

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. 30-025-51188
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 30-025-51188		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 126H
⁷ OGRID No. 228937		⁸ Operator Name MATADOR PRODUCTION COMPANY			⁹ Elevation 3790'

¹⁰Surface Location

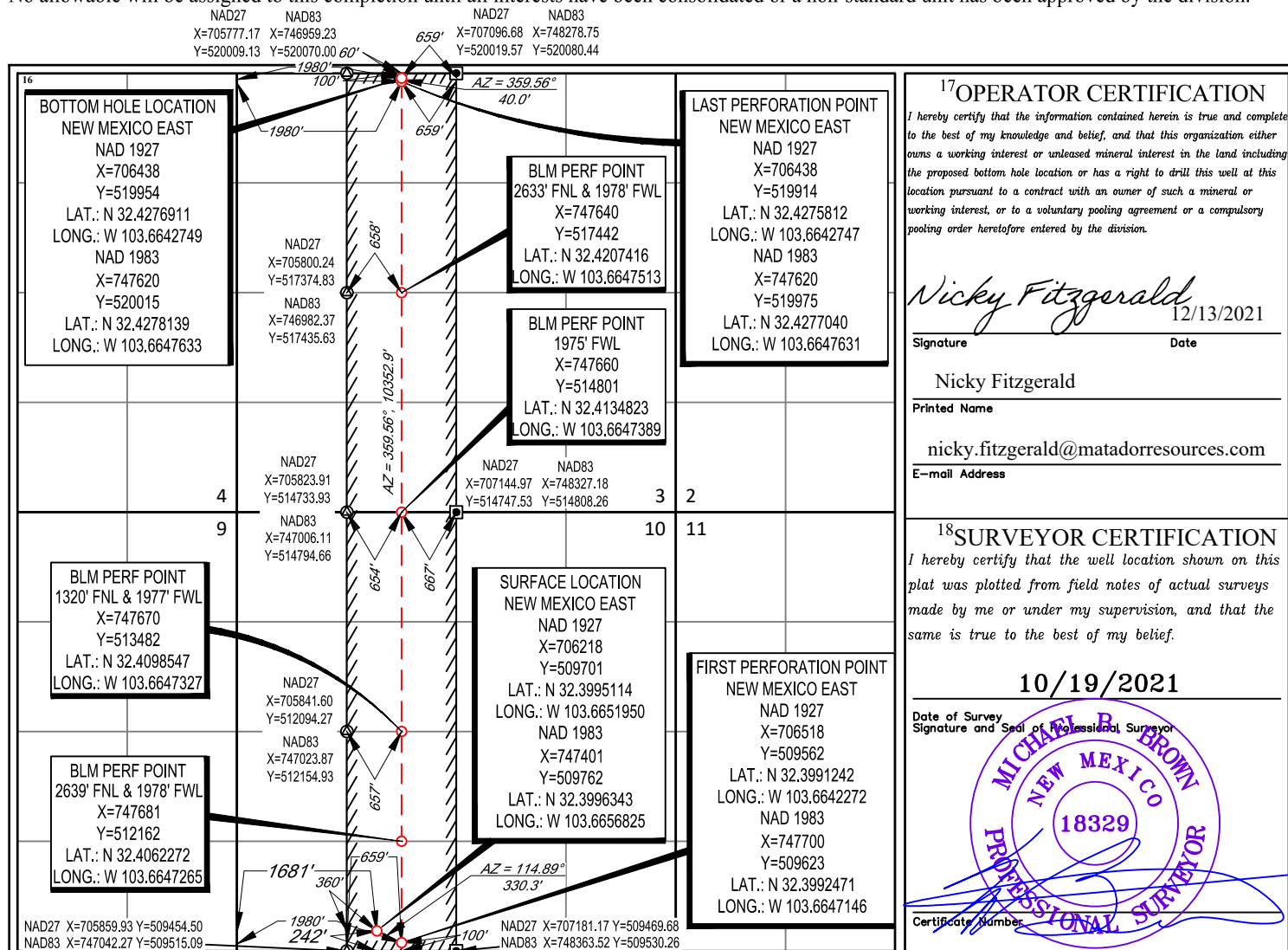
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	10	22-S	32-E	-	242'	SOUTH	1681'	WEST	LEA

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	1980'	WEST	LEA

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

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



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
	30-025-51188					
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

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 126H
SHL: 242' FSL & 1681' FWL Section 10
BHL: 60' FNL & 1980' FWL Section 3
Township/Range: 22S 32E
Elevation Above Sea Level: 3,790'

Drilling Operation Plan

Proposed Drilling Depth: 21094' MD / 10852' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.39910951637791 N / -103.66471514800288 W

TD Lat/Long (NAD83): 32.42781391525686 N / -103.66476332396957

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
Lamar (Base of Salt)	4,929	4,906	38	Dolomite	Barren
Bell Canyon	4,967	4,944	888	Sandstone	Oil/Natural Gas
Cherry Canyon	5,855	5,832	1,131	Sandstone	Oil/Natural Gas
Brushy Canyon	6,986	6,963	1,849	Sandstone	Oil/Natural Gas
Bone Spring Lime	8,835	8,812	1,061	Limestone	Oil/Natural Gas
1st Bone Spring Sand	9,896	9,873	298	Sandstone	Oil/Natural Gas
2nd Bone Spring Carbonate	10,194	10,171	407	Carbonate	Oil/Natural Gas
KOP	10,324	10,302	-	Carbonate	Oil/Natural Gas
2nd Bone Spring Sand	10,654	10,578	-	Sandstone	Oil/Natural Gas
TD	21,094	10,852	-	Sandstone	Oil/Natural Gas

2. Notable Zones

2nd Bone Spring is the goal. All perforations will be within the setback requirements as prescribed or permitted by the New Mexico Oil Conservation Division. OSE estimated ground water depth at this location is 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 - 10174	0 - 10152	7.625	29.7	P-110	BUTT	1.125	1.125	1.8
Production	6.75	0 - 21094	0 - 10852	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	730	3.66	2660	10.3	35%	0	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	210	1.38	290	13.2	35%	9174	A/C	5% NaCl + LCM
Production	Tail	760	1.35	1022	13.2	10%	9974	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 - 10174	8.4 - 9.4	28-30	NC
Production	6.75	OBM/Cut Brine	10174 - 21094	9 - 9.8	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 5530 psi. Maximum anticipated surface pressure is 3143 psi. Expected bottom hole temperature is 163 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.

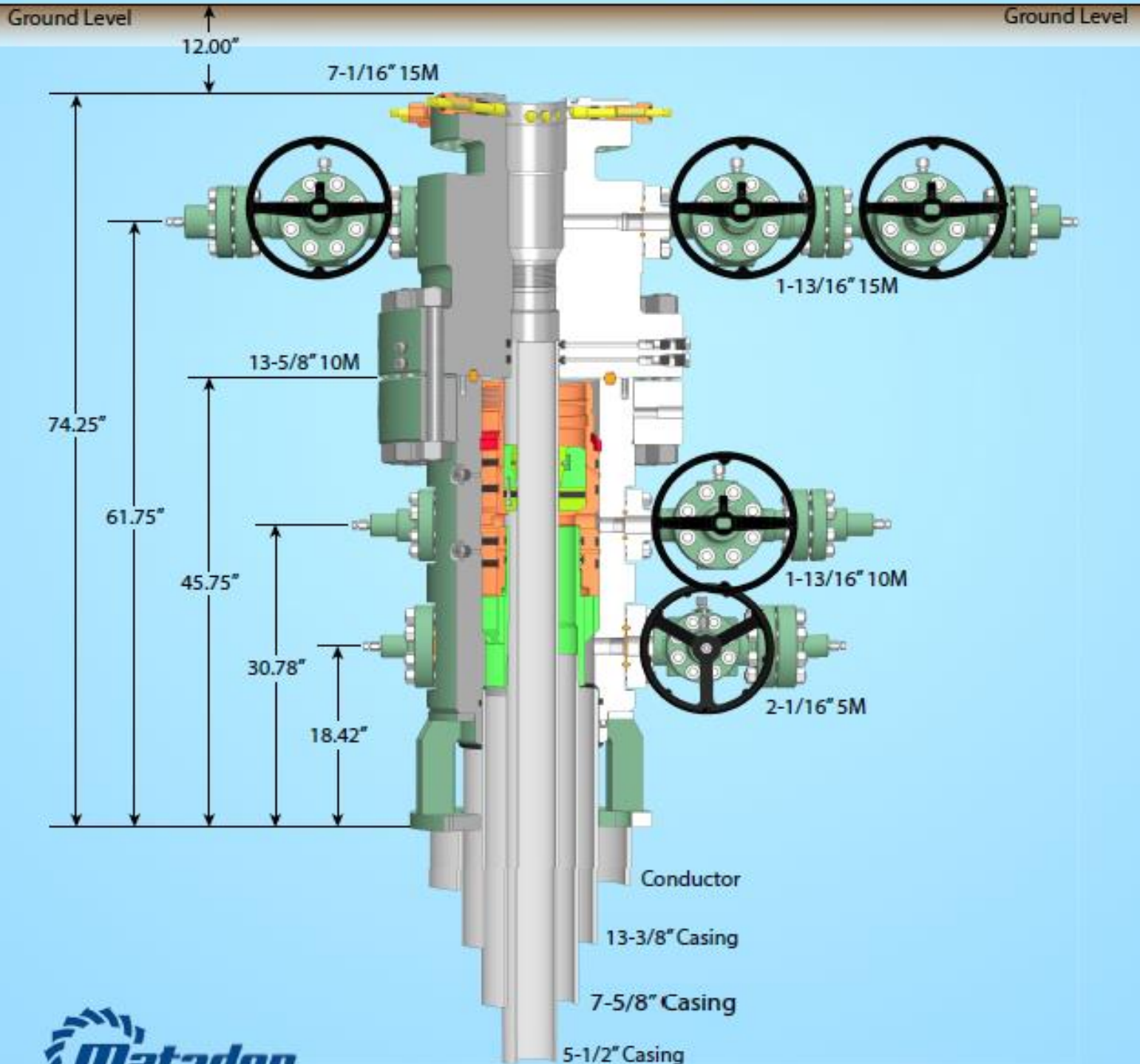
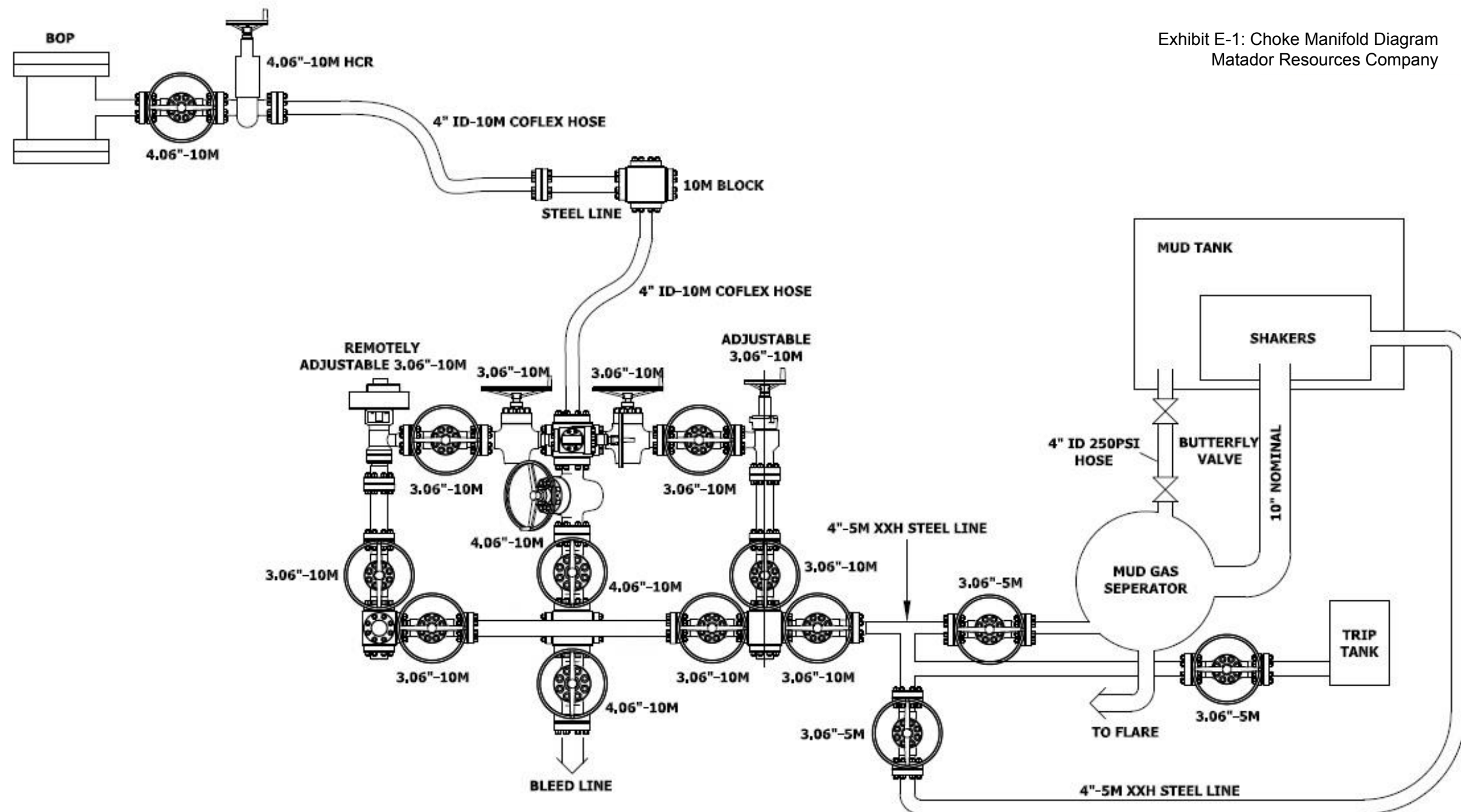
**13-5/8" 10M MN-DS Wellhead**2018-083-01
Rev 01

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
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CHOKE MANIFOLD

10M CHOKE ARRANGEMENT
RIG 297

DWG NO.	R0297-D.001.LAY.09	SHT	1	OF	1	REV.	02
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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

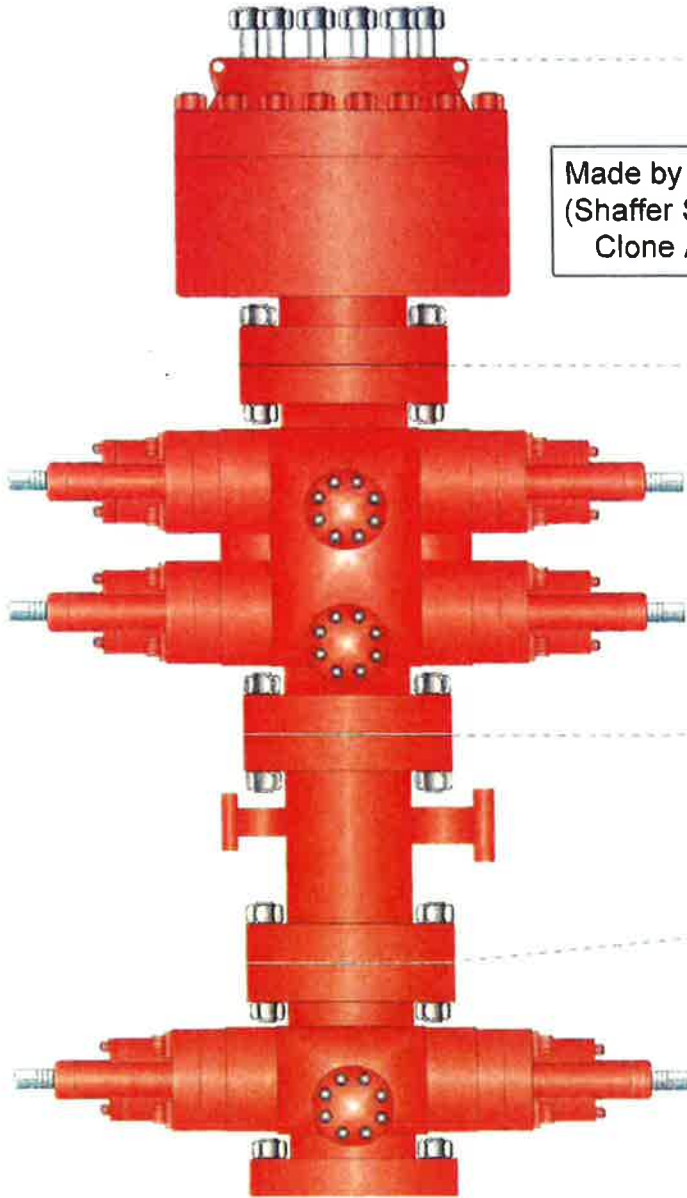
End Fitting 1:	4 1/16 10K FLANGES FIXED	End Fitting 2:	4 1/16 10K FLANGES FLOAT
Gates Part No.:	68503010-9721632	Assembly Code:	L41422010819H3-012119-5
Working Pressure:	10,000 psi.	Test Pressure:	15,000 psi.

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 # PS2-628STYLE: New Shaffer SphericalBORE 13 5/8" PRESSURE 5,000HEIGHT: 48 1/2" WEIGHT: 13,800 lbsPATTERSON-UTI # PC2-128STYLE: New Cameron Type UBORE 13 5/8" PRESSURE 10,000RAMS: TOP 5" Pipe BTM BlindsHEIGHT: 66 5/8" WEIGHT: 24,000 lbsLength 40" Outlets 4" 10MDSA 4" 10M x 2" 10MPATTERSON-UTI # PC2-228STYLE: New Cameron Type UBORE 13 5/8" PRESSURE 10,000RAMS: 5" PipeHEIGHT: 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.



SURVEY PROGRAM

Depth From	0.0	Depth To	21094.0	Survey/Plan	BLM Plan #1 (Wellbore #1)	Tool	MWD	+N/-S	+E/-W	GL @ 3790.0	KB @ 3818.5usft (Original Well Elev)				Slot
										Northing	Easting	Latitude	Longitude		
								0.0	0.0	509701.05	706218.27	32° 23' 58.241 N	103° 39' 54.702 W		

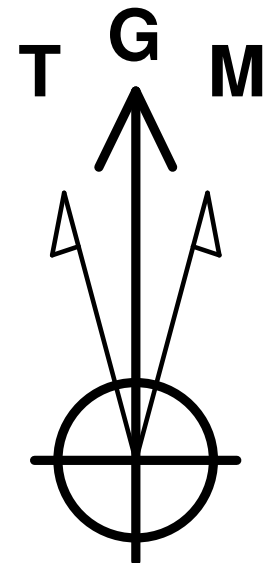
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
VP - Nina Fed Com #126H	10301.5	-189.1	299.8	509512.00	706518.00	32° 23' 56.352 N	103° 39' 51.220 W
BHL - Nina Cortell Fed Com #126H	10253.5	219.8	519954.35	706438.09	32° 25' 39.688 N	103° 39' 51.390 W	
Enter NMNM 055952 - Nina Cortell Fed Com #126H	10866.9	3719.1	269.7	513419.88	706487.94	32° 24' 35.024 N	103° 39' 51.285 W
Enter NMNM 135247 - Nina Cortell Fed Com #126H	10857.9	269.7	517378.95	706457.55	32° 25' 14.202 N	103° 39' 51.351 W	
Enter NMNM 141008 - Nina Cortell Fed Com #126H	10869.9	2399.4	279.8	512100.25	706498.07	32° 24' 21.965 N	103° 39' 51.264 W
Exit NMNM 055952 - Nina Cortell Fed Com #126H	10863.9	5037.8	259.6	514738.54	706477.82	32° 24' 48.073 N	103° 39' 51.307 W

1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	Start Build 1.00
2000.0	8.00	122.24	1997.4	-29.7	47.2	1.00	122.24	-30.1	Start 1878.9 hold at 2000.0 MD
3878.9	8.00	122.24	3858.0	-169.2	268.3	0.00	0.00	-171.3	Start Drop -1.50
4412.2	0.00	0.00	4389.6	-189.1	299.8	1.50	180.00	-191.4	Start 5911.9 hold at 4412.2 MD
10324.1	0.00	0.00	10301.5	-189.1	299.8	0.00	0.00	-191.4	Start Build 10.00
11225.4	90.13	359.56	10874.5	385.2	295.4	10.00	359.56	382.9	Start 61.7 hold at 11225.4 MD
11287.1	90.13	359.56	10874.3	446.8	294.9	0.00	0.00	444.6	Start 9807.0 hold at 11287.1 MD
21094.0	90.13	359.56	10851.5	10253.5	219.8	0.00	0.00	10251.5	TD at 21094.0

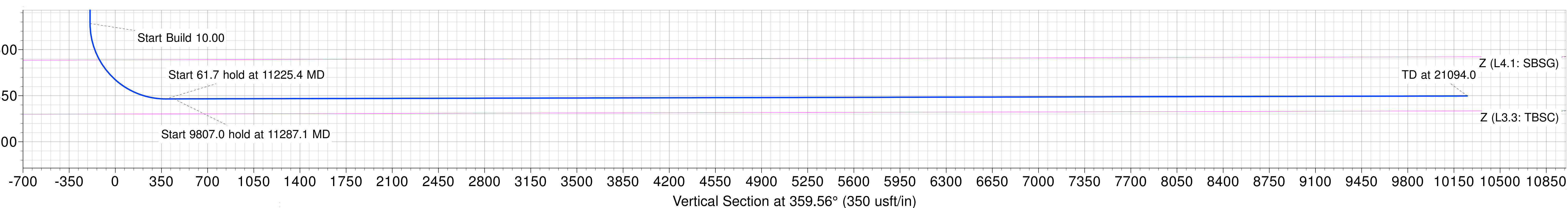
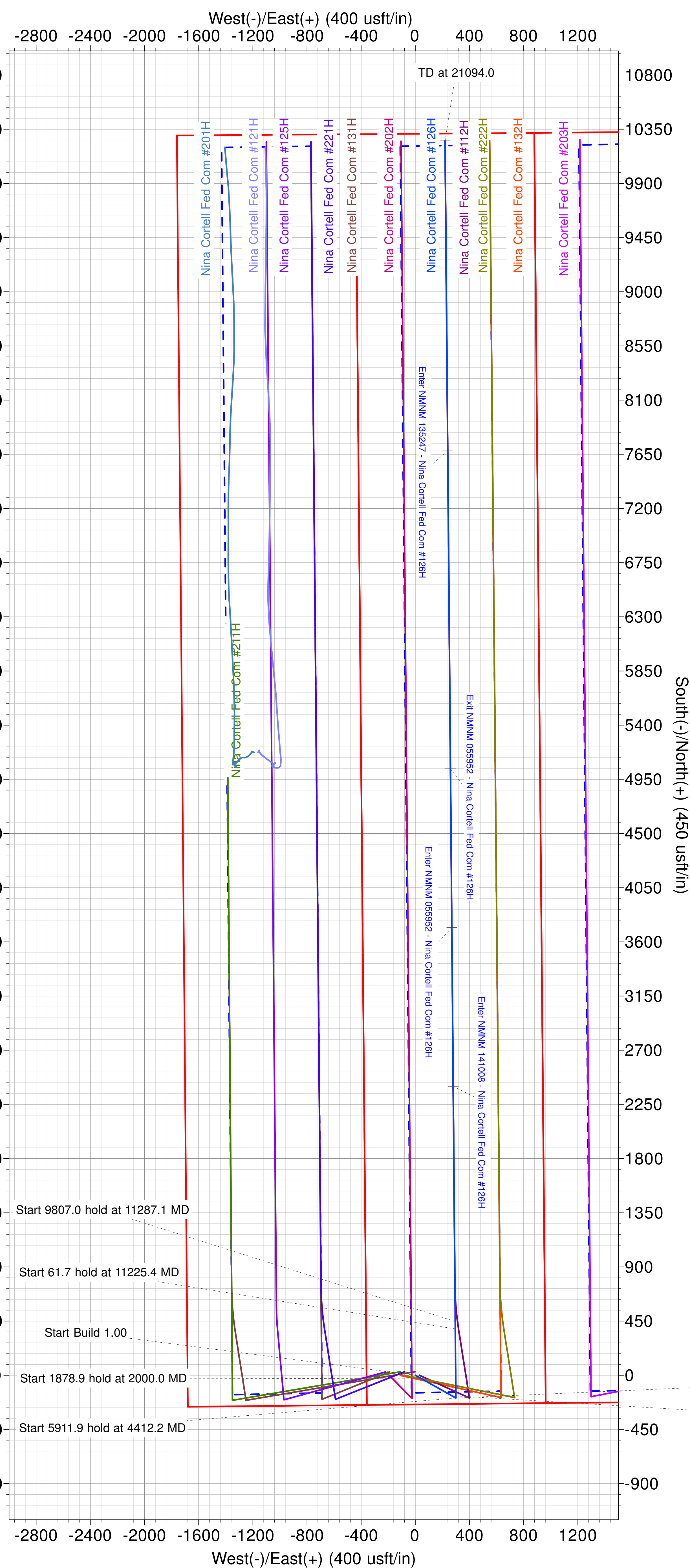
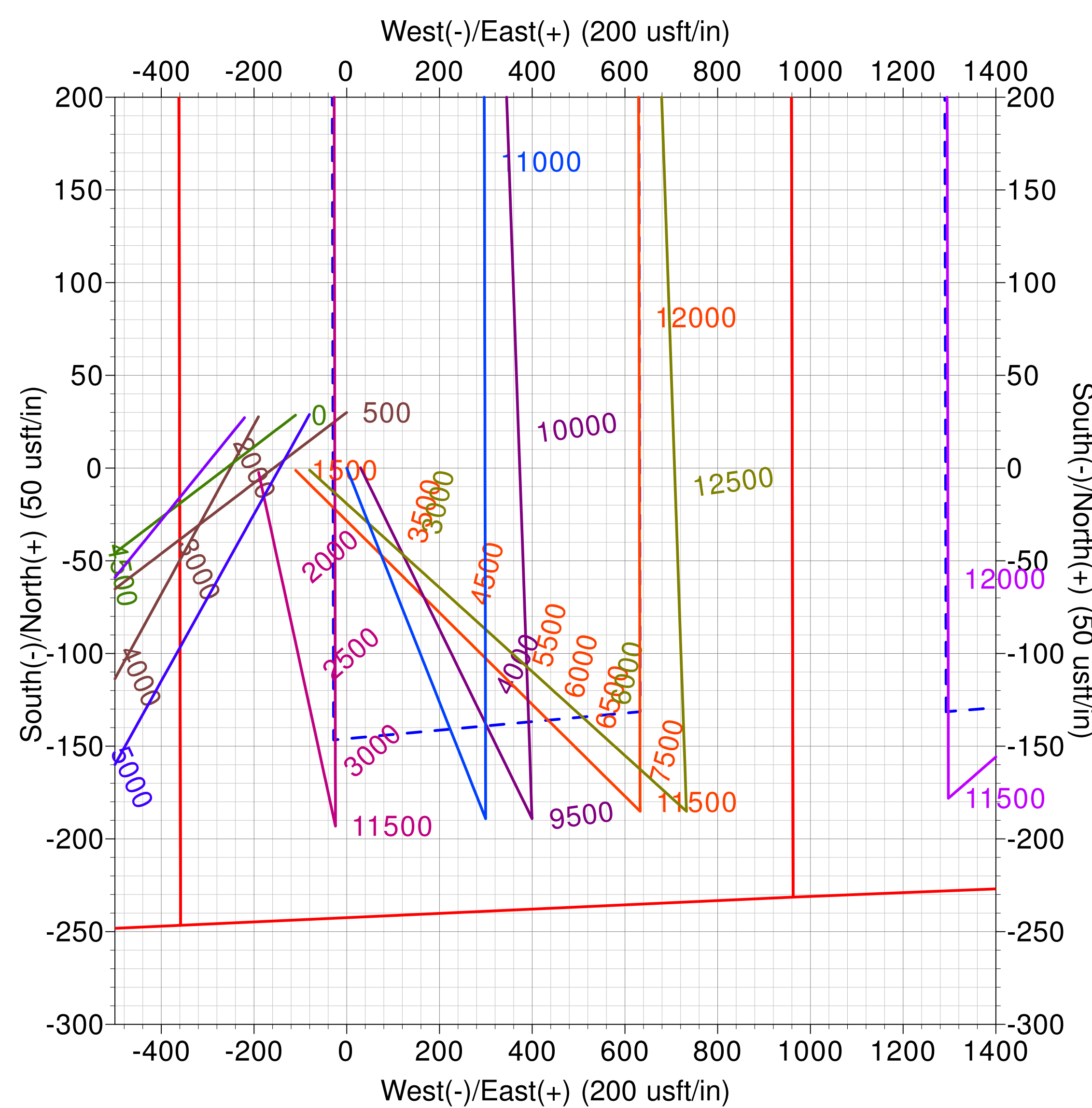
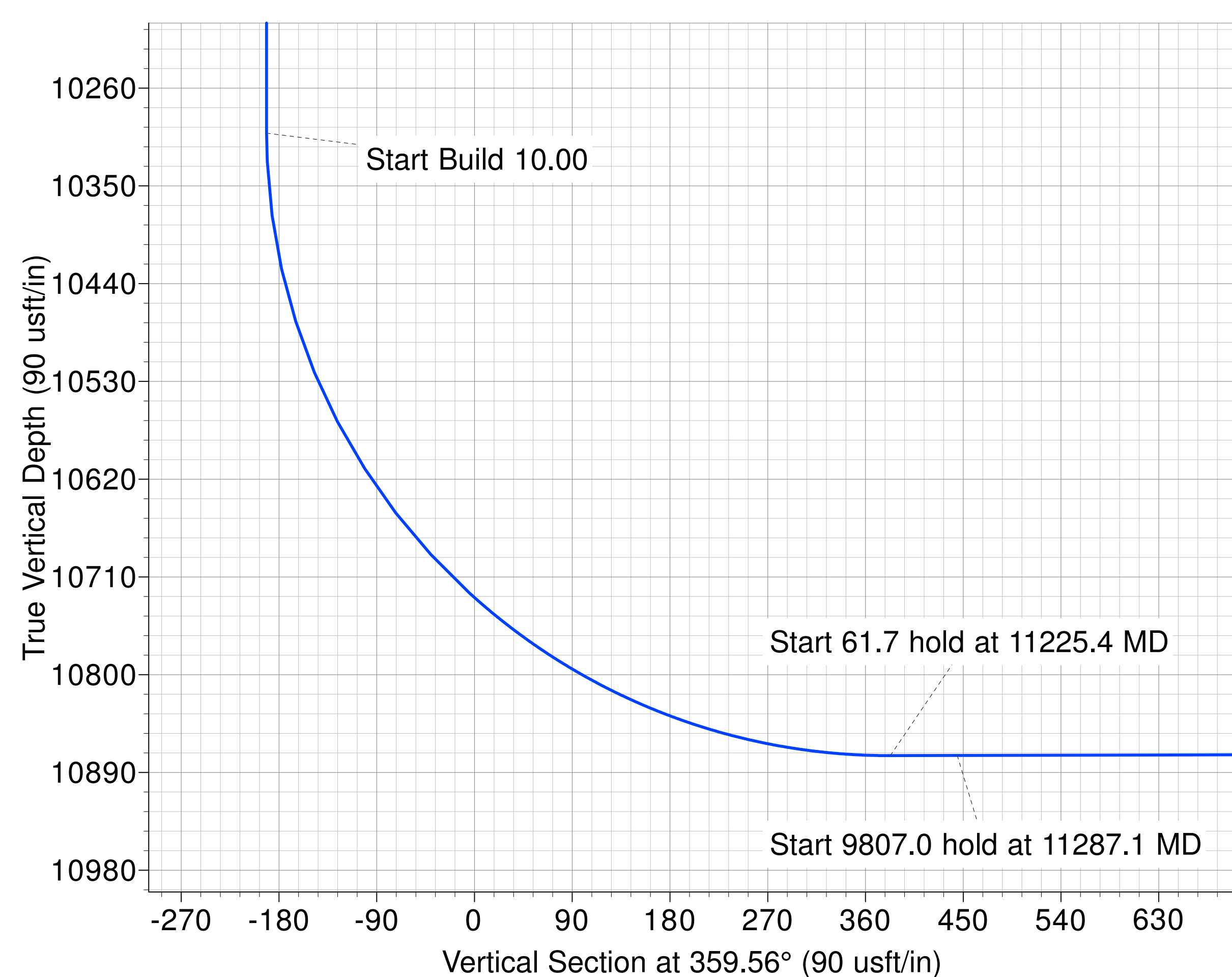
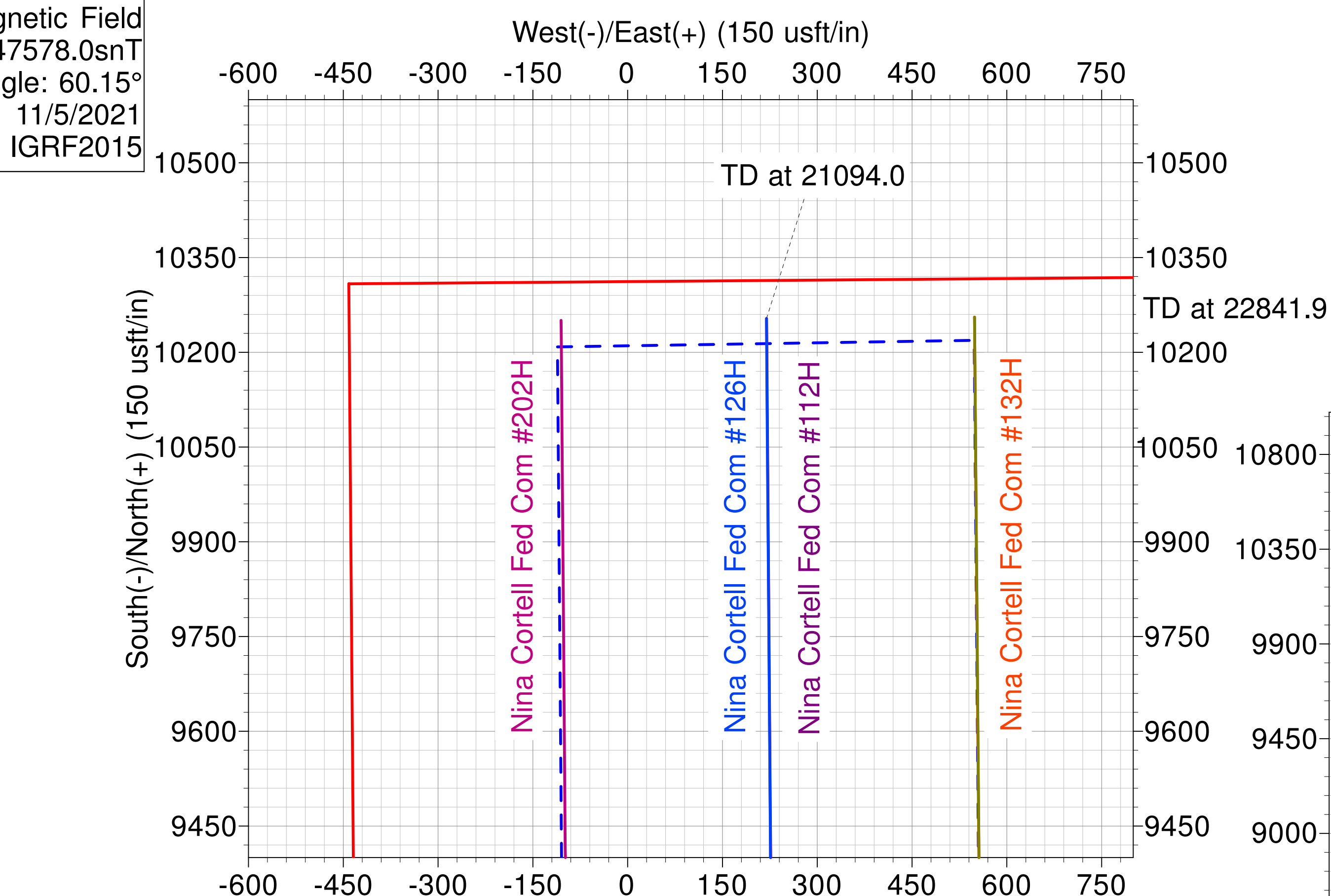
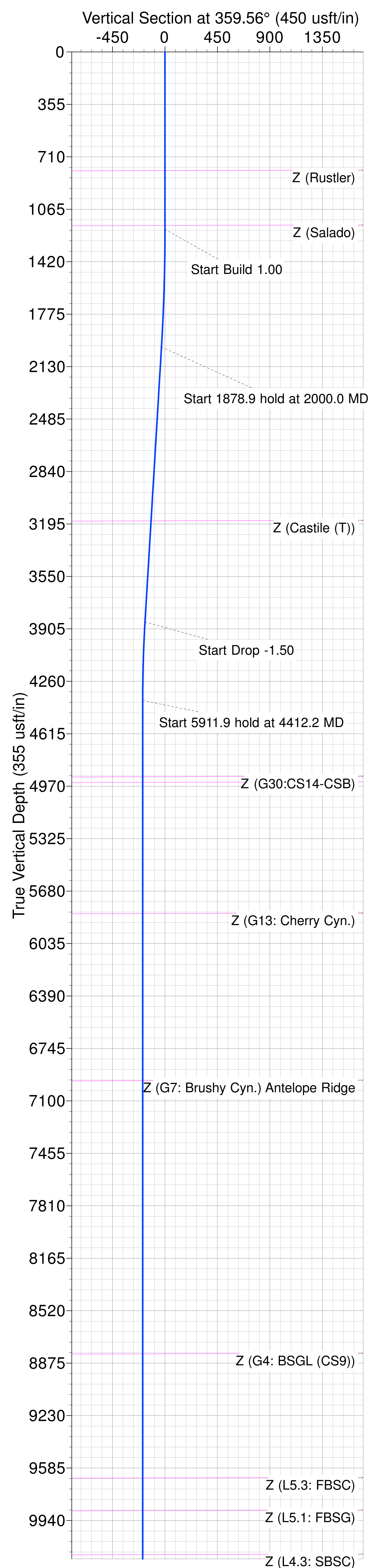
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

To convert a Magnetic Direction to a Grid Direction, Add 6.17°
 To convert a Magnetic Direction to a True Direction, Add 6.53° East
 To convert a True Direction to a Grid Direction, Subtract 0.36°



Azimuths to Grid North
True North: -0.36°
Magnetic North: 6.18°

Magnetic Field
Strength: 47578.0snT
Dip Angle: 60.15°
Date: 11/5/2021
Model: IGRF2015



Matador Production Company

Antelope Ridge

Nina Cortell

Nina Cortell Fed Com #126H

Wellbore #1

Plan: BLM Plan #1

Standard Planning Report

08 November, 2021

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #126H
Company:	Matador Production Company	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Project:	Antelope Ridge	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site:	Nina Cortell	North Reference:	Grid
Well:	Nina Cortell Fed Com #126H	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 #126H					
Well Position	+N/-S	2.6 usft	Northing:	509,701.05 usft	Latitude:	32° 23' 58.241 N
	+E/-W	220.1 usft	Easting:	706,218.26 usft	Longitude:	103° 39' 54.702 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,790.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	11/5/2021	6.53	60.15	47,577.99847653

Design	BLM Plan #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.56

Plan Survey Tool Program	Date	11/8/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	21,094.0	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	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.0	8.00	122.24	1,997.4	-29.7	47.2	1.00	1.00	0.00	122.24	
3,878.9	8.00	122.24	3,858.0	-169.2	268.3	0.00	0.00	0.00	0.00	
4,412.2	0.00	0.00	4,389.6	-189.1	299.8	1.50	-1.50	0.00	180.00	
10,324.1	0.00	0.00	10,301.5	-189.1	299.8	0.00	0.00	0.00	0.00	VP - Nina Fed Com
11,225.4	90.13	359.56	10,874.5	385.2	295.4	10.00	10.00	0.00	359.56	
11,287.1	90.13	359.56	10,874.3	446.8	294.9	0.00	0.00	0.00	0.00	
21,094.0	90.13	359.56	10,851.5	10,253.5	219.8	0.00	0.00	0.00	0.00	BHL - Nina Cortell F

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Company:	Matador Production Company	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Project:	Antelope Ridge	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site:	Nina Cortell	North Reference:	Grid
Well:	Nina Cortell Fed Com #126H	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
Start Build 1.00									
1,300.0	1.00	122.24	1,300.0	-0.5	0.7	-0.5	1.00	1.00	0.00
1,400.0	2.00	122.24	1,400.0	-1.9	3.0	-1.9	1.00	1.00	0.00
1,500.0	3.00	122.24	1,499.9	-4.2	6.6	-4.2	1.00	1.00	0.00
1,600.0	4.00	122.24	1,599.7	-7.4	11.8	-7.5	1.00	1.00	0.00
1,700.0	5.00	122.24	1,699.4	-11.6	18.4	-11.8	1.00	1.00	0.00
1,800.0	6.00	122.24	1,798.9	-16.7	26.5	-16.9	1.00	1.00	0.00
1,900.0	7.00	122.24	1,898.3	-22.8	36.1	-23.1	1.00	1.00	0.00
2,000.0	8.00	122.24	1,997.4	-29.7	47.2	-30.1	1.00	1.00	0.00
Start 1878.9 hold at 2000.0 MD									
2,100.0	8.00	122.24	2,096.4	-37.2	58.9	-37.6	0.00	0.00	0.00
2,200.0	8.00	122.24	2,195.5	-44.6	70.7	-45.1	0.00	0.00	0.00
2,300.0	8.00	122.24	2,294.5	-52.0	82.5	-52.7	0.00	0.00	0.00
2,400.0	8.00	122.24	2,393.5	-59.4	94.2	-60.2	0.00	0.00	0.00
2,500.0	8.00	122.24	2,492.5	-66.9	106.0	-67.7	0.00	0.00	0.00
2,600.0	8.00	122.24	2,591.6	-74.3	117.8	-75.2	0.00	0.00	0.00
2,700.0	8.00	122.24	2,690.6	-81.7	129.6	-82.7	0.00	0.00	0.00
2,800.0	8.00	122.24	2,789.6	-89.1	141.3	-90.2	0.00	0.00	0.00
2,900.0	8.00	122.24	2,888.6	-96.6	153.1	-97.7	0.00	0.00	0.00
3,000.0	8.00	122.24	2,987.7	-104.0	164.9	-105.3	0.00	0.00	0.00
3,100.0	8.00	122.24	3,086.7	-111.4	176.6	-112.8	0.00	0.00	0.00
3,188.4	8.00	122.24	3,174.3	-118.0	187.1	-119.4	0.00	0.00	0.00
Z (Castile (T))									
3,200.0	8.00	122.24	3,185.7	-118.8	188.4	-120.3	0.00	0.00	0.00
3,300.0	8.00	122.24	3,284.8	-126.3	200.2	-127.8	0.00	0.00	0.00
3,400.0	8.00	122.24	3,383.8	-133.7	212.0	-135.3	0.00	0.00	0.00
3,500.0	8.00	122.24	3,482.8	-141.1	223.7	-142.8	0.00	0.00	0.00
3,600.0	8.00	122.24	3,581.8	-148.5	235.5	-150.3	0.00	0.00	0.00
3,700.0	8.00	122.24	3,680.9	-156.0	247.3	-157.9	0.00	0.00	0.00
3,800.0	8.00	122.24	3,779.9	-163.4	259.0	-165.4	0.00	0.00	0.00
3,878.9	8.00	122.24	3,858.0	-169.2	268.3	-171.3	0.00	0.00	0.00
Start Drop -1.50									
3,900.0	7.68	122.24	3,878.9	-170.8	270.8	-172.9	1.50	-1.50	0.00
4,000.0	6.18	122.24	3,978.2	-177.2	281.0	-179.4	1.50	-1.50	0.00
4,100.0	4.68	122.24	4,077.7	-182.3	289.0	-184.5	1.50	-1.50	0.00
4,200.0	3.18	122.24	4,177.5	-185.9	294.8	-188.2	1.50	-1.50	0.00

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #126H
Company:	Matador Production Company	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Project:	Antelope Ridge	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site:	Nina Cortell	North Reference:	Grid
Well:	Nina Cortell Fed Com #126H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,300.0	1.68	122.24	4,277.4	-188.2	298.4	-190.5	1.50	-1.50	0.00
4,400.0	0.18	122.24	4,377.4	-189.1	299.8	-191.4	1.50	-1.50	0.00
4,412.2	0.00	0.00	4,389.6	-189.1	299.8	-191.4	1.50	-1.50	0.00
Start 5911.9 hold at 4412.2 MD									
4,500.0	0.00	0.00	4,477.4	-189.1	299.8	-191.4	0.00	0.00	0.00
4,600.0	0.00	0.00	4,577.4	-189.1	299.8	-191.4	0.00	0.00	0.00
4,700.0	0.00	0.00	4,677.4	-189.1	299.8	-191.4	0.00	0.00	0.00
4,800.0	0.00	0.00	4,777.4	-189.1	299.8	-191.4	0.00	0.00	0.00
4,900.0	0.00	0.00	4,877.4	-189.1	299.8	-191.4	0.00	0.00	0.00
4,929.0	0.00	0.00	4,906.4	-189.1	299.8	-191.4	0.00	0.00	0.00
Z (G30:CS14-CSB)									
4,967.0	0.00	0.00	4,944.4	-189.1	299.8	-191.4	0.00	0.00	0.00
Z (G26: Bell Cyn.)									
5,000.0	0.00	0.00	4,977.4	-189.1	299.8	-191.4	0.00	0.00	0.00
5,100.0	0.00	0.00	5,077.4	-189.1	299.8	-191.4	0.00	0.00	0.00
5,200.0	0.00	0.00	5,177.4	-189.1	299.8	-191.4	0.00	0.00	0.00
5,300.0	0.00	0.00	5,277.4	-189.1	299.8	-191.4	0.00	0.00	0.00
5,400.0	0.00	0.00	5,377.4	-189.1	299.8	-191.4	0.00	0.00	0.00
5,500.0	0.00	0.00	5,477.4	-189.1	299.8	-191.4	0.00	0.00	0.00
5,600.0	0.00	0.00	5,577.4	-189.1	299.8	-191.4	0.00	0.00	0.00
5,700.0	0.00	0.00	5,677.4	-189.1	299.8	-191.4	0.00	0.00	0.00
5,800.0	0.00	0.00	5,777.4	-189.1	299.8	-191.4	0.00	0.00	0.00
5,855.0	0.00	0.00	5,832.4	-189.1	299.8	-191.4	0.00	0.00	0.00
Z (G13: Cherry Cyn.)									
5,900.0	0.00	0.00	5,877.4	-189.1	299.8	-191.4	0.00	0.00	0.00
6,000.0	0.00	0.00	5,977.4	-189.1	299.8	-191.4	0.00	0.00	0.00
6,100.0	0.00	0.00	6,077.4	-189.1	299.8	-191.4	0.00	0.00	0.00
6,200.0	0.00	0.00	6,177.4	-189.1	299.8	-191.4	0.00	0.00	0.00
6,300.0	0.00	0.00	6,277.4	-189.1	299.8	-191.4	0.00	0.00	0.00
6,400.0	0.00	0.00	6,377.4	-189.1	299.8	-191.4	0.00	0.00	0.00
6,500.0	0.00	0.00	6,477.4	-189.1	299.8	-191.4	0.00	0.00	0.00
6,600.0	0.00	0.00	6,577.4	-189.1	299.8	-191.4	0.00	0.00	0.00
6,700.0	0.00	0.00	6,677.4	-189.1	299.8	-191.4	0.00	0.00	0.00
6,800.0	0.00	0.00	6,777.4	-189.1	299.8	-191.4	0.00	0.00	0.00
6,900.0	0.00	0.00	6,877.4	-189.1	299.8	-191.4	0.00	0.00	0.00
6,986.0	0.00	0.00	6,963.4	-189.1	299.8	-191.4	0.00	0.00	0.00
Z (G7: Brushy Cyn.) Antelope Ridge									
7,000.0	0.00	0.00	6,977.4	-189.1	299.8	-191.4	0.00	0.00	0.00
7,100.0	0.00	0.00	7,077.4	-189.1	299.8	-191.4	0.00	0.00	0.00
7,200.0	0.00	0.00	7,177.4	-189.1	299.8	-191.4	0.00	0.00	0.00
7,300.0	0.00	0.00	7,277.4	-189.1	299.8	-191.4	0.00	0.00	0.00
7,400.0	0.00	0.00	7,377.4	-189.1	299.8	-191.4	0.00	0.00	0.00
7,500.0	0.00	0.00	7,477.4	-189.1	299.8	-191.4	0.00	0.00	0.00
7,600.0	0.00	0.00	7,577.4	-189.1	299.8	-191.4	0.00	0.00	0.00
7,700.0	0.00	0.00	7,677.4	-189.1	299.8	-191.4	0.00	0.00	0.00
7,800.0	0.00	0.00	7,777.4	-189.1	299.8	-191.4	0.00	0.00	0.00
7,900.0	0.00	0.00	7,877.4	-189.1	299.8	-191.4	0.00	0.00	0.00
8,000.0	0.00	0.00	7,977.4	-189.1	299.8	-191.4	0.00	0.00	0.00
8,100.0	0.00	0.00	8,077.4	-189.1	299.8	-191.4	0.00	0.00	0.00
8,200.0	0.00	0.00	8,177.4	-189.1	299.8	-191.4	0.00	0.00	0.00
8,300.0	0.00	0.00	8,277.4	-189.1	299.8	-191.4	0.00	0.00	0.00
8,400.0	0.00	0.00	8,377.4	-189.1	299.8	-191.4	0.00	0.00	0.00
8,500.0	0.00	0.00	8,477.4	-189.1	299.8	-191.4	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #126H
Company:	Matador Production Company	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Project:	Antelope Ridge	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site:	Nina Cortell	North Reference:	Grid
Well:	Nina Cortell Fed Com #126H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,600.0	0.00	0.00	8,577.4	-189.1	299.8	-191.4	0.00	0.00	0.00
8,700.0	0.00	0.00	8,677.4	-189.1	299.8	-191.4	0.00	0.00	0.00
8,800.0	0.00	0.00	8,777.4	-189.1	299.8	-191.4	0.00	0.00	0.00
8,835.0	0.00	0.00	8,812.4	-189.1	299.8	-191.4	0.00	0.00	0.00
Z (G4: BSG) (CS9))									
8,900.0	0.00	0.00	8,877.4	-189.1	299.8	-191.4	0.00	0.00	0.00
9,000.0	0.00	0.00	8,977.4	-189.1	299.8	-191.4	0.00	0.00	0.00
9,100.0	0.00	0.00	9,077.4	-189.1	299.8	-191.4	0.00	0.00	0.00
9,200.0	0.00	0.00	9,177.4	-189.1	299.8	-191.4	0.00	0.00	0.00
9,300.0	0.00	0.00	9,277.4	-189.1	299.8	-191.4	0.00	0.00	0.00
9,400.0	0.00	0.00	9,377.4	-189.1	299.8	-191.4	0.00	0.00	0.00
9,500.0	0.00	0.00	9,477.4	-189.1	299.8	-191.4	0.00	0.00	0.00
9,600.0	0.00	0.00	9,577.4	-189.1	299.8	-191.4	0.00	0.00	0.00
9,675.0	0.00	0.00	9,652.4	-189.1	299.8	-191.4	0.00	0.00	0.00
Z (L5.3: FBSC)									
9,700.0	0.00	0.00	9,677.4	-189.1	299.8	-191.4	0.00	0.00	0.00
9,800.0	0.00	0.00	9,777.4	-189.1	299.8	-191.4	0.00	0.00	0.00
9,896.0	0.00	0.00	9,873.4	-189.1	299.8	-191.4	0.00	0.00	0.00
Z (L5.1: FBSC)									
9,900.0	0.00	0.00	9,877.4	-189.1	299.8	-191.4	0.00	0.00	0.00
10,000.0	0.00	0.00	9,977.4	-189.1	299.8	-191.4	0.00	0.00	0.00
10,100.0	0.00	0.00	10,077.4	-189.1	299.8	-191.4	0.00	0.00	0.00
10,194.0	0.00	0.00	10,171.4	-189.1	299.8	-191.4	0.00	0.00	0.00
Z (L4.3: SBSC)									
10,200.0	0.00	0.00	10,177.4	-189.1	299.8	-191.4	0.00	0.00	0.00
10,300.0	0.00	0.00	10,277.4	-189.1	299.8	-191.4	0.00	0.00	0.00
10,324.1	0.00	0.00	10,301.5	-189.1	299.8	-191.4	0.00	0.00	0.00
Start Build 10.00 - VP - Nina Fed Com #126H									
10,400.0	7.59	359.56	10,377.2	-184.1	299.7	-186.4	10.00	10.00	0.00
10,500.0	17.59	359.56	10,474.6	-162.3	299.6	-164.6	10.00	10.00	0.00
10,600.0	27.59	359.56	10,566.8	-123.9	299.3	-126.2	10.00	10.00	0.00
10,613.0	28.89	359.56	10,578.3	-117.8	299.2	-120.1	10.00	10.00	0.00
Z (L4.1: SBSC)									
10,700.0	37.59	359.56	10,651.0	-70.1	298.9	-72.4	10.00	10.00	0.00
10,800.0	47.59	359.56	10,724.5	-2.6	298.3	-4.8	10.00	10.00	0.00
10,900.0	57.59	359.56	10,785.2	76.8	297.7	74.5	10.00	10.00	0.00
11,000.0	67.59	359.56	10,831.2	165.4	297.1	163.1	10.00	10.00	0.00
11,100.0	77.59	359.56	10,861.1	260.7	296.3	258.4	10.00	10.00	0.00
11,200.0	87.59	359.56	10,874.0	359.8	295.6	357.5	10.00	10.00	0.00
11,225.4	90.13	359.56	10,874.5	385.2	295.4	382.9	10.00	10.00	0.00
Start 61.7 hold at 11225.4 MD									
11,287.1	90.13	359.56	10,874.3	446.8	294.9	444.6	0.00	0.00	0.00
Start 9807.0 hold at 11287.1 MD									
11,300.0	90.13	359.56	10,874.3	459.7	294.8	457.5	0.00	0.00	0.00
11,400.0	90.13	359.56	10,874.1	559.7	294.0	557.5	0.00	0.00	0.00
11,500.0	90.13	359.56	10,873.8	659.7	293.3	657.5	0.00	0.00	0.00
11,600.0	90.13	359.56	10,873.6	759.7	292.5	757.5	0.00	0.00	0.00
11,700.0	90.13	359.56	10,873.4	859.7	291.7	857.5	0.00	0.00	0.00
11,800.0	90.13	359.56	10,873.2	959.7	291.0	957.5	0.00	0.00	0.00
11,900.0	90.13	359.56	10,872.9	1,059.7	290.2	1,057.5	0.00	0.00	0.00
12,000.0	90.13	359.56	10,872.7	1,159.7	289.4	1,157.5	0.00	0.00	0.00
12,100.0	90.13	359.56	10,872.5	1,259.7	288.7	1,257.5	0.00	0.00	0.00
12,200.0	90.13	359.56	10,872.2	1,359.7	287.9	1,357.5	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #126H
Company:	Matador Production Company	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Project:	Antelope Ridge	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site:	Nina Cortell	North Reference:	Grid
Well:	Nina Cortell Fed Com #126H	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	90.13	359.56	10,872.0	1,459.7	287.1	1,457.5	0.00	0.00	0.00
12,400.0	90.13	359.56	10,871.8	1,559.7	286.3	1,557.5	0.00	0.00	0.00
12,500.0	90.13	359.56	10,871.6	1,659.7	285.6	1,657.5	0.00	0.00	0.00
12,600.0	90.13	359.56	10,871.3	1,759.7	284.8	1,757.5	0.00	0.00	0.00
12,700.0	90.13	359.56	10,871.1	1,859.7	284.0	1,857.5	0.00	0.00	0.00
12,800.0	90.13	359.56	10,870.9	1,959.7	283.3	1,957.5	0.00	0.00	0.00
12,900.0	90.13	359.56	10,870.7	2,059.7	282.5	2,057.5	0.00	0.00	0.00
13,000.0	90.13	359.56	10,870.4	2,159.7	281.7	2,157.5	0.00	0.00	0.00
13,100.0	90.13	359.56	10,870.2	2,259.7	281.0	2,257.5	0.00	0.00	0.00
13,200.0	90.13	359.56	10,870.0	2,359.7	280.2	2,357.5	0.00	0.00	0.00
13,239.7	90.13	359.56	10,869.9	2,399.4	279.9	2,397.2	0.00	0.00	0.00
Enter NMNM 141008 - Nina Cortell Fed Com #126H									
13,300.0	90.13	359.56	10,869.7	2,459.7	279.4	2,457.5	0.00	0.00	0.00
13,400.0	90.13	359.56	10,869.5	2,559.7	278.7	2,557.5	0.00	0.00	0.00
13,500.0	90.13	359.56	10,869.3	2,659.7	277.9	2,657.5	0.00	0.00	0.00
13,600.0	90.13	359.56	10,869.1	2,759.7	277.1	2,757.5	0.00	0.00	0.00
13,700.0	90.13	359.56	10,868.8	2,859.7	276.4	2,857.5	0.00	0.00	0.00
13,800.0	90.13	359.56	10,868.6	2,959.7	275.6	2,957.5	0.00	0.00	0.00
13,900.0	90.13	359.56	10,868.4	3,059.7	274.8	3,057.5	0.00	0.00	0.00
14,000.0	90.13	359.56	10,868.2	3,159.7	274.1	3,157.5	0.00	0.00	0.00
14,100.0	90.13	359.56	10,867.9	3,259.7	273.3	3,257.5	0.00	0.00	0.00
14,200.0	90.13	359.56	10,867.7	3,359.7	272.5	3,357.5	0.00	0.00	0.00
14,300.0	90.13	359.56	10,867.5	3,459.6	271.8	3,457.5	0.00	0.00	0.00
14,400.0	90.13	359.56	10,867.3	3,559.6	271.0	3,557.5	0.00	0.00	0.00
14,500.0	90.13	359.56	10,867.0	3,659.6	270.2	3,657.5	0.00	0.00	0.00
14,559.5	90.13	359.56	10,866.9	3,719.1	269.8	3,716.9	0.00	0.00	0.00
Enter NMNM 055952 - Nina Cortell Fed Com #126H									
14,600.0	90.13	359.56	10,866.8	3,759.6	269.5	3,757.5	0.00	0.00	0.00
14,700.0	90.13	359.56	10,866.6	3,859.6	268.7	3,857.5	0.00	0.00	0.00
14,800.0	90.13	359.56	10,866.3	3,959.6	267.9	3,957.5	0.00	0.00	0.00
14,900.0	90.13	359.56	10,866.1	4,059.6	267.1	4,057.5	0.00	0.00	0.00
15,000.0	90.13	359.56	10,865.9	4,159.6	266.4	4,157.5	0.00	0.00	0.00
15,100.0	90.13	359.56	10,865.7	4,259.6	265.6	4,257.5	0.00	0.00	0.00
15,200.0	90.13	359.56	10,865.4	4,359.6	264.8	4,357.5	0.00	0.00	0.00
15,300.0	90.13	359.56	10,865.2	4,459.6	264.1	4,457.5	0.00	0.00	0.00
15,400.0	90.13	359.56	10,865.0	4,559.6	263.3	4,557.5	0.00	0.00	0.00
15,500.0	90.13	359.56	10,864.8	4,659.6	262.5	4,657.5	0.00	0.00	0.00
15,600.0	90.13	359.56	10,864.5	4,759.6	261.8	4,757.5	0.00	0.00	0.00
15,700.0	90.13	359.56	10,864.3	4,859.6	261.0	4,857.5	0.00	0.00	0.00
15,800.0	90.13	359.56	10,864.1	4,959.6	260.2	4,957.5	0.00	0.00	0.00
15,878.2	90.13	359.56	10,863.9	5,037.8	259.6	5,035.7	0.00	0.00	0.00
Exit NMNM 055952 - Nina Cortell Fed Com #126H									
15,900.0	90.13	359.56	10,863.8	5,059.6	259.5	5,057.5	0.00	0.00	0.00
16,000.0	90.13	359.56	10,863.6	5,159.6	258.7	5,157.5	0.00	0.00	0.00
16,100.0	90.13	359.56	10,863.4	5,259.6	257.9	5,257.5	0.00	0.00	0.00
16,200.0	90.13	359.56	10,863.2	5,359.6	257.2	5,357.5	0.00	0.00	0.00
16,300.0	90.13	359.56	10,862.9	5,459.6	256.4	5,457.5	0.00	0.00	0.00
16,400.0	90.13	359.56	10,862.7	5,559.6	255.6	5,557.5	0.00	0.00	0.00
16,500.0	90.13	359.56	10,862.5	5,659.6	254.9	5,657.5	0.00	0.00	0.00
16,600.0	90.13	359.56	10,862.3	5,759.6	254.1	5,757.5	0.00	0.00	0.00
16,700.0	90.13	359.56	10,862.0	5,859.6	253.3	5,857.5	0.00	0.00	0.00
16,800.0	90.13	359.56	10,861.8	5,959.6	252.6	5,957.5	0.00	0.00	0.00
16,900.0	90.13	359.56	10,861.6	6,059.6	251.8	6,057.5	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #126H
Company:	Matador Production Company	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Project:	Antelope Ridge	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site:	Nina Cortell	North Reference:	Grid
Well:	Nina Cortell Fed Com #126H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,000.0	90.13	359.56	10,861.4	6,159.6	251.0	6,157.5	0.00	0.00	0.00
17,100.0	90.13	359.56	10,861.1	6,259.6	250.3	6,257.5	0.00	0.00	0.00
17,200.0	90.13	359.56	10,860.9	6,359.6	249.5	6,357.5	0.00	0.00	0.00
17,300.0	90.13	359.56	10,860.7	6,459.6	248.7	6,457.5	0.00	0.00	0.00
17,400.0	90.13	359.56	10,860.4	6,559.6	248.0	6,557.5	0.00	0.00	0.00
17,500.0	90.13	359.56	10,860.2	6,659.5	247.2	6,657.5	0.00	0.00	0.00
17,600.0	90.13	359.56	10,860.0	6,759.5	246.4	6,757.5	0.00	0.00	0.00
17,700.0	90.13	359.56	10,859.8	6,859.5	245.6	6,857.5	0.00	0.00	0.00
17,800.0	90.13	359.56	10,859.5	6,959.5	244.9	6,957.5	0.00	0.00	0.00
17,900.0	90.13	359.56	10,859.3	7,059.5	244.1	7,057.5	0.00	0.00	0.00
18,000.0	90.13	359.56	10,859.1	7,159.5	243.3	7,157.5	0.00	0.00	0.00
18,100.0	90.13	359.56	10,858.9	7,259.5	242.6	7,257.5	0.00	0.00	0.00
18,200.0	90.13	359.56	10,858.6	7,359.5	241.8	7,357.5	0.00	0.00	0.00
18,300.0	90.13	359.56	10,858.4	7,459.5	241.0	7,457.5	0.00	0.00	0.00
18,400.0	90.13	359.56	10,858.2	7,559.5	240.3	7,557.5	0.00	0.00	0.00
18,500.0	90.13	359.56	10,857.9	7,659.5	239.5	7,657.5	0.00	0.00	0.00
18,518.7	90.13	359.56	10,857.9	7,678.2	239.4	7,676.1	0.00	0.00	0.00
Enter NMNM 135247 - Nina Cortell Fed Com #126H									
18,600.0	90.13	359.56	10,857.7	7,759.5	238.7	7,757.4	0.00	0.00	0.00
18,700.0	90.13	359.56	10,857.5	7,859.5	238.0	7,857.4	0.00	0.00	0.00
18,800.0	90.13	359.56	10,857.3	7,959.5	237.2	7,957.4	0.00	0.00	0.00
18,900.0	90.13	359.56	10,857.0	8,059.5	236.4	8,057.4	0.00	0.00	0.00
19,000.0	90.13	359.56	10,856.8	8,159.5	235.7	8,157.4	0.00	0.00	0.00
19,100.0	90.13	359.56	10,856.6	8,259.5	234.9	8,257.4	0.00	0.00	0.00
19,200.0	90.13	359.56	10,856.4	8,359.5	234.1	8,357.4	0.00	0.00	0.00
19,300.0	90.13	359.56	10,856.1	8,459.5	233.4	8,457.4	0.00	0.00	0.00
19,400.0	90.13	359.56	10,855.9	8,559.5	232.6	8,557.4	0.00	0.00	0.00
19,500.0	90.13	359.56	10,855.7	8,659.5	231.8	8,657.4	0.00	0.00	0.00
19,600.0	90.13	359.56	10,855.5	8,759.5	231.1	8,757.4	0.00	0.00	0.00
19,700.0	90.13	359.56	10,855.2	8,859.5	230.3	8,857.4	0.00	0.00	0.00
19,800.0	90.13	359.56	10,855.0	8,959.5	229.5	8,957.4	0.00	0.00	0.00
19,900.0	90.13	359.56	10,854.8	9,059.5	228.8	9,057.4	0.00	0.00	0.00
20,000.0	90.13	359.56	10,854.5	9,159.5	228.0	9,157.4	0.00	0.00	0.00
20,100.0	90.13	359.56	10,854.3	9,259.5	227.2	9,257.4	0.00	0.00	0.00
20,200.0	90.13	359.56	10,854.1	9,359.5	226.4	9,357.4	0.00	0.00	0.00
20,300.0	90.13	359.56	10,853.9	9,459.5	225.7	9,457.4	0.00	0.00	0.00
20,400.0	90.13	359.56	10,853.6	9,559.5	224.9	9,557.4	0.00	0.00	0.00
20,500.0	90.13	359.56	10,853.4	9,659.5	224.1	9,657.4	0.00	0.00	0.00
20,600.0	90.13	359.56	10,853.2	9,759.4	223.4	9,757.4	0.00	0.00	0.00
20,700.0	90.13	359.56	10,853.0	9,859.4	222.6	9,857.4	0.00	0.00	0.00
20,800.0	90.13	359.56	10,852.7	9,959.4	221.8	9,957.4	0.00	0.00	0.00
20,900.0	90.13	359.56	10,852.5	10,059.4	221.1	10,057.4	0.00	0.00	0.00
21,000.0	90.13	359.56	10,852.3	10,159.4	220.3	10,157.4	0.00	0.00	0.00
21,094.0	90.13	359.56	10,851.5	10,253.5	219.8	10,251.5	0.00	0.00	0.00
TD at 21094.0 - BHL - Nina Cortell Fed Com #126H									

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #126H
Company:	Matador Production Company	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Project:	Antelope Ridge	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site:	Nina Cortell	North Reference:	Grid
Well:	Nina Cortell Fed Com #126H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
VP - Nina Fed Com # - plan hits target center - Point	0.00	0.00	10,301.5	-189.1	299.8	509,512.00	706,518.00	32° 23' 56.352 N	103° 39' 51.220 W
BHL - Nina Cortell Fed - plan hits target center - Point	0.00	0.00	10,851.5	10,253.5	219.8	519,954.35	706,438.08	32° 25' 39.688 N	103° 39' 51.390 W
Enter NMNM 135247 - plan misses target center by 0.1usft at 18518.7usft MD (10857.9 TVD, 7678.2 N, 239.4 E) - Point	0.00	0.00	10,857.9	7,678.2	239.3	517,378.95	706,457.54	32° 25' 14.202 N	103° 39' 51.351 W
Exit NMNM 055952 - I - plan misses target center by 0.1usft at 15878.2usft MD (10863.9 TVD, 5037.8 N, 259.6 E) - Point	0.00	0.00	10,863.9	5,037.8	259.6	514,738.55	706,477.81	32° 24' 48.073 N	103° 39' 51.307 W
Enter NMNM 055952 - plan misses target center by 0.1usft at 14559.5usft MD (10866.9 TVD, 3719.1 N, 269.8 E) - Point	0.00	0.00	10,866.9	3,719.1	269.7	513,419.88	706,487.94	32° 24' 35.024 N	103° 39' 51.285 W
Enter NMNM 141008 - plan misses target center by 0.1usft at 13239.7usft MD (10869.9 TVD, 2399.4 N, 279.9 E) - Point	0.00	0.00	10,869.9	2,399.4	279.8	512,100.25	706,498.06	32° 24' 21.965 N	103° 39' 51.264 W

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
803.0	803.0	Z (Rustler)		-0.13	359.56
1,175.0	1,175.0	Z (Salado)		-0.13	359.56
3,188.4	3,174.3	Z (Castile (T))		-0.13	359.56
4,929.0	4,906.4	Z (G30:CS14-CSB)		-0.13	359.56
4,967.0	4,944.4	Z (G26: Bell Cyn.)		-0.13	359.56
5,855.0	5,832.4	Z (G13: Cherry Cyn.)		-0.13	359.56
6,986.0	6,963.4	Z (G7: Brushy Cyn.) Antelope Ridge		-0.13	359.56
8,835.0	8,812.4	Z (G4: BSG (CS9))		-0.13	359.56
9,675.0	9,652.4	Z (L5.3: FBSC)		-0.13	359.56
9,896.0	9,873.4	Z (L5.1: FBSG)		-0.13	359.56
10,194.0	10,171.4	Z (L4.3: SBSC)		-0.13	359.56
10,613.0	10,578.3	Z (L4.1: SBSG)		-0.13	359.56

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
1,200.0	1,200.0	0.0	0.0	Start Build 1.00
2,000.0	1,997.4	-29.7	47.2	Start 1878.9 hold at 2000.0 MD
3,878.9	3,858.0	-169.2	268.3	Start Drop -1.50
4,412.2	4,389.6	-189.1	299.8	Start 5911.9 hold at 4412.2 MD
10,324.1	10,301.5	-189.1	299.8	Start Build 10.00
11,225.4	10,874.5	385.2	295.4	Start 61.7 hold at 11225.4 MD
11,287.1	10,874.3	446.8	294.9	Start 9807.0 hold at 11287.1 MD
21,094.0	10,851.5	10,253.5	219.8	TD at 21094.0

Matador Production Company

Antelope Ridge

Nina Cortell

Nina Cortell Fed Com #126H

Wellbore #1

BLM Plan #1

Anticollision Report

08 November, 2021

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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
Depth Range:	Unlimited
Results Limited by:	Maximum center-center distance of 10,000.0 us
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program		Date	11/8/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	21,094.0	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 #	624.9	625.0	29.5	25.5	7.350	CC, ES
Nina Cortell Fed Com #111H - Wellbore #1 - BLM Plan #	700.0	699.5	30.7	26.1	6.742	SF
Nina Cortell Fed Com #112H - Wellbore #1 - BLM Plan #	1,801.5	1,800.4	16.8	4.5	1.368	Level 3, CC, ES
Nina Cortell Fed Com #112H - Wellbore #1 - BLM Plan #	1,900.0	1,898.7	17.7	4.7	1.361	Level 3, SF
Nina Cortell Fed Com #113H - Wellbore #1 - BLM Plan #	9,907.6	9,986.6	1,412.0	1,342.2	20.213	CC
Nina Cortell Fed Com #113H - Wellbore #1 - BLM Plan #	21,094.0	20,283.6	1,573.4	1,268.4	5.158	ES, SF
Nina Cortell Fed Com #114H - Wellbore #1 - BLM Plan #	2,510.5	2,228.1	2,406.5	2,390.2	147.820	CC
Nina Cortell Fed Com #114H - Wellbore #1 - BLM Plan #	2,600.0	2,309.8	2,407.0	2,390.1	142.543	ES
Nina Cortell Fed Com #114H - Wellbore #1 - BLM Plan #	21,094.0	20,281.1	2,778.9	2,443.2	8.279	SF
Nina Cortell Fed Com #121H - Wellbore #1 - Actual Surv	16,514.1	10,375.6	1,532.8	1,413.9	12.896	CC
Nina Cortell Fed Com #121H - Wellbore #1 - Actual Surv	20,700.0	14,536.5	1,580.9	1,360.5	7.172	ES
Nina Cortell Fed Com #121H - Wellbore #1 - Actual Surv	21,094.0	14,853.8	1,597.9	1,369.1	6.984	SF
Nina Cortell Fed Com #125H - Wellbore #1 - BLM Plan #	1,200.0	1,201.0	221.9	213.8	27.240	CC, ES
Nina Cortell Fed Com #125H - Wellbore #1 - BLM Plan #	21,094.0	21,087.2	1,322.6	974.4	3.798	SF
Nina Cortell Fed Com #127H - Wellbore #1 - BLM Plan #	21,094.0	21,119.5	1,322.1	973.5	3.792	CC, ES, SF
Nina Cortell Fed Com #128H - Wellbore #1 - BLM Plan #	3,030.7	2,762.4	2,268.1	2,248.0	112.742	CC
Nina Cortell Fed Com #128H - Wellbore #1 - BLM Plan #	3,878.9	3,602.1	2,272.7	2,246.3	86.208	ES
Nina Cortell Fed Com #128H - Wellbore #1 - BLM Plan #	21,094.0	21,197.1	2,643.4	2,295.5	7.598	SF
Nina Cortell Fed Com #131H - Wellbore #1 - BLM Plan #	1,200.0	1,200.0	192.4	184.2	23.626	CC, ES
Nina Cortell Fed Com #131H - Wellbore #1 - BLM Plan #	21,091.0	22,172.2	1,415.4	1,144.3	5.220	SF
Nina Cortell Fed Com #132H - Wellbore #1 - BLM Plan #	5,074.4	5,082.5	83.9	46.3	2.232	CC
Nina Cortell Fed Com #132H - Wellbore #1 - BLM Plan #	5,100.0	5,107.8	84.0	46.2	2.221	ES, SF
Nina Cortell Fed Com #133H - Wellbore #1 - BLM Plan #	10,402.2	10,402.9	1,653.1	1,580.1	22.644	CC
Nina Cortell Fed Com #133H - Wellbore #1 - BLM Plan #	10,500.0	10,501.8	1,653.2	1,579.6	22.442	ES
Nina Cortell Fed Com #133H - Wellbore #1 - BLM Plan #	21,094.0	22,173.5	1,954.7	1,646.5	6.341	SF
Nina Cortell Fed Com #134H - Wellbore #1 - BLM Plan #	2,928.7	2,674.6	2,163.9	2,144.5	111.257	CC
Nina Cortell Fed Com #134H - Wellbore #1 - BLM Plan #	3,000.0	2,726.8	2,164.2	2,144.3	108.820	ES
Nina Cortell Fed Com #134H - Wellbore #1 - BLM Plan #	21,094.0	22,225.5	3,154.8	2,822.8	9.501	SF
Nina Cortell Fed Com #201H - Wellbore #1 - Actual Surv	15,935.6	10,867.5	1,599.8	1,469.3	12.261	CC, ES
Nina Cortell Fed Com #201H - Wellbore #1 - Actual Surv	21,094.0	16,858.2	2,106.6	1,887.2	9.605	SF
Nina Cortell Fed Com #202H - Wellbore #1 - BLM Plan #	1,733.0	1,747.2	181.3	169.5	15.355	CC
Nina Cortell Fed Com #202H - Wellbore #1 - BLM Plan #	1,800.0	1,815.0	181.5	169.2	14.763	ES
Nina Cortell Fed Com #202H - Wellbore #1 - BLM Plan #	10,500.0	10,509.9	325.3	251.5	4.409	SF
Nina Cortell Fed Com #203H - Wellbore #1 - BLM Plan #	10,386.0	10,428.1	998.0	924.4	13.554	CC
Nina Cortell Fed Com #203H - Wellbore #1 - BLM Plan #	10,500.0	10,539.4	998.3	923.9	13.418	ES
Nina Cortell Fed Com #203H - Wellbore #1 - BLM Plan #	21,094.0	22,398.2	1,582.2	1,325.0	6.152	SF
Nina Cortell Fed Com #204H - Wellbore #1 - BLM Plan #	3,521.0	3,274.9	2,072.3	2,048.4	87.032	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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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 #204H - Wellbore #1 - BLM Plan #	3,900.0	3,646.4	2,073.6	2,047.1	78.052	ES
Nina Cortell Fed Com #204H - Wellbore #1 - BLM Plan #	21,094.0	22,369.9	2,624.2	2,307.3	8.281	SF
Nina Cortell Fed Com #211H - Wellbore #1 - BLM Plan #	1,200.0	1,201.0	114.0	105.8	13.988	CC, ES
Nina Cortell Fed Com #211H - Wellbore #1 - BLM Plan #	1,600.0	1,598.7	128.1	117.2	11.732	SF
Nina Cortell Fed Com #221H - Wellbore #1 - BLM Plan #	1,200.0	1,200.0	85.3	77.1	10.473	CC, ES
Nina Cortell Fed Com #221H - Wellbore #1 - BLM Plan #	21,089.0	22,787.3	1,835.4	1,601.2	7.835	SF
Nina Cortell Fed Com #223H - Wellbore #1 - BLM Plan #	2,166.4	2,174.7	45.5	30.7	3.070	CC
Nina Cortell Fed Com #222H - Wellbore #1 - BLM Plan #	2,300.0	2,308.1	45.9	30.1	2.908	ES
Nina Cortell Fed Com #222H - Wellbore #1 - BLM Plan #	2,700.0	2,707.7	51.9	33.1	2.758	SF
Nina Cortell Fed Com #223H - Wellbore #1 - BLM Plan #	10,396.3	10,405.1	1,753.1	1,680.1	24.018	CC
Nina Cortell Fed Com #223H - Wellbore #1 - BLM Plan #	10,500.0	10,504.0	1,753.3	1,679.6	23.797	ES
Nina Cortell Fed Com #223H - Wellbore #1 - BLM Plan #	21,094.0	22,784.2	2,268.9	1,989.7	8.125	SF
Nina Cortell Fed Com #224H - Wellbore #1 - BLM Plan #	2,937.9	2,674.4	2,243.3	2,223.8	115.139	CC
Nina Cortell Fed Com #224H - Wellbore #1 - BLM Plan #	3,000.0	2,719.5	2,243.5	2,223.7	112.946	ES
Nina Cortell Fed Com #224H - Wellbore #1 - BLM Plan #	21,094.0	22,841.9	3,355.3	3,038.0	10.575	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)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	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	0.0	0.0	0.0	0.0	-0.30	30.0	-0.2	30.0					
100.0	100.0	100.0	100.0	0.1	0.1	-0.30	30.0	-0.2	30.0	29.7	0.26	116.962		
200.0	200.0	200.0	200.0	0.5	0.5	-0.30	30.0	-0.2	30.0	29.0	0.97	30.802		
300.0	300.0	300.0	300.0	0.8	0.8	-0.30	30.0	-0.2	30.0	28.3	1.69	17.737		
400.0	400.0	400.0	400.0	1.2	1.2	-0.30	30.0	-0.2	30.0	27.6	2.41	12.454		
500.0	500.0	500.0	500.0	1.6	1.6	-0.30	30.0	-0.2	30.0	26.9	3.12	9.596		
600.0	600.0	600.2	600.1	1.9	1.9	-7.00	29.3	-3.6	29.5	25.7	3.83	7.707		
624.9	624.9	625.0	624.9	2.0	2.0	-10.78	29.0	-5.5	29.5	25.5	4.01	7.350	CC, ES	
700.0	700.0	699.5	698.8	2.3	2.3	-26.71	27.4	-13.8	30.7	26.1	4.55	6.742	SF	
800.0	800.0	801.9	796.3	2.6	2.7	-49.48	24.5	-28.7	38.0	32.6	5.31	7.146		
900.0	900.0	896.9	893.8	3.0	3.0	-63.74	21.7	-43.9	49.3	43.3	6.02	8.195		
1,000.0	1,000.0	1,004.4	991.4	3.4	3.5	-72.38	18.8	-59.1	62.6	55.8	6.76	9.256		
1,100.0	1,100.0	1,105.6	1,088.9	3.7	3.9	-77.93	15.9	-74.2	76.7	69.3	7.47	10.265		
1,200.0	1,200.0	1,206.8	1,186.5	4.1	4.3	-81.74	13.0	-89.4	91.4	83.2	8.19	11.156		
1,300.0	1,300.0	1,308.2	1,283.9	4.4	4.7	153.41	10.1	-104.6	107.1	98.2	8.90	12.035		
1,400.0	1,400.0	1,409.7	1,381.1	4.8	5.2	151.83	7.2	-119.7	124.4	114.8	9.60	12.967		
1,500.0	1,499.9	1,488.4	1,478.1	5.1	5.5	150.95	4.3	-134.8	143.4	133.1	10.22	14.032		
1,600.0	1,599.7	1,586.3	1,574.8	5.4	5.9	150.56	1.5	-149.8	163.8	152.9	10.91	15.010		
1,700.0	1,699.4	1,683.9	1,671.2	5.8	6.4	150.49	-1.4	-164.8	185.7	174.1	11.61	15.993		
1,800.0	1,798.9	1,781.1	1,767.2	6.1	6.8	150.65	-4.2	-179.8	209.1	196.8	12.31	16.981		
1,900.0	1,898.3	1,877.9	1,862.8	6.5	7.2	150.96	-7.1	-194.7	234.0	221.0	13.02	17.973		
2,000.0	1,997.4	1,974.4	1,958.1	6.9	7.6	151.37	-9.9	-209.5	260.4	246.7	13.73	18.968		
2,100.0	2,096.4	2,070.6	2,053.1	7.2	8.0	151.89	-12.7	-224.3	287.5	273.1	14.44	19.917		
2,200.0	2,195.5	2,166.8	2,148.1	7.6	8.4	152.33	-15.5	-239.0	314.7	299.5	15.15	20.775		
2,300.0	2,294.5	2,263.0	2,243.2	8.0	8.9	152.70	-18.3	-253.8	341.9	326.0	15.86	21.555		
2,400.0	2,393.5	2,359.2	2,338.2	8.4	9.3	153.01	-21.1	-268.6	369.1	352.5	16.58	22.264		
2,500.0	2,492.5	2,455.4	2,433.2	8.8	9.7	153.28	-24.0	-283.4	396.2	379.0	17.29	22.913		
2,600.0	2,591.6	2,551.7	2,528.2	9.2	10.1	153.51	-26.8	-298.2	423.4	405.4	18.01	23.508		

