

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.
2. Name of Operator		9. API Well No. 30 015 48018
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or Exploratory
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.

(Continued on page 2)

*(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 30 015 48018		² Pool Code 97860		³ Pool Name Jennings; Bone Spring, West	
⁴ Property Code 328098		⁵ Property Name VONI FED COM			⁶ Well Number 114H
⁷ GRID No. 228937		⁸ Operator Name MATADOR PRODUCTION COMPANY			⁹ Elevation 3193'

¹⁰Surface Location

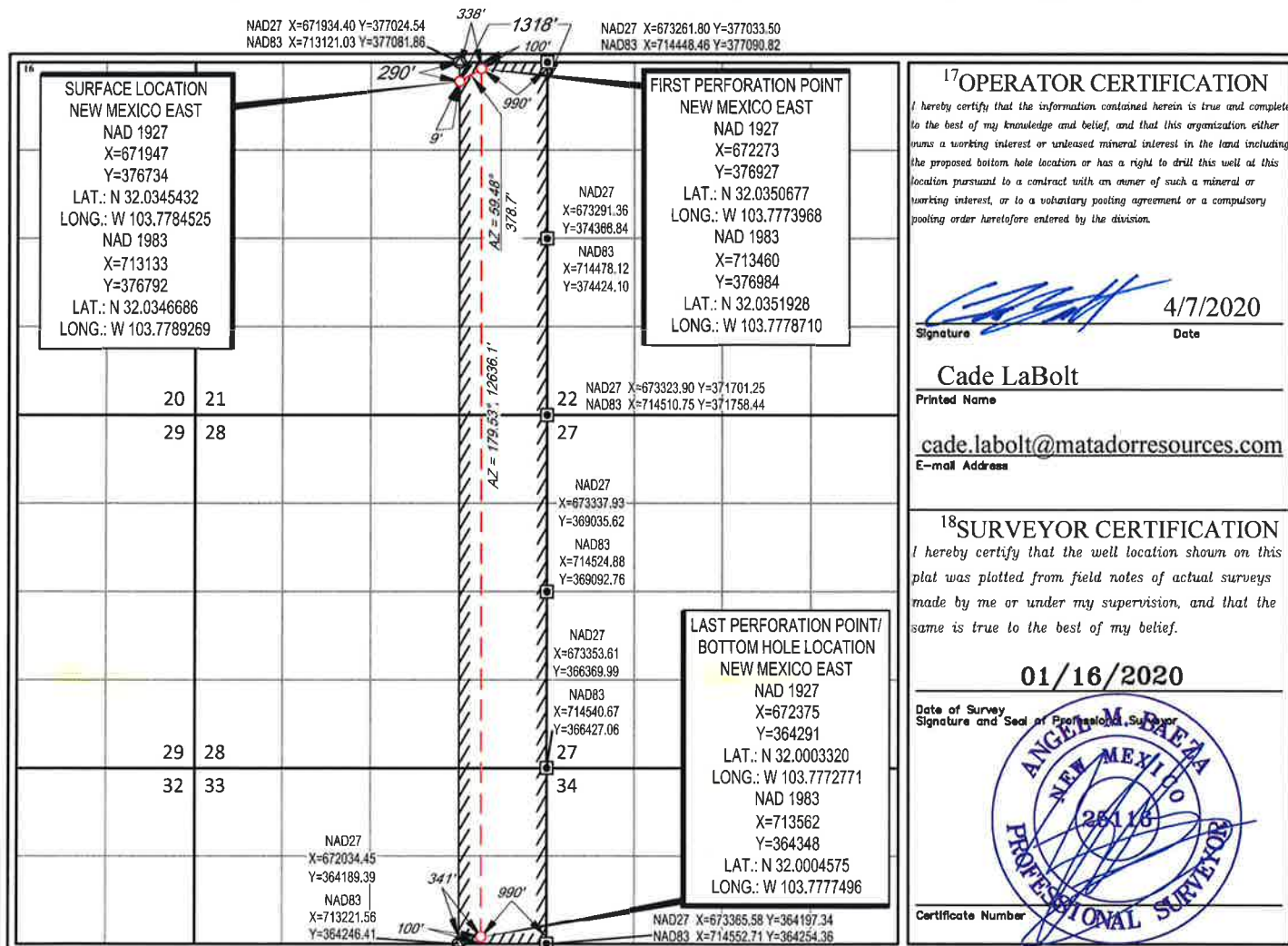
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	21	26-S	31-E	-	290'	NORTH	1318'	EAST	EDDY

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
1	33	26-S	31-E	-	100'	SOUTH	990'	EAST	EDDY

¹² Dedicated Acres 385.22	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MATADOR PRODUCTION COMPANY
LEASE NO.:	NMNM138866
WELL NAME & NO.:	VONI FEDERAL / 114H
SURFACE HOLE FOOTAGE:	290'/N & 1208'/E
BOTTOM HOLE FOOTAGE:	100'/S & 990'/E
LOCATION:	Section 21, T.26 S., R.31 E., NMPM
COUNTY:	Eddy 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

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

Casing Design:

1. The 13-3/8 inch surface casing shall be set at approximately **1092** feet (a minimum of **70 feet (Eddy 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 **8 hours** 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 **9-5/8** inch intermediate casing shall be set at approximately **4077** feet. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

Option 1 (Single Stage):

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

Option 2:

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 **High Cave/Karst Areas** if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
3. 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 **200 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 **200 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.

Option 1:

- a. 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.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **5000 (5M)** psi.

Option 2:

1. 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.
 - 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)
393-3612

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.

NMK04162020



U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Drilling Plan Data Report

11/09/2020

APD ID: 10400045466

Submission Date: 08/20/2019

Highlighted data
reflects the most
recent changes

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: VONI FED COM

Well Number: 114H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
509230	RUSTLER	3192	893	893	ANHYDRITE	NONE	N
509231	SALADO	1618	1574	1574	SALT	NONE	N
509243	CASTILE	-199	3391	3391	SALT	NONE	N
509232	LAMAR	-833	4025	4025	SALT	NONE	N
509233	BELL CANYON	-860	4052	4052	SANDSTONE	NATURAL GAS, OIL	N
509234	CHERRY CANYON	-1950	5142	5142	SANDSTONE	NATURAL GAS, OIL	N
509235	BRUSHY CANYON	-3099	6291	6291	SANDSTONE	NATURAL GAS, OIL	N
509236	BONE SPRING LIME	-4752	7944	7944	LIMESTONE	NATURAL GAS, OIL	N
509237	BONE SPRING 1ST	-5738	8930	9003	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 12000

Equipment: A 12,000' 5000-psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and one annular preventer will be utilized below surface casing to TD. See attachments for BOP and choke manifold diagrams. An accumulator complying with Onshore Order #2 requirements for the pressure rating of the BOP stack will be present. A rotating head will also be installed as needed.

Requesting Variance? YES

Variance request: Matador requests a variance to have the option of running a multi-bowl wellhead assembly for setting the Intermediate 1 and Production Strings. The BOPs will not be tested again unless any flanges are separated. Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not available, then one of equal or higher rating will be used. Matador requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, the wellbore will be secured with a blind flange of like pressure. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test. Matador request 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.

Testing Procedure: 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

Operator Name: MATADOR PRODUCTION COMPANY**Well Name:** VONI FED COM**Well Number:** 114H

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

Choke Diagram Attachment:

Voni_Fed_Com_114H_5M_Choke_Manifold_Arrangement_20200407123242.pdf

BOP Diagram Attachment:

Voni_Fed_Com_114H_5M_BOP_20200407123256.pdf

Voni_Fed_Com_114H_Co_Flex_Certs_20200407123256.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	918	0	918	3193	2275	918	J-55	54.5	BUTT	1.125	1.125	BUOY	1.8	BUOY	1.8
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	4077	0	4077	3194	-884	4077	J-55	40	BUTT	1.125	1.125	BUOY	1.8	BUOY	1.8
3	PRODUCTION	8.75	5.5	NEW	NON API	N	0	21544	0	9070	3194	-5877	21544	P-110	20	OTHER - Hunting TLW	1.125	1.125	BUOY	1.8	BUOY	1.8

Casing Attachments**Casing ID:** 1 **String Type:** SURFACE**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

Voni_Fed_Com_114H_BLM_Casing_Design_Assumptions_3_string_20200407123422.pdf

Operator Name: MATADOR PRODUCTION COMPANY

Well Name: VONI FED COM

Well Number: 114H

Casing Attachments

Casing ID: 2 String Type: INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Voni_Fed_Com_114H_BLM_Casing_Design_Assumptions_3_string_20200407123457.pdf

Casing ID: 3 String Type: PRODUCTION

Inspection Document:

Spec Document:

Voni_Fed_Com_114H_Casing_Specs_5.5in_20lb_Hunting_TLW_SC_20200407123549.pdf

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Voni_Fed_Com_114H_BLM_Casing_Design_Assumptions_3_string_20200407123559.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	618	420	1.72	12.5	716	50	C	5% NaCl + LCM
SURFACE	Tail		618	918	250	1.38	14.8	347	50	C	5% NaCl + LCM
INTERMEDIATE	Lead		0	3262	750	2.13	12.6	1601	50	C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
INTERMEDIATE	Tail		3262	4077	300	1.38	14.8	417	50	C	5% NaCl + LCM
PRODUCTION	Lead		3877	8013	580	2.22	11.5	1295	25	H	Fluid Loss + Dispersant + Retarder + LCM

Operator Name: MATADOR PRODUCTION COMPANY**Well Name:** VONI FED COM**Well Number:** 114H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail		8013	2154 4	3170	1.35	13.2	4283	25	H	Fluid Loss + Dispersant + Retarder + LCM

Section 5 - Circulating Medium

Mud System Type: Closed**Will an air or gas system be Used?** NO**Description of the equipment for the circulating system in accordance with Onshore Order #2:****Diagram of the equipment for the circulating system in accordance with Onshore Order #2:**

Describe what will be on location to control well or mitigate other conditions: 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.

Describe the mud monitoring system utilized: An electronic Pason mud monitoring system complying with Onshore Order 2 will be used.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	918	SPUD MUD	8.4	8.8							
918	4077	OTHER : Brine/OBM	9.5	10.2							
4077	9070	OTHER : Cut Brine/OBM	8.6	9.4							

Operator Name: MATADOR PRODUCTION COMPANY**Well Name:** VONI FED COM**Well Number:** 114H

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

A 2-person mud logging program will be used from Kick-off point to TD.

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.

List of open and cased hole logs run in the well:

CEMENT BOND LOG,GAMMA RAY LOG,MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

No core or drill stem test is planned.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4434**Anticipated Surface Pressure:** 2438**Anticipated Bottom Hole Temperature(F):** 160**Anticipated abnormal pressures, temperatures, or potential geologic hazards?** NO**Describe:****Contingency Plans geohazards description:****Contingency Plans geohazards attachment:****Hydrogen Sulfide drilling operations plan required?** NO**Hydrogen sulfide drilling operations plan:**

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Voni_Fed_Com_114H_Directional_AC_Report_v2_20200407124525.pdf

Voni_Fed_Com_114H_Directional_Well_Plan_v2_20200407124525.pdf

Other proposed operations facets description:**Other proposed operations facets attachment:**

Voni_Fed_Com_114H_Drill_Plan_20200407124504.pdf

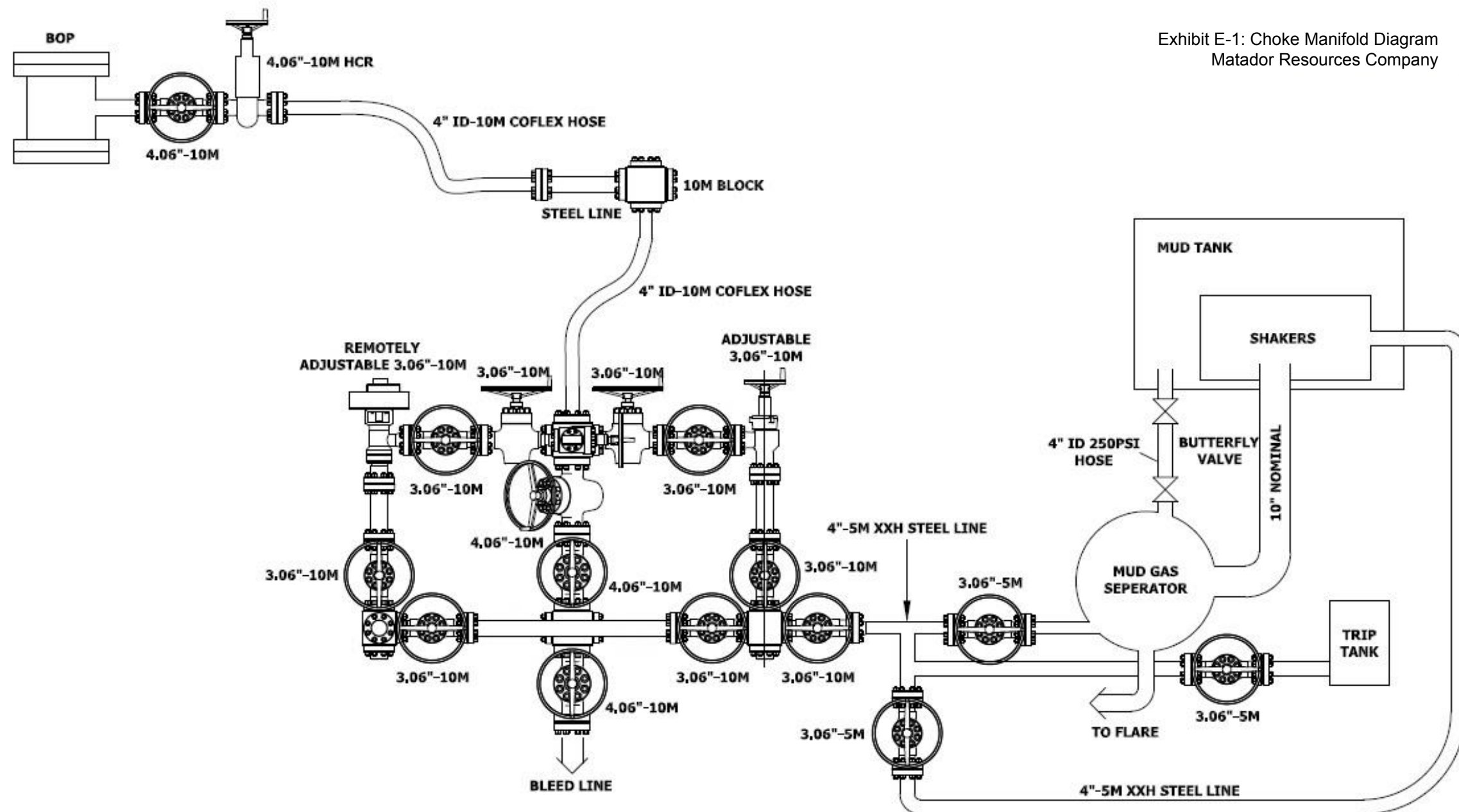
Voni_Fed_Com_114H_Closed_Loop_System_20200407124504.pdf

Voni_Fed_Com_114H_3_String_Wellhead_Diagram_20200407124504.pdf

H2S_Plan_20200407124504.pdf

Gas_Capture_Plan___Voni_Federal_Com_Slot_4_20200407124540.pdf

Other Variance attachment:

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
HIDE MACHINED CORNER RADI: ± .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	APPRD ENG.
02	8-3-15	ISSUED FOR INFORMATION		CP	CSL
01	7-8-15	ISSUED FOR INFORMATION		CSL	

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PATTERSON-UTI

DRILLING COMPANY LLC

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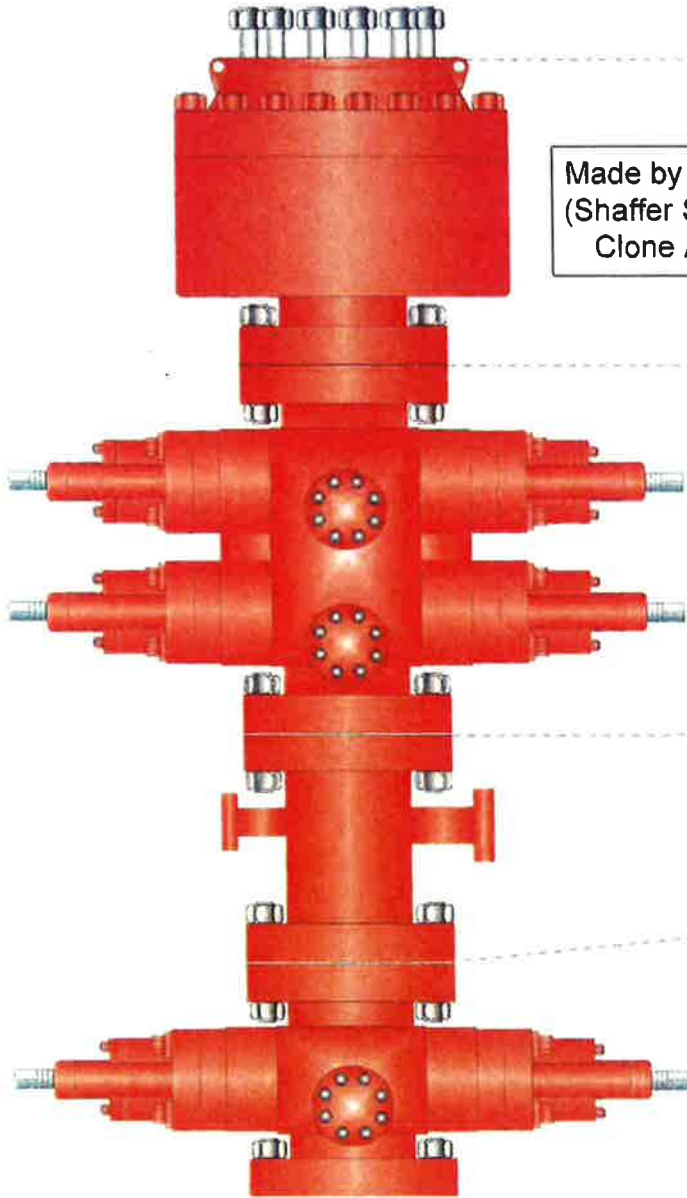


CHOKE MANIFOLD

10M CHOKE ARRANGEMENT
RIG 297

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

SHEET 1 OF 1 REV. 02

**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



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Graph

December 9, 2014

Customer: Patterson

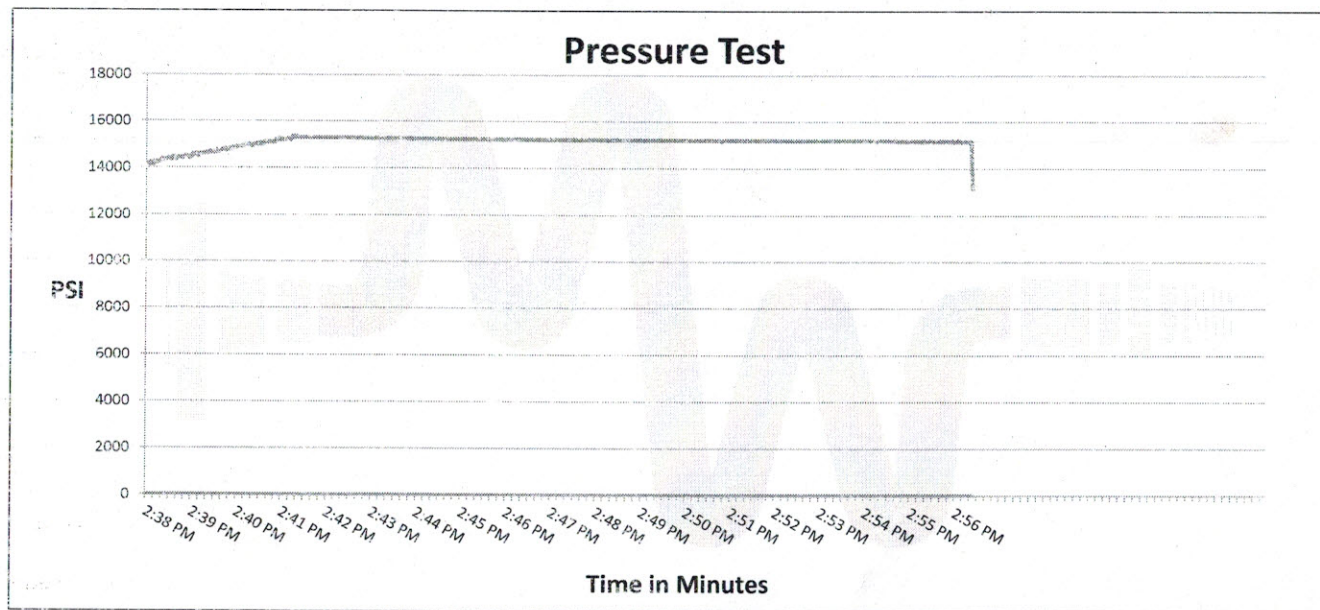
Pick Ticket #: 284918

Hose Specifications

<u>Hose Type</u>	<u>Length</u>
Mud	70'
<u>I.D.</u>	<u>O.D.</u>
3"	4.79"
<u>Working Pressure</u>	<u>Burst Pressure</u>
10000 PSI	Standard Safety Multiplier Applies

Verification

<u>Type of Fitting</u>	<u>Coupling Method</u>
4 1/16 10K	Swage
<u>Die Size</u>	<u>Final O.D.</u>
5.37"	5.37"
<u>Hose Serial #</u>	<u>Hose Assembly Serial #</u>
10490	284918-3



Test Pressure
15000 PSI

Time Held at Test Pressure
16 3/4 Minutes

Actual Burst Pressure

Peak Pressure
15410 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: Tyler Hill

Approved By: Ryan Adams

[Signature of Tyler Hill]

[Signature of Ryan Adams]

Matador Production Company

Rustler Breaks

Voni

Voni Fed Com #114H

Wellbore #1

BLM Plan #1

Anticollision Report

21 January, 2020

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

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

Survey Tool Program	Date	1/21/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	21,544.1	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
Voni						
Voni Fed Com #024H - Wellbore #1 - BLM Plan #1	1,066.2	1,070.1	9.9	2.7	1.381	Level 3, CC, ES, SF
Voni Fed Com #104H - Wellbore #1 - BLM Plan #1	1,200.0	1,201.0	85.5	77.4	10.498	CC, ES
Voni Fed Com #104H - Wellbore #1 - BLM Plan #1	7,700.0	7,700.0	171.1	116.3	3.119	SF
Voni Fed Com #108H - Wellbore #1 - BLM Plan #1	500.0	501.0	80.0	76.9	25.594	CC, ES
Voni Fed Com #108H - Wellbore #1 - BLM Plan #1	21,544.1	21,141.1	791.0	422.7	2.148	SF
Voni Fed Com #124H - Wellbore #1 - BLM Plan #1	500.0	501.0	222.1	219.0	71.026	CC, ES
Voni Fed Com #124H - Wellbore #1 - BLM Plan #1	21,544.1	22,304.6	818.5	571.7	3.317	SF
Voni Fed Com #134H - Wellbore #1 - BLM Plan #1	2,040.6	2,041.8	15.6	1.4	1.099	Level 2, CC, ES, SF
Voni Fed Com #204H - Wellbore #1 - BLM Plan #1	500.0	500.0	192.4	189.3	61.590	CC
Voni Fed Com #204H - Wellbore #1 - BLM Plan #1	8,761.1	8,754.2	241.3	179.2	3.887	ES
Voni Fed Com #204H - Wellbore #1 - BLM Plan #1	8,800.0	8,788.9	242.0	179.7	3.885	SF
Voni Fed Com #218H - Wellbore #1 - BLM Plan #1	2,726.0	2,718.2	187.6	168.4	9.785	CC
Voni Fed Com #218H - Wellbore #1 - BLM Plan #1	2,800.0	2,808.5	187.9	168.1	9.496	ES
Voni Fed Com #218H - Wellbore #1 - BLM Plan #1	3,300.0	3,283.6	206.0	182.6	8.803	SF
Voni Fed Com #224H - Wellbore #1 - BLM Plan #1	5,849.5	5,845.6	75.1	33.2	1.792	CC
Voni Fed Com #224H - Wellbore #1 - BLM Plan #1	8,659.8	8,656.6	85.0	23.4	1.381	Level 3, ES, SF
Voni Fed Com #228H - Wellbore #1 - BLM Plan #1	2,312.7	2,311.0	93.8	77.7	5.817	CC, ES
Voni Fed Com #228H - Wellbore #1 - BLM Plan #1	7,100.0	7,086.3	222.7	172.1	4.406	SF
Voni Fed Com #244H - Wellbore #1 - BLM Plan #1	1,835.8	1,838.6	41.2	28.5	3.243	CC
Voni Fed Com #244H - Wellbore #1 - BLM Plan #1	1,900.0	1,902.7	41.4	28.2	3.145	ES
Voni Fed Com #244H - Wellbore #1 - BLM Plan #1	8,983.2	8,941.3	173.2	110.2	2.751	SF

Offset Design												Offset Site Error:	0.0 usft
Voni - Voni Fed Com #024H - Wellbore #1 - BLM Plan #1												Offset Well Error:	0.0 usft
Survey Program: 0-MWD													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	3.0	3.0	0.0	0.0	-90.29	-0.2	-30.0	30.0				
100.0	100.0	103.0	103.0	0.1	0.1	-90.29	-0.2	-30.0	30.0	29.8	0.27	112.446	
200.0	200.0	203.0	203.0	0.5	0.5	-90.29	-0.2	-30.0	30.0	29.0	0.98	30.518	
300.0	300.0	303.0	303.0	0.8	0.9	-90.29	-0.2	-30.0	30.0	28.3	1.70	17.655	
400.0	400.0	403.0	403.0	1.2	1.2	-90.29	-0.2	-30.0	30.0	27.6	2.42	12.420	
500.0	500.0	503.0	503.0	1.6	1.6	-90.29	-0.2	-30.0	30.0	26.9	3.13	9.580	
600.0	600.0	603.5	603.5	1.9	1.9	-89.69	0.2	-29.1	29.2	25.3	3.85	7.574	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #024H - 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		
700.0	700.0	703.9	703.9	2.3	2.3	-87.71	1.1	-26.6	26.6	22.1	4.56	5.842		
800.0	800.0	804.2	804.1	2.6	2.6	-83.50	2.6	-22.4	22.6	17.3	5.27	4.284		
900.0	900.0	904.3	904.0	3.0	3.0	-74.40	4.6	-16.6	17.3	11.3	5.99	2.883		
1,000.0	1,000.0	1,004.2	1,003.5	3.4	3.4	-51.45	7.3	-9.1	11.7	5.0	6.71	1.745		
1,066.2	1,066.2	1,070.1	1,069.2	3.6	3.6	-19.61	9.4	-3.3	9.9	2.7	7.19	1.381	Level 3, CC, ES, SF	
1,100.0	1,100.0	1,103.8	1,102.6	3.7	3.7	-0.50	10.5	-0.1	10.5	3.1	7.44	1.414	Level 3	
1,200.0	1,200.0	1,202.9	1,201.2	4.1	4.1	36.39	14.3	10.5	17.9	9.7	8.14	2.195		
1,300.0	1,300.0	1,301.7	1,299.1	4.4	4.5	50.63	18.6	22.7	29.6	20.8	8.83	3.358		
1,400.0	1,400.0	1,400.8	1,397.2	4.8	4.9	56.91	23.3	35.7	43.0	33.5	9.54	4.510		
1,500.0	1,500.0	1,500.2	1,495.2	5.1	5.3	60.19	27.9	48.7	56.6	46.4	10.25	5.527		
1,600.0	1,600.0	1,598.9	1,593.4	5.5	5.7	31.38	32.5	61.7	69.6	58.7	10.96	6.357		
1,700.0	1,700.0	1,701.8	1,691.7	5.9	6.1	33.62	37.2	74.7	81.3	69.6	11.68	6.959		
1,800.0	1,799.9	1,802.4	1,790.1	6.2	6.5	35.92	41.8	87.7	91.6	79.2	12.40	7.389		
1,900.0	1,899.7	1,897.1	1,888.7	6.6	6.9	38.35	46.5	100.8	100.7	87.6	13.10	7.689		
2,000.0	1,999.4	1,996.6	1,987.3	6.9	7.3	40.98	51.1	113.8	108.6	94.8	13.81	7.863		
2,100.0	2,098.9	2,103.8	2,085.9	7.3	7.7	43.83	55.8	126.9	115.5	100.9	14.57	7.929		
2,200.0	2,198.3	2,195.8	2,184.5	7.7	8.1	46.94	60.4	139.9	121.4	106.1	15.27	7.952		
2,300.0	2,297.4	2,304.6	2,283.1	8.0	8.6	50.36	65.1	153.0	126.6	110.5	16.04	7.890		
2,400.0	2,396.4	2,395.0	2,381.7	8.4	8.9	53.84	69.7	166.0	131.6	114.9	16.76	7.854		
2,500.0	2,495.5	2,505.4	2,480.3	8.8	9.4	57.06	74.4	179.1	137.1	119.6	17.56	7.810		
2,600.0	2,594.5	2,605.9	2,578.9	9.2	9.8	60.02	79.0	192.2	143.0	124.7	18.33	7.803		
2,700.0	2,693.5	2,706.3	2,677.5	9.6	10.2	62.74	83.7	205.2	149.3	130.2	19.11	7.811		
2,800.0	2,792.5	2,806.8	2,776.1	9.9	10.6	65.23	88.3	218.3	155.9	136.0	19.90	7.832		
2,900.0	2,891.6	2,907.2	2,874.7	10.3	11.1	67.52	93.0	231.3	162.7	142.0	20.69	7.863		
3,000.0	2,990.6	3,007.6	2,973.3	10.7	11.5	69.63	97.6	244.4	169.8	148.3	21.49	7.900		
3,100.0	3,089.6	3,108.1	3,071.9	11.1	11.9	71.56	102.3	257.4	177.1	154.8	22.29	7.942		
3,200.0	3,188.6	3,208.5	3,170.5	11.5	12.3	73.34	106.9	270.5	184.5	161.4	23.10	7.988		
3,300.0	3,287.7	3,308.9	3,269.1	11.9	12.7	74.98	111.6	283.5	192.2	168.3	23.91	8.037		
3,400.0	3,386.7	3,409.4	3,367.7	12.3	13.1	76.49	116.2	296.6	200.0	175.2	24.72	8.088		
3,500.0	3,485.7	3,490.2	3,466.3	12.7	13.5	77.89	120.9	309.6	207.9	182.4	25.46	8.164		
3,600.0	3,584.8	3,589.7	3,564.9	13.1	13.9	79.19	125.5	322.7	215.9	189.6	26.27	8.217		
3,667.1	3,651.2	3,656.6	3,631.0	13.4	14.2	80.01	128.6	331.4	221.3	194.5	26.82	8.253		
3,700.0	3,683.8	3,689.3	3,663.5	13.5	14.3	80.40	130.2	335.7	224.0	197.0	27.09	8.272		
3,800.0	3,783.1	3,788.9	3,762.1	13.9	14.7	81.11	134.8	348.8	232.6	204.7	27.88	8.343		
3,900.0	3,882.7	3,888.5	3,860.7	14.3	15.1	81.18	139.5	361.8	241.5	212.9	28.65	8.432		
4,000.0	3,982.5	3,988.0	3,959.3	14.7	15.6	80.66	144.1	374.9	250.9	221.5	29.39	8.538		
4,100.0	4,082.4	4,087.4	4,057.7	15.0	16.0	79.63	148.8	387.9	260.8	230.7	30.10	8.664		
4,200.5	4,182.8	4,187.0	4,156.3	15.4	16.4	109.27	153.4	401.0	271.3	240.5	30.79	8.812		
4,300.0	4,282.4	4,285.6	4,253.9	15.7	16.8	107.51	158.0	413.9	282.3	250.8	31.46	8.972		
4,400.0	4,382.4	4,384.6	4,352.0	16.1	17.2	105.88	162.7	426.9	293.5	261.4	32.14	9.133		
4,500.0	4,482.4	4,483.6	4,450.1	16.4	17.6	104.36	167.3	439.9	305.0	272.2	32.82	9.294		
4,600.0	4,582.4	4,582.7	4,548.1	16.7	18.0	102.96	171.9	452.8	316.7	283.2	33.50	9.453		
4,700.0	4,682.4	4,681.7	4,646.2	17.1	18.5	101.66	176.5	465.8	328.5	294.4	34.19	9.610		
4,800.0	4,782.4	4,780.7	4,744.2	17.4	18.9	100.44	181.2	478.8	340.5	305.7	34.87	9.766		
4,900.0	4,882.4	4,879.7	4,842.3	17.8	19.3	99.31	185.8	491.8	352.7	317.1	35.56	9.918		
5,000.0	4,982.4	4,978.8	4,940.4	18.1	19.7	98.26	190.4	504.8	365.0	328.7	36.25	10.068		
5,100.0	5,082.4	5,077.8	5,038.4	18.5	20.1	97.27	195.0	517.8	377.3	340.4	36.94	10.214		
5,200.0	5,182.4	5,176.8	5,136.5	18.8	20.5	96.35	199.7	530.7	389.8	352.2	37.64	10.358		
5,300.0	5,282.4	5,275.9	5,234.6	19.2	20.9	95.48	204.3	543.7	402.4	364.1	38.33	10.498		
5,400.0	5,382.4	5,374.9	5,332.6	19.5	21.4	94.67	208.9	556.7	415.1	376.0	39.03	10.635		
5,500.0	5,482.4	5,473.9	5,430.7	19.9	21.8	93.91	213.5	569.7	427.8	388.1	39.73	10.769		
5,600.0	5,582.4	5,572.9	5,528.8	20.2	22.2	93.18	218.2	582.7	440.6	400.2	40.43	10.900		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
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Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #024H - 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		
5,700.0	5,682.4	5,672.0	5,626.8	20.6	22.6	92.50	222.8	595.7	453.5	412.4	41.13	11.027		
5,800.0	5,782.4	5,771.0	5,724.9	20.9	23.0	91.86	227.4	608.6	466.5	424.6	41.83	11.151		
5,900.0	5,882.4	5,870.2	5,823.1	21.3	23.4	91.25	232.1	621.6	479.4	436.9	42.53	11.272		
6,000.0	5,982.4	5,982.9	5,934.9	21.6	23.9	90.67	236.7	634.8	491.1	447.7	43.34	11.330		
6,100.0	6,082.4	6,096.2	6,047.8	22.0	24.3	90.24	240.4	644.9	500.0	455.9	44.12	11.331		
6,200.0	6,182.4	6,210.2	6,161.4	22.3	24.8	89.96	242.8	651.9	506.1	461.2	44.87	11.279		
6,300.0	6,282.4	6,324.4	6,275.6	22.7	25.1	89.80	244.2	655.7	509.4	463.8	45.58	11.177		
6,400.0	6,382.4	6,434.2	6,385.4	23.0	25.5	89.77	244.5	656.4	510.1	463.8	46.26	11.027		
6,500.0	6,482.4	6,534.2	6,485.4	23.4	25.8	89.77	244.5	656.4	510.1	463.1	46.94	10.866		
6,600.0	6,582.4	6,634.2	6,585.4	23.7	26.1	89.77	244.5	656.4	510.1	462.4	47.63	10.709		
6,700.0	6,682.4	6,734.2	6,685.4	24.1	26.4	89.77	244.5	656.4	510.1	461.8	48.32	10.556		
6,800.0	6,782.4	6,834.2	6,785.4	24.4	26.7	89.77	244.5	656.4	510.1	461.1	49.01	10.408		
6,900.0	6,882.4	6,934.2	6,885.4	24.8	27.1	89.77	244.5	656.4	510.1	460.4	49.70	10.264		
7,000.0	6,982.4	7,034.2	6,985.4	25.1	27.4	89.77	244.5	656.4	510.1	459.7	50.39	10.123		
7,100.0	7,082.4	7,134.2	7,085.4	25.5	27.7	89.78	244.4	656.4	510.1	459.0	51.08	9.986		
7,107.7	7,090.1	7,141.9	7,093.1	25.5	27.7	89.80	244.2	656.4	510.1	458.9	51.13	9.976		
7,200.0	7,182.4	7,232.9	7,183.5	25.8	28.0	90.90	234.5	656.5	510.2	458.4	51.77	9.855		
7,300.0	7,282.4	7,325.7	7,272.9	26.2	28.2	93.65	209.9	656.6	511.4	458.9	52.48	9.744		
7,400.0	7,382.4	7,408.8	7,348.6	26.5	28.4	97.42	176.0	656.7	515.9	462.8	53.13	9.711		
7,500.0	7,482.4	7,480.7	7,409.6	26.9	28.5	101.56	138.0	656.8	526.5	473.0	53.51	9.838		
7,600.0	7,582.4	7,541.7	7,457.3	27.2	28.6	105.59	100.0	656.9	545.3	491.9	53.39	10.213		
7,700.0	7,682.4	7,593.1	7,494.2	27.6	28.6	109.24	64.2	657.1	573.7	521.1	52.63	10.901		
7,800.0	7,782.4	7,636.2	7,522.5	27.9	28.7	112.42	31.7	657.2	611.9	560.6	51.26	11.936		
7,900.0	7,882.4	7,672.6	7,544.5	28.3	28.7	115.14	2.7	657.3	659.3	609.9	49.45	13.333		
8,000.0	7,982.4	7,700.0	7,559.8	28.7	28.8	117.18	-20.0	657.4	714.9	667.6	47.30	15.113		
8,100.0	8,082.4	7,729.8	7,575.2	29.0	28.8	119.40	-45.5	657.4	777.4	732.1	45.29	17.164		
8,200.0	8,182.4	7,750.0	7,584.9	29.4	28.8	120.88	-63.2	657.5	845.8	802.6	43.14	19.605		
8,300.0	8,282.4	7,772.2	7,594.7	29.7	28.8	122.49	-83.1	657.6	918.8	877.6	41.27	22.262		
8,400.0	8,382.4	7,800.0	7,606.0	30.1	28.9	124.47	-108.5	657.7	996.0	956.2	39.76	25.047		
8,500.0	8,482.4	7,800.0	7,606.0	30.4	28.9	124.47	-108.5	657.7	1,076.0	1,038.2	37.79	28.474		
8,513.6	8,496.0	7,800.0	7,606.0	30.5	28.9	124.47	-108.5	657.7	1,087.2	1,049.6	37.54	28.960		
8,550.0	8,532.3	7,800.0	7,606.0	30.6	28.9	-39.86	-108.5	657.7	1,116.8	1,079.9	36.87	30.290		
8,600.0	8,582.0	7,819.9	7,613.4	30.7	28.9	-34.87	-127.1	657.7	1,155.9	1,119.5	36.38	31.770		
8,650.0	8,631.1	7,829.0	7,616.5	30.9	28.9	-31.31	-135.5	657.8	1,193.6	1,158.0	35.61	33.517		
8,700.0	8,679.1	7,850.0	7,623.2	31.0	28.9	-27.97	-155.5	657.8	1,229.7	1,194.6	35.08	35.056		
8,750.0	8,725.7	7,850.0	7,623.2	31.2	28.9	-25.88	-155.5	657.8	1,263.5	1,229.5	34.08	37.075		
8,800.0	8,770.6	7,850.0	7,623.2	31.3	28.9	-24.12	-155.5	657.8	1,295.6	1,262.5	33.10	39.146		
8,850.0	8,813.4	7,871.8	7,629.4	31.4	29.0	-22.14	-176.4	657.9	1,325.1	1,292.5	32.55	40.713		
8,900.0	8,853.7	7,883.9	7,632.5	31.5	29.0	-20.70	-188.0	657.9	1,352.3	1,320.5	31.81	42.514		
8,950.0	8,891.4	7,900.0	7,636.2	31.6	29.0	-19.42	-203.7	658.0	1,377.1	1,345.9	31.16	44.198		
9,000.0	8,926.0	7,900.0	7,636.2	31.6	29.0	-18.61	-203.7	658.0	1,399.4	1,369.1	30.27	46.228		
9,050.0	8,957.4	7,922.1	7,640.6	31.7	29.1	-17.62	-225.4	658.1	1,418.8	1,389.0	29.77	47.653		
9,100.0	8,985.2	7,950.0	7,645.0	31.8	29.1	-16.73	-252.9	658.2	1,435.7	1,406.4	29.38	48.874		
9,150.0	9,009.4	7,950.0	7,645.0	32.0	29.1	-16.32	-252.9	658.2	1,449.4	1,420.8	28.66	50.576		
9,200.0	9,029.6	7,950.0	7,645.0	32.1	29.1	-16.00	-252.9	658.2	1,460.7	1,432.6	28.05	52.074		
9,250.0	9,045.7	7,976.4	7,647.8	32.3	29.2	-15.50	-279.2	658.3	1,468.6	1,440.8	27.79	52.850		
9,300.0	9,057.7	8,000.0	7,649.4	32.4	29.2	-15.14	-302.7	658.3	1,473.9	1,446.4	27.55	53.499		
9,350.0	9,065.4	8,000.0	7,649.4	32.6	29.2	-15.09	-302.7	658.3	1,476.1	1,448.8	27.24	54.184		
9,400.0	9,068.8	8,025.8	7,650.0	32.8	29.3	-14.89	-328.5	658.4	1,475.3	1,448.2	27.17	54.299		
9,413.6	9,069.0	8,025.8	7,650.0	32.8	29.3	-14.91	-328.5	658.4	1,474.6	1,447.4	27.14	54.332		
9,500.0	9,069.0	8,103.8	7,650.0	33.2	29.6	-14.50	-398.9	659.0	1,470.2	1,442.9	27.30	53.845		
9,600.0	9,069.0	8,205.0	7,650.0	33.7	30.1	-13.98	-497.7	659.8	1,466.3	1,438.6	27.69	52.952		

