05	5,124.1	-24.5	668.0	578.5	89.48	7.465		
16,600.0	11,450.0	17,336.2	12,111.8	95.4	97.5	-177.22	5,210.4	-23.0	663.0	572.3	90.66	7.313		
16,700.0	11,450.0	17,416.1	12,110.7	96.9	98.7	-177.33	5,290.3	-22.3	661.4	569.7	91.74	7.210		
16,800.0	11,450.0	17,516.3	12,110.1	98.4	100.2	-177.47	5,390.5	-21.5	660.7	567.6	93.16	7.092		
16,842.8	11,450.0	17,555.8	12,110.0	99.1	100.8	-177.51	5,430.0	-21.3	660.6	566.9	93.72	7.049		
16,900.0	11,450.0	17,605.0	12,110.2	100.0	101.5	-177.54	5,479.2	-21.3	660.9	566.5	94.41	7.000		
17,000.0	11,450.0	17,690.3	12,112.5	101.5	102.8	-177.54	5,564.4	-22.1	663.6	568.0	95.61	6.940		
17,100.0	11,450.0	17,799.3	12,114.8	103.0	104.5	-177.49	5,673.4	-23.6	665.6	568.3	97.27	6.843		
17,200.0	11,450.0	17,893.3	12,117.9	104.5	105.9	-177.39	5,767.3	-25.7	668.9	570.2	98.67	6.779		
17,300.0	11,450.0	18,028.1	12,117.8	106.1	108.0	-177.23	5,902.1	-28.7	668.8	568.0	100.83	6.633		
17,400.0	11,450.0	18,132.1	12,114.8	107.6	109.5	-177.09	6,006.0	-30.9	665.9	563.5	102.43	6.502		
17,500.0	11,450.0	18,230.1	12,112.1	109.1	111.0	-176.91	6,103.9	-33.6	663.3	559.3	103.95	6.381		
17,600.0	11,450.0	18,323.0	12,110.0	110.7	112.5	-176.66	6,196.8	-37.1	661.2	555.8	105.42	6.272		
17,700.0	11,450.0	18,428.3	12,108.1	112.2	114.1	-176.47	6,302.0	-40.0	659.5	552.4	107.09	6.159		
17,800.0	11,450.0	18,536.9	12,105.0	113.8	115.8	-176.59	6,410.5	-39.3	656.6	548.0	108.67	6.042		
17,900.0	11,450.0	18,632.4	12,102.1	115.3	117.2	-176.71	6,506.0	-38.6	653.5	543.4	110.05	5.938		
18,000.0	11,450.0	18,726.3	12,099.7	116.9	118.7	-176.74	6,599.9	-38.7	650.9	539.5	111.43	5.841		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 23-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
18,053.3	11,450.0	18,766.8	12,099.3	117.7	119.3	-176.76	6,640.4	-38.9	650.4	538.4	112.00	5.807		
18,100.0	11,450.0	18,802.4	12,099.6	118.4	119.9	-176.78	6,676.0	-38.9	650.8	538.3	112.48	5.786		
18,200.0	11,450.0	18,904.4	12,101.5	120.0	121.5	-176.87	6,777.9	-38.9	652.6	538.6	113.98	5.725		
18,300.0	11,450.0	19,021.5	12,101.1	121.6	123.3	-176.91	6,895.0	-39.3	652.1	536.4	115.79	5.632		
18,400.0	11,450.0	19,113.8	12,100.6	123.1	124.7	-176.86	6,987.3	-40.5	651.6	534.4	117.18	5.561		
18,407.5	11,450.0	19,121.1	12,100.6	123.3	124.8	-176.85	6,994.6	-40.7	651.6	534.3	117.30	5.555		
18,500.0	11,450.0	19,218.3	12,100.6	124.7	126.3	-176.72	7,091.8	-43.0	651.7	532.8	118.84	5.483		
18,600.0	11,450.0	19,343.5	12,097.2	126.3	128.3	-176.74	7,217.0	-43.5	649.0	528.2	120.75	5.375		
18,700.0	11,450.0	19,444.9	12,092.1	127.8	129.9	-176.87	7,318.2	-42.6	643.8	521.6	122.23	5.268		
18,800.0	11,450.0	19,543.2	12,087.7	129.4	131.4	-177.03	7,416.4	-41.3	639.2	515.6	123.64	5.170		
18,900.0	11,450.0	19,620.6	12,085.3	131.0	132.6	-177.27	7,493.7	-39.1	636.1	511.4	124.68	5.102		
18,923.9	11,450.0	19,638.0	12,085.3	131.4	132.9	-177.32	7,511.1	-38.7	636.0	511.1	124.91	5.092		
19,000.0	11,450.0	19,704.0	12,086.1	132.6	133.9	-177.47	7,577.1	-37.6	636.8	511.0	125.80	5.062		
19,100.0	11,450.0	19,802.6	12,088.0	134.2	135.5	-177.59	7,675.6	-37.1	638.7	511.5	127.24	5.020		
19,200.0	11,450.0	19,908.5	12,089.5	135.7	137.2	-177.61	7,781.5	-37.8	640.1	511.2	128.88	4.967		
19,300.0	11,450.0	20,023.5	12,089.3	137.3	139.0	-177.50	7,896.5	-39.9	640.0	509.3	130.72	4.896		
19,400.0	11,450.0	20,131.1	12,087.0	138.9	140.7	-177.34	8,004.0	-42.4	637.9	505.4	132.43	4.817		
19,500.0	11,450.0	20,215.6	12,085.8	140.5	142.0	-177.29	8,088.6	-43.7	636.5	502.8	133.71	4.760		
19,600.0	11,450.0	20,328.7	12,084.6	142.1	143.8	-177.43	8,201.7	-42.9	635.4	500.0	135.40	4.693		
19,671.8	11,450.0	20,386.0	12,084.2	143.2	144.7	-177.57	8,258.9	-41.8	634.8	498.6	136.18	4.662		
19,700.0	11,450.0	20,410.5	12,084.4	143.7	145.1	-177.65	8,283.5	-41.1	634.9	498.4	136.51	4.651		
19,800.0	11,450.0	20,527.3	12,083.7	145.3	146.9	-178.09	8,400.1	-37.2	634.2	496.1	138.18	4.590		
19,900.0	11,450.0	20,626.2	12,081.0	146.9	148.5	-178.59	8,498.9	-32.3	631.3	491.8	139.54	4.525		
19,938.5	11,450.0	20,653.1	12,080.8	147.5	148.9	-178.75	8,525.8	-30.8	631.0	491.1	139.87	4.511		
20,000.0	11,450.0	20,698.3	12,081.6	148.5	149.6	-179.01	8,570.9	-28.3	631.9	491.5	140.41	4.500		
20,100.0	11,450.0	20,799.7	12,084.2	150.1	151.2	-179.36	8,672.2	-25.2	634.5	492.6	141.91	4.471		
20,200.0	11,450.0	20,908.8	12,086.0	151.7	152.9	-179.59	8,781.3	-23.5	636.0	492.4	143.60	4.429		
20,300.0	11,450.0	21,013.2	12,086.6	153.3	154.6	-179.55	8,885.7	-24.8	636.6	491.4	145.22	4.384		
20,400.0	11,450.0	21,120.9	12,086.3	154.9	156.3	-179.43	8,993.4	-27.0	636.4	489.5	146.91	4.332		
20,486.6	11,450.0	21,201.4	12,085.5	156.3	157.6	-179.45	9,073.9	-27.4	635.5	487.4	148.12	4.291		
20,500.0	11,450.0	21,211.8	12,085.5	156.5	157.8	-179.46	9,084.2	-27.4	635.5	487.3	148.26	4.287		
20,600.0	11,450.0	21,299.8	12,087.3	158.1	159.2	-179.48	9,172.2	-27.9	637.5	488.0	149.53	4.263		
20,700.0	11,450.0	21,409.9	12,089.2	159.7	160.9	-179.56	9,282.3	-27.9	639.2	488.0	151.27	4.226		
20,800.0	11,450.0	21,516.2	12,089.3	161.3	162.6	-179.72	9,388.6	-26.8	639.3	486.4	152.91	4.181		
20,900.0	11,450.0	21,619.3	12,088.9	162.9	164.3	-179.94	9,491.7	-25.2	638.9	484.4	154.48	4.136		
20,958.1	11,450.0	21,673.1	12,088.6	163.8	165.1	179.95	9,545.5	-24.4	638.6	483.3	155.28	4.113		
21,000.0	11,450.0	21,709.6	12,088.8	164.5	165.7	179.87	9,582.0	-23.9	638.8	483.0	155.82	4.100		
21,100.0	11,450.0	21,848.4	12,086.8	166.1	167.9	179.76	9,720.7	-23.7	637.7	479.8	157.95	4.037		
21,200.0	11,450.0	21,937.4	12,083.5	167.7	169.4	179.82	9,809.6	-25.1	633.9	474.5	159.35	3.978		
21,300.0	11,450.0	22,024.9	12,081.3	169.3	170.8	179.94	9,897.1	-27.1	631.4	470.7	160.70	3.929		
21,400.0	11,450.0	22,115.7	12,080.5	170.9	172.2	-179.86	9,987.8	-30.0	630.5	468.5	162.08	3.890		
21,404.7	11,450.0	22,119.9	12,080.5	171.0	172.3	-179.85	9,992.0	-30.2	630.5	468.4	162.14	3.889		
21,500.0	11,450.0	22,205.1	12,081.2	172.5	173.7	-179.61	10,077.2	-33.5	631.3	467.9	163.42	3.863		
21,600.0	11,450.0	22,302.8	12,083.0	174.2	175.2	-179.28	10,174.8	-38.0	633.1	468.2	164.95	3.838		
21,614.7	11,450.0	22,317.5	12,083.3	174.4	175.5	-179.22	10,189.4	-38.6	633.4	468.3	165.17	3.835		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 220-MWD, 3018-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.34	26.5	2,313.2	2,313.3					
100.0	100.0	90.3	90.3	0.1	0.1	89.34	26.5	2,313.4	2,313.5	2,313.3	0.27	8,537.075		
200.0	200.0	180.5	180.5	0.5	0.3	89.34	26.6	2,313.9	2,314.2	2,313.4	0.77	3,005.758		
300.0	300.0	272.4	272.4	0.8	0.5	89.34	26.8	2,314.9	2,315.2	2,313.8	1.38	1,680.018		
400.0	400.0	370.4	370.4	1.2	0.9	89.34	26.7	2,316.1	2,316.5	2,314.4	2.09	1,109.971		
500.0	500.0	481.8	481.8	1.6	1.3	89.35	26.4	2,317.4	2,317.6	2,314.7	2.84	815.188		
600.0	600.0	603.8	603.8	1.9	1.7	89.35	26.1	2,317.7	2,317.9	2,314.3	3.63	639.173		
700.0	700.0	717.1	717.0	2.3	2.1	89.37	25.5	2,317.2	2,317.4	2,313.0	4.37	530.134		
800.0	800.0	824.7	824.7	2.6	2.5	89.39	24.8	2,316.2	2,316.5	2,311.4	5.10	454.239		
900.0	900.0	922.3	922.3	3.0	2.8	89.40	24.1	2,315.2	2,315.4	2,309.6	5.80	399.470		
1,000.0	1,000.0	1,017.2	1,017.1	3.4	3.1	89.41	23.6	2,314.3	2,314.5	2,308.0	6.48	356.971		
1,100.0	1,100.0	1,344.8	1,344.1	3.7	4.3	-60.55	26.0	2,299.5	2,312.1	2,304.1	7.96	290.378		
1,200.0	1,200.0	1,441.8	1,440.6	4.0	4.6	-60.74	27.4	2,289.1	2,300.1	2,291.5	8.63	266.581		
1,300.0	1,299.9	1,535.8	1,534.1	4.4	5.0	-60.97	28.4	2,279.4	2,287.7	2,278.4	9.29	246.205		
1,400.0	1,399.7	1,629.9	1,627.7	4.7	5.3	-61.24	29.0	2,269.8	2,274.6	2,264.7	9.96	228.312		
1,500.0	1,499.4	1,714.4	1,711.7	5.0	5.6	-61.51	29.1	2,261.6	2,261.1	2,250.5	10.61	213.149		
1,600.0	1,598.9	1,802.8	1,799.8	5.4	6.0	-61.79	27.4	2,253.6	2,247.4	2,236.2	11.27	199.349		
1,700.0	1,698.3	1,892.6	1,889.2	5.8	6.3	-62.10	25.6	2,245.7	2,233.3	2,221.3	11.95	186.859		
1,800.0	1,797.4	1,978.8	1,975.2	6.1	6.6	-62.45	23.7	2,238.6	2,218.9	2,206.2	12.63	175.737		
1,900.0	1,896.4	2,085.2	2,081.2	6.5	7.0	-62.74	21.2	2,230.3	2,204.5	2,191.1	13.37	164.829		
2,000.0	1,995.5	2,194.9	2,190.4	6.9	7.4	-63.01	17.6	2,220.7	2,189.2	2,175.0	14.14	154.839		
2,100.0	2,094.5	2,287.5	2,282.6	7.3	7.8	-63.24	14.3	2,212.7	2,174.0	2,159.2	14.85	146.377		
2,200.0	2,193.5	2,373.9	2,368.6	7.7	8.1	-63.45	11.0	2,205.6	2,159.3	2,143.7	15.55	138.857		
2,300.0	2,292.5	2,456.7	2,451.1	8.1	8.4	-63.65	7.9	2,199.3	2,145.2	2,129.0	16.24	132.090		
2,400.0	2,391.6	2,540.0	2,534.2	8.5	8.7	-63.86	4.8	2,193.6	2,132.0	2,115.1	16.94	125.887		
2,500.0	2,490.6	2,664.4	2,658.3	8.9	9.2	-64.17	0.1	2,185.5	2,119.2	2,101.4	17.77	119.286		
2,600.0	2,589.6	2,766.9	2,760.3	9.3	9.6	-64.43	-3.8	2,177.1	2,104.6	2,086.1	18.53	113.594		
2,700.0	2,688.6	2,848.3	2,841.4	9.7	9.9	-64.63	-7.3	2,171.0	2,090.9	2,071.6	19.23	108.745		
2,729.0	2,717.4	2,871.9	2,864.9	9.8	10.0	-64.69	-8.5	2,169.4	2,087.0	2,067.6	19.43	107.413		
2,800.0	2,787.8	2,924.2	2,917.1	10.1	10.2	-64.67	-11.0	2,166.1	2,078.3	2,058.4	19.91	104.399		
2,900.0	2,887.2	3,063.4	3,055.8	10.5	10.5	-64.71	-18.1	2,157.5	2,067.3	2,046.8	20.55	100.621		
3,000.0	2,986.8	3,164.2	3,156.1	10.9	10.5	-64.58	-25.3	2,149.8	2,055.7	2,034.7	20.94	98.184		
3,100.0	3,086.7	3,265.2	3,256.4	11.2	10.6	-64.34	-34.2	2,142.1	2,045.0	2,023.6	21.33	95.856		
3,200.0	3,186.6	3,353.4	3,343.8	11.6	10.7	-64.05	-43.1	2,135.7	2,035.7	2,013.9	21.74	93.644		
3,262.3	3,249.0	3,409.9	3,399.9	11.8	10.7	85.95	-49.0	2,131.9	2,030.7	2,008.7	21.99	92.361		
3,300.0	3,286.6	3,444.4	3,434.2	11.9	10.7	86.05	-52.6	2,129.6	2,028.0	2,005.8	22.13	91.621		
3,400.0	3,386.6	3,525.5	3,514.6	12.2	10.8	86.28	-61.2	2,124.6	2,021.1	1,998.6	22.54	89.685		
3,500.0	3,486.6	3,626.2	3,614.7	12.6	10.9	86.55	-71.1	2,119.1	2,015.0	1,992.0	22.95	87.786		
3,600.0	3,586.6	3,739.4	3,727.4	12.9	11.1	86.78	-79.5	2,112.0	2,008.3	1,984.9	23.39	85.874		
3,700.0	3,686.6	3,856.8	3,844.3	13.2	11.2	86.93	-85.3	2,103.7	2,001.0	1,977.1	23.83	83.960		
3,800.0	3,786.6	4,050.1	4,036.4	13.5	11.5	87.24	-97.1	2,084.7	1,990.9	1,966.6	24.31	81.890		
3,900.0	3,886.6	4,153.4	4,138.5	13.9	11.7	87.44	-104.4	2,071.7	1,977.9	1,953.1	24.79	79.777		
4,000.0	3,986.6	4,225.9	4,210.5	14.2	11.9	87.54	-108.2	2,063.1	1,965.8	1,940.5	25.27	77.778		
4,100.0	4,086.6	4,294.7	4,278.8	14.6	12.0	87.59	-110.3	2,055.9	1,955.2	1,929.5	25.75	75.920		
4,200.0	4,186.6	4,382.0	4,365.7	14.9	12.2	87.63	-111.8	2,047.7	1,945.8	1,919.5	26.24	74.148		
4,300.0	4,286.6	4,526.7	4,509.6	15.2	12.5	87.67	-113.9	2,032.6	1,935.3	1,908.5	26.77	72.303		
4,400.0	4,386.6	4,616.2	4,598.5	15.6	12.7	87.70	-115.1	2,022.5	1,923.9	1,896.6	27.28	70.531		
4,500.0	4,486.6	4,698.9	4,680.8	15.9	12.9	87.71	-115.9	2,013.9	1,913.4	1,885.6	27.79	68.854		
4,600.0	4,586.6	4,802.5	4,783.8	16.2	13.1	87.73	-116.9	2,003.1	1,903.0	1,874.7	28.32	67.189		
4,700.0	4,686.6	4,889.3	4,870.2	16.6	13.3	87.77	-118.8	1,994.5	1,893.0	1,864.1	28.86	65.603		
4,800.0	4,786.6	4,983.9	4,964.3	16.9	13.6	87.84	-121.5	1,985.7	1,883.6	1,854.2	29.40	64.062		
4,900.0	4,886.6	5,101.7	5,081.4	17.3	13.9	87.95	-125.4	1,973.9	1,873.4	1,843.4	29.98	62.484		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 220-MWD, 3018-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.0	4,986.6	5,186.4	5,165.7	17.6	14.1	88.03	-128.3	1,965.4	1,863.2	1,832.7	30.54	61.017		
5,100.0	5,086.6	5,268.1	5,247.0	18.0	14.3	88.10	-130.8	1,958.1	1,854.3	1,823.2	31.09	59.639		
5,200.0	5,186.6	5,376.3	5,354.7	18.3	14.6	88.18	-133.8	1,948.7	1,845.4	1,813.8	31.68	58.250		
5,300.0	5,286.6	5,508.4	5,486.2	18.6	14.9	88.31	-138.2	1,935.8	1,835.7	1,803.4	32.30	56.824		
5,400.0	5,386.6	5,589.4	5,566.7	19.0	15.2	88.41	-141.6	1,927.3	1,825.1	1,792.2	32.88	55.502		
5,500.0	5,486.6	5,668.9	5,645.8	19.3	15.4	88.49	-144.2	1,920.1	1,815.9	1,782.4	33.46	54.273		
5,600.0	5,586.6	5,754.2	5,730.7	19.7	15.6	88.53	-145.8	1,913.0	1,807.5	1,773.4	34.04	53.103		
5,700.0	5,686.6	5,843.9	5,820.2	20.0	15.9	88.56	-146.8	1,906.2	1,799.9	1,765.3	34.62	51.984		
5,800.0	5,786.6	5,944.3	5,920.3	20.4	16.2	88.59	-148.0	1,898.7	1,792.4	1,757.2	35.23	50.879		
5,900.0	5,886.6	6,043.3	6,019.1	20.7	16.5	88.61	-148.9	1,891.4	1,785.0	1,749.1	35.84	49.807		
6,000.0	5,986.6	6,141.2	6,116.7	21.1	16.7	88.65	-150.2	1,884.2	1,777.6	1,741.2	36.45	48.770		
6,100.0	6,086.6	6,240.1	6,215.3	21.4	17.0	88.67	-151.1	1,877.0	1,770.3	1,733.3	37.07	47.763		
6,200.0	6,186.6	6,342.7	6,317.5	21.8	17.3	88.71	-152.3	1,869.5	1,763.0	1,725.3	37.69	46.775		
6,300.0	6,286.6	6,438.4	6,413.0	22.1	17.6	88.74	-153.5	1,862.5	1,755.6	1,717.3	38.31	45.826		
6,400.0	6,386.6	6,537.1	6,511.5	22.5	17.9	88.76	-154.2	1,855.5	1,748.5	1,709.6	38.94	44.906		
6,500.0	6,486.6	6,639.9	6,614.0	22.8	18.2	88.78	-155.1	1,848.1	1,741.3	1,701.7	39.57	44.001		
6,600.0	6,586.6	6,733.2	6,707.0	23.2	18.5	88.81	-156.1	1,841.4	1,734.1	1,693.9	40.20	43.140		
6,700.0	6,686.6	6,838.5	6,812.0	23.5	18.8	88.84	-157.1	1,834.0	1,727.1	1,686.3	40.85	42.283		
6,800.0	6,786.6	6,936.3	6,909.6	23.9	19.1	88.86	-157.9	1,827.0	1,719.9	1,678.4	41.48	41.460		
6,900.0	6,886.6	7,024.4	6,997.6	24.2	19.4	88.88	-158.5	1,821.0	1,713.1	1,671.0	42.10	40.686		
7,000.0	6,986.6	7,113.4	7,086.4	24.6	19.7	88.90	-159.2	1,815.5	1,706.9	1,664.2	42.73	39.948		
7,100.0	7,086.6	7,260.7	7,233.2	24.9	20.1	88.92	-160.1	1,805.0	1,699.8	1,656.3	43.46	39.110		
7,200.0	7,186.6	7,369.4	7,341.5	25.3	20.5	88.90	-159.9	1,795.0	1,690.6	1,646.4	44.12	38.315		
7,300.0	7,286.6	7,469.7	7,441.4	25.6	20.8	88.89	-159.7	1,785.9	1,681.5	1,636.7	44.77	37.555		
7,400.0	7,386.6	7,563.2	7,534.5	26.0	21.1	88.86	-159.0	1,777.3	1,672.3	1,626.9	45.42	36.821		
7,500.0	7,486.6	7,655.2	7,626.2	26.3	21.4	88.83	-158.3	1,769.4	1,663.8	1,617.7	46.06	36.121		
7,600.0	7,586.6	7,753.7	7,724.3	26.7	21.7	88.81	-157.7	1,761.2	1,655.5	1,608.7	46.72	35.437		
7,700.0	7,686.6	7,846.1	7,816.4	27.0	22.0	88.79	-157.5	1,753.7	1,647.3	1,599.9	47.36	34.780		
7,800.0	7,786.6	7,944.6	7,914.6	27.4	22.4	88.78	-157.1	1,746.0	1,639.6	1,591.5	48.02	34.142		
7,900.0	7,886.6	8,042.0	8,011.7	27.7	22.7	88.76	-156.7	1,738.4	1,631.8	1,583.1	48.68	33.520		
8,000.0	7,986.6	8,147.4	8,116.8	28.1	23.0	88.75	-156.8	1,730.2	1,624.0	1,574.7	49.35	32.905		
8,100.0	8,086.6	8,243.0	8,212.0	28.4	23.4	88.75	-156.8	1,722.7	1,616.1	1,566.1	50.01	32.312		
8,200.0	8,186.6	8,343.9	8,312.7	28.8	23.7	88.74	-156.9	1,714.8	1,608.3	1,557.6	50.69	31.731		
8,300.0	8,286.6	8,437.8	8,406.3	29.1	24.0	88.75	-157.1	1,707.6	1,600.6	1,549.3	51.35	31.174		
8,400.0	8,386.6	8,537.8	8,506.0	29.5	24.4	88.76	-157.6	1,700.2	1,593.2	1,541.1	52.02	30.626		
8,500.0	8,486.6	8,642.4	8,610.3	29.8	24.7	88.79	-158.5	1,692.2	1,585.5	1,532.8	52.70	30.084		
8,600.0	8,586.6	8,738.4	8,706.0	30.2	25.0	88.81	-159.3	1,684.8	1,577.8	1,524.5	53.37	29.562		
8,700.0	8,686.6	8,828.7	8,796.1	30.6	25.3	88.83	-160.2	1,678.2	1,570.5	1,516.5	54.03	29.066		
8,800.0	8,786.6	8,912.0	8,879.2	30.9	25.6	88.86	-160.8	1,672.9	1,564.1	1,509.4	54.68	28.606		
8,900.0	8,886.6	9,036.4	9,003.3	31.3	26.0	88.88	-161.8	1,664.3	1,557.2	1,501.8	55.41	28.105		
9,000.0	8,986.6	9,128.3	9,095.0	31.6	26.4	88.92	-162.9	1,657.6	1,549.8	1,493.8	56.07	27.639		
9,100.0	9,086.6	9,234.0	9,200.4	32.0	26.7	88.98	-164.6	1,650.6	1,543.2	1,486.5	56.77	27.185		
9,200.0	9,186.6	9,347.9	9,313.9	32.3	27.1	89.03	-166.1	1,641.0	1,534.7	1,477.2	57.48	26.701		
9,300.0	9,286.6	9,429.5	9,395.2	32.7	27.4	89.07	-167.3	1,634.7	1,526.9	1,468.8	58.13	26.267		
9,400.0	9,386.6	9,558.3	9,523.6	33.0	27.9	89.13	-169.0	1,625.3	1,519.8	1,460.9	58.86	25.820		
9,500.0	9,486.6	9,651.0	9,616.0	33.4	28.2	89.12	-169.0	1,616.9	1,510.8	1,451.2	59.54	25.375		
9,600.0	9,586.6	9,731.0	9,695.7	33.7	28.5	89.11	-168.7	1,610.5	1,502.8	1,442.6	60.19	24.967		
9,700.0	9,686.6	9,852.5	9,816.9	34.1	28.9	89.12	-169.1	1,601.4	1,495.4	1,434.5	60.91	24.551		
9,800.0	9,786.6	9,968.0	9,931.9	34.5	29.3	89.16	-170.3	1,590.5	1,485.9	1,424.3	61.62	24.116		
9,900.0	9,886.6	10,055.6	10,019.1	34.8	29.6	89.21	-171.7	1,582.3	1,476.6	1,414.3	62.30	23.702		
10,000.0	9,986.6	10,144.0	10,107.2	35.2	30.0	89.26	-173.1	1,574.7	1,468.0	1,405.0	62.98	23.310		
10,100.0	10,086.6	10,224.8	10,187.8	35.5	30.2	89.30	-174.4	1,568.6	1,460.4	1,396.8	63.64	22.948		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 220-MWD, 3018-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,200.0	10,186.6	10,305.2	10,267.9	35.9	30.5	89.36	-175.8	1,563.6	1,454.1	1,389.8	64.29	22.617		
10,300.0	10,286.6	10,438.0	10,400.4	36.2	31.0	89.46	-178.4	1,555.0	1,447.7	1,382.6	65.05	22.255		
10,400.0	10,386.6	10,526.8	10,488.9	36.6	31.3	89.52	-179.9	1,548.4	1,440.2	1,374.5	65.73	21.912		
10,500.0	10,486.6	10,616.9	10,578.8	36.9	31.6	89.57	-181.4	1,542.3	1,433.5	1,367.1	66.41	21.587		
10,600.0	10,586.6	10,738.7	10,700.3	37.3	32.1	89.66	-183.7	1,533.2	1,425.9	1,358.8	67.14	21.238		
10,700.0	10,686.6	10,832.5	10,793.7	37.6	32.4	89.76	-186.2	1,526.0	1,418.2	1,350.4	67.83	20.908		
10,800.0	10,786.6	10,929.0	10,890.0	38.0	32.7	89.88	-189.2	1,518.8	1,410.7	1,342.2	68.53	20.586		
10,890.4	10,877.0	11,005.1	10,965.9	38.3	33.0	89.97	-191.4	1,513.4	1,404.4	1,335.3	69.14	20.313		
10,900.0	10,886.6	11,011.3	10,972.0	38.4	33.0	95.44	-191.5	1,513.0	1,403.8	1,334.6	69.20	20.287		
10,950.0	10,936.5	11,043.2	11,003.8	38.5	33.1	95.79	-192.2	1,511.3	1,401.4	1,331.9	69.50	20.163		
11,000.0	10,986.0	11,083.0	11,043.6	38.7	33.3	96.19	-192.7	1,509.7	1,400.1	1,330.3	69.82	20.053		
11,046.3	11,031.0	11,113.2	11,073.8	38.8	33.4	96.54	-193.0	1,508.7	1,399.7	1,329.6	70.09	19.972 CC		
11,050.0	11,034.6	11,116.6	11,077.2	38.9	33.4	96.58	-193.0	1,508.6	1,399.7	1,329.6	70.11	19.965		
11,100.0	11,082.0	11,160.9	11,121.5	39.0	33.5	97.12	-193.5	1,507.3	1,400.2	1,329.7	70.43	19.881		
11,150.0	11,127.8	11,205.4	11,165.9	39.2	33.7	97.73	-194.1	1,506.1	1,401.5	1,330.7	70.74	19.810		
11,200.0	11,171.8	11,248.8	11,209.3	39.3	33.8	98.37	-194.6	1,504.9	1,403.7	1,332.7	71.06	19.755		
11,250.0	11,213.5	11,287.4	11,247.9	39.4	34.0	98.91	-195.1	1,503.8	1,407.2	1,335.8	71.35	19.721		
11,300.0	11,252.6	11,320.4	11,280.9	39.5	34.1	99.27	-195.7	1,503.1	1,412.0	1,340.4	71.63	19.713		
11,350.0	11,288.9	11,350.7	11,311.2	39.7	34.2	99.49	-196.3	1,502.4	1,418.4	1,346.6	71.89	19.730		
11,400.0	11,322.0	11,377.2	11,337.7	39.8	34.3	99.48	-196.9	1,502.0	1,426.6	1,354.5	72.15	19.774		
11,450.0	11,351.8	11,399.6	11,360.1	39.9	34.3	99.21	-197.4	1,501.7	1,436.7	1,364.3	72.39	19.847		
11,500.0	11,377.9	11,419.2	11,379.6	40.0	34.4	98.67	-197.8	1,501.6	1,448.7	1,376.1	72.62	19.949		
11,550.0	11,400.3	11,437.9	11,398.4	40.1	34.4	97.92	-198.3	1,501.5	1,462.7	1,389.8	72.86	20.076		
11,600.0	11,418.6	11,453.4	11,413.9	40.3	34.5	96.86	-198.7	1,501.4	1,478.5	1,405.5	73.08	20.232		
11,650.0	11,432.8	11,465.2	11,425.6	40.4	34.5	95.44	-199.0	1,501.4	1,496.2	1,422.9	73.29	20.415		
11,700.0	11,442.8	11,473.0	11,433.5	40.5	34.6	93.65	-199.2	1,501.3	1,515.7	1,442.2	73.49	20.624		
11,750.0	11,448.5	11,477.0	11,437.5	40.7	34.6	91.50	-199.3	1,501.3	1,536.7	1,463.1	73.67	20.859		
11,790.4	11,450.0	11,477.4	11,437.8	40.8	34.6	89.50	-199.3	1,501.3	1,554.8	1,481.0	73.81	21.066		
11,800.0	11,450.0	11,477.1	11,437.6	40.8	34.6	89.49	-199.3	1,501.3	1,559.2	1,485.3	73.84	21.117		
11,900.0	11,450.0	11,900.0	12,096.0	41.1	35.7	114.24	460.7	1,488.5	1,577.4	1,508.0	69.41	22.727		
12,000.0	11,450.0	12,728.3	12,106.2	41.5	37.4	114.60	661.2	1,477.7	1,576.8	1,503.5	73.29	21.515		
12,037.8	11,450.0	12,766.3	12,106.2	41.7	37.6	114.64	699.2	1,475.7	1,575.5	1,501.9	73.64	21.396		
12,100.0	11,450.0	12,832.4	12,106.5	41.9	38.0	114.70	765.2	1,472.1	1,573.0	1,498.7	74.26	21.180		
12,200.0	11,450.0	12,931.2	12,107.8	42.4	38.6	114.82	863.8	1,466.1	1,568.8	1,493.5	75.30	20.833		
12,300.0	11,450.0	13,029.1	12,109.2	43.0	39.3	114.94	961.5	1,460.3	1,564.7	1,488.2	76.43	20.471		
12,400.0	11,450.0	13,114.6	12,109.5	43.6	40.0	115.00	1,046.9	1,456.2	1,561.1	1,483.6	77.56	20.127		
12,500.0	11,450.0	13,245.2	12,110.2	44.3	41.1	115.12	1,177.3	1,449.1	1,557.2	1,477.9	79.25	19.649		
12,600.0	11,450.0	13,364.6	12,109.3	45.0	42.1	115.21	1,296.4	1,440.9	1,551.3	1,470.4	80.95	19.164		
12,700.0	11,450.0	13,484.3	12,109.6	45.8	43.3	115.36	1,415.7	1,430.8	1,544.5	1,461.8	82.73	18.670		
12,800.0	11,450.0	13,550.2	12,109.6	46.6	43.9	115.44	1,481.3	1,425.3	1,537.8	1,453.8	83.95	18.318		
12,900.0	11,450.0	13,611.1	12,110.6	47.4	44.5	115.53	1,542.2	1,421.6	1,533.7	1,448.6	85.14	18.015		
13,000.0	11,450.0	13,688.0	12,111.7	48.3	45.3	115.60	1,619.0	1,419.0	1,531.9	1,445.3	86.59	17.693		
13,100.0	11,450.0	13,798.2	12,110.8	49.3	46.5	115.58	1,729.1	1,417.0	1,530.7	1,442.1	88.60	17.277		
13,200.0	11,450.0	13,910.5	12,109.6	50.3	47.7	115.59	1,841.4	1,413.2	1,527.9	1,437.1	90.71	16.843		
13,300.0	11,450.0	14,010.2	12,109.3	51.3	48.8	115.62	1,941.0	1,410.0	1,525.5	1,432.8	92.69	16.458		
13,400.0	11,450.0	14,101.3	12,110.4	52.3	49.9	115.72	2,032.0	1,405.4	1,522.3	1,427.7	94.55	16.100		
13,473.5	11,450.0	14,143.3	12,111.5	53.1	50.3	115.77	2,074.0	1,404.0	1,521.4	1,425.9	95.56	15.921		
13,500.0	11,450.0	14,160.0	12,112.0	53.4	50.5	115.79	2,090.6	1,403.7	1,521.5	1,425.5	95.95	15.858		
13,600.0	11,450.0	14,252.6	12,114.6	54.5	51.6	115.89	2,183.2	1,402.5	1,522.3	1,424.4	97.90	15.549		
13,700.0	11,450.0	14,332.5	12,115.0	55.6	52.6	115.88	2,263.1	1,403.2	1,524.0	1,424.2	99.74	15.280		
13,800.0	11,450.0	14,452.9	12,110.9	56.8	54.0	115.67	2,383.3	1,406.8	1,525.9	1,423.5	102.43	14.897		
13,900.0	11,450.0	14,583.1	12,109.1	58.0	55.7	115.60	2,513.5	1,405.9	1,525.3	1,420.0	105.27	14.489		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 220-MWD, 3018-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,000.0	11,450.0	14,691.5	12,108.6	59.2	57.0	115.60	2,621.9	1,404.0	1,524.3	1,416.5	107.73	14.149		
14,100.0	11,450.0	14,779.4	12,109.5	60.4	58.2	115.67	2,709.8	1,401.4	1,522.8	1,413.0	109.84	13.865		
14,148.0	11,450.0	14,816.0	12,110.2	61.0	58.7	115.70	2,746.3	1,400.7	1,522.6	1,411.9	110.75	13.748		
14,200.0	11,450.0	14,843.4	12,110.8	61.7	59.0	115.72	2,773.7	1,400.4	1,523.1	1,411.6	111.52	13.657		
14,300.0	11,450.0	14,911.0	12,112.8	62.9	59.9	115.76	2,841.3	1,401.6	1,526.3	1,413.1	113.27	13.476		
14,400.0	11,450.0	14,971.9	12,113.4	64.2	60.7	115.72	2,902.1	1,404.8	1,531.9	1,417.0	114.91	13.331		
14,500.0	11,450.0	15,075.9	12,109.1	65.5	62.0	115.42	3,005.6	1,413.5	1,538.3	1,420.7	117.63	13.077		
14,600.0	11,450.0	15,168.9	12,103.4	66.8	63.3	115.09	3,098.1	1,421.6	1,544.4	1,424.3	120.17	12.852		
14,700.0	11,450.0	15,349.9	12,084.4	68.2	65.7	114.18	3,277.4	1,437.4	1,549.0	1,424.0	124.96	12.396		
14,800.0	11,450.0	15,484.6	12,081.1	69.5	67.5	114.05	3,411.9	1,437.9	1,549.0	1,420.7	128.28	12.075		
14,893.6	11,450.0	15,565.1	12,084.0	70.8	68.7	114.17	3,492.3	1,435.6	1,548.6	1,418.2	130.38	11.878		
14,900.0	11,450.0	15,570.6	12,084.3	70.9	68.7	114.18	3,497.9	1,435.4	1,548.6	1,418.1	130.52	11.865		
15,000.0	11,450.0	15,655.3	12,089.0	72.2	70.0	114.36	3,582.4	1,433.2	1,549.2	1,416.5	132.70	11.674		
15,100.0	11,450.0	15,785.1	12,093.2	73.6	71.8	114.53	3,712.0	1,430.6	1,549.5	1,413.7	135.79	11.411		
15,200.0	11,450.0	15,921.1	12,097.0	75.0	73.8	114.73	3,847.8	1,424.7	1,547.4	1,408.4	138.96	11.135		
15,300.0	11,450.0	16,047.9	12,102.0	76.4	75.7	115.02	3,974.2	1,415.7	1,543.3	1,401.4	141.87	10.878		
15,400.0	11,450.0	16,118.3	12,105.0	77.8	76.7	115.20	4,044.4	1,410.7	1,539.4	1,395.5	143.90	10.697		
15,500.0	11,450.0	16,228.2	12,109.2	79.3	78.3	115.43	4,154.0	1,404.2	1,536.4	1,389.9	146.59	10.481		
15,600.0	11,450.0	16,309.7	12,110.7	80.7	79.6	115.53	4,235.4	1,400.1	1,533.4	1,384.5	148.87	10.300		
15,700.0	11,450.0	16,427.3	12,113.8	82.1	81.3	115.72	4,352.8	1,394.1	1,530.7	1,378.9	151.75	10.087		
15,800.0	11,450.0	16,493.7	12,115.9	83.6	82.3	115.84	4,419.1	1,390.8	1,528.3	1,374.5	153.74	9.941		
15,900.0	11,450.0	16,605.0	12,115.8	85.0	84.0	115.86	4,530.3	1,388.4	1,527.0	1,370.4	156.67	9.747		
16,000.0	11,450.0	16,680.1	12,112.3	86.5	85.1	115.73	4,605.3	1,388.3	1,525.7	1,366.6	159.04	9.593		
16,025.3	11,450.0	16,698.5	12,111.9	86.9	85.4	115.72	4,623.7	1,388.3	1,525.6	1,366.0	159.61	9.558		
16,100.0	11,450.0	16,754.0	12,111.9	88.0	86.2	115.71	4,679.2	1,388.3	1,526.1	1,364.8	161.27	9.463		
16,200.0	11,450.0	16,842.2	12,114.8	89.4	87.5	115.80	4,767.3	1,388.1	1,528.0	1,364.3	163.68	9.336		
16,300.0	11,450.0	16,932.3	12,120.0	90.9	88.9	115.98	4,857.3	1,386.9	1,530.0	1,364.0	166.04	9.215		
16,400.0	11,450.0	17,020.8	12,123.7	92.4	90.2	116.08	4,945.7	1,387.9	1,533.6	1,365.1	168.44	9.104		
16,500.0	11,450.0	17,186.5	12,126.0	93.9	92.7	116.13	5,111.4	1,387.9	1,534.9	1,362.3	172.62	8.891		
16,600.0	11,450.0	17,285.6	12,126.3	95.4	94.2	116.16	5,210.5	1,386.3	1,534.3	1,358.9	175.38	8.748		
16,700.0	11,450.0	17,403.0	12,125.3	96.9	96.0	116.15	5,327.8	1,383.8	1,532.6	1,354.1	178.54	8.584		
16,800.0	11,450.0	17,500.7	12,125.7	98.4	97.5	116.20	5,425.5	1,380.9	1,530.8	1,349.6	181.26	8.445		
16,900.0	11,450.0	17,589.3	12,127.0	100.0	98.9	116.28	5,514.0	1,377.9	1,529.2	1,345.4	183.76	8.322		
16,958.6	11,450.0	17,632.2	12,128.0	100.8	99.6	116.32	5,556.8	1,376.8	1,528.9	1,343.9	185.04	8.262		
17,000.0	11,450.0	17,666.7	12,128.7	101.5	100.1	116.35	5,591.4	1,376.3	1,529.0	1,343.0	186.03	8.219		
17,100.0	11,450.0	17,776.2	12,126.0	103.0	101.8	116.23	5,700.8	1,377.2	1,529.4	1,340.2	189.20	8.083		
17,200.0	11,450.0	17,886.0	12,123.7	104.5	103.5	116.15	5,810.6	1,376.4	1,528.4	1,336.1	192.34	7.947		
17,300.0	11,450.0	17,985.4	12,122.8	106.1	105.0	116.13	5,910.0	1,375.5	1,528.0	1,332.8	195.20	7.827		
17,400.0	11,450.0	18,074.7	12,122.0	107.6	106.4	116.11	5,999.2	1,374.3	1,527.2	1,329.3	197.85	7.719		
17,403.4	11,450.0	18,077.1	12,122.0	107.7	106.5	116.11	6,001.7	1,374.3	1,527.2	1,329.2	197.93	7.716		
17,500.0	11,450.0	18,166.7	12,120.3	109.1	107.8	116.02	6,091.2	1,375.2	1,527.8	1,327.2	200.64	7.615		
17,600.0	11,450.0	18,281.6	12,119.8	110.7	109.6	116.01	6,206.2	1,374.2	1,527.6	1,323.7	203.85	7.494		
17,700.0	11,450.0	18,394.2	12,119.2	112.2	111.4	116.00	6,318.7	1,372.5	1,526.7	1,319.7	206.99	7.376		
17,800.0	11,450.0	18,510.0	12,120.4	113.8	113.2	116.09	6,434.4	1,368.7	1,524.9	1,314.8	210.07	7.259		