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
2,700.0	2,690.6	2,647.9	2,623.3	9.6	10.5	153.72	-29.6	-313.0	450.7	431.9	18.73	24.056	
2,800.0	2,789.6	2,744.1	2,718.3	10.0	11.0	153.91	-32.4	-327.8	477.9	458.4	19.46	24.561	
2,900.0	2,888.6	2,840.3	2,813.3	10.4	11.4	154.07	-35.2	-342.5	505.1	484.9	20.18	25.029	
3,000.0	2,987.7	2,936.5	2,908.4	10.8	11.8	154.22	-38.0	-357.3	532.3	511.4	20.90	25.464	
3,100.0	3,086.7	3,032.7	3,003.4	11.2	12.2	154.35	-40.8	-372.1	559.5	537.9	21.63	25.868	
3,200.0	3,185.7	3,129.0	3,098.4	11.6	12.6	154.47	-43.7	-386.9	586.7	564.4	22.36	26.245	
3,300.0	3,284.8	3,225.2	3,193.5	12.0	13.1	154.58	-46.5	-401.7	614.0	590.9	23.08	26.598	
3,400.0	3,383.8	3,321.4	3,288.5	12.4	13.5	154.68	-49.3	-416.5	641.2	617.4	23.81	26.928	
3,500.0	3,482.8	3,417.6	3,383.5	12.8	13.9	154.77	-52.1	-431.3	668.4	643.9	24.54	27.238	
3,600.0	3,581.8	3,513.8	3,478.6	13.2	14.3	154.86	-54.9	-446.0	695.7	670.4	25.27	27.529	
3,700.0	3,680.9	3,610.0	3,573.6	13.7	14.8	154.93	-57.7	-460.8	722.9	696.9	26.00	27.804	
3,800.0	3,779.9	3,706.3	3,668.6	14.1	15.2	155.01	-60.6	-475.6	750.1	723.4	26.73	28.063	
3,878.9	3,858.0	3,782.2	3,743.6	14.4	15.5	155.06	-62.8	-487.3	771.6	744.3	27.31	28.257	
3,900.0	3,878.9	3,802.5	3,763.7	14.5	15.6	155.11	-63.4	-490.4	777.3	749.9	27.46	28.306	
4,000.0	3,978.2	3,900.9	3,859.1	14.9	16.0	155.28	-66.2	-505.3	802.9	774.7	28.20	28.475	
4,100.0	4,077.7	4,003.6	3,955.2	15.3	16.5	155.36	-69.0	-520.2	826.2	797.3	28.95	28.544	
4,200.0	4,177.5	4,105.9	4,051.7	15.6	16.9	155.35	-71.9	-535.2	847.2	817.5	29.69	28.537	
4,300.0	4,277.4	4,207.7	4,148.7	16.0	17.4	155.26	-74.8	-550.3	865.9	835.4	30.42	28.460	
4,400.0	4,377.4	4,290.9	4,246.1	16.3	17.7	155.08	-77.7	-565.5	882.2	851.1	31.08	28.381	
4,412.2	4,389.6	4,303.0	4,258.0	16.4	17.8	-82.70	-78.0	-567.3	884.0	852.9	31.17	28.362	
4,500.0	4,477.4	4,389.7	4,343.6	16.7	18.2	-82.97	-80.5	-580.6	897.1	865.3	31.79	28.222	
4,600.0	4,577.4	4,488.4	4,441.2	17.0	18.6	-83.27	-83.4	-595.8	912.0	879.5	32.49	28.070	
4,700.0	4,677.4	4,587.2	4,538.7	17.3	19.0	-83.56	-86.3	-611.0	927.0	893.8	33.20	27.924	
4,800.0	4,777.4	4,686.0	4,636.3	17.6	19.5	-83.84	-89.2	-626.2	942.0	908.0	33.90	27.784	
4,900.0	4,877.4	4,784.7	4,733.8	18.0	19.9	-84.12	-92.1	-641.4	956.9	922.3	34.61	27.650	
5,000.0	4,977.4	4,883.5	4,831.4	18.3	20.3	-84.38	-95.0	-656.5	972.0	936.6	35.32	27.522	
5,100.0	5,077.4	4,982.3	4,928.9	18.6	20.8	-84.64	-97.9	-671.7	987.0	951.0	36.02	27.398	
5,200.0	5,177.4	5,081.0	5,026.5	19.0	21.2	-84.89	-100.8	-686.9	1,002.0	965.3	36.73	27.280	
5,300.0	5,277.4	5,179.8	5,124.0	19.3	21.6	-85.13	-103.7	-702.1	1,017.1	979.7	37.44	27.166	
5,400.0	5,377.4	5,278.6	5,221.6	19.6	22.1	-85.36	-106.6	-717.2	1,032.2	994.0	38.15	27.056	
5,500.0	5,477.4	5,377.3	5,319.1	20.0	22.5	-85.59	-109.4	-732.4	1,047.3	1,008.4	38.86	26.951	
5,600.0	5,577.4	5,476.1	5,416.7	20.3	22.9	-85.81	-112.3	-747.6	1,062.4	1,022.8	39.57	26.849	
5,700.0	5,677.4	5,574.9	5,514.3	20.6	23.4	-86.02	-115.2	-762.8	1,077.5	1,037.3	40.28	26.751	
5,800.0	5,777.4	5,673.7	5,611.8	21.0	23.8	-86.23	-118.1	-778.0	1,092.7	1,051.7	40.99	26.656	
5,900.0	5,877.4	5,772.4	5,709.4	21.3	24.2	-86.44	-121.0	-793.1	1,107.8	1,066.1	41.70	26.565	
6,000.0	5,977.4	5,871.2	5,806.9	21.6	24.7	-86.63	-123.9	-808.3	1,123.0	1,080.6	42.42	26.477	
6,100.0	6,077.4	5,970.0	5,904.5	22.0	25.1	-86.83	-126.8	-823.5	1,138.2	1,095.1	43.13	26.392	
6,200.0	6,177.4	6,068.7	6,002.0	22.3	25.5	-87.01	-129.7	-838.7	1,153.4	1,109.6	43.84	26.309	
6,300.0	6,277.4	6,167.5	6,099.6	22.6	26.0	-87.20	-132.6	-853.8	1,168.6	1,124.1	44.55	26.230	
6,400.0	6,377.4	6,266.3	6,197.1	23.0	26.4	-87.37	-135.5	-869.0	1,183.8	1,138.6	45.27	26.153	
6,500.0	6,477.4	6,365.0	6,294.7	23.3	26.8	-87.55	-138.3	-884.2	1,199.1	1,153.1	45.98	26.078	
6,600.0	6,577.4	6,463.8	6,392.2	23.7	27.3	-87.72	-141.2	-899.4	1,214.3	1,167.6	46.69	26.006	
6,700.0	6,677.4	6,562.6	6,489.8	24.0	27.7	-87.88	-144.1	-914.6	1,229.6	1,182.2	47.41	25.936	
6,800.0	6,777.4	6,661.3	6,587.3	24.3	28.2	-88.04	-147.0	-929.7	1,244.8	1,196.7	48.12	25.868	
6,900.0	6,877.4	6,760.1	6,684.9	24.7	28.6	-88.20	-149.9	-944.9	1,260.1	1,211.3	48.84	25.802	
7,000.0	6,977.4	6,858.9	6,782.4	25.0	29.0	-88.35	-152.8	-960.1	1,275.4	1,225.8	49.55	25.738	
7,100.0	7,077.4	6,957.6	6,880.0	25.4	29.5	-88.50	-155.7	-975.3	1,290.7	1,240.4	50.27	25.676	
7,200.0	7,177.4	7,056.4	6,977.5	25.7	29.9	-88.65	-158.6	-990.5	1,306.0	1,255.0	50.98	25.615	
7,300.0	7,277.4	7,155.2	7,075.1	26.1	30.3	-88.79	-161.5	-1,005.6	1,321.3	1,269.6	51.70	25.557	
7,400.0	7,377.4	7,254.0	7,172.6	26.4	30.8	-88.93	-164.4	-1,020.8	1,336.6	1,284.2	52.42	25.500	
7,500.0	7,477.4	7,352.7	7,270.2	26.8	31.2	-89.06	-167.2	-1,036.0	1,351.9	1,298.8	53.13	25.444	
7,600.0	7,577.4	7,451.5	7,367.8	27.1	31.6	-89.20	-170.1	-1,051.2	1,367.2	1,313.4	53.85	25.390	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
7,700.0	7,677.4	7,550.3	7,465.3	27.4	32.1	-89.33	-173.0	-1,066.3	1,382.6	1,328.0	54.57	25.338	
7,800.0	7,777.4	7,649.0	7,562.9	27.8	32.5	-89.45	-175.9	-1,081.5	1,397.9	1,342.6	55.28	25.286	
7,900.0	7,877.4	7,747.8	7,660.4	28.1	32.9	-89.58	-178.8	-1,096.7	1,413.3	1,357.3	56.00	25.237	
8,000.0	7,977.4	7,846.6	7,758.0	28.5	33.4	-89.70	-181.7	-1,111.9	1,428.6	1,371.9	56.72	25.188	
8,100.0	8,077.4	7,945.3	7,855.5	28.8	33.8	-89.82	-184.6	-1,127.1	1,444.0	1,386.6	57.44	25.141	
8,200.0	8,177.4	8,044.1	7,953.1	29.2	34.2	-89.94	-187.5	-1,142.2	1,459.4	1,401.2	58.15	25.095	
8,300.0	8,277.4	8,142.9	8,050.6	29.5	34.7	-90.05	-190.4	-1,157.4	1,474.7	1,415.9	58.87	25.050	
8,400.0	8,377.4	8,241.6	8,148.2	29.9	35.1	-90.16	-193.3	-1,172.6	1,490.1	1,430.5	59.59	25.006	
8,500.0	8,477.4	8,340.4	8,245.7	30.2	35.5	-90.27	-196.1	-1,187.8	1,505.5	1,445.2	60.31	24.963	
8,600.0	8,577.4	8,439.2	8,343.3	30.6	36.0	-90.38	-199.0	-1,202.9	1,520.9	1,459.9	61.03	24.921	
8,700.0	8,677.4	8,538.0	8,440.8	30.9	36.4	-90.49	-201.9	-1,218.1	1,536.3	1,474.5	61.75	24.881	
8,800.0	8,777.4	8,636.7	8,538.7	31.3	37.7	-90.70	-208.1	-1,250.5	1,550.3	1,486.8	63.51	24.413	
8,900.0	8,877.4	8,735.7	8,637.4	31.6	38.0	-90.70	-208.1	-1,250.5	1,550.3	1,486.2	64.18	24.158	
9,000.0	8,977.4	8,834.7	8,737.4	32.0	38.3	-90.70	-208.1	-1,250.5	1,550.3	1,485.5	64.85	23.907	
9,100.0	9,077.4	8,933.7	8,837.4	32.3	38.6	-90.70	-208.1	-1,250.5	1,550.3	1,484.8	65.52	23.661	
9,200.0	9,177.4	9,032.7	8,937.4	32.7	38.8	-90.70	-208.1	-1,250.5	1,550.3	1,484.2	66.20	23.420	
9,300.0	9,277.4	9,131.7	9,037.4	33.0	39.1	-90.70	-208.1	-1,250.5	1,550.3	1,483.5	66.87	23.184	
9,400.0	9,377.4	9,230.7	9,137.4	33.4	39.4	-90.70	-208.1	-1,250.5	1,550.3	1,482.8	67.55	22.952	
9,401.4	9,378.8	9,231.1	9,138.8	33.4	39.4	-90.70	-208.1	-1,250.5	1,550.3	1,482.8	67.56	22.949	
9,500.0	9,477.4	9,330.7	9,237.4	33.7	39.7	-90.68	-207.6	-1,250.5	1,550.4	1,482.2	68.21	22.729	
9,600.0	9,577.4	9,429.7	9,337.4	34.1	39.9	-90.40	-199.9	-1,251.6	1,551.8	1,482.9	68.85	22.540	
9,700.0	9,677.4	9,528.7	9,437.4	34.4	40.1	-89.81	-183.9	-1,253.8	1,555.0	1,485.5	69.45	22.392	
9,800.0	9,777.4	9,627.7	9,537.4	34.8	40.3	-88.99	-161.6	-1,256.9	1,560.4	1,490.4	69.99	22.293	
9,900.0	9,877.4	9,726.7	9,637.4	35.1	40.4	-88.02	-135.2	-1,260.6	1,568.5	1,498.0	70.47	22.258	
10,000.0	9,977.4	9,825.7	9,737.4	35.5	40.5	-87.00	-107.1	-1,264.5	1,579.8	1,508.9	70.84	22.300	
10,100.0	10,077.4	9,924.7	9,837.4	35.8	40.6	-85.98	-78.8	-1,268.4	1,594.6	1,523.5	71.09	22.431	
10,200.0	10,177.4	10,023.7	9,937.4	36.2	40.7	-84.99	-51.3	-1,272.2	1,613.4	1,542.2	71.19	22.663	
10,300.0	10,277.4	10,122.7	10,037.4	36.5	40.8	-84.07	-25.4	-1,275.8	1,636.3	1,565.2	71.14	23.002	
10,324.1	10,301.5	10,226.4	10,141.5	36.6	40.8	-83.86	-19.5	-1,276.6	1,642.5	1,571.4	71.10	23.100	
10,350.0	10,327.4	10,303.5	10,278.3	36.7	40.8	-82.49	-13.0	-1,277.5	1,649.3	1,578.3	71.05	23.212	
10,400.0	10,377.2	10,353.0	10,328.9	36.9	40.8	-80.74	-1.8	-1,279.1	1,662.9	1,592.0	70.92	23.449	
10,450.0	10,426.4	10,403.9	10,378.3	37.0	40.8	-78.87	13.6	-1,281.2	1,676.8	1,606.0	70.79	23.688	
10,500.0	10,474.6	10,452.1	10,427.7	37.2	40.9	-77.07	27.8	-1,283.2	1,690.9	1,620.2	70.62	23.945	
10,550.0	10,521.6	10,500.0	10,475.6	37.3	40.9	-75.41	37.7	-1,284.6	1,704.9	1,634.6	70.37	24.228	
10,600.0	10,566.8	10,545.3	10,520.9	37.5	40.9	-73.61	58.0	-1,287.4	1,718.8	1,648.6	70.22	24.476	
10,650.0	10,610.1	10,588.7	10,564.3	37.6	41.0	-71.89	79.7	-1,290.4	1,732.4	1,662.3	70.08	24.719	
10,700.0	10,651.0	10,630.0	10,605.6	37.7	41.0	-70.60	79.7	-1,290.4	1,745.6	1,675.9	69.71	25.043	
10,750.0	10,689.2	10,668.2	10,643.8	37.8	41.0	-69.04	107.0	-1,294.2	1,758.1	1,688.5	69.63	25.249	
10,800.0	10,724.5	10,703.5	10,679.1	37.9	41.0	-67.73	123.8	-1,296.5	1,770.0	1,700.6	69.46	25.481	
10,850.0	10,756.6	10,735.6	10,711.2	37.9	41.1	-66.55	141.8	-1,299.0	1,781.1	1,711.8	69.33	25.690	
10,900.0	10,785.2	10,764.2	10,739.8	38.0	41.1	-65.44	169.7	-1,302.9	1,791.5	1,722.1	69.32	25.845	
10,950.0	10,810.1	10,789.1	10,764.7	38.0	41.1	-64.59	169.7	-1,302.9	1,800.7	1,731.6	69.09	26.062	
11,000.0	10,831.2	10,810.2	10,785.8	38.1	41.2	-63.78	196.3	-1,306.6	1,808.9	1,739.8	69.15	26.158	
11,050.0	10,848.2	10,827.2	10,802.8	38.3	41.2	-63.13	217.1	-1,309.4	1,816.1	1,746.9	69.21	26.240	
11,100.0	10,861.1	10,840.1	10,815.7	38.4	41.2	-62.61	233.8	-1,311.8	1,822.1	1,752.8	69.29	26.296	
11,150.0	10,869.7	10,848.7	10,824.3	38.5	41.3	-62.28	265.5	-1,316.2	1,827.1	1,757.5	69.53	26.279	
11,200.0	10,874.0	10,853.0	10,829.6	38.7	41.3	-61.96	265.5	-1,316.2	1,830.6	1,761.0	69.63	26.292	
11,225.4	10,874.5	10,853.5	10,829.1	38.8	41.3	-61.93	281.6	-1,318.4	1,832.0	1,762.2	69.80	26.248	
11,287.1	10,874.3	10,853.3	10,828.9	39.0	41.4	-62.09	314.6	-1,323.0	1,835.7	1,765.5	70.19	26.151	
11,300.0	10,874.3	10,853.3	10,828.9	39.0	41.4	-62.09	314.6	-1,323.0	1,836.6	1,766.3	70.25	26.144	
11,400.0	10,874.1	10,853.1	10,828.7	39.4	41.5	-62.23	360.1	-1,329.3	1,845.6	1,774.7	70.90	26.032	
11,500.0	10,873.8	10,852.8	10,828.4	39.8	42.0	-62.48	530.2	-1,347.7	1,854.9	1,782.9	72.06	25.743	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
11,600.0	10,873.6	10,834.6	10,018.5	40.3	42.8	-62.59	747.5	-1,356.5	1,857.6	1,784.1	73.48	25.281	
11,700.0	10,873.4	10,934.6	10,018.4	40.9	43.3	-62.59	847.5	-1,357.2	1,857.4	1,782.9	74.58	24.905	
11,800.0	10,873.2	11,034.6	10,018.3	41.5	43.8	-62.59	947.5	-1,357.9	1,857.3	1,781.5	75.79	24.507	
11,900.0	10,872.9	11,134.6	10,018.1	42.2	44.4	-62.60	1,047.5	-1,358.6	1,857.2	1,780.1	77.09	24.090	
12,000.0	10,872.7	11,234.6	10,018.0	42.9	45.1	-62.60	1,147.5	-1,359.2	1,857.1	1,778.6	78.50	23.658	
12,100.0	10,872.5	11,334.6	10,017.9	43.7	45.8	-62.60	1,247.5	-1,359.9	1,856.9	1,776.9	79.99	23.215	
12,200.0	10,872.2	11,434.6	10,017.8	44.6	46.5	-62.60	1,347.5	-1,360.6	1,856.8	1,775.2	81.57	22.765	
12,300.0	10,872.0	11,534.6	10,017.7	45.4	47.3	-62.60	1,447.5	-1,361.3	1,856.7	1,773.5	83.22	22.310	
12,400.0	10,871.8	11,634.6	10,017.5	46.3	48.2	-62.60	1,547.5	-1,361.9	1,856.5	1,771.6	84.96	21.853	
12,500.0	10,871.6	11,734.6	10,017.4	47.3	49.1	-62.61	1,647.5	-1,362.6	1,856.4	1,769.7	86.76	21.397	
12,600.0	10,871.3	11,834.6	10,017.3	48.3	50.1	-62.61	1,747.5	-1,363.3	1,856.3	1,767.7	88.63	20.943	
12,700.0	10,871.1	11,934.6	10,017.2	49.3	51.0	-62.61	1,847.5	-1,364.0	1,856.2	1,765.6	90.57	20.494	
12,800.0	10,870.9	12,034.6	10,017.1	50.4	52.1	-62.61	1,947.5	-1,364.7	1,856.0	1,763.5	92.56	20.052	
12,900.0	10,870.7	12,134.6	10,017.0	51.5	53.1	-62.61	2,047.5	-1,365.3	1,855.9	1,761.3	94.61	19.616	
13,000.0	10,870.4	12,234.6	10,016.8	52.6	54.2	-62.62	2,147.5	-1,366.0	1,855.8	1,759.1	96.71	19.189	
13,100.0	10,870.2	12,334.6	10,016.7	53.8	55.3	-62.62	2,247.5	-1,366.7	1,855.6	1,756.8	98.86	18.770	
13,200.0	10,870.0	12,434.6	10,016.6	54.9	56.5	-62.62	2,347.5	-1,367.4	1,855.5	1,754.5	101.05	18.361	
13,300.0	10,869.7	12,534.6	10,016.5	56.1	57.6	-62.62	2,447.5	-1,368.1	1,855.4	1,752.1	103.29	17.963	
13,400.0	10,869.5	12,634.6	10,016.4	57.4	58.8	-62.62	2,547.5	-1,368.7	1,855.3	1,749.7	105.57	17.574	
13,500.0	10,869.3	12,734.6	10,016.2	58.6	60.0	-62.62	2,647.5	-1,369.4	1,855.1	1,747.3	107.88	17.196	
13,600.0	10,869.1	12,834.6	10,016.1	59.9	61.3	-62.63	2,747.5	-1,370.1	1,855.0	1,744.8	110.23	16.829	
13,700.0	10,868.8	12,934.6	10,016.0	61.1	62.5	-62.63	2,847.5	-1,370.8	1,854.9	1,742.3	112.61	16.472	
13,800.0	10,868.6	13,034.6	10,015.9	62.4	63.8	-62.63	2,947.5	-1,371.5	1,854.7	1,739.7	115.02	16.125	
13,900.0	10,868.4	13,134.6	10,015.8	63.8	65.1	-62.63	3,047.5	-1,372.1	1,854.6	1,737.2	117.46	15.789	
14,000.0	10,868.2	13,234.6	10,015.6	65.1	66.4	-62.63	3,147.5	-1,372.8	1,854.5	1,734.6	119.93	15.463	
14,100.0	10,867.9	13,334.6	10,015.5	66.4	67.7	-62.63	3,247.5	-1,373.5	1,854.4	1,731.9	122.42	15.147	
14,200.0	10,867.7	13,434.6	10,015.4	67.8	69.1	-62.64	3,347.5	-1,374.2	1,854.2	1,729.3	124.94	14.841	
14,300.0	10,867.5	13,534.6	10,015.3	69.2	70.4	-62.64	3,447.5	-1,374.9	1,854.1	1,726.6	127.48	14.545	
14,400.0	10,867.3	13,634.6	10,015.2	70.6	71.8	-62.64	3,547.4	-1,375.5	1,854.0	1,723.9	130.04	14.257	
14,500.0	10,867.0	13,734.6	10,015.1	72.0	73.1	-62.64	3,647.4	-1,376.2	1,853.9	1,721.2	132.62	13.979	
14,600.0	10,866.8	13,834.6	10,014.9	73.4	74.5	-62.64	3,747.4	-1,376.9	1,853.7	1,718.5	135.22	13.709	
14,700.0	10,866.6	13,934.6	10,014.8	74.8	75.9	-62.64	3,847.4	-1,377.6	1,853.6	1,715.8	137.83	13.448	
14,800.0	10,866.3	14,034.6	10,014.7	76.2	77.3	-62.65	3,947.4	-1,378.3	1,853.5	1,713.0	140.47	13.195	
14,900.0	10,866.1	14,134.6	10,014.6	77.7	78.8	-62.65	4,047.4	-1,378.9	1,853.3	1,710.2	143.12	12.950	
15,000.0	10,865.9	14,234.6	10,014.5	79.1	80.2	-62.65	4,147.4	-1,379.6	1,853.2	1,707.4	145.78	12.712	
15,100.0	10,865.7	14,334.6	10,014.3	80.6	81.6	-62.65	4,247.4	-1,380.3	1,853.1	1,704.6	148.46	12.482	
15,200.0	10,865.4	14,434.6	10,014.2	82.0	83.1	-62.65	4,347.4	-1,381.0	1,853.0	1,701.8	151.15	12.259	
15,300.0	10,865.2	14,534.6	10,014.1	83.5	84.5	-62.65	4,447.4	-1,381.7	1,852.8	1,699.0	153.86	12.043	
15,400.0	10,865.0	14,634.6	10,014.0	85.0	86.0	-62.66	4,547.4	-1,382.3	1,852.7	1,696.1	156.57	11.833	
15,500.0	10,864.8	14,734.6	10,013.9	86.4	87.4	-62.66	4,647.4	-1,383.0	1,852.6	1,693.3	159.30	11.629	
15,600.0	10,864.5	14,834.6	10,013.8	87.9	88.9	-62.66	4,747.4	-1,383.7	1,852.4	1,690.4	162.04	11.432	
15,700.0	10,864.3	14,934.6	10,013.6	89.4	90.4	-62.66	4,847.4	-1,384.4	1,852.3	1,687.5	164.79	11.241	
15,800.0	10,864.1	15,034.6	10,013.5	90.9	91.9	-62.66	4,947.4	-1,385.1	1,852.2	1,684.7	167.47	11.059	
15,819.1	10,864.0	15,053.8	10,013.5	91.2	92.2	-62.66	4,966.6	-1,385.2	1,852.2	1,684.2	167.97	11.027	
15,900.0	10,863.8	15,050.3	10,013.5	92.4	92.1	-62.66	4,963.1	-1,385.2	1,854.0	1,684.5	169.49	10.939	
16,000.0	10,863.6	15,050.3	10,013.5	94.0	92.1	-62.66	4,963.1	-1,385.2	1,861.1	1,690.0	171.04	10.881	
16,100.0	10,863.4	15,050.3	10,013.5	95.5	92.1	-62.66	4,963.1	-1,385.2	1,873.5	1,701.3	172.21	10.879	
16,200.0	10,863.2	15,050.3	10,013.5	97.0	92.1	-62.66	4,963.1	-1,385.2	1,891.1	1,718.1	172.98	10.933	
16,300.0	10,862.9	15,050.3	10,013.5	98.5	92.1	-62.66	4,963.1	-1,385.2	1,913.8	1,740.5	173.38	11.038	
16,400.0	10,862.7	15,050.3	10,013.5	100.0	92.1	-62.66	4,963.1	-1,385.2	1,941.4	1,768.0	173.43	11.194	
16,500.0	10,862.5	15,050.3	10,013.5	101.6	92.1	-62.66	4,963.1	-1,385.2	1,973.7	1,800.6	173.16	11.398	
16,600.0	10,862.3	15,050.3	10,013.5	103.1	92.1	-62.66	4,963.1	-1,385.2	2,010.5	1,837.9	172.60	11.648	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
16,700.0	10,862.0	15,050.3	10,013.5	104.7	92.1	-62.66	4,963.1	-1,385.2	2,051.4	1,879.6	171.78	11.942	
16,800.0	10,861.8	15,050.3	10,013.5	106.2	92.1	-62.66	4,963.1	-1,385.2	2,096.4	1,925.6	170.75	12.277	
16,900.0	10,861.6	15,050.3	10,013.5	107.7	92.1	-62.66	4,963.1	-1,385.2	2,145.0	1,975.5	169.54	12.652	
17,000.0	10,861.4	15,050.3	10,013.5	109.3	92.1	-62.66	4,963.1	-1,385.2	2,197.2	2,029.0	168.18	13.065	
17,100.0	10,861.1	15,050.3	10,013.5	110.8	92.1	-62.66	4,963.1	-1,385.2	2,252.5	2,085.8	166.70	13.512	
17,200.0	10,860.9	15,050.3	10,013.5	112.4	92.1	-62.66	4,963.1	-1,385.2	2,310.9	2,145.8	165.14	13.993	
17,300.0	10,860.7	15,050.3	10,013.5	114.0	92.1	-62.66	4,963.1	-1,385.2	2,372.1	2,208.5	163.52	14.506	
17,400.0	10,860.4	15,050.3	10,013.5	115.5	92.1	-62.66	4,963.1	-1,385.2	2,435.8	2,273.9	161.86	15.049	
17,500.0	10,860.2	15,050.3	10,013.5	117.1	92.1	-62.66	4,963.1	-1,385.2	2,501.9	2,341.7	160.18	15.619	
17,600.0	10,860.0	15,050.3	10,013.5	118.7	92.1	-62.66	4,963.1	-1,385.2	2,570.2	2,411.7	158.50	16.216	
17,700.0	10,859.8	15,050.3	10,013.5	120.2	92.1	-62.66	4,963.1	-1,385.2	2,640.5	2,483.7	156.82	16.838	
17,800.0	10,859.5	15,050.3	10,013.5	121.8	92.1	-62.66	4,963.1	-1,385.2	2,712.7	2,557.5	155.16	17.483	
17,900.0	10,859.3	15,050.3	10,013.5	123.4	92.1	-62.66	4,963.1	-1,385.2	2,786.6	2,633.0	153.54	18.149	
18,000.0	10,859.1	15,050.3	10,013.5	124.9	92.1	-62.66	4,963.1	-1,385.2	2,862.1	2,710.1	151.94	18.837	
18,100.0	10,858.9	15,050.3	10,013.5	126.5	92.1	-62.66	4,963.1	-1,385.2	2,939.0	2,788.6	150.38	19.543	
18,200.0	10,858.6	15,050.3	10,013.5	128.1	92.1	-62.66	4,963.1	-1,385.2	3,017.3	2,868.4	148.87	20.268	
18,300.0	10,858.4	15,050.3	10,013.5	129.7	92.1	-62.66	4,963.1	-1,385.2	3,096.9	2,949.5	147.40	21.009	
18,400.0	10,858.2	15,050.3	10,013.5	131.3	92.1	-62.66	4,963.1	-1,385.2	3,177.6	3,031.6	145.98	21.767	
18,500.0	10,857.9	15,050.3	10,013.5	132.9	92.1	-62.66	4,963.1	-1,385.2	3,259.3	3,114.7	144.61	22.539	
18,600.0	10,857.7	15,050.3	10,013.5	134.4	92.1	-62.66	4,963.1	-1,385.2	3,342.1	3,198.8	143.28	23.325	
18,700.0	10,857.5	15,050.3	10,013.5	136.0	92.1	-62.66	4,963.1	-1,385.2	3,425.8	3,283.8	142.01	24.124	
18,800.0	10,857.3	15,050.3	10,013.5	137.6	92.1	-62.66	4,963.1	-1,385.2	3,510.3	3,369.6	140.78	24.936	
18,900.0	10,857.0	15,050.3	10,013.5	139.2	92.1	-62.66	4,963.1	-1,385.2	3,595.7	3,456.1	139.59	25.758	
19,000.0	10,856.8	15,050.3	10,013.5	140.8	92.1	-62.66	4,963.1	-1,385.2	3,681.7	3,543.3	138.45	26.592	
19,100.0	10,856.6	15,050.3	10,013.5	142.4	92.1	-62.66	4,963.1	-1,385.2	3,768.5	3,631.1	137.36	27.435	
19,200.0	10,856.4	15,050.3	10,013.5	144.0	92.1	-62.66	4,963.1	-1,385.2	3,855.9	3,719.6	136.31	28.287	
19,300.0	10,856.1	15,050.3	10,013.5	145.6	92.1	-62.66	4,963.1	-1,385.2	3,943.9	3,808.6	135.30	29.148	
19,400.0	10,855.9	15,050.3	10,013.5	147.2	92.1	-62.66	4,963.1	-1,385.2	4,032.5	3,898.1	134.34	30.018	
19,500.0	10,855.7	15,050.3	10,013.5	148.8	92.1	-62.66	4,963.1	-1,385.2	4,121.6	3,988.1	133.41	30.894	
19,600.0	10,855.5	15,050.3	10,013.5	150.4	92.1	-62.66	4,963.1	-1,385.2	4,211.1	4,078.6	132.52	31.778	
19,700.0	10,855.2	15,050.3	10,013.5	152.0	92.1	-62.66	4,963.1	-1,385.2	4,301.2	4,169.5	131.66	32.668	
19,800.0	10,855.0	15,050.3	10,013.5	153.6	92.1	-62.66	4,963.1	-1,385.2	4,391.6	4,260.8	130.84	33.564	
19,900.0	10,854.8	15,050.3	10,013.5	155.2	92.1	-62.66	4,963.1	-1,385.2	4,482.5	4,352.4	130.06	34.466	
20,000.0	10,854.5	15,050.3	10,013.5	156.8	92.1	-62.66	4,963.1	-1,385.2	4,573.7	4,444.4	129.30	35.373	
20,100.0	10,854.3	15,050.3	10,013.5	158.4	92.1	-62.66	4,963.1	-1,385.2	4,665.4	4,536.8	128.58	36.285	
20,200.0	10,854.1	15,050.3	10,013.5	160.0	92.1	-62.66	4,963.1	-1,385.2	4,757.3	4,629.4	127.88	37.201	
20,300.0	10,853.9	15,050.3	10,013.5	161.7	92.1	-62.66	4,963.1	-1,385.2	4,849.6	4,722.4	127.21	38.121	
20,400.0	10,853.6	15,050.3	10,013.5	163.3	92.1	-62.66	4,963.1	-1,385.2	4,942.1	4,815.6	126.57	39.046	
20,500.0	10,853.4	15,050.3	10,013.5	164.9	92.1	-62.66	4,963.1	-1,385.2	5,035.0	4,909.0	125.96	39.973	
20,600.0	10,853.2	15,050.3	10,013.5	166.5	92.1	-62.66	4,963.1	-1,385.2	5,128.1	5,002.7	125.37	40.904	
20,700.0	10,853.0	15,050.3	10,013.5	168.1	92.1	-62.66	4,963.1	-1,385.2	5,221.5	5,096.7	124.80	41.838	
20,800.0	10,852.7	15,050.3	10,013.5	169.7	92.1	-62.66	4,963.1	-1,385.2	5,315.1	5,190.8	124.26	42.775	
20,900.0	10,852.5	15,050.3	10,013.5	171.3	92.1	-62.66	4,963.1	-1,385.2	5,408.9	5,285.2	123.74	43.714	
21,000.0	10,852.3	15,050.3	10,013.5	172.9	92.1	-62.66	4,963.1	-1,385.2	5,503.0	5,379.8	123.23	44.655	
21,094.0	10,851.5	15,050.3	10,013.5	174.5	92.1	-62.68	4,963.1	-1,385.2	5,591.6	5,468.8	122.79	45.540	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	89.71	0.2	29.9	29.9				
100.0	100.0	100.0	100.0	0.1	0.1	89.71	0.2	29.9	29.9	29.6	0.26	116.576	
200.0	200.0	200.0	200.0	0.5	0.5	89.71	0.2	29.9	29.9	28.9	0.97	30.701	
300.0	300.0	300.0	300.0	0.8	0.8	89.71	0.2	29.9	29.9	28.2	1.69	17.678	
400.0	400.0	400.0	400.0	1.2	1.2	89.71	0.2	29.9	29.9	27.5	2.41	12.413	
500.0	500.0	500.0	500.0	1.6	1.6	89.71	0.2	29.9	29.9	26.8	3.12	9.564	
600.0	600.0	600.0	600.0	1.9	1.9	89.71	0.2	29.9	29.9	26.0	3.84	7.779	
700.0	700.0	700.0	700.0	2.3	2.3	89.71	0.2	29.9	29.9	25.3	4.56	6.555	
800.0	800.0	800.0	800.0	2.6	2.6	89.71	0.2	29.9	29.9	24.6	5.27	5.664	
900.0	900.0	900.0	900.0	3.0	3.0	89.71	0.2	29.9	29.9	23.9	5.99	4.987	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	89.71	0.2	29.9	29.9	23.2	6.71	4.454	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	89.71	0.2	29.9	29.9	22.5	7.43	4.024	
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	89.71	0.2	29.9	29.9	21.7	8.14	3.669	
1,300.0	1,300.0	1,300.0	1,300.0	4.4	4.4	-33.46	0.2	29.9	29.1	20.3	8.85	3.295	
1,400.0	1,400.0	1,400.0	1,400.0	4.8	4.8	-36.53	0.2	29.9	27.0	17.5	9.54	2.831	
1,500.0	1,499.9	1,499.9	1,499.9	5.1	5.1	-42.86	0.2	29.9	23.6	13.4	10.23	2.310	
1,600.0	1,599.7	1,599.4	1,599.4	5.4	5.5	-53.19	-0.2	30.6	20.2	9.3	10.92	1.847	
1,700.0	1,699.4	1,699.1	1,699.1	5.8	5.8	-67.35	-1.4	33.0	17.7	6.1	11.60	1.530	
1,800.0	1,798.9	1,798.9	1,798.7	6.1	6.2	-84.63	-3.4	36.8	16.8	4.5	12.30	1.369 Level 3	
1,801.5	1,800.4	1,800.4	1,800.2	6.1	6.2	-84.90	-3.4	36.9	16.8	4.5	12.31	1.368 Level 3, CC, ES	
1,900.0	1,898.3	1,898.7	1,898.4	6.5	6.5	-102.04	-6.2	42.2	17.7	4.7	13.00	1.361 Level 3, SF	
2,000.0	1,997.4	1,998.7	1,998.0	6.9	6.9	-116.47	-9.7	49.2	20.1	6.4	13.71	1.469 Level 3	
2,100.0	2,096.4	2,098.7	2,097.6	7.2	7.2	-125.37	-14.1	57.7	23.2	8.7	14.41	1.607	
2,200.0	2,195.5	2,198.9	2,197.2	7.6	7.6	-128.96	-19.2	67.8	25.6	10.5	15.12	1.692	
2,300.0	2,294.5	2,299.2	2,296.6	8.0	7.9	-128.96	-25.2	79.4	27.1	11.2	15.85	1.709	
2,400.0	2,393.5	2,400.8	2,395.6	8.4	8.3	-127.44	-31.5	91.8	28.1	11.5	16.60	1.693	
2,500.0	2,492.5	2,500.8	2,494.6	8.8	8.7	-126.04	-37.9	104.2	29.1	11.8	17.36	1.678	
2,600.0	2,591.6	2,600.9	2,593.6	9.2	9.1	-124.73	-44.2	116.6	30.2	12.1	18.13	1.665	
2,700.0	2,690.6	2,700.9	2,692.7	9.6	9.5	-123.51	-50.5	129.0	31.3	12.4	18.90	1.654	
2,800.0	2,789.6	2,800.9	2,791.7	10.0	9.8	-122.37	-56.9	141.4	32.3	12.7	19.68	1.643	
2,900.0	2,888.6	2,900.9	2,890.7	10.4	10.2	-121.30	-63.2	153.8	33.4	13.0	20.46	1.633	
3,000.0	2,987.7	3,000.9	2,989.7	10.8	10.6	-120.30	-69.6	166.1	34.5	13.3	21.25	1.625	
3,100.0	3,086.7	3,100.9	3,088.7	11.2	11.0	-119.37	-75.9	178.5	35.6	13.6	22.04	1.616	
3,200.0	3,185.7	3,200.9	3,187.8	11.6	11.4	-118.49	-82.2	190.9	36.8	13.9	22.84	1.609	
3,300.0	3,284.8	3,300.9	3,286.8	12.0	11.8	-117.66	-88.6	203.3	37.9	14.2	23.64	1.602	
3,400.0	3,383.8	3,400.9	3,385.8	12.4	12.2	-116.88	-94.9	215.7	39.0	14.6	24.45	1.596	
3,500.0	3,482.8	3,500.9	3,484.8	12.8	12.6	-116.15	-101.2	228.1	40.2	14.9	25.25	1.590	
3,600.0	3,581.8	3,600.9	3,583.8	13.2	13.0	-115.45	-107.6	240.5	41.3	15.2	26.06	1.585	
3,700.0	3,680.9	3,700.9	3,682.9	13.7	13.4	-114.80	-113.9	252.9	42.5	15.6	26.88	1.580	
3,800.0	3,779.9	3,799.1	3,781.9	14.1	13.8	-114.17	-120.3	265.3	43.6	15.9	27.69	1.576	
3,878.9	3,858.0	3,877.9	3,860.0	14.4	14.2	-113.71	-125.3	275.0	44.5	16.2	28.33	1.572	
3,900.0	3,878.9	3,901.0	3,880.9	14.5	14.2	-113.52	-126.6	277.6	44.8	16.3	28.51	1.570	
4,000.0	3,978.2	4,001.0	3,979.9	14.9	14.7	-110.80	-132.9	290.0	45.2	15.9	29.36	1.541	
4,100.0	4,077.7	4,101.1	4,078.8	15.3	15.1	-104.97	-139.3	302.4	45.1	14.8	30.24	1.490 Level 3	
4,163.4	4,140.9	4,162.1	4,141.4	15.5	15.3	-99.60	-143.3	310.2	45.0	14.2	30.78	1.460 Level 3	
4,200.0	4,177.5	4,201.3	4,177.6	15.6	15.5	-95.90	-145.6	314.8	45.0	13.9	31.11	1.447 Level 3	
4,300.0	4,277.4	4,301.8	4,276.1	16.0	15.9	-83.85	-151.9	327.1	46.3	14.4	31.86	1.454 Level 3	
4,400.0	4,377.4	4,397.4	4,374.4	16.3	16.3	-70.16	-158.2	339.4	50.3	17.9	32.39	1.554	
4,412.2	4,389.6	4,409.5	4,386.4	16.4	16.3	53.77	-159.0	340.9	51.1	18.6	32.44	1.574	
4,500.0	4,477.4	4,503.6	4,472.5	16.7	16.7	64.62	-164.5	351.7	57.6	24.8	32.82	1.756	
4,600.0	4,577.4	4,595.5	4,570.5	17.0	17.1	74.05	-170.7	363.9	67.1	33.9	33.21	2.020	
4,700.0	4,677.4	4,695.8	4,670.0	17.3	17.5	80.76	-176.7	375.7	77.2	43.5	33.72	2.290	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
4,800.0	4,777.4	4,797.0	4,770.6	17.6	17.9	85.00	-181.6	385.2	86.0	51.7	34.32	2.506	
4,900.0	4,877.4	4,898.7	4,872.0	18.0	18.3	87.65	-185.3	392.4	92.8	57.9	34.94	2.656	
5,000.0	4,977.4	5,000.8	4,974.0	18.3	18.7	89.21	-187.7	397.2	97.5	61.9	35.58	2.739	
5,100.0	5,077.4	5,103.2	5,076.3	18.6	19.0	89.92	-188.9	399.5	99.8	63.5	36.22	2.754	
5,200.0	5,177.4	5,204.3	5,177.4	19.0	19.3	90.00	-189.1	399.8	100.0	63.1	36.88	2.712	
5,300.0	5,277.4	5,304.3	5,277.4	19.3	19.7	90.00	-189.1	399.8	100.0	62.5	37.55	2.664	
5,400.0	5,377.4	5,404.3	5,377.4	19.6	20.0	90.00	-189.1	399.8	100.0	61.8	38.23	2.616	
5,500.0	5,477.4	5,504.3	5,477.4	20.0	20.3	90.00	-189.1	399.8	100.0	61.1	38.90	2.571	
5,600.0	5,577.4	5,604.3	5,577.4	20.3	20.6	90.00	-189.1	399.8	100.0	60.4	39.58	2.527	
5,700.0	5,677.4	5,704.3	5,677.4	20.6	21.0	90.00	-189.1	399.8	100.0	59.8	40.26	2.484	
5,800.0	5,777.4	5,804.3	5,777.4	21.0	21.3	90.00	-189.1	399.8	100.0	59.1	40.94	2.443	
5,900.0	5,877.4	5,904.3	5,877.4	21.3	21.6	90.00	-189.1	399.8	100.0	58.4	41.63	2.403	
6,000.0	5,977.4	6,004.3	5,977.4	21.6	22.0	90.00	-189.1	399.8	100.0	57.7	42.31	2.364	
6,100.0	6,077.4	6,104.3	6,077.4	22.0	22.3	90.00	-189.1	399.8	100.0	57.0	42.99	2.326	
6,200.0	6,177.4	6,204.3	6,177.4	22.3	22.6	90.00	-189.1	399.8	100.0	56.3	43.68	2.290	
6,300.0	6,277.4	6,304.3	6,277.4	22.6	23.0	90.00	-189.1	399.8	100.0	55.7	44.37	2.254	
6,400.0	6,377.4	6,404.3	6,377.4	23.0	23.3	90.00	-189.1	399.8	100.0	55.0	45.05	2.220	
6,500.0	6,477.4	6,504.3	6,477.4	23.3	23.6	90.00	-189.1	399.8	100.0	54.3	45.74	2.187	
6,600.0	6,577.4	6,604.3	6,577.4	23.7	24.0	90.00	-189.1	399.8	100.0	53.6	46.43	2.154	
6,700.0	6,677.4	6,704.3	6,677.4	24.0	24.3	90.00	-189.1	399.8	100.0	52.9	47.12	2.123	
6,800.0	6,777.4	6,804.3	6,777.4	24.3	24.6	90.00	-189.1	399.8	100.0	52.2	47.81	2.092	
6,900.0	6,877.4	6,904.3	6,877.4	24.7	25.0	90.00	-189.1	399.8	100.0	51.5	48.50	2.062	
7,000.0	6,977.4	7,004.3	6,977.4	25.0	25.3	90.00	-189.1	399.8	100.0	50.8	49.20	2.033	
7,100.0	7,077.4	7,104.3	7,077.4	25.4	25.7	90.00	-189.1	399.8	100.0	50.1	49.89	2.005	
7,200.0	7,177.4	7,204.3	7,177.4	25.7	26.0	90.00	-189.1	399.8	100.0	49.4	50.58	1.977	
7,300.0	7,277.4	7,304.3	7,277.4	26.1	26.3	90.00	-189.1	399.8	100.0	48.7	51.28	1.951	
7,400.0	7,377.4	7,404.3	7,377.4	26.4	26.7	90.00	-189.1	399.8	100.0	48.0	51.97	1.924	
7,500.0	7,477.4	7,504.3	7,477.4	26.8	27.0	90.00	-189.1	399.8	100.0	47.4	52.67	1.899	
7,600.0	7,577.4	7,604.3	7,577.4	27.1	27.4	90.00	-189.1	399.8	100.0	46.7	53.36	1.874	
7,700.0	7,677.4	7,704.3	7,677.4	27.4	27.7	90.00	-189.1	399.8	100.0	46.0	54.06	1.850	
7,800.0	7,777.4	7,804.3	7,777.4	27.8	28.0	90.00	-189.1	399.8	100.0	45.3	54.76	1.827	
7,900.0	7,877.4	7,904.3	7,877.4	28.1	28.4	90.00	-189.1	399.8	100.0	44.6	55.46	1.804	
8,000.0	7,977.4	8,004.3	7,977.4	28.5	28.7	90.00	-189.1	399.8	100.0	43.9	56.15	1.781	
8,100.0	8,077.4	8,104.3	8,077.4	28.8	29.1	90.00	-189.1	399.8	100.0	43.2	56.85	1.759	
8,200.0	8,177.4	8,204.3	8,177.4	29.2	29.4	90.00	-189.1	399.8	100.0	42.5	57.55	1.738	
8,300.0	8,277.4	8,304.3	8,277.4	29.5	29.8	90.00	-189.1	399.8	100.0	41.8	58.25	1.717	
8,400.0	8,377.4	8,404.3	8,377.4	29.9	30.1	90.00	-189.1	399.8	100.0	41.1	58.95	1.697	
8,500.0	8,477.4	8,504.3	8,477.4	30.2	30.5	90.00	-189.1	399.8	100.0	40.4	59.65	1.677	
8,600.0	8,577.4	8,604.3	8,577.4	30.6	30.8	90.00	-189.1	399.8	100.0	39.7	60.35	1.657	
8,700.0	8,677.4	8,704.3	8,677.4	30.9	31.1	90.00	-189.1	399.8	100.0	39.0	61.05	1.638	
8,800.0	8,777.4	8,804.3	8,777.4	31.3	31.5	90.00	-189.1	399.8	100.0	38.3	61.76	1.620	
8,900.0	8,877.4	8,904.3	8,877.4	31.6	31.8	90.00	-189.1	399.8	100.0	37.6	62.46	1.601	
9,000.0	8,977.4	9,004.3	8,977.4	32.0	32.2	90.00	-189.1	399.8	100.0	36.9	63.16	1.584	
9,100.0	9,077.4	9,104.3	9,077.4	32.3	32.5	90.00	-189.1	399.8	100.0	36.2	63.86	1.566	
9,200.0	9,177.4	9,204.3	9,177.4	32.7	32.9	90.00	-189.1	399.8	100.0	35.5	64.56	1.549	
9,300.0	9,277.4	9,304.3	9,277.4	33.0	33.2	90.00	-189.1	399.8	100.0	34.8	65.27	1.532	
9,400.0	9,377.4	9,404.3	9,377.4	33.4	33.6	90.00	-189.1	399.8	100.0	34.0	65.97	1.516	
9,500.0	9,477.4	9,504.6	9,477.7	33.7	33.9	89.93	-189.0	399.8	100.0	33.3	66.67	1.500 Level 3	
9,600.0	9,577.4	9,605.6	9,577.9	34.1	34.2	83.61	-178.0	398.2	99.1	31.6	67.47	1.469 Level 3	
9,613.7	9,591.0	9,619.0	9,591.0	34.1	34.3	82.00	-175.3	397.9	99.0	31.4	67.60	1.465 Level 3	
9,700.0	9,677.4	9,700.0	9,668.6	34.4	34.5	68.78	-152.3	394.6	102.1	33.8	68.33	1.495 Level 3	
9,800.0	9,777.4	9,784.0	9,744.6	34.8	34.7	51.36	-117.2	389.7	119.7	52.5	67.23	1.780	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
9,900.0	9,877.4	9,856.2	9,805.4	35.1	34.9	37.37	-78.5	384.3	156.7	93.4	63.30	2.476	
10,000.0	9,977.4	9,917.2	9,852.4	35.5	35.0	27.97	-40.2	378.9	209.9	151.4	58.47	3.590	
10,100.0	10,077.4	9,968.2	9,888.5	35.8	35.1	21.85	-4.4	373.8	274.4	220.3	54.02	5.079	
10,200.0	10,177.4	10,011.0	9,916.1	36.2	35.1	17.77	27.9	369.3	346.6	296.4	50.24	6.900	
10,300.0	10,277.4	10,050.0	9,939.2	36.5	35.2	14.71	59.1	364.9	424.5	377.1	47.42	8.952	
10,324.1	10,301.5	10,050.0	9,939.2	36.6	35.2	14.71	59.1	364.9	444.0	398.0	45.97	9.657	
10,350.0	10,327.4	10,063.0	9,946.3	36.7	35.2	13.44	69.8	363.4	464.7	419.0	45.73	10.162	
10,400.0	10,377.2	10,079.5	9,955.1	36.9	35.2	11.25	83.6	361.5	503.6	459.2	44.35	11.354	
10,450.0	10,426.4	10,100.0	9,965.5	37.0	35.2	9.43	101.2	359.0	540.7	497.5	43.24	12.506	
10,500.0	10,474.6	10,114.2	9,972.2	37.2	35.2	8.22	113.5	357.3	576.0	534.5	41.56	13.861	
10,550.0	10,521.6	10,132.2	9,980.4	37.3	35.3	7.13	129.4	355.0	609.4	569.2	40.14	15.181	
10,600.0	10,566.8	10,150.0	9,987.9	37.5	35.3	6.26	145.4	352.8	640.7	602.0	38.67	16.568	
10,650.0	10,610.1	10,169.3	9,995.6	37.6	35.3	5.52	162.9	350.3	669.9	632.6	37.30	17.962	
10,700.0	10,651.0	10,188.3	10,002.5	37.7	35.3	4.90	180.4	347.9	697.0	661.1	35.91	19.409	
10,750.0	10,689.2	10,200.0	10,006.5	37.8	35.3	4.49	191.3	346.3	721.8	687.7	34.14	21.141	
10,800.0	10,724.5	10,226.9	10,014.7	37.9	35.4	3.93	216.7	342.8	744.2	711.0	33.26	22.377	
10,850.0	10,756.6	10,250.0	10,020.9	37.9	35.4	3.49	238.7	339.7	764.4	732.2	32.20	23.741	
10,900.0	10,785.2	10,266.2	10,024.6	38.0	35.5	3.19	254.3	337.5	782.1	751.2	30.89	25.319	
10,950.0	10,810.1	10,286.0	10,028.6	38.0	35.5	2.89	273.6	334.8	797.3	767.5	29.86	26.698	
11,000.0	10,831.2	10,300.0	10,031.0	38.1	35.6	2.68	287.2	332.9	810.2	781.4	28.80	28.131	
11,050.0	10,848.2	10,326.0	10,034.6	38.3	35.7	2.37	312.7	329.3	820.4	792.1	28.26	29.030	
11,100.0	10,861.1	10,350.0	10,036.9	38.4	35.7	2.11	336.4	325.9	828.2	800.4	27.80	29.790	
11,150.0	10,869.7	10,366.2	10,037.9	38.5	35.8	1.94	352.3	323.7	833.4	806.0	27.40	30.413	
11,200.0	10,874.0	10,393.0	10,038.5	38.7	35.9	1.68	378.9	320.0	836.1	808.7	27.33	30.593	
11,225.4	10,874.5	10,401.7	10,038.4	38.8	35.9	1.61	387.5	318.8	836.3	809.0	27.34	30.594	
11,287.1	10,874.3	10,462.5	10,038.4	39.0	36.1	1.11	447.8	311.1	836.1	808.5	27.54	30.355	
11,300.0	10,874.3	10,475.3	10,038.4	39.0	36.2	1.02	460.5	309.7	836.0	808.5	27.59	30.300	
11,400.0	10,874.1	10,574.5	10,038.3	39.4	36.6	0.44	559.4	300.4	835.8	807.8	28.06	29.791	
11,500.0	10,873.8	10,674.3	10,038.2	39.8	37.1	0.09	658.9	294.6	835.7	807.0	28.64	29.176	
11,600.0	10,873.6	10,774.3	10,038.1	40.3	37.6	-0.02	758.9	292.2	835.5	806.2	29.33	28.486	
11,700.0	10,873.4	10,874.3	10,038.0	40.9	38.3	-0.02	858.9	291.4	835.4	805.3	30.11	27.748	
11,800.0	10,873.2	10,974.3	10,037.9	41.5	38.9	-0.02	958.9	290.6	835.3	804.3	30.94	26.997	
11,900.0	10,872.9	11,074.3	10,037.8	42.2	39.7	-0.02	1,058.9	289.9	835.2	803.3	31.83	26.239	
12,000.0	10,872.7	11,174.3	10,037.7	42.9	40.4	-0.02	1,158.9	289.1	835.0	802.3	32.77	25.483	
12,100.0	10,872.5	11,274.3	10,037.6	43.7	41.3	-0.02	1,258.9	288.3	834.9	801.2	33.75	24.735	
12,200.0	10,872.2	11,374.3	10,037.5	44.6	42.2	-0.02	1,358.9	287.6	834.8	800.0	34.78	23.999	
12,300.0	10,872.0	11,474.3	10,037.4	45.4	43.1	-0.02	1,458.9	286.8	834.7	798.8	35.85	23.281	
12,400.0	10,871.8	11,574.3	10,037.3	46.3	44.1	-0.02	1,558.9	286.1	834.5	797.6	36.96	22.582	
12,500.0	10,871.6	11,674.3	10,037.2	47.3	45.1	-0.02	1,658.9	285.3	834.4	796.3	38.09	21.905	
12,600.0	10,871.3	11,774.3	10,037.1	48.3	46.1	-0.02	1,758.9	284.5	834.3	795.0	39.26	21.251	
12,700.0	10,871.1	11,874.3	10,037.0	49.3	47.2	-0.02	1,858.9	283.8	834.2	793.7	40.45	20.621	
12,800.0	10,870.9	11,974.3	10,036.9	50.4	48.3	-0.02	1,958.9	283.0	834.0	792.4	41.67	20.016	
12,900.0	10,870.7	12,074.3	10,036.8	51.5	49.5	-0.02	2,058.9	282.2	833.9	791.0	42.91	19.434	
13,000.0	10,870.4	12,174.3	10,036.7	52.6	50.7	-0.02	2,158.8	281.5	833.8	789.6	44.17	18.876	
13,100.0	10,870.2	12,274.3	10,036.6	53.8	51.9	-0.02	2,258.8	280.7	833.6	788.2	45.45	18.341	
13,200.0	10,870.0	12,374.3	10,036.5	54.9	53.1	-0.02	2,358.8	280.0	833.5	786.8	46.75	17.829	
13,300.0	10,869.7	12,474.3	10,036.4	56.1	54.3	-0.02	2,458.8	279.2	833.4	785.3	48.06	17.339	
13,400.0	10,869.5	12,574.3	10,036.3	57.4	55.6	-0.02	2,558.8	278.4	833.3	783.9	49.39	16.870	
13,500.0	10,869.3	12,674.3	10,036.2	58.6	56.9	-0.02	2,658.8	277.7	833.1	782.4	50.74	16.421	
13,600.0	10,869.1	12,774.3	10,036.1	59.9	58.2	-0.02	2,758.8	276.9	833.0	780.9	52.09	15.991	
13,700.0	10,868.8	12,874.3	10,035.9	61.1	59.5	-0.01	2,858.8	276.2	832.9	779.4	53.46	15.580	
13,800.0	10,868.6	12,974.3	10,035.8	62.4	60.9	-0.01	2,958.8	275.4	832.8	777.9	54.84	15.186	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,868.4	13,074.3	10,035.7	63.8	62.2	-0.01	3,058.8	274.6	832.6	776.4	56.23	14.809	
14,000.0	10,868.2	13,174.3	10,035.6	65.1	63.6	-0.01	3,158.8	273.9	832.5	774.9	57.62	14.447	
14,100.0	10,867.9	13,274.3	10,035.5	66.4	65.0	-0.01	3,258.8	273.1	832.4	773.4	59.03	14.101	
14,200.0	10,867.7	13,374.3	10,035.4	67.8	66.4	-0.01	3,358.8	272.3	832.3	771.8	60.44	13.769	
14,300.0	10,867.5	13,474.3	10,035.3	69.2	67.8	-0.01	3,458.8	271.6	832.1	770.3	61.87	13.451	
14,400.0	10,867.3	13,574.3	10,035.2	70.6	69.2	-0.01	3,558.8	270.8	832.0	768.7	63.29	13.145	
14,500.0	10,867.0	13,674.3	10,035.1	72.0	70.6	-0.01	3,658.8	270.1	831.9	767.2	64.73	12.852	
14,600.0	10,866.8	13,774.3	10,035.0	73.4	72.1	-0.01	3,758.8	269.3	831.8	765.6	66.17	12.570	
14,700.0	10,866.6	13,874.3	10,034.9	74.8	73.5	-0.01	3,858.8	268.5	831.6	764.0	67.62	12.299	
14,800.0	10,866.3	13,974.3	10,034.8	76.2	75.0	-0.01	3,958.8	267.8	831.5	762.4	69.07	12.039	
14,900.0	10,866.1	14,074.3	10,034.7	77.7	76.4	-0.01	4,058.8	267.0	831.4	760.9	70.53	11.788	
15,000.0	10,865.9	14,174.3	10,034.6	79.1	77.9	-0.01	4,158.8	266.3	831.3	759.3	71.99	11.547	
15,100.0	10,865.7	14,274.3	10,034.5	80.6	79.4	-0.01	4,258.8	265.5	831.1	757.7	73.45	11.315	
15,200.0	10,865.4	14,374.3	10,034.4	82.0	80.9	-0.01	4,358.8	264.7	831.0	756.1	74.92	11.091	
15,300.0	10,865.2	14,474.3	10,034.3	83.5	82.4	-0.01	4,458.8	264.0	830.9	754.5	76.40	10.875	
15,400.0	10,865.0	14,574.3	10,034.2	85.0	83.9	-0.01	4,558.8	263.2	830.7	752.9	77.88	10.667	
15,500.0	10,864.8	14,674.3	10,034.1	86.4	85.4	-0.01	4,658.8	262.4	830.6	751.3	79.36	10.467	
15,600.0	10,864.5	14,774.3	10,034.0	87.9	86.9	-0.01	4,758.8	261.7	830.5	749.6	80.84	10.273	
15,700.0	10,864.3	14,874.3	10,033.9	89.4	88.4	-0.01	4,858.8	260.9	830.4	748.0	82.33	10.086	
15,800.0	10,864.1	14,974.3	10,033.8	90.9	89.9	-0.01	4,958.8	260.2	830.2	746.4	83.82	9.905	
15,900.0	10,863.8	15,074.3	10,033.7	92.4	91.5	-0.01	5,058.8	259.4	830.1	744.8	85.32	9.730	
16,000.0	10,863.6	15,174.3	10,033.6	94.0	93.0	0.00	5,158.8	258.6	830.0	743.2	86.81	9.561	
16,100.0	10,863.4	15,274.3	10,033.5	95.5	94.5	0.00	5,258.8	257.9	829.9	741.6	88.31	9.397	
16,200.0	10,863.2	15,374.3	10,033.4	97.0	96.1	0.00	5,358.8	257.1	829.7	739.9	89.81	9.238	
16,300.0	10,862.9	15,474.3	10,033.3	98.5	97.6	0.00	5,458.7	256.4	829.6	738.3	91.32	9.085	
16,400.0	10,862.7	15,574.3	10,033.2	100.0	99.2	0.00	5,558.7	255.6	829.5	736.7	92.82	8.936	
16,500.0	10,862.5	15,674.3	10,033.1	101.6	100.7	0.00	5,658.7	254.8	829.4	735.0	94.33	8.792	
16,600.0	10,862.3	15,774.3	10,033.0	103.1	102.3	0.00	5,758.7	254.1	829.2	733.4	95.84	8.652	
16,700.0	10,862.0	15,874.3	10,032.9	104.7	103.8	0.00	5,858.7	253.3	829.1	731.8	97.35	8.516	
16,800.0	10,861.8	15,974.3	10,032.8	106.2	105.4	0.00	5,958.7	252.5	829.0	730.1	98.87	8.385	
16,900.0	10,861.6	16,074.3	10,032.7	107.7	106.9	0.00	6,058.7	251.8	828.9	728.5	100.38	8.257	
17,000.0	10,861.4	16,174.3	10,032.6	109.3	108.5	0.00	6,158.7	251.0	828.7	726.8	101.90	8.133	
17,100.0	10,861.1	16,274.3	10,032.5	110.8	110.1	0.00	6,258.7	250.3	828.6	725.2	103.42	8.012	
17,200.0	10,860.9	16,374.3	10,032.4	112.4	111.6	0.00	6,358.7	249.5	828.5	723.5	104.94	7.895	
17,300.0	10,860.7	16,474.3	10,032.3	114.0	113.2	0.00	6,458.7	248.7	828.3	721.9	106.46	7.781	
17,400.0	10,860.4	16,574.3	10,032.2	115.5	114.8	0.00	6,558.7	248.0	828.2	720.2	107.98	7.670	
17,500.0	10,860.2	16,674.3	10,032.1	117.1	116.4	0.00	6,658.7	247.2	828.1	718.6	109.51	7.562	
17,600.0	10,860.0	16,774.3	10,032.0	118.7	117.9	0.00	6,758.7	246.5	828.0	716.9	111.03	7.457	
17,700.0	10,859.8	16,874.3	10,031.9	120.2	119.5	0.00	6,858.7	245.7	827.8	715.3	112.56	7.355	
17,800.0	10,859.5	16,974.3	10,031.8	121.8	121.1	0.00	6,958.7	244.9	827.7	713.6	114.09	7.255	
17,900.0	10,859.3	17,074.3	10,031.7	123.4	122.7	0.00	7,058.7	244.2	827.6	712.0	115.62	7.158	
18,000.0	10,859.1	17,174.3	10,031.6	124.9	124.3	0.00	7,158.7	243.4	827.5	710.3	117.15	7.064	
18,100.0	10,858.9	17,274.3	10,031.5	126.5	125.9	0.00	7,258.7	242.6	827.3	708.7	118.68	6.971	
18,200.0	10,858.6	17,374.3	10,031.4	128.1	127.5	0.00	7,358.7	241.9	827.2	707.0	120.21	6.881	
18,300.0	10,858.4	17,474.3	10,031.3	129.7	129.1	0.01	7,458.7	241.1	827.1	705.3	121.74	6.794	
18,400.0	10,858.2	17,574.3	10,031.2	131.3	130.7	0.01	7,558.7	240.4	827.0	703.7	123.28	6.708	
18,500.0	10,857.9	17,674.3	10,031.1	132.9	132.3	0.01	7,658.7	239.6	826.8	702.0	124.81	6.625	
18,600.0	10,857.7	17,774.3	10,031.0	134.4	133.8	0.01	7,758.7	238.8	826.7	700.4	126.35	6.543	
18,700.0	10,857.5	17,874.3	10,030.9	136.0	135.4	0.01	7,858.7	238.1	826.6	698.7	127.88	6.464	
18,800.0	10,857.3	17,974.3	10,030.8	137.6	137.0	0.01	7,958.7	237.3	826.5	697.0	129.42	6.386	
18,900.0	10,857.0	18,074.3	10,030.7	139.2	138.6	0.01	8,058.7	236.5	826.3	695.4	130.96	6.310	
19,000.0	10,856.8	18,174.3	10,030.6	140.8	140.3	0.01	8,158.7	235.8	826.2	693.7	132.50	6.236	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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 #112H - 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
19,100.0	10,856.6	18,274.3	10,030.5	142.4	141.9	0.01	8,258.7	235.0	826.1	692.0	134.04	6.163	
19,200.0	10,856.4	18,374.3	10,030.4	144.0	143.5	0.01	8,358.7	234.3	826.0	690.4	135.58	6.092	
19,300.0	10,856.1	18,474.3	10,030.3	145.6	145.1	0.01	8,458.7	233.5	825.8	688.7	137.12	6.023	
19,400.0	10,855.9	18,574.3	10,030.2	147.2	146.7	0.01	8,558.7	232.7	825.7	687.0	138.66	5.955	
19,500.0	10,855.7	18,674.3	10,030.1	148.8	148.3	0.01	8,658.7	232.0	825.6	685.4	140.20	5.888	
19,600.0	10,855.5	18,774.3	10,030.0	150.4	149.9	0.01	8,758.6	231.2	825.4	683.7	141.75	5.823	
19,700.0	10,855.2	18,874.3	10,029.9	152.0	151.5	0.01	8,858.6	230.5	825.3	682.0	143.29	5.760	
19,800.0	10,855.0	18,974.3	10,029.8	153.6	153.1	0.01	8,958.6	229.7	825.2	680.4	144.83	5.698	
19,900.0	10,854.8	19,074.3	10,029.7	155.2	154.7	0.01	9,058.6	228.9	825.1	678.7	146.38	5.637	
20,000.0	10,854.5	19,174.3	10,029.6	156.8	156.3	0.01	9,158.6	228.2	824.9	677.0	147.92	5.577	
20,100.0	10,854.3	19,274.3	10,029.5	158.4	158.0	0.01	9,258.6	227.4	824.8	675.3	149.47	5.518	
20,200.0	10,854.1	19,374.3	10,029.4	160.0	159.6	0.01	9,358.6	226.6	824.7	673.7	151.01	5.461	
20,300.0	10,853.9	19,474.3	10,029.3	161.7	161.2	0.01	9,458.6	225.9	824.6	672.0	152.56	5.405	
20,400.0	10,853.6	19,574.3	10,029.2	163.3	162.8	0.01	9,558.6	225.1	824.4	670.3	154.11	5.350	
20,500.0	10,853.4	19,674.3	10,029.1	164.9	164.4	0.01	9,658.6	224.4	824.3	668.7	155.65	5.296	
20,600.0	10,853.2	19,774.3	10,029.0	166.5	166.0	0.02	9,758.6	223.6	824.2	667.0	157.20	5.243	
20,700.0	10,853.0	19,874.3	10,028.9	168.1	167.7	0.02	9,858.6	222.8	824.1	665.3	158.75	5.191	
20,800.0	10,852.7	19,974.3	10,028.8	169.7	169.3	0.02	9,958.6	222.1	823.9	663.6	160.30	5.140	
20,900.0	10,852.5	20,074.3	10,028.7	171.3	170.9	0.02	10,058.6	221.3	823.8	662.0	161.85	5.090	
21,000.0	10,852.3	20,174.3	10,028.6	172.9	172.5	0.02	10,158.6	220.6	823.7	660.3	163.40	5.041	
21,094.0	10,851.5	20,268.3	10,028.5	174.5	173.9	0.00	10,252.7	219.8	823.0	658.4	164.59	5.000	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	89.36	27.6	2,453.0	2,453.2				
100.0	100.0	101.0	99.0	0.1	0.1	89.36	27.6	2,453.0	2,453.2	2,452.9	0.26	9,439.278	
200.0	200.0	201.0	199.0	0.5	0.5	89.36	27.6	2,453.0	2,453.2	2,452.2	0.98	2,511.370	
300.0	300.0	301.0	299.0	0.8	0.8	89.36	27.6	2,453.0	2,453.2	2,451.5	1.69	1,448.357	
400.0	400.0	401.0	399.0	1.2	1.2	89.36	27.6	2,453.0	2,453.2	2,450.8	2.41	1,017.619	
500.0	500.0	501.0	499.0	1.6	1.6	89.36	27.6	2,453.0	2,453.2	2,450.1	3.13	784.354	
600.0	600.0	601.0	599.0	1.9	1.9	89.36	27.6	2,453.0	2,453.2	2,449.4	3.84	638.087	
700.0	700.0	701.0	699.0	2.3	2.3	89.36	27.6	2,453.0	2,453.2	2,448.6	4.56	537.798	
800.0	800.0	801.0	799.0	2.6	2.6	89.36	27.6	2,453.0	2,453.2	2,447.9	5.28	464.753	
900.0	900.0	901.0	899.0	3.0	3.0	89.36	27.6	2,453.0	2,453.2	2,447.2	6.00	409.177	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	89.36	27.6	2,453.0	2,453.2	2,446.5	6.71	365.473	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	89.36	27.6	2,453.0	2,453.2	2,445.8	7.43	330.204	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	89.36	27.6	2,453.0	2,453.2	2,445.0	8.15	301.144	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	-32.90	27.6	2,453.0	2,452.5	2,443.6	8.85	277.129	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	-32.95	27.6	2,453.0	2,450.3	2,440.7	9.54	256.777	
1,500.0	1,499.9	1,498.9	1,498.9	5.1	5.1	-33.02	27.6	2,453.0	2,446.6	2,436.4	10.23	239.138	
1,600.0	1,599.7	1,667.8	1,667.8	5.4	5.7	-33.17	26.9	2,450.7	2,440.1	2,428.9	11.15	218.854	
1,700.0	1,699.4	1,836.5	1,836.3	5.8	6.3	-33.36	25.0	2,443.5	2,429.3	2,417.2	12.06	201.494	
1,800.0	1,798.9	2,003.7	2,003.1	6.1	6.9	-33.58	21.7	2,431.7	2,414.2	2,401.3	12.96	186.341	
1,900.0	1,898.3	2,168.9	2,167.4	6.5	7.5	-33.84	17.2	2,415.5	2,395.0	2,381.1	13.85	172.981	
2,000.0	1,997.4	2,318.9	2,316.1	6.9	8.0	-34.13	12.0	2,396.8	2,371.6	2,357.0	14.69	161.499	
2,100.0	2,096.4	2,415.7	2,412.0	7.2	8.4	-34.24	8.4	2,383.8	2,346.8	2,331.4	15.37	152.645	
2,200.0	2,195.5	2,512.4	2,507.8	7.6	8.8	-34.35	4.8	2,370.8	2,321.9	2,305.8	16.07	144.517	
2,300.0	2,294.5	2,609.2	2,603.6	8.0	9.1	-34.46	1.2	2,357.9	2,297.0	2,280.3	16.76	137.023	
2,400.0	2,393.5	2,706.0	2,699.4	8.4	9.5	-34.57	-2.5	2,344.9	2,272.2	2,254.7	17.46	130.099	
2,500.0	2,492.5	2,802.7	2,795.2	8.8	9.9	-34.69	-6.1	2,331.9	2,247.3	2,229.2	18.17	123.686	
2,600.0	2,591.6	2,899.5	2,891.0	9.2	10.3	-34.81	-9.7	2,318.9	2,222.5	2,203.6	18.88	117.732	
2,700.0	2,690.6	3,003.8	2,986.9	9.6	10.7	-34.93	-13.3	2,306.0	2,197.7	2,178.1	19.62	112.037	
2,800.0	2,789.6	3,107.0	3,082.7	10.0	11.1	-35.06	-16.9	2,293.0	2,172.9	2,152.5	20.35	106.761	
2,900.0	2,888.6	3,189.8	3,178.5	10.4	11.4	-35.18	-20.5	2,280.0	2,148.0	2,127.0	21.02	102.204	
3,000.0	2,987.7	3,286.5	3,274.3	10.8	11.8	-35.31	-24.1	2,267.0	2,123.2	2,101.5	21.73	97.688	
3,100.0	3,086.7	3,383.3	3,370.1	11.2	12.2	-35.45	-27.7	2,254.1	2,098.5	2,076.0	22.45	93.454	
3,200.0	3,185.7	3,480.0	3,466.0	11.6	12.6	-35.59	-31.3	2,241.1	2,073.7	2,050.5	23.18	89.476	
3,300.0	3,284.8	3,576.8	3,561.8	12.0	13.0	-35.73	-34.9	2,228.1	2,048.9	2,025.0	23.90	85.733	
3,400.0	3,383.8	3,673.6	3,657.6	12.4	13.4	-35.87	-38.5	2,215.1	2,024.2	1,999.6	24.62	82.206	
3,500.0	3,482.8	3,770.3	3,753.4	12.8	13.7	-36.02	-42.1	2,202.2	1,999.4	1,974.1	25.35	78.876	
3,600.0	3,581.8	3,867.1	3,849.2	13.2	14.1	-36.17	-45.7	2,189.2	1,974.7	1,948.6	26.08	75.728	
3,700.0	3,680.9	3,963.9	3,945.1	13.7	14.5	-36.32	-49.3	2,176.2	1,950.0	1,923.2	26.80	72.748	
3,800.0	3,779.9	4,060.6	4,040.9	14.1	14.9	-36.48	-52.9	2,163.2	1,925.3	1,897.8	27.53	69.924	
3,878.9	3,858.0	4,137.0	4,116.5	14.4	15.2	-36.61	-55.8	2,153.0	1,905.8	1,877.7	28.11	67.797	
3,900.0	3,878.9	4,157.4	4,136.7	14.5	15.3	-36.60	-56.5	2,150.3	1,900.7	1,872.4	28.26	67.245	
4,000.0	3,978.2	4,254.6	4,232.9	14.9	15.7	-36.52	-60.2	2,137.2	1,877.4	1,848.4	28.99	64.756	
4,100.0	4,077.7	4,352.3	4,329.7	15.3	16.1	-36.41	-63.8	2,124.1	1,856.3	1,826.6	29.72	62.467	
4,200.0	4,177.5	4,450.4	4,426.9	15.6	16.5	-36.27	-67.5	2,111.0	1,837.2	1,806.7	30.44	60.363	
4,300.0	4,277.4	4,548.9	4,524.5	16.0	16.9	-36.11	-71.1	2,097.8	1,820.2	1,789.0	31.15	58.432	
4,400.0	4,377.4	4,647.8	4,622.4	16.3	17.4	-35.92	-74.8	2,084.5	1,805.2	1,773.4	31.86	56.663	
4,412.2	4,389.6	4,659.9	4,634.3	16.4	17.4	86.35	-75.3	2,082.9	1,803.5	1,771.6	31.94	56.459	
4,500.0	4,477.4	4,746.8	4,720.4	16.7	17.8	86.43	-78.5	2,071.2	1,791.6	1,759.0	32.55	55.037	
4,600.0	4,577.4	4,845.9	4,818.5	17.0	18.2	86.52	-82.2	2,057.9	1,778.0	1,744.7	33.25	53.477	
4,700.0	4,677.4	4,944.9	4,916.5	17.3	18.6	86.62	-85.9	2,044.7	1,764.4	1,730.4	33.94	51.979	
4,800.0	4,777.4	5,043.9	5,014.6	17.6	19.0	86.71	-89.6	2,031.4	1,750.7	1,716.1	34.64	50.540	
4,900.0	4,877.4	5,142.9	5,112.7	18.0	19.4	86.81	-93.3	2,018.1	1,737.1	1,701.8	35.34	49.155	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
5,000.0	4,977.4	5,242.0	5,210.7	18.3	19.8	86.91	-97.0	2,004.8	1,723.5	1,687.5	36.04	47.823	
5,100.0	5,077.4	5,341.0	5,308.8	18.6	20.2	87.01	-100.6	1,991.5	1,709.9	1,673.2	36.74	46.540	
5,200.0	5,177.4	5,440.0	5,406.9	19.0	20.6	87.11	-104.3	1,978.3	1,696.4	1,658.9	37.44	45.304	
5,300.0	5,277.4	5,539.0	5,504.9	19.3	21.1	87.21	-108.0	1,965.0	1,682.8	1,644.6	38.15	44.113	
5,400.0	5,377.4	5,638.1	5,603.0	19.6	21.5	87.32	-111.7	1,951.7	1,669.2	1,630.3	38.85	42.964	
5,500.0	5,477.4	5,737.1	5,701.0	20.0	21.9	87.43	-115.4	1,938.4	1,655.6	1,616.1	39.56	41.854	
5,600.0	5,577.4	5,836.1	5,799.1	20.3	22.3	87.53	-119.1	1,925.2	1,642.1	1,601.8	40.26	40.783	
5,700.0	5,677.4	5,935.1	5,897.2	20.6	22.7	87.65	-122.8	1,911.9	1,628.5	1,587.5	40.97	39.748	
5,800.0	5,777.4	6,034.2	5,995.2	21.0	23.1	87.76	-126.5	1,898.6	1,614.9	1,573.3	41.68	38.747	
5,900.0	5,877.4	6,133.2	6,093.3	21.3	23.5	87.87	-130.2	1,885.3	1,601.4	1,559.0	42.39	37.779	
6,000.0	5,977.4	6,232.2	6,191.4	21.6	24.0	87.99	-133.9	1,872.0	1,587.9	1,544.8	43.10	36.843	
6,100.0	6,077.4	6,331.3	6,289.4	22.0	24.4	88.11	-137.6	1,858.8	1,574.3	1,530.5	43.81	35.936	
6,200.0	6,177.4	6,430.3	6,387.5	22.3	24.8	88.23	-141.2	1,845.5	1,560.8	1,516.3	44.52	35.058	
6,300.0	6,277.4	6,529.3	6,485.6	22.6	25.2	88.35	-144.9	1,832.2	1,547.3	1,502.0	45.23	34.207	
6,400.0	6,377.4	6,628.3	6,583.6	23.0	25.6	88.47	-148.6	1,818.9	1,533.8	1,487.8	45.95	33.382	
6,500.0	6,477.4	6,727.4	6,681.7	23.3	26.0	88.60	-152.3	1,805.6	1,520.2	1,473.6	46.66	32.582	
6,600.0	6,577.4	6,826.4	6,779.7	23.7	26.4	88.73	-156.0	1,792.4	1,506.7	1,459.4	47.37	31.806	
6,700.0	6,677.4	6,925.4	6,877.8	24.0	26.9	88.86	-159.7	1,779.1	1,493.3	1,445.2	48.09	31.052	
6,800.0	6,777.4	7,024.4	6,975.9	24.3	27.3	89.00	-163.4	1,765.8	1,479.8	1,431.0	48.80	30.320	
6,900.0	6,877.4	7,109.3	7,059.9	24.7	27.6	89.11	-166.5	1,754.6	1,466.5	1,417.0	49.51	29.619	
7,000.0	6,977.4	7,181.8	7,131.9	25.0	27.9	89.20	-168.8	1,746.2	1,454.9	1,404.7	50.20	28.980	
7,100.0	7,077.4	7,254.5	7,204.3	25.4	28.2	89.27	-170.8	1,739.2	1,445.2	1,394.3	50.88	28.404	
7,200.0	7,177.4	7,327.6	7,277.1	25.7	28.5	89.33	-172.4	1,733.4	1,437.2	1,385.7	51.54	27.887	
7,300.0	7,277.4	7,400.0	7,349.3	26.1	28.8	89.38	-173.6	1,729.0	1,431.2	1,379.0	52.18	27.429	
7,400.0	7,377.4	7,474.2	7,423.4	26.4	29.0	89.41	-174.5	1,725.9	1,426.9	1,374.1	52.80	27.025	
7,500.0	7,477.4	7,547.7	7,496.9	26.8	29.3	89.43	-175.0	1,724.1	1,424.6	1,371.2	53.40	26.678	
7,600.0	7,577.4	7,627.1	7,576.4	27.1	29.5	89.44	-175.1	1,723.7	1,424.0	1,370.0	54.00	26.370	
7,700.0	7,677.4	7,727.1	7,676.4	27.4	29.8	89.44	-175.1	1,723.7	1,424.0	1,369.3	54.68	26.041	
7,800.0	7,777.4	7,827.1	7,776.4	27.8	30.1	89.44	-175.1	1,723.7	1,424.0	1,368.6	55.37	25.720	
7,900.0	7,877.4	7,927.1	7,876.4	28.1	30.5	89.44	-175.1	1,723.7	1,424.0	1,368.0	56.05	25.406	
8,000.0	7,977.4	8,027.1	7,976.4	28.5	30.8	89.44	-175.1	1,723.7	1,424.0	1,367.3	56.73	25.100	
8,100.0	8,077.4	8,127.1	8,076.4	28.8	31.1	89.44	-175.1	1,723.7	1,424.0	1,366.6	57.42	24.800	
8,200.0	8,177.4	8,227.1	8,176.4	29.2	31.4	89.44	-175.1	1,723.7	1,424.0	1,365.9	58.11	24.507	
8,300.0	8,277.4	8,327.1	8,276.4	29.5	31.7	89.44	-175.1	1,723.7	1,424.0	1,365.2	58.79	24.221	
8,400.0	8,377.4	8,427.1	8,376.4	29.9	32.0	89.44	-175.1	1,723.7	1,424.0	1,364.5	59.48	23.941	
8,500.0	8,477.4	8,527.1	8,476.4	30.2	32.4	89.44	-175.1	1,723.7	1,424.0	1,363.8	60.17	23.668	
8,600.0	8,577.4	8,627.1	8,576.4	30.6	32.7	89.44	-175.1	1,723.7	1,424.0	1,363.2	60.86	23.400	
8,700.0	8,677.4	8,727.1	8,676.4	30.9	33.0	89.44	-175.1	1,723.7	1,424.0	1,362.5	61.55	23.138	
8,800.0	8,777.4	8,827.1	8,776.4	31.3	33.3	89.44	-175.1	1,723.7	1,424.0	1,361.8	62.23	22.881	
8,900.0	8,877.4	8,927.1	8,876.4	31.6	33.7	89.44	-175.1	1,723.7	1,424.0	1,361.1	62.93	22.630	
9,000.0	8,977.4	9,027.1	8,976.4	32.0	34.0	89.44	-175.1	1,723.7	1,424.0	1,360.4	63.62	22.384	
9,100.0	9,077.4	9,127.1	9,076.4	32.3	34.3	89.44	-175.1	1,723.7	1,424.0	1,359.7	64.31	22.144	
9,200.0	9,177.4	9,227.1	9,176.4	32.7	34.6	89.44	-175.1	1,723.7	1,424.0	1,359.0	65.00	21.908	
9,300.0	9,277.4	9,327.1	9,276.4	33.0	35.0	89.44	-175.1	1,723.7	1,424.0	1,358.3	65.69	21.677	
9,400.0	9,377.4	9,427.1	9,376.4	33.4	35.3	89.44	-175.1	1,723.7	1,424.0	1,357.6	66.39	21.450	
9,500.0	9,477.4	9,533.5	9,482.7	33.7	35.6	89.42	-174.7	1,723.7	1,424.0	1,356.9	67.11	21.220	
9,600.0	9,577.4	9,676.4	9,623.5	34.1	36.1	88.52	-152.4	1,720.5	1,422.0	1,354.1	67.92	20.937	
9,700.0	9,677.4	9,801.5	9,738.8	34.4	36.4	86.60	-105.0	1,713.9	1,418.0	1,349.4	68.61	20.666	
9,800.0	9,777.4	9,902.6	9,822.7	34.8	36.6	84.33	-49.4	1,706.1	1,414.0	1,344.7	69.25	20.417	
9,900.0	9,877.4	9,981.4	9,880.4	35.1	36.8	82.15	3.7	1,698.6	1,412.0	1,342.2	69.82	20.224	
9,907.6	9,885.0	9,986.6	9,884.0	35.1	36.8	82.00	7.4	1,698.1	1,412.0	1,342.2	69.86	20.213 CC	
10,000.0	9,977.4	10,042.5	9,919.8	35.5	36.9	80.26	49.8	1,692.1	1,413.8	1,343.6	70.25	20.126	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,077.4	10,090.2	9,947.0	35.8	37.0	78.68	88.6	1,686.7	1,420.3	1,349.8	70.47	20.155	
10,200.0	10,177.4	10,128.0	9,966.1	36.2	37.0	77.36	120.9	1,682.1	1,432.2	1,361.8	70.44	20.333	
10,300.0	10,277.4	10,158.4	9,980.0	36.5	37.1	76.27	147.7	1,678.4	1,449.7	1,379.6	70.15	20.665	
10,324.1	10,301.5	10,164.8	9,982.7	36.6	37.1	76.04	153.5	1,677.5	1,454.8	1,384.8	70.05	20.769	
10,350.0	10,327.4	10,171.7	9,985.6	36.7	37.1	75.66	159.7	1,676.7	1,460.6	1,390.6	69.92	20.890	
10,400.0	10,377.2	10,185.9	9,991.2	36.9	37.1	74.05	172.5	1,674.9	1,471.8	1,402.2	69.63	21.138	
10,450.0	10,426.4	10,200.0	9,996.5	37.0	37.1	72.45	185.5	1,673.0	1,483.3	1,414.0	69.29	21.408	
10,500.0	10,474.6	10,216.6	10,002.4	37.2	37.2	70.80	200.9	1,670.9	1,494.8	1,425.9	68.92	21.689	
10,550.0	10,521.6	10,233.1	10,007.7	37.3	37.2	69.21	216.3	1,668.7	1,506.2	1,437.7	68.51	21.984	
10,600.0	10,566.8	10,250.0	10,012.7	37.5	37.2	67.67	232.3	1,666.5	1,517.3	1,449.2	68.08	22.286	
10,650.0	10,610.1	10,267.4	10,017.4	37.6	37.3	66.21	249.0	1,664.1	1,527.9	1,460.3	67.63	22.591	
10,700.0	10,651.0	10,285.3	10,021.6	37.7	37.3	64.84	266.1	1,661.7	1,538.0	1,470.8	67.18	22.894	
10,750.0	10,689.2	10,300.0	10,024.7	37.8	37.3	63.64	280.4	1,659.7	1,547.3	1,480.6	66.70	23.199	
10,800.0	10,724.5	10,321.9	10,028.6	37.9	37.4	62.40	301.8	1,656.7	1,555.8	1,489.6	66.29	23.471	
10,850.0	10,756.6	10,350.0	10,032.4	37.9	37.5	61.19	329.3	1,652.8	1,563.5	1,497.6	65.94	23.713	
10,900.0	10,785.2	10,350.0	10,032.4	38.0	37.5	60.61	329.3	1,652.8	1,570.1	1,504.7	65.42	23.999	
10,950.0	10,810.1	10,378.8	10,034.9	38.0	37.5	59.66	357.7	1,648.8	1,575.5	1,510.4	65.15	24.184	
11,000.0	10,831.2	10,400.0	10,035.8	38.1	37.6	58.99	378.7	1,645.9	1,579.8	1,515.0	64.87	24.356	
11,050.0	10,848.2	10,416.0	10,036.0	38.3	37.6	58.52	394.5	1,643.7	1,582.9	1,518.3	64.62	24.496	
11,100.0	10,861.1	10,451.2	10,035.8	38.4	37.8	58.02	429.4	1,639.0	1,584.5	1,519.9	64.53	24.553	
11,150.0	10,869.7	10,484.4	10,035.7	38.5	37.9	57.79	462.4	1,635.0	1,584.3	1,519.8	64.52	24.556	
11,200.0	10,874.0	10,518.1	10,035.6	38.7	38.0	57.79	495.9	1,631.3	1,582.4	1,517.8	64.60	24.494	
11,225.4	10,874.5	10,535.3	10,035.5	38.8	38.1	57.89	513.0	1,629.5	1,580.7	1,516.0	64.68	24.437	
11,287.1	10,874.3	10,577.2	10,035.3	39.0	38.2	57.83	554.7	1,625.7	1,576.4	1,511.5	64.93	24.279	
11,300.0	10,874.3	10,586.0	10,035.3	39.0	38.3	57.81	563.5	1,625.0	1,575.6	1,510.6	64.98	24.246	
11,400.0	10,874.1	10,654.2	10,035.0	39.4	38.6	57.73	631.5	1,620.4	1,570.5	1,505.0	65.49	23.982	
11,500.0	10,873.8	10,722.5	10,034.8	39.8	38.9	57.68	699.7	1,617.3	1,567.5	1,501.4	66.10	23.715	
11,600.0	10,873.6	10,793.6	10,034.5	40.3	39.3	57.65	770.9	1,615.9	1,566.5	1,499.7	66.83	23.440	
11,602.9	10,873.6	10,793.6	10,034.5	40.4	39.3	57.65	770.9	1,615.9	1,566.5	1,499.7	66.84	23.436	
11,700.0	10,873.4	10,889.6	10,034.1	40.9	39.8	57.65	866.8	1,615.1	1,566.6	1,498.7	67.83	23.095	
11,800.0	10,873.2	10,989.6	10,033.7	41.5	40.5	57.64	966.8	1,614.4	1,566.6	1,497.7	68.96	22.717	
11,900.0	10,872.9	11,089.6	10,033.3	42.2	41.2	57.64	1,066.8	1,613.6	1,566.7	1,496.5	70.20	22.318	
12,000.0	10,872.7	11,189.6	10,032.9	42.9	41.9	57.63	1,166.8	1,612.8	1,566.8	1,495.3	71.53	21.903	
12,100.0	10,872.5	11,289.6	10,032.6	43.7	42.7	57.63	1,266.8	1,612.0	1,566.9	1,493.9	72.96	21.475	
12,200.0	10,872.2	11,389.6	10,032.2	44.6	43.6	57.62	1,366.8	1,611.2	1,567.0	1,492.5	74.48	21.039	
12,300.0	10,872.0	11,489.6	10,031.8	45.4	44.5	57.62	1,466.8	1,610.5	1,567.0	1,491.0	76.07	20.599	
12,400.0	10,871.8	11,589.6	10,031.4	46.3	45.4	57.61	1,566.8	1,609.7	1,567.1	1,489.4	77.75	20.156	
12,500.0	10,871.6	11,689.6	10,031.0	47.3	46.4	57.61	1,666.7	1,608.9	1,567.2	1,487.7	79.50	19.714	
12,600.0	10,871.3	11,789.6	10,030.6	48.3	47.4	57.60	1,766.7	1,608.1	1,567.3	1,486.0	81.31	19.275	
12,700.0	10,871.1	11,889.6	10,030.2	49.3	48.5	57.60	1,866.7	1,607.3	1,567.3	1,484.2	83.19	18.841	
12,800.0	10,870.9	11,989.6	10,029.8	50.4	49.6	57.59	1,966.7	1,606.6	1,567.4	1,482.3	85.12	18.414	
12,900.0	10,870.7	12,089.6	10,029.4	51.5	50.7	57.59	2,066.7	1,605.8	1,567.5	1,480.4	87.11	17.994	
13,000.0	10,870.4	12,189.6	10,029.1	52.6	51.8	57.58	2,166.7	1,605.0	1,567.6	1,478.4	89.15	17.583	
13,100.0	10,870.2	12,289.6	10,028.7	53.8	53.0	57.58	2,266.7	1,604.2	1,567.7	1,476.4	91.24	17.181	
13,200.0	10,870.0	12,389.6	10,028.3	54.9	54.2	57.57	2,366.7	1,603.4	1,567.7	1,474.4	93.38	16.789	
13,300.0	10,869.7	12,489.6	10,027.9	56.1	55.4	57.57	2,466.7	1,602.7	1,567.8	1,472.3	95.55	16.408	
13,400.0	10,869.5	12,589.6	10,027.5	57.4	56.7	57.56	2,566.7	1,601.9	1,567.9	1,470.1	97.77	16.037	
13,500.0	10,869.3	12,689.6	10,027.1	58.6	57.9	57.56	2,666.7	1,601.1	1,568.0	1,468.0	100.02	15.677	
13,600.0	10,869.1	12,789.6	10,026.7	59.9	59.2	57.55	2,766.7	1,600.3	1,568.0	1,465.7	102.30	15.328	
13,700.0	10,868.8	12,889.6	10,026.3	61.1	60.5	57.54	2,866.7	1,599.6	1,568.1	1,463.5	104.61	14.990	
13,800.0	10,868.6	12,989.6	10,025.9	62.4	61.8	57.54	2,966.7	1,598.8	1,568.2	1,461.2	106.96	14.662	
13,900.0	10,868.4	13,089.6	10,025.5	63.8	63.2	57.53	3,066.7	1,598.0	1,568.3	1,459.0	109.33	14.345	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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-MWMD												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	10,868.2	13,189.6	10,025.2	65.1	64.5	57.53	3,166.7	1,597.2	1,568.4	1,456.6	111.73	14.037	
14,100.0	10,867.9	13,289.6	10,024.8	66.4	65.9	57.52	3,266.7	1,596.4	1,568.4	1,454.3	114.15	13.740	
14,200.0	10,867.7	13,389.6	10,024.4	67.8	67.2	57.52	3,366.7	1,595.7	1,568.5	1,451.9	116.59	13.453	
14,300.0	10,867.5	13,489.6	10,024.0	69.2	68.6	57.51	3,466.7	1,594.9	1,568.6	1,449.5	119.06	13.175	
14,400.0	10,867.3	13,589.6	10,023.6	70.6	70.0	57.51	3,566.7	1,594.1	1,568.7	1,447.1	121.54	12.907	
14,500.0	10,867.0	13,689.6	10,023.2	72.0	71.5	57.50	3,666.7	1,593.3	1,568.7	1,444.7	124.04	12.647	
14,600.0	10,866.8	13,789.6	10,022.8	73.4	72.9	57.50	3,766.7	1,592.5	1,568.8	1,442.3	126.56	12.396	
14,700.0	10,866.6	13,889.6	10,022.4	74.8	74.3	57.49	3,866.7	1,591.8	1,568.9	1,439.8	129.10	12.153	
14,800.0	10,866.3	13,989.6	10,022.0	76.2	75.7	57.49	3,966.7	1,591.0	1,569.0	1,437.3	131.65	11.918	
14,900.0	10,866.1	14,089.6	10,021.7	77.7	77.2	57.48	4,066.7	1,590.2	1,569.1	1,434.8	134.22	11.690	
15,000.0	10,865.9	14,189.6	10,021.3	79.1	78.7	57.48	4,166.6	1,589.4	1,569.1	1,432.3	136.80	11.470	
15,100.0	10,865.7	14,289.6	10,020.9	80.6	80.1	57.47	4,266.6	1,588.6	1,569.2	1,429.8	139.39	11.257	
15,200.0	10,865.4	14,389.6	10,020.5	82.0	81.6	57.47	4,366.6	1,587.9	1,569.3	1,427.3	142.00	11.051	
15,300.0	10,865.2	14,489.6	10,020.1	83.5	83.1	57.46	4,466.6	1,587.1	1,569.4	1,424.8	144.62	10.852	
15,400.0	10,865.0	14,589.6	10,019.7	85.0	84.6	57.46	4,566.6	1,586.3	1,569.5	1,422.2	147.25	10.659	
15,500.0	10,864.8	14,689.6	10,019.3	86.4	86.0	57.45	4,666.6	1,585.5	1,569.5	1,419.6	149.88	10.472	
15,600.0	10,864.5	14,789.6	10,018.9	87.9	87.5	57.45	4,766.6	1,584.7	1,569.6	1,417.1	152.53	10.290	
15,700.0	10,864.3	14,889.6	10,018.5	89.4	89.0	57.44	4,866.6	1,584.0	1,569.7	1,414.5	155.19	10.115	
15,800.0	10,864.1	14,989.6	10,018.1	90.9	90.6	57.44	4,966.6	1,583.2	1,569.8	1,411.9	157.86	9.944	
15,900.0	10,863.8	15,089.6	10,017.8	92.4	92.1	57.43	5,066.6	1,582.4	1,569.8	1,409.3	160.53	9.779	
16,000.0	10,863.6	15,189.6	10,017.4	94.0	93.6	57.42	5,166.6	1,581.6	1,569.9	1,406.7	163.21	9.619	
16,100.0	10,863.4	15,289.6	10,017.0	95.5	95.1	57.42	5,266.6	1,580.9	1,570.0	1,404.1	165.90	9.463	
16,200.0	10,863.2	15,389.6	10,016.6	97.0	96.6	57.41	5,366.6	1,580.1	1,570.1	1,401.5	168.60	9.312	
16,300.0	10,862.9	15,489.6	10,016.2	98.5	98.2	57.41	5,466.6	1,579.3	1,570.2	1,398.8	171.31	9.166	
16,400.0	10,862.7	15,589.6	10,015.8	100.0	99.7	57.40	5,566.6	1,578.5	1,570.2	1,396.2	174.02	9.023	
16,500.0	10,862.5	15,689.6	10,015.4	101.6	101.3	57.40	5,666.6	1,577.7	1,570.3	1,393.6	176.73	8.885	
16,600.0	10,862.3	15,789.6	10,015.0	103.1	102.8	57.39	5,766.6	1,577.0	1,570.4	1,390.9	179.46	8.751	
16,700.0	10,862.0	15,889.6	10,014.6	104.7	104.3	57.39	5,866.6	1,576.2	1,570.5	1,388.3	182.18	8.620	
16,800.0	10,861.8	15,989.6	10,014.3	106.2	105.9	57.38	5,966.6	1,575.4	1,570.5	1,385.6	184.92	8.493	
16,900.0	10,861.6	16,089.6	10,013.9	107.7	107.4	57.38	6,066.6	1,574.6	1,570.6	1,383.0	187.66	8.370	
17,000.0	10,861.4	16,189.6	10,013.5	109.3	109.0	57.37	6,166.6	1,573.8	1,570.7	1,380.3	190.40	8.249	
17,100.0	10,861.1	16,289.6	10,013.1	110.8	110.6	57.37	6,266.6	1,573.1	1,570.8	1,377.6	193.15	8.132	
17,200.0	10,860.9	16,389.6	10,012.7	112.4	112.1	57.36	6,366.6	1,572.3	1,570.9	1,375.0	195.90	8.019	
17,300.0	10,860.7	16,489.6	10,012.3	114.0	113.7	57.36	6,466.6	1,571.5	1,570.9	1,372.3	198.66	7.908	
17,400.0	10,860.4	16,589.6	10,011.9	115.5	115.3	57.35	6,566.6	1,570.7	1,571.0	1,369.6	201.42	7.800	
17,500.0	10,860.2	16,689.6	10,011.5	117.1	116.8	57.35	6,666.6	1,569.9	1,571.1	1,366.9	204.18	7.694	
17,600.0	10,860.0	16,789.6	10,011.1	118.7	118.4	57.34	6,766.5	1,569.2	1,571.2	1,364.2	206.95	7.592	
17,700.0	10,859.8	16,889.6	10,010.7	120.2	120.0	57.34	6,866.5	1,568.4	1,571.2	1,361.5	209.73	7.492	
17,800.0	10,859.5	16,989.6	10,010.4	121.8	121.6	57.33	6,966.5	1,567.6	1,571.3	1,358.8	212.50	7.394	
17,900.0	10,859.3	17,089.6	10,010.0	123.4	123.1	57.33	7,066.5	1,566.8	1,571.4	1,356.1	215.28	7.299	
18,000.0	10,859.1	17,189.6	10,009.6	124.9	124.7	57.32	7,166.5	1,566.0	1,571.5	1,353.4	218.06	7.207	
18,100.0	10,858.9	17,289.6	10,009.2	126.5	126.3	57.32	7,266.5	1,565.3	1,571.6	1,350.7	220.85	7.116	
18,200.0	10,858.6	17,389.6	10,008.8	128.1	127.9	57.31	7,366.5	1,564.5	1,571.6	1,348.0	223.64	7.028	
18,300.0	10,858.4	17,489.6	10,008.4	129.7	129.5	57.30	7,466.5	1,563.7	1,571.7	1,345.3	226.43	6.941	
18,400.0	10,858.2	17,589.6	10,008.0	131.3	131.1	57.30	7,566.5	1,562.9	1,571.8	1,342.6	229.22	6.857	
18,500.0	10,857.9	17,689.6	10,007.6	132.9	132.6	57.29	7,666.5	1,562.2	1,571.9	1,339.9	232.02	6.775	
18,600.0	10,857.7	17,789.6	10,007.2	134.4	134.2	57.29	7,766.5	1,561.4	1,572.0	1,337.1	234.81	6.694	
18,700.0	10,857.5	17,889.6	10,006.8	136.0	135.8	57.28	7,866.5	1,560.6	1,572.0	1,334.4	237.61	6.616	
18,800.0	10,857.3	17,989.6	10,006.5	137.6	137.4	57.28	7,966.5	1,559.8	1,572.1	1,331.7	240.42	6.539	
18,900.0	10,857.0	18,089.6	10,006.1	139.2	139.0	57.27	8,066.5	1,559.0	1,572.2	1,329.0	243.22	6.464	
19,000.0	10,856.8	18,189.6	10,005.7	140.8	140.6	57.27	8,166.5	1,558.3	1,572.3	1,326.2	246.03	6.391	
19,100.0	10,856.6	18,289.6	10,005.3	142.4	142.2	57.26	8,266.5	1,557.5	1,572.3	1,323.5	248.84	6.319	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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						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	10,856.4	18,389.6	10,004.9	144.0	143.8	57.26	8,366.5	1,556.7	1,572.4	1,320.8	251.65	6.248	
19,300.0	10,856.1	18,489.6	10,004.5	145.6	145.4	57.25	8,466.5	1,555.9	1,572.5	1,318.0	254.46	6.180	
19,400.0	10,855.9	18,589.6	10,004.1	147.2	147.0	57.25	8,566.5	1,555.1	1,572.6	1,315.3	257.28	6.112	
19,500.0	10,855.7	18,689.6	10,003.7	148.8	148.6	57.24	8,666.5	1,554.4	1,572.7	1,312.6	260.10	6.046	
19,600.0	10,855.5	18,789.6	10,003.3	150.4	150.2	57.24	8,766.5	1,553.6	1,572.7	1,309.8	262.91	5.982	
19,700.0	10,855.2	18,889.6	10,003.0	152.0	151.8	57.23	8,866.5	1,552.8	1,572.8	1,307.1	265.73	5.919	
19,800.0	10,855.0	18,989.6	10,002.6	153.6	153.5	57.23	8,966.5	1,552.0	1,572.9	1,304.3	268.55	5.857	
19,900.0	10,854.8	19,089.6	10,002.2	155.2	155.1	57.22	9,066.5	1,551.2	1,573.0	1,301.6	271.38	5.796	
20,000.0	10,854.5	19,189.6	10,001.8	156.8	156.7	57.22	9,166.5	1,550.5	1,573.1	1,298.9	274.20	5.737	
20,100.0	10,854.3	19,289.6	10,001.4	158.4	158.3	57.21	9,266.4	1,549.7	1,573.1	1,296.1	277.03	5.679	
20,200.0	10,854.1	19,389.6	10,001.0	160.0	159.9	57.21	9,366.4	1,548.9	1,573.2	1,293.4	279.86	5.622	
20,300.0	10,853.9	19,489.6	10,000.6	161.7	161.5	57.20	9,466.4	1,548.1	1,573.3	1,290.6	282.68	5.566	
20,400.0	10,853.6	19,589.6	10,000.2	163.3	163.1	57.20	9,566.4	1,547.4	1,573.4	1,287.9	285.51	5.511	
20,500.0	10,853.4	19,689.6	9,999.8	164.9	164.7	57.19	9,666.4	1,546.6	1,573.4	1,285.1	288.34	5.457	
20,600.0	10,853.2	19,789.6	9,999.4	166.5	166.3	57.18	9,766.4	1,545.8	1,573.5	1,282.4	291.18	5.404	
20,700.0	10,853.0	19,889.6	9,999.1	168.1	168.0	57.18	9,866.4	1,545.0	1,573.6	1,279.6	294.01	5.352	
20,800.0	10,852.7	19,989.6	9,998.7	169.7	169.6	57.17	9,966.4	1,544.2	1,573.7	1,276.8	296.84	5.301	
20,900.0	10,852.5	20,089.6	9,998.3	171.3	171.2	57.17	10,066.4	1,543.5	1,573.8	1,274.1	299.68	5.251	
21,000.0	10,852.3	20,189.6	9,997.9	172.9	172.8	57.16	10,166.4	1,542.7	1,573.8	1,271.3	302.52	5.203	
21,091.7	10,852.1	20,281.3	9,997.5	174.4	174.2	57.16	10,258.1	1,542.0	1,573.9	1,269.0	304.95	5.161	
21,094.0	10,851.5	20,283.6	9,997.5	174.5	174.2	57.17	10,260.5	1,541.9	1,573.4	1,268.4	305.04	5.158 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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	2,452.9	2,453.6				
100.0	100.0	101.0	99.0	0.1	0.1	88.65	57.7	2,452.9	2,453.6	2,453.3	0.26	9,440.794	
200.0	200.0	201.0	199.0	0.5	0.5	88.65	57.7	2,452.9	2,453.6	2,452.6	0.98	2,511.773	
300.0	300.0	301.0	299.0	0.8	0.8	88.65	57.7	2,452.9	2,453.6	2,451.9	1.69	1,448.589	
400.0	400.0	401.0	399.0	1.2	1.2	88.65	57.7	2,452.9	2,453.6	2,451.2	2.41	1,017.782	
500.0	500.0	501.0	499.0	1.6	1.6	88.65	57.7	2,452.9	2,453.6	2,450.5	3.13	784.480	
600.0	600.0	601.0	599.0	1.9	1.9	88.65	57.7	2,452.9	2,453.6	2,449.7	3.84	638.190	
700.0	700.0	701.0	699.0	2.3	2.3	88.65	57.7	2,452.9	2,453.6	2,449.0	4.56	537.885	
800.0	800.0	801.0	799.0	2.6	2.6	88.65	57.7	2,452.9	2,453.6	2,448.3	5.28	464.827	
900.0	900.0	901.0	899.0	3.0	3.0	88.65	57.7	2,452.9	2,453.6	2,447.6	6.00	409.243	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	88.65	57.7	2,452.9	2,453.6	2,446.9	6.71	365.532	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	88.65	57.7	2,452.9	2,453.6	2,446.2	7.43	330.257	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	88.65	57.7	2,452.9	2,453.6	2,445.4	8.15	301.192	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	-33.60	57.7	2,452.9	2,452.9	2,444.0	8.85	277.175	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	-33.65	57.7	2,452.9	2,450.7	2,441.1	9.54	256.821	
1,500.0	1,499.9	1,498.9	1,498.9	5.1	5.1	-33.73	57.7	2,452.9	2,447.1	2,436.8	10.23	239.181	
1,600.0	1,599.7	1,571.1	1,571.1	5.4	5.4	-33.80	57.5	2,453.3	2,442.5	2,431.7	10.82	225.707	
1,700.0	1,699.4	1,643.0	1,643.0	5.8	5.6	-33.89	57.0	2,454.6	2,437.7	2,426.3	11.41	213.660	
1,800.0	1,798.9	1,715.0	1,714.9	6.1	5.9	-33.99	56.1	2,456.6	2,432.6	2,420.6	12.00	202.769	
1,900.0	1,898.3	1,787.0	1,786.8	6.5	6.1	-34.10	54.9	2,459.5	2,427.2	2,414.6	12.59	192.804	
2,000.0	1,997.4	1,859.0	1,858.7	6.9	6.4	-34.21	53.3	2,463.3	2,421.5	2,408.3	13.19	183.649	
2,100.0	2,096.4	1,931.1	1,930.7	7.2	6.6	-34.30	51.4	2,467.8	2,416.2	2,402.4	13.79	175.270	
2,200.0	2,195.5	2,000.0	1,999.4	7.6	6.9	-34.37	49.2	2,473.0	2,412.0	2,397.7	14.38	167.777	
2,300.0	2,294.5	2,075.6	2,074.7	8.0	7.1	-34.44	46.4	2,479.5	2,409.0	2,394.0	15.00	160.649	
2,400.0	2,393.5	2,148.0	2,146.6	8.4	7.4	-34.50	43.4	2,486.6	2,407.2	2,391.6	15.60	154.261	
2,500.0	2,492.5	2,220.4	2,218.6	8.8	7.6	-34.55	40.1	2,494.6	2,406.5	2,390.3	16.22	148.408	
2,510.5	2,503.0	2,228.1	2,226.1	8.8	7.7	-34.55	39.7	2,495.5	2,406.5	2,390.2	16.28	147.820 CC	
2,600.0	2,591.6	2,309.8	2,287.7	9.2	8.0	-34.59	36.5	2,503.0	2,407.0	2,390.1	16.89	142.543 ES	
2,700.0	2,690.6	2,409.8	2,386.7	9.6	8.4	-34.63	31.1	2,515.9	2,408.1	2,390.5	17.61	136.711	
2,800.0	2,789.6	2,509.8	2,485.7	10.0	8.7	-34.68	25.7	2,528.7	2,409.2	2,390.9	18.35	131.314	
2,900.0	2,888.6	2,609.9	2,584.7	10.4	9.1	-34.73	20.3	2,541.5	2,410.4	2,391.3	19.08	126.308	
3,000.0	2,987.7	2,709.9	2,683.7	10.8	9.5	-34.77	14.9	2,554.3	2,411.5	2,391.7	19.82	121.655	
3,100.0	3,086.7	2,809.9	2,782.7	11.2	9.9	-34.82	9.5	2,567.1	2,412.7	2,392.1	20.56	117.321	
3,200.0	3,185.7	2,890.0	2,881.7	11.6	10.2	-34.87	4.1	2,580.0	2,413.8	2,392.6	21.24	113.663	
3,300.0	3,284.8	3,010.0	2,980.7	12.0	10.7	-34.91	-1.3	2,592.8	2,414.9	2,392.9	22.06	109.491	
3,400.0	3,383.8	3,090.0	3,079.7	12.4	11.0	-34.96	-6.7	2,605.6	2,416.1	2,393.4	22.73	106.288	
3,500.0	3,482.8	3,190.0	3,178.7	12.8	11.4	-35.01	-12.1	2,618.4	2,417.2	2,393.8	23.48	102.940	
3,600.0	3,581.8	3,289.9	3,277.7	13.2	11.8	-35.05	-17.5	2,631.3	2,418.4	2,394.2	24.23	99.793	
3,700.0	3,680.9	3,389.9	3,376.7	13.7	12.2	-35.10	-22.9	2,644.1	2,419.6	2,394.6	24.99	96.828	
3,800.0	3,779.9	3,489.9	3,475.7	14.1	12.6	-35.15	-28.3	2,656.9	2,420.7	2,395.0	25.74	94.032	
3,878.9	3,858.0	3,568.8	3,553.8	14.4	12.9	-35.18	-32.6	2,667.0	2,421.6	2,395.3	26.34	91.936	
3,900.0	3,878.9	3,589.9	3,574.7	14.5	13.0	-35.20	-33.7	2,669.7	2,421.9	2,395.4	26.50	91.393	
4,000.0	3,978.2	3,689.8	3,673.7	14.9	13.4	-35.24	-39.1	2,682.5	2,424.6	2,397.3	27.25	88.969	
4,100.0	4,077.7	3,789.7	3,772.6	15.3	13.8	-35.27	-44.5	2,695.3	2,429.4	2,401.4	28.00	86.776	
4,200.0	4,177.5	3,889.4	3,871.4	15.6	14.2	-35.28	-49.9	2,708.1	2,436.4	2,407.6	28.73	84.796	
4,300.0	4,277.4	3,989.0	3,969.9	16.0	14.6	-35.27	-55.3	2,720.9	2,445.4	2,416.0	29.46	83.014	
4,400.0	4,377.4	4,088.2	4,068.2	16.3	15.0	-35.25	-60.7	2,733.6	2,456.7	2,426.5	30.17	81.415	
4,412.2	4,389.6	4,100.3	4,080.2	16.4	15.1	87.00	-61.3	2,735.2	2,458.2	2,427.9	30.26	81.232	
4,500.0	4,477.4	4,187.2	4,166.3	16.7	15.4	87.12	-66.0	2,746.3	2,469.2	2,438.3	30.87	79.982	
4,600.0	4,577.4	4,286.2	4,264.3	17.0	15.8	87.26	-71.4	2,759.0	2,481.8	2,450.2	31.57	78.614	
4,700.0	4,677.4	4,385.3	4,362.4	17.3	16.2	87.40	-76.7	2,771.7	2,494.3	2,462.1	32.27	77.302	
4,800.0	4,777.4	4,484.3	4,460.4	17.6	16.7	87.53	-82.1	2,784.4	2,506.9	2,474.0	32.97	76.043	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
4,900.0	4,877.4	4,583.3	4,558.5	18.0	17.1	87.67	-87.4	2,797.1	2,519.6	2,485.9	33.67	74.834	
5,000.0	4,977.4	4,682.4	4,656.6	18.3	17.5	87.80	-92.8	2,809.8	2,532.2	2,497.8	34.37	73.672	
5,100.0	5,077.4	4,781.4	4,754.6	18.6	17.9	87.94	-98.1	2,822.5	2,544.8	2,509.7	35.07	72.555	
5,200.0	5,177.4	4,880.4	4,852.7	19.0	18.3	88.07	-103.5	2,835.2	2,557.5	2,521.7	35.78	71.481	
5,300.0	5,277.4	4,979.4	4,950.8	19.3	18.7	88.20	-108.8	2,847.9	2,570.1	2,533.6	36.48	70.446	
5,400.0	5,377.4	5,078.5	5,048.8	19.6	19.1	88.32	-114.2	2,860.6	2,582.8	2,545.6	37.19	69.449	
5,500.0	5,477.4	5,177.5	5,146.9	20.0	19.5	88.45	-119.5	2,873.3	2,595.5	2,557.6	37.90	68.488	
5,600.0	5,577.4	5,276.5	5,244.9	20.3	19.9	88.58	-124.9	2,886.0	2,608.2	2,569.6	38.60	67.561	
5,700.0	5,677.4	5,375.5	5,343.0	20.6	20.3	88.70	-130.2	2,898.7	2,620.9	2,581.6	39.31	66.667	
5,800.0	5,777.4	5,474.6	5,441.1	21.0	20.8	88.83	-135.6	2,911.4	2,633.6	2,593.6	40.02	65.803	
5,900.0	5,877.4	5,573.6	5,539.1	21.3	21.2	88.95	-140.9	2,924.1	2,646.4	2,605.6	40.73	64.969	
6,000.0	5,977.4	5,672.6	5,637.2	21.6	21.6	89.07	-146.3	2,936.8	2,659.1	2,617.7	41.44	64.163	
6,100.0	6,077.4	5,769.9	5,734.9	22.0	22.6	89.31	-157.2	2,962.8	2,669.0	2,626.2	42.83	62.314	
6,200.0	6,177.4	6,200.0	6,172.4	22.3	23.6	89.40	-161.1	2,971.9	2,672.3	2,628.3	44.02	60.710	
6,300.0	6,277.4	6,313.6	6,276.4	22.6	23.9	89.40	-161.1	2,971.9	2,672.3	2,627.6	44.74	59.735	
6,400.0	6,377.4	6,413.6	6,376.4	23.0	24.2	89.40	-161.1	2,971.9	2,672.3	2,626.9	45.41	58.843	
6,500.0	6,477.4	6,513.6	6,476.4	23.3	24.6	89.40	-161.1	2,971.9	2,672.3	2,626.2	46.09	57.976	
6,600.0	6,577.4	6,613.6	6,576.4	23.7	24.9	89.40	-161.1	2,971.9	2,672.3	2,625.5	46.77	57.133	
6,700.0	6,677.4	6,713.6	6,676.4	24.0	25.2	89.40	-161.1	2,971.9	2,672.3	2,624.8	47.45	56.313	
6,800.0	6,777.4	6,813.6	6,776.4	24.3	25.5	89.40	-161.1	2,971.9	2,672.3	2,624.2	48.14	55.515	
6,900.0	6,877.4	6,913.6	6,876.4	24.7	25.8	89.40	-161.1	2,971.9	2,672.3	2,623.5	48.82	54.738	
7,000.0	6,977.4	7,013.6	6,976.4	25.0	26.2	89.40	-161.1	2,971.9	2,672.3	2,622.8	49.50	53.981	
7,100.0	7,077.4	7,113.6	7,076.4	25.4	26.5	89.40	-161.1	2,971.9	2,672.3	2,622.1	50.19	53.244	
7,200.0	7,177.4	7,213.6	7,176.4	25.7	26.8	89.40	-161.1	2,971.9	2,672.3	2,621.4	50.88	52.526	
7,300.0	7,277.4	7,313.6	7,276.4	26.1	27.1	89.40	-161.1	2,971.9	2,672.3	2,620.7	51.56	51.827	
7,400.0	7,377.4	7,413.6	7,376.4	26.4	27.5	89.40	-161.1	2,971.9	2,672.3	2,620.0	52.25	51.145	
7,500.0	7,477.4	7,513.6	7,476.4	26.8	27.8	89.40	-161.1	2,971.9	2,672.3	2,619.4	52.94	50.480	
7,600.0	7,577.4	7,613.6	7,576.4	27.1	28.1	89.40	-161.1	2,971.9	2,672.3	2,618.7	53.63	49.831	
7,700.0	7,677.4	7,713.6	7,676.4	27.4	28.5	89.40	-161.1	2,971.9	2,672.3	2,618.0	54.32	49.198	
7,800.0	7,777.4	7,813.6	7,776.4	27.8	28.8	89.40	-161.1	2,971.9	2,672.3	2,617.3	55.01	48.580	
7,900.0	7,877.4	7,913.6	7,876.4	28.1	29.1	89.40	-161.1	2,971.9	2,672.3	2,616.6	55.70	47.977	
8,000.0	7,977.4	8,013.6	7,976.4	28.5	29.5	89.40	-161.1	2,971.9	2,672.3	2,615.9	56.39	47.389	
8,100.0	8,077.4	8,113.6	8,076.4	28.8	29.8	89.40	-161.1	2,971.9	2,672.3	2,615.2	57.08	46.814	
8,200.0	8,177.4	8,213.6	8,176.4	29.2	30.1	89.40	-161.1	2,971.9	2,672.3	2,614.5	57.78	46.252	
8,300.0	8,277.4	8,313.6	8,276.4	29.5	30.5	89.40	-161.1	2,971.9	2,672.3	2,613.8	58.47	45.704	
8,400.0	8,377.4	8,413.6	8,376.4	29.9	30.8	89.40	-161.1	2,971.9	2,672.3	2,613.1	59.16	45.167	
8,500.0	8,477.4	8,513.6	8,476.4	30.2	31.1	89.40	-161.1	2,971.9	2,672.3	2,612.4	59.86	44.643	
8,600.0	8,577.4	8,613.6	8,576.4	30.6	31.5	89.40	-161.1	2,971.9	2,672.3	2,611.7	60.55	44.131	
8,700.0	8,677.4	8,713.6	8,676.4	30.9	31.8	89.40	-161.1	2,971.9	2,672.3	2,611.0	61.25	43.629	
8,800.0	8,777.4	8,813.6	8,776.4	31.3	32.1	89.40	-161.1	2,971.9	2,672.3	2,610.3	61.95	43.139	
8,900.0	8,877.4	8,913.6	8,876.4	31.6	32.5	89.40	-161.1	2,971.9	2,672.3	2,609.6	62.64	42.659	
9,000.0	8,977.4	9,013.6	8,976.4	32.0	32.8	89.40	-161.1	2,971.9	2,672.3	2,609.0	63.34	42.190	
9,100.0	9,077.4	9,113.6	9,076.4	32.3	33.1	89.40	-161.1	2,971.9	2,672.3	2,608.3	64.04	41.730	
9,200.0	9,177.4	9,213.6	9,176.4	32.7	33.5	89.40	-161.1	2,971.9	2,672.3	2,607.6	64.74	41.280	
9,300.0	9,277.4	9,313.6	9,276.4	33.0	33.8	89.40	-161.1	2,971.9	2,672.3	2,606.9	65.43	40.839	
9,400.0	9,377.4	9,413.6	9,376.4	33.4	34.2	89.40	-161.1	2,971.9	2,672.3	2,606.2	66.13	40.408	
9,500.0	9,477.4	9,513.6	9,476.4	33.7	34.5	89.40	-161.1	2,971.9	2,672.3	2,605.5	66.83	39.985	
9,600.0	9,577.4	9,633.0	9,595.2	34.1	34.9	89.17	-150.6	2,971.4	2,672.0	2,604.4	67.57	39.546	
9,700.0	9,677.4	9,745.6	9,702.8	34.4	35.2	88.49	-118.5	2,969.8	2,671.1	2,602.8	68.26	39.132	
9,800.0	9,777.4	9,842.7	9,789.1	34.8	35.4	87.54	-74.4	2,967.5	2,670.2	2,601.3	68.90	38.754	
9,843.4	9,820.7	9,879.5	9,819.7	34.9	35.5	87.10	-54.0	2,966.5	2,670.1	2,601.0	69.17	38.604	
9,900.0	9,877.4	9,922.9	9,854.1	35.1	35.6	86.53	-27.4	2,965.1	2,670.4	2,600.9	69.50	38.421	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	9,977.4	9,988.0	9,901.5	35.5	35.7	85.57	17.1	2,962.9	2,672.1	2,602.1	70.05	38.144		
10,100.0	10,077.4	10,040.5	9,935.8	35.8	35.7	84.72	56.7	2,960.9	2,676.1	2,605.6	70.54	37.936		
10,200.0	10,177.4	10,083.2	9,961.0	36.2	35.8	83.99	91.1	2,959.1	2,682.8	2,611.8	70.96	37.806		
10,300.0	10,277.4	10,118.1	9,979.6	36.5	35.8	83.35	120.6	2,957.6	2,692.3	2,621.0	71.30	37.759		
10,324.1	10,301.5	10,125.6	9,983.4	36.6	35.8	83.22	127.1	2,957.3	2,695.0	2,623.6	71.37	37.761		
10,350.0	10,327.4	10,133.6	9,987.3	36.7	35.8	83.20	134.0	2,957.0	2,698.1	2,626.7	71.44	37.767		
10,400.0	10,377.2	10,150.0	9,995.0	36.9	35.8	82.29	148.5	2,956.2	2,704.2	2,632.7	71.56	37.790		
10,450.0	10,426.4	10,166.3	10,002.3	37.0	35.8	81.39	163.0	2,955.5	2,710.5	2,638.9	71.66	37.826		
10,500.0	10,474.6	10,183.6	10,009.6	37.2	35.8	80.48	178.7	2,954.7	2,716.9	2,645.1	71.74	37.872		
10,550.0	10,521.6	10,200.0	10,016.0	37.3	35.8	79.59	193.8	2,953.9	2,723.2	2,651.4	71.80	37.928		
10,600.0	10,566.8	10,219.7	10,023.2	37.5	35.8	78.69	212.1	2,953.0	2,729.4	2,657.6	71.85	37.987		
10,650.0	10,610.1	10,238.3	10,029.4	37.6	35.8	77.85	229.6	2,952.1	2,735.4	2,663.5	71.89	38.048		
10,700.0	10,651.0	10,250.0	10,033.0	37.7	35.8	77.13	240.8	2,951.6	2,741.2	2,669.3	71.90	38.124		
10,750.0	10,689.2	10,276.5	10,040.3	37.8	35.9	76.29	266.2	2,950.3	2,746.6	2,674.6	71.96	38.166		
10,800.0	10,724.5	10,300.0	10,045.8	37.9	35.9	75.56	289.0	2,949.1	2,751.5	2,679.5	72.01	38.211		
10,850.0	10,756.6	10,315.7	10,048.9	37.9	35.9	74.97	304.4	2,948.3	2,756.0	2,684.0	72.03	38.259		
10,900.0	10,785.2	10,335.6	10,052.3	38.0	35.9	74.42	324.0	2,947.4	2,759.9	2,687.9	72.08	38.288		
10,950.0	10,810.1	10,350.0	10,054.3	38.0	35.9	73.98	338.2	2,946.6	2,763.3	2,691.2	72.13	38.310		
11,000.0	10,831.2	10,375.8	10,057.0	38.1	36.0	73.54	363.8	2,945.3	2,766.0	2,693.7	72.23	38.293		
11,050.0	10,848.2	10,400.0	10,058.5	38.3	36.1	73.21	388.0	2,944.1	2,768.0	2,695.6	72.35	38.261		
11,100.0	10,861.1	10,416.4	10,058.9	38.4	36.1	73.01	404.3	2,943.3	2,769.3	2,696.8	72.46	38.218		
11,150.0	10,869.7	10,427.2	10,058.9	38.5	36.1	72.91	415.1	2,942.7	2,769.9	2,697.3	72.59	38.160		
11,200.0	10,874.0	10,465.1	10,058.7	38.7	36.3	72.85	453.0	2,941.1	2,769.6	2,696.7	72.83	38.030		
11,225.4	10,874.5	10,478.3	10,058.6	38.8	36.3	72.88	466.2	2,940.6	2,769.1	2,696.1	72.94	37.964		
11,287.1	10,874.3	10,510.4	10,058.4	39.0	36.4	72.88	498.2	2,939.7	2,768.0	2,694.8	73.25	37.790		
11,300.0	10,874.3	10,517.1	10,058.3	39.0	36.5	72.88	504.9	2,939.6	2,767.9	2,694.6	73.32	37.752		
11,357.3	10,874.2	10,554.5	10,058.1	39.2	36.6	72.87	532.3	2,939.2	2,767.6	2,693.9	73.68	37.561		
11,400.0	10,874.1	10,587.1	10,057.8	39.4	36.7	72.87	575.0	2,938.9	2,767.7	2,693.7	73.97	37.414		
11,500.0	10,873.8	10,687.1	10,057.1	39.8	37.2	72.86	675.0	2,938.1	2,767.8	2,692.9	74.86	36.972		
11,600.0	10,873.6	10,787.1	10,056.4	40.3	37.7	72.85	775.0	2,937.3	2,767.9	2,692.0	75.87	36.482		
11,700.0	10,873.4	10,887.1	10,055.7	40.9	38.3	72.84	875.0	2,936.5	2,768.0	2,691.0	77.00	35.948		
11,800.0	10,873.2	10,987.1	10,055.0	41.5	39.0	72.83	975.0	2,935.7	2,768.1	2,689.9	78.24	35.378		
11,900.0	10,872.9	11,087.1	10,054.3	42.2	39.7	72.82	1,075.0	2,934.9	2,768.2	2,688.6	79.60	34.778		
12,000.0	10,872.7	11,187.1	10,053.6	42.9	40.5	72.81	1,174.9	2,934.1	2,768.4	2,687.3	81.06	34.154		
12,100.0	10,872.5	11,287.1	10,052.9	43.7	41.3	72.80	1,274.9	2,933.3	2,768.5	2,685.9	82.61	33.512		
12,200.0	10,872.2	11,387.1	10,052.2	44.6	42.2	72.79	1,374.9	2,932.5	2,768.6	2,684.3	84.26	32.858		
12,300.0	10,872.0	11,487.1	10,051.5	45.4	43.1	72.78	1,474.9	2,931.7	2,768.7	2,682.7	85.99	32.196		
12,400.0	10,871.8	11,587.1	10,050.8	46.3	44.0	72.77	1,574.9	2,930.9	2,768.8	2,681.0	87.81	31.531		
12,500.0	10,871.6	11,687.1	10,050.1	47.3	45.0	72.76	1,674.9	2,930.1	2,768.9	2,679.2	89.71	30.867		
12,600.0	10,871.3	11,787.1	10,049.4	48.3	46.0	72.75	1,774.9	2,929.3	2,769.1	2,677.4	91.67	30.206		
12,700.0	10,871.1	11,887.1	10,048.7	49.3	47.1	72.74	1,874.9	2,928.5	2,769.2	2,675.5	93.71	29.551		
12,800.0	10,870.9	11,987.1	10,048.0	50.4	48.2	72.73	1,974.9	2,927.7	2,769.3	2,673.5	95.81	28.905		
12,900.0	10,870.7	12,087.1	10,047.3	51.5	49.3	72.73	2,074.9	2,927.0	2,769.4	2,671.5	97.96	28.270		
13,000.0	10,870.4	12,187.1	10,046.6	52.6	50.5	72.72	2,174.9	2,926.2	2,769.5	2,669.4	100.18	27.646		
13,100.0	10,870.2	12,287.1	10,045.9	53.8	51.7	72.71	2,274.9	2,925.4	2,769.6	2,667.2	102.44	27.036		
13,200.0	10,870.0	12,387.1	10,045.2	54.9	52.9	72.70	2,374.9	2,924.6	2,769.8	2,665.0	104.76	26.440		
13,300.0	10,869.7	12,487.1	10,044.4	56.1	54.1	72.69	2,474.9	2,923.8	2,769.9	2,662.8	107.11	25.859		
13,400.0	10,869.5	12,587.1	10,043.7	57.4	55.4	72.68	2,574.9	2,923.0	2,770.0	2,660.5	109.51	25.293		
13,500.0	10,869.3	12,687.1	10,043.0	58.6	56.7	72.67	2,674.8	2,922.2	2,770.1	2,658.2	111.96	24.743		
13,600.0	10,869.1	12,787.1	10,042.3	59.9	58.0	72.66	2,774.8	2,921.4	2,770.2	2,655.8	114.43	24.208		
13,700.0	10,868.8	12,887.1	10,041.6	61.1	59.3	72.65	2,874.8	2,920.6	2,770.4	2,653.4	116.94	23.689		
13,800.0	10,868.6	12,987.1	10,040.9	62.4	60.6	72.64	2,974.8	2,919.8	2,770.5	2,651.0	119.49	23.186		