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 Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #024H - 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		
9,700.0	9,069.0	8,305.8	7,650.0	34.2	30.6	-13.57	-596.9	660.6	1,463.3	1,435.1	28.25	51.806		
9,800.0	9,069.0	8,406.2	7,650.0	34.8	31.3	-13.28	-696.5	661.4	1,461.2	1,432.3	28.96	50.453		
9,900.0	9,069.0	8,506.4	7,650.0	35.5	32.0	-13.09	-796.3	662.3	1,460.0	1,430.2	29.83	48.944		
10,005.0	9,069.0	8,601.4	7,650.0	36.2	32.7	-13.03	-901.3	663.1	1,459.6	1,428.7	30.84	47.330		
10,005.2	9,069.0	8,601.2	7,650.0	36.2	32.7	-13.03	-901.5	663.1	1,459.6	1,428.7	30.84	47.330		
10,100.0	9,069.0	8,706.4	7,650.0	37.0	33.6	-13.03	-996.3	663.9	1,459.6	1,427.6	31.96	45.672		
10,200.0	9,069.0	8,806.4	7,650.0	37.8	34.5	-13.03	-1,096.3	664.7	1,459.6	1,426.5	33.12	44.067		
10,300.0	9,069.0	8,906.4	7,650.0	38.6	35.4	-13.03	-1,196.3	665.6	1,459.6	1,425.3	34.33	42.515		
10,400.0	9,069.0	9,006.4	7,650.0	39.6	36.4	-13.03	-1,296.3	666.4	1,459.6	1,424.0	35.58	41.023		
10,500.0	9,069.0	9,106.4	7,650.0	40.5	37.5	-13.03	-1,396.3	667.2	1,459.6	1,422.7	36.87	39.593		
10,600.0	9,069.0	9,206.4	7,650.0	41.5	38.6	-13.03	-1,496.3	668.0	1,459.6	1,421.4	38.18	38.226		
10,700.0	9,069.0	9,306.4	7,650.0	42.6	39.7	-13.03	-1,596.3	668.9	1,459.6	1,420.1	39.53	36.924		
10,800.0	9,069.0	9,406.4	7,650.0	43.7	40.9	-13.03	-1,696.3	669.7	1,459.6	1,418.7	40.90	35.684		
10,900.0	9,069.0	9,506.4	7,650.0	44.8	42.1	-13.03	-1,796.3	670.5	1,459.6	1,417.3	42.30	34.506		
11,000.0	9,069.0	9,606.4	7,650.0	45.9	43.3	-13.03	-1,896.3	671.3	1,459.6	1,415.9	43.72	33.386		
11,100.0	9,069.0	9,706.4	7,650.0	47.1	44.6	-13.03	-1,996.3	672.2	1,459.6	1,414.4	45.16	32.323		
11,200.0	9,069.0	9,806.4	7,650.0	48.3	45.8	-13.03	-2,096.3	673.0	1,459.6	1,413.0	46.61	31.313		
11,300.0	9,069.0	9,906.4	7,650.0	49.6	47.1	-13.03	-2,196.3	673.8	1,459.6	1,411.5	48.09	30.354		
11,400.0	9,069.0	10,006.4	7,650.0	50.8	48.5	-13.03	-2,296.3	674.6	1,459.6	1,410.0	49.57	29.444		
11,500.0	9,069.0	10,106.4	7,650.0	52.1	49.8	-13.03	-2,396.3	675.5	1,459.6	1,408.5	51.07	28.579		
11,600.0	9,069.0	10,206.4	7,650.0	53.4	51.2	-13.03	-2,496.2	676.3	1,459.6	1,407.0	52.58	27.757		
11,700.0	9,069.0	10,306.4	7,650.0	54.7	52.5	-13.03	-2,596.2	677.1	1,459.6	1,405.5	54.11	26.976		
11,800.0	9,069.0	10,406.4	7,650.0	56.1	53.9	-13.03	-2,696.2	678.0	1,459.6	1,404.0	55.64	26.232		
11,900.0	9,069.0	10,506.4	7,650.0	57.4	55.4	-13.04	-2,796.2	678.8	1,459.6	1,402.4	57.19	25.524		
12,000.0	9,069.0	10,606.4	7,650.0	58.8	56.8	-13.04	-2,896.2	679.6	1,459.6	1,400.9	58.74	24.849		
12,100.0	9,069.0	10,706.4	7,650.0	60.2	58.2	-13.04	-2,996.2	680.4	1,459.6	1,399.3	60.30	24.206		
12,200.0	9,069.0	10,806.4	7,650.0	61.6	59.6	-13.04	-3,096.2	681.3	1,459.6	1,397.7	61.87	23.593		
12,300.0	9,069.0	10,906.4	7,650.0	63.0	61.1	-13.04	-3,196.2	682.1	1,459.6	1,396.2	63.44	23.007		
12,400.0	9,069.0	11,006.4	7,650.0	64.4	62.6	-13.04	-3,296.2	682.9	1,459.6	1,394.6	65.02	22.448		
12,500.0	9,069.0	11,106.4	7,650.0	65.8	64.0	-13.04	-3,396.2	683.7	1,459.6	1,393.0	66.61	21.913		
12,600.0	9,069.0	11,206.4	7,650.0	67.3	65.5	-13.04	-3,496.2	684.6	1,459.6	1,391.4	68.20	21.401		
12,700.0	9,069.0	11,306.4	7,650.0	68.7	67.0	-13.04	-3,596.2	685.4	1,459.6	1,389.8	69.80	20.911		
12,800.0	9,069.0	11,406.4	7,650.0	70.2	68.5	-13.04	-3,696.2	686.2	1,459.6	1,388.2	71.40	20.442		
12,900.0	9,069.0	11,506.4	7,650.0	71.6	70.0	-13.04	-3,796.2	687.0	1,459.6	1,386.6	73.01	19.992		
13,000.0	9,069.0	11,606.4	7,650.0	73.1	71.5	-13.04	-3,896.2	687.9	1,459.6	1,385.0	74.62	19.560		
13,100.0	9,069.0	11,706.4	7,650.0	74.6	73.0	-13.04	-3,996.2	688.7	1,459.6	1,383.4	76.24	19.146		
13,200.0	9,069.0	11,806.4	7,650.0	76.1	74.6	-13.04	-4,096.2	689.5	1,459.6	1,381.8	77.86	18.747		
13,300.0	9,069.0	11,906.4	7,650.0	77.6	76.1	-13.04	-4,196.2	690.3	1,459.6	1,380.2	79.48	18.365		
13,400.0	9,069.0	12,006.4	7,650.0	79.1	77.6	-13.04	-4,296.2	691.2	1,459.6	1,378.5	81.11	17.997		
13,500.0	9,069.0	12,106.4	7,650.0	80.6	79.2	-13.04	-4,396.2	692.0	1,459.6	1,376.9	82.74	17.642		
13,600.0	9,069.0	12,206.4	7,650.0	82.1	80.7	-13.04	-4,496.2	692.8	1,459.6	1,375.3	84.37	17.301		
13,700.0	9,069.0	12,293.6	7,650.0	83.6	82.1	-13.04	-4,596.2	693.6	1,459.6	1,373.7	85.90	16.993		
13,800.0	9,069.0	12,406.4	7,650.0	85.2	83.8	-13.04	-4,696.2	694.5	1,459.6	1,372.0	87.64	16.655		
13,900.0	9,069.0	12,506.4	7,650.0	86.7	85.4	-13.04	-4,796.2	695.3	1,459.6	1,370.4	89.28	16.349		
14,000.0	9,069.0	12,606.4	7,650.0	88.2	86.9	-13.04	-4,896.2	696.1	1,459.7	1,368.7	90.92	16.054		
14,100.0	9,069.0	12,706.4	7,650.0	89.8	88.5	-13.04	-4,996.2	696.9	1,459.7	1,367.1	92.57	15.769		
14,200.0	9,069.0	12,806.4	7,650.0	91.3	90.0	-13.04	-5,096.2	697.8	1,459.7	1,365.4	94.21	15.493		
14,300.0	9,069.0	12,906.4	7,650.0	92.8	91.6	-13.04	-5,196.2	698.6	1,459.7	1,363.8	95.86	15.227		
14,400.0	9,069.0	13,006.4	7,650.0	94.4	93.2	-13.04	-5,296.2	699.4	1,459.7	1,362.1	97.51	14.969		
14,500.0	9,069.0	13,106.4	7,650.0	95.9	94.8	-13.04	-5,396.2	700.2	1,459.7	1,360.5	99.16	14.720		
14,600.0	9,069.0	13,206.4	7,650.0	97.5	96.3	-13.04	-5,496.1	701.1	1,459.7	1,358.8	100.82	14.478		
14,700.0	9,069.0	13,306.4	7,650.0	99.1	97.9	-13.04	-5,596.1	701.9	1,459.7	1,357.2	102.47	14.245		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #024H - Wellbore #1 - BLM Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,800.0	9,069.0	13,406.4	7,650.0	100.6	99.5	-13.04	-5,696.1	702.7	1,459.7	1,355.5	104.13	14.018		
14,900.0	9,069.0	13,506.4	7,650.0	102.2	101.1	-13.04	-5,796.1	703.5	1,459.7	1,353.9	105.79	13.798		
15,000.0	9,069.0	13,606.4	7,650.0	103.8	102.7	-13.05	-5,896.1	704.4	1,459.7	1,352.2	107.45	13.585		
15,100.0	9,069.0	13,706.4	7,650.0	105.3	104.2	-13.05	-5,996.1	705.2	1,459.7	1,350.6	109.11	13.378		
15,200.0	9,069.0	13,806.4	7,650.0	106.9	105.8	-13.05	-6,096.1	706.0	1,459.7	1,348.9	110.77	13.178		
15,300.0	9,069.0	13,906.4	7,650.0	108.5	107.4	-13.05	-6,196.1	706.8	1,459.7	1,347.2	112.43	12.983		
15,400.0	9,069.0	14,006.4	7,650.0	110.1	109.0	-13.05	-6,296.1	707.7	1,459.7	1,345.6	114.10	12.793		
15,500.0	9,069.0	14,106.4	7,650.0	111.6	110.6	-13.05	-6,396.1	708.5	1,459.7	1,343.9	115.76	12.609		
15,600.0	9,069.0	14,206.4	7,650.0	113.2	112.2	-13.05	-6,496.1	709.3	1,459.7	1,342.3	117.43	12.430		
15,700.0	9,069.0	14,306.4	7,650.0	114.8	113.8	-13.05	-6,596.1	710.1	1,459.7	1,340.6	119.10	12.256		
15,800.0	9,069.0	14,406.4	7,650.0	116.4	115.4	-13.05	-6,696.1	711.0	1,459.7	1,338.9	120.77	12.087		
15,900.0	9,069.0	14,506.4	7,650.0	118.0	117.0	-13.05	-6,796.1	711.8	1,459.7	1,337.3	122.44	11.922		
16,000.0	9,069.0	14,606.4	7,650.0	119.6	118.6	-13.05	-6,896.1	712.6	1,459.7	1,335.6	124.11	11.762		
16,100.0	9,069.0	14,706.4	7,650.0	121.2	120.2	-13.05	-6,996.1	713.4	1,459.7	1,333.9	125.78	11.605		
16,200.0	9,069.0	14,806.4	7,650.0	122.7	121.8	-13.05	-7,096.1	714.3	1,459.7	1,332.2	127.45	11.453		
16,300.0	9,069.0	14,906.4	7,650.0	124.3	123.4	-13.05	-7,196.1	715.1	1,459.7	1,330.6	129.12	11.305		
16,400.0	9,069.0	15,006.4	7,650.0	125.9	125.0	-13.05	-7,296.1	715.9	1,459.7	1,328.9	130.80	11.160		
16,500.0	9,069.0	15,106.4	7,650.0	127.5	126.7	-13.05	-7,396.1	716.8	1,459.7	1,327.2	132.47	11.019		
16,600.0	9,069.0	15,206.4	7,650.0	129.1	128.3	-13.05	-7,496.1	717.6	1,459.7	1,325.6	134.15	10.881		
16,700.0	9,069.0	15,306.4	7,650.0	130.7	129.9	-13.05	-7,596.1	718.4	1,459.7	1,323.9	135.82	10.747		
16,800.0	9,069.0	15,406.4	7,650.0	132.3	131.5	-13.05	-7,696.1	719.2	1,459.7	1,322.2	137.50	10.616		
16,900.0	9,069.0	15,506.4	7,650.0	133.9	133.1	-13.05	-7,796.1	720.1	1,459.7	1,320.5	139.18	10.488		
17,000.0	9,069.0	15,606.4	7,650.0	135.5	134.7	-13.05	-7,896.1	720.9	1,459.7	1,318.9	140.86	10.363		
17,100.0	9,069.0	15,706.4	7,650.0	137.1	136.3	-13.05	-7,996.1	721.7	1,459.7	1,317.2	142.53	10.241		
17,200.0	9,069.0	15,806.4	7,650.0	138.8	137.9	-13.05	-8,096.1	722.5	1,459.7	1,315.5	144.21	10.122		
17,300.0	9,069.0	15,906.4	7,650.0	140.4	139.6	-13.05	-8,196.1	723.4	1,459.7	1,313.8	145.89	10.005		
17,400.0	9,069.0	16,006.4	7,650.0	142.0	141.2	-13.05	-8,296.1	724.2	1,459.7	1,312.1	147.57	9.891		
17,500.0	9,069.0	16,106.4	7,650.0	143.6	142.8	-13.05	-8,396.0	725.0	1,459.7	1,310.5	149.25	9.780		
17,600.0	9,069.0	16,206.4	7,650.0	145.2	144.4	-13.05	-8,496.0	725.8	1,459.7	1,308.8	150.94	9.671		
17,700.0	9,069.0	16,306.4	7,650.0	146.8	146.0	-13.05	-8,596.0	726.7	1,459.7	1,307.1	152.62	9.565		
17,800.0	9,069.0	16,406.4	7,650.0	148.4	147.7	-13.05	-8,696.0	727.5	1,459.7	1,305.4	154.30	9.460		
17,900.0	9,069.0	16,506.4	7,650.0	150.0	149.3	-13.05	-8,796.0	728.3	1,459.7	1,303.7	155.98	9.358		
18,000.0	9,069.0	16,606.4	7,650.0	151.6	150.9	-13.05	-8,896.0	729.1	1,459.7	1,302.1	157.67	9.258		
18,100.0	9,069.0	16,706.4	7,650.0	153.3	152.5	-13.05	-8,996.0	730.0	1,459.7	1,300.4	159.35	9.161		
18,200.0	9,069.0	16,806.4	7,650.0	154.9	154.1	-13.06	-9,096.0	730.8	1,459.7	1,298.7	161.03	9.065		
18,300.0	9,069.0	16,906.4	7,650.0	156.5	155.8	-13.06	-9,196.0	731.6	1,459.7	1,297.0	162.72	8.971		
18,400.0	9,069.0	17,006.4	7,650.0	158.1	157.4	-13.06	-9,296.0	732.4	1,459.7	1,295.3	164.40	8.879		
18,500.0	9,069.0	17,106.4	7,650.0	159.7	159.0	-13.06	-9,396.0	733.3	1,459.7	1,293.6	166.09	8.789		
18,600.0	9,069.0	17,206.4	7,650.0	161.3	160.6	-13.06	-9,496.0	734.1	1,459.7	1,292.0	167.77	8.701		
18,700.0	9,069.0	17,306.4	7,650.0	163.0	162.3	-13.06	-9,596.0	734.9	1,459.7	1,290.3	169.46	8.614		
18,800.0	9,069.0	17,406.4	7,650.0	164.6	163.9	-13.06	-9,696.0	735.7	1,459.7	1,288.6	171.15	8.529		
18,900.0	9,069.0	17,506.4	7,650.0	166.2	165.5	-13.06	-9,796.0	736.6	1,459.7	1,286.9	172.83	8.446		
19,000.0	9,069.0	17,606.4	7,650.0	167.8	167.2	-13.06	-9,896.0	737.4	1,459.7	1,285.2	174.52	8.364		
19,100.0	9,069.0	17,706.4	7,650.0	169.4	168.8	-13.06	-9,996.0	738.2	1,459.7	1,283.5	176.21	8.284		
19,200.0	9,069.0	17,806.4	7,650.0	171.1	170.4	-13.06	-10,096.0	739.0	1,459.7	1,281.9	177.89	8.206		
19,300.0	9,069.0	17,906.4	7,650.0	172.7	172.0	-13.06	-10,196.0	739.9	1,459.8	1,280.2	179.58	8.129		
19,400.0	9,069.0	18,006.4	7,650.0	174.3	173.7	-13.06	-10,296.0	740.7	1,459.8	1,278.5	181.27	8.053		
19,500.0	9,069.0	18,106.4	7,650.0	175.9	175.3	-13.06	-10,396.0	741.5	1,459.8	1,276.8	182.96	7.979		
19,600.0	9,069.0	18,206.4	7,650.0	177.6	176.9	-13.06	-10,496.0	742.3	1,459.8	1,275.1	184.65	7.906		
19,700.0	9,069.0	18,306.4	7,650.0	179.2	178.6	-13.06	-10,596.0	743.2	1,459.8	1,273.4	186.34	7.834		
19,800.0	9,069.0	18,406.4	7,650.0	180.8	180.2	-13.06	-10,696.0	744.0	1,459.8	1,271.7	188.03	7.764		
19,900.0	9,069.0	18,506.4	7,650.0	182.4	181.8	-13.06	-10,796.0	744.8	1,459.8	1,270.0	189.72	7.694		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #024H - 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		
20,000.0	9,069.0	18,606.4	7,650.0	184.1	183.5	-13.06	-10,896.0	745.6	1,459.8	1,268.4	191.41	7.627		
20,100.0	9,069.0	18,706.4	7,650.0	185.7	185.1	-13.06	-10,996.0	746.5	1,459.8	1,266.7	193.10	7.560		
20,200.0	9,069.0	18,806.4	7,650.0	187.3	186.7	-13.06	-11,096.0	747.3	1,459.8	1,265.0	194.79	7.494		
20,300.0	9,069.0	18,906.4	7,650.0	188.9	188.4	-13.06	-11,196.0	748.1	1,459.8	1,263.3	196.48	7.430		
20,400.0	9,069.0	19,006.4	7,650.0	190.6	190.0	-13.06	-11,295.9	748.9	1,459.8	1,261.6	198.17	7.366		
20,500.0	9,069.0	19,106.4	7,650.0	192.2	191.6	-13.06	-11,395.9	749.8	1,459.8	1,259.9	199.86	7.304		
20,600.0	9,069.0	19,206.4	7,650.0	193.8	193.3	-13.06	-11,495.9	750.6	1,459.8	1,258.2	201.55	7.243		
20,700.0	9,069.0	19,306.4	7,650.0	195.5	194.9	-13.06	-11,595.9	751.4	1,459.8	1,256.5	203.24	7.183		
20,800.0	9,069.0	19,406.4	7,650.0	197.1	196.5	-13.06	-11,695.9	752.2	1,459.8	1,254.8	204.93	7.123		
20,900.0	9,069.0	19,506.4	7,650.0	198.7	198.2	-13.06	-11,795.9	753.1	1,459.8	1,253.2	206.62	7.065		
21,000.0	9,069.0	19,606.4	7,650.0	200.3	199.8	-13.06	-11,895.9	753.9	1,459.8	1,251.5	208.32	7.008		
21,100.0	9,069.0	19,706.4	7,650.0	202.0	201.4	-13.06	-11,995.9	754.7	1,459.8	1,249.8	210.01	6.951		
21,200.0	9,069.0	19,806.4	7,650.0	203.6	203.1	-13.06	-12,095.9	755.6	1,459.8	1,248.1	211.70	6.896		
21,300.0	9,069.0	19,906.4	7,650.0	205.2	204.7	-13.07	-12,195.9	756.4	1,459.8	1,246.4	213.39	6.841		
21,400.0	9,069.0	20,006.4	7,650.0	206.9	206.3	-13.07	-12,295.9	757.2	1,459.8	1,244.7	215.09	6.787		
21,500.0	9,069.0	20,093.6	7,650.0	208.5	207.8	-13.07	-12,395.9	758.0	1,459.8	1,243.1	216.67	6.737		
21,544.1	9,069.0	20,137.7	7,650.0	209.2	208.5	-13.07	-12,440.1	758.4	1,459.8	1,242.4	217.42	6.714		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #104H - 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		
0.0	0.0	1.0	1.0	0.0	0.0	69.11	30.5	79.9	85.5					
100.0	100.0	101.0	101.0	0.1	0.1	69.11	30.5	79.9	85.5	85.3	0.26	329.043		
200.0	200.0	201.0	201.0	0.5	0.5	69.11	30.5	79.9	85.5	84.5	0.98	87.544		
300.0	300.0	301.0	301.0	0.8	0.8	69.11	30.5	79.9	85.5	83.8	1.69	50.488		
400.0	400.0	401.0	401.0	1.2	1.2	69.11	30.5	79.9	85.5	83.1	2.41	35.473		
500.0	500.0	501.0	501.0	1.6	1.6	69.11	30.5	79.9	85.5	82.4	3.13	27.342		
600.0	600.0	601.0	601.0	1.9	1.9	69.11	30.5	79.9	85.5	81.7	3.84	22.243		
700.0	700.0	701.0	701.0	2.3	2.3	69.11	30.5	79.9	85.5	81.0	4.56	18.747		
800.0	800.0	801.0	801.0	2.6	2.6	69.11	30.5	79.9	85.5	80.2	5.28	16.201		
900.0	900.0	901.0	901.0	3.0	3.0	69.11	30.5	79.9	85.5	79.5	6.00	14.263		
1,000.0	1,000.0	1,001.0	1,001.0	3.4	3.4	69.11	30.5	79.9	85.5	78.8	6.71	12.740		
1,100.0	1,100.0	1,101.0	1,101.0	3.7	3.7	69.11	30.5	79.9	85.5	78.1	7.43	11.511		
1,200.0	1,200.0	1,201.0	1,201.0	4.1	4.1	69.11	30.5	79.9	85.5	77.4	8.15	10.498 CC, ES		
1,300.0	1,300.0	1,299.6	1,299.6	4.4	4.4	68.90	31.1	80.5	86.3	77.5	8.85	9.751		
1,400.0	1,400.0	1,398.2	1,398.1	4.8	4.8	68.32	32.8	82.4	88.8	79.2	9.56	9.287		
1,500.0	1,500.0	1,496.6	1,496.5	5.1	5.1	67.41	35.6	85.6	92.8	82.6	10.26	9.048		
1,600.0	1,600.0	1,594.9	1,594.6	5.5	5.5	35.41	39.6	90.0	97.8	86.9	10.96	8.929		
1,700.0	1,700.0	1,693.1	1,692.5	5.9	5.8	34.87	44.7	95.7	103.1	91.4	11.65	8.847		
1,800.0	1,799.9	1,791.3	1,790.2	6.2	6.2	34.63	50.8	102.6	108.5	96.1	12.34	8.792		
1,900.0	1,899.7	1,889.3	1,887.6	6.6	6.5	34.64	58.1	110.7	114.1	101.1	13.03	8.759		
2,000.0	1,999.4	1,987.2	1,984.7	6.9	6.9	34.87	66.5	120.1	119.9	106.2	13.71	8.745		
2,100.0	2,098.9	2,086.8	2,083.4	7.3	7.3	35.38	75.8	130.4	125.3	110.9	14.43	8.688		
2,200.0	2,198.3	2,186.7	2,182.3	7.7	7.7	36.31	85.1	140.8	129.3	114.2	15.15	8.539		
2,300.0	2,297.4	2,286.6	2,281.2	8.0	8.1	37.65	94.3	151.1	132.0	116.1	15.87	8.315		
2,400.0	2,396.4	2,386.5	2,380.2	8.4	8.4	39.19	103.6	161.5	134.1	117.5	16.61	8.072		
2,500.0	2,495.5	2,486.4	2,479.1	8.8	8.8	40.67	112.9	171.8	136.2	118.9	17.35	7.852		
2,600.0	2,594.5	2,586.4	2,578.1	9.2	9.2	42.11	122.2	182.2	138.5	120.4	18.09	7.654		
2,700.0	2,693.5	2,686.3	2,677.0	9.6	9.6	43.51	131.5	192.5	140.8	121.9	18.84	7.473		
2,800.0	2,792.5	2,786.2	2,775.9	9.9	10.0	44.85	140.7	202.9	143.2	123.6	19.59	7.308		
2,900.0	2,891.6	2,886.1	2,874.9	10.3	10.4	46.16	150.0	213.3	145.7	125.3	20.35	7.158		
3,000.0	2,990.6	2,986.0	2,973.8	10.7	10.8	47.41	159.3	223.6	148.2	127.1	21.11	7.021		
3,100.0	3,089.6	3,085.9	3,072.8	11.1	11.2	48.63	168.6	234.0	150.9	129.0	21.88	6.894		
3,200.0	3,188.6	3,185.9	3,171.7	11.5	11.6	49.80	177.9	244.3	153.5	130.9	22.65	6.779		
3,300.0	3,287.7	3,285.8	3,270.7	11.9	12.0	50.93	187.1	254.7	156.3	132.9	23.43	6.672		
3,400.0	3,386.7	3,385.7	3,369.6	12.3	12.4	52.03	196.4	265.0	159.1	134.9	24.20	6.573		
3,500.0	3,485.7	3,485.6	3,468.5	12.7	12.9	53.08	205.7	275.4	162.0	137.0	24.99	6.482		
3,600.0	3,584.8	3,585.5	3,567.5	13.1	13.3	54.10	215.0	285.7	164.9	139.1	25.77	6.398		
3,667.1	3,651.2	3,654.0	3,635.3	13.4	13.5	54.82	221.2	292.7	166.7	140.4	26.32	6.335		
3,700.0	3,683.8	3,688.0	3,669.0	13.5	13.7	55.22	224.0	295.8	167.4	140.8	26.59	6.296		
3,800.0	3,783.1	3,791.5	3,771.9	13.9	14.1	56.32	231.4	304.0	169.1	141.7	27.40	6.172		
3,900.0	3,882.7	3,895.0	3,875.1	14.3	14.5	57.24	236.9	310.2	170.2	142.0	28.18	6.040		
4,000.0	3,982.5	3,998.4	3,978.4	14.7	14.8	57.98	240.5	314.2	170.7	141.7	28.93	5.900		
4,100.0	4,082.4	4,101.9	4,081.9	15.0	15.2	58.56	242.3	316.2	170.5	140.9	29.65	5.751		
4,200.5	4,182.8	4,203.9	4,183.8	15.4	15.5	90.00	242.4	316.4	170.0	139.7	30.34	5.603		
4,300.0	4,282.4	4,303.4	4,283.4	15.7	15.9	90.00	242.4	316.4	170.0	139.0	31.03	5.479		
4,400.0	4,382.4	4,403.4	4,383.4	16.1	16.2	90.00	242.4	316.4	170.0	138.3	31.72	5.360		
4,500.0	4,482.4	4,503.4	4,483.4	16.4	16.6	90.00	242.4	316.4	170.0	137.6	32.41	5.246		
4,600.0	4,582.4	4,603.4	4,583.4	16.7	16.9	90.00	242.4	316.4	170.0	136.9	33.10	5.136		
4,700.0	4,682.4	4,703.4	4,683.4	17.1	17.2	90.00	242.4	316.4	170.0	136.2	33.79	5.031		
4,800.0	4,782.4	4,803.4	4,783.4	17.4	17.6	90.00	242.4	316.4	170.0	135.5	34.49	4.930		
4,900.0	4,882.4	4,903.4	4,883.4	17.8	17.9	90.00	242.4	316.4	170.0	134.8	35.18	4.832		
5,000.0	4,982.4	5,003.4	4,983.4	18.1	18.3	90.00	242.4	316.4	170.0	134.1	35.88	4.739		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #104H - 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		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
5,100.0	5,082.4	5,103.4	5,083.4	18.5	18.6	90.00	242.4	316.4	170.0	133.4	36.58	4.648		
5,200.0	5,182.4	5,203.4	5,183.4	18.8	19.0	90.00	242.4	316.4	170.0	132.7	37.27	4.561		
5,300.0	5,282.4	5,303.4	5,283.4	19.2	19.3	90.00	242.4	316.4	170.0	132.0	37.97	4.477		
5,400.0	5,382.4	5,403.4	5,383.4	19.5	19.6	90.00	242.4	316.4	170.0	131.3	38.67	4.397		
5,500.0	5,482.4	5,503.4	5,483.4	19.9	20.0	90.00	242.4	316.4	170.0	130.6	39.37	4.318		
5,600.0	5,582.4	5,603.4	5,583.4	20.2	20.3	90.00	242.4	316.4	170.0	129.9	40.07	4.243		
5,700.0	5,682.4	5,703.4	5,683.4	20.6	20.7	90.00	242.4	316.4	170.0	129.2	40.77	4.170		
5,800.0	5,782.4	5,803.4	5,783.4	20.9	21.0	90.00	242.4	316.4	170.0	128.5	41.47	4.100		
5,900.0	5,882.4	5,903.4	5,883.4	21.3	21.4	90.00	242.4	316.4	170.0	127.8	42.17	4.031		
6,000.0	5,982.4	6,003.4	5,983.4	21.6	21.7	90.00	242.4	316.4	170.0	127.1	42.88	3.965		
6,100.0	6,082.4	6,103.4	6,083.4	22.0	22.1	90.00	242.4	316.4	170.0	126.4	43.58	3.901		
6,200.0	6,182.4	6,203.4	6,183.4	22.3	22.4	90.00	242.4	316.4	170.0	125.7	44.28	3.839		
6,300.0	6,282.4	6,303.4	6,283.4	22.7	22.8	90.00	242.4	316.4	170.0	125.0	44.99	3.779		
6,400.0	6,382.4	6,403.4	6,383.4	23.0	23.1	90.00	242.4	316.4	170.0	124.3	45.69	3.721		
6,500.0	6,482.4	6,503.4	6,483.4	23.4	23.5	90.00	242.4	316.4	170.0	123.6	46.39	3.665		
6,600.0	6,582.4	6,603.4	6,583.4	23.7	23.8	90.00	242.4	316.4	170.0	122.9	47.10	3.610		
6,700.0	6,682.4	6,703.4	6,683.4	24.1	24.2	90.00	242.4	316.4	170.0	122.2	47.80	3.557		
6,800.0	6,782.4	6,803.4	6,783.4	24.4	24.5	90.00	242.4	316.4	170.0	121.5	48.51	3.505		
6,900.0	6,882.4	6,903.4	6,883.4	24.8	24.9	90.00	242.4	316.4	170.0	120.8	49.22	3.455		
7,000.0	6,982.4	7,003.4	6,983.4	25.1	25.2	90.00	242.4	316.4	170.0	120.1	49.92	3.406		
7,100.0	7,082.4	7,103.4	7,083.4	25.5	25.6	90.00	242.4	316.4	170.0	119.4	50.63	3.358		
7,200.0	7,182.4	7,203.4	7,183.4	25.8	25.9	90.00	242.4	316.4	170.0	118.7	51.34	3.312		
7,300.0	7,282.4	7,303.4	7,283.4	26.2	26.3	90.00	242.4	316.4	170.0	118.0	52.04	3.267		
7,400.0	7,382.4	7,403.4	7,383.4	26.5	26.6	90.00	242.4	316.4	170.0	117.3	52.75	3.223		
7,500.0	7,482.4	7,503.4	7,483.4	26.9	27.0	90.00	242.4	316.4	170.0	116.6	53.46	3.180		
7,500.8	7,483.2	7,504.2	7,484.2	26.9	27.0	90.00	242.4	316.4	170.0	116.6	53.46	3.180		
7,600.0	7,582.4	7,603.1	7,583.1	27.2	27.3	90.38	241.3	316.4	170.0	115.9	54.16	3.140		
7,700.0	7,682.4	7,700.0	7,678.8	27.6	27.6	95.15	227.1	316.7	171.1	116.3	54.87	3.119 SF		
7,800.0	7,782.4	7,789.9	7,764.3	27.9	27.8	104.04	199.7	317.4	177.3	122.0	55.33	3.204		
7,900.0	7,882.4	7,869.5	7,835.6	28.3	28.0	114.42	164.5	318.2	194.6	139.9	54.73	3.556		
8,000.0	7,982.4	7,938.1	7,892.7	28.7	28.1	123.89	126.5	319.0	226.9	174.4	52.51	4.321		
8,100.0	8,082.4	7,996.2	7,937.2	29.0	28.2	131.47	89.1	319.9	273.8	224.6	49.22	5.563		
8,200.0	8,182.4	8,050.0	7,974.8	29.4	28.3	137.71	50.7	320.7	332.7	286.6	46.11	7.215		
8,300.0	8,282.4	8,086.3	7,998.1	29.7	28.4	141.45	22.9	321.4	400.3	357.9	42.43	9.434		
8,400.0	8,382.4	8,121.1	8,018.7	30.1	28.4	144.65	-5.2	322.0	474.5	434.9	39.58	11.988		
8,500.0	8,482.4	8,150.0	8,034.5	30.4	28.4	147.05	-29.3	322.6	553.6	516.4	37.13	14.909		
8,513.6	8,496.0	8,150.0	8,034.5	30.5	28.4	147.05	-29.3	322.6	564.7	528.1	36.60	15.430		
8,550.0	8,532.3	8,164.3	8,041.8	30.6	28.4	-17.99	-41.6	322.8	593.9	557.8	36.09	16.457		
8,600.0	8,582.0	8,178.7	8,048.9	30.7	28.5	-15.41	-54.1	323.1	632.7	597.7	34.98	18.089		
8,650.0	8,631.1	8,200.0	8,058.8	30.9	28.5	-13.09	-73.0	323.5	669.7	635.5	34.20	19.584		
8,700.0	8,679.1	8,200.0	8,058.8	31.0	28.5	-12.01	-73.0	323.5	704.9	672.7	32.22	21.881		
8,750.0	8,725.7	8,225.3	8,069.7	31.2	28.6	-10.34	-95.8	324.1	737.9	706.4	31.56	23.383		
8,800.0	8,770.6	8,250.0	8,079.3	31.3	28.7	-9.01	-118.5	324.6	769.0	738.2	30.80	24.966		
8,850.0	8,813.4	8,250.0	8,079.3	31.4	28.7	-8.47	-118.5	324.6	797.9	769.0	28.87	27.641		
8,900.0	8,853.7	8,275.7	8,088.3	31.5	28.8	-7.49	-142.6	325.1	824.3	796.2	28.12	29.314		
8,950.0	8,891.4	8,300.0	8,095.8	31.6	28.8	-6.70	-165.7	325.6	848.6	821.3	27.29	31.097		
9,000.0	8,926.0	8,300.0	8,095.8	31.6	28.8	-6.42	-165.7	325.6	870.4	844.9	25.53	34.099		
9,050.0	8,957.4	8,328.6	8,103.3	31.7	28.9	-5.74	-193.3	326.3	889.6	864.6	24.91	35.715		
9,100.0	8,985.2	8,350.0	8,108.0	31.8	29.0	-5.25	-214.2	326.7	906.4	882.3	24.06	37.671		
9,150.0	9,009.4	8,364.7	8,110.8	32.0	29.1	-4.92	-228.6	327.1	920.6	897.5	23.09	39.876		
9,200.0	9,029.6	8,383.0	8,113.8	32.1	29.1	-4.58	-246.6	327.5	932.2	909.8	22.33	41.749		
9,250.0	9,045.7	8,400.0	8,116.0	32.3	29.2	-4.29	-263.5	327.9	941.2	919.5	21.67	43.425		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #104H - 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		
9,300.0	9,057.7	8,419.7	8,118.0	32.4	29.3	-4.00	-283.1	328.3	947.5	926.3	21.22	44.646		
9,350.0	9,065.4	8,450.0	8,119.7	32.6	29.4	-3.62	-313.3	329.0	951.4	930.3	21.05	45.199		
9,400.0	9,068.8	8,456.6	8,119.9	32.8	29.4	-3.54	-319.9	329.1	952.2	931.4	20.78	45.818		
9,413.6	9,069.0	8,461.6	8,119.9	32.8	29.4	-3.48	-325.0	329.3	952.0	931.2	20.78	45.815		
9,500.0	9,069.0	8,538.3	8,120.0	33.2	29.7	-2.65	-401.6	330.3	951.1	930.0	21.06	45.159		
9,600.0	9,069.0	8,637.1	8,120.0	33.7	30.2	-1.72	-500.4	331.1	950.4	928.9	21.59	44.029		
9,700.0	9,069.0	8,736.3	8,120.0	34.2	30.8	-0.99	-599.6	331.9	950.1	927.9	22.27	42.656		
9,800.0	9,069.0	8,835.9	8,120.0	34.8	31.4	-0.46	-699.2	332.7	950.0	926.9	23.09	41.138		
9,900.0	9,069.0	8,935.7	8,120.0	35.5	32.1	-0.13	-799.0	333.5	950.0	926.0	24.02	39.552		
9,980.5	9,069.0	9,016.2	8,120.0	36.1	32.7	-0.02	-879.5	334.2	950.0	925.2	24.83	38.261		
10,005.2	9,069.0	9,040.9	8,120.0	36.2	32.9	-0.02	-904.2	334.4	950.0	924.9	25.09	37.870		
10,100.0	9,069.0	9,135.7	8,120.0	37.0	33.7	-0.02	-999.0	335.1	950.0	923.9	26.11	36.386		
10,200.0	9,069.0	9,235.7	8,120.0	37.8	34.6	-0.02	-1,099.0	336.0	950.0	922.8	27.23	34.882		
10,300.0	9,069.0	9,335.7	8,120.0	38.6	35.6	-0.02	-1,199.0	336.8	950.0	921.6	28.40	33.448		
10,400.0	9,069.0	9,435.7	8,120.0	39.6	36.6	-0.02	-1,299.0	337.6	950.0	920.4	29.61	32.087		
10,500.0	9,069.0	9,535.7	8,120.0	40.5	37.6	-0.02	-1,399.0	338.4	950.0	919.2	30.84	30.800		
10,600.0	9,069.0	9,635.7	8,120.0	41.5	38.7	-0.02	-1,499.0	339.2	950.0	917.9	32.11	29.585		
10,700.0	9,069.0	9,735.7	8,120.0	42.6	39.8	-0.02	-1,599.0	340.0	950.0	916.6	33.40	28.441		
10,800.0	9,069.0	9,835.7	8,120.0	43.7	41.0	-0.02	-1,699.0	340.8	950.0	915.3	34.72	27.364		
10,900.0	9,069.0	9,935.7	8,120.0	44.8	42.2	-0.02	-1,799.0	341.7	950.0	913.9	36.05	26.351		
11,000.0	9,069.0	10,035.7	8,120.0	45.9	43.4	-0.02	-1,899.0	342.5	950.0	912.6	37.40	25.398		
11,100.0	9,069.0	10,135.7	8,120.0	47.1	44.7	-0.02	-1,999.0	343.3	950.0	911.2	38.77	24.501		
11,200.0	9,069.0	10,235.7	8,120.0	48.3	45.9	-0.02	-2,099.0	344.1	950.0	909.8	40.16	23.657		
11,300.0	9,069.0	10,335.7	8,120.0	49.6	47.2	-0.01	-2,199.0	344.9	950.0	908.4	41.55	22.862		
11,400.0	9,069.0	10,435.7	8,120.0	50.8	48.6	-0.01	-2,299.0	345.7	950.0	907.0	42.96	22.112		
11,500.0	9,069.0	10,535.7	8,120.0	52.1	49.9	-0.01	-2,399.0	346.5	950.0	905.6	44.38	21.405		
11,600.0	9,069.0	10,635.7	8,120.0	53.4	51.3	-0.01	-2,499.0	347.4	950.0	904.2	45.81	20.737		
11,700.0	9,069.0	10,735.7	8,120.0	54.7	52.6	-0.01	-2,599.0	348.2	950.0	902.7	47.25	20.106		
11,800.0	9,069.0	10,835.7	8,120.0	56.1	54.0	-0.01	-2,699.0	349.0	950.0	901.3	48.70	19.509		
11,900.0	9,069.0	10,935.7	8,120.0	57.4	55.4	-0.01	-2,799.0	349.8	950.0	899.9	50.15	18.943		
12,000.0	9,069.0	11,035.7	8,120.0	58.8	56.9	-0.01	-2,899.0	350.6	950.0	898.4	51.61	18.407		
12,100.0	9,069.0	11,135.7	8,120.0	60.2	58.3	-0.01	-2,998.9	351.4	950.0	896.9	53.08	17.899		
12,200.0	9,069.0	11,235.7	8,120.0	61.6	59.7	-0.01	-3,098.9	352.2	950.0	895.5	54.55	17.416		
12,300.0	9,069.0	11,335.7	8,120.0	63.0	61.2	-0.01	-3,198.9	353.1	950.0	894.0	56.03	16.956		
12,400.0	9,069.0	11,435.7	8,120.0	64.4	62.7	-0.01	-3,298.9	353.9	950.0	892.5	57.51	16.519		
12,500.0	9,069.0	11,535.7	8,120.0	65.8	64.1	-0.01	-3,398.9	354.7	950.0	891.0	58.99	16.103		
12,600.0	9,069.0	11,635.7	8,120.0	67.3	65.6	-0.01	-3,498.9	355.5	950.0	889.5	60.49	15.706		
12,700.0	9,069.0	11,735.7	8,120.0	68.7	67.1	-0.01	-3,598.9	356.3	950.0	888.0	61.98	15.327		
12,800.0	9,069.0	11,835.7	8,120.0	70.2	68.6	-0.01	-3,698.9	357.1	950.0	886.5	63.48	14.965		
12,900.0	9,069.0	11,935.7	8,120.0	71.6	70.1	-0.01	-3,798.9	358.0	950.0	885.0	64.98	14.620		
13,000.0	9,069.0	12,035.7	8,120.0	73.1	71.6	-0.01	-3,898.9	358.8	950.0	883.5	66.49	14.289		
13,100.0	9,069.0	12,135.7	8,120.0	74.6	73.1	-0.01	-3,998.9	359.6	950.0	882.0	67.99	13.972		
13,200.0	9,069.0	12,235.7	8,120.0	76.1	74.6	-0.01	-4,098.9	360.4	950.0	880.5	69.50	13.668		
13,300.0	9,069.0	12,335.7	8,120.0	77.6	76.2	-0.01	-4,198.9	361.2	950.0	879.0	71.02	13.377		
13,400.0	9,069.0	12,435.7	8,120.0	79.1	77.7	-0.01	-4,298.9	362.0	950.0	877.5	72.53	13.097		
13,500.0	9,069.0	12,535.7	8,120.0	80.6	79.2	-0.01	-4,398.9	362.8	950.0	875.9	74.05	12.829		
13,600.0	9,069.0	12,635.7	8,120.0	82.1	80.8	-0.01	-4,498.9	363.7	950.0	874.4	75.57	12.571		
13,700.0	9,069.0	12,735.7	8,120.0	83.6	82.3	-0.01	-4,598.9	364.5	950.0	872.9	77.09	12.323		
13,800.0	9,069.0	12,835.7	8,120.0	85.2	83.9	-0.01	-4,698.9	365.3	950.0	871.4	78.62	12.084		
13,900.0	9,069.0	12,935.7	8,120.0	86.7	85.4	-0.01	-4,798.9	366.1	950.0	869.9	80.14	11.854		
14,000.0	9,069.0	13,035.7	8,120.0	88.2	87.0	-0.01	-4,898.9	366.9	950.0	868.3	81.67	11.632		
14,100.0	9,069.0	13,135.7	8,120.0	89.8	88.6	-0.01	-4,998.9	367.7	950.0	866.8	83.20	11.419		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #104H - 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		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
14,200.0	9,069.0	13,235.7	8,120.0	91.3	90.1	-0.01	-5,098.9	368.5	950.0	865.3	84.73	11.212		
14,300.0	9,069.0	13,335.7	8,120.0	92.8	91.7	-0.01	-5,198.9	369.4	950.0	863.7	86.26	11.013		
14,400.0	9,069.0	13,435.7	8,120.0	94.4	93.3	-0.01	-5,298.9	370.2	950.0	862.2	87.79	10.821		
14,500.0	9,069.0	13,535.7	8,120.0	95.9	94.8	-0.01	-5,398.9	371.0	950.0	860.7	89.33	10.635		
14,600.0	9,069.0	13,635.7	8,120.0	97.5	96.4	-0.01	-5,498.9	371.8	950.0	859.1	90.86	10.455		
14,700.0	9,069.0	13,735.7	8,120.0	99.1	98.0	-0.01	-5,598.9	372.6	950.0	857.6	92.40	10.282		
14,800.0	9,069.0	13,835.7	8,120.0	100.6	99.6	-0.01	-5,698.9	373.4	950.0	856.1	93.94	10.113		
14,900.0	9,069.0	13,935.7	8,120.0	102.2	101.2	-0.01	-5,798.9	374.3	950.0	854.5	95.48	9.950		
15,000.0	9,069.0	14,035.7	8,120.0	103.8	102.7	-0.01	-5,898.9	375.1	950.0	853.0	97.02	9.792		
15,100.0	9,069.0	14,135.7	8,120.0	105.3	104.3	-0.01	-5,998.8	375.9	950.0	851.4	98.56	9.639		
15,200.0	9,069.0	14,235.7	8,120.0	106.9	105.9	-0.01	-6,098.8	376.7	950.0	849.9	100.10	9.491		
15,300.0	9,069.0	14,335.7	8,120.0	108.5	107.5	-0.01	-6,198.8	377.5	950.0	848.4	101.64	9.347		
15,400.0	9,069.0	14,435.7	8,120.0	110.1	109.1	-0.01	-6,298.8	378.3	950.0	846.8	103.18	9.207		
15,500.0	9,069.0	14,535.7	8,120.0	111.6	110.7	-0.01	-6,398.8	379.1	950.0	845.3	104.73	9.071		
15,600.0	9,069.0	14,635.7	8,120.0	113.2	112.3	-0.01	-6,498.8	380.0	950.0	843.7	106.27	8.939		
15,700.0	9,069.0	14,735.7	8,120.0	114.8	113.9	-0.01	-6,598.8	380.8	950.0	842.2	107.82	8.811		
15,800.0	9,069.0	14,835.7	8,120.0	116.4	115.5	-0.01	-6,698.8	381.6	950.0	840.6	109.36	8.687		
15,900.0	9,069.0	14,935.7	8,120.0	118.0	117.1	-0.01	-6,798.8	382.4	950.0	839.1	110.91	8.566		
16,000.0	9,069.0	15,035.7	8,120.0	119.6	118.7	-0.01	-6,898.8	383.2	950.0	837.5	112.46	8.448		
16,100.0	9,069.0	15,135.7	8,120.0	121.2	120.3	-0.01	-6,998.8	384.0	950.0	836.0	114.01	8.333		
16,200.0	9,069.0	15,235.7	8,120.0	122.7	121.9	-0.01	-7,098.8	384.8	950.0	834.4	115.55	8.221		
16,300.0	9,069.0	15,335.7	8,120.0	124.3	123.5	-0.01	-7,198.8	385.7	950.0	832.9	117.10	8.112		
16,400.0	9,069.0	15,435.7	8,120.0	125.9	125.1	-0.01	-7,298.8	386.5	950.0	831.3	118.65	8.007		
16,500.0	9,069.0	15,535.7	8,120.0	127.5	126.7	-0.01	-7,398.8	387.3	950.0	829.8	120.20	7.903		
16,600.0	9,069.0	15,635.7	8,120.0	129.1	128.3	-0.01	-7,498.8	388.1	950.0	828.2	121.75	7.803		
16,700.0	9,069.0	15,735.7	8,120.0	130.7	129.9	-0.01	-7,598.8	388.9	950.0	826.7	123.31	7.704		
16,800.0	9,069.0	15,835.7	8,120.0	132.3	131.6	-0.01	-7,698.8	389.7	950.0	825.1	124.86	7.609		
16,900.0	9,069.0	15,935.7	8,120.0	133.9	133.2	-0.01	-7,798.8	390.6	950.0	823.6	126.41	7.515		
17,000.0	9,069.0	16,035.7	8,120.0	135.5	134.8	-0.01	-7,898.8	391.4	950.0	822.0	127.96	7.424		
17,100.0	9,069.0	16,135.7	8,120.0	137.1	136.4	-0.01	-7,998.8	392.2	950.0	820.5	129.51	7.335		
17,200.0	9,069.0	16,235.7	8,120.0	138.8	138.0	-0.01	-8,098.8	393.0	950.0	818.9	131.07	7.248		
17,300.0	9,069.0	16,335.7	8,120.0	140.4	139.6	-0.01	-8,198.8	393.8	950.0	817.4	132.62	7.163		
17,400.0	9,069.0	16,435.7	8,120.0	142.0	141.3	-0.01	-8,298.8	394.6	950.0	815.8	134.18	7.080		
17,500.0	9,069.0	16,535.7	8,120.0	143.6	142.9	-0.01	-8,398.8	395.4	950.0	814.3	135.73	6.999		
17,600.0	9,069.0	16,635.7	8,120.0	145.2	144.5	-0.01	-8,498.8	396.3	950.0	812.7	137.28	6.920		
17,700.0	9,069.0	16,735.7	8,120.0	146.8	146.1	-0.01	-8,598.8	397.1	950.0	811.2	138.84	6.842		
17,800.0	9,069.0	16,835.7	8,120.0	148.4	147.7	-0.01	-8,698.8	397.9	950.0	809.6	140.40	6.767		
17,900.0	9,069.0	16,935.7	8,120.0	150.0	149.4	-0.01	-8,798.8	398.7	950.0	808.0	141.95	6.692		
18,000.0	9,069.0	17,035.7	8,120.0	151.6	151.0	-0.01	-8,898.8	399.5	950.0	806.5	143.51	6.620		
18,100.0	9,069.0	17,135.7	8,120.0	153.3	152.6	-0.01	-8,998.7	400.3	950.0	804.9	145.06	6.549		
18,200.0	9,069.0	17,235.7	8,120.0	154.9	154.2	-0.01	-9,098.7	401.1	950.0	803.4	146.62	6.479		
18,300.0	9,069.0	17,335.7	8,120.0	156.5	155.8	-0.01	-9,198.7	402.0	950.0	801.8	148.18	6.411		
18,400.0	9,069.0	17,435.7	8,120.0	158.1	157.5	-0.01	-9,298.7	402.8	950.0	800.3	149.73	6.345		
18,500.0	9,069.0	17,535.7	8,120.0	159.7	159.1	-0.01	-9,398.7	403.6	950.0	798.7	151.29	6.279		
18,600.0	9,069.0	17,635.7	8,120.0	161.3	160.7	0.00	-9,498.7	404.4	950.0	797.2	152.85	6.215		
18,700.0	9,069.0	17,735.7	8,120.0	163.0	162.3	0.00	-9,598.7	405.2	950.0	795.6	154.41	6.153		
18,800.0	9,069.0	17,835.7	8,120.0	164.6	164.0	0.00	-9,698.7	406.0	950.0	794.0	155.97	6.091		
18,900.0	9,069.0	17,935.7	8,120.0	166.2	165.6	0.00	-9,798.7	406.9	950.0	792.5	157.52	6.031		
19,000.0	9,069.0	18,035.7	8,120.0	167.8	167.2	0.00	-9,898.7	407.7	950.0	790.9	159.08	5.972		
19,100.0	9,069.0	18,135.7	8,120.0	169.4	168.9	0.00	-9,998.7	408.5	950.0	789.4	160.64	5.914		
19,200.0	9,069.0	18,235.7	8,120.0	171.1	170.5	0.00	-10,098.7	409.3	950.0	787.8	162.20	5.857		
19,300.0	9,069.0	18,335.7	8,120.0	172.7	172.1	0.00	-10,198.7	410.1	950.0	786.2	163.76	5.801		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #104H - 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		
19,400.0	9,069.0	18,435.7	8,120.0	174.3	173.7	0.00	-10,298.7	410.9	950.0	784.7	165.32	5.746		
19,500.0	9,069.0	18,535.7	8,120.0	175.9	175.4	0.00	-10,398.7	411.7	950.0	783.1	166.88	5.693		
19,600.0	9,069.0	18,635.7	8,120.0	177.6	177.0	0.00	-10,498.7	412.6	950.0	781.6	168.44	5.640		
19,700.0	9,069.0	18,735.7	8,120.0	179.2	178.6	0.00	-10,598.7	413.4	950.0	780.0	170.00	5.588		
19,800.0	9,069.0	18,835.7	8,120.0	180.8	180.3	0.00	-10,698.7	414.2	950.0	778.4	171.56	5.537		
19,900.0	9,069.0	18,935.7	8,120.0	182.4	181.9	0.00	-10,798.7	415.0	950.0	776.9	173.12	5.488		
20,000.0	9,069.0	19,035.7	8,120.0	184.1	183.5	0.00	-10,898.7	415.8	950.0	775.3	174.68	5.439		
20,100.0	9,069.0	19,135.7	8,120.0	185.7	185.2	0.00	-10,998.7	416.6	950.0	773.8	176.24	5.390		
20,200.0	9,069.0	19,235.7	8,120.0	187.3	186.8	0.00	-11,098.7	417.4	950.0	772.2	177.80	5.343		
20,300.0	9,069.0	19,335.7	8,120.0	188.9	188.4	0.00	-11,198.7	418.3	950.0	770.6	179.36	5.297		
20,400.0	9,069.0	19,435.7	8,120.0	190.6	190.1	0.00	-11,298.7	419.1	950.0	769.1	180.92	5.251		
20,500.0	9,069.0	19,535.7	8,120.0	192.2	191.7	0.00	-11,398.7	419.9	950.0	767.5	182.48	5.206		
20,600.0	9,069.0	19,635.7	8,120.0	193.8	193.3	0.00	-11,498.7	420.7	950.0	766.0	184.04	5.162		
20,700.0	9,069.0	19,735.7	8,120.0	195.5	195.0	0.00	-11,598.7	421.5	950.0	764.4	185.61	5.118		
20,800.0	9,069.0	19,835.7	8,120.0	197.1	196.6	0.00	-11,698.7	422.3	950.0	762.8	187.17	5.076		
20,900.0	9,069.0	19,935.7	8,120.0	198.7	198.2	0.00	-11,798.7	423.2	950.0	761.3	188.73	5.034		
21,000.0	9,069.0	20,035.7	8,120.0	200.3	199.9	0.00	-11,898.7	424.0	950.0	759.7	190.29	4.992		
21,100.0	9,069.0	20,135.7	8,120.0	202.0	201.5	0.00	-11,998.6	424.8	950.0	758.1	191.85	4.952		
21,200.0	9,069.0	20,235.7	8,120.0	203.6	203.1	0.00	-12,098.6	425.6	950.0	756.6	193.42	4.912		
21,300.0	9,069.0	20,335.7	8,120.0	205.2	204.8	0.00	-12,198.6	426.4	950.0	755.0	194.98	4.872		
21,400.0	9,069.0	20,435.7	8,120.0	206.9	206.4	0.00	-12,298.6	427.2	950.0	753.5	196.54	4.834		
21,500.0	9,069.0	20,535.7	8,120.0	208.5	208.0	0.00	-12,398.6	428.0	950.0	751.9	198.10	4.795		
21,544.1	9,069.0	20,579.9	8,120.0	209.2	208.8	0.00	-12,442.8	428.4	950.0	751.2	198.79	4.779		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design		Voni - Voni Fed Com #108H - Wellbore #1 - BLM Plan #1											Offset Site Error:		0.0 usft
Survey Program:		0-MWD											Offset Well Error:		0.0 usft
Reference		Offset		Semi Major Axis			Distance								
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.0	0.0	1.0	1.0	0.0	0.0	89.71	0.4	80.0	80.0						
100.0	100.0	101.0	101.0	0.1	0.1	89.71	0.4	80.0	80.0	79.8	0.26	308.008			
200.0	200.0	201.0	201.0	0.5	0.5	89.71	0.4	80.0	80.0	79.1	0.98	81.947			
300.0	300.0	301.0	301.0	0.8	0.8	89.71	0.4	80.0	80.0	78.4	1.69	47.261			
400.0	400.0	401.0	401.0	1.2	1.2	89.71	0.4	80.0	80.0	77.6	2.41	33.205			
500.0	500.0	501.0	501.0	1.6	1.6	89.71	0.4	80.0	80.0	76.9	3.13	25.594	CC, ES		
600.0	600.0	599.3	599.3	1.9	1.9	89.51	0.7	81.1	81.1	77.3	3.83	21.148			
700.0	700.0	697.6	697.5	2.3	2.3	88.97	1.5	84.1	84.2	79.6	4.54	18.546			
800.0	800.0	795.7	795.5	2.6	2.6	88.15	2.9	89.1	89.3	84.1	5.24	17.033			
900.0	900.0	893.5	893.0	3.0	3.0	87.16	4.8	96.1	96.6	90.6	5.95	16.230			
1,000.0	1,000.0	991.0	990.1	3.4	3.3	86.08	7.2	105.0	105.9	99.2	6.65	15.917			
1,100.0	1,100.0	1,088.0	1,086.4	3.7	3.7	85.00	10.1	115.9	117.2	109.9	7.35	15.954			
1,200.0	1,200.0	1,184.5	1,182.1	4.1	4.1	83.97	13.6	128.6	130.7	122.7	8.04	16.255			
1,300.0	1,300.0	1,280.9	1,277.3	4.4	4.4	83.01	17.5	143.2	146.2	137.5	8.73	16.743			
1,400.0	1,400.0	1,379.6	1,374.6	4.8	4.8	82.19	21.8	158.8	162.4	153.0	9.44	17.207			
1,500.0	1,500.0	1,478.2	1,471.9	5.1	5.3	81.51	26.0	174.4	178.7	168.6	10.15	17.605			
1,600.0	1,600.0	1,577.0	1,569.3	5.5	5.7	49.91	30.3	190.0	194.4	183.6	10.86	17.900			
1,700.0	1,700.0	1,675.9	1,666.9	5.9	6.1	49.86	34.5	205.7	209.1	197.5	11.58	18.062			
1,800.0	1,799.9	1,775.0	1,764.6	6.2	6.5	50.15	38.8	221.3	222.6	210.3	12.29	18.110			
1,900.0	1,899.7	1,874.1	1,862.5	6.6	6.9	50.74	43.0	237.0	235.0	222.0	13.01	18.065			
2,000.0	1,999.4	1,973.4	1,960.4	6.9	7.4	51.58	47.3	252.7	246.4	232.7	13.73	17.942			
2,100.0	2,098.9	2,072.7	2,058.4	7.3	7.8	52.66	51.6	268.5	256.8	242.4	14.46	17.757			
2,200.0	2,198.3	2,172.1	2,156.4	7.7	8.2	53.96	55.8	284.2	266.3	251.1	15.20	17.522			
2,300.0	2,297.4	2,271.5	2,254.4	8.0	8.6	55.46	60.1	299.9	274.9	259.0	15.94	17.247			
2,400.0	2,396.4	2,370.8	2,352.4	8.4	9.1	57.09	64.4	315.6	283.3	266.6	16.69	16.972			
2,500.0	2,495.5	2,470.1	2,450.4	8.8	9.5	58.62	68.6	331.3	291.8	274.4	17.45	16.727			
2,600.0	2,594.5	2,569.5	2,548.4	9.2	9.9	60.06	72.9	347.1	300.6	282.4	18.21	16.508			
2,700.0	2,693.5	2,668.8	2,646.4	9.6	10.4	61.43	77.2	362.8	309.5	290.5	18.98	16.311			
2,800.0	2,792.5	2,768.1	2,744.3	9.9	10.8	62.71	81.4	378.5	318.6	298.8	19.75	16.133			
2,900.0	2,891.6	2,867.5	2,842.3	10.3	11.2	63.92	85.7	394.2	327.8	307.3	20.52	15.973			
3,000.0	2,990.6	2,966.8	2,940.3	10.7	11.7	65.07	90.0	409.9	337.2	315.9	21.31	15.828			
3,100.0	3,089.6	3,066.1	3,038.3	11.1	12.1	66.16	94.2	425.6	346.7	324.7	22.09	15.696			
3,200.0	3,188.6	3,165.5	3,136.3	11.5	12.6	67.18	98.5	441.4	356.4	333.5	22.88	15.576			
3,300.0	3,287.7	3,264.8	3,234.3	11.9	13.0	68.16	102.8	457.1	366.1	342.4	23.67	15.466			
3,400.0	3,386.7	3,364.2	3,332.3	12.3	13.4	69.08	107.0	472.8	376.0	351.5	24.47	15.365			
3,500.0	3,485.7	3,463.5	3,430.3	12.7	13.9	69.95	111.3	488.5	385.9	360.6	25.27	15.273			
3,600.0	3,584.8	3,562.8	3,528.3	13.1	14.3	70.78	115.6	504.2	395.9	369.8	26.07	15.188			
3,667.1	3,651.2	3,629.5	3,594.1	13.4	14.6	71.32	118.4	514.8	402.7	376.1	26.60	15.135			
3,700.0	3,683.8	3,662.2	3,626.3	13.5	14.7	71.60	119.8	519.9	406.0	379.2	26.87	15.113			
3,800.0	3,783.1	3,761.5	3,724.3	13.9	15.2	72.23	124.1	535.7	416.9	389.2	27.66	15.073			
3,900.0	3,882.7	3,860.8	3,822.3	14.3	15.6	72.50	128.4	551.4	428.5	400.1	28.42	15.075			
4,000.0	3,982.5	3,960.0	3,920.1	14.7	16.1	72.46	132.6	567.1	440.9	411.7	29.17	15.115			
4,100.0	4,082.4	4,059.1	4,017.8	15.0	16.5	72.12	136.9	582.8	454.1	424.2	29.90	15.190			
4,200.5	4,182.8	4,158.3	4,115.7	15.4	16.9	102.63	141.1	598.5	468.3	437.7	30.60	15.302			
4,300.0	4,282.4	4,256.5	4,212.6	15.7	17.4	101.73	145.3	614.0	482.8	451.5	31.29	15.429			
4,400.0	4,382.4	4,355.2	4,309.9	16.1	17.8	100.88	149.6	629.6	497.5	465.5	31.99	15.554			
4,500.0	4,482.4	4,453.8	4,407.2	16.4	18.2	100.07	153.8	645.2	512.3	479.7	32.68	15.676			
4,600.0	4,582.4	4,552.5	4,504.5	16.7	18.7	99.32	158.1	660.8	527.3	493.9	33.38	15.796			
4,700.0	4,682.4	4,651.1	4,601.8	17.1	19.1	98.60	162.3	676.4	542.3	508.2	34.08	15.912			
4,800.0	4,782.4	4,749.8	4,699.1	17.4	19.5	97.92	166.5	692.0	557.3	522.5	34.78	16.025			
4,900.0	4,882.4	4,848.4	4,796.5	17.8	20.0	97.28	170.8	707.6	572.5	537.0	35.48	16.136			
5,000.0	4,982.4	4,947.0	4,893.8	18.1	20.4	96.67	175.0	723.3	587.7	551.5	36.18	16.243			

