

Well Name: UNCLE CHES 2116 FED COM	Well Location: T20S / R35E / SEC 21 / SESW / 32.5521085 / -103.4650448	County or Parish/State: LEA / NM
Well Number: 125Y	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM132079	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002547338	Well Status: Temporarily Abandoned	Operator: MATADOR PRODUCTION COMPANY

Notice of Intent

Sundry ID: 2633265

Type of Submission: Notice of Intent	Type of Action: Other
Date Sundry Submitted: 09/10/2021	Time Sundry Submitted: 02:29
Date proposed operation will begin: 09/11/2021	

Procedure Description: BLM Bond No. NMB001079 Surety Bond No. RLB0015172 As previously discussed with the BLM, while drilling this well we became stuck and will be skidding over to spud the well using a new surface hole location, as reflected in this sundry. As reflected in the attached, the completed lateral and bottom hole location for the well remains the same. Based on our communications with the NMOCD, we understand the NMOCD will then assign the replacement well under this sundry a new API number, leaving the original, partially-drilled wellbore with its same API number. The original well is UNCLE CHES 2116 FEDERAL COM 125Y (API 30-025-47338). The well we will skid to spud will be named UNCLE CHES 2116 FEDERAL COM 125H. Please see the attached supporting documents.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

- BLM_Casing_String_Spec_Uncle_Ches_2116_Federal_Com_125H_20210910132229.pdf
- Ga_Capture_Plan___Uncle_Ches_125H_20210910132227.pdf
- Uncle_Ches_2116_Fed_Com_125H___AC_v2_20210910132227.pdf
- Uncle_Ches_2116_Fed_Com_125H___Well_Plan_v2_20210910132227.pdf
- Drill_Plan_Uncle_Ches_2116_Federal_Com_125H_20210910132227.pdf

Received by OCD: 9/21/2021 11:59:21 AM

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US Well Number: 3002547338	Well Status: Temporarily Abandoned	Operator: MATADOR PRODUCTION COMPANY

Addendum___Uncle_Ches_2116_Fed_Com_125H_20210910132227.pdf

Signed_C_102_20210910132227.pdf

Conditions of Approval

Specialist Review

Uncle_Ches_2116_Fed_Com_125H_COA_20210920082636.pdf

Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: NICKY FITZGERALD	Signed on: SEP 10, 2021 01:22 PM
Name: MATADOR PRODUCTION COMPANY	
Title: Regulatory	
Street Address: 5400 LBJ FREEWAY STE 1500	
City: DALLAS	State: TX
Phone: (972) 371-5448	
Email address: nicky.fitzgerald@matadorresources.com	

Field Representative

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: ZOTA M STEVENS	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752345998	BLM POC Email Address: ZSTEVENS@BLM.GOV
Disposition: Approved	Disposition Date: 09/20/2021
Signature: Zota Stevens	

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources
Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

FORM C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 24250	³ Pool Name FEATHERSTONE; BONE SPRING
⁴ Property Code	⁵ Property Name UNCLE CHES 2116 FED COM	⁶ Well Number 125H
⁷ OGRID No. 228937	⁸ Operator Name MATADOR PRODUCTION COMPANY	⁹ Elevation 3716'

¹⁰Surface Location

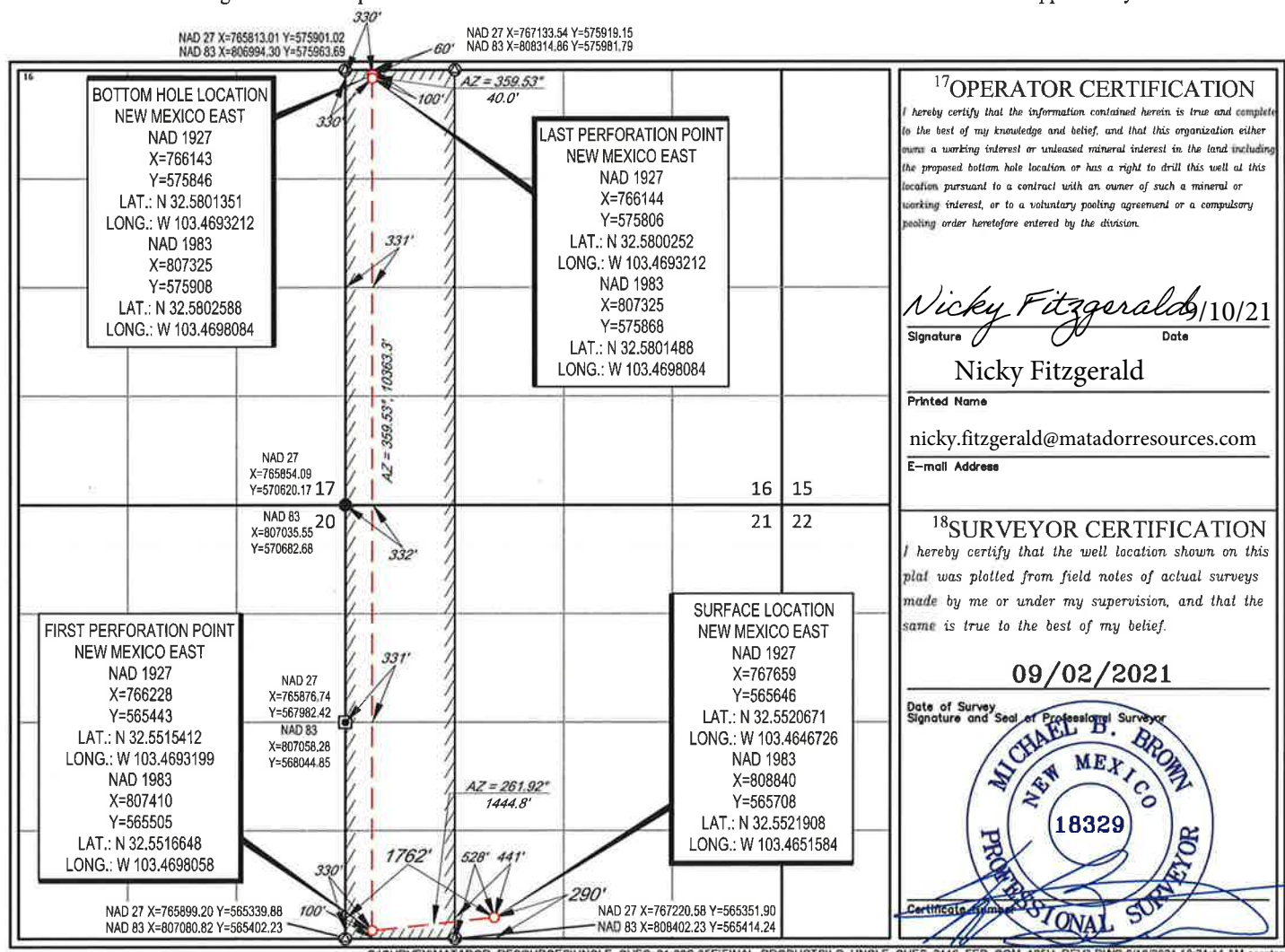
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	21	20-S	35-E	-	290'	SOUTH	1762'	WEST	LEA