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,868.4	13,087.1	10,040.2	63.8	62.0	72.63	3,074.8	2,919.0	2,770.6	2,648.5	122.06	22.698	
14,000.0	10,868.2	13,187.1	10,039.5	65.1	63.3	72.62	3,174.8	2,918.2	2,770.7	2,646.0	124.67	22.225	
14,100.0	10,867.9	13,287.1	10,038.8	66.4	64.7	72.61	3,274.8	2,917.4	2,770.8	2,643.5	127.30	21.767	
14,200.0	10,867.7	13,387.1	10,038.1	67.8	66.1	72.60	3,374.8	2,916.6	2,770.9	2,641.0	129.95	21.323	
14,300.0	10,867.5	13,487.1	10,037.4	69.2	67.5	72.59	3,474.8	2,915.9	2,771.1	2,638.4	132.63	20.893	
14,400.0	10,867.3	13,587.1	10,036.7	70.6	68.9	72.58	3,574.8	2,915.1	2,771.2	2,635.9	135.33	20.477	
14,500.0	10,867.0	13,687.1	10,036.0	72.0	70.3	72.57	3,674.8	2,914.3	2,771.3	2,633.2	138.05	20.074	
14,600.0	10,866.8	13,787.1	10,035.3	73.4	71.7	72.56	3,774.8	2,913.5	2,771.4	2,630.6	140.80	19.684	
14,700.0	10,866.6	13,887.1	10,034.6	74.8	73.2	72.55	3,874.8	2,912.7	2,771.5	2,628.0	143.56	19.306	
14,800.0	10,866.3	13,987.1	10,033.9	76.2	74.6	72.54	3,974.8	2,911.9	2,771.7	2,625.3	146.33	18.941	
14,900.0	10,866.1	14,087.1	10,033.2	77.7	76.1	72.53	4,074.7	2,911.1	2,771.8	2,622.7	149.13	18.587	
15,000.0	10,865.9	14,187.1	10,032.5	79.1	77.6	72.52	4,174.7	2,910.3	2,771.9	2,620.0	151.93	18.244	
15,100.0	10,865.7	14,287.1	10,031.8	80.6	79.0	72.51	4,274.7	2,909.5	2,772.0	2,617.3	154.76	17.912	
15,200.0	10,865.4	14,387.1	10,031.1	82.0	80.5	72.50	4,374.7	2,908.7	2,772.1	2,614.5	157.60	17.590	
15,300.0	10,865.2	14,487.1	10,030.4	83.5	82.0	72.50	4,474.7	2,907.9	2,772.3	2,611.8	160.45	17.278	
15,400.0	10,865.0	14,587.1	10,029.7	85.0	83.5	72.49	4,574.7	2,907.1	2,772.4	2,609.1	163.31	16.976	
15,500.0	10,864.8	14,687.1	10,029.0	86.4	85.0	72.48	4,674.7	2,906.3	2,772.5	2,606.3	166.18	16.683	
15,600.0	10,864.5	14,787.1	10,028.3	87.9	86.5	72.47	4,774.7	2,905.5	2,772.6	2,603.5	169.07	16.399	
15,700.0	10,864.3	14,887.1	10,027.6	89.4	88.0	72.46	4,874.7	2,904.7	2,772.7	2,600.8	171.97	16.124	
15,800.0	10,864.1	14,987.1	10,026.9	90.9	89.5	72.45	4,974.7	2,904.0	2,772.9	2,598.0	174.87	15.856	
15,900.0	10,863.8	15,087.1	10,026.2	92.4	91.1	72.44	5,074.7	2,903.2	2,773.0	2,595.2	177.79	15.597	
16,000.0	10,863.6	15,187.1	10,025.4	94.0	92.6	72.43	5,174.7	2,902.4	2,773.1	2,592.4	180.71	15.345	
16,100.0	10,863.4	15,287.1	10,024.7	95.5	94.1	72.42	5,274.7	2,901.6	2,773.2	2,589.6	183.65	15.101	
16,200.0	10,863.2	15,387.1	10,024.0	97.0	95.7	72.41	5,374.7	2,900.8	2,773.3	2,586.7	186.59	14.863	
16,300.0	10,862.9	15,487.1	10,023.3	98.5	97.2	72.40	5,474.7	2,900.0	2,773.5	2,583.9	189.54	14.633	
16,400.0	10,862.7	15,587.1	10,022.6	100.0	98.7	72.39	5,574.6	2,899.2	2,773.6	2,581.1	192.50	14.409	
16,500.0	10,862.5	15,687.1	10,021.9	101.6	100.3	72.38	5,674.6	2,898.4	2,773.7	2,578.2	195.46	14.191	
16,600.0	10,862.3	15,787.1	10,021.2	103.1	101.8	72.37	5,774.6	2,897.6	2,773.8	2,575.4	198.43	13.979	
16,700.0	10,862.0	15,887.1	10,020.5	104.7	103.4	72.36	5,874.6	2,896.8	2,773.9	2,572.5	201.41	13.773	
16,800.0	10,861.8	15,987.1	10,019.8	106.2	104.9	72.35	5,974.6	2,896.0	2,774.1	2,569.7	204.39	13.572	
16,900.0	10,861.6	16,087.1	10,019.1	107.7	106.5	72.34	6,074.6	2,895.2	2,774.2	2,566.8	207.38	13.377	
17,000.0	10,861.4	16,187.1	10,018.4	109.3	108.1	72.33	6,174.6	2,894.4	2,774.3	2,563.9	210.37	13.187	
17,100.0	10,861.1	16,287.1	10,017.7	110.8	109.6	72.32	6,274.6	2,893.6	2,774.4	2,561.0	213.37	13.003	
17,200.0	10,860.9	16,387.1	10,017.0	112.4	111.2	72.31	6,374.6	2,892.8	2,774.5	2,558.2	216.38	12.823	
17,300.0	10,860.7	16,487.1	10,016.3	114.0	112.8	72.30	6,474.6	2,892.1	2,774.7	2,555.3	219.39	12.647	
17,400.0	10,860.4	16,587.1	10,015.6	115.5	114.3	72.29	6,574.6	2,891.3	2,774.8	2,552.4	222.40	12.476	
17,500.0	10,860.2	16,687.1	10,014.9	117.1	115.9	72.29	6,674.6	2,890.5	2,774.9	2,549.5	225.42	12.310	
17,600.0	10,860.0	16,787.1	10,014.2	118.7	117.5	72.28	6,774.6	2,889.7	2,775.0	2,546.6	228.45	12.147	
17,700.0	10,859.8	16,887.1	10,013.5	120.2	119.1	72.27	6,874.6	2,888.9	2,775.1	2,543.7	231.47	11.989	
17,800.0	10,859.5	16,987.1	10,012.8	121.8	120.7	72.26	6,974.6	2,888.1	2,775.3	2,540.8	234.50	11.835	
17,900.0	10,859.3	17,087.1	10,012.1	123.4	122.2	72.25	7,074.5	2,887.3	2,775.4	2,537.8	237.54	11.684	
18,000.0	10,859.1	17,187.1	10,011.4	124.9	123.8	72.24	7,174.5	2,886.5	2,775.5	2,534.9	240.58	11.537	
18,100.0	10,858.9	17,287.1	10,010.7	126.5	125.4	72.23	7,274.5	2,885.7	2,775.6	2,532.0	243.62	11.393	
18,200.0	10,858.6	17,387.1	10,010.0	128.1	127.0	72.22	7,374.5	2,884.9	2,775.7	2,529.1	246.67	11.253	
18,300.0	10,858.4	17,487.1	10,009.3	129.7	128.6	72.21	7,474.5	2,884.1	2,775.9	2,526.2	249.71	11.116	
18,400.0	10,858.2	17,587.1	10,008.6	131.3	130.2	72.20	7,574.5	2,883.3	2,776.0	2,523.2	252.77	10.982	
18,500.0	10,857.9	17,687.1	10,007.9	132.9	131.8	72.19	7,674.5	2,882.5	2,776.1	2,520.3	255.82	10.852	
18,600.0	10,857.7	17,787.0	10,007.1	134.4	133.4	72.18	7,774.5	2,881.7	2,776.2	2,517.4	258.88	10.724	
18,700.0	10,857.5	17,887.0	10,006.4	136.0	135.0	72.17	7,874.5	2,880.9	2,776.4	2,514.4	261.94	10.599	
18,800.0	10,857.3	17,987.0	10,005.7	137.6	136.6	72.16	7,974.5	2,880.2	2,776.5	2,511.5	265.00	10.477	
18,900.0	10,857.0	18,087.0	10,005.0	139.2	138.2	72.15	8,074.5	2,879.4	2,776.6	2,508.5	268.07	10.358	
19,000.0	10,856.8	18,187.0	10,004.3	140.8	139.8	72.14	8,174.5	2,878.6	2,776.7	2,505.6	271.14	10.241	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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 #114H - 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
19,100.0	10,856.6	18,287.0	10,003.6	142.4	141.4	72.13	8,274.5	2,877.8	2,776.8	2,502.6	274.21	10.127	
19,200.0	10,856.4	18,387.0	10,002.9	144.0	143.0	72.12	8,374.5	2,877.0	2,777.0	2,499.7	277.28	10.015	
19,300.0	10,856.1	18,487.0	10,002.2	145.6	144.6	72.11	8,474.5	2,876.2	2,777.1	2,496.7	280.35	9.906	
19,400.0	10,855.9	18,587.0	10,001.5	147.2	146.2	72.10	8,574.4	2,875.4	2,777.2	2,493.8	283.43	9.799	
19,500.0	10,855.7	18,687.0	10,000.8	148.8	147.8	72.09	8,674.4	2,874.6	2,777.3	2,490.8	286.51	9.694	
19,600.0	10,855.5	18,787.0	10,000.1	150.4	149.4	72.09	8,774.4	2,873.8	2,777.5	2,487.9	289.59	9.591	
19,700.0	10,855.2	18,887.0	9,999.4	152.0	151.0	72.08	8,874.4	2,873.0	2,777.6	2,484.9	292.67	9.490	
19,800.0	10,855.0	18,987.0	9,998.7	153.6	152.6	72.07	8,974.4	2,872.2	2,777.7	2,481.9	295.76	9.392	
19,900.0	10,854.8	19,087.0	9,998.0	155.2	154.2	72.06	9,074.4	2,871.4	2,777.8	2,479.0	298.84	9.295	
20,000.0	10,854.5	19,187.0	9,997.3	156.8	155.8	72.05	9,174.4	2,870.6	2,777.9	2,476.0	301.93	9.201	
20,100.0	10,854.3	19,287.0	9,996.6	158.4	157.5	72.04	9,274.4	2,869.8	2,778.1	2,473.0	305.02	9.108	
20,200.0	10,854.1	19,387.0	9,995.9	160.0	159.1	72.03	9,374.4	2,869.0	2,778.2	2,470.1	308.11	9.017	
20,300.0	10,853.9	19,487.0	9,995.2	161.7	160.7	72.02	9,474.4	2,868.3	2,778.3	2,467.1	311.20	8.928	
20,400.0	10,853.6	19,587.0	9,994.5	163.3	162.3	72.01	9,574.4	2,867.5	2,778.4	2,464.1	314.30	8.840	
20,500.0	10,853.4	19,687.0	9,993.8	164.9	163.9	72.00	9,674.4	2,866.7	2,778.6	2,461.2	317.39	8.754	
20,600.0	10,853.2	19,787.0	9,993.1	166.5	165.5	71.99	9,774.4	2,865.9	2,778.7	2,458.2	320.49	8.670	
20,700.0	10,853.0	19,887.0	9,992.4	168.1	167.2	71.98	9,874.4	2,865.1	2,778.8	2,455.2	323.59	8.587	
20,800.0	10,852.7	19,987.0	9,991.7	169.7	168.8	71.97	9,974.4	2,864.3	2,778.9	2,452.2	326.69	8.506	
20,900.0	10,852.5	20,087.0	9,991.0	171.3	170.4	71.96	10,074.3	2,863.5	2,779.1	2,449.3	329.79	8.427	
21,000.0	10,852.3	20,187.0	9,990.3	172.9	172.0	71.95	10,174.3	2,862.7	2,779.2	2,446.3	332.89	8.349	
21,089.3	10,852.1	20,276.3	9,989.6	174.4	173.3	71.94	10,263.6	2,862.0	2,779.3	2,443.8	335.51	8.284	
21,094.0	10,851.5	20,281.1	9,989.6	174.5	173.4	71.95	10,268.4	2,862.0	2,778.9	2,443.2	335.66	8.279 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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	13.1	13.1	0.0	0.0	-12.65	5,175.1	-1,161.4	5,303.9				
100.0	100.0	94.8	94.8	0.1	0.2	-12.65	5,175.4	-1,161.2	5,304.1	5,303.8	0.28	N/A	
200.0	200.0	176.5	176.5	0.5	0.3	-12.64	5,176.0	-1,160.6	5,304.7	5,303.9	0.76	6,970.916	
300.0	300.0	263.5	263.5	0.8	0.5	-12.63	5,177.0	-1,159.7	5,305.5	5,304.2	1.37	3,866.671	
400.0	400.0	353.4	353.4	1.2	0.8	-12.61	5,178.2	-1,158.8	5,306.6	5,304.6	2.05	2,585.127	
500.0	500.0	449.9	449.8	1.6	1.2	-12.60	5,179.6	-1,157.9	5,307.9	5,305.1	2.76	1,925.215	
600.0	600.0	549.1	549.0	1.9	1.6	-12.59	5,181.1	-1,157.0	5,309.1	5,305.6	3.47	1,529.530	
700.0	700.0	639.1	639.0	2.3	1.9	-12.58	5,182.5	-1,156.2	5,310.4	5,306.3	4.15	1,278.886	
800.0	800.0	727.2	727.1	2.6	2.2	-12.57	5,184.0	-1,155.5	5,312.0	5,307.2	4.83	1,100.505	
900.0	900.0	820.6	820.5	3.0	2.5	-12.55	5,185.9	-1,154.8	5,313.8	5,308.2	5.52	962.553	
1,000.0	1,000.0	916.7	916.6	3.4	2.9	-12.54	5,187.8	-1,154.1	5,315.6	5,309.4	6.22	854.140	
1,100.0	1,100.0	1,012.7	1,012.6	3.7	3.2	-12.53	5,189.9	-1,153.4	5,317.5	5,310.6	6.93	767.751	
1,200.0	1,200.0	1,491.3	1,490.9	4.1	4.8	-12.55	5,181.9	-1,153.1	5,315.7	5,306.8	8.90	597.584	
1,300.0	1,300.0	1,655.5	1,654.8	4.4	5.4	-134.81	5,172.9	-1,148.7	5,310.3	5,300.5	9.80	541.890	
1,400.0	1,400.0	1,774.0	1,773.1	4.8	5.8	-134.84	5,165.9	-1,144.5	5,305.6	5,295.1	10.54	503.288	
1,500.0	1,499.9	1,884.7	1,883.4	5.1	6.2	-134.87	5,159.2	-1,139.9	5,301.9	5,290.6	11.27	470.574	
1,600.0	1,599.7	1,996.0	1,994.4	5.4	6.6	-134.89	5,152.5	-1,134.0	5,299.1	5,287.1	12.00	441.583	
1,700.0	1,699.4	2,111.9	2,109.9	5.8	7.0	-134.92	5,145.4	-1,126.8	5,297.4	5,284.6	12.76	415.239	
1,800.0	1,798.9	2,217.6	2,215.1	6.1	7.4	-134.94	5,138.9	-1,119.3	5,296.6	5,283.1	13.49	392.765	
1,813.8	1,812.6	2,231.3	2,228.7	6.2	7.5	-134.94	5,138.1	-1,118.4	5,296.6	5,283.0	13.58	389.926	
1,900.0	1,898.3	2,316.3	2,313.4	6.5	7.8	-134.96	5,132.8	-1,112.5	5,297.1	5,282.9	14.20	373.159	
2,000.0	1,997.4	2,413.5	2,410.2	6.9	8.1	-134.99	5,126.8	-1,105.8	5,298.8	5,283.9	14.91	355.481	
2,100.0	2,096.4	2,510.0	2,506.3	7.2	8.5	-135.04	5,120.9	-1,099.2	5,301.2	5,285.6	15.62	339.404	
2,200.0	2,195.5	2,595.6	2,591.5	7.6	8.8	-135.08	5,115.8	-1,093.5	5,303.7	5,287.4	16.30	325.414	
2,300.0	2,294.5	2,677.2	2,672.8	8.0	9.1	-135.12	5,111.2	-1,087.9	5,306.6	5,289.6	16.97	312.768	
2,400.0	2,393.5	2,767.8	2,763.0	8.4	9.5	-135.16	5,106.5	-1,081.5	5,309.8	5,292.1	17.67	300.510	
2,500.0	2,492.5	2,871.0	2,865.9	8.8	9.9	-135.21	5,101.0	-1,074.4	5,313.0	5,294.6	18.42	288.440	
2,600.0	2,591.6	2,966.5	2,961.0	9.2	10.2	-135.25	5,096.0	-1,067.8	5,316.2	5,297.1	19.14	277.682	
2,700.0	2,690.6	3,056.7	3,050.9	9.6	10.6	-135.29	5,091.3	-1,061.7	5,319.6	5,299.7	19.85	267.948	
2,800.0	2,789.6	3,135.0	3,128.9	10.0	10.9	-135.33	5,087.4	-1,056.5	5,323.2	5,302.6	20.52	259.437	
2,900.0	2,888.6	3,200.6	3,194.4	10.4	11.1	-135.37	5,084.3	-1,053.1	5,327.3	5,306.2	21.14	252.042	
3,000.0	2,987.7	3,266.1	3,259.7	10.8	11.3	-135.42	5,081.4	-1,050.7	5,332.2	5,310.4	21.75	245.104	
3,100.0	3,086.7	3,292.0	3,285.6	11.2	11.4	-135.45	5,080.3	-1,050.1	5,337.9	5,315.6	22.23	240.128	
3,200.0	3,185.7	3,368.8	3,362.3	11.6	11.7	-135.52	5,077.8	-1,048.4	5,344.2	5,321.3	22.88	233.539	
3,300.0	3,284.8	3,416.6	3,410.1	12.0	11.9	-135.56	5,076.8	-1,047.3	5,351.6	5,328.2	23.43	228.388	
3,400.0	3,383.8	3,482.0	3,475.5	12.4	12.1	-135.61	5,076.2	-1,045.8	5,360.1	5,336.1	24.04	222.929	
3,500.0	3,482.8	3,521.7	3,515.1	12.8	12.3	-135.64	5,076.2	-1,044.8	5,369.4	5,344.8	24.56	218.632	
3,600.0	3,581.8	3,584.6	3,578.0	13.2	12.5	-135.69	5,076.7	-1,043.0	5,379.4	5,354.3	25.16	213.814	
3,700.0	3,680.9	3,647.5	3,640.9	13.7	12.7	-135.73	5,077.7	-1,040.8	5,390.1	5,364.4	25.76	209.256	
3,800.0	3,779.9	3,735.3	3,728.6	14.1	13.0	-135.78	5,079.6	-1,037.5	5,401.4	5,374.9	26.45	204.211	
3,878.9	3,858.0	3,816.1	3,809.4	14.4	13.3	-135.84	5,081.2	-1,035.4	5,410.3	5,383.2	27.04	200.090	
3,900.0	3,878.9	3,837.7	3,831.0	14.5	13.4	-135.88	5,081.5	-1,035.0	5,412.6	5,385.4	27.20	199.019	
4,000.0	3,978.2	3,952.7	3,945.9	14.9	13.8	-136.07	5,083.2	-1,033.5	5,422.3	5,394.4	27.98	193.783	
4,100.0	4,077.7	4,071.2	4,064.4	15.3	14.2	-136.21	5,084.3	-1,032.5	5,429.9	5,401.1	28.77	188.726	
4,200.0	4,177.5	4,176.3	4,169.5	15.6	14.5	-136.32	5,084.9	-1,032.5	5,435.4	5,405.9	29.49	184.305	
4,300.0	4,277.4	4,268.4	4,261.6	16.0	14.8	-136.39	5,085.1	-1,033.1	5,438.9	5,408.7	30.16	180.356	
4,400.0	4,377.4	4,340.7	4,333.9	16.3	15.1	-136.42	5,085.7	-1,033.3	5,440.9	5,410.2	30.74	176.999	
4,412.2	4,389.6	4,349.6	4,342.8	16.4	15.1	-14.18	5,085.8	-1,033.4	5,441.1	5,410.2	30.81	176.601	
4,500.0	4,477.4	4,413.0	4,406.2	16.7	15.3	-14.18	5,086.7	-1,033.3	5,442.3	5,411.0	31.31	173.827	
4,600.0	4,577.4	4,693.8	4,686.9	17.0	16.3	-14.22	5,084.7	-1,036.6	5,441.3	5,408.6	32.64	166.730	
4,700.0	4,677.4	4,798.0	4,791.1	17.3	16.6	-14.25	5,082.2	-1,039.1	5,439.5	5,406.2	33.32	163.253	
4,800.0	4,777.4	4,891.8	4,884.9	17.6	16.9	-14.28	5,079.9	-1,041.3	5,437.8	5,403.8	33.97	160.075	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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		
4,900.0	4,877.4	4,990.3	4,983.3	18.0	17.3	-14.31	5,077.7	-1,043.6	5,436.2	5,401.5	34.64	156.940		
5,000.0	4,977.4	5,109.5	5,102.4	18.3	17.7	-14.34	5,074.8	-1,046.1	5,434.3	5,398.9	35.38	153.586		
5,100.0	5,077.4	5,204.4	5,197.3	18.6	18.0	-14.37	5,072.3	-1,048.1	5,432.3	5,396.3	36.04	150.717		
5,200.0	5,177.4	5,277.0	5,269.8	19.0	18.2	-14.39	5,070.5	-1,049.7	5,430.5	5,393.9	36.63	148.272		
5,300.0	5,277.4	5,362.2	5,355.0	19.3	18.5	-14.41	5,068.9	-1,051.0	5,429.0	5,391.8	37.26	145.714		
5,400.0	5,377.4	5,431.3	5,424.1	19.6	18.8	-14.41	5,068.2	-1,051.4	5,428.2	5,390.4	37.83	143.481		
5,500.0	5,477.4	5,513.7	5,506.5	20.0	19.1	-14.41	5,068.0	-1,051.1	5,427.9	5,389.4	38.46	141.137		
5,600.0	5,577.4	5,609.8	5,602.6	20.3	19.4	-14.41	5,067.9	-1,050.8	5,427.6	5,388.5	39.14	138.682		
5,700.0	5,677.4	5,707.8	5,700.6	20.6	19.7	-14.41	5,067.7	-1,050.6	5,427.5	5,387.7	39.82	136.292		
5,800.0	5,777.4	5,807.5	5,800.2	21.0	20.1	-14.41	5,067.6	-1,050.6	5,427.4	5,386.9	40.51	133.966		
5,900.0	5,877.4	5,910.9	5,903.7	21.3	20.4	-14.41	5,067.4	-1,050.7	5,427.2	5,386.0	41.22	131.674		
6,000.0	5,977.4	6,016.6	6,009.3	21.6	20.8	-14.41	5,067.1	-1,050.8	5,427.0	5,385.1	41.93	129.434		
6,100.0	6,077.4	6,103.5	6,096.2	22.0	21.1	-14.41	5,066.9	-1,050.9	5,426.8	5,384.2	42.57	127.482		
6,117.8	6,095.2	6,118.4	6,111.2	22.0	21.2	-14.41	5,066.9	-1,050.9	5,426.8	5,384.1	42.68	127.147		
6,200.0	6,177.4	6,187.4	6,180.2	22.3	21.4	-14.41	5,067.0	-1,051.2	5,426.9	5,383.7	43.20	125.627		
6,300.0	6,277.4	6,281.0	6,273.8	22.6	21.7	-14.42	5,067.2	-1,051.6	5,427.2	5,383.4	43.86	123.735		
6,400.0	6,377.4	6,380.5	6,373.3	23.0	22.1	-14.42	5,067.4	-1,052.0	5,427.6	5,383.0	44.55	121.843		
6,500.0	6,477.4	6,478.5	6,471.3	23.3	22.4	-14.43	5,067.7	-1,052.5	5,428.0	5,382.7	45.23	120.020		
6,600.0	6,577.4	6,576.0	6,568.8	23.7	22.7	-14.43	5,068.0	-1,053.0	5,428.4	5,382.5	45.90	118.256		
6,700.0	6,677.4	6,677.0	6,669.8	24.0	23.1	-14.44	5,068.3	-1,053.6	5,428.8	5,382.3	46.60	116.509		
6,800.0	6,777.4	6,778.9	6,771.6	24.3	23.4	-14.44	5,068.6	-1,054.1	5,429.3	5,382.0	47.29	114.802		
6,900.0	6,877.4	6,885.1	6,877.9	24.7	23.8	-14.44	5,068.9	-1,054.6	5,429.6	5,381.6	48.01	113.102		
7,000.0	6,977.4	7,002.4	6,995.2	25.0	24.2	-14.45	5,069.0	-1,055.2	5,429.8	5,381.1	48.76	111.354		
7,100.0	7,077.4	7,173.5	7,166.2	25.4	24.8	-14.47	5,067.4	-1,056.5	5,429.1	5,379.4	49.71	109.206		
7,200.0	7,177.4	7,320.9	7,313.6	25.7	25.3	-14.48	5,064.6	-1,057.1	5,427.4	5,376.8	50.58	107.298		
7,300.0	7,277.4	7,445.5	7,438.2	26.1	25.7	-14.49	5,061.4	-1,056.8	5,424.9	5,373.5	51.37	105.608		
7,400.0	7,377.4	7,564.0	7,556.6	26.4	26.1	-14.49	5,058.1	-1,056.5	5,422.0	5,369.9	52.13	104.005		
7,500.0	7,477.4	7,607.6	7,600.3	26.8	26.3	-14.49	5,057.1	-1,056.3	5,419.7	5,367.1	52.63	102.969		
7,600.0	7,577.4	7,663.9	7,656.5	27.1	26.5	-14.49	5,056.3	-1,056.1	5,418.1	5,364.9	53.18	101.889		
7,700.0	7,677.4	7,729.0	7,721.6	27.4	26.7	-14.49	5,055.8	-1,055.9	5,417.4	5,363.6	53.75	100.789		
7,800.0	7,777.4	7,843.8	7,836.4	27.8	27.1	-14.49	5,055.4	-1,055.4	5,416.9	5,362.4	54.51	99.382		
7,900.0	7,877.4	7,964.5	7,957.2	28.1	27.6	-14.48	5,054.3	-1,054.7	5,415.8	5,360.5	55.28	97.963		
8,000.0	7,977.4	8,067.0	8,059.6	28.5	27.9	-14.48	5,053.2	-1,053.8	5,414.6	5,358.6	56.00	96.696		
8,100.0	8,077.4	8,144.7	8,137.3	28.8	28.2	-14.47	5,052.5	-1,053.1	5,413.5	5,356.9	56.62	95.618		
8,200.0	8,177.4	8,207.1	8,199.7	29.2	28.4	-14.47	5,052.3	-1,052.7	5,413.1	5,355.9	57.18	94.671		
8,216.9	8,194.3	8,217.7	8,210.3	29.2	28.4	-14.47	5,052.3	-1,052.6	5,413.0	5,355.8	57.27	94.514		
8,300.0	8,277.4	8,269.6	8,262.2	29.5	28.6	-14.46	5,052.5	-1,052.4	5,413.3	5,355.5	57.74	93.758		
8,400.0	8,377.4	8,369.5	8,362.1	29.9	29.0	-14.46	5,053.4	-1,051.9	5,414.0	5,355.6	58.43	92.650		
8,500.0	8,477.4	8,683.3	8,675.8	30.2	30.1	-14.40	5,052.0	-1,046.1	5,414.2	5,354.3	59.91	90.373		
8,600.0	8,577.4	8,901.6	8,893.0	30.6	30.9	-14.23	5,045.4	-1,027.4	5,408.4	5,347.4	61.01	88.645		
8,700.0	8,677.4	8,928.0	8,918.8	30.9	31.0	-14.17	5,045.3	-1,022.0	5,403.4	5,341.9	61.48	87.892		
8,800.0	8,777.4	8,948.4	8,938.8	31.3	31.0	-14.13	5,045.6	-1,017.8	5,399.9	5,338.0	61.91	87.218		
8,900.0	8,877.4	8,973.0	8,963.0	31.6	31.1	-14.08	5,046.3	-1,013.6	5,398.1	5,335.7	62.35	86.576		
8,969.7	8,947.0	8,973.0	8,963.0	31.9	31.1	-14.08	5,046.3	-1,013.6	5,397.6	5,335.0	62.58	86.247		
9,000.0	8,977.4	8,973.0	8,963.0	32.0	31.1	-14.08	5,046.3	-1,013.6	5,397.7	5,335.0	62.68	86.113		
9,100.0	9,077.4	9,002.3	8,992.0	32.3	31.2	-14.04	5,047.7	-1,009.5	5,398.9	5,335.8	63.11	85.544		
9,200.0	9,177.4	9,022.0	9,011.5	32.7	31.3	-14.01	5,048.8	-1,007.0	5,401.5	5,338.0	63.49	85.071		
9,300.0	9,277.4	9,063.0	9,052.2	33.0	31.4	-13.96	5,051.4	-1,002.5	5,405.3	5,341.3	63.95	84.520		
9,400.0	9,377.4	9,117.0	9,105.8	33.4	31.6	-13.90	5,055.6	-998.1	5,410.5	5,346.0	64.46	83.934		
9,500.0	9,477.4	9,401.0	9,389.4	33.7	32.6	-13.84	5,067.4	-995.5	5,414.7	5,348.8	65.91	82.154		
9,600.0	9,577.4	9,401.0	9,389.4	34.1	32.6	-13.84	5,067.4	-995.5	5,417.6	5,351.4	66.21	81.827		
9,700.0	9,677.4	9,401.0	9,389.4	34.4	32.6	-13.84	5,067.4	-995.5	5,422.3	5,355.8	66.49	81.555		

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
9,800.0	9,777.4	9,444.3	9,432.7	34.8	32.7	-13.84	5,069.2	-995.4	5,427.4	5,360.5	66.94	81.084	
9,900.0	9,877.4	9,495.0	9,483.1	35.1	32.9	-13.82	5,074.4	-995.0	5,435.9	5,368.5	67.41	80.637	
10,000.0	9,977.4	9,495.0	9,483.1	35.5	32.9	-13.82	5,074.4	-995.0	5,444.4	5,376.7	67.65	80.481	
10,100.0	10,077.4	9,495.0	9,483.1	35.8	32.9	-13.82	5,074.4	-995.0	5,454.7	5,386.8	67.86	80.376	
10,200.0	10,177.4	9,495.0	9,483.1	36.2	32.9	-13.82	5,074.4	-995.0	5,466.7	5,398.7	68.06	80.323	
10,300.0	10,277.4	9,495.0	9,483.1	36.5	32.9	-13.82	5,074.4	-995.0	5,480.6	5,412.4	68.24	80.319	
10,324.1	10,301.5	9,495.0	9,483.1	36.6	32.9	-13.82	5,074.4	-995.0	5,484.3	5,416.0	68.28	80.326	
10,350.0	10,327.4	9,495.0	9,483.1	36.7	32.9	-13.30	5,074.4	-995.0	5,487.7	5,419.4	68.32	80.328	
10,400.0	10,377.2	9,495.0	9,483.1	36.9	32.9	-13.21	5,074.4	-995.0	5,491.5	5,423.1	68.39	80.297	
10,450.0	10,426.4	9,495.0	9,483.1	37.0	32.9	-13.21	5,074.4	-995.0	5,491.4	5,423.0	68.46	80.220	
10,500.0	10,474.6	9,516.5	9,504.3	37.2	33.0	-13.30	5,077.9	-994.6	5,487.1	5,418.4	68.63	79.946	
10,550.0	10,521.6	9,520.0	9,507.8	37.3	33.0	-13.49	5,078.6	-994.5	5,479.3	5,410.6	68.70	79.751	
10,600.0	10,566.8	9,542.0	9,529.2	37.5	33.1	-13.77	5,083.6	-994.0	5,468.2	5,399.3	68.87	79.396	
10,650.0	10,610.1	9,542.0	9,529.2	37.6	33.1	-14.16	5,083.6	-994.0	5,452.8	5,383.9	68.90	79.137	
10,700.0	10,651.0	9,542.0	9,529.2	37.7	33.1	-14.67	5,083.6	-994.0	5,433.9	5,364.9	68.92	78.839	
10,750.0	10,689.2	9,542.0	9,529.2	37.8	33.1	-15.32	5,083.6	-994.0	5,411.5	5,342.5	68.93	78.503	
10,800.0	10,724.5	9,542.0	9,529.2	37.9	33.1	-16.14	5,083.6	-994.0	5,385.7	5,316.8	68.93	78.131	
10,850.0	10,756.6	9,542.0	9,529.2	37.9	33.1	-17.15	5,083.6	-994.0	5,356.8	5,287.9	68.92	77.722	
10,900.0	10,785.2	9,542.0	9,529.2	38.0	33.1	-18.42	5,083.6	-994.0	5,324.9	5,256.0	68.91	77.278	
10,950.0	10,810.1	9,542.0	9,529.2	38.0	33.1	-20.01	5,083.6	-994.0	5,290.2	5,221.3	68.88	76.800	
11,000.0	10,831.2	9,559.9	9,546.4	38.1	33.1	-22.11	5,088.2	-993.5	5,252.7	5,183.7	68.97	76.160	
11,050.0	10,848.2	9,567.0	9,553.3	38.3	33.1	-24.78	5,090.0	-993.3	5,212.8	5,143.9	68.99	75.564	
11,100.0	10,861.1	9,589.0	9,574.5	38.4	33.2	-28.42	5,096.0	-992.9	5,170.9	5,101.8	69.10	74.833	
11,150.0	10,869.7	9,589.0	9,574.5	38.5	33.2	-33.12	5,096.0	-992.9	5,127.0	5,058.0	69.07	74.225	
11,200.0	10,874.0	9,589.0	9,574.5	38.7	33.2	-39.59	5,096.0	-992.9	5,081.6	5,012.5	69.05	73.590	
11,225.4	10,874.5	9,589.0	9,574.5	38.8	33.2	-43.81	5,096.0	-992.9	5,058.0	4,989.0	69.05	73.256	
11,287.1	10,874.3	9,589.0	9,574.5	39.0	33.2	-43.81	5,096.0	-992.9	5,000.4	4,931.4	69.03	72.444	
11,300.0	10,874.3	9,589.0	9,574.5	39.0	33.2	-43.81	5,096.0	-992.9	4,988.4	4,919.4	69.02	72.274	
11,400.0	10,874.1	9,589.0	9,574.5	39.4	33.2	-43.81	5,096.0	-992.9	4,895.4	4,826.4	68.99	70.955	
11,500.0	10,873.8	9,589.0	9,574.5	39.8	33.2	-43.81	5,096.0	-992.9	4,802.6	4,733.6	68.97	69.634	
11,600.0	10,873.6	9,589.0	9,574.5	40.3	33.2	-43.81	5,096.0	-992.9	4,710.1	4,641.1	68.95	68.311	
11,700.0	10,873.4	9,589.0	9,574.5	40.9	33.2	-43.81	5,096.0	-992.9	4,617.9	4,549.0	68.94	66.986	
11,800.0	10,873.2	9,589.0	9,574.5	41.5	33.2	-43.81	5,096.0	-992.9	4,526.1	4,457.1	68.93	65.658	
11,900.0	10,872.9	9,589.0	9,574.5	42.2	33.2	-43.81	5,096.0	-992.9	4,434.6	4,365.6	68.94	64.328	
12,000.0	10,872.7	9,589.0	9,574.5	42.9	33.2	-43.81	5,096.0	-992.9	4,343.5	4,274.5	68.95	62.995	
12,100.0	10,872.5	9,589.0	9,574.5	43.7	33.2	-43.81	5,096.0	-992.9	4,252.8	4,183.8	68.97	61.660	
12,200.0	10,872.2	9,612.3	9,596.7	44.6	33.3	-44.29	5,103.0	-992.6	4,161.8	4,092.6	69.19	60.150	
12,300.0	10,872.0	9,636.0	9,618.9	45.4	33.3	-44.79	5,111.4	-992.7	4,072.3	4,002.8	69.43	58.654	
12,400.0	10,871.8	9,636.0	9,618.9	46.3	33.3	-44.79	5,111.4	-992.7	3,982.5	3,913.0	69.50	57.306	
12,500.0	10,871.6	9,636.0	9,618.9	47.3	33.3	-44.79	5,111.4	-992.7	3,893.3	3,823.7	69.58	55.957	
12,600.0	10,871.3	9,636.0	9,618.9	48.3	33.3	-44.79	5,111.4	-992.7	3,804.6	3,734.9	69.67	54.605	
12,700.0	10,871.1	9,636.0	9,618.9	49.3	33.3	-44.79	5,111.4	-992.7	3,716.5	3,646.7	69.79	53.251	
12,800.0	10,870.9	9,636.0	9,618.9	50.4	33.3	-44.79	5,111.4	-992.7	3,628.9	3,559.0	69.93	51.895	
12,900.0	10,870.7	9,636.0	9,618.9	51.5	33.3	-44.79	5,111.4	-992.7	3,542.1	3,472.0	70.09	50.539	
13,000.0	10,870.4	9,636.0	9,618.9	52.6	33.3	-44.79	5,111.4	-992.7	3,455.9	3,385.7	70.27	49.181	
13,100.0	10,870.2	9,653.9	9,635.4	53.8	33.4	-45.18	5,118.3	-993.0	3,370.3	3,299.7	70.65	47.703	
13,200.0	10,870.0	9,675.3	9,654.9	54.9	33.5	-45.64	5,126.9	-993.4	3,285.6	3,214.5	71.10	46.209	
13,300.0	10,869.7	9,675.3	9,654.9	56.1	33.5	-45.64	5,126.9	-993.4	3,201.5	3,130.1	71.39	44.847	
13,400.0	10,869.5	9,683.0	9,662.0	57.4	33.5	-45.81	5,130.1	-993.7	3,118.2	3,046.4	71.78	43.439	
13,500.0	10,869.3	9,683.0	9,662.0	58.6	33.5	-45.81	5,130.1	-993.7	3,035.9	2,963.8	72.14	42.082	
13,600.0	10,869.1	9,683.0	9,662.0	59.9	33.5	-45.81	5,130.1	-993.7	2,954.7	2,882.1	72.55	40.728	
13,700.0	10,868.8	9,708.4	9,684.8	61.1	33.6	-46.37	5,141.2	-994.5	2,874.1	2,800.8	73.27	39.225	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
13,800.0	10,868.6	9,730.0	9,703.9	62.4	33.6	-46.85	5,151.2	-995.3	2,795.0	2,721.0	74.02	37.761	
13,900.0	10,868.4	9,730.0	9,703.9	63.8	33.6	-46.85	5,151.2	-995.3	2,716.8	2,642.2	74.59	36.425	
14,000.0	10,868.2	9,730.0	9,703.9	65.1	33.6	-46.85	5,151.2	-995.3	2,640.1	2,564.9	75.21	35.102	
14,100.0	10,867.9	9,730.0	9,703.9	66.4	33.6	-46.85	5,151.2	-995.3	2,565.1	2,489.2	75.90	33.794	
14,200.0	10,867.7	9,755.5	9,726.1	67.8	33.7	-47.41	5,163.9	-996.3	2,491.0	2,414.1	76.97	32.363	
14,300.0	10,867.5	9,777.0	9,744.2	69.2	33.7	-47.88	5,175.3	-997.3	2,419.1	2,341.0	78.07	30.986	
14,400.0	10,867.3	9,777.0	9,744.2	70.6	33.7	-47.88	5,175.3	-997.3	2,348.7	2,269.7	78.99	29.735	
14,500.0	10,867.0	9,794.2	9,758.5	72.0	33.8	-48.26	5,185.0	-998.2	2,280.4	2,200.2	80.21	28.431	
14,600.0	10,866.8	9,824.0	9,782.7	73.4	33.9	-48.92	5,202.2	-999.6	2,214.0	2,132.3	81.68	27.107	
14,700.0	10,866.6	9,824.0	9,782.7	74.8	33.9	-48.92	5,202.2	-999.6	2,149.6	2,066.7	82.85	25.944	
14,800.0	10,866.3	9,871.0	9,819.8	76.2	34.0	-49.93	5,230.9	-1,001.6	2,087.3	2,002.6	84.74	24.633	
14,900.0	10,866.1	9,871.0	9,819.8	77.7	34.0	-49.93	5,230.9	-1,001.6	2,027.3	1,941.2	86.10	23.546	
15,000.0	10,865.9	9,895.1	9,838.2	79.1	34.1	-50.44	5,246.6	-1,002.6	1,970.0	1,882.2	87.88	22.418	
15,100.0	10,865.7	9,918.0	9,854.8	80.6	34.1	-50.92	5,262.2	-1,003.6	1,915.8	1,826.1	89.71	21.354	
15,200.0	10,865.4	9,933.2	9,865.6	82.0	34.2	-51.23	5,272.9	-1,004.3	1,864.6	1,773.0	91.53	20.370	
15,300.0	10,865.2	9,966.0	9,888.2	83.5	34.3	-51.89	5,296.6	-1,006.1	1,816.6	1,723.0	93.67	19.393	
15,400.0	10,865.0	9,980.6	9,897.9	85.0	34.4	-52.19	5,307.5	-1,007.0	1,771.9	1,676.3	95.63	18.529	
15,500.0	10,864.8	10,013.0	9,918.4	86.4	34.5	-52.81	5,332.5	-1,009.1	1,730.9	1,633.0	97.88	17.684	
15,600.0	10,864.5	10,031.1	9,929.2	87.9	34.5	-53.15	5,346.9	-1,010.2	1,693.5	1,593.5	99.96	16.942	
15,700.0	10,864.3	10,060.0	9,945.4	89.4	34.6	-53.66	5,370.8	-1,012.0	1,660.1	1,557.9	102.19	16.245	
15,800.0	10,864.1	10,095.5	9,963.7	90.9	34.7	-54.24	5,401.2	-1,014.1	1,630.6	1,526.1	104.50	15.804	
15,900.0	10,863.8	10,125.0	9,977.8	92.4	34.8	-54.69	5,427.0	-1,015.7	1,604.6	1,497.9	106.69	15.039	
16,000.0	10,863.6	10,155.0	9,991.1	94.0	35.0	-55.12	5,453.9	-1,017.4	1,582.6	1,473.8	108.85	14.540	
16,100.0	10,863.4	10,202.0	10,008.5	95.5	35.1	-55.71	5,497.4	-1,020.2	1,564.8	1,453.7	111.11	14.083	
16,200.0	10,863.2	10,226.5	10,015.9	97.0	35.2	-55.97	5,520.7	-1,021.8	1,551.4	1,438.4	113.00	13.720	
16,300.0	10,862.9	10,268.4	10,025.6	98.5	35.4	-56.32	5,561.4	-1,024.4	1,542.4	1,427.5	114.92	13.431	
16,400.0	10,862.7	10,335.3	10,037.6	100.0	35.7	-56.76	5,627.1	-1,027.9	1,536.1	1,419.1	116.98	13.131	
16,500.0	10,862.5	10,371.1	10,042.7	101.6	35.8	-56.96	5,662.5	-1,030.1	1,532.9	1,414.2	118.64	12.921	
16,514.1	10,862.5	10,375.6	10,043.2	101.8	35.8	-56.98	5,666.9	-1,030.5	1,532.8	1,413.9	118.85	12.896 CC	
16,600.0	10,862.3	10,411.3	10,046.5	103.1	36.0	-57.15	5,702.3	-1,033.6	1,534.1	1,413.8	120.21	12.761	
16,700.0	10,862.0	10,479.7	10,049.3	104.7	36.3	-57.35	5,770.4	-1,039.6	1,538.3	1,416.3	121.96	12.613	
16,800.0	10,861.8	10,561.9	10,050.1	106.2	36.8	-57.50	5,852.3	-1,046.3	1,543.9	1,420.1	123.78	12.473	
16,900.0	10,861.6	10,646.8	10,049.7	107.7	37.2	-57.63	5,936.9	-1,053.5	1,550.6	1,425.0	125.63	12.343	
17,000.0	10,861.4	10,745.6	10,048.4	109.3	37.9	-57.75	6,035.3	-1,062.3	1,558.0	1,430.3	127.68	12.203	
17,100.0	10,861.1	10,858.5	10,046.9	110.8	38.7	-57.86	6,147.9	-1,070.8	1,564.3	1,434.4	129.94	12.039	
17,200.0	10,860.9	10,976.3	10,044.7	112.4	39.6	-57.95	6,265.4	-1,079.4	1,570.8	1,438.5	132.30	11.873	
17,300.0	10,860.7	11,083.4	10,041.5	114.0	40.5	-57.94	6,372.2	-1,084.3	1,575.5	1,441.0	134.48	11.715	
17,400.0	10,860.4	11,300.9	10,036.1	115.5	42.4	-57.79	6,589.6	-1,085.9	1,576.8	1,439.1	137.70	11.451	
17,500.0	10,860.2	11,377.9	10,034.0	117.1	43.2	-57.68	6,666.6	-1,084.0	1,575.2	1,435.6	139.61	11.283	
17,600.0	10,860.0	11,462.9	10,030.9	118.7	44.0	-57.54	6,751.5	-1,082.1	1,574.5	1,432.9	141.57	11.122	
17,700.0	10,859.8	11,589.1	10,028.2	120.2	45.3	-57.39	6,877.7	-1,079.4	1,573.1	1,429.1	143.97	10.926	
17,800.0	10,859.5	11,683.8	10,026.7	121.8	46.3	-57.31	6,972.3	-1,077.7	1,571.6	1,425.4	146.15	10.753	
17,900.0	10,859.3	11,795.2	10,027.0	123.4	47.6	-57.27	7,083.7	-1,075.9	1,569.3	1,420.7	148.59	10.561	
18,000.0	10,859.1	11,884.3	10,027.5	124.9	48.6	-57.26	7,172.8	-1,075.0	1,567.3	1,416.5	150.87	10.389	
18,100.0	10,858.9	11,979.1	10,027.5	126.5	49.7	-57.24	7,267.6	-1,074.3	1,566.0	1,412.7	153.21	10.221	
18,200.0	10,858.6	12,077.0	10,027.1	128.1	50.9	-57.20	7,365.5	-1,073.4	1,564.7	1,409.1	155.58	10.057	
18,300.0	10,858.4	12,173.0	10,025.9	129.7	52.0	-57.14	7,461.5	-1,072.4	1,563.7	1,405.8	157.92	9.902	
18,400.0	10,858.2	12,262.8	10,024.0	131.3	53.1	-57.05	7,551.3	-1,071.2	1,563.0	1,402.8	160.17	9.759	
18,422.5	10,858.1	12,281.6	10,023.4	131.6	53.4	-57.02	7,570.0	-1,071.0	1,563.0	1,402.3	160.65	9.729	
18,500.0	10,857.9	12,345.0	10,021.2	132.9	54.2	-56.94	7,633.4	-1,070.5	1,563.3	1,401.0	162.29	9.633	
18,600.0	10,857.7	12,427.3	10,017.1	134.4	55.2	-56.80	7,715.6	-1,070.1	1,564.8	1,400.5	164.36	9.521	
18,700.0	10,857.5	12,524.9	10,013.5	136.0	56.5	-56.71	7,813.1	-1,071.4	1,567.2	1,400.5	166.74	9.399	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
18,800.0	10,857.3	12,645.6	10,014.7	137.6	58.1	-56.81	7,933.7	-1,075.0	1,568.3	1,398.6	169.76	9.239	
18,900.0	10,857.0	12,734.4	10,016.9	139.2	59.3	-56.94	8,022.4	-1,078.5	1,569.5	1,397.1	172.36	9.106	
19,000.0	10,856.8	12,823.0	10,018.8	140.8	60.5	-57.07	8,110.9	-1,082.7	1,571.5	1,396.5	174.98	8.981	
19,100.0	10,856.6	12,919.2	10,020.9	142.4	61.8	-57.22	8,207.0	-1,087.7	1,574.0	1,396.2	177.76	8.854	
19,200.0	10,856.4	13,008.8	10,022.7	144.0	63.1	-57.37	8,296.4	-1,092.6	1,576.8	1,396.3	180.44	8.738	
19,300.0	10,856.1	13,124.2	10,024.2	145.6	64.7	-57.53	8,411.6	-1,099.2	1,580.2	1,396.6	183.59	8.607	
19,400.0	10,855.9	13,232.1	10,025.4	147.2	66.2	-57.64	8,519.4	-1,103.1	1,581.8	1,395.3	186.54	8.480	
19,500.0	10,855.7	13,327.4	10,026.5	148.8	67.5	-57.74	8,614.6	-1,106.8	1,583.7	1,394.5	189.29	8.367	
19,600.0	10,855.5	13,463.4	10,026.4	150.4	69.5	-57.77	8,750.6	-1,109.3	1,584.5	1,391.9	192.58	8.228	
19,630.7	10,855.4	13,490.8	10,025.8	150.9	69.9	-57.75	8,778.0	-1,109.1	1,584.5	1,391.1	193.33	8.196	
19,700.0	10,855.2	13,553.1	10,023.7	152.0	70.8	-57.66	8,840.2	-1,108.5	1,584.6	1,389.7	194.95	8.128	
19,800.0	10,855.0	13,643.9	10,019.6	153.6	72.1	-57.51	8,930.9	-1,107.5	1,585.3	1,388.1	197.27	8.037	
19,900.0	10,854.8	13,743.6	10,014.5	155.2	73.5	-57.34	9,030.5	-1,106.9	1,586.8	1,387.1	199.68	7.947	
20,000.0	10,854.5	13,889.0	10,012.4	156.8	75.7	-57.22	9,175.9	-1,105.0	1,585.4	1,382.5	202.85	7.816	
20,100.0	10,854.3	13,984.3	10,011.7	158.4	77.1	-57.17	9,271.1	-1,103.5	1,583.7	1,378.3	205.40	7.710	
20,200.0	10,854.1	14,070.3	10,010.3	160.0	78.3	-57.09	9,357.2	-1,102.2	1,582.6	1,374.8	207.80	7.616	
20,260.5	10,854.0	14,120.9	10,008.9	161.0	79.1	-57.03	9,407.8	-1,101.6	1,582.4	1,373.2	209.20	7.564	
20,300.0	10,853.9	14,154.0	10,007.8	161.7	79.6	-56.99	9,440.8	-1,101.3	1,582.5	1,372.4	210.11	7.532	
20,400.0	10,853.6	14,276.9	10,004.5	163.3	81.4	-56.86	9,563.7	-1,100.4	1,582.7	1,369.8	212.94	7.433	
20,500.0	10,853.4	14,384.2	10,004.5	164.9	83.0	-56.84	9,670.9	-1,099.7	1,581.4	1,365.6	215.73	7.330	
20,600.0	10,853.2	14,467.7	10,004.6	166.5	84.3	-56.83	9,754.4	-1,099.5	1,580.4	1,362.2	218.22	7.242	
20,627.1	10,853.1	14,487.7	10,004.4	166.9	84.6	-56.83	9,774.5	-1,099.5	1,580.3	1,361.5	218.85	7.221	
20,700.0	10,853.0	14,536.5	10,003.5	168.1	85.3	-56.80	9,823.2	-1,099.9	1,580.9	1,360.5	220.42	7.172 ES	
20,800.0	10,852.7	14,608.5	10,000.7	169.7	86.4	-56.73	9,895.2	-1,100.8	1,583.4	1,360.8	222.52	7.115	
20,900.0	10,852.5	14,687.9	9,995.9	171.3	87.6	-56.60	9,974.4	-1,102.2	1,587.4	1,362.7	224.63	7.067	
21,000.0	10,852.3	14,773.0	9,989.9	172.9	88.9	-56.46	10,059.3	-1,104.1	1,592.4	1,365.6	226.78	7.022	
21,094.0	10,851.5	14,853.8	9,983.3	174.5	90.2	-56.31	10,139.8	-1,106.3	1,597.9	1,369.1	228.80	6.984 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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	-82.95	27.2	-220.2	221.9				
100.0	100.0	101.0	101.0	0.1	0.1	-82.95	27.2	-220.2	221.9	221.6	0.26	853.822	
200.0	200.0	201.0	201.0	0.5	0.5	-82.95	27.2	-220.2	221.9	220.9	0.98	227.164	
300.0	300.0	301.0	301.0	0.8	0.8	-82.95	27.2	-220.2	221.9	220.2	1.69	131.010	
400.0	400.0	401.0	401.0	1.2	1.2	-82.95	27.2	-220.2	221.9	219.5	2.41	92.048	
500.0	500.0	501.0	501.0	1.6	1.6	-82.95	27.2	-220.2	221.9	218.8	3.13	70.948	
600.0	600.0	601.0	601.0	1.9	1.9	-82.95	27.2	-220.2	221.9	218.1	3.84	57.718	
700.0	700.0	701.0	701.0	2.3	2.3	-82.95	27.2	-220.2	221.9	217.3	4.56	48.646	
800.0	800.0	801.0	801.0	2.6	2.6	-82.95	27.2	-220.2	221.9	216.6	5.28	42.039	
900.0	900.0	901.0	901.0	3.0	3.0	-82.95	27.2	-220.2	221.9	215.9	6.00	37.012	
1,000.0	1,000.0	1,001.0	1,001.0	3.4	3.4	-82.95	27.2	-220.2	221.9	215.2	6.71	33.059	
1,100.0	1,100.0	1,101.0	1,101.0	3.7	3.7	-82.95	27.2	-220.2	221.9	214.5	7.43	29.868	
1,200.0	1,200.0	1,201.0	1,201.0	4.1	4.1	-82.95	27.2	-220.2	221.9	213.8	8.15	27.240 CC, ES	
1,300.0	1,300.0	1,301.0	1,301.0	4.4	4.4	154.90	27.2	-220.2	222.7	213.8	8.85	25.164	
1,400.0	1,400.0	1,401.0	1,401.0	4.8	4.8	155.17	27.2	-220.2	225.1	215.5	9.54	23.587	
1,500.0	1,499.9	1,500.9	1,500.9	5.1	5.1	155.61	27.2	-220.2	229.0	218.8	10.24	22.371	
1,600.0	1,599.7	1,600.7	1,600.7	5.4	5.5	156.21	27.2	-220.2	234.6	223.7	10.94	21.452	
1,700.0	1,699.4	1,700.4	1,700.4	5.8	5.9	156.93	27.2	-220.2	241.8	230.2	11.64	20.779	
1,800.0	1,798.9	1,799.2	1,796.1	6.1	6.2	157.63	27.0	-221.0	251.4	239.1	12.31	20.416	
1,900.0	1,898.3	1,891.5	1,891.5	6.5	6.5	158.25	26.3	-223.3	264.1	251.1	12.98	20.350	
2,000.0	1,997.4	1,986.2	1,986.1	6.9	6.8	158.76	25.1	-227.1	279.9	266.3	13.64	20.519	
2,100.0	2,096.4	2,080.4	2,080.1	7.2	7.2	159.18	23.5	-232.3	298.0	283.7	14.30	20.834	
2,200.0	2,195.5	2,174.1	2,173.5	7.6	7.5	159.41	21.4	-239.0	317.5	302.5	14.96	21.221	
2,300.0	2,294.5	2,267.2	2,266.3	8.0	7.8	159.49	19.0	-247.0	338.3	322.7	15.61	21.668	
2,400.0	2,393.5	2,359.8	2,358.3	8.4	8.1	159.44	16.0	-256.5	360.6	344.3	16.27	22.169	
2,500.0	2,492.5	2,451.7	2,449.6	8.8	8.5	159.28	12.7	-267.3	384.2	367.3	16.91	22.717	
2,600.0	2,591.6	2,545.7	2,542.6	9.2	8.8	159.05	8.9	-279.6	409.1	391.5	17.58	23.266	
2,700.0	2,690.6	2,642.5	2,638.5	9.6	9.2	158.82	4.9	-292.5	434.1	415.8	18.28	23.748	
2,800.0	2,789.6	2,739.3	2,734.4	10.0	9.6	158.62	1.0	-305.3	459.1	440.1	18.98	24.190	
2,900.0	2,888.6	2,836.1	2,830.2	10.4	9.9	158.44	-3.0	-318.2	484.2	464.5	19.68	24.597	
3,000.0	2,987.7	2,932.9	2,926.1	10.8	10.3	158.27	-7.0	-331.1	509.2	488.8	20.39	24.972	
3,100.0	3,086.7	3,029.7	3,021.9	11.2	10.7	158.12	-10.9	-344.0	534.3	513.2	21.10	25.320	
3,200.0	3,185.7	3,126.5	3,117.8	11.6	11.0	157.99	-14.9	-356.8	559.3	537.5	21.81	25.642	
3,300.0	3,284.8	3,223.3	3,213.7	12.0	11.4	157.86	-18.9	-369.7	584.4	561.9	22.53	25.942	
3,400.0	3,383.8	3,320.1	3,309.5	12.4	11.8	157.75	-22.8	-382.6	609.5	586.2	23.24	26.222	
3,500.0	3,482.8	3,416.9	3,405.4	12.8	12.2	157.64	-26.8	-395.5	634.5	610.6	23.96	26.483	
3,600.0	3,581.8	3,513.7	3,501.2	13.2	12.6	157.55	-30.8	-408.3	659.6	634.9	24.68	26.727	
3,700.0	3,680.9	3,610.5	3,597.1	13.7	13.0	157.46	-34.7	-421.2	684.6	659.2	25.40	26.956	
3,800.0	3,779.9	3,707.3	3,693.0	14.1	13.4	157.37	-38.7	-434.1	709.7	683.6	26.12	27.171	
3,878.9	3,858.0	3,783.7	3,768.6	14.4	13.7	157.31	-41.8	-444.2	729.5	702.8	26.69	27.332	
3,900.0	3,878.9	3,804.1	3,788.8	14.5	13.7	157.33	-42.7	-447.0	734.7	707.9	26.84	27.372	
4,000.0	3,978.2	3,901.3	3,885.1	14.9	14.1	157.34	-46.7	-459.9	758.1	730.6	27.57	27.503	
4,100.0	4,077.7	4,001.0	3,981.9	15.3	14.5	157.26	-50.7	-472.9	779.2	750.9	28.29	27.539	
4,200.0	4,177.5	4,102.8	4,079.1	15.6	14.9	157.11	-54.7	-485.9	797.9	768.9	29.03	27.486	
4,300.0	4,277.4	4,204.2	4,176.7	16.0	15.4	156.89	-58.7	-499.0	814.2	784.5	29.76	27.361	
4,400.0	4,377.4	4,294.6	4,274.6	16.3	15.7	156.59	-62.8	-512.2	828.2	797.8	30.44	27.206	
4,412.2	4,389.6	4,306.7	4,286.6	16.4	15.8	-81.21	-63.3	-513.8	829.8	799.3	30.53	27.180	
4,500.0	4,477.4	4,406.3	4,372.6	16.7	16.2	-81.57	-66.9	-525.4	840.8	809.6	31.19	26.955	
4,600.0	4,577.4	4,507.3	4,470.7	17.0	16.6	-81.98	-70.9	-538.5	853.4	821.5	31.90	26.749	
4,700.0	4,677.4	4,591.7	4,568.8	17.3	16.9	-82.37	-75.0	-551.7	866.1	833.5	32.55	26.604	
4,800.0	4,777.4	4,690.7	4,666.8	17.6	17.4	-82.75	-79.0	-564.9	878.7	845.5	33.26	26.422	
4,900.0	4,877.4	4,789.8	4,764.9	18.0	17.8	-83.12	-83.1	-578.0	891.4	857.5	33.96	26.248	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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
5,000.0	4,977.4	4,888.8	4,862.9	18.3	18.2	-83.47	-87.2	-591.2	904.2	869.5	34.67	26.081	
5,100.0	5,077.4	4,987.8	4,961.0	18.6	18.6	-83.82	-91.2	-604.4	917.0	881.6	35.38	25.921	
5,200.0	5,177.4	5,086.8	5,059.1	19.0	19.0	-84.16	-95.3	-617.5	929.8	893.7	36.08	25.769	
5,300.0	5,277.4	5,185.9	5,157.1	19.3	19.4	-84.49	-99.3	-630.7	942.6	905.9	36.79	25.622	
5,400.0	5,377.4	5,284.9	5,255.2	19.6	19.8	-84.81	-103.4	-643.9	955.5	918.0	37.50	25.482	
5,500.0	5,477.4	5,383.9	5,353.3	20.0	20.2	-85.13	-107.5	-657.1	968.4	930.2	38.21	25.347	
5,600.0	5,577.4	5,483.0	5,451.3	20.3	20.6	-85.43	-111.5	-670.2	981.4	942.4	38.92	25.217	
5,700.0	5,677.4	5,582.0	5,549.4	20.6	21.0	-85.73	-115.6	-683.4	994.3	954.7	39.63	25.093	
5,800.0	5,777.4	5,681.0	5,647.5	21.0	21.4	-86.01	-119.7	-696.6	1,007.3	967.0	40.34	24.973	
5,900.0	5,877.4	5,780.0	5,745.5	21.3	21.9	-86.30	-123.7	-709.7	1,020.3	979.3	41.05	24.858	
6,000.0	5,977.4	5,879.1	5,843.6	21.6	22.3	-86.57	-127.8	-722.9	1,033.4	991.6	41.76	24.747	
6,100.0	6,077.4	5,978.1	5,941.6	22.0	22.7	-86.84	-131.8	-736.1	1,046.4	1,003.9	42.47	24.640	
6,200.0	6,177.4	6,077.1	6,039.7	22.3	23.1	-87.10	-135.9	-749.2	1,059.5	1,016.3	43.18	24.537	
6,300.0	6,277.4	6,176.1	6,137.8	22.6	23.5	-87.35	-140.0	-762.4	1,072.6	1,028.7	43.89	24.438	
6,400.0	6,377.4	6,275.2	6,235.8	23.0	23.9	-87.60	-144.0	-775.6	1,085.7	1,041.1	44.60	24.342	
6,500.0	6,477.4	6,374.2	6,333.9	23.3	24.3	-87.84	-148.1	-788.8	1,098.8	1,053.5	45.32	24.249	
6,600.0	6,577.4	6,473.2	6,432.0	23.7	24.7	-88.08	-152.1	-801.9	1,112.0	1,066.0	46.03	24.159	
6,700.0	6,677.4	6,572.2	6,530.0	24.0	25.2	-88.31	-156.2	-815.1	1,125.2	1,078.4	46.74	24.073	
6,800.0	6,777.4	6,671.3	6,628.1	24.3	25.6	-88.54	-160.3	-828.3	1,138.4	1,090.9	47.45	23.989	
6,900.0	6,877.4	6,770.3	6,726.1	24.7	26.0	-88.76	-164.3	-841.4	1,151.6	1,103.4	48.17	23.908	
7,000.0	6,977.4	6,869.3	6,824.2	25.0	26.4	-88.97	-168.4	-854.6	1,164.8	1,115.9	48.88	23.830	
7,100.0	7,077.4	6,968.4	6,922.3	25.4	26.8	-89.18	-172.4	-867.8	1,178.1	1,128.5	49.59	23.754	
7,200.0	7,177.4	7,067.4	7,020.3	25.7	27.2	-89.39	-176.5	-880.9	1,191.3	1,141.0	50.31	23.680	
7,300.0	7,277.4	7,166.4	7,118.4	26.1	27.6	-89.59	-180.6	-894.1	1,204.6	1,153.6	51.02	23.609	
7,400.0	7,377.4	7,265.4	7,216.5	26.4	28.1	-89.79	-184.6	-907.3	1,217.9	1,166.1	51.74	23.539	
7,500.0	7,477.4	7,364.5	7,314.5	26.8	28.5	-89.98	-188.7	-920.5	1,231.2	1,178.7	52.45	23.472	
7,600.0	7,577.4	7,463.5	7,412.6	27.1	28.9	-90.17	-192.7	-933.6	1,244.5	1,191.3	53.17	23.407	
7,700.0	7,677.4	7,603.8	7,551.9	27.4	29.5	-90.40	-197.8	-950.2	1,256.4	1,202.2	54.18	23.347	
7,800.0	7,777.4	7,749.6	7,697.0	27.8	30.0	-90.57	-201.5	-962.2	1,264.6	1,209.5	55.16	22.926	
7,900.0	7,877.4	7,896.0	7,843.3	28.1	30.5	-90.66	-203.6	-968.9	1,269.2	1,213.1	56.07	22.638	
8,000.0	7,977.4	8,031.1	7,978.4	28.5	31.0	-90.68	-204.1	-970.4	1,270.2	1,213.4	56.85	22.342	
8,100.0	8,077.4	8,131.1	8,078.4	28.8	31.3	-90.68	-204.1	-970.4	1,270.2	1,212.7	57.54	22.077	
8,200.0	8,177.4	8,231.1	8,178.4	29.2	31.6	-90.68	-204.1	-970.4	1,270.2	1,212.0	58.22	21.818	
8,300.0	8,277.4	8,331.1	8,278.4	29.5	31.9	-90.68	-204.1	-970.4	1,270.2	1,211.3	58.90	21.565	
8,400.0	8,377.4	8,431.1	8,378.4	29.9	32.2	-90.68	-204.1	-970.4	1,270.2	1,210.7	59.59	21.317	
8,500.0	8,477.4	8,531.1	8,478.4	30.2	32.6	-90.68	-204.1	-970.4	1,270.2	1,210.0	60.28	21.074	
8,600.0	8,577.4	8,631.1	8,578.4	30.6	32.9	-90.68	-204.1	-970.4	1,270.2	1,209.3	60.96	20.837	
8,700.0	8,677.4	8,731.1	8,678.4	30.9	33.2	-90.68	-204.1	-970.4	1,270.2	1,208.6	61.65	20.604	
8,800.0	8,777.4	8,831.1	8,778.4	31.3	33.5	-90.68	-204.1	-970.4	1,270.2	1,207.9	62.34	20.377	
8,900.0	8,877.4	8,931.1	8,878.4	31.6	33.8	-90.68	-204.1	-970.4	1,270.2	1,207.2	63.03	20.154	
9,000.0	8,977.4	9,031.1	8,978.4	32.0	34.2	-90.68	-204.1	-970.4	1,270.2	1,206.5	63.71	19.936	
9,100.0	9,077.4	9,131.1	9,078.4	32.3	34.5	-90.68	-204.1	-970.4	1,270.2	1,205.8	64.40	19.723	
9,200.0	9,177.4	9,231.1	9,178.4	32.7	34.8	-90.68	-204.1	-970.4	1,270.2	1,205.2	65.09	19.514	
9,300.0	9,277.4	9,331.1	9,278.4	33.0	35.1	-90.68	-204.1	-970.4	1,270.2	1,204.5	65.79	19.309	
9,400.0	9,377.4	9,431.1	9,378.4	33.4	35.5	-90.68	-204.1	-970.4	1,270.2	1,203.8	66.48	19.108	
9,500.0	9,477.4	9,531.1	9,478.4	33.7	35.8	-90.68	-204.1	-970.4	1,270.2	1,203.1	67.17	18.911	
9,600.0	9,577.4	9,631.1	9,578.4	34.1	36.1	-90.68	-204.1	-970.4	1,270.2	1,202.4	67.86	18.718	
9,700.0	9,677.4	9,731.1	9,678.4	34.4	36.4	-90.68	-204.1	-970.4	1,270.2	1,201.7	68.55	18.529	
9,800.0	9,777.4	9,831.1	9,778.4	34.8	36.8	-90.68	-204.1	-970.4	1,270.2	1,201.0	69.25	18.343	
9,900.0	9,877.4	9,931.1	9,878.4	35.1	37.1	-90.68	-204.1	-970.4	1,270.2	1,200.3	69.94	18.161	
10,000.0	9,977.4	10,031.1	9,978.4	35.5	37.4	-90.68	-204.1	-970.4	1,270.2	1,199.6	70.64	17.983	
10,100.0	10,077.4	10,131.1	10,078.4	35.8	37.7	-90.68	-204.1	-970.4	1,270.2	1,198.9	71.33	17.808	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,177.4	10,231.1	10,178.4	36.2	38.1	-90.68	-204.1	-970.4	1,270.2	1,198.2	72.03	17.636		
10,208.1	10,185.5	10,239.3	10,186.5	36.2	38.1	-90.68	-204.1	-970.4	1,270.2	1,198.2	72.08	17.622		
10,300.0	10,277.4	10,328.4	10,275.7	36.5	38.4	-90.66	-203.8	-970.4	1,270.3	1,197.6	72.72	17.469		
10,324.1	10,301.5	10,349.3	10,296.6	36.6	38.5	-90.62	-202.8	-970.5	1,270.4	1,197.5	72.87	17.432		
10,350.0	10,327.4	10,371.7	10,318.8	36.7	38.5	-90.10	-200.9	-970.6	1,270.5	1,197.5	73.04	17.394		
10,400.0	10,377.2	10,414.7	10,361.4	36.9	38.7	-89.94	-194.7	-971.1	1,271.0	1,197.7	73.36	17.327		
10,450.0	10,426.4	10,457.6	10,403.3	37.0	38.8	-89.78	-185.4	-971.9	1,271.8	1,198.2	73.66	17.267		
10,500.0	10,474.6	10,500.4	10,444.2	37.2	38.9	-89.62	-173.1	-972.9	1,272.9	1,198.9	73.94	17.215		
10,550.0	10,521.6	10,543.2	10,484.1	37.3	39.0	-89.45	-157.7	-974.1	1,274.2	1,200.0	74.21	17.171		
10,600.0	10,566.8	10,585.8	10,522.7	37.5	39.1	-89.29	-139.5	-975.6	1,275.8	1,201.3	74.46	17.133		
10,650.0	10,610.1	10,628.5	10,559.8	37.6	39.2	-89.13	-118.5	-977.3	1,277.5	1,202.8	74.70	17.102		
10,700.0	10,651.0	10,671.3	10,595.2	37.7	39.3	-88.97	-94.7	-979.2	1,279.5	1,204.6	74.93	17.076		
10,750.0	10,689.2	10,714.0	10,628.8	37.8	39.4	-88.82	-68.3	-981.3	1,281.8	1,206.6	75.16	17.054		
10,800.0	10,724.5	10,756.9	10,660.4	37.9	39.5	-88.67	-39.5	-983.6	1,284.2	1,208.8	75.38	17.036		
10,850.0	10,756.6	10,799.9	10,689.9	37.9	39.5	-88.53	-8.3	-986.1	1,286.7	1,211.1	75.60	17.021		
10,900.0	10,785.2	10,843.0	10,717.0	38.0	39.6	-88.39	25.2	-988.8	1,289.5	1,213.6	75.82	17.007		
10,950.0	10,810.1	10,886.4	10,741.6	38.0	39.6	-88.27	60.7	-991.7	1,292.3	1,216.3	76.04	16.995		
11,000.0	10,831.2	10,930.0	10,763.5	38.1	39.7	-88.15	98.2	-994.7	1,295.3	1,219.1	76.27	16.982		
11,050.0	10,848.2	10,973.8	10,782.7	38.3	39.7	-88.05	137.6	-997.9	1,298.4	1,221.9	76.51	16.970		
11,100.0	10,861.1	11,018.0	10,798.8	38.4	39.8	-87.96	178.5	-1,001.2	1,301.6	1,224.9	76.76	16.957		
11,150.0	10,869.7	11,062.5	10,811.9	38.5	39.8	-87.88	220.9	-1,004.6	1,304.9	1,227.9	77.02	16.943		
11,200.0	10,874.0	11,107.4	10,821.7	38.7	39.9	-87.82	264.6	-1,008.1	1,308.2	1,230.9	77.28	16.928		
11,225.4	10,874.5	11,130.4	10,825.3	38.8	39.9	-87.79	287.2	-1,009.9	1,309.9	1,232.5	77.42	16.920		
11,287.1	10,874.3	11,187.0	10,830.5	39.0	40.0	-88.03	343.4	-1,014.4	1,314.2	1,236.4	77.77	16.898		
11,300.0	10,874.3	11,198.9	10,830.8	39.0	40.1	-88.05	355.3	-1,015.4	1,315.1	1,237.2	77.85	16.893		
11,400.0	10,874.1	11,368.6	10,830.0	39.4	40.5	-88.04	524.6	-1,024.8	1,320.1	1,241.3	78.76	16.762		
11,500.0	10,873.8	11,506.7	10,829.2	39.8	41.1	-88.02	649.3	-1,026.3	1,320.4	1,240.6	79.75	16.556		
11,600.0	10,873.6	11,606.7	10,828.6	40.3	41.5	-88.00	749.3	-1,027.1	1,320.4	1,239.7	80.75	16.352		
11,700.0	10,873.4	11,706.7	10,828.0	40.9	42.1	-87.99	849.3	-1,027.8	1,320.4	1,238.6	81.87	16.128		
11,800.0	10,873.2	11,806.7	10,827.4	41.5	42.7	-87.97	949.3	-1,028.6	1,320.4	1,237.3	83.11	15.888		
11,900.0	10,872.9	11,906.7	10,826.8	42.2	43.3	-87.95	1,049.3	-1,029.4	1,320.5	1,236.0	84.46	15.635		
12,000.0	10,872.7	12,006.7	10,826.2	42.9	44.1	-87.94	1,149.3	-1,030.2	1,320.5	1,234.6	85.91	15.370		
12,100.0	10,872.5	12,106.7	10,825.6	43.7	44.8	-87.92	1,249.3	-1,030.9	1,320.5	1,233.0	87.47	15.097		
12,200.0	10,872.2	12,206.7	10,825.0	44.6	45.6	-87.90	1,349.3	-1,031.7	1,320.5	1,231.4	89.12	14.817		
12,300.0	10,872.0	12,306.7	10,824.3	45.4	46.5	-87.89	1,449.3	-1,032.5	1,320.5	1,229.7	90.87	14.533		
12,400.0	10,871.8	12,406.7	10,823.7	46.3	47.4	-87.87	1,549.3	-1,033.2	1,320.5	1,227.8	92.69	14.246		
12,500.0	10,871.6	12,506.7	10,823.1	47.3	48.3	-87.85	1,649.2	-1,034.0	1,320.5	1,225.9	94.61	13.959		
12,600.0	10,871.3	12,606.7	10,822.5	48.3	49.3	-87.84	1,749.2	-1,034.8	1,320.6	1,224.0	96.59	13.672		
12,700.0	10,871.1	12,706.7	10,821.9	49.3	50.3	-87.82	1,849.2	-1,035.5	1,320.6	1,221.9	98.65	13.387		
12,800.0	10,870.9	12,806.8	10,821.3	50.4	51.4	-87.80	1,949.2	-1,036.3	1,320.6	1,219.8	100.77	13.105		
12,900.0	10,870.7	12,906.8	10,820.7	51.5	52.4	-87.79	2,049.2	-1,037.1	1,320.6	1,217.7	102.96	12.827		
13,000.0	10,870.4	13,006.8	10,820.1	52.6	53.6	-87.77	2,149.2	-1,037.9	1,320.6	1,215.4	105.20	12.553		
13,100.0	10,870.2	13,106.8	10,819.4	53.8	54.7	-87.75	2,249.2	-1,038.6	1,320.6	1,213.1	107.51	12.285		
13,200.0	10,870.0	13,206.8	10,818.8	54.9	55.9	-87.74	2,349.2	-1,039.4	1,320.7	1,210.8	109.86	12.022		
13,300.0	10,869.7	13,306.8	10,818.2	56.1	57.0	-87.72	2,449.2	-1,040.2	1,320.7	1,208.4	112.26	11.765		
13,400.0	10,869.5	13,406.8	10,817.6	57.4	58.2	-87.70	2,549.2	-1,040.9	1,320.7	1,206.0	114.70	11.514		
13,500.0	10,869.3	13,506.8	10,817.0	58.6	59.5	-87.69	2,649.2	-1,041.7	1,320.7	1,203.5	117.19	11.270		
13,600.0	10,869.1	13,606.8	10,816.4	59.9	60.7	-87.67	2,749.2	-1,042.5	1,320.7	1,201.0	119.72	11.032		
13,700.0	10,868.8	13,706.8	10,815.8	61.1	62.0	-87.65	2,849.2	-1,043.2	1,320.8	1,198.5	122.29	10.800		
13,800.0	10,868.6	13,793.2	10,815.2	62.4	63.1	-87.64	2,949.2	-1,044.0	1,320.8	1,196.1	124.71	10.591		
13,900.0	10,868.4	13,906.8	10,814.5	63.8	64.6	-87.62	3,049.2	-1,044.8	1,320.8	1,193.3	127.52	10.357		
14,000.0	10,868.2	14,006.8	10,813.9	65.1	65.9	-87.60	3,149.2	-1,045.5	1,320.8	1,190.6	130.19	10.145		