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #108H - 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		
5,100.0	5,082.4	5,045.7	4,991.1	18.5	20.8	96.09	179.2	738.9	603.0	566.1	36.88	16.347		
5,200.0	5,182.4	5,146.3	5,090.3	18.8	21.3	95.53	183.5	754.7	618.2	580.6	37.60	16.440		
5,300.0	5,282.4	5,248.3	5,191.0	19.2	21.7	95.01	187.8	770.2	633.0	594.7	38.33	16.513		
5,400.0	5,382.4	5,350.4	5,292.0	19.5	22.2	94.53	191.8	785.3	647.4	608.3	39.07	16.571		
5,500.0	5,482.4	5,452.8	5,393.2	19.9	22.6	94.09	195.8	799.8	661.2	621.4	39.80	16.615		
5,600.0	5,582.4	5,555.3	5,494.7	20.2	23.0	93.68	199.6	813.8	674.6	634.1	40.53	16.646		
5,700.0	5,682.4	5,657.9	5,596.4	20.6	23.5	93.30	203.2	827.2	687.5	646.3	41.26	16.664		
5,800.0	5,782.4	5,760.7	5,698.3	20.9	23.9	92.95	206.7	840.2	699.9	657.9	41.99	16.669		
5,900.0	5,882.4	5,863.7	5,800.5	21.3	24.3	92.62	210.1	852.6	711.8	669.1	42.72	16.663		
6,000.0	5,982.4	5,966.8	5,902.8	21.6	24.7	92.32	213.3	864.5	723.2	679.8	43.45	16.645		
6,100.0	6,082.4	6,070.0	6,005.4	22.0	25.1	92.04	216.4	875.8	734.1	689.9	44.18	16.617		
6,200.0	6,182.4	6,173.4	6,108.1	22.3	25.6	91.79	219.4	886.7	744.5	699.6	44.91	16.578		
6,300.0	6,282.4	6,276.9	6,211.1	22.7	26.0	91.55	222.1	896.9	754.3	708.7	45.63	16.530		
6,400.0	6,382.4	6,380.5	6,314.2	23.0	26.4	91.33	224.8	906.6	763.6	717.3	46.36	16.472		
6,500.0	6,482.4	6,484.2	6,417.5	23.4	26.7	91.13	227.3	915.8	772.4	725.3	47.08	16.406		
6,600.0	6,582.4	6,588.0	6,520.9	23.7	27.1	90.94	229.6	924.4	780.7	732.9	47.81	16.330		
6,700.0	6,682.4	6,691.9	6,624.5	24.1	27.5	90.78	231.8	932.5	788.4	739.9	48.53	16.247		
6,800.0	6,782.4	6,795.9	6,728.2	24.4	27.9	90.62	233.8	940.0	795.6	746.4	49.25	16.155		
6,900.0	6,882.4	6,900.0	6,832.0	24.8	28.3	90.48	235.7	947.0	802.3	752.3	49.97	16.056		
7,000.0	6,982.4	7,004.2	6,936.0	25.1	28.7	90.35	237.5	953.4	808.4	757.7	50.68	15.950		
7,100.0	7,082.4	7,108.4	7,040.0	25.5	29.0	90.24	239.1	959.2	814.0	762.6	51.40	15.837		
7,200.0	7,182.4	7,212.7	7,144.2	25.8	29.4	90.14	240.5	964.5	819.1	767.0	52.11	15.717		
7,300.0	7,282.4	7,317.1	7,248.5	26.2	29.8	90.05	241.8	969.2	823.6	770.8	52.83	15.590		
7,400.0	7,382.4	7,421.5	7,352.8	26.5	30.1	89.97	242.9	973.4	827.6	774.0	53.54	15.458		
7,500.0	7,482.4	7,525.9	7,457.2	26.9	30.5	89.90	243.9	976.9	831.0	776.7	54.25	15.319		
7,600.0	7,582.4	7,630.4	7,561.6	27.2	30.8	89.85	244.7	979.9	833.9	778.9	54.95	15.174		
7,700.0	7,682.4	7,735.0	7,666.1	27.6	31.2	89.80	245.3	982.4	836.2	780.5	55.66	15.024		
7,800.0	7,782.4	7,839.5	7,770.7	27.9	31.5	89.77	245.8	984.2	838.0	781.6	56.36	14.869		
7,900.0	7,882.4	7,944.1	7,875.2	28.3	31.8	89.74	246.2	985.5	839.2	782.2	57.06	14.708		
8,000.0	7,982.4	8,048.7	7,979.8	28.7	32.2	89.73	246.4	986.3	839.9	782.2	57.76	14.542		
8,100.0	8,082.4	8,152.3	8,083.4	29.0	32.5	89.76	246.0	986.4	840.1	781.6	58.45	14.373		
8,112.6	8,095.0	8,164.9	8,096.0	29.0	32.5	89.80	245.4	986.4	840.1	781.6	58.53	14.352		
8,200.0	8,182.4	8,250.7	8,180.9	29.4	32.8	90.59	233.8	986.5	840.2	781.0	59.13	14.209		
8,300.0	8,282.4	8,342.4	8,268.6	29.7	33.0	92.38	207.5	986.6	841.1	781.3	59.82	14.060		
8,400.0	8,382.4	8,424.0	8,342.3	30.1	33.1	94.75	172.6	986.7	844.2	783.8	60.48	13.960		
8,500.0	8,482.4	8,494.4	8,401.4	30.4	33.3	97.33	134.4	986.8	851.3	790.3	61.01	13.954		
8,513.6	8,496.0	8,503.1	8,408.4	30.5	33.3	97.68	129.1	986.9	852.7	791.6	61.07	13.963		
8,550.0	8,532.3	8,526.0	8,426.3	30.6	33.3	-68.76	114.9	986.9	856.5	795.3	61.19	13.997		
8,600.0	8,582.0	8,557.0	8,449.6	30.7	33.4	-67.10	94.5	987.0	861.5	800.2	61.29	14.057		
8,650.0	8,631.1	8,587.5	8,471.5	30.9	33.4	-65.56	73.2	987.0	866.2	804.9	61.31	14.129		
8,700.0	8,679.1	8,617.6	8,491.9	31.0	33.4	-64.13	51.1	987.1	870.5	809.3	61.25	14.212		
8,750.0	8,725.7	8,650.0	8,512.6	31.2	33.5	-62.74	26.1	987.2	874.3	813.2	61.16	14.296		
8,800.0	8,770.6	8,676.8	8,528.5	31.3	33.5	-61.64	4.7	987.3	877.5	816.6	60.94	14.399		
8,850.0	8,813.4	8,705.9	8,544.8	31.4	33.5	-60.59	-19.5	987.4	880.0	819.2	60.72	14.493		
8,900.0	8,853.7	8,734.8	8,559.6	31.5	33.5	-59.67	-44.3	987.5	881.6	821.2	60.45	14.585		
8,950.0	8,891.4	8,763.4	8,573.1	31.6	33.6	-58.88	-69.6	987.5	882.4	822.3	60.13	14.675		
9,000.0	8,926.0	8,791.9	8,585.3	31.6	33.6	-58.22	-95.3	987.6	882.3	822.5	59.81	14.752		
9,050.0	8,957.4	8,820.2	8,596.0	31.7	33.6	-57.70	-121.5	987.7	881.2	821.7	59.49	14.813		
9,100.0	8,985.2	8,850.0	8,606.0	31.8	33.7	-57.29	-149.6	987.8	879.1	819.9	59.20	14.851		
9,150.0	9,009.4	8,876.5	8,613.5	32.0	33.7	-57.08	-174.9	987.9	876.0	817.1	58.91	14.871		
9,200.0	9,029.6	8,900.0	8,619.3	32.1	33.7	-57.04	-197.7	988.0	871.8	813.1	58.64	14.867		
9,250.0	9,045.7	8,932.3	8,625.7	32.3	33.8	-57.02	-229.4	988.1	866.5	808.0	58.51	14.810		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #108H - 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		
9,300.0	9,057.7	8,960.1	8,629.7	32.4	33.8	-57.21	-256.9	988.2	860.1	801.7	58.41	14.725		
9,350.0	9,065.4	8,987.9	8,632.4	32.6	33.9	-57.54	-284.6	988.3	852.7	794.3	58.40	14.601		
9,400.0	9,068.8	9,015.7	8,633.8	32.8	34.0	-58.03	-312.3	988.4	844.2	785.7	58.49	14.435		
9,413.6	9,069.0	9,023.3	8,633.9	32.8	34.0	-58.19	-319.9	988.4	841.7	783.2	58.53	14.382		
9,500.0	9,069.0	9,100.4	8,634.0	33.2	34.2	-57.81	-396.2	989.0	827.6	768.7	58.89	14.054		
9,600.0	9,069.0	9,201.7	8,634.0	33.7	34.6	-57.36	-494.9	989.8	814.2	754.7	59.49	13.686		
9,700.0	9,069.0	9,302.5	8,634.0	34.2	35.0	-57.00	-594.2	990.6	803.8	743.5	60.27	13.337		
9,800.0	9,069.0	9,397.1	8,634.0	34.8	35.5	-56.74	-693.8	991.4	796.4	735.2	61.18	13.016		
9,900.0	9,069.0	9,497.0	8,634.0	35.5	36.1	-56.57	-793.6	992.3	791.8	729.5	62.30	12.710		
10,005.0	9,069.0	9,602.0	8,634.0	36.2	36.8	-56.51	-898.6	993.1	790.2	726.6	63.65	12.415		
10,005.2	9,069.0	9,602.2	8,634.0	36.2	36.8	-56.51	-898.8	993.1	790.2	726.6	63.66	12.414		
10,100.0	9,069.0	9,703.0	8,634.0	37.0	37.6	-56.51	-993.6	993.9	790.2	725.2	65.05	12.148		
10,200.0	9,069.0	9,803.0	8,634.0	37.8	38.4	-56.51	-1,093.6	994.7	790.2	723.7	66.57	11.870		
10,300.0	9,069.0	9,903.0	8,634.0	38.6	39.2	-56.51	-1,193.6	995.6	790.3	722.1	68.18	11.590		
10,400.0	9,069.0	9,997.0	8,634.0	39.6	40.1	-56.52	-1,293.6	996.4	790.3	720.4	69.82	11.318		
10,500.0	9,069.0	10,103.0	8,634.0	40.5	41.1	-56.52	-1,393.6	997.2	790.3	718.6	71.64	11.030		
10,600.0	9,069.0	10,203.0	8,634.0	41.5	42.1	-56.52	-1,493.6	998.0	790.3	716.8	73.48	10.754		
10,700.0	9,069.0	10,303.0	8,634.0	42.6	43.1	-56.52	-1,593.6	998.9	790.3	714.9	75.39	10.483		
10,800.0	9,069.0	10,397.0	8,634.0	43.7	44.1	-56.52	-1,693.6	999.7	790.3	713.0	77.30	10.224		
10,900.0	9,069.0	10,503.0	8,634.0	44.8	45.3	-56.52	-1,793.5	1,000.5	790.3	710.9	79.38	9.956		
11,000.0	9,069.0	10,603.0	8,634.0	45.9	46.4	-56.52	-1,893.5	1,001.3	790.3	708.8	81.46	9.702		
11,100.0	9,069.0	10,703.0	8,634.0	47.1	47.6	-56.52	-1,993.5	1,002.2	790.3	706.7	83.58	9.456		
11,200.0	9,069.0	10,803.0	8,634.0	48.3	48.8	-56.52	-2,093.5	1,003.0	790.3	704.6	85.75	9.216		
11,300.0	9,069.0	10,897.0	8,634.0	49.6	49.9	-56.52	-2,193.5	1,003.8	790.3	702.4	87.89	8.992		
11,400.0	9,069.0	11,003.0	8,634.0	50.8	51.2	-56.52	-2,293.5	1,004.6	790.3	700.1	90.21	8.761		
11,500.0	9,069.0	11,097.0	8,634.0	52.1	52.4	-56.52	-2,393.5	1,005.5	790.3	697.9	92.43	8.551		
11,600.0	9,069.0	11,197.0	8,634.0	53.4	53.7	-56.52	-2,493.5	1,006.3	790.3	695.6	94.74	8.342		
11,700.0	9,069.0	11,303.0	8,634.0	54.7	55.1	-56.52	-2,593.5	1,007.1	790.3	693.2	97.16	8.134		
11,800.0	9,069.0	11,397.0	8,634.0	56.1	56.4	-56.52	-2,693.5	1,007.9	790.4	690.9	99.47	7.946		
11,900.0	9,069.0	11,503.0	8,634.0	57.4	57.8	-56.52	-2,793.5	1,008.8	790.4	688.4	101.94	7.753		
12,000.0	9,069.0	11,603.0	8,634.0	58.8	59.1	-56.52	-2,893.5	1,009.6	790.4	686.0	104.37	7.573		
12,100.0	9,069.0	11,697.0	8,634.0	60.2	60.4	-56.52	-2,993.5	1,010.4	790.4	683.6	106.75	7.404		
12,200.0	9,069.0	11,797.0	8,634.0	61.6	61.8	-56.52	-3,093.5	1,011.2	790.4	681.2	109.22	7.237		
12,300.0	9,069.0	11,903.0	8,634.0	63.0	63.3	-56.52	-3,193.5	1,012.1	790.4	678.6	111.79	7.070		
12,400.0	9,069.0	12,003.0	8,634.0	64.4	64.7	-56.52	-3,293.5	1,012.9	790.4	676.1	114.30	6.915		
12,500.0	9,069.0	12,103.0	8,634.0	65.8	66.1	-56.52	-3,393.5	1,013.7	790.4	673.6	116.83	6.765		
12,600.0	9,069.0	12,203.0	8,634.0	67.3	67.6	-56.52	-3,493.5	1,014.5	790.4	671.0	119.38	6.621		
12,700.0	9,069.0	12,303.0	8,634.0	68.7	69.0	-56.52	-3,593.5	1,015.4	790.4	668.5	121.94	6.482		
12,800.0	9,069.0	12,403.0	8,634.0	70.2	70.5	-56.52	-3,693.5	1,016.2	790.4	665.9	124.51	6.348		
12,900.0	9,069.0	12,503.0	8,634.0	71.6	71.9	-56.52	-3,793.5	1,017.0	790.4	663.3	127.10	6.219		
13,000.0	9,069.0	12,603.0	8,634.0	73.1	73.4	-56.52	-3,893.5	1,017.8	790.4	660.7	129.71	6.094		
13,100.0	9,069.0	12,703.0	8,634.0	74.6	74.9	-56.52	-3,993.5	1,018.7	790.4	658.1	132.32	5.974		
13,200.0	9,069.0	12,803.0	8,634.0	76.1	76.4	-56.52	-4,093.5	1,019.5	790.4	655.5	134.94	5.858		
13,300.0	9,069.0	12,903.0	8,634.0	77.6	77.9	-56.52	-4,193.5	1,020.3	790.5	652.9	137.58	5.745		
13,400.0	9,069.0	12,997.0	8,634.0	79.1	79.3	-56.52	-4,293.5	1,021.1	790.5	650.3	140.15	5.640		
13,500.0	9,069.0	13,103.0	8,634.0	80.6	80.9	-56.53	-4,393.5	1,022.0	790.5	647.6	142.88	5.532		
13,600.0	9,069.0	13,203.0	8,634.0	82.1	82.4	-56.53	-4,493.5	1,022.8	790.5	644.9	145.55	5.431		
13,700.0	9,069.0	13,303.0	8,634.0	83.6	83.9	-56.53	-4,593.5	1,023.6	790.5	642.3	148.22	5.333		
13,800.0	9,069.0	13,403.0	8,634.0	85.2	85.4	-56.53	-4,693.4	1,024.5	790.5	639.6	150.90	5.238		
13,900.0	9,069.0	13,497.0	8,634.0	86.7	86.8	-56.53	-4,793.4	1,025.3	790.5	637.0	153.51	5.150		
14,000.0	9,069.0	13,603.0	8,634.0	88.2	88.4	-56.53	-4,893.4	1,026.1	790.5	634.2	156.29	5.058		
14,100.0	9,069.0	13,697.0	8,634.0	89.8	89.9	-56.53	-4,993.4	1,026.9	790.5	631.6	158.91	4.975		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #108H - Wellbore #1 - BLM Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,200.0	9,069.0	13,803.0	8,634.0	91.3	91.5	-56.53	-5,093.4	1,027.8	790.5	628.8	161.70	4.889		
14,300.0	9,069.0	13,903.0	8,634.0	92.8	93.1	-56.53	-5,193.4	1,028.6	790.5	626.1	164.41	4.808		
14,400.0	9,069.0	13,997.0	8,634.0	94.4	94.5	-56.53	-5,293.4	1,029.4	790.5	623.5	167.05	4.732		
14,500.0	9,069.0	14,103.0	8,634.0	95.9	96.2	-56.53	-5,393.4	1,030.2	790.5	620.7	169.86	4.654		
14,600.0	9,069.0	14,203.0	8,634.0	97.5	97.7	-56.53	-5,493.4	1,031.1	790.5	617.9	172.60	4.580		
14,700.0	9,069.0	14,297.0	8,634.0	99.1	99.2	-56.53	-5,593.4	1,031.9	790.5	615.3	175.25	4.511		
14,800.0	9,069.0	14,403.0	8,634.0	100.6	100.8	-56.53	-5,693.4	1,032.7	790.6	612.5	178.08	4.439		
14,900.0	9,069.0	14,497.0	8,634.0	102.2	102.3	-56.53	-5,793.4	1,033.5	790.6	609.8	180.74	4.374		
15,000.0	9,069.0	14,603.0	8,634.0	103.8	103.9	-56.53	-5,893.4	1,034.4	790.6	607.0	183.57	4.307		
15,100.0	9,069.0	14,703.0	8,634.0	105.3	105.5	-56.53	-5,993.4	1,035.2	790.6	604.2	186.33	4.243		
15,200.0	9,069.0	14,803.0	8,634.0	106.9	107.1	-56.53	-6,093.4	1,036.0	790.6	601.5	189.09	4.181		
15,300.0	9,069.0	14,903.0	8,634.0	108.5	108.7	-56.53	-6,193.4	1,036.8	790.6	598.7	191.85	4.121		
15,400.0	9,069.0	15,003.0	8,634.0	110.1	110.2	-56.53	-6,293.4	1,037.7	790.6	596.0	194.62	4.062		
15,500.0	9,069.0	15,097.0	8,634.0	111.6	111.7	-56.53	-6,393.4	1,038.5	790.6	593.3	197.31	4.007		
15,600.0	9,069.0	15,203.0	8,634.0	113.2	113.4	-56.53	-6,493.4	1,039.3	790.6	590.4	200.17	3.950		
15,700.0	9,069.0	15,303.0	8,634.0	114.8	115.0	-56.53	-6,593.4	1,040.1	790.6	587.7	202.94	3.896		
15,800.0	9,069.0	15,403.0	8,634.0	116.4	116.5	-56.53	-6,693.4	1,041.0	790.6	584.9	205.72	3.843		
15,900.0	9,069.0	15,503.0	8,634.0	118.0	118.1	-56.53	-6,793.4	1,041.8	790.6	582.1	208.51	3.792		
16,000.0	9,069.0	15,597.0	8,634.0	119.6	119.6	-56.53	-6,893.4	1,042.6	790.6	579.4	211.21	3.743		
16,100.0	9,069.0	15,703.0	8,634.0	121.2	121.3	-56.53	-6,993.4	1,043.4	790.6	576.6	214.08	3.693		
16,200.0	9,069.0	15,803.0	8,634.0	122.7	122.9	-56.53	-7,093.4	1,044.3	790.6	573.8	216.88	3.646		
16,300.0	9,069.0	15,903.0	8,634.0	124.3	124.5	-56.53	-7,193.4	1,045.1	790.7	571.0	219.67	3.599		
16,400.0	9,069.0	16,003.0	8,634.0	125.9	126.1	-56.53	-7,293.4	1,045.9	790.7	568.2	222.47	3.554		
16,500.0	9,069.0	16,103.0	8,634.0	127.5	127.7	-56.53	-7,393.4	1,046.7	790.7	565.4	225.27	3.510		
16,600.0	9,069.0	16,197.0	8,634.0	129.1	129.2	-56.54	-7,493.4	1,047.6	790.7	562.7	227.99	3.468		
16,700.0	9,069.0	16,303.0	8,634.0	130.7	130.9	-56.54	-7,593.3	1,048.4	790.7	559.8	230.87	3.425		
16,800.0	9,069.0	16,397.0	8,634.0	132.3	132.4	-56.54	-7,693.3	1,049.2	790.7	557.1	233.60	3.385		
16,900.0	9,069.0	16,503.0	8,634.0	133.9	134.1	-56.54	-7,793.3	1,050.0	790.7	554.2	236.49	3.343		
17,000.0	9,069.0	16,603.0	8,634.0	135.5	135.7	-56.54	-7,893.3	1,050.9	790.7	551.4	239.30	3.304		
17,100.0	9,069.0	16,697.0	8,634.0	137.1	137.2	-56.54	-7,993.3	1,051.7	790.7	548.7	242.03	3.267		
17,200.0	9,069.0	16,803.0	8,634.0	138.8	138.9	-56.54	-8,093.3	1,052.5	790.7	545.8	244.93	3.228		
17,300.0	9,069.0	16,897.0	8,634.0	140.4	140.4	-56.54	-8,193.3	1,053.3	790.7	543.1	247.66	3.193		
17,400.0	9,069.0	17,003.0	8,634.0	142.0	142.1	-56.54	-8,293.3	1,054.2	790.7	540.2	250.56	3.156		
17,500.0	9,069.0	17,103.0	8,634.0	143.6	143.7	-56.54	-8,393.3	1,055.0	790.7	537.4	253.38	3.121		
17,600.0	9,069.0	17,197.0	8,634.0	145.2	145.2	-56.54	-8,493.3	1,055.8	790.7	534.6	256.11	3.087		
17,700.0	9,069.0	17,303.0	8,634.0	146.8	146.9	-56.54	-8,593.3	1,056.6	790.7	531.7	259.02	3.053		
17,800.0	9,069.0	17,403.0	8,634.0	148.4	148.5	-56.54	-8,693.3	1,057.5	790.8	528.9	261.85	3.020		
17,900.0	9,069.0	17,503.0	8,634.0	150.0	150.1	-56.54	-8,793.3	1,058.3	790.8	526.1	264.67	2.988		
18,000.0	9,069.0	17,603.0	8,634.0	151.6	151.7	-56.54	-8,893.3	1,059.1	790.8	523.3	267.50	2.956		
18,100.0	9,069.0	17,703.0	8,634.0	153.3	153.4	-56.54	-8,993.3	1,059.9	790.8	520.4	270.33	2.925		
18,200.0	9,069.0	17,803.0	8,634.0	154.9	155.0	-56.54	-9,093.3	1,060.8	790.8	517.6	273.16	2.895		
18,300.0	9,069.0	17,903.0	8,634.0	156.5	156.6	-56.54	-9,193.3	1,061.6	790.8	514.8	275.99	2.865		
18,400.0	9,069.0	17,997.0	8,634.0	158.1	158.1	-56.54	-9,293.3	1,062.4	790.8	512.1	278.73	2.837		
18,500.0	9,069.0	18,103.0	8,634.0	159.7	159.8	-56.54	-9,393.3	1,063.2	790.8	509.1	281.65	2.808		
18,600.0	9,069.0	18,203.0	8,634.0	161.3	161.4	-56.54	-9,493.3	1,064.1	790.8	506.3	284.49	2.780		
18,700.0	9,069.0	18,303.0	8,634.0	163.0	163.0	-56.54	-9,593.3	1,064.9	790.8	503.5	287.32	2.752		
18,800.0	9,069.0	18,403.0	8,634.0	164.6	164.7	-56.54	-9,693.3	1,065.7	790.8	500.7	290.16	2.725		
18,900.0	9,069.0	18,503.0	8,634.0	166.2	166.3	-56.54	-9,793.3	1,066.5	790.8	497.8	293.00	2.699		
19,000.0	9,069.0	18,597.0	8,634.0	167.8	167.8	-56.54	-9,893.3	1,067.4	790.8	495.1	295.75	2.674		
19,100.0	9,069.0	18,703.0	8,634.0	169.4	169.5	-56.54	-9,993.3	1,068.2	790.8	492.2	298.68	2.648		
19,200.0	9,069.0	18,797.0	8,634.0	171.1	171.0	-56.54	-10,093.3	1,069.0	790.8	489.4	301.43	2.624		
19,300.0	9,069.0	18,903.0	8,634.0	172.7	172.8	-56.54	-10,193.3	1,069.8	790.9	486.5	304.36	2.598		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #108H - 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		
19,400.0	9,069.0	19,003.0	8,634.0	174.3	174.4	-56.54	-10,293.3	1,070.7	790.9	483.7	307.21	2.574		
19,500.0	9,069.0	19,103.0	8,634.0	175.9	176.0	-56.54	-10,393.3	1,071.5	790.9	480.8	310.05	2.551		
19,600.0	9,069.0	19,203.0	8,634.0	177.6	177.6	-56.54	-10,493.3	1,072.3	790.9	478.0	312.89	2.528		
19,700.0	9,069.0	19,297.0	8,634.0	179.2	179.2	-56.54	-10,593.2	1,073.1	790.9	475.2	315.65	2.506		
19,800.0	9,069.0	19,403.0	8,634.0	180.8	180.9	-56.55	-10,693.2	1,074.0	790.9	472.3	318.59	2.482		
19,900.0	9,069.0	19,503.0	8,634.0	182.4	182.5	-56.55	-10,793.2	1,074.8	790.9	469.5	321.43	2.461		
20,000.0	9,069.0	19,603.0	8,634.0	184.1	184.1	-56.55	-10,893.2	1,075.6	790.9	466.6	324.28	2.439		
20,100.0	9,069.0	19,703.0	8,634.0	185.7	185.8	-56.55	-10,993.2	1,076.4	790.9	463.8	327.13	2.418		
20,200.0	9,069.0	19,797.0	8,634.0	187.3	187.3	-56.55	-11,093.2	1,077.3	790.9	461.0	329.89	2.397		
20,300.0	9,069.0	19,903.0	8,634.0	188.9	189.0	-56.55	-11,193.2	1,078.1	790.9	458.1	332.83	2.376		
20,400.0	9,069.0	19,997.0	8,634.0	190.6	190.5	-56.55	-11,293.2	1,078.9	790.9	455.3	335.60	2.357		
20,500.0	9,069.0	20,103.0	8,634.0	192.2	192.3	-56.55	-11,393.2	1,079.7	790.9	452.4	338.53	2.336		
20,600.0	9,069.0	20,197.0	8,634.0	193.8	193.8	-56.55	-11,493.2	1,080.6	790.9	449.6	341.30	2.317		
20,700.0	9,069.0	20,303.0	8,634.0	195.5	195.5	-56.55	-11,593.2	1,081.4	790.9	446.7	344.24	2.298		
20,800.0	9,069.0	20,403.0	8,634.0	197.1	197.1	-56.55	-11,693.2	1,082.2	791.0	443.9	347.09	2.279		
20,900.0	9,069.0	20,497.0	8,634.0	198.7	198.7	-56.55	-11,793.2	1,083.0	791.0	441.1	349.86	2.261		
21,000.0	9,069.0	20,603.0	8,634.0	200.3	200.4	-56.55	-11,893.2	1,083.9	791.0	438.2	352.80	2.242		
21,100.0	9,069.0	20,703.0	8,634.0	202.0	202.0	-56.55	-11,993.2	1,084.7	791.0	435.3	355.66	2.224		
21,200.0	9,069.0	20,797.0	8,634.0	203.6	203.6	-56.55	-12,093.2	1,085.5	791.0	432.6	358.43	2.207		
21,300.0	9,069.0	20,903.0	8,634.0	205.2	205.3	-56.55	-12,193.2	1,086.3	791.0	429.6	361.37	2.189		
21,400.0	9,069.0	20,997.0	8,634.0	206.9	206.8	-56.55	-12,293.2	1,087.2	791.0	426.9	364.14	2.172		
21,500.0	9,069.0	21,103.0	8,634.0	208.5	208.6	-56.55	-12,393.2	1,088.0	791.0	423.9	367.09	2.155		
21,544.1	9,069.0	21,141.1	8,634.0	209.2	209.2	-56.55	-12,437.3	1,088.4	791.0	422.7	368.26	2.148 SF		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #124H - Wellbore #1 - BLM Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	1.0	1.0	0.0	0.0	81.86	31.5	219.9	222.1					
100.0	100.0	101.0	101.0	0.1	0.1	81.86	31.5	219.9	222.1	221.9	0.26	854.763		
200.0	200.0	201.0	201.0	0.5	0.5	81.86	31.5	219.9	222.1	221.2	0.98	227.414		
300.0	300.0	301.0	301.0	0.8	0.8	81.86	31.5	219.9	222.1	220.5	1.69	131.154		
400.0	400.0	401.0	401.0	1.2	1.2	81.86	31.5	219.9	222.1	219.7	2.41	92.149		
500.0	500.0	501.0	501.0	1.6	1.6	81.86	31.5	219.9	222.1	219.0	3.13	71.026 CC, ES		
600.0	600.0	597.3	597.3	1.9	1.9	81.80	31.8	220.7	223.0	219.1	3.83	58.253		
700.0	700.0	693.7	693.6	2.3	2.2	81.65	32.7	222.9	225.4	220.9	4.53	49.808		
800.0	800.0	789.9	789.7	2.6	2.6	81.39	34.3	226.7	229.5	224.3	5.23	43.926		
900.0	900.0	885.9	885.6	3.0	2.9	81.05	36.5	231.9	235.2	229.3	5.92	39.711		
1,000.0	1,000.0	981.7	981.2	3.4	3.3	80.64	39.3	238.6	242.6	236.0	6.62	36.640		
1,100.0	1,100.0	1,077.3	1,076.3	3.7	3.6	80.17	42.7	246.7	251.6	244.3	7.32	34.387		
1,200.0	1,200.0	1,172.6	1,171.0	4.1	4.0	79.66	46.8	256.3	262.2	254.2	8.01	32.746		
1,300.0	1,300.0	1,267.4	1,265.1	4.4	4.4	79.12	51.4	267.2	274.5	265.8	8.70	31.560		
1,400.0	1,400.0	1,361.9	1,358.6	4.8	4.7	78.56	56.5	279.5	288.3	279.0	9.38	30.736		
1,500.0	1,500.0	1,455.8	1,451.4	5.1	5.1	78.00	62.3	293.2	303.9	293.8	10.06	30.198		
1,600.0	1,600.0	1,552.1	1,546.3	5.5	5.5	46.32	68.7	308.5	320.2	309.4	10.76	29.767		
1,700.0	1,700.0	1,651.0	1,643.6	5.9	5.9	46.00	75.4	324.3	335.5	324.0	11.47	29.256		
1,800.0	1,799.9	1,750.0	1,741.1	6.2	6.3	45.92	82.0	340.2	349.6	337.4	12.18	28.697		
1,900.0	1,899.7	1,849.1	1,838.7	6.6	6.8	46.04	88.7	356.0	362.5	349.6	12.90	28.098		
2,000.0	1,999.4	1,948.4	1,936.5	6.9	7.2	46.35	95.4	371.9	374.2	360.6	13.62	27.468		
2,100.0	2,098.9	2,047.8	2,034.4	7.3	7.6	46.84	102.1	387.8	384.8	370.4	14.35	26.810		
2,200.0	2,198.3	2,147.2	2,132.3	7.7	8.1	47.49	108.8	403.7	394.2	379.1	15.08	26.132		
2,300.0	2,297.4	2,246.7	2,230.2	8.0	8.5	48.30	115.5	419.7	402.5	386.7	15.82	25.437		
2,400.0	2,396.4	2,346.1	2,328.2	8.4	8.9	49.23	122.2	435.6	410.3	393.8	16.57	24.765		
2,500.0	2,495.5	2,445.6	2,426.2	8.8	9.4	50.12	128.9	451.5	418.3	400.9	17.32	24.151		
2,600.0	2,594.5	2,545.1	2,524.1	9.2	9.8	50.98	135.6	467.4	426.3	408.2	18.07	23.587		
2,700.0	2,693.5	2,644.6	2,622.1	9.6	10.2	51.81	142.2	483.4	434.4	415.6	18.83	23.068		
2,800.0	2,792.5	2,744.0	2,720.1	9.9	10.7	52.60	148.9	499.3	442.6	423.0	19.59	22.590		
2,900.0	2,891.6	2,843.5	2,818.0	10.3	11.1	53.37	155.6	515.2	450.9	430.6	20.36	22.147		
3,000.0	2,990.6	2,943.0	2,916.0	10.7	11.6	54.11	162.3	531.1	459.3	438.2	21.13	21.736		
3,100.0	3,089.6	3,042.5	3,014.0	11.1	12.0	54.83	169.0	547.1	467.7	445.8	21.90	21.355		
3,200.0	3,188.6	3,141.9	3,111.9	11.5	12.5	55.52	175.7	563.0	476.3	453.6	22.68	21.000		
3,300.0	3,287.7	3,241.4	3,209.9	11.9	12.9	56.18	182.4	578.9	484.8	461.4	23.46	20.668		
3,400.0	3,386.7	3,340.9	3,307.9	12.3	13.3	56.82	189.1	594.8	493.5	469.3	24.24	20.358		
3,500.0	3,485.7	3,440.4	3,405.8	12.7	13.8	57.44	195.8	610.7	502.2	477.2	25.03	20.068		
3,600.0	3,584.8	3,539.8	3,503.8	13.1	14.2	58.04	202.5	626.7	511.0	485.2	25.81	19.796		
3,667.1	3,651.2	3,606.6	3,569.5	13.4	14.5	58.43	207.0	637.4	516.9	490.5	26.34	19.622		
3,700.0	3,683.8	3,639.3	3,601.7	13.5	14.7	58.64	209.2	642.6	519.9	493.3	26.60	19.543		
3,800.0	3,783.1	3,738.8	3,699.7	13.9	15.1	59.13	215.9	658.5	529.8	502.4	27.38	19.352		
3,900.0	3,882.7	3,839.5	3,798.9	14.3	15.6	59.38	222.7	674.6	541.1	513.0	28.15	19.221		
4,000.0	3,982.5	3,953.9	3,911.9	14.7	16.1	59.45	229.6	691.1	552.2	523.2	29.00	19.037		
4,100.0	4,082.4	4,068.8	4,025.9	15.0	16.5	59.38	235.2	704.5	561.8	532.0	29.82	18.841		
4,200.5	4,182.8	4,184.7	4,141.2	15.4	17.0	90.29	239.5	714.8	570.0	539.4	30.59	18.633		
4,300.0	4,282.4	4,299.9	4,256.2	15.7	17.4	89.99	242.5	721.8	576.1	544.7	31.32	18.390		
4,400.0	4,382.4	4,416.1	4,372.3	16.1	17.8	89.83	244.1	725.6	579.4	547.4	32.04	18.086		
4,500.0	4,482.4	4,527.2	4,483.4	16.4	18.1	89.80	244.4	726.4	580.0	547.3	32.71	17.731		
4,600.0	4,582.4	4,627.2	4,583.4	16.7	18.4	89.80	244.4	726.4	580.0	546.6	33.39	17.370		
4,700.0	4,682.4	4,727.2	4,683.4	17.1	18.8	89.80	244.4	726.4	580.0	546.0	34.07	17.024		
4,800.0	4,782.4	4,827.2	4,783.4	17.4	19.1	89.80	244.4	726.4	580.0	545.3	34.75	16.690		
4,900.0	4,882.4	4,927.2	4,883.4	17.8	19.4	89.80	244.4	726.4	580.0	544.6	35.44	16.368		
5,000.0	4,982.4	5,027.2	4,983.4	18.1	19.7	89.80	244.4	726.4	580.0	543.9	36.12	16.058		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #124H - Wellbore #1 - 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		
5,100.0	5,082.4	5,127.2	5,083.4	18.5	20.0	89.80	244.4	726.4	580.0	543.2	36.81	15.759		
5,200.0	5,182.4	5,227.2	5,183.4	18.8	20.3	89.80	244.4	726.4	580.0	542.5	37.49	15.470		
5,300.0	5,282.4	5,327.2	5,283.4	19.2	20.6	89.80	244.4	726.4	580.0	541.9	38.18	15.191		
5,400.0	5,382.4	5,427.2	5,383.4	19.5	21.0	89.80	244.4	726.4	580.0	541.2	38.87	14.922		
5,500.0	5,482.4	5,527.2	5,483.4	19.9	21.3	89.80	244.4	726.4	580.0	540.5	39.56	14.662		
5,600.0	5,582.4	5,627.2	5,583.4	20.2	21.6	89.80	244.4	726.4	580.0	539.8	40.25	14.410		
5,700.0	5,682.4	5,727.2	5,683.4	20.6	21.9	89.80	244.4	726.4	580.0	539.1	40.94	14.167		
5,800.0	5,782.4	5,827.2	5,783.4	20.9	22.3	89.80	244.4	726.4	580.0	538.4	41.64	13.931		
5,900.0	5,882.4	5,927.2	5,883.4	21.3	22.6	89.80	244.4	726.4	580.0	537.7	42.33	13.703		
6,000.0	5,982.4	6,027.2	5,983.4	21.6	22.9	89.80	244.4	726.4	580.0	537.0	43.02	13.482		
6,100.0	6,082.4	6,127.2	6,083.4	22.0	23.2	89.80	244.4	726.4	580.0	536.3	43.72	13.267		
6,200.0	6,182.4	6,227.2	6,183.4	22.3	23.6	89.80	244.4	726.4	580.0	535.6	44.41	13.060		
6,300.0	6,282.4	6,327.2	6,283.4	22.7	23.9	89.80	244.4	726.4	580.0	534.9	45.11	12.858		
6,400.0	6,382.4	6,427.2	6,383.4	23.0	24.2	89.80	244.4	726.4	580.0	534.2	45.81	12.662		
6,500.0	6,482.4	6,527.2	6,483.4	23.4	24.6	89.80	244.4	726.4	580.0	533.5	46.51	12.473		
6,600.0	6,582.4	6,627.2	6,583.4	23.7	24.9	89.80	244.4	726.4	580.0	532.8	47.20	12.288		
6,700.0	6,682.4	6,727.2	6,683.4	24.1	25.2	89.80	244.4	726.4	580.0	532.1	47.90	12.109		
6,800.0	6,782.4	6,827.2	6,783.4	24.4	25.5	89.80	244.4	726.4	580.0	531.4	48.60	11.935		
6,900.0	6,882.4	6,927.2	6,883.4	24.8	25.9	89.80	244.4	726.4	580.0	530.7	49.30	11.765		
7,000.0	6,982.4	7,027.2	6,983.4	25.1	26.2	89.80	244.4	726.4	580.0	530.0	50.00	11.601		
7,100.0	7,082.4	7,127.2	7,083.4	25.5	26.6	89.80	244.4	726.4	580.0	529.3	50.70	11.440		
7,200.0	7,182.4	7,227.2	7,183.4	25.8	26.9	89.80	244.4	726.4	580.0	528.6	51.40	11.284		
7,300.0	7,282.4	7,327.2	7,283.4	26.2	27.2	89.80	244.4	726.4	580.0	527.9	52.10	11.132		
7,400.0	7,382.4	7,427.2	7,383.4	26.5	27.6	89.80	244.4	726.4	580.0	527.2	52.81	10.984		
7,500.0	7,482.4	7,527.2	7,483.4	26.9	27.9	89.80	244.4	726.4	580.0	526.5	53.51	10.840		
7,600.0	7,582.4	7,627.2	7,583.4	27.2	28.2	89.80	244.4	726.4	580.0	525.8	54.21	10.700		
7,700.0	7,682.4	7,727.2	7,683.4	27.6	28.6	89.80	244.4	726.4	580.0	525.1	54.91	10.563		
7,800.0	7,782.4	7,827.2	7,783.4	27.9	28.9	89.80	244.4	726.4	580.0	524.4	55.62	10.429		
7,900.0	7,882.4	7,927.2	7,883.4	28.3	29.3	89.80	244.4	726.4	580.0	523.7	56.32	10.299		
8,000.0	7,982.4	8,027.2	7,983.4	28.7	29.6	89.80	244.4	726.4	580.0	523.0	57.03	10.171		
8,100.0	8,082.4	8,127.2	8,083.4	29.0	29.9	89.80	244.4	726.4	580.0	522.3	57.73	10.047		
8,200.0	8,182.4	8,227.2	8,183.4	29.4	30.3	89.80	244.4	726.4	580.0	521.6	58.44	9.926		
8,300.0	8,282.4	8,327.2	8,283.4	29.7	30.6	89.80	244.4	726.4	580.0	520.9	59.14	9.808		
8,400.0	8,382.4	8,427.2	8,383.4	30.1	31.0	89.80	244.4	726.4	580.0	520.2	59.85	9.692		
8,500.0	8,482.4	8,527.2	8,483.4	30.4	31.3	89.80	244.4	726.4	580.0	519.5	60.55	9.579		
8,513.6	8,496.0	8,540.8	8,497.0	30.5	31.3	89.80	244.4	726.4	580.0	519.4	60.65	9.564		
8,550.0	8,532.3	8,577.2	8,533.3	30.6	31.5	-78.03	244.4	726.4	579.8	518.9	60.89	9.521		
8,600.0	8,582.0	8,626.9	8,583.0	30.7	31.6	-78.65	244.4	726.4	578.7	517.5	61.21	9.454		
8,650.0	8,631.1	8,675.9	8,632.1	30.9	31.8	-79.76	244.4	726.4	576.9	515.4	61.51	9.378		
8,700.0	8,679.1	8,723.9	8,680.1	31.0	32.0	-81.30	244.4	726.4	574.5	512.7	61.79	9.297		
8,750.0	8,725.7	8,770.5	8,726.7	31.2	32.1	-83.22	244.4	726.4	571.9	509.8	62.06	9.216		
8,800.0	8,770.6	8,815.4	8,771.6	31.3	32.3	-85.44	244.4	726.4	569.5	507.2	62.31	9.140		
8,850.0	8,813.4	8,858.2	8,814.4	31.4	32.4	-87.84	244.4	726.4	567.7	505.2	62.55	9.077		
8,893.9	8,848.9	8,906.2	8,849.9	31.5	32.6	-90.00	244.4	726.4	567.1	504.4	62.79	9.032		
8,900.0	8,853.7	8,901.4	8,854.7	31.5	32.6	-90.30	244.4	726.4	567.2	504.4	62.79	9.033		
8,950.0	8,891.4	8,936.2	8,892.4	31.6	32.7	-92.68	244.4	726.4	568.3	505.3	63.01	9.020		
9,000.0	8,926.0	8,970.9	8,927.0	31.6	32.8	-94.84	244.4	726.4	571.8	508.5	63.24	9.041		
9,050.0	8,957.4	9,002.2	8,958.4	31.7	32.9	-96.66	244.4	726.4	578.0	514.5	63.48	9.105		
9,100.0	8,985.2	9,030.1	8,986.2	31.8	33.0	-98.00	244.4	726.4	587.5	523.7	63.73	9.218		
9,150.0	9,009.4	9,054.2	9,010.4	32.0	33.1	-98.76	244.4	726.4	600.4	536.4	63.98	9.384		
9,200.0	9,029.6	9,074.4	9,030.6	32.1	33.2	-98.86	244.4	726.4	616.9	552.6	64.23	9.604		
9,250.0	9,045.7	9,109.4	9,046.7	32.3	33.3	-98.20	244.4	726.4	637.0	572.4	64.54	9.870		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #124H - Wellbore #1 - 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		
9,300.0	9,057.7	9,102.6	9,058.7	32.4	33.3	-96.71	244.4	726.4	660.5	595.8	64.70	10.208		
9,350.0	9,065.4	9,110.3	9,066.4	32.6	33.3	-94.33	244.4	726.4	687.1	622.2	64.91	10.586		
9,400.0	9,068.8	9,113.6	9,069.8	32.8	33.3	-91.05	244.4	726.4	716.4	651.3	65.09	11.007		
9,413.6	9,069.0	9,113.8	9,070.0	32.8	33.3	-90.00	244.4	726.4	724.8	659.7	65.13	11.129		
9,500.0	9,069.0	9,113.8	9,070.0	33.2	33.3	-90.00	244.4	726.4	782.5	717.1	65.39	11.966		
9,600.0	9,069.0	10,374.8	9,819.0	33.7	36.1	-154.66	-510.7	662.3	831.2	795.6	35.55	23.377		
9,700.0	9,069.0	10,462.9	9,819.0	34.2	36.5	-155.35	-598.8	661.2	825.0	789.5	35.55	23.208		
9,800.0	9,069.0	10,560.6	9,819.0	34.8	37.1	-155.83	-696.5	662.0	821.3	785.4	35.91	22.874		
9,900.0	9,069.0	10,660.5	9,819.0	35.5	37.7	-156.14	-796.3	662.8	819.1	782.6	36.51	22.434		
10,005.1	9,069.0	10,765.6	9,819.0	36.2	38.3	-156.25	-901.4	663.7	818.3	780.9	37.41	21.876		
10,005.2	9,069.0	10,765.7	9,819.0	36.2	38.3	-156.25	-901.5	663.7	818.3	780.9	37.41	21.876		
10,100.0	9,069.0	10,860.5	9,819.0	37.0	39.0	-156.25	-996.3	664.5	818.3	780.0	38.37	21.329		
10,200.0	9,069.0	10,960.5	9,819.0	37.8	39.8	-156.25	-1,096.3	665.3	818.3	778.9	39.45	20.744		
10,300.0	9,069.0	11,060.5	9,819.0	38.6	40.6	-156.25	-1,196.3	666.1	818.3	777.7	40.60	20.158		
10,400.0	9,069.0	11,160.5	9,819.0	39.6	41.5	-156.25	-1,296.3	666.9	818.3	776.5	41.80	19.576		
10,500.0	9,069.0	11,260.5	9,819.0	40.5	42.4	-156.25	-1,396.3	667.7	818.3	775.3	43.06	19.002		
10,600.0	9,069.0	11,360.5	9,819.0	41.5	43.4	-156.25	-1,496.3	668.6	818.3	773.9	44.38	18.440		
10,700.0	9,069.0	11,460.5	9,819.0	42.6	44.4	-156.25	-1,596.3	669.4	818.3	772.6	45.74	17.892		
10,800.0	9,069.0	11,560.5	9,819.0	43.7	45.4	-156.25	-1,696.3	670.2	818.3	771.2	47.14	17.360		
10,900.0	9,069.0	11,660.5	9,819.0	44.8	46.5	-156.25	-1,796.3	671.0	818.3	769.8	48.58	16.846		
11,000.0	9,069.0	11,760.5	9,819.0	45.9	47.6	-156.25	-1,896.3	671.8	818.3	768.3	50.05	16.350		
11,100.0	9,069.0	11,860.5	9,819.0	47.1	48.7	-156.25	-1,996.3	672.7	818.3	766.8	51.56	15.872		
11,200.0	9,069.0	11,960.5	9,819.0	48.3	49.9	-156.24	-2,096.3	673.5	818.3	765.2	53.10	15.413		
11,300.0	9,069.0	12,060.5	9,819.0	49.6	51.1	-156.24	-2,196.3	674.3	818.3	763.7	54.66	14.972		
11,400.0	9,069.0	12,160.5	9,819.0	50.8	52.3	-156.24	-2,296.3	675.1	818.3	762.1	56.25	14.549		
11,500.0	9,069.0	12,260.5	9,819.0	52.1	53.5	-156.24	-2,396.3	676.0	818.3	760.5	57.86	14.144		
11,600.0	9,069.0	12,360.5	9,819.0	53.4	54.8	-156.24	-2,496.3	676.8	818.3	758.9	59.49	13.756		
11,700.0	9,069.0	12,460.5	9,819.0	54.7	56.1	-156.24	-2,596.3	677.6	818.3	757.2	61.14	13.385		
11,800.0	9,069.0	12,560.5	9,819.0	56.1	57.4	-156.24	-2,696.2	678.4	818.3	755.5	62.81	13.029		
11,900.0	9,069.0	12,660.5	9,819.0	57.4	58.7	-156.24	-2,796.2	679.2	818.3	753.9	64.49	12.689		
12,000.0	9,069.0	12,760.5	9,819.0	58.8	60.0	-156.24	-2,896.2	680.1	818.3	752.2	66.19	12.363		
12,100.0	9,069.0	12,860.5	9,819.0	60.2	61.4	-156.24	-2,996.2	680.9	818.3	750.4	67.90	12.051		
12,200.0	9,069.0	12,960.5	9,819.0	61.6	62.7	-156.24	-3,096.2	681.7	818.3	748.7	69.63	11.753		
12,300.0	9,069.0	13,060.5	9,819.0	63.0	64.1	-156.24	-3,196.2	682.5	818.3	747.0	71.37	11.466		
12,400.0	9,069.0	13,160.5	9,819.0	64.4	65.5	-156.24	-3,296.2	683.3	818.3	745.2	73.12	11.192		
12,500.0	9,069.0	13,260.5	9,819.0	65.8	66.9	-156.24	-3,396.2	684.2	818.4	743.5	74.88	10.929		
12,600.0	9,069.0	13,360.5	9,819.0	67.3	68.3	-156.24	-3,496.2	685.0	818.4	741.7	76.65	10.677		
12,700.0	9,069.0	13,460.5	9,819.0	68.7	69.7	-156.24	-3,596.2	685.8	818.4	739.9	78.43	10.435		
12,800.0	9,069.0	13,560.5	9,819.0	70.2	71.2	-156.24	-3,696.2	686.6	818.4	738.1	80.21	10.202		
12,900.0	9,069.0	13,660.5	9,819.0	71.6	72.6	-156.24	-3,796.2	687.4	818.4	736.3	82.01	9.979		
13,000.0	9,069.0	13,760.5	9,819.0	73.1	74.1	-156.24	-3,896.2	688.3	818.4	734.5	83.81	9.764		
13,100.0	9,069.0	13,860.5	9,819.0	74.6	75.5	-156.24	-3,996.2	689.1	818.4	732.7	85.62	9.558		
13,200.0	9,069.0	13,960.5	9,819.0	76.1	77.0	-156.24	-4,096.2	689.9	818.4	730.9	87.43	9.360		
13,300.0	9,069.0	14,060.5	9,819.0	77.6	78.5	-156.24	-4,196.2	690.7	818.4	729.1	89.26	9.169		
13,400.0	9,069.0	14,160.5	9,819.0	79.1	80.0	-156.24	-4,296.2	691.5	818.4	727.3	91.08	8.985		
13,500.0	9,069.0	14,260.5	9,819.0	80.6	81.5	-156.24	-4,396.2	692.4	818.4	725.5	92.91	8.808		
13,600.0	9,069.0	14,360.5	9,819.0	82.1	83.0	-156.24	-4,496.2	693.2	818.4	723.6	94.75	8.637		
13,700.0	9,069.0	14,460.5	9,819.0	83.6	84.5	-156.24	-4,596.2	694.0	818.4	721.8	96.59	8.472		
13,800.0	9,069.0	14,560.5	9,819.0	85.2	86.0	-156.24	-4,696.2	694.8	818.4	719.9	98.44	8.313		
13,900.0	9,069.0	14,660.5	9,819.0	86.7	87.5	-156.24	-4,796.2	695.6	818.4	718.1	100.29	8.160		
14,000.0	9,069.0	14,760.5	9,819.0	88.2	89.0	-156.24	-4,896.2	696.5	818.4	716.2	102.15	8.012		
14,100.0	9,069.0	14,860.5	9,819.0	89.8	90.5	-156.24	-4,996.2	697.3	818.4	714.4	104.00	7.869		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #124H - Wellbore #1 - BLM Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,200.0	9,069.0	14,960.5	9,819.0	91.3	92.0	-156.24	-5,096.2	698.1	818.4	712.5	105.87	7.730		
14,300.0	9,069.0	15,060.5	9,819.0	92.8	93.6	-156.24	-5,196.2	698.9	818.4	710.6	107.73	7.596		
14,400.0	9,069.0	15,160.5	9,819.0	94.4	95.1	-156.24	-5,296.2	699.7	818.4	708.8	109.60	7.467		
14,500.0	9,069.0	15,260.5	9,819.0	95.9	96.6	-156.24	-5,396.2	700.6	818.4	706.9	111.47	7.341		
14,600.0	9,069.0	15,360.5	9,819.0	97.5	98.2	-156.24	-5,496.2	701.4	818.4	705.0	113.35	7.220		
14,700.0	9,069.0	15,460.5	9,819.0	99.1	99.7	-156.24	-5,596.1	702.2	818.4	703.2	115.23	7.102		
14,800.0	9,069.0	15,560.5	9,819.0	100.6	101.3	-156.24	-5,696.1	703.0	818.4	701.3	117.11	6.988		
14,900.0	9,069.0	15,660.5	9,819.0	102.2	102.8	-156.24	-5,796.1	703.9	818.4	699.4	118.99	6.878		
15,000.0	9,069.0	15,760.5	9,819.0	103.8	104.4	-156.24	-5,896.1	704.7	818.4	697.5	120.87	6.771		
15,100.0	9,069.0	15,860.5	9,819.0	105.3	105.9	-156.24	-5,996.1	705.5	818.4	695.6	122.76	6.666		
15,200.0	9,069.0	15,960.5	9,819.0	106.9	107.5	-156.24	-6,096.1	706.3	818.4	693.7	124.65	6.565		
15,300.0	9,069.0	16,060.5	9,819.0	108.5	109.1	-156.24	-6,196.1	707.1	818.4	691.8	126.54	6.467		
15,400.0	9,069.0	16,160.5	9,819.0	110.1	110.6	-156.24	-6,296.1	708.0	818.4	690.0	128.44	6.372		
15,500.0	9,069.0	16,260.5	9,819.0	111.6	112.2	-156.24	-6,396.1	708.8	818.4	688.1	130.33	6.279		
15,600.0	9,069.0	16,360.5	9,819.0	113.2	113.8	-156.24	-6,496.1	709.6	818.4	686.2	132.23	6.189		
15,700.0	9,069.0	16,460.5	9,819.0	114.8	115.3	-156.24	-6,596.1	710.4	818.4	684.3	134.13	6.101		
15,800.0	9,069.0	16,560.5	9,819.0	116.4	116.9	-156.23	-6,696.1	711.2	818.4	682.4	136.03	6.016		
15,900.0	9,069.0	16,660.5	9,819.0	118.0	118.5	-156.23	-6,796.1	712.1	818.4	680.5	137.93	5.933		
16,000.0	9,069.0	16,760.5	9,819.0	119.6	120.1	-156.23	-6,896.1	712.9	818.4	678.6	139.84	5.852		
16,100.0	9,069.0	16,860.5	9,819.0	121.2	121.7	-156.23	-6,996.1	713.7	818.4	676.7	141.74	5.774		
16,200.0	9,069.0	16,960.5	9,819.0	122.7	123.2	-156.23	-7,096.1	714.5	818.4	674.8	143.65	5.697		
16,300.0	9,069.0	17,060.5	9,819.0	124.3	124.8	-156.23	-7,196.1	715.3	818.4	672.8	145.56	5.622		
16,400.0	9,069.0	17,160.5	9,819.0	125.9	126.4	-156.23	-7,296.1	716.2	818.4	670.9	147.47	5.550		
16,500.0	9,069.0	17,260.5	9,819.0	127.5	128.0	-156.23	-7,396.1	717.0	818.4	669.0	149.38	5.479		
16,600.0	9,069.0	17,360.5	9,819.0	129.1	129.6	-156.23	-7,496.1	717.8	818.4	667.1	151.29	5.409		
16,700.0	9,069.0	17,460.5	9,819.0	130.7	131.2	-156.23	-7,596.1	718.6	818.4	665.2	153.21	5.342		
16,800.0	9,069.0	17,560.5	9,819.0	132.3	132.8	-156.23	-7,696.1	719.4	818.4	663.3	155.12	5.276		
16,900.0	9,069.0	17,660.5	9,819.0	133.9	134.4	-156.23	-7,796.1	720.3	818.4	661.4	157.04	5.212		
17,000.0	9,069.0	17,760.5	9,819.0	135.5	136.0	-156.23	-7,896.1	721.1	818.4	659.5	158.95	5.149		
17,100.0	9,069.0	17,860.5	9,819.0	137.1	137.6	-156.23	-7,996.1	721.9	818.4	657.5	160.87	5.087		
17,200.0	9,069.0	17,960.5	9,819.0	138.8	139.2	-156.23	-8,096.1	722.7	818.4	655.6	162.79	5.027		
17,300.0	9,069.0	18,060.5	9,819.0	140.4	140.8	-156.23	-8,196.1	723.5	818.4	653.7	164.71	4.969		
17,400.0	9,069.0	18,160.5	9,819.0	142.0	142.4	-156.23	-8,296.1	724.4	818.4	651.8	166.63	4.912		
17,500.0	9,069.0	18,260.5	9,819.0	143.6	144.0	-156.23	-8,396.1	725.2	818.4	649.9	168.55	4.856		
17,600.0	9,069.0	18,360.5	9,819.0	145.2	145.6	-156.23	-8,496.1	726.0	818.4	647.9	170.47	4.801		
17,700.0	9,069.0	18,460.5	9,819.0	146.8	147.2	-156.23	-8,596.0	726.8	818.4	646.0	172.40	4.747		
17,800.0	9,069.0	18,560.5	9,819.0	148.4	148.8	-156.23	-8,696.0	727.6	818.4	644.1	174.32	4.695		
17,900.0	9,069.0	18,660.5	9,819.0	150.0	150.4	-156.23	-8,796.0	728.5	818.4	642.2	176.25	4.644		
18,000.0	9,069.0	18,760.5	9,819.0	151.6	152.0	-156.23	-8,896.0	729.3	818.4	640.3	178.17	4.593		
18,100.0	9,069.0	18,860.5	9,819.0	153.3	153.6	-156.23	-8,996.0	730.1	818.4	638.3	180.10	4.544		
18,200.0	9,069.0	18,960.5	9,819.0	154.9	155.2	-156.23	-9,096.0	730.9	818.4	636.4	182.02	4.496		
18,300.0	9,069.0	19,060.5	9,819.0	156.5	156.8	-156.23	-9,196.0	731.8	818.4	634.5	183.95	4.449		
18,400.0	9,069.0	19,160.5	9,819.0	158.1	158.4	-156.23	-9,296.0	732.6	818.4	632.6	185.88	4.403		
18,500.0	9,069.0	19,260.5	9,819.0	159.7	160.1	-156.23	-9,396.0	733.4	818.4	630.6	187.81	4.358		
18,600.0	9,069.0	19,360.5	9,819.0	161.3	161.7	-156.23	-9,496.0	734.2	818.4	628.7	189.74	4.313		
18,700.0	9,069.0	19,460.5	9,819.0	163.0	163.3	-156.23	-9,596.0	735.0	818.4	626.8	191.67	4.270		
18,800.0	9,069.0	19,560.5	9,819.0	164.6	164.9	-156.23	-9,696.0	735.9	818.4	624.8	193.60	4.227		
18,900.0	9,069.0	19,660.5	9,819.0	166.2	166.5	-156.23	-9,796.0	736.7	818.4	622.9	195.53	4.186		
19,000.0	9,069.0	19,760.5	9,819.0	167.8	168.1	-156.23	-9,896.0	737.5	818.4	621.0	197.46	4.145		
19,100.0	9,069.0	19,860.5	9,819.0	169.4	169.7	-156.23	-9,996.0	738.3	818.4	619.0	199.40	4.105		
19,200.0	9,069.0	19,960.5	9,819.0	171.1	171.4	-156.23	-10,096.0	739.1	818.4	617.1	201.33	4.065		
19,300.0	9,069.0	20,060.5	9,819.0	172.7	173.0	-156.23	-10,196.0	740.0	818.4	615.2	203.26	4.027		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Voni - Voni Fed Com #124H - Wellbore #1 - 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	9,069.0	20,160.5	9,819.0	174.3	174.6	-156.23	-10,296.0	740.8	818.4	613.2	205.20	3.989				
19,500.0	9,069.0	20,260.5	9,819.0	175.9	176.2	-156.23	-10,396.0	741.6	818.4	611.3	207.13	3.951				
19,600.0	9,069.0	20,360.5	9,819.0	177.6	177.8	-156.23	-10,496.0	742.4	818.4	609.4	209.07	3.915				
19,700.0	9,069.0	20,460.5	9,819.0	179.2	179.5	-156.23	-10,596.0	743.2	818.4	607.4	211.00	3.879				
19,800.0	9,069.0	20,560.5	9,819.0	180.8	181.1	-156.23	-10,696.0	744.1	818.5	605.5	212.94	3.844				
19,900.0	9,069.0	20,660.5	9,819.0	182.4	182.7	-156.23	-10,796.0	744.9	818.5	603.6	214.87	3.809				
20,000.0	9,069.0	20,760.5	9,819.0	184.1	184.3	-156.23	-10,896.0	745.7	818.5	601.6	216.81	3.775				
20,100.0	9,069.0	20,860.5	9,819.0	185.7	185.9	-156.23	-10,996.0	746.5	818.5	599.7	218.75	3.742				
20,200.0	9,069.0	20,960.5	9,819.0	187.3	187.6	-156.23	-11,096.0	747.3	818.5	597.8	220.68	3.709				
20,300.0	9,069.0	21,060.5	9,819.0	188.9	189.2	-156.23	-11,196.0	748.2	818.5	595.8	222.62	3.676				
20,400.0	9,069.0	21,160.5	9,819.0	190.6	190.8	-156.22	-11,296.0	749.0	818.5	593.9	224.56	3.645				
20,500.0	9,069.0	21,260.5	9,819.0	192.2	192.4	-156.22	-11,396.0	749.8	818.5	592.0	226.50	3.614				
20,600.0	9,069.0	21,360.5	9,819.0	193.8	194.1	-156.22	-11,496.0	750.6	818.5	590.0	228.44	3.583				
20,700.0	9,069.0	21,460.5	9,819.0	195.5	195.7	-156.22	-11,595.9	751.4	818.5	588.1	230.38	3.553				
20,800.0	9,069.0	21,560.5	9,819.0	197.1	197.3	-156.22	-11,695.9	752.3	818.5	586.1	232.32	3.523				
20,900.0	9,069.0	21,660.5	9,819.0	198.7	198.9	-156.22	-11,795.9	753.1	818.5	584.2	234.26	3.494				
21,000.0	9,069.0	21,760.5	9,819.0	200.3	200.6	-156.22	-11,895.9	753.9	818.5	582.3	236.20	3.465				
21,100.0	9,069.0	21,860.5	9,819.0	202.0	202.2	-156.22	-11,995.9	754.7	818.5	580.3	238.14	3.437				
21,200.0	9,069.0	21,960.5	9,819.0	203.6	203.8	-156.22	-12,095.9	755.5	818.5	578.4	240.08	3.409				
21,300.0	9,069.0	22,060.5	9,819.0	205.2	205.5	-156.22	-12,195.9	756.4	818.5	576.5	242.02	3.382				
21,400.0	9,069.0	22,160.5	9,819.0	206.9	207.1	-156.22	-12,295.9	757.2	818.5	574.5	243.96	3.355				
21,500.0	9,069.0	22,260.5	9,819.0	208.5	208.7	-156.22	-12,395.9	758.0	818.5	572.6	245.90	3.328				
21,544.1	9,069.0	22,304.6	9,819.0	209.2	209.4	-156.22	-12,440.1	758.4	818.5	571.7	246.76	3.317 SF				