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	16	20-S	35-E	-	60'	NORTH	330'	WEST	LEA

¹² Dedicated Acres 320	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.





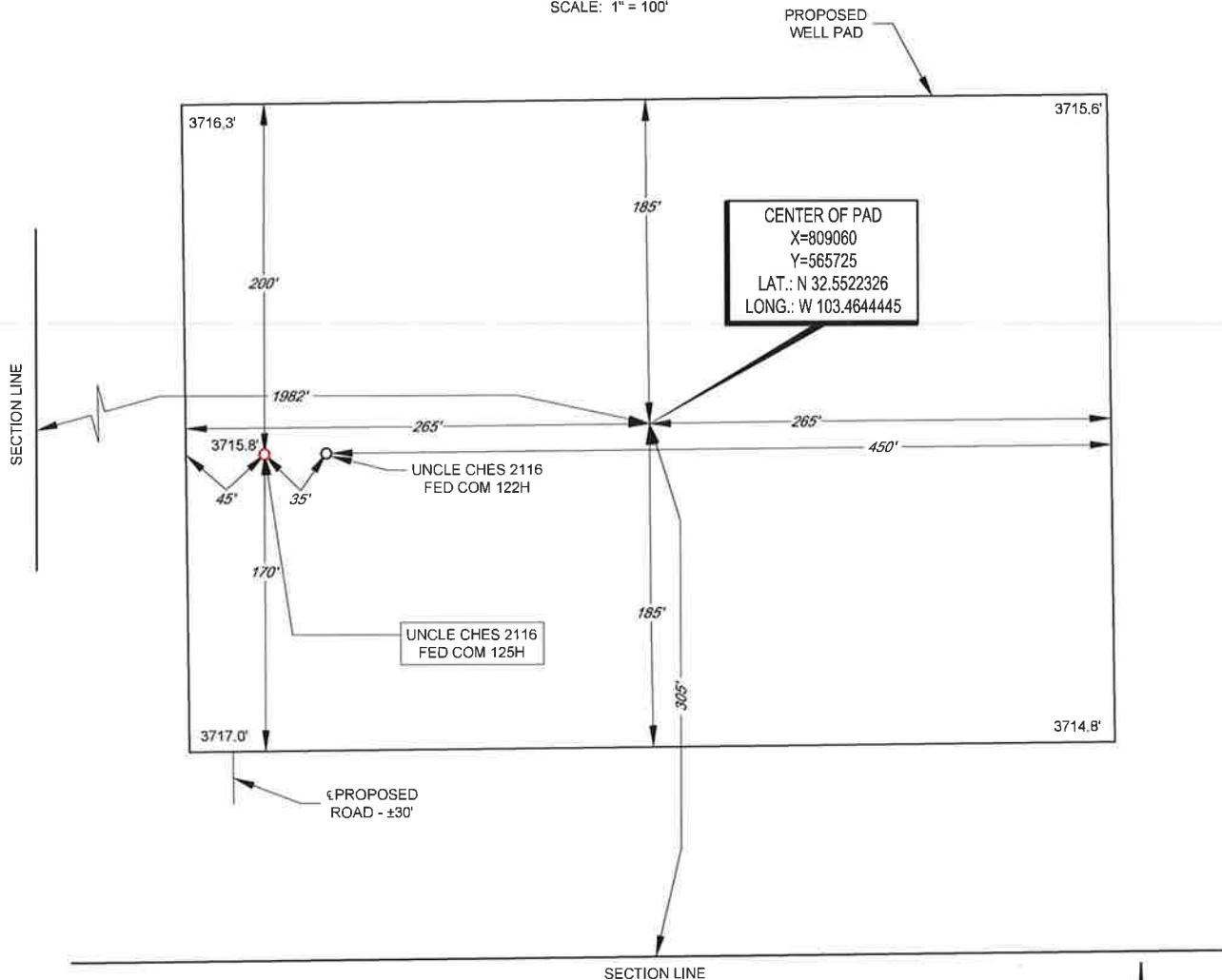


LEGEND

--- SECTION LINE
 --- PROPOSED ROAD

SECTION 21, TOWNSHIP 20-S, RANGE 35-E, N.M.P.M.
 LEA COUNTY, NEW MEXICO

DETAIL VIEW
 SCALE: 1" = 100'



LEASE NAME & WELL NO.: UNCLE CHES 2116 FED COM 125H
 125H LATITUDE N 32.5521908 125H LONGITUDE W 103.4651584

CENTER OF PAD IS 305' FSL & 1982' FWL

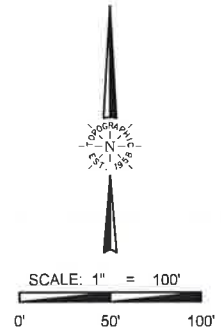


Michael B. Brown, P.S. No. 18329
 September 2, 2021

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. ONLY THE DATA SHOWN ABOVE IS BEING CERTIFIED TO, ALL OTHER INFORMATION WAS INTENTIONALLY OMITTED. THIS PLAT IS ONLY INTENDED TO BE USED FOR A PERMIT AND IS NOT A BOUNDARY SURVEY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

