

Form 3160-3
(June 2015)FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☐ DRILL ☐ REENTER 1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other 1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone		5. Lease Serial No. 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No. [320841]
2. Name of Operator [228937]		9. API Well No. 30-025-51189
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or Exploratory [5695]
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		11. Sec., T. R. M. or Blk. and Survey or Area
14. Distance in miles and direction from nearest town or post office*		12. County or Parish 13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- | | |
|---|---|
| 1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM. |
|---|---|

25. Signature	Name (Printed/Typed)	Date
Title		
Approved by (Signature)	Name (Printed/Typed)	Date
Title		
Office		

Application approval 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.
 Conditions of approval, if any, are attached.

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.

NGMP Rec 03/06/2023

SL

(Continued on page 2)



Approval Date: 02/28/2023

KZ

 03/09/2023

*(Instructions on page 2)

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 30-025-51189	² Pool Code 5695	³ Pool Name BILBREY BASIN, BONE SPRING
⁴ Property Code 320841	⁵ Property Name NINA CORTELL FED COM	⁶ Well Number 132H
⁷ OGRID No. 228937	⁸ Operator Name MATADOR PRODUCTION COMPANY	⁹ Elevation 3791'

¹⁰Surface Location

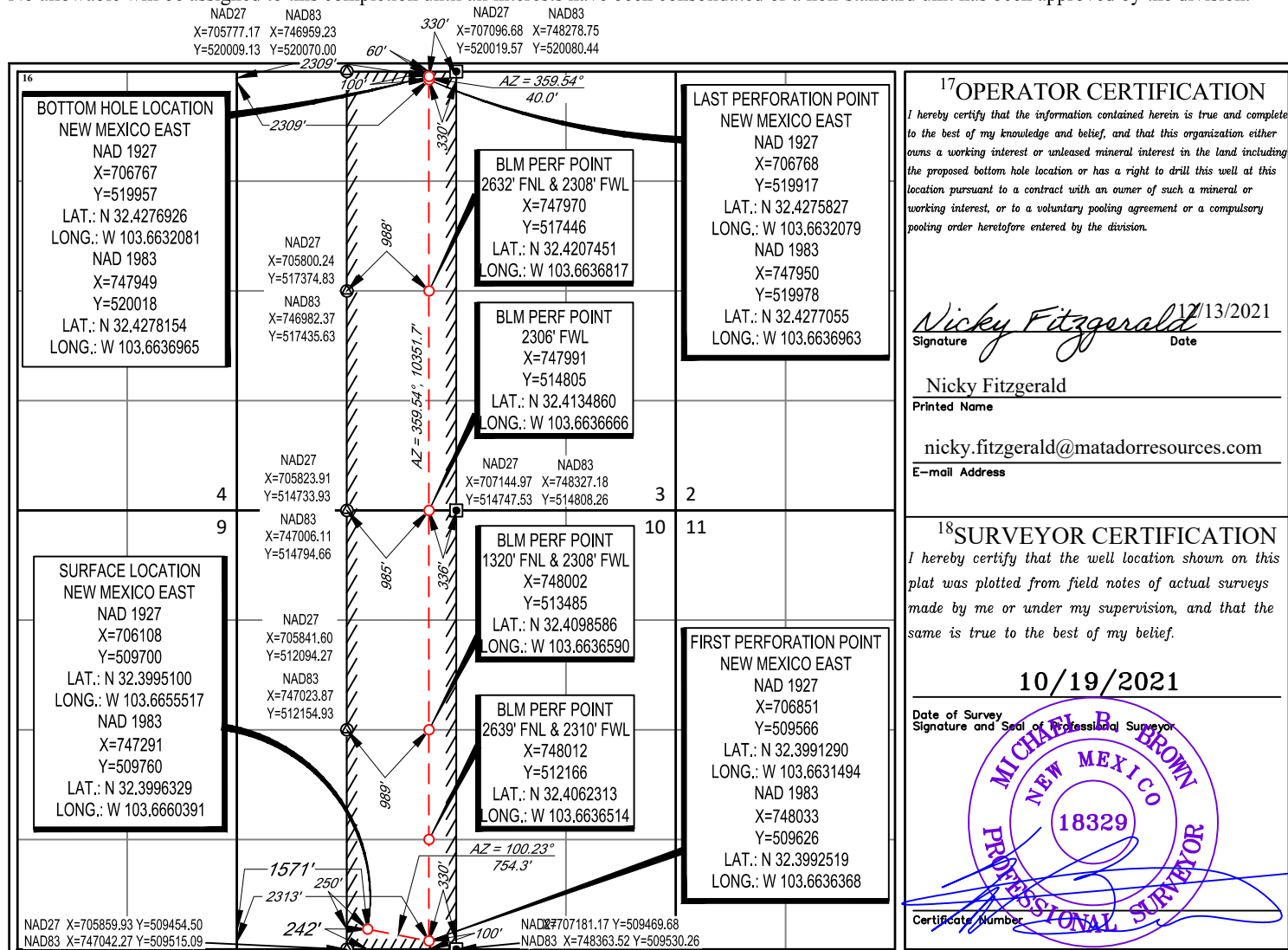
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	10	22-S	32-E	-	242'	SOUTH	1571'	WEST	LEA

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
3	3	22-S	32-E	-	60'	NORTH	2309'	WEST	LEA

¹² Dedicated Acres 319.92	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



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

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Matador Production Company **OGRID:** 228937 **Date:** 03/01/2023

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Nina Cortell Fed Com 126H	TBD	N 10-22S-32E	242' FSL 1,681' FWL	1,300	1,300	3,000
Nina Cortell Fed Com 222H	TBD	N 10-22S-32E	242' FSL 1,601' FWL	1,000	3,500	4,000
Nina Cortell Fed Com 221H	TBD	N 10-22S-32E	272' FSL 1,601' FWL	1,000	3,500	4,000
Nina Cortell Fed Com 132H	TBD	N 10-22S-32E	242' FSL 1,571' FWL	1,400	2,500	3,500

IV. Central Delivery Point Name: Nina Cortell South TB [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Nina Cortell Fed Com 126H	TBD	08/10/2023	09/05/2023	11/20/2023	12/20/2023	12/20/2023
Nina Cortell Fed Com 222H	TBD	09/06/2023	10/02/2023	11/20/2023	12/20/2023	12/20/2023
Nina Cortell Fed Com 221H	TBD	10/03/2023	10/23/2023	11/20/2023	12/20/2023	12/20/2023
Nina Cortell Fed Com 132H	TBD	10/24/2023	11/18/2023	11/20/2023	12/20/2023	12/20/2023

30-025-51189

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:
Printed Name: Omar Enriquez
Title: Sr. Production Engineer
E-mail Address: oenriquez@matadorresources.com
Date: 03/01/2023
Phone: (972) 587-4638
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

Addendum to Natural Gas Management Plan for Matador's

Nina Cortell Fed Com 126H, Nina Cortell Fed Com 221H, Nina Cortell Fed Com 222H and Nina Cortell Fed Com 132H

VI. Separation Equipment

Flow from the wells will be routed via a flowline to a 48"x15' three phase separator dedicated to the well. The first stage separators are sized with input from BRE ProMax and API 12J. Anticipated production rates can be seen in the below table. Liquid retention times at expected maximum rates will be >3 minutes. Gas will be routed from the first stage separator to sales. Hydrocarbon liquids are dumped from the first stage separator and commingled to one or more heater treaters. The flash gas from the heater treater(s) could either be sent to sales or routed to a compressor if the sales line pressure is higher than the MAWP of the heater treater (125 psi). From the heater treaters, hydrocarbon liquid will be routed to the tanks where vapor is compressed by a VRU if technically feasible to either sales or a compressor if the sales line pressure is higher than the VRU's maximum discharge pressure (~150 psi). Therefore, Matador has sized our separation equipment to optimize gas capture and our separation equipment is of sufficient size to handle the expected volumes of gas.

Well Name	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Nina Cortell Fed Com 126H	1,300	1,300	3,000
Nina Cortell Fed Com 222H	1,000	3,500	4,000
Nina Cortell Fed Com 221H	1,000	3,500	4,000
Nina Cortell Fed Com 132H	1,400	2,500	3,500

VII. Operation Practices

Although not a complete recitation of all our efforts to comply with a subsection A through F of 19.15.27.8 NMAC, a summary is as follows. During drilling, Matador will have a properly sized flare stack at least 100 feet from the nearest surface hole. During initial flowback we will route the flowback fluids into completion or storage tanks and, to the extent possible, flare rather than vent any gas. We will commence operation of a separator as soon as technically feasible, and have instructed our team that we want to connect the gas to sales as soon as possible but not later than 30 days after initial flowback.

Regarding production operations, we have designed our production facilities to be compliant with the requirements of Part E of 19.15.27.8 NMAC. We will instruct our team to perform the AVOs on the frequency required under the rules. While the well is producing, we will take steps to minimize flaring during maintenance, as set forth below, and we have a process in place for the measuring of any flared gas and the reporting of any reportable flaring events.

VII. Best Management Practices

Steps are taken to minimize venting during active or planned maintenance when technically feasible including:

- Isolating the affected component and reducing pressure through process piping
- Blowing down the equipment being maintained to a control device
- Performing preventative maintenance and minimizing the duration of maintenance activities
- Shutting in sources of supply as possible
- Other steps that are available depending on the maintenance being performed

Drill Plan

Nina Cortell Fed Com 132H
SHL: 242' FSL & 1571' FWL Section 10
BHL: 60' FNL & 2309' FWL Section 3
Township/Range: 22S 32E
Elevation Above Sea Level: 3,791'

Drilling Operation Plan

Proposed Drilling Depth: 22192' MD / 11891' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type Oil

Geologic Name of Surface Formation Quaternary Deposits

KOP Lat/Long (NAD83): 32.39911478461821 N / -103.66363619911013 W

TD Lat/Long (NAD83): 32.427815539587606 N / -103.66369731452517 W

1. Estimated Tops

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	803	803	372	Anhydrite	Barren
Salado (Top of Salt)	1,175	1,175	3,731	Salt	Barren
Cherry Canyon	5,870	5,832	1,131	Sandstone	Oil/Natural Gas
Brushy Canyon	7,012	6,963	1,849	Sandstone	Oil/Natural Gas
Bone Spring Lime	8,864	8,812	1,061	Limestone	Oil/Natural Gas
1st Bone Spring Sand	9,925	9,873	298	Sandstone	Oil/Natural Gas
2nd Bone Spring Carbonate	10,223	10,171	407	Carbonate	Oil/Natural Gas
2nd Bone Spring Sand	10,630	10,578	411	Sandstone	Oil/Natural Gas
3rd Bone Spring Carbonate	11,041	10,989	597	Carbonate	Oil/Natural Gas
KOP	11,423	11,372	-	Carbonate	Oil/Natural Gas
3rd Bone Spring Sand	11,644	11,586	-	Sandstone	Oil/Natural Gas
TD	22,172	11,864		Sandstone	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' 5,000-psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and one annular preventer will be utilized below surface casing to TD. See attachments for BOP and choke manifold diagrams.

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

Testing Procedure

Drill Plan

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

A third party company will test the BOPs.

After setting surface casing, a minimum 5M BOPE system will be installed. Test pressures will be 250 psi low and 5,000 psi high with the annular preventer being tested to 250 psi low and 2500 psi high before drilling below surface shoe. In the event that the rig drills multiple wells on the pad and any seal subject to test pressures are broken, a full BOP test will be performed when the rig returns and the 5M BOPE system is re-installed.

Variance Request

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

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

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

4. Casing & Cement

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

String	Hole Size (in)	Set MD (ft)	Set TVD (ft)	Casing Size (in)	Wt. (lb/ft)	Grade	Joint	Collapse	Burst	Tension
Surface	17.5	0 - 828	0 - 828	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	9.875	0 - 11273	0 - 11222	7.625	29.7	P-110	BUTT	1.125	1.125	1.8
Production	6.75	0 - 22192	0 - 11891	5.5	20	P-110	Hunting TLW-SC	1.125	1.125	1.8

- All casing strings will be tested in accordance with Onshore Order #2 - III.B.1.h
- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed
- All non-API joint connections will be of like or greater quality, and as run specification sheets will be on location for review
- Request the option to deepen the Intermediate 1 casing set depth to 80° in curve, no changes in pipe grade or weight is necessary.

Variance Request

Drill Plan

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

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

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

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

String	Type	Sacks	Yield	Cu. Ft.	Weight	Percent Excess	Top of Cement (ft)	Class	Blend
Surface	Lead	360	1.72	622	13.5	50%	0	C	5% NaCl + LCM
	Tail	250	1.38	347	14.8	50%	528	C	5% NaCl + LCM
Intermediate 1	Lead	810	3.66	2979	10.3	35%	0	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	210	1.38	290	13.2	35%	10273	A/C	5% NaCl + LCM
Production	Tail	760	1.35	1022	13.2	10%	11073	A/C	Fluid Loss + Dispersant + Retarder

5. Mud Program

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

Hole Section	Hole Size (in)	Mud Type	Interval MD (ft)	Density (lb/gal)	Viscosity	Fluid Loss
Surface	17.5	Spud Mud	0 - 828	8.4 - 8.8	28-30	NC
Intermediate 1	9.875	Diesel Brine Emulsion	828 - 11273	8.7 - 9.4	28-30	NC
Production	6.75	OBM/Cut Brine	11273 - 22192	10 - 11	50-65	<20

6. Cores, Test, & Logs

No core or drill stem test is planned.

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

7. Down Hole Conditions

Drill Plan

No abnormal pressure or temperature is expected. Bottom hole pressure is 6802 psi. Maximum anticipated surface pressure is 4186 psi. Expected bottom hole temperature is 174 F.

In accordance with Onshore Order 6, Matador does not anticipate that there will be enough H₂S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of 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.

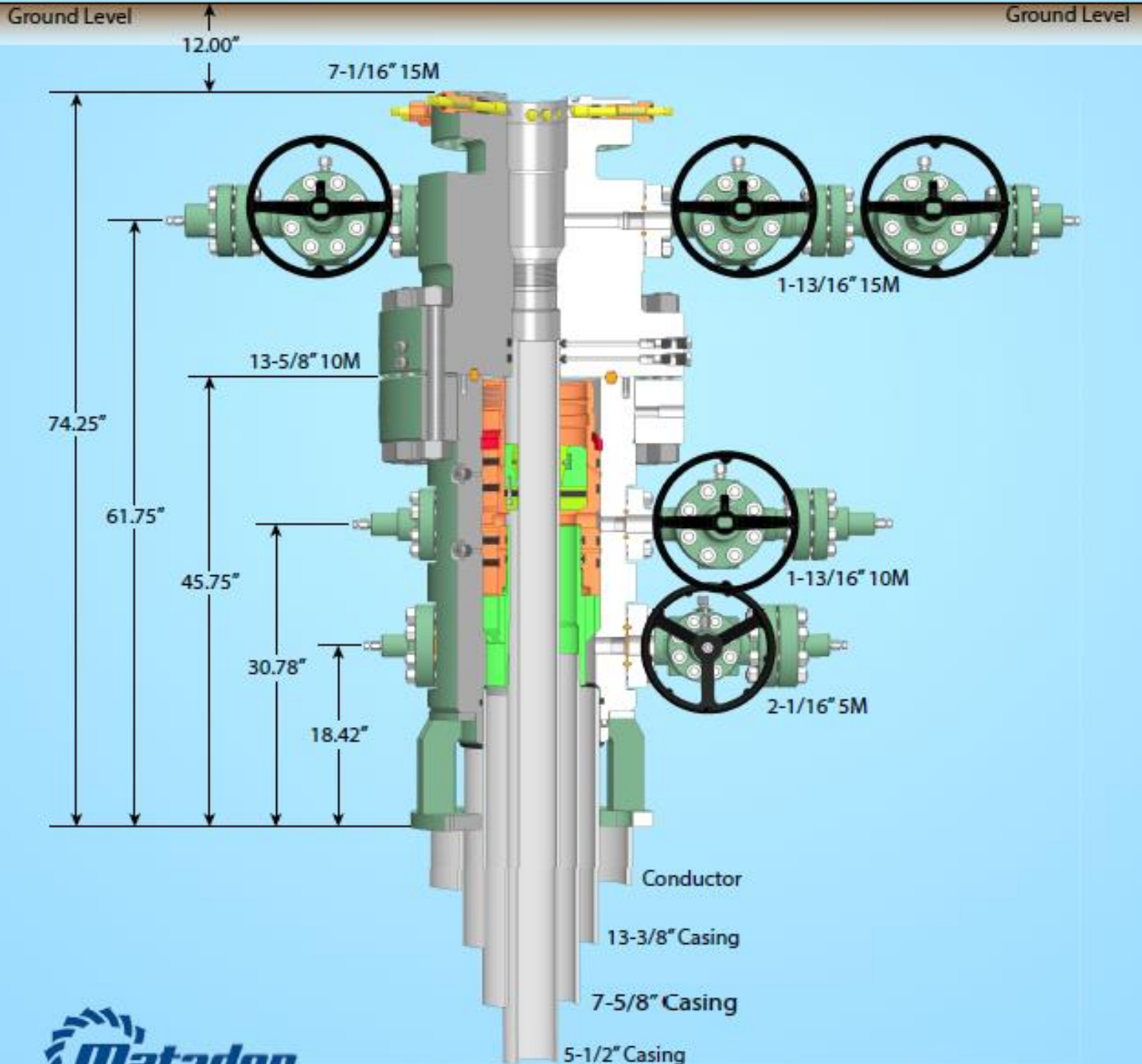
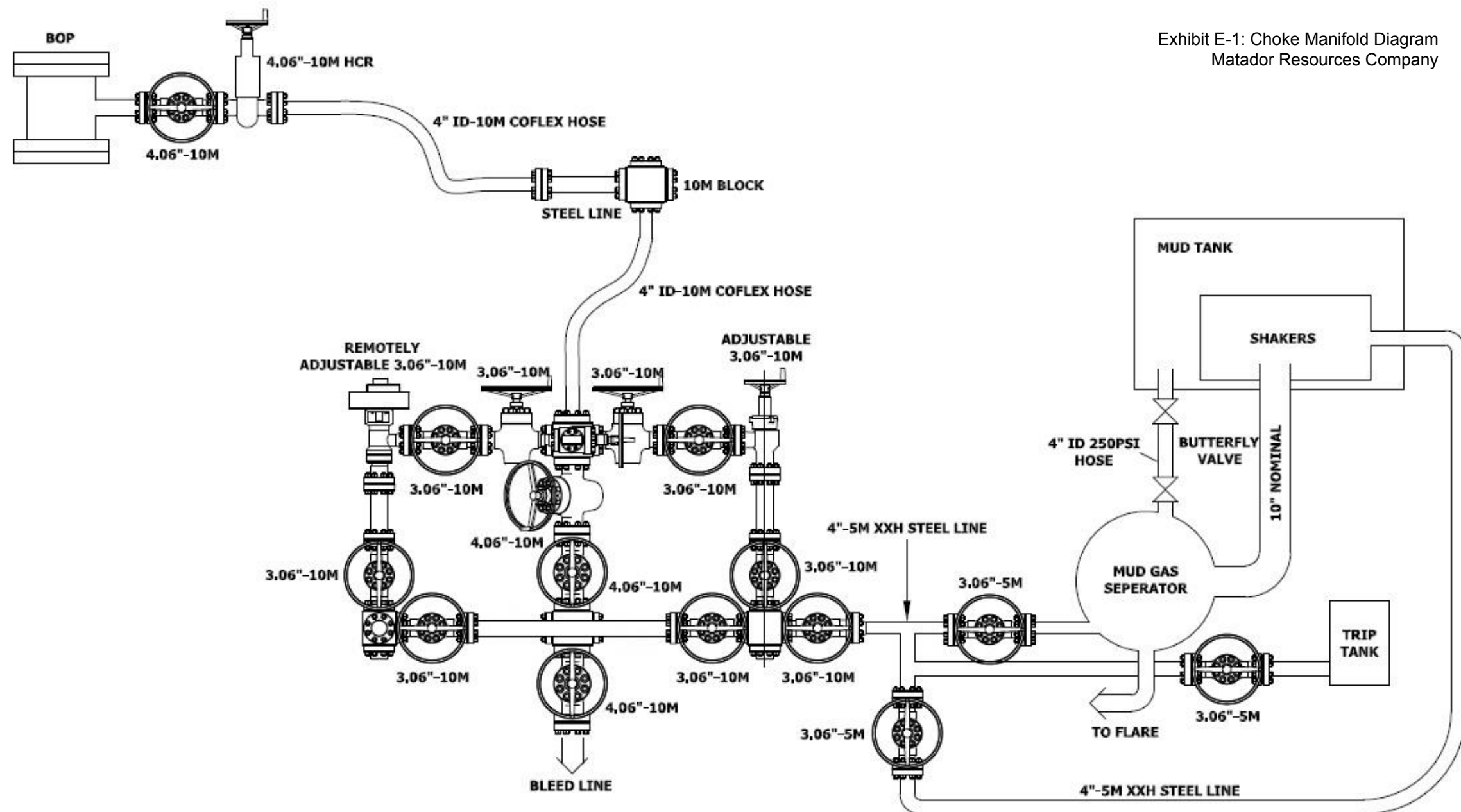
**13-5/8" 10M MN-DS Wellhead**2018-083-01
Rev 01

Exhibit E-1: Choke Manifold Diagram
Matador Resources Company



WELDING NOTE & TOLERANCES UNLESS OTHERWISE SPECIFIED,

GENERAL WELDING NOTE:
ALL ACCESSIBLE CONTACT SURFACES
SHALL BE JOINED WITH CONTINUOUS
45 DEGREE FILLET WELDS, WELD SIZE
TO BE 1/16 INCH SMALLER THAN
THINNER MEMBER JOINED UP TO
5/16 INCH THICKNESS AND 1/8 INCH
SMALLER THAN THINNER MEMBER
JOINED UP TO 3/4 INCH THICKNESS
WELDMENT TOLERANCES: ± 1/16

MACHINING TOLERANCES
1 PLACE DECIMAL: ± .1
2 PLACE DECIMAL: ± .03
3 PLACE DECIMAL: ± .015
FRACTIONAL TOLERANCES: 1/64
H/2 SIDE MACHINED CORNER RADIUS: .031
CHAMFER OUTSIDE CORNERS: .03 X 45 DEG
ANGLE TOLERANCES: ± 1 DEGREE
MACHINED SURFACE FINISH: 125 RMS
ALL UNSPECIFIED DIMENSIONS ARE IN INCHES

REV	DATE	DESCRIPTION	DRWN BY	CHK BY	APPROV. ENG.
02	8-3-15	ISSUED FOR INFORMATION		CP	CSL
01	7-8-15	ISSUED FOR INFORMATION		CSL	

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DRILLING COMPANY LLC
CONFIDENTIAL AND PROPRIETARY
NOT TO BE DISTRIBUTED



CHOKE MANIFOLD

10M CHOKE ARRANGEMENT
RIG 297

DWG NO. R0297-D.001.LAY.09

SHT 1 OF 1 REV. 02



GATES ENGINEERING & SERVICES NORTH AMERICA
7603 Prairie Oak Dr.
Houston, TX 77086

PHONE: (281) 602 - 4119
FAX:
EMAIL: Troy.Schmidt@gates.com
WEB: www.gates.com

10K CHOKE & KILL ASSEMBLY PRESSURE TEST CERTIFICATE

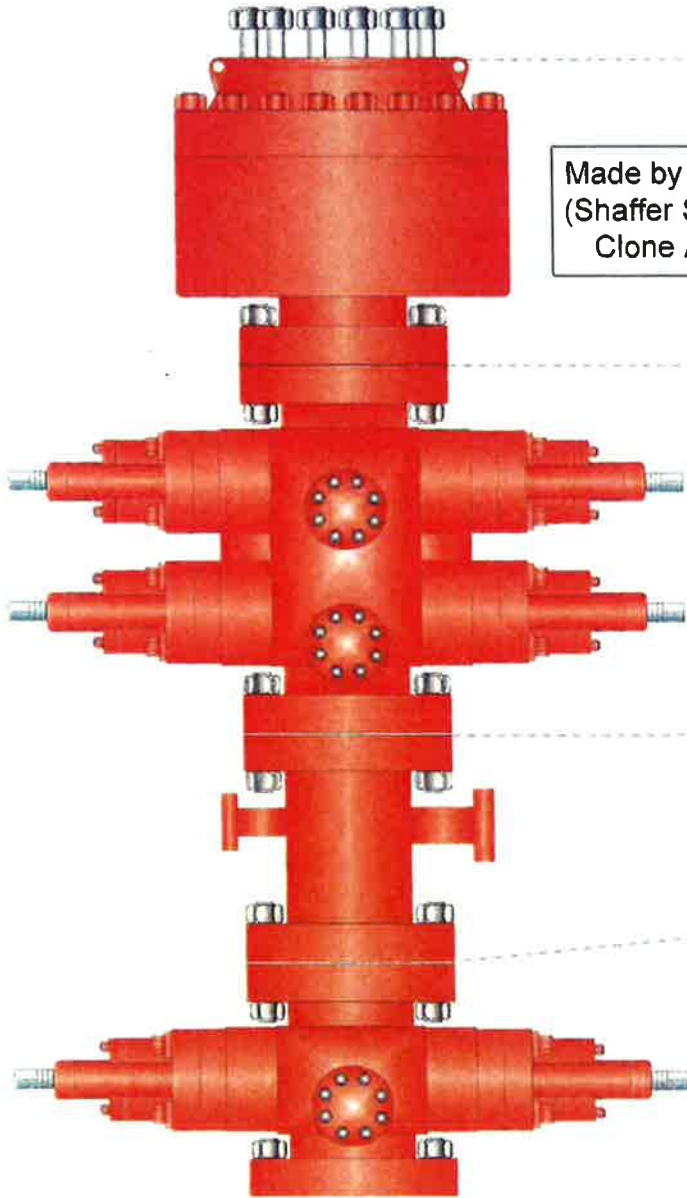
Customer:	A-7 AUSTIN INC DBA AUSTIN HOSE	Test Date:	1/21/2019
Customer Ref.:	4110435	Hose Serial No.:	H3-012119-5
Invoice No.:	513755	Created By:	Cristian Rivera
Product Description: 10KF3.035.0CK41/1610KFLGFXFLT LE HT SSA			
End Fitting 1:	4 1/16 10K FLANGES FIXED	End Fitting 2:	4 1/16 10K FLANGES FLOAT
Gates Part No.:	68503010-9721632	Assembly Code:	L41422010819H3-012119-5
Working Pressure:	10,000 psi.	Test Pressure:	15,000 psi.

Gates Engineering & Services North America certifies that the following hose assembly has successfully passed all pressure testing requirements set forth in Gates specifications: GTS-04-052 (for 5K assemblies) or GTS-04-053 (10K assemblies), which include reference to Specification API 16C (2nd Edition); sections 7.5.4, 7.5.9, and 10.8.7. A test graph will accompany this test certificate to illustrate conformity to test requirements

Quality:	QUALITY	Production:	PRODUCTION
Date :	1/21/2019	Date :	1/21/2019
Signature :		Signature :	

Form PTC - 01 Rev.0 2



**PATTERSON-UTI****Well Control****RIG:** 297

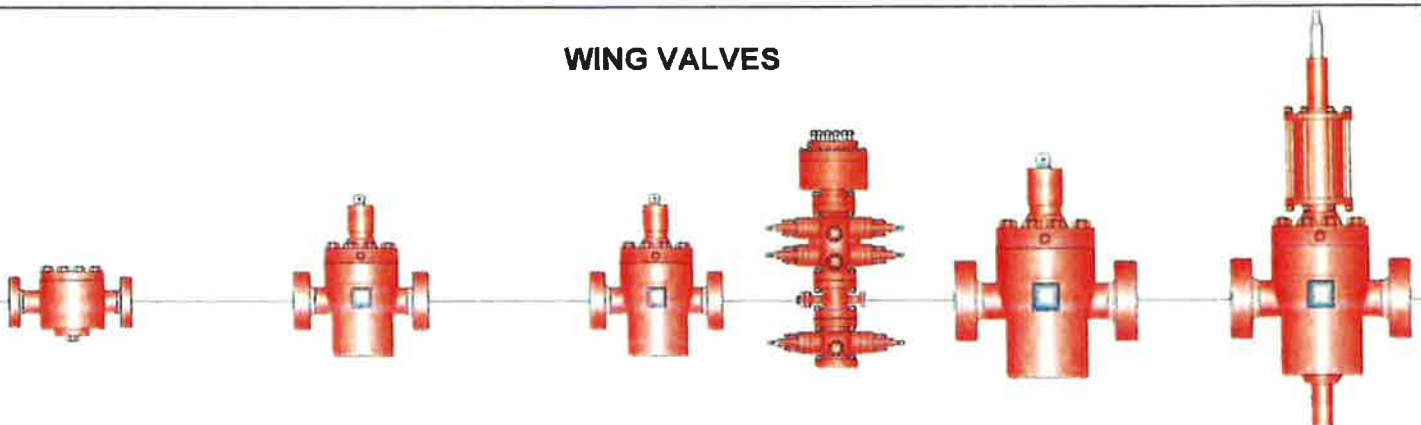
Made by Cameron
(Shaffer Spherical)
Clone Annular

PATTERSON-UTI # PS2-628
STYLE: New Shaffer Spherical
BORE 13 5/8" PRESSURE 5,000
HEIGHT: 48 1/2" WEIGHT: 13,800 lbs

PATTERSON-UTI # PC2-128
STYLE: New Cameron Type U
BORE 13 5/8" PRESSURE 10,000
RAMS: TOP 5" Pipe BTM Blinds
HEIGHT: 66 5/8" WEIGHT: 24,000 lbs

Length 40" Outlets 4" 10M
DSA 4" 10M x 2" 10M

PATTERSON-UTI # PC2-228
STYLE: New Cameron Type U
BORE 13 5/8" PRESSURE 10,000
RAMS: 5" Pipe
HEIGHT: 41 5/8" WEIGHT: 13,000 lbs

WING VALVES

2" Check Valve

2" Manual Valve

2" Manual Valve

4" Manual Valve

4" Hydraulic Valve



TEC-LOCK WEDGE

5.500" 20 LB/FT (.361"Wall) with 5.875" SPECIAL CLEARANCE OD
BEN P110 CY

Pipe Body Data

Nominal OD:	5.500	in
Nominal Wall:	.361	in
Nominal Weight:	20.00	lb/ft
Plain End Weight:	19.83	lb/ft
Material Grade:	P110 CY	
Mill/Specification:	BEN	
Yield Strength:	125,000	psi
Tensile Strength:	135,000	psi
Nominal ID:	4.778	in
API Drift Diameter:	4.653	in
Special Drift Diameter:	None	in
RBW:	87.5 %	
Body Yield:	729,000	lbf
Burst:	14,360	psi
Collapse:	13,010	psi

Connection Data

Standard OD:	5.875	in
Pin Bored ID:	4.778	in
Critical Section Area:	5.656	in ²
Tensile Efficiency:	97 %	
Compressive Efficiency:	100 %	
Longitudinal Yield Strength:	707,000	lbf
Compressive Limit:	729,000	lbf
Internal Pressure Rating:	14,360	psi
External Pressure Rating:	13,010	psi
Maximum Bend:	101.2	°/100ft

Operational Data

Minimum Makeup Torque:	15,000	ft*lbf
Optimum Makeup Torque:	18,700	ft*lbf
Maximum Makeup Torque:	41,200	ft*lbf
Minimum Yield:	45,800	ft*lbf
Makeup Loss:	5.97	in

Notes Operational Torque is equivalent to the Maximum Make-Up Torque

Generated on Sep 03, 2019



Casing Design Criteria and Load Case Assumptions

Surface Casing

Collapse: $DF_c=1.125$

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

Burst: $DF_b=1.125$

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

Tensile: $DF_t=1.8$

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (8.3 ppg).

Intermediate #1 Casing

Collapse: $DF_c=1.125$

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

Burst: $DF_b=1.125$

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- Gas Kick Profile: Internal burst force at the shoe will be Fracture Pressure at that depth. Surface burst pressure will be fracture gradient at setting depth less a gas gradient to equivalent height of 50 bbl kick with Drill Pipe inside casing and mud gradient with which the next hole section will be run above that. External force will be equal to the mud gradient in which the casing will be run, which is a more conservative backup force than pore pressure.
- Fracture at Shoe with 1/3 BHP at Surface: Internal burst force at the shoe will be Fracture Pressure at setting depth. Internal burst force at surface will be 1/3 of pore pressure at setting depth. External force will be equal to the mud gradient in which the casing will be run which is a more conservative backup force than pore pressure.

Tensile: $DF_t=1.8$

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

Production Casing

Collapse: $DF_c=1.125$

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run. The effects of axial load on collapse will be considered.

- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: $DF_b=1.125$

- Pressure Test: 8000 psi casing test with an external force equal to the mud gradient in which the casing will be run, which is a more conservative backup force than pore pressure.
- Injection Down Casing: 9500 psi surface injection pressure plus an internal pressure gradient of 0.50 psi/ft with an external force equal to the mud gradient in which the casing will be run, which is a more conservative backup force than pore pressure.

Tensile: $DF_t=1.8$

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

Matador Production Company

Antelope Ridge

Nina Cortell

Nina Cortell Fed Com #132H

Wellbore #1

Plan: BLM Plan #1

Standard Planning Report

09 November, 2021

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #132H
Company:	Matador Production Company	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Project:	Antelope Ridge	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site:	Nina Cortell	North Reference:	Grid
Well:	Nina Cortell Fed Com #132H	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 #132H					
Well Position	+N/-S	1.4 usft	Northing:	509,699.86 usft	Latitude:	32° 23' 58.236 N
	+E/-W	110.0 usft	Easting:	706,108.17 usft	Longitude:	103° 39' 55.986 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,791.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	11/5/2021	6.53	60.15	47,577.95390205

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	359.54

Plan Survey Tool Program	Date	11/9/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	22,191.7	BLM Plan #1 (Wellbore #1)	MWD
				OWSG MWD - Standard

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,300.0	8.00	103.90	2,297.4	-13.4	54.1	1.00	1.00	0.00	103.90	
7,131.4	8.00	103.90	7,081.7	-174.9	706.8	0.00	0.00	0.00	0.00	
7,664.7	0.00	0.00	7,613.3	-183.9	742.9	1.50	-1.50	0.00	180.00	
11,423.3	0.00	0.00	11,372.0	-183.9	742.9	0.00	0.00	0.00	0.00	VP - Nina Cortell Fe
12,326.5	90.32	359.54	11,944.9	392.3	738.3	10.00	10.00	0.00	359.54	
12,391.6	90.32	359.54	11,944.6	457.4	737.8	0.00	0.00	0.00	0.00	
22,191.7	90.32	359.54	11,890.5	10,257.0	659.1	0.00	0.00	0.00	0.00	BHL - Nina Cortell F

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Project:	Antelope Ridge	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site:	Nina Cortell	North Reference:	Grid
Well:	Nina Cortell Fed Com #132H	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
803.0	0.00	0.00	803.0	0.0	0.0	0.0	0.00	0.00	0.00
Z (Rustler)									
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,175.0	0.00	0.00	1,175.0	0.0	0.0	0.0	0.00	0.00	0.00
Z (Salado)									
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 1.00									
1,600.0	1.00	103.90	1,600.0	-0.2	0.8	-0.2	1.00	1.00	0.00
1,700.0	2.00	103.90	1,700.0	-0.8	3.4	-0.9	1.00	1.00	0.00
1,800.0	3.00	103.90	1,799.9	-1.9	7.6	-1.9	1.00	1.00	0.00
1,900.0	4.00	103.90	1,899.7	-3.4	13.5	-3.5	1.00	1.00	0.00
2,000.0	5.00	103.90	1,999.4	-5.2	21.2	-5.4	1.00	1.00	0.00
2,100.0	6.00	103.90	2,098.9	-7.5	30.5	-7.8	1.00	1.00	0.00
2,200.0	7.00	103.90	2,198.3	-10.3	41.5	-10.6	1.00	1.00	0.00
2,300.0	8.00	103.90	2,297.4	-13.4	54.1	-13.8	1.00	1.00	0.00
Start 4831.4 hold at 2300.0 MD									
2,400.0	8.00	103.90	2,396.4	-16.7	67.6	-17.3	0.00	0.00	0.00
2,500.0	8.00	103.90	2,495.5	-20.1	81.1	-20.7	0.00	0.00	0.00
2,600.0	8.00	103.90	2,594.5	-23.4	94.7	-24.2	0.00	0.00	0.00
2,700.0	8.00	103.90	2,693.5	-26.8	108.2	-27.6	0.00	0.00	0.00
2,800.0	8.00	103.90	2,792.5	-30.1	121.7	-31.1	0.00	0.00	0.00
2,900.0	8.00	103.90	2,891.6	-33.5	135.2	-34.5	0.00	0.00	0.00
3,000.0	8.00	103.90	2,990.6	-36.8	148.7	-38.0	0.00	0.00	0.00
3,100.0	8.00	103.90	3,089.6	-40.1	162.2	-41.4	0.00	0.00	0.00
3,185.5	8.00	103.90	3,174.2	-43.0	173.7	-44.4	0.00	0.00	0.00
Z (Castile (T))									
3,200.0	8.00	103.90	3,188.6	-43.5	175.7	-44.9	0.00	0.00	0.00
3,300.0	8.00	103.90	3,287.7	-46.8	189.2	-48.4	0.00	0.00	0.00
3,400.0	8.00	103.90	3,386.7	-50.2	202.7	-51.8	0.00	0.00	0.00
3,500.0	8.00	103.90	3,485.7	-53.5	216.2	-55.3	0.00	0.00	0.00
3,600.0	8.00	103.90	3,584.8	-56.9	229.8	-58.7	0.00	0.00	0.00
3,700.0	8.00	103.90	3,683.8	-60.2	243.3	-62.2	0.00	0.00	0.00
3,800.0	8.00	103.90	3,782.8	-63.6	256.8	-65.6	0.00	0.00	0.00
3,900.0	8.00	103.90	3,881.8	-66.9	270.3	-69.1	0.00	0.00	0.00
4,000.0	8.00	103.90	3,980.9	-70.2	283.8	-72.5	0.00	0.00	0.00
4,100.0	8.00	103.90	4,079.9	-73.6	297.3	-76.0	0.00	0.00	0.00
4,200.0	8.00	103.90	4,178.9	-76.9	310.8	-79.4	0.00	0.00	0.00
4,300.0	8.00	103.90	4,277.9	-80.3	324.3	-82.9	0.00	0.00	0.00
4,400.0	8.00	103.90	4,377.0	-83.6	337.8	-86.3	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #132H
Company:	Matador Production Company	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Project:	Antelope Ridge	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site:	Nina Cortell	North Reference:	Grid
Well:	Nina Cortell Fed Com #132H	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)
4,500.0	8.00	103.90	4,476.0	-87.0	351.3	-89.8	0.00	0.00	0.00
4,600.0	8.00	103.90	4,575.0	-90.3	364.8	-93.2	0.00	0.00	0.00
4,700.0	8.00	103.90	4,674.0	-93.6	378.4	-96.7	0.00	0.00	0.00
4,800.0	8.00	103.90	4,773.1	-97.0	391.9	-100.1	0.00	0.00	0.00
4,900.0	8.00	103.90	4,872.1	-100.3	405.4	-103.6	0.00	0.00	0.00
4,934.8	8.00	103.90	4,906.6	-101.5	410.1	-104.8	0.00	0.00	0.00
Z (G30:CS14-CSB)									
4,973.2	8.00	103.90	4,944.6	-102.8	415.3	-106.1	0.00	0.00	0.00
Z (G26: Bell Cyn.)									
5,000.0	8.00	103.90	4,971.1	-103.7	418.9	-107.0	0.00	0.00	0.00
5,100.0	8.00	103.90	5,070.2	-107.0	432.4	-110.5	0.00	0.00	0.00
5,200.0	8.00	103.90	5,169.2	-110.4	445.9	-113.9	0.00	0.00	0.00
5,300.0	8.00	103.90	5,268.2	-113.7	459.4	-117.4	0.00	0.00	0.00
5,400.0	8.00	103.90	5,367.2	-117.1	472.9	-120.8	0.00	0.00	0.00
5,500.0	8.00	103.90	5,466.3	-120.4	486.4	-124.3	0.00	0.00	0.00
5,600.0	8.00	103.90	5,565.3	-123.7	499.9	-127.7	0.00	0.00	0.00
5,700.0	8.00	103.90	5,664.3	-127.1	513.5	-131.2	0.00	0.00	0.00
5,800.0	8.00	103.90	5,763.3	-130.4	527.0	-134.7	0.00	0.00	0.00
5,870.1	8.00	103.90	5,832.8	-132.8	536.4	-137.1	0.00	0.00	0.00
Z (G13: Cherry Cyn.)									
5,900.0	8.00	103.90	5,862.4	-133.8	540.5	-138.1	0.00	0.00	0.00
6,000.0	8.00	103.90	5,961.4	-137.1	554.0	-141.6	0.00	0.00	0.00
6,100.0	8.00	103.90	6,060.4	-140.5	567.5	-145.0	0.00	0.00	0.00
6,200.0	8.00	103.90	6,159.4	-143.8	581.0	-148.5	0.00	0.00	0.00
6,300.0	8.00	103.90	6,258.5	-147.1	594.5	-151.9	0.00	0.00	0.00
6,400.0	8.00	103.90	6,357.5	-150.5	608.0	-155.4	0.00	0.00	0.00
6,500.0	8.00	103.90	6,456.5	-153.8	621.5	-158.8	0.00	0.00	0.00
6,600.0	8.00	103.90	6,555.6	-157.2	635.0	-162.3	0.00	0.00	0.00
6,700.0	8.00	103.90	6,654.6	-160.5	648.6	-165.7	0.00	0.00	0.00
6,800.0	8.00	103.90	6,753.6	-163.9	662.1	-169.2	0.00	0.00	0.00
6,900.0	8.00	103.90	6,852.6	-167.2	675.6	-172.6	0.00	0.00	0.00
7,000.0	8.00	103.90	6,951.7	-170.6	689.1	-176.1	0.00	0.00	0.00
7,012.4	8.00	103.90	6,964.0	-171.0	690.8	-176.5	0.00	0.00	0.00
Z (G7: Brushy Cyn.) Antelope Ridge									
7,100.0	8.00	103.90	7,050.7	-173.9	702.6	-179.5	0.00	0.00	0.00
7,131.4	8.00	103.90	7,081.7	-174.9	706.8	-180.6	0.00	0.00	0.00
Start Drop -1.50									
7,200.0	6.97	103.90	7,149.8	-177.1	715.5	-182.8	1.50	-1.50	0.00
7,300.0	5.47	103.90	7,249.2	-179.7	726.0	-185.5	1.50	-1.50	0.00
7,400.0	3.97	103.90	7,348.9	-181.7	734.0	-187.6	1.50	-1.50	0.00
7,500.0	2.47	103.90	7,448.7	-183.0	739.5	-189.0	1.50	-1.50	0.00
7,600.0	0.97	103.90	7,548.7	-183.7	742.4	-189.7	1.50	-1.50	0.00
7,664.7	0.00	0.00	7,613.3	-183.9	742.9	-189.8	1.50	-1.50	0.00
Start 3758.7 hold at 7664.7 MD									
7,700.0	0.00	0.00	7,648.7	-183.9	742.9	-189.8	0.00	0.00	0.00
7,800.0	0.00	0.00	7,748.7	-183.9	742.9	-189.8	0.00	0.00	0.00
7,900.0	0.00	0.00	7,848.7	-183.9	742.9	-189.8	0.00	0.00	0.00
8,000.0	0.00	0.00	7,948.7	-183.9	742.9	-189.8	0.00	0.00	0.00
8,100.0	0.00	0.00	8,048.7	-183.9	742.9	-189.8	0.00	0.00	0.00
8,200.0	0.00	0.00	8,148.7	-183.9	742.9	-189.8	0.00	0.00	0.00
8,300.0	0.00	0.00	8,248.7	-183.9	742.9	-189.8	0.00	0.00	0.00
8,400.0	0.00	0.00	8,348.7	-183.9	742.9	-189.8	0.00	0.00	0.00
8,500.0	0.00	0.00	8,448.7	-183.9	742.9	-189.8	0.00	0.00	0.00

Planning Report

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Project:	Antelope Ridge	MD Reference:	KB @ 3819.5usft (Original Well Elev)
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Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
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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	8,548.7	-183.9	742.9	-189.8	0.00	0.00	0.00
8,700.0	0.00	0.00	8,648.7	-183.9	742.9	-189.8	0.00	0.00	0.00
8,800.0	0.00	0.00	8,748.7	-183.9	742.9	-189.8	0.00	0.00	0.00
8,864.4	0.00	0.00	8,813.1	-183.9	742.9	-189.8	0.00	0.00	0.00
Z (G4: BSG) (CS9))									
8,900.0	0.00	0.00	8,848.7	-183.9	742.9	-189.8	0.00	0.00	0.00
9,000.0	0.00	0.00	8,948.7	-183.9	742.9	-189.8	0.00	0.00	0.00
9,100.0	0.00	0.00	9,048.7	-183.9	742.9	-189.8	0.00	0.00	0.00
9,200.0	0.00	0.00	9,148.7	-183.9	742.9	-189.8	0.00	0.00	0.00
9,300.0	0.00	0.00	9,248.7	-183.9	742.9	-189.8	0.00	0.00	0.00
9,400.0	0.00	0.00	9,348.7	-183.9	742.9	-189.8	0.00	0.00	0.00
9,500.0	0.00	0.00	9,448.7	-183.9	742.9	-189.8	0.00	0.00	0.00
9,600.0	0.00	0.00	9,548.7	-183.9	742.9	-189.8	0.00	0.00	0.00
9,700.0	0.00	0.00	9,648.7	-183.9	742.9	-189.8	0.00	0.00	0.00
9,704.4	0.00	0.00	9,653.1	-183.9	742.9	-189.8	0.00	0.00	0.00
Z (L5.3: FBSC)									
9,800.0	0.00	0.00	9,748.7	-183.9	742.9	-189.8	0.00	0.00	0.00
9,900.0	0.00	0.00	9,848.7	-183.9	742.9	-189.8	0.00	0.00	0.00
9,925.4	0.00	0.00	9,874.1	-183.9	742.9	-189.8	0.00	0.00	0.00
Z (L5.1: FBSC)									
10,000.0	0.00	0.00	9,948.7	-183.9	742.9	-189.8	0.00	0.00	0.00
10,100.0	0.00	0.00	10,048.7	-183.9	742.9	-189.8	0.00	0.00	0.00
10,200.0	0.00	0.00	10,148.7	-183.9	742.9	-189.8	0.00	0.00	0.00
10,223.4	0.00	0.00	10,172.1	-183.9	742.9	-189.8	0.00	0.00	0.00
Z (L4.3: SBSC)									
10,300.0	0.00	0.00	10,248.7	-183.9	742.9	-189.8	0.00	0.00	0.00
10,400.0	0.00	0.00	10,348.7	-183.9	742.9	-189.8	0.00	0.00	0.00
10,500.0	0.00	0.00	10,448.7	-183.9	742.9	-189.8	0.00	0.00	0.00
10,600.0	0.00	0.00	10,548.7	-183.9	742.9	-189.8	0.00	0.00	0.00
10,630.4	0.00	0.00	10,579.1	-183.9	742.9	-189.8	0.00	0.00	0.00
Z (L4.1: SBSC)									
10,700.0	0.00	0.00	10,648.7	-183.9	742.9	-189.8	0.00	0.00	0.00
10,800.0	0.00	0.00	10,748.7	-183.9	742.9	-189.8	0.00	0.00	0.00
10,900.0	0.00	0.00	10,848.7	-183.9	742.9	-189.8	0.00	0.00	0.00
11,000.0	0.00	0.00	10,948.7	-183.9	742.9	-189.8	0.00	0.00	0.00
11,041.4	0.00	0.00	10,990.1	-183.9	742.9	-189.8	0.00	0.00	0.00
Z (L3.3: TBSC)									
11,100.0	0.00	0.00	11,048.7	-183.9	742.9	-189.8	0.00	0.00	0.00
11,200.0	0.00	0.00	11,148.7	-183.9	742.9	-189.8	0.00	0.00	0.00
11,300.0	0.00	0.00	11,248.7	-183.9	742.9	-189.8	0.00	0.00	0.00
11,400.0	0.00	0.00	11,348.7	-183.9	742.9	-189.8	0.00	0.00	0.00
11,423.3	0.00	0.00	11,372.0	-183.9	742.9	-189.8	0.00	0.00	0.00
Start Build 10.00 - VP - Nina Cortell Fed Com #132H									
11,500.0	7.67	359.54	11,448.4	-178.8	742.9	-184.7	10.00	10.00	0.00
11,600.0	17.67	359.54	11,545.9	-156.9	742.7	-162.8	10.00	10.00	0.00
11,643.6	22.02	359.54	11,586.8	-142.1	742.6	-148.0	10.00	10.00	0.00
Z (L3.1: TBSC)									
11,700.0	27.67	359.54	11,638.0	-118.4	742.4	-124.3	10.00	10.00	0.00
11,800.0	37.67	359.54	11,722.1	-64.5	742.0	-70.4	10.00	10.00	0.00
11,900.0	47.67	359.54	11,795.5	3.2	741.4	-2.7	10.00	10.00	0.00
12,000.0	57.67	359.54	11,856.1	82.6	740.8	76.7	10.00	10.00	0.00
12,100.0	67.67	359.54	11,902.0	171.3	740.1	165.4	10.00	10.00	0.00
12,200.0	77.67	359.54	11,931.7	266.7	739.3	260.7	10.00	10.00	0.00

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #132H
Company:	Matador Production Company	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Project:	Antelope Ridge	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site:	Nina Cortell	North Reference:	Grid
Well:	Nina Cortell Fed Com #132H	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)
12,300.0	87.67	359.54	11,944.5	365.7	738.5	359.8	10.00	10.00	0.00
12,326.5	90.32	359.54	11,944.9	392.3	738.3	386.3	10.00	10.00	0.00
Start 65.1 hold at 12326.5 MD									
12,391.6	90.32	359.54	11,944.6	457.4	737.8	451.4	0.00	0.00	0.00
Start 9800.1 hold at 12391.6 MD									
12,400.0	90.32	359.54	11,944.5	465.7	737.7	459.8	0.00	0.00	0.00
12,500.0	90.32	359.54	11,944.0	565.7	736.9	559.8	0.00	0.00	0.00
12,600.0	90.32	359.54	11,943.4	665.7	736.1	659.8	0.00	0.00	0.00
12,700.0	90.32	359.54	11,942.9	765.7	735.3	759.8	0.00	0.00	0.00
12,800.0	90.32	359.54	11,942.3	865.7	734.5	859.8	0.00	0.00	0.00
12,900.0	90.32	359.54	11,941.7	965.7	733.7	959.8	0.00	0.00	0.00
13,000.0	90.32	359.54	11,941.2	1,065.7	732.9	1,059.8	0.00	0.00	0.00
13,100.0	90.32	359.54	11,940.6	1,165.7	732.1	1,159.8	0.00	0.00	0.00
13,200.0	90.32	359.54	11,940.1	1,265.7	731.3	1,259.8	0.00	0.00	0.00
13,300.0	90.32	359.54	11,939.5	1,365.7	730.5	1,359.8	0.00	0.00	0.00
13,400.0	90.32	359.54	11,939.0	1,465.7	729.7	1,459.8	0.00	0.00	0.00
13,500.0	90.32	359.54	11,938.4	1,565.7	728.9	1,559.8	0.00	0.00	0.00
13,600.0	90.32	359.54	11,937.8	1,665.7	728.1	1,659.8	0.00	0.00	0.00
13,700.0	90.32	359.54	11,937.3	1,765.7	727.3	1,759.8	0.00	0.00	0.00
13,800.0	90.32	359.54	11,936.7	1,865.6	726.5	1,859.8	0.00	0.00	0.00
13,900.0	90.32	359.54	11,936.2	1,965.6	725.7	1,959.8	0.00	0.00	0.00
14,000.0	90.32	359.54	11,935.6	2,065.6	724.9	2,059.8	0.00	0.00	0.00
14,100.0	90.32	359.54	11,935.0	2,165.6	724.0	2,159.8	0.00	0.00	0.00
14,200.0	90.32	359.54	11,934.5	2,265.6	723.2	2,259.7	0.00	0.00	0.00
14,300.0	90.32	359.54	11,933.9	2,365.6	722.4	2,359.7	0.00	0.00	0.00
14,339.8	90.32	359.54	11,933.7	2,405.4	722.1	2,399.6	0.00	0.00	0.00
Enter NMNM 141008 - Nina Cortell Fed Com #132H									
14,400.0	90.32	359.54	11,933.4	2,465.6	721.6	2,459.7	0.00	0.00	0.00
14,500.0	90.32	359.54	11,932.8	2,565.6	720.8	2,559.7	0.00	0.00	0.00
14,600.0	90.32	359.54	11,932.3	2,665.6	720.0	2,659.7	0.00	0.00	0.00
14,700.0	90.32	359.54	11,931.7	2,765.6	719.2	2,759.7	0.00	0.00	0.00
14,800.0	90.32	359.54	11,931.1	2,865.6	718.4	2,859.7	0.00	0.00	0.00
14,900.0	90.32	359.54	11,930.6	2,965.6	717.6	2,959.7	0.00	0.00	0.00
15,000.0	90.32	359.54	11,930.0	3,065.6	716.8	3,059.7	0.00	0.00	0.00
15,100.0	90.32	359.54	11,929.5	3,165.6	716.0	3,159.7	0.00	0.00	0.00
15,200.0	90.32	359.54	11,928.9	3,265.6	715.2	3,259.7	0.00	0.00	0.00
15,300.0	90.32	359.54	11,928.3	3,365.6	714.4	3,359.7	0.00	0.00	0.00
15,400.0	90.32	359.54	11,927.8	3,465.6	713.6	3,459.7	0.00	0.00	0.00
15,500.0	90.32	359.54	11,927.2	3,565.6	712.8	3,559.7	0.00	0.00	0.00
15,600.0	90.32	359.54	11,926.7	3,665.6	712.0	3,659.7	0.00	0.00	0.00
15,658.6	90.32	359.54	11,926.3	3,724.1	711.5	3,718.3	0.00	0.00	0.00
Enter NMNM 055952 - Nina Cortell Fed Com #132H									
15,700.0	90.32	359.54	11,926.1	3,765.6	711.2	3,759.7	0.00	0.00	0.00
15,800.0	90.32	359.54	11,925.6	3,865.6	710.4	3,859.7	0.00	0.00	0.00
15,900.0	90.32	359.54	11,925.0	3,965.5	709.6	3,959.7	0.00	0.00	0.00
16,000.0	90.32	359.54	11,924.4	4,065.5	708.8	4,059.7	0.00	0.00	0.00
16,100.0	90.32	359.54	11,923.9	4,165.5	708.0	4,159.7	0.00	0.00	0.00
16,200.0	90.32	359.54	11,923.3	4,265.5	707.2	4,259.7	0.00	0.00	0.00
16,300.0	90.32	359.54	11,922.8	4,365.5	706.4	4,359.7	0.00	0.00	0.00
16,400.0	90.32	359.54	11,922.2	4,465.5	705.6	4,459.7	0.00	0.00	0.00
16,500.0	90.32	359.54	11,921.6	4,565.5	704.8	4,559.7	0.00	0.00	0.00
16,600.0	90.32	359.54	11,921.1	4,665.5	704.0	4,659.7	0.00	0.00	0.00
16,700.0	90.32	359.54	11,920.5	4,765.5	703.2	4,759.7	0.00	0.00	0.00
16,800.0	90.32	359.54	11,920.0	4,865.5	702.4	4,859.7	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #132H
Company:	Matador Production Company	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Project:	Antelope Ridge	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site:	Nina Cortell	North Reference:	Grid
Well:	Nina Cortell Fed Com #132H	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)
16,900.0	90.32	359.54	11,919.4	4,965.5	701.6	4,959.7	0.00	0.00	0.00
16,978.3	90.32	359.54	11,919.0	5,043.8	700.9	5,038.0	0.00	0.00	0.00
Exit NMNM 055952 - Nina Cortell Fed Com #132H									
17,000.0	90.32	359.54	11,918.8	5,065.5	700.8	5,059.7	0.00	0.00	0.00
17,100.0	90.32	359.54	11,918.3	5,165.5	700.0	5,159.7	0.00	0.00	0.00
17,200.0	90.32	359.54	11,917.7	5,265.5	699.2	5,259.7	0.00	0.00	0.00
17,300.0	90.32	359.54	11,917.2	5,365.5	698.4	5,359.7	0.00	0.00	0.00
17,400.0	90.32	359.54	11,916.6	5,465.5	697.6	5,459.7	0.00	0.00	0.00
17,500.0	90.32	359.54	11,916.1	5,565.5	696.8	5,559.7	0.00	0.00	0.00
17,600.0	90.32	359.54	11,915.5	5,665.5	695.9	5,659.7	0.00	0.00	0.00
17,700.0	90.32	359.54	11,914.9	5,765.5	695.1	5,759.7	0.00	0.00	0.00
17,800.0	90.32	359.54	11,914.4	5,865.5	694.3	5,859.7	0.00	0.00	0.00
17,900.0	90.32	359.54	11,913.8	5,965.5	693.5	5,959.7	0.00	0.00	0.00
18,000.0	90.32	359.54	11,913.3	6,065.4	692.7	6,059.7	0.00	0.00	0.00
18,100.0	90.32	359.54	11,912.7	6,165.4	691.9	6,159.7	0.00	0.00	0.00
18,200.0	90.32	359.54	11,912.1	6,265.4	691.1	6,259.7	0.00	0.00	0.00
18,300.0	90.32	359.54	11,911.6	6,365.4	690.3	6,359.7	0.00	0.00	0.00
18,400.0	90.32	359.54	11,911.0	6,465.4	689.5	6,459.7	0.00	0.00	0.00
18,500.0	90.32	359.54	11,910.5	6,565.4	688.7	6,559.7	0.00	0.00	0.00
18,600.0	90.32	359.54	11,909.9	6,665.4	687.9	6,659.7	0.00	0.00	0.00
18,700.0	90.32	359.54	11,909.4	6,765.4	687.1	6,759.7	0.00	0.00	0.00
18,800.0	90.32	359.54	11,908.8	6,865.4	686.3	6,859.7	0.00	0.00	0.00
18,900.0	90.32	359.54	11,908.2	6,965.4	685.5	6,959.7	0.00	0.00	0.00
19,000.0	90.32	359.54	11,907.7	7,065.4	684.7	7,059.7	0.00	0.00	0.00
19,100.0	90.32	359.54	11,907.1	7,165.4	683.9	7,159.7	0.00	0.00	0.00
19,200.0	90.32	359.54	11,906.6	7,265.4	683.1	7,259.7	0.00	0.00	0.00
19,300.0	90.32	359.54	11,906.0	7,365.4	682.3	7,359.7	0.00	0.00	0.00
19,400.0	90.32	359.54	11,905.4	7,465.4	681.5	7,459.7	0.00	0.00	0.00
19,500.0	90.32	359.54	11,904.9	7,565.4	680.7	7,559.7	0.00	0.00	0.00
19,600.0	90.32	359.54	11,904.3	7,665.4	679.9	7,659.7	0.00	0.00	0.00
19,618.8	90.32	359.54	11,904.2	7,684.2	679.7	7,678.5	0.00	0.00	0.00
Enter NMNM 135247 - Nina Cortell Fed Com #132H									
19,700.0	90.32	359.54	11,903.8	7,765.4	679.1	7,759.7	0.00	0.00	0.00
19,800.0	90.32	359.54	11,903.2	7,865.4	678.3	7,859.7	0.00	0.00	0.00
19,900.0	90.32	359.54	11,902.7	7,965.4	677.5	7,959.7	0.00	0.00	0.00
20,000.0	90.32	359.54	11,902.1	8,065.4	676.7	8,059.7	0.00	0.00	0.00
20,100.0	90.32	359.54	11,901.5	8,165.3	675.9	8,159.7	0.00	0.00	0.00
20,200.0	90.32	359.54	11,901.0	8,265.3	675.1	8,259.7	0.00	0.00	0.00
20,300.0	90.32	359.54	11,900.4	8,365.3	674.3	8,359.7	0.00	0.00	0.00
20,400.0	90.32	359.54	11,899.9	8,465.3	673.5	8,459.7	0.00	0.00	0.00
20,500.0	90.32	359.54	11,899.3	8,565.3	672.7	8,559.7	0.00	0.00	0.00
20,600.0	90.32	359.54	11,898.7	8,665.3	671.9	8,659.6	0.00	0.00	0.00
20,700.0	90.32	359.54	11,898.2	8,765.3	671.1	8,759.6	0.00	0.00	0.00
20,800.0	90.32	359.54	11,897.6	8,865.3	670.3	8,859.6	0.00	0.00	0.00
20,900.0	90.32	359.54	11,897.1	8,965.3	669.5	8,959.6	0.00	0.00	0.00
21,000.0	90.32	359.54	11,896.5	9,065.3	668.7	9,059.6	0.00	0.00	0.00
21,100.0	90.32	359.54	11,896.0	9,165.3	667.8	9,159.6	0.00	0.00	0.00
21,200.0	90.32	359.54	11,895.4	9,265.3	667.0	9,259.6	0.00	0.00	0.00
21,300.0	90.32	359.54	11,894.8	9,365.3	666.2	9,359.6	0.00	0.00	0.00
21,400.0	90.32	359.54	11,894.3	9,465.3	665.4	9,459.6	0.00	0.00	0.00
21,500.0	90.32	359.54	11,893.7	9,565.3	664.6	9,559.6	0.00	0.00	0.00
21,600.0	90.32	359.54	11,893.2	9,665.3	663.8	9,659.6	0.00	0.00	0.00
21,700.0	90.32	359.54	11,892.6	9,765.3	663.0	9,759.6	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #132H
Company:	Matador Production Company	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Project:	Antelope Ridge	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site:	Nina Cortell	North Reference:	Grid
Well:	Nina Cortell Fed Com #132H	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)
21,800.0	90.32	359.54	11,892.0	9,865.3	662.2	9,859.6	0.00	0.00	0.00
21,900.0	90.32	359.54	11,891.5	9,965.3	661.4	9,959.6	0.00	0.00	0.00
22,000.0	90.32	359.54	11,890.9	10,065.3	660.6	10,059.6	0.00	0.00	0.00
22,100.0	90.32	359.54	11,890.4	10,165.3	659.8	10,159.6	0.00	0.00	0.00
22,191.7	90.32	359.54	11,890.5	10,257.0	659.1	10,251.4	0.00	0.00	0.00
TD at 22191.7 - BHL - Nina Cortell Fed Com #132H									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
VP - Nina Cortell Fed - hit/miss target - Shape - Point	0.00	0.00	11,372.0	-183.9	742.9	509,516.00	706,851.00	32° 23' 56.371 N	103° 39' 47.336 W
BHL - Nina Cortell Fed - plan hits target center - Point	0.00	0.00	11,890.5	10,257.0	659.1	519,956.96	706,767.25	32° 25' 39.693 N	103° 39' 47.549 W
Enter NMNM 135247 - plan misses target center by 0.2usft at 19618.8usft MD (11904.2 TVD, 7684.2 N, 679.7 E) - Point	0.00	0.00	11,904.2	7,684.2	679.6	517,383.98	706,787.73	32° 25' 14.231 N	103° 39' 47.498 W
Exit NMNM 055952 - I - plan misses target center by 0.2usft at 16978.3usft MD (11919.0 TVD, 5043.8 N, 700.9 E) - Point	0.00	0.00	11,919.0	5,043.8	700.8	514,743.49	706,808.91	32° 24' 48.101 N	103° 39' 47.445 W
Enter NMNM 055952 - plan misses target center by 0.2usft at 15658.6usft MD (11926.3 TVD, 3724.1 N, 711.5 E) - Point	0.00	0.00	11,926.3	3,724.1	711.4	513,423.79	706,819.49	32° 24' 35.042 N	103° 39' 47.418 W
Enter NMNM 141008 - plan misses target center by 0.2usft at 14339.8usft MD (11933.7 TVD, 2405.4 N, 722.1 E) - Point	0.00	0.00	11,933.7	2,405.4	721.9	512,105.12	706,830.07	32° 24' 21.992 N	103° 39' 47.391 W

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #132H
Company:	Matador Production Company	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Project:	Antelope Ridge	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site:	Nina Cortell	North Reference:	Grid
Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
803.0	803.0	Z (Rustler)		-0.32	359.54	
1,175.0	1,175.0	Z (Salado)		-0.32	359.54	
3,185.5	3,174.2	Z (Castile (T))		-0.32	359.54	
4,934.8	4,906.6	Z (G30: CS14-CSB)		-0.32	359.54	
4,973.2	4,944.6	Z (G26: Bell Cyn.)		-0.32	359.54	
5,870.1	5,832.8	Z (G13: Cherry Cyn.)		-0.32	359.54	
7,012.4	6,964.0	Z (G7: Brushy Cyn.) Antelope Ridge		-0.32	359.54	
8,864.4	8,813.1	Z (G4: BSGI (CS9))		-0.32	359.54	
9,704.4	9,653.1	Z (L5.3: FBSC)		-0.32	359.54	
9,925.4	9,874.1	Z (L5.1: FBSG)		-0.32	359.54	
10,223.4	10,172.1	Z (L4.3: SBSC)		-0.32	359.54	
10,630.4	10,579.1	Z (L4.1: SBSG)		-0.32	359.54	
11,041.4	10,990.1	Z (L3.3: TBSC)		-0.32	359.54	
11,643.6	11,586.8	Z (L3.1: TBSG)		-0.32	359.54	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,500.0	1,500.0	0.0	0.0	Start Build 1.00	
2,300.0	2,297.4	-13.4	54.1	Start 4831.4 hold at 2300.0 MD	
7,131.4	7,081.7	-174.9	706.8	Start Drop -1.50	
7,664.7	7,613.3	-183.9	742.9	Start 3758.7 hold at 7664.7 MD	
11,423.3	11,372.0	-183.9	742.9	Start Build 10.00	
12,326.5	11,944.9	392.3	738.3	Start 65.1 hold at 12326.5 MD	
12,391.6	11,944.6	457.4	737.8	Start 9800.1 hold at 12391.6 MD	
22,191.7	11,890.5	10,257.0	659.1	TD at 22191.7	

Matador Production Company

Antelope Ridge

Nina Cortell

Nina Cortell Fed Com #132H

Wellbore #1

BLM Plan #1

Anticollision Report

09 November, 2021

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Reference	BLM Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0 us	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	11/9/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	22,191.7	BLM Plan #1 (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 #	1,332.4	1,339.9	10.1	0.6	1.068	Level 2, CC, ES, SF
Nina Cortell Fed Com #112H - Wellbore #1 - BLM Plan #	5,780.1	5,769.5	59.9	16.7	1.387	Level 3, CC
Nina Cortell Fed Com #112H - Wellbore #1 - BLM Plan #	5,800.0	5,789.2	59.9	16.6	1.383	Level 3, ES, SF
Nina Cortell Fed Com #113H - Wellbore #1 - BLM Plan #	9,893.8	9,925.9	1,081.7	1,011.6	15.439	CC
Nina Cortell Fed Com #113H - Wellbore #1 - BLM Plan #	9,900.0	9,930.5	1,081.7	1,011.6	15.431	ES
Nina Cortell Fed Com #113H - Wellbore #1 - BLM Plan #	22,191.7	20,279.3	2,135.8	1,916.9	9.754	SF
Nina Cortell Fed Com #114H - Wellbore #1 - BLM Plan #	9,854.4	9,856.8	2,337.3	2,267.8	33.629	CC
Nina Cortell Fed Com #114H - Wellbore #1 - BLM Plan #	9,900.0	9,893.2	2,337.5	2,267.7	33.493	ES
Nina Cortell Fed Com #114H - Wellbore #1 - BLM Plan #	22,191.7	20,273.5	2,992.6	2,700.1	10.231	SF
Nina Cortell Fed Com #121H - Wellbore #1 - Actual Surv	17,667.1	10,416.9	2,483.9	2,383.8	24.828	CC
Nina Cortell Fed Com #121H - Wellbore #1 - Actual Surv	21,800.0	14,522.5	2,520.6	2,334.3	13.523	ES
Nina Cortell Fed Com #121H - Wellbore #1 - Actual Surv	22,191.7	14,780.7	2,537.9	2,344.9	13.148	SF
Nina Cortell Fed Com #125H - Wellbore #1 - BLM Plan #	1,500.0	1,500.0	113.7	103.4	11.049	CC, ES
Nina Cortell Fed Com #125H - Wellbore #1 - BLM Plan #	22,191.7	21,080.6	1,993.5	1,689.8	6.563	SF
Nina Cortell Fed Com #126H - Wellbore #1 - BLM Plan #	5,082.5	5,074.4	83.9	46.3	2.232	CC
Nina Cortell Fed Com #126H - Wellbore #1 - BLM Plan #	5,100.0	5,108.2	83.9	46.1	2.221	ES
Nina Cortell Fed Com #126H - Wellbore #1 - BLM Plan #	5,200.0	5,209.2	85.5	46.9	2.216	SF
Nina Cortell Fed Com #127H - Wellbore #1 - BLM Plan #	10,301.9	10,300.7	991.0	918.1	13.600	CC
Nina Cortell Fed Com #127H - Wellbore #1 - BLM Plan #	10,500.0	10,495.7	991.1	916.9	13.358	ES
Nina Cortell Fed Com #127H - Wellbore #1 - BLM Plan #	22,191.7	21,130.4	1,436.5	1,166.3	5.317	SF
Nina Cortell Fed Com #128H - Wellbore #1 - BLM Plan #	10,405.3	10,382.2	2,149.2	2,075.9	29.334	CC
Nina Cortell Fed Com #128H - Wellbore #1 - BLM Plan #	10,500.0	10,450.0	2,149.5	2,075.6	29.099	ES
Nina Cortell Fed Com #128H - Wellbore #1 - BLM Plan #	22,191.7	21,193.5	2,502.8	2,172.0	7.566	SF
Nina Cortell Fed Com #131H - Wellbore #1 - BLM Plan #	1,500.0	1,499.0	85.3	75.0	8.291	CC, ES
Nina Cortell Fed Com #131H - Wellbore #1 - BLM Plan #	22,191.7	22,172.2	1,319.8	969.6	3.768	SF
Nina Cortell Fed Com #133H - Wellbore #1 - BLM Plan #	11,441.6	11,412.8	1,320.1	1,239.6	16.409	CC
Nina Cortell Fed Com #133H - Wellbore #1 - BLM Plan #	22,191.7	22,167.6	1,321.6	971.1	3.770	ES, SF
Nina Cortell Fed Com #134H - Wellbore #1 - BLM Plan #	3,106.9	2,810.0	2,285.4	2,265.0	111.977	CC
Nina Cortell Fed Com #134H - Wellbore #1 - BLM Plan #	7,131.4	6,814.4	2,289.2	2,239.2	45.760	ES
Nina Cortell Fed Com #134H - Wellbore #1 - BLM Plan #	22,191.7	22,219.6	2,643.1	2,292.7	7.545	SF
Nina Cortell Fed Com #201H - Wellbore #1 - Actual Surv	20,707.4	15,568.0	1,915.9	1,692.1	8.561	CC
Nina Cortell Fed Com #201H - Wellbore #1 - Actual Surv	20,900.0	15,715.8	1,918.0	1,689.4	8.391	ES
Nina Cortell Fed Com #201H - Wellbore #1 - Actual Surv	22,191.7	16,905.7	1,977.4	1,712.9	7.474	SF
Nina Cortell Fed Com #202H - Wellbore #1 - BLM Plan #	1,687.7	1,689.9	64.1	52.5	5.559	CC
Nina Cortell Fed Com #202H - Wellbore #1 - BLM Plan #	1,700.0	1,702.1	64.1	52.5	5.519	ES
Nina Cortell Fed Com #202H - Wellbore #1 - BLM Plan #	22,191.7	22,334.7	678.3	335.9	1.981	SF
Nina Cortell Fed Com #203H - Wellbore #1 - BLM Plan #	11,467.0	11,479.4	664.9	583.7	8.188	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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Summary

Site Name	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 #203H - Wellbore #1 - BLM Plan #	22,191.7	22,392.4	693.2	352.7	2.036	ES, SF
Nina Cortell Fed Com #204H - Wellbore #1 - BLM Plan #	11,491.5	11,467.9	1,987.2	1,906.3	24.586	CC
Nina Cortell Fed Com #204H - Wellbore #1 - BLM Plan #	22,191.7	22,363.4	1,997.8	1,649.1	5.730	ES, SF
Nina Cortell Fed Com #211H - Wellbore #1 - BLM Plan #	1,500.0	1,500.0	29.8	19.5	2.891	CC
Nina Cortell Fed Com #211H - Wellbore #1 - BLM Plan #	1,600.0	1,600.1	29.9	18.9	2.718	ES
Nina Cortell Fed Com #211H - Wellbore #1 - BLM Plan #	1,700.0	1,700.0	30.8	19.1	2.636	SF
Nina Cortell Fed Com #221H - Wellbore #1 - BLM Plan #	1,943.9	1,943.6	27.3	14.0	2.050	CC, ES, SF
Nina Cortell Fed Com #222H - Wellbore #1 - BLM Plan #	1,000.0	999.0	30.0	23.3	4.475	CC
Nina Cortell Fed Com #222H - Wellbore #1 - BLM Plan #	11,500.0	11,503.5	100.2	19.0	1.235	Level 2, ES, SF
Nina Cortell Fed Com #223H - Wellbore #1 - BLM Plan #	22,191.7	22,789.0	1,419.8	1,087.7	4.276	CC, ES, SF
Nina Cortell Fed Com #224H - Wellbore #1 - BLM Plan #	3,118.2	2,809.8	2,364.7	2,344.2	115.632	CC
Nina Cortell Fed Com #224H - Wellbore #1 - BLM Plan #	7,131.4	6,803.3	2,368.9	2,319.0	47.396	ES
Nina Cortell Fed Com #224H - Wellbore #1 - BLM Plan #	22,191.7	22,842.3	2,693.5	2,348.7	7.813	SF

Offset Design

Nina Cortell - Nina Cortell Fed Com #111H - Wellbore #1 - BLM Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.0	-1.0	0.0	0.0	74.17	31.2	109.9	114.3				
100.0	100.0	101.0	99.0	0.1	0.1	74.17	31.2	109.9	114.3	114.0	0.26	439.704	
200.0	200.0	201.0	199.0	0.5	0.5	74.17	31.2	109.9	114.3	113.3	0.98	116.986	
300.0	300.0	301.0	299.0	0.8	0.8	74.17	31.2	109.9	114.3	112.6	1.69	67.468	
400.0	400.0	401.0	399.0	1.2	1.2	74.17	31.2	109.9	114.3	111.9	2.41	47.403	
500.0	500.0	499.0	499.0	1.6	1.6	74.17	31.2	109.9	114.3	111.2	3.12	36.621	
600.0	600.0	607.3	607.2	1.9	1.9	73.98	30.4	106.0	110.6	106.7	3.89	28.390	
700.0	700.0	714.6	713.8	2.3	2.3	73.35	28.2	94.2	99.4	94.7	4.69	21.181	
800.0	800.0	814.1	812.0	2.6	2.7	72.25	25.3	78.9	83.9	78.5	5.38	15.587	
900.0	900.0	912.8	909.6	3.0	3.1	70.66	22.4	63.8	68.4	62.3	6.07	11.264	
1,000.0	1,000.0	1,011.6	1,007.1	3.4	3.5	68.14	19.5	48.6	53.0	46.2	6.77	7.828	
1,100.0	1,100.0	1,110.4	1,104.7	3.7	3.9	63.57	16.6	33.4	37.7	30.3	7.48	5.047	
1,200.0	1,200.0	1,209.1	1,202.2	4.1	4.3	53.04	13.7	18.2	23.0	14.8	8.21	2.805	
1,300.0	1,300.0	1,307.9	1,299.8	4.4	4.7	15.70	10.8	3.0	11.3	2.2	9.11	1.237	Level 2
1,332.4	1,332.4	1,339.9	1,331.4	4.5	4.9	-10.78	9.9	-1.9	10.1	0.6	9.42	1.068	Level 2, CC, ES, SF
1,400.0	1,400.0	1,406.7	1,397.3	4.8	5.2	-56.84	7.9	-12.1	14.6	4.8	9.77	1.493	Level 3
1,500.0	1,500.0	1,505.4	1,494.9	5.1	5.6	-79.54	5.0	-27.3	28.1	17.7	10.37	2.708	
1,600.0	1,600.0	1,604.1	1,592.3	5.5	6.0	169.19	2.2	-42.5	43.9	32.9	11.04	3.975	
1,700.0	1,700.0	1,702.4	1,689.5	5.8	6.4	166.12	-0.7	-57.6	61.7	50.0	11.73	5.261	
1,800.0	1,799.9	1,800.5	1,786.3	6.2	6.9	164.74	-3.6	-72.7	81.3	68.8	12.42	6.542	
1,900.0	1,899.7	1,898.2	1,882.8	6.5	7.3	164.14	-6.5	-87.7	102.5	89.4	13.12	7.813	
2,000.0	1,999.4	2,004.4	1,979.0	6.9	7.7	163.94	-9.3	-102.6	125.4	111.5	13.85	9.051	
2,100.0	2,098.9	2,107.5	2,074.7	7.2	8.2	163.98	-12.1	-117.5	149.9	135.3	14.57	10.284	
2,200.0	2,198.3	2,189.0	2,170.1	7.6	8.5	164.14	-15.0	-132.4	176.0	160.8	15.22	11.566	
2,300.0	2,297.4	2,285.1	2,265.0	8.0	9.0	164.37	-17.8	-147.1	203.7	187.8	15.92	12.801	
2,400.0	2,396.4	2,380.9	2,359.6	8.3	9.4	164.67	-20.6	-161.9	232.3	215.7	16.62	13.981	
2,500.0	2,495.5	2,476.8	2,454.3	8.7	9.8	164.90	-23.4	-176.6	260.9	243.5	17.31	15.066	
2,600.0	2,594.5	2,572.6	2,548.9	9.1	10.2	165.09	-26.2	-191.3	289.4	271.4	18.02	16.065	
2,700.0	2,693.5	2,668.4	2,643.6	9.5	10.6	165.24	-29.0	-206.0	318.0	299.3	18.72	16.987	
2,800.0	2,792.5	2,764.2	2,738.2	9.9	11.1	165.37	-31.8	-220.8	346.6	327.1	19.42	17.842	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
2,900.0	2,891.6	2,860.1	2,832.9	10.3	11.5	165.48	-34.6	-235.5	375.1	355.0	20.13	18.635	
3,000.0	2,990.6	2,955.9	2,927.5	10.7	11.9	165.57	-37.4	-250.2	403.7	382.9	20.84	19.374	
3,100.0	3,089.6	3,051.7	3,022.2	11.0	12.3	165.65	-40.2	-264.9	432.3	410.7	21.55	20.063	
3,200.0	3,188.6	3,147.6	3,116.8	11.4	12.7	165.72	-43.0	-279.7	460.9	438.6	22.26	20.707	
3,300.0	3,287.7	3,243.4	3,211.5	11.8	13.1	165.78	-45.8	-294.4	489.4	466.5	22.97	21.311	
3,400.0	3,386.7	3,339.2	3,306.1	12.2	13.6	165.84	-48.6	-309.1	518.0	494.3	23.68	21.877	
3,500.0	3,485.7	3,435.0	3,400.8	12.7	14.0	165.89	-51.4	-323.8	546.6	522.2	24.39	22.410	
3,600.0	3,584.8	3,530.9	3,495.4	13.1	14.4	165.93	-54.2	-338.6	575.2	550.1	25.10	22.912	
3,700.0	3,683.8	3,626.7	3,590.1	13.5	14.8	165.97	-57.0	-353.3	603.7	577.9	25.82	23.385	
3,800.0	3,782.8	3,722.5	3,684.7	13.9	15.2	166.01	-59.8	-368.0	632.3	605.8	26.53	23.833	
3,900.0	3,881.8	3,818.4	3,779.4	14.3	15.7	166.04	-62.6	-382.8	660.9	633.6	27.25	24.256	
4,000.0	3,980.9	3,914.2	3,874.0	14.7	16.1	166.07	-65.4	-397.5	689.5	661.5	27.96	24.658	
4,100.0	4,079.9	4,010.0	3,968.7	15.1	16.5	166.10	-68.2	-412.2	718.0	689.4	28.68	25.039	
4,200.0	4,178.9	4,105.9	4,063.3	15.5	16.9	166.13	-71.0	-426.9	746.6	717.2	29.39	25.400	
4,300.0	4,277.9	4,201.7	4,158.0	15.9	17.4	166.15	-73.9	-441.7	775.2	745.1	30.11	25.745	
4,400.0	4,377.0	4,302.5	4,252.6	16.3	17.8	166.17	-76.7	-456.4	803.8	772.9	30.85	26.057	
4,500.0	4,476.0	4,406.7	4,347.3	16.7	18.2	166.20	-79.5	-471.1	832.3	800.7	31.60	26.344	
4,600.0	4,575.0	4,489.2	4,441.9	17.1	18.6	166.22	-82.3	-485.8	860.9	828.7	32.26	26.684	
4,700.0	4,674.0	4,585.0	4,536.5	17.6	19.0	166.23	-85.1	-500.6	889.5	856.5	32.98	26.970	
4,800.0	4,773.1	4,680.8	4,631.2	18.0	19.5	166.25	-87.9	-515.3	918.1	884.4	33.70	27.242	
4,900.0	4,872.1	4,776.7	4,725.8	18.4	19.9	166.27	-90.7	-530.0	946.7	912.2	34.42	27.504	
5,000.0	4,971.1	4,872.5	4,820.5	18.8	20.3	166.28	-93.5	-544.7	975.2	940.1	35.14	27.754	
5,100.0	5,070.2	4,968.3	4,915.1	19.2	20.7	166.30	-96.3	-559.5	1,003.8	967.9	35.86	27.994	
5,200.0	5,169.2	5,064.1	5,009.8	19.6	21.1	166.31	-99.1	-574.2	1,032.4	995.8	36.58	28.224	
5,300.0	5,268.2	5,160.0	5,104.4	20.0	21.6	166.32	-101.9	-588.9	1,061.0	1,023.7	37.30	28.446	
5,400.0	5,367.2	5,255.8	5,199.1	20.5	22.0	166.34	-104.7	-603.6	1,089.5	1,051.5	38.02	28.658	
5,500.0	5,466.3	5,351.6	5,293.7	20.9	22.4	166.35	-107.5	-618.4	1,118.1	1,079.4	38.74	28.863	
5,600.0	5,565.3	5,447.5	5,388.4	21.3	22.8	166.36	-110.3	-633.1	1,146.7	1,107.2	39.46	29.060	
5,700.0	5,664.3	5,543.3	5,483.0	21.7	23.2	166.37	-113.1	-647.8	1,175.3	1,135.1	40.18	29.250	
5,800.0	5,763.3	5,639.1	5,577.7	22.1	23.7	166.38	-115.9	-662.6	1,203.9	1,162.9	40.90	29.433	
5,900.0	5,862.4	5,734.9	5,672.3	22.5	24.1	166.39	-118.7	-677.3	1,232.4	1,190.8	41.62	29.609	
6,000.0	5,961.4	5,830.8	5,767.0	23.0	24.5	166.40	-121.5	-692.0	1,261.0	1,218.7	42.34	29.780	
6,100.0	6,060.4	5,926.6	5,861.6	23.4	24.9	166.41	-124.3	-706.7	1,289.6	1,246.5	43.07	29.944	
6,200.0	6,159.4	6,022.4	5,956.3	23.8	25.3	166.41	-127.1	-721.5	1,318.2	1,274.4	43.79	30.103	
6,300.0	6,258.5	6,118.3	6,050.9	24.2	25.8	166.42	-129.9	-736.2	1,346.7	1,302.2	44.51	30.257	
6,400.0	6,357.5	6,214.1	6,145.6	24.6	26.2	166.43	-132.7	-750.9	1,375.3	1,330.1	45.23	30.405	
6,500.0	6,456.5	6,309.9	6,240.2	25.1	26.6	166.44	-135.5	-765.6	1,403.9	1,357.9	45.96	30.549	
6,600.0	6,555.6	6,405.8	6,334.9	25.5	27.0	166.44	-138.3	-780.4	1,432.5	1,385.8	46.68	30.688	
6,700.0	6,654.6	6,501.6	6,429.5	25.9	27.4	166.45	-141.1	-795.1	1,461.1	1,413.7	47.40	30.823	
6,800.0	6,753.6	6,602.6	6,524.2	26.3	27.9	166.46	-144.0	-809.8	1,489.6	1,441.5	48.14	30.941	
6,900.0	6,852.6	6,706.8	6,618.8	26.7	28.4	166.46	-146.8	-824.5	1,518.2	1,469.3	48.90	31.048	
7,000.0	6,951.7	6,789.1	6,713.5	27.1	28.7	166.47	-149.6	-839.3	1,546.8	1,497.2	49.57	31.204	
7,100.0	7,050.7	6,884.9	6,808.1	27.6	29.1	166.47	-152.4	-854.0	1,575.4	1,525.1	50.29	31.323	
7,131.4	7,081.7	6,915.0	6,837.8	27.7	29.3	166.48	-153.2	-858.6	1,584.3	1,533.8	50.52	31.360	
7,200.0	7,149.8	6,980.9	6,903.0	28.0	29.6	166.54	-155.2	-868.7	1,603.4	1,552.4	51.02	31.428	
7,300.0	7,249.2	7,077.5	6,998.4	28.4	30.0	166.62	-158.0	-883.6	1,629.0	1,577.3	51.74	31.485	
7,400.0	7,348.9	7,174.8	7,094.5	28.8	30.4	166.66	-160.8	-898.5	1,652.2	1,599.8	52.46	31.494	
7,500.0	7,448.7	7,272.6	7,191.1	29.1	30.8	166.67	-163.7	-913.6	1,673.0	1,619.8	53.18	31.456	
7,600.0	7,548.7	7,370.9	7,288.2	29.5	31.3	166.65	-166.6	-928.7	1,691.2	1,637.3	53.90	31.375	
7,664.7	7,613.3	7,434.7	7,351.2	29.7	31.5	-89.47	-168.5	-938.5	1,701.6	1,647.3	54.36	31.302	
7,700.0	7,648.7	7,469.6	7,385.6	29.8	31.7	-89.51	-169.5	-943.8	1,707.1	1,652.4	54.61	31.259	
7,800.0	7,748.7	7,568.4	7,483.2	30.1	32.1	-89.61	-172.4	-959.0	1,722.4	1,667.1	55.31	31.139	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
7,900.0	7,848.7	7,667.1	7,580.7	30.4	32.6	-89.71	-175.3	-974.2	1,737.8	1,681.7	56.02	31.022	
8,000.0	7,948.7	7,765.9	7,678.3	30.7	33.0	-89.81	-178.1	-989.4	1,753.1	1,696.4	56.72	30.908	
8,100.0	8,048.7	7,864.7	7,775.8	31.0	33.4	-89.91	-181.0	-1,004.6	1,768.5	1,711.1	57.43	30.796	
8,200.0	8,148.7	7,963.4	7,873.4	31.4	33.9	-90.00	-183.9	-1,019.7	1,783.9	1,725.7	58.13	30.686	
8,300.0	8,248.7	8,062.2	7,971.0	31.7	34.3	-90.09	-186.8	-1,034.9	1,799.2	1,740.4	58.84	30.579	
8,400.0	8,348.7	8,161.0	8,068.5	32.0	34.7	-90.19	-189.7	-1,050.1	1,814.6	1,755.1	59.54	30.475	
8,500.0	8,448.7	8,259.8	8,166.1	32.3	35.2	-90.28	-192.6	-1,065.3	1,830.0	1,769.8	60.25	30.373	
8,600.0	8,548.7	8,358.5	8,263.6	32.6	35.6	-90.36	-195.5	-1,080.5	1,845.4	1,784.4	60.96	30.273	
8,700.0	8,648.7	8,457.3	8,361.2	33.0	36.0	-90.45	-198.4	-1,095.6	1,860.8	1,799.1	61.67	30.175	
8,800.0	8,748.7	8,556.1	8,458.7	33.3	36.5	-90.54	-201.3	-1,110.8	1,876.2	1,813.8	62.37	30.079	
8,900.0	8,848.7	8,656.9	8,561.7	33.6	37.9	-90.70	-206.9	-1,140.4	1,883.4	1,818.9	64.51	29.194	
9,000.0	8,948.7	8,756.9	8,661.7	33.9	38.2	-90.70	-206.9	-1,140.4	1,883.4	1,818.2	65.17	28.898	
9,100.0	9,048.7	8,856.9	8,761.7	34.3	38.5	-90.70	-206.9	-1,140.4	1,883.4	1,817.6	65.83	28.608	
9,200.0	9,148.7	8,956.9	8,861.7	34.6	38.8	-90.70	-206.9	-1,140.4	1,883.4	1,816.9	66.50	28.323	
9,300.0	9,248.7	9,056.9	8,961.7	34.9	39.0	-90.70	-206.9	-1,140.4	1,883.4	1,816.2	67.16	28.044	
9,400.0	9,348.7	9,156.9	9,061.7	35.2	39.3	-90.70	-206.9	-1,140.4	1,883.4	1,815.6	67.82	27.769	
9,500.0	9,448.7	9,256.9	9,161.7	35.6	39.6	-90.70	-206.9	-1,140.4	1,883.4	1,814.9	68.49	27.499	
9,600.0	9,548.7	9,356.9	9,261.7	35.9	39.8	-90.57	-202.5	-1,141.0	1,884.2	1,815.1	69.08	27.278	
9,700.0	9,648.7	9,456.9	9,361.7	36.2	40.0	-90.19	-190.0	-1,142.7	1,886.7	1,817.0	69.63	27.094	
9,800.0	9,748.7	9,556.9	9,461.7	36.5	40.2	-89.61	-171.0	-1,145.3	1,891.0	1,820.8	70.15	26.957	
9,900.0	9,848.7	9,656.9	9,561.7	36.9	40.3	-88.90	-147.7	-1,148.6	1,897.5	1,826.9	70.60	26.876	
10,000.0	9,948.7	9,756.9	9,661.7	37.2	40.5	-88.12	-121.7	-1,152.2	1,906.6	1,835.6	70.98	26.859	
10,100.0	10,048.7	9,856.9	9,761.7	37.5	40.6	-87.31	-94.8	-1,155.9	1,918.6	1,847.3	71.28	26.918	
10,200.0	10,148.7	9,956.9	9,861.7	37.9	40.6	-86.61	-71.1	-1,159.2	1,933.8	1,862.3	71.43	27.071	
10,300.0	10,248.7	10,056.9	9,961.7	38.2	40.7	-85.61	-37.4	-1,163.9	1,952.4	1,880.8	71.59	27.274	
10,400.0	10,348.7	10,156.9	10,061.7	38.5	40.8	-85.05	-18.4	-1,166.5	1,974.6	1,903.1	71.50	27.619	
10,500.0	10,448.7	10,256.9	10,161.7	38.9	40.8	-84.52	-0.6	-1,169.0	2,000.6	1,929.3	71.29	28.062	
10,600.0	10,548.7	10,356.9	10,261.7	39.2	40.9	-83.78	24.7	-1,172.5	2,030.2	1,959.1	71.07	28.567	
10,700.0	10,648.7	10,456.9	10,361.7	39.5	40.9	-83.37	38.9	-1,174.5	2,063.6	1,992.9	70.64	29.211	
10,800.0	10,748.7	10,556.9	10,461.7	39.9	40.9	-82.73	61.1	-1,177.5	2,100.6	2,030.3	70.22	29.912	
10,900.0	10,848.7	10,656.9	10,561.7	40.2	41.0	-82.16	80.9	-1,180.3	2,141.1	2,071.4	69.72	30.712	
11,000.0	10,948.7	10,756.9	10,661.7	40.5	41.0	-82.16	80.9	-1,180.3	2,185.2	2,116.3	68.94	31.696	
11,100.0	11,048.7	10,856.9	10,761.7	40.9	41.0	-81.48	104.8	-1,183.6	2,232.3	2,164.0	68.37	32.649	
11,200.0	11,148.7	10,956.9	10,861.7	41.2	41.0	-80.90	125.0	-1,186.4	2,282.8	2,215.0	67.74	33.698	
11,300.0	11,248.7	11,056.9	10,961.7	41.5	41.0	-80.90	125.0	-1,186.4	2,336.1	2,269.2	66.87	34.932	
11,400.0	11,348.7	11,156.9	11,061.7	41.9	41.0	-80.90	125.0	-1,186.4	2,392.3	2,326.3	65.99	36.253	
11,423.3	11,372.0	11,173.3	11,084.2	42.0	41.1	-80.46	140.8	-1,188.6	2,405.6	2,339.7	65.96	36.472	
11,450.0	11,398.6	11,200.0	11,111.7	42.0	41.1	-78.06	143.5	-1,189.0	2,421.1	2,355.4	65.75	36.822	
11,500.0	11,448.7	11,226.4	11,137.7	42.2	41.1	-74.47	149.1	-1,189.8	2,450.0	2,384.7	65.36	37.483	
11,550.0	11,497.6	11,250.0	11,161.0	42.4	41.1	-70.65	170.9	-1,192.8	2,478.8	2,413.7	65.12	38.066	
11,600.0	11,545.9	11,250.0	11,161.0	42.5	41.1	-67.51	170.9	-1,192.8	2,506.7	2,442.0	64.67	38.763	
11,650.0	11,592.8	11,250.0	11,161.0	42.6	41.1	-64.55	170.9	-1,192.8	2,533.9	2,469.7	64.22	39.455	
11,700.0	11,638.0	11,250.0	11,161.0	42.8	41.1	-61.80	170.9	-1,192.8	2,560.2	2,496.4	63.79	40.137	
11,750.0	11,681.2	11,250.0	11,161.0	42.9	41.1	-59.25	170.9	-1,192.8	2,585.4	2,522.0	63.36	40.803	
11,800.0	11,722.1	11,276.4	11,186.3	43.0	41.2	-56.66	195.8	-1,196.2	2,608.9	2,545.7	63.20	41.279	
11,850.0	11,760.3	11,300.0	11,210.6	43.1	41.2	-54.41	218.3	-1,199.4	2,631.2	2,568.2	63.02	41.750	
11,900.0	11,795.5	11,300.0	11,210.6	43.2	41.2	-52.62	218.3	-1,199.4	2,651.6	2,588.9	62.68	42.306	
11,950.0	11,827.6	11,300.0	11,210.6	43.2	41.2	-51.03	218.3	-1,199.4	2,670.3	2,607.9	62.36	42.818	
12,000.0	11,856.1	11,300.0	11,210.6	43.3	41.2	-49.64	218.3	-1,199.4	2,687.3	2,625.2	62.09	43.278	
12,050.0	11,881.0	11,328.8	11,237.2	43.3	41.2	-48.38	246.0	-1,203.2	2,701.8	2,639.7	62.09	43.513	
12,100.0	11,902.0	11,350.0	11,261.1	43.3	41.3	-47.38	266.7	-1,206.1	2,714.5	2,652.4	62.06	43.737	
12,150.0	11,918.9	11,350.0	11,261.1	43.4	41.3	-46.60	266.7	-1,206.1	2,724.8	2,662.9	61.94	43.993	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
12,200.0	11,931.7	10,350.0	10,011.1	43.4	41.3	-46.00	266.7	-1,206.1	2,733.1	2,671.2	61.87	44.175	
12,250.0	11,940.3	10,373.6	10,014.5	43.5	41.3	-45.60	289.9	-1,209.3	2,738.8	2,676.8	62.01	44.168	
12,300.0	11,944.5	10,400.0	10,017.2	43.6	41.4	-45.42	315.8	-1,212.9	2,742.5	2,680.3	62.21	44.085	
12,326.5	11,944.9	10,400.0	10,017.2	43.6	41.4	-45.36	315.8	-1,212.9	2,743.2	2,681.0	62.26	44.063	
12,391.6	11,944.6	10,400.0	10,017.2	43.7	41.4	-45.36	315.8	-1,212.9	2,745.2	2,682.8	62.42	43.977	
12,400.0	11,944.5	10,400.0	10,017.2	43.8	41.4	-45.36	315.8	-1,212.9	2,745.6	2,683.1	62.45	43.966	
12,500.0	11,944.0	10,446.0	10,019.0	44.1	41.5	-45.48	361.3	-1,219.2	2,751.4	2,688.4	63.00	43.673	
12,600.0	11,943.4	10,544.3	10,018.8	44.4	41.8	-45.65	458.9	-1,231.0	2,759.1	2,695.3	63.82	43.236	
12,700.0	11,942.9	10,835.9	10,018.5	44.9	42.8	-45.86	750.0	-1,246.4	2,761.7	2,696.2	65.51	42.156	
12,800.0	11,942.3	10,935.9	10,018.4	45.4	43.3	-45.86	850.0	-1,247.1	2,761.3	2,694.8	66.46	41.548	
12,900.0	11,941.7	11,035.9	10,018.3	45.9	43.8	-45.87	950.0	-1,247.8	2,760.9	2,693.4	67.49	40.905	
13,000.0	11,941.2	11,135.9	10,018.1	46.6	44.4	-45.87	1,049.9	-1,248.5	2,760.5	2,691.9	68.61	40.233	
13,100.0	11,940.6	11,235.9	10,018.0	47.2	45.1	-45.88	1,149.9	-1,249.1	2,760.1	2,690.3	69.81	39.536	
13,200.0	11,940.1	11,335.9	10,017.9	48.0	45.8	-45.88	1,249.9	-1,249.8	2,759.7	2,688.6	71.09	38.821	
13,300.0	11,939.5	11,435.9	10,017.8	48.7	46.5	-45.89	1,349.9	-1,250.5	2,759.3	2,686.9	72.43	38.094	
13,400.0	11,939.0	11,535.9	10,017.7	49.5	47.4	-45.89	1,449.9	-1,251.2	2,758.9	2,685.1	73.85	37.358	
13,500.0	11,938.4	11,635.9	10,017.5	50.4	48.2	-45.90	1,549.9	-1,251.9	2,758.5	2,683.2	75.33	36.618	
13,600.0	11,937.8	11,735.9	10,017.4	51.3	49.1	-45.90	1,649.9	-1,252.5	2,758.1	2,681.2	76.87	35.879	
13,700.0	11,937.3	11,835.9	10,017.3	52.2	50.1	-45.90	1,749.9	-1,253.2	2,757.7	2,679.2	78.47	35.143	
13,800.0	11,936.7	11,935.9	10,017.2	53.1	51.1	-45.91	1,849.9	-1,253.9	2,757.3	2,677.2	80.12	34.413	
13,900.0	11,936.2	12,035.9	10,017.1	54.1	52.1	-45.91	1,949.9	-1,254.6	2,756.9	2,675.1	81.83	33.692	
14,000.0	11,935.6	12,135.9	10,016.9	55.2	53.1	-45.92	2,049.9	-1,255.3	2,756.5	2,673.0	83.58	32.981	
14,100.0	11,935.0	12,235.9	10,016.8	56.2	54.2	-45.92	2,149.9	-1,255.9	2,756.1	2,670.8	85.38	32.283	
14,200.0	11,934.5	12,335.9	10,016.7	57.3	55.3	-45.93	2,249.9	-1,256.6	2,755.7	2,668.5	87.21	31.598	
14,300.0	11,933.9	12,435.9	10,016.6	58.4	56.5	-45.93	2,349.9	-1,257.3	2,755.3	2,666.3	89.09	30.927	
14,400.0	11,933.4	12,535.9	10,016.5	59.5	57.6	-45.94	2,449.9	-1,258.0	2,755.0	2,663.9	91.01	30.272	
14,500.0	11,932.8	12,635.9	10,016.4	60.7	58.8	-45.94	2,549.9	-1,258.7	2,754.6	2,661.6	92.96	29.633	
14,600.0	11,932.3	12,735.9	10,016.2	61.9	60.1	-45.95	2,649.9	-1,259.3	2,754.2	2,659.2	94.94	29.010	
14,700.0	11,931.7	12,835.9	10,016.1	63.1	61.3	-45.95	2,749.9	-1,260.0	2,753.8	2,656.8	96.95	28.404	
14,800.0	11,931.1	12,935.9	10,016.0	64.3	62.5	-45.96	2,849.9	-1,260.7	2,753.4	2,654.4	98.99	27.814	
14,900.0	11,930.6	13,035.9	10,015.9	65.5	63.8	-45.96	2,949.9	-1,261.4	2,753.0	2,651.9	101.06	27.241	
15,000.0	11,930.0	13,135.9	10,015.8	66.8	65.1	-45.97	3,049.9	-1,262.1	2,752.6	2,649.4	103.16	26.684	
15,100.0	11,929.5	13,235.8	10,015.6	68.1	66.4	-45.97	3,149.9	-1,262.7	2,752.2	2,646.9	105.27	26.143	
15,200.0	11,928.9	13,335.8	10,015.5	69.4	67.7	-45.98	3,249.9	-1,263.4	2,751.8	2,644.4	107.42	25.618	
15,300.0	11,928.3	13,435.8	10,015.4	70.7	69.1	-45.98	3,349.9	-1,264.1	2,751.4	2,641.8	109.58	25.109	
15,400.0	11,927.8	13,535.8	10,015.3	72.0	70.4	-45.99	3,449.9	-1,264.8	2,751.0	2,639.2	111.76	24.615	
15,500.0	11,927.2	13,635.8	10,015.2	73.3	71.8	-45.99	3,549.9	-1,265.4	2,750.6	2,636.7	113.96	24.136	
15,600.0	11,926.7	13,735.8	10,015.1	74.7	73.2	-46.00	3,649.9	-1,266.1	2,750.2	2,634.0	116.18	23.672	
15,700.0	11,926.1	13,835.8	10,014.9	76.0	74.5	-46.00	3,749.9	-1,266.8	2,749.8	2,631.4	118.42	23.221	
15,800.0	11,925.6	13,935.8	10,014.8	77.4	75.9	-46.01	3,849.9	-1,267.5	2,749.4	2,628.8	120.67	22.785	
15,900.0	11,925.0	14,035.8	10,014.7	78.8	77.4	-46.01	3,949.8	-1,268.2	2,749.0	2,626.1	122.94	22.361	
16,000.0	11,924.4	14,135.8	10,014.6	80.2	78.8	-46.02	4,049.8	-1,268.8	2,748.6	2,623.4	125.22	21.951	
16,100.0	11,923.9	14,235.8	10,014.5	81.6	80.2	-46.02	4,149.8	-1,269.5	2,748.2	2,620.7	127.51	21.553	
16,200.0	11,923.3	14,335.8	10,014.3	83.0	81.6	-46.02	4,249.8	-1,270.2	2,747.9	2,618.0	129.82	21.166	
16,300.0	11,922.8	14,435.8	10,014.2	84.4	83.1	-46.03	4,349.8	-1,270.9	2,747.5	2,615.3	132.14	20.792	
16,400.0	11,922.2	14,535.8	10,014.1	85.9	84.5	-46.03	4,449.8	-1,271.6	2,747.1	2,612.6	134.47	20.428	
16,500.0	11,921.6	14,635.8	10,014.0	87.3	86.0	-46.04	4,549.8	-1,272.2	2,746.7	2,609.9	136.82	20.076	
16,600.0	11,921.1	14,735.8	10,013.9	88.7	87.4	-46.04	4,649.8	-1,272.9	2,746.3	2,607.1	139.17	19.733	
16,700.0	11,920.5	14,835.8	10,013.8	90.2	88.9	-46.05	4,749.8	-1,273.6	2,745.9	2,604.3	141.53	19.401	
16,800.0	11,920.0	14,935.8	10,013.6	91.7	90.4	-46.05	4,849.8	-1,274.3	2,745.5	2,601.6	143.90	19.079	
16,900.0	11,919.4	15,035.8	10,013.5	93.1	91.9	-46.06	4,949.8	-1,275.0	2,745.1	2,598.9	146.20	18.776	
16,923.5	11,919.3	15,050.3	10,013.5	93.5	92.1	-46.06	4,964.3	-1,275.1	2,745.0	2,598.4	146.64	18.719	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													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		
17,000.0	11,918.8	15,050.3	10,013.5	94.6	92.1	-46.06	4,964.3	-1,275.1	2,746.0	2,598.3	147.73	18.589		
17,100.0	11,918.3	15,050.3	10,013.5	96.1	92.1	-46.06	4,964.3	-1,275.1	2,750.6	2,601.5	149.03	18.457		
17,200.0	11,917.7	15,050.3	10,013.5	97.6	92.1	-46.06	4,964.3	-1,275.1	2,758.7	2,608.5	150.19	18.368		
17,300.0	11,917.2	15,050.3	10,013.5	99.0	92.1	-46.06	4,964.3	-1,275.1	2,770.5	2,619.2	151.22	18.320		
17,400.0	11,916.6	15,050.3	10,013.5	100.5	92.1	-46.06	4,964.3	-1,275.1	2,785.8	2,633.6	152.11	18.314		
17,500.0	11,916.1	15,050.3	10,013.5	102.0	92.1	-46.06	4,964.3	-1,275.1	2,804.5	2,651.7	152.86	18.347		
17,600.0	11,915.5	15,050.3	10,013.5	103.5	92.1	-46.06	4,964.3	-1,275.1	2,826.7	2,673.2	153.48	18.418		
17,700.0	11,914.9	15,050.3	10,013.5	105.1	92.1	-46.06	4,964.3	-1,275.1	2,852.2	2,698.3	153.95	18.526		
17,800.0	11,914.4	15,050.3	10,013.5	106.6	92.1	-46.06	4,964.3	-1,275.1	2,881.0	2,726.7	154.30	18.671		
17,900.0	11,913.8	15,050.3	10,013.5	108.1	92.1	-46.06	4,964.3	-1,275.1	2,912.9	2,758.4	154.53	18.850		
18,000.0	11,913.3	15,050.3	10,013.5	109.6	92.1	-46.06	4,964.3	-1,275.1	2,947.9	2,793.2	154.64	19.063		
18,100.0	11,912.7	15,050.3	10,013.5	111.1	92.1	-46.06	4,964.3	-1,275.1	2,985.8	2,831.2	154.65	19.307		
18,200.0	11,912.1	15,050.3	10,013.5	112.7	92.1	-46.06	4,964.3	-1,275.1	3,026.5	2,872.0	154.55	19.583		
18,300.0	11,911.6	15,050.3	10,013.5	114.2	92.1	-46.06	4,964.3	-1,275.1	3,070.0	2,915.6	154.36	19.888		
18,400.0	11,911.0	15,050.3	10,013.5	115.7	92.1	-46.06	4,964.3	-1,275.1	3,116.1	2,962.0	154.09	20.222		
18,500.0	11,910.5	15,050.3	10,013.5	117.3	92.1	-46.06	4,964.3	-1,275.1	3,164.6	3,010.9	153.75	20.583		
18,600.0	11,909.9	15,050.3	10,013.5	118.8	92.1	-46.06	4,964.3	-1,275.1	3,215.5	3,062.2	153.34	20.971		
18,700.0	11,909.4	15,050.3	10,013.5	120.4	92.1	-46.06	4,964.3	-1,275.1	3,268.7	3,115.9	152.87	21.383		
18,800.0	11,908.8	15,050.3	10,013.5	121.9	92.1	-46.06	4,964.3	-1,275.1	3,324.1	3,171.7	152.35	21.819		
18,900.0	11,908.2	15,050.3	10,013.5	123.5	92.1	-46.06	4,964.3	-1,275.1	3,381.5	3,229.7	151.79	22.278		
19,000.0	11,907.7	15,050.3	10,013.5	125.0	92.1	-46.06	4,964.3	-1,275.1	3,440.9	3,289.7	151.19	22.759		
19,100.0	11,907.1	15,050.3	10,013.5	126.6	92.1	-46.06	4,964.3	-1,275.1	3,502.1	3,351.5	150.56	23.261		
19,200.0	11,906.6	15,050.3	10,013.5	128.1	92.1	-46.06	4,964.3	-1,275.1	3,565.0	3,415.1	149.90	23.782		
19,300.0	11,906.0	15,050.3	10,013.5	129.7	92.1	-46.06	4,964.3	-1,275.1	3,629.6	3,480.4	149.23	24.322		
19,400.0	11,905.4	15,050.3	10,013.5	131.3	92.1	-46.06	4,964.3	-1,275.1	3,695.8	3,547.3	148.54	24.881		
19,500.0	11,904.9	15,050.3	10,013.5	132.8	92.1	-46.06	4,964.3	-1,275.1	3,763.5	3,615.7	147.85	25.456		
19,600.0	11,904.3	15,050.3	10,013.5	134.4	92.1	-46.06	4,964.3	-1,275.1	3,832.6	3,685.5	147.14	26.048		
19,700.0	11,903.8	15,050.3	10,013.5	136.0	92.1	-46.06	4,964.3	-1,275.1	3,903.1	3,756.7	146.43	26.655		
19,800.0	11,903.2	15,050.3	10,013.5	137.5	92.1	-46.06	4,964.3	-1,275.1	3,974.8	3,829.1	145.72	27.277		
19,900.0	11,902.7	15,050.3	10,013.5	139.1	92.1	-46.06	4,964.3	-1,275.1	4,047.7	3,902.7	145.01	27.912		
20,000.0	11,902.1	15,050.3	10,013.5	140.7	92.1	-46.06	4,964.3	-1,275.1	4,121.8	3,977.4	144.31	28.562		
20,100.0	11,901.5	15,050.3	10,013.5	142.3	92.1	-46.06	4,964.3	-1,275.1	4,196.9	4,053.3	143.61	29.223		
20,200.0	11,901.0	15,050.3	10,013.5	143.8	92.1	-46.06	4,964.3	-1,275.1	4,273.0	4,130.1	142.92	29.897		
20,300.0	11,900.4	15,050.3	10,013.5	145.4	92.1	-46.06	4,964.3	-1,275.1	4,350.1	4,207.9	142.24	30.582		
20,400.0	11,899.9	15,050.3	10,013.5	147.0	92.1	-46.06	4,964.3	-1,275.1	4,428.2	4,286.6	141.57	31.278		
20,500.0	11,899.3	15,050.3	10,013.5	148.6	92.1	-46.06	4,964.3	-1,275.1	4,507.1	4,366.1	140.92	31.984		
20,600.0	11,898.7	15,050.3	10,013.5	150.2	92.1	-46.06	4,964.3	-1,275.1	4,586.8	4,446.5	140.27	32.700		
20,700.0	11,898.2	15,050.3	10,013.5	151.8	92.1	-46.06	4,964.3	-1,275.1	4,667.3	4,527.6	139.63	33.425		
20,800.0	11,897.6	15,050.3	10,013.5	153.4	92.1	-46.06	4,964.3	-1,275.1	4,748.5	4,609.5	139.01	34.159		
20,900.0	11,897.1	15,050.3	10,013.5	155.0	92.1	-46.06	4,964.3	-1,275.1	4,830.5	4,692.1	138.40	34.901		
21,000.0	11,896.5	15,050.3	10,013.5	156.5	92.1	-46.06	4,964.3	-1,275.1	4,913.1	4,775.3	137.81	35.651		
21,100.0	11,896.0	15,050.3	10,013.5	158.1	92.1	-46.06	4,964.3	-1,275.1	4,996.3	4,859.1	137.23	36.408		
21,200.0	11,895.4	15,050.3	10,013.5	159.7	92.1	-46.06	4,964.3	-1,275.1	5,080.2	4,943.5	136.67	37.172		
21,300.0	11,894.8	15,050.3	10,013.5	161.3	92.1	-46.06	4,964.3	-1,275.1	5,164.6	5,028.5	136.11	37.943		
21,400.0	11,894.3	15,050.3	10,013.5	162.9	92.1	-46.06	4,964.3	-1,275.1	5,249.6	5,114.0	135.58	38.720		
21,500.0	11,893.7	15,050.3	10,013.5	164.5	92.1	-46.06	4,964.3	-1,275.1	5,335.1	5,200.0	135.05	39.503		
21,600.0	11,893.2	15,050.3	10,013.5	166.1	92.1	-46.06	4,964.3	-1,275.1	5,421.1	5,286.5	134.55	40.292		
21,700.0	11,892.6	15,050.3	10,013.5	167.7	92.1	-46.06	4,964.3	-1,275.1	5,507.5	5,373.5	134.05	41.085		
21,800.0	11,892.0	15,050.3	10,013.5	169.3	92.1	-46.06	4,964.3	-1,275.1	5,594.4	5,460.9	133.57	41.884		
21,900.0	11,891.5	15,050.3	10,013.5	170.9	92.1	-46.06	4,964.3	-1,275.1	5,681.8	5,548.7	133.10	42.687		
22,000.0	11,890.9	15,050.3	10,013.5	172.5	92.1	-46.06	4,964.3	-1,275.1	5,769.5	5,636.9	132.65	43.495		
22,100.0	11,890.4	15,050.3	10,013.5	174.1	92.1	-46.06	4,964.3	-1,275.1	5,857.7	5,725.5	132.21	44.307		