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #134H - Wellbore #1 - 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		
0.0	0.0	2.0	2.0	0.0	0.0	-0.29	29.9	-0.2	29.9					
100.0	100.0	102.0	102.0	0.1	0.1	-0.29	29.9	-0.2	29.9	29.6	0.26	113.358		
200.0	200.0	202.0	202.0	0.5	0.5	-0.29	29.9	-0.2	29.9	28.9	0.98	30.464		
300.0	300.0	302.0	302.0	0.8	0.9	-0.29	29.9	-0.2	29.9	28.2	1.70	17.596		
400.0	400.0	402.0	402.0	1.2	1.2	-0.29	29.9	-0.2	29.9	27.5	2.41	12.371		
500.0	500.0	502.0	502.0	1.6	1.6	-0.29	29.9	-0.2	29.9	26.7	3.13	9.538		
600.0	600.0	602.0	602.0	1.9	1.9	-0.29	29.9	-0.2	29.9	26.0	3.85	7.761		
700.0	700.0	702.0	702.0	2.3	2.3	-0.29	29.9	-0.2	29.9	25.3	4.57	6.542		
800.0	800.0	802.0	802.0	2.6	2.6	-0.29	29.9	-0.2	29.9	24.6	5.28	5.654		
900.0	900.0	902.0	902.0	3.0	3.0	-0.29	29.9	-0.2	29.9	23.9	6.00	4.979		
1,000.0	1,000.0	1,002.0	1,002.0	3.4	3.4	-0.29	29.9	-0.2	29.9	23.2	6.72	4.447		
1,100.0	1,100.0	1,102.0	1,102.0	3.7	3.7	-0.29	29.9	-0.2	29.9	22.4	7.43	4.018		
1,200.0	1,200.0	1,202.0	1,202.0	4.1	4.1	-0.29	29.9	-0.2	29.9	21.7	8.15	3.665		
1,300.0	1,300.0	1,302.0	1,302.0	4.4	4.4	-0.29	29.9	-0.2	29.9	21.0	8.87	3.368		
1,400.0	1,400.0	1,402.0	1,402.0	4.8	4.8	-0.29	29.9	-0.2	29.9	20.3	9.58	3.116		
1,500.0	1,500.0	1,502.0	1,502.0	5.1	5.2	-0.29	29.9	-0.2	29.9	19.6	10.30	2.900		
1,600.0	1,600.0	1,602.0	1,602.0	5.5	5.5	-32.31	29.9	-0.2	29.1	18.1	11.02	2.644		
1,700.0	1,700.0	1,702.0	1,702.0	5.9	5.9	-35.30	29.9	-0.2	27.0	15.2	11.73	2.297		
1,800.0	1,799.9	1,801.9	1,801.9	6.2	6.2	-41.47	29.9	-0.2	23.5	11.1	12.45	1.890		
1,900.0	1,899.7	1,901.7	1,901.7	6.6	6.6	-53.54	29.9	-0.2	19.4	6.2	13.16	1.472 Level 3		
2,000.0	1,999.4	2,001.4	2,001.4	6.9	6.9	-76.73	29.9	-0.2	16.0	2.1	13.88	1.153 Level 2		
2,040.6	2,039.8	2,041.8	2,041.8	7.1	7.1	-89.97	29.9	-0.2	15.6	1.4	14.17	1.099 Level 2, CC, ES, SF		
2,100.0	2,098.9	2,100.9	2,100.9	7.3	7.3	-110.65	29.9	-0.2	16.6	2.1	14.59	1.141 Level 2		
2,200.0	2,198.3	2,200.3	2,200.3	7.7	7.7	-137.67	29.9	-0.2	23.2	7.9	15.30	1.517		
2,300.0	2,297.4	2,300.6	2,299.4	8.0	8.0	-152.56	29.9	-0.2	34.0	18.0	16.02	2.125		
2,400.0	2,396.4	2,401.6	2,398.4	8.4	8.4	-160.42	29.9	-0.2	46.8	30.1	16.74	2.799		
2,500.0	2,495.5	2,497.5	2,497.5	8.8	8.7	-164.86	29.9	-0.2	60.2	42.7	17.44	3.450		
2,600.0	2,594.5	2,597.6	2,597.6	9.2	9.1	-168.00	30.2	0.6	73.0	54.8	18.15	4.019		
2,700.0	2,693.5	2,698.1	2,698.1	9.6	9.4	-170.78	31.1	3.1	84.4	65.5	18.86	4.474		
2,800.0	2,792.5	2,798.9	2,798.7	9.9	9.8	-173.46	32.6	7.2	94.5	74.9	19.57	4.828		
2,900.0	2,891.6	2,899.8	2,899.5	10.3	10.1	-176.17	34.7	12.9	103.3	83.0	20.28	5.093		
3,000.0	2,990.6	3,000.9	3,000.3	10.7	10.5	-179.00	37.5	20.4	110.9	89.9	20.99	5.282		
3,100.0	3,089.6	3,102.1	3,101.0	11.1	10.8	-177.98	40.9	29.5	117.3	95.6	21.70	5.407		
3,200.0	3,188.6	3,203.3	3,201.5	11.5	11.2	-174.72	44.9	40.3	122.8	100.4	22.42	5.477		
3,300.0	3,287.7	3,304.4	3,301.8	11.9	11.6	-171.17	49.5	52.7	127.4	104.3	23.15	5.505		
3,400.0	3,386.7	3,404.0	3,400.3	12.3	11.9	-167.66	54.3	65.7	132.0	108.1	23.90	5.523		
3,500.0	3,485.7	3,503.5	3,499.0	12.7	12.3	-164.39	59.1	78.7	137.0	112.4	24.65	5.558		
3,600.0	3,584.8	3,603.1	3,597.6	13.1	12.7	-161.37	63.9	91.7	142.5	117.0	25.42	5.605		
3,667.1	3,651.2	3,670.0	3,663.8	13.4	12.9	-159.46	67.2	100.4	146.3	120.4	25.93	5.643		
3,700.0	3,683.8	3,702.7	3,696.2	13.5	13.1	-158.56	68.7	104.7	148.1	121.9	26.18	5.658		
3,800.0	3,783.1	3,802.3	3,794.8	13.9	13.4	-155.67	73.6	117.7	152.3	125.3	26.95	5.650		
3,900.0	3,882.7	3,901.9	3,893.5	14.3	13.8	-152.49	78.4	130.7	154.5	126.8	27.73	5.572		
4,000.0	3,982.5	4,001.4	3,992.0	14.7	14.2	-148.92	83.2	143.7	154.9	126.4	28.51	5.434		
4,100.0	4,082.4	4,100.8	4,090.4	15.0	14.6	-144.82	88.0	156.6	153.8	124.5	29.29	5.251		
4,200.5	4,182.8	4,200.4	4,189.1	15.4	15.0	-171.16	92.8	169.6	151.5	121.4	30.08	5.035		
4,300.0	4,282.4	4,301.0	4,286.7	15.7	15.4	-166.00	97.6	182.5	149.3	118.4	30.86	4.837		
4,400.0	4,382.4	4,402.0	4,384.7	16.1	15.8	-160.70	102.4	195.4	148.4	116.7	31.65	4.689		
4,419.7	4,402.1	4,417.6	4,404.1	16.1	15.8	-159.65	103.3	198.0	148.4	116.6	31.78	4.668		
4,500.0	4,482.4	4,502.9	4,482.8	16.4	16.2	-155.39	107.2	208.3	148.8	116.4	32.42	4.590		
4,600.0	4,582.4	4,603.9	4,580.9	16.7	16.6	-150.14	112.0	221.2	150.5	117.3	33.17	4.536		
4,700.0	4,682.4	4,704.9	4,678.9	17.1	17.0	-145.06	116.8	234.2	153.4	119.5	33.91	4.523		
4,800.0	4,782.4	4,805.9	4,777.0	17.4	17.4	-140.20	121.6	247.1	157.5	122.9	34.64	4.547		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #134H - Wellbore #1 - 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		
4,900.0	4,882.4	4,906.8	4,875.1	17.8	17.8	135.61	126.4	260.0	162.7	127.4	35.36	4.602		
5,000.0	4,982.4	5,007.8	4,973.1	18.1	18.2	131.33	131.2	272.9	168.9	132.9	36.06	4.684		
5,100.0	5,082.4	5,108.8	5,071.2	18.5	18.6	127.36	135.9	285.9	176.0	139.2	36.76	4.788		
5,200.0	5,182.4	5,209.8	5,169.3	18.8	19.0	123.72	140.7	298.8	183.9	146.4	37.45	4.909		
5,300.0	5,282.4	5,289.3	5,267.3	19.2	19.3	120.38	145.5	311.7	192.4	154.3	38.06	5.056		
5,400.0	5,382.4	5,388.3	5,365.4	19.5	19.7	117.33	150.3	324.6	201.6	162.8	38.73	5.203		
5,500.0	5,482.4	5,487.3	5,463.4	19.9	20.1	114.55	155.1	337.5	211.2	171.8	39.41	5.359		
5,600.0	5,582.4	5,586.4	5,561.5	20.2	20.5	112.02	159.9	350.5	221.3	181.3	40.09	5.521		
5,700.0	5,682.4	5,685.4	5,659.6	20.6	20.9	109.71	164.7	363.4	231.9	191.1	40.77	5.686		
5,800.0	5,782.4	5,784.4	5,757.6	20.9	21.3	107.60	169.5	376.3	242.7	201.3	41.46	5.855		
5,900.0	5,882.4	5,883.4	5,855.7	21.3	21.7	105.68	174.3	389.2	253.9	211.7	42.14	6.024		
6,000.0	5,982.4	5,982.5	5,953.8	21.6	22.1	103.91	179.1	402.2	265.3	222.5	42.83	6.195		
6,100.0	6,082.4	6,081.5	6,051.8	22.0	22.5	102.30	183.9	415.1	276.9	233.4	43.52	6.364		
6,200.0	6,182.4	6,180.5	6,149.9	22.3	22.9	100.81	188.7	428.0	288.8	244.6	44.21	6.533		
6,300.0	6,282.4	6,279.5	6,247.9	22.7	23.3	99.44	193.5	440.9	300.8	255.9	44.90	6.700		
6,400.0	6,382.4	6,378.6	6,346.0	23.0	23.7	98.18	198.2	453.8	313.0	267.4	45.59	6.865		
6,500.0	6,482.4	6,477.6	6,444.1	23.4	24.1	97.01	203.0	466.8	325.3	279.0	46.29	7.028		
6,600.0	6,582.4	6,576.6	6,542.1	23.7	24.5	95.93	207.8	479.7	337.8	290.8	46.98	7.189		
6,700.0	6,682.4	6,675.6	6,640.2	24.1	24.9	94.92	212.6	492.6	350.3	302.6	47.68	7.347		
6,800.0	6,782.4	6,774.7	6,738.3	24.4	25.3	93.99	217.4	505.5	363.0	314.6	48.38	7.502		
6,900.0	6,882.4	6,873.7	6,836.3	24.8	25.7	93.11	222.2	518.5	375.7	326.6	49.08	7.655		
7,000.0	6,982.4	6,972.7	6,934.4	25.1	26.1	92.30	227.0	531.4	388.5	338.8	49.79	7.804		
7,100.0	7,082.4	7,072.4	7,033.1	25.5	26.5	91.53	231.8	544.4	401.4	350.9	50.50	7.949		
7,200.0	7,182.4	7,182.6	7,142.4	25.8	27.0	90.82	236.5	557.1	412.9	361.6	51.33	8.044		
7,300.0	7,282.4	7,293.5	7,252.8	26.2	27.4	90.31	240.2	566.9	421.7	369.6	52.13	8.090		
7,400.0	7,382.4	7,404.9	7,364.0	26.5	27.8	89.96	242.7	573.7	427.9	375.0	52.90	8.088		
7,500.0	7,482.4	7,516.6	7,475.6	26.9	28.2	89.78	244.1	577.5	431.3	377.6	53.63	8.042		
7,600.0	7,582.4	7,625.3	7,584.4	27.2	28.6	89.74	244.4	578.4	432.0	377.7	54.32	7.953		
7,700.0	7,682.4	7,725.3	7,684.4	27.6	28.9	89.74	244.4	578.4	432.0	377.0	55.02	7.852		
7,800.0	7,782.4	7,825.3	7,784.4	27.9	29.3	89.74	244.4	578.4	432.0	376.3	55.72	7.753		
7,900.0	7,882.4	7,925.3	7,884.4	28.3	29.6	89.74	244.4	578.4	432.0	375.6	56.42	7.657		
8,000.0	7,982.4	8,025.3	7,984.4	28.7	29.9	89.74	244.4	578.4	432.0	374.9	57.12	7.563		
8,100.0	8,082.4	8,125.3	8,084.4	29.0	30.3	89.74	244.4	578.4	432.0	374.2	57.83	7.471		
8,200.0	8,182.4	8,225.3	8,184.4	29.4	30.6	89.74	244.4	578.4	432.0	373.5	58.53	7.381		
8,300.0	8,282.4	8,325.3	8,284.4	29.7	30.9	89.74	244.4	578.4	432.0	372.8	59.23	7.294		
8,400.0	8,382.4	8,425.3	8,384.4	30.1	31.3	89.74	244.4	578.4	432.0	372.1	59.93	7.208		
8,500.0	8,482.4	8,525.3	8,484.4	30.4	31.6	89.74	244.4	578.4	432.0	371.4	60.63	7.125		
8,513.6	8,496.0	8,539.0	8,498.0	30.5	31.6	89.74	244.4	578.4	432.0	371.3	60.73	7.114		
8,550.0	8,532.3	8,575.3	8,534.3	30.6	31.8	-78.14	244.4	578.4	431.8	370.8	60.98	7.081		
8,600.0	8,582.0	8,625.0	8,584.0	30.7	31.9	-78.93	244.4	578.4	430.7	369.4	61.29	7.028		
8,650.0	8,631.1	8,674.1	8,633.1	30.9	32.1	-80.35	244.4	578.4	428.9	367.4	61.58	6.966		
8,700.0	8,679.1	8,722.1	8,681.1	31.0	32.3	-82.33	244.4	578.4	426.8	364.9	61.85	6.900		
8,750.0	8,725.7	8,768.7	8,727.7	31.2	32.4	-84.79	244.4	578.4	424.6	362.5	62.11	6.836		
8,800.0	8,770.6	8,813.6	8,772.6	31.3	32.6	-87.62	244.4	578.4	423.0	360.6	62.35	6.784		
8,839.3	8,804.4	8,847.4	8,806.4	31.4	32.7	-90.00	244.4	578.4	422.5	360.0	62.54	6.756		
8,850.0	8,813.4	8,856.4	8,815.4	31.4	32.7	-90.66	244.4	578.4	422.6	360.0	62.59	6.751		
8,900.0	8,853.7	8,903.3	8,855.7	31.5	32.9	-93.74	244.4	578.4	424.0	361.1	62.86	6.745		
8,950.0	8,891.4	8,934.4	8,893.4	31.6	33.0	-96.66	244.4	578.4	428.0	364.9	63.09	6.784		
9,000.0	8,926.0	8,969.0	8,928.0	31.6	33.1	-99.26	244.4	578.4	435.2	371.8	63.36	6.869		
9,050.0	8,957.4	9,000.4	8,959.4	31.7	33.2	-101.36	244.4	578.4	446.1	382.5	63.64	7.010		
9,100.0	8,985.2	9,028.2	8,987.2	31.8	33.3	-102.82	244.4	578.4	461.1	397.2	63.93	7.213		
9,150.0	9,009.4	9,052.3	9,011.4	32.0	33.4	-103.50	244.4	578.4	480.3	416.1	64.22	7.479		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #134H - Wellbore #1 - 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		
9,200.0	9,029.6	9,072.6	9,031.6	32.1	33.5	-103.30	244.4	578.4	503.7	439.2	64.50	7.809		
9,250.0	9,045.7	9,088.7	9,047.7	32.3	33.5	-102.10	244.4	578.4	530.9	466.1	64.76	8.198		
9,300.0	9,057.7	9,100.7	9,059.7	32.4	33.5	-99.79	244.4	578.4	561.6	496.6	64.99	8.641		
9,350.0	9,065.4	9,108.4	9,067.4	32.6	33.6	-96.28	244.4	578.4	595.3	530.1	65.19	9.132		
9,400.0	9,068.8	9,111.8	9,070.8	32.8	33.6	-91.51	244.4	578.4	631.4	566.1	65.35	9.662		
9,413.6	9,069.0	9,111.9	9,071.0	32.8	33.6	-90.00	244.4	578.4	641.6	576.2	65.39	9.812		
9,500.0	9,069.0	9,111.9	9,071.0	33.2	33.6	-90.00	244.4	578.4	709.7	644.1	65.60	10.818		
9,600.0	9,069.0	9,111.9	9,071.0	33.7	33.6	-90.00	244.4	578.4	794.6	728.8	65.79	12.078		
9,700.0	9,069.0	9,111.9	9,071.0	34.2	33.6	-90.00	244.4	578.4	884.2	818.3	65.93	13.411		
9,800.0	9,069.0	9,111.9	9,071.0	34.8	33.6	-90.00	244.4	578.4	977.1	911.1	66.03	14.797		
9,900.0	9,069.0	9,111.9	9,071.0	35.5	33.6	-90.00	244.4	578.4	1,072.3	1,006.2	66.11	16.221		
10,005.2	9,069.0	9,111.9	9,071.0	36.2	33.6	-90.00	244.4	578.4	1,174.4	1,108.2	66.17	17.747		
10,100.0	9,069.0	9,111.9	9,071.0	37.0	33.6	-90.00	244.4	578.4	1,267.1	1,200.8	66.22	19.135		
10,200.0	9,069.0	9,111.9	9,071.0	37.8	33.6	-90.00	244.4	578.4	1,365.2	1,298.9	66.26	20.604		
10,300.0	9,069.0	9,111.9	9,071.0	38.6	33.6	-90.00	244.4	578.4	1,463.6	1,397.3	66.30	22.076		
10,400.0	9,069.0	9,111.9	9,071.0	39.6	33.6	-90.00	244.4	578.4	1,562.1	1,495.8	66.33	23.550		
10,500.0	9,069.0	9,111.9	9,071.0	40.5	33.6	-90.00	244.4	578.4	1,660.9	1,594.5	66.37	25.026		
10,600.0	9,069.0	9,111.9	9,071.0	41.5	33.6	-90.00	244.4	578.4	1,759.8	1,693.4	66.40	26.504		
10,700.0	9,069.0	9,111.9	9,071.0	42.6	33.6	-90.00	244.4	578.4	1,858.8	1,792.4	66.43	27.982		
10,800.0	9,069.0	9,111.9	9,071.0	43.7	33.6	-90.00	244.4	578.4	1,957.9	1,891.5	66.46	29.460		
10,900.0	9,069.0	9,111.9	9,071.0	44.8	33.6	-90.00	244.4	578.4	2,057.1	1,990.6	66.49	30.938		
11,000.0	9,069.0	13,100.9	11,159.0	45.9	51.9	-171.03	-1,896.3	672.0	2,113.9	2,070.6	43.25	48.873		
11,100.0	9,069.0	13,200.9	11,159.0	47.1	52.9	-171.03	-1,996.3	672.8	2,113.9	2,069.4	44.52	47.485		
11,200.0	9,069.0	13,300.9	11,159.0	48.3	54.0	-171.03	-2,096.3	673.6	2,113.9	2,068.1	45.80	46.150		
11,300.0	9,069.0	13,400.9	11,159.0	49.6	55.1	-171.03	-2,196.3	674.4	2,113.9	2,066.8	47.11	44.868		
11,400.0	9,069.0	13,500.9	11,159.0	50.8	56.2	-171.03	-2,296.3	675.2	2,113.9	2,065.4	48.44	43.638		
11,500.0	9,069.0	13,600.9	11,159.0	52.1	57.4	-171.03	-2,396.3	676.1	2,113.9	2,064.1	49.79	42.459		
11,600.0	9,069.0	13,700.9	11,159.0	53.4	58.6	-171.03	-2,496.3	676.9	2,113.9	2,062.7	51.15	41.328		
11,700.0	9,069.0	13,800.9	11,159.0	54.7	59.8	-171.03	-2,596.3	677.7	2,113.9	2,061.4	52.53	40.244		
11,800.0	9,069.0	13,900.9	11,159.0	56.1	61.0	-171.03	-2,696.2	678.5	2,113.9	2,060.0	53.92	39.206		
11,900.0	9,069.0	14,000.9	11,159.0	57.4	62.3	-171.03	-2,796.2	679.3	2,113.9	2,058.6	55.32	38.211		
12,000.0	9,069.0	14,100.9	11,159.0	58.8	63.5	-171.02	-2,896.2	680.2	2,113.9	2,057.1	56.74	37.257		
12,100.0	9,069.0	14,200.9	11,159.0	60.2	64.8	-171.02	-2,996.2	681.0	2,113.9	2,055.7	58.17	36.343		
12,200.0	9,069.0	14,300.9	11,159.0	61.6	66.1	-171.02	-3,096.2	681.8	2,113.9	2,054.3	59.60	35.466		
12,300.0	9,069.0	14,400.9	11,159.0	63.0	67.4	-171.02	-3,196.2	682.6	2,113.9	2,052.8	61.05	34.625		
12,400.0	9,069.0	14,500.9	11,159.0	64.4	68.8	-171.02	-3,296.2	683.4	2,113.9	2,051.4	62.51	33.818		
12,500.0	9,069.0	14,600.9	11,159.0	65.8	70.1	-171.02	-3,396.2	684.2	2,113.9	2,049.9	63.97	33.044		
12,600.0	9,069.0	14,700.9	11,159.0	67.3	71.5	-171.02	-3,496.2	685.1	2,113.9	2,048.4	65.45	32.300		
12,700.0	9,069.0	14,800.9	11,159.0	68.7	72.8	-171.02	-3,596.2	685.9	2,113.9	2,047.0	66.93	31.586		
12,800.0	9,069.0	14,900.9	11,159.0	70.2	74.2	-171.02	-3,696.2	686.7	2,113.9	2,045.5	68.41	30.899		
12,900.0	9,069.0	15,000.9	11,159.0	71.6	75.6	-171.02	-3,796.2	687.5	2,113.9	2,044.0	69.91	30.239		
13,000.0	9,069.0	15,100.9	11,159.0	73.1	77.0	-171.02	-3,896.2	688.3	2,113.9	2,042.5	71.41	29.604		
13,100.0	9,069.0	15,200.9	11,159.0	74.6	78.4	-171.02	-3,996.2	689.2	2,113.9	2,041.0	72.91	28.993		
13,200.0	9,069.0	15,300.9	11,159.0	76.1	79.9	-171.02	-4,096.2	690.0	2,113.9	2,039.5	74.42	28.404		
13,300.0	9,069.0	15,400.9	11,159.0	77.6	81.3	-171.02	-4,196.2	690.8	2,113.9	2,037.9	75.94	27.837		
13,400.0	9,069.0	15,500.9	11,159.0	79.1	82.7	-171.02	-4,296.2	691.6	2,113.9	2,036.4	77.46	27.291		
13,500.0	9,069.0	15,600.9	11,159.0	80.6	84.2	-171.02	-4,396.2	692.4	2,113.9	2,034.9	78.98	26.764		
13,600.0	9,069.0	15,700.9	11,159.0	82.1	85.6	-171.02	-4,496.2	693.3	2,113.9	2,033.4	80.51	26.256		
13,700.0	9,069.0	15,800.9	11,159.0	83.6	87.1	-171.02	-4,596.2	694.1	2,113.9	2,031.8	82.04	25.765		
13,800.0	9,069.0	15,900.9	11,159.0	85.2	88.5	-171.02	-4,696.2	694.9	2,113.9	2,030.3	83.58	25.291		
13,900.0	9,069.0	16,000.9	11,159.0	86.7	90.0	-171.02	-4,796.2	695.7	2,113.9	2,028.8	85.12	24.834		
14,000.0	9,069.0	16,100.9	11,159.0	88.2	91.5	-171.02	-4,896.2	696.5	2,113.9	2,027.2	86.67	24.391		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #134H - Wellbore #1 - BLM Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,100.0	9,069.0	16,200.9	11,159.0	89.8	93.0	-171.02	-4,996.2	697.4	2,113.9	2,025.7	88.21	23.964		
14,200.0	9,069.0	16,300.9	11,159.0	91.3	94.5	-171.02	-5,096.2	698.2	2,113.9	2,024.1	89.76	23.550		
14,300.0	9,069.0	16,400.9	11,159.0	92.8	96.0	-171.02	-5,196.2	699.0	2,113.9	2,022.6	91.32	23.149		
14,400.0	9,069.0	16,500.9	11,159.0	94.4	97.5	-171.02	-5,296.2	699.8	2,113.9	2,021.0	92.87	22.762		
14,500.0	9,069.0	16,600.9	11,159.0	95.9	99.0	-171.02	-5,396.2	700.6	2,113.9	2,019.5	94.43	22.386		
14,600.0	9,069.0	16,700.9	11,159.0	97.5	100.5	-171.02	-5,496.2	701.4	2,113.9	2,017.9	95.99	22.022		
14,700.0	9,069.0	16,800.9	11,159.0	99.1	102.0	-171.02	-5,596.2	702.3	2,113.9	2,016.3	97.55	21.669		
14,800.0	9,069.0	16,900.9	11,159.0	100.6	103.5	-171.02	-5,696.1	703.1	2,113.9	2,014.8	99.12	21.327		
14,900.0	9,069.0	17,000.9	11,159.0	102.2	105.1	-171.02	-5,796.1	703.9	2,113.9	2,013.2	100.69	20.995		
15,000.0	9,069.0	17,100.9	11,159.0	103.8	106.6	-171.02	-5,896.1	704.7	2,113.9	2,011.6	102.25	20.673		
15,100.0	9,069.0	17,200.9	11,159.0	105.3	108.1	-171.02	-5,996.1	705.5	2,113.9	2,010.1	103.83	20.360		
15,200.0	9,069.0	17,300.9	11,159.0	106.9	109.6	-171.02	-6,096.1	706.4	2,113.9	2,008.5	105.40	20.056		
15,300.0	9,069.0	17,400.9	11,159.0	108.5	111.2	-171.02	-6,196.1	707.2	2,113.9	2,006.9	106.97	19.761		
15,400.0	9,069.0	17,500.9	11,159.0	110.1	112.7	-171.02	-6,296.1	708.0	2,113.9	2,005.3	108.55	19.474		
15,500.0	9,069.0	17,600.9	11,159.0	111.6	114.3	-171.02	-6,396.1	708.8	2,113.9	2,003.8	110.13	19.195		
15,600.0	9,069.0	17,700.9	11,159.0	113.2	115.8	-171.02	-6,496.1	709.6	2,113.9	2,002.2	111.71	18.923		
15,700.0	9,069.0	17,800.9	11,159.0	114.8	117.4	-171.02	-6,596.1	710.5	2,113.9	2,000.6	113.29	18.659		
15,800.0	9,069.0	17,900.9	11,159.0	116.4	118.9	-171.02	-6,696.1	711.3	2,113.9	1,999.0	114.87	18.402		
15,900.0	9,069.0	18,000.9	11,159.0	118.0	120.5	-171.02	-6,796.1	712.1	2,113.9	1,997.4	116.46	18.151		
16,000.0	9,069.0	18,100.9	11,159.0	119.6	122.0	-171.02	-6,896.1	712.9	2,113.9	1,995.8	118.04	17.908		
16,100.0	9,069.0	18,200.9	11,159.0	121.2	123.6	-171.02	-6,996.1	713.7	2,113.9	1,994.3	119.63	17.670		
16,200.0	9,069.0	18,300.9	11,159.0	122.7	125.2	-171.02	-7,096.1	714.6	2,113.9	1,992.7	121.22	17.439		
16,300.0	9,069.0	18,400.9	11,159.0	124.3	126.7	-171.02	-7,196.1	715.4	2,113.9	1,991.1	122.81	17.213		
16,400.0	9,069.0	18,500.9	11,159.0	125.9	128.3	-171.02	-7,296.1	716.2	2,113.9	1,989.5	124.40	16.993		
16,500.0	9,069.0	18,600.9	11,159.0	127.5	129.9	-171.02	-7,396.1	717.0	2,113.9	1,987.9	125.99	16.778		
16,600.0	9,069.0	18,700.9	11,159.0	129.1	131.4	-171.02	-7,496.1	717.8	2,113.9	1,986.3	127.58	16.569		
16,700.0	9,069.0	18,800.9	11,159.0	130.7	133.0	-171.02	-7,596.1	718.6	2,113.9	1,984.7	129.18	16.364		
16,800.0	9,069.0	18,900.9	11,159.0	132.3	134.6	-171.02	-7,696.1	719.5	2,113.9	1,983.1	130.77	16.165		
16,900.0	9,069.0	19,000.9	11,159.0	133.9	136.2	-171.02	-7,796.1	720.3	2,113.9	1,981.5	132.37	15.970		
17,000.0	9,069.0	19,100.9	11,159.0	135.5	137.7	-171.02	-7,896.1	721.1	2,113.9	1,979.9	133.96	15.780		
17,100.0	9,069.0	19,200.9	11,159.0	137.1	139.3	-171.02	-7,996.1	721.9	2,113.9	1,978.3	135.56	15.594		
17,200.0	9,069.0	19,300.9	11,159.0	138.8	140.9	-171.02	-8,096.1	722.7	2,113.9	1,976.7	137.16	15.412		
17,300.0	9,069.0	19,400.9	11,159.0	140.4	142.5	-171.02	-8,196.1	723.6	2,113.9	1,975.1	138.76	15.234		
17,400.0	9,069.0	19,500.9	11,159.0	142.0	144.1	-171.02	-8,296.1	724.4	2,113.9	1,973.5	140.36	15.061		
17,500.0	9,069.0	19,600.9	11,159.0	143.6	145.7	-171.02	-8,396.1	725.2	2,113.9	1,971.9	141.96	14.891		
17,600.0	9,069.0	19,700.9	11,159.0	145.2	147.2	-171.02	-8,496.1	726.0	2,113.9	1,970.3	143.56	14.725		
17,700.0	9,069.0	19,800.9	11,159.0	146.8	148.8	-171.02	-8,596.0	726.8	2,113.9	1,968.7	145.16	14.562		
17,800.0	9,069.0	19,900.9	11,159.0	148.4	150.4	-171.02	-8,696.0	727.7	2,113.9	1,967.1	146.77	14.403		
17,900.0	9,069.0	20,000.9	11,159.0	150.0	152.0	-171.02	-8,796.0	728.5	2,113.9	1,965.5	148.37	14.248		
18,000.0	9,069.0	20,100.9	11,159.0	151.6	153.6	-171.02	-8,896.0	729.3	2,113.9	1,963.9	149.97	14.095		
18,100.0	9,069.0	20,200.9	11,159.0	153.3	155.2	-171.02	-8,996.0	730.1	2,113.9	1,962.3	151.58	13.946		
18,200.0	9,069.0	20,300.9	11,159.0	154.9	156.8	-171.02	-9,096.0	730.9	2,113.9	1,960.7	153.18	13.800		
18,300.0	9,069.0	20,400.9	11,159.0	156.5	158.4	-171.02	-9,196.0	731.7	2,113.9	1,959.1	154.79	13.657		
18,400.0	9,069.0	20,500.9	11,159.0	158.1	160.0	-171.02	-9,296.0	732.6	2,113.9	1,957.5	156.40	13.516		
18,500.0	9,069.0	20,600.9	11,159.0	159.7	161.6	-171.02	-9,396.0	733.4	2,113.9	1,955.9	158.00	13.379		
18,600.0	9,069.0	20,700.9	11,159.0	161.3	163.2	-171.02	-9,496.0	734.2	2,113.9	1,954.3	159.61	13.244		
18,700.0	9,069.0	20,800.9	11,159.0	163.0	164.8	-171.02	-9,596.0	735.0	2,113.9	1,952.7	161.22	13.112		
18,800.0	9,069.0	20,900.9	11,159.0	164.6	166.4	-171.02	-9,696.0	735.8	2,113.9	1,951.1	162.83	12.982		
18,900.0	9,069.0	21,000.9	11,159.0	166.2	168.0	-171.02	-9,796.0	736.7	2,113.9	1,949.5	164.44	12.855		
19,000.0	9,069.0	21,100.9	11,159.0	167.8	169.6	-171.02	-9,896.0	737.5	2,113.9	1,947.9	166.05	12.731		
19,100.0	9,069.0	21,200.9	11,159.0	169.4	171.2	-171.02	-9,996.0	738.3	2,113.9	1,946.2	167.66	12.609		
19,200.0	9,069.0	21,300.9	11,159.0	171.1	172.8	-171.02	-10,096.0	739.1	2,113.9	1,944.6	169.27	12.489		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #134H - Wellbore #1 - BLM Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,300.0	9,069.0	21,400.9	11,159.0	172.7	174.4	-171.02	-10,196.0	739.9	2,113.9	1,943.0	170.88	12.371		
19,400.0	9,069.0	21,500.9	11,159.0	174.3	176.0	-171.02	-10,296.0	740.8	2,113.9	1,941.4	172.49	12.255		
19,500.0	9,069.0	21,600.9	11,159.0	175.9	177.6	-171.02	-10,396.0	741.6	2,113.9	1,939.8	174.10	12.142		
19,600.0	9,069.0	21,700.9	11,159.0	177.6	179.3	-171.02	-10,496.0	742.4	2,113.9	1,938.2	175.71	12.030		
19,700.0	9,069.0	21,800.9	11,159.0	179.2	180.9	-171.02	-10,596.0	743.2	2,113.9	1,936.6	177.32	11.921		
19,800.0	9,069.0	21,900.9	11,159.0	180.8	182.5	-171.02	-10,696.0	744.0	2,113.9	1,935.0	178.94	11.814		
19,900.0	9,069.0	22,000.9	11,159.0	182.4	184.1	-171.02	-10,796.0	744.9	2,113.9	1,933.4	180.55	11.708		
20,000.0	9,069.0	22,100.9	11,159.0	184.1	185.7	-171.02	-10,896.0	745.7	2,113.9	1,931.7	182.16	11.604		
20,100.0	9,069.0	22,200.9	11,159.0	185.7	187.3	-171.02	-10,996.0	746.5	2,113.9	1,930.1	183.78	11.502		
20,200.0	9,069.0	22,300.9	11,159.0	187.3	188.9	-171.02	-11,096.0	747.3	2,113.9	1,928.5	185.39	11.402		
20,300.0	9,069.0	22,400.9	11,159.0	188.9	190.5	-171.02	-11,196.0	748.1	2,113.9	1,926.9	187.01	11.304		
20,400.0	9,069.0	22,500.9	11,159.0	190.6	192.2	-171.02	-11,296.0	748.9	2,113.9	1,925.3	188.62	11.207		
20,500.0	9,069.0	22,600.9	11,159.0	192.2	193.8	-171.02	-11,396.0	749.8	2,113.9	1,923.7	190.24	11.112		
20,600.0	9,069.0	22,700.9	11,159.0	193.8	195.4	-171.02	-11,496.0	750.6	2,113.9	1,922.1	191.85	11.018		
20,700.0	9,069.0	22,800.9	11,159.0	195.5	197.0	-171.02	-11,595.9	751.4	2,113.9	1,920.4	193.47	10.926		
20,800.0	9,069.0	22,900.9	11,159.0	197.1	198.6	-171.02	-11,695.9	752.2	2,113.9	1,918.8	195.09	10.836		
20,900.0	9,069.0	23,000.9	11,159.0	198.7	200.2	-171.02	-11,795.9	753.0	2,113.9	1,917.2	196.70	10.747		
21,000.0	9,069.0	23,100.9	11,159.0	200.3	201.9	-171.02	-11,895.9	753.9	2,113.9	1,915.6	198.32	10.659		
21,100.0	9,069.0	23,200.9	11,159.0	202.0	203.5	-171.02	-11,995.9	754.7	2,113.9	1,914.0	199.94	10.573		
21,200.0	9,069.0	23,300.9	11,159.0	203.6	205.1	-171.02	-12,095.9	755.5	2,113.9	1,912.4	201.55	10.488		
21,300.0	9,069.0	23,400.9	11,159.0	205.2	206.7	-171.02	-12,195.9	756.3	2,113.9	1,910.7	203.17	10.405		
21,400.0	9,069.0	23,500.9	11,159.0	206.9	208.3	-171.02	-12,295.9	757.1	2,113.9	1,909.1	204.79	10.322		
21,500.0	9,069.0	23,600.9	11,159.0	208.5	210.0	-171.02	-12,395.9	758.0	2,113.9	1,907.5	206.40	10.242		
21,544.1	9,069.0	23,643.3	11,159.0	209.2	210.6	-171.02	-12,440.1	758.3	2,113.9	1,907.0	206.95	10.215		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #204H - Wellbore #1 - 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		
0.0	0.0	0.0	0.0	0.0	0.0	80.63	31.3	189.8	192.4					
100.0	100.0	100.0	100.0	0.1	0.1	80.63	31.3	189.8	192.4	192.2	0.26	750.703		
200.0	200.0	200.0	200.0	0.5	0.5	80.63	31.3	189.8	192.4	191.4	0.97	197.699		
300.0	300.0	300.0	300.0	0.8	0.8	80.63	31.3	189.8	192.4	190.7	1.69	113.839		
400.0	400.0	400.0	400.0	1.2	1.2	80.63	31.3	189.8	192.4	190.0	2.41	79.933		
500.0	500.0	500.0	500.0	1.6	1.6	80.63	31.3	189.8	192.4	189.3	3.12	61.590 CC		
600.0	600.0	597.4	597.4	1.9	1.9	80.49	31.9	190.4	193.1	189.3	3.83	50.415		
700.0	700.0	694.7	694.6	2.3	2.3	80.05	33.7	192.1	195.1	190.6	4.54	43.029		
800.0	800.0	791.9	791.8	2.6	2.6	79.35	36.7	195.0	198.6	193.4	5.24	37.895		
900.0	900.0	888.9	888.6	3.0	3.0	78.41	40.8	199.0	203.5	197.5	5.95	34.220		
1,000.0	1,000.0	985.7	985.1	3.4	3.3	77.27	46.1	204.1	209.8	203.2	6.65	31.549		
1,100.0	1,100.0	1,082.3	1,081.3	3.7	3.7	75.96	52.6	210.4	217.6	210.3	7.35	29.600		
1,200.0	1,200.0	1,178.5	1,176.9	4.1	4.0	74.54	60.2	217.7	227.0	219.0	8.05	28.194		
1,300.0	1,300.0	1,274.3	1,271.9	4.4	4.4	73.05	68.9	226.1	238.0	229.3	8.75	27.200		
1,400.0	1,400.0	1,372.4	1,369.1	4.8	4.8	71.52	78.7	235.5	250.3	240.8	9.46	26.449		
1,500.0	1,500.0	1,471.4	1,467.1	5.1	5.2	70.12	88.6	245.1	262.7	252.5	10.18	25.809		
1,600.0	1,600.0	1,570.5	1,565.3	5.5	5.6	37.76	98.6	254.7	274.6	263.7	10.90	25.203		
1,700.0	1,700.0	1,669.9	1,663.7	5.9	6.0	36.84	108.5	264.3	285.2	273.6	11.61	24.560		
1,800.0	1,799.9	1,769.4	1,762.2	6.2	6.4	36.19	118.5	273.9	294.5	282.1	12.33	23.877		
1,900.0	1,899.7	1,869.1	1,860.9	6.6	6.8	35.78	128.5	283.5	302.4	289.3	13.06	23.159		
2,000.0	1,999.4	1,968.9	1,959.7	6.9	7.2	35.58	138.5	293.2	308.8	295.1	13.78	22.409		
2,100.0	2,098.9	2,068.7	2,058.6	7.3	7.6	35.58	148.5	302.8	313.9	299.4	14.51	21.631		
2,200.0	2,198.3	2,168.6	2,157.6	7.7	8.0	35.78	158.5	312.5	317.6	302.3	15.24	20.830		
2,300.0	2,297.4	2,268.6	2,256.6	8.0	8.4	36.16	168.5	322.1	319.8	303.8	15.98	20.009		
2,400.0	2,396.4	2,368.6	2,355.6	8.4	8.8	36.64	178.5	331.8	321.4	304.6	16.72	19.214		
2,500.0	2,495.5	2,468.5	2,454.5	8.8	9.2	37.12	188.5	341.4	322.9	305.5	17.47	18.485		
2,600.0	2,594.5	2,568.5	2,553.5	9.2	9.6	37.59	198.6	351.1	324.5	306.3	18.22	17.814		
2,700.0	2,693.5	2,668.4	2,652.5	9.6	10.0	38.05	208.6	360.7	326.2	307.2	18.97	17.195		
2,800.0	2,792.5	2,770.8	2,753.9	9.9	10.5	38.54	218.7	370.5	327.7	308.0	19.74	16.601		
2,900.0	2,891.6	2,879.1	2,861.4	10.3	10.9	39.22	227.8	379.3	327.4	306.8	20.54	15.934		
3,000.0	2,990.6	2,987.1	2,969.1	10.7	11.3	40.15	234.8	386.0	324.5	303.2	21.33	15.212		
3,100.0	3,089.6	3,094.8	3,076.6	11.1	11.7	41.35	239.5	390.5	319.3	297.2	22.11	14.443		
3,200.0	3,188.6	3,202.0	3,183.6	11.5	12.1	42.87	242.0	392.9	311.8	288.9	22.87	13.634		
3,300.0	3,287.7	3,306.0	3,287.7	11.9	12.4	44.68	242.4	393.4	302.2	278.6	23.61	12.799		
3,400.0	3,386.7	3,405.0	3,386.7	12.3	12.7	46.59	242.4	393.4	292.4	268.1	24.36	12.003		
3,500.0	3,485.7	3,504.1	3,485.7	12.7	13.1	48.63	242.4	393.4	283.0	257.9	25.12	11.266		
3,600.0	3,584.8	3,603.1	3,584.8	13.1	13.4	50.80	242.4	393.4	274.0	248.1	25.88	10.584		
3,667.1	3,651.2	3,669.6	3,651.2	13.4	13.6	52.34	242.4	393.4	268.1	241.7	26.40	10.156		
3,700.0	3,683.8	3,702.1	3,683.8	13.5	13.7	53.06	242.4	393.4	265.4	238.8	26.65	9.958		
3,800.0	3,783.1	3,801.4	3,783.1	13.9	14.1	55.05	242.4	393.4	258.5	231.1	27.42	9.428		
3,900.0	3,882.7	3,901.0	3,882.7	14.3	14.4	56.68	242.4	393.4	253.3	225.1	28.17	8.994		
4,000.0	3,982.5	4,000.8	3,982.5	14.7	14.7	57.89	242.4	393.4	249.8	220.9	28.90	8.642		
4,100.0	4,082.4	4,100.7	4,082.4	15.0	15.1	58.63	242.4	393.4	247.7	218.1	29.62	8.363		
4,200.5	4,182.8	4,201.2	4,182.8	15.4	15.4	90.00	242.4	393.4	247.0	216.7	30.32	8.147		
4,300.0	4,282.4	4,300.7	4,282.4	15.7	15.8	90.00	242.4	393.4	247.0	216.0	31.01	7.966		
4,400.0	4,382.4	4,400.7	4,382.4	16.1	16.1	90.00	242.4	393.4	247.0	215.3	31.70	7.793		
4,500.0	4,482.4	4,500.7	4,482.4	16.4	16.4	90.00	242.4	393.4	247.0	214.6	32.39	7.626		
4,600.0	4,582.4	4,600.7	4,582.4	16.7	16.8	90.00	242.4	393.4	247.0	213.9	33.08	7.466		
4,700.0	4,682.4	4,700.7	4,682.4	17.1	17.1	90.00	242.4	393.4	247.0	213.2	33.78	7.313		
4,800.0	4,782.4	4,800.7	4,782.4	17.4	17.5	90.00	242.4	393.4	247.0	212.5	34.47	7.165		
4,900.0	4,882.4	4,900.7	4,882.4	17.8	17.8	90.00	242.4	393.4	247.0	211.8	35.17	7.024		
5,000.0	4,982.4	5,000.7	4,982.4	18.1	18.2	90.00	242.4	393.4	247.0	211.1	35.87	6.887		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #204H - Wellbore #1 - BLM Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
5,100.0	5,082.4	5,100.7	5,082.4	18.5	18.5	90.00	242.4	393.4	247.0	210.4	36.56	6.756		
5,200.0	5,182.4	5,200.7	5,182.4	18.8	18.9	90.00	242.4	393.4	247.0	209.7	37.26	6.629		
5,300.0	5,282.4	5,300.7	5,282.4	19.2	19.2	90.00	242.4	393.4	247.0	209.0	37.96	6.507		
5,400.0	5,382.4	5,400.7	5,382.4	19.5	19.5	90.00	242.4	393.4	247.0	208.3	38.66	6.389		
5,500.0	5,482.4	5,500.7	5,482.4	19.9	19.9	90.00	242.4	393.4	247.0	207.6	39.36	6.275		
5,600.0	5,582.4	5,600.7	5,582.4	20.2	20.2	90.00	242.4	393.4	247.0	206.9	40.06	6.166		
5,700.0	5,682.4	5,700.7	5,682.4	20.6	20.6	90.00	242.4	393.4	247.0	206.2	40.76	6.060		
5,800.0	5,782.4	5,800.7	5,782.4	20.9	20.9	90.00	242.4	393.4	247.0	205.5	41.46	5.957		
5,900.0	5,882.4	5,900.7	5,882.4	21.3	21.3	90.00	242.4	393.4	247.0	204.8	42.17	5.858		
6,000.0	5,982.4	6,000.7	5,982.4	21.6	21.6	90.00	242.4	393.4	247.0	204.1	42.87	5.762		
6,100.0	6,082.4	6,100.7	6,082.4	22.0	22.0	90.00	242.4	393.4	247.0	203.4	43.57	5.669		
6,200.0	6,182.4	6,200.7	6,182.4	22.3	22.3	90.00	242.4	393.4	247.0	202.7	44.28	5.579		
6,300.0	6,282.4	6,300.7	6,282.4	22.7	22.7	90.00	242.4	393.4	247.0	202.0	44.98	5.491		
6,400.0	6,382.4	6,400.7	6,382.4	23.0	23.0	90.00	242.4	393.4	247.0	201.3	45.69	5.406		
6,500.0	6,482.4	6,500.7	6,482.4	23.4	23.4	90.00	242.4	393.4	247.0	200.6	46.39	5.324		
6,600.0	6,582.4	6,600.7	6,582.4	23.7	23.7	90.00	242.4	393.4	247.0	199.9	47.10	5.245		
6,700.0	6,682.4	6,700.7	6,682.4	24.1	24.1	90.00	242.4	393.4	247.0	199.2	47.80	5.167		
6,800.0	6,782.4	6,800.7	6,782.4	24.4	24.4	90.00	242.4	393.4	247.0	198.5	48.51	5.092		
6,900.0	6,882.4	6,900.7	6,882.4	24.8	24.8	90.00	242.4	393.4	247.0	197.8	49.22	5.019		
7,000.0	6,982.4	7,000.7	6,982.4	25.1	25.1	90.00	242.4	393.4	247.0	197.1	49.92	4.948		
7,100.0	7,082.4	7,100.7	7,082.4	25.5	25.5	90.00	242.4	393.4	247.0	196.4	50.63	4.879		
7,200.0	7,182.4	7,200.7	7,182.4	25.8	25.8	90.00	242.4	393.4	247.0	195.7	51.34	4.811		
7,300.0	7,282.4	7,300.7	7,282.4	26.2	26.2	90.00	242.4	393.4	247.0	195.0	52.04	4.746		
7,400.0	7,382.4	7,400.7	7,382.4	26.5	26.5	90.00	242.4	393.4	247.0	194.3	52.75	4.682		
7,500.0	7,482.4	7,500.7	7,482.4	26.9	26.9	90.00	242.4	393.4	247.0	193.5	53.46	4.620		
7,600.0	7,582.4	7,600.7	7,582.4	27.2	27.3	90.00	242.4	393.4	247.0	192.8	54.17	4.560		
7,700.0	7,682.4	7,700.7	7,682.4	27.6	27.6	90.00	242.4	393.4	247.0	192.1	54.88	4.501		
7,800.0	7,782.4	7,800.7	7,782.4	27.9	28.0	90.00	242.4	393.4	247.0	191.4	55.59	4.444		
7,900.0	7,882.4	7,900.7	7,882.4	28.3	28.3	90.00	242.4	393.4	247.0	190.7	56.29	4.388		
8,000.0	7,982.4	8,000.7	7,982.4	28.7	28.7	90.00	242.4	393.4	247.0	190.0	57.00	4.333		
8,100.0	8,082.4	8,100.7	8,082.4	29.0	29.0	90.00	242.4	393.4	247.0	189.3	57.71	4.280		
8,200.0	8,182.4	8,200.7	8,182.4	29.4	29.4	90.00	242.4	393.4	247.0	188.6	58.42	4.228		
8,300.0	8,282.4	8,300.7	8,282.4	29.7	29.7	90.00	242.4	393.4	247.0	187.9	59.13	4.177		
8,400.0	8,382.4	8,400.7	8,382.4	30.1	30.1	90.00	242.4	393.4	247.0	187.2	59.84	4.128		
8,500.0	8,482.4	8,500.7	8,482.4	30.4	30.4	90.00	242.4	393.4	247.0	186.5	60.55	4.079		
8,513.6	8,496.0	8,514.3	8,496.0	30.5	30.5	90.00	242.4	393.4	247.0	186.4	60.65	4.073		
8,550.0	8,532.3	8,550.7	8,532.3	30.6	30.6	-77.98	242.4	393.4	246.8	185.9	60.90	4.052		
8,600.0	8,582.0	8,600.4	8,582.0	30.7	30.8	-79.30	242.4	393.4	245.7	184.5	61.21	4.014		
8,650.0	8,631.1	8,649.4	8,631.1	30.9	31.0	-81.64	242.4	393.4	244.1	182.6	61.51	3.968		
8,700.0	8,679.1	8,702.6	8,679.1	31.0	31.1	-84.93	242.4	393.4	242.4	180.6	61.80	3.922		
8,750.0	8,725.7	8,744.1	8,725.7	31.2	31.3	-89.01	242.4	393.4	241.4	179.3	62.04	3.891		
8,761.1	8,735.9	8,754.2	8,735.9	31.2	31.3	-90.00	242.4	393.4	241.3	179.2	62.09	3.887 ES		
8,800.0	8,770.6	8,788.9	8,770.6	31.3	31.5	-93.63	242.4	393.4	242.0	179.7	62.28	3.885 SF		
8,850.0	8,813.4	8,831.7	8,813.4	31.4	31.6	-98.50	242.4	393.4	245.2	182.7	62.52	3.922		
8,900.0	8,853.7	8,872.1	8,853.7	31.5	31.7	-103.25	242.4	393.4	252.1	189.3	62.76	4.016		
8,950.0	8,891.4	8,909.7	8,891.4	31.6	31.9	-107.58	242.4	393.4	263.4	200.4	63.01	4.181		
9,000.0	8,926.0	8,944.4	8,926.0	31.6	32.0	-111.21	242.4	393.4	279.9	216.6	63.26	4.424		
9,050.0	8,957.4	8,975.7	8,957.4	31.7	32.1	-113.93	242.4	393.4	301.4	237.9	63.50	4.747		
9,100.0	8,985.2	9,003.6	8,985.2	31.8	32.2	-115.60	242.4	393.4	328.0	264.3	63.73	5.147		
9,150.0	9,009.4	9,027.7	9,009.4	32.0	32.3	-116.07	242.4	393.4	359.1	295.1	63.94	5.616		
9,200.0	9,029.6	9,047.9	9,029.6	32.1	32.4	-115.19	242.4	393.4	394.1	330.0	64.11	6.147		
9,250.0	9,045.7	9,064.1	9,045.7	32.3	32.4	-112.73	242.4	393.4	432.5	368.2	64.26	6.730		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #204H - Wellbore #1 - 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		
9,300.0	9,057.7	9,076.1	9,057.7	32.4	32.5	-108.40	242.4	393.4	473.5	409.2	64.37	7.356		
9,350.0	9,065.4	9,083.8	9,065.4	32.6	32.5	-101.85	242.4	393.4	516.7	452.2	64.46	8.015		
9,400.0	9,068.8	9,087.1	9,068.8	32.8	32.5	-92.86	242.4	393.4	561.2	496.7	64.51	8.699		
9,413.6	9,069.0	9,087.3	9,069.0	32.8	32.5	-90.00	242.4	393.4	573.6	509.0	64.52	8.889		
9,500.0	9,069.0	9,087.3	9,069.0	33.2	32.5	-90.00	242.4	393.4	653.4	588.8	64.58	10.118		
9,600.0	9,069.0	9,087.3	9,069.0	33.7	32.5	-90.00	242.4	393.4	748.6	684.0	64.63	11.583		
9,700.0	9,069.0	9,087.3	9,069.0	34.2	32.5	-90.00	242.4	393.4	845.8	781.1	64.66	13.080		
9,800.0	9,069.0	9,087.3	9,069.0	34.8	32.5	-90.00	242.4	393.4	944.2	879.5	64.69	14.595		
9,900.0	9,069.0	9,087.3	9,069.0	35.5	32.5	-90.00	242.4	393.4	1,043.3	978.6	64.71	16.123		
10,005.2	9,069.0	9,087.3	9,069.0	36.2	32.5	-90.00	242.4	393.4	1,148.2	1,083.5	64.73	17.738		
10,100.0	9,069.0	9,087.3	9,069.0	37.0	32.5	-90.00	242.4	393.4	1,242.8	1,178.1	64.74	19.196		
10,200.0	9,069.0	9,087.3	9,069.0	37.8	32.5	-90.00	242.4	393.4	1,342.7	1,277.9	64.76	20.733		
10,300.0	9,069.0	9,087.3	9,069.0	38.6	32.5	-90.00	242.4	393.4	1,442.6	1,377.8	64.78	22.270		
10,400.0	9,069.0	9,087.3	9,069.0	39.6	32.5	-90.00	242.4	393.4	1,542.5	1,477.7	64.79	23.806		
10,500.0	9,069.0	9,087.3	9,069.0	40.5	32.5	-90.00	242.4	393.4	1,642.4	1,577.6	64.81	25.341		
10,600.0	9,069.0	9,087.3	9,069.0	41.5	32.5	-90.01	242.4	393.4	1,742.3	1,677.5	64.83	26.876		
10,700.0	9,069.0	9,087.3	9,069.0	42.6	32.5	-90.01	242.4	393.4	1,842.2	1,777.4	64.85	28.409		
10,800.0	9,069.0	9,087.3	9,069.0	43.7	32.5	-90.01	242.4	393.4	1,942.1	1,877.3	64.87	29.941		
10,900.0	9,069.0	9,087.3	9,069.0	44.8	32.5	-90.01	242.4	393.4	2,042.1	1,977.2	64.89	31.472		
11,000.0	9,069.0	9,087.3	9,069.0	45.9	32.5	-90.01	242.4	393.4	2,142.0	2,077.1	64.91	33.002		
11,100.0	9,069.0	9,087.3	9,069.0	47.1	32.5	-90.01	242.4	393.4	2,242.0	2,177.0	64.93	34.530		
11,200.0	9,069.0	13,502.4	11,386.0	48.3	53.7	179.99	-2,099.0	343.5	2,317.0	2,272.0	45.02	51.465		
11,300.0	9,069.0	13,602.4	11,386.0	49.6	54.8	179.99	-2,199.0	344.3	2,317.0	2,270.7	46.28	50.066		
11,400.0	9,069.0	13,702.4	11,386.0	50.8	55.9	179.99	-2,299.0	345.1	2,317.0	2,269.4	47.55	48.723		
11,500.0	9,069.0	13,802.4	11,386.0	52.1	57.1	179.99	-2,399.0	345.9	2,317.0	2,268.2	48.85	47.434		
11,600.0	9,069.0	13,902.4	11,386.0	53.4	58.2	179.99	-2,499.0	346.7	2,317.0	2,266.8	50.15	46.197		
11,700.0	9,069.0	14,002.4	11,386.0	54.7	59.4	179.99	-2,599.0	347.6	2,317.0	2,265.5	51.48	45.011		
11,800.0	9,069.0	14,102.4	11,386.0	56.1	60.7	179.99	-2,699.0	348.4	2,317.0	2,264.2	52.81	43.873		
11,900.0	9,069.0	14,202.4	11,386.0	57.4	61.9	179.99	-2,798.9	349.2	2,317.0	2,262.8	54.16	42.781		
12,000.0	9,069.0	14,302.4	11,386.0	58.8	63.2	179.99	-2,898.9	350.0	2,317.0	2,261.5	55.52	41.734		
12,100.0	9,069.0	14,402.4	11,386.0	60.2	64.5	179.99	-2,998.9	350.8	2,317.0	2,260.1	56.89	40.730		
12,200.0	9,069.0	14,502.4	11,386.0	61.6	65.8	179.99	-3,098.9	351.7	2,317.0	2,258.7	58.27	39.766		
12,300.0	9,069.0	14,602.4	11,386.0	63.0	67.1	179.99	-3,198.9	352.5	2,317.0	2,257.3	59.65	38.840		
12,400.0	9,069.0	14,702.4	11,386.0	64.4	68.4	179.99	-3,298.9	353.3	2,317.0	2,255.9	61.05	37.952		
12,500.0	9,069.0	14,802.4	11,386.0	65.8	69.7	179.99	-3,398.9	354.1	2,317.0	2,254.5	62.46	37.098		
12,600.0	9,069.0	14,902.4	11,386.0	67.3	71.1	179.99	-3,498.9	355.0	2,317.0	2,253.1	63.87	36.277		
12,700.0	9,069.0	15,002.4	11,386.0	68.7	72.5	179.99	-3,598.9	355.8	2,317.0	2,251.7	65.29	35.489		
12,800.0	9,069.0	15,102.4	11,386.0	70.2	73.8	179.99	-3,698.9	356.6	2,317.0	2,250.3	66.71	34.730		
12,900.0	9,069.0	15,202.4	11,386.0	71.6	75.2	179.99	-3,798.9	357.4	2,317.0	2,248.9	68.15	34.000		
13,000.0	9,069.0	15,302.4	11,386.0	73.1	76.6	179.99	-3,898.9	358.2	2,317.0	2,247.4	69.58	33.298		
13,100.0	9,069.0	15,402.4	11,386.0	74.6	78.0	179.99	-3,998.9	359.1	2,317.0	2,246.0	71.03	32.621		
13,200.0	9,069.0	15,502.4	11,386.0	76.1	79.5	179.99	-4,098.9	359.9	2,317.0	2,244.5	72.48	31.969		
13,300.0	9,069.0	15,602.4	11,386.0	77.6	80.9	179.99	-4,198.9	360.7	2,317.0	2,243.1	73.93	31.340		
13,400.0	9,069.0	15,702.4	11,386.0	79.1	82.3	179.99	-4,298.9	361.5	2,317.0	2,241.6	75.39	30.734		
13,500.0	9,069.0	15,802.4	11,386.0	80.6	83.8	179.99	-4,398.9	362.3	2,317.0	2,240.1	76.85	30.149		
13,600.0	9,069.0	15,902.4	11,386.0	82.1	85.2	179.99	-4,498.9	363.2	2,317.0	2,238.7	78.32	29.585		
13,700.0	9,069.0	16,002.4	11,386.0	83.6	86.7	179.99	-4,598.9	364.0	2,317.0	2,237.2	79.79	29.040		
13,800.0	9,069.0	16,102.4	11,386.0	85.2	88.2	179.99	-4,698.9	364.8	2,317.0	2,235.7	81.26	28.513		
13,900.0	9,069.0	16,202.4	11,386.0	86.7	89.6	179.99	-4,798.9	365.6	2,317.0	2,234.3	82.74	28.004		
14,000.0	9,069.0	16,302.4	11,386.0	88.2	91.1	179.99	-4,898.9	366.5	2,317.0	2,232.8	84.22	27.511		
14,100.0	9,069.0	16,402.4	11,386.0	89.8	92.6	179.99	-4,998.9	367.3	2,317.0	2,231.3	85.70	27.035		
14,200.0	9,069.0	16,502.4	11,386.0	91.3	94.1	179.99	-5,098.9	368.1	2,317.0	2,229.8	87.19	26.574		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #204H - Wellbore #1 - BLM Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,300.0	9,069.0	16,602.4	11,386.0	92.8	95.6	179.99	-5,198.9	368.9	2,317.0	2,228.3	88.68	26.128		
14,400.0	9,069.0	16,702.4	11,386.0	94.4	97.1	179.99	-5,298.9	369.7	2,317.0	2,226.8	90.17	25.695		
14,500.0	9,069.0	16,802.4	11,386.0	95.9	98.6	179.99	-5,398.9	370.6	2,317.0	2,225.3	91.67	25.276		
14,600.0	9,069.0	16,902.4	11,386.0	97.5	100.1	179.99	-5,498.9	371.4	2,317.0	2,223.8	93.16	24.870		
14,700.0	9,069.0	17,002.4	11,386.0	99.1	101.6	179.99	-5,598.9	372.2	2,317.0	2,222.3	94.66	24.476		
14,800.0	9,069.0	17,102.4	11,386.0	100.6	103.1	179.99	-5,698.8	373.0	2,317.0	2,220.8	96.17	24.094		
14,900.0	9,069.0	17,202.4	11,386.0	102.2	104.7	179.99	-5,798.8	373.8	2,317.0	2,219.3	97.67	23.723		
15,000.0	9,069.0	17,302.4	11,386.0	103.8	106.2	179.99	-5,898.8	374.7	2,317.0	2,217.8	99.18	23.363		
15,100.0	9,069.0	17,402.4	11,386.0	105.3	107.7	179.99	-5,998.8	375.5	2,317.0	2,216.3	100.68	23.013		
15,200.0	9,069.0	17,502.4	11,386.0	106.9	109.2	179.99	-6,098.8	376.3	2,317.0	2,214.8	102.19	22.673		
15,300.0	9,069.0	17,602.4	11,386.0	108.5	110.8	179.99	-6,198.8	377.1	2,317.0	2,213.3	103.70	22.342		
15,400.0	9,069.0	17,702.4	11,386.0	110.1	112.3	179.99	-6,298.8	378.0	2,317.0	2,211.8	105.22	22.021		
15,500.0	9,069.0	17,802.4	11,386.0	111.6	113.9	179.99	-6,398.8	378.8	2,317.0	2,210.3	106.73	21.708		
15,600.0	9,069.0	17,902.4	11,386.0	113.2	115.4	179.99	-6,498.8	379.6	2,317.0	2,208.8	108.25	21.404		
15,700.0	9,069.0	18,002.4	11,386.0	114.8	117.0	179.99	-6,598.8	380.4	2,317.0	2,207.2	109.77	21.108		
15,800.0	9,069.0	18,102.4	11,386.0	116.4	118.5	179.99	-6,698.8	381.2	2,317.0	2,205.7	111.29	20.820		
15,900.0	9,069.0	18,202.4	11,386.0	118.0	120.1	180.00	-6,798.8	382.1	2,317.0	2,204.2	112.81	20.540		
16,000.0	9,069.0	18,302.4	11,386.0	119.6	121.6	180.00	-6,898.8	382.9	2,317.0	2,202.7	114.33	20.266		
16,100.0	9,069.0	18,402.4	11,386.0	121.2	123.2	180.00	-6,998.8	383.7	2,317.0	2,201.1	115.85	20.000		
16,200.0	9,069.0	18,502.4	11,386.0	122.7	124.8	180.00	-7,098.8	384.5	2,317.0	2,199.6	117.38	19.740		
16,300.0	9,069.0	18,602.4	11,386.0	124.3	126.3	180.00	-7,198.8	385.3	2,317.0	2,198.1	118.90	19.487		
16,400.0	9,069.0	18,702.4	11,386.0	125.9	127.9	180.00	-7,298.8	386.2	2,317.0	2,196.6	120.43	19.240		
16,500.0	9,069.0	18,802.4	11,386.0	127.5	129.5	180.00	-7,398.8	387.0	2,317.0	2,195.0	121.96	18.999		
16,600.0	9,069.0	18,902.4	11,386.0	129.1	131.0	180.00	-7,498.8	387.8	2,317.0	2,193.5	123.48	18.763		
16,700.0	9,069.0	19,002.4	11,386.0	130.7	132.6	180.00	-7,598.8	388.6	2,317.0	2,192.0	125.01	18.534		
16,800.0	9,069.0	19,102.4	11,386.0	132.3	134.2	180.00	-7,698.8	389.5	2,317.0	2,190.5	126.55	18.310		
16,900.0	9,069.0	19,202.4	11,386.0	133.9	135.8	180.00	-7,798.8	390.3	2,317.0	2,188.9	128.08	18.091		
17,000.0	9,069.0	19,302.4	11,386.0	135.5	137.3	180.00	-7,898.8	391.1	2,317.0	2,187.4	129.61	17.877		
17,100.0	9,069.0	19,402.4	11,386.0	137.1	138.9	180.00	-7,998.8	391.9	2,317.0	2,185.9	131.14	17.668		
17,200.0	9,069.0	19,502.4	11,386.0	138.8	140.5	180.00	-8,098.8	392.7	2,317.0	2,184.3	132.68	17.463		
17,300.0	9,069.0	19,602.4	11,386.0	140.4	142.1	180.00	-8,198.8	393.6	2,317.0	2,182.8	134.21	17.264		
17,400.0	9,069.0	19,702.4	11,386.0	142.0	143.7	180.00	-8,298.8	394.4	2,317.0	2,181.3	135.75	17.068		
17,500.0	9,069.0	19,802.4	11,386.0	143.6	145.3	180.00	-8,398.8	395.2	2,317.0	2,179.7	137.29	16.877		
17,600.0	9,069.0	19,902.4	11,386.0	145.2	146.8	180.00	-8,498.8	396.0	2,317.0	2,178.2	138.82	16.690		
17,700.0	9,069.0	20,002.4	11,386.0	146.8	148.4	180.00	-8,598.8	396.8	2,317.0	2,176.6	140.36	16.507		
17,800.0	9,069.0	20,102.4	11,386.0	148.4	150.0	180.00	-8,698.7	397.7	2,317.0	2,175.1	141.90	16.328		
17,900.0	9,069.0	20,202.4	11,386.0	150.0	151.6	180.00	-8,798.7	398.5	2,317.0	2,173.6	143.44	16.153		
18,000.0	9,069.0	20,302.4	11,386.0	151.6	153.2	180.00	-8,898.7	399.3	2,317.0	2,172.0	144.98	15.982		
18,100.0	9,069.0	20,402.4	11,386.0	153.3	154.8	180.00	-8,998.7	400.1	2,317.0	2,170.5	146.52	15.814		
18,200.0	9,069.0	20,502.4	11,386.0	154.9	156.4	180.00	-9,098.7	401.0	2,317.0	2,168.9	148.06	15.649		
18,300.0	9,069.0	20,602.4	11,386.0	156.5	158.0	180.00	-9,198.7	401.8	2,317.0	2,167.4	149.60	15.488		
18,400.0	9,069.0	20,702.4	11,386.0	158.1	159.6	180.00	-9,298.7	402.6	2,317.0	2,165.9	151.15	15.330		
18,500.0	9,069.0	20,802.4	11,386.0	159.7	161.2	180.00	-9,398.7	403.4	2,317.0	2,164.3	152.69	15.175		
18,600.0	9,069.0	20,902.4	11,386.0	161.3	162.8	180.00	-9,498.7	404.2	2,317.0	2,162.8	154.23	15.023		
18,700.0	9,069.0	21,002.4	11,386.0	163.0	164.4	180.00	-9,598.7	405.1	2,317.0	2,161.2	155.78	14.874		
18,800.0	9,069.0	21,102.4	11,386.0	164.6	166.0	180.00	-9,698.7	405.9	2,317.0	2,159.7	157.32	14.728		
18,900.0	9,069.0	21,202.4	11,386.0	166.2	167.6	180.00	-9,798.7	406.7	2,317.0	2,158.1	158.87	14.585		
19,000.0	9,069.0	21,302.4	11,386.0	167.8	169.2	180.00	-9,898.7	407.5	2,317.0	2,156.6	160.41	14.444		
19,100.0	9,069.0	21,402.4	11,386.0	169.4	170.8	180.00	-9,998.7	408.3	2,317.0	2,155.0	161.96	14.306		
19,200.0	9,069.0	21,502.4	11,386.0	171.1	172.4	180.00	-10,098.7	409.2	2,317.0	2,153.5	163.50	14.171		
19,300.0	9,069.0	21,602.4	11,386.0	172.7	174.0	180.00	-10,198.7	410.0	2,317.0	2,152.0	165.05	14.038		
19,400.0	9,069.0	21,702.4	11,386.0	174.3	175.6	180.00	-10,298.7	410.8	2,317.0	2,150.4	166.60	13.908		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													Voni - Voni Fed Com #204H - Wellbore #1 - 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					
19,500.0	9,069.0	21,802.4	11,386.0	175.9	177.3	180.00	-10,398.7	411.6	2,317.0	2,148.9	168.15	13.780					
19,600.0	9,069.0	21,902.4	11,386.0	177.6	178.9	180.00	-10,498.7	412.5	2,317.0	2,147.3	169.69	13.654					
19,700.0	9,069.0	22,002.4	11,386.0	179.2	180.5	180.00	-10,598.7	413.3	2,317.0	2,145.8	171.24	13.531					
19,800.0	9,069.0	22,102.4	11,386.0	180.8	182.1	180.00	-10,698.7	414.1	2,317.0	2,144.2	172.79	13.409					
19,900.0	9,069.0	22,202.4	11,386.0	182.4	183.7	180.00	-10,798.7	414.9	2,317.0	2,142.7	174.34	13.290					
20,000.0	9,069.0	22,302.4	11,386.0	184.1	185.3	180.00	-10,898.7	415.7	2,317.0	2,141.1	175.89	13.173					
20,100.0	9,069.0	22,402.4	11,386.0	185.7	186.9	180.00	-10,998.7	416.6	2,317.0	2,139.6	177.44	13.058					
20,200.0	9,069.0	22,502.4	11,386.0	187.3	188.5	180.00	-11,098.7	417.4	2,317.0	2,138.0	178.99	12.945					
20,300.0	9,069.0	22,602.4	11,386.0	188.9	190.1	180.00	-11,198.7	418.2	2,317.0	2,136.5	180.54	12.834					
20,400.0	9,069.0	22,702.4	11,386.0	190.6	191.8	180.00	-11,298.7	419.0	2,317.0	2,134.9	182.09	12.724					
20,500.0	9,069.0	22,802.4	11,386.0	192.2	193.4	180.00	-11,398.7	419.8	2,317.0	2,133.4	183.64	12.617					
20,600.0	9,069.0	22,902.4	11,386.0	193.8	195.0	180.00	-11,498.7	420.7	2,317.0	2,131.8	185.19	12.511					
20,700.0	9,069.0	23,002.4	11,386.0	195.5	196.6	180.00	-11,598.6	421.5	2,317.0	2,130.3	186.75	12.407					
20,800.0	9,069.0	23,102.4	11,386.0	197.1	198.2	-180.00	-11,698.6	422.3	2,317.0	2,128.7	188.30	12.305					
20,900.0	9,069.0	23,202.4	11,386.0	198.7	199.9	-180.00	-11,798.6	423.1	2,317.0	2,127.1	189.85	12.204					
21,000.0	9,069.0	23,302.4	11,386.0	200.3	201.5	-180.00	-11,898.6	423.9	2,317.0	2,125.6	191.40	12.105					
21,100.0	9,069.0	23,402.4	11,386.0	202.0	203.1	-180.00	-11,998.6	424.8	2,317.0	2,124.0	192.96	12.008					
21,200.0	9,069.0	23,502.4	11,386.0	203.6	204.7	-180.00	-12,098.6	425.6	2,317.0	2,122.5	194.51	11.912					
21,300.0	9,069.0	23,602.4	11,386.0	205.2	206.3	-180.00	-12,198.6	426.4	2,317.0	2,120.9	196.06	11.818					
21,400.0	9,069.0	23,702.4	11,386.0	206.9	208.0	-180.00	-12,298.6	427.2	2,317.0	2,119.4	197.62	11.725					
21,500.0	9,069.0	23,705.7	11,386.0	208.5	208.0	-180.00	-12,301.9	427.3	2,319.0	2,121.0	198.04	11.710					
21,544.1	9,069.0	23,705.7	11,386.0	209.2	208.0	-180.00	-12,301.9	427.3	2,321.3	2,123.2	198.12	11.716					