17,900.0	11,450.0	18,604.0	12,121.2	115.3	114.7	116.16	6,528.3	1,365.2	1,522.6	1,309.9	212.75	7.157		
17,994.6	11,450.0	18,668.5	12,121.7	116.8	115.7	116.20	6,592.8	1,363.7	1,521.7	1,306.9	214.81	7.084		
18,000.0	11,450.0	18,672.1	12,121.8	116.9	115.8	116.20	6,596.5	1,363.6	1,521.7	1,306.7	214.92	7.080		
18,100.0	11,450.0	18,750.3	12,121.5	118.4	117.0	116.18	6,674.6	1,363.9	1,522.6	1,305.2	217.34	7.006		
18,200.0	11,450.0	18,838.7	12,116.7	120.0	118.4	115.94	6,762.9	1,367.6	1,524.6	1,304.4	220.25	6.922		
18,300.0	11,450.0	18,921.1	12,115.1	121.6	119.7	115.83	6,845.1	1,370.2	1,527.4	1,304.5	222.83	6.854		
18,400.0	11,450.0	19,001.3	12,116.5	123.1	120.9	115.83	6,925.3	1,372.7	1,531.6	1,306.4	225.20	6.801		
18,500.0	11,450.0	19,190.9	12,115.8	124.7	123.9	115.71	7,114.8	1,377.3	1,535.1	1,304.6	230.44	6.661		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 220-MWD, 3018-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
18,600.0	11,450.0	19,347.6	12,108.7	126.3	126.4	115.49	7,271.3	1,374.6	1,532.3	1,297.6	234.69	6.529		
18,700.0	11,450.0	19,427.4	12,104.9	127.8	127.6	115.39	7,351.0	1,372.1	1,528.2	1,290.8	237.43	6.436		
18,800.0	11,450.0	19,520.1	12,102.9	129.4	129.1	115.36	7,443.6	1,369.1	1,525.1	1,284.8	240.28	6.347		
18,900.0	11,450.0	19,615.3	12,101.0	131.0	130.6	115.33	7,538.7	1,366.3	1,522.2	1,279.1	243.17	6.260		
19,000.0	11,450.0	19,690.2	12,100.2	132.6	131.8	115.32	7,613.6	1,364.4	1,520.3	1,274.7	245.63	6.189		
19,053.2	11,450.0	19,728.0	12,100.7	133.4	132.4	115.35	7,651.4	1,363.7	1,520.0	1,273.2	246.83	6.158		
19,100.0	11,450.0	19,769.4	12,101.7	134.2	133.1	115.39	7,692.8	1,363.0	1,520.1	1,272.1	248.03	6.129		
19,200.0	11,450.0	19,867.7	12,104.4	135.7	134.6	115.49	7,791.0	1,361.5	1,520.7	1,269.9	250.77	6.064		
19,300.0	11,450.0	19,991.3	12,106.9	137.3	136.6	115.60	7,914.5	1,359.2	1,520.6	1,266.5	254.08	5.985		
19,400.0	11,450.0	20,090.6	12,107.4	138.9	138.2	115.64	8,013.8	1,356.8	1,519.4	1,262.4	256.94	5.913		
19,500.0	11,450.0	20,215.1	12,105.8	140.5	140.2	115.61	8,138.3	1,354.2	1,517.7	1,257.3	260.42	5.828		
19,600.0	11,450.0	20,277.6	12,104.7	142.1	141.2	115.57	8,200.8	1,353.6	1,516.6	1,253.9	262.67	5.774		
19,700.0	11,450.0	20,381.2	12,101.9	143.7	142.8	115.46	8,304.4	1,354.0	1,516.5	1,250.6	265.88	5.704		
19,800.0	11,450.0	20,478.8	12,099.1	145.3	144.4	115.35	8,401.9	1,354.2	1,516.2	1,247.2	268.96	5.637		
19,900.0	11,450.0	20,595.8	12,096.2	146.9	146.3	115.24	8,518.9	1,353.5	1,515.2	1,242.8	272.45	5.562		
20,000.0	11,450.0	20,687.6	12,093.1	148.5	147.7	115.14	8,610.6	1,353.0	1,514.0	1,238.6	275.42	5.497		
20,045.4	11,450.0	20,720.5	12,092.1	149.2	148.3	115.10	8,643.5	1,353.1	1,513.8	1,237.3	276.56	5.474		
20,100.0	11,450.0	20,760.2	12,090.9	150.1	148.9	115.04	8,683.1	1,353.5	1,514.1	1,236.2	277.91	5.448		
20,200.0	11,450.0	20,837.1	12,089.9	151.7	150.1	114.98	8,760.1	1,354.9	1,515.9	1,235.5	280.40	5.406		
20,300.0	11,450.0	20,938.6	12,090.9	153.3	151.7	114.97	8,861.6	1,356.7	1,518.6	1,235.2	283.43	5.358		
20,400.0	11,450.0	21,055.9	12,090.4	154.9	153.6	114.91	8,978.8	1,358.4	1,520.5	1,233.5	286.94	5.299		
20,500.0	11,450.0	21,146.6	12,090.7	156.5	155.1	114.90	9,069.5	1,359.2	1,522.1	1,232.4	289.71	5.254		
20,600.0	11,450.0	21,257.5	12,092.4	158.1	156.8	114.94	9,180.4	1,359.4	1,523.7	1,230.8	292.89	5.202		
20,700.0	11,450.0	21,381.1	12,092.1	159.7	158.8	114.91	9,304.0	1,359.2	1,524.1	1,227.7	296.46	5.141		
20,800.0	11,450.0	21,496.3	12,089.3	161.3	160.7	114.82	9,419.1	1,358.3	1,523.1	1,223.1	299.94	5.078		
20,900.0	11,450.0	21,592.4	12,086.4	162.9	162.2	114.72	9,515.2	1,357.5	1,521.7	1,218.7	303.02	5.022		
21,000.0	11,450.0	21,707.6	12,086.1	164.5	164.1	114.74	9,630.4	1,354.9	1,520.3	1,214.0	306.29	4.964		
21,100.0	11,450.0	21,820.8	12,084.4	166.1	165.9	114.72	9,743.5	1,351.5	1,517.7	1,208.1	309.56	4.903		
21,200.0	11,450.0	21,919.8	12,083.2	167.7	167.5	114.72	9,842.4	1,348.1	1,514.8	1,202.3	312.54	4.847		
21,300.0	11,450.0	22,035.4	12,081.0	169.3	169.4	114.70	9,958.0	1,343.9	1,511.4	1,195.6	315.85	4.785		
21,400.0	11,450.0	22,150.9	12,076.9	170.9	171.3	114.61	10,073.3	1,339.1	1,506.9	1,187.7	319.23	4.720		
21,500.0	11,450.0	22,255.3	12,072.3	172.5	173.0	114.52	10,177.5	1,334.4	1,501.7	1,179.2	322.48	4.657		
21,600.0	11,450.0	22,292.0	12,070.4	174.2	173.6	114.47	10,214.1	1,332.9	1,497.7	1,173.2	324.52	4.615		
21,614.7	11,450.0	22,292.0	12,070.4	174.4	173.6	114.47	10,214.1	1,332.9	1,497.6	1,173.0	324.61	4.614 ES, SF		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 220-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.34	26.5	2,313.2	2,313.3					
100.0	100.0	90.3	90.3	0.1	0.1	89.34	26.5	2,313.4	2,313.5	2,313.3	0.27	8,537.066		
200.0	200.0	180.5	180.5	0.5	0.3	89.34	26.6	2,313.9	2,314.2	2,313.4	0.77	3,005.756		
300.0	300.0	272.4	272.4	0.8	0.5	89.34	26.8	2,314.9	2,315.2	2,313.8	1.38	1,680.018		
400.0	400.0	370.4	370.4	1.2	0.9	89.34	26.7	2,316.1	2,316.5	2,314.4	2.09	1,109.972		
500.0	500.0	481.8	481.8	1.6	1.3	89.35	26.4	2,317.4	2,317.6	2,314.7	2.84	815.188		
600.0	600.0	603.8	603.8	1.9	1.7	89.35	26.1	2,317.7	2,317.9	2,314.3	3.63	639.174		
700.0	700.0	717.1	717.0	2.3	2.1	89.37	25.5	2,317.2	2,317.4	2,313.0	4.37	530.135		
800.0	800.0	824.7	824.7	2.6	2.5	89.39	24.8	2,316.2	2,316.5	2,311.4	5.10	454.239		
900.0	900.0	922.3	922.3	3.0	2.8	89.40	24.1	2,315.2	2,315.4	2,309.6	5.80	399.471		
1,000.0	1,000.0	1,017.2	1,017.1	3.4	3.1	89.41	23.6	2,314.3	2,314.5	2,308.0	6.48	356.971		
1,100.0	1,100.0	1,344.8	1,344.1	3.7	4.3	-60.55	26.0	2,299.5	2,312.1	2,304.1	7.96	290.378		
1,200.0	1,200.0	1,441.8	1,440.6	4.0	4.6	-60.74	27.4	2,289.1	2,300.1	2,291.5	8.63	266.581		
1,300.0	1,299.9	1,535.8	1,534.1	4.4	5.0	-60.97	28.4	2,279.4	2,287.7	2,278.4	9.29	246.204		
1,400.0	1,399.7	1,629.9	1,627.7	4.7	5.3	-61.24	29.0	2,269.8	2,274.6	2,264.7	9.96	228.311		
1,500.0	1,499.4	1,714.4	1,711.7	5.0	5.6	-61.51	29.1	2,261.6	2,261.1	2,250.5	10.61	213.148		
1,600.0	1,598.9	1,802.8	1,799.8	5.4	6.0	-61.79	27.4	2,253.6	2,247.4	2,236.2	11.27	199.348		
1,700.0	1,698.3	1,892.6	1,889.2	5.8	6.3	-62.10	25.6	2,245.7	2,233.3	2,221.3	11.95	186.858		
1,800.0	1,797.4	1,978.8	1,975.2	6.1	6.6	-62.45	23.7	2,238.6	2,218.9	2,206.2	12.63	175.737		
1,900.0	1,896.4	2,085.2	2,081.2	6.5	7.0	-62.74	21.2	2,230.3	2,204.5	2,191.1	13.37	164.829		
2,000.0	1,995.5	2,194.9	2,190.4	6.9	7.4	-63.01	17.6	2,220.7	2,189.2	2,175.0	14.14	154.839		
2,100.0	2,094.5	2,287.5	2,282.6	7.3	7.8	-63.24	14.3	2,212.7	2,174.0	2,159.2	14.85	146.377		
2,200.0	2,193.5	2,373.9	2,368.6	7.7	8.1	-63.45	11.0	2,205.6	2,159.3	2,143.7	15.55	138.857		
2,300.0	2,292.5	2,456.7	2,451.1	8.1	8.4	-63.65	7.9	2,199.3	2,145.2	2,129.0	16.24	132.090		
2,400.0	2,391.6	2,540.0	2,534.2	8.5	8.7	-63.86	4.8	2,193.6	2,132.0	2,115.1	16.94	125.886		
2,500.0	2,490.6	2,664.4	2,658.3	8.9	9.2	-64.17	0.1	2,185.5	2,119.2	2,101.4	17.77	119.286		
2,600.0	2,589.6	2,766.9	2,760.3	9.3	9.6	-64.43	-3.8	2,177.1	2,104.6	2,086.1	18.53	113.593		
2,700.0	2,688.6	2,848.3	2,841.4	9.7	9.9	-64.63	-7.3	2,171.0	2,090.9	2,071.6	19.23	108.745		
2,729.0	2,717.4	2,871.9	2,864.9	9.8	10.0	-64.69	-8.5	2,169.4	2,087.0	2,067.6	19.43	107.412		
2,800.0	2,787.8	2,924.2	2,917.1	10.1	10.2	-64.67	-11.0	2,166.1	2,078.3	2,058.4	19.91	104.398		
2,900.0	2,887.2	3,001.2	2,993.8	10.5	10.5	-64.65	-14.7	2,162.1	2,068.1	2,047.5	20.58	100.488		
3,000.0	2,986.8	3,110.9	3,103.4	10.9	10.9	-64.68	-17.7	2,156.6	2,059.4	2,038.0	21.35	96.473		
3,100.0	3,086.7	3,216.6	3,208.9	11.2	11.3	-64.70	-19.1	2,150.2	2,050.8	2,028.7	22.09	92.845		
3,200.0	3,186.6	3,300.7	3,292.8	11.6	11.6	-64.67	-19.5	2,145.6	2,044.0	2,021.3	22.75	89.853		
3,262.3	3,249.0	3,366.1	3,358.1	11.8	11.8	85.12	-18.8	2,142.2	2,040.6	2,017.4	23.19	87.998		
3,300.0	3,286.6	3,300.0	3,420.2	11.9	11.6	85.06	-17.1	2,137.8	2,037.9	2,014.8	23.07	88.352		
3,400.0	3,386.6	3,570.3	3,561.6	12.2	12.6	84.88	-11.5	2,126.2	2,029.9	2,005.6	24.32	83.469		
3,500.0	3,486.6	3,698.9	3,689.5	12.6	13.0	84.76	-8.6	2,113.2	2,020.0	1,994.9	25.08	80.535		
3,600.0	3,586.6	3,779.6	3,769.8	12.9	13.4	84.77	-9.4	2,105.4	2,010.3	1,984.6	25.72	78.159		
3,700.0	3,686.6	3,906.6	3,896.2	13.2	13.8	84.84	-13.1	2,094.1	2,001.3	1,974.8	26.48	75.567		
3,800.0	3,786.6	4,030.3	4,019.0	13.5	14.3	85.04	-21.3	2,080.8	1,990.0	1,962.8	27.24	73.060		
3,900.0	3,886.6	4,119.3	4,107.1	13.9	14.7	85.24	-28.7	2,071.2	1,978.5	1,950.6	27.91	70.887		
4,000.0	3,986.6	4,190.7	4,178.0	14.2	15.0	85.37	-34.0	2,064.2	1,968.1	1,939.5	28.54	68.957		
4,100.0	4,086.6	4,279.8	4,266.6	14.6	15.3	85.49	-38.6	2,056.2	1,958.7	1,929.5	29.21	67.048		
4,200.0	4,186.6	4,364.3	4,350.7	14.9	15.6	85.54	-41.0	2,048.9	1,949.9	1,920.0	29.87	65.272		
4,300.0	4,286.6	4,498.1	4,483.9	15.2	16.2	85.59	-43.7	2,036.9	1,940.9	1,910.2	30.66	63.305		
4,400.0	4,386.6	4,598.1	4,583.4	15.6	16.5	85.63	-45.6	2,026.8	1,930.6	1,899.3	31.36	61.562		
4,500.0	4,486.6	4,688.1	4,673.0	15.9	16.9	85.66	-47.3	2,018.0	1,920.7	1,888.6	32.04	59.947		
4,600.0	4,586.6	4,774.8	4,759.3	16.2	17.2	85.69	-49.0	2,009.9	1,911.3	1,878.6	32.71	58.432		
4,700.0	4,686.6	4,863.4	4,847.6	16.6	17.6	85.73	-50.8	2,002.3	1,902.6	1,869.2	33.39	56.988		
4,800.0	4,786.6	4,954.6	4,938.4	16.9	17.9	85.77	-52.7	1,994.9	1,894.3	1,860.3	34.07	55.606		
4,900.0	4,886.6	5,122.1	5,105.1	17.3	18.6	85.83	-55.9	1,978.1	1,883.9	1,849.0	34.93	53.934		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 220-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.0	4,986.6	5,224.8	5,207.0	17.6	19.0	85.86	-57.8	1,966.1	1,872.1	1,836.5	35.64	52.527		
5,100.0	5,086.6	5,319.9	5,301.5	18.0	19.4	85.89	-59.6	1,955.1	1,860.4	1,824.1	36.34	51.197		
5,200.0	5,186.6	5,409.5	5,390.5	18.3	19.7	85.92	-61.2	1,945.0	1,849.1	1,812.1	37.03	49.941		
5,300.0	5,286.6	5,495.4	5,475.9	18.6	20.1	85.94	-62.6	1,935.9	1,838.5	1,800.8	37.71	48.759		
5,400.0	5,386.6	5,588.7	5,568.7	19.0	20.4	85.97	-64.1	1,926.6	1,828.4	1,790.0	38.40	47.615		
5,500.0	5,486.6	5,680.2	5,659.8	19.3	20.8	85.99	-65.5	1,917.8	1,818.6	1,779.5	39.09	46.524		
5,600.0	5,586.6	5,771.7	5,750.9	19.7	21.1	86.01	-66.7	1,909.3	1,809.3	1,769.6	39.78	45.484		
5,700.0	5,686.6	5,864.8	5,843.6	20.0	21.5	86.02	-67.7	1,901.1	1,800.4	1,760.0	40.47	44.486		
5,800.0	5,786.6	5,959.8	5,938.2	20.4	21.8	86.03	-68.5	1,893.0	1,791.9	1,750.7	41.17	43.525		
5,900.0	5,886.6	6,051.4	6,029.6	20.7	22.2	86.04	-69.4	1,885.5	1,783.6	1,741.7	41.86	42.610		
6,000.0	5,986.6	6,146.1	6,124.0	21.1	22.6	86.05	-70.1	1,878.1	1,775.8	1,733.2	42.55	41.730		
6,100.0	6,086.6	6,241.7	6,219.3	21.4	22.9	86.05	-70.7	1,870.8	1,768.1	1,724.9	43.25	40.880		
6,200.0	6,186.6	6,390.0	6,367.0	21.8	23.5	86.06	-71.9	1,858.0	1,759.6	1,715.5	44.07	39.928		
6,300.0	6,286.6	6,499.7	6,476.1	22.1	23.9	86.08	-73.2	1,846.3	1,748.8	1,704.0	44.80	39.039		
6,400.0	6,386.6	6,592.9	6,568.7	22.5	24.3	86.09	-74.1	1,836.4	1,738.2	1,692.7	45.50	38.204		
6,500.0	6,486.6	6,687.2	6,662.5	22.8	24.7	86.10	-75.0	1,826.8	1,727.9	1,681.7	46.20	37.401		
6,600.0	6,586.6	6,785.0	6,759.8	23.2	25.0	86.15	-77.2	1,817.0	1,717.7	1,670.8	46.91	36.619		
6,700.0	6,686.6	6,879.7	6,854.0	23.5	25.4	86.21	-79.8	1,807.7	1,707.8	1,660.1	47.61	35.867		
6,800.0	6,786.6	6,971.6	6,945.5	23.9	25.8	86.27	-82.1	1,799.0	1,698.2	1,649.9	48.31	35.150		
6,900.0	6,886.6	7,065.3	7,038.8	24.2	26.1	86.33	-84.2	1,790.5	1,689.0	1,640.0	49.02	34.459		
7,000.0	6,986.6	7,160.6	7,133.7	24.6	26.5	86.38	-86.2	1,782.2	1,680.2	1,630.4	49.72	33.792		
7,100.0	7,086.6	7,255.4	7,228.2	24.9	26.9	86.43	-88.3	1,774.1	1,671.5	1,621.1	50.42	33.149		
7,200.0	7,186.6	7,346.1	7,318.5	25.3	27.2	86.49	-90.4	1,766.8	1,663.3	1,612.2	51.12	32.538		
7,300.0	7,286.6	7,449.8	7,421.9	25.6	27.6	86.56	-93.0	1,758.9	1,655.6	1,603.7	51.84	31.935		
7,400.0	7,386.6	7,561.4	7,533.0	26.0	28.0	86.64	-95.9	1,749.3	1,646.8	1,594.2	52.58	31.319		
7,500.0	7,486.6	7,652.9	7,624.1	26.3	28.4	86.70	-98.2	1,741.4	1,638.1	1,584.8	53.28	30.744		
7,600.0	7,586.6	7,745.0	7,715.9	26.7	28.7	86.77	-100.4	1,734.1	1,629.9	1,576.0	53.98	30.196		
7,700.0	7,686.6	7,841.1	7,811.7	27.0	29.1	86.83	-102.7	1,726.7	1,622.1	1,567.4	54.69	29.662		
7,800.0	7,786.6	7,935.0	7,905.3	27.4	29.5	86.89	-104.8	1,719.7	1,614.6	1,559.2	55.39	29.150		
7,900.0	7,886.6	8,040.3	8,010.3	27.7	29.9	86.97	-107.4	1,712.0	1,607.2	1,551.1	56.12	28.640		
8,000.0	7,986.6	8,136.5	8,106.2	28.1	30.2	87.06	-110.2	1,704.8	1,599.5	1,542.7	56.83	28.148		
8,100.0	8,086.6	8,245.4	8,214.7	28.4	30.6	87.13	-112.6	1,696.6	1,591.9	1,534.3	57.56	27.656		
8,200.0	8,186.6	8,398.7	8,367.3	28.8	31.3	87.18	-114.6	1,681.2	1,581.6	1,523.3	58.35	27.105		
8,300.0	8,286.6	8,493.4	8,461.4	29.1	31.6	87.20	-115.7	1,670.4	1,570.2	1,511.1	59.06	26.584		
8,400.0	8,386.6	8,580.0	8,547.5	29.5	32.0	87.22	-116.7	1,661.2	1,559.5	1,499.7	59.77	26.093		
8,500.0	8,486.6	8,668.6	8,635.6	29.8	32.3	87.24	-117.9	1,652.4	1,549.5	1,489.0	60.47	25.625		
8,600.0	8,586.6	8,756.2	8,722.8	30.2	32.7	87.28	-119.2	1,644.4	1,540.3	1,479.1	61.17	25.182		
8,700.0	8,686.6	8,844.0	8,810.3	30.6	33.0	87.31	-120.5	1,637.0	1,531.8	1,470.0	61.86	24.762		
8,800.0	8,786.6	8,942.8	8,908.8	30.9	33.4	87.37	-122.4	1,629.4	1,524.1	1,461.5	62.58	24.355		
8,900.0	8,886.6	9,053.5	9,019.0	31.3	33.8	87.47	-125.4	1,619.7	1,515.2	1,451.8	63.31	23.931		
9,000.0	8,986.6	9,145.1	9,110.3	31.6	34.2	87.56	-128.0	1,612.3	1,506.9	1,442.9	64.02	23.538		
9,100.0	9,086.6	9,238.1	9,203.0	32.0	34.5	87.61	-129.6	1,604.7	1,498.7	1,433.9	64.72	23.155		
9,200.0	9,186.6	9,338.1	9,302.7	32.3	34.9	87.63	-130.5	1,597.4	1,491.4	1,426.0	65.44	22.790		
9,300.0	9,286.6	9,442.7	9,407.0	32.7	35.3	87.71	-132.9	1,588.7	1,483.0	1,416.8	66.17	22.413		
9,400.0	9,386.6	9,552.5	9,516.3	33.0	35.7	87.80	-135.7	1,580.0	1,474.9	1,408.0	66.90	22.047		
9,500.0	9,486.6	9,644.7	9,608.2	33.4	36.1	87.84	-137.0	1,571.9	1,466.1	1,398.5	67.61	21.687		
9,600.0	9,586.6	9,751.8	9,714.9	33.7	36.5	87.89	-138.6	1,563.0	1,457.8	1,389.5	68.33	21.334		
9,700.0	9,686.6	9,855.9	9,818.5	34.1	36.9	87.98	-141.1	1,553.8	1,448.8	1,379.8	69.06	20.980		
9,800.0	9,786.6	9,956.7	9,918.9	34.5	37.3	88.08	-144.0	1,544.6	1,439.7	1,369.9	69.78	20.632		
9,900.0	9,886.6	10,041.1	10,002.9	34.8	37.6	88.17	-146.5	1,537.5	1,431.1	1,360.6	70.48	20.305		
10,000.0	9,986.6	10,155.0	10,116.4	35.2	38.0	88.30	-150.0	1,527.6	1,422.3	1,351.1	71.22	19.971		
10,100.0	10,086.6	10,244.8	10,205.8	35.5	38.4	88.40	-152.8	1,519.9	1,413.7	1,341.7	71.93	19.654		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 220-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,200.0	10,186.6	10,355.1	10,315.6	35.9	38.8	88.52	-155.9	1,509.9	1,404.5	1,331.8	72.66	19.329		
10,300.0	10,286.6	10,436.6	10,396.8	36.2	39.1	88.61	-158.2	1,503.1	1,396.0	1,322.7	73.36	19.030		
10,400.0	10,386.6	10,544.1	10,503.9	36.6	39.5	88.69	-160.5	1,494.5	1,388.0	1,313.9	74.09	18.734		
10,500.0	10,486.6	10,659.9	10,619.1	36.9	40.0	88.80	-163.4	1,483.9	1,378.7	1,303.9	74.83	18.426		
10,600.0	10,586.6	10,753.4	10,712.2	37.3	40.4	88.90	-165.9	1,475.0	1,369.2	1,293.7	75.54	18.125		
10,700.0	10,686.6	10,832.6	10,791.1	37.6	40.7	89.02	-168.7	1,468.3	1,360.6	1,284.4	76.24	17.847		
10,800.0	10,786.6	10,906.1	10,864.4	38.0	40.9	89.13	-171.6	1,463.5	1,354.0	1,277.1	76.91	17.605		
10,890.4	10,877.0	10,989.3	10,947.3	38.3	41.2	89.27	-174.9	1,459.0	1,349.1	1,271.5	77.54	17.398		
10,900.0	10,886.6	10,996.0	10,954.1	38.4	41.3	94.73	-175.2	1,458.6	1,348.6	1,271.0	77.60	17.378		
10,950.0	10,936.5	11,031.5	10,989.5	38.5	41.4	95.07	-176.3	1,457.1	1,346.6	1,268.7	77.92	17.283		
11,000.0	10,986.0	11,066.7	11,024.6	38.7	41.5	95.43	-177.2	1,455.9	1,345.6	1,267.4	78.22	17.203		
11,028.3	11,013.6	11,087.1	11,045.1	38.8	41.6	95.64	-177.5	1,455.3	1,345.4	1,267.0	78.38	17.165 CC		
11,050.0	11,034.6	11,107.4	11,065.3	38.9	41.7	95.87	-177.8	1,454.9	1,345.5	1,266.9	78.53	17.134 ES		
11,100.0	11,082.0	11,153.0	11,110.9	39.0	41.8	96.45	-178.5	1,453.8	1,346.1	1,267.2	78.86	17.070		
11,150.0	11,127.8	11,194.5	11,152.4	39.2	42.0	97.02	-179.0	1,453.0	1,347.5	1,268.4	79.17	17.022		
11,200.0	11,171.8	11,231.1	11,189.0	39.3	42.1	97.51	-179.3	1,452.4	1,350.1	1,270.6	79.45	16.993		
11,250.0	11,213.5	11,266.0	11,223.9	39.4	42.2	97.95	-179.5	1,452.0	1,353.9	1,274.2	79.73	16.982 SF		
11,300.0	11,252.6	11,301.8	11,259.8	39.5	42.3	98.37	-179.6	1,451.8	1,359.2	1,279.1	80.01	16.987		
11,350.0	11,288.9	11,335.6	11,293.5	39.7	42.5	98.68	-179.7	1,451.6	1,365.8	1,285.6	80.29	17.012		
11,400.0	11,322.0	11,366.2	11,324.1	39.8	42.6	98.82	-179.9	1,451.5	1,374.2	1,293.6	80.55	17.059		
11,450.0	11,351.8	11,391.6	11,349.5	39.9	42.6	98.66	-180.1	1,451.5	1,384.2	1,303.4	80.80	17.131		
11,500.0	11,377.9	11,415.1	11,373.0	40.0	42.7	98.29	-180.4	1,451.5	1,396.2	1,315.2	81.05	17.227		
11,550.0	11,400.3	11,436.9	11,394.8	40.1	42.8	97.68	-180.7	1,451.5	1,410.0	1,328.8	81.29	17.346		
11,600.0	11,418.6	11,454.6	11,412.5	40.3	42.8	96.74	-180.9	1,451.6	1,425.8	1,344.3	81.52	17.490		
11,650.0	11,432.8	11,468.2	11,426.1	40.4	42.9	95.42	-181.1	1,451.6	1,443.4	1,361.7	81.74	17.659		
11,700.0	11,442.8	11,468.0	11,425.9	40.5	42.9	93.31	-181.1	1,451.6	1,462.8	1,380.9	81.89	17.864		
11,750.0	11,448.5	11,468.0	11,425.9	40.7	42.9	90.99	-181.1	1,451.6	1,483.9	1,401.8	82.04	18.086		
11,790.4	11,450.0	11,468.0	11,425.9	40.8	42.9	88.97	-181.1	1,451.6	1,501.9	1,419.8	82.17	18.278		
11,800.0	11,450.0	11,468.0	11,425.9	40.8	42.9	88.97	-181.1	1,451.6	1,506.4	1,424.2	82.20	18.325		
11,900.0	11,450.0	11,468.0	11,425.9	41.1	42.9	88.99	-181.1	1,451.6	1,553.4	1,470.9	82.54	18.820		
12,000.0	11,450.0	11,468.0	11,425.9	41.5	42.9	89.01	-181.1	1,451.6	1,602.4	1,519.5	82.89	19.331		
12,037.8	11,450.0	11,468.0	11,425.9	41.7	42.9	89.02	-181.1	1,451.6	1,621.3	1,538.3	83.03	19.528		
12,100.0	11,450.0	11,468.0	11,425.9	41.9	42.9	89.02	-181.1	1,451.6	1,653.5	1,570.3	83.25	19.862		
12,200.0	11,450.0	11,468.0	11,425.9	42.4	42.9	89.02	-181.1	1,451.6	1,708.8	1,625.2	83.61	20.438		
12,300.0	11,450.0	11,468.0	11,425.9	43.0	42.9	89.02	-181.1	1,451.6	1,768.1	1,684.1	83.96	21.058		
12,400.0	11,450.0	11,468.0	11,425.9	43.6	42.9	89.02	-181.1	1,451.6	1,830.9	1,746.6	84.30	21.718		
12,500.0	11,450.0	11,468.0	11,425.9	44.3	42.9	89.02	-181.1	1,451.6	1,896.8	1,812.2	84.62	22.415		
12,600.0	11,450.0	11,473.3	11,431.2	45.0	42.9	89.23	-181.2	1,451.6	1,965.7	1,880.7	84.95	23.140		
12,700.0	11,450.0	11,472.0	11,429.9	45.8	42.9	89.18	-181.1	1,451.6	2,037.1	1,951.9	85.23	23.902		
12,800.0	11,450.0	11,470.7	11,428.7	46.6	42.9	89.13	-181.1	1,451.6	2,110.9	2,025.4	85.49	24.692		
12,900.0	11,450.0	11,469.5	11,427.4	47.4	42.9	89.08	-181.1	1,451.6	2,186.7	2,101.0	85.73	25.506		
13,000.0	11,450.0	11,468.2	11,426.1	48.3	42.9	89.02	-181.1	1,451.6	2,264.5	2,178.5	85.96	26.343		
13,100.0	11,450.0	11,466.9	11,424.8	49.3	42.9	88.97	-181.1	1,451.6	2,343.9	2,257.7	86.17	27.200		
13,200.0	11,450.0	11,465.7	11,423.6	50.3	42.9	88.92	-181.1	1,451.6	2,424.8	2,338.4	86.37	28.075		
13,300.0	11,450.0	11,464.4	11,422.3	51.3	42.9	88.87	-181.0	1,451.6	2,507.1	2,420.6	86.55	28.967		
13,400.0	11,450.0	11,463.1	11,421.0	52.3	42.9	88.82	-181.0	1,451.6	2,590.7	2,503.9	86.72	29.873		
13,500.0	11,450.0	11,461.9	11,419.8	53.4	42.9	88.76	-181.0	1,451.6	2,675.4	2,588.5	86.88	30.793		
13,600.0	11,450.0	11,460.6	11,418.5	54.5	42.9	88.71	-181.0	1,451.6	2,761.1	2,674.0	87.03	31.725		
13,700.0	11,450.0	11,459.3	11,417.2	55.6	42.9	88.66	-181.0	1,451.6	2,847.7	2,760.5	87.17	32.668		
13,800.0	11,450.0	11,458.0	11,415.9	56.8	42.9	88.61	-181.0	1,451.6	2,935.2	2,847.9	87.30	33.621		
13,900.0	11,450.0	11,456.8	11,414.7	58.0	42.8	88.56	-180.9	1,451.6	3,023.4	2,936.0	87.43	34.583		
14,000.0	11,450.0	11,455.5	11,413.4	59.2	42.8	88.50	-180.9	1,451.6	3,112.4	3,024.9	87.54	35.553		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 220-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,100.0	11,450.0	11,454.2	11,412.1	60.4	42.8	88.45	-180.9	1,451.6	3,202.0	3,114.4	87.65	36.531		
14,200.0	11,450.0	11,453.0	11,410.9	61.7	42.8	88.40	-180.9	1,451.6	3,292.3	3,204.5	87.76	37.515		
14,300.0	11,450.0	11,451.7	11,409.6	62.9	42.8	88.35	-180.9	1,451.6	3,383.0	3,295.2	87.86	38.505		
14,400.0	11,450.0	11,450.4	11,408.3	64.2	42.8	88.30	-180.9	1,451.6	3,474.3	3,386.4	87.96	39.500		
14,500.0	11,450.0	11,449.1	11,407.1	65.5	42.8	88.24	-180.9	1,451.6	3,566.1	3,478.0	88.05	40.501		
14,600.0	11,450.0	11,447.9	11,405.8	66.8	42.8	88.19	-180.8	1,451.6	3,658.2	3,570.1	88.14	41.506		
14,700.0	11,450.0	11,446.6	11,404.5	68.2	42.8	88.14	-180.8	1,451.5	3,750.8	3,662.6	88.22	42.515		
14,800.0	11,450.0	11,445.3	11,403.2	69.5	42.8	88.09	-180.8	1,451.5	3,843.8	3,755.4	88.30	43.528		
14,900.0	11,450.0	11,444.1	11,402.0	70.9	42.8	88.04	-180.8	1,451.5	3,937.0	3,848.7	88.38	44.544		
15,000.0	11,450.0	11,442.8	11,400.7	72.2	42.8	87.98	-180.8	1,451.5	4,030.7	3,942.2	88.46	45.563		
15,100.0	11,450.0	11,441.5	11,399.4	73.6	42.8	87.93	-180.8	1,451.5	4,124.6	4,036.0	88.54	46.585		
15,200.0	11,450.0	11,440.3	11,398.2	75.0	42.8	87.88	-180.7	1,451.5	4,218.8	4,130.2	88.61	47.609		
15,300.0	11,450.0	11,439.0	11,396.9	76.4	42.8	87.83	-180.7	1,451.5	4,313.2	4,224.5	88.68	48.635		
15,400.0	11,450.0	11,437.7	11,395.6	77.8	42.8	87.78	-180.7	1,451.5	4,407.9	4,319.2	88.76	49.663		
15,500.0	11,450.0	11,436.4	11,394.3	79.3	42.8	87.73	-180.7	1,451.5	4,502.8	4,414.0	88.83	50.693		
15,600.0	11,450.0	11,435.2	11,393.1	80.7	42.8	87.67	-180.7	1,451.5	4,598.0	4,509.1	88.89	51.724		
15,700.0	11,450.0	11,433.9	11,391.8	82.1	42.8	87.62	-180.7	1,451.5	4,693.3	4,604.4	88.96	52.757		
15,800.0	11,450.0	11,432.6	11,390.5	83.6	42.8	87.57	-180.6	1,451.5	4,788.9	4,699.8	89.03	53.790		
15,900.0	11,450.0	11,431.4	11,389.3	85.0	42.8	87.52	-180.6	1,451.5	4,884.6	4,795.5	89.10	54.824		
16,000.0	11,450.0	11,430.1	11,388.0	86.5	42.8	87.47	-180.6	1,451.5	4,980.5	4,891.3	89.16	55.859		
16,100.0	11,450.0	11,428.8	11,386.7	88.0	42.8	87.41	-180.6	1,451.5	5,076.5	4,987.3	89.23	56.894		
16,200.0	11,450.0	11,427.5	11,385.5	89.4	42.8	87.36	-180.6	1,451.5	5,172.7	5,083.4	89.29	57.930		
16,300.0	11,450.0	11,426.3	11,384.2	90.9	42.8	87.31	-180.6	1,451.5	5,269.0	5,179.7	89.36	58.967		
16,400.0	11,450.0	11,425.0	11,382.9	92.4	42.7	87.26	-180.5	1,451.5	5,365.5	5,276.1	89.42	60.003		
16,500.0	11,450.0	11,423.7	11,381.6	93.9	42.7	87.21	-180.5	1,451.5	5,462.1	5,372.6	89.48	61.039		
16,600.0	11,450.0	11,422.5	11,380.4	95.4	42.7	87.15	-180.5	1,451.5	5,558.8	5,469.2	89.55	62.075		
16,700.0	11,450.0	11,421.2	11,379.1	96.9	42.7	87.10	-180.5	1,451.5	5,655.6	5,566.0	89.61	63.112		
16,800.0	11,450.0	11,419.9	11,377.8	98.4	42.7	87.05	-180.5	1,451.5	5,752.5	5,662.9	89.68	64.147		
16,900.0	11,450.0	11,418.6	11,376.6	100.0	42.7	87.00	-180.5	1,451.5	5,849.6	5,759.8	89.74	65.183		
17,000.0	11,450.0	11,417.4	11,375.3	101.5	42.7	86.95	-180.4	1,451.5	5,946.7	5,856.9	89.81	66.218		
17,100.0	11,450.0	11,416.1	11,374.0	103.0	42.7	86.90	-180.4	1,451.5	6,043.9	5,954.1	89.87	67.252		
17,200.0	11,450.0	11,414.8	11,372.8	104.5	42.7	86.84	-180.4	1,451.5	6,141.3	6,051.3	89.93	68.286		
17,300.0	11,450.0	11,413.6	11,371.5	106.1	42.7	86.79	-180.4	1,451.5	6,238.7	6,148.7	90.00	69.319		
17,400.0	11,450.0	11,412.3	11,370.2	107.6	42.7	86.74	-180.4	1,451.5	6,336.1	6,246.1	90.06	70.351		
17,500.0	11,450.0	11,411.0	11,368.9	109.1	42.7	86.69	-180.4	1,451.5	6,433.7	6,343.6	90.13	71.383		
17,600.0	11,450.0	11,409.8	11,367.7	110.7	42.7	86.64	-180.4	1,451.5	6,531.3	6,441.1	90.20	72.413		
17,700.0	11,450.0	11,408.5	11,366.4	112.2	42.7	86.58	-180.3	1,451.5	6,629.0	6,538.8	90.26	73.443		
17,800.0	11,450.0	11,407.2	11,365.1	113.8	42.7	86.53	-180.3	1,451.5	6,726.8	6,636.5	90.33	74.471		
17,900.0	11,450.0	11,405.9	11,363.9	115.3	42.7	86.48	-180.3	1,451.5	6,824.6	6,734.2	90.39	75.499		
18,000.0	11,450.0	11,404.7	11,362.6	116.9	42.7	86.43	-180.3	1,451.5	6,922.5	6,832.1	90.46	76.525		
18,100.0	11,450.0	11,404.6	11,361.3	118.4	42.7	86.38	-180.3	1,451.5	7,020.5	6,930.0	90.53	77.546		
18,200.0	11,450.0	11,405.9	11,360.0	120.0	42.7	86.32	-180.3	1,451.5	7,118.5	7,027.9	90.61	78.563		
18,300.0	11,450.0	11,407.1	11,358.8	121.6	42.7	86.27	-180.2	1,451.5	7,216.6	7,125.9	90.69	79.578		
18,400.0	11,450.0	11,408.4	11,357.5	123.1	42.7	86.22	-180.2	1,451.5	7,314.7	7,223.9	90.76	80.591		
18,500.0	11,450.0	11,409.7	11,356.2	124.7	42.7	86.17	-180.2	1,451.5	7,412.8	7,322.0	90.84	81.603		
18,600.0	11,450.0	11,404.0	11,361.9	126.3	42.7	86.40	-180.3	1,451.5	7,511.1	7,420.2	90.89	82.637		
18,700.0	11,450.0	11,404.0	11,361.9	127.8	42.7	86.40	-180.3	1,451.5	7,609.3	7,518.4	90.97	83.650		
18,800.0	11,450.0	11,404.0	11,361.9	129.4	42.7	86.40	-180.3	1,451.5	7,707.6	7,616.6	91.04	84.662		
18,900.0	11,450.0	11,404.0	11,361.9	131.0	42.7	86.40	-180.3	1,451.5	7,806.0	7,714.9	91.12	85.672		
19,000.0	11,450.0	11,404.0	11,361.9	132.6	42.7	86.40	-180.3	1,451.5	7,904.4	7,813.2	91.19	86.680		
19,100.0	11,450.0	11,404.0	11,361.9	134.2	42.7	86.40	-180.3	1,451.5	8,002.8	7,911.6	91.27	87.686		
19,200.0	11,450.0	11,404.0	11,361.9	135.7	42.7	86.40	-180.3	1,451.5	8,101.3	8,009.9	91.34	88.691		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 220-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,300.0	11,450.0	11,404.0	11,361.9	137.3	42.7	86.40	-180.3	1,451.5	8,199.8	8,108.4	91.42	89.694		
19,400.0	11,450.0	11,404.0	11,361.9	138.9	42.7	86.40	-180.3	1,451.5	8,298.3	8,206.8	91.50	90.695		
19,500.0	11,450.0	11,404.0	11,361.9	140.5	42.7	86.40	-180.3	1,451.5	8,396.9	8,305.3	91.58	91.694		
19,600.0	11,450.0	11,404.0	11,361.9	142.1	42.7	86.40	-180.3	1,451.5	8,495.5	8,403.9	91.65	92.691		
19,700.0	11,450.0	11,404.0	11,361.9	143.7	42.7	86.40	-180.3	1,451.5	8,594.2	8,502.4	91.73	93.686		
19,800.0	11,450.0	11,404.0	11,361.9	145.3	42.7	86.40	-180.3	1,451.5	8,692.8	8,601.0	91.81	94.680		
19,900.0	11,450.0	11,394.3	11,352.2	146.9	42.6	86.01	-180.2	1,451.5	8,791.5	8,699.7	91.87	95.698		
20,000.0	11,450.0	11,393.8	11,351.8	148.5	42.6	85.99	-180.2	1,451.5	8,890.3	8,798.3	91.95	96.689		
20,100.0	11,450.0	11,393.4	11,351.3	150.1	42.6	85.97	-180.2	1,451.5	8,989.0	8,897.0	92.03	97.678		
20,200.0	11,450.0	11,392.9	11,350.8	151.7	42.6	85.95	-180.1	1,451.5	9,087.8	8,995.7	92.11	98.664		