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,867.9	14,106.8	10,813.3	66.4	67.2	-87.59	3,249.2	-1,046.3	1,320.8	1,187.9	132.88	9.940	
14,200.0	10,867.7	14,206.8	10,812.7	67.8	68.6	-87.57	3,349.2	-1,047.1	1,320.8	1,185.2	135.60	9.741	
14,300.0	10,867.5	14,306.8	10,812.1	69.2	69.9	-87.55	3,449.1	-1,047.9	1,320.9	1,182.5	138.35	9.547	
14,400.0	10,867.3	14,406.8	10,811.5	70.6	71.3	-87.54	3,549.1	-1,048.6	1,320.9	1,179.8	141.12	9.360	
14,500.0	10,867.0	14,506.8	10,810.9	72.0	72.7	-87.52	3,649.1	-1,049.4	1,320.9	1,177.0	143.91	9.178	
14,600.0	10,866.8	14,606.8	10,810.3	73.4	74.1	-87.50	3,749.1	-1,050.2	1,320.9	1,174.2	146.73	9.002	
14,700.0	10,866.6	14,706.8	10,809.6	74.8	75.5	-87.49	3,849.1	-1,050.9	1,320.9	1,171.4	149.56	8.832	
14,800.0	10,866.3	14,806.8	10,809.0	76.2	76.9	-87.47	3,949.1	-1,051.7	1,321.0	1,168.5	152.42	8.667	
14,900.0	10,866.1	14,906.8	10,808.4	77.7	78.4	-87.45	4,049.1	-1,052.5	1,321.0	1,165.7	155.29	8.506	
15,000.0	10,865.9	15,006.8	10,807.8	79.1	79.8	-87.44	4,149.1	-1,053.2	1,321.0	1,162.8	158.18	8.351	
15,100.0	10,865.7	15,106.8	10,807.2	80.6	81.2	-87.42	4,249.1	-1,054.0	1,321.0	1,159.9	161.09	8.201	
15,200.0	10,865.4	15,206.8	10,806.6	82.0	82.7	-87.40	4,349.1	-1,054.8	1,321.0	1,157.0	164.01	8.055	
15,300.0	10,865.2	15,306.8	10,806.0	83.5	84.1	-87.39	4,449.1	-1,055.6	1,321.1	1,154.1	166.95	7.913	
15,400.0	10,865.0	15,393.2	10,805.4	85.0	85.4	-87.37	4,549.1	-1,056.3	1,321.1	1,151.4	169.69	7.785	
15,500.0	10,864.8	15,506.8	10,804.8	86.4	87.1	-87.35	4,649.1	-1,057.1	1,321.1	1,148.2	172.86	7.643	
15,600.0	10,864.5	15,593.2	10,804.1	87.9	88.4	-87.34	4,749.1	-1,057.9	1,321.1	1,145.5	175.63	7.522	
15,700.0	10,864.3	15,706.8	10,803.5	89.4	90.1	-87.32	4,849.1	-1,058.6	1,321.1	1,142.3	178.82	7.388	
15,800.0	10,864.1	15,806.8	10,802.9	90.9	91.5	-87.30	4,949.1	-1,059.4	1,321.2	1,139.3	181.82	7.266	
15,900.0	10,863.8	15,906.8	10,802.3	92.4	93.0	-87.29	5,049.1	-1,060.2	1,321.2	1,136.3	184.82	7.148	
16,000.0	10,863.6	16,006.8	10,801.7	94.0	94.5	-87.27	5,149.1	-1,060.9	1,321.2	1,133.3	187.84	7.033	
16,100.0	10,863.4	16,093.2	10,801.1	95.5	95.8	-87.25	5,249.0	-1,061.7	1,321.2	1,130.5	190.67	6.929	
16,200.0	10,863.2	16,206.8	10,800.5	97.0	97.6	-87.24	5,349.0	-1,062.5	1,321.2	1,127.3	193.91	6.814	
16,300.0	10,862.9	16,306.8	10,799.9	98.5	99.1	-87.22	5,449.0	-1,063.3	1,321.3	1,124.3	196.95	6.708	
16,400.0	10,862.7	16,406.8	10,799.2	100.0	100.6	-87.20	5,549.0	-1,064.0	1,321.3	1,121.3	200.01	6.606	
16,500.0	10,862.5	16,506.8	10,798.6	101.6	102.1	-87.19	5,649.0	-1,064.8	1,321.3	1,118.2	203.07	6.507	
16,600.0	10,862.3	16,606.8	10,798.0	103.1	103.7	-87.17	5,749.0	-1,065.6	1,321.3	1,115.2	206.14	6.410	
16,700.0	10,862.0	16,706.8	10,797.4	104.7	105.2	-87.15	5,849.0	-1,066.3	1,321.3	1,112.1	209.22	6.316	
16,800.0	10,861.8	16,806.8	10,796.8	106.2	106.7	-87.14	5,949.0	-1,067.1	1,321.4	1,109.1	212.30	6.224	
16,900.0	10,861.6	16,906.8	10,796.2	107.7	108.3	-87.12	6,049.0	-1,067.9	1,321.4	1,106.0	215.39	6.135	
17,000.0	10,861.4	17,006.8	10,795.6	109.3	109.8	-87.10	6,149.0	-1,068.6	1,321.4	1,102.9	218.49	6.048	
17,100.0	10,861.1	17,106.8	10,795.0	110.8	111.4	-87.09	6,249.0	-1,069.4	1,321.4	1,099.8	221.59	5.963	
17,200.0	10,860.9	17,206.8	10,794.3	112.4	112.9	-87.07	6,349.0	-1,070.2	1,321.4	1,096.7	224.70	5.881	
17,300.0	10,860.7	17,306.8	10,793.7	114.0	114.5	-87.05	6,449.0	-1,071.0	1,321.5	1,093.7	227.81	5.801	
17,400.0	10,860.4	17,406.8	10,793.1	115.5	116.0	-87.04	6,549.0	-1,071.7	1,321.5	1,090.6	230.93	5.722	
17,500.0	10,860.2	17,506.8	10,792.5	117.1	117.6	-87.02	6,649.0	-1,072.5	1,321.5	1,087.5	234.06	5.646	
17,600.0	10,860.0	17,593.2	10,791.9	118.7	118.9	-87.00	6,749.0	-1,073.3	1,321.5	1,084.6	236.97	5.577	
17,700.0	10,859.8	17,706.8	10,791.3	120.2	120.7	-86.99	6,849.0	-1,074.0	1,321.6	1,081.2	240.32	5.499	
17,800.0	10,859.5	17,806.8	10,790.7	121.8	122.3	-86.97	6,949.0	-1,074.8	1,321.6	1,078.1	243.46	5.428	
17,900.0	10,859.3	17,906.8	10,790.1	123.4	123.8	-86.95	7,049.0	-1,075.6	1,321.6	1,075.0	246.60	5.359	
18,000.0	10,859.1	18,006.8	10,789.4	124.9	125.4	-86.94	7,149.0	-1,076.3	1,321.6	1,071.9	249.75	5.292	
18,100.0	10,858.9	18,106.8	10,788.8	126.5	127.0	-86.92	7,249.0	-1,077.1	1,321.6	1,068.7	252.90	5.226	
18,200.0	10,858.6	18,206.8	10,788.2	128.1	128.6	-86.90	7,349.0	-1,077.9	1,321.7	1,065.6	256.06	5.162	
18,300.0	10,858.4	18,306.8	10,787.6	129.7	130.1	-86.89	7,449.0	-1,078.7	1,321.7	1,062.5	259.22	5.099	
18,400.0	10,858.2	18,406.8	10,787.0	131.3	131.7	-86.87	7,549.0	-1,079.4	1,321.7	1,059.3	262.38	5.037	
18,500.0	10,857.9	18,506.8	10,786.4	132.9	133.3	-86.85	7,649.0	-1,080.2	1,321.7	1,056.2	265.55	4.977	
18,600.0	10,857.7	18,606.8	10,785.8	134.4	134.9	-86.84	7,749.0	-1,081.0	1,321.8	1,053.0	268.71	4.919	
18,700.0	10,857.5	18,706.8	10,785.2	136.0	136.5	-86.82	7,849.0	-1,081.7	1,321.8	1,049.9	271.89	4.862	
18,800.0	10,857.3	18,806.8	10,784.5	137.6	138.1	-86.80	7,949.0	-1,082.5	1,321.8	1,046.7	275.06	4.805	
18,900.0	10,857.0	18,906.8	10,783.9	139.2	139.7	-86.79	8,049.0	-1,083.3	1,321.8	1,043.6	278.24	4.751	
19,000.0	10,856.8	18,993.2	10,783.3	140.8	141.0	-86.77	8,149.0	-1,084.0	1,321.9	1,040.6	281.21	4.701	
19,100.0	10,856.6	19,106.8	10,782.7	142.4	142.8	-86.75	8,249.0	-1,084.8	1,321.9	1,037.3	284.61	4.645	
19,200.0	10,856.4	19,206.8	10,782.1	144.0	144.4	-86.74	8,349.0	-1,085.6	1,321.9	1,034.1	287.79	4.593	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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
19,300.0	10,856.1	19,306.8	10,781.5	145.6	146.0	-86.72	8,448.9	-1,086.4	1,321.9	1,030.9	290.98	4.543	
19,400.0	10,855.9	19,406.8	10,780.9	147.2	147.6	-86.70	8,548.9	-1,087.1	1,321.9	1,027.8	294.18	4.494	
19,500.0	10,855.7	19,506.8	10,780.3	148.8	149.2	-86.69	8,648.9	-1,087.9	1,322.0	1,024.6	297.37	4.446	
19,600.0	10,855.5	19,606.8	10,779.6	150.4	150.8	-86.67	8,748.8	-1,088.7	1,322.0	1,021.4	300.57	4.398	
19,700.0	10,855.2	19,706.8	10,779.0	152.0	152.4	-86.65	8,848.8	-1,089.4	1,322.0	1,018.3	303.77	4.352	
19,800.0	10,855.0	19,806.8	10,778.4	153.6	154.0	-86.64	8,948.8	-1,090.2	1,322.0	1,015.1	306.97	4.307	
19,900.0	10,854.8	19,906.8	10,777.8	155.2	155.6	-86.62	9,048.8	-1,091.0	1,322.1	1,011.9	310.17	4.262	
20,000.0	10,854.5	20,006.8	10,777.2	156.8	157.2	-86.60	9,148.8	-1,091.7	1,322.1	1,008.7	313.38	4.219	
20,100.0	10,854.3	20,106.8	10,776.6	158.4	158.8	-86.59	9,248.8	-1,092.5	1,322.1	1,005.5	316.58	4.176	
20,200.0	10,854.1	20,206.8	10,776.0	160.0	160.4	-86.57	9,348.8	-1,093.3	1,322.1	1,002.3	319.79	4.134	
20,300.0	10,853.9	20,306.8	10,775.4	161.7	162.0	-86.55	9,448.8	-1,094.1	1,322.2	999.2	323.00	4.093	
20,400.0	10,853.6	20,406.8	10,774.8	163.3	163.6	-86.54	9,548.8	-1,094.8	1,322.2	996.0	326.22	4.053	
20,500.0	10,853.4	20,506.8	10,774.1	164.9	165.3	-86.52	9,648.8	-1,095.6	1,322.2	992.8	329.43	4.014	
20,600.0	10,853.2	20,606.8	10,773.5	166.5	166.9	-86.50	9,748.8	-1,096.4	1,322.2	989.6	332.65	3.975	
20,700.0	10,853.0	20,706.8	10,772.9	168.1	168.5	-86.49	9,848.8	-1,097.1	1,322.3	986.4	335.86	3.937	
20,800.0	10,852.7	20,793.2	10,772.3	169.7	169.9	-86.47	9,948.8	-1,097.9	1,322.3	983.4	338.86	3.902	
20,900.0	10,852.5	20,906.8	10,771.7	171.3	171.7	-86.45	10,048.8	-1,098.7	1,322.3	980.0	342.31	3.863	
21,000.0	10,852.3	20,993.2	10,771.1	172.9	173.1	-86.44	10,148.8	-1,099.4	1,322.3	977.0	345.31	3.829	
21,094.0	10,851.5	21,087.2	10,770.5	174.5	174.5	-86.45	10,242.8	-1,100.2	1,322.6	974.4	348.18	3.798 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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	26.8	2,373.2	2,373.3				
100.0	100.0	101.0	99.0	0.1	0.1	89.35	26.8	2,373.2	2,373.3	2,373.1	0.26	9,131.903	
200.0	200.0	201.0	199.0	0.5	0.5	89.35	26.8	2,373.2	2,373.3	2,372.3	0.98	2,429.591	
300.0	300.0	301.0	299.0	0.8	0.8	89.35	26.8	2,373.2	2,373.3	2,371.6	1.69	1,401.193	
400.0	400.0	401.0	399.0	1.2	1.2	89.35	26.8	2,373.2	2,373.3	2,370.9	2.41	984.481	
500.0	500.0	501.0	499.0	1.6	1.6	89.35	26.8	2,373.2	2,373.3	2,370.2	3.13	758.812	
600.0	600.0	601.0	599.0	1.9	1.9	89.35	26.8	2,373.2	2,373.3	2,369.5	3.84	617.309	
700.0	700.0	701.0	699.0	2.3	2.3	89.35	26.8	2,373.2	2,373.3	2,368.7	4.56	520.286	
800.0	800.0	801.0	799.0	2.6	2.6	89.35	26.8	2,373.2	2,373.3	2,368.0	5.28	449.619	
900.0	900.0	901.0	899.0	3.0	3.0	89.35	26.8	2,373.2	2,373.3	2,367.3	6.00	395.853	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	89.35	26.8	2,373.2	2,373.3	2,366.6	6.71	353.572	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	89.35	26.8	2,373.2	2,373.3	2,365.9	7.43	319.452	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	89.35	26.8	2,373.2	2,373.3	2,365.2	8.15	291.337	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	-32.90	26.8	2,373.2	2,372.6	2,363.7	8.85	268.102	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	-32.95	26.8	2,373.2	2,370.4	2,360.8	9.54	248.405	
1,500.0	1,499.9	1,498.9	1,498.9	5.1	5.1	-33.03	26.8	2,373.2	2,366.7	2,356.5	10.23	231.330	
1,600.0	1,599.7	1,664.3	1,664.3	5.4	5.7	-33.18	26.2	2,370.9	2,360.2	2,349.1	11.14	211.913	
1,700.0	1,699.4	1,829.5	1,829.3	5.8	6.3	-33.37	24.4	2,364.0	2,349.5	2,337.5	12.03	195.255	
1,800.0	1,798.9	1,993.2	1,992.6	6.1	6.8	-33.60	21.3	2,352.7	2,334.6	2,321.6	12.92	180.676	
1,900.0	1,898.3	2,155.0	2,153.5	6.5	7.4	-33.87	17.1	2,337.1	2,315.5	2,301.7	13.80	167.791	
2,000.0	1,997.4	2,314.4	2,311.6	6.9	8.0	-34.17	11.8	2,317.4	2,292.4	2,277.7	14.67	156.315	
2,100.0	2,096.4	2,405.5	2,401.9	7.2	8.3	-34.28	8.5	2,305.1	2,267.5	2,252.1	15.34	147.833	
2,200.0	2,195.5	2,502.3	2,497.7	7.6	8.7	-34.40	5.0	2,292.1	2,242.6	2,226.6	16.03	139.895	
2,300.0	2,294.5	2,601.0	2,593.5	8.0	9.1	-34.52	1.5	2,279.1	2,217.7	2,201.0	16.73	132.524	
2,400.0	2,393.5	2,704.2	2,689.3	8.4	9.5	-34.64	-2.0	2,266.1	2,192.8	2,175.4	17.46	125.602	
2,500.0	2,492.5	2,807.5	2,785.1	8.8	9.9	-34.76	-5.5	2,253.1	2,168.0	2,149.8	18.19	119.206	
2,600.0	2,591.6	2,889.3	2,881.0	9.2	10.2	-34.89	-9.0	2,240.1	2,143.1	2,124.3	18.84	113.749	
2,700.0	2,690.6	2,986.0	2,976.8	9.6	10.6	-35.02	-12.5	2,227.1	2,118.3	2,098.7	19.55	108.345	
2,800.0	2,789.6	3,082.8	3,072.6	10.0	11.0	-35.16	-16.0	2,214.1	2,093.4	2,073.2	20.26	103.306	
2,900.0	2,888.6	3,179.5	3,168.4	10.4	11.4	-35.29	-19.5	2,201.1	2,068.6	2,047.6	20.98	98.600	
3,000.0	2,987.7	3,276.3	3,264.2	10.8	11.8	-35.43	-23.0	2,188.1	2,043.8	2,022.1	21.70	94.196	
3,100.0	3,086.7	3,373.0	3,360.0	11.2	12.1	-35.58	-26.5	2,175.1	2,019.0	1,996.6	22.42	90.067	
3,200.0	3,185.7	3,469.8	3,455.8	11.6	12.5	-35.72	-30.0	2,162.1	1,994.2	1,971.1	23.14	86.188	
3,300.0	3,284.8	3,566.5	3,551.6	12.0	12.9	-35.87	-33.5	2,149.1	1,969.4	1,945.6	23.86	82.539	
3,400.0	3,383.8	3,663.3	3,647.4	12.4	13.3	-36.03	-37.0	2,136.1	1,944.7	1,920.1	24.59	79.099	
3,500.0	3,482.8	3,760.0	3,743.2	12.8	13.7	-36.19	-40.5	2,123.1	1,919.9	1,894.6	25.31	75.854	
3,600.0	3,581.8	3,856.8	3,839.0	13.2	14.1	-36.35	-44.0	2,110.1	1,895.2	1,869.2	26.04	72.785	
3,700.0	3,680.9	3,953.5	3,934.8	13.7	14.5	-36.52	-47.5	2,097.1	1,870.5	1,843.7	26.77	69.881	
3,800.0	3,779.9	4,050.3	4,030.7	14.1	14.9	-36.69	-51.0	2,084.1	1,845.8	1,818.3	27.50	67.129	
3,878.9	3,858.0	4,126.6	4,106.3	14.4	15.2	-36.83	-53.8	2,073.9	1,826.3	1,798.2	28.07	65.057	
3,900.0	3,878.9	4,147.1	4,126.5	14.5	15.3	-36.82	-54.5	2,071.1	1,821.1	1,792.9	28.23	64.519	
4,000.0	3,978.2	4,244.2	4,222.7	14.9	15.7	-36.75	-58.1	2,058.1	1,797.9	1,769.0	28.95	62.095	
4,100.0	4,077.7	4,341.9	4,319.4	15.3	16.1	-36.65	-61.6	2,044.9	1,776.7	1,747.1	29.68	59.867	
4,200.0	4,177.5	4,440.0	4,416.6	15.6	16.5	-36.52	-65.1	2,031.7	1,757.6	1,727.2	30.40	57.822	
4,300.0	4,277.4	4,538.6	4,514.2	16.0	16.9	-36.36	-68.7	2,018.5	1,740.6	1,709.5	31.11	55.947	
4,400.0	4,377.4	4,637.4	4,612.1	16.3	17.3	-36.17	-72.3	2,005.2	1,725.6	1,693.8	31.82	54.230	
4,412.2	4,389.6	4,649.5	4,624.1	16.4	17.4	86.09	-72.7	2,003.6	1,723.9	1,692.0	31.91	54.033	
4,500.0	4,477.4	4,736.5	4,710.1	16.7	17.7	86.17	-75.9	1,991.9	1,711.9	1,679.4	32.51	52.654	
4,600.0	4,577.4	4,835.5	4,808.2	17.0	18.1	86.26	-79.5	1,978.6	1,698.3	1,665.1	33.21	51.142	
4,700.0	4,677.4	4,934.5	4,906.3	17.3	18.5	86.36	-83.0	1,965.3	1,684.6	1,650.7	33.90	49.690	
4,800.0	4,777.4	5,033.5	5,004.3	17.6	19.0	86.45	-86.6	1,952.0	1,671.0	1,636.4	34.60	48.294	
4,900.0	4,877.4	5,132.6	5,102.4	18.0	19.4	86.55	-90.2	1,938.7	1,657.4	1,622.1	35.30	46.952	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
5,000.0	4,977.4	5,231.6	5,200.5	18.3	19.8	86.65	-93.8	1,925.4	1,643.7	1,607.7	36.00	45.661	
5,100.0	5,077.4	5,330.6	5,298.5	18.6	20.2	86.75	-97.4	1,912.1	1,630.1	1,593.4	36.70	44.418	
5,200.0	5,177.4	5,429.6	5,396.6	19.0	20.6	86.85	-101.0	1,898.8	1,616.5	1,579.1	37.40	43.220	
5,300.0	5,277.4	5,528.7	5,494.7	19.3	21.0	86.95	-104.6	1,885.4	1,602.9	1,564.7	38.10	42.065	
5,400.0	5,377.4	5,627.7	5,592.7	19.6	21.4	87.05	-108.1	1,872.1	1,589.2	1,550.4	38.81	40.951	
5,500.0	5,477.4	5,726.7	5,690.8	20.0	21.8	87.16	-111.7	1,858.8	1,575.6	1,536.1	39.51	39.876	
5,600.0	5,577.4	5,825.8	5,788.8	20.3	22.3	87.27	-115.3	1,845.5	1,562.0	1,521.8	40.22	38.838	
5,700.0	5,677.4	5,924.8	5,886.9	20.6	22.7	87.38	-118.9	1,832.2	1,548.4	1,507.5	40.93	37.835	
5,800.0	5,777.4	6,023.8	5,985.0	21.0	23.1	87.49	-122.5	1,818.9	1,534.8	1,493.2	41.63	36.865	
5,900.0	5,877.4	6,122.8	6,083.0	21.3	23.5	87.60	-126.1	1,805.6	1,521.2	1,478.9	42.34	35.927	
6,000.0	5,977.4	6,221.9	6,181.1	21.6	23.9	87.72	-129.7	1,792.3	1,507.7	1,464.6	43.05	35.020	
6,100.0	6,077.4	6,320.9	6,279.2	22.0	24.3	87.84	-133.2	1,779.0	1,494.1	1,450.3	43.76	34.141	
6,200.0	6,177.4	6,419.9	6,377.2	22.3	24.7	87.96	-136.8	1,765.7	1,480.5	1,436.0	44.47	33.290	
6,300.0	6,277.4	6,518.9	6,475.3	22.6	25.2	88.08	-140.4	1,752.4	1,467.0	1,421.8	45.18	32.466	
6,400.0	6,377.4	6,618.0	6,573.3	23.0	25.6	88.21	-144.0	1,739.1	1,453.4	1,407.5	45.90	31.666	
6,500.0	6,477.4	6,717.0	6,671.4	23.3	26.0	88.33	-147.6	1,725.8	1,439.9	1,393.2	46.61	30.891	
6,600.0	6,577.4	6,816.0	6,769.5	23.7	26.4	88.46	-151.2	1,712.5	1,426.3	1,379.0	47.32	30.139	
6,700.0	6,677.4	6,915.0	6,867.5	24.0	26.8	88.60	-154.8	1,699.1	1,412.8	1,364.7	48.04	29.409	
6,800.0	6,777.4	7,014.1	6,965.6	24.3	27.2	88.73	-158.3	1,685.8	1,399.3	1,350.5	48.75	28.700	
6,900.0	6,877.4	7,113.1	7,063.7	24.7	27.6	88.87	-161.9	1,672.5	1,385.7	1,336.3	49.47	28.012	
7,000.0	6,977.4	7,212.1	7,161.7	25.0	28.1	89.01	-165.5	1,659.2	1,372.2	1,322.0	50.19	27.342	
7,100.0	7,077.4	7,285.0	7,234.0	25.4	28.4	89.10	-168.0	1,650.2	1,359.7	1,308.8	50.89	26.717	
7,200.0	7,177.4	7,358.9	7,307.5	25.7	28.7	89.19	-170.1	1,642.3	1,349.0	1,297.5	51.58	26.153	
7,300.0	7,277.4	7,433.2	7,381.4	26.1	28.9	89.26	-171.8	1,635.8	1,340.3	1,288.0	52.26	25.648	
7,400.0	7,377.4	7,507.7	7,455.7	26.4	29.2	89.32	-173.2	1,630.7	1,333.4	1,280.5	52.91	25.200	
7,500.0	7,477.4	7,582.4	7,530.3	26.8	29.5	89.36	-174.2	1,627.0	1,328.4	1,274.8	53.55	24.808	
7,600.0	7,577.4	7,657.2	7,605.1	27.1	29.7	89.38	-174.8	1,624.6	1,325.3	1,271.1	54.16	24.469	
7,700.0	7,677.4	7,732.0	7,679.9	27.4	30.0	89.39	-175.1	1,623.7	1,324.0	1,269.3	54.75	24.183	
7,738.8	7,716.1	7,767.3	7,715.1	27.6	30.1	89.39	-175.1	1,623.7	1,324.0	1,269.0	55.00	24.073	
7,800.0	7,777.4	7,828.5	7,776.4	27.8	30.3	89.39	-175.1	1,623.7	1,324.0	1,268.6	55.42	23.891	
7,900.0	7,877.4	7,928.5	7,876.4	28.1	30.6	89.39	-175.1	1,623.7	1,324.0	1,267.9	56.10	23.601	
8,000.0	7,977.4	8,028.5	7,976.4	28.5	30.9	89.39	-175.1	1,623.7	1,324.0	1,267.2	56.78	23.317	
8,100.0	8,077.4	8,128.5	8,076.4	28.8	31.2	89.39	-175.1	1,623.7	1,324.0	1,266.6	57.47	23.039	
8,200.0	8,177.4	8,228.5	8,176.4	29.2	31.6	89.39	-175.1	1,623.7	1,324.0	1,265.9	58.15	22.768	
8,300.0	8,277.4	8,328.5	8,276.4	29.5	31.9	89.39	-175.1	1,623.7	1,324.0	1,265.2	58.84	22.503	
8,400.0	8,377.4	8,428.5	8,376.4	29.9	32.2	89.39	-175.1	1,623.7	1,324.0	1,264.5	59.53	22.243	
8,500.0	8,477.4	8,528.5	8,476.4	30.2	32.5	89.39	-175.1	1,623.7	1,324.0	1,263.8	60.21	21.989	
8,600.0	8,577.4	8,628.5	8,576.4	30.6	32.8	89.39	-175.1	1,623.7	1,324.0	1,263.1	60.90	21.741	
8,700.0	8,677.4	8,728.5	8,676.4	30.9	33.1	89.39	-175.1	1,623.7	1,324.0	1,262.4	61.59	21.498	
8,800.0	8,777.4	8,828.5	8,776.4	31.3	33.5	89.39	-175.1	1,623.7	1,324.0	1,261.7	62.28	21.260	
8,900.0	8,877.4	8,928.5	8,876.4	31.6	33.8	89.39	-175.1	1,623.7	1,324.0	1,261.1	62.97	21.027	
9,000.0	8,977.4	9,028.5	8,976.4	32.0	34.1	89.39	-175.1	1,623.7	1,324.0	1,260.4	63.66	20.799	
9,100.0	9,077.4	9,128.5	9,076.4	32.3	34.4	89.39	-175.1	1,623.7	1,324.0	1,259.7	64.35	20.576	
9,200.0	9,177.4	9,228.5	9,176.4	32.7	34.8	89.39	-175.1	1,623.7	1,324.0	1,259.0	65.04	20.357	
9,300.0	9,277.4	9,328.5	9,276.4	33.0	35.1	89.39	-175.1	1,623.7	1,324.0	1,258.3	65.73	20.143	
9,400.0	9,377.4	9,428.5	9,376.4	33.4	35.4	89.39	-175.1	1,623.7	1,324.0	1,257.6	66.42	19.933	
9,500.0	9,477.4	9,528.5	9,476.4	33.7	35.7	89.39	-175.1	1,623.7	1,324.0	1,256.9	67.12	19.727	
9,600.0	9,577.4	9,628.5	9,576.4	34.1	36.1	89.39	-175.1	1,623.7	1,324.0	1,256.2	67.81	19.525	
9,700.0	9,677.4	9,728.5	9,676.4	34.4	36.4	89.39	-175.1	1,623.7	1,324.0	1,255.5	68.50	19.327	
9,800.0	9,777.4	9,828.5	9,776.4	34.8	36.7	89.39	-175.1	1,623.7	1,324.0	1,254.8	69.20	19.134	
9,900.0	9,877.4	9,928.5	9,876.4	35.1	37.0	89.39	-175.1	1,623.7	1,324.0	1,254.1	69.89	18.943	
10,000.0	9,977.4	10,028.5	9,976.4	35.5	37.4	89.39	-175.1	1,623.7	1,324.0	1,253.4	70.59	18.757	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,077.4	10,128.5	10,076.4	35.8	37.7	89.39	-175.1	1,623.7	1,324.0	1,252.7	71.29	18.574	
10,200.0	10,177.4	10,228.5	10,176.4	36.2	38.0	89.39	-175.1	1,623.7	1,324.0	1,252.0	71.98	18.394	
10,300.0	10,277.4	10,328.5	10,276.4	36.5	38.4	89.39	-175.1	1,623.7	1,324.0	1,251.3	72.68	18.218	
10,324.1	10,301.5	10,352.6	10,300.5	36.6	38.4	89.39	-175.1	1,623.7	1,324.0	1,251.2	72.85	18.176	
10,350.0	10,327.4	10,378.4	10,326.3	36.7	38.5	89.85	-174.8	1,623.7	1,324.0	1,251.0	73.02	18.131	
10,400.0	10,377.2	10,428.1	10,375.9	36.9	38.7	89.88	-171.2	1,623.7	1,324.0	1,250.7	73.36	18.048	
10,450.0	10,426.4	10,477.9	10,425.0	37.0	38.8	89.92	-163.3	1,623.6	1,324.0	1,250.3	73.68	17.969	
10,500.0	10,474.6	10,527.8	10,473.4	37.2	39.0	89.96	-151.1	1,623.5	1,324.0	1,250.0	73.99	17.894	
10,550.0	10,521.6	10,577.8	10,520.6	37.3	39.1	89.99	-134.8	1,623.4	1,324.0	1,249.7	74.29	17.822	
10,600.0	10,566.8	10,627.8	10,566.2	37.5	39.2	90.03	-114.3	1,623.3	1,324.0	1,249.4	74.57	17.755	
10,650.0	10,610.1	10,677.9	10,610.0	37.6	39.4	90.07	-90.0	1,623.1	1,324.0	1,249.2	74.84	17.690	
10,700.0	10,651.0	10,728.1	10,651.5	37.7	39.5	90.10	-61.8	1,622.8	1,324.0	1,248.9	75.10	17.629	
10,750.0	10,689.2	10,778.4	10,690.5	37.8	39.5	90.14	-30.1	1,622.6	1,324.0	1,248.6	75.36	17.570	
10,800.0	10,724.5	10,828.7	10,726.5	37.9	39.6	90.17	5.0	1,622.3	1,324.0	1,248.4	75.60	17.512	
10,850.0	10,756.6	10,879.1	10,759.4	37.9	39.7	90.21	43.1	1,622.0	1,324.0	1,248.1	75.85	17.456	
10,900.0	10,785.2	10,929.5	10,788.9	38.0	39.7	90.24	84.1	1,621.7	1,324.0	1,247.9	76.09	17.400	
10,950.0	10,810.1	10,980.1	10,814.7	38.0	39.8	90.27	127.5	1,621.4	1,324.0	1,247.6	76.34	17.344	
11,000.0	10,831.2	11,030.6	10,836.5	38.1	39.8	90.30	173.1	1,621.0	1,324.0	1,247.4	76.58	17.288	
11,050.0	10,848.2	11,081.3	10,854.3	38.3	39.9	90.32	220.5	1,620.6	1,324.0	1,247.1	76.84	17.230	
11,100.0	10,861.1	11,132.0	10,867.9	38.4	39.9	90.34	269.3	1,620.2	1,324.0	1,246.9	77.10	17.172	
11,150.0	10,869.7	11,182.7	10,877.0	38.5	40.0	90.36	319.2	1,619.8	1,324.0	1,246.6	77.37	17.112	
11,200.0	10,874.0	11,233.4	10,881.8	38.7	40.0	90.38	369.7	1,619.4	1,324.0	1,246.3	77.65	17.051	
11,225.4	10,874.5	11,259.3	10,882.5	38.8	40.1	90.39	395.5	1,619.2	1,324.0	1,246.2	77.79	17.020	
11,287.1	10,874.3	11,321.0	10,882.3	39.0	40.2	90.39	457.2	1,618.8	1,323.9	1,245.8	78.16	16.938	
11,300.0	10,874.3	11,333.9	10,882.2	39.0	40.3	90.39	470.1	1,618.7	1,323.9	1,245.7	78.25	16.920	
11,400.0	10,874.1	11,433.9	10,881.9	39.4	40.6	90.38	570.2	1,617.9	1,323.9	1,244.9	78.98	16.762	
11,500.0	10,873.8	11,533.9	10,881.6	39.8	41.0	90.38	670.2	1,617.1	1,323.9	1,244.1	79.85	16.580	
11,600.0	10,873.6	11,633.9	10,881.2	40.3	41.5	90.37	770.2	1,616.3	1,323.9	1,243.0	80.84	16.377	
11,700.0	10,873.4	11,733.9	10,880.9	40.9	42.0	90.37	870.2	1,615.5	1,323.9	1,241.9	81.95	16.154	
11,800.0	10,873.2	11,833.9	10,880.6	41.5	42.6	90.36	970.2	1,614.7	1,323.8	1,240.7	83.18	15.915	
11,900.0	10,872.9	11,933.9	10,880.2	42.2	43.3	90.36	1,070.2	1,613.9	1,323.8	1,239.3	84.52	15.663	
12,000.0	10,872.7	12,033.9	10,879.9	42.9	44.0	90.36	1,170.1	1,613.2	1,323.8	1,237.8	85.97	15.398	
12,100.0	10,872.5	12,133.9	10,879.6	43.7	44.7	90.35	1,270.1	1,612.4	1,323.8	1,236.3	87.52	15.125	
12,200.0	10,872.2	12,233.9	10,879.2	44.6	45.5	90.35	1,370.1	1,611.6	1,323.8	1,234.6	89.17	14.846	
12,300.0	10,872.0	12,333.9	10,878.9	45.4	46.4	90.34	1,470.1	1,610.8	1,323.8	1,232.9	90.90	14.562	
12,400.0	10,871.8	12,433.9	10,878.6	46.3	47.3	90.34	1,570.1	1,610.0	1,323.7	1,231.0	92.73	14.275	
12,500.0	10,871.6	12,533.9	10,878.2	47.3	48.2	90.33	1,670.1	1,609.2	1,323.7	1,229.1	94.63	13.988	
12,600.0	10,871.3	12,633.9	10,877.9	48.3	49.2	90.33	1,770.1	1,608.5	1,323.7	1,227.1	96.61	13.701	
12,700.0	10,871.1	12,733.9	10,877.6	49.3	50.2	90.32	1,870.1	1,607.7	1,323.7	1,225.0	98.67	13.416	
12,800.0	10,870.9	12,833.9	10,877.2	50.4	51.3	90.32	1,970.1	1,606.9	1,323.7	1,222.9	100.79	13.134	
12,900.0	10,870.7	12,933.9	10,876.9	51.5	52.3	90.31	2,070.1	1,606.1	1,323.6	1,220.7	102.97	12.855	
13,000.0	10,870.4	13,033.9	10,876.6	52.6	53.4	90.31	2,170.1	1,605.3	1,323.6	1,218.4	105.21	12.581	
13,100.0	10,870.2	13,133.9	10,876.3	53.8	54.6	90.31	2,270.1	1,604.5	1,323.6	1,216.1	107.51	12.312	
13,200.0	10,870.0	13,233.9	10,875.9	54.9	55.7	90.30	2,370.1	1,603.7	1,323.6	1,213.7	109.86	12.048	
13,300.0	10,869.7	13,333.9	10,875.6	56.1	56.9	90.30	2,470.1	1,603.0	1,323.6	1,211.3	112.25	11.791	
13,400.0	10,869.5	13,433.9	10,875.3	57.4	58.1	90.29	2,570.1	1,602.2	1,323.6	1,208.9	114.70	11.540	
13,500.0	10,869.3	13,533.9	10,874.9	58.6	59.4	90.29	2,670.1	1,601.4	1,323.5	1,206.4	117.18	11.295	
13,600.0	10,869.1	13,633.9	10,874.6	59.9	60.6	90.28	2,770.1	1,600.6	1,323.5	1,203.8	119.71	11.056	
13,700.0	10,868.8	13,733.9	10,874.3	61.1	61.9	90.28	2,870.1	1,599.8	1,323.5	1,201.2	122.27	10.824	
13,800.0	10,868.6	13,833.9	10,873.9	62.4	63.2	90.27	2,970.1	1,599.0	1,323.5	1,198.6	124.87	10.599	
13,900.0	10,868.4	13,933.9	10,873.6	63.8	64.5	90.27	3,070.1	1,598.2	1,323.5	1,196.0	127.51	10.380	
14,000.0	10,868.2	14,033.9	10,873.3	65.1	65.8	90.26	3,170.1	1,597.5	1,323.5	1,193.3	130.17	10.167	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,867.9	14,133.9	10,872.9	66.4	67.1	90.26	3,270.1	1,596.7	1,323.4	1,190.6	132.86	9.961	
14,200.0	10,867.7	14,233.9	10,872.6	67.8	68.5	90.26	3,370.1	1,595.9	1,323.4	1,187.8	135.58	9.761	
14,300.0	10,867.5	14,333.9	10,872.3	69.2	69.8	90.25	3,470.1	1,595.1	1,323.4	1,185.1	138.33	9.567	
14,400.0	10,867.3	14,433.9	10,871.9	70.6	71.2	90.25	3,570.1	1,594.3	1,323.4	1,182.3	141.10	9.379	
14,500.0	10,867.0	14,533.9	10,871.6	72.0	72.6	90.24	3,670.1	1,593.5	1,323.4	1,179.5	143.90	9.197	
14,600.0	10,866.8	14,633.9	10,871.3	73.4	74.0	90.24	3,770.1	1,592.7	1,323.3	1,176.6	146.71	9.020	
14,700.0	10,866.6	14,733.9	10,870.9	74.8	75.4	90.23	3,870.0	1,592.0	1,323.3	1,173.8	149.55	8.849	
14,800.0	10,866.3	14,833.9	10,870.6	76.2	76.8	90.23	3,970.0	1,591.2	1,323.3	1,170.9	152.40	8.683	
14,900.0	10,866.1	14,933.9	10,870.3	77.7	78.2	90.22	4,070.0	1,590.4	1,323.3	1,168.0	155.28	8.522	
15,000.0	10,865.9	15,033.9	10,870.0	79.1	79.7	90.22	4,170.0	1,589.6	1,323.3	1,165.1	158.17	8.366	
15,100.0	10,865.7	15,133.9	10,869.6	80.6	81.1	90.21	4,270.0	1,588.8	1,323.3	1,162.2	161.07	8.215	
15,200.0	10,865.4	15,233.9	10,869.3	82.0	82.5	90.21	4,370.0	1,588.0	1,323.2	1,159.2	164.00	8.069	
15,300.0	10,865.2	15,333.9	10,869.0	83.5	84.0	90.21	4,470.0	1,587.2	1,323.2	1,156.3	166.93	7.927	
15,400.0	10,865.0	15,433.9	10,868.6	85.0	85.5	90.20	4,570.0	1,586.5	1,323.2	1,153.3	169.89	7.789	
15,500.0	10,864.8	15,533.9	10,868.3	86.4	86.9	90.20	4,670.0	1,585.7	1,323.2	1,150.3	172.85	7.655	
15,600.0	10,864.5	15,633.9	10,868.0	87.9	88.4	90.19	4,770.0	1,584.9	1,323.2	1,147.3	175.83	7.525	
15,700.0	10,864.3	15,733.9	10,867.6	89.4	89.9	90.19	4,870.0	1,584.1	1,323.1	1,144.3	178.82	7.399	
15,800.0	10,864.1	15,833.9	10,867.3	90.9	91.4	90.18	4,970.0	1,583.3	1,323.1	1,141.3	181.82	7.277	
15,900.0	10,863.8	15,933.9	10,867.0	92.4	92.9	90.18	5,070.0	1,582.5	1,323.1	1,138.3	184.83	7.159	
16,000.0	10,863.6	16,033.9	10,866.6	94.0	94.4	90.17	5,170.0	1,581.7	1,323.1	1,135.2	187.85	7.043	
16,100.0	10,863.4	16,133.9	10,866.3	95.5	95.9	90.17	5,270.0	1,581.0	1,323.1	1,132.2	190.88	6.932	
16,200.0	10,863.2	16,233.9	10,866.0	97.0	97.4	90.16	5,370.0	1,580.2	1,323.1	1,129.1	193.92	6.823	
16,300.0	10,862.9	16,333.9	10,865.6	98.5	98.9	90.16	5,470.0	1,579.4	1,323.0	1,126.1	196.97	6.717	
16,400.0	10,862.7	16,433.9	10,865.3	100.0	100.5	90.16	5,570.0	1,578.6	1,323.0	1,123.0	200.02	6.614	
16,500.0	10,862.5	16,533.9	10,865.0	101.6	102.0	90.15	5,670.0	1,577.8	1,323.0	1,119.9	203.09	6.514	
16,600.0	10,862.3	16,633.9	10,864.6	103.1	103.5	90.15	5,770.0	1,577.0	1,323.0	1,116.8	206.16	6.417	
16,700.0	10,862.0	16,733.9	10,864.3	104.7	105.1	90.14	5,870.0	1,576.3	1,323.0	1,113.7	209.24	6.323	
16,800.0	10,861.8	16,833.9	10,864.0	106.2	106.6	90.14	5,970.0	1,575.5	1,323.0	1,110.6	212.33	6.231	
16,900.0	10,861.6	16,933.9	10,863.7	107.7	108.1	90.13	6,070.0	1,574.7	1,322.9	1,107.5	215.43	6.141	
17,000.0	10,861.4	17,033.9	10,863.3	109.3	109.7	90.13	6,170.0	1,573.9	1,322.9	1,104.4	218.53	6.054	
17,100.0	10,861.1	17,133.9	10,863.0	110.8	111.2	90.12	6,270.0	1,573.1	1,322.9	1,101.3	221.63	5.969	
17,200.0	10,860.9	17,233.9	10,862.7	112.4	112.8	90.12	6,370.0	1,572.3	1,322.9	1,098.1	224.75	5.886	
17,300.0	10,860.7	17,333.9	10,862.3	114.0	114.3	90.12	6,470.0	1,571.5	1,322.9	1,095.0	227.86	5.805	
17,400.0	10,860.4	17,433.9	10,862.0	115.5	115.9	90.11	6,569.9	1,570.8	1,322.8	1,091.9	230.99	5.727	
17,500.0	10,860.2	17,533.9	10,861.7	117.1	117.4	90.11	6,669.9	1,570.0	1,322.8	1,088.7	234.12	5.650	
17,600.0	10,860.0	17,633.9	10,861.3	118.7	119.0	90.10	6,769.9	1,569.2	1,322.8	1,085.6	237.25	5.576	
17,700.0	10,859.8	17,733.9	10,861.0	120.2	120.6	90.10	6,869.9	1,568.4	1,322.8	1,082.4	240.39	5.503	
17,800.0	10,859.5	17,833.9	10,860.7	121.8	122.1	90.09	6,969.9	1,567.6	1,322.8	1,079.2	243.53	5.432	
17,900.0	10,859.3	17,933.9	10,860.3	123.4	123.7	90.09	7,069.9	1,566.8	1,322.8	1,076.1	246.68	5.362	
18,000.0	10,859.1	18,033.9	10,860.0	124.9	125.3	90.08	7,169.9	1,566.0	1,322.7	1,072.9	249.84	5.294	
18,100.0	10,858.9	18,133.9	10,859.7	126.5	126.8	90.08	7,269.9	1,565.3	1,322.7	1,069.7	252.99	5.228	
18,200.0	10,858.6	18,233.9	10,859.3	128.1	128.4	90.07	7,369.9	1,564.5	1,322.7	1,066.6	256.15	5.164	
18,300.0	10,858.4	18,333.9	10,859.0	129.7	130.0	90.07	7,469.9	1,563.7	1,322.7	1,063.4	259.32	5.101	
18,400.0	10,858.2	18,433.9	10,858.7	131.3	131.6	90.07	7,569.9	1,562.9	1,322.7	1,060.2	262.49	5.039	
18,500.0	10,857.9	18,533.9	10,858.3	132.9	133.2	90.06	7,669.9	1,562.1	1,322.7	1,057.0	265.66	4.979	
18,600.0	10,857.7	18,633.9	10,858.0	134.4	134.7	90.06	7,769.9	1,561.3	1,322.6	1,053.8	268.83	4.920	
18,700.0	10,857.5	18,733.9	10,857.7	136.0	136.3	90.05	7,869.9	1,560.5	1,322.6	1,050.6	272.01	4.862	
18,800.0	10,857.3	18,833.9	10,857.4	137.6	137.9	90.05	7,969.9	1,559.8	1,322.6	1,047.4	275.19	4.806	
18,900.0	10,857.0	18,933.9	10,857.0	139.2	139.5	90.04	8,069.9	1,559.0	1,322.6	1,044.2	278.38	4.751	
19,000.0	10,856.8	19,033.9	10,856.7	140.8	141.1	90.04	8,169.9	1,558.2	1,322.6	1,041.0	281.56	4.697	
19,100.0	10,856.6	19,133.9	10,856.4	142.4	142.7	90.03	8,269.9	1,557.4	1,322.5	1,037.8	284.76	4.644	
19,200.0	10,856.4	19,233.9	10,856.0	144.0	144.3	90.03	8,369.9	1,556.6	1,322.5	1,034.6	287.95	4.593	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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
19,300.0	10,856.1	19,333.9	10,855.7	145.6	145.9	90.02	8,469.9	1,555.8	1,322.5	1,031.4	291.15	4.542	
19,400.0	10,855.9	19,433.9	10,855.4	147.2	147.5	90.02	8,569.9	1,555.0	1,322.5	1,028.1	294.34	4.493	
19,500.0	10,855.7	19,533.9	10,855.0	148.8	149.1	90.02	8,669.9	1,554.3	1,322.5	1,024.9	297.55	4.445	
19,600.0	10,855.5	19,633.9	10,854.7	150.4	150.7	90.01	8,769.9	1,553.5	1,322.5	1,021.7	300.75	4.397	
19,700.0	10,855.2	19,733.9	10,854.4	152.0	152.3	90.01	8,869.9	1,552.7	1,322.4	1,018.5	303.96	4.351	
19,800.0	10,855.0	19,833.9	10,854.0	153.6	153.9	90.00	8,969.9	1,551.9	1,322.4	1,015.3	307.16	4.305	
19,900.0	10,854.8	19,933.9	10,853.7	155.2	155.5	90.00	9,069.9	1,551.1	1,322.4	1,012.0	310.37	4.261	
20,000.0	10,854.5	20,033.9	10,853.4	156.8	157.1	89.99	9,169.9	1,550.3	1,322.4	1,008.8	313.59	4.217	
20,100.0	10,854.3	20,133.9	10,853.0	158.4	158.7	89.99	9,269.8	1,549.5	1,322.4	1,005.6	316.80	4.174	
20,200.0	10,854.1	20,233.9	10,852.7	160.0	160.3	89.98	9,369.8	1,548.8	1,322.4	1,002.3	320.02	4.132	
20,300.0	10,853.9	20,333.9	10,852.4	161.7	161.9	89.98	9,469.8	1,548.0	1,322.3	999.1	323.24	4.091	
20,400.0	10,853.6	20,433.9	10,852.0	163.3	163.5	89.97	9,569.8	1,547.2	1,322.3	995.9	326.46	4.050	
20,500.0	10,853.4	20,533.9	10,851.7	164.9	165.1	89.97	9,669.8	1,546.4	1,322.3	992.6	329.68	4.011	
20,600.0	10,853.2	20,633.9	10,851.4	166.5	166.7	89.97	9,769.8	1,545.6	1,322.3	989.4	332.91	3.972	
20,700.0	10,853.0	20,733.9	10,851.1	168.1	168.3	89.96	9,869.8	1,544.8	1,322.3	986.1	336.13	3.934	
20,800.0	10,852.7	20,833.9	10,850.7	169.7	169.9	89.96	9,969.8	1,544.1	1,322.2	982.9	339.36	3.896	
20,900.0	10,852.5	20,933.9	10,850.4	171.3	171.5	89.95	10,069.8	1,543.3	1,322.2	979.6	342.59	3.860	
21,000.0	10,852.3	21,033.9	10,850.1	172.9	173.2	89.95	10,169.8	1,542.5	1,322.2	976.4	345.82	3.823	
21,070.7	10,852.1	21,104.6	10,849.8	174.1	174.3	89.94	10,240.5	1,541.9	1,322.2	974.1	348.11	3.798	
21,094.0	10,851.5	21,119.5	10,850.3	174.5	174.5	89.99	10,255.4	1,541.9	1,322.1	973.5	348.65	3.792	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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	88.63	56.9	2,373.0	2,373.7				
100.0	100.0	101.0	99.0	0.1	0.1	88.63	56.9	2,373.0	2,373.7	2,373.4	0.26	9,133.213	
200.0	200.0	201.0	199.0	0.5	0.5	88.63	56.9	2,373.0	2,373.7	2,372.7	0.98	2,429.940	
300.0	300.0	301.0	299.0	0.8	0.8	88.63	56.9	2,373.0	2,373.7	2,372.0	1.69	1,401.394	
400.0	400.0	401.0	399.0	1.2	1.2	88.63	56.9	2,373.0	2,373.7	2,371.2	2.41	984.623	
500.0	500.0	501.0	499.0	1.6	1.6	88.63	56.9	2,373.0	2,373.7	2,370.5	3.13	758.921	
600.0	600.0	601.0	599.0	1.9	1.9	88.63	56.9	2,373.0	2,373.7	2,369.8	3.84	617.397	
700.0	700.0	701.0	699.0	2.3	2.3	88.63	56.9	2,373.0	2,373.7	2,369.1	4.56	520.361	
800.0	800.0	801.0	799.0	2.6	2.6	88.63	56.9	2,373.0	2,373.7	2,368.4	5.28	449.683	
900.0	900.0	901.0	899.0	3.0	3.0	88.63	56.9	2,373.0	2,373.7	2,367.7	6.00	395.910	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	88.63	56.9	2,373.0	2,373.7	2,366.9	6.71	353.623	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	88.63	56.9	2,373.0	2,373.7	2,366.2	7.43	319.498	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	88.63	56.9	2,373.0	2,373.7	2,365.5	8.15	291.379	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	-33.63	56.9	2,373.0	2,372.9	2,364.1	8.85	268.141	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	-33.68	56.9	2,373.0	2,370.7	2,361.2	9.54	248.443	
1,500.0	1,499.9	1,501.1	1,498.9	5.1	5.2	-33.76	56.9	2,373.0	2,367.1	2,356.9	10.24	231.184	
1,600.0	1,599.7	1,601.3	1,598.7	5.4	5.5	-33.87	56.9	2,373.0	2,362.0	2,351.1	10.94	215.920	
1,700.0	1,699.4	1,701.6	1,698.4	5.8	5.9	-34.01	56.9	2,373.0	2,355.5	2,343.9	11.64	202.305	
1,800.0	1,798.9	1,802.1	1,797.9	6.1	6.2	-34.18	56.9	2,373.0	2,347.6	2,335.2	12.35	190.067	
1,900.0	1,898.3	1,902.7	1,897.3	6.5	6.6	-34.39	56.9	2,373.0	2,338.2	2,325.1	13.06	178.990	
2,000.0	1,997.4	1,996.4	1,996.4	6.9	6.9	-34.64	56.9	2,373.0	2,327.4	2,313.7	13.75	169.215	
2,100.0	2,096.4	2,070.8	2,070.8	7.2	7.2	-34.78	56.7	2,373.4	2,316.5	2,302.1	14.37	161.196	
2,200.0	2,195.5	2,144.4	2,144.4	7.6	7.4	-34.91	56.0	2,374.6	2,306.6	2,291.6	14.98	153.971	
2,300.0	2,294.5	2,218.3	2,218.2	8.0	7.7	-35.02	54.9	2,376.6	2,297.9	2,282.3	15.59	147.387	
2,400.0	2,393.5	2,292.4	2,292.2	8.4	7.9	-35.13	53.4	2,379.5	2,290.3	2,274.1	16.20	141.338	
2,500.0	2,492.5	2,366.6	2,366.3	8.8	8.2	-35.22	51.4	2,383.3	2,283.8	2,267.0	16.82	135.775	
2,600.0	2,591.6	2,441.0	2,440.5	9.2	8.4	-35.31	48.9	2,387.9	2,278.4	2,261.0	17.44	130.652	
2,700.0	2,690.6	2,515.5	2,514.8	9.6	8.7	-35.38	46.0	2,393.4	2,274.2	2,256.1	18.06	125.931	
2,800.0	2,789.6	2,590.1	2,589.0	10.0	9.0	-35.43	42.6	2,399.8	2,271.1	2,252.4	18.68	121.575	
2,900.0	2,888.6	2,664.8	2,663.3	10.4	9.2	-35.48	38.8	2,407.0	2,269.0	2,249.7	19.30	117.550	
3,000.0	2,987.7	2,739.5	2,737.4	10.8	9.5	-35.51	34.5	2,415.0	2,268.1	2,248.2	19.93	113.829	
3,030.7	3,018.1	2,762.4	2,760.2	10.9	9.6	-35.52	33.1	2,417.7	2,268.1	2,248.0	20.12	112.742 CC	
3,100.0	3,086.7	2,819.0	2,816.2	11.2	9.8	-35.53	29.4	2,424.5	2,268.3	2,247.8	20.57	110.277	
3,200.0	3,185.7	2,919.0	2,915.2	11.6	10.1	-35.56	22.9	2,436.8	2,268.9	2,247.6	21.30	106.514	
3,300.0	3,284.8	3,019.0	3,014.3	12.0	10.5	-35.58	16.3	2,449.1	2,269.5	2,247.4	22.04	102.985	
3,400.0	3,383.8	3,119.0	3,113.3	12.4	10.9	-35.60	9.8	2,461.4	2,270.0	2,247.2	22.78	99.670	
3,500.0	3,482.8	3,219.0	3,212.3	12.8	11.3	-35.62	3.2	2,473.6	2,270.6	2,247.1	23.52	96.552	
3,600.0	3,581.8	3,319.0	3,311.3	13.2	11.6	-35.64	-3.3	2,485.9	2,271.1	2,246.9	24.26	93.614	
3,700.0	3,680.9	3,419.0	3,410.4	13.7	12.0	-35.66	-9.9	2,498.2	2,271.7	2,246.7	25.01	90.842	
3,800.0	3,779.9	3,519.0	3,509.4	14.1	12.4	-35.68	-16.4	2,510.5	2,272.3	2,246.5	25.76	88.224	
3,878.9	3,858.0	3,602.1	3,587.5	14.4	12.7	-35.70	-21.6	2,520.2	2,272.7	2,246.3	26.36	86.208 ES	
3,900.0	3,878.9	3,619.0	3,608.4	14.5	12.8	-35.71	-22.9	2,522.8	2,272.9	2,246.4	26.51	85.750	
4,000.0	3,978.2	3,718.9	3,707.4	14.9	13.2	-35.72	-29.5	2,535.0	2,274.9	2,247.7	27.25	83.477	
4,100.0	4,077.7	3,818.8	3,806.3	15.3	13.6	-35.71	-36.0	2,547.3	2,279.1	2,251.1	27.99	81.423	
4,200.0	4,177.5	3,918.6	3,905.1	15.6	14.0	-35.68	-42.6	2,559.6	2,285.5	2,256.7	28.72	79.571	
4,300.0	4,277.4	4,018.1	4,003.7	16.0	14.4	-35.64	-49.1	2,571.8	2,293.9	2,264.5	29.44	77.907	
4,400.0	4,377.4	4,117.3	4,101.9	16.3	14.8	-35.57	-55.6	2,584.0	2,304.5	2,274.3	30.16	76.417	
4,412.2	4,389.6	4,129.5	4,113.9	16.4	14.8	86.68	-56.4	2,585.5	2,305.9	2,275.7	30.24	76.248	
4,500.0	4,477.4	4,216.4	4,200.0	16.7	15.2	86.83	-62.1	2,596.1	2,316.4	2,285.6	30.85	75.085	
4,600.0	4,577.4	4,315.4	4,298.1	17.0	15.6	87.01	-68.5	2,608.3	2,328.3	2,296.8	31.54	73.812	
4,700.0	4,677.4	4,414.4	4,396.1	17.3	16.0	87.19	-75.0	2,620.4	2,340.3	2,308.1	32.24	72.590	
4,800.0	4,777.4	4,513.4	4,494.2	17.6	16.4	87.36	-81.5	2,632.6	2,352.3	2,319.4	32.94	71.417	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
4,900.0	4,877.4	4,612.5	4,592.2	18.0	16.8	87.53	-88.0	2,644.8	2,364.3	2,330.7	33.64	70.290	
5,000.0	4,977.4	4,711.5	4,690.3	18.3	17.2	87.70	-94.5	2,656.9	2,376.3	2,342.0	34.34	69.207	
5,100.0	5,077.4	4,810.5	4,788.4	18.6	17.6	87.87	-101.0	2,669.1	2,388.4	2,353.3	35.04	68.165	
5,200.0	5,177.4	4,909.6	4,886.4	19.0	18.0	88.04	-107.4	2,681.3	2,400.5	2,364.7	35.74	67.162	
5,300.0	5,277.4	5,008.6	4,984.5	19.3	18.4	88.20	-113.9	2,693.4	2,412.5	2,376.1	36.45	66.196	
5,400.0	5,377.4	5,107.6	5,082.6	19.6	18.8	88.36	-120.4	2,705.6	2,424.7	2,387.5	37.15	65.266	
5,500.0	5,477.4	5,206.6	5,180.6	20.0	19.2	88.53	-126.9	2,717.7	2,436.8	2,398.9	37.86	64.369	
5,600.0	5,577.4	5,305.7	5,278.7	20.3	19.6	88.69	-133.4	2,729.9	2,448.9	2,410.4	38.56	63.504	
5,700.0	5,677.4	5,404.7	5,376.7	20.6	20.0	88.85	-139.9	2,742.1	2,461.1	2,421.8	39.27	62.669	
5,800.0	5,777.4	5,558.6	5,529.3	21.0	20.6	89.07	-149.4	2,759.9	2,472.8	2,432.6	40.23	61.473	
5,900.0	5,877.4	5,789.4	5,759.3	21.3	21.5	89.29	-158.5	2,777.0	2,480.2	2,438.7	41.43	59.858	
6,000.0	5,977.4	6,006.6	5,976.4	21.6	22.2	89.35	-161.1	2,781.9	2,482.3	2,439.8	42.47	58.454	
6,100.0	6,077.4	6,106.6	6,076.4	22.0	22.6	89.35	-161.1	2,781.9	2,482.3	2,439.1	43.15	57.532	
6,200.0	6,177.4	6,206.6	6,176.4	22.3	22.9	89.35	-161.1	2,781.9	2,482.3	2,438.4	43.83	56.638	
6,300.0	6,277.4	6,306.6	6,276.4	22.6	23.2	89.35	-161.1	2,781.9	2,482.3	2,437.8	44.51	55.769	
6,400.0	6,377.4	6,406.6	6,376.4	23.0	23.6	89.35	-161.1	2,781.9	2,482.3	2,437.1	45.19	54.926	
6,500.0	6,477.4	6,506.6	6,476.4	23.3	23.9	89.35	-161.1	2,781.9	2,482.3	2,436.4	45.88	54.106	
6,600.0	6,577.4	6,606.6	6,576.4	23.7	24.2	89.35	-161.1	2,781.9	2,482.3	2,435.7	46.56	53.309	
6,700.0	6,677.4	6,706.6	6,676.4	24.0	24.6	89.35	-161.1	2,781.9	2,482.3	2,435.0	47.25	52.535	
6,800.0	6,777.4	6,806.6	6,776.4	24.3	24.9	89.35	-161.1	2,781.9	2,482.3	2,434.3	47.94	51.781	
6,900.0	6,877.4	6,906.6	6,876.4	24.7	25.2	89.35	-161.1	2,781.9	2,482.3	2,433.6	48.63	51.048	
7,000.0	6,977.4	7,006.6	6,976.4	25.0	25.6	89.35	-161.1	2,781.9	2,482.3	2,433.0	49.32	50.335	
7,100.0	7,077.4	7,106.6	7,076.4	25.4	25.9	89.35	-161.1	2,781.9	2,482.3	2,432.3	50.00	49.641	
7,200.0	7,177.4	7,206.6	7,176.4	25.7	26.2	89.35	-161.1	2,781.9	2,482.3	2,431.6	50.70	48.964	
7,300.0	7,277.4	7,306.6	7,276.4	26.1	26.6	89.35	-161.1	2,781.9	2,482.3	2,430.9	51.39	48.306	
7,400.0	7,377.4	7,406.6	7,376.4	26.4	26.9	89.35	-161.1	2,781.9	2,482.3	2,430.2	52.08	47.664	
7,500.0	7,477.4	7,506.6	7,476.4	26.8	27.2	89.35	-161.1	2,781.9	2,482.3	2,429.5	52.77	47.038	
7,600.0	7,577.4	7,606.6	7,576.4	27.1	27.6	89.35	-161.1	2,781.9	2,482.3	2,428.8	53.47	46.428	
7,700.0	7,677.4	7,706.6	7,676.4	27.4	27.9	89.35	-161.1	2,781.9	2,482.3	2,428.1	54.16	45.833	
7,800.0	7,777.4	7,806.6	7,776.4	27.8	28.2	89.35	-161.1	2,781.9	2,482.3	2,427.4	54.85	45.253	
7,900.0	7,877.4	7,906.6	7,876.4	28.1	28.6	89.35	-161.1	2,781.9	2,482.3	2,426.7	55.55	44.686	
8,000.0	7,977.4	8,006.6	7,976.4	28.5	28.9	89.35	-161.1	2,781.9	2,482.3	2,426.0	56.24	44.134	
8,100.0	8,077.4	8,106.6	8,076.4	28.8	29.3	89.35	-161.1	2,781.9	2,482.3	2,425.3	56.94	43.594	
8,200.0	8,177.4	8,206.6	8,176.4	29.2	29.6	89.35	-161.1	2,781.9	2,482.3	2,424.6	57.64	43.067	
8,300.0	8,277.4	8,306.6	8,276.4	29.5	29.9	89.35	-161.1	2,781.9	2,482.3	2,423.9	58.33	42.552	
8,400.0	8,377.4	8,406.6	8,376.4	29.9	30.3	89.35	-161.1	2,781.9	2,482.3	2,423.2	59.03	42.050	
8,500.0	8,477.4	8,506.6	8,476.4	30.2	30.6	89.35	-161.1	2,781.9	2,482.3	2,422.5	59.73	41.558	
8,600.0	8,577.4	8,606.6	8,576.4	30.6	31.0	89.35	-161.1	2,781.9	2,482.3	2,421.8	60.43	41.078	
8,700.0	8,677.4	8,706.6	8,676.4	30.9	31.3	89.35	-161.1	2,781.9	2,482.3	2,421.1	61.13	40.608	
8,800.0	8,777.4	8,806.6	8,776.4	31.3	31.7	89.35	-161.1	2,781.9	2,482.3	2,420.4	61.83	40.149	
8,900.0	8,877.4	8,906.6	8,876.4	31.6	32.0	89.35	-161.1	2,781.9	2,482.3	2,419.7	62.53	39.699	
9,000.0	8,977.4	9,006.6	8,976.4	32.0	32.3	89.35	-161.1	2,781.9	2,482.3	2,419.0	63.23	39.260	
9,100.0	9,077.4	9,106.6	9,076.4	32.3	32.7	89.35	-161.1	2,781.9	2,482.3	2,418.3	63.93	38.829	
9,200.0	9,177.4	9,206.6	9,176.4	32.7	33.0	89.35	-161.1	2,781.9	2,482.3	2,417.6	64.63	38.408	
9,300.0	9,277.4	9,306.6	9,276.4	33.0	33.4	89.35	-161.1	2,781.9	2,482.3	2,416.9	65.33	37.996	
9,400.0	9,377.4	9,406.6	9,376.4	33.4	33.7	89.35	-161.1	2,781.9	2,482.3	2,416.2	66.03	37.592	
9,500.0	9,477.4	9,506.6	9,476.4	33.7	34.1	89.35	-161.1	2,781.9	2,482.3	2,415.5	66.73	37.197	
9,600.0	9,577.4	9,606.6	9,576.4	34.1	34.4	89.35	-161.1	2,781.9	2,482.3	2,414.8	67.44	36.809	
9,700.0	9,677.4	9,706.6	9,676.4	34.4	34.7	89.35	-161.1	2,781.9	2,482.3	2,414.1	68.14	36.430	
9,800.0	9,777.4	9,806.6	9,776.4	34.8	35.1	89.35	-161.1	2,781.9	2,482.3	2,413.4	68.84	36.058	
9,900.0	9,877.4	9,906.6	9,876.4	35.1	35.4	89.35	-161.1	2,781.9	2,482.3	2,412.7	69.54	35.693	
10,000.0	9,977.4	10,006.6	9,976.4	35.5	35.8	89.35	-161.1	2,781.9	2,482.3	2,412.0	70.25	35.336	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,077.4	10,106.6	10,076.4	35.8	36.1	89.35	-161.1	2,781.9	2,482.3	2,411.3	70.95	34.986	
10,200.0	10,177.4	10,206.6	10,176.4	36.2	36.5	89.35	-161.1	2,781.9	2,482.3	2,410.6	71.66	34.642	
10,300.0	10,277.4	10,306.6	10,276.4	36.5	36.8	89.35	-161.1	2,781.9	2,482.3	2,409.9	72.36	34.305	
10,324.1	10,301.5	10,330.7	10,300.5	36.6	36.9	89.35	-161.1	2,781.9	2,482.3	2,409.7	72.53	34.224	
10,350.0	10,327.4	10,356.6	10,326.4	36.7	37.0	89.81	-161.1	2,781.9	2,482.3	2,409.6	72.71	34.139	
10,400.0	10,377.2	10,406.4	10,376.2	36.9	37.2	89.91	-161.1	2,781.9	2,482.3	2,409.2	73.05	33.978	
10,417.6	10,394.6	10,423.8	10,393.6	36.9	37.2	89.97	-161.1	2,781.9	2,482.3	2,409.1	73.17	33.924	
10,450.0	10,426.4	10,440.4	10,410.2	37.0	37.3	90.03	-160.8	2,781.9	2,482.4	2,409.0	73.35	33.845	
10,500.0	10,474.6	10,467.5	10,437.2	37.2	37.4	90.10	-159.3	2,782.2	2,482.9	2,409.3	73.60	33.734	
10,550.0	10,521.6	10,500.0	10,469.5	37.3	37.5	90.18	-155.8	2,782.9	2,484.0	2,410.1	73.87	33.629	
10,600.0	10,566.8	10,521.7	10,491.0	37.5	37.6	90.17	-152.5	2,783.5	2,485.5	2,411.4	74.08	33.552	
10,650.0	10,610.1	10,550.0	10,518.7	37.6	37.7	90.18	-147.0	2,784.5	2,487.5	2,413.2	74.30	33.479	
10,700.0	10,651.0	10,576.1	10,544.0	37.7	37.7	90.15	-140.8	2,785.7	2,490.1	2,415.5	74.51	33.420	
10,750.0	10,689.2	10,600.0	10,566.9	37.8	37.8	90.06	-134.0	2,786.9	2,493.1	2,418.4	74.70	33.375	
10,800.0	10,724.5	10,630.7	10,595.9	37.9	37.9	90.01	-124.0	2,788.8	2,496.6	2,421.7	74.91	33.329	
10,850.0	10,756.6	10,658.1	10,621.2	37.9	38.0	89.90	-113.8	2,790.6	2,500.7	2,425.6	75.11	33.296	
10,900.0	10,785.2	10,685.5	10,646.1	38.0	38.1	89.76	-102.4	2,792.8	2,505.3	2,430.0	75.30	33.269	
10,950.0	10,810.1	10,713.1	10,670.5	38.0	38.1	89.59	-89.8	2,795.1	2,510.3	2,434.8	75.50	33.248	
11,000.0	10,831.2	10,740.7	10,694.3	38.1	38.2	89.40	-76.0	2,797.7	2,515.9	2,440.2	75.71	33.232	
11,050.0	10,848.2	10,768.5	10,717.5	38.3	38.3	89.17	-61.0	2,800.4	2,522.0	2,446.1	75.92	33.221	
11,100.0	10,861.1	10,796.5	10,740.1	38.4	38.3	88.92	-44.8	2,803.4	2,528.5	2,452.4	76.13	33.213	
11,150.0	10,869.7	10,824.6	10,762.0	38.5	38.4	88.64	-27.4	2,806.7	2,535.5	2,459.2	76.35	33.211	
11,200.0	10,874.0	10,853.0	10,783.2	38.7	38.4	88.33	-8.9	2,810.1	2,543.0	2,466.4	76.57	33.213	
11,225.4	10,874.5	10,867.6	10,793.7	38.8	38.5	88.16	1.0	2,811.9	2,547.0	2,470.3	76.68	33.217	
11,287.1	10,874.3	10,905.3	10,819.7	39.0	38.5	88.76	27.9	2,816.9	2,557.1	2,480.2	76.96	33.225	
11,300.0	10,874.3	10,913.8	10,825.3	39.0	38.5	88.89	34.2	2,818.1	2,559.4	2,482.3	77.03	33.227	
11,400.0	10,874.1	10,987.7	10,869.8	39.4	38.6	89.90	92.1	2,828.8	2,577.6	2,500.0	77.57	33.229	
11,500.0	10,873.8	11,076.7	10,912.9	39.8	38.8	90.87	168.6	2,843.0	2,596.9	2,518.7	78.20	33.210	
11,600.0	10,873.6	11,180.3	10,947.1	40.3	39.0	91.64	264.6	2,860.8	2,616.6	2,537.7	78.93	33.150	
11,700.0	10,873.4	11,294.3	10,963.8	40.9	39.3	92.00	375.3	2,881.3	2,636.1	2,556.3	79.79	33.037	
11,800.0	10,873.2	11,903.0	10,962.6	41.5	42.1	91.96	980.6	2,934.3	2,645.0	2,562.2	82.78	31.952	
11,900.0	10,872.9	12,003.0	10,962.2	42.2	42.7	91.96	1,080.6	2,933.5	2,644.9	2,560.9	84.09	31.453	
12,000.0	10,872.7	12,103.0	10,961.9	42.9	43.4	91.95	1,180.6	2,932.7	2,644.9	2,559.4	85.51	30.930	
12,100.0	10,872.5	12,203.0	10,961.6	43.7	44.2	91.95	1,280.6	2,931.9	2,644.9	2,557.9	87.04	30.388	
12,200.0	10,872.2	12,303.0	10,961.3	44.6	44.9	91.95	1,380.6	2,931.2	2,644.9	2,556.2	88.66	29.832	
12,300.0	10,872.0	12,403.0	10,960.9	45.4	45.8	91.95	1,480.6	2,930.4	2,644.9	2,554.5	90.37	29.266	
12,400.0	10,871.8	12,503.0	10,960.6	46.3	46.7	91.95	1,580.6	2,929.6	2,644.9	2,552.7	92.18	28.694	
12,500.0	10,871.6	12,603.0	10,960.3	47.3	47.6	91.94	1,680.6	2,928.8	2,644.9	2,550.8	94.06	28.119	
12,600.0	10,871.3	12,703.0	10,960.0	48.3	48.5	91.94	1,780.6	2,928.1	2,644.8	2,548.8	96.02	27.544	
12,700.0	10,871.1	12,803.0	10,959.6	49.3	49.5	91.94	1,880.6	2,927.3	2,644.8	2,546.8	98.06	26.973	
12,800.0	10,870.9	12,903.0	10,959.3	50.4	50.6	91.94	1,980.6	2,926.5	2,644.8	2,544.7	100.16	26.406	
12,900.0	10,870.7	13,003.0	10,959.0	51.5	51.6	91.94	2,080.6	2,925.7	2,644.8	2,542.5	102.32	25.847	
13,000.0	10,870.4	13,103.0	10,958.7	52.6	52.7	91.93	2,180.6	2,924.9	2,644.8	2,540.2	104.55	25.297	
13,100.0	10,870.2	13,203.0	10,958.4	53.8	53.8	91.93	2,280.6	2,924.2	2,644.8	2,537.9	106.83	24.756	
13,200.0	10,870.0	13,303.0	10,958.0	54.9	55.0	91.93	2,380.6	2,923.4	2,644.8	2,535.6	109.17	24.226	
13,300.0	10,869.7	13,403.0	10,957.7	56.1	56.2	91.93	2,480.6	2,922.6	2,644.7	2,533.2	111.56	23.708	
13,400.0	10,869.5	13,503.0	10,957.4	57.4	57.4	91.93	2,580.6	2,921.8	2,644.7	2,530.7	113.99	23.202	
13,500.0	10,869.3	13,603.0	10,957.1	58.6	58.6	91.92	2,680.6	2,921.0	2,644.7	2,528.3	116.46	22.709	
13,600.0	10,869.1	13,703.0	10,956.7	59.9	59.8	91.92	2,780.5	2,920.3	2,644.7	2,525.7	118.98	22.228	
13,700.0	10,868.8	13,803.0	10,956.4	61.1	61.1	91.92	2,880.5	2,919.5	2,644.7	2,523.2	121.53	21.761	
13,800.0	10,868.6	13,903.0	10,956.1	62.4	62.4	91.92	2,980.5	2,918.7	2,644.7	2,520.6	124.12	21.307	
13,900.0	10,868.4	14,003.0	10,955.8	63.8	63.7	91.92	3,080.5	2,917.9	2,644.7	2,517.9	126.75	20.866	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,868.2	14,103.0	10,955.4	65.1	65.0	91.91	3,180.5	2,917.1	2,644.6	2,515.2	129.40	20.437	
14,100.0	10,867.9	14,203.0	10,955.1	66.4	66.3	91.91	3,280.5	2,916.4	2,644.6	2,512.5	132.09	20.022	
14,200.0	10,867.7	14,303.0	10,954.8	67.8	67.7	91.91	3,380.5	2,915.6	2,644.6	2,509.8	134.80	19.619	
14,300.0	10,867.5	14,403.0	10,954.5	69.2	69.0	91.91	3,480.5	2,914.8	2,644.6	2,507.1	137.54	19.228	
14,400.0	10,867.3	14,503.0	10,954.2	70.6	70.4	91.90	3,580.5	2,914.0	2,644.6	2,504.3	140.30	18.849	
14,500.0	10,867.0	14,603.0	10,953.8	72.0	71.8	91.90	3,680.5	2,913.3	2,644.6	2,501.5	143.09	18.482	
14,600.0	10,866.8	14,703.0	10,953.5	73.4	73.2	91.90	3,780.5	2,912.5	2,644.6	2,498.7	145.90	18.126	
14,700.0	10,866.6	14,803.0	10,953.2	74.8	74.6	91.90	3,880.5	2,911.7	2,644.5	2,495.8	148.73	17.781	
14,800.0	10,866.3	14,903.0	10,952.9	76.2	76.0	91.90	3,980.5	2,910.9	2,644.5	2,493.0	151.58	17.446	
14,900.0	10,866.1	15,003.0	10,952.5	77.7	77.4	91.89	4,080.5	2,910.1	2,644.5	2,490.1	154.45	17.122	
15,000.0	10,865.9	15,103.0	10,952.2	79.1	78.8	91.89	4,180.5	2,909.4	2,644.5	2,487.2	157.34	16.808	
15,100.0	10,865.7	15,203.0	10,951.9	80.6	80.3	91.89	4,280.5	2,908.6	2,644.5	2,484.3	160.24	16.504	
15,200.0	10,865.4	15,303.0	10,951.6	82.0	81.7	91.89	4,380.5	2,907.8	2,644.5	2,481.3	163.16	16.208	
15,300.0	10,865.2	15,403.0	10,951.2	83.5	83.2	91.89	4,480.5	2,907.0	2,644.5	2,478.4	166.09	15.922	
15,400.0	10,865.0	15,503.0	10,950.9	85.0	84.6	91.88	4,580.5	2,906.2	2,644.4	2,475.4	169.04	15.644	
15,500.0	10,864.8	15,603.0	10,950.6	86.4	86.1	91.88	4,680.5	2,905.5	2,644.4	2,472.4	172.00	15.375	
15,600.0	10,864.5	15,703.0	10,950.3	87.9	87.6	91.88	4,780.5	2,904.7	2,644.4	2,469.4	174.97	15.114	
15,700.0	10,864.3	15,803.0	10,950.0	89.4	89.1	91.88	4,880.5	2,903.9	2,644.4	2,466.5	177.95	14.860	
15,800.0	10,864.1	15,903.0	10,949.6	90.9	90.6	91.88	4,980.5	2,903.1	2,644.4	2,463.4	180.95	14.614	
15,900.0	10,863.8	16,003.0	10,949.3	92.4	92.1	91.87	5,080.5	2,902.4	2,644.4	2,460.4	183.96	14.375	
16,000.0	10,863.6	16,103.0	10,949.0	94.0	93.6	91.87	5,180.5	2,901.6	2,644.4	2,457.4	186.98	14.143	
16,100.0	10,863.4	16,203.0	10,948.7	95.5	95.1	91.87	5,280.5	2,900.8	2,644.3	2,454.3	190.00	13.917	
16,200.0	10,863.2	16,303.0	10,948.3	97.0	96.6	91.87	5,380.5	2,900.0	2,644.3	2,451.3	193.04	13.698	
16,300.0	10,862.9	16,403.0	10,948.0	98.5	98.1	91.87	5,480.4	2,899.2	2,644.3	2,448.2	196.09	13.486	
16,400.0	10,862.7	16,503.0	10,947.7	100.0	99.6	91.86	5,580.4	2,898.5	2,644.3	2,445.2	199.14	13.279	
16,500.0	10,862.5	16,603.0	10,947.4	101.6	101.2	91.86	5,680.4	2,897.7	2,644.3	2,442.1	202.20	13.077	
16,600.0	10,862.3	16,703.0	10,947.0	103.1	102.7	91.86	5,780.4	2,896.9	2,644.3	2,439.0	205.27	12.882	
16,700.0	10,862.0	16,803.0	10,946.7	104.7	104.2	91.86	5,880.4	2,896.1	2,644.3	2,435.9	208.35	12.691	
16,800.0	10,861.8	16,903.0	10,946.4	106.2	105.8	91.85	5,980.4	2,895.3	2,644.2	2,432.8	211.44	12.506	
16,900.0	10,861.6	17,003.0	10,946.1	107.7	107.3	91.85	6,080.4	2,894.6	2,644.2	2,429.7	214.53	12.326	
17,000.0	10,861.4	17,103.0	10,945.8	109.3	108.8	91.85	6,180.4	2,893.8	2,644.2	2,426.6	217.63	12.150	
17,100.0	10,861.1	17,203.0	10,945.4	110.8	110.4	91.85	6,280.4	2,893.0	2,644.2	2,423.5	220.73	11.979	
17,200.0	10,860.9	17,303.0	10,945.1	112.4	111.9	91.85	6,380.4	2,892.2	2,644.2	2,420.4	223.84	11.813	
17,300.0	10,860.7	17,403.0	10,944.8	114.0	113.5	91.84	6,480.4	2,891.4	2,644.2	2,417.2	226.96	11.651	
17,400.0	10,860.4	17,503.0	10,944.5	115.5	115.0	91.84	6,580.4	2,890.7	2,644.2	2,414.1	230.08	11.492	
17,500.0	10,860.2	17,603.0	10,944.1	117.1	116.6	91.84	6,680.4	2,889.9	2,644.2	2,410.9	233.21	11.338	
17,600.0	10,860.0	17,703.0	10,943.8	118.7	118.2	91.84	6,780.4	2,889.1	2,644.1	2,407.8	236.34	11.188	
17,700.0	10,859.8	17,803.0	10,943.5	120.2	119.7	91.84	6,880.4	2,888.3	2,644.1	2,404.6	239.48	11.041	
17,800.0	10,859.5	17,903.0	10,943.2	121.8	121.3	91.83	6,980.4	2,887.6	2,644.1	2,401.5	242.62	10.898	
17,900.0	10,859.3	18,003.0	10,942.8	123.4	122.9	91.83	7,080.4	2,886.8	2,644.1	2,398.3	245.76	10.759	
18,000.0	10,859.1	18,103.0	10,942.5	124.9	124.4	91.83	7,180.4	2,886.0	2,644.1	2,395.2	248.91	10.622	
18,100.0	10,858.9	18,203.0	10,942.2	126.5	126.0	91.83	7,280.4	2,885.2	2,644.1	2,392.0	252.07	10.489	
18,200.0	10,858.6	18,303.0	10,941.9	128.1	127.6	91.83	7,380.4	2,884.4	2,644.1	2,388.8	255.23	10.360	
18,300.0	10,858.4	18,403.0	10,941.6	129.7	129.2	91.82	7,480.4	2,883.7	2,644.0	2,385.6	258.39	10.233	
18,400.0	10,858.2	18,503.0	10,941.2	131.3	130.7	91.82	7,580.4	2,882.9	2,644.0	2,382.5	261.56	10.109	
18,500.0	10,857.9	18,603.0	10,940.9	132.9	132.3	91.82	7,680.4	2,882.1	2,644.0	2,379.3	264.73	9.988	
18,600.0	10,857.7	18,703.0	10,940.6	134.4	133.9	91.82	7,780.4	2,881.3	2,644.0	2,376.1	267.90	9.869	
18,700.0	10,857.5	18,803.0	10,940.3	136.0	135.5	91.82	7,880.4	2,880.5	2,644.0	2,372.9	271.08	9.754	
18,800.0	10,857.3	18,903.0	10,939.9	137.6	137.1	91.81	7,980.4	2,879.8	2,644.0	2,369.7	274.26	9.640	
18,900.0	10,857.0	19,003.0	10,939.6	139.2	138.7	91.81	8,080.4	2,879.0	2,644.0	2,366.5	277.44	9.530	
19,000.0	10,856.8	19,103.0	10,939.3	140.8	140.3	91.81	8,180.4	2,878.2	2,643.9	2,363.3	280.63	9.422	
19,100.0	10,856.6	19,203.0	10,939.0	142.4	141.9	91.81	8,280.3	2,877.4	2,643.9	2,360.1	283.82	9.316	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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
19,200.0	10,856.4	19,303.0	10,938.6	144.0	143.5	91.81	8,380.3	2,876.6	2,643.9	2,356.9	287.01	9.212	
19,300.0	10,856.1	19,403.0	10,938.3	145.6	145.0	91.80	8,480.3	2,875.9	2,643.9	2,353.7	290.20	9.110	
19,400.0	10,855.9	19,503.0	10,938.0	147.2	146.6	91.80	8,580.3	2,875.1	2,643.9	2,350.5	293.40	9.011	
19,500.0	10,855.7	19,603.0	10,937.7	148.8	148.2	91.80	8,680.3	2,874.3	2,643.9	2,347.3	296.60	8.914	
19,600.0	10,855.5	19,703.0	10,937.4	150.4	149.8	91.80	8,780.3	2,873.5	2,643.9	2,344.1	299.80	8.819	
19,700.0	10,855.2	19,803.0	10,937.0	152.0	151.4	91.79	8,880.3	2,872.8	2,643.8	2,340.8	303.01	8.725	
19,800.0	10,855.0	19,903.0	10,936.7	153.6	153.0	91.79	8,980.3	2,872.0	2,643.8	2,337.6	306.22	8.634	
19,900.0	10,854.8	20,003.0	10,936.4	155.2	154.6	91.79	9,080.3	2,871.2	2,643.8	2,334.4	309.43	8.544	
20,000.0	10,854.5	20,103.0	10,936.1	156.8	156.2	91.79	9,180.3	2,870.4	2,643.8	2,331.2	312.64	8.456	
20,100.0	10,854.3	20,203.0	10,935.7	158.4	157.9	91.79	9,280.3	2,869.6	2,643.8	2,327.9	315.85	8.370	
20,200.0	10,854.1	20,303.0	10,935.4	160.0	159.5	91.78	9,380.3	2,868.9	2,643.8	2,324.7	319.07	8.286	
20,300.0	10,853.9	20,403.0	10,935.1	161.7	161.1	91.78	9,480.3	2,868.1	2,643.8	2,321.5	322.28	8.203	
20,400.0	10,853.6	20,503.0	10,934.8	163.3	162.7	91.78	9,580.3	2,867.3	2,643.7	2,318.2	325.50	8.122	
20,500.0	10,853.4	20,603.0	10,934.4	164.9	164.3	91.78	9,680.3	2,866.5	2,643.7	2,315.0	328.73	8.042	
20,600.0	10,853.2	20,703.0	10,934.1	166.5	165.9	91.78	9,780.3	2,865.7	2,643.7	2,311.8	331.95	7.964	
20,700.0	10,853.0	20,803.0	10,933.8	168.1	167.5	91.77	9,880.3	2,865.0	2,643.7	2,308.5	335.17	7.888	
20,800.0	10,852.7	20,903.0	10,933.5	169.7	169.1	91.77	9,980.3	2,864.2	2,643.7	2,305.3	338.40	7.812	
20,900.0	10,852.5	21,003.0	10,933.2	171.3	170.7	91.77	10,080.3	2,863.4	2,643.7	2,302.0	341.63	7.738	
21,000.0	10,852.3	21,103.0	10,932.8	172.9	172.3	91.77	10,180.3	2,862.6	2,643.7	2,298.8	344.86	7.666	
21,094.0	10,851.5	21,197.1	10,932.5	174.5	173.9	91.78	10,274.3	2,861.9	2,643.4	2,295.5	347.90	7.598 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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	-81.73	27.7	-190.4	192.4				
100.0	100.0	100.0	100.0	0.1	0.1	-81.73	27.7	-190.4	192.4	192.1	0.26	750.578	
200.0	200.0	200.0	200.0	0.5	0.5	-81.73	27.7	-190.4	192.4	191.4	0.97	197.666	
300.0	300.0	300.0	300.0	0.8	0.8	-81.73	27.7	-190.4	192.4	190.7	1.69	113.820	
400.0	400.0	400.0	400.0	1.2	1.2	-81.73	27.7	-190.4	192.4	190.0	2.41	79.920	
500.0	500.0	500.0	500.0	1.6	1.6	-81.73	27.7	-190.4	192.4	189.3	3.12	61.579	
600.0	600.0	600.0	600.0	1.9	1.9	-81.73	27.7	-190.4	192.4	188.5	3.84	50.085	
700.0	700.0	700.0	700.0	2.3	2.3	-81.73	27.7	-190.4	192.4	187.8	4.56	42.207	
800.0	800.0	800.0	800.0	2.6	2.6	-81.73	27.7	-190.4	192.4	187.1	5.27	36.471	
900.0	900.0	900.0	900.0	3.0	3.0	-81.73	27.7	-190.4	192.4	186.4	5.99	32.107	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	-81.73	27.7	-190.4	192.4	185.7	6.71	28.676	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	-81.73	27.7	-190.4	192.4	185.0	7.43	25.907	
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	-81.73	27.7	-190.4	192.4	184.2	8.14	23.626	CC, ES
1,300.0	1,300.0	1,300.0	1,300.0	4.4	4.4	156.13	27.7	-190.4	193.2	184.3	8.85	21.838	
1,400.0	1,400.0	1,400.0	1,400.0	4.8	4.8	156.43	27.7	-190.4	195.6	186.0	9.54	20.503	
1,500.0	1,499.9	1,499.9	1,499.9	5.1	5.1	156.91	27.7	-190.4	199.6	189.3	10.23	19.501	
1,600.0	1,599.7	1,596.8	1,596.8	5.4	5.5	157.41	27.3	-191.1	205.9	195.0	10.91	18.874	
1,700.0	1,699.4	1,693.4	1,693.4	5.8	5.8	157.79	26.3	-193.3	215.2	203.7	11.57	18.596	
1,800.0	1,798.9	1,789.6	1,789.5	6.1	6.1	158.04	24.6	-197.0	227.6	215.3	12.24	18.593	
1,900.0	1,898.3	1,885.2	1,884.9	6.5	6.5	158.18	22.3	-202.2	242.9	230.0	12.90	18.820	
2,000.0	1,997.4	1,980.1	1,979.6	6.9	6.8	158.22	19.3	-208.7	261.1	247.5	13.57	19.243	
2,100.0	2,096.4	2,074.4	2,073.4	7.2	7.1	158.19	15.7	-216.5	281.5	267.2	14.23	19.779	
2,200.0	2,195.5	2,168.1	2,166.6	7.6	7.5	157.99	11.5	-225.8	303.1	288.2	14.89	20.359	
2,300.0	2,294.5	2,261.2	2,259.0	8.0	7.8	157.67	6.7	-236.3	326.1	310.5	15.55	20.976	
2,400.0	2,393.5	2,356.4	2,353.3	8.4	8.1	157.25	1.2	-248.2	350.2	333.9	16.22	21.581	
2,500.0	2,492.5	2,453.4	2,449.3	8.8	8.5	156.87	-4.4	-260.5	374.3	357.4	16.92	22.119	
2,600.0	2,591.6	2,550.4	2,545.4	9.2	8.9	156.54	-10.0	-272.8	398.5	380.9	17.63	22.609	
2,700.0	2,690.6	2,647.4	2,641.4	9.6	9.3	156.24	-15.6	-285.1	422.8	404.4	18.34	23.057	
2,800.0	2,789.6	2,744.4	2,737.5	10.0	9.6	155.98	-21.2	-297.4	447.0	427.9	19.05	23.468	
2,900.0	2,888.6	2,841.4	2,833.6	10.4	10.0	155.74	-26.8	-309.7	471.2	451.5	19.76	23.847	
3,000.0	2,987.7	2,938.4	2,929.6	10.8	10.4	155.53	-32.4	-321.9	495.5	475.0	20.48	24.196	
3,100.0	3,086.7	3,035.4	3,025.7	11.2	10.8	155.33	-38.0	-334.2	519.7	498.5	21.20	24.520	
3,200.0	3,185.7	3,132.4	3,121.7	11.6	11.2	155.16	-43.6	-346.5	544.0	522.0	21.92	24.820	
3,300.0	3,284.8	3,229.4	3,217.8	12.0	11.5	154.99	-49.2	-358.8	568.2	545.6	22.64	25.099	
3,400.0	3,383.8	3,326.4	3,313.8	12.4	11.9	154.85	-54.8	-371.1	592.5	569.1	23.36	25.359	
3,500.0	3,482.8	3,423.4	3,409.9	12.8	12.3	154.71	-60.4	-383.3	616.7	592.6	24.09	25.601	
3,600.0	3,581.8	3,520.4	3,506.0	13.2	12.7	154.58	-66.0	-395.6	641.0	616.2	24.82	25.828	
3,700.0	3,680.9	3,617.4	3,602.0	13.7	13.1	154.47	-71.6	-407.9	665.3	639.7	25.55	26.041	
3,800.0	3,779.9	3,714.4	3,698.1	14.1	13.5	154.36	-77.2	-420.2	689.5	663.3	26.28	26.242	
3,878.9	3,858.0	3,791.0	3,773.9	14.4	13.8	154.28	-81.7	-429.9	708.7	681.8	26.85	26.391	
3,900.0	3,878.9	3,811.4	3,794.1	14.5	13.9	154.29	-82.8	-432.5	713.8	686.8	27.01	26.428	
4,000.0	3,978.2	3,908.8	3,890.6	14.9	14.3	154.28	-88.5	-444.8	736.4	708.7	27.74	26.549	
4,100.0	4,077.7	4,006.7	3,987.5	15.3	14.7	154.18	-94.1	-457.2	756.8	728.3	28.47	26.584	
4,200.0	4,177.5	4,105.0	4,084.8	15.6	15.1	153.99	-99.8	-469.6	774.8	745.6	29.19	26.541	
4,300.0	4,277.4	4,203.6	4,182.4	16.0	15.5	153.71	-105.5	-482.1	790.6	760.7	29.92	26.425	
4,400.0	4,377.4	4,302.4	4,280.4	16.3	15.9	153.35	-111.2	-494.6	804.1	773.4	30.64	26.244	
4,412.2	4,389.6	4,314.6	4,292.4	16.4	16.0	-84.46	-111.9	-496.2	805.6	774.8	30.72	26.219	
4,500.0	4,477.4	4,401.5	4,378.4	16.7	16.3	-84.89	-116.9	-507.2	816.2	784.8	31.34	26.040	
4,600.0	4,577.4	4,500.5	4,476.5	17.0	16.7	-85.37	-122.7	-519.7	828.3	796.3	32.05	25.846	
4,700.0	4,677.4	4,600.5	4,574.6	17.3	17.1	-85.83	-128.4	-532.2	840.5	807.8	32.76	25.659	
4,800.0	4,777.4	4,701.4	4,672.6	17.6	17.5	-86.28	-134.1	-544.8	852.8	819.3	33.47	25.478	
4,900.0	4,877.4	4,802.4	4,770.7	18.0	18.0	-86.71	-139.8	-557.3	865.1	830.9	34.19	25.305	