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #218H - Wellbore #1 - BLM Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	1.0	-1.0	0.0	0.0	89.60	1.5	220.1	220.1					
100.0	100.0	101.0	99.0	0.1	0.1	89.60	1.5	220.1	220.1	219.8	0.26	840.955		
200.0	200.0	201.0	199.0	0.5	0.5	89.60	1.5	220.1	220.1	219.1	0.98	224.871		
300.0	300.0	301.0	299.0	0.8	0.9	89.60	1.5	220.1	220.1	218.4	1.70	129.788		
400.0	400.0	401.0	399.0	1.2	1.2	89.60	1.5	220.1	220.1	217.7	2.41	91.218		
500.0	500.0	501.0	499.0	1.6	1.6	89.60	1.5	220.1	220.1	216.9	3.13	70.321		
600.0	600.0	601.0	599.0	1.9	1.9	89.60	1.5	220.1	220.1	216.2	3.85	57.213		
700.0	700.0	701.0	699.0	2.3	2.3	89.60	1.5	220.1	220.1	215.5	4.56	48.225		
800.0	800.0	801.0	799.0	2.6	2.6	89.60	1.5	220.1	220.1	214.8	5.28	41.677		
900.0	900.0	901.0	899.0	3.0	3.0	89.60	1.5	220.1	220.1	214.1	6.00	36.694		
1,000.0	1,000.0	1,001.0	999.0	3.4	3.4	89.60	1.5	220.1	220.1	213.4	6.71	32.776		
1,100.0	1,100.0	1,101.0	1,099.0	3.7	3.7	89.60	1.5	220.1	220.1	212.6	7.43	29.614		
1,200.0	1,200.0	1,201.0	1,199.0	4.1	4.1	89.60	1.5	220.1	220.1	211.9	8.15	27.008		
1,300.0	1,300.0	1,301.0	1,299.0	4.4	4.4	89.60	1.5	220.1	220.1	211.2	8.87	24.824		
1,400.0	1,400.0	1,401.0	1,399.0	4.8	4.8	89.60	1.5	220.1	220.1	210.5	9.58	22.967		
1,500.0	1,500.0	1,501.0	1,499.0	5.1	5.2	89.60	1.5	220.1	220.1	209.8	10.30	21.368		
1,600.0	1,600.0	1,601.0	1,599.0	5.5	5.5	58.68	1.5	220.1	219.6	208.6	11.01	19.939		
1,700.0	1,700.0	1,701.0	1,699.0	5.9	5.9	59.28	1.5	220.1	218.3	206.5	11.73	18.609		
1,800.0	1,799.9	1,801.1	1,798.9	6.2	6.2	60.29	1.5	220.1	216.1	203.6	12.44	17.364		
1,900.0	1,899.7	1,901.3	1,898.7	6.6	6.6	61.74	1.5	220.1	213.1	199.9	13.16	16.194		
2,000.0	1,999.4	2,001.6	1,998.4	6.9	6.9	63.66	1.5	220.1	209.5	195.6	13.88	15.097		
2,100.0	2,098.9	2,102.1	2,097.9	7.3	7.3	66.08	1.5	220.1	205.4	190.8	14.60	14.071		
2,200.0	2,198.3	2,202.7	2,197.3	7.7	7.7	69.06	1.5	220.1	201.1	185.7	15.32	13.122		
2,300.0	2,297.4	2,303.6	2,296.4	8.0	8.0	72.62	1.5	220.1	196.7	180.7	16.05	12.255		
2,400.0	2,396.4	2,404.6	2,395.4	8.4	8.4	76.53	1.5	220.1	193.0	176.2	16.79	11.493		
2,500.0	2,495.5	2,505.5	2,494.5	8.8	8.8	80.57	1.5	220.1	190.2	172.7	17.54	10.847		
2,600.0	2,594.5	2,606.5	2,593.5	9.2	9.1	84.71	1.5	220.1	188.4	170.1	18.28	10.306		
2,700.0	2,693.5	2,707.5	2,692.5	9.6	9.5	88.91	1.5	220.1	187.6	168.6	19.03	9.858		
2,726.0	2,719.2	2,718.2	2,718.2	9.7	9.5	90.00	1.5	220.1	187.6	168.4	19.17	9.785 CC		
2,800.0	2,792.5	2,808.5	2,791.5	9.9	9.8	93.11	1.5	220.1	187.9	168.1	19.78	9.496 ES		
2,900.0	2,891.6	2,909.4	2,890.6	10.3	10.2	97.29	1.5	220.1	189.2	168.6	20.54	9.210		
3,000.0	2,990.6	2,989.6	2,989.6	10.7	10.5	101.38	1.5	220.1	191.4	170.2	21.21	9.024		
3,100.0	3,089.6	3,087.4	3,087.4	11.1	10.8	105.14	1.8	220.7	195.0	173.0	21.95	8.883		
3,200.0	3,188.6	3,185.4	3,185.4	11.5	11.2	108.31	2.5	222.9	199.9	177.2	22.67	8.817		
3,300.0	3,287.7	3,283.6	3,283.5	11.9	11.5	110.89	3.9	226.7	206.0	182.6	23.40	8.803 SF		
3,400.0	3,386.7	3,382.1	3,381.8	12.3	11.9	112.88	5.8	232.0	212.9	188.8	24.13	8.825		
3,500.0	3,485.7	3,480.7	3,480.1	12.7	12.2	114.33	8.3	239.0	220.5	195.7	24.86	8.871		
3,600.0	3,584.8	3,579.3	3,578.3	13.1	12.6	115.26	11.4	247.6	228.7	203.1	25.59	8.934		
3,667.1	3,651.2	3,645.6	3,644.2	13.4	12.8	115.62	13.8	254.3	234.4	208.3	26.09	8.983		
3,700.0	3,683.8	3,678.0	3,676.4	13.5	12.9	115.73	15.0	257.8	237.2	210.9	26.33	9.007		
3,800.0	3,783.1	3,776.7	3,774.3	13.9	13.3	115.44	19.3	269.5	245.2	218.2	27.07	9.058		
3,900.0	3,882.7	3,876.1	3,872.7	14.3	13.6	114.35	23.9	282.5	252.5	224.7	27.81	9.078		
4,000.0	3,982.5	3,975.6	3,971.3	14.7	14.0	112.78	28.6	295.6	258.9	230.3	28.55	9.066		
4,100.0	4,082.4	4,075.0	4,069.7	15.0	14.4	110.75	33.3	308.6	264.5	235.2	29.28	9.033		
4,200.5	4,182.8	4,174.6	4,168.3	15.4	14.7	139.40	37.9	321.6	269.7	239.7	30.00	8.989		
4,300.0	4,282.4	4,273.2	4,265.9	15.7	15.1	136.73	42.6	334.5	275.0	244.3	30.71	8.955		
4,400.0	4,382.4	4,372.2	4,364.0	16.1	15.5	134.15	47.2	347.5	280.9	249.4	31.41	8.941		
4,500.0	4,482.4	4,471.2	4,462.1	16.4	15.9	131.67	51.9	360.5	287.3	255.2	32.12	8.945		
4,600.0	4,582.4	4,570.2	4,560.1	16.7	16.2	129.31	56.5	373.5	294.3	261.4	32.82	8.966		
4,700.0	4,682.4	4,669.3	4,658.2	17.1	16.6	127.06	61.2	386.4	301.7	268.2	33.52	9.000		
4,800.0	4,782.4	4,768.3	4,756.3	17.4	17.0	124.92	65.8	399.4	309.6	275.4	34.22	9.047		
4,900.0	4,882.4	4,867.3	4,854.3	17.8	17.4	122.88	70.5	412.4	317.9	283.0	34.92	9.103		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #218H - Wellbore #1 - 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		
5,000.0	4,982.4	4,966.3	4,952.4	18.1	17.8	120.96	75.1	425.4	326.6	291.0	35.62	9.168		
5,100.0	5,082.4	5,065.4	5,050.5	18.5	18.2	119.13	79.8	438.3	335.7	299.3	36.32	9.241		
5,200.0	5,182.4	5,164.4	5,148.5	18.8	18.5	117.40	84.4	451.3	345.0	308.0	37.02	9.320		
5,300.0	5,282.4	5,263.4	5,246.6	19.2	18.9	115.76	89.1	464.3	354.7	317.0	37.72	9.403		
5,400.0	5,382.4	5,362.4	5,344.6	19.5	19.3	114.20	93.7	477.3	364.6	326.2	38.42	9.491		
5,500.0	5,482.4	5,461.5	5,442.7	19.9	19.7	112.74	98.4	490.2	374.8	335.7	39.12	9.582		
5,600.0	5,582.4	5,560.5	5,540.8	20.2	20.1	111.34	103.0	503.2	385.3	345.4	39.81	9.676		
5,700.0	5,682.4	5,659.5	5,638.8	20.6	20.5	110.03	107.7	516.2	395.9	355.4	40.51	9.772		
5,800.0	5,782.4	5,758.6	5,736.9	20.9	20.9	108.78	112.3	529.1	406.7	365.5	41.21	9.869		
5,900.0	5,882.4	5,857.6	5,835.0	21.3	21.3	107.59	117.0	542.1	417.8	375.8	41.91	9.967		
6,000.0	5,982.4	5,956.6	5,933.0	21.6	21.7	106.47	121.6	555.1	429.0	386.3	42.61	10.066		
6,100.0	6,082.4	6,055.6	6,031.1	22.0	22.1	105.40	126.3	568.1	440.3	397.0	43.31	10.165		
6,200.0	6,182.4	6,154.7	6,129.1	22.3	22.5	104.39	130.9	581.0	451.8	407.8	44.02	10.264		
6,300.0	6,282.4	6,253.7	6,227.2	22.7	22.9	103.43	135.6	594.0	463.4	418.7	44.72	10.363		
6,400.0	6,382.4	6,352.7	6,325.3	23.0	23.3	102.51	140.2	607.0	475.2	429.7	45.42	10.461		
6,500.0	6,482.4	6,451.7	6,423.3	23.4	23.7	101.64	144.9	620.0	487.0	440.9	46.12	10.559		
6,600.0	6,582.4	6,550.8	6,521.4	23.7	24.1	100.81	149.5	632.9	499.0	452.2	46.83	10.656		
6,700.0	6,682.4	6,649.8	6,619.5	24.1	24.5	100.02	154.2	645.9	511.1	463.5	47.53	10.752		
6,800.0	6,782.4	6,748.8	6,717.5	24.4	24.9	99.27	158.8	658.9	523.2	475.0	48.24	10.847		
6,900.0	6,882.4	6,847.8	6,815.6	24.8	25.3	98.55	163.5	671.9	535.5	486.5	48.94	10.941		
7,000.0	6,982.4	6,946.9	6,913.7	25.1	25.7	97.86	168.1	684.8	547.8	498.1	49.65	11.033		
7,100.0	7,082.4	7,045.9	7,011.7	25.5	26.1	97.20	172.8	697.8	560.2	509.8	50.35	11.125		
7,200.0	7,182.4	7,144.9	7,109.8	25.8	26.5	96.57	177.4	710.8	572.6	521.6	51.06	11.215		
7,300.0	7,282.4	7,244.0	7,207.8	26.2	26.9	95.97	182.1	723.8	585.2	533.4	51.77	11.304		
7,400.0	7,382.4	7,343.0	7,305.9	26.5	27.3	95.39	186.7	736.7	597.8	545.3	52.48	11.391		
7,500.0	7,482.4	7,442.0	7,404.0	26.9	27.7	94.84	191.3	749.7	610.4	557.2	53.18	11.477		
7,600.0	7,582.4	7,541.0	7,502.0	27.2	28.1	94.31	196.0	762.7	623.1	569.2	53.89	11.562		
7,700.0	7,682.4	7,640.1	7,600.1	27.6	28.5	93.80	200.6	775.6	635.9	581.3	54.60	11.646		
7,800.0	7,782.4	7,739.1	7,698.2	27.9	28.9	93.31	205.3	788.6	648.7	593.4	55.31	11.728		
7,900.0	7,882.4	7,838.1	7,796.2	28.3	29.3	92.84	209.9	801.6	661.5	605.5	56.02	11.808		
8,000.0	7,982.4	7,937.1	7,894.3	28.7	29.7	92.39	214.6	814.6	674.4	617.7	56.73	11.888		
8,100.0	8,082.4	8,036.2	7,992.3	29.0	30.1	91.95	219.2	827.5	687.4	629.9	57.44	11.966		
8,200.0	8,182.4	8,135.2	8,090.4	29.4	30.5	91.53	223.9	840.5	700.3	642.2	58.16	12.042		
8,300.0	8,282.4	8,234.2	8,188.5	29.7	30.9	91.13	228.5	853.5	713.3	654.5	58.87	12.118		
8,400.0	8,382.4	8,333.2	8,286.5	30.1	31.3	90.74	233.2	866.5	726.4	666.8	59.58	12.192		
8,500.0	8,482.4	8,451.0	8,403.3	30.4	31.8	90.33	238.3	880.6	738.4	677.9	60.46	12.213		
8,513.6	8,496.0	8,467.6	8,419.8	30.5	31.9	90.28	238.9	882.3	739.8	679.2	60.58	12.212		
8,550.0	8,532.3	8,511.8	8,463.8	30.6	32.0	-77.33	240.4	886.6	743.0	682.2	60.89	12.203		
8,600.0	8,582.0	8,572.4	8,524.1	30.7	32.3	-77.66	242.2	891.6	746.1	684.8	61.28	12.175		
8,650.0	8,631.1	8,632.3	8,583.9	30.9	32.5	-78.49	243.7	895.7	747.6	685.9	61.64	12.128		
8,700.0	8,679.1	8,691.1	8,642.6	31.0	32.7	-79.78	244.8	898.9	747.7	685.7	61.97	12.065		
8,750.0	8,725.7	8,748.3	8,699.7	31.2	32.9	-81.49	245.6	901.2	746.7	684.4	62.27	11.991		
8,800.0	8,770.6	8,803.5	8,754.9	31.3	33.1	-83.54	246.2	902.6	745.0	682.5	62.54	11.912		
8,850.0	8,813.4	8,856.2	8,807.6	31.4	33.3	-85.84	246.4	903.3	743.0	680.2	62.79	11.833		
8,900.0	8,853.7	8,901.3	8,852.7	31.5	33.4	-88.07	246.4	903.4	741.2	678.2	63.02	11.762		
8,948.7	8,890.4	8,938.0	8,889.4	31.6	33.6	-90.00	246.4	903.4	740.5	677.3	63.23	11.711		
8,950.0	8,891.4	8,939.0	8,890.4	31.6	33.6	-90.05	246.4	903.4	740.5	677.3	63.24	11.709		
9,000.0	8,926.0	8,973.6	8,925.0	31.6	33.7	-91.89	246.4	903.4	741.4	677.9	63.46	11.683		
9,050.0	8,957.4	9,005.0	8,956.4	31.7	33.8	-93.48	246.4	903.4	744.4	680.7	63.69	11.687		
9,100.0	8,985.2	9,032.8	8,984.2	31.8	33.9	-94.72	246.4	903.4	749.7	685.8	63.93	11.728		
9,150.0	9,009.4	9,057.0	9,008.4	32.0	34.0	-95.52	246.4	903.4	757.8	693.6	64.17	11.809		
9,200.0	9,029.6	9,077.2	9,028.6	32.1	34.0	-95.81	246.4	903.4	768.8	704.4	64.42	11.934		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #218H - Wellbore #1 - 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		
9,250.0	9,045.7	9,106.7	9,044.7	32.3	34.1	-95.52	246.4	903.4	782.9	718.2	64.72	12.096		
9,300.0	9,057.7	9,105.3	9,056.7	32.4	34.1	-94.60	246.4	903.4	800.0	735.0	64.93	12.321		
9,350.0	9,065.4	9,113.0	9,064.4	32.6	34.1	-93.02	246.4	903.4	819.9	754.8	65.17	12.581		
9,400.0	9,068.8	9,116.4	9,067.8	32.8	34.2	-90.74	246.4	903.4	842.5	777.2	65.40	12.884		
9,413.6	9,069.0	9,116.5	9,068.0	32.8	34.2	-90.00	246.4	903.4	849.1	783.7	65.46	12.973		
9,500.0	9,069.0	9,116.5	9,068.0	33.2	34.2	-90.00	246.4	903.4	895.7	829.8	65.82	13.608		
9,600.0	9,069.0	9,116.5	9,068.0	33.7	34.2	-90.00	246.4	903.4	958.9	892.7	66.21	14.483		
9,700.0	9,069.0	9,116.5	9,068.0	34.2	34.2	-90.00	246.4	903.4	1,030.4	963.9	66.55	15.483		
9,800.0	9,069.0	9,116.5	9,068.0	34.8	34.2	-90.00	246.4	903.4	1,108.5	1,041.7	66.84	16.584		
9,900.0	9,069.0	9,116.5	9,068.0	35.5	34.2	-90.00	246.4	903.4	1,191.8	1,124.7	67.08	17.766		
10,005.2	9,069.0	9,116.5	9,068.0	36.2	34.2	-90.00	246.4	903.4	1,283.8	1,216.5	67.28	19.081		
10,100.0	9,069.0	9,116.5	9,068.0	37.0	34.2	-90.00	246.4	903.4	1,369.1	1,301.6	67.43	20.303		
10,200.0	9,069.0	9,116.5	9,068.0	37.8	34.2	-90.00	246.4	903.4	1,460.3	1,392.7	67.57	21.611		
10,300.0	9,069.0	9,116.5	9,068.0	38.6	34.2	-90.00	246.4	903.4	1,552.6	1,484.9	67.69	22.936		
10,400.0	9,069.0	9,116.5	9,068.0	39.6	34.2	-90.00	246.4	903.4	1,645.8	1,578.0	67.80	24.274		
10,500.0	9,069.0	9,116.5	9,068.0	40.5	34.2	-90.00	246.4	903.4	1,739.8	1,671.9	67.90	25.622		
10,600.0	9,069.0	9,116.5	9,068.0	41.5	34.2	-90.00	246.4	903.4	1,834.4	1,766.4	67.99	26.980		
10,700.0	9,069.0	9,116.5	9,068.0	42.6	34.2	-90.00	246.4	903.4	1,929.6	1,861.5	68.07	28.346		
10,800.0	9,069.0	9,116.5	9,068.0	43.7	34.2	-90.00	246.4	903.4	2,025.2	1,957.0	68.15	29.717		
10,900.0	9,069.0	9,116.6	9,068.0	44.8	34.2	-90.00	246.4	903.4	2,121.2	2,053.0	68.22	31.094		
11,000.0	9,069.0	9,116.6	9,068.0	45.9	34.2	-90.00	246.4	903.4	2,217.6	2,149.3	68.28	32.476		
11,100.0	9,069.0	9,116.6	9,068.0	47.1	34.2	-90.00	246.4	903.4	2,314.3	2,245.9	68.35	33.861		
11,200.0	9,069.0	9,116.6	9,068.0	48.3	34.2	-90.00	246.4	903.4	2,411.2	2,342.8	68.41	35.249		
11,300.0	9,069.0	9,116.6	9,068.0	49.6	34.2	-90.00	246.4	903.4	2,508.4	2,440.0	68.46	36.639		
11,400.0	9,069.0	9,116.6	9,068.0	50.8	34.2	-90.00	246.4	903.4	2,605.8	2,537.3	68.52	38.032		
11,500.0	9,069.0	14,053.5	11,606.0	52.1	58.5	-165.44	-2,393.5	1,005.7	2,622.3	2,568.9	53.36	49.141		
11,600.0	9,069.0	14,153.5	11,606.0	53.4	59.7	-165.44	-2,493.5	1,006.5	2,622.3	2,567.5	54.77	47.882		
11,700.0	9,069.0	14,253.5	11,606.0	54.7	60.9	-165.43	-2,593.5	1,007.4	2,622.3	2,566.1	56.19	46.671		
11,800.0	9,069.0	14,353.5	11,606.0	56.1	62.1	-165.43	-2,693.5	1,008.2	2,622.3	2,564.7	57.62	45.507		
11,900.0	9,069.0	14,453.5	11,606.0	57.4	63.3	-165.43	-2,793.5	1,009.0	2,622.3	2,563.2	59.08	44.388		
12,000.0	9,069.0	14,553.5	11,606.0	58.8	64.5	-165.43	-2,893.5	1,009.8	2,622.3	2,561.7	60.54	43.313		
12,100.0	9,069.0	14,653.5	11,606.0	60.2	65.8	-165.43	-2,993.5	1,010.7	2,622.3	2,560.3	62.02	42.279		
12,200.0	9,069.0	14,753.5	11,606.0	61.6	67.0	-165.43	-3,093.5	1,011.5	2,622.3	2,558.8	63.52	41.286		
12,300.0	9,069.0	14,853.5	11,606.0	63.0	68.3	-165.43	-3,193.5	1,012.3	2,622.3	2,557.3	65.02	40.330		
12,400.0	9,069.0	14,953.5	11,606.0	64.4	69.6	-165.43	-3,293.5	1,013.1	2,622.3	2,555.7	66.54	39.412		
12,500.0	9,069.0	15,053.5	11,606.0	65.8	70.9	-165.43	-3,393.5	1,013.9	2,622.3	2,554.2	68.06	38.529		
12,600.0	9,069.0	15,153.5	11,606.0	67.3	72.3	-165.43	-3,493.5	1,014.8	2,622.3	2,552.7	69.60	37.679		
12,700.0	9,069.0	15,253.5	11,606.0	68.7	73.6	-165.43	-3,593.5	1,015.6	2,622.3	2,551.1	71.14	36.862		
12,800.0	9,069.0	15,353.5	11,606.0	70.2	75.0	-165.43	-3,693.5	1,016.4	2,622.3	2,549.6	72.69	36.075		
12,900.0	9,069.0	15,453.5	11,606.0	71.6	76.4	-165.43	-3,793.5	1,017.2	2,622.3	2,548.0	74.25	35.317		
13,000.0	9,069.0	15,553.5	11,606.0	73.1	77.7	-165.43	-3,893.5	1,018.1	2,622.3	2,546.5	75.82	34.587		
13,100.0	9,069.0	15,653.5	11,606.0	74.6	79.1	-165.43	-3,993.5	1,018.9	2,622.3	2,544.9	77.39	33.884		
13,200.0	9,069.0	15,753.5	11,606.0	76.1	80.5	-165.43	-4,093.5	1,019.7	2,622.3	2,543.3	78.97	33.205		
13,300.0	9,069.0	15,853.5	11,606.0	77.6	81.9	-165.43	-4,193.5	1,020.5	2,622.3	2,541.7	80.56	32.552		
13,400.0	9,069.0	15,953.5	11,606.0	79.1	83.4	-165.43	-4,293.5	1,021.3	2,622.3	2,540.1	82.15	31.921		
13,500.0	9,069.0	16,053.5	11,606.0	80.6	84.8	-165.43	-4,393.5	1,022.2	2,622.3	2,538.5	83.75	31.312		
13,600.0	9,069.0	16,153.5	11,606.0	82.1	86.2	-165.43	-4,493.5	1,023.0	2,622.3	2,536.9	85.35	30.724		
13,700.0	9,069.0	16,253.5	11,606.0	83.6	87.7	-165.43	-4,593.5	1,023.8	2,622.3	2,535.3	86.96	30.156		
13,800.0	9,069.0	16,353.5	11,606.0	85.2	89.1	-165.43	-4,693.5	1,024.6	2,622.3	2,533.7	88.57	29.607		
13,900.0	9,069.0	16,453.5	11,606.0	86.7	90.6	-165.43	-4,793.5	1,025.5	2,622.3	2,532.1	90.19	29.076		
14,000.0	9,069.0	16,553.5	11,606.0	88.2	92.0	-165.43	-4,893.4	1,026.3	2,622.3	2,530.5	91.81	28.563		
14,100.0	9,069.0	16,653.5	11,606.0	89.8	93.5	-165.43	-4,993.4	1,027.1	2,622.3	2,528.9	93.43	28.066		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #218H - Wellbore #1 - BLM Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,200.0	9,069.0	16,753.5	11,606.0	91.3	95.0	-165.43	-5,093.4	1,027.9	2,622.3	2,527.2	95.06	27.585		
14,300.0	9,069.0	16,853.5	11,606.0	92.8	96.5	-165.43	-5,193.4	1,028.7	2,622.3	2,525.6	96.69	27.120		
14,400.0	9,069.0	16,953.5	11,606.0	94.4	97.9	-165.43	-5,293.4	1,029.6	2,622.3	2,524.0	98.33	26.669		
14,500.0	9,069.0	17,053.5	11,606.0	95.9	99.4	-165.43	-5,393.4	1,030.4	2,622.3	2,522.3	99.97	26.232		
14,600.0	9,069.0	17,153.5	11,606.0	97.5	100.9	-165.43	-5,493.4	1,031.2	2,622.3	2,520.7	101.61	25.808		
14,700.0	9,069.0	17,253.5	11,606.0	99.1	102.4	-165.43	-5,593.4	1,032.0	2,622.3	2,519.1	103.25	25.397		
14,800.0	9,069.0	17,353.5	11,606.0	100.6	103.9	-165.43	-5,693.4	1,032.9	2,622.3	2,517.4	104.90	24.998		
14,900.0	9,069.0	17,453.5	11,606.0	102.2	105.5	-165.43	-5,793.4	1,033.7	2,622.3	2,515.8	106.55	24.611		
15,000.0	9,069.0	17,553.5	11,606.0	103.8	107.0	-165.43	-5,893.4	1,034.5	2,622.3	2,514.1	108.20	24.235		
15,100.0	9,069.0	17,653.5	11,606.0	105.3	108.5	-165.43	-5,993.4	1,035.3	2,622.3	2,512.5	109.86	23.870		
15,200.0	9,069.0	17,753.5	11,606.0	106.9	110.0	-165.43	-6,093.4	1,036.1	2,622.3	2,510.8	111.52	23.515		
15,300.0	9,069.0	17,853.5	11,606.0	108.5	111.5	-165.43	-6,193.4	1,037.0	2,622.3	2,509.1	113.17	23.171		
15,400.0	9,069.0	17,953.5	11,606.0	110.1	113.1	-165.43	-6,293.4	1,037.8	2,622.3	2,507.5	114.84	22.835		
15,500.0	9,069.0	18,053.5	11,606.0	111.6	114.6	-165.43	-6,393.4	1,038.6	2,622.3	2,505.8	116.50	22.509		
15,600.0	9,069.0	18,153.5	11,606.0	113.2	116.1	-165.43	-6,493.4	1,039.4	2,622.3	2,504.2	118.17	22.192		
15,700.0	9,069.0	18,253.5	11,606.0	114.8	117.7	-165.43	-6,593.4	1,040.3	2,622.3	2,502.5	119.83	21.883		
15,800.0	9,069.0	18,353.5	11,606.0	116.4	119.2	-165.43	-6,693.4	1,041.1	2,622.3	2,500.8	121.50	21.583		
15,900.0	9,069.0	18,453.5	11,606.0	118.0	120.8	-165.43	-6,793.4	1,041.9	2,622.3	2,499.2	123.17	21.290		
16,000.0	9,069.0	18,553.5	11,606.0	119.6	122.3	-165.43	-6,893.4	1,042.7	2,622.3	2,497.5	124.84	21.005		
16,100.0	9,069.0	18,653.5	11,606.0	121.2	123.9	-165.43	-6,993.4	1,043.5	2,622.3	2,495.8	126.52	20.727		
16,200.0	9,069.0	18,753.5	11,606.0	122.7	125.4	-165.43	-7,093.4	1,044.4	2,622.3	2,494.1	128.19	20.456		
16,300.0	9,069.0	18,853.5	11,606.0	124.3	127.0	-165.43	-7,193.4	1,045.2	2,622.3	2,492.5	129.87	20.192		
16,400.0	9,069.0	18,953.5	11,606.0	125.9	128.5	-165.43	-7,293.4	1,046.0	2,622.3	2,490.8	131.55	19.934		
16,500.0	9,069.0	19,053.5	11,606.0	127.5	130.1	-165.43	-7,393.4	1,046.8	2,622.3	2,489.1	133.23	19.683		
16,600.0	9,069.0	19,153.5	11,606.0	129.1	131.7	-165.43	-7,493.4	1,047.7	2,622.3	2,487.4	134.91	19.438		
16,700.0	9,069.0	19,253.5	11,606.0	130.7	133.2	-165.43	-7,593.4	1,048.5	2,622.3	2,485.7	136.59	19.198		
16,800.0	9,069.0	19,353.5	11,606.0	132.3	134.8	-165.43	-7,693.4	1,049.3	2,622.3	2,484.1	138.28	18.965		
16,900.0	9,069.0	19,453.5	11,606.0	133.9	136.4	-165.43	-7,793.4	1,050.1	2,622.3	2,482.4	139.96	18.736		
17,000.0	9,069.0	19,553.5	11,606.0	135.5	137.9	-165.43	-7,893.3	1,051.0	2,622.3	2,480.7	141.65	18.513		
17,100.0	9,069.0	19,653.5	11,606.0	137.1	139.5	-165.43	-7,993.3	1,051.8	2,622.3	2,479.0	143.33	18.295		
17,200.0	9,069.0	19,753.5	11,606.0	138.8	141.1	-165.43	-8,093.3	1,052.6	2,622.3	2,477.3	145.02	18.083		
17,300.0	9,069.0	19,853.5	11,606.0	140.4	142.7	-165.43	-8,193.3	1,053.4	2,622.3	2,475.6	146.71	17.874		
17,400.0	9,069.0	19,953.5	11,606.0	142.0	144.2	-165.43	-8,293.3	1,054.2	2,622.3	2,473.9	148.40	17.671		
17,500.0	9,069.0	20,053.5	11,606.0	143.6	145.8	-165.43	-8,393.3	1,055.1	2,622.3	2,472.3	150.09	17.472		
17,600.0	9,069.0	20,153.5	11,606.0	145.2	147.4	-165.43	-8,493.3	1,055.9	2,622.4	2,470.6	151.78	17.277		
17,700.0	9,069.0	20,253.5	11,606.0	146.8	149.0	-165.43	-8,593.3	1,056.7	2,622.4	2,468.9	153.47	17.087		
17,800.0	9,069.0	20,353.5	11,606.0	148.4	150.6	-165.43	-8,693.3	1,057.5	2,622.4	2,467.2	155.17	16.900		
17,900.0	9,069.0	20,453.5	11,606.0	150.0	152.2	-165.43	-8,793.3	1,058.4	2,622.4	2,465.5	156.86	16.718		
18,000.0	9,069.0	20,553.5	11,606.0	151.6	153.8	-165.43	-8,893.3	1,059.2	2,622.4	2,463.8	158.56	16.539		
18,100.0	9,069.0	20,653.5	11,606.0	153.3	155.3	-165.43	-8,993.3	1,060.0	2,622.4	2,462.1	160.25	16.364		
18,200.0	9,069.0	20,753.5	11,606.0	154.9	156.9	-165.43	-9,093.3	1,060.8	2,622.4	2,460.4	161.95	16.192		
18,300.0	9,069.0	20,853.5	11,606.0	156.5	158.5	-165.43	-9,193.3	1,061.6	2,622.4	2,458.7	163.65	16.024		
18,400.0	9,069.0	20,953.5	11,606.0	158.1	160.1	-165.43	-9,293.3	1,062.5	2,622.4	2,457.0	165.35	15.860		
18,500.0	9,069.0	21,053.5	11,606.0	159.7	161.7	-165.43	-9,393.3	1,063.3	2,622.4	2,455.3	167.04	15.699		
18,600.0	9,069.0	21,153.5	11,606.0	161.3	163.3	-165.43	-9,493.3	1,064.1	2,622.4	2,453.6	168.74	15.541		
18,700.0	9,069.0	21,253.5	11,606.0	163.0	164.9	-165.43	-9,593.3	1,064.9	2,622.4	2,451.9	170.44	15.386		
18,800.0	9,069.0	21,353.5	11,606.0	164.6	166.5	-165.43	-9,693.3	1,065.8	2,622.4	2,450.2	172.14	15.234		
18,900.0	9,069.0	21,453.5	11,606.0	166.2	168.1	-165.43	-9,793.3	1,066.6	2,622.4	2,448.5	173.85	15.084		
19,000.0	9,069.0	21,553.5	11,606.0	167.8	169.7	-165.43	-9,893.3	1,067.4	2,622.4	2,446.8	175.55	14.938		
19,100.0	9,069.0	21,653.5	11,606.0	169.4	171.3	-165.43	-9,993.3	1,068.2	2,622.4	2,445.1	177.25	14.795		
19,200.0	9,069.0	21,753.5	11,606.0	171.1	172.9	-165.43	-10,093.3	1,069.0	2,622.4	2,443.4	178.95	14.654		
19,300.0	9,069.0	21,853.5	11,606.0	172.7	174.5	-165.43	-10,193.3	1,069.9	2,622.4	2,441.7	180.66	14.516		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #218H - Wellbore #1 - 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		
19,400.0	9,069.0	21,953.5	11,606.0	174.3	176.1	-165.43	-10,293.3	1,070.7	2,622.4	2,440.0	182.36	14.380		
19,500.0	9,069.0	22,053.5	11,606.0	175.9	177.7	-165.43	-10,393.3	1,071.5	2,622.4	2,438.3	184.06	14.247		
19,600.0	9,069.0	22,153.5	11,606.0	177.6	179.3	-165.43	-10,493.3	1,072.3	2,622.4	2,436.6	185.77	14.116		
19,700.0	9,069.0	22,253.5	11,606.0	179.2	180.9	-165.43	-10,593.3	1,073.2	2,622.4	2,434.9	187.48	13.988		
19,800.0	9,069.0	22,353.5	11,606.0	180.8	182.5	-165.43	-10,693.3	1,074.0	2,622.4	2,433.2	189.18	13.862		
19,900.0	9,069.0	22,453.5	11,606.0	182.4	184.1	-165.43	-10,793.2	1,074.8	2,622.4	2,431.5	190.89	13.738		
20,000.0	9,069.0	22,553.5	11,606.0	184.1	185.7	-165.43	-10,893.2	1,075.6	2,622.4	2,429.8	192.59	13.616		
20,100.0	9,069.0	22,653.5	11,606.0	185.7	187.4	-165.43	-10,993.2	1,076.4	2,622.4	2,428.1	194.30	13.496		
20,200.0	9,069.0	22,753.5	11,606.0	187.3	189.0	-165.43	-11,093.2	1,077.3	2,622.4	2,426.4	196.01	13.379		
20,300.0	9,069.0	22,853.5	11,606.0	188.9	190.6	-165.43	-11,193.2	1,078.1	2,622.4	2,424.7	197.72	13.263		
20,400.0	9,069.0	22,953.5	11,606.0	190.6	192.2	-165.43	-11,293.2	1,078.9	2,622.4	2,423.0	199.43	13.150		
20,500.0	9,069.0	23,053.5	11,606.0	192.2	193.8	-165.43	-11,393.2	1,079.7	2,622.4	2,421.3	201.14	13.038		
20,600.0	9,069.0	23,153.5	11,606.0	193.8	195.4	-165.43	-11,493.2	1,080.6	2,622.4	2,419.5	202.84	12.928		
20,700.0	9,069.0	23,253.5	11,606.0	195.5	197.0	-165.42	-11,593.2	1,081.4	2,622.4	2,417.8	204.55	12.820		
20,800.0	9,069.0	23,353.5	11,606.0	197.1	198.6	-165.42	-11,693.2	1,082.2	2,622.4	2,416.1	206.26	12.714		
20,900.0	9,069.0	23,453.5	11,606.0	198.7	200.3	-165.42	-11,793.2	1,083.0	2,622.4	2,414.4	207.98	12.609		
21,000.0	9,069.0	23,553.5	11,606.0	200.3	201.9	-165.42	-11,893.2	1,083.8	2,622.4	2,412.7	209.69	12.506		
21,100.0	9,069.0	23,653.5	11,606.0	202.0	203.5	-165.42	-11,993.2	1,084.7	2,622.4	2,411.0	211.40	12.405		
21,200.0	9,069.0	23,753.5	11,606.0	203.6	205.1	-165.42	-12,093.2	1,085.5	2,622.4	2,409.3	213.11	12.305		
21,300.0	9,069.0	23,853.5	11,606.0	205.2	206.7	-165.42	-12,193.2	1,086.3	2,622.4	2,407.6	214.82	12.207		
21,400.0	9,069.0	23,953.5	11,606.0	206.9	208.3	-165.42	-12,293.2	1,087.1	2,622.4	2,405.9	216.53	12.111		
21,500.0	9,069.0	23,958.1	11,606.0	208.5	208.4	-165.42	-12,297.9	1,087.2	2,624.1	2,406.8	217.37	12.072		
21,544.1	9,069.0	23,958.1	11,606.0	209.2	208.4	-165.42	-12,297.9	1,087.2	2,626.1	2,408.5	217.64	12.066		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #224H - Wellbore #1 - 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		
0.0	0.0	1.0	1.0	0.0	0.0	74.37	30.7	109.8	114.0					
100.0	100.0	101.0	101.0	0.1	0.1	74.37	30.7	109.8	114.0	113.8	0.26	438.819		
200.0	200.0	201.0	201.0	0.5	0.5	74.37	30.7	109.8	114.0	113.1	0.98	116.750		
300.0	300.0	301.0	301.0	0.8	0.8	74.37	30.7	109.8	114.0	112.4	1.69	67.332		
400.0	400.0	401.0	401.0	1.2	1.2	74.37	30.7	109.8	114.0	111.6	2.41	47.308		
500.0	500.0	501.0	501.0	1.6	1.6	74.37	30.7	109.8	114.0	110.9	3.13	36.464		
600.0	600.0	601.0	601.0	1.9	1.9	74.37	30.7	109.8	114.0	110.2	3.84	29.664		
700.0	700.0	701.0	701.0	2.3	2.3	74.37	30.7	109.8	114.0	109.5	4.56	25.001		
800.0	800.0	801.0	801.0	2.6	2.6	74.37	30.7	109.8	114.0	108.8	5.28	21.606		
900.0	900.0	901.0	901.0	3.0	3.0	74.37	30.7	109.8	114.0	108.1	6.00	19.022		
1,000.0	1,000.0	1,001.0	1,001.0	3.4	3.4	74.37	30.7	109.8	114.0	107.3	6.71	16.990		
1,100.0	1,100.0	1,101.0	1,101.0	3.7	3.7	74.37	30.7	109.8	114.0	106.6	7.43	15.351		
1,200.0	1,200.0	1,201.0	1,201.0	4.1	4.1	74.37	30.7	109.8	114.0	105.9	8.15	14.000		
1,300.0	1,300.0	1,301.0	1,301.0	4.4	4.4	74.37	30.7	109.8	114.0	105.2	8.86	12.867		
1,400.0	1,400.0	1,401.0	1,401.0	4.8	4.8	74.37	30.7	109.8	114.0	104.5	9.58	11.904		
1,500.0	1,500.0	1,501.0	1,501.0	5.1	5.2	74.37	30.7	109.8	114.0	103.7	10.30	11.076		
1,600.0	1,600.0	1,601.0	1,601.0	5.5	5.5	43.56	30.7	109.8	113.4	102.4	11.01	10.298		
1,700.0	1,700.0	1,701.0	1,701.0	5.9	5.9	44.50	30.7	109.8	111.5	99.8	11.73	9.511		
1,800.0	1,799.9	1,800.9	1,800.9	6.2	6.2	46.13	30.7	109.8	108.5	96.0	12.44	8.718		
1,900.0	1,899.7	1,900.7	1,900.7	6.6	6.6	48.58	30.7	109.8	104.3	91.2	13.15	7.930		
2,000.0	1,999.4	2,000.4	2,000.4	6.9	6.9	52.01	30.7	109.8	99.3	85.4	13.87	7.159		
2,100.0	2,098.9	2,100.1	2,099.9	7.3	7.3	56.67	30.7	109.8	93.7	79.1	14.59	6.423		
2,200.0	2,198.3	2,200.7	2,199.3	7.7	7.7	62.86	30.7	109.8	88.0	72.6	15.31	5.744		
2,300.0	2,297.4	2,301.6	2,298.4	8.0	8.0	70.91	30.7	109.8	82.8	66.7	16.04	5.159		
2,400.0	2,396.4	2,402.6	2,397.4	8.4	8.4	80.37	30.7	109.8	79.3	62.5	16.79	4.723		
2,496.2	2,491.7	2,507.3	2,492.7	8.8	8.8	90.00	30.7	109.8	78.1	60.6	17.53	4.458		
2,500.0	2,495.5	2,503.5	2,496.5	8.8	8.7	90.38	30.7	109.8	78.1	60.6	17.53	4.457		
2,600.0	2,594.5	2,604.5	2,595.5	9.2	9.1	100.37	30.7	109.8	79.5	61.2	18.28	4.348		
2,700.0	2,693.5	2,705.5	2,694.5	9.6	9.5	109.77	30.7	109.8	83.1	64.1	19.02	4.371		
2,800.0	2,792.5	2,806.5	2,793.5	9.9	9.8	118.18	30.7	109.8	88.9	69.1	19.75	4.498		
2,900.0	2,891.6	2,907.4	2,892.6	10.3	10.2	125.46	30.7	109.8	96.3	75.8	20.48	4.700		
3,000.0	2,990.6	3,008.4	2,991.6	10.7	10.6	131.62	30.7	109.8	105.0	83.8	21.20	4.952		
3,100.0	3,089.6	3,109.4	3,090.6	11.1	10.9	136.80	30.7	109.8	114.8	92.8	21.92	5.234		
3,200.0	3,188.6	3,189.6	3,189.6	11.5	11.2	141.14	30.7	109.8	125.3	102.7	22.57	5.552		
3,300.0	3,287.7	3,288.7	3,288.7	11.9	11.6	144.80	30.7	109.8	136.5	113.2	23.28	5.862		
3,400.0	3,386.7	3,387.7	3,387.7	12.3	11.9	147.90	30.7	109.8	148.1	124.1	23.99	6.172		
3,500.0	3,485.7	3,486.7	3,486.7	12.7	12.3	150.54	30.7	109.8	160.1	135.4	24.71	6.479		
3,600.0	3,584.8	3,585.8	3,585.8	13.1	12.6	152.81	30.7	109.8	172.4	146.9	25.42	6.781		
3,667.1	3,651.2	3,652.2	3,652.2	13.4	12.9	154.16	30.7	109.8	180.7	154.8	25.90	6.979		
3,700.0	3,683.8	3,684.8	3,684.8	13.5	13.0	154.79	30.7	109.8	184.7	158.6	26.13	7.069		
3,800.0	3,783.1	3,784.1	3,784.1	13.9	13.3	156.32	30.7	109.8	195.5	168.6	26.85	7.281		
3,900.0	3,882.7	3,883.7	3,883.7	14.3	13.7	157.40	30.7	109.8	203.9	176.3	27.56	7.398		
4,000.0	3,982.5	3,983.5	3,983.5	14.7	14.0	158.12	30.7	109.8	210.0	181.7	28.28	7.425		
4,100.0	4,082.4	4,086.4	4,086.4	15.0	14.4	158.48	31.3	110.2	213.0	184.0	29.01	7.343		
4,200.5	4,182.8	4,190.5	4,190.4	15.4	14.8	-170.51	33.5	111.4	212.0	182.2	29.74	7.128		
4,300.0	4,282.4	4,293.4	4,293.3	15.7	15.2	-170.93	37.2	113.6	208.1	177.6	30.46	6.831		
4,400.0	4,382.4	4,396.7	4,396.4	16.1	15.5	-171.57	42.6	116.7	202.5	171.3	31.17	6.496		
4,500.0	4,482.4	4,499.7	4,499.1	16.4	15.9	-172.45	49.5	120.8	195.2	163.4	31.87	6.125		
4,600.0	4,582.4	4,602.4	4,601.3	16.7	16.3	-173.63	58.0	125.8	186.4	153.8	32.57	5.723		
4,700.0	4,682.4	4,704.7	4,702.9	17.1	16.6	-175.17	68.1	131.6	176.0	142.8	33.26	5.293		
4,800.0	4,782.4	4,806.5	4,803.9	17.4	17.0	-177.19	79.7	138.4	164.3	130.3	33.95	4.838		
4,900.0	4,882.4	4,905.4	4,901.8	17.8	17.3	-179.60	91.6	145.3	152.0	117.3	34.68	4.383		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #224H - Wellbore #1 - 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		
5,000.0	4,982.4	5,004.4	4,999.8	18.1	17.7	177.57	103.5	152.3	140.1	104.7	35.42	3.955		
5,100.0	5,082.4	5,103.4	5,097.9	18.5	18.1	174.23	115.4	159.2	128.6	92.4	36.16	3.555		
5,200.0	5,182.4	5,202.5	5,195.9	18.8	18.4	170.25	127.3	166.2	117.5	80.6	36.92	3.184		
5,300.0	5,282.4	5,301.5	5,294.0	19.2	18.8	165.48	139.2	173.1	107.2	69.5	37.69	2.845		
5,400.0	5,382.4	5,400.5	5,392.1	19.5	19.2	159.76	151.1	180.1	97.8	59.3	38.47	2.542		
5,500.0	5,482.4	5,500.5	5,490.1	19.9	19.6	152.92	163.0	187.0	89.5	50.3	39.26	2.280		
5,600.0	5,582.4	5,598.6	5,588.2	20.2	19.9	144.85	174.9	193.9	82.8	42.7	40.05	2.067		
5,700.0	5,682.4	5,702.4	5,686.3	20.6	20.3	135.59	186.8	200.9	78.0	37.1	40.85	1.909		
5,800.0	5,782.4	5,803.4	5,784.3	20.9	20.7	125.45	198.7	207.8	75.5	33.9	41.61	1.814		
5,849.5	5,831.8	5,845.6	5,832.8	21.1	20.9	120.26	204.6	211.3	75.1	33.2	41.94	1.792 CC		
5,900.0	5,882.4	5,895.7	5,882.4	21.3	21.1	114.97	210.6	214.8	75.5	33.2	42.29	1.785		
6,000.0	5,982.4	5,995.2	5,981.2	21.6	21.4	105.73	221.4	221.1	77.7	34.7	42.97	1.808		
6,100.0	6,082.4	6,095.4	6,080.8	22.0	21.8	98.86	230.0	226.1	80.8	37.1	43.64	1.850		
6,200.0	6,182.4	6,196.0	6,181.1	22.3	22.2	94.14	236.4	229.8	83.7	39.4	44.32	1.889		
6,300.0	6,282.4	6,296.9	6,282.0	22.7	22.5	91.28	240.5	232.2	85.9	40.9	45.02	1.909		
6,400.0	6,382.4	6,398.0	6,383.0	23.0	22.9	90.07	242.3	233.3	86.9	41.2	45.71	1.902		
6,500.0	6,482.4	6,501.7	6,483.4	23.4	23.3	90.01	242.4	233.4	87.0	40.6	46.43	1.874		
6,600.0	6,582.4	6,601.7	6,583.4	23.7	23.6	90.01	242.4	233.4	87.0	39.9	47.13	1.846		
6,700.0	6,682.4	6,701.7	6,683.4	24.1	24.0	90.01	242.4	233.4	87.0	39.2	47.84	1.818		
6,800.0	6,782.4	6,801.7	6,783.4	24.4	24.3	90.01	242.4	233.4	87.0	38.4	48.55	1.792		
6,900.0	6,882.4	6,901.7	6,883.4	24.8	24.7	90.01	242.4	233.4	87.0	37.7	49.26	1.766		
7,000.0	6,982.4	7,001.7	6,983.4	25.1	25.0	90.01	242.4	233.4	87.0	37.0	49.96	1.741		
7,100.0	7,082.4	7,101.7	7,083.4	25.5	25.4	90.01	242.4	233.4	87.0	36.3	50.67	1.717		
7,200.0	7,182.4	7,201.7	7,183.4	25.8	25.8	90.01	242.4	233.4	87.0	35.6	51.38	1.693		
7,300.0	7,282.4	7,301.7	7,283.4	26.2	26.1	90.01	242.4	233.4	87.0	34.9	52.09	1.670		
7,400.0	7,382.4	7,401.7	7,383.4	26.5	26.5	90.01	242.4	233.4	87.0	34.2	52.80	1.648		
7,500.0	7,482.4	7,501.7	7,483.4	26.9	26.8	90.01	242.4	233.4	87.0	33.5	53.51	1.626		
7,600.0	7,582.4	7,601.7	7,583.4	27.2	27.2	90.01	242.4	233.4	87.0	32.8	54.21	1.605		
7,700.0	7,682.4	7,701.7	7,683.4	27.6	27.5	90.01	242.4	233.4	87.0	32.1	54.92	1.584		
7,800.0	7,782.4	7,801.7	7,783.4	27.9	27.9	90.01	242.4	233.4	87.0	31.4	55.63	1.564		
7,900.0	7,882.4	7,901.7	7,883.4	28.3	28.2	90.01	242.4	233.4	87.0	30.7	56.34	1.544		
8,000.0	7,982.4	8,001.7	7,983.4	28.7	28.6	90.01	242.4	233.4	87.0	29.9	57.05	1.525		
8,100.0	8,082.4	8,101.7	8,083.4	29.0	28.9	90.01	242.4	233.4	87.0	29.2	57.76	1.506		
8,200.0	8,182.4	8,201.7	8,183.4	29.4	29.3	90.01	242.4	233.4	87.0	28.5	58.47	1.488 Level 3		
8,300.0	8,282.4	8,301.7	8,283.4	29.7	29.7	90.01	242.4	233.4	87.0	27.8	59.18	1.470 Level 3		
8,400.0	8,382.4	8,401.7	8,383.4	30.1	30.0	90.01	242.4	233.4	87.0	27.1	59.89	1.452 Level 3		
8,500.0	8,482.4	8,501.7	8,483.4	30.4	30.4	90.01	242.4	233.4	87.0	26.4	60.60	1.435 Level 3		
8,513.6	8,496.0	8,512.0	8,497.0	30.5	30.4	90.01	242.4	233.4	87.0	26.3	60.69	1.433 Level 3		
8,550.0	8,532.3	8,548.3	8,533.3	30.6	30.5	-78.45	242.4	233.4	86.8	25.8	60.93	1.424 Level 3		
8,600.0	8,582.0	8,602.0	8,583.0	30.7	30.7	-82.02	242.4	233.4	85.8	24.6	61.25	1.402 Level 3		
8,650.0	8,631.1	8,647.1	8,632.1	30.9	30.9	-88.43	242.4	233.4	85.0	23.5	61.50	1.383 Level 3		
8,659.8	8,640.6	8,656.6	8,641.6	30.9	30.9	-90.00	242.4	233.4	85.0	23.4	61.55	1.381 Level 3, ES, SF		
8,700.0	8,679.1	8,704.9	8,680.1	31.0	31.1	-97.30	242.4	233.4	85.8	24.0	61.77	1.388 Level 3		
8,750.0	8,725.7	8,741.7	8,726.7	31.2	31.2	-107.65	242.4	233.4	90.0	28.0	61.98	1.452 Level 3		
8,800.0	8,770.6	8,786.6	8,771.6	31.3	31.4	-118.02	242.4	233.4	99.4	37.2	62.24	1.597		
8,850.0	8,813.4	8,829.3	8,814.4	31.4	31.5	-127.16	242.4	233.4	114.9	52.4	62.53	1.838		
8,900.0	8,853.7	8,869.7	8,854.7	31.5	31.7	-134.48	242.4	233.4	136.5	73.7	62.82	2.173		
8,950.0	8,891.4	8,907.4	8,892.4	31.6	31.8	-139.96	242.4	233.4	163.6	100.5	63.10	2.592		
9,000.0	8,926.0	8,942.0	8,927.0	31.6	31.9	-143.81	242.4	233.4	195.2	131.9	63.35	3.082		
9,050.0	8,957.4	8,973.4	8,958.4	31.7	32.0	-146.27	242.4	233.4	230.9	167.3	63.57	3.632		
9,100.0	8,985.2	9,001.2	8,986.2	31.8	32.1	-147.49	242.4	233.4	269.9	206.2	63.76	4.233		
9,150.0	9,009.4	9,025.3	9,010.4	32.0	32.2	-147.46	242.4	233.4	311.8	247.9	63.92	4.878		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #224H - Wellbore #1 - 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		
9,200.0	9,029.6	9,045.6	9,030.6	32.1	32.3	-145.98	242.4	233.4	356.0	291.9	64.05	5.558		
9,250.0	9,045.7	9,061.7	9,046.7	32.3	32.4	-142.49	242.4	233.4	402.1	337.9	64.15	6.268		
9,300.0	9,057.7	9,073.7	9,058.7	32.4	32.4	-135.67	242.4	233.4	449.6	385.4	64.22	7.002		
9,350.0	9,065.4	9,081.4	9,066.4	32.6	32.4	-122.63	242.4	233.4	498.2	433.9	64.27	7.752		
9,400.0	9,068.8	9,084.8	9,069.8	32.8	32.4	-98.61	242.4	233.4	547.4	483.1	64.29	8.514		
9,413.6	9,069.0	9,084.9	9,070.0	32.8	32.4	-90.00	242.4	233.4	560.9	496.6	64.30	8.723		
9,500.0	9,069.0	9,084.9	9,070.0	33.2	32.4	-90.00	242.4	233.4	646.5	582.2	64.31	10.053		
9,600.0	9,069.0	9,084.9	9,070.0	33.7	32.4	-90.00	242.4	233.4	746.2	681.9	64.33	11.600		
9,700.0	9,069.0	9,084.9	9,070.0	34.2	32.4	-90.01	242.4	233.4	846.1	781.8	64.34	13.152		
9,800.0	9,069.0	9,084.9	9,070.0	34.8	32.4	90.01	242.4	233.4	946.1	881.8	64.35	14.704		
9,900.0	9,069.0	9,084.9	9,070.0	35.5	32.4	90.00	242.4	233.4	1,046.1	981.7	64.35	16.255		
10,005.2	9,069.0	9,084.9	9,070.0	36.2	32.4	90.00	242.4	233.4	1,151.1	1,086.7	64.36	17.885		
10,100.0	9,069.0	9,084.9	9,070.0	37.0	32.4	90.00	242.4	233.4	1,245.6	1,181.2	64.37	19.350		
10,200.0	9,069.0	9,084.9	9,070.0	37.8	32.4	90.00	242.4	233.4	1,345.3	1,281.0	64.38	20.897		
10,300.0	9,069.0	9,084.9	9,070.0	38.6	32.4	90.00	242.4	233.4	1,445.1	1,380.7	64.39	22.443		
10,400.0	9,069.0	9,084.9	9,070.0	39.6	32.4	90.00	242.4	233.4	1,544.9	1,480.5	64.40	23.988		
10,500.0	9,069.0	9,084.9	9,070.0	40.5	32.4	90.00	242.4	233.4	1,644.8	1,580.3	64.42	25.533		
10,600.0	9,069.0	9,084.9	9,070.0	41.5	32.4	90.00	242.4	233.4	1,744.6	1,680.2	64.43	27.077		
10,700.0	9,069.0	9,084.9	9,070.0	42.6	32.4	90.00	242.4	233.4	1,844.5	1,780.0	64.45	28.620		
10,800.0	9,069.0	9,084.9	9,070.0	43.7	32.4	90.00	242.4	233.4	1,944.4	1,879.9	64.46	30.162		
10,900.0	9,069.0	9,084.9	9,070.0	44.8	32.4	90.00	242.4	233.4	2,044.3	1,979.8	64.48	31.703		
11,000.0	9,069.0	9,084.9	9,070.0	45.9	32.4	90.00	242.4	233.4	2,144.2	2,079.7	64.50	33.242		
11,100.0	9,069.0	9,084.9	9,070.0	47.1	32.4	90.01	242.4	233.4	2,244.1	2,179.6	64.52	34.780		
11,200.0	9,069.0	9,084.9	9,070.0	48.3	32.4	90.01	242.4	233.4	2,344.0	2,279.5	64.54	36.317		
11,300.0	9,069.0	9,084.9	9,070.0	49.6	32.4	90.01	242.4	233.4	2,443.9	2,379.4	64.57	37.852		
11,400.0	9,069.0	9,084.9	9,070.0	50.8	32.4	90.01	242.4	233.4	2,543.9	2,479.3	64.59	39.385		
11,500.0	9,069.0	9,084.9	9,070.0	52.1	32.4	90.01	242.4	233.4	2,643.8	2,579.2	64.61	40.917		
11,600.0	9,069.0	9,084.9	9,070.0	53.4	32.4	90.01	242.4	233.4	2,743.7	2,679.1	64.64	42.447		
11,700.0	9,069.0	9,084.9	9,070.0	54.7	32.4	90.01	242.4	233.4	2,843.7	2,779.0	64.67	43.975		
11,800.0	9,069.0	9,084.9	9,070.0	56.1	32.4	90.01	242.4	233.4	2,943.6	2,879.0	64.69	45.502		
11,900.0	9,069.0	9,084.9	9,070.0	57.4	32.4	90.01	242.4	233.4	3,043.6	2,978.9	64.72	47.026		
12,000.0	9,069.0	9,084.9	9,070.0	58.8	32.4	90.01	242.4	233.4	3,143.6	3,078.8	64.75	48.549		
12,100.0	9,069.0	9,084.9	9,070.0	60.2	32.4	90.01	242.4	233.4	3,243.5	3,178.7	64.78	50.069		
12,200.0	9,069.0	9,084.9	9,070.0	61.6	32.4	90.01	242.4	233.4	3,343.5	3,278.7	64.81	51.587		
12,300.0	9,069.0	9,084.9	9,070.0	63.0	32.4	90.01	242.4	233.4	3,443.4	3,378.6	64.84	53.103		
12,400.0	9,069.0	15,830.4	12,514.0	64.4	71.1	-180.00	-3,298.9	353.9	3,444.0	3,380.9	63.08	54.594		
12,500.0	9,069.0	15,930.4	12,514.0	65.8	72.4	-180.00	-3,398.9	354.7	3,444.0	3,379.6	64.45	53.438		
12,600.0	9,069.0	16,030.4	12,514.0	67.3	73.7	-180.00	-3,498.9	355.5	3,444.0	3,378.2	65.82	52.323		
12,700.0	9,069.0	16,130.4	12,514.0	68.7	75.1	-180.00	-3,598.9	356.4	3,444.0	3,376.8	67.20	51.247		
12,800.0	9,069.0	16,230.4	12,514.0	70.2	76.4	-180.00	-3,698.9	357.2	3,444.0	3,375.4	68.59	50.209		
12,900.0	9,069.0	16,330.4	12,514.0	71.6	77.8	-180.00	-3,798.9	358.0	3,444.0	3,374.0	69.99	49.207		
13,000.0	9,069.0	16,430.4	12,514.0	73.1	79.1	-180.00	-3,898.9	358.8	3,444.0	3,372.6	71.39	48.239		
13,100.0	9,069.0	16,530.4	12,514.0	74.6	80.5	-180.00	-3,998.9	359.6	3,444.0	3,371.2	72.80	47.305		
13,200.0	9,069.0	16,630.4	12,514.0	76.1	81.9	-180.00	-4,098.9	360.4	3,444.0	3,369.8	74.22	46.402		
13,300.0	9,069.0	16,730.4	12,514.0	77.6	83.3	-180.00	-4,198.9	361.2	3,444.0	3,368.4	75.64	45.530		
13,400.0	9,069.0	16,830.4	12,514.0	79.1	84.7	-180.00	-4,298.9	362.1	3,444.0	3,366.9	77.07	44.686		
13,500.0	9,069.0	16,930.4	12,514.0	80.6	86.1	-180.00	-4,398.9	362.9	3,444.0	3,365.5	78.50	43.871		
13,600.0	9,069.0	17,030.4	12,514.0	82.1	87.5	-180.00	-4,498.9	363.7	3,444.0	3,364.1	79.94	43.081		
13,700.0	9,069.0	17,130.4	12,514.0	83.6	88.9	-180.00	-4,598.9	364.5	3,444.0	3,362.6	81.38	42.318		
13,800.0	9,069.0	17,230.4	12,514.0	85.2	90.4	-180.00	-4,698.9	365.3	3,444.0	3,361.2	82.83	41.579		
13,900.0	9,069.0	17,330.4	12,514.0	86.7	91.8	-180.00	-4,798.9	366.1	3,444.0	3,359.7	84.28	40.863		
14,000.0	9,069.0	17,430.4	12,514.0	88.2	93.3	-180.00	-4,898.9	366.9	3,444.0	3,358.3	85.74	40.169		