20,300.0	11,450.0	11,392.5	11,350.4	153.3	42.6	85.93	-180.1	1,451.5	9,186.6	9,094.4	92.19	99.649		
20,400.0	11,450.0	11,392.0	11,350.0	154.9	42.6	85.91	-180.1	1,451.5	9,285.5	9,193.2	92.27	100.631		
20,500.0	11,450.0	11,391.6	11,349.5	156.5	42.6	85.90	-180.1	1,451.5	9,384.3	9,292.0	92.36	101.611		
20,600.0	11,450.0	11,391.2	11,349.1	158.1	42.6	85.88	-180.1	1,451.5	9,483.2	9,390.8	92.44	102.589		
20,700.0	11,450.0	11,390.8	11,348.7	159.7	42.6	85.86	-180.1	1,451.5	9,582.1	9,489.6	92.52	103.565		
20,800.0	11,450.0	11,390.3	11,348.2	161.3	42.6	85.84	-180.1	1,451.5	9,681.1	9,588.5	92.61	104.539		
20,900.0	11,450.0	11,389.9	11,347.8	162.9	42.6	85.83	-180.1	1,451.5	9,780.0	9,687.3	92.69	105.510		
21,000.0	11,450.0	11,389.5	11,347.4	164.5	42.6	85.81	-180.1	1,451.5	9,879.0	9,786.2	92.78	106.479		
21,100.0	11,450.0	11,389.1	11,347.0	166.1	42.6	85.79	-180.1	1,451.5	9,978.0	9,885.1	92.87	107.446		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 220-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	88.60	56.5	2,313.0	2,313.7					
100.0	100.0	87.1	87.1	0.1	0.1	88.61	56.2	2,313.2	2,313.9	2,313.7	0.27	8,625.975		
200.0	200.0	174.2	174.2	0.5	0.3	88.63	55.4	2,314.0	2,314.8	2,314.0	0.76	3,035.573		
300.0	300.0	265.9	265.8	0.8	0.5	88.66	54.1	2,315.2	2,316.1	2,314.8	1.36	1,705.399		
400.0	400.0	364.9	364.9	1.2	0.9	88.70	52.6	2,316.8	2,317.6	2,315.6	2.07	1,118.666		
500.0	500.0	467.4	467.3	1.6	1.2	88.73	51.4	2,318.3	2,319.1	2,316.3	2.80	828.923		
600.0	600.0	579.0	579.0	1.9	1.6	88.76	50.4	2,319.7	2,320.3	2,316.8	3.56	652.434		
700.0	700.0	698.6	698.6	2.3	2.1	88.77	49.8	2,320.2	2,320.7	2,316.4	4.34	534.908		
800.0	800.0	805.9	805.8	2.6	2.4	88.77	49.8	2,320.1	2,320.7	2,315.6	5.06	458.828		
900.0	900.0	913.2	913.1	3.0	2.8	88.76	50.1	2,319.7	2,320.2	2,314.5	5.77	401.835		
1,000.0	1,000.0	1,004.0	1,003.9	3.4	3.1	88.76	50.3	2,319.2	2,319.8	2,313.3	6.44	360.122		
1,100.0	1,100.0	1,089.5	1,089.5	3.7	3.4	-61.05	50.5	2,319.3	2,319.5	2,312.4	7.08	327.664		
1,200.0	1,200.0	1,177.1	1,177.0	4.0	3.7	-61.11	50.8	2,320.0	2,319.0	2,311.3	7.71	300.719		
1,300.0	1,299.9	1,267.1	1,267.0	4.4	4.0	-61.22	51.4	2,321.0	2,318.0	2,309.6	8.36	277.216		
1,400.0	1,399.7	1,345.0	1,344.9	4.7	4.3	-61.34	51.7	2,322.5	2,317.0	2,308.1	8.98	258.164		
1,500.0	1,499.4	1,406.6	1,406.5	5.0	4.5	-61.45	51.7	2,324.6	2,316.5	2,307.0	9.54	242.910		
1,522.3	1,521.6	1,421.1	1,420.9	5.1	4.5	-61.47	51.7	2,325.2	2,316.5	2,306.9	9.67	239.670		
1,600.0	1,598.9	1,471.4	1,471.2	5.4	4.7	-61.57	51.5	2,327.7	2,316.7	2,306.6	10.11	229.057		
1,700.0	1,698.3	1,537.0	1,536.7	5.8	5.0	-61.71	51.0	2,331.8	2,317.6	2,306.9	10.70	216.593		
1,800.0	1,797.4	1,616.0	1,615.4	6.1	5.3	-61.89	49.8	2,337.7	2,318.9	2,307.5	11.34	204.417		
1,900.0	1,896.4	1,757.3	1,756.3	6.5	5.8	-62.20	45.4	2,348.1	2,319.7	2,307.5	12.23	189.647		
2,000.0	1,995.5	1,930.0	1,928.6	6.9	6.4	-62.57	39.2	2,355.6	2,317.2	2,304.0	13.24	175.048		
2,100.0	2,094.5	2,028.2	2,026.8	7.3	6.7	-62.78	35.9	2,358.5	2,313.6	2,299.6	13.97	165.578		
2,200.0	2,193.5	2,099.0	2,097.5	7.7	7.0	-62.92	32.9	2,361.1	2,310.6	2,296.0	14.61	158.130		
2,300.0	2,292.5	2,176.0	2,174.3	8.1	7.3	-63.05	28.8	2,364.7	2,308.7	2,293.5	15.28	151.114		
2,400.0	2,391.6	2,260.3	2,258.3	8.5	7.6	-63.18	23.6	2,369.7	2,308.0	2,292.0	15.98	144.470		
2,500.0	2,490.6	2,368.0	2,365.6	8.9	8.0	-63.33	16.7	2,376.3	2,307.4	2,290.7	16.77	137.626		
2,600.0	2,589.6	2,490.2	2,487.3	9.3	8.5	-63.52	9.8	2,382.7	2,306.1	2,288.4	17.61	130.931		
2,700.0	2,688.6	2,588.9	2,585.8	9.7	8.8	-63.71	5.0	2,387.5	2,304.3	2,285.9	18.37	125.426		
2,729.0	2,717.4	2,619.1	2,615.9	9.8	8.9	-63.76	3.7	2,388.9	2,303.8	2,285.2	18.60	123.872		
2,800.0	2,787.8	2,694.6	2,691.3	10.1	9.2	-63.88	0.4	2,392.4	2,302.8	2,283.6	19.16	120.213		
2,900.0	2,887.2	2,795.7	2,792.2	10.5	9.6	-64.00	-3.9	2,396.8	2,302.1	2,282.2	19.91	115.606		
2,901.7	2,888.8	2,797.2	2,793.7	10.5	9.6	-64.00	-4.0	2,396.9	2,302.1	2,282.2	19.93	115.538 CC, ES		
3,000.0	2,986.8	2,882.6	2,878.9	10.9	9.9	-64.06	-8.3	2,400.9	2,302.9	2,282.3	20.61	111.751		
3,100.0	3,086.7	2,964.3	2,960.4	11.2	10.2	-64.07	-12.9	2,405.4	2,305.6	2,284.3	21.27	108.393		
3,200.0	3,186.6	3,045.1	3,040.9	11.6	10.5	-64.07	-17.2	2,410.6	2,310.2	2,288.3	21.92	105.408		
3,262.3	3,249.0	3,101.0	3,096.6	11.8	10.7	85.72	-19.9	2,414.4	2,314.0	2,291.6	22.33	103.629		
3,300.0	3,286.6	3,135.4	3,130.9	11.9	10.9	85.76	-21.3	2,416.8	2,316.5	2,293.9	22.58	102.603		
3,400.0	3,386.6	3,250.5	3,245.7	12.2	11.3	85.85	-24.2	2,424.2	2,322.8	2,299.4	23.32	99.584		
3,500.0	3,486.6	3,334.2	3,329.3	12.6	11.6	85.87	-24.6	2,429.5	2,329.0	2,305.1	23.95	97.259		
3,600.0	3,586.6	3,392.7	3,387.6	12.9	11.8	85.87	-24.3	2,434.0	2,336.7	2,312.2	24.46	95.511		
3,700.0	3,686.6	3,455.9	3,450.4	13.2	12.0	85.86	-23.3	2,439.8	2,346.0	2,321.0	25.00	93.857		
3,800.0	3,786.6	3,529.8	3,523.9	13.5	12.3	85.84	-21.9	2,447.7	2,356.8	2,331.2	25.57	92.173		
3,900.0	3,886.6	3,668.2	3,661.5	13.9	12.8	85.85	-21.6	2,462.4	2,367.5	2,341.0	26.43	89.585		
4,000.0	3,986.6	3,814.2	3,807.0	14.2	13.4	85.95	-24.8	2,474.9	2,375.8	2,348.5	27.32	86.966		
4,100.0	4,086.6	3,937.3	3,929.7	14.6	13.8	86.05	-28.3	2,483.9	2,382.9	2,354.8	28.11	84.764		
4,200.0	4,186.6	4,064.0	4,056.1	14.9	14.3	86.12	-30.5	2,491.7	2,388.9	2,360.0	28.92	82.616		
4,300.0	4,286.6	4,189.4	4,181.4	15.2	14.8	86.19	-33.3	2,498.1	2,393.8	2,364.1	29.71	80.565		
4,400.0	4,386.6	4,287.1	4,278.9	15.6	15.1	86.24	-34.9	2,502.7	2,398.4	2,368.0	30.40	78.885		
4,500.0	4,486.6	4,388.7	4,380.4	15.9	15.5	86.26	-35.3	2,507.1	2,402.8	2,371.7	31.11	77.241		
4,600.0	4,586.6	4,486.1	4,477.7	16.2	15.9	86.27	-35.6	2,511.6	2,407.4	2,375.6	31.80	75.713		
4,700.0	4,686.6	4,614.1	4,605.6	16.6	16.3	86.30	-36.7	2,516.9	2,411.4	2,378.8	32.60	73.972		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 220-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,800.0	4,786.6	4,735.1	4,726.5	16.9	16.8	86.39	-40.1	2,520.6	2,414.3	2,380.9	33.38	72.334		
4,900.0	4,886.6	4,839.0	4,830.2	17.3	17.1	86.48	-43.8	2,523.3	2,416.7	2,382.6	34.09	70.883		
5,000.0	4,986.6	4,942.8	4,934.0	17.6	17.5	86.57	-47.4	2,525.8	2,418.9	2,384.1	34.81	69.486		
5,100.0	5,086.6	5,040.5	5,031.6	18.0	17.9	86.65	-50.7	2,528.2	2,421.1	2,385.6	35.51	68.186		
5,200.0	5,186.6	5,141.3	5,132.4	18.3	18.2	86.74	-54.1	2,530.7	2,423.4	2,387.2	36.22	66.915		
5,300.0	5,286.6	5,243.0	5,233.9	18.6	18.6	86.82	-57.4	2,533.2	2,425.6	2,388.7	36.93	65.685		
5,400.0	5,386.6	5,349.4	5,340.3	19.0	19.0	86.90	-60.9	2,535.5	2,427.7	2,390.0	37.66	64.469		
5,500.0	5,486.6	5,446.2	5,437.0	19.3	19.3	86.98	-63.9	2,537.5	2,429.6	2,391.2	38.35	63.350		
5,600.0	5,586.6	5,553.8	5,544.5	19.7	19.7	87.05	-67.1	2,539.8	2,431.5	2,392.4	39.08	62.212		
5,700.0	5,686.6	5,650.5	5,641.2	20.0	20.1	87.13	-70.0	2,541.6	2,433.3	2,393.5	39.78	61.169		
5,800.0	5,786.6	5,752.9	5,743.4	20.4	20.4	87.20	-73.2	2,543.7	2,435.1	2,394.6	40.50	60.134		
5,900.0	5,886.6	5,854.0	5,844.5	20.7	20.8	87.28	-76.3	2,545.4	2,436.7	2,395.5	41.21	59.134		
6,000.0	5,986.6	5,918.3	5,908.8	21.1	21.0	87.32	-78.2	2,547.1	2,439.2	2,397.4	41.79	58.369		
6,100.0	6,086.6	5,991.7	5,982.1	21.4	21.3	87.37	-80.0	2,550.0	2,443.0	2,400.6	42.40	57.619		
6,200.0	6,186.6	6,085.1	6,075.4	21.8	21.6	87.43	-82.3	2,554.4	2,447.5	2,404.5	43.08	56.809		
6,300.0	6,286.6	6,185.9	6,176.0	22.1	22.0	87.49	-84.9	2,559.0	2,452.0	2,408.2	43.80	55.984		
6,400.0	6,386.6	6,289.1	6,279.1	22.5	22.4	87.56	-87.5	2,563.8	2,456.5	2,412.0	44.52	55.175		
6,500.0	6,486.6	6,385.0	6,374.8	22.8	22.7	87.62	-89.9	2,568.1	2,460.9	2,415.7	45.22	54.423		
6,600.0	6,586.6	6,490.1	6,479.8	23.2	23.1	87.68	-92.2	2,572.9	2,465.4	2,419.5	45.95	53.655		
6,700.0	6,686.6	6,598.0	6,587.7	23.5	23.5	87.72	-93.9	2,577.5	2,469.6	2,422.9	46.69	52.893		
6,800.0	6,786.6	6,700.9	6,690.4	23.9	23.9	87.76	-95.5	2,581.6	2,473.5	2,426.1	47.41	52.171		
6,900.0	6,886.6	6,806.4	6,795.8	24.2	24.3	87.81	-97.2	2,585.6	2,477.3	2,429.1	48.14	51.456		
7,000.0	6,986.6	6,906.9	6,896.3	24.6	24.6	87.84	-98.7	2,589.4	2,481.0	2,432.1	48.86	50.782		
7,100.0	7,086.6	7,016.7	7,005.9	24.9	25.0	87.88	-100.3	2,593.2	2,484.4	2,434.8	49.60	50.085		
7,200.0	7,186.6	7,122.5	7,111.7	25.3	25.4	87.92	-101.8	2,596.6	2,487.5	2,437.2	50.34	49.420		
7,300.0	7,286.6	7,227.3	7,216.4	25.6	25.8	87.96	-103.5	2,599.7	2,490.4	2,439.4	51.06	48.771		
7,400.0	7,386.6	7,328.0	7,317.0	26.0	26.2	88.00	-105.0	2,602.6	2,493.2	2,441.4	51.78	48.153		
7,500.0	7,486.6	7,440.3	7,429.4	26.3	26.6	88.05	-106.9	2,605.6	2,495.8	2,443.3	52.53	47.509		
7,600.0	7,586.6	7,539.7	7,528.7	26.7	26.9	88.09	-108.7	2,607.9	2,498.1	2,444.9	53.24	46.919		
7,700.0	7,686.6	7,640.4	7,629.4	27.0	27.3	88.13	-110.5	2,610.3	2,500.4	2,446.5	53.96	46.341		
7,800.0	7,786.6	7,750.0	7,738.9	27.4	27.7	88.19	-112.8	2,612.6	2,502.5	2,447.8	54.70	45.746		
7,900.0	7,886.6	7,848.4	7,837.3	27.7	28.1	88.23	-114.9	2,614.6	2,504.5	2,449.1	55.41	45.199		
8,000.0	7,986.6	7,955.4	7,944.2	28.1	28.4	88.29	-117.2	2,616.6	2,506.2	2,450.0	56.15	44.638		
8,100.0	8,086.6	8,056.1	8,044.9	28.4	28.8	88.34	-119.4	2,618.4	2,508.0	2,451.1	56.86	44.108		
8,200.0	8,186.6	8,153.1	8,141.9	28.8	29.1	88.40	-121.8	2,620.0	2,509.6	2,452.0	57.56	43.598		
8,300.0	8,286.6	8,247.2	8,235.9	29.1	29.5	88.45	-124.1	2,622.0	2,511.6	2,453.3	58.25	43.114		
8,400.0	8,386.6	8,335.0	8,323.7	29.5	29.8	88.48	-125.3	2,623.8	2,513.7	2,454.8	58.92	42.661		
8,500.0	8,486.6	8,419.9	8,408.5	29.8	30.1	88.48	-125.4	2,626.4	2,516.6	2,457.0	59.58	42.242		
8,600.0	8,586.6	8,526.5	8,515.0	30.2	30.5	88.48	-125.1	2,629.5	2,519.6	2,459.3	60.31	41.780		
8,700.0	8,686.6	8,636.2	8,624.8	30.6	30.9	88.47	-124.7	2,632.4	2,522.3	2,461.2	61.05	41.315		
8,800.0	8,786.6	8,745.2	8,733.7	30.9	31.3	88.47	-124.4	2,634.9	2,524.5	2,462.7	61.79	40.858		
8,900.0	8,886.6	8,871.0	8,859.5	31.3	31.7	88.49	-125.3	2,637.0	2,526.2	2,463.6	62.58	40.364		
9,000.0	8,986.6	8,976.5	8,965.0	31.6	32.1	88.53	-127.1	2,638.0	2,527.1	2,463.7	63.31	39.914		
9,100.0	9,086.6	9,059.5	9,047.9	32.0	32.4	88.58	-129.4	2,639.0	2,528.2	2,464.2	63.97	39.523		
9,200.0	9,186.6	9,125.1	9,113.4	32.3	32.6	88.63	-131.7	2,640.5	2,530.4	2,465.8	64.56	39.195		
9,300.0	9,286.6	9,215.2	9,203.4	32.7	32.9	88.72	-135.3	2,643.4	2,533.6	2,468.4	65.24	38.836		
9,400.0	9,386.6	9,298.3	9,286.4	33.0	33.2	88.80	-138.9	2,646.5	2,537.2	2,471.3	65.89	38.505		
9,500.0	9,486.6	9,379.5	9,367.4	33.4	33.5	88.88	-142.4	2,650.1	2,541.5	2,475.0	66.53	38.200		
9,600.0	9,586.6	9,467.3	9,455.0	33.7	33.9	88.95	-145.3	2,654.5	2,546.5	2,479.3	67.20	37.895		
9,700.0	9,686.6	9,570.1	9,557.7	34.1	34.3	89.01	-148.0	2,659.9	2,551.7	2,483.8	67.93	37.565		
9,800.0	9,786.6	9,683.4	9,670.9	34.5	34.7	89.06	-150.3	2,665.3	2,556.5	2,487.8	68.70	37.213		
9,900.0	9,886.6	9,789.4	9,776.7	34.8	35.1	89.13	-153.0	2,670.0	2,560.9	2,491.4	69.44	36.878		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 220-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,000.0	9,986.6	9,903.2	9,890.4	35.2	35.5	89.19	-156.0	2,674.7	2,564.9	2,494.7	70.21	36.531		
10,100.0	10,086.6	9,990.0	9,977.1	35.5	35.8	89.23	-157.6	2,678.2	2,568.9	2,498.1	70.88	36.246		
10,200.0	10,186.6	10,091.4	10,078.4	35.9	36.2	89.27	-159.2	2,682.5	2,573.2	2,501.6	71.60	35.940		
10,300.0	10,286.6	10,212.3	10,199.2	36.2	36.6	89.31	-160.8	2,687.0	2,576.9	2,504.5	72.39	35.596		
10,400.0	10,386.6	10,313.2	10,300.0	36.6	37.0	89.34	-162.3	2,690.5	2,580.2	2,507.1	73.11	35.292		
10,500.0	10,486.6	10,410.8	10,397.5	36.9	37.3	89.36	-163.4	2,693.8	2,583.6	2,509.8	73.82	35.001		
10,600.0	10,586.6	10,509.6	10,496.3	37.3	37.7	89.39	-164.4	2,697.3	2,587.1	2,512.6	74.52	34.715		
10,700.0	10,686.6	10,603.6	10,590.3	37.6	38.0	89.41	-165.5	2,700.6	2,590.7	2,515.4	75.22	34.443		
10,800.0	10,786.6	10,695.3	10,681.9	38.0	38.4	89.43	-166.3	2,704.2	2,594.6	2,518.7	75.90	34.186		
10,890.4	10,877.0	10,796.1	10,782.6	38.3	38.7	89.46	-167.5	2,708.2	2,598.2	2,521.6	76.58	33.926		
10,900.0	10,886.6	10,808.2	10,794.7	38.4	38.8	94.83	-167.7	2,708.6	2,598.5	2,521.9	76.66	33.896		
10,950.0	10,936.5	10,867.6	10,854.0	38.5	39.0	94.74	-168.8	2,710.6	2,600.4	2,523.4	77.05	33.750		
11,000.0	10,986.0	10,922.6	10,909.0	38.7	39.2	94.73	-169.9	2,712.3	2,602.6	2,525.2	77.42	33.618		
11,050.0	11,034.6	10,972.7	10,959.0	38.9	39.4	94.75	-170.8	2,713.7	2,605.1	2,527.3	77.75	33.505		
11,100.0	11,082.0	11,020.1	11,006.4	39.0	39.5	94.81	-171.5	2,715.1	2,608.0	2,529.9	78.07	33.405		
11,150.0	11,127.8	11,071.2	11,057.5	39.2	39.7	94.93	-172.1	2,716.6	2,611.4	2,533.0	78.40	33.309		
11,200.0	11,171.8	11,200.0	11,160.0	39.3	40.2	95.66	-172.4	2,718.2	2,614.8	2,535.8	78.97	33.112		
11,250.0	11,213.5	11,274.9	11,261.2	39.4	40.4	96.57	-172.3	2,717.5	2,617.9	2,538.6	79.29	33.016		
11,300.0	11,252.6	11,325.9	11,312.2	39.5	40.6	96.92	-172.1	2,716.4	2,621.2	2,541.6	79.56	32.945		
11,350.0	11,288.9	11,365.5	11,351.7	39.7	40.7	97.09	-171.3	2,715.5	2,625.4	2,545.6	79.81	32.897		
11,400.0	11,322.0	11,393.2	11,379.4	39.8	40.8	97.00	-170.0	2,715.0	2,630.5	2,550.5	80.02	32.875		
11,450.0	11,351.8	11,414.2	11,400.4	39.9	40.8	96.72	-168.4	2,714.7	2,636.9	2,556.7	80.21	32.875		
11,500.0	11,377.9	11,448.6	11,434.5	40.0	41.0	96.56	-164.5	2,714.4	2,644.4	2,563.9	80.42	32.882		
11,550.0	11,400.3	11,507.5	11,492.3	40.1	41.1	96.74	-153.4	2,714.0	2,652.7	2,572.0	80.67	32.882		
11,600.0	11,418.6	11,540.2	11,523.9	40.3	41.2	96.38	-144.8	2,713.8	2,661.9	2,581.0	80.87	32.917		
11,650.0	11,432.8	11,566.8	11,549.1	40.4	41.3	95.81	-136.5	2,713.9	2,672.1	2,591.1	81.04	32.971		
11,700.0	11,442.8	11,593.4	11,574.0	40.5	41.4	95.14	-127.1	2,714.2	2,683.4	2,602.2	81.22	33.041		
11,750.0	11,448.5	11,620.0	11,598.5	40.7	41.4	94.38	-116.6	2,714.6	2,695.7	2,614.4	81.38	33.125		
11,790.4	11,450.0	11,627.8	11,605.5	40.8	41.5	93.43	-113.3	2,714.8	2,706.5	2,625.0	81.49	33.213		
11,800.0	11,450.0	11,630.5	11,608.0	40.8	41.5	93.48	-112.1	2,714.9	2,709.1	2,627.6	81.51	33.235		
11,900.0	11,450.0	11,963.5	11,873.7	41.1	42.1	99.10	84.9	2,721.1	2,734.7	2,652.8	81.89	33.393		
12,000.0	11,450.0	12,172.9	11,999.2	41.5	42.6	101.63	252.3	2,721.6	2,752.1	2,669.8	82.27	33.454		
12,037.8	11,450.0	12,302.6	12,068.6	41.7	43.1	103.04	361.7	2,718.8	2,756.8	2,674.3	82.46	33.433		
12,100.0	11,450.0	12,371.3	12,097.6	41.9	43.3	103.63	424.0	2,718.2	2,763.3	2,680.5	82.80	33.375		
12,200.0	11,450.0	12,716.6	12,139.8	42.4	44.8	104.42	763.2	2,727.3	2,770.6	2,686.2	84.40	32.829		
12,300.0	11,450.0	12,861.9	12,133.9	43.0	45.6	104.29	908.3	2,729.0	2,771.5	2,685.8	85.70	32.340		
12,400.0	11,450.0	12,963.8	12,130.4	43.6	46.2	104.21	1,010.1	2,729.1	2,771.5	2,684.6	86.91	31.891		
12,437.1	11,450.0	12,999.6	12,129.3	43.9	46.4	104.19	1,045.9	2,729.1	2,771.5	2,684.2	87.38	31.719		
12,500.0	11,450.0	13,058.4	12,127.2	44.3	46.8	104.14	1,104.7	2,729.1	2,771.6	2,683.4	88.17	31.435		
12,600.0	11,450.0	13,148.4	12,125.7	45.0	47.4	104.11	1,194.7	2,729.2	2,772.0	2,682.5	89.48	30.978		
12,700.0	11,450.0	13,311.5	12,122.8	45.8	48.7	104.05	1,357.7	2,727.7	2,771.4	2,680.0	91.39	30.327		
12,800.0	11,450.0	13,413.6	12,118.9	46.6	49.5	103.98	1,459.7	2,725.8	2,769.5	2,676.5	93.00	29.779		
12,900.0	11,450.0	13,479.2	12,116.1	47.4	50.0	103.92	1,525.3	2,725.1	2,768.2	2,673.8	94.43	29.317		
12,938.1	11,450.0	13,503.0	12,115.3	47.8	50.2	103.91	1,549.1	2,725.0	2,768.1	2,673.1	94.97	29.146		
13,000.0	11,450.0	13,537.3	12,114.6	48.3	50.5	103.89	1,583.3	2,725.1	2,768.3	2,672.5	95.83	28.888		
13,100.0	11,450.0	13,588.6	12,114.1	49.3	51.0	103.88	1,634.6	2,725.8	2,770.1	2,672.9	97.22	28.494		
13,200.0	11,450.0	13,673.4	12,114.4	50.3	51.8	103.87	1,719.5	2,727.9	2,773.4	2,674.4	98.93	28.034		
13,300.0	11,450.0	13,773.1	12,114.9	51.3	52.7	103.86	1,819.1	2,730.2	2,776.5	2,675.7	100.83	27.537		
13,400.0	11,450.0	13,861.4	12,115.3	52.3	53.6	103.86	1,907.4	2,732.5	2,779.9	2,677.2	102.69	27.070		
13,500.0	11,450.0	13,968.2	12,117.4	53.4	54.6	103.88	2,014.1	2,735.2	2,783.6	2,678.8	104.78	26.566		
13,600.0	11,450.0	14,153.5	12,121.6	54.5	56.6	103.95	2,199.3	2,736.2	2,785.4	2,677.8	107.68	25.868		
13,700.0	11,450.0	14,237.6	12,121.5	55.6	57.5	103.95	2,283.5	2,735.9	2,785.9	2,676.2	109.70	25.396		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 220-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,800.0	11,450.0	14,331.0	12,118.5	56.8	58.5	103.88	2,376.8	2,737.1	2,787.1	2,675.2	111.88	24.911		
13,900.0	11,450.0	14,424.5	12,115.7	58.0	59.6	103.82	2,470.3	2,738.2	2,788.3	2,674.1	114.11	24.435		
14,000.0	11,450.0	14,514.5	12,114.9	59.2	60.6	103.79	2,560.2	2,739.1	2,789.8	2,673.5	116.32	23.984		
14,100.0	11,450.0	14,661.1	12,113.7	60.4	62.4	103.76	2,706.9	2,739.9	2,791.0	2,671.8	119.19	23.416		
14,200.0	11,450.0	14,993.6	12,116.4	61.7	66.4	103.88	3,038.5	2,723.0	2,787.3	2,663.4	123.88	22.499		
14,300.0	11,450.0	15,065.0	12,115.4	62.9	67.3	103.89	3,109.6	2,717.3	2,779.8	2,653.7	126.10	22.045		
14,400.0	11,450.0	15,114.0	12,117.0	64.2	68.0	103.94	3,158.4	2,712.9	2,773.0	2,644.9	128.08	21.651		
14,500.0	11,450.0	15,170.4	12,119.8	65.5	68.7	104.02	3,214.5	2,708.5	2,767.9	2,637.7	130.13	21.270		
14,600.0	11,450.0	15,207.0	12,121.4	66.8	69.2	104.05	3,251.1	2,706.8	2,765.2	2,633.2	131.98	20.951		
14,642.4	11,450.0	15,207.0	12,121.4	67.4	69.2	104.05	3,251.1	2,706.8	2,764.9	2,632.3	132.59	20.853		
14,700.0	11,450.0	15,207.0	12,121.4	68.2	69.2	104.05	3,251.1	2,706.8	2,765.5	2,632.1	133.38	20.733		
14,800.0	11,450.0	15,263.7	12,122.9	69.5	69.9	104.08	3,307.7	2,706.6	2,767.3	2,631.9	135.41	20.436		
14,900.0	11,450.0	14,900.0	12,124.2	70.9	65.1	104.09	3,394.2	2,709.7	2,771.8	2,639.8	132.06	20.988		
15,000.0	11,450.0	15,489.0	12,125.9	72.2	72.9	104.11	3,532.9	2,711.7	2,773.9	2,633.0	140.97	19.678		
15,100.0	11,450.0	15,550.1	12,124.5	73.6	73.7	104.07	3,593.9	2,713.6	2,777.2	2,634.0	143.14	19.402		
15,200.0	11,450.0	15,604.0	12,123.3	75.0	74.4	104.03	3,647.8	2,716.2	2,782.2	2,637.0	145.21	19.160		
15,300.0	11,450.0	15,660.6	12,122.9	76.4	75.2	104.00	3,704.3	2,719.7	2,788.7	2,641.4	147.29	18.934		
15,400.0	11,450.0	15,400.0	12,119.7	77.8	71.6	103.88	3,953.9	2,730.3	2,793.2	2,648.0	145.24	19.231		
15,500.0	11,450.0	16,068.9	12,120.6	79.3	80.8	103.89	4,112.2	2,729.9	2,793.7	2,638.0	155.64	17.950		
15,600.0	11,450.0	15,600.0	12,121.2	80.7	74.2	103.91	4,263.9	2,726.8	2,792.5	2,642.0	150.43	18.564		
15,700.0	11,450.0	16,297.1	12,122.6	82.1	84.0	103.95	4,340.2	2,724.1	2,790.4	2,628.9	161.53	17.275		
15,768.1	11,450.0	16,334.0	12,126.5	83.1	84.6	104.03	4,376.9	2,722.7	2,790.1	2,627.1	163.01	17.116		
15,800.0	11,450.0	16,360.1	12,130.0	83.6	84.9	104.11	4,402.8	2,721.7	2,790.2	2,626.4	163.79	17.035		
15,900.0	11,450.0	16,471.3	12,145.1	85.0	86.5	104.43	4,512.9	2,717.0	2,790.2	2,623.6	166.58	16.750		
15,956.3	11,450.0	16,530.4	12,150.9	85.9	87.4	104.55	4,571.6	2,714.9	2,790.1	2,621.9	168.13	16.594		
16,000.0	11,450.0	16,551.7	12,152.4	86.5	87.7	104.58	4,592.9	2,714.4	2,790.2	2,621.1	169.07	16.504		
16,100.0	11,450.0	16,618.0	12,154.8	88.0	88.6	104.63	4,659.1	2,714.2	2,791.6	2,620.1	171.43	16.284		
16,200.0	11,450.0	16,752.7	12,154.1	89.4	90.6	104.60	4,793.8	2,715.8	2,793.5	2,618.7	174.77	15.984		
16,300.0	11,450.0	16,954.3	12,151.9	90.9	93.5	104.57	4,995.3	2,712.1	2,792.3	2,613.3	178.92	15.606		
16,400.0	11,450.0	17,032.1	12,150.9	92.4	94.7	104.56	5,073.0	2,709.0	2,789.0	2,607.4	181.56	15.361		
16,500.0	11,450.0	17,088.0	12,150.4	93.9	95.5	104.55	5,128.9	2,708.2	2,787.8	2,603.9	183.93	15.157		
16,600.0	11,450.0	17,226.8	12,151.6	95.4	97.6	104.59	5,267.7	2,704.1	2,785.8	2,598.5	187.30	14.874		
16,700.0	11,450.0	17,276.0	12,152.0	96.9	98.3	104.60	5,316.8	2,702.9	2,784.4	2,594.9	189.57	14.688		
16,731.0	11,450.0	17,298.8	12,152.2	97.4	98.6	104.61	5,339.7	2,702.5	2,784.3	2,594.0	190.37	14.626		
16,800.0	11,450.0	17,332.1	12,152.5	98.4	99.1	104.61	5,372.9	2,702.4	2,784.8	2,592.9	191.90	14.511		
16,900.0	11,450.0	17,435.0	12,152.9	100.0	100.7	104.61	5,475.8	2,703.7	2,786.8	2,591.9	194.88	14.300		
17,000.0	11,450.0	17,593.9	12,149.6	101.5	103.1	104.55	5,634.7	2,702.0	2,785.5	2,586.9	198.66	14.021		
17,050.0	11,450.0	17,617.9	12,149.5	102.2	103.4	104.54	5,658.7	2,701.7	2,785.3	2,585.5	199.80	13.940		
17,100.0	11,450.0	17,652.0	12,149.6	103.0	103.9	104.55	5,692.8	2,701.7	2,785.6	2,584.5	201.07	13.854		
17,200.0	11,450.0	17,686.8	12,149.8	104.5	104.5	104.55	5,727.6	2,702.1	2,787.4	2,584.3	203.09	13.725		
17,300.0	11,450.0	17,745.0	12,149.8	106.1	105.3	104.53	5,785.7	2,704.2	2,791.4	2,586.0	205.41	13.589		
17,400.0	11,450.0	18,048.6	12,145.5	107.6	109.9	104.42	6,089.0	2,708.3	2,795.0	2,583.8	211.29	13.228		
17,500.0	11,450.0	18,102.9	12,146.0	109.1	110.7	104.43	6,143.3	2,706.6	2,793.0	2,579.3	213.72	13.069		
17,575.9	11,450.0	18,144.2	12,146.4	110.3	111.4	104.44	6,184.6	2,705.9	2,792.5	2,577.0	215.53	12.956		
17,600.0	11,450.0	18,157.4	12,146.5	110.7	111.6	104.44	6,197.8	2,705.7	2,792.6	2,576.5	216.10	12.922		
17,700.0	11,450.0	18,216.0	12,146.9	112.2	112.5	104.45	6,256.4	2,705.9	2,793.8	2,575.3	218.51	12.785		
17,800.0	11,450.0	18,268.7	12,147.3	113.8	113.3	104.45	6,309.1	2,707.0	2,796.6	2,575.8	220.79	12.666		
17,900.0	11,450.0	18,331.6	12,148.0	115.3	114.2	104.45	6,372.0	2,709.1	2,800.9	2,577.7	223.19	12.549		
18,000.0	11,450.0	18,416.3	12,148.6	116.9	115.5	104.44	6,456.6	2,713.0	2,806.2	2,580.2	225.94	12.420		
18,100.0	11,450.0	18,578.3	12,156.8	118.4	118.0	104.57	6,618.3	2,716.5	2,810.2	2,580.3	229.87	12.225		
18,200.0	11,450.0	18,720.1	12,158.3	120.0	120.2	104.59	6,760.1	2,718.5	2,812.6	2,579.1	233.52	12.044		
18,300.0	11,450.0	18,931.9	12,149.0	121.6	123.5	104.40	6,971.7	2,718.0	2,811.6	2,573.4	238.22	11.803		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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		Offset		Semi Major Axis			Distance										
Measured Depth	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Minimum	Separation	Warning				
Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Centres	Ellipses	Separation	Factor					
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)						
18,400.0	11,450.0	19,032.9	12,144.2	123.1	125.1	104.31	7,072.5	2,716.3	2,809.6	2,568.2	241.36	11.641					
18,500.0	11,450.0	19,160.6	12,140.1	124.7	127.0	104.24	7,200.1	2,712.7	2,806.8	2,562.0	244.80	11.466					
18,600.0	11,450.0	19,224.7	12,140.2	126.3	128.0	104.25	7,264.2	2,710.5	2,804.3	2,556.8	247.43	11.334					
18,700.0	11,450.0	19,310.7	12,139.4	127.8	129.4	104.24	7,350.1	2,708.6	2,802.7	2,552.3	250.33	11.196					
18,800.0	11,450.0	19,383.0	12,137.4	129.4	130.5	104.20	7,422.3	2,707.7	2,801.5	2,548.5	253.07	11.070					
18,831.6	11,450.0	19,401.1	12,137.0	129.9	130.8	104.20	7,440.4	2,707.6	2,801.4	2,547.6	253.86	11.035					
18,900.0	11,450.0	19,440.0	12,136.2	131.0	131.4	104.18	7,479.3	2,707.7	2,801.8	2,546.2	255.56	10.963					
19,000.0	11,450.0	19,502.2	12,135.2	132.6	132.4	104.15	7,541.5	2,708.5	2,803.5	2,545.4	258.08	10.863					
19,100.0	11,450.0	19,677.5	12,134.6	134.2	135.1	104.12	7,716.8	2,710.3	2,805.6	2,543.3	262.28	10.697					
19,200.0	11,450.0	19,830.7	12,142.2	135.7	137.5	104.29	7,869.6	2,704.9	2,804.1	2,538.2	265.89	10.546					
19,300.0	11,450.0	19,974.9	12,144.3	137.3	139.8	104.36	8,013.7	2,698.6	2,800.8	2,531.4	269.42	10.396					
19,400.0	11,450.0	20,049.9	12,143.6	138.9	141.0	104.36	8,088.7	2,695.4	2,797.3	2,525.1	272.23	10.276					
19,500.0	11,450.0	20,122.4	12,142.0	140.5	142.1	104.34	8,161.1	2,693.7	2,795.2	2,520.1	275.03	10.163					
19,600.0	11,450.0	20,232.7	12,141.0	142.1	143.9	104.33	8,271.4	2,690.3	2,792.7	2,514.5	278.26	10.037					
19,700.0	11,450.0	20,291.0	12,140.9	143.7	144.8	104.33	8,329.6	2,688.8	2,791.1	2,510.2	280.83	9.939					
19,777.9	11,450.0	20,347.9	12,140.6	144.9	145.7	104.33	8,386.6	2,688.0	2,790.6	2,507.6	282.96	9.862					
19,800.0	11,450.0	20,361.3	12,140.5	145.3	145.9	104.33	8,400.0	2,688.0	2,790.6	2,507.1	283.52	9.843					
19,900.0	11,450.0	20,445.9	12,139.1	146.9	147.3	104.29	8,484.5	2,688.4	2,791.4	2,505.0	286.44	9.745					
20,000.0	11,450.0	20,594.2	12,135.6	148.5	149.6	104.22	8,632.7	2,688.4	2,791.7	2,501.4	290.29	9.617					
20,100.0	11,450.0	20,705.4	12,134.8	150.1	151.4	104.21	8,744.0	2,686.5	2,790.7	2,497.1	293.56	9.506					
20,200.0	11,450.0	20,787.9	12,133.8	151.7	152.7	104.19	8,826.5	2,685.1	2,789.5	2,493.0	296.46	9.409					
20,241.1	11,450.0	20,811.2	12,133.6	152.3	153.1	104.19	8,849.7	2,684.9	2,789.4	2,491.9	297.50	9.376					
20,300.0	11,450.0	20,857.0	12,133.4	153.3	153.8	104.18	8,895.5	2,684.8	2,789.7	2,490.5	299.15	9.325					
20,400.0	11,450.0	20,949.9	12,133.8	154.9	155.3	104.18	8,988.4	2,685.0	2,790.6	2,488.5	302.16	9.236					
20,500.0	11,450.0	21,181.7	12,134.1	156.5	159.0	104.22	9,220.0	2,677.5	2,787.4	2,480.5	306.89	9.083					
20,600.0	11,450.0	21,247.3	12,132.5	158.1	160.0	104.20	9,285.5	2,675.2	2,784.1	2,474.5	309.68	8.990					
20,700.0	11,450.0	21,329.0	12,131.3	159.7	161.3	104.18	9,367.2	2,672.2	2,781.1	2,468.5	312.61	8.896					
20,800.0	11,450.0	21,396.4	12,130.3	161.3	162.4	104.17	9,434.6	2,670.3	2,779.0	2,463.7	315.34	8.813					
20,854.0	11,450.0	21,424.0	12,129.3	162.1	162.8	104.15	9,462.2	2,670.2	2,778.8	2,462.1	316.70	8.774					
20,900.0	11,450.0	21,451.3	12,128.2	162.9	163.3	104.13	9,489.5	2,670.4	2,779.0	2,461.1	317.89	8.742					
21,000.0	11,450.0	21,519.0	12,126.4	164.5	164.3	104.08	9,557.1	2,671.2	2,780.3	2,459.7	320.57	8.673					
21,100.0	11,450.0	21,588.3	12,125.0	166.1	165.5	104.05	9,626.3	2,672.8	2,782.7	2,459.5	323.23	8.609					
21,200.0	11,450.0	21,747.2	12,124.6	167.7	168.0	104.02	9,785.2	2,674.8	2,784.7	2,457.3	327.34	8.507					
21,300.0	11,450.0	21,892.8	12,121.1	169.3	170.3	103.94	9,930.8	2,674.9	2,785.0	2,453.8	331.21	8.409					
21,400.0	11,450.0	21,999.3	12,119.5	170.9	172.0	103.92	10,037.3	2,673.5	2,784.2	2,449.7	334.47	8.324					
21,500.0	11,450.0	22,155.7	12,115.1	172.5	174.5	103.84	10,193.6	2,670.1	2,782.2	2,443.8	338.38	8.222					
21,600.0	11,450.0	22,191.0	12,113.6	174.2	175.1	103.81	10,228.8	2,669.1	2,779.9	2,439.1	340.78	8.157					
21,614.7	11,450.0	22,191.0	12,113.6	174.4	175.1	103.81	10,228.8	2,669.1	2,779.8	2,438.8	341.02	8.152 SF					