ORIGINAL DOCUMENT SIZE: 8.5" X 11" SURVEY\MATADOR_RESOURCES\UNCLE_CHES_21-20S-35E\FINAL_PRODUCTS\ILO_UNCLE_CHES_2116_FED_COM_125H_REV3.DWG 9/10/2021 10:21:18 AM ccaston



TOPOGRAPHIC
 LOYALTY INNOVATION LEGACY
 1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140
 TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
 2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
 TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
 WWW.TOPOGRAPHIC.COM

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Matador
LEASE NO.:	NMNM132079
LOCATION:	Section 21, T.20 S., R.35 E., NMPM
COUNTY:	Lea County, New Mexico

WELL NAME & NO.:	Uncle Ches 2116 Fed Com 125H
SURFACE HOLE FOOTAGE:	290'S & 1762'/W
BOTTOM HOLE FOOTAGE:	60'/N & 330'/W

COA

All previous COAs still apply

H2S	☒ Yes	☐ No	
Potash	☒ None	☐ Secretary	☐ R-111-P
Cave/Karst Potential	☒ Low	☐ Medium	☐ High
Cave/Karst Potential	☐ Critical		
Variance	☐ None	☒ Flex Hose	☐ Other
Wellhead	☐ Conventional	☒ Multibowl	☐ Both
Other	☐ 4 String Area	☒ Capitan Reef	☐ WIPP
Other	☒ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☒ COM	☐ Unit

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Seven River** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **1984** feet (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of

24 hours in the Potash Area or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Intermediate casing must be kept 1/3rd fluid filled to meet BLM minimum collapse requirement.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

- 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.

- ❖ In Capitan Reef 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.

- ❖ **Special Capitan Reef requirements.** If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:

(Use this for 3 string wells in the Capitan Reef, if 4 string well ensure FW based mud used across the capitan interval)

- Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
- Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

- Cement should tie-back at least **50 feet (5146ft)** on top of Capitan Reef top. If cement does not circulate see B.1.a, c-d above. **Excess calculates to 19%.**

Additional cement maybe requiried.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or capitan reef.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
 - 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.

ZS062121

Addendum to Natural Gas Management Plan for Matador's
Uncle Ches 2116 Fed Com 125H

VI. Separation Equipment

Flow from the well will be routed via a flowline to a 48"x15' three phase separator dedicated to the well. The first stage separator is sized with input from BRE ProMax and API 12J. Expected production from the well is approximately 1,200 mcf/d, 1,750 bopd, and 2,000 bwpd. Liquid retention times at expected maximum rates will be >3 minutes. Gas will be routed from the first stage separator to sales. Hydrocarbon liquids are dumped from the first stage separator and commingled to one or more heater treaters. The flash gas from the heater treater(s) could either be sent to sales or routed to a compressor if the sales line pressure is higher than the MAWP of the heater treater (125 psi). From the heater treaters, hydrocarbon liquid will be routed to the tanks where vapor is compressed by a VRU if technically feasible to either sales or a compressor if the sales line pressure is higher than the VRU's maximum discharge pressure (~150 psi). Therefore, Matador has sized our separation equipment to optimize gas capture and our separation equipment is of sufficient size to handle the expected volumes of gas.

VII. Operation Practices

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

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

VII. Best Management Practices

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Matador Production Company **OGRID:** 228937 **Date:** 09/10/2021

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Uncle Ches 2116 Fed Com 125H		UL-N Sec 21 T20S R35E	290' FSL 1,762' FWL	1,750	1,200	2,000

IV. Central Delivery Point Name: Uncle Ches Fed TB [See 19.15.27.9(D)(1) NMAC]

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

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Uncle Ches 2116 Fed Com 125H	TBD	9/20/2021	10/15/2021	12/14/2021	1/4/2022	1/4/2022

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

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

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

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature: 
Printed Name: Ryan Hernandez
Title: Production Engineer
E-mail Address: rhernandez@matadorresources.com
Date: 09/10/21
Phone: (972) 619-1276
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:



Matador Resources

**Lea County, New Mexico (NAD 27)
Uncle Ches 2116 Fed Com (122H, 125H)
Uncle Ches 2116 Fed Com 125H**

**Wellbore #1
Design #2**

Anticollision Report

10 September, 2021





MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Reference	Design #2
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD + Stations Interval 100.00usft
Depth Range:	Unlimited
Results Limited by:	Maximum centre distance of 10,000.00usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program		Date	9/9/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	21,103.87	Design #2 (Wellbore #1)	MWD+HRGM	OWSG MWD + HRGM	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Uncle Ches 2116 Fed Com (122H, 125H)						
Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Design	283.65	283.72	34.58	33.28	26.475	CC
Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Design	300.00	300.01	34.60	33.17	24.302	ES
Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Design	21,103.87	20,997.07	1,320.29	1,012.10	4.284	SF
Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Surveys	268.79	268.86	33.98	32.94	32.781	CC
Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Surveys	300.00	299.98	34.03	32.83	28.551	ES
Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Surveys	2,100.00	2,099.80	69.62	59.47	6.859	SF
Uncle Ches 2116 Fed Com 125Y - Wellbore #1 - Pilot Su	4,115.09	4,120.86	35.75	14.83	1.708	CC
Uncle Ches 2116 Fed Com 125Y - Wellbore #1 - Pilot Su	10,300.00	10,349.14	60.38	4.70	1.084	Level 3, ES, SF
Uncle Ches 2116 Fed Com 125Y - Wellbore #2 - Surveys	4,115.09	4,120.86	35.75	14.83	1.708	CC
Uncle Ches 2116 Fed Com 125Y - Wellbore #2 - Surveys	13,147.49	13,136.00	54.70	-21.44	0.718	Level 3, ES, SF
Uncle Ches 2116 Fed Com Offsets						
Featherstone Federal No. 1 - Wellbore #1 - Surveys	13,702.01	10,694.19	2,957.29	2,690.99	11.105	CC, ES
Featherstone Federal No. 1 - Wellbore #1 - Surveys	13,900.00	10,688.40	2,963.91	2,696.17	11.070	SF
Manzanita State #1 - Wellbore #1 - Surveys	19,290.79	10,273.62	323.55	-22.65	0.935	Level 3, CC, ES, SF
Manzanita State #2 - Wellbore #1 - Surveys	20,500.00	10,610.13	321.55	-30.19	0.914	Level 3, ES, SF
Manzanita State #2 - Wellbore #1 - Surveys	20,510.72	10,610.14	321.37	-30.13	0.914	Level 3, CC
NJ State #1 - Wellbore #1 - Surveys	2,120.08	2,094.53	5,644.78	5,599.33	124.202	CC
NJ State #1 - Wellbore #1 - Surveys	2,600.00	2,573.24	5,648.44	5,592.03	100.129	ES
NJ State #1 - Wellbore #1 - Surveys	5,200.00	4,700.00	5,803.85	5,689.61	50.806	SF