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 Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #224H - Wellbore #1 - BLM Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,100.0	9,069.0	17,530.4	12,514.0	89.8	94.7	-180.00	-4,998.9	367.8	3,444.0	3,356.8	87.20	39.497		
14,200.0	9,069.0	17,630.4	12,514.0	91.3	96.2	-180.00	-5,098.9	368.6	3,444.0	3,355.3	88.66	38.845		
14,300.0	9,069.0	17,730.4	12,514.0	92.8	97.6	-180.00	-5,198.9	369.4	3,444.0	3,353.9	90.13	38.213		
14,400.0	9,069.0	17,830.4	12,514.0	94.4	99.1	-180.00	-5,298.9	370.2	3,444.0	3,352.4	91.60	37.600		
14,500.0	9,069.0	17,930.4	12,514.0	95.9	100.6	-180.00	-5,398.9	371.0	3,444.0	3,350.9	93.07	37.005		
14,600.0	9,069.0	18,030.4	12,514.0	97.5	102.1	-180.00	-5,498.8	371.8	3,444.0	3,349.5	94.54	36.427		
14,700.0	9,069.0	18,130.4	12,514.0	99.1	103.6	-180.00	-5,598.8	372.6	3,444.0	3,348.0	96.02	35.866		
14,800.0	9,069.0	18,230.4	12,514.0	100.6	105.1	-180.00	-5,698.8	373.5	3,444.0	3,346.5	97.50	35.321		
14,900.0	9,069.0	18,330.4	12,514.0	102.2	106.6	-180.00	-5,798.8	374.3	3,444.0	3,345.0	98.99	34.792		
15,000.0	9,069.0	18,430.4	12,514.0	103.8	108.1	-180.00	-5,898.8	375.1	3,444.0	3,343.5	100.48	34.277		
15,100.0	9,069.0	18,530.4	12,514.0	105.3	109.6	-180.00	-5,998.8	375.9	3,444.0	3,342.0	101.96	33.776		
15,200.0	9,069.0	18,630.4	12,514.0	106.9	111.1	-180.00	-6,098.8	376.7	3,444.0	3,340.5	103.46	33.290		
15,300.0	9,069.0	18,730.4	12,514.0	108.5	112.6	-180.00	-6,198.8	377.5	3,444.0	3,339.1	104.95	32.816		
15,400.0	9,069.0	18,830.4	12,514.0	110.1	114.1	-180.00	-6,298.8	378.4	3,444.0	3,337.6	106.45	32.355		
15,500.0	9,069.0	18,930.4	12,514.0	111.6	115.6	-180.00	-6,398.8	379.2	3,444.0	3,336.1	107.94	31.906		
15,600.0	9,069.0	19,030.4	12,514.0	113.2	117.2	-180.00	-6,498.8	380.0	3,444.0	3,334.6	109.44	31.468		
15,700.0	9,069.0	19,130.4	12,514.0	114.8	118.7	-180.00	-6,598.8	380.8	3,444.0	3,333.1	110.94	31.042		
15,800.0	9,069.0	19,230.4	12,514.0	116.4	120.2	-180.00	-6,698.8	381.6	3,444.0	3,331.6	112.45	30.627		
15,900.0	9,069.0	19,330.4	12,514.0	118.0	121.8	-180.00	-6,798.8	382.4	3,444.0	3,330.0	113.95	30.223		
16,000.0	9,069.0	19,430.4	12,514.0	119.6	123.3	-180.00	-6,898.8	383.2	3,444.0	3,328.5	115.46	29.828		
16,100.0	9,069.0	19,530.4	12,514.0	121.2	124.9	-180.00	-6,998.8	384.1	3,444.0	3,327.0	116.97	29.444		
16,200.0	9,069.0	19,630.4	12,514.0	122.7	126.4	-180.00	-7,098.8	384.9	3,444.0	3,325.5	118.48	29.068		
16,300.0	9,069.0	19,730.4	12,514.0	124.3	128.0	-180.00	-7,198.8	385.7	3,444.0	3,324.0	119.99	28.702		
16,400.0	9,069.0	19,830.4	12,514.0	125.9	129.5	-180.00	-7,298.8	386.5	3,444.0	3,322.5	121.50	28.345		
16,500.0	9,069.0	19,930.4	12,514.0	127.5	131.1	-180.00	-7,398.8	387.3	3,444.0	3,321.0	123.02	27.996		
16,600.0	9,069.0	20,030.4	12,514.0	129.1	132.6	-180.00	-7,498.8	388.1	3,444.0	3,319.5	124.53	27.655		
16,700.0	9,069.0	20,130.4	12,514.0	130.7	134.2	-180.00	-7,598.8	388.9	3,444.0	3,317.9	126.05	27.322		
16,800.0	9,069.0	20,230.4	12,514.0	132.3	135.7	-180.00	-7,698.8	389.8	3,444.0	3,316.4	127.57	26.997		
16,900.0	9,069.0	20,330.4	12,514.0	133.9	137.3	-180.00	-7,798.8	390.6	3,444.0	3,314.9	129.09	26.679		
17,000.0	9,069.0	20,430.4	12,514.0	135.5	138.9	-180.00	-7,898.8	391.4	3,444.0	3,313.4	130.61	26.369		
17,100.0	9,069.0	20,530.4	12,514.0	137.1	140.4	-180.00	-7,998.8	392.2	3,444.0	3,311.9	132.13	26.065		
17,200.0	9,069.0	20,630.4	12,514.0	138.8	142.0	-180.00	-8,098.8	393.0	3,444.0	3,310.3	133.65	25.768		
17,300.0	9,069.0	20,730.4	12,514.0	140.4	143.6	-180.00	-8,198.8	393.8	3,444.0	3,308.8	135.18	25.477		
17,400.0	9,069.0	20,830.4	12,514.0	142.0	145.1	-180.00	-8,298.8	394.6	3,444.0	3,307.3	136.70	25.193		
17,500.0	9,069.0	20,930.4	12,514.0	143.6	146.7	-180.00	-8,398.8	395.5	3,444.0	3,305.8	138.23	24.915		
17,600.0	9,069.0	21,030.4	12,514.0	145.2	148.3	-180.00	-8,498.7	396.3	3,444.0	3,304.2	139.76	24.643		
17,700.0	9,069.0	21,130.4	12,514.0	146.8	149.9	-180.00	-8,598.7	397.1	3,444.0	3,302.7	141.28	24.376		
17,800.0	9,069.0	21,230.4	12,514.0	148.4	151.4	-180.00	-8,698.7	397.9	3,444.0	3,301.2	142.81	24.115		
17,900.0	9,069.0	21,330.4	12,514.0	150.0	153.0	-180.00	-8,798.7	398.7	3,444.0	3,299.7	144.34	23.860		
18,000.0	9,069.0	21,430.4	12,514.0	151.6	154.6	-180.00	-8,898.7	399.5	3,444.0	3,298.1	145.87	23.609		
18,100.0	9,069.0	21,530.4	12,514.0	153.3	156.2	-180.00	-8,998.7	400.3	3,444.0	3,296.6	147.40	23.364		
18,200.0	9,069.0	21,630.4	12,514.0	154.9	157.8	-180.00	-9,098.7	401.2	3,444.0	3,295.1	148.94	23.124		
18,300.0	9,069.0	21,730.4	12,514.0	156.5	159.4	-180.00	-9,198.7	402.0	3,444.0	3,293.5	150.47	22.888		
18,400.0	9,069.0	21,830.4	12,514.0	158.1	160.9	-180.00	-9,298.7	402.8	3,444.0	3,292.0	152.00	22.657		
18,500.0	9,069.0	21,930.4	12,514.0	159.7	162.5	-180.00	-9,398.7	403.6	3,444.0	3,290.5	153.54	22.431		
18,600.0	9,069.0	22,030.4	12,514.0	161.3	164.1	-180.00	-9,498.7	404.4	3,444.0	3,288.9	155.07	22.209		
18,700.0	9,069.0	22,130.4	12,514.0	163.0	165.7	-180.00	-9,598.7	405.2	3,444.0	3,287.4	156.61	21.991		
18,800.0	9,069.0	22,230.4	12,514.0	164.6	167.3	-180.00	-9,698.7	406.0	3,444.0	3,285.9	158.14	21.778		
18,900.0	9,069.0	22,330.4	12,514.0	166.2	168.9	-180.00	-9,798.7	406.9	3,444.0	3,284.3	159.68	21.568		
19,000.0	9,069.0	22,430.4	12,514.0	167.8	170.5	-180.00	-9,898.7	407.7	3,444.0	3,282.8	161.22	21.362		
19,100.0	9,069.0	22,530.4	12,514.0	169.4	172.1	-180.00	-9,998.7	408.5	3,444.0	3,281.2	162.76	21.160		
19,200.0	9,069.0	22,630.4	12,514.0	171.1	173.7	-180.00	-10,098.7	409.3	3,444.0	3,279.7	164.30	20.962		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design		Voni - Voni Fed Com #224H - Wellbore #1 - BLM Plan #1											Offset Site Error:		0.0 usft
Survey Program:		0-MWD											Offset Well Error:		0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
19,300.0	9,069.0	22,730.4	12,514.0	172.7	175.3	-180.00	-10,198.7	410.1	3,444.0	3,278.2	165.84	20.768			
19,400.0	9,069.0	22,830.4	12,514.0	174.3	176.9	-180.00	-10,298.7	410.9	3,444.0	3,276.6	167.38	20.576			
19,500.0	9,069.0	22,930.4	12,514.0	175.9	178.5	-180.00	-10,398.7	411.7	3,444.0	3,275.1	168.92	20.389			
19,600.0	9,069.0	23,030.4	12,514.0	177.6	180.1	-180.00	-10,498.7	412.6	3,444.0	3,273.5	170.46	20.205			
19,700.0	9,069.0	23,130.4	12,514.0	179.2	181.7	-180.00	-10,598.7	413.4	3,444.0	3,272.0	172.00	20.023			
19,800.0	9,069.0	23,230.4	12,514.0	180.8	183.3	-180.00	-10,698.7	414.2	3,444.0	3,270.5	173.54	19.846			
19,900.0	9,069.0	23,330.4	12,514.0	182.4	184.9	-180.00	-10,798.7	415.0	3,444.0	3,268.9	175.08	19.671			
20,000.0	9,069.0	23,430.4	12,514.0	184.1	186.5	-180.00	-10,898.7	415.8	3,444.0	3,267.4	176.63	19.499			
20,100.0	9,069.0	23,530.4	12,514.0	185.7	188.1	-180.00	-10,998.7	416.6	3,444.0	3,265.8	178.17	19.330			
20,200.0	9,069.0	23,630.4	12,514.0	187.3	189.7	-180.00	-11,098.7	417.4	3,444.0	3,264.3	179.71	19.164			
20,300.0	9,069.0	23,730.4	12,514.0	188.9	191.3	-180.00	-11,198.7	418.3	3,444.0	3,262.7	181.26	19.001			
20,400.0	9,069.0	23,830.4	12,514.0	190.6	192.9	-180.00	-11,298.7	419.1	3,444.0	3,261.2	182.80	18.840			
20,500.0	9,069.0	23,930.4	12,514.0	192.2	194.5	-180.00	-11,398.7	419.9	3,444.0	3,259.7	184.35	18.682			
20,600.0	9,069.0	24,030.4	12,514.0	193.8	196.1	-180.00	-11,498.6	420.7	3,444.0	3,258.1	185.89	18.527			
20,700.0	9,069.0	24,130.4	12,514.0	195.5	197.8	-180.00	-11,598.6	421.5	3,444.0	3,256.6	187.44	18.374			
20,800.0	9,069.0	24,230.4	12,514.0	197.1	199.4	-180.00	-11,698.6	422.3	3,444.0	3,255.0	188.99	18.224			
20,900.0	9,069.0	24,330.4	12,514.0	198.7	201.0	-180.00	-11,798.6	423.1	3,444.0	3,253.5	190.53	18.076			
21,000.0	9,069.0	24,430.4	12,514.0	200.3	202.6	-180.00	-11,898.6	424.0	3,444.0	3,251.9	192.08	17.930			
21,100.0	9,069.0	24,530.4	12,514.0	202.0	204.2	-180.00	-11,998.6	424.8	3,444.0	3,250.4	193.63	17.787			
21,200.0	9,069.0	24,630.4	12,514.0	203.6	205.8	-180.00	-12,098.6	425.6	3,444.0	3,248.8	195.17	17.646			
21,300.0	9,069.0	24,730.4	12,514.0	205.2	207.4	-180.00	-12,198.6	426.4	3,444.0	3,247.3	196.72	17.507			
21,400.0	9,069.0	24,830.4	12,514.0	206.9	209.0	-180.00	-12,298.6	427.2	3,444.0	3,245.7	198.27	17.370			
21,500.0	9,069.0	24,833.3	12,514.0	208.5	209.1	-180.00	-12,301.5	427.2	3,445.4	3,246.6	198.81	17.330			
21,544.1	9,069.0	24,833.3	12,514.0	209.2	209.1	-180.00	-12,301.5	427.2	3,446.9	3,247.9	199.00	17.321			