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	1.0	1.0	0.0	0.0	-45.59	29.6	-30.2	42.3					
100.0	100.0	101.0	101.0	0.1	0.1	-45.59	29.6	-30.2	42.3	42.0	0.26	162.785		
200.0	200.0	201.0	201.0	0.5	0.5	-45.59	29.6	-30.2	42.3	41.3	0.98	43.310		
300.0	300.0	301.0	301.0	0.8	0.8	-45.59	29.6	-30.2	42.3	40.6	1.69	24.978		
400.0	400.0	401.0	401.0	1.2	1.2	-45.59	29.6	-30.2	42.3	39.9	2.41	17.549		
500.0	500.0	501.0	501.0	1.6	1.6	-45.59	29.6	-30.2	42.3	39.2	3.13	13.527		
600.0	600.0	601.0	601.0	1.9	1.9	-45.59	29.6	-30.2	42.3	38.5	3.84	11.004		
700.0	700.0	701.0	701.0	2.3	2.3	-45.59	29.6	-30.2	42.3	37.7	4.56	9.275		
800.0	800.0	801.0	801.0	2.6	2.6	-45.59	29.6	-30.2	42.3	37.0	5.28	8.015		
900.0	900.0	901.0	901.0	3.0	3.0	-45.59	29.6	-30.2	42.3	36.3	6.00	7.056		
1,000.0	1,000.0	1,001.0	1,001.0	3.4	3.4	-45.59	29.6	-30.2	42.3	35.6	6.71	6.303 CC, ES		
1,100.0	1,100.0	1,101.0	1,101.0	3.7	3.7	164.94	29.6	-30.2	43.1	35.7	7.41	5.821		
1,200.0	1,200.0	1,201.0	1,201.0	4.0	4.1	165.78	29.6	-30.2	45.7	37.6	8.10	5.639 SF		
1,300.0	1,299.9	1,300.9	1,300.9	4.4	4.4	167.00	29.6	-30.2	49.9	41.1	8.79	5.677		
1,400.0	1,399.7	1,400.7	1,400.7	4.7	4.8	168.40	29.6	-30.2	55.9	46.4	9.49	5.889		
1,500.0	1,499.4	1,500.4	1,500.4	5.0	5.1	169.81	29.6	-30.2	63.6	53.4	10.19	6.241		
1,600.0	1,598.9	1,599.3	1,599.3	5.4	5.5	170.52	29.4	-31.1	73.5	62.6	10.88	6.754		
1,700.0	1,698.3	1,697.9	1,697.8	5.8	5.8	170.23	29.0	-33.6	85.9	74.3	11.56	7.431		
1,800.0	1,797.4	1,795.9	1,795.8	6.1	6.2	169.33	28.2	-37.7	100.8	88.6	12.24	8.239		
1,900.0	1,896.4	1,893.6	1,893.2	6.5	6.5	168.06	27.1	-43.5	117.5	104.6	12.92	9.095		
2,000.0	1,995.5	1,990.8	1,990.2	6.9	6.8	166.50	25.7	-50.9	135.1	121.5	13.60	9.934		
2,100.0	2,094.5	2,087.6	2,086.6	7.3	7.2	164.79	24.0	-59.8	153.8	139.5	14.29	10.763		
2,200.0	2,193.5	2,183.9	2,182.3	7.7	7.5	163.00	22.0	-70.3	173.5	158.5	14.97	11.587		
2,300.0	2,292.5	2,279.7	2,277.3	8.1	7.9	161.20	19.7	-82.2	194.3	178.7	15.66	12.412		
2,400.0	2,391.6	2,376.7	2,373.3	8.5	8.2	159.49	17.2	-95.5	216.1	199.7	16.36	13.205		
2,500.0	2,490.6	2,474.1	2,469.8	8.9	8.6	158.08	14.6	-108.8	238.0	220.9	17.08	13.935		
2,600.0	2,589.6	2,571.5	2,566.3	9.3	9.0	156.91	12.1	-122.1	260.0	242.2	17.80	14.609		
2,700.0	2,688.6	2,668.9	2,662.7	9.7	9.4	155.92	9.5	-135.4	282.1	263.6	18.52	15.232		
2,729.0	2,717.4	2,702.8	2,690.7	9.8	9.5	155.66	8.8	-139.3	288.5	269.8	18.75	15.387		
2,800.0	2,787.8	2,766.5	2,759.3	10.1	9.7	155.12	7.0	-148.8	303.7	284.4	19.25	15.780		
2,900.0	2,887.2	2,864.4	2,856.3	10.5	10.1	154.27	4.4	-162.2	323.1	303.2	19.97	16.179		
3,000.0	2,986.8	2,962.7	2,953.7	10.9	10.5	153.33	1.9	-175.6	340.3	319.7	20.70	16.443		
3,100.0	3,086.7	3,061.3	3,051.3	11.2	10.9	152.27	-0.7	-189.1	355.4	334.0	21.42	16.588		
3,200.0	3,186.6	3,160.2	3,149.2	11.6	11.3	151.10	-3.3	-202.6	368.3	346.1	22.15	16.629		
3,262.3	3,249.0	3,221.9	3,210.3	11.8	11.5	-59.90	-4.9	-211.0	375.3	352.7	22.59	16.611		
3,300.0	3,286.6	3,259.2	3,247.3	11.9	11.7	-60.42	-5.9	-216.1	379.3	356.4	22.86	16.593		
3,400.0	3,386.6	3,358.2	3,345.3	12.2	12.1	-61.74	-8.4	-229.7	390.0	366.5	23.56	16.552		
3,500.0	3,486.6	3,457.2	3,443.4	12.6	12.5	-62.99	-11.0	-243.2	401.0	376.7	24.27	16.521		
3,600.0	3,586.6	3,556.3	3,541.4	12.9	12.9	-64.17	-13.6	-256.7	412.1	387.1	24.98	16.499		
3,700.0	3,686.6	3,655.3	3,639.5	13.2	13.3	-65.29	-16.2	-270.3	423.4	397.7	25.68	16.484		
3,800.0	3,786.6	3,754.3	3,737.6	13.5	13.7	-66.35	-18.8	-283.8	434.8	408.4	26.39	16.475		
3,900.0	3,886.6	3,853.4	3,835.6	13.9	14.1	-67.36	-21.4	-297.3	446.4	419.3	27.10	16.472		
4,000.0	3,986.6	3,952.4	3,933.7	14.2	14.5	-68.32	-23.9	-310.9	458.1	430.3	27.81	16.474		
4,100.0	4,086.6	4,051.4	4,031.8	14.6	14.9	-69.23	-26.5	-324.4	469.9	441.4	28.52	16.480		
4,200.0	4,186.6	4,150.4	4,129.8	14.9	15.3	-70.09	-29.1	-338.0	481.9	452.6	29.22	16.489		
4,300.0	4,286.6	4,249.5	4,227.9	15.2	15.7	-70.91	-31.7	-351.5	493.9	464.0	29.93	16.501		
4,400.0	4,386.6	4,348.5	4,326.0	15.6	16.1	-71.70	-34.3	-365.0	506.1	475.4	30.64	16.516		
4,500.0	4,486.6	4,447.5	4,424.0	15.9	16.5	-72.44	-36.9	-378.6	518.3	486.9	31.35	16.532		
4,600.0	4,586.6	4,546.5	4,522.1	16.2	16.9	-73.15	-39.4	-392.1	530.6	498.5	32.06	16.550		
4,700.0	4,686.6	4,645.6	4,620.1	16.6	17.4	-73.84	-42.0	-405.6	543.0	510.2	32.77	16.570		
4,800.0	4,786.6	4,744.6	4,718.2	16.9	17.8	-74.48	-44.6	-419.2	555.5	522.0	33.48	16.591		
4,900.0	4,886.6	4,843.6	4,816.3	17.3	18.2	-75.11	-47.2	-432.7	568.0	533.8	34.19	16.613		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.0	4,986.6	4,942.6	4,914.3	17.6	18.6	-75.70	-49.8	-446.3	580.6	545.7	34.90	16.636		
5,100.0	5,086.6	5,041.7	5,012.4	18.0	19.0	-76.27	-52.4	-459.8	593.2	557.6	35.61	16.659		
5,200.0	5,186.6	5,140.7	5,110.5	18.3	19.4	-76.82	-54.9	-473.3	605.9	569.6	36.32	16.683		
5,300.0	5,286.6	5,239.7	5,208.5	18.6	19.8	-77.34	-57.5	-486.9	618.7	581.7	37.03	16.707		
5,400.0	5,386.6	5,338.8	5,306.6	19.0	20.2	-77.84	-60.1	-500.4	631.5	593.8	37.74	16.731		
5,500.0	5,486.6	5,437.8	5,404.6	19.3	20.6	-78.32	-62.7	-513.9	644.4	605.9	38.46	16.756		
5,600.0	5,586.6	5,536.8	5,502.7	19.7	21.1	-78.79	-65.3	-527.5	657.3	618.1	39.17	16.781		
5,700.0	5,686.6	5,635.8	5,600.8	20.0	21.5	-79.23	-67.9	-541.0	670.2	630.3	39.88	16.806		
5,800.0	5,786.6	5,734.9	5,698.8	20.4	21.9	-79.66	-70.4	-554.6	683.2	642.6	40.59	16.830		
5,900.0	5,886.6	5,833.9	5,796.9	20.7	22.3	-80.07	-73.0	-568.1	696.2	654.9	41.31	16.855		
6,000.0	5,986.6	5,932.9	5,895.0	21.1	22.7	-80.47	-75.6	-581.6	709.3	667.2	42.02	16.880		
6,100.0	6,086.6	6,031.9	5,993.0	21.4	23.1	-80.85	-78.2	-595.2	722.3	679.6	42.73	16.904		
6,200.0	6,186.6	6,131.0	6,091.1	21.8	23.5	-81.22	-80.8	-608.7	735.5	692.0	43.45	16.928		
6,300.0	6,286.6	6,230.0	6,189.2	22.1	24.0	-81.58	-83.4	-622.2	748.6	704.4	44.16	16.952		
6,400.0	6,386.6	6,329.0	6,287.2	22.5	24.4	-81.92	-85.9	-635.8	761.8	716.9	44.87	16.976		
6,500.0	6,486.6	6,428.0	6,385.3	22.8	24.8	-82.26	-88.5	-649.3	775.0	729.4	45.59	16.999		
6,600.0	6,586.6	6,527.1	6,483.3	23.2	25.2	-82.58	-91.1	-662.9	788.2	741.9	46.30	17.023		
6,700.0	6,686.6	6,626.1	6,581.4	23.5	25.6	-82.89	-93.7	-676.4	801.4	754.4	47.02	17.046		
6,800.0	6,786.6	6,725.1	6,679.5	23.9	26.0	-83.19	-96.3	-689.9	814.7	767.0	47.73	17.068		
6,900.0	6,886.6	6,824.2	6,777.5	24.2	26.4	-83.48	-98.9	-703.5	828.0	779.5	48.45	17.091		
7,000.0	6,986.6	6,923.2	6,875.6	24.6	26.9	-83.76	-101.4	-717.0	841.3	792.1	49.16	17.113		
7,100.0	7,086.6	7,022.2	6,973.7	24.9	27.3	-84.04	-104.0	-730.5	854.6	804.7	49.88	17.135		
7,200.0	7,186.6	7,121.2	7,071.7	25.3	27.7	-84.30	-106.6	-744.1	868.0	817.4	50.59	17.156		
7,300.0	7,286.6	7,220.3	7,169.8	25.6	28.1	-84.56	-109.2	-757.6	881.3	830.0	51.31	17.177		
7,400.0	7,386.6	7,319.3	7,267.8	26.0	28.5	-84.81	-111.8	-771.2	894.7	842.7	52.02	17.198		
7,500.0	7,486.6	7,418.3	7,365.9	26.3	28.9	-85.05	-114.4	-784.7	908.1	855.4	52.74	17.219		
7,600.0	7,586.6	7,517.3	7,464.0	26.7	29.4	-85.28	-116.9	-798.2	921.5	868.0	53.46	17.239		
7,700.0	7,686.6	7,616.4	7,562.0	27.0	29.8	-85.51	-119.5	-811.8	934.9	880.8	54.17	17.259		
7,800.0	7,786.6	7,715.4	7,660.1	27.4	30.2	-85.73	-122.1	-825.3	948.4	893.5	54.89	17.278		
7,900.0	7,886.6	7,814.4	7,758.2	27.7	30.6	-85.95	-124.7	-838.8	961.8	906.2	55.61	17.297		
8,000.0	7,986.6	7,913.5	7,856.2	28.1	31.0	-86.16	-127.3	-852.4	975.3	919.0	56.32	17.316		
8,100.0	8,086.6	8,012.5	7,954.3	28.4	31.4	-86.36	-129.9	-865.9	988.8	931.7	57.04	17.335		
8,200.0	8,186.6	8,111.5	8,052.4	28.8	31.9	-86.56	-132.4	-879.5	1,002.3	944.5	57.76	17.353		
8,300.0	8,286.6	8,210.5	8,150.4	29.1	32.3	-86.75	-135.0	-893.0	1,015.8	957.3	58.47	17.371		
8,400.0	8,386.6	8,309.6	8,248.5	29.5	32.7	-86.94	-137.6	-906.5	1,029.3	970.1	59.19	17.389		
8,500.0	8,486.6	8,408.6	8,346.5	29.8	33.1	-87.12	-140.2	-920.1	1,042.8	982.9	59.91	17.406		
8,600.0	8,586.6	8,507.6	8,444.6	30.2	33.5	-87.30	-142.8	-933.6	1,056.3	995.7	60.63	17.424		
8,700.0	8,686.6	8,606.6	8,542.7	30.6	33.9	-87.48	-145.4	-947.1	1,069.9	1,008.5	61.35	17.440		
8,800.0	8,786.6	8,705.7	8,640.7	30.9	34.4	-87.65	-147.9	-960.7	1,083.4	1,021.4	62.06	17.457		
8,900.0	8,886.6	8,804.7	8,738.8	31.3	34.8	-87.81	-150.5	-974.2	1,097.0	1,034.2	62.78	17.473		
9,000.0	8,986.6	8,903.7	8,836.9	31.6	35.2	-87.97	-153.1	-987.8	1,110.6	1,047.1	63.50	17.489		
9,100.0	9,086.6	9,002.7	8,934.9	32.0	35.6	-88.13	-155.7	-1,001.3	1,124.2	1,059.9	64.22	17.505		
9,200.0	9,186.6	9,101.8	9,033.0	32.3	36.0	-88.28	-158.3	-1,014.8	1,137.7	1,072.8	64.94	17.521		
9,300.0	9,286.6	9,200.8	9,131.0	32.7	36.4	-88.43	-160.9	-1,028.4	1,151.3	1,085.7	65.66	17.536		
9,400.0	9,386.6	9,300.2	9,229.1	33.0	36.9	-88.58	-163.4	-1,041.9	1,164.9	1,098.6	66.38	17.551		
9,500.0	9,486.6	9,401.1	9,327.2	33.4	37.3	-88.72	-166.0	-1,055.4	1,178.6	1,111.5	67.10	17.564		
9,600.0	9,586.6	9,502.1	9,425.2	33.7	37.7	-88.86	-168.6	-1,069.0	1,192.2	1,124.3	67.83	17.576		
9,700.0	9,686.6	9,603.1	9,523.3	34.1	38.1	-89.00	-171.2	-1,082.5	1,205.8	1,137.2	68.56	17.589		
9,800.0	9,786.6	9,704.1	9,621.4	34.5	38.6	-89.13	-173.8	-1,096.1	1,219.4	1,150.1	69.28	17.601		
9,900.0	9,886.6	9,805.0	9,719.4	34.8	39.0	-89.27	-176.4	-1,109.6	1,233.1	1,163.1	70.01	17.613		
10,000.0	9,986.6	9,906.0	9,817.5	35.2	39.4	-89.39	-178.9	-1,123.1	1,246.7	1,176.0	70.74	17.625		
10,100.0	10,086.6	10,007.0	9,915.6	35.5	39.8	-89.52	-181.5	-1,136.7	1,260.4	1,188.9	71.46	17.637		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,200.0	10,186.6	10,108.0	10,013.6	35.9	40.3	-89.64	-184.1	-1,150.2	1,274.0	1,201.8	72.19	17.648		
10,300.0	10,286.6	10,208.9	10,111.7	36.2	40.7	-89.76	-186.7	-1,163.8	1,287.7	1,214.8	72.92	17.659		
10,400.0	10,386.6	10,309.9	10,209.7	36.6	41.1	-89.88	-189.3	-1,177.3	1,301.3	1,227.7	73.64	17.671		
10,500.0	10,486.6	10,389.1	10,307.8	36.9	41.5	-89.99	-191.9	-1,190.8	1,315.0	1,240.7	74.29	17.701		
10,600.0	10,586.6	10,488.1	10,405.9	37.3	41.9	-90.11	-194.4	-1,204.4	1,328.7	1,253.7	75.01	17.713		
10,700.0	10,686.6	10,587.2	10,503.9	37.6	42.3	-90.22	-197.0	-1,217.9	1,342.4	1,266.6	75.73	17.726		
10,800.0	10,786.6	10,686.2	10,602.0	38.0	42.7	-90.32	-199.6	-1,231.4	1,356.1	1,279.6	76.45	17.738		
10,890.4	10,877.0	10,815.0	10,729.8	38.3	43.2	-90.45	-202.7	-1,247.5	1,367.4	1,290.0	77.39	17.670		
10,900.0	10,886.6	10,829.8	10,744.5	38.4	43.3	-84.96	-203.0	-1,249.0	1,368.4	1,290.9	77.49	17.660		
10,950.0	10,936.5	10,906.5	10,820.8	38.5	43.6	-84.77	-204.4	-1,256.3	1,372.9	1,294.9	78.00	17.602		
11,000.0	10,986.0	10,982.8	10,896.9	38.7	43.9	-84.96	-205.4	-1,262.0	1,376.0	1,297.6	78.46	17.538		
11,050.0	11,034.6	11,058.0	10,972.0	38.9	44.1	-85.53	-206.2	-1,266.2	1,377.9	1,299.0	78.88	17.468		
11,100.0	11,082.0	11,131.6	11,045.5	39.0	44.4	-86.44	-206.8	-1,268.9	1,378.7	1,299.4	79.26	17.394		
11,150.0	11,127.8	11,202.8	11,116.7	39.2	44.6	-87.64	-207.0	-1,270.2	1,378.5	1,298.9	79.59	17.319		
11,200.0	11,171.8	11,258.9	11,172.8	39.3	44.8	-88.81	-207.0	-1,270.3	1,377.8	1,298.0	79.87	17.251		
11,250.0	11,213.5	11,300.6	11,214.5	39.4	44.9	-89.80	-207.0	-1,270.3	1,377.4	1,297.3	80.12	17.192		
11,260.0	11,221.5	11,308.6	11,222.5	39.4	45.0	-90.00	-207.0	-1,270.3	1,377.4	1,297.2	80.17	17.181		
11,300.0	11,252.6	11,339.7	11,253.6	39.5	45.1	-90.79	-207.0	-1,270.3	1,377.6	1,297.3	80.36	17.144		
11,350.0	11,288.9	11,376.0	11,289.9	39.7	45.2	-91.72	-207.0	-1,270.3	1,378.7	1,298.1	80.59	17.109		
11,400.0	11,322.0	11,409.1	11,323.0	39.8	45.3	-92.54	-207.0	-1,270.3	1,380.8	1,300.0	80.80	17.089		
11,450.0	11,351.8	11,438.9	11,352.8	39.9	45.4	-93.19	-207.0	-1,270.3	1,384.2	1,303.2	81.02	17.086		
11,500.0	11,377.9	11,465.1	11,378.9	40.0	45.4	-93.62	-207.0	-1,270.3	1,389.1	1,307.9	81.22	17.103		
11,550.0	11,400.3	11,487.4	11,401.3	40.1	45.5	-93.80	-207.0	-1,270.3	1,395.6	1,314.2	81.42	17.141		
11,600.0	11,418.6	11,505.7	11,419.6	40.3	45.6	-93.67	-207.0	-1,270.3	1,403.8	1,322.2	81.61	17.201		
11,650.0	11,432.8	11,520.0	11,433.8	40.4	45.6	-93.21	-207.0	-1,270.3	1,413.8	1,332.0	81.80	17.284		
11,700.0	11,442.8	11,530.0	11,443.8	40.5	45.6	-92.40	-207.0	-1,270.3	1,425.7	1,343.7	81.98	17.390		
11,750.0	11,448.5	11,535.6	11,449.5	40.7	45.7	-91.22	-207.0	-1,270.3	1,439.3	1,357.1	82.16	17.519		
11,790.4	11,450.0	11,537.1	11,451.0	40.8	45.7	-90.00	-207.0	-1,270.3	1,451.5	1,369.2	82.29	17.640		
11,800.0	11,450.0	11,537.1	11,451.0	40.8	45.7	-90.00	-207.0	-1,270.3	1,454.6	1,372.3	82.32	17.671		
11,900.0	11,450.0	12,622.1	12,094.0	41.1	47.4	-115.93	480.4	-1,274.6	1,472.1	1,395.5	76.63	19.212		
12,000.0	11,450.0	12,722.0	12,093.7	41.5	47.6	-115.95	580.3	-1,275.2	1,469.2	1,392.0	77.22	19.026		
12,037.8	11,450.0	12,759.8	12,093.6	41.7	47.7	-115.95	618.1	-1,275.5	1,468.9	1,391.4	77.48	18.958		
12,100.0	11,450.0	12,822.0	12,093.5	41.9	47.9	-115.94	680.3	-1,275.9	1,468.7	1,390.8	77.95	18.842		
12,200.0	11,450.0	12,922.0	12,093.2	42.4	48.2	-115.93	780.3	-1,276.6	1,468.5	1,389.7	78.80	18.637		
12,300.0	11,450.0	13,022.0	12,093.0	43.0	48.6	-115.93	880.3	-1,277.3	1,468.3	1,388.6	79.75	18.411		
12,400.0	11,450.0	13,122.0	12,092.7	43.6	49.1	-115.92	980.3	-1,278.0	1,468.1	1,387.3	80.81	18.167		
12,500.0	11,450.0	13,222.0	12,092.4	44.3	49.7	-115.91	1,080.3	-1,278.6	1,467.9	1,385.9	81.97	17.907		
12,600.0	11,450.0	13,322.0	12,092.2	45.0	50.3	-115.91	1,180.3	-1,279.3	1,467.7	1,384.5	83.23	17.634		
12,700.0	11,450.0	13,422.0	12,091.9	45.8	50.9	-115.90	1,280.3	-1,280.0	1,467.5	1,382.9	84.58	17.350		
12,800.0	11,450.0	13,522.0	12,091.7	46.6	51.6	-115.89	1,380.3	-1,280.7	1,467.3	1,381.2	86.02	17.058		
12,900.0	11,450.0	13,622.0	12,091.4	47.4	52.4	-115.88	1,480.3	-1,281.3	1,467.1	1,379.5	87.54	16.759		
13,000.0	11,450.0	13,722.0	12,091.2	48.3	53.2	-115.88	1,580.3	-1,282.0	1,466.8	1,377.7	89.14	16.456		
13,100.0	11,450.0	13,822.0	12,090.9	49.3	54.0	-115.87	1,680.3	-1,282.7	1,466.6	1,375.8	90.82	16.150		
13,200.0	11,450.0	13,922.0	12,090.7	50.3	54.9	-115.86	1,780.3	-1,283.4	1,466.4	1,373.9	92.56	15.842		
13,300.0	11,450.0	14,022.0	12,090.4	51.3	55.8	-115.86	1,880.3	-1,284.1	1,466.2	1,371.8	94.38	15.536		
13,400.0	11,450.0	14,122.0	12,090.1	52.3	56.8	-115.85	1,980.3	-1,284.7	1,466.0	1,369.7	96.26	15.230		
13,500.0	11,450.0	14,222.0	12,089.9	53.4	57.8	-115.84	2,080.3	-1,285.4	1,465.8	1,367.6	98.19	14.928		
13,600.0	11,450.0	14,322.0	12,089.6	54.5	58.8	-115.83	2,180.3	-1,286.1	1,465.6	1,365.4	100.19	14.628		
13,700.0	11,450.0	14,422.0	12,089.4	55.6	59.8	-115.83	2,280.2	-1,286.8	1,465.4	1,363.1	102.24	14.333		
13,800.0	11,450.0	14,522.0	12,089.1	56.8	60.9	-115.82	2,380.2	-1,287.5	1,465.2	1,360.8	104.33	14.043		
13,900.0	11,450.0	14,622.0	12,088.9	58.0	62.0	-115.81	2,480.2	-1,288.1	1,464.9	1,358.5	106.48	13.758		
14,000.0	11,450.0	14,722.0	12,088.6	59.2	63.1	-115.81	2,580.2	-1,288.8	1,464.7	1,356.1	108.67	13.479		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,100.0	11,450.0	14,822.0	12,088.3	60.4	64.2	-115.80	2,680.2	-1,289.5	1,464.5	1,353.6	110.90	13.206		
14,200.0	11,450.0	14,922.0	12,088.1	61.7	65.4	-115.79	2,780.2	-1,290.2	1,464.3	1,351.2	113.17	12.939		
14,300.0	11,450.0	15,022.0	12,087.8	62.9	66.6	-115.78	2,880.2	-1,290.8	1,464.1	1,348.6	115.48	12.679		
14,400.0	11,450.0	15,122.0	12,087.6	64.2	67.8	-115.78	2,980.2	-1,291.5	1,463.9	1,346.1	117.82	12.425		
14,500.0	11,450.0	15,222.0	12,087.3	65.5	69.0	-115.77	3,080.2	-1,292.2	1,463.7	1,343.5	120.19	12.178		
14,600.0	11,450.0	15,322.0	12,087.1	66.8	70.3	-115.76	3,180.2	-1,292.9	1,463.5	1,340.9	122.60	11.937		
14,700.0	11,450.0	15,422.0	12,086.8	68.2	71.5	-115.76	3,280.2	-1,293.6	1,463.3	1,338.2	125.03	11.703		
14,800.0	11,450.0	15,522.0	12,086.6	69.5	72.8	-115.75	3,380.2	-1,294.2	1,463.1	1,335.6	127.50	11.475		
14,900.0	11,450.0	15,622.0	12,086.3	70.9	74.1	-115.74	3,480.2	-1,294.9	1,462.8	1,332.9	129.99	11.254		
15,000.0	11,450.0	15,722.0	12,086.0	72.2	75.4	-115.73	3,580.2	-1,295.6	1,462.6	1,330.1	132.50	11.039		
15,100.0	11,450.0	15,822.0	12,085.8	73.6	76.7	-115.73	3,680.2	-1,296.3	1,462.4	1,327.4	135.04	10.830		
15,200.0	11,450.0	15,922.0	12,085.5	75.0	78.1	-115.72	3,780.2	-1,297.0	1,462.2	1,324.6	137.59	10.627		
15,300.0	11,450.0	16,022.0	12,085.3	76.4	79.4	-115.71	3,880.2	-1,297.6	1,462.0	1,321.8	140.17	10.430		
15,400.0	11,450.0	16,122.0	12,085.0	77.8	80.7	-115.71	3,980.2	-1,298.3	1,461.8	1,319.0	142.77	10.239		
15,500.0	11,450.0	16,222.0	12,084.8	79.3	82.1	-115.70	4,080.2	-1,299.0	1,461.6	1,316.2	145.39	10.053		
15,600.0	11,450.0	16,322.0	12,084.5	80.7	83.5	-115.69	4,180.2	-1,299.7	1,461.4	1,313.4	148.02	9.873		
15,700.0	11,450.0	16,422.0	12,084.3	82.1	84.9	-115.68	4,280.2	-1,300.3	1,461.2	1,310.5	150.68	9.697		
15,800.0	11,450.0	16,522.0	12,084.0	83.6	86.3	-115.68	4,380.2	-1,301.0	1,461.0	1,307.6	153.34	9.527		
15,900.0	11,450.0	16,622.0	12,083.7	85.0	87.7	-115.67	4,480.2	-1,301.7	1,460.7	1,304.7	156.03	9.362		
16,000.0	11,450.0	16,722.0	12,083.5	86.5	89.1	-115.66	4,580.2	-1,302.4	1,460.5	1,301.8	158.72	9.202		
16,100.0	11,450.0	16,822.0	12,083.2	88.0	90.5	-115.66	4,680.2	-1,303.1	1,460.3	1,298.9	161.43	9.046		
16,200.0	11,450.0	16,922.0	12,083.0	89.4	91.9	-115.65	4,780.2	-1,303.7	1,460.1	1,296.0	164.16	8.895		
16,300.0	11,450.0	17,022.0	12,082.7	90.9	93.4	-115.64	4,880.2	-1,304.4	1,459.9	1,293.0	166.89	8.747		
16,394.3	11,450.0	17,116.2	12,082.5	92.3	94.7	-115.63	4,974.4	-1,305.1	1,459.7	1,290.2	169.48	8.613		
16,400.0	11,450.0	17,105.7	12,082.5	92.4	94.6	-115.63	4,963.9	-1,305.0	1,459.8	1,290.2	169.55	8.610		
16,500.0	11,450.0	17,105.7	12,082.5	93.9	94.6	-115.63	4,963.9	-1,305.0	1,464.1	1,292.8	171.36	8.544		
16,600.0	11,450.0	17,105.7	12,082.5	95.4	94.6	-115.63	4,963.9	-1,305.0	1,475.2	1,302.6	172.58	8.548		
16,700.0	11,450.0	17,105.7	12,082.5	96.9	94.6	-115.63	4,963.9	-1,305.0	1,493.0	1,319.7	173.21	8.619		
16,800.0	11,450.0	17,105.7	12,082.5	98.4	94.6	-115.63	4,963.9	-1,305.0	1,517.1	1,343.8	173.28	8.755		
16,900.0	11,450.0	17,105.7	12,082.5	100.0	94.6	-115.63	4,963.9	-1,305.0	1,547.3	1,374.5	172.84	8.952		
17,000.0	11,450.0	17,105.7	12,082.5	101.5	94.6	-115.63	4,963.9	-1,305.0	1,583.3	1,411.4	171.96	9.208		
17,100.0	11,450.0	17,105.7	12,082.5	103.0	94.6	-115.63	4,963.9	-1,305.0	1,624.7	1,454.0	170.70	9.518		
17,200.0	11,450.0	17,105.7	12,082.5	104.5	94.6	-115.63	4,963.9	-1,305.0	1,671.0	1,501.8	169.14	9.879		
17,300.0	11,450.0	17,105.7	12,082.5	106.1	94.6	-115.63	4,963.9	-1,305.0	1,721.9	1,554.5	167.35	10.289		
17,400.0	11,450.0	17,105.7	12,082.5	107.6	94.6	-115.63	4,963.9	-1,305.0	1,776.9	1,611.5	165.39	10.744		
17,500.0	11,450.0	17,105.7	12,082.5	109.1	94.6	-115.63	4,963.9	-1,305.0	1,835.8	1,672.5	163.32	11.240		
17,600.0	11,450.0	17,105.7	12,082.5	110.7	94.6	-115.63	4,963.9	-1,305.0	1,898.1	1,736.9	161.19	11.776		
17,700.0	11,450.0	17,105.7	12,082.5	112.2	94.6	-115.63	4,963.9	-1,305.0	1,963.5	1,804.5	159.03	12.347		
17,800.0	11,450.0	17,105.7	12,082.5	113.8	94.6	-115.63	4,963.9	-1,305.0	2,031.8	1,874.9	156.88	12.951		
17,900.0	11,450.0	17,105.7	12,082.5	115.3	94.6	-115.63	4,963.9	-1,305.0	2,102.5	1,947.8	154.76	13.586		
18,000.0	11,450.0	17,105.7	12,082.5	116.9	94.6	-115.63	4,963.9	-1,305.0	2,175.6	2,022.9	152.69	14.249		
18,100.0	11,450.0	17,105.7	12,082.5	118.4	94.6	-115.63	4,963.9	-1,305.0	2,250.8	2,100.1	150.67	14.938		
18,200.0	11,450.0	17,105.7	12,082.5	120.0	94.6	-115.63	4,963.9	-1,305.0	2,327.8	2,179.1	148.73	15.651		
18,300.0	11,450.0	17,105.7	12,082.5	121.6	94.6	-115.63	4,963.9	-1,305.0	2,406.5	2,259.6	146.86	16.386		
18,400.0	11,450.0	17,105.7	12,082.5	123.1	94.6	-115.63	4,963.9	-1,305.0	2,486.7	2,341.7	145.08	17.141		
18,500.0	11,450.0	17,105.7	12,082.5	124.7	94.6	-115.63	4,963.9	-1,305.0	2,568.4	2,425.0	143.37	17.915		
18,600.0	11,450.0	17,105.7	12,082.5	126.3	94.6	-115.63	4,963.9	-1,305.0	2,651.3	2,509.5	141.74	18.705		
18,700.0	11,450.0	17,105.7	12,082.5	127.8	94.6	-115.63	4,963.9	-1,305.0	2,735.3	2,595.1	140.19	19.511		
18,800.0	11,450.0	17,105.7	12,082.5	129.4	94.6	-115.63	4,963.9	-1,305.0	2,820.4	2,681.6	138.72	20.331		
18,900.0	11,450.0	17,105.7	12,082.5	131.0	94.6	-115.63	4,963.9	-1,305.0	2,906.4	2,769.1	137.33	21.164		
19,000.0	11,450.0	17,105.7	12,082.5	132.6	94.6	-115.63	4,963.9	-1,305.0	2,993.3	2,857.3	136.00	22.009		
19,100.0	11,450.0	17,105.7	12,082.5	134.2	94.6	-115.63	4,963.9	-1,305.0	3,081.0	2,946.2	134.75	22.865		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,200.0	11,450.0	17,105.7	12,082.5	135.7	94.6	-115.63	4,963.9	-1,305.0	3,169.4	3,035.8	133.56	23.730		
19,300.0	11,450.0	17,105.7	12,082.5	137.3	94.6	-115.63	4,963.9	-1,305.0	3,258.5	3,126.1	132.43	24.605		
19,400.0	11,450.0	17,105.7	12,082.5	138.9	94.6	-115.63	4,963.9	-1,305.0	3,348.2	3,216.8	131.36	25.488		
19,500.0	11,450.0	17,105.7	12,082.5	140.5	94.6	-115.63	4,963.9	-1,305.0	3,438.5	3,308.1	130.35	26.378		
19,600.0	11,450.0	17,105.7	12,082.5	142.1	94.6	-115.63	4,963.9	-1,305.0	3,529.3	3,399.9	129.39	27.275		
19,700.0	11,450.0	17,105.7	12,082.5	143.7	94.6	-115.63	4,963.9	-1,305.0	3,620.5	3,492.1	128.49	28.179		
19,800.0	11,450.0	17,105.7	12,082.5	145.3	94.6	-115.63	4,963.9	-1,305.0	3,712.3	3,584.6	127.62	29.088		
19,900.0	11,450.0	17,105.7	12,082.5	146.9	94.6	-115.63	4,963.9	-1,305.0	3,804.4	3,677.6	126.81	30.002		
20,000.0	11,450.0	17,105.7	12,082.5	148.5	94.6	-115.63	4,963.9	-1,305.0	3,897.0	3,770.9	126.03	30.920		
20,100.0	11,450.0	17,105.7	12,082.5	150.1	94.6	-115.63	4,963.9	-1,305.0	3,989.8	3,864.6	125.30	31.843		
20,200.0	11,450.0	17,105.7	12,082.5	151.7	94.6	-115.63	4,963.9	-1,305.0	4,083.1	3,958.5	124.60	32.769		
20,300.0	11,450.0	17,105.7	12,082.5	153.3	94.6	-115.63	4,963.9	-1,305.0	4,176.6	4,052.7	123.94	33.699		
20,400.0	11,450.0	17,105.7	12,082.5	154.9	94.6	-115.63	4,963.9	-1,305.0	4,270.5	4,147.2	123.31	34.632		
20,500.0	11,450.0	17,105.7	12,082.5	156.5	94.6	-115.63	4,963.9	-1,305.0	4,364.6	4,241.9	122.71	35.567		
20,600.0	11,450.0	17,105.7	12,082.5	158.1	94.6	-115.63	4,963.9	-1,305.0	4,458.9	4,336.8	122.15	36.505		
20,700.0	11,450.0	17,105.7	12,082.5	159.7	94.6	-115.63	4,963.9	-1,305.0	4,553.5	4,431.9	121.61	37.445		
20,800.0	11,450.0	17,105.7	12,082.5	161.3	94.6	-115.63	4,963.9	-1,305.0	4,648.4	4,527.3	121.10	38.386		
20,900.0	11,450.0	17,105.7	12,082.5	162.9	94.6	-115.63	4,963.9	-1,305.0	4,743.4	4,622.8	120.61	39.329		
21,000.0	11,450.0	17,105.7	12,082.5	164.5	94.6	-115.63	4,963.9	-1,305.0	4,838.7	4,718.5	120.15	40.273		
21,100.0	11,450.0	17,105.7	12,082.5	166.1	94.6	-115.63	4,963.9	-1,305.0	4,934.1	4,814.4	119.71	41.219		
21,200.0	11,450.0	17,105.7	12,082.5	167.7	94.6	-115.63	4,963.9	-1,305.0	5,029.7	4,910.4	119.29	42.165		
21,300.0	11,450.0	17,105.7	12,082.5	169.3	94.6	-115.63	4,963.9	-1,305.0	5,125.5	5,006.6	118.89	43.112		
21,400.0	11,450.0	17,105.7	12,082.5	170.9	94.6	-115.63	4,963.9	-1,305.0	5,221.4	5,102.9	118.51	44.059		
21,500.0	11,450.0	17,105.7	12,082.5	172.5	94.6	-115.63	4,963.9	-1,305.0	5,317.5	5,199.4	118.15	45.007		
21,600.0	11,450.0	17,105.7	12,082.5	174.2	94.6	-115.63	4,963.9	-1,305.0	5,413.7	5,295.9	117.81	45.955		
21,614.7	11,450.0	17,105.7	12,082.5	174.4	94.6	-115.63	4,963.9	-1,305.0	5,427.9	5,307.3	120.57	45.017		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-0.24	30.0	-0.1	30.0					
100.0	100.0	100.0	100.0	0.1	0.1	-0.24	30.0	-0.1	30.0	29.7	0.26	116.962		
200.0	200.0	200.0	200.0	0.5	0.5	-0.24	30.0	-0.1	30.0	29.0	0.97	30.802		
300.0	300.0	300.0	300.0	0.8	0.8	-0.24	30.0	-0.1	30.0	28.3	1.69	17.737		
400.0	400.0	400.0	400.0	1.2	1.2	-0.24	30.0	-0.1	30.0	27.6	2.41	12.454		
500.0	500.0	500.0	500.0	1.6	1.6	-0.24	30.0	-0.1	30.0	26.9	3.12	9.596		
600.0	600.0	600.0	600.0	1.9	1.9	-0.24	30.0	-0.1	30.0	26.1	3.84	7.805		
700.0	700.0	700.0	700.0	2.3	2.3	-0.24	30.0	-0.1	30.0	25.4	4.56	6.577		
800.0	800.0	800.0	800.0	2.6	2.6	-0.24	30.0	-0.1	30.0	24.7	5.27	5.683		
900.0	900.0	900.0	900.0	3.0	3.0	-0.24	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	-0.24	30.0	-0.1	30.0	23.3	6.71	4.468 CC, ES		
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	-150.83	30.0	-0.1	30.7	23.3	7.41	4.148		
1,200.0	1,200.0	1,200.0	1,200.0	4.0	4.1	-153.03	30.0	-0.1	33.0	24.9	8.10	4.081 SF		
1,300.0	1,299.9	1,300.1	1,299.9	4.4	4.4	-156.08	30.0	-0.1	37.0	28.2	8.79	4.207		
1,400.0	1,399.7	1,400.3	1,399.7	4.7	4.8	-159.39	30.0	-0.1	42.6	33.2	9.49	4.493		
1,500.0	1,499.4	1,500.6	1,499.4	5.0	5.1	-162.53	30.0	-0.1	50.1	39.9	10.19	4.912		
1,600.0	1,598.9	1,601.1	1,598.9	5.4	5.5	-165.29	30.0	-0.1	59.3	48.4	10.90	5.440		
1,700.0	1,698.3	1,701.7	1,698.3	5.8	5.9	-167.61	30.0	-0.1	70.3	58.7	11.60	6.057		
1,800.0	1,797.4	1,802.6	1,797.4	6.1	6.2	-169.51	30.0	-0.1	83.1	70.8	12.31	6.748		
1,900.0	1,896.4	1,903.6	1,896.4	6.5	6.6	-171.01	30.0	-0.1	96.8	83.8	13.03	7.433		
2,000.0	1,995.5	2,004.5	1,995.5	6.9	7.0	-172.14	30.0	-0.1	110.6	96.8	13.74	8.050		
2,100.0	2,094.5	2,105.5	2,094.5	7.3	7.3	-173.02	30.0	-0.1	124.4	109.9	14.45	8.607		
2,200.0	2,193.5	2,206.5	2,193.5	7.7	7.7	-173.72	30.0	-0.1	138.2	123.0	15.17	9.112		
2,300.0	2,292.5	2,307.5	2,292.5	8.1	8.0	-174.29	30.0	-0.1	152.1	136.2	15.88	9.573		
2,400.0	2,391.6	2,408.4	2,391.6	8.5	8.4	-174.77	30.0	-0.1	165.9	149.3	16.60	9.993		
2,500.0	2,490.6	2,509.4	2,490.6	8.9	8.8	-175.17	30.0	-0.1	179.8	162.5	17.32	10.379		
2,600.0	2,589.6	2,589.6	2,589.6	9.3	9.1	-175.52	30.0	-0.1	193.6	175.7	17.97	10.778		
2,700.0	2,688.6	2,688.6	2,688.6	9.7	9.4	-175.82	30.0	-0.1	207.5	188.8	18.68	11.109		
2,729.0	2,717.4	2,717.4	2,717.4	9.8	9.5	-175.90	30.0	-0.1	211.6	192.7	18.89	11.200		
2,800.0	2,787.8	2,787.8	2,787.8	10.1	9.8	-176.08	30.0	-0.1	220.8	201.4	19.40	11.382		
2,900.0	2,887.2	2,887.2	2,887.2	10.5	10.1	-176.27	30.0	-0.1	231.5	211.4	20.11	11.512		
3,000.0	2,986.8	2,986.8	2,986.8	10.9	10.5	-176.41	30.0	-0.1	239.7	218.8	20.82	11.509		
3,100.0	3,086.7	3,086.7	3,086.7	11.2	10.8	-176.49	30.0	-0.1	245.2	223.7	21.54	11.386		
3,200.0	3,186.6	3,186.6	3,186.6	11.6	11.2	-176.54	30.0	-0.1	248.1	225.9	22.25	11.153		
3,262.3	3,249.0	3,249.0	3,249.0	11.8	11.4	-26.76	30.0	-0.1	248.6	226.0	22.69	10.960		
3,300.0	3,286.6	3,286.6	3,286.6	11.9	11.6	-26.76	30.0	-0.1	248.6	225.7	22.95	10.835		
3,400.0	3,386.6	3,386.6	3,386.6	12.2	11.9	-26.76	30.0	-0.1	248.6	225.0	23.65	10.515		
3,500.0	3,486.6	3,486.6	3,486.6	12.6	12.3	-26.76	30.0	-0.1	248.6	224.3	24.34	10.214		
3,600.0	3,586.6	3,586.6	3,586.6	12.9	12.6	-26.76	30.0	-0.1	248.6	223.6	25.04	9.928		
3,700.0	3,686.6	3,686.6	3,686.6	13.2	13.0	-26.76	30.0	-0.1	248.6	222.9	25.75	9.658		
3,800.0	3,786.6	3,786.6	3,786.6	13.5	13.3	-26.76	30.0	-0.1	248.6	222.2	26.45	9.402		
3,900.0	3,886.6	3,886.6	3,886.6	13.9	13.7	-26.76	30.0	-0.1	248.6	221.5	27.15	9.159		
4,000.0	3,986.6	3,986.6	3,986.6	14.2	14.1	-26.76	30.0	-0.1	248.6	220.8	27.85	8.927		
4,100.0	4,086.6	4,086.6	4,086.6	14.6	14.4	-26.76	30.0	-0.1	248.6	220.1	28.56	8.707		
4,200.0	4,186.6	4,186.6	4,186.6	14.9	14.8	-26.76	30.0	-0.1	248.6	219.4	29.26	8.498		
4,300.0	4,286.6	4,286.6	4,286.6	15.2	15.1	-26.76	30.0	-0.1	248.6	218.7	29.97	8.298		
4,400.0	4,386.6	4,386.6	4,386.6	15.6	15.5	-26.76	30.0	-0.1	248.6	218.0	30.67	8.107		
4,500.0	4,486.6	4,486.6	4,486.6	15.9	15.9	-26.76	30.0	-0.1	248.6	217.3	31.38	7.925		
4,600.0	4,586.6	4,586.6	4,586.6	16.2	16.2	-26.76	30.0	-0.1	248.6	216.6	32.08	7.750		
4,700.0	4,686.6	4,686.6	4,686.6	16.6	16.6	-26.76	30.0	-0.1	248.6	215.9	32.79	7.583		
4,800.0	4,786.6	4,786.6	4,786.6	16.9	16.9	-26.76	30.0	-0.1	248.6	215.1	33.50	7.423		
4,900.0	4,886.6	4,886.6	4,886.6	17.3	17.3	-26.76	30.0	-0.1	248.6	214.4	34.21	7.269		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.0	4,986.6	4,986.6	4,986.6	17.6	17.6	-26.76	30.0	-0.1	248.6	213.7	34.91	7.122		
5,100.0	5,086.6	5,086.6	5,086.6	18.0	18.0	-26.76	30.0	-0.1	248.6	213.0	35.62	6.980		
5,200.0	5,186.6	5,186.6	5,186.6	18.3	18.4	-26.76	30.0	-0.1	248.6	212.3	36.33	6.844		
5,300.0	5,286.6	5,286.6	5,286.6	18.6	18.7	-26.76	30.0	-0.1	248.6	211.6	37.04	6.713		
5,400.0	5,386.6	5,386.6	5,386.6	19.0	19.1	-26.76	30.0	-0.1	248.6	210.9	37.75	6.587		
5,500.0	5,486.6	5,486.6	5,486.6	19.3	19.4	-26.76	30.0	-0.1	248.6	210.2	38.46	6.465		
5,600.0	5,586.6	5,586.6	5,586.6	19.7	19.8	-26.76	30.0	-0.1	248.6	209.5	39.17	6.348		
5,700.0	5,686.6	5,686.6	5,686.6	20.0	20.2	-26.76	30.0	-0.1	248.6	208.8	39.88	6.235		
5,800.0	5,786.6	5,786.6	5,786.6	20.4	20.5	-26.76	30.0	-0.1	248.6	208.1	40.59	6.126		
5,900.0	5,886.6	5,886.6	5,886.6	20.7	20.9	-26.76	30.0	-0.1	248.6	207.3	41.30	6.020		
6,000.0	5,986.6	5,986.6	5,986.6	21.1	21.2	-26.76	30.0	-0.1	248.6	206.6	42.01	5.918		
6,100.0	6,086.6	6,086.6	6,086.6	21.4	21.6	-26.76	30.0	-0.1	248.6	205.9	42.72	5.820		
6,200.0	6,186.6	6,186.6	6,186.6	21.8	21.9	-26.76	30.0	-0.1	248.6	205.2	43.43	5.725		
6,300.0	6,286.6	6,286.6	6,286.6	22.1	22.3	-26.76	30.0	-0.1	248.6	204.5	44.15	5.632		
6,400.0	6,386.6	6,386.6	6,386.6	22.5	22.7	-26.76	30.0	-0.1	248.6	203.8	44.86	5.543		
6,500.0	6,486.6	6,486.6	6,486.6	22.8	23.0	-26.76	30.0	-0.1	248.6	203.1	45.57	5.456		
6,600.0	6,586.6	6,586.6	6,586.6	23.2	23.4	-26.76	30.0	-0.1	248.6	202.4	46.28	5.372		
6,700.0	6,686.6	6,686.6	6,686.6	23.5	23.7	-26.76	30.0	-0.1	248.6	201.7	46.99	5.291		
6,800.0	6,786.6	6,786.6	6,786.6	23.9	24.1	-26.76	30.0	-0.1	248.6	200.9	47.71	5.212		
6,900.0	6,886.6	6,886.6	6,886.6	24.2	24.5	-26.76	30.0	-0.1	248.6	200.2	48.42	5.135		
7,000.0	6,986.6	6,986.6	6,986.6	24.6	24.8	-26.76	30.0	-0.1	248.6	199.5	49.13	5.061		
7,100.0	7,086.6	7,085.9	7,085.9	24.9	25.2	-26.91	29.8	-0.7	248.8	198.9	49.83	4.993		
7,200.0	7,186.6	7,185.0	7,185.0	25.3	25.5	-27.44	29.2	-3.0	249.3	198.7	50.51	4.934		
7,300.0	7,286.6	7,284.0	7,283.9	25.6	25.8	-28.34	28.1	-6.9	250.1	198.9	51.20	4.886		
7,400.0	7,386.6	7,382.8	7,382.5	26.0	26.2	-29.62	26.6	-12.4	251.5	199.6	51.88	4.848		
7,500.0	7,486.6	7,481.4	7,480.8	26.3	26.5	-31.25	24.6	-19.6	253.4	200.9	52.55	4.823		
7,600.0	7,586.6	7,579.7	7,578.7	26.7	26.8	-33.21	22.2	-28.4	256.1	202.9	53.22	4.812		
7,700.0	7,686.6	7,677.7	7,676.1	27.0	27.2	-35.47	19.3	-38.7	259.7	205.8	53.89	4.819		
7,800.0	7,786.6	7,775.2	7,772.9	27.4	27.5	-37.98	16.0	-50.6	264.3	209.7	54.54	4.845		
7,900.0	7,886.6	7,872.4	7,869.0	27.7	27.8	-40.72	12.3	-64.0	270.1	214.9	55.19	4.895		
8,000.0	7,986.6	7,969.0	7,964.4	28.1	28.2	-43.62	8.1	-78.9	277.4	221.6	55.81	4.970		
8,100.0	8,086.6	8,065.1	8,058.9	28.4	28.5	-46.63	3.6	-95.2	286.2	229.8	56.42	5.073		
8,200.0	8,186.6	8,160.5	8,152.6	28.8	28.9	-49.69	-1.3	-113.0	296.8	239.8	57.00	5.207		
8,300.0	8,286.6	8,257.7	8,247.8	29.1	29.2	-52.77	-6.6	-132.2	308.9	251.3	57.62	5.361		
8,400.0	8,386.6	8,355.6	8,343.6	29.5	29.6	-55.64	-12.0	-151.5	321.9	263.6	58.27	5.525		
8,500.0	8,486.6	8,453.5	8,439.4	29.8	29.9	-58.28	-17.3	-170.8	335.6	276.7	58.91	5.697		
8,600.0	8,586.6	8,551.4	8,535.2	30.2	30.3	-60.72	-22.7	-190.2	350.0	290.5	59.57	5.876		
8,700.0	8,686.6	8,649.3	8,631.0	30.6	30.7	-62.96	-28.0	-209.5	365.0	304.8	60.22	6.061		
8,800.0	8,786.6	8,747.1	8,726.8	30.9	31.0	-65.03	-33.4	-228.8	380.5	319.6	60.88	6.250		
8,900.0	8,886.6	8,845.0	8,822.6	31.3	31.4	-66.94	-38.8	-248.1	396.5	334.9	61.55	6.441		
9,000.0	8,986.6	8,942.9	8,918.4	31.6	31.8	-68.70	-44.1	-267.5	412.8	350.6	62.22	6.635		
9,100.0	9,086.6	9,040.8	9,014.2	32.0	32.2	-70.32	-49.5	-286.8	429.5	366.6	62.89	6.830		
9,200.0	9,186.6	9,138.6	9,110.0	32.3	32.6	-71.83	-54.8	-306.1	446.5	383.0	63.56	7.025		
9,300.0	9,286.6	9,236.5	9,205.8	32.7	32.9	-73.22	-60.2	-325.5	463.8	399.6	64.24	7.221		
9,400.0	9,386.6	9,334.4	9,301.6	33.0	33.3	-74.52	-65.5	-344.8	481.4	416.5	64.92	7.415		
9,500.0	9,486.6	9,432.3	9,397.4	33.4	33.7	-75.72	-70.9	-364.1	499.2	433.6	65.60	7.609		
9,600.0	9,586.6	9,530.1	9,493.2	33.7	34.1	-76.84	-76.3	-383.4	517.2	450.9	66.28	7.802		
9,700.0	9,686.6	9,628.0	9,589.0	34.1	34.5	-77.89	-81.6	-402.8	535.3	468.3	66.97	7.993		
9,800.0	9,786.6	9,725.9	9,684.8	34.5	34.9	-78.87	-87.0	-422.1	553.6	486.0	67.66	8.183		
9,900.0	9,886.6	9,823.8	9,780.6	34.8	35.3	-79.79	-92.3	-441.4	572.1	503.8	68.34	8.371		
10,000.0	9,986.6	9,921.7	9,876.4	35.2	35.7	-80.64	-97.7	-460.8	590.7	521.7	69.04	8.557		
10,100.0	10,086.6	10,019.5	9,972.2	35.5	36.1	-81.45	-103.0	-480.1	609.4	539.7	69.73	8.740		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,200.0	10,186.6	10,117.4	10,068.0	35.9	36.5	-82.21	-108.4	-499.4	628.3	557.9	70.42	8.922		
10,300.0	10,286.6	10,215.3	10,163.8	36.2	36.9	-82.92	-113.8	-518.8	647.2	576.1	71.11	9.101		
10,400.0	10,386.6	10,313.2	10,259.6	36.6	37.3	-83.60	-119.1	-538.1	666.2	594.4	71.81	9.278		
10,500.0	10,486.6	10,411.0	10,355.4	36.9	37.7	-84.24	-124.5	-557.4	685.3	612.8	72.51	9.452		
10,600.0	10,586.6	10,508.9	10,451.2	37.3	38.2	-84.84	-129.8	-576.7	704.5	631.3	73.20	9.624		
10,700.0	10,686.6	10,606.8	10,547.0	37.6	38.6	-85.41	-135.2	-596.1	723.8	649.9	73.90	9.794		
10,800.0	10,786.6	10,704.7	10,642.8	38.0	39.0	-85.95	-140.6	-615.4	743.1	668.5	74.60	9.961		
10,890.4	10,877.0	10,793.1	10,729.3	38.3	39.4	-86.42	-145.4	-632.9	760.6	685.4	75.23	10.110		
10,900.0	10,886.6	10,802.6	10,738.6	38.4	39.4	-80.88	-145.9	-634.7	762.5	687.2	75.30	10.126		
10,950.0	10,936.5	10,851.3	10,786.3	38.5	39.6	-80.42	-148.6	-644.4	771.8	696.1	75.64	10.203		
11,000.0	10,986.0	10,899.4	10,833.4	38.7	39.8	-80.32	-151.2	-653.9	780.4	704.4	75.97	10.273		
11,050.0	11,034.6	10,946.6	10,879.5	38.9	40.0	-80.53	-153.8	-663.2	788.5	712.2	76.28	10.337		
11,100.0	11,082.0	11,007.6	10,924.4	39.0	40.3	-81.00	-156.3	-672.2	796.3	719.6	76.63	10.391		
11,150.0	11,127.8	11,036.6	10,967.6	39.2	40.4	-81.67	-158.7	-681.0	803.9	727.0	76.85	10.460		
11,200.0	11,171.8	11,078.7	11,008.9	39.3	40.6	-82.48	-161.0	-689.3	811.5	734.4	77.11	10.525		
11,250.0	11,213.5	11,118.5	11,047.9	39.4	40.8	-83.34	-163.2	-697.1	819.6	742.2	77.36	10.595		
11,300.0	11,252.6	11,155.7	11,084.3	39.5	40.9	-84.18	-165.2	-704.5	828.3	750.7	77.59	10.675		
11,350.0	11,288.9	11,210.0	11,117.8	39.7	41.1	-84.92	-167.1	-711.3	838.0	760.1	77.90	10.757		
11,400.0	11,322.0	11,221.1	11,148.2	39.8	41.2	-85.48	-168.8	-717.4	848.8	770.8	78.04	10.876		
11,450.0	11,351.8	11,248.8	11,175.3	39.9	41.3	-85.78	-170.3	-722.9	861.1	782.8	78.26	11.003		
11,500.0	11,377.9	11,272.9	11,198.9	40.0	41.4	-85.77	-171.7	-727.6	875.0	796.5	78.47	11.150		
11,550.0	11,400.3	11,293.1	11,218.7	40.1	41.5	-85.38	-172.8	-731.6	890.6	811.9	78.68	11.320		
11,600.0	11,418.6	11,309.4	11,234.6	40.3	41.6	-84.57	-173.7	-734.8	908.0	829.1	78.88	11.512		
11,650.0	11,432.8	11,321.6	11,246.6	40.4	41.6	-83.30	-174.3	-737.2	927.2	848.1	79.07	11.726		
11,700.0	11,442.8	11,329.6	11,254.5	40.5	41.7	-81.56	-174.8	-738.8	948.0	868.8	79.25	11.963		
11,750.0	11,448.5	11,333.4	11,258.2	40.7	41.7	-79.34	-175.0	-739.6	970.4	891.0	79.41	12.220		
11,790.4	11,450.0	11,333.4	11,258.1	40.8	41.7	-77.22	-175.0	-739.6	989.4	909.9	79.53	12.441		
11,800.0	11,450.0	11,333.0	11,257.8	40.8	41.7	-77.18	-174.9	-739.5	994.1	914.6	79.56	12.495		
11,900.0	11,450.0	11,329.0	11,253.8	41.1	41.7	-76.62	-174.7	-738.7	1,048.3	968.4	79.85	13.127		
12,000.0	11,450.0	11,324.3	11,249.2	41.5	41.6	-75.91	-174.5	-737.8	1,111.4	1,031.2	80.14	13.868		
12,037.8	11,450.0	11,322.3	11,247.3	41.7	41.6	-75.59	-174.4	-737.4	1,137.2	1,057.0	80.24	14.172		
12,100.0	11,450.0	11,319.0	11,244.1	41.9	41.6	-75.36	-174.2	-736.7	1,181.5	1,101.1	80.40	14.694		
12,200.0	11,450.0	11,313.7	11,238.9	42.4	41.6	-74.99	-173.9	-735.7	1,255.8	1,175.1	80.64	15.572		
12,300.0	11,450.0	11,308.4	11,233.7	43.0	41.6	-74.62	-173.6	-734.6	1,333.4	1,252.6	80.86	16.490		
12,400.0	11,450.0	11,303.1	11,228.5	43.6	41.6	-74.25	-173.3	-733.6	1,413.9	1,332.8	81.06	17.442		
12,500.0	11,450.0	11,302.3	11,223.3	44.3	41.5	-73.87	-173.0	-732.5	1,496.6	1,415.4	81.26	18.419		
12,600.0	11,450.0	11,307.6	11,218.0	45.0	41.6	-73.50	-172.7	-731.5	1,581.4	1,499.9	81.46	19.414		
12,700.0	11,450.0	11,287.1	11,212.8	45.8	41.5	-73.13	-172.4	-730.4	1,667.8	1,586.3	81.54	20.454		
12,800.0	11,450.0	11,281.8	11,207.6	46.6	41.5	-72.76	-172.1	-729.4	1,755.7	1,674.0	81.66	21.498		
12,900.0	11,450.0	11,276.5	11,202.4	47.4	41.4	-72.39	-171.8	-728.3	1,844.7	1,763.0	81.78	22.558		
13,000.0	11,450.0	11,271.2	11,197.2	48.3	41.4	-72.02	-171.6	-727.3	1,934.9	1,853.0	81.88	23.630		
13,100.0	11,450.0	11,265.8	11,192.0	49.3	41.4	-71.65	-171.3	-726.2	2,025.9	1,943.9	81.97	24.714		
13,200.0	11,450.0	11,260.5	11,186.8	50.3	41.4	-71.29	-171.0	-725.2	2,117.7	2,035.7	82.06	25.808		
13,300.0	11,450.0	15,208.5	13,200.0	51.3	59.8	-143.05	1,877.4	-1,280.9	2,189.8	2,115.7	74.10	29.553		
13,400.0	11,450.0	15,308.5	13,200.0	52.3	60.7	-143.05	1,977.4	-1,281.7	2,189.8	2,114.2	75.53	28.991		
13,500.0	11,450.0	15,408.5	13,200.0	53.4	61.6	-143.05	2,077.4	-1,282.4	2,189.8	2,112.7	77.01	28.433		
13,600.0	11,450.0	15,508.5	13,200.0	54.5	62.6	-143.05	2,177.4	-1,283.2	2,189.7	2,111.2	78.54	27.881		
13,700.0	11,450.0	15,608.5	13,200.0	55.6	63.6	-143.05	2,277.4	-1,284.0	2,189.7	2,109.6	80.10	27.336		
13,800.0	11,450.0	15,708.5	13,200.0	56.8	64.6	-143.05	2,377.4	-1,284.8	2,189.7	2,108.0	81.71	26.800		
13,900.0	11,450.0	15,808.5	13,200.0	58.0	65.6	-143.05	2,477.4	-1,285.5	2,189.7	2,106.4	83.34	26.273		
14,000.0	11,450.0	15,908.5	13,200.0	59.2	66.7	-143.05	2,577.4	-1,286.3	2,189.7	2,104.7	85.02	25.757		
14,100.0	11,450.0	16,008.5	13,200.0	60.4	67.8	-143.05	2,677.4	-1,287.1	2,189.7	2,103.0	86.72	25.251		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,200.0	11,450.0	16,108.5	13,200.0	61.7	68.9	-143.05	2,777.4	-1,287.8	2,189.7	2,101.2	88.45	24.756		
14,300.0	11,450.0	16,208.5	13,200.0	62.9	70.0	-143.05	2,877.4	-1,288.6	2,189.7	2,099.5	90.21	24.272		
14,400.0	11,450.0	16,308.5	13,200.0	64.2	71.2	-143.05	2,977.4	-1,289.4	2,189.7	2,097.7	92.00	23.801		
14,500.0	11,450.0	16,408.5	13,200.0	65.5	72.4	-143.05	3,077.4	-1,290.2	2,189.7	2,095.8	93.81	23.341		
14,600.0	11,450.0	16,508.5	13,200.0	66.8	73.6	-143.06	3,177.4	-1,290.9	2,189.6	2,094.0	95.65	22.892		
14,700.0	11,450.0	16,608.5	13,200.0	68.2	74.8	-143.06	3,277.4	-1,291.7	2,189.6	2,092.1	97.51	22.456		
14,800.0	11,450.0	16,708.5	13,200.0	69.5	76.0	-143.06	3,377.4	-1,292.5	2,189.6	2,090.2	99.39	22.031		
14,900.0	11,450.0	16,808.5	13,200.0	70.9	77.3	-143.06	3,477.4	-1,293.3	2,189.6	2,088.3	101.29	21.618		
15,000.0	11,450.0	16,908.5	13,200.0	72.2	78.5	-143.06	3,577.4	-1,294.0	2,189.6	2,086.4	103.21	21.216		
15,100.0	11,450.0	17,008.5	13,200.0	73.6	79.8	-143.06	3,677.3	-1,294.8	2,189.6	2,084.5	105.14	20.825		
15,200.0	11,450.0	17,108.5	13,200.0	75.0	81.1	-143.06	3,777.3	-1,295.6	2,189.6	2,082.5	107.09	20.446		
15,300.0	11,450.0	17,208.5	13,200.0	76.4	82.4	-143.06	3,877.3	-1,296.3	2,189.6	2,080.5	109.06	20.076		
15,400.0	11,450.0	17,308.5	13,200.0	77.8	83.7	-143.06	3,977.3	-1,297.1	2,189.6	2,078.5	111.05	19.718		
15,500.0	11,450.0	17,408.5	13,200.0	79.3	85.0	-143.06	4,077.3	-1,297.9	2,189.6	2,076.5	113.04	19.369		
15,600.0	11,450.0	17,508.5	13,200.0	80.7	86.4	-143.06	4,177.3	-1,298.7	2,189.6	2,074.5	115.05	19.031		
15,700.0	11,450.0	17,608.5	13,200.0	82.1	87.7	-143.06	4,277.3	-1,299.4	2,189.5	2,072.5	117.08	18.701		
15,800.0	11,450.0	17,691.5	13,200.0	83.6	88.8	-143.06	4,377.3	-1,300.2	2,189.5	2,070.6	118.95	18.408		
15,900.0	11,450.0	17,808.5	13,200.0	85.0	90.4	-143.06	4,477.3	-1,301.0	2,189.5	2,068.4	121.16	18.071		
16,000.0	11,450.0	17,908.5	13,200.0	86.5	91.8	-143.06	4,577.3	-1,301.7	2,189.5	2,066.3	123.22	17.769		
16,100.0	11,450.0	18,008.5	13,200.0	88.0	93.2	-143.06	4,677.3	-1,302.5	2,189.5	2,064.2	125.29	17.475		
16,200.0	11,450.0	18,108.5	13,200.0	89.4	94.6	-143.06	4,777.3	-1,303.3	2,189.5	2,062.1	127.37	17.190		
16,300.0	11,450.0	18,208.5	13,200.0	90.9	96.0	-143.06	4,877.3	-1,304.1	2,189.5	2,060.0	129.46	16.913		
16,400.0	11,450.0	18,308.5	13,200.0	92.4	97.4	-143.06	4,977.3	-1,304.8	2,189.5	2,057.9	131.56	16.643		
16,500.0	11,450.0	18,408.5	13,200.0	93.9	98.9	-143.06	5,077.3	-1,305.6	2,189.5	2,055.8	133.66	16.381		
16,600.0	11,450.0	18,508.5	13,200.0	95.4	100.3	-143.06	5,177.3	-1,306.4	2,189.5	2,053.7	135.78	16.125		
16,700.0	11,450.0	18,608.5	13,200.0	96.9	101.7	-143.06	5,277.3	-1,307.2	2,189.5	2,051.6	137.90	15.877		
16,800.0	11,450.0	18,708.5	13,200.0	98.4	103.2	-143.06	5,377.3	-1,307.9	2,189.4	2,049.4	140.03	15.636		
16,900.0	11,450.0	18,808.5	13,200.0	100.0	104.6	-143.06	5,477.3	-1,308.7	2,189.4	2,047.3	142.17	15.401		
17,000.0	11,450.0	18,908.5	13,200.0	101.5	106.1	-143.06	5,577.3	-1,309.5	2,189.4	2,045.1	144.31	15.172		
17,100.0	11,450.0	19,008.5	13,200.0	103.0	107.5	-143.06	5,677.3	-1,310.2	2,189.4	2,043.0	146.46	14.949		
17,200.0	11,450.0	19,091.5	13,200.0	104.5	108.7	-143.06	5,777.3	-1,311.0	2,189.4	2,041.0	148.43	14.750		
17,300.0	11,450.0	19,208.5	13,200.0	106.1	110.5	-143.06	5,877.3	-1,311.8	2,189.4	2,038.6	150.78	14.521		
17,400.0	11,450.0	19,308.5	13,200.0	107.6	111.9	-143.06	5,977.3	-1,312.6	2,189.4	2,036.4	152.94	14.315		
17,500.0	11,450.0	19,408.5	13,200.0	109.1	113.4	-143.06	6,077.3	-1,313.3	2,189.4	2,034.3	155.12	14.114		
17,600.0	11,450.0	19,508.5	13,200.0	110.7	114.9	-143.07	6,177.3	-1,314.1	2,189.4	2,032.1	157.30	13.919		
17,700.0	11,450.0	19,608.5	13,200.0	112.2	116.4	-143.07	6,277.3	-1,314.9	2,189.4	2,029.9	159.48	13.728		
17,800.0	11,450.0	19,708.5	13,200.0	113.8	117.9	-143.07	6,377.3	-1,315.7	2,189.3	2,027.7	161.67	13.542		
17,900.0	11,450.0	19,808.5	13,200.0	115.3	119.4	-143.07	6,477.3	-1,316.4	2,189.3	2,025.5	163.86	13.361		
18,000.0	11,450.0	19,908.5	13,200.0	116.9	120.9	-143.07	6,577.3	-1,317.2	2,189.3	2,023.3	166.06	13.184		
18,100.0	11,450.0	20,008.5	13,200.0	118.4	122.4	-143.07	6,677.3	-1,318.0	2,189.3	2,021.1	168.26	13.012		
18,200.0	11,450.0	20,108.5	13,200.0	120.0	123.9	-143.07	6,777.3	-1,318.7	2,189.3	2,018.8	170.47	12.843		
18,300.0	11,450.0	20,208.5	13,200.0	121.6	125.4	-143.07	6,877.3	-1,319.5	2,189.3	2,016.6	172.67	12.679		
18,400.0	11,450.0	20,308.5	13,200.0	123.1	127.0	-143.07	6,977.2	-1,320.3	2,189.3	2,014.4	174.89	12.518		
18,500.0	11,450.0	20,408.5	13,200.0	124.7	128.5	-143.07	7,077.2	-1,321.1	2,189.3	2,012.2	177.11	12.361		
18,600.0	11,450.0	20,508.5	13,200.0	126.3	130.0	-143.07	7,177.2	-1,321.8	2,189.3	2,009.9	179.33	12.208		
18,700.0	11,450.0	20,608.5	13,200.0	127.8	131.5	-143.07	7,277.2	-1,322.6	2,189.3	2,007.7	181.55	12.059		
18,800.0	11,450.0	20,708.5	13,200.0	129.4	133.1	-143.07	7,377.2	-1,323.4	2,189.3	2,005.5	183.78	11.913		
18,900.0	11,450.0	20,808.5	13,200.0	131.0	134.6	-143.07	7,477.2	-1,324.1	2,189.2	2,003.2	186.01	11.770		
19,000.0	11,450.0	20,891.5	13,200.0	132.6	135.9	-143.07	7,577.2	-1,324.9	2,189.2	2,001.2	188.05	11.642		
19,100.0	11,450.0	21,008.5	13,200.0	134.2	137.7	-143.07	7,677.2	-1,325.7	2,189.2	1,998.7	190.48	11.493		
19,200.0	11,450.0	21,108.5	13,200.0	135.7	139.2	-143.07	7,777.2	-1,326.5	2,189.2	1,996.5	192.72	11.360		
19,300.0	11,450.0	21,208.5	13,200.0	137.3	140.8	-143.07	7,877.2	-1,327.2	2,189.2	1,994.2	194.96	11.229		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,400.0	11,450.0	21,308.5	13,200.0	138.9	142.3	-143.07	7,977.2	-1,328.0	2,189.2	1,992.0	197.20	11.101		
19,500.0	11,450.0	21,408.5	13,200.0	140.5	143.9	-143.07	8,077.2	-1,328.8	2,189.2	1,989.7	199.45	10.976		
19,600.0	11,450.0	21,508.5	13,200.0	142.1	145.4	-143.07	8,177.2	-1,329.6	2,189.2	1,987.5	201.70	10.854		
19,700.0	11,450.0	21,608.5	13,200.0	143.7	147.0	-143.07	8,277.2	-1,330.3	2,189.2	1,985.2	203.95	10.734		
19,800.0	11,450.0	21,708.5	13,200.0	145.3	148.6	-143.07	8,377.2	-1,331.1	2,189.2	1,983.0	206.20	10.616		
19,900.0	11,450.0	21,808.5	13,200.0	146.9	150.1	-143.07	8,477.2	-1,331.9	2,189.2	1,980.7	208.46	10.502		
20,000.0	11,450.0	21,908.5	13,200.0	148.5	151.7	-143.07	8,577.2	-1,332.6	2,189.1	1,978.4	210.72	10.389		
20,100.0	11,450.0	22,008.5	13,200.0	150.1	153.2	-143.07	8,677.2	-1,333.4	2,189.1	1,976.2	212.98	10.279		
20,200.0	11,450.0	22,108.5	13,200.0	151.7	154.8	-143.07	8,777.2	-1,334.2	2,189.1	1,973.9	215.24	10.171		
20,300.0	11,450.0	22,208.5	13,200.0	153.3	156.4	-143.07	8,877.2	-1,335.0	2,189.1	1,971.6	217.51	10.065		
20,400.0	11,450.0	22,308.5	13,200.0	154.9	158.0	-143.07	8,977.2	-1,335.7	2,189.1	1,969.3	219.77	9.961		
20,500.0	11,450.0	22,391.5	13,200.0	156.5	159.3	-143.07	9,077.2	-1,336.5	2,189.1	1,967.2	221.85	9.867		
20,600.0	11,450.0	22,508.5	13,200.0	158.1	161.1	-143.07	9,177.2	-1,337.3	2,189.1	1,964.8	224.31	9.759		
20,700.0	11,450.0	22,591.5	13,200.0	159.7	162.4	-143.08	9,277.2	-1,338.1	2,189.1	1,962.7	226.39	9.669		
20,800.0	11,450.0	22,708.5	13,200.0	161.3	164.3	-143.08	9,377.2	-1,338.8	2,189.1	1,960.2	228.85	9.565		
20,900.0	11,450.0	22,808.5	13,200.0	162.9	165.8	-143.08	9,477.2	-1,339.6	2,189.1	1,957.9	231.13	9.471		
21,000.0	11,450.0	22,908.5	13,200.0	164.5	167.4	-143.08	9,577.2	-1,340.4	2,189.0	1,955.6	233.41	9.379		
21,100.0	11,450.0	23,008.5	13,200.0	166.1	169.0	-143.08	9,677.2	-1,341.1	2,189.0	1,953.4	235.68	9.288		
21,200.0	11,450.0	23,108.5	13,200.0	167.7	170.6	-143.08	9,777.2	-1,341.9	2,189.0	1,951.1	237.96	9.199		
21,300.0	11,450.0	23,191.5	13,200.0	169.3	171.9	-143.08	9,877.2	-1,342.7	2,189.0	1,949.0	240.05	9.119		
21,400.0	11,450.0	23,308.5	13,200.0	170.9	173.7	-143.08	9,977.2	-1,343.5	2,189.0	1,946.5	242.53	9.026		
21,500.0	11,450.0	23,391.5	13,200.0	172.5	175.1	-143.08	10,077.2	-1,344.2	2,189.0	1,944.4	244.62	8.949		
21,600.0	11,450.0	23,491.5	13,200.0	174.2	176.7	-143.08	10,177.2	-1,345.0	2,189.0	1,942.1	246.90	8.866		
21,614.7	11,450.0	23,506.2	13,200.0	174.4	176.9	-143.08	10,191.8	-1,345.1	2,189.0	1,941.8	247.20	8.855		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey 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)