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Design #3													Offset Site Error:	0.00 usft
Survey Program:		16-MWD+HRGM, 1910-MWD+HRGM						Rule Assigned:				Offset Well Error:	0.00 usft	
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance			Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	89.789	0.13	35.32	35.32					
100.00	100.00	100.09	100.09	0.13	0.14	90.609	-0.37	35.21	35.21	34.94	0.27	129.260		
200.00	200.00	200.17	200.15	0.49	0.32	93.792	-2.30	34.78	34.85	34.05	0.80	43.387		
283.65	283.65	283.72	283.65	0.79	0.52	98.154	-4.91	34.23	34.58	33.28	1.31	26.475	CC	
300.00	300.00	300.01	299.94	0.85	0.58	98.975	-5.40	34.17	34.60	33.17	1.42	24.302	ES	
400.00	400.00	399.65	399.53	1.20	0.94	103.295	-8.15	34.50	35.45	33.31	2.14	16.556		
500.00	500.00	499.65	499.52	1.56	1.28	103.489	-8.58	35.78	36.80	33.96	2.84	12.941		
600.00	599.99	599.59	599.39	1.92	1.62	98.700	-5.47	37.84	39.05	35.51	3.54	11.040		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Design #3													Offset Site Error:
Survey Program: 16-MWD+HRGM, 1910-MWD+HRGM													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Minimum Separation (usft)	Separation Factor	Warning	
700.00	699.98	699.59	699.28	2.27	1.96	93.575	-1.33	40.01	42.37	38.14	4.23	10.017	
800.00	799.96	800.30	799.94	2.62	2.31	91.328	1.14	41.02	44.81	39.88	4.93	9.083	
900.00	899.95	900.55	900.18	2.98	2.66	93.775	0.04	40.42	45.81	40.17	5.64	8.126	
1,000.00	999.93	1,000.20	999.84	3.34	3.01	95.239	-0.39	40.24	47.24	40.90	6.34	7.449	
1,100.00	1,099.92	1,100.02	1,099.65	3.69	3.36	94.962	0.54	40.76	49.26	42.22	7.04	6.993	
1,200.00	1,199.90	1,199.93	1,199.55	4.05	3.70	94.587	1.56	41.47	51.46	43.71	7.75	6.640	
1,300.00	1,299.89	1,299.80	1,299.41	4.41	4.05	93.837	2.94	42.36	53.82	45.36	8.46	6.364	
1,400.00	1,399.87	1,399.80	1,399.39	4.76	4.41	93.357	4.12	43.31	56.25	47.09	9.17	6.137	
1,500.00	1,499.86	1,499.72	1,499.31	5.12	4.76	93.334	4.88	44.20	58.66	48.78	9.88	5.940	
1,600.00	1,599.84	1,599.71	1,599.29	5.48	5.11	92.984	5.97	45.32	61.28	50.69	10.59	5.788	
1,700.00	1,699.83	1,699.98	1,699.54	5.84	5.47	92.547	7.22	46.01	63.46	52.16	11.30	5.616	
1,800.00	1,799.81	1,800.15	1,799.70	6.20	5.82	92.077	8.54	46.37	65.31	53.30	12.01	5.437	
1,900.00	1,899.80	1,899.82	1,899.35	6.56	6.18	91.245	10.32	46.76	67.18	54.46	12.72	5.281	
2,000.00	1,999.78	1,999.73	1,999.24	6.91	6.53	89.869	12.81	47.54	69.45	56.02	13.43	5.170	
2,050.23	2,050.00	2,049.94	2,049.43	7.09	6.71	89.209	14.07	47.93	70.61	56.82	13.79	5.120	
2,100.00	2,099.76	2,099.69	2,099.16	7.27	6.89	88.536	15.31	48.31	71.98	57.83	14.15	5.088	
2,200.00	2,199.71	2,199.59	2,199.02	7.63	7.24	87.052	17.81	49.09	76.03	61.17	14.86	5.117	
2,300.00	2,299.59	2,300.02	2,299.44	7.99	7.60	86.030	19.52	49.55	81.46	65.89	15.57	5.231	
2,400.00	2,399.37	2,400.47	2,399.88	8.35	7.95	85.962	19.59	49.35	87.84	71.57	16.27	5.398	
2,500.00	2,499.03	2,500.52	2,499.92	8.71	8.28	86.530	18.26	48.58	95.28	78.31	16.96	5.616	