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 #126H
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Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
5,000.0	4,977.4	4,896.6	4,868.7	18.3	18.4	-87.13	-145.5	-569.9	877.5	842.6	34.88	25.159	
5,100.0	5,077.4	5,004.4	4,966.8	18.6	18.8	-87.55	-151.3	-582.4	889.9	854.3	35.62	24.984	
5,200.0	5,177.4	5,105.3	5,064.9	19.0	19.2	-87.95	-157.0	-594.9	902.3	866.0	36.33	24.834	
5,300.0	5,277.4	5,206.3	5,162.9	19.3	19.6	-88.34	-162.7	-607.5	914.8	877.8	37.05	24.691	
5,400.0	5,377.4	5,307.3	5,261.0	19.6	20.1	-88.71	-168.4	-620.0	927.4	889.6	37.77	24.554	
5,500.0	5,477.4	5,408.3	5,359.1	20.0	20.5	-89.08	-174.2	-632.5	939.9	901.4	38.49	24.423	
5,600.0	5,577.4	5,490.8	5,457.1	20.3	20.8	-89.44	-179.9	-645.1	952.5	913.4	39.13	24.341	
5,700.0	5,677.4	5,594.8	5,560.1	20.6	21.3	-89.81	-185.9	-658.2	965.1	925.2	39.88	24.198	
5,800.0	5,777.4	5,724.0	5,688.4	21.0	21.8	-90.18	-192.1	-671.9	975.8	935.0	40.81	23.908	
5,900.0	5,877.4	5,854.1	5,818.1	21.3	22.3	-90.44	-196.6	-681.7	983.3	941.6	41.70	23.580	
6,000.0	5,977.4	5,984.8	5,948.6	21.6	22.7	-90.59	-199.3	-687.6	987.8	945.3	42.55	23.217	
6,100.0	6,077.4	6,115.8	6,079.6	22.0	23.2	-90.64	-200.1	-689.3	989.2	945.8	43.34	22.825	
6,106.2	6,083.6	6,123.9	6,087.7	22.0	23.2	-90.64	-200.1	-689.3	989.1	945.8	43.38	22.800	
6,200.0	6,177.4	6,213.6	6,177.4	22.3	23.5	-90.64	-200.1	-689.3	989.2	945.2	44.01	22.478	
6,300.0	6,277.4	6,313.6	6,277.4	22.6	23.8	-90.64	-200.1	-689.3	989.2	944.5	44.68	22.137	
6,400.0	6,377.4	6,413.6	6,377.4	23.0	24.1	-90.64	-200.1	-689.3	989.2	943.8	45.36	21.806	
6,500.0	6,477.4	6,513.6	6,477.4	23.3	24.5	-90.64	-200.1	-689.3	989.2	943.1	46.04	21.484	
6,600.0	6,577.4	6,613.6	6,577.4	23.7	24.8	-90.64	-200.1	-689.3	989.2	942.5	46.72	21.171	
6,700.0	6,677.4	6,713.6	6,677.4	24.0	25.1	-90.64	-200.1	-689.3	989.2	941.8	47.41	20.866	
6,800.0	6,777.4	6,813.6	6,777.4	24.3	25.4	-90.64	-200.1	-689.3	989.2	941.1	48.09	20.570	
6,900.0	6,877.4	6,913.6	6,877.4	24.7	25.7	-90.64	-200.1	-689.3	989.2	940.4	48.77	20.282	
7,000.0	6,977.4	7,013.6	6,977.4	25.0	26.1	-90.64	-200.1	-689.3	989.2	939.7	49.46	20.001	
7,100.0	7,077.4	7,113.6	7,077.4	25.4	26.4	-90.64	-200.1	-689.3	989.2	939.0	50.14	19.727	
7,200.0	7,177.4	7,213.6	7,177.4	25.7	26.7	-90.64	-200.1	-689.3	989.2	938.3	50.83	19.461	
7,300.0	7,277.4	7,313.6	7,277.4	26.1	27.1	-90.64	-200.1	-689.3	989.2	937.7	51.52	19.201	
7,400.0	7,377.4	7,413.6	7,377.4	26.4	27.4	-90.64	-200.1	-689.3	989.2	937.0	52.21	18.948	
7,500.0	7,477.4	7,513.6	7,477.4	26.8	27.7	-90.64	-200.1	-689.3	989.2	936.3	52.89	18.701	
7,600.0	7,577.4	7,613.6	7,577.4	27.1	28.0	-90.64	-200.1	-689.3	989.2	935.6	53.58	18.460	
7,700.0	7,677.4	7,713.6	7,677.4	27.4	28.4	-90.64	-200.1	-689.3	989.2	934.9	54.27	18.225	
7,800.0	7,777.4	7,813.6	7,777.4	27.8	28.7	-90.64	-200.1	-689.3	989.2	934.2	54.97	17.996	
7,900.0	7,877.4	7,913.6	7,877.4	28.1	29.0	-90.64	-200.1	-689.3	989.2	933.5	55.66	17.772	
8,000.0	7,977.4	8,013.6	7,977.4	28.5	29.4	-90.64	-200.1	-689.3	989.2	932.8	56.35	17.554	
8,100.0	8,077.4	8,113.6	8,077.4	28.8	29.7	-90.64	-200.1	-689.3	989.2	932.1	57.04	17.341	
8,200.0	8,177.4	8,213.6	8,177.4	29.2	30.0	-90.64	-200.1	-689.3	989.2	931.4	57.74	17.132	
8,300.0	8,277.4	8,313.6	8,277.4	29.5	30.4	-90.64	-200.1	-689.3	989.2	930.7	58.43	16.929	
8,400.0	8,377.4	8,413.6	8,377.4	29.9	30.7	-90.64	-200.1	-689.3	989.2	930.0	59.13	16.730	
8,500.0	8,477.4	8,513.6	8,477.4	30.2	31.0	-90.64	-200.1	-689.3	989.2	929.4	59.82	16.536	
8,600.0	8,577.4	8,613.6	8,577.4	30.6	31.4	-90.64	-200.1	-689.3	989.2	928.7	60.52	16.345	
8,700.0	8,677.4	8,713.6	8,677.4	30.9	31.7	-90.64	-200.1	-689.3	989.2	928.0	61.21	16.159	
8,800.0	8,777.4	8,813.6	8,777.4	31.3	32.1	-90.64	-200.1	-689.3	989.2	927.3	61.91	15.978	
8,900.0	8,877.4	8,913.6	8,877.4	31.6	32.4	-90.64	-200.1	-689.3	989.2	926.6	62.61	15.800	
9,000.0	8,977.4	9,013.6	8,977.4	32.0	32.7	-90.64	-200.1	-689.3	989.2	925.9	63.30	15.626	
9,100.0	9,077.4	9,113.6	9,077.4	32.3	33.1	-90.64	-200.1	-689.3	989.2	925.2	64.00	15.455	
9,200.0	9,177.4	9,213.6	9,177.4	32.7	33.4	-90.64	-200.1	-689.3	989.2	924.5	64.70	15.288	
9,300.0	9,277.4	9,313.6	9,277.4	33.0	33.7	-90.64	-200.1	-689.3	989.2	923.8	65.40	15.125	
9,400.0	9,377.4	9,413.6	9,377.4	33.4	34.1	-90.64	-200.1	-689.3	989.2	923.1	66.10	14.965	
9,500.0	9,477.4	9,513.6	9,477.4	33.7	34.4	-90.64	-200.1	-689.3	989.2	922.4	66.80	14.808	
9,600.0	9,577.4	9,613.6	9,577.4	34.1	34.8	-90.64	-200.1	-689.3	989.2	921.7	67.50	14.655	
9,700.0	9,677.4	9,713.6	9,677.4	34.4	35.1	-90.64	-200.1	-689.3	989.2	921.0	68.20	14.504	
9,800.0	9,777.4	9,813.6	9,777.4	34.8	35.4	-90.64	-200.1	-689.3	989.2	920.3	68.90	14.357	
9,900.0	9,877.4	9,913.6	9,877.4	35.1	35.8	-90.64	-200.1	-689.3	989.2	919.6	69.60	14.212	
10,000.0	9,977.4	10,013.6	9,977.4	35.5	36.1	-90.64	-200.1	-689.3	989.2	918.9	70.30	14.070	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,077.4	10,113.6	10,077.4	35.8	36.5	-90.64	-200.1	-689.3	989.2	918.2	71.00	13.931	
10,200.0	10,177.4	10,213.6	10,177.4	36.2	36.8	-90.64	-200.1	-689.3	989.2	917.5	71.71	13.795	
10,300.0	10,277.4	10,313.6	10,277.4	36.5	37.2	-90.64	-200.1	-689.3	989.2	916.8	72.41	13.661	
10,324.1	10,301.5	10,337.7	10,301.5	36.6	37.2	-90.64	-200.1	-689.3	989.2	916.6	72.58	13.629	
10,350.0	10,327.4	10,363.6	10,327.4	36.7	37.3	-90.23	-200.1	-689.3	989.2	916.4	72.76	13.595	
10,400.0	10,377.2	10,413.3	10,377.2	36.9	37.5	-90.48	-200.1	-689.3	989.2	916.1	73.10	13.532	
10,450.0	10,426.4	10,462.6	10,426.4	37.0	37.7	-90.97	-200.1	-689.3	989.3	915.9	73.43	13.472	
10,500.0	10,474.6	10,510.8	10,474.6	37.2	37.8	-91.67	-200.1	-689.3	989.6	915.9	73.75	13.418	
10,550.0	10,521.6	10,557.8	10,521.6	37.3	38.0	-92.53	-200.1	-689.3	990.3	916.2	74.06	13.371	
10,600.0	10,566.8	10,603.0	10,566.8	37.5	38.1	-93.51	-200.1	-689.3	991.5	917.2	74.36	13.335	
10,650.0	10,610.1	10,646.3	10,610.1	37.6	38.3	-94.56	-200.1	-689.3	993.6	919.0	74.63	13.313	
10,700.0	10,651.0	10,687.2	10,651.0	37.7	38.4	-95.60	-200.1	-689.3	996.7	921.8	74.90	13.307	
10,750.0	10,689.2	10,725.4	10,689.2	37.8	38.6	-96.56	-200.1	-689.3	1,001.2	926.0	75.15	13.323	
10,800.0	10,724.5	10,760.7	10,724.5	37.9	38.7	-97.38	-200.1	-689.3	1,007.2	931.9	75.38	13.362	
10,850.0	10,756.6	10,807.2	10,756.6	37.9	38.9	-97.98	-200.1	-689.3	1,015.2	939.5	75.65	13.419	
10,900.0	10,785.2	10,821.4	10,785.2	38.0	38.9	-98.30	-200.1	-689.3	1,025.2	949.4	75.80	13.524	
10,950.0	10,810.1	10,846.3	10,810.1	38.0	39.0	-98.28	-200.1	-689.3	1,037.4	961.4	75.99	13.652	
11,000.0	10,831.2	10,867.4	10,831.2	38.1	39.1	-97.85	-200.1	-689.3	1,051.9	975.8	76.16	13.813	
11,050.0	10,848.2	10,884.4	10,848.2	38.3	39.1	-96.98	-200.1	-689.3	1,068.8	992.5	76.30	14.008	
11,100.0	10,861.1	10,902.7	10,861.1	38.4	39.2	-95.62	-200.1	-689.3	1,088.1	1,011.6	76.45	14.232	
11,150.0	10,869.7	10,905.9	10,869.7	38.5	39.2	-93.75	-200.1	-689.3	1,109.5	1,032.9	76.53	14.496	
11,200.0	10,874.0	10,910.1	10,874.0	38.7	39.2	-91.35	-200.1	-689.3	1,132.9	1,056.3	76.61	14.787	
11,225.4	10,874.5	10,910.6	10,874.5	38.8	39.2	-89.92	-200.1	-689.3	1,145.5	1,068.8	76.65	14.945	
11,287.1	10,874.3	10,910.5	10,874.3	39.0	39.2	-89.92	-200.1	-689.3	1,177.8	1,101.1	76.72	15.351	
11,300.0	10,874.3	10,910.5	10,874.3	39.0	39.2	-89.91	-200.1	-689.3	1,184.9	1,108.1	76.74	15.440	
11,400.0	10,874.1	10,910.2	10,874.1	39.4	39.2	-89.90	-200.1	-689.3	1,242.7	1,165.8	76.87	16.166	
11,500.0	10,873.8	10,910.0	10,873.8	39.8	39.2	-89.89	-200.1	-689.3	1,305.7	1,228.7	77.01	16.954	
11,600.0	10,873.6	10,909.8	10,873.6	40.3	39.2	-89.87	-200.1	-689.3	1,373.0	1,295.9	77.15	17.797	
11,700.0	10,873.4	10,909.6	10,873.4	40.9	39.2	-89.86	-200.1	-689.3	1,444.2	1,366.9	77.29	18.686	
11,800.0	10,873.2	12,886.1	11,931.7	41.5	45.1	-136.93	959.7	-698.4	1,448.9	1,385.0	63.88	22.680	
11,900.0	10,872.9	12,986.1	11,930.9	42.2	45.8	-136.92	1,059.7	-699.2	1,448.6	1,383.6	64.92	22.312	
12,000.0	10,872.7	13,086.1	11,930.2	42.9	46.4	-136.91	1,159.7	-700.0	1,448.2	1,382.2	66.04	21.929	
12,100.0	10,872.5	13,186.1	11,929.5	43.7	47.1	-136.89	1,259.7	-700.8	1,447.8	1,380.6	67.24	21.533	
12,200.0	10,872.2	13,286.1	11,928.7	44.6	47.9	-136.88	1,359.7	-701.6	1,447.5	1,379.0	68.51	21.128	
12,300.0	10,872.0	13,386.1	11,928.0	45.4	48.7	-136.86	1,459.7	-702.4	1,447.1	1,377.3	69.85	20.717	
12,400.0	10,871.8	13,486.1	11,927.3	46.3	49.6	-136.85	1,559.7	-703.2	1,446.8	1,375.5	71.26	20.303	
12,500.0	10,871.6	13,586.1	11,926.5	47.3	50.5	-136.84	1,659.7	-703.9	1,446.4	1,373.7	72.73	19.888	
12,600.0	10,871.3	13,686.1	11,925.8	48.3	51.4	-136.82	1,759.7	-704.7	1,446.1	1,371.8	74.26	19.474	
12,700.0	10,871.1	13,786.1	11,925.1	49.3	52.3	-136.81	1,859.7	-705.5	1,445.7	1,369.9	75.84	19.062	
12,800.0	10,870.9	13,886.1	11,924.3	50.4	53.3	-136.79	1,959.6	-706.3	1,445.3	1,367.9	77.48	18.655	
12,900.0	10,870.7	13,986.1	11,923.6	51.5	54.4	-136.78	2,059.6	-707.1	1,445.0	1,365.8	79.16	18.254	
13,000.0	10,870.4	14,086.1	11,922.9	52.6	55.4	-136.76	2,159.6	-707.9	1,444.6	1,363.7	80.89	17.859	
13,100.0	10,870.2	14,186.1	11,922.1	53.8	56.5	-136.75	2,259.6	-708.6	1,444.3	1,361.6	82.67	17.471	
13,200.0	10,870.0	14,286.1	11,921.4	54.9	57.6	-136.74	2,359.6	-709.4	1,443.9	1,359.4	84.48	17.092	
13,300.0	10,869.7	14,386.1	11,920.7	56.1	58.8	-136.72	2,459.6	-710.2	1,443.6	1,357.2	86.33	16.721	
13,400.0	10,869.5	14,486.1	11,919.9	57.4	59.9	-136.71	2,559.6	-711.0	1,443.2	1,355.0	88.22	16.359	
13,500.0	10,869.3	14,586.0	11,919.2	58.6	61.1	-136.69	2,659.6	-711.8	1,442.8	1,352.7	90.14	16.007	
13,600.0	10,869.1	14,686.0	11,918.5	59.9	62.3	-136.68	2,759.6	-712.6	1,442.5	1,350.4	92.09	15.663	
13,700.0	10,868.8	14,786.0	11,917.7	61.1	63.6	-136.66	2,859.6	-713.4	1,442.1	1,348.1	94.08	15.329	
13,800.0	10,868.6	14,886.0	11,917.0	62.4	64.8	-136.65	2,959.6	-714.1	1,441.8	1,345.7	96.09	15.005	
13,900.0	10,868.4	14,986.0	11,916.3	63.8	66.1	-136.64	3,059.6	-714.9	1,441.4	1,343.3	98.12	14.690	
14,000.0	10,868.2	15,086.0	11,915.5	65.1	67.4	-136.62	3,159.6	-715.7	1,441.1	1,340.9	100.18	14.384	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,867.9	15,186.0	11,914.8	66.4	68.7	-136.61	3,259.6	-716.5	1,440.7	1,338.4	102.27	14.088	
14,200.0	10,867.7	15,286.0	11,914.1	67.8	70.0	-136.59	3,359.5	-717.3	1,440.4	1,336.0	104.37	13.800	
14,300.0	10,867.5	15,386.0	11,913.3	69.2	71.3	-136.58	3,459.5	-718.1	1,440.0	1,333.5	106.50	13.521	
14,400.0	10,867.3	15,486.0	11,912.6	70.6	72.6	-136.56	3,559.5	-718.9	1,439.6	1,331.0	108.65	13.251	
14,500.0	10,867.0	15,586.0	11,911.9	72.0	74.0	-136.55	3,659.5	-719.6	1,439.3	1,328.5	110.81	12.988	
14,600.0	10,866.8	15,686.0	11,911.1	73.4	75.4	-136.53	3,759.5	-720.4	1,438.9	1,325.9	112.99	12.735	
14,700.0	10,866.6	15,786.0	11,910.4	74.8	76.7	-136.52	3,859.5	-721.2	1,438.6	1,323.4	115.19	12.488	
14,800.0	10,866.3	15,886.0	11,909.7	76.2	78.1	-136.51	3,959.5	-722.0	1,438.2	1,320.8	117.41	12.250	
14,900.0	10,866.1	15,986.0	11,908.9	77.7	79.5	-136.49	4,059.5	-722.8	1,437.9	1,318.2	119.64	12.019	
15,000.0	10,865.9	16,086.0	11,908.2	79.1	80.9	-136.48	4,159.5	-723.6	1,437.5	1,315.6	121.88	11.794	
15,100.0	10,865.7	16,186.0	11,907.5	80.6	82.3	-136.46	4,259.5	-724.4	1,437.2	1,313.0	124.14	11.577	
15,200.0	10,865.4	16,286.0	11,906.7	82.0	83.8	-136.45	4,359.5	-725.1	1,436.8	1,310.4	126.41	11.367	
15,300.0	10,865.2	16,386.0	11,906.0	83.5	85.2	-136.43	4,459.5	-725.9	1,436.4	1,307.8	128.69	11.162	
15,400.0	10,865.0	16,486.0	11,905.3	85.0	86.7	-136.42	4,559.5	-726.7	1,436.1	1,305.1	130.98	10.964	
15,500.0	10,864.8	16,586.0	11,904.5	86.4	88.1	-136.41	4,659.5	-727.5	1,435.7	1,302.5	133.28	10.772	
15,600.0	10,864.5	16,686.0	11,903.8	87.9	89.6	-136.39	4,759.5	-728.3	1,435.4	1,299.8	135.60	10.586	
15,700.0	10,864.3	16,786.0	11,903.1	89.4	91.0	-136.38	4,859.4	-729.1	1,435.0	1,297.1	137.92	10.405	
15,800.0	10,864.1	16,886.0	11,902.3	90.9	92.5	-136.36	4,959.4	-729.9	1,434.7	1,294.4	140.26	10.229	
15,900.0	10,863.8	16,986.0	11,901.6	92.4	94.0	-136.35	5,059.4	-730.6	1,434.3	1,291.7	142.60	10.058	
16,000.0	10,863.6	17,086.0	11,900.9	94.0	95.5	-136.33	5,159.4	-731.4	1,434.0	1,289.0	144.95	9.893	
16,100.0	10,863.4	17,186.0	11,900.2	95.5	96.9	-136.32	5,259.4	-732.2	1,433.6	1,286.3	147.31	9.732	
16,200.0	10,863.2	17,286.0	11,899.4	97.0	98.4	-136.30	5,359.4	-733.0	1,433.3	1,283.6	149.68	9.576	
16,300.0	10,862.9	17,386.0	11,898.7	98.5	99.9	-136.29	5,459.4	-733.8	1,432.9	1,280.9	152.05	9.424	
16,400.0	10,862.7	17,486.0	11,898.0	100.0	101.4	-136.28	5,559.4	-734.6	1,432.6	1,278.1	154.44	9.276	
16,500.0	10,862.5	17,586.0	11,897.2	101.6	102.9	-136.26	5,659.4	-735.4	1,432.2	1,275.4	156.83	9.132	
16,600.0	10,862.3	17,686.0	11,896.5	103.1	104.5	-136.25	5,759.4	-736.1	1,431.8	1,272.6	159.22	8.993	
16,700.0	10,862.0	17,786.0	11,895.8	104.7	106.0	-136.23	5,859.4	-736.9	1,431.5	1,269.9	161.63	8.857	
16,800.0	10,861.8	17,886.0	11,895.0	106.2	107.5	-136.22	5,959.4	-737.7	1,431.1	1,267.1	164.04	8.725	
16,900.0	10,861.6	17,986.0	11,894.3	107.7	109.0	-136.20	6,059.4	-738.5	1,430.8	1,264.3	166.45	8.596	
17,000.0	10,861.4	18,086.0	11,893.6	109.3	110.6	-136.19	6,159.4	-739.3	1,430.4	1,261.6	168.87	8.471	
17,100.0	10,861.1	18,186.0	11,892.8	110.8	112.1	-136.17	6,259.3	-740.1	1,430.1	1,258.8	171.30	8.348	
17,200.0	10,860.9	18,286.0	11,892.1	112.4	113.6	-136.16	6,359.3	-740.8	1,429.7	1,256.0	173.73	8.230	
17,300.0	10,860.7	18,386.0	11,891.4	114.0	115.2	-136.14	6,459.3	-741.6	1,429.4	1,253.2	176.17	8.114	
17,400.0	10,860.4	18,486.0	11,890.6	115.5	116.7	-136.13	6,559.3	-742.4	1,429.0	1,250.4	178.61	8.001	
17,500.0	10,860.2	18,586.0	11,889.9	117.1	118.3	-136.12	6,659.3	-743.2	1,428.7	1,247.6	181.06	7.891	
17,600.0	10,860.0	18,686.0	11,889.2	118.7	119.8	-136.10	6,759.3	-744.0	1,428.3	1,244.8	183.51	7.783	
17,700.0	10,859.8	18,786.0	11,888.4	120.2	121.4	-136.09	6,859.3	-744.8	1,428.0	1,242.0	185.97	7.679	
17,800.0	10,859.5	18,886.0	11,887.7	121.8	122.9	-136.07	6,959.3	-745.6	1,427.6	1,239.2	188.43	7.576	
17,900.0	10,859.3	18,986.0	11,887.0	123.4	124.5	-136.06	7,059.3	-746.3	1,427.3	1,236.4	190.89	7.477	
18,000.0	10,859.1	19,086.0	11,886.2	124.9	126.0	-136.04	7,159.3	-747.1	1,426.9	1,233.5	193.36	7.379	
18,100.0	10,858.9	19,186.0	11,885.5	126.5	127.6	-136.03	7,259.3	-747.9	1,426.6	1,230.7	195.84	7.284	
18,200.0	10,858.6	19,286.0	11,884.8	128.1	129.2	-136.01	7,359.3	-748.7	1,426.2	1,227.9	198.31	7.192	
18,300.0	10,858.4	19,386.0	11,884.0	129.7	130.7	-136.00	7,459.3	-749.5	1,425.8	1,225.1	200.79	7.101	
18,400.0	10,858.2	19,486.0	11,883.3	131.3	132.3	-135.98	7,559.3	-750.3	1,425.5	1,222.2	203.28	7.012	
18,500.0	10,857.9	19,586.0	11,882.6	132.9	133.9	-135.97	7,659.2	-751.1	1,425.1	1,219.4	205.77	6.926	
18,600.0	10,857.7	19,686.0	11,881.8	134.4	135.4	-135.95	7,759.2	-751.8	1,424.8	1,216.5	208.26	6.841	
18,700.0	10,857.5	19,786.0	11,881.1	136.0	137.0	-135.94	7,859.2	-752.6	1,424.4	1,213.7	210.76	6.759	
18,800.0	10,857.3	19,886.0	11,880.4	137.6	138.6	-135.93	7,959.2	-753.4	1,424.1	1,210.8	213.25	6.678	
18,900.0	10,857.0	19,986.0	11,879.6	139.2	140.2	-135.91	8,059.2	-754.2	1,423.7	1,208.0	215.76	6.599	
19,000.0	10,856.8	20,086.0	11,878.9	140.8	141.7	-135.90	8,159.2	-755.0	1,423.4	1,205.1	218.26	6.521	
19,100.0	10,856.6	20,186.0	11,878.2	142.4	143.3	-135.88	8,259.2	-755.8	1,423.0	1,202.3	220.77	6.446	
19,200.0	10,856.4	20,286.0	11,877.4	144.0	144.9	-135.87	8,359.2	-756.6	1,422.7	1,199.4	223.28	6.372	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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 #131H - 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	10,856.1	20,386.0	11,876.7	145.6	146.5	-135.85	8,459.2	-757.3	1,422.3	1,196.5	225.80	6.299	
19,400.0	10,855.9	20,486.0	11,876.0	147.2	148.1	-135.84	8,559.2	-758.1	1,422.0	1,193.7	228.31	6.228	
19,500.0	10,855.7	20,586.0	11,875.2	148.8	149.7	-135.82	8,659.2	-758.9	1,421.6	1,190.8	230.83	6.159	
19,600.0	10,855.5	20,686.0	11,874.5	150.4	151.3	-135.81	8,759.2	-759.7	1,421.3	1,187.9	233.36	6.091	
19,700.0	10,855.2	20,786.0	11,873.8	152.0	152.9	-135.79	8,859.2	-760.5	1,420.9	1,185.1	235.88	6.024	
19,800.0	10,855.0	20,886.0	11,873.0	153.6	154.5	-135.78	8,959.2	-761.3	1,420.6	1,182.2	238.41	5.959	
19,900.0	10,854.8	20,986.0	11,872.3	155.2	156.0	-135.76	9,059.1	-762.1	1,420.2	1,179.3	240.94	5.895	
20,000.0	10,854.5	21,086.0	11,871.6	156.8	157.6	-135.75	9,159.1	-762.8	1,419.9	1,176.4	243.47	5.832	
20,100.0	10,854.3	21,186.0	11,870.8	158.4	159.2	-135.73	9,259.1	-763.6	1,419.5	1,173.5	246.01	5.770	
20,200.0	10,854.1	21,286.0	11,870.1	160.0	160.8	-135.72	9,359.1	-764.4	1,419.2	1,170.6	248.55	5.710	
20,300.0	10,853.9	21,386.0	11,869.4	161.7	162.4	-135.70	9,459.1	-765.2	1,418.8	1,167.7	251.09	5.651	
20,400.0	10,853.6	21,486.0	11,868.6	163.3	164.0	-135.69	9,559.1	-766.0	1,418.5	1,164.9	253.63	5.593	
20,500.0	10,853.4	21,586.0	11,867.9	164.9	165.6	-135.67	9,659.1	-766.8	1,418.1	1,162.0	256.17	5.536	
20,600.0	10,853.2	21,686.0	11,867.2	166.5	167.2	-135.66	9,759.1	-767.6	1,417.8	1,159.1	258.72	5.480	
20,700.0	10,853.0	21,786.0	11,866.4	168.1	168.8	-135.65	9,859.1	-768.3	1,417.4	1,156.2	261.27	5.425	
20,800.0	10,852.7	21,886.0	11,865.7	169.7	170.5	-135.63	9,959.1	-769.1	1,417.1	1,153.3	263.82	5.371	
20,900.0	10,852.5	21,986.0	11,865.0	171.3	172.1	-135.62	10,059.1	-769.9	1,416.7	1,150.4	266.38	5.319	
21,000.0	10,852.3	22,086.0	11,864.2	172.9	173.7	-135.60	10,159.1	-770.7	1,416.4	1,147.4	268.93	5.267	
21,091.0	10,852.1	22,172.2	11,863.5	174.4	175.1	-135.61	10,245.4	-770.5	1,415.4	1,144.3	271.13	5.220 SF	
21,094.0	10,851.5	22,172.2	11,863.5	174.5	175.1	-135.62	10,245.4	-770.5	1,416.0	1,144.9	271.14	5.222	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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
0.0	0.0	1.0	1.0	0.0	0.0	-90.62	-1.2	-110.1	110.1				
100.0	100.0	101.0	101.0	0.1	0.1	-90.62	-1.2	-110.1	110.1	109.8	0.26	423.653	
200.0	200.0	201.0	201.0	0.5	0.5	-90.62	-1.2	-110.1	110.1	109.1	0.98	112.715	
300.0	300.0	301.0	301.0	0.8	0.8	-90.62	-1.2	-110.1	110.1	108.4	1.69	65.005	
400.0	400.0	401.0	401.0	1.2	1.2	-90.62	-1.2	-110.1	110.1	107.7	2.41	45.673	
500.0	500.0	501.0	501.0	1.6	1.6	-90.62	-1.2	-110.1	110.1	107.0	3.13	35.203	
600.0	600.0	601.0	601.0	1.9	1.9	-90.62	-1.2	-110.1	110.1	106.3	3.84	28.639	
700.0	700.0	701.0	701.0	2.3	2.3	-90.62	-1.2	-110.1	110.1	105.5	4.56	24.137	
800.0	800.0	801.0	801.0	2.6	2.6	-90.62	-1.2	-110.1	110.1	104.8	5.28	20.859	
900.0	900.0	901.0	901.0	3.0	3.0	-90.62	-1.2	-110.1	110.1	104.1	6.00	18.365	
1,000.0	1,000.0	1,001.0	1,001.0	3.4	3.4	-90.62	-1.2	-110.1	110.1	103.4	6.71	16.403	
1,100.0	1,100.0	1,101.0	1,101.0	3.7	3.7	-90.62	-1.2	-110.1	110.1	102.7	7.43	14.820	
1,200.0	1,200.0	1,201.0	1,201.0	4.1	4.1	-90.62	-1.2	-110.1	110.1	102.0	8.15	13.516	
1,300.0	1,300.0	1,301.0	1,301.0	4.4	4.4	147.38	-1.2	-110.1	110.8	102.0	8.85	12.525	
1,400.0	1,400.0	1,401.0	1,401.0	4.8	4.8	148.08	-1.2	-110.1	113.1	103.5	9.54	11.848	
1,500.0	1,499.9	1,500.9	1,500.9	5.1	5.1	149.19	-1.2	-110.1	116.8	106.5	10.24	11.406	
1,600.0	1,599.7	1,602.8	1,602.8	5.4	5.5	150.59	-1.4	-109.2	121.2	110.2	10.93	11.085	
1,700.0	1,699.4	1,704.8	1,704.8	5.8	5.8	152.12	-2.1	-106.5	125.4	113.8	11.62	10.797	
1,800.0	1,798.9	1,806.9	1,806.8	6.1	6.2	153.80	-3.2	-102.1	129.6	117.3	12.31	10.529	
1,900.0	1,898.3	1,909.1	1,908.7	6.5	6.6	155.60	-4.7	-95.9	133.6	120.6	12.99	10.282	
2,000.0	1,997.4	2,011.3	2,010.6	6.9	6.9	157.52	-6.7	-88.0	137.6	123.9	13.69	10.056	
2,100.0	2,096.4	2,113.6	2,112.5	7.2	7.3	159.45	-9.1	-78.2	140.8	126.4	14.38	9.795	
2,200.0	2,195.5	2,216.1	2,214.2	7.6	7.6	161.28	-11.9	-66.7	142.4	127.3	15.07	9.449	
2,300.0	2,294.5	2,318.1	2,315.3	8.0	8.0	163.08	-15.2	-53.5	142.3	126.5	15.76	9.029	
2,400.0	2,393.5	2,418.0	2,414.2	8.4	8.4	164.85	-18.5	-40.0	141.8	125.3	16.47	8.608	
2,500.0	2,492.5	2,517.9	2,513.1	8.8	8.8	166.64	-21.9	-26.5	141.4	124.2	17.18	8.228	
2,600.0	2,591.6	2,617.8	2,612.1	9.2	9.2	168.43	-25.2	-13.0	141.1	123.2	17.89	7.885	
2,700.0	2,690.6	2,717.7	2,711.0	9.6	9.5	170.23	-28.6	0.5	141.0	122.4	18.61	7.575	
2,738.0	2,728.3	2,755.7	2,748.6	9.7	9.7	170.92	-29.8	5.6	141.0	122.1	18.88	7.465	
2,800.0	2,789.6	2,817.6	2,809.9	10.0	9.9	172.03	-31.9	13.9	141.0	121.7	19.33	7.294	
2,900.0	2,888.6	2,917.5	2,908.9	10.4	10.3	173.83	-35.2	27.4	141.1	121.1	20.05	7.039	
3,000.0	2,987.7	3,017.4	3,007.8	10.8	10.7	175.62	-38.6	40.9	141.4	120.7	20.77	6.808	
3,100.0	3,086.7	3,117.3	3,106.7	11.2	11.1	177.41	-41.9	54.4	141.9	120.4	21.50	6.598	
3,200.0	3,185.7	3,217.2	3,205.6	11.6	11.5	179.18	-45.3	67.9	142.4	120.2	22.23	6.406	
3,300.0	3,284.8	3,317.1	3,304.6	12.0	11.9	-179.07	-48.6	81.4	143.1	120.2	22.97	6.232	
3,400.0	3,383.8	3,417.0	3,403.5	12.4	12.3	-177.33	-51.9	94.9	144.0	120.3	23.71	6.073	
3,500.0	3,482.8	3,516.9	3,502.4	12.8	12.7	-175.61	-55.3	108.4	145.0	120.5	24.45	5.927	
3,600.0	3,581.8	3,616.8	3,601.4	13.2	13.1	-173.92	-58.6	121.9	146.0	120.8	25.20	5.795	
3,700.0	3,680.9	3,716.7	3,700.3	13.7	13.5	-172.26	-62.0	135.4	147.3	121.3	25.96	5.674	
3,800.0	3,779.9	3,816.6	3,799.2	14.1	13.9	-170.62	-65.3	148.9	148.6	121.9	26.71	5.563	
3,878.9	3,858.0	3,904.6	3,877.3	14.4	14.3	-169.36	-67.9	159.6	149.8	122.4	27.35	5.476	
3,900.0	3,878.9	3,916.5	3,898.2	14.5	14.3	-169.02	-68.6	162.4	150.0	122.5	27.48	5.460	
4,000.0	3,978.2	4,016.4	3,997.1	14.9	14.8	-167.29	-72.0	175.9	149.8	121.5	28.25	5.303	
4,100.0	4,077.7	4,116.2	4,095.9	15.3	15.2	-165.29	-75.3	189.4	147.2	118.1	29.02	5.071	
4,200.0	4,177.5	4,215.9	4,194.7	15.6	15.6	-162.92	-78.7	202.9	142.2	112.4	29.81	4.771	
4,300.0	4,277.4	4,315.4	4,293.2	16.0	16.0	-159.99	-82.0	216.3	135.0	104.4	30.61	4.412	
4,400.0	4,377.4	4,414.6	4,391.4	16.3	16.4	-156.27	-85.3	229.7	125.9	94.4	31.43	4.005	
4,412.2	4,389.6	4,426.7	4,403.4	16.4	16.4	-33.50	-85.7	231.3	124.6	93.1	31.53	3.952	
4,500.0	4,477.4	4,513.7	4,489.5	16.7	16.8	-29.44	-88.6	243.1	115.9	83.6	32.28	3.590	
4,600.0	4,577.4	4,612.7	4,587.6	17.0	17.2	-24.03	-91.9	256.5	106.8	73.6	33.17	3.219	
4,700.0	4,677.4	4,711.7	4,685.6	17.3	17.6	-17.69	-95.2	269.8	98.8	64.7	34.09	2.897	
4,800.0	4,777.4	4,810.7	4,783.7	17.6	18.0	-10.36	-98.5	283.2	92.2	57.1	35.05	2.630	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
4,900.0	4,877.4	4,909.8	4,881.8	18.0	18.4	-2.09	-101.9	296.6	87.3	51.3	36.02	2.425	
5,000.0	4,977.4	5,008.8	4,979.8	18.3	18.8	6.93	-105.2	310.0	84.5	47.6	36.95	2.288	
5,074.4	5,051.8	5,082.5	5,052.8	18.5	19.1	13.90	-107.6	319.9	83.9	46.3	37.60	2.232 CC	
5,100.0	5,077.4	5,107.8	5,077.9	18.6	19.3	16.31	-108.5	323.4	84.0	46.2	37.80	2.221 ES, SF	
5,200.0	5,177.4	5,206.8	5,176.0	19.0	19.7	25.56	-111.8	336.7	85.7	47.1	38.56	2.223	
5,300.0	5,277.4	5,305.9	5,274.0	19.3	20.1	34.23	-115.1	350.1	89.6	50.4	39.21	2.284	
5,400.0	5,377.4	5,404.9	5,372.1	19.6	20.5	42.04	-118.4	363.5	95.4	55.6	39.80	2.396	
5,500.0	5,477.4	5,503.9	5,470.1	20.0	20.9	48.86	-121.7	376.9	102.7	62.4	40.35	2.545	
5,600.0	5,577.4	5,602.9	5,568.2	20.3	21.3	54.70	-125.0	390.2	111.3	70.4	40.89	2.722	
5,700.0	5,677.4	5,702.0	5,666.3	20.6	21.7	59.68	-128.3	403.6	120.9	79.5	41.43	2.918	
5,800.0	5,777.4	5,801.0	5,764.3	21.0	22.1	63.90	-131.7	417.0	131.3	89.3	42.00	3.126	
5,900.0	5,877.4	5,900.0	5,862.4	21.3	22.5	67.50	-135.0	430.4	142.3	99.7	42.58	3.342	
6,000.0	5,977.4	6,000.9	5,960.5	21.6	23.0	70.57	-138.3	443.8	153.7	110.5	43.18	3.560	
6,100.0	6,077.4	6,101.9	6,058.5	22.0	23.4	73.21	-141.6	457.1	165.6	121.8	43.80	3.780	
6,200.0	6,177.4	6,202.9	6,156.6	22.3	23.8	75.49	-144.9	470.5	177.7	133.3	44.44	3.999	
6,300.0	6,277.4	6,303.9	6,254.6	22.6	24.2	77.49	-148.2	483.9	190.1	145.0	45.08	4.216	
6,400.0	6,377.4	6,404.8	6,352.7	23.0	24.7	79.23	-151.5	497.3	202.7	156.9	45.74	4.431	
6,500.0	6,477.4	6,505.8	6,450.8	23.3	25.1	80.78	-154.8	510.6	215.4	169.0	46.41	4.642	
6,600.0	6,577.4	6,593.2	6,548.8	23.7	25.4	82.15	-158.1	524.0	228.3	181.3	47.03	4.855	
6,700.0	6,677.4	6,707.8	6,646.9	24.0	25.9	83.37	-161.5	537.4	241.3	193.5	47.76	5.053	
6,800.0	6,777.4	6,808.7	6,745.0	24.3	26.3	84.47	-164.8	550.8	254.4	205.9	48.44	5.252	
6,900.0	6,877.4	6,909.7	6,843.0	24.7	26.8	85.46	-168.1	564.2	267.6	218.4	49.13	5.446	
7,000.0	6,977.4	6,989.3	6,941.1	25.0	27.1	86.36	-171.4	577.5	280.8	231.1	49.74	5.646	
7,100.0	7,077.4	7,088.3	7,039.2	25.4	27.5	87.17	-174.7	590.9	294.1	243.7	50.43	5.833	
7,200.0	7,177.4	7,192.1	7,141.9	25.7	28.0	87.93	-178.1	604.5	307.1	255.9	51.18	6.000	
7,300.0	7,277.4	7,300.0	7,249.2	26.1	28.4	88.52	-180.9	615.9	317.6	265.6	51.95	6.114	
7,400.0	7,377.4	7,408.5	7,357.3	26.4	28.8	88.93	-183.0	624.5	325.4	272.7	52.69	6.177	
7,500.0	7,477.4	7,517.4	7,466.1	26.8	29.2	89.19	-184.4	630.1	330.5	277.1	53.39	6.191	
7,600.0	7,577.4	7,626.5	7,575.2	27.1	29.6	89.30	-185.0	632.6	332.9	278.8	54.06	6.158	
7,700.0	7,677.4	7,729.7	7,678.4	27.4	29.9	89.31	-185.1	632.8	333.1	278.3	54.72	6.087	
7,800.0	7,777.4	7,829.7	7,778.4	27.8	30.2	89.31	-185.1	632.8	333.1	277.7	55.40	6.012	
7,900.0	7,877.4	7,929.7	7,878.4	28.1	30.5	89.31	-185.1	632.8	333.1	277.0	56.09	5.938	
8,000.0	7,977.4	8,029.7	7,978.4	28.5	30.8	89.31	-185.1	632.8	333.1	276.3	56.77	5.867	
8,100.0	8,077.4	8,129.7	8,078.4	28.8	31.1	89.31	-185.1	632.8	333.1	275.6	57.46	5.797	
8,200.0	8,177.4	8,229.7	8,178.4	29.2	31.5	89.31	-185.1	632.8	333.1	274.9	58.14	5.728	
8,300.0	8,277.4	8,329.7	8,278.4	29.5	31.8	89.31	-185.1	632.8	333.1	274.2	58.83	5.662	
8,400.0	8,377.4	8,429.7	8,378.4	29.9	32.1	89.31	-185.1	632.8	333.1	273.5	59.52	5.596	
8,500.0	8,477.4	8,529.7	8,478.4	30.2	32.4	89.31	-185.1	632.8	333.1	272.9	60.20	5.532	
8,600.0	8,577.4	8,629.7	8,578.4	30.6	32.7	89.31	-185.1	632.8	333.1	272.2	60.89	5.470	
8,700.0	8,677.4	8,729.7	8,678.4	30.9	33.1	89.31	-185.1	632.8	333.1	271.5	61.58	5.408	
8,800.0	8,777.4	8,829.7	8,778.4	31.3	33.4	89.31	-185.1	632.8	333.1	270.8	62.27	5.348	
8,900.0	8,877.4	8,929.7	8,878.4	31.6	33.7	89.31	-185.1	632.8	333.1	270.1	62.96	5.290	
9,000.0	8,977.4	9,029.7	8,978.4	32.0	34.0	89.31	-185.1	632.8	333.1	269.4	63.65	5.232	
9,100.0	9,077.4	9,129.7	9,078.4	32.3	34.4	89.31	-185.1	632.8	333.1	268.7	64.35	5.176	
9,200.0	9,177.4	9,229.7	9,178.4	32.7	34.7	89.31	-185.1	632.8	333.1	268.0	65.04	5.121	
9,300.0	9,277.4	9,329.7	9,278.4	33.0	35.0	89.31	-185.1	632.8	333.1	267.3	65.73	5.067	
9,400.0	9,377.4	9,429.7	9,378.4	33.4	35.3	89.31	-185.1	632.8	333.1	266.6	66.42	5.014	
9,500.0	9,477.4	9,529.7	9,478.4	33.7	35.7	89.31	-185.1	632.8	333.1	265.9	67.12	4.962	
9,600.0	9,577.4	9,629.7	9,578.4	34.1	36.0	89.31	-185.1	632.8	333.1	265.2	67.81	4.912	
9,700.0	9,677.4	9,729.7	9,678.4	34.4	36.3	89.31	-185.1	632.8	333.1	264.6	68.51	4.862	
9,800.0	9,777.4	9,829.7	9,778.4	34.8	36.6	89.31	-185.1	632.8	333.1	263.9	69.20	4.813	
9,900.0	9,877.4	9,929.7	9,878.4	35.1	37.0	89.31	-185.1	632.8	333.1	263.2	69.90	4.765	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	9,977.4	10,029.7	9,978.4	35.5	37.3	89.31	-185.1	632.8	333.1	262.5	70.59	4.718	
10,100.0	10,077.4	10,129.7	10,078.4	35.8	37.6	89.31	-185.1	632.8	333.1	261.8	71.29	4.672	
10,200.0	10,177.4	10,229.7	10,178.4	36.2	38.0	89.31	-185.1	632.8	333.1	261.1	71.99	4.627	
10,300.0	10,277.4	10,329.7	10,278.4	36.5	38.3	89.31	-185.1	632.8	333.1	260.4	72.68	4.582	
10,324.1	10,301.5	10,353.8	10,302.5	36.6	38.4	89.31	-185.1	632.8	333.1	260.2	72.85	4.572	
10,350.0	10,327.4	10,379.7	10,328.4	36.7	38.5	89.85	-185.1	632.8	333.1	260.0	73.03	4.561	
10,364.9	10,342.2	10,405.4	10,343.2	36.7	38.5	90.00	-185.1	632.8	333.1	259.9	73.16	4.552	
10,400.0	10,377.2	10,429.5	10,378.2	36.9	38.6	90.61	-185.1	632.8	333.1	259.7	73.35	4.541	
10,450.0	10,426.4	10,478.7	10,427.4	37.0	38.8	92.07	-185.1	632.8	333.3	259.6	73.65	4.525	
10,500.0	10,474.6	10,527.0	10,475.6	37.2	39.0	94.15	-185.1	632.8	334.0	260.1	73.93	4.518	
10,550.0	10,521.6	10,573.9	10,522.6	37.3	39.1	96.72	-185.1	632.8	335.8	261.6	74.19	4.526	
10,600.0	10,566.8	10,619.2	10,567.8	37.5	39.3	99.62	-185.1	632.8	339.1	264.6	74.45	4.555	
10,650.0	10,610.1	10,662.4	10,611.1	37.6	39.4	102.66	-185.1	632.8	344.7	270.0	74.71	4.614	
10,700.0	10,651.0	10,703.3	10,652.0	37.7	39.5	105.62	-185.1	632.8	353.2	278.2	74.99	4.710	
10,750.0	10,689.2	10,741.6	10,690.2	37.8	39.7	108.31	-185.1	632.8	365.1	289.9	75.29	4.850	
10,800.0	10,724.5	10,776.9	10,725.5	37.9	39.8	110.55	-185.1	632.8	381.0	305.4	75.61	5.039	
10,850.0	10,756.6	10,808.9	10,757.6	37.9	39.9	112.17	-185.1	632.8	401.1	325.1	75.94	5.281	
10,900.0	10,785.2	10,837.5	10,786.2	38.0	40.0	113.05	-185.1	632.8	425.3	349.0	76.27	5.576	
10,950.0	10,810.1	10,862.5	10,811.1	38.0	40.1	113.04	-185.1	632.8	453.5	376.9	76.59	5.921	
11,000.0	10,831.2	10,883.5	10,832.2	38.1	40.1	112.01	-185.1	632.8	485.4	408.5	76.88	6.314	
11,050.0	10,848.2	10,900.6	10,849.2	38.3	40.2	109.77	-185.1	632.8	520.6	443.4	77.14	6.748	
11,100.0	10,861.1	10,913.4	10,862.1	38.4	40.2	106.14	-185.1	632.8	558.5	481.2	77.36	7.220	
11,150.0	10,869.7	10,922.0	10,870.7	38.5	40.3	100.91	-185.1	632.8	598.8	521.2	77.55	7.721	
11,200.0	10,874.0	10,926.3	10,875.0	38.7	40.3	93.96	-185.1	632.8	640.8	563.1	77.70	8.247	
11,225.4	10,874.5	10,926.8	10,875.5	38.8	40.3	89.78	-185.1	632.8	662.6	584.8	77.76	8.521	
11,287.1	10,874.3	10,926.7	10,875.3	39.0	40.3	89.75	-185.1	632.8	716.6	638.7	77.89	9.200	
11,300.0	10,874.3	10,926.6	10,875.3	39.0	40.3	89.75	-185.1	632.8	728.0	650.1	77.92	9.344	
11,400.0	10,874.1	10,926.4	10,875.1	39.4	40.3	89.71	-185.1	632.8	818.2	740.2	78.09	10.478	
11,500.0	10,873.8	10,926.2	10,874.8	39.8	40.3	89.67	-185.1	632.8	910.5	832.3	78.23	11.638	
11,600.0	10,873.6	10,926.0	10,874.6	40.3	40.3	89.63	-185.1	632.8	1,004.2	925.9	78.35	12.817	
11,700.0	10,873.4	10,925.7	10,874.4	40.9	40.3	89.59	-185.1	632.8	1,099.1	1,020.6	78.45	14.010	
11,800.0	10,873.2	12,903.9	11,941.7	41.5	46.0	162.69	968.4	623.6	1,118.2	1,077.9	40.28	27.762	
11,900.0	10,872.9	13,003.9	11,941.2	42.2	46.6	162.69	1,068.4	622.8	1,117.9	1,076.8	41.08	27.216	
12,000.0	10,872.7	13,103.9	11,940.6	42.9	47.3	162.69	1,168.4	621.9	1,117.6	1,075.6	41.93	26.652	
12,100.0	10,872.5	13,203.9	11,940.1	43.7	48.0	162.68	1,268.3	621.1	1,117.2	1,074.4	42.85	26.074	
12,200.0	10,872.2	13,303.9	11,939.5	44.6	48.7	162.68	1,368.3	620.3	1,116.9	1,073.1	43.82	25.489	
12,300.0	10,872.0	13,403.9	11,938.9	45.4	49.6	162.68	1,468.3	619.5	1,116.6	1,071.7	44.84	24.902	
12,400.0	10,871.8	13,503.9	11,938.4	46.3	50.4	162.67	1,568.3	618.7	1,116.3	1,070.3	45.91	24.315	
12,500.0	10,871.6	13,603.9	11,937.8	47.3	51.3	162.67	1,668.3	617.9	1,115.9	1,068.9	47.02	23.733	
12,600.0	10,871.3	13,703.9	11,937.3	48.3	52.2	162.67	1,768.3	617.1	1,115.6	1,067.4	48.17	23.158	
12,700.0	10,871.1	13,803.9	11,936.7	49.3	53.2	162.66	1,868.3	616.3	1,115.3	1,065.9	49.37	22.592	
12,800.0	10,870.9	13,903.9	11,936.1	50.4	54.2	162.66	1,968.3	615.5	1,114.9	1,064.4	50.59	22.038	
12,900.0	10,870.7	14,003.9	11,935.6	51.5	55.2	162.66	2,068.3	614.7	1,114.6	1,062.8	51.85	21.496	
13,000.0	10,870.4	14,103.9	11,935.0	52.6	56.2	162.65	2,168.3	613.9	1,114.3	1,061.2	53.14	20.967	
13,100.0	10,870.2	14,203.9	11,934.5	53.8	57.3	162.65	2,268.3	613.1	1,114.0	1,059.5	54.46	20.453	
13,200.0	10,870.0	14,303.9	11,933.9	54.9	58.4	162.65	2,368.3	612.3	1,113.6	1,057.8	55.81	19.954	
13,300.0	10,869.7	14,403.9	11,933.3	56.1	59.6	162.64	2,468.3	611.5	1,113.3	1,056.1	57.18	19.469	
13,400.0	10,869.5	14,503.9	11,932.8	57.4	60.7	162.64	2,568.3	610.7	1,113.0	1,054.4	58.58	19.000	
13,500.0	10,869.3	14,603.9	11,932.2	58.6	61.9	162.64	2,668.3	609.9	1,112.7	1,052.7	59.99	18.547	
13,600.0	10,869.1	14,703.9	11,931.7	59.9	63.1	162.63	2,768.3	609.1	1,112.3	1,050.9	61.43	18.108	
13,700.0	10,868.8	14,803.9	11,931.1	61.1	64.3	162.63	2,868.3	608.3	1,112.0	1,049.1	62.88	17.684	
13,800.0	10,868.6	14,903.9	11,930.6	62.4	65.6	162.63	2,968.3	607.5	1,111.7	1,047.3	64.35	17.274	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,868.4	15,003.9	11,930.0	63.8	66.8	162.62	3,068.3	606.7	1,111.4	1,045.5	65.84	16.879	
14,000.0	10,868.2	15,103.9	11,929.4	65.1	68.1	162.62	3,168.2	605.9	1,111.0	1,043.7	67.34	16.498	
14,100.0	10,867.9	15,203.9	11,928.9	66.4	69.4	162.62	3,268.2	605.1	1,110.7	1,041.8	68.86	16.129	
14,200.0	10,867.7	15,303.9	11,928.3	67.8	70.7	162.61	3,368.2	604.3	1,110.4	1,040.0	70.39	15.774	
14,300.0	10,867.5	15,403.9	11,927.8	69.2	72.0	162.61	3,468.2	603.5	1,110.0	1,038.1	71.94	15.431	
14,400.0	10,867.3	15,503.9	11,927.2	70.6	73.4	162.61	3,568.2	602.7	1,109.7	1,036.2	73.49	15.100	
14,500.0	10,867.0	15,603.9	11,926.6	72.0	74.7	162.60	3,668.2	601.9	1,109.4	1,034.3	75.06	14.781	
14,600.0	10,866.8	15,703.9	11,926.1	73.4	76.1	162.60	3,768.2	601.1	1,109.1	1,032.4	76.63	14.473	
14,700.0	10,866.6	15,803.9	11,925.5	74.8	77.5	162.60	3,868.2	600.3	1,108.7	1,030.5	78.22	14.175	
14,800.0	10,866.3	15,903.9	11,925.0	76.2	78.9	162.59	3,968.2	599.5	1,108.4	1,028.6	79.81	13.888	
14,900.0	10,866.1	16,003.9	11,924.4	77.7	80.2	162.59	4,068.2	598.7	1,108.1	1,026.7	81.41	13.610	
15,000.0	10,865.9	16,103.9	11,923.9	79.1	81.6	162.59	4,168.2	597.9	1,107.8	1,024.7	83.03	13.342	
15,100.0	10,865.7	16,203.9	11,923.3	80.6	83.1	162.58	4,268.2	597.1	1,107.4	1,022.8	84.65	13.083	
15,200.0	10,865.4	16,303.9	11,922.7	82.0	84.5	162.58	4,368.2	596.3	1,107.1	1,020.8	86.27	12.833	
15,300.0	10,865.2	16,403.9	11,922.2	83.5	85.9	162.57	4,468.2	595.5	1,106.8	1,018.9	87.90	12.591	
15,400.0	10,865.0	16,503.8	11,921.6	85.0	87.3	162.57	4,568.2	594.7	1,106.4	1,016.9	89.54	12.356	
15,500.0	10,864.8	16,603.8	11,921.1	86.4	88.8	162.57	4,668.2	593.8	1,106.1	1,014.9	91.19	12.130	
15,600.0	10,864.5	16,703.8	11,920.5	87.9	90.2	162.56	4,768.2	593.0	1,105.8	1,013.0	92.84	11.911	
15,700.0	10,864.3	16,803.8	11,919.9	89.4	91.7	162.56	4,868.2	592.2	1,105.5	1,011.0	94.50	11.698	
15,800.0	10,864.1	16,903.8	11,919.4	90.9	93.2	162.56	4,968.1	591.4	1,105.1	1,009.0	96.16	11.493	
15,900.0	10,863.8	17,003.8	11,918.8	92.4	94.6	162.55	5,068.1	590.6	1,104.8	1,007.0	97.83	11.293	
16,000.0	10,863.6	17,103.8	11,918.3	94.0	96.1	162.55	5,168.1	589.8	1,104.5	1,005.0	99.50	11.100	
16,100.0	10,863.4	17,203.8	11,917.7	95.5	97.6	162.55	5,268.1	589.0	1,104.2	1,003.0	101.18	10.913	
16,200.0	10,863.2	17,303.8	11,917.2	97.0	99.1	162.54	5,368.1	588.2	1,103.8	1,001.0	102.86	10.732	
16,300.0	10,862.9	17,403.8	11,916.6	98.5	100.6	162.54	5,468.1	587.4	1,103.5	999.0	104.54	10.555	
16,400.0	10,862.7	17,503.8	11,916.0	100.0	102.1	162.54	5,568.1	586.6	1,103.2	996.9	106.23	10.385	
16,500.0	10,862.5	17,603.8	11,915.5	101.6	103.6	162.53	5,668.1	585.8	1,102.9	994.9	107.93	10.219	
16,600.0	10,862.3	17,703.8	11,914.9	103.1	105.1	162.53	5,768.1	585.0	1,102.5	992.9	109.62	10.057	
16,700.0	10,862.0	17,803.8	11,914.4	104.7	106.6	162.53	5,868.1	584.2	1,102.2	990.9	111.32	9.901	
16,800.0	10,861.8	17,903.8	11,913.8	106.2	108.1	162.52	5,968.1	583.4	1,101.9	988.8	113.03	9.749	
16,900.0	10,861.6	18,003.8	11,913.2	107.7	109.7	162.52	6,068.1	582.6	1,101.5	986.8	114.73	9.601	
17,000.0	10,861.4	18,103.8	11,912.7	109.3	111.2	162.52	6,168.1	581.8	1,101.2	984.8	116.44	9.457	
17,100.0	10,861.1	18,203.8	11,912.1	110.8	112.7	162.51	6,268.1	581.0	1,100.9	982.7	118.15	9.317	
17,200.0	10,860.9	18,303.8	11,911.6	112.4	114.3	162.51	6,368.1	580.2	1,100.6	980.7	119.87	9.181	
17,300.0	10,860.7	18,403.8	11,911.0	114.0	115.8	162.51	6,468.1	579.4	1,100.2	978.7	121.59	9.049	
17,400.0	10,860.4	18,503.8	11,910.5	115.5	117.3	162.50	6,568.1	578.6	1,099.9	976.6	123.31	8.920	
17,500.0	10,860.2	18,603.8	11,909.9	117.1	118.9	162.50	6,668.1	577.8	1,099.6	974.6	125.03	8.795	
17,600.0	10,860.0	18,703.8	11,909.3	118.7	120.4	162.50	6,768.1	577.0	1,099.3	972.5	126.76	8.672	
17,700.0	10,859.8	18,803.8	11,908.8	120.2	122.0	162.49	6,868.0	576.2	1,098.9	970.5	128.48	8.553	
17,800.0	10,859.5	18,903.8	11,908.2	121.8	123.5	162.49	6,968.0	575.4	1,098.6	968.4	130.21	8.437	
17,900.0	10,859.3	19,003.8	11,907.7	123.4	125.1	162.49	7,068.0	574.6	1,098.3	966.3	131.94	8.324	
18,000.0	10,859.1	19,103.8	11,907.1	124.9	126.6	162.48	7,168.0	573.8	1,098.0	964.3	133.68	8.213	
18,100.0	10,858.9	19,203.8	11,906.5	126.5	128.2	162.48	7,268.0	573.0	1,097.6	962.2	135.41	8.106	
18,200.0	10,858.6	19,303.8	11,906.0	128.1	129.8	162.47	7,368.0	572.2	1,097.3	960.1	137.15	8.001	
18,300.0	10,858.4	19,403.8	11,905.4	129.7	131.3	162.47	7,468.0	571.4	1,097.0	958.1	138.89	7.898	
18,400.0	10,858.2	19,503.8	11,904.9	131.3	132.9	162.47	7,568.0	570.6	1,096.6	956.0	140.63	7.798	
18,500.0	10,857.9	19,603.8	11,904.3	132.9	134.5	162.46	7,668.0	569.8	1,096.3	953.9	142.38	7.700	
18,600.0	10,857.7	19,703.8	11,903.7	134.4	136.0	162.46	7,768.0	569.0	1,096.0	951.9	144.12	7.605	
18,700.0	10,857.5	19,803.8	11,903.2	136.0	137.6	162.46	7,868.0	568.2	1,095.7	949.8	145.87	7.511	
18,800.0	10,857.3	19,903.8	11,902.6	137.6	139.2	162.45	7,968.0	567.4	1,095.3	947.7	147.62	7.420	
18,900.0	10,857.0	20,003.8	11,902.1	139.2	140.7	162.45	8,068.0	566.6	1,095.0	945.6	149.36	7.331	
19,000.0	10,856.8	20,103.8	11,901.5	140.8	142.3	162.45	8,168.0	565.7	1,094.7	943.6	151.12	7.244	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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 #132H - 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
19,100.0	10,856.6	20,203.8	11,901.0	142.4	143.9	162.44	8,268.0	564.9	1,094.4	941.5	152.87	7.159	
19,200.0	10,856.4	20,303.8	11,900.4	144.0	145.5	162.44	8,368.0	564.1	1,094.0	939.4	154.62	7.076	
19,300.0	10,856.1	20,403.8	11,899.8	145.6	147.1	162.44	8,468.0	563.3	1,093.7	937.3	156.38	6.994	
19,400.0	10,855.9	20,503.8	11,899.3	147.2	148.7	162.43	8,568.0	562.5	1,093.4	935.2	158.13	6.914	
19,500.0	10,855.7	20,603.8	11,898.7	148.8	150.2	162.43	8,668.0	561.7	1,093.1	933.2	159.89	6.836	
19,600.0	10,855.5	20,703.8	11,898.2	150.4	151.8	162.43	8,767.9	560.9	1,092.7	931.1	161.65	6.760	
19,700.0	10,855.2	20,803.8	11,897.6	152.0	153.4	162.42	8,867.9	560.1	1,092.4	929.0	163.41	6.685	
19,800.0	10,855.0	20,903.8	11,897.0	153.6	155.0	162.42	8,967.9	559.3	1,092.1	926.9	165.17	6.612	
19,900.0	10,854.8	21,003.8	11,896.5	155.2	156.6	162.42	9,067.9	558.5	1,091.7	924.8	166.93	6.540	
20,000.0	10,854.5	21,103.8	11,895.9	156.8	158.2	162.41	9,167.9	557.7	1,091.4	922.7	168.70	6.470	
20,100.0	10,854.3	21,203.8	11,895.4	158.4	159.8	162.41	9,267.9	556.9	1,091.1	920.6	170.46	6.401	
20,200.0	10,854.1	21,303.8	11,894.8	160.0	161.4	162.41	9,367.9	556.1	1,090.8	918.5	172.23	6.333	
20,300.0	10,853.9	21,403.8	11,894.3	161.7	163.0	162.40	9,467.9	555.3	1,090.4	916.4	173.99	6.267	
20,400.0	10,853.6	21,503.8	11,893.7	163.3	164.6	162.40	9,567.9	554.5	1,090.1	914.4	175.76	6.202	
20,500.0	10,853.4	21,603.8	11,893.1	164.9	166.2	162.39	9,667.9	553.7	1,089.8	912.3	177.53	6.139	
20,600.0	10,853.2	21,703.8	11,892.6	166.5	167.8	162.39	9,767.9	552.9	1,089.5	910.2	179.30	6.076	
20,700.0	10,853.0	21,803.8	11,892.0	168.1	169.4	162.39	9,867.9	552.1	1,089.1	908.1	181.07	6.015	
20,800.0	10,852.7	21,903.8	11,891.5	169.7	171.0	162.38	9,967.9	551.3	1,088.8	906.0	182.84	5.955	
20,900.0	10,852.5	22,003.8	11,890.9	171.3	172.6	162.38	10,067.9	550.5	1,088.5	903.9	184.61	5.896	
21,000.0	10,852.3	22,103.8	11,890.3	172.9	174.2	162.38	10,167.9	549.7	1,088.2	901.8	186.39	5.838	
21,006.2	10,852.3	22,110.0	11,890.3	173.0	174.3	162.38	10,174.0	549.6	1,088.1	901.6	186.50	5.835	
21,094.0	10,851.5	22,190.6	11,890.5	174.5	175.6	162.41	10,254.7	549.0	1,088.9	901.0	187.92	5.795	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	89.35	25.8	2,263.2	2,263.3				
100.0	100.0	100.0	100.0	0.1	0.1	89.35	25.8	2,263.2	2,263.3	2,263.0	0.26	8,830.407	
200.0	200.0	200.0	200.0	0.5	0.5	89.35	25.8	2,263.2	2,263.3	2,262.3	0.97	2,325.505	
300.0	300.0	300.0	300.0	0.8	0.8	89.35	25.8	2,263.2	2,263.3	2,261.6	1.69	1,339.077	
400.0	400.0	400.0	400.0	1.2	1.2	89.35	25.8	2,263.2	2,263.3	2,260.9	2.41	940.246	
500.0	500.0	500.0	500.0	1.6	1.6	89.35	25.8	2,263.2	2,263.3	2,260.2	3.12	724.469	
600.0	600.0	600.0	600.0	1.9	1.9	89.35	25.8	2,263.2	2,263.3	2,259.5	3.84	589.244	
700.0	700.0	700.0	700.0	2.3	2.3	89.35	25.8	2,263.2	2,263.3	2,258.7	4.56	496.559	
800.0	800.0	800.0	800.0	2.6	2.6	89.35	25.8	2,263.2	2,263.3	2,258.0	5.27	429.069	
900.0	900.0	900.0	900.0	3.0	3.0	89.35	25.8	2,263.2	2,263.3	2,257.3	5.99	377.730	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	89.35	25.8	2,263.2	2,263.3	2,256.6	6.71	337.363	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	89.35	25.8	2,263.2	2,263.3	2,255.9	7.43	304.791	
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	89.35	25.8	2,263.2	2,263.3	2,255.2	8.14	277.955	
1,300.0	1,300.0	1,300.0	1,300.0	4.4	4.4	-32.91	25.8	2,263.2	2,262.6	2,253.7	8.85	255.775	
1,400.0	1,400.0	1,400.0	1,400.0	4.8	4.8	-32.96	25.8	2,263.2	2,260.4	2,250.8	9.54	236.966	
1,500.0	1,499.9	1,499.9	1,499.9	5.1	5.1	-33.04	25.8	2,263.2	2,256.7	2,246.5	10.23	220.500	
1,600.0	1,599.7	1,649.8	1,649.8	5.4	5.7	-33.17	24.7	2,261.5	2,250.5	2,239.4	11.09	203.019	
1,700.0	1,699.4	1,799.2	1,799.1	5.8	6.2	-33.31	21.6	2,256.6	2,240.6	2,228.7	11.92	187.920	
1,800.0	1,798.9	1,947.6	1,947.2	6.1	6.7	-33.46	16.4	2,248.4	2,227.0	2,214.3	12.76	174.518	
1,900.0	1,898.3	2,094.8	2,093.7	6.5	7.2	-33.62	9.2	2,237.1	2,209.9	2,196.3	13.60	162.542	
2,000.0	1,997.4	2,240.3	2,238.2	6.9	7.7	-33.78	0.2	2,222.8	2,189.2	2,174.7	14.43	151.743	
2,100.0	2,096.4	2,357.0	2,353.8	7.2	8.1	-33.80	-8.4	2,209.4	2,166.0	2,150.8	15.18	142.730	
2,200.0	2,195.5	2,454.2	2,450.1	7.6	8.5	-33.81	-15.6	2,197.9	2,142.6	2,126.7	15.87	134.987	
2,300.0	2,294.5	2,551.4	2,546.4	8.0	8.9	-33.83	-22.9	2,186.5	2,119.3	2,102.7	16.58	127.855	
2,400.0	2,393.5	2,648.7	2,642.7	8.4	9.2	-33.84	-30.1	2,175.1	2,095.9	2,078.6	17.28	121.270	
2,500.0	2,492.5	2,745.9	2,739.0	8.8	9.6	-33.86	-37.3	2,163.7	2,072.6	2,054.6	17.99	115.176	
2,600.0	2,591.6	2,843.1	2,835.3	9.2	10.0	-33.87	-44.6	2,152.2	2,049.2	2,030.5	18.71	109.524	
2,700.0	2,690.6	2,940.4	2,931.5	9.6	10.4	-33.89	-51.8	2,140.8	2,025.8	2,006.4	19.43	104.272	
2,800.0	2,789.6	3,037.6	3,027.8	10.0	10.8	-33.90	-59.1	2,129.4	2,002.5	1,982.3	20.15	99.379	
2,900.0	2,888.6	3,134.8	3,124.1	10.4	11.1	-33.92	-66.3	2,117.9	1,979.1	1,958.3	20.87	94.813	
3,000.0	2,987.7	3,232.1	3,220.4	10.8	11.5	-33.93	-73.6	2,106.5	1,955.8	1,934.2	21.60	90.543	
3,100.0	3,086.7	3,329.3	3,316.7	11.2	11.9	-33.95	-80.8	2,095.1	1,932.4	1,910.1	22.33	86.543	
3,200.0	3,185.7	3,426.5	3,413.0	11.6	12.3	-33.97	-88.1	2,083.7	1,909.1	1,886.0	23.06	82.788	
3,300.0	3,284.8	3,523.8	3,509.3	12.0	12.7	-33.98	-95.3	2,072.2	1,885.7	1,861.9	23.79	79.259	
3,400.0	3,383.8	3,621.0	3,605.6	12.4	13.1	-34.00	-102.6	2,060.8	1,862.4	1,837.8	24.53	75.935	
3,500.0	3,482.8	3,718.2	3,701.8	12.8	13.5	-34.02	-109.8	2,049.4	1,839.0	1,813.7	25.26	72.800	
3,600.0	3,581.8	3,815.5	3,798.1	13.2	13.9	-34.04	-117.1	2,037.9	1,815.6	1,789.7	26.00	69.839	
3,700.0	3,680.9	3,912.7	3,894.4	13.7	14.3	-34.06	-124.3	2,026.5	1,792.3	1,765.6	26.74	67.038	
3,800.0	3,779.9	4,009.9	3,990.7	14.1	14.7	-34.08	-131.6	2,015.1	1,768.9	1,741.5	27.47	64.385	
3,878.9	3,858.0	4,086.7	4,066.7	14.4	15.0	-34.09	-137.3	2,006.1	1,750.5	1,722.5	28.06	62.389	
3,900.0	3,878.9	4,107.2	4,087.0	14.5	15.1	-34.05	-138.8	2,003.7	1,745.6	1,717.4	28.21	61.871	
4,000.0	3,978.2	4,204.8	4,183.6	14.9	15.5	-33.85	-146.1	1,992.2	1,723.8	1,694.8	28.95	59.540	
4,100.0	4,077.7	4,294.5	4,272.5	15.3	15.8	-33.63	-152.7	1,981.7	1,704.1	1,674.5	29.67	57.434	
4,200.0	4,177.5	4,366.0	4,343.5	15.6	16.1	-33.42	-157.5	1,974.2	1,687.8	1,657.5	30.35	55.616	
4,300.0	4,277.4	4,438.1	4,415.1	16.0	16.4	-33.24	-161.6	1,967.8	1,675.3	1,644.3	31.01	54.019	
4,400.0	4,377.4	4,510.5	4,487.3	16.3	16.7	-33.08	-164.9	1,962.5	1,666.5	1,634.8	31.66	52.630	
4,412.2	4,389.6	4,519.4	4,496.2	16.4	16.7	89.18	-165.3	1,961.9	1,665.7	1,633.9	31.74	52.477	
4,500.0	4,477.4	4,583.3	4,559.9	16.7	17.0	89.26	-167.6	1,958.3	1,660.7	1,628.4	32.29	51.433	
4,600.0	4,577.4	4,656.2	4,632.7	17.0	17.2	89.32	-169.5	1,955.3	1,656.5	1,623.6	32.90	50.346	
4,700.0	4,677.4	4,729.3	4,705.7	17.3	17.5	89.36	-170.7	1,953.4	1,654.0	1,620.5	33.51	49.365	
4,800.0	4,777.4	4,811.6	4,777.4	17.6	17.8	89.38	-171.1	1,952.8	1,653.1	1,619.0	34.13	48.441	
4,900.0	4,877.4	4,900.9	4,877.4	18.0	18.0	89.38	-171.1	1,952.8	1,653.1	1,618.4	34.76	47.557	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
5,000.0	4,977.4	5,000.9	4,977.4	18.3	18.4	89.38	-171.1	1,952.8	1,653.1	1,617.7	35.43	46.655	
5,100.0	5,077.4	5,100.9	5,077.4	18.6	18.7	89.38	-171.1	1,952.8	1,653.1	1,617.0	36.11	45.785	
5,200.0	5,177.4	5,200.9	5,177.4	19.0	19.0	89.38	-171.1	1,952.8	1,653.1	1,616.3	36.78	44.944	
5,300.0	5,277.4	5,300.9	5,277.4	19.3	19.4	89.38	-171.1	1,952.8	1,653.1	1,615.7	37.46	44.132	
5,400.0	5,377.4	5,400.9	5,377.4	19.6	19.7	89.38	-171.1	1,952.8	1,653.1	1,615.0	38.14	43.347	
5,500.0	5,477.4	5,500.9	5,477.4	20.0	20.0	89.38	-171.1	1,952.8	1,653.1	1,614.3	38.82	42.588	
5,600.0	5,577.4	5,600.9	5,577.4	20.3	20.4	89.38	-171.1	1,952.8	1,653.1	1,613.6	39.50	41.854	
5,700.0	5,677.4	5,700.9	5,677.4	20.6	20.7	89.38	-171.1	1,952.8	1,653.1	1,612.9	40.18	41.143	
5,800.0	5,777.4	5,800.9	5,777.4	21.0	21.0	89.38	-171.1	1,952.8	1,653.1	1,612.2	40.86	40.455	
5,900.0	5,877.4	5,900.9	5,877.4	21.3	21.4	89.38	-171.1	1,952.8	1,653.1	1,611.6	41.55	39.789	
6,000.0	5,977.4	6,000.9	5,977.4	21.6	21.7	89.38	-171.1	1,952.8	1,653.1	1,610.9	42.23	39.143	
6,100.0	6,077.4	6,100.9	6,077.4	22.0	22.0	89.38	-171.1	1,952.8	1,653.1	1,610.2	42.92	38.517	
6,200.0	6,177.4	6,200.9	6,177.4	22.3	22.4	89.38	-171.1	1,952.8	1,653.1	1,609.5	43.61	37.909	
6,300.0	6,277.4	6,300.9	6,277.4	22.6	22.7	89.38	-171.1	1,952.8	1,653.1	1,608.8	44.30	37.320	
6,400.0	6,377.4	6,400.9	6,377.4	23.0	23.0	89.38	-171.1	1,952.8	1,653.1	1,608.1	44.99	36.748	
6,500.0	6,477.4	6,500.9	6,477.4	23.3	23.4	89.38	-171.1	1,952.8	1,653.1	1,607.4	45.68	36.193	
6,600.0	6,577.4	6,600.9	6,577.4	23.7	23.7	89.38	-171.1	1,952.8	1,653.1	1,606.7	46.37	35.653	
6,700.0	6,677.4	6,700.9	6,677.4	24.0	24.1	89.38	-171.1	1,952.8	1,653.1	1,606.1	47.06	35.129	
6,800.0	6,777.4	6,800.9	6,777.4	24.3	24.4	89.38	-171.1	1,952.8	1,653.1	1,605.4	47.75	34.620	
6,900.0	6,877.4	6,900.9	6,877.4	24.7	24.7	89.38	-171.1	1,952.8	1,653.1	1,604.7	48.44	34.124	
7,000.0	6,977.4	7,000.9	6,977.4	25.0	25.1	89.38	-171.1	1,952.8	1,653.1	1,604.0	49.14	33.642	
7,100.0	7,077.4	7,100.9	7,077.4	25.4	25.4	89.38	-171.1	1,952.8	1,653.1	1,603.3	49.83	33.173	
7,200.0	7,177.4	7,200.9	7,177.4	25.7	25.8	89.38	-171.1	1,952.8	1,653.1	1,602.6	50.53	32.717	
7,300.0	7,277.4	7,300.9	7,277.4	26.1	26.1	89.38	-171.1	1,952.8	1,653.1	1,601.9	51.22	32.272	
7,400.0	7,377.4	7,400.9	7,377.4	26.4	26.5	89.38	-171.1	1,952.8	1,653.1	1,601.2	51.92	31.839	
7,500.0	7,477.4	7,500.9	7,477.4	26.8	26.8	89.38	-171.1	1,952.8	1,653.1	1,600.5	52.62	31.418	
7,600.0	7,577.4	7,600.9	7,577.4	27.1	27.1	89.38	-171.1	1,952.8	1,653.1	1,599.8	53.31	31.007	
7,700.0	7,677.4	7,700.9	7,677.4	27.4	27.5	89.38	-171.1	1,952.8	1,653.1	1,599.1	54.01	30.606	
7,800.0	7,777.4	7,800.9	7,777.4	27.8	27.8	89.38	-171.1	1,952.8	1,653.1	1,598.4	54.71	30.215	
7,900.0	7,877.4	7,900.9	7,877.4	28.1	28.2	89.38	-171.1	1,952.8	1,653.1	1,597.7	55.41	29.834	
8,000.0	7,977.4	8,000.9	7,977.4	28.5	28.5	89.38	-171.1	1,952.8	1,653.1	1,597.0	56.11	29.462	
8,100.0	8,077.4	8,100.9	8,077.4	28.8	28.9	89.38	-171.1	1,952.8	1,653.1	1,596.3	56.81	29.099	
8,200.0	8,177.4	8,200.9	8,177.4	29.2	29.2	89.38	-171.1	1,952.8	1,653.1	1,595.6	57.51	28.745	
8,300.0	8,277.4	8,300.9	8,277.4	29.5	29.6	89.38	-171.1	1,952.8	1,653.1	1,594.9	58.21	28.399	
8,400.0	8,377.4	8,400.9	8,377.4	29.9	29.9	89.38	-171.1	1,952.8	1,653.1	1,594.2	58.91	28.061	
8,500.0	8,477.4	8,500.9	8,477.4	30.2	30.3	89.38	-171.1	1,952.8	1,653.1	1,593.5	59.61	27.731	
8,600.0	8,577.4	8,600.9	8,577.4	30.6	30.6	89.38	-171.1	1,952.8	1,653.1	1,592.8	60.31	27.408	
8,700.0	8,677.4	8,700.9	8,677.4	30.9	30.9	89.38	-171.1	1,952.8	1,653.1	1,592.1	61.02	27.093	
8,800.0	8,777.4	8,800.9	8,777.4	31.3	31.3	89.38	-171.1	1,952.8	1,653.1	1,591.4	61.72	26.784	
8,900.0	8,877.4	8,900.9	8,877.4	31.6	31.6	89.38	-171.1	1,952.8	1,653.1	1,590.7	62.42	26.483	
9,000.0	8,977.4	9,000.9	8,977.4	32.0	32.0	89.38	-171.1	1,952.8	1,653.1	1,590.0	63.13	26.188	
9,100.0	9,077.4	9,100.9	9,077.4	32.3	32.3	89.38	-171.1	1,952.8	1,653.1	1,589.3	63.83	25.899	
9,200.0	9,177.4	9,200.9	9,177.4	32.7	32.7	89.38	-171.1	1,952.8	1,653.1	1,588.6	64.53	25.617	
9,300.0	9,277.4	9,300.9	9,277.4	33.0	33.0	89.38	-171.1	1,952.8	1,653.1	1,587.9	65.24	25.340	
9,400.0	9,377.4	9,400.9	9,377.4	33.4	33.4	89.38	-171.1	1,952.8	1,653.1	1,587.2	65.94	25.069	
9,500.0	9,477.4	9,500.9	9,477.4	33.7	33.7	89.38	-171.1	1,952.8	1,653.1	1,586.5	66.65	24.804	
9,600.0	9,577.4	9,600.9	9,577.4	34.1	34.1	89.38	-171.1	1,952.8	1,653.1	1,585.8	67.35	24.545	
9,700.0	9,677.4	9,700.9	9,677.4	34.4	34.4	89.38	-171.1	1,952.8	1,653.1	1,585.1	68.06	24.291	
9,800.0	9,777.4	9,800.9	9,777.4	34.8	34.8	89.38	-171.1	1,952.8	1,653.1	1,584.3	68.76	24.041	
9,900.0	9,877.4	9,900.9	9,877.4	35.1	35.1	89.38	-171.1	1,952.8	1,653.1	1,583.6	69.47	23.797	
10,000.0	9,977.4	10,000.9	9,977.4	35.5	35.5	89.38	-171.1	1,952.8	1,653.1	1,582.9	70.17	23.558	
10,100.0	10,077.4	10,100.9	10,077.4	35.8	35.8	89.38	-171.1	1,952.8	1,653.1	1,582.2	70.88	23.323	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,177.4	10,200.9	10,177.4	36.2	36.2	89.38	-171.1	1,952.8	1,653.1	1,581.5	71.58	23.093	
10,300.0	10,277.4	10,300.9	10,277.4	36.5	36.5	89.38	-171.1	1,952.8	1,653.1	1,580.8	72.29	22.867	
10,324.1	10,301.5	10,325.0	10,301.5	36.6	36.6	89.38	-171.1	1,952.8	1,653.1	1,580.6	72.46	22.814	
10,350.0	10,327.4	10,350.9	10,327.4	36.7	36.7	89.84	-171.1	1,952.8	1,653.1	1,580.5	72.64	22.756	
10,400.0	10,377.2	10,400.7	10,377.2	36.9	36.9	89.99	-171.1	1,952.8	1,653.1	1,580.1	72.99	22.648	
10,402.2	10,379.3	10,402.9	10,379.3	36.9	36.9	90.00	-171.1	1,952.8	1,653.1	1,580.1	73.01	22.644 CC	
10,450.0	10,426.4	10,449.9	10,426.4	37.0	37.1	90.29	-171.1	1,952.8	1,653.1	1,579.8	73.33	22.544	
10,500.0	10,474.6	10,501.8	10,474.6	37.2	37.2	90.71	-171.1	1,952.8	1,653.2	1,579.6	73.67	22.442 ES	
10,550.0	10,521.6	10,545.1	10,521.6	37.3	37.4	91.24	-171.1	1,952.8	1,653.6	1,579.6	73.97	22.354	
10,600.0	10,566.8	10,609.6	10,566.8	37.5	37.6	91.84	-171.1	1,952.8	1,654.2	1,579.8	74.34	22.250	
10,650.0	10,610.1	10,633.6	10,610.1	37.6	37.7	92.48	-171.1	1,952.8	1,655.3	1,580.7	74.57	22.198	
10,700.0	10,651.0	10,674.5	10,651.0	37.7	37.8	93.12	-171.1	1,952.8	1,657.0	1,582.2	74.85	22.137	
10,750.0	10,689.2	10,712.8	10,689.2	37.8	38.0	93.72	-171.1	1,952.8	1,659.5	1,584.4	75.12	22.091	
10,800.0	10,724.5	10,748.1	10,724.5	37.9	38.1	94.23	-171.1	1,952.8	1,663.0	1,587.6	75.38	22.062	
10,850.0	10,756.6	10,780.1	10,756.6	37.9	38.2	94.61	-171.1	1,952.8	1,667.6	1,592.0	75.63	22.050	
10,900.0	10,785.2	10,808.7	10,785.2	38.0	38.3	94.83	-171.1	1,952.8	1,673.5	1,597.6	75.87	22.058	
10,950.0	10,810.1	10,833.7	10,810.1	38.0	38.4	94.84	-171.1	1,952.8	1,680.8	1,604.7	76.10	22.087	
11,000.0	10,831.2	10,854.7	10,831.2	38.1	38.5	94.60	-171.1	1,952.8	1,689.6	1,613.3	76.32	22.139	
11,050.0	10,848.2	10,871.7	10,848.2	38.3	38.5	94.10	-171.1	1,952.8	1,699.9	1,623.4	76.53	22.213	
11,100.0	10,861.1	10,884.6	10,861.1	38.4	38.6	93.31	-171.1	1,952.8	1,711.8	1,635.1	76.73	22.311	
11,150.0	10,869.7	10,906.8	10,869.7	38.5	38.7	92.21	-171.1	1,952.8	1,725.3	1,648.3	76.96	22.417	
11,200.0	10,874.0	10,902.5	10,874.0	38.7	38.6	90.79	-171.1	1,952.8	1,740.2	1,663.1	77.10	22.569	
11,225.4	10,874.5	10,902.0	10,874.5	38.8	38.6	89.96	-171.1	1,952.8	1,748.3	1,671.1	77.18	22.651	
11,287.1	10,874.3	10,902.2	10,874.3	39.0	38.6	89.95	-171.1	1,952.8	1,769.3	1,691.9	77.39	22.862	
11,300.0	10,874.3	10,902.2	10,874.3	39.0	38.6	89.95	-171.1	1,952.8	1,773.9	1,696.5	77.43	22.909	
11,400.0	10,874.1	10,902.4	10,874.1	39.4	38.6	89.94	-171.1	1,952.8	1,812.6	1,734.8	77.81	23.296	
11,500.0	10,873.8	10,902.6	10,873.8	39.8	38.6	89.93	-171.1	1,952.8	1,855.9	1,777.7	78.21	23.729	
11,600.0	10,873.6	10,902.9	10,873.6	40.3	38.6	89.93	-171.1	1,952.8	1,903.4	1,824.8	78.63	24.207	
11,700.0	10,873.4	10,903.1	10,873.4	40.9	38.7	89.92	-171.1	1,952.8	1,954.9	1,875.9	79.06	24.728	
11,800.0	10,873.2	12,879.5	11,948.8	41.5	45.0	123.03	978.9	1,945.2	1,973.3	1,898.3	74.97	26.322	
11,900.0	10,872.9	12,979.5	11,948.3	42.2	45.7	123.03	1,078.9	1,944.4	1,973.1	1,897.0	76.13	25.918	
12,000.0	10,872.7	13,079.5	11,947.8	42.9	46.3	123.02	1,178.9	1,943.6	1,972.9	1,895.5	77.38	25.495	
12,100.0	10,872.5	13,179.5	11,947.2	43.7	47.1	123.01	1,278.8	1,942.8	1,972.7	1,894.0	78.73	25.058	
12,200.0	10,872.2	13,279.5	11,946.7	44.6	47.8	123.01	1,378.8	1,942.0	1,972.5	1,892.3	80.15	24.609	
12,300.0	10,872.0	13,379.5	11,946.1	45.4	48.6	123.00	1,478.8	1,941.1	1,972.3	1,890.6	81.66	24.153	
12,400.0	10,871.8	13,479.5	11,945.6	46.3	49.5	122.99	1,578.8	1,940.3	1,972.1	1,888.8	83.24	23.692	
12,500.0	10,871.6	13,579.5	11,945.0	47.3	50.4	122.98	1,678.8	1,939.5	1,971.9	1,887.0	84.89	23.229	
12,600.0	10,871.3	13,679.5	11,944.5	48.3	51.3	122.98	1,778.8	1,938.7	1,971.7	1,885.1	86.61	22.766	
12,700.0	10,871.1	13,779.5	11,944.0	49.3	52.3	122.97	1,878.8	1,937.9	1,971.5	1,883.1	88.39	22.306	
12,800.0	10,870.9	13,879.5	11,943.4	50.4	53.3	122.96	1,978.8	1,937.1	1,971.3	1,881.1	90.22	21.849	
12,900.0	10,870.7	13,979.5	11,942.9	51.5	54.3	122.96	2,078.8	1,936.3	1,971.1	1,879.0	92.12	21.397	
13,000.0	10,870.4	14,079.5	11,942.3	52.6	55.4	122.95	2,178.8	1,935.5	1,970.9	1,876.8	94.07	20.952	
13,100.0	10,870.2	14,179.5	11,941.8	53.8	56.5	122.94	2,278.8	1,934.7	1,970.7	1,874.6	96.06	20.515	
13,200.0	10,870.0	14,279.5	11,941.3	54.9	57.6	122.93	2,378.8	1,933.9	1,970.5	1,872.4	98.10	20.086	
13,300.0	10,869.7	14,379.5	11,940.7	56.1	58.7	122.93	2,478.8	1,933.1	1,970.3	1,870.1	100.19	19.666	
13,400.0	10,869.5	14,479.5	11,940.2	57.4	59.9	122.92	2,578.8	1,932.3	1,970.1	1,867.8	102.31	19.255	
13,500.0	10,869.3	14,579.5	11,939.6	58.6	61.1	122.91	2,678.8	1,931.5	1,969.9	1,865.4	104.48	18.854	
13,600.0	10,869.1	14,679.5	11,939.1	59.9	62.3	122.91	2,778.8	1,930.7	1,969.7	1,863.0	106.68	18.464	
13,700.0	10,868.8	14,779.5	11,938.5	61.1	63.5	122.90	2,878.8	1,929.9	1,969.5	1,860.5	108.91	18.083	
13,800.0	10,868.6	14,879.5	11,938.0	62.4	64.8	122.89	2,978.8	1,929.1	1,969.3	1,858.1	111.18	17.713	
13,900.0	10,868.4	14,979.5	11,937.5	63.8	66.1	122.88	3,078.8	1,928.3	1,969.1	1,855.6	113.47	17.353	
14,000.0	10,868.2	15,079.5	11,936.9	65.1	67.3	122.88	3,178.7	1,927.5	1,968.9	1,853.1	115.80	17.003	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,867.9	15,179.5	11,936.4	66.4	68.6	122.87	3,278.7	1,926.7	1,968.7	1,850.5	118.15	16.663	
14,200.0	10,867.7	15,279.5	11,935.8	67.8	70.0	122.86	3,378.7	1,925.9	1,968.5	1,847.9	120.52	16.333	
14,300.0	10,867.5	15,379.5	11,935.3	69.2	71.3	122.86	3,478.7	1,925.1	1,968.3	1,845.3	122.92	16.013	
14,400.0	10,867.3	15,479.5	11,934.8	70.6	72.6	122.85	3,578.7	1,924.3	1,968.1	1,842.7	125.34	15.702	
14,500.0	10,867.0	15,579.5	11,934.2	72.0	74.0	122.84	3,678.7	1,923.5	1,967.8	1,840.1	127.78	15.400	
14,600.0	10,866.8	15,679.5	11,933.7	73.4	75.4	122.83	3,778.7	1,922.6	1,967.6	1,837.4	130.24	15.108	
14,700.0	10,866.6	15,779.5	11,933.1	74.8	76.7	122.83	3,878.7	1,921.8	1,967.4	1,834.7	132.72	14.824	
14,800.0	10,866.3	15,879.5	11,932.6	76.2	78.1	122.82	3,978.7	1,921.0	1,967.2	1,832.0	135.22	14.549	
14,900.0	10,866.1	15,979.5	11,932.0	77.7	79.5	122.81	4,078.7	1,920.2	1,967.0	1,829.3	137.73	14.281	
15,000.0	10,865.9	16,079.5	11,931.5	79.1	80.9	122.81	4,178.7	1,919.4	1,966.8	1,826.6	140.26	14.022	
15,100.0	10,865.7	16,179.5	11,931.0	80.6	82.4	122.80	4,278.7	1,918.6	1,966.6	1,823.8	142.81	13.771	
15,200.0	10,865.4	16,279.5	11,930.4	82.0	83.8	122.79	4,378.7	1,917.8	1,966.4	1,821.1	145.37	13.527	
15,300.0	10,865.2	16,379.5	11,929.9	83.5	85.2	122.78	4,478.7	1,917.0	1,966.2	1,818.3	147.94	13.290	
15,400.0	10,865.0	16,479.5	11,929.3	85.0	86.7	122.78	4,578.7	1,916.2	1,966.0	1,815.5	150.53	13.061	
15,500.0	10,864.8	16,579.5	11,928.8	86.4	88.1	122.77	4,678.7	1,915.4	1,965.8	1,812.7	153.13	12.838	
15,600.0	10,864.5	16,679.5	11,928.3	87.9	89.6	122.76	4,778.7	1,914.6	1,965.6	1,809.9	155.74	12.621	
15,700.0	10,864.3	16,779.5	11,927.7	89.4	91.1	122.76	4,878.7	1,913.8	1,965.4	1,807.1	158.36	12.411	
15,800.0	10,864.1	16,879.5	11,927.2	90.9	92.5	122.75	4,978.7	1,913.0	1,965.2	1,804.2	160.99	12.207	
15,900.0	10,863.8	16,979.5	11,926.6	92.4	94.0	122.74	5,078.7	1,912.2	1,965.0	1,801.4	163.63	12.009	
16,000.0	10,863.6	17,079.5	11,926.1	94.0	95.5	122.73	5,178.6	1,911.4	1,964.8	1,798.5	166.29	11.816	
16,100.0	10,863.4	17,179.5	11,925.5	95.5	97.0	122.73	5,278.6	1,910.6	1,964.6	1,795.7	168.95	11.629	
16,200.0	10,863.2	17,279.5	11,925.0	97.0	98.5	122.72	5,378.6	1,909.8	1,964.4	1,792.8	171.62	11.447	
16,300.0	10,862.9	17,379.5	11,924.5	98.5	100.0	122.71	5,478.6	1,909.0	1,964.2	1,789.9	174.29	11.270	
16,400.0	10,862.7	17,479.5	11,923.9	100.0	101.5	122.71	5,578.6	1,908.2	1,964.0	1,787.0	176.98	11.097	
16,500.0	10,862.5	17,579.5	11,923.4	101.6	103.0	122.70	5,678.6	1,907.4	1,963.8	1,784.2	179.67	10.930	
16,600.0	10,862.3	17,679.5	11,922.8	103.1	104.5	122.69	5,778.6	1,906.6	1,963.6	1,781.3	182.38	10.767	
16,700.0	10,862.0	17,779.5	11,922.3	104.7	106.0	122.68	5,878.6	1,905.8	1,963.4	1,778.3	185.08	10.608	
16,800.0	10,861.8	17,879.5	11,921.8	106.2	107.6	122.68	5,978.6	1,905.0	1,963.2	1,775.4	187.80	10.454	
16,900.0	10,861.6	17,979.5	11,921.2	107.7	109.1	122.67	6,078.6	1,904.2	1,963.0	1,772.5	190.52	10.303	
17,000.0	10,861.4	18,079.5	11,920.7	109.3	110.6	122.66	6,178.6	1,903.3	1,962.8	1,769.6	193.25	10.157	
17,100.0	10,861.1	18,179.5	11,920.1	110.8	112.2	122.66	6,278.6	1,902.5	1,962.6	1,766.6	195.98	10.014	
17,200.0	10,860.9	18,279.5	11,919.6	112.4	113.7	122.65	6,378.6	1,901.7	1,962.4	1,763.7	198.72	9.875	
17,300.0	10,860.7	18,379.5	11,919.0	114.0	115.2	122.64	6,478.6	1,900.9	1,962.2	1,760.8	201.47	9.740	
17,400.0	10,860.4	18,479.5	11,918.5	115.5	116.8	122.63	6,578.6	1,900.1	1,962.0	1,757.8	204.22	9.607	
17,500.0	10,860.2	18,579.5	11,918.0	117.1	118.3	122.63	6,678.6	1,899.3	1,961.8	1,754.8	206.97	9.479	
17,600.0	10,860.0	18,679.5	11,917.4	118.7	119.9	122.62	6,778.6	1,898.5	1,961.6	1,751.9	209.73	9.353	
17,700.0	10,859.8	18,779.5	11,916.9	120.2	121.4	122.61	6,878.6	1,897.7	1,961.4	1,748.9	212.50	9.230	
17,800.0	10,859.5	18,879.5	11,916.3	121.8	123.0	122.61	6,978.6	1,896.9	1,961.2	1,746.0	215.27	9.111	
17,900.0	10,859.3	18,979.5	11,915.8	123.4	124.5	122.60	7,078.5	1,896.1	1,961.0	1,743.0	218.04	8.994	
18,000.0	10,859.1	19,079.5	11,915.2	124.9	126.1	122.59	7,178.5	1,895.3	1,960.8	1,740.0	220.82	8.880	
18,100.0	10,858.9	19,179.5	11,914.7	126.5	127.7	122.58	7,278.5	1,894.5	1,960.6	1,737.0	223.61	8.768	
18,200.0	10,858.6	19,279.5	11,914.2	128.1	129.2	122.58	7,378.5	1,893.7	1,960.4	1,734.0	226.39	8.659	
18,300.0	10,858.4	19,379.5	11,913.6	129.7	130.8	122.57	7,478.5	1,892.9	1,960.2	1,731.0	229.18	8.553	
18,400.0	10,858.2	19,479.5	11,913.1	131.3	132.4	122.56	7,578.5	1,892.1	1,960.0	1,728.0	231.98	8.449	
18,500.0	10,857.9	19,579.5	11,912.5	132.9	133.9	122.56	7,678.5	1,891.3	1,959.8	1,725.0	234.78	8.348	
18,600.0	10,857.7	19,679.5	11,912.0	134.4	135.5	122.55	7,778.5	1,890.5	1,959.6	1,722.0	237.58	8.248	
18,700.0	10,857.5	19,779.5	11,911.5	136.0	137.1	122.54	7,878.5	1,889.7	1,959.4	1,719.0	240.38	8.151	
18,800.0	10,857.3	19,879.5	11,910.9	137.6	138.7	122.53	7,978.5	1,888.9	1,959.2	1,716.0	243.19	8.056	
18,900.0	10,857.0	19,979.5	11,910.4	139.2	140.3	122.53	8,078.5	1,888.1	1,959.0	1,713.0	246.00	7.963	
19,000.0	10,856.8	20,079.5	11,909.8	140.8	141.8	122.52	8,178.5	1,887.3	1,958.8	1,710.0	248.82	7.873	
19,100.0	10,856.6	20,179.5	11,909.3	142.4	143.4	122.51	8,278.5	1,886.5	1,958.6	1,707.0	251.63	7.784	
19,200.0	10,856.4	20,279.5	11,908.7	144.0	145.0	122.50	8,378.5	1,885.7	1,958.4	1,704.0	254.45	7.697	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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 #133H - 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	10,856.1	20,379.5	11,908.2	145.6	146.6	122.50	8,478.5	1,884.8	1,958.2	1,700.9	257.28	7.611	
19,400.0	10,855.9	20,479.5	11,907.7	147.2	148.2	122.49	8,578.5	1,884.0	1,958.0	1,697.9	260.10	7.528	
19,500.0	10,855.7	20,579.5	11,907.1	148.8	149.8	122.48	8,678.5	1,883.2	1,957.8	1,694.9	262.93	7.446	
19,600.0	10,855.5	20,679.5	11,906.6	150.4	151.4	122.48	8,778.5	1,882.4	1,957.6	1,691.9	265.76	7.366	
19,700.0	10,855.2	20,779.5	11,906.0	152.0	153.0	122.47	8,878.5	1,881.6	1,957.4	1,688.8	268.60	7.288	
19,800.0	10,855.0	20,879.5	11,905.5	153.6	154.5	122.46	8,978.4	1,880.8	1,957.2	1,685.8	271.43	7.211	
19,900.0	10,854.8	20,979.5	11,905.0	155.2	156.1	122.45	9,078.4	1,880.0	1,957.0	1,682.7	274.27	7.135	
20,000.0	10,854.5	21,079.5	11,904.4	156.8	157.7	122.45	9,178.4	1,879.2	1,956.8	1,679.7	277.11	7.061	
20,100.0	10,854.3	21,179.5	11,903.9	158.4	159.3	122.44	9,278.4	1,878.4	1,956.6	1,676.7	279.96	6.989	
20,200.0	10,854.1	21,279.5	11,903.3	160.0	160.9	122.43	9,378.4	1,877.6	1,956.4	1,673.6	282.80	6.918	
20,300.0	10,853.9	21,379.5	11,902.8	161.7	162.5	122.43	9,478.4	1,876.8	1,956.2	1,670.6	285.65	6.848	
20,400.0	10,853.6	21,479.5	11,902.2	163.3	164.1	122.42	9,578.4	1,876.0	1,956.0	1,667.5	288.50	6.780	
20,500.0	10,853.4	21,579.5	11,901.7	164.9	165.7	122.41	9,678.4	1,875.2	1,955.8	1,664.5	291.35	6.713	
20,600.0	10,853.2	21,679.5	11,901.2	166.5	167.3	122.40	9,778.4	1,874.4	1,955.6	1,661.4	294.20	6.647	
20,700.0	10,853.0	21,779.5	11,900.6	168.1	168.9	122.40	9,878.4	1,873.6	1,955.4	1,658.4	297.06	6.583	
20,800.0	10,852.7	21,879.5	11,900.1	169.7	170.6	122.39	9,978.4	1,872.8	1,955.2	1,655.3	299.92	6.519	
20,900.0	10,852.5	21,979.5	11,899.5	171.3	172.2	122.38	10,078.4	1,872.0	1,955.0	1,652.2	302.78	6.457	
21,000.0	10,852.3	22,079.5	11,899.0	172.9	173.8	122.38	10,178.4	1,871.2	1,954.8	1,649.2	305.64	6.396	
21,094.0	10,851.5	22,173.5	11,898.5	174.5	175.3	122.39	10,272.4	1,870.4	1,954.7	1,646.5	308.29	6.341 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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	88.59	55.8	2,262.9	2,263.6				
100.0	100.0	100.0	100.0	0.1	0.1	88.59	55.8	2,262.9	2,263.6	2,263.3	0.26	8,831.540	
200.0	200.0	200.0	200.0	0.5	0.5	88.59	55.8	2,262.9	2,263.6	2,262.6	0.97	2,325.804	
300.0	300.0	300.0	300.0	0.8	0.8	88.59	55.8	2,262.9	2,263.6	2,261.9	1.69	1,339.249	
400.0	400.0	400.0	400.0	1.2	1.2	88.59	55.8	2,262.9	2,263.6	2,261.2	2.41	940.366	
500.0	500.0	500.0	500.0	1.6	1.6	88.59	55.8	2,262.9	2,263.6	2,260.5	3.12	724.562	
600.0	600.0	600.0	600.0	1.9	1.9	88.59	55.8	2,262.9	2,263.6	2,259.7	3.84	589.320	
700.0	700.0	700.0	700.0	2.3	2.3	88.59	55.8	2,262.9	2,263.6	2,259.0	4.56	496.623	
800.0	800.0	800.0	800.0	2.6	2.6	88.59	55.8	2,262.9	2,263.6	2,258.3	5.27	429.124	
900.0	900.0	900.0	900.0	3.0	3.0	88.59	55.8	2,262.9	2,263.6	2,257.6	5.99	377.778	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	88.59	55.8	2,262.9	2,263.6	2,256.9	6.71	337.406	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	88.59	55.8	2,262.9	2,263.6	2,256.2	7.43	304.830	
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	88.59	55.8	2,262.9	2,263.6	2,255.4	8.14	277.991	
1,300.0	1,300.0	1,300.0	1,300.0	4.4	4.4	-33.67	55.8	2,262.9	2,262.9	2,254.0	8.85	255.808	
1,400.0	1,400.0	1,400.0	1,400.0	4.8	4.8	-33.72	55.8	2,262.9	2,260.7	2,251.1	9.54	236.999	
1,500.0	1,499.9	1,500.1	1,499.9	5.1	5.1	-33.80	55.8	2,262.9	2,257.1	2,246.8	10.24	220.512	
1,600.0	1,599.7	1,600.3	1,599.7	5.4	5.5	-33.92	55.8	2,262.9	2,252.0	2,241.0	10.94	205.927	
1,700.0	1,699.4	1,700.6	1,699.4	5.8	5.9	-34.06	55.8	2,262.9	2,245.5	2,233.8	11.64	192.912	
1,800.0	1,798.9	1,801.1	1,798.9	6.1	6.2	-34.25	55.8	2,262.9	2,237.5	2,225.2	12.35	181.210	
1,900.0	1,898.3	1,901.7	1,898.3	6.5	6.6	-34.46	55.8	2,262.9	2,228.2	2,215.1	13.06	170.613	
2,000.0	1,997.4	1,997.4	1,997.4	6.9	6.9	-34.71	55.8	2,262.9	2,217.4	2,203.6	13.76	161.173	
2,100.0	2,096.4	2,070.3	2,070.3	7.2	7.2	-34.86	55.7	2,263.3	2,206.5	2,192.1	14.37	153.543	
2,200.0	2,195.5	2,142.7	2,142.6	7.6	7.4	-35.00	55.5	2,264.6	2,196.8	2,181.9	14.98	146.661	
2,300.0	2,294.5	2,215.2	2,215.2	8.0	7.7	-35.14	55.0	2,266.8	2,188.4	2,172.8	15.59	140.396	
2,400.0	2,393.5	2,288.0	2,287.9	8.4	7.9	-35.27	54.3	2,270.0	2,181.2	2,165.1	16.20	134.656	
2,500.0	2,492.5	2,360.9	2,360.7	8.8	8.2	-35.40	53.4	2,274.0	2,175.3	2,158.5	16.81	129.393	
2,600.0	2,591.6	2,433.9	2,433.5	9.2	8.4	-35.52	52.3	2,278.9	2,170.6	2,153.2	17.43	124.560	
2,700.0	2,690.6	2,507.1	2,506.4	9.6	8.7	-35.63	51.0	2,284.8	2,167.2	2,149.1	18.04	120.121	
2,800.0	2,789.6	2,580.3	2,579.3	10.0	8.9	-35.74	49.5	2,291.6	2,164.9	2,146.3	18.66	116.037	
2,900.0	2,888.6	2,653.5	2,652.1	10.4	9.2	-35.84	47.8	2,299.3	2,164.0	2,144.7	19.27	112.280	
2,928.7	2,917.1	2,674.6	2,673.0	10.5	9.3	-35.87	47.3	2,301.6	2,163.9	2,144.5	19.45	111.257 CC	
3,000.0	2,987.7	2,726.8	2,724.9	10.8	9.5	-35.93	45.9	2,307.9	2,164.2	2,144.3	19.89	108.820 ES	
3,100.0	3,086.7	2,800.2	2,797.6	11.2	9.7	-36.02	43.8	2,317.4	2,165.7	2,145.2	20.50	105.631	
3,200.0	3,185.7	2,900.1	2,896.5	11.6	10.1	-36.13	40.8	2,331.0	2,167.9	2,146.6	21.23	102.093	
3,300.0	3,284.8	3,000.0	2,995.4	12.0	10.5	-36.25	37.8	2,344.5	2,170.0	2,148.0	21.97	98.778	
3,400.0	3,383.8	3,100.1	3,094.4	12.4	10.8	-36.36	34.8	2,358.1	2,172.1	2,149.4	22.71	95.662	
3,500.0	3,482.8	3,200.2	3,193.3	12.8	11.2	-36.47	31.8	2,371.7	2,174.3	2,150.8	23.45	92.734	
3,600.0	3,581.8	3,300.4	3,292.2	13.2	11.6	-36.58	28.8	2,385.3	2,176.4	2,152.2	24.19	89.976	
3,700.0	3,680.9	3,400.5	3,391.1	13.7	12.0	-36.70	25.8	2,398.8	2,178.6	2,153.6	24.93	87.376	
3,800.0	3,779.9	3,500.6	3,490.0	14.1	12.4	-36.81	22.8	2,412.4	2,180.7	2,155.1	25.68	84.920	
3,878.9	3,858.0	3,578.2	3,568.1	14.4	12.7	-36.90	20.5	2,423.1	2,182.5	2,156.2	26.27	83.093	
3,900.0	3,878.9	3,600.7	3,588.9	14.5	12.8	-36.92	19.8	2,426.0	2,183.0	2,156.5	26.43	82.601	
4,000.0	3,978.2	3,700.8	3,687.8	14.9	13.2	-37.04	16.8	2,439.5	2,186.6	2,159.5	27.17	80.474	
4,100.0	4,077.7	3,801.0	3,786.7	15.3	13.6	-37.13	13.8	2,453.1	2,192.4	2,164.5	27.91	78.556	
4,200.0	4,177.5	3,901.3	3,885.4	15.6	14.0	-37.20	10.9	2,466.7	2,200.2	2,171.6	28.64	76.831	
4,300.0	4,277.4	4,001.8	3,983.9	16.0	14.4	-37.25	7.9	2,480.2	2,210.2	2,180.8	29.36	75.281	
4,400.0	4,377.4	4,097.4	4,082.2	16.3	14.7	-37.28	4.9	2,493.7	2,222.2	2,192.1	30.05	73.941	
4,412.2	4,389.6	4,109.5	4,094.2	16.4	14.8	84.96	4.5	2,495.3	2,223.8	2,193.6	30.14	73.785	
4,500.0	4,477.4	4,203.6	4,180.2	16.7	15.2	85.05	1.9	2,507.1	2,235.4	2,204.7	30.77	72.656	
4,600.0	4,577.4	4,304.5	4,278.3	17.0	15.6	85.16	-1.0	2,520.6	2,248.7	2,217.3	31.46	71.472	
4,700.0	4,677.4	4,405.5	4,376.4	17.3	16.0	85.27	-4.0	2,534.0	2,262.0	2,229.9	32.16	70.336	
4,800.0	4,777.4	4,493.5	4,474.4	17.6	16.3	85.37	-7.0	2,547.5	2,275.3	2,242.5	32.81	69.345	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
4,900.0	4,877.4	4,607.5	4,572.5	18.0	16.8	85.47	-10.0	2,561.0	2,288.7	2,255.1	33.56	68.196	
5,000.0	4,977.4	4,708.4	4,670.6	18.3	17.2	85.57	-12.9	2,574.4	2,302.0	2,267.7	34.26	67.188	
5,100.0	5,077.4	4,809.4	4,768.6	18.6	17.6	85.67	-15.9	2,587.9	2,315.3	2,280.4	34.97	66.218	
5,200.0	5,177.4	4,889.6	4,866.7	19.0	17.9	85.77	-18.9	2,601.3	2,328.7	2,293.1	35.59	65.425	
5,300.0	5,277.4	4,988.6	4,964.7	19.3	18.3	85.87	-21.8	2,614.8	2,342.0	2,305.7	36.29	64.534	
5,400.0	5,377.4	5,087.7	5,062.8	19.6	18.7	85.96	-24.8	2,628.2	2,355.4	2,318.4	36.99	63.675	
5,500.0	5,477.4	5,186.7	5,160.9	20.0	19.2	86.06	-27.8	2,641.7	2,368.7	2,331.0	37.69	62.846	
5,600.0	5,577.4	5,285.7	5,258.9	20.3	19.6	86.15	-30.8	2,655.2	2,382.1	2,343.7	38.39	62.046	
5,700.0	5,677.4	5,384.8	5,357.0	20.6	20.0	86.25	-33.7	2,668.6	2,395.5	2,356.4	39.09	61.274	
5,800.0	5,777.4	5,483.8	5,455.1	21.0	20.4	86.34	-36.7	2,682.1	2,408.8	2,369.0	39.80	60.527	
5,900.0	5,877.4	5,582.8	5,553.1	21.3	20.8	86.43	-39.7	2,695.5	2,422.2	2,381.7	40.50	59.806	
6,000.0	5,977.4	5,681.8	5,651.2	21.6	21.2	86.52	-42.6	2,709.0	2,435.6	2,394.4	41.21	59.108	
6,100.0	6,077.4	5,780.9	5,749.3	22.0	21.6	86.61	-45.6	2,722.5	2,449.0	2,407.1	41.91	58.433	
6,200.0	6,177.4	5,879.9	5,847.3	22.3	22.0	86.70	-48.6	2,735.9	2,462.4	2,419.8	42.62	57.779	
6,300.0	6,277.4	5,978.9	5,945.4	22.6	22.4	86.79	-51.5	2,749.4	2,475.8	2,432.5	43.32	57.146	
6,400.0	6,377.4	6,077.9	6,043.4	23.0	22.8	86.87	-54.5	2,762.8	2,489.2	2,445.2	44.03	56.533	
6,500.0	6,477.4	6,177.0	6,141.5	23.3	23.2	86.96	-57.5	2,776.3	2,502.6	2,457.9	44.74	55.938	
6,600.0	6,577.4	6,276.0	6,239.6	23.7	23.6	87.04	-60.5	2,789.7	2,516.1	2,470.6	45.45	55.362	
6,700.0	6,677.4	6,375.0	6,337.6	24.0	24.0	87.13	-63.4	2,803.2	2,529.5	2,483.3	46.16	54.802	
6,800.0	6,777.4	6,474.0	6,435.7	24.3	24.5	87.21	-66.4	2,816.7	2,542.9	2,496.1	46.87	54.259	
6,900.0	6,877.4	6,573.1	6,533.8	24.7	24.9	87.29	-69.4	2,830.1	2,556.4	2,508.8	47.58	53.732	
7,000.0	6,977.4	6,672.1	6,631.8	25.0	25.3	87.37	-72.3	2,843.6	2,569.8	2,521.5	48.29	53.220	
7,100.0	7,077.4	6,771.1	6,729.9	25.4	25.7	87.45	-75.3	2,857.0	2,583.3	2,534.3	49.00	52.722	
7,200.0	7,177.4	6,870.2	6,827.9	25.7	26.1	87.53	-78.3	2,870.5	2,596.7	2,547.0	49.71	52.238	
7,300.0	7,277.4	6,969.2	6,926.0	26.1	26.5	87.61	-81.3	2,883.9	2,610.2	2,559.8	50.42	51.768	
7,400.0	7,377.4	7,068.2	7,024.1	26.4	26.9	87.69	-84.2	2,897.4	2,623.6	2,572.5	51.13	51.310	
7,500.0	7,477.4	7,167.2	7,122.1	26.8	27.3	87.77	-87.2	2,910.9	2,637.1	2,585.3	51.85	50.864	
7,600.0	7,577.4	7,266.3	7,220.2	27.1	27.8	87.84	-90.2	2,924.3	2,650.6	2,598.0	52.56	50.431	
7,700.0	7,677.4	7,365.3	7,318.3	27.4	28.2	87.92	-93.1	2,937.8	2,664.1	2,610.8	53.27	50.009	
7,800.0	7,777.4	7,464.3	7,416.3	27.8	28.6	87.99	-96.1	2,951.2	2,677.5	2,623.6	53.99	49.597	
7,900.0	7,877.4	7,563.3	7,514.4	28.1	29.0	88.07	-99.1	2,964.7	2,691.0	2,636.3	54.70	49.197	
8,000.0	7,977.4	7,662.4	7,612.5	28.5	29.4	88.14	-102.1	2,978.2	2,704.5	2,649.1	55.41	48.806	
8,100.0	8,077.4	7,761.4	7,710.5	28.8	29.8	88.21	-105.0	2,991.6	2,718.0	2,661.9	56.13	48.425	
8,200.0	8,177.4	7,860.4	7,808.6	29.2	30.2	88.28	-108.0	3,005.1	2,731.5	2,674.7	56.84	48.054	
8,300.0	8,277.4	7,959.4	7,906.6	29.5	30.6	88.35	-111.0	3,018.5	2,745.0	2,687.5	57.56	47.691	
8,400.0	8,377.4	8,058.5	8,004.7	29.9	31.1	88.42	-113.9	3,032.0	2,758.5	2,700.3	58.27	47.338	
8,500.0	8,477.4	8,157.5	8,102.8	30.2	31.5	88.49	-116.9	3,045.4	2,772.0	2,713.1	58.99	46.992	
8,600.0	8,577.4	8,256.5	8,200.8	30.6	31.9	88.56	-119.9	3,058.9	2,785.6	2,725.9	59.70	46.655	
8,700.0	8,677.4	8,355.6	8,298.9	30.9	32.3	88.63	-122.8	3,072.4	2,799.1	2,738.7	60.42	46.326	
8,800.0	8,777.4	8,454.6	8,397.0	31.3	32.7	88.70	-125.8	3,085.8	2,812.6	2,751.5	61.14	46.005	
8,900.0	8,877.4	8,553.6	8,495.0	31.6	33.1	88.77	-128.8	3,099.3	2,826.1	2,764.3	61.85	45.690	
9,000.0	8,977.4	8,652.6	8,593.1	32.0	33.5	88.83	-131.8	3,112.7	2,839.7	2,777.1	62.57	45.383	
9,100.0	9,077.4	8,751.7	8,691.1	32.3	34.0	88.90	-134.7	3,126.2	2,853.2	2,789.9	63.29	45.083	
9,200.0	9,177.4	8,850.7	8,789.2	32.7	34.4	88.96	-137.7	3,139.6	2,866.7	2,802.7	64.00	44.789	
9,300.0	9,277.4	8,949.7	8,887.3	33.0	34.8	89.03	-140.7	3,153.1	2,880.3	2,815.6	64.72	44.502	
9,400.0	9,377.4	9,048.7	8,985.3	33.4	35.2	89.09	-143.6	3,166.6	2,893.8	2,828.4	65.44	44.221	
9,500.0	9,477.4	9,147.8	9,083.4	33.7	35.6	89.16	-146.6	3,180.0	2,907.4	2,841.2	66.16	43.946	
9,600.0	9,577.4	9,246.8	9,181.5	34.1	36.0	89.22	-149.6	3,193.5	2,920.9	2,854.1	66.88	43.677	
9,700.0	9,677.4	9,345.8	9,275.3	34.4	37.4	89.37	-156.9	3,226.6	2,931.0	2,862.4	68.63	42.705	
9,800.0	9,777.4	9,444.6	9,377.4	34.8	38.2	89.39	-158.1	3,231.9	2,932.3	2,862.6	69.73	42.052	
9,900.0	9,877.4	9,544.6	9,477.4	35.1	38.5	89.39	-158.1	3,231.9	2,932.3	2,861.9	70.42	41.642	
10,000.0	9,977.4	10,044.6	9,977.4	35.5	38.9	89.39	-158.1	3,231.9	2,932.3	2,861.2	71.11	41.239	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,077.4	10,144.6	10,077.4	35.8	39.2	89.39	-158.1	3,231.9	2,932.3	2,860.5	71.79	40.844	
10,200.0	10,177.4	10,244.6	10,177.4	36.2	39.5	89.39	-158.1	3,231.9	2,932.3	2,859.8	72.48	40.456	
10,300.0	10,277.4	10,344.6	10,277.4	36.5	39.8	89.39	-158.1	3,231.9	2,932.3	2,859.2	73.17	40.076	
10,324.1	10,301.5	10,368.7	10,301.5	36.6	39.9	89.39	-158.1	3,231.9	2,932.3	2,859.0	73.34	39.985	
10,350.0	10,327.4	10,405.4	10,327.4	36.7	40.0	89.85	-158.1	3,231.9	2,932.3	2,858.8	73.55	39.869	
10,400.0	10,377.2	10,444.4	10,377.2	36.9	40.1	89.93	-158.1	3,231.9	2,932.3	2,858.5	73.85	39.707	
10,422.9	10,399.8	10,467.0	10,399.8	36.9	40.2	90.00	-158.1	3,231.9	2,932.3	2,858.3	74.00	39.628	
10,450.0	10,426.4	10,506.4	10,426.4	37.0	40.3	90.10	-158.1	3,231.9	2,932.3	2,858.1	74.21	39.511	
10,500.0	10,474.6	10,541.9	10,474.6	37.2	40.4	90.34	-158.1	3,231.9	2,932.4	2,857.9	74.48	39.370	
10,550.0	10,521.6	10,588.8	10,521.6	37.3	40.6	90.64	-158.1	3,231.9	2,932.5	2,857.7	74.78	39.216	
10,600.0	10,566.8	10,634.1	10,566.8	37.5	40.7	90.98	-158.1	3,231.9	2,932.9	2,857.8	75.06	39.072	
10,650.0	10,610.1	10,677.3	10,610.1	37.6	40.9	91.35	-158.1	3,231.9	2,933.4	2,858.1	75.33	38.941	
10,700.0	10,651.0	10,718.2	10,651.0	37.7	41.0	91.71	-158.1	3,231.9	2,934.4	2,858.8	75.59	38.822	
10,750.0	10,689.2	10,756.5	10,689.2	37.8	41.1	92.05	-158.1	3,231.9	2,935.8	2,859.9	75.83	38.717	
10,800.0	10,724.5	10,808.3	10,724.5	37.9	41.3	92.34	-158.1	3,231.9	2,937.7	2,861.6	76.11	38.597	
10,850.0	10,756.6	10,823.8	10,756.6	37.9	41.3	92.57	-158.1	3,231.9	2,940.3	2,864.0	76.27	38.549	
10,900.0	10,785.2	10,852.4	10,785.2	38.0	41.4	92.69	-158.1	3,231.9	2,943.6	2,867.1	76.48	38.487	
10,950.0	10,810.1	10,877.4	10,810.1	38.0	41.5	92.70	-158.1	3,231.9	2,947.7	2,871.0	76.68	38.442	
11,000.0	10,831.2	10,901.6	10,831.2	38.1	41.6	92.58	-158.1	3,231.9	2,952.7	2,875.8	76.88	38.406	
11,050.0	10,848.2	10,915.4	10,848.2	38.3	41.6	92.30	-158.1	3,231.9	2,958.5	2,881.5	77.05	38.398	
11,100.0	10,861.1	10,928.3	10,861.1	38.4	41.7	91.85	-158.1	3,231.9	2,965.3	2,888.1	77.22	38.401	
11,150.0	10,869.7	10,936.9	10,869.7	38.5	41.7	91.24	-158.1	3,231.9	2,973.1	2,895.7	77.38	38.420	
11,200.0	10,874.0	10,941.2	10,874.0	38.7	41.7	90.44	-158.1	3,231.9	2,981.7	2,904.1	77.54	38.455	
11,225.4	10,874.5	10,941.7	10,874.5	38.8	41.7	89.97	-158.1	3,231.9	2,986.4	2,908.8	77.61	38.479	
11,287.1	10,874.3	10,941.5	10,874.3	39.0	41.7	89.97	-158.1	3,231.9	2,998.7	2,920.9	77.80	38.542	
11,300.0	10,874.3	10,941.5	10,874.3	39.0	41.7	89.97	-158.1	3,231.9	3,001.4	2,923.6	77.85	38.556	
11,400.0	10,874.1	10,941.3	10,874.1	39.4	41.7	89.97	-158.1	3,231.9	3,024.3	2,946.1	78.22	38.663	
11,500.0	10,873.8	10,941.1	10,873.8	39.8	41.7	89.96	-158.1	3,231.9	3,050.3	2,971.7	78.66	38.779	
11,600.0	10,873.6	10,940.8	10,873.6	40.3	41.7	89.96	-158.1	3,231.9	3,079.4	3,000.2	79.15	38.906	
11,700.0	10,873.4	10,940.6	10,873.4	40.9	41.7	89.95	-158.1	3,231.9	3,111.4	3,031.7	79.69	39.046	
11,800.0	10,873.2	10,940.4	10,873.2	41.5	41.7	89.95	-158.1	3,231.9	3,146.2	3,066.0	80.26	39.200	
11,900.0	10,872.9	13,031.5	11,958.8	42.2	47.6	110.06	1,088.7	3,263.3	3,165.4	3,083.5	81.86	38.668	
12,000.0	10,872.7	13,131.5	11,958.3	42.9	48.2	110.06	1,188.7	3,262.6	3,165.3	3,082.1	83.16	38.064	
12,100.0	10,872.5	13,231.5	11,957.8	43.7	48.9	110.05	1,288.7	3,261.8	3,165.2	3,080.6	84.55	37.434	
12,200.0	10,872.2	13,331.5	11,957.2	44.6	49.6	110.05	1,388.7	3,261.0	3,165.0	3,079.0	86.04	36.785	
12,300.0	10,872.0	13,431.5	11,956.7	45.4	50.4	110.04	1,488.7	3,260.2	3,164.9	3,077.3	87.62	36.122	
12,400.0	10,871.8	13,531.5	11,956.2	46.3	51.2	110.04	1,588.7	3,259.5	3,164.8	3,075.5	89.28	35.448	
12,500.0	10,871.6	13,631.5	11,955.6	47.3	52.1	110.03	1,688.7	3,258.7	3,164.7	3,073.7	91.02	34.769	
12,600.0	10,871.3	13,731.5	11,955.1	48.3	53.0	110.03	1,788.6	3,257.9	3,164.6	3,071.8	92.84	34.088	
12,700.0	10,871.1	13,831.5	11,954.5	49.3	53.9	110.02	1,888.6	3,257.1	3,164.5	3,069.7	94.72	33.408	
12,800.0	10,870.9	13,931.5	11,954.0	50.4	54.9	110.02	1,988.6	3,256.3	3,164.4	3,067.7	96.68	32.732	
12,900.0	10,870.7	14,031.5	11,953.5	51.5	55.9	110.01	2,088.6	3,255.6	3,164.2	3,065.6	98.69	32.062	
13,000.0	10,870.4	14,131.5	11,952.9	52.6	56.9	110.01	2,188.6	3,254.8	3,164.1	3,063.4	100.77	31.401	
13,100.0	10,870.2	14,231.5	11,952.4	53.8	57.9	110.00	2,288.6	3,254.0	3,164.0	3,061.1	102.90	30.750	
13,200.0	10,870.0	14,331.5	11,951.9	54.9	59.0	110.00	2,388.6	3,253.2	3,163.9	3,058.8	105.08	30.110	
13,300.0	10,869.7	14,431.5	11,951.3	56.1	60.1	109.99	2,488.6	3,252.5	3,163.8	3,056.5	107.31	29.483	
13,400.0	10,869.5	14,531.5	11,950.8	57.4	61.3	109.99	2,588.6	3,251.7	3,163.7	3,054.1	109.58	28.870	
13,500.0	10,869.3	14,631.5	11,950.3	58.6	62.4	109.98	2,688.6	3,250.9	3,163.5	3,051.6	111.90	28.270	
13,600.0	10,869.1	14,731.5	11,949.7	59.9	63.6	109.98	2,788.6	3,250.1	3,163.4	3,049.2	114.27	27.685	
13,700.0	10,868.8	14,831.5	11,949.2	61.1	64.8	109.97	2,888.6	3,249.3	3,163.3	3,046.7	116.66	27.115	
13,800.0	10,868.6	14,931.5	11,948.6	62.4	66.0	109.96	2,988.6	3,248.6	3,163.2	3,044.1	119.10	26.560	
13,900.0	10,868.4	15,031.5	11,948.1	63.8	67.3	109.96	3,088.6	3,247.8	3,163.1	3,041.5	121.57	26.020	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,868.2	15,131.5	11,947.6	65.1	68.5	109.95	3,188.6	3,247.0	3,163.0	3,038.9	124.06	25.495	
14,100.0	10,867.9	15,231.5	11,947.0	66.4	69.8	109.95	3,288.6	3,246.2	3,162.9	3,036.3	126.59	24.984	
14,200.0	10,867.7	15,331.5	11,946.5	67.8	71.1	109.94	3,388.6	3,245.5	3,162.7	3,033.6	129.15	24.489	
14,300.0	10,867.5	15,431.5	11,946.0	69.2	72.4	109.94	3,488.6	3,244.7	3,162.6	3,030.9	131.74	24.007	
14,400.0	10,867.3	15,531.5	11,945.4	70.6	73.7	109.93	3,588.6	3,243.9	3,162.5	3,028.2	134.34	23.540	
14,500.0	10,867.0	15,631.5	11,944.9	72.0	75.1	109.93	3,688.6	3,243.1	3,162.4	3,025.4	136.98	23.087	
14,600.0	10,866.8	15,731.4	11,944.4	73.4	76.4	109.92	3,788.5	3,242.3	3,162.3	3,022.7	139.63	22.648	
14,700.0	10,866.6	15,831.4	11,943.8	74.8	77.8	109.92	3,888.5	3,241.6	3,162.2	3,019.9	142.31	22.221	
14,800.0	10,866.3	15,931.4	11,943.3	76.2	79.1	109.91	3,988.5	3,240.8	3,162.1	3,017.1	145.00	21.807	
14,900.0	10,866.1	16,031.4	11,942.7	77.7	80.5	109.91	4,088.5	3,240.0	3,161.9	3,014.2	147.71	21.406	
15,000.0	10,865.9	16,131.4	11,942.2	79.1	81.9	109.90	4,188.5	3,239.2	3,161.8	3,011.4	150.45	21.016	
15,100.0	10,865.7	16,231.4	11,941.7	80.6	83.3	109.90	4,288.5	3,238.5	3,161.7	3,008.5	153.20	20.638	
15,200.0	10,865.4	16,331.4	11,941.1	82.0	84.7	109.89	4,388.5	3,237.7	3,161.6	3,005.6	155.96	20.272	
15,300.0	10,865.2	16,431.4	11,940.6	83.5	86.1	109.89	4,488.5	3,236.9	3,161.5	3,002.7	158.74	19.916	
15,400.0	10,865.0	16,531.4	11,940.1	85.0	87.5	109.88	4,588.5	3,236.1	3,161.4	2,999.8	161.53	19.571	
15,500.0	10,864.8	16,631.4	11,939.5	86.4	89.0	109.88	4,688.5	3,235.3	3,161.3	2,996.9	164.34	19.236	
15,600.0	10,864.5	16,731.4	11,939.0	87.9	90.4	109.87	4,788.5	3,234.6	3,161.1	2,994.0	167.16	18.911	
15,700.0	10,864.3	16,831.4	11,938.5	89.4	91.9	109.87	4,888.5	3,233.8	3,161.0	2,991.0	169.99	18.595	
15,800.0	10,864.1	16,931.4	11,937.9	90.9	93.3	109.86	4,988.5	3,233.0	3,160.9	2,988.1	172.84	18.288	
15,900.0	10,863.8	17,031.4	11,937.4	92.4	94.8	109.86	5,088.5	3,232.2	3,160.8	2,985.1	175.69	17.990	
16,000.0	10,863.6	17,131.4	11,936.8	94.0	96.2	109.85	5,188.5	3,231.5	3,160.7	2,982.1	178.56	17.701	
16,100.0	10,863.4	17,231.4	11,936.3	95.5	97.7	109.84	5,288.5	3,230.7	3,160.6	2,979.1	181.44	17.420	
16,200.0	10,863.2	17,331.4	11,935.8	97.0	99.2	109.84	5,388.5	3,229.9	3,160.4	2,976.1	184.32	17.146	
16,300.0	10,862.9	17,431.4	11,935.2	98.5	100.7	109.83	5,488.5	3,229.1	3,160.3	2,973.1	187.22	16.881	
16,400.0	10,862.7	17,531.4	11,934.7	100.0	102.2	109.83	5,588.5	3,228.3	3,160.2	2,970.1	190.12	16.622	
16,500.0	10,862.5	17,631.4	11,934.2	101.6	103.7	109.82	5,688.5	3,227.6	3,160.1	2,967.1	193.03	16.371	
16,600.0	10,862.3	17,731.4	11,933.6	103.1	105.2	109.82	5,788.5	3,226.8	3,160.0	2,964.0	195.95	16.126	
16,700.0	10,862.0	17,831.4	11,933.1	104.7	106.7	109.81	5,888.4	3,226.0	3,159.9	2,961.0	198.88	15.888	
16,800.0	10,861.8	17,931.4	11,932.6	106.2	108.2	109.81	5,988.4	3,225.2	3,159.8	2,957.9	201.82	15.657	
16,900.0	10,861.6	18,031.4	11,932.0	107.7	109.7	109.80	6,088.4	3,224.5	3,159.6	2,954.9	204.76	15.431	
17,000.0	10,861.4	18,131.4	11,931.5	109.3	111.2	109.80	6,188.4	3,223.7	3,159.5	2,951.8	207.71	15.211	
17,100.0	10,861.1	18,231.4	11,930.9	110.8	112.7	109.79	6,288.4	3,222.9	3,159.4	2,948.8	210.67	14.997	
17,200.0	10,860.9	18,331.4	11,930.4	112.4	114.3	109.79	6,388.4	3,222.1	3,159.3	2,945.7	213.63	14.789	
17,300.0	10,860.7	18,431.4	11,929.9	114.0	115.8	109.78	6,488.4	3,221.3	3,159.2	2,942.6	216.60	14.586	
17,400.0	10,860.4	18,531.4	11,929.3	115.5	117.3	109.78	6,588.4	3,220.6	3,159.1	2,939.5	219.57	14.388	
17,500.0	10,860.2	18,631.4	11,928.8	117.1	118.9	109.77	6,688.4	3,219.8	3,159.0	2,936.4	222.55	14.194	
17,600.0	10,860.0	18,731.4	11,928.3	118.7	120.4	109.77	6,788.4	3,219.0	3,158.8	2,933.3	225.53	14.006	
17,700.0	10,859.8	18,831.4	11,927.7	120.2	121.9	109.76	6,888.4	3,218.2	3,158.7	2,930.2	228.52	13.822	
17,800.0	10,859.5	18,931.4	11,927.2	121.8	123.5	109.76	6,988.4	3,217.5	3,158.6	2,927.1	231.52	13.643	
17,900.0	10,859.3	19,031.4	11,926.7	123.4	125.0	109.75	7,088.4	3,216.7	3,158.5	2,924.0	234.52	13.468	
18,000.0	10,859.1	19,131.4	11,926.1	124.9	126.6	109.75	7,188.4	3,215.9	3,158.4	2,920.9	237.52	13.297	
18,100.0	10,858.9	19,231.4	11,925.6	126.5	128.1	109.74	7,288.4	3,215.1	3,158.3	2,917.7	240.53	13.130	
18,200.0	10,858.6	19,331.4	11,925.0	128.1	129.7	109.74	7,388.4	3,214.3	3,158.2	2,914.6	243.54	12.968	
18,300.0	10,858.4	19,431.4	11,924.5	129.7	131.3	109.73	7,488.4	3,213.6	3,158.1	2,911.5	246.56	12.808	
18,400.0	10,858.2	19,531.4	11,924.0	131.3	132.8	109.72	7,588.4	3,212.8	3,157.9	2,908.4	249.58	12.653	
18,500.0	10,857.9	19,631.4	11,923.4	132.9	134.4	109.72	7,688.4	3,212.0	3,157.8	2,905.2	252.61	12.501	
18,600.0	10,857.7	19,731.4	11,922.9	134.4	136.0	109.71	7,788.4	3,211.2	3,157.7	2,902.1	255.63	12.352	
18,700.0	10,857.5	19,831.4	11,922.4	136.0	137.5	109.71	7,888.3	3,210.4	3,157.6	2,899.9	258.67	12.207	
18,800.0	10,857.3	19,931.4	11,921.8	137.6	139.1	109.70	7,988.3	3,209.7	3,157.5	2,898.8	261.70	12.065	
18,900.0	10,857.0	20,031.4	11,921.3	139.2	140.7	109.70	8,088.3	3,208.9	3,157.4	2,897.6	264.74	11.926	
19,000.0	10,856.8	20,131.4	11,920.7	140.8	142.2	109.69	8,188.3	3,208.1	3,157.3	2,896.5	267.78	11.790	
19,100.0	10,856.6	20,231.4	11,920.2	142.4	143.8	109.69	8,288.3	3,207.3	3,157.1	2,896.3	270.83	11.657	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,856.4	20,331.4	11,919.7	144.0	145.4	109.68	8,388.3	3,206.6	3,157.0	2,883.2	273.87	11.527	
19,300.0	10,856.1	20,431.4	11,919.1	145.6	147.0	109.68	8,488.3	3,205.8	3,156.9	2,880.0	276.92	11.400	
19,400.0	10,855.9	20,531.4	11,918.6	147.2	148.5	109.67	8,588.3	3,205.0	3,156.8	2,876.8	279.98	11.275	
19,500.0	10,855.7	20,631.4	11,918.1	148.8	150.1	109.67	8,688.3	3,204.2	3,156.7	2,873.7	283.03	11.153	
19,600.0	10,855.5	20,731.4	11,917.5	150.4	151.7	109.66	8,788.3	3,203.4	3,156.6	2,870.5	286.09	11.033	
19,700.0	10,855.2	20,831.4	11,917.0	152.0	153.3	109.66	8,888.3	3,202.7	3,156.5	2,867.3	289.16	10.916	
19,800.0	10,855.0	20,931.4	11,916.5	153.6	154.9	109.65	8,988.3	3,201.9	3,156.3	2,864.1	292.22	10.801	
19,900.0	10,854.8	21,031.4	11,915.9	155.2	156.5	109.65	9,088.3	3,201.1	3,156.2	2,860.9	295.29	10.689	
20,000.0	10,854.5	21,131.4	11,915.4	156.8	158.1	109.64	9,188.3	3,200.3	3,156.1	2,857.8	298.36	10.578	
20,100.0	10,854.3	21,231.4	11,914.8	158.4	159.7	109.64	9,288.3	3,199.6	3,156.0	2,854.6	301.43	10.470	
20,200.0	10,854.1	21,331.4	11,914.3	160.0	161.2	109.63	9,388.3	3,198.8	3,155.9	2,851.4	304.50	10.364	
20,300.0	10,853.9	21,431.4	11,913.8	161.7	162.8	109.63	9,488.3	3,198.0	3,155.8	2,848.2	307.58	10.260	
20,400.0	10,853.6	21,531.4	11,913.2	163.3	164.4	109.62	9,588.3	3,197.2	3,155.7	2,845.0	310.65	10.158	
20,500.0	10,853.4	21,631.4	11,912.7	164.9	166.0	109.61	9,688.3	3,196.4	3,155.6	2,841.8	313.73	10.058	
20,600.0	10,853.2	21,731.4	11,912.2	166.5	167.6	109.61	9,788.3	3,195.7	3,155.4	2,838.6	316.82	9.960	
20,700.0	10,853.0	21,831.4	11,911.6	168.1	169.2	109.60	9,888.2	3,194.9	3,155.3	2,835.4	319.90	9.863	
20,800.0	10,852.7	21,931.4	11,911.1	169.7	170.8	109.60	9,988.2	3,194.1	3,155.2	2,832.2	322.99	9.769	
20,900.0	10,852.5	22,031.4	11,910.6	171.3	172.4	109.59	10,088.2	3,193.3	3,155.1	2,829.0	326.07	9.676	
21,000.0	10,852.3	22,131.4	11,910.0	172.9	174.0	109.59	10,188.2	3,192.6	3,155.0	2,825.8	329.16	9.585	
21,094.0	10,851.5	22,225.5	11,909.5	174.5	175.5	109.59	10,282.3	3,191.8	3,154.8	2,822.8	332.05	9.501 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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
0.0	0.0	13.7	13.7	0.0	0.0	-12.97	5,174.9	-1,191.5	5,310.3				
100.0	100.0	94.2	94.2	0.1	0.2	-12.97	5,175.0	-1,192.0	5,310.6	5,310.3	0.28	N/A	
200.0	200.0	174.7	174.7	0.5	0.3	-12.99	5,175.2	-1,193.4	5,311.2	5,310.4	0.76	7,003.687	
300.0	300.0	266.3	266.2	0.8	0.6	-13.01	5,175.5	-1,195.7	5,312.1	5,310.7	1.40	3,803.567	
400.0	400.0	362.7	362.6	1.2	0.9	-13.03	5,176.0	-1,197.7	5,313.1	5,311.0	2.10	2,527.997	
500.0	500.0	460.1	460.1	1.6	1.2	-13.04	5,176.7	-1,199.4	5,314.1	5,311.3	2.81	1,891.247	
600.0	600.0	557.9	557.8	1.9	1.6	-13.06	5,177.5	-1,200.8	5,315.2	5,311.7	3.52	1,510.567	
700.0	700.0	655.8	655.7	2.3	1.9	-13.07	5,178.3	-1,202.2	5,316.4	5,312.1	4.23	1,257.265	
800.0	800.0	753.8	753.7	2.6	2.3	-13.08	5,179.1	-1,203.6	5,317.5	5,312.6	4.94	1,076.776	
900.0	900.0	846.5	846.3	3.0	2.6	-13.10	5,180.0	-1,205.0	5,318.8	5,313.2	5.63	944.829	
1,000.0	1,000.0	943.0	942.8	3.4	3.0	-13.11	5,181.0	-1,206.5	5,320.2	5,313.9	6.33	840.096	
1,100.0	1,100.0	1,132.2	1,132.1	3.7	3.6	-13.12	5,182.0	-1,207.3	5,320.8	5,313.4	7.34	725.169	
1,200.0	1,200.0	1,361.1	1,360.9	4.1	4.4	-13.11	5,178.6	-1,206.4	5,319.2	5,310.7	8.46	628.446	
1,300.0	1,300.0	1,540.3	1,539.9	4.4	5.0	-135.44	5,171.3	-1,210.0	5,316.3	5,306.8	9.43	563.723	
1,400.0	1,400.0	1,682.4	1,681.6	4.8	5.5	-135.57	5,163.2	-1,216.0	5,313.5	5,303.3	10.27	517.469	
1,500.0	1,499.9	1,779.2	1,778.2	5.1	5.9	-135.69	5,157.0	-1,221.1	5,311.7	5,300.7	10.96	484.802	
1,585.9	1,585.6	1,860.1	1,858.7	5.4	6.2	-135.79	5,151.9	-1,225.6	5,311.2	5,299.6	11.54	460.099	
1,600.0	1,599.7	1,873.4	1,872.0	5.4	6.2	-135.80	5,151.1	-1,226.4	5,311.2	5,299.5	11.64	456.277	
1,700.0	1,699.4	1,975.2	1,973.4	5.8	6.6	-135.94	5,144.6	-1,232.4	5,312.0	5,299.6	12.36	429.809	
1,800.0	1,798.9	2,077.2	2,075.0	6.1	7.0	-136.08	5,137.9	-1,238.8	5,314.0	5,301.0	13.08	406.173	
1,900.0	1,898.3	2,068.0	2,065.8	6.5	6.9	-136.03	5,138.6	-1,238.2	5,318.5	5,305.1	13.41	396.610	
2,000.0	1,997.4	2,151.0	2,148.5	6.9	7.3	-136.13	5,134.1	-1,243.5	5,324.4	5,310.3	14.07	378.300	
2,100.0	2,096.4	2,190.6	2,188.0	7.2	7.4	-136.20	5,132.7	-1,246.0	5,332.5	5,317.9	14.58	365.658	
2,200.0	2,195.5	2,257.0	2,254.3	7.6	7.6	-136.32	5,131.3	-1,250.0	5,341.9	5,326.7	15.19	351.622	
2,300.0	2,294.5	2,282.3	2,279.6	8.0	7.7	-136.36	5,131.1	-1,251.6	5,352.1	5,336.5	15.65	342.016	
2,400.0	2,393.5	2,361.6	2,358.7	8.4	8.0	-136.49	5,130.5	-1,256.2	5,363.0	5,346.7	16.31	328.890	
2,500.0	2,492.5	2,441.0	2,438.0	8.8	8.3	-136.62	5,130.3	-1,260.6	5,374.3	5,357.4	16.97	316.778	
2,600.0	2,591.6	2,519.2	2,516.1	9.2	8.6	-136.74	5,130.5	-1,264.7	5,386.0	5,368.4	17.62	305.677	
2,700.0	2,690.6	2,597.4	2,594.1	9.6	8.9	-136.86	5,130.9	-1,268.7	5,398.1	5,379.8	18.27	295.384	
2,800.0	2,789.6	3,022.7	3,018.6	10.0	10.4	-137.55	5,122.1	-1,292.1	5,408.9	5,388.7	20.23	267.412	
2,900.0	2,888.6	3,105.3	3,101.0	10.4	10.7	-137.68	5,117.9	-1,295.4	5,415.5	5,394.6	20.91	259.040	
3,000.0	2,987.7	3,188.0	3,183.6	10.8	11.0	-137.80	5,114.1	-1,298.4	5,422.4	5,400.8	21.59	251.198	
3,100.0	3,086.7	3,302.9	3,298.3	11.2	11.5	-137.98	5,108.8	-1,302.8	5,429.3	5,406.9	22.39	242.529	
3,200.0	3,185.7	3,423.4	3,418.4	11.6	11.9	-138.18	5,102.3	-1,309.3	5,435.9	5,412.7	23.21	234.232	
3,300.0	3,284.8	3,497.5	3,492.3	12.0	12.2	-138.31	5,098.2	-1,313.9	5,442.7	5,418.9	23.87	228.031	
3,400.0	3,383.8	3,581.1	3,575.6	12.4	12.5	-138.46	5,093.6	-1,319.7	5,449.8	5,425.3	24.56	221.875	
3,500.0	3,482.8	3,652.2	3,646.4	12.8	12.8	-138.59	5,090.0	-1,324.4	5,457.4	5,432.2	25.21	216.497	
3,600.0	3,581.8	3,723.7	3,717.7	13.2	13.0	-138.71	5,087.1	-1,328.2	5,465.4	5,439.6	25.85	211.396	
3,700.0	3,680.9	3,798.7	3,792.7	13.7	13.3	-138.82	5,084.6	-1,331.3	5,474.0	5,447.5	26.51	206.482	
3,800.0	3,779.9	3,879.3	3,873.2	14.1	13.6	-138.93	5,082.4	-1,334.2	5,483.0	5,455.8	27.18	201.695	
3,878.9	3,858.0	3,943.0	3,936.8	14.4	13.8	-139.02	5,081.0	-1,336.2	5,490.3	5,462.6	27.72	198.091	
3,900.0	3,878.9	3,960.0	3,953.8	14.5	13.9	-139.06	5,080.7	-1,336.7	5,492.3	5,464.4	27.86	197.154	
4,000.0	3,978.2	4,040.2	4,034.0	14.9	14.2	-139.23	5,079.3	-1,338.5	5,500.5	5,472.0	28.52	192.873	
4,100.0	4,077.7	4,120.9	4,114.6	15.3	14.5	-139.36	5,078.6	-1,339.6	5,507.2	5,478.0	29.17	188.774	
4,200.0	4,177.5	4,222.9	4,216.6	15.6	14.8	-139.46	5,078.1	-1,340.0	5,512.1	5,482.2	29.89	184.421	
4,300.0	4,277.4	4,334.1	4,327.8	16.0	15.2	-139.52	5,077.6	-1,339.8	5,514.8	5,484.2	30.63	180.073	
4,400.0	4,377.4	4,420.5	4,414.3	16.3	15.5	-139.53	5,077.4	-1,339.1	5,515.6	5,484.3	31.25	176.483	
4,412.2	4,389.6	4,431.1	4,424.9	16.4	15.5	-17.28	5,077.4	-1,338.9	5,515.5	5,484.2	31.33	176.057	
4,500.0	4,477.4	4,506.8	4,500.6	16.7	15.8	-17.27	5,077.6	-1,337.6	5,515.3	5,483.5	31.87	173.084	
4,551.4	4,528.8	4,552.0	4,545.8	16.8	15.9	-17.26	5,077.9	-1,336.7	5,515.3	5,483.1	32.18	171.379	
4,600.0	4,577.4	4,595.4	4,589.1	17.0	16.1	-17.25	5,078.2	-1,335.7	5,515.3	5,482.9	32.48	169.791	
4,700.0	4,677.4	4,684.5	4,678.2	17.3	16.4	-17.23	5,079.0	-1,333.6	5,515.5	5,482.4	33.10	166.614	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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		
4,800.0	4,777.4	4,775.7	4,769.4	17.6	16.7	-17.20	5,080.0	-1,331.6	5,515.9	5,482.2	33.73	163.511		
4,900.0	4,877.4	4,868.1	4,861.7	18.0	17.0	-17.18	5,081.1	-1,329.8	5,516.4	5,482.1	34.37	160.499		
5,000.0	4,977.4	4,969.3	4,962.9	18.3	17.3	-17.17	5,082.1	-1,328.4	5,517.0	5,482.0	35.04	157.447		
5,100.0	5,077.4	5,074.0	5,067.6	18.6	17.6	-17.15	5,083.1	-1,327.2	5,517.6	5,481.8	35.73	154.441		
5,200.0	5,177.4	5,175.6	5,169.2	19.0	18.0	-17.13	5,084.0	-1,325.9	5,518.0	5,481.6	36.40	151.584		
5,300.0	5,277.4	5,276.6	5,270.2	19.3	18.3	-17.12	5,084.9	-1,324.6	5,518.5	5,481.4	37.08	148.835		
5,400.0	5,377.4	5,366.8	5,360.4	19.6	18.6	-17.11	5,085.7	-1,323.5	5,519.0	5,481.3	37.72	146.322		
5,500.0	5,477.4	5,456.7	5,450.3	20.0	18.9	-17.10	5,086.6	-1,322.8	5,519.7	5,481.4	38.36	143.900		
5,600.0	5,577.4	5,556.3	5,549.9	20.3	19.2	-17.09	5,087.6	-1,322.3	5,520.5	5,481.5	39.04	141.419		
5,700.0	5,677.4	5,657.5	5,651.1	20.6	19.6	-17.08	5,088.5	-1,322.0	5,521.3	5,481.6	39.72	138.998		
5,800.0	5,777.4	5,774.2	5,767.7	21.0	20.0	-17.08	5,089.4	-1,321.8	5,522.0	5,481.5	40.47	136.460		
5,900.0	5,877.4	5,884.6	5,878.2	21.3	20.4	-17.07	5,089.9	-1,321.4	5,522.3	5,481.1	41.19	134.078		
6,000.0	5,977.4	5,985.3	5,978.9	21.6	20.7	-17.07	5,090.3	-1,321.0	5,522.6	5,480.7	41.87	131.889		
6,100.0	6,077.4	6,087.5	6,081.0	22.0	21.0	-17.06	5,090.8	-1,320.4	5,522.9	5,480.3	42.57	129.751		
6,200.0	6,177.4	6,191.1	6,184.7	22.3	21.4	-17.05	5,091.3	-1,319.5	5,523.1	5,479.8	43.26	127.664		
6,300.0	6,277.4	6,320.8	6,314.4	22.6	21.8	-17.03	5,091.6	-1,318.2	5,523.1	5,479.0	44.06	125.367		
6,400.0	6,377.4	6,444.2	6,437.7	23.0	22.3	-17.03	5,091.1	-1,317.2	5,522.4	5,477.6	44.83	123.191		
6,500.0	6,477.4	6,536.4	6,529.9	23.3	22.6	-17.04	5,090.1	-1,318.1	5,521.7	5,476.2	45.49	121.369		
6,600.0	6,577.4	6,627.7	6,621.2	23.7	22.9	-17.07	5,088.8	-1,320.8	5,521.1	5,474.9	46.16	119.605		
6,700.0	6,677.4	6,717.2	6,710.6	24.0	23.2	-17.10	5,087.5	-1,323.8	5,520.7	5,473.9	46.83	117.900		
6,800.0	6,777.4	6,811.3	6,804.7	24.3	23.6	-17.14	5,086.4	-1,326.8	5,520.5	5,473.0	47.51	116.204		
6,900.0	6,877.4	6,922.8	6,916.2	24.7	24.0	-17.17	5,085.0	-1,330.0	5,520.2	5,472.0	48.25	114.401		
7,000.0	6,977.4	7,064.9	7,058.1	25.0	24.5	-17.22	5,082.8	-1,333.9	5,519.6	5,470.5	49.11	112.387		
7,100.0	7,077.4	7,240.9	7,234.0	25.4	25.1	-17.28	5,078.0	-1,338.3	5,517.8	5,467.7	50.09	110.163		
7,200.0	7,177.4	7,200.0	7,342.8	25.7	24.9	-17.30	5,074.3	-1,339.3	5,514.7	5,464.4	50.29	109.658		
7,300.0	7,277.4	7,436.2	7,429.2	26.1	25.8	-17.31	5,071.7	-1,339.3	5,511.8	5,460.3	51.47	107.090		
7,400.0	7,377.4	7,495.1	7,488.1	26.4	26.0	-17.31	5,070.5	-1,339.0	5,509.7	5,457.7	52.02	105.913		
7,500.0	7,477.4	7,561.7	7,554.7	26.8	26.2	-17.30	5,069.7	-1,338.5	5,508.4	5,455.8	52.60	104.726		
7,600.0	7,577.4	7,661.1	7,654.0	27.1	26.6	-17.30	5,068.9	-1,337.5	5,507.3	5,454.0	53.29	103.350		
7,700.0	7,677.4	7,762.6	7,755.6	27.4	26.9	-17.28	5,068.2	-1,336.1	5,506.2	5,452.2	53.99	101.994		
7,800.0	7,777.4	7,869.5	7,862.4	27.8	27.3	-17.27	5,067.3	-1,334.5	5,505.0	5,450.3	54.70	100.637		
7,900.0	7,877.4	7,980.0	7,973.0	28.1	27.6	-17.26	5,066.3	-1,332.9	5,503.7	5,448.3	55.43	99.287		
8,000.0	7,977.4	8,094.0	8,087.0	28.5	28.0	-17.25	5,065.0	-1,331.3	5,502.2	5,446.0	56.18	97.946		
8,100.0	8,077.4	8,209.9	8,202.7	28.8	28.4	-17.24	5,063.3	-1,329.7	5,500.4	5,443.4	56.93	96.623		
8,200.0	8,177.4	8,325.9	8,318.8	29.2	28.8	-17.22	5,061.3	-1,327.8	5,498.2	5,440.6	57.68	95.328		
8,300.0	8,277.4	8,438.8	8,431.6	29.5	29.2	-17.21	5,059.1	-1,325.9	5,495.9	5,437.4	58.42	94.078		
8,400.0	8,377.4	8,547.6	8,540.4	29.9	29.6	-17.20	5,056.7	-1,323.9	5,493.3	5,434.1	59.15	92.877		
8,500.0	8,477.4	8,653.3	8,646.0	30.2	30.0	-17.19	5,054.3	-1,322.1	5,490.6	5,430.7	59.86	91.718		
8,600.0	8,577.4	8,737.1	8,729.8	30.6	30.3	-17.18	5,052.4	-1,320.6	5,487.9	5,427.4	60.51	90.698		
8,700.0	8,677.4	8,815.7	8,808.4	30.9	30.5	-17.17	5,050.9	-1,319.5	5,485.6	5,424.5	61.13	89.733		
8,800.0	8,777.4	8,862.0	8,854.7	31.3	30.7	-17.17	5,050.1	-1,319.0	5,483.9	5,422.2	61.64	88.961		
8,900.0	8,877.4	8,927.5	8,920.2	31.6	30.9	-17.17	5,049.4	-1,318.6	5,482.8	5,420.6	62.22	88.122		
8,948.1	8,925.5	8,949.8	8,942.5	31.8	31.0	-17.17	5,049.4	-1,318.6	5,482.7	5,420.3	62.46	87.779		
9,000.0	8,977.4	8,973.9	8,966.6	32.0	31.1	-17.17	5,049.4	-1,318.6	5,482.9	5,420.1	62.72	87.417		
9,100.0	9,077.4	9,051.0	9,043.7	32.3	31.4	-17.17	5,050.3	-1,319.3	5,484.0	5,420.7	63.33	86.589		
9,200.0	9,177.4	9,100.8	9,093.4	32.7	31.5	-17.18	5,051.1	-1,320.0	5,485.7	5,421.9	63.84	85.926		
9,300.0	9,277.4	9,247.3	9,239.9	33.0	32.0	-17.19	5,052.6	-1,322.1	5,487.1	5,422.4	64.72	84.782		
9,400.0	9,377.4	9,310.8	9,303.4	33.4	32.3	-17.20	5,053.2	-1,323.0	5,488.5	5,423.2	65.28	84.075		
9,500.0	9,477.4	9,378.2	9,370.8	33.7	32.5	-17.21	5,054.3	-1,324.0	5,490.5	5,424.6	65.86	83.372		
9,600.0	9,577.4	9,448.3	9,440.9	34.1	32.7	-17.21	5,055.9	-1,325.1	5,493.0	5,426.6	66.44	82.679		
9,700.0	9,677.4	9,526.2	9,518.7	34.4	33.0	-17.22	5,057.8	-1,326.8	5,496.0	5,428.9	67.05	81.968		
9,800.0	9,777.4	9,604.1	9,596.6	34.8	33.3	-17.24	5,059.8	-1,329.2	5,499.4	5,431.7	67.66	81.277		