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #228H - Wellbore #1 - 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		
0.0	0.0	1.0	1.0	0.0	0.0	89.61	0.7	110.1	110.1					
100.0	100.0	101.0	101.0	0.1	0.1	89.61	0.7	110.1	110.1	109.8	0.26	423.556		
200.0	200.0	201.0	201.0	0.5	0.5	89.61	0.7	110.1	110.1	109.1	0.98	112.689		
300.0	300.0	301.0	301.0	0.8	0.8	89.61	0.7	110.1	110.1	108.4	1.69	64.990		
400.0	400.0	401.0	401.0	1.2	1.2	89.61	0.7	110.1	110.1	107.7	2.41	45.662		
500.0	500.0	501.0	501.0	1.6	1.6	89.61	0.7	110.1	110.1	107.0	3.13	35.195		
600.0	600.0	601.0	601.0	1.9	1.9	89.61	0.7	110.1	110.1	106.2	3.84	28.632		
700.0	700.0	701.0	701.0	2.3	2.3	89.61	0.7	110.1	110.1	105.5	4.56	24.132		
800.0	800.0	801.0	801.0	2.6	2.6	89.61	0.7	110.1	110.1	104.8	5.28	20.854		
900.0	900.0	901.0	901.0	3.0	3.0	89.61	0.7	110.1	110.1	104.1	6.00	18.360		
1,000.0	1,000.0	1,001.0	1,001.0	3.4	3.4	89.61	0.7	110.1	110.1	103.4	6.71	16.399		
1,100.0	1,100.0	1,101.0	1,101.0	3.7	3.7	89.61	0.7	110.1	110.1	102.6	7.43	14.817		
1,200.0	1,200.0	1,201.0	1,201.0	4.1	4.1	89.61	0.7	110.1	110.1	101.9	8.15	13.513		
1,300.0	1,300.0	1,301.0	1,301.0	4.4	4.4	89.61	0.7	110.1	110.1	101.2	8.86	12.420		
1,400.0	1,400.0	1,401.0	1,401.0	4.8	4.8	89.61	0.7	110.1	110.1	100.5	9.58	11.490		
1,500.0	1,500.0	1,501.0	1,501.0	5.1	5.2	89.61	0.7	110.1	110.1	99.8	10.30	10.690		
1,600.0	1,600.0	1,601.0	1,601.0	5.5	5.5	58.88	0.7	110.1	109.6	98.6	11.01	9.955		
1,700.0	1,700.0	1,701.0	1,701.0	5.9	5.9	60.08	0.7	110.1	108.3	96.6	11.73	9.235		
1,800.0	1,799.9	1,800.9	1,800.9	6.2	6.2	62.14	0.7	110.1	106.2	93.7	12.44	8.536		
1,900.0	1,899.7	1,900.7	1,900.7	6.6	6.6	65.15	0.7	110.1	103.5	90.3	13.15	7.866		
2,000.0	1,999.4	2,000.4	2,000.4	6.9	6.9	69.23	0.7	110.1	100.4	86.5	13.87	7.240		
2,100.0	2,098.9	2,100.1	2,099.9	7.3	7.3	74.52	0.7	110.1	97.4	82.8	14.59	6.677		
2,200.0	2,198.3	2,200.7	2,199.3	7.7	7.7	81.09	0.7	110.1	95.0	79.7	15.32	6.203		
2,300.0	2,297.4	2,301.6	2,298.4	8.0	8.0	88.93	0.7	110.1	93.9	77.8	16.05	5.848		
2,312.7	2,310.0	2,311.0	2,311.0	8.1	8.1	90.00	0.7	110.1	93.8	77.7	16.13	5.817 CC, ES		
2,400.0	2,396.4	2,402.6	2,397.4	8.4	8.4	97.30	0.7	110.1	94.6	77.8	16.79	5.636		
2,500.0	2,495.5	2,503.5	2,496.5	8.8	8.7	105.38	0.7	110.1	97.4	79.9	17.53	5.556		
2,600.0	2,594.5	2,604.5	2,595.5	9.2	9.1	112.87	0.7	110.1	102.0	83.7	18.27	5.584		
2,700.0	2,693.5	2,705.5	2,694.5	9.6	9.5	119.63	0.7	110.1	108.2	89.2	19.00	5.695		
2,800.0	2,792.5	2,806.5	2,793.5	9.9	9.8	125.59	0.7	110.1	115.8	96.1	19.73	5.867		
2,900.0	2,891.6	2,907.4	2,892.6	10.3	10.2	130.78	0.7	110.1	124.5	104.0	20.46	6.082		
3,000.0	2,990.6	3,008.4	2,991.6	10.7	10.6	135.26	0.7	110.1	134.0	112.8	21.19	6.324		
3,100.0	3,089.6	3,109.4	3,090.6	11.1	10.9	139.14	0.7	110.1	144.3	122.4	21.91	6.584		
3,200.0	3,188.6	3,189.6	3,189.6	11.5	11.2	142.49	0.7	110.1	155.1	132.5	22.56	6.875		
3,300.0	3,287.7	3,288.7	3,288.7	11.9	11.6	145.40	0.7	110.1	166.4	143.1	23.28	7.148		
3,400.0	3,386.7	3,387.7	3,387.7	12.3	11.9	147.94	0.7	110.1	178.1	154.1	23.99	7.421		
3,500.0	3,485.7	3,486.7	3,486.7	12.7	12.3	150.16	0.7	110.1	190.0	165.3	24.71	7.691		
3,600.0	3,584.8	3,585.8	3,585.8	13.1	12.6	152.12	0.7	110.1	202.2	176.8	25.42	7.955		
3,667.1	3,651.2	3,652.2	3,652.2	13.4	12.9	153.31	0.7	110.1	210.6	184.7	25.90	8.129		
3,700.0	3,683.8	3,684.8	3,684.8	13.5	13.0	153.87	0.7	110.1	214.5	188.4	26.14	8.208		
3,800.0	3,783.1	3,784.1	3,784.1	13.9	13.3	155.25	0.7	110.1	225.2	198.3	26.85	8.385		
3,900.0	3,882.7	3,883.7	3,883.7	14.3	13.7	156.24	0.7	110.1	233.5	206.0	27.57	8.471		
4,000.0	3,982.5	3,983.5	3,983.5	14.7	14.0	156.91	0.7	110.1	239.6	211.3	28.28	8.469		
4,100.0	4,082.4	4,083.4	4,083.4	15.0	14.4	157.29	0.7	110.1	243.2	214.2	29.00	8.386		
4,200.5	4,182.8	4,183.8	4,183.8	15.4	14.8	-171.46	0.7	110.1	244.4	214.7	29.71	8.226		
4,300.0	4,282.4	4,283.4	4,283.4	15.7	15.1	-171.46	0.7	110.1	244.4	214.0	30.42	8.034		
4,400.0	4,382.4	4,383.4	4,383.4	16.1	15.5	-171.46	0.7	110.1	244.4	213.3	31.13	7.851		
4,500.0	4,482.4	4,483.4	4,483.4	16.4	15.8	-171.46	0.7	110.1	244.4	212.6	31.84	7.676		
4,600.0	4,582.4	4,583.4	4,583.4	16.7	16.2	-171.46	0.7	110.1	244.4	211.9	32.55	7.508		
4,700.0	4,682.4	4,683.4	4,683.4	17.1	16.6	-171.46	0.7	110.1	244.4	211.1	33.26	7.348		
4,800.0	4,782.4	4,783.4	4,783.4	17.4	16.9	-171.46	0.7	110.1	244.4	210.4	33.98	7.194		
4,900.0	4,882.4	4,883.4	4,883.4	17.8	17.3	-171.46	0.7	110.1	244.4	209.7	34.69	7.046		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #228H - Wellbore #1 - 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		
5,000.0	4,982.4	4,983.4	4,983.4	18.1	17.6	-171.46	0.7	110.1	244.4	209.0	35.40	6.904		
5,100.0	5,082.4	5,083.4	5,083.4	18.5	18.0	-171.46	0.7	110.1	244.4	208.3	36.11	6.768		
5,200.0	5,182.4	5,183.4	5,183.4	18.8	18.4	-171.46	0.7	110.1	244.4	207.6	36.82	6.637		
5,300.0	5,282.4	5,283.4	5,283.4	19.2	18.7	-171.46	0.7	110.1	244.4	206.9	37.54	6.511		
5,400.0	5,382.4	5,383.4	5,383.4	19.5	19.1	-171.46	0.7	110.1	244.4	206.2	38.25	6.390		
5,500.0	5,482.4	5,483.4	5,483.4	19.9	19.4	-171.46	0.7	110.1	244.4	205.4	38.96	6.273		
5,600.0	5,582.4	5,585.0	5,585.0	20.2	19.8	-171.59	1.0	110.7	244.1	204.4	39.68	6.152		
5,700.0	5,682.4	5,687.0	5,687.0	20.6	20.1	-172.10	1.7	113.0	243.0	202.6	40.40	6.016		
5,800.0	5,782.4	5,788.8	5,788.7	20.9	20.5	-172.99	3.1	117.0	241.2	200.1	41.11	5.866		
5,900.0	5,882.4	5,890.5	5,890.2	21.3	20.8	-174.29	5.1	122.6	238.6	196.8	41.83	5.705		
6,000.0	5,982.4	5,991.9	5,991.3	21.6	21.2	-176.02	7.7	130.0	235.5	192.9	42.55	5.535		
6,100.0	6,082.4	6,093.0	6,092.0	22.0	21.6	-178.19	10.8	139.0	231.9	188.7	43.27	5.360		
6,200.0	6,182.4	6,193.8	6,192.1	22.3	21.9	-179.16	14.5	149.7	228.1	184.1	43.99	5.186		
6,300.0	6,282.4	6,294.1	6,291.5	22.7	22.3	-176.01	18.8	162.0	224.4	179.7	44.72	5.017		
6,400.0	6,382.4	6,406.8	6,389.7	23.0	22.7	-172.56	23.3	175.0	221.1	175.6	45.50	4.860		
6,500.0	6,482.4	6,507.8	6,487.7	23.4	23.0	-169.02	27.8	188.0	218.7	172.5	46.24	4.729		
6,600.0	6,582.4	6,591.2	6,585.8	23.7	23.3	-165.41	32.3	201.0	217.2	170.2	46.92	4.628		
6,700.0	6,682.4	6,709.8	6,683.8	24.1	23.8	-161.78	36.8	214.1	216.5	168.8	47.72	4.536		
6,724.8	6,707.2	6,714.8	6,708.2	24.2	23.8	-160.87	37.9	217.3	216.5	168.6	47.83	4.525		
6,800.0	6,782.4	6,789.3	6,781.9	24.4	24.1	-158.13	41.3	227.1	216.7	168.3	48.38	4.480		
6,900.0	6,882.4	6,888.3	6,880.0	24.8	24.4	-154.51	45.9	240.1	217.8	168.7	49.10	4.436		
7,000.0	6,982.4	6,987.3	6,978.0	25.1	24.8	-150.93	50.4	253.1	219.8	170.0	49.82	4.412		
7,100.0	7,082.4	7,086.3	7,076.1	25.5	25.2	-147.44	54.9	266.2	222.7	172.1	50.53	4.406 SF		
7,200.0	7,182.4	7,185.4	7,174.2	25.8	25.5	-144.04	59.4	279.2	226.3	175.1	51.24	4.417		
7,300.0	7,282.4	7,284.4	7,272.2	26.2	25.9	-140.76	63.9	292.2	230.8	178.8	51.95	4.442		
7,400.0	7,382.4	7,383.4	7,370.3	26.5	26.3	-137.61	68.4	305.2	236.0	183.3	52.65	4.482		
7,500.0	7,482.4	7,482.5	7,468.4	26.9	26.6	-134.60	72.9	318.2	241.9	188.5	53.35	4.533		
7,600.0	7,582.4	7,581.5	7,566.4	27.2	27.0	-131.74	77.5	331.3	248.4	194.3	54.05	4.595		
7,700.0	7,682.4	7,680.5	7,664.5	27.6	27.4	-129.03	82.0	344.3	255.5	200.7	54.74	4.667		
7,800.0	7,782.4	7,779.5	7,762.5	27.9	27.8	-126.48	86.5	357.3	263.1	207.7	55.43	4.747		
7,900.0	7,882.4	7,878.6	7,860.6	28.3	28.1	-124.07	91.0	370.3	271.3	215.2	56.13	4.834		
8,000.0	7,982.4	7,977.6	7,958.7	28.7	28.5	-121.80	95.5	383.3	279.9	223.1	56.82	4.927		
8,100.0	8,082.4	8,076.6	8,056.7	29.0	28.9	-119.67	100.0	396.4	288.9	231.4	57.51	5.024		
8,200.0	8,182.4	8,175.6	8,154.8	29.4	29.3	-117.66	104.6	409.4	298.3	240.1	58.20	5.126		
8,300.0	8,282.4	8,274.7	8,252.9	29.7	29.7	-115.79	109.1	422.4	308.1	249.2	58.89	5.232		
8,400.0	8,382.4	8,373.7	8,350.9	30.1	30.0	-114.03	113.6	435.4	318.1	258.6	59.58	5.340		
8,500.0	8,482.4	8,472.7	8,449.0	30.4	30.4	-112.37	118.1	448.4	328.5	268.2	60.27	5.450		
8,513.6	8,496.0	8,486.2	8,462.4	30.5	30.5	-112.15	118.7	450.2	329.9	269.5	60.37	5.465		
8,550.0	8,532.3	8,522.2	8,498.0	30.6	30.6	-110.01	120.4	454.9	333.1	272.5	60.61	5.496		
8,600.0	8,582.0	8,571.3	8,546.6	30.7	30.8	-107.31	122.6	461.4	335.5	274.6	60.91	5.509		
8,650.0	8,631.1	8,619.7	8,594.6	30.9	31.0	-105.33	124.8	467.8	336.0	274.8	61.20	5.490		
8,700.0	8,679.1	8,667.0	8,641.4	31.0	31.2	-103.03	127.0	474.0	334.8	273.4	61.46	5.448		
8,750.0	8,725.7	8,712.9	8,686.8	31.2	31.4	-100.34	129.1	480.0	332.6	270.9	61.70	5.390		
8,800.0	8,770.6	8,757.0	8,730.5	31.3	31.5	-97.17	131.1	485.8	329.9	268.0	61.91	5.329		
8,850.0	8,813.4	8,801.1	8,772.0	31.4	31.7	-93.35	133.0	491.3	327.7	265.5	62.12	5.275		
8,895.5	8,853.4	8,838.1	8,810.8	31.5	31.9	-89.64	134.8	496.5	326.7	264.4	62.31	5.244		
8,900.0	8,853.7	8,838.4	8,811.1	31.5	31.9	-87.68	134.8	496.5	326.7	264.4	62.31	5.244		
8,950.0	8,891.4	8,875.1	8,847.5	31.6	32.0	-81.91	136.5	501.4	328.0	265.5	62.51	5.248		
9,000.0	8,926.0	8,908.8	8,880.9	31.6	32.1	-75.78	138.0	505.8	332.5	269.8	62.73	5.301		
9,050.0	8,957.4	8,939.3	8,911.0	31.7	32.2	-70.06	139.4	509.8	341.0	278.0	62.97	5.415		
9,100.0	8,985.2	8,966.2	8,937.6	31.8	32.4	-61.53	140.6	513.3	353.9	290.7	63.24	5.597		
9,150.0	9,009.4	8,989.3	8,960.6	32.0	32.4	-53.05	141.7	516.4	371.6	308.1	63.51	5.850		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #228H - Wellbore #1 - 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		
9,200.0	9,029.6	9,008.6	8,979.6	32.1	32.5	-93.47	142.6	518.9	393.9	330.1	63.79	6.174		
9,250.0	9,045.7	9,023.8	8,994.7	32.3	32.6	-92.69	143.2	520.9	420.4	356.4	64.04	6.564		
9,300.0	9,057.7	9,034.9	9,005.7	32.4	32.6	-90.63	143.8	522.4	450.7	386.5	64.27	7.013		
9,350.0	9,065.4	9,041.7	9,012.4	32.6	32.6	-87.23	144.1	523.3	484.2	419.7	64.46	7.512		
9,400.0	9,068.8	9,044.2	9,014.9	32.8	32.7	-82.50	144.2	523.6	520.1	455.5	64.60	8.051		
9,413.6	9,069.0	9,044.1	9,014.8	32.8	32.7	-80.99	144.2	523.6	530.2	465.6	64.64	8.203		
9,500.0	9,069.0	9,042.5	9,013.2	33.2	32.7	-80.36	144.1	523.4	598.3	533.5	64.81	9.232		
9,600.0	9,069.0	9,040.2	9,010.9	33.7	32.6	-79.37	144.0	523.1	684.0	619.0	64.96	10.529		
9,700.0	9,069.0	9,037.4	9,008.2	34.2	32.6	-78.02	143.9	522.7	774.4	709.4	65.05	11.905		
9,800.0	9,069.0	9,034.2	9,004.9	34.8	32.6	-76.16	143.7	522.3	868.2	803.1	65.12	13.333		
9,900.0	9,069.0	9,030.4	9,001.3	35.5	32.6	-73.54	143.5	521.8	964.1	899.0	65.16	14.797		
10,005.2	9,069.0	9,026.0	8,996.9	36.2	32.6	-69.52	143.3	521.2	1,066.7	1,001.5	65.18	16.364		
10,100.0	9,069.0	9,021.8	8,992.7	37.0	32.6	-68.39	143.2	520.6	1,159.8	1,094.6	65.20	17.788		
10,200.0	9,069.0	9,017.3	8,988.3	37.8	32.6	-67.22	143.0	520.1	1,258.2	1,193.0	65.21	19.295		
10,300.0	9,069.0	9,012.9	8,983.9	38.6	32.5	-66.06	142.7	519.5	1,356.9	1,291.7	65.22	20.805		
10,400.0	9,069.0	9,008.4	8,979.5	39.6	32.5	-64.92	142.5	518.9	1,455.8	1,390.5	65.23	22.317		
10,500.0	9,069.0	9,004.0	8,975.1	40.5	32.5	-63.79	142.3	518.3	1,554.7	1,489.5	65.24	23.831		
10,600.0	9,069.0	9,000.5	8,970.6	41.5	32.5	-62.67	142.1	517.7	1,653.8	1,588.6	65.25	25.346		
10,700.0	9,069.0	9,004.9	8,966.2	42.6	32.5	-61.57	141.9	517.1	1,753.0	1,687.7	65.29	26.848		
10,800.0	9,069.0	8,990.6	8,961.8	43.7	32.4	-60.48	141.7	516.5	1,852.3	1,787.0	65.26	28.381		
10,900.0	9,069.0	8,986.2	8,957.4	44.8	32.4	-59.41	141.5	516.0	1,951.6	1,886.3	65.27	29.900		
11,000.0	9,069.0	8,981.7	8,953.0	45.9	32.4	-58.36	141.3	515.4	2,051.0	1,985.7	65.28	31.418		
11,100.0	9,069.0	8,977.2	8,948.6	47.1	32.4	-57.33	141.1	514.8	2,150.4	2,085.1	65.29	32.937		
11,200.0	9,069.0	8,972.8	8,944.2	48.3	32.4	-56.31	140.9	514.2	2,249.9	2,184.6	65.30	34.455		
11,300.0	9,069.0	8,968.3	8,939.8	49.6	32.4	-55.31	140.7	513.6	2,349.4	2,284.1	65.31	35.974		
11,400.0	9,069.0	8,963.9	8,935.4	50.8	32.3	-54.32	140.5	513.0	2,448.9	2,383.6	65.32	37.492		
11,500.0	9,069.0	8,959.4	8,931.0	52.1	32.3	-53.36	140.3	512.4	2,548.5	2,483.2	65.33	39.009		
11,600.0	9,069.0	8,955.0	8,926.5	53.4	32.3	-52.41	140.1	511.9	2,648.1	2,582.8	65.34	40.526		
11,700.0	9,069.0	8,950.5	8,922.1	54.7	32.3	-51.48	139.9	511.3	2,747.7	2,682.4	65.36	42.043		
11,800.0	9,069.0	8,946.1	8,917.7	56.1	32.3	-50.57	139.7	510.7	2,847.3	2,782.0	65.37	43.558		
11,900.0	9,069.0	8,941.6	8,913.3	57.4	32.3	-49.67	139.5	510.1	2,947.0	2,881.6	65.38	45.073		
12,000.0	9,069.0	8,937.2	8,908.9	58.8	32.2	-48.80	139.3	509.5	3,046.7	2,981.3	65.40	46.587		
12,100.0	9,069.0	8,932.7	8,904.5	60.2	32.2	-47.94	139.1	508.9	3,146.4	3,080.9	65.41	48.100		
12,200.0	9,069.0	15,338.3	12,178.0	61.6	68.7	-168.01	-3,093.5	1,012.1	3,177.3	3,114.3	62.98	50.452		
12,300.0	9,069.0	15,438.3	12,178.0	63.0	70.0	-168.01	-3,193.5	1,012.9	3,177.3	3,112.9	64.42	49.320		
12,400.0	9,069.0	15,538.3	12,178.0	64.4	71.3	-168.01	-3,293.5	1,013.7	3,177.3	3,111.4	65.88	48.231		
12,500.0	9,069.0	15,638.3	12,178.0	65.8	72.6	-168.01	-3,393.5	1,014.5	3,177.3	3,110.0	67.34	47.181		
12,600.0	9,069.0	15,738.3	12,178.0	67.3	73.9	-168.01	-3,493.5	1,015.4	3,177.3	3,108.5	68.82	46.170		
12,700.0	9,069.0	15,838.3	12,178.0	68.7	75.2	-168.01	-3,593.5	1,016.2	3,177.3	3,107.0	70.30	45.195		
12,800.0	9,069.0	15,938.3	12,178.0	70.2	76.5	-168.01	-3,693.5	1,017.0	3,177.3	3,105.5	71.80	44.255		
12,900.0	9,069.0	16,038.3	12,178.0	71.6	77.9	-168.01	-3,793.5	1,017.8	3,177.3	3,104.0	73.30	43.349		
13,000.0	9,069.0	16,138.3	12,178.0	73.1	79.2	-168.01	-3,893.5	1,018.6	3,177.3	3,102.5	74.80	42.475		
13,100.0	9,069.0	16,238.3	12,178.0	74.6	80.6	-168.01	-3,993.5	1,019.4	3,177.3	3,101.0	76.32	41.632		
13,200.0	9,069.0	16,338.3	12,178.0	76.1	82.0	-168.01	-4,093.5	1,020.2	3,177.3	3,099.5	77.84	40.818		
13,300.0	9,069.0	16,438.3	12,178.0	77.6	83.4	-168.01	-4,193.5	1,021.1	3,177.3	3,098.0	79.37	40.033		
13,400.0	9,069.0	16,538.3	12,178.0	79.1	84.8	-168.01	-4,293.5	1,021.9	3,177.3	3,096.4	80.90	39.274		
13,500.0	9,069.0	16,638.3	12,178.0	80.6	86.2	-168.01	-4,393.5	1,022.7	3,177.3	3,094.9	82.44	38.540		
13,600.0	9,069.0	16,738.3	12,178.0	82.1	87.6	-168.01	-4,493.5	1,023.5	3,177.3	3,093.3	83.99	37.831		
13,700.0	9,069.0	16,838.3	12,178.0	83.6	89.0	-168.01	-4,593.5	1,024.3	3,177.3	3,091.8	85.54	37.146		
13,800.0	9,069.0	16,938.3	12,178.0	85.2	90.4	-168.01	-4,693.5	1,025.1	3,177.3	3,090.2	87.09	36.483		
13,900.0	9,069.0	17,038.3	12,178.0	86.7	91.9	-168.01	-4,793.5	1,026.0	3,177.3	3,088.7	88.65	35.841		
14,000.0	9,069.0	17,138.3	12,178.0	88.2	93.3	-168.01	-4,893.5	1,026.8	3,177.3	3,087.1	90.21	35.220		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #228H - Wellbore #1 - BLM Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,100.0	9,069.0	17,238.3	12,178.0	89.8	94.8	-168.01	-4,993.5	1,027.6	3,177.3	3,085.5	91.78	34.618		
14,200.0	9,069.0	17,338.3	12,178.0	91.3	96.2	-168.01	-5,093.5	1,028.4	3,177.3	3,084.0	93.35	34.036		
14,300.0	9,069.0	17,438.3	12,178.0	92.8	97.7	-168.01	-5,193.5	1,029.2	3,177.3	3,082.4	94.93	33.471		
14,400.0	9,069.0	17,538.3	12,178.0	94.4	99.2	-168.01	-5,293.5	1,030.0	3,177.3	3,080.8	96.51	32.923		
14,500.0	9,069.0	17,638.3	12,178.0	95.9	100.6	-168.01	-5,393.5	1,030.8	3,177.3	3,079.2	98.09	32.392		
14,600.0	9,069.0	17,738.3	12,178.0	97.5	102.1	-168.01	-5,493.5	1,031.7	3,177.3	3,077.6	99.67	31.877		
14,700.0	9,069.0	17,838.3	12,178.0	99.1	103.6	-168.01	-5,593.5	1,032.5	3,177.3	3,076.1	101.26	31.377		
14,800.0	9,069.0	17,938.3	12,178.0	100.6	105.1	-168.01	-5,693.5	1,033.3	3,177.3	3,074.5	102.85	30.892		
14,900.0	9,069.0	18,038.3	12,178.0	102.2	106.6	-168.01	-5,793.5	1,034.1	3,177.3	3,072.9	104.45	30.420		
15,000.0	9,069.0	18,138.3	12,178.0	103.8	108.1	-168.01	-5,893.5	1,034.9	3,177.3	3,071.3	106.04	29.962		
15,100.0	9,069.0	18,238.3	12,178.0	105.3	109.6	-168.01	-5,993.5	1,035.7	3,177.3	3,069.7	107.64	29.517		
15,200.0	9,069.0	18,338.3	12,178.0	106.9	111.1	-168.01	-6,093.4	1,036.6	3,177.3	3,068.1	109.24	29.084		
15,300.0	9,069.0	18,438.3	12,178.0	108.5	112.6	-168.01	-6,193.4	1,037.4	3,177.3	3,066.5	110.85	28.664		
15,400.0	9,069.0	18,538.3	12,178.0	110.1	114.1	-168.01	-6,293.4	1,038.2	3,177.3	3,064.9	112.45	28.254		
15,500.0	9,069.0	18,638.3	12,178.0	111.6	115.7	-168.01	-6,393.4	1,039.0	3,177.3	3,063.2	114.06	27.856		
15,600.0	9,069.0	18,738.3	12,178.0	113.2	117.2	-168.01	-6,493.4	1,039.8	3,177.3	3,061.6	115.67	27.468		
15,700.0	9,069.0	18,838.3	12,178.0	114.8	118.7	-168.01	-6,593.4	1,040.6	3,177.3	3,060.0	117.28	27.091		
15,800.0	9,069.0	18,938.3	12,178.0	116.4	120.2	-168.01	-6,693.4	1,041.4	3,177.3	3,058.4	118.90	26.723		
15,900.0	9,069.0	19,038.3	12,178.0	118.0	121.8	-168.01	-6,793.4	1,042.3	3,177.3	3,056.8	120.52	26.364		
16,000.0	9,069.0	19,138.3	12,178.0	119.6	123.3	-168.01	-6,893.4	1,043.1	3,177.3	3,055.2	122.13	26.015		
16,100.0	9,069.0	19,238.3	12,178.0	121.2	124.9	-168.01	-6,993.4	1,043.9	3,177.3	3,053.6	123.75	25.675		
16,200.0	9,069.0	19,338.3	12,178.0	122.7	126.4	-168.01	-7,093.4	1,044.7	3,177.3	3,051.9	125.37	25.343		
16,300.0	9,069.0	19,438.3	12,178.0	124.3	127.9	-168.01	-7,193.4	1,045.5	3,177.3	3,050.3	127.00	25.019		
16,400.0	9,069.0	19,538.3	12,178.0	125.9	129.5	-168.01	-7,293.4	1,046.3	3,177.3	3,048.7	128.62	24.703		
16,500.0	9,069.0	19,638.3	12,178.0	127.5	131.0	-168.01	-7,393.4	1,047.2	3,177.3	3,047.1	130.24	24.395		
16,600.0	9,069.0	19,738.3	12,178.0	129.1	132.6	-168.01	-7,493.4	1,048.0	3,177.3	3,045.4	131.87	24.094		
16,700.0	9,069.0	19,838.3	12,178.0	130.7	134.2	-168.01	-7,593.4	1,048.8	3,177.3	3,043.8	133.50	23.800		
16,800.0	9,069.0	19,938.3	12,178.0	132.3	135.7	-168.01	-7,693.4	1,049.6	3,177.3	3,042.2	135.13	23.513		
16,900.0	9,069.0	20,038.3	12,178.0	133.9	137.3	-168.01	-7,793.4	1,050.4	3,177.3	3,040.5	136.76	23.233		
17,000.0	9,069.0	20,138.3	12,178.0	135.5	138.8	-168.01	-7,893.4	1,051.2	3,177.3	3,038.9	138.39	22.959		
17,100.0	9,069.0	20,238.3	12,178.0	137.1	140.4	-168.01	-7,993.4	1,052.0	3,177.3	3,037.3	140.02	22.691		
17,200.0	9,069.0	20,338.3	12,178.0	138.8	142.0	-168.01	-8,093.4	1,052.9	3,177.3	3,035.6	141.66	22.429		
17,300.0	9,069.0	20,438.3	12,178.0	140.4	143.5	-168.01	-8,193.4	1,053.7	3,177.3	3,034.0	143.29	22.173		
17,400.0	9,069.0	20,538.3	12,178.0	142.0	145.1	-168.01	-8,293.4	1,054.5	3,177.3	3,032.4	144.93	21.923		
17,500.0	9,069.0	20,638.3	12,178.0	143.6	146.7	-168.01	-8,393.4	1,055.3	3,177.3	3,030.7	146.57	21.678		
17,600.0	9,069.0	20,738.3	12,178.0	145.2	148.3	-168.01	-8,493.4	1,056.1	3,177.3	3,029.1	148.21	21.438		
17,700.0	9,069.0	20,838.3	12,178.0	146.8	149.8	-168.01	-8,593.4	1,056.9	3,177.3	3,027.5	149.85	21.204		
17,800.0	9,069.0	20,938.3	12,178.0	148.4	151.4	-168.01	-8,693.4	1,057.8	3,177.3	3,025.8	151.49	20.974		
17,900.0	9,069.0	21,038.3	12,178.0	150.0	153.0	-168.01	-8,793.4	1,058.6	3,177.3	3,024.2	153.13	20.750		
18,000.0	9,069.0	21,138.3	12,178.0	151.6	154.6	-168.01	-8,893.4	1,059.4	3,177.3	3,022.5	154.77	20.529		
18,100.0	9,069.0	21,238.3	12,178.0	153.3	156.2	-168.01	-8,993.4	1,060.2	3,177.3	3,020.9	156.41	20.314		
18,200.0	9,069.0	21,338.3	12,178.0	154.9	157.7	-168.01	-9,093.3	1,061.0	3,177.3	3,019.2	158.05	20.103		
18,300.0	9,069.0	21,438.3	12,178.0	156.5	159.3	-168.01	-9,193.3	1,061.8	3,177.3	3,017.6	159.70	19.896		
18,400.0	9,069.0	21,538.3	12,178.0	158.1	160.9	-168.01	-9,293.3	1,062.6	3,177.3	3,016.0	161.34	19.693		
18,500.0	9,069.0	21,638.3	12,178.0	159.7	162.5	-168.01	-9,393.3	1,063.5	3,177.3	3,014.3	162.99	19.494		
18,600.0	9,069.0	21,738.3	12,178.0	161.3	164.1	-168.01	-9,493.3	1,064.3	3,177.3	3,012.7	164.64	19.299		
18,700.0	9,069.0	21,838.3	12,178.0	163.0	165.7	-168.01	-9,593.3	1,065.1	3,177.3	3,011.0	166.28	19.108		
18,800.0	9,069.0	21,938.3	12,178.0	164.6	167.3	-168.01	-9,693.3	1,065.9	3,177.3	3,009.4	167.93	18.920		
18,900.0	9,069.0	22,038.3	12,178.0	166.2	168.9	-168.01	-9,793.3	1,066.7	3,177.3	3,007.7	169.58	18.736		
19,000.0	9,069.0	22,138.3	12,178.0	167.8	170.5	-168.01	-9,893.3	1,067.5	3,177.3	3,006.1	171.23	18.556		
19,100.0	9,069.0	22,238.3	12,178.0	169.4	172.0	-168.01	-9,993.3	1,068.4	3,177.3	3,004.4	172.88	18.379		
19,200.0	9,069.0	22,338.3	12,178.0	171.1	173.6	-168.01	-10,093.3	1,069.2	3,177.3	3,002.8	174.53	18.205		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #228H - Wellbore #1 - BLM Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,300.0	9,069.0	22,438.3	12,178.0	172.7	175.2	-168.01	-10,193.3	1,070.0	3,177.3	3,001.1	176.18	18.034		
19,400.0	9,069.0	22,538.3	12,178.0	174.3	176.8	-168.01	-10,293.3	1,070.8	3,177.3	2,999.5	177.83	17.867		
19,500.0	9,069.0	22,638.3	12,178.0	175.9	178.4	-168.01	-10,393.3	1,071.6	3,177.3	2,997.8	179.48	17.703		
19,600.0	9,069.0	22,738.3	12,178.0	177.6	180.0	-168.01	-10,493.3	1,072.4	3,177.3	2,996.2	181.13	17.541		
19,700.0	9,069.0	22,838.3	12,178.0	179.2	181.6	-168.01	-10,593.3	1,073.2	3,177.3	2,994.5	182.79	17.382		
19,800.0	9,069.0	22,938.3	12,178.0	180.8	183.2	-168.01	-10,693.3	1,074.1	3,177.3	2,992.9	184.44	17.227		
19,900.0	9,069.0	23,038.3	12,178.0	182.4	184.8	-168.01	-10,793.3	1,074.9	3,177.3	2,991.2	186.10	17.073		
20,000.0	9,069.0	23,138.3	12,178.0	184.1	186.4	-168.01	-10,893.3	1,075.7	3,177.3	2,989.5	187.75	16.923		
20,100.0	9,069.0	23,238.3	12,178.0	185.7	188.0	-168.01	-10,993.3	1,076.5	3,177.3	2,987.9	189.40	16.775		
20,200.0	9,069.0	23,338.3	12,178.0	187.3	189.7	-168.01	-11,093.3	1,077.3	3,177.3	2,986.2	191.06	16.630		
20,300.0	9,069.0	23,438.3	12,178.0	188.9	191.3	-168.01	-11,193.3	1,078.1	3,177.3	2,984.6	192.72	16.487		
20,400.0	9,069.0	23,538.3	12,178.0	190.6	192.9	-168.01	-11,293.3	1,079.0	3,177.3	2,982.9	194.37	16.346		
20,500.0	9,069.0	23,638.3	12,178.0	192.2	194.5	-168.01	-11,393.3	1,079.8	3,177.3	2,981.3	196.03	16.208		
20,600.0	9,069.0	23,738.3	12,178.0	193.8	196.1	-168.01	-11,493.3	1,080.6	3,177.3	2,979.6	197.69	16.072		
20,700.0	9,069.0	23,838.3	12,178.0	195.5	197.7	-168.01	-11,593.3	1,081.4	3,177.3	2,977.9	199.34	15.939		
20,800.0	9,069.0	23,938.3	12,178.0	197.1	199.3	-168.01	-11,693.3	1,082.2	3,177.3	2,976.3	201.00	15.807		
20,900.0	9,069.0	24,038.3	12,178.0	198.7	200.9	-168.01	-11,793.3	1,083.0	3,177.3	2,974.6	202.66	15.678		
21,000.0	9,069.0	24,138.3	12,178.0	200.3	202.5	-168.01	-11,893.3	1,083.8	3,177.3	2,973.0	204.32	15.551		
21,100.0	9,069.0	24,238.3	12,178.0	202.0	204.1	-168.01	-11,993.3	1,084.7	3,177.3	2,971.3	205.98	15.425		
21,200.0	9,069.0	24,338.3	12,178.0	203.6	205.7	-168.01	-12,093.2	1,085.5	3,177.3	2,969.7	207.64	15.302		
21,300.0	9,069.0	24,438.3	12,178.0	205.2	207.4	-168.01	-12,193.2	1,086.3	3,177.3	2,968.0	209.30	15.181		
21,400.0	9,069.0	24,538.3	12,178.0	206.9	209.0	-168.01	-12,293.2	1,087.1	3,177.3	2,966.3	210.96	15.061		
21,404.1	9,069.0	24,542.4	12,178.0	206.9	209.0	-168.01	-12,297.3	1,087.1	3,177.3	2,966.3	211.02	15.057		
21,500.0	9,069.0	24,542.7	12,178.0	208.5	209.0	-168.01	-12,297.7	1,087.1	3,178.7	2,967.0	211.76	15.011		
21,544.1	9,069.0	24,542.7	12,178.0	209.2	209.0	-168.01	-12,297.7	1,087.1	3,180.4	2,968.3	212.05	14.998		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #244H - Wellbore #1 - 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		
0.0	0.0	3.0	3.0	0.0	0.0	-45.45	29.7	-30.2	42.4					
100.0	100.0	103.0	103.0	0.1	0.1	-45.45	29.7	-30.2	42.4	42.1	0.27	158.592		
200.0	200.0	203.0	203.0	0.5	0.5	-45.45	29.7	-30.2	42.4	41.4	0.98	43.042		
300.0	300.0	303.0	303.0	0.8	0.9	-45.45	29.7	-30.2	42.4	40.7	1.70	24.900		
400.0	400.0	403.0	403.0	1.2	1.2	-45.45	29.7	-30.2	42.4	39.9	2.42	17.517		
500.0	500.0	503.0	503.0	1.6	1.6	-45.45	29.7	-30.2	42.4	39.2	3.13	13.511		
600.0	600.0	603.0	603.0	1.9	1.9	-45.45	29.7	-30.2	42.4	38.5	3.85	10.996		
700.0	700.0	703.0	703.0	2.3	2.3	-45.45	29.7	-30.2	42.4	37.8	4.57	9.270		
800.0	800.0	803.0	803.0	2.6	2.6	-45.45	29.7	-30.2	42.4	37.1	5.29	8.013		
900.0	900.0	903.0	903.0	3.0	3.0	-45.45	29.7	-30.2	42.4	36.4	6.00	7.056		
1,000.0	1,000.0	1,003.0	1,003.0	3.4	3.4	-45.45	29.7	-30.2	42.4	35.6	6.72	6.303		
1,100.0	1,100.0	1,103.0	1,103.0	3.7	3.7	-45.45	29.7	-30.2	42.4	34.9	7.44	5.695		
1,200.0	1,200.0	1,203.0	1,203.0	4.1	4.1	-45.45	29.7	-30.2	42.4	34.2	8.15	5.195		
1,300.0	1,300.0	1,303.0	1,303.0	4.4	4.4	-45.45	29.7	-30.2	42.4	33.5	8.87	4.775		
1,400.0	1,400.0	1,403.0	1,403.0	4.8	4.8	-45.45	29.7	-30.2	42.4	32.8	9.59	4.418		
1,500.0	1,500.0	1,503.0	1,503.0	5.1	5.2	-45.45	29.7	-30.2	42.4	32.0	10.30	4.110		
1,600.0	1,600.0	1,603.0	1,603.0	5.5	5.5	-77.73	29.7	-30.2	42.2	31.1	11.02	3.826		
1,700.0	1,700.0	1,703.0	1,703.0	5.9	5.9	-81.25	29.7	-30.2	41.7	29.9	11.73	3.552		
1,800.0	1,799.9	1,802.9	1,802.9	6.2	6.2	-87.25	29.7	-30.2	41.2	28.8	12.45	3.313		
1,835.8	1,835.6	1,838.6	1,838.6	6.3	6.4	-90.00	29.7	-30.2	41.2	28.5	12.70	3.243 CC		
1,900.0	1,899.7	1,902.7	1,902.7	6.6	6.6	-95.70	29.7	-30.2	41.4	28.2	13.16	3.145 ES		
2,000.0	1,999.4	2,002.4	2,002.4	6.9	6.9	-106.14	29.7	-30.2	42.9	29.0	13.88	3.091		
2,100.0	2,098.9	2,101.9	2,101.9	7.3	7.3	-117.49	29.7	-30.2	46.5	31.9	14.59	3.186		
2,200.0	2,198.3	2,201.3	2,201.3	7.7	7.7	-128.38	29.7	-30.2	52.7	37.4	15.31	3.442		
2,300.0	2,297.4	2,300.4	2,300.4	8.0	8.0	-137.83	29.7	-30.2	61.7	45.7	16.02	3.850		
2,400.0	2,396.4	2,400.6	2,399.4	8.4	8.4	-145.19	29.7	-30.2	72.6	55.9	16.74	4.339		
2,500.0	2,495.5	2,501.5	2,498.5	8.8	8.7	-150.58	29.7	-30.2	84.5	67.0	17.46	4.838		
2,600.0	2,594.5	2,602.5	2,597.5	9.2	9.1	-154.62	29.7	-30.2	96.9	78.7	18.18	5.328		
2,700.0	2,693.5	2,703.5	2,696.5	9.6	9.5	-157.73	29.7	-30.2	109.6	90.7	18.90	5.799		
2,800.0	2,792.5	2,804.5	2,795.5	9.9	9.8	-160.19	29.7	-30.2	122.6	103.0	19.62	6.249		
2,900.0	2,891.6	2,905.4	2,894.6	10.3	10.2	-162.18	29.7	-30.2	135.8	115.5	20.35	6.676		
3,000.0	2,990.6	3,006.4	2,993.6	10.7	10.5	-163.82	29.7	-30.2	149.1	128.1	21.07	7.079		
3,100.0	3,089.6	3,107.4	3,092.6	11.1	10.9	-165.18	29.7	-30.2	162.6	140.8	21.79	7.460		
3,200.0	3,188.6	3,208.4	3,191.6	11.5	11.3	-166.34	29.7	-30.2	176.1	153.6	22.52	7.820		
3,300.0	3,287.7	3,309.3	3,290.7	11.9	11.6	-167.33	29.7	-30.2	189.6	166.4	23.24	8.160		
3,400.0	3,386.7	3,389.7	3,389.7	12.3	11.9	-168.19	29.7	-30.2	203.2	179.3	23.89	8.507		
3,500.0	3,485.7	3,488.7	3,488.7	12.7	12.3	-168.95	29.7	-30.2	216.9	192.3	24.61	8.814		
3,600.0	3,584.8	3,587.8	3,587.8	13.1	12.6	-169.61	29.7	-30.2	230.6	205.2	25.33	9.104		
3,667.1	3,651.2	3,654.2	3,654.2	13.4	12.9	-170.01	29.7	-30.2	239.8	213.9	25.81	9.290		
3,700.0	3,683.8	3,686.8	3,686.8	13.5	13.0	-170.20	29.7	-30.2	244.1	218.1	26.04	9.374		
3,800.0	3,783.1	3,786.1	3,786.1	13.9	13.3	-170.68	29.7	-30.2	255.7	229.0	26.76	9.556		
3,900.0	3,882.7	3,885.7	3,885.7	14.3	13.7	-171.02	29.7	-30.2	264.8	237.3	27.48	9.635		
4,000.0	3,982.5	3,985.5	3,985.5	14.7	14.1	-171.25	29.7	-30.2	271.3	243.1	28.20	9.620		
4,100.0	4,082.4	4,085.4	4,085.4	15.0	14.4	-171.39	29.7	-30.2	275.1	246.2	28.91	9.517		
4,200.5	4,182.8	4,185.8	4,185.8	15.4	14.8	-140.31	29.7	-30.2	276.4	246.8	29.63	9.331		
4,300.0	4,282.4	4,285.4	4,285.4	15.7	15.1	-140.31	29.7	-30.2	276.4	246.1	30.34	9.113		
4,400.0	4,382.4	4,385.4	4,385.4	16.1	15.5	-140.31	29.7	-30.2	276.4	245.4	31.05	8.904		
4,500.0	4,482.4	4,485.4	4,485.4	16.4	15.8	-140.31	29.7	-30.2	276.4	244.7	31.76	8.704		
4,600.0	4,582.4	4,585.4	4,585.4	16.7	16.2	-140.31	29.7	-30.2	276.4	244.0	32.47	8.513		
4,700.0	4,682.4	4,685.4	4,685.4	17.1	16.6	-140.31	29.7	-30.2	276.4	243.3	33.18	8.331		
4,800.0	4,782.4	4,785.4	4,785.4	17.4	16.9	-140.31	29.7	-30.2	276.4	242.6	33.90	8.156		
4,900.0	4,882.4	4,885.4	4,885.4	17.8	17.3	-140.31	29.7	-30.2	276.4	241.8	34.61	7.988		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #244H - Wellbore #1 - 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		
5,000.0	4,982.4	4,985.4	4,985.4	18.1	17.6	-140.31	29.7	-30.2	276.4	241.1	35.32	7.826		
5,100.0	5,082.4	5,085.4	5,085.4	18.5	18.0	-140.31	29.7	-30.2	276.4	240.4	36.04	7.671		
5,200.0	5,182.4	5,185.4	5,185.4	18.8	18.4	-140.31	29.7	-30.2	276.4	239.7	36.75	7.523		
5,300.0	5,282.4	5,285.4	5,285.4	19.2	18.7	-140.31	29.7	-30.2	276.4	239.0	37.46	7.379		
5,400.0	5,382.4	5,385.4	5,385.4	19.5	19.1	-140.31	29.7	-30.2	276.4	238.3	38.18	7.241		
5,500.0	5,482.4	5,485.4	5,485.4	19.9	19.4	-140.31	29.7	-30.2	276.4	237.6	38.89	7.109		
5,600.0	5,582.4	5,585.4	5,585.4	20.2	19.8	-140.31	29.7	-30.2	276.4	236.8	39.60	6.980		
5,700.0	5,682.4	5,685.4	5,685.4	20.6	20.2	-140.31	29.7	-30.2	276.4	236.1	40.32	6.857		
5,800.0	5,782.4	5,785.4	5,785.4	20.9	20.5	-140.31	29.7	-30.2	276.4	235.4	41.03	6.738		
5,900.0	5,882.4	5,885.4	5,885.4	21.3	20.9	-140.31	29.7	-30.2	276.4	234.7	41.75	6.622		
6,000.0	5,982.4	5,985.4	5,985.4	21.6	21.2	-140.31	29.7	-30.2	276.4	234.0	42.46	6.511		
6,100.0	6,082.4	6,085.4	6,085.4	22.0	21.6	-140.31	29.7	-30.2	276.4	233.3	43.17	6.403		
6,200.0	6,182.4	6,185.4	6,185.4	22.3	21.9	-140.31	29.7	-30.2	276.4	232.6	43.89	6.299		
6,300.0	6,282.4	6,285.4	6,285.4	22.7	22.3	-140.31	29.7	-30.2	276.4	231.8	44.60	6.198		
6,400.0	6,382.4	6,385.4	6,385.4	23.0	22.7	-140.31	29.7	-30.2	276.4	231.1	45.32	6.100		
6,500.0	6,482.4	6,485.4	6,485.4	23.4	23.0	-140.31	29.7	-30.2	276.4	230.4	46.03	6.006		
6,600.0	6,582.4	6,585.4	6,585.4	23.7	23.4	-140.31	29.7	-30.2	276.4	229.7	46.75	5.914		
6,700.0	6,682.4	6,685.4	6,685.4	24.1	23.7	-140.31	29.7	-30.2	276.4	229.0	47.46	5.825		
6,800.0	6,782.4	6,785.4	6,785.4	24.4	24.1	-140.31	29.7	-30.2	276.4	228.3	48.18	5.738		
6,900.0	6,882.4	6,885.4	6,885.4	24.8	24.5	-140.31	29.7	-30.2	276.4	227.6	48.89	5.654		
7,000.0	6,982.4	6,985.4	6,985.4	25.1	24.8	-140.31	29.7	-30.2	276.4	226.8	49.61	5.573		
7,100.0	7,082.4	7,085.4	7,085.4	25.5	25.2	-140.31	29.7	-30.2	276.4	226.1	50.32	5.494		
7,200.0	7,182.4	7,185.4	7,185.4	25.8	25.5	-140.31	29.7	-30.2	276.4	225.4	51.04	5.417		
7,300.0	7,282.4	7,285.4	7,285.4	26.2	25.9	-140.31	29.7	-30.2	276.4	224.7	51.75	5.342		
7,400.0	7,382.4	7,385.4	7,385.4	26.5	26.2	-140.31	29.7	-30.2	276.4	224.0	52.47	5.269		
7,500.0	7,482.4	7,485.4	7,485.4	26.9	26.6	-140.31	29.7	-30.2	276.4	223.3	53.18	5.198		
7,600.0	7,582.4	7,585.4	7,585.4	27.2	27.0	-140.31	29.7	-30.2	276.4	222.6	53.90	5.129		
7,700.0	7,682.4	7,685.4	7,685.4	27.6	27.3	-140.31	29.7	-30.2	276.4	221.8	54.61	5.062		
7,800.0	7,782.4	7,785.4	7,785.4	27.9	27.7	-140.31	29.7	-30.2	276.4	221.1	55.33	4.997		
7,900.0	7,882.4	7,885.4	7,885.4	28.3	28.0	-140.31	29.7	-30.2	276.4	220.4	56.04	4.933		
8,000.0	7,982.4	7,985.4	7,985.4	28.7	28.4	-140.31	29.7	-30.2	276.4	219.7	56.76	4.871		
8,100.0	8,082.4	8,085.4	8,085.4	29.0	28.8	-140.31	29.7	-30.2	276.4	219.0	57.47	4.810		
8,200.0	8,182.4	8,185.4	8,185.4	29.4	29.1	-140.31	29.7	-30.2	276.4	218.3	58.19	4.751		
8,300.0	8,282.4	8,289.2	8,289.2	29.7	29.5	-140.38	30.0	-29.5	275.9	216.9	58.92	4.682		
8,400.0	8,382.4	8,393.5	8,393.5	30.1	29.8	-140.63	31.0	-27.2	273.7	214.1	59.64	4.589		
8,500.0	8,482.4	8,497.8	8,497.7	30.4	30.2	-141.08	32.6	-23.0	269.9	209.6	60.34	4.473		
8,513.6	8,496.0	8,512.0	8,511.8	30.5	30.3	-141.16	32.9	-22.3	269.3	208.9	60.43	4.456		
8,550.0	8,532.3	8,549.8	8,549.6	30.6	30.4	51.32	33.8	-20.3	266.7	206.1	60.68	4.396		
8,600.0	8,582.0	8,601.4	8,601.1	30.7	30.6	52.40	35.0	-17.2	260.5	199.5	61.00	4.271		
8,650.0	8,631.1	8,652.2	8,651.8	30.9	30.7	54.55	36.5	-13.7	251.4	190.1	61.30	4.101		
8,700.0	8,679.1	8,701.8	8,701.1	31.0	30.9	57.88	38.0	-9.9	239.7	178.1	61.59	3.892		
8,750.0	8,725.7	8,749.7	8,748.9	31.2	31.1	62.55	39.7	-5.8	225.9	164.1	61.86	3.652		
8,800.0	8,770.6	8,795.6	8,794.6	31.3	31.2	68.68	41.4	-1.6	211.0	148.9	62.11	3.397		
8,850.0	8,813.4	8,839.2	8,837.9	31.4	31.4	76.22	43.2	2.8	196.2	133.9	62.34	3.147		
8,900.0	8,853.7	8,880.0	8,878.4	31.5	31.5	84.87	45.0	7.1	183.4	120.8	62.56	2.931		
8,950.0	8,891.4	8,917.9	8,916.0	31.6	31.7	93.93	46.8	11.4	175.0	112.2	62.78	2.787		
8,983.2	8,914.8	8,941.3	8,939.2	31.6	31.8	99.74	47.9	14.1	173.2	110.2	62.94	2.751 SF		
9,000.0	8,926.0	8,952.4	8,950.3	31.6	31.8	102.51	48.4	15.5	173.7	110.6	63.03	2.755		
9,050.0	8,957.4	8,983.5	8,981.0	31.7	31.9	109.81	50.0	19.3	181.5	118.2	63.28	2.867		
9,100.0	8,985.2	9,010.8	9,008.1	31.8	32.0	115.35	51.4	22.8	198.9	135.3	63.53	3.130		
9,150.0	9,009.4	9,033.3	9,030.4	32.0	32.1	118.70	52.6	25.7	225.0	161.2	63.74	3.529		
9,200.0	9,029.6	9,052.2	9,049.1	32.1	32.2	120.04	53.6	28.1	257.9	194.0	63.90	4.037		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #244H - Wellbore #1 - 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		
9,250.0	9,045.7	9,067.1	9,063.9	32.3	32.2	119.13	54.4	30.0	296.1	232.1	64.00	4.626		
9,300.0	9,057.7	9,077.8	9,074.4	32.4	32.2	115.57	55.0	31.4	337.9	273.9	64.07	5.275		
9,350.0	9,065.4	9,084.2	9,080.8	32.6	32.3	108.69	55.3	32.3	382.4	318.3	64.11	5.965		
9,400.0	9,068.8	9,086.4	9,082.9	32.8	32.3	97.79	55.4	32.5	428.5	364.4	64.12	6.683		
9,413.6	9,069.0	9,086.2	9,082.8	32.8	32.3	94.09	55.4	32.5	441.3	377.2	64.12	6.883		
9,500.0	9,069.0	9,083.9	9,080.5	33.2	32.3	92.97	55.3	32.2	522.9	458.8	64.11	8.156		
9,600.0	9,069.0	9,080.9	9,077.5	33.7	32.3	91.71	55.1	31.8	618.0	554.0	64.09	9.643		
9,700.0	9,069.0	9,077.3	9,074.0	34.2	32.2	90.56	55.0	31.4	713.6	649.6	64.08	11.137		
9,800.0	9,069.0	9,073.3	9,070.0	34.8	32.2	89.52	54.7	30.8	809.4	745.3	64.07	12.633		
9,900.0	9,069.0	9,068.8	9,065.6	35.5	32.2	88.61	54.5	30.3	905.1	841.1	64.05	14.131		
10,005.2	9,069.0	9,063.7	9,060.4	36.2	32.2	87.78	54.2	29.6	1,005.7	941.7	64.04	15.705		
10,100.0	9,069.0	9,058.7	9,055.6	37.0	32.2	86.85	54.0	29.0	1,096.6	1,032.6	64.03	17.128		
10,200.0	9,069.0	9,053.6	9,050.5	37.8	32.2	85.87	53.7	28.3	1,193.2	1,129.2	64.02	18.638		
10,300.0	9,069.0	9,048.4	9,045.3	38.6	32.1	84.91	53.4	27.6	1,290.2	1,226.2	64.01	20.157		
10,400.0	9,069.0	9,043.2	9,040.2	39.6	32.1	83.94	53.2	27.0	1,387.7	1,323.7	64.00	21.681		
10,500.0	9,069.0	9,038.0	9,035.1	40.5	32.1	82.99	52.9	26.3	1,485.4	1,421.4	64.00	23.210		
10,600.0	9,069.0	9,032.9	9,030.0	41.5	32.1	82.05	52.6	25.6	1,583.5	1,519.5	64.00	24.742		
10,700.0	9,069.0	9,027.7	9,024.8	42.6	32.1	81.11	52.3	25.0	1,681.7	1,617.7	64.00	26.278		
10,800.0	9,069.0	9,022.5	9,019.7	43.7	32.0	80.18	52.1	24.3	1,780.1	1,716.2	64.00	27.816		
10,900.0	9,069.0	9,017.3	9,014.6	44.8	32.0	79.27	51.8	23.6	1,878.7	1,814.7	64.00	29.355		
11,000.0	9,069.0	9,012.2	9,009.5	45.9	32.0	78.36	51.5	23.0	1,977.4	1,913.4	64.00	30.896		
11,100.0	9,069.0	9,007.0	9,004.3	47.1	32.0	77.46	51.2	22.3	2,076.3	2,012.2	64.01	32.438		
11,200.0	9,069.0	9,001.8	8,999.2	48.3	32.0	76.57	51.0	21.6	2,175.2	2,111.2	64.01	33.981		
11,300.0	9,069.0	9,003.4	8,994.1	49.6	32.0	75.69	50.7	21.0	2,274.2	2,210.1	64.04	35.511		
11,400.0	9,069.0	9,008.5	8,989.0	50.8	32.0	74.82	50.4	20.3	2,373.2	2,309.2	64.09	37.032		
11,500.0	9,069.0	8,987.7	8,985.2	52.1	31.9	74.19	50.2	19.8	2,472.4	2,408.3	64.04	38.607		
11,600.0	9,069.0	8,983.1	8,980.7	53.4	31.9	73.44	50.0	19.3	2,571.6	2,507.5	64.05	40.148		
11,700.0	9,069.0	8,978.6	8,976.2	54.7	31.9	72.71	49.8	18.7	2,670.8	2,606.8	64.07	41.689		
11,800.0	9,069.0	8,974.1	8,971.8	56.1	31.9	71.99	49.5	18.1	2,770.1	2,706.0	64.08	43.229		
11,900.0	9,069.0	8,969.7	8,967.4	57.4	31.9	71.29	49.3	17.6	2,869.4	2,805.3	64.10	44.768		
12,000.0	9,069.0	8,965.4	8,963.1	58.8	31.8	70.61	49.1	17.0	2,968.8	2,904.7	64.11	46.306		
12,100.0	9,069.0	8,961.1	8,958.8	60.2	31.8	69.94	48.9	16.5	3,068.2	3,004.1	64.13	47.842		
12,200.0	9,069.0	8,956.8	8,954.6	61.6	31.8	69.28	48.6	16.0	3,167.7	3,103.5	64.15	49.378		
12,300.0	9,069.0	8,952.6	8,950.4	63.0	31.8	68.64	48.4	15.5	3,267.1	3,202.9	64.17	50.912		
12,400.0	9,069.0	8,948.4	8,946.3	64.4	31.8	68.02	48.2	15.0	3,366.6	3,302.4	64.19	52.445		
12,500.0	9,069.0	8,944.3	8,942.2	65.8	31.8	67.41	48.0	14.5	3,466.1	3,401.9	64.22	53.976		
12,600.0	9,069.0	8,940.2	8,938.2	67.3	31.8	66.81	47.8	14.0	3,565.7	3,501.4	64.24	55.505		
12,700.0	9,069.0	8,936.2	8,934.2	68.7	31.7	66.22	47.6	13.5	3,665.2	3,600.9	64.27	57.032		
12,800.0	9,069.0	8,932.2	8,930.2	70.2	31.7	65.65	47.4	13.0	3,764.8	3,700.5	64.29	58.558		
12,900.0	9,069.0	8,928.2	8,926.3	71.6	31.7	65.09	47.2	12.6	3,864.4	3,800.1	64.32	60.081		
13,000.0	9,069.0	8,924.3	8,922.4	73.1	31.7	64.55	47.1	12.1	3,964.0	3,899.6	64.35	61.603		
13,100.0	9,069.0	8,920.5	8,918.6	74.6	31.7	64.01	46.9	11.7	4,063.6	3,999.2	64.38	63.122		
13,200.0	9,069.0	8,916.6	8,914.8	76.1	31.7	63.49	46.7	11.2	4,163.2	4,098.8	64.41	64.639		
13,300.0	9,069.0	8,912.9	8,911.0	77.6	31.7	62.98	46.5	10.8	4,262.9	4,198.4	64.44	66.153		
13,400.0	9,069.0	8,909.1	8,907.3	79.1	31.6	62.48	46.3	10.4	4,362.5	4,298.1	64.47	67.666		
13,500.0	9,069.0	8,905.4	8,903.6	80.6	31.6	61.99	46.2	9.9	4,462.2	4,397.7	64.51	69.175		
13,600.0	9,069.0	18,138.2	13,591.0	82.1	90.0	-175.83	-4,496.2	692.9	4,531.0	4,448.5	82.53	54.904		
13,700.0	9,069.0	18,238.2	13,591.0	83.6	91.4	-175.83	-4,596.2	693.8	4,531.0	4,447.0	83.95	53.972		
13,800.0	9,069.0	18,338.2	13,591.0	85.2	92.8	-175.83	-4,696.2	694.6	4,531.0	4,445.6	85.38	53.067		
13,900.0	9,069.0	18,438.2	13,591.0	86.7	94.2	-175.83	-4,796.2	695.4	4,531.0	4,444.2	86.82	52.190		
14,000.0	9,069.0	18,538.2	13,591.0	88.2	95.6	-175.83	-4,896.2	696.2	4,531.0	4,442.7	88.26	51.338		
14,100.0	9,069.0	18,638.2	13,591.0	89.8	97.0	-175.83	-4,996.2	697.0	4,531.0	4,441.3	89.70	50.511		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #244H - Wellbore #1 - BLM Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,200.0	9,069.0	18,738.2	13,591.0	91.3	98.4	-175.83	-5,096.1	697.9	4,531.0	4,439.8	91.15	49.708		
14,300.0	9,069.0	18,838.2	13,591.0	92.8	99.9	-175.83	-5,196.1	698.7	4,531.0	4,438.4	92.61	48.928		
14,400.0	9,069.0	18,938.2	13,591.0	94.4	101.3	-175.83	-5,296.1	699.5	4,531.0	4,436.9	94.06	48.169		
14,500.0	9,069.0	19,038.2	13,591.0	95.9	102.8	-175.83	-5,396.1	700.3	4,531.0	4,435.5	95.53	47.433		
14,600.0	9,069.0	19,138.2	13,591.0	97.5	104.2	-175.83	-5,496.1	701.2	4,531.0	4,434.0	96.99	46.716		
14,700.0	9,069.0	19,238.2	13,591.0	99.1	105.7	-175.83	-5,596.1	702.0	4,531.0	4,432.5	98.46	46.019		
14,800.0	9,069.0	19,338.2	13,591.0	100.6	107.1	-175.83	-5,696.1	702.8	4,531.0	4,431.1	99.93	45.341		
14,900.0	9,069.0	19,438.2	13,591.0	102.2	108.6	-175.83	-5,796.1	703.6	4,531.0	4,429.6	101.41	44.682		
15,000.0	9,069.0	19,538.2	13,591.0	103.8	110.1	-175.83	-5,896.1	704.5	4,531.0	4,428.1	102.88	44.040		
15,100.0	9,069.0	19,638.2	13,591.0	105.3	111.6	-175.83	-5,996.1	705.3	4,531.0	4,426.6	104.37	43.415		
15,200.0	9,069.0	19,738.2	13,591.0	106.9	113.1	-175.83	-6,096.1	706.1	4,531.0	4,425.2	105.85	42.806		
15,300.0	9,069.0	19,838.2	13,591.0	108.5	114.5	-175.83	-6,196.1	706.9	4,531.0	4,423.7	107.34	42.213		
15,400.0	9,069.0	19,938.2	13,591.0	110.1	116.0	-175.83	-6,296.1	707.7	4,531.0	4,422.2	108.83	41.636		
15,500.0	9,069.0	20,038.2	13,591.0	111.6	117.5	-175.83	-6,396.1	708.6	4,531.0	4,420.7	110.32	41.072		
15,600.0	9,069.0	20,138.2	13,591.0	113.2	119.0	-175.83	-6,496.1	709.4	4,531.0	4,419.2	111.81	40.524		
15,700.0	9,069.0	20,238.2	13,591.0	114.8	120.5	-175.83	-6,596.1	710.2	4,531.0	4,417.7	113.31	39.988		
15,800.0	9,069.0	20,338.2	13,591.0	116.4	122.1	-175.83	-6,696.1	711.0	4,531.0	4,416.2	114.81	39.466		
15,900.0	9,069.0	20,438.2	13,591.0	118.0	123.6	-175.83	-6,796.1	711.9	4,531.0	4,414.7	116.31	38.957		
16,000.0	9,069.0	20,538.2	13,591.0	119.6	125.1	-175.83	-6,896.1	712.7	4,531.0	4,413.2	117.81	38.460		
16,100.0	9,069.0	20,638.2	13,591.0	121.2	126.6	-175.83	-6,996.1	713.5	4,531.0	4,411.7	119.32	37.975		
16,200.0	9,069.0	20,738.2	13,591.0	122.7	128.1	-175.83	-7,096.1	714.3	4,531.0	4,410.2	120.82	37.501		
16,300.0	9,069.0	20,838.2	13,591.0	124.3	129.7	-175.83	-7,196.1	715.1	4,531.0	4,408.7	122.33	37.038		
16,400.0	9,069.0	20,938.2	13,591.0	125.9	131.2	-175.83	-7,296.1	716.0	4,531.0	4,407.2	123.84	36.586		
16,500.0	9,069.0	21,038.2	13,591.0	127.5	132.7	-175.83	-7,396.1	716.8	4,531.0	4,405.7	125.36	36.145		
16,600.0	9,069.0	21,138.2	13,591.0	129.1	134.3	-175.83	-7,496.1	717.6	4,531.0	4,404.1	126.87	35.714		
16,700.0	9,069.0	21,238.2	13,591.0	130.7	135.8	-175.83	-7,596.1	718.4	4,531.0	4,402.6	128.39	35.292		
16,800.0	9,069.0	21,338.2	13,591.0	132.3	137.4	-175.83	-7,696.1	719.3	4,531.0	4,401.1	129.90	34.880		
16,900.0	9,069.0	21,438.2	13,591.0	133.9	138.9	-175.83	-7,796.1	720.1	4,531.0	4,399.6	131.42	34.477		
17,000.0	9,069.0	21,538.2	13,591.0	135.5	140.4	-175.83	-7,896.1	720.9	4,531.0	4,398.1	132.94	34.082		
17,100.0	9,069.0	21,638.2	13,591.0	137.1	142.0	-175.83	-7,996.0	721.7	4,531.0	4,396.5	134.47	33.696		
17,200.0	9,069.0	21,738.2	13,591.0	138.8	143.5	-175.83	-8,096.0	722.6	4,531.0	4,395.0	135.99	33.319		
17,300.0	9,069.0	21,838.2	13,591.0	140.4	145.1	-175.83	-8,196.0	723.4	4,531.0	4,393.5	137.51	32.950		
17,400.0	9,069.0	21,938.2	13,591.0	142.0	146.7	-175.83	-8,296.0	724.2	4,531.0	4,392.0	139.04	32.588		
17,500.0	9,069.0	22,038.2	13,591.0	143.6	148.2	-175.83	-8,396.0	725.0	4,531.0	4,390.4	140.57	32.234		
17,600.0	9,069.0	22,138.2	13,591.0	145.2	149.8	-175.83	-8,496.0	725.8	4,531.0	4,388.9	142.09	31.887		
17,700.0	9,069.0	22,238.2	13,591.0	146.8	151.3	-175.83	-8,596.0	726.7	4,531.0	4,387.4	143.62	31.548		
17,800.0	9,069.0	22,338.2	13,591.0	148.4	152.9	-175.83	-8,696.0	727.5	4,531.0	4,385.9	145.15	31.215		
17,900.0	9,069.0	22,438.2	13,591.0	150.0	154.5	-175.83	-8,796.0	728.3	4,531.0	4,384.3	146.69	30.889		
18,000.0	9,069.0	22,538.2	13,591.0	151.6	156.0	-175.83	-8,896.0	729.1	4,531.0	4,382.8	148.22	30.570		
18,100.0	9,069.0	22,638.2	13,591.0	153.3	157.6	-175.83	-8,996.0	730.0	4,531.0	4,381.3	149.75	30.257		
18,200.0	9,069.0	22,738.2	13,591.0	154.9	159.2	-175.83	-9,096.0	730.8	4,531.0	4,379.7	151.29	29.950		
18,300.0	9,069.0	22,838.2	13,591.0	156.5	160.8	-175.83	-9,196.0	731.6	4,531.0	4,378.2	152.82	29.649		
18,400.0	9,069.0	22,938.2	13,591.0	158.1	162.3	-175.83	-9,296.0	732.4	4,531.0	4,376.7	154.36	29.354		
18,500.0	9,069.0	23,038.2	13,591.0	159.7	163.9	-175.83	-9,396.0	733.2	4,531.0	4,375.1	155.90	29.064		
18,600.0	9,069.0	23,138.2	13,591.0	161.3	165.5	-175.83	-9,496.0	734.1	4,531.0	4,373.6	157.44	28.780		
18,700.0	9,069.0	23,238.2	13,591.0	163.0	167.1	-175.83	-9,596.0	734.9	4,531.0	4,372.0	158.98	28.501		
18,800.0	9,069.0	23,338.2	13,591.0	164.6	168.6	-175.83	-9,696.0	735.7	4,531.0	4,370.5	160.52	28.228		
18,900.0	9,069.0	23,438.2	13,591.0	166.2	170.2	-175.83	-9,796.0	736.5	4,531.0	4,369.0	162.06	27.959		
19,000.0	9,069.0	23,538.2	13,591.0	167.8	171.8	-175.83	-9,896.0	737.4	4,531.0	4,367.4	163.60	27.696		
19,100.0	9,069.0	23,638.2	13,591.0	169.4	173.4	-175.83	-9,996.0	738.2	4,531.0	4,365.9	165.14	27.437		
19,200.0	9,069.0	23,738.2	13,591.0	171.1	175.0	-175.83	-10,096.0	739.0	4,531.0	4,364.3	166.69	27.183		
19,300.0	9,069.0	23,838.2	13,591.0	172.7	176.6	-175.83	-10,196.0	739.8	4,531.0	4,362.8	168.23	26.934		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Voni - Voni Fed Com #244H - Wellbore #1 - 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		
19,400.0	9,069.0	23,938.2	13,591.0	174.3	178.1	-175.83	-10,296.0	740.7	4,531.0	4,361.2	169.77	26.689		
19,500.0	9,069.0	24,038.2	13,591.0	175.9	179.7	-175.83	-10,396.0	741.5	4,531.0	4,359.7	171.32	26.448		
19,600.0	9,069.0	24,138.2	13,591.0	177.6	181.3	-175.83	-10,496.0	742.3	4,531.0	4,358.2	172.87	26.211		
19,700.0	9,069.0	24,238.2	13,591.0	179.2	182.9	-175.83	-10,596.0	743.1	4,531.0	4,356.6	174.41	25.979		
19,800.0	9,069.0	24,338.2	13,591.0	180.8	184.5	-175.83	-10,696.0	743.9	4,531.0	4,355.1	175.96	25.750		
19,900.0	9,069.0	24,438.2	13,591.0	182.4	186.1	-175.83	-10,796.0	744.8	4,531.0	4,353.5	177.51	25.526		
20,000.0	9,069.0	24,538.2	13,591.0	184.1	187.7	-175.83	-10,896.0	745.6	4,531.0	4,352.0	179.06	25.305		
20,100.0	9,069.0	24,638.2	13,591.0	185.7	189.3	-175.83	-10,995.9	746.4	4,531.0	4,350.4	180.61	25.088		
20,200.0	9,069.0	24,738.2	13,591.0	187.3	190.9	-175.83	-11,095.9	747.2	4,531.0	4,348.9	182.16	24.874		
20,300.0	9,069.0	24,838.2	13,591.0	188.9	192.5	-175.83	-11,195.9	748.1	4,531.0	4,347.3	183.71	24.664		
20,400.0	9,069.0	24,938.2	13,591.0	190.6	194.1	-175.83	-11,295.9	748.9	4,531.0	4,345.8	185.26	24.458		
20,500.0	9,069.0	25,038.2	13,591.0	192.2	195.7	-175.83	-11,395.9	749.7	4,531.0	4,344.2	186.81	24.255		
20,600.0	9,069.0	25,138.2	13,591.0	193.8	197.3	-175.83	-11,495.9	750.5	4,531.0	4,342.7	188.36	24.055		
20,700.0	9,069.0	25,238.2	13,591.0	195.5	198.9	-175.83	-11,595.9	751.3	4,531.0	4,341.1	189.91	23.858		
20,800.0	9,069.0	25,338.2	13,591.0	197.1	200.5	-175.82	-11,695.9	752.2	4,531.0	4,339.6	191.47	23.665		
20,900.0	9,069.0	25,438.2	13,591.0	198.7	202.1	-175.82	-11,795.9	753.0	4,531.0	4,338.0	193.02	23.474		
21,000.0	9,069.0	25,538.2	13,591.0	200.3	203.7	-175.82	-11,895.9	753.8	4,531.0	4,336.4	194.58	23.287		
21,100.0	9,069.0	25,638.2	13,591.0	202.0	205.3	-175.82	-11,995.9	754.6	4,531.0	4,334.9	196.13	23.102		
21,200.0	9,069.0	25,738.2	13,591.0	203.6	206.9	-175.82	-12,095.9	755.5	4,531.0	4,333.3	197.69	22.920		
21,300.0	9,069.0	25,838.2	13,591.0	205.2	208.5	-175.82	-12,195.9	756.3	4,531.0	4,331.8	199.24	22.741		
21,400.0	9,069.0	25,938.2	13,591.0	206.9	210.1	-175.82	-12,295.9	757.1	4,531.0	4,330.2	200.80	22.565		
21,500.0	9,069.0	25,941.4	13,591.0	208.5	210.2	-175.82	-12,299.1	757.1	4,532.1	4,330.6	201.44	22.498		
21,544.1	9,069.0	25,941.4	13,591.0	209.2	210.2	-175.82	-12,299.1	757.1	4,533.2	4,331.5	201.69	22.476		

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 3219.5usft

Offset Depths are relative to Offset Datum

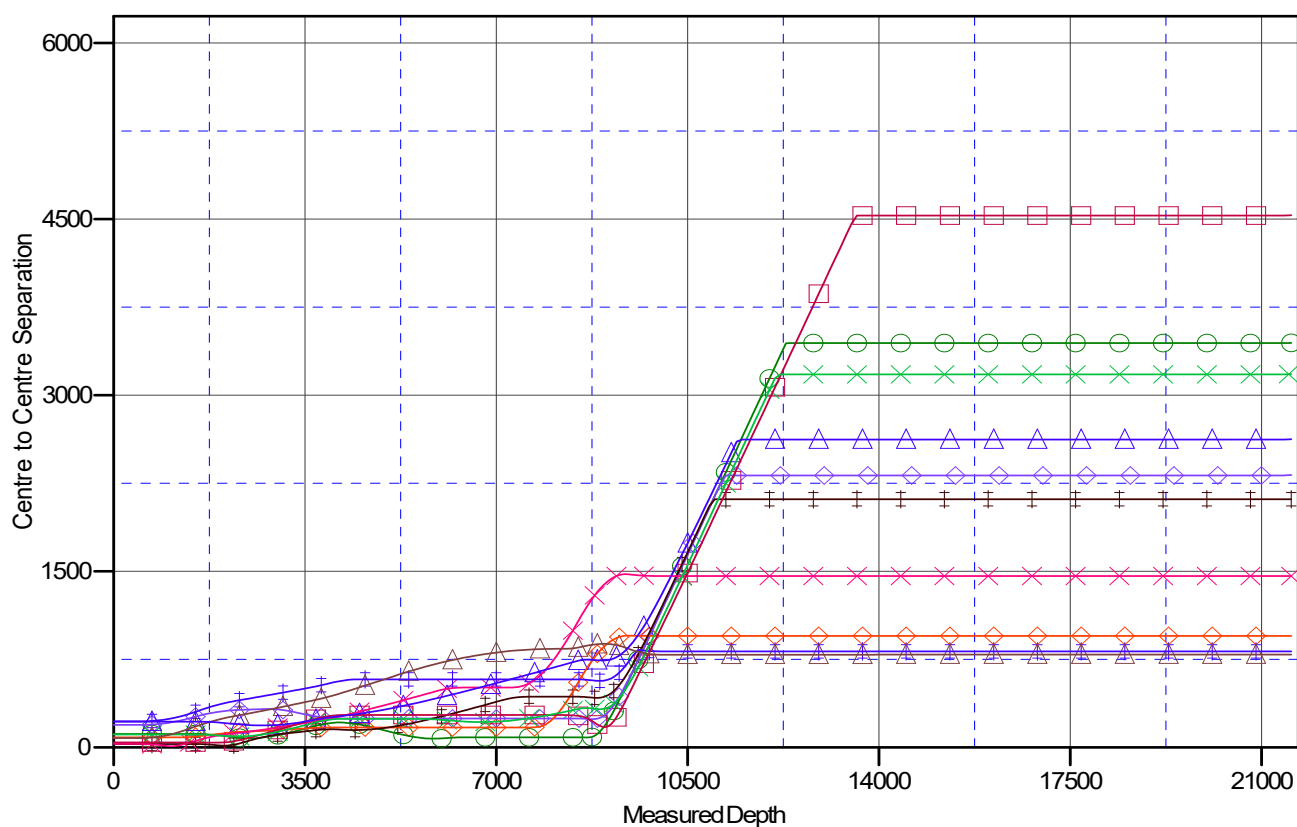
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Voni Fed Com #114H

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

Grid Convergence at Surface is: 0.29°

Ladder Plot



LEGEND

Voni Fed Com #228H, Wellbore #1, BLM Plan #1 V0	Voni Fed Com #128H, Wellbore #1, BLM Plan #1 V0	Voni Fed Com #108H, Wellbore #1, BLM Plan #1 V0
Voni Fed Com #204H, Wellbore #1, BLM Plan #1 V0	Voni Fed Com #124H, Wellbore #1, BLM Plan #1 V0	Voni Fed Com #218H, Wellbore #1, BLM Plan #1 V0
Voni Fed Com #104H, Wellbore #1, BLM Plan #1 V0	Voni Fed Com #244H, Wellbore #1, BLM Plan #1 V0	
Voni Fed Com #134H, Wellbore #1, BLM Plan #1 V0	Voni Fed Com #228H, Wellbore #1, BLM Plan #1 V0	

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

Anticollision Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Project:	Rustler Breaks	TVD Reference:	KB @ 3219.5usft
Reference Site:	Voni	MD Reference:	KB @ 3219.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Server
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 3219.5usft

Offset Depths are relative to Offset Datum

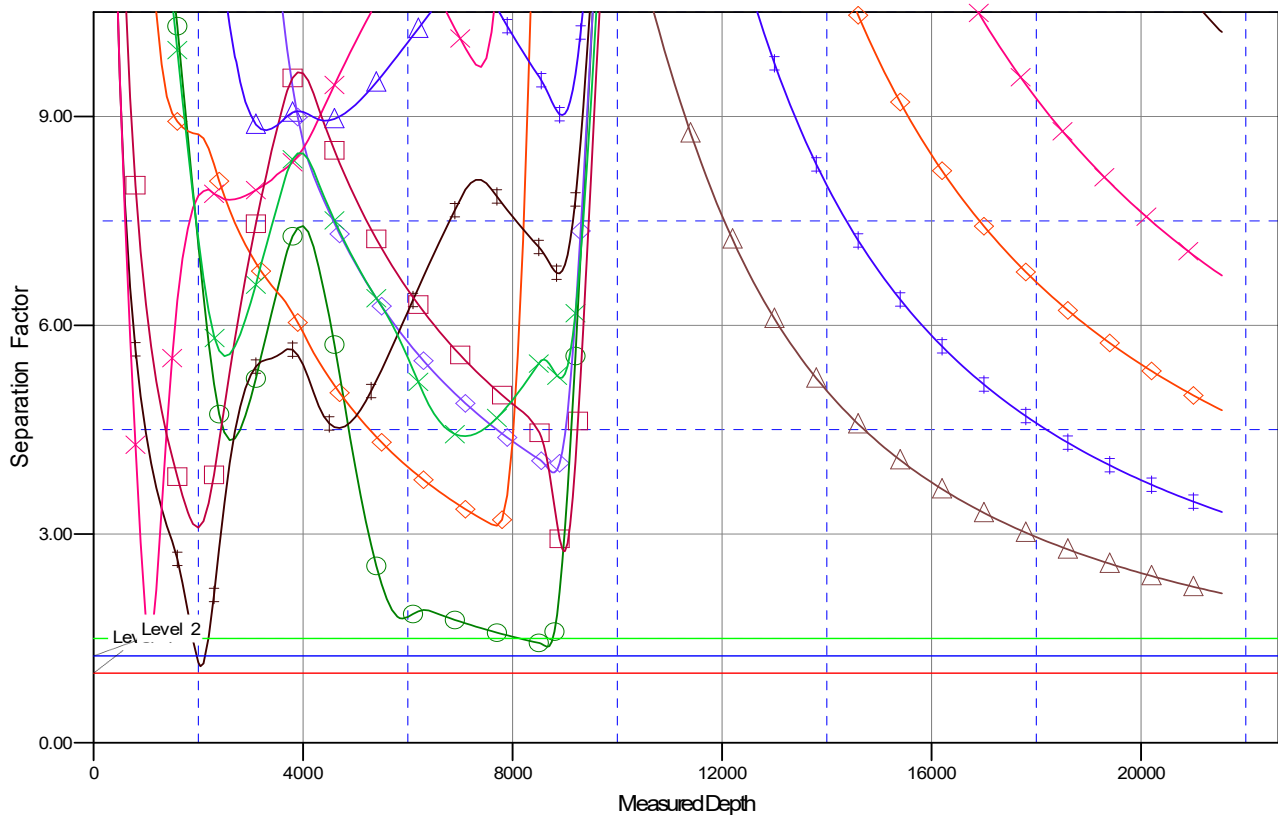
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Voni Fed Com #114H

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

Grid Convergence at Surface is: 0.29°

Separation Factor Plot



LEGEND

- Voni Fed Can #228H, Wellbore #1, BLM Plan #1 V0
- Voni Fed Can #204H, Wellbore #1, BLM Plan #1 V0
- Voni Fed Can #104H, Wellbore #1, BLM Plan #1 V0
- Voni Fed Can #134H, Wellbore #1, BLM Plan #1 V0
- Voni Fed Can #234H, Wellbore #1, BLM Plan #1 V0
- Voni Fed Can #124H, Wellbore #1, BLM Plan #1 V0
- Voni Fed Can #244H, Wellbore #1, BLM Plan #1 V0
- Voni Fed Can #228H, Wellbore #1, BLM Plan #1 V0
- Voni Fed Can #108H, Wellbore #1, BLM Plan #1 V0
- Voni Fed Can #218H, Wellbore #1, BLM Plan #1 V0

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



SURVEY PROGRAM

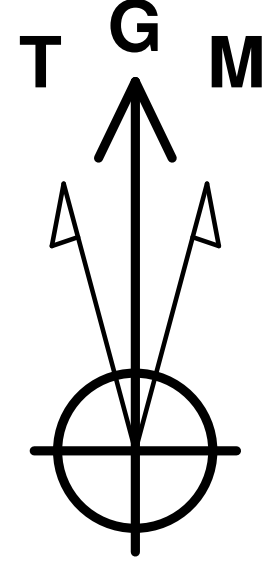
WELL DETAILS: Voni Fed Com #114H

Depth From	Depth To	Survey/Plan	Tool	+N/-S	+E/-W	Northing	GL @ 3191.0	KB @ 3219.5usft	Longitude	Slot
0.0	21544.1	BLM Plan #1 (Wellbore #1)	MWD	0.0	0.0	376734.58	Easting 671946.65	Latittude 32° 2' 4.358 N	103° 46' 42.430 W	

Company: Matador Production Company
Well: Voni Fed Com #114H
County: Eddy County, New Mexico
Wellbore: Wellbore #1
Plan: BLM Plan #1
Date: 1/23/20

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 6.46°
To convert a Magnetic Direction to a True Direction, Add 6.75° East
To convert a True Direction to a Grid Direction, Subtract 0.29°



Azimuths to Grid North
True North: -0.29°
Magnetic North: 6.46°

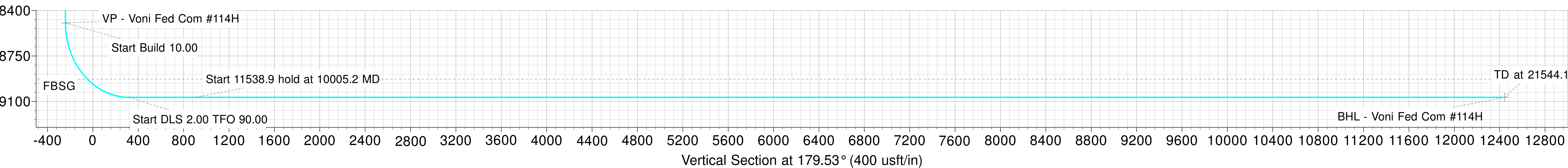
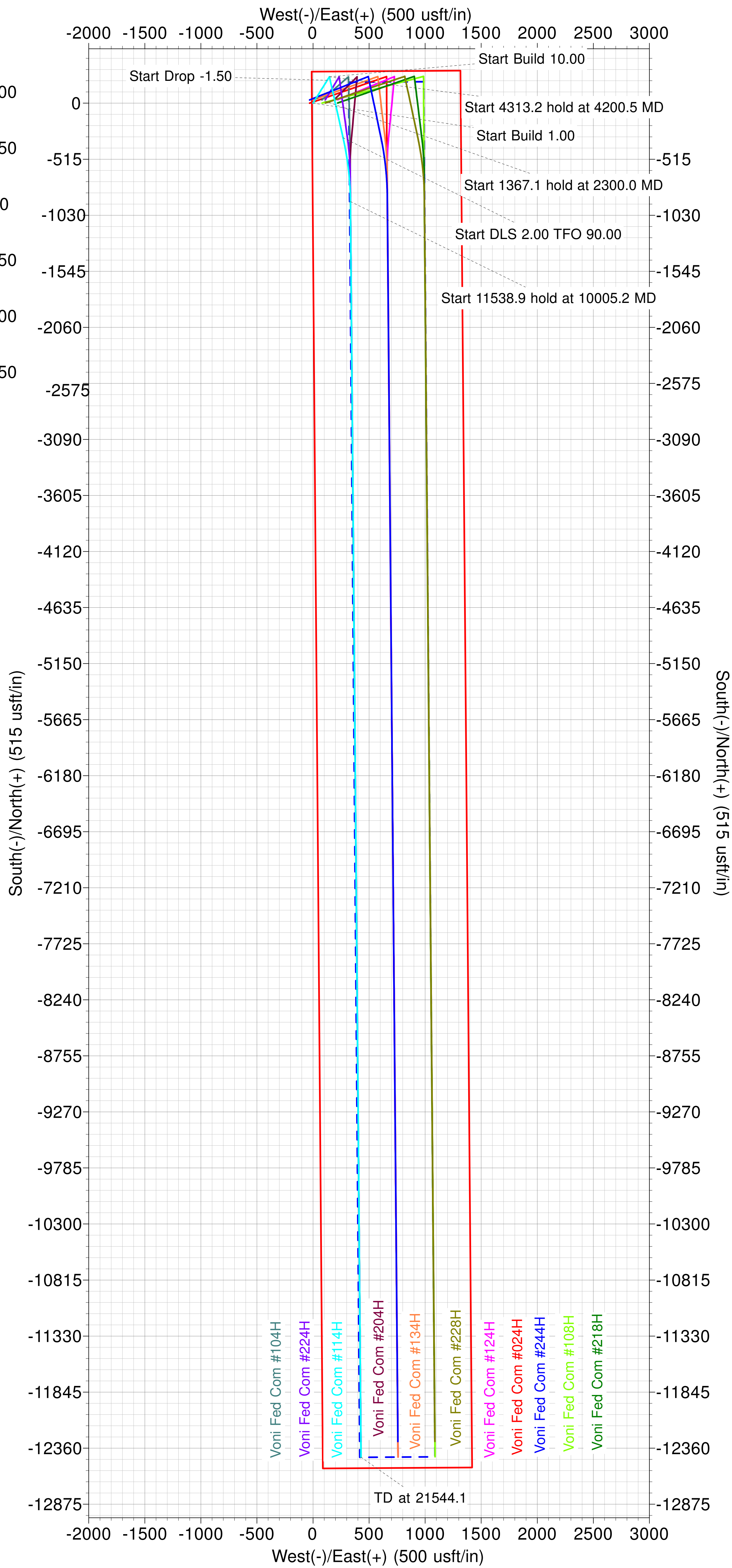
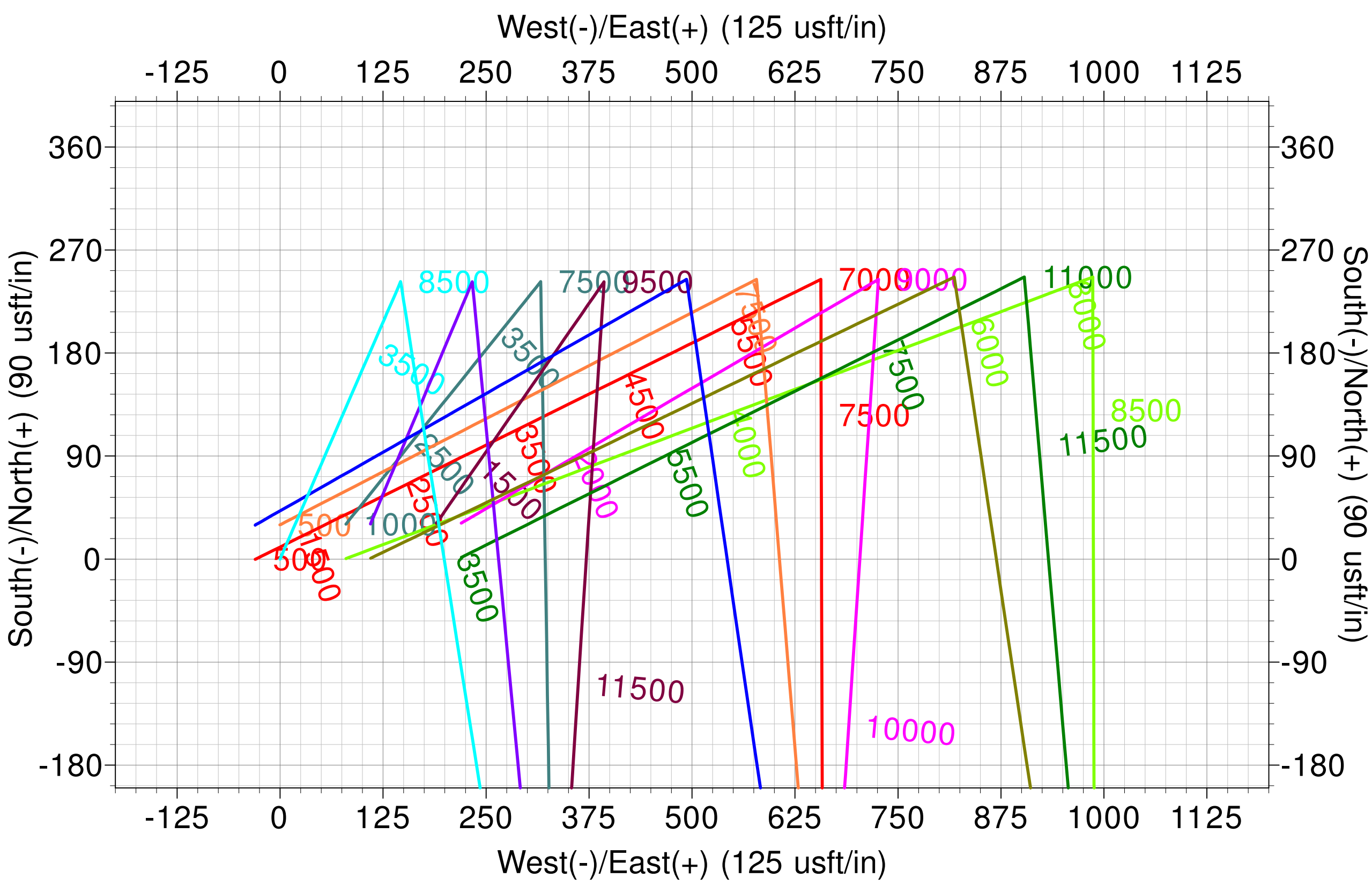
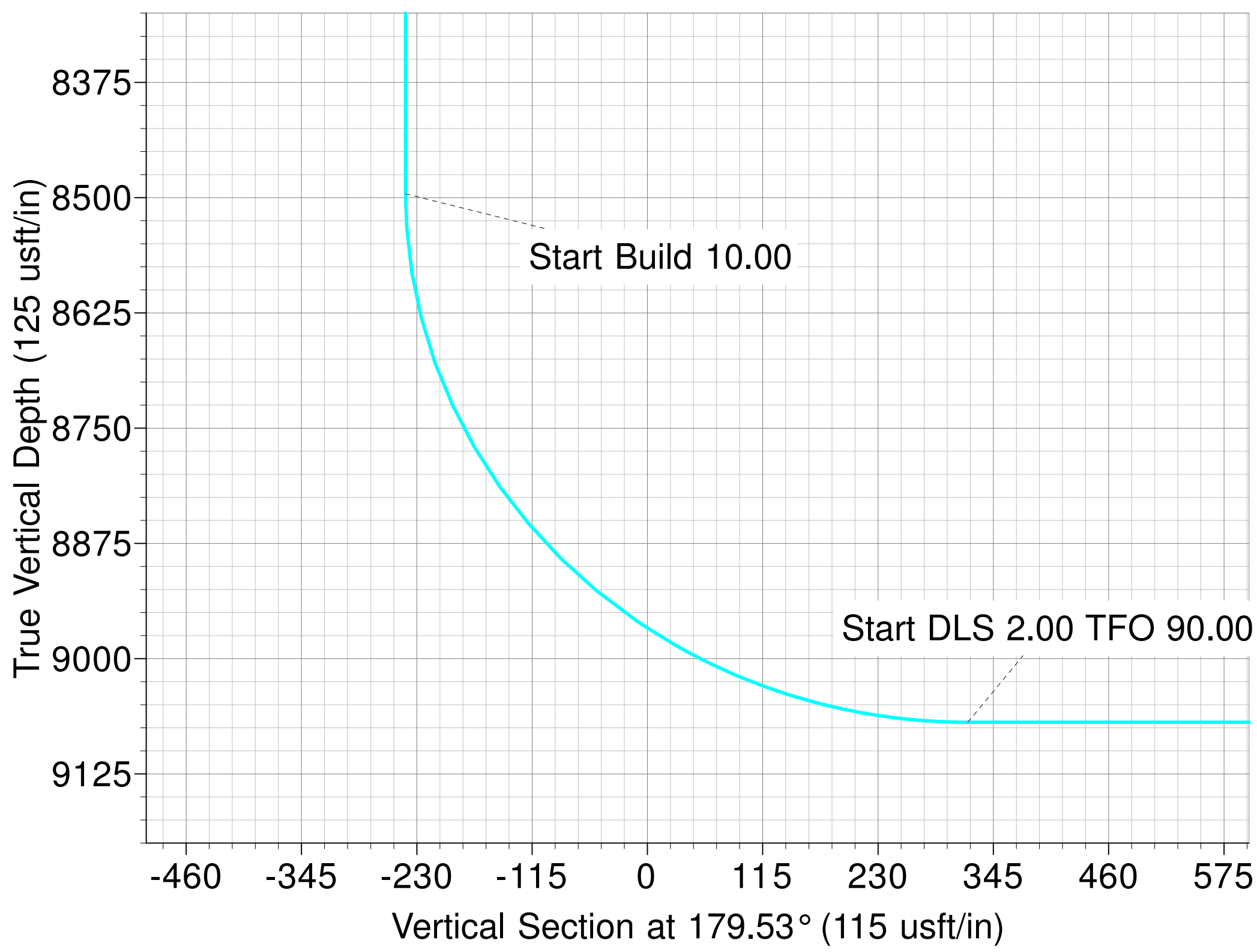
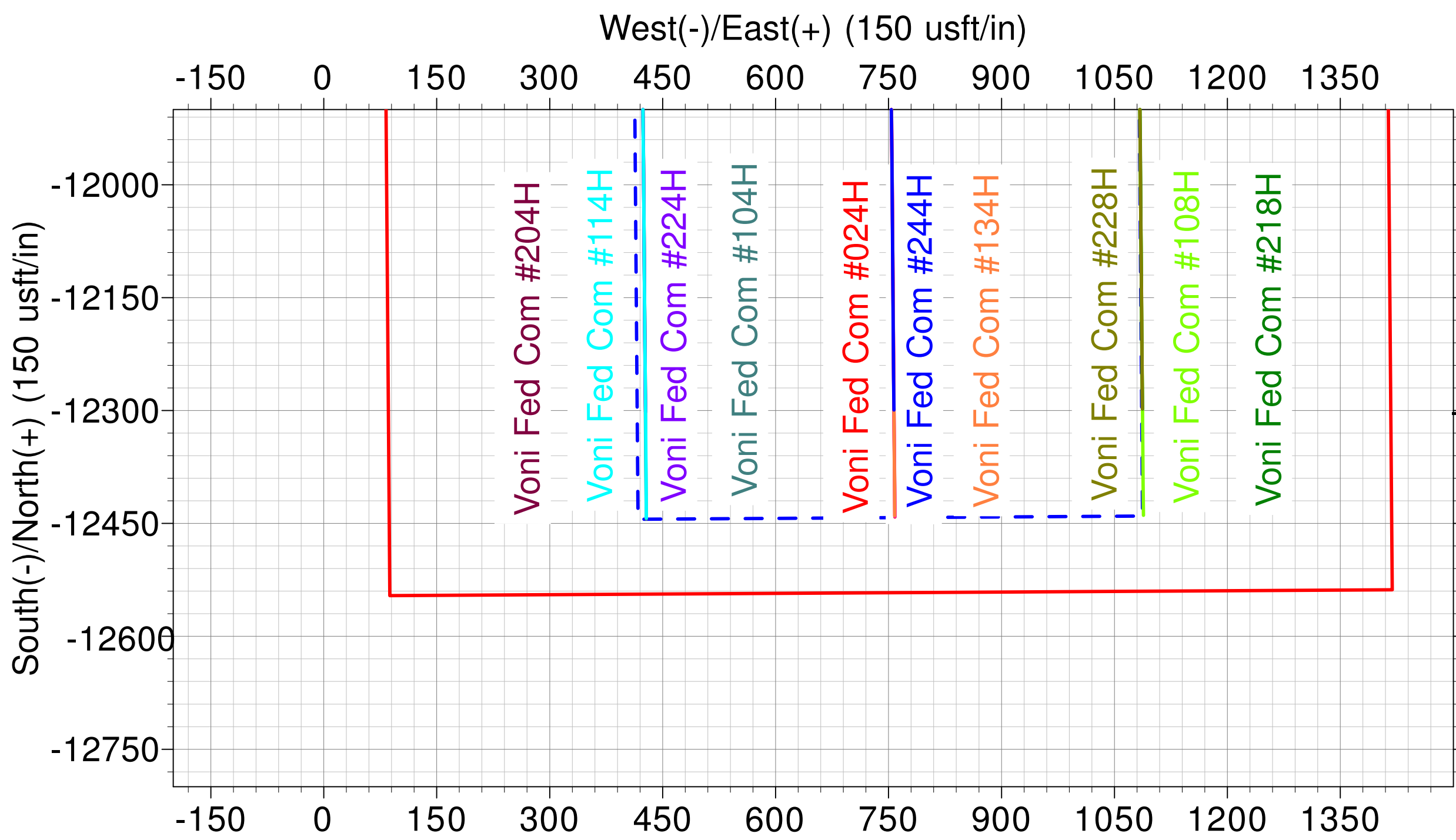
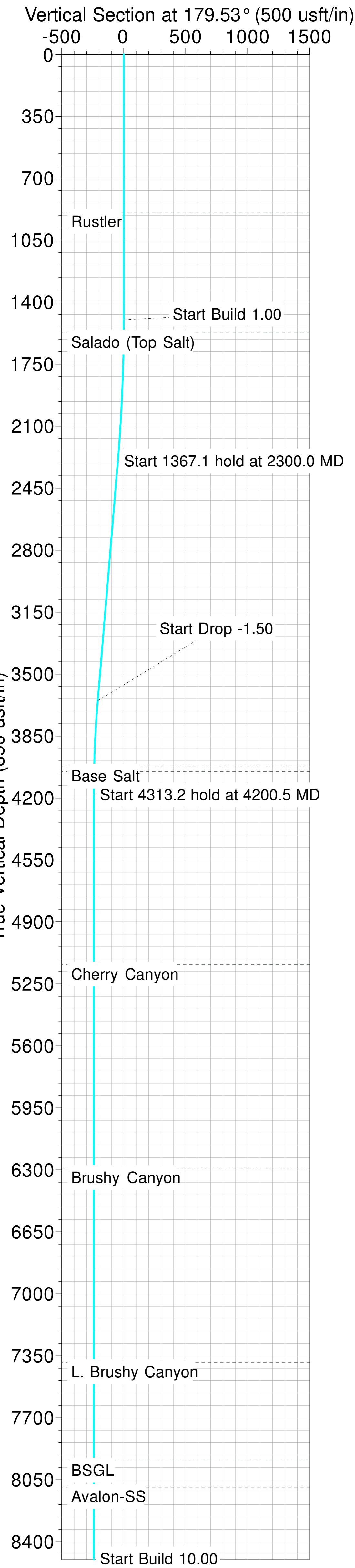
Magnetic Field
Strength: 47539.4snT
Dip Angle: 59.82°
Date: 1/21/2020
Model: IGRF2015