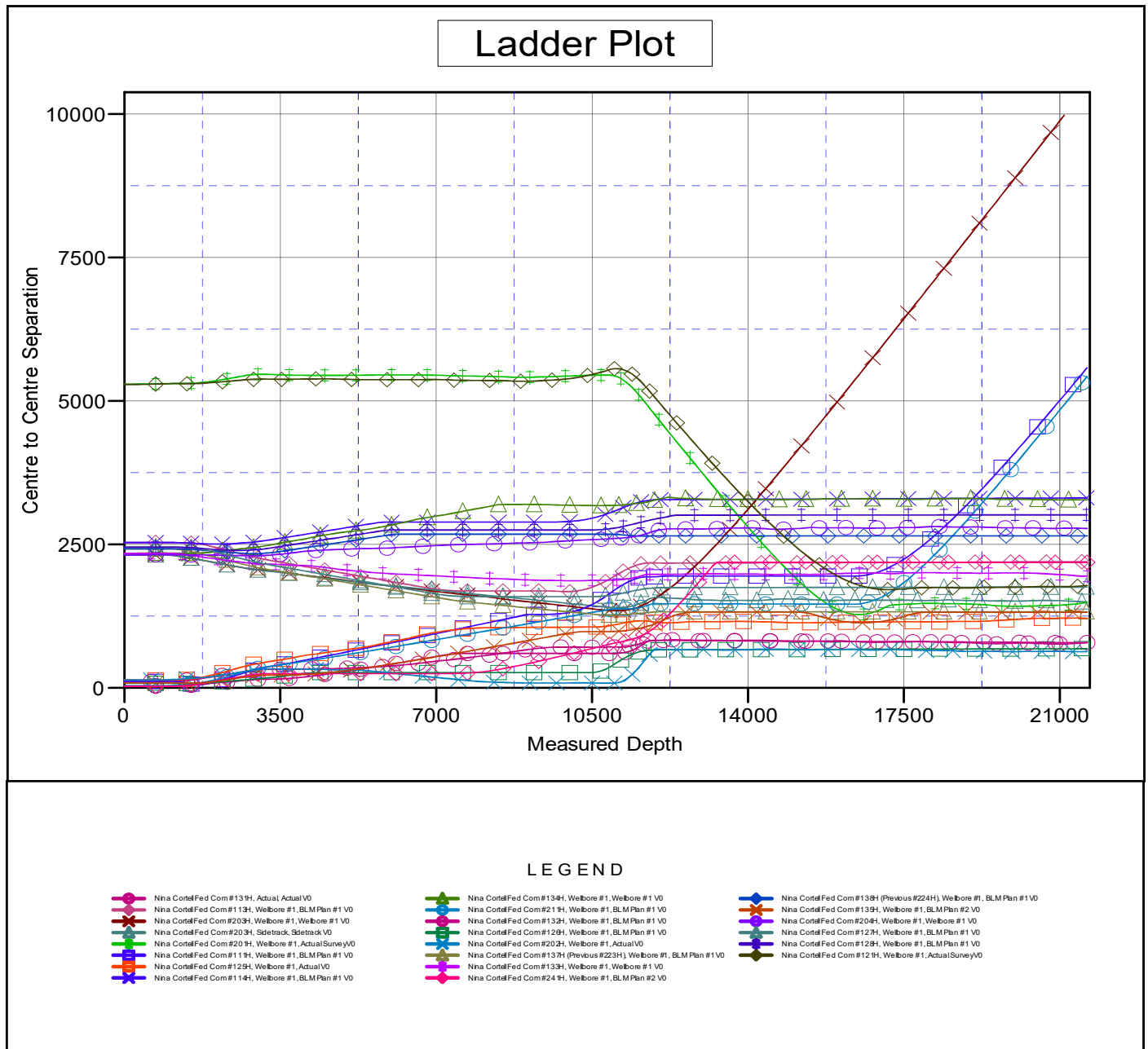
Offset Depths are relative to Offset Datum

Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Nina Cortell Fed Com #136H

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

Grid Convergence at Surface is: 0.36°



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

Anticollision Report

Company: Matador Production Company
Project: Antelope Ridge
Reference Site: Nina Cortell
Site Error: 0.0 usft
Reference Well: Nina Cortell Fed Com #136H
Well Error: 0.0 usft
Reference Wellbore: Wellbore #1
Reference Design: BLM Plan #2

Local Co-ordinate Reference: Well Nina Cortell Fed Com #136H
TVD Reference: KB @ 3818.5usft (Original Well Elev)
MD Reference: KB @ 3818.5usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.14 Single User Db
Offset TVD Reference: Offset Datum

Reference Depths are relative to KB @ 3818.5usft (Original Well Elev)

Offset Depths are relative to Offset Datum

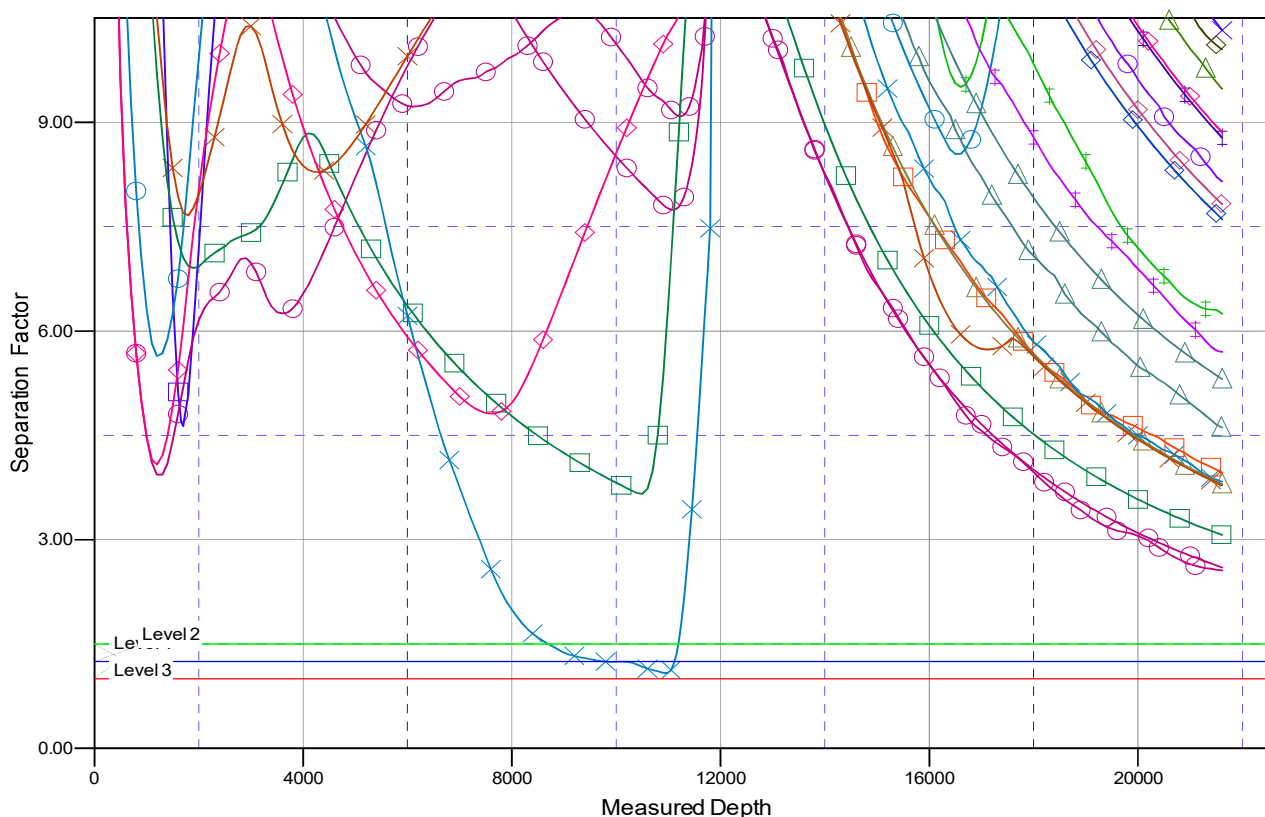
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Nina Cortell Fed Com #136H

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 Cortell Fed Com #131H, Actual Actual V0	Nina Cortell Fed Com #134H, Wellbore #1, Wellbore #1 V0	Nina Cortell Fed Com #138H (Previous #224H), Wellbore #1, BLM Plan #1 V0
Nina Cortell Fed Com #131H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #211H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #139H, Wellbore #1, BLM Plan #2 V0
Nina Cortell Fed Com #203H, Wellbore #1, Wellbore #1 V0	Nina Cortell Fed Com #132H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #204H, Wellbore #1, Wellbore #1 V0
Nina Cortell Fed Com #203H, Sidetrack, Sidetrack V0	Nina Cortell Fed Com #129H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #127H, Wellbore #1, BLM Plan #1 V0
Nina Cortell Fed Com #201H, Wellbore #1, Actual Survey V0	Nina Cortell Fed Com #202H, Wellbore #1, Actual V0	Nina Cortell Fed Com #128H, Wellbore #1, Wellbore #1 V0
Nina Cortell Fed Com #111H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #137H (Previous #223H), Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #121H, Wellbore #1, Actual Survey V0
Nina Cortell Fed Com #129H, Wellbore #1, Actual V0	Nina Cortell Fed Com #133H, Wellbore #1, Wellbore #1 V0	
Nina Cortell Fed Com #114H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #241H, Wellbore #1, BLM Plan #2 V0	

Offline Cementing - Intermediate Casing

Nina Cortell Fed Com 136H**Township/Range: 22S 32E****SHL: 242' FSL & 1601' FWL Section 10****Elevation Above Sea Level: 3,790"**

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.

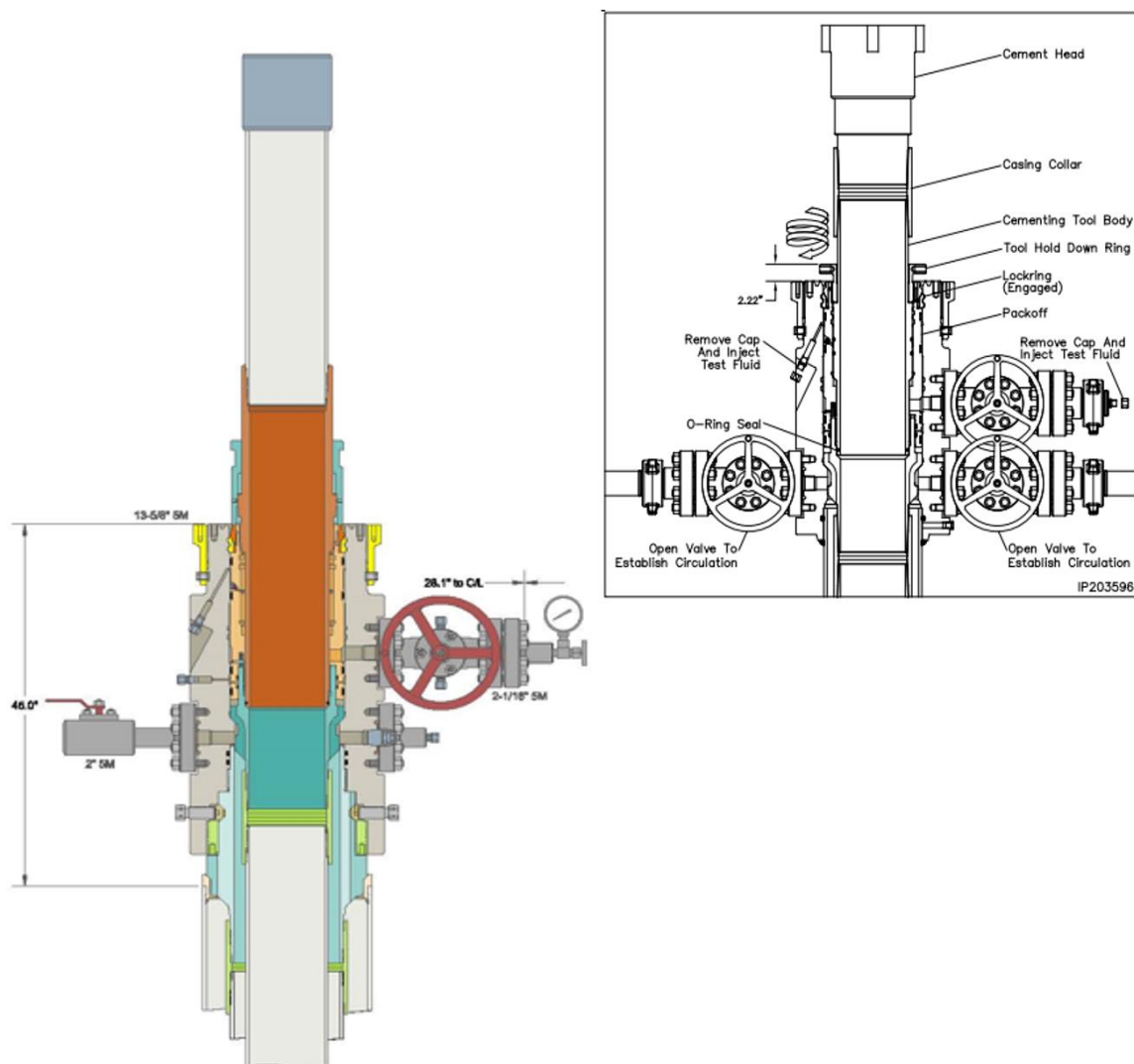
Offline Cementing Procedure

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 nipping 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

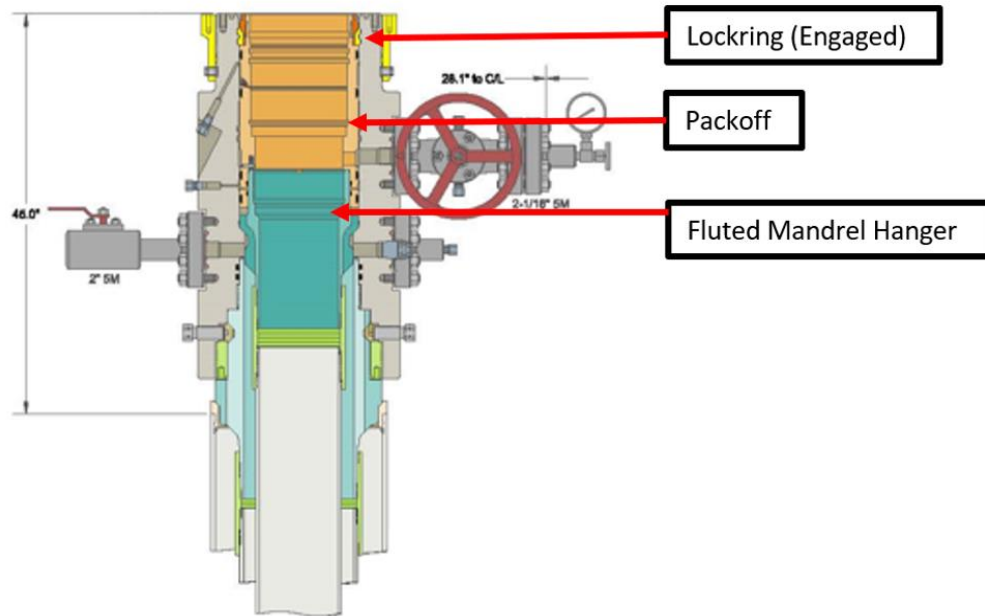
Figure 1: Cactus Offline Cementing Tool Schematic (5M tool)



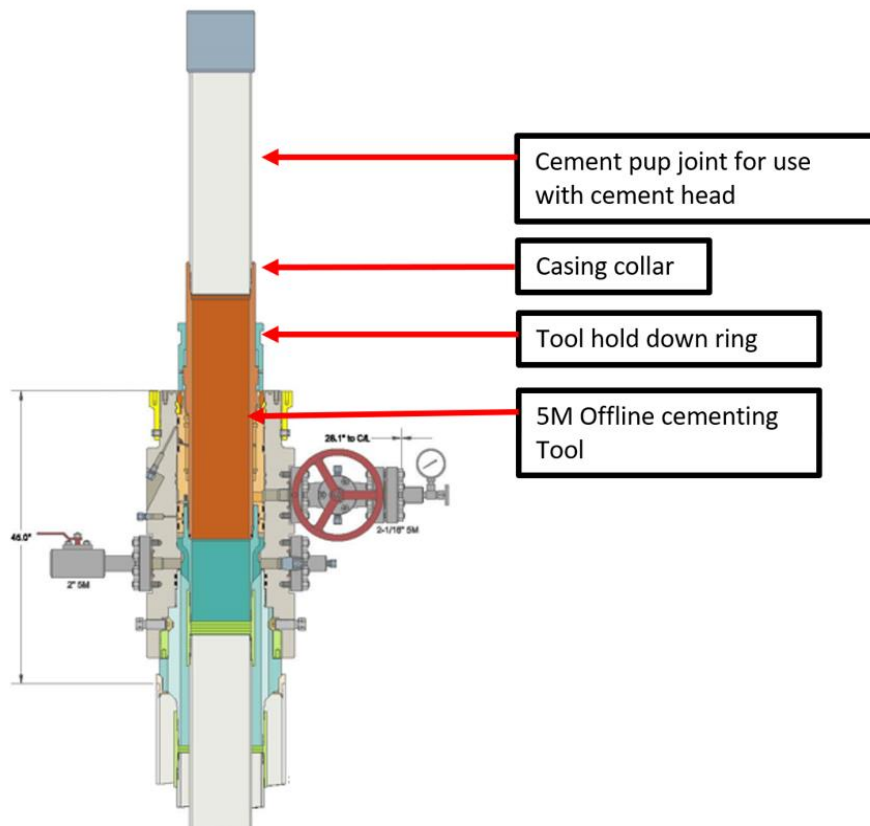
Offline Cementing - Intermediate Casing

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.

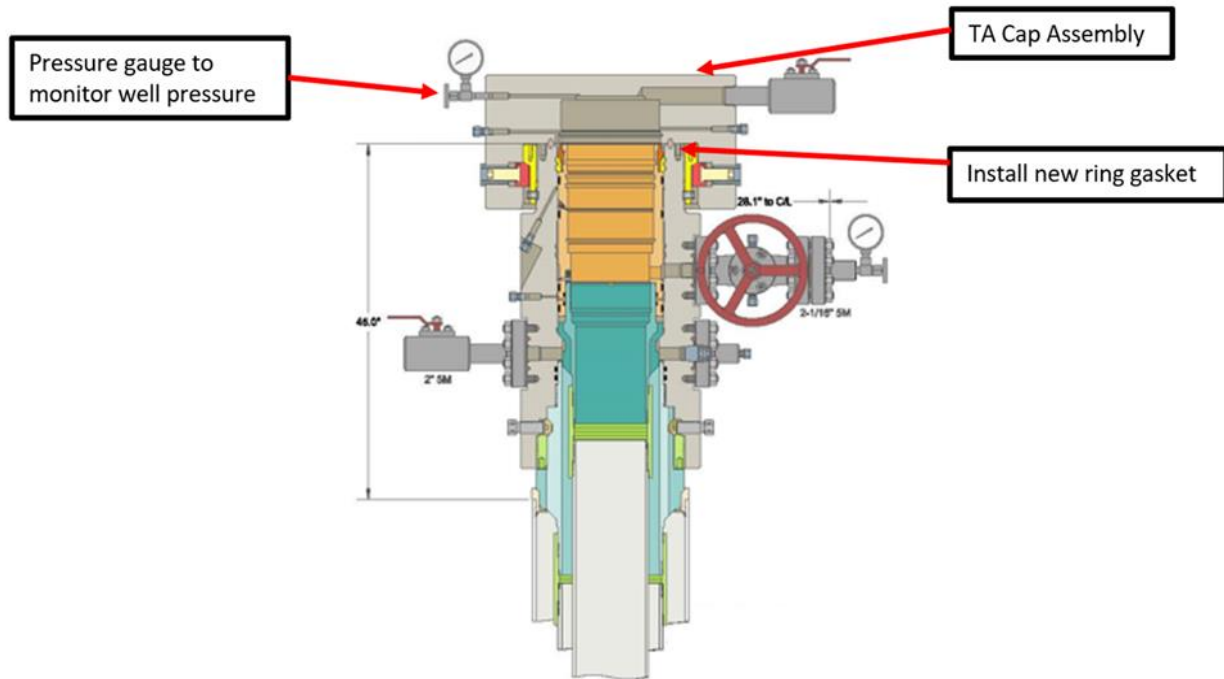


Step 2: Install casing hanger/packoff offline cementing tool.



Offline Cementing - Intermediate Casing

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



Modified BOP Testing Procedure for Batch Drilling

Nina Cortell Fed Com 136H
SHL: 242' FSL & 1601' FWL Section 10

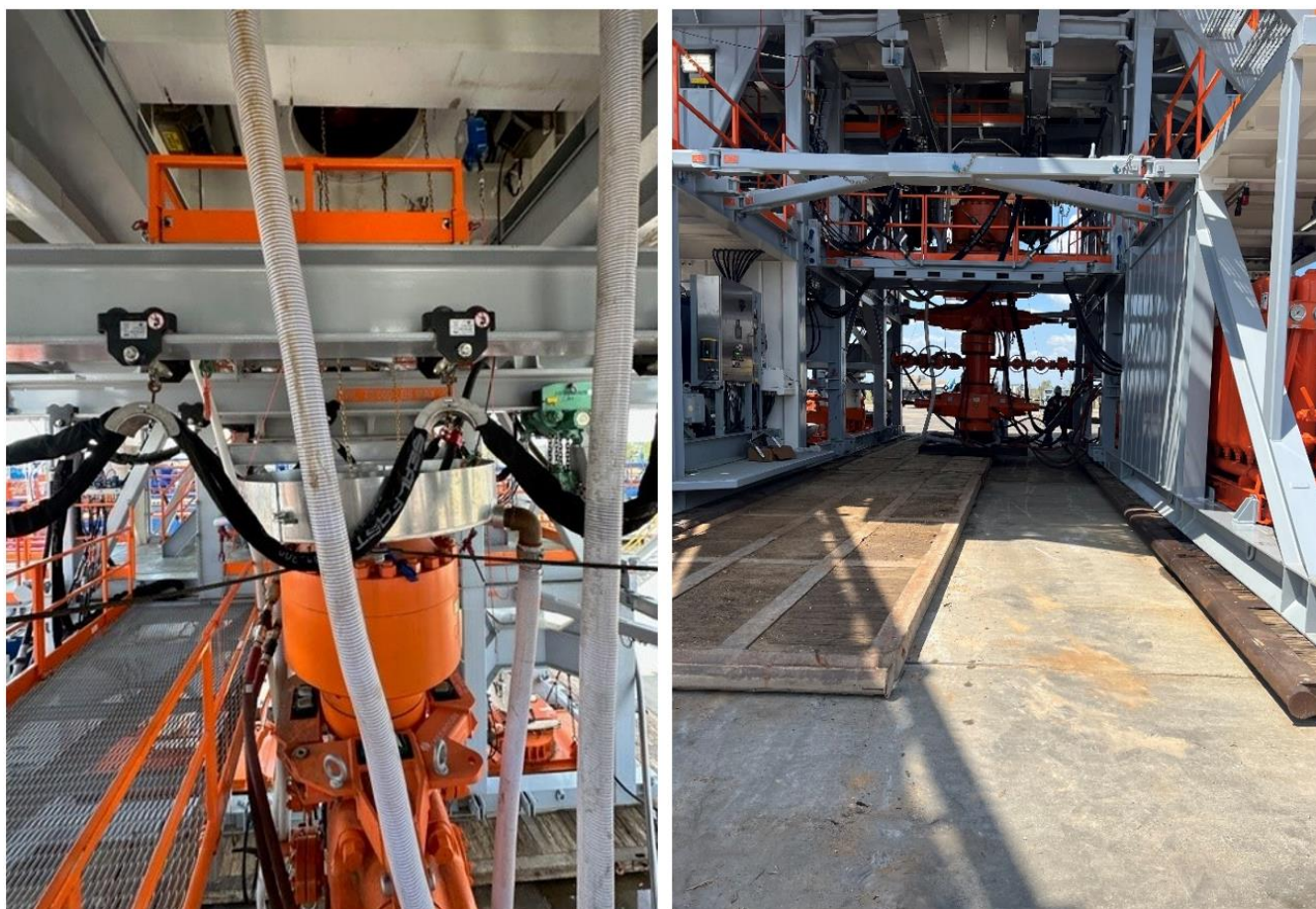
Township/Range: 22S 32E
Elevation Above Sea Level: 3,790"

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

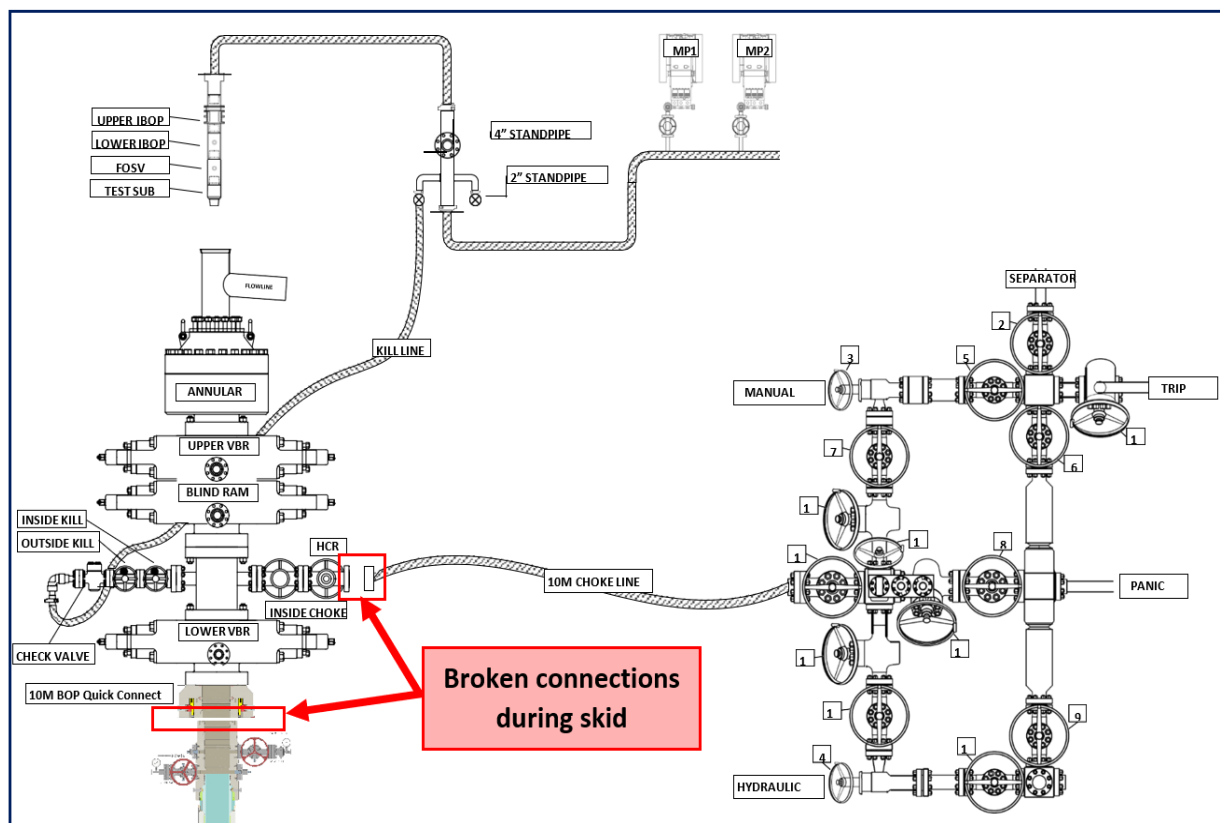


Figure 3: Shows which connections are broken during the skidding process

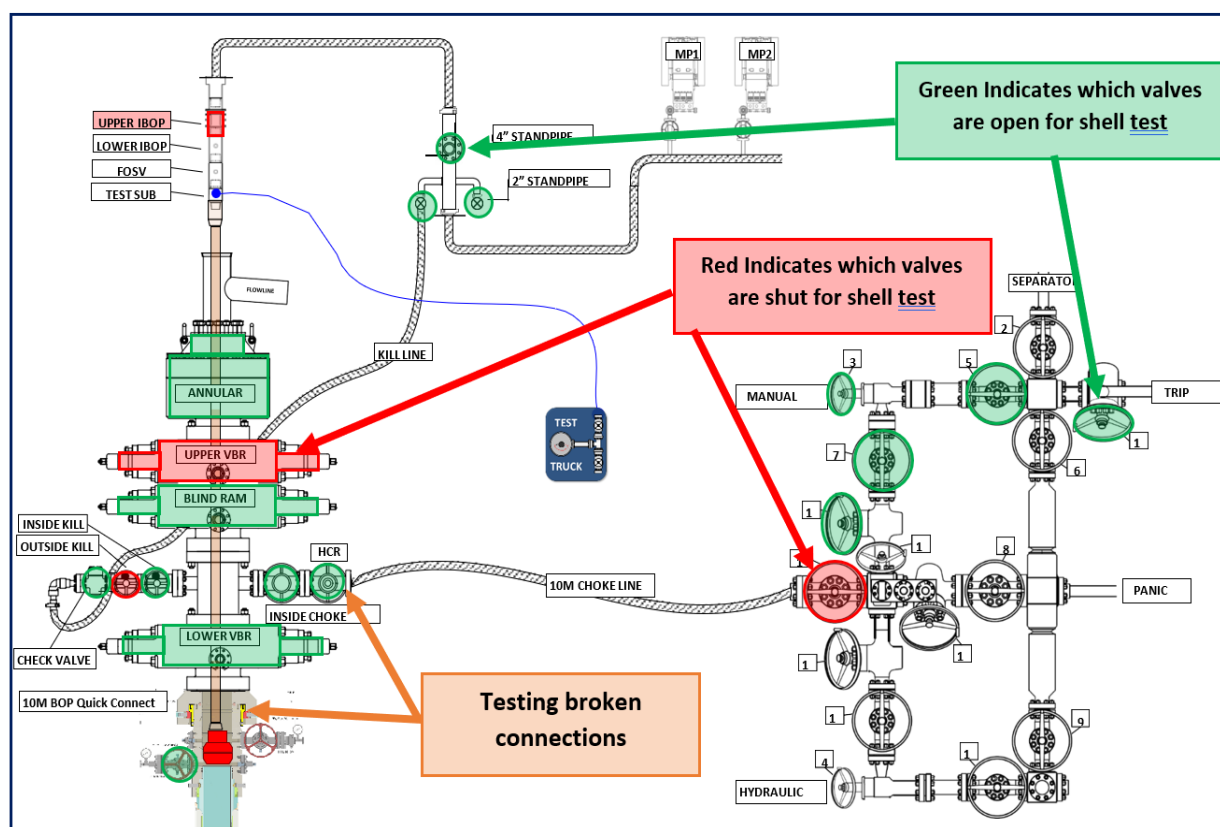


Figure 4: Shows which valves are shut/open for the shell test, testing both broken connections

Matador Production Company

Antelope Ridge

Nina Cortell

Nina Cortell Fed Com #136H

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 #136H
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 #136H	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 #136H					
Well Position	+N/-S	1.5 usft	Northing:	509,700.01 usft	Latitude:	32° 23' 58.236 N
	+E/-W	140.0 usft	Easting:	706,138.17 usft	Longitude:	103° 39' 55.636 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	47,341.86288690

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	359.55

Plan Survey Tool Program	Date	2/21/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	21,613.8	BLM Plan #1 (Wellbore #1)	MWD
				OWSG MWD - Standard

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,800.0	8.00	149.78	1,797.4	-48.2	28.1	1.00	1.00	0.00	149.78	
2,729.0	8.00	149.78	2,717.4	-159.9	93.1	0.00	0.00	0.00	0.00	
3,262.3	0.00	0.00	3,249.0	-192.0	111.8	1.50	-1.50	0.00	180.00	
10,890.4	0.00	0.00	10,877.0	-192.0	111.8	0.00	0.00	0.00	0.00	KOP - Nina Cortell Fe
11,790.4	90.00	354.60	11,450.0	378.4	57.9	10.00	10.00	0.00	354.60	
12,037.8	90.00	359.55	11,450.0	625.4	45.3	2.00	0.00	2.00	90.00	
21,614.7	90.00	359.55	11,450.0	10,202.0	-30.2	0.00	0.00	0.00	0.00	BHL - Nina Cortell Fe