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design 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
22,191.7	11,890.5	15,050.3	10,013.5	175.6	92.1	-46.05	4,964.3	-1,275.1	5,939.1	5,807.3	131.81	45.057	

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	89.45	1.3	140.0	140.0				
100.0	100.0	101.0	99.0	0.1	0.1	89.45	1.3	140.0	140.0	139.7	0.26	538.620	
200.0	200.0	201.0	199.0	0.5	0.5	89.45	1.3	140.0	140.0	139.0	0.98	143.303	
300.0	300.0	301.0	299.0	0.8	0.8	89.45	1.3	140.0	140.0	138.3	1.69	82.646	
400.0	400.0	401.0	399.0	1.2	1.2	89.45	1.3	140.0	140.0	137.6	2.41	58.067	
500.0	500.0	501.0	499.0	1.6	1.6	89.45	1.3	140.0	140.0	136.9	3.13	44.756	
600.0	600.0	601.0	599.0	1.9	1.9	89.45	1.3	140.0	140.0	136.1	3.84	36.410	
700.0	700.0	701.0	699.0	2.3	2.3	89.45	1.3	140.0	140.0	135.4	4.56	30.688	
800.0	800.0	801.0	799.0	2.6	2.6	89.45	1.3	140.0	140.0	134.7	5.28	26.520	
900.0	900.0	901.0	899.0	3.0	3.0	89.45	1.3	140.0	140.0	134.0	6.00	23.348	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	89.45	1.3	140.0	140.0	133.3	6.71	20.854	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	89.45	1.3	140.0	140.0	132.6	7.43	18.842	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	89.45	1.3	140.0	140.0	131.8	8.15	17.184	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	89.45	1.3	140.0	140.0	131.1	8.86	15.794	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	89.45	1.3	140.0	140.0	130.4	9.58	14.612	
1,500.0	1,500.0	1,499.0	1,499.0	5.1	5.1	89.45	1.3	140.0	140.0	129.7	10.29	13.604	
1,600.0	1,600.0	1,596.9	1,596.9	5.5	5.5	-14.39	1.0	140.7	139.9	128.9	10.97	12.746	
1,700.0	1,700.0	1,694.8	1,694.7	5.8	5.8	-14.17	-0.2	142.9	139.6	128.0	11.64	11.996	
1,800.0	1,799.9	1,792.7	1,792.5	6.2	6.1	-13.82	-2.1	146.6	139.2	126.8	12.30	11.310	
1,900.0	1,899.7	1,890.5	1,890.2	6.5	6.5	-13.31	-4.7	151.8	138.5	125.6	12.97	10.681	
2,000.0	1,999.4	1,988.4	1,987.8	6.9	6.8	-12.66	-8.1	158.5	137.8	124.1	13.64	10.101	
2,100.0	2,098.9	2,086.3	2,085.2	7.2	7.2	-11.85	-12.3	166.7	136.9	122.6	14.31	9.565	
2,200.0	2,198.3	2,184.1	2,182.5	7.6	7.5	-10.88	-17.2	176.3	135.8	120.8	14.98	9.068	
2,300.0	2,297.4	2,281.9	2,279.5	8.0	7.9	-9.74	-22.9	187.4	134.7	119.0	15.65	8.608	
2,400.0	2,396.4	2,381.5	2,378.1	8.3	8.2	-8.44	-29.2	199.7	133.8	117.5	16.34	8.187	
2,500.0	2,495.5	2,481.4	2,477.1	8.7	8.6	-7.11	-35.5	212.1	133.0	116.0	17.05	7.802	
2,600.0	2,594.5	2,581.4	2,576.1	9.1	9.0	-5.76	-41.9	224.5	132.3	114.5	17.75	7.451	
2,700.0	2,693.5	2,681.3	2,675.0	9.5	9.4	-4.40	-48.2	236.9	131.6	113.2	18.46	7.130	
2,800.0	2,792.5	2,781.3	2,774.0	9.9	9.8	-3.03	-54.6	249.3	131.1	111.9	19.17	6.836	
2,900.0	2,891.6	2,881.2	2,873.0	10.3	10.2	-1.65	-60.9	261.6	130.6	110.7	19.89	6.566	
3,000.0	2,990.6	2,981.2	2,972.0	10.7	10.5	-0.26	-67.2	274.0	130.2	109.6	20.60	6.318	
3,100.0	3,089.6	3,081.1	3,070.9	11.0	10.9	1.14	-73.6	286.4	129.8	108.5	21.32	6.090	
3,200.0	3,188.6	3,181.1	3,169.9	11.4	11.3	2.55	-79.9	298.8	129.6	107.5	22.04	5.879	
3,300.0	3,287.7	3,281.0	3,268.9	11.8	11.7	3.96	-86.2	311.2	129.4	106.6	22.76	5.686	
3,400.0	3,386.7	3,381.0	3,367.9	12.2	12.1	5.38	-92.6	323.6	129.3	105.8	23.48	5.506	
3,481.5	3,467.4	3,462.4	3,448.5	12.6	12.5	6.53	-97.7	333.6	129.2	105.2	24.07	5.370	
3,500.0	3,485.7	3,480.9	3,466.8	12.7	12.5	6.79	-98.9	335.9	129.3	105.1	24.20	5.341	
3,600.0	3,584.8	3,580.9	3,565.8	13.1	12.9	8.21	-105.2	348.3	129.3	104.4	24.93	5.188	
3,700.0	3,683.8	3,680.8	3,664.8	13.5	13.4	9.62	-111.6	360.7	129.4	103.8	25.65	5.046	
3,800.0	3,782.8	3,780.8	3,763.8	13.9	13.8	11.03	-117.9	373.1	129.7	103.3	26.38	4.914	
3,900.0	3,881.8	3,880.7	3,862.7	14.3	14.2	12.44	-124.2	385.5	129.9	102.8	27.12	4.792	
4,000.0	3,980.9	3,980.7	3,961.7	14.7	14.6	13.84	-130.6	397.9	130.3	102.5	27.85	4.678	
4,100.0	4,079.9	4,080.6	4,060.7	15.1	15.0	15.22	-136.9	410.2	130.8	102.2	28.59	4.573	
4,200.0	4,178.9	4,180.6	4,159.7	15.5	15.4	16.60	-143.2	422.6	131.3	101.9	29.33	4.475	
4,300.0	4,277.9	4,280.5	4,258.7	15.9	15.8	17.97	-149.6	435.0	131.9	101.8	30.08	4.384	
4,400.0	4,377.0	4,380.5	4,357.6	16.3	16.2	19.32	-155.9	447.4	132.5	101.7	30.83	4.299	
4,500.0	4,476.0	4,480.4	4,456.6	16.7	16.6	20.66	-162.2	459.8	133.3	101.7	31.58	4.220	
4,600.0	4,575.0	4,580.4	4,555.6	17.1	17.0	21.99	-168.6	472.2	134.1	101.8	32.34	4.147	
4,700.0	4,674.0	4,682.6	4,656.9	17.6	17.5	23.36	-174.8	484.3	134.5	101.3	33.14	4.058	
4,800.0	4,773.1	4,786.0	4,759.7	18.0	17.9	24.98	-179.9	494.4	132.4	98.5	33.94	3.902	
4,900.0	4,872.1	4,889.3	4,862.6	18.4	18.3	26.93	-183.8	501.9	127.9	93.2	34.73	3.682	
5,000.0	4,971.1	4,992.1	4,965.3	18.8	18.6	29.38	-186.4	506.9	120.9	85.4	35.51	3.405	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
5,100.0	5,070.2	5,094.5	5,067.6	19.2	19.0	32.58	-187.7	509.5	111.6	75.3	36.29	3.075	
5,200.0	5,169.2	5,204.9	5,168.2	19.6	19.3	36.83	-187.9	509.9	100.5	63.4	37.16	2.705	
5,300.0	5,268.2	5,305.9	5,267.2	20.0	19.7	42.14	-187.9	509.9	89.7	51.6	38.08	2.356	
5,400.0	5,367.2	5,406.9	5,366.2	20.5	20.0	48.82	-187.9	509.9	79.9	40.8	39.08	2.044	
5,500.0	5,466.3	5,507.9	5,465.3	20.9	20.3	57.19	-187.9	509.9	71.5	31.3	40.17	1.778	
5,600.0	5,565.3	5,608.8	5,564.3	21.3	20.7	67.48	-187.9	509.9	64.9	23.6	41.33	1.571	
5,700.0	5,664.3	5,709.8	5,663.3	21.7	21.0	79.55	-187.9	509.9	60.9	18.4	42.46	1.434	Level 3
5,780.1	5,743.7	5,769.5	5,742.7	22.0	21.2	90.00	-187.9	509.9	59.9	16.7	43.18	1.387	Level 3, CC
5,800.0	5,763.3	5,789.2	5,762.3	22.1	21.3	92.62	-187.9	509.9	59.9	16.6	43.35	1.383	Level 3, ES, SF
5,900.0	5,862.4	5,888.3	5,861.4	22.5	21.6	105.43	-187.9	509.9	62.2	18.1	44.04	1.411	Level 3
6,000.0	5,961.4	5,987.3	5,960.4	23.0	21.9	116.84	-187.9	509.9	67.2	22.7	44.53	1.510	
6,100.0	6,060.4	6,086.3	6,059.4	23.4	22.2	126.36	-187.9	509.9	74.6	29.7	44.93	1.661	
6,200.0	6,159.4	6,185.3	6,158.4	23.8	22.6	134.02	-187.9	509.9	83.7	38.3	45.32	1.846	
6,300.0	6,258.5	6,284.4	6,257.5	24.2	22.9	140.11	-187.9	509.9	93.9	48.2	45.76	2.052	
6,400.0	6,357.5	6,383.4	6,356.5	24.6	23.2	144.97	-187.9	509.9	105.0	58.8	46.24	2.271	
6,500.0	6,456.5	6,482.4	6,455.5	25.1	23.6	148.89	-187.9	509.9	116.7	69.9	46.77	2.495	
6,600.0	6,555.6	6,581.4	6,554.6	25.5	23.9	152.08	-187.9	509.9	128.9	81.5	47.34	2.722	
6,700.0	6,654.6	6,680.5	6,653.6	25.9	24.2	154.72	-187.9	509.9	141.3	93.4	47.93	2.949	
6,800.0	6,753.6	6,779.5	6,752.6	26.3	24.6	156.93	-187.9	509.9	154.1	105.5	48.55	3.173	
6,900.0	6,852.6	6,878.5	6,851.6	26.7	24.9	158.80	-187.9	509.9	167.0	117.8	49.18	3.395	
7,000.0	6,951.7	6,977.5	6,950.7	27.1	25.2	160.40	-187.9	509.9	180.0	130.2	49.83	3.613	
7,100.0	7,050.7	7,076.6	7,049.7	27.6	25.6	161.78	-187.9	509.9	193.2	142.7	50.49	3.827	
7,131.4	7,081.7	7,107.6	7,080.7	27.7	25.7	162.18	-187.9	509.9	197.4	146.7	50.70	3.893	
7,200.0	7,149.8	7,175.7	7,148.8	28.0	25.9	162.97	-187.9	509.9	205.9	154.7	51.16	4.025	
7,300.0	7,249.2	7,275.1	7,248.2	28.4	26.2	163.86	-187.9	509.9	216.3	164.4	51.84	4.172	
7,400.0	7,348.9	7,374.7	7,347.9	28.8	26.6	164.47	-187.9	509.9	224.2	171.7	52.52	4.269	
7,500.0	7,448.7	7,474.6	7,447.7	29.1	26.9	164.87	-187.9	509.9	229.6	176.4	53.21	4.315	
7,600.0	7,548.7	7,574.5	7,547.7	29.5	27.3	165.08	-187.9	509.9	232.5	178.6	53.91	4.314	
7,664.7	7,613.3	7,639.2	7,612.3	29.7	27.5	-90.99	-187.9	509.9	233.1	178.7	54.35	4.288	
7,700.0	7,648.7	7,674.5	7,647.7	29.8	27.6	-90.99	-187.9	509.9	233.1	178.5	54.59	4.269	
7,800.0	7,748.7	7,774.5	7,747.7	30.1	27.9	-90.99	-187.9	509.9	233.1	177.8	55.27	4.217	
7,900.0	7,848.7	7,874.5	7,847.7	30.4	28.3	-90.99	-187.9	509.9	233.1	177.1	55.95	4.165	
8,000.0	7,948.7	7,974.5	7,947.7	30.7	28.6	-90.99	-187.9	509.9	233.1	176.4	56.63	4.115	
8,100.0	8,048.7	8,074.5	8,047.7	31.0	29.0	-90.99	-187.9	509.9	233.1	175.7	57.32	4.066	
8,200.0	8,148.7	8,174.5	8,147.7	31.4	29.3	-90.99	-187.9	509.9	233.1	175.1	58.00	4.018	
8,300.0	8,248.7	8,274.5	8,247.7	31.7	29.7	-90.99	-187.9	509.9	233.1	174.4	58.69	3.971	
8,400.0	8,348.7	8,374.5	8,347.7	32.0	30.0	-90.99	-187.9	509.9	233.1	173.7	59.37	3.925	
8,500.0	8,448.7	8,474.5	8,447.7	32.3	30.3	-90.99	-187.9	509.9	233.1	173.0	60.06	3.881	
8,600.0	8,548.7	8,574.5	8,547.7	32.6	30.7	-90.99	-187.9	509.9	233.1	172.3	60.74	3.837	
8,700.0	8,648.7	8,674.5	8,647.7	33.0	31.0	-90.99	-187.9	509.9	233.1	171.6	61.43	3.794	
8,800.0	8,748.7	8,774.5	8,747.7	33.3	31.4	-90.99	-187.9	509.9	233.1	170.9	62.12	3.752	
8,900.0	8,848.7	8,874.5	8,847.7	33.6	31.7	-90.99	-187.9	509.9	233.1	170.2	62.81	3.711	
9,000.0	8,948.7	8,974.5	8,947.7	33.9	32.1	-90.99	-187.9	509.9	233.1	169.6	63.50	3.670	
9,100.0	9,048.7	9,074.5	9,047.7	34.3	32.4	-90.99	-187.9	509.9	233.1	168.9	64.19	3.631	
9,200.0	9,148.7	9,174.5	9,147.7	34.6	32.8	-90.99	-187.9	509.9	233.1	168.2	64.88	3.592	
9,300.0	9,248.7	9,274.5	9,247.7	34.9	33.1	-90.99	-187.9	509.9	233.1	167.5	65.57	3.554	
9,400.0	9,348.7	9,374.5	9,347.7	35.2	33.5	-90.99	-187.9	509.9	233.1	166.8	66.26	3.517	
9,500.0	9,448.7	9,474.5	9,447.7	35.6	33.8	-90.99	-187.9	509.9	233.1	166.1	66.95	3.481	
9,600.0	9,548.7	9,574.5	9,547.7	35.9	34.1	-89.70	-182.7	509.2	233.8	166.3	67.50	3.464	
9,700.0	9,648.7	9,660.9	9,631.6	36.2	34.4	-85.08	-163.5	506.5	237.9	170.1	67.71	3.513	
9,800.0	9,748.7	9,743.7	9,708.9	36.5	34.6	-78.33	-134.2	502.3	248.7	181.4	67.26	3.698	
9,900.0	9,848.7	9,816.7	9,772.8	36.9	34.8	-71.01	-99.4	497.5	270.2	204.5	65.69	4.113	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	9,948.7	9,879.6	9,823.9	37.2	34.9	-64.28	-63.2	492.4	304.4	241.5	62.92	4.838	
10,100.0	10,048.7	9,933.1	9,864.0	37.5	35.0	-58.64	-28.2	487.4	351.0	291.7	59.38	5.912	
10,200.0	10,148.7	9,978.4	9,895.3	37.9	35.1	-54.11	4.3	482.9	408.3	352.7	55.65	7.337	
10,300.0	10,248.7	10,016.8	9,919.7	38.2	35.1	-50.53	33.6	478.8	474.0	421.8	52.13	9.093	
10,400.0	10,348.7	10,050.0	9,939.2	38.5	35.2	-47.66	60.3	475.0	546.1	497.1	49.03	11.138	
10,500.0	10,448.7	10,077.6	9,954.1	38.9	35.2	-45.43	83.2	471.8	623.2	576.9	46.30	13.460	
10,600.0	10,548.7	10,100.0	9,965.5	39.2	35.2	-43.73	102.4	469.1	704.2	660.3	43.91	16.038	
10,700.0	10,648.7	10,122.7	9,976.2	39.5	35.2	-42.10	122.2	466.3	788.1	746.0	42.11	18.716	
10,800.0	10,748.7	10,150.0	9,987.9	39.9	35.3	-40.28	146.6	462.9	874.5	833.5	40.97	21.346	
10,900.0	10,848.7	10,150.0	9,987.9	40.2	35.3	-40.28	146.6	462.9	962.7	923.8	38.83	24.790	
11,000.0	10,948.7	10,171.5	9,996.4	40.5	35.3	-38.93	166.2	460.1	1,052.3	1,014.2	38.07	27.645	
11,100.0	11,048.7	10,184.3	10,001.1	40.9	35.3	-38.17	177.9	458.5	1,143.3	1,106.1	37.16	30.769	
11,200.0	11,148.7	10,200.0	10,006.5	41.2	35.3	-37.27	192.5	456.4	1,235.3	1,198.8	36.57	33.777	
11,300.0	11,248.7	10,200.0	10,006.5	41.5	35.3	-37.27	192.5	456.4	1,328.3	1,292.7	35.62	37.291	
11,400.0	11,348.7	10,200.0	10,006.5	41.9	35.3	-37.27	192.5	456.4	1,422.2	1,387.3	34.87	40.783	
11,423.3	11,372.0	10,217.2	10,011.9	42.0	35.4	-36.33	208.7	454.2	1,443.8	1,408.6	35.22	40.992	
11,450.0	11,398.6	10,219.7	10,012.6	42.0	35.4	-31.83	211.0	453.8	1,468.8	1,433.7	35.11	41.840	
11,500.0	11,448.4	10,224.9	10,014.2	42.2	35.4	-26.11	216.0	453.1	1,514.6	1,479.8	34.85	43.457	
11,550.0	11,497.6	10,231.0	10,015.9	42.4	35.4	-22.06	221.8	452.3	1,559.0	1,524.4	34.57	45.102	
11,600.0	11,545.9	10,250.0	10,020.9	42.5	35.4	-18.97	239.9	449.8	1,601.8	1,567.3	34.55	46.357	
11,650.0	11,592.8	10,250.0	10,020.9	42.6	35.4	-16.83	239.9	449.8	1,642.4	1,608.4	34.02	48.280	
11,700.0	11,638.0	10,250.0	10,020.9	42.8	35.4	-15.15	239.9	449.8	1,681.1	1,647.6	33.48	50.217	
11,750.0	11,681.2	10,250.0	10,020.9	42.9	35.4	-13.82	239.9	449.8	1,717.6	1,684.6	32.94	52.146	
11,800.0	11,722.1	10,271.5	10,025.8	43.0	35.5	-12.73	260.7	446.9	1,751.3	1,718.5	32.83	53.344	
11,850.0	11,760.3	10,281.1	10,027.7	43.1	35.5	-11.87	270.0	445.5	1,782.6	1,750.1	32.47	54.893	
11,900.0	11,795.5	10,300.0	10,031.0	43.2	35.6	-11.19	288.4	443.0	1,811.2	1,778.9	32.28	56.104	
11,950.0	11,827.6	10,300.0	10,031.0	43.2	35.6	-10.62	288.4	443.0	1,836.8	1,805.0	31.79	57.777	
12,000.0	11,856.1	10,300.0	10,031.0	43.3	35.6	-10.16	288.4	443.0	1,859.7	1,828.3	31.36	59.295	
12,050.0	11,881.0	10,322.9	10,034.3	43.3	35.7	-9.83	310.9	439.8	1,879.2	1,847.9	31.28	60.073	
12,100.0	11,902.0	10,350.0	10,036.9	43.3	35.7	-9.61	337.6	436.0	1,896.0	1,864.8	31.26	60.653	
12,150.0	11,918.9	10,350.0	10,036.9	43.4	35.7	-9.38	337.6	436.0	1,909.1	1,878.1	30.99	61.612	
12,200.0	11,931.7	10,350.0	10,036.9	43.4	35.7	-9.21	337.6	436.0	1,919.3	1,888.5	30.82	62.282	
12,250.0	11,940.3	10,367.9	10,037.9	43.5	35.8	-9.16	355.2	433.6	1,926.1	1,895.2	30.85	62.431	
12,300.0	11,944.5	10,393.0	10,038.5	43.6	35.9	-9.20	380.1	430.1	1,929.9	1,898.9	30.97	62.316	
12,326.5	11,944.9	10,393.0	10,038.5	43.6	35.9	-9.19	380.1	430.1	1,930.3	1,899.3	31.00	62.271	
12,327.5	11,944.9	10,393.0	10,038.5	43.6	35.9	-9.19	380.1	430.1	1,930.3	1,899.3	31.00	62.268	
12,391.6	11,944.6	10,428.6	10,038.4	43.7	36.0	-9.32	415.4	425.3	1,931.1	1,899.8	31.26	61.770	
12,400.0	11,944.5	10,437.9	10,038.4	43.8	36.0	-9.35	424.7	424.2	1,931.2	1,899.9	31.31	61.680	
12,500.0	11,944.0	10,550.1	10,038.3	44.1	36.5	-9.67	536.2	412.5	1,932.3	1,900.4	31.90	60.566	
12,600.0	11,943.4	10,662.9	10,038.2	44.4	37.0	-9.86	648.7	405.1	1,932.9	1,900.3	32.56	59.367	
12,700.0	11,942.9	10,776.0	10,038.1	44.9	37.6	-9.92	761.8	402.2	1,932.7	1,899.5	33.26	58.115	
12,800.0	11,942.3	10,875.4	10,038.0	45.4	38.3	-9.92	861.2	401.5	1,932.3	1,898.3	33.97	56.885	
12,900.0	11,941.7	10,975.4	10,037.9	45.9	38.9	-9.93	961.2	400.7	1,931.8	1,897.1	34.74	55.606	
13,000.0	11,941.2	11,075.4	10,037.8	46.6	39.7	-9.93	1,061.2	400.0	1,931.3	1,895.8	35.57	54.291	
13,100.0	11,940.6	11,175.4	10,037.7	47.2	40.5	-9.93	1,161.2	399.2	1,930.9	1,894.4	36.46	52.957	
13,200.0	11,940.1	11,275.4	10,037.6	48.0	41.3	-9.93	1,261.2	398.4	1,930.4	1,893.0	37.40	51.615	
13,300.0	11,939.5	11,375.4	10,037.5	48.7	42.2	-9.93	1,361.2	397.7	1,930.0	1,891.6	38.39	50.276	
13,400.0	11,939.0	11,475.4	10,037.4	49.5	43.1	-9.93	1,461.2	396.9	1,929.5	1,890.1	39.42	48.950	
13,500.0	11,938.4	11,575.4	10,037.3	50.4	44.1	-9.93	1,561.2	396.1	1,929.1	1,888.6	40.49	47.645	
13,600.0	11,937.8	11,675.4	10,037.2	51.3	45.1	-9.93	1,661.2	395.4	1,928.6	1,887.0	41.60	46.365	
13,700.0	11,937.3	11,775.4	10,037.1	52.2	46.1	-9.94	1,761.2	394.6	1,928.1	1,885.4	42.74	45.115	
13,800.0	11,936.7	11,875.4	10,037.0	53.1	47.2	-9.94	1,861.2	393.9	1,927.7	1,883.8	43.91	43.898	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,936.2	11,975.4	10,036.9	54.1	48.3	-9.94	1,961.2	393.1	1,927.2	1,882.1	45.12	42.717	
14,000.0	11,935.6	12,075.4	10,036.8	55.2	49.5	-9.94	2,061.2	392.3	1,926.8	1,880.4	46.35	41.573	
14,100.0	11,935.0	12,175.4	10,036.7	56.2	50.7	-9.94	2,161.2	391.6	1,926.3	1,878.7	47.60	40.468	
14,200.0	11,934.5	12,275.4	10,036.6	57.3	51.9	-9.94	2,261.2	390.8	1,925.8	1,877.0	48.88	39.400	
14,300.0	11,933.9	12,375.4	10,036.5	58.4	53.1	-9.94	2,361.2	390.1	1,925.4	1,875.2	50.18	38.371	
14,400.0	11,933.4	12,475.4	10,036.4	59.5	54.3	-9.94	2,461.2	389.3	1,924.9	1,873.4	51.50	37.379	
14,500.0	11,932.8	12,575.4	10,036.3	60.7	55.6	-9.94	2,561.2	388.5	1,924.5	1,871.6	52.83	36.425	
14,600.0	11,932.3	12,675.4	10,036.1	61.9	56.9	-9.95	2,661.2	387.8	1,924.0	1,869.8	54.19	35.506	
14,700.0	11,931.7	12,775.4	10,036.0	63.1	58.2	-9.95	2,761.2	387.0	1,923.6	1,868.0	55.56	34.622	
14,800.0	11,931.1	12,875.4	10,035.9	64.3	59.5	-9.95	2,861.2	386.2	1,923.1	1,866.2	56.94	33.773	
14,900.0	11,930.6	12,975.4	10,035.8	65.5	60.9	-9.95	2,961.2	385.5	1,922.6	1,864.3	58.34	32.955	
15,000.0	11,930.0	13,075.4	10,035.7	66.8	62.2	-9.95	3,061.2	384.7	1,922.2	1,862.4	59.75	32.170	
15,100.0	11,929.5	13,175.4	10,035.6	68.1	63.6	-9.95	3,161.1	384.0	1,921.7	1,860.6	61.17	31.414	
15,200.0	11,928.9	13,275.4	10,035.5	69.4	65.0	-9.95	3,261.1	383.2	1,921.3	1,858.7	62.61	30.688	
15,300.0	11,928.3	13,375.4	10,035.4	70.7	66.4	-9.95	3,361.1	382.4	1,920.8	1,856.8	64.05	29.989	
15,400.0	11,927.8	13,475.4	10,035.3	72.0	67.8	-9.95	3,461.1	381.7	1,920.4	1,854.8	65.50	29.317	
15,500.0	11,927.2	13,575.4	10,035.2	73.3	69.2	-9.96	3,561.1	380.9	1,919.9	1,852.9	66.97	28.670	
15,600.0	11,926.7	13,675.4	10,035.1	74.7	70.6	-9.96	3,661.1	380.2	1,919.4	1,851.0	68.44	28.047	
15,700.0	11,926.1	13,775.4	10,035.0	76.0	72.1	-9.96	3,761.1	379.4	1,919.0	1,849.1	69.91	27.448	
15,800.0	11,925.6	13,875.4	10,034.9	77.4	73.5	-9.96	3,861.1	378.6	1,918.5	1,847.1	71.40	26.870	
15,900.0	11,925.0	13,975.4	10,034.8	78.8	75.0	-9.96	3,961.1	377.9	1,918.1	1,845.2	72.89	26.314	
16,000.0	11,924.4	14,075.4	10,034.7	80.2	76.5	-9.96	4,061.1	377.1	1,917.6	1,843.2	74.39	25.777	
16,100.0	11,923.9	14,175.4	10,034.6	81.6	77.9	-9.96	4,161.1	376.3	1,917.1	1,841.2	75.90	25.260	
16,200.0	11,923.3	14,275.4	10,034.5	83.0	79.4	-9.96	4,261.1	375.6	1,916.7	1,839.3	77.41	24.761	
16,300.0	11,922.8	14,375.4	10,034.4	84.4	80.9	-9.96	4,361.1	374.8	1,916.2	1,837.3	78.93	24.279	
16,400.0	11,922.2	14,475.4	10,034.3	85.9	82.4	-9.97	4,461.1	374.1	1,915.8	1,835.3	80.45	23.814	
16,500.0	11,921.6	14,575.4	10,034.2	87.3	83.9	-9.97	4,561.1	373.3	1,915.3	1,833.3	81.97	23.365	
16,600.0	11,921.1	14,675.4	10,034.1	88.7	85.4	-9.97	4,661.1	372.5	1,914.9	1,831.4	83.51	22.931	
16,700.0	11,920.5	14,775.4	10,034.0	90.2	86.9	-9.97	4,761.1	371.8	1,914.4	1,829.4	85.04	22.511	
16,800.0	11,920.0	14,875.4	10,033.9	91.7	88.4	-9.97	4,861.1	371.0	1,913.9	1,827.4	86.58	22.106	
16,900.0	11,919.4	14,975.4	10,033.8	93.1	89.9	-9.97	4,961.1	370.3	1,913.5	1,825.4	88.13	21.713	
17,000.0	11,918.8	15,075.4	10,033.7	94.6	91.5	-9.97	5,061.1	369.5	1,913.0	1,823.4	89.67	21.333	
17,100.0	11,918.3	15,175.4	10,033.6	96.1	93.0	-9.97	5,161.1	368.7	1,912.6	1,821.3	91.22	20.966	
17,200.0	11,917.7	15,275.4	10,033.5	97.6	94.5	-9.98	5,261.1	368.0	1,912.1	1,819.3	92.78	20.609	
17,300.0	11,917.2	15,375.4	10,033.4	99.0	96.1	-9.98	5,361.1	367.2	1,911.7	1,817.3	94.34	20.264	
17,400.0	11,916.6	15,475.4	10,033.3	100.5	97.6	-9.98	5,461.1	366.4	1,911.2	1,815.3	95.90	19.930	
17,500.0	11,916.1	15,575.4	10,033.2	102.0	99.2	-9.98	5,561.1	365.7	1,910.7	1,813.3	97.46	19.605	
17,600.0	11,915.5	15,675.4	10,033.1	103.5	100.7	-9.98	5,661.0	364.9	1,910.3	1,811.2	99.03	19.290	
17,700.0	11,914.9	15,775.4	10,033.0	105.1	102.3	-9.98	5,761.0	364.2	1,909.8	1,809.2	100.60	18.985	
17,800.0	11,914.4	15,875.4	10,032.9	106.6	103.8	-9.98	5,861.0	363.4	1,909.4	1,807.2	102.17	18.688	
17,900.0	11,913.8	15,975.4	10,032.8	108.1	105.4	-9.98	5,961.0	362.6	1,908.9	1,805.2	103.74	18.400	
18,000.0	11,913.3	16,075.4	10,032.7	109.6	107.0	-9.98	6,061.0	361.9	1,908.4	1,803.1	105.32	18.120	
18,100.0	11,912.7	16,175.4	10,032.6	111.1	108.5	-9.99	6,161.0	361.1	1,908.0	1,801.1	106.90	17.849	
18,200.0	11,912.1	16,275.4	10,032.5	112.7	110.1	-9.99	6,261.0	360.3	1,907.5	1,799.0	108.48	17.584	
18,300.0	11,911.6	16,375.4	10,032.4	114.2	111.7	-9.99	6,361.0	359.6	1,907.1	1,797.0	110.06	17.327	
18,400.0	11,911.0	16,475.4	10,032.3	115.7	113.2	-9.99	6,461.0	358.8	1,906.6	1,795.0	111.65	17.077	
18,500.0	11,910.5	16,575.4	10,032.2	117.3	114.8	-9.99	6,561.0	358.1	1,906.2	1,792.9	113.23	16.834	
18,600.0	11,909.9	16,675.4	10,032.1	118.8	116.4	-9.99	6,661.0	357.3	1,905.7	1,790.9	114.82	16.597	
18,700.0	11,909.4	16,775.4	10,032.0	120.4	118.0	-9.99	6,761.0	356.5	1,905.2	1,788.8	116.41	16.366	
18,800.0	11,908.8	16,875.4	10,031.9	121.9	119.5	-9.99	6,861.0	355.8	1,904.8	1,786.8	118.01	16.141	
18,900.0	11,908.2	16,975.4	10,031.8	123.5	121.1	-10.00	6,961.0	355.0	1,904.3	1,784.7	119.60	15.923	
19,000.0	11,907.7	17,075.4	10,031.7	125.0	122.7	-10.00	7,061.0	354.3	1,903.9	1,782.7	121.19	15.709	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,907.1	17,175.4	10,031.6	126.6	124.3	-10.00	7,161.0	353.5	1,903.4	1,780.6	122.79	15.501	
19,200.0	11,906.6	17,275.4	10,031.5	128.1	125.9	-10.00	7,261.0	352.7	1,902.9	1,778.6	124.39	15.298	
19,300.0	11,906.0	17,375.4	10,031.4	129.7	127.5	-10.00	7,361.0	352.0	1,902.5	1,776.5	125.99	15.101	
19,400.0	11,905.4	17,475.4	10,031.3	131.3	129.1	-10.00	7,461.0	351.2	1,902.0	1,774.4	127.59	14.907	
19,500.0	11,904.9	17,575.4	10,031.2	132.8	130.7	-10.00	7,561.0	350.4	1,901.6	1,772.4	129.19	14.719	
19,600.0	11,904.3	17,675.4	10,031.1	134.4	132.3	-10.00	7,661.0	349.7	1,901.1	1,770.3	130.79	14.535	
19,700.0	11,903.8	17,775.4	10,031.0	136.0	133.9	-10.00	7,761.0	348.9	1,900.7	1,768.3	132.40	14.356	
19,800.0	11,903.2	17,875.4	10,030.9	137.5	135.5	-10.01	7,861.0	348.2	1,900.2	1,766.2	134.00	14.180	
19,900.0	11,902.7	17,975.4	10,030.8	139.1	137.1	-10.01	7,961.0	347.4	1,899.7	1,764.1	135.61	14.009	
20,000.0	11,902.1	18,075.4	10,030.7	140.7	138.7	-10.01	8,061.0	346.6	1,899.3	1,762.1	137.22	13.841	
20,100.0	11,901.5	18,175.4	10,030.6	142.3	140.3	-10.01	8,160.9	345.9	1,898.8	1,760.0	138.83	13.678	
20,200.0	11,901.0	18,275.4	10,030.5	143.8	141.9	-10.01	8,260.9	345.1	1,898.4	1,757.9	140.44	13.518	
20,300.0	11,900.4	18,375.4	10,030.4	145.4	143.5	-10.01	8,360.9	344.4	1,897.9	1,755.9	142.05	13.361	
20,400.0	11,899.9	18,475.4	10,030.3	147.0	145.1	-10.01	8,460.9	343.6	1,897.5	1,753.8	143.66	13.208	
20,500.0	11,899.3	18,575.4	10,030.2	148.6	146.7	-10.01	8,560.9	342.8	1,897.0	1,751.7	145.27	13.058	
20,600.0	11,898.7	18,675.4	10,030.1	150.2	148.3	-10.02	8,660.9	342.1	1,896.5	1,749.7	146.89	12.912	
20,700.0	11,898.2	18,775.4	10,030.0	151.8	149.9	-10.02	8,760.9	341.3	1,896.1	1,747.6	148.50	12.768	
20,800.0	11,897.6	18,875.4	10,029.9	153.4	151.5	-10.02	8,860.9	340.5	1,895.6	1,745.5	150.11	12.628	
20,900.0	11,897.1	18,975.4	10,029.8	155.0	153.1	-10.02	8,960.9	339.8	1,895.2	1,743.4	151.73	12.490	
21,000.0	11,896.5	19,075.4	10,029.7	156.5	154.7	-10.02	9,060.9	339.0	1,894.7	1,741.4	153.35	12.356	
21,100.0	11,896.0	19,175.3	10,029.6	158.1	156.4	-10.02	9,160.9	338.3	1,894.2	1,739.3	154.96	12.224	
21,200.0	11,895.4	19,275.3	10,029.5	159.7	158.0	-10.02	9,260.9	337.5	1,893.8	1,737.2	156.58	12.094	
21,300.0	11,894.8	19,375.3	10,029.4	161.3	159.6	-10.02	9,360.9	336.7	1,893.3	1,735.1	158.20	11.968	
21,400.0	11,894.3	19,475.3	10,029.3	162.9	161.2	-10.02	9,460.9	336.0	1,892.9	1,733.1	159.82	11.844	
21,500.0	11,893.7	19,575.3	10,029.2	164.5	162.8	-10.03	9,560.9	335.2	1,892.4	1,731.0	161.44	11.722	
21,600.0	11,893.2	19,675.3	10,029.1	166.1	164.4	-10.03	9,660.9	334.5	1,892.0	1,728.9	163.06	11.603	
21,700.0	11,892.6	19,775.3	10,029.0	167.7	166.1	-10.03	9,760.9	333.7	1,891.5	1,726.8	164.68	11.486	
21,800.0	11,892.0	19,875.3	10,028.9	169.3	167.7	-10.03	9,860.9	332.9	1,891.0	1,724.7	166.31	11.371	
21,900.0	11,891.5	19,975.3	10,028.8	170.9	169.3	-10.03	9,960.9	332.2	1,890.6	1,722.7	167.93	11.258	
22,000.0	11,890.9	20,075.3	10,028.7	172.5	170.9	-10.03	10,060.9	331.4	1,890.1	1,720.6	169.55	11.148	
22,100.0	11,890.4	20,175.3	10,028.6	174.1	172.5	-10.03	10,160.9	330.6	1,889.7	1,718.5	171.18	11.039	
22,148.7	11,890.1	20,224.1	10,028.5	174.9	173.3	-10.03	10,209.6	330.3	1,889.4	1,717.6	171.88	10.993	
22,191.7	11,890.5	20,267.1	10,028.5	175.6	173.9	-10.03	10,252.6	329.9	1,889.9	1,717.5	172.41	10.961	

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

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COMPASS 5000.14 Build 83

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	2.0	-2.0	0.0	0.0	89.36	28.8	2,563.1	2,563.3				
100.0	100.0	102.0	98.0	0.1	0.1	89.36	28.8	2,563.1	2,563.3	2,563.0	0.26	9,728.743	
200.0	200.0	202.0	198.0	0.5	0.5	89.36	28.8	2,563.1	2,563.3	2,562.3	0.98	2,614.491	
300.0	300.0	302.0	298.0	0.8	0.9	89.36	28.8	2,563.1	2,563.3	2,561.6	1.70	1,510.166	
400.0	400.0	402.0	398.0	1.2	1.2	89.36	28.8	2,563.1	2,563.3	2,560.9	2.41	1,061.713	
500.0	500.0	502.0	498.0	1.6	1.6	89.36	28.8	2,563.1	2,563.3	2,560.2	3.13	818.619	
600.0	600.0	602.0	598.0	1.9	1.9	89.36	28.8	2,563.1	2,563.3	2,559.5	3.85	666.105	
700.0	700.0	702.0	698.0	2.3	2.3	89.36	28.8	2,563.1	2,563.3	2,558.7	4.57	561.495	
800.0	800.0	802.0	798.0	2.6	2.6	89.36	28.8	2,563.1	2,563.3	2,558.0	5.28	485.282	
900.0	900.0	902.0	898.0	3.0	3.0	89.36	28.8	2,563.1	2,563.3	2,557.3	6.00	427.286	
1,000.0	1,000.0	1,002.0	998.0	3.4	3.4	89.36	28.8	2,563.1	2,563.3	2,556.6	6.72	381.673	
1,100.0	1,100.0	1,102.0	1,098.0	3.7	3.7	89.36	28.8	2,563.1	2,563.3	2,555.9	7.43	344.858	
1,200.0	1,200.0	1,202.0	1,198.0	4.1	4.1	89.36	28.8	2,563.1	2,563.3	2,555.1	8.15	314.521	
1,300.0	1,300.0	1,302.0	1,298.0	4.4	4.4	89.36	28.8	2,563.1	2,563.3	2,554.4	8.87	289.090	
1,400.0	1,400.0	1,402.0	1,398.0	4.8	4.8	89.36	28.8	2,563.1	2,563.3	2,553.7	9.58	267.463	
1,500.0	1,500.0	1,498.0	1,498.0	5.1	5.1	89.36	28.8	2,563.1	2,563.3	2,553.0	10.29	249.194	
1,600.0	1,600.0	1,672.5	1,672.5	5.5	5.7	-14.54	28.1	2,560.6	2,561.0	2,549.8	11.23	228.054	
1,700.0	1,700.0	1,848.0	1,847.8	5.8	6.3	-14.54	26.0	2,553.0	2,554.1	2,542.0	12.15	210.138	
1,800.0	1,799.9	2,022.2	2,021.5	6.2	6.9	-14.54	22.4	2,540.2	2,542.6	2,529.5	13.07	194.498	
1,900.0	1,899.7	2,194.5	2,192.8	6.5	7.6	-14.53	17.5	2,522.6	2,526.5	2,512.5	13.98	180.725	
2,000.0	1,999.4	2,337.2	2,334.3	6.9	8.1	-14.53	12.5	2,504.4	2,506.1	2,491.3	14.79	169.400	
2,100.0	2,098.9	2,434.7	2,430.7	7.2	8.5	-14.56	8.9	2,491.4	2,483.5	2,468.0	15.48	160.468	
2,200.0	2,198.3	2,531.7	2,526.8	7.6	8.8	-14.61	5.2	2,478.3	2,459.3	2,443.1	16.16	152.178	
2,300.0	2,297.4	2,628.3	2,622.5	8.0	9.2	-14.67	1.6	2,465.4	2,433.4	2,416.6	16.85	144.457	
2,400.0	2,396.4	2,724.6	2,717.9	8.3	9.6	-14.67	-2.0	2,452.5	2,406.7	2,389.2	17.53	137.287	
2,500.0	2,495.5	2,821.0	2,813.4	8.7	9.9	-14.67	-5.5	2,439.5	2,380.0	2,361.8	18.22	130.643	
2,600.0	2,594.5	2,917.4	2,908.8	9.1	10.3	-14.66	-9.1	2,426.6	2,353.4	2,334.5	18.91	124.463	
2,700.0	2,693.5	3,013.8	3,004.2	9.5	10.7	-14.66	-12.7	2,413.7	2,326.7	2,307.1	19.60	118.701	
2,800.0	2,792.5	3,110.1	3,099.7	9.9	11.1	-14.66	-16.3	2,400.8	2,300.0	2,279.7	20.30	113.320	
2,900.0	2,891.6	3,206.5	3,195.1	10.3	11.5	-14.66	-19.9	2,387.9	2,273.3	2,252.3	20.99	108.284	
3,000.0	2,990.6	3,302.9	3,290.5	10.7	11.9	-14.65	-23.5	2,374.9	2,246.7	2,225.0	21.69	103.562	
3,100.0	3,089.6	3,399.3	3,386.0	11.0	12.2	-14.65	-27.1	2,362.0	2,220.0	2,197.6	22.40	99.128	
3,200.0	3,188.6	3,504.3	3,481.4	11.4	12.7	-14.65	-30.7	2,349.1	2,193.3	2,170.2	23.13	94.825	
3,300.0	3,287.7	3,592.0	3,576.9	11.8	13.0	-14.65	-34.3	2,336.2	2,166.6	2,142.8	23.80	91.025	
3,400.0	3,386.7	3,688.4	3,672.3	12.2	13.4	-14.64	-37.9	2,323.2	2,140.0	2,115.4	24.51	87.315	
3,500.0	3,485.7	3,784.8	3,767.7	12.7	13.8	-14.64	-41.5	2,310.3	2,113.3	2,088.1	25.22	83.809	
3,600.0	3,584.8	3,881.2	3,863.2	13.1	14.2	-14.64	-45.0	2,297.4	2,086.6	2,060.7	25.92	80.491	
3,700.0	3,683.8	3,977.5	3,958.6	13.5	14.6	-14.64	-48.6	2,284.5	2,059.9	2,033.3	26.63	77.346	
3,800.0	3,782.8	4,073.9	4,054.0	13.9	15.0	-14.63	-52.2	2,271.5	2,033.3	2,005.9	27.34	74.361	
3,900.0	3,881.8	4,170.3	4,149.5	14.3	15.4	-14.63	-55.8	2,258.6	2,006.6	1,978.5	28.05	71.525	
4,000.0	3,980.9	4,266.7	4,244.9	14.7	15.8	-14.63	-59.4	2,245.7	1,979.9	1,951.1	28.77	68.828	
4,100.0	4,079.9	4,363.0	4,340.4	15.1	16.2	-14.62	-63.0	2,232.8	1,953.2	1,923.7	29.48	66.259	
4,200.0	4,178.9	4,459.4	4,435.8	15.5	16.6	-14.62	-66.6	2,219.9	1,926.5	1,896.4	30.19	63.810	
4,300.0	4,277.9	4,555.8	4,531.2	15.9	17.0	-14.62	-70.2	2,206.9	1,899.9	1,869.0	30.91	61.473	
4,400.0	4,377.0	4,652.2	4,626.7	16.3	17.4	-14.61	-73.8	2,194.0	1,873.2	1,841.6	31.62	59.240	
4,500.0	4,476.0	4,748.5	4,722.1	16.7	17.8	-14.61	-77.4	2,181.1	1,846.5	1,814.2	32.34	57.104	
4,600.0	4,575.0	4,844.9	4,817.6	17.1	18.2	-14.61	-81.0	2,168.2	1,819.8	1,786.8	33.05	55.061	
4,700.0	4,674.0	4,941.3	4,913.0	17.6	18.6	-14.60	-84.6	2,155.2	1,793.2	1,759.4	33.77	53.103	
4,800.0	4,773.1	5,037.7	5,008.4	18.0	19.0	-14.60	-88.1	2,142.3	1,766.5	1,732.0	34.48	51.225	
4,900.0	4,872.1	5,134.0	5,103.9	18.4	19.4	-14.60	-91.7	2,129.4	1,739.8	1,704.6	35.20	49.424	
5,000.0	4,971.1	5,230.4	5,199.3	18.8	19.8	-14.59	-95.3	2,116.5	1,713.1	1,677.2	35.92	47.693	
5,100.0	5,070.2	5,326.8	5,294.7	19.2	20.2	-14.59	-98.9	2,103.5	1,686.5	1,649.8	36.64	46.030	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
5,200.0	5,169.2	5,423.2	5,390.2	19.6	20.6	-14.58	-102.5	2,090.6	1,659.8	1,622.4	37.36	44.431	
5,300.0	5,268.2	5,519.6	5,485.6	20.0	21.0	-14.58	-106.1	2,077.7	1,633.1	1,595.0	38.08	42.891	
5,400.0	5,367.2	5,615.9	5,581.1	20.5	21.4	-14.57	-109.7	2,064.8	1,606.4	1,567.6	38.79	41.409	
5,500.0	5,466.3	5,712.3	5,676.5	20.9	21.8	-14.57	-113.3	2,051.9	1,579.8	1,540.2	39.51	39.979	
5,600.0	5,565.3	5,808.7	5,771.9	21.3	22.2	-14.56	-116.9	2,038.9	1,553.1	1,512.8	40.23	38.601	
5,700.0	5,664.3	5,905.1	5,867.4	21.7	22.6	-14.56	-120.5	2,026.0	1,526.4	1,485.4	40.95	37.271	
5,800.0	5,763.3	6,001.4	5,962.8	22.1	23.0	-14.55	-124.1	2,013.1	1,499.7	1,458.1	41.68	35.986	
5,900.0	5,862.4	6,102.2	6,058.3	22.5	23.4	-14.55	-127.7	2,000.2	1,473.1	1,430.6	42.41	34.732	
6,000.0	5,961.4	6,205.8	6,153.7	23.0	23.8	-14.54	-131.2	1,987.2	1,446.4	1,403.2	43.16	33.511	
6,100.0	6,060.4	6,309.4	6,249.1	23.4	24.3	-14.54	-134.8	1,974.3	1,419.7	1,375.8	43.91	32.333	
6,200.0	6,159.4	6,386.9	6,344.6	23.8	24.6	-14.53	-138.4	1,961.4	1,393.0	1,348.5	44.56	31.262	
6,300.0	6,258.5	6,483.3	6,440.0	24.2	25.0	-14.53	-142.0	1,948.5	1,366.3	1,321.1	45.28	30.174	
6,400.0	6,357.5	6,579.7	6,535.4	24.6	25.4	-14.52	-145.6	1,935.5	1,339.7	1,293.7	46.00	29.121	
6,500.0	6,456.5	6,676.1	6,630.9	25.1	25.8	-14.51	-149.2	1,922.6	1,313.0	1,266.3	46.73	28.099	
6,600.0	6,555.6	6,772.4	6,726.3	25.5	26.2	-14.50	-152.8	1,909.7	1,286.3	1,238.9	47.45	27.109	
6,700.0	6,654.6	6,868.8	6,821.8	25.9	26.6	-14.50	-156.4	1,896.8	1,259.6	1,211.5	48.17	26.149	
6,800.0	6,753.6	6,965.2	6,917.2	26.3	27.0	-14.49	-160.0	1,883.9	1,233.0	1,184.1	48.90	25.216	
6,900.0	6,852.6	7,061.6	7,012.6	26.7	27.4	-14.48	-163.6	1,870.9	1,206.3	1,156.7	49.62	24.311	
7,000.0	6,951.7	7,138.0	7,088.4	27.1	27.7	-14.48	-166.3	1,861.2	1,180.3	1,130.0	50.37	23.435	
7,100.0	7,050.7	7,213.0	7,162.9	27.6	28.0	-14.50	-168.5	1,853.1	1,156.2	1,105.1	51.11	22.623	
7,131.4	7,081.7	7,236.6	7,186.4	27.7	28.1	-14.51	-169.1	1,850.9	1,149.0	1,097.7	51.34	22.382	
7,200.0	7,149.8	7,288.7	7,238.3	28.0	28.3	-14.48	-170.4	1,846.4	1,134.5	1,082.7	51.83	21.888	
7,300.0	7,249.2	7,365.3	7,314.7	28.4	28.6	-14.45	-171.9	1,841.0	1,117.1	1,064.5	52.54	21.261	
7,400.0	7,348.9	7,442.7	7,392.0	28.8	28.9	-14.43	-173.0	1,837.1	1,104.1	1,050.8	53.23	20.742	
7,500.0	7,448.7	7,520.7	7,469.9	29.1	29.2	-14.42	-173.6	1,834.7	1,095.5	1,041.6	53.89	20.329	
7,600.0	7,548.7	7,611.7	7,546.7	29.5	29.5	-14.42	-173.9	1,833.8	1,091.5	1,036.9	54.57	20.003	
7,664.7	7,613.3	7,662.1	7,611.3	29.7	29.6	89.48	-173.9	1,833.8	1,091.0	1,036.0	54.95	19.852	
7,700.0	7,648.7	7,702.6	7,646.7	29.8	29.8	89.48	-173.9	1,833.8	1,091.0	1,035.7	55.21	19.761	
7,800.0	7,748.7	7,802.6	7,746.7	30.1	30.1	89.48	-173.9	1,833.8	1,091.0	1,035.1	55.87	19.526	
7,900.0	7,848.7	7,902.6	7,846.7	30.4	30.4	89.48	-173.9	1,833.8	1,091.0	1,034.4	56.54	19.295	
8,000.0	7,948.7	8,002.6	7,946.7	30.7	30.7	89.48	-173.9	1,833.8	1,091.0	1,033.7	57.21	19.070	
8,100.0	8,048.7	8,102.6	8,046.7	31.0	31.0	89.48	-173.9	1,833.8	1,091.0	1,033.1	57.88	18.849	
8,200.0	8,148.7	8,202.6	8,146.7	31.4	31.3	89.48	-173.9	1,833.8	1,091.0	1,032.4	58.55	18.633	
8,300.0	8,248.7	8,302.6	8,246.7	31.7	31.6	89.48	-173.9	1,833.8	1,091.0	1,031.7	59.22	18.422	
8,400.0	8,348.7	8,402.6	8,346.7	32.0	32.0	89.48	-173.9	1,833.8	1,091.0	1,031.1	59.89	18.215	
8,500.0	8,448.7	8,502.6	8,446.7	32.3	32.3	89.48	-173.9	1,833.8	1,091.0	1,030.4	60.57	18.012	
8,600.0	8,548.7	8,602.6	8,546.7	32.6	32.6	89.48	-173.9	1,833.8	1,091.0	1,029.7	61.24	17.814	
8,700.0	8,648.7	8,702.6	8,646.7	33.0	32.9	89.48	-173.9	1,833.8	1,091.0	1,029.0	61.92	17.619	
8,800.0	8,748.7	8,802.6	8,746.7	33.3	33.3	89.48	-173.9	1,833.8	1,091.0	1,028.4	62.60	17.429	
8,900.0	8,848.7	8,902.6	8,846.7	33.6	33.6	89.48	-173.9	1,833.8	1,091.0	1,027.7	63.27	17.242	
9,000.0	8,948.7	9,002.6	8,946.7	33.9	33.9	89.48	-173.9	1,833.8	1,091.0	1,027.0	63.95	17.059	
9,100.0	9,048.7	9,102.6	9,046.7	34.3	34.2	89.48	-173.9	1,833.8	1,091.0	1,026.3	64.63	16.880	
9,200.0	9,148.7	9,202.6	9,146.7	34.6	34.5	89.48	-173.9	1,833.8	1,091.0	1,025.6	65.31	16.704	
9,300.0	9,248.7	9,302.6	9,246.7	34.9	34.9	89.48	-173.9	1,833.8	1,091.0	1,025.0	65.99	16.532	
9,400.0	9,348.7	9,402.6	9,346.7	35.2	35.2	89.48	-173.9	1,833.8	1,091.0	1,024.3	66.67	16.362	
9,500.0	9,448.7	9,497.4	9,446.7	35.6	35.5	89.48	-173.9	1,833.8	1,091.0	1,023.6	67.34	16.201	
9,600.0	9,548.7	9,623.6	9,572.2	35.9	35.9	88.93	-163.5	1,832.4	1,089.9	1,021.9	68.08	16.009	
9,700.0	9,648.7	9,744.5	9,687.6	36.2	36.3	87.08	-128.5	1,827.4	1,086.7	1,017.9	68.77	15.802	
9,800.0	9,748.7	9,847.2	9,778.0	36.5	36.5	84.52	-80.5	1,820.7	1,083.2	1,013.7	69.45	15.596	
9,893.8	9,842.5	9,925.9	9,840.5	36.9	36.7	82.00	-33.3	1,814.1	1,081.7	1,011.6	70.06	15.439 CC	
9,900.0	9,848.7	9,930.5	9,843.9	36.9	36.7	81.84	-30.3	1,813.6	1,081.7	1,011.6	70.10	15.431 ES	
10,000.0	9,948.7	9,996.7	9,890.7	37.2	36.8	79.36	16.0	1,807.1	1,084.3	1,013.7	70.60	15.357	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	10,048.7	10,050.0	9,924.3	37.5	36.9	77.18	57.0	1,801.4	1,092.4	1,021.6	70.84	15.420	
10,200.0	10,148.7	10,091.5	9,947.7	37.9	37.0	75.38	90.9	1,796.6	1,107.0	1,036.2	70.72	15.654	
10,300.0	10,248.7	10,125.6	9,965.0	38.2	37.0	73.85	120.1	1,792.5	1,128.4	1,058.2	70.21	16.073	
10,400.0	10,348.7	10,150.0	9,976.3	38.5	37.1	72.73	141.4	1,789.5	1,156.9	1,087.6	69.30	16.694	
10,500.0	10,448.7	10,177.1	9,987.8	38.9	37.1	71.47	165.8	1,786.1	1,192.1	1,123.9	68.17	17.486	
10,600.0	10,548.7	10,200.0	9,996.5	39.2	37.1	70.39	186.7	1,783.1	1,233.7	1,166.9	66.80	18.468	
10,700.0	10,648.7	10,213.7	10,001.4	39.5	37.2	69.74	199.4	1,781.4	1,281.3	1,216.1	65.16	19.662	
10,800.0	10,748.7	10,228.2	10,006.2	39.9	37.2	69.05	212.9	1,779.5	1,334.2	1,270.8	63.48	21.020	
10,900.0	10,848.7	10,250.0	10,012.7	40.2	37.2	68.01	233.5	1,776.6	1,392.2	1,330.3	61.89	22.493	
11,000.0	10,948.7	10,250.0	10,012.7	40.5	37.2	68.01	233.5	1,776.6	1,454.3	1,394.3	60.00	24.237	
11,100.0	11,048.7	10,250.0	10,012.7	40.9	37.2	68.01	233.5	1,776.6	1,520.4	1,462.2	58.18	26.133	
11,200.0	11,148.7	10,270.2	10,018.1	41.2	37.3	67.04	252.8	1,773.9	1,589.7	1,533.0	56.74	28.016	
11,300.0	11,248.7	10,277.9	10,019.9	41.5	37.3	66.67	260.2	1,772.8	1,662.2	1,606.9	55.22	30.099	
11,400.0	11,348.7	10,300.0	10,024.7	41.9	37.3	65.62	281.6	1,769.8	1,737.4	1,683.4	54.01	32.170	
11,423.3	11,372.0	10,300.0	10,024.7	42.0	37.3	65.62	281.6	1,769.8	1,755.3	1,701.6	53.67	32.706	
11,450.0	11,398.6	10,300.0	10,024.7	42.0	37.3	63.23	281.6	1,769.8	1,775.6	1,722.3	53.28	33.326	
11,500.0	11,448.4	10,300.0	10,024.7	42.2	37.3	58.25	281.6	1,769.8	1,813.2	1,760.7	52.54	34.509	
11,550.0	11,497.6	10,300.0	10,024.7	42.4	37.3	53.77	281.6	1,769.8	1,849.9	1,798.1	51.80	35.713	
11,600.0	11,545.9	10,300.0	10,024.7	42.5	37.3	49.80	281.6	1,769.8	1,885.5	1,834.4	51.06	36.928	
11,650.0	11,592.8	10,300.0	10,024.7	42.6	37.3	46.31	281.6	1,769.8	1,919.7	1,869.4	50.33	38.145	
11,700.0	11,638.0	10,318.1	10,028.0	42.8	37.4	42.83	299.2	1,767.3	1,952.1	1,902.3	49.82	39.186	
11,750.0	11,681.2	10,326.2	10,029.3	42.9	37.4	40.08	307.2	1,766.2	1,982.8	1,933.6	49.20	40.297	
11,800.0	11,722.1	10,350.0	10,032.4	43.0	37.5	37.44	330.5	1,762.9	2,011.6	1,962.9	48.77	41.249	
11,850.0	11,760.3	10,350.0	10,032.4	43.1	37.5	35.60	330.5	1,762.9	2,037.9	1,989.8	48.12	42.351	
11,900.0	11,795.5	10,350.0	10,032.4	43.2	37.5	34.03	330.5	1,762.9	2,062.1	2,014.6	47.52	43.392	
11,950.0	11,827.6	10,350.0	10,032.4	43.2	37.5	32.69	330.5	1,762.9	2,084.0	2,037.0	46.98	44.356	
12,000.0	11,856.1	10,373.9	10,034.6	43.3	37.5	31.32	354.0	1,759.6	2,103.0	2,056.3	46.67	45.062	
12,050.0	11,881.0	10,400.0	10,035.8	43.3	37.6	30.17	379.9	1,756.0	2,119.7	2,073.3	46.40	45.685	
12,100.0	11,902.0	10,400.0	10,035.8	43.3	37.6	29.47	379.9	1,756.0	2,133.3	2,087.2	46.03	46.342	
12,150.0	11,918.9	10,406.2	10,035.9	43.4	37.6	28.88	386.0	1,755.1	2,144.2	2,098.4	45.78	46.836	
12,200.0	11,931.7	10,416.0	10,036.0	43.4	37.6	28.43	395.7	1,753.8	2,152.3	2,106.6	45.62	47.181	
12,250.0	11,940.3	10,456.5	10,035.8	43.5	37.8	27.99	435.9	1,748.4	2,157.1	2,111.4	45.61	47.293	
12,300.0	11,944.5	10,493.1	10,035.7	43.6	37.9	27.79	472.2	1,744.1	2,158.4	2,112.7	45.65	47.281	
12,326.5	11,944.9	10,512.6	10,035.6	43.6	38.0	27.78	491.6	1,741.9	2,157.6	2,111.9	45.70	47.212	
12,391.6	11,944.6	10,560.5	10,035.4	43.7	38.2	27.68	539.3	1,737.3	2,154.8	2,108.9	45.87	46.973	
12,400.0	11,944.5	10,566.7	10,035.4	43.8	38.2	27.67	545.4	1,736.7	2,154.5	2,108.6	45.90	46.941	
12,500.0	11,944.0	10,640.7	10,035.1	44.1	38.5	27.55	619.2	1,731.3	2,151.2	2,105.0	46.27	46.497	
12,600.0	11,943.4	10,714.9	10,034.8	44.4	38.9	27.48	693.3	1,727.7	2,149.2	2,102.5	46.75	45.974	
12,700.0	11,942.9	10,793.6	10,034.5	44.9	39.3	27.46	772.1	1,726.0	2,148.4	2,101.1	47.36	45.359	
12,800.0	11,942.3	10,887.6	10,034.1	45.4	39.8	27.46	866.0	1,725.2	2,148.3	2,100.1	48.15	44.621	
12,900.0	11,941.7	10,987.6	10,033.7	45.9	40.5	27.47	966.0	1,724.5	2,148.1	2,099.1	49.03	43.817	
13,000.0	11,941.2	11,087.6	10,033.3	46.6	41.2	27.47	1,066.0	1,723.7	2,148.0	2,098.0	49.98	42.979	
13,100.0	11,940.6	11,187.6	10,033.0	47.2	41.9	27.47	1,166.0	1,722.9	2,147.9	2,096.9	51.00	42.116	
13,200.0	11,940.1	11,287.6	10,032.6	48.0	42.7	27.47	1,266.0	1,722.1	2,147.7	2,095.6	52.08	41.235	
13,300.0	11,939.5	11,387.6	10,032.2	48.7	43.6	27.48	1,366.0	1,721.4	2,147.6	2,094.4	53.23	40.345	
13,400.0	11,939.0	11,487.6	10,031.8	49.5	44.5	27.48	1,466.0	1,720.6	2,147.5	2,093.0	54.43	39.452	
13,500.0	11,938.4	11,587.6	10,031.4	50.4	45.4	27.48	1,566.0	1,719.8	2,147.3	2,091.6	55.69	38.562	
13,600.0	11,937.8	11,687.6	10,031.0	51.3	46.4	27.48	1,666.0	1,719.0	2,147.2	2,090.2	56.99	37.678	
13,700.0	11,937.3	11,787.6	10,030.6	52.2	47.4	27.49	1,766.0	1,718.2	2,147.0	2,088.7	58.33	36.806	
13,800.0	11,936.7	11,887.6	10,030.2	53.1	48.5	27.49	1,865.9	1,717.5	2,146.9	2,087.2	59.72	35.948	
13,900.0	11,936.2	11,987.6	10,029.8	54.1	49.5	27.49	1,965.9	1,716.7	2,146.8	2,085.6	61.15	35.106	
14,000.0	11,935.6	12,087.6	10,029.5	55.2	50.7	27.49	2,065.9	1,715.9	2,146.6	2,084.0	62.61	34.283	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,935.0	12,187.6	10,029.1	56.2	51.8	27.50	2,165.9	1,715.1	2,146.5	2,082.4	64.11	33.480	
14,200.0	11,934.5	12,287.6	10,028.7	57.3	53.0	27.50	2,265.9	1,714.3	2,146.3	2,080.7	65.64	32.699	
14,300.0	11,933.9	12,387.6	10,028.3	58.4	54.2	27.50	2,365.9	1,713.6	2,146.2	2,079.0	67.20	31.939	
14,400.0	11,933.4	12,487.6	10,027.9	59.5	55.4	27.51	2,465.9	1,712.8	2,146.1	2,077.3	68.78	31.201	
14,500.0	11,932.8	12,587.6	10,027.5	60.7	56.6	27.51	2,565.9	1,712.0	2,145.9	2,075.5	70.39	30.485	
14,600.0	11,932.3	12,687.6	10,027.1	61.9	57.9	27.51	2,665.9	1,711.2	2,145.8	2,073.8	72.03	29.792	
14,700.0	11,931.7	12,787.6	10,026.7	63.1	59.2	27.51	2,765.9	1,710.4	2,145.6	2,072.0	73.68	29.120	
14,800.0	11,931.1	12,887.6	10,026.3	64.3	60.5	27.52	2,865.9	1,709.7	2,145.5	2,070.2	75.36	28.471	
14,900.0	11,930.6	12,987.6	10,025.9	65.5	61.8	27.52	2,965.9	1,708.9	2,145.4	2,068.3	77.05	27.843	
15,000.0	11,930.0	13,087.6	10,025.6	66.8	63.1	27.52	3,065.9	1,708.1	2,145.2	2,066.5	78.77	27.235	
15,100.0	11,929.5	13,187.6	10,025.2	68.1	64.5	27.52	3,165.9	1,707.3	2,145.1	2,064.6	80.50	26.648	
15,200.0	11,928.9	13,287.6	10,024.8	69.4	65.8	27.53	3,265.9	1,706.5	2,145.0	2,062.7	82.24	26.081	
15,300.0	11,928.3	13,387.6	10,024.4	70.7	67.2	27.53	3,365.9	1,705.8	2,144.8	2,060.8	84.00	25.533	
15,400.0	11,927.8	13,487.6	10,024.0	72.0	68.6	27.53	3,465.9	1,705.0	2,144.7	2,058.9	85.78	25.003	
15,500.0	11,927.2	13,587.6	10,023.6	73.3	70.0	27.53	3,565.9	1,704.2	2,144.5	2,057.0	87.57	24.491	
15,600.0	11,926.7	13,687.6	10,023.2	74.7	71.4	27.54	3,665.9	1,703.4	2,144.4	2,055.0	89.36	23.996	
15,700.0	11,926.1	13,787.6	10,022.8	76.0	72.8	27.54	3,765.9	1,702.7	2,144.3	2,053.1	91.18	23.518	
15,800.0	11,925.6	13,887.6	10,022.4	77.4	74.3	27.54	3,865.9	1,701.9	2,144.1	2,051.1	93.00	23.055	
15,900.0	11,925.0	13,987.6	10,022.0	78.8	75.7	27.54	3,965.9	1,701.1	2,144.0	2,049.1	94.83	22.608	
16,000.0	11,924.4	14,087.6	10,021.7	80.2	77.2	27.55	4,065.9	1,700.3	2,143.8	2,047.2	96.67	22.176	
16,100.0	11,923.9	14,187.6	10,021.3	81.6	78.6	27.55	4,165.9	1,699.5	2,143.7	2,045.2	98.53	21.758	
16,200.0	11,923.3	14,287.6	10,020.9	83.0	80.1	27.55	4,265.9	1,698.8	2,143.6	2,043.2	100.39	21.353	
16,300.0	11,922.8	14,387.6	10,020.5	84.4	81.6	27.56	4,365.9	1,698.0	2,143.4	2,041.2	102.25	20.962	
16,400.0	11,922.2	14,487.6	10,020.1	85.9	83.0	27.56	4,465.8	1,697.2	2,143.3	2,039.2	104.13	20.583	
16,500.0	11,921.6	14,587.6	10,019.7	87.3	84.5	27.56	4,565.8	1,696.4	2,143.1	2,037.1	106.01	20.216	
16,600.0	11,921.1	14,687.6	10,019.3	88.7	86.0	27.56	4,665.8	1,695.6	2,143.0	2,035.1	107.91	19.860	
16,700.0	11,920.5	14,787.6	10,018.9	90.2	87.5	27.57	4,765.8	1,694.9	2,142.9	2,033.1	109.80	19.515	
16,800.0	11,920.0	14,887.6	10,018.5	91.7	89.0	27.57	4,865.8	1,694.1	2,142.7	2,031.0	111.71	19.182	
16,900.0	11,919.4	14,987.6	10,018.2	93.1	90.5	27.57	4,965.8	1,693.3	2,142.6	2,029.0	113.62	18.858	
17,000.0	11,918.8	15,087.6	10,017.8	94.6	92.0	27.57	5,065.8	1,692.5	2,142.5	2,026.9	115.53	18.544	
17,100.0	11,918.3	15,187.6	10,017.4	96.1	93.6	27.58	5,165.8	1,691.7	2,142.3	2,024.9	117.45	18.239	
17,200.0	11,917.7	15,287.6	10,017.0	97.6	95.1	27.58	5,265.8	1,691.0	2,142.2	2,022.8	119.38	17.944	
17,300.0	11,917.2	15,387.6	10,016.6	99.0	96.6	27.58	5,365.8	1,690.2	2,142.0	2,020.7	121.31	17.657	
17,400.0	11,916.6	15,487.6	10,016.2	100.5	98.1	27.58	5,465.8	1,689.4	2,141.9	2,018.6	123.25	17.379	
17,500.0	11,916.1	15,587.6	10,015.8	102.0	99.7	27.59	5,565.8	1,688.6	2,141.8	2,016.6	125.19	17.108	
17,600.0	11,915.5	15,687.6	10,015.4	103.5	101.2	27.59	5,665.8	1,687.8	2,141.6	2,014.5	127.14	16.845	
17,700.0	11,914.9	15,787.6	10,015.0	105.1	102.8	27.59	5,765.8	1,687.1	2,141.5	2,012.4	129.09	16.590	
17,800.0	11,914.4	15,887.6	10,014.6	106.6	104.3	27.60	5,865.8	1,686.3	2,141.3	2,010.3	131.04	16.341	
17,900.0	11,913.8	15,987.6	10,014.3	108.1	105.9	27.60	5,965.8	1,685.5	2,141.2	2,008.2	133.00	16.100	
18,000.0	11,913.3	16,087.6	10,013.9	109.6	107.4	27.60	6,065.8	1,684.7	2,141.1	2,006.1	134.96	15.865	
18,100.0	11,912.7	16,187.6	10,013.5	111.1	109.0	27.60	6,165.8	1,684.0	2,140.9	2,004.0	136.92	15.636	
18,200.0	11,912.1	16,287.6	10,013.1	112.7	110.5	27.61	6,265.8	1,683.2	2,140.8	2,001.9	138.89	15.414	
18,300.0	11,911.6	16,387.6	10,012.7	114.2	112.1	27.61	6,365.8	1,682.4	2,140.7	1,999.8	140.86	15.197	
18,400.0	11,911.0	16,487.6	10,012.3	115.7	113.7	27.61	6,465.8	1,681.6	2,140.5	1,997.7	142.84	14.986	
18,500.0	11,910.5	16,587.6	10,011.9	117.3	115.2	27.61	6,565.8	1,680.8	2,140.4	1,995.6	144.81	14.780	
18,600.0	11,909.9	16,687.6	10,011.5	118.8	116.8	27.62	6,665.8	1,680.1	2,140.2	1,993.4	146.79	14.580	
18,700.0	11,909.4	16,787.6	10,011.1	120.4	118.4	27.62	6,765.8	1,679.3	2,140.1	1,991.3	148.78	14.385	
18,800.0	11,908.8	16,887.6	10,010.8	121.9	119.9	27.62	6,865.8	1,678.5	2,140.0	1,989.2	150.76	14.194	
18,900.0	11,908.2	16,987.6	10,010.4	123.5	121.5	27.62	6,965.7	1,677.7	2,139.8	1,987.1	152.75	14.009	
19,000.0	11,907.7	17,087.6	10,010.0	125.0	123.1	27.63	7,065.7	1,676.9	2,139.7	1,984.9	154.74	13.827	
19,100.0	11,907.1	17,187.6	10,009.6	126.6	124.7	27.63	7,165.7	1,676.2	2,139.5	1,982.8	156.74	13.651	
19,200.0	11,906.6	17,287.6	10,009.2	128.1	126.3	27.63	7,265.7	1,675.4	2,139.4	1,980.7	158.73	13.478	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design 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						
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
19,300.0	11,906.0	17,387.6	10,008.8	129.7	127.9	27.64	7,365.7	1,674.6	2,139.3	1,978.5	160.73	13.310	
19,400.0	11,905.4	17,487.6	10,008.4	131.3	129.4	27.64	7,465.7	1,673.8	2,139.1	1,976.4	162.73	13.145	
19,500.0	11,904.9	17,587.6	10,008.0	132.8	131.0	27.64	7,565.7	1,673.0	2,139.0	1,974.3	164.73	12.985	
19,600.0	11,904.3	17,687.6	10,007.6	134.4	132.6	27.64	7,665.7	1,672.3	2,138.8	1,972.1	166.74	12.828	
19,700.0	11,903.8	17,787.6	10,007.2	136.0	134.2	27.65	7,765.7	1,671.5	2,138.7	1,970.0	168.74	12.674	
19,800.0	11,903.2	17,887.6	10,006.9	137.5	135.8	27.65	7,865.7	1,670.7	2,138.6	1,967.8	170.75	12.525	
19,900.0	11,902.7	17,987.6	10,006.5	139.1	137.4	27.65	7,965.7	1,669.9	2,138.4	1,965.7	172.76	12.378	
20,000.0	11,902.1	18,087.6	10,006.1	140.7	139.0	27.65	8,065.7	1,669.2	2,138.3	1,963.5	174.77	12.235	
20,100.0	11,901.5	18,187.6	10,005.7	142.3	140.6	27.66	8,165.7	1,668.4	2,138.2	1,961.4	176.78	12.095	
20,200.0	11,901.0	18,287.6	10,005.3	143.8	142.2	27.66	8,265.7	1,667.6	2,138.0	1,959.2	178.80	11.958	
20,300.0	11,900.4	18,387.6	10,004.9	145.4	143.8	27.66	8,365.7	1,666.8	2,137.9	1,957.1	180.82	11.823	
20,400.0	11,899.9	18,487.6	10,004.5	147.0	145.4	27.66	8,465.7	1,666.0	2,137.7	1,954.9	182.83	11.692	
20,500.0	11,899.3	18,587.6	10,004.1	148.6	147.0	27.67	8,565.7	1,665.3	2,137.6	1,952.7	184.85	11.564	
20,600.0	11,898.7	18,687.6	10,003.7	150.2	148.6	27.67	8,665.7	1,664.5	2,137.5	1,950.6	186.88	11.438	
20,700.0	11,898.2	18,787.6	10,003.4	151.8	150.2	27.67	8,765.7	1,663.7	2,137.3	1,948.4	188.90	11.315	
20,800.0	11,897.6	18,887.6	10,003.0	153.4	151.8	27.68	8,865.7	1,662.9	2,137.2	1,946.3	190.92	11.194	
20,900.0	11,897.1	18,987.6	10,002.6	155.0	153.4	27.68	8,965.7	1,662.1	2,137.0	1,944.1	192.95	11.076	
21,000.0	11,896.5	19,087.6	10,002.2	156.5	155.0	27.68	9,065.7	1,661.4	2,136.9	1,941.9	194.98	10.960	
21,100.0	11,896.0	19,187.6	10,001.8	158.1	156.6	27.68	9,165.7	1,660.6	2,136.8	1,939.8	197.00	10.846	
21,200.0	11,895.4	19,287.6	10,001.4	159.7	158.2	27.69	9,265.7	1,659.8	2,136.6	1,937.6	199.03	10.735	
21,300.0	11,894.8	19,387.6	10,001.0	161.3	159.9	27.69	9,365.7	1,659.0	2,136.5	1,935.4	201.06	10.626	
21,400.0	11,894.3	19,487.6	10,000.6	162.9	161.5	27.69	9,465.7	1,658.2	2,136.4	1,933.3	203.10	10.519	
21,500.0	11,893.7	19,587.6	10,000.2	164.5	163.1	27.69	9,565.6	1,657.5	2,136.2	1,931.1	205.13	10.414	
21,600.0	11,893.2	19,687.6	9,999.8	166.1	164.7	27.70	9,665.6	1,656.7	2,136.1	1,928.9	207.16	10.311	
21,700.0	11,892.6	19,787.6	9,999.5	167.7	166.3	27.70	9,765.6	1,655.9	2,135.9	1,926.7	209.20	10.210	
21,800.0	11,892.0	19,887.6	9,999.1	169.3	167.9	27.70	9,865.6	1,655.1	2,135.8	1,924.6	211.24	10.111	
21,900.0	11,891.5	19,987.6	9,998.7	170.9	169.5	27.70	9,965.6	1,654.3	2,135.7	1,922.4	213.27	10.014	
22,000.0	11,890.9	20,087.6	9,998.3	172.5	171.2	27.71	10,065.6	1,653.6	2,135.5	1,920.2	215.31	9.918	
22,100.0	11,890.4	20,187.6	9,997.9	174.1	172.8	27.71	10,165.6	1,652.8	2,135.4	1,918.0	217.35	9.825	
22,140.6	11,890.1	20,228.2	9,997.7	174.8	173.4	27.71	10,206.3	1,652.5	2,135.3	1,917.2	218.10	9.791	
22,191.7	11,890.5	20,279.3	9,997.5	175.6	174.1	27.70	10,257.3	1,652.1	2,135.8	1,916.9	218.97	9.754 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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	2.0	-2.0	0.0	0.0	88.68	58.9	2,563.0	2,563.7				
100.0	100.0	102.0	98.0	0.1	0.1	88.68	58.9	2,563.0	2,563.7	2,563.4	0.26	9,730.206	
200.0	200.0	202.0	198.0	0.5	0.5	88.68	58.9	2,563.0	2,563.7	2,562.7	0.98	2,614.884	
300.0	300.0	302.0	298.0	0.8	0.9	88.68	58.9	2,563.0	2,563.7	2,562.0	1.70	1,510.393	
400.0	400.0	402.0	398.0	1.2	1.2	88.68	58.9	2,563.0	2,563.7	2,561.3	2.41	1,061.872	
500.0	500.0	502.0	498.0	1.6	1.6	88.68	58.9	2,563.0	2,563.7	2,560.6	3.13	818.742	
600.0	600.0	602.0	598.0	1.9	1.9	88.68	58.9	2,563.0	2,563.7	2,559.8	3.85	666.205	
700.0	700.0	702.0	698.0	2.3	2.3	88.68	58.9	2,563.0	2,563.7	2,559.1	4.57	561.579	
800.0	800.0	802.0	798.0	2.6	2.6	88.68	58.9	2,563.0	2,563.7	2,558.4	5.28	485.355	
900.0	900.0	902.0	898.0	3.0	3.0	88.68	58.9	2,563.0	2,563.7	2,557.7	6.00	427.351	
1,000.0	1,000.0	1,002.0	998.0	3.4	3.4	88.68	58.9	2,563.0	2,563.7	2,557.0	6.72	381.730	
1,100.0	1,100.0	1,102.0	1,098.0	3.7	3.7	88.68	58.9	2,563.0	2,563.7	2,556.3	7.43	344.910	
1,200.0	1,200.0	1,202.0	1,198.0	4.1	4.1	88.68	58.9	2,563.0	2,563.7	2,555.5	8.15	314.568	
1,300.0	1,300.0	1,302.0	1,298.0	4.4	4.4	88.68	58.9	2,563.0	2,563.7	2,554.8	8.87	289.133	
1,400.0	1,400.0	1,402.0	1,398.0	4.8	4.8	88.68	58.9	2,563.0	2,563.7	2,554.1	9.58	267.504	
1,500.0	1,500.0	1,498.0	1,498.0	5.1	5.1	88.68	58.9	2,563.0	2,563.7	2,553.4	10.29	249.232	
1,600.0	1,600.0	1,569.6	1,569.6	5.5	5.4	-15.22	58.7	2,563.4	2,563.4	2,552.5	10.88	235.580	
1,700.0	1,700.0	1,640.6	1,640.6	5.8	5.6	-15.22	58.2	2,564.6	2,562.5	2,551.1	11.46	223.619	
1,800.0	1,799.9	1,711.6	1,711.6	6.2	5.9	-15.22	57.3	2,566.6	2,561.1	2,549.1	12.04	212.791	
1,900.0	1,899.7	1,782.6	1,782.5	6.5	6.1	-15.22	56.1	2,569.4	2,559.2	2,546.6	12.61	202.869	
2,000.0	1,999.4	1,853.7	1,853.5	6.9	6.4	-15.23	54.6	2,573.1	2,556.7	2,543.5	13.20	193.747	
2,100.0	2,098.9	1,924.7	1,924.3	7.2	6.6	-15.23	52.7	2,577.5	2,553.6	2,539.8	13.78	185.335	
2,200.0	2,198.3	2,000.0	1,999.4	7.6	6.9	-15.23	50.4	2,583.1	2,550.0	2,535.6	14.38	177.348	
2,300.0	2,297.4	2,066.9	2,065.9	8.0	7.1	-15.24	48.0	2,588.8	2,545.8	2,530.9	14.95	170.299	
2,400.0	2,396.4	2,138.0	2,136.6	8.3	7.4	-15.23	45.1	2,595.7	2,541.9	2,526.4	15.54	163.603	
2,500.0	2,495.5	2,209.1	2,207.3	8.7	7.6	-15.21	41.8	2,603.4	2,539.2	2,523.1	16.13	157.451	
2,600.0	2,594.5	2,280.3	2,277.9	9.1	7.9	-15.19	38.3	2,611.9	2,537.6	2,520.9	16.72	151.786	
2,700.0	2,693.5	2,372.3	2,369.0	9.5	8.2	-15.14	33.3	2,623.7	2,536.8	2,519.4	17.40	145.819	
2,800.0	2,792.5	2,472.3	2,468.0	9.9	8.6	-15.10	27.9	2,636.5	2,536.1	2,518.0	18.11	140.018	
2,900.0	2,891.6	2,572.3	2,567.0	10.3	9.0	-15.05	22.5	2,649.3	2,535.3	2,516.5	18.83	134.634	
3,000.0	2,990.6	2,672.2	2,666.0	10.7	9.4	-15.00	17.1	2,662.1	2,534.6	2,515.1	19.55	129.627	
3,100.0	3,089.6	2,772.2	2,765.0	11.0	9.7	-14.96	11.7	2,675.0	2,533.9	2,513.6	20.28	124.959	
3,200.0	3,188.6	2,872.2	2,864.0	11.4	10.1	-14.91	6.3	2,687.8	2,533.2	2,512.2	21.00	120.600	
3,300.0	3,287.7	2,972.2	2,963.0	11.8	10.5	-14.87	0.9	2,700.6	2,532.5	2,510.7	21.73	116.522	
3,400.0	3,386.7	3,072.1	3,062.0	12.2	10.9	-14.82	-4.5	2,713.4	2,531.7	2,509.3	22.46	112.699	
3,500.0	3,485.7	3,172.1	3,161.0	12.7	11.3	-14.77	-9.9	2,726.2	2,531.0	2,507.8	23.20	109.108	
3,600.0	3,584.8	3,272.1	3,260.0	13.1	11.7	-14.73	-15.3	2,739.1	2,530.3	2,506.4	23.93	105.731	
3,700.0	3,683.8	3,372.1	3,359.0	13.5	12.1	-14.68	-20.7	2,751.9	2,529.6	2,504.9	24.67	102.550	
3,800.0	3,782.8	3,472.1	3,458.0	13.9	12.5	-14.63	-26.2	2,764.7	2,528.9	2,503.5	25.40	99.547	
3,900.0	3,881.8	3,572.0	3,557.1	14.3	12.9	-14.59	-31.6	2,777.5	2,528.2	2,502.0	26.14	96.710	
4,000.0	3,980.9	3,672.0	3,656.1	14.7	13.3	-14.54	-37.0	2,790.3	2,527.5	2,500.6	26.88	94.026	
4,100.0	4,079.9	3,772.0	3,755.1	15.1	13.7	-14.49	-42.4	2,803.2	2,526.8	2,499.2	27.62	91.481	
4,200.0	4,178.9	3,872.0	3,854.1	15.5	14.1	-14.45	-47.8	2,816.0	2,526.1	2,497.7	28.36	89.067	
4,300.0	4,277.9	3,971.9	3,953.1	15.9	14.5	-14.40	-53.2	2,828.8	2,525.4	2,496.3	29.10	86.774	
4,400.0	4,377.0	4,071.9	4,052.1	16.3	15.0	-14.35	-58.6	2,841.6	2,524.7	2,494.8	29.85	84.592	
4,500.0	4,476.0	4,171.9	4,151.1	16.7	15.4	-14.31	-64.0	2,854.5	2,524.0	2,493.4	30.59	82.515	
4,600.0	4,575.0	4,271.9	4,250.1	17.1	15.8	-14.26	-69.4	2,867.3	2,523.3	2,491.9	31.33	80.535	
4,700.0	4,674.0	4,371.8	4,349.1	17.6	16.2	-14.21	-74.8	2,880.1	2,522.6	2,490.5	32.08	78.645	
4,800.0	4,773.1	4,471.8	4,448.1	18.0	16.6	-14.17	-80.2	2,892.9	2,521.9	2,489.1	32.82	76.840	
4,900.0	4,872.1	4,571.8	4,547.1	18.4	17.0	-14.12	-85.6	2,905.7	2,521.2	2,487.6	33.56	75.114	
5,000.0	4,971.1	4,671.8	4,646.1	18.8	17.4	-14.07	-91.0	2,918.6	2,520.5	2,486.2	34.31	73.462	
5,100.0	5,070.2	4,771.7	4,745.1	19.2	17.8	-14.03	-96.4	2,931.4	2,519.8	2,484.8	35.06	71.879	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
5,200.0	5,169.2	4,871.7	4,844.1	19.6	18.3	-13.98	-101.8	2,944.2	2,519.1	2,483.3	35.80	70.362	
5,300.0	5,268.2	4,971.7	4,943.1	20.0	18.7	-13.93	-107.2	2,957.0	2,518.4	2,481.9	36.55	68.907	
5,400.0	5,367.2	5,071.7	5,042.1	20.5	19.1	-13.89	-112.6	2,969.9	2,517.8	2,480.5	37.30	67.509	
5,500.0	5,466.3	5,171.6	5,141.1	20.9	19.5	-13.84	-118.0	2,982.7	2,517.1	2,479.0	38.04	66.165	
5,600.0	5,565.3	5,271.6	5,240.1	21.3	19.9	-13.79	-123.4	2,995.5	2,516.4	2,477.6	38.79	64.873	
5,700.0	5,664.3	5,371.6	5,339.1	21.7	20.3	-13.74	-128.8	3,008.3	2,515.7	2,476.2	39.54	63.629	
5,800.0	5,763.3	5,471.6	5,438.1	22.1	20.7	-13.70	-134.2	3,021.1	2,515.0	2,474.8	40.28	62.431	
5,900.0	5,862.4	5,571.6	5,537.1	22.5	21.2	-13.65	-139.6	3,034.0	2,514.4	2,473.3	41.03	61.277	
6,000.0	5,961.4	5,671.5	5,636.1	23.0	21.6	-13.60	-145.0	3,046.8	2,513.7	2,471.9	41.78	60.164	
6,100.0	6,060.4	5,771.5	5,736.1	23.4	22.5	-13.55	-155.4	3,071.3	2,510.4	2,467.3	43.08	58.277	
6,200.0	6,159.4	5,871.5	5,836.1	23.8	23.4	-13.64	-159.8	3,081.8	2,501.0	2,456.7	44.22	56.552	
6,300.0	6,258.5	5,971.5	5,936.1	24.2	23.9	-13.74	-159.9	3,082.0	2,487.5	2,442.5	45.03	55.246	
6,400.0	6,357.5	6,071.5	6,036.1	24.6	24.2	-13.81	-159.9	3,082.0	2,474.0	2,428.3	45.74	54.093	
6,500.0	6,456.5	6,171.5	6,136.1	25.1	24.5	-13.89	-159.9	3,082.0	2,460.5	2,414.0	46.45	52.974	
6,600.0	6,555.6	6,271.5	6,236.1	25.5	24.9	-13.97	-159.9	3,082.0	2,447.0	2,399.8	47.16	51.889	
6,700.0	6,654.6	6,371.5	6,336.1	25.9	25.1	-14.05	-159.9	3,082.0	2,433.5	2,385.7	47.80	50.907	
6,800.0	6,753.6	6,471.5	6,436.1	26.3	25.4	-14.13	-159.9	3,082.0	2,420.0	2,371.5	48.51	49.887	
6,900.0	6,852.6	6,571.5	6,536.1	26.7	25.8	-14.21	-159.9	3,082.0	2,406.5	2,357.2	49.22	48.896	
7,000.0	6,951.7	6,671.5	6,636.1	27.1	26.1	-14.29	-159.9	3,082.0	2,393.0	2,343.0	49.92	47.932	
7,100.0	7,050.7	6,771.5	6,736.1	27.6	26.4	-14.37	-159.9	3,082.0	2,379.5	2,328.8	50.63	46.995	
7,131.4	7,081.7	6,802.5	6,767.1	27.7	26.5	-14.40	-159.9	3,082.0	2,375.2	2,324.4	50.86	46.706	
7,200.0	7,149.8	6,871.5	6,836.1	28.0	26.7	-14.42	-159.9	3,082.0	2,366.6	2,315.2	51.34	46.095	
7,300.0	7,249.2	6,971.5	6,936.1	28.4	27.0	-14.45	-159.9	3,082.0	2,356.1	2,304.0	52.05	45.268	
7,400.0	7,348.9	7,071.5	7,036.1	28.8	27.4	-14.47	-159.9	3,082.0	2,348.1	2,295.4	52.75	44.514	
7,500.0	7,448.7	7,171.5	7,136.1	29.1	27.7	-14.48	-159.9	3,082.0	2,342.7	2,289.2	53.45	43.831	
7,600.0	7,548.7	7,271.5	7,236.1	29.5	28.0	-14.49	-159.9	3,082.0	2,339.8	2,285.6	54.14	43.216	
7,664.7	7,613.3	7,341.5	7,306.1	29.7	28.2	89.41	-159.9	3,082.0	2,339.2	2,284.6	54.58	42.857	
7,700.0	7,648.7	7,381.5	7,346.1	29.8	28.4	89.41	-159.9	3,082.0	2,339.2	2,284.4	54.82	42.671	
7,800.0	7,748.7	7,481.5	7,446.1	30.1	28.7	89.41	-159.9	3,082.0	2,339.2	2,283.7	55.49	42.153	
7,900.0	7,848.7	7,581.5	7,546.1	30.4	29.0	89.41	-159.9	3,082.0	2,339.2	2,283.1	56.17	41.646	
8,000.0	7,948.7	7,681.5	7,646.1	30.7	29.4	89.41	-159.9	3,082.0	2,339.2	2,282.4	56.85	41.151	
8,100.0	8,048.7	7,781.5	7,746.1	31.0	29.7	89.41	-159.9	3,082.0	2,339.2	2,281.7	57.52	40.666	
8,200.0	8,148.7	7,881.5	7,846.1	31.4	30.0	89.41	-159.9	3,082.0	2,339.2	2,281.0	58.20	40.192	
8,300.0	8,248.7	7,981.5	7,946.1	31.7	30.4	89.41	-159.9	3,082.0	2,339.2	2,280.4	58.88	39.729	
8,400.0	8,348.7	8,081.5	8,046.1	32.0	30.7	89.41	-159.9	3,082.0	2,339.2	2,279.7	59.56	39.275	
8,500.0	8,448.7	8,181.5	8,146.1	32.3	31.0	89.41	-159.9	3,082.0	2,339.2	2,279.0	60.24	38.832	
8,600.0	8,548.7	8,281.5	8,246.1	32.6	31.4	89.41	-159.9	3,082.0	2,339.2	2,278.3	60.92	38.397	
8,700.0	8,648.7	8,381.5	8,346.1	33.0	31.7	89.41	-159.9	3,082.0	2,339.2	2,277.6	61.60	37.972	
8,800.0	8,748.7	8,481.5	8,446.1	33.3	32.0	89.41	-159.9	3,082.0	2,339.2	2,276.9	62.29	37.555	
8,900.0	8,848.7	8,581.5	8,546.1	33.6	32.4	89.41	-159.9	3,082.0	2,339.2	2,276.3	62.97	37.148	
9,000.0	8,948.7	8,681.5	8,646.1	33.9	32.7	89.41	-159.9	3,082.0	2,339.2	2,275.6	63.66	36.748	
9,100.0	9,048.7	8,781.5	8,746.1	34.3	33.0	89.41	-159.9	3,082.0	2,339.2	2,274.9	64.34	36.357	
9,200.0	9,148.7	8,881.5	8,846.1	34.6	33.4	89.41	-159.9	3,082.0	2,339.2	2,274.2	65.03	35.973	
9,300.0	9,248.7	8,981.5	8,946.1	34.9	33.7	89.41	-159.9	3,082.0	2,339.2	2,273.5	65.71	35.597	
9,400.0	9,348.7	9,081.5	9,046.1	35.2	34.1	89.41	-159.9	3,082.0	2,339.2	2,272.8	66.40	35.229	
9,500.0	9,448.7	9,181.5	9,146.1	35.6	34.4	89.41	-159.9	3,082.0	2,339.2	2,272.1	67.09	34.868	
9,600.0	9,548.7	9,281.5	9,246.1	35.9	34.8	89.30	-155.3	3,081.8	2,339.1	2,271.3	67.79	34.503	
9,700.0	9,648.7	9,381.5	9,346.1	36.2	35.1	88.68	-130.1	3,080.5	2,338.3	2,269.8	68.48	34.144	
9,800.0	9,748.7	9,481.5	9,446.1	36.5	35.4	87.70	-90.2	3,078.5	2,337.5	2,268.3	69.15	33.803	
9,854.4	9,803.0	9,536.0	9,501.0	36.7	35.5	87.10	-65.6	3,077.2	2,337.3	2,267.8	69.50	33.629 CC	
9,900.0	9,848.7	9,636.0	9,601.0	36.9	35.5	86.59	-44.7	3,076.2	2,337.5	2,267.7	69.79	33.493 ES	
10,000.0	9,948.7	9,736.0	9,701.0	37.2	35.6	85.49	0.1	3,073.9	2,339.1	2,268.7	70.39	33.230	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	10,048.7	10,018.4	9,921.8	37.5	35.7	84.49	40.8	3,071.9	2,343.1	2,272.2	70.93	33.033	
10,200.0	10,148.7	10,064.0	9,950.0	37.9	35.8	83.61	76.6	3,070.0	2,349.9	2,278.5	71.40	32.914	
10,300.0	10,248.7	10,100.0	9,970.2	38.2	35.8	82.89	106.4	3,068.5	2,359.9	2,288.2	71.76	32.886	
10,400.0	10,348.7	10,132.4	9,986.7	38.5	35.8	82.21	134.2	3,067.1	2,373.3	2,301.3	72.04	32.946	
10,500.0	10,448.7	10,150.0	9,995.0	38.9	35.8	81.83	149.7	3,066.3	2,390.3	2,318.1	72.17	33.122	
10,600.0	10,548.7	10,180.4	10,008.3	39.2	35.8	81.17	177.0	3,065.0	2,410.8	2,338.5	72.27	33.359	
10,700.0	10,648.7	10,200.0	10,016.0	39.5	35.8	80.73	195.0	3,064.0	2,434.9	2,362.7	72.24	33.707	
10,800.0	10,748.7	10,215.3	10,021.7	39.9	35.8	80.38	209.2	3,063.3	2,462.6	2,390.5	72.10	34.155	
10,900.0	10,848.7	10,229.4	10,026.5	40.2	35.8	80.06	222.5	3,062.6	2,493.8	2,421.9	71.89	34.691	
11,000.0	10,948.7	10,250.0	10,033.0	40.5	35.8	79.59	242.0	3,061.7	2,528.4	2,456.8	71.64	35.293	
11,100.0	11,048.7	10,250.0	10,033.0	40.9	35.8	79.59	242.0	3,061.7	2,566.2	2,495.0	71.22	36.033	
11,200.0	11,148.7	10,250.0	10,033.0	41.2	35.8	79.59	242.0	3,061.7	2,607.3	2,536.6	70.74	36.859	
11,300.0	11,248.7	10,271.1	10,038.9	41.5	35.9	79.10	262.2	3,060.6	2,651.3	2,581.0	70.34	37.694	
11,400.0	11,348.7	10,279.0	10,040.9	41.9	35.9	78.92	269.8	3,060.3	2,698.3	2,628.5	69.82	38.648	
11,423.3	11,372.0	10,280.7	10,041.3	42.0	35.9	78.88	271.5	3,060.2	2,709.7	2,640.0	69.69	38.881	
11,450.0	11,398.6	10,282.8	10,041.8	42.0	35.9	77.83	273.5	3,060.1	2,722.7	2,653.2	69.54	39.151	
11,500.0	11,448.4	10,300.0	10,045.8	42.2	35.9	74.73	290.2	3,059.2	2,747.2	2,677.9	69.33	39.627	
11,550.0	11,497.6	10,300.0	10,045.8	42.4	35.9	72.11	290.2	3,059.2	2,771.2	2,702.2	69.01	40.158	
11,600.0	11,545.9	10,300.0	10,045.8	42.5	35.9	69.60	290.2	3,059.2	2,794.7	2,726.0	68.68	40.692	
11,650.0	11,592.8	10,300.0	10,045.8	42.6	35.9	67.21	290.2	3,059.2	2,817.6	2,749.2	68.35	41.222	
11,700.0	11,638.0	10,300.0	10,045.8	42.8	35.9	64.96	290.2	3,059.2	2,839.7	2,771.6	68.03	41.743	
11,750.0	11,681.2	10,322.9	10,050.2	42.9	35.9	62.54	312.6	3,058.1	2,860.4	2,792.6	67.83	42.168	
11,800.0	11,722.1	10,331.9	10,051.7	43.0	35.9	60.53	321.5	3,057.6	2,880.1	2,812.5	67.58	42.619	
11,850.0	11,760.3	10,350.0	10,054.3	43.1	35.9	58.61	339.4	3,056.7	2,898.5	2,831.1	67.38	43.015	
11,900.0	11,795.5	10,350.0	10,054.3	43.2	35.9	57.10	339.4	3,056.7	2,915.3	2,848.1	67.13	43.429	
11,950.0	11,827.6	10,350.0	10,054.3	43.2	35.9	55.76	339.4	3,056.7	2,930.6	2,863.7	66.90	43.803	
12,000.0	11,856.1	10,372.0	10,056.7	43.3	36.0	54.42	361.2	3,055.6	2,944.0	2,877.2	66.81	44.065	
12,050.0	11,881.0	10,400.0	10,058.5	43.3	36.1	53.25	389.2	3,054.2	2,955.8	2,889.1	66.76	44.273	
12,100.0	11,902.0	10,400.0	10,058.5	43.3	36.1	52.47	389.2	3,054.2	2,965.4	2,898.8	66.66	44.487	
12,150.0	11,918.9	10,400.0	10,058.5	43.4	36.1	51.85	389.2	3,054.2	2,973.2	2,906.6	66.60	44.641	
12,200.0	11,931.7	10,416.6	10,058.9	43.4	36.1	51.32	405.7	3,053.4	2,979.0	2,912.3	66.65	44.697	
12,250.0	11,940.3	10,427.2	10,058.9	43.5	36.1	51.00	416.3	3,052.8	2,982.7	2,915.9	66.72	44.702	
12,300.0	11,944.5	10,456.7	10,058.7	43.6	36.2	50.83	445.8	3,051.5	2,984.1	2,917.2	66.90	44.603	
12,326.5	11,944.9	10,471.4	10,058.6	43.6	36.3	50.84	460.5	3,050.9	2,983.9	2,916.9	67.02	44.525	
12,391.6	11,944.6	10,500.0	10,058.4	43.7	36.4	50.83	489.1	3,050.1	2,982.9	2,915.6	67.31	44.316	
12,400.0	11,944.5	10,512.0	10,058.3	43.8	36.4	50.83	501.1	3,049.8	2,982.8	2,915.4	67.38	44.271	
12,464.3	11,944.2	10,552.9	10,058.1	43.9	36.6	50.82	535.1	3,049.3	2,982.5	2,914.8	67.76	44.015	
12,500.0	11,944.0	10,581.7	10,057.9	44.1	36.7	50.82	570.8	3,049.0	2,982.6	2,914.6	68.00	43.864	
12,600.0	11,943.4	10,681.7	10,057.2	44.4	37.2	50.82	670.8	3,048.2	2,982.7	2,913.9	68.81	43.345	
12,700.0	11,942.9	10,781.7	10,056.5	44.9	37.7	50.82	770.8	3,047.4	2,982.8	2,913.0	69.73	42.778	
12,800.0	11,942.3	10,881.7	10,055.7	45.4	38.3	50.82	870.8	3,046.6	2,982.9	2,912.1	70.74	42.169	
12,900.0	11,941.7	10,981.7	10,055.0	45.9	39.0	50.81	970.8	3,045.8	2,983.0	2,911.1	71.84	41.523	
13,000.0	11,941.2	11,081.7	10,054.3	46.6	39.7	50.81	1,070.8	3,045.0	2,983.1	2,910.0	73.03	40.848	
13,100.0	11,940.6	11,181.7	10,053.6	47.2	40.4	50.81	1,170.8	3,044.2	2,983.2	2,908.9	74.30	40.149	
13,200.0	11,940.1	11,281.7	10,052.9	48.0	41.3	50.81	1,270.7	3,043.4	2,983.3	2,907.6	75.65	39.433	
13,300.0	11,939.5	11,381.7	10,052.2	48.7	42.1	50.81	1,370.7	3,042.6	2,983.4	2,906.3	77.08	38.704	
13,400.0	11,939.0	11,481.7	10,051.5	49.5	43.0	50.80	1,470.7	3,041.9	2,983.5	2,904.9	78.58	37.968	
13,500.0	11,938.4	11,581.7	10,050.8	50.4	44.0	50.80	1,570.7	3,041.1	2,983.6	2,903.4	80.14	37.228	
13,600.0	11,937.8	11,681.7	10,050.1	51.3	45.0	50.80	1,670.7	3,040.3	2,983.7	2,901.9	81.77	36.488	
13,700.0	11,937.3	11,781.7	10,049.4	52.2	46.0	50.80	1,770.7	3,039.5	2,983.8	2,900.3	83.46	35.752	
13,800.0	11,936.7	11,881.7	10,048.7	53.1	47.1	50.80	1,870.7	3,038.7	2,983.9	2,898.7	85.20	35.022	
13,900.0	11,936.2	11,981.7	10,048.0	54.1	48.2	50.79	1,970.7	3,037.9	2,984.0	2,897.0	86.99	34.301	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,935.6	12,081.7	10,047.3	55.2	49.3	50.79	2,070.7	3,037.1	2,984.1	2,895.2	88.84	33.591	
14,100.0	11,935.0	12,181.7	10,046.6	56.2	50.4	50.79	2,170.7	3,036.3	2,984.2	2,893.4	90.73	32.892	
14,200.0	11,934.5	12,281.7	10,045.9	57.3	51.6	50.79	2,270.7	3,035.5	2,984.3	2,891.6	92.66	32.207	
14,300.0	11,933.9	12,381.7	10,045.2	58.4	52.8	50.79	2,370.7	3,034.7	2,984.4	2,889.7	94.63	31.537	
14,400.0	11,933.4	12,481.7	10,044.5	59.5	54.1	50.78	2,470.7	3,033.9	2,984.5	2,887.8	96.64	30.882	
14,500.0	11,932.8	12,581.7	10,043.8	60.7	55.3	50.78	2,570.7	3,033.1	2,984.6	2,885.9	98.69	30.243	
14,600.0	11,932.3	12,681.7	10,043.1	61.9	56.6	50.78	2,670.7	3,032.3	2,984.7	2,883.9	100.77	29.620	
14,700.0	11,931.7	12,781.7	10,042.4	63.1	57.9	50.78	2,770.7	3,031.5	2,984.8	2,881.9	102.88	29.013	
14,800.0	11,931.1	12,881.7	10,041.7	64.3	59.2	50.78	2,870.7	3,030.8	2,984.9	2,879.8	105.02	28.422	
14,900.0	11,930.6	12,981.7	10,041.0	65.5	60.5	50.77	2,970.7	3,030.0	2,985.0	2,877.8	107.19	27.848	
15,000.0	11,930.0	13,081.7	10,040.3	66.8	61.9	50.77	3,070.6	3,029.2	2,985.1	2,875.7	109.38	27.290	
15,100.0	11,929.5	13,181.7	10,039.6	68.1	63.2	50.77	3,170.6	3,028.4	2,985.2	2,873.6	111.60	26.749	
15,200.0	11,928.9	13,281.7	10,038.9	69.4	64.6	50.77	3,270.6	3,027.6	2,985.3	2,871.4	113.84	26.223	
15,300.0	11,928.3	13,381.7	10,038.2	70.7	66.0	50.77	3,370.6	3,026.8	2,985.4	2,869.2	116.11	25.712	
15,400.0	11,927.8	13,481.7	10,037.4	72.0	67.4	50.76	3,470.6	3,026.0	2,985.5	2,867.1	118.39	25.217	
15,500.0	11,927.2	13,581.7	10,036.7	73.3	68.8	50.76	3,570.6	3,025.2	2,985.6	2,864.9	120.69	24.737	
15,600.0	11,926.7	13,681.7	10,036.0	74.7	70.2	50.76	3,670.6	3,024.4	2,985.7	2,862.6	123.02	24.270	
15,700.0	11,926.1	13,781.7	10,035.3	76.0	71.7	50.76	3,770.6	3,023.6	2,985.8	2,860.4	125.36	23.818	
15,800.0	11,925.6	13,881.7	10,034.6	77.4	73.1	50.75	3,870.6	3,022.8	2,985.9	2,858.1	127.71	23.380	
15,900.0	11,925.0	13,981.7	10,033.9	78.8	74.6	50.75	3,970.6	3,022.0	2,986.0	2,855.9	130.08	22.954	
16,000.0	11,924.4	14,081.7	10,033.2	80.2	76.0	50.75	4,070.6	3,021.2	2,986.1	2,853.6	132.47	22.542	
16,100.0	11,923.9	14,181.7	10,032.5	81.6	77.5	50.75	4,170.6	3,020.4	2,986.2	2,851.3	134.87	22.142	
16,200.0	11,923.3	14,281.7	10,031.8	83.0	79.0	50.75	4,270.6	3,019.6	2,986.2	2,849.0	137.28	21.753	
16,300.0	11,922.8	14,381.7	10,031.1	84.4	80.4	50.74	4,370.6	3,018.9	2,986.3	2,846.6	139.70	21.376	
16,400.0	11,922.2	14,481.7	10,030.4	85.9	81.9	50.74	4,470.6	3,018.1	2,986.4	2,844.3	142.14	21.011	
16,500.0	11,921.6	14,581.7	10,029.7	87.3	83.4	50.74	4,570.6	3,017.3	2,986.5	2,842.0	144.59	20.656	
16,600.0	11,921.1	14,681.7	10,029.0	88.7	84.9	50.74	4,670.6	3,016.5	2,986.6	2,839.6	147.04	20.311	
16,700.0	11,920.5	14,781.7	10,028.3	90.2	86.4	50.74	4,770.5	3,015.7	2,986.7	2,837.2	149.51	19.977	
16,800.0	11,920.0	14,881.7	10,027.6	91.7	87.9	50.73	4,870.5	3,014.9	2,986.8	2,834.9	151.99	19.652	
16,900.0	11,919.4	14,981.7	10,026.9	93.1	89.5	50.73	4,970.5	3,014.1	2,986.9	2,832.5	154.48	19.336	
17,000.0	11,918.8	15,081.7	10,026.2	94.6	91.0	50.73	5,070.5	3,013.3	2,987.0	2,830.1	156.97	19.029	
17,100.0	11,918.3	15,181.7	10,025.5	96.1	92.5	50.73	5,170.5	3,012.5	2,987.1	2,827.7	159.48	18.731	
17,200.0	11,917.7	15,281.7	10,024.8	97.6	94.0	50.73	5,270.5	3,011.7	2,987.2	2,825.3	161.99	18.441	
17,300.0	11,917.2	15,381.7	10,024.1	99.0	95.6	50.72	5,370.5	3,010.9	2,987.3	2,822.8	164.51	18.159	
17,400.0	11,916.6	15,481.7	10,023.4	100.5	97.1	50.72	5,470.5	3,010.1	2,987.4	2,820.4	167.03	17.885	
17,500.0	11,916.1	15,581.7	10,022.7	102.0	98.7	50.72	5,570.5	3,009.3	2,987.5	2,818.0	169.57	17.619	
17,600.0	11,915.5	15,681.7	10,022.0	103.5	100.2	50.72	5,670.5	3,008.5	2,987.6	2,815.5	172.11	17.359	
17,700.0	11,914.9	15,781.7	10,021.3	105.1	101.7	50.72	5,770.5	3,007.7	2,987.7	2,813.1	174.65	17.107	
17,800.0	11,914.4	15,881.7	10,020.6	106.6	103.3	50.71	5,870.5	3,007.0	2,987.8	2,810.6	177.20	16.861	
17,900.0	11,913.8	15,981.7	10,019.9	108.1	104.9	50.71	5,970.5	3,006.2	2,987.9	2,808.2	179.76	16.622	
18,000.0	11,913.3	16,081.7	10,019.1	109.6	106.4	50.71	6,070.5	3,005.4	2,988.0	2,805.7	182.32	16.389	
18,100.0	11,912.7	16,181.7	10,018.4	111.1	108.0	50.71	6,170.5	3,004.6	2,988.1	2,803.2	184.89	16.162	
18,200.0	11,912.1	16,281.7	10,017.7	112.7	109.5	50.71	6,270.5	3,003.8	2,988.2	2,800.8	187.46	15.940	
18,300.0	11,911.6	16,381.7	10,017.0	114.2	111.1	50.70	6,370.5	3,003.0	2,988.3	2,798.3	190.04	15.725	
18,400.0	11,911.0	16,481.7	10,016.3	115.7	112.7	50.70	6,470.5	3,002.2	2,988.4	2,795.8	192.63	15.514	
18,500.0	11,910.5	16,581.7	10,015.6	117.3	114.3	50.70	6,570.4	3,001.4	2,988.5	2,793.3	195.21	15.309	
18,600.0	11,909.9	16,681.7	10,014.9	118.8	115.8	50.70	6,670.4	3,000.6	2,988.6	2,790.8	197.80	15.109	
18,700.0	11,909.4	16,781.7	10,014.2	120.4	117.4	50.70	6,770.4	2,999.8	2,988.7	2,788.3	200.40	14.914	
18,800.0	11,908.8	16,881.7	10,013.5	121.9	119.0	50.69	6,870.4	2,999.0	2,988.8	2,785.8	203.00	14.723	
18,900.0	11,908.2	16,981.7	10,012.8	123.5	120.6	50.69	6,970.4	2,998.2	2,988.9	2,783.3	205.60	14.538	
19,000.0	11,907.7	17,081.7	10,012.1	125.0	122.2	50.69	7,070.4	2,997.4	2,989.0	2,780.8	208.21	14.356	
19,100.0	11,907.1	17,181.7	10,011.4	126.6	123.7	50.69	7,170.4	2,996.6	2,989.1	2,778.3	210.82	14.179	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													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	11,906.6	17,281.7	10,010.7	128.1	125.3	50.69	7,270.4	2,995.8	2,989.2	2,775.8	213.43	14.006		
19,300.0	11,906.0	17,381.7	10,010.0	129.7	126.9	50.68	7,370.4	2,995.1	2,989.3	2,773.3	216.05	13.836		
19,400.0	11,905.4	17,481.7	10,009.3	131.3	128.5	50.68	7,470.4	2,994.3	2,989.4	2,770.8	218.67	13.671		
19,500.0	11,904.9	17,581.7	10,008.6	132.8	130.1	50.68	7,570.4	2,993.5	2,989.5	2,768.2	221.29	13.509		
19,600.0	11,904.3	17,681.7	10,007.9	134.4	131.7	50.68	7,670.4	2,992.7	2,989.6	2,765.7	223.92	13.352		
19,700.0	11,903.8	17,781.7	10,007.2	136.0	133.3	50.68	7,770.4	2,991.9	2,989.7	2,763.2	226.55	13.197		
19,800.0	11,903.2	17,881.7	10,006.5	137.5	134.9	50.67	7,870.4	2,991.1	2,989.8	2,760.7	229.18	13.046		
19,900.0	11,902.7	17,981.7	10,005.8	139.1	136.5	50.67	7,970.4	2,990.3	2,989.9	2,758.1	231.81	12.898		
20,000.0	11,902.1	18,081.7	10,005.1	140.7	138.1	50.67	8,070.4	2,989.5	2,990.0	2,755.6	234.45	12.754		
20,100.0	11,901.5	18,181.7	10,004.4	142.3	139.7	50.67	8,170.4	2,988.7	2,990.1	2,753.0	237.08	12.612		
20,200.0	11,901.0	18,281.7	10,003.7	143.8	141.3	50.67	8,270.3	2,987.9	2,990.2	2,750.5	239.73	12.474		
20,300.0	11,900.4	18,381.7	10,003.0	145.4	142.9	50.66	8,370.3	2,987.1	2,990.3	2,748.0	242.37	12.338		
20,400.0	11,899.9	18,481.7	10,002.3	147.0	144.5	50.66	8,470.3	2,986.3	2,990.4	2,745.4	245.01	12.205		
20,500.0	11,899.3	18,581.7	10,001.6	148.6	146.1	50.66	8,570.3	2,985.5	2,990.5	2,742.9	247.66	12.075		
20,600.0	11,898.7	18,681.7	10,000.9	150.2	147.7	50.66	8,670.3	2,984.7	2,990.6	2,740.3	250.31	11.948		
20,700.0	11,898.2	18,781.7	10,000.1	151.8	149.3	50.66	8,770.3	2,983.9	2,990.7	2,737.8	252.96	11.823		
20,800.0	11,897.6	18,881.7	9,999.4	153.4	150.9	50.65	8,870.3	2,983.2	2,990.8	2,735.2	255.62	11.700		
20,900.0	11,897.1	18,981.7	9,998.7	155.0	152.5	50.65	8,970.3	2,982.4	2,990.9	2,732.7	258.27	11.581		
21,000.0	11,896.5	19,081.7	9,998.0	156.5	154.2	50.65	9,070.3	2,981.6	2,991.0	2,730.1	260.93	11.463		
21,100.0	11,896.0	19,181.7	9,997.3	158.1	155.8	50.65	9,170.3	2,980.8	2,991.1	2,727.5	263.59	11.348		
21,200.0	11,895.4	19,281.7	9,996.6	159.7	157.4	50.64	9,270.3	2,980.0	2,991.2	2,725.0	266.25	11.235		
21,300.0	11,894.8	19,381.7	9,995.9	161.3	159.0	50.64	9,370.3	2,979.2	2,991.3	2,722.4	268.91	11.124		
21,400.0	11,894.3	19,481.7	9,995.2	162.9	160.6	50.64	9,470.3	2,978.4	2,991.4	2,719.8	271.57	11.015		
21,500.0	11,893.7	19,581.7	9,994.5	164.5	162.2	50.64	9,570.3	2,977.6	2,991.5	2,717.3	274.24	10.908		
21,600.0	11,893.2	19,681.7	9,993.8	166.1	163.8	50.64	9,670.3	2,976.8	2,991.6	2,714.7	276.90	10.804		
21,700.0	11,892.6	19,781.7	9,993.1	167.7	165.5	50.63	9,770.3	2,976.0	2,991.7	2,712.1	279.57	10.701		
21,800.0	11,892.0	19,881.7	9,992.4	169.3	167.1	50.63	9,870.3	2,975.2	2,991.8	2,709.6	282.24	10.600		
21,900.0	11,891.5	19,981.7	9,991.7	170.9	168.7	50.63	9,970.3	2,974.4	2,991.9	2,707.0	284.91	10.501		
22,000.0	11,890.9	20,081.7	9,991.0	172.5	170.3	50.63	10,070.2	2,973.6	2,992.0	2,704.4	287.58	10.404		
22,100.0	11,890.4	20,181.7	9,990.3	174.1	171.9	50.63	10,170.2	2,972.8	2,992.1	2,701.9	290.26	10.309		
22,191.7	11,890.5	20,273.5	9,989.6	175.6	173.3	50.62	10,262.0	2,972.1	2,992.6	2,700.1	292.52	10.231 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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	12.2	12.2	0.0	0.0	-11.48	5,176.3	-1,051.3	5,282.0				
100.0	100.0	93.5	93.5	0.1	0.1	-11.48	5,176.6	-1,051.1	5,282.2	5,282.0	0.27	N/A	
200.0	200.0	174.9	174.9	0.5	0.3	-11.47	5,177.2	-1,050.5	5,282.8	5,282.1	0.76	6,965.180	
300.0	300.0	261.6	261.5	0.8	0.5	-11.46	5,178.1	-1,049.6	5,283.7	5,282.4	1.37	3,870.317	
400.0	400.0	351.6	351.5	1.2	0.8	-11.45	5,179.3	-1,048.7	5,284.8	5,282.8	2.05	2,582.873	
500.0	500.0	447.9	447.8	1.6	1.2	-11.43	5,180.8	-1,047.8	5,286.1	5,283.3	2.75	1,922.358	
600.0	600.0	547.1	547.0	1.9	1.5	-11.42	5,182.2	-1,046.9	5,287.4	5,283.9	3.46	1,526.416	
700.0	700.0	637.4	637.3	2.3	1.9	-11.41	5,183.6	-1,046.1	5,288.7	5,284.6	4.15	1,275.551	
800.0	800.0	725.5	725.4	2.6	2.2	-11.40	5,185.2	-1,045.4	5,290.3	5,285.5	4.82	1,097.362	
900.0	900.0	818.9	818.8	3.0	2.5	-11.39	5,187.0	-1,044.7	5,292.1	5,286.6	5.51	959.733	
1,000.0	1,000.0	914.9	914.8	3.4	2.9	-11.38	5,189.0	-1,044.0	5,293.9	5,287.7	6.22	851.524	
1,100.0	1,100.0	1,011.0	1,010.9	3.7	3.2	-11.36	5,191.0	-1,043.3	5,295.9	5,288.9	6.92	765.320	
1,200.0	1,200.0	1,485.8	1,485.4	4.1	4.8	-11.38	5,183.3	-1,043.1	5,294.2	5,285.3	8.88	596.411	
1,300.0	1,300.0	1,650.0	1,649.4	4.4	5.4	-11.35	5,174.4	-1,038.8	5,288.2	5,278.4	9.79	539.913	
1,400.0	1,400.0	1,767.9	1,766.9	4.8	5.8	-11.32	5,167.4	-1,034.7	5,281.7	5,271.2	10.56	500.224	
1,500.0	1,500.0	1,877.5	1,876.3	5.1	6.2	-11.29	5,160.8	-1,030.1	5,275.0	5,263.7	11.30	466.828	
1,600.0	1,600.0	1,986.8	1,985.2	5.5	6.6	-115.21	5,154.2	-1,024.4	5,268.4	5,256.4	12.03	437.926	
1,700.0	1,700.0	2,101.1	2,099.1	5.8	7.0	-115.24	5,147.3	-1,017.4	5,262.4	5,249.6	12.77	411.954	
1,800.0	1,799.9	2,207.8	2,205.3	6.2	7.4	-115.27	5,140.7	-1,009.9	5,256.8	5,243.3	13.50	389.503	
1,900.0	1,899.7	2,306.5	2,303.6	6.5	7.7	-115.31	5,134.6	-1,003.0	5,252.0	5,237.8	14.20	369.955	
2,000.0	1,999.4	2,404.1	2,400.8	6.9	8.1	-115.36	5,128.6	-996.3	5,248.0	5,233.1	14.90	352.281	
2,100.0	2,098.9	2,500.7	2,497.0	7.2	8.5	-115.42	5,122.7	-989.8	5,244.7	5,229.1	15.60	336.205	
2,200.0	2,198.3	2,587.8	2,583.7	7.6	8.8	-115.49	5,117.5	-983.9	5,242.3	5,226.1	16.28	322.108	
2,300.0	2,297.4	2,669.3	2,664.9	8.0	9.1	-115.56	5,112.9	-978.3	5,241.1	5,224.1	16.94	309.432	
2,400.0	2,396.4	2,757.6	2,752.9	8.3	9.4	-115.62	5,108.2	-972.1	5,240.5	5,222.9	17.63	297.249	
2,500.0	2,495.5	2,860.8	2,855.7	8.7	9.8	-115.70	5,102.8	-965.0	5,240.0	5,221.6	18.38	285.103	
2,600.0	2,594.5	2,957.7	2,952.2	9.1	10.2	-115.77	5,097.6	-958.3	5,239.4	5,220.3	19.11	274.178	
2,700.0	2,693.5	3,047.9	3,042.1	9.5	10.5	-115.84	5,093.0	-952.2	5,239.0	5,219.2	19.82	264.329	
2,790.9	2,783.5	3,123.1	3,117.0	9.8	10.8	-115.90	5,089.2	-947.2	5,238.8	5,218.4	20.44	256.273	
2,800.0	2,792.5	3,129.2	3,123.1	9.9	10.8	-115.91	5,088.9	-946.8	5,238.8	5,218.3	20.50	255.555	
2,900.0	2,891.6	3,196.2	3,190.0	10.3	11.1	-115.97	5,085.7	-943.2	5,239.2	5,218.1	21.13	247.963	
3,000.0	2,990.6	3,263.1	3,256.7	10.7	11.3	-116.04	5,082.8	-940.7	5,240.2	5,218.5	21.76	240.834	
3,100.0	3,089.6	3,292.0	3,285.6	11.0	11.4	-116.07	5,081.5	-940.0	5,242.1	5,219.8	22.25	235.561	
3,200.0	3,188.6	3,367.4	3,361.0	11.4	11.7	-116.17	5,079.0	-938.3	5,244.6	5,221.7	22.91	228.909	
3,300.0	3,287.7	3,415.6	3,409.1	11.8	11.9	-116.22	5,078.0	-937.2	5,248.2	5,224.8	23.47	223.599	
3,400.0	3,386.7	3,482.0	3,475.5	12.2	12.1	-116.30	5,077.4	-935.7	5,253.0	5,228.9	24.10	217.989	
3,500.0	3,485.7	3,521.1	3,514.5	12.7	12.3	-116.34	5,077.4	-934.8	5,258.5	5,233.9	24.62	213.563	
3,600.0	3,584.8	3,584.1	3,577.5	13.1	12.5	-116.41	5,077.9	-932.9	5,264.8	5,239.6	25.23	208.632	
3,700.0	3,683.8	3,647.2	3,640.5	13.5	12.7	-116.47	5,078.9	-930.7	5,271.8	5,246.0	25.85	203.965	
3,800.0	3,782.8	3,735.7	3,729.0	13.9	13.0	-116.55	5,080.8	-927.4	5,279.4	5,252.8	26.55	198.830	
3,900.0	3,881.8	3,839.5	3,832.7	14.3	13.4	-116.66	5,082.8	-924.9	5,286.9	5,259.6	27.31	193.557	
4,000.0	3,980.9	3,954.8	3,948.0	14.7	13.8	-116.79	5,084.4	-923.4	5,294.3	5,266.2	28.12	188.294	
4,100.0	4,079.9	4,072.7	4,066.0	15.1	14.2	-116.94	5,085.5	-922.4	5,301.4	5,272.4	28.93	183.252	
4,200.0	4,178.9	4,177.6	4,170.8	15.5	14.5	-117.08	5,086.1	-922.4	5,308.3	5,278.6	29.68	178.838	
4,300.0	4,277.9	4,268.8	4,262.0	15.9	14.8	-117.20	5,086.3	-923.0	5,315.1	5,284.7	30.39	174.909	
4,400.0	4,377.0	4,340.6	4,333.8	16.3	15.1	-117.30	5,086.9	-923.3	5,322.4	5,291.3	31.02	171.563	
4,500.0	4,476.0	4,412.4	4,405.6	16.7	15.3	-117.39	5,087.9	-923.2	5,330.2	5,298.5	31.66	168.371	
4,600.0	4,575.0	4,688.9	4,682.1	17.1	16.2	-117.80	5,086.0	-926.4	5,335.7	5,302.7	33.02	161.570	
4,700.0	4,674.0	4,791.8	4,784.9	17.6	16.6	-117.97	5,083.6	-928.8	5,340.5	5,306.8	33.77	158.147	
4,800.0	4,773.1	4,885.3	4,878.3	18.0	16.9	-118.12	5,081.3	-931.1	5,345.4	5,310.9	34.48	155.012	
4,900.0	4,872.1	4,980.0	4,973.0	18.4	17.2	-118.27	5,079.1	-933.2	5,350.4	5,315.2	35.20	151.987	
5,000.0	4,971.1	5,104.3	5,097.2	18.8	17.6	-118.47	5,076.1	-935.9	5,355.2	5,319.1	36.03	148.646	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													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		
5,100.0	5,070.2	5,194.2	5,187.1	19.2	17.9	-118.61	5,073.8	-937.8	5,359.9	5,323.2	36.73	145.918		
5,200.0	5,169.2	5,288.0	5,280.8	19.6	18.3	-118.76	5,071.5	-939.8	5,364.8	5,327.3	37.45	143.244		
5,300.0	5,268.2	5,354.1	5,346.8	20.0	18.5	-118.86	5,070.2	-940.8	5,370.1	5,332.0	38.08	141.028		
5,400.0	5,367.2	5,423.2	5,416.0	20.5	18.7	-118.96	5,069.4	-941.3	5,375.9	5,337.2	38.71	138.865		
5,500.0	5,466.3	5,502.3	5,495.1	20.9	19.0	-119.06	5,069.2	-941.0	5,382.3	5,343.0	39.39	136.654		
5,600.0	5,565.3	5,597.4	5,590.1	21.3	19.4	-119.18	5,069.1	-940.7	5,388.9	5,348.8	40.12	134.316		
5,700.0	5,664.3	5,693.8	5,686.6	21.7	19.7	-119.30	5,069.0	-940.5	5,395.6	5,354.8	40.86	132.052		
5,800.0	5,763.3	5,792.3	5,785.1	22.1	20.0	-119.43	5,068.8	-940.5	5,402.4	5,360.8	41.60	129.852		
5,900.0	5,862.4	5,893.8	5,886.6	22.5	20.4	-119.56	5,068.7	-940.6	5,409.2	5,366.8	42.36	127.700		
6,000.0	5,961.4	5,998.3	5,991.1	23.0	20.7	-119.70	5,068.4	-940.7	5,415.9	5,372.7	43.12	125.592		
6,100.0	6,060.4	6,088.1	6,080.8	23.4	21.1	-119.82	5,068.2	-940.8	5,422.6	5,378.8	43.83	123.717		
6,200.0	6,159.4	6,171.0	6,163.8	23.8	21.3	-119.92	5,068.1	-941.0	5,429.6	5,385.1	44.51	121.981		
6,300.0	6,258.5	6,260.5	6,253.3	24.2	21.6	-120.04	5,068.3	-941.4	5,437.0	5,391.7	45.22	120.245		
6,400.0	6,357.5	6,358.9	6,351.7	24.6	22.0	-120.17	5,068.6	-941.8	5,444.4	5,398.4	45.95	118.482		
6,500.0	6,456.5	6,456.3	6,449.1	25.1	22.3	-120.30	5,068.8	-942.3	5,451.8	5,405.1	46.68	116.785		
6,600.0	6,555.6	6,552.6	6,545.4	25.5	22.6	-120.42	5,069.1	-942.8	5,459.3	5,411.9	47.41	115.151		
6,700.0	6,654.6	6,651.5	6,644.3	25.9	23.0	-120.55	5,069.4	-943.4	5,466.9	5,418.8	48.15	113.544		
6,800.0	6,753.6	6,752.5	6,745.3	26.3	23.3	-120.68	5,069.7	-943.9	5,474.5	5,425.6	48.89	111.966		
6,900.0	6,852.6	6,856.4	6,849.2	26.7	23.7	-120.82	5,070.0	-944.4	5,482.1	5,432.4	49.65	110.409		
7,000.0	6,951.7	6,961.7	6,954.5	27.1	24.0	-120.96	5,070.2	-944.9	5,489.5	5,439.1	50.42	108.886		
7,100.0	7,050.7	7,121.9	7,114.6	27.6	24.6	-121.17	5,069.3	-945.9	5,496.5	5,445.1	51.39	106.966		
7,131.4	7,081.7	7,174.4	7,167.1	27.7	24.8	-121.24	5,068.6	-946.4	5,498.4	5,446.7	51.70	106.360		
7,200.0	7,149.8	7,276.9	7,269.6	28.0	25.1	-121.42	5,066.7	-946.9	5,502.0	5,449.7	52.33	105.138		
7,300.0	7,249.2	7,411.5	7,404.2	28.4	25.6	-121.60	5,063.5	-946.8	5,505.4	5,452.2	53.19	103.503		
7,400.0	7,348.9	7,530.1	7,522.8	28.8	26.0	-121.71	5,060.3	-946.5	5,507.0	5,453.0	53.98	102.021		
7,500.0	7,448.7	7,591.5	7,584.1	29.1	26.2	-121.75	5,058.7	-946.3	5,507.4	5,452.8	54.55	100.962		
7,600.0	7,548.7	7,647.8	7,640.4	29.5	26.4	-121.77	5,057.7	-946.1	5,507.2	5,452.1	55.08	99.976		
7,664.7	7,613.3	7,684.2	7,676.8	29.7	26.6	-17.86	5,057.3	-946.0	5,506.7	5,451.3	55.42	99.364		
7,700.0	7,648.7	7,729.0	7,721.6	29.8	26.7	-17.86	5,057.0	-945.8	5,506.6	5,450.9	55.69	98.874		
7,800.0	7,748.7	7,805.3	7,797.9	30.1	27.0	-17.86	5,056.8	-945.5	5,506.0	5,449.8	56.28	97.839		
7,900.0	7,848.7	7,942.6	7,935.2	30.4	27.5	-17.85	5,055.7	-944.7	5,505.1	5,448.0	57.09	96.428		
8,000.0	7,948.7	8,039.3	8,031.9	30.7	27.8	-17.85	5,054.7	-944.0	5,503.9	5,446.1	57.75	95.299		
8,100.0	8,048.7	8,106.0	8,098.6	31.0	28.1	-17.85	5,054.0	-943.4	5,502.7	5,444.4	58.30	94.378		
8,200.0	8,148.7	8,190.0	8,182.6	31.4	28.3	-17.84	5,053.5	-942.7	5,502.0	5,443.1	58.92	93.383		
8,249.9	8,198.6	8,221.0	8,213.6	31.5	28.5	-17.84	5,053.5	-942.5	5,501.9	5,442.7	59.18	92.964		
8,300.0	8,248.7	8,252.1	8,244.7	31.7	28.6	-17.84	5,053.6	-942.3	5,502.0	5,442.5	59.45	92.551		
8,400.0	8,348.7	8,334.0	8,326.6	32.0	28.8	-17.83	5,054.3	-942.0	5,502.6	5,442.6	60.05	91.630		
8,500.0	8,448.7	8,460.1	8,452.7	32.3	29.3	-17.82	5,055.1	-941.4	5,503.0	5,442.2	60.83	90.472		
8,600.0	8,548.7	8,531.7	8,522.4	32.6	31.0	-17.55	5,046.5	-911.1	5,497.4	5,434.6	62.83	87.503		
8,700.0	8,648.7	8,628.0	8,618.8	33.0	31.0	-17.56	5,046.5	-911.9	5,491.9	5,428.7	63.17	86.942		
8,800.0	8,748.7	8,952.6	8,942.9	33.3	31.0	-17.51	5,046.8	-906.9	5,487.7	5,424.1	63.59	86.294		
8,900.0	8,848.7	8,973.0	8,963.0	33.6	31.1	-17.47	5,047.5	-903.5	5,485.3	5,421.3	63.99	85.718		
8,999.4	8,948.0	8,973.0	8,963.0	33.9	31.1	-17.47	5,047.5	-903.5	5,484.4	5,420.1	64.30	85.296		
9,000.0	8,948.7	8,973.0	8,963.0	33.9	31.1	-17.47	5,047.5	-903.5	5,484.4	5,420.1	64.30	85.294		
9,100.0	9,048.7	9,022.0	9,011.5	34.3	31.3	-17.40	5,050.0	-896.9	5,485.0	5,420.2	64.79	84.659		
9,200.0	9,148.7	9,022.0	9,011.5	34.6	31.3	-17.40	5,050.0	-896.9	5,486.8	5,421.8	65.07	84.325		
9,300.0	9,248.7	9,064.1	9,053.2	34.9	31.4	-17.34	5,052.7	-892.3	5,490.0	5,424.5	65.51	83.803		
9,400.0	9,348.7	9,117.0	9,105.8	35.2	31.6	-17.29	5,056.8	-888.0	5,494.6	5,428.6	65.99	83.258		
9,500.0	9,448.7	9,401.0	9,389.4	35.6	32.6	-17.22	5,068.6	-885.4	5,499.6	5,432.2	67.43	81.565		
9,600.0	9,548.7	9,401.0	9,389.4	35.9	32.6	-17.22	5,068.6	-885.4	5,501.9	5,434.1	67.70	81.264		
9,700.0	9,648.7	9,401.0	9,389.4	36.2	32.6	-17.22	5,068.6	-885.4	5,505.9	5,438.0	67.96	81.016		
9,800.0	9,748.7	9,401.0	9,389.4	36.5	32.6	-17.22	5,068.6	-885.4	5,511.8	5,443.6	68.20	80.819		