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
VP - Voni Fed Com #114H	8496.0	242.4	146.4	376977.00	672093.00	32° 2' 6.749 N	103° 46' 40.716 W
BHL - Voni Fed Com #114H	9069.0	-12442.8	428.4	364291.40	672375.05	32° 0' 1.195 N	103° 46' 38.198 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	Start Build 1.00
2300.0	8.00	31.12	2297.4	47.7	28.8	1.00	31.12	-47.5	Start 1367.1 hold at 2300.0 MD
3667.1	8.00	31.12	3651.2	210.6	127.2	0.00	0.00	-209.6	Start Drop -1.50
4200.5	0.00	0.00	4182.8	242.4	146.4	1.50	180.00	-241.2	Start 4313.2 hold at 4200.5 MD
8513.6	0.00	0.00	8496.0	242.4	146.4	0.00	0.00	-241.2	Start Build 10.00
9413.6	90.00	167.70	9069.0	-317.4	268.4	10.00	167.70	319.6	Start DLS 2.00 TFO 90.00
10005.2	90.00	179.53	9069.0	-904.2	334.1	2.00	90.00	906.9	Start 11538.9 hold at 10005.2 MD
21544.1	90.00	179.53	9069.0	-12442.8	428.4	0.00	0.00	12445.9	TD at 21544.1



Matador Production Company

Rustler Breaks

Voni

Voni Fed Com #114H

Wellbore #1

Plan: BLM Plan #1

Standard Planning Report

21 January, 2020

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Company:	Matador Production Company	TVD Reference:	KB @ 3219.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3219.5usft
Site:	Voni	North Reference:	Grid
Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

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

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

Well	Voni Fed Com #114H					
Well Position	+N/-S	82.9 usft	Northing:	376,734.58 usft	Latitude:	32° 2' 4.358 N
	+E/-W	3,648.2 usft	Easting:	671,946.64 usft	Longitude:	103° 46' 42.430 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,191.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	1/21/2020	6.75	59.82	47,539.38397650

Design	BLM Plan #1					
Audit Notes:						
Version:	1	Phase:	PROTOTYPE		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)		+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0		0.0	0.0	179.53	

Plan Survey Tool Program	Date	1/21/2020			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	21,544.1	BLM Plan #1 (Wellbore #1)	MWD	
				OWSG MWD - Standard	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,300.0	8.00	31.12	2,297.4	47.7	28.8	1.00	1.00	0.00	31.12	
3,667.1	8.00	31.12	3,651.2	210.6	127.2	0.00	0.00	0.00	0.00	
4,200.5	0.00	0.00	4,182.8	242.4	146.4	1.50	-1.50	0.00	180.00	
8,513.6	0.00	0.00	8,496.0	242.4	146.4	0.00	0.00	0.00	0.00	VP - Voni Fed Com #
9,413.6	90.00	167.70	9,069.0	-317.4	268.4	10.00	10.00	0.00	167.70	
10,005.2	90.00	179.53	9,069.0	-904.2	334.1	2.00	0.00	2.00	90.00	
21,544.1	90.00	179.53	9,069.0	-12,442.8	428.4	0.00	0.00	0.00	0.00	BHL - Voni Fed Com

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Company:	Matador Production Company	TVD Reference:	KB @ 3219.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3219.5usft
Site:	Voni	North Reference:	Grid
Well:	Voni Fed Com #114H	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
892.6	0.00	0.00	892.6	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 1.00									
1,573.6	0.74	31.12	1,573.6	0.4	0.2	-0.4	1.00	1.00	0.00
Salado (Top Salt)									
1,600.0	1.00	31.12	1,600.0	0.7	0.5	-0.7	1.00	1.00	0.00
1,700.0	2.00	31.12	1,700.0	3.0	1.8	-3.0	1.00	1.00	0.00
1,800.0	3.00	31.12	1,799.9	6.7	4.1	-6.7	1.00	1.00	0.00
1,900.0	4.00	31.12	1,899.7	11.9	7.2	-11.9	1.00	1.00	0.00
2,000.0	5.00	31.12	1,999.4	18.7	11.3	-18.6	1.00	1.00	0.00
2,100.0	6.00	31.12	2,098.9	26.9	16.2	-26.7	1.00	1.00	0.00
2,200.0	7.00	31.12	2,198.3	36.6	22.1	-36.4	1.00	1.00	0.00
2,300.0	8.00	31.12	2,297.4	47.7	28.8	-47.5	1.00	1.00	0.00
Start 1367.1 hold at 2300.0 MD									
2,400.0	8.00	31.12	2,396.4	59.6	36.0	-59.4	0.00	0.00	0.00
2,500.0	8.00	31.12	2,495.5	71.6	43.2	-71.2	0.00	0.00	0.00
2,600.0	8.00	31.12	2,594.5	83.5	50.4	-83.1	0.00	0.00	0.00
2,700.0	8.00	31.12	2,693.5	95.4	57.6	-94.9	0.00	0.00	0.00
2,800.0	8.00	31.12	2,792.5	107.3	64.8	-106.8	0.00	0.00	0.00
2,900.0	8.00	31.12	2,891.6	119.2	72.0	-118.6	0.00	0.00	0.00
3,000.0	8.00	31.12	2,990.6	131.1	79.2	-130.5	0.00	0.00	0.00
3,100.0	8.00	31.12	3,089.6	143.1	86.4	-142.3	0.00	0.00	0.00
3,200.0	8.00	31.12	3,188.6	155.0	93.6	-154.2	0.00	0.00	0.00
3,300.0	8.00	31.12	3,287.7	166.9	100.7	-166.0	0.00	0.00	0.00
3,400.0	8.00	31.12	3,386.7	178.8	107.9	-177.9	0.00	0.00	0.00
3,500.0	8.00	31.12	3,485.7	190.7	115.1	-189.8	0.00	0.00	0.00
3,600.0	8.00	31.12	3,584.8	202.6	122.3	-201.6	0.00	0.00	0.00
3,667.1	8.00	31.12	3,651.2	210.6	127.2	-209.6	0.00	0.00	0.00
Start Drop -1.50									
3,700.0	7.51	31.12	3,683.8	214.4	129.4	-213.3	1.50	-1.50	0.00
3,800.0	6.01	31.12	3,783.1	224.5	135.5	-223.4	1.50	-1.50	0.00
3,900.0	4.51	31.12	3,882.7	232.3	140.3	-231.2	1.50	-1.50	0.00
4,000.0	3.01	31.12	3,982.5	237.9	143.6	-236.8	1.50	-1.50	0.00
4,041.9	2.38	31.12	4,024.3	239.6	144.7	-238.4	1.50	-1.50	0.00
Base Salt									
4,069.1	1.97	31.12	4,051.5	240.5	145.2	-239.3	1.50	-1.50	0.00
Bell Canyon									

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Company:	Matador Production Company	TVD Reference:	KB @ 3219.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3219.5usft
Site:	Voni	North Reference:	Grid
Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,100.0	1.51	31.12	4,082.4	241.3	145.7	-240.1	1.50	-1.50	0.00
4,200.0	0.01	31.12	4,182.4	242.4	146.4	-241.2	1.50	-1.50	0.00
4,200.5	0.00	0.00	4,182.8	242.4	146.4	-241.2	1.50	-1.50	0.00
Start 4313.2 hold at 4200.5 MD									
4,300.0	0.00	0.00	4,282.4	242.4	146.4	-241.2	0.00	0.00	0.00
4,400.0	0.00	0.00	4,382.4	242.4	146.4	-241.2	0.00	0.00	0.00
4,500.0	0.00	0.00	4,482.4	242.4	146.4	-241.2	0.00	0.00	0.00
4,600.0	0.00	0.00	4,582.4	242.4	146.4	-241.2	0.00	0.00	0.00
4,700.0	0.00	0.00	4,682.4	242.4	146.4	-241.2	0.00	0.00	0.00
4,800.0	0.00	0.00	4,782.4	242.4	146.4	-241.2	0.00	0.00	0.00
4,900.0	0.00	0.00	4,882.4	242.4	146.4	-241.2	0.00	0.00	0.00
5,000.0	0.00	0.00	4,982.4	242.4	146.4	-241.2	0.00	0.00	0.00
5,100.0	0.00	0.00	5,082.4	242.4	146.4	-241.2	0.00	0.00	0.00
5,159.2	0.00	0.00	5,141.6	242.4	146.4	-241.2	0.00	0.00	0.00
Cherry Canyon									
5,200.0	0.00	0.00	5,182.4	242.4	146.4	-241.2	0.00	0.00	0.00
5,300.0	0.00	0.00	5,282.4	242.4	146.4	-241.2	0.00	0.00	0.00
5,400.0	0.00	0.00	5,382.4	242.4	146.4	-241.2	0.00	0.00	0.00
5,500.0	0.00	0.00	5,482.4	242.4	146.4	-241.2	0.00	0.00	0.00
5,600.0	0.00	0.00	5,582.4	242.4	146.4	-241.2	0.00	0.00	0.00
5,700.0	0.00	0.00	5,682.4	242.4	146.4	-241.2	0.00	0.00	0.00
5,800.0	0.00	0.00	5,782.4	242.4	146.4	-241.2	0.00	0.00	0.00
5,900.0	0.00	0.00	5,882.4	242.4	146.4	-241.2	0.00	0.00	0.00
6,000.0	0.00	0.00	5,982.4	242.4	146.4	-241.2	0.00	0.00	0.00
6,100.0	0.00	0.00	6,082.4	242.4	146.4	-241.2	0.00	0.00	0.00
6,200.0	0.00	0.00	6,182.4	242.4	146.4	-241.2	0.00	0.00	0.00
6,300.0	0.00	0.00	6,282.4	242.4	146.4	-241.2	0.00	0.00	0.00
6,308.6	0.00	0.00	6,291.0	242.4	146.4	-241.2	0.00	0.00	0.00
Brushy Canyon									
6,400.0	0.00	0.00	6,382.4	242.4	146.4	-241.2	0.00	0.00	0.00
6,500.0	0.00	0.00	6,482.4	242.4	146.4	-241.2	0.00	0.00	0.00
6,600.0	0.00	0.00	6,582.4	242.4	146.4	-241.2	0.00	0.00	0.00
6,700.0	0.00	0.00	6,682.4	242.4	146.4	-241.2	0.00	0.00	0.00
6,800.0	0.00	0.00	6,782.4	242.4	146.4	-241.2	0.00	0.00	0.00
6,900.0	0.00	0.00	6,882.4	242.4	146.4	-241.2	0.00	0.00	0.00
7,000.0	0.00	0.00	6,982.4	242.4	146.4	-241.2	0.00	0.00	0.00
7,100.0	0.00	0.00	7,082.4	242.4	146.4	-241.2	0.00	0.00	0.00
7,200.0	0.00	0.00	7,182.4	242.4	146.4	-241.2	0.00	0.00	0.00
7,300.0	0.00	0.00	7,282.4	242.4	146.4	-241.2	0.00	0.00	0.00
7,400.0	0.00	0.00	7,382.4	242.4	146.4	-241.2	0.00	0.00	0.00
7,404.7	0.00	0.00	7,387.1	242.4	146.4	-241.2	0.00	0.00	0.00
L. Brushy Canyon									
7,500.0	0.00	0.00	7,482.4	242.4	146.4	-241.2	0.00	0.00	0.00
7,600.0	0.00	0.00	7,582.4	242.4	146.4	-241.2	0.00	0.00	0.00
7,700.0	0.00	0.00	7,682.4	242.4	146.4	-241.2	0.00	0.00	0.00
7,800.0	0.00	0.00	7,782.4	242.4	146.4	-241.2	0.00	0.00	0.00
7,900.0	0.00	0.00	7,882.4	242.4	146.4	-241.2	0.00	0.00	0.00
7,960.9	0.00	0.00	7,943.3	242.4	146.4	-241.2	0.00	0.00	0.00
BSGL									
8,000.0	0.00	0.00	7,982.4	242.4	146.4	-241.2	0.00	0.00	0.00
8,100.0	0.00	0.00	8,082.4	242.4	146.4	-241.2	0.00	0.00	0.00
8,109.8	0.00	0.00	8,092.1	242.4	146.4	-241.2	0.00	0.00	0.00
Avalon-SS									

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Company:	Matador Production Company	TVD Reference:	KB @ 3219.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3219.5usft
Site:	Voni	North Reference:	Grid
Well:	Voni Fed Com #114H	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)
8,200.0	0.00	0.00	8,182.4	242.4	146.4	-241.2	0.00	0.00	0.00
8,300.0	0.00	0.00	8,282.4	242.4	146.4	-241.2	0.00	0.00	0.00
8,400.0	0.00	0.00	8,382.4	242.4	146.4	-241.2	0.00	0.00	0.00
8,500.0	0.00	0.00	8,482.4	242.4	146.4	-241.2	0.00	0.00	0.00
8,513.6	0.00	0.00	8,496.0	242.4	146.4	-241.2	0.00	0.00	0.00
Start Build 10.00 - VP - Voni Fed Com #114H									
8,600.0	8.64	167.70	8,582.0	236.1	147.8	-234.9	10.00	10.00	0.00
8,700.0	18.64	167.70	8,679.1	213.1	152.8	-211.8	10.00	10.00	0.00
8,800.0	28.64	167.70	8,770.6	174.0	161.3	-172.6	10.00	10.00	0.00
8,900.0	38.64	167.70	8,853.7	119.9	173.1	-118.5	10.00	10.00	0.00
9,000.0	48.64	167.70	8,926.0	52.6	187.8	-51.0	10.00	10.00	0.00
9,005.0	49.13	167.70	8,929.3	48.9	188.6	-47.4	10.00	10.00	0.00
FBSG									
9,100.0	58.64	167.70	8,985.2	-26.0	204.9	27.7	10.00	10.00	0.00
9,200.0	68.64	167.70	9,029.6	-113.4	224.0	115.3	10.00	10.00	0.00
9,300.0	78.64	167.70	9,057.7	-207.1	244.4	209.1	10.00	10.00	0.00
9,400.0	88.64	167.70	9,068.8	-304.0	265.5	306.2	10.00	10.00	0.00
9,413.6	90.00	167.70	9,069.0	-317.4	268.4	319.6	10.00	10.00	0.00
Start DLS 2.00 TFO 90.00									
9,500.0	90.00	169.43	9,069.0	-402.0	285.5	404.3	2.00	0.00	2.00
9,600.0	90.00	171.43	9,069.0	-500.6	302.2	503.1	2.00	0.00	2.00
9,700.0	90.00	173.43	9,069.0	-599.7	315.4	602.3	2.00	0.00	2.00
9,800.0	90.00	175.43	9,069.0	-699.3	325.1	701.9	2.00	0.00	2.00
9,900.0	90.00	177.43	9,069.0	-799.1	331.3	801.7	2.00	0.00	2.00
10,000.0	90.00	179.43	9,069.0	-899.0	334.0	901.7	2.00	0.00	2.00
10,005.2	90.00	179.53	9,069.0	-904.2	334.1	906.9	2.00	0.00	2.00
Start 11538.9 hold at 10005.2 MD									
10,100.0	90.00	179.53	9,069.0	-999.0	334.9	1,001.7	0.00	0.00	0.00
10,200.0	90.00	179.53	9,069.0	-1,099.0	335.7	1,101.7	0.00	0.00	0.00
10,300.0	90.00	179.53	9,069.0	-1,199.0	336.5	1,201.7	0.00	0.00	0.00
10,400.0	90.00	179.53	9,069.0	-1,299.0	337.3	1,301.7	0.00	0.00	0.00
10,500.0	90.00	179.53	9,069.0	-1,399.0	338.1	1,401.7	0.00	0.00	0.00
10,600.0	90.00	179.53	9,069.0	-1,499.0	338.9	1,501.7	0.00	0.00	0.00
10,700.0	90.00	179.53	9,069.0	-1,599.0	339.8	1,601.7	0.00	0.00	0.00
10,800.0	90.00	179.53	9,069.0	-1,699.0	340.6	1,701.7	0.00	0.00	0.00
10,900.0	90.00	179.53	9,069.0	-1,799.0	341.4	1,801.7	0.00	0.00	0.00
11,000.0	90.00	179.53	9,069.0	-1,899.0	342.2	1,901.7	0.00	0.00	0.00
11,100.0	90.00	179.53	9,069.0	-1,999.0	343.0	2,001.7	0.00	0.00	0.00
11,200.0	90.00	179.53	9,069.0	-2,099.0	343.9	2,101.7	0.00	0.00	0.00
11,300.0	90.00	179.53	9,069.0	-2,199.0	344.7	2,201.7	0.00	0.00	0.00
11,400.0	90.00	179.53	9,069.0	-2,299.0	345.5	2,301.7	0.00	0.00	0.00
11,500.0	90.00	179.53	9,069.0	-2,399.0	346.3	2,401.7	0.00	0.00	0.00
11,600.0	90.00	179.53	9,069.0	-2,499.0	347.1	2,501.7	0.00	0.00	0.00
11,700.0	90.00	179.53	9,069.0	-2,599.0	347.9	2,601.7	0.00	0.00	0.00
11,800.0	90.00	179.53	9,069.0	-2,699.0	348.8	2,701.7	0.00	0.00	0.00
11,900.0	90.00	179.53	9,069.0	-2,799.0	349.6	2,801.7	0.00	0.00	0.00
12,000.0	90.00	179.53	9,069.0	-2,898.9	350.4	2,901.7	0.00	0.00	0.00
12,100.0	90.00	179.53	9,069.0	-2,998.9	351.2	3,001.7	0.00	0.00	0.00
12,200.0	90.00	179.53	9,069.0	-3,098.9	352.0	3,101.7	0.00	0.00	0.00
12,300.0	90.00	179.53	9,069.0	-3,198.9	352.8	3,201.7	0.00	0.00	0.00
12,400.0	90.00	179.53	9,069.0	-3,298.9	353.7	3,301.7	0.00	0.00	0.00
12,500.0	90.00	179.53	9,069.0	-3,398.9	354.5	3,401.7	0.00	0.00	0.00
12,600.0	90.00	179.53	9,069.0	-3,498.9	355.3	3,501.7	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Company:	Matador Production Company	TVD Reference:	KB @ 3219.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3219.5usft
Site:	Voni	North Reference:	Grid
Well:	Voni Fed Com #114H	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)
12,700.0	90.00	179.53	9,069.0	-3,598.9	356.1	3,601.7	0.00	0.00	0.00
12,800.0	90.00	179.53	9,069.0	-3,698.9	356.9	3,701.7	0.00	0.00	0.00
12,900.0	90.00	179.53	9,069.0	-3,798.9	357.7	3,801.7	0.00	0.00	0.00
13,000.0	90.00	179.53	9,069.0	-3,898.9	358.6	3,901.7	0.00	0.00	0.00
13,100.0	90.00	179.53	9,069.0	-3,998.9	359.4	4,001.7	0.00	0.00	0.00
13,200.0	90.00	179.53	9,069.0	-4,098.9	360.2	4,101.7	0.00	0.00	0.00
13,300.0	90.00	179.53	9,069.0	-4,198.9	361.0	4,201.7	0.00	0.00	0.00
13,400.0	90.00	179.53	9,069.0	-4,298.9	361.8	4,301.7	0.00	0.00	0.00
13,500.0	90.00	179.53	9,069.0	-4,398.9	362.6	4,401.7	0.00	0.00	0.00
13,600.0	90.00	179.53	9,069.0	-4,498.9	363.5	4,501.7	0.00	0.00	0.00
13,700.0	90.00	179.53	9,069.0	-4,598.9	364.3	4,601.7	0.00	0.00	0.00
13,800.0	90.00	179.53	9,069.0	-4,698.9	365.1	4,701.7	0.00	0.00	0.00
13,900.0	90.00	179.53	9,069.0	-4,798.9	365.9	4,801.7	0.00	0.00	0.00
14,000.0	90.00	179.53	9,069.0	-4,898.9	366.7	4,901.7	0.00	0.00	0.00
14,100.0	90.00	179.53	9,069.0	-4,998.9	367.6	5,001.7	0.00	0.00	0.00
14,200.0	90.00	179.53	9,069.0	-5,098.9	368.4	5,101.7	0.00	0.00	0.00
14,300.0	90.00	179.53	9,069.0	-5,198.9	369.2	5,201.7	0.00	0.00	0.00
14,400.0	90.00	179.53	9,069.0	-5,298.9	370.0	5,301.7	0.00	0.00	0.00
14,500.0	90.00	179.53	9,069.0	-5,398.9	370.8	5,401.7	0.00	0.00	0.00
14,600.0	90.00	179.53	9,069.0	-5,498.9	371.6	5,501.7	0.00	0.00	0.00
14,700.0	90.00	179.53	9,069.0	-5,598.9	372.5	5,601.7	0.00	0.00	0.00
14,800.0	90.00	179.53	9,069.0	-5,698.9	373.3	5,701.7	0.00	0.00	0.00
14,900.0	90.00	179.53	9,069.0	-5,798.9	374.1	5,801.7	0.00	0.00	0.00
15,000.0	90.00	179.53	9,069.0	-5,898.8	374.9	5,901.7	0.00	0.00	0.00
15,100.0	90.00	179.53	9,069.0	-5,998.8	375.7	6,001.7	0.00	0.00	0.00
15,200.0	90.00	179.53	9,069.0	-6,098.8	376.5	6,101.7	0.00	0.00	0.00
15,300.0	90.00	179.53	9,069.0	-6,198.8	377.4	6,201.7	0.00	0.00	0.00
15,400.0	90.00	179.53	9,069.0	-6,298.8	378.2	6,301.7	0.00	0.00	0.00
15,500.0	90.00	179.53	9,069.0	-6,398.8	379.0	6,401.7	0.00	0.00	0.00
15,600.0	90.00	179.53	9,069.0	-6,498.8	379.8	6,501.7	0.00	0.00	0.00
15,700.0	90.00	179.53	9,069.0	-6,598.8	380.6	6,601.7	0.00	0.00	0.00
15,800.0	90.00	179.53	9,069.0	-6,698.8	381.4	6,701.7	0.00	0.00	0.00
15,900.0	90.00	179.53	9,069.0	-6,798.8	382.3	6,801.7	0.00	0.00	0.00
16,000.0	90.00	179.53	9,069.0	-6,898.8	383.1	6,901.7	0.00	0.00	0.00
16,100.0	90.00	179.53	9,069.0	-6,998.8	383.9	7,001.7	0.00	0.00	0.00
16,200.0	90.00	179.53	9,069.0	-7,098.8	384.7	7,101.7	0.00	0.00	0.00
16,300.0	90.00	179.53	9,069.0	-7,198.8	385.5	7,201.7	0.00	0.00	0.00
16,400.0	90.00	179.53	9,069.0	-7,298.8	386.3	7,301.7	0.00	0.00	0.00
16,500.0	90.00	179.53	9,069.0	-7,398.8	387.2	7,401.7	0.00	0.00	0.00
16,600.0	90.00	179.53	9,069.0	-7,498.8	388.0	7,501.7	0.00	0.00	0.00
16,700.0	90.00	179.53	9,069.0	-7,598.8	388.8	7,601.7	0.00	0.00	0.00
16,800.0	90.00	179.53	9,069.0	-7,698.8	389.6	7,701.7	0.00	0.00	0.00
16,900.0	90.00	179.53	9,069.0	-7,798.8	390.4	7,801.7	0.00	0.00	0.00
17,000.0	90.00	179.53	9,069.0	-7,898.8	391.2	7,901.7	0.00	0.00	0.00
17,100.0	90.00	179.53	9,069.0	-7,998.8	392.1	8,001.7	0.00	0.00	0.00
17,200.0	90.00	179.53	9,069.0	-8,098.8	392.9	8,101.7	0.00	0.00	0.00
17,300.0	90.00	179.53	9,069.0	-8,198.8	393.7	8,201.7	0.00	0.00	0.00
17,400.0	90.00	179.53	9,069.0	-8,298.8	394.5	8,301.7	0.00	0.00	0.00
17,500.0	90.00	179.53	9,069.0	-8,398.8	395.3	8,401.7	0.00	0.00	0.00
17,600.0	90.00	179.53	9,069.0	-8,498.8	396.2	8,501.7	0.00	0.00	0.00
17,700.0	90.00	179.53	9,069.0	-8,598.8	397.0	8,601.7	0.00	0.00	0.00
17,800.0	90.00	179.53	9,069.0	-8,698.8	397.8	8,701.7	0.00	0.00	0.00
17,900.0	90.00	179.53	9,069.0	-8,798.8	398.6	8,801.7	0.00	0.00	0.00
18,000.0	90.00	179.53	9,069.0	-8,898.7	399.4	8,901.7	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Company:	Matador Production Company	TVD Reference:	KB @ 3219.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3219.5usft
Site:	Voni	North Reference:	Grid
Well:	Voni Fed Com #114H	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)	
18,100.0	90.00	179.53	9,069.0	-8,998.7	400.2	9,001.7	0.00	0.00	0.00	
18,200.0	90.00	179.53	9,069.0	-9,098.7	401.1	9,101.7	0.00	0.00	0.00	
18,300.0	90.00	179.53	9,069.0	-9,198.7	401.9	9,201.7	0.00	0.00	0.00	
18,400.0	90.00	179.53	9,069.0	-9,298.7	402.7	9,301.7	0.00	0.00	0.00	
18,500.0	90.00	179.53	9,069.0	-9,398.7	403.5	9,401.7	0.00	0.00	0.00	
18,600.0	90.00	179.53	9,069.0	-9,498.7	404.3	9,501.7	0.00	0.00	0.00	
18,700.0	90.00	179.53	9,069.0	-9,598.7	405.1	9,601.7	0.00	0.00	0.00	
18,800.0	90.00	179.53	9,069.0	-9,698.7	406.0	9,701.7	0.00	0.00	0.00	
18,900.0	90.00	179.53	9,069.0	-9,798.7	406.8	9,801.7	0.00	0.00	0.00	
19,000.0	90.00	179.53	9,069.0	-9,898.7	407.6	9,901.7	0.00	0.00	0.00	
19,100.0	90.00	179.53	9,069.0	-9,998.7	408.4	10,001.7	0.00	0.00	0.00	
19,200.0	90.00	179.53	9,069.0	-10,098.7	409.2	10,101.7	0.00	0.00	0.00	
19,300.0	90.00	179.53	9,069.0	-10,198.7	410.0	10,201.7	0.00	0.00	0.00	
19,400.0	90.00	179.53	9,069.0	-10,298.7	410.9	10,301.7	0.00	0.00	0.00	
19,500.0	90.00	179.53	9,069.0	-10,398.7	411.7	10,401.7	0.00	0.00	0.00	
19,600.0	90.00	179.53	9,069.0	-10,498.7	412.5	10,501.7	0.00	0.00	0.00	
19,700.0	90.00	179.53	9,069.0	-10,598.7	413.3	10,601.7	0.00	0.00	0.00	
19,800.0	90.00	179.53	9,069.0	-10,698.7	414.1	10,701.7	0.00	0.00	0.00	
19,900.0	90.00	179.53	9,069.0	-10,798.7	414.9	10,801.7	0.00	0.00	0.00	
20,000.0	90.00	179.53	9,069.0	-10,898.7	415.8	10,901.7	0.00	0.00	0.00	
20,100.0	90.00	179.53	9,069.0	-10,998.7	416.6	11,001.7	0.00	0.00	0.00	
20,200.0	90.00	179.53	9,069.0	-11,098.7	417.4	11,101.7	0.00	0.00	0.00	
20,300.0	90.00	179.53	9,069.0	-11,198.7	418.2	11,201.7	0.00	0.00	0.00	
20,400.0	90.00	179.53	9,069.0	-11,298.7	419.0	11,301.7	0.00	0.00	0.00	
20,500.0	90.00	179.53	9,069.0	-11,398.7	419.9	11,401.7	0.00	0.00	0.00	
20,600.0	90.00	179.53	9,069.0	-11,498.7	420.7	11,501.7	0.00	0.00	0.00	
20,700.0	90.00	179.53	9,069.0	-11,598.7	421.5	11,601.7	0.00	0.00	0.00	
20,800.0	90.00	179.53	9,069.0	-11,698.7	422.3	11,701.7	0.00	0.00	0.00	
20,900.0	90.00	179.53	9,069.0	-11,798.7	423.1	11,801.7	0.00	0.00	0.00	
21,000.0	90.00	179.53	9,069.0	-11,898.6	423.9	11,901.7	0.00	0.00	0.00	
21,100.0	90.00	179.53	9,069.0	-11,998.6	424.8	12,001.7	0.00	0.00	0.00	
21,200.0	90.00	179.53	9,069.0	-12,098.6	425.6	12,101.7	0.00	0.00	0.00	
21,300.0	90.00	179.53	9,069.0	-12,198.6	426.4	12,201.7	0.00	0.00	0.00	
21,400.0	90.00	179.53	9,069.0	-12,298.6	427.2	12,301.7	0.00	0.00	0.00	
21,500.0	90.00	179.53	9,069.0	-12,398.6	428.0	12,401.7	0.00	0.00	0.00	
21,544.1	90.00	179.53	9,069.0	-12,442.8	428.4	12,445.9	0.00	0.00	0.00	
TD at 21544.1 - BHL - Voni Fed Com #114H										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
VP - Voni Fed Com #114	0.00	0.00	8,496.0	242.4	146.4	376,977.00	672,093.00	32° 2' 6.749 N	103° 46' 40.716 W	
- plan hits target center										
- Point										
BHL - Voni Fed Com #11	0.00	0.00	9,069.0	-12,442.8	428.4	364,291.40	672,375.04	32° 0' 1.195 N	103° 46' 38.198 W	
- plan hits target center										
- Point										

Planning Report

Database:	EDM 5000.14 Server	Local Co-ordinate Reference:	Well Voni Fed Com #114H
Company:	Matador Production Company	TVD Reference:	KB @ 3219.5usft
Project:	Rustler Breaks	MD Reference:	KB @ 3219.5usft
Site:	Voni	North Reference:	Grid
Well:	Voni Fed Com #114H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
892.6	893.6	Rustler			
1,573.6	1,574.6	Salado (Top Salt)			
4,041.9	4,025.3	Base Salt			
4,069.1	4,052.5	Bell Canyon			
5,159.2	5,142.6	Cherry Canyon			
6,308.6	6,292.0	Brushy Canyon			
7,404.7	7,388.1	L. Brushy Canyon			
7,960.9	7,944.3	BSGL			
8,109.8	8,093.1	Avalon-SS			
9,005.0	8,930.3	FBSG			

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,500.0	1,500.0	0.0	0.0	Start Build 1.00	
2,300.0	2,297.4	47.7	28.8	Start 1367.1 hold at 2300.0 MD	
3,667.1	3,651.2	210.6	127.2	Start Drop -1.50	
4,200.5	4,182.8	242.4	146.4	Start 4313.2 hold at 4200.5 MD	
8,513.6	8,496.0	242.4	146.4	Start Build 10.00	
9,413.6	9,069.0	-317.4	268.4	Start DLS 2.00 TFO 90.00	
10,005.2	9,069.0	-904.2	334.1	Start 11538.9 hold at 10005.2 MD	
21,544.1	9,069.0	-12,442.8	428.4	TD at 21544.1	

Voni Fed Com #114H
SHL: 290' FNL & 1318' FEL Section 21
BHL: 100' FSL & 990' FEL Section 33
Township/Range: 26S 31E
Elevation Above Sea Level: 3192

Drilling Operation Plan

Proposed Drilling Depth: 21544' MD / 9070' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.0353332809 N / -103.7784510147 W

TD Lat/Long (NAD83): 32.0004573400 N / -103.7777502039 W

1. Estimated Tops

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	893	893	681	Anhydrite	Barren
Salado (Top of Salt)	1,574	1,574	1,817	Salt	Barren
Castile	3,391	3,391	634	Salt	Barren
Lamar (Base of Salt)	4,025	4,025	27	Salt	Barren
Bell Canyon	4,052	4,052	1,090	Sandstone	Oil/Natural Gas
Cherry Canyon	5,142	5,142	1,149	Sandstone	Oil/Natural Gas
Brushy Canyon	6,291	6,291	1,653	Sandstone	Oil/Natural Gas
BoneSpring Lime	7,944	7,944	553	Limestone	Oil/Natural Gas
KOP	8,513	8,497		Limestone	Oil/Natural Gas
1st Bone Spring Sand	9,003	8,930		Sandstone	Oil/Natural Gas
TD	21,544	9,070		Sandstone	Oil/Natural Gas

2. Notable Zones

1st Bone Spring is the goal. All perforations will be within the setback requirements as prescribed or permitted by the New Mexico Oil Conservation Division. OSE estimated ground water depth at this location is 230'.

3. Pressure Control

Equipment

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

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

Variance Request

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

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

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

Matador request 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.

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 - 918	0 - 918	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	12.25	0 - 4077	0 - 4077	9.625	40	J-55	BUTT	1.125	1.125	1.8
Production	8.75	0 - 21544	0 - 9070	5.5	20	P-110	Hunting TLW	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 the Bone Spring Lime

String	Type	Sacks	Yield	Cu. Ft.	Weight	Percent Excess	Top of Cement	Class	Blend
Surface	Lead	420	1.72	716	12.5	50%	0	C	5% NaCl + LCM
	Tail	250	1.38	347	14.8	50%	618	C	5% NaCl + LCM
Intermediate 1	Lead	750	2.13	1601	12.6	50%	0	C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	300	1.38	417	14.8	50%	3262	C	5% NaCl + LCM
Production	Lead	580	2.22	1295	11.5	25%	3877	H	Fluid Loss + Dispersant + Retarder + LCM

Drill Plan

Production	Tail	3170	1.35	4283	13.2	25%	8013	H	Fluid Loss + Dispersant + Retarder + LCM
------------	------	------	------	------	------	-----	------	---	--

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 - 918	8.4 - 8.8	28-30	NC
Intermediate 1	12.25	Brine/OBM	918 - 4077	9.5 - 10.2	28-30	NC
Production	8.75	Cut Brine/OBM	4077 - 21544	8.6 - 9.4	28-65	NC

6. Cores, Test, & Logs

No core or drill stem test is planned.

A 2-person mud logging program will be used from Kick-off point to TD.

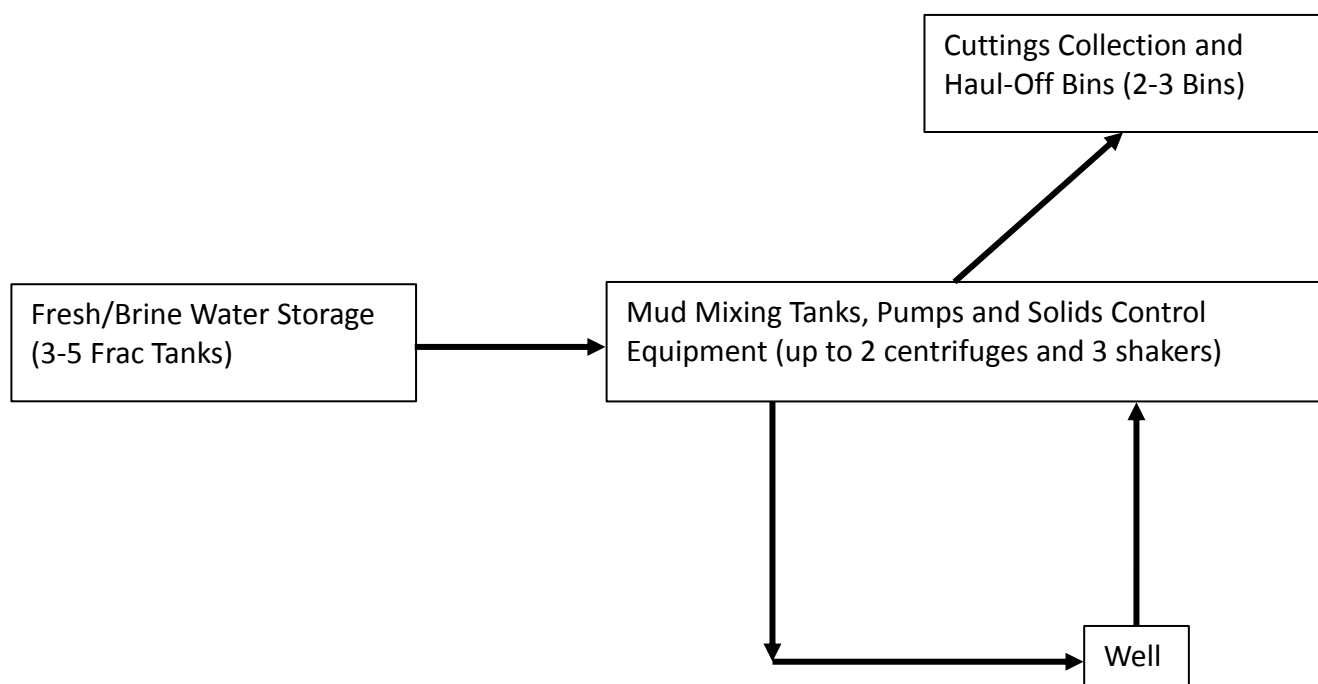
No electric logs are planned at this time. GR will be collected through the MWD tools from Intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to top of curve.

7. Down Hole Conditions

No abnormal pressure or temperature is expected. Maximum anticipated surface pressure is 2438 psi. Expected bottom hole temperature is 160° 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 a "H₂S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have a H₂S safety package on all wells, attached is a "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 the equipment being used.

Closed-Loop System



Operating and Maintenance Plan:

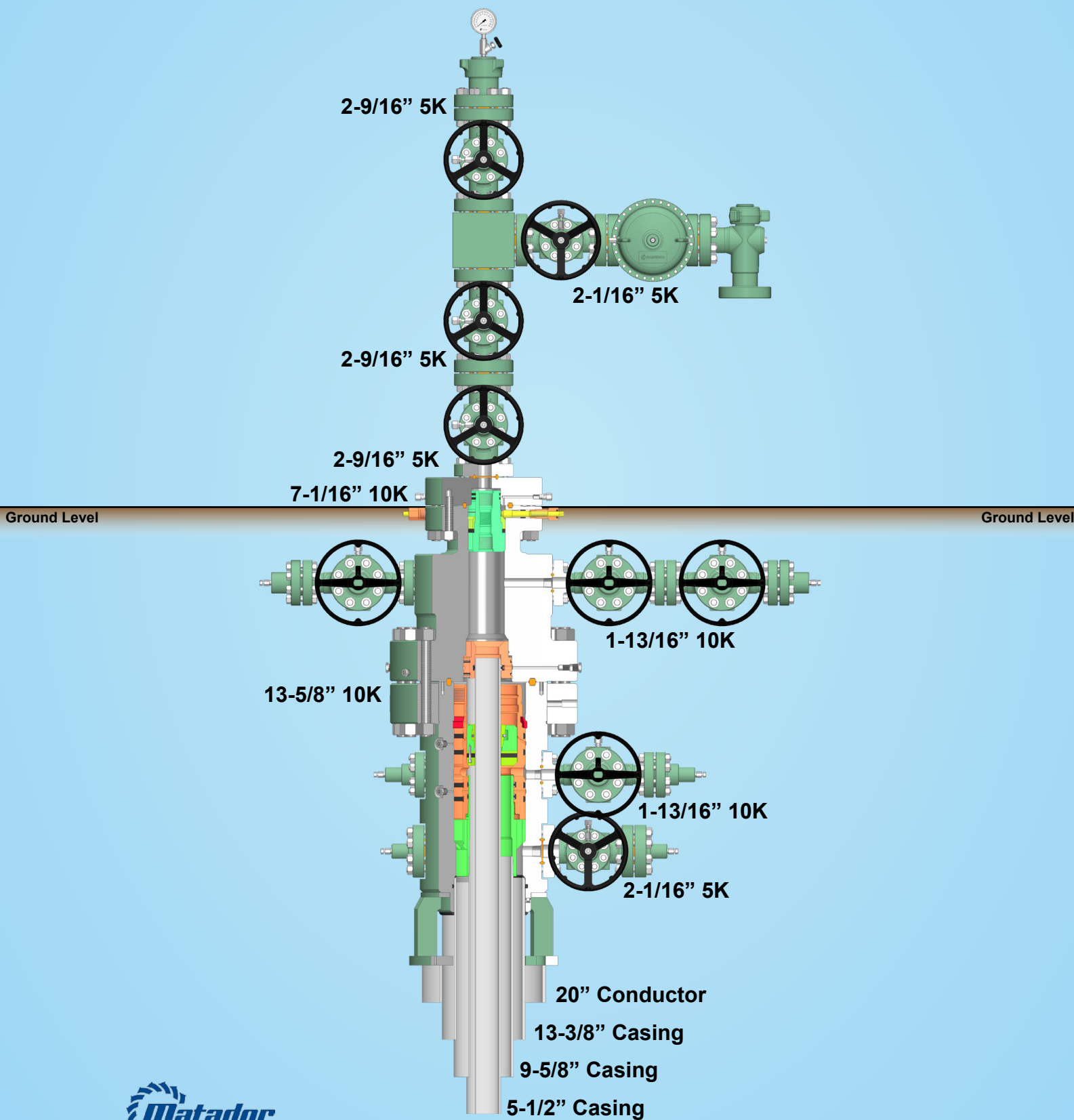
During drilling operations, third party service companies will utilize solids control equipment to remove cuttings from the drilling fluids and collect it in haul-off bins. Equipment will be closely monitored at all times while drilling by the derrick man and the service company employees.

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.



13-5/8" 10K MN-DS Wellhead 13-3/8 x 9-5/8 x 5-1/2 Casing Program



2018-147-03

Rev: 01

NOTE: All dimensions on this drawing are estimated measurements and should be evaluated by engineering.

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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

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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

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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:	a. Be alert for a condition change b. Check all safety equipment for availability and proper functioning. c. 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:	a. Be alert for a condition change b. WHEN DRILLING AHEAD - Driller and designated crewmember will don 30 min SCBA, shut-in the well and immediately proceed to the Safe Briefing Area. WHEN TRIPPING – Driller and two designated crewmembers will don 30 min SCBA, shut in the well and immediately proceed to the Safe Briefing Area. The Derrickman will

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

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

CONDITION III “EXTREME DANGER”
Warning Flags Red

Alarms Actuate at 15 ppm. Continuous Sirens and Flashing Lights

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

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

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

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

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

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

Do Not Panic!

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

B. RESPONSIBILITIES OF WELL-SITE PERSONNEL

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

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

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

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

2. Toolpusher

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

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3. Mud Engineer

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

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

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

5. General Personnel & Visitors

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

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

C. INSTRUCTIONS FOR IGNITING THE WELL

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

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

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

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

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

DO NOT ASSUME THE AREA IS SAFE AFTER THE WELL IS IGNITED**D. CORING PROCEDURES**

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

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

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

Cores will be appropriately marked and sealed for transportation.

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

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

B. Toolpusher

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

C. In Scope Personnel

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

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

D. Total Safety H₂S Safety Technician or MRC Designee

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

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OUT OF SCOPE PERSONNEL

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

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SAFETY EQUIPMENT

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

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

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

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

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

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

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

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

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

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

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

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V – TOXICITY OF VARIOUS GASES

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

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

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

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

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

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

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

B. HYDROGEN SULFIDE

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

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

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

¹ Grains per 100 Cubic Feet

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VII. Treatment Procedures for Hydrogen Sulfide Poisoning

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

C. SULPHUR DIOXIDE

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

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

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

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

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

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

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

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

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

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

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

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IX. HYDROGEN SULFIDE TRAINING CURRICULUM

(FOR EMPLOYERS, VISITORS, AND CONTRACTORS)

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

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

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

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

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

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

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

Employee Name: _____ Date: _____

Date of Employee Medical Evaluation: _____

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

Respirator Type (Dustmask, SCBA, etc): _____

Brand: _____

Size: (circle): XS S M L XL

FIT TEST INFORMATION

Type of Fit Test Performed:

Quantitative

Porta Count

Fit Factor: _____

Fittester 3000

Fit Factor: _____

Qualitative

Irritant Smoke

Passed / Failed

Isoamyl Acetate (Banana Oil)

Passed / Failed

Saccharin

Passed / Failed

Bitrex

Passed / Failed

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

Fit Tester Name (Print): _____

Signature: _____ Date: _____

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XI. H₂S SAFETY SERVICES

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

RESPIRATORY SAFETY SYSTEMS**QTY DESCRIPTION**

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

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

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

DETECTION AND ALARM SAFETY SYSTEM

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

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ADDITIONAL SAFETY RELATED EQUIPMENT

QTY DESCRIPTION

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

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

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

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

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

MRC Energy Co. Emergency Phone #

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

MRC Energy Co. Production

113 Daw Rd

Mansfield LA 71052

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

Hydrogen Sulfide Safety Consultants

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

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

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

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State Police (911)

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

Local Law Enforcement (911) (Sheriff)

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

MRC ENERGY CO.'S

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

MRC ENERGY CO.'S

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.

MRC ENERGY CO.'S

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	

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Submit Original
to Appropriate
District Office

GAS CAPTURE PLAN

X Original

Operator & OGRID No.: Matador Production Company (228937)

☐ Amended

Date: 4/23/19

Reason for Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: A C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule 19.15.18.12.A

Well(s)/Production Facility – Name of facility

The wells that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Voni Fed Com 024H	N/A	UL-A Sec 21 &16 T26S R31E	### FNL ### FEL	+/- 400	~30 days	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well
Voni Fed Com 104H	N/A	UL-A Sec 21 &16 T26S R31E	### FNL ### FEL	+/- 3,000	~30 days	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well
Voni Fed Com 108H	N/A	UL-A Sec 21 &16 T26S R31E	### FNL ### FEL	+/- 3,000	~30 days	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup.
Voni Fed Com 114 H	N/A	UL-A Sec 21 &16 T26S R31E	### FNL ### FEL	+/- 2,500	~30 days	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup
Voni Fed Com 124H	N/A	UL-A Sec 21 &16 T26S R31E	### FNL ### FEL	+/- 2,500	~30 days	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup
Voni Fed Com 134H	N/A	UL-A Sec 21 &16 T26S R31E	### FNL ### FEL	+/- 6,000	~30 days	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup

Voni Fed Com 204H	N/A	UL-A Sec 21 &16 T26S R31E	### FNL ### FEL	+/- 6,000	~30 days	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup
Voni Fed Com 218H	N/A	UL-A Sec 21 &16 T26S R31E	### FNL ### FEL	+/- 6,500	~30 days	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup
Voni Fed Com 224H	N/A	UL-A Sec 21 &16 T26S R31E	### FNL ### FEL	+/-5900	~30 days	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup
Voni Fed Com 228H	N/A	UL-A Sec 21 &16 T26S R31E	### FNL ### FEL	+/- 5900	~30 days	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup
Voni Fed Com 244H	N/A	UL-A Sec 21 &16 T26S R31E	### FNL ### FEL	+/- 10,000	~30 days	Flare ~30 days on flowback before turn into TB. Time est. depends on sales connect and well cleanup

Gathering System and Pipeline Notification

The wells will be connected to a production facility after flowback operations are complete so long as the gas transporter system is in place. The gas produced from the production facility should be connected to Lucid Energy Delaware, LLC gathering system. It will require ~5,000' of pipeline to connect the facility to Lucid Energy Delaware, LLC gathering system. Matador Production Company periodically provides a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future to Lucid Energy Delaware, LLC. If changes occur that will affect the drilling and completion schedule, Matador Production Company will notify Lucid Energy Delaware, LLC. Additionally, the gas produced from the well will be processed at a processing plant further downstream and, although unanticipated, any issues with downstream facilities could cause flaring at the wellhead. The actual flow of the gas will be based on compression operating parameters and gathering system pressures measured when the well starts producing.

Flowback Strategy

After the fracture treatment/completion operations (flowback), the well will be produced to temporary production tanks and the gas will be flared or vented. During flowback, the fluids and sand content will be monitored. If the produced fluids contain minimal sand, then the well will be turned to production facilities. The gas sales should start as soon as the well starts flowing through the production facilities, unless there are operational issues on the midstream system at that time. Based on current information, it is Matador's belief the system will be able to take the gas upon completion of the well.

Safety requirements during cleanout operations may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - o Operating a generator will only utilize a portion of the produced gas and the remainder of gas would still need to be flared.
 - o Power Company has to be willing to purchase gas back and if they are willing they require a 5 year commitment to supply the agreed upon amount of power back to them. With gas decline rates and unpredictability of markets

it is impossible to agree to such long term demands. If the demands are not met then operator is burdened with penalty for not delivering.

- Compressed Natural Gas – On lease
 - o Compressed Natural Gas is likely to be uneconomic to operate when the gas volume declines.
- NGL Removal – On lease
 - o NGL Removal requires a plant and is expensive on such a small scale rendering it uneconomic and still requires residue gas to be flared.

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

COMMENTS

Action 16409

COMMENTS

Operator:	OGRID:	Action Number:	Action Type:
MATADOR PRODUCTION COMPANY 5400 LBJ Freeway, Ste 1500 One Lincoln Centre Dallas, TX75240	228937	16409	FORM 3160-3

Created By	Comment	Comment Date
kpickford	KP GEO Review 2/3/2021	02/03/2021

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CONDITIONS

Action 16409

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
MATADOR PRODUCTION COMPANY 5400 LBJ Freeway, Ste 1500	228937	16409	FORM 3160-3
One Lincoln Centre Dallas, TX75240			

OCD Reviewer	Condition
kpickford	Notify OCD 24 hours prior to casing & cement
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104
kpickford	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
kpickford	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