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Well:	Nina Cortell Fed Com #136H	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
Start Build 1.00									
1,100.0	1.00	149.78	1,100.0	-0.8	0.4	-0.8	1.00	1.00	0.00
1,200.0	2.00	149.78	1,200.0	-3.0	1.8	-3.0	1.00	1.00	0.00
1,252.4	2.52	149.78	1,252.3	-4.8	2.8	-4.8	1.00	1.00	0.00
Z (Salado) (Top Salt)									
1,300.0	3.00	149.78	1,299.9	-6.8	4.0	-6.8	1.00	1.00	0.00
1,400.0	4.00	149.78	1,399.7	-12.1	7.0	-12.1	1.00	1.00	0.00
1,500.0	5.00	149.78	1,499.4	-18.8	11.0	-18.9	1.00	1.00	0.00
1,600.0	6.00	149.78	1,598.9	-27.1	15.8	-27.2	1.00	1.00	0.00
1,700.0	7.00	149.78	1,698.3	-36.9	21.5	-37.1	1.00	1.00	0.00
1,800.0	8.00	149.78	1,797.4	-48.2	28.1	-48.4	1.00	1.00	0.00
Start 929.0 hold at 1800.0 MD									
1,900.0	8.00	149.78	1,896.4	-60.2	35.1	-60.5	0.00	0.00	0.00
2,000.0	8.00	149.78	1,995.5	-72.2	42.1	-72.6	0.00	0.00	0.00
2,100.0	8.00	149.78	2,094.5	-84.3	49.1	-84.6	0.00	0.00	0.00
2,200.0	8.00	149.78	2,193.5	-96.3	56.1	-96.7	0.00	0.00	0.00
2,300.0	8.00	149.78	2,292.5	-108.3	63.1	-108.8	0.00	0.00	0.00
2,400.0	8.00	149.78	2,391.6	-120.3	70.1	-120.9	0.00	0.00	0.00
2,500.0	8.00	149.78	2,490.6	-132.4	77.1	-133.0	0.00	0.00	0.00
2,600.0	8.00	149.78	2,589.6	-144.4	84.1	-145.1	0.00	0.00	0.00
2,700.0	8.00	149.78	2,688.6	-156.4	91.1	-157.1	0.00	0.00	0.00
2,729.0	8.00	149.78	2,717.4	-159.9	93.1	-160.6	0.00	0.00	0.00
Start Drop -1.50									
2,800.0	6.94	149.78	2,787.8	-167.9	97.8	-168.6	1.50	-1.50	0.00
2,900.0	5.44	149.78	2,887.2	-177.2	103.2	-178.0	1.50	-1.50	0.00
3,000.0	3.94	149.78	2,986.8	-184.2	107.3	-185.1	1.50	-1.50	0.00
3,100.0	2.44	149.78	3,086.7	-189.1	110.1	-189.9	1.50	-1.50	0.00
3,149.3	1.70	149.78	3,135.9	-190.6	111.0	-191.5	1.50	-1.50	0.00
Z (Castile (T))									
3,200.0	0.94	149.78	3,186.6	-191.6	111.6	-192.5	1.50	-1.50	0.00
3,262.3	0.00	0.00	3,249.0	-192.0	111.8	-192.9	1.50	-1.50	0.00
Start 7628.0 hold at 3262.3 MD									
3,300.0	0.00	0.00	3,286.6	-192.0	111.8	-192.9	0.00	0.00	0.00
3,400.0	0.00	0.00	3,386.6	-192.0	111.8	-192.9	0.00	0.00	0.00
3,500.0	0.00	0.00	3,486.6	-192.0	111.8	-192.9	0.00	0.00	0.00
3,600.0	0.00	0.00	3,586.6	-192.0	111.8	-192.9	0.00	0.00	0.00
3,700.0	0.00	0.00	3,686.6	-192.0	111.8	-192.9	0.00	0.00	0.00
3,800.0	0.00	0.00	3,786.6	-192.0	111.8	-192.9	0.00	0.00	0.00
3,900.0	0.00	0.00	3,886.6	-192.0	111.8	-192.9	0.00	0.00	0.00
4,000.0	0.00	0.00	3,986.6	-192.0	111.8	-192.9	0.00	0.00	0.00

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Well:	Nina Cortell Fed Com #136H	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)
4,100.0	0.00	0.00	4,086.6	-192.0	111.8	-192.9	0.00	0.00	0.00
4,200.0	0.00	0.00	4,186.6	-192.0	111.8	-192.9	0.00	0.00	0.00
4,300.0	0.00	0.00	4,286.6	-192.0	111.8	-192.9	0.00	0.00	0.00
4,400.0	0.00	0.00	4,386.6	-192.0	111.8	-192.9	0.00	0.00	0.00
4,500.0	0.00	0.00	4,486.6	-192.0	111.8	-192.9	0.00	0.00	0.00
4,600.0	0.00	0.00	4,586.6	-192.0	111.8	-192.9	0.00	0.00	0.00
4,700.0	0.00	0.00	4,686.6	-192.0	111.8	-192.9	0.00	0.00	0.00
4,800.0	0.00	0.00	4,786.6	-192.0	111.8	-192.9	0.00	0.00	0.00
4,860.2	0.00	0.00	4,846.8	-192.0	111.8	-192.9	0.00	0.00	0.00
Z (G30:CS14-CSB) (Base of Salt)									
4,900.0	0.00	0.00	4,886.6	-192.0	111.8	-192.9	0.00	0.00	0.00
5,000.0	0.00	0.00	4,986.6	-192.0	111.8	-192.9	0.00	0.00	0.00
5,100.0	0.00	0.00	5,086.6	-192.0	111.8	-192.9	0.00	0.00	0.00
5,126.7	0.00	0.00	5,113.3	-192.0	111.8	-192.9	0.00	0.00	0.00
Z (G26: Bell Cyn.)									
5,200.0	0.00	0.00	5,186.6	-192.0	111.8	-192.9	0.00	0.00	0.00
5,300.0	0.00	0.00	5,286.6	-192.0	111.8	-192.9	0.00	0.00	0.00
5,400.0	0.00	0.00	5,386.6	-192.0	111.8	-192.9	0.00	0.00	0.00
5,500.0	0.00	0.00	5,486.6	-192.0	111.8	-192.9	0.00	0.00	0.00
5,600.0	0.00	0.00	5,586.6	-192.0	111.8	-192.9	0.00	0.00	0.00
5,700.0	0.00	0.00	5,686.6	-192.0	111.8	-192.9	0.00	0.00	0.00
5,780.7	0.00	0.00	5,767.3	-192.0	111.8	-192.9	0.00	0.00	0.00
Z (G13: Cherry Cyn.)									
5,800.0	0.00	0.00	5,786.6	-192.0	111.8	-192.9	0.00	0.00	0.00
5,900.0	0.00	0.00	5,886.6	-192.0	111.8	-192.9	0.00	0.00	0.00
6,000.0	0.00	0.00	5,986.6	-192.0	111.8	-192.9	0.00	0.00	0.00
6,100.0	0.00	0.00	6,086.6	-192.0	111.8	-192.9	0.00	0.00	0.00
6,200.0	0.00	0.00	6,186.6	-192.0	111.8	-192.9	0.00	0.00	0.00
6,300.0	0.00	0.00	6,286.6	-192.0	111.8	-192.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,386.6	-192.0	111.8	-192.9	0.00	0.00	0.00
6,500.0	0.00	0.00	6,486.6	-192.0	111.8	-192.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,586.6	-192.0	111.8	-192.9	0.00	0.00	0.00
6,700.0	0.00	0.00	6,686.6	-192.0	111.8	-192.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,786.6	-192.0	111.8	-192.9	0.00	0.00	0.00
6,900.0	0.00	0.00	6,886.6	-192.0	111.8	-192.9	0.00	0.00	0.00
7,000.0	0.00	0.00	6,986.6	-192.0	111.8	-192.9	0.00	0.00	0.00
7,012.6	0.00	0.00	6,999.2	-192.0	111.8	-192.9	0.00	0.00	0.00
Z (G7: Brushy Cyn.) Antelope Ridge									
7,100.0	0.00	0.00	7,086.6	-192.0	111.8	-192.9	0.00	0.00	0.00
7,200.0	0.00	0.00	7,186.6	-192.0	111.8	-192.9	0.00	0.00	0.00
7,300.0	0.00	0.00	7,286.6	-192.0	111.8	-192.9	0.00	0.00	0.00
7,400.0	0.00	0.00	7,386.6	-192.0	111.8	-192.9	0.00	0.00	0.00
7,500.0	0.00	0.00	7,486.6	-192.0	111.8	-192.9	0.00	0.00	0.00
7,600.0	0.00	0.00	7,586.6	-192.0	111.8	-192.9	0.00	0.00	0.00
7,700.0	0.00	0.00	7,686.6	-192.0	111.8	-192.9	0.00	0.00	0.00
7,800.0	0.00	0.00	7,786.6	-192.0	111.8	-192.9	0.00	0.00	0.00
7,900.0	0.00	0.00	7,886.6	-192.0	111.8	-192.9	0.00	0.00	0.00
8,000.0	0.00	0.00	7,986.6	-192.0	111.8	-192.9	0.00	0.00	0.00
8,100.0	0.00	0.00	8,086.6	-192.0	111.8	-192.9	0.00	0.00	0.00
8,200.0	0.00	0.00	8,186.6	-192.0	111.8	-192.9	0.00	0.00	0.00
8,300.0	0.00	0.00	8,286.6	-192.0	111.8	-192.9	0.00	0.00	0.00
8,400.0	0.00	0.00	8,386.6	-192.0	111.8	-192.9	0.00	0.00	0.00
8,500.0	0.00	0.00	8,486.6	-192.0	111.8	-192.9	0.00	0.00	0.00

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Site:	Nina Cortell	North Reference:	Grid
Well:	Nina Cortell Fed Com #136H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,600.0	0.00	0.00	8,586.6	-192.0	111.8	-192.9	0.00	0.00	0.00
8,700.0	0.00	0.00	8,686.6	-192.0	111.8	-192.9	0.00	0.00	0.00
8,800.0	0.00	0.00	8,786.6	-192.0	111.8	-192.9	0.00	0.00	0.00
8,802.5	0.00	0.00	8,789.2	-192.0	111.8	-192.9	0.00	0.00	0.00
Z (G4: BSGL (CS9))									
8,900.0	0.00	0.00	8,886.6	-192.0	111.8	-192.9	0.00	0.00	0.00
9,000.0	0.00	0.00	8,986.6	-192.0	111.8	-192.9	0.00	0.00	0.00
9,100.0	0.00	0.00	9,086.6	-192.0	111.8	-192.9	0.00	0.00	0.00
9,200.0	0.00	0.00	9,186.6	-192.0	111.8	-192.9	0.00	0.00	0.00
9,300.0	0.00	0.00	9,286.6	-192.0	111.8	-192.9	0.00	0.00	0.00
9,400.0	0.00	0.00	9,386.6	-192.0	111.8	-192.9	0.00	0.00	0.00
9,500.0	0.00	0.00	9,486.6	-192.0	111.8	-192.9	0.00	0.00	0.00
9,600.0	0.00	0.00	9,586.6	-192.0	111.8	-192.9	0.00	0.00	0.00
9,700.0	0.00	0.00	9,686.6	-192.0	111.8	-192.9	0.00	0.00	0.00
9,800.0	0.00	0.00	9,786.6	-192.0	111.8	-192.9	0.00	0.00	0.00
9,889.6	0.00	0.00	9,876.2	-192.0	111.8	-192.9	0.00	0.00	0.00
Z (L5.1: FBSC)									
9,900.0	0.00	0.00	9,886.6	-192.0	111.8	-192.9	0.00	0.00	0.00
10,000.0	0.00	0.00	9,986.6	-192.0	111.8	-192.9	0.00	0.00	0.00
10,100.0	0.00	0.00	10,086.6	-192.0	111.8	-192.9	0.00	0.00	0.00
10,180.3	0.00	0.00	10,166.9	-192.0	111.8	-192.9	0.00	0.00	0.00
Z (L4.3: SBSC)									
10,200.0	0.00	0.00	10,186.6	-192.0	111.8	-192.9	0.00	0.00	0.00
10,300.0	0.00	0.00	10,286.6	-192.0	111.8	-192.9	0.00	0.00	0.00
10,400.0	0.00	0.00	10,386.6	-192.0	111.8	-192.9	0.00	0.00	0.00
10,500.0	0.00	0.00	10,486.6	-192.0	111.8	-192.9	0.00	0.00	0.00
10,558.7	0.00	0.00	10,545.3	-192.0	111.8	-192.9	0.00	0.00	0.00
Z (L4.1: SBSG)									
10,600.0	0.00	0.00	10,586.6	-192.0	111.8	-192.9	0.00	0.00	0.00
10,700.0	0.00	0.00	10,686.6	-192.0	111.8	-192.9	0.00	0.00	0.00
10,800.0	0.00	0.00	10,786.6	-192.0	111.8	-192.9	0.00	0.00	0.00
10,890.4	0.00	0.00	10,877.0	-192.0	111.8	-192.9	0.00	0.00	0.00
Start Build 10.00 - KOP - Nina Cortell Fed Com #136H									
10,900.0	0.96	354.60	10,886.6	-192.0	111.8	-192.8	10.00	10.00	0.00
10,971.3	8.09	354.60	10,957.6	-186.4	111.3	-187.2	10.00	10.00	0.00
Z (L3.3: TBSC)									
11,000.0	10.96	354.60	10,986.0	-181.6	110.9	-182.5	10.00	10.00	0.00
11,100.0	20.96	354.60	11,082.0	-154.3	108.3	-155.1	10.00	10.00	0.00
11,132.1	24.18	354.60	11,111.6	-142.0	107.1	-142.8	10.00	10.00	0.00
FTP - Nina Cortell Fed Com #136H									
11,200.0	30.96	354.60	11,171.8	-110.7	104.2	-111.6	10.00	10.00	0.00
11,300.0	40.96	354.60	11,252.6	-52.4	98.6	-53.1	10.00	10.00	0.00
11,400.0	50.96	354.60	11,322.0	19.1	91.9	18.4	10.00	10.00	0.00
11,500.0	60.96	354.60	11,377.9	101.5	84.1	100.9	10.00	10.00	0.00
11,600.0	70.96	354.60	11,418.6	192.3	75.5	191.7	10.00	10.00	0.00
11,700.0	80.96	354.60	11,442.8	288.8	66.4	288.3	10.00	10.00	0.00
11,790.4	90.00	354.60	11,450.0	378.4	57.9	377.9	10.00	10.00	0.00
Start DLS 2.00 TFO 90.00									
11,800.0	90.00	354.79	11,450.0	388.0	57.0	387.5	2.00	0.00	2.00
11,900.0	90.00	356.79	11,450.0	487.7	49.7	487.3	2.00	0.00	2.00
12,000.0	90.00	358.79	11,450.0	587.6	45.8	587.2	2.00	0.00	2.00
12,037.8	90.00	359.55	11,450.0	625.4	45.3	625.0	2.00	0.00	2.00
Start 9576.9 hold at 12037.8 MD									

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	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)
12,100.0	90.00	359.55	11,450.0	687.6	44.8	687.2	0.00	0.00	0.00
12,200.0	90.00	359.55	11,450.0	787.6	44.0	787.2	0.00	0.00	0.00
12,300.0	90.00	359.55	11,450.0	887.6	43.2	887.2	0.00	0.00	0.00
12,400.0	90.00	359.55	11,450.0	987.6	42.4	987.2	0.00	0.00	0.00
12,500.0	90.00	359.55	11,450.0	1,087.6	41.7	1,087.2	0.00	0.00	0.00
12,600.0	90.00	359.55	11,450.0	1,187.6	40.9	1,187.2	0.00	0.00	0.00
12,700.0	90.00	359.55	11,450.0	1,287.6	40.1	1,287.2	0.00	0.00	0.00
12,800.0	90.00	359.55	11,450.0	1,387.6	39.3	1,387.2	0.00	0.00	0.00
12,900.0	90.00	359.55	11,450.0	1,487.6	38.5	1,487.2	0.00	0.00	0.00
13,000.0	90.00	359.55	11,450.0	1,587.6	37.7	1,587.2	0.00	0.00	0.00
13,100.0	90.00	359.55	11,450.0	1,687.6	36.9	1,687.2	0.00	0.00	0.00
13,200.0	90.00	359.55	11,450.0	1,787.6	36.1	1,787.2	0.00	0.00	0.00
13,300.0	90.00	359.55	11,450.0	1,887.6	35.3	1,887.2	0.00	0.00	0.00
13,400.0	90.00	359.55	11,450.0	1,987.6	34.6	1,987.2	0.00	0.00	0.00
13,500.0	90.00	359.55	11,450.0	2,087.6	33.8	2,087.2	0.00	0.00	0.00
13,600.0	90.00	359.55	11,450.0	2,187.6	33.0	2,187.2	0.00	0.00	0.00
13,700.0	90.00	359.55	11,450.0	2,287.6	32.2	2,287.2	0.00	0.00	0.00
13,800.0	90.00	359.55	11,450.0	2,387.6	31.4	2,387.2	0.00	0.00	0.00
13,809.9	90.00	359.55	11,450.0	2,397.4	31.3	2,397.1	0.00	0.00	0.00
BPP1 - Nina Cortell Fed Com #136H									
13,900.0	90.00	359.55	11,450.0	2,487.6	30.6	2,487.2	0.00	0.00	0.00
14,000.0	90.00	359.55	11,450.0	2,587.6	29.8	2,587.2	0.00	0.00	0.00
14,100.0	90.00	359.55	11,450.0	2,687.6	29.0	2,687.2	0.00	0.00	0.00
14,200.0	90.00	359.55	11,450.0	2,787.5	28.3	2,787.2	0.00	0.00	0.00
14,300.0	90.00	359.55	11,450.0	2,887.5	27.5	2,887.2	0.00	0.00	0.00
14,400.0	90.00	359.55	11,450.0	2,987.5	26.7	2,987.2	0.00	0.00	0.00
14,500.0	90.00	359.55	11,450.0	3,087.5	25.9	3,087.2	0.00	0.00	0.00
14,600.0	90.00	359.55	11,450.0	3,187.5	25.1	3,187.2	0.00	0.00	0.00
14,700.0	90.00	359.55	11,450.0	3,287.5	24.3	3,287.2	0.00	0.00	0.00
14,800.0	90.00	359.55	11,450.0	3,387.5	23.5	3,387.2	0.00	0.00	0.00
14,900.0	90.00	359.55	11,450.0	3,487.5	22.7	3,487.2	0.00	0.00	0.00
15,000.0	90.00	359.55	11,450.0	3,587.5	22.0	3,587.2	0.00	0.00	0.00
15,100.0	90.00	359.55	11,450.0	3,687.5	21.2	3,687.2	0.00	0.00	0.00
15,129.6	90.00	359.55	11,450.0	3,717.1	20.9	3,716.8	0.00	0.00	0.00
BPP2 - Nina Cortell Fed Com #136H									
15,200.0	90.00	359.55	11,450.0	3,787.5	20.4	3,787.2	0.00	0.00	0.00
15,300.0	90.00	359.55	11,450.0	3,887.5	19.6	3,887.2	0.00	0.00	0.00
15,400.0	90.00	359.55	11,450.0	3,987.5	18.8	3,987.2	0.00	0.00	0.00
15,500.0	90.00	359.55	11,450.0	4,087.5	18.0	4,087.2	0.00	0.00	0.00
15,600.0	90.00	359.55	11,450.0	4,187.5	17.2	4,187.2	0.00	0.00	0.00
15,700.0	90.00	359.55	11,450.0	4,287.5	16.4	4,287.2	0.00	0.00	0.00
15,800.0	90.00	359.55	11,450.0	4,387.5	15.6	4,387.2	0.00	0.00	0.00
15,900.0	90.00	359.55	11,450.0	4,487.5	14.9	4,487.2	0.00	0.00	0.00
16,000.0	90.00	359.55	11,450.0	4,587.5	14.1	4,587.2	0.00	0.00	0.00
16,100.0	90.00	359.55	11,450.0	4,687.5	13.3	4,687.2	0.00	0.00	0.00
16,200.0	90.00	359.55	11,450.0	4,787.5	12.5	4,787.2	0.00	0.00	0.00
16,300.0	90.00	359.55	11,450.0	4,887.5	11.7	4,887.2	0.00	0.00	0.00
16,400.0	90.00	359.55	11,450.0	4,987.5	10.9	4,987.2	0.00	0.00	0.00
16,448.3	90.00	359.55	11,450.0	5,035.8	10.5	5,035.6	0.00	0.00	0.00
BPP3 - Nina Cortell Fed Com #136H									
16,500.0	90.00	359.55	11,450.0	5,087.5	10.1	5,087.2	0.00	0.00	0.00
16,600.0	90.00	359.55	11,450.0	5,187.5	9.3	5,187.2	0.00	0.00	0.00
16,700.0	90.00	359.55	11,450.0	5,287.5	8.6	5,287.2	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	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)	
16,800.0	90.00	359.55	11,450.0	5,387.5	7.8	5,387.2	0.00	0.00	0.00	
16,900.0	90.00	359.55	11,450.0	5,487.5	7.0	5,487.2	0.00	0.00	0.00	
17,000.0	90.00	359.55	11,450.0	5,587.5	6.2	5,587.2	0.00	0.00	0.00	
17,100.0	90.00	359.55	11,450.0	5,687.5	5.4	5,687.2	0.00	0.00	0.00	
17,200.0	90.00	359.55	11,450.0	5,787.5	4.6	5,787.2	0.00	0.00	0.00	
17,300.0	90.00	359.55	11,450.0	5,887.5	3.8	5,887.2	0.00	0.00	0.00	
17,400.0	90.00	359.55	11,450.0	5,987.4	3.0	5,987.2	0.00	0.00	0.00	
17,500.0	90.00	359.55	11,450.0	6,087.4	2.3	6,087.2	0.00	0.00	0.00	
17,600.0	90.00	359.55	11,450.0	6,187.4	1.5	6,187.2	0.00	0.00	0.00	
17,700.0	90.00	359.55	11,450.0	6,287.4	0.7	6,287.2	0.00	0.00	0.00	
17,800.0	90.00	359.55	11,450.0	6,387.4	-0.1	6,387.2	0.00	0.00	0.00	
17,900.0	90.00	359.55	11,450.0	6,487.4	-0.9	6,487.2	0.00	0.00	0.00	
18,000.0	90.00	359.55	11,450.0	6,587.4	-1.7	6,587.2	0.00	0.00	0.00	
18,100.0	90.00	359.55	11,450.0	6,687.4	-2.5	6,687.2	0.00	0.00	0.00	
18,200.0	90.00	359.55	11,450.0	6,787.4	-3.3	6,787.2	0.00	0.00	0.00	
18,300.0	90.00	359.55	11,450.0	6,887.4	-4.1	6,887.2	0.00	0.00	0.00	
18,400.0	90.00	359.55	11,450.0	6,987.4	-4.8	6,987.2	0.00	0.00	0.00	
18,500.0	90.00	359.55	11,450.0	7,087.4	-5.6	7,087.2	0.00	0.00	0.00	
18,600.0	90.00	359.55	11,450.0	7,187.4	-6.4	7,187.2	0.00	0.00	0.00	
18,700.0	90.00	359.55	11,450.0	7,287.4	-7.2	7,287.2	0.00	0.00	0.00	
18,800.0	90.00	359.55	11,450.0	7,387.4	-8.0	7,387.2	0.00	0.00	0.00	
18,900.0	90.00	359.55	11,450.0	7,487.4	-8.8	7,487.2	0.00	0.00	0.00	
19,000.0	90.00	359.55	11,450.0	7,587.4	-9.6	7,587.2	0.00	0.00	0.00	
19,088.8	90.00	359.55	11,450.0	7,676.2	-10.3	7,676.0	0.00	0.00	0.00	
BPP4 - Nina Cortell Fed Com #136H										
19,100.0	90.00	359.55	11,450.0	7,687.4	-10.4	7,687.2	0.00	0.00	0.00	
19,200.0	90.00	359.55	11,450.0	7,787.4	-11.1	7,787.2	0.00	0.00	0.00	
19,300.0	90.00	359.55	11,450.0	7,887.4	-11.9	7,887.2	0.00	0.00	0.00	
19,400.0	90.00	359.55	11,450.0	7,987.4	-12.7	7,987.2	0.00	0.00	0.00	
19,500.0	90.00	359.55	11,450.0	8,087.4	-13.5	8,087.2	0.00	0.00	0.00	
19,600.0	90.00	359.55	11,450.0	8,187.4	-14.3	8,187.2	0.00	0.00	0.00	
19,700.0	90.00	359.55	11,450.0	8,287.4	-15.1	8,287.2	0.00	0.00	0.00	
19,800.0	90.00	359.55	11,450.0	8,387.4	-15.9	8,387.2	0.00	0.00	0.00	
19,900.0	90.00	359.55	11,450.0	8,487.4	-16.7	8,487.2	0.00	0.00	0.00	
20,000.0	90.00	359.55	11,450.0	8,587.4	-17.5	8,587.2	0.00	0.00	0.00	
20,100.0	90.00	359.55	11,450.0	8,687.4	-18.2	8,687.2	0.00	0.00	0.00	
20,200.0	90.00	359.55	11,450.0	8,787.4	-19.0	8,787.2	0.00	0.00	0.00	
20,300.0	90.00	359.55	11,450.0	8,887.4	-19.8	8,887.2	0.00	0.00	0.00	
20,400.0	90.00	359.55	11,450.0	8,987.4	-20.6	8,987.2	0.00	0.00	0.00	
20,500.0	90.00	359.55	11,450.0	9,087.4	-21.4	9,087.2	0.00	0.00	0.00	
20,600.0	90.00	359.55	11,450.0	9,187.3	-22.2	9,187.2	0.00	0.00	0.00	
20,700.0	90.00	359.55	11,450.0	9,287.3	-23.0	9,287.2	0.00	0.00	0.00	
20,800.0	90.00	359.55	11,450.0	9,387.3	-23.8	9,387.2	0.00	0.00	0.00	
20,900.0	90.00	359.55	11,450.0	9,487.3	-24.5	9,487.2	0.00	0.00	0.00	
21,000.0	90.00	359.55	11,450.0	9,587.3	-25.3	9,587.2	0.00	0.00	0.00	
21,100.0	90.00	359.55	11,450.0	9,687.3	-26.1	9,687.2	0.00	0.00	0.00	
21,200.0	90.00	359.55	11,450.0	9,787.3	-26.9	9,787.2	0.00	0.00	0.00	
21,300.0	90.00	359.55	11,450.0	9,887.3	-27.7	9,887.2	0.00	0.00	0.00	
21,400.0	90.00	359.55	11,450.0	9,987.3	-28.5	9,987.2	0.00	0.00	0.00	
21,500.0	90.00	359.55	11,450.0	10,087.3	-29.3	10,087.2	0.00	0.00	0.00	
21,600.0	90.00	359.55	11,450.0	10,187.3	-30.1	10,187.2	0.00	0.00	0.00	
21,614.7	90.00	359.55	11,450.0	10,202.0	-30.2	10,201.9	0.00	0.00	0.00	
TD at 21614.7 - BHL - Nina Cortell Fed Com #136H										

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
KOP - Nina Cortell Fed C - plan hits target center - Point	0.00	0.00	10,877.0	-192.0	111.8	509,508.00	706,250.00	32° 23' 56.329 N	103° 39' 54.346 W
FTP - Nina Cortell Fed C - plan hits target center - Point	0.00	0.00	11,111.7	-142.0	107.1	509,558.06	706,245.24	32° 23' 56.824 N	103° 39' 54.398 W
BPP1 - Nina Cortell Fed - plan misses target center by 0.1usft at 13809.9usft MD (11450.0 TVD, 2397.4 N, 31.3 E) - Point	0.00	0.00	11,450.0	2,397.4	31.4	512,097.24	706,169.56	32° 24' 21.955 N	103° 39' 55.095 W
BPP2 - Nina Cortell Fed - plan hits target center - Point	0.00	0.00	11,450.0	3,717.1	21.0	513,416.89	706,159.15	32° 24' 35.014 N	103° 39' 55.121 W
BPP3 - Nina Cortell Fed - plan hits target center - Point	0.00	0.00	11,450.0	5,035.8	10.6	514,735.58	706,148.74	32° 24' 48.064 N	103° 39' 55.146 W
BPP4 - Nina Cortell Fed - plan hits target center - Point	0.00	0.00	11,450.0	7,676.2	-10.3	517,376.03	706,127.91	32° 25' 14.194 N	103° 39' 55.196 W
BHL - Nina Cortell Fed C - plan hits target center - Point	0.00	0.00	11,450.0	10,202.0	-30.2	519,902.00	706,108.00	32° 25' 39.190 N	103° 39' 55.245 W

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
928.2	928.2	Z(Rustler)		0.00	359.55
1,252.4	1,252.3	Z (Salado) (Top Salt)		0.00	359.55
3,149.3	3,135.9	Z (Castile (T))		0.00	359.55
4,860.2	4,846.8	Z (G30:CS14-CSB) (Base of Salt)		0.00	359.55
5,126.7	5,113.3	Z (G26: Bell Cyn.)		0.00	359.55
5,780.7	5,767.3	Z (G13: Cherry Cyn.)		0.00	359.55
7,012.6	6,999.2	Z (G7: Brushy Cyn.) Antelope Ridge		0.00	359.55
8,802.5	8,789.2	Z (G4: BSGI (CS9))		0.00	359.55
9,889.6	9,876.2	Z (L5.1: FBSG)		0.00	359.55
10,180.3	10,166.9	Z (L4.3: SBSC)		0.00	359.55
10,558.7	10,545.3	Z (L4.1: SBSC)		0.00	359.55
10,971.3	10,957.6	Z (L3.3: TBSC)		0.00	359.55

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #136H
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 #136H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,000.0	1,000.0	0.0	0.0	Start Build 1.00
1,800.0	1,797.4	-48.2	28.1	Start 929.0 hold at 1800.0 MD
2,729.0	2,717.4	-159.9	93.1	Start Drop -1.50
3,262.3	3,249.0	-192.0	111.8	Start 7628.0 hold at 3262.3 MD
10,890.4	10,877.0	-192.0	111.8	Start Build 10.00
11,790.4	11,450.0	378.4	57.9	Start DLS 2.00 TFO 90.00
12,037.8	11,450.0	625.4	45.3	Start 9576.9 hold at 12037.8 MD
21,614.7	11,450.0	10,202.0	-30.2	TD at 21614.7



SURVEY PROGRAM

WELL DETAILS: Nina Cortell Fed Com #136H

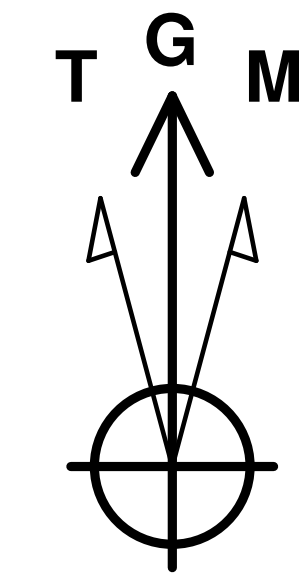
Depth From	Depth To	Survey/Plan	Tool	+N/-S	+E/-W	GL @ 3790.0	KB @ 3818.5usft (Original Well Elev)	Longitude	Slot
0.0	21613.8	BLM Plan #1 (Wellbore #1)	MWD	0.0	0.0	509700.00	706138.18	32° 23' 58.236 N 103° 39' 55.636 W	

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
KOP - Nina Cortell Fed Com #136H	10877.0	-192.0	111.8	509508.00	706250.00	32° 23' 56.329 N	103° 39' 54.346 W
BHL - Nina Cortell Fed Com #136H	11450.0	10202.0	-30.2	519902.00	706108.00	32° 25' 39.190 N	103° 39' 55.245 W
BPP1 - Nina Cortell Fed Com #136H	11450.0	2397.4	31.4	512097.24	706169.56	32° 24' 21.955 N	103° 39' 55.095 W
BPP2 - Nina Cortell Fed Com #136H	11450.0	3717.1	21.0	513416.89	706159.15	32° 24' 35.014 N	103° 39' 55.121 W
BPP3 - Nina Cortell Fed Com #136H	11450.0	5035.8	10.6	514735.58	706148.75	32° 24' 48.064 N	103° 39' 55.146 W
BPP4 - Nina Cortell Fed Com #136H	11450.0	7676.2	-10.3	517376.03	706127.92	32° 25' 14.194 N	103° 39' 55.196 W
FTP - Nina Cortell Fed Com #136H	11111.7	-142.0	107.1	509558.06	706245.25	32° 23' 56.824 N	103° 39' 54.398 W