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
9,900.0	9,848.7	9,453.6	9,441.9	36.9	32.8	-17.21	5,071.1	-885.3	5,517.6	5,448.9	68.66	80.359	
10,000.0	9,948.7	9,495.0	9,483.1	37.2	32.9	-17.20	5,075.6	-884.9	5,526.6	5,457.5	69.07	80.017	
10,100.0	10,048.7	9,495.0	9,483.1	37.5	32.9	-17.20	5,075.6	-884.9	5,536.2	5,466.9	69.26	79.927	
10,200.0	10,148.7	9,495.0	9,483.1	37.9	32.9	-17.20	5,075.6	-884.9	5,547.5	5,478.1	69.44	79.886	
10,300.0	10,248.7	9,495.0	9,483.1	38.2	32.9	-17.20	5,075.6	-884.9	5,560.7	5,491.1	69.60	79.893	
10,400.0	10,348.7	9,495.0	9,483.1	38.5	32.9	-17.20	5,075.6	-884.9	5,575.6	5,505.9	69.74	79.947	
10,500.0	10,448.7	9,495.0	9,483.1	38.9	32.9	-17.20	5,075.6	-884.9	5,592.3	5,522.4	69.86	80.047	
10,600.0	10,548.7	9,542.0	9,529.2	39.2	33.1	-17.16	5,084.8	-883.9	5,610.3	5,540.0	70.24	79.874	
10,700.0	10,648.7	9,542.0	9,529.2	39.5	33.1	-17.16	5,084.8	-883.9	5,629.6	5,559.2	70.33	80.042	
10,800.0	10,748.7	9,542.0	9,529.2	39.9	33.1	-17.16	5,084.8	-883.9	5,650.6	5,580.2	70.41	80.254	
10,900.0	10,848.7	9,542.0	9,529.2	40.2	33.1	-17.16	5,084.8	-883.9	5,673.3	5,602.8	70.47	80.509	
11,000.0	10,948.7	9,566.6	9,552.9	40.5	33.1	-17.13	5,091.1	-883.2	5,697.4	5,626.7	70.67	80.621	
11,100.0	11,048.7	9,589.0	9,574.5	40.9	33.2	-17.11	5,097.2	-882.8	5,722.8	5,651.9	70.85	80.776	
11,200.0	11,148.7	9,589.0	9,574.5	41.2	33.2	-17.11	5,097.2	-882.8	5,749.6	5,678.7	70.87	81.133	
11,300.0	11,248.7	9,589.0	9,574.5	41.5	33.2	-17.11	5,097.2	-882.8	5,778.0	5,707.2	70.87	81.529	
11,400.0	11,348.7	9,589.0	9,574.5	41.9	33.2	-17.11	5,097.2	-882.8	5,808.1	5,737.2	70.86	81.963	
11,423.3	11,372.0	9,589.0	9,574.5	42.0	33.2	-17.11	5,097.2	-882.8	5,815.3	5,744.4	70.86	82.070	
11,450.0	11,398.6	9,611.8	9,596.2	42.0	33.3	-16.40	5,104.1	-882.5	5,822.4	5,751.4	71.01	81.994	
11,500.0	11,448.4	9,636.0	9,618.9	42.2	33.3	-16.05	5,112.6	-882.6	5,834.6	5,763.5	71.17	81.986	
11,550.0	11,497.6	9,636.0	9,618.9	42.4	33.3	-15.83	5,112.6	-882.6	5,842.4	5,771.2	71.15	82.117	
11,600.0	11,545.9	9,636.0	9,618.9	42.5	33.3	-15.72	5,112.6	-882.6	5,846.4	5,775.3	71.12	82.204	
11,650.0	11,592.8	9,636.0	9,618.9	42.6	33.3	-15.72	5,112.6	-882.6	5,846.6	5,775.5	71.09	82.247	
11,700.0	11,638.0	9,636.0	9,618.9	42.8	33.3	-15.81	5,112.6	-882.6	5,843.1	5,772.0	71.04	82.247	
11,750.0	11,681.2	9,636.0	9,618.9	42.9	33.3	-16.02	5,112.6	-882.6	5,835.8	5,764.8	70.99	82.203	
11,800.0	11,722.1	9,636.0	9,618.9	43.0	33.3	-16.33	5,112.6	-882.6	5,824.8	5,753.8	70.93	82.117	
11,850.0	11,760.3	9,636.0	9,618.9	43.1	33.3	-16.77	5,112.6	-882.6	5,810.1	5,739.3	70.87	81.988	
11,900.0	11,795.5	9,636.0	9,618.9	43.2	33.3	-17.34	5,112.6	-882.6	5,791.9	5,721.2	70.79	81.816	
11,950.0	11,827.6	9,653.7	9,635.2	43.2	33.4	-18.10	5,119.4	-882.9	5,770.1	5,699.2	70.85	81.443	
12,000.0	11,856.1	9,675.3	9,654.9	43.3	33.5	-19.08	5,128.1	-883.3	5,745.1	5,674.2	70.93	80.993	
12,050.0	11,881.0	9,675.3	9,654.9	43.3	33.5	-20.24	5,128.1	-883.3	5,716.7	5,645.8	70.85	80.687	
12,100.0	11,902.0	9,675.3	9,654.9	43.3	33.5	-21.69	5,128.1	-883.3	5,685.2	5,614.5	70.77	80.339	
12,150.0	11,918.9	9,675.3	9,654.9	43.4	33.5	-23.50	5,128.1	-883.3	5,651.0	5,580.3	70.68	79.949	
12,200.0	11,931.7	9,683.0	9,662.0	43.4	33.5	-25.81	5,131.3	-883.6	5,614.2	5,543.5	70.67	79.447	
12,250.0	11,940.3	9,683.0	9,662.0	43.5	33.5	-28.72	5,131.3	-883.6	5,574.9	5,504.3	70.59	78.973	
12,300.0	11,944.5	9,683.0	9,662.0	43.6	33.5	-32.46	5,131.3	-883.6	5,533.6	5,463.1	70.53	78.458	
12,326.5	11,944.9	9,683.0	9,662.0	43.6	33.5	-34.89	5,131.3	-883.6	5,510.9	5,440.4	70.50	78.167	
12,391.6	11,944.6	9,683.0	9,662.0	43.7	33.5	-34.89	5,131.3	-883.6	5,454.7	5,384.3	70.43	77.447	
12,400.0	11,944.5	9,683.0	9,662.0	43.8	33.5	-34.89	5,131.3	-883.6	5,447.5	5,377.1	70.42	77.355	
12,500.0	11,944.0	9,683.0	9,662.0	44.1	33.5	-34.89	5,131.3	-883.6	5,361.6	5,291.3	70.32	76.251	
12,600.0	11,943.4	9,703.0	9,680.0	44.4	33.5	-35.11	5,140.0	-884.2	5,276.0	5,205.6	70.39	74.956	
12,700.0	11,942.9	9,708.7	9,685.1	44.9	33.6	-35.18	5,142.5	-884.4	5,190.9	5,120.6	70.34	73.795	
12,800.0	11,942.3	9,730.0	9,703.9	45.4	33.6	-35.42	5,152.4	-885.2	5,106.5	5,036.1	70.44	72.491	
12,900.0	11,941.7	9,730.0	9,703.9	45.9	33.6	-35.42	5,152.4	-885.2	5,022.4	4,952.0	70.36	71.376	
13,000.0	11,941.2	9,730.0	9,703.9	46.6	33.6	-35.42	5,152.4	-885.2	4,938.8	4,868.5	70.29	70.261	
13,100.0	11,940.6	9,730.0	9,703.9	47.2	33.6	-35.42	5,152.4	-885.2	4,855.9	4,785.6	70.23	69.146	
13,200.0	11,940.1	9,730.0	9,703.9	48.0	33.6	-35.42	5,152.4	-885.2	4,773.6	4,703.4	70.17	68.030	
13,300.0	11,939.5	9,730.0	9,703.9	48.7	33.6	-35.42	5,152.4	-885.2	4,692.0	4,621.9	70.12	66.914	
13,400.0	11,939.0	9,730.0	9,703.9	49.5	33.6	-35.42	5,152.4	-885.2	4,611.1	4,541.0	70.08	65.798	
13,500.0	11,938.4	9,752.4	9,723.4	50.4	33.7	-35.67	5,163.5	-886.1	4,530.5	4,460.2	70.28	64.466	
13,600.0	11,937.8	9,777.0	9,744.2	51.3	33.7	-35.94	5,176.5	-887.2	4,451.2	4,380.7	70.52	63.124	
13,700.0	11,937.3	9,777.0	9,744.2	52.2	33.7	-35.94	5,176.5	-887.2	4,372.2	4,301.7	70.52	61.999	
13,800.0	11,936.7	9,777.0	9,744.2	53.1	33.7	-35.94	5,176.5	-887.2	4,294.1	4,223.5	70.54	60.875	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
13,900.0	11,936.2	9,777.0	9,744.2	54.1	33.7	-35.94	5,176.5	-887.2	4,216.9	4,146.3	70.57	59.751	
14,000.0	11,935.6	9,777.0	9,744.2	55.2	33.7	-35.94	5,176.5	-887.2	4,140.6	4,070.0	70.62	58.629	
14,100.0	11,935.0	9,797.6	9,761.3	56.2	33.8	-36.17	5,188.1	-888.3	4,065.2	3,994.2	70.92	57.318	
14,200.0	11,934.5	9,824.0	9,782.7	57.3	33.9	-36.47	5,203.4	-889.5	3,990.8	3,919.5	71.31	55.962	
14,300.0	11,933.9	9,824.0	9,782.7	58.4	33.9	-36.47	5,203.4	-889.5	3,917.1	3,845.7	71.43	54.838	
14,400.0	11,933.4	9,824.0	9,782.7	59.5	33.9	-36.47	5,203.4	-889.5	3,844.6	3,773.1	71.57	53.718	
14,500.0	11,932.8	9,848.8	9,802.5	60.7	33.9	-36.74	5,218.3	-890.7	3,773.1	3,701.0	72.03	52.382	
14,600.0	11,932.3	9,871.0	9,819.8	61.9	34.0	-36.98	5,232.1	-891.5	3,702.7	3,630.2	72.49	51.082	
14,700.0	11,931.7	9,871.0	9,819.8	63.1	34.0	-36.98	5,232.1	-891.5	3,633.4	3,560.7	72.71	49.969	
14,800.0	11,931.1	9,871.0	9,819.8	64.3	34.0	-36.98	5,232.1	-891.5	3,565.6	3,492.6	72.97	48.865	
14,900.0	11,930.6	9,892.4	9,836.1	65.5	34.1	-37.20	5,245.9	-892.4	3,498.8	3,425.3	73.52	47.590	
15,000.0	11,930.0	9,918.0	9,854.8	66.8	34.1	-37.47	5,263.4	-893.5	3,434.0	3,359.8	74.15	46.311	
15,100.0	11,929.5	9,918.0	9,854.8	68.1	34.1	-37.47	5,263.4	-893.5	3,370.1	3,295.6	74.51	45.230	
15,200.0	11,928.9	9,918.0	9,854.8	69.4	34.1	-37.47	5,263.4	-893.5	3,308.1	3,233.1	74.90	44.165	
15,300.0	11,928.3	9,937.4	9,868.5	70.7	34.2	-37.67	5,277.1	-894.4	3,247.6	3,172.0	75.57	42.973	
15,400.0	11,927.8	9,966.0	9,888.2	72.0	34.3	-37.96	5,297.8	-896.0	3,189.0	3,112.6	76.41	41.736	
15,500.0	11,927.2	9,966.0	9,888.2	73.3	34.3	-37.96	5,297.8	-896.0	3,131.8	3,054.9	76.92	40.716	
15,600.0	11,926.7	9,966.0	9,888.2	74.7	34.3	-37.96	5,297.8	-896.0	3,076.9	2,999.4	77.47	39.719	
15,700.0	11,926.1	9,994.6	9,906.9	76.0	34.4	-38.25	5,319.3	-897.8	3,023.5	2,945.1	78.42	38.553	
15,800.0	11,925.6	10,013.0	9,918.4	77.4	34.5	-38.42	5,333.7	-899.0	2,972.3	2,893.0	79.29	37.486	
15,900.0	11,925.0	10,013.0	9,918.4	78.8	34.5	-38.42	5,333.7	-899.0	2,923.4	2,843.4	79.96	36.562	
16,000.0	11,924.4	10,036.9	9,932.6	80.2	34.5	-38.65	5,352.9	-900.5	2,876.5	2,795.6	80.97	35.526	
16,100.0	11,923.9	10,060.0	9,945.4	81.6	34.6	-38.85	5,372.0	-901.9	2,832.2	2,750.2	82.01	34.536	
16,200.0	11,923.3	10,060.0	9,945.4	83.0	34.6	-38.85	5,372.0	-901.9	2,790.2	2,707.4	82.79	33.704	
16,300.0	11,922.8	10,107.0	9,969.3	84.4	34.8	-39.23	5,412.4	-904.6	2,750.7	2,666.5	84.18	32.676	
16,400.0	11,922.2	10,117.4	9,974.3	85.9	34.8	-39.32	5,421.5	-905.2	2,713.2	2,628.1	85.15	31.863	
16,500.0	11,921.6	10,136.9	9,983.2	87.3	34.9	-39.46	5,438.7	-906.3	2,678.4	2,592.1	86.26	31.048	
16,600.0	11,921.1	10,155.0	9,991.1	88.7	35.0	-39.59	5,455.1	-907.3	2,646.3	2,558.9	87.38	30.284	
16,700.0	11,920.5	10,155.0	9,991.1	90.2	35.0	-39.59	5,455.1	-907.3	2,617.3	2,529.0	88.30	29.640	
16,800.0	11,920.0	10,202.0	10,008.5	91.7	35.1	-39.89	5,498.6	-910.2	2,590.8	2,501.0	89.78	28.857	
16,900.0	11,919.4	10,202.0	10,008.5	93.1	35.1	-39.89	5,498.6	-910.2	2,567.2	2,476.5	90.73	28.294	
17,000.0	11,918.8	10,223.6	10,015.1	94.6	35.2	-40.01	5,519.1	-911.5	2,546.9	2,455.0	91.93	27.706	
17,100.0	11,918.3	10,249.0	10,021.5	96.1	35.3	-40.13	5,543.7	-913.1	2,529.8	2,436.7	93.14	27.160	
17,200.0	11,917.7	10,270.8	10,026.1	97.6	35.4	-40.22	5,565.0	-914.4	2,515.7	2,421.4	94.32	26.673	
17,300.0	11,917.2	10,316.6	10,034.5	99.0	35.6	-40.39	5,609.9	-916.8	2,503.9	2,408.2	95.70	26.165	
17,400.0	11,916.6	10,344.0	10,039.0	100.5	35.7	-40.48	5,636.9	-918.3	2,494.5	2,397.6	96.90	25.742	
17,500.0	11,916.1	10,372.5	10,042.9	102.0	35.8	-40.57	5,665.1	-920.1	2,487.9	2,389.8	98.11	25.359	
17,600.0	11,915.5	10,391.0	10,044.8	103.5	35.9	-40.62	5,683.4	-921.7	2,484.5	2,385.3	99.20	25.046	
17,667.1	11,915.1	10,416.9	10,046.9	104.6	36.0	-40.70	5,709.1	-924.0	2,483.9	2,383.8	100.05	24.828 CC	
17,700.0	11,914.9	10,438.0	10,048.0	105.1	36.1	-40.74	5,730.1	-925.9	2,484.1	2,383.6	100.53	24.711	
17,800.0	11,914.4	10,480.9	10,049.4	106.6	36.3	-40.83	5,772.8	-929.6	2,486.0	2,384.2	101.78	24.424	
17,900.0	11,913.8	10,545.0	10,050.1	108.1	36.7	-40.92	5,836.7	-934.8	2,489.5	2,386.3	103.20	24.123	
18,000.0	11,913.3	10,620.0	10,049.9	109.6	37.1	-41.03	5,911.4	-941.1	2,494.3	2,389.5	104.73	23.817	
18,100.0	11,912.7	10,700.2	10,049.1	111.1	37.6	-41.13	5,991.2	-948.2	2,499.9	2,393.6	106.34	23.510	
18,200.0	11,912.1	10,831.4	10,047.3	112.7	38.5	-41.28	6,122.0	-958.8	2,505.3	2,396.8	108.48	23.095	
18,300.0	11,911.6	10,910.7	10,046.1	114.2	39.1	-41.36	6,201.0	-964.9	2,510.5	2,400.4	110.14	22.794	
18,400.0	11,911.0	11,042.4	10,042.7	115.7	40.1	-41.43	6,332.5	-972.3	2,515.2	2,402.9	112.32	22.393	
18,500.0	11,910.5	11,283.5	10,036.4	117.3	42.3	-41.39	6,573.4	-976.4	2,518.1	2,402.7	115.47	21.808	
18,600.0	11,909.9	11,362.9	10,034.5	118.8	43.0	-41.33	6,652.8	-974.3	2,517.3	2,400.2	117.07	21.502	
18,647.7	11,909.6	11,399.3	10,033.4	119.6	43.4	-41.29	6,689.2	-973.4	2,517.2	2,399.4	117.83	21.363	
18,700.0	11,909.4	11,438.3	10,031.9	120.4	43.8	-41.25	6,728.1	-972.5	2,517.3	2,398.7	118.65	21.216	
18,800.0	11,908.8	11,589.9	10,028.2	121.9	45.3	-41.13	6,879.6	-969.3	2,516.9	2,395.9	120.96	20.807	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
18,900.0	11,908.2	11,678.0	10,026.8	123.5	46.3	-41.08	6,967.7	-967.7	2,515.9	2,393.1	122.75	20.495	
19,000.0	11,907.7	11,809.8	10,027.1	125.0	47.7	-41.04	7,099.5	-965.6	2,513.5	2,388.5	125.06	20.099	
19,100.0	11,907.1	11,893.1	10,027.6	126.6	48.7	-41.03	7,182.8	-964.8	2,511.6	2,384.6	126.91	19.790	
19,200.0	11,906.6	11,983.7	10,027.5	128.1	49.8	-41.01	7,273.4	-964.1	2,510.2	2,381.3	128.85	19.482	
19,300.0	11,906.0	12,076.7	10,027.1	129.7	50.9	-40.99	7,366.4	-963.3	2,509.0	2,378.2	130.82	19.179	
19,400.0	11,905.4	12,165.1	10,026.0	131.3	51.9	-40.95	7,454.8	-962.4	2,508.3	2,375.5	132.73	18.897	
19,485.8	11,905.0	12,237.8	10,024.6	132.6	52.8	-40.91	7,527.4	-961.4	2,508.0	2,373.7	134.33	18.671	
19,500.0	11,904.9	12,248.1	10,024.4	132.8	53.0	-40.90	7,537.7	-961.3	2,508.0	2,373.4	134.57	18.637	
19,600.0	11,904.3	12,320.2	10,022.1	134.4	53.9	-40.85	7,609.8	-960.6	2,508.7	2,372.4	136.27	18.409	
19,700.0	11,903.8	12,387.5	10,019.2	136.0	54.7	-40.80	7,677.0	-960.1	2,510.6	2,372.7	137.90	18.206	
19,800.0	11,903.2	12,481.0	10,014.7	137.5	55.9	-40.73	7,770.4	-960.4	2,513.5	2,373.6	139.86	17.971	
19,900.0	11,902.7	12,663.2	10,015.1	139.1	58.3	-40.82	7,952.5	-965.5	2,513.8	2,370.5	143.27	17.546	
19,971.8	11,902.3	12,724.1	10,016.7	140.2	59.2	-40.88	8,013.3	-967.9	2,513.6	2,368.8	144.83	17.356	
20,000.0	11,902.1	12,745.9	10,017.2	140.7	59.5	-40.90	8,035.2	-968.9	2,513.6	2,368.2	145.41	17.286	
20,100.0	11,901.5	12,832.3	10,019.0	142.3	60.6	-40.99	8,121.4	-973.1	2,514.2	2,366.6	147.63	17.031	
20,200.0	11,901.0	12,927.9	10,021.0	143.8	61.9	-41.10	8,216.8	-978.1	2,515.1	2,365.1	150.01	16.766	
20,300.0	11,900.4	13,011.3	10,022.7	145.4	63.1	-41.20	8,300.0	-982.6	2,516.3	2,364.1	152.22	16.531	
20,400.0	11,899.9	13,128.7	10,024.2	147.0	64.7	-41.33	8,417.2	-989.3	2,518.3	2,363.3	154.97	16.250	
20,500.0	11,899.3	13,237.5	10,025.5	148.6	66.3	-41.41	8,526.0	-993.2	2,518.8	2,361.2	157.52	15.990	
20,600.0	11,898.7	13,327.8	10,026.5	150.2	67.6	-41.49	8,616.3	-996.7	2,519.6	2,359.7	159.81	15.766	
20,700.0	11,898.2	13,456.2	10,026.5	151.8	69.4	-41.52	8,744.6	-999.2	2,519.9	2,357.3	162.56	15.501	
20,710.5	11,898.1	13,463.5	10,026.4	151.9	69.5	-41.52	8,751.9	-999.2	2,519.9	2,357.1	162.75	15.483	
20,800.0	11,897.6	13,525.6	10,024.8	153.4	70.4	-41.48	8,814.0	-998.7	2,520.3	2,356.0	164.36	15.334	
20,900.0	11,897.1	13,608.8	10,021.2	155.0	71.6	-41.41	8,897.1	-997.8	2,521.8	2,355.5	166.27	15.167	
21,000.0	11,896.5	13,689.3	10,017.3	156.5	72.8	-41.33	8,977.5	-997.1	2,523.9	2,355.8	168.13	15.012	
21,100.0	11,896.0	13,893.4	10,012.4	158.1	75.7	-41.21	9,181.5	-994.8	2,523.7	2,352.1	171.62	14.706	
21,200.0	11,895.4	13,983.1	10,011.7	159.7	77.0	-41.17	9,271.2	-993.4	2,522.3	2,348.6	173.72	14.520	
21,300.0	11,894.8	14,059.3	10,010.5	161.3	78.2	-41.13	9,347.4	-992.2	2,521.6	2,345.9	175.63	14.357	
21,322.0	11,894.7	14,075.3	10,010.2	161.7	78.4	-41.12	9,363.4	-992.0	2,521.5	2,345.5	176.04	14.324	
21,400.0	11,894.3	14,132.9	10,008.5	162.9	79.3	-41.08	9,420.9	-991.4	2,521.9	2,344.4	177.48	14.209	
21,500.0	11,893.7	14,273.8	10,004.5	164.5	81.4	-41.00	9,561.8	-990.4	2,522.9	2,342.7	180.18	14.002	
21,600.0	11,893.2	14,397.6	10,004.6	166.1	83.2	-40.98	9,685.6	-989.5	2,521.4	2,338.6	182.78	13.795	
21,700.0	11,892.6	14,467.6	10,004.6	167.7	84.3	-40.97	9,755.6	-989.4	2,520.4	2,335.7	184.71	13.645	
21,723.6	11,892.5	14,477.0	10,004.5	168.1	84.4	-40.97	9,764.9	-989.4	2,520.3	2,335.2	185.06	13.619	
21,800.0	11,892.0	14,522.5	10,003.9	169.3	85.1	-40.96	9,810.5	-989.6	2,520.6	2,334.3	186.39	13.523 ES	
21,900.0	11,891.5	14,571.0	10,002.4	170.9	85.8	-40.94	9,858.9	-990.2	2,522.8	2,334.9	187.91	13.426	
22,000.0	11,890.9	14,638.0	9,999.1	172.5	86.9	-40.91	9,925.8	-991.2	2,526.7	2,337.0	189.63	13.324	
22,100.0	11,890.4	14,710.0	9,994.3	174.1	88.0	-40.86	9,997.6	-992.5	2,531.9	2,340.5	191.38	13.229	
22,191.7	11,890.5	14,780.7	9,989.3	175.6	89.0	-40.80	10,068.2	-994.2	2,537.9	2,344.9	193.02	13.148 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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	-75.53	28.4	-110.1	113.7				
100.0	100.0	100.0	100.0	0.1	0.1	-75.53	28.4	-110.1	113.7	113.5	0.26	443.747	
200.0	200.0	200.0	200.0	0.5	0.5	-75.53	28.4	-110.1	113.7	112.8	0.97	116.862	
300.0	300.0	300.0	300.0	0.8	0.8	-75.53	28.4	-110.1	113.7	112.0	1.69	67.291	
400.0	400.0	400.0	400.0	1.2	1.2	-75.53	28.4	-110.1	113.7	111.3	2.41	47.249	
500.0	500.0	500.0	500.0	1.6	1.6	-75.53	28.4	-110.1	113.7	110.6	3.12	36.406	
600.0	600.0	600.0	600.0	1.9	1.9	-75.53	28.4	-110.1	113.7	109.9	3.84	29.611	
700.0	700.0	700.0	700.0	2.3	2.3	-75.53	28.4	-110.1	113.7	109.2	4.56	24.953	
800.0	800.0	800.0	800.0	2.6	2.6	-75.53	28.4	-110.1	113.7	108.5	5.27	21.562	
900.0	900.0	900.0	900.0	3.0	3.0	-75.53	28.4	-110.1	113.7	107.7	5.99	18.982	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	-75.53	28.4	-110.1	113.7	107.0	6.71	16.953	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	-75.53	28.4	-110.1	113.7	106.3	7.43	15.316	
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	-75.53	28.4	-110.1	113.7	105.6	8.14	13.968	
1,300.0	1,300.0	1,300.0	1,300.0	4.4	4.4	-75.53	28.4	-110.1	113.7	104.9	8.86	12.838	
1,400.0	1,400.0	1,400.0	1,400.0	4.8	4.8	-75.53	28.4	-110.1	113.7	104.2	9.58	11.876	
1,500.0	1,500.0	1,500.0	1,500.0	5.1	5.1	-75.53	28.4	-110.1	113.7	103.4	10.29	11.049 CC, ES	
1,600.0	1,600.0	1,600.0	1,600.0	5.5	5.5	-179.44	28.4	-110.1	114.6	103.6	11.00	10.420	
1,700.0	1,700.0	1,700.0	1,700.0	5.8	5.9	-179.45	28.4	-110.1	117.2	105.5	11.70	10.023	
1,800.0	1,799.9	1,798.1	1,798.1	6.2	6.2	-179.67	28.2	-110.9	122.3	109.9	12.38	9.883	
1,900.0	1,899.7	1,895.9	1,895.8	6.5	6.5	179.74	27.4	-113.3	130.6	117.6	13.04	10.013	
2,000.0	1,999.4	1,993.2	1,993.1	6.9	6.9	178.89	26.2	-117.3	142.1	128.4	13.71	10.365	
2,100.0	2,098.9	2,089.9	2,089.6	7.2	7.2	177.89	24.5	-122.8	156.9	142.5	14.38	10.912	
2,200.0	2,198.3	2,185.8	2,185.2	7.6	7.5	176.83	22.4	-129.8	174.8	159.8	15.03	11.628	
2,300.0	2,297.4	2,280.7	2,279.7	8.0	7.9	175.78	19.8	-138.2	196.0	180.3	15.69	12.493	
2,400.0	2,396.4	2,374.8	2,373.2	8.3	8.2	174.79	16.7	-148.1	219.5	203.2	16.33	13.438	
2,500.0	2,495.5	2,468.1	2,465.8	8.7	8.5	173.83	13.3	-159.3	244.5	227.5	16.97	14.405	
2,600.0	2,594.5	2,563.3	2,560.1	9.1	8.9	172.93	9.4	-171.8	270.7	253.1	17.64	15.347	
2,700.0	2,693.5	2,659.7	2,655.5	9.5	9.3	172.16	5.4	-184.6	297.0	278.7	18.32	16.212	
2,800.0	2,792.5	2,756.1	2,751.0	9.9	9.6	171.52	1.5	-197.5	323.4	304.4	19.01	17.013	
2,900.0	2,891.6	2,852.5	2,846.4	10.3	10.0	170.98	-2.5	-210.3	349.8	330.1	19.70	17.758	
3,000.0	2,990.6	2,948.9	2,941.9	10.7	10.4	170.51	-6.4	-223.1	376.2	355.8	20.39	18.451	
3,100.0	3,089.6	3,045.3	3,037.4	11.0	10.7	170.10	-10.4	-235.9	402.7	381.6	21.08	19.097	
3,200.0	3,188.6	3,141.7	3,132.8	11.4	11.1	169.74	-14.3	-248.8	429.1	407.3	21.78	19.700	
3,300.0	3,287.7	3,238.1	3,228.3	11.8	11.5	169.43	-18.3	-261.6	455.6	433.1	22.48	20.265	
3,400.0	3,386.7	3,334.5	3,323.8	12.2	11.9	169.15	-22.2	-274.4	482.1	458.9	23.18	20.795	
3,500.0	3,485.7	3,430.9	3,419.2	12.7	12.2	168.90	-26.2	-287.2	508.6	484.7	23.88	21.293	
3,600.0	3,584.8	3,527.3	3,514.7	13.1	12.6	168.67	-30.1	-300.0	535.1	510.5	24.59	21.761	
3,700.0	3,683.8	3,623.7	3,610.2	13.5	13.0	168.47	-34.1	-312.9	561.6	536.3	25.29	22.202	
3,800.0	3,782.8	3,720.1	3,705.6	13.9	13.4	168.28	-38.0	-325.7	588.1	562.1	26.00	22.619	
3,900.0	3,881.8	3,816.5	3,801.1	14.3	13.8	168.11	-42.0	-338.5	614.6	587.9	26.71	23.012	
4,000.0	3,980.9	3,912.9	3,896.6	14.7	14.2	167.95	-46.0	-351.3	641.1	613.7	27.42	23.385	
4,100.0	4,079.9	4,009.3	3,992.0	15.1	14.6	167.81	-49.9	-364.1	667.7	639.5	28.13	23.738	
4,200.0	4,178.9	4,105.7	4,087.5	15.5	15.0	167.68	-53.9	-377.0	694.2	665.4	28.84	24.073	
4,300.0	4,277.9	4,202.1	4,183.0	15.9	15.4	167.55	-57.8	-389.8	720.7	691.2	29.55	24.391	
4,400.0	4,377.0	4,298.5	4,278.4	16.3	15.7	167.44	-61.8	-402.6	747.3	717.0	30.26	24.693	
4,500.0	4,476.0	4,405.1	4,373.9	16.7	16.2	167.33	-65.7	-415.4	773.8	742.8	31.01	24.951	
4,600.0	4,575.0	4,508.7	4,469.4	17.1	16.6	167.23	-69.7	-428.2	800.4	768.6	31.75	25.205	
4,700.0	4,674.0	4,587.7	4,564.8	17.6	16.9	167.14	-73.6	-441.1	826.9	794.5	32.40	25.518	
4,800.0	4,773.1	4,684.1	4,660.3	18.0	17.3	167.05	-77.6	-453.9	853.5	820.3	33.12	25.769	
4,900.0	4,872.1	4,780.5	4,755.8	18.4	17.7	166.97	-81.5	-466.7	880.0	846.2	33.84	26.008	
5,000.0	4,971.1	4,877.0	4,851.2	18.8	18.1	166.89	-85.5	-479.5	906.6	872.0	34.55	26.237	
5,100.0	5,070.2	4,973.4	4,946.7	19.2	18.5	166.82	-89.4	-492.4	933.1	897.9	35.27	26.457	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
5,200.0	5,169.2	5,069.8	5,042.2	19.6	18.9	166.75	-93.4	-505.2	959.7	923.7	35.99	26.667	
5,300.0	5,268.2	5,166.2	5,137.6	20.0	19.3	166.69	-97.3	-518.0	986.2	949.5	36.71	26.869	
5,400.0	5,367.2	5,262.6	5,233.1	20.5	19.7	166.63	-101.3	-530.8	1,012.8	975.4	37.42	27.063	
5,500.0	5,466.3	5,359.0	5,328.5	20.9	20.1	166.57	-105.3	-543.6	1,039.4	1,001.2	38.14	27.249	
5,600.0	5,565.3	5,455.4	5,424.0	21.3	20.5	166.51	-109.2	-556.5	1,065.9	1,027.0	38.86	27.428	
5,700.0	5,664.3	5,551.8	5,519.5	21.7	20.9	166.46	-113.2	-569.3	1,092.5	1,052.9	39.58	27.601	
5,800.0	5,763.3	5,648.2	5,614.9	22.1	21.3	166.41	-117.1	-582.1	1,119.0	1,078.7	40.30	27.767	
5,900.0	5,862.4	5,744.6	5,710.4	22.5	21.7	166.36	-121.1	-594.9	1,145.6	1,104.6	41.02	27.927	
6,000.0	5,961.4	5,841.0	5,805.9	23.0	22.1	166.31	-125.0	-607.7	1,172.2	1,130.4	41.74	28.081	
6,100.0	6,060.4	5,937.4	5,901.3	23.4	22.5	166.27	-129.0	-620.6	1,198.7	1,156.3	42.46	28.229	
6,200.0	6,159.4	6,033.8	5,996.8	23.8	22.9	166.23	-132.9	-633.4	1,225.3	1,182.1	43.18	28.373	
6,300.0	6,258.5	6,130.2	6,092.3	24.2	23.3	166.19	-136.9	-646.2	1,251.8	1,207.9	43.91	28.512	
6,400.0	6,357.5	6,226.6	6,187.7	24.6	23.7	166.15	-140.8	-659.0	1,278.4	1,233.8	44.63	28.646	
6,500.0	6,456.5	6,323.0	6,283.2	25.1	24.1	166.11	-144.8	-671.9	1,305.0	1,259.6	45.35	28.775	
6,600.0	6,555.6	6,419.4	6,378.7	25.5	24.5	166.08	-148.7	-684.7	1,331.5	1,285.5	46.07	28.901	
6,700.0	6,654.6	6,515.8	6,474.1	25.9	24.9	166.04	-152.7	-697.5	1,358.1	1,311.3	46.80	29.022	
6,800.0	6,753.6	6,612.2	6,569.6	26.3	25.3	166.01	-156.6	-710.3	1,384.7	1,337.2	47.52	29.140	
6,900.0	6,852.6	6,708.6	6,665.1	26.7	25.7	165.98	-160.6	-723.1	1,411.2	1,363.0	48.24	29.253	
7,000.0	6,951.7	6,805.0	6,760.5	27.1	26.1	165.95	-164.5	-736.0	1,437.8	1,388.8	48.97	29.364	
7,100.0	7,050.7	6,901.4	6,856.0	27.6	26.5	165.92	-168.5	-748.8	1,464.4	1,414.7	49.69	29.471	
7,131.4	7,081.7	6,931.7	6,885.9	27.7	26.7	165.91	-169.7	-752.8	1,472.7	1,422.8	49.92	29.504	
7,200.0	7,149.8	7,002.0	6,951.6	28.0	27.0	165.95	-172.5	-761.6	1,490.4	1,439.9	50.43	29.554	
7,300.0	7,249.2	7,104.9	7,047.8	28.4	27.4	165.98	-176.4	-774.5	1,514.0	1,462.8	51.17	29.587	
7,400.0	7,348.9	7,207.2	7,144.6	28.8	27.8	165.98	-180.5	-787.5	1,535.2	1,483.3	51.91	29.573	
7,500.0	7,448.7	7,309.0	7,241.8	29.1	28.2	165.95	-184.5	-800.6	1,553.9	1,501.2	52.65	29.516	
7,600.0	7,548.7	7,389.7	7,339.5	29.5	28.6	165.89	-188.5	-813.7	1,570.1	1,516.8	53.30	29.460	
7,664.7	7,613.3	7,453.6	7,402.8	29.7	28.9	-90.27	-191.1	-822.2	1,579.2	1,525.5	53.76	29.378	
7,700.0	7,648.7	7,499.1	7,447.8	29.8	29.0	-90.33	-193.0	-828.2	1,583.9	1,529.8	54.09	29.284	
7,800.0	7,748.7	7,664.4	7,612.1	30.1	29.7	-90.52	-198.4	-845.7	1,594.5	1,539.3	55.26	28.856	
7,900.0	7,848.7	7,830.9	7,778.3	30.4	30.3	-90.64	-201.7	-856.4	1,601.0	1,544.7	56.34	28.419	
8,000.0	7,948.7	7,998.2	7,945.5	30.7	30.9	-90.68	-202.9	-860.3	1,603.3	1,546.0	57.30	27.980	
8,100.0	8,048.7	8,101.4	8,048.7	31.0	31.2	-90.68	-202.9	-860.3	1,603.3	1,545.3	57.98	27.653	
8,200.0	8,148.7	8,201.4	8,148.7	31.4	31.5	-90.68	-202.9	-860.3	1,603.3	1,544.7	58.65	27.337	
8,300.0	8,248.7	8,301.4	8,248.7	31.7	31.8	-90.68	-202.9	-860.3	1,603.3	1,544.0	59.32	27.029	
8,400.0	8,348.7	8,401.4	8,348.7	32.0	32.2	-90.68	-202.9	-860.3	1,603.3	1,543.3	59.99	26.727	
8,500.0	8,448.7	8,501.4	8,448.7	32.3	32.5	-90.68	-202.9	-860.3	1,603.3	1,542.6	60.66	26.431	
8,600.0	8,548.7	8,601.4	8,548.7	32.6	32.8	-90.68	-202.9	-860.3	1,603.3	1,542.0	61.33	26.141	
8,700.0	8,648.7	8,701.4	8,648.7	33.0	33.1	-90.68	-202.9	-860.3	1,603.3	1,541.3	62.01	25.857	
8,800.0	8,748.7	8,801.4	8,748.7	33.3	33.4	-90.68	-202.9	-860.3	1,603.3	1,540.6	62.68	25.578	
8,900.0	8,848.7	8,901.4	8,848.7	33.6	33.7	-90.68	-202.9	-860.3	1,603.3	1,540.0	63.36	25.306	
9,000.0	8,948.7	9,001.4	8,948.7	33.9	34.1	-90.68	-202.9	-860.3	1,603.3	1,539.3	64.03	25.038	
9,100.0	9,048.7	9,101.4	9,048.7	34.3	34.4	-90.68	-202.9	-860.3	1,603.3	1,538.6	64.71	24.776	
9,200.0	9,148.7	9,201.4	9,148.7	34.6	34.7	-90.68	-202.9	-860.3	1,603.3	1,537.9	65.39	24.519	
9,300.0	9,248.7	9,301.4	9,248.7	34.9	35.0	-90.68	-202.9	-860.3	1,603.3	1,537.2	66.07	24.267	
9,400.0	9,348.7	9,401.4	9,348.7	35.2	35.4	-90.68	-202.9	-860.3	1,603.3	1,536.6	66.75	24.020	
9,500.0	9,448.7	9,501.4	9,448.7	35.6	35.7	-90.68	-202.9	-860.3	1,603.3	1,535.9	67.43	23.778	
9,600.0	9,548.7	9,601.4	9,548.7	35.9	36.0	-90.68	-202.9	-860.3	1,603.3	1,535.2	68.11	23.540	
9,700.0	9,648.7	9,701.4	9,648.7	36.2	36.3	-90.68	-202.9	-860.3	1,603.3	1,534.5	68.79	23.306	
9,800.0	9,748.7	9,801.4	9,748.7	36.5	36.7	-90.68	-202.9	-860.3	1,603.3	1,533.8	69.48	23.077	
9,900.0	9,848.7	9,901.4	9,848.7	36.9	37.0	-90.68	-202.9	-860.3	1,603.3	1,533.1	70.16	22.852	
10,000.0	9,948.7	10,001.4	9,948.7	37.2	37.3	-90.68	-202.9	-860.3	1,603.3	1,532.5	70.84	22.632	
10,100.0	10,048.7	10,101.4	10,048.7	37.5	37.6	-90.68	-202.9	-860.3	1,603.3	1,531.8	71.53	22.415	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	10,148.7	10,201.4	10,148.7	37.9	38.0	-90.68	-202.9	-860.3	1,603.3	1,531.1	72.21	22.202	
10,300.0	10,248.7	10,301.4	10,248.7	38.2	38.3	-90.68	-202.9	-860.3	1,603.3	1,530.4	72.90	21.993	
10,400.0	10,348.7	10,386.4	10,333.4	38.5	38.6	-90.50	-197.9	-860.7	1,603.7	1,530.2	73.53	21.812	
10,500.0	10,448.7	10,466.8	10,412.1	38.9	38.8	-89.93	-181.8	-862.0	1,605.3	1,531.2	74.11	21.662	
10,600.0	10,548.7	10,541.4	10,482.5	39.2	39.0	-89.05	-157.2	-864.0	1,608.5	1,533.8	74.63	21.552	
10,700.0	10,648.7	10,608.6	10,542.6	39.5	39.2	-87.99	-127.4	-866.4	1,613.7	1,538.7	75.07	21.496	
10,800.0	10,748.7	10,667.8	10,592.4	39.9	39.3	-86.86	-95.5	-868.9	1,621.8	1,546.4	75.40	21.509	
10,900.0	10,848.7	10,719.4	10,632.9	40.2	39.4	-85.74	-63.6	-871.5	1,633.2	1,557.6	75.60	21.602	
11,000.0	10,948.7	10,764.1	10,665.5	40.5	39.5	-84.68	-33.2	-873.9	1,648.3	1,572.7	75.65	21.789	
11,100.0	11,048.7	10,800.0	10,689.9	40.9	39.5	-83.77	-7.0	-876.0	1,667.6	1,592.1	75.51	22.084	
11,200.0	11,148.7	10,836.1	10,712.8	41.2	39.6	-82.80	20.8	-878.3	1,691.2	1,616.0	75.25	22.474	
11,300.0	11,248.7	10,865.0	10,729.8	41.5	39.6	-82.00	44.2	-880.2	1,719.2	1,644.4	74.81	22.980	
11,400.0	11,348.7	10,900.0	10,748.7	41.9	39.7	-81.00	73.5	-882.5	1,751.6	1,677.3	74.31	23.570	
11,423.3	11,372.0	10,900.0	10,748.7	42.0	39.7	-81.00	73.5	-882.5	1,759.7	1,685.6	74.11	23.746	
11,450.0	11,398.6	10,900.0	10,748.7	42.0	39.7	-79.54	73.5	-882.5	1,769.3	1,695.4	73.86	23.953	
11,500.0	11,448.4	10,914.3	10,756.0	42.2	39.7	-77.25	85.7	-883.5	1,787.3	1,713.8	73.52	24.312	
11,550.0	11,497.6	10,927.3	10,762.3	42.4	39.7	-75.03	97.1	-884.4	1,805.5	1,732.4	73.14	24.686	
11,600.0	11,545.9	10,950.0	10,772.7	42.5	39.7	-72.65	117.2	-886.0	1,823.7	1,750.8	72.84	25.036	
11,650.0	11,592.8	10,950.0	10,772.7	42.6	39.7	-70.84	117.2	-886.0	1,841.4	1,769.1	72.31	25.465	
11,700.0	11,638.0	10,969.7	10,781.0	42.8	39.7	-68.72	135.0	-887.5	1,858.8	1,786.8	71.97	25.826	
11,750.0	11,681.2	10,984.8	10,787.0	42.9	39.7	-66.82	148.8	-888.6	1,875.5	1,804.0	71.60	26.195	
11,800.0	11,722.1	11,000.0	10,792.6	43.0	39.8	-65.05	162.9	-889.7	1,891.5	1,820.3	71.23	26.556	
11,850.0	11,760.3	11,015.9	10,798.2	43.1	39.8	-63.42	177.8	-890.9	1,906.6	1,835.7	70.89	26.895	
11,900.0	11,795.5	11,031.9	10,803.3	43.2	39.8	-61.94	192.9	-892.1	1,920.7	1,850.1	70.58	27.213	
11,950.0	11,827.6	11,050.0	10,808.6	43.2	39.8	-60.60	210.1	-893.5	1,933.6	1,863.3	70.32	27.498	
12,000.0	11,866.1	11,050.0	10,808.6	43.3	39.8	-59.54	210.1	-893.5	1,945.4	1,875.4	69.95	27.811	
12,050.0	11,881.0	11,081.1	10,816.4	43.3	39.9	-58.45	240.1	-895.9	1,955.5	1,885.6	69.88	27.983	
12,100.0	11,902.0	11,100.0	10,820.3	43.3	39.9	-57.60	258.5	-897.4	1,964.4	1,894.7	69.76	28.159	
12,150.0	11,918.9	11,100.0	10,820.3	43.4	39.9	-56.96	258.5	-897.4	1,972.0	1,902.4	69.58	28.343	
12,200.0	11,931.7	11,131.4	10,825.5	43.4	39.9	-56.41	289.4	-899.9	1,977.7	1,908.0	69.66	28.392	
12,250.0	11,940.3	11,150.0	10,827.7	43.5	40.0	-56.06	307.8	-901.4	1,982.0	1,912.3	69.72	28.430	
12,300.0	11,944.5	11,165.2	10,829.1	43.6	40.0	-55.85	322.9	-902.6	1,984.7	1,914.9	69.82	28.425	
12,326.5	11,944.9	11,174.1	10,829.8	43.6	40.0	-55.81	331.8	-903.3	1,985.5	1,915.5	69.91	28.400	
12,391.6	11,944.6	11,200.0	10,830.9	43.7	40.1	-55.87	357.5	-905.4	1,987.5	1,917.3	70.18	28.321	
12,400.0	11,944.5	11,200.0	10,830.9	43.8	40.1	-55.87	357.5	-905.4	1,987.9	1,917.7	70.20	28.317	
12,500.0	11,944.0	11,343.6	10,830.2	44.1	40.4	-55.99	500.9	-914.0	1,992.5	1,921.5	71.01	28.060	
12,600.0	11,943.4	11,488.9	10,829.3	44.4	41.0	-56.01	646.2	-916.2	1,992.9	1,921.0	71.91	27.712	
12,700.0	11,942.9	11,588.9	10,828.7	44.9	41.4	-56.01	746.2	-916.9	1,992.9	1,920.2	72.76	27.390	
12,800.0	11,942.3	11,688.9	10,828.0	45.4	42.0	-56.00	846.2	-917.7	1,992.9	1,919.2	73.71	27.037	
12,900.0	11,941.7	11,788.9	10,827.4	45.9	42.6	-56.00	946.1	-918.5	1,992.9	1,918.2	74.76	26.657	
13,000.0	11,941.2	11,888.9	10,826.8	46.6	43.2	-56.00	1,046.1	-919.3	1,992.9	1,917.0	75.90	26.256	
13,100.0	11,940.6	11,988.9	10,826.2	47.2	43.9	-56.00	1,146.1	-920.0	1,992.9	1,915.8	77.14	25.836	
13,200.0	11,940.1	12,088.9	10,825.6	48.0	44.7	-56.00	1,246.1	-920.8	1,992.9	1,914.5	78.46	25.401	
13,300.0	11,939.5	12,188.9	10,825.0	48.7	45.5	-56.00	1,346.1	-921.6	1,992.9	1,913.1	79.86	24.954	
13,400.0	11,939.0	12,288.9	10,824.4	49.5	46.3	-55.99	1,446.1	-922.3	1,992.9	1,911.6	81.34	24.500	
13,500.0	11,938.4	12,388.9	10,823.8	50.4	47.2	-55.99	1,546.1	-923.1	1,992.9	1,910.0	82.90	24.041	
13,600.0	11,937.8	12,488.9	10,823.1	51.3	48.2	-55.99	1,646.1	-923.9	1,992.9	1,908.4	84.52	23.579	
13,700.0	11,937.3	12,588.9	10,822.5	52.2	49.1	-55.99	1,746.1	-924.6	1,992.9	1,906.7	86.21	23.116	
13,800.0	11,936.7	12,688.9	10,821.9	53.1	50.1	-55.99	1,846.1	-925.4	1,992.9	1,905.0	87.97	22.656	
13,900.0	11,936.2	12,788.9	10,821.3	54.1	51.2	-55.99	1,946.1	-926.2	1,992.9	1,903.2	89.78	22.199	
14,000.0	11,935.6	12,888.9	10,820.7	55.2	52.3	-55.98	2,046.1	-926.9	1,993.0	1,901.3	91.64	21.747	
14,100.0	11,935.0	12,988.9	10,820.1	56.2	53.4	-55.98	2,146.1	-927.7	1,993.0	1,899.4	93.56	21.302	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,934.5	13,088.9	10,819.5	57.3	54.5	-55.98	2,246.1	-928.5	1,993.0	1,897.4	95.52	20.863	
14,300.0	11,933.9	13,188.9	10,818.9	58.4	55.6	-55.98	2,346.1	-929.3	1,993.0	1,895.4	97.54	20.433	
14,400.0	11,933.4	13,288.9	10,818.2	59.5	56.8	-55.98	2,446.1	-930.0	1,993.0	1,893.4	99.59	20.012	
14,500.0	11,932.8	13,388.9	10,817.6	60.7	58.0	-55.97	2,546.1	-930.8	1,993.0	1,891.3	101.68	19.600	
14,600.0	11,932.3	13,488.9	10,817.0	61.9	59.3	-55.97	2,646.1	-931.6	1,993.0	1,889.2	103.81	19.197	
14,700.0	11,931.7	13,588.9	10,816.4	63.1	60.5	-55.97	2,746.1	-932.3	1,993.0	1,887.0	105.98	18.805	
14,800.0	11,931.1	13,688.9	10,815.8	64.3	61.8	-55.97	2,846.1	-933.1	1,993.0	1,884.8	108.18	18.422	
14,900.0	11,930.6	13,788.9	10,815.2	65.5	63.0	-55.97	2,946.1	-933.9	1,993.0	1,882.6	110.41	18.050	
15,000.0	11,930.0	13,888.9	10,814.6	66.8	64.3	-55.97	3,046.0	-934.6	1,993.0	1,880.3	112.68	17.688	
15,100.0	11,929.5	13,988.9	10,814.0	68.1	65.7	-55.96	3,146.0	-935.4	1,993.0	1,878.0	114.96	17.336	
15,200.0	11,928.9	14,088.9	10,813.3	69.4	67.0	-55.96	3,246.0	-936.2	1,993.0	1,875.7	117.28	16.993	
15,300.0	11,928.3	14,188.9	10,812.7	70.7	68.3	-55.96	3,346.0	-937.0	1,993.0	1,873.4	119.62	16.661	
15,400.0	11,927.8	14,288.9	10,812.1	72.0	69.7	-55.96	3,446.0	-937.7	1,993.0	1,871.0	121.98	16.338	
15,500.0	11,927.2	14,388.9	10,811.5	73.3	71.1	-55.96	3,546.0	-938.5	1,993.0	1,868.6	124.37	16.025	
15,600.0	11,926.7	14,488.9	10,810.9	74.7	72.5	-55.95	3,646.0	-939.3	1,993.0	1,866.2	126.77	15.721	
15,700.0	11,926.1	14,588.9	10,810.3	76.0	73.9	-55.95	3,746.0	-940.0	1,993.0	1,863.8	129.20	15.426	
15,800.0	11,925.6	14,688.9	10,809.7	77.4	75.3	-55.95	3,846.0	-940.8	1,993.0	1,861.4	131.64	15.140	
15,900.0	11,925.0	14,788.9	10,809.1	78.8	76.7	-55.95	3,946.0	-941.6	1,993.0	1,858.9	134.10	14.862	
16,000.0	11,924.4	14,888.9	10,808.4	80.2	78.1	-55.95	4,046.0	-942.3	1,993.0	1,856.4	136.58	14.593	
16,100.0	11,923.9	14,988.9	10,807.8	81.6	79.5	-55.95	4,146.0	-943.1	1,993.0	1,853.9	139.07	14.331	
16,200.0	11,923.3	15,088.9	10,807.2	83.0	81.0	-55.94	4,246.0	-943.9	1,993.0	1,851.4	141.58	14.077	
16,300.0	11,922.8	15,188.9	10,806.6	84.4	82.4	-55.94	4,346.0	-944.7	1,993.0	1,848.9	144.10	13.831	
16,400.0	11,922.2	15,288.9	10,806.0	85.9	83.9	-55.94	4,446.0	-945.4	1,993.0	1,846.4	146.63	13.592	
16,500.0	11,921.6	15,388.9	10,805.4	87.3	85.3	-55.94	4,546.0	-946.2	1,993.0	1,843.8	149.18	13.360	
16,600.0	11,921.1	15,488.9	10,804.8	88.7	86.8	-55.94	4,646.0	-947.0	1,993.0	1,841.3	151.74	13.135	
16,700.0	11,920.5	15,588.9	10,804.2	90.2	88.3	-55.93	4,746.0	-947.7	1,993.0	1,838.7	154.31	12.916	
16,800.0	11,920.0	15,688.9	10,803.6	91.7	89.8	-55.93	4,846.0	-948.5	1,993.0	1,836.1	156.89	12.704	
16,900.0	11,919.4	15,788.9	10,802.9	93.1	91.3	-55.93	4,946.0	-949.3	1,993.0	1,833.6	159.48	12.497	
17,000.0	11,918.8	15,888.9	10,802.3	94.6	92.8	-55.93	5,045.9	-950.0	1,993.0	1,831.0	162.08	12.297	
17,100.0	11,918.3	15,988.9	10,801.7	96.1	94.3	-55.93	5,145.9	-950.8	1,993.0	1,828.4	164.69	12.102	
17,200.0	11,917.7	16,088.9	10,801.1	97.6	95.8	-55.93	5,245.9	-951.6	1,993.0	1,825.7	167.30	11.913	
17,300.0	11,917.2	16,188.9	10,800.5	99.0	97.3	-55.92	5,345.9	-952.4	1,993.0	1,823.1	169.93	11.729	
17,400.0	11,916.6	16,288.9	10,799.9	100.5	98.8	-55.92	5,445.9	-953.1	1,993.0	1,820.5	172.57	11.549	
17,500.0	11,916.1	16,388.9	10,799.3	102.0	100.3	-55.92	5,545.9	-953.9	1,993.0	1,817.8	175.21	11.375	
17,600.0	11,915.5	16,488.9	10,798.7	103.5	101.9	-55.92	5,645.9	-954.7	1,993.1	1,815.2	177.86	11.206	
17,700.0	11,914.9	16,588.9	10,798.0	105.1	103.4	-55.92	5,745.9	-955.4	1,993.1	1,812.5	180.51	11.041	
17,800.0	11,914.4	16,688.9	10,797.4	106.6	104.9	-55.91	5,845.9	-956.2	1,993.1	1,809.9	183.18	10.880	
17,900.0	11,913.8	16,788.9	10,796.8	108.1	106.5	-55.91	5,945.9	-957.0	1,993.1	1,807.2	185.85	10.724	
18,000.0	11,913.3	16,888.9	10,796.2	109.6	108.0	-55.91	6,045.9	-957.7	1,993.1	1,804.5	188.52	10.572	
18,100.0	11,912.7	16,988.9	10,795.6	111.1	109.5	-55.91	6,145.9	-958.5	1,993.1	1,801.9	191.21	10.424	
18,200.0	11,912.1	17,088.9	10,795.0	112.7	111.1	-55.91	6,245.9	-959.3	1,993.1	1,799.2	193.89	10.279	
18,300.0	11,911.6	17,188.9	10,794.4	114.2	112.6	-55.91	6,345.9	-960.1	1,993.1	1,796.5	196.59	10.138	
18,400.0	11,911.0	17,288.9	10,793.8	115.7	114.2	-55.90	6,445.9	-960.8	1,993.1	1,793.8	199.28	10.001	
18,500.0	11,910.5	17,388.9	10,793.1	117.3	115.7	-55.90	6,545.9	-961.6	1,993.1	1,791.1	201.99	9.867	
18,600.0	11,909.9	17,488.9	10,792.5	118.8	117.3	-55.90	6,645.9	-962.4	1,993.1	1,788.4	204.69	9.737	
18,700.0	11,909.4	17,588.9	10,791.9	120.4	118.9	-55.90	6,745.9	-963.1	1,993.1	1,785.7	207.40	9.610	
18,800.0	11,908.8	17,688.9	10,791.3	121.9	120.4	-55.90	6,845.9	-963.9	1,993.1	1,783.0	210.12	9.485	
18,900.0	11,908.2	17,788.9	10,790.7	123.5	122.0	-55.89	6,945.9	-964.7	1,993.1	1,780.2	212.84	9.364	
19,000.0	11,907.7	17,888.9	10,790.1	125.0	123.6	-55.89	7,045.9	-965.4	1,993.1	1,777.5	215.57	9.246	
19,100.0	11,907.1	17,988.9	10,789.5	126.6	125.1	-55.89	7,145.8	-966.2	1,993.1	1,774.8	218.29	9.130	
19,200.0	11,906.6	18,088.9	10,788.9	128.1	126.7	-55.89	7,245.8	-967.0	1,993.1	1,772.1	221.03	9.017	
19,300.0	11,906.0	18,188.9	10,788.2	129.7	128.3	-55.89	7,345.8	-967.8	1,993.1	1,769.3	223.76	8.907	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #125H - 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
19,400.0	11,905.4	18,288.9	10,787.6	131.3	129.9	-55.89	7,445.8	-968.5	1,993.1	1,766.6	226.50	8.800	
19,500.0	11,904.9	18,388.9	10,787.0	132.8	131.4	-55.88	7,545.8	-969.3	1,993.1	1,763.9	229.24	8.694	
19,600.0	11,904.3	18,488.9	10,786.4	134.4	133.0	-55.88	7,645.8	-970.1	1,993.1	1,761.1	231.99	8.591	
19,700.0	11,903.8	18,588.9	10,785.8	136.0	134.6	-55.88	7,745.8	-970.8	1,993.1	1,758.4	234.74	8.491	
19,800.0	11,903.2	18,688.9	10,785.2	137.5	136.2	-55.88	7,845.8	-971.6	1,993.1	1,755.6	237.49	8.392	
19,900.0	11,902.7	18,788.9	10,784.6	139.1	137.8	-55.88	7,945.8	-972.4	1,993.1	1,752.9	240.24	8.296	
20,000.0	11,902.1	18,888.9	10,784.0	140.7	139.4	-55.87	8,045.8	-973.1	1,993.1	1,750.1	243.00	8.202	
20,100.0	11,901.5	18,988.9	10,783.3	142.3	141.0	-55.87	8,145.8	-973.9	1,993.1	1,747.4	245.76	8.110	
20,200.0	11,901.0	19,088.9	10,782.7	143.8	142.5	-55.87	8,245.8	-974.7	1,993.1	1,744.6	248.52	8.020	
20,300.0	11,900.4	19,188.9	10,782.1	145.4	144.1	-55.87	8,345.8	-975.5	1,993.1	1,741.8	251.29	7.932	
20,400.0	11,899.9	19,288.9	10,781.5	147.0	145.7	-55.87	8,445.8	-976.2	1,993.1	1,739.1	254.06	7.845	
20,500.0	11,899.3	19,388.9	10,780.9	148.6	147.3	-55.87	8,545.8	-977.0	1,993.1	1,736.3	256.83	7.761	
20,600.0	11,898.7	19,488.9	10,780.3	150.2	148.9	-55.86	8,645.8	-977.8	1,993.1	1,733.5	259.60	7.678	
20,700.0	11,898.2	19,588.9	10,779.7	151.8	150.5	-55.86	8,745.8	-978.5	1,993.1	1,730.8	262.37	7.597	
20,800.0	11,897.6	19,688.9	10,779.1	153.4	152.1	-55.86	8,845.8	-979.3	1,993.1	1,728.0	265.15	7.517	
20,900.0	11,897.1	19,788.9	10,778.5	155.0	153.7	-55.86	8,945.8	-980.1	1,993.1	1,725.2	267.93	7.439	
21,000.0	11,896.5	19,888.9	10,777.8	156.5	155.3	-55.86	9,045.8	-980.8	1,993.1	1,722.4	270.71	7.363	
21,100.0	11,896.0	19,988.9	10,777.2	158.1	156.9	-55.85	9,145.7	-981.6	1,993.1	1,719.7	273.49	7.288	
21,200.0	11,895.4	20,088.9	10,776.6	159.7	158.5	-55.85	9,245.7	-982.4	1,993.2	1,716.9	276.27	7.214	
21,300.0	11,894.8	20,188.9	10,776.0	161.3	160.1	-55.85	9,345.7	-983.1	1,993.2	1,714.1	279.06	7.142	
21,400.0	11,894.3	20,288.9	10,775.4	162.9	161.7	-55.85	9,445.7	-983.9	1,993.2	1,711.3	281.85	7.072	
21,500.0	11,893.7	20,388.9	10,774.8	164.5	163.4	-55.85	9,545.7	-984.7	1,993.2	1,708.5	284.64	7.002	
21,600.0	11,893.2	20,488.9	10,774.2	166.1	165.0	-55.85	9,645.7	-985.5	1,993.2	1,705.7	287.43	6.934	
21,700.0	11,892.6	20,588.9	10,773.6	167.7	166.6	-55.84	9,745.7	-986.2	1,993.2	1,702.9	290.22	6.868	
21,800.0	11,892.0	20,688.9	10,772.9	169.3	168.2	-55.84	9,845.7	-987.0	1,993.2	1,700.2	293.01	6.802	
21,900.0	11,891.5	20,788.9	10,772.3	170.9	169.8	-55.84	9,945.7	-987.8	1,993.2	1,697.4	295.81	6.738	
22,000.0	11,890.9	20,888.9	10,771.7	172.5	171.4	-55.84	10,045.7	-988.5	1,993.2	1,694.6	298.61	6.675	
22,100.0	11,890.4	20,988.9	10,771.1	174.1	173.0	-55.84	10,145.7	-989.3	1,993.2	1,691.8	301.41	6.613	
22,191.7	11,890.5	21,080.6	10,770.5	175.6	174.4	-55.82	10,237.4	-990.0	1,993.5	1,689.8	303.76	6.563 SF	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	89.38	1.2	110.1	110.1				
100.0	100.0	101.0	99.0	0.1	0.1	89.38	1.2	110.1	110.1	109.8	0.26	423.653	
200.0	200.0	201.0	199.0	0.5	0.5	89.38	1.2	110.1	110.1	109.1	0.98	112.715	
300.0	300.0	301.0	299.0	0.8	0.8	89.38	1.2	110.1	110.1	108.4	1.69	65.005	
400.0	400.0	401.0	399.0	1.2	1.2	89.38	1.2	110.1	110.1	107.7	2.41	45.673	
500.0	500.0	501.0	499.0	1.6	1.6	89.38	1.2	110.1	110.1	107.0	3.13	35.203	
600.0	600.0	601.0	599.0	1.9	1.9	89.38	1.2	110.1	110.1	106.3	3.84	28.639	
700.0	700.0	701.0	699.0	2.3	2.3	89.38	1.2	110.1	110.1	105.5	4.56	24.137	
800.0	800.0	801.0	799.0	2.6	2.6	89.38	1.2	110.1	110.1	104.8	5.28	20.859	
900.0	900.0	901.0	899.0	3.0	3.0	89.38	1.2	110.1	110.1	104.1	6.00	18.365	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	89.38	1.2	110.1	110.1	103.4	6.71	16.403	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	89.38	1.2	110.1	110.1	102.7	7.43	14.820	
1,200.0	1,200.0	1,199.0	1,199.0	4.1	4.1	89.38	1.2	110.1	110.1	102.0	8.14	13.528	
1,300.0	1,300.0	1,297.4	1,297.4	4.4	4.4	89.61	0.8	110.8	110.8	102.0	8.84	12.540	
1,400.0	1,400.0	1,395.8	1,395.7	4.8	4.7	90.30	-0.6	112.9	113.0	103.5	9.52	11.864	
1,500.0	1,500.0	1,494.0	1,493.9	5.1	5.1	91.39	-2.8	116.5	116.6	106.4	10.21	11.424	
1,600.0	1,600.0	1,592.1	1,591.8	5.5	5.4	-11.16	-6.0	121.4	120.9	110.1	10.88	11.112	
1,700.0	1,700.0	1,690.1	1,689.5	5.8	5.7	-9.68	-10.0	127.8	125.1	113.6	11.55	10.833	
1,800.0	1,799.9	1,788.0	1,787.0	6.2	6.1	-8.07	-14.9	135.6	129.2	117.0	12.22	10.574	
1,900.0	1,899.7	1,885.9	1,884.2	6.5	6.4	-6.35	-20.7	144.8	133.2	120.3	12.88	10.335	
2,000.0	1,999.4	1,983.6	1,981.1	6.9	6.8	-4.51	-27.3	155.3	137.1	123.5	13.55	10.116	
2,100.0	2,098.9	2,083.0	2,079.6	7.2	7.2	-2.63	-34.7	167.0	140.4	126.2	14.24	9.861	
2,200.0	2,198.3	2,182.9	2,178.5	7.6	7.6	-0.83	-42.1	178.8	142.2	127.3	14.94	9.519	
2,300.0	2,297.4	2,282.8	2,277.5	8.0	7.9	0.93	-49.5	190.6	142.4	126.8	15.64	9.102	
2,400.0	2,396.4	2,382.7	2,376.4	8.3	8.3	2.70	-57.0	202.3	141.8	125.5	16.35	8.675	
2,500.0	2,495.5	2,482.6	2,475.3	8.7	8.7	4.49	-64.4	214.1	141.4	124.4	17.06	8.290	
2,600.0	2,594.5	2,582.5	2,574.3	9.1	9.1	6.28	-71.8	225.8	141.1	123.4	17.77	7.942	
2,700.0	2,693.5	2,682.4	2,673.2	9.5	9.5	8.08	-79.2	237.6	141.0	122.5	18.48	7.627	
2,755.7	2,748.6	2,738.0	2,728.3	9.7	9.7	9.08	-83.3	244.1	141.0	122.1	18.88	7.465	
2,800.0	2,792.5	2,782.3	2,772.1	9.9	9.9	9.88	-86.6	249.4	141.0	121.8	19.20	7.342	
2,900.0	2,891.6	2,882.2	2,871.1	10.3	10.3	11.68	-94.1	261.1	141.1	121.2	19.92	7.084	
3,000.0	2,990.6	2,982.1	2,970.0	10.7	10.7	13.47	-101.5	272.9	141.4	120.7	20.64	6.849	
3,100.0	3,089.6	3,082.0	3,068.9	11.0	11.1	15.26	-108.9	284.6	141.8	120.4	21.37	6.636	
3,200.0	3,188.6	3,181.9	3,167.8	11.4	11.5	17.03	-116.3	296.4	142.3	120.2	22.10	6.441	
3,300.0	3,287.7	3,281.8	3,266.8	11.8	11.9	18.79	-123.7	308.2	143.0	120.2	22.83	6.264	
3,400.0	3,386.7	3,381.7	3,365.7	12.2	12.4	20.53	-131.1	319.9	143.8	120.3	23.57	6.103	
3,500.0	3,485.7	3,481.6	3,464.6	12.7	12.8	22.25	-138.6	331.7	144.8	120.5	24.31	5.956	
3,600.0	3,584.8	3,581.5	3,563.6	13.1	13.2	23.94	-146.0	343.4	145.8	120.8	25.05	5.821	
3,700.0	3,683.8	3,681.4	3,662.5	13.5	13.6	25.61	-153.4	355.2	147.0	121.2	25.80	5.699	
3,800.0	3,782.8	3,781.3	3,761.4	13.9	14.0	27.25	-160.8	367.0	148.4	121.8	26.56	5.586	
3,900.0	3,881.8	3,881.3	3,860.4	14.3	14.4	28.86	-168.2	378.7	149.8	122.5	27.32	5.483	
4,000.0	3,980.9	3,985.2	3,963.5	14.7	14.8	30.63	-175.2	389.7	150.0	121.8	28.14	5.330	
4,100.0	4,079.9	4,089.0	4,066.8	15.1	15.2	32.65	-180.6	398.3	147.7	118.7	28.94	5.102	
4,200.0	4,178.9	4,192.5	4,170.0	15.5	15.6	35.05	-184.5	404.5	142.9	113.2	29.73	4.806	
4,300.0	4,277.9	4,295.6	4,273.0	15.9	16.0	37.99	-186.9	408.4	135.9	105.3	30.52	4.451	
4,400.0	4,377.0	4,398.1	4,375.5	16.3	16.3	41.72	-187.9	409.9	126.7	95.4	31.32	4.046	
4,500.0	4,476.0	4,502.4	4,475.0	16.7	16.7	46.26	-187.9	409.9	116.7	84.5	32.18	3.626	
4,600.0	4,575.0	4,603.4	4,574.0	17.1	17.0	51.60	-187.9	409.9	107.5	74.4	33.07	3.250	
4,700.0	4,674.0	4,704.3	4,673.0	17.6	17.3	57.86	-187.9	409.9	99.4	65.4	34.01	2.922	
4,800.0	4,773.1	4,805.3	4,772.1	18.0	17.7	65.11	-187.9	409.9	92.7	57.7	34.98	2.649	
4,900.0	4,872.1	4,906.3	4,871.1	18.4	18.0	73.31	-187.9	409.9	87.7	51.7	35.96	2.438	
5,000.0	4,971.1	5,007.3	4,970.1	18.8	18.3	82.28	-187.9	409.9	84.7	47.8	36.92	2.294	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
5,082.5	5,052.8	5,074.4	5,051.8	19.1	18.5	90.00	-187.9	409.9	83.9	46.3	37.60	2.232	CC
5,100.0	5,070.2	5,108.2	5,069.2	19.2	18.7	91.65	-187.9	409.9	83.9	46.1	37.80	2.221	ES
5,200.0	5,169.2	5,209.2	5,168.2	19.6	19.0	100.92	-187.9	409.9	85.5	46.9	38.57	2.216	SF
5,300.0	5,268.2	5,289.8	5,267.2	20.0	19.3	109.66	-187.9	409.9	89.2	50.0	39.18	2.277	
5,400.0	5,367.2	5,388.8	5,366.2	20.5	19.6	117.54	-187.9	409.9	94.8	55.1	39.77	2.385	
5,500.0	5,466.3	5,487.9	5,465.3	20.9	19.9	124.44	-187.9	409.9	102.1	61.7	40.32	2.531	
5,600.0	5,565.3	5,586.9	5,564.3	21.3	20.2	130.37	-187.9	409.9	110.6	69.7	40.85	2.707	
5,700.0	5,664.3	5,685.9	5,663.3	21.7	20.6	135.41	-187.9	409.9	120.1	78.7	41.40	2.901	
5,800.0	5,763.3	5,785.0	5,762.3	22.1	20.9	139.69	-187.9	409.9	130.4	88.5	41.96	3.109	
5,900.0	5,862.4	5,884.0	5,861.4	22.5	21.2	143.32	-187.9	409.9	141.4	98.8	42.53	3.324	
6,000.0	5,961.4	5,983.0	5,960.4	23.0	21.6	146.43	-187.9	409.9	152.8	109.7	43.13	3.543	
6,100.0	6,060.4	6,082.0	6,059.4	23.4	21.9	149.11	-187.9	409.9	164.6	120.9	43.74	3.764	
6,200.0	6,159.4	6,181.1	6,158.4	23.8	22.2	151.42	-187.9	409.9	176.7	132.4	44.36	3.984	
6,300.0	6,258.5	6,280.1	6,257.5	24.2	22.6	153.43	-187.9	409.9	189.1	144.1	45.00	4.202	
6,400.0	6,357.5	6,379.1	6,356.5	24.6	22.9	155.20	-187.9	409.9	201.6	156.0	45.64	4.418	
6,500.0	6,456.5	6,478.1	6,455.5	25.1	23.3	156.76	-187.9	409.9	214.4	168.1	46.30	4.630	
6,600.0	6,555.6	6,577.2	6,554.6	25.5	23.6	158.14	-187.9	409.9	227.3	180.3	46.96	4.839	
6,700.0	6,654.6	6,676.2	6,653.6	25.9	23.9	159.37	-187.9	409.9	240.2	192.6	47.63	5.044	
6,800.0	6,753.6	6,775.2	6,752.6	26.3	24.3	160.48	-187.9	409.9	253.3	205.0	48.31	5.244	
6,900.0	6,852.6	6,874.2	6,851.6	26.7	24.6	161.48	-187.9	409.9	266.5	217.5	48.99	5.440	
7,000.0	6,951.7	6,973.3	6,950.7	27.1	24.9	162.39	-187.9	409.9	279.7	230.1	49.67	5.632	
7,100.0	7,050.7	7,072.3	7,049.7	27.6	25.3	163.21	-187.9	409.9	293.0	242.7	50.36	5.819	
7,131.4	7,081.7	7,103.4	7,080.7	27.7	25.4	163.45	-187.9	409.9	297.2	246.7	50.57	5.877	
7,200.0	7,149.8	7,171.4	7,148.8	28.0	25.6	163.96	-187.9	409.9	305.8	254.8	51.05	5.991	
7,300.0	7,249.2	7,270.8	7,248.2	28.4	26.0	164.55	-187.9	409.9	316.3	264.5	51.74	6.112	
7,400.0	7,348.9	7,370.5	7,347.9	28.8	26.3	164.97	-187.9	409.9	324.2	271.8	52.44	6.183	
7,500.0	7,448.7	7,470.3	7,447.7	29.1	26.7	165.24	-187.9	409.9	329.6	276.5	53.13	6.204	
7,600.0	7,548.7	7,570.3	7,547.7	29.5	27.0	165.38	-187.9	409.9	332.5	278.7	53.83	6.177	
7,664.7	7,613.3	7,635.0	7,612.3	29.7	27.2	-90.69	-187.9	409.9	333.1	278.8	54.28	6.136	
7,700.0	7,648.7	7,670.3	7,647.7	29.8	27.3	-90.69	-187.9	409.9	333.1	278.5	54.52	6.109	
7,800.0	7,748.7	7,770.3	7,747.7	30.1	27.7	-90.69	-187.9	409.9	333.1	277.9	55.20	6.034	
7,900.0	7,848.7	7,870.3	7,847.7	30.4	28.0	-90.69	-187.9	409.9	333.1	277.2	55.88	5.960	
8,000.0	7,948.7	7,970.3	7,947.7	30.7	28.4	-90.69	-187.9	409.9	333.1	276.5	56.57	5.888	
8,100.0	8,048.7	8,070.3	8,047.7	31.0	28.7	-90.69	-187.9	409.9	333.1	275.8	57.25	5.817	
8,200.0	8,148.7	8,170.3	8,147.7	31.4	29.1	-90.69	-187.9	409.9	333.1	275.1	57.94	5.749	
8,300.0	8,248.7	8,270.3	8,247.7	31.7	29.4	-90.69	-187.9	409.9	333.1	274.4	58.62	5.681	
8,400.0	8,348.7	8,370.3	8,347.7	32.0	29.8	-90.69	-187.9	409.9	333.1	273.7	59.31	5.615	
8,500.0	8,448.7	8,470.3	8,447.7	32.3	30.1	-90.69	-187.9	409.9	333.1	273.1	60.00	5.551	
8,600.0	8,548.7	8,570.3	8,547.7	32.6	30.5	-90.69	-187.9	409.9	333.1	272.4	60.69	5.488	
8,700.0	8,648.7	8,670.3	8,647.7	33.0	30.8	-90.69	-187.9	409.9	333.1	271.7	61.38	5.426	
8,800.0	8,748.7	8,770.3	8,747.7	33.3	31.2	-90.69	-187.9	409.9	333.1	271.0	62.07	5.366	
8,900.0	8,848.7	8,870.3	8,847.7	33.6	31.5	-90.69	-187.9	409.9	333.1	270.3	62.76	5.307	
9,000.0	8,948.7	8,970.3	8,947.7	33.9	31.9	-90.69	-187.9	409.9	333.1	269.6	63.45	5.249	
9,100.0	9,048.7	9,070.3	9,047.7	34.3	32.2	-90.69	-187.9	409.9	333.1	268.9	64.14	5.193	
9,200.0	9,148.7	9,170.3	9,147.7	34.6	32.6	-90.69	-187.9	409.9	333.1	268.2	64.83	5.137	
9,300.0	9,248.7	9,270.3	9,247.7	34.9	32.9	-90.69	-187.9	409.9	333.1	267.5	65.52	5.083	
9,400.0	9,348.7	9,370.3	9,347.7	35.2	33.3	-90.69	-187.9	409.9	333.1	266.8	66.22	5.030	
9,500.0	9,448.7	9,470.3	9,447.7	35.6	33.6	-90.69	-187.9	409.9	333.1	266.1	66.91	4.978	
9,600.0	9,548.7	9,570.3	9,547.7	35.9	34.0	-90.69	-187.9	409.9	333.1	265.5	67.60	4.927	
9,700.0	9,648.7	9,670.3	9,647.7	36.2	34.3	-90.69	-187.9	409.9	333.1	264.8	68.30	4.876	
9,800.0	9,748.7	9,770.3	9,747.7	36.5	34.7	-90.69	-187.9	409.9	333.1	264.1	68.99	4.827	
9,900.0	9,848.7	9,870.3	9,847.7	36.9	35.0	-90.69	-187.9	409.9	333.1	263.4	69.69	4.779	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	9,948.7	9,970.3	9,947.7	37.2	35.4	-90.69	-187.9	409.9	333.1	262.7	70.39	4.732	
10,100.0	10,048.7	10,070.3	10,047.7	37.5	35.7	-90.69	-187.9	409.9	333.1	262.0	71.08	4.686	
10,200.0	10,148.7	10,170.3	10,147.7	37.9	36.1	-90.69	-187.9	409.9	333.1	261.3	71.78	4.640	
10,300.0	10,248.7	10,270.3	10,247.7	38.2	36.4	-90.69	-187.9	409.9	333.1	260.6	72.48	4.595	
10,394.6	10,343.2	10,364.9	10,342.2	38.5	36.7	-90.44	-186.4	409.9	333.1	259.9	73.13	4.555	
10,400.0	10,348.7	10,370.3	10,347.6	38.5	36.8	-90.37	-186.0	409.9	333.1	259.9	73.16	4.552	
10,500.0	10,448.7	10,467.6	10,443.5	38.9	37.1	-87.62	-170.0	409.7	333.5	259.8	73.71	4.524	
10,600.0	10,548.7	10,557.1	10,528.1	39.2	37.3	-82.70	-141.1	409.5	336.7	262.7	73.98	4.551	
10,700.0	10,648.7	10,636.1	10,598.3	39.5	37.5	-76.70	-105.0	409.2	346.4	272.7	73.65	4.703	
10,800.0	10,748.7	10,703.9	10,654.1	39.9	37.7	-70.65	-66.6	408.9	366.1	293.8	72.30	5.064	
10,900.0	10,848.7	10,761.1	10,697.3	40.2	37.8	-65.16	-29.2	408.7	397.8	328.0	69.78	5.701	
11,000.0	10,948.7	10,809.2	10,730.7	40.5	37.9	-60.49	5.5	408.4	441.4	375.0	66.42	6.646	
11,100.0	11,048.7	10,850.0	10,756.6	40.9	37.9	-56.59	37.0	408.1	495.5	432.8	62.72	7.901	
11,200.0	11,148.7	10,883.8	10,776.3	41.2	38.0	-53.46	64.4	407.9	558.3	499.3	59.05	9.455	
11,300.0	11,248.7	10,912.8	10,791.9	41.5	38.0	-50.87	88.8	407.8	628.0	572.3	55.72	11.271	
11,400.0	11,348.7	10,937.6	10,804.3	41.9	38.0	-48.73	110.4	407.6	703.0	650.2	52.80	13.315	
11,423.3	11,372.0	10,950.0	10,810.1	42.0	38.0	-47.70	121.3	407.5	721.3	668.7	52.57	13.719	
11,450.0	11,398.6	10,950.0	10,810.1	42.0	38.0	-44.89	121.3	407.5	741.9	690.4	51.54	14.394	
11,500.0	11,448.4	10,950.0	10,810.1	42.2	38.0	-40.85	121.3	407.5	780.2	730.5	49.64	15.717	
11,550.0	11,497.6	10,974.0	10,820.7	42.4	38.1	-36.14	142.8	407.3	816.8	767.8	48.98	16.676	
11,600.0	11,545.9	10,987.6	10,826.3	42.5	38.1	-32.73	155.2	407.2	852.2	804.4	47.77	17.840	
11,650.0	11,592.8	11,000.0	10,831.2	42.6	38.1	-29.93	166.6	407.2	885.9	839.4	46.50	19.053	
11,700.0	11,638.0	11,016.6	10,837.3	42.8	38.2	-27.49	182.1	407.0	917.8	872.3	45.43	20.203	
11,750.0	11,681.2	11,031.8	10,842.5	42.9	38.2	-25.49	196.4	406.9	947.7	903.4	44.30	21.391	
11,800.0	11,722.1	11,050.0	10,848.2	43.0	38.3	-23.78	213.6	406.8	975.5	932.2	43.32	22.520	
11,850.0	11,760.3	11,050.0	10,848.2	43.1	38.3	-22.59	213.6	406.8	1,001.3	959.6	41.73	23.998	
11,900.0	11,795.5	11,079.7	10,856.4	43.2	38.3	-21.25	242.2	406.6	1,024.4	983.2	41.22	24.853	
11,950.0	11,827.6	11,100.0	10,861.1	43.2	38.4	-20.24	261.9	406.4	1,045.3	1,004.9	40.43	25.855	
12,000.0	11,856.1	11,100.0	10,861.1	43.3	38.4	-19.55	261.9	406.4	1,064.0	1,024.8	39.17	27.161	
12,050.0	11,881.0	11,130.0	10,866.7	43.3	38.5	-18.81	291.4	406.2	1,079.7	1,040.9	38.79	27.837	
12,100.0	11,902.0	11,150.0	10,869.7	43.3	38.5	-18.27	311.2	406.0	1,093.0	1,054.8	38.23	28.590	