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	9,877.4	9,758.4	9,750.7	35.1	33.8	-17.27	5,063.7	-1,333.1	5,502.6	5,434.0	68.58	80.236	
10,000.0	9,977.4	9,868.6	9,860.9	35.5	34.2	-17.27	5,066.2	-1,333.8	5,505.0	5,435.7	69.32	79.414	
10,100.0	10,077.4	9,956.3	9,948.6	35.8	34.5	-17.26	5,068.4	-1,334.2	5,507.5	5,437.5	69.97	78.712	
10,200.0	10,177.4	10,058.2	10,050.5	36.2	34.8	-17.26	5,071.2	-1,334.5	5,510.2	5,439.5	70.68	77.964	
10,300.0	10,277.4	10,171.0	10,163.3	36.5	35.2	-17.25	5,074.1	-1,334.7	5,512.7	5,441.3	71.43	77.181	
10,324.1	10,301.5	10,198.2	10,190.5	36.6	35.3	-17.25	5,074.8	-1,334.7	5,513.3	5,441.7	71.61	76.994	
10,350.0	10,327.4	10,221.8	10,214.0	36.7	35.4	-16.81	5,075.3	-1,334.8	5,513.3	5,441.5	71.78	76.811	
10,400.0	10,377.2	10,270.8	10,263.0	36.9	35.6	-16.91	5,076.5	-1,335.0	5,510.3	5,438.1	72.12	76.401	
10,450.0	10,426.4	10,319.4	10,311.6	37.0	35.7	-17.15	5,077.6	-1,335.3	5,503.1	5,430.6	72.46	75.942	
10,500.0	10,474.6	10,367.1	10,359.3	37.2	35.9	-17.54	5,078.7	-1,335.7	5,491.8	5,419.0	72.80	75.440	
10,550.0	10,521.6	10,416.2	10,408.4	37.3	36.1	-18.09	5,079.7	-1,336.2	5,476.5	5,403.3	73.13	74.889	
10,600.0	10,566.8	10,463.9	10,456.1	37.5	36.2	-18.82	5,080.8	-1,336.7	5,457.3	5,383.8	73.45	74.303	
10,650.0	10,610.1	10,509.6	10,501.8	37.6	36.4	-19.76	5,081.8	-1,337.0	5,434.3	5,360.6	73.75	73.688	
10,700.0	10,651.0	10,553.0	10,545.1	37.7	36.6	-20.96	5,082.7	-1,337.3	5,407.8	5,333.8	74.03	73.048	
10,750.0	10,689.2	10,702.3	10,694.4	37.8	37.1	-22.87	5,084.4	-1,338.5	5,377.6	5,302.9	74.70	71.985	
10,800.0	10,724.5	10,800.0	10,693.1	37.9	37.4	-24.70	5,083.9	-1,338.6	5,343.5	5,268.4	75.15	71.109	
10,850.0	10,756.6	10,820.4	10,812.4	37.9	37.5	-27.72	5,083.5	-1,339.8	5,306.9	5,231.6	75.33	70.452	
10,900.0	10,785.2	10,855.8	10,847.9	38.0	37.6	-31.10	5,083.0	-1,340.3	5,267.6	5,192.1	75.54	69.736	
10,950.0	10,810.1	10,886.5	10,878.6	38.0	37.7	-35.48	5,082.6	-1,340.7	5,226.1	5,150.4	75.72	69.020	
11,000.0	10,831.2	10,912.1	10,904.1	38.1	37.8	-41.21	5,082.2	-1,341.0	5,182.8	5,106.9	75.87	68.307	
11,050.0	10,848.2	10,932.4	10,924.5	38.3	37.9	-48.74	5,081.9	-1,341.3	5,137.9	5,061.9	76.00	67.601	
11,100.0	10,861.1	10,947.5	10,939.5	38.4	37.9	-58.56	5,081.6	-1,341.5	5,091.9	5,015.8	76.11	66.904	
11,150.0	10,869.7	10,957.1	10,949.2	38.5	38.0	-70.88	5,081.4	-1,341.7	5,045.1	4,968.9	76.19	66.219	
11,200.0	10,874.0	10,961.3	10,953.4	38.7	38.0	-85.12	5,081.4	-1,341.7	4,997.8	4,921.6	76.25	65.548	
11,225.4	10,874.5	10,961.3	10,953.4	38.8	38.0	-92.60	5,081.4	-1,341.7	4,973.7	4,897.5	76.27	65.213	
11,287.1	10,874.3	10,959.8	10,951.8	39.0	38.0	-92.54	5,081.4	-1,341.7	4,915.4	4,839.1	76.32	64.406	
11,300.0	10,874.3	10,959.5	10,951.5	39.0	38.0	-92.53	5,081.4	-1,341.7	4,903.2	4,826.9	76.33	64.237	
11,400.0	10,874.1	10,957.0	10,949.0	39.4	38.0	-92.44	5,081.4	-1,341.7	4,808.8	4,732.4	76.42	62.923	
11,500.0	10,873.8	10,954.5	10,946.5	39.8	38.0	-92.35	5,081.5	-1,341.6	4,714.6	4,638.1	76.53	61.604	
11,600.0	10,873.6	10,952.0	10,944.1	40.3	38.0	-92.27	5,081.5	-1,341.6	4,620.7	4,544.1	76.65	60.279	
11,700.0	10,873.4	10,949.6	10,941.7	40.9	38.0	-92.18	5,081.6	-1,341.6	4,527.0	4,450.2	76.79	58.950	
11,800.0	10,873.2	10,947.2	10,939.3	41.5	37.9	-92.09	5,081.6	-1,341.5	4,433.7	4,356.7	76.95	57.615	
11,900.0	10,872.9	10,944.9	10,936.9	42.2	37.9	-92.01	5,081.7	-1,341.5	4,340.6	4,263.4	77.13	56.275	
12,000.0	10,872.7	10,942.5	10,934.6	42.9	37.9	-91.93	5,081.7	-1,341.5	4,247.8	4,170.4	77.33	54.930	
12,100.0	10,872.5	10,940.2	10,932.3	43.7	37.9	-91.84	5,081.7	-1,341.4	4,155.3	4,077.8	77.55	53.580	
12,200.0	10,872.2	10,937.9	10,930.0	44.6	37.9	-91.76	5,081.8	-1,341.4	4,063.2	3,985.4	77.80	52.225	
12,300.0	10,872.0	10,935.7	10,927.7	45.4	37.9	-91.68	5,081.8	-1,341.4	3,971.5	3,893.4	78.08	50.866	
12,400.0	10,871.8	10,933.4	10,925.5	46.3	37.9	-91.60	5,081.8	-1,341.3	3,880.2	3,801.8	78.39	49.502	
12,500.0	10,871.6	10,931.2	10,923.3	47.3	37.9	-91.52	5,081.9	-1,341.3	3,789.4	3,710.6	78.73	48.134	
12,600.0	10,871.3	10,929.0	10,921.1	48.3	37.9	-91.44	5,081.9	-1,341.3	3,699.0	3,619.9	79.10	46.762	
12,700.0	10,871.1	10,926.9	10,918.9	49.3	37.9	-91.37	5,082.0	-1,341.2	3,609.1	3,529.6	79.52	45.387	
12,800.0	10,870.9	10,924.7	10,916.8	50.4	37.9	-91.29	5,082.0	-1,341.2	3,519.7	3,439.8	79.98	44.010	
12,900.0	10,870.7	10,922.6	10,914.7	51.5	37.9	-91.21	5,082.0	-1,341.2	3,431.0	3,350.5	80.48	42.631	
13,000.0	10,870.4	10,920.5	10,912.6	52.6	37.8	-91.14	5,082.1	-1,341.1	3,342.8	3,261.8	81.04	41.251	
13,100.0	10,870.2	10,918.4	10,910.5	53.8	37.8	-91.06	5,082.1	-1,341.1	3,255.4	3,173.8	81.65	39.872	
13,200.0	10,870.0	10,916.4	10,908.5	54.9	37.8	-90.99	5,082.1	-1,341.1	3,168.7	3,086.4	82.32	38.494	
13,300.0	10,869.7	10,914.4	10,906.4	56.1	37.8	-90.92	5,082.2	-1,341.1	3,082.8	2,999.8	83.05	37.119	
13,400.0	10,869.5	10,912.4	10,904.4	57.4	37.8	-90.85	5,082.2	-1,341.0	2,997.8	2,913.9	83.86	35.750	
13,500.0	10,869.3	10,910.4	10,902.4	58.6	37.8	-90.78	5,082.2	-1,341.0	2,913.7	2,829.0	84.73	34.387	
13,600.0	10,869.1	10,908.4	10,900.5	59.9	37.8	-90.71	5,082.3	-1,341.0	2,830.7	2,745.0	85.69	33.033	
13,700.0	10,868.8	10,906.4	10,898.5	61.1	37.8	-90.64	5,082.3	-1,340.9	2,748.8	2,662.1	86.74	31.690	
13,800.0	10,868.6	10,904.5	10,896.6	62.4	37.8	-90.57	5,082.3	-1,340.9	2,668.1	2,580.2	87.88	30.361	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,868.4	10,902.6	10,894.7	63.8	37.8	-90.50	5,082.4	-1,340.9	2,588.8	2,499.7	89.12	29.050	
14,000.0	10,868.2	10,900.7	10,892.8	65.1	37.8	-90.43	5,082.4	-1,340.9	2,511.0	2,420.5	90.46	27.759	
14,100.0	10,867.9	10,898.8	10,890.9	66.4	37.8	-90.36	5,082.4	-1,340.8	2,434.7	2,342.8	91.91	26.491	
14,200.0	10,867.7	10,897.0	10,889.1	67.8	37.8	-90.30	5,082.4	-1,340.8	2,360.3	2,266.8	93.47	25.252	
14,300.0	10,867.5	10,895.1	10,887.2	69.2	37.8	-90.23	5,082.5	-1,340.8	2,287.8	2,192.6	95.15	24.044	
14,400.0	10,867.3	10,893.3	10,885.4	70.6	37.8	-90.17	5,082.5	-1,340.8	2,217.4	2,120.4	96.95	22.871	
14,500.0	10,867.0	10,891.5	10,883.6	72.0	37.7	-90.10	5,082.5	-1,340.7	2,149.4	2,050.5	98.87	21.739	
14,600.0	10,866.8	10,889.7	10,881.8	73.4	37.7	-90.04	5,082.5	-1,340.7	2,083.9	1,983.0	100.91	20.651	
14,700.0	10,866.6	10,888.0	10,880.0	74.8	37.7	-89.97	5,082.6	-1,340.7	2,021.3	1,918.2	103.06	19.612	
14,800.0	10,866.3	10,886.2	10,878.3	76.2	37.7	-89.91	5,082.6	-1,340.7	1,961.8	1,856.5	105.32	18.626	
14,900.0	10,866.1	10,884.5	10,876.6	77.7	37.7	-89.85	5,082.6	-1,340.6	1,905.7	1,798.0	107.68	17.698	
15,000.0	10,865.9	10,882.8	10,874.8	79.1	37.7	-89.79	5,082.6	-1,340.6	1,853.2	1,743.1	110.10	16.832	
15,100.0	10,865.7	10,881.1	10,873.1	80.6	37.7	-89.73	5,082.7	-1,340.6	1,804.8	1,692.2	112.59	16.031	
15,200.0	10,865.4	10,879.4	10,871.5	82.0	37.7	-89.67	5,082.7	-1,340.6	1,760.8	1,645.7	115.09	15.299	
15,300.0	10,865.2	10,877.7	10,869.8	83.5	37.7	-89.61	5,082.7	-1,340.6	1,721.4	1,603.8	117.59	14.640	
15,400.0	10,865.0	10,876.1	10,868.1	85.0	37.7	-89.55	5,082.7	-1,340.5	1,687.1	1,567.0	120.03	14.055	
15,500.0	10,864.8	10,874.4	10,866.5	86.4	37.7	-89.49	5,082.8	-1,340.5	1,658.0	1,535.6	122.39	13.548	
15,600.0	10,864.5	10,872.8	10,864.9	87.9	37.7	-89.43	5,082.8	-1,340.5	1,634.6	1,510.0	124.60	13.119	
15,700.0	10,864.3	10,871.2	10,863.3	89.4	37.7	-89.37	5,082.8	-1,340.5	1,617.1	1,490.4	126.63	12.769	
15,800.0	10,864.1	10,869.6	10,861.7	90.9	37.7	-89.32	5,082.8	-1,340.4	1,605.5	1,477.1	128.44	12.500	
15,900.0	10,863.8	10,868.0	10,860.1	92.4	37.7	-89.26	5,082.9	-1,340.4	1,600.2	1,470.2	129.99	12.310	
15,935.6	10,863.8	10,867.5	10,859.5	93.0	37.7	-89.24	5,082.9	-1,340.4	1,599.8	1,469.3	130.48	12.261	CC, ES
16,000.0	10,863.6	10,866.5	10,858.5	94.0	37.7	-89.20	5,082.9	-1,340.4	1,601.1	1,469.8	131.26	12.198	
16,100.0	10,863.4	10,864.9	10,857.0	95.5	37.7	-89.15	5,082.9	-1,340.4	1,608.2	1,476.0	132.22	12.163	
16,200.0	10,863.2	10,863.4	10,855.5	97.0	37.6	-89.09	5,082.9	-1,340.4	1,621.5	1,488.6	132.88	12.203	
16,300.0	10,862.9	10,861.9	10,853.9	98.5	37.6	-89.04	5,082.9	-1,340.3	1,640.8	1,507.5	133.23	12.315	
16,400.0	10,862.7	10,860.3	10,852.4	100.0	37.6	-88.99	5,083.0	-1,340.3	1,665.8	1,532.5	133.31	12.496	
16,500.0	10,862.5	10,858.9	10,850.9	101.6	37.6	-88.93	5,083.0	-1,340.3	1,696.4	1,563.3	133.12	12.744	
16,600.0	10,862.3	10,857.4	10,849.5	103.1	37.6	-88.88	5,083.0	-1,340.3	1,732.2	1,599.5	132.70	13.054	
16,700.0	10,862.0	10,855.9	10,848.0	104.7	37.6	-88.83	5,083.0	-1,340.3	1,773.0	1,640.9	132.09	13.423	
16,800.0	10,861.8	10,854.4	10,846.5	106.2	37.6	-88.77	5,083.0	-1,340.2	1,818.3	1,687.0	131.31	13.848	
16,900.0	10,861.6	10,853.0	10,845.1	107.7	37.6	-88.72	5,083.1	-1,340.2	1,867.9	1,737.5	130.40	14.324	
17,000.0	10,861.4	10,851.6	10,843.7	109.3	37.6	-88.67	5,083.1	-1,340.2	1,921.5	1,792.1	129.39	14.850	
17,100.0	10,861.1	10,850.2	10,842.2	110.8	37.6	-88.62	5,083.1	-1,340.2	1,978.6	1,850.3	128.31	15.421	
17,200.0	10,860.9	10,848.7	10,840.8	112.4	37.6	-88.57	5,083.1	-1,340.2	2,039.0	1,911.9	127.17	16.033	
17,300.0	10,860.7	13,193.2	12,168.0	114.0	47.0	-128.53	6,384.3	-1,370.9	2,072.2	1,937.9	134.28	15.432	
17,400.0	10,860.4	13,335.3	12,166.2	115.5	48.1	-128.40	6,526.2	-1,377.7	2,074.7	1,938.0	136.77	15.170	
17,500.0	10,860.2	13,454.1	12,165.6	117.1	49.1	-128.37	6,645.0	-1,379.8	2,075.4	1,936.4	138.98	14.934	
17,600.0	10,860.0	13,578.2	12,164.4	118.7	50.2	-128.35	6,769.1	-1,381.2	2,075.2	1,934.0	141.27	14.690	
17,700.0	10,859.8	13,691.7	12,162.9	120.2	51.2	-128.34	6,882.6	-1,381.0	2,073.8	1,930.4	143.48	14.454	
17,800.0	10,859.5	13,796.7	12,161.4	121.8	52.2	-128.33	6,987.5	-1,380.6	2,072.2	1,926.5	145.66	14.226	
17,900.0	10,859.3	13,868.1	12,160.6	123.4	52.9	-128.33	7,058.9	-1,380.4	2,070.9	1,923.4	147.55	14.035	
17,926.1	10,859.3	13,885.3	12,160.6	123.8	53.1	-128.33	7,076.1	-1,380.5	2,070.9	1,922.8	148.03	13.990	
18,000.0	10,859.1	13,941.8	12,161.0	124.9	53.7	-128.34	7,132.6	-1,380.9	2,071.2	1,921.8	149.44	13.860	
18,100.0	10,858.9	18,100.0	12,162.6	126.5	97.6	-128.40	7,259.3	-1,380.8	2,071.5	1,883.9	187.64	11.040	
18,200.0	10,858.6	14,196.9	12,162.8	128.1	56.4	-128.47	7,387.7	-1,378.7	2,069.7	1,915.4	154.25	13.417	
18,300.0	10,858.4	14,298.1	12,163.9	129.7	57.5	-128.56	7,488.8	-1,375.9	2,067.8	1,911.4	156.38	13.222	
18,400.0	10,858.2	14,379.0	12,165.9	131.3	58.4	-128.66	7,569.7	-1,373.4	2,066.4	1,908.1	158.31	13.052	
18,500.0	10,857.9	14,522.9	12,165.6	132.9	60.1	-128.73	7,713.6	-1,370.2	2,063.9	1,903.0	160.95	12.824	
18,600.0	10,857.7	14,634.1	12,163.2	134.4	61.4	-128.74	7,824.6	-1,368.1	2,060.7	1,897.3	163.37	12.614	
18,700.0	10,857.5	14,765.3	12,160.6	136.0	63.0	-128.78	7,955.7	-1,363.8	2,056.4	1,890.5	165.93	12.393	
18,800.0	10,857.3	14,897.8	12,157.2	137.6	64.6	-128.84	8,088.1	-1,357.4	2,050.6	1,882.2	168.47	12.172	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
18,900.0	10,857.0	14,984.6	12,154.7	139.2	65.7	-128.90	8,174.7	-1,352.1	2,043.7	1,873.1	170.65	11.976	
19,000.0	10,856.8	15,042.6	12,154.4	140.8	66.4	-128.96	8,232.6	-1,348.9	2,038.7	1,866.1	172.55	11.815	
19,100.0	10,856.6	15,130.8	12,155.5	142.4	67.6	-129.08	8,320.7	-1,344.3	2,034.9	1,860.3	174.62	11.654	
19,200.0	10,856.4	15,200.4	12,157.2	144.0	68.5	-129.19	8,390.2	-1,340.9	2,032.2	1,855.7	176.51	11.513	
19,300.0	10,856.1	15,267.7	12,159.4	145.6	69.3	-129.30	8,457.4	-1,338.5	2,031.0	1,852.7	178.36	11.387	
19,321.3	10,856.1	15,281.8	12,159.8	145.9	69.5	-129.31	8,471.5	-1,338.2	2,031.0	1,852.3	178.76	11.362	
19,400.0	10,855.9	15,340.9	12,161.2	147.2	70.3	-129.36	8,530.6	-1,337.9	2,031.5	1,851.2	180.34	11.265	
19,500.0	10,855.7	15,445.8	12,163.0	148.8	71.7	-129.41	8,635.4	-1,338.2	2,032.4	1,849.6	182.75	11.121	
19,600.0	10,855.5	15,541.0	12,164.5	150.4	73.0	-129.46	8,730.6	-1,338.4	2,033.1	1,848.0	185.04	10.987	
19,700.0	10,855.2	15,629.2	12,166.6	152.0	74.2	-129.51	8,818.8	-1,338.9	2,034.5	1,847.3	187.25	10.865	
19,800.0	10,855.0	15,733.5	12,165.7	153.6	75.6	-129.46	8,923.0	-1,341.6	2,035.6	1,845.7	189.87	10.721	
19,900.0	10,854.8	15,807.1	12,165.2	155.2	76.6	-129.41	8,996.6	-1,344.5	2,037.6	1,845.6	192.06	10.609	
20,000.0	10,854.5	15,897.7	12,165.0	156.8	77.9	-129.36	9,087.2	-1,348.5	2,040.5	1,846.0	194.51	10.490	
20,100.0	10,854.3	16,000.7	12,164.7	158.4	79.3	-129.28	9,190.0	-1,353.7	2,043.7	1,846.5	197.22	10.363	
20,200.0	10,854.1	16,134.9	12,162.3	160.0	81.2	-129.15	9,324.0	-1,359.3	2,045.2	1,844.7	200.50	10.200	
20,300.0	10,853.9	16,214.6	12,161.3	161.7	82.4	-129.09	9,403.6	-1,362.2	2,046.9	1,844.0	202.84	10.091	
20,400.0	10,853.6	16,284.6	12,162.4	163.3	83.4	-129.09	9,473.7	-1,364.4	2,049.9	1,845.0	204.91	10.004	
20,500.0	10,853.4	16,360.0	12,165.7	164.9	84.5	-129.13	9,548.9	-1,366.6	2,054.4	1,847.5	206.93	9.928	
20,600.0	10,853.2	16,436.0	12,170.2	166.5	85.6	-129.21	9,624.7	-1,369.0	2,060.1	1,851.2	208.90	9.862	
20,700.0	10,853.0	16,510.3	12,175.0	168.1	86.6	-129.27	9,698.8	-1,371.9	2,066.8	1,855.9	210.82	9.803	
20,800.0	10,852.7	16,587.0	12,180.7	169.7	87.8	-129.34	9,775.2	-1,375.6	2,074.7	1,862.0	212.75	9.752	
20,900.0	10,852.5	16,644.0	12,185.6	171.3	88.6	-129.41	9,832.0	-1,378.3	2,083.7	1,869.5	214.24	9.726	
21,000.0	10,852.3	16,705.6	12,191.5	172.9	89.5	-129.48	9,893.1	-1,382.3	2,094.6	1,878.9	215.76	9.708	
21,094.0	10,851.5	16,858.2	12,205.1	174.5	91.8	-129.58	10,044.6	-1,394.9	2,106.6	1,887.2	219.32	9.605 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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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
0.0	0.0	0.0	0.0	0.0	0.0	-90.70	-2.3	-190.0	190.0				
100.0	100.0	100.0	100.0	0.1	0.1	-90.70	-2.3	-190.0	190.0	189.7	0.26	741.260	
200.0	200.0	200.0	200.0	0.5	0.5	-90.70	-2.3	-190.0	190.0	189.0	0.97	195.212	
300.0	300.0	300.0	300.0	0.8	0.8	-90.70	-2.3	-190.0	190.0	188.3	1.69	112.407	
400.0	400.0	400.0	400.0	1.2	1.2	-90.70	-2.3	-190.0	190.0	187.6	2.41	78.928	
500.0	500.0	500.0	500.0	1.6	1.6	-90.70	-2.3	-190.0	190.0	186.9	3.12	60.815	
600.0	600.0	600.0	600.0	1.9	1.9	-90.70	-2.3	-190.0	190.0	186.1	3.84	49.463	
700.0	700.0	700.0	700.0	2.3	2.3	-90.70	-2.3	-190.0	190.0	185.4	4.56	41.683	
800.0	800.0	800.0	800.0	2.6	2.6	-90.70	-2.3	-190.0	190.0	184.7	5.27	36.018	
900.0	900.0	900.0	900.0	3.0	3.0	-90.70	-2.3	-190.0	190.0	184.0	5.99	31.708	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	-90.70	-2.3	-190.0	190.0	183.3	6.71	28.320	
1,100.0	1,100.0	1,102.2	1,102.2	3.7	3.7	-90.91	-3.0	-189.4	189.4	182.0	7.42	25.537	
1,200.0	1,200.0	1,204.3	1,204.3	4.1	4.0	-91.55	-5.1	-187.6	187.7	179.6	8.11	23.134	
1,300.0	1,300.0	1,306.3	1,306.2	4.4	4.4	145.29	-8.5	-184.6	185.6	176.8	8.80	21.093	
1,400.0	1,400.0	1,408.3	1,407.9	4.8	4.7	144.23	-13.3	-180.4	183.9	174.4	9.48	19.401	
1,500.0	1,499.9	1,510.1	1,509.5	5.1	5.1	143.02	-19.4	-175.1	182.6	172.5	10.17	17.960	
1,600.0	1,599.7	1,611.9	1,610.8	5.4	5.5	141.67	-27.0	-168.6	181.8	170.9	10.87	16.729	
1,700.0	1,699.4	1,713.6	1,711.8	5.8	5.8	140.19	-35.8	-160.9	181.4	169.8	11.57	15.672	
1,733.0	1,732.2	1,747.2	1,745.1	5.9	6.0	139.67	-39.0	-158.1	181.3	169.5	11.81	15.355 CC	
1,800.0	1,798.9	1,815.0	1,812.3	6.1	6.2	138.60	-46.0	-152.0	181.5	169.2	12.29	14.763 ES	
1,900.0	1,898.3	1,914.9	1,911.2	6.5	6.6	137.22	-56.5	-142.9	182.6	169.6	13.02	14.026	
2,000.0	1,997.4	2,014.8	2,010.1	6.9	7.0	136.24	-67.0	-133.8	185.2	171.4	13.76	13.457	
2,100.0	2,096.4	2,114.7	2,109.1	7.2	7.4	135.48	-77.5	-124.7	188.4	173.9	14.51	12.984	
2,200.0	2,195.5	2,214.7	2,208.0	7.6	7.8	134.74	-88.0	-115.6	191.7	176.4	15.27	12.553	
2,300.0	2,294.5	2,314.6	2,307.0	8.0	8.1	134.04	-98.5	-106.4	194.9	178.9	16.03	12.159	
2,400.0	2,393.5	2,414.5	2,405.9	8.4	8.5	133.35	-109.0	-97.3	198.3	181.5	16.80	11.798	
2,500.0	2,492.5	2,514.4	2,504.9	8.8	8.9	132.69	-119.5	-88.2	201.6	184.0	17.58	11.467	
2,600.0	2,591.6	2,614.3	2,603.8	9.2	9.4	132.05	-130.0	-79.1	205.0	186.6	18.36	11.161	
2,700.0	2,690.6	2,714.2	2,702.7	9.6	9.8	131.43	-140.5	-70.0	208.3	189.2	19.15	10.880	
2,800.0	2,789.6	2,814.2	2,801.7	10.0	10.2	130.83	-151.0	-60.8	211.8	191.8	19.94	10.619	
2,900.0	2,888.6	2,914.1	2,900.6	10.4	10.6	130.25	-161.5	-51.7	215.2	194.5	20.74	10.377	
3,000.0	2,987.7	3,012.5	2,998.2	10.8	11.0	129.82	-171.4	-43.1	218.9	197.3	21.53	10.168	
3,100.0	3,086.7	3,110.2	3,095.3	11.2	11.4	129.98	-179.5	-36.1	223.5	201.2	22.30	10.025	
3,200.0	3,185.7	3,207.7	3,192.4	11.6	11.7	130.69	-185.7	-30.7	229.2	206.1	23.04	9.946	
3,300.0	3,284.8	3,304.8	3,289.4	12.0	12.1	131.92	-190.0	-26.9	235.9	212.2	23.76	9.929	
3,400.0	3,383.8	3,401.6	3,386.1	12.4	12.4	133.60	-192.4	-24.8	244.0	219.5	24.46	9.975	
3,500.0	3,482.8	3,501.7	3,482.8	12.8	12.8	135.65	-193.1	-24.3	253.4	228.2	25.13	10.084	
3,600.0	3,581.8	3,602.7	3,581.8	13.2	13.1	137.75	-193.1	-24.3	263.6	237.8	25.80	10.216	
3,700.0	3,680.9	3,703.6	3,680.9	13.7	13.4	139.70	-193.1	-24.3	274.1	247.6	26.47	10.352	
3,800.0	3,779.9	3,804.6	3,779.9	14.1	13.7	141.50	-193.1	-24.3	284.9	257.7	27.15	10.492	
3,878.9	3,858.0	3,873.5	3,858.0	14.4	14.0	142.83	-193.1	-24.3	293.6	265.9	27.65	10.618	
3,900.0	3,878.9	3,905.6	3,878.9	14.5	14.1	143.19	-193.1	-24.3	295.9	268.0	27.83	10.632	
4,000.0	3,978.2	4,006.3	3,978.2	14.9	14.4	144.63	-193.1	-24.3	305.6	277.1	28.51	10.721	
4,100.0	4,077.7	4,106.8	4,077.7	15.3	14.7	145.70	-193.1	-24.3	313.4	284.2	29.19	10.738	
4,200.0	4,177.5	4,207.0	4,177.5	15.6	15.1	146.44	-193.1	-24.3	319.1	289.3	29.87	10.683	
4,300.0	4,277.4	4,307.1	4,277.4	16.0	15.4	146.88	-193.1	-24.3	322.7	292.1	30.56	10.560	
4,400.0	4,377.4	4,407.1	4,377.4	16.3	15.7	147.05	-193.1	-24.3	324.0	292.8	31.24	10.373	
4,412.2	4,389.6	4,405.1	4,389.6	16.4	15.7	-90.71	-193.1	-24.3	324.1	292.8	31.27	10.362	
4,500.0	4,477.4	4,507.1	4,477.4	16.7	16.1	-90.71	-193.1	-24.3	324.1	292.1	31.91	10.155	
4,600.0	4,577.4	4,607.1	4,577.4	17.0	16.4	-90.71	-193.1	-24.3	324.1	291.5	32.58	9.945	
4,700.0	4,677.4	4,707.1	4,677.4	17.3	16.8	-90.71	-193.1	-24.3	324.1	290.8	33.26	9.744	
4,800.0	4,777.4	4,807.1	4,777.4	17.6	17.1	-90.71	-193.1	-24.3	324.1	290.1	33.93	9.550	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
4,900.0	4,877.4	4,907.1	4,877.4	18.0	17.4	-90.71	-193.1	-24.3	324.1	289.4	34.61	9.363	
5,000.0	4,977.4	5,007.1	4,977.4	18.3	17.8	-90.71	-193.1	-24.3	324.1	288.8	35.29	9.183	
5,100.0	5,077.4	5,107.1	5,077.4	18.6	18.1	-90.71	-193.1	-24.3	324.1	288.1	35.97	9.009	
5,200.0	5,177.4	5,207.1	5,177.4	19.0	18.5	-90.71	-193.1	-24.3	324.1	287.4	36.65	8.841	
5,300.0	5,277.4	5,307.1	5,277.4	19.3	18.8	-90.71	-193.1	-24.3	324.1	286.7	37.34	8.679	
5,400.0	5,377.4	5,407.1	5,377.4	19.6	19.1	-90.71	-193.1	-24.3	324.1	286.0	38.02	8.523	
5,500.0	5,477.4	5,507.1	5,477.4	20.0	19.5	-90.71	-193.1	-24.3	324.1	285.4	38.71	8.372	
5,600.0	5,577.4	5,607.1	5,577.4	20.3	19.8	-90.71	-193.1	-24.3	324.1	284.7	39.39	8.226	
5,700.0	5,677.4	5,707.1	5,677.4	20.6	20.2	-90.71	-193.1	-24.3	324.1	284.0	40.08	8.085	
5,800.0	5,777.4	5,807.1	5,777.4	21.0	20.5	-90.71	-193.1	-24.3	324.1	283.3	40.77	7.948	
5,900.0	5,877.4	5,907.1	5,877.4	21.3	20.9	-90.71	-193.1	-24.3	324.1	282.6	41.46	7.816	
6,000.0	5,977.4	6,007.1	5,977.4	21.6	21.2	-90.71	-193.1	-24.3	324.1	281.9	42.15	7.688	
6,100.0	6,077.4	6,107.1	6,077.4	22.0	21.6	-90.71	-193.1	-24.3	324.1	281.2	42.84	7.564	
6,200.0	6,177.4	6,207.1	6,177.4	22.3	21.9	-90.71	-193.1	-24.3	324.1	280.5	43.53	7.444	
6,300.0	6,277.4	6,307.1	6,277.4	22.6	22.3	-90.71	-193.1	-24.3	324.1	279.8	44.23	7.327	
6,400.0	6,377.4	6,407.1	6,377.4	23.0	22.6	-90.71	-193.1	-24.3	324.1	279.1	44.92	7.214	
6,500.0	6,477.4	6,507.1	6,477.4	23.3	22.9	-90.71	-193.1	-24.3	324.1	278.4	45.62	7.104	
6,600.0	6,577.4	6,607.1	6,577.4	23.7	23.3	-90.71	-193.1	-24.3	324.1	277.7	46.31	6.997	
6,700.0	6,677.4	6,707.1	6,677.4	24.0	23.6	-90.71	-193.1	-24.3	324.1	277.0	47.01	6.894	
6,800.0	6,777.4	6,807.1	6,777.4	24.3	24.0	-90.71	-193.1	-24.3	324.1	276.4	47.70	6.793	
6,900.0	6,877.4	6,907.1	6,877.4	24.7	24.3	-90.71	-193.1	-24.3	324.1	275.7	48.40	6.695	
7,000.0	6,977.4	7,007.1	6,977.4	25.0	24.7	-90.71	-193.1	-24.3	324.1	275.0	49.10	6.600	
7,100.0	7,077.4	7,107.1	7,077.4	25.4	25.0	-90.71	-193.1	-24.3	324.1	274.3	49.80	6.507	
7,200.0	7,177.4	7,207.1	7,177.4	25.7	25.4	-90.71	-193.1	-24.3	324.1	273.6	50.50	6.417	
7,300.0	7,277.4	7,307.1	7,277.4	26.1	25.7	-90.71	-193.1	-24.3	324.1	272.9	51.20	6.330	
7,400.0	7,377.4	7,407.1	7,377.4	26.4	26.1	-90.71	-193.1	-24.3	324.1	272.2	51.90	6.244	
7,500.0	7,477.4	7,507.1	7,477.4	26.8	26.4	-90.71	-193.1	-24.3	324.1	271.5	52.60	6.161	
7,600.0	7,577.4	7,607.1	7,577.4	27.1	26.8	-90.71	-193.1	-24.3	324.1	270.8	53.30	6.080	
7,700.0	7,677.4	7,707.1	7,677.4	27.4	27.1	-90.71	-193.1	-24.3	324.1	270.1	54.00	6.001	
7,800.0	7,777.4	7,807.1	7,777.4	27.8	27.5	-90.71	-193.1	-24.3	324.1	269.4	54.70	5.924	
7,900.0	7,877.4	7,907.1	7,877.4	28.1	27.8	-90.71	-193.1	-24.3	324.1	268.7	55.40	5.849	
8,000.0	7,977.4	8,007.1	7,977.4	28.5	28.2	-90.71	-193.1	-24.3	324.1	268.0	56.10	5.776	
8,100.0	8,077.4	8,107.1	8,077.4	28.8	28.5	-90.71	-193.1	-24.3	324.1	267.3	56.81	5.705	
8,200.0	8,177.4	8,207.1	8,177.4	29.2	28.9	-90.71	-193.1	-24.3	324.1	266.5	57.51	5.635	
8,300.0	8,277.4	8,307.1	8,277.4	29.5	29.2	-90.71	-193.1	-24.3	324.1	265.8	58.21	5.567	
8,400.0	8,377.4	8,407.1	8,377.4	29.9	29.6	-90.71	-193.1	-24.3	324.1	265.1	58.92	5.500	
8,500.0	8,477.4	8,507.1	8,477.4	30.2	30.0	-90.71	-193.1	-24.3	324.1	264.4	59.62	5.435	
8,600.0	8,577.4	8,607.1	8,577.4	30.6	30.3	-90.71	-193.1	-24.3	324.1	263.7	60.32	5.372	
8,700.0	8,677.4	8,707.1	8,677.4	30.9	30.7	-90.71	-193.1	-24.3	324.1	263.0	61.03	5.310	
8,800.0	8,777.4	8,807.1	8,777.4	31.3	31.0	-90.71	-193.1	-24.3	324.1	262.3	61.73	5.249	
8,900.0	8,877.4	8,907.1	8,877.4	31.6	31.4	-90.71	-193.1	-24.3	324.1	261.6	62.44	5.190	
9,000.0	8,977.4	9,007.1	8,977.4	32.0	31.7	-90.71	-193.1	-24.3	324.1	260.9	63.14	5.132	
9,100.0	9,077.4	9,107.1	9,077.4	32.3	32.1	-90.71	-193.1	-24.3	324.1	260.2	63.85	5.075	
9,200.0	9,177.4	9,207.1	9,177.4	32.7	32.4	-90.71	-193.1	-24.3	324.1	259.5	64.56	5.020	
9,300.0	9,277.4	9,307.1	9,277.4	33.0	32.8	-90.71	-193.1	-24.3	324.1	258.8	65.26	4.965	
9,400.0	9,377.4	9,407.1	9,377.4	33.4	33.1	-90.71	-193.1	-24.3	324.1	258.1	65.97	4.912	
9,500.0	9,477.4	9,507.1	9,477.4	33.7	33.5	-90.71	-193.1	-24.3	324.1	257.4	66.68	4.860	
9,600.0	9,577.4	9,607.1	9,577.4	34.1	33.8	-90.71	-193.1	-24.3	324.1	256.7	67.38	4.809	
9,700.0	9,677.4	9,707.1	9,677.4	34.4	34.2	-90.71	-193.1	-24.3	324.1	256.0	68.09	4.759	
9,800.0	9,777.4	9,807.1	9,777.4	34.8	34.5	-90.71	-193.1	-24.3	324.1	255.3	68.80	4.710	
9,900.0	9,877.4	9,907.1	9,877.4	35.1	34.9	-90.71	-193.1	-24.3	324.1	254.6	69.50	4.662	
10,000.0	9,977.4	10,007.1	9,977.4	35.5	35.3	-90.71	-193.1	-24.3	324.1	253.8	70.21	4.615	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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
10,100.0	10,077.4	10,107.1	10,077.4	35.8	35.6	-90.71	-193.1	-24.3	324.1	253.1	70.92	4.569	
10,200.0	10,177.4	10,207.1	10,177.4	36.2	36.0	-90.71	-193.1	-24.3	324.1	252.4	71.63	4.524	
10,300.0	10,277.4	10,307.1	10,277.4	36.5	36.3	-90.71	-193.1	-24.3	324.1	251.7	72.34	4.480	
10,324.1	10,301.5	10,317.0	10,301.5	36.6	36.3	-90.71	-193.1	-24.3	324.1	251.6	72.46	4.472	
10,350.0	10,327.4	10,342.9	10,327.4	36.7	36.4	-90.37	-193.1	-24.3	324.1	251.4	72.64	4.461	
10,400.0	10,377.2	10,407.3	10,377.2	36.9	36.7	-91.14	-193.1	-24.3	324.1	251.1	73.05	4.437	
10,450.0	10,426.4	10,441.9	10,426.4	37.0	36.8	-92.63	-193.1	-24.3	324.4	251.1	73.35	4.423	
10,500.0	10,474.6	10,509.9	10,474.6	37.2	37.0	-94.76	-193.1	-24.3	325.3	251.5	73.78	4.409 SF	
10,550.0	10,521.6	10,537.1	10,521.6	37.3	37.1	-97.38	-193.1	-24.3	327.2	253.2	74.06	4.419	
10,600.0	10,566.8	10,582.3	10,566.8	37.5	37.3	-100.33	-193.1	-24.3	330.8	256.4	74.40	4.447	
10,650.0	10,610.1	10,625.6	10,610.1	37.6	37.4	-103.41	-193.1	-24.3	336.8	262.1	74.73	4.507	
10,700.0	10,651.0	10,666.5	10,651.0	37.7	37.6	-106.41	-193.1	-24.3	345.7	270.7	75.04	4.607	
10,750.0	10,689.2	10,704.7	10,689.2	37.8	37.7	-109.13	-193.1	-24.3	358.2	282.9	75.34	4.755	
10,800.0	10,724.5	10,740.0	10,724.5	37.9	37.8	-111.37	-193.1	-24.3	374.7	299.1	75.60	4.956	
10,850.0	10,756.6	10,772.1	10,756.6	37.9	38.0	-113.00	-193.1	-24.3	395.3	319.5	75.84	5.213	
10,900.0	10,785.2	10,800.7	10,785.2	38.0	38.1	-113.86	-193.1	-24.3	420.1	344.1	76.03	5.525	
10,950.0	10,810.1	10,825.6	10,810.1	38.0	38.2	-113.82	-193.1	-24.3	448.9	372.7	76.20	5.892	
11,000.0	10,831.2	10,846.7	10,831.2	38.1	38.2	-112.73	-193.1	-24.3	481.4	405.1	76.32	6.308	
11,050.0	10,848.2	10,863.7	10,848.2	38.3	38.3	-110.41	-193.1	-24.3	517.1	440.7	76.41	6.768	
11,100.0	10,861.1	10,876.6	10,861.1	38.4	38.3	-106.66	-193.1	-24.3	555.6	479.1	76.48	7.265	
11,150.0	10,869.7	10,885.2	10,869.7	38.5	38.4	-101.27	-193.1	-24.3	596.3	519.8	76.51	7.794	
11,200.0	10,874.0	10,889.4	10,874.0	38.7	38.4	-94.09	-193.1	-24.3	638.7	562.2	76.52	8.347	
11,225.4	10,874.5	10,890.0	10,874.5	38.8	38.4	-89.77	-193.1	-24.3	660.7	584.2	76.52	8.635	
11,287.1	10,874.3	10,889.8	10,874.3	39.0	38.4	-89.74	-193.1	-24.3	715.1	638.6	76.50	9.347	
11,300.0	10,874.3	10,889.8	10,874.3	39.0	38.4	-89.74	-193.1	-24.3	726.6	650.1	76.50	9.498	
11,400.0	10,874.1	10,889.6	10,874.1	39.4	38.4	-89.70	-193.1	-24.3	817.3	740.9	76.48	10.687	
11,500.0	10,873.8	10,889.3	10,873.8	39.8	38.4	-89.66	-193.1	-24.3	910.0	833.5	76.47	11.900	
11,600.0	10,873.6	10,889.1	10,873.6	40.3	38.4	-89.62	-193.1	-24.3	1,004.1	927.6	76.46	13.132	
11,700.0	10,873.4	10,888.9	10,873.4	40.9	38.4	-89.58	-193.1	-24.3	1,099.2	1,022.7	76.46	14.377	
11,800.0	10,873.2	10,888.7	10,873.2	41.5	38.4	-89.54	-193.1	-24.3	1,195.1	1,118.7	76.46	15.631	
11,900.0	10,872.9	13,146.3	12,116.4	42.2	46.2	-165.41	1,063.7	-33.6	1,284.9	1,241.8	43.13	29.790	
12,000.0	10,872.7	13,246.3	12,115.9	42.9	46.9	-165.40	1,163.7	-34.4	1,284.7	1,240.7	44.00	29.198	
12,100.0	10,872.5	13,346.3	12,115.4	43.7	47.6	-165.40	1,263.7	-35.1	1,284.4	1,239.5	44.91	28.596	
12,200.0	10,872.2	13,446.3	12,114.8	44.6	48.4	-165.40	1,363.7	-35.9	1,284.1	1,238.2	45.88	27.989	
12,300.0	10,872.0	13,546.3	12,114.3	45.4	49.2	-165.39	1,463.7	-36.7	1,283.8	1,236.9	46.89	27.381	
12,400.0	10,871.8	13,646.3	12,113.8	46.3	50.1	-165.39	1,563.7	-37.5	1,283.5	1,235.6	47.94	26.776	
12,500.0	10,871.6	13,746.3	12,113.3	47.3	50.9	-165.38	1,663.7	-38.3	1,283.3	1,234.2	49.02	26.175	
12,600.0	10,871.3	13,846.3	12,112.8	48.3	51.9	-165.38	1,763.7	-39.0	1,283.0	1,232.8	50.15	25.583	
12,700.0	10,871.1	13,946.3	12,112.2	49.3	52.8	-165.38	1,863.6	-39.8	1,282.7	1,231.4	51.31	24.999	
12,800.0	10,870.9	14,046.3	12,111.7	50.4	53.8	-165.37	1,963.6	-40.6	1,282.4	1,229.9	52.50	24.427	
12,900.0	10,870.7	14,146.3	12,111.2	51.5	54.9	-165.37	2,063.6	-41.4	1,282.1	1,228.4	53.72	23.866	
13,000.0	10,870.4	14,246.3	12,110.7	52.6	55.9	-165.37	2,163.6	-42.2	1,281.8	1,226.9	54.97	23.319	
13,100.0	10,870.2	14,346.3	12,110.1	53.8	57.0	-165.36	2,263.6	-42.9	1,281.6	1,225.3	56.24	22.786	
13,200.0	10,870.0	14,446.3	12,109.6	54.9	58.1	-165.36	2,363.6	-43.7	1,281.3	1,223.7	57.54	22.267	
13,300.0	10,869.7	14,546.3	12,109.1	56.1	59.3	-165.35	2,463.6	-44.5	1,281.0	1,222.1	58.86	21.762	
13,400.0	10,869.5	14,646.3	12,108.6	57.4	60.4	-165.35	2,563.6	-45.3	1,280.7	1,220.5	60.21	21.272	
13,500.0	10,869.3	14,746.3	12,108.1	58.6	61.6	-165.35	2,663.6	-46.1	1,280.4	1,218.9	61.57	20.797	
13,600.0	10,869.1	14,846.3	12,107.5	59.9	62.8	-165.34	2,763.6	-46.8	1,280.1	1,217.2	62.95	20.336	
13,700.0	10,868.8	14,946.3	12,107.0	61.1	64.0	-165.34	2,863.6	-47.6	1,279.9	1,215.5	64.35	19.890	
13,800.0	10,868.6	15,046.3	12,106.5	62.4	65.3	-165.33	2,963.6	-48.4	1,279.6	1,213.8	65.76	19.458	
13,900.0	10,868.4	15,146.3	12,106.0	63.8	66.6	-165.33	3,063.6	-49.2	1,279.3	1,212.1	67.19	19.040	
14,000.0	10,868.2	15,246.3	12,105.5	65.1	67.8	-165.33	3,163.6	-50.0	1,279.0	1,210.4	68.63	18.635	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,867.9	15,346.3	12,104.9	66.4	69.1	-165.32	3,263.6	-50.7	1,278.7	1,208.6	70.09	18.244	
14,200.0	10,867.7	15,446.3	12,104.4	67.8	70.4	-165.32	3,363.6	-51.5	1,278.5	1,206.9	71.56	17.865	
14,300.0	10,867.5	15,546.3	12,103.9	69.2	71.8	-165.32	3,463.6	-52.3	1,278.2	1,205.1	73.04	17.499	
14,400.0	10,867.3	15,646.3	12,103.4	70.6	73.1	-165.31	3,563.6	-53.1	1,277.9	1,203.4	74.54	17.144	
14,500.0	10,867.0	15,746.3	12,102.8	72.0	74.5	-165.31	3,663.6	-53.9	1,277.6	1,201.6	76.04	16.802	
14,600.0	10,866.8	15,846.3	12,102.3	73.4	75.8	-165.30	3,763.6	-54.6	1,277.3	1,199.8	77.55	16.470	
14,700.0	10,866.6	15,946.3	12,101.8	74.8	77.2	-165.30	3,863.6	-55.4	1,277.0	1,198.0	79.08	16.149	
14,800.0	10,866.3	16,046.3	12,101.3	76.2	78.6	-165.30	3,963.5	-56.2	1,276.8	1,196.2	80.61	15.839	
14,900.0	10,866.1	16,146.3	12,100.8	77.7	80.0	-165.29	4,063.5	-57.0	1,276.5	1,194.3	82.15	15.539	
15,000.0	10,865.9	16,246.3	12,100.2	79.1	81.4	-165.29	4,163.5	-57.8	1,276.2	1,192.5	83.70	15.248	
15,100.0	10,865.7	16,346.3	12,099.7	80.6	82.8	-165.28	4,263.5	-58.5	1,275.9	1,190.7	85.25	14.966	
15,200.0	10,865.4	16,446.3	12,099.2	82.0	84.2	-165.28	4,363.5	-59.3	1,275.6	1,188.8	86.82	14.694	
15,300.0	10,865.2	16,546.3	12,098.7	83.5	85.7	-165.28	4,463.5	-60.1	1,275.4	1,187.0	88.39	14.429	
15,400.0	10,865.0	16,646.3	12,098.2	85.0	87.1	-165.27	4,563.5	-60.9	1,275.1	1,185.1	89.96	14.173	
15,500.0	10,864.8	16,746.3	12,097.6	86.4	88.6	-165.27	4,663.5	-61.7	1,274.8	1,183.2	91.54	13.925	
15,600.0	10,864.5	16,846.3	12,097.1	87.9	90.0	-165.27	4,763.5	-62.4	1,274.5	1,181.4	93.13	13.685	
15,700.0	10,864.3	16,946.3	12,096.6	89.4	91.5	-165.26	4,863.5	-63.2	1,274.2	1,179.5	94.73	13.452	
15,800.0	10,864.1	17,046.3	12,096.1	90.9	93.0	-165.26	4,963.5	-64.0	1,273.9	1,177.6	96.32	13.226	
15,900.0	10,863.8	17,146.3	12,095.5	92.4	94.4	-165.25	5,063.5	-64.8	1,273.7	1,175.7	97.93	13.006	
16,000.0	10,863.6	17,246.3	12,095.0	94.0	95.9	-165.25	5,163.5	-65.6	1,273.4	1,173.8	99.54	12.793	
16,100.0	10,863.4	17,346.3	12,094.5	95.5	97.4	-165.25	5,263.5	-66.3	1,273.1	1,172.0	101.15	12.586	
16,200.0	10,863.2	17,446.3	12,094.0	97.0	98.9	-165.24	5,363.5	-67.1	1,272.8	1,170.1	102.77	12.385	
16,300.0	10,862.9	17,546.3	12,093.5	98.5	100.4	-165.24	5,463.5	-67.9	1,272.5	1,168.2	104.39	12.190	
16,400.0	10,862.7	17,646.3	12,092.9	100.0	101.9	-165.23	5,563.5	-68.7	1,272.3	1,166.2	106.01	12.001	
16,500.0	10,862.5	17,746.3	12,092.4	101.6	103.4	-165.23	5,663.5	-69.5	1,272.0	1,164.3	107.64	11.817	
16,600.0	10,862.3	17,846.3	12,091.9	103.1	104.9	-165.23	5,763.5	-70.2	1,271.7	1,162.4	109.28	11.637	
16,700.0	10,862.0	17,946.3	12,091.4	104.7	106.4	-165.22	5,863.5	-71.0	1,271.4	1,160.5	110.91	11.463	
16,800.0	10,861.8	18,046.3	12,090.9	106.2	108.0	-165.22	5,963.4	-71.8	1,271.1	1,158.6	112.55	11.294	
16,900.0	10,861.6	18,146.3	12,090.3	107.7	109.5	-165.21	6,063.4	-72.6	1,270.8	1,156.7	114.20	11.129	
17,000.0	10,861.4	18,246.3	12,089.8	109.3	111.0	-165.21	6,163.4	-73.3	1,270.6	1,154.7	115.84	10.968	
17,100.0	10,861.1	18,346.3	12,089.3	110.8	112.5	-165.21	6,263.4	-74.1	1,270.3	1,152.8	117.49	10.812	
17,200.0	10,860.9	18,446.3	12,088.8	112.4	114.1	-165.20	6,363.4	-74.9	1,270.0	1,150.9	119.14	10.659	
17,300.0	10,860.7	18,546.3	12,088.2	114.0	115.6	-165.20	6,463.4	-75.7	1,269.7	1,148.9	120.80	10.511	
17,400.0	10,860.4	18,646.3	12,087.7	115.5	117.2	-165.19	6,563.4	-76.5	1,269.4	1,147.0	122.45	10.367	
17,500.0	10,860.2	18,746.3	12,087.2	117.1	118.7	-165.19	6,663.4	-77.2	1,269.2	1,145.0	124.11	10.226	
17,600.0	10,860.0	18,846.3	12,086.7	118.7	120.3	-165.19	6,763.4	-78.0	1,268.9	1,143.1	125.78	10.088	
17,700.0	10,859.8	18,946.3	12,086.2	120.2	121.8	-165.18	6,863.4	-78.8	1,268.6	1,141.2	127.44	9.954	
17,800.0	10,859.5	19,046.3	12,085.6	121.8	123.4	-165.18	6,963.4	-79.6	1,268.3	1,139.2	129.11	9.824	
17,900.0	10,859.3	19,146.3	12,085.1	123.4	124.9	-165.18	7,063.4	-80.4	1,268.0	1,137.3	130.78	9.696	
18,000.0	10,859.1	19,246.3	12,084.6	124.9	126.5	-165.17	7,163.4	-81.1	1,267.8	1,135.3	132.45	9.572	
18,100.0	10,858.9	19,346.3	12,084.1	126.5	128.0	-165.17	7,263.4	-81.9	1,267.5	1,133.3	134.12	9.450	
18,200.0	10,858.6	19,446.3	12,083.6	128.1	129.6	-165.16	7,363.4	-82.7	1,267.2	1,131.4	135.80	9.331	
18,300.0	10,858.4	19,546.3	12,083.0	129.7	131.2	-165.16	7,463.4	-83.5	1,266.9	1,129.4	137.47	9.216	
18,400.0	10,858.2	19,646.3	12,082.5	131.3	132.7	-165.16	7,563.4	-84.3	1,266.6	1,127.5	139.15	9.102	
18,500.0	10,857.9	19,746.3	12,082.0	132.9	134.3	-165.15	7,663.4	-85.0	1,266.3	1,125.5	140.83	8.992	
18,600.0	10,857.7	19,846.3	12,081.5	134.4	135.9	-165.15	7,763.4	-85.8	1,266.1	1,123.5	142.52	8.884	
18,700.0	10,857.5	19,946.3	12,080.9	136.0	137.5	-165.14	7,863.4	-86.6	1,265.8	1,121.6	144.20	8.778	
18,800.0	10,857.3	20,046.3	12,080.4	137.6	139.0	-165.14	7,963.4	-87.4	1,265.5	1,119.6	145.89	8.675	
18,900.0	10,857.0	20,146.3	12,079.9	139.2	140.6	-165.14	8,063.3	-88.2	1,265.2	1,117.6	147.57	8.573	
19,000.0	10,856.8	20,246.3	12,079.4	140.8	142.2	-165.13	8,163.3	-88.9	1,264.9	1,115.7	149.26	8.475	
19,100.0	10,856.6	20,346.3	12,078.9	142.4	143.8	-165.13	8,263.3	-89.7	1,264.7	1,113.7	150.95	8.378	
19,200.0	10,856.4	20,446.3	12,078.3	144.0	145.4	-165.12	8,363.3	-90.5	1,264.4	1,111.7	152.64	8.283	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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 #202H - 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	10,856.1	20,546.3	12,077.8	145.6	146.9	-165.12	8,463.3	-91.3	1,264.1	1,109.8	154.34	8.190	
19,400.0	10,855.9	20,646.3	12,077.3	147.2	148.5	-165.12	8,563.3	-92.1	1,263.8	1,107.8	156.03	8.100	
19,500.0	10,855.7	20,746.3	12,076.8	148.8	150.1	-165.11	8,663.3	-92.8	1,263.5	1,105.8	157.73	8.011	
19,600.0	10,855.5	20,846.3	12,076.3	150.4	151.7	-165.11	8,763.3	-93.6	1,263.2	1,103.8	159.43	7.924	
19,700.0	10,855.2	20,946.3	12,075.7	152.0	153.3	-165.10	8,863.3	-94.4	1,263.0	1,101.8	161.12	7.838	
19,800.0	10,855.0	21,046.3	12,075.2	153.6	154.9	-165.10	8,963.3	-95.2	1,262.7	1,099.9	162.82	7.755	
19,900.0	10,854.8	21,146.3	12,074.7	155.2	156.5	-165.10	9,063.3	-96.0	1,262.4	1,097.9	164.52	7.673	
20,000.0	10,854.5	21,246.3	12,074.2	156.8	158.1	-165.09	9,163.3	-96.7	1,262.1	1,095.9	166.23	7.593	
20,100.0	10,854.3	21,346.3	12,073.6	158.4	159.7	-165.09	9,263.3	-97.5	1,261.8	1,093.9	167.93	7.514	
20,200.0	10,854.1	21,446.3	12,073.1	160.0	161.3	-165.08	9,363.3	-98.3	1,261.6	1,091.9	169.63	7.437	
20,300.0	10,853.9	21,546.3	12,072.6	161.7	162.9	-165.08	9,463.3	-99.1	1,261.3	1,089.9	171.34	7.361	
20,400.0	10,853.6	21,646.3	12,072.1	163.3	164.5	-165.08	9,563.3	-99.9	1,261.0	1,087.9	173.05	7.287	
20,500.0	10,853.4	21,746.3	12,071.6	164.9	166.1	-165.07	9,663.3	-100.6	1,260.7	1,086.0	174.75	7.214	
20,600.0	10,853.2	21,846.3	12,071.0	166.5	167.7	-165.07	9,763.3	-101.4	1,260.4	1,084.0	176.46	7.143	
20,700.0	10,853.0	21,946.3	12,070.5	168.1	169.3	-165.06	9,863.3	-102.2	1,260.1	1,082.0	178.17	7.073	
20,800.0	10,852.7	22,046.3	12,070.0	169.7	170.9	-165.06	9,963.3	-103.0	1,259.9	1,080.0	179.88	7.004	
20,900.0	10,852.5	22,146.3	12,069.5	171.3	172.5	-165.06	10,063.3	-103.8	1,259.6	1,078.0	181.59	6.936	
21,000.0	10,852.3	22,246.3	12,069.0	172.9	174.1	-165.05	10,163.2	-104.5	1,259.3	1,076.0	183.30	6.870	
21,057.4	10,852.1	22,303.8	12,068.7	173.9	175.0	-165.05	10,220.7	-105.0	1,259.1	1,074.9	184.29	6.832	
21,094.0	10,851.5	22,333.6	12,068.5	174.5	175.5	-165.05	10,250.5	-105.2	1,259.7	1,074.8	184.82	6.816	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	89.35	25.4	2,233.1	2,233.2				
100.0	100.0	100.0	100.0	0.1	0.1	89.35	25.4	2,233.1	2,233.2	2,233.0	0.26	8,713.107	
200.0	200.0	200.0	200.0	0.5	0.5	89.35	25.4	2,233.1	2,233.2	2,232.3	0.97	2,294.614	
300.0	300.0	300.0	300.0	0.8	0.8	89.35	25.4	2,233.1	2,233.2	2,231.5	1.69	1,321.289	
400.0	400.0	400.0	400.0	1.2	1.2	89.35	25.4	2,233.1	2,233.2	2,230.8	2.41	927.756	
500.0	500.0	500.0	500.0	1.6	1.6	89.35	25.4	2,233.1	2,233.2	2,230.1	3.12	714.846	
600.0	600.0	600.0	600.0	1.9	1.9	89.35	25.4	2,233.1	2,233.2	2,229.4	3.84	581.417	
700.0	700.0	700.0	700.0	2.3	2.3	89.35	25.4	2,233.1	2,233.2	2,228.7	4.56	489.963	
800.0	800.0	800.0	800.0	2.6	2.6	89.35	25.4	2,233.1	2,233.2	2,228.0	5.27	423.369	
900.0	900.0	900.0	900.0	3.0	3.0	89.35	25.4	2,233.1	2,233.2	2,227.2	5.99	372.712	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	89.35	25.4	2,233.1	2,233.2	2,226.5	6.71	332.882	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	89.35	25.4	2,233.1	2,233.2	2,225.8	7.43	300.742	
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	89.35	25.4	2,233.1	2,233.2	2,225.1	8.14	274.263	
1,300.0	1,300.0	1,300.0	1,300.0	4.4	4.4	-32.91	25.4	2,233.1	2,232.5	2,223.7	8.85	252.376	
1,400.0	1,400.0	1,400.0	1,400.0	4.8	4.8	-32.96	25.4	2,233.1	2,230.3	2,220.8	9.54	233.814	
1,500.0	1,499.9	1,499.9	1,499.9	5.1	5.1	-33.04	25.4	2,233.1	2,226.6	2,216.4	10.23	217.562	
1,600.0	1,599.7	1,660.7	1,660.7	5.4	5.7	-33.20	24.9	2,230.9	2,220.2	2,209.0	11.13	199.533	
1,700.0	1,699.4	1,820.7	1,820.6	5.8	6.2	-33.41	23.5	2,224.3	2,209.5	2,197.5	12.01	184.038	
1,800.0	1,798.9	1,979.3	1,978.8	6.1	6.8	-33.65	21.2	2,213.5	2,194.7	2,181.8	12.88	170.423	
1,900.0	1,898.3	2,136.1	2,134.8	6.5	7.4	-33.94	17.9	2,198.6	2,175.8	2,162.0	13.74	158.352	
2,000.0	1,997.4	2,290.6	2,288.1	6.9	7.9	-34.29	13.8	2,179.9	2,152.9	2,138.3	14.59	147.563	
2,100.0	2,096.4	2,409.3	2,387.3	7.2	8.4	-34.43	10.9	2,166.3	2,127.8	2,112.5	15.35	138.601	
2,200.0	2,195.5	2,487.4	2,483.0	7.6	8.7	-34.58	8.0	2,153.1	2,102.8	2,086.8	15.98	131.603	
2,300.0	2,294.5	2,584.1	2,578.7	8.0	9.0	-34.72	5.2	2,140.0	2,077.8	2,061.1	16.67	124.609	
2,400.0	2,393.5	2,680.8	2,674.5	8.4	9.4	-34.88	2.3	2,126.8	2,052.8	2,035.5	17.37	118.149	
2,500.0	2,492.5	2,777.5	2,770.2	8.8	9.8	-35.03	-0.6	2,113.7	2,027.9	2,009.8	18.08	112.168	
2,600.0	2,591.6	2,874.2	2,866.0	9.2	10.2	-35.19	-3.4	2,100.5	2,002.9	1,984.1	18.79	106.618	
2,700.0	2,690.6	2,970.8	2,961.7	9.6	10.5	-35.35	-6.3	2,087.4	1,977.9	1,958.4	19.50	101.456	
2,800.0	2,789.6	3,067.5	3,057.4	10.0	10.9	-35.52	-9.1	2,074.2	1,953.0	1,932.8	20.21	96.645	
2,900.0	2,888.6	3,164.2	3,153.2	10.4	11.3	-35.69	-12.0	2,061.1	1,928.1	1,907.2	20.92	92.153	
3,000.0	2,987.7	3,260.9	3,248.9	10.8	11.7	-35.87	-14.9	2,047.9	1,903.2	1,881.5	21.64	87.949	
3,100.0	3,086.7	3,357.6	3,344.7	11.2	12.1	-36.05	-17.7	2,034.8	1,878.3	1,855.9	22.36	84.008	
3,200.0	3,185.7	3,454.2	3,440.4	11.6	12.5	-36.23	-20.6	2,021.6	1,853.4	1,830.4	23.08	80.307	
3,300.0	3,284.8	3,550.9	3,536.2	12.0	12.9	-36.42	-23.4	2,008.5	1,828.6	1,804.8	23.80	76.826	
3,400.0	3,383.8	3,647.6	3,631.9	12.4	13.3	-36.62	-26.3	1,995.3	1,803.8	1,779.2	24.53	73.546	
3,500.0	3,482.8	3,744.3	3,727.6	12.8	13.7	-36.82	-29.2	1,982.2	1,778.9	1,753.7	25.25	70.450	
3,600.0	3,581.8	3,841.0	3,823.4	13.2	14.0	-37.02	-32.0	1,969.0	1,754.2	1,728.2	25.98	67.525	
3,700.0	3,680.9	3,937.7	3,919.1	13.7	14.4	-37.24	-34.9	1,955.9	1,729.4	1,702.7	26.71	64.756	
3,800.0	3,779.9	4,034.3	4,014.9	14.1	14.8	-37.46	-37.7	1,942.7	1,704.7	1,677.2	27.44	62.132	
3,878.9	3,858.0	4,110.6	4,090.4	14.4	15.1	-37.63	-40.0	1,932.4	1,685.1	1,657.1	28.01	60.157	
3,900.0	3,878.9	4,131.0	4,110.6	14.5	15.2	-37.63	-40.6	1,929.6	1,680.0	1,651.8	28.17	59.645	
4,000.0	3,978.2	4,228.1	4,206.8	14.9	15.6	-37.60	-43.5	1,916.4	1,656.7	1,627.8	28.89	57.337	
4,100.0	4,077.7	4,325.8	4,303.5	15.3	16.0	-37.54	-46.4	1,903.1	1,635.5	1,605.9	29.62	55.220	
4,200.0	4,177.5	4,423.9	4,400.6	15.6	16.4	-37.45	-49.3	1,889.8	1,616.3	1,586.0	30.34	53.279	
4,300.0	4,277.4	4,522.4	4,498.2	16.0	16.8	-37.32	-52.2	1,876.4	1,599.2	1,568.1	31.05	51.502	
4,400.0	4,377.4	4,621.2	4,596.1	16.3	17.3	-37.15	-55.1	1,862.9	1,584.1	1,552.3	31.76	49.880	
4,412.2	4,389.6	4,633.4	4,608.1	16.4	17.3	85.11	-55.5	1,861.3	1,582.4	1,550.5	31.84	49.693	
4,500.0	4,477.4	4,720.3	4,694.1	16.7	17.7	85.17	-58.0	1,849.5	1,570.2	1,537.8	32.45	48.391	
4,600.0	4,577.4	4,819.3	4,792.2	17.0	18.1	85.23	-61.0	1,836.0	1,556.4	1,523.3	33.14	46.963	
4,700.0	4,677.4	4,918.3	4,890.2	17.3	18.5	85.30	-63.9	1,822.5	1,542.6	1,508.8	33.84	45.592	
4,800.0	4,777.4	5,017.3	4,988.3	17.6	18.9	85.37	-66.8	1,809.1	1,528.9	1,494.3	34.53	44.274	
4,900.0	4,877.4	5,116.4	5,086.4	18.0	19.3	85.44	-69.8	1,795.6	1,515.1	1,479.8	35.23	43.007	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
5,000.0	4,977.4	5,215.4	5,184.4	18.3	19.7	85.51	-72.7	1,782.1	1,501.3	1,465.3	35.93	41.787	
5,100.0	5,077.4	5,314.4	5,282.5	18.6	20.1	85.58	-75.6	1,768.7	1,487.5	1,450.8	36.63	40.613	
5,200.0	5,177.4	5,413.5	5,380.6	19.0	20.5	85.66	-78.5	1,755.2	1,473.7	1,436.4	37.33	39.482	
5,300.0	5,277.4	5,512.5	5,478.6	19.3	21.0	85.73	-81.5	1,741.7	1,459.9	1,421.9	38.03	38.392	
5,400.0	5,377.4	5,611.5	5,576.7	19.6	21.4	85.81	-84.4	1,728.3	1,446.1	1,407.4	38.73	37.340	
5,500.0	5,477.4	5,710.5	5,674.7	20.0	21.8	85.89	-87.3	1,714.8	1,432.3	1,392.9	39.43	36.325	
5,600.0	5,577.4	5,809.6	5,772.8	20.3	22.2	85.97	-90.3	1,701.3	1,418.6	1,378.4	40.14	35.345	
5,700.0	5,677.4	5,908.6	5,870.9	20.6	22.6	86.05	-93.2	1,687.9	1,404.8	1,363.9	40.84	34.397	
5,800.0	5,777.4	6,007.6	5,968.9	21.0	23.0	86.13	-96.1	1,674.4	1,391.0	1,349.5	41.55	33.482	
5,900.0	5,877.4	6,106.6	6,067.0	21.3	23.4	86.22	-99.1	1,660.9	1,377.2	1,335.0	42.25	32.596	
6,000.0	5,977.4	6,205.7	6,165.1	21.6	23.8	86.30	-102.0	1,647.5	1,363.5	1,320.5	42.96	31.739	
6,100.0	6,077.4	6,304.7	6,263.1	22.0	24.3	86.39	-104.9	1,634.0	1,349.7	1,306.0	43.67	30.910	
6,200.0	6,177.4	6,403.7	6,361.2	22.3	24.7	86.48	-107.8	1,620.5	1,336.0	1,291.6	44.37	30.106	
6,300.0	6,277.4	6,502.8	6,459.3	22.6	25.1	86.57	-110.8	1,607.1	1,322.2	1,277.1	45.08	29.328	
6,400.0	6,377.4	6,601.8	6,557.3	23.0	25.5	86.67	-113.7	1,593.6	1,308.4	1,262.6	45.79	28.573	
6,500.0	6,477.4	6,700.8	6,655.4	23.3	25.9	86.76	-116.6	1,580.1	1,294.7	1,248.2	46.50	27.841	
6,600.0	6,577.4	6,800.2	6,753.4	23.7	26.3	86.86	-119.6	1,566.7	1,280.9	1,233.7	47.22	27.129	
6,700.0	6,677.4	6,901.1	6,851.5	24.0	26.8	86.96	-122.5	1,553.2	1,267.2	1,219.3	47.93	26.436	
6,800.0	6,777.4	6,997.9	6,949.6	24.3	27.2	87.06	-125.4	1,539.7	1,253.5	1,204.8	48.64	25.771	
6,900.0	6,877.4	7,103.1	7,047.6	24.7	27.6	87.17	-128.4	1,526.3	1,239.7	1,190.4	49.37	25.109	
7,000.0	6,977.4	7,204.1	7,145.7	25.0	28.0	87.27	-131.3	1,512.8	1,226.0	1,175.9	50.09	24.474	
7,100.0	7,077.4	7,305.0	7,243.8	25.4	28.5	87.38	-134.2	1,499.3	1,212.3	1,161.5	50.82	23.856	
7,200.0	7,177.4	7,406.0	7,341.8	25.7	28.9	87.49	-137.1	1,485.9	1,198.6	1,147.0	51.54	23.256	
7,300.0	7,277.4	7,507.0	7,439.9	26.1	29.3	87.61	-140.1	1,472.4	1,184.8	1,132.6	52.26	22.672	
7,400.0	7,377.4	7,608.0	7,537.9	26.4	29.7	87.72	-143.0	1,458.9	1,171.1	1,118.1	52.98	22.104	
7,500.0	7,477.4	7,691.1	7,636.0	26.8	30.1	87.84	-145.9	1,445.5	1,157.4	1,103.8	53.64	21.578	
7,600.0	7,577.4	7,790.1	7,734.1	27.1	30.5	87.97	-148.9	1,432.0	1,143.7	1,089.4	54.36	21.042	
7,700.0	7,677.4	7,889.1	7,832.1	27.4	30.9	88.09	-151.8	1,418.5	1,130.0	1,074.9	55.07	20.519	
7,800.0	7,777.4	7,988.2	7,930.2	27.8	31.3	88.22	-154.7	1,405.1	1,116.3	1,060.5	55.79	20.010	
7,900.0	7,877.4	8,087.2	8,028.3	28.1	31.7	88.35	-157.7	1,391.6	1,102.6	1,046.1	56.51	19.513	
8,000.0	7,977.4	8,186.2	8,126.3	28.5	32.2	88.49	-160.6	1,378.1	1,089.0	1,031.7	57.23	19.029	
8,100.0	8,077.4	8,285.2	8,224.4	28.8	32.6	88.62	-163.5	1,364.7	1,075.3	1,017.3	57.94	18.557	
8,200.0	8,177.4	8,384.3	8,322.5	29.2	33.0	88.77	-166.4	1,351.2	1,061.6	1,003.0	58.66	18.097	
8,300.0	8,277.4	8,483.3	8,420.5	29.5	33.4	88.91	-169.4	1,337.7	1,048.0	988.6	59.38	17.647	
8,400.0	8,377.4	8,582.2	8,519.7	29.9	33.8	89.03	-171.8	1,324.2	1,034.8	974.7	60.12	17.212	
8,500.0	8,477.4	8,681.2	8,618.7	30.2	34.1	89.13	-173.7	1,310.8	1,021.6	961.8	60.85	16.822	
8,600.0	8,577.4	8,780.2	8,717.7	30.6	34.4	89.22	-175.2	1,301.7	1,014.4	952.9	61.55	16.481	
8,700.0	8,677.4	8,879.2	8,816.7	30.9	34.7	89.28	-176.5	1,305.1	1,007.3	945.1	62.23	16.186	
8,800.0	8,777.4	8,978.2	8,915.7	31.3	35.0	89.33	-177.4	1,301.0	1,002.2	939.3	62.89	15.936	
8,900.0	8,877.4	9,077.2	9,014.7	31.6	35.2	89.36	-177.9	1,298.6	999.1	935.6	63.51	15.730	
9,000.0	8,977.4	9,176.2	9,113.7	32.0	35.5	89.37	-178.1	1,297.7	998.0	933.9	64.12	15.565	
9,100.0	9,077.4	9,275.2	9,212.7	32.3	35.8	89.37	-178.1	1,297.7	998.0	933.2	64.79	15.404	
9,200.0	9,177.4	9,374.2	9,311.7	32.7	36.1	89.37	-178.1	1,297.7	998.0	932.5	65.47	15.243	
9,300.0	9,277.4	9,473.2	9,410.7	33.0	36.4	89.37	-178.1	1,297.7	998.0	931.9	66.16	15.085	
9,400.0	9,377.4	9,572.2	9,509.7	33.4	36.7	89.37	-178.1	1,297.7	998.0	931.2	66.84	14.930	
9,500.0	9,477.4	9,671.2	9,608.7	33.7	37.0	89.37	-178.1	1,297.7	998.0	930.5	67.53	14.779	
9,600.0	9,577.4	9,770.2	9,707.7	34.1	37.4	89.37	-178.1	1,297.7	998.0	929.8	68.22	14.630	
9,700.0	9,677.4	9,869.2	9,806.7	34.4	37.7	89.37	-178.1	1,297.7	998.0	929.1	68.90	14.484	
9,800.0	9,777.4	9,968.2	9,905.7	34.8	38.0	89.37	-178.1	1,297.7	998.0	928.4	69.59	14.341	
9,900.0	9,877.4	10,067.2	10,004.7	35.1	38.3	89.37	-178.1	1,297.7	998.0	927.7	70.28	14.200	
10,000.0	9,977.4	10,166.2	10,103.7	35.5	38.6	89.37	-178.1	1,297.7	998.0	927.0	70.97	14.063	
10,100.0	10,077.4	10,265.2	10,202.7	35.8	38.9	89.37	-178.1	1,297.7	998.0	926.4	71.66	13.927	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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 #203H - 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				
10,200.0	10,177.4	10,242.2	10,177.4	36.2	39.3	89.37	-178.1	1,297.7	998.0	925.7	72.35	13.795				
10,300.0	10,277.4	10,342.2	10,277.4	36.5	39.6	89.37	-178.1	1,297.7	998.0	925.0	73.04	13.664				
10,324.1	10,301.5	10,366.3	10,301.5	36.6	39.7	89.37	-178.1	1,297.7	998.0	924.8	73.21	13.633				
10,350.0	10,327.4	10,407.9	10,327.4	36.7	39.8	89.84	-178.1	1,297.7	998.0	924.6	73.44	13.590				
10,386.0	10,363.3	10,428.1	10,363.3	36.8	39.9	90.00	-178.1	1,297.7	998.0	924.4	73.63	13.554	CC			
10,400.0	10,377.2	10,441.9	10,377.2	36.9	39.9	90.10	-178.1	1,297.7	998.0	924.3	73.73	13.537				
10,450.0	10,426.4	10,508.9	10,426.4	37.0	40.1	90.58	-178.1	1,297.7	998.1	923.9	74.12	13.465				
10,500.0	10,474.6	10,539.4	10,474.6	37.2	40.2	91.28	-178.1	1,297.7	998.3	923.9	74.40	13.418	ES			
10,550.0	10,521.6	10,586.3	10,521.6	37.3	40.4	92.15	-178.1	1,297.7	998.8	924.1	74.73	13.367				
10,600.0	10,566.8	10,631.6	10,566.8	37.5	40.5	93.14	-178.1	1,297.7	999.9	924.9	75.05	13.324				
10,650.0	10,610.1	10,674.9	10,610.1	37.6	40.6	94.19	-178.1	1,297.7	1,001.8	926.4	75.37	13.292				
10,700.0	10,651.0	10,715.8	10,651.0	37.7	40.8	95.24	-178.1	1,297.7	1,004.7	929.0	75.68	13.275				
10,750.0	10,689.2	10,754.0	10,689.2	37.8	40.9	96.22	-178.1	1,297.7	1,008.9	932.9	76.00	13.275				
10,800.0	10,724.5	10,789.3	10,724.5	37.9	41.0	97.06	-178.1	1,297.7	1,014.7	938.4	76.31	13.296				
10,850.0	10,756.6	10,821.4	10,756.6	37.9	41.1	97.68	-178.1	1,297.7	1,022.3	945.7	76.63	13.341				
10,900.0	10,785.2	10,850.0	10,785.2	38.0	41.2	98.03	-178.1	1,297.7	1,032.0	955.0	76.94	13.413				
10,950.0	10,810.1	10,874.9	10,810.1	38.0	41.3	98.03	-178.1	1,297.7	1,043.8	966.6	77.25	13.512				
11,000.0	10,831.2	10,904.1	10,831.2	38.1	41.4	97.64	-178.1	1,297.7	1,058.0	980.4	77.58	13.637				
11,050.0	10,848.2	10,913.0	10,848.2	38.3	41.4	96.81	-178.1	1,297.7	1,074.5	996.6	77.85	13.802				
11,100.0	10,861.1	10,925.8	10,861.1	38.4	41.4	95.49	-178.1	1,297.7	1,093.3	1,015.2	78.14	13.992				
11,150.0	10,869.7	10,934.4	10,869.7	38.5	41.5	93.67	-178.1	1,297.7	1,114.3	1,035.9	78.41	14.212				
11,200.0	10,874.0	10,938.7	10,874.0	38.7	41.5	91.32	-178.1	1,297.7	1,137.4	1,058.7	78.66	14.460				
11,225.4	10,874.5	10,939.2	10,874.5	38.8	41.5	89.93	-178.1	1,297.7	1,149.8	1,071.0	78.78	14.595				
11,287.1	10,874.3	10,939.1	10,874.3	39.0	41.5	89.92	-178.1	1,297.7	1,181.6	1,102.5	79.06	14.946				
11,300.0	10,874.3	10,939.1	10,874.3	39.0	41.5	89.92	-178.1	1,297.7	1,188.6	1,109.4	79.12	15.023				
11,400.0	10,874.1	10,938.8	10,874.1	39.4	41.5	89.90	-178.1	1,297.7	1,245.7	1,166.1	79.57	15.656				
11,500.0	10,873.8	10,938.6	10,873.8	39.8	41.5	89.89	-178.1	1,297.7	1,308.0	1,228.0	80.00	16.351				
11,600.0	10,873.6	10,938.4	10,873.6	40.3	41.5	89.88	-178.1	1,297.7	1,374.8	1,294.4	80.40	17.100				
11,700.0	10,873.4	10,938.1	10,873.4	40.9	41.5	89.86	-178.1	1,297.7	1,445.4	1,364.6	80.76	17.897				
11,800.0	10,873.2	10,937.9	10,873.2	41.5	41.5	89.85	-178.1	1,297.7	1,519.3	1,438.2	81.09	18.735				
11,900.0	10,872.9	10,937.7	10,872.9	42.2	41.5	89.84	-178.1	1,297.7	1,596.0	1,514.6	81.39	19.609				
12,000.0	10,872.7	13,304.2	12,128.9	42.9	48.6	141.53	1,174.2	1,287.5	1,604.5	1,539.2	65.35	24.552				
12,100.0	10,872.5	13,404.2	12,128.4	43.7	49.3	141.52	1,274.2	1,286.7	1,604.3	1,537.7	66.52	24.117				
12,200.0	10,872.2	13,504.2	12,127.9	44.6	50.0	141.52	1,374.2	1,285.9	1,604.0	1,536.3	67.75	23.674				
12,300.0	10,872.0	13,604.2	12,127.3	45.4	50.8	141.51	1,474.2	1,285.1	1,603.8	1,534.7	69.05	23.226				
12,400.0	10,871.8	13,704.2	12,126.8	46.3	51.6	141.51	1,574.2	1,284.3	1,603.5	1,533.1	70.40	22.776				
12,500.0	10,871.6	13,804.2	12,126.3	47.3	52.5	141.50	1,674.2	1,283.5	1,603.3	1,531.5	71.81	22.325				
12,600.0	10,871.3	13,904.2	12,125.8	48.3	53.4	141.50	1,774.2	1,282.7	1,603.0	1,529.7	73.28	21.876				
12,700.0	10,871.1	14,004.2	12,125.2	49.3	54.3	141.49	1,874.2	1,281.9	1,602.8	1,528.0	74.79	21.430				
12,800.0	10,870.9	14,104.2	12,124.7	50.4	55.3	141.48	1,974.2	1,281.1	1,602.5	1,526.2	76.35	20.990				
12,900.0	10,870.7	14,204.2	12,124.2	51.5	56.3	141.48	2,074.2	1,280.3	1,602.3	1,524.3	77.95	20.555				
13,000.0	10,870.4	14,304.2	12,123.7	52.6	57.3	141.47	2,174.2	1,279.5	1,602.0	1,522.4	79.59	20.128				
13,100.0	10,870.2	14,404.2	12,123.2	53.8	58.4	141.47	2,274.2	1,278.7	1,601.8	1,520.5	81.27	19.708				
13,200.0	10,870.0	14,504.2	12,122.6	54.9	59.5	141.46	2,374.2	1,277.9	1,601.5	1,518.5	82.99	19.298				
13,300.0	10,869.7	14,604.2	12,122.1	56.1	60.6	141.46	2,474.2	1,277.2	1,601.3	1,516.5	84.74	18.896				
13,400.0	10,869.5	14,704.2	12,121.6	57.4	61.7	141.45	2,574.2	1,276.4	1,601.0	1,514.5	86.52	18.504				
13,500.0	10,869.3	14,804.2	12,121.1	58.6	62.9	141.44	2,674.2	1,275.6	1,600.8	1,512.4	88.34	18.122				
13,600.0	10,869.1	14,904.2	12,120.6	59.9	64.1	141.44	2,774.2	1,274.8	1,600.5	1,510.4	90.17	17.749				
13,700.0	10,868.8	15,004.2	12,120.0	61.1	65.3	141.43	2,874.2	1,274.0	1,600.3	1,508.2	92.04	17.386				
13,800.0	10,868.6	15,104.2	12,119.5	62.4	66.5	141.43	2,974.1	1,273.2	1,600.0	1,506.1	93.93	17.034				
13,900.0	10,868.4	15,204.2	12,119.0	63.8	67.7	141.42	3,074.1	1,272.4	1,599.8	1,503.9	95.85	16.691				
14,000.0	10,868.2	15,304.2	12,118.5	65.1	69.0	141.41	3,174.1	1,271.6	1,599.5	1,501.7	97.78	16.358				