2,600.00	2,598.52	2,600.10	2,599.49	9.07	8.62	86.918	16.74	47.73	104.33	86.68	17.66	5.909	
2,700.00	2,697.83	2,699.52	2,698.89	9.44	8.96	87.061	15.23	46.89	115.09	96.74	18.35	6.272	
2,800.00	2,796.92	2,798.74	2,798.10	9.81	9.30	87.016	13.71	46.04	127.55	108.50	19.05	6.697	
2,900.00	2,895.75	2,897.73	2,897.08	10.19	9.64	86.833	12.21	45.20	141.70	121.96	19.74	7.177	
3,000.00	2,994.31	2,996.47	2,995.79	10.57	9.98	86.555	10.70	44.37	157.54	137.10	20.44	7.708	
3,100.00	3,092.56	3,094.91	3,094.22	10.96	10.32	86.217	9.20	43.53	175.07	153.93	21.14	8.283	
3,161.76	3,153.08	3,155.56	3,154.86	11.21	10.53	85.989	8.27	43.02	186.74	165.17	21.57	8.659	
3,200.00	3,190.50	3,193.06	3,192.36	11.36	10.66	85.851	7.70	42.70	194.17	172.33	21.83	8.893	
3,300.00	3,288.37	3,291.15	3,290.43	11.77	11.00	85.534	6.21	41.86	213.59	191.06	22.53	9.480	
3,400.00	3,386.24	3,389.24	3,388.51	12.17	11.34	85.270	4.71	41.03	233.02	209.79	23.23	10.031	
3,500.00	3,484.11	3,487.33	3,486.58	12.59	11.69	85.046	3.22	40.20	252.46	228.53	23.93	10.548	
3,600.00	3,581.98	3,585.42	3,584.66	13.00	12.03	84.855	1.72	39.37	271.90	247.26	24.64	11.036	
3,700.00	3,679.85	3,683.51	3,682.73	13.42	12.37	84.689	0.22	38.53	291.34	266.00	25.34	11.496	
3,800.00	3,777.73	3,781.59	3,780.80	13.84	12.72	84.544	-1.27	37.70	310.78	284.73	26.05	11.930	
3,900.00	3,875.60	3,879.68	3,878.88	14.26	13.06	84.416	-2.77	36.87	330.23	303.47	26.76	12.341	
4,000.00	3,973.47	3,977.77	3,976.95	14.69	13.41	84.302	-4.26	36.03	349.67	322.20	27.47	12.730	
4,100.00	4,071.34	4,075.86	4,075.02	15.12	13.75	84.200	-5.76	35.20	369.12	340.94	28.18	13.098	
4,200.00	4,169.21	4,173.95	4,173.10	15.55	14.10	84.108	-7.25	34.37	388.57	359.68	28.89	13.448	
4,300.00	4,267.08	4,272.04	4,271.17	15.98	14.44	84.025	-8.75	33.54	408.02	378.41	29.61	13.781	
4,400.00	4,364.95	4,370.13	4,369.25	16.42	14.79	83.950	-10.25	32.70	427.47	397.15	30.32	14.098	
4,500.00	4,462.82	4,468.22	4,467.32	16.85	15.14	83.881	-11.74	31.87	446.92	415.88	31.04	14.399	
4,600.00	4,560.69	4,566.30	4,565.39	17.29	15.48	83.818	-13.24	31.04	466.37	434.62	31.75	14.687	
4,700.00	4,658.56	4,664.39	4,663.47	17.73	15.83	83.760	-14.73	30.20	485.82	453.35	32.47	14.962	
4,800.00	4,756.43	4,762.48	4,761.54	18.17	16.18	83.707	-16.23	29.37	505.28	472.09	33.19	15.224	
4,900.00	4,854.30	4,860.57	4,859.61	18.61	16.53	83.657	-17.72	28.54	524.73	490.82	33.91	15.475	
5,000.00	4,952.17	4,958.66	4,957.69	19.05	16.87	83.611	-19.22	27.71	544.18	509.56	34.63	15.715	
5,100.00	5,050.04	5,056.75	5,055.76	19.49	17.22	83.568	-20.72	26.87	563.64	528.29	35.35	15.945	
5,200.00	5,147.91	5,154.84	5,153.83	19.94	17.57	83.528	-22.21	26.04	583.09	547.02	36.07	16.166	
5,300.00	5,245.78	5,252.92	5,251.91	20.38	17.92	83.491	-23.71	25.21	602.55	565.75	36.79	16.378	
5,400.00	5,343.65	5,351.01	5,349.98	20.83	18.27	83.456	-25.20	24.37	622.00	584.49	37.51	16.581	
5,500.00	5,441.52	5,449.10	5,448.06	21.27	18.62	83.423	-26.70	23.54	641.45	603.22	38.23	16.777	
5,600.00	5,539.40	5,547.19	5,546.13	21.72	18.97	83.392	-28.19	22.71	660.91	621.95	38.96	16.965	