12,150.0	11,918.9	11,150.0	10,869.7	43.4	38.5	-17.92	311.2	406.0	1,104.0	1,066.5	37.47	29.462	
12,200.0	11,931.7	11,181.7	10,872.9	43.4	38.6	-17.59	342.6	405.8	1,111.8	1,074.4	37.33	29.782	
12,250.0	11,940.3	11,200.0	10,874.0	43.5	38.7	-17.39	361.0	405.7	1,117.1	1,080.0	37.12	30.092	
12,300.0	11,944.5	11,216.5	10,874.4	43.6	38.7	-17.30	377.4	405.5	1,119.8	1,082.7	37.05	30.223	
12,326.5	11,944.9	11,226.3	10,874.5	43.6	38.8	-17.29	387.3	405.5	1,120.1	1,083.0	37.08	30.208	
12,391.6	11,944.6	11,291.4	10,874.3	43.7	39.0	-17.29	452.4	405.0	1,119.9	1,082.6	37.31	30.014	
12,400.0	11,944.5	11,300.2	10,874.3	43.8	39.0	-17.29	460.7	404.9	1,119.9	1,082.5	37.35	29.987	
12,500.0	11,944.0	11,400.2	10,874.1	44.1	39.4	-17.29	560.7	404.1	1,119.5	1,081.8	37.78	29.635	
12,600.0	11,943.4	11,500.2	10,873.8	44.4	39.8	-17.30	660.7	403.4	1,119.2	1,080.9	38.29	29.230	
12,700.0	11,942.9	11,600.2	10,873.6	44.9	40.3	-17.30	760.7	402.6	1,118.9	1,080.0	38.88	28.780	
12,800.0	11,942.3	11,700.2	10,873.4	45.4	40.9	-17.30	860.7	401.8	1,118.6	1,079.0	39.54	28.291	
12,900.0	11,941.7	11,800.2	10,873.2	45.9	41.5	-17.31	960.7	401.1	1,118.2	1,078.0	40.27	27.770	
13,000.0	11,941.2	11,900.2	10,872.9	46.6	42.2	-17.31	1,060.7	400.3	1,117.9	1,076.8	41.06	27.224	
13,100.0	11,940.6	12,000.2	10,872.7	47.2	42.9	-17.31	1,160.7	399.5	1,117.6	1,075.7	41.92	26.660	
13,200.0	11,940.1	12,100.2	10,872.5	48.0	43.7	-17.32	1,260.7	398.8	1,117.2	1,074.4	42.83	26.083	
13,300.0	11,939.5	12,200.2	10,872.2	48.7	44.6	-17.32	1,360.7	398.0	1,116.9	1,073.1	43.80	25.498	
13,400.0	11,939.0	12,300.2	10,872.0	49.5	45.4	-17.32	1,460.7	397.2	1,116.6	1,071.8	44.82	24.911	
13,500.0	11,938.4	12,400.2	10,871.8	50.4	46.3	-17.33	1,560.7	396.4	1,116.3	1,070.4	45.89	24.324	
13,600.0	11,937.8	12,500.2	10,871.6	51.3	47.3	-17.33	1,660.7	395.7	1,115.9	1,068.9	47.00	23.742	
13,700.0	11,937.3	12,600.2	10,871.3	52.2	48.3	-17.33	1,760.7	394.9	1,115.6	1,067.5	48.16	23.167	
13,800.0	11,936.7	12,700.2	10,871.1	53.1	49.3	-17.34	1,860.7	394.1	1,115.3	1,065.9	49.35	22.601	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,936.2	12,800.2	10,870.9	54.1	50.4	-17.34	1,960.7	393.4	1,115.0	1,064.4	50.57	22.046	
14,000.0	11,935.6	12,899.8	10,870.7	55.2	51.5	-17.34	2,060.7	392.6	1,114.6	1,062.8	51.83	21.505	
14,100.0	11,935.0	12,999.8	10,870.4	56.2	52.6	-17.35	2,160.7	391.8	1,114.3	1,061.2	53.12	20.976	
14,200.0	11,934.5	13,100.2	10,870.2	57.3	53.8	-17.35	2,260.7	391.1	1,114.0	1,059.5	54.44	20.461	
14,300.0	11,933.9	13,200.2	10,870.0	58.4	54.9	-17.35	2,360.7	390.3	1,113.6	1,057.9	55.79	19.961	
14,400.0	11,933.4	13,299.8	10,869.7	59.5	56.1	-17.36	2,460.7	389.5	1,113.3	1,056.2	57.16	19.478	
14,500.0	11,932.8	13,400.2	10,869.5	60.7	57.4	-17.36	2,560.7	388.8	1,113.0	1,054.4	58.56	19.007	
14,600.0	11,932.3	13,500.2	10,869.3	61.9	58.6	-17.36	2,660.6	388.0	1,112.7	1,052.7	59.97	18.553	
14,700.0	11,931.7	13,600.2	10,869.1	63.1	59.9	-17.37	2,760.6	387.2	1,112.3	1,050.9	61.41	18.114	
14,800.0	11,931.1	13,700.2	10,868.8	64.3	61.1	-17.37	2,860.6	386.5	1,112.0	1,049.2	62.86	17.690	
14,900.0	11,930.6	13,800.2	10,868.6	65.5	62.4	-17.37	2,960.6	385.7	1,111.7	1,047.4	64.33	17.281	
15,000.0	11,930.0	13,900.2	10,868.4	66.8	63.8	-17.38	3,060.6	384.9	1,111.4	1,045.5	65.82	16.885	
15,100.0	11,929.5	14,000.2	10,868.2	68.1	65.1	-17.38	3,160.6	384.2	1,111.0	1,043.7	67.32	16.503	
15,200.0	11,928.9	14,100.2	10,867.9	69.4	66.4	-17.38	3,260.6	383.4	1,110.7	1,041.9	68.84	16.135	
15,300.0	11,928.3	14,200.2	10,867.7	70.7	67.8	-17.39	3,360.6	382.6	1,110.4	1,040.0	70.37	15.779	
15,400.0	11,927.8	14,300.2	10,867.5	72.0	69.2	-17.39	3,460.6	381.9	1,110.1	1,038.1	71.91	15.436	
15,500.0	11,927.2	14,400.2	10,867.3	73.3	70.6	-17.39	3,560.6	381.1	1,109.7	1,036.3	73.47	15.105	
15,600.0	11,926.7	14,500.2	10,867.0	74.7	72.0	-17.40	3,660.6	380.3	1,109.4	1,034.4	75.03	14.786	
15,700.0	11,926.1	14,600.2	10,866.8	76.0	73.4	-17.40	3,760.6	379.6	1,109.1	1,032.5	76.61	14.477	
15,800.0	11,925.6	14,700.2	10,866.6	77.4	74.8	-17.40	3,860.6	378.8	1,108.7	1,030.6	78.19	14.180	
15,900.0	11,925.0	14,800.2	10,866.3	78.8	76.2	-17.41	3,960.6	378.0	1,108.4	1,028.6	79.79	13.892	
16,000.0	11,924.4	14,900.2	10,866.1	80.2	77.7	-17.41	4,060.6	377.2	1,108.1	1,026.7	81.39	13.615	
16,100.0	11,923.9	15,000.2	10,865.9	81.6	79.1	-17.41	4,160.6	376.5	1,107.8	1,024.8	83.00	13.346	
16,200.0	11,923.3	15,100.2	10,865.7	83.0	80.6	-17.42	4,260.6	375.7	1,107.4	1,022.8	84.62	13.087	
16,300.0	11,922.8	15,200.2	10,865.4	84.4	82.0	-17.42	4,360.6	374.9	1,107.1	1,020.9	86.25	12.837	
16,400.0	11,922.2	15,300.2	10,865.2	85.9	83.5	-17.43	4,460.6	374.2	1,106.8	1,018.9	87.88	12.594	
16,500.0	11,921.6	15,400.2	10,865.0	87.3	85.0	-17.43	4,560.6	373.4	1,106.5	1,016.9	89.52	12.360	
16,600.0	11,921.1	15,500.2	10,864.8	88.7	86.5	-17.43	4,660.6	372.6	1,106.1	1,015.0	91.17	12.133	
16,700.0	11,920.5	15,599.8	10,864.5	90.2	87.9	-17.44	4,760.6	371.9	1,105.8	1,013.0	92.81	11.914	
16,800.0	11,920.0	15,699.8	10,864.3	91.7	89.4	-17.44	4,860.6	371.1	1,105.5	1,011.0	94.47	11.702	
16,900.0	11,919.4	15,800.2	10,864.1	93.1	90.9	-17.44	4,960.6	370.3	1,105.1	1,009.0	96.14	11.496	
17,000.0	11,918.8	15,900.2	10,863.8	94.6	92.4	-17.45	5,060.6	369.6	1,104.8	1,007.0	97.80	11.296	
17,100.0	11,918.3	16,000.2	10,863.6	96.1	94.0	-17.45	5,160.6	368.8	1,104.5	1,005.0	99.48	11.103	
17,200.0	11,917.7	16,100.2	10,863.4	97.6	95.5	-17.45	5,260.6	368.0	1,104.2	1,003.0	101.15	10.916	
17,300.0	11,917.2	16,200.2	10,863.2	99.0	97.0	-17.46	5,360.5	367.3	1,103.8	1,001.0	102.83	10.734	
17,400.0	11,916.6	16,300.2	10,862.9	100.5	98.5	-17.46	5,460.5	366.5	1,103.5	999.0	104.52	10.558	
17,500.0	11,916.1	16,400.2	10,862.7	102.0	100.0	-17.46	5,560.5	365.7	1,103.2	997.0	106.21	10.387	
17,600.0	11,915.5	16,500.2	10,862.5	103.5	101.6	-17.47	5,660.5	365.0	1,102.9	995.0	107.90	10.221	
17,700.0	11,914.9	16,600.2	10,862.3	105.1	103.1	-17.47	5,760.5	364.2	1,102.5	992.9	109.60	10.060	
17,800.0	11,914.4	16,700.2	10,862.0	106.6	104.7	-17.47	5,860.5	363.4	1,102.2	990.9	111.30	9.903	
17,900.0	11,913.8	16,799.8	10,861.8	108.1	106.2	-17.48	5,960.5	362.7	1,101.9	988.9	113.00	9.751	
18,000.0	11,913.3	16,900.2	10,861.6	109.6	107.7	-17.48	6,060.5	361.9	1,101.6	986.8	114.71	9.603	
18,100.0	11,912.7	17,000.2	10,861.4	111.1	109.3	-17.48	6,160.5	361.1	1,101.2	984.8	116.42	9.459	
18,200.0	11,912.1	17,100.2	10,861.1	112.7	110.9	-17.49	6,260.5	360.4	1,100.9	982.8	118.13	9.320	
18,300.0	11,911.6	17,200.2	10,860.9	114.2	112.4	-17.49	6,360.5	359.6	1,100.6	980.7	119.84	9.183	
18,400.0	11,911.0	17,299.8	10,860.7	115.7	114.0	-17.49	6,460.5	358.8	1,100.2	978.7	121.56	9.051	
18,500.0	11,910.5	17,400.2	10,860.4	117.3	115.5	-17.50	6,560.5	358.1	1,099.9	976.6	123.28	8.922	
18,600.0	11,909.9	17,500.2	10,860.2	118.8	117.1	-17.50	6,660.5	357.3	1,099.6	974.6	125.00	8.796	
18,700.0	11,909.4	17,600.2	10,860.0	120.4	118.7	-17.50	6,760.5	356.5	1,099.3	972.5	126.73	8.674	
18,800.0	11,908.8	17,700.2	10,859.8	121.9	120.2	-17.51	6,860.5	355.7	1,098.9	970.5	128.46	8.555	
18,900.0	11,908.2	17,800.2	10,859.5	123.5	121.8	-17.51	6,960.5	355.0	1,098.6	968.4	130.19	8.439	
19,000.0	11,907.7	17,900.2	10,859.3	125.0	123.4	-17.51	7,060.5	354.2	1,098.3	966.4	131.92	8.325	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,907.1	18,000.2	10,859.1	126.6	125.0	-17.52	7,160.5	353.4	1,098.0	964.3	133.65	8.215	
19,200.0	11,906.6	18,100.2	10,858.9	128.1	126.5	-17.52	7,260.5	352.7	1,097.6	962.2	135.39	8.107	
19,300.0	11,906.0	18,200.2	10,858.6	129.7	128.1	-17.53	7,360.5	351.9	1,097.3	960.2	137.13	8.002	
19,400.0	11,905.4	18,299.8	10,858.4	131.3	129.7	-17.53	7,460.5	351.1	1,097.0	958.1	138.86	7.900	
19,500.0	11,904.9	18,400.2	10,858.2	132.8	131.3	-17.53	7,560.5	350.4	1,096.7	956.0	140.61	7.799	
19,600.0	11,904.3	18,500.3	10,857.9	134.4	132.9	-17.54	7,660.5	349.6	1,096.3	954.0	142.35	7.702	
19,700.0	11,903.8	18,600.3	10,857.7	136.0	134.5	-17.54	7,760.5	348.8	1,096.0	951.9	144.09	7.606	
19,800.0	11,903.2	18,700.3	10,857.5	137.5	136.0	-17.54	7,860.5	348.1	1,095.7	949.8	145.84	7.513	
19,900.0	11,902.7	18,800.3	10,857.3	139.1	137.6	-17.55	7,960.5	347.3	1,095.3	947.8	147.59	7.422	
20,000.0	11,902.1	18,899.7	10,857.0	140.7	139.2	-17.55	8,060.4	346.5	1,095.0	945.7	149.33	7.333	
20,100.0	11,901.5	19,000.3	10,856.8	142.3	140.8	-17.55	8,160.4	345.8	1,094.7	943.6	151.09	7.245	
20,200.0	11,901.0	19,100.3	10,856.6	143.8	142.4	-17.56	8,260.4	345.0	1,094.4	941.5	152.84	7.160	
20,300.0	11,900.4	19,200.3	10,856.4	145.4	144.0	-17.56	8,360.4	344.2	1,094.0	939.4	154.60	7.077	
20,400.0	11,899.9	19,300.3	10,856.1	147.0	145.6	-17.56	8,460.4	343.5	1,093.7	937.4	156.35	6.995	
20,500.0	11,899.3	19,400.3	10,855.9	148.6	147.2	-17.57	8,560.4	342.7	1,093.4	935.3	158.11	6.915	
20,600.0	11,898.7	19,499.7	10,855.7	150.2	148.8	-17.57	8,660.4	341.9	1,093.1	933.2	159.86	6.838	
20,700.0	11,898.2	19,600.3	10,855.5	151.8	150.4	-17.57	8,760.4	341.2	1,092.7	931.1	161.62	6.761	
20,800.0	11,897.6	19,700.3	10,855.2	153.4	152.0	-17.58	8,860.4	340.4	1,092.4	929.0	163.38	6.686	
20,900.0	11,897.1	19,800.3	10,855.0	155.0	153.6	-17.58	8,960.4	339.6	1,092.1	926.9	165.14	6.613	
21,000.0	11,896.5	19,900.3	10,854.8	156.5	155.2	-17.58	9,060.4	338.9	1,091.8	924.8	166.91	6.541	
21,100.0	11,896.0	20,000.3	10,854.5	158.1	156.8	-17.59	9,160.4	338.1	1,091.4	922.8	168.67	6.471	
21,200.0	11,895.4	20,100.3	10,854.3	159.7	158.4	-17.59	9,260.4	337.3	1,091.1	920.7	170.44	6.402	
21,300.0	11,894.8	20,200.3	10,854.1	161.3	160.0	-17.59	9,360.4	336.5	1,090.8	918.6	172.20	6.334	
21,400.0	11,894.3	20,300.3	10,853.9	162.9	161.7	-17.60	9,460.4	335.8	1,090.4	916.5	173.97	6.268	
21,500.0	11,893.7	20,400.3	10,853.6	164.5	163.3	-17.60	9,560.4	335.0	1,090.1	914.4	175.74	6.203	
21,600.0	11,893.2	20,500.3	10,853.4	166.1	164.9	-17.61	9,660.4	334.2	1,089.8	912.3	177.50	6.140	
21,700.0	11,892.6	20,600.3	10,853.2	167.7	166.5	-17.61	9,760.4	333.5	1,089.5	910.2	179.27	6.077	
21,800.0	11,892.0	20,700.3	10,853.0	169.3	168.1	-17.61	9,860.4	332.7	1,089.1	908.1	181.04	6.016	
21,900.0	11,891.5	20,800.3	10,852.7	170.9	169.7	-17.62	9,960.4	331.9	1,088.8	906.0	182.82	5.956	
22,000.0	11,890.9	20,900.3	10,852.5	172.5	171.3	-17.62	10,060.4	331.2	1,088.5	903.9	184.59	5.897	
22,091.3	11,890.4	20,991.1	10,852.3	174.0	172.8	-17.62	10,151.7	330.5	1,088.2	902.0	186.20	5.844	
22,100.0	11,890.4	23,712.3	10,852.3	174.1	216.8	-17.62	10,155.0	330.4	1,088.1	877.8	210.35	5.173	
22,191.7	11,890.5	21,086.1	10,851.6	175.6	174.3	-17.60	10,246.7	330.0	1,088.9	901.1	187.85	5.797	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	2.0	-2.0	0.0	0.0	89.35	28.0	2,483.3	2,483.4				
100.0	100.0	102.0	98.0	0.1	0.1	89.35	28.0	2,483.3	2,483.4	2,483.2	0.26	9,425.550	
200.0	200.0	202.0	198.0	0.5	0.5	89.35	28.0	2,483.3	2,483.4	2,482.4	0.98	2,533.011	
300.0	300.0	302.0	298.0	0.8	0.9	89.35	28.0	2,483.3	2,483.4	2,481.7	1.70	1,463.102	
400.0	400.0	402.0	398.0	1.2	1.2	89.35	28.0	2,483.3	2,483.4	2,481.0	2.41	1,028.625	
500.0	500.0	502.0	498.0	1.6	1.6	89.35	28.0	2,483.3	2,483.4	2,480.3	3.13	793.107	
600.0	600.0	602.0	598.0	1.9	1.9	89.35	28.0	2,483.3	2,483.4	2,479.6	3.85	645.346	
700.0	700.0	702.0	698.0	2.3	2.3	89.35	28.0	2,483.3	2,483.4	2,478.8	4.57	543.996	
800.0	800.0	802.0	798.0	2.6	2.6	89.35	28.0	2,483.3	2,483.4	2,478.1	5.28	470.159	
900.0	900.0	902.0	898.0	3.0	3.0	89.35	28.0	2,483.3	2,483.4	2,477.4	6.00	413.970	
1,000.0	1,000.0	1,002.0	998.0	3.4	3.4	89.35	28.0	2,483.3	2,483.4	2,476.7	6.72	369.778	
1,100.0	1,100.0	1,102.0	1,098.0	3.7	3.7	89.35	28.0	2,483.3	2,483.4	2,476.0	7.43	334.111	
1,200.0	1,200.0	1,202.0	1,198.0	4.1	4.1	89.35	28.0	2,483.3	2,483.4	2,475.3	8.15	304.719	
1,300.0	1,300.0	1,302.0	1,298.0	4.4	4.4	89.35	28.0	2,483.3	2,483.4	2,474.5	8.87	280.080	
1,400.0	1,400.0	1,402.0	1,398.0	4.8	4.8	89.35	28.0	2,483.3	2,483.4	2,473.8	9.58	259.128	
1,500.0	1,500.0	1,498.0	1,498.0	5.1	5.1	89.35	28.0	2,483.3	2,483.4	2,473.1	10.29	241.428	
1,600.0	1,600.0	1,668.8	1,668.8	5.5	5.7	-14.55	27.4	2,480.9	2,481.2	2,470.0	11.22	221.187	
1,700.0	1,700.0	1,840.5	1,840.3	5.8	6.3	-14.55	25.4	2,473.5	2,474.3	2,462.2	12.13	203.992	
1,800.0	1,799.9	2,010.9	2,010.2	6.2	6.9	-14.55	22.1	2,461.3	2,462.9	2,449.9	13.04	188.942	
1,900.0	1,899.7	2,179.6	2,178.1	6.5	7.5	-14.54	17.6	2,444.4	2,447.0	2,433.1	13.93	175.653	
2,000.0	1,999.4	2,327.2	2,324.3	6.9	8.1	-14.55	12.6	2,425.8	2,426.8	2,412.0	14.76	164.434	
2,100.0	2,098.9	2,424.6	2,420.8	7.2	8.4	-14.58	9.0	2,412.7	2,404.2	2,388.7	15.44	155.702	
2,200.0	2,198.3	2,521.6	2,516.8	7.6	8.8	-14.63	5.5	2,399.6	2,379.9	2,363.8	16.12	147.597	
2,300.0	2,297.4	2,618.2	2,612.5	8.0	9.2	-14.69	2.0	2,386.7	2,354.0	2,337.2	16.81	140.047	
2,400.0	2,396.4	2,714.6	2,707.9	8.3	9.5	-14.69	-1.5	2,373.7	2,327.3	2,309.8	17.49	133.035	
2,500.0	2,495.5	2,810.9	2,803.4	8.7	9.9	-14.69	-5.0	2,360.8	2,300.6	2,282.4	18.18	126.539	
2,600.0	2,594.5	2,907.3	2,898.8	9.1	10.3	-14.69	-8.5	2,347.8	2,273.9	2,255.1	18.87	120.497	
2,700.0	2,693.5	3,003.7	2,994.2	9.5	10.7	-14.70	-11.9	2,334.9	2,247.2	2,227.7	19.56	114.866	
2,800.0	2,792.5	3,100.0	3,089.6	9.9	11.0	-14.70	-15.4	2,321.9	2,220.5	2,200.3	20.26	109.606	
2,900.0	2,891.6	3,203.6	3,185.1	10.3	11.5	-14.70	-18.9	2,309.0	2,193.8	2,172.8	20.98	104.554	
3,000.0	2,990.6	3,307.2	3,280.5	10.7	11.9	-14.70	-22.4	2,296.0	2,167.1	2,145.4	21.71	99.828	
3,100.0	3,089.6	3,389.1	3,375.9	11.0	12.2	-14.70	-25.9	2,283.1	2,140.4	2,118.1	22.36	95.738	
3,200.0	3,188.6	3,485.5	3,471.4	11.4	12.6	-14.70	-29.4	2,270.1	2,113.7	2,090.6	23.06	91.663	
3,300.0	3,287.7	3,581.9	3,566.8	11.8	13.0	-14.70	-32.9	2,257.2	2,087.0	2,063.2	23.76	87.823	
3,400.0	3,386.7	3,678.2	3,662.2	12.2	13.4	-14.70	-36.4	2,244.2	2,060.3	2,035.8	24.47	84.200	
3,500.0	3,485.7	3,774.6	3,757.7	12.7	13.8	-14.70	-39.9	2,231.3	2,033.6	2,008.4	25.18	80.775	
3,600.0	3,584.8	3,871.0	3,853.1	13.1	14.2	-14.70	-43.3	2,218.3	2,006.9	1,981.0	25.88	77.535	
3,700.0	3,683.8	3,967.3	3,948.5	13.5	14.6	-14.70	-46.8	2,205.4	1,980.2	1,953.6	26.59	74.463	
3,800.0	3,782.8	4,063.7	4,044.0	13.9	14.9	-14.71	-50.3	2,192.4	1,953.5	1,926.2	27.30	71.549	
3,900.0	3,881.8	4,160.1	4,139.4	14.3	15.3	-14.71	-53.8	2,179.5	1,926.8	1,898.8	28.01	68.781	
4,000.0	3,980.9	4,256.5	4,234.8	14.7	15.7	-14.71	-57.3	2,166.5	1,900.1	1,871.4	28.73	66.147	
4,100.0	4,079.9	4,352.8	4,330.2	15.1	16.1	-14.71	-60.8	2,153.6	1,873.4	1,843.9	29.44	63.639	
4,200.0	4,178.9	4,449.2	4,425.7	15.5	16.5	-14.71	-64.3	2,140.6	1,846.7	1,816.5	30.15	61.249	
4,300.0	4,277.9	4,545.6	4,521.1	15.9	16.9	-14.71	-67.8	2,127.7	1,820.0	1,789.1	30.86	58.967	
4,400.0	4,377.0	4,641.9	4,616.5	16.3	17.3	-14.71	-71.3	2,114.7	1,793.3	1,761.7	31.58	56.787	
4,500.0	4,476.0	4,738.3	4,712.0	16.7	17.7	-14.71	-74.7	2,101.8	1,766.6	1,734.3	32.29	54.703	
4,600.0	4,575.0	4,834.7	4,807.4	17.1	18.1	-14.72	-78.2	2,088.8	1,739.9	1,706.9	33.01	52.708	
4,700.0	4,674.0	4,931.0	4,902.8	17.6	18.5	-14.72	-81.7	2,075.9	1,713.2	1,679.4	33.73	50.798	
4,800.0	4,773.1	5,027.4	4,998.3	18.0	18.9	-14.72	-85.2	2,062.9	1,686.5	1,652.0	34.44	48.965	
4,900.0	4,872.1	5,123.8	5,093.7	18.4	19.3	-14.72	-88.7	2,050.0	1,659.7	1,624.6	35.16	47.207	
5,000.0	4,971.1	5,220.1	5,189.1	18.8	19.7	-14.72	-92.2	2,037.0	1,633.0	1,597.2	35.88	45.519	
5,100.0	5,070.2	5,316.5	5,284.6	19.2	20.1	-14.72	-95.7	2,024.1	1,606.3	1,569.7	36.59	43.896	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
5,200.0	5,169.2	5,412.9	5,380.0	19.6	20.5	-14.72	-99.2	2,011.1	1,579.6	1,542.3	37.31	42.336	
5,300.0	5,268.2	5,509.2	5,475.4	20.0	20.9	-14.73	-102.7	1,998.2	1,552.9	1,514.9	38.03	40.833	
5,400.0	5,367.2	5,605.6	5,570.9	20.5	21.3	-14.73	-106.1	1,985.2	1,526.2	1,487.5	38.75	39.387	
5,500.0	5,466.3	5,702.0	5,666.3	20.9	21.7	-14.73	-109.6	1,972.3	1,499.5	1,460.1	39.47	37.992	
5,600.0	5,565.3	5,801.6	5,761.7	21.3	22.2	-14.73	-113.1	1,959.3	1,472.8	1,432.6	40.20	36.636	
5,700.0	5,664.3	5,905.3	5,857.1	21.7	22.6	-14.73	-116.6	1,946.4	1,446.1	1,405.2	40.95	35.316	
5,800.0	5,763.3	6,008.9	5,952.6	22.1	23.0	-14.74	-120.1	1,933.4	1,419.4	1,377.7	41.70	34.042	
5,900.0	5,862.4	6,087.5	6,048.0	22.5	23.3	-14.74	-123.6	1,920.5	1,392.7	1,350.4	42.35	32.886	
6,000.0	5,961.4	6,183.8	6,143.4	23.0	23.7	-14.74	-127.1	1,907.5	1,366.0	1,322.9	43.07	31.716	
6,100.0	6,060.4	6,280.2	6,238.9	23.4	24.2	-14.74	-130.6	1,894.6	1,339.3	1,295.5	43.79	30.584	
6,200.0	6,159.4	6,376.6	6,334.3	23.8	24.6	-14.74	-134.1	1,881.6	1,312.6	1,268.1	44.51	29.488	
6,300.0	6,258.5	6,472.9	6,429.7	24.2	25.0	-14.75	-137.6	1,868.7	1,285.9	1,240.7	45.23	28.427	
6,400.0	6,357.5	6,569.3	6,525.2	24.6	25.4	-14.75	-141.0	1,855.7	1,259.2	1,213.2	45.96	27.400	
6,500.0	6,456.5	6,665.7	6,620.6	25.1	25.8	-14.75	-144.5	1,842.8	1,232.5	1,185.8	46.68	26.404	
6,600.0	6,555.6	6,762.0	6,716.0	25.5	26.2	-14.75	-148.0	1,829.8	1,205.8	1,158.4	47.40	25.438	
6,700.0	6,654.6	6,858.4	6,811.5	25.9	26.6	-14.76	-151.5	1,816.9	1,179.1	1,131.0	48.12	24.501	
6,800.0	6,753.6	6,954.8	6,906.9	26.3	27.0	-14.76	-155.0	1,803.9	1,152.4	1,103.5	48.85	23.592	
6,900.0	6,852.6	7,051.1	7,002.3	26.7	27.4	-14.76	-158.5	1,791.0	1,125.7	1,076.1	49.57	22.709	
7,000.0	6,951.7	7,147.5	7,097.7	27.1	27.8	-14.77	-162.0	1,778.0	1,099.0	1,048.7	50.29	21.852	
7,100.0	7,050.7	7,236.5	7,185.8	27.6	28.2	-14.77	-165.2	1,766.1	1,072.4	1,021.4	51.03	21.014	
7,131.4	7,081.7	7,260.3	7,209.5	27.7	28.3	-14.78	-166.0	1,763.2	1,064.3	1,013.1	51.27	20.759	
7,200.0	7,149.8	7,312.9	7,261.7	28.0	28.5	-14.72	-167.6	1,757.1	1,047.9	996.1	51.79	20.233	
7,300.0	7,249.2	7,390.4	7,338.8	28.4	28.8	-14.65	-169.7	1,749.5	1,027.6	975.1	52.53	19.561	
7,400.0	7,348.9	7,488.9	7,417.0	28.8	29.1	-14.59	-171.3	1,743.3	1,011.8	958.5	53.25	18.998	
7,500.0	7,448.7	7,548.0	7,496.0	29.1	29.4	-14.54	-172.6	1,738.6	1,000.4	946.5	53.96	18.542	
7,600.0	7,548.7	7,627.7	7,575.6	29.5	29.6	-14.51	-173.4	1,735.5	993.6	939.0	54.63	18.188	
7,664.7	7,613.3	7,679.3	7,627.2	29.7	29.8	89.41	-173.7	1,734.3	991.6	936.6	55.05	18.013	
7,700.0	7,648.7	7,707.5	7,655.4	29.8	29.9	89.42	-173.8	1,734.0	991.2	935.9	55.27	17.934	
7,759.2	7,707.9	7,758.0	7,705.9	30.0	30.1	89.42	-173.9	1,733.8	991.0	935.3	55.64	17.811	
7,800.0	7,748.7	7,801.2	7,746.7	30.1	30.2	89.42	-173.9	1,733.8	991.0	935.0	55.92	17.722	
7,900.0	7,848.7	7,901.2	7,846.7	30.4	30.5	89.42	-173.9	1,733.8	991.0	934.4	56.58	17.513	
8,000.0	7,948.7	8,001.2	7,946.7	30.7	30.8	89.42	-173.9	1,733.8	991.0	933.7	57.25	17.309	
8,100.0	8,048.7	8,101.2	8,046.7	31.0	31.2	89.42	-173.9	1,733.8	991.0	933.0	57.92	17.109	
8,200.0	8,148.7	8,201.2	8,146.7	31.4	31.5	89.42	-173.9	1,733.8	991.0	932.4	58.59	16.914	
8,300.0	8,248.7	8,301.2	8,246.7	31.7	31.8	89.42	-173.9	1,733.8	991.0	931.7	59.26	16.722	
8,400.0	8,348.7	8,401.2	8,346.7	32.0	32.1	89.42	-173.9	1,733.8	991.0	931.0	59.93	16.535	
8,500.0	8,448.7	8,501.2	8,446.7	32.3	32.4	89.42	-173.9	1,733.8	991.0	930.4	60.61	16.351	
8,600.0	8,548.7	8,601.2	8,546.7	32.6	32.7	89.42	-173.9	1,733.8	991.0	929.7	61.28	16.171	
8,700.0	8,648.7	8,701.2	8,646.7	33.0	33.1	89.42	-173.9	1,733.8	991.0	929.0	61.95	15.995	
8,800.0	8,748.7	8,801.2	8,746.7	33.3	33.4	89.42	-173.9	1,733.8	991.0	928.3	62.63	15.823	
8,900.0	8,848.7	8,901.2	8,846.7	33.6	33.7	89.42	-173.9	1,733.8	991.0	927.7	63.31	15.653	
9,000.0	8,948.7	9,001.2	8,946.7	33.9	34.0	89.42	-173.9	1,733.8	991.0	927.0	63.98	15.488	
9,100.0	9,048.7	9,101.2	9,046.7	34.3	34.3	89.42	-173.9	1,733.8	991.0	926.3	64.66	15.325	
9,200.0	9,148.7	9,201.2	9,146.7	34.6	34.7	89.42	-173.9	1,733.8	991.0	925.6	65.34	15.166	
9,300.0	9,248.7	9,301.2	9,246.7	34.9	35.0	89.42	-173.9	1,733.8	991.0	924.9	66.02	15.010	
9,400.0	9,348.7	9,401.2	9,346.7	35.2	35.3	89.42	-173.9	1,733.8	991.0	924.3	66.70	14.856	
9,500.0	9,448.7	9,501.2	9,446.7	35.6	35.6	89.42	-173.9	1,733.8	991.0	923.6	67.39	14.706	
9,600.0	9,548.7	9,601.2	9,546.7	35.9	36.0	89.42	-173.9	1,733.8	991.0	922.9	68.07	14.559	
9,700.0	9,648.7	9,701.2	9,646.7	36.2	36.3	89.42	-173.9	1,733.8	991.0	922.2	68.75	14.414	
9,800.0	9,748.7	9,801.2	9,746.7	36.5	36.6	89.42	-173.9	1,733.8	991.0	921.5	69.43	14.272	
9,900.0	9,848.7	9,901.2	9,846.7	36.9	37.0	89.42	-173.9	1,733.8	991.0	920.8	70.12	14.133	
10,000.0	9,948.7	10,001.2	9,946.7	37.2	37.3	89.42	-173.9	1,733.8	991.0	920.2	70.80	13.996	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #127H - Wellbore #1 - BLM Plan #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		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
19,200.0	11,906.6	18,132.5	10,859.7	128.1	126.8	43.52	7,269.7	1,675.4	1,441.0	1,245.1	195.82	7.358	
19,300.0	11,906.0	18,232.5	10,859.3	129.7	128.4	43.53	7,369.7	1,674.6	1,440.8	1,242.5	198.27	7.267	
19,400.0	11,905.4	18,332.5	10,859.0	131.3	130.0	43.53	7,469.7	1,673.8	1,440.7	1,239.9	200.72	7.177	
19,500.0	11,904.9	18,432.5	10,858.7	132.8	131.6	43.54	7,569.7	1,673.0	1,440.5	1,237.3	203.17	7.090	
19,600.0	11,904.3	18,532.5	10,858.4	134.4	133.1	43.55	7,669.7	1,672.2	1,440.4	1,234.7	205.63	7.005	
19,700.0	11,903.8	18,632.5	10,858.0	136.0	134.7	43.55	7,769.7	1,671.4	1,440.2	1,232.1	208.09	6.921	
19,800.0	11,903.2	18,732.5	10,857.7	137.5	136.3	43.56	7,869.7	1,670.7	1,440.1	1,229.5	210.55	6.840	
19,900.0	11,902.7	18,832.5	10,857.4	139.1	137.9	43.57	7,969.7	1,669.9	1,439.9	1,226.9	213.01	6.760	
20,000.0	11,902.1	18,932.5	10,857.0	140.7	139.5	43.57	8,069.7	1,669.1	1,439.7	1,224.3	215.48	6.682	
20,100.0	11,901.5	19,032.5	10,856.7	142.3	141.1	43.58	8,169.7	1,668.3	1,439.6	1,221.6	217.95	6.605	
20,200.0	11,901.0	19,132.5	10,856.4	143.8	142.7	43.59	8,269.7	1,667.5	1,439.4	1,219.0	220.42	6.530	
20,300.0	11,900.4	19,232.5	10,856.0	145.4	144.3	43.59	8,369.7	1,666.7	1,439.3	1,216.4	222.90	6.457	
20,400.0	11,899.9	19,332.5	10,855.7	147.0	145.9	43.60	8,469.7	1,665.9	1,439.1	1,213.8	225.37	6.386	
20,500.0	11,899.3	19,432.5	10,855.4	148.6	147.4	43.61	8,569.7	1,665.2	1,439.0	1,211.1	227.85	6.315	
20,600.0	11,898.7	19,532.5	10,855.0	150.2	149.0	43.61	8,669.7	1,664.4	1,438.8	1,208.5	230.34	6.247	
20,700.0	11,898.2	19,632.5	10,854.7	151.8	150.6	43.62	8,769.7	1,663.6	1,438.7	1,205.9	232.82	6.179	
20,800.0	11,897.6	19,732.5	10,854.4	153.4	152.2	43.63	8,869.7	1,662.8	1,438.5	1,203.2	235.31	6.113	
20,900.0	11,897.1	19,832.5	10,854.0	155.0	153.8	43.63	8,969.7	1,662.0	1,438.4	1,200.6	237.80	6.049	
21,000.0	11,896.5	19,932.5	10,853.7	156.5	155.4	43.64	9,069.6	1,661.2	1,438.2	1,197.9	240.29	5.985	
21,100.0	11,896.0	20,032.5	10,853.4	158.1	157.1	43.65	9,169.6	1,660.4	1,438.1	1,195.3	242.78	5.923	
21,200.0	11,895.4	20,132.5	10,853.0	159.7	158.7	43.65	9,269.6	1,659.7	1,437.9	1,192.6	245.28	5.862	
21,300.0	11,894.8	20,232.5	10,852.7	161.3	160.3	43.66	9,369.6	1,658.9	1,437.8	1,190.0	247.77	5.803	
21,400.0	11,894.3	20,332.5	10,852.4	162.9	161.9	43.67	9,469.6	1,658.1	1,437.6	1,187.3	250.27	5.744	
21,500.0	11,893.7	20,432.5	10,852.1	164.5	163.5	43.68	9,569.6	1,657.3	1,437.5	1,184.7	252.77	5.687	
21,600.0	11,893.2	20,532.5	10,851.7	166.1	165.1	43.68	9,669.6	1,656.5	1,437.3	1,182.0	255.28	5.630	
21,700.0	11,892.6	20,632.5	10,851.4	167.7	166.7	43.69	9,769.6	1,655.7	1,437.2	1,179.4	257.78	5.575	
21,800.0	11,892.0	20,732.5	10,851.1	169.3	168.3	43.70	9,869.6	1,654.9	1,437.0	1,176.7	260.29	5.521	
21,900.0	11,891.5	20,832.5	10,850.7	170.9	169.9	43.70	9,969.6	1,654.2	1,436.9	1,174.1	262.79	5.468	
22,000.0	11,890.9	20,932.5	10,850.4	172.5	171.5	43.71	10,069.6	1,653.4	1,436.7	1,171.4	265.30	5.415	
22,100.0	11,890.4	21,032.5	10,850.1	174.1	173.1	43.72	10,169.6	1,652.6	1,436.6	1,168.7	267.82	5.364	
22,191.7	11,890.5	21,130.4	10,850.5	175.6	174.7	43.73	10,267.5	1,652.0	1,436.5	1,166.3	270.15	5.317 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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	2.0	-2.0	0.0	0.0	88.66	58.1	2,483.1	2,483.7				
100.0	100.0	102.0	98.0	0.1	0.1	88.66	58.1	2,483.1	2,483.7	2,483.5	0.26	9,426.807	
200.0	200.0	202.0	198.0	0.5	0.5	88.66	58.1	2,483.1	2,483.7	2,482.8	0.98	2,533.349	
300.0	300.0	302.0	298.0	0.8	0.9	88.66	58.1	2,483.1	2,483.7	2,482.0	1.70	1,463.297	
400.0	400.0	402.0	398.0	1.2	1.2	88.66	58.1	2,483.1	2,483.7	2,481.3	2.41	1,028.762	
500.0	500.0	502.0	498.0	1.6	1.6	88.66	58.1	2,483.1	2,483.7	2,480.6	3.13	793.213	
600.0	600.0	602.0	598.0	1.9	1.9	88.66	58.1	2,483.1	2,483.7	2,479.9	3.85	645.432	
700.0	700.0	702.0	698.0	2.3	2.3	88.66	58.1	2,483.1	2,483.7	2,479.2	4.57	544.068	
800.0	800.0	802.0	798.0	2.6	2.6	88.66	58.1	2,483.1	2,483.7	2,478.5	5.28	470.221	
900.0	900.0	902.0	898.0	3.0	3.0	88.66	58.1	2,483.1	2,483.7	2,477.7	6.00	414.025	
1,000.0	1,000.0	1,002.0	998.0	3.4	3.4	88.66	58.1	2,483.1	2,483.7	2,477.0	6.72	369.827	
1,100.0	1,100.0	1,102.0	1,098.0	3.7	3.7	88.66	58.1	2,483.1	2,483.7	2,476.3	7.43	334.155	
1,200.0	1,200.0	1,202.0	1,198.0	4.1	4.1	88.66	58.1	2,483.1	2,483.7	2,475.6	8.15	304.760	
1,300.0	1,300.0	1,302.0	1,298.0	4.4	4.4	88.66	58.1	2,483.1	2,483.7	2,474.9	8.87	280.118	
1,400.0	1,400.0	1,402.0	1,398.0	4.8	4.8	88.66	58.1	2,483.1	2,483.7	2,474.2	9.58	259.163	
1,500.0	1,500.0	1,502.0	1,498.0	5.1	5.2	88.66	58.1	2,483.1	2,483.7	2,473.4	10.30	241.124	
1,600.0	1,600.0	1,602.0	1,598.0	5.5	5.5	-15.25	58.1	2,483.1	2,482.9	2,471.9	11.01	225.585	
1,700.0	1,700.0	1,702.0	1,698.0	5.8	5.9	-15.27	58.1	2,483.1	2,480.4	2,468.7	11.70	211.935	
1,800.0	1,799.9	1,802.1	1,797.9	6.2	6.2	-15.31	58.1	2,483.1	2,476.2	2,463.8	12.40	199.642	
1,900.0	1,899.7	1,902.3	1,897.7	6.5	6.6	-15.36	58.1	2,483.1	2,470.3	2,457.2	13.10	188.500	
2,000.0	1,999.4	1,997.4	1,997.4	6.9	6.9	-15.43	58.1	2,483.1	2,462.7	2,448.9	13.79	178.585	
2,100.0	2,098.9	2,070.6	2,070.6	7.2	7.2	-15.49	57.9	2,483.5	2,454.0	2,439.6	14.39	170.543	
2,200.0	2,198.3	2,143.2	2,143.2	7.6	7.4	-15.55	57.3	2,484.6	2,444.7	2,429.7	14.98	163.180	
2,300.0	2,297.4	2,215.8	2,215.7	8.0	7.7	-15.61	56.2	2,486.7	2,434.8	2,419.3	15.57	156.362	
2,400.0	2,396.4	2,288.5	2,288.4	8.3	7.9	-15.64	54.7	2,489.5	2,425.2	2,409.0	16.16	150.039	
2,500.0	2,495.5	2,361.4	2,361.2	8.7	8.2	-15.66	52.7	2,493.1	2,416.7	2,399.9	16.76	144.210	
2,600.0	2,594.5	2,434.4	2,434.0	9.1	8.4	-15.66	50.4	2,497.6	2,409.3	2,391.9	17.35	138.827	
2,700.0	2,693.5	2,507.6	2,506.9	9.5	8.7	-15.66	47.5	2,502.9	2,403.0	2,385.0	17.95	133.852	
2,800.0	2,792.5	2,580.8	2,579.8	9.9	8.9	-15.64	44.3	2,509.0	2,397.8	2,379.2	18.55	129.247	
2,900.0	2,891.6	2,654.1	2,652.7	10.3	9.2	-15.61	40.6	2,516.0	2,393.7	2,374.5	19.15	124.982	
3,000.0	2,990.6	2,727.4	2,725.5	10.7	9.4	-15.57	36.4	2,523.8	2,390.7	2,371.0	19.75	121.029	
3,100.0	3,089.6	2,801.0	2,798.4	11.0	9.7	-15.52	31.8	2,532.4	2,388.9	2,368.5	20.36	117.358	
3,200.0	3,188.6	2,901.0	2,897.4	11.4	10.1	-15.45	25.3	2,544.7	2,387.5	2,366.5	21.07	113.316	
3,300.0	3,287.7	3,000.9	2,996.4	11.8	10.4	-15.37	18.7	2,556.9	2,386.2	2,364.4	21.79	109.523	
3,400.0	3,386.7	3,100.9	3,095.3	12.2	10.8	-15.30	12.2	2,569.2	2,384.9	2,362.4	22.51	105.958	
3,500.0	3,485.7	3,200.8	3,194.3	12.7	11.2	-15.22	5.6	2,581.5	2,383.6	2,360.4	23.23	102.603	
3,600.0	3,584.8	3,300.7	3,293.3	13.1	11.6	-15.14	-0.9	2,593.8	2,382.3	2,358.4	23.96	99.441	
3,700.0	3,683.8	3,400.7	3,392.2	13.5	12.0	-15.07	-7.5	2,606.0	2,381.0	2,356.4	24.69	96.457	
3,800.0	3,782.8	3,500.6	3,491.2	13.9	12.3	-14.99	-14.0	2,618.3	2,379.8	2,354.3	25.41	93.636	
3,900.0	3,881.8	3,600.6	3,590.2	14.3	12.7	-14.91	-20.5	2,630.6	2,378.5	2,352.3	26.15	90.967	
4,000.0	3,980.9	3,700.5	3,689.1	14.7	13.1	-14.84	-27.1	2,642.9	2,377.2	2,350.3	26.88	88.439	
4,100.0	4,079.9	3,800.4	3,788.1	15.1	13.5	-14.76	-33.6	2,655.1	2,375.9	2,348.3	27.61	86.040	
4,200.0	4,178.9	3,900.4	3,887.1	15.5	13.9	-14.68	-40.2	2,667.4	2,374.6	2,346.3	28.35	83.762	
4,300.0	4,277.9	4,000.3	3,986.0	15.9	14.3	-14.61	-46.7	2,679.7	2,373.4	2,344.3	29.09	81.596	
4,400.0	4,377.0	4,100.3	4,085.0	16.3	14.7	-14.53	-53.3	2,692.0	2,372.1	2,342.3	29.83	79.534	
4,500.0	4,476.0	4,200.2	4,184.0	16.7	15.1	-14.45	-59.8	2,704.2	2,370.9	2,340.3	30.56	77.570	
4,600.0	4,575.0	4,300.1	4,282.9	17.1	15.5	-14.38	-66.3	2,716.5	2,369.6	2,338.3	31.30	75.696	
4,700.0	4,674.0	4,400.1	4,381.9	17.6	15.9	-14.30	-72.9	2,728.8	2,368.4	2,336.3	32.05	73.907	
4,800.0	4,773.1	4,500.0	4,480.9	18.0	16.3	-14.22	-79.4	2,741.1	2,367.1	2,334.3	32.79	72.197	
4,900.0	4,872.1	4,600.0	4,579.9	18.4	16.7	-14.14	-86.0	2,753.3	2,365.9	2,332.3	33.53	70.561	
5,000.0	4,971.1	4,700.1	4,678.8	18.8	17.1	-14.07	-92.5	2,765.6	2,364.6	2,330.4	34.27	68.995	
5,100.0	5,070.2	4,800.1	4,777.8	19.2	17.5	-13.99	-99.1	2,777.9	2,363.4	2,328.4	35.02	67.494	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
5,200.0	5,169.2	4,900.2	4,876.8	19.6	17.9	-13.91	-105.6	2,790.2	2,362.2	2,326.4	35.76	66.054	
5,300.0	5,268.2	5,000.3	4,975.7	20.0	18.3	-13.83	-112.1	2,802.4	2,361.0	2,324.4	36.51	64.673	
5,400.0	5,367.2	5,099.7	5,074.7	20.5	18.7	-13.76	-118.7	2,814.7	2,359.7	2,322.5	37.25	63.350	
5,500.0	5,466.3	5,200.4	5,173.7	20.9	19.2	-13.68	-125.2	2,827.0	2,358.5	2,320.5	38.00	62.071	
5,600.0	5,565.3	5,299.6	5,272.6	21.3	19.6	-13.60	-131.8	2,839.3	2,357.3	2,318.6	38.74	60.849	
5,700.0	5,664.3	5,400.5	5,371.6	21.7	20.0	-13.52	-138.3	2,851.5	2,356.1	2,316.6	39.49	59.663	
5,800.0	5,763.3	5,544.8	5,515.6	22.1	20.6	-13.42	-147.4	2,868.6	2,354.5	2,314.1	40.42	58.245	
5,900.0	5,862.4	5,764.9	5,734.8	22.5	21.4	-13.37	-156.6	2,885.9	2,348.9	2,307.3	41.60	56.470	
6,000.0	5,961.4	5,983.0	5,952.8	23.0	22.2	-13.47	-159.9	2,892.0	2,338.1	2,295.5	42.62	54.853	
6,100.0	6,060.4	6,088.7	6,058.4	23.4	22.5	-13.55	-159.9	2,892.0	2,324.6	2,281.2	43.34	53.630	
6,200.0	6,159.4	6,187.7	6,157.4	23.8	22.8	-13.63	-159.9	2,892.0	2,311.0	2,267.0	44.05	52.462	
6,300.0	6,258.5	6,286.7	6,256.5	24.2	23.2	-13.71	-159.9	2,892.0	2,297.5	2,252.8	44.76	51.330	
6,400.0	6,357.5	6,385.7	6,355.5	24.6	23.5	-13.80	-159.9	2,892.0	2,284.0	2,238.5	45.47	50.233	
6,500.0	6,456.5	6,484.8	6,454.5	25.1	23.8	-13.88	-159.9	2,892.0	2,270.5	2,224.3	46.18	49.169	
6,600.0	6,555.6	6,583.8	6,553.6	25.5	24.1	-13.96	-159.9	2,892.0	2,256.9	2,210.1	46.89	48.136	
6,700.0	6,654.6	6,682.8	6,652.6	25.9	24.5	-14.05	-159.9	2,892.0	2,243.4	2,195.8	47.60	47.133	
6,800.0	6,753.6	6,781.8	6,751.6	26.3	24.8	-14.14	-159.9	2,892.0	2,229.9	2,181.6	48.31	46.159	
6,900.0	6,852.6	6,880.9	6,850.6	26.7	25.1	-14.22	-159.9	2,892.0	2,216.4	2,167.4	49.02	45.213	
7,000.0	6,951.7	6,979.9	6,949.7	27.1	25.5	-14.31	-159.9	2,892.0	2,202.9	2,153.2	49.73	44.294	
7,100.0	7,050.7	7,078.9	7,048.7	27.6	25.8	-14.40	-159.9	2,892.0	2,189.4	2,139.0	50.45	43.400	
7,131.4	7,081.7	7,110.0	7,079.7	27.7	25.9	-14.43	-159.9	2,892.0	2,185.2	2,134.5	50.67	43.125	
7,200.0	7,149.8	7,178.0	7,147.8	28.0	26.1	-14.46	-159.9	2,892.0	2,176.6	2,125.4	51.16	42.543	
7,300.0	7,249.2	7,277.4	7,247.2	28.4	26.5	-14.49	-159.9	2,892.0	2,166.1	2,114.2	51.87	41.758	
7,400.0	7,348.9	7,377.1	7,346.9	28.8	26.8	-14.51	-159.9	2,892.0	2,158.1	2,105.5	52.58	41.045	
7,500.0	7,448.7	7,476.9	7,446.7	29.1	27.1	-14.53	-159.9	2,892.0	2,152.6	2,099.4	53.28	40.402	
7,600.0	7,548.7	7,576.9	7,546.7	29.5	27.5	-14.54	-159.9	2,892.0	2,149.7	2,095.8	53.98	39.826	
7,664.7	7,613.3	7,641.6	7,611.3	29.7	27.7	89.36	-159.9	2,892.0	2,149.2	2,094.8	54.42	39.491	
7,700.0	7,648.7	7,676.9	7,646.7	29.8	27.8	89.36	-159.9	2,892.0	2,149.2	2,094.6	54.66	39.318	
7,800.0	7,748.7	7,776.9	7,746.7	30.1	28.1	89.36	-159.9	2,892.0	2,149.2	2,093.9	55.34	38.836	
7,900.0	7,848.7	7,876.9	7,846.7	30.4	28.5	89.36	-159.9	2,892.0	2,149.2	2,093.2	56.02	38.366	
8,000.0	7,948.7	7,976.9	7,946.7	30.7	28.8	89.36	-159.9	2,892.0	2,149.2	2,092.5	56.70	37.906	
8,100.0	8,048.7	8,076.9	8,046.7	31.0	29.2	89.36	-159.9	2,892.0	2,149.2	2,091.8	57.38	37.456	
8,200.0	8,148.7	8,176.9	8,146.7	31.4	29.5	89.36	-159.9	2,892.0	2,149.2	2,091.2	58.06	37.016	
8,300.0	8,248.7	8,276.9	8,246.7	31.7	29.8	89.36	-159.9	2,892.0	2,149.2	2,090.5	58.74	36.586	
8,400.0	8,348.7	8,376.9	8,346.7	32.0	30.2	89.36	-159.9	2,892.0	2,149.2	2,089.8	59.43	36.165	
8,500.0	8,448.7	8,476.9	8,446.7	32.3	30.5	89.36	-159.9	2,892.0	2,149.2	2,089.1	60.11	35.754	
8,600.0	8,548.7	8,576.9	8,546.7	32.6	30.9	89.36	-159.9	2,892.0	2,149.2	2,088.4	60.80	35.351	
8,700.0	8,648.7	8,676.9	8,646.7	33.0	31.2	89.36	-159.9	2,892.0	2,149.2	2,087.7	61.48	34.957	
8,800.0	8,748.7	8,776.9	8,746.7	33.3	31.5	89.36	-159.9	2,892.0	2,149.2	2,087.0	62.17	34.571	
8,900.0	8,848.7	8,876.9	8,846.7	33.6	31.9	89.36	-159.9	2,892.0	2,149.2	2,086.4	62.86	34.193	
9,000.0	8,948.7	8,976.9	8,946.7	33.9	32.2	89.36	-159.9	2,892.0	2,149.2	2,085.7	63.54	33.823	
9,100.0	9,048.7	9,076.9	9,046.7	34.3	32.6	89.36	-159.9	2,892.0	2,149.2	2,085.0	64.23	33.461	
9,200.0	9,148.7	9,176.9	9,146.7	34.6	32.9	89.36	-159.9	2,892.0	2,149.2	2,084.3	64.92	33.105	
9,300.0	9,248.7	9,276.9	9,246.7	34.9	33.3	89.36	-159.9	2,892.0	2,149.2	2,083.6	65.61	32.758	
9,400.0	9,348.7	9,376.9	9,346.7	35.2	33.6	89.36	-159.9	2,892.0	2,149.2	2,082.9	66.30	32.417	
9,500.0	9,448.7	9,476.9	9,446.7	35.6	34.0	89.36	-159.9	2,892.0	2,149.2	2,082.2	66.99	32.082	
9,600.0	9,548.7	9,576.9	9,546.7	35.9	34.3	89.36	-159.9	2,892.0	2,149.2	2,081.5	67.68	31.755	
9,700.0	9,648.7	9,676.9	9,646.7	36.2	34.6	89.36	-159.9	2,892.0	2,149.2	2,080.8	68.37	31.434	
9,800.0	9,748.7	9,776.9	9,746.7	36.5	35.0	89.36	-159.9	2,892.0	2,149.2	2,080.1	69.07	31.118	
9,900.0	9,848.7	9,876.9	9,846.7	36.9	35.3	89.36	-159.9	2,892.0	2,149.2	2,079.5	69.76	30.809	
10,000.0	9,948.7	9,976.9	9,946.7	37.2	35.7	89.36	-159.9	2,892.0	2,149.2	2,078.8	70.45	30.506	
10,100.0	10,048.7	10,076.9	10,046.7	37.5	36.0	89.36	-159.9	2,892.0	2,149.2	2,078.1	71.15	30.209	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	10,148.7	10,176.9	10,146.7	37.9	36.4	89.36	-159.9	2,892.0	2,149.2	2,077.4	71.84	29.917	
10,300.0	10,248.7	10,276.9	10,246.7	38.2	36.7	89.36	-159.9	2,892.0	2,149.2	2,076.7	72.53	29.630	
10,400.0	10,348.7	10,376.9	10,346.7	38.5	37.1	89.36	-159.9	2,892.0	2,149.2	2,076.0	73.23	29.349	
10,405.3	10,354.0	10,382.2	10,352.0	38.5	37.1	89.36	-159.9	2,892.0	2,149.2	2,075.9	73.27	29.334 CC	
10,500.0	10,448.7	10,450.0	10,419.8	38.9	37.3	89.34	-159.2	2,892.1	2,149.5	2,075.6	73.87	29.099 ES	
10,600.0	10,548.7	10,511.0	10,480.4	39.2	37.5	89.18	-153.1	2,893.3	2,151.6	2,077.1	74.47	28.894	
10,700.0	10,648.7	10,566.5	10,534.7	39.5	37.7	88.89	-142.0	2,895.3	2,155.7	2,080.7	75.02	28.737	
10,800.0	10,748.7	10,619.4	10,585.3	39.9	37.9	88.48	-126.7	2,898.1	2,162.0	2,086.5	75.52	28.628	
10,900.0	10,848.7	10,669.0	10,631.2	40.2	38.0	87.99	-108.2	2,901.6	2,170.7	2,094.7	75.97	28.573	
11,000.0	10,948.7	10,715.0	10,672.1	40.5	38.1	87.45	-87.7	2,905.4	2,181.9	2,105.6	76.35	28.577	
11,100.0	11,048.7	10,750.0	10,702.1	40.9	38.2	86.99	-69.9	2,908.7	2,195.9	2,119.3	76.62	28.660	
11,200.0	11,148.7	10,800.0	10,742.9	41.2	38.3	86.25	-41.5	2,913.9	2,212.8	2,135.9	76.91	28.772	
11,300.0	11,248.7	10,830.5	10,766.4	41.5	38.4	85.76	-22.5	2,917.4	2,232.8	2,155.8	77.02	28.991	
11,400.0	11,348.7	10,850.0	10,781.0	41.9	38.4	85.43	-9.7	2,919.8	2,255.9	2,179.0	76.97	29.308	
11,423.3	11,372.0	10,868.9	10,794.6	42.0	38.5	85.09	3.2	2,922.2	2,261.7	2,184.7	77.05	29.353	
11,450.0	11,398.6	10,876.8	10,800.2	42.0	38.5	84.71	8.6	2,923.2	2,268.6	2,191.5	77.04	29.445	
11,500.0	11,448.4	10,900.0	10,816.1	42.2	38.5	82.98	25.3	2,926.3	2,281.7	2,204.7	77.07	29.607	
11,550.0	11,497.6	10,900.0	10,816.1	42.4	38.5	81.61	25.3	2,926.3	2,295.1	2,218.2	76.90	29.847	
11,600.0	11,545.9	10,923.3	10,831.4	42.5	38.6	79.91	42.5	2,929.5	2,308.6	2,231.7	76.88	30.028	
11,650.0	11,592.8	10,950.0	10,848.0	42.6	38.6	78.22	63.1	2,933.3	2,322.1	2,245.2	76.88	30.204	
11,700.0	11,638.0	10,950.0	10,848.0	42.8	38.6	76.88	63.1	2,933.3	2,335.4	2,258.7	76.67	30.461	
11,750.0	11,681.2	10,972.5	10,861.3	42.9	38.6	75.37	80.9	2,936.6	2,348.4	2,271.8	76.62	30.648	
11,800.0	11,722.1	11,000.0	10,876.5	43.0	38.7	73.91	103.5	2,940.8	2,361.1	2,284.5	76.62	30.815	
11,850.0	11,760.3	11,000.0	10,876.5	43.1	38.7	72.72	103.5	2,940.8	2,373.2	2,296.8	76.42	31.054	
11,900.0	11,795.5	11,023.3	10,888.5	43.2	38.7	71.49	123.1	2,944.4	2,384.7	2,308.3	76.41	31.209	
11,950.0	11,827.6	11,050.0	10,901.2	43.2	38.7	70.37	146.2	2,948.7	2,395.6	2,319.2	76.45	31.337	
12,000.0	11,856.1	11,050.0	10,901.2	43.3	38.7	69.41	146.2	2,948.7	2,405.6	2,329.3	76.32	31.521	
12,050.0	11,881.0	11,074.8	10,912.1	43.3	38.8	68.53	168.1	2,952.8	2,414.8	2,338.4	76.40	31.608	
12,100.0	11,902.0	11,100.0	10,922.1	43.3	38.8	67.79	190.9	2,957.0	2,423.1	2,346.6	76.51	31.670	
12,150.0	11,918.9	11,100.0	10,922.1	43.4	38.8	67.11	190.9	2,957.0	2,430.4	2,353.9	76.50	31.769	
12,200.0	11,931.7	11,126.4	10,931.5	43.4	38.9	66.62	215.1	2,961.5	2,436.7	2,360.0	76.70	31.767	
12,250.0	11,940.3	11,150.0	10,938.9	43.5	38.9	66.26	237.1	2,965.6	2,441.9	2,365.0	76.93	31.743	
12,300.0	11,944.5	11,150.0	10,938.9	43.6	38.9	65.88	237.1	2,965.6	2,446.1	2,369.1	77.07	31.741	
12,326.5	11,944.9	11,169.4	10,944.3	43.6	38.9	65.85	255.4	2,969.0	2,447.8	2,370.6	77.26	31.683	
12,391.6	11,944.6	11,200.0	10,951.6	43.7	39.0	66.07	284.7	2,974.4	2,452.4	2,374.8	77.67	31.575	
12,400.0	11,944.5	11,200.0	10,951.6	43.8	39.0	66.07	284.7	2,974.4	2,453.1	2,375.4	77.71	31.568	
12,500.0	11,944.0	11,229.3	10,957.0	44.1	39.1	66.24	313.0	2,979.6	2,462.5	2,384.2	78.32	31.442	
12,600.0	11,943.4	11,265.0	10,961.6	44.4	39.2	66.40	347.8	2,986.1	2,474.6	2,395.6	79.01	31.319	
12,700.0	11,942.9	11,300.0	10,964.0	44.9	39.3	66.52	382.1	2,992.4	2,489.2	2,409.4	79.75	31.211	
12,800.0	11,942.3	11,514.6	10,963.8	45.4	40.1	66.86	594.1	3,025.3	2,505.0	2,424.0	81.00	30.924	
12,900.0	11,941.7	11,901.8	10,962.6	45.9	42.1	67.08	980.5	3,044.4	2,508.9	2,425.8	83.06	30.205	
13,000.0	11,941.2	12,001.8	10,962.2	46.6	42.7	67.08	1,080.5	3,043.6	2,508.8	2,424.5	84.30	29.762	
13,100.0	11,940.6	12,101.8	10,961.9	47.2	43.4	67.09	1,180.5	3,042.8	2,508.7	2,423.1	85.63	29.299	
13,200.0	11,940.1	12,201.8	10,961.6	48.0	44.1	67.09	1,280.5	3,042.1	2,508.7	2,421.6	87.05	28.820	
13,300.0	11,939.5	12,301.8	10,961.3	48.7	44.9	67.10	1,380.5	3,041.3	2,508.6	2,420.1	88.56	28.328	
13,400.0	11,939.0	12,401.8	10,960.9	49.5	45.8	67.10	1,480.5	3,040.5	2,508.5	2,418.4	90.15	27.827	
13,500.0	11,938.4	12,501.8	10,960.6	50.4	46.6	67.11	1,580.5	3,039.7	2,508.5	2,416.7	91.82	27.320	
13,600.0	11,937.8	12,601.8	10,960.3	51.3	47.6	67.11	1,680.5	3,038.9	2,508.4	2,414.8	93.56	26.810	
13,700.0	11,937.3	12,701.8	10,960.0	52.2	48.5	67.12	1,780.5	3,038.2	2,508.3	2,413.0	95.38	26.300	
13,800.0	11,936.7	12,801.8	10,959.6	53.1	49.5	67.12	1,880.5	3,037.4	2,508.3	2,411.0	97.26	25.791	
13,900.0	11,936.2	12,901.8	10,959.3	54.1	50.6	67.13	1,980.5	3,036.6	2,508.2	2,409.0	99.20	25.285	
14,000.0	11,935.6	13,001.8	10,959.0	55.2	51.6	67.13	2,080.5	3,035.8	2,508.1	2,406.9	101.20	24.784	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #128H - Wellbore #1 - BLM Plan #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		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
19,300.0	11,906.0	18,301.7	10,941.9	129.7	127.6	67.41	7,380.3	2,994.5	2,504.5	2,260.7	243.73	10.276	
19,400.0	11,905.4	18,401.7	10,941.6	131.3	129.1	67.41	7,480.3	2,993.8	2,504.4	2,257.7	246.70	10.152	
19,500.0	11,904.9	18,501.7	10,941.2	132.8	130.7	67.42	7,580.3	2,993.0	2,504.3	2,254.7	249.67	10.031	
19,600.0	11,904.3	18,601.7	10,940.9	134.4	132.3	67.42	7,680.3	2,992.2	2,504.3	2,251.6	252.64	9.912	
19,700.0	11,903.8	18,701.7	10,940.6	136.0	133.9	67.43	7,780.3	2,991.4	2,504.2	2,248.6	255.62	9.796	
19,800.0	11,903.2	18,801.7	10,940.3	137.5	135.5	67.43	7,880.3	2,990.6	2,504.1	2,245.5	258.61	9.683	
19,900.0	11,902.7	18,901.7	10,939.9	139.1	137.1	67.44	7,980.3	2,989.9	2,504.1	2,242.5	261.60	9.572	
20,000.0	11,902.1	19,001.7	10,939.6	140.7	138.7	67.44	8,080.3	2,989.1	2,504.0	2,239.4	264.59	9.464	
20,100.0	11,901.5	19,101.7	10,939.3	142.3	140.2	67.45	8,180.3	2,988.3	2,503.9	2,236.3	267.58	9.358	
20,200.0	11,901.0	19,201.7	10,939.0	143.8	141.8	67.45	8,280.3	2,987.5	2,503.9	2,233.3	270.58	9.254	
20,300.0	11,900.4	19,301.7	10,938.6	145.4	143.4	67.46	8,380.2	2,986.8	2,503.8	2,230.2	273.58	9.152	
20,400.0	11,899.9	19,401.7	10,938.3	147.0	145.0	67.47	8,480.2	2,986.0	2,503.7	2,227.1	276.58	9.052	
20,500.0	11,899.3	19,501.7	10,938.0	148.6	146.6	67.47	8,580.2	2,985.2	2,503.7	2,224.1	279.59	8.955	
20,600.0	11,898.7	19,601.7	10,937.7	150.2	148.2	67.48	8,680.2	2,984.4	2,503.6	2,221.0	282.59	8.859	
20,700.0	11,898.2	19,701.7	10,937.4	151.8	149.8	67.48	8,780.2	2,983.6	2,503.5	2,217.9	285.61	8.766	
20,800.0	11,897.6	19,801.7	10,937.0	153.4	151.4	67.49	8,880.2	2,982.9	2,503.4	2,214.8	288.62	8.674	
20,900.0	11,897.1	19,901.7	10,936.7	155.0	153.0	67.49	8,980.2	2,982.1	2,503.4	2,211.7	291.64	8.584	
21,000.0	11,896.5	20,001.7	10,936.4	156.5	154.6	67.50	9,080.2	2,981.3	2,503.3	2,208.7	294.66	8.496	
21,100.0	11,896.0	20,101.7	10,936.1	158.1	156.2	67.50	9,180.2	2,980.5	2,503.2	2,205.6	297.68	8.409	
21,200.0	11,895.4	20,201.7	10,935.7	159.7	157.8	67.51	9,280.2	2,979.7	2,503.2	2,202.5	300.70	8.324	
21,300.0	11,894.8	20,301.7	10,935.4	161.3	159.4	67.51	9,380.2	2,979.0	2,503.1	2,199.4	303.73	8.241	
21,400.0	11,894.3	20,401.7	10,935.1	162.9	161.0	67.52	9,480.2	2,978.2	2,503.0	2,196.3	306.76	8.160	
21,500.0	11,893.7	20,501.7	10,934.8	164.5	162.7	67.52	9,580.2	2,977.4	2,503.0	2,193.2	309.79	8.080	
21,600.0	11,893.2	20,601.7	10,934.4	166.1	164.3	67.53	9,680.2	2,976.6	2,502.9	2,190.1	312.82	8.001	
21,700.0	11,892.6	20,701.7	10,934.1	167.7	165.9	67.53	9,780.2	2,975.8	2,502.8	2,187.0	315.85	7.924	
21,800.0	11,892.0	20,801.7	10,933.8	169.3	167.5	67.54	9,880.2	2,975.1	2,502.8	2,183.9	318.89	7.848	
21,900.0	11,891.5	20,901.7	10,933.5	170.9	169.1	67.54	9,980.2	2,974.3	2,502.7	2,180.8	321.93	7.774	
22,000.0	11,890.9	21,001.7	10,933.2	172.5	170.7	67.55	10,080.2	2,973.5	2,502.6	2,177.7	324.97	7.701	
22,100.0	11,890.4	21,101.7	10,932.8	174.1	172.3	67.55	10,180.2	2,972.7	2,502.6	2,174.6	328.01	7.629	
22,140.9	11,890.1	21,142.7	10,932.7	174.8	173.0	67.56	10,221.1	2,972.4	2,502.5	2,173.3	329.26	7.600	
22,191.7	11,890.5	21,193.5	10,932.5	175.6	173.8	67.54	10,271.9	2,972.0	2,502.8	2,172.0	330.78	7.566 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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	-70.23	28.9	-80.3	85.3				
100.0	100.0	101.0	99.0	0.1	0.1	-70.23	28.9	-80.3	85.3	85.1	0.26	328.257	
200.0	200.0	201.0	199.0	0.5	0.5	-70.23	28.9	-80.3	85.3	84.3	0.98	87.334	
300.0	300.0	301.0	299.0	0.8	0.8	-70.23	28.9	-80.3	85.3	83.6	1.69	50.367	
400.0	400.0	401.0	399.0	1.2	1.2	-70.23	28.9	-80.3	85.3	82.9	2.41	35.388	
500.0	500.0	501.0	499.0	1.6	1.6	-70.23	28.9	-80.3	85.3	82.2	3.13	27.276	
600.0	600.0	601.0	599.0	1.9	1.9	-70.23	28.9	-80.3	85.3	81.5	3.84	22.190	
700.0	700.0	701.0	699.0	2.3	2.3	-70.23	28.9	-80.3	85.3	80.7	4.56	18.702	
800.0	800.0	801.0	799.0	2.6	2.6	-70.23	28.9	-80.3	85.3	80.0	5.28	16.162	
900.0	900.0	901.0	899.0	3.0	3.0	-70.23	28.9	-80.3	85.3	79.3	6.00	14.229	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	-70.23	28.9	-80.3	85.3	78.6	6.71	12.710	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	-70.23	28.9	-80.3	85.3	77.9	7.43	11.483	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	-70.23	28.9	-80.3	85.3	77.2	8.15	10.472	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	-70.23	28.9	-80.3	85.3	76.4	8.86	9.625	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	-70.23	28.9	-80.3	85.3	75.7	9.58	8.905	
1,500.0	1,500.0	1,499.0	1,499.0	5.1	5.1	-70.23	28.9	-80.3	85.3	75.0	10.29	8.291 CC, ES	
1,600.0	1,600.0	1,597.9	1,597.9	5.5	5.5	-174.57	28.5	-81.0	86.8	75.8	10.98	7.905	
1,700.0	1,700.0	1,696.7	1,696.7	5.8	5.8	-175.83	27.5	-83.4	91.3	79.6	11.65	7.836	
1,800.0	1,799.9	1,795.1	1,795.0	6.2	6.2	-177.67	25.7	-87.2	98.8	86.5	12.32	8.024	
1,900.0	1,899.7	1,893.1	1,892.8	6.5	6.5	-179.82	23.3	-92.5	109.5	96.6	12.99	8.436	
2,000.0	1,999.4	1,990.5	1,989.9	6.9	6.8	-177.97	20.1	-99.4	123.5	109.8	13.65	9.044	
2,100.0	2,098.9	2,087.0	2,086.0	7.2	7.2	175.87	16.4	-107.6	140.6	126.3	14.31	9.826	
2,200.0	2,198.3	2,182.7	2,181.1	7.6	7.5	173.96	12.0	-117.2	161.1	146.1	14.97	10.758	
2,300.0	2,297.4	2,277.3	2,274.9	8.0	7.9	172.28	7.0	-128.2	184.7	169.1	15.62	11.823	
2,400.0	2,396.4	2,373.2	2,369.9	8.3	8.2	170.86	1.5	-140.3	210.3	194.0	16.29	12.905	
2,500.0	2,495.5	2,469.8	2,465.5	8.7	8.6	169.74	-4.1	-152.5	236.0	219.0	16.98	13.900	
2,600.0	2,594.5	2,566.3	2,561.1	9.1	8.9	168.83	-9.7	-164.7	261.8	244.1	17.66	14.819	
2,700.0	2,693.5	2,662.9	2,656.7	9.5	9.3	168.09	-15.3	-176.9	287.6	269.2	18.35	15.669	
2,800.0	2,792.5	2,759.4	2,752.3	9.9	9.7	167.47	-20.8	-189.2	313.4	294.4	19.05	16.456	
2,900.0	2,891.6	2,855.9	2,847.9	10.3	10.1	166.95	-26.4	-201.4	339.3	319.6	19.74	17.187	
3,000.0	2,990.6	2,952.5	2,943.5	10.7	10.4	166.49	-32.0	-213.6	365.3	344.8	20.44	17.867	
3,100.0	3,089.6	3,049.0	3,039.2	11.0	10.8	166.10	-37.6	-225.8	391.2	370.0	21.15	18.500	
3,200.0	3,188.6	3,145.6	3,134.8	11.4	11.2	165.76	-43.2	-238.1	417.1	395.3	21.85	19.092	
3,300.0	3,287.7	3,242.1	3,230.4	11.8	11.6	165.46	-48.7	-250.3	443.1	420.6	22.55	19.646	
3,400.0	3,386.7	3,338.7	3,326.0	12.2	12.0	165.19	-54.3	-262.5	469.1	445.8	23.26	20.165	
3,500.0	3,485.7	3,435.2	3,421.6	12.7	12.4	164.95	-59.9	-274.7	495.1	471.1	23.97	20.652	
3,600.0	3,584.8	3,531.8	3,517.2	13.1	12.8	164.73	-65.5	-287.0	521.1	496.4	24.68	21.111	
3,700.0	3,683.8	3,628.3	3,612.8	13.5	13.1	164.54	-71.1	-299.2	547.0	521.7	25.39	21.543	
3,800.0	3,782.8	3,724.9	3,708.4	13.9	13.5	164.36	-76.6	-311.4	573.1	546.9	26.11	21.950	
3,900.0	3,881.8	3,821.4	3,804.0	14.3	13.9	164.19	-82.2	-323.6	599.1	572.2	26.82	22.335	
4,000.0	3,980.9	3,918.0	3,899.6	14.7	14.3	164.04	-87.8	-335.9	625.1	597.5	27.54	22.700	
4,100.0	4,079.9	4,014.5	3,995.2	15.1	14.7	163.91	-93.4	-348.1	651.1	622.8	28.25	23.045	
4,200.0	4,178.9	4,111.0	4,090.8	15.5	15.1	163.78	-99.0	-360.3	677.1	648.1	28.97	23.373	
4,300.0	4,277.9	4,207.6	4,186.4	15.9	15.5	163.66	-104.5	-372.5	703.1	673.4	29.69	23.684	
4,400.0	4,377.0	4,304.1	4,282.0	16.3	15.9	163.55	-110.1	-384.7	729.1	698.7	30.41	23.980	
4,500.0	4,476.0	4,400.7	4,377.6	16.7	16.3	163.45	-115.7	-397.0	755.2	724.0	31.13	24.262	
4,600.0	4,575.0	4,502.8	4,473.2	17.1	16.7	163.36	-121.3	-409.2	781.2	749.3	31.87	24.515	
4,700.0	4,674.0	4,606.2	4,568.9	17.6	17.2	163.27	-126.8	-421.4	807.2	774.6	32.61	24.751	
4,800.0	4,773.1	4,709.7	4,664.5	18.0	17.6	163.19	-132.4	-433.6	833.2	799.9	33.36	24.977	
4,900.0	4,872.1	4,786.9	4,760.1	18.4	17.9	163.11	-138.0	-445.9	859.3	825.3	34.01	25.266	
5,000.0	4,971.1	4,883.4	4,855.7	18.8	18.3	163.03	-143.6	-458.1	885.3	850.6	34.73	25.490	
5,100.0	5,070.2	4,980.0	4,951.3	19.2	18.7	162.96	-149.2	-470.3	911.3	875.9	35.45	25.704	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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
19,400.0	11,905.4	19,380.4	11,884.1	131.3	130.6	-89.12	7,454.9	-639.3	1,321.0	1,059.6	261.40	5.054	
19,500.0	11,904.9	19,480.4	11,883.3	132.8	132.2	-89.11	7,554.9	-640.1	1,321.0	1,056.5	264.54	4.994	
19,600.0	11,904.3	19,580.4	11,882.6	134.4	133.8	-89.10	7,654.8	-640.9	1,321.0	1,053.3	267.68	4.935	
19,700.0	11,903.8	19,680.4	11,881.9	136.0	135.3	-89.09	7,754.8	-641.7	1,321.0	1,050.2	270.83	4.878	
19,800.0	11,903.2	19,780.4	11,881.1	137.5	136.9	-89.09	7,854.8	-642.5	1,321.0	1,047.0	273.98	4.821	
19,900.0	11,902.7	19,880.4	11,880.4	139.1	138.5	-89.08	7,954.8	-643.3	1,321.0	1,043.8	277.14	4.766	
20,000.0	11,902.1	19,980.4	11,879.7	140.7	140.1	-89.07	8,054.8	-644.1	1,321.0	1,040.7	280.30	4.713	
20,100.0	11,901.5	20,080.4	11,878.9	142.3	141.7	-89.06	8,154.8	-644.8	1,320.9	1,037.5	283.46	4.660	
20,200.0	11,901.0	20,180.4	11,878.2	143.8	143.2	-89.06	8,254.8	-645.6	1,320.9	1,034.3	286.63	4.608	
20,300.0	11,900.4	20,280.4	11,877.5	145.4	144.8	-89.05	8,354.8	-646.4	1,320.9	1,031.1	289.80	4.558	
20,400.0	11,899.9	20,380.4	11,876.7	147.0	146.4	-89.04	8,454.8	-647.2	1,320.9	1,027.9	292.97	4.509	
20,500.0	11,899.3	20,480.4	11,876.0	148.6	148.0	-89.03	8,554.8	-648.0	1,320.9	1,024.7	296.15	4.460	
20,600.0	11,898.7	20,580.4	11,875.3	150.2	149.6	-89.03	8,654.8	-648.8	1,320.9	1,021.5	299.33	4.413	
20,700.0	11,898.2	20,680.4	11,874.5	151.8	151.2	-89.02	8,754.8	-649.6	1,320.9	1,018.3	302.51	4.366	
20,800.0	11,897.6	20,780.4	11,873.8	153.4	152.8	-89.01	8,854.8	-650.3	1,320.8	1,015.1	305.69	4.321	
20,900.0	11,897.1	20,880.4	11,873.1	155.0	154.4	-89.00	8,954.8	-651.1	1,320.8	1,011.9	308.88	4.276	
21,000.0	11,896.5	20,980.4	11,872.3	156.5	156.0	-88.99	9,054.8	-651.9	1,320.8	1,008.7	312.07	4.232	
21,100.0	11,896.0	21,080.4	11,871.6	158.1	157.6	-88.99	9,154.8	-652.7	1,320.8	1,005.5	315.26	4.190	
21,200.0	11,895.4	21,180.4	11,870.9	159.7	159.2	-88.98	9,254.7	-653.5	1,320.8	1,002.3	318.46	4.147	
21,300.0	11,894.8	21,280.4	11,870.1	161.3	160.7	-88.97	9,354.7	-654.3	1,320.8	999.1	321.65	4.106	
21,400.0	11,894.3	21,380.4	11,869.4	162.9	162.3	-88.96	9,454.7	-655.1	1,320.8	995.9	324.85	4.066	
21,500.0	11,893.7	21,480.4	11,868.7	164.5	163.9	-88.96	9,554.7	-655.8	1,320.7	992.7	328.05	4.026	
21,600.0	11,893.2	21,580.4	11,867.9	166.1	165.6	-88.95	9,654.7	-656.6	1,320.7	989.5	331.26	3.987	
21,700.0	11,892.6	21,680.4	11,867.2	167.7	167.2	-88.94	9,754.7	-657.4	1,320.7	986.2	334.46	3.949	
21,800.0	11,892.0	21,780.4	11,866.5	169.3	168.8	-88.93	9,854.7	-658.2	1,320.7	983.0	337.67	3.911	
21,900.0	11,891.5	21,880.4	11,865.7	170.9	170.4	-88.93	9,954.7	-659.0	1,320.7	979.8	340.88	3.874	
22,000.0	11,890.9	21,980.4	11,865.0	172.5	172.0	-88.92	10,054.7	-659.8	1,320.7	976.6	344.09	3.838	
22,100.0	11,890.4	22,080.4	11,864.3	174.1	173.6	-88.91	10,154.7	-660.6	1,320.7	973.3	347.31	3.803	
22,191.7	11,890.5	22,172.2	11,863.5	175.6	175.1	-88.87	10,246.5	-660.4	1,319.8	969.6	350.26	3.768 SF	