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,867.9	15,404.2	12,117.9	66.4	70.3	141.41	3,274.1	1,270.8	1,599.3	1,499.5	99.74	16.034	
14,200.0	10,867.7	15,504.2	12,117.4	67.8	71.6	141.40	3,374.1	1,270.0	1,599.0	1,497.3	101.72	15.720	
14,300.0	10,867.5	15,604.2	12,116.9	69.2	72.9	141.40	3,474.1	1,269.2	1,598.8	1,495.1	103.71	15.415	
14,400.0	10,867.3	15,704.2	12,116.4	70.6	74.2	141.39	3,574.1	1,268.4	1,598.5	1,492.8	105.73	15.119	
14,500.0	10,867.0	15,804.2	12,115.9	72.0	75.5	141.39	3,674.1	1,267.6	1,598.3	1,490.5	107.76	14.832	
14,600.0	10,866.8	15,904.2	12,115.3	73.4	76.9	141.38	3,774.1	1,266.8	1,598.0	1,488.2	109.80	14.554	
14,700.0	10,866.6	16,004.2	12,114.8	74.8	78.2	141.37	3,874.1	1,266.0	1,597.8	1,485.9	111.86	14.284	
14,800.0	10,866.3	16,104.2	12,114.3	76.2	79.6	141.37	3,974.1	1,265.2	1,597.5	1,483.6	113.94	14.022	
14,900.0	10,866.1	16,204.2	12,113.8	77.7	81.0	141.36	4,074.1	1,264.4	1,597.3	1,481.3	116.02	13.767	
15,000.0	10,865.9	16,304.2	12,113.3	79.1	82.4	141.36	4,174.1	1,263.6	1,597.0	1,478.9	118.12	13.520	
15,100.0	10,865.7	16,404.2	12,112.7	80.6	83.8	141.35	4,274.1	1,262.8	1,596.8	1,476.6	120.23	13.281	
15,200.0	10,865.4	16,504.2	12,112.2	82.0	85.2	141.35	4,374.1	1,262.0	1,596.5	1,474.2	122.36	13.048	
15,300.0	10,865.2	16,604.1	12,111.7	83.5	86.6	141.34	4,474.1	1,261.2	1,596.3	1,471.8	124.49	12.823	
15,400.0	10,865.0	16,704.1	12,111.2	85.0	88.0	141.33	4,574.1	1,260.4	1,596.1	1,469.4	126.63	12.604	
15,500.0	10,864.8	16,804.1	12,110.6	86.4	89.5	141.33	4,674.1	1,259.6	1,595.8	1,467.0	128.79	12.391	
15,600.0	10,864.5	16,904.1	12,110.1	87.9	90.9	141.32	4,774.1	1,258.8	1,595.6	1,464.6	130.95	12.184	
15,700.0	10,864.3	17,004.1	12,109.6	89.4	92.3	141.32	4,874.1	1,258.0	1,595.3	1,462.2	133.12	11.984	
15,800.0	10,864.1	17,104.1	12,109.1	90.9	93.8	141.31	4,974.0	1,257.2	1,595.1	1,459.8	135.30	11.789	
15,900.0	10,863.8	17,204.1	12,108.6	92.4	95.3	141.31	5,074.0	1,256.4	1,594.8	1,457.3	137.49	11.599	
16,000.0	10,863.6	17,304.1	12,108.0	94.0	96.7	141.30	5,174.0	1,255.6	1,594.6	1,454.9	139.69	11.415	
16,100.0	10,863.4	17,404.1	12,107.5	95.5	98.2	141.29	5,274.0	1,254.8	1,594.3	1,452.4	141.89	11.236	
16,200.0	10,863.2	17,504.1	12,107.0	97.0	99.7	141.29	5,374.0	1,254.0	1,594.1	1,450.0	144.10	11.062	
16,300.0	10,862.9	17,604.1	12,106.5	98.5	101.2	141.28	5,474.0	1,253.2	1,593.8	1,447.5	146.32	10.893	
16,400.0	10,862.7	17,704.1	12,106.0	100.0	102.7	141.28	5,574.0	1,252.4	1,593.6	1,445.0	148.54	10.728	
16,500.0	10,862.5	17,804.1	12,105.4	101.6	104.2	141.27	5,674.0	1,251.6	1,593.3	1,442.5	150.77	10.568	
16,600.0	10,862.3	17,904.1	12,104.9	103.1	105.7	141.26	5,774.0	1,250.8	1,593.1	1,440.1	153.01	10.412	
16,700.0	10,862.0	18,004.1	12,104.4	104.7	107.2	141.26	5,874.0	1,250.0	1,592.8	1,437.6	155.25	10.260	
16,800.0	10,861.8	18,104.1	12,103.9	106.2	108.7	141.25	5,974.0	1,249.2	1,592.6	1,435.1	157.50	10.112	
16,900.0	10,861.6	18,204.1	12,103.3	107.7	110.2	141.25	6,074.0	1,248.4	1,592.3	1,432.6	159.75	9.967	
17,000.0	10,861.4	18,304.1	12,102.8	109.3	111.7	141.24	6,174.0	1,247.6	1,592.1	1,430.1	162.01	9.827	
17,100.0	10,861.1	18,404.1	12,102.3	110.8	113.2	141.24	6,274.0	1,246.8	1,591.8	1,427.6	164.27	9.690	
17,200.0	10,860.9	18,504.1	12,101.8	112.4	114.7	141.23	6,374.0	1,246.0	1,591.6	1,425.0	166.54	9.557	
17,300.0	10,860.7	18,604.1	12,101.3	114.0	116.3	141.22	6,474.0	1,245.3	1,591.3	1,422.5	168.81	9.427	
17,400.0	10,860.4	18,704.1	12,100.7	115.5	117.8	141.22	6,574.0	1,244.5	1,591.1	1,420.0	171.09	9.300	
17,500.0	10,860.2	18,804.1	12,100.2	117.1	119.3	141.21	6,674.0	1,243.7	1,590.8	1,417.5	173.37	9.176	
17,600.0	10,860.0	18,904.1	12,099.7	118.7	120.9	141.21	6,774.0	1,242.9	1,590.6	1,414.9	175.65	9.055	
17,700.0	10,859.8	19,004.1	12,099.2	120.2	122.4	141.20	6,874.0	1,242.1	1,590.3	1,412.4	177.94	8.937	
17,800.0	10,859.5	19,104.1	12,098.7	121.8	124.0	141.19	6,973.9	1,241.3	1,590.1	1,409.9	180.23	8.822	
17,900.0	10,859.3	19,204.1	12,098.1	123.4	125.5	141.19	7,073.9	1,240.5	1,589.8	1,407.3	182.53	8.710	
18,000.0	10,859.1	19,304.1	12,097.6	124.9	127.1	141.18	7,173.9	1,239.7	1,589.6	1,404.8	184.83	8.600	
18,100.0	10,858.9	19,404.1	12,097.1	126.5	128.6	141.18	7,273.9	1,238.9	1,589.3	1,402.2	187.13	8.493	
18,200.0	10,858.6	19,504.1	12,096.6	128.1	130.2	141.17	7,373.9	1,238.1	1,589.1	1,399.7	189.44	8.389	
18,300.0	10,858.4	19,604.1	12,096.0	129.7	131.7	141.17	7,473.9	1,237.3	1,588.9	1,397.1	191.75	8.286	
18,400.0	10,858.2	19,704.1	12,095.5	131.3	133.3	141.16	7,573.9	1,236.5	1,588.6	1,394.5	194.06	8.186	
18,500.0	10,857.9	19,804.1	12,095.0	132.9	134.9	141.15	7,673.9	1,235.7	1,588.4	1,392.0	196.37	8.088	
18,600.0	10,857.7	19,904.1	12,094.5	134.4	136.4	141.15	7,773.9	1,234.9	1,588.1	1,389.4	198.69	7.993	
18,700.0	10,857.5	20,004.1	12,094.0	136.0	138.0	141.14	7,873.9	1,234.1	1,587.9	1,386.8	201.01	7.899	
18,800.0	10,857.3	20,104.1	12,093.4	137.6	139.6	141.14	7,973.9	1,233.3	1,587.6	1,384.3	203.34	7.808	
18,900.0	10,857.0	20,204.1	12,092.9	139.2	141.1	141.13	8,073.9	1,232.5	1,587.4	1,381.7	205.66	7.718	
19,000.0	10,856.8	20,304.1	12,092.4	140.8	142.7	141.12	8,173.9	1,231.7	1,587.1	1,379.1	207.99	7.631	
19,100.0	10,856.6	20,404.1	12,091.9	142.4	144.3	141.12	8,273.9	1,230.9	1,586.9	1,376.5	210.32	7.545	
19,200.0	10,856.4	20,504.1	12,091.3	144.0	145.9	141.11	8,373.9	1,230.1	1,586.6	1,374.0	212.66	7.461	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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 #203H - 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	10,856.1	20,604.1	12,090.8	145.6	147.4	141.11	8,473.9	1,229.3	1,586.4	1,371.4	214.99	7.379	
19,400.0	10,855.9	20,704.1	12,090.3	147.2	149.0	141.10	8,573.9	1,228.5	1,586.1	1,368.8	217.33	7.298	
19,500.0	10,855.7	20,804.1	12,089.8	148.8	150.6	141.10	8,673.9	1,227.7	1,585.9	1,366.2	219.67	7.219	
19,600.0	10,855.5	20,904.1	12,089.3	150.4	152.2	141.09	8,773.9	1,226.9	1,585.6	1,363.6	222.02	7.142	
19,700.0	10,855.2	21,004.1	12,088.7	152.0	153.8	141.08	8,873.9	1,226.1	1,585.4	1,361.0	224.36	7.066	
19,800.0	10,855.0	21,104.1	12,088.2	153.6	155.4	141.08	8,973.8	1,225.3	1,585.1	1,358.4	226.71	6.992	
19,900.0	10,854.8	21,204.1	12,087.7	155.2	156.9	141.07	9,073.8	1,224.5	1,584.9	1,355.8	229.06	6.919	
20,000.0	10,854.5	21,304.1	12,087.2	156.8	158.5	141.07	9,173.8	1,223.7	1,584.6	1,353.2	231.41	6.848	
20,100.0	10,854.3	21,404.1	12,086.7	158.4	160.1	141.06	9,273.8	1,222.9	1,584.4	1,350.6	233.76	6.778	
20,200.0	10,854.1	21,504.1	12,086.1	160.0	161.7	141.05	9,373.8	1,222.1	1,584.1	1,348.0	236.12	6.709	
20,300.0	10,853.9	21,604.1	12,085.6	161.7	163.3	141.05	9,473.8	1,221.3	1,583.9	1,345.4	238.48	6.642	
20,400.0	10,853.6	21,704.1	12,085.1	163.3	164.9	141.04	9,573.8	1,220.5	1,583.6	1,342.8	240.84	6.576	
20,500.0	10,853.4	21,804.1	12,084.6	164.9	166.5	141.04	9,673.8	1,219.7	1,583.4	1,340.2	243.20	6.511	
20,600.0	10,853.2	21,904.1	12,084.0	166.5	168.1	141.03	9,773.8	1,218.9	1,583.2	1,337.6	245.56	6.447	
20,700.0	10,853.0	22,004.1	12,083.5	168.1	169.7	141.03	9,873.8	1,218.1	1,582.9	1,335.0	247.92	6.385	
20,800.0	10,852.7	22,104.1	12,083.0	169.7	171.3	141.02	9,973.8	1,217.3	1,582.7	1,332.4	250.29	6.323	
20,900.0	10,852.5	22,204.1	12,082.5	171.3	172.9	141.01	10,073.8	1,216.5	1,582.4	1,329.8	252.66	6.263	
21,000.0	10,852.3	22,304.1	12,082.0	172.9	174.5	141.01	10,173.8	1,215.7	1,582.2	1,327.1	255.02	6.204	
21,062.7	10,852.1	22,366.8	12,081.6	174.0	175.5	141.00	10,236.5	1,215.2	1,582.0	1,325.5	256.51	6.167	
21,094.0	10,851.5	22,398.2	12,081.5	174.5	176.0	141.02	10,267.8	1,215.0	1,582.2	1,325.0	257.19	6.152 SF	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	88.58	55.4	2,232.9	2,233.6				
100.0	100.0	100.0	100.0	0.1	0.1	88.58	55.4	2,232.9	2,233.6	2,233.3	0.26	8,714.366	
200.0	200.0	200.0	200.0	0.5	0.5	88.58	55.4	2,232.9	2,233.6	2,232.6	0.97	2,294.946	
300.0	300.0	300.0	300.0	0.8	0.8	88.58	55.4	2,232.9	2,233.6	2,231.9	1.69	1,321.480	
400.0	400.0	400.0	400.0	1.2	1.2	88.58	55.4	2,232.9	2,233.6	2,231.2	2.41	927.890	
500.0	500.0	500.0	500.0	1.6	1.6	88.58	55.4	2,232.9	2,233.6	2,230.4	3.12	714.949	
600.0	600.0	600.0	600.0	1.9	1.9	88.58	55.4	2,232.9	2,233.6	2,229.7	3.84	581.501	
700.0	700.0	700.0	700.0	2.3	2.3	88.58	55.4	2,232.9	2,233.6	2,229.0	4.56	490.034	
800.0	800.0	800.0	800.0	2.6	2.6	88.58	55.4	2,232.9	2,233.6	2,228.3	5.27	423.431	
900.0	900.0	900.0	900.0	3.0	3.0	88.58	55.4	2,232.9	2,233.6	2,227.6	5.99	372.766	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	88.58	55.4	2,232.9	2,233.6	2,226.8	6.71	332.930	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	88.58	55.4	2,232.9	2,233.6	2,226.1	7.43	300.786	
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	88.58	55.4	2,232.9	2,233.6	2,225.4	8.14	274.302	
1,300.0	1,300.0	1,300.0	1,300.0	4.4	4.4	-33.68	55.4	2,232.9	2,232.8	2,224.0	8.85	252.413	
1,400.0	1,400.0	1,400.0	1,400.0	4.8	4.8	-33.73	55.4	2,232.9	2,230.7	2,221.1	9.54	233.850	
1,500.0	1,499.9	1,500.1	1,499.9	5.1	5.1	-33.81	55.4	2,232.9	2,227.0	2,216.8	10.24	217.578	
1,600.0	1,599.7	1,600.3	1,599.7	5.4	5.5	-33.93	55.4	2,232.9	2,222.0	2,211.0	10.94	203.180	
1,700.0	1,699.4	1,700.6	1,699.4	5.8	5.9	-34.08	55.4	2,232.9	2,215.4	2,203.8	11.64	190.332	
1,800.0	1,798.9	1,801.1	1,798.9	6.1	6.2	-34.26	55.4	2,232.9	2,207.5	2,195.2	12.35	178.778	
1,900.0	1,898.3	1,901.7	1,898.3	6.5	6.6	-34.48	55.4	2,232.9	2,198.1	2,185.1	13.06	168.314	
2,000.0	1,997.4	2,002.6	1,997.4	6.9	6.9	-34.73	55.4	2,232.9	2,187.4	2,173.6	13.78	158.775	
2,100.0	2,096.4	2,103.6	2,096.4	7.2	7.3	-34.94	55.4	2,232.9	2,175.9	2,161.4	14.50	150.095	
2,200.0	2,195.5	2,204.5	2,195.5	7.6	7.7	-35.15	55.4	2,232.9	2,164.5	2,149.3	15.22	142.213	
2,300.0	2,294.5	2,305.5	2,294.5	8.0	8.0	-35.37	55.4	2,232.9	2,153.1	2,137.1	15.95	135.022	
2,400.0	2,393.5	2,406.5	2,393.5	8.4	8.4	-35.58	55.4	2,232.9	2,141.7	2,125.0	16.67	128.440	
2,500.0	2,492.5	2,492.5	2,492.5	8.8	8.7	-35.80	55.4	2,232.9	2,130.4	2,113.0	17.35	122.771	
2,600.0	2,591.6	2,569.9	2,569.9	9.2	9.0	-35.96	55.2	2,233.2	2,119.5	2,101.5	17.99	117.789	
2,700.0	2,690.6	2,645.8	2,645.8	9.6	9.2	-36.11	54.5	2,234.5	2,109.8	2,091.2	18.63	113.278	
2,800.0	2,789.6	2,721.9	2,721.8	10.0	9.5	-36.24	53.3	2,236.6	2,101.2	2,081.9	19.25	109.133	
2,900.0	2,888.6	2,800.0	2,799.9	10.4	9.7	-36.37	51.5	2,239.7	2,093.7	2,073.8	19.89	105.264	
3,000.0	2,987.7	2,874.6	2,874.4	10.8	10.0	-36.47	49.4	2,243.5	2,087.4	2,066.8	20.52	101.747	
3,100.0	3,086.7	2,951.3	2,950.8	11.2	10.3	-36.56	46.6	2,248.3	2,082.1	2,061.0	21.15	98.457	
3,200.0	3,185.7	3,028.0	3,027.3	11.6	10.5	-36.63	43.4	2,254.0	2,078.0	2,056.2	21.78	95.408	
3,300.0	3,284.8	3,104.9	3,103.8	12.0	10.8	-36.69	39.6	2,260.6	2,075.0	2,052.6	22.41	92.580	
3,400.0	3,383.8	3,181.8	3,180.2	12.4	11.1	-36.74	35.4	2,268.1	2,073.1	2,050.0	23.05	89.956	
3,500.0	3,482.8	3,258.8	3,256.5	12.8	11.3	-36.76	30.6	2,276.5	2,072.3	2,048.6	23.68	87.520	
3,521.0	3,503.6	3,274.9	3,272.5	12.9	11.4	-36.77	29.5	2,278.3	2,072.3	2,048.4	23.81	87.032 CC	
3,600.0	3,581.8	3,346.4	3,343.4	13.2	11.6	-36.78	24.6	2,286.9	2,072.5	2,048.1	24.36	85.091	
3,700.0	3,680.9	3,446.4	3,442.4	13.7	12.0	-36.79	17.7	2,299.0	2,072.8	2,047.8	25.09	82.616	
3,800.0	3,779.9	3,546.4	3,541.4	14.1	12.4	-36.81	10.8	2,311.1	2,073.2	2,047.4	25.83	80.272	
3,878.9	3,858.0	3,625.3	3,619.6	14.4	12.7	-36.82	5.4	2,320.7	2,073.5	2,047.1	26.41	78.509	
3,900.0	3,878.9	3,646.4	3,640.5	14.5	12.7	-36.82	4.0	2,323.2	2,073.6	2,047.1	26.57	78.052 ES	
4,000.0	3,978.2	3,746.4	3,739.5	14.9	13.1	-36.82	-2.9	2,335.3	2,075.5	2,048.2	27.30	76.014	
4,100.0	4,077.7	3,846.3	3,838.4	15.3	13.5	-36.80	-9.8	2,347.4	2,079.4	2,051.4	28.03	74.177	
4,200.0	4,177.5	3,946.0	3,937.2	15.6	13.9	-36.75	-16.7	2,359.4	2,085.5	2,056.7	28.76	72.525	
4,300.0	4,277.4	4,045.6	4,035.7	16.0	14.2	-36.68	-23.5	2,371.5	2,093.6	2,064.1	29.47	71.046	
4,400.0	4,377.4	4,144.8	4,134.0	16.3	14.6	-36.58	-30.4	2,383.5	2,103.9	2,073.7	30.17	69.727	
4,412.2	4,389.6	4,156.9	4,146.0	16.4	14.7	85.67	-31.2	2,384.9	2,105.3	2,075.0	30.26	69.577	
4,500.0	4,477.4	4,243.8	4,232.1	16.7	15.0	85.85	-37.2	2,395.4	2,115.4	2,084.6	30.86	68.552	
4,600.0	4,577.4	4,342.9	4,330.1	17.0	15.4	86.06	-44.0	2,407.4	2,127.1	2,095.5	31.55	67.428	
4,700.0	4,677.4	4,441.9	4,428.2	17.3	15.8	86.27	-50.8	2,419.4	2,138.7	2,106.5	32.23	66.347	
4,800.0	4,777.4	4,540.9	4,526.2	17.6	16.2	86.47	-57.7	2,431.4	2,150.4	2,117.4	32.93	65.309	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
4,900.0	4,877.4	4,639.9	4,624.3	18.0	16.6	86.67	-64.5	2,443.3	2,162.0	2,128.4	33.62	64.311	
5,000.0	4,977.4	4,739.0	4,722.4	18.3	16.9	86.87	-71.3	2,455.3	2,173.8	2,139.5	34.31	63.350	
5,100.0	5,077.4	4,838.0	4,820.4	18.6	17.3	87.07	-78.1	2,467.3	2,185.5	2,150.5	35.01	62.425	
5,200.0	5,177.4	4,937.0	4,918.5	19.0	17.7	87.26	-85.0	2,479.3	2,197.3	2,161.6	35.71	61.535	
5,300.0	5,277.4	5,036.0	5,016.6	19.3	18.1	87.46	-91.8	2,491.2	2,209.1	2,172.7	36.41	60.677	
5,400.0	5,377.4	5,135.1	5,114.6	19.6	18.5	87.65	-98.6	2,503.2	2,220.9	2,183.8	37.11	59.849	
5,500.0	5,477.4	5,234.1	5,212.7	20.0	18.9	87.84	-105.4	2,515.2	2,232.7	2,194.9	37.81	59.051	
5,600.0	5,577.4	5,333.1	5,310.7	20.3	19.3	88.02	-112.3	2,527.2	2,244.6	2,206.1	38.51	58.281	
5,700.0	5,677.4	5,432.2	5,408.8	20.6	19.7	88.21	-119.1	2,539.1	2,256.5	2,217.3	39.22	57.538	
5,800.0	5,777.4	5,531.2	5,506.9	21.0	20.1	88.39	-125.9	2,551.1	2,268.4	2,228.5	39.92	56.820	
5,900.0	5,877.4	5,630.2	5,604.9	21.3	20.5	88.57	-132.7	2,563.1	2,280.3	2,239.7	40.63	56.126	
6,000.0	5,977.4	5,729.2	5,703.0	21.6	20.9	88.75	-139.5	2,575.1	2,292.3	2,251.0	41.34	55.455	
6,100.0	6,077.4	5,828.3	5,801.1	22.0	21.3	88.93	-146.4	2,587.0	2,304.3	2,262.2	42.04	54.806	
6,200.0	6,177.4	6,031.0	6,002.5	22.3	22.1	89.22	-157.8	2,607.1	2,314.2	2,271.0	43.21	53.556	
6,300.0	6,277.4	6,240.6	6,211.6	22.6	22.9	89.38	-164.1	2,618.1	2,319.4	2,275.1	44.30	52.359	
6,400.0	6,377.4	6,406.4	6,377.4	23.0	23.5	89.41	-165.1	2,619.9	2,320.2	2,275.1	45.17	51.369	
6,500.0	6,477.4	6,506.4	6,477.4	23.3	23.8	89.41	-165.1	2,619.9	2,320.2	2,274.4	45.85	50.601	
6,600.0	6,577.4	6,606.4	6,577.4	23.7	24.1	89.41	-165.1	2,619.9	2,320.2	2,273.7	46.54	49.855	
6,700.0	6,677.4	6,706.4	6,677.4	24.0	24.4	89.41	-165.1	2,619.9	2,320.2	2,273.0	47.23	49.130	
6,800.0	6,777.4	6,806.4	6,777.4	24.3	24.8	89.41	-165.1	2,619.9	2,320.2	2,272.3	47.91	48.424	
6,900.0	6,877.4	6,906.4	6,877.4	24.7	25.1	89.41	-165.1	2,619.9	2,320.2	2,271.6	48.60	47.738	
7,000.0	6,977.4	7,006.4	6,977.4	25.0	25.5	89.41	-165.1	2,619.9	2,320.2	2,270.9	49.29	47.070	
7,100.0	7,077.4	7,106.4	7,077.4	25.4	25.8	89.41	-165.1	2,619.9	2,320.2	2,270.2	49.98	46.419	
7,200.0	7,177.4	7,206.4	7,177.4	25.7	26.1	89.41	-165.1	2,619.9	2,320.2	2,269.5	50.67	45.786	
7,300.0	7,277.4	7,306.4	7,277.4	26.1	26.5	89.41	-165.1	2,619.9	2,320.2	2,268.9	51.37	45.170	
7,400.0	7,377.4	7,406.4	7,377.4	26.4	26.8	89.41	-165.1	2,619.9	2,320.2	2,268.2	52.06	44.569	
7,500.0	7,477.4	7,506.4	7,477.4	26.8	27.1	89.41	-165.1	2,619.9	2,320.2	2,267.5	52.75	43.983	
7,600.0	7,577.4	7,606.4	7,577.4	27.1	27.5	89.41	-165.1	2,619.9	2,320.2	2,266.8	53.45	43.412	
7,700.0	7,677.4	7,706.4	7,677.4	27.4	27.8	89.41	-165.1	2,619.9	2,320.2	2,266.1	54.14	42.855	
7,800.0	7,777.4	7,806.4	7,777.4	27.8	28.2	89.41	-165.1	2,619.9	2,320.2	2,265.4	54.84	42.312	
7,900.0	7,877.4	7,906.4	7,877.4	28.1	28.5	89.41	-165.1	2,619.9	2,320.2	2,264.7	55.53	41.782	
8,000.0	7,977.4	8,006.4	7,977.4	28.5	28.8	89.41	-165.1	2,619.9	2,320.2	2,264.0	56.23	41.265	
8,100.0	8,077.4	8,106.4	8,077.4	28.8	29.2	89.41	-165.1	2,619.9	2,320.2	2,263.3	56.92	40.760	
8,200.0	8,177.4	8,206.4	8,177.4	29.2	29.5	89.41	-165.1	2,619.9	2,320.2	2,262.6	57.62	40.266	
8,300.0	8,277.4	8,306.4	8,277.4	29.5	29.9	89.41	-165.1	2,619.9	2,320.2	2,261.9	58.32	39.785	
8,400.0	8,377.4	8,406.4	8,377.4	29.9	30.2	89.41	-165.1	2,619.9	2,320.2	2,261.2	59.02	39.314	
8,500.0	8,477.4	8,506.4	8,477.4	30.2	30.5	89.41	-165.1	2,619.9	2,320.2	2,260.5	59.72	38.854	
8,600.0	8,577.4	8,606.4	8,577.4	30.6	30.9	89.41	-165.1	2,619.9	2,320.2	2,259.8	60.41	38.405	
8,700.0	8,677.4	8,706.4	8,677.4	30.9	31.2	89.41	-165.1	2,619.9	2,320.2	2,259.1	61.11	37.965	
8,800.0	8,777.4	8,806.4	8,777.4	31.3	31.6	89.41	-165.1	2,619.9	2,320.2	2,258.4	61.81	37.535	
8,900.0	8,877.4	8,906.4	8,877.4	31.6	31.9	89.41	-165.1	2,619.9	2,320.2	2,257.7	62.51	37.115	
9,000.0	8,977.4	9,006.4	8,977.4	32.0	32.3	89.41	-165.1	2,619.9	2,320.2	2,257.0	63.21	36.704	
9,100.0	9,077.4	9,106.4	9,077.4	32.3	32.6	89.41	-165.1	2,619.9	2,320.2	2,256.3	63.92	36.301	
9,200.0	9,177.4	9,206.4	9,177.4	32.7	33.0	89.41	-165.1	2,619.9	2,320.2	2,255.6	64.62	35.907	
9,300.0	9,277.4	9,306.4	9,277.4	33.0	33.3	89.41	-165.1	2,619.9	2,320.2	2,254.9	65.32	35.522	
9,400.0	9,377.4	9,406.4	9,377.4	33.4	33.6	89.41	-165.1	2,619.9	2,320.2	2,254.2	66.02	35.144	
9,500.0	9,477.4	9,506.4	9,477.4	33.7	34.0	89.41	-165.1	2,619.9	2,320.2	2,253.5	66.72	34.774	
9,600.0	9,577.4	9,606.4	9,577.4	34.1	34.3	89.41	-165.1	2,619.9	2,320.2	2,252.8	67.43	34.412	
9,700.0	9,677.4	9,706.4	9,677.4	34.4	34.7	89.41	-165.1	2,619.9	2,320.2	2,252.1	68.13	34.057	
9,800.0	9,777.4	9,806.4	9,777.4	34.8	35.0	89.41	-165.1	2,619.9	2,320.2	2,251.4	68.83	33.709	
9,900.0	9,877.4	9,906.4	9,877.4	35.1	35.4	89.41	-165.1	2,619.9	2,320.2	2,250.7	69.53	33.368	
10,000.0	9,977.4	10,006.4	9,977.4	35.5	35.7	89.41	-165.1	2,619.9	2,320.2	2,250.0	70.24	33.033	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,077.4	10,106.4	10,077.4	35.8	36.1	89.41	-165.1	2,619.9	2,320.2	2,249.3	70.94	32.706	
10,200.0	10,177.4	10,206.4	10,177.4	36.2	36.4	89.41	-165.1	2,619.9	2,320.2	2,248.6	71.65	32.384	
10,300.0	10,277.4	10,306.4	10,277.4	36.5	36.8	89.41	-165.1	2,619.9	2,320.2	2,247.9	72.35	32.069	
10,324.1	10,301.5	10,330.5	10,301.5	36.6	36.8	89.41	-165.1	2,619.9	2,320.2	2,247.7	72.52	31.994	
10,350.0	10,327.4	10,356.4	10,327.4	36.7	36.9	89.86	-165.1	2,619.9	2,320.2	2,247.5	72.70	31.914	
10,400.0	10,377.2	10,406.1	10,377.2	36.9	37.1	89.97	-165.1	2,619.9	2,320.2	2,247.2	73.05	31.764	
10,408.4	10,385.5	10,414.5	10,385.5	36.9	37.1	90.00	-165.1	2,619.9	2,320.2	2,247.1	73.10	31.739	
10,450.0	10,426.4	10,455.4	10,426.4	37.0	37.3	90.18	-165.1	2,619.9	2,320.2	2,246.8	73.38	31.620	
10,500.0	10,474.6	10,503.6	10,474.6	37.2	37.4	90.48	-165.1	2,619.9	2,320.3	2,246.6	73.70	31.483	
10,550.0	10,521.6	10,550.6	10,521.6	37.3	37.6	90.86	-165.1	2,619.9	2,320.5	2,246.5	74.01	31.355	
10,600.0	10,566.8	10,604.2	10,566.8	37.5	37.8	91.29	-165.1	2,619.9	2,321.0	2,246.6	74.33	31.225	
10,650.0	10,610.1	10,639.1	10,610.1	37.6	37.9	91.75	-165.1	2,619.9	2,321.7	2,247.2	74.58	31.131	
10,700.0	10,651.0	10,680.0	10,651.0	37.7	38.1	92.21	-165.1	2,619.9	2,322.9	2,248.1	74.85	31.036	
10,750.0	10,689.2	10,718.2	10,689.2	37.8	38.2	92.63	-165.1	2,619.9	2,324.7	2,249.6	75.10	30.955	
10,800.0	10,724.5	10,753.5	10,724.5	37.9	38.3	93.00	-165.1	2,619.9	2,327.2	2,251.9	75.34	30.889	
10,850.0	10,756.6	10,785.6	10,756.6	37.9	38.4	93.28	-165.1	2,619.9	2,330.5	2,254.9	75.57	30.840	
10,900.0	10,785.2	10,814.2	10,785.2	38.0	38.5	93.43	-165.1	2,619.9	2,334.7	2,258.9	75.79	30.807	
10,950.0	10,810.1	10,839.1	10,810.1	38.0	38.6	93.44	-165.1	2,619.9	2,339.9	2,263.9	75.99	30.791	
11,000.0	10,831.2	10,860.2	10,831.2	38.1	38.7	93.28	-165.1	2,619.9	2,346.2	2,270.0	76.19	30.795	
11,050.0	10,848.2	10,877.2	10,848.2	38.3	38.7	92.92	-165.1	2,619.9	2,353.6	2,277.3	76.38	30.817	
11,100.0	10,861.1	10,910.0	10,861.1	38.4	38.9	92.35	-165.1	2,619.9	2,362.2	2,285.6	76.62	30.830	
11,150.0	10,869.7	10,901.4	10,869.7	38.5	38.8	91.57	-165.1	2,619.9	2,372.0	2,295.3	76.73	30.914	
11,200.0	10,874.0	10,902.9	10,874.0	38.7	38.8	90.56	-165.1	2,619.9	2,382.8	2,306.0	76.87	30.997	
11,225.4	10,874.5	10,903.4	10,874.5	38.8	38.8	89.97	-165.1	2,619.9	2,388.7	2,311.8	76.95	31.044	
11,287.1	10,874.3	10,903.3	10,874.3	39.0	38.8	89.96	-165.1	2,619.9	2,404.2	2,327.0	77.14	31.168	
11,300.0	10,874.3	10,903.3	10,874.3	39.0	38.8	89.96	-165.1	2,619.9	2,407.6	2,330.4	77.18	31.195	
11,400.0	10,874.1	10,903.0	10,874.1	39.4	38.8	89.96	-165.1	2,619.9	2,436.2	2,358.6	77.54	31.419	
11,500.0	10,873.8	10,902.8	10,873.8	39.8	38.8	89.95	-165.1	2,619.9	2,468.5	2,390.5	77.95	31.668	
11,600.0	10,873.6	10,902.6	10,873.6	40.3	38.8	89.95	-165.1	2,619.9	2,504.4	2,426.0	78.40	31.944	
11,700.0	10,873.4	10,902.4	10,873.4	40.9	38.8	89.94	-165.1	2,619.9	2,543.7	2,464.8	78.88	32.247	
11,800.0	10,873.2	10,902.1	10,873.2	41.5	38.8	89.94	-165.1	2,619.9	2,586.3	2,506.9	79.39	32.578	
11,900.0	10,872.9	10,901.9	10,872.9	42.2	38.8	89.93	-165.1	2,619.9	2,632.0	2,552.1	79.91	32.938	
12,000.0	10,872.7	13,276.0	12,137.3	42.9	46.9	118.59	1,185.8	2,609.7	2,642.6	2,563.4	79.24	33.348	
12,100.0	10,872.5	13,376.0	12,136.7	43.7	47.6	118.58	1,285.8	2,608.9	2,642.4	2,561.8	80.59	32.790	
12,200.0	10,872.2	13,476.0	12,136.1	44.6	48.3	118.58	1,385.8	2,608.1	2,642.2	2,560.2	82.02	32.215	
12,300.0	10,872.0	13,576.0	12,135.5	45.4	49.1	118.57	1,485.8	2,607.3	2,642.0	2,558.5	83.54	31.628	
12,400.0	10,871.8	13,676.0	12,134.9	46.3	50.0	118.56	1,585.8	2,606.5	2,641.8	2,556.7	85.13	31.032	
12,500.0	10,871.6	13,776.0	12,134.3	47.3	50.8	118.56	1,685.8	2,605.7	2,641.6	2,554.8	86.80	30.433	
12,600.0	10,871.3	13,876.0	12,133.7	48.3	51.8	118.55	1,785.8	2,604.9	2,641.4	2,552.9	88.54	29.832	
12,700.0	10,871.1	13,976.0	12,133.1	49.3	52.7	118.54	1,885.8	2,604.1	2,641.2	2,550.8	90.35	29.233	
12,800.0	10,870.9	14,076.0	12,132.5	50.4	53.7	118.54	1,985.8	2,603.3	2,641.0	2,548.8	92.22	28.637	
12,900.0	10,870.7	14,176.0	12,131.9	51.5	54.7	118.53	2,085.8	2,602.5	2,640.8	2,546.6	94.15	28.048	
13,000.0	10,870.4	14,276.0	12,131.3	52.6	55.8	118.52	2,185.8	2,601.7	2,640.6	2,544.4	96.14	27.467	
13,100.0	10,870.2	14,376.0	12,130.7	53.8	56.8	118.51	2,285.8	2,600.9	2,640.4	2,542.2	98.17	26.895	
13,200.0	10,870.0	14,476.0	12,130.1	54.9	57.9	118.51	2,385.8	2,600.1	2,640.2	2,539.9	100.26	26.333	
13,300.0	10,869.7	14,576.0	12,129.4	56.1	59.1	118.50	2,485.7	2,599.3	2,640.0	2,537.6	102.39	25.782	
13,400.0	10,869.5	14,676.0	12,128.8	57.4	60.2	118.49	2,585.7	2,598.5	2,639.8	2,535.2	104.57	25.244	
13,500.0	10,869.3	14,776.0	12,128.2	58.6	61.4	118.49	2,685.7	2,597.7	2,639.6	2,532.8	106.79	24.718	
13,600.0	10,869.1	14,876.0	12,127.6	59.9	62.6	118.48	2,785.7	2,596.9	2,639.4	2,530.3	109.04	24.205	
13,700.0	10,868.8	14,976.0	12,127.0	61.1	63.8	118.47	2,885.7	2,596.1	2,639.2	2,527.8	111.33	23.705	
13,800.0	10,868.6	15,076.0	12,126.4	62.4	65.1	118.47	2,985.7	2,595.4	2,638.9	2,525.3	113.66	23.218	
13,900.0	10,868.4	15,175.9	12,125.8	63.8	66.3	118.46	3,085.7	2,594.6	2,638.7	2,522.7	116.01	22.745	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,868.2	15,275.9	12,125.2	65.1	67.6	118.45	3,185.7	2,593.8	2,638.5	2,520.1	118.40	22.285	
14,100.0	10,867.9	15,375.9	12,124.6	66.4	68.9	118.45	3,285.7	2,593.0	2,638.3	2,517.5	120.82	21.838	
14,200.0	10,867.7	15,475.9	12,124.0	67.8	70.2	118.44	3,385.7	2,592.2	2,638.1	2,514.9	123.26	21.404	
14,300.0	10,867.5	15,575.9	12,123.4	69.2	71.5	118.43	3,485.7	2,591.4	2,637.9	2,512.2	125.72	20.982	
14,400.0	10,867.3	15,675.9	12,122.8	70.6	72.8	118.43	3,585.7	2,590.6	2,637.7	2,509.5	128.21	20.573	
14,500.0	10,867.0	15,775.9	12,122.2	72.0	74.2	118.42	3,685.7	2,589.8	2,637.5	2,506.8	130.72	20.176	
14,600.0	10,866.8	15,875.9	12,121.6	73.4	75.5	118.41	3,785.7	2,589.0	2,637.3	2,504.1	133.26	19.791	
14,700.0	10,866.6	15,975.9	12,121.0	74.8	76.9	118.40	3,885.7	2,588.2	2,637.1	2,501.3	135.81	19.418	
14,800.0	10,866.3	16,075.9	12,120.4	76.2	78.3	118.40	3,985.7	2,587.4	2,636.9	2,498.5	138.38	19.055	
14,900.0	10,866.1	16,175.9	12,119.8	77.7	79.7	118.39	4,085.7	2,586.6	2,636.7	2,495.7	140.97	18.704	
15,000.0	10,865.9	16,275.9	12,119.2	79.1	81.1	118.38	4,185.6	2,585.8	2,636.5	2,492.9	143.58	18.363	
15,100.0	10,865.7	16,375.9	12,118.6	80.6	82.5	118.38	4,285.6	2,585.0	2,636.3	2,490.1	146.20	18.032	
15,200.0	10,865.4	16,475.9	12,118.0	82.0	83.9	118.37	4,385.6	2,584.2	2,636.1	2,487.3	148.84	17.711	
15,300.0	10,865.2	16,575.9	12,117.4	83.5	85.4	118.36	4,485.6	2,583.4	2,635.9	2,484.4	151.49	17.400	
15,400.0	10,865.0	16,675.9	12,116.8	85.0	86.8	118.36	4,585.6	2,582.6	2,635.7	2,481.5	154.15	17.098	
15,500.0	10,864.8	16,775.9	12,116.2	86.4	88.2	118.35	4,685.6	2,581.8	2,635.5	2,478.7	156.83	16.804	
15,600.0	10,864.5	16,875.9	12,115.6	87.9	89.7	118.34	4,785.6	2,581.0	2,635.3	2,475.8	159.52	16.520	
15,700.0	10,864.3	16,975.9	12,115.0	89.4	91.1	118.34	4,885.6	2,580.2	2,635.1	2,472.9	162.23	16.243	
15,800.0	10,864.1	17,075.9	12,114.4	90.9	92.6	118.33	4,985.6	2,579.4	2,634.9	2,469.9	164.94	15.975	
15,900.0	10,863.8	17,175.9	12,113.8	92.4	94.1	118.32	5,085.6	2,578.6	2,634.7	2,467.0	167.66	15.714	
16,000.0	10,863.6	17,275.9	12,113.2	94.0	95.6	118.31	5,185.6	2,577.8	2,634.5	2,464.1	170.40	15.461	
16,100.0	10,863.4	17,375.9	12,112.6	95.5	97.1	118.31	5,285.6	2,577.0	2,634.3	2,461.1	173.14	15.215	
16,200.0	10,863.2	17,475.9	12,112.0	97.0	98.5	118.30	5,385.6	2,576.2	2,634.1	2,458.2	175.89	14.975	
16,300.0	10,862.9	17,575.9	12,111.4	98.5	100.0	118.29	5,485.6	2,575.4	2,633.9	2,455.2	178.66	14.743	
16,400.0	10,862.7	17,675.9	12,110.8	100.0	101.5	118.29	5,585.6	2,574.6	2,633.7	2,452.2	181.43	14.516	
16,500.0	10,862.5	17,775.9	12,110.2	101.6	103.0	118.28	5,685.6	2,573.9	2,633.5	2,449.3	184.21	14.296	
16,600.0	10,862.3	17,875.9	12,109.6	103.1	104.5	118.27	5,785.6	2,573.1	2,633.3	2,446.3	186.99	14.082	
16,700.0	10,862.0	17,975.9	12,109.0	104.7	106.1	118.27	5,885.6	2,572.3	2,633.1	2,443.3	189.79	13.874	
16,800.0	10,861.8	18,075.9	12,108.4	106.2	107.6	118.26	5,985.5	2,571.5	2,632.8	2,440.3	192.59	13.671	
16,900.0	10,861.6	18,175.9	12,107.8	107.7	109.1	118.25	6,085.5	2,570.7	2,632.6	2,437.3	195.39	13.474	
17,000.0	10,861.4	18,275.9	12,107.2	109.3	110.6	118.25	6,185.5	2,569.9	2,632.4	2,434.2	198.21	13.281	
17,100.0	10,861.1	18,375.9	12,106.6	110.8	112.2	118.24	6,285.5	2,569.1	2,632.2	2,431.2	201.03	13.094	
17,200.0	10,860.9	18,475.9	12,106.0	112.4	113.7	118.23	6,385.5	2,568.3	2,632.0	2,428.2	203.85	12.911	
17,300.0	10,860.7	18,575.9	12,105.3	114.0	115.2	118.23	6,485.5	2,567.5	2,631.8	2,425.1	206.69	12.733	
17,400.0	10,860.4	18,675.9	12,104.7	115.5	116.8	118.22	6,585.5	2,566.7	2,631.6	2,422.1	209.52	12.560	
17,500.0	10,860.2	18,775.9	12,104.1	117.1	118.3	118.21	6,685.5	2,565.9	2,631.4	2,419.1	212.37	12.391	
17,600.0	10,860.0	18,875.9	12,103.5	118.7	119.9	118.20	6,785.5	2,565.1	2,631.2	2,416.0	215.22	12.226	
17,700.0	10,859.8	18,975.9	12,102.9	120.2	121.4	118.20	6,885.5	2,564.3	2,631.0	2,413.0	218.07	12.065	
17,800.0	10,859.5	19,075.9	12,102.3	121.8	123.0	118.19	6,985.5	2,563.5	2,630.8	2,409.9	220.93	11.908	
17,900.0	10,859.3	19,175.9	12,101.7	123.4	124.5	118.18	7,085.5	2,562.7	2,630.6	2,406.8	223.79	11.755	
18,000.0	10,859.1	19,275.9	12,101.1	124.9	126.1	118.18	7,185.5	2,561.9	2,630.4	2,403.8	226.66	11.605	
18,100.0	10,858.9	19,375.9	12,100.5	126.5	127.6	118.17	7,285.5	2,561.1	2,630.2	2,400.7	229.53	11.459	
18,200.0	10,858.6	19,475.9	12,099.9	128.1	129.2	118.16	7,385.5	2,560.3	2,630.0	2,397.6	232.40	11.317	
18,300.0	10,858.4	19,575.9	12,099.3	129.7	130.8	118.16	7,485.5	2,559.5	2,629.8	2,394.5	235.28	11.177	
18,400.0	10,858.2	19,675.9	12,098.7	131.3	132.3	118.15	7,585.5	2,558.7	2,629.6	2,391.4	238.17	11.041	
18,500.0	10,857.9	19,775.9	12,098.1	132.9	133.9	118.14	7,685.4	2,557.9	2,629.4	2,388.4	241.05	10.908	
18,600.0	10,857.7	19,875.9	12,097.5	134.4	135.5	118.14	7,785.4	2,557.1	2,629.2	2,385.3	243.94	10.778	
18,700.0	10,857.5	19,975.9	12,096.9	136.0	137.0	118.13	7,885.4	2,556.3	2,629.0	2,382.2	246.84	10.651	
18,800.0	10,857.3	20,075.9	12,096.3	137.6	138.6	118.12	7,985.4	2,555.5	2,628.8	2,379.1	249.74	10.526	
18,900.0	10,857.0	20,175.9	12,095.7	139.2	140.2	118.11	8,085.4	2,554.7	2,628.6	2,376.0	252.64	10.405	
19,000.0	10,856.8	20,275.9	12,095.1	140.8	141.8	118.11	8,185.4	2,553.9	2,628.4	2,372.9	255.54	10.286	
19,100.0	10,856.6	20,375.9	12,094.5	142.4	143.4	118.10	8,285.4	2,553.2	2,628.2	2,369.7	258.45	10.169	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,856.4	20,475.9	12,093.9	144.0	144.9	118.09	8,385.4	2,552.4	2,628.0	2,366.6	261.36	10.055	
19,300.0	10,856.1	20,575.9	12,093.3	145.6	146.5	118.09	8,485.4	2,551.6	2,627.8	2,363.5	264.27	9.944	
19,400.0	10,855.9	20,675.9	12,092.7	147.2	148.1	118.08	8,585.4	2,550.8	2,627.6	2,360.4	267.19	9.834	
19,500.0	10,855.7	20,775.9	12,092.1	148.8	149.7	118.07	8,685.4	2,550.0	2,627.4	2,357.3	270.11	9.727	
19,600.0	10,855.5	20,875.9	12,091.5	150.4	151.3	118.07	8,785.4	2,549.2	2,627.2	2,354.2	273.03	9.622	
19,700.0	10,855.2	20,975.9	12,090.9	152.0	152.9	118.06	8,885.4	2,548.4	2,627.0	2,351.0	275.95	9.520	
19,800.0	10,855.0	21,075.9	12,090.3	153.6	154.5	118.05	8,985.4	2,547.6	2,626.8	2,347.9	278.88	9.419	
19,900.0	10,854.8	21,175.9	12,089.7	155.2	156.1	118.05	9,085.4	2,546.8	2,626.6	2,344.8	281.81	9.321	
20,000.0	10,854.5	21,275.9	12,089.1	156.8	157.7	118.04	9,185.4	2,546.0	2,626.4	2,341.6	284.74	9.224	
20,100.0	10,854.3	21,375.9	12,088.5	158.4	159.2	118.03	9,285.4	2,545.2	2,626.2	2,338.5	287.67	9.129	
20,200.0	10,854.1	21,475.9	12,087.9	160.0	160.8	118.02	9,385.4	2,544.4	2,626.0	2,335.4	290.61	9.036	
20,300.0	10,853.9	21,575.9	12,087.3	161.7	162.4	118.02	9,485.3	2,543.6	2,625.8	2,332.2	293.54	8.945	
20,400.0	10,853.6	21,675.9	12,086.7	163.3	164.0	118.01	9,585.3	2,542.8	2,625.6	2,329.1	296.48	8.856	
20,500.0	10,853.4	21,775.9	12,086.1	164.9	165.6	118.00	9,685.3	2,542.0	2,625.4	2,325.9	299.43	8.768	
20,600.0	10,853.2	21,875.9	12,085.5	166.5	167.2	118.00	9,785.3	2,541.2	2,625.2	2,322.8	302.37	8.682	
20,700.0	10,853.0	21,975.9	12,084.9	168.1	168.8	117.99	9,885.3	2,540.4	2,625.0	2,319.7	305.32	8.598	
20,800.0	10,852.7	22,075.9	12,084.3	169.7	170.4	117.98	9,985.3	2,539.6	2,624.8	2,316.5	308.26	8.515	
20,900.0	10,852.5	22,175.9	12,083.7	171.3	172.1	117.98	10,085.3	2,538.8	2,624.6	2,313.4	311.21	8.433	
21,000.0	10,852.3	22,275.9	12,083.1	172.9	173.7	117.97	10,185.3	2,538.0	2,624.4	2,310.2	314.17	8.353	
21,094.0	10,851.5	22,369.9	12,082.5	174.5	175.2	117.98	10,279.4	2,537.3	2,624.2	2,307.3	316.91	8.281 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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	-75.48	28.6	-110.3	114.0					
100.0	100.0	101.0	101.0	0.1	0.1	-75.48	28.6	-110.3	114.0	113.7	0.26	438.459		
200.0	200.0	201.0	201.0	0.5	0.5	-75.48	28.6	-110.3	114.0	113.0	0.98	116.654		
300.0	300.0	301.0	301.0	0.8	0.8	-75.48	28.6	-110.3	114.0	112.3	1.69	67.277		
400.0	400.0	401.0	401.0	1.2	1.2	-75.48	28.6	-110.3	114.0	111.5	2.41	47.269		
500.0	500.0	501.0	501.0	1.6	1.6	-75.48	28.6	-110.3	114.0	110.8	3.13	36.434		
600.0	600.0	601.0	601.0	1.9	1.9	-75.48	28.6	-110.3	114.0	110.1	3.84	29.639		
700.0	700.0	701.0	701.0	2.3	2.3	-75.48	28.6	-110.3	114.0	109.4	4.56	24.981		
800.0	800.0	801.0	801.0	2.6	2.6	-75.48	28.6	-110.3	114.0	108.7	5.28	21.588		
900.0	900.0	901.0	901.0	3.0	3.0	-75.48	28.6	-110.3	114.0	108.0	6.00	19.006		
1,000.0	1,000.0	1,001.0	1,001.0	3.4	3.4	-75.48	28.6	-110.3	114.0	107.2	6.71	16.976		
1,100.0	1,100.0	1,101.0	1,101.0	3.7	3.7	-75.48	28.6	-110.3	114.0	106.5	7.43	15.338		
1,200.0	1,200.0	1,201.0	1,201.0	4.1	4.1	-75.48	28.6	-110.3	114.0	105.8	8.15	13.988 CC, ES		
1,300.0	1,300.0	1,301.0	1,301.0	4.4	4.4	162.41	28.6	-110.3	114.8	105.9	8.85	12.971		
1,400.0	1,400.0	1,401.0	1,401.0	4.8	4.8	162.78	28.6	-110.3	117.3	107.7	9.54	12.291		
1,500.0	1,499.9	1,500.9	1,500.9	5.1	5.1	163.38	28.6	-110.3	121.5	111.2	10.24	11.863		
1,600.0	1,599.7	1,598.7	1,598.7	5.4	5.5	163.96	28.4	-111.1	128.1	117.2	10.92	11.732 SF		
1,700.0	1,699.4	1,696.2	1,696.2	5.8	5.8	164.34	27.9	-113.6	137.9	126.3	11.59	11.901		
1,800.0	1,798.9	1,793.2	1,793.1	6.1	6.2	164.54	27.2	-117.7	150.9	138.7	12.26	12.311		
1,900.0	1,898.3	1,889.5	1,889.2	6.5	6.5	164.58	26.1	-123.3	167.1	154.1	12.93	12.924		
2,000.0	1,997.4	1,985.0	1,984.5	6.9	6.8	164.50	24.7	-130.5	186.3	172.7	13.59	13.709		
2,100.0	2,096.4	2,079.8	2,078.8	7.2	7.2	164.34	23.1	-139.1	207.8	193.6	14.25	14.584		
2,200.0	2,195.5	2,173.9	2,172.4	7.6	7.5	164.02	21.1	-149.2	230.8	215.9	14.91	15.482		
2,300.0	2,294.5	2,267.4	2,265.1	8.0	7.8	163.61	18.9	-160.7	255.2	239.6	15.56	16.400		
2,400.0	2,393.5	2,362.7	2,359.5	8.4	8.2	163.13	16.5	-173.7	280.6	264.4	16.23	17.288		
2,500.0	2,492.5	2,459.4	2,455.2	8.8	8.6	162.73	14.0	-186.9	306.2	289.3	16.93	18.092		
2,600.0	2,591.6	2,556.0	2,550.9	9.2	8.9	162.39	11.4	-200.1	331.9	314.2	17.62	18.829		
2,700.0	2,690.6	2,652.7	2,646.6	9.6	9.3	162.09	8.9	-213.3	357.5	339.1	18.33	19.507		
2,800.0	2,789.6	2,749.3	2,742.4	10.0	9.7	161.84	6.4	-226.5	383.1	364.1	19.03	20.133		
2,900.0	2,888.6	2,846.0	2,838.1	10.4	10.1	161.61	3.9	-239.7	408.7	389.0	19.73	20.711		
3,000.0	2,987.7	2,942.6	2,933.8	10.8	10.4	161.42	1.3	-252.9	434.4	413.9	20.44	21.248		
3,100.0	3,086.7	3,039.3	3,029.5	11.2	10.8	161.24	-1.2	-266.1	460.0	438.9	21.15	21.747		
3,200.0	3,185.7	3,135.9	3,125.2	11.6	11.2	161.09	-3.7	-279.4	485.7	463.8	21.86	22.212		
3,300.0	3,284.8	3,232.6	3,220.9	12.0	11.6	160.95	-6.2	-292.6	511.3	488.7	22.58	22.646		
3,400.0	3,383.8	3,329.2	3,316.6	12.4	12.0	160.82	-8.7	-305.8	537.0	513.7	23.29	23.052		
3,500.0	3,482.8	3,425.9	3,412.3	12.8	12.4	160.70	-11.3	-319.0	562.6	538.6	24.01	23.433		
3,600.0	3,581.8	3,522.5	3,508.0	13.2	12.8	160.60	-13.8	-332.2	588.3	563.5	24.73	23.790		
3,700.0	3,680.9	3,619.2	3,603.7	13.7	13.1	160.50	-16.3	-345.4	613.9	588.5	25.45	24.126		
3,800.0	3,779.9	3,715.8	3,699.4	14.1	13.5	160.41	-18.8	-358.6	639.6	613.4	26.17	24.443		
3,878.9	3,858.0	3,807.9	3,774.9	14.4	13.9	160.35	-20.8	-369.1	659.8	633.0	26.79	24.626		
3,900.0	3,878.9	3,812.5	3,795.1	14.5	13.9	160.36	-21.3	-371.8	665.2	638.3	26.89	24.740		
4,000.0	3,978.2	3,909.5	3,891.3	14.9	14.3	160.35	-23.9	-385.1	689.2	661.5	27.61	24.963		
4,100.0	4,077.7	4,007.1	3,987.9	15.3	14.7	160.27	-26.4	-398.5	710.7	682.4	28.33	25.089		
4,200.0	4,177.5	4,105.2	4,085.1	15.6	15.1	160.11	-29.0	-411.9	729.9	700.8	29.05	25.128		
4,300.0	4,277.4	4,203.7	4,182.6	16.0	15.5	159.89	-31.6	-425.3	746.7	716.9	29.77	25.084		
4,400.0	4,377.4	4,302.6	4,280.5	16.3	15.9	159.60	-34.1	-438.9	761.0	730.5	30.48	24.966		
4,412.2	4,389.6	4,314.7	4,292.5	16.4	16.0	-78.20	-34.4	-440.5	762.6	732.0	30.57	24.948		
4,500.0	4,477.4	4,401.6	4,378.6	16.7	16.3	-78.55	-36.7	-452.4	773.9	742.7	31.18	24.817		
4,600.0	4,577.4	4,500.6	4,476.6	17.0	16.8	-78.93	-39.3	-465.9	786.8	754.9	31.89	24.675		
4,700.0	4,677.4	4,600.3	4,574.7	17.3	17.2	-79.30	-41.9	-479.5	799.8	767.2	32.59	24.537		
4,800.0	4,777.4	4,701.3	4,672.8	17.6	17.6	-79.66	-44.5	-493.0	812.8	779.5	33.31	24.403		
4,900.0	4,877.4	4,802.3	4,770.8	18.0	18.0	-80.01	-47.0	-506.5	825.8	791.7	34.02	24.274		