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



MS Directional Anticollision Report



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Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Design #3													Offset Site Error:
Survey Program: 16-MWD+HRGM, 1910-MWD+HRGM													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,700.00	5,637.27	5,645.28	5,644.20	22.17	19.31	83.363	-29.69	21.88	680.36	640.68	39.68	17.146	
5,800.00	5,735.14	5,743.37	5,742.28	22.62	19.66	83.335	-31.18	21.04	699.82	659.41	40.40	17.320	
5,900.00	5,833.01	5,841.46	5,840.35	23.07	20.01	83.309	-32.68	20.21	719.28	678.15	41.13	17.488	
6,000.00	5,930.88	5,939.54	5,938.42	23.52	20.36	83.284	-34.18	19.38	738.73	696.88	41.85	17.650	
6,100.00	6,028.75	6,037.63	6,036.50	23.97	20.71	83.261	-35.67	18.55	758.19	715.61	42.58	17.807	
6,200.00	6,126.62	6,135.72	6,134.57	24.42	21.06	83.238	-37.17	17.71	777.64	734.34	43.30	17.958	
6,300.00	6,224.49	6,233.81	6,232.65	24.87	21.41	83.217	-38.66	16.88	797.10	753.07	44.03	18.103	
6,400.00	6,322.36	6,339.26	6,338.06	25.32	21.79	83.243	-40.86	15.65	816.19	771.39	44.80	18.218	
6,500.00	6,420.23	6,446.66	6,445.36	25.77	22.17	83.379	-44.82	13.45	834.22	788.64	45.58	18.302	
6,600.00	6,518.10	6,554.40	6,552.90	26.23	22.56	83.622	-50.56	10.26	851.18	804.82	46.36	18.359	
6,700.00	6,615.97	6,655.03	6,653.26	26.68	22.92	83.902	-57.06	6.64	867.41	820.30	47.11	18.413	
6,800.00	6,713.84	6,753.62	6,751.58	27.13	23.28	84.167	-63.47	3.07	883.63	835.79	47.85	18.468	
6,900.00	6,811.71	6,852.21	6,849.90	27.58	23.64	84.422	-69.88	-0.50	899.87	851.29	48.58	18.522	
7,000.00	6,909.58	6,950.81	6,948.22	28.04	23.99	84.668	-76.29	-4.07	916.13	866.80	49.32	18.574	
7,100.00	7,007.45	7,049.40	7,046.54	28.49	24.35	84.905	-82.70	-7.64	932.40	882.34	50.06	18.625	
7,200.00	7,105.32	7,147.99	7,144.85	28.95	24.71	85.134	-89.11	-11.21	948.69	897.89	50.80	18.675	
7,300.00	7,203.19	7,246.59	7,243.17	29.40	25.07	85.356	-95.53	-14.78	964.99	913.45	51.54	18.723	
7,400.00	7,301.06	7,345.18	7,341.49	29.86	25.42	85.570	-101.94	-18.35	981.31	929.02	52.28	18.769	
7,500.00	7,398.94	7,443.77	7,439.81	30.31	25.78	85.777	-108.35	-21.92	997.64	944.61	53.02	18.815	
7,600.00	7,496.81	7,542.36	7,538.13	30.77	26.14	85.977	-114.76	-25.49	1,013.98	960.21	53.77	18.859	
7,700.00	7,594.68	7,640.96	7,636.45	31.22	26.50	86.171	-121.17	-29.06	1,030.33	975.82	54.51	18.902	
7,800.00	7,692.55	7,739.55	7,734.77	31.68	26.86	86.359	-127.58	-32.63	1,046.70	991.45	55.25	18.944	
7,900.00	7,790.42	7,838.14	7,833.09	32.14	27.22	86.542	-133.99	-36.20	1,063.07	1,007.08	56.00	18.985	
8,000.00	7,888.29	7,936.73	7,931.41	32.59	27.58	86.718	-140.40	-39.77	1,079.46	1,022.72	56.74	19.025	
8,100.00	7,986.16	8,035.33	8,029.73	33.05	27.94	86.890	-146.82	-43.34	1,095.86	1,038.37	57.48	19.063	
8,200.00	8,084.03	8,133.92	8,128.05	33.51	28.30	87.056	-153.23	-46.90	1,112.27	1,054.04	58.23	19.101	
8,300.00	8,181.90	8,232.51	8,226.37	33.96	28.66	87.218	-159.64	-50.47	1,128.68	1,069.71	58.98	19.138	
8,400.00	8,279.77	8,331.11	8,324.69	34.42	29.02	87.374	-166.05	-54.04	1,145.11	1,085.38	59.72	19.174	
8,500.00	8,377.64	8,429.70	8,423.00	34.88	29.38	87.527	-172.46	-57.61	1,161.54	1,101.07	60.47	19.209	
8,600.00	8,475.51	8,528.29	8,521.32	35.34	29.74	87.675	-178.87	-61.18	1,177.98	1,116.76	61.22	19.243	
8,700.00	8,573.38	8,626.88	8,619.64	35.79	30.11	87.819	-185.28	-64.75	1,194.43	1,132.47	61.96	19.276	
8,800.00	8,671.25	8,725.48	8,717.96	36.25	30.47	87.959	-191.69	-68.32	1,210.89	1,148.17	62.71	19.309	
8,845.65	8,715.93	8,770.48	8,762.84	36.46	30.63	88.022	-194.62	-69.95	1,218.40	1,155.35	63.05	19.323	
8,900.00	8,769.20	8,824.13	8,816.34	36.71	30.83	88.099	-198.11	-71.89	1,226.97	1,163.51	63.46	19.335	
9,000.00	8,867.59	8,923.11	8,915.05	37.14	31.19	88.254	-204.55	-75.48	1,240.78	1,176.58	64.21	19.325	
9,100.00	8,966.42	9,022.40	9,014.06	37.56	31.56	88.426	-211.00	-79.07	1,252.04	1,187.09	64.95	19.278	
9,200.00	9,065.61	9,121.93	9,113.32	37.96	31.92	88.617	-217.47	-82.67	1,260.75	1,195.06	65.69	19.193	
9,300.00	9,165.10	9,221.63	9,212.74	38.34	32.29	88.827	-223.96	-86.28	1,266.90	1,200.48	66.42	19.073	
9,400.00	9,264.82	9,321.43	9,312.27	38.70	32.66	89.056	-230.45	-89.90	1,270.50	1,203.34	67.15	18.919	
9,500.00	9,364.70	9,421.27	9,411.83	39.04	33.03	89.306	-236.94	-93.51	1,271.54	1,203.67	67.88	18.733	
9,600.00	9,464.67	9,521.07	9,511.35	39.36	33.39	89.578	-243.43	-97.13	1,270.05	1,201.45	68.60	18.514	
9,635.33	9,500.00	9,556.32	9,546.50	39.47	33.52	89.680	-245.72	-98.40	1,268.91	1,200.06	68.85	18.431	