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

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COMPASS 5000.14 Build 83

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	26.9	2,373.3	2,373.4				
100.0	100.0	101.0	99.0	0.1	0.1	89.35	26.9	2,373.3	2,373.4	2,373.1	0.26	9,132.262	
200.0	200.0	201.0	199.0	0.5	0.5	89.35	26.9	2,373.3	2,373.4	2,372.4	0.98	2,429.687	
300.0	300.0	301.0	299.0	0.8	0.8	89.35	26.9	2,373.3	2,373.4	2,371.7	1.69	1,401.248	
400.0	400.0	401.0	399.0	1.2	1.2	89.35	26.9	2,373.3	2,373.4	2,371.0	2.41	984.520	
500.0	500.0	501.0	499.0	1.6	1.6	89.35	26.9	2,373.3	2,373.4	2,370.3	3.13	758.842	
600.0	600.0	601.0	599.0	1.9	1.9	89.35	26.9	2,373.3	2,373.4	2,369.6	3.84	617.333	
700.0	700.0	701.0	699.0	2.3	2.3	89.35	26.9	2,373.3	2,373.4	2,368.8	4.56	520.306	
800.0	800.0	801.0	799.0	2.6	2.6	89.35	26.9	2,373.3	2,373.4	2,368.1	5.28	449.637	
900.0	900.0	901.0	899.0	3.0	3.0	89.35	26.9	2,373.3	2,373.4	2,367.4	6.00	395.868	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	89.35	26.9	2,373.3	2,373.4	2,366.7	6.71	353.586	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	89.35	26.9	2,373.3	2,373.4	2,366.0	7.43	319.464	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	89.35	26.9	2,373.3	2,373.4	2,365.3	8.15	291.349	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	89.35	26.9	2,373.3	2,373.4	2,364.5	8.86	267.782	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	89.35	26.9	2,373.3	2,373.4	2,363.8	9.58	247.742	
1,500.0	1,500.0	1,499.0	1,499.0	5.1	5.1	89.35	26.9	2,373.3	2,373.4	2,363.1	10.29	230.653	
1,600.0	1,600.0	1,652.8	1,652.8	5.5	5.7	-14.54	25.9	2,371.5	2,371.4	2,360.3	11.16	212.503	
1,700.0	1,700.0	1,806.7	1,806.5	5.8	6.2	-14.50	22.6	2,366.3	2,365.5	2,353.5	12.01	197.003	
1,800.0	1,799.9	1,959.8	1,959.3	6.2	6.7	-14.43	17.1	2,357.7	2,355.6	2,342.7	12.86	183.229	
1,900.0	1,899.7	2,111.6	2,110.5	6.5	7.2	-14.34	9.5	2,345.7	2,341.8	2,328.1	13.70	170.920	
2,000.0	1,999.4	2,261.8	2,259.6	6.9	7.8	-14.22	-0.1	2,330.5	2,324.1	2,309.6	14.54	159.826	
2,100.0	2,098.9	2,372.6	2,369.3	7.2	8.2	-14.13	-8.3	2,317.6	2,303.2	2,287.9	15.27	150.871	
2,200.0	2,198.3	2,469.9	2,465.7	7.6	8.6	-14.07	-15.6	2,306.2	2,280.6	2,264.6	15.95	142.943	
2,300.0	2,297.4	2,566.8	2,561.6	8.0	8.9	-14.02	-22.8	2,294.8	2,256.3	2,239.7	16.65	135.555	
2,400.0	2,396.4	2,663.6	2,657.4	8.3	9.3	-13.92	-30.0	2,283.4	2,231.3	2,213.9	17.34	128.697	
2,500.0	2,495.5	2,760.3	2,753.2	8.7	9.7	-13.81	-37.2	2,272.1	2,206.2	2,188.2	18.03	122.347	
2,600.0	2,594.5	2,857.0	2,849.0	9.1	10.0	-13.70	-44.4	2,260.7	2,181.2	2,162.4	18.73	116.445	
2,700.0	2,693.5	2,953.7	2,944.8	9.5	10.4	-13.58	-51.6	2,249.3	2,156.1	2,136.7	19.43	110.950	
2,800.0	2,792.5	3,050.4	3,040.5	9.9	10.8	-13.47	-58.8	2,238.0	2,131.1	2,110.9	20.14	105.822	
2,900.0	2,891.6	3,147.2	3,136.3	10.3	11.2	-13.35	-66.1	2,226.6	2,106.1	2,085.2	20.85	101.029	
3,000.0	2,990.6	3,243.9	3,232.1	10.7	11.6	-13.23	-73.3	2,215.2	2,081.0	2,059.5	21.56	96.540	
3,100.0	3,089.6	3,340.6	3,327.9	11.0	12.0	-13.11	-80.5	2,203.9	2,056.0	2,033.8	22.27	92.328	
3,200.0	3,188.6	3,437.3	3,423.7	11.4	12.4	-12.98	-87.7	2,192.5	2,031.0	2,008.0	22.98	88.370	
3,300.0	3,287.7	3,534.1	3,519.5	11.8	12.7	-12.85	-94.9	2,181.1	2,006.0	1,982.3	23.70	84.645	
3,400.0	3,386.7	3,630.8	3,615.2	12.2	13.1	-12.71	-102.1	2,169.8	1,981.0	1,956.6	24.42	81.132	
3,500.0	3,485.7	3,727.5	3,711.0	12.7	13.5	-12.58	-109.3	2,158.4	1,956.1	1,930.9	25.14	77.816	
3,600.0	3,584.8	3,824.2	3,806.8	13.1	13.9	-12.44	-116.5	2,147.0	1,931.1	1,905.3	25.86	74.681	
3,700.0	3,683.8	3,921.0	3,902.6	13.5	14.3	-12.29	-123.7	2,135.6	1,906.2	1,879.6	26.58	71.712	
3,800.0	3,782.8	4,017.7	3,998.4	13.9	14.7	-12.14	-130.9	2,124.3	1,881.2	1,853.9	27.30	68.897	
3,900.0	3,881.8	4,114.4	4,094.2	14.3	15.1	-11.99	-138.2	2,112.9	1,856.3	1,828.3	28.03	66.226	
4,000.0	3,980.9	4,211.1	4,189.9	14.7	15.5	-11.84	-145.4	2,101.5	1,831.4	1,802.6	28.76	63.687	
4,100.0	4,079.9	4,298.1	4,276.1	15.1	15.9	-11.69	-151.8	2,091.4	1,806.6	1,777.1	29.46	61.316	
4,200.0	4,178.9	4,368.1	4,345.5	15.5	16.1	-11.60	-156.4	2,084.1	1,783.0	1,752.8	30.13	59.169	
4,300.0	4,277.9	4,438.7	4,415.7	15.9	16.4	-11.52	-160.4	2,077.8	1,760.8	1,730.0	30.80	57.173	
4,400.0	4,377.0	4,509.8	4,486.6	16.3	16.7	-11.47	-163.7	2,072.6	1,740.1	1,708.7	31.46	55.317	
4,500.0	4,476.0	4,581.4	4,558.0	16.7	17.0	-11.44	-166.3	2,068.5	1,721.0	1,688.9	32.11	53.597	
4,600.0	4,575.0	4,653.4	4,629.9	17.1	17.2	-11.44	-168.2	2,065.5	1,703.3	1,670.6	32.75	52.003	
4,700.0	4,674.0	4,725.7	4,702.2	17.6	17.5	-11.46	-169.4	2,063.6	1,687.2	1,653.8	33.39	50.530	
4,800.0	4,773.1	4,798.4	4,774.9	18.0	17.7	-11.52	-169.9	2,062.9	1,672.6	1,638.6	34.01	49.174	
4,900.0	4,872.1	4,905.4	4,871.1	18.4	18.1	-11.61	-169.9	2,062.9	1,659.0	1,624.2	34.74	47.755	
5,000.0	4,971.1	5,006.3	4,970.1	18.8	18.4	-11.71	-169.9	2,062.9	1,645.3	1,609.9	35.44	46.421	
5,100.0	5,070.2	5,107.3	5,069.2	19.2	18.7	-11.81	-169.9	2,062.9	1,631.7	1,595.6	36.15	45.138	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
5,200.0	5,169.2	5,208.3	5,168.2	19.6	19.1	-11.91	-169.9	2,062.9	1,618.1	1,581.2	36.86	43.902	
5,300.0	5,268.2	5,309.3	5,267.2	20.0	19.4	-12.01	-169.9	2,062.9	1,604.5	1,566.9	37.56	42.712	
5,400.0	5,367.2	5,389.8	5,366.2	20.5	19.7	-12.11	-169.9	2,062.9	1,590.8	1,552.6	38.20	41.640	
5,500.0	5,466.3	5,488.8	5,465.3	20.9	20.0	-12.22	-169.9	2,062.9	1,577.2	1,538.3	38.91	40.537	
5,600.0	5,565.3	5,587.8	5,564.3	21.3	20.3	-12.33	-169.9	2,062.9	1,563.6	1,524.0	39.61	39.473	
5,700.0	5,664.3	5,686.8	5,663.3	21.7	20.6	-12.44	-169.9	2,062.9	1,550.0	1,509.7	40.32	38.445	
5,800.0	5,763.3	5,785.9	5,762.3	22.1	21.0	-12.55	-169.9	2,062.9	1,536.4	1,495.4	41.02	37.451	
5,900.0	5,862.4	5,884.9	5,861.4	22.5	21.3	-12.66	-169.9	2,062.9	1,522.8	1,481.1	41.73	36.491	
6,000.0	5,961.4	5,983.9	5,960.4	23.0	21.6	-12.78	-169.9	2,062.9	1,509.3	1,466.8	42.44	35.562	
6,100.0	6,060.4	6,083.0	6,059.4	23.4	22.0	-12.90	-169.9	2,062.9	1,495.7	1,452.5	43.15	34.663	
6,200.0	6,159.4	6,182.0	6,158.4	23.8	22.3	-13.02	-169.9	2,062.9	1,482.1	1,438.3	43.86	33.793	
6,300.0	6,258.5	6,281.0	6,257.5	24.2	22.6	-13.14	-169.9	2,062.9	1,468.6	1,424.0	44.57	32.950	
6,400.0	6,357.5	6,380.0	6,356.5	24.6	23.0	-13.26	-169.9	2,062.9	1,455.0	1,409.7	45.28	32.133	
6,500.0	6,456.5	6,479.1	6,455.5	25.1	23.3	-13.39	-169.9	2,062.9	1,441.4	1,395.5	45.99	31.340	
6,600.0	6,555.6	6,578.1	6,554.6	25.5	23.6	-13.52	-169.9	2,062.9	1,427.9	1,381.2	46.71	30.572	
6,700.0	6,654.6	6,677.1	6,653.6	25.9	24.0	-13.65	-169.9	2,062.9	1,414.4	1,366.9	47.42	29.827	
6,800.0	6,753.6	6,776.1	6,752.6	26.3	24.3	-13.78	-169.9	2,062.9	1,400.8	1,352.7	48.13	29.103	
6,900.0	6,852.6	6,875.2	6,851.6	26.7	24.7	-13.92	-169.9	2,062.9	1,387.3	1,338.5	48.85	28.401	
7,000.0	6,951.7	6,974.2	6,950.7	27.1	25.0	-14.06	-169.9	2,062.9	1,373.8	1,324.2	49.56	27.718	
7,100.0	7,050.7	7,073.2	7,049.7	27.6	25.3	-14.20	-169.9	2,062.9	1,360.3	1,310.0	50.28	27.055	
7,131.4	7,081.7	7,104.3	7,080.7	27.7	25.4	-14.25	-169.9	2,062.9	1,356.1	1,305.6	50.50	26.850	
7,200.0	7,149.8	7,172.3	7,148.8	28.0	25.7	-14.31	-169.9	2,062.9	1,347.4	1,296.4	51.00	26.422	
7,300.0	7,249.2	7,271.7	7,248.2	28.4	26.0	-14.39	-169.9	2,062.9	1,336.9	1,285.2	51.71	25.854	
7,400.0	7,348.9	7,371.4	7,347.9	28.8	26.4	-14.44	-169.9	2,062.9	1,328.9	1,276.5	52.42	25.352	
7,500.0	7,448.7	7,471.2	7,447.7	29.1	26.7	-14.48	-169.9	2,062.9	1,323.5	1,270.4	53.13	24.912	
7,600.0	7,548.7	7,571.2	7,547.7	29.5	27.0	-14.51	-169.9	2,062.9	1,320.6	1,266.8	53.83	24.534	
7,664.7	7,613.3	7,635.9	7,612.3	29.7	27.3	89.39	-169.9	2,062.9	1,320.1	1,265.8	54.27	24.322	
7,700.0	7,648.7	7,671.2	7,647.7	29.8	27.4	89.39	-169.9	2,062.9	1,320.1	1,265.5	54.51	24.215	
7,800.0	7,748.7	7,771.2	7,747.7	30.1	27.7	89.39	-169.9	2,062.9	1,320.1	1,264.9	55.20	23.916	
7,900.0	7,848.7	7,871.2	7,847.7	30.4	28.1	89.39	-169.9	2,062.9	1,320.1	1,264.2	55.88	23.623	
8,000.0	7,948.7	7,971.2	7,947.7	30.7	28.4	89.39	-169.9	2,062.9	1,320.1	1,263.5	56.56	23.338	
8,100.0	8,048.7	8,071.2	8,047.7	31.0	28.8	89.39	-169.9	2,062.9	1,320.1	1,262.8	57.25	23.059	
8,200.0	8,148.7	8,171.2	8,147.7	31.4	29.1	89.39	-169.9	2,062.9	1,320.1	1,262.1	57.93	22.786	
8,300.0	8,248.7	8,271.2	8,247.7	31.7	29.5	89.39	-169.9	2,062.9	1,320.1	1,261.4	58.62	22.519	
8,400.0	8,348.7	8,371.2	8,347.7	32.0	29.8	89.39	-169.9	2,062.9	1,320.1	1,260.7	59.31	22.258	
8,500.0	8,448.7	8,471.2	8,447.7	32.3	30.1	89.39	-169.9	2,062.9	1,320.1	1,260.1	59.99	22.003	
8,600.0	8,548.7	8,571.2	8,547.7	32.6	30.5	89.39	-169.9	2,062.9	1,320.1	1,259.4	60.68	21.754	
8,700.0	8,648.7	8,671.2	8,647.7	33.0	30.8	89.39	-169.9	2,062.9	1,320.1	1,258.7	61.37	21.510	
8,800.0	8,748.7	8,771.2	8,747.7	33.3	31.2	89.39	-169.9	2,062.9	1,320.1	1,258.0	62.06	21.271	
8,900.0	8,848.7	8,871.2	8,847.7	33.6	31.5	89.39	-169.9	2,062.9	1,320.1	1,257.3	62.75	21.037	
9,000.0	8,948.7	8,971.2	8,947.7	33.9	31.9	89.39	-169.9	2,062.9	1,320.1	1,256.6	63.44	20.808	
9,100.0	9,048.7	9,071.2	9,047.7	34.3	32.2	89.39	-169.9	2,062.9	1,320.1	1,255.9	64.13	20.584	
9,200.0	9,148.7	9,171.2	9,147.7	34.6	32.6	89.39	-169.9	2,062.9	1,320.1	1,255.2	64.82	20.364	
9,300.0	9,248.7	9,271.2	9,247.7	34.9	32.9	89.39	-169.9	2,062.9	1,320.1	1,254.5	65.52	20.149	
9,400.0	9,348.7	9,371.2	9,347.7	35.2	33.3	89.39	-169.9	2,062.9	1,320.1	1,253.8	66.21	19.938	
9,500.0	9,448.7	9,471.2	9,447.7	35.6	33.6	89.39	-169.9	2,062.9	1,320.1	1,253.1	66.90	19.731	
9,600.0	9,548.7	9,571.2	9,547.7	35.9	34.0	89.39	-169.9	2,062.9	1,320.1	1,252.5	67.60	19.529	
9,700.0	9,648.7	9,671.2	9,647.7	36.2	34.3	89.39	-169.9	2,062.9	1,320.1	1,251.8	68.29	19.330	
9,800.0	9,748.7	9,771.2	9,747.7	36.5	34.7	89.39	-169.9	2,062.9	1,320.1	1,251.1	68.98	19.135	
9,900.0	9,848.7	9,871.2	9,847.7	36.9	35.0	89.39	-169.9	2,062.9	1,320.1	1,250.4	69.68	18.945	
10,000.0	9,948.7	9,971.2	9,947.7	37.2	35.4	89.39	-169.9	2,062.9	1,320.1	1,249.7	70.38	18.757	
10,100.0	10,048.7	10,071.2	10,047.7	37.5	35.7	89.39	-169.9	2,062.9	1,320.1	1,249.0	71.07	18.574	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Nina Cortell - Nina Cortell Fed Com #133H - Wellbore #1 - BLM Plan #1												Offset Well Error:	0.0 usft
Survey Program: 0-MWD													
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
19,300.0	11,906.0	19,275.8	11,914.2	129.7	129.2	90.40	7,376.1	2,003.8	1,321.6	1,063.1	258.48	5.113	
19,400.0	11,905.4	19,375.8	11,913.6	131.3	130.7	90.40	7,476.1	2,003.0	1,321.6	1,060.0	261.62	5.052	
19,500.0	11,904.9	19,475.8	11,913.1	132.8	132.3	90.40	7,576.1	2,002.2	1,321.6	1,056.8	264.76	4.992	
19,600.0	11,904.3	19,575.8	11,912.6	134.4	133.9	90.40	7,676.0	2,001.4	1,321.6	1,053.7	267.90	4.933	
19,700.0	11,903.8	19,675.8	11,912.0	136.0	135.5	90.40	7,776.0	2,000.6	1,321.6	1,050.5	271.05	4.876	
19,800.0	11,903.2	19,775.8	11,911.5	137.5	137.0	90.40	7,876.0	1,999.8	1,321.6	1,047.4	274.21	4.820	
19,900.0	11,902.7	19,875.8	11,910.9	139.1	138.6	90.40	7,976.0	1,999.0	1,321.6	1,044.2	277.36	4.765	
20,000.0	11,902.1	19,975.8	11,910.4	140.7	140.2	90.40	8,076.0	1,998.2	1,321.6	1,041.1	280.52	4.711	
20,100.0	11,901.5	20,075.8	11,909.9	142.3	141.8	90.40	8,176.0	1,997.4	1,321.6	1,037.9	283.69	4.659	
20,200.0	11,901.0	20,175.8	11,909.3	143.8	143.4	90.40	8,276.0	1,996.6	1,321.6	1,034.7	286.85	4.607	
20,300.0	11,900.4	20,275.8	11,908.8	145.4	144.9	90.41	8,376.0	1,995.8	1,321.6	1,031.6	290.02	4.557	
20,400.0	11,899.9	20,375.8	11,908.2	147.0	146.5	90.41	8,476.0	1,995.0	1,321.6	1,028.4	293.20	4.507	
20,500.0	11,899.3	20,475.8	11,907.7	148.6	148.1	90.41	8,576.0	1,994.2	1,321.6	1,025.2	296.37	4.459	
20,600.0	11,898.7	20,575.8	11,907.1	150.2	149.7	90.41	8,676.0	1,993.4	1,321.6	1,022.0	299.55	4.412	
20,700.0	11,898.2	20,675.8	11,906.6	151.8	151.3	90.41	8,776.0	1,992.6	1,321.6	1,018.8	302.74	4.365	
20,800.0	11,897.6	20,775.8	11,906.1	153.4	152.9	90.41	8,876.0	1,991.8	1,321.6	1,015.7	305.92	4.320	
20,900.0	11,897.1	20,875.8	11,905.5	155.0	154.5	90.41	8,976.0	1,991.0	1,321.6	1,012.5	309.11	4.275	
21,000.0	11,896.5	20,975.8	11,905.0	156.5	156.1	90.41	9,076.0	1,990.2	1,321.6	1,009.3	312.30	4.232	
21,100.0	11,896.0	21,075.8	11,904.4	158.1	157.7	90.41	9,176.0	1,989.3	1,321.6	1,006.1	315.50	4.189	
21,200.0	11,895.4	21,175.8	11,903.9	159.7	159.3	90.41	9,276.0	1,988.5	1,321.6	1,002.9	318.69	4.147	
21,300.0	11,894.8	21,275.8	11,903.3	161.3	160.9	90.41	9,376.0	1,987.7	1,321.6	999.7	321.89	4.106	
21,400.0	11,894.3	21,375.8	11,902.8	162.9	162.5	90.41	9,476.0	1,986.9	1,321.6	996.5	325.09	4.065	
21,500.0	11,893.7	21,475.8	11,902.3	164.5	164.1	90.41	9,576.0	1,986.1	1,321.6	993.3	328.29	4.026	
21,600.0	11,893.2	21,575.8	11,901.7	166.1	165.7	90.41	9,676.0	1,985.3	1,321.6	990.1	331.50	3.987	
21,700.0	11,892.6	21,675.8	11,901.2	167.7	167.3	90.42	9,776.0	1,984.5	1,321.6	986.9	334.71	3.948	
21,800.0	11,892.0	21,775.8	11,900.6	169.3	168.9	90.42	9,875.9	1,983.7	1,321.6	983.6	337.91	3.911	
21,900.0	11,891.5	21,875.8	11,900.1	170.9	170.5	90.42	9,975.9	1,982.9	1,321.6	980.4	341.13	3.874	
22,000.0	11,890.9	21,975.8	11,899.6	172.5	172.1	90.42	10,075.9	1,982.1	1,321.6	977.2	344.34	3.838	
22,100.0	11,890.4	22,075.8	11,899.0	174.1	173.7	90.42	10,175.9	1,981.3	1,321.6	974.0	347.55	3.802	
22,138.9	11,890.1	22,114.7	11,898.8	174.8	174.3	90.42	10,214.8	1,981.0	1,321.6	972.8	348.81	3.789	
22,191.7	11,890.5	22,167.6	11,898.5	175.6	175.2	90.39	10,267.7	1,980.6	1,321.6	971.1	350.51	3.770 ES, SF	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	88.62	57.0	2,373.0	2,373.7				
100.0	100.0	101.0	99.0	0.1	0.1	88.62	57.0	2,373.0	2,373.7	2,373.4	0.26	9,133.341	
200.0	200.0	201.0	199.0	0.5	0.5	88.62	57.0	2,373.0	2,373.7	2,372.7	0.98	2,429.974	
300.0	300.0	301.0	299.0	0.8	0.8	88.62	57.0	2,373.0	2,373.7	2,372.0	1.69	1,401.414	
400.0	400.0	401.0	399.0	1.2	1.2	88.62	57.0	2,373.0	2,373.7	2,371.3	2.41	984.637	
500.0	500.0	501.0	499.0	1.6	1.6	88.62	57.0	2,373.0	2,373.7	2,370.6	3.13	758.932	
600.0	600.0	601.0	599.0	1.9	1.9	88.62	57.0	2,373.0	2,373.7	2,369.8	3.84	617.406	
700.0	700.0	701.0	699.0	2.3	2.3	88.62	57.0	2,373.0	2,373.7	2,369.1	4.56	520.368	
800.0	800.0	801.0	799.0	2.6	2.6	88.62	57.0	2,373.0	2,373.7	2,368.4	5.28	449.690	
900.0	900.0	901.0	899.0	3.0	3.0	88.62	57.0	2,373.0	2,373.7	2,367.7	6.00	395.915	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	88.62	57.0	2,373.0	2,373.7	2,367.0	6.71	353.628	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	88.62	57.0	2,373.0	2,373.7	2,366.3	7.43	319.502	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	88.62	57.0	2,373.0	2,373.7	2,365.5	8.15	291.383	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	88.62	57.0	2,373.0	2,373.7	2,364.8	8.86	267.813	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	88.62	57.0	2,373.0	2,373.7	2,364.1	9.58	247.771	
1,500.0	1,500.0	1,501.0	1,499.0	5.1	5.2	88.62	57.0	2,373.0	2,373.7	2,363.4	10.30	230.520	
1,600.0	1,600.0	1,601.0	1,599.0	5.5	5.5	-15.29	57.0	2,373.0	2,372.8	2,361.8	11.00	215.656	
1,700.0	1,700.0	1,701.0	1,699.0	5.8	5.9	-15.31	57.0	2,373.0	2,370.3	2,358.6	11.70	202.593	
1,800.0	1,799.9	1,801.1	1,798.9	6.2	6.2	-15.35	57.0	2,373.0	2,366.1	2,353.7	12.40	190.824	
1,900.0	1,899.7	1,901.3	1,898.7	6.5	6.6	-15.40	57.0	2,373.0	2,360.2	2,347.1	13.10	180.151	
2,000.0	1,999.4	1,998.4	1,998.4	6.9	6.9	-15.47	57.0	2,373.0	2,352.7	2,338.9	13.79	170.560	
2,100.0	2,098.9	2,070.1	2,070.1	7.2	7.2	-15.54	56.9	2,373.4	2,344.0	2,329.6	14.39	162.901	
2,200.0	2,198.3	2,141.4	2,141.4	7.6	7.4	-15.61	56.7	2,374.7	2,334.9	2,319.9	14.98	155.873	
2,300.0	2,297.4	2,212.8	2,212.7	8.0	7.7	-15.69	56.2	2,376.9	2,325.3	2,309.7	15.57	149.366	
2,400.0	2,396.4	2,284.2	2,284.1	8.3	7.9	-15.73	55.5	2,379.9	2,316.1	2,299.9	16.16	143.342	
2,500.0	2,495.5	2,355.9	2,355.6	8.7	8.2	-15.78	54.7	2,383.8	2,308.0	2,291.3	16.75	137.803	
2,600.0	2,594.5	2,427.6	2,427.2	9.1	8.4	-15.81	53.6	2,388.6	2,301.2	2,283.9	17.34	132.699	
2,700.0	2,693.5	2,500.0	2,499.4	9.5	8.7	-15.85	52.3	2,394.3	2,295.6	2,277.7	17.94	127.982	
2,800.0	2,792.5	2,571.5	2,570.6	9.9	8.9	-15.87	50.9	2,400.8	2,291.3	2,272.7	18.53	123.654	
2,900.0	2,891.6	2,643.6	2,642.2	10.3	9.2	-15.89	49.3	2,408.3	2,288.1	2,269.0	19.12	119.646	
3,000.0	2,990.6	2,715.7	2,713.8	10.7	9.4	-15.91	47.4	2,416.6	2,286.2	2,266.4	19.72	115.944	
3,100.0	3,089.6	2,787.8	2,785.3	11.0	9.7	-15.92	45.4	2,425.8	2,285.4	2,265.1	20.31	112.522	
3,106.9	3,096.5	2,810.0	2,787.5	11.1	9.8	-15.92	45.3	2,426.1	2,285.4	2,265.0	20.41	111.977	CC
3,200.0	3,188.6	2,883.1	2,879.7	11.4	10.0	-15.93	42.5	2,438.7	2,285.5	2,264.5	21.00	108.809	
3,300.0	3,287.7	2,983.1	2,978.7	11.8	10.4	-15.94	39.5	2,452.3	2,285.6	2,263.9	21.72	105.222	
3,400.0	3,386.7	3,083.1	3,077.7	12.2	10.8	-15.94	36.5	2,465.9	2,285.7	2,263.2	22.44	101.853	
3,500.0	3,485.7	3,183.1	3,176.8	12.7	11.2	-15.95	33.5	2,479.5	2,285.8	2,262.6	23.16	98.683	
3,600.0	3,584.8	3,283.1	3,275.8	13.1	11.5	-15.96	30.5	2,493.1	2,285.9	2,262.0	23.89	95.698	
3,700.0	3,683.8	3,383.1	3,374.8	13.5	11.9	-15.97	27.5	2,506.7	2,286.0	2,261.4	24.61	92.881	
3,800.0	3,782.8	3,483.1	3,473.8	13.9	12.3	-15.98	24.5	2,520.3	2,286.1	2,260.7	25.34	90.219	
3,900.0	3,881.8	3,583.1	3,572.9	14.3	12.7	-15.99	21.5	2,533.9	2,286.2	2,260.1	26.07	87.700	
4,000.0	3,980.9	3,683.1	3,671.9	14.7	13.1	-16.00	18.5	2,547.5	2,286.2	2,259.4	26.80	85.314	
4,100.0	4,079.9	3,783.1	3,770.9	15.1	13.5	-16.00	15.5	2,561.0	2,286.3	2,258.8	27.53	83.051	
4,200.0	4,178.9	3,883.1	3,869.9	15.5	13.9	-16.01	12.5	2,574.6	2,286.4	2,258.2	28.26	80.901	
4,300.0	4,277.9	3,983.1	3,969.0	15.9	14.3	-16.02	9.5	2,588.2	2,286.5	2,257.5	29.00	78.857	
4,400.0	4,377.0	4,083.1	4,068.0	16.3	14.7	-16.03	6.5	2,601.8	2,286.6	2,256.9	29.73	76.912	
4,500.0	4,476.0	4,183.1	4,167.0	16.7	15.1	-16.04	3.5	2,615.4	2,286.7	2,256.2	30.47	75.057	
4,600.0	4,575.0	4,283.1	4,266.0	17.1	15.5	-16.05	0.5	2,629.0	2,286.8	2,255.6	31.20	73.289	
4,700.0	4,674.0	4,383.1	4,365.1	17.6	15.9	-16.06	-2.5	2,642.6	2,286.9	2,255.0	31.94	71.599	
4,800.0	4,773.1	4,483.1	4,464.1	18.0	16.3	-16.06	-5.5	2,656.2	2,287.0	2,254.3	32.68	69.985	
4,900.0	4,872.1	4,583.1	4,563.1	18.4	16.7	-16.07	-8.5	2,669.8	2,287.1	2,253.7	33.42	68.440	
5,000.0	4,971.1	4,683.1	4,662.2	18.8	17.1	-16.08	-11.5	2,683.4	2,287.2	2,253.0	34.16	66.961	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
5,100.0	5,070.2	4,783.1	4,761.2	19.2	17.5	-16.09	-14.5	2,697.0	2,287.3	2,252.4	34.90	65.543	
5,200.0	5,169.2	4,883.1	4,860.2	19.6	17.9	-16.10	-17.5	2,710.5	2,287.4	2,251.7	35.64	64.183	
5,300.0	5,268.2	4,983.1	4,959.2	20.0	18.3	-16.11	-20.5	2,724.1	2,287.5	2,251.1	36.38	62.878	
5,400.0	5,367.2	5,083.1	5,058.3	20.5	18.7	-16.12	-23.5	2,737.7	2,287.6	2,250.4	37.12	61.624	
5,500.0	5,466.3	5,183.1	5,157.3	20.9	19.1	-16.12	-26.5	2,751.3	2,287.6	2,249.8	37.86	60.418	
5,600.0	5,565.3	5,283.1	5,256.3	21.3	19.5	-16.13	-29.5	2,764.9	2,287.7	2,249.1	38.61	59.258	
5,700.0	5,664.3	5,383.1	5,355.3	21.7	20.0	-16.14	-32.5	2,778.5	2,287.8	2,248.5	39.35	58.141	
5,800.0	5,763.3	5,483.1	5,454.4	22.1	20.4	-16.15	-35.5	2,792.1	2,287.9	2,247.8	40.09	57.065	
5,900.0	5,862.4	5,583.1	5,553.4	22.5	20.8	-16.16	-38.5	2,805.7	2,288.0	2,247.2	40.84	56.027	
6,000.0	5,961.4	5,683.1	5,652.4	23.0	21.2	-16.17	-41.5	2,819.3	2,288.1	2,246.5	41.58	55.026	
6,100.0	6,060.4	5,783.1	5,751.4	23.4	21.6	-16.18	-44.5	2,832.9	2,288.2	2,245.9	42.33	54.060	
6,200.0	6,159.4	5,883.1	5,850.5	23.8	22.0	-16.18	-47.5	2,846.4	2,288.3	2,245.2	43.07	53.127	
6,300.0	6,258.5	5,983.1	5,949.5	24.2	22.4	-16.19	-50.5	2,860.0	2,288.4	2,244.6	43.82	52.225	
6,400.0	6,357.5	6,083.1	6,048.5	24.6	22.8	-16.20	-53.5	2,873.6	2,288.5	2,243.9	44.56	51.354	
6,500.0	6,456.5	6,183.1	6,147.5	25.1	23.3	-16.21	-56.5	2,887.2	2,288.6	2,243.3	45.31	50.510	
6,600.0	6,555.6	6,283.1	6,246.6	25.5	23.7	-16.22	-59.5	2,900.8	2,288.7	2,242.6	46.06	49.693	
6,700.0	6,654.6	6,383.1	6,345.6	25.9	24.1	-16.23	-62.5	2,914.4	2,288.8	2,242.0	46.80	48.903	
6,800.0	6,753.6	6,483.1	6,444.6	26.3	24.5	-16.23	-65.5	2,928.0	2,288.9	2,241.3	47.55	48.136	
6,900.0	6,852.6	6,583.1	6,543.6	26.7	24.9	-16.24	-68.5	2,941.6	2,289.0	2,240.7	48.30	47.394	
7,000.0	6,951.7	6,683.1	6,642.7	27.1	25.3	-16.25	-71.5	2,955.2	2,289.1	2,240.0	49.04	46.673	
7,100.0	7,050.7	6,783.1	6,741.7	27.6	25.7	-16.26	-74.5	2,968.8	2,289.2	2,239.4	49.79	45.975	
7,131.4	7,081.7	6,814.4	6,772.8	27.7	25.9	-16.26	-75.4	2,973.0	2,289.2	2,239.2	50.03	45.760 ES	
7,200.0	7,149.8	6,883.1	6,840.7	28.0	26.2	-16.27	-77.5	2,982.3	2,289.8	2,239.3	50.54	45.309	
7,300.0	7,249.2	6,983.0	6,939.7	28.4	26.6	-16.27	-80.5	2,995.9	2,292.9	2,241.6	51.28	44.714	
7,400.0	7,348.9	7,082.8	7,038.6	28.8	27.0	-16.26	-83.5	3,009.5	2,298.5	2,246.5	52.01	44.191	
7,500.0	7,448.7	7,182.5	7,137.2	29.1	27.4	-16.24	-86.5	3,023.0	2,306.6	2,253.9	52.74	43.735	
7,600.0	7,548.7	7,281.9	7,235.7	29.5	27.8	-16.22	-89.4	3,036.5	2,317.2	2,263.7	53.46	43.345	
7,664.7	7,613.3	7,346.0	7,299.2	29.7	28.1	87.70	-91.4	3,045.3	2,325.4	2,271.5	53.92	43.130	
7,700.0	7,648.7	7,381.0	7,333.8	29.8	28.2	87.73	-92.4	3,050.0	2,330.1	2,276.0	54.16	43.023	
7,800.0	7,748.7	7,480.0	7,431.9	30.1	28.6	87.82	-95.4	3,063.5	2,343.6	2,288.8	54.86	42.723	
7,900.0	7,848.7	7,579.0	7,529.9	30.4	29.1	87.90	-98.4	3,076.9	2,357.1	2,301.5	55.55	42.430	
8,000.0	7,948.7	7,678.1	7,628.0	30.7	29.5	87.99	-101.3	3,090.4	2,370.6	2,314.3	56.25	42.145	
8,100.0	8,048.7	7,777.1	7,726.1	31.0	29.9	88.07	-104.3	3,103.8	2,384.1	2,327.1	56.95	41.865	
8,200.0	8,148.7	7,876.1	7,824.1	31.4	30.3	88.15	-107.3	3,117.3	2,397.6	2,339.9	57.64	41.593	
8,300.0	8,248.7	7,975.1	7,922.2	31.7	30.7	88.23	-110.2	3,130.8	2,411.0	2,352.7	58.34	41.326	
8,400.0	8,348.7	8,074.2	8,020.2	32.0	31.1	88.31	-113.2	3,144.2	2,424.6	2,365.5	59.04	41.065	
8,500.0	8,448.7	8,173.2	8,118.3	32.3	31.5	88.39	-116.2	3,157.7	2,438.1	2,378.3	59.74	40.810	
8,600.0	8,548.7	8,272.2	8,216.4	32.6	32.0	88.47	-119.1	3,171.1	2,451.6	2,391.1	60.44	40.561	
8,700.0	8,648.7	8,371.3	8,314.4	33.0	32.4	88.55	-122.1	3,184.6	2,465.1	2,403.9	61.14	40.317	
8,800.0	8,748.7	8,470.3	8,412.5	33.3	32.8	88.63	-125.1	3,198.0	2,478.6	2,416.8	61.84	40.078	
8,900.0	8,848.7	8,569.3	8,510.6	33.6	33.2	88.70	-128.1	3,211.5	2,492.1	2,429.6	62.55	39.844	
9,000.0	8,948.7	8,668.3	8,608.6	33.9	33.6	88.78	-131.0	3,225.0	2,505.7	2,442.4	63.25	39.615	
9,100.0	9,048.7	8,767.4	8,706.7	34.3	34.0	88.86	-134.0	3,238.4	2,519.2	2,455.2	63.95	39.391	
9,200.0	9,148.7	8,866.4	8,804.8	34.6	34.4	88.93	-137.0	3,251.9	2,532.7	2,468.1	64.66	39.172	
9,300.0	9,248.7	8,965.4	8,902.8	34.9	34.9	89.00	-139.9	3,265.3	2,546.3	2,480.9	65.36	38.957	
9,400.0	9,348.7	9,064.4	9,000.9	35.2	35.3	89.07	-142.9	3,278.8	2,559.8	2,493.7	66.07	38.747	
9,500.0	9,448.7	9,163.5	9,098.9	35.6	35.7	89.15	-145.9	3,292.3	2,573.4	2,506.6	66.77	38.540	
9,600.0	9,548.7	9,262.5	9,197.0	35.9	36.1	89.22	-148.9	3,305.7	2,586.9	2,519.4	67.48	38.338	
9,700.0	9,648.7	9,361.5	9,296.6	36.2	36.5	89.27	-151.9	3,319.1	2,599.3	2,532.8	68.19	38.137	
9,800.0	9,748.7	9,460.5	9,395.7	36.5	36.9	89.32	-154.9	3,332.5	2,612.7	2,546.2	68.90	37.936	
9,900.0	9,848.7	9,559.5	9,494.7	36.9	37.3	89.37	-157.9	3,345.9	2,626.1	2,559.6	69.61	37.735	
10,000.0	9,948.7	9,658.5	9,593.7	37.2	37.7	89.42	-160.9	3,359.3	2,639.5	2,573.0	70.32	37.534	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	10,048.7	10,114.9	10,047.7	37.5	39.1	89.40	-156.9	3,342.0	2,599.3	2,527.3	71.99	36.106	
10,200.0	10,148.7	10,214.9	10,147.7	37.9	39.4	89.40	-156.9	3,342.0	2,599.3	2,526.6	72.67	35.769	
10,300.0	10,248.7	10,314.9	10,247.7	38.2	39.7	89.40	-156.9	3,342.0	2,599.3	2,525.9	73.35	35.437	
10,400.0	10,348.7	10,414.9	10,347.7	38.5	40.0	89.40	-156.9	3,342.0	2,599.3	2,525.2	74.03	35.112	
10,500.0	10,448.7	10,514.9	10,447.7	38.9	40.3	89.40	-156.9	3,342.0	2,599.3	2,524.6	74.71	34.792	
10,600.0	10,548.7	10,614.9	10,547.7	39.2	40.7	89.40	-156.9	3,342.0	2,599.3	2,523.9	75.39	34.478	
10,700.0	10,648.7	10,714.9	10,647.7	39.5	41.0	89.40	-156.9	3,342.0	2,599.3	2,523.2	76.07	34.169	
10,800.0	10,748.7	10,814.9	10,747.7	39.9	41.3	89.40	-156.9	3,342.0	2,599.3	2,522.5	76.75	33.865	
10,900.0	10,848.7	10,914.9	10,847.7	40.2	41.6	89.40	-156.9	3,342.0	2,599.3	2,521.8	77.44	33.566	
11,000.0	10,948.7	11,014.9	10,947.7	40.5	41.9	89.40	-156.9	3,342.0	2,599.3	2,521.1	78.12	33.272	
11,100.0	11,048.7	11,114.9	11,047.7	40.9	42.3	89.40	-156.9	3,342.0	2,599.3	2,520.5	78.81	32.983	
11,200.0	11,148.7	11,214.9	11,147.7	41.2	42.6	89.40	-156.9	3,342.0	2,599.3	2,519.8	79.49	32.699	
11,300.0	11,248.7	11,314.9	11,247.7	41.5	42.9	89.40	-156.9	3,342.0	2,599.3	2,519.1	80.18	32.420	
11,400.0	11,348.7	11,414.9	11,347.7	41.9	43.2	89.40	-156.9	3,342.0	2,599.3	2,518.4	80.86	32.145	
11,423.3	11,372.0	11,438.2	11,371.0	42.0	43.3	89.40	-156.9	3,342.0	2,599.3	2,518.2	81.02	32.081	
11,447.5	11,396.1	11,462.3	11,395.1	42.0	43.4	89.88	-156.9	3,342.0	2,599.3	2,518.1	81.19	32.016	
11,450.0	11,398.6	11,463.0	11,395.8	42.0	43.4	89.88	-156.8	3,342.0	2,599.3	2,518.1	81.20	32.010	
11,500.0	11,448.4	11,501.8	11,434.5	42.2	43.5	89.90	-155.1	3,342.1	2,599.4	2,517.9	81.52	31.888	
11,550.0	11,497.6	11,540.6	11,473.1	42.4	43.6	89.92	-150.8	3,342.4	2,599.7	2,517.9	81.82	31.774	
11,600.0	11,545.9	11,579.6	11,511.4	42.5	43.7	89.94	-143.8	3,342.7	2,600.3	2,518.2	82.11	31.668	
11,650.0	11,592.8	11,618.7	11,549.3	42.6	43.9	89.95	-134.2	3,343.3	2,601.1	2,518.7	82.39	31.571	
11,700.0	11,638.0	11,658.1	11,586.7	42.8	44.0	89.96	-121.9	3,343.9	2,602.0	2,519.4	82.65	31.482	
11,750.0	11,681.2	11,697.7	11,623.4	42.9	44.1	89.97	-107.0	3,344.7	2,603.2	2,520.3	82.90	31.400	
11,800.0	11,722.1	11,737.6	11,659.3	43.0	44.2	89.97	-89.5	3,345.7	2,604.6	2,521.4	83.15	31.325	
11,850.0	11,760.3	11,777.9	11,694.1	43.1	44.3	89.97	-69.3	3,346.8	2,606.2	2,522.8	83.38	31.256	
11,900.0	11,795.5	11,818.6	11,727.8	43.2	44.3	89.96	-46.5	3,348.0	2,607.9	2,524.3	83.61	31.192	
11,950.0	11,827.6	11,859.7	11,760.1	43.2	44.4	89.95	-21.1	3,349.4	2,609.9	2,526.1	83.83	31.132	
12,000.0	11,856.1	11,901.3	11,790.8	43.3	44.5	89.94	6.9	3,350.9	2,612.0	2,528.0	84.06	31.075	
12,050.0	11,881.0	11,943.5	11,819.8	43.3	44.5	89.93	37.5	3,352.6	2,614.3	2,530.1	84.28	31.021	
12,100.0	11,902.0	11,986.4	11,846.9	43.3	44.6	89.92	70.6	3,354.4	2,616.8	2,532.3	84.50	30.969	
12,150.0	11,918.9	12,029.9	11,871.7	43.4	44.7	89.90	106.3	3,356.3	2,619.4	2,534.7	84.72	30.919	
12,200.0	11,931.7	12,074.2	11,894.2	43.4	44.7	89.89	144.5	3,358.4	2,622.2	2,537.2	84.94	30.869	
12,250.0	11,940.3	12,119.5	11,914.0	43.5	44.7	89.88	185.0	3,360.6	2,625.0	2,539.9	85.17	30.821	
12,300.0	11,944.5	12,165.6	11,930.9	43.6	44.8	89.87	228.0	3,362.9	2,628.0	2,542.6	85.40	30.774	
12,326.5	11,944.9	12,190.6	11,938.5	43.6	44.8	89.86	251.7	3,364.2	2,629.6	2,544.1	85.52	30.749	
12,391.6	11,944.6	12,254.0	11,953.3	43.7	44.9	90.19	313.2	3,367.5	2,633.7	2,547.8	85.84	30.680	
12,400.0	11,944.5	12,262.3	11,954.7	43.8	44.9	90.22	321.4	3,367.9	2,634.2	2,548.3	85.89	30.670	
12,500.0	11,944.0	12,500.0	11,962.3	44.1	45.3	90.40	441.5	3,374.3	2,640.4	2,553.5	86.85	30.401	
12,600.0	11,943.4	12,627.9	11,961.0	44.4	45.7	90.40	686.3	3,376.6	2,640.6	2,553.1	87.59	30.148	
12,700.0	11,942.9	12,727.9	11,960.5	44.9	46.1	90.40	786.3	3,375.8	2,640.7	2,552.2	88.48	29.846	
12,800.0	11,942.3	12,827.9	11,959.9	45.4	46.5	90.40	886.3	3,375.0	2,640.7	2,551.2	89.48	29.511	
12,900.0	11,941.7	12,927.9	11,959.4	45.9	47.0	90.40	986.3	3,374.3	2,640.7	2,550.1	90.59	29.149	
13,000.0	11,941.2	13,027.9	11,958.9	46.6	47.6	90.41	1,086.3	3,373.5	2,640.7	2,548.9	91.81	28.762	
13,100.0	11,940.6	13,127.9	11,958.3	47.2	48.2	90.41	1,186.3	3,372.7	2,640.8	2,547.6	93.14	28.354	
13,200.0	11,940.1	13,227.9	11,957.8	48.0	48.9	90.41	1,286.3	3,371.9	2,640.8	2,546.2	94.56	27.928	
13,300.0	11,939.5	13,327.9	11,957.3	48.7	49.6	90.41	1,386.3	3,371.1	2,640.8	2,544.7	96.07	27.489	
13,400.0	11,939.0	13,427.9	11,956.7	49.5	50.4	90.41	1,486.3	3,370.4	2,640.8	2,543.2	97.67	27.038	
13,500.0	11,938.4	13,527.9	11,956.2	50.4	51.2	90.41	1,586.3	3,369.6	2,640.9	2,541.5	99.36	26.579	
13,600.0	11,937.8	13,627.9	11,955.6	51.3	52.0	90.41	1,686.3	3,368.8	2,640.9	2,539.8	101.13	26.115	
13,700.0	11,937.3	13,727.9	11,955.1	52.2	52.9	90.41	1,786.3	3,368.0	2,640.9	2,537.9	102.97	25.648	
13,800.0	11,936.7	13,827.9	11,954.6	53.1	53.9	90.41	1,886.3	3,367.2	2,640.9	2,536.1	104.88	25.179	
13,900.0	11,936.2	13,927.9	11,954.0	54.1	54.8	90.41	1,986.3	3,366.5	2,641.0	2,534.1	106.87	24.712	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,935.6	14,027.9	11,953.5	55.2	55.8	90.41	2,086.3	3,365.7	2,641.0	2,532.1	108.92	24.247	
14,100.0	11,935.0	14,127.9	11,953.0	56.2	56.8	90.41	2,186.3	3,364.9	2,641.0	2,530.0	111.03	23.787	
14,200.0	11,934.5	14,227.9	11,952.4	57.3	57.9	90.41	2,286.3	3,364.1	2,641.0	2,527.8	113.20	23.331	
14,300.0	11,933.9	14,327.9	11,951.9	58.4	59.0	90.41	2,386.3	3,363.4	2,641.1	2,525.6	115.42	22.882	
14,400.0	11,933.4	14,427.9	11,951.3	59.5	60.1	90.41	2,486.3	3,362.6	2,641.1	2,523.4	117.69	22.440	
14,500.0	11,932.8	14,527.9	11,950.8	60.7	61.2	90.41	2,586.3	3,361.8	2,641.1	2,521.1	120.02	22.006	
14,600.0	11,932.3	14,627.9	11,950.3	61.9	62.4	90.41	2,686.3	3,361.0	2,641.1	2,518.8	122.39	21.581	
14,700.0	11,931.7	14,727.9	11,949.7	63.1	63.6	90.41	2,786.3	3,360.2	2,641.2	2,516.4	124.80	21.164	
14,800.0	11,931.1	14,827.9	11,949.2	64.3	64.8	90.41	2,886.2	3,359.5	2,641.2	2,513.9	127.25	20.756	
14,900.0	11,930.6	14,927.9	11,948.7	65.5	66.0	90.41	2,986.2	3,358.7	2,641.2	2,511.5	129.74	20.358	
15,000.0	11,930.0	15,027.9	11,948.1	66.8	67.2	90.41	3,086.2	3,357.9	2,641.2	2,509.0	132.27	19.969	
15,100.0	11,929.5	15,127.9	11,947.6	68.1	68.5	90.41	3,186.2	3,357.1	2,641.3	2,506.4	134.83	19.590	
15,200.0	11,928.9	15,227.9	11,947.1	69.4	69.8	90.42	3,286.2	3,356.4	2,641.3	2,503.9	137.42	19.221	
15,300.0	11,928.3	15,327.9	11,946.5	70.7	71.1	90.42	3,386.2	3,355.6	2,641.3	2,501.3	140.04	18.861	
15,400.0	11,927.8	15,427.9	11,946.0	72.0	72.4	90.42	3,486.2	3,354.8	2,641.3	2,498.6	142.69	18.510	
15,500.0	11,927.2	15,527.9	11,945.4	73.3	73.7	90.42	3,586.2	3,354.0	2,641.4	2,496.0	145.37	18.169	
15,600.0	11,926.7	15,627.9	11,944.9	74.7	75.0	90.42	3,686.2	3,353.2	2,641.4	2,493.3	148.08	17.838	
15,700.0	11,926.1	15,727.9	11,944.4	76.0	76.3	90.42	3,786.2	3,352.5	2,641.4	2,490.6	150.81	17.515	
15,800.0	11,925.6	15,827.9	11,943.8	77.4	77.7	90.42	3,886.2	3,351.7	2,641.4	2,487.9	153.56	17.201	
15,900.0	11,925.0	15,927.9	11,943.3	78.8	79.1	90.42	3,986.2	3,350.9	2,641.5	2,485.1	156.34	16.896	
16,000.0	11,924.4	16,027.9	11,942.8	80.2	80.5	90.42	4,086.2	3,350.1	2,641.5	2,482.4	159.13	16.600	
16,100.0	11,923.9	16,127.9	11,942.2	81.6	81.8	90.42	4,186.2	3,349.4	2,641.5	2,479.6	161.94	16.311	
16,200.0	11,923.3	16,227.9	11,941.7	83.0	83.2	90.42	4,286.2	3,348.6	2,641.5	2,476.8	164.78	16.031	
16,300.0	11,922.8	16,327.9	11,941.2	84.4	84.6	90.42	4,386.2	3,347.8	2,641.6	2,473.9	167.63	15.758	
16,400.0	11,922.2	16,427.9	11,940.6	85.9	86.1	90.42	4,486.2	3,347.0	2,641.6	2,471.1	170.50	15.494	
16,500.0	11,921.6	16,527.9	11,940.1	87.3	87.5	90.42	4,586.2	3,346.2	2,641.6	2,468.2	173.38	15.236	
16,600.0	11,921.1	16,627.9	11,939.5	88.7	88.9	90.42	4,686.2	3,345.5	2,641.6	2,465.4	176.28	14.986	
16,700.0	11,920.5	16,727.9	11,939.0	90.2	90.4	90.42	4,786.2	3,344.7	2,641.7	2,462.5	179.19	14.742	
16,800.0	11,920.0	16,827.9	11,938.5	91.7	91.8	90.42	4,886.2	3,343.9	2,641.7	2,459.6	182.12	14.505	
16,900.0	11,919.4	16,927.9	11,937.9	93.1	93.3	90.42	4,986.2	3,343.1	2,641.7	2,456.7	185.06	14.275	
17,000.0	11,918.8	17,027.9	11,937.4	94.6	94.7	90.42	5,086.1	3,342.4	2,641.7	2,453.7	188.01	14.051	
17,100.0	11,918.3	17,127.9	11,936.9	96.1	96.2	90.42	5,186.1	3,341.6	2,641.8	2,450.8	190.98	13.833	
17,200.0	11,917.7	17,227.9	11,936.3	97.6	97.7	90.42	5,286.1	3,340.8	2,641.8	2,447.8	193.95	13.621	
17,300.0	11,917.2	17,327.9	11,935.8	99.0	99.1	90.43	5,386.1	3,340.0	2,641.8	2,444.9	196.94	13.415	
17,400.0	11,916.6	17,427.9	11,935.3	100.5	100.6	90.43	5,486.1	3,339.2	2,641.8	2,441.9	199.93	13.214	
17,500.0	11,916.1	17,527.9	11,934.7	102.0	102.1	90.43	5,586.1	3,338.5	2,641.9	2,438.9	202.94	13.018	
17,600.0	11,915.5	17,627.9	11,934.2	103.5	103.6	90.43	5,686.1	3,337.7	2,641.9	2,435.9	205.96	12.827	
17,700.0	11,914.9	17,727.9	11,933.6	105.1	105.1	90.43	5,786.1	3,336.9	2,641.9	2,432.9	208.98	12.642	
17,800.0	11,914.4	17,827.9	11,933.1	106.6	106.6	90.43	5,886.1	3,336.1	2,641.9	2,429.9	212.02	12.461	
17,900.0	11,913.8	17,927.9	11,932.6	108.1	108.1	90.43	5,986.1	3,335.4	2,642.0	2,426.9	215.06	12.285	
18,000.0	11,913.3	18,027.9	11,932.0	109.6	109.6	90.43	6,086.1	3,334.6	2,642.0	2,423.9	218.11	12.113	
18,100.0	11,912.7	18,127.9	11,931.5	111.1	111.2	90.43	6,186.1	3,333.8	2,642.0	2,420.9	221.17	11.946	
18,200.0	11,912.1	18,227.9	11,931.0	112.7	112.7	90.43	6,286.1	3,333.0	2,642.0	2,417.8	224.23	11.783	
18,300.0	11,911.6	18,327.9	11,930.4	114.2	114.2	90.43	6,386.1	3,332.2	2,642.1	2,414.8	227.30	11.624	
18,400.0	11,911.0	18,427.9	11,929.9	115.7	115.7	90.43	6,486.1	3,331.5	2,642.1	2,411.7	230.38	11.468	
18,500.0	11,910.5	18,527.9	11,929.4	117.3	117.3	90.43	6,586.1	3,330.7	2,642.1	2,408.7	233.47	11.317	
18,600.0	11,909.9	18,627.9	11,928.8	118.8	118.8	90.43	6,686.1	3,329.9	2,642.1	2,405.6	236.56	11.169	
18,700.0	11,909.4	18,727.9	11,928.3	120.4	120.4	90.43	6,786.1	3,329.1	2,642.2	2,402.5	239.66	11.025	
18,800.0	11,908.8	18,827.9	11,927.7	121.9	121.9	90.43	6,886.1	3,328.4	2,642.2	2,399.4	242.76	10.884	
18,900.0	11,908.2	18,927.9	11,927.2	123.5	123.4	90.43	6,986.1	3,327.6	2,642.2	2,396.4	245.87	10.747	
19,000.0	11,907.7	19,027.9	11,926.7	125.0	125.0	90.43	7,086.1	3,326.8	2,642.2	2,393.3	248.98	10.612	
19,100.0	11,907.1	19,127.9	11,926.1	126.6	126.5	90.43	7,186.1	3,326.0	2,642.3	2,390.2	252.10	10.481	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #134H - 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	
19,200.0	11,906.6	19,227.9	11,925.6	128.1	128.1	90.43	7,286.1	3,325.2	2,642.3	2,387.1	255.22	10.353	
19,300.0	11,906.0	19,327.9	11,925.1	129.7	129.6	90.43	7,386.0	3,324.5	2,642.3	2,384.0	258.35	10.228	
19,400.0	11,905.4	19,427.9	11,924.5	131.3	131.2	90.44	7,486.0	3,323.7	2,642.3	2,380.9	261.49	10.105	
19,500.0	11,904.9	19,527.9	11,924.0	132.8	132.8	90.44	7,586.0	3,322.9	2,642.4	2,377.7	264.62	9.985	
19,600.0	11,904.3	19,627.9	11,923.5	134.4	134.3	90.44	7,686.0	3,322.1	2,642.4	2,374.6	267.77	9.868	
19,700.0	11,903.8	19,727.9	11,922.9	136.0	135.9	90.44	7,786.0	3,321.4	2,642.4	2,371.5	270.91	9.754	
19,800.0	11,903.2	19,827.9	11,922.4	137.5	137.5	90.44	7,886.0	3,320.6	2,642.4	2,368.4	274.06	9.642	
19,900.0	11,902.7	19,927.9	11,921.8	139.1	139.0	90.44	7,986.0	3,319.8	2,642.5	2,365.3	277.22	9.532	
20,000.0	11,902.1	20,027.9	11,921.3	140.7	140.6	90.44	8,086.0	3,319.0	2,642.5	2,362.1	280.37	9.425	
20,100.0	11,901.5	20,127.9	11,920.8	142.3	142.2	90.44	8,186.0	3,318.2	2,642.5	2,359.0	283.54	9.320	
20,200.0	11,901.0	20,227.9	11,920.2	143.8	143.8	90.44	8,286.0	3,317.5	2,642.5	2,355.8	286.70	9.217	
20,300.0	11,900.4	20,327.9	11,919.7	145.4	145.3	90.44	8,386.0	3,316.7	2,642.6	2,352.7	289.87	9.116	
20,400.0	11,899.9	20,427.9	11,919.2	147.0	146.9	90.44	8,486.0	3,315.9	2,642.6	2,349.6	293.04	9.018	
20,500.0	11,899.3	20,527.9	11,918.6	148.6	148.5	90.44	8,586.0	3,315.1	2,642.6	2,346.4	296.21	8.921	
20,600.0	11,898.7	20,627.9	11,918.1	150.2	150.1	90.44	8,686.0	3,314.4	2,642.6	2,343.3	299.39	8.827	
20,700.0	11,898.2	20,727.9	11,917.5	151.8	151.7	90.44	8,786.0	3,313.6	2,642.7	2,340.1	302.57	8.734	
20,800.0	11,897.6	20,827.9	11,917.0	153.4	153.2	90.44	8,886.0	3,312.8	2,642.7	2,336.9	305.75	8.643	
20,900.0	11,897.1	20,927.9	11,916.5	155.0	154.8	90.44	8,986.0	3,312.0	2,642.7	2,333.8	308.94	8.554	
21,000.0	11,896.5	21,027.9	11,915.9	156.5	156.4	90.44	9,086.0	3,311.2	2,642.7	2,330.6	312.13	8.467	
21,100.0	11,896.0	21,127.9	11,915.4	158.1	158.0	90.44	9,186.0	3,310.5	2,642.8	2,327.5	315.32	8.381	
21,200.0	11,895.4	21,227.9	11,914.9	159.7	159.6	90.44	9,286.0	3,309.7	2,642.8	2,324.3	318.51	8.297	
21,300.0	11,894.8	21,327.9	11,914.3	161.3	161.2	90.44	9,386.0	3,308.9	2,642.8	2,321.1	321.71	8.215	
21,400.0	11,894.3	21,427.9	11,913.8	162.9	162.8	90.44	9,486.0	3,308.1	2,642.8	2,317.9	324.91	8.134	
21,500.0	11,893.7	21,527.9	11,913.3	164.5	164.4	90.45	9,585.9	3,307.3	2,642.9	2,314.8	328.11	8.055	
21,600.0	11,893.2	21,627.9	11,912.7	166.1	166.0	90.45	9,685.9	3,306.6	2,642.9	2,311.6	331.31	7.977	
21,700.0	11,892.6	21,727.9	11,912.2	167.7	167.6	90.45	9,785.9	3,305.8	2,642.9	2,308.4	334.52	7.901	
21,800.0	11,892.0	21,827.9	11,911.6	169.3	169.2	90.45	9,885.9	3,305.0	2,642.9	2,305.2	337.73	7.826	
21,900.0	11,891.5	21,927.9	11,911.1	170.9	170.8	90.45	9,985.9	3,304.2	2,643.0	2,302.0	340.94	7.752	
22,000.0	11,890.9	22,027.9	11,910.6	172.5	172.4	90.45	10,085.9	3,303.5	2,643.0	2,298.9	344.15	7.680	
22,100.0	11,890.4	22,127.9	11,910.0	174.1	174.0	90.45	10,185.9	3,302.7	2,643.0	2,295.7	347.36	7.609	
22,191.7	11,890.5	22,219.6	11,909.5	175.6	175.4	90.43	10,277.6	3,302.0	2,643.1	2,292.7	350.31	7.545 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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 199-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	13.0	13.0	0.0	0.0	-11.80	5,176.1	-1,081.4	5,287.9				
100.0	100.0	94.5	94.5	0.1	0.2	-11.81	5,176.2	-1,081.9	5,288.1	5,287.8	0.28	N/A	
200.0	200.0	175.9	175.9	0.5	0.3	-11.82	5,176.4	-1,083.4	5,288.7	5,287.9	0.76	6,957.794	
300.0	300.0	267.7	267.7	0.8	0.6	-11.84	5,176.7	-1,085.6	5,289.6	5,288.2	1.40	3,773.453	
400.0	400.0	363.7	363.6	1.2	0.9	-11.86	5,177.2	-1,087.6	5,290.5	5,288.4	2.11	2,512.898	
500.0	500.0	460.9	460.8	1.6	1.3	-11.88	5,177.9	-1,089.3	5,291.5	5,288.7	2.81	1,881.434	
600.0	600.0	558.3	558.2	1.9	1.6	-11.89	5,178.7	-1,090.7	5,292.6	5,289.1	3.52	1,503.413	
700.0	700.0	656.4	656.3	2.3	2.0	-11.91	5,179.5	-1,092.1	5,293.7	5,289.5	4.23	1,251.315	
800.0	800.0	754.5	754.4	2.6	2.3	-11.92	5,180.3	-1,093.5	5,294.9	5,289.9	4.94	1,071.661	
900.0	900.0	847.1	847.0	3.0	2.6	-11.93	5,181.2	-1,094.9	5,296.1	5,290.5	5.63	940.405	
1,000.0	1,000.0	944.1	943.9	3.4	3.0	-11.95	5,182.3	-1,096.4	5,297.5	5,291.1	6.34	835.990	
1,100.0	1,100.0	1,128.5	1,128.3	3.7	3.6	-11.95	5,183.2	-1,097.3	5,298.0	5,290.7	7.32	723.303	
1,200.0	1,200.0	1,360.0	1,359.8	4.1	4.4	-11.95	5,179.8	-1,096.3	5,296.5	5,288.0	8.46	626.036	
1,300.0	1,300.0	1,544.4	1,544.0	4.4	5.0	-12.01	5,172.3	-1,100.0	5,292.9	5,283.4	9.46	559.590	
1,400.0	1,400.0	1,689.2	1,688.5	4.8	5.6	-12.09	5,164.0	-1,106.2	5,288.1	5,277.8	10.33	511.938	
1,500.0	1,500.0	1,784.3	1,783.2	5.1	5.9	-12.16	5,157.9	-1,111.3	5,283.0	5,272.0	11.03	478.925	
1,600.0	1,600.0	1,879.0	1,877.6	5.5	6.2	-116.18	5,151.9	-1,116.6	5,278.4	5,266.7	11.72	450.321	
1,700.0	1,700.0	1,982.1	1,980.2	5.8	6.6	-116.32	5,145.4	-1,122.7	5,274.6	5,262.1	12.44	424.109	
1,800.0	1,799.9	2,084.9	2,082.7	6.2	7.0	-116.48	5,138.6	-1,129.2	5,271.5	5,258.3	13.16	400.714	
1,900.0	1,899.7	2,068.0	2,065.8	6.5	6.9	-116.46	5,139.7	-1,128.1	5,270.4	5,257.0	13.45	391.979	
1,931.8	1,931.4	2,127.2	2,124.8	6.6	7.2	-116.55	5,136.4	-1,131.9	5,269.8	5,256.1	13.77	382.625	
1,932.1	1,931.7	2,127.3	2,124.9	6.6	7.2	-116.55	5,136.4	-1,131.9	5,269.8	5,256.1	13.77	382.583	
2,000.0	1,999.4	2,154.4	2,151.9	6.9	7.3	-116.59	5,135.1	-1,133.6	5,270.3	5,256.2	14.11	373.437	
2,100.0	2,098.9	2,194.3	2,191.7	7.2	7.4	-116.64	5,133.8	-1,136.1	5,272.6	5,257.9	14.61	360.786	
2,200.0	2,198.3	2,257.0	2,254.3	7.6	7.6	-116.71	5,132.5	-1,139.9	5,276.9	5,261.7	15.20	347.099	
2,300.0	2,297.4	2,290.2	2,287.4	8.0	7.8	-116.73	5,132.2	-1,141.9	5,282.8	5,267.2	15.69	336.784	
2,400.0	2,396.4	2,369.3	2,366.4	8.3	8.1	-116.88	5,131.7	-1,146.5	5,289.9	5,273.5	16.34	323.687	
2,500.0	2,495.5	2,445.0	2,442.0	8.7	8.3	-117.03	5,131.5	-1,150.7	5,297.3	5,280.3	16.99	311.799	
2,600.0	2,594.5	2,526.4	2,523.3	9.1	8.6	-117.18	5,131.7	-1,155.0	5,305.1	5,287.5	17.66	300.428	
2,700.0	2,693.5	2,604.5	2,601.3	9.5	8.9	-117.33	5,132.2	-1,159.0	5,313.4	5,295.1	18.32	290.070	
2,800.0	2,792.5	3,026.3	3,022.2	9.9	10.5	-118.15	5,123.1	-1,182.2	5,319.9	5,299.6	20.25	262.732	
2,900.0	2,891.6	3,108.4	3,104.2	10.3	10.8	-118.30	5,119.0	-1,185.5	5,322.6	5,301.7	20.93	254.290	
3,000.0	2,990.6	3,190.7	3,186.3	10.7	11.1	-118.45	5,115.2	-1,188.4	5,325.7	5,304.1	21.62	246.373	
3,100.0	3,089.6	3,308.0	3,303.4	11.0	11.5	-118.67	5,109.8	-1,193.0	5,328.9	5,306.5	22.43	237.565	
3,200.0	3,188.6	3,429.7	3,424.7	11.4	11.9	-118.92	5,103.1	-1,199.6	5,331.7	5,308.4	23.26	229.191	
3,300.0	3,287.7	3,502.2	3,497.0	11.8	12.2	-119.07	5,099.1	-1,204.1	5,334.7	5,310.8	23.93	222.943	
3,400.0	3,386.7	3,580.0	3,574.5	12.2	12.5	-119.24	5,094.8	-1,209.5	5,338.1	5,313.5	24.61	216.896	
3,500.0	3,485.7	3,655.8	3,650.0	12.7	12.8	-119.40	5,091.1	-1,214.5	5,341.9	5,316.6	25.28	211.269	
3,600.0	3,584.8	3,726.6	3,720.7	13.1	13.1	-119.54	5,088.2	-1,218.2	5,346.2	5,320.3	25.94	206.098	
3,700.0	3,683.8	3,801.6	3,795.5	13.5	13.3	-119.67	5,085.7	-1,221.3	5,351.2	5,324.6	26.61	201.106	
3,800.0	3,782.8	3,882.0	3,875.8	13.9	13.6	-119.81	5,083.6	-1,224.2	5,356.5	5,329.2	27.29	196.254	
3,900.0	3,881.8	3,962.4	3,956.2	14.3	13.9	-119.95	5,081.8	-1,226.6	5,362.2	5,334.2	27.98	191.652	
4,000.0	3,980.9	4,042.1	4,035.8	14.7	14.2	-120.07	5,080.5	-1,228.5	5,368.3	5,339.7	28.66	187.333	
4,100.0	4,079.9	4,121.9	4,115.7	15.1	14.5	-120.19	5,079.8	-1,229.5	5,374.8	5,345.5	29.33	183.221	
4,200.0	4,178.9	4,222.9	4,216.7	15.5	14.8	-120.32	5,079.3	-1,229.9	5,381.5	5,351.5	30.08	178.910	
4,300.0	4,277.9	4,332.5	4,326.3	15.9	15.2	-120.46	5,078.8	-1,229.7	5,388.1	5,357.3	30.85	174.647	
4,400.0	4,377.0	4,418.6	4,412.3	16.3	15.5	-120.56	5,078.6	-1,229.0	5,394.8	5,363.2	31.53	171.111	
4,500.0	4,476.0	4,504.2	4,497.9	16.7	15.8	-120.66	5,078.8	-1,227.6	5,401.7	5,369.5	32.20	167.740	
4,600.0	4,575.0	4,592.1	4,585.9	17.1	16.1	-120.75	5,079.4	-1,225.7	5,408.8	5,375.9	32.88	164.486	
4,700.0	4,674.0	4,680.8	4,674.5	17.6	16.3	-120.84	5,080.2	-1,223.6	5,416.2	5,382.6	33.57	161.362	
4,800.0	4,773.1	4,771.4	4,765.1	18.0	16.6	-120.93	5,081.2	-1,221.6	5,423.7	5,389.5	34.26	158.330	
4,900.0	4,872.1	4,863.1	4,856.8	18.4	16.9	-121.02	5,082.2	-1,219.8	5,431.5	5,396.5	34.95	155.400	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													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		
5,000.0	4,971.1	4,962.6	4,956.2	18.8	17.3	-121.13	5,083.3	-1,218.4	5,439.3	5,403.6	35.68	152.465		
5,100.0	5,070.2	5,066.4	5,060.1	19.2	17.6	-121.25	5,084.2	-1,217.2	5,447.1	5,410.7	36.42	149.572		
5,200.0	5,169.2	5,167.5	5,161.1	19.6	17.9	-121.36	5,085.1	-1,215.9	5,454.8	5,417.7	37.15	146.827		
5,300.0	5,268.2	5,267.6	5,261.2	20.0	18.3	-121.47	5,086.0	-1,214.6	5,462.6	5,424.7	37.88	144.198		
5,400.0	5,367.2	5,358.0	5,351.6	20.5	18.6	-121.57	5,086.8	-1,213.5	5,470.4	5,431.8	38.58	141.789		
5,500.0	5,466.3	5,446.9	5,440.5	20.9	18.9	-121.67	5,087.7	-1,212.8	5,478.4	5,439.1	39.27	139.489		
5,600.0	5,565.3	5,544.1	5,537.7	21.3	19.2	-121.78	5,088.7	-1,212.2	5,486.6	5,446.6	40.00	137.160		
5,700.0	5,664.3	5,643.9	5,637.5	21.7	19.5	-121.90	5,089.6	-1,211.9	5,494.8	5,454.0	40.74	134.880		
5,800.0	5,763.3	5,757.3	5,750.9	22.1	19.9	-122.03	5,090.5	-1,211.7	5,502.9	5,461.3	41.53	132.518		
5,900.0	5,862.4	5,872.8	5,866.4	22.5	20.3	-122.17	5,091.0	-1,211.4	5,510.7	5,468.4	42.32	130.213		
6,000.0	5,961.4	5,969.1	5,962.6	23.0	20.6	-122.28	5,091.4	-1,211.0	5,518.4	5,475.4	43.04	128.202		
6,100.0	6,060.4	6,070.1	6,063.7	23.4	21.0	-122.40	5,091.9	-1,210.5	5,526.2	5,482.4	43.79	126.206		
6,200.0	6,159.4	6,173.4	6,167.0	23.8	21.3	-122.52	5,092.4	-1,209.6	5,533.9	5,489.4	44.54	124.254		
6,300.0	6,258.5	6,295.5	6,289.0	24.2	21.7	-122.65	5,092.8	-1,208.3	5,541.5	5,496.1	45.36	122.177		
6,400.0	6,357.5	6,434.1	6,427.7	24.6	22.2	-122.81	5,092.4	-1,207.1	5,548.4	5,502.2	46.23	120.008		
6,500.0	6,456.5	6,513.0	6,506.5	25.1	22.5	-122.91	5,091.6	-1,207.6	5,555.3	5,508.4	46.91	118.434		
6,600.0	6,555.6	6,599.8	6,593.3	25.5	22.8	-123.04	5,090.4	-1,209.7	5,562.4	5,514.8	47.61	116.844		
6,700.0	6,654.6	6,688.5	6,681.9	25.9	23.1	-123.18	5,089.1	-1,212.7	5,569.8	5,521.5	48.32	115.276		
6,800.0	6,753.6	6,777.2	6,770.6	26.3	23.4	-123.32	5,087.9	-1,215.6	5,577.4	5,528.3	49.03	113.758		
6,900.0	6,852.6	6,885.3	6,878.6	26.7	23.8	-123.48	5,086.7	-1,218.9	5,585.0	5,535.2	49.81	112.121		
7,000.0	6,951.7	7,006.0	6,999.3	27.1	24.3	-123.66	5,085.1	-1,222.2	5,592.4	5,541.8	50.64	110.427		
7,100.0	7,050.7	7,174.9	7,168.1	27.6	24.9	-123.92	5,081.3	-1,226.8	5,599.1	5,547.4	51.65	108.400		
7,131.4	7,081.7	7,236.6	7,229.7	27.7	25.1	-124.02	5,079.4	-1,228.2	5,600.9	5,548.9	52.00	107.717		
7,200.0	7,149.8	7,372.3	7,365.4	28.0	25.6	-124.23	5,074.7	-1,229.3	5,603.9	5,551.1	52.74	106.245		
7,300.0	7,249.2	7,419.3	7,412.3	28.4	25.7	-124.31	5,073.3	-1,229.2	5,607.0	5,553.7	53.29	105.216		
7,400.0	7,348.9	7,478.7	7,471.7	28.8	25.9	-124.39	5,071.9	-1,229.0	5,609.4	5,555.5	53.86	104.140		
7,500.0	7,448.7	7,543.0	7,536.0	29.1	26.1	-124.44	5,071.1	-1,228.6	5,611.0	5,556.6	54.44	103.069		
7,600.0	7,548.7	7,635.2	7,628.2	29.5	26.5	-124.46	5,070.3	-1,227.7	5,611.6	5,556.5	55.10	101.846		
7,664.7	7,613.3	7,700.1	7,693.1	29.7	26.7	-20.55	5,069.8	-1,226.9	5,611.2	5,555.6	55.53	101.039		
7,700.0	7,648.7	7,735.8	7,728.8	29.8	26.8	-20.55	5,069.6	-1,226.4	5,610.8	5,555.0	55.77	100.804		
7,800.0	7,748.7	7,842.9	7,835.8	30.1	27.2	-20.54	5,068.8	-1,224.8	5,609.6	5,553.1	56.46	99.354		
7,900.0	7,848.7	7,951.7	7,944.6	30.4	27.5	-20.53	5,067.8	-1,223.2	5,608.2	5,551.1	57.16	98.119		
8,000.0	7,948.7	8,065.3	8,058.2	30.7	27.9	-20.51	5,066.5	-1,221.6	5,606.7	5,548.8	57.87	96.878		
8,100.0	8,048.7	8,180.9	8,173.8	31.0	28.3	-20.50	5,064.9	-1,220.0	5,604.9	5,546.3	58.60	95.650		
8,200.0	8,148.7	8,297.9	8,290.7	31.4	28.7	-20.49	5,063.0	-1,218.2	5,602.8	5,543.5	59.33	94.437		
8,300.0	8,248.7	8,411.4	8,404.3	31.7	29.1	-20.48	5,060.8	-1,216.2	5,600.4	5,540.4	60.05	93.267		
8,400.0	8,348.7	8,522.3	8,515.1	32.0	29.5	-20.47	5,058.5	-1,214.3	5,597.8	5,537.0	60.76	92.133		
8,500.0	8,448.7	8,628.1	8,620.8	32.3	29.9	-20.46	5,056.1	-1,212.4	5,595.1	5,533.6	61.45	91.048		
8,600.0	8,548.7	8,718.0	8,710.7	32.6	30.2	-20.46	5,054.0	-1,210.8	5,592.3	5,530.2	62.09	90.064		
8,700.0	8,648.7	8,795.7	8,788.4	33.0	30.5	-20.45	5,052.4	-1,209.7	5,589.9	5,527.2	62.69	89.166		
8,800.0	8,748.7	8,862.0	8,854.7	33.3	30.7	-20.45	5,051.3	-1,208.9	5,587.9	5,524.6	63.25	88.349		
8,900.0	8,848.7	8,914.2	8,906.9	33.6	30.9	-20.45	5,050.7	-1,208.5	5,586.6	5,522.9	63.75	87.632		
8,977.6	8,926.3	8,949.6	8,942.3	33.9	31.0	-20.45	5,050.6	-1,208.5	5,586.3	5,522.2	64.12	87.123		
9,000.0	8,948.7	8,959.8	8,952.5	33.9	31.0	-20.45	5,050.6	-1,208.5	5,586.4	5,522.1	64.23	86.980		
9,100.0	9,048.7	9,005.3	8,998.0	34.3	31.2	-20.45	5,050.8	-1,208.7	5,587.1	5,522.4	64.70	86.359		
9,200.0	9,148.7	9,051.0	9,043.7	34.6	31.4	-20.45	5,051.5	-1,209.2	5,588.8	5,523.6	65.16	85.768		
9,300.0	9,248.7	9,196.9	9,189.5	34.9	31.9	-20.46	5,053.4	-1,211.3	5,590.5	5,524.5	66.02	84.678		
9,400.0	9,348.7	9,287.5	9,280.1	35.2	32.2	-20.47	5,054.2	-1,212.6	5,591.8	5,525.1	66.66	83.880		
9,500.0	9,448.7	9,354.8	9,347.4	35.6	32.4	-20.48	5,055.1	-1,213.6	5,593.6	5,526.4	67.22	83.218		
9,600.0	9,548.7	9,428.0	9,420.6	35.9	32.7	-20.48	5,056.6	-1,214.7	5,596.0	5,528.2	67.79	82.549		
9,700.0	9,648.7	9,497.2	9,489.7	36.2	32.9	-20.49	5,058.2	-1,216.0	5,598.9	5,530.5	68.35	81.919		
9,800.0	9,748.7	9,572.9	9,565.4	36.5	33.2	-20.50	5,060.2	-1,218.0	5,602.2	5,533.3	68.93	81.276		

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
9,900.0	9,848.7	9,694.9	9,687.3	36.9	33.6	-20.53	5,063.4	-1,221.9	5,605.8	5,536.1	69.70	80.427	
10,000.0	9,948.7	9,841.2	9,833.5	37.2	34.1	-20.53	5,066.8	-1,223.6	5,608.4	5,537.8	70.57	79.473	
10,100.0	10,048.7	9,929.1	9,921.5	37.5	34.4	-20.53	5,068.9	-1,224.0	5,610.8	5,539.6	71.20	78.801	
10,200.0	10,148.7	10,023.8	10,016.0	37.9	34.7	-20.52	5,071.5	-1,224.3	5,613.5	5,541.6	71.86	78.114	
10,300.0	10,248.7	10,137.1	10,129.3	38.2	35.1	-20.51	5,074.5	-1,224.5	5,616.0	5,543.4	72.60	77.358	
10,400.0	10,348.7	10,240.5	10,232.7	38.5	35.5	-20.51	5,077.0	-1,224.7	5,618.3	5,545.0	73.29	76.655	
10,500.0	10,448.7	10,337.1	10,329.3	38.9	35.8	-20.50	5,079.2	-1,225.3	5,620.7	5,546.7	73.96	75.992	
10,600.0	10,548.7	10,439.3	10,431.5	39.2	36.2	-20.51	5,081.4	-1,226.4	5,623.1	5,548.5	74.66	75.318	
10,700.0	10,648.7	10,544.7	10,536.8	39.5	36.5	-20.51	5,083.8	-1,227.2	5,625.4	5,550.1	75.36	74.643	
10,800.0	10,748.7	10,607.0	10,799.1	39.9	37.4	-20.52	5,084.8	-1,229.6	5,625.9	5,549.2	76.68	73.372	
10,900.0	10,848.7	10,934.2	10,926.3	40.2	37.9	-20.55	5,083.0	-1,231.2	5,625.1	5,547.6	77.47	72.611	
11,000.0	10,948.7	11,030.2	11,022.3	40.5	38.2	-20.57	5,081.4	-1,232.6	5,624.0	5,545.8	78.15	71.968	
11,100.0	11,048.7	11,123.7	11,115.7	40.9	38.6	-20.58	5,080.0	-1,233.8	5,623.0	5,544.2	78.81	71.346	
11,200.0	11,148.7	11,237.7	11,229.7	41.2	39.0	-20.60	5,078.2	-1,235.3	5,622.0	5,542.4	79.56	70.666	
11,300.0	11,248.7	11,354.1	11,346.1	41.5	39.4	-20.62	5,076.1	-1,236.7	5,620.7	5,540.4	80.31	69.989	
11,400.0	11,348.7	11,456.7	11,448.7	41.9	39.7	-20.64	5,074.1	-1,237.7	5,619.3	5,538.3	81.01	69.364	
11,423.3	11,372.0	11,481.4	11,473.3	42.0	39.8	-20.64	5,073.6	-1,237.9	5,618.9	5,537.7	81.18	69.218	
11,450.0	11,398.6	11,498.4	11,490.3	42.0	39.9	-20.22	5,073.3	-1,238.0	5,617.9	5,536.6	81.33	69.078	
11,500.0	11,448.4	11,532.3	11,524.2	42.2	40.0	-20.41	5,072.8	-1,238.3	5,613.1	5,531.5	81.62	68.775	
11,550.0	11,497.6	11,549.0	11,540.9	42.4	40.1	-20.73	5,072.6	-1,238.4	5,604.4	5,522.6	81.84	68.480	
11,600.0	11,545.9	11,549.0	11,540.9	42.5	40.1	-21.18	5,072.6	-1,238.4	5,592.1	5,510.1	82.00	68.201	
11,650.0	11,592.8	11,549.0	11,540.9	42.6	40.1	-21.79	5,072.6	-1,238.4	5,576.4	5,494.2	82.14	67.887	
11,700.0	11,638.0	11,549.0	11,540.9	42.8	40.1	-22.58	5,072.6	-1,238.4	5,557.2	5,474.9	82.28	67.542	
11,750.0	11,681.2	11,549.0	11,540.9	42.9	40.1	-23.56	5,072.6	-1,238.4	5,534.7	5,452.3	82.40	67.166	
11,800.0	11,722.1	11,549.0	11,540.9	43.0	40.1	-24.78	5,072.6	-1,238.4	5,509.1	5,426.5	82.52	66.762	
11,850.0	11,760.3	11,549.0	11,540.9	43.1	40.1	-26.29	5,072.6	-1,238.4	5,480.4	5,397.8	82.62	66.331	
11,900.0	11,795.5	11,549.0	11,540.9	43.2	40.1	-28.15	5,072.6	-1,238.4	5,449.0	5,366.2	82.72	65.875	
11,950.0	11,827.6	11,549.0	11,540.9	43.2	40.1	-30.43	5,072.6	-1,238.4	5,414.9	5,332.0	82.80	65.395	
12,000.0	11,856.1	11,549.0	11,540.9	43.3	40.1	-33.25	5,072.6	-1,238.4	5,378.3	5,295.4	82.88	64.892	
12,050.0	11,881.0	11,549.0	11,540.9	43.3	40.1	-36.77	5,072.6	-1,238.4	5,339.6	5,256.6	82.95	64.369	
12,100.0	11,902.0	11,590.8	11,582.7	43.3	40.2	-41.66	5,073.8	-1,238.4	5,297.2	5,214.0	83.21	63.662	
12,150.0	11,918.9	11,592.8	11,584.7	43.4	40.2	-47.36	5,073.9	-1,238.4	5,254.7	5,171.4	83.28	63.093	
12,200.0	11,931.7	11,594.5	11,586.4	43.4	40.2	-54.50	5,074.1	-1,238.4	5,210.8	5,127.5	83.36	62.511	
12,250.0	11,940.3	11,595.7	11,587.6	43.5	40.2	-63.30	5,074.2	-1,238.4	5,165.9	5,082.4	83.43	61.917	
12,300.0	11,944.5	11,596.6	11,588.5	43.6	40.2	-73.78	5,074.2	-1,238.4	5,120.2	5,036.7	83.51	61.315	
12,326.5	11,944.9	11,596.9	11,588.7	43.6	40.2	-79.88	5,074.2	-1,238.3	5,095.7	5,012.2	83.55	60.992	
12,391.6	11,944.6	11,597.4	11,589.3	43.7	40.2	-79.90	5,074.3	-1,238.3	5,035.8	4,952.1	83.65	60.199	
12,400.0	11,944.5	11,597.4	11,589.3	43.8	40.2	-79.90	5,074.3	-1,238.3	5,028.1	4,944.4	83.67	60.097	
12,500.0	11,944.0	11,598.3	11,590.2	44.1	40.2	-79.92	5,074.4	-1,238.3	4,936.2	4,852.4	83.84	58.877	
12,600.0	11,943.4	11,599.1	11,591.0	44.4	40.2	-79.95	5,074.4	-1,238.3	4,844.7	4,760.7	84.03	57.653	
12,700.0	11,942.9	11,600.1	11,591.9	44.9	40.2	-79.97	5,074.5	-1,238.3	4,753.5	4,669.3	84.24	56.427	
12,800.0	11,942.3	11,601.0	11,592.9	45.4	40.2	-80.00	5,074.6	-1,238.3	4,662.7	4,578.2	84.47	55.198	
12,900.0	11,941.7	11,602.0	11,593.9	45.9	40.2	-80.03	5,074.7	-1,238.3	4,572.2	4,487.5	84.72	53.966	
13,000.0	11,941.2	11,643.0	11,634.5	46.6	40.4	-81.20	5,080.2	-1,237.6	4,483.7	4,398.5	85.20	52.627	
13,100.0	11,940.6	11,643.0	11,634.5	47.2	40.4	-81.20	5,080.2	-1,237.6	4,393.9	4,308.5	85.49	51.394	
13,200.0	11,940.1	11,643.0	11,634.5	48.0	40.4	-81.20	5,080.2	-1,237.6	4,304.7	4,218.9	85.82	50.160	
13,300.0	11,939.5	11,643.0	11,634.5	48.7	40.4	-81.20	5,080.2	-1,237.6	4,215.9	4,129.8	86.17	48.925	
13,400.0	11,939.0	11,643.0	11,634.5	49.5	40.4	-81.20	5,080.2	-1,237.6	4,127.7	4,041.1	86.55	47.689	
13,500.0	11,938.4	11,643.0	11,634.5	50.4	40.4	-81.20	5,080.2	-1,237.6	4,040.0	3,953.0	86.97	46.453	
13,600.0	11,937.8	11,643.0	11,634.5	51.3	40.4	-81.20	5,080.2	-1,237.6	3,952.8	3,865.4	87.42	45.217	
13,700.0	11,937.3	11,643.0	11,634.5	52.2	40.4	-81.20	5,080.2	-1,237.6	3,866.3	3,778.4	87.91	43.981	
13,800.0	11,936.7	11,643.0	11,634.5	53.1	40.4	-81.20	5,080.2	-1,237.6	3,780.5	3,692.1	88.44	42.748	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
13,900.0	11,936.2	11,643.0	11,634.5	54.1	40.4	-81.20	5,080.2	-1,237.6	3,695.4	3,606.4	89.01	41.517	
14,000.0	11,935.6	11,643.0	11,634.5	55.2	40.4	-81.20	5,080.2	-1,237.6	3,611.0	3,521.4	89.63	40.290	
14,100.0	11,935.0	11,643.0	11,634.5	56.2	40.4	-81.20	5,080.2	-1,237.6	3,527.5	3,437.2	90.29	39.067	
14,200.0	11,934.5	11,643.0	11,634.5	57.3	40.4	-81.20	5,080.2	-1,237.6	3,444.8	3,353.8	91.01	37.850	
14,300.0	11,933.9	11,643.0	11,634.5	58.4	40.4	-81.20	5,080.2	-1,237.6	3,363.1	3,271.3	91.79	36.640	
14,400.0	11,933.4	11,643.0	11,634.5	59.5	40.4	-81.20	5,080.2	-1,237.6	3,282.3	3,189.7	92.62	35.439	
14,500.0	11,932.8	11,643.0	11,634.5	60.7	40.4	-81.20	5,080.2	-1,237.6	3,202.7	3,109.2	93.52	34.248	
14,600.0	11,932.3	11,643.0	11,634.5	61.9	40.4	-81.20	5,080.2	-1,237.6	3,124.3	3,029.8	94.48	33.069	
14,700.0	11,931.7	11,643.0	11,634.5	63.1	40.4	-81.20	5,080.2	-1,237.6	3,047.1	2,951.6	95.51	31.905	
14,800.0	11,931.1	11,643.0	11,634.5	64.3	40.4	-81.20	5,080.2	-1,237.6	2,971.2	2,874.6	96.61	30.756	
14,900.0	11,930.6	11,643.0	11,634.5	65.5	40.4	-81.20	5,080.2	-1,237.6	2,896.9	2,799.1	97.78	29.626	
15,000.0	11,930.0	11,643.0	11,634.5	66.8	40.4	-81.20	5,080.2	-1,237.6	2,824.1	2,725.1	99.03	28.517	
15,100.0	11,929.5	11,643.0	11,634.5	68.1	40.4	-81.20	5,080.2	-1,237.6	2,753.0	2,652.7	100.36	27.431	
15,200.0	11,928.9	11,643.0	11,634.5	69.4	40.4	-81.20	5,080.2	-1,237.6	2,683.8	2,582.0	101.77	26.371	
15,300.0	11,928.3	11,643.0	11,634.5	70.7	40.4	-81.20	5,080.2	-1,237.6	2,616.5	2,513.3	103.26	25.340	
15,400.0	11,927.8	11,643.0	11,634.5	72.0	40.4	-81.20	5,080.2	-1,237.6	2,551.5	2,446.6	104.83	24.340	
15,500.0	11,927.2	11,643.0	11,634.5	73.3	40.4	-81.20	5,080.2	-1,237.6	2,488.7	2,382.2	106.47	23.374	
15,600.0	11,926.7	11,663.9	11,654.9	74.7	40.5	-81.79	5,084.4	-1,237.2	2,428.0	2,319.6	108.34	22.410	
15,700.0	11,926.1	11,668.7	11,659.6	76.0	40.5	-81.92	5,085.5	-1,237.0	2,370.2	2,260.0	110.17	21.515	
15,800.0	11,925.6	11,690.0	11,680.1	77.4	40.5	-82.52	5,091.2	-1,236.6	2,315.4	2,203.3	112.17	20.643	
15,900.0	11,925.0	11,690.0	11,680.1	78.8	40.5	-82.52	5,091.2	-1,236.6	2,263.3	2,149.3	114.08	19.841	
16,000.0	11,924.4	11,690.0	11,680.1	80.2	40.5	-82.52	5,091.2	-1,236.6	2,214.5	2,098.5	116.02	19.087	
16,100.0	11,923.9	11,690.0	11,680.1	81.6	40.5	-82.52	5,091.2	-1,236.6	2,169.3	2,051.3	118.00	18.384	
16,200.0	11,923.3	11,707.2	11,696.4	83.0	40.6	-82.99	5,096.6	-1,236.2	2,127.5	2,007.4	120.11	17.713	
16,300.0	11,922.8	11,720.4	11,708.8	84.4	40.6	-83.35	5,101.2	-1,235.8	2,089.6	1,967.4	122.18	17.102	
16,400.0	11,922.2	11,738.0	11,725.1	85.9	40.7	-83.82	5,107.9	-1,235.3	2,055.5	1,931.3	124.26	16.542	
16,500.0	11,921.6	11,766.6	11,751.1	87.3	40.8	-84.59	5,119.8	-1,234.4	2,025.4	1,899.1	126.36	16.029	
16,600.0	11,921.1	11,803.8	11,784.2	88.7	40.9	-85.56	5,136.6	-1,232.9	1,999.2	1,870.7	128.45	15.563	
16,700.0	11,920.5	11,832.0	11,808.9	90.2	41.0	-86.29	5,150.2	-1,231.5	1,976.7	1,846.3	130.40	15.159	
16,800.0	11,920.0	11,865.0	11,837.0	91.7	41.0	-87.12	5,167.4	-1,230.0	1,958.3	1,826.0	132.28	14.805	
16,900.0	11,919.4	11,893.9	11,860.8	93.1	41.1	-87.82	5,183.7	-1,228.9	1,944.2	1,810.2	134.01	14.507	
17,000.0	11,918.8	11,927.0	11,887.1	94.6	41.2	-88.61	5,203.9	-1,227.9	1,934.2	1,798.5	135.65	14.259	
17,100.0	11,918.3	11,963.7	11,914.9	96.1	41.3	-89.44	5,227.7	-1,227.1	1,928.2	1,791.0	137.18	14.056	
17,200.0	11,917.7	12,004.6	11,944.5	97.6	41.4	-90.32	5,255.9	-1,226.8	1,926.0	1,787.4	138.60	13.896	
17,208.5	11,917.7	12,008.3	11,947.1	97.7	41.4	-90.40	5,258.6	-1,226.8	1,926.0	1,787.3	138.72	13.885	
17,300.0	11,917.2	12,074.3	11,991.3	99.0	41.6	-91.72	5,307.6	-1,227.1	1,927.2	1,787.1	140.11	13.755	
17,400.0	11,916.6	12,227.6	12,078.4	100.5	42.1	-94.33	5,433.4	-1,225.4	1,928.8	1,786.7	142.09	13.574	
17,500.0	11,916.1	12,278.7	12,101.3	102.0	42.3	-95.02	5,479.1	-1,225.0	1,931.1	1,787.7	143.40	13.466	
17,600.0	11,915.5	12,389.4	12,133.7	103.5	42.7	-95.99	5,584.6	-1,226.8	1,935.0	1,789.9	145.17	13.329	
17,700.0	11,914.9	12,496.5	12,151.7	105.1	43.1	-96.53	5,690.2	-1,228.9	1,938.1	1,791.1	147.01	13.183	
17,800.0	11,914.4	12,583.0	12,159.2	106.6	43.4	-96.76	5,776.2	-1,231.9	1,941.8	1,793.1	148.75	13.054	
17,900.0	11,913.8	12,672.3	12,164.1	108.1	43.8	-96.91	5,865.4	-1,235.7	1,946.0	1,795.4	150.56	12.924	
18,000.0	11,913.3	12,772.6	12,169.0	109.6	44.3	-97.05	5,965.5	-1,240.3	1,950.4	1,797.9	152.55	12.785	
18,100.0	11,912.7	12,885.3	12,170.5	111.1	45.0	-97.10	6,078.0	-1,245.4	1,954.3	1,799.6	154.76	12.628	
18,200.0	11,912.1	12,980.5	12,170.2	112.7	45.5	-97.09	6,173.1	-1,249.9	1,958.3	1,801.4	156.83	12.487	
18,300.0	11,911.6	13,078.6	12,169.3	114.2	46.2	-97.07	6,271.1	-1,254.6	1,962.2	1,803.2	158.99	12.342	
18,400.0	11,911.0	13,167.2	12,168.4	115.7	46.8	-97.04	6,359.5	-1,259.3	1,966.6	1,805.5	161.08	12.209	
18,500.0	11,910.5	13,300.4	12,166.5	117.3	47.8	-96.99	6,492.5	-1,266.4	1,971.1	1,807.3	163.82	12.032	
18,600.0	11,909.9	13,449.4	12,165.6	118.8	49.0	-96.98	6,641.5	-1,269.7	1,972.4	1,805.6	166.81	11.824	
18,700.0	11,909.4	13,565.4	12,164.5	120.4	50.1	-96.97	6,757.4	-1,271.0	1,972.7	1,803.3	169.42	11.644	
18,800.0	11,908.8	13,682.7	12,163.1	121.9	51.1	-96.95	6,874.7	-1,270.9	1,971.7	1,799.6	172.09	11.457	
18,900.0	11,908.2	13,786.4	12,161.6	123.5	52.1	-96.92	6,978.5	-1,270.5	1,970.4	1,795.8	174.64	11.283	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,907.7	13,868.2	12,160.6	125.0	52.9	-96.91	7,060.3	-1,270.3	1,969.4	1,792.4	176.94	11.130	
19,036.4	11,907.5	13,895.4	12,160.6	125.6	53.2	-96.92	7,087.5	-1,270.5	1,969.3	1,791.5	177.74	11.080	
19,100.0	11,907.1	13,958.1	12,161.2	126.6	53.8	-96.94	7,150.2	-1,270.9	1,969.4	1,790.0	179.35	10.980	
19,200.0	11,906.6	14,115.5	12,162.6	128.1	55.5	-97.02	7,307.5	-1,270.2	1,968.5	1,785.8	182.69	10.775	
19,300.0	11,906.0	14,221.0	12,163.0	129.7	56.6	-97.06	7,413.0	-1,268.0	1,965.7	1,780.3	185.39	10.603	
19,400.0	11,905.4	14,327.7	12,164.5	131.3	57.8	-97.13	7,519.7	-1,264.9	1,962.2	1,774.1	188.12	10.431	
19,500.0	11,904.9	14,419.8	12,166.7	132.8	58.9	-97.22	7,611.7	-1,262.2	1,958.9	1,768.2	190.69	10.273	
19,600.0	11,904.3	14,512.8	12,165.8	134.4	60.0	-97.22	7,704.6	-1,260.3	1,956.0	1,762.7	193.32	10.118	
19,700.0	11,903.8	14,622.9	12,163.4	136.0	61.3	-97.18	7,814.7	-1,258.3	1,953.3	1,757.1	196.21	9.955	
19,800.0	11,903.2	14,760.8	12,160.7	137.5	62.9	-97.14	7,952.5	-1,253.8	1,949.1	1,749.6	199.46	9.772	
19,900.0	11,902.7	14,886.3	12,157.6	139.1	64.5	-97.10	8,077.8	-1,247.9	1,943.4	1,740.9	202.56	9.594	
20,000.0	11,902.1	14,989.1	12,154.7	140.7	65.8	-97.06	8,180.4	-1,241.7	1,936.3	1,730.9	205.41	9.427	
20,100.0	11,901.5	15,071.0	12,154.7	142.3	66.8	-97.09	8,262.2	-1,237.4	1,930.3	1,722.3	208.03	9.279	
20,200.0	11,901.0	15,163.3	12,156.2	143.8	68.0	-97.17	8,354.3	-1,232.5	1,924.6	1,713.8	210.75	9.132	
20,300.0	11,900.4	15,228.0	12,158.1	145.4	68.8	-97.25	8,418.9	-1,229.6	1,919.9	1,706.8	213.13	9.008	
20,400.0	11,899.9	15,291.1	12,160.0	147.0	69.6	-97.32	8,482.0	-1,228.0	1,917.1	1,701.7	215.43	8.899	
20,500.0	11,899.3	15,365.1	12,161.6	148.6	70.6	-97.39	8,555.9	-1,227.9	1,916.5	1,698.6	217.88	8.796	
20,600.0	11,898.7	15,467.5	12,163.3	150.2	72.0	-97.45	8,658.3	-1,228.2	1,916.3	1,695.4	220.80	8.679	
20,700.0	11,898.2	15,561.7	12,164.9	151.8	73.3	-97.52	8,752.6	-1,228.3	1,915.9	1,692.3	223.60	8.569	
20,707.4	11,898.1	15,568.0	12,165.1	151.9	73.3	-97.53	8,758.9	-1,228.3	1,915.9	1,692.1	223.79	8.561 CC	
20,800.0	11,897.6	15,641.1	12,166.7	153.4	74.3	-97.59	8,831.9	-1,229.0	1,916.3	1,690.2	226.13	8.474	
20,900.0	11,897.1	15,715.8	12,166.0	155.0	75.4	-97.57	8,906.6	-1,230.9	1,918.0	1,689.4	228.59	8.391 ES	
21,000.0	11,896.5	15,795.6	12,165.2	156.5	76.5	-97.55	8,986.3	-1,233.9	1,920.9	1,689.7	231.14	8.311	
21,100.0	11,896.0	15,888.1	12,165.0	158.1	77.8	-97.55	9,078.7	-1,237.9	1,924.5	1,690.5	233.94	8.226	
21,200.0	11,895.4	15,974.0	12,164.8	159.7	79.0	-97.54	9,164.5	-1,242.2	1,928.6	1,692.0	236.61	8.151	
21,300.0	11,894.8	16,107.6	12,162.8	161.3	80.8	-97.49	9,298.0	-1,248.2	1,932.1	1,691.7	240.36	8.038	
21,400.0	11,894.3	16,209.0	12,161.3	162.9	82.3	-97.45	9,399.3	-1,251.9	1,934.8	1,691.4	243.41	7.949	
21,500.0	11,893.7	16,308.1	12,163.2	164.5	83.7	-97.51	9,498.3	-1,255.0	1,937.5	1,691.1	246.38	7.864	
21,600.0	11,893.2	16,399.1	12,168.0	166.1	85.0	-97.66	9,589.1	-1,257.7	1,940.4	1,691.2	249.15	7.788	
21,700.0	11,892.6	16,481.1	12,173.0	167.7	86.2	-97.81	9,671.0	-1,260.6	1,944.0	1,692.3	251.72	7.723	
21,800.0	11,892.0	16,560.7	12,178.7	169.3	87.4	-97.98	9,750.2	-1,264.2	1,948.7	1,694.5	254.20	7.666	
21,900.0	11,891.5	16,644.0	12,185.6	170.9	88.6	-98.18	9,833.2	-1,268.2	1,954.1	1,697.3	256.74	7.611	
22,000.0	11,890.9	16,699.1	12,190.8	172.5	89.4	-98.33	9,887.9	-1,271.7	1,961.1	1,702.6	258.52	7.586	
22,100.0	11,890.4	16,788.8	12,200.0	174.1	90.7	-98.58	9,976.8	-1,279.5	1,970.5	1,709.3	261.16	7.545	
22,191.7	11,890.5	16,905.7	12,208.3	175.6	92.5	-98.78	10,093.0	-1,288.3	1,977.4	1,712.9	264.58	7.474 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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	-90.80	-1.1	-79.9	79.9				
100.0	100.0	101.0	99.0	0.1	0.1	-90.80	-1.1	-79.9	79.9	79.6	0.26	307.383	
200.0	200.0	201.0	199.0	0.5	0.5	-90.80	-1.1	-79.9	79.9	78.9	0.98	81.781	
300.0	300.0	301.0	299.0	0.8	0.8	-90.80	-1.1	-79.9	79.9	78.2	1.69	47.165	
400.0	400.0	401.0	399.0	1.2	1.2	-90.80	-1.1	-79.9	79.9	77.5	2.41	33.138	
500.0	500.0	501.0	499.0	1.6	1.6	-90.80	-1.1	-79.9	79.9	76.8	3.13	25.542	
600.0	600.0	601.0	599.0	1.9	1.9	-90.80	-1.1	-79.9	79.9	76.0	3.84	20.779	
700.0	700.0	701.0	699.0	2.3	2.3	-90.80	-1.1	-79.9	79.9	75.3	4.56	17.513	
800.0	800.0	801.0	799.0	2.6	2.6	-90.80	-1.1	-79.9	79.9	74.6	5.28	15.134	
900.0	900.0	901.0	899.0	3.0	3.0	-90.80	-1.1	-79.9	79.9	73.9	6.00	13.325	
1,000.0	1,000.0	999.0	999.0	3.4	3.4	-90.80	-1.1	-79.9	79.9	73.2	6.71	11.914	
1,100.0	1,100.0	1,099.9	1,099.9	3.7	3.7	-91.28	-1.8	-79.3	79.3	71.9	7.41	10.707	
1,200.0	1,200.0	1,200.7	1,200.7	4.1	4.0	-92.78	-3.8	-77.6	77.7	69.6	8.10	9.588	
1,300.0	1,300.0	1,301.4	1,301.3	4.4	4.4	-95.43	-7.1	-74.7	75.1	66.3	8.80	8.530	
1,400.0	1,400.0	1,402.0	1,401.6	4.8	4.7	-99.45	-11.8	-70.6	71.7	62.2	9.50	7.544	
1,500.0	1,500.0	1,502.2	1,501.6	5.1	5.1	-105.15	-17.7	-65.5	67.9	57.7	10.20	6.650	
1,600.0	1,600.0	1,602.3	1,601.2	5.5	5.4	143.67	-25.0	-59.1	64.9	54.0	10.91	5.953	
1,687.7	1,687.7	1,689.9	1,688.2	5.8	5.7	136.45	-32.4	-52.7	64.1	52.5	11.53	5.559 CC	
1,700.0	1,700.0	1,702.1	1,700.4	5.8	5.8	135.41	-33.6	-51.7	64.1	52.5	11.61	5.519 ES	
1,800.0	1,799.9	1,801.8	1,799.1	6.2	6.2	126.80	-43.4	-43.1	65.6	53.3	12.33	5.320	
1,900.0	1,899.7	1,901.3	1,897.7	6.5	6.5	119.30	-53.9	-34.1	69.4	56.4	13.05	5.319	
2,000.0	1,999.4	2,000.9	1,996.3	6.9	6.9	113.88	-64.3	-25.0	75.0	61.2	13.78	5.443	
2,100.0	2,098.9	2,100.6	2,095.0	7.2	7.3	110.37	-74.8	-15.9	81.7	67.2	14.51	5.631	
2,200.0	2,198.3	2,200.2	2,193.7	7.6	7.7	108.45	-85.3	-6.8	89.2	74.0	15.26	5.850	
2,300.0	2,297.4	2,300.1	2,292.4	8.0	8.1	107.80	-95.7	2.3	97.4	81.3	16.01	6.081	
2,400.0	2,396.4	2,400.4	2,391.1	8.3	8.5	107.77	-106.2	11.4	105.7	89.0	16.78	6.303	
2,500.0	2,495.5	2,500.8	2,489.8	8.7	8.9	107.74	-116.7	20.5	114.1	96.6	17.55	6.503	
2,600.0	2,594.5	2,601.2	2,588.5	9.1	9.3	107.72	-127.1	29.6	122.5	104.2	18.33	6.684	
2,700.0	2,693.5	2,701.5	2,687.2	9.5	9.7	107.70	-137.6	38.7	130.9	111.8	19.12	6.848	
2,800.0	2,792.5	2,801.9	2,785.8	9.9	10.1	107.68	-148.1	47.8	139.3	119.4	19.91	6.998	
2,900.0	2,891.6	2,902.2	2,884.5	10.3	10.5	107.66	-158.5	56.9	147.7	127.0	20.70	7.135	
3,000.0	2,990.6	2,998.0	2,983.8	10.7	10.9	107.77	-168.8	65.8	156.0	134.5	21.48	7.262	
3,100.0	3,089.6	3,098.9	3,084.1	11.0	11.3	108.64	-177.4	73.3	163.6	141.4	22.28	7.346	
3,200.0	3,188.6	3,199.7	3,184.5	11.4	11.7	110.29	-184.0	79.0	170.6	147.6	23.06	7.399	
3,300.0	3,287.7	3,300.3	3,284.9	11.8	12.1	112.65	-188.6	83.0	177.2	153.3	23.83	7.435	
3,400.0	3,386.7	3,400.6	3,385.1	12.2	12.4	115.64	-191.2	85.3	183.6	159.0	24.58	7.468	
3,500.0	3,485.7	3,500.2	3,484.7	12.7	12.8	119.16	-191.9	85.8	190.1	164.8	25.29	7.517	
3,600.0	3,584.8	3,600.7	3,583.8	13.1	13.1	122.67	-191.9	85.8	197.3	171.3	25.99	7.592	
3,700.0	3,683.8	3,701.7	3,682.8	13.5	13.4	125.92	-191.9	85.8	205.2	178.5	26.68	7.691	
3,800.0	3,782.8	3,802.7	3,781.8	13.9	13.7	128.93	-191.9	85.8	213.7	186.4	27.37	7.808	
3,900.0	3,881.8	3,903.7	3,880.8	14.3	14.1	131.70	-191.9	85.8	222.8	194.7	28.06	7.940	
4,000.0	3,980.9	4,004.6	3,979.9	14.7	14.4	134.25	-191.9	85.8	232.3	203.6	28.74	8.083	
4,100.0	4,079.9	4,105.6	4,078.9	15.1	14.7	136.60	-191.9	85.8	242.3	212.9	29.43	8.234	
4,200.0	4,178.9	4,206.6	4,177.9	15.5	15.1	138.76	-191.9	85.8	252.6	222.5	30.11	8.390	
4,300.0	4,277.9	4,307.6	4,276.9	15.9	15.4	140.74	-191.9	85.8	263.3	232.5	30.80	8.550	
4,400.0	4,377.0	4,408.5	4,376.0	16.3	15.8	142.58	-191.9	85.8	274.3	242.8	31.48	8.712	
4,500.0	4,476.0	4,509.5	4,475.0	16.7	16.1	144.27	-191.9	85.8	285.5	253.3	32.17	8.875	
4,600.0	4,575.0	4,589.5	4,574.0	17.1	16.4	145.83	-191.9	85.8	296.9	264.1	32.78	9.057	
4,700.0	4,674.0	4,688.5	4,673.0	17.6	16.7	147.28	-191.9	85.8	308.6	275.1	33.47	9.221	
4,800.0	4,773.1	4,787.6	4,772.1	18.0	17.0	148.62	-191.9	85.8	320.4	286.2	34.15	9.382	
4,900.0	4,872.1	4,886.6	4,871.1	18.4	17.4	149.87	-191.9	85.8	332.4	297.6	34.83	9.542	
5,000.0	4,971.1	4,985.6	4,970.1	18.8	17.7	151.03	-191.9	85.8	344.5	309.0	35.52	9.699	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
5,100.0	5,070.2	5,084.7	5,069.2	19.2	18.0	152.11	-191.9	85.8	356.8	320.6	36.21	9.853	
5,200.0	5,169.2	5,183.7	5,168.2	19.6	18.4	153.12	-191.9	85.8	369.2	332.3	36.90	10.005	
5,300.0	5,268.2	5,282.7	5,267.2	20.0	18.7	154.06	-191.9	85.8	381.7	344.1	37.59	10.153	
5,400.0	5,367.2	5,381.7	5,366.2	20.5	19.1	154.94	-191.9	85.8	394.2	356.0	38.29	10.298	
5,500.0	5,466.3	5,480.8	5,465.3	20.9	19.4	155.77	-191.9	85.8	406.9	367.9	38.98	10.439	
5,600.0	5,565.3	5,579.8	5,564.3	21.3	19.7	156.55	-191.9	85.8	419.7	380.0	39.68	10.577	
5,700.0	5,664.3	5,678.8	5,663.3	21.7	20.1	157.28	-191.9	85.8	432.5	392.1	40.37	10.712	
5,800.0	5,763.3	5,777.8	5,762.3	22.1	20.4	157.97	-191.9	85.8	445.4	404.3	41.07	10.844	
5,900.0	5,862.4	5,876.9	5,861.4	22.5	20.8	158.63	-191.9	85.8	458.3	416.6	41.77	10.973	
6,000.0	5,961.4	5,975.9	5,960.4	23.0	21.1	159.24	-191.9	85.8	471.3	428.9	42.47	11.098	
6,100.0	6,060.4	6,074.9	6,059.4	23.4	21.4	159.82	-191.9	85.8	484.4	441.2	43.17	11.220	
6,200.0	6,159.4	6,173.9	6,158.4	23.8	21.8	160.38	-191.9	85.8	497.5	453.6	43.87	11.339	
6,300.0	6,258.5	6,273.0	6,257.5	24.2	22.1	160.90	-191.9	85.8	510.6	466.1	44.58	11.455	
6,400.0	6,357.5	6,372.0	6,356.5	24.6	22.5	161.40	-191.9	85.8	523.8	478.5	45.28	11.568	
6,500.0	6,456.5	6,471.0	6,455.5	25.1	22.8	161.87	-191.9	85.8	537.0	491.1	45.99	11.678	
6,600.0	6,555.6	6,570.1	6,554.6	25.5	23.2	162.32	-191.9	85.8	550.3	503.6	46.69	11.786	
6,700.0	6,654.6	6,669.1	6,653.6	25.9	23.5	162.75	-191.9	85.8	563.6	516.2	47.40	11.891	
6,800.0	6,753.6	6,768.1	6,752.6	26.3	23.9	163.16	-191.9	85.8	576.9	528.8	48.10	11.993	
6,900.0	6,852.6	6,867.1	6,851.6	26.7	24.2	163.55	-191.9	85.8	590.2	541.4	48.81	12.092	
7,000.0	6,951.7	6,966.2	6,950.7	27.1	24.5	163.93	-191.9	85.8	603.6	554.1	49.52	12.189	
7,100.0	7,050.7	7,065.2	7,049.7	27.6	24.9	164.28	-191.9	85.8	617.0	566.8	50.23	12.284	
7,131.4	7,081.7	7,103.8	7,080.7	27.7	25.0	164.39	-191.9	85.8	621.2	570.7	50.48	12.307	
7,200.0	7,149.8	7,164.3	7,148.8	28.0	25.2	164.65	-191.9	85.8	629.8	578.9	50.94	12.365	
7,300.0	7,249.2	7,263.7	7,248.2	28.4	25.6	164.94	-191.9	85.8	640.3	588.7	51.65	12.398	
7,400.0	7,348.9	7,363.4	7,347.9	28.8	25.9	165.16	-191.9	85.8	648.3	595.9	52.35	12.383	
7,500.0	7,448.7	7,463.2	7,447.7	29.1	26.3	165.31	-191.9	85.8	653.7	600.6	53.06	12.320	
7,600.0	7,548.7	7,563.2	7,547.7	29.5	26.6	165.39	-191.9	85.8	656.6	602.8	53.76	12.213	
7,664.7	7,613.3	7,627.8	7,612.3	29.7	26.9	-90.70	-191.9	85.8	657.1	602.9	54.21	12.122	
7,700.0	7,648.7	7,663.2	7,647.7	29.8	27.0	-90.70	-191.9	85.8	657.1	602.7	54.45	12.068	
7,800.0	7,748.7	7,763.2	7,747.7	30.1	27.3	-90.70	-191.9	85.8	657.1	602.0	55.13	11.918	
7,900.0	7,848.7	7,863.2	7,847.7	30.4	27.7	-90.70	-191.9	85.8	657.1	601.3	55.82	11.772	
8,000.0	7,948.7	7,963.2	7,947.7	30.7	28.0	-90.70	-191.9	85.8	657.1	600.6	56.51	11.629	
8,100.0	8,048.7	8,063.2	8,047.7	31.0	28.4	-90.70	-191.9	85.8	657.1	599.9	57.19	11.489	
8,200.0	8,148.7	8,163.2	8,147.7	31.4	28.7	-90.70	-191.9	85.8	657.1	599.2	57.88	11.353	
8,300.0	8,248.7	8,263.2	8,247.7	31.7	29.1	-90.70	-191.9	85.8	657.1	598.5	58.57	11.219	
8,400.0	8,348.7	8,363.2	8,347.7	32.0	29.4	-90.70	-191.9	85.8	657.1	597.9	59.26	11.089	
8,500.0	8,448.7	8,463.2	8,447.7	32.3	29.8	-90.70	-191.9	85.8	657.1	597.2	59.95	10.961	
8,600.0	8,548.7	8,563.2	8,547.7	32.6	30.2	-90.70	-191.9	85.8	657.1	596.5	60.64	10.836	
8,700.0	8,648.7	8,663.2	8,647.7	33.0	30.5	-90.70	-191.9	85.8	657.1	595.8	61.33	10.714	
8,800.0	8,748.7	8,763.2	8,747.7	33.3	30.9	-90.70	-191.9	85.8	657.1	595.1	62.02	10.595	
8,900.0	8,848.7	8,863.2	8,847.7	33.6	31.2	-90.70	-191.9	85.8	657.1	594.4	62.72	10.478	
9,000.0	8,948.7	8,963.2	8,947.7	33.9	31.6	-90.70	-191.9	85.8	657.1	593.7	63.41	10.363	
9,100.0	9,048.7	9,063.2	9,047.7	34.3	31.9	-90.70	-191.9	85.8	657.1	593.0	64.10	10.251	
9,200.0	9,148.7	9,163.2	9,147.7	34.6	32.3	-90.70	-191.9	85.8	657.1	592.3	64.80	10.141	
9,300.0	9,248.7	9,263.2	9,247.7	34.9	32.6	-90.70	-191.9	85.8	657.1	591.6	65.49	10.034	
9,400.0	9,348.7	9,363.2	9,347.7	35.2	33.0	-90.70	-191.9	85.8	657.1	590.9	66.19	9.928	
9,500.0	9,448.7	9,463.2	9,447.7	35.6	33.3	-90.70	-191.9	85.8	657.1	590.2	66.88	9.825	
9,600.0	9,548.7	9,563.2	9,547.7	35.9	33.7	-90.70	-191.9	85.8	657.1	589.5	67.58	9.724	
9,700.0	9,648.7	9,663.2	9,647.7	36.2	34.0	-90.70	-191.9	85.8	657.1	588.8	68.27	9.625	
9,800.0	9,748.7	9,763.2	9,747.7	36.5	34.4	-90.70	-191.9	85.8	657.1	588.1	68.97	9.528	
9,900.0	9,848.7	9,863.2	9,847.7	36.9	34.7	-90.70	-191.9	85.8	657.1	587.5	69.67	9.432	
10,000.0	9,948.7	9,963.2	9,947.7	37.2	35.1	-90.70	-191.9	85.8	657.1	586.8	70.36	9.339	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	10,048.7	10,063.2	10,047.7	37.5	35.5	-90.70	-191.9	85.8	657.1	586.1	71.06	9.247	
10,200.0	10,148.7	10,163.2	10,147.7	37.9	35.8	-90.70	-191.9	85.8	657.1	585.4	71.76	9.157	
10,300.0	10,248.7	10,263.2	10,247.7	38.2	36.2	-90.70	-191.9	85.8	657.1	584.7	72.46	9.069	
10,400.0	10,348.7	10,363.2	10,347.7	38.5	36.5	-90.70	-191.9	85.8	657.1	584.0	73.16	8.982	
10,500.0	10,448.7	10,463.2	10,447.7	38.9	36.9	-90.70	-191.9	85.8	657.1	583.3	73.86	8.897	
10,600.0	10,548.7	10,563.2	10,547.7	39.2	37.2	-90.70	-191.9	85.8	657.1	582.6	74.56	8.814	
10,700.0	10,648.7	10,663.2	10,647.7	39.5	37.6	-90.70	-191.9	85.8	657.1	581.9	75.26	8.732	
10,800.0	10,748.7	10,763.2	10,747.7	39.9	37.9	-90.70	-191.9	85.8	657.1	581.2	75.96	8.651	
10,900.0	10,848.7	10,863.2	10,847.7	40.2	38.3	-90.70	-191.9	85.8	657.1	580.5	76.66	8.572	
11,000.0	10,948.7	10,963.2	10,947.7	40.5	38.6	-90.70	-191.9	85.8	657.1	579.8	77.36	8.494	
11,100.0	11,048.7	11,063.2	11,047.7	40.9	39.0	-90.70	-191.9	85.8	657.1	579.1	78.06	8.418	
11,200.0	11,148.7	11,163.2	11,147.7	41.2	39.4	-90.70	-191.9	85.8	657.1	578.4	78.76	8.343	
11,300.0	11,248.7	11,263.2	11,247.7	41.5	39.7	-90.70	-191.9	85.8	657.1	577.7	79.46	8.269	
11,400.0	11,348.7	11,363.2	11,347.7	41.9	40.1	-90.70	-191.9	85.8	657.1	577.0	80.17	8.197	
11,423.3	11,372.0	11,386.5	11,371.0	42.0	40.1	-90.70	-191.9	85.8	657.1	576.8	80.33	8.180	
11,450.0	11,398.6	11,413.1	11,397.6	42.0	40.2	-90.29	-191.9	85.8	657.1	576.6	80.52	8.161	
11,500.0	11,448.4	11,462.9	11,447.4	42.2	40.4	-90.68	-191.9	85.8	657.2	576.3	80.87	8.126	
11,550.0	11,497.6	11,512.1	11,496.6	42.4	40.6	-91.42	-191.9	85.8	657.3	576.1	81.22	8.093	
11,600.0	11,545.9	11,560.4	11,544.9	42.5	40.8	-92.47	-191.9	85.8	657.8	576.2	81.57	8.064	
11,650.0	11,592.8	11,611.2	11,595.7	42.6	40.9	-93.74	-189.8	85.8	658.7	576.7	81.94	8.038	
11,700.0	11,638.0	11,663.8	11,647.7	42.8	41.1	-95.00	-183.0	85.8	659.9	577.6	82.30	8.018	
11,750.0	11,681.2	11,718.0	11,700.6	42.9	41.3	-96.25	-170.9	85.7	661.4	578.7	82.65	8.003	
11,800.0	11,722.1	11,774.0	11,753.7	43.0	41.5	-97.46	-153.3	85.6	663.2	580.2	82.96	7.994	
11,850.0	11,760.3	11,831.8	11,806.5	43.1	41.6	-98.64	-129.7	85.4	665.2	581.9	83.23	7.992	
11,900.0	11,795.5	11,891.6	11,858.3	43.2	41.8	-99.76	-99.9	85.2	667.3	583.9	83.44	7.998	
11,950.0	11,827.6	11,953.4	11,908.3	43.2	41.9	-100.82	-63.6	84.9	669.5	586.0	83.58	8.010	
12,000.0	11,856.1	12,017.3	11,955.5	43.3	42.1	-101.80	-20.7	84.6	671.7	588.1	83.67	8.029	
12,050.0	11,881.0	12,083.0	11,998.8	43.3	42.2	-102.68	28.7	84.3	673.8	590.2	83.70	8.051	
12,100.0	11,902.0	12,150.6	12,037.1	43.3	42.3	-103.44	84.3	83.9	675.7	592.0	83.70	8.073	
12,150.0	11,918.9	12,219.7	12,069.3	43.4	42.5	-104.07	145.5	83.5	677.4	593.6	83.71	8.091	
12,200.0	11,931.7	12,290.2	12,094.3	43.4	42.7	-104.55	211.4	83.0	678.6	594.8	83.77	8.101	
12,250.0	11,940.3	12,361.7	12,111.1	43.5	42.8	-104.86	280.8	82.5	679.4	595.5	83.91	8.097	
12,300.0	11,944.5	12,433.7	12,119.2	43.6	43.0	-105.00	352.3	82.0	679.7	595.6	84.15	8.077	
12,326.5	11,944.9	12,469.5	12,119.9	43.6	43.1	-105.01	388.1	81.8	679.7	595.4	84.32	8.061	
12,391.6	11,944.6	12,534.6	12,119.6	43.7	43.3	-105.01	453.2	81.3	679.7	595.0	84.70	8.024	
12,400.0	11,944.5	12,542.9	12,119.5	43.8	43.3	-105.01	461.5	81.2	679.7	594.9	84.75	8.019	
12,500.0	11,944.0	12,642.9	12,119.0	44.1	43.7	-105.01	561.5	80.4	679.7	594.2	85.44	7.955	
12,600.0	11,943.4	12,742.9	12,118.5	44.4	44.1	-105.02	661.5	79.7	679.6	593.4	86.24	7.881	
12,700.0	11,942.9	12,842.9	12,118.0	44.9	44.5	-105.02	761.5	78.9	679.6	592.5	87.15	7.799	
12,800.0	11,942.3	12,942.9	12,117.5	45.4	45.0	-105.02	861.5	78.1	679.6	591.5	88.17	7.708	
12,900.0	11,941.7	13,042.9	12,116.9	45.9	45.6	-105.03	961.5	77.3	679.6	590.3	89.29	7.611	
13,000.0	11,941.2	13,142.9	12,116.4	46.6	46.2	-105.03	1,061.5	76.5	679.6	589.1	90.52	7.508	
13,100.0	11,940.6	13,242.9	12,115.9	47.2	46.9	-105.03	1,161.5	75.8	679.6	587.7	91.84	7.400	
13,200.0	11,940.1	13,342.9	12,115.4	48.0	47.6	-105.04	1,261.5	75.0	679.6	586.3	93.26	7.287	
13,300.0	11,939.5	13,442.9	12,114.9	48.7	48.4	-105.04	1,361.5	74.2	679.6	584.8	94.76	7.171	
13,400.0	11,939.0	13,542.9	12,114.3	49.5	49.2	-105.04	1,461.5	73.4	679.5	583.2	96.35	7.053	
13,500.0	11,938.4	13,642.9	12,113.8	50.4	50.0	-105.05	1,561.5	72.6	679.5	581.5	98.02	6.933	
13,600.0	11,937.8	13,742.9	12,113.3	51.3	50.9	-105.05	1,661.5	71.9	679.5	579.8	99.77	6.811	
13,700.0	11,937.3	13,842.9	12,112.8	52.2	51.8	-105.05	1,761.5	71.1	679.5	577.9	101.59	6.689	
13,800.0	11,936.7	13,942.9	12,112.2	53.1	52.8	-105.06	1,861.5	70.3	679.5	576.0	103.47	6.567	
13,900.0	11,936.2	14,042.9	12,111.7	54.1	53.8	-105.06	1,961.4	69.5	679.5	574.1	105.43	6.445	
14,000.0	11,935.6	14,142.9	12,111.2	55.2	54.8	-105.06	2,061.4	68.7	679.5	572.0	107.44	6.324	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,935.0	14,242.9	12,110.7	56.2	55.9	-105.07	2,161.4	68.0	679.5	569.9	109.51	6.204	
14,200.0	11,934.5	14,342.9	12,110.2	57.3	57.0	-105.07	2,261.4	67.2	679.4	567.8	111.64	6.086	
14,300.0	11,933.9	14,442.9	12,109.6	58.4	58.1	-105.08	2,361.4	66.4	679.4	565.6	113.82	5.970	
14,400.0	11,933.4	14,542.9	12,109.1	59.5	59.2	-105.08	2,461.4	65.6	679.4	563.4	116.04	5.855	
14,500.0	11,932.8	14,642.9	12,108.6	60.7	60.4	-105.08	2,561.4	64.8	679.4	561.1	118.32	5.742	
14,600.0	11,932.3	14,742.9	12,108.1	61.9	61.6	-105.09	2,661.4	64.1	679.4	558.8	120.63	5.632	
14,700.0	11,931.7	14,842.9	12,107.6	63.1	62.8	-105.09	2,761.4	63.3	679.4	556.4	122.99	5.524	
14,800.0	11,931.1	14,942.9	12,107.0	64.3	64.0	-105.09	2,861.4	62.5	679.4	554.0	125.39	5.418	
14,900.0	11,930.6	15,042.9	12,106.5	65.5	65.2	-105.10	2,961.4	61.7	679.4	551.5	127.82	5.315	
15,000.0	11,930.0	15,142.9	12,106.0	66.8	66.5	-105.10	3,061.4	60.9	679.3	549.1	130.29	5.214	
15,100.0	11,929.5	15,242.9	12,105.5	68.1	67.8	-105.10	3,161.4	60.2	679.3	546.5	132.78	5.116	
15,200.0	11,928.9	15,342.9	12,104.9	69.4	69.1	-105.11	3,261.4	59.4	679.3	544.0	135.31	5.020	
15,300.0	11,928.3	15,442.9	12,104.4	70.7	70.4	-105.11	3,361.4	58.6	679.3	541.4	137.87	4.927	
15,400.0	11,927.8	15,542.9	12,103.9	72.0	71.7	-105.11	3,461.4	57.8	679.3	538.8	140.46	4.836	
15,500.0	11,927.2	15,642.9	12,103.4	73.3	73.1	-105.12	3,561.4	57.0	679.3	536.2	143.07	4.748	
15,600.0	11,926.7	15,742.9	12,102.9	74.7	74.4	-105.12	3,661.4	56.3	679.3	533.6	145.71	4.662	
15,700.0	11,926.1	15,842.9	12,102.3	76.0	75.8	-105.12	3,761.4	55.5	679.3	530.9	148.37	4.578	
15,800.0	11,925.6	15,942.9	12,101.8	77.4	77.2	-105.13	3,861.4	54.7	679.2	528.2	151.05	4.497	
15,900.0	11,925.0	16,042.9	12,101.3	78.8	78.5	-105.13	3,961.4	53.9	679.2	525.5	153.75	4.418	
16,000.0	11,924.4	16,142.9	12,100.8	80.2	79.9	-105.14	4,061.4	53.1	679.2	522.7	156.48	4.341	
16,100.0	11,923.9	16,242.9	12,100.3	81.6	81.4	-105.14	4,161.3	52.4	679.2	520.0	159.22	4.266	
16,200.0	11,923.3	16,342.9	12,099.7	83.0	82.8	-105.14	4,261.3	51.6	679.2	517.2	161.98	4.193	
16,300.0	11,922.8	16,442.9	12,099.2	84.4	84.2	-105.15	4,361.3	50.8	679.2	514.4	164.75	4.122	
16,400.0	11,922.2	16,542.9	12,098.7	85.9	85.6	-105.15	4,461.3	50.0	679.2	511.6	167.54	4.054	
16,500.0	11,921.6	16,642.9	12,098.2	87.3	87.1	-105.15	4,561.3	49.3	679.2	508.8	170.35	3.987	
16,600.0	11,921.1	16,742.9	12,097.6	88.7	88.5	-105.16	4,661.3	48.5	679.1	506.0	173.17	3.922	
16,700.0	11,920.5	16,842.9	12,097.1	90.2	90.0	-105.16	4,761.3	47.7	679.1	503.1	176.01	3.859	
16,800.0	11,920.0	16,942.9	12,096.6	91.7	91.4	-105.16	4,861.3	46.9	679.1	500.3	178.86	3.797	
16,900.0	11,919.4	17,042.9	12,096.1	93.1	92.9	-105.17	4,961.3	46.1	679.1	497.4	181.72	3.737	
17,000.0	11,918.8	17,142.9	12,095.6	94.6	94.4	-105.17	5,061.3	45.4	679.1	494.5	184.59	3.679	
17,100.0	11,918.3	17,242.9	12,095.0	96.1	95.9	-105.17	5,161.3	44.6	679.1	491.6	187.47	3.622	
17,200.0	11,917.7	17,342.9	12,094.5	97.6	97.4	-105.18	5,261.3	43.8	679.1	488.7	190.37	3.567	
17,300.0	11,917.2	17,442.9	12,094.0	99.0	98.8	-105.18	5,361.3	43.0	679.1	485.8	193.27	3.513	
17,400.0	11,916.6	17,542.9	12,093.5	100.5	100.3	-105.18	5,461.3	42.2	679.0	482.9	196.19	3.461	
17,500.0	11,916.1	17,642.9	12,093.0	102.0	101.8	-105.19	5,561.3	41.5	679.0	479.9	199.11	3.410	
17,600.0	11,915.5	17,742.9	12,092.4	103.5	103.4	-105.19	5,661.3	40.7	679.0	477.0	202.05	3.361	
17,700.0	11,914.9	17,842.9	12,091.9	105.1	104.9	-105.20	5,761.3	39.9	679.0	474.0	204.99	3.312	
17,800.0	11,914.4	17,942.9	12,091.4	106.6	106.4	-105.20	5,861.3	39.1	679.0	471.1	207.94	3.265	
17,900.0	11,913.8	18,042.9	12,090.9	108.1	107.9	-105.20	5,961.3	38.3	679.0	468.1	210.90	3.219	
18,000.0	11,913.3	18,142.9	12,090.3	109.6	109.4	-105.21	6,061.3	37.6	679.0	465.1	213.86	3.175	
18,100.0	11,912.7	18,242.9	12,089.8	111.1	111.0	-105.21	6,161.3	36.8	679.0	462.1	216.84	3.131	
18,200.0	11,912.1	18,342.9	12,089.3	112.7	112.5	-105.21	6,261.3	36.0	678.9	459.1	219.82	3.089	
18,300.0	11,911.6	18,442.9	12,088.8	114.2	114.0	-105.22	6,361.3	35.2	678.9	456.1	222.80	3.047	
18,400.0	11,911.0	18,542.9	12,088.3	115.7	115.6	-105.22	6,461.2	34.4	678.9	453.1	225.80	3.007	
18,500.0	11,910.5	18,642.9	12,087.7	117.3	117.1	-105.22	6,561.2	33.7	678.9	450.1	228.80	2.967	
18,600.0	11,909.9	18,742.9	12,087.2	118.8	118.7	-105.23	6,661.2	32.9	678.9	447.1	231.80	2.929	
18,700.0	11,909.4	18,842.9	12,086.7	120.4	120.2	-105.23	6,761.2	32.1	678.9	444.1	234.81	2.891	
18,800.0	11,908.8	18,942.9	12,086.2	121.9	121.7	-105.23	6,861.2	31.3	678.9	441.0	237.83	2.854	
18,900.0	11,908.2	19,042.9	12,085.7	123.5	123.3	-105.24	6,961.2	30.5	678.9	438.0	240.85	2.819	
19,000.0	11,907.7	19,142.9	12,085.1	125.0	124.9	-105.24	7,061.2	29.8	678.8	435.0	243.88	2.784	
19,100.0	11,907.1	19,242.9	12,084.6	126.6	126.4	-105.24	7,161.2	29.0	678.8	431.9	246.91	2.749	
19,200.0	11,906.6	19,342.9	12,084.1	128.1	128.0	-105.25	7,261.2	28.2	678.8	428.9	249.95	2.716	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,906.0	19,442.9	12,083.6	129.7	129.5	-105.25	7,361.2	27.4	678.8	425.8	252.99	2.683	
19,400.0	11,905.4	19,542.9	12,083.0	131.3	131.1	-105.26	7,461.2	26.6	678.8	422.8	256.03	2.651	
19,500.0	11,904.9	19,642.9	12,082.5	132.8	132.7	-105.26	7,561.2	25.9	678.8	419.7	259.08	2.620	
19,600.0	11,904.3	19,742.9	12,082.0	134.4	134.3	-105.26	7,661.2	25.1	678.8	416.6	262.14	2.589	
19,700.0	11,903.8	19,842.9	12,081.5	136.0	135.8	-105.27	7,761.2	24.3	678.8	413.6	265.19	2.559	
19,800.0	11,903.2	19,942.9	12,081.0	137.5	137.4	-105.27	7,861.2	23.5	678.7	410.5	268.26	2.530	
19,900.0	11,902.7	20,042.9	12,080.4	139.1	139.0	-105.27	7,961.2	22.7	678.7	407.4	271.32	2.502	
20,000.0	11,902.1	20,142.9	12,079.9	140.7	140.6	-105.28	8,061.2	22.0	678.7	404.3	274.39	2.474	
20,100.0	11,901.5	20,242.9	12,079.4	142.3	142.1	-105.28	8,161.2	21.2	678.7	401.2	277.46	2.446	
20,200.0	11,901.0	20,342.9	12,078.9	143.8	143.7	-105.28	8,261.2	20.4	678.7	398.2	280.54	2.419	
20,300.0	11,900.4	20,442.9	12,078.4	145.4	145.3	-105.29	8,361.2	19.6	678.7	395.1	283.61	2.393	
20,400.0	11,899.9	20,542.9	12,077.8	147.0	146.9	-105.29	8,461.2	18.8	678.7	392.0	286.70	2.367	
20,500.0	11,899.3	20,642.9	12,077.3	148.6	148.5	-105.29	8,561.2	18.1	678.7	388.9	289.78	2.342	
20,600.0	11,898.7	20,742.9	12,076.8	150.2	150.1	-105.30	8,661.2	17.3	678.6	385.8	292.87	2.317	
20,700.0	11,898.2	20,842.9	12,076.3	151.8	151.6	-105.30	8,761.1	16.5	678.6	382.7	295.96	2.293	
20,800.0	11,897.6	20,942.9	12,075.8	153.4	153.2	-105.31	8,861.1	15.7	678.6	379.6	299.05	2.269	
20,900.0	11,897.1	21,042.9	12,075.2	155.0	154.8	-105.31	8,961.1	14.9	678.6	376.5	302.14	2.246	
21,000.0	11,896.5	21,142.9	12,074.7	156.5	156.4	-105.31	9,061.1	14.2	678.6	373.3	305.24	2.223	
21,100.0	11,896.0	21,242.9	12,074.2	158.1	158.0	-105.32	9,161.1	13.4	678.6	370.2	308.34	2.201	
21,200.0	11,895.4	21,342.9	12,073.7	159.7	159.6	-105.32	9,261.1	12.6	678.6	367.1	311.44	2.179	
21,300.0	11,894.8	21,442.9	12,073.1	161.3	161.2	-105.32	9,361.1	11.8	678.6	364.0	314.55	2.157	
21,400.0	11,894.3	21,542.9	12,072.6	162.9	162.8	-105.33	9,461.1	11.0	678.5	360.9	317.66	2.136	
21,500.0	11,893.7	21,642.9	12,072.1	164.5	164.4	-105.33	9,561.1	10.3	678.5	357.8	320.77	2.115	
21,600.0	11,893.2	21,742.9	12,071.6	166.1	166.0	-105.33	9,661.1	9.5	678.5	354.6	323.88	2.095	
21,700.0	11,892.6	21,842.9	12,071.1	167.7	167.6	-105.34	9,761.1	8.7	678.5	351.5	326.99	2.075	
21,800.0	11,892.0	21,942.9	12,070.5	169.3	169.2	-105.34	9,861.1	7.9	678.5	348.4	330.11	2.055	
21,900.0	11,891.5	22,042.9	12,070.0	170.9	170.8	-105.34	9,961.1	7.1	678.5	345.3	333.22	2.036	
22,000.0	11,890.9	22,142.9	12,069.5	172.5	172.4	-105.35	10,061.1	6.4	678.5	342.1	336.34	2.017	
22,100.0	11,890.4	22,242.9	12,069.0	174.1	174.0	-105.35	10,161.1	5.6	678.5	339.0	339.46	1.999	
22,191.7	11,890.5	22,334.7	12,068.5	175.6	175.5	-105.30	10,252.8	4.9	678.3	335.9	342.39	1.981 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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	26.6	2,343.2	2,343.3				
100.0	100.0	101.0	99.0	0.1	0.1	89.35	26.6	2,343.2	2,343.3	2,343.1	0.26	9,016.580	
200.0	200.0	201.0	199.0	0.5	0.5	89.35	26.6	2,343.2	2,343.3	2,342.4	0.98	2,398.909	
300.0	300.0	301.0	299.0	0.8	0.8	89.35	26.6	2,343.2	2,343.3	2,341.6	1.69	1,383.498	
400.0	400.0	401.0	399.0	1.2	1.2	89.35	26.6	2,343.2	2,343.3	2,340.9	2.41	972.049	
500.0	500.0	501.0	499.0	1.6	1.6	89.35	26.6	2,343.2	2,343.3	2,340.2	3.13	749.230	
600.0	600.0	601.0	599.0	1.9	1.9	89.35	26.6	2,343.2	2,343.3	2,339.5	3.84	609.513	
700.0	700.0	701.0	699.0	2.3	2.3	89.35	26.6	2,343.2	2,343.3	2,338.8	4.56	513.715	
800.0	800.0	801.0	799.0	2.6	2.6	89.35	26.6	2,343.2	2,343.3	2,338.1	5.28	443.941	
900.0	900.0	901.0	899.0	3.0	3.0	89.35	26.6	2,343.2	2,343.3	2,337.3	6.00	390.854	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	89.35	26.6	2,343.2	2,343.3	2,336.6	6.71	349.107	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	89.35	26.6	2,343.2	2,343.3	2,335.9	7.43	315.418	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	89.35	26.6	2,343.2	2,343.3	2,335.2	8.15	287.658	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	89.35	26.6	2,343.2	2,343.3	2,334.5	8.86	264.389	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	89.35	26.6	2,343.2	2,343.3	2,333.8	9.58	244.604	
1,500.0	1,500.0	1,499.0	1,499.0	5.1	5.1	89.35	26.6	2,343.2	2,343.3	2,333.0	10.29	227.731	
1,600.0	1,600.0	1,665.1	1,665.1	5.5	5.7	-14.56	26.1	2,340.9	2,341.1	2,329.9	11.21	208.915	
1,700.0	1,700.0	1,831.3	1,831.1	5.8	6.3	-14.56	24.6	2,333.8	2,334.3	2,322.2	12.10	192.908	
1,800.0	1,799.9	1,996.3	1,995.7	6.2	6.9	-14.58	22.0	2,322.2	2,323.1	2,310.1	12.99	178.844	
1,900.0	1,899.7	2,159.8	2,158.3	6.5	7.4	-14.60	18.5	2,306.1	2,307.3	2,293.5	13.87	166.379	
2,000.0	1,999.4	2,312.8	2,310.1	6.9	8.0	-14.62	14.4	2,287.0	2,287.2	2,272.5	14.71	155.498	
2,100.0	2,098.9	2,410.2	2,406.5	7.2	8.4	-14.67	11.5	2,273.7	2,264.5	2,249.1	15.39	147.131	
2,200.0	2,198.3	2,507.2	2,502.6	7.6	8.7	-14.74	8.6	2,260.5	2,240.1	2,224.0	16.07	139.363	
2,300.0	2,297.4	2,603.7	2,598.2	8.0	9.1	-14.82	5.8	2,247.4	2,214.0	2,197.3	16.76	132.124	
2,400.0	2,396.4	2,700.1	2,693.6	8.3	9.5	-14.84	2.9	2,234.3	2,187.2	2,169.7	17.44	125.401	
2,500.0	2,495.5	2,796.4	2,788.9	8.7	9.9	-14.86	0.1	2,221.2	2,160.3	2,142.2	18.13	119.174	
2,600.0	2,594.5	2,907.3	2,884.3	9.1	10.3	-14.88	-2.8	2,208.1	2,133.5	2,114.6	18.87	113.067	
2,700.0	2,693.5	2,989.0	2,979.7	9.5	10.6	-14.90	-5.6	2,195.0	2,106.6	2,087.1	19.51	107.986	
2,800.0	2,792.5	3,085.4	3,075.1	9.9	11.0	-14.93	-8.5	2,181.9	2,079.8	2,059.6	20.20	102.947	
2,900.0	2,891.6	3,181.7	3,170.5	10.3	11.4	-14.95	-11.3	2,168.8	2,052.9	2,032.0	20.90	98.233	
3,000.0	2,990.6	3,278.0	3,265.9	10.7	11.8	-14.97	-14.2	2,155.7	2,026.1	2,004.5	21.60	93.814	
3,100.0	3,089.6	3,374.3	3,361.3	11.0	12.2	-14.99	-17.0	2,142.6	1,999.2	1,976.9	22.30	89.665	
3,200.0	3,188.6	3,470.7	3,456.7	11.4	12.5	-15.02	-19.9	2,129.5	1,972.4	1,949.4	23.00	85.763	
3,300.0	3,287.7	3,567.0	3,552.0	11.8	12.9	-15.04	-22.7	2,116.4	1,945.5	1,921.8	23.70	82.086	
3,400.0	3,386.7	3,663.3	3,647.4	12.2	13.3	-15.07	-25.6	2,103.3	1,918.7	1,894.3	24.41	78.618	
3,500.0	3,485.7	3,759.6	3,742.8	12.7	13.7	-15.10	-28.4	2,090.2	1,891.8	1,866.7	25.11	75.340	
3,600.0	3,584.8	3,855.9	3,838.2	13.1	14.1	-15.12	-31.3	2,077.1	1,865.0	1,839.2	25.82	72.238	
3,700.0	3,683.8	3,952.3	3,933.6	13.5	14.5	-15.15	-34.1	2,064.0	1,838.1	1,811.6	26.52	69.298	
3,800.0	3,782.8	4,048.6	4,029.0	13.9	14.9	-15.18	-37.0	2,050.9	1,811.3	1,784.0	27.23	66.510	
3,900.0	3,881.8	4,144.9	4,124.4	14.3	15.3	-15.21	-39.8	2,037.8	1,784.4	1,756.5	27.94	63.860	
4,000.0	3,980.9	4,241.2	4,219.8	14.7	15.7	-15.24	-42.7	2,024.7	1,757.6	1,728.9	28.65	61.340	
4,100.0	4,079.9	4,337.6	4,315.1	15.1	16.1	-15.27	-45.5	2,011.6	1,730.7	1,701.4	29.36	58.941	
4,200.0	4,178.9	4,433.9	4,410.5	15.5	16.5	-15.30	-48.4	1,998.5	1,703.9	1,673.8	30.08	56.653	
4,300.0	4,277.9	4,530.2	4,505.9	15.9	16.9	-15.34	-51.2	1,985.4	1,677.0	1,646.3	30.79	54.470	
4,400.0	4,377.0	4,626.5	4,601.3	16.3	17.3	-15.37	-54.1	1,972.3	1,650.2	1,618.7	31.50	52.385	
4,500.0	4,476.0	4,722.9	4,696.7	16.7	17.7	-15.41	-56.9	1,959.2	1,623.4	1,591.1	32.22	50.391	
4,600.0	4,575.0	4,819.2	4,792.1	17.1	18.1	-15.44	-59.8	1,946.1	1,596.5	1,563.6	32.93	48.483	
4,700.0	4,674.0	4,915.5	4,887.5	17.6	18.5	-15.48	-62.6	1,933.0	1,569.7	1,536.0	33.64	46.655	
4,800.0	4,773.1	5,011.8	4,982.9	18.0	18.9	-15.52	-65.5	1,919.9	1,542.8	1,508.5	34.36	44.903	
4,900.0	4,872.1	5,108.2	5,078.2	18.4	19.3	-15.56	-68.3	1,906.8	1,516.0	1,480.9	35.08	43.221	
5,000.0	4,971.1	5,204.5	5,173.6	18.8	19.7	-15.61	-71.2	1,893.7	1,489.2	1,453.4	35.79	41.607	
5,100.0	5,070.2	5,300.8	5,269.0	19.2	20.1	-15.65	-74.0	1,880.6	1,462.3	1,425.8	36.51	40.055	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
5,200.0	5,169.2	5,402.9	5,364.4	19.6	20.5	-15.69	-76.9	1,867.5	1,435.5	1,398.2	37.25	38.540	
5,300.0	5,268.2	5,506.5	5,459.8	20.0	20.9	-15.74	-79.7	1,854.4	1,408.6	1,370.6	37.99	37.079	
5,400.0	5,367.2	5,589.8	5,555.2	20.5	21.3	-15.79	-82.6	1,841.3	1,381.8	1,343.1	38.66	35.742	
5,500.0	5,466.3	5,686.1	5,650.6	20.9	21.7	-15.84	-85.4	1,828.2	1,355.0	1,315.6	39.38	34.409	
5,600.0	5,565.3	5,782.4	5,746.0	21.3	22.1	-15.90	-88.3	1,815.1	1,328.1	1,288.0	40.10	33.123	
5,700.0	5,664.3	5,878.8	5,841.3	21.7	22.5	-15.95	-91.1	1,802.0	1,301.3	1,260.5	40.82	31.883	
5,800.0	5,763.3	5,975.1	5,936.7	22.1	22.9	-16.01	-94.0	1,788.9	1,274.5	1,232.9	41.53	30.684	
5,900.0	5,862.4	6,071.4	6,032.1	22.5	23.3	-16.07	-96.8	1,775.8	1,247.6	1,205.4	42.25	29.527	
6,000.0	5,961.4	6,167.7	6,127.5	23.0	23.7	-16.13	-99.7	1,762.7	1,220.8	1,177.8	42.97	28.408	
6,100.0	6,060.4	6,264.1	6,222.9	23.4	24.1	-16.20	-102.5	1,749.6	1,194.0	1,150.3	43.69	27.326	
6,200.0	6,159.4	6,360.4	6,318.3	23.8	24.5	-16.27	-105.4	1,736.5	1,167.2	1,122.7	44.41	26.279	
6,300.0	6,258.5	6,456.7	6,413.7	24.2	24.9	-16.34	-108.2	1,723.4	1,140.3	1,095.2	45.14	25.265	
6,400.0	6,357.5	6,553.0	6,509.1	24.6	25.3	-16.41	-111.1	1,710.3	1,113.5	1,067.6	45.86	24.283	
6,500.0	6,456.5	6,649.4	6,604.4	25.1	25.7	-16.49	-113.9	1,697.2	1,086.7	1,040.1	46.58	23.331	
6,600.0	6,555.6	6,745.7	6,699.8	25.5	26.1	-16.58	-116.8	1,684.1	1,059.9	1,012.6	47.30	22.408	
6,700.0	6,654.6	6,842.0	6,795.2	25.9	26.5	-16.66	-119.6	1,671.0	1,033.0	985.0	48.02	21.512	
6,800.0	6,753.6	6,938.3	6,890.6	26.3	26.9	-16.75	-122.5	1,657.9	1,006.2	957.5	48.74	20.644	
6,900.0	6,852.6	7,034.7	6,986.0	26.7	27.3	-16.85	-125.3	1,644.8	979.4	930.0	49.47	19.800	
7,000.0	6,951.7	7,131.0	7,081.4	27.1	27.7	-16.95	-128.2	1,631.7	952.6	902.4	50.19	18.981	
7,100.0	7,050.7	7,227.3	7,176.8	27.6	28.1	-17.06	-131.0	1,618.6	925.8	874.9	50.91	18.185	
7,131.4	7,081.7	7,257.5	7,206.7	27.7	28.3	-17.10	-131.9	1,614.5	917.4	866.3	51.14	17.940	
7,200.0	7,149.8	7,323.8	7,272.3	28.0	28.5	-17.08	-133.9	1,605.5	899.6	847.9	51.63	17.422	
7,300.0	7,249.2	7,420.9	7,368.5	28.4	28.9	-17.04	-136.7	1,592.3	875.6	823.3	52.36	16.725	
7,400.0	7,348.9	7,518.5	7,465.2	28.8	29.4	-16.95	-139.6	1,579.0	854.1	801.1	53.08	16.093	
7,500.0	7,448.7	7,616.7	7,562.4	29.1	29.8	-16.82	-142.5	1,565.7	835.1	781.3	53.79	15.524	
7,600.0	7,548.7	7,715.3	7,660.0	29.5	30.2	-16.65	-145.5	1,552.3	818.5	764.0	54.51	15.017	
7,664.7	7,613.3	7,779.3	7,723.4	29.7	30.5	87.39	-147.3	1,543.6	809.1	754.2	54.96	14.721	
7,700.0	7,648.7	7,814.3	7,758.0	29.8	30.6	87.45	-148.4	1,538.8	804.3	749.1	55.21	14.568	
7,800.0	7,748.7	7,913.3	7,856.1	30.1	31.0	87.62	-151.3	1,525.3	790.6	734.7	55.91	14.140	
7,900.0	7,848.7	8,012.3	7,954.1	30.4	31.4	87.79	-154.2	1,511.9	776.9	720.3	56.61	13.723	
8,000.0	7,948.7	8,111.4	8,052.2	30.7	31.8	87.98	-157.2	1,498.4	763.2	705.9	57.31	13.317	
8,100.0	8,048.7	8,210.4	8,150.3	31.0	32.3	88.16	-160.1	1,484.9	749.5	691.5	58.01	12.920	
8,200.0	8,148.7	8,309.4	8,248.3	31.4	32.7	88.36	-163.0	1,471.5	735.8	677.1	58.71	12.532	
8,300.0	8,248.7	8,408.4	8,346.4	31.7	33.1	88.56	-166.0	1,458.0	722.1	662.7	59.42	12.153	
8,400.0	8,348.7	8,507.5	8,444.5	32.0	33.5	88.78	-168.9	1,444.5	708.4	648.3	60.12	11.783	
8,500.0	8,448.7	8,591.9	8,528.2	32.3	33.9	88.95	-171.2	1,433.9	695.8	634.9	60.91	11.423	
8,600.0	8,548.7	8,676.4	8,612.2	32.6	34.2	89.10	-173.1	1,425.1	685.3	623.6	61.67	11.112	
8,700.0	8,648.7	8,761.2	8,696.7	33.0	34.5	89.22	-174.7	1,418.0	677.0	614.5	62.41	10.847	
8,800.0	8,748.7	8,846.3	8,781.6	33.3	34.8	89.31	-175.8	1,412.8	670.8	607.7	63.12	10.628	
8,900.0	8,848.7	8,931.6	8,866.8	33.6	35.1	89.37	-176.5	1,409.4	666.8	603.0	63.80	10.452	
9,000.0	8,948.7	9,017.0	8,952.2	33.9	35.4	89.40	-176.9	1,407.9	665.1	600.6	64.44	10.320	
9,048.5	8,997.1	9,060.9	8,996.1	34.1	35.6	89.40	-176.9	1,407.8	665.0	600.2	64.75	10.269	
9,100.0	9,048.7	9,112.4	9,047.7	34.3	35.7	89.40	-176.9	1,407.8	665.0	599.9	65.10	10.214	
9,200.0	9,148.7	9,212.4	9,147.7	34.6	36.0	89.40	-176.9	1,407.8	665.0	599.2	65.77	10.110	
9,300.0	9,248.7	9,312.4	9,247.7	34.9	36.3	89.40	-176.9	1,407.8	665.0	598.5	66.44	10.008	
9,400.0	9,348.7	9,412.4	9,347.7	35.2	36.6	89.40	-176.9	1,407.8	665.0	597.8	67.12	9.907	
9,500.0	9,448.7	9,512.4	9,447.7	35.6	37.0	89.40	-176.9	1,407.8	665.0	597.2	67.79	9.809	
9,600.0	9,548.7	9,612.4	9,547.7	35.9	37.3	89.40	-176.9	1,407.8	665.0	596.5	68.47	9.712	
9,700.0	9,648.7	9,712.4	9,647.7	36.2	37.6	89.40	-176.9	1,407.8	665.0	595.8	69.14	9.617	
9,800.0	9,748.7	9,812.4	9,747.7	36.5	37.9	89.40	-176.9	1,407.8	665.0	595.1	69.82	9.524	
9,900.0	9,848.7	9,912.4	9,847.7	36.9	38.2	89.40	-176.9	1,407.8	665.0	594.5	70.50	9.432	
10,000.0	9,948.7	10,012.4	9,947.7	37.2	38.5	89.40	-176.9	1,407.8	665.0	593.8	71.18	9.342	