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
5,000.0	4,977.4	4,903.3	4,868.9	18.3	18.4	-80.35	-49.6	-520.1	838.8	804.1	34.73	24.151	
5,100.0	5,077.4	5,004.2	4,966.9	18.6	18.8	-80.67	-52.2	-533.6	851.9	816.4	35.45	24.033	
5,200.0	5,177.4	5,105.2	5,065.0	19.0	19.3	-80.99	-54.8	-547.2	865.0	828.8	36.16	23.921	
5,300.0	5,277.4	5,206.2	5,163.1	19.3	19.7	-81.30	-57.4	-560.7	878.1	841.2	36.87	23.813	
5,400.0	5,377.4	5,307.1	5,261.1	19.6	20.1	-81.60	-60.0	-574.2	891.2	853.6	37.59	23.709	
5,500.0	5,477.4	5,408.1	5,359.2	20.0	20.5	-81.89	-62.5	-587.8	904.4	866.1	38.31	23.610	
5,600.0	5,577.4	5,509.1	5,457.3	20.3	20.9	-82.17	-65.1	-601.3	917.6	878.6	39.02	23.515	
5,700.0	5,677.4	5,589.9	5,555.3	20.6	21.3	-82.44	-67.7	-614.8	930.8	891.1	39.66	23.467	
5,800.0	5,777.4	5,689.0	5,653.4	21.0	21.7	-82.71	-70.3	-628.4	944.0	903.7	40.37	23.382	
5,900.0	5,877.4	5,788.0	5,751.4	21.3	22.1	-82.97	-72.9	-641.9	957.3	916.2	41.08	23.301	
6,000.0	5,977.4	5,887.0	5,849.5	21.6	22.5	-83.22	-75.5	-655.5	970.6	928.8	41.79	23.222	
6,100.0	6,077.4	5,986.0	5,947.6	22.0	22.9	-83.46	-78.0	-669.0	983.8	941.3	42.51	23.146	
6,200.0	6,177.4	6,085.1	6,045.6	22.3	23.3	-83.70	-80.6	-682.5	997.2	953.9	43.22	23.073	
6,300.0	6,277.4	6,184.1	6,143.7	22.6	23.8	-83.93	-83.2	-696.1	1,010.5	966.5	43.93	23.002	
6,400.0	6,377.4	6,283.1	6,241.8	23.0	24.2	-84.16	-85.8	-709.6	1,023.8	979.2	44.64	22.934	
6,500.0	6,477.4	6,382.1	6,339.8	23.3	24.6	-84.38	-88.4	-723.1	1,037.2	991.8	45.35	22.868	
6,600.0	6,577.4	6,481.2	6,437.9	23.7	25.0	-84.59	-91.0	-736.7	1,050.5	1,004.5	46.07	22.805	
6,700.0	6,677.4	6,580.2	6,536.0	24.0	25.4	-84.80	-93.5	-750.2	1,063.9	1,017.1	46.78	22.743	
6,800.0	6,777.4	6,679.2	6,634.0	24.3	25.8	-85.01	-96.1	-763.8	1,077.3	1,029.8	47.49	22.684	
6,900.0	6,877.4	6,778.3	6,732.1	24.7	26.2	-85.20	-98.7	-777.3	1,090.7	1,042.5	48.21	22.626	
7,000.0	6,977.4	6,877.3	6,830.1	25.0	26.7	-85.40	-101.3	-790.8	1,104.1	1,055.2	48.92	22.570	
7,100.0	7,077.4	6,976.3	6,928.2	25.4	27.1	-85.59	-103.9	-804.4	1,117.6	1,067.9	49.63	22.516	
7,200.0	7,177.4	7,075.3	7,026.3	25.7	27.5	-85.77	-106.5	-817.9	1,131.0	1,080.7	50.35	22.464	
7,300.0	7,277.4	7,174.4	7,124.3	26.1	27.9	-85.95	-109.0	-831.4	1,144.5	1,093.4	51.06	22.413	
7,400.0	7,377.4	7,273.4	7,222.4	26.4	28.3	-86.13	-111.6	-845.0	1,157.9	1,106.2	51.78	22.364	
7,500.0	7,477.4	7,372.4	7,320.5	26.8	28.7	-86.30	-114.2	-858.5	1,171.4	1,118.9	52.49	22.316	
7,600.0	7,577.4	7,471.4	7,418.5	27.1	29.2	-86.47	-116.8	-872.1	1,184.9	1,131.7	53.21	22.270	
7,700.0	7,677.4	7,570.5	7,516.6	27.4	29.6	-86.63	-119.4	-885.6	1,198.4	1,144.5	53.92	22.225	
7,800.0	7,777.4	7,669.5	7,614.6	27.8	30.0	-86.80	-122.0	-899.1	1,211.9	1,157.3	54.64	22.181	
7,900.0	7,877.4	7,768.5	7,712.7	28.1	30.4	-86.95	-124.5	-912.7	1,225.4	1,170.1	55.35	22.138	
8,000.0	7,977.4	7,867.6	7,810.8	28.5	30.8	-87.11	-127.1	-926.2	1,238.9	1,182.9	56.07	22.097	
8,100.0	8,077.4	7,966.6	7,908.8	28.8	31.2	-87.26	-129.7	-939.7	1,252.5	1,195.7	56.79	22.056	
8,200.0	8,177.4	8,065.6	8,006.9	29.2	31.7	-87.41	-132.3	-953.3	1,266.0	1,208.5	57.50	22.017	
8,300.0	8,277.4	8,164.6	8,105.0	29.5	32.1	-87.55	-134.9	-966.8	1,279.6	1,221.3	58.22	21.979	
8,400.0	8,377.4	8,263.7	8,203.0	29.9	32.5	-87.69	-137.5	-980.4	1,293.1	1,234.2	58.93	21.942	
8,500.0	8,477.4	8,362.7	8,301.1	30.2	32.9	-87.83	-140.0	-993.9	1,306.7	1,247.0	59.65	21.905	
8,600.0	8,577.4	8,461.7	8,399.2	30.6	33.3	-87.96	-142.6	-1,007.4	1,320.3	1,259.9	60.37	21.870	
8,700.0	8,677.4	8,560.7	8,497.2	30.9	33.7	-88.10	-145.2	-1,021.0	1,333.8	1,272.8	61.09	21.836	
8,800.0	8,777.4	8,659.8	8,595.3	31.3	34.2	-88.23	-147.8	-1,034.5	1,347.4	1,285.6	61.80	21.802	
8,900.0	8,877.4	8,758.8	8,693.3	31.6	34.6	-88.36	-150.4	-1,048.0	1,361.0	1,298.5	62.52	21.769	
9,000.0	8,977.4	8,857.8	8,791.4	32.0	35.0	-88.48	-153.0	-1,061.6	1,374.6	1,311.4	63.24	21.737	
9,100.0	9,077.4	8,956.8	8,889.5	32.3	35.4	-88.60	-155.5	-1,075.1	1,388.2	1,324.3	63.96	21.706	
9,200.0	9,177.4	9,055.9	8,987.5	32.7	35.8	-88.72	-158.1	-1,088.7	1,401.8	1,337.2	64.67	21.676	
9,300.0	9,277.4	9,154.9	9,085.6	33.0	36.2	-88.84	-160.7	-1,102.2	1,415.5	1,350.1	65.39	21.646	
9,400.0	9,377.4	9,253.9	9,183.7	33.4	36.7	-88.96	-163.3	-1,115.7	1,429.1	1,363.0	66.11	21.617	
9,500.0	9,477.4	9,353.0	9,281.7	33.7	37.1	-89.07	-165.9	-1,129.3	1,442.7	1,375.9	66.83	21.588	
9,600.0	9,577.4	9,452.0	9,379.8	34.1	37.5	-89.18	-168.5	-1,142.8	1,456.3	1,388.8	67.55	21.561	
9,700.0	9,677.4	9,551.0	9,477.8	34.4	37.9	-89.29	-171.0	-1,156.3	1,470.0	1,401.7	68.26	21.534	
9,800.0	9,777.4	9,650.0	9,575.9	34.8	38.3	-89.40	-173.6	-1,169.9	1,483.6	1,414.6	68.98	21.507	
9,900.0	9,877.4	9,749.1	9,674.0	35.1	38.8	-89.50	-176.2	-1,183.4	1,497.3	1,427.6	69.70	21.481	
10,000.0	9,977.4	9,848.1	9,772.0	35.5	39.2	-89.61	-178.8	-1,197.0	1,510.9	1,440.5	70.42	21.456	
10,100.0	10,077.4	9,947.1	9,870.1	35.8	39.6	-89.71	-181.4	-1,210.5	1,524.6	1,453.4	71.14	21.431	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,177.4	10,046.1	9,968.2	36.2	40.0	-89.81	-184.0	-1,224.0	1,538.3	1,466.4	71.86	21.406	
10,300.0	10,277.4	10,145.2	10,066.2	36.5	40.4	-89.91	-186.5	-1,237.6	1,551.9	1,479.3	72.58	21.383	
10,324.1	10,301.5	10,169.0	10,089.9	36.6	40.5	-89.93	-187.2	-1,240.8	1,555.2	1,482.5	72.75	21.377	
10,350.0	10,327.4	10,205.3	10,115.2	36.7	40.7	-89.18	-187.8	-1,244.3	1,558.8	1,485.8	72.98	21.360	
10,400.0	10,377.2	10,243.8	10,163.9	36.9	40.8	-88.70	-189.1	-1,251.1	1,565.5	1,492.2	73.29	21.362	
10,450.0	10,426.4	10,307.6	10,212.0	37.0	41.1	-88.39	-190.4	-1,257.7	1,572.3	1,498.6	73.68	21.340	
10,500.0	10,474.6	10,339.8	10,259.0	37.2	41.2	-88.21	-191.6	-1,264.2	1,579.0	1,505.0	73.94	21.354	
10,550.0	10,521.6	10,385.9	10,304.6	37.3	41.4	-88.15	-192.8	-1,270.5	1,585.7	1,511.4	74.25	21.357	
10,600.0	10,566.8	10,430.2	10,348.5	37.5	41.6	-88.17	-194.0	-1,276.5	1,592.6	1,518.0	74.54	21.366	
10,650.0	10,610.1	10,472.4	10,390.3	37.6	41.8	-88.26	-195.1	-1,282.3	1,599.6	1,524.8	74.81	21.382	
10,700.0	10,651.0	10,512.2	10,429.6	37.7	42.0	-88.36	-196.1	-1,287.7	1,607.1	1,532.0	75.07	21.408	
10,750.0	10,689.2	10,549.2	10,466.3	37.8	42.1	-88.44	-197.1	-1,292.8	1,615.0	1,539.6	75.31	21.444	
10,800.0	10,724.5	10,583.3	10,500.1	37.9	42.3	-88.46	-198.0	-1,297.5	1,623.5	1,547.9	75.54	21.491	
10,850.0	10,756.6	10,614.1	10,530.6	37.9	42.4	-88.38	-198.8	-1,301.7	1,632.7	1,556.9	75.76	21.552	
10,900.0	10,785.2	10,641.4	10,557.6	38.0	42.5	-88.16	-199.5	-1,305.4	1,642.8	1,566.8	75.96	21.627	
10,950.0	10,810.1	10,665.0	10,581.0	38.0	42.6	-87.77	-200.1	-1,308.6	1,653.7	1,577.6	76.15	21.717	
11,000.0	10,831.2	10,684.7	10,600.5	38.1	42.7	-87.18	-200.6	-1,311.3	1,665.7	1,589.4	76.33	21.823	
11,050.0	10,848.2	10,700.4	10,616.0	38.3	42.8	-86.37	-201.0	-1,313.5	1,678.7	1,602.2	76.49	21.946	
11,100.0	10,861.1	10,718.7	10,634.2	38.4	42.8	-85.54	-201.5	-1,315.9	1,692.6	1,615.9	76.70	22.069	
11,150.0	10,869.7	10,731.9	10,647.2	38.5	42.9	-84.45	-201.8	-1,317.7	1,707.5	1,630.6	76.88	22.210	
11,200.0	10,874.0	10,737.4	10,652.7	38.7	42.9	-82.99	-202.0	-1,318.4	1,723.3	1,646.3	77.02	22.373	
11,225.4	10,874.5	10,737.2	10,652.5	38.8	42.9	-82.11	-202.0	-1,318.4	1,731.6	1,654.5	77.08	22.465	
11,287.1	10,874.3	10,734.3	10,649.7	39.0	42.9	-82.01	-201.9	-1,318.0	1,753.0	1,675.8	77.22	22.701	
11,300.0	10,874.3	10,733.7	10,649.1	39.0	42.9	-81.99	-201.9	-1,317.9	1,757.8	1,680.5	77.25	22.753	
11,400.0	10,874.1	10,729.0	10,644.3	39.4	42.9	-81.82	-201.8	-1,317.3	1,797.1	1,719.5	77.52	23.181	
11,500.0	10,873.8	10,724.1	10,639.6	39.8	42.9	-81.65	-201.6	-1,316.7	1,841.0	1,763.1	77.83	23.653	
11,600.0	10,873.6	10,719.2	10,634.7	40.3	42.8	-81.48	-201.5	-1,316.0	1,889.1	1,811.0	78.16	24.170	
11,700.0	10,873.4	10,714.2	10,629.7	40.9	42.8	-81.30	-201.4	-1,315.3	1,941.3	1,862.8	78.51	24.727	
11,800.0	10,873.2	10,709.1	10,624.7	41.5	42.8	-81.13	-201.3	-1,314.7	1,997.0	1,918.2	78.86	25.324	
11,900.0	10,872.9	10,703.9	10,619.5	42.2	42.8	-80.94	-201.1	-1,314.0	2,056.1	1,976.9	79.21	25.957	
12,000.0	10,872.7	10,700.9	10,616.6	42.9	42.8	-80.84	-201.0	-1,313.5	2,118.3	2,038.7	79.58	26.619	
12,100.0	10,872.5	13,573.6	12,247.3	43.7	51.3	-129.81	1,266.3	-1,360.0	2,146.1	2,073.0	73.09	29.362	
12,200.0	10,872.2	13,673.6	12,246.0	44.6	52.0	-129.79	1,366.3	-1,360.7	2,145.3	2,070.9	74.40	28.833	
12,300.0	10,872.0	13,773.6	12,244.8	45.4	52.8	-129.77	1,466.3	-1,361.4	2,144.6	2,068.8	75.80	28.294	
12,400.0	10,871.8	13,873.6	12,243.5	46.3	53.6	-129.75	1,566.3	-1,362.0	2,143.8	2,066.6	77.26	27.748	
12,500.0	10,871.6	13,973.6	12,242.2	47.3	54.4	-129.73	1,666.2	-1,362.7	2,143.1	2,064.3	78.80	27.198	
12,600.0	10,871.3	14,073.6	12,240.9	48.3	55.3	-129.71	1,766.2	-1,363.4	2,142.3	2,061.9	80.39	26.648	
12,700.0	10,871.1	14,173.6	12,239.6	49.3	56.2	-129.69	1,866.2	-1,364.1	2,141.6	2,059.5	82.05	26.099	
12,800.0	10,870.9	14,273.6	12,238.3	50.4	57.1	-129.67	1,966.2	-1,364.7	2,140.8	2,057.0	83.77	25.555	
12,900.0	10,870.7	14,373.6	12,237.0	51.5	58.1	-129.64	2,066.2	-1,365.4	2,140.1	2,054.5	85.55	25.016	
13,000.0	10,870.4	14,473.6	12,235.7	52.6	59.1	-129.62	2,166.2	-1,366.1	2,139.3	2,051.9	87.37	24.485	
13,100.0	10,870.2	14,573.6	12,234.4	53.8	60.1	-129.60	2,266.2	-1,366.8	2,138.6	2,049.3	89.24	23.963	
13,200.0	10,870.0	14,673.6	12,233.1	54.9	61.2	-129.58	2,366.1	-1,367.5	2,137.8	2,046.7	91.16	23.450	
13,300.0	10,869.7	14,773.6	12,231.8	56.1	62.3	-129.56	2,466.1	-1,368.1	2,137.1	2,043.9	93.13	22.948	
13,400.0	10,869.5	14,873.6	12,230.5	57.4	63.4	-129.54	2,566.1	-1,368.8	2,136.3	2,041.2	95.13	22.458	
13,500.0	10,869.3	14,973.6	12,229.2	58.6	64.5	-129.52	2,666.1	-1,369.5	2,135.6	2,038.4	97.17	21.978	
13,600.0	10,869.1	15,073.6	12,227.9	59.9	65.7	-129.50	2,766.1	-1,370.2	2,134.8	2,035.6	99.24	21.511	
13,700.0	10,868.8	15,173.6	12,226.6	61.1	66.9	-129.48	2,866.1	-1,370.9	2,134.1	2,032.7	101.35	21.056	
13,800.0	10,868.6	15,273.5	12,225.3	62.4	68.1	-129.46	2,966.0	-1,371.5	2,133.3	2,029.8	103.49	20.614	
13,900.0	10,868.4	15,373.5	12,224.0	63.8	69.3	-129.44	3,066.0	-1,372.2	2,132.6	2,026.9	105.66	20.183	
14,000.0	10,868.2	15,473.5	12,222.8	65.1	70.5	-129.42	3,166.0	-1,372.9	2,131.8	2,024.0	107.86	19.765	
14,100.0	10,867.9	15,573.5	12,221.5	66.4	71.8	-129.40	3,266.0	-1,373.6	2,131.1	2,021.0	110.08	19.359	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,867.7	15,673.5	12,220.2	67.8	73.0	-129.38	3,366.0	-1,374.2	2,130.3	2,018.0	112.33	18.964	
14,300.0	10,867.5	15,773.5	12,218.9	69.2	74.3	-129.36	3,466.0	-1,374.9	2,129.6	2,015.0	114.61	18.582	
14,400.0	10,867.3	15,873.5	12,217.6	70.6	75.6	-129.34	3,565.9	-1,375.6	2,128.8	2,011.9	116.90	18.210	
14,500.0	10,867.0	15,973.5	12,216.3	72.0	76.9	-129.32	3,665.9	-1,376.3	2,128.1	2,008.9	119.22	17.850	
14,600.0	10,866.8	16,073.5	12,215.0	73.4	78.3	-129.29	3,765.9	-1,377.0	2,127.4	2,005.8	121.56	17.501	
14,700.0	10,866.6	16,173.5	12,213.7	74.8	79.6	-129.27	3,865.9	-1,377.6	2,126.6	2,002.7	123.91	17.162	
14,800.0	10,866.3	16,273.5	12,212.4	76.2	80.9	-129.25	3,965.9	-1,378.3	2,125.9	1,999.6	126.29	16.834	
14,900.0	10,866.1	16,373.5	12,211.1	77.7	82.3	-129.23	4,065.9	-1,379.0	2,125.1	1,996.4	128.68	16.515	
15,000.0	10,865.9	16,473.5	12,209.8	79.1	83.7	-129.21	4,165.8	-1,379.7	2,124.4	1,993.3	131.08	16.206	
15,100.0	10,865.7	16,573.5	12,208.5	80.6	85.1	-129.19	4,265.8	-1,380.4	2,123.6	1,990.1	133.51	15.907	
15,200.0	10,865.4	16,673.5	12,207.2	82.0	86.4	-129.17	4,365.8	-1,381.0	2,122.9	1,986.9	135.94	15.616	
15,300.0	10,865.2	16,773.5	12,205.9	83.5	87.8	-129.15	4,465.8	-1,381.7	2,122.1	1,983.8	138.39	15.334	
15,400.0	10,865.0	16,873.5	12,204.6	85.0	89.3	-129.13	4,565.8	-1,382.4	2,121.4	1,980.5	140.86	15.061	
15,500.0	10,864.8	16,973.4	12,203.3	86.4	90.7	-129.11	4,665.8	-1,383.1	2,120.7	1,977.3	143.33	14.795	
15,600.0	10,864.5	17,073.4	12,202.1	87.9	92.1	-129.09	4,765.7	-1,383.7	2,119.9	1,974.1	145.82	14.538	
15,700.0	10,864.3	17,173.4	12,200.8	89.4	93.5	-129.07	4,865.7	-1,384.4	2,119.2	1,970.9	148.32	14.288	
15,800.0	10,864.1	17,273.4	12,199.5	90.9	95.0	-129.04	4,965.7	-1,385.1	2,118.4	1,967.6	150.83	14.045	
15,812.8	10,864.0	17,270.5	12,199.5	91.1	94.9	-129.05	4,962.8	-1,385.1	2,118.4	1,967.4	151.02	14.028	
15,900.0	10,863.8	17,270.5	12,199.5	92.4	94.9	-129.05	4,962.8	-1,385.1	2,120.2	1,967.8	152.35	13.917	
16,000.0	10,863.6	17,270.5	12,199.5	94.0	94.9	-129.05	4,962.8	-1,385.1	2,126.7	1,973.0	153.66	13.840	
16,100.0	10,863.4	17,270.5	12,199.5	95.5	94.9	-129.05	4,962.8	-1,385.1	2,137.8	1,983.0	154.73	13.816	
16,200.0	10,863.2	17,270.5	12,199.5	97.0	94.9	-129.05	4,962.8	-1,385.1	2,153.5	1,997.9	155.57	13.843	
16,300.0	10,862.9	17,270.5	12,199.5	98.5	94.9	-129.05	4,962.8	-1,385.1	2,173.7	2,017.5	156.17	13.919	
16,400.0	10,862.7	17,270.5	12,199.5	100.0	94.9	-129.05	4,962.8	-1,385.1	2,198.3	2,041.7	156.54	14.043	
16,500.0	10,862.5	17,270.5	12,199.5	101.6	94.9	-129.05	4,962.8	-1,385.1	2,227.1	2,070.4	156.69	14.213	
16,600.0	10,862.3	17,270.5	12,199.5	103.1	94.9	-129.05	4,962.8	-1,385.1	2,259.9	2,103.3	156.65	14.427	
16,700.0	10,862.0	17,270.5	12,199.5	104.7	94.9	-129.05	4,962.8	-1,385.1	2,296.7	2,140.2	156.42	14.682	
16,800.0	10,861.8	17,270.5	12,199.5	106.2	94.9	-129.05	4,962.8	-1,385.1	2,337.1	2,181.1	156.04	14.978	
16,900.0	10,861.6	17,270.5	12,199.5	107.7	94.9	-129.05	4,962.8	-1,385.1	2,381.1	2,225.6	155.51	15.312	
17,000.0	10,861.4	17,270.5	12,199.5	109.3	94.9	-129.05	4,962.8	-1,385.1	2,428.4	2,273.5	154.85	15.682	
17,100.0	10,861.1	17,270.5	12,199.5	110.8	94.9	-129.05	4,962.8	-1,385.1	2,478.8	2,324.7	154.09	16.087	
17,200.0	10,860.9	17,270.5	12,199.5	112.4	94.9	-129.05	4,962.8	-1,385.1	2,532.2	2,378.9	153.24	16.524	
17,300.0	10,860.7	17,270.5	12,199.5	114.0	94.9	-129.05	4,962.8	-1,385.1	2,588.3	2,436.0	152.32	16.992	
17,400.0	10,860.4	17,270.5	12,199.5	115.5	94.9	-129.05	4,962.8	-1,385.1	2,647.0	2,495.7	151.35	17.489	
17,500.0	10,860.2	17,270.5	12,199.5	117.1	94.9	-129.05	4,962.8	-1,385.1	2,708.2	2,557.8	150.33	18.014	
17,600.0	10,860.0	17,270.5	12,199.5	118.7	94.9	-129.05	4,962.8	-1,385.1	2,771.6	2,622.3	149.29	18.565	
17,700.0	10,859.8	17,270.5	12,199.5	120.2	94.9	-129.05	4,962.8	-1,385.1	2,837.1	2,688.9	148.23	19.140	
17,800.0	10,859.5	17,270.5	12,199.5	121.8	94.9	-129.05	4,962.8	-1,385.1	2,904.6	2,757.4	147.15	19.738	
17,900.0	10,859.3	17,270.5	12,199.5	123.4	94.9	-129.05	4,962.8	-1,385.1	2,973.9	2,827.8	146.08	20.358	
18,000.0	10,859.1	17,270.5	12,199.5	124.9	94.9	-129.05	4,962.8	-1,385.1	3,044.9	2,899.9	145.01	20.999	
18,100.0	10,858.9	17,270.5	12,199.5	126.5	94.9	-129.05	4,962.8	-1,385.1	3,117.5	2,973.6	143.94	21.658	
18,200.0	10,858.6	17,270.5	12,199.5	128.1	94.9	-129.05	4,962.8	-1,385.1	3,191.6	3,048.7	142.90	22.335	
18,300.0	10,858.4	17,270.5	12,199.5	129.7	94.9	-129.05	4,962.8	-1,385.1	3,267.1	3,125.2	141.87	23.029	
18,400.0	10,858.2	17,270.5	12,199.5	131.3	94.9	-129.05	4,962.8	-1,385.1	3,343.8	3,203.0	140.86	23.739	
18,500.0	10,857.9	17,270.5	12,199.5	132.9	94.9	-129.05	4,962.8	-1,385.1	3,421.8	3,281.9	139.87	24.463	
18,600.0	10,857.7	17,270.5	12,199.5	134.4	94.9	-129.05	4,962.8	-1,385.1	3,500.9	3,361.9	138.91	25.202	
18,700.0	10,857.5	17,270.5	12,199.5	136.0	94.9	-129.05	4,962.8	-1,385.1	3,581.0	3,443.0	137.98	25.953	
18,800.0	10,857.3	17,270.5	12,199.5	137.6	94.9	-129.05	4,962.8	-1,385.1	3,662.1	3,525.0	137.07	26.717	
18,900.0	10,857.0	17,270.5	12,199.5	139.2	94.9	-129.05	4,962.8	-1,385.1	3,744.1	3,607.9	136.19	27.492	
19,000.0	10,856.8	17,270.5	12,199.5	140.8	94.9	-129.05	4,962.8	-1,385.1	3,827.0	3,691.6	135.34	28.277	
19,100.0	10,856.6	17,270.5	12,199.5	142.4	94.9	-129.05	4,962.8	-1,385.1	3,910.6	3,776.1	134.51	29.073	
19,200.0	10,856.4	17,270.5	12,199.5	144.0	94.9	-129.05	4,962.8	-1,385.1	3,995.1	3,861.4	133.72	29.877	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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 #211H - 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	10,856.1	17,270.5	12,199.5	145.6	94.9	-129.05	4,962.8	-1,385.1	4,080.2	3,947.3	132.95	30.691	
19,400.0	10,855.9	17,270.5	12,199.5	147.2	94.9	-129.05	4,962.8	-1,385.1	4,166.0	4,033.8	132.20	31.512	
19,500.0	10,855.7	17,270.5	12,199.5	148.8	94.9	-129.05	4,962.8	-1,385.1	4,252.4	4,120.9	131.48	32.341	
19,600.0	10,855.5	17,270.5	12,199.5	150.4	94.9	-129.05	4,962.8	-1,385.1	4,339.4	4,208.6	130.79	33.178	
19,700.0	10,855.2	17,270.5	12,199.5	152.0	94.9	-129.05	4,962.8	-1,385.1	4,426.9	4,296.8	130.13	34.020	
19,800.0	10,855.0	17,270.5	12,199.5	153.6	94.9	-129.05	4,962.8	-1,385.1	4,515.0	4,385.5	129.48	34.869	
19,900.0	10,854.8	17,270.5	12,199.5	155.2	94.9	-129.05	4,962.8	-1,385.1	4,603.5	4,474.7	128.87	35.724	
20,000.0	10,854.5	17,270.5	12,199.5	156.8	94.9	-129.05	4,962.8	-1,385.1	4,692.6	4,564.3	128.27	36.583	
20,100.0	10,854.3	17,270.5	12,199.5	158.4	94.9	-129.05	4,962.8	-1,385.1	4,782.0	4,654.3	127.70	37.448	
20,200.0	10,854.1	17,270.5	12,199.5	160.0	94.9	-129.05	4,962.8	-1,385.1	4,871.9	4,744.7	127.15	38.317	
20,300.0	10,853.9	17,270.5	12,199.5	161.7	94.9	-129.05	4,962.8	-1,385.1	4,962.1	4,835.5	126.61	39.191	
20,400.0	10,853.6	17,270.5	12,199.5	163.3	94.9	-129.05	4,962.8	-1,385.1	5,052.7	4,926.6	126.10	40.068	
20,500.0	10,853.4	17,270.5	12,199.5	164.9	94.9	-129.05	4,962.8	-1,385.1	5,143.7	5,018.1	125.61	40.949	
20,600.0	10,853.2	17,270.5	12,199.5	166.5	94.9	-129.05	4,962.8	-1,385.1	5,235.0	5,109.8	125.14	41.833	
20,700.0	10,853.0	17,270.5	12,199.5	168.1	94.9	-129.05	4,962.8	-1,385.1	5,326.6	5,201.9	124.68	42.720	
20,800.0	10,852.7	17,270.5	12,199.5	169.7	94.9	-129.05	4,962.8	-1,385.1	5,418.4	5,294.2	124.25	43.610	
20,900.0	10,852.5	17,270.5	12,199.5	171.3	94.9	-129.05	4,962.8	-1,385.1	5,510.6	5,386.8	123.83	44.503	
21,000.0	10,852.3	17,270.5	12,199.5	172.9	94.9	-129.05	4,962.8	-1,385.1	5,603.1	5,479.7	123.42	45.398	
21,094.0	10,851.5	17,270.5	12,199.5	174.5	94.9	-129.05	4,962.8	-1,385.1	5,690.5	5,567.4	123.06	46.241	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	-70.17	28.9	-80.2	85.3				
100.0	100.0	100.0	100.0	0.1	0.1	-70.17	28.9	-80.2	85.3	85.0	0.26	332.719	
200.0	200.0	200.0	200.0	0.5	0.5	-70.17	28.9	-80.2	85.3	84.3	0.97	87.622	
300.0	300.0	300.0	300.0	0.8	0.8	-70.17	28.9	-80.2	85.3	83.6	1.69	50.455	
400.0	400.0	400.0	400.0	1.2	1.2	-70.17	28.9	-80.2	85.3	82.9	2.41	35.427	
500.0	500.0	500.0	500.0	1.6	1.6	-70.17	28.9	-80.2	85.3	82.2	3.12	27.297	
600.0	600.0	600.0	600.0	1.9	1.9	-70.17	28.9	-80.2	85.3	81.4	3.84	22.202	
700.0	700.0	700.0	700.0	2.3	2.3	-70.17	28.9	-80.2	85.3	80.7	4.56	18.710	
800.0	800.0	800.0	800.0	2.6	2.6	-70.17	28.9	-80.2	85.3	80.0	5.27	16.167	
900.0	900.0	900.0	900.0	3.0	3.0	-70.17	28.9	-80.2	85.3	79.3	5.99	14.232	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	-70.17	28.9	-80.2	85.3	78.6	6.71	12.711	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	-70.17	28.9	-80.2	85.3	77.9	7.43	11.484	
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	-70.17	28.9	-80.2	85.3	77.1	8.14	10.473	CC, ES
1,300.0	1,300.0	1,300.0	1,300.0	4.4	4.4	167.71	28.9	-80.2	86.1	77.3	8.85	9.737	
1,400.0	1,400.0	1,400.0	1,400.0	4.8	4.8	168.07	28.9	-80.2	88.7	79.2	9.54	9.298	
1,500.0	1,499.9	1,499.9	1,499.9	5.1	5.1	168.62	28.9	-80.2	93.0	82.7	10.23	9.083	
1,600.0	1,599.7	1,598.5	1,598.5	5.4	5.5	168.94	28.6	-81.0	99.6	88.6	10.92	9.120	
1,700.0	1,699.4	1,696.8	1,696.7	5.8	5.8	168.75	27.5	-83.3	109.1	97.5	11.59	9.413	
1,800.0	1,798.9	1,794.6	1,794.5	6.1	6.2	168.18	25.8	-87.1	121.5	109.2	12.26	9.909	
1,900.0	1,898.3	1,891.8	1,891.5	6.5	6.5	167.37	23.4	-92.4	136.8	123.9	12.93	10.580	
2,000.0	1,997.4	1,988.3	1,987.8	6.9	6.8	166.43	20.4	-99.2	155.0	141.4	13.60	11.399	
2,100.0	2,096.4	2,084.2	2,083.2	7.2	7.2	165.43	16.7	-107.4	175.3	161.0	14.27	12.289	
2,200.0	2,195.5	2,179.4	2,177.9	7.6	7.5	164.32	12.4	-116.9	196.9	182.0	14.93	13.186	
2,300.0	2,294.5	2,274.1	2,271.7	8.0	7.8	163.17	7.5	-127.8	219.8	204.2	15.59	14.092	
2,400.0	2,393.5	2,370.3	2,367.0	8.4	8.2	162.03	2.0	-140.0	243.6	227.3	16.28	14.965	
2,500.0	2,492.5	2,467.3	2,463.1	8.8	8.6	161.09	-3.5	-152.3	267.6	250.6	16.98	15.762	
2,600.0	2,591.6	2,564.3	2,559.1	9.2	8.9	160.29	-9.0	-164.6	291.7	274.0	17.68	16.495	
2,700.0	2,690.6	2,661.3	2,655.2	9.6	9.3	159.62	-14.6	-176.9	315.8	297.4	18.39	17.171	
2,800.0	2,789.6	2,758.3	2,751.2	10.0	9.7	159.04	-20.1	-189.2	339.9	320.8	19.10	17.795	
2,900.0	2,888.6	2,855.3	2,847.3	10.4	10.1	158.54	-25.6	-201.6	364.0	344.2	19.81	18.374	
3,000.0	2,987.7	2,952.3	2,943.3	10.8	10.4	158.11	-31.2	-213.9	388.2	367.7	20.53	18.911	
3,100.0	3,086.7	3,049.3	3,039.4	11.2	10.8	157.72	-36.7	-226.2	412.4	391.2	21.25	19.410	
3,200.0	3,185.7	3,146.3	3,135.4	11.6	11.2	157.37	-42.3	-238.5	436.6	414.7	21.97	19.875	
3,300.0	3,284.8	3,243.2	3,231.5	12.0	11.6	157.07	-47.8	-250.8	460.9	438.2	22.69	20.310	
3,400.0	3,383.8	3,340.2	3,327.5	12.4	12.0	156.79	-53.3	-263.1	485.1	461.7	23.41	20.717	
3,500.0	3,482.8	3,437.2	3,423.6	12.8	12.4	156.54	-58.9	-275.4	509.3	485.2	24.14	21.098	
3,600.0	3,581.8	3,534.2	3,519.6	13.2	12.8	156.31	-64.4	-287.7	533.6	508.7	24.87	21.457	
3,700.0	3,680.9	3,631.2	3,615.7	13.7	13.2	156.10	-69.9	-300.0	557.9	532.3	25.60	21.794	
3,800.0	3,779.9	3,728.2	3,711.7	14.1	13.6	155.91	-75.5	-312.3	582.1	555.8	26.33	22.111	
3,878.9	3,858.0	3,804.7	3,787.5	14.4	13.9	155.77	-79.9	-322.1	601.3	574.4	26.90	22.349	
3,900.0	3,878.9	3,825.2	3,807.8	14.5	13.9	155.77	-81.0	-324.7	606.3	579.3	27.06	22.409	
4,000.0	3,978.2	3,922.6	3,904.2	14.9	14.3	155.68	-86.6	-337.0	629.0	601.2	27.79	22.635	
4,100.0	4,077.7	4,020.4	4,001.1	15.3	14.7	155.49	-92.2	-349.4	649.3	620.8	28.52	22.769	
4,200.0	4,177.5	4,118.7	4,098.4	15.6	15.1	155.21	-97.8	-361.9	667.3	638.1	29.24	22.819	
4,300.0	4,277.4	4,217.3	4,196.1	16.0	15.6	154.85	-103.4	-374.4	683.0	653.0	29.97	22.791	
4,400.0	4,377.4	4,316.2	4,294.0	16.3	16.0	154.40	-109.1	-387.0	696.4	665.7	30.69	22.693	
4,412.2	4,389.6	4,328.3	4,306.0	16.4	16.0	-83.42	-109.7	-388.5	697.9	667.1	30.77	22.677	
4,500.0	4,477.4	4,415.2	4,392.0	16.7	16.4	-83.93	-114.7	-399.5	708.4	677.0	31.39	22.566	
4,600.0	4,577.4	4,514.3	4,490.1	17.0	16.8	-84.49	-120.4	-412.1	720.5	688.4	32.10	22.446	
4,700.0	4,677.4	4,613.3	4,588.2	17.3	17.2	-85.02	-126.0	-424.7	732.7	699.8	32.81	22.333	
4,800.0	4,777.4	4,712.3	4,686.2	17.6	17.6	-85.55	-131.7	-437.3	744.9	711.3	33.51	22.226	
4,900.0	4,877.4	4,811.3	4,784.3	18.0	18.0	-86.05	-137.3	-449.8	757.1	722.9	34.22	22.125	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
5,000.0	4,977.4	4,910.4	4,882.4	18.3	18.4	-86.54	-143.0	-462.4	769.4	734.5	34.93	22.030	
5,100.0	5,077.4	5,009.4	4,980.4	18.6	18.8	-87.01	-148.6	-475.0	781.8	746.2	35.64	21.939	
5,200.0	5,177.4	5,108.4	5,078.5	19.0	19.2	-87.47	-154.3	-487.5	794.3	757.9	36.34	21.854	
5,300.0	5,277.4	5,207.4	5,176.5	19.3	19.6	-87.91	-159.9	-500.1	806.7	769.7	37.05	21.772	
5,400.0	5,377.4	5,306.5	5,274.6	19.6	20.1	-88.34	-165.6	-512.7	819.3	781.5	37.76	21.695	
5,500.0	5,477.4	5,405.5	5,372.7	20.0	20.5	-88.76	-171.2	-525.2	831.8	793.3	38.47	21.622	
5,600.0	5,577.4	5,504.5	5,470.7	20.3	20.9	-89.17	-176.9	-537.8	844.4	805.2	39.18	21.552	
5,700.0	5,677.4	5,603.5	5,568.8	20.6	21.3	-89.56	-182.6	-550.4	857.1	817.2	39.89	21.485	
5,800.0	5,777.4	5,718.1	5,682.3	21.0	21.8	-89.98	-188.8	-564.2	869.2	828.5	40.73	21.341	
5,900.0	5,877.4	5,843.9	5,807.4	21.3	22.3	-90.33	-194.1	-576.1	878.7	837.1	41.63	21.108	
6,000.0	5,977.4	5,970.4	5,933.6	21.6	22.7	-90.56	-197.8	-584.2	885.1	842.7	42.49	20.834	
6,100.0	6,077.4	6,097.3	6,060.5	22.0	23.2	-90.69	-199.7	-588.6	888.6	845.3	43.30	20.521	
6,200.0	6,177.4	6,214.3	6,177.4	22.3	23.6	-90.71	-200.1	-589.3	889.2	845.1	44.03	20.193	
6,300.0	6,277.4	6,314.3	6,277.4	22.6	23.9	-90.71	-200.1	-589.3	889.2	844.5	44.71	19.887	
6,400.0	6,377.4	6,414.3	6,377.4	23.0	24.2	-90.71	-200.1	-589.3	889.2	843.8	45.39	19.590	
6,500.0	6,477.4	6,514.3	6,477.4	23.3	24.5	-90.71	-200.1	-589.3	889.2	843.1	46.07	19.301	
6,600.0	6,577.4	6,614.3	6,577.4	23.7	24.8	-90.71	-200.1	-589.3	889.2	842.4	46.75	19.020	
6,700.0	6,677.4	6,714.3	6,677.4	24.0	25.2	-90.71	-200.1	-589.3	889.2	841.7	47.43	18.747	
6,800.0	6,777.4	6,814.3	6,777.4	24.3	25.5	-90.71	-200.1	-589.3	889.2	841.1	48.11	18.481	
6,900.0	6,877.4	6,914.3	6,877.4	24.7	25.8	-90.71	-200.1	-589.3	889.2	840.4	48.80	18.222	
7,000.0	6,977.4	7,014.3	6,977.4	25.0	26.1	-90.71	-200.1	-589.3	889.2	839.7	49.48	17.970	
7,100.0	7,077.4	7,114.3	7,077.4	25.4	26.5	-90.71	-200.1	-589.3	889.2	839.0	50.17	17.725	
7,200.0	7,177.4	7,214.3	7,177.4	25.7	26.8	-90.71	-200.1	-589.3	889.2	838.3	50.85	17.486	
7,300.0	7,277.4	7,314.3	7,277.4	26.1	27.1	-90.71	-200.1	-589.3	889.2	837.6	51.54	17.253	
7,400.0	7,377.4	7,414.3	7,377.4	26.4	27.4	-90.71	-200.1	-589.3	889.2	836.9	52.23	17.025	
7,500.0	7,477.4	7,514.3	7,477.4	26.8	27.8	-90.71	-200.1	-589.3	889.2	836.3	52.91	16.804	
7,600.0	7,577.4	7,614.3	7,577.4	27.1	28.1	-90.71	-200.1	-589.3	889.2	835.6	53.60	16.588	
7,700.0	7,677.4	7,714.3	7,677.4	27.4	28.4	-90.71	-200.1	-589.3	889.2	834.9	54.29	16.377	
7,800.0	7,777.4	7,814.3	7,777.4	27.8	28.8	-90.71	-200.1	-589.3	889.2	834.2	54.98	16.171	
7,900.0	7,877.4	7,914.3	7,877.4	28.1	29.1	-90.71	-200.1	-589.3	889.2	833.5	55.68	15.971	
8,000.0	7,977.4	8,014.3	7,977.4	28.5	29.4	-90.71	-200.1	-589.3	889.2	832.8	56.37	15.774	
8,100.0	8,077.4	8,114.3	8,077.4	28.8	29.8	-90.71	-200.1	-589.3	889.2	832.1	57.06	15.583	
8,200.0	8,177.4	8,214.3	8,177.4	29.2	30.1	-90.71	-200.1	-589.3	889.2	831.4	57.75	15.396	
8,300.0	8,277.4	8,314.3	8,277.4	29.5	30.4	-90.71	-200.1	-589.3	889.2	830.7	58.45	15.213	
8,400.0	8,377.4	8,414.3	8,377.4	29.9	30.8	-90.71	-200.1	-589.3	889.2	830.0	59.14	15.035	
8,500.0	8,477.4	8,514.3	8,477.4	30.2	31.1	-90.71	-200.1	-589.3	889.2	829.3	59.84	14.860	
8,600.0	8,577.4	8,614.3	8,577.4	30.6	31.4	-90.71	-200.1	-589.3	889.2	828.6	60.53	14.689	
8,700.0	8,677.4	8,714.3	8,677.4	30.9	31.8	-90.71	-200.1	-589.3	889.2	827.9	61.23	14.522	
8,800.0	8,777.4	8,814.3	8,777.4	31.3	32.1	-90.71	-200.1	-589.3	889.2	827.2	61.92	14.359	
8,900.0	8,877.4	8,914.3	8,877.4	31.6	32.4	-90.71	-200.1	-589.3	889.2	826.5	62.62	14.199	
9,000.0	8,977.4	9,014.3	8,977.4	32.0	32.8	-90.71	-200.1	-589.3	889.2	825.9	63.32	14.043	
9,100.0	9,077.4	9,114.3	9,077.4	32.3	33.1	-90.71	-200.1	-589.3	889.2	825.2	64.02	13.890	
9,200.0	9,177.4	9,214.3	9,177.4	32.7	33.5	-90.71	-200.1	-589.3	889.2	824.5	64.71	13.740	
9,300.0	9,277.4	9,314.3	9,277.4	33.0	33.8	-90.71	-200.1	-589.3	889.2	823.8	65.41	13.593	
9,400.0	9,377.4	9,414.3	9,377.4	33.4	34.1	-90.71	-200.1	-589.3	889.2	823.1	66.11	13.450	
9,500.0	9,477.4	9,514.3	9,477.4	33.7	34.5	-90.71	-200.1	-589.3	889.2	822.4	66.81	13.309	
9,600.0	9,577.4	9,614.3	9,577.4	34.1	34.8	-90.71	-200.1	-589.3	889.2	821.7	67.51	13.171	
9,700.0	9,677.4	9,714.3	9,677.4	34.4	35.1	-90.71	-200.1	-589.3	889.2	821.0	68.21	13.036	
9,800.0	9,777.4	9,814.3	9,777.4	34.8	35.5	-90.71	-200.1	-589.3	889.2	820.3	68.91	12.903	
9,900.0	9,877.4	9,914.3	9,877.4	35.1	35.8	-90.71	-200.1	-589.3	889.2	819.6	69.61	12.773	
10,000.0	9,977.4	10,014.3	9,977.4	35.5	36.2	-90.71	-200.1	-589.3	889.2	818.9	70.31	12.646	
10,100.0	10,077.4	10,114.3	10,077.4	35.8	36.5	-90.71	-200.1	-589.3	889.2	818.2	71.01	12.521	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,177.4	10,214.3	10,177.4	36.2	36.9	-90.71	-200.1	-589.3	889.2	817.5	71.72	12.399	
10,300.0	10,277.4	10,314.3	10,277.4	36.5	37.2	-90.71	-200.1	-589.3	889.2	816.8	72.42	12.278	
10,324.1	10,301.5	10,338.4	10,301.5	36.6	37.3	-90.71	-200.1	-589.3	889.2	816.6	72.59	12.250	
10,350.0	10,327.4	10,364.2	10,327.4	36.7	37.4	-90.31	-200.1	-589.3	889.2	816.4	72.77	12.219	
10,400.0	10,377.2	10,414.0	10,377.2	36.9	37.5	-90.59	-200.1	-589.3	889.2	816.1	73.11	12.163	
10,450.0	10,426.4	10,463.2	10,426.4	37.0	37.7	-91.13	-200.1	-589.3	889.3	815.9	73.44	12.110	
10,500.0	10,474.6	10,511.5	10,474.6	37.2	37.9	-91.90	-200.1	-589.3	889.7	815.9	73.76	12.062	
10,550.0	10,521.6	10,558.4	10,521.6	37.3	38.0	-92.86	-200.1	-589.3	890.5	816.4	74.07	12.022	
10,600.0	10,566.8	10,603.7	10,566.8	37.5	38.2	-93.95	-200.1	-589.3	891.9	817.5	74.36	11.994	
10,650.0	10,610.1	10,647.0	10,610.1	37.6	38.3	-95.11	-200.1	-589.3	894.2	819.5	74.64	11.980	
10,700.0	10,651.0	10,687.9	10,651.0	37.7	38.5	-96.26	-200.1	-589.3	897.6	822.7	74.90	11.984	
10,750.0	10,689.2	10,726.1	10,689.2	37.8	38.6	-97.33	-200.1	-589.3	902.6	827.5	75.15	12.011	
10,800.0	10,724.5	10,761.4	10,724.5	37.9	38.7	-98.23	-200.1	-589.3	909.4	834.0	75.38	12.063	
10,850.0	10,756.6	10,806.5	10,756.6	37.9	38.9	-98.89	-200.1	-589.3	918.2	842.5	75.65	12.137	
10,900.0	10,785.2	10,822.1	10,785.2	38.0	38.9	-99.25	-200.1	-589.3	929.3	853.5	75.81	12.258	
10,950.0	10,810.1	10,847.0	10,810.1	38.0	39.0	-99.22	-200.1	-589.3	942.8	866.8	75.99	12.406	
11,000.0	10,831.2	10,868.0	10,831.2	38.1	39.1	-98.74	-200.1	-589.3	958.8	882.6	76.16	12.590	
11,050.0	10,848.2	10,885.1	10,848.2	38.3	39.2	-97.77	-200.1	-589.3	977.3	901.0	76.30	12.809	
11,100.0	10,861.1	10,902.1	10,861.1	38.4	39.2	-96.26	-200.1	-589.3	998.3	921.9	76.44	13.060	
11,150.0	10,869.7	10,906.5	10,869.7	38.5	39.2	-94.18	-200.1	-589.3	1,021.7	945.2	76.53	13.350	
11,200.0	10,874.0	10,910.8	10,874.0	38.7	39.2	-91.50	-200.1	-589.3	1,047.1	970.5	76.61	13.669	
11,225.4	10,874.5	10,911.3	10,874.5	38.8	39.2	-89.92	-200.1	-589.3	1,060.7	984.1	76.64	13.841	
11,287.1	10,874.3	10,911.2	10,874.3	39.0	39.2	-89.91	-200.1	-589.3	1,095.6	1,018.9	76.71	14.283	
11,300.0	10,874.3	10,911.2	10,874.3	39.0	39.2	-89.90	-200.1	-589.3	1,103.2	1,026.5	76.72	14.379	
11,400.0	10,874.1	10,910.9	10,874.1	39.4	39.2	-89.89	-200.1	-589.3	1,165.2	1,088.3	76.84	15.163	
11,500.0	10,873.8	10,910.7	10,873.8	39.8	39.2	-89.88	-200.1	-589.3	1,232.2	1,155.2	76.97	16.009	
11,600.0	10,873.6	10,910.5	10,873.6	40.3	39.2	-89.86	-200.1	-589.3	1,303.4	1,226.3	77.09	16.907	
11,700.0	10,873.4	10,910.2	10,873.4	40.9	39.2	-89.85	-200.1	-589.3	1,378.2	1,301.0	77.21	17.850	
11,800.0	10,873.2	10,910.0	10,873.2	41.5	39.2	-89.83	-200.1	-589.3	1,456.0	1,378.7	77.32	18.832	
11,900.0	10,872.9	10,909.8	10,872.9	42.2	39.2	-89.82	-200.1	-589.3	1,536.4	1,459.0	77.42	19.845	
12,000.0	10,872.7	10,909.6	10,872.7	42.9	39.2	-89.80	-200.1	-589.3	1,619.0	1,541.5	77.52	20.885	
12,100.0	10,872.5	10,909.3	10,872.5	43.7	39.2	-89.79	-200.1	-589.3	1,703.5	1,625.9	77.61	21.949	
12,200.0	10,872.2	10,909.1	10,872.2	44.6	39.2	-89.77	-200.1	-589.3	1,789.5	1,711.8	77.70	23.033	
12,300.0	10,872.0	10,908.9	10,872.0	45.4	39.2	-89.76	-200.1	-589.3	1,877.0	1,799.2	77.77	24.134	
12,400.0	10,871.8	14,117.2	12,525.2	46.3	51.9	-149.11	1,576.3	-702.8	1,926.8	1,865.3	61.46	31.351	
12,500.0	10,871.6	14,217.2	12,523.7	47.3	52.8	-149.10	1,676.3	-703.6	1,925.7	1,863.0	62.73	30.698	
12,600.0	10,871.3	14,317.2	12,522.3	48.3	53.7	-149.08	1,776.3	-704.4	1,924.6	1,860.6	64.05	30.047	
12,700.0	10,871.1	14,417.2	12,520.8	49.3	54.6	-149.06	1,876.3	-705.1	1,923.6	1,858.2	65.42	29.402	
12,800.0	10,870.9	14,517.2	12,519.3	50.4	55.6	-149.04	1,976.3	-705.9	1,922.5	1,855.7	66.84	28.764	
12,900.0	10,870.7	14,617.2	12,517.8	51.5	56.6	-149.02	2,076.2	-706.7	1,921.5	1,853.2	68.29	28.136	
13,000.0	10,870.4	14,717.2	12,516.4	52.6	57.6	-149.00	2,176.2	-707.5	1,920.4	1,850.6	69.79	27.519	
13,100.0	10,870.2	14,817.2	12,514.9	53.8	58.7	-148.98	2,276.2	-708.3	1,919.3	1,848.0	71.32	26.913	
13,200.0	10,870.0	14,917.2	12,513.4	54.9	59.8	-148.96	2,376.2	-709.1	1,918.3	1,845.4	72.88	26.321	
13,300.0	10,869.7	15,017.2	12,511.9	56.1	60.9	-148.94	2,476.1	-709.8	1,917.2	1,842.7	74.48	25.743	
13,400.0	10,869.5	15,117.2	12,510.5	57.4	62.0	-148.92	2,576.1	-710.6	1,916.2	1,840.1	76.10	25.179	
13,500.0	10,869.3	15,217.2	12,509.0	58.6	63.2	-148.90	2,676.1	-711.4	1,915.1	1,837.3	77.76	24.629	
13,600.0	10,869.1	15,317.1	12,507.5	59.9	64.4	-148.88	2,776.1	-712.2	1,914.0	1,834.6	79.44	24.094	
13,700.0	10,868.8	15,417.1	12,506.1	61.1	65.6	-148.86	2,876.1	-713.0	1,913.0	1,831.8	81.15	23.574	
13,800.0	10,868.6	15,517.1	12,504.6	62.4	66.8	-148.84	2,976.0	-713.7	1,911.9	1,829.0	82.88	23.069	
13,900.0	10,868.4	15,617.1	12,503.1	63.8	68.0	-148.82	3,076.0	-714.5	1,910.9	1,826.2	84.63	22.578	
14,000.0	10,868.2	15,717.1	12,501.6	65.1	69.3	-148.80	3,176.0	-715.3	1,909.8	1,823.4	86.41	22.102	
14,100.0	10,867.9	15,817.1	12,500.2	66.4	70.6	-148.78	3,276.0	-716.1	1,908.7	1,820.5	88.20	21.640	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,867.7	15,917.1	12,498.7	67.8	71.9	-148.76	3,375.9	-716.9	1,907.7	1,817.7	90.02	21.193	
14,300.0	10,867.5	16,017.1	12,497.2	69.2	73.2	-148.74	3,475.9	-717.6	1,906.6	1,814.8	91.85	20.758	
14,400.0	10,867.3	16,117.1	12,495.7	70.6	74.5	-148.72	3,575.9	-718.4	1,905.6	1,811.9	93.70	20.337	
14,500.0	10,867.0	16,217.1	12,494.3	72.0	75.8	-148.70	3,675.9	-719.2	1,904.5	1,808.9	95.56	19.929	
14,600.0	10,866.8	16,317.1	12,492.8	73.4	77.2	-148.68	3,775.9	-720.0	1,903.5	1,806.0	97.44	19.534	
14,700.0	10,866.6	16,417.1	12,491.3	74.8	78.5	-148.66	3,875.8	-720.8	1,902.4	1,803.1	99.34	19.151	
14,800.0	10,866.3	16,517.1	12,489.9	76.2	79.9	-148.64	3,975.8	-721.5	1,901.3	1,800.1	101.25	18.780	
14,900.0	10,866.1	16,617.0	12,488.4	77.7	81.3	-148.62	4,075.8	-722.3	1,900.3	1,797.1	103.17	18.420	
15,000.0	10,865.9	16,717.0	12,486.9	79.1	82.6	-148.60	4,175.8	-723.1	1,899.2	1,794.1	105.10	18.071	
15,100.0	10,865.7	16,817.0	12,485.4	80.6	84.0	-148.58	4,275.8	-723.9	1,898.2	1,791.1	107.05	17.732	
15,200.0	10,865.4	16,917.0	12,484.0	82.0	85.5	-148.56	4,375.7	-724.7	1,897.1	1,788.1	109.00	17.404	
15,300.0	10,865.2	17,017.0	12,482.5	83.5	86.9	-148.54	4,475.7	-725.5	1,896.1	1,785.1	110.97	17.086	
15,400.0	10,865.0	17,117.0	12,481.0	85.0	88.3	-148.52	4,575.7	-726.2	1,895.0	1,782.1	112.95	16.778	
15,500.0	10,864.8	17,217.0	12,479.5	86.4	89.7	-148.50	4,675.7	-727.0	1,893.9	1,779.0	114.93	16.478	
15,600.0	10,864.5	17,317.0	12,478.1	87.9	91.2	-148.48	4,775.6	-727.8	1,892.9	1,776.0	116.93	16.188	
15,700.0	10,864.3	17,417.0	12,476.6	89.4	92.6	-148.46	4,875.6	-728.6	1,891.8	1,772.9	118.94	15.906	
15,800.0	10,864.1	17,517.0	12,475.1	90.9	94.1	-148.44	4,975.6	-729.4	1,890.8	1,769.8	120.95	15.633	
15,900.0	10,863.8	17,617.0	12,473.7	92.4	95.5	-148.42	5,075.6	-730.1	1,889.7	1,766.7	122.97	15.367	
16,000.0	10,863.6	17,717.0	12,472.2	94.0	97.0	-148.40	5,175.6	-730.9	1,888.7	1,763.7	125.00	15.109	
16,100.0	10,863.4	17,817.0	12,470.7	95.5	98.5	-148.38	5,275.5	-731.7	1,887.6	1,760.6	127.04	14.858	
16,200.0	10,863.2	17,916.9	12,469.2	97.0	100.0	-148.36	5,375.5	-732.5	1,886.6	1,757.5	129.09	14.615	
16,300.0	10,862.9	18,016.9	12,467.8	98.5	101.4	-148.34	5,475.5	-733.3	1,885.5	1,754.4	131.14	14.378	
16,400.0	10,862.7	18,116.9	12,466.3	100.0	102.9	-148.32	5,575.5	-734.0	1,884.5	1,751.3	133.20	14.148	
16,500.0	10,862.5	18,216.9	12,464.8	101.6	104.4	-148.30	5,675.5	-734.8	1,883.4	1,748.1	135.27	13.924	
16,600.0	10,862.3	18,316.9	12,463.3	103.1	105.9	-148.28	5,775.4	-735.6	1,882.3	1,745.0	137.34	13.706	
16,700.0	10,862.0	18,416.9	12,461.9	104.7	107.4	-148.26	5,875.4	-736.4	1,881.3	1,741.9	139.42	13.494	
16,800.0	10,861.8	18,516.9	12,460.4	106.2	108.9	-148.24	5,975.4	-737.2	1,880.2	1,738.7	141.50	13.288	
16,900.0	10,861.6	18,616.9	12,458.9	107.7	110.4	-148.22	6,075.4	-738.0	1,879.2	1,735.6	143.59	13.087	
17,000.0	10,861.4	18,716.9	12,457.5	109.3	112.0	-148.20	6,175.3	-738.7	1,878.1	1,732.5	145.68	12.892	
17,100.0	10,861.1	18,816.9	12,456.0	110.8	113.5	-148.18	6,275.3	-739.5	1,877.1	1,729.3	147.78	12.702	
17,200.0	10,860.9	18,916.9	12,454.5	112.4	115.0	-148.16	6,375.3	-740.3	1,876.0	1,726.1	149.89	12.516	
17,300.0	10,860.7	19,016.9	12,453.0	114.0	116.5	-148.14	6,475.3	-741.1	1,875.0	1,723.0	152.00	12.335	
17,400.0	10,860.4	19,116.9	12,451.6	115.5	118.1	-148.12	6,575.3	-741.9	1,873.9	1,719.8	154.12	12.159	
17,500.0	10,860.2	19,216.8	12,450.1	117.1	119.6	-148.10	6,675.2	-742.6	1,872.9	1,716.6	156.24	11.987	
17,600.0	10,860.0	19,316.8	12,448.6	118.7	121.1	-148.08	6,775.2	-743.4	1,871.8	1,713.5	158.36	11.820	
17,700.0	10,859.8	19,416.8	12,447.1	120.2	122.7	-148.06	6,875.2	-744.2	1,870.8	1,710.3	160.49	11.657	
17,800.0	10,859.5	19,516.8	12,445.7	121.8	124.2	-148.04	6,975.2	-745.0	1,869.7	1,707.1	162.62	11.497	
17,900.0	10,859.3	19,616.8	12,444.2	123.4	125.8	-148.02	7,075.1	-745.8	1,868.7	1,703.9	164.76	11.342	
18,000.0	10,859.1	19,716.8	12,442.7	124.9	127.3	-148.00	7,175.1	-746.5	1,867.6	1,700.7	166.90	11.190	
18,100.0	10,858.9	19,816.8	12,441.3	126.5	128.9	-147.98	7,275.1	-747.3	1,866.6	1,697.5	169.05	11.042	
18,200.0	10,858.6	19,916.8	12,439.8	128.1	130.4	-147.96	7,375.1	-748.1	1,865.5	1,694.3	171.20	10.897	
18,300.0	10,858.4	20,016.8	12,438.3	129.7	132.0	-147.93	7,475.1	-748.9	1,864.5	1,691.1	173.35	10.755	
18,400.0	10,858.2	20,116.8	12,436.8	131.3	133.6	-147.91	7,575.0	-749.7	1,863.4	1,687.9	175.51	10.617	
18,500.0	10,857.9	20,216.8	12,435.4	132.9	135.1	-147.89	7,675.0	-750.4	1,862.4	1,684.7	177.67	10.482	
18,600.0	10,857.7	20,316.8	12,433.9	134.4	136.7	-147.87	7,775.0	-751.2	1,861.3	1,681.5	179.84	10.350	
18,700.0	10,857.5	20,416.8	12,432.4	136.0	138.3	-147.85	7,875.0	-752.0	1,860.3	1,678.3	182.00	10.221	
18,800.0	10,857.3	20,516.7	12,430.9	137.6	139.8	-147.83	7,975.0	-752.8	1,859.2	1,675.1	184.18	10.095	
18,900.0	10,857.0	20,616.7	12,429.5	139.2	141.4	-147.81	8,074.9	-753.6	1,858.2	1,671.8	186.35	9.971	
19,000.0	10,856.8	20,716.7	12,428.0	140.8	143.0	-147.79	8,174.9	-754.4	1,857.1	1,668.6	188.53	9.851	
19,100.0	10,856.6	20,816.7	12,426.5	142.4	144.5	-147.77	8,274.9	-755.1	1,856.1	1,665.4	190.71	9.733	
19,200.0	10,856.4	20,916.7	12,425.1	144.0	146.1	-147.75	8,374.9	-755.9	1,855.1	1,662.2	192.90	9.617	
19,300.0	10,856.1	21,016.7	12,423.6	145.6	147.7	-147.73	8,474.8	-756.7	1,854.0	1,658.9	195.08	9.504	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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
19,400.0	10,855.9	21,116.7	12,422.1	147.2	149.3	-147.71	8,574.8	-757.5	1,853.0	1,655.7	197.27	9.393	
19,500.0	10,855.7	21,216.7	12,420.6	148.8	150.9	-147.68	8,674.8	-758.3	1,851.9	1,652.4	199.47	9.284	
19,600.0	10,855.5	21,316.7	12,419.2	150.4	152.4	-147.66	8,774.8	-759.0	1,850.9	1,649.2	201.66	9.178	
19,700.0	10,855.2	21,416.7	12,417.7	152.0	154.0	-147.64	8,874.8	-759.8	1,849.8	1,646.0	203.86	9.074	
19,800.0	10,855.0	21,516.7	12,416.2	153.6	155.6	-147.62	8,974.7	-760.6	1,848.8	1,642.7	206.07	8.972	
19,900.0	10,854.8	21,616.7	12,414.7	155.2	157.2	-147.60	9,074.7	-761.4	1,847.7	1,639.5	208.27	8.872	
20,000.0	10,854.5	21,716.7	12,413.3	156.8	158.8	-147.58	9,174.7	-762.2	1,846.7	1,636.2	210.48	8.774	
20,100.0	10,854.3	21,816.6	12,411.8	158.4	160.4	-147.56	9,274.7	-762.9	1,845.6	1,632.9	212.69	8.678	
20,200.0	10,854.1	21,916.6	12,410.3	160.0	162.0	-147.54	9,374.6	-763.7	1,844.6	1,629.7	214.90	8.583	
20,300.0	10,853.9	22,016.6	12,408.9	161.7	163.6	-147.52	9,474.6	-764.5	1,843.6	1,626.4	217.12	8.491	
20,400.0	10,853.6	22,116.6	12,407.4	163.3	165.2	-147.50	9,574.6	-765.3	1,842.5	1,623.2	219.34	8.400	
20,500.0	10,853.4	22,216.6	12,405.9	164.9	166.8	-147.47	9,674.6	-766.1	1,841.5	1,619.9	221.56	8.311	
20,600.0	10,853.2	22,316.6	12,404.4	166.5	168.4	-147.45	9,774.6	-766.8	1,840.4	1,616.6	223.78	8.224	
20,700.0	10,853.0	22,416.6	12,403.0	168.1	170.0	-147.43	9,874.5	-767.6	1,839.4	1,613.4	226.01	8.138	
20,800.0	10,852.7	22,516.6	12,401.5	169.7	171.6	-147.41	9,974.5	-768.4	1,838.3	1,610.1	228.24	8.054	
20,900.0	10,852.5	22,616.6	12,400.0	171.3	173.2	-147.39	10,074.5	-769.2	1,837.3	1,606.8	230.47	7.972	
21,000.0	10,852.3	22,716.6	12,398.5	172.9	174.7	-147.37	10,174.5	-770.0	1,836.3	1,603.6	232.66	7.892	
21,089.0	10,852.1	22,787.3	12,397.5	174.4	175.7	-147.35	10,245.2	-770.5	1,835.4	1,601.2	234.26	7.835 SF	
21,094.0	10,851.5	22,787.3	12,397.5	174.5	175.7	-147.36	10,245.2	-770.5	1,836.0	1,601.7	234.31	7.836	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	-90.75	-1.0	-80.1	80.1				
100.0	100.0	100.0	100.0	0.1	0.1	-90.75	-1.0	-80.1	80.1	79.8	0.26	312.523	
200.0	200.0	200.0	200.0	0.5	0.5	-90.75	-1.0	-80.1	80.1	79.1	0.97	82.304	
300.0	300.0	300.0	300.0	0.8	0.8	-90.75	-1.0	-80.1	80.1	78.4	1.69	47.392	
400.0	400.0	400.0	400.0	1.2	1.2	-90.75	-1.0	-80.1	80.1	77.7	2.41	33.277	
500.0	500.0	500.0	500.0	1.6	1.6	-90.75	-1.0	-80.1	80.1	77.0	3.12	25.640	
600.0	600.0	600.0	600.0	1.9	1.9	-90.75	-1.0	-80.1	80.1	76.3	3.84	20.854	
700.0	700.0	700.0	700.0	2.3	2.3	-90.75	-1.0	-80.1	80.1	75.5	4.56	17.574	
800.0	800.0	800.0	800.0	2.6	2.6	-90.75	-1.0	-80.1	80.1	74.8	5.27	15.185	
900.0	900.0	900.0	900.0	3.0	3.0	-90.75	-1.0	-80.1	80.1	74.1	5.99	13.368	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	-90.75	-1.0	-80.1	80.1	73.4	6.71	11.940	
1,100.0	1,100.0	1,101.4	1,101.4	3.7	3.7	-90.90	-1.2	-79.2	79.2	71.8	7.42	10.680	
1,200.0	1,200.0	1,202.7	1,202.6	4.1	4.1	-91.37	-1.8	-76.6	76.7	68.5	8.12	9.440	
1,300.0	1,300.0	1,303.9	1,303.7	4.4	4.4	145.93	-2.8	-72.2	73.1	64.3	8.81	8.298	
1,400.0	1,400.0	1,405.0	1,404.7	4.8	4.8	145.88	-4.2	-66.1	69.3	59.8	9.49	7.303	
1,500.0	1,499.9	1,506.1	1,505.4	5.1	5.1	146.29	-6.0	-58.3	65.2	55.0	10.17	6.413	
1,600.0	1,599.7	1,607.1	1,605.9	5.4	5.5	147.26	-8.1	-48.8	60.9	50.0	10.85	5.611	
1,700.0	1,699.4	1,708.0	1,706.2	5.8	5.8	148.94	-10.7	-37.5	56.4	44.8	11.54	4.885	
1,800.0	1,798.9	1,808.8	1,806.1	6.1	6.2	151.52	-13.6	-24.5	51.7	39.4	12.22	4.228	
1,900.0	1,898.3	1,908.6	1,904.9	6.5	6.6	155.37	-16.7	-11.0	48.0	35.0	12.92	3.711	
2,000.0	1,997.4	2,008.4	2,003.8	6.9	7.0	160.58	-19.8	2.6	46.1	32.5	13.62	3.386	
2,100.0	2,096.4	2,108.3	2,102.7	7.2	7.4	166.42	-22.8	16.1	45.6	31.2	14.33	3.179	
2,166.4	2,162.2	2,174.7	2,168.4	7.5	7.7	170.35	-24.9	25.1	45.5	30.7	14.81	3.070 CC	
2,200.0	2,195.5	2,208.2	2,201.7	7.6	7.8	172.34	-25.9	29.7	45.5	30.4	15.05	3.022	
2,300.0	2,294.5	2,308.1	2,300.6	8.0	8.2	178.22	-29.0	43.3	45.9	30.1	15.78	2.908 ES	
2,400.0	2,393.5	2,408.0	2,399.5	8.4	8.6	-176.06	-32.0	56.8	46.8	30.3	16.52	2.831	
2,500.0	2,492.5	2,507.9	2,498.4	8.8	9.0	-170.61	-35.1	70.4	48.1	30.8	17.28	2.784	
2,600.0	2,591.6	2,607.8	2,597.3	9.2	9.4	-165.49	-38.2	83.9	49.8	31.8	18.05	2.761	
2,700.0	2,690.6	2,707.7	2,696.2	9.6	9.8	-160.75	-41.2	97.5	51.9	33.1	18.84	2.758 SF	
2,800.0	2,789.6	2,807.6	2,795.2	10.0	10.2	-156.40	-44.3	111.1	54.4	34.7	19.63	2.769	
2,900.0	2,888.6	2,907.5	2,894.1	10.4	10.6	-152.45	-47.4	124.6	57.1	36.7	20.44	2.793	
3,000.0	2,987.7	3,007.3	2,993.0	10.8	11.0	-148.87	-50.5	138.2	60.1	38.8	21.26	2.825	
3,100.0	3,086.7	3,107.2	3,091.9	11.2	11.4	-145.64	-53.5	151.7	63.2	41.2	22.08	2.864	
3,200.0	3,185.7	3,207.1	3,190.8	11.6	11.8	-142.73	-56.6	165.3	66.6	43.7	22.91	2.908	
3,300.0	3,284.8	3,307.0	3,289.7	12.0	12.2	-140.10	-59.7	178.8	70.1	46.4	23.74	2.954	
3,400.0	3,383.8	3,406.9	3,388.7	12.4	12.7	-137.73	-62.7	192.4	73.8	49.2	24.57	3.002	
3,500.0	3,482.8	3,506.8	3,487.6	12.8	13.1	-135.58	-65.8	206.0	77.5	52.1	25.40	3.052	
3,600.0	3,581.8	3,606.7	3,586.5	13.2	13.5	-133.64	-68.9	219.5	81.4	55.2	26.24	3.102	
3,700.0	3,680.9	3,706.6	3,685.4	13.7	13.9	-131.87	-71.9	233.1	85.3	58.3	27.08	3.152	
3,800.0	3,779.9	3,806.5	3,784.3	14.1	14.3	-130.26	-75.0	246.6	89.4	61.4	27.91	3.201	
3,878.9	3,858.0	3,885.3	3,862.4	14.4	14.6	-129.09	-77.4	257.3	92.6	64.0	28.57	3.240	
3,900.0	3,878.9	3,906.3	3,883.2	14.5	14.7	-128.77	-78.1	260.2	93.4	64.7	28.75	3.249	
4,000.0	3,978.2	4,006.2	3,982.2	14.9	15.1	-126.59	-81.2	273.8	96.4	66.8	29.60	3.257	
4,100.0	4,077.7	4,106.0	4,081.0	15.3	15.6	-123.27	-84.2	287.3	98.1	67.6	30.48	3.220	
4,200.0	4,177.5	4,205.7	4,179.7	15.6	16.0	-118.76	-87.3	300.8	98.9	67.5	31.36	3.153	
4,300.0	4,277.4	4,305.2	4,278.3	16.0	16.4	-112.98	-90.3	314.3	99.2	66.9	32.23	3.076	
4,400.0	4,377.4	4,404.5	4,376.5	16.3	16.8	-105.90	-93.4	327.8	99.7	66.6	33.07	3.015	
4,412.2	4,389.6	4,416.6	4,388.5	16.4	16.9	17.30	-93.8	329.5	99.8	66.7	33.17	3.010	
4,500.0	4,477.4	4,503.5	4,474.6	16.7	17.2	24.12	-96.4	341.3	101.5	67.7	33.83	3.002	
4,600.0	4,577.4	4,602.5	4,572.6	17.0	17.6	31.50	-99.5	354.7	105.2	70.7	34.51	3.049	
4,700.0	4,677.4	4,701.5	4,670.7	17.3	18.1	38.30	-102.5	368.1	110.5	75.4	35.13	3.145	
4,800.0	4,777.4	4,800.6	4,768.8	17.6	18.5	44.40	-105.6	381.6	117.2	81.5	35.72	3.282	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
4,900.0	4,877.4	4,900.4	4,866.8	18.0	18.9	49.80	-108.6	395.0	125.1	88.8	36.29	3.448	
5,000.0	4,977.4	5,001.4	4,964.9	18.3	19.3	54.53	-111.6	408.5	134.0	97.2	36.86	3.636	
5,100.0	5,077.4	5,102.4	5,063.0	18.6	19.7	58.65	-114.7	421.9	143.7	106.3	37.44	3.839	
5,200.0	5,177.4	5,203.3	5,161.0	19.0	20.2	62.24	-117.7	435.3	154.1	116.0	38.03	4.051	
5,300.0	5,277.4	5,304.3	5,259.1	19.3	20.6	65.37	-120.8	448.8	164.9	126.3	38.63	4.270	
5,400.0	5,377.4	5,394.7	5,357.1	19.6	21.0	68.11	-123.8	462.2	176.2	137.0	39.20	4.496	
5,500.0	5,477.4	5,506.2	5,455.2	20.0	21.4	70.52	-126.9	475.7	187.9	148.0	39.87	4.713	
5,600.0	5,577.4	5,607.2	5,553.3	20.3	21.8	72.64	-129.9	489.1	199.8	159.3	40.50	4.934	
5,700.0	5,677.4	5,708.2	5,651.3	20.6	22.3	74.53	-132.9	502.6	212.0	170.9	41.15	5.153	
5,800.0	5,777.4	5,809.2	5,749.4	21.0	22.7	76.20	-136.0	516.0	224.4	182.6	41.80	5.368	
5,900.0	5,877.4	5,889.9	5,847.5	21.3	23.0	77.71	-139.0	529.4	236.9	194.6	42.39	5.590	
6,000.0	5,977.4	5,988.9	5,945.5	21.6	23.5	79.06	-142.1	542.9	249.6	206.6	43.05	5.800	
6,100.0	6,077.4	6,087.9	6,043.6	22.0	23.9	80.28	-145.1	556.3	262.5	218.8	43.71	6.005	
6,200.0	6,177.4	6,186.9	6,141.6	22.3	24.3	81.38	-148.2	569.8	275.4	231.0	44.38	6.205	
6,300.0	6,277.4	6,286.0	6,239.7	22.6	24.7	82.39	-151.2	583.2	288.4	243.4	45.06	6.401	
6,400.0	6,377.4	6,385.0	6,337.8	23.0	25.1	83.31	-154.2	596.6	301.5	255.8	45.74	6.592	
6,500.0	6,477.4	6,484.0	6,435.8	23.3	25.5	84.15	-157.3	610.1	314.7	268.3	46.42	6.779	
6,600.0	6,577.4	6,583.0	6,533.9	23.7	26.0	84.93	-160.3	623.5	327.9	280.8	47.11	6.961	
6,700.0	6,677.4	6,682.1	6,632.0	24.0	26.4	85.64	-163.4	637.0	341.2	293.4	47.80	7.139	
6,800.0	6,777.4	6,781.1	6,730.0	24.3	26.8	86.30	-166.4	650.4	354.5	306.1	48.49	7.312	
6,900.0	6,877.4	6,880.1	6,828.1	24.7	27.2	86.92	-169.5	663.9	367.9	318.7	49.18	7.481	
7,000.0	6,977.4	6,979.2	6,926.2	25.0	27.6	87.49	-172.5	677.3	381.3	331.5	49.88	7.645	
7,100.0	7,077.4	7,078.2	7,024.2	25.4	28.0	88.02	-175.5	690.7	394.8	344.2	50.58	7.806	
7,200.0	7,177.4	7,183.7	7,128.8	25.7	28.5	88.53	-178.7	704.6	407.8	356.5	51.34	7.944	
7,300.0	7,277.4	7,294.8	7,239.2	26.1	28.9	88.93	-181.3	716.3	418.4	366.2	52.12	8.027	
7,400.0	7,377.4	7,406.5	7,350.5	26.4	29.3	89.22	-183.3	725.0	426.1	373.2	52.87	8.059	
7,500.0	7,477.4	7,518.6	7,462.5	26.8	29.7	89.40	-184.5	730.5	431.0	377.4	53.57	8.044	
7,600.0	7,577.4	7,630.9	7,574.8	27.1	30.1	89.47	-185.1	732.7	433.0	378.8	54.23	7.984	
7,700.0	7,677.4	7,733.5	7,677.4	27.4	30.4	89.47	-185.1	732.8	433.1	378.2	54.90	7.888	
7,800.0	7,777.4	7,833.5	7,777.4	27.8	30.7	89.47	-185.1	732.8	433.1	377.5	55.58	7.792	
7,900.0	7,877.4	7,933.5	7,877.4	28.1	31.0	89.47	-185.1	732.8	433.1	376.8	56.26	7.697	
8,000.0	7,977.4	8,033.5	7,977.4	28.5	31.4	89.47	-185.1	732.8	433.1	376.1	56.94	7.605	
8,100.0	8,077.4	8,133.5	8,077.4	28.8	31.7	89.47	-185.1	732.8	433.1	375.4	57.62	7.515	
8,200.0	8,177.4	8,233.5	8,177.4	29.2	32.0	89.47	-185.1	732.8	433.1	374.7	58.30	7.427	
8,300.0	8,277.4	8,333.5	8,277.4	29.5	32.3	89.47	-185.1	732.8	433.1	374.1	58.99	7.341	
8,400.0	8,377.4	8,433.5	8,377.4	29.9	32.6	89.47	-185.1	732.8	433.1	373.4	59.67	7.257	
8,500.0	8,477.4	8,533.5	8,477.4	30.2	32.9	89.47	-185.1	732.8	433.1	372.7	60.36	7.175	
8,600.0	8,577.4	8,633.5	8,577.4	30.6	33.2	89.47	-185.1	732.8	433.1	372.0	61.04	7.094	
8,700.0	8,677.4	8,733.5	8,677.4	30.9	33.5	89.47	-185.1	732.8	433.1	371.3	61.73	7.015	
8,800.0	8,777.4	8,833.5	8,777.4	31.3	33.9	89.47	-185.1	732.8	433.1	370.6	62.42	6.938	
8,900.0	8,877.4	8,933.5	8,877.4	31.6	34.2	89.47	-185.1	732.8	433.1	369.9	63.10	6.862	
9,000.0	8,977.4	9,033.5	8,977.4	32.0	34.5	89.47	-185.1	732.8	433.1	369.3	63.79	6.788	
9,100.0	9,077.4	9,133.5	9,077.4	32.3	34.8	89.47	-185.1	732.8	433.1	368.6	64.48	6.716	
9,200.0	9,177.4	9,233.5	9,177.4	32.7	35.1	89.47	-185.1	732.8	433.1	367.9	65.17	6.645	
9,300.0	9,277.4	9,333.5	9,277.4	33.0	35.5	89.47	-185.1	732.8	433.1	367.2	65.86	6.575	
9,400.0	9,377.4	9,433.5	9,377.4	33.4	35.8	89.47	-185.1	732.8	433.1	366.5	66.55	6.507	
9,500.0	9,477.4	9,533.5	9,477.4	33.7	36.1	89.47	-185.1	732.8	433.1	365.8	67.24	6.440	
9,600.0	9,577.4	9,633.5	9,577.4	34.1	36.4	89.47	-185.1	732.8	433.1	365.1	67.94	6.374	
9,700.0	9,677.4	9,733.5	9,677.4	34.4	36.8	89.47	-185.1	732.8	433.1	364.4	68.63	6.310	
9,800.0	9,777.4	9,833.5	9,777.4	34.8	37.1	89.47	-185.1	732.8	433.1	363.7	69.32	6.247	
9,900.0	9,877.4	9,933.5	9,877.4	35.1	37.4	89.47	-185.1	732.8	433.1	363.0	70.01	6.185	
10,000.0	9,977.4	10,033.5	9,977.4	35.5	37.7	89.47	-185.1	732.8	433.1	362.3	70.71	6.125	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,077.4	10,133.5	10,077.4	35.8	38.1	89.47	-185.1	732.8	433.1	361.6	71.40	6.065	
10,200.0	10,177.4	10,233.5	10,177.4	36.2	38.4	89.47	-185.1	732.8	433.1	361.0	72.10	6.007	
10,300.0	10,277.4	10,333.5	10,277.4	36.5	38.7	89.47	-185.1	732.8	433.1	360.3	72.79	5.949	
10,324.1	10,301.5	10,357.6	10,301.5	36.6	38.8	89.47	-185.1	732.8	433.1	360.1	72.96	5.936	
10,350.0	10,327.4	10,383.5	10,327.4	36.7	38.9	89.99	-185.1	732.8	433.1	359.9	73.14	5.921	
10,352.1	10,329.5	10,385.6	10,329.5	36.7	38.9	90.00	-185.1	732.8	433.1	359.9	73.15	5.920	
10,400.0	10,377.2	10,433.3	10,377.2	36.9	39.0	90.57	-185.1	732.8	433.1	359.6	73.46	5.895	
10,450.0	10,426.4	10,482.5	10,426.4	37.0	39.2	91.69	-185.1	732.8	433.2	359.5	73.76	5.873	
10,500.0	10,474.6	10,530.7	10,474.6	37.2	39.4	93.29	-185.1	732.8	433.8	359.8	74.05	5.859	
10,550.0	10,521.6	10,577.7	10,521.6	37.3	39.5	95.27	-185.1	732.8	435.2	360.9	74.31	5.856	
10,600.0	10,566.8	10,623.0	10,566.8	37.5	39.7	97.52	-185.1	732.8	437.8	363.2	74.57	5.871	
10,650.0	10,610.1	10,666.2	10,610.1	37.6	39.8	99.88	-185.1	732.8	442.2	367.4	74.83	5.910	
10,700.0	10,651.0	10,707.1	10,651.0	37.7	39.9	102.21	-185.1	732.8	448.9	373.8	75.09	5.978	
10,750.0	10,689.2	10,745.3	10,689.2	37.8	40.1	104.35	-185.1	732.8	458.4	383.1	75.36	6.083	
10,800.0	10,724.5	10,780.6	10,724.5	37.9	40.2	106.14	-185.1	732.8	471.2	395.6	75.65	6.229	
10,850.0	10,756.6	10,812.7	10,756.6	37.9	40.3	107.46	-185.1	732.8	487.6	411.7	75.95	6.420	
10,900.0	10,785.2	10,841.3	10,785.2	38.0	40.4	108.17	-185.1	732.8	507.8	431.5	76.26	6.659	
10,950.0	10,810.1	10,866.2	10,810.1	38.0	40.5	108.16	-185.1	732.8	531.7	455.1	76.57	6.944	
11,000.0	10,831.2	10,887.3	10,831.2	38.1	40.5	107.30	-185.1	732.8	559.2	482.4	76.86	7.276	
11,050.0	10,848.2	10,904.3	10,848.2	38.3	40.6	105.48	-185.1	732.8	590.1	512.9	77.14	7.650	
11,100.0	10,861.1	10,917.2	10,861.1	38.4	40.6	102.57	-185.1	732.8	623.9	546.5	77.38	8.062	
11,150.0	10,869.7	10,925.8	10,869.7	38.5	40.7	98.44	-185.1	732.8	660.2	582.6	77.60	8.508	
11,200.0	10,874.0	10,930.1	10,874.0	38.7	40.7	93.05	-185.1	732.8	698.6	620.8	77.78	8.981	
11,225.4	10,874.5	10,930.6	10,874.5	38.8	40.7	89.83	-185.1	732.8	718.7	640.8	77.86	9.230	
11,287.1	10,874.3	10,930.4	10,874.3	39.0	40.7	89.81	-185.1	732.8	768.8	690.8	78.04	9.852	
11,300.0	10,874.3	10,930.4	10,874.3	39.0	40.7	89.81	-185.1	732.8	779.5	701.4	78.07	9.985	
11,400.0	10,874.1	10,930.2	10,874.1	39.4	40.7	89.78	-185.1	732.8	864.5	786.1	78.31	11.039	
11,500.0	10,873.8	10,929.9	10,873.8	39.8	40.7	89.75	-185.1	732.8	952.3	873.8	78.51	12.129	
11,600.0	10,873.6	10,929.7	10,873.6	40.3	40.7	89.72	-185.1	732.8	1,042.4	963.7	78.68	13.248	
11,700.0	10,873.4	10,929.5	10,873.4	40.9	40.7	89.69	-185.1	732.8	1,134.1	1,055.3	78.83	14.387	
11,800.0	10,873.2	10,929.3	10,873.2	41.5	40.7	89.66	-185.1	732.8	1,227.1	1,148.2	78.95	15.543	
11,900.0	10,872.9	10,929.0	10,872.9	42.2	40.7	89.63	-185.1	732.8	1,321.1	1,242.1	79.06	16.712	
12,000.0	10,872.7	10,928.8	10,872.7	42.9	40.7	89.60	-185.1	732.8	1,416.0	1,336.9	79.15	17.890	
12,100.0	10,872.5	10,928.6	10,872.5	43.7	40.7	89.57	-185.1	732.8	1,511.5	1,432.3	79.23	19.077	
12,200.0	10,872.2	10,928.4	10,872.2	44.6	40.7	89.54	-185.1	732.8	1,607.6	1,528.3	79.31	20.270	
12,300.0	10,872.0	14,043.9	12,537.2	45.4	51.5	168.69	1,487.8	619.9	1,698.3	1,654.9	43.36	39.163	
12,400.0	10,871.8	14,143.9	12,535.6	46.3	52.4	168.68	1,587.8	619.1	1,697.0	1,652.7	44.36	38.251	
12,500.0	10,871.6	14,243.9	12,534.1	47.3	53.3	168.68	1,687.7	618.3	1,695.7	1,650.3	45.40	37.347	
12,600.0	10,871.3	14,343.9	12,532.6	48.3	54.2	168.67	1,787.7	617.5	1,694.5	1,648.0	46.48	36.455	
12,700.0	10,871.1	14,443.9	12,531.1	49.3	55.1	168.66	1,887.7	616.7	1,693.2	1,645.6	47.59	35.577	
12,800.0	10,870.9	14,543.9	12,529.5	50.4	56.1	168.66	1,987.7	615.9	1,691.9	1,643.2	48.74	34.716	
12,900.0	10,870.7	14,643.9	12,528.0	51.5	57.1	168.65	2,087.7	615.0	1,690.6	1,640.7	49.91	33.875	
13,000.0	10,870.4	14,743.9	12,526.5	52.6	58.1	168.64	2,187.6	614.2	1,689.3	1,638.2	51.11	33.054	
13,100.0	10,870.2	14,843.9	12,525.0	53.8	59.2	168.63	2,287.6	613.4	1,688.1	1,635.7	52.33	32.255	
13,200.0	10,870.0	14,943.9	12,523.4	54.9	60.3	168.63	2,387.6	612.6	1,686.8	1,633.2	53.59	31.479	
13,300.0	10,869.7	15,043.9	12,521.9	56.1	61.4	168.62	2,487.6	611.8	1,685.5	1,630.6	54.86	30.725	
13,400.0	10,869.5	15,143.8	12,520.4	57.4	62.6	168.61	2,587.5	611.0	1,684.2	1,628.1	56.15	29.994	
13,500.0	10,869.3	15,243.8	12,518.9	58.6	63.7	168.60	2,687.5	610.2	1,682.9	1,625.5	57.47	29.286	
13,600.0	10,869.1	15,343.8	12,517.3	59.9	64.9	168.60	2,787.5	609.4	1,681.7	1,622.9	58.80	28.601	
13,700.0	10,868.8	15,443.8	12,515.8	61.1	66.1	168.59	2,887.5	608.6	1,680.4	1,620.2	60.15	27.938	
13,800.0	10,868.6	15,543.8	12,514.3	62.4	67.3	168.58	2,987.4	607.8	1,679.1	1,617.6	61.51	27.297	
13,900.0	10,868.4	15,643.8	12,512.8	63.8	68.6	168.57	3,087.4	607.0	1,677.8	1,614.9	62.89	26.678	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,868.2	15,743.8	12,511.2	65.1	69.9	168.57	3,187.4	606.1	1,676.5	1,612.3	64.29	26.080	
14,100.0	10,867.9	15,843.8	12,509.7	66.4	71.1	168.56	3,287.4	605.3	1,675.3	1,609.6	65.69	25.501	
14,200.0	10,867.7	15,943.8	12,508.2	67.8	72.4	168.55	3,387.3	604.5	1,674.0	1,606.9	67.11	24.943	
14,300.0	10,867.5	16,043.8	12,506.7	69.2	73.7	168.55	3,487.3	603.7	1,672.7	1,604.2	68.54	24.403	
14,400.0	10,867.3	16,143.8	12,505.2	70.6	75.0	168.54	3,587.3	602.9	1,671.4	1,601.4	69.99	23.882	
14,500.0	10,867.0	16,243.7	12,503.6	72.0	76.4	168.53	3,687.3	602.1	1,670.1	1,598.7	71.44	23.379	
14,600.0	10,866.8	16,343.7	12,502.1	73.4	77.7	168.52	3,787.3	601.3	1,668.9	1,596.0	72.90	22.892	
14,700.0	10,866.6	16,443.7	12,500.6	74.8	79.1	168.52	3,887.2	600.5	1,667.6	1,593.2	74.37	22.422	
14,800.0	10,866.3	16,543.7	12,499.1	76.2	80.4	168.51	3,987.2	599.7	1,666.3	1,590.5	75.85	21.967	
14,900.0	10,866.1	16,643.7	12,497.5	77.7	81.8	168.50	4,087.2	598.9	1,665.0	1,587.7	77.34	21.528	
15,000.0	10,865.9	16,743.7	12,496.0	79.1	83.2	168.49	4,187.2	598.1	1,663.7	1,584.9	78.84	21.103	
15,100.0	10,865.7	16,843.7	12,494.5	80.6	84.6	168.49	4,287.1	597.3	1,662.5	1,582.1	80.34	20.692	
15,200.0	10,865.4	16,943.7	12,493.0	82.0	86.0	168.48	4,387.1	596.4	1,661.2	1,579.3	81.85	20.295	
15,300.0	10,865.2	17,043.7	12,491.4	83.5	87.4	168.47	4,487.1	595.6	1,659.9	1,576.5	83.37	19.910	
15,400.0	10,865.0	17,143.7	12,489.9	85.0	88.9	168.46	4,587.1	594.8	1,658.6	1,573.7	84.89	19.538	
15,500.0	10,864.8	17,243.7	12,488.4	86.4	90.3	168.45	4,687.0	594.0	1,657.3	1,570.9	86.42	19.177	
15,600.0	10,864.5	17,343.7	12,486.9	87.9	91.7	168.45	4,787.0	593.2	1,656.1	1,568.1	87.96	18.828	
15,700.0	10,864.3	17,443.6	12,485.3	89.4	93.2	168.44	4,887.0	592.4	1,654.8	1,565.3	89.50	18.489	
15,800.0	10,864.1	17,543.6	12,483.8	90.9	94.6	168.43	4,987.0	591.6	1,653.5	1,562.5	91.04	18.161	
15,900.0	10,863.8	17,643.6	12,482.3	92.4	96.1	168.42	5,087.0	590.8	1,652.2	1,559.6	92.60	17.844	
16,000.0	10,863.6	17,743.6	12,480.8	94.0	97.6	168.42	5,186.9	590.0	1,651.0	1,556.8	94.15	17.535	
16,100.0	10,863.4	17,843.6	12,479.2	95.5	99.0	168.41	5,286.9	589.2	1,649.7	1,554.0	95.71	17.236	
16,200.0	10,863.2	17,943.6	12,477.7	97.0	100.5	168.40	5,386.9	588.4	1,648.4	1,551.1	97.27	16.946	
16,300.0	10,862.9	18,043.6	12,476.2	98.5	102.0	168.39	5,486.9	587.5	1,647.1	1,548.3	98.84	16.664	
16,400.0	10,862.7	18,143.6	12,474.7	100.0	103.5	168.39	5,586.8	586.7	1,645.8	1,545.4	100.41	16.390	
16,500.0	10,862.5	18,243.6	12,473.1	101.6	105.0	168.38	5,686.8	585.9	1,644.6	1,542.6	101.99	16.125	
16,600.0	10,862.3	18,343.6	12,471.6	103.1	106.5	168.37	5,786.8	585.1	1,643.3	1,539.7	103.57	15.866	
16,700.0	10,862.0	18,443.6	12,470.1	104.7	108.0	168.36	5,886.8	584.3	1,642.0	1,536.8	105.15	15.615	
16,800.0	10,861.8	18,543.6	12,468.6	106.2	109.5	168.36	5,986.7	583.5	1,640.7	1,534.0	106.74	15.371	
16,900.0	10,861.6	18,643.5	12,467.1	107.7	111.0	168.35	6,086.7	582.7	1,639.4	1,531.1	108.33	15.134	
17,000.0	10,861.4	18,743.5	12,465.5	109.3	112.5	168.34	6,186.7	581.9	1,638.2	1,528.2	109.92	14.903	
17,100.0	10,861.1	18,843.5	12,464.0	110.8	114.0	168.33	6,286.7	581.1	1,636.9	1,525.4	111.52	14.679	
17,200.0	10,860.9	18,943.5	12,462.5	112.4	115.6	168.32	6,386.6	580.3	1,635.6	1,522.5	113.11	14.460	
17,300.0	10,860.7	19,043.5	12,461.0	114.0	117.1	168.32	6,486.6	579.5	1,634.3	1,519.6	114.71	14.247	
17,400.0	10,860.4	19,143.5	12,459.4	115.5	118.6	168.31	6,586.6	578.6	1,633.0	1,516.7	116.32	14.040	
17,500.0	10,860.2	19,243.5	12,457.9	117.1	120.2	168.30	6,686.6	577.8	1,631.8	1,513.8	117.92	13.838	
17,600.0	10,860.0	19,343.5	12,456.4	118.7	121.7	168.29	6,786.6	577.0	1,630.5	1,511.0	119.53	13.641	
17,700.0	10,859.8	19,443.5	12,454.9	120.2	123.2	168.29	6,886.5	576.2	1,629.2	1,508.1	121.14	13.449	
17,800.0	10,859.5	19,543.5	12,453.3	121.8	124.8	168.28	6,986.5	575.4	1,627.9	1,505.2	122.76	13.262	
17,900.0	10,859.3	19,643.5	12,451.8	123.4	126.3	168.27	7,086.5	574.6	1,626.7	1,502.3	124.37	13.079	
18,000.0	10,859.1	19,743.5	12,450.3	124.9	127.9	168.26	7,186.5	573.8	1,625.4	1,499.4	125.99	12.901	
18,100.0	10,858.9	19,843.4	12,448.8	126.5	129.4	168.25	7,286.4	573.0	1,624.1	1,496.5	127.61	12.727	
18,200.0	10,858.6	19,943.4	12,447.2	128.1	131.0	168.25	7,386.4	572.2	1,622.8	1,493.6	129.23	12.558	
18,300.0	10,858.4	20,043.4	12,445.7	129.7	132.5	168.24	7,486.4	571.4	1,621.5	1,490.7	130.85	12.392	
18,400.0	10,858.2	20,143.4	12,444.2	131.3	134.1	168.23	7,586.4	570.6	1,620.3	1,487.8	132.48	12.230	
18,500.0	10,857.9	20,243.4	12,442.7	132.9	135.7	168.22	7,686.3	569.8	1,619.0	1,484.9	134.10	12.073	
18,600.0	10,857.7	20,343.4	12,441.1	134.4	137.2	168.21	7,786.3	568.9	1,617.7	1,482.0	135.73	11.918	
18,700.0	10,857.5	20,443.4	12,439.6	136.0	138.8	168.21	7,886.3	568.1	1,616.4	1,479.1	137.36	11.768	
18,800.0	10,857.3	20,543.4	12,438.1	137.6	140.4	168.20	7,986.3	567.3	1,615.1	1,476.2	139.00	11.620	
18,900.0	10,857.0	20,643.4	12,436.6	139.2	141.9	168.19	8,086.3	566.5	1,613.9	1,473.2	140.63	11.476	
19,000.0	10,856.8	20,743.4	12,435.0	140.8	143.5	168.18	8,186.2	565.7	1,612.6	1,470.3	142.26	11.335	
19,100.0	10,856.6	20,843.4	12,433.5	142.4	145.1	168.17	8,286.2	564.9	1,611.3	1,467.4	143.90	11.197	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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 #222H - 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	10,856.4	20,943.4	12,432.0	144.0	146.7	168.17	8,386.2	564.1	1,610.0	1,464.5	145.54	11.062	
19,300.0	10,856.1	21,043.3	12,430.5	145.6	148.2	168.16	8,486.2	563.3	1,608.8	1,461.6	147.18	10.931	
19,400.0	10,855.9	21,143.3	12,428.9	147.2	149.8	168.15	8,586.1	562.5	1,607.5	1,458.7	148.82	10.801	
19,500.0	10,855.7	21,243.3	12,427.4	148.8	151.4	168.14	8,686.1	561.7	1,606.2	1,455.7	150.46	10.675	
19,600.0	10,855.5	21,343.3	12,425.9	150.4	153.0	168.13	8,786.1	560.9	1,604.9	1,452.8	152.11	10.551	
19,700.0	10,855.2	21,443.3	12,424.4	152.0	154.6	168.13	8,886.1	560.0	1,603.6	1,449.9	153.75	10.430	
19,800.0	10,855.0	21,543.3	12,422.9	153.6	156.2	168.12	8,986.0	559.2	1,602.4	1,447.0	155.40	10.311	
19,900.0	10,854.8	21,643.3	12,421.3	155.2	157.7	168.11	9,086.0	558.4	1,601.1	1,444.0	157.05	10.195	
20,000.0	10,854.5	21,743.3	12,419.8	156.8	159.3	168.10	9,186.0	557.6	1,599.8	1,441.1	158.70	10.081	
20,100.0	10,854.3	21,843.3	12,418.3	158.4	160.9	168.09	9,286.0	556.8	1,598.5	1,438.2	160.35	9.969	
20,200.0	10,854.1	21,943.3	12,416.8	160.0	162.5	168.08	9,385.9	556.0	1,597.3	1,435.3	162.00	9.860	
20,300.0	10,853.9	22,043.3	12,415.2	161.7	164.1	168.08	9,485.9	555.2	1,596.0	1,432.3	163.65	9.752	
20,400.0	10,853.6	22,143.3	12,413.7	163.3	165.7	168.07	9,585.9	554.4	1,594.7	1,429.4	165.31	9.647	
20,500.0	10,853.4	22,243.2	12,412.2	164.9	167.3	168.06	9,685.9	553.6	1,593.4	1,426.5	166.96	9.544	
20,600.0	10,853.2	22,343.2	12,410.7	166.5	168.9	168.05	9,785.9	552.8	1,592.1	1,423.5	168.62	9.442	
20,700.0	10,853.0	22,443.2	12,409.1	168.1	170.5	168.04	9,885.8	552.0	1,590.9	1,420.6	170.27	9.343	
20,800.0	10,852.7	22,543.2	12,407.6	169.7	172.1	168.04	9,985.8	551.1	1,589.6	1,417.7	171.93	9.245	
20,900.0	10,852.5	22,643.2	12,406.1	171.3	173.7	168.03	10,085.8	550.3	1,588.3	1,414.7	173.59	9.150	
21,000.0	10,852.3	22,743.2	12,404.6	172.9	175.3	168.02	10,185.8	549.5	1,587.0	1,411.8	175.25	9.056	
21,090.1	10,852.1	22,813.1	12,403.5	174.4	176.4	168.01	10,255.6	549.0	1,586.0	1,409.5	176.54	8.984	
21,094.0	10,851.5	22,813.1	12,403.5	174.5	176.4	168.03	10,255.6	549.0	1,586.5	1,410.0	176.55	8.986	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	2,343.0	2,343.2				
100.0	100.0	101.0	99.0	0.1	0.1	89.35	26.6	2,343.0	2,343.2	2,342.9	0.26	9,015.866	
200.0	200.0	201.0	199.0	0.5	0.5	89.35	26.6	2,343.0	2,343.2	2,342.2	0.98	2,398.719	
300.0	300.0	301.0	299.0	0.8	0.8	89.35	26.6	2,343.0	2,343.2	2,341.5	1.69	1,383.388	
400.0	400.0	401.0	399.0	1.2	1.2	89.35	26.6	2,343.0	2,343.2	2,340.7	2.41	971.972	
500.0	500.0	501.0	499.0	1.6	1.6	89.35	26.6	2,343.0	2,343.2	2,340.0	3.13	749.170	
600.0	600.0	601.0	599.0	1.9	1.9	89.35	26.6	2,343.0	2,343.2	2,339.3	3.84	609.465	
700.0	700.0	701.0	699.0	2.3	2.3	89.35	26.6	2,343.0	2,343.2	2,338.6	4.56	513.675	
800.0	800.0	801.0	799.0	2.6	2.6	89.35	26.6	2,343.0	2,343.2	2,337.9	5.28	443.906	
900.0	900.0	901.0	899.0	3.0	3.0	89.35	26.6	2,343.0	2,343.2	2,337.2	6.00	390.823	
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	89.35	26.6	2,343.0	2,343.2	2,336.4	6.71	349.079	
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	89.35	26.6	2,343.0	2,343.2	2,335.7	7.43	315.393	
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	89.35	26.6	2,343.0	2,343.2	2,335.0	8.15	287.635	
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	-32.91	26.6	2,343.0	2,342.4	2,333.6	8.85	264.695	
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	-32.95	26.6	2,343.0	2,340.2	2,330.7	9.54	245.245	
1,500.0	1,499.9	1,498.9	1,498.9	5.1	5.1	-33.03	26.6	2,343.0	2,336.6	2,326.3	10.23	228.382	
1,600.0	1,599.7	1,649.4	1,649.4	5.4	5.7	-33.16	25.5	2,341.4	2,330.4	2,319.3	11.08	210.262	
1,700.0	1,699.4	1,799.9	1,799.7	5.8	6.2	-33.30	22.2	2,336.5	2,320.5	2,308.6	11.92	194.605	
1,800.0	1,798.9	1,949.4	1,948.9	6.1	6.7	-33.43	16.7	2,328.4	2,307.1	2,294.3	12.77	180.720	
1,900.0	1,898.3	2,097.6	2,096.5	6.5	7.2	-33.58	9.1	2,317.3	2,290.1	2,276.4	13.60	168.325	
2,000.0	1,997.4	2,244.2	2,242.1	6.9	7.7	-33.72	-0.6	2,303.1	2,269.5	2,255.0	14.44	157.155	
2,100.0	2,096.4	2,360.0	2,356.8	7.2	8.1	-33.73	-9.5	2,290.0	2,246.5	2,231.3	15.19	147.911	
2,200.0	2,195.5	2,457.2	2,453.1	7.6	8.5	-33.73	-17.1	2,278.8	2,223.4	2,207.5	15.89	139.954	
2,300.0	2,294.5	2,554.5	2,549.5	8.0	8.9	-33.73	-24.7	2,267.6	2,200.3	2,183.7	16.59	132.623	
2,400.0	2,393.5	2,651.8	2,645.8	8.4	9.2	-33.74	-32.4	2,256.4	2,177.2	2,159.9	17.30	125.853	
2,500.0	2,492.5	2,749.1	2,742.2	8.8	9.6	-33.74	-40.0	2,245.3	2,154.0	2,136.0	18.01	119.589	
2,600.0	2,591.6	2,846.4	2,838.5	9.2	10.0	-33.74	-47.6	2,234.1	2,130.9	2,112.2	18.73	113.779	
2,700.0	2,690.6	2,943.7	2,934.8	9.6	10.4	-33.74	-55.2	2,222.9	2,107.8	2,088.3	19.45	108.379	
2,800.0	2,789.6	3,041.0	3,031.2	10.0	10.8	-33.75	-62.9	2,211.7	2,084.7	2,064.5	20.17	103.349	
2,900.0	2,888.6	3,138.3	3,127.5	10.4	11.2	-33.75	-70.5	2,200.5	2,061.6	2,040.7	20.90	98.654	
3,000.0	2,987.7	3,235.6	3,223.9	10.8	11.5	-33.75	-78.1	2,189.3	2,038.4	2,016.8	21.62	94.264	
3,100.0	3,086.7	3,332.9	3,320.2	11.2	11.9	-33.76	-85.7	2,178.1	2,015.3	1,993.0	22.35	90.152	
3,200.0	3,185.7	3,430.2	3,416.6	11.6	12.3	-33.76	-93.3	2,166.9	1,992.2	1,969.1	23.09	86.292	
3,300.0	3,284.8	3,527.4	3,512.9	12.0	12.7	-33.76	-101.0	2,155.7	1,969.1	1,945.3	23.82	82.663	
3,400.0	3,383.8	3,624.7	3,609.2	12.4	13.1	-33.76	-108.6	2,144.5	1,946.0	1,921.4	24.56	79.246	
3,500.0	3,482.8	3,722.0	3,705.6	12.8	13.5	-33.77	-116.2	2,133.3	1,922.8	1,897.5	25.29	76.023	
3,600.0	3,581.8	3,819.3	3,801.9	13.2	13.9	-33.77	-123.8	2,122.2	1,899.7	1,873.7	26.03	72.979	
3,700.0	3,680.9	3,916.6	3,898.3	13.7	14.3	-33.77	-131.5	2,111.0	1,876.6	1,849.8	26.77	70.100	
3,800.0	3,779.9	4,013.9	3,994.6	14.1	14.7	-33.78	-139.1	2,099.8	1,853.5	1,826.0	27.51	67.372	
3,878.9	3,858.0	4,090.7	4,070.6	14.4	15.0	-33.78	-145.1	2,090.9	1,835.2	1,807.1	28.10	65.320	
3,900.0	3,878.9	4,111.2	4,091.0	14.5	15.1	-33.74	-146.7	2,088.6	1,830.4	1,802.2	28.25	64.787	
4,000.0	3,978.2	4,193.6	4,172.6	14.9	15.4	-33.54	-153.1	2,079.3	1,809.0	1,780.1	28.96	62.465	
4,100.0	4,077.7	4,264.2	4,242.7	15.3	15.7	-33.35	-157.8	2,072.3	1,791.1	1,761.5	29.63	60.441	
4,200.0	4,177.5	4,335.4	4,313.5	15.6	16.0	-33.19	-161.9	2,066.3	1,776.9	1,746.6	30.30	58.648	
4,300.0	4,277.4	4,407.0	4,384.9	16.0	16.3	-33.05	-165.2	2,061.4	1,766.5	1,735.5	30.95	57.076	
4,400.0	4,377.4	4,479.1	4,456.8	16.3	16.5	-32.94	-167.8	2,057.5	1,759.7	1,728.2	31.58	55.715	
4,412.2	4,389.6	4,487.9	4,465.6	16.4	16.6	89.32	-168.1	2,057.2	1,759.2	1,727.5	31.66	55.564	
4,500.0	4,477.4	4,551.3	4,528.9	16.7	16.8	89.37	-169.7	2,054.8	1,756.0	1,723.8	32.19	54.543	
4,600.0	4,577.4	4,623.6	4,601.2	17.0	17.0	89.40	-170.8	2,053.3	1,753.7	1,721.0	32.79	53.482	
4,700.0	4,677.4	4,701.2	4,676.4	17.3	17.3	89.41	-171.1	2,052.8	1,753.1	1,719.7	33.39	52.498	
4,800.0	4,777.4	4,801.2	4,776.4	17.6	17.6	89.41	-171.1	2,052.8	1,753.1	1,719.1	34.06	51.467	
4,900.0	4,877.4	4,901.2	4,876.4	18.0	17.9	89.41	-171.1	2,052.8	1,753.1	1,718.4	34.73	50.473	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Nina Cortell Fed Com #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
5,000.0	4,977.4	5,001.2	4,976.4	18.3	18.3	89.41	-171.1	2,052.8	1,753.1	1,717.7	35.41	49.513	
5,100.0	5,077.4	5,101.2	5,076.4	18.6	18.6	89.41	-171.1	2,052.8	1,753.1	1,717.0	36.08	48.588	
5,200.0	5,177.4	5,201.2	5,176.4	19.0	18.9	89.41	-171.1	2,052.8	1,753.1	1,716.4	36.76	47.694	
5,300.0	5,277.4	5,301.2	5,276.4	19.3	19.3	89.41	-171.1	2,052.8	1,753.1	1,715.7	37.44	46.831	
5,400.0	5,377.4	5,401.2	5,376.4	19.6	19.6	89.41	-171.1	2,052.8	1,753.1	1,715.0	38.11	45.996	
5,500.0	5,477.4	5,501.2	5,476.4	20.0	19.9	89.41	-171.1	2,052.8	1,753.1	1,714.3	38.79	45.189	
5,600.0	5,577.4	5,601.2	5,576.4	20.3	20.3	89.41	-171.1	2,052.8	1,753.1	1,713.6	39.48	44.409	
5,700.0	5,677.4	5,701.2	5,676.4	20.6	20.6	89.41	-171.1	2,052.8	1,753.1	1,713.0	40.16	43.654	
5,800.0	5,777.4	5,801.2	5,776.4	21.0	20.9	89.41	-171.1	2,052.8	1,753.1	1,712.3	40.84	42.923	
5,900.0	5,877.4	5,901.2	5,876.4	21.3	21.3	89.41	-171.1	2,052.8	1,753.1	1,711.6	41.53	42.214	
6,000.0	5,977.4	6,001.2	5,976.4	21.6	21.6	89.41	-171.1	2,052.8	1,753.1	1,710.9	42.22	41.528	
6,100.0	6,077.4	6,101.2	6,076.4	22.0	21.9	89.41	-171.1	2,052.8	1,753.1	1,710.2	42.90	40.863	
6,200.0	6,177.4	6,201.2	6,176.4	22.3	22.3	89.41	-171.1	2,052.8	1,753.1	1,709.5	43.59	40.218	
6,300.0	6,277.4	6,301.2	6,276.4	22.6	22.6	89.41	-171.1	2,052.8	1,753.1	1,708.8	44.28	39.592	
6,400.0	6,377.4	6,401.2	6,376.4	23.0	23.0	89.41	-171.1	2,052.8	1,753.1	1,708.1	44.97	38.984	
6,500.0	6,477.4	6,501.2	6,476.4	23.3	23.3	89.41	-171.1	2,052.8	1,753.1	1,707.5	45.66	38.394	
6,600.0	6,577.4	6,601.2	6,576.4	23.7	23.6	89.41	-171.1	2,052.8	1,753.1	1,706.8	46.35	37.821	
6,700.0	6,677.4	6,701.2	6,676.4	24.0	24.0	89.41	-171.1	2,052.8	1,753.1	1,706.1	47.04	37.265	
6,800.0	6,777.4	6,801.2	6,776.4	24.3	24.3	89.41	-171.1	2,052.8	1,753.1	1,705.4	47.74	36.724	
6,900.0	6,877.4	6,901.2	6,876.4	24.7	24.7	89.41	-171.1	2,052.8	1,753.1	1,704.7	48.43	36.198	
7,000.0	6,977.4	7,001.2	6,976.4	25.0	25.0	89.41	-171.1	2,052.8	1,753.1	1,704.0	49.13	35.686	
7,100.0	7,077.4	7,101.2	7,076.4	25.4	25.4	89.41	-171.1	2,052.8	1,753.1	1,703.3	49.82	35.188	
7,200.0	7,177.4	7,201.2	7,176.4	25.7	25.7	89.41	-171.1	2,052.8	1,753.1	1,702.6	50.52	34.703	
7,300.0	7,277.4	7,301.2	7,276.4	26.1	26.0	89.41	-171.1	2,052.8	1,753.1	1,701.9	51.21	34.231	
7,400.0	7,377.4	7,401.2	7,376.4	26.4	26.4	89.41	-171.1	2,052.8	1,753.1	1,701.2	51.91	33.772	
7,500.0	7,477.4	7,501.2	7,476.4	26.8	26.7	89.41	-171.1	2,052.8	1,753.1	1,700.5	52.61	33.324	
7,600.0	7,577.4	7,601.2	7,576.4	27.1	27.1	89.41	-171.1	2,052.8	1,753.1	1,699.8	53.31	32.888	
7,700.0	7,677.4	7,701.2	7,676.4	27.4	27.4	89.41	-171.1	2,052.8	1,753.1	1,699.1	54.00	32.462	
7,800.0	7,777.4	7,801.2	7,776.4	27.8	27.8	89.41	-171.1	2,052.8	1,753.1	1,698.4	54.70	32.048	
7,900.0	7,877.4	7,901.2	7,876.4	28.1	28.1	89.41	-171.1	2,052.8	1,753.1	1,697.7	55.40	31.643	
8,000.0	7,977.4	8,001.2	7,976.4	28.5	28.5	89.41	-171.1	2,052.8	1,753.1	1,697.0	56.10	31.248	
8,100.0	8,077.4	8,101.2	8,076.4	28.8	28.8	89.41	-171.1	2,052.8	1,753.1	1,696.3	56.80	30.863	
8,200.0	8,177.4	8,201.2	8,176.4	29.2	29.2	89.41	-171.1	2,052.8	1,753.1	1,695.6	57.50	30.487	
8,300.0	8,277.4	8,301.2	8,276.4	29.5	29.5	89.41	-171.1	2,052.8	1,753.1	1,694.9	58.20	30.120	
8,400.0	8,377.4	8,401.2	8,376.4	29.9	29.8	89.41	-171.1	2,052.8	1,753.1	1,694.2	58.91	29.761	
8,500.0	8,477.4	8,501.2	8,476.4	30.2	30.2	89.41	-171.1	2,052.8	1,753.1	1,693.5	59.61	29.411	
8,600.0	8,577.4	8,601.2	8,576.4	30.6	30.5	89.41	-171.1	2,052.8	1,753.1	1,692.8	60.31	29.068	
8,700.0	8,677.4	8,701.2	8,676.4	30.9	30.9	89.41	-171.1	2,052.8	1,753.1	1,692.1	61.01	28.734	
8,800.0	8,777.4	8,801.2	8,776.4	31.3	31.2	89.41	-171.1	2,052.8	1,753.1	1,691.4	61.72	28.407	
8,900.0	8,877.4	8,901.2	8,876.4	31.6	31.6	89.41	-171.1	2,052.8	1,753.1	1,690.7	62.42	28.087	
9,000.0	8,977.4	9,001.2	8,976.4	32.0	31.9	89.41	-171.1	2,052.8	1,753.1	1,690.0	63.12	27.773	
9,100.0	9,077.4	9,101.2	9,076.4	32.3	32.3	89.41	-171.1	2,052.8	1,753.1	1,689.3	63.83	27.467	
9,200.0	9,177.4	9,201.2	9,176.4	32.7	32.6	89.41	-171.1	2,052.8	1,753.1	1,688.6	64.53	27.168	
9,300.0	9,277.4	9,301.2	9,276.4	33.0	33.0	89.41	-171.1	2,052.8	1,753.1	1,687.9	65.23	26.874	
9,400.0	9,377.4	9,401.2	9,376.4	33.4	33.3	89.41	-171.1	2,052.8	1,753.1	1,687.2	65.94	26.587	
9,500.0	9,477.4	9,501.2	9,476.4	33.7	33.7	89.41	-171.1	2,052.8	1,753.1	1,686.5	66.64	26.306	
9,600.0	9,577.4	9,601.2	9,576.4	34.1	34.0	89.41	-171.1	2,052.8	1,753.1	1,685.8	67.35	26.030	
9,700.0	9,677.4	9,701.2	9,676.4	34.4	34.4	89.41	-171.1	2,052.8	1,753.1	1,685.1	68.05	25.761	
9,800.0	9,777.4	9,801.2	9,776.4	34.8	34.7	89.41	-171.1	2,052.8	1,753.1	1,684.4	68.76	25.496	
9,900.0	9,877.4	9,901.2	9,876.4	35.1	35.1	89.41	-171.1	2,052.8	1,753.1	1,683.6	69.47	25.237	
10,000.0	9,977.4	10,001.2	9,976.4	35.5	35.4	89.41	-171.1	2,052.8	1,753.1	1,682.9	70.17	24.983	
10,100.0	10,077.4	10,101.2	10,076.4	35.8	35.8	89.41	-171.1	2,052.8	1,753.1	1,682.2	70.88	24.734	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,177.4	10,201.2	10,176.4	36.2	36.1	89.41	-171.1	2,052.8	1,753.1	1,681.5	71.58	24.490	
10,300.0	10,277.4	10,301.2	10,276.4	36.5	36.5	89.41	-171.1	2,052.8	1,753.1	1,680.8	72.29	24.251	
10,324.1	10,301.5	10,322.9	10,300.5	36.6	36.6	89.41	-171.1	2,052.8	1,753.1	1,680.7	72.45	24.197	
10,350.0	10,327.4	10,348.8	10,326.4	36.7	36.7	89.87	-171.1	2,052.8	1,753.1	1,680.5	72.64	24.136	
10,396.3	10,373.5	10,405.1	10,372.5	36.8	36.9	90.00	-171.1	2,052.8	1,753.1	1,680.1	72.99	24.018 CC	
10,400.0	10,377.2	10,401.5	10,376.2	36.9	36.8	90.02	-171.1	2,052.8	1,753.1	1,680.1	72.99	24.018	
10,450.0	10,426.4	10,447.8	10,425.4	37.0	37.0	90.29	-171.1	2,052.8	1,753.1	1,679.8	73.32	23.911	
10,500.0	10,474.6	10,504.0	10,473.6	37.2	37.2	90.69	-171.1	2,052.8	1,753.3	1,679.6	73.67	23.797 ES	
10,550.0	10,521.6	10,543.0	10,520.6	37.3	37.3	91.19	-171.1	2,052.8	1,753.6	1,679.6	73.96	23.709	
10,600.0	10,566.8	10,588.2	10,565.8	37.5	37.5	91.75	-171.1	2,052.8	1,754.2	1,679.9	74.27	23.620	
10,650.0	10,610.1	10,631.5	10,609.1	37.6	37.7	92.36	-171.1	2,052.8	1,755.2	1,680.6	74.56	23.541	
10,700.0	10,651.0	10,672.4	10,650.0	37.7	37.8	92.96	-171.1	2,052.8	1,756.8	1,682.0	74.84	23.475	
10,750.0	10,689.2	10,710.6	10,688.2	37.8	37.9	93.52	-171.1	2,052.8	1,759.2	1,684.1	75.11	23.422	
10,800.0	10,724.5	10,745.9	10,723.5	37.9	38.1	94.00	-171.1	2,052.8	1,762.5	1,687.2	75.37	23.386	
10,850.0	10,756.6	10,778.0	10,755.6	37.9	38.2	94.37	-171.1	2,052.8	1,766.9	1,691.3	75.61	23.367	
10,900.0	10,785.2	10,806.6	10,784.2	38.0	38.3	94.57	-171.1	2,052.8	1,772.5	1,696.6	75.85	23.368	
10,950.0	10,810.1	10,831.5	10,809.1	38.0	38.4	94.57	-171.1	2,052.8	1,779.4	1,703.3	76.08	23.388	
11,000.0	10,831.2	10,852.6	10,830.2	38.1	38.4	94.35	-171.1	2,052.8	1,787.7	1,711.4	76.30	23.430	
11,050.0	10,848.2	10,869.6	10,847.2	38.3	38.5	93.88	-171.1	2,052.8	1,797.5	1,721.0	76.51	23.495	
11,100.0	10,861.1	10,882.4	10,860.1	38.4	38.5	93.12	-171.1	2,052.8	1,808.8	1,732.1	76.70	23.581	
11,150.0	10,869.7	10,908.9	10,868.7	38.5	38.6	92.08	-171.1	2,052.8	1,821.5	1,744.6	76.95	23.671	
11,200.0	10,874.0	10,904.7	10,873.0	38.7	38.6	90.75	-171.1	2,052.8	1,835.7	1,758.6	77.09	23.811	
11,225.4	10,874.5	10,904.2	10,873.5	38.8	38.6	89.96	-171.1	2,052.8	1,843.4	1,766.2	77.17	23.886	
11,287.1	10,874.3	10,904.3	10,873.3	39.0	38.6	89.95	-171.1	2,052.8	1,863.3	1,786.0	77.38	24.081	
11,300.0	10,874.3	10,904.3	10,873.3	39.0	38.6	89.95	-171.1	2,052.8	1,867.8	1,790.3	77.42	24.123	
11,400.0	10,874.1	10,904.6	10,873.1	39.4	38.6	89.94	-171.1	2,052.8	1,904.6	1,826.8	77.80	24.480	
11,500.0	10,873.8	10,904.8	10,872.8	39.8	38.6	89.94	-171.1	2,052.8	1,945.8	1,867.6	78.21	24.880	
11,600.0	10,873.6	10,905.0	10,872.6	40.3	38.6	89.93	-171.1	2,052.8	1,991.3	1,912.6	78.64	25.321	
11,700.0	10,873.4	10,905.2	10,872.4	40.9	38.6	89.92	-171.1	2,052.8	2,040.6	1,961.5	79.08	25.804	
11,800.0	10,873.2	10,905.5	10,872.2	41.5	38.6	89.92	-171.1	2,052.8	2,093.5	2,014.0	79.52	26.325	
11,900.0	10,872.9	10,905.7	10,871.9	42.2	38.6	89.91	-171.1	2,052.8	2,149.8	2,069.8	79.97	26.884	
12,000.0	10,872.7	10,905.9	10,871.7	42.9	38.6	89.90	-171.1	2,052.8	2,209.2	2,128.8	80.40	27.478	
12,100.0	10,872.5	10,906.1	10,871.5	43.7	38.6	89.89	-171.1	2,052.8	2,271.4	2,190.6	80.82	28.106	
12,200.0	10,872.2	10,906.4	10,871.2	44.6	38.6	89.89	-171.1	2,052.8	2,336.3	2,255.1	81.22	28.764	
12,300.0	10,872.0	14,012.0	12,542.1	45.4	50.9	135.28	1,498.8	1,941.5	2,351.8	2,278.1	73.75	31.887	
12,400.0	10,871.8	14,112.0	12,540.5	46.3	51.8	135.26	1,598.7	1,940.7	2,350.9	2,275.7	75.18	31.270	
12,500.0	10,871.6	14,212.0	12,539.0	47.3	52.6	135.24	1,698.7	1,939.9	2,349.9	2,273.2	76.67	30.650	
12,600.0	10,871.3	14,312.0	12,537.5	48.3	53.5	135.22	1,798.7	1,939.1	2,349.0	2,270.7	78.22	30.032	
12,700.0	10,871.1	14,412.0	12,535.9	49.3	54.5	135.20	1,898.7	1,938.3	2,348.0	2,268.2	79.82	29.417	
12,800.0	10,870.9	14,512.0	12,534.4	50.4	55.5	135.17	1,998.6	1,937.5	2,347.0	2,265.6	81.47	28.808	
12,900.0	10,870.7	14,611.9	12,532.9	51.5	56.5	135.15	2,098.6	1,936.7	2,346.1	2,262.9	83.18	28.207	
13,000.0	10,870.4	14,711.9	12,531.3	52.6	57.5	135.13	2,198.6	1,935.9	2,345.1	2,260.2	84.92	27.614	
13,100.0	10,870.2	14,811.9	12,529.8	53.8	58.6	135.11	2,298.6	1,935.1	2,344.2	2,257.5	86.72	27.032	
13,200.0	10,870.0	14,911.9	12,528.3	54.9	59.7	135.09	2,398.6	1,934.2	2,343.2	2,254.7	88.55	26.461	
13,300.0	10,869.7	15,011.9	12,526.7	56.1	60.8	135.07	2,498.5	1,933.4	2,342.3	2,251.8	90.43	25.903	
13,400.0	10,869.5	15,111.9	12,525.2	57.4	61.9	135.04	2,598.5	1,932.6	2,341.3	2,249.0	92.33	25.357	
13,500.0	10,869.3	15,211.9	12,523.7	58.6	63.1	135.02	2,698.5	1,931.8	2,340.3	2,246.1	94.28	24.824	
13,600.0	10,869.1	15,311.9	12,522.1	59.9	64.3	135.00	2,798.5	1,931.0	2,339.4	2,243.1	96.25	24.304	
13,700.0	10,868.8	15,411.9	12,520.6	61.1	65.5	134.98	2,898.4	1,930.2	2,338.4	2,240.2	98.26	23.798	
13,800.0	10,868.6	15,511.9	12,519.1	62.4	66.7	134.96	2,998.4	1,929.4	2,337.5	2,237.2	100.29	23.306	
13,900.0	10,868.4	15,611.9	12,517.5	63.8	68.0	134.93	3,098.4	1,928.6	2,336.5	2,234.2	102.36	22.827	
14,000.0	10,868.2	15,711.9	12,516.0	65.1	69.3	134.91	3,198.4	1,927.8	2,335.6	2,231.1	104.44	22.362	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,867.9	15,811.8	12,514.5	66.4	70.5	134.89	3,298.3	1,927.0	2,334.6	2,228.1	106.56	21.910	
14,200.0	10,867.7	15,911.8	12,512.9	67.8	71.8	134.87	3,398.3	1,926.1	2,333.7	2,225.0	108.69	21.471	
14,300.0	10,867.5	16,011.8	12,511.4	69.2	73.1	134.85	3,498.3	1,925.3	2,332.7	2,221.9	110.85	21.045	
14,400.0	10,867.3	16,111.8	12,509.9	70.6	74.5	134.82	3,598.3	1,924.5	2,331.8	2,218.7	113.02	20.631	
14,500.0	10,867.0	16,211.8	12,508.3	72.0	75.8	134.80	3,698.2	1,923.7	2,330.8	2,215.6	115.22	20.229	
14,600.0	10,866.8	16,311.8	12,506.8	73.4	77.2	134.78	3,798.2	1,922.9	2,329.9	2,212.4	117.43	19.840	
14,700.0	10,866.6	16,411.8	12,505.3	74.8	78.5	134.76	3,898.2	1,922.1	2,328.9	2,209.2	119.67	19.462	
14,800.0	10,866.3	16,511.8	12,503.7	76.2	79.9	134.74	3,998.2	1,921.3	2,328.0	2,206.0	121.91	19.095	
14,900.0	10,866.1	16,611.8	12,502.2	77.7	81.3	134.71	4,098.2	1,920.5	2,327.0	2,202.8	124.18	18.739	
15,000.0	10,865.9	16,711.8	12,500.7	79.1	82.7	134.69	4,198.1	1,919.7	2,326.1	2,199.6	126.46	18.394	
15,100.0	10,865.7	16,811.8	12,499.1	80.6	84.1	134.67	4,298.1	1,918.9	2,325.1	2,196.4	128.75	18.059	
15,200.0	10,865.4	16,911.8	12,497.6	82.0	85.5	134.65	4,398.1	1,918.0	2,324.2	2,193.1	131.06	17.734	
15,300.0	10,865.2	17,011.7	12,496.1	83.5	86.9	134.63	4,498.1	1,917.2	2,323.2	2,189.8	133.38	17.418	
15,400.0	10,865.0	17,111.7	12,494.5	85.0	88.3	134.60	4,598.0	1,916.4	2,322.3	2,186.6	135.71	17.112	
15,500.0	10,864.8	17,211.7	12,493.0	86.4	89.8	134.58	4,698.0	1,915.6	2,321.3	2,183.3	138.06	16.814	
15,600.0	10,864.5	17,311.7	12,491.5	87.9	91.2	134.56	4,798.0	1,914.8	2,320.4	2,180.0	140.41	16.526	
15,700.0	10,864.3	17,411.7	12,489.9	89.4	92.7	134.54	4,898.0	1,914.0	2,319.4	2,176.6	142.78	16.245	
15,800.0	10,864.1	17,511.7	12,488.4	90.9	94.1	134.51	4,997.9	1,913.2	2,318.5	2,173.3	145.15	15.973	
15,900.0	10,863.8	17,611.7	12,486.9	92.4	95.6	134.49	5,097.9	1,912.4	2,317.5	2,170.0	147.54	15.708	
16,000.0	10,863.6	17,711.7	12,485.3	94.0	97.1	134.47	5,197.9	1,911.6	2,316.6	2,166.6	149.94	15.450	
16,100.0	10,863.4	17,811.7	12,483.8	95.5	98.5	134.45	5,297.9	1,910.7	2,315.6	2,163.3	152.34	15.200	
16,200.0	10,863.2	17,911.7	12,482.3	97.0	100.0	134.42	5,397.8	1,909.9	2,314.7	2,159.9	154.76	14.957	
16,300.0	10,862.9	18,011.7	12,480.7	98.5	101.5	134.40	5,497.8	1,909.1	2,313.7	2,156.6	157.18	14.720	
16,400.0	10,862.7	18,111.6	12,479.2	100.0	103.0	134.38	5,597.8	1,908.3	2,312.8	2,153.2	159.61	14.490	
16,500.0	10,862.5	18,211.6	12,477.7	101.6	104.5	134.36	5,697.8	1,907.5	2,311.9	2,149.8	162.05	14.266	
16,600.0	10,862.3	18,311.6	12,476.1	103.1	106.0	134.33	5,797.7	1,906.7	2,310.9	2,146.4	164.50	14.048	
16,700.0	10,862.0	18,411.6	12,474.6	104.7	107.5	134.31	5,897.7	1,905.9	2,310.0	2,143.0	166.95	13.836	
16,800.0	10,861.8	18,511.6	12,473.0	106.2	109.0	134.29	5,997.7	1,905.1	2,309.0	2,139.6	169.41	13.630	
16,900.0	10,861.6	18,611.6	12,471.5	107.7	110.5	134.27	6,097.7	1,904.3	2,308.1	2,136.2	171.88	13.429	
17,000.0	10,861.4	18,711.6	12,470.0	109.3	112.1	134.24	6,197.7	1,903.5	2,307.1	2,132.8	174.35	13.233	
17,100.0	10,861.1	18,811.6	12,468.4	110.8	113.6	134.22	6,297.6	1,902.6	2,306.2	2,129.4	176.83	13.042	
17,200.0	10,860.9	18,911.6	12,466.9	112.4	115.1	134.20	6,397.6	1,901.8	2,305.3	2,125.9	179.32	12.855	
17,300.0	10,860.7	19,011.6	12,465.4	114.0	116.6	134.18	6,497.6	1,901.0	2,304.3	2,122.5	181.81	12.674	
17,400.0	10,860.4	19,111.6	12,463.8	115.5	118.2	134.15	6,597.6	1,900.2	2,303.4	2,119.1	184.31	12.497	
17,500.0	10,860.2	19,211.6	12,462.3	117.1	119.7	134.13	6,697.5	1,899.4	2,302.4	2,115.6	186.82	12.325	
17,600.0	10,860.0	19,311.5	12,460.8	118.7	121.2	134.11	6,797.5	1,898.6	2,301.5	2,112.2	189.33	12.156	
17,700.0	10,859.8	19,411.5	12,459.2	120.2	122.8	134.09	6,897.5	1,897.8	2,300.5	2,108.7	191.84	11.992	
17,800.0	10,859.5	19,511.5	12,457.7	121.8	124.3	134.06	6,997.5	1,897.0	2,299.6	2,105.2	194.36	11.832	
17,900.0	10,859.3	19,611.5	12,456.2	123.4	125.9	134.04	7,097.4	1,896.2	2,298.7	2,101.8	196.89	11.675	
18,000.0	10,859.1	19,711.5	12,454.6	124.9	127.4	134.02	7,197.4	1,895.4	2,297.7	2,098.3	199.42	11.522	
18,100.0	10,858.9	19,811.5	12,453.1	126.5	129.0	134.00	7,297.4	1,894.5	2,296.8	2,094.8	201.95	11.373	
18,200.0	10,858.6	19,911.5	12,451.6	128.1	130.6	133.97	7,397.4	1,893.7	2,295.9	2,091.4	204.49	11.227	
18,300.0	10,858.4	20,011.5	12,450.0	129.7	132.1	133.95	7,497.3	1,892.9	2,294.9	2,087.9	207.03	11.085	
18,400.0	10,858.2	20,111.5	12,448.5	131.3	133.7	133.93	7,597.3	1,892.1	2,294.0	2,084.4	209.58	10.946	
18,500.0	10,857.9	20,211.5	12,447.0	132.9	135.2	133.91	7,697.3	1,891.3	2,293.0	2,080.9	212.13	10.809	
18,600.0	10,857.7	20,311.5	12,445.4	134.4	136.8	133.88	7,797.3	1,890.5	2,292.1	2,077.4	214.69	10.676	
18,700.0	10,857.5	20,411.5	12,443.9	136.0	138.4	133.86	7,897.3	1,889.7	2,291.2	2,073.9	217.25	10.546	
18,800.0	10,857.3	20,511.4	12,442.4	137.6	139.9	133.84	7,997.2	1,888.9	2,290.2	2,070.4	219.81	10.419	
18,900.0	10,857.0	20,611.4	12,440.8	139.2	141.5	133.81	8,097.2	1,888.1	2,289.3	2,066.9	222.38	10.294	
19,000.0	10,856.8	20,711.4	12,439.3	140.8	143.1	133.79	8,197.2	1,887.3	2,288.4	2,063.4	224.95	10.173	
19,100.0	10,856.6	20,811.4	12,437.8	142.4	144.7	133.77	8,297.2	1,886.4	2,287.4	2,059.9	227.53	10.053	
19,200.0	10,856.4	20,911.4	12,436.2	144.0	146.2	133.75	8,397.1	1,885.6	2,286.5	2,056.4	230.11	9.936	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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 #223H - Wellbore #1 - BLM Plan #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
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	10,856.1	21,011.4	12,434.7	145.6	147.8	133.72	8,497.1	1,884.8	2,285.6	2,052.9	232.69	9.822	
19,400.0	10,855.9	21,111.4	12,433.2	147.2	149.4	133.70	8,597.1	1,884.0	2,284.6	2,049.3	235.28	9.710	
19,500.0	10,855.7	21,211.4	12,431.6	148.8	151.0	133.68	8,697.1	1,883.2	2,283.7	2,045.8	237.87	9.601	
19,600.0	10,855.5	21,311.4	12,430.1	150.4	152.6	133.65	8,797.0	1,882.4	2,282.8	2,042.3	240.46	9.493	
19,700.0	10,855.2	21,411.4	12,428.6	152.0	154.2	133.63	8,897.0	1,881.6	2,281.8	2,038.8	243.06	9.388	
19,800.0	10,855.0	21,511.4	12,427.0	153.6	155.8	133.61	8,997.0	1,880.8	2,280.9	2,035.2	245.66	9.285	
19,900.0	10,854.8	21,611.3	12,425.5	155.2	157.3	133.58	9,097.0	1,880.0	2,280.0	2,031.7	248.26	9.184	
20,000.0	10,854.5	21,711.3	12,424.0	156.8	158.9	133.56	9,196.9	1,879.1	2,279.0	2,028.2	250.87	9.085	
20,100.0	10,854.3	21,811.3	12,422.4	158.4	160.5	133.54	9,296.9	1,878.3	2,278.1	2,024.6	253.48	8.987	
20,200.0	10,854.1	21,911.3	12,420.9	160.0	162.1	133.51	9,396.9	1,877.5	2,277.2	2,021.1	256.09	8.892	
20,300.0	10,853.9	22,011.3	12,419.4	161.7	163.7	133.49	9,496.9	1,876.7	2,276.2	2,017.5	258.71	8.799	
20,400.0	10,853.6	22,111.3	12,417.8	163.3	165.3	133.47	9,596.9	1,875.9	2,275.3	2,014.0	261.32	8.707	
20,500.0	10,853.4	22,211.3	12,416.3	164.9	166.9	133.45	9,696.8	1,875.1	2,274.4	2,010.4	263.95	8.617	
20,600.0	10,853.2	22,311.3	12,414.8	166.5	168.5	133.42	9,796.8	1,874.3	2,273.4	2,006.9	266.57	8.528	
20,700.0	10,853.0	22,411.3	12,413.2	168.1	170.1	133.40	9,896.8	1,873.5	2,272.5	2,003.3	269.20	8.442	
20,800.0	10,852.7	22,511.3	12,411.7	169.7	171.7	133.38	9,996.8	1,872.7	2,271.6	1,999.8	271.83	8.357	
20,900.0	10,852.5	22,611.3	12,410.2	171.3	173.3	133.35	10,096.7	1,871.9	2,270.7	1,996.2	274.46	8.273	
21,000.0	10,852.3	22,711.3	12,408.6	172.9	174.9	133.33	10,196.7	1,871.0	2,269.7	1,992.6	277.09	8.191	
21,094.0	10,852.1	22,784.2	12,407.5	174.5	176.1	133.31	10,269.6	1,870.5	2,268.9	1,989.7	279.26	8.125 SF	
21,094.0	10,851.5	22,784.2	12,407.5	174.5	176.1	133.33	10,269.6	1,870.5	2,269.2	1,989.9	279.22	8.127	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	88.62	56.5	2,342.9	2,343.6				
100.0	100.0	100.0	100.0	0.1	0.1	88.62	56.5	2,342.9	2,343.6	2,343.3	0.26	9,143.534	
200.0	200.0	200.0	200.0	0.5	0.5	88.62	56.5	2,342.9	2,343.6	2,342.6	0.97	2,407.968	
300.0	300.0	300.0	300.0	0.8	0.8	88.62	56.5	2,342.9	2,343.6	2,341.9	1.69	1,386.561	
400.0	400.0	400.0	400.0	1.2	1.2	88.62	56.5	2,342.9	2,343.6	2,341.1	2.41	973.587	
500.0	500.0	500.0	500.0	1.6	1.6	88.62	56.5	2,342.9	2,343.6	2,340.4	3.12	750.159	
600.0	600.0	600.0	600.0	1.9	1.9	88.62	56.5	2,342.9	2,343.6	2,339.7	3.84	610.139	
700.0	700.0	700.0	700.0	2.3	2.3	88.62	56.5	2,342.9	2,343.6	2,339.0	4.56	514.167	
800.0	800.0	800.0	800.0	2.6	2.6	88.62	56.5	2,342.9	2,343.6	2,338.3	5.27	444.284	
900.0	900.0	900.0	900.0	3.0	3.0	88.62	56.5	2,342.9	2,343.6	2,337.6	5.99	391.124	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	88.62	56.5	2,342.9	2,343.6	2,336.8	6.71	349.326	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	88.62	56.5	2,342.9	2,343.6	2,336.1	7.43	315.599	
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	88.62	56.5	2,342.9	2,343.6	2,335.4	8.14	287.811	
1,300.0	1,300.0	1,300.0	1,300.0	4.4	4.4	-33.64	56.5	2,342.9	2,342.8	2,334.0	8.85	264.848	
1,400.0	1,400.0	1,400.0	1,400.0	4.8	4.8	-33.69	56.5	2,342.9	2,340.7	2,331.1	9.54	245.382	
1,500.0	1,499.9	1,500.1	1,499.9	5.1	5.1	-33.76	56.5	2,342.9	2,337.0	2,326.8	10.24	228.325	
1,600.0	1,599.7	1,600.3	1,599.7	5.4	5.5	-33.88	56.5	2,342.9	2,331.9	2,321.0	10.94	213.238	
1,700.0	1,699.4	1,700.6	1,699.4	5.8	5.9	-34.02	56.5	2,342.9	2,325.4	2,313.8	11.64	199.782	
1,800.0	1,798.9	1,801.1	1,798.9	6.1	6.2	-34.20	56.5	2,342.9	2,317.5	2,305.1	12.35	187.686	
1,900.0	1,898.3	1,901.7	1,898.3	6.5	6.6	-34.41	56.5	2,342.9	2,308.1	2,295.1	13.06	176.735	
2,000.0	1,997.4	1,997.4	1,997.4	6.9	6.9	-34.65	56.5	2,342.9	2,297.3	2,283.6	13.76	166.984	
2,100.0	2,096.4	2,069.6	2,069.6	7.2	7.2	-34.79	56.4	2,343.3	2,286.4	2,272.1	14.37	159.133	
2,200.0	2,195.5	2,141.2	2,141.2	7.6	7.4	-34.93	56.1	2,344.6	2,276.7	2,261.8	14.97	152.045	
2,300.0	2,294.5	2,213.1	2,213.0	8.0	7.7	-35.06	55.6	2,346.7	2,268.3	2,252.7	15.58	145.589	
2,400.0	2,393.5	2,285.1	2,285.0	8.4	7.9	-35.19	55.0	2,349.8	2,261.1	2,244.9	16.19	139.669	
2,500.0	2,492.5	2,357.2	2,357.0	8.8	8.2	-35.31	54.1	2,353.8	2,255.1	2,238.3	16.80	134.235	
2,600.0	2,591.6	2,429.5	2,429.1	9.2	8.4	-35.42	53.1	2,358.6	2,250.3	2,232.9	17.41	129.243	
2,700.0	2,690.6	2,500.0	2,499.4	9.6	8.7	-35.53	51.9	2,364.2	2,246.8	2,228.7	18.02	124.703	
2,800.0	2,789.6	2,574.4	2,573.4	10.0	8.9	-35.64	50.4	2,371.0	2,244.5	2,225.8	18.64	120.426	
2,900.0	2,888.6	2,646.9	2,645.5	10.4	9.2	-35.73	48.8	2,378.5	2,243.4	2,224.1	19.25	116.533	
2,937.9	2,926.2	2,674.4	2,672.8	10.5	9.3	-35.77	48.1	2,381.6	2,243.3	2,223.8	19.48	115.139 CC	
3,000.0	2,987.7	2,719.5	2,717.6	10.8	9.4	-35.82	46.9	2,387.0	2,243.5	2,223.7	19.86	112.946 ES	
3,100.0	3,086.7	2,792.0	2,789.5	11.2	9.7	-35.91	44.9	2,396.3	2,244.9	2,224.4	20.48	109.637	
3,200.0	3,185.7	2,888.9	2,885.5	11.6	10.1	-36.02	42.0	2,409.5	2,247.0	2,225.8	21.19	106.023	
3,300.0	3,284.8	2,988.8	2,984.4	12.0	10.4	-36.13	39.1	2,423.0	2,249.1	2,227.2	21.93	102.572	
3,400.0	3,383.8	3,088.7	3,083.3	12.4	10.8	-36.24	36.2	2,436.6	2,251.3	2,228.6	22.66	99.333	
3,500.0	3,482.8	3,188.6	3,182.2	12.8	11.2	-36.35	33.2	2,450.2	2,253.4	2,230.0	23.40	96.288	
3,600.0	3,581.8	3,288.5	3,281.1	13.2	11.6	-36.46	30.3	2,463.8	2,255.6	2,231.5	24.14	93.421	
3,700.0	3,680.9	3,388.3	3,380.0	13.7	12.0	-36.57	27.3	2,477.4	2,257.8	2,232.9	24.89	90.718	
3,800.0	3,779.9	3,488.2	3,478.9	14.1	12.3	-36.68	24.4	2,491.0	2,259.9	2,234.3	25.63	88.165	
3,878.9	3,858.0	3,567.0	3,557.0	14.4	12.6	-36.76	22.0	2,501.7	2,261.7	2,235.4	26.22	86.249	
3,900.0	3,878.9	3,588.1	3,577.8	14.5	12.7	-36.79	21.4	2,504.6	2,262.2	2,235.8	26.38	85.753	
4,000.0	3,978.2	3,688.0	3,676.8	14.9	13.1	-36.90	18.5	2,518.1	2,265.8	2,238.7	27.12	83.541	
4,100.0	4,077.7	3,787.8	3,775.6	15.3	13.5	-36.99	15.5	2,531.7	2,271.6	2,243.8	27.86	81.544	
4,200.0	4,177.5	3,887.5	3,874.3	15.6	13.9	-37.07	12.6	2,545.3	2,279.5	2,250.9	28.58	79.746	
4,300.0	4,277.4	3,987.0	3,972.8	16.0	14.3	-37.12	9.6	2,558.8	2,289.4	2,260.1	29.30	78.133	
4,400.0	4,377.4	4,086.2	4,071.1	16.3	14.7	-37.15	6.7	2,572.3	2,301.4	2,271.4	30.01	76.692	
4,412.2	4,389.6	4,098.3	4,083.1	16.4	14.7	85.09	6.4	2,574.0	2,303.0	2,273.0	30.09	76.528	
4,500.0	4,477.4	4,185.2	4,169.2	16.7	15.1	85.18	3.8	2,585.8	2,314.7	2,284.0	30.70	75.405	
4,600.0	4,577.4	4,284.3	4,267.2	17.0	15.5	85.28	0.9	2,599.2	2,328.1	2,296.7	31.39	74.175	
4,700.0	4,677.4	4,383.3	4,365.3	17.3	15.9	85.38	-2.0	2,612.7	2,341.4	2,309.3	32.08	72.995	
4,800.0	4,777.4	4,482.3	4,463.3	17.6	16.3	85.48	-5.0	2,626.2	2,354.7	2,321.9	32.77	71.861	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	
4,900.0	4,877.4	4,581.3	4,561.4	18.0	16.7	85.57	-7.9	2,639.6	2,368.1	2,334.6	33.46	70.771	
5,000.0	4,977.4	4,680.4	4,659.5	18.3	17.1	85.67	-10.8	2,653.1	2,381.4	2,347.2	34.16	69.722	
5,100.0	5,077.4	4,779.4	4,757.5	18.6	17.5	85.76	-13.7	2,666.6	2,394.7	2,359.9	34.85	68.713	
5,200.0	5,177.4	4,878.4	4,855.6	19.0	17.9	85.86	-16.7	2,680.1	2,408.1	2,372.6	35.55	67.741	
5,300.0	5,277.4	4,977.5	4,953.7	19.3	18.3	85.95	-19.6	2,693.5	2,421.5	2,385.2	36.25	66.805	
5,400.0	5,377.4	5,076.5	5,051.7	19.6	18.7	86.04	-22.5	2,707.0	2,434.8	2,397.9	36.95	65.903	
5,500.0	5,477.4	5,175.5	5,149.8	20.0	19.1	86.13	-25.4	2,720.5	2,448.2	2,410.6	37.65	65.032	
5,600.0	5,577.4	5,274.5	5,247.9	20.3	19.5	86.22	-28.3	2,733.9	2,461.6	2,423.3	38.35	64.192	
5,700.0	5,677.4	5,373.6	5,345.9	20.6	19.9	86.31	-31.3	2,747.4	2,475.0	2,435.9	39.05	63.380	
5,800.0	5,777.4	5,472.6	5,444.0	21.0	20.3	86.40	-34.2	2,760.9	2,488.4	2,448.6	39.75	62.597	
5,900.0	5,877.4	5,571.6	5,542.0	21.3	20.7	86.49	-37.1	2,774.3	2,501.8	2,461.3	40.46	61.839	
6,000.0	5,977.4	5,670.6	5,640.1	21.6	21.1	86.57	-40.0	2,787.8	2,515.2	2,474.0	41.16	61.106	
6,100.0	6,077.4	5,769.7	5,738.2	22.0	21.5	86.66	-43.0	2,801.3	2,528.6	2,486.7	41.87	60.397	
6,200.0	6,177.4	5,868.7	5,836.2	22.3	22.0	86.74	-45.9	2,814.7	2,542.0	2,499.5	42.57	59.710	
6,300.0	6,277.4	5,967.7	5,934.3	22.6	22.4	86.82	-48.8	2,828.2	2,555.5	2,512.2	43.28	59.045	
6,400.0	6,377.4	6,066.7	6,032.4	23.0	22.8	86.91	-51.7	2,841.7	2,568.9	2,524.9	43.99	58.401	
6,500.0	6,477.4	6,165.8	6,130.4	23.3	23.2	86.99	-54.6	2,855.1	2,582.3	2,537.6	44.69	57.777	
6,600.0	6,577.4	6,264.8	6,228.5	23.7	23.6	87.07	-57.6	2,868.6	2,595.8	2,550.4	45.40	57.171	
6,700.0	6,677.4	6,363.8	6,326.5	24.0	24.0	87.15	-60.5	2,882.1	2,609.2	2,563.1	46.11	56.584	
6,800.0	6,777.4	6,462.9	6,424.6	24.3	24.4	87.23	-63.4	2,895.6	2,622.6	2,575.8	46.82	56.013	
6,900.0	6,877.4	6,561.9	6,522.7	24.7	24.8	87.31	-66.3	2,909.0	2,636.1	2,588.6	47.53	55.460	
7,000.0	6,977.4	6,660.9	6,620.7	25.0	25.2	87.38	-69.2	2,922.5	2,649.6	2,601.3	48.24	54.922	
7,100.0	7,077.4	6,759.9	6,718.8	25.4	25.6	87.46	-72.2	2,936.0	2,663.0	2,614.1	48.95	54.399	
7,200.0	7,177.4	6,859.0	6,816.9	25.7	26.1	87.54	-75.1	2,949.4	2,676.5	2,626.8	49.66	53.891	
7,300.0	7,277.4	6,958.0	6,914.9	26.1	26.5	87.61	-78.0	2,962.9	2,690.0	2,639.6	50.38	53.397	
7,400.0	7,377.4	7,057.0	7,013.0	26.4	26.9	87.69	-80.9	2,976.4	2,703.4	2,652.4	51.09	52.917	
7,500.0	7,477.4	7,156.0	7,111.1	26.8	27.3	87.76	-83.9	2,989.8	2,716.9	2,665.1	51.80	52.449	
7,600.0	7,577.4	7,255.1	7,209.1	27.1	27.7	87.83	-86.8	3,003.3	2,730.4	2,677.9	52.51	51.994	
7,700.0	7,677.4	7,354.1	7,307.2	27.4	28.1	87.91	-89.7	3,016.8	2,743.9	2,690.7	53.23	51.550	
7,800.0	7,777.4	7,453.1	7,405.2	27.8	28.5	87.98	-92.6	3,030.2	2,757.4	2,703.4	53.94	51.119	
7,900.0	7,877.4	7,552.1	7,503.3	28.1	28.9	88.05	-95.5	3,043.7	2,770.9	2,716.2	54.65	50.698	
8,000.0	7,977.4	7,651.2	7,601.4	28.5	29.4	88.12	-98.5	3,057.2	2,784.4	2,729.0	55.37	50.288	
8,100.0	8,077.4	7,750.2	7,699.4	28.8	29.8	88.19	-101.4	3,070.6	2,797.9	2,741.8	56.08	49.888	
8,200.0	8,177.4	7,849.2	7,797.5	29.2	30.2	88.26	-104.3	3,084.1	2,811.4	2,754.6	56.80	49.498	
8,300.0	8,277.4	7,948.3	7,895.6	29.5	30.6	88.32	-107.2	3,097.6	2,824.9	2,767.4	57.51	49.117	
8,400.0	8,377.4	8,047.3	7,993.6	29.9	31.0	88.39	-110.2	3,111.0	2,838.4	2,780.2	58.23	48.746	
8,500.0	8,477.4	8,146.3	8,091.7	30.2	31.4	88.46	-113.1	3,124.5	2,852.0	2,793.0	58.94	48.384	
8,600.0	8,577.4	8,245.3	8,189.7	30.6	31.8	88.52	-116.0	3,138.0	2,865.5	2,805.8	59.66	48.030	
8,700.0	8,677.4	8,344.4	8,287.8	30.9	32.3	88.59	-118.9	3,151.5	2,879.0	2,818.6	60.38	47.684	
8,800.0	8,777.4	8,443.4	8,385.9	31.3	32.7	88.66	-121.8	3,164.9	2,892.6	2,831.5	61.09	47.347	
8,900.0	8,877.4	8,542.4	8,483.9	31.6	33.1	88.72	-124.8	3,178.4	2,906.1	2,844.3	61.81	47.017	
9,000.0	8,977.4	8,641.4	8,582.0	32.0	33.5	88.78	-127.7	3,191.9	2,919.6	2,857.1	62.53	46.694	
9,100.0	9,077.4	8,740.5	8,680.1	32.3	33.9	88.85	-130.6	3,205.3	2,933.2	2,869.9	63.24	46.379	
9,200.0	9,177.4	8,839.5	8,778.1	32.7	34.3	88.91	-133.5	3,218.8	2,946.7	2,882.8	63.96	46.071	
9,300.0	9,277.4	8,938.5	8,876.2	33.0	34.7	88.97	-136.4	3,232.3	2,960.3	2,895.6	64.68	45.770	
9,400.0	9,377.4	9,037.6	8,974.3	33.4	35.2	89.03	-139.4	3,245.7	2,973.8	2,908.4	65.40	45.475	
9,500.0	9,477.4	9,136.6	9,072.3	33.7	35.6	89.09	-142.3	3,259.2	2,987.4	2,921.3	66.11	45.186	
9,600.0	9,577.4	9,235.6	9,170.4	34.1	36.0	89.15	-145.2	3,272.7	3,000.9	2,934.1	66.83	44.903	
9,700.0	9,677.4	9,334.6	9,268.4	34.4	36.4	89.21	-148.1	3,286.1	3,014.5	2,947.0	67.55	44.627	
9,800.0	9,777.4	9,433.6	9,403.3	34.8	36.8	89.27	-151.0	3,303.8	3,027.5	2,957.8	68.27	44.352	
9,900.0	9,877.4	9,532.6	9,502.3	35.1	37.2	89.33	-153.9	3,317.2	3,040.9	2,968.6	69.00	44.080	
10,000.0	9,977.4	9,631.6	9,601.3	35.5	37.6	89.39	-156.8	3,330.6	3,054.3	2,979.4	69.73	43.811	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,077.4	10,146.0	10,077.4	35.8	39.3	89.41	-158.1	3,331.9	3,032.3	2,960.5	71.85	42.205	
10,200.0	10,177.4	10,246.0	10,177.4	36.2	39.6	89.41	-158.1	3,331.9	3,032.3	2,959.8	72.53	41.805	
10,300.0	10,277.4	10,346.0	10,277.4	36.5	40.0	89.41	-158.1	3,331.9	3,032.3	2,959.1	73.22	41.412	
10,324.1	10,301.5	10,370.1	10,301.5	36.6	40.0	89.41	-158.1	3,331.9	3,032.3	2,958.9	73.39	41.319	
10,350.0	10,327.4	10,404.0	10,327.4	36.7	40.1	89.87	-158.1	3,331.9	3,032.3	2,958.7	73.59	41.204	
10,400.0	10,377.2	10,445.8	10,377.2	36.9	40.3	89.95	-158.1	3,331.9	3,032.3	2,958.4	73.90	41.032	
10,418.3	10,395.3	10,463.9	10,395.3	36.9	40.3	90.00	-158.1	3,331.9	3,032.3	2,958.3	74.02	40.967	
10,450.0	10,426.4	10,505.0	10,426.4	37.0	40.5	90.11	-158.1	3,331.9	3,032.3	2,958.0	74.26	40.835	
10,500.0	10,474.6	10,543.2	10,474.6	37.2	40.6	90.34	-158.1	3,331.9	3,032.4	2,957.8	74.53	40.684	
10,550.0	10,521.6	10,609.8	10,521.6	37.3	40.8	90.63	-158.1	3,331.9	3,032.5	2,957.6	74.90	40.490	
10,600.0	10,566.8	10,635.4	10,566.8	37.5	40.9	90.96	-158.1	3,331.9	3,032.8	2,957.7	75.11	40.377	
10,650.0	10,610.1	10,678.7	10,610.1	37.6	41.0	91.31	-158.1	3,331.9	3,033.4	2,958.0	75.38	40.241	
10,700.0	10,651.0	10,719.6	10,651.0	37.7	41.1	91.66	-158.1	3,331.9	3,034.3	2,958.7	75.64	40.117	
10,750.0	10,689.2	10,757.8	10,689.2	37.8	41.3	91.99	-158.1	3,331.9	3,035.7	2,959.8	75.88	40.008	
10,800.0	10,724.5	10,806.9	10,724.5	37.9	41.4	92.28	-158.1	3,331.9	3,037.6	2,961.4	76.15	39.887	
10,850.0	10,756.6	10,825.2	10,756.6	37.9	41.5	92.49	-158.1	3,331.9	3,040.1	2,963.7	76.32	39.831	
10,900.0	10,785.2	10,853.8	10,785.2	38.0	41.6	92.61	-158.1	3,331.9	3,043.3	2,966.7	76.53	39.765	
10,950.0	10,810.1	10,878.7	10,810.1	38.0	41.6	92.62	-158.1	3,331.9	3,047.2	2,970.5	76.73	39.714	
11,000.0	10,831.2	10,900.2	10,831.2	38.1	41.7	92.50	-158.1	3,331.9	3,052.1	2,975.1	76.92	39.679	
11,050.0	10,848.2	10,916.8	10,848.2	38.3	41.8	92.23	-158.1	3,331.9	3,057.8	2,980.7	77.10	39.661	
11,100.0	10,861.1	10,929.7	10,861.1	38.4	41.8	91.79	-158.1	3,331.9	3,064.4	2,987.1	77.27	39.659	
11,150.0	10,869.7	10,938.3	10,869.7	38.5	41.8	91.20	-158.1	3,331.9	3,071.8	2,994.4	77.43	39.672	
11,200.0	10,874.0	10,942.5	10,874.0	38.7	41.8	90.43	-158.1	3,331.9	3,080.2	3,002.6	77.58	39.701	
11,225.4	10,874.5	10,943.1	10,874.5	38.8	41.8	89.98	-158.1	3,331.9	3,084.8	3,007.1	77.66	39.722	
11,287.1	10,874.3	10,942.9	10,874.3	39.0	41.8	89.97	-158.1	3,331.9	3,096.7	3,018.8	77.85	39.778	
11,300.0	10,874.3	10,942.9	10,874.3	39.0	41.8	89.97	-158.1	3,331.9	3,099.3	3,021.4	77.89	39.790	
11,400.0	10,874.1	10,942.7	10,874.1	39.4	41.8	89.97	-158.1	3,331.9	3,121.6	3,043.3	78.27	39.882	
11,500.0	10,873.8	10,942.4	10,873.8	39.8	41.8	89.96	-158.1	3,331.9	3,146.8	3,068.1	78.71	39.981	
11,600.0	10,873.6	10,942.2	10,873.6	40.3	41.8	89.96	-158.1	3,331.9	3,175.0	3,095.8	79.20	40.089	
11,700.0	10,873.4	10,942.0	10,873.4	40.9	41.8	89.96	-158.1	3,331.9	3,206.0	3,126.3	79.74	40.207	
11,800.0	10,873.2	10,941.8	10,873.2	41.5	41.8	89.95	-158.1	3,331.9	3,239.9	3,159.6	80.32	40.339	
11,900.0	10,872.9	10,941.5	10,872.9	42.2	41.8	89.95	-158.1	3,331.9	3,276.5	3,195.5	80.93	40.486	
12,000.0	10,872.7	10,941.3	10,872.7	42.9	41.8	89.94	-158.1	3,331.9	3,315.6	3,234.1	81.56	40.651	
12,100.0	10,872.5	10,941.1	10,872.5	43.7	41.8	89.94	-158.1	3,331.9	3,357.3	3,275.1	82.22	40.834	
12,200.0	10,872.2	10,940.8	10,872.2	44.6	41.8	89.93	-158.1	3,331.9	3,401.4	3,318.6	82.89	41.037	
12,300.0	10,872.0	10,940.6	12,553.8	45.4	52.1	119.49	1,510.9	3,260.7	3,416.7	3,333.1	83.61	40.865	
12,400.0	10,871.8	14,166.6	12,552.2	46.3	52.9	119.47	1,610.9	3,260.0	3,415.9	3,330.8	85.18	40.104	
12,500.0	10,871.6	14,266.6	12,550.5	47.3	53.8	119.45	1,710.9	3,259.2	3,415.2	3,328.4	86.82	39.336	
12,600.0	10,871.3	14,366.5	12,548.9	48.3	54.6	119.43	1,810.9	3,258.4	3,414.5	3,326.0	88.54	38.566	
12,700.0	10,871.1	14,466.5	12,547.2	49.3	55.6	119.41	1,910.8	3,257.6	3,413.8	3,323.5	90.32	37.797	
12,800.0	10,870.9	14,566.5	12,545.6	50.4	56.5	119.39	2,010.8	3,256.8	3,413.1	3,320.9	92.16	37.032	
12,900.0	10,870.7	14,666.5	12,543.9	51.5	57.5	119.37	2,110.8	3,256.0	3,412.4	3,318.3	94.07	36.275	
13,000.0	10,870.4	14,766.5	12,542.2	52.6	58.5	119.34	2,210.7	3,255.2	3,411.6	3,315.6	96.03	35.526	
13,100.0	10,870.2	14,866.5	12,540.6	53.8	59.6	119.32	2,310.7	3,254.5	3,410.9	3,312.9	98.05	34.789	
13,200.0	10,870.0	14,966.5	12,538.9	54.9	60.7	119.30	2,410.7	3,253.7	3,410.2	3,310.1	100.11	34.064	
13,300.0	10,869.7	15,066.5	12,537.3	56.1	61.8	119.28	2,510.7	3,252.9	3,409.5	3,307.3	102.22	33.354	
13,400.0	10,869.5	15,166.5	12,535.6	57.4	62.9	119.26	2,610.6	3,252.1	3,408.8	3,304.4	104.38	32.658	
13,500.0	10,869.3	15,266.5	12,534.0	58.6	64.0	119.24	2,710.6	3,251.3	3,408.1	3,301.5	106.57	31.978	
13,600.0	10,869.1	15,366.4	12,532.3	59.9	65.2	119.22	2,810.6	3,250.5	3,407.4	3,298.5	108.81	31.315	
13,700.0	10,868.8	15,466.4	12,530.6	61.1	66.4	119.20	2,910.6	3,249.7	3,406.6	3,295.6	111.08	30.667	
13,800.0	10,868.6	15,566.4	12,529.0	62.4	67.6	119.18	3,010.5	3,249.0	3,405.9	3,292.5	113.39	30.037	
13,900.0	10,868.4	15,666.4	12,527.3	63.8	68.8	119.16	3,110.5	3,248.2	3,405.2	3,289.5	115.73	29.423	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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	10,868.2	15,766.4	12,525.7	65.1	70.1	119.14	3,210.5	3,247.4	3,404.5	3,286.4	118.10	28.827	
14,100.0	10,867.9	15,866.4	12,524.0	66.4	71.3	119.12	3,310.5	3,246.6	3,403.8	3,283.3	120.50	28.247	
14,200.0	10,867.7	15,966.4	12,522.4	67.8	72.6	119.09	3,410.4	3,245.8	3,403.1	3,280.1	122.93	27.683	
14,300.0	10,867.5	16,066.4	12,520.7	69.2	73.9	119.07	3,510.4	3,245.0	3,402.4	3,277.0	125.38	27.136	
14,400.0	10,867.3	16,166.4	12,519.1	70.6	75.2	119.05	3,610.4	3,244.2	3,401.7	3,273.8	127.86	26.604	
14,500.0	10,867.0	16,266.4	12,517.4	72.0	76.5	119.03	3,710.3	3,243.5	3,400.9	3,270.6	130.36	26.088	
14,600.0	10,866.8	16,366.3	12,515.7	73.4	77.9	119.01	3,810.3	3,242.7	3,400.2	3,267.4	132.89	25.588	
14,700.0	10,866.6	16,466.3	12,514.1	74.8	79.2	118.99	3,910.3	3,241.9	3,399.5	3,264.1	135.43	25.102	
14,800.0	10,866.3	16,566.3	12,512.4	76.2	80.6	118.97	4,010.3	3,241.1	3,398.8	3,260.8	137.99	24.631	
14,900.0	10,866.1	16,666.3	12,510.8	77.7	81.9	118.95	4,110.2	3,240.3	3,398.1	3,257.5	140.57	24.173	
15,000.0	10,865.9	16,766.3	12,509.1	79.1	83.3	118.93	4,210.2	3,239.5	3,397.4	3,254.2	143.17	23.729	
15,100.0	10,865.7	16,866.3	12,507.5	80.6	84.7	118.91	4,310.2	3,238.7	3,396.7	3,250.9	145.79	23.298	
15,200.0	10,865.4	16,966.3	12,505.8	82.0	86.1	118.89	4,410.2	3,238.0	3,396.0	3,247.6	148.42	22.880	
15,300.0	10,865.2	17,066.3	12,504.2	83.5	87.5	118.86	4,510.1	3,237.2	3,395.3	3,244.2	151.07	22.475	
15,400.0	10,865.0	17,166.3	12,502.5	85.0	88.9	118.84	4,610.1	3,236.4	3,394.6	3,240.9	153.73	22.081	
15,500.0	10,864.8	17,266.3	12,500.8	86.4	90.4	118.82	4,710.1	3,235.6	3,393.9	3,237.5	156.41	21.699	
15,600.0	10,864.5	17,366.2	12,499.2	87.9	91.8	118.80	4,810.0	3,234.8	3,393.2	3,234.1	159.10	21.328	
15,700.0	10,864.3	17,466.2	12,497.5	89.4	93.2	118.78	4,910.0	3,234.0	3,392.5	3,230.7	161.80	20.967	
15,800.0	10,864.1	17,566.2	12,495.9	90.9	94.7	118.76	5,010.0	3,233.2	3,391.8	3,227.3	164.51	20.617	
15,900.0	10,863.8	17,666.2	12,494.2	92.4	96.1	118.74	5,110.0	3,232.5	3,391.1	3,223.8	167.24	20.277	
16,000.0	10,863.6	17,766.2	12,492.6	94.0	97.6	118.72	5,209.9	3,231.7	3,390.4	3,220.4	169.97	19.946	
16,100.0	10,863.4	17,866.2	12,490.9	95.5	99.0	118.70	5,309.9	3,230.9	3,389.7	3,216.9	172.72	19.625	
16,200.0	10,863.2	17,966.2	12,489.2	97.0	100.5	118.68	5,409.9	3,230.1	3,389.0	3,213.5	175.48	19.313	
16,300.0	10,862.9	18,066.2	12,487.6	98.5	102.0	118.65	5,509.9	3,229.3	3,388.3	3,210.0	178.24	19.009	
16,400.0	10,862.7	18,166.2	12,485.9	100.0	103.5	118.63	5,609.8	3,228.5	3,387.6	3,206.5	181.02	18.714	
16,500.0	10,862.5	18,266.1	12,484.3	101.6	105.0	118.61	5,709.8	3,227.7	3,386.9	3,203.1	183.80	18.427	
16,600.0	10,862.3	18,366.1	12,482.6	103.1	106.5	118.59	5,809.8	3,227.0	3,386.2	3,199.6	186.59	18.147	
16,700.0	10,862.0	18,466.1	12,481.0	104.7	108.0	118.57	5,909.8	3,226.2	3,385.5	3,196.1	189.39	17.875	
16,800.0	10,861.8	18,566.1	12,479.3	106.2	109.5	118.55	6,009.7	3,225.4	3,384.8	3,192.6	192.20	17.610	
16,900.0	10,861.6	18,666.1	12,477.7	107.7	111.0	118.53	6,109.7	3,224.6	3,384.1	3,189.0	195.02	17.353	
17,000.0	10,861.4	18,766.1	12,476.0	109.3	112.5	118.51	6,209.7	3,223.8	3,383.4	3,185.5	197.84	17.101	
17,100.0	10,861.1	18,866.1	12,474.3	110.8	114.0	118.49	6,309.6	3,223.0	3,382.7	3,182.0	200.67	16.857	
17,200.0	10,860.9	18,966.1	12,472.7	112.4	115.5	118.46	6,409.6	3,222.2	3,382.0	3,178.5	203.51	16.618	
17,300.0	10,860.7	19,066.1	12,471.0	114.0	117.0	118.44	6,509.6	3,221.5	3,381.3	3,174.9	206.35	16.386	
17,400.0	10,860.4	19,166.1	12,469.4	115.5	118.6	118.42	6,609.6	3,220.7	3,380.6	3,171.4	209.20	16.160	
17,500.0	10,860.2	19,266.0	12,467.7	117.1	120.1	118.40	6,709.5	3,219.9	3,379.9	3,167.8	212.06	15.939	
17,600.0	10,860.0	19,366.0	12,466.1	118.7	121.6	118.38	6,809.5	3,219.1	3,379.2	3,164.3	214.92	15.723	
17,700.0	10,859.8	19,466.0	12,464.4	120.2	123.2	118.36	6,909.5	3,218.3	3,378.5	3,160.7	217.78	15.513	
17,800.0	10,859.5	19,566.0	12,462.8	121.8	124.7	118.34	7,009.5	3,217.5	3,377.8	3,157.1	220.66	15.308	
17,900.0	10,859.3	19,666.0	12,461.1	123.4	126.2	118.32	7,109.4	3,216.7	3,377.1	3,153.6	223.53	15.108	
18,000.0	10,859.1	19,766.0	12,459.4	124.9	127.8	118.30	7,209.4	3,216.0	3,376.4	3,150.0	226.42	14.912	
18,100.0	10,858.9	19,866.0	12,457.8	126.5	129.3	118.27	7,309.4	3,215.2	3,375.7	3,146.4	229.31	14.721	
18,200.0	10,858.6	19,966.0	12,456.1	128.1	130.9	118.25	7,409.3	3,214.4	3,375.0	3,142.8	232.20	14.535	
18,300.0	10,858.4	20,066.0	12,454.5	129.7	132.4	118.23	7,509.3	3,213.6	3,374.3	3,139.2	235.10	14.353	
18,400.0	10,858.2	20,166.0	12,452.8	131.3	134.0	118.21	7,609.3	3,212.8	3,373.6	3,135.6	238.00	14.175	
18,500.0	10,857.9	20,265.9	12,451.2	132.9	135.5	118.19	7,709.3	3,212.0	3,372.9	3,132.0	240.90	14.001	
18,600.0	10,857.7	20,365.9	12,449.5	134.4	137.1	118.17	7,809.2	3,211.2	3,372.3	3,128.4	243.81	13.831	
18,700.0	10,857.5	20,465.9	12,447.8	136.0	138.7	118.15	7,909.2	3,210.5	3,371.6	3,124.8	246.73	13.665	
18,800.0	10,857.3	20,565.9	12,446.2	137.6	140.2	118.13	8,009.2	3,209.7	3,370.9	3,121.2	249.65	13.503	
18,900.0	10,857.0	20,665.9	12,444.5	139.2	141.8	118.10	8,109.2	3,208.9	3,370.2	3,117.6	252.57	13.344	
19,000.0	10,856.8	20,765.9	12,442.9	140.8	143.4	118.08	8,209.1	3,208.1	3,369.5	3,114.0	255.50	13.188	
19,100.0	10,856.6	20,865.9	12,441.2	142.4	144.9	118.06	8,309.1	3,207.3	3,368.8	3,110.4	258.43	13.036	

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 #126H
Project:	Antelope Ridge	TVD Reference:	KB @ 3818.5usft (Original Well Elev)
Reference Site:	Nina Cortell	MD Reference:	KB @ 3818.5usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Nina Cortell Fed Com #126H	Survey 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 #224H - 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	10,856.4	20,965.9	12,439.6	144.0	146.5	118.04	8,409.1	3,206.5	3,368.1	3,106.8	261.36	12.887	
19,300.0	10,856.1	21,065.9	12,437.9	145.6	148.1	118.02	8,509.0	3,205.8	3,367.4	3,103.1	264.30	12.741	
19,400.0	10,855.9	21,165.9	12,436.3	147.2	149.7	118.00	8,609.0	3,205.0	3,366.7	3,099.5	267.24	12.598	
19,500.0	10,855.7	21,265.8	12,434.6	148.8	151.2	117.98	8,709.0	3,204.2	3,366.1	3,095.9	270.18	12.458	
19,600.0	10,855.5	21,365.8	12,432.9	150.4	152.8	117.95	8,809.0	3,203.4	3,365.4	3,092.2	273.13	12.321	
19,700.0	10,855.2	21,465.8	12,431.3	152.0	154.4	117.93	8,908.9	3,202.6	3,364.7	3,088.6	276.08	12.187	
19,800.0	10,855.0	21,565.8	12,429.6	153.6	156.0	117.91	9,008.9	3,201.8	3,364.0	3,085.0	279.04	12.056	
19,900.0	10,854.8	21,665.8	12,428.0	155.2	157.6	117.89	9,108.9	3,201.0	3,363.3	3,081.3	281.99	11.927	
20,000.0	10,854.5	21,765.8	12,426.3	156.8	159.2	117.87	9,208.9	3,200.3	3,362.6	3,077.7	284.95	11.801	
20,100.0	10,854.3	21,865.8	12,424.7	158.4	160.7	117.85	9,308.8	3,199.5	3,361.9	3,074.0	287.91	11.677	
20,200.0	10,854.1	21,965.8	12,423.0	160.0	162.3	117.83	9,408.8	3,198.7	3,361.3	3,070.4	290.88	11.555	
20,300.0	10,853.9	22,065.8	12,421.4	161.7	163.9	117.80	9,508.8	3,197.9	3,360.6	3,066.7	293.85	11.436	
20,400.0	10,853.6	22,165.8	12,419.7	163.3	165.5	117.78	9,608.8	3,197.1	3,359.9	3,063.1	296.82	11.320	
20,500.0	10,853.4	22,265.7	12,418.0	164.9	167.1	117.76	9,708.7	3,196.3	3,359.2	3,059.4	299.79	11.205	
20,600.0	10,853.2	22,365.7	12,416.4	166.5	168.7	117.74	9,808.7	3,195.5	3,358.5	3,055.8	302.77	11.093	
20,700.0	10,853.0	22,465.7	12,414.7	168.1	170.3	117.72	9,908.7	3,194.8	3,357.9	3,052.1	305.75	10.982	
20,800.0	10,852.7	22,565.7	12,413.1	169.7	171.9	117.70	10,008.6	3,194.0	3,357.2	3,048.4	308.73	10.874	
20,900.0	10,852.5	22,665.7	12,411.4	171.3	173.5	117.68	10,108.6	3,193.2	3,356.5	3,044.8	311.72	10.768	
21,000.0	10,852.3	22,765.7	12,409.8	172.9	175.1	117.65	10,208.6	3,192.4	3,355.8	3,041.1	314.70	10.663	
21,094.0	10,851.5	22,841.9	12,408.5	174.5	176.3	117.65	10,284.8	3,191.8	3,355.3	3,038.0	317.29	10.575 SF	

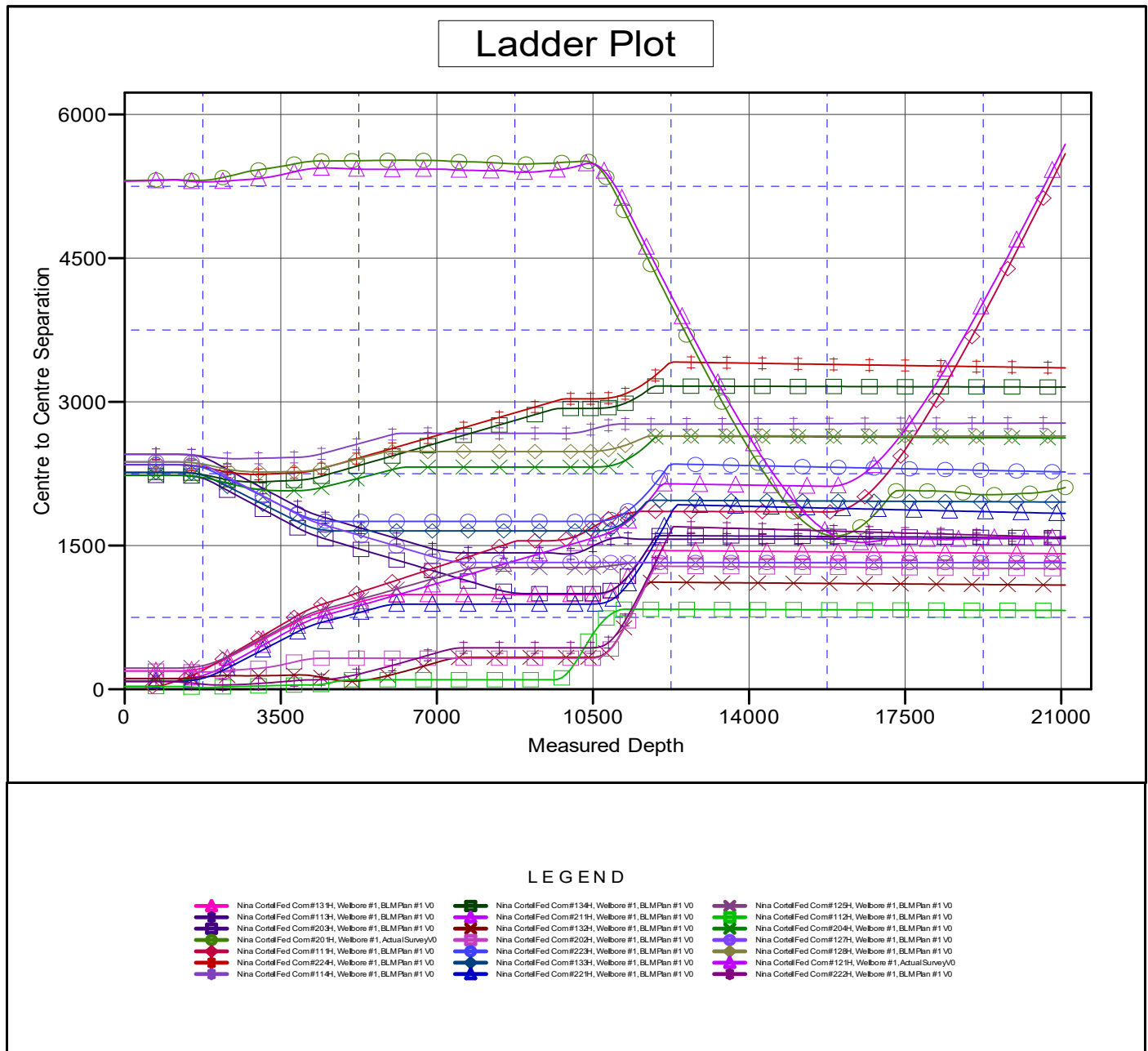
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company: Matador Production Company
Project: Antelope Ridge
Reference Site: Nina Cortell
Site Error: 0.0 usft
Reference Well: Nina Cortell Fed Com #126H
Well Error: 0.0 usft
Reference Wellbore: Wellbore #1
Reference Design: BLM Plan #1

Local Co-ordinate Reference: Well Nina Cortell Fed Com #126H
TVD Reference: KB @ 3818.5usft (Original Well Elev)
MD Reference: KB @ 3818.5usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.14 Server
Offset TVD Reference: Offset Datum

Reference Depths are relative to KB @ 3818.5usft (Original Well Elev) Coordinates are relative to: Nina Cortell Fed Com #126H
 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

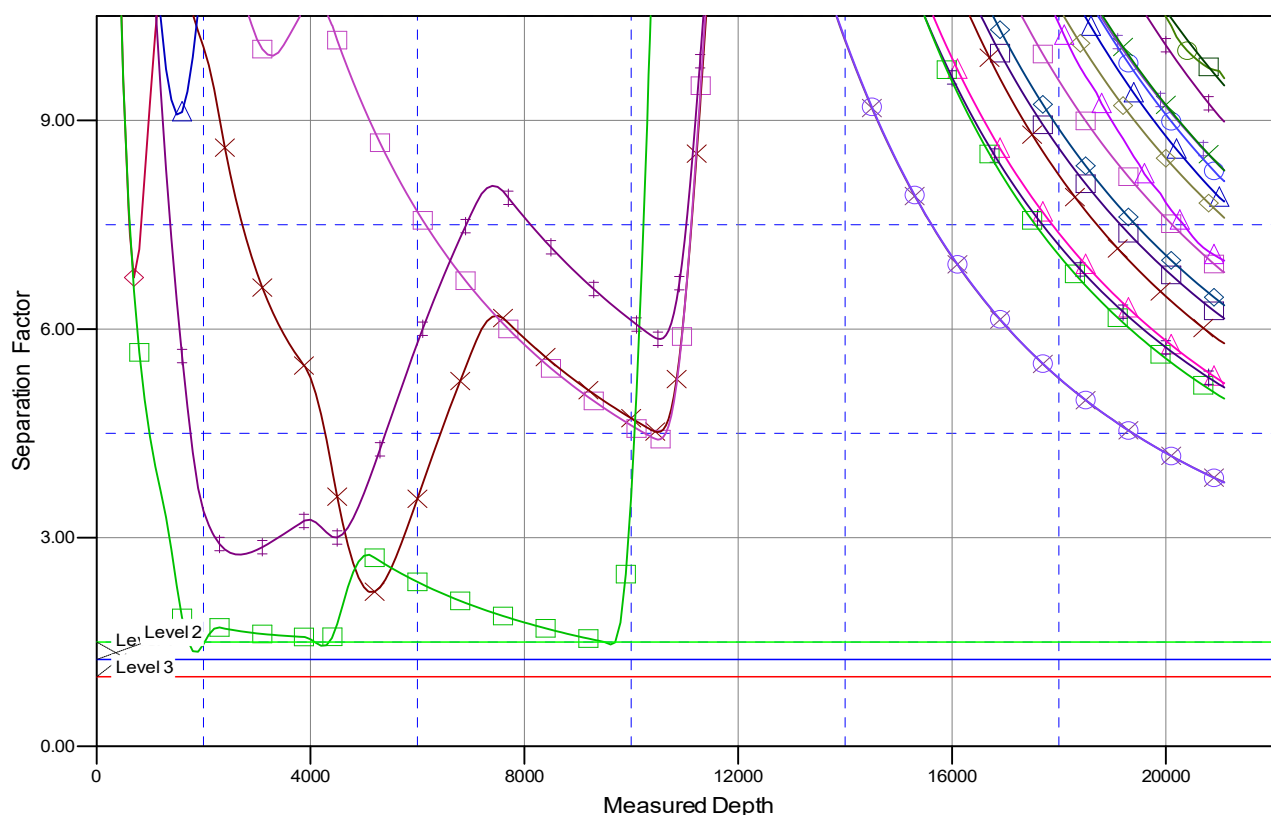
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 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
 Central Meridian is 104° 20' 0.000 W Grid Convergence at Surface is: 0.36°

Separation Factor Plot



LEGEND

Nina Cortell Fed Com #13H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #13H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #12H, Wellbore #1, BLM Plan #1 V0
Nina Cortell Fed Com #113H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #21H, 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 #132H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #204H, Wellbore #1, BLM Plan #1 V0
Nina Cortell Fed Com #20H, Wellbore #1, Actual Survey V0	Nina Cortell Fed Com #202H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #12H, Wellbore #1, BLM Plan #1 V0
Nina Cortell Fed Com #11H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #223H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #12H, Wellbore #1, BLM Plan #1 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 #12H, Wellbore #1, Actual Survey V0
Nina Cortell Fed Com #114H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #22H, Wellbore #1, BLM Plan #1 V0	Nina Cortell Fed Com #222H, 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 126H
SURFACE HOLE FOOTAGE:	242'S & 1681'W
BOTTOM HOLE FOOTAGE:	60'N & 1980'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 **10,174 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 **21,094 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

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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 system 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.

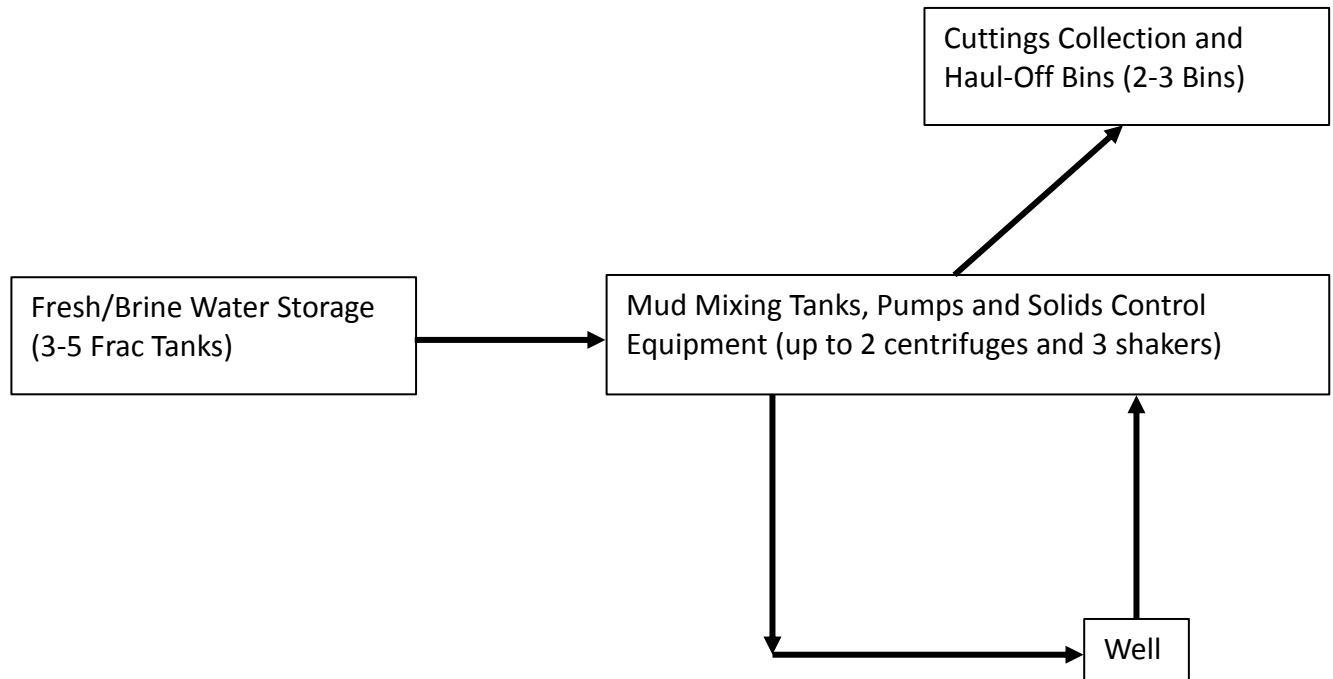
- D. One of the products of the combustion of hydrogen sulfide is sulfur dioxide (SO₂). Under certain conditions this gas may be equally as dangerous as H₂S. A pump type detector device, which determines the percent of SO₂ in air through concentrations in ppm, will be available. Although normal air movement 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 192847

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 192847
	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