9,700.00	9,564.67	9,620.80	9,610.81	39.66	33.76	89.869	-249.91	-100.74	1,266.55	1,197.25	69.30	18.277	
9,800.00	9,664.67	9,720.53	9,710.25	39.95	34.13	90.163	-256.40	-104.35	1,262.92	1,192.92	70.00	18.043	
9,900.00	9,764.67	9,807.35	9,796.89	40.25	34.45	90.386	-261.29	-107.07	1,259.81	1,189.19	70.62	17.840	
10,000.00	9,864.67	9,900.00	9,889.46	40.55	34.78	90.538	-264.61	-108.92	1,257.82	1,186.55	71.26	17.650	
10,100.00	9,964.67	9,980.01	9,969.46	40.85	35.07	90.597	-265.90	-109.64	1,256.88	1,185.05	71.82	17.500	
10,151.54	10,016.21	10,026.76	10,016.21	41.00	35.23	90.602	-266.01	-109.70	1,256.81	1,184.67	72.14	17.423	
10,200.00	10,064.67	10,075.22	10,064.67	41.15	35.39	90.602	-266.01	-109.70	1,256.81	1,184.36	72.45	17.346	
10,300.00	10,164.67	10,175.22	10,164.67	41.45	35.72	90.602	-266.01	-109.70	1,256.81	1,183.70	73.11	17.191	
10,319.92	10,184.58	10,195.27	10,184.72	41.51	35.79	90.602	-266.00	-109.70	1,256.81	1,183.57	73.24	17.160	
10,350.00	10,214.65	10,226.63	10,216.06	41.60	35.89	90.590	-264.97	-109.71	1,256.81	1,183.36	73.44	17.112	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Design #3													Offset Site Error:	0.00 usft
Survey Program: 16-MWD+HRGM, 1910-MWD+HRGM													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
10,400.00	10,264.41	10,278.73	10,267.85	41.74	36.06	90.558	-259.47	-109.75	1,256.80	1,183.02	73.77	17.036		
10,450.00	10,313.55	10,330.77	10,318.86	41.88	36.22	90.510	-249.30	-109.84	1,256.79	1,182.69	74.09	16.963		
10,500.00	10,361.72	10,382.73	10,368.68	42.02	36.38	90.448	-234.57	-109.96	1,256.77	1,182.38	74.39	16.893		
10,550.00	10,408.53	10,434.61	10,416.87	42.14	36.52	90.374	-215.43	-110.11	1,256.75	1,182.07	74.69	16.827		
10,600.00	10,453.64	10,486.37	10,463.05	42.25	36.67	90.290	-192.06	-110.30	1,256.74	1,181.77	74.96	16.765		
10,650.00	10,496.71	10,538.02	10,506.83	42.35	36.80	90.199	-164.69	-110.53	1,256.72	1,181.49	75.22	16.706		
10,700.00	10,537.40	10,589.54	10,547.86	42.43	36.93	90.104	-133.57	-110.78	1,256.70	1,181.22	75.48	16.650		
10,750.00	10,575.40	10,640.91	10,585.83	42.51	37.06	90.008	-99.00	-111.07	1,256.68	1,180.96	75.72	16.597		
10,800.00	10,610.43	10,692.13	10,620.46	42.57	37.18	89.914	-61.28	-111.38	1,256.66	1,180.71	75.95	16.546		
10,850.00	10,642.22	10,743.19	10,651.48	42.61	37.30	89.825	-20.76	-111.71	1,256.64	1,180.46	76.18	16.496		
10,900.00	10,670.52	10,794.07	10,678.70	42.65	37.41	89.743	22.22	-112.06	1,256.63	1,180.23	76.40	16.448		
10,950.00	10,695.13	10,844.78	10,701.92	42.68	37.53	89.673	67.28	-112.43	1,256.61	1,180.00	76.62	16.401		
11,000.00	10,715.85	10,895.31	10,721.00	42.70	37.65	89.614	114.05	-112.82	1,256.60	1,179.77	76.83	16.355		
11,050.00	10,732.53	10,945.66	10,735.85	42.71	37.77	89.570	162.14	-113.21	1,256.59	1,179.55	77.05	16.310		
11,100.00	10,745.04	10,995.83	10,746.39	42.72	37.89	89.540	211.17	-113.61	1,256.59	1,179.33	77.26	16.265		
11,133.11	10,750.98	11,028.95	10,750.98	42.72	37.97	89.530	243.96	-113.88	1,256.59	1,179.19	77.40	16.235		
11,150.00	10,753.28	11,045.82	10,752.58	42.73	38.01	89.527	260.75	-114.02	1,256.59	1,179.12	77.47	16.220		
11,200.00	10,757.20	11,095.63	10,754.44	42.74	38.13	89.530	310.52	-114.43	1,256.59	1,178.91	77.69	16.175		
11,224.92	10,757.52	11,120.54	10,754.35	42.75	38.20	89.530	335.43	-114.63	1,256.59	1,178.79	77.80	16.151		
11,300.00	10,756.87	11,195.62	10,754.09	42.80	38.41	89.530	410.51	-115.25	1,256.59	1,178.42	78.18	16.074		
11,400.00	10,755.99	11,295.62	10,753.74	42.90	38.73	89.530	510.50	-116.07	1,256.59	1,177.82	78.78	15.952		
11,500.00	10,755.12	11,395.62	10,753.39	43.06	39.11	89.530	610.49	-116.89	1,256.59	1,177.12	79.47	15.811		
11,600.00	10,754.25	11,495.62	10,753.04	43.28	39.54	89.530	710.49	-117.71	1,256.59	1,176.32	80.27	15.655		
11,700.00	10,753.37	11,595.62	10,752.69	43.55	40.01	89.530	810.48	-118.53	1,256.59	1,175.43	81.16	15.482		
11,800.00	10,752.50	11,695.62	10,752.34	43.90	40.54	89.530	910.48	-119.35	1,256.59	1,174.44	82.15	15.297		
11,829.96	10,752.24	11,725.58	10,752.24	44.01	40.70	89.530	940.44	-119.59	1,256.59	1,174.12	82.47	15.237		
11,900.00	10,751.63	11,795.62	10,752.00	44.31	41.10	89.530	1,010.47	-120.17	1,256.59	1,173.37	83.22	15.100		
12,000.00	10,750.76	11,895.62	10,751.65	44.77	41.71	89.530	1,110.47	-120.99	1,256.59	1,172.21	84.38	14.892		
12,100.00	10,749.88	11,995.61	10,751.30	45.29	42.36	89.530	1,210.46	-121.81	1,256.59	1,170.97	85.62	14.676		
12,200.00	10,749.01	12,095.61	10,750.95	45.87	43.05	89.530	1,310.46	-122.63	1,256.59	1,169.65	86.94	14.454		
12,300.00	10,748.14	12,195.61	10,750.60	46.48	43.77	89.530	1,410.45	-123.45	1,256.59	1,168.26	88.33	14.225		