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 #132H
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Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	10,048.7	10,112.4	10,047.7	37.5	38.8	89.40	-176.9	1,407.8	665.0	593.1	71.86	9.254	
10,200.0	10,148.7	10,212.4	10,147.7	37.9	39.2	89.40	-176.9	1,407.8	665.0	592.4	72.54	9.167	
10,300.0	10,248.7	10,312.4	10,247.7	38.2	39.5	89.40	-176.9	1,407.8	665.0	591.7	73.22	9.082	
10,400.0	10,348.7	10,412.4	10,347.7	38.5	39.8	89.40	-176.9	1,407.8	665.0	591.1	73.90	8.998	
10,500.0	10,448.7	10,512.4	10,447.7	38.9	40.1	89.40	-176.9	1,407.8	665.0	590.4	74.58	8.916	
10,600.0	10,548.7	10,612.4	10,547.7	39.2	40.4	89.40	-176.9	1,407.8	665.0	589.7	75.26	8.835	
10,700.0	10,648.7	10,712.4	10,647.7	39.5	40.8	89.40	-176.9	1,407.8	665.0	589.0	75.95	8.755	
10,800.0	10,748.7	10,812.4	10,747.7	39.9	41.1	89.40	-176.9	1,407.8	665.0	588.3	76.63	8.677	
10,900.0	10,848.7	10,912.4	10,847.7	40.2	41.4	89.40	-176.9	1,407.8	665.0	587.6	77.32	8.600	
11,000.0	10,948.7	11,012.4	10,947.7	40.5	41.7	89.40	-176.9	1,407.8	665.0	587.0	78.00	8.525	
11,100.0	11,048.7	11,112.4	11,047.7	40.9	42.1	89.40	-176.9	1,407.8	665.0	586.3	78.69	8.451	
11,200.0	11,148.7	11,212.4	11,147.7	41.2	42.4	89.40	-176.9	1,407.8	665.0	585.6	79.37	8.378	
11,300.0	11,248.7	11,312.4	11,247.7	41.5	42.7	89.40	-176.9	1,407.8	665.0	584.9	80.06	8.306	
11,400.0	11,348.7	11,412.4	11,347.7	41.9	43.0	89.40	-176.9	1,407.8	665.0	584.2	80.75	8.235	
11,423.3	11,372.0	11,435.8	11,371.0	42.0	43.1	89.40	-176.9	1,407.8	665.0	584.0	80.91	8.219	
11,450.0	11,398.6	11,462.4	11,397.6	42.0	43.2	89.91	-176.9	1,407.8	665.0	583.9	81.09	8.200	
11,467.0	11,415.6	11,479.4	11,414.6	42.1	43.2	90.00	-176.9	1,407.8	664.9	583.7	81.21	8.188	CC
11,500.0	11,448.4	11,512.2	11,447.4	42.2	43.4	90.30	-176.9	1,407.8	665.0	583.5	81.43	8.166	
11,550.0	11,497.6	11,561.4	11,496.6	42.4	43.5	91.03	-176.9	1,407.8	665.1	583.3	81.77	8.134	
11,600.0	11,545.9	11,609.6	11,544.9	42.5	43.7	92.08	-176.9	1,407.8	665.4	583.3	82.10	8.106	
11,650.0	11,592.8	11,659.0	11,594.2	42.6	43.8	93.38	-175.9	1,407.8	666.3	583.8	82.43	8.082	
11,700.0	11,638.0	11,710.7	11,645.6	42.8	44.0	94.71	-170.4	1,407.8	667.5	584.7	82.77	8.065	
11,750.0	11,681.2	11,764.1	11,698.0	42.9	44.1	96.03	-160.0	1,407.7	669.1	586.0	83.09	8.053	
11,800.0	11,722.1	11,819.4	11,750.9	43.0	44.3	97.33	-144.1	1,407.6	671.1	587.7	83.37	8.049	
11,850.0	11,760.3	11,876.7	11,803.9	43.1	44.4	98.59	-122.4	1,407.4	673.3	589.7	83.61	8.053	
11,900.0	11,795.5	11,936.1	11,856.3	43.2	44.6	99.80	-94.3	1,407.3	675.8	592.0	83.78	8.066	
11,950.0	11,827.6	11,997.8	11,907.3	43.2	44.7	100.96	-59.7	1,407.0	678.4	594.5	83.87	8.088	
12,000.0	11,856.1	12,061.8	11,955.9	43.3	44.8	102.04	-18.1	1,406.7	681.0	597.1	83.88	8.119	
12,050.0	11,881.0	12,128.0	12,001.0	43.3	44.9	103.03	30.3	1,406.4	683.6	599.8	83.81	8.156	
12,100.0	11,902.0	12,196.4	12,041.4	43.3	45.0	103.90	85.4	1,406.0	686.0	602.3	83.70	8.196	
12,150.0	11,918.9	12,266.7	12,075.8	43.4	45.0	104.63	146.7	1,405.6	688.1	604.5	83.58	8.233	
12,200.0	11,931.7	12,338.8	12,103.0	43.4	45.1	105.21	213.3	1,405.1	689.8	606.3	83.50	8.261	
12,250.0	11,940.3	12,412.2	12,121.9	43.5	45.1	105.61	284.2	1,404.6	691.0	607.5	83.51	8.274	
12,300.0	11,944.5	12,486.4	12,131.7	43.6	45.2	105.82	357.8	1,404.1	691.7	608.1	83.67	8.268	
12,326.5	11,944.9	12,526.0	12,133.0	43.6	45.3	105.85	397.3	1,403.8	691.9	608.1	83.82	8.255	
12,391.6	11,944.6	12,607.6	12,132.6	43.7	45.4	105.86	463.7	1,403.3	691.9	607.7	84.22	8.215	
12,400.0	11,944.5	12,600.7	12,132.6	43.8	45.4	105.86	472.0	1,403.2	691.9	607.7	84.22	8.215	
12,500.0	11,944.0	12,700.7	12,132.0	44.1	45.7	105.86	572.0	1,402.4	691.9	607.0	84.88	8.152	
12,600.0	11,943.4	12,800.7	12,131.5	44.4	46.0	105.86	672.0	1,401.6	691.9	606.3	85.65	8.079	
12,700.0	11,942.9	12,900.7	12,131.0	44.9	46.4	105.86	772.0	1,400.8	691.9	605.4	86.53	7.997	
12,800.0	11,942.3	13,000.7	12,130.5	45.4	46.8	105.87	872.0	1,400.0	691.9	604.4	87.52	7.906	
12,900.0	11,941.7	13,100.7	12,130.0	45.9	47.4	105.87	972.0	1,399.2	692.0	603.3	88.62	7.808	
13,000.0	11,941.2	13,200.7	12,129.4	46.6	47.9	105.87	1,072.0	1,398.4	692.0	602.2	89.82	7.704	
13,100.0	11,940.6	13,300.7	12,128.9	47.2	48.6	105.88	1,172.0	1,397.6	692.0	600.9	91.12	7.595	
13,200.0	11,940.1	13,400.7	12,128.4	48.0	49.3	105.88	1,272.0	1,396.8	692.0	599.5	92.51	7.480	
13,300.0	11,939.5	13,500.7	12,127.9	48.7	50.0	105.88	1,372.0	1,396.0	692.0	598.0	93.99	7.363	
13,400.0	11,939.0	13,600.7	12,127.4	49.5	50.8	105.88	1,472.0	1,395.3	692.0	596.5	95.55	7.242	
13,500.0	11,938.4	13,700.7	12,126.8	50.4	51.6	105.89	1,572.0	1,394.5	692.0	594.8	97.20	7.120	
13,600.0	11,937.8	13,800.7	12,126.3	51.3	52.5	105.89	1,672.0	1,393.7	692.1	593.1	98.93	6.996	
13,700.0	11,937.3	13,900.7	12,125.8	52.2	53.4	105.89	1,771.9	1,392.9	692.1	591.4	100.73	6.871	
13,800.0	11,936.7	14,000.7	12,125.3	53.1	54.3	105.90	1,871.9	1,392.1	692.1	589.5	102.59	6.746	
13,900.0	11,936.2	14,100.7	12,124.7	54.1	55.3	105.90	1,971.9	1,391.3	692.1	587.6	104.53	6.621	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWID												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	11,935.6	14,200.7	12,124.2	55.2	56.3	105.90	2,071.9	1,390.5	692.1	585.6	106.52	6.498	
14,100.0	11,935.0	14,300.7	12,123.7	56.2	57.3	105.90	2,171.9	1,389.7	692.1	583.6	108.57	6.375	
14,200.0	11,934.5	14,400.7	12,123.2	57.3	58.4	105.91	2,271.9	1,388.9	692.2	581.5	110.68	6.254	
14,300.0	11,933.9	14,500.7	12,122.7	58.4	59.4	105.91	2,371.9	1,388.1	692.2	579.3	112.84	6.134	
14,400.0	11,933.4	14,600.7	12,122.1	59.5	60.6	105.91	2,471.9	1,387.3	692.2	577.1	115.05	6.016	
14,500.0	11,932.8	14,700.7	12,121.6	60.7	61.7	105.91	2,571.9	1,386.5	692.2	574.9	117.31	5.901	
14,600.0	11,932.3	14,800.7	12,121.1	61.9	62.9	105.92	2,671.9	1,385.7	692.2	572.6	119.61	5.787	
14,700.0	11,931.7	14,900.7	12,120.6	63.1	64.0	105.92	2,771.9	1,384.9	692.2	570.3	121.95	5.676	
14,800.0	11,931.1	15,000.7	12,120.1	64.3	65.2	105.92	2,871.9	1,384.1	692.2	567.9	124.33	5.568	
14,900.0	11,930.6	15,100.7	12,119.5	65.5	66.5	105.93	2,971.9	1,383.3	692.3	565.5	126.75	5.462	
15,000.0	11,930.0	15,200.7	12,119.0	66.8	67.7	105.93	3,071.9	1,382.5	692.3	563.1	129.21	5.358	
15,100.0	11,929.5	15,300.7	12,118.5	68.1	69.0	105.93	3,171.9	1,381.7	692.3	560.6	131.69	5.257	
15,200.0	11,928.9	15,400.7	12,118.0	69.4	70.2	105.93	3,271.9	1,380.9	692.3	558.1	134.21	5.159	
15,300.0	11,928.3	15,500.7	12,117.4	70.7	71.5	105.94	3,371.9	1,380.1	692.3	555.6	136.75	5.063	
15,400.0	11,927.8	15,600.7	12,116.9	72.0	72.8	105.94	3,471.9	1,379.3	692.3	553.0	139.33	4.969	
15,500.0	11,927.2	15,700.7	12,116.4	73.3	74.2	105.94	3,571.9	1,378.5	692.4	550.4	141.92	4.878	
15,600.0	11,926.7	15,800.7	12,115.9	74.7	75.5	105.95	3,671.9	1,377.7	692.4	547.8	144.55	4.790	
15,700.0	11,926.1	15,900.7	12,115.4	76.0	76.8	105.95	3,771.9	1,376.9	692.4	545.2	147.20	4.704	
15,800.0	11,925.6	16,000.7	12,114.8	77.4	78.2	105.95	3,871.9	1,376.1	692.4	542.5	149.87	4.620	
15,900.0	11,925.0	16,100.7	12,114.3	78.8	79.6	105.95	3,971.8	1,375.3	692.4	539.9	152.56	4.539	
16,000.0	11,924.4	16,200.7	12,113.8	80.2	80.9	105.96	4,071.8	1,374.5	692.4	537.2	155.27	4.460	
16,100.0	11,923.9	16,300.7	12,113.3	81.6	82.3	105.96	4,171.8	1,373.7	692.4	534.5	158.00	4.383	
16,200.0	11,923.3	16,400.7	12,112.8	83.0	83.7	105.96	4,271.8	1,372.9	692.5	531.7	160.74	4.308	
16,300.0	11,922.8	16,500.7	12,112.2	84.4	85.1	105.97	4,371.8	1,372.1	692.5	529.0	163.51	4.235	
16,400.0	11,922.2	16,600.7	12,111.7	85.9	86.5	105.97	4,471.8	1,371.3	692.5	526.2	166.29	4.164	
16,500.0	11,921.6	16,700.7	12,111.2	87.3	88.0	105.97	4,571.8	1,370.5	692.5	523.4	169.08	4.096	
16,600.0	11,921.1	16,800.7	12,110.7	88.7	89.4	105.97	4,671.8	1,369.7	692.5	520.6	171.89	4.029	
16,700.0	11,920.5	16,900.7	12,110.1	90.2	90.8	105.98	4,771.8	1,368.9	692.5	517.8	174.72	3.964	
16,800.0	11,920.0	17,000.7	12,109.6	91.7	92.3	105.98	4,871.8	1,368.1	692.6	515.0	177.55	3.901	
16,900.0	11,919.4	17,100.7	12,109.1	93.1	93.7	105.98	4,971.8	1,367.3	692.6	512.2	180.40	3.839	
17,000.0	11,918.8	17,200.7	12,108.6	94.6	95.2	105.99	5,071.8	1,366.5	692.6	509.3	183.26	3.779	
17,100.0	11,918.3	17,300.7	12,108.1	96.1	96.7	105.99	5,171.8	1,365.7	692.6	506.5	186.14	3.721	
17,200.0	11,917.7	17,400.7	12,107.5	97.6	98.2	105.99	5,271.8	1,364.9	692.6	503.6	189.02	3.664	
17,300.0	11,917.2	17,500.7	12,107.0	99.0	99.6	105.99	5,371.8	1,364.1	692.6	500.7	191.92	3.609	
17,400.0	11,916.6	17,600.7	12,106.5	100.5	101.1	106.00	5,471.8	1,363.4	692.6	497.8	194.82	3.555	
17,500.0	11,916.1	17,700.7	12,106.0	102.0	102.6	106.00	5,571.8	1,362.6	692.7	494.9	197.73	3.503	
17,600.0	11,915.5	17,800.7	12,105.4	103.5	104.1	106.00	5,671.8	1,361.8	692.7	492.0	200.66	3.452	
17,700.0	11,914.9	17,900.7	12,104.9	105.1	105.6	106.00	5,771.8	1,361.0	692.7	489.1	203.59	3.402	
17,800.0	11,914.4	18,000.7	12,104.4	106.6	107.1	106.01	5,871.8	1,360.2	692.7	486.2	206.53	3.354	
17,900.0	11,913.8	18,100.7	12,103.9	108.1	108.6	106.01	5,971.8	1,359.4	692.7	483.2	209.48	3.307	
18,000.0	11,913.3	18,200.7	12,103.4	109.6	110.1	106.01	6,071.8	1,358.6	692.7	480.3	212.43	3.261	
18,100.0	11,912.7	18,300.7	12,102.8	111.1	111.6	106.02	6,171.7	1,357.8	692.8	477.4	215.39	3.216	
18,200.0	11,912.1	18,400.7	12,102.3	112.7	113.2	106.02	6,271.7	1,357.0	692.8	474.4	218.36	3.173	
18,300.0	11,911.6	18,500.7	12,101.8	114.2	114.7	106.02	6,371.7	1,356.2	692.8	471.4	221.34	3.130	
18,400.0	11,911.0	18,600.7	12,101.3	115.7	116.2	106.02	6,471.7	1,355.4	692.8	468.5	224.32	3.088	
18,500.0	11,910.5	18,700.7	12,100.8	117.3	117.8	106.03	6,571.7	1,354.6	692.8	465.5	227.31	3.048	
18,600.0	11,909.9	18,800.7	12,100.2	118.8	119.3	106.03	6,671.7	1,353.8	692.8	462.5	230.31	3.008	
18,700.0	11,909.4	18,900.7	12,099.7	120.4	120.8	106.03	6,771.7	1,353.0	692.8	459.5	233.31	2.970	
18,800.0	11,908.8	19,000.7	12,099.2	121.9	122.4	106.04	6,871.7	1,352.2	692.9	456.5	236.31	2.932	
18,900.0	11,908.2	19,100.7	12,098.7	123.5	123.9	106.04	6,971.7	1,351.4	692.9	453.6	239.33	2.895	
19,000.0	11,907.7	19,200.7	12,098.1	125.0	125.5	106.04	7,071.7	1,350.6	692.9	450.5	242.34	2.859	
19,100.0	11,907.1	19,300.7	12,097.6	126.6	127.0	106.04	7,171.7	1,349.8	692.9	447.5	245.36	2.824	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,906.6	19,400.7	12,097.1	128.1	128.6	106.05	7,271.7	1,349.0	692.9	444.5	248.39	2.790	
19,300.0	11,906.0	19,500.7	12,096.6	129.7	130.1	106.05	7,371.7	1,348.2	692.9	441.5	251.42	2.756	
19,400.0	11,905.4	19,600.7	12,096.1	131.3	131.7	106.05	7,471.7	1,347.4	693.0	438.5	254.46	2.723	
19,500.0	11,904.9	19,700.7	12,095.5	132.8	133.2	106.06	7,571.7	1,346.6	693.0	435.5	257.50	2.691	
19,600.0	11,904.3	19,800.7	12,095.0	134.4	134.8	106.06	7,671.7	1,345.8	693.0	432.4	260.54	2.660	
19,700.0	11,903.8	19,900.7	12,094.5	136.0	136.4	106.06	7,771.7	1,345.0	693.0	429.4	263.59	2.629	
19,800.0	11,903.2	20,000.7	12,094.0	137.5	137.9	106.06	7,871.7	1,344.2	693.0	426.4	266.64	2.599	
19,900.0	11,902.7	20,100.7	12,093.5	139.1	139.5	106.07	7,971.7	1,343.4	693.0	423.3	269.69	2.570	
20,000.0	11,902.1	20,200.7	12,092.9	140.7	141.1	106.07	8,071.7	1,342.6	693.0	420.3	272.75	2.541	
20,100.0	11,901.5	20,300.7	12,092.4	142.3	142.7	106.07	8,171.7	1,341.8	693.1	417.2	275.81	2.513	
20,200.0	11,901.0	20,400.7	12,091.9	143.8	144.2	106.08	8,271.7	1,341.0	693.1	414.2	278.88	2.485	
20,300.0	11,900.4	20,500.7	12,091.4	145.4	145.8	106.08	8,371.6	1,340.2	693.1	411.1	281.95	2.458	
20,400.0	11,899.9	20,600.7	12,090.8	147.0	147.4	106.08	8,471.6	1,339.4	693.1	408.1	285.02	2.432	
20,500.0	11,899.3	20,700.7	12,090.3	148.6	149.0	106.08	8,571.6	1,338.6	693.1	405.0	288.09	2.406	
20,600.0	11,898.7	20,800.7	12,089.8	150.2	150.5	106.09	8,671.6	1,337.8	693.1	402.0	291.17	2.381	
20,700.0	11,898.2	20,900.7	12,089.3	151.8	152.1	106.09	8,771.6	1,337.0	693.2	398.9	294.25	2.356	
20,800.0	11,897.6	21,000.7	12,088.8	153.4	153.7	106.09	8,871.6	1,336.2	693.2	395.8	297.33	2.331	
20,900.0	11,897.1	21,100.7	12,088.2	155.0	155.3	106.09	8,971.6	1,335.4	693.2	392.8	300.42	2.307	
21,000.0	11,896.5	21,200.7	12,087.7	156.5	156.9	106.10	9,071.6	1,334.6	693.2	389.7	303.51	2.284	
21,100.0	11,896.0	21,300.7	12,087.2	158.1	158.5	106.10	9,171.6	1,333.8	693.2	386.6	306.60	2.261	
21,200.0	11,895.4	21,400.7	12,086.7	159.7	160.1	106.10	9,271.6	1,333.0	693.2	383.5	309.69	2.238	
21,300.0	11,894.8	21,500.7	12,086.2	161.3	161.7	106.11	9,371.6	1,332.3	693.2	380.5	312.79	2.216	
21,400.0	11,894.3	21,600.7	12,085.6	162.9	163.3	106.11	9,471.6	1,331.5	693.3	377.4	315.88	2.195	
21,500.0	11,893.7	21,700.7	12,085.1	164.5	164.9	106.11	9,571.6	1,330.7	693.3	374.3	318.98	2.173	
21,600.0	11,893.2	21,800.7	12,084.6	166.1	166.5	106.11	9,671.6	1,329.9	693.3	371.2	322.08	2.153	
21,700.0	11,892.6	21,900.7	12,084.1	167.7	168.0	106.12	9,771.6	1,329.1	693.3	368.1	325.19	2.132	
21,800.0	11,892.0	22,000.7	12,083.5	169.3	169.6	106.12	9,871.6	1,328.3	693.3	365.0	328.29	2.112	
21,900.0	11,891.5	22,100.7	12,083.0	170.9	171.2	106.12	9,971.6	1,327.5	693.3	361.9	331.40	2.092	
22,000.0	11,890.9	22,200.7	12,082.5	172.5	172.8	106.13	10,071.6	1,326.7	693.4	358.8	334.51	2.073	
22,100.0	11,890.4	22,300.7	12,082.0	174.1	174.4	106.13	10,171.6	1,325.9	693.4	355.7	337.62	2.054	
22,190.4	11,889.9	22,391.1	12,081.5	175.6	175.9	106.13	10,262.0	1,325.1	693.4	352.9	340.44	2.037	
22,191.7	11,890.5	22,392.4	12,081.5	175.6	175.9	106.08	10,263.3	1,325.1	693.2	352.7	340.54	2.036 ES, SF	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	88.62	56.6	2,343.0	2,343.7				
100.0	100.0	101.0	99.0	0.1	0.1	88.62	56.6	2,343.0	2,343.7	2,343.4	0.26	9,017.783	
200.0	200.0	201.0	199.0	0.5	0.5	88.62	56.6	2,343.0	2,343.7	2,342.7	0.98	2,399.229	
300.0	300.0	301.0	299.0	0.8	0.8	88.62	56.6	2,343.0	2,343.7	2,342.0	1.69	1,383.683	
400.0	400.0	401.0	399.0	1.2	1.2	88.62	56.6	2,343.0	2,343.7	2,341.2	2.41	972.178	
500.0	500.0	501.0	499.0	1.6	1.6	88.62	56.6	2,343.0	2,343.7	2,340.5	3.13	749.330	
600.0	600.0	601.0	599.0	1.9	1.9	88.62	56.6	2,343.0	2,343.7	2,339.8	3.84	609.594	
700.0	700.0	701.0	699.0	2.3	2.3	88.62	56.6	2,343.0	2,343.7	2,339.1	4.56	513.784	
800.0	800.0	801.0	799.0	2.6	2.6	88.62	56.6	2,343.0	2,343.7	2,338.4	5.28	444.000	
900.0	900.0	901.0	899.0	3.0	3.0	88.62	56.6	2,343.0	2,343.7	2,337.7	6.00	390.906	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	88.62	56.6	2,343.0	2,343.7	2,336.9	6.71	349.154	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	88.62	56.6	2,343.0	2,343.7	2,336.2	7.43	315.460	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	88.62	56.6	2,343.0	2,343.7	2,335.5	8.15	287.696	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	88.62	56.6	2,343.0	2,343.7	2,334.8	8.86	264.425	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	88.62	56.6	2,343.0	2,343.7	2,334.1	9.58	244.636	
1,500.0	1,500.0	1,501.0	1,499.0	5.1	5.2	88.62	56.6	2,343.0	2,343.7	2,333.4	10.30	227.603	
1,600.0	1,600.0	1,601.0	1,599.0	5.5	5.5	-15.29	56.6	2,343.0	2,342.8	2,331.8	11.00	212.926	
1,700.0	1,700.0	1,701.0	1,699.0	5.8	5.9	-15.32	56.6	2,343.0	2,340.3	2,328.6	11.70	200.026	
1,800.0	1,799.9	1,801.1	1,798.9	6.2	6.2	-15.36	56.6	2,343.0	2,336.1	2,323.7	12.40	188.402	
1,900.0	1,899.7	1,901.3	1,898.7	6.5	6.6	-15.41	56.6	2,343.0	2,330.2	2,317.1	13.10	177.859	
2,000.0	1,999.4	2,001.6	1,998.4	6.9	6.9	-15.48	56.6	2,343.0	2,322.6	2,308.8	13.81	168.240	
2,100.0	2,098.9	2,102.1	2,097.9	7.2	7.3	-15.57	56.6	2,343.0	2,313.4	2,298.9	14.51	159.414	
2,200.0	2,198.3	2,202.7	2,197.3	7.6	7.7	-15.68	56.6	2,343.0	2,302.5	2,287.3	15.22	151.275	
2,300.0	2,297.4	2,303.6	2,296.4	8.0	8.0	-15.80	56.6	2,343.0	2,289.9	2,274.0	15.93	143.734	
2,400.0	2,396.4	2,404.6	2,395.4	8.3	8.4	-15.90	56.6	2,343.0	2,276.5	2,259.9	16.64	136.773	
2,500.0	2,495.5	2,494.5	2,494.5	8.7	8.7	-15.99	56.6	2,343.0	2,263.1	2,245.8	17.32	130.674	
2,600.0	2,594.5	2,570.1	2,570.1	9.1	9.0	-16.06	56.4	2,343.3	2,250.2	2,232.3	17.94	125.457	
2,700.0	2,693.5	2,644.5	2,644.5	9.5	9.2	-16.12	55.7	2,344.6	2,238.4	2,219.9	18.54	120.707	
2,800.0	2,792.5	2,719.2	2,719.1	9.9	9.5	-16.16	54.6	2,346.6	2,227.7	2,208.6	19.15	116.331	
2,900.0	2,891.6	2,794.1	2,793.9	10.3	9.7	-16.19	52.9	2,349.5	2,218.1	2,198.4	19.76	112.271	
3,000.0	2,990.6	2,869.1	2,868.8	10.7	10.0	-16.20	50.7	2,353.3	2,209.6	2,189.3	20.37	108.500	
3,100.0	3,089.6	2,944.2	2,943.8	11.0	10.2	-16.21	48.1	2,357.9	2,202.3	2,181.3	20.97	104.997	
3,200.0	3,188.6	3,019.5	3,018.8	11.4	10.5	-16.20	45.0	2,363.4	2,196.0	2,174.4	21.58	101.743	
3,300.0	3,287.7	3,094.9	3,093.8	11.8	10.8	-16.17	41.4	2,369.8	2,190.8	2,168.6	22.19	98.717	
3,400.0	3,386.7	3,170.3	3,168.8	12.2	11.0	-16.13	37.2	2,377.0	2,186.8	2,164.0	22.80	95.902	
3,500.0	3,485.7	3,245.7	3,243.6	12.7	11.3	-16.08	32.6	2,385.1	2,183.9	2,160.5	23.41	93.283	
3,600.0	3,584.8	3,328.1	3,325.2	13.1	11.6	-16.01	27.1	2,394.8	2,182.1	2,158.0	24.05	90.733	
3,700.0	3,683.8	3,428.0	3,424.2	13.5	11.9	-15.92	20.2	2,406.9	2,180.5	2,155.8	24.76	88.050	
3,800.0	3,782.8	3,527.9	3,523.1	13.9	12.3	-15.82	13.3	2,419.0	2,179.0	2,153.5	25.48	85.508	
3,900.0	3,881.8	3,627.9	3,622.1	14.3	12.7	-15.73	6.4	2,431.1	2,177.5	2,151.2	26.20	83.098	
4,000.0	3,980.9	3,727.8	3,721.0	14.7	13.0	-15.64	-0.5	2,443.1	2,175.9	2,149.0	26.93	80.810	
4,100.0	4,079.9	3,827.7	3,820.0	15.1	13.4	-15.55	-7.3	2,455.2	2,174.4	2,146.8	27.65	78.636	
4,200.0	4,178.9	3,927.6	3,918.9	15.5	13.8	-15.46	-14.2	2,467.3	2,172.9	2,144.5	28.38	76.567	
4,300.0	4,277.9	4,027.6	4,017.9	15.9	14.2	-15.36	-21.1	2,479.4	2,171.4	2,142.3	29.11	74.598	
4,400.0	4,377.0	4,127.5	4,116.9	16.3	14.6	-15.27	-28.0	2,491.5	2,169.9	2,140.1	29.84	72.722	
4,500.0	4,476.0	4,227.4	4,215.8	16.7	14.9	-15.18	-34.9	2,503.6	2,168.4	2,137.8	30.57	70.932	
4,600.0	4,575.0	4,327.4	4,314.8	17.1	15.3	-15.08	-41.8	2,515.6	2,166.9	2,135.6	31.30	69.222	
4,700.0	4,674.0	4,427.3	4,413.7	17.6	15.7	-14.99	-48.6	2,527.7	2,165.4	2,133.4	32.04	67.589	
4,800.0	4,773.1	4,527.2	4,512.7	18.0	16.1	-14.90	-55.5	2,539.8	2,163.9	2,131.2	32.77	66.027	
4,900.0	4,872.1	4,627.1	4,611.6	18.4	16.5	-14.81	-62.4	2,551.9	2,162.5	2,129.0	33.51	64.531	
5,000.0	4,971.1	4,727.1	4,710.6	18.8	16.9	-14.71	-69.3	2,564.0	2,161.0	2,126.8	34.25	63.098	
5,100.0	5,070.2	4,827.0	4,809.5	19.2	17.3	-14.62	-76.2	2,576.1	2,159.5	2,124.6	34.99	61.725	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
5,200.0	5,169.2	4,926.9	4,908.5	19.6	17.7	-14.52	-83.1	2,588.1	2,158.1	2,122.4	35.73	60.407	
5,300.0	5,268.2	5,026.8	5,007.4	20.0	18.1	-14.43	-90.0	2,600.2	2,156.6	2,120.2	36.47	59.141	
5,400.0	5,367.2	5,126.8	5,106.4	20.5	18.5	-14.34	-96.8	2,612.3	2,155.2	2,118.0	37.21	57.925	
5,500.0	5,466.3	5,226.7	5,205.4	20.9	18.9	-14.24	-103.7	2,624.4	2,153.8	2,115.8	37.95	56.755	
5,600.0	5,565.3	5,326.6	5,304.3	21.3	19.3	-14.15	-110.6	2,636.5	2,152.3	2,113.6	38.69	55.630	
5,700.0	5,664.3	5,426.6	5,403.3	21.7	19.7	-14.05	-117.5	2,648.6	2,150.9	2,111.5	39.43	54.546	
5,800.0	5,763.3	5,526.5	5,502.2	22.1	20.1	-13.96	-124.4	2,660.6	2,149.5	2,109.3	40.18	53.502	
5,900.0	5,862.4	5,626.4	5,601.2	22.5	20.5	-13.87	-131.3	2,672.7	2,148.1	2,107.2	40.92	52.495	
6,000.0	5,961.4	5,726.3	5,700.1	23.0	20.9	-13.77	-138.1	2,684.8	2,146.7	2,105.0	41.66	51.524	
6,100.0	6,060.4	5,826.3	5,799.1	23.4	21.3	-13.68	-145.0	2,696.9	2,145.3	2,102.9	42.41	50.587	
6,200.0	6,159.4	6,015.8	5,987.4	23.8	22.1	-13.55	-155.9	2,716.0	2,141.9	2,098.4	43.52	49.220	
6,300.0	6,258.5	6,210.7	6,181.8	24.2	22.8	-13.55	-162.3	2,727.2	2,134.1	2,089.6	44.55	47.902	
6,400.0	6,357.5	6,385.5	6,356.5	24.6	23.4	-13.67	-163.9	2,730.0	2,122.0	2,076.5	45.44	46.699	
6,500.0	6,456.5	6,484.5	6,455.5	25.1	23.7	-13.76	-163.9	2,730.0	2,108.5	2,062.3	46.15	45.687	
6,600.0	6,555.6	6,583.5	6,554.6	25.5	24.0	-13.85	-163.9	2,730.0	2,094.9	2,048.1	46.86	44.706	
6,700.0	6,654.6	6,682.6	6,653.6	25.9	24.4	-13.94	-163.9	2,730.0	2,081.4	2,033.8	47.57	43.753	
6,800.0	6,753.6	6,781.6	6,752.6	26.3	24.7	-14.03	-163.9	2,730.0	2,067.9	2,019.6	48.28	42.828	
6,900.0	6,852.6	6,880.6	6,851.6	26.7	25.0	-14.13	-163.9	2,730.0	2,054.4	2,005.4	49.00	41.929	
7,000.0	6,951.7	6,979.6	6,950.7	27.1	25.4	-14.22	-163.9	2,730.0	2,040.9	1,991.2	49.71	41.055	
7,100.0	7,050.7	7,078.7	7,049.7	27.6	25.7	-14.32	-163.9	2,730.0	2,027.4	1,977.0	50.43	40.206	
7,131.4	7,081.7	7,109.7	7,080.7	27.7	25.8	-14.35	-163.9	2,730.0	2,023.2	1,972.5	50.65	39.945	
7,200.0	7,149.8	7,177.8	7,148.8	28.0	26.0	-14.38	-163.9	2,730.0	2,014.5	1,963.4	51.14	39.393	
7,300.0	7,249.2	7,277.2	7,248.2	28.4	26.4	-14.42	-163.9	2,730.0	2,004.0	1,952.2	51.85	38.650	
7,400.0	7,348.9	7,376.8	7,347.9	28.8	26.7	-14.45	-163.9	2,730.0	1,996.0	1,943.5	52.56	37.978	
7,500.0	7,448.7	7,476.7	7,447.7	29.1	27.0	-14.47	-163.9	2,730.0	1,990.6	1,937.3	53.26	37.374	
7,600.0	7,548.7	7,576.6	7,547.7	29.5	27.4	-14.48	-163.9	2,730.0	1,987.7	1,933.7	53.96	36.837	
7,664.7	7,613.3	7,641.3	7,612.3	29.7	27.6	89.42	-163.9	2,730.0	1,987.2	1,932.8	54.40	36.526	
7,700.0	7,648.7	7,676.6	7,647.7	29.8	27.7	89.42	-163.9	2,730.0	1,987.2	1,932.5	54.64	36.366	
7,800.0	7,748.7	7,776.6	7,747.7	30.1	28.1	89.42	-163.9	2,730.0	1,987.2	1,931.8	55.32	35.920	
7,900.0	7,848.7	7,876.6	7,847.7	30.4	28.4	89.42	-163.9	2,730.0	1,987.2	1,931.2	56.00	35.484	
8,000.0	7,948.7	7,976.6	7,947.7	30.7	28.7	89.42	-163.9	2,730.0	1,987.2	1,930.5	56.68	35.058	
8,100.0	8,048.7	8,076.6	8,047.7	31.0	29.1	89.42	-163.9	2,730.0	1,987.2	1,929.8	57.36	34.642	
8,200.0	8,148.7	8,176.6	8,147.7	31.4	29.4	89.42	-163.9	2,730.0	1,987.2	1,929.1	58.04	34.235	
8,300.0	8,248.7	8,276.6	8,247.7	31.7	29.8	89.42	-163.9	2,730.0	1,987.2	1,928.4	58.73	33.837	
8,400.0	8,348.7	8,376.6	8,347.7	32.0	30.1	89.42	-163.9	2,730.0	1,987.2	1,927.7	59.41	33.447	
8,500.0	8,448.7	8,476.6	8,447.7	32.3	30.4	89.42	-163.9	2,730.0	1,987.2	1,927.1	60.10	33.066	
8,600.0	8,548.7	8,576.6	8,547.7	32.6	30.8	89.42	-163.9	2,730.0	1,987.2	1,926.4	60.78	32.694	
8,700.0	8,648.7	8,676.6	8,647.7	33.0	31.1	89.42	-163.9	2,730.0	1,987.2	1,925.7	61.47	32.329	
8,800.0	8,748.7	8,776.6	8,747.7	33.3	31.5	89.42	-163.9	2,730.0	1,987.2	1,925.0	62.15	31.971	
8,900.0	8,848.7	8,876.6	8,847.7	33.6	31.8	89.42	-163.9	2,730.0	1,987.2	1,924.3	62.84	31.622	
9,000.0	8,948.7	8,976.6	8,947.7	33.9	32.2	89.42	-163.9	2,730.0	1,987.2	1,923.6	63.53	31.279	
9,100.0	9,048.7	9,076.6	9,047.7	34.3	32.5	89.42	-163.9	2,730.0	1,987.2	1,922.9	64.22	30.944	
9,200.0	9,148.7	9,176.6	9,147.7	34.6	32.8	89.42	-163.9	2,730.0	1,987.2	1,922.3	64.91	30.615	
9,300.0	9,248.7	9,276.6	9,247.7	34.9	33.2	89.42	-163.9	2,730.0	1,987.2	1,921.6	65.60	30.293	
9,400.0	9,348.7	9,376.6	9,347.7	35.2	33.5	89.42	-163.9	2,730.0	1,987.2	1,920.9	66.29	29.978	
9,500.0	9,448.7	9,476.6	9,447.7	35.6	33.9	89.42	-163.9	2,730.0	1,987.2	1,920.2	66.98	29.668	
9,600.0	9,548.7	9,576.6	9,547.7	35.9	34.2	89.42	-163.9	2,730.0	1,987.2	1,919.5	67.67	29.365	
9,700.0	9,648.7	9,676.6	9,647.7	36.2	34.6	89.42	-163.9	2,730.0	1,987.2	1,918.8	68.36	29.068	
9,800.0	9,748.7	9,776.6	9,747.7	36.5	34.9	89.42	-163.9	2,730.0	1,987.2	1,918.1	69.05	28.777	
9,900.0	9,848.7	9,876.6	9,847.7	36.9	35.3	89.42	-163.9	2,730.0	1,987.2	1,917.4	69.75	28.491	
10,000.0	9,948.7	9,976.6	9,947.7	37.2	35.6	89.42	-163.9	2,730.0	1,987.2	1,916.7	70.44	28.210	
10,100.0	10,048.7	10,076.6	10,047.7	37.5	36.0	89.42	-163.9	2,730.0	1,987.2	1,916.0	71.14	27.935	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	10,148.7	10,176.6	10,147.7	37.9	36.3	89.42	-163.9	2,730.0	1,987.2	1,915.3	71.83	27.665	
10,300.0	10,248.7	10,276.6	10,247.7	38.2	36.7	89.42	-163.9	2,730.0	1,987.2	1,914.6	72.52	27.400	
10,400.0	10,348.7	10,376.6	10,347.7	38.5	37.0	89.42	-163.9	2,730.0	1,987.2	1,913.9	73.22	27.140	
10,500.0	10,448.7	10,476.6	10,447.7	38.9	37.4	89.42	-163.9	2,730.0	1,987.2	1,913.2	73.92	26.884	
10,600.0	10,548.7	10,576.6	10,547.7	39.2	37.7	89.42	-163.9	2,730.0	1,987.2	1,912.5	74.61	26.633	
10,700.0	10,648.7	10,676.6	10,647.7	39.5	38.1	89.42	-163.9	2,730.0	1,987.2	1,911.9	75.31	26.387	
10,800.0	10,748.7	10,776.6	10,747.7	39.9	38.4	89.42	-163.9	2,730.0	1,987.2	1,911.2	76.01	26.145	
10,900.0	10,848.7	10,876.6	10,847.7	40.2	38.7	89.42	-163.9	2,730.0	1,987.2	1,910.5	76.70	25.907	
11,000.0	10,948.7	10,976.6	10,947.7	40.5	39.1	89.42	-163.9	2,730.0	1,987.2	1,909.8	77.40	25.674	
11,100.0	11,048.7	11,076.6	11,047.7	40.9	39.4	89.42	-163.9	2,730.0	1,987.2	1,909.1	78.10	25.444	
11,200.0	11,148.7	11,176.6	11,147.7	41.2	39.8	89.42	-163.9	2,730.0	1,987.2	1,908.4	78.80	25.219	
11,300.0	11,248.7	11,276.6	11,247.7	41.5	40.1	89.42	-163.9	2,730.0	1,987.2	1,907.7	79.50	24.997	
11,400.0	11,348.7	11,376.6	11,347.7	41.9	40.5	89.42	-163.9	2,730.0	1,987.2	1,907.0	80.19	24.779	
11,423.3	11,372.0	11,400.0	11,371.0	42.0	40.6	89.42	-163.9	2,730.0	1,987.2	1,906.8	80.36	24.729	
11,450.0	11,398.6	11,426.6	11,397.6	42.0	40.7	89.90	-163.9	2,730.0	1,987.2	1,906.6	80.54	24.672	
11,491.5	11,440.0	11,467.9	11,439.0	42.2	40.8	90.00	-163.9	2,730.0	1,987.2	1,906.3	80.82	24.586 CC	
11,500.0	11,448.4	11,476.4	11,447.4	42.2	40.8	90.03	-163.9	2,730.0	1,987.2	1,906.3	80.88	24.569	
11,550.0	11,497.6	11,525.6	11,496.6	42.4	41.0	90.28	-163.9	2,730.0	1,987.2	1,906.0	81.21	24.469	
11,600.0	11,545.9	11,573.8	11,544.9	42.5	41.2	90.63	-163.9	2,730.0	1,987.3	1,905.8	81.53	24.376	
11,650.0	11,592.8	11,622.4	11,593.4	42.6	41.4	91.07	-163.4	2,730.0	1,987.6	1,905.7	81.83	24.288	
11,700.0	11,638.0	11,673.4	11,644.2	42.8	41.5	91.54	-158.9	2,729.9	1,988.0	1,905.8	82.13	24.206	
11,750.0	11,681.2	11,726.3	11,696.2	42.9	41.7	92.00	-149.6	2,729.9	1,988.5	1,906.1	82.41	24.130	
11,800.0	11,722.1	11,781.1	11,749.0	43.0	41.9	92.46	-134.9	2,729.8	1,989.3	1,906.6	82.68	24.059	
11,850.0	11,760.3	11,838.0	11,802.0	43.1	42.0	92.91	-114.3	2,729.6	1,990.1	1,907.1	82.94	23.995	
11,900.0	11,795.5	11,897.1	11,854.7	43.2	42.2	93.35	-87.5	2,729.4	1,991.0	1,907.8	83.18	23.936	
11,950.0	11,827.6	11,958.7	11,906.3	43.2	42.3	93.77	-54.0	2,729.2	1,992.0	1,908.6	83.41	23.883	
12,000.0	11,856.1	12,022.7	11,955.9	43.3	42.4	94.18	-13.6	2,728.9	1,993.0	1,909.4	83.62	23.835	
12,050.0	11,881.0	12,089.1	12,002.2	43.3	42.5	94.55	34.1	2,728.6	1,994.0	1,910.2	83.82	23.789	
12,100.0	11,902.0	12,158.0	12,044.0	43.3	42.6	94.88	88.7	2,728.2	1,995.0	1,911.0	84.02	23.745	
12,150.0	11,918.9	12,229.2	12,080.1	43.4	42.7	95.17	150.1	2,727.8	1,995.9	1,911.7	84.21	23.700	
12,200.0	11,931.7	12,302.4	12,108.9	43.4	42.7	95.40	217.3	2,727.3	1,996.6	1,912.2	84.42	23.650	
12,250.0	11,940.3	12,377.1	12,129.3	43.5	42.8	95.57	289.1	2,726.8	1,997.1	1,912.5	84.65	23.593	
12,300.0	11,944.5	12,453.0	12,140.2	43.6	43.0	95.67	364.1	2,726.3	1,997.5	1,912.6	84.90	23.527	
12,326.5	11,944.9	12,493.5	12,141.9	43.6	43.1	95.69	404.6	2,726.0	1,997.6	1,912.5	85.05	23.488	
12,391.6	11,944.6	12,563.3	12,141.6	43.7	43.3	95.69	474.4	2,725.5	1,997.6	1,912.2	85.40	23.390	
12,400.0	11,944.5	12,571.6	12,141.5	43.8	43.4	95.69	482.7	2,725.4	1,997.6	1,912.2	85.45	23.377	
12,500.0	11,944.0	12,671.6	12,140.9	44.1	43.7	95.69	582.7	2,724.6	1,997.6	1,911.5	86.09	23.204	
12,600.0	11,943.4	12,771.6	12,140.3	44.4	44.1	95.69	682.7	2,723.8	1,997.6	1,910.8	86.85	23.001	
12,700.0	11,942.9	12,871.6	12,139.7	44.9	44.5	95.68	782.7	2,723.0	1,997.6	1,909.9	87.72	22.771	
12,800.0	11,942.3	12,971.6	12,139.1	45.4	45.0	95.68	882.7	2,722.2	1,997.6	1,908.9	88.72	22.517	
12,900.0	11,941.7	13,071.6	12,138.5	45.9	45.6	95.68	982.7	2,721.4	1,997.6	1,907.8	89.82	22.241	
13,000.0	11,941.2	13,171.6	12,137.9	46.6	46.2	95.68	1,082.7	2,720.6	1,997.6	1,906.6	91.02	21.946	
13,100.0	11,940.6	13,271.6	12,137.3	47.2	46.8	95.68	1,182.7	2,719.8	1,997.6	1,905.3	92.34	21.634	
13,200.0	11,940.1	13,371.6	12,136.7	48.0	47.6	95.68	1,282.7	2,719.0	1,997.6	1,903.9	93.74	21.309	
13,300.0	11,939.5	13,471.6	12,136.1	48.7	48.3	95.68	1,382.7	2,718.2	1,997.6	1,902.4	95.25	20.973	
13,400.0	11,939.0	13,571.6	12,135.5	49.5	49.1	95.68	1,482.7	2,717.4	1,997.6	1,900.8	96.84	20.629	
13,500.0	11,938.4	13,671.6	12,134.9	50.4	49.9	95.67	1,582.7	2,716.6	1,997.6	1,899.1	98.51	20.277	
13,600.0	11,937.8	13,771.6	12,134.3	51.3	50.8	95.67	1,682.7	2,715.8	1,997.6	1,897.4	100.27	19.922	
13,700.0	11,937.3	13,871.6	12,133.7	52.2	51.7	95.67	1,782.7	2,715.0	1,997.6	1,895.5	102.11	19.564	
13,800.0	11,936.7	13,971.6	12,133.1	53.1	52.7	95.67	1,882.7	2,714.2	1,997.6	1,893.6	104.01	19.206	
13,900.0	11,936.2	14,071.6	12,132.5	54.1	53.7	95.67	1,982.7	2,713.4	1,997.6	1,891.6	105.99	18.848	
14,000.0	11,935.6	14,171.6	12,131.9	55.2	54.7	95.67	2,082.7	2,712.6	1,997.6	1,889.6	108.03	18.492	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,935.0	14,271.6	12,131.3	56.2	55.7	95.67	2,182.6	2,711.9	1,997.6	1,887.5	110.13	18.139	
14,200.0	11,934.5	14,371.6	12,130.7	57.3	56.8	95.67	2,282.6	2,711.1	1,997.6	1,885.4	112.29	17.790	
14,300.0	11,933.9	14,471.6	12,130.1	58.4	57.9	95.66	2,382.6	2,710.3	1,997.6	1,883.1	114.50	17.446	
14,400.0	11,933.4	14,571.6	12,129.5	59.5	59.0	95.66	2,482.6	2,709.5	1,997.6	1,880.9	116.77	17.108	
14,500.0	11,932.8	14,671.6	12,128.9	60.7	60.2	95.66	2,582.6	2,708.7	1,997.6	1,878.6	119.08	16.776	
14,600.0	11,932.3	14,771.6	12,128.3	61.9	61.3	95.66	2,682.6	2,707.9	1,997.6	1,876.2	121.44	16.450	
14,700.0	11,931.7	14,871.6	12,127.7	63.1	62.5	95.66	2,782.6	2,707.1	1,997.7	1,873.8	123.84	16.131	
14,800.0	11,931.1	14,971.6	12,127.1	64.3	63.8	95.66	2,882.6	2,706.3	1,997.7	1,871.4	126.28	15.819	
14,900.0	11,930.6	15,071.6	12,126.5	65.5	65.0	95.66	2,982.6	2,705.5	1,997.7	1,868.9	128.77	15.514	
15,000.0	11,930.0	15,171.6	12,125.9	66.8	66.3	95.65	3,082.6	2,704.7	1,997.7	1,866.4	131.28	15.216	
15,100.0	11,929.5	15,271.6	12,125.3	68.1	67.5	95.65	3,182.6	2,703.9	1,997.7	1,863.8	133.84	14.926	
15,200.0	11,928.9	15,371.6	12,124.7	69.4	68.8	95.65	3,282.6	2,703.1	1,997.7	1,861.2	136.42	14.644	
15,300.0	11,928.3	15,471.6	12,124.1	70.7	70.1	95.65	3,382.6	2,702.3	1,997.7	1,858.6	139.03	14.368	
15,400.0	11,927.8	15,571.6	12,123.4	72.0	71.4	95.65	3,482.6	2,701.5	1,997.7	1,856.0	141.68	14.100	
15,500.0	11,927.2	15,671.6	12,122.8	73.3	72.8	95.65	3,582.6	2,700.7	1,997.7	1,853.3	144.35	13.839	
15,600.0	11,926.7	15,771.6	12,122.2	74.7	74.1	95.65	3,682.6	2,699.9	1,997.7	1,850.6	147.04	13.586	
15,700.0	11,926.1	15,871.6	12,121.6	76.0	75.5	95.65	3,782.6	2,699.1	1,997.7	1,847.9	149.76	13.339	
15,800.0	11,925.6	15,971.6	12,121.0	77.4	76.9	95.64	3,882.6	2,698.3	1,997.7	1,845.2	152.51	13.099	
15,900.0	11,925.0	16,071.6	12,120.4	78.8	78.2	95.64	3,982.6	2,697.5	1,997.7	1,842.4	155.27	12.866	
16,000.0	11,924.4	16,171.6	12,119.8	80.2	79.6	95.64	4,082.6	2,696.7	1,997.7	1,839.6	158.06	12.639	
16,100.0	11,923.9	16,271.6	12,119.2	81.6	81.0	95.64	4,182.5	2,695.9	1,997.7	1,836.8	160.86	12.418	
16,200.0	11,923.3	16,371.6	12,118.6	83.0	82.4	95.64	4,282.5	2,695.1	1,997.7	1,834.0	163.69	12.204	
16,300.0	11,922.8	16,471.6	12,118.0	84.4	83.9	95.64	4,382.5	2,694.3	1,997.7	1,831.2	166.53	11.996	
16,400.0	11,922.2	16,571.6	12,117.4	85.9	85.3	95.64	4,482.5	2,693.5	1,997.7	1,828.3	169.39	11.794	
16,500.0	11,921.6	16,671.6	12,116.8	87.3	86.7	95.64	4,582.5	2,692.7	1,997.7	1,825.4	172.26	11.597	
16,600.0	11,921.1	16,771.6	12,116.2	88.7	88.2	95.63	4,682.5	2,691.9	1,997.7	1,822.5	175.15	11.406	
16,700.0	11,920.5	16,871.6	12,115.6	90.2	89.6	95.63	4,782.5	2,691.2	1,997.7	1,819.6	178.05	11.220	
16,800.0	11,920.0	16,971.6	12,115.0	91.7	91.1	95.63	4,882.5	2,690.4	1,997.7	1,816.7	180.97	11.039	
16,900.0	11,919.4	17,071.6	12,114.4	93.1	92.6	95.63	4,982.5	2,689.6	1,997.7	1,813.8	183.90	10.863	
17,000.0	11,918.8	17,171.6	12,113.8	94.6	94.0	95.63	5,082.5	2,688.8	1,997.7	1,810.9	186.85	10.692	
17,100.0	11,918.3	17,271.6	12,113.2	96.1	95.5	95.63	5,182.5	2,688.0	1,997.7	1,807.9	189.80	10.525	
17,200.0	11,917.7	17,371.6	12,112.6	97.6	97.0	95.63	5,282.5	2,687.2	1,997.7	1,804.9	192.77	10.363	
17,300.0	11,917.2	17,471.6	12,112.0	99.0	98.5	95.63	5,382.5	2,686.4	1,997.7	1,802.0	195.74	10.206	
17,400.0	11,916.6	17,571.6	12,111.4	100.5	100.0	95.62	5,482.5	2,685.6	1,997.7	1,799.0	198.73	10.052	
17,500.0	11,916.1	17,671.6	12,110.8	102.0	101.5	95.62	5,582.5	2,684.8	1,997.7	1,796.0	201.73	9.903	
17,600.0	11,915.5	17,771.6	12,110.2	103.5	103.0	95.62	5,682.5	2,684.0	1,997.7	1,793.0	204.73	9.758	
17,700.0	11,914.9	17,871.6	12,109.6	105.1	104.5	95.62	5,782.5	2,683.2	1,997.7	1,790.0	207.75	9.616	
17,800.0	11,914.4	17,971.6	12,109.0	106.6	106.0	95.62	5,882.5	2,682.4	1,997.7	1,786.9	210.77	9.478	
17,900.0	11,913.8	18,071.6	12,108.4	108.1	107.5	95.62	5,982.5	2,681.6	1,997.7	1,783.9	213.81	9.344	
18,000.0	11,913.3	18,171.6	12,107.8	109.6	109.0	95.62	6,082.5	2,680.8	1,997.7	1,780.9	216.85	9.213	
18,100.0	11,912.7	18,271.6	12,107.2	111.1	110.6	95.62	6,182.4	2,680.0	1,997.7	1,777.8	219.89	9.085	
18,200.0	11,912.1	18,371.6	12,106.6	112.7	112.1	95.61	6,282.4	2,679.2	1,997.7	1,774.8	222.95	8.961	
18,300.0	11,911.6	18,471.6	12,106.0	114.2	113.6	95.61	6,382.4	2,678.4	1,997.7	1,771.7	226.01	8.839	
18,400.0	11,911.0	18,571.6	12,105.4	115.7	115.2	95.61	6,482.4	2,677.6	1,997.7	1,768.7	229.08	8.721	
18,500.0	11,910.5	18,671.6	12,104.8	117.3	116.7	95.61	6,582.4	2,676.8	1,997.7	1,765.6	232.15	8.605	
18,600.0	11,909.9	18,771.6	12,104.2	118.8	118.2	95.61	6,682.4	2,676.0	1,997.7	1,762.5	235.24	8.493	
18,700.0	11,909.4	18,871.6	12,103.6	120.4	119.8	95.61	6,782.4	2,675.2	1,997.7	1,759.4	238.32	8.383	
18,800.0	11,908.8	18,971.6	12,103.0	121.9	121.3	95.61	6,882.4	2,674.4	1,997.7	1,756.3	241.42	8.275	
18,900.0	11,908.2	19,071.6	12,102.4	123.5	122.9	95.61	6,982.4	2,673.6	1,997.7	1,753.2	244.51	8.170	
19,000.0	11,907.7	19,171.6	12,101.8	125.0	124.5	95.60	7,082.4	2,672.8	1,997.7	1,750.1	247.62	8.068	
19,100.0	11,907.1	19,271.6	12,101.2	126.6	126.0	95.60	7,182.4	2,672.0	1,997.8	1,747.0	250.73	7.968	
19,200.0	11,906.6	19,371.6	12,100.6	128.1	127.6	95.60	7,282.4	2,671.2	1,997.8	1,743.9	253.84	7.870	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #204H - 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
19,300.0	11,906.0	19,471.6	12,100.0	129.7	129.1	95.60	7,382.4	2,670.4	1,997.8	1,740.8	256.96	7.775	
19,400.0	11,905.4	19,571.6	12,099.3	131.3	130.7	95.60	7,482.4	2,669.7	1,997.8	1,737.7	260.08	7.681	
19,500.0	11,904.9	19,671.6	12,098.7	132.8	132.3	95.60	7,582.4	2,668.9	1,997.8	1,734.6	263.21	7.590	
19,600.0	11,904.3	19,771.6	12,098.1	134.4	133.8	95.60	7,682.4	2,668.1	1,997.8	1,731.4	266.34	7.501	
19,700.0	11,903.8	19,871.6	12,097.5	136.0	135.4	95.59	7,782.4	2,667.3	1,997.8	1,728.3	269.48	7.413	
19,800.0	11,903.2	19,971.6	12,096.9	137.5	137.0	95.59	7,882.4	2,666.5	1,997.8	1,725.2	272.62	7.328	
19,900.0	11,902.7	20,071.6	12,096.3	139.1	138.5	95.59	7,982.4	2,665.7	1,997.8	1,722.0	275.76	7.245	
20,000.0	11,902.1	20,171.6	12,095.7	140.7	140.1	95.59	8,082.4	2,664.9	1,997.8	1,718.9	278.91	7.163	
20,100.0	11,901.5	20,271.6	12,095.1	142.3	141.7	95.59	8,182.3	2,664.1	1,997.8	1,715.7	282.06	7.083	
20,200.0	11,901.0	20,371.6	12,094.5	143.8	143.3	95.59	8,282.3	2,663.3	1,997.8	1,712.6	285.21	7.004	
20,300.0	11,900.4	20,471.6	12,093.9	145.4	144.9	95.59	8,382.3	2,662.5	1,997.8	1,709.4	288.37	6.928	
20,400.0	11,899.9	20,571.6	12,093.3	147.0	146.5	95.59	8,482.3	2,661.7	1,997.8	1,706.2	291.53	6.853	
20,500.0	11,899.3	20,671.6	12,092.7	148.6	148.0	95.58	8,582.3	2,660.9	1,997.8	1,703.1	294.70	6.779	
20,600.0	11,898.7	20,771.6	12,092.1	150.2	149.6	95.58	8,682.3	2,660.1	1,997.8	1,699.9	297.86	6.707	
20,700.0	11,898.2	20,871.6	12,091.5	151.8	151.2	95.58	8,782.3	2,659.3	1,997.8	1,696.8	301.03	6.636	
20,800.0	11,897.6	20,971.6	12,090.9	153.4	152.8	95.58	8,882.3	2,658.5	1,997.8	1,693.6	304.21	6.567	
20,900.0	11,897.1	21,071.6	12,090.3	155.0	154.4	95.58	8,982.3	2,657.7	1,997.8	1,690.4	307.38	6.499	
21,000.0	11,896.5	21,171.6	12,089.7	156.5	156.0	95.58	9,082.3	2,656.9	1,997.8	1,687.2	310.56	6.433	
21,100.0	11,896.0	21,271.6	12,089.1	158.1	157.6	95.58	9,182.3	2,656.1	1,997.8	1,684.1	313.74	6.368	
21,200.0	11,895.4	21,371.6	12,088.5	159.7	159.2	95.58	9,282.3	2,655.3	1,997.8	1,680.9	316.92	6.304	
21,300.0	11,894.8	21,471.6	12,087.9	161.3	160.8	95.57	9,382.3	2,654.5	1,997.8	1,677.7	320.11	6.241	
21,400.0	11,894.3	21,571.6	12,087.3	162.9	162.4	95.57	9,482.3	2,653.7	1,997.8	1,674.5	323.30	6.179	
21,500.0	11,893.7	21,671.6	12,086.7	164.5	164.0	95.57	9,582.3	2,652.9	1,997.8	1,671.3	326.49	6.119	
21,600.0	11,893.2	21,771.6	12,086.1	166.1	165.6	95.57	9,682.3	2,652.1	1,997.8	1,668.1	329.68	6.060	
21,700.0	11,892.6	21,871.6	12,085.5	167.7	167.2	95.57	9,782.3	2,651.3	1,997.8	1,664.9	332.88	6.002	
21,800.0	11,892.0	21,971.6	12,084.9	169.3	168.8	95.57	9,882.3	2,650.5	1,997.8	1,661.7	336.07	5.945	
21,900.0	11,891.5	22,071.6	12,084.3	170.9	170.4	95.57	9,982.3	2,649.7	1,997.8	1,658.5	339.27	5.889	
22,000.0	11,890.9	22,171.6	12,083.7	172.5	172.0	95.57	10,082.3	2,649.0	1,997.8	1,655.3	342.47	5.833	
22,100.0	11,890.4	22,271.6	12,083.1	174.1	173.6	95.56	10,182.2	2,648.2	1,997.8	1,652.1	345.68	5.779	
22,191.0	11,889.9	22,362.7	12,082.5	175.6	175.1	95.56	10,273.3	2,647.4	1,997.8	1,649.2	348.59	5.731	
22,191.7	11,890.5	22,363.4	12,082.5	175.6	175.1	95.54	10,274.0	2,647.4	1,997.8	1,649.1	348.63	5.730 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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	-0.42	29.8	-0.2	29.8				
100.0	100.0	100.0	100.0	0.1	0.1	-0.42	29.8	-0.2	29.8	29.5	0.26	116.110	
200.0	200.0	200.0	200.0	0.5	0.5	-0.42	29.8	-0.2	29.8	28.8	0.97	30.578	
300.0	300.0	300.0	300.0	0.8	0.8	-0.42	29.8	-0.2	29.8	28.1	1.69	17.607	
400.0	400.0	400.0	400.0	1.2	1.2	-0.42	29.8	-0.2	29.8	27.4	2.41	12.363	
500.0	500.0	500.0	500.0	1.6	1.6	-0.42	29.8	-0.2	29.8	26.6	3.12	9.526	
600.0	600.0	600.0	600.0	1.9	1.9	-0.42	29.8	-0.2	29.8	25.9	3.84	7.748	
700.0	700.0	700.0	700.0	2.3	2.3	-0.42	29.8	-0.2	29.8	25.2	4.56	6.529	
800.0	800.0	800.0	800.0	2.6	2.6	-0.42	29.8	-0.2	29.8	24.5	5.27	5.642	
900.0	900.0	900.0	900.0	3.0	3.0	-0.42	29.8	-0.2	29.8	23.8	5.99	4.967	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	-0.42	29.8	-0.2	29.8	23.1	6.71	4.436	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	-0.42	29.8	-0.2	29.8	22.3	7.43	4.008	
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	-0.42	29.8	-0.2	29.8	21.6	8.14	3.655	
1,300.0	1,300.0	1,300.0	1,300.0	4.4	4.4	-0.42	29.8	-0.2	29.8	20.9	8.86	3.359	
1,400.0	1,400.0	1,400.0	1,400.0	4.8	4.8	-0.42	29.8	-0.2	29.8	20.2	9.58	3.108	
1,500.0	1,500.0	1,500.0	1,500.0	5.1	5.1	-0.42	29.8	-0.2	29.8	19.5	10.29	2.891 CC	
1,600.0	1,600.0	1,600.1	1,600.1	5.5	5.5	-107.59	29.6	-1.1	29.9	18.9	10.99	2.718 ES	
1,700.0	1,700.0	1,700.0	1,699.9	5.8	5.8	-117.10	29.1	-3.6	30.8	19.1	11.67	2.636 SF	
1,800.0	1,799.9	1,799.5	1,799.4	6.2	6.2	-131.05	28.3	-7.9	33.9	21.6	12.35	2.748	
1,900.0	1,899.7	1,898.5	1,898.2	6.5	6.5	-145.65	27.2	-13.8	41.0	28.0	13.03	3.148	
2,000.0	1,999.4	1,996.9	1,996.2	6.9	6.9	-157.66	25.7	-21.4	52.7	39.0	13.70	3.847	
2,100.0	2,098.9	2,094.4	2,093.3	7.2	7.2	-166.36	24.0	-30.5	68.8	54.5	14.36	4.793	
2,200.0	2,198.3	2,190.8	2,189.2	7.6	7.6	-172.43	22.0	-41.1	89.1	74.0	15.02	5.930	
2,300.0	2,297.4	2,286.2	2,283.7	8.0	7.9	-176.68	19.7	-53.1	113.1	97.4	15.67	7.217	
2,400.0	2,396.4	2,382.2	2,378.8	8.3	8.3	-179.68	17.2	-66.2	139.2	122.9	16.34	8.522	
2,500.0	2,495.5	2,478.5	2,474.2	8.7	8.6	-178.26	14.6	-79.4	165.6	148.6	17.01	9.735	
2,600.0	2,594.5	2,574.8	2,569.6	9.1	9.0	-176.76	12.1	-92.6	192.2	174.5	17.70	10.861	
2,700.0	2,693.5	2,671.2	2,664.9	9.5	9.4	-175.63	9.6	-105.7	218.8	200.5	18.38	11.906	
2,800.0	2,792.5	2,767.5	2,760.3	9.9	9.7	-174.75	7.1	-118.9	245.6	226.5	19.07	12.877	
2,900.0	2,891.6	2,863.8	2,855.7	10.3	10.1	-174.04	4.6	-132.1	272.3	252.6	19.76	13.780	
3,000.0	2,990.6	2,960.1	2,951.0	10.7	10.5	-173.45	2.1	-145.2	299.1	278.7	20.46	14.622	
3,100.0	3,089.6	3,056.4	3,046.4	11.0	10.9	-172.96	-0.4	-158.4	325.9	304.8	21.15	15.409	
3,200.0	3,188.6	3,152.7	3,141.8	11.4	11.3	-172.55	-2.9	-171.6	352.8	330.9	21.85	16.145	
3,300.0	3,287.7	3,249.0	3,237.1	11.8	11.7	-172.19	-5.4	-184.7	379.6	357.1	22.55	16.835	
3,400.0	3,386.7	3,345.3	3,332.5	12.2	12.0	-171.88	-8.0	-197.9	406.5	383.2	23.25	17.482	
3,500.0	3,485.7	3,441.6	3,427.9	12.7	12.4	-171.61	-10.5	-211.0	433.3	409.4	23.95	18.091	
3,600.0	3,584.8	3,537.9	3,523.2	13.1	12.8	-171.38	-13.0	-224.2	460.2	435.6	24.66	18.665	
3,700.0	3,683.8	3,634.2	3,618.6	13.5	13.2	-171.16	-15.5	-237.4	487.1	461.7	25.36	19.206	
3,800.0	3,782.8	3,730.5	3,714.0	13.9	13.6	-170.97	-18.0	-250.5	514.0	487.9	26.07	19.717	
3,900.0	3,881.8	3,826.8	3,809.3	14.3	14.0	-170.80	-20.5	-263.7	540.9	514.1	26.78	20.201	
4,000.0	3,980.9	3,923.1	3,904.7	14.7	14.4	-170.65	-23.0	-276.9	567.8	540.3	27.48	20.659	
4,100.0	4,079.9	4,019.4	4,000.1	15.1	14.8	-170.51	-25.5	-290.0	594.7	566.5	28.19	21.094	
4,200.0	4,178.9	4,115.7	4,095.4	15.5	15.2	-170.38	-28.1	-303.2	621.6	592.7	28.90	21.507	
4,300.0	4,277.9	4,212.0	4,190.8	15.9	15.6	-170.26	-30.6	-316.4	648.5	618.9	29.61	21.899	
4,400.0	4,377.0	4,308.3	4,286.2	16.3	16.0	-170.15	-33.1	-329.5	675.4	645.1	30.32	22.273	
4,500.0	4,476.0	4,404.6	4,381.5	16.7	16.4	-170.05	-35.6	-342.7	702.3	671.3	31.04	22.630	
4,600.0	4,575.0	4,500.9	4,476.9	17.1	16.8	-169.96	-38.1	-355.9	729.2	697.5	31.75	22.970	
4,700.0	4,674.0	4,602.8	4,572.3	17.6	17.2	-169.87	-40.6	-369.0	756.2	723.7	32.48	23.279	
4,800.0	4,773.1	4,693.5	4,667.6	18.0	17.6	-169.79	-43.1	-382.2	783.1	749.9	33.17	23.605	
4,900.0	4,872.1	4,789.8	4,763.0	18.4	18.0	-169.71	-45.6	-395.4	810.0	776.1	33.89	23.902	
5,000.0	4,971.1	4,886.1	4,858.4	18.8	18.4	-169.64	-48.2	-408.5	836.9	802.3	34.60	24.186	
5,100.0	5,070.2	4,982.4	4,953.7	19.2	18.8	-169.58	-50.7	-421.7	863.8	828.5	35.32	24.459	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
5,200.0	5,169.2	5,078.7	5,049.1	19.6	19.2	169.52	-53.2	-434.9	890.8	854.7	36.03	24.720	
5,300.0	5,268.2	5,175.0	5,144.5	20.0	19.6	169.46	-55.7	-448.0	917.7	880.9	36.75	24.972	
5,400.0	5,367.2	5,271.3	5,239.8	20.5	20.0	169.40	-58.2	-461.2	944.6	907.1	37.47	25.213	
5,500.0	5,466.3	5,367.6	5,335.2	20.9	20.4	169.35	-60.7	-474.4	971.5	933.3	38.18	25.445	
5,600.0	5,565.3	5,464.0	5,430.6	21.3	20.8	169.30	-63.2	-487.5	998.4	959.6	38.90	25.668	
5,700.0	5,664.3	5,560.3	5,525.9	21.7	21.2	169.25	-65.7	-500.7	1,025.4	985.8	39.62	25.883	
5,800.0	5,763.3	5,656.6	5,621.3	22.1	21.6	169.21	-68.3	-513.9	1,052.3	1,012.0	40.33	26.090	
5,900.0	5,862.4	5,752.9	5,716.7	22.5	22.0	169.17	-70.8	-527.0	1,079.2	1,038.2	41.05	26.290	
6,000.0	5,961.4	5,849.2	5,812.0	23.0	22.4	169.13	-73.3	-540.2	1,106.2	1,064.4	41.77	26.483	
6,100.0	6,060.4	5,945.5	5,907.4	23.4	22.8	169.09	-75.8	-553.3	1,133.1	1,090.6	42.49	26.669	
6,200.0	6,159.4	6,041.8	6,002.8	23.8	23.2	169.05	-78.3	-566.5	1,160.0	1,116.8	43.21	26.848	
6,300.0	6,258.5	6,138.1	6,098.1	24.2	23.6	169.02	-80.8	-579.7	1,186.9	1,143.0	43.93	27.022	
6,400.0	6,357.5	6,234.4	6,193.5	24.6	24.0	168.99	-83.3	-592.8	1,213.9	1,169.2	44.64	27.190	
6,500.0	6,456.5	6,330.7	6,288.9	25.1	24.4	168.96	-85.8	-606.0	1,240.8	1,195.4	45.36	27.352	
6,600.0	6,555.6	6,427.0	6,384.2	25.5	24.8	168.93	-88.4	-619.2	1,267.7	1,221.7	46.08	27.510	
6,700.0	6,654.6	6,523.3	6,479.6	25.9	25.2	168.90	-90.9	-632.3	1,294.7	1,247.9	46.80	27.662	
6,800.0	6,753.6	6,619.6	6,575.0	26.3	25.6	168.87	-93.4	-645.5	1,321.6	1,274.1	47.52	27.809	
6,900.0	6,852.6	6,715.9	6,670.3	26.7	26.0	168.84	-95.9	-658.7	1,348.5	1,300.3	48.24	27.952	
7,000.0	6,951.7	6,812.2	6,765.7	27.1	26.4	168.82	-98.4	-671.8	1,375.5	1,326.5	48.96	28.091	
7,100.0	7,050.7	6,908.5	6,861.1	27.6	26.8	168.79	-100.9	-685.0	1,402.4	1,352.7	49.68	28.226	
7,131.4	7,081.7	6,938.7	6,891.0	27.7	26.9	168.78	-101.7	-689.1	1,410.8	1,360.9	49.91	28.267	
7,200.0	7,149.8	7,005.0	6,956.6	28.0	27.2	168.82	-103.4	-698.2	1,428.7	1,378.3	50.41	28.345	
7,300.0	7,249.2	7,102.0	7,052.7	28.4	27.6	168.84	-106.0	-711.5	1,452.7	1,401.6	51.13	28.415	
7,400.0	7,348.9	7,200.3	7,149.4	28.8	28.0	168.84	-108.5	-724.8	1,474.2	1,422.4	51.85	28.433	
7,500.0	7,448.7	7,302.2	7,246.6	29.1	28.4	168.81	-111.1	-738.2	1,493.2	1,440.6	52.58	28.398	
7,600.0	7,548.7	7,396.4	7,344.2	29.5	28.8	168.76	-113.6	-751.7	1,509.6	1,456.3	53.28	28.333	
7,664.7	7,613.3	7,460.4	7,407.6	29.7	29.1	-87.39	-115.3	-760.5	1,518.9	1,465.2	53.74	28.264	
7,700.0	7,648.7	7,504.6	7,442.2	29.8	29.3	-87.43	-116.2	-765.2	1,523.7	1,469.7	54.02	28.205	
7,800.0	7,748.7	7,605.6	7,540.3	30.1	29.7	-87.55	-118.8	-778.8	1,537.3	1,482.5	54.73	28.087	
7,900.0	7,848.7	7,706.6	7,638.4	30.4	30.1	-87.67	-121.4	-792.3	1,550.8	1,495.4	55.44	27.973	
8,000.0	7,948.7	7,792.5	7,736.4	30.7	30.5	-87.79	-124.0	-805.8	1,564.4	1,508.3	56.09	27.888	
8,100.0	8,048.7	7,908.5	7,834.5	31.0	31.0	-87.90	-126.6	-819.4	1,577.9	1,521.1	56.86	27.751	
8,200.0	8,148.7	8,009.5	7,932.6	31.4	31.4	-88.01	-129.1	-832.9	1,591.5	1,533.9	57.57	27.644	
8,300.0	8,248.7	8,089.6	8,030.6	31.7	31.8	-88.12	-131.7	-846.5	1,605.1	1,546.9	58.21	27.576	
8,400.0	8,348.7	8,188.6	8,128.7	32.0	32.2	-88.23	-134.3	-860.0	1,618.7	1,559.8	58.91	27.477	
8,500.0	8,448.7	8,287.6	8,226.7	32.3	32.6	-88.34	-136.9	-873.5	1,632.3	1,572.7	59.62	27.380	
8,600.0	8,548.7	8,386.6	8,324.8	32.6	33.0	-88.44	-139.5	-887.1	1,645.9	1,585.6	60.32	27.285	
8,700.0	8,648.7	8,485.7	8,422.9	33.0	33.4	-88.54	-142.1	-900.6	1,659.5	1,598.5	61.03	27.193	
8,800.0	8,748.7	8,584.7	8,520.9	33.3	33.8	-88.64	-144.6	-914.1	1,673.1	1,611.4	61.73	27.102	
8,900.0	8,848.7	8,683.7	8,619.0	33.6	34.3	-88.74	-147.2	-927.7	1,686.7	1,624.3	62.44	27.013	
9,000.0	8,948.7	8,782.7	8,717.1	33.9	34.7	-88.84	-149.8	-941.2	1,700.3	1,637.2	63.15	26.926	
9,100.0	9,048.7	8,881.8	8,815.1	34.3	35.1	-88.94	-152.4	-954.8	1,713.9	1,650.1	63.86	26.841	
9,200.0	9,148.7	8,980.8	8,913.2	34.6	35.5	-89.03	-155.0	-968.3	1,727.6	1,663.0	64.56	26.758	
9,300.0	9,248.7	9,079.8	9,011.2	34.9	35.9	-89.13	-157.6	-981.8	1,741.2	1,675.9	65.27	26.674	
9,400.0	9,348.7	9,178.9	9,109.3	35.2	36.3	-89.22	-160.1	-995.4	1,754.8	1,688.9	65.98	26.596	
9,500.0	9,448.7	9,277.9	9,207.4	35.6	36.8	-89.31	-162.7	-1,008.9	1,768.5	1,701.8	66.69	26.518	
9,600.0	9,548.7	9,376.9	9,305.4	35.9	37.2	-89.40	-165.3	-1,022.4	1,782.1	1,714.7	67.40	26.442	
9,700.0	9,648.7	9,475.9	9,403.5	36.2	37.6	-89.49	-167.9	-1,036.0	1,795.8	1,727.7	68.11	26.366	
9,800.0	9,748.7	9,575.0	9,501.6	36.5	38.0	-89.57	-170.5	-1,049.5	1,809.4	1,740.6	68.82	26.293	
9,900.0	9,848.7	9,674.0	9,599.6	36.9	38.4	-89.66	-173.1	-1,063.1	1,823.1	1,753.6	69.53	26.221	
10,000.0	9,948.7	9,773.0	9,697.7	37.2	38.9	-89.74	-175.6	-1,076.6	1,836.8	1,766.5	70.24	26.150	
10,100.0	10,048.7	9,872.0	9,795.8	37.5	39.3	-89.82	-178.2	-1,090.1	1,850.4	1,779.5	70.95	26.080	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	10,148.7	9,971.1	9,893.8	37.9	39.7	-89.90	-180.8	-1,103.7	1,864.1	1,792.4	71.66	26.012	
10,300.0	10,248.7	10,070.1	9,991.9	38.2	40.1	-89.99	-183.4	-1,117.2	1,877.8	1,805.4	72.37	25.945	
10,400.0	10,348.7	10,169.1	10,089.9	38.5	40.5	-90.06	-186.0	-1,130.7	1,891.4	1,818.4	73.09	25.880	
10,500.0	10,448.7	10,268.1	10,188.0	38.9	40.9	-90.14	-188.6	-1,144.3	1,905.1	1,831.3	73.80	25.816	
10,600.0	10,548.7	10,367.2	10,286.1	39.2	41.4	-90.22	-191.1	-1,157.8	1,918.8	1,844.3	74.51	25.752	
10,700.0	10,648.7	10,466.2	10,384.1	39.5	41.8	-90.29	-193.7	-1,171.4	1,932.5	1,857.3	75.22	25.690	
10,800.0	10,748.7	10,565.2	10,482.2	39.9	42.2	-90.37	-196.3	-1,184.9	1,946.2	1,870.2	75.93	25.630	
10,900.0	10,848.7	10,664.3	10,580.3	40.2	42.6	-90.44	-198.9	-1,198.4	1,959.9	1,883.2	76.65	25.570	
11,000.0	10,948.7	10,825.3	10,739.9	40.5	43.3	-90.55	-202.7	-1,218.6	1,972.6	1,894.8	77.80	25.355	
11,100.0	11,048.7	11,028.4	10,942.4	40.9	44.0	-90.64	-205.8	-1,234.7	1,980.6	1,901.5	79.09	25.043	
11,200.0	11,148.7	11,232.8	11,146.7	41.2	44.7	-90.66	-206.9	-1,240.3	1,983.3	1,903.2	80.17	24.738	
11,300.0	11,248.7	11,334.8	11,248.7	41.5	45.0	-90.66	-206.9	-1,240.3	1,983.3	1,902.5	80.85	24.530	
11,400.0	11,348.7	11,434.8	11,348.7	41.9	45.3	-90.66	-206.9	-1,240.3	1,983.3	1,901.8	81.53	24.326	
11,423.3	11,372.0	11,458.1	11,372.0	42.0	45.4	-90.66	-206.9	-1,240.3	1,983.3	1,901.6	81.69	24.279	
11,450.0	11,398.6	11,484.8	11,398.6	42.0	45.5	-90.22	-206.9	-1,240.3	1,983.3	1,901.5	81.87	24.226	
11,500.0	11,448.4	11,534.5	11,448.4	42.2	45.7	-90.35	-206.9	-1,240.3	1,983.4	1,901.2	82.20	24.129	
11,550.0	11,497.6	11,583.7	11,497.6	42.4	45.8	-90.59	-206.9	-1,240.3	1,983.4	1,900.9	82.52	24.036	
11,600.0	11,545.9	11,632.0	11,545.9	42.5	46.0	-90.94	-206.9	-1,240.3	1,983.6	1,900.8	82.83	23.949	
11,650.0	11,592.8	11,678.9	11,592.8	42.6	46.1	-91.37	-206.9	-1,240.3	1,984.0	1,900.9	83.12	23.868	
11,700.0	11,638.0	11,724.1	11,638.0	42.8	46.2	-91.86	-206.9	-1,240.3	1,984.7	1,901.2	83.41	23.795	
11,750.0	11,681.2	11,767.4	11,681.2	42.9	46.4	-92.37	-206.9	-1,240.3	1,985.7	1,902.1	83.67	23.731	
11,800.0	11,722.1	11,818.7	11,732.6	43.0	46.5	-93.03	-205.0	-1,240.3	1,987.3	1,903.3	83.95	23.671	
11,850.0	11,760.3	11,874.7	11,788.1	43.1	46.7	-93.72	-197.7	-1,240.3	1,989.1	1,904.9	84.23	23.616	
11,900.0	11,795.5	11,935.0	11,846.7	43.2	46.9	-94.41	-183.9	-1,240.4	1,991.3	1,906.8	84.49	23.568	
11,950.0	11,827.6	12,000.2	11,908.1	43.2	47.0	-95.13	-162.1	-1,240.6	1,993.7	1,909.0	84.74	23.528	
12,000.0	11,866.1	12,071.3	11,971.8	43.3	47.2	-95.85	-130.5	-1,240.8	1,996.3	1,911.4	84.96	23.497	
12,050.0	11,881.0	12,149.2	12,036.4	43.3	47.3	-96.58	-87.2	-1,241.0	1,998.9	1,913.8	85.15	23.475	
12,100.0	11,902.0	12,234.5	12,099.8	43.3	47.4	-97.29	-30.2	-1,241.4	2,001.5	1,916.1	85.32	23.459	
12,150.0	11,918.9	12,327.5	12,158.4	43.4	47.5	-97.94	41.9	-1,241.8	2,003.7	1,918.2	85.46	23.445	
12,200.0	11,931.7	12,428.0	12,207.7	43.4	47.6	-98.48	129.3	-1,242.3	2,005.5	1,919.9	85.62	23.423	
12,250.0	11,940.3	12,534.5	12,242.5	43.5	47.6	-98.85	229.8	-1,243.0	2,006.6	1,920.8	85.82	23.381	
12,300.0	11,944.5	12,644.5	12,258.3	43.6	47.7	-99.00	338.5	-1,243.6	2,007.0	1,920.9	86.11	23.308	
12,326.5	11,944.9	12,688.9	12,258.8	43.6	47.8	-99.00	382.9	-1,243.9	2,006.9	1,920.6	86.27	23.263	
12,391.6	11,944.6	12,754.0	12,257.9	43.7	47.8	-98.98	448.0	-1,244.3	2,006.7	1,920.1	86.63	23.166	
12,400.0	11,944.5	12,762.4	12,257.8	43.8	47.9	-98.98	456.3	-1,244.4	2,006.7	1,920.1	86.67	23.153	
12,500.0	11,944.0	12,862.4	12,256.5	44.1	48.0	-98.96	556.3	-1,245.1	2,006.5	1,919.2	87.32	22.978	
12,600.0	11,943.4	12,962.4	12,255.2	44.4	48.3	-98.94	656.3	-1,245.8	2,006.3	1,918.2	88.09	22.775	
12,700.0	11,942.9	13,062.4	12,254.0	44.9	48.6	-98.92	756.3	-1,246.4	2,006.0	1,917.0	88.97	22.547	
12,800.0	11,942.3	13,162.4	12,252.7	45.4	49.0	-98.90	856.3	-1,247.1	2,005.8	1,915.8	89.96	22.295	
12,900.0	11,941.7	13,262.4	12,251.4	45.9	49.5	-98.88	956.3	-1,247.8	2,005.5	1,914.5	91.06	22.023	
13,000.0	11,941.2	13,362.4	12,250.1	46.6	50.0	-98.86	1,056.2	-1,248.5	2,005.3	1,913.0	92.27	21.733	
13,100.0	11,940.6	13,462.3	12,248.8	47.2	50.6	-98.84	1,156.2	-1,249.1	2,005.1	1,911.5	93.57	21.428	
13,200.0	11,940.1	13,562.3	12,247.5	48.0	51.3	-98.82	1,256.2	-1,249.8	2,004.8	1,909.9	94.97	21.109	
13,300.0	11,939.5	13,662.3	12,246.2	48.7	52.0	-98.80	1,356.2	-1,250.5	2,004.6	1,908.1	96.47	20.780	
13,400.0	11,939.0	13,762.3	12,244.9	49.5	52.7	-98.78	1,456.2	-1,251.2	2,004.4	1,906.3	98.05	20.443	
13,500.0	11,938.4	13,862.3	12,243.6	50.4	53.5	-98.76	1,556.2	-1,251.9	2,004.1	1,904.4	99.71	20.099	
13,600.0	11,937.8	13,962.3	12,242.3	51.3	54.3	-98.74	1,656.2	-1,252.5	2,003.9	1,902.4	101.45	19.752	
13,700.0	11,937.3	14,062.3	12,241.0	52.2	55.2	-98.72	1,756.1	-1,253.2	2,003.7	1,900.4	103.27	19.402	
13,800.0	11,936.7	14,162.3	12,239.7	53.1	56.1	-98.70	1,856.1	-1,253.9	2,003.4	1,898.3	105.16	19.051	
13,900.0	11,936.2	14,262.3	12,238.4	54.1	57.0	-98.68	1,956.1	-1,254.6	2,003.2	1,896.1	107.12	18.701	
14,000.0	11,935.6	14,362.3	12,237.1	55.2	58.0	-98.66	2,056.1	-1,255.3	2,003.0	1,893.8	109.14	18.352	
14,100.0	11,935.0	14,462.3	12,235.8	56.2	59.0	-98.64	2,156.1	-1,255.9	2,002.7	1,891.5	111.22	18.006	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,934.5	14,562.3	12,234.5	57.3	60.0	-98.62	2,256.1	-1,256.6	2,002.5	1,889.1	113.36	17.664	
14,300.0	11,933.9	14,662.3	12,233.3	58.4	61.1	-98.60	2,356.1	-1,257.3	2,002.3	1,886.7	115.56	17.327	
14,400.0	11,933.4	14,762.3	12,232.0	59.5	62.2	-98.58	2,456.1	-1,258.0	2,002.0	1,884.2	117.80	16.995	
14,500.0	11,932.8	14,862.3	12,230.7	60.7	63.3	-98.56	2,556.0	-1,258.6	2,001.8	1,881.7	120.10	16.668	
14,600.0	11,932.3	14,962.3	12,229.4	61.9	64.4	-98.54	2,656.0	-1,259.3	2,001.6	1,879.1	122.43	16.348	
14,700.0	11,931.7	15,062.3	12,228.1	63.1	65.6	-98.52	2,756.0	-1,260.0	2,001.3	1,876.5	124.82	16.034	
14,800.0	11,931.1	15,162.3	12,226.8	64.3	66.7	-98.50	2,856.0	-1,260.7	2,001.1	1,873.9	127.24	15.727	
14,900.0	11,930.6	15,262.3	12,225.5	65.5	67.9	-98.48	2,956.0	-1,261.4	2,000.9	1,871.2	129.70	15.427	
15,000.0	11,930.0	15,362.3	12,224.2	66.8	69.1	-98.46	3,056.0	-1,262.0	2,000.6	1,868.4	132.20	15.134	
15,100.0	11,929.5	15,462.3	12,222.9	68.1	70.4	-98.44	3,156.0	-1,262.7	2,000.4	1,865.7	134.73	14.847	
15,200.0	11,928.9	15,562.3	12,221.6	69.4	71.6	-98.42	3,255.9	-1,263.4	2,000.2	1,862.9	137.30	14.568	
15,300.0	11,928.3	15,662.3	12,220.3	70.7	72.9	-98.40	3,355.9	-1,264.1	1,999.9	1,860.0	139.89	14.296	
15,400.0	11,927.8	15,762.3	12,219.0	72.0	74.2	-98.38	3,455.9	-1,264.8	1,999.7	1,857.2	142.51	14.032	
15,500.0	11,927.2	15,862.3	12,217.7	73.3	75.5	-98.35	3,555.9	-1,265.4	1,999.5	1,854.3	145.17	13.774	
15,600.0	11,926.7	15,962.3	12,216.4	74.7	76.8	-98.33	3,655.9	-1,266.1	1,999.2	1,851.4	147.84	13.523	
15,700.0	11,926.1	16,062.3	12,215.1	76.0	78.1	-98.31	3,755.9	-1,266.8	1,999.0	1,848.5	150.55	13.279	
15,800.0	11,925.6	16,162.3	12,213.8	77.4	79.4	-98.29	3,855.9	-1,267.5	1,998.8	1,845.5	153.27	13.041	
15,900.0	11,925.0	16,262.3	12,212.5	78.8	80.8	-98.27	3,955.9	-1,268.1	1,998.6	1,842.5	156.02	12.810	
16,000.0	11,924.4	16,362.3	12,211.3	80.2	82.1	-98.25	4,055.8	-1,268.8	1,998.3	1,839.5	158.79	12.585	
16,100.0	11,923.9	16,462.3	12,210.0	81.6	83.5	-98.23	4,155.8	-1,269.5	1,998.1	1,836.5	161.58	12.366	
16,200.0	11,923.3	16,562.3	12,208.7	83.0	84.9	-98.21	4,255.8	-1,270.2	1,997.9	1,833.5	164.38	12.154	
16,300.0	11,922.8	16,662.3	12,207.4	84.4	86.3	-98.19	4,355.8	-1,270.9	1,997.6	1,830.4	167.21	11.947	
16,400.0	11,922.2	16,762.3	12,206.1	85.9	87.7	-98.17	4,455.8	-1,271.5	1,997.4	1,827.4	170.05	11.746	
16,500.0	11,921.6	16,862.3	12,204.8	87.3	89.1	-98.15	4,555.8	-1,272.2	1,997.2	1,824.3	172.91	11.550	
16,600.0	11,921.1	16,962.3	12,203.5	88.7	90.5	-98.13	4,655.8	-1,272.9	1,997.0	1,821.2	175.78	11.360	
16,700.0	11,920.5	17,062.2	12,202.2	90.2	91.9	-98.11	4,755.7	-1,273.6	1,996.7	1,818.1	178.67	11.175	
16,800.0	11,920.0	17,162.2	12,200.9	91.7	93.4	-98.09	4,855.7	-1,274.2	1,996.5	1,814.9	181.58	10.995	
16,900.0	11,919.4	17,262.2	12,199.6	93.1	94.8	-98.07	4,955.7	-1,274.9	1,996.3	1,811.8	184.49	10.820	
16,914.9	11,919.3	17,277.2	12,199.4	93.3	95.0	-98.07	4,970.6	-1,275.0	1,996.2	1,811.3	184.93	10.795	
17,000.0	11,918.8	17,270.5	12,199.5	94.6	94.9	-98.07	4,964.0	-1,275.0	1,998.2	1,812.0	186.17	10.733	
17,100.0	11,918.3	17,270.5	12,199.5	96.1	94.9	-98.07	4,964.0	-1,275.0	2,005.0	1,817.6	187.40	10.699	
17,200.0	11,917.7	17,270.5	12,199.5	97.6	94.9	-98.07	4,964.0	-1,275.0	2,016.8	1,828.5	188.26	10.713	
17,300.0	11,917.2	17,270.5	12,199.5	99.0	94.9	-98.07	4,964.0	-1,275.0	2,033.5	1,844.7	188.77	10.772	
17,400.0	11,916.6	17,270.5	12,199.5	100.5	94.9	-98.07	4,964.0	-1,275.0	2,054.8	1,865.9	188.93	10.876	
17,500.0	11,916.1	17,270.5	12,199.5	102.0	94.9	-98.07	4,964.0	-1,275.0	2,080.8	1,892.1	188.77	11.023	
17,600.0	11,915.5	17,270.5	12,199.5	103.5	94.9	-98.07	4,964.0	-1,275.0	2,111.2	1,922.9	188.31	11.211	
17,700.0	11,914.9	17,270.5	12,199.5	105.1	94.9	-98.07	4,964.0	-1,275.0	2,145.9	1,958.3	187.58	11.439	
17,800.0	11,914.4	17,270.5	12,199.5	106.6	94.9	-98.07	4,964.0	-1,275.0	2,184.5	1,997.9	186.62	11.706	
17,900.0	11,913.8	17,270.5	12,199.5	108.1	94.9	-98.07	4,964.0	-1,275.0	2,227.0	2,041.6	185.44	12.009	
18,000.0	11,913.3	17,270.5	12,199.5	109.6	94.9	-98.07	4,964.0	-1,275.0	2,273.1	2,089.0	184.10	12.347	
18,100.0	11,912.7	17,270.5	12,199.5	111.1	94.9	-98.07	4,964.0	-1,275.0	2,322.6	2,140.0	182.61	12.719	
18,200.0	11,912.1	17,270.5	12,199.5	112.7	94.9	-98.07	4,964.0	-1,275.0	2,375.3	2,194.3	181.00	13.123	
18,300.0	11,911.6	17,270.5	12,199.5	114.2	94.9	-98.07	4,964.0	-1,275.0	2,430.9	2,251.6	179.32	13.557	
18,400.0	11,911.0	17,270.5	12,199.5	115.7	94.9	-98.07	4,964.0	-1,275.0	2,489.3	2,311.8	177.56	14.019	
18,500.0	11,910.5	17,270.5	12,199.5	117.3	94.9	-98.07	4,964.0	-1,275.0	2,550.3	2,374.6	175.77	14.509	
18,600.0	11,909.9	17,270.5	12,199.5	118.8	94.9	-98.07	4,964.0	-1,275.0	2,613.7	2,439.8	173.96	15.025	
18,700.0	11,909.4	17,270.5	12,199.5	120.4	94.9	-98.07	4,964.0	-1,275.0	2,679.4	2,507.2	172.13	15.566	
18,800.0	11,908.8	17,270.5	12,199.5	121.9	94.9	-98.07	4,964.0	-1,275.0	2,747.1	2,576.8	170.31	16.130	
18,900.0	11,908.2	17,270.5	12,199.5	123.5	94.9	-98.07	4,964.0	-1,275.0	2,816.7	2,648.2	168.51	16.715	
19,000.0	11,907.7	17,270.5	12,199.5	125.0	94.9	-98.07	4,964.0	-1,275.0	2,888.1	2,721.4	166.74	17.321	
19,100.0	11,907.1	17,270.5	12,199.5	126.6	94.9	-98.07	4,964.0	-1,275.0	2,961.2	2,796.2	165.00	17.947	
19,200.0	11,906.6	17,270.5	12,199.5	128.1	94.9	-98.07	4,964.0	-1,275.0	3,035.8	2,872.5	163.29	18.591	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													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	11,906.0	17,270.5	12,199.5	129.7	94.9	-98.07	4,964.0	-1,275.0	3,111.9	2,950.2	161.63	19.253		
19,400.0	11,905.4	17,270.5	12,199.5	131.3	94.9	-98.07	4,964.0	-1,275.0	3,189.2	3,029.2	160.02	19.931		
19,500.0	11,904.9	17,270.5	12,199.5	132.8	94.9	-98.07	4,964.0	-1,275.0	3,267.8	3,109.4	158.45	20.624		
19,600.0	11,904.3	17,270.5	12,199.5	134.4	94.9	-98.07	4,964.0	-1,275.0	3,347.5	3,190.6	156.93	21.331		
19,700.0	11,903.8	17,270.5	12,199.5	136.0	94.9	-98.07	4,964.0	-1,275.0	3,428.3	3,272.9	155.46	22.052		
19,800.0	11,903.2	17,270.5	12,199.5	137.5	94.9	-98.07	4,964.0	-1,275.0	3,510.1	3,356.1	154.05	22.786		
19,900.0	11,902.7	17,270.5	12,199.5	139.1	94.9	-98.07	4,964.0	-1,275.0	3,592.8	3,440.1	152.68	23.532		
20,000.0	11,902.1	17,270.5	12,199.5	140.7	94.9	-98.07	4,964.0	-1,275.0	3,676.4	3,525.0	151.36	24.289		
20,100.0	11,901.5	17,270.5	12,199.5	142.3	94.9	-98.07	4,964.0	-1,275.0	3,760.7	3,610.6	150.09	25.056		
20,200.0	11,901.0	17,270.5	12,199.5	143.8	94.9	-98.07	4,964.0	-1,275.0	3,845.9	3,697.0	148.87	25.833		
20,300.0	11,900.4	17,270.5	12,199.5	145.4	94.9	-98.07	4,964.0	-1,275.0	3,931.7	3,784.0	147.70	26.619		
20,400.0	11,899.9	17,270.5	12,199.5	147.0	94.9	-98.07	4,964.0	-1,275.0	4,018.1	3,871.6	146.57	27.414		
20,500.0	11,899.3	17,270.5	12,199.5	148.6	94.9	-98.07	4,964.0	-1,275.0	4,105.2	3,959.7	145.49	28.217		
20,600.0	11,898.7	17,270.5	12,199.5	150.2	94.9	-98.07	4,964.0	-1,275.0	4,192.9	4,048.5	144.44	29.028		
20,700.0	11,898.2	17,270.5	12,199.5	151.8	94.9	-98.07	4,964.0	-1,275.0	4,281.1	4,137.7	143.44	29.845		
20,800.0	11,897.6	17,270.5	12,199.5	153.4	94.9	-98.07	4,964.0	-1,275.0	4,369.8	4,227.3	142.48	30.669		
20,900.0	11,897.1	17,270.5	12,199.5	155.0	94.9	-98.07	4,964.0	-1,275.0	4,459.0	4,317.4	141.56	31.499		
21,000.0	11,896.5	17,270.5	12,199.5	156.5	94.9	-98.07	4,964.0	-1,275.0	4,548.6	4,408.0	140.67	32.335		
21,100.0	11,896.0	17,270.5	12,199.5	158.1	94.9	-98.07	4,964.0	-1,275.0	4,638.7	4,498.9	139.82	33.176		
21,200.0	11,895.4	17,270.5	12,199.5	159.7	94.9	-98.07	4,964.0	-1,275.0	4,729.2	4,590.2	139.00	34.022		
21,300.0	11,894.8	17,270.5	12,199.5	161.3	94.9	-98.07	4,964.0	-1,275.0	4,820.0	4,681.8	138.22	34.872		
21,400.0	11,894.3	17,270.5	12,199.5	162.9	94.9	-98.07	4,964.0	-1,275.0	4,911.2	4,773.7	137.47	35.726		
21,500.0	11,893.7	17,270.5	12,199.5	164.5	94.9	-98.07	4,964.0	-1,275.0	5,002.7	4,866.0	136.74	36.585		
21,600.0	11,893.2	17,270.5	12,199.5	166.1	94.9	-98.07	4,964.0	-1,275.0	5,094.6	4,958.5	136.05	37.447		
21,700.0	11,892.6	17,270.5	12,199.5	167.7	94.9	-98.07	4,964.0	-1,275.0	5,186.7	5,051.3	135.38	38.312		
21,800.0	11,892.0	17,270.5	12,199.5	169.3	94.9	-98.07	4,964.0	-1,275.0	5,279.2	5,144.4	134.74	39.180		
21,900.0	11,891.5	17,270.5	12,199.5	170.9	94.9	-98.07	4,964.0	-1,275.0	5,371.9	5,237.8	134.12	40.052		
22,000.0	11,890.9	17,270.5	12,199.5	172.5	94.9	-98.07	4,964.0	-1,275.0	5,464.8	5,331.3	133.53	40.925		
22,100.0	11,890.4	17,270.5	12,199.5	174.1	94.9	-98.07	4,964.0	-1,275.0	5,558.0	5,425.1	132.96	41.801		
22,191.7	11,890.5	17,270.5	12,199.5	175.6	94.9	-98.05	4,964.0	-1,275.0	5,643.7	5,511.3	132.46	42.606		