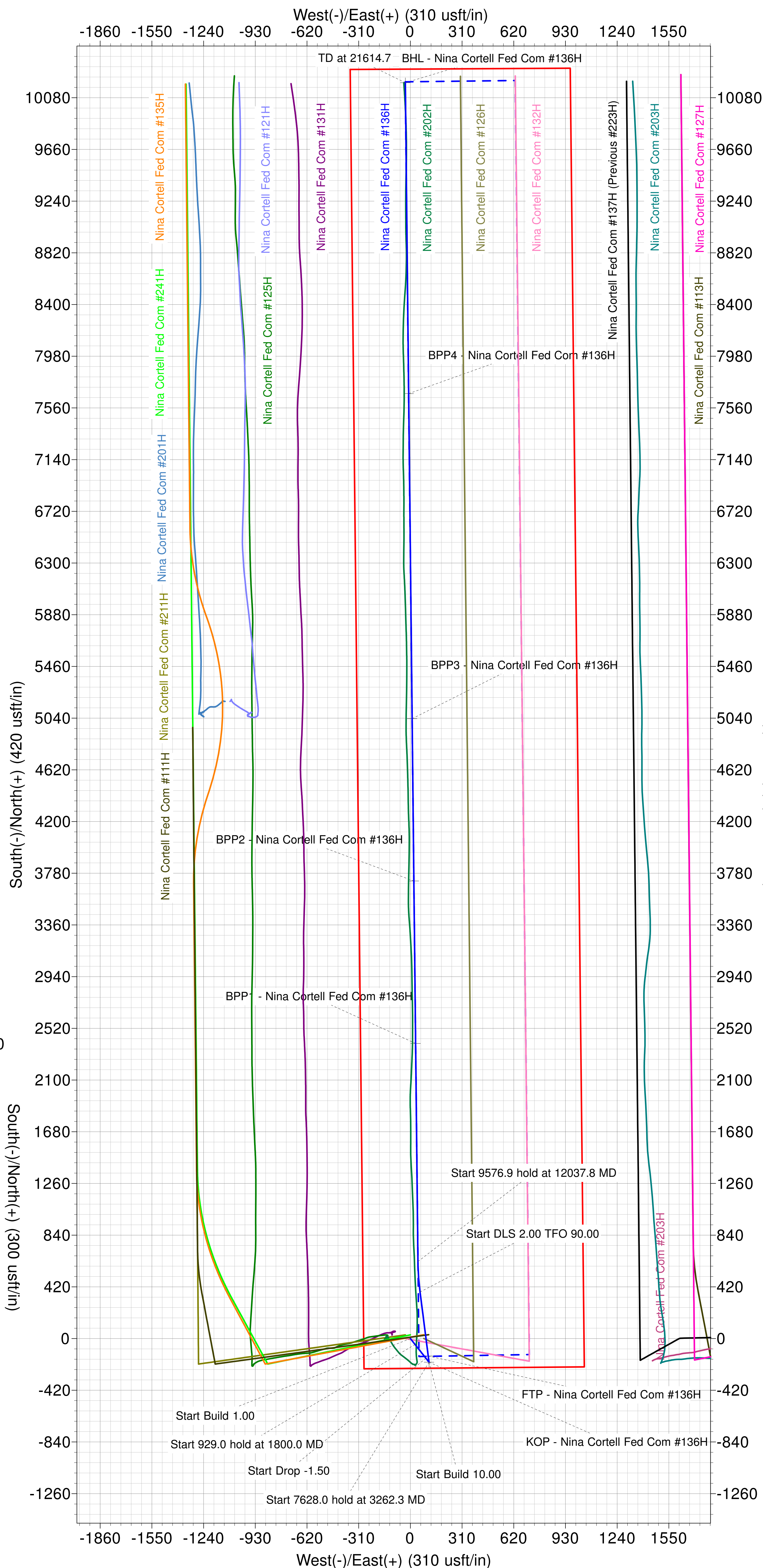
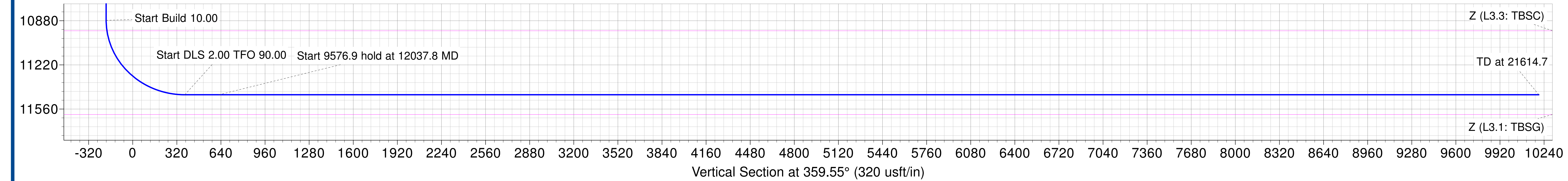
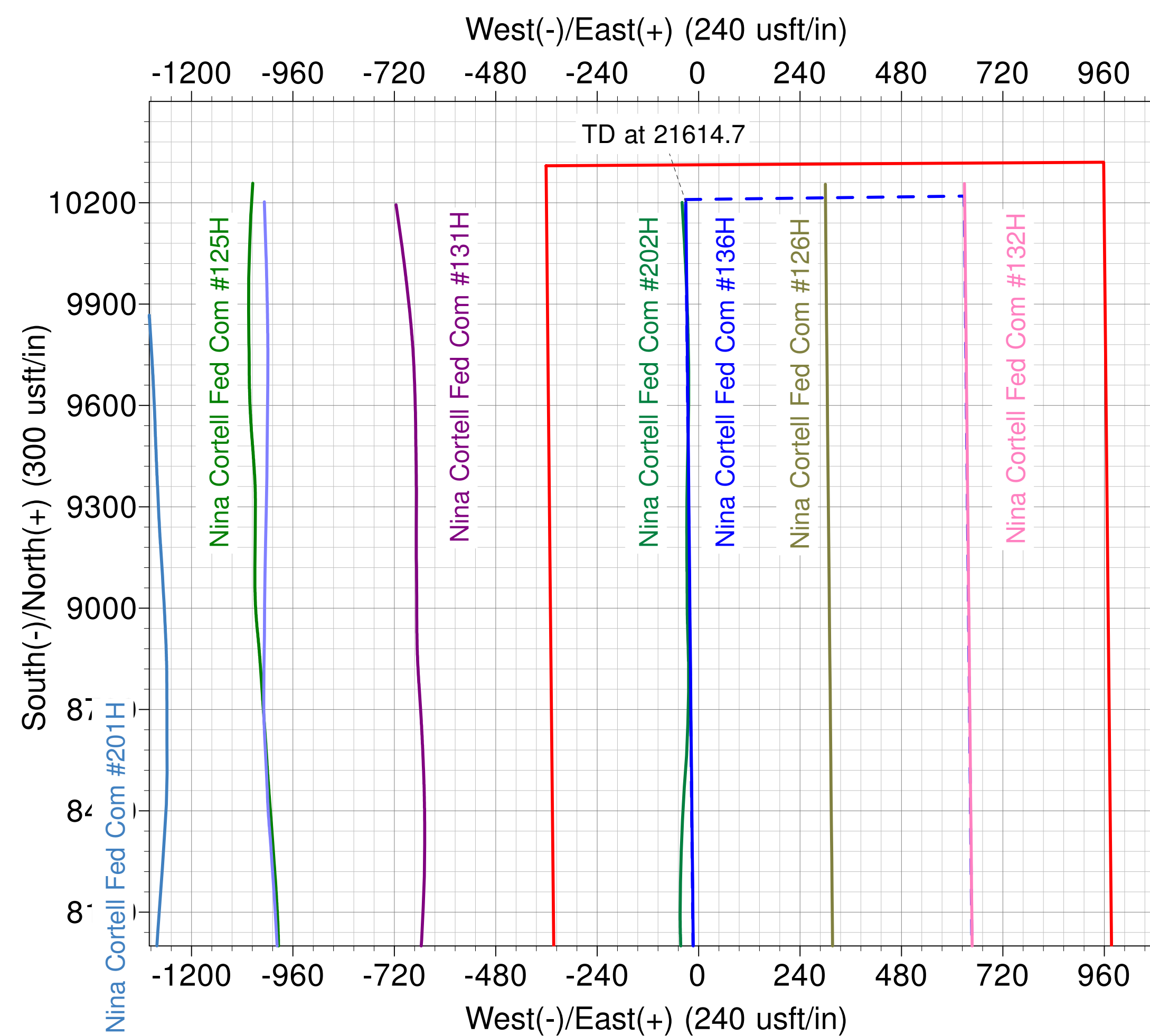
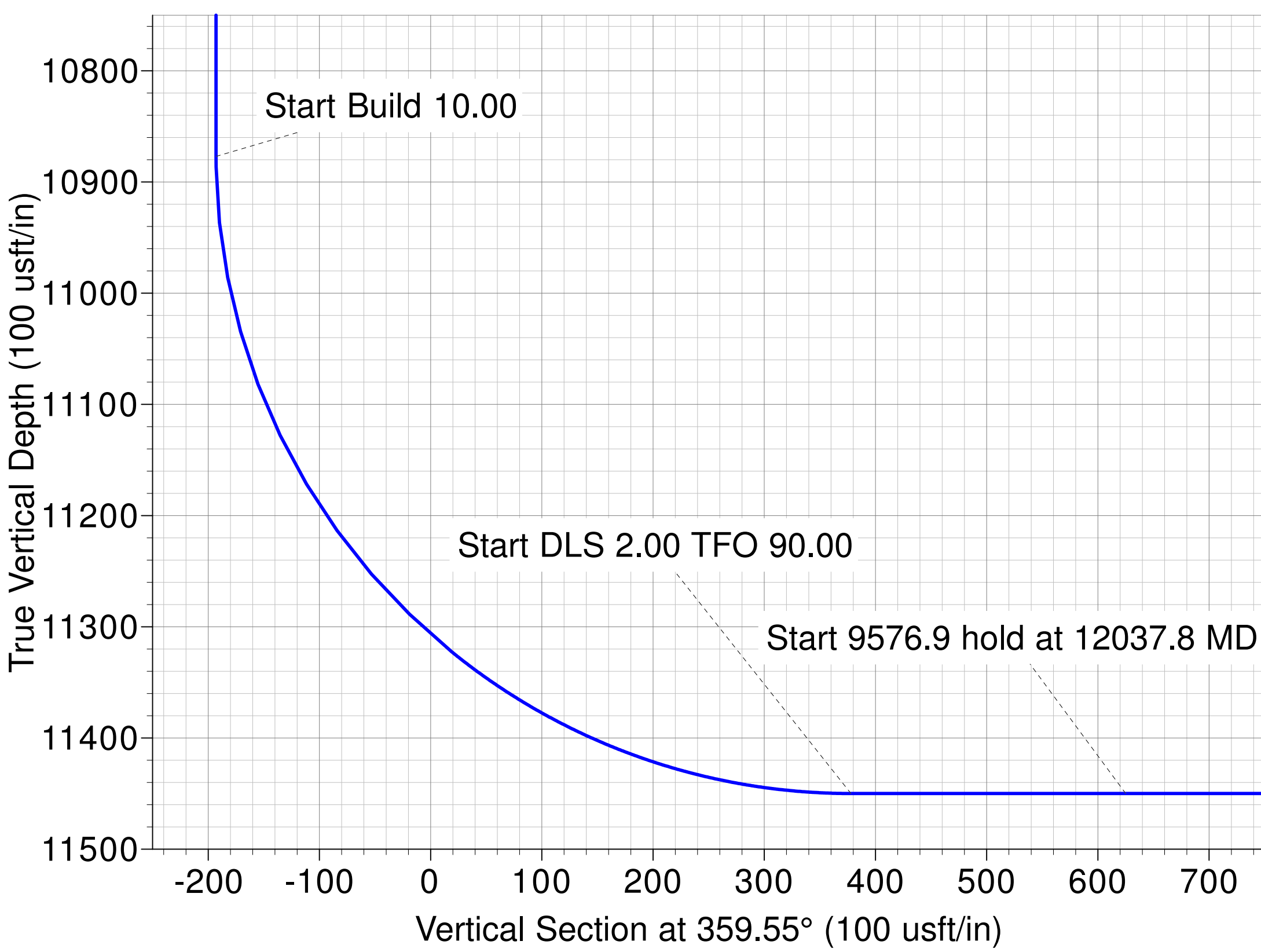
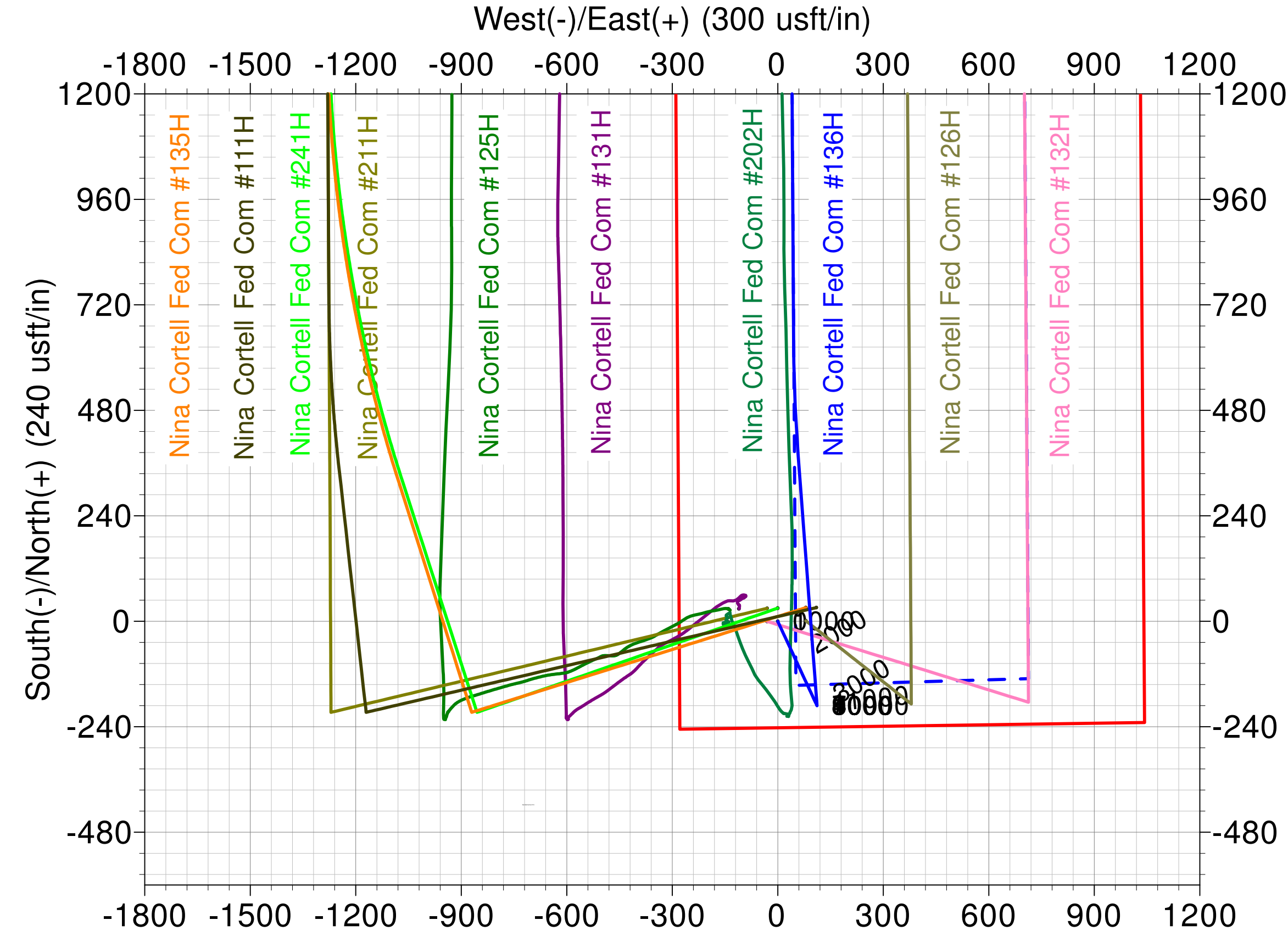
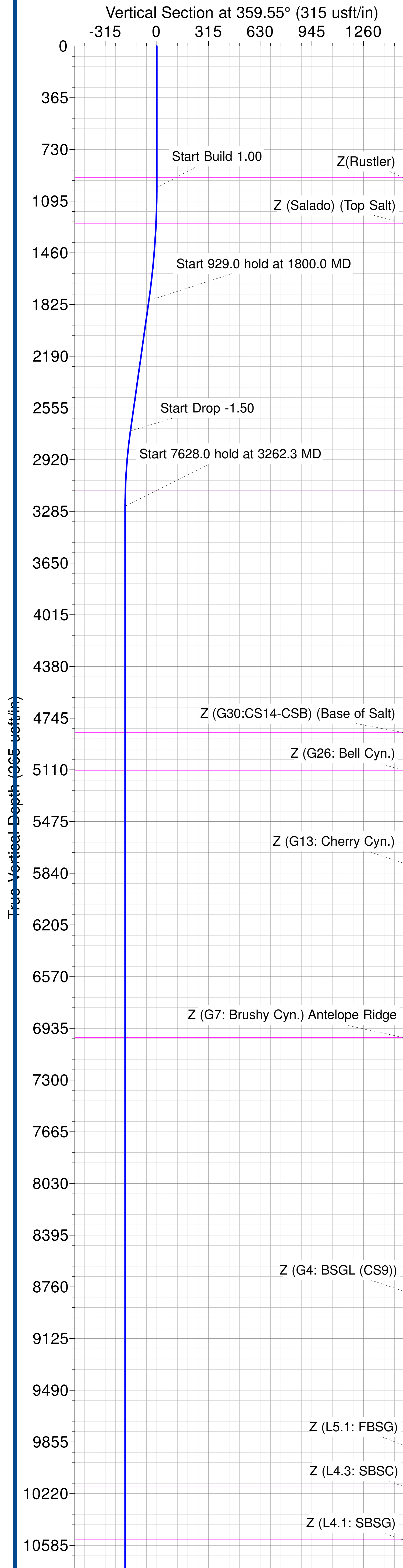
SECTION DETAILS

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	Start Build 1.00
1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	Start 929.0 hold at 1800.0 MD
1800.0	8.00	149.78	1797.4	-48.2	28.1	1.00	149.78	-48.4	Start Drop -1.50
2729.0	8.00	149.78	2717.4	-159.9	93.1	0.00	0.00	-160.6	Start 7628.0 hold at 3262.3 MD
3262.3	0.00	0.00	3249.0	-192.0	111.8	1.50	180.00	-192.9	Start Build 10.00
10890.4	0.00	0.00	10877.0	-192.0	111.8	0.00	0.00	-192.9	Start DLS 2.00 TFO 90.00
11790.4	90.00	354.60	11450.0	378.4	57.9	10.00	354.60	377.9	Start 9576.9 hold at 12037.8 MD
12037.8	90.00	359.55	11450.0	625.4	45.3	2.00	90.00	625.0	TD at 21614.7
21614.7	90.00	359.55	11450.0	10202.0	-30.2	0.00	0.00	10201.9	



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

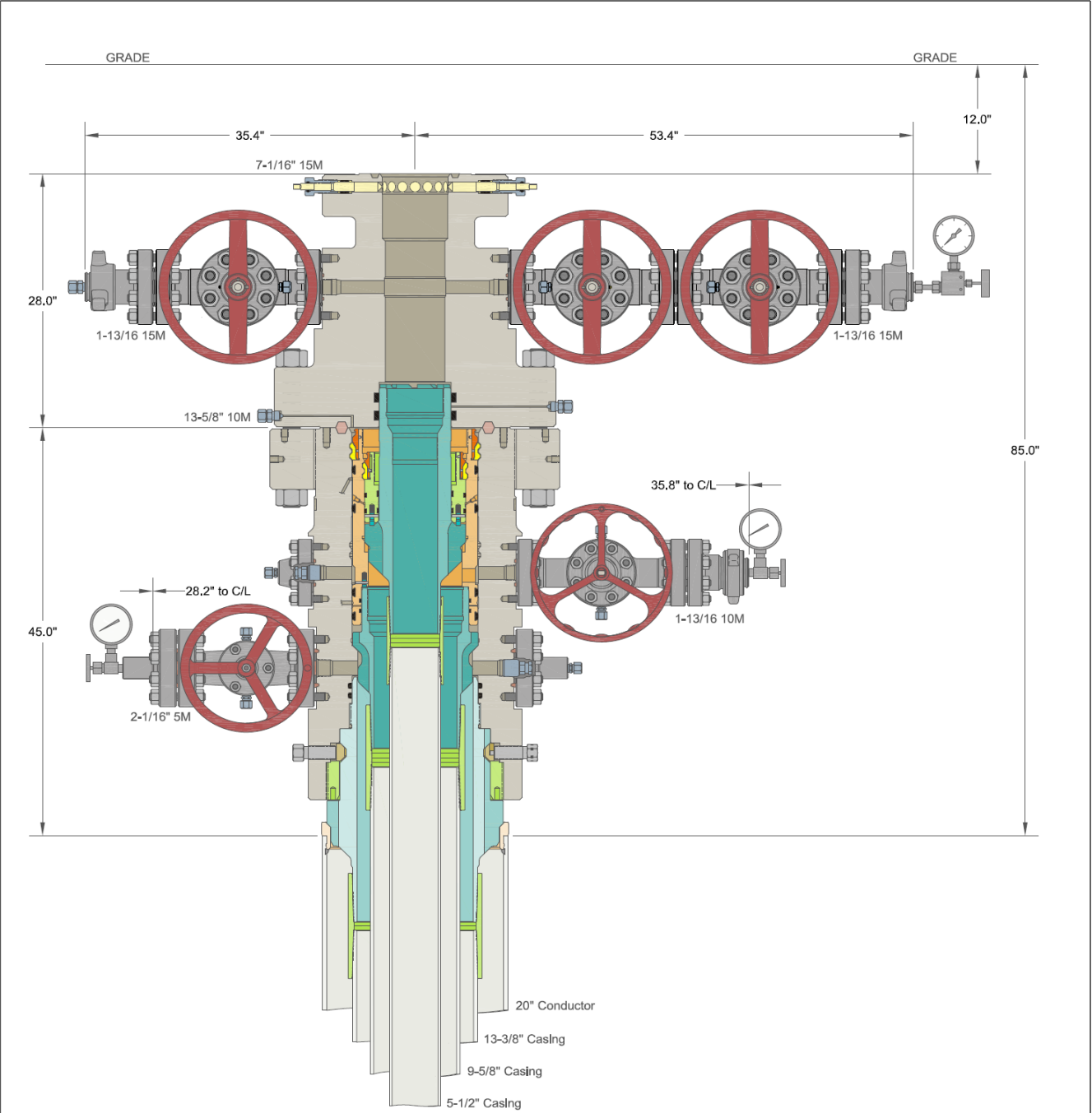
Magnetic Field
Strength: 47341.9snT
Dip Angle: 60.12°
Date: 2/21/2024
Model: IGRF2015



3-String Wellhead Diagram

Nina Cortell Fed Com 136H
SHL: 242' FSL & 1601' FWL Section 10

Township/Range: 22S 32E
Elevation Above Sea Level: 3,790"



INFORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, L.L.C. REPRODUCTION, DISCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR AS EXPRESSLY AUTHORIZED BY CACTUS WELLHEAD, L.L.C.

ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC		MATADOR PRODUCTION COMPANY NEW MEXICO	
13-3/8" x 9-5/8" x 5-1/2" MBU-3T Wellhead System With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head And 9-5/8" & 5-1/2" Fluted Mandrel Casing Hangers		DRAWN	DLE
		APPRV	11OCT21
		DRAWING NO.	HBE0000605

Drill Plan

Nina Cortell Fed Com 136H
SHL: 242' FSL & 1601' FWL Section 10
BHL: 110' FNL & 1650' FWL Section 3
Township/Range: 22S 32E
Elevation Above Sea Level: 3,790'

Sundry Request

Matador request the option to amend the well design of the Nina Cortell Fed Com #222H and make the following changes to the current APD:

- Change well name from the Nina Cortell Fed Com #222H to the Nina Cortell Fed Com #136H
- Change BHL from 60' FNL & 2309' FWL to 110' FNL & 1650' FWL. All perforations will be within the setback requirements as previously approved.
- Change target zone from Wolfcamp to Third Bone Spring
- Amend casing and cementing plan by changing intermediate 1 casing from 7-5/8" to 9-5/8" and revising set depths as described below.

Drilling Operation Plan

Proposed Drilling Depth: 21614' MD / 11450' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.3991049 N / -103.6657793 W

TD Lat/Long (NAD83): 32.4276750 N / -103.6658337 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	1,884	Salt	Barren
Castile	3,149	3,136	1,711	Salt	Barren
Lamar (Base of Salt)	4,860	4,847	267	Salt	Barren
Bell Canyon	5,127	5,113	654	Sandstone	Oil/Natural Gas
Cherry Canyon	5,781	5,767	1,232	Sandstone	Oil/Natural Gas
Brushy Canyon	7,013	6,999	1,790	Sandstone	Oil/Natural Gas
Bone Spring Lime	8,803	8,789	1,087	Limestone	Oil/Natural Gas
1st Bone Spring Sand	9,890	9,876	291	Sandstone	Oil/Natural Gas
2nd Bone Spring Carb	10,180	10,167	378	Carbonate	Oil/Natural Gas
2nd Bone Spring Sand	10,559	10,545	412	Sandstone	Oil/Natural Gas
KOP	10,890	10,877	-	Sandstone	Oil/Natural Gas
3rd Bone Spring Carb	10,971	10,958	-	Carbonate	Oil/Natural Gas
TD	21,614	11,450		Carbonate	Oil/Natural Gas

2. Notable Zones

3rd Bone Spring is the goal. All perforations will be within the setback requirements as prescribed or permitted by the New Mexico Oil Conservation Division. OSE estimated ground water depth at this location is 375'.

3. Pressure Control

Equipment

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

An accumulator complying with Title 43 CFR 3172 requirements for the pressure rating of the BOP stack will be present. A rotating head will also be installed as needed.

Testing Procedure

BOP will be inspected and operated as required in Title 43 CFR 3172. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs.

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

Variance Request

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

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

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

Matador request the option to offline cement surface casing. The "Offline Cementing - Surface 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.

4. Casing & Cement

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

Drill Plan

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 - 4910.2	0 - 4896.8	9.625	40	J-55	BUTT	1.125	1.125	1.8
Production	8.75	0 - 21614	0 - 11450	5.5	20	P-110	Hunting TLW-SC	1.125	1.125	1.8

- All casing strings will be tested in accordance with Title 43 CFR 3172.7(b)(8)
- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed
- All non-API joint connections will be of like or greater quality, and as run specification sheets will be on location for review

Variance Request

Matador request a variance to wave the centralizer requirement for 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	210	1.78	371	13.5	10%	0	A/C	5% NaCl + LCM
	Stg 1 Lead	960	1.84	1758	12.5	50%	0	A/C	Bentonite + 1% CaCl ₂ + 8% NaCl + LCM
	Stg 1 Tail	370	1.33	494	14.8	50%	3928	A/C	5% NaCl + LCM
Production	Lead	430	3.66	1559	11.5	25%	4710	A/C	Fluid Loss + Dispersant + Retarder + LCM
	Tail	2790	1.35	3767	13.2	25%	10690	A/C	Fluid Loss + Dispersant + Retarder + LCM

5. Mud Program

Drill Plan

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	975 - 4910.2	9.8 - 10.5	28-30	NC
Production	8.75	OBM/Cut Brine	4910.2 - 21614	8.8 - 10.5	30-55	<20

6. Cores, Test, & Logs

No core or drill stem test is planned.

No electric logs are planned at this time. GR will be collected through the MWD tools from Intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to top of curve. We will be running a Neutron log on one of the wells on each pad.

7. Down Hole Conditions

No abnormal pressure or temperature is expected. Bottom hole pressure is 6252 psi. Maximum anticipated surface pressure is 3733 psi. Expected bottom hole temperature is 163 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.

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

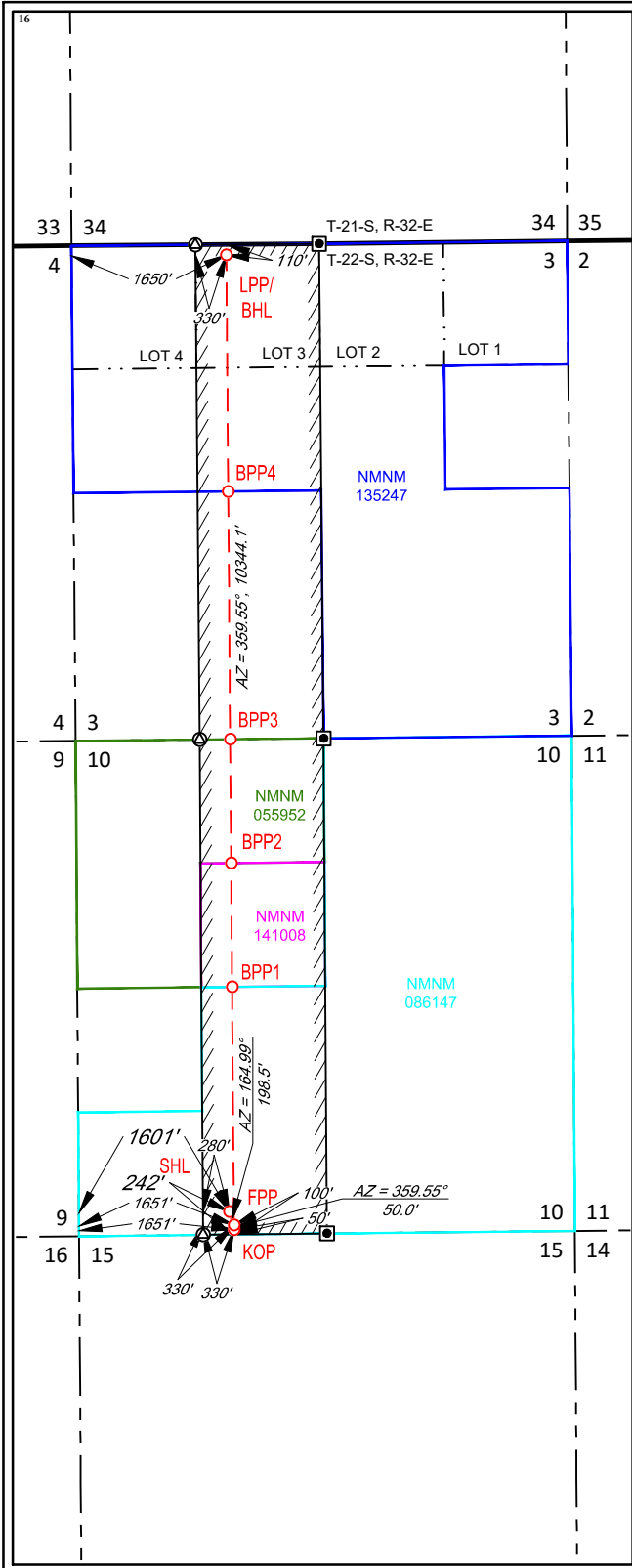
FORM C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-51191		² Pool Code 5695		³ Pool Name BILBREY BASIN; BONE SPRING					
⁴ Property Code		⁵ Property Name NINA CORTELL FED COM						⁶ Well Number 136H	
⁷ OGRID No. 228937		⁸ Operator Name MATADOR PRODUCTION COMPANY						⁹ Elevation 3790'	
¹⁰ Surface Location									
UL or lot no. N	Section 10	Township 22-S	Range 32-E	Lot Idn -	Feet from the 242'	North/South line SOUTH	Feet from the 1601'	East/West line WEST	County LEA
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. 3	Section 3	Township 22-S	Range 32-E	Lot Idn -	Feet from the 110'	North/South line NORTH	Feet from the 1650'	East/West line WEST	County LEA
¹² Dedicated Acres 319.92		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

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



NEW MEXICO EAST
NAD 1983

SURFACE LOCATION (SHL)

242' FSL - SEC. 10
1601' FWL - SEC. 10
X=747321 Y=509761
LAT.: N 32.3996328
LONG.: W 103.6659419
KICK OFF POINT (KOP)

50' FSL - SEC. 10
1651' FWL - SEC. 10
X=747372 Y=509569
LAT.: N 32.3991049
LONG.: W 103.6657793
FIRST PERF. POINT (FPP)

100' FSL - SEC. 10
1651' FWL - SEC. 10
X=747372 Y=509619
LAT.: N 32.3992424
LONG.: W 103.6657796
BLM PERF. POINT (BPP1)

2640' FNL - SEC. 10
1649' FWL - SEC. 10
X=747352 Y=512158
LAT.: N 32.4062231
LONG.: W 103.6657929
BLM PERF. POINT (BPP2)

1320' FNL - SEC. 10
1648' FWL - SEC. 10
X=747341 Y=513478
LAT.: N 32.4098509
LONG.: W 103.6657998
BLM PERF. POINT (BPP3)

0' FSL - SEC. 3
1646' FWL - SEC. 3
X=747331 Y=514798
LAT.: N 32.4134786
LONG.: W 103.6658067
BLM PERF. POINT (BPP4)

2634' FNL - SEC. 3
1648' FWL - SEC. 3
X=747310 Y=517439
LAT.: N 32.4207380
LONG.: W 103.6658205
LAST PERF. POINT (LPP)

BOTTOM HOLE LOCATION (BHL)

110' FNL - SEC. 3
1650' FWL - SEC. 3
X=747290 Y=519963
LAT.: N 32.4276750
LONG.: W 103.6658337

¹⁷OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Nicky Fitzgerald 3/7/2024
Signature Date

Nicky Fitzgerald
Printed Name

nicky.fitzgerald@matadorresources.com
E-mail Address

¹⁸SURVEYOR CERTIFICATION

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

03/21/2023
Date of Survey

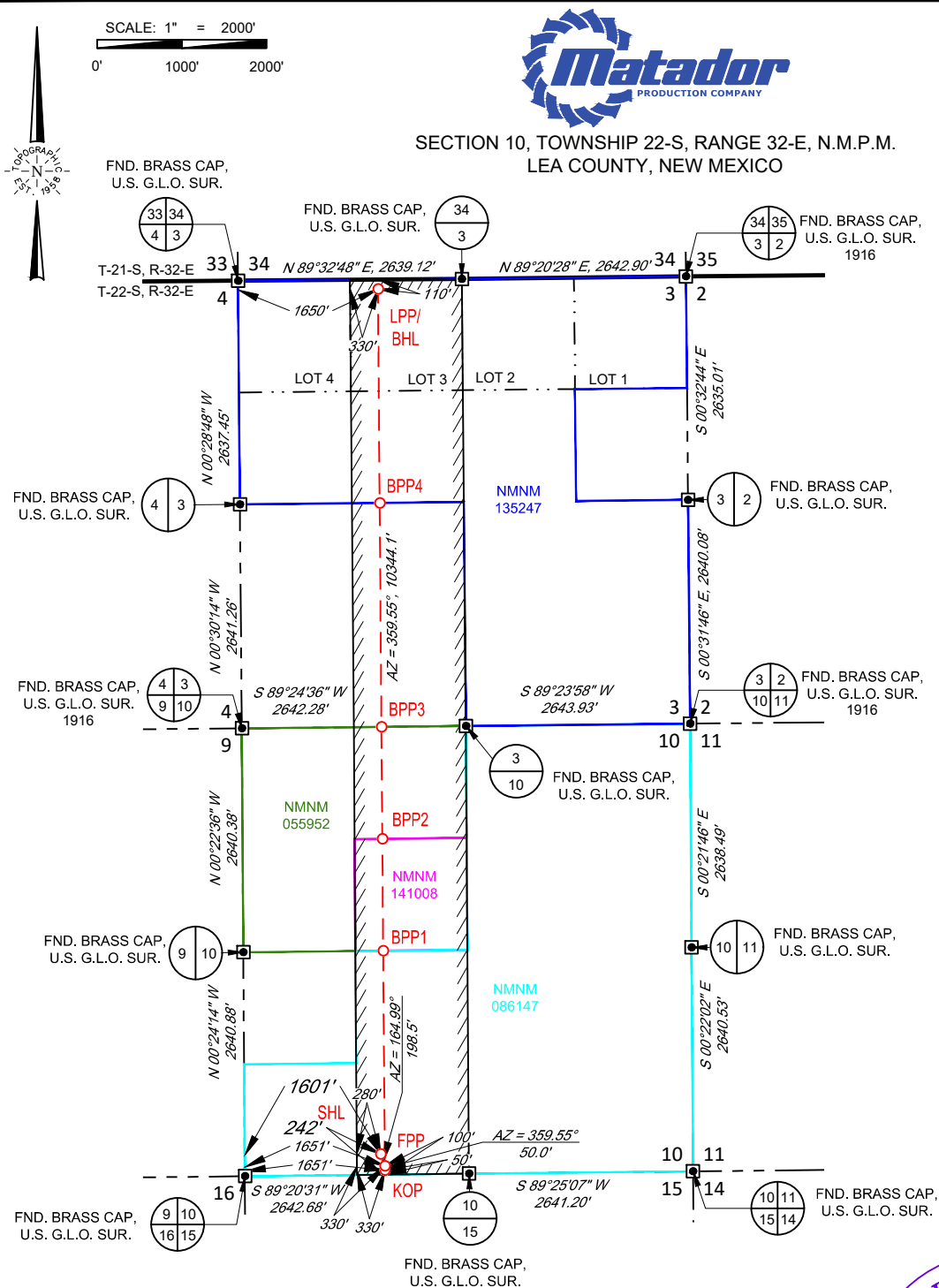
Signature and Seal of Professional Surveyor

ANGEL M. BAEZA
NEW MEXICO
25116
PROFESSIONAL SURVEYOR

Certificate Number

NEW MEXICO EAST
NAD 1927

<u>SURFACE LOCATION (SHL)</u> X=706138 Y=509700 LAT.: N 32.3995099 LONG.: W 103.6654545	<u>KICK OFF POINT (KOP)</u> X=706190 Y=509508 LAT.: N 32.3989820 LONG.: W 103.6652919
<u>FIRST PERF. POINT (FPP)</u> X=706159 Y=509558 LAT.: N 32.3991195 LONG.: W 103.6652922	<u>BLM PERF. POINT (BPP1)</u> X=706169 Y=512098 LAT.: N 32.4061002 LONG.: W 103.6653052
<u>BLM PERF. POINT (BPP2)</u> X=706159 Y=513418 LAT.: N 32.4097280 LONG.: W 103.6653120	<u>BLM PERF. POINT (BPP3)</u> X=706149 Y=514737 LAT.: N 32.4133558 LONG.: W 103.6653188
<u>BLM PERF. POINT (BPP4)</u> X=706128 Y=517378 LAT.: N 32.4206152 LONG.: W 103.6653324	<u>LAST PERF. POINT (LPP)</u> X=706108 Y=519902 LAT.: N 32.4275522 LONG.: W 103.6653453

NEW MEXICO EAST
NAD 1983

SURFACE LOCATION (SHL)

242' FSL - SEC. 10
1601' FWL - SEC. 10
X=747321 Y=509761
LAT.: N 32.3996328
LONG.: W 103.6659419

KICK OFF POINT (KOP)

50' FSL - SEC. 10
1651' FWL - SEC. 10
X=747372 Y=509569
LAT.: N 32.3991049
LONG.: W 103.6657793

FIRST PERF. POINT (FPP)

100' FSL - SEC. 10
1651' FWL - SEC. 10
X=747372 Y=509619
LAT.: N 32.3992424
LONG.: W 103.6657796

BLM PERF. POINT (BPP1)

2640' FNL - SEC. 10
1649' FWL - SEC. 10
X=747352 Y=512158
LAT.: N 32.4062231
LONG.: W 103.6657929

BLM PERF. POINT (BPP2)

1320' FNL - SEC. 10
1648' FWL - SEC. 10
X=747341 Y=513478
LAT.: N 32.4098509
LONG.: W 103.6657998

BLM PERF. POINT (BPP3)

0' FSL - SEC. 3
1646' FWL - SEC. 3
X=747331 Y=514798
LAT.: N 32.4134786
LONG.: W 103.6658067

BLM PERF. POINT (BPP4)

2634' FNL - SEC. 3
1648' FWL - SEC. 3
X=747310 Y=517439
LAT.: N 32.4207380
LONG.: W 103.6658205

LAST PERF. POINT (LPP)

BOTTOM HOLE LOCATION (BHL)

110' FNL - SEC. 3
1650' FWL - SEC. 3
X=747290 Y=519963
LAT.: N 32.4276750
LONG.: W 103.6658337

LEASE NAME & WELL NO.: NINA CORTELL FED COM 136H

SECTION 10 TWP 22-S RGE 32-E SURVEY N.M.P.M.
COUNTY _____ LEA _____ STATE _____ NM _____

DESCRIPTION	242' FSL & 1601' FWL
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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 ± 377 FEET NORTHEAST OF THE LOCATION.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE BASED ON THE 1983 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, P.S. No. 25116

April 4, 2023



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

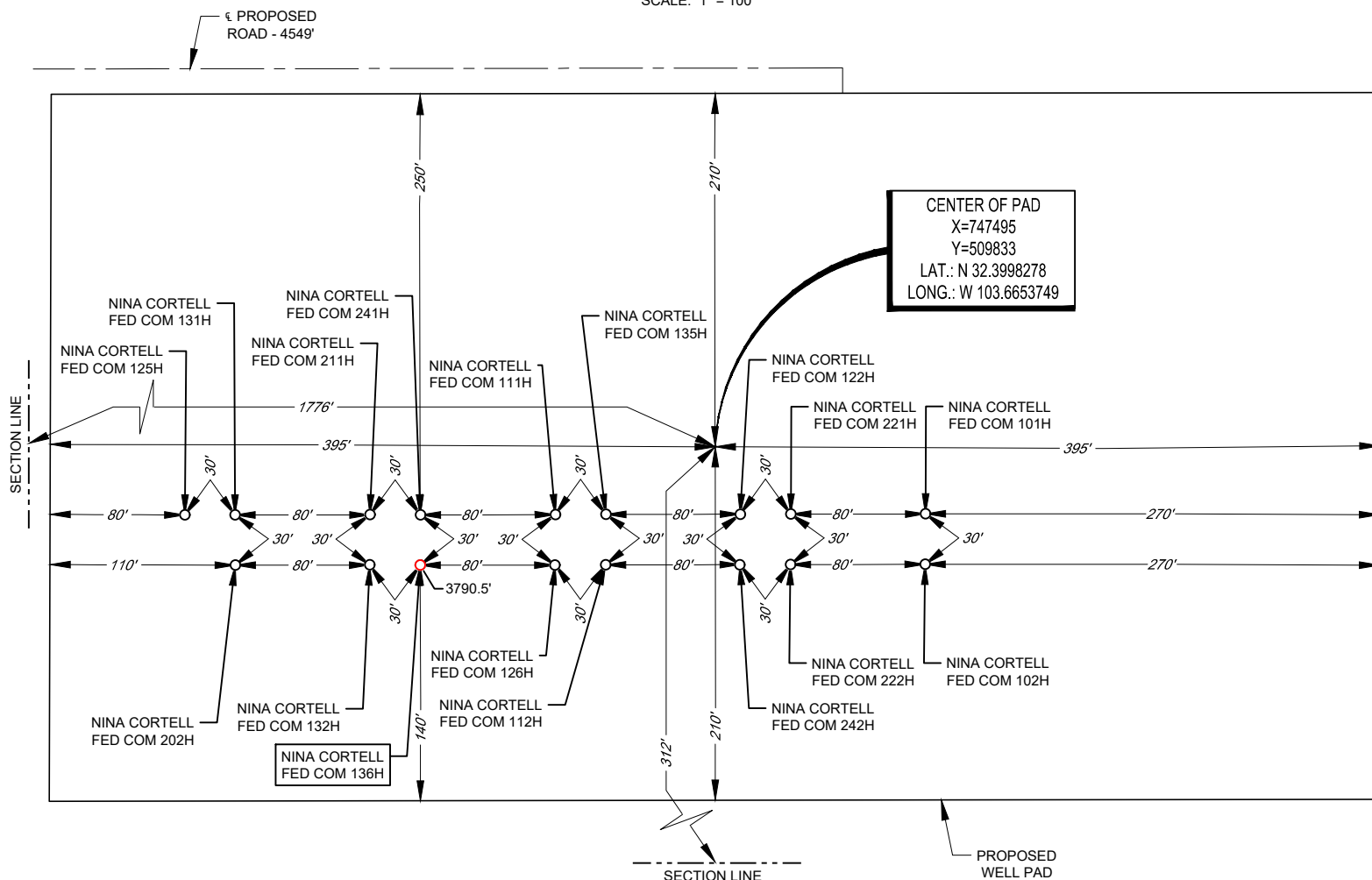


LEGEND

 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 136H
136H LATITUDE N 32.3996328 136H LONGITUDE W 103.6659419

CENTER OF PAD IS 312' FSL & 1776' FWL



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

April 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"



SCALE: 1" = 100'

0' 50' 100'



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<https://www.emnrd.nm.gov/oed/contact-us>

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

CONDITIONS

Action 335335

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 335335
	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