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

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COMPASS 5000.14 Build 83

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	44.76	30.1	29.9	42.4				
100.0	100.0	101.0	99.0	0.1	0.1	44.76	30.1	29.9	42.4	42.2	0.26	163.264	
200.0	200.0	201.0	199.0	0.5	0.5	44.76	30.1	29.9	42.4	41.5	0.98	43.437	
300.0	300.0	301.0	299.0	0.8	0.8	44.76	30.1	29.9	42.4	40.7	1.69	25.051	
400.0	400.0	401.0	399.0	1.2	1.2	44.76	30.1	29.9	42.4	40.0	2.41	17.601	
500.0	500.0	501.0	499.0	1.6	1.6	44.76	30.1	29.9	42.4	39.3	3.13	13.566	
600.0	600.0	601.0	599.0	1.9	1.9	44.76	30.1	29.9	42.4	38.6	3.84	11.036	
700.0	700.0	701.0	699.0	2.3	2.3	44.76	30.1	29.9	42.4	37.9	4.56	9.302	
800.0	800.0	801.0	799.0	2.6	2.6	44.76	30.1	29.9	42.4	37.2	5.28	8.038	
900.0	900.0	901.0	899.0	3.0	3.0	44.76	30.1	29.9	42.4	36.4	6.00	7.077	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	44.76	30.1	29.9	42.4	35.7	6.71	6.321	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	44.76	30.1	29.9	42.4	35.0	7.43	5.711	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	44.76	30.1	29.9	42.4	34.3	8.15	5.209	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	44.76	30.1	29.9	42.4	33.6	8.86	4.787	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	44.76	30.1	29.9	42.4	32.9	9.58	4.429	
1,500.0	1,500.0	1,499.0	1,499.0	5.1	5.1	44.76	30.1	29.9	42.4	32.1	10.29	4.124	
1,600.0	1,600.0	1,599.7	1,599.7	5.5	5.5	-60.63	29.8	29.1	41.2	30.2	10.98	3.750	
1,700.0	1,700.0	1,700.2	1,700.1	5.8	5.8	-65.70	28.7	26.7	37.6	26.0	11.66	3.228	
1,800.0	1,799.9	1,800.3	1,800.2	6.2	6.2	-76.40	26.9	22.7	32.5	20.2	12.34	2.636	
1,900.0	1,899.7	1,900.0	1,899.7	6.5	6.5	-96.64	24.4	17.1	28.0	15.0	13.03	2.150	
1,943.9	1,943.4	1,943.6	1,943.1	6.7	6.7	-109.11	23.1	14.2	27.3	14.0	13.33	2.050 CC, ES, SF	
2,000.0	1,999.4	1,999.1	1,998.4	6.9	6.9	-126.56	21.2	10.1	28.7	15.0	13.72	2.090	
2,100.0	2,098.9	2,097.3	2,096.2	7.2	7.2	-152.95	17.4	1.5	38.2	23.8	14.40	2.656	
2,200.0	2,198.3	2,194.6	2,192.9	7.6	7.6	-168.85	12.9	-8.5	55.2	40.2	15.05	3.669	
2,300.0	2,297.4	2,309.3	2,288.2	8.0	8.0	-177.86	7.8	-19.8	77.3	61.6	15.76	4.908	
2,400.0	2,396.4	2,387.2	2,383.8	8.3	8.3	176.82	2.3	-32.0	102.1	85.8	16.36	6.244	
2,500.0	2,495.5	2,483.7	2,479.4	8.7	8.6	173.58	-3.2	-44.3	127.5	110.4	17.04	7.482	
2,600.0	2,594.5	2,580.3	2,574.9	9.1	9.0	171.42	-8.7	-56.5	153.0	135.3	17.72	8.637	
2,700.0	2,693.5	2,676.8	2,670.5	9.5	9.4	169.87	-14.3	-68.8	178.8	160.4	18.41	9.711	
2,800.0	2,792.5	2,773.4	2,766.1	9.9	9.7	168.72	-19.8	-81.1	204.6	185.5	19.10	10.710	
2,900.0	2,891.6	2,869.9	2,861.7	10.3	10.1	167.82	-25.3	-93.3	230.4	210.7	19.80	11.641	
3,000.0	2,990.6	2,966.4	2,957.3	10.7	10.5	167.11	-30.8	-105.6	256.4	235.9	20.50	12.508	
3,100.0	3,089.6	3,063.0	3,052.9	11.0	10.9	166.52	-36.3	-117.8	282.3	261.1	21.20	13.319	
3,200.0	3,188.6	3,159.5	3,148.5	11.4	11.3	166.03	-41.8	-130.1	308.3	286.4	21.90	14.077	
3,300.0	3,287.7	3,256.0	3,244.1	11.8	11.6	165.62	-47.3	-142.3	334.3	311.7	22.61	14.787	
3,400.0	3,386.7	3,352.6	3,339.7	12.2	12.0	165.27	-52.8	-154.6	360.3	336.9	23.31	15.454	
3,500.0	3,485.7	3,449.1	3,435.3	12.7	12.4	164.97	-58.4	-166.8	386.3	362.2	24.02	16.080	
3,600.0	3,584.8	3,545.7	3,530.9	13.1	12.8	164.70	-63.9	-179.1	412.3	387.6	24.73	16.671	
3,700.0	3,683.8	3,642.2	3,626.5	13.5	13.2	164.47	-69.4	-191.3	438.3	412.9	25.44	17.227	
3,800.0	3,782.8	3,738.7	3,722.1	13.9	13.6	164.26	-74.9	-203.6	464.3	438.2	26.16	17.753	
3,900.0	3,881.8	3,835.3	3,817.7	14.3	14.0	164.08	-80.4	-215.8	490.4	463.5	26.87	18.250	
4,000.0	3,980.9	3,931.8	3,913.3	14.7	14.4	163.91	-85.9	-228.1	516.4	488.8	27.58	18.721	
4,100.0	4,079.9	4,028.4	4,008.9	15.1	14.8	163.76	-91.4	-240.3	542.5	514.2	28.30	19.168	
4,200.0	4,178.9	4,124.9	4,104.5	15.5	15.2	163.62	-96.9	-252.6	568.5	539.5	29.02	19.592	
4,300.0	4,277.9	4,221.4	4,200.1	15.9	15.6	163.50	-102.4	-264.9	594.6	564.8	29.74	19.995	
4,400.0	4,377.0	4,318.0	4,295.7	16.3	16.0	163.38	-108.0	-277.1	620.6	590.2	30.45	20.379	
4,500.0	4,476.0	4,414.5	4,391.3	16.7	16.4	163.28	-113.5	-289.4	646.7	615.5	31.17	20.745	
4,600.0	4,575.0	4,511.1	4,486.9	17.1	16.8	163.18	-119.0	-301.6	672.7	640.8	31.89	21.093	
4,700.0	4,674.0	4,607.6	4,582.5	17.6	17.2	163.09	-124.5	-313.9	698.8	666.2	32.61	21.426	
4,800.0	4,773.1	4,704.1	4,678.1	18.0	17.6	163.00	-130.0	-326.1	724.9	691.5	33.33	21.745	
4,900.0	4,872.1	4,800.7	4,773.7	18.4	18.0	162.93	-135.5	-338.4	750.9	716.9	34.06	22.049	
5,000.0	4,971.1	4,897.2	4,869.3	18.8	18.4	162.85	-141.0	-350.6	777.0	742.2	34.78	22.341	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
5,100.0	5,070.2	4,993.8	4,964.9	19.2	18.8	162.79	-146.5	-362.9	803.0	767.5	35.50	22.620	
5,200.0	5,169.2	5,090.3	5,060.5	19.6	19.2	162.72	-152.1	-375.1	829.1	792.9	36.22	22.888	
5,300.0	5,268.2	5,186.8	5,156.1	20.0	19.6	162.66	-157.6	-387.4	855.2	818.2	36.95	23.145	
5,400.0	5,367.2	5,283.4	5,251.7	20.5	20.0	162.61	-163.1	-399.6	881.2	843.6	37.67	23.392	
5,500.0	5,466.3	5,379.9	5,347.3	20.9	20.4	162.55	-168.6	-411.9	907.3	868.9	38.40	23.630	
5,600.0	5,565.3	5,476.5	5,442.9	21.3	20.8	162.50	-174.1	-424.1	933.4	894.3	39.12	23.858	
5,700.0	5,664.3	5,573.0	5,538.5	21.7	21.2	162.46	-179.6	-436.4	959.4	919.6	39.85	24.078	
5,800.0	5,763.3	5,677.9	5,642.4	22.1	21.6	162.41	-185.5	-449.6	985.4	944.8	40.65	24.244	
5,900.0	5,862.4	5,806.4	5,770.1	22.5	22.1	162.42	-191.5	-462.9	1,009.1	967.5	41.62	24.244	
6,000.0	5,961.4	5,936.7	5,900.0	23.0	22.6	162.53	-195.8	-472.4	1,029.8	987.2	42.57	24.193	
6,100.0	6,060.4	6,068.6	6,031.8	23.4	23.1	162.71	-198.2	-477.8	1,047.3	1,003.8	43.47	24.094	
6,200.0	6,159.4	6,204.7	6,158.4	23.8	23.5	162.97	-198.9	-479.2	1,061.7	1,017.3	44.32	23.953	
6,300.0	6,258.5	6,305.7	6,257.5	24.2	23.9	163.19	-198.9	-479.2	1,075.0	1,030.0	45.03	23.873	
6,400.0	6,357.5	6,406.6	6,356.5	24.6	24.2	163.40	-198.9	-479.2	1,088.3	1,042.6	45.74	23.794	
6,500.0	6,456.5	6,507.6	6,455.5	25.1	24.5	163.60	-198.9	-479.2	1,101.7	1,055.2	46.45	23.719	
6,600.0	6,555.6	6,608.6	6,554.6	25.5	24.8	163.81	-198.9	-479.2	1,115.0	1,067.9	47.16	23.645	
6,700.0	6,654.6	6,709.6	6,653.6	25.9	25.1	164.00	-198.9	-479.2	1,128.4	1,080.6	47.87	23.574	
6,800.0	6,753.6	6,789.5	6,752.6	26.3	25.4	164.19	-198.9	-479.2	1,141.8	1,093.3	48.51	23.539	
6,900.0	6,852.6	6,888.5	6,851.6	26.7	25.7	164.38	-198.9	-479.2	1,155.2	1,106.0	49.21	23.474	
7,000.0	6,951.7	6,987.5	6,950.7	27.1	26.0	164.57	-198.9	-479.2	1,168.7	1,118.7	49.92	23.412	
7,100.0	7,050.7	7,086.6	7,049.7	27.6	26.4	164.75	-198.9	-479.2	1,182.1	1,131.5	50.62	23.351	
7,131.4	7,081.7	7,117.6	7,080.7	27.7	26.5	164.80	-198.9	-479.2	1,186.3	1,135.4	50.84	23.332	
7,200.0	7,149.8	7,185.7	7,148.8	28.0	26.7	164.95	-198.9	-479.2	1,194.9	1,143.6	51.33	23.280	
7,300.0	7,249.2	7,285.1	7,248.2	28.4	27.0	165.12	-198.9	-479.2	1,205.4	1,153.4	52.03	23.167	
7,400.0	7,348.9	7,384.7	7,347.9	28.8	27.3	165.25	-198.9	-479.2	1,213.4	1,160.6	52.73	23.010	
7,500.0	7,448.7	7,484.6	7,447.7	29.1	27.7	165.34	-198.9	-479.2	1,218.8	1,165.4	53.43	22.812	
7,600.0	7,548.7	7,584.5	7,547.7	29.5	28.0	165.39	-198.9	-479.2	1,221.7	1,167.6	54.12	22.574	
7,664.7	7,613.3	7,649.2	7,612.3	29.7	28.2	-90.70	-198.9	-479.2	1,222.2	1,167.7	54.56	22.401	
7,700.0	7,648.7	7,684.5	7,647.7	29.8	28.3	-90.70	-198.9	-479.2	1,222.2	1,167.4	54.80	22.304	
7,800.0	7,748.7	7,784.5	7,747.7	30.1	28.7	-90.70	-198.9	-479.2	1,222.2	1,166.8	55.47	22.033	
7,900.0	7,848.7	7,884.5	7,847.7	30.4	29.0	-90.70	-198.9	-479.2	1,222.2	1,166.1	56.15	21.768	
8,000.0	7,948.7	7,984.5	7,947.7	30.7	29.3	-90.70	-198.9	-479.2	1,222.2	1,165.4	56.82	21.509	
8,100.0	8,048.7	8,084.5	8,047.7	31.0	29.7	-90.70	-198.9	-479.2	1,222.2	1,164.7	57.50	21.256	
8,200.0	8,148.7	8,184.5	8,147.7	31.4	30.0	-90.70	-198.9	-479.2	1,222.2	1,164.0	58.18	21.008	
8,300.0	8,248.7	8,284.5	8,247.7	31.7	30.3	-90.70	-198.9	-479.2	1,222.2	1,163.4	58.86	20.765	
8,400.0	8,348.7	8,384.5	8,347.7	32.0	30.7	-90.70	-198.9	-479.2	1,222.2	1,162.7	59.54	20.528	
8,500.0	8,448.7	8,484.5	8,447.7	32.3	31.0	-90.70	-198.9	-479.2	1,222.2	1,162.0	60.22	20.296	
8,600.0	8,548.7	8,584.5	8,547.7	32.6	31.3	-90.70	-198.9	-479.2	1,222.2	1,161.3	60.90	20.069	
8,700.0	8,648.7	8,684.5	8,647.7	33.0	31.7	-90.70	-198.9	-479.2	1,222.2	1,160.6	61.58	19.847	
8,800.0	8,748.7	8,784.5	8,747.7	33.3	32.0	-90.70	-198.9	-479.2	1,222.2	1,160.0	62.27	19.629	
8,900.0	8,848.7	8,884.5	8,847.7	33.6	32.3	-90.70	-198.9	-479.2	1,222.2	1,159.3	62.95	19.416	
9,000.0	8,948.7	8,984.5	8,947.7	33.9	32.7	-90.70	-198.9	-479.2	1,222.2	1,158.6	63.64	19.207	
9,100.0	9,048.7	9,084.5	9,047.7	34.3	33.0	-90.70	-198.9	-479.2	1,222.2	1,157.9	64.32	19.002	
9,200.0	9,148.7	9,184.5	9,147.7	34.6	33.3	-90.70	-198.9	-479.2	1,222.2	1,157.2	65.01	18.802	
9,300.0	9,248.7	9,284.5	9,247.7	34.9	33.7	-90.70	-198.9	-479.2	1,222.2	1,156.5	65.69	18.605	
9,400.0	9,348.7	9,384.5	9,347.7	35.2	34.0	-90.70	-198.9	-479.2	1,222.2	1,155.8	66.38	18.412	
9,500.0	9,448.7	9,484.5	9,447.7	35.6	34.4	-90.70	-198.9	-479.2	1,222.2	1,155.2	67.07	18.223	
9,600.0	9,548.7	9,584.5	9,547.7	35.9	34.7	-90.70	-198.9	-479.2	1,222.2	1,154.5	67.76	18.038	
9,700.0	9,648.7	9,684.5	9,647.7	36.2	35.0	-90.70	-198.9	-479.2	1,222.2	1,153.8	68.45	17.857	
9,800.0	9,748.7	9,784.5	9,747.7	36.5	35.4	-90.70	-198.9	-479.2	1,222.2	1,153.1	69.14	17.679	
9,900.0	9,848.7	9,884.5	9,847.7	36.9	35.7	-90.70	-198.9	-479.2	1,222.2	1,152.4	69.83	17.504	
10,000.0	9,948.7	9,984.5	9,947.7	37.2	36.1	-90.70	-198.9	-479.2	1,222.2	1,151.7	70.52	17.332	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													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	10,048.7	10,084.5	10,047.7	37.5	36.4	-90.70	-198.9	-479.2	1,222.2	1,151.0	71.21	17.164		
10,200.0	10,148.7	10,184.5	10,147.7	37.9	36.8	-90.70	-198.9	-479.2	1,222.2	1,150.3	71.90	16.999		
10,300.0	10,248.7	10,284.5	10,247.7	38.2	37.1	-90.70	-198.9	-479.2	1,222.2	1,149.6	72.59	16.837		
10,400.0	10,348.7	10,384.5	10,347.7	38.5	37.4	-90.70	-198.9	-479.2	1,222.2	1,148.9	73.29	16.678		
10,500.0	10,448.7	10,484.5	10,447.7	38.9	37.8	-90.70	-198.9	-479.2	1,222.2	1,148.3	73.98	16.521		
10,600.0	10,548.7	10,584.5	10,547.7	39.2	38.1	-90.70	-198.9	-479.2	1,222.2	1,147.6	74.67	16.368		
10,700.0	10,648.7	10,684.5	10,647.7	39.5	38.5	-90.70	-198.9	-479.2	1,222.2	1,146.9	75.37	16.217		
10,800.0	10,748.7	10,784.5	10,747.7	39.9	38.8	-90.70	-198.9	-479.2	1,222.2	1,146.2	76.06	16.069		
10,900.0	10,848.7	10,884.5	10,847.7	40.2	39.2	-90.70	-198.9	-479.2	1,222.2	1,145.5	76.76	15.924		
11,000.0	10,948.7	10,984.5	10,947.7	40.5	39.5	-90.70	-198.9	-479.2	1,222.2	1,144.8	77.45	15.781		
11,100.0	11,048.7	11,084.5	11,047.7	40.9	39.8	-90.70	-198.9	-479.2	1,222.2	1,144.1	78.15	15.640		
11,200.0	11,148.7	11,184.5	11,147.7	41.2	40.2	-90.70	-198.9	-479.2	1,222.2	1,143.4	78.84	15.502		
11,300.0	11,248.7	11,284.5	11,247.7	41.5	40.5	-90.70	-198.9	-479.2	1,222.2	1,142.7	79.54	15.366		
11,400.0	11,348.7	11,384.5	11,347.7	41.9	40.9	-90.70	-198.9	-479.2	1,222.2	1,142.0	80.24	15.233		
11,423.3	11,372.0	11,407.9	11,371.0	42.0	41.0	-90.70	-198.9	-479.2	1,222.2	1,141.8	80.40	15.202		
11,450.0	11,398.6	11,434.5	11,397.6	42.0	41.0	-90.27	-198.9	-479.2	1,222.2	1,141.6	80.58	15.167		
11,500.0	11,448.4	11,484.3	11,447.4	42.2	41.2	-90.48	-198.9	-479.2	1,222.3	1,141.3	80.93	15.103		
11,550.0	11,497.6	11,533.5	11,496.6	42.4	41.4	-90.87	-198.9	-479.2	1,222.4	1,141.1	81.26	15.042		
11,600.0	11,545.9	11,581.7	11,544.9	42.5	41.6	-91.44	-198.9	-479.2	1,222.6	1,141.1	81.59	14.985		
11,650.0	11,592.8	11,628.7	11,591.8	42.6	41.7	-92.14	-198.9	-479.2	1,223.2	1,141.3	81.90	14.935		
11,700.0	11,638.0	11,673.9	11,637.0	42.8	41.9	-92.93	-198.9	-479.2	1,224.3	1,142.1	82.21	14.892		
11,750.0	11,681.2	11,717.1	11,680.2	42.9	42.0	-93.78	-198.9	-479.2	1,226.0	1,143.5	82.50	14.861		
11,800.0	11,722.1	11,758.0	11,721.1	43.0	42.2	-94.61	-198.9	-479.2	1,228.6	1,145.8	82.77	14.843		
11,850.0	11,760.3	11,803.8	11,759.3	43.1	42.3	-95.39	-198.9	-479.2	1,232.2	1,149.2	83.06	14.836		
11,900.0	11,795.5	11,831.4	11,794.5	43.2	42.4	-96.05	-198.9	-479.2	1,237.3	1,154.0	83.27	14.858		
11,950.0	11,827.6	11,863.4	11,826.6	43.2	42.5	-96.53	-198.9	-479.2	1,243.8	1,160.3	83.50	14.896		
12,000.0	11,856.1	11,908.0	11,855.1	43.3	42.7	-96.78	-198.9	-479.2	1,252.1	1,168.3	83.76	14.948		
12,050.0	11,881.0	11,916.8	11,880.0	43.3	42.7	-96.75	-198.9	-479.2	1,262.2	1,178.3	83.89	15.045		
12,100.0	11,902.0	11,937.8	11,901.0	43.3	42.8	-96.39	-198.9	-479.2	1,274.3	1,190.2	84.06	15.160		
12,150.0	11,918.9	11,954.8	11,917.9	43.4	42.8	-95.67	-198.9	-479.2	1,288.3	1,204.1	84.20	15.301		
12,200.0	11,931.7	11,967.6	11,930.7	43.4	42.9	-94.55	-198.9	-479.2	1,304.4	1,220.1	84.31	15.471		
12,250.0	11,940.3	11,976.1	11,939.3	43.5	42.9	-93.02	-198.9	-479.2	1,322.4	1,238.0	84.41	15.667		
12,300.0	11,944.5	11,980.3	11,943.5	43.6	42.9	-91.06	-198.9	-479.2	1,342.2	1,257.8	84.47	15.890		
12,326.5	11,944.9	11,980.8	11,943.9	43.6	42.9	-89.85	-198.9	-479.2	1,353.4	1,268.9	84.50	16.018		
12,391.6	11,944.6	11,980.5	11,943.6	43.7	42.9	-89.83	-198.9	-479.2	1,382.6	1,298.1	84.55	16.353		
12,400.0	11,944.5	11,980.4	11,943.5	43.8	42.9	-89.83	-198.9	-479.2	1,386.6	1,302.0	84.56	16.398		
12,500.0	11,944.0	11,979.8	11,943.0	44.1	42.9	-89.80	-198.9	-479.2	1,436.5	1,351.8	84.65	16.969		
12,600.0	11,943.4	13,131.9	12,539.7	44.4	45.8	-114.38	592.4	-580.8	1,447.8	1,365.0	82.87	17.471		
12,700.0	11,942.9	13,303.7	12,537.2	44.9	46.5	-114.25	764.1	-586.3	1,449.5	1,365.5	84.05	17.245		
12,800.0	11,942.3	13,403.7	12,535.7	45.4	47.0	-114.22	864.1	-587.1	1,449.1	1,364.1	85.02	17.044		
12,900.0	11,941.7	13,503.7	12,534.2	45.9	47.5	-114.19	964.1	-587.9	1,448.7	1,362.6	86.10	16.827		
13,000.0	11,941.2	13,603.7	12,532.8	46.6	48.1	-114.15	1,064.1	-588.7	1,448.3	1,361.1	87.27	16.597		
13,100.0	11,940.6	13,703.7	12,531.3	47.2	48.8	-114.12	1,164.1	-589.5	1,447.9	1,359.4	88.53	16.356		
13,200.0	11,940.1	13,803.7	12,529.8	48.0	49.5	-114.09	1,264.1	-590.3	1,447.6	1,357.7	89.88	16.106		
13,300.0	11,939.5	13,903.7	12,528.3	48.7	50.2	-114.05	1,364.0	-591.0	1,447.2	1,355.8	91.32	15.848		
13,400.0	11,939.0	14,003.7	12,526.9	49.5	51.0	-114.02	1,464.0	-591.8	1,446.8	1,353.9	92.84	15.584		
13,500.0	11,938.4	14,103.7	12,525.4	50.4	51.8	-113.99	1,564.0	-592.6	1,446.4	1,351.9	94.43	15.316		
13,600.0	11,937.8	14,203.7	12,523.9	51.3	52.7	-113.96	1,664.0	-593.4	1,446.0	1,349.9	96.11	15.046		
13,700.0	11,937.3	14,303.7	12,522.5	52.2	53.6	-113.92	1,764.0	-594.2	1,445.6	1,347.7	97.85	14.774		
13,800.0	11,936.7	14,403.7	12,521.0	53.1	54.5	-113.89	1,863.9	-594.9	1,445.2	1,345.5	99.66	14.502		
13,900.0	11,936.2	14,503.7	12,519.5	54.1	55.5	-113.86	1,963.9	-595.7	1,444.8	1,343.3	101.53	14.230		
14,000.0	11,935.6	14,603.7	12,518.0	55.2	56.5	-113.83	2,063.9	-596.5	1,444.4	1,341.0	103.46	13.961		

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,935.0	14,703.7	12,516.6	56.2	57.5	-113.79	2,163.9	-597.3	1,444.0	1,338.6	105.46	13.693	
14,200.0	11,934.5	14,803.7	12,515.1	57.3	58.5	-113.76	2,263.9	-598.1	1,443.6	1,336.1	107.50	13.429	
14,300.0	11,933.9	14,903.7	12,513.6	58.4	59.6	-113.73	2,363.9	-598.8	1,443.3	1,333.7	109.59	13.169	
14,400.0	11,933.4	15,003.7	12,512.1	59.5	60.7	-113.69	2,463.8	-599.6	1,442.9	1,331.1	111.74	12.913	
14,500.0	11,932.8	15,103.7	12,510.7	60.7	61.9	-113.66	2,563.8	-600.4	1,442.5	1,328.6	113.93	12.661	
14,600.0	11,932.3	15,203.7	12,509.2	61.9	63.0	-113.63	2,663.8	-601.2	1,442.1	1,325.9	116.16	12.415	
14,700.0	11,931.7	15,303.7	12,507.7	63.1	64.2	-113.59	2,763.8	-602.0	1,441.7	1,323.3	118.43	12.173	
14,800.0	11,931.1	15,403.7	12,506.3	64.3	65.4	-113.56	2,863.8	-602.8	1,441.3	1,320.6	120.74	11.937	
14,900.0	11,930.6	15,503.6	12,504.8	65.5	66.6	-113.53	2,963.7	-603.5	1,440.9	1,317.9	123.09	11.706	
15,000.0	11,930.0	15,603.6	12,503.3	66.8	67.9	-113.50	3,063.7	-604.3	1,440.6	1,315.1	125.47	11.481	
15,100.0	11,929.5	15,703.6	12,501.8	68.1	69.1	-113.46	3,163.7	-605.1	1,440.2	1,312.3	127.89	11.261	
15,200.0	11,928.9	15,803.6	12,500.4	69.4	70.4	-113.43	3,263.7	-605.9	1,439.8	1,309.5	130.34	11.047	
15,300.0	11,928.3	15,903.6	12,498.9	70.7	71.7	-113.40	3,363.7	-606.7	1,439.4	1,306.6	132.81	10.838	
15,400.0	11,927.8	16,003.6	12,497.4	72.0	73.0	-113.36	3,463.7	-607.4	1,439.0	1,303.7	135.32	10.635	
15,500.0	11,927.2	16,103.6	12,495.9	73.3	74.3	-113.33	3,563.6	-608.2	1,438.6	1,300.8	137.84	10.437	
15,600.0	11,926.7	16,203.6	12,494.5	74.7	75.6	-113.30	3,663.6	-609.0	1,438.3	1,297.9	140.40	10.244	
15,700.0	11,926.1	16,303.6	12,493.0	76.0	77.0	-113.26	3,763.6	-609.8	1,437.9	1,294.9	142.98	10.057	
15,800.0	11,925.6	16,403.6	12,491.5	77.4	78.3	-113.23	3,863.6	-610.6	1,437.5	1,291.9	145.58	9.874	
15,900.0	11,925.0	16,503.6	12,490.0	78.8	79.7	-113.20	3,963.6	-611.3	1,437.1	1,288.9	148.20	9.697	
16,000.0	11,924.4	16,603.6	12,488.6	80.2	81.1	-113.17	4,063.6	-612.1	1,436.7	1,285.9	150.84	9.525	
16,100.0	11,923.9	16,703.6	12,487.1	81.6	82.5	-113.13	4,163.5	-612.9	1,436.4	1,282.9	153.50	9.357	
16,200.0	11,923.3	16,803.6	12,485.6	83.0	83.9	-113.10	4,263.5	-613.7	1,436.0	1,279.8	156.19	9.194	
16,300.0	11,922.8	16,903.6	12,484.2	84.4	85.3	-113.07	4,363.5	-614.5	1,435.6	1,276.7	158.88	9.036	
16,400.0	11,922.2	17,003.6	12,482.7	85.9	86.7	-113.03	4,463.5	-615.3	1,435.2	1,273.6	161.60	8.881	
16,500.0	11,921.6	17,103.6	12,481.2	87.3	88.1	-113.00	4,563.5	-616.0	1,434.8	1,270.5	164.33	8.732	
16,600.0	11,921.1	17,203.6	12,479.7	88.7	89.5	-112.97	4,663.4	-616.8	1,434.5	1,267.4	167.07	8.586	
16,700.0	11,920.5	17,303.6	12,478.3	90.2	91.0	-112.93	4,763.4	-617.6	1,434.1	1,264.3	169.84	8.444	
16,800.0	11,920.0	17,403.6	12,476.8	91.7	92.4	-112.90	4,863.4	-618.4	1,433.7	1,261.1	172.61	8.306	
16,900.0	11,919.4	17,503.6	12,475.3	93.1	93.9	-112.87	4,963.4	-619.2	1,433.3	1,257.9	175.40	8.172	
17,000.0	11,918.8	17,603.6	12,473.8	94.6	95.3	-112.83	5,063.4	-619.9	1,433.0	1,254.8	178.20	8.041	
17,100.0	11,918.3	17,703.6	12,472.4	96.1	96.8	-112.80	5,163.3	-620.7	1,432.6	1,251.6	181.01	7.914	
17,200.0	11,917.7	17,803.5	12,470.9	97.6	98.3	-112.77	5,263.3	-621.5	1,432.2	1,248.4	183.84	7.791	
17,300.0	11,917.2	17,903.5	12,469.4	99.0	99.8	-112.73	5,363.3	-622.3	1,431.8	1,245.2	186.67	7.670	
17,400.0	11,916.6	18,003.5	12,468.0	100.5	101.2	-112.70	5,463.3	-623.1	1,431.5	1,242.0	189.52	7.553	
17,500.0	11,916.1	18,103.5	12,466.5	102.0	102.7	-112.67	5,563.3	-623.8	1,431.1	1,238.7	192.38	7.439	
17,600.0	11,915.5	18,203.5	12,465.0	103.5	104.2	-112.63	5,663.3	-624.6	1,430.7	1,235.5	195.24	7.328	
17,700.0	11,914.9	18,303.5	12,463.5	105.1	105.7	-112.60	5,763.2	-625.4	1,430.4	1,232.2	198.12	7.220	
17,800.0	11,914.4	18,403.5	12,462.1	106.6	107.2	-112.56	5,863.2	-626.2	1,430.0	1,229.0	201.01	7.114	
17,900.0	11,913.8	18,503.5	12,460.6	108.1	108.7	-112.53	5,963.2	-627.0	1,429.6	1,225.7	203.90	7.011	
18,000.0	11,913.3	18,603.5	12,459.1	109.6	110.2	-112.50	6,063.2	-627.7	1,429.2	1,222.4	206.80	6.911	
18,100.0	11,912.7	18,703.5	12,457.6	111.1	111.8	-112.46	6,163.2	-628.5	1,428.9	1,219.2	209.72	6.813	
18,200.0	11,912.1	18,803.5	12,456.2	112.7	113.3	-112.43	6,263.1	-629.3	1,428.5	1,215.9	212.63	6.718	
18,300.0	11,911.6	18,903.5	12,454.7	114.2	114.8	-112.40	6,363.1	-630.1	1,428.1	1,212.6	215.56	6.625	
18,400.0	11,911.0	19,003.5	12,453.2	115.7	116.3	-112.36	6,463.1	-630.9	1,427.8	1,209.3	218.50	6.535	
18,500.0	11,910.5	19,103.5	12,451.8	117.3	117.9	-112.33	6,563.1	-631.7	1,427.4	1,206.0	221.44	6.446	
18,600.0	11,909.9	19,203.5	12,450.3	118.8	119.4	-112.30	6,663.1	-632.4	1,427.0	1,202.6	224.39	6.360	
18,700.0	11,909.4	19,303.5	12,448.8	120.4	120.9	-112.26	6,763.1	-633.2	1,426.7	1,199.3	227.34	6.275	
18,800.0	11,908.8	19,403.5	12,447.3	121.9	122.5	-112.23	6,863.0	-634.0	1,426.3	1,196.0	230.31	6.193	
18,900.0	11,908.2	19,503.5	12,445.9	123.5	124.0	-112.20	6,963.0	-634.8	1,425.9	1,192.7	233.27	6.113	
19,000.0	11,907.7	19,603.5	12,444.4	125.0	125.6	-112.16	7,063.0	-635.6	1,425.6	1,189.3	236.25	6.034	
19,100.0	11,907.1	19,703.5	12,442.9	126.6	127.1	-112.13	7,163.0	-636.3	1,425.2	1,186.0	239.23	5.958	
19,200.0	11,906.6	19,803.5	12,441.4	128.1	128.7	-112.09	7,263.0	-637.1	1,424.8	1,182.6	242.21	5.883	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Nina Cortell - Nina Cortell Fed Com #221H - 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
19,300.0	11,906.0	19,903.5	12,440.0	129.7	130.2	-112.06	7,363.0	-637.9	1,424.5	1,179.3	245.21	5.809	
19,400.0	11,905.4	20,003.5	12,438.5	131.3	131.8	-112.03	7,462.9	-638.7	1,424.1	1,175.9	248.20	5.738	
19,500.0	11,904.9	20,103.5	12,437.0	132.8	133.3	-111.99	7,562.9	-639.5	1,423.8	1,172.5	251.21	5.668	
19,600.0	11,904.3	20,203.4	12,435.6	134.4	134.9	-111.96	7,662.9	-640.2	1,423.4	1,169.2	254.21	5.599	
19,700.0	11,903.8	20,303.4	12,434.1	136.0	136.5	-111.93	7,762.9	-641.0	1,423.0	1,165.8	257.23	5.532	
19,800.0	11,903.2	20,403.4	12,432.6	137.5	138.0	-111.89	7,862.9	-641.8	1,422.7	1,162.4	260.24	5.467	
19,900.0	11,902.7	20,503.4	12,431.1	139.1	139.6	-111.86	7,962.8	-642.6	1,422.3	1,159.0	263.27	5.403	
20,000.0	11,902.1	20,603.4	12,429.7	140.7	141.2	-111.82	8,062.8	-643.4	1,421.9	1,155.7	266.29	5.340	
20,100.0	11,901.5	20,703.4	12,428.2	142.3	142.8	-111.79	8,162.8	-644.2	1,421.6	1,152.3	269.32	5.278	
20,200.0	11,901.0	20,803.4	12,426.7	143.8	144.3	-111.76	8,262.8	-644.9	1,421.2	1,148.9	272.36	5.218	
20,300.0	11,900.4	20,903.4	12,425.2	145.4	145.9	-111.72	8,362.8	-645.7	1,420.9	1,145.5	275.40	5.159	
20,400.0	11,899.9	21,003.4	12,423.8	147.0	147.5	-111.69	8,462.8	-646.5	1,420.5	1,142.1	278.44	5.102	
20,500.0	11,899.3	21,103.4	12,422.3	148.6	149.1	-111.65	8,562.7	-647.3	1,420.2	1,138.7	281.49	5.045	
20,600.0	11,898.7	21,203.4	12,420.8	150.2	150.6	-111.62	8,662.7	-648.1	1,419.8	1,135.3	284.54	4.990	
20,700.0	11,898.2	21,303.4	12,419.4	151.8	152.2	-111.59	8,762.7	-648.8	1,419.4	1,131.8	287.60	4.936	
20,800.0	11,897.6	21,403.4	12,417.9	153.4	153.8	-111.55	8,862.7	-649.6	1,419.1	1,128.4	290.66	4.882	
20,900.0	11,897.1	21,503.4	12,416.4	155.0	155.4	-111.52	8,962.7	-650.4	1,418.7	1,125.0	293.72	4.830	
21,000.0	11,896.5	21,603.4	12,414.9	156.5	157.0	-111.48	9,062.6	-651.2	1,418.4	1,121.6	296.79	4.779	
21,100.0	11,896.0	21,703.4	12,413.5	158.1	158.6	-111.45	9,162.6	-652.0	1,418.0	1,118.2	299.86	4.729	
21,200.0	11,895.4	21,803.4	12,412.0	159.7	160.2	-111.42	9,262.6	-652.7	1,417.7	1,114.7	302.93	4.680	
21,300.0	11,894.8	21,903.4	12,410.5	161.3	161.8	-111.38	9,362.6	-653.5	1,417.3	1,111.3	306.01	4.632	
21,400.0	11,894.3	22,003.4	12,409.0	162.9	163.4	-111.35	9,462.6	-654.3	1,417.0	1,107.9	309.09	4.584	
21,500.0	11,893.7	22,103.4	12,407.6	164.5	165.0	-111.31	9,562.6	-655.1	1,416.6	1,104.4	312.17	4.538	
21,600.0	11,893.2	22,203.4	12,406.1	166.1	166.5	-111.28	9,662.5	-655.9	1,416.2	1,101.0	315.26	4.492	
21,700.0	11,892.6	22,303.4	12,404.6	167.7	168.1	-111.25	9,762.5	-656.6	1,415.9	1,097.6	318.35	4.448	
21,800.0	11,892.0	22,403.4	12,403.2	169.3	169.7	-111.21	9,862.5	-657.4	1,415.5	1,094.1	321.44	4.404	
21,900.0	11,891.5	22,503.4	12,401.7	170.9	171.3	-111.18	9,962.5	-658.2	1,415.2	1,090.7	324.53	4.361	
22,000.0	11,890.9	22,603.3	12,400.2	172.5	172.9	-111.14	10,062.5	-659.0	1,414.8	1,087.2	327.63	4.318	
22,100.0	11,890.4	22,703.3	12,398.7	174.1	174.5	-111.11	10,162.4	-659.8	1,414.5	1,083.8	330.73	4.277	
22,191.7	11,890.5	22,795.1	12,397.4	175.6	175.8	-111.05	10,254.1	-660.5	1,413.9	1,080.5	333.44	4.240	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	89.71	0.2	30.0	30.0				
100.0	100.0	101.0	99.0	0.1	0.1	89.71	0.2	30.0	30.0	29.7	0.26	115.443	
200.0	200.0	201.0	199.0	0.5	0.5	89.71	0.2	30.0	30.0	29.0	0.98	30.714	
300.0	300.0	301.0	299.0	0.8	0.8	89.71	0.2	30.0	30.0	28.3	1.69	17.714	
400.0	400.0	401.0	399.0	1.2	1.2	89.71	0.2	30.0	30.0	27.6	2.41	12.446	
500.0	500.0	501.0	499.0	1.6	1.6	89.71	0.2	30.0	30.0	26.9	3.13	9.593	
600.0	600.0	601.0	599.0	1.9	1.9	89.71	0.2	30.0	30.0	26.2	3.84	7.804	
700.0	700.0	701.0	699.0	2.3	2.3	89.71	0.2	30.0	30.0	25.4	4.56	6.577	
800.0	800.0	801.0	799.0	2.6	2.6	89.71	0.2	30.0	30.0	24.7	5.28	5.684	
900.0	900.0	901.0	899.0	3.0	3.0	89.71	0.2	30.0	30.0	24.0	6.00	5.004	
1,000.0	1,000.0	999.0	999.0	3.4	3.4	89.71	0.2	30.0	30.0	23.3	6.71	4.475 CC	
1,100.0	1,100.0	1,098.5	1,098.5	3.7	3.7	90.07	0.0	30.8	30.8	23.4	7.41	4.161	
1,200.0	1,200.0	1,197.9	1,197.9	4.1	4.0	91.04	-0.6	33.3	33.4	25.3	8.11	4.116	
1,300.0	1,300.0	1,297.2	1,297.1	4.4	4.4	92.37	-1.6	37.5	37.6	28.8	8.80	4.272	
1,400.0	1,400.0	1,396.3	1,396.0	4.8	4.7	93.79	-2.9	43.4	43.6	34.1	9.50	4.587	
1,500.0	1,500.0	1,495.2	1,494.6	5.1	5.1	95.14	-4.6	50.9	51.3	41.1	10.19	5.030	
1,600.0	1,600.0	1,593.9	1,592.8	5.5	5.4	-7.69	-6.6	60.0	59.8	48.9	10.87	5.503	
1,700.0	1,700.0	1,692.4	1,690.8	5.8	5.8	-6.91	-9.1	70.8	68.4	56.8	11.54	5.927	
1,800.0	1,799.9	1,809.3	1,788.2	6.2	6.2	-6.33	-11.9	83.1	76.9	64.6	12.27	6.269	
1,900.0	1,899.7	1,890.4	1,886.9	6.5	6.5	-5.92	-14.9	96.7	84.7	71.8	12.89	6.571	
2,000.0	1,999.4	1,990.2	1,985.8	6.9	6.9	-5.69	-18.0	110.2	90.8	77.2	13.59	6.682	
2,100.0	2,098.9	2,090.1	2,084.7	7.2	7.3	-5.60	-21.1	123.8	95.2	80.9	14.30	6.659	
2,200.0	2,198.3	2,209.9	2,183.7	7.6	7.8	-5.61	-24.1	137.3	97.8	82.8	15.07	6.490	
2,300.0	2,297.4	2,309.9	2,282.7	8.0	8.2	-5.72	-27.2	150.9	98.7	82.9	15.78	6.254	
2,400.0	2,396.4	2,390.1	2,381.7	8.3	8.5	-5.88	-30.3	164.5	98.7	82.3	16.43	6.011	
2,500.0	2,495.5	2,509.9	2,480.8	8.7	9.0	-6.04	-33.4	178.1	98.8	81.6	17.22	5.737	
2,600.0	2,594.5	2,609.9	2,579.8	9.1	9.4	-6.20	-36.4	191.6	98.8	80.9	17.94	5.509	
2,700.0	2,693.5	2,709.9	2,678.8	9.5	9.8	-6.36	-39.5	205.2	98.8	80.2	18.66	5.297	
2,800.0	2,792.5	2,809.9	2,777.8	9.9	10.2	-6.52	-42.6	218.8	98.9	79.5	19.38	5.101	
2,900.0	2,891.6	2,890.1	2,876.9	10.3	10.5	-6.68	-45.7	232.4	98.9	78.8	20.03	4.936	
3,000.0	2,990.6	3,009.9	2,975.9	10.7	11.0	-6.84	-48.7	245.9	98.9	78.1	20.83	4.748	
3,100.0	3,089.6	3,109.9	3,074.9	11.0	11.4	-7.00	-51.8	259.5	98.9	77.4	21.56	4.589	
3,200.0	3,188.6	3,190.1	3,173.9	11.4	11.8	-7.16	-54.9	273.1	99.0	76.8	22.22	4.455	
3,300.0	3,287.7	3,309.9	3,273.0	11.8	12.3	-7.32	-57.9	286.6	99.0	76.0	23.02	4.300	
3,400.0	3,386.7	3,390.1	3,372.0	12.2	12.6	-7.48	-61.0	300.2	99.0	75.4	23.68	4.182	
3,500.0	3,485.7	3,490.1	3,471.0	12.7	13.0	-7.64	-64.1	313.8	99.1	74.7	24.42	4.058	
3,600.0	3,584.8	3,609.9	3,570.1	13.1	13.5	-7.80	-67.2	327.4	99.1	73.9	25.22	3.929	
3,700.0	3,683.8	3,709.9	3,669.1	13.5	13.9	-7.96	-70.2	340.9	99.1	73.2	25.96	3.819	
3,800.0	3,782.8	3,790.1	3,768.1	13.9	14.3	-8.12	-73.3	354.5	99.2	72.6	26.62	3.726	
3,900.0	3,881.8	3,909.9	3,867.1	14.3	14.7	-8.28	-76.4	368.1	99.2	71.8	27.43	3.617	
4,000.0	3,980.9	3,990.1	3,966.2	14.7	15.1	-8.44	-79.5	381.7	99.3	71.2	28.10	3.533	
4,100.0	4,079.9	4,109.9	4,065.2	15.1	15.6	-8.60	-82.5	395.2	99.3	70.4	28.91	3.435	
4,200.0	4,178.9	4,209.9	4,164.2	15.5	16.0	-8.76	-85.6	408.8	99.3	69.7	29.65	3.350	
4,300.0	4,277.9	4,290.1	4,263.2	15.9	16.3	-8.92	-88.7	422.4	99.4	69.1	30.31	3.278	
4,400.0	4,377.0	4,409.9	4,362.3	16.3	16.8	-9.08	-91.7	436.0	99.4	68.3	31.13	3.194	
4,500.0	4,476.0	4,509.9	4,461.3	16.7	17.3	-9.23	-94.8	449.5	99.5	67.6	31.87	3.121	
4,600.0	4,575.0	4,609.9	4,560.3	17.1	17.7	-9.39	-97.9	463.1	99.5	66.9	32.61	3.051	
4,700.0	4,674.0	4,709.9	4,659.3	17.6	18.1	-9.55	-101.0	476.7	99.5	66.2	33.35	2.984	
4,800.0	4,773.1	4,790.1	4,758.4	18.0	18.4	-9.71	-104.0	490.3	99.6	65.6	34.02	2.927	
4,900.0	4,872.1	4,909.9	4,857.4	18.4	18.9	-9.87	-107.1	503.8	99.6	64.8	34.84	2.860	
5,000.0	4,971.1	5,009.9	4,956.4	18.8	19.3	-10.03	-110.2	517.4	99.7	64.1	35.59	2.801	
5,100.0	5,070.2	5,109.9	5,055.4	19.2	19.8	-10.18	-113.3	531.0	99.7	63.4	36.33	2.745	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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
5,200.0	5,169.2	5,209.9	5,154.5	19.6	20.2	-10.34	-116.3	544.5	99.8	62.7	37.08	2.691	
5,300.0	5,268.2	5,290.1	5,253.5	20.0	20.5	-10.50	-119.4	558.1	99.8	62.1	37.75	2.644	
5,400.0	5,367.2	5,390.1	5,352.5	20.5	20.9	-10.66	-122.5	571.7	99.9	61.4	38.49	2.594	
5,500.0	5,466.3	5,490.1	5,451.6	20.9	21.4	-10.81	-125.5	585.3	99.9	60.7	39.24	2.546	
5,600.0	5,565.3	5,609.9	5,550.6	21.3	21.9	-10.97	-128.6	598.8	100.0	59.9	40.06	2.495	
5,700.0	5,664.3	5,709.9	5,649.6	21.7	22.3	-11.13	-131.7	612.4	100.0	59.2	40.81	2.451	
5,800.0	5,763.3	5,809.9	5,748.6	22.1	22.7	-11.28	-134.8	626.0	100.1	58.5	41.56	2.408	
5,900.0	5,862.4	5,909.9	5,847.7	22.5	23.1	-11.44	-137.8	639.6	100.1	57.8	42.31	2.366	
6,000.0	5,961.4	6,009.9	5,946.7	23.0	23.5	-11.60	-140.9	653.1	100.2	57.1	43.06	2.327	
6,100.0	6,060.4	6,090.1	6,045.7	23.4	23.9	-11.75	-144.0	666.7	100.2	56.5	43.73	2.292	
6,200.0	6,159.4	6,209.9	6,144.7	23.8	24.4	-11.91	-147.1	680.3	100.3	55.7	44.56	2.251	
6,300.0	6,258.5	6,309.9	6,243.8	24.2	24.8	-12.06	-150.1	693.9	100.3	55.0	45.31	2.215	
6,400.0	6,357.5	6,409.9	6,342.8	24.6	25.2	-12.22	-153.2	707.4	100.4	54.3	46.06	2.180	
6,500.0	6,456.5	6,509.9	6,441.8	25.1	25.6	-12.38	-156.3	721.0	100.4	53.6	46.81	2.146	
6,600.0	6,555.6	6,609.9	6,540.8	25.5	26.1	-12.53	-159.3	734.6	100.5	52.9	47.56	2.113	
6,700.0	6,654.6	6,709.9	6,639.9	25.9	26.5	-12.69	-162.4	748.2	100.6	52.2	48.31	2.081	
6,800.0	6,753.6	6,809.9	6,738.9	26.3	26.9	-12.84	-165.5	761.7	100.6	51.6	49.07	2.051	
6,900.0	6,852.6	6,909.9	6,837.9	26.7	27.3	-13.00	-168.6	775.3	100.7	50.9	49.82	2.021	
7,000.0	6,951.7	7,009.9	6,936.9	27.1	27.7	-13.15	-171.6	788.9	100.7	50.2	50.57	1.992	
7,100.0	7,050.7	7,090.1	7,036.0	27.6	28.1	-13.31	-174.7	802.5	100.8	49.5	51.25	1.967	
7,131.4	7,081.7	7,121.4	7,067.0	27.7	28.2	-13.35	-175.7	806.7	100.8	49.3	51.49	1.958	
7,200.0	7,149.8	7,191.9	7,136.9	28.0	28.5	-13.46	-177.7	815.6	100.8	48.8	52.03	1.938	
7,300.0	7,249.2	7,294.5	7,238.9	28.4	28.9	-13.59	-180.1	826.4	100.8	48.0	52.78	1.910	
7,400.0	7,348.9	7,397.2	7,341.3	28.8	29.3	-13.71	-182.0	834.5	100.7	47.2	53.49	1.882	
7,500.0	7,448.7	7,499.8	7,443.7	29.1	29.7	-13.80	-183.2	839.9	100.5	46.3	54.15	1.855	
7,600.0	7,548.7	7,602.4	7,546.3	29.5	30.0	-13.87	-183.8	842.6	100.2	45.4	54.77	1.829	
7,664.7	7,613.3	7,668.5	7,612.3	29.7	30.2	90.00	-183.9	842.9	100.0	44.8	55.15	1.813	
7,700.0	7,648.7	7,703.8	7,647.7	29.8	30.3	90.00	-183.9	842.9	100.0	44.6	55.38	1.806	
7,800.0	7,748.7	7,803.8	7,747.7	30.1	30.6	90.00	-183.9	842.9	100.0	44.0	56.04	1.784	
7,900.0	7,848.7	7,903.8	7,847.7	30.4	31.0	90.00	-183.9	842.9	100.0	43.3	56.71	1.763	
8,000.0	7,948.7	8,003.8	7,947.7	30.7	31.3	90.00	-183.9	842.9	100.0	42.6	57.37	1.743	
8,100.0	8,048.7	8,103.8	8,047.7	31.0	31.6	90.00	-183.9	842.9	100.0	42.0	58.04	1.723	
8,200.0	8,148.7	8,203.8	8,147.7	31.4	31.9	90.00	-183.9	842.9	100.0	41.3	58.71	1.703	
8,300.0	8,248.7	8,303.8	8,247.7	31.7	32.2	90.00	-183.9	842.9	100.0	40.6	59.38	1.684	
8,400.0	8,348.7	8,403.8	8,347.7	32.0	32.5	90.00	-183.9	842.9	100.0	39.9	60.05	1.665	
8,500.0	8,448.7	8,503.8	8,447.7	32.3	32.8	90.00	-183.9	842.9	100.0	39.3	60.72	1.647	
8,600.0	8,548.7	8,603.8	8,547.7	32.6	33.1	90.00	-183.9	842.9	100.0	38.6	61.39	1.629	
8,700.0	8,648.7	8,703.8	8,647.7	33.0	33.5	90.00	-183.9	842.9	100.0	37.9	62.06	1.611	
8,800.0	8,748.7	8,803.8	8,747.7	33.3	33.8	90.00	-183.9	842.9	100.0	37.3	62.74	1.594	
8,900.0	8,848.7	8,903.8	8,847.7	33.6	34.1	90.00	-183.9	842.9	100.0	36.6	63.41	1.577	
9,000.0	8,948.7	9,003.8	8,947.7	33.9	34.4	90.00	-183.9	842.9	100.0	35.9	64.09	1.560	
9,100.0	9,048.7	9,103.8	9,047.7	34.3	34.7	90.00	-183.9	842.9	100.0	35.2	64.77	1.544	
9,200.0	9,148.7	9,203.8	9,147.7	34.6	35.0	90.00	-183.9	842.9	100.0	34.6	65.44	1.528	
9,300.0	9,248.7	9,303.8	9,247.7	34.9	35.4	90.00	-183.9	842.9	100.0	33.9	66.12	1.512	
9,400.0	9,348.7	9,403.8	9,347.7	35.2	35.7	90.00	-183.9	842.9	100.0	33.2	66.80	1.497 Level 3	
9,500.0	9,448.7	9,503.8	9,447.7	35.6	36.0	90.00	-183.9	842.9	100.0	32.5	67.48	1.482 Level 3	
9,600.0	9,548.7	9,603.8	9,547.7	35.9	36.3	90.00	-183.9	842.9	100.0	31.8	68.16	1.467 Level 3	
9,700.0	9,648.7	9,703.8	9,647.7	36.2	36.7	90.00	-183.9	842.9	100.0	31.2	68.84	1.453 Level 3	
9,800.0	9,748.7	9,803.8	9,747.7	36.5	37.0	90.00	-183.9	842.9	100.0	30.5	69.53	1.438 Level 3	
9,900.0	9,848.7	9,903.8	9,847.7	36.9	37.3	90.00	-183.9	842.9	100.0	29.8	70.21	1.424 Level 3	
10,000.0	9,948.7	10,003.8	9,947.7	37.2	37.6	90.00	-183.9	842.9	100.0	29.1	70.89	1.411 Level 3	
10,100.0	10,048.7	10,103.8	10,047.7	37.5	38.0	90.00	-183.9	842.9	100.0	28.4	71.58	1.397 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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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
10,200.0	10,148.7	10,203.8	10,147.7	37.9	38.3	90.00	-183.9	842.9	100.0	27.7	72.26	1.384	Level 3
10,300.0	10,248.7	10,303.8	10,247.7	38.2	38.6	90.00	-183.9	842.9	100.0	27.0	72.95	1.371	Level 3
10,400.0	10,348.7	10,403.8	10,347.7	38.5	38.9	90.00	-183.9	842.9	100.0	26.4	73.63	1.358	Level 3
10,500.0	10,448.7	10,503.8	10,447.7	38.9	39.3	90.00	-183.9	842.9	100.0	25.7	74.32	1.345	Level 3
10,600.0	10,548.7	10,603.8	10,547.7	39.2	39.6	90.00	-183.9	842.9	100.0	25.0	75.01	1.333	Level 3
10,700.0	10,648.7	10,703.8	10,647.7	39.5	39.9	90.00	-183.9	842.9	100.0	24.3	75.70	1.321	Level 3
10,800.0	10,748.7	10,803.8	10,747.7	39.9	40.3	90.00	-183.9	842.9	100.0	23.6	76.38	1.309	Level 3
10,900.0	10,848.7	10,903.8	10,847.7	40.2	40.6	90.00	-183.9	842.9	100.0	22.9	77.07	1.297	Level 3
11,000.0	10,948.7	11,003.8	10,947.7	40.5	40.9	90.00	-183.9	842.9	100.0	22.2	77.76	1.286	Level 3
11,100.0	11,048.7	11,103.8	11,047.7	40.9	41.2	90.00	-183.9	842.9	100.0	21.5	78.45	1.275	Level 3
11,200.0	11,148.7	11,203.8	11,147.7	41.2	41.6	90.00	-183.9	842.9	100.0	20.9	79.14	1.263	Level 3
11,300.0	11,248.7	11,303.8	11,247.7	41.5	41.9	90.00	-183.9	842.9	100.0	20.2	79.83	1.253	Level 3
11,400.0	11,348.7	11,403.8	11,347.7	41.9	42.2	90.00	-183.9	842.9	100.0	19.5	80.53	1.242	Level 2
11,423.3	11,372.0	11,427.1	11,371.0	42.0	42.3	90.00	-183.9	842.9	100.0	19.3	80.69	1.239	Level 2
11,450.0	11,398.6	11,453.8	11,397.6	42.0	42.4	90.81	-183.9	842.9	100.0	19.1	80.86	1.237	Level 2
11,500.0	11,448.4	11,503.5	11,447.4	42.2	42.6	93.36	-183.9	842.9	100.2	19.0	81.12	1.235	Level 2, ES, SF
11,550.0	11,497.6	11,552.7	11,496.6	42.4	42.7	98.19	-183.9	842.9	101.1	19.7	81.35	1.242	Level 2
11,600.0	11,545.9	11,601.0	11,544.9	42.5	42.9	104.85	-183.9	842.9	103.8	22.2	81.63	1.272	Level 3
11,650.0	11,592.8	11,647.9	11,591.8	42.6	43.1	112.57	-183.9	842.9	109.7	27.6	82.06	1.336	Level 3
11,700.0	11,638.0	11,706.9	11,637.0	42.8	43.3	120.42	-183.9	842.9	120.0	37.2	82.73	1.450	Level 3
11,750.0	11,681.2	11,736.4	11,680.2	42.9	43.4	127.58	-183.9	842.9	135.5	52.1	83.43	1.624	
11,800.0	11,722.1	11,777.2	11,721.1	43.0	43.5	133.58	-183.9	842.9	156.4	72.2	84.19	1.857	
11,850.0	11,760.3	11,815.4	11,759.3	43.1	43.6	138.27	-183.9	842.9	182.3	97.4	84.87	2.148	
11,900.0	11,795.5	11,850.7	11,794.5	43.2	43.7	141.68	-183.9	842.9	212.8	127.4	85.45	2.491	
11,950.0	11,827.6	11,882.7	11,826.6	43.2	43.8	143.92	-183.9	842.9	247.4	161.5	85.93	2.879	
12,000.0	11,866.1	11,911.2	11,865.1	43.3	43.9	145.03	-183.9	842.9	285.4	199.1	86.32	3.306	
12,050.0	11,881.0	11,936.1	11,880.0	43.3	44.0	144.97	-183.9	842.9	326.4	239.7	86.62	3.768	
12,100.0	11,902.0	11,957.1	11,901.0	43.3	44.1	143.53	-183.9	842.9	369.8	282.9	86.87	4.257	
12,150.0	11,918.9	11,974.0	11,917.9	43.4	44.1	140.22	-183.9	842.9	415.3	328.2	87.06	4.770	
12,200.0	11,931.7	11,986.8	11,930.7	43.4	44.2	133.96	-183.9	842.9	462.3	375.1	87.21	5.301	
12,250.0	11,940.3	11,995.4	11,939.3	43.5	44.2	122.58	-183.9	842.9	510.5	423.2	87.32	5.847	
12,300.0	11,944.5	12,000.4	11,943.5	43.6	44.2	102.64	-183.9	842.9	559.4	472.0	87.40	6.401	
12,326.5	11,944.9	12,000.1	11,943.9	43.6	44.2	88.15	-183.9	842.9	585.6	498.1	87.42	6.698	
12,391.6	11,944.6	13,022.6	12,552.7	43.7	45.7	178.52	468.4	753.4	609.4	571.4	38.00	16.036	
12,400.0	11,944.5	13,030.9	12,552.6	43.8	45.8	178.60	476.7	752.5	609.3	571.3	38.05	16.014	
12,500.0	11,944.0	13,130.1	12,551.1	44.1	46.0	179.37	575.5	743.5	608.2	569.6	38.63	15.745	
12,600.0	11,943.4	13,229.8	12,549.6	44.4	46.4	179.82	675.0	737.9	607.2	568.0	39.23	15.480	
12,700.0	11,942.9	13,329.8	12,548.0	44.9	46.8	179.95	774.9	735.8	606.2	566.4	39.81	15.227	
12,800.0	11,942.3	13,429.8	12,546.5	45.4	47.3	179.95	874.9	735.0	605.3	564.9	40.42	14.973	
12,900.0	11,941.7	13,529.8	12,545.0	45.9	47.9	179.95	974.9	734.2	604.3	563.2	41.09	14.709	
13,000.0	11,941.2	13,629.8	12,543.5	46.6	48.5	179.95	1,074.9	733.3	603.4	561.6	41.80	14.436	
13,100.0	11,940.6	13,729.8	12,541.9	47.2	49.2	179.95	1,174.9	732.5	602.4	559.8	42.55	14.157	
13,200.0	11,940.1	13,829.8	12,540.4	48.0	49.9	179.95	1,274.8	731.7	601.4	558.1	43.35	13.873	
13,300.0	11,939.5	13,929.8	12,538.9	48.7	50.6	179.95	1,374.8	730.9	600.5	556.3	44.19	13.588	
13,400.0	11,939.0	14,029.8	12,537.4	49.5	51.4	179.95	1,474.8	730.1	599.5	554.4	45.07	13.301	
13,500.0	11,938.4	14,129.7	12,535.8	50.4	52.3	179.95	1,574.8	729.3	598.5	552.5	45.99	13.015	
13,600.0	11,937.8	14,229.7	12,534.3	51.3	53.1	179.95	1,674.8	728.5	597.6	550.6	46.94	12.730	
13,700.0	11,937.3	14,329.7	12,532.8	52.2	54.0	179.95	1,774.7	727.7	596.6	548.7	47.92	12.449	
13,800.0	11,936.7	14,429.7	12,531.3	53.1	55.0	179.95	1,874.7	726.9	595.6	546.7	48.94	12.171	
13,900.0	11,936.2	14,529.7	12,529.8	54.1	56.0	179.95	1,974.7	726.1	594.7	544.7	49.98	11.898	
14,000.0	11,935.6	14,629.7	12,528.2	55.2	57.0	179.95	2,074.7	725.3	593.7	542.6	51.05	11.630	
14,100.0	11,935.0	14,729.7	12,526.7	56.2	58.0	179.95	2,174.7	724.5	592.7	540.6	52.14	11.367	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,934.5	14,829.7	12,525.2	57.3	59.1	179.95	2,274.7	723.6	591.8	538.5	53.26	11.110	
14,300.0	11,933.9	14,929.7	12,523.7	58.4	60.2	179.96	2,374.6	722.8	590.8	536.4	54.40	10.859	
14,400.0	11,933.4	15,029.7	12,522.1	59.5	61.3	179.96	2,474.6	722.0	589.8	534.3	55.57	10.615	
14,500.0	11,932.8	15,129.7	12,520.6	60.7	62.4	179.96	2,574.6	721.2	588.9	532.1	56.75	10.377	
14,600.0	11,932.3	15,229.7	12,519.1	61.9	63.6	179.96	2,674.6	720.4	587.9	530.0	57.95	10.145	
14,700.0	11,931.7	15,329.7	12,517.6	63.1	64.7	179.96	2,774.6	719.6	586.9	527.8	59.17	9.920	
14,800.0	11,931.1	15,429.7	12,516.0	64.3	66.0	179.96	2,874.5	718.8	586.0	525.6	60.40	9.702	
14,900.0	11,930.6	15,529.7	12,514.5	65.5	67.2	179.96	2,974.5	718.0	585.0	523.4	61.65	9.490	
15,000.0	11,930.0	15,629.7	12,513.0	66.8	68.4	179.96	3,074.5	717.2	584.0	521.1	62.91	9.284	
15,100.0	11,929.5	15,729.7	12,511.5	68.1	69.7	179.96	3,174.5	716.4	583.1	518.9	64.19	9.084	
15,200.0	11,928.9	15,829.7	12,509.9	69.4	70.9	179.96	3,274.5	715.6	582.1	516.6	65.48	8.890	
15,300.0	11,928.3	15,929.7	12,508.4	70.7	72.2	179.96	3,374.4	714.7	581.1	514.4	66.78	8.703	
15,400.0	11,927.8	16,029.7	12,506.9	72.0	73.5	179.96	3,474.4	713.9	580.2	512.1	68.09	8.521	
15,500.0	11,927.2	16,129.7	12,505.4	73.3	74.9	179.96	3,574.4	713.1	579.2	509.8	69.41	8.344	
15,600.0	11,926.7	16,229.7	12,503.8	74.7	76.2	179.96	3,674.4	712.3	578.2	507.5	70.75	8.173	
15,700.0	11,926.1	16,329.6	12,502.3	76.0	77.5	179.96	3,774.4	711.5	577.3	505.2	72.09	8.008	
15,800.0	11,925.6	16,429.6	12,500.8	77.4	78.9	179.96	3,874.3	710.7	576.3	502.9	73.44	7.847	
15,900.0	11,925.0	16,529.6	12,499.3	78.8	80.3	179.96	3,974.3	709.9	575.3	500.5	74.80	7.692	
16,000.0	11,924.4	16,629.6	12,497.7	80.2	81.6	179.96	4,074.3	709.1	574.4	498.2	76.17	7.541	
16,100.0	11,923.9	16,729.6	12,496.2	81.6	83.0	179.96	4,174.3	708.3	573.4	495.9	77.55	7.395	
16,200.0	11,923.3	16,829.6	12,494.7	83.0	84.4	179.97	4,274.3	707.5	572.4	493.5	78.93	7.253	
16,300.0	11,922.8	16,929.6	12,493.2	84.4	85.8	179.97	4,374.2	706.7	571.5	491.2	80.32	7.115	
16,400.0	11,922.2	17,029.6	12,491.7	85.9	87.2	179.97	4,474.2	705.8	570.5	488.8	81.72	6.982	
16,500.0	11,921.6	17,129.6	12,490.1	87.3	88.7	179.97	4,574.2	705.0	569.6	486.4	83.12	6.852	
16,600.0	11,921.1	17,229.6	12,488.6	88.7	90.1	179.97	4,674.2	704.2	568.6	484.1	84.53	6.727	
16,700.0	11,920.5	17,329.6	12,487.1	90.2	91.5	179.97	4,774.2	703.4	567.6	481.7	85.94	6.605	
16,800.0	11,920.0	17,429.6	12,485.6	91.7	93.0	179.97	4,874.1	702.6	566.7	479.3	87.36	6.486	
16,900.0	11,919.4	17,529.6	12,484.0	93.1	94.4	179.97	4,974.1	701.8	565.7	476.9	88.78	6.371	
17,000.0	11,918.8	17,629.6	12,482.5	94.6	95.9	179.97	5,074.1	701.0	564.7	474.5	90.21	6.260	
17,100.0	11,918.3	17,729.6	12,481.0	96.1	97.4	179.97	5,174.1	700.2	563.8	472.1	91.65	6.151	
17,200.0	11,917.7	17,829.6	12,479.5	97.6	98.8	179.97	5,274.1	699.4	562.8	469.7	93.09	6.046	
17,300.0	11,917.2	17,929.6	12,477.9	99.0	100.3	179.97	5,374.0	698.6	561.8	467.3	94.53	5.943	
17,400.0	11,916.6	18,029.6	12,476.4	100.5	101.8	179.97	5,474.0	697.8	560.9	464.9	95.97	5.844	
17,500.0	11,916.1	18,129.6	12,474.9	102.0	103.3	179.97	5,574.0	696.9	559.9	462.5	97.42	5.747	
17,600.0	11,915.5	18,229.6	12,473.4	103.5	104.8	179.97	5,674.0	696.1	558.9	460.0	98.88	5.653	
17,700.0	11,914.9	18,329.6	12,471.8	105.1	106.3	179.97	5,774.0	695.3	558.0	457.6	100.34	5.561	
17,800.0	11,914.4	18,429.5	12,470.3	106.6	107.8	179.97	5,873.9	694.5	557.0	455.2	101.80	5.472	
17,900.0	11,913.8	18,529.5	12,468.8	108.1	109.3	179.98	5,973.9	693.7	556.0	452.8	103.26	5.385	
18,000.0	11,913.3	18,629.5	12,467.3	109.6	110.8	179.98	6,073.9	692.9	555.1	450.3	104.73	5.300	
18,100.0	11,912.7	18,729.5	12,465.7	111.1	112.3	179.98	6,173.9	692.1	554.1	447.9	106.20	5.218	
18,200.0	11,912.1	18,829.5	12,464.2	112.7	113.8	179.98	6,273.9	691.3	553.1	445.5	107.67	5.137	
18,300.0	11,911.6	18,929.5	12,462.7	114.2	115.4	179.98	6,373.8	690.5	552.2	443.0	109.14	5.059	
18,400.0	11,911.0	19,029.5	12,461.2	115.7	116.9	179.98	6,473.8	689.7	551.2	440.6	110.62	4.983	
18,500.0	11,910.5	19,129.5	12,459.6	117.3	118.4	179.98	6,573.8	688.9	550.2	438.1	112.10	4.908	
18,600.0	11,909.9	19,229.5	12,458.1	118.8	120.0	179.98	6,673.8	688.1	549.3	435.7	113.59	4.836	
18,700.0	11,909.4	19,329.5	12,456.6	120.4	121.5	179.98	6,773.8	687.2	548.3	433.2	115.07	4.765	
18,800.0	11,908.8	19,429.5	12,455.1	121.9	123.0	179.98	6,873.8	686.4	547.3	430.8	116.56	4.696	
18,900.0	11,908.2	19,529.5	12,453.5	123.5	124.6	179.98	6,973.7	685.6	546.4	428.3	118.05	4.628	
19,000.0	11,907.7	19,629.5	12,452.0	125.0	126.1	179.98	7,073.7	684.8	545.4	425.9	119.54	4.563	
19,100.0	11,907.1	19,729.5	12,450.5	126.6	127.7	179.98	7,173.7	684.0	544.4	423.4	121.03	4.498	
19,200.0	11,906.6	19,829.5	12,449.0	128.1	129.2	179.98	7,273.7	683.2	543.5	420.9	122.53	4.436	
19,300.0	11,906.0	19,929.5	12,447.5	129.7	130.8	179.98	7,373.7	682.4	542.5	418.5	124.03	4.374	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,905.4	20,029.5	12,445.9	131.3	132.3	179.98	7,473.6	681.6	541.5	416.0	125.52	4.314	
19,500.0	11,904.9	20,129.5	12,444.4	132.8	133.9	179.99	7,573.6	680.8	540.6	413.6	127.02	4.256	
19,600.0	11,904.3	20,229.5	12,442.9	134.4	135.5	179.99	7,673.6	680.0	539.6	411.1	128.53	4.198	
19,700.0	11,903.8	20,329.5	12,441.4	136.0	137.0	179.99	7,773.6	679.2	538.6	408.6	130.03	4.142	
19,800.0	11,903.2	20,429.5	12,439.8	137.5	138.6	179.99	7,873.6	678.3	537.7	406.1	131.54	4.088	
19,900.0	11,902.7	20,529.4	12,438.3	139.1	140.2	179.99	7,973.5	677.5	536.7	403.7	133.04	4.034	
20,000.0	11,902.1	20,629.4	12,436.8	140.7	141.7	179.99	8,073.5	676.7	535.8	401.2	134.55	3.982	
20,100.0	11,901.5	20,729.4	12,435.3	142.3	143.3	179.99	8,173.5	675.9	534.8	398.7	136.06	3.930	
20,200.0	11,901.0	20,829.4	12,433.7	143.8	144.9	179.99	8,273.5	675.1	533.8	396.2	137.57	3.880	
20,300.0	11,900.4	20,929.4	12,432.2	145.4	146.4	179.99	8,373.5	674.3	532.9	393.8	139.09	3.831	
20,400.0	11,899.9	21,029.4	12,430.7	147.0	148.0	179.99	8,473.4	673.5	531.9	391.3	140.60	3.783	
20,500.0	11,899.3	21,129.4	12,429.2	148.6	149.6	179.99	8,573.4	672.7	530.9	388.8	142.11	3.736	
20,600.0	11,898.7	21,229.4	12,427.6	150.2	151.2	179.99	8,673.4	671.9	530.0	386.3	143.63	3.690	
20,700.0	11,898.2	21,329.4	12,426.1	151.8	152.8	179.99	8,773.4	671.1	529.0	383.8	145.15	3.645	
20,800.0	11,897.6	21,429.4	12,424.6	153.4	154.3	179.99	8,873.4	670.3	528.0	381.4	146.66	3.600	
20,900.0	11,897.1	21,529.4	12,423.1	155.0	155.9	179.99	8,973.3	669.4	527.1	378.9	148.18	3.557	
21,000.0	11,896.5	21,629.4	12,421.5	156.5	157.5	179.99	9,073.3	668.6	526.1	376.4	149.70	3.514	
21,100.0	11,896.0	21,729.4	12,420.0	158.1	159.1	180.00	9,173.3	667.8	525.1	373.9	151.23	3.472	
21,200.0	11,895.4	21,829.4	12,418.5	159.7	160.7	180.00	9,273.3	667.0	524.2	371.4	152.75	3.432	
21,300.0	11,894.8	21,929.4	12,417.0	161.3	162.3	180.00	9,373.3	666.2	523.2	368.9	154.27	3.391	
21,400.0	11,894.3	22,029.4	12,415.4	162.9	163.9	180.00	9,473.2	665.4	522.2	366.4	155.80	3.352	
21,500.0	11,893.7	22,129.4	12,413.9	164.5	165.5	180.00	9,573.2	664.6	521.3	363.9	157.32	3.313	
21,600.0	11,893.2	22,229.4	12,412.4	166.1	167.1	180.00	9,673.2	663.8	520.3	361.5	158.85	3.275	
21,700.0	11,892.6	22,329.4	12,410.9	167.7	168.7	180.00	9,773.2	663.0	519.3	359.0	160.37	3.238	
21,800.0	11,892.0	22,429.4	12,409.3	169.3	170.3	-180.00	9,873.2	662.2	518.4	356.5	161.90	3.202	
21,900.0	11,891.5	22,529.4	12,407.8	170.9	171.9	-180.00	9,973.1	661.4	517.4	354.0	163.43	3.166	
22,000.0	11,890.9	22,629.4	12,406.3	172.5	173.5	-180.00	10,073.1	660.5	516.4	351.5	164.96	3.131	
22,100.0	11,890.4	22,729.3	12,404.8	174.1	175.1	-180.00	10,173.1	659.7	515.5	349.0	166.49	3.096	
22,186.1	11,889.9	22,813.1	12,403.5	175.5	176.4	-180.00	10,256.8	659.1	514.6	346.9	167.72	3.069	
22,191.7	11,890.5	22,813.1	12,403.5	175.6	176.4	-180.00	10,256.8	659.1	514.0	346.3	167.69	3.065	

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

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COMPASS 5000.14 Build 83

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	2.0	-2.0	0.0	0.0	89.35	27.8	2,453.1	2,453.3				
100.0	100.0	102.0	98.0	0.1	0.1	89.35	27.8	2,453.1	2,453.3	2,453.0	0.26	9,311.091	
200.0	200.0	202.0	198.0	0.5	0.5	89.35	27.8	2,453.1	2,453.3	2,452.3	0.98	2,502.252	
300.0	300.0	302.0	298.0	0.8	0.9	89.35	27.8	2,453.1	2,453.3	2,451.6	1.70	1,445.335	
400.0	400.0	402.0	398.0	1.2	1.2	89.35	27.8	2,453.1	2,453.3	2,450.8	2.41	1,016.134	
500.0	500.0	502.0	498.0	1.6	1.6	89.35	27.8	2,453.1	2,453.3	2,450.1	3.13	783.476	
600.0	600.0	602.0	598.0	1.9	1.9	89.35	27.8	2,453.1	2,453.3	2,449.4	3.85	637.509	
700.0	700.0	702.0	698.0	2.3	2.3	89.35	27.8	2,453.1	2,453.3	2,448.7	4.57	537.390	
800.0	800.0	802.0	798.0	2.6	2.6	89.35	27.8	2,453.1	2,453.3	2,448.0	5.28	464.449	
900.0	900.0	902.0	898.0	3.0	3.0	89.35	27.8	2,453.1	2,453.3	2,447.3	6.00	408.943	
1,000.0	1,000.0	1,002.0	998.0	3.4	3.4	89.35	27.8	2,453.1	2,453.3	2,446.5	6.72	365.287	
1,100.0	1,100.0	1,102.0	1,098.0	3.7	3.7	89.35	27.8	2,453.1	2,453.3	2,445.8	7.43	330.054	
1,200.0	1,200.0	1,202.0	1,198.0	4.1	4.1	89.35	27.8	2,453.1	2,453.3	2,445.1	8.15	301.019	
1,300.0	1,300.0	1,302.0	1,298.0	4.4	4.4	89.35	27.8	2,453.1	2,453.3	2,444.4	8.87	276.679	
1,400.0	1,400.0	1,402.0	1,398.0	4.8	4.8	89.35	27.8	2,453.1	2,453.3	2,443.7	9.58	255.981	
1,500.0	1,500.0	1,498.0	1,498.0	5.1	5.1	89.35	27.8	2,453.1	2,453.3	2,443.0	10.29	238.497	
1,600.0	1,600.0	1,652.2	1,652.2	5.5	5.7	-14.54	26.6	2,451.4	2,451.3	2,440.2	11.16	219.705	
1,700.0	1,700.0	1,807.2	1,807.0	5.8	6.2	-14.49	23.1	2,446.3	2,445.5	2,433.5	12.01	203.649	
1,800.0	1,799.9	1,961.3	1,960.8	6.2	6.7	-14.42	17.3	2,437.8	2,435.7	2,422.8	12.86	189.393	
1,900.0	1,899.7	2,114.2	2,113.0	6.5	7.2	-14.32	9.3	2,425.9	2,422.0	2,408.3	13.71	176.664	
2,000.0	1,999.4	2,265.4	2,263.1	6.9	7.8	-14.19	-1.0	2,410.9	2,404.5	2,389.9	14.55	165.203	
2,100.0	2,098.9	2,375.1	2,371.8	7.2	8.2	-14.10	-9.5	2,398.4	2,383.8	2,368.5	15.28	156.037	
2,200.0	2,198.3	2,472.5	2,468.2	7.6	8.6	-14.03	-17.1	2,387.2	2,361.4	2,345.5	15.97	147.898	
2,300.0	2,297.4	2,569.4	2,564.2	8.0	8.9	-13.98	-24.7	2,376.0	2,337.4	2,320.8	16.66	140.317	
2,400.0	2,396.4	2,666.2	2,660.0	8.3	9.3	-13.86	-32.3	2,364.9	2,312.6	2,295.3	17.35	133.278	
2,500.0	2,495.5	2,763.0	2,755.9	8.7	9.7	-13.75	-39.9	2,353.8	2,287.8	2,269.8	18.05	126.762	
2,600.0	2,594.5	2,859.7	2,851.7	9.1	10.1	-13.63	-47.5	2,342.6	2,263.0	2,244.2	18.75	120.705	
2,700.0	2,693.5	2,956.5	2,947.5	9.5	10.4	-13.51	-55.0	2,331.5	2,238.2	2,218.8	19.45	115.066	
2,800.0	2,792.5	3,053.3	3,043.4	9.9	10.8	-13.39	-62.6	2,320.4	2,213.4	2,193.3	20.16	109.803	
2,900.0	2,891.6	3,150.1	3,139.2	10.3	11.2	-13.27	-70.2	2,309.2	2,188.6	2,167.8	20.87	104.884	
3,000.0	2,990.6	3,246.8	3,235.0	10.7	11.6	-13.14	-77.8	2,298.1	2,163.9	2,142.3	21.58	100.277	
3,100.0	3,089.6	3,343.6	3,330.8	11.0	12.0	-13.01	-85.4	2,287.0	2,139.1	2,116.8	22.29	95.955	
3,200.0	3,188.6	3,440.4	3,426.7	11.4	12.4	-12.88	-92.9	2,275.8	2,114.4	2,091.4	23.01	91.893	
3,300.0	3,287.7	3,537.1	3,522.5	11.8	12.7	-12.74	-100.5	2,264.7	2,089.6	2,065.9	23.73	88.070	
3,400.0	3,386.7	3,633.9	3,618.3	12.2	13.1	-12.60	-108.1	2,253.6	2,064.9	2,040.5	24.45	84.465	
3,500.0	3,485.7	3,730.7	3,714.2	12.7	13.5	-12.46	-115.7	2,242.4	2,040.2	2,015.0	25.17	81.062	
3,600.0	3,584.8	3,827.5	3,810.0	13.1	13.9	-12.31	-123.3	2,231.3	2,015.5	1,989.6	25.89	77.845	
3,700.0	3,683.8	3,924.2	3,905.8	13.5	14.3	-12.16	-130.9	2,220.2	1,990.8	1,964.2	26.62	74.799	
3,800.0	3,782.8	4,021.0	4,001.7	13.9	14.7	-12.01	-138.4	2,209.1	1,966.2	1,938.8	27.34	71.911	
3,900.0	3,881.8	4,117.8	4,097.5	14.3	15.1	-11.85	-146.0	2,197.9	1,941.5	1,913.4	28.07	69.170	
4,000.0	3,980.9	4,200.0	4,178.9	14.7	15.4	-11.72	-152.3	2,188.7	1,917.1	1,888.4	28.76	66.650	
4,100.0	4,079.9	4,266.9	4,245.3	15.1	15.7	-11.63	-156.8	2,182.1	1,894.1	1,864.6	29.42	64.380	
4,200.0	4,178.9	4,336.8	4,314.9	15.5	16.0	-11.56	-160.8	2,176.3	1,872.4	1,842.4	30.08	62.253	
4,300.0	4,277.9	4,407.2	4,385.1	15.9	16.3	-11.51	-164.0	2,171.5	1,852.3	1,821.5	30.73	60.274	
4,400.0	4,377.0	4,478.1	4,455.8	16.3	16.5	-11.48	-166.6	2,167.7	1,833.5	1,802.1	31.38	58.436	
4,500.0	4,476.0	4,549.3	4,527.0	16.7	16.8	-11.48	-168.4	2,165.0	1,816.3	1,784.2	32.02	56.731	
4,600.0	4,575.0	4,620.9	4,598.5	17.1	17.0	-11.51	-169.5	2,163.4	1,800.5	1,767.8	32.65	55.152	
4,700.0	4,674.0	4,705.6	4,672.0	17.6	17.3	-11.57	-169.9	2,162.9	1,786.2	1,752.9	33.31	53.627	
4,800.0	4,773.1	4,806.5	4,771.1	18.0	17.6	-11.66	-169.9	2,162.9	1,772.5	1,738.5	34.01	52.117	
4,900.0	4,872.1	4,907.5	4,870.1	18.4	18.0	-11.75	-169.9	2,162.9	1,758.9	1,724.2	34.71	50.667	
5,000.0	4,971.1	5,008.5	4,969.1	18.8	18.3	-11.84	-169.9	2,162.9	1,745.3	1,709.8	35.42	49.272	
5,100.0	5,070.2	5,109.5	5,068.2	19.2	18.6	-11.93	-169.9	2,162.9	1,731.6	1,695.5	36.13	47.931	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
5,200.0	5,169.2	5,189.6	5,167.2	19.6	18.9	-12.03	-169.9	2,162.9	1,718.0	1,681.3	36.77	46.729	
5,300.0	5,268.2	5,288.6	5,266.2	20.0	19.2	-12.13	-169.9	2,162.9	1,704.4	1,666.9	37.47	45.489	
5,400.0	5,367.2	5,387.6	5,365.2	20.5	19.6	-12.23	-169.9	2,162.9	1,690.8	1,652.6	38.17	44.294	
5,500.0	5,466.3	5,486.6	5,464.3	20.9	19.9	-12.33	-169.9	2,162.9	1,677.2	1,638.3	38.88	43.142	
5,600.0	5,565.3	5,585.7	5,563.3	21.3	20.2	-12.43	-169.9	2,162.9	1,663.6	1,624.0	39.58	42.029	
5,700.0	5,664.3	5,684.7	5,662.3	21.7	20.5	-12.53	-169.9	2,162.9	1,650.0	1,609.7	40.29	40.955	
5,800.0	5,763.3	5,783.7	5,761.3	22.1	20.9	-12.64	-169.9	2,162.9	1,636.4	1,595.4	41.00	39.917	
5,900.0	5,862.4	5,882.8	5,860.4	22.5	21.2	-12.75	-169.9	2,162.9	1,622.8	1,581.1	41.70	38.913	
6,000.0	5,961.4	5,981.8	5,959.4	23.0	21.5	-12.86	-169.9	2,162.9	1,609.2	1,566.8	42.41	37.942	
6,100.0	6,060.4	6,080.8	6,058.4	23.4	21.9	-12.97	-169.9	2,162.9	1,595.7	1,552.6	43.12	37.003	
6,200.0	6,159.4	6,179.8	6,157.4	23.8	22.2	-13.08	-169.9	2,162.9	1,582.1	1,538.3	43.83	36.094	
6,300.0	6,258.5	6,278.9	6,256.5	24.2	22.5	-13.20	-169.9	2,162.9	1,568.5	1,524.0	44.54	35.213	
6,400.0	6,357.5	6,377.9	6,355.5	24.6	22.9	-13.31	-169.9	2,162.9	1,555.0	1,509.7	45.26	34.359	
6,500.0	6,456.5	6,476.9	6,454.5	25.1	23.2	-13.43	-169.9	2,162.9	1,541.4	1,495.5	45.97	33.532	
6,600.0	6,555.6	6,575.9	6,553.6	25.5	23.6	-13.55	-169.9	2,162.9	1,527.9	1,481.2	46.68	32.730	
6,700.0	6,654.6	6,675.0	6,652.6	25.9	23.9	-13.68	-169.9	2,162.9	1,514.4	1,467.0	47.40	31.951	
6,800.0	6,753.6	6,774.0	6,751.6	26.3	24.2	-13.80	-169.9	2,162.9	1,500.8	1,452.7	48.11	31.195	
6,900.0	6,852.6	6,873.0	6,850.6	26.7	24.6	-13.93	-169.9	2,162.9	1,487.3	1,438.5	48.83	30.461	
7,000.0	6,951.7	6,972.0	6,949.7	27.1	24.9	-14.06	-169.9	2,162.9	1,473.8	1,424.3	49.54	29.748	
7,100.0	7,050.7	7,071.1	7,048.7	27.6	25.3	-14.19	-169.9	2,162.9	1,460.3	1,410.1	50.26	29.055	
7,131.4	7,081.7	7,102.1	7,079.7	27.7	25.4	-14.23	-169.9	2,162.9	1,456.1	1,405.6	50.48	28.842	
7,200.0	7,149.8	7,170.2	7,147.8	28.0	25.6	-14.29	-169.9	2,162.9	1,447.4	1,396.4	50.98	28.394	
7,300.0	7,249.2	7,269.6	7,247.2	28.4	25.9	-14.36	-169.9	2,162.9	1,436.9	1,385.2	51.69	27.799	
7,400.0	7,348.9	7,369.2	7,346.9	28.8	26.3	-14.41	-169.9	2,162.9	1,428.9	1,376.5	52.40	27.270	
7,500.0	7,448.7	7,469.1	7,446.7	29.1	26.6	-14.44	-169.9	2,162.9	1,423.5	1,370.4	53.11	26.804	
7,600.0	7,548.7	7,569.0	7,546.7	29.5	27.0	-14.46	-169.9	2,162.9	1,420.6	1,366.8	53.81	26.401	
7,664.7	7,613.3	7,633.7	7,611.3	29.7	27.2	89.44	-169.9	2,162.9	1,420.1	1,365.8	54.26	26.173	
7,700.0	7,648.7	7,669.0	7,646.7	29.8	27.3	89.44	-169.9	2,162.9	1,420.1	1,365.6	54.50	26.058	
7,800.0	7,748.7	7,769.0	7,746.7	30.1	27.7	89.44	-169.9	2,162.9	1,420.1	1,364.9	55.18	25.735	
7,900.0	7,848.7	7,869.0	7,846.7	30.4	28.0	89.44	-169.9	2,162.9	1,420.1	1,364.2	55.86	25.421	
8,000.0	7,948.7	7,969.0	7,946.7	30.7	28.3	89.44	-169.9	2,162.9	1,420.1	1,363.5	56.55	25.113	
8,100.0	8,048.7	8,069.0	8,046.7	31.0	28.7	89.44	-169.9	2,162.9	1,420.1	1,362.8	57.23	24.813	
8,200.0	8,148.7	8,169.0	8,146.7	31.4	29.0	89.44	-169.9	2,162.9	1,420.1	1,362.1	57.92	24.519	
8,300.0	8,248.7	8,269.0	8,246.7	31.7	29.4	89.44	-169.9	2,162.9	1,420.1	1,361.5	58.60	24.232	
8,400.0	8,348.7	8,369.0	8,346.7	32.0	29.7	89.44	-169.9	2,162.9	1,420.1	1,360.8	59.29	23.951	
8,500.0	8,448.7	8,469.0	8,446.7	32.3	30.1	89.44	-169.9	2,162.9	1,420.1	1,360.1	59.98	23.676	
8,600.0	8,548.7	8,569.0	8,546.7	32.6	30.4	89.44	-169.9	2,162.9	1,420.1	1,359.4	60.67	23.407	
8,700.0	8,648.7	8,669.0	8,646.7	33.0	30.8	89.44	-169.9	2,162.9	1,420.1	1,358.7	61.36	23.144	
8,800.0	8,748.7	8,769.0	8,746.7	33.3	31.1	89.44	-169.9	2,162.9	1,420.1	1,358.0	62.05	22.887	
8,900.0	8,848.7	8,869.0	8,846.7	33.6	31.5	89.44	-169.9	2,162.9	1,420.1	1,357.3	62.74	22.635	
9,000.0	8,948.7	8,969.0	8,946.7	33.9	31.8	89.44	-169.9	2,162.9	1,420.1	1,356.6	63.43	22.389	
9,100.0	9,048.7	9,069.0	9,046.7	34.3	32.2	89.44	-169.9	2,162.9	1,420.1	1,355.9	64.12	22.147	
9,200.0	9,148.7	9,169.0	9,146.7	34.6	32.5	89.44	-169.9	2,162.9	1,420.1	1,355.2	64.81	21.911	
9,300.0	9,248.7	9,269.0	9,246.7	34.9	32.9	89.44	-169.9	2,162.9	1,420.1	1,354.6	65.50	21.679	
9,400.0	9,348.7	9,369.0	9,346.7	35.2	33.2	89.44	-169.9	2,162.9	1,420.1	1,353.9	66.20	21.452	
9,500.0	9,448.7	9,469.0	9,446.7	35.6	33.6	89.44	-169.9	2,162.9	1,420.1	1,353.2	66.89	21.230	
9,600.0	9,548.7	9,569.0	9,546.7	35.9	33.9	89.44	-169.9	2,162.9	1,420.1	1,352.5	67.58	21.012	
9,700.0	9,648.7	9,669.0	9,646.7	36.2	34.3	89.44	-169.9	2,162.9	1,420.1	1,351.8	68.28	20.798	
9,800.0	9,748.7	9,769.0	9,746.7	36.5	34.6	89.44	-169.9	2,162.9	1,420.1	1,351.1	68.97	20.588	
9,900.0	9,848.7	9,869.0	9,846.7	36.9	35.0	89.44	-169.9	2,162.9	1,420.1	1,350.4	69.67	20.383	
10,000.0	9,948.7	9,969.0	9,946.7	37.2	35.3	89.44	-169.9	2,162.9	1,420.1	1,349.7	70.37	20.181	
10,100.0	10,048.7	10,069.0	10,046.7	37.5	35.7	89.44	-169.9	2,162.9	1,420.1	1,349.0	71.06	19.983	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	10,148.7	10,169.0	10,146.7	37.9	36.0	89.44	-169.9	2,162.9	1,420.1	1,348.3	71.76	19.789	
10,300.0	10,248.7	10,269.0	10,246.7	38.2	36.4	89.44	-169.9	2,162.9	1,420.1	1,347.6	72.46	19.599	
10,400.0	10,348.7	10,369.0	10,346.7	38.5	36.7	89.44	-169.9	2,162.9	1,420.1	1,346.9	73.15	19.412	
10,500.0	10,448.7	10,469.0	10,446.7	38.9	37.1	89.44	-169.9	2,162.9	1,420.1	1,346.2	73.85	19.229	
10,600.0	10,548.7	10,569.0	10,546.7	39.2	37.4	89.44	-169.9	2,162.9	1,420.1	1,345.5	74.55	19.049	
10,700.0	10,648.7	10,669.0	10,646.7	39.5	37.8	89.44	-169.9	2,162.9	1,420.1	1,344.8	75.25	18.872	
10,800.0	10,748.7	10,769.0	10,746.7	39.9	38.1	89.44	-169.9	2,162.9	1,420.1	1,344.1	75.95	18.698	
10,900.0	10,848.7	10,869.0	10,846.7	40.2	38.5	89.44	-169.9	2,162.9	1,420.1	1,343.4	76.65	18.528	
11,000.0	10,948.7	10,969.0	10,946.7	40.5	38.8	89.44	-169.9	2,162.9	1,420.1	1,342.7	77.35	18.360	
11,100.0	11,048.7	11,069.0	11,046.7	40.9	39.2	89.44	-169.9	2,162.9	1,420.1	1,342.0	78.05	18.195	
11,200.0	11,148.7	11,169.0	11,146.7	41.2	39.5	89.44	-169.9	2,162.9	1,420.1	1,341.3	78.75	18.034	
11,300.0	11,248.7	11,269.0	11,246.7	41.5	39.9	89.44	-169.9	2,162.9	1,420.1	1,340.6	79.45	17.875	
11,400.0	11,348.7	11,369.0	11,346.7	41.9	40.2	89.44	-169.9	2,162.9	1,420.1	1,339.9	80.15	17.718	
11,423.3	11,372.0	11,407.6	11,370.0	42.0	40.4	89.44	-169.9	2,162.9	1,420.1	1,339.7	80.36	17.670	
11,450.0	11,398.6	11,419.0	11,396.6	42.0	40.4	89.92	-169.9	2,162.9	1,420.1	1,339.6	80.50	17.641	
11,478.0	11,426.5	11,446.9	11,424.5	42.1	40.5	90.00	-169.9	2,162.9	1,420.1	1,339.4	80.69	17.599	
11,500.0	11,448.4	11,468.8	11,446.4	42.2	40.6	90.10	-169.9	2,162.9	1,420.1	1,339.2	80.84	17.567	
11,550.0	11,497.6	11,518.0	11,495.6	42.4	40.8	90.45	-169.9	2,162.9	1,420.1	1,338.9	81.17	17.495	
11,600.0	11,545.9	11,566.3	11,543.9	42.5	40.9	90.94	-169.9	2,162.9	1,420.3	1,338.8	81.49	17.428	
11,650.0	11,592.8	11,613.2	11,590.8	42.6	41.1	91.55	-169.9	2,162.9	1,420.7	1,338.9	81.80	17.367	
11,700.0	11,638.0	11,658.4	11,636.0	42.8	41.3	92.25	-169.9	2,162.9	1,421.4	1,339.3	82.10	17.313	
11,750.0	11,681.2	11,701.6	11,679.2	42.9	41.4	92.99	-169.9	2,162.9	1,422.8	1,340.4	82.39	17.268	
11,800.0	11,722.1	11,742.5	11,720.1	43.0	41.6	93.73	-169.9	2,162.9	1,424.8	1,342.2	82.67	17.235	
11,850.0	11,760.3	11,780.7	11,758.3	43.1	41.7	94.41	-169.9	2,162.9	1,427.9	1,344.9	82.95	17.214	
11,900.0	11,795.5	11,815.9	11,793.5	43.2	41.8	95.00	-169.9	2,162.9	1,432.0	1,348.8	83.21	17.209	
11,950.0	11,827.6	11,847.9	11,825.6	43.2	41.9	95.44	-169.9	2,162.9	1,437.4	1,354.0	83.47	17.220	
12,000.0	11,856.1	11,876.5	11,854.1	43.3	42.0	95.68	-169.9	2,162.9	1,444.4	1,360.6	83.73	17.250	
12,050.0	11,881.0	11,901.4	11,879.0	43.3	42.1	95.67	-169.9	2,162.9	1,452.9	1,368.9	83.98	17.300	
12,100.0	11,902.0	11,922.4	11,900.0	43.3	42.2	95.39	-169.9	2,162.9	1,463.2	1,378.9	84.23	17.370	
12,150.0	11,918.9	11,939.3	11,916.9	43.4	42.3	94.79	-169.9	2,162.9	1,475.2	1,390.7	84.48	17.462	
12,200.0	11,931.7	11,952.1	11,929.7	43.4	42.3	93.86	-169.9	2,162.9	1,489.0	1,404.3	84.72	17.575	
12,250.0	11,940.3	12,986.8	12,557.8	43.5	45.0	114.00	475.6	2,075.3	1,481.7	1,401.4	80.28	18.456	
12,300.0	11,944.5	13,020.5	12,557.3	43.6	45.1	114.53	509.1	2,071.8	1,475.2	1,394.7	80.52	18.321	
12,326.5	11,944.9	13,038.5	12,557.0	43.6	45.2	114.76	527.0	2,070.0	1,472.7	1,392.1	80.62	18.267	
12,391.6	11,944.6	13,082.8	12,556.3	43.7	45.3	114.80	571.1	2,066.2	1,467.8	1,386.9	80.86	18.151	
12,400.0	11,944.5	13,088.5	12,556.3	43.8	45.4	114.81	576.8	2,065.8	1,467.2	1,386.3	80.90	18.137	
12,500.0	11,944.0	13,156.6	12,555.2	44.1	45.6	114.85	644.8	2,061.4	1,461.7	1,380.3	81.39	17.960	
12,600.0	11,943.4	13,225.0	12,554.2	44.4	45.9	114.86	713.1	2,058.6	1,458.3	1,376.4	81.98	17.789	
12,700.0	11,942.9	13,302.3	12,553.0	44.9	46.3	114.84	785.8	2,057.4	1,457.1	1,374.4	82.72	17.615	
12,800.0	11,942.3	13,397.7	12,551.5	45.4	46.8	114.81	885.8	2,056.6	1,456.7	1,373.1	83.65	17.414	
12,900.0	11,941.7	13,502.3	12,550.0	45.9	47.3	114.78	985.8	2,055.8	1,456.3	1,371.6	84.73	17.187	
13,000.0	11,941.2	13,602.3	12,548.4	46.6	47.9	114.74	1,085.8	2,055.0	1,455.9	1,370.0	85.89	16.951	
13,100.0	11,940.6	13,702.3	12,546.9	47.2	48.6	114.71	1,185.7	2,054.2	1,455.5	1,368.3	87.14	16.702	
13,200.0	11,940.1	13,797.7	12,545.4	48.0	49.3	114.67	1,285.7	2,053.4	1,455.0	1,366.6	88.45	16.450	
13,300.0	11,939.5	13,902.3	12,543.8	48.7	50.1	114.64	1,385.7	2,052.6	1,454.6	1,364.7	89.91	16.178	
13,400.0	11,939.0	14,002.3	12,542.3	49.5	50.8	114.60	1,485.7	2,051.8	1,454.2	1,362.8	91.42	15.906	
13,500.0	11,938.4	14,097.7	12,540.8	50.4	51.6	114.57	1,585.7	2,050.9	1,453.8	1,360.8	92.98	15.636	
13,600.0	11,937.8	14,202.3	12,539.2	51.3	52.5	114.53	1,685.6	2,050.1	1,453.4	1,358.7	94.68	15.350	
13,700.0	11,937.3	14,302.3	12,537.7	52.2	53.5	114.50	1,785.6	2,049.3	1,453.0	1,356.6	96.42	15.069	
13,800.0	11,936.7	14,402.3	12,536.2	53.1	54.4	114.46	1,885.6	2,048.5	1,452.6	1,354.3	98.22	14.788	
13,900.0	11,936.2	14,502.3	12,534.6	54.1	55.4	114.43	1,985.6	2,047.7	1,452.2	1,352.1	100.09	14.508	
14,000.0	11,935.6	14,602.3	12,533.1	55.2	56.4	114.39	2,085.6	2,046.9	1,451.8	1,349.7	102.02	14.229	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,935.0	14,697.7	12,531.6	56.2	57.4	114.36	2,185.5	2,046.1	1,451.3	1,347.4	103.97	13.960	
14,200.0	11,934.5	14,802.3	12,530.0	57.3	58.5	114.32	2,285.5	2,045.3	1,450.9	1,344.9	106.05	13.681	
14,300.0	11,933.9	14,902.3	12,528.5	58.4	59.6	114.29	2,385.5	2,044.5	1,450.5	1,342.4	108.15	13.412	
14,400.0	11,933.4	15,002.3	12,527.0	59.5	60.7	114.25	2,485.5	2,043.7	1,450.1	1,339.8	110.29	13.148	
14,500.0	11,932.8	15,097.7	12,525.4	60.7	61.8	114.22	2,585.5	2,042.8	1,449.7	1,337.3	112.43	12.895	
14,600.0	11,932.3	15,202.4	12,523.9	61.9	63.0	114.18	2,685.4	2,042.0	1,449.3	1,334.6	114.71	12.635	
14,700.0	11,931.7	15,302.4	12,522.4	63.1	64.2	114.15	2,785.4	2,041.2	1,448.9	1,331.9	116.98	12.386	
14,800.0	11,931.1	15,402.4	12,520.8	64.3	65.4	114.11	2,885.4	2,040.4	1,448.5	1,329.2	119.29	12.142	
14,900.0	11,930.6	15,502.4	12,519.3	65.5	66.6	114.08	2,985.4	2,039.6	1,448.1	1,326.4	121.64	11.905	
15,000.0	11,930.0	15,602.4	12,517.8	66.8	67.9	114.04	3,085.4	2,038.8	1,447.7	1,323.7	124.02	11.673	
15,100.0	11,929.5	15,702.4	12,516.2	68.1	69.1	114.01	3,185.3	2,038.0	1,447.3	1,320.8	126.44	11.447	
15,200.0	11,928.9	15,802.4	12,514.7	69.4	70.4	113.97	3,285.3	2,037.2	1,446.9	1,318.0	128.88	11.226	
15,300.0	11,928.3	15,897.6	12,513.2	70.7	71.6	113.94	3,385.3	2,036.4	1,446.5	1,315.2	131.30	11.017	
15,400.0	11,927.8	16,002.4	12,511.6	72.0	73.0	113.90	3,485.3	2,035.5	1,446.1	1,312.2	133.86	10.803	
15,500.0	11,927.2	16,102.4	12,510.1	73.3	74.3	113.87	3,585.3	2,034.7	1,445.7	1,309.3	136.39	10.600	
15,600.0	11,926.7	16,197.6	12,508.6	74.7	75.6	113.83	3,685.2	2,033.9	1,445.3	1,306.4	138.88	10.406	
15,700.0	11,926.1	16,297.6	12,507.0	76.0	77.0	113.80	3,785.2	2,033.1	1,444.9	1,303.4	141.46	10.214	
15,800.0	11,925.6	16,402.4	12,505.5	77.4	78.4	113.76	3,885.2	2,032.3	1,444.5	1,300.3	144.12	10.023	
15,900.0	11,925.0	16,502.4	12,503.9	78.8	79.8	113.72	3,985.2	2,031.5	1,444.1	1,297.3	146.74	9.841	
16,000.0	11,924.4	16,602.4	12,502.4	80.2	81.1	113.69	4,085.2	2,030.7	1,443.7	1,294.3	149.39	9.664	
16,100.0	11,923.9	16,697.6	12,500.9	81.6	82.5	113.65	4,185.1	2,029.9	1,443.3	1,291.3	151.98	9.496	
16,200.0	11,923.3	16,797.6	12,499.3	83.0	83.9	113.62	4,285.1	2,029.1	1,442.9	1,288.2	154.66	9.329	
16,300.0	11,922.8	16,902.4	12,497.8	84.4	85.3	113.58	4,385.1	2,028.3	1,442.5	1,285.0	157.42	9.163	
16,400.0	11,922.2	17,002.4	12,496.3	85.9	86.8	113.55	4,485.1	2,027.4	1,442.1	1,281.9	160.14	9.005	
16,500.0	11,921.6	17,097.6	12,494.7	87.3	88.1	113.51	4,585.1	2,026.6	1,441.7	1,278.9	162.80	8.855	
16,600.0	11,921.1	17,202.4	12,493.2	88.7	89.6	113.48	4,685.0	2,025.8	1,441.3	1,275.7	165.61	8.703	
16,700.0	11,920.5	17,302.5	12,491.7	90.2	91.1	113.44	4,785.0	2,025.0	1,440.9	1,272.5	168.37	8.558	
16,800.0	11,920.0	17,402.5	12,490.1	91.7	92.5	113.41	4,885.0	2,024.2	1,440.5	1,269.3	171.15	8.417	
16,900.0	11,919.4	17,497.5	12,488.6	93.1	93.9	113.37	4,985.0	2,023.4	1,440.1	1,266.2	173.87	8.283	
17,000.0	11,918.8	17,602.5	12,487.1	94.6	95.4	113.33	5,085.0	2,022.6	1,439.7	1,263.0	176.74	8.146	
17,100.0	11,918.3	17,702.5	12,485.5	96.1	96.9	113.30	5,184.9	2,021.8	1,439.3	1,259.8	179.55	8.016	
17,200.0	11,917.7	17,802.5	12,484.0	97.6	98.4	113.26	5,284.9	2,021.0	1,438.9	1,256.5	182.37	7.890	
17,300.0	11,917.2	17,902.5	12,482.5	99.0	99.9	113.23	5,384.9	2,020.2	1,438.5	1,253.3	185.21	7.767	
17,400.0	11,916.6	18,002.5	12,480.9	100.5	101.4	113.19	5,484.9	2,019.3	1,438.1	1,250.1	188.05	7.647	
17,500.0	11,916.1	18,097.5	12,479.4	102.0	102.8	113.16	5,584.9	2,018.5	1,437.7	1,246.9	190.84	7.534	
17,600.0	11,915.5	18,197.5	12,477.9	103.5	104.3	113.12	5,684.8	2,017.7	1,437.3	1,243.6	193.71	7.420	
17,700.0	11,914.9	18,297.5	12,476.3	105.1	105.8	113.09	5,784.8	2,016.9	1,437.0	1,240.4	196.58	7.310	
17,800.0	11,914.4	18,397.5	12,474.8	106.6	107.3	113.05	5,884.8	2,016.1	1,436.6	1,237.1	199.47	7.202	
17,900.0	11,913.8	18,502.5	12,473.3	108.1	108.9	113.01	5,984.8	2,015.3	1,436.2	1,233.7	202.43	7.095	
18,000.0	11,913.3	18,602.5	12,471.7	109.6	110.4	112.98	6,084.8	2,014.5	1,435.8	1,230.5	205.33	6.992	
18,100.0	11,912.7	18,702.5	12,470.2	111.1	111.9	112.94	6,184.7	2,013.7	1,435.4	1,227.2	208.25	6.893	
18,200.0	11,912.1	18,797.5	12,468.7	112.7	113.4	112.91	6,284.7	2,012.9	1,435.0	1,223.9	211.09	6.798	
18,300.0	11,911.6	18,902.5	12,467.1	114.2	115.0	112.87	6,384.7	2,012.0	1,434.6	1,220.5	214.09	6.701	
18,400.0	11,911.0	18,997.5	12,465.6	115.7	116.4	112.84	6,484.7	2,011.2	1,434.2	1,217.3	216.95	6.611	
18,500.0	11,910.5	19,102.5	12,464.1	117.3	118.0	112.80	6,584.7	2,010.4	1,433.9	1,213.9	219.97	6.519	
18,600.0	11,909.9	19,197.5	12,462.5	118.8	119.5	112.76	6,684.6	2,009.6	1,433.5	1,210.6	222.84	6.433	
18,700.0	11,909.4	19,302.5	12,461.0	120.4	121.1	112.73	6,784.6	2,008.8	1,433.1	1,207.2	225.87	6.345	
18,800.0	11,908.8	19,402.6	12,459.5	121.9	122.7	112.69	6,884.6	2,008.0	1,432.7	1,203.9	228.83	6.261	
18,900.0	11,908.2	19,502.6	12,457.9	123.5	124.2	112.66	6,984.6	2,007.2	1,432.3	1,200.5	231.80	6.179	
19,000.0	11,907.7	19,597.4	12,456.4	125.0	125.7	112.62	7,084.6	2,006.4	1,431.9	1,197.2	234.70	6.101	
19,100.0	11,907.1	19,702.6	12,454.9	126.6	127.3	112.58	7,184.5	2,005.6	1,431.6	1,193.8	237.75	6.021	
19,200.0	11,906.6	19,802.6	12,453.3	128.1	128.9	112.55	7,284.5	2,004.8	1,431.2	1,190.4	240.74	5.945	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Nina Cortell - Nina Cortell Fed Com #223H - Wellbore #1 - BLM Plan #1												Offset Well Error:	0.0 usft
Survey Program: 0-MWD													
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
19,300.0	11,906.0	19,897.4	12,451.8	129.7	130.3	112.51	7,384.5	2,003.9	1,430.8	1,187.1	243.66	5.872	
19,400.0	11,905.4	20,002.6	12,450.3	131.3	132.0	112.48	7,484.5	2,003.1	1,430.4	1,183.7	246.73	5.798	
19,500.0	11,904.9	20,102.6	12,448.7	132.8	133.5	112.44	7,584.5	2,002.3	1,430.0	1,180.3	249.73	5.726	
19,600.0	11,904.3	20,202.6	12,447.2	134.4	135.1	112.40	7,684.4	2,001.5	1,429.7	1,176.9	252.74	5.657	
19,700.0	11,903.8	20,302.6	12,445.7	136.0	136.7	112.37	7,784.4	2,000.7	1,429.3	1,173.5	255.75	5.589	
19,800.0	11,903.2	20,402.6	12,444.1	137.5	138.2	112.33	7,884.4	1,999.9	1,428.9	1,170.1	258.77	5.522	
19,900.0	11,902.7	20,502.6	12,442.6	139.1	139.8	112.30	7,984.4	1,999.1	1,428.5	1,166.7	261.79	5.457	
20,000.0	11,902.1	20,602.6	12,441.0	140.7	141.4	112.26	8,084.4	1,998.3	1,428.1	1,163.3	264.81	5.393	
20,100.0	11,901.5	20,702.6	12,439.5	142.3	143.0	112.22	8,184.3	1,997.5	1,427.8	1,159.9	267.85	5.331	
20,200.0	11,901.0	20,802.6	12,438.0	143.8	144.5	112.19	8,284.3	1,996.7	1,427.4	1,156.5	270.88	5.269	
20,300.0	11,900.4	20,902.6	12,436.4	145.4	146.1	112.15	8,384.3	1,995.8	1,427.0	1,153.1	273.92	5.210	
20,400.0	11,899.9	21,002.6	12,434.9	147.0	147.7	112.12	8,484.3	1,995.0	1,426.6	1,149.7	276.96	5.151	
20,500.0	11,899.3	21,102.6	12,433.4	148.6	149.3	112.08	8,584.3	1,994.2	1,426.3	1,146.3	280.01	5.094	
20,600.0	11,898.7	21,202.6	12,431.8	150.2	150.9	112.04	8,684.2	1,993.4	1,425.9	1,142.8	283.06	5.037	
20,700.0	11,898.2	21,302.6	12,430.3	151.8	152.4	112.01	8,784.2	1,992.6	1,425.5	1,139.4	286.12	4.982	
20,800.0	11,897.6	21,402.6	12,428.8	153.4	154.0	111.97	8,884.2	1,991.8	1,425.1	1,136.0	289.18	4.928	
20,900.0	11,897.1	21,497.3	12,427.2	155.0	155.5	111.93	8,984.2	1,991.0	1,424.8	1,132.6	292.16	4.877	
21,000.0	11,896.5	21,602.7	12,425.7	156.5	157.2	111.90	9,084.2	1,990.2	1,424.4	1,129.1	295.31	4.823	
21,100.0	11,896.0	21,697.3	12,424.2	158.1	158.7	111.86	9,184.1	1,989.4	1,424.0	1,125.7	298.30	4.774	
21,200.0	11,895.4	21,797.3	12,422.6	159.7	160.3	111.83	9,284.1	1,988.5	1,423.7	1,122.3	301.37	4.724	
21,300.0	11,894.8	21,897.3	12,421.1	161.3	161.9	111.79	9,384.1	1,987.7	1,423.3	1,118.8	304.45	4.675	
21,400.0	11,894.3	21,997.3	12,419.6	162.9	163.5	111.75	9,484.1	1,986.9	1,422.9	1,115.4	307.53	4.627	
21,500.0	11,893.7	22,102.7	12,418.0	164.5	165.2	111.72	9,584.1	1,986.1	1,422.6	1,111.9	310.70	4.579	
21,600.0	11,893.2	22,202.7	12,416.5	166.1	166.8	111.68	9,684.0	1,985.3	1,422.2	1,108.4	313.78	4.532	
21,700.0	11,892.6	22,302.7	12,415.0	167.7	168.4	111.64	9,784.0	1,984.5	1,421.8	1,104.9	316.87	4.487	
21,800.0	11,892.0	22,397.3	12,413.4	169.3	169.9	111.61	9,884.0	1,983.7	1,421.5	1,101.6	319.89	4.444	
21,900.0	11,891.5	22,502.7	12,411.9	170.9	171.6	111.57	9,984.0	1,982.9	1,421.1	1,098.0	323.06	4.399	
22,000.0	11,890.9	22,602.7	12,410.4	172.5	173.2	111.53	10,084.0	1,982.1	1,420.7	1,094.6	326.16	4.356	
22,100.0	11,890.4	22,702.7	12,408.8	174.1	174.8	111.50	10,183.9	1,981.3	1,420.4	1,091.1	329.27	4.314	
22,191.7	11,890.5	22,789.0	12,407.4	175.6	176.2	111.44	10,275.6	1,980.5	1,419.8	1,087.7	332.07	4.276	CC, 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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	57.7	2,453.0	2,453.7				
100.0	100.0	101.0	99.0	0.1	0.1	88.65	57.7	2,453.0	2,453.7	2,453.4	0.26	9,441.034	
200.0	200.0	201.0	199.0	0.5	0.5	88.65	57.7	2,453.0	2,453.7	2,452.7	0.98	2,511.837	
300.0	300.0	301.0	299.0	0.8	0.8	88.65	57.7	2,453.0	2,453.7	2,452.0	1.69	1,448.626	
400.0	400.0	401.0	399.0	1.2	1.2	88.65	57.7	2,453.0	2,453.7	2,451.2	2.41	1,017.808	
500.0	500.0	501.0	499.0	1.6	1.6	88.65	57.7	2,453.0	2,453.7	2,450.5	3.13	784.500	
600.0	600.0	601.0	599.0	1.9	1.9	88.65	57.7	2,453.0	2,453.7	2,449.8	3.84	638.206	
700.0	700.0	701.0	699.0	2.3	2.3	88.65	57.7	2,453.0	2,453.7	2,449.1	4.56	537.899	
800.0	800.0	801.0	799.0	2.6	2.6	88.65	57.7	2,453.0	2,453.7	2,448.4	5.28	464.839	
900.0	900.0	901.0	899.0	3.0	3.0	88.65	57.7	2,453.0	2,453.7	2,447.7	6.00	409.253	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	88.65	57.7	2,453.0	2,453.7	2,446.9	6.71	365.541	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	88.65	57.7	2,453.0	2,453.7	2,446.2	7.43	330.266	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	88.65	57.7	2,453.0	2,453.7	2,445.5	8.15	301.200	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	88.65	57.7	2,453.0	2,453.7	2,444.8	8.86	276.836	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	88.65	57.7	2,453.0	2,453.7	2,444.1	9.58	256.118	
1,500.0	1,500.0	1,501.0	1,499.0	5.1	5.2	88.65	57.7	2,453.0	2,453.7	2,443.4	10.30	238.286	
1,600.0	1,600.0	1,601.0	1,599.0	5.5	5.5	-15.26	57.7	2,453.0	2,452.8	2,441.8	11.00	222.923	
1,700.0	1,700.0	1,701.0	1,699.0	5.8	5.9	-15.28	57.7	2,453.0	2,450.3	2,438.6	11.70	209.428	
1,800.0	1,799.9	1,801.1	1,798.9	6.2	6.2	-15.32	57.7	2,453.0	2,446.1	2,433.7	12.40	197.273	
1,900.0	1,899.7	1,901.3	1,898.7	6.5	6.6	-15.37	57.7	2,453.0	2,440.2	2,427.1	13.10	186.255	
2,000.0	1,999.4	1,998.4	1,998.4	6.9	6.9	-15.44	57.7	2,453.0	2,432.6	2,418.8	13.79	176.357	
2,100.0	2,098.9	2,069.4	2,069.4	7.2	7.2	-15.50	57.6	2,453.4	2,424.0	2,409.6	14.39	168.486	
2,200.0	2,198.3	2,140.0	2,140.0	7.6	7.4	-15.57	57.3	2,454.6	2,414.8	2,399.8	14.97	161.260	
2,300.0	2,297.4	2,210.6	2,210.6	8.0	7.7	-15.64	56.9	2,456.8	2,405.2	2,389.6	15.56	154.568	
2,400.0	2,396.4	2,281.4	2,281.3	8.3	7.9	-15.69	56.2	2,459.7	2,395.9	2,379.8	16.15	148.370	
2,500.0	2,495.5	2,352.3	2,352.1	8.7	8.1	-15.73	55.4	2,463.6	2,387.9	2,371.1	16.74	142.667	
2,600.0	2,594.5	2,423.4	2,423.0	9.1	8.4	-15.77	54.4	2,468.3	2,381.0	2,363.7	17.33	137.409	
2,700.0	2,693.5	2,500.0	2,499.4	9.5	8.7	-15.80	53.1	2,474.3	2,375.3	2,357.4	17.94	132.403	
2,800.0	2,792.5	2,565.8	2,564.9	9.9	8.9	-15.83	51.8	2,480.3	2,370.9	2,352.3	18.51	128.077	
2,900.0	2,891.6	2,637.2	2,635.8	10.3	9.1	-15.85	50.2	2,487.6	2,367.6	2,348.5	19.10	123.937	
3,000.0	2,990.6	2,708.5	2,706.7	10.7	9.4	-15.86	48.4	2,495.7	2,365.6	2,345.9	19.69	120.110	
3,100.0	3,089.6	2,780.0	2,777.6	11.0	9.7	-15.88	46.4	2,504.8	2,364.7	2,344.4	20.29	116.569	
3,118.2	3,107.7	2,809.8	2,787.7	11.1	9.8	-15.88	46.2	2,506.1	2,364.7	2,344.2	20.45	115.632 CC	
3,200.0	3,188.6	2,871.9	2,868.6	11.4	10.0	-15.88	43.7	2,517.2	2,364.8	2,343.8	20.97	112.793	
3,300.0	3,287.7	2,971.9	2,967.7	11.8	10.4	-15.89	40.8	2,530.9	2,364.9	2,343.2	21.68	109.070	
3,400.0	3,386.7	3,071.9	3,066.7	12.2	10.7	-15.90	37.8	2,544.5	2,365.0	2,342.6	22.40	105.573	
3,500.0	3,485.7	3,171.9	3,165.7	12.7	11.1	-15.91	34.9	2,558.1	2,365.1	2,342.0	23.12	102.283	
3,600.0	3,584.8	3,271.9	3,264.7	13.1	11.5	-15.92	31.9	2,571.7	2,365.2	2,341.3	23.85	99.185	
3,700.0	3,683.8	3,371.9	3,363.8	13.5	11.9	-15.93	29.0	2,585.3	2,365.3	2,340.7	24.57	96.261	
3,800.0	3,782.8	3,471.9	3,462.8	13.9	12.3	-15.94	26.0	2,598.9	2,365.4	2,340.1	25.30	93.499	
3,900.0	3,881.8	3,571.9	3,561.8	14.3	12.7	-15.95	23.1	2,612.5	2,365.5	2,339.5	26.03	90.886	
4,000.0	3,980.9	3,671.9	3,660.9	14.7	13.1	-15.96	20.1	2,626.1	2,365.6	2,338.9	26.76	88.411	
4,100.0	4,079.9	3,771.9	3,759.9	15.1	13.4	-15.97	17.2	2,639.7	2,365.7	2,338.2	27.49	86.063	
4,200.0	4,178.9	3,871.9	3,858.9	15.5	13.8	-15.98	14.2	2,653.3	2,365.8	2,337.6	28.22	83.833	
4,300.0	4,277.9	3,971.9	3,957.9	15.9	14.2	-15.99	11.3	2,666.9	2,365.9	2,337.0	28.95	81.712	
4,400.0	4,377.0	4,071.9	4,057.0	16.3	14.6	-16.00	8.3	2,680.5	2,366.0	2,336.4	29.69	79.694	
4,500.0	4,476.0	4,171.9	4,156.0	16.7	15.0	-16.01	5.4	2,694.1	2,366.1	2,335.7	30.42	77.771	
4,600.0	4,575.0	4,271.9	4,255.0	17.1	15.4	-16.02	2.4	2,707.7	2,366.3	2,335.1	31.16	75.936	
4,700.0	4,674.0	4,371.9	4,354.0	17.6	15.8	-16.03	-0.5	2,721.3	2,366.4	2,334.5	31.90	74.184	
4,800.0	4,773.1	4,471.9	4,453.1	18.0	16.2	-16.04	-3.5	2,734.9	2,366.5	2,333.8	32.64	72.510	
4,900.0	4,872.1	4,571.9	4,552.1	18.4	16.6	-16.05	-6.4	2,748.5	2,366.6	2,333.2	33.38	70.908	
5,000.0	4,971.1	4,671.9	4,651.1	18.8	17.1	-16.05	-9.4	2,762.1	2,366.7	2,332.6	34.11	69.374	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	
5,100.0	5,070.2	4,771.9	4,750.1	19.2	17.5	-16.06	-12.3	2,775.7	2,366.8	2,331.9	34.85	67.904	
5,200.0	5,169.2	4,871.9	4,849.2	19.6	17.9	-16.07	-15.3	2,789.3	2,366.9	2,331.3	35.60	66.494	
5,300.0	5,268.2	4,971.9	4,948.2	20.0	18.3	-16.08	-18.2	2,802.9	2,367.0	2,330.7	36.34	65.141	
5,400.0	5,367.2	5,071.9	5,047.2	20.5	18.7	-16.09	-21.2	2,816.5	2,367.1	2,330.0	37.08	63.840	
5,500.0	5,466.3	5,171.9	5,146.2	20.9	19.1	-16.10	-24.1	2,830.1	2,367.2	2,329.4	37.82	62.590	
5,600.0	5,565.3	5,271.9	5,245.3	21.3	19.5	-16.11	-27.1	2,843.7	2,367.3	2,328.7	38.56	61.387	
5,700.0	5,664.3	5,371.9	5,344.3	21.7	19.9	-16.12	-30.0	2,857.3	2,367.4	2,328.1	39.31	60.229	
5,800.0	5,763.3	5,471.9	5,443.3	22.1	20.3	-16.13	-33.0	2,870.9	2,367.5	2,327.5	40.05	59.114	
5,900.0	5,862.4	5,571.9	5,542.3	22.5	20.7	-16.14	-35.9	2,884.5	2,367.6	2,326.8	40.79	58.038	
6,000.0	5,961.4	5,671.9	5,641.4	23.0	21.1	-16.15	-38.9	2,898.1	2,367.7	2,326.2	41.54	57.001	
6,100.0	6,060.4	5,771.9	5,740.4	23.4	21.6	-16.16	-41.8	2,911.7	2,367.8	2,325.6	42.28	55.999	
6,200.0	6,159.4	5,871.9	5,839.4	23.8	22.0	-16.17	-44.8	2,925.3	2,368.0	2,324.9	43.03	55.032	
6,300.0	6,258.5	5,971.9	5,938.4	24.2	22.4	-16.18	-47.7	2,938.9	2,368.1	2,324.3	43.77	54.097	
6,400.0	6,357.5	6,071.9	6,037.5	24.6	22.8	-16.19	-50.7	2,952.5	2,368.2	2,323.6	44.52	53.194	
6,500.0	6,456.5	6,171.9	6,136.5	25.1	23.2	-16.20	-53.6	2,966.1	2,368.3	2,323.0	45.27	52.319	
6,600.0	6,555.6	6,271.9	6,235.5	25.5	23.6	-16.21	-56.6	2,979.7	2,368.4	2,322.4	46.01	51.473	
6,700.0	6,654.6	6,371.9	6,334.6	25.9	24.0	-16.21	-59.5	2,993.3	2,368.5	2,321.7	46.76	50.654	
6,800.0	6,753.6	6,471.9	6,433.6	26.3	24.5	-16.22	-62.5	3,006.9	2,368.6	2,321.1	47.51	49.859	
6,900.0	6,852.6	6,571.9	6,532.6	26.7	24.9	-16.23	-65.4	3,020.5	2,368.7	2,320.4	48.25	49.090	
7,000.0	6,951.7	6,671.9	6,631.6	27.1	25.3	-16.24	-68.4	3,034.1	2,368.8	2,319.8	49.00	48.343	
7,100.0	7,050.7	6,771.9	6,730.7	27.6	25.7	-16.25	-71.3	3,047.7	2,368.9	2,319.2	49.75	47.619	
7,131.4	7,081.7	6,803.3	6,761.7	27.7	25.8	-16.26	-72.3	3,051.9	2,368.9	2,319.0	49.98	47.396 ES	
7,200.0	7,149.8	6,871.9	6,829.7	28.0	26.1	-16.26	-74.3	3,061.3	2,369.6	2,319.1	50.49	46.929	
7,300.0	7,249.2	6,971.9	6,928.7	28.4	26.5	-16.26	-77.2	3,074.9	2,372.7	2,321.5	51.23	46.311	
7,400.0	7,348.9	7,071.7	7,027.5	28.8	26.9	-16.26	-80.2	3,088.5	2,378.3	2,326.3	51.97	45.764	
7,500.0	7,448.7	7,171.3	7,126.2	29.1	27.4	-16.24	-83.1	3,102.0	2,386.4	2,333.7	52.70	45.287	
7,600.0	7,548.7	7,270.7	7,224.6	29.5	27.8	-16.22	-86.0	3,115.5	2,397.0	2,343.6	53.41	44.876	
7,664.7	7,613.3	7,334.9	7,288.1	29.7	28.0	87.69	-87.9	3,124.3	2,405.2	2,351.4	53.87	44.648	
7,700.0	7,648.7	7,369.8	7,322.8	29.8	28.2	87.72	-89.0	3,129.0	2,410.0	2,355.9	54.12	44.533	
7,800.0	7,748.7	7,468.9	7,420.8	30.1	28.6	87.80	-91.9	3,142.5	2,423.5	2,368.7	54.81	44.214	
7,900.0	7,848.7	7,567.9	7,518.9	30.4	29.0	87.89	-94.8	3,155.9	2,437.0	2,381.4	55.51	43.903	
8,000.0	7,948.7	7,666.9	7,616.9	30.7	29.4	87.97	-97.7	3,169.4	2,450.4	2,394.2	56.20	43.599	
8,100.0	8,048.7	7,765.9	7,715.0	31.0	29.8	88.05	-100.7	3,182.9	2,463.9	2,407.0	56.90	43.302	
8,200.0	8,148.7	7,865.0	7,813.1	31.4	30.3	88.13	-103.6	3,196.3	2,477.4	2,419.8	57.60	43.011	
8,300.0	8,248.7	7,964.0	7,911.1	31.7	30.7	88.20	-106.5	3,209.8	2,491.0	2,432.7	58.30	42.728	
8,400.0	8,348.7	8,063.0	8,009.2	32.0	31.1	88.28	-109.4	3,223.3	2,504.5	2,445.5	59.00	42.450	
8,500.0	8,448.7	8,162.0	8,107.3	32.3	31.5	88.36	-112.3	3,236.8	2,518.0	2,458.3	59.70	42.179	
8,600.0	8,548.7	8,261.1	8,205.3	32.6	31.9	88.43	-115.3	3,250.2	2,531.5	2,471.1	60.40	41.913	
8,700.0	8,648.7	8,360.1	8,303.4	33.0	32.3	88.51	-118.2	3,263.7	2,545.0	2,483.9	61.10	41.654	
8,800.0	8,748.7	8,459.1	8,401.5	33.3	32.7	88.58	-121.1	3,277.2	2,558.6	2,496.8	61.80	41.400	
8,900.0	8,848.7	8,558.2	8,499.5	33.6	33.1	88.65	-124.0	3,290.6	2,572.1	2,509.6	62.50	41.151	
9,000.0	8,948.7	8,657.2	8,597.6	33.9	33.6	88.73	-127.0	3,304.1	2,585.6	2,522.4	63.21	40.908	
9,100.0	9,048.7	8,756.2	8,695.6	34.3	34.0	88.80	-129.9	3,317.6	2,599.2	2,535.3	63.91	40.669	
9,200.0	9,148.7	8,855.2	8,793.7	34.6	34.4	88.87	-132.8	3,331.0	2,612.7	2,548.1	64.61	40.436	
9,300.0	9,248.7	8,954.3	8,891.8	34.9	34.8	88.94	-135.7	3,344.5	2,626.3	2,560.9	65.32	40.208	
9,400.0	9,348.7	9,053.3	8,989.8	35.2	35.2	89.01	-138.6	3,358.0	2,639.8	2,573.8	66.02	39.984	
9,500.0	9,448.7	9,152.3	9,087.9	35.6	35.6	89.08	-141.6	3,371.4	2,653.4	2,586.6	66.73	39.764	
9,600.0	9,548.7	9,251.3	9,186.0	35.9	36.1	89.15	-144.5	3,384.9	2,666.9	2,599.5	67.43	39.549	
9,700.0	9,648.7	9,350.4	9,284.0	36.2	36.5	89.21	-147.4	3,398.4	2,680.5	2,612.4	68.14	39.339	
9,800.0	9,748.7	9,448.9	9,481.0	36.5	37.3	89.33	-152.7	3,422.7	2,693.2	2,624.0	69.28	38.876	
9,900.0	9,848.7	9,548.2	9,480.6	36.9	38.4	89.42	-156.7	3,441.4	2,699.1	2,628.4	70.61	38.223	
10,000.0	9,948.7	10,016.3	9,947.7	37.2	38.9	89.43	-156.9	3,442.0	2,699.2	2,627.9	71.37	37.821	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	10,048.7	10,116.3	10,047.7	37.5	39.2	89.43	-156.9	3,442.0	2,699.2	2,627.2	72.04	37.466	
10,200.0	10,148.7	10,216.3	10,147.7	37.9	39.5	89.43	-156.9	3,442.0	2,699.2	2,626.5	72.72	37.117	
10,300.0	10,248.7	10,316.3	10,247.7	38.2	39.9	89.43	-156.9	3,442.0	2,699.2	2,625.8	73.40	36.774	
10,400.0	10,348.7	10,416.3	10,347.7	38.5	40.2	89.43	-156.9	3,442.0	2,699.2	2,625.2	74.08	36.437	
10,500.0	10,448.7	10,516.3	10,447.7	38.9	40.5	89.43	-156.9	3,442.0	2,699.2	2,624.5	74.76	36.106	
10,600.0	10,548.7	10,616.3	10,547.7	39.2	40.8	89.43	-156.9	3,442.0	2,699.2	2,623.8	75.44	35.780	
10,700.0	10,648.7	10,716.3	10,647.7	39.5	41.1	89.43	-156.9	3,442.0	2,699.2	2,623.1	76.12	35.460	
10,800.0	10,748.7	10,816.3	10,747.7	39.9	41.4	89.43	-156.9	3,442.0	2,699.2	2,622.4	76.80	35.145	
10,900.0	10,848.7	10,916.3	10,847.7	40.2	41.8	89.43	-156.9	3,442.0	2,699.2	2,621.8	77.48	34.836	
11,000.0	10,948.7	11,016.3	10,947.7	40.5	42.1	89.43	-156.9	3,442.0	2,699.2	2,621.1	78.17	34.531	
11,100.0	11,048.7	11,116.3	11,047.7	40.9	42.4	89.43	-156.9	3,442.0	2,699.2	2,620.4	78.85	34.232	
11,200.0	11,148.7	11,216.3	11,147.7	41.2	42.7	89.43	-156.9	3,442.0	2,699.2	2,619.7	79.54	33.938	
11,300.0	11,248.7	11,316.3	11,247.7	41.5	43.0	89.43	-156.9	3,442.0	2,699.2	2,619.0	80.22	33.648	
11,400.0	11,348.7	11,416.3	11,347.7	41.9	43.4	89.43	-156.9	3,442.0	2,699.2	2,618.3	80.91	33.363	
11,423.3	11,372.0	11,439.6	11,371.0	42.0	43.4	89.43	-156.9	3,442.0	2,699.2	2,618.2	81.07	33.297	
11,450.0	11,398.6	11,466.2	11,397.6	42.0	43.5	89.90	-156.9	3,442.0	2,699.2	2,618.0	81.25	33.223	
11,500.0	11,448.4	11,516.0	11,447.4	42.2	43.7	90.00	-156.9	3,442.0	2,699.2	2,617.7	81.58	33.087	
11,501.6	11,450.0	11,517.6	11,449.0	42.2	43.7	90.00	-156.9	3,442.0	2,699.2	2,617.7	81.59	33.083	
11,550.0	11,497.6	11,565.2	11,496.6	42.4	43.8	90.18	-156.9	3,442.0	2,699.3	2,617.4	81.90	32.958	
11,600.0	11,545.9	11,613.5	11,544.9	42.5	44.0	90.44	-156.9	3,442.0	2,699.3	2,617.1	82.21	32.835	
11,650.0	11,592.8	11,660.4	11,591.8	42.6	44.2	90.76	-156.9	3,442.0	2,699.5	2,617.0	82.50	32.720	
11,700.0	11,638.0	11,705.6	11,637.0	42.8	44.3	91.13	-156.9	3,442.0	2,699.9	2,617.1	82.78	32.614	
11,750.0	11,681.2	11,748.8	11,680.2	42.9	44.4	91.52	-156.9	3,442.0	2,700.6	2,617.5	83.05	32.518	
11,800.0	11,722.1	11,789.7	11,721.1	43.0	44.6	91.92	-156.9	3,442.0	2,701.7	2,618.3	83.30	32.431	
11,850.0	11,760.3	11,827.9	11,759.3	43.1	44.7	92.28	-156.9	3,442.0	2,703.2	2,619.7	83.55	32.356	
11,900.0	11,795.5	11,863.1	11,794.5	43.2	44.8	92.60	-156.9	3,442.0	2,705.4	2,621.6	83.78	32.292	
11,950.0	11,827.6	11,904.8	11,826.6	43.2	44.9	92.83	-156.9	3,442.0	2,708.2	2,624.2	84.03	32.229	
12,000.0	11,856.1	11,923.7	11,855.1	43.3	45.0	92.96	-156.9	3,442.0	2,711.8	2,627.6	84.21	32.203	
12,050.0	11,881.0	11,948.6	11,880.0	43.3	45.1	92.97	-156.9	3,442.0	2,716.4	2,631.9	84.42	32.178	
12,100.0	11,902.0	11,969.6	11,901.0	43.3	45.2	92.82	-156.9	3,442.0	2,721.8	2,637.2	84.62	32.166	
12,150.0	11,918.9	11,986.5	11,917.9	43.4	45.2	92.51	-156.9	3,442.0	2,728.3	2,643.5	84.81	32.169	
12,200.0	11,931.7	13,026.4	12,571.1	43.4	46.7	102.48	472.3	3,385.2	2,730.0	2,645.8	84.23	32.410	
12,250.0	11,940.3	13,051.8	12,570.6	43.5	46.8	102.89	497.7	3,383.4	2,724.9	2,640.5	84.47	32.260	
12,300.0	11,944.5	13,077.6	12,570.2	43.6	46.8	103.21	523.4	3,381.9	2,721.2	2,636.6	84.68	32.136	
12,326.5	11,944.9	13,100.0	12,569.8	43.6	46.8	103.33	545.8	3,380.7	2,719.9	2,635.1	84.80	32.076	
12,391.6	11,944.6	13,125.2	12,569.4	43.7	46.9	103.33	571.0	3,379.6	2,717.4	2,632.3	85.05	31.950	
12,400.0	11,944.5	13,129.6	12,569.4	43.8	46.9	103.33	575.3	3,379.5	2,717.1	2,632.0	85.09	31.933	
12,500.0	11,944.0	13,200.0	12,568.2	44.1	47.1	103.32	645.7	3,377.7	2,715.0	2,629.3	85.64	31.704	
12,600.0	11,943.4	13,251.1	12,567.3	44.4	47.2	103.31	696.8	3,377.2	2,714.3	2,628.0	86.25	31.471	
12,700.0	11,942.9	13,351.1	12,565.7	44.9	47.6	103.29	796.8	3,376.5	2,714.0	2,626.9	87.09	31.164	
12,800.0	11,942.3	13,451.1	12,564.0	45.4	48.1	103.27	896.8	3,375.7	2,713.8	2,625.7	88.04	30.825	
12,900.0	11,941.7	13,551.1	12,562.4	45.9	48.6	103.24	996.7	3,374.9	2,713.6	2,624.5	89.10	30.455	
13,000.0	11,941.2	13,651.1	12,560.7	46.6	49.2	103.22	1,096.7	3,374.1	2,713.3	2,623.1	90.27	30.059	
13,100.0	11,940.6	13,751.1	12,559.1	47.2	49.8	103.20	1,196.7	3,373.3	2,713.1	2,621.6	91.53	29.641	
13,200.0	11,940.1	13,851.1	12,557.4	48.0	50.5	103.18	1,296.7	3,372.5	2,712.8	2,620.0	92.90	29.203	
13,300.0	11,939.5	13,951.1	12,555.7	48.7	51.2	103.15	1,396.7	3,371.7	2,712.6	2,618.3	94.35	28.750	
13,400.0	11,939.0	14,051.1	12,554.1	49.5	52.0	103.13	1,496.6	3,371.0	2,712.4	2,616.5	95.90	28.285	
13,500.0	11,938.4	14,151.1	12,552.4	50.4	52.8	103.11	1,596.6	3,370.2	2,712.1	2,614.6	97.52	27.810	
13,600.0	11,937.8	14,251.1	12,550.8	51.3	53.6	103.09	1,696.6	3,369.4	2,711.9	2,612.7	99.23	27.329	
13,700.0	11,937.3	14,351.0	12,549.1	52.2	54.5	103.06	1,796.6	3,368.6	2,711.7	2,610.7	101.02	26.844	
13,800.0	11,936.7	14,451.0	12,547.5	53.1	55.4	103.04	1,896.5	3,367.8	2,711.5	2,608.6	102.88	26.357	
13,900.0	11,936.2	14,551.0	12,545.8	54.1	56.4	103.02	1,996.5	3,367.0	2,711.2	2,606.4	104.80	25.870	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												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	11,935.6	14,651.0	12,544.2	55.2	57.4	102.99	2,096.5	3,366.2	2,711.0	2,604.2	106.79	25.386	
14,100.0	11,935.0	14,751.0	12,542.5	56.2	58.4	102.97	2,196.5	3,365.5	2,710.8	2,601.9	108.84	24.905	
14,200.0	11,934.5	14,851.0	12,540.8	57.3	59.4	102.95	2,296.4	3,364.7	2,710.5	2,599.6	110.95	24.430	
14,300.0	11,933.9	14,951.0	12,539.2	58.4	60.5	102.93	2,396.4	3,363.9	2,710.3	2,597.2	113.12	23.960	
14,400.0	11,933.4	15,051.0	12,537.5	59.5	61.6	102.90	2,496.4	3,363.1	2,710.1	2,594.7	115.33	23.498	
14,500.0	11,932.8	15,151.0	12,535.9	60.7	62.7	102.88	2,596.4	3,362.3	2,709.8	2,592.3	117.60	23.043	
14,600.0	11,932.3	15,251.0	12,534.2	61.9	63.9	102.86	2,696.4	3,361.5	2,709.6	2,589.7	119.91	22.598	
14,700.0	11,931.7	15,351.0	12,532.6	63.1	65.0	102.84	2,796.3	3,360.7	2,709.4	2,587.1	122.26	22.161	
14,800.0	11,931.1	15,451.0	12,530.9	64.3	66.2	102.81	2,896.3	3,360.0	2,709.2	2,584.5	124.66	21.733	
14,900.0	11,930.6	15,551.0	12,529.2	65.5	67.4	102.79	2,996.3	3,359.2	2,708.9	2,581.8	127.09	21.315	
15,000.0	11,930.0	15,651.0	12,527.6	66.8	68.6	102.77	3,096.3	3,358.4	2,708.7	2,579.2	129.56	20.907	
15,100.0	11,929.5	15,751.0	12,525.9	68.1	69.9	102.74	3,196.2	3,357.6	2,708.5	2,576.4	132.07	20.508	
15,200.0	11,928.9	15,851.0	12,524.3	69.4	71.1	102.72	3,296.2	3,356.8	2,708.3	2,573.7	134.61	20.120	
15,300.0	11,928.3	15,951.0	12,522.6	70.7	72.4	102.70	3,396.2	3,356.0	2,708.0	2,570.9	137.17	19.742	
15,400.0	11,927.8	16,050.9	12,521.0	72.0	73.7	102.68	3,496.2	3,355.2	2,707.8	2,568.0	139.77	19.373	
15,500.0	11,927.2	16,150.9	12,519.3	73.3	75.0	102.65	3,596.1	3,354.5	2,707.6	2,565.2	142.40	19.014	
15,600.0	11,926.7	16,250.9	12,517.7	74.7	76.3	102.63	3,696.1	3,353.7	2,707.4	2,562.3	145.05	18.665	
15,700.0	11,926.1	16,350.9	12,516.0	76.0	77.7	102.61	3,796.1	3,352.9	2,707.1	2,559.4	147.73	18.325	
15,800.0	11,925.6	16,450.9	12,514.3	77.4	79.0	102.59	3,896.1	3,352.1	2,706.9	2,556.5	150.43	17.995	
15,900.0	11,925.0	16,550.9	12,512.7	78.8	80.4	102.56	3,996.1	3,351.3	2,706.7	2,553.5	153.15	17.674	
16,000.0	11,924.4	16,650.9	12,511.0	80.2	81.7	102.54	4,096.0	3,350.5	2,706.5	2,550.6	155.89	17.361	
16,100.0	11,923.9	16,750.9	12,509.4	81.6	83.1	102.52	4,196.0	3,349.8	2,706.3	2,547.6	158.66	17.057	
16,200.0	11,923.3	16,850.9	12,507.7	83.0	84.5	102.49	4,296.0	3,349.0	2,706.0	2,544.6	161.44	16.762	
16,300.0	11,922.8	16,950.9	12,506.1	84.4	85.9	102.47	4,396.0	3,348.2	2,705.8	2,541.6	164.24	16.475	
16,400.0	11,922.2	17,050.9	12,504.4	85.9	87.3	102.45	4,495.9	3,347.4	2,705.6	2,538.5	167.06	16.196	
16,500.0	11,921.6	17,150.9	12,502.8	87.3	88.7	102.43	4,595.9	3,346.6	2,705.4	2,535.5	169.89	15.924	
16,600.0	11,921.1	17,250.9	12,501.1	88.7	90.1	102.40	4,695.9	3,345.8	2,705.2	2,532.4	172.74	15.660	
16,700.0	11,920.5	17,350.9	12,499.4	90.2	91.6	102.38	4,795.9	3,345.0	2,704.9	2,529.3	175.61	15.403	
16,800.0	11,920.0	17,450.9	12,497.8	91.7	93.0	102.36	4,895.9	3,344.3	2,704.7	2,526.2	178.49	15.154	
16,900.0	11,919.4	17,550.9	12,496.1	93.1	94.4	102.34	4,995.8	3,343.5	2,704.5	2,523.1	181.38	14.911	
17,000.0	11,918.8	17,650.9	12,494.5	94.6	95.9	102.31	5,095.8	3,342.7	2,704.3	2,520.0	184.29	14.674	
17,100.0	11,918.3	17,750.8	12,492.8	96.1	97.4	102.29	5,195.8	3,341.9	2,704.1	2,516.9	187.20	14.445	
17,200.0	11,917.7	17,850.8	12,491.2	97.6	98.8	102.27	5,295.8	3,341.1	2,703.8	2,513.7	190.13	14.221	
17,300.0	11,917.2	17,950.8	12,489.5	99.0	100.3	102.24	5,395.7	3,340.3	2,703.6	2,510.6	193.07	14.003	
17,400.0	11,916.6	18,050.8	12,487.8	100.5	101.8	102.22	5,495.7	3,339.5	2,703.4	2,507.4	196.03	13.791	
17,500.0	11,916.1	18,150.8	12,486.2	102.0	103.3	102.20	5,595.7	3,338.8	2,703.2	2,504.2	198.99	13.585	
17,600.0	11,915.5	18,250.8	12,484.5	103.5	104.7	102.18	5,695.7	3,338.0	2,703.0	2,501.0	201.96	13.384	
17,700.0	11,914.9	18,350.8	12,482.9	105.1	106.2	102.15	5,795.6	3,337.2	2,702.8	2,497.8	204.94	13.188	
17,800.0	11,914.4	18,450.8	12,481.2	106.6	107.7	102.13	5,895.6	3,336.4	2,702.6	2,494.6	207.93	12.997	
17,900.0	11,913.8	18,550.8	12,479.6	108.1	109.2	102.11	5,995.6	3,335.6	2,702.3	2,491.4	210.93	12.811	
18,000.0	11,913.3	18,650.8	12,477.9	109.6	110.7	102.08	6,095.6	3,334.8	2,702.1	2,488.2	213.94	12.630	
18,100.0	11,912.7	18,750.8	12,476.3	111.1	112.2	102.06	6,195.6	3,334.0	2,701.9	2,485.0	216.96	12.454	
18,200.0	11,912.1	18,850.8	12,474.6	112.7	113.8	102.04	6,295.5	3,333.3	2,701.7	2,481.7	219.98	12.282	
18,300.0	11,911.6	18,950.8	12,472.9	114.2	115.3	102.02	6,395.5	3,332.5	2,701.5	2,478.5	223.01	12.114	
18,400.0	11,911.0	19,050.8	12,471.3	115.7	116.8	101.99	6,495.5	3,331.7	2,701.3	2,475.2	226.05	11.950	
18,500.0	11,910.5	19,150.8	12,469.6	117.3	118.3	101.97	6,595.5	3,330.9	2,701.1	2,472.0	229.09	11.790	
18,600.0	11,909.9	19,250.8	12,468.0	118.8	119.9	101.95	6,695.4	3,330.1	2,700.9	2,468.7	232.14	11.634	
18,700.0	11,909.4	19,350.7	12,466.3	120.4	121.4	101.92	6,795.4	3,329.3	2,700.6	2,465.4	235.20	11.482	
18,800.0	11,908.8	19,450.7	12,464.7	121.9	122.9	101.90	6,895.4	3,328.5	2,700.4	2,462.2	238.27	11.334	
18,900.0	11,908.2	19,550.7	12,463.0	123.5	124.5	101.88	6,995.4	3,327.8	2,700.2	2,458.9	241.34	11.189	
19,000.0	11,907.7	19,650.7	12,461.4	125.0	126.0	101.86	7,095.3	3,327.0	2,700.0	2,455.6	244.41	11.047	
19,100.0	11,907.1	19,750.7	12,459.7	126.6	127.5	101.83	7,195.3	3,326.2	2,699.8	2,452.3	247.49	10.909	

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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

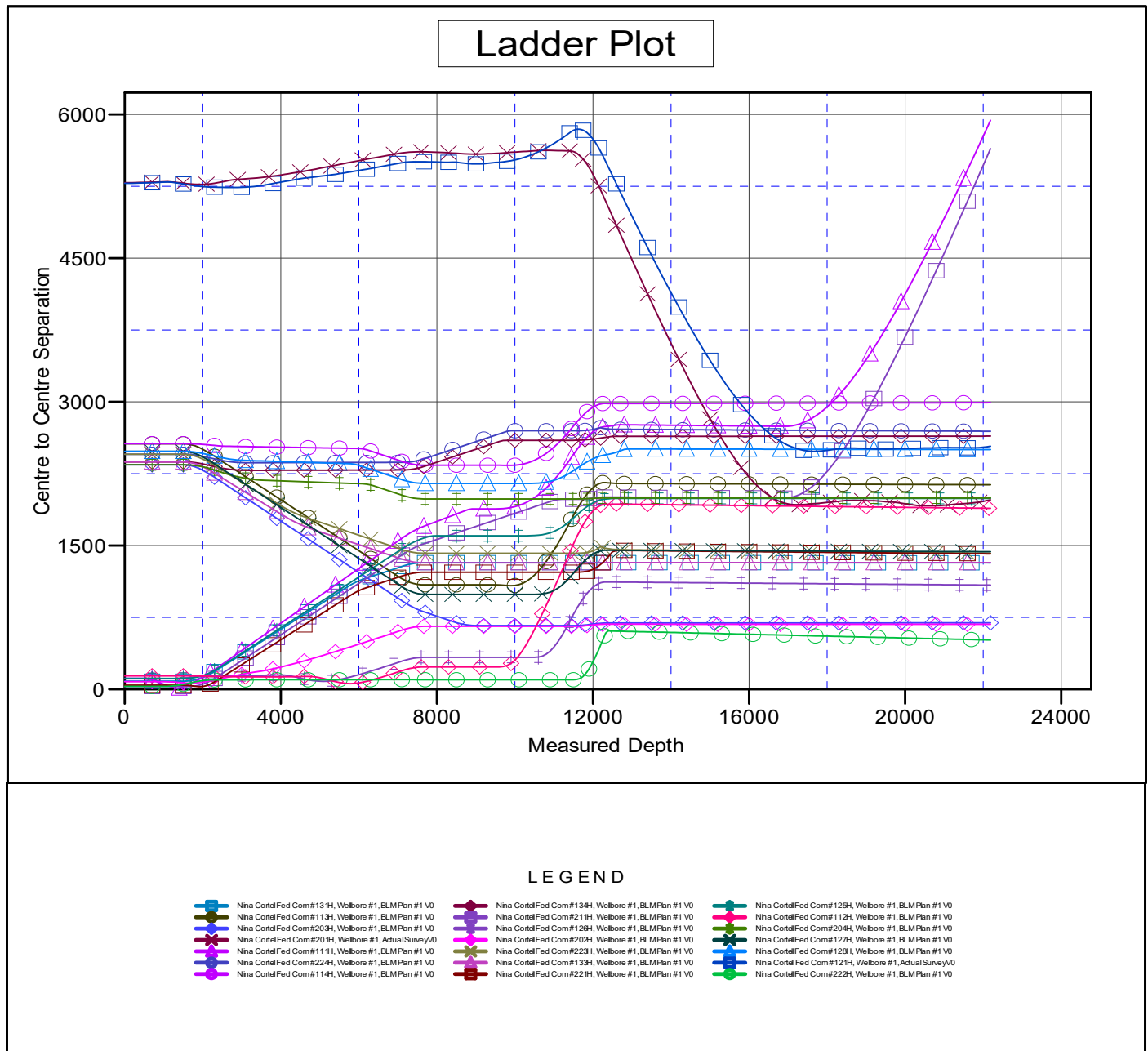
Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
19,200.0	11,906.6	19,850.7	12,458.0	128.1	129.1	101.81	7,295.3	3,325.4	2,699.6	2,449.0	250.58	10.773	
19,300.0	11,906.0	19,950.7	12,456.4	129.7	130.6	101.79	7,395.3	3,324.6	2,699.4	2,445.7	253.67	10.641	
19,400.0	11,905.4	20,050.7	12,454.7	131.3	132.2	101.76	7,495.3	3,323.8	2,699.2	2,442.4	256.77	10.512	
19,500.0	11,904.9	20,150.7	12,453.1	132.8	133.8	101.74	7,595.2	3,323.0	2,699.0	2,439.1	259.87	10.386	
19,600.0	11,904.3	20,250.7	12,451.4	134.4	135.3	101.72	7,695.2	3,322.3	2,698.8	2,435.8	262.98	10.262	
19,700.0	11,903.8	20,350.7	12,449.8	136.0	136.9	101.70	7,795.2	3,321.5	2,698.6	2,432.5	266.09	10.142	
19,800.0	11,903.2	20,450.7	12,448.1	137.5	138.4	101.67	7,895.2	3,320.7	2,698.4	2,429.2	269.20	10.023	
19,900.0	11,902.7	20,550.7	12,446.4	139.1	140.0	101.65	7,995.1	3,319.9	2,698.2	2,425.8	272.32	9.908	
20,000.0	11,902.1	20,650.7	12,444.8	140.7	141.6	101.63	8,095.1	3,319.1	2,697.9	2,422.5	275.45	9.795	
20,100.0	11,901.5	20,750.7	12,443.1	142.3	143.1	101.60	8,195.1	3,318.3	2,697.7	2,419.2	278.57	9.684	
20,200.0	11,901.0	20,850.7	12,441.5	143.8	144.7	101.58	8,295.1	3,317.5	2,697.5	2,415.8	281.71	9.576	
20,300.0	11,900.4	20,950.7	12,439.8	145.4	146.3	101.56	8,395.1	3,316.8	2,697.3	2,412.5	284.84	9.470	
20,400.0	11,899.9	21,050.6	12,438.2	147.0	147.8	101.54	8,495.0	3,316.0	2,697.1	2,409.2	287.98	9.366	
20,500.0	11,899.3	21,150.6	12,436.5	148.6	149.4	101.51	8,595.0	3,315.2	2,696.9	2,405.8	291.12	9.264	
20,600.0	11,898.7	21,250.6	12,434.9	150.2	151.0	101.49	8,695.0	3,314.4	2,696.7	2,402.5	294.27	9.164	
20,700.0	11,898.2	21,350.6	12,433.2	151.8	152.6	101.47	8,795.0	3,313.6	2,696.5	2,399.1	297.42	9.066	
20,800.0	11,897.6	21,450.6	12,431.5	153.4	154.2	101.44	8,894.9	3,312.8	2,696.3	2,395.8	300.57	8.971	
20,900.0	11,897.1	21,550.6	12,429.9	155.0	155.7	101.42	8,994.9	3,312.0	2,696.1	2,392.4	303.72	8.877	
21,000.0	11,896.5	21,650.6	12,428.2	156.5	157.3	101.40	9,094.9	3,311.3	2,695.9	2,389.0	306.88	8.785	
21,100.0	11,896.0	21,750.6	12,426.6	158.1	158.9	101.37	9,194.9	3,310.5	2,695.7	2,385.7	310.04	8.695	
21,200.0	11,895.4	21,850.6	12,424.9	159.7	160.5	101.35	9,294.8	3,309.7	2,695.5	2,382.3	313.21	8.606	
21,300.0	11,894.8	21,950.6	12,423.3	161.3	162.1	101.33	9,394.8	3,308.9	2,695.3	2,379.0	316.38	8.519	
21,400.0	11,894.3	22,050.6	12,421.6	162.9	163.7	101.31	9,494.8	3,308.1	2,695.1	2,375.6	319.55	8.434	
21,500.0	11,893.7	22,150.6	12,419.9	164.5	165.3	101.28	9,594.8	3,307.3	2,694.9	2,372.2	322.72	8.351	
21,600.0	11,893.2	22,250.6	12,418.3	166.1	166.9	101.26	9,694.8	3,306.5	2,694.7	2,368.8	325.89	8.269	
21,700.0	11,892.6	22,350.6	12,416.6	167.7	168.5	101.24	9,794.7	3,305.8	2,694.5	2,365.5	329.07	8.188	
21,800.0	11,892.0	22,450.6	12,415.0	169.3	170.1	101.21	9,894.7	3,305.0	2,694.3	2,362.1	332.25	8.109	
21,900.0	11,891.5	22,550.6	12,413.3	170.9	171.6	101.19	9,994.7	3,304.2	2,694.1	2,358.7	335.43	8.032	
22,000.0	11,890.9	22,650.5	12,411.7	172.5	173.2	101.17	10,094.7	3,303.4	2,693.9	2,355.3	338.62	7.956	
22,100.0	11,890.4	22,750.5	12,410.0	174.1	174.8	101.15	10,194.6	3,302.6	2,693.7	2,351.9	341.81	7.881	
22,191.7	11,890.5	22,842.3	12,408.5	175.6	176.3	101.11	10,286.3	3,301.9	2,693.5	2,348.7	344.75	7.813 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 #132H
Project:	Antelope Ridge	TVD Reference:	KB @ 3819.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3819.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #132H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 3819.5usft (Original Well Elev) Coordinates are relative to: Nina Cortell Fed Com #132H
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
 Central Meridian is 104° 20' 0.000 W Grid Convergence at Surface is: 0.36°



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

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COMPASS 5000.14 Build 83

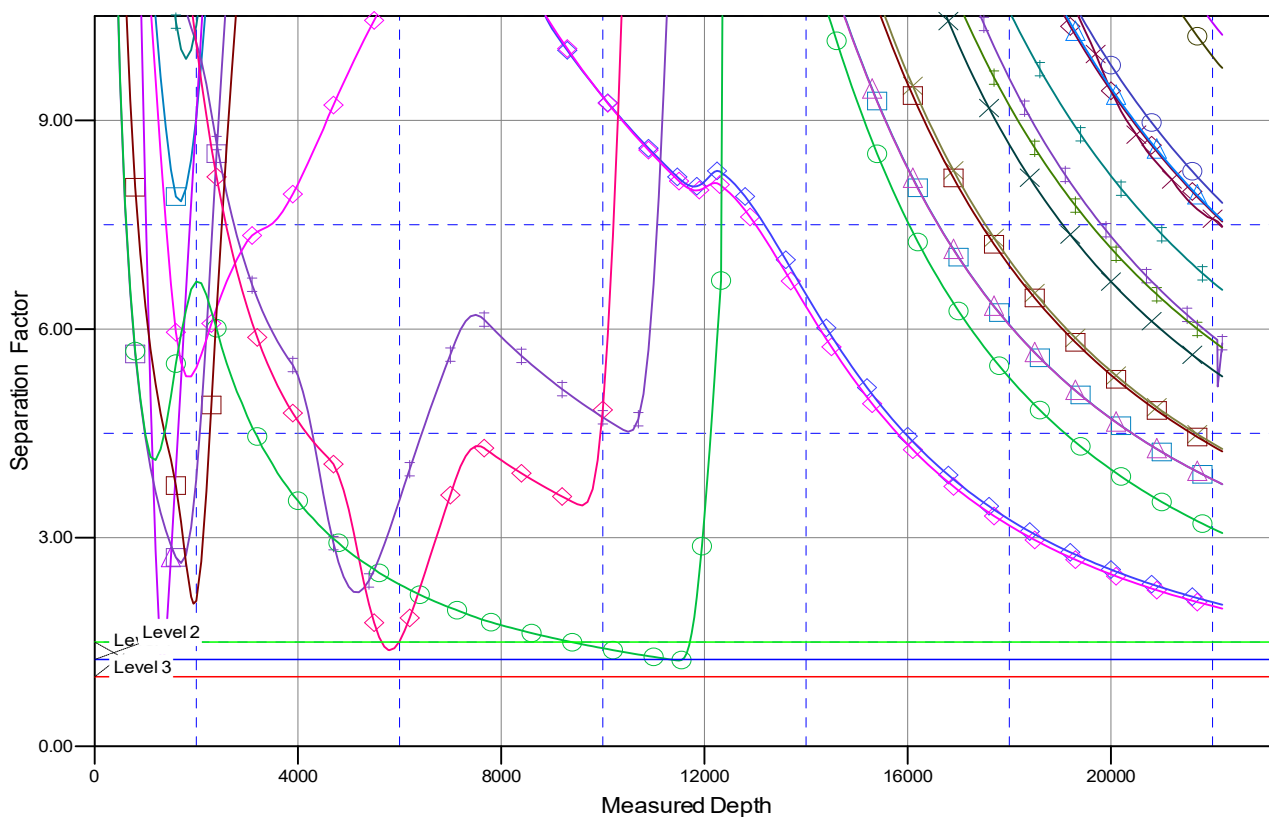
Anticollision Report

Company: Matador Production Company
Project: Antelope Ridge
Reference Site: Nina Cortell
Site Error: 0.0 usft
Reference Well: Nina Cortell Fed Com #132H
Well Error: 0.0 usft
Reference Wellbore: Wellbore #1
Reference Design: BLM Plan #1

Local Co-ordinate Reference: Well Nina Cortell Fed Com #132H
TVD Reference: KB @ 3819.5usft (Original Well Elev)
MD Reference: KB @ 3819.5usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.14 Server
Offset TVD Reference: Offset Datum

Reference Depths are relative to KB @ 3819.5usft (Original Well Elev) Coordinates are relative to: Nina Cortell Fed Com #132H
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
 Central Meridian is 104° 20' 0.000 W Grid Convergence at Surface is: 0.36°

Separation Factor Plot



LEGEND

Nina Cortell Fed Com #132H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #132H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #122H, Wellbore #1, BLM Plan #1 V0
Nina Cortell Fed Com #113H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #211H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #112H, Wellbore #1, BLM Plan #1 V0
Nina Cortell Fed Com #203H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #120H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #204H, Wellbore #1, BLM Plan #1 V0
Nina Cortell Fed Com #201H, Wellbore #1, Actual Survey V0	Nina Cortell Fed Com #202H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #121H, Wellbore #1, BLM Plan #1 V0
Nina Cortell Fed Com #111H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #223H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #123H, Wellbore #1, Actual Survey V0
Nina Cortell Fed Com #224H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #133H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #222H, Wellbore #1, BLM Plan #1 V0
Nina Cortell Fed Com #114H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #221H, Wellbore #1, BLM Plan #1 V0	

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

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PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Matador Production Company
LEASE NO.:	NMNM086147
WELL NAME & NO.:	Nina Cortell Fed Com 132H
SURFACE HOLE FOOTAGE:	242'S & 1571'/W
BOTTOM HOLE FOOTAGE:	60'/N & 2309'/W
LOCATION:	Section 10, T.22 S., R.32 E., NMPM
COUNTY:	Lea County, New Mexico

COA

H2S	☒ 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 Area	☐ Capitan Reef	☐ WIPP
Other	☐ Fluid Filled	☒ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☒ COM	☐ Unit

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated **WHEN DRILLING OUT SURFACE CASING**. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 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

Primary Casing Design:

1. The 13-3/8 inch surface casing shall be set at approximately **975** feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - 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 in the Potash Area** or 500 pounds 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 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The 7-5/8 inch intermediate casing shall be set at approximately **11,273 feet. Keep casing full during run to meet collapse SF. CEMENT EXCESS < CFO RECOMMENDATION OF 25%. MORE CEMENT MIGHT BE NEEDED TO ACHIEVE CEMENT TO SURFACE.** The minimum required fill of cement behind the 7-5/8 inch intermediate casing is:

Option 1 (Single Stage):

- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

Option 2:

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

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
 - b. Second stage above DV tool:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**
- ❖ 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 has proposed to pump down 13-3/8" X 7-5/8" annulus. Operator must run a CBL or ECHOMETER to verify TOC. Submit results to BLM.

3. The 5-1/2 inch production casing shall be set at approximately **22,192 feet. EXCESS < 25% CFO RECOMMENDATION. ENSURE CEMENT VOLUMES EVALUATED TO ACHIEVE TIE BACK.** The minimum required fill of cement behind the 5-1/2 inch production casing is:

Option 1 (Single Stage):

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

Option 2:

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

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
 - Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification.

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. Variance is approved to use a 5000 (5M) Annular which shall be tested to 3500 (3.5M) psi.**
 - 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 OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

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

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

☒ Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(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 Onshore Oil and Gas Order No. 2 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 Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
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 OOGO2.III.A.2.i 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 when specified), 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 plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
 - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 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 Onshore Order No. 2.

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.

KPI – 2/27/2023

MRC ENERGY CO.'S

Hydrogen Sulfide Drilling
Operations Plan
Matador Resources

1 H2S safety instructions to the following:

- Characteristics of H2S
- Physical effects and hazards
- Principal and operation of H2S detectors, warning system and briefing areas
- Evacuation procedures, routes and first aid
- Proper use of safety equipment & life support systems
- Essential personnel meeting medical evaluation criteria will receive additional training on the proper use of 30min pressure demand air packs

2 H2S Detection and Alarm Systems:

- H2S sensor/detectors to be located on the drilling rig floor, in the base of the sub structure / cellar area, on the mud pits in the shale shaker area. Additional H2S detectors may be placed as deemed necessary
- An audio alarm system will be installed on the derrick floor and in the doghouse

3 Windssocks and / Wind Streamers:

- Windssocks at mud pit area should be high enough to be visible
- Windssock on the rig floor and / top of doghouse should be high enough to be visible

4 Condition Flags and Signs:

- Warning sign on access road to location
- Flags to be displayed on sign at entrance to location
 - Green Flag – Normal Safe Operation Condition
 - Yellow Flag – Potential Pressure and Danger
 - Red Flag – Danger (H2S present in dangerous concentrations) Only H2S trained personnel admitted on location

5 Well Control Equipment:

- See Exhibit E-1

6 Communication:

- While working under masks chalkboards will be used for communications
- Hand signals will be used where chalk board is inappropriate
- Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.

7 Drilling Stem Testing:

- No DST cores are planned at this time

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8 Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubulars good and other mechanical equipment

9 If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H2S scavengers if necessary

11 Emergency Contacts

- See exhibit E-6

MRC ENERGY CO.'S

HYDROGEN SULFIDE CONTINGENCY PLAN Drilling, Testing, & Completion

MRC ENERGY CO.

Reviewers

----- Operations Manager
----- Operations Supt.
----- Staff RES
----- Field Supt.
Blake Hermes---Engineering

H2S Contingency Plan # **0165**

Revision# **0**

This H2S Contingency Plan is subject to updating

Effective date: July 8, 2015

MRC ENERGY CO.'S

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INTRODUCTION

The H2S equipment will be rigged up 2 days prior to reaching a potential H2S containing zone. Drilling into any potential H2S zone shall not commence until the on-site MRC Drilling Supervisor has confirmed this plan in place.

The onsite Drilling Foreman will give Total Safety one week (7 days) notice to prepare for rig up of H2S equipment)

To be effective, the plan requires the cooperation and effort of each person participating in the drilling of an H₂S well. Each person must know his/her responsibilities and all emergency and safety procedures. He/she should thoroughly understand and be able to use with accuracy, all safety equipment while performing his/her normal duties, if the circumstance should arise. He/she should therefore familiarize himself/herself with the location of all safety equipment and check to see that it is properly stored, easily accessible at all times, and routinely maintained.

It is the intention of MRC ENERGY CO. and the Drilling Contractor to make every effort to provide adequate safeguards against harm to persons on the rig and in the immediate vicinity from the effects of hydrogen sulfide, which may be released into the atmosphere under emergency conditions. However, the initiative rests with the individual in utilizing the safeguards provided. The ideas and suggestions of the individuals involved in the drilling of this well are highly welcomed and act as a fundamental tool for providing the safest working conditions possible.

The drilling representative is required to enforce these procedures. They are set up for your safety and the safety of all others.

II. PURPOSE

It is MRC Energy Co.'s intent to provide a safe working place, not only for its employees, but also for other contractors who are aiding in the drilling of this well. The safety of the general public is of utmost concern. All precautions will be taken to keep a safe working environment and protect the public.

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There is a possibility of encountering toxic hydrogen sulfide gas. Safety procedures must be adhered to in order to protect all personnel connected with the operations as well as people living within the area.

The MRC Energy Co. representative will enforce all aspects of the H2S Contingency Plan. This job will become easier by a careful study of the following pages and training and informing all personnel that will be working on the well, their duties and responsibilities.

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A. OPERATING PROCEDURES**DEFINITIONS:**

For purpose of this plan, on-site personnel shall be referred to as “In Scope Personnel” or “Out of Scope Personnel”, per the following definitions:

In Scope Personnel – Personnel who will be working or otherwise present in potential H₂S release areas, including the rig floor, cellar, pits, and shaker areas.

Out of Scope Personnel – Personnel who will not be working or Otherwise present in potential H₂S areas. Such personnel include rig Site visitor, delivery and camp services personnel.

GENERAL:

Before this H₂S contingency plan becomes operational, all regularly assigned In Scope Personnel (primarily the MRC, drilling contractor, and certain service personnel,) shall be thoroughly trained in the use of breathing equipment, emergency procedures, and responsibilities. Total Safety Technician or a designee assigned by the MRC Drilling Foreman shall keep a list of all personnel who have been through the on-site H₂S training program at the drill site.

All In Scope Personnel shall be given H₂S training and the steps to be taken during H₂S conditions under which the well may be drilled. General information will be explained about toxic gases, as well as the physiological effects of H₂S and the various classified operating conditions. In addition, the reader will be informed his/her general responsibility concerning safety equipment and emergency procedures.

The Total Safety H₂S Safety Technician or MRC on-site RSE Technician shall make available the H₂S Contingency Plan for all personnel to review.

Without exception, all personnel that arrive on location must proceed directly to and sign-in with the on-site MRC RSE Technician. In Scope Personnel will be required to complete an on-site H₂S training and respirator fit testing before starting work, or produce evidence that they have received equivalent training. Out of Scope Personnel will be required to complete a site H₂S awareness and general safety briefing. This briefing will consist of a H₂S hazard overview, alarm review and required response to alarms.

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B. PROCEDURES TO BE INITIATED PRIOR TO H2S CONTINGENCY PLAN COMPLIANCE:

A list of emergency phone numbers and contacts will be on location and posted at the following locations:

1. MRC ENERGY CO.'S Representative's Office
2. Drilling Contractor's, Toolpusher Office
3. Living Quarters Area

All safety equipment and H₂S related hardware must be set up as required by MRC Energy Co. with regard to location of briefing areas, breathing equipment, etc. All safety equipment must be inspected periodically (at least weekly) with particular attention to resuscitators and breathing equipment.

In Scope Personnel working in the well site area will be assigned breathing apparatus. Operator and drilling contractor personnel required to work in the following areas will be provided with Self Contained Breathing Apparatus:

1. Rig Floor
2. Mud Pits
3. Derrick
4. Shale Shaker
5. Cellar

The Total Safety H₂S Safety Technician will be responsible for rigging up all H₂S continuous monitoring-type detectors. The Total Safety Technician will monitor and bump test the detector units periodically (at least at least once a week to test alarm function during drilling conditions. In the event H₂S is detected, or when drilling in a zone confirmed to contain H₂S, the units shall be bump tested at least once every 24 hours. A bump test/calibration log will be kept on location. All results will be reported to the MRC on-site Drilling Foreman.

All Total Safety H₂S equipment will be maintained and inspected by a Total Safety Technician on at least a Weekly basis.

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C. DRILLING BELOW CONTINGENCY PLAN DEPTH

H₂S response drills will be held at least once per week if possible or as often as necessary to acquaint the crews and service company personnel of their responsibilities and the proper procedures to shut-in a well. Initial drills will be performed until crews demonstrate competency donning and working under mask. After the MRC Energy Co.'s representative is satisfied with initial blowout drill procedures, a drill will be conducted weekly with each crew, as necessary. The H₂S Safety Technician or designee will conduct safety talks and maintain the safety equipment, consult and carry out the instructions of the drilling supervisor. All personnel allowed in the well work area during drilling or testing operations will be instructed in the use of breathing equipment until supervisory personnel are satisfied that they are capable of using it.

After familiarization, each person must perform a drill with breathing equipment. The drill should include getting the breathing equipment, donning the breathing apparatus, and performing expected duties for a short period. A record shall be kept of all personnel drilled and the date of the drill. H₂S training records will be kept on location for all personnel.

Rig crews and service company personnel shall be made aware of the location of spare air bottles, resuscitation equipment, portable fire extinguishers, H₂S monitors and detectors. Knowledge of the location of the H₂S monitors and detectors are vital in determining as our gas location and the severity of the emergency conditions.

After any device has initially detected H₂S, all areas of poor ventilation shall be inspected periodically by means of a portable H₂S detector instrument. The buddy system will be utilized. (When an alarm sounds, personnel will don an SCBA, shut the well in, and proceed to SBA for roll call. The H₂S Technician or designee will mask up, with a buddy and will verify source of H₂S and report back to the on-site MRC Foreman.)

D. PROCEDURES PROGRAM

1. Drill Site
 - a. The drilling rig will be located to allow prevailing winds to blow across the reserve pit.
 - b. A Safe Briefing Area will be provided with a breathing air cascade trailer and or 30-minute SCBA's at the Primary Area. Personnel will assemble at the most up-wind station under alarm conditions, or when so ordered by the MRC Energy Co. representative, the Contractor representative, or

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the Total Safety H₂S Safety Technician. Windssocks or streamers will be anchored to various strategic places on a pole about 10 feet high, so it is in easy view from the rig floor at all times.

- c. Warning signs will be posted on the perimeters. "No Smoking" signs will be posted by MRC Energy Co.as well.
- d. One multi-channel automatic H₂S monitor will be provided by Total Safety and the detector heads will be at the shale shaker, bell nipple, mud pits, rig floor, and quarter's area. The monitor will be located inside HSE or Company man trailer. Should the alarm be shut off to silence the sirens, the blinker light must continue to warn of H₂S presence. The Total Safety H₂S Safety Technician or designee will continuously monitor the detectors and will reactivate the alarm if H₂S concentrations increase to a dangerous level.
- e. A method of escape will be open at all times.
- f. If available, land line telephone service will be provided or cell phones provided. (Primary communications provided)
- g. A rig communication system will be provided, as needed.
- h. A gas trap, choke manifold, and degasser will be installed.
- i. A kill line, securely anchored and of ample strength, will be laid to the well-head from a safe location. This line is to be used only in an emergency.

General

- a. The MRC Energy Co. representative and/or the Contractor's Toolpusher will be available at all times. The drilling supervisor, while on duty, will have complete charge of the rig and location operations and will take whatever action is deemed necessary to insure personnel safety, to protect the well, and to prevent damage.
- b. A Mud Engineer will be on location at all times when drilling takes place at the depth H₂S may be expected. The mud engineer will be able to verify the presence or absence of H₂S.

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III. CONDITIONS AND EMERGENCY PROCEDURES**A. DEFINITION OF OPERATIONAL "CONDITIONS"**

CONDITION I	"POSSIBLE DANGER"
Warning Flags	Green
Alarms	No Alarm. Less than 10 ppm
Characterized By:	Drilling operations in zones that may contain hydrogen sulfide. This condition remains in effect unless H ₂ S is detected and it becomes necessary to go to Condition II.
General Action:	- Be alert for a condition change - Check all safety equipment for availability and proper functioning. - Perform all drills for familiarization and proficiency.
CONDITION II	"MODERATE DANGER"
Warning Flags	Yellow
Alarms:	Actuates at 10 ppm. Continuous flashing light.
Characterized By:	Drilling operations in zones containing hydrogen sulfide. This condition will remain in effect until adding chemicals to the mud system neutralizes the hydrogen sulfide or it becomes necessary to go to Condition III.
General Action:	- Be alert for a condition change WHEN DRILLING AHEAD - Driller and designated crewmember will don 30 min SCBA, shut-in the well and immediately proceed to the Safe Briefing Area. WHEN TRIPPING – Driller and two designated crewmembers will don 30 min SCBA, shut in the well and immediately proceed to the Safe Briefing Area. The Derrickman will

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don a 5-minute escape pack, descend to the rig floor, don a 30-min SCBA (if necessary) and immediately proceed to the Safe Briefing Area.

- c. All In Scope Personnel will proceed directly to the appropriate Safe Briefing Area.
- d. Remain in safe briefing area, take roll call and wait for instructions
- e. Contact the Total H₂S Technician if not on location.
- f. Personnel shall ensure that their breathing apparatus is properly fitted and operational before entering an H₂S contaminated area to provide assistance to anyone who may be injured or overcome by toxic gases.
- g. All Out of Scope Personnel will report to the appropriate Safe Briefing Area.

CONDITION III “EXTREME DANGER”
Warning Flags Red

Alarms Actuate at 15 ppm. Continuous Sirens and Flashing Lights

Characterized by: Critical well operations which pose an immediate threat of H₂S exposure to on-site personnel and a potential threat to the public.

- General Action:
- a. WHEN DRILLING AHEAD - Driller and designated crewmember will don 30 min SCBA, shut-in the well and immediately proceed to the Safe Briefing Area.
- WHEN TRIPPING – Driller and two designated crewmembers will don 30

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- min SCBA, shut in the well and immediately proceed to the Safe Briefing Area. The Derrickman will don a 5-minute escape pack, descend to the rig floor, don a 30-min SCBA (if necessary) and immediately proceed to the Safe Briefing Area.
- b. All In Scope Personnel should don SCBA if nearby and immediately proceed to Safe Briefing Area. If SCBA is not nearby at time of alarm, DO NOT GO TOWARDS RIG AREA, but proceed directly to the Safe Briefing Area
 - c. All out of Scope Personnel shall evacuate the location.
 - d. Remain in the Safe Briefing Area, take roll call and wait for instructions.
 - e. Contact the Total H2S Technician if not on location.
 - f. Personnel shall ensure that their breathing apparatus is properly fitted and operational before entering an H₂S contaminated area to provide assistance to anyone who may be injured or overcome by toxic gases. Use the buddy system.
 - g. Remain in safe briefing area, take roll call and wait for instructions.
 - h. A cascade breathing air systems shall be mobilized and utilized to conduct any additional on rig work required to correct the H₂S release condition.
 - i. If well is ignited do not assume area is safe. SO₂ is hazardous and not all H₂S will burn.

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H₂S EMERGENCY PROCEDURES; IN SCOPE PERSONNEL**A. Day To Day Drilling Operations**

1. Upon discovering a release of H₂S gas in the ambient air by warning alarms or in any other way **Do Not Panic**.
2. Hold your breath donning the nearest Self Contained Breathing Apparatus and rapidly move up or across-wind away from the areas where H₂S sensing devices are in place, to the closest available safe briefing area. Continue to use breathing apparatus until it has been determined that the exposure of H₂S gas in the ambient air no longer exists. **Do Not Panic!**
3. Utilize the "Buddy System", i.e.; select and pair up each person participating in the drilling of an H₂S well prior to an emergency situation.
4. Help anyone who is overcome or affected by the H₂S gas by taking him/her up-wind out of the contaminated area. (This should be done utilizing an SCBA and with a buddy.)
5. Take necessary steps to confirm the release of the H₂S gas into the ambient air.
 - When an H₂S alarm activates, two designated personnel using the buddy system, while wearing their self contained breathing apparatus, will determine by the read-out on the fixed monitor which sensing device has detected the release of the H₂S gas.
 - They will utilize the hand-held sniffer type device at the particular sensing point disclosed on the fixed monitor to corroborate the fact that H₂S gas has actually been released. This will rule out the possibility of a false alarm. This will be done with a buddy and under mask after reporting to the Safe Briefing Area for roll call and instructions by on-site MRC Foreman.
6. Refer to the Emergency Phone Numbers and call emergency personnel.
7. Take the necessary steps to suppress the release of H₂S gas into the ambient air. Comply with the MRC Energy Co. Representative to physically suppress the release of H₂S gas at the actual release point.

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8. Check all of MRC Energy Co.'s monitoring devices and increase gas-monitoring activities with the portable hand-operated H₂S and gas detector units.

Do Not Panic!

The MRC Energy Co. representative will assess the situation and with assistance of the Contractor's Representative and Total Safety's H₂S Safety Technician or on site designee, will assign duties to each person to bring the situation under control.

B. RESPONSIBILITIES OF WELL-SITE PERSONNEL

In the event of a release of potentially hazardous amounts of H₂S, all personnel will immediately don their protective breathing apparatus, the well will be shut in and personnel will proceed upwind to the nearest designated safe briefing area for roll call and instructions by MRC Foreman. Consideration will be given to evacuating Out of Scope Personnel, as situation warrants.

1. MRC ENERGY CO.'S Well-site Representatives

- a. If MRC Energy Co.'s well-site representative is incapacitated or not on location, this responsibility will fall to the Toolpusher/Driller.
- b. Immediately upon assessing the situation, set this plan into Action by initiating the proper procedures to contain the gas and notify the appropriate people and agencies.
- c. Ensure that the alarm area indicated by the fixed H₂S Monitor is checked and verified with a portable H₂S detector. (Safety Technician if on location or MRC assigned designee with a buddy utilizing SCBA's)
- d. Consult Pusher/driller of remedial actions as needed.
- e. Ensure that non-essential personnel proceed to the safe briefing area.
- f. Ensure location entrance barricades are positioned. Keep the number of persons on location to a minimum during hazardous operations.

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- g. Consult each contractor, Service Company and all others allowed to enter the site, that H₂S gas may be encountered and the potential hazards that may exist.
- h. Authorize the evacuation of local residents if H₂S threatens Their safety.
- i. Non essential personnel should be evacuated from location if Situation warrants.

2. Toolpusher

- a. Toolpusher/Driller will assume responsibilities of MRC Energy Co.'s well-site representative if that person is incapacitated or not on location.
- b. Ensure that the alarm area indicated by the fixed H₂S monitor is checked and verified with a portable H₂S gas detector. (Alarm area indicated by the monitor will be Checked by the H₂S Technician and a buddy, under mask.) This will be done after checking in and roll call at the Upwind Safe Briefing Area.
- c. Confer with MRC Energy Co.'s well-site representative or superintendent and direct remedial action to suppress the H₂S and control the well.
- d. Ensure that personnel at the safe briefing area are instructed on emergency actions required.
- e. Ensure that personnel at the drill floor area are instructed on emergency actions required.
- f. Ensure that all personnel observe the appropriate safety and emergency procedures.
- g. Ensure that all persons are accounted for and provided emergency assistance as necessary.

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3. Mud Engineer

- a. Run a sulfide check on the flowline mud.
- b. Take steps to determine the source of the H₂S and suppress it. Lime and H₂S scavenger shall be added to the mud as necessary.

4. Total H₂S Safety Technician, if on location, or MRC Designee

- a. H₂S Safety Technician or designee don nearest SCBA and report to Safe Briefing Area for roll call, take a buddy masked up and check monitor and verify with a portable H₂S detector the alarm area indicated by the fixed H₂S monitor. Advise the Toolpusher/Driller and MRC Energy Co.'s well-site representative of findings. Record all findings.
- b. If H₂S is flared, check for sulfur dioxide (SO₂) near the flare as necessary. Take hourly readings at different perimeters, log readings and record on location.
- c. Ensure that personnel at the safe briefing area are instructed on emergency actions required.
- d. Ensure that the appropriate warning flags are displayed.
- e. Ensure that all personnel are in S.C.B.A. as necessary.
- f. Ensure that all persons are accounted for and provide emergency assistance as necessary.
- g. Be prepared to evacuate rig if order is issued.

5. General Personnel & Visitors

- a. All In Scope Personnel, if not specifically designated to shut the well in or control the well, shall proceed to the (upwind) safe briefing area. All Out of Scope Personnel shall immediately proceed to the appropriate (upwind) safe briefing area or evacuate the site as conditions warrant.

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- b. During any emergency, use the "buddy" system to prevent anyone from entering or being left in a gas area alone, even wearing breathing apparatus.
- c. Provide assistance to anyone who may be injured or overcome by toxic gases. Personnel shall ensure that their breathing apparatus is properly fitted and operational before entering a potentially H₂S contaminated area.
- d. Remain in safe briefing area and wait for instructions.

C. INSTRUCTIONS FOR IGNITING THE WELL

1. The Toolpusher/Driller will confer with MRC Energy Co.'s well-site representative who will secure the approval of the "Texas Wells Delivery Manager, prior to igniting the well, if at all possible.

The Toolpusher/Driller will be responsible for igniting the well in the event of severe well control problems. This decision should be made only as a last resort in situations where it is clear that:

- a. Human life and property are endangered, or
 - b. There is no hope of controlling the well under current conditions.
2. Once the decision has been made, the following procedures should be followed:
 - a. Two people wearing self-contained breathing apparatus will be needed for the actual lighting of the well. They must first establish the flammable perimeter by using an explosimeter. This should be established at 30% to 40% of the lower flammable limits.
 - b. After the flammable perimeter has been established and everyone removed from the area, the ignition team should select a site upwind of the well from which to ignite the well. This site should offer the maximum protection and have a clear path for retreat from the area.

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- c. The ignition team should have safety belts and lifeline attached and manned before attempting ignition. If the leak is not ignited on the first attempt, move in 20 to 30 feet and fire again. Continue to monitor with the explosimeter and NEVER fire from an area with over 75% of the Lower Explosive Limit (LEL). If having trouble igniting the well, try firing 40 degrees to 90 degrees on either side of the well.
- d. If ignition is not possible due to the makeup of the gas, the toxic perimeter must be established and evacuation continued until the well is contained.
- e. All personnel must act only as directed by the person in charge of the operations.

NOTE: After the well is ignited, burning hydrogen sulfide (H_2S) will convert to sulfur dioxide (SO_2), which is also a highly toxic gas.

DO NOT ASSUME THE AREA IS SAFE AFTER THE WELL IS IGNITED

D. CORING PROCEDURES

Only essential personnel shall be on the rig floor. Ten (10) stands prior to retrieving core barrel; all personnel on drill floor and in derrick shall confirm self-Contained breathing apparatus available and ready for use.

A Total H₂S Technician will don a SCBA with a buddy assigned from the rig crew, and continuously monitor for H₂S at each connection. Any levels detected will require operations to be shut down and all involved personnel to don SCBAs. Precautions will remain in place until barrel is laid down.

All involved personnel will don SCBAs when removing the inner barrel from the outer barrel. SCBAs can be removed once the absence of H₂S is confirmed by the Total H₂S Technician.

Cores will be appropriately marked and sealed for transportation.

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Normal Operations**1. Responsibilities of well-site personnel****a. Well-site Representative**

1. Notify H₂S Technician of expected date to reach Contingency Plan implementation depth (Two (2) days prior to reaching suspected H₂S bearing zone) or prior to starting well work.
2. Ensure H₂S Safety Technician completes rig-up procedures prior to reaching Contingency Plan effective depth.
3. Restrict the number of personnel at the drilling rig or well site to a minimum while drilling, starting well work, testing or coring.
4. Ensure weekly H₂S drills/training are performed, if possible.

B. Toolpusher

1. Ensure that necessary H₂S safety equipment is provided on the rig, and that it is properly inspected and maintained.
2. Ensure that all personnel that work in the well area, are thoroughly trained in the use of H₂S safety equipment and periodic drills are held to maintain an adequate level of proficiency.

C. In Scope Personnel

1. Remain clean-shaven. Beards and long sideburns do not allow a proper facepiece seal.
2. Receive H₂S safety training on location, or confirm prior training by certification that is one year within date.
3. Familiarize yourself with the rig's Contingency Plan.
4. Inspect and practice putting on your breathing apparatus.

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5. Know the location of the “safe briefing areas”.
6. Keep yourself “wind conscious”. Be prepared to quickly move upwind and away in the event of any emergency involving release of H₂S.

D. Total Safety H₂S Safety Technician or MRC Designee

1. Conduct training as necessary to ensure all personnel working in well area are familiar with the contingency procedures and the operation of emergency equipment.
2. Check all H₂S safety equipment to ensure that it is ready for emergency use:
 - Check pressure weekly for each shift on breathing apparatus (both 30-minute and hip-packs) to make sure they are charged to full volume.
 - Check pressure on cascade air bottles, if on location, to see that they are capable of recharging breathing apparatus.
 - Check oxygen resuscitator, if on location, to ensure that it is charged to full volume.
 - Check H₂S detectors weekly for each shift (fixed and portable), and explosimeter, to ensure they are working properly.
3. Provide a weekly report to MRC Energy Co.'s well-site representative documenting:
 - Calibrations performed on H₂S detectors.
 - Proper location and working order of H₂S safety equipment.
 - Attendance of all personnel, trained or retrained, and their company.
 - Weekly drills, if held and a list of personnel participating and summary of actions.

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OUT OF SCOPE PERSONNEL

MRC Energy Co. policy will not require Out of Scope Personnel to be clean shaven, have processed medical questionnaires, fit testing, or have certified H2S Training.

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SAFETY EQUIPMENT

All respirators will be designed, selected, used and maintained in conformance with ANSI Z88.2, American National Standard for respiratory protection.

Personal protective equipment must be provided and used. Those who are expected to use respiratory equipment in case of an emergency will be carefully instructed in the proper use and told why the equipment is being used. Careful attention will be given to the minute details in order to avoid possible misuse of the equipment during periods of extreme stress.

Self-contained breathing apparatus provides complete respiratory and eye protection in any concentration of toxic gases and under any condition of oxygen deficiency. The wearer is independent of the surrounding atmosphere because he/she is breathing with a system admitting no outside air. It consists of a full face mask, breathing tube, pressure demand regulator, air supply cylinder, and harness. Pure breathing air from the supply cylinder flows to the mask automatically through the pressure demand regulator which reduces the pressure to a breathing level. Upon inhalation, air flows into the mask at a rate precisely regulated to the user's demand. Upon exhalation, the flow to the mask stops and the exhaled breath passes through a valve in the face piece to the surrounding atmosphere. The apparatus includes an alarm & gauge which warns the wearer to leave the contaminated area for a new cylinder of air or cylinder refill.

The derrickman is provided with a full face piece unit attached to a 5– minute escape cylinder. He will also have his own self-contained 30-minute unit breathing apparatus located on the drilling floor. He will use the 5-minute unit to exit the derrick to the floor, donning the 30-minute unit located on the floor, if needed.

All respiratory protective equipment, when not in use, should be stored in a clean, cool, dry place, and out of direct sunlight to retard the deterioration of rubber parts. After each use, the mask assembly will be scrubbed with soap and water, rinsed thoroughly, and dried. Air cylinders can be recharged to a full condition from a cascade system.

Personnel in each crew will be trained in the proper techniques of bottle filling.

The primary piece of equipment to be utilized, should anyone be overcome by hydrogen sulfide, is the oxygen resuscitator, if on location.

When asphyxiation occurs, the victim must be moved to fresh air and immediately given artificial respiration. In order to assure readiness, the bottles of oxygen will be checked at regular intervals and an extra tank kept on hand.

Hand-operated pump-type detectors incorporating detector tubes will give more accurate readings of hydrogen sulfide. The pump-type draws air to be tested through the detector tube containing lead acetate-silica gel granules. Presence of hydrogen sulfide in the air sample is shown by the development of a dark brown stain on the granules, which is the

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scale reading of the concentration of hydrogen sulfide. By changing the type of detector tube used, this detector may also be used for sulfur dioxide (SO₂) detection when hydrogen sulfide (H₂S) is being burned in the flare area.

Provisions must be made for the storage of all safety equipment as is evident from the foregoing discussion. All equipment must be stored in an available location so that anyone engaged in normal work situations is no more than "one breath away" from a mask.

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V – TOXICITY OF VARIOUS GASES

Lethal Common Name ppm⁴	Chemical Formula	Specific Gravity¹	PEL (OSHA)²	STEL³
Hydrogen Cyanide 300	HCN	0.94	10	150
Hydrogen Sulfide 600	H ₂ S	1.18	20	Peak- 50ppm
Note: The ACGIH(7) recommends a TWA(6) value of 10ppm as the TLV(5) for H ₂ S and an STEL of 15ppm.				
Sulfur Dioxide 1000	SO ₂	2.21	2	5 ppm
Chlorine	CL ₂	2.45	1	
Carbon Monoxide 1000	CO	0.97	35	200/1 Hour
Carbon Dioxide 10%	CO ₂	1.52	5000	5%
Methane	CH ₄	0.55	90000	

¹ **Air = 1.0**² **Permissible** - Concentration at which is believed that all workers may repeatedly be exposed, day after day, without adverse effect.³ **STEL** - Short Term Exposure Limit. A 15-minute time weighted average.⁴ **Lethal** - Concentration that will cause death with short-term exposure.**TLV** – Threshold Limit Value; a concentration recommended by the American Conference of Governmental Industrial Hygienists (ACGIH)**TWA** – Time Weighted Average; the average concentration of contaminant one can be exposed to over a given eight-hour period.

ACGIH – (American Conference of Governmental Industrial Hygienists) is an organization comprised of Occupational Health Professionals believed by many to be the top experts in the field of Industrial Hygiene. They are recognized as an expert resource by OSHA. The ACGIH releases a bi-annual publication “Threshold Limit Values and Biological Indices” that many safety professionals consider to be the authoritative document on airborne contaminants.

Reference: API RP-49, September 1974 - Reissued August 1978

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VI. PROPERTIES OF GASES**A. CARBON DIOXIDE**

1. Carbon Dioxide (CO₂) is usually considered inert and is commonly used to extinguish fires. It is 1.52 times heavier than air and will concentrate in low areas of still air. Humans cannot breathe air containing more than 10% CO₂ without losing conscience or becoming disorientation in a few minutes. Continued exposure to CO₂ after being affected will cause convulsions, coma, and respiratory failure.

2. The threshold limit of CO₂ is 5000 ppm. Short-term exposure to 50,000 ppm (5%) is reasonable. This gas is colorless, odorless, and can be tolerated in relatively high concentrations.

B. HYDROGEN SULFIDE

1. Hydrogen Sulfide (H₂S) is a colorless, transparent, flammable gas. It is heavier than air and, hence, may accumulate in low places.

2. Although the slightest presence of H₂S in the air is normally detectable by its characteristic "rotten egg" odor, it is dangerous to rely on the odor as a means of detecting excessive concentrations because the sense of smell is rapidly lost, allowing lethal concentrations to be accumulated without warning. The following table indicates the poisonous nature of H₂S.

CONCENTRATION			EFFECTS
% H ₂ S	PPM	GR/100 SCF ¹	
0.001	10	.65	Safe for 8 hours without respirator. Obvious and unpleasant odor.
0.0015	15	0.975	Safe for 15 minutes of exposure without respirator.
0.01	100	6.48	Kills smell in 3-15 minutes; may sting eyes and throat.
0.02	200	12.96	Kills smell quickly; stings eyes and throat.
0.05	500	32.96	Dizziness; breathing ceases in a few minutes; need prompt artificial respiration.
0.07	700	45.92	Rapid Unconsciousness; death will result if not rescued promptly.
0.1	1000	64.80	Instant unconsciousness, followed by death within minutes.

¹ Grains per 100 Cubic Feet

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VII. Treatment Procedures for Hydrogen Sulfide Poisoning

- A. Remove the victim to fresh air.
- B. If breathing has ceased or is labored, begin resuscitation immediately.
Note: This is the quickest and preferred method of clearing victim's lungs of contaminated air; however, under disaster conditions, it may not be practical to move the victim to fresh air. In such instances, where those rendering first aid must continue to wear masks, a resuscitator should be used.
- C. Apply resuscitator to help purge H₂S from the blood stream.
- D. Keep the victim at rest and prevent chilling.
- E. Get victim under physician's care as soon as possible.

C. SULPHUR DIOXIDE

1. Sulfur Dioxide (SO₂) is a colorless, non-flammable, transparent gas.
2. SO₂ is produced during the burning of H₂S. Although SO₂ is heavier than air, it can be picked up by a breeze and carried downwind at elevated temperatures. Since SO₂ is extremely irritating to the eyes and mucous membranes of the upper respiratory tract, it has exceptionally good warning powers in this respect. The following table indicates the toxic nature of SO₂:

CONCENTRATION		EFFECTS
% SO ₂	PPM	
0.0005	3 to 5	Pungent odor, normally a person can detect SO ₂ in this range.
0.0012	12	Throat irritation, coughing, constriction of the chest, tearing and smarting of eyes.
0.015	150	So irritating that it can only be endured for a few minutes.
.05	500	Causes a sense of suffocation, event with the first breath.

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VIII. BREATHING AIR EQUIPMENT DRILLS FOR ON & OFF DUTY PERSONNEL

An H₂S Drill and Training Session must be given once a week to ALL on-duty personnel with off duty personnel. On-duty and Off-duty personnel will reverse roles on alternate drills.

An H₂S drill and training session must be given once a week to all off-duty personnel in coincidence with on-duty personnel reversing roles on alternate drills.

The purpose of this drill is to instruct the crews in the operation and use of breathing air and H₂S related emergency equipment and to allow the personnel to become acquainted with using the equipment under working conditions. The crews should be trained to put on the breathing air equipment within one minute when required or requested to do so.

The following procedure should be used for weekly drills. The MRC supervisor must be satisfied that the crews are proficient with the equipment.

1. All personnel should be informed that a drill will be held.
2. The Total H₂S Safety Technician or a designee assigned by the MRC Drilling Foreman should initiate the drill by signaling as he/she would if H₂S was detected.
3. Personnel should don their breathing apparatus.
4. Once the breathing air equipment is on, the H₂S Technician should check all personnel to insure proper operation.

A training and information session will be conducted after each drill to answer any H₂S related questions and to cover any gaps identified from one of the following topics:

- Condition II, and III alerts and steps to be taken by all personnel.
- The importance of wind direction when dealing with H₂S.
- Proper use and storage of all types of breathing equipment.
- Proper use and storage of oxygen resuscitators.
- Proper use and storage of H₂S detectors (Mini Checks or equivalent).
- The "buddy system" and the procedure for rescuing a person overcome by H₂S.
- Responsibilities and duties.
- Location of H₂S safety equipment.
- Other parts of the "H₂S Contingency Plan" that should be reviewed.

NOTE: A record of attendance must be kept for weekly drills and training sessions.

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IX. HYDROGEN SULFIDE TRAINING CURRICULUM

(FOR EMPLOYERS, VISITORS, AND CONTRACTORS)

EACH PERSON WILL BE INFORMED ON THE RESTRICTIONS OF HAVING BEARDS AND CONTACT LENS. THEY WILL ALSO BE INFORMED OF THE AVAILABILITY OF SPECTACLE KITS.

AFTER THE H₂S EQUIPMENT IS RIGGED UP, ALL IN SCOPE PERSONNEL WILL BE H₂S TRAINED AND PUT THROUGH A DRILL. ANY DEFICIENCIES WILL BE CORRECTED.

Training Completion cards are good for one year and will indicate date of completion or expiration. Personnel previously trained on another facility and visiting, must attend a "supplemental briefing" on H₂S equipment and procedures before beginning duty. Visitors who remain on the location more than 24 hours must receive full H₂S training given all crew members. A "supplemental briefing" will include but not be limited to: Location of respirators, familiarization with safe briefing areas, alarms with instruction on responsibilities in the event of a release and hazards of H₂S and (SO₂, if applicable). A training and drill log will be kept.

Topics for full H₂S training shall include the following equipment if on location, but not be limited to the following:

1. **Brief Introduction on H₂S**
 - A. Slide or Computer presentation (If Available)
 - B. H₂S material will be distributed
 - C. Re-emphasize the properties, toxicity, and hazards of H₂S
 - D. Source of SO₂ (if applicable)
2. **H₂S Detection**
 - A. Description of H₂S sensors
 - B. Description of warning system (how it works & it's location)
 - C. Actual location of H₂S sensors
 - D. Instruction on use of pump type detector (Gastec)
 - E. Use of card detectors, ampoules, or dosimeters
 - F. Use of combustible gas detector
 - G. Other personnel detectors used
 - H. Alarm conditions I & II,
 - I. SO₂ alarms (if applicable)

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3. **H2S Protection**
 - A. Types of breathing apparatus provided (30-minute SCBA & 5-minute SCBA (with voice diaphragms for communication if supplied)
 - B. Principle of how breathing apparatus works
 - C. Demonstration on how to use breathing apparatus
 - D. Location of breathing apparatus
4. **Cascade System**
 - A. Description of cascade system
 - B. How system works
 - C. Cascade location of rig with reference to briefing areas
 - D. How to use cascade system (with 5-minute hose work line units & refill, if supplied)
 - E. Importance of wind direction and actual location of Windsocks
 - F. Purpose of compressor/ function (if one is on site)
5. **H2S Rescue and First Aid**
 - A. Importance of wind direction
 - B. Safe briefing area
 - C. Buddy system
 - D. H2S symptoms
 - E. Methods of rescue
6. **Hands on Training**
 - A. Donning/ familiarization of SCBA 30-minute unit
 - B. Donning/ familiarization of SKADA 5- MIN. Packs
 - C. Familiarization of cascades
 - D. Use of O2 resuscitator
 - E. Alarm conditions - upwind briefing areas, etc...
 - F. Duties and responsibilities of all personnel
 - G. Procedures for evacuation
 - H. Search and Rescue teams
7. **Certification**
 - A. Testing on material covered

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TOTAL SAFETY US INC., FIT TEST**X. EMPLOYEE INFORMATION**

Employee Name: _____ Date: _____

Date of Employee Medical Evaluation: _____

Medical Status (circle): Unrestricted Limitations on Use Use Not
Authorized**RESPIRATOR INFORMATION**

Respirator Type (Dustmask, SCBA, etc): _____

Brand: _____

Size: (circle): XS S M L XL

FIT TEST INFORMATION

Type of Fit Test Performed:

Quantitative

Porta Count

Fit Factor: _____

Fittester 3000

Fit Factor: _____

Qualitative

Irritant Smoke

Passed / Failed

Isoamyl Acetate (Banana Oil)

Passed / Failed

Saccharin

Passed / Failed

Bitrex

Passed / Failed

I hereby certify that this fittest was conducted in accordance with the OSHA Fit Testing
Protocols found in Appendix A of 1910.134.

Fit Tester Name (Print): _____

Signature: _____ Date: _____

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XI. H₂S SAFETY SERVICES

HYDROGEN SULFIDE SAFETY PACKAGE – Contained on location in Total Safety H₂S Equipment Trailer, unless otherwise noted:

RESPIRATORY SAFETY SYSTEMS**QTY DESCRIPTION**

- 12 30-Minute Pressure Demand SCBA
(4-Primary Safe Briefing Area, 4-Secondary Safe Briefing Area, 4-floor with one of these for derrick man)
- 9 Hose Line 5-minute Work Unit w/Escapes Cylinder (1 in derrick, 6 on drill floor, 1 in mud pit wt area, 1 in shaker area)

The following shall be part of the package if requested by the MRC Foremen (at least one trailer with cascade system is required to be located in the MRC Magnolia asset for use as needed)

- 1 Breathing air cascade of 10 bottles w/regulator
- 2 Refill lines to refill 30-minute units on location
- 1 6-Man manifold that can be rigged up to work area on floor, if needed
- 6 25 foot hose lines
- 2 50 foot hose lines
- 100 Feet of hose line to rig cascade up to 12 man manifold on floor
- 12 30-minute Self Contained Breathing apparatus

DETECTION AND ALARM SAFETY SYSTEM

- 1 H₂S Fixed Monitor w/8Channels (Loc determined at rig up) suggested.
(Mud pit area, shaker area, bell nipple area, floor/driller area, & outside quarters)
- 5 H₂S Sensors
- 3 Explosion Proof Alarms (Light and Siren)
(1 on floor, 1 in work area, 1 in trailer area where quarters are located)
- 2 Personal H₂S monitors
- 1 Portable Tri-Gas Hand Held Meter (O₂, LEL, H₂S)
- 1 Sensidyne/Gastech Manual Pump Type Detector
- 8 Boxes H₂S Tubes Various Ranges
- 2 Boxes SO₂ Tubes Various Ranges
- 1 Calibration Gas
- 1 Set Paper Work for Records: Training, Cal, Inspection, other

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ADDITIONAL SAFETY RELATED EQUIPMENT**QTY DESCRIPTION**

2	Windssocks with Pole and Bracket
1	Set Well Condition Sign w/Green, Yellow, Red Flags
1	Primary Safe Briefing Area Sign
1	Secondary Safe Briefing Area Sign
6	Operating Condition Signs for Work Areas & Living Quarters

**TRAILER WITH BREATHING AIR CASCADE WILL
ALSO INCLUDE THE FOLLOWING:**

This equipment will be part of the H2S equipment stored in the trailer, when on location

1	First aid kit
1	Fire Blanket
1	Eye wash station
2	Safety Harness w/150' safety line

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XII. EMERGENCY PHONE NUMBERS (Updated March 18, 2009)**EMERGENCY PHONE NUMBERS**

MRC Energy Co. Emergency Phone #

MRC Energy Co. Permian Operations Phone-----

MRC Energy Co. Production

113 Daw Rd

Mansfield LA 71052

Title	Names	Phone	Cell
Operations Manager			
Operation Supt.			
Operations Supervisor			
Operations Supervisor			
Office Supervisor			
HSE			
Scheduler Planner			

Hydrogen Sulfide Safety Consultants

Total Safety W. Bender Blvd. Hobbs, NM	575-392-2973	After Hours 24 Hour Call Center Through Office Number
Tommy Throckmorton Operations Manager	575-392-2973	940-268-9614
Rodney Jourdan Sales Contact	575-392-2973	432-349-3928

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MRC Energy Co. MEDICAL RESPONSE PLAN AND IT'S MEDICAL PROTOCOLS WILL BE FOLLOWED**MEDICAL COORDINATOR # -----**[Emergency Numbers & Directions](#)**Hospitals (911)**

Artesia General Hospital 702 N. 13th St. Artesia, NM 88210	Main Phone Number	575-748-3333
Nor-Lea General Hospital 1600 N. Main Ave. Lovington, NM 88260	Main Phone Number	575-396-6611
Lea Regional Medical Center 5419 N. Lovington Hwy Hobbs, NM 88240	Main Phone Number	575-492-5260
Carlsbad General Hospital 2430 W. Pierce St. Carlsbad, NM	Main Phone Number	575-887-4100
Lovelace Regional Hospital 117 E. 19th St Roswell, NM 88201	Main Phone Number	575-627-7000
Winkler Co. Memorial Hospital 821 Jeffee Dr. Kermit, Texas 79745	Main Phone Number	432-586-8299
Reeves County Hospital 2323 Texas St. Pecos, Texas 79772	Main Phone Number	432-447-3551

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State Police (911)

Texas DPS Loving co. 225 N.Pecos Mentone, Texas 79754	Office Number	432-377-2411
Texas DPS Winkler Co. 100 E Winkler Kermit, Texas 79745	Office Number	432-586-3465
Texas DPS Pecos Co. 148 N I-20 Frontage RD Pecos, Texas 79772	Office Number	432-447-3532
New Mexico State Police 3300 W. Main St Artesia, NM	Office Number	575-748-9718
New Mexico State Police 304 N. Canyon St Carlsbad, NM 88220	Office Number	575-885-3137
New Mexico State Police 5100 Jack Gomez Blvd. Hobbs, NM 88240	Office Number	575-392-5588

Local Law Enforcement (911) (Sheriff)

Reeves Co. Sheriff 500 N. Oak ST Pecos, Texas 79722	Office Number	432-445-4901
Winkler Co. Sheriff 1300 Bellaire St. Kermit, Texas 79745	Office Number	432-586-3461
Loving Co. Sheriff Courthouse Mentone, Texas	Office Number	432-377-2411
Lea Co. Sheriff 1417 S. Commercial St. Lovington, NM 88260	Office Number	
Eddy Co. Sheriff 305 N 7th St. Artesia, NM 88210	Office Number	575-766-9888
Eddy Co. Sheriff 305 N 7th St. Carlsbad, NM 88220	Office Number	575-746-9888

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Federal & State Agencies

OSHA Lubbock Area Office 1205 Texas Av. Room 806 Lubbock, Texas 79401	Main Number	806-472-7681 EXT 7685
New Mexico Environment Department 400 N Pennsylvania Roswell, NM 88201	Joe Fresquez	575-623-3935
Texas Railroad Commission Midland, Texas	Main Number	844-773-0305
BLM Carlsbad, NM Field Office 620 E. Green ST Carlsbad, NM 88220	Main Number	575-234-5972
BLM Hobbs Field Station 414 W. Taylor Rd. Hobbs, NM 88240	Main Number	575-393-3612
BLM Roswell District Office 2909 W. Second St. Roswell, NM 88201	Main Number	575-627-0272
TECQ Texas Commission on Environmental Quality	Main Number	800-832-8224
New Mexico OCD		
U.S. Environmental Protection Agency Region 6 Texas/New Mexico	Main Number	214-655-2222
National Response Center Toxic Chemicals & Oil Spills	Main Number	800-424-8802

Rig Company

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XIII. EVACUATION OF THE GENERAL PUBLIC

The procedure to be used in alerting nearby persons in the event of any occurrence that could pose a threat to life or property will be arranged and completed with public officials in detail, prior to drilling into the hydrogen sulfide formations.

In the event of an actual emergency, the following steps will be immediately taken:

1. The MRC Energy Co.'s representative will dispatch sufficient personnel to immediately warn each resident and transients down-wind within radius of exposure from the well site. Then warn all residence in the radius of exposure. Additional evacuation zones may be necessary as the situation warrants.
2. The MRC Energy Co.'s representative will immediately notify proper authorities, including the Sheriff's Office, Highway Patrol, and any other public officials as described above and will enlist their assistance in warning residents and transients in the calculated radius of exposure.
3. The MRC Energy Co.'s representative will dispatch sufficient personnel to divert traffic in the vicinity away from the potentially dangerous area. A guard to the entrance of the well site will be posted to monitor essential and non essential traffic.
4. General:
 - A. The area included within the radius of exposure is considered to be the zone of maximum potential hazard from a hydrogen sulfide gas escape. Immediate evacuation of public areas, in accordance with the provisions of this contingency plan, is imperative. When it is determined that conditions exist which create an additional area (beyond the initial zone of maximum potential hazard) vulnerable to possible hazard, public areas in the additional hazardous area will be evacuated in accordance with the contingency plan.
 - B. In the event of a disaster, after the public areas have been evacuated and traffic stopped, it is expected that local civil authorities will have arrived and within a few hours will have assumed direction of and control of the public, including all public areas. MRC Energy Co. will cooperate with these authorities to the fullest extent and will exert every effort by careful advice to such authorities to prevent panic or rumors.
 - C. MRC Energy Co. will dispatch appropriate management personnel at the disaster site as soon as possible. The company's personnel

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will cooperate with and provide such information to civil authorities as they might require.

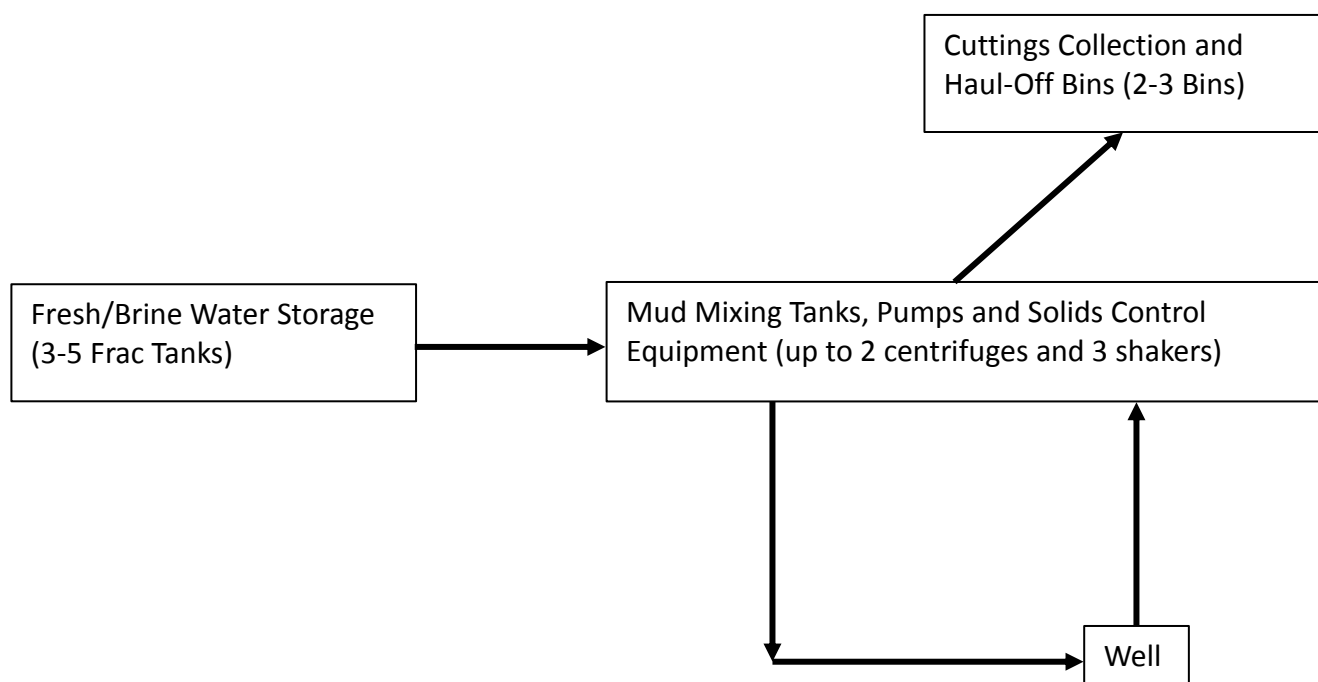
- D. One of the products of the combustion of hydrogen sulfide is sulfur dioxide (SO₂). Under certain conditions this gas may be equally as dangerous as H₂S. A pump type detector device, which determines the percent of SO₂ in air through concentrations in ppm, will be available. Although normal air movement is sufficient to dissipate this material to safe levels, the SO₂ detector should be utilized to check concentrations in the proximity of the well once every hour, or as necessary and the situation warrants. Also, if any low areas are suspected of having high concentrations, personnel should be made aware of these areas, and steps should be taken to determine whether or not these low areas are hazardous.

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Exhibit E-6: H2S Contingency Plan Emergency Contacts
Matador Resources Company

Company Office			
Matador Resources Company		(972)-371-5200	
Key Personnel			
Name	Title	Office	Mobile
Billy Goodwin	Vice President Drilling	972-371-5210	817-522-2928
Gary Martin	Drilling Superintendent		601-669-1774
Dee Smith	Drilling Superintendent	972-371-5447	972-822-1010
Blake Hermes	Drilling Engineer	972-371-5485	713-876-8558
	Construction Superintendent		
	Construction Superintendent		
Artesia			
Ambulance		911	
State Police		575-746-2703	
City Police		575-746-2703	
Sheriff's Office		575-746-9888	
Fire Department		575-746-2701	
Local Emergency Planning Committee		575-746-2122	
New Mexico Oil Conservation Division		575-748-1283	
Carlsbad			
Ambulance		911	
State Police		575-885-3137	
City Police		575-885-2111	
Sheriff's Office		575-887-7551	
Fire Department		575-887-3798	
Local Emergency Planning Committee		575-887-6544	
New Mexico Oil Conservation Division		575-887-6544	
Santa Fe			
New Mexico Emergency Response Comission (Santa Fe)		505-476-9600	
New Mexico Emergency Response Comission (Santa Fe) 24 hrs		505-827-9126	
New Mexico State Emergency Operations Center		505-476-9635	
National			
National Emegency Response Center (Washington, D.C.)		800-424-8802	
Medical			
Flight for Life- 4000 24th St.; Lubbock, TX		806-743-9911	
Aerocare- R3, Box 49F; Lubbock, TX		806-747-8923	
Med Flight Air Amb- 2301 Yale Blvd S.E., D3; Albuquerque, NM		505-842-4433	
SB Air Med Service- 2505 Clark Carr Loop S.E.; Albuquerque, NM		505-842-4949	
Other			
Boots & Coots IWC		800-256-9688	or 281-931-8884
Cudd Pressure Control		432-699-0139	or 432-563-3356
Haliburton		575-746-2757	
B.J. Services		575-746-3569	

Closed-Loop System



Operating and Maintenance Plan:

During drilling operations, third party service companies will utilize solids control equipment to remove cuttings from the drilling fluids and collect it in haul-off bins. Equipment will be closely monitored at all times while drilling by the derrick man and the service company employees.

Closure Plan:

During drilling operations, third party service companies will haul off drill solids and fluids to an approved disposal facility. At the end of the well, all closed loop equipment will be removed from the location.

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 Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 192859

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 192859
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	3/9/2023
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	3/9/2023
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	3/9/2023
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	3/9/2023