12,400.00	10,747.27	12,295.61	10,750.25	47.14	44.53	89.530	1,510.45	-124.27	1,256.59	1,166.79	89.80	13.993		
12,500.00	10,746.39	12,395.61	10,749.90	47.84	45.33	89.529	1,610.44	-125.09	1,256.59	1,165.26	91.34	13.758		
12,600.00	10,745.52	12,495.61	10,749.55	48.58	46.15	89.529	1,710.44	-125.91	1,256.60	1,163.66	92.94	13.521		
12,700.00	10,744.65	12,595.61	10,749.20	49.35	47.01	89.529	1,810.43	-126.73	1,256.60	1,162.00	94.60	13.284		
12,800.00	10,743.78	12,695.60	10,748.85	50.15	47.89	89.529	1,910.43	-127.55	1,256.60	1,160.28	96.32	13.047		
12,888.61	10,743.00	12,784.22	10,748.54	50.89	48.70	89.529	1,999.03	-128.28	1,256.60	1,158.72	97.89	12.837		
12,900.00	10,742.88	12,795.60	10,748.51	50.98	48.80	89.529	2,010.42	-128.37	1,256.60	1,158.51	98.09	12.811		
12,939.06	10,742.12	12,834.66	10,748.37	51.32	49.16	89.529	2,049.48	-128.69	1,256.61	1,157.80	98.80	12.718		
13,000.00	10,740.51	12,895.58	10,748.16	51.85	49.74	89.529	2,110.39	-129.19	1,256.61	1,156.69	99.93	12.575		
13,100.00	10,737.88	12,995.56	10,747.81	52.74	50.69	89.528	2,210.36	-130.01	1,256.63	1,154.81	101.82	12.342		
13,147.49	10,736.63	13,043.04	10,747.64	53.17	51.16	89.528	2,257.84	-130.40	1,256.64	1,153.91	102.73	12.232		
13,200.00	10,735.25	13,095.53	10,747.46	53.65	51.68	89.528	2,310.33	-130.83	1,257.13	1,153.38	103.75	12.117		
13,300.00	10,732.61	13,195.43	10,747.11	54.61	52.68	89.528	2,410.23	-131.65	1,260.73	1,155.00	105.74	11.923		
13,347.43	10,731.36	13,242.75	10,746.94	55.08	53.16	89.528	2,457.55	-132.04	1,263.66	1,156.97	106.69	11.844		
13,400.00	10,729.98	13,295.24	10,746.74	55.60	53.70	89.525	2,510.04	-132.47	1,267.34	1,159.58	107.76	11.761		
13,500.00	10,727.34	13,395.36	10,744.42	56.62	54.75	89.508	2,610.13	-133.29	1,274.32	1,164.49	109.83	11.603		
13,600.00	10,724.71	13,495.12	10,741.29	57.66	55.81	89.509	2,709.83	-134.10	1,281.29	1,169.36	111.93	11.447		
13,700.00	10,722.08	13,594.87	10,738.15	58.72	56.89	89.510	2,809.53	-134.92	1,288.26	1,174.20	114.06	11.294		
13,800.00	10,719.44	13,694.63	10,735.02	59.79	57.99	89.511	2,909.23	-135.73	1,295.23	1,179.00	116.23	11.144		
13,900.00	10,716.81	13,794.38	10,731.89	60.88	59.10	89.512	3,008.94	-136.54	1,302.20	1,183.77	118.43	10.996		
14,000.00	10,714.18	13,894.14	10,728.75	61.99	60.23	89.512	3,108.64	-137.36	1,309.17	1,188.52	120.66	10.850		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Design #3													Offset Site Error: 0.00 usft
Survey Program: 16-MWD+HRGM, 1910-MWD+HRGM													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,055.43	10,712.72	13,949.43	10,727.02	62.60	60.86	89.513	3,163.90	-137.81	1,313.04	1,191.13	121.91	10.771	
14,100.00	10,711.54	13,993.91	10,725.62	63.10	61.37	89.513	3,208.36	-138.17	1,315.80	1,192.89	122.91	10.705	
14,200.00	10,708.91	14,093.84	10,722.48	64.22	62.52	89.514	3,308.24	-138.99	1,319.48	1,194.28	125.19	10.539	
14,255.44	10,707.45	14,149.28	10,720.74	64.84	63.17	89.514	3,363.64	-139.44	1,320.01	1,193.54	126.47	10.438	
14,300.00	10,706.27	14,193.84	10,719.34	65.33	63.69	89.515	3,408.18	-139.80	1,320.01	1,192.51	127.49	10.354	
14,400.00	10,703.64	14,293.83	10,716.20	66.46	64.87	89.515	3,508.13	-140.62	1,320.00	1,190.19	129.82	10.168	
14,500.00	10,701.01	14,393.83	10,713.06	67.59	66.06	89.516	3,608.07	-141.43	1,320.00	1,187.84	132.16	9.988	
14,600.00	10,698.37	14,493.83	10,709.92	68.74	67.25	89.517	3,708.02	-142.25	1,320.00	1,185.47	134.53	9.812	
14,700.00	10,695.74	14,593.83	10,706.78	69.90	68.46	89.517	3,807.96	-143.06	1,319.99	1,183.08	136.92	9.641	
14,800.00	10,693.11	14,693.83	10,703.63	71.07	69.68	89.518	3,907.91	-143.88	1,319.99	1,180.67	139.32	9.474	
14,900.00	10,690.47	14,793.83	10,700.49	72.25	70.91	89.519	4,007.86	-144.69	1,319.99	1,178.24	141.75	9.312	
15,000.00	10,687.84	14,893.83	10,697.35	73.43	72.14	89.519	4,107.80	-145.51	1,319.99	1,175.80	144.19	9.155	
15,100.00	10,685.21	14,993.83	10,694.21	74.63	73.38	89.520	4,207.75	-146.33	1,319.98	1,173.34	146.65	9.001	
15,200.00	10,682.57	15,093.82	10,691.07	75.84	74.63	89.521	4,307.69	-147.14	1,319.98	1,170.86	149.12	8.852	
15,300.00	10,679.94	15,193.82	10,687.93	77.05	75.89	89.522	4,407.64	-147.96	1,319.98	1,168.37	151.61	8.707	
15,399.00	10,677.33	15,292.80	10,684.83	78.26	77.14	89.523	4,506.57	-148.76	1,319.98	1,165.90	154.08	8.567	
15,400.00	10,677.31	15,293.80	10,684.80	78.27	77.15	89.523	4,507.56	-148.77	1,319.98	1,165.87	154.11	8.565	
15,500.00	10,674.67	15,393.71	10,682.89	79.50	78.41	89.526	4,607.46	-149.59	1,319.98	1,163.36	156.63	8.428	
15,600.00	10,672.04	15,493.71	10,681.14	80.74	79.69	89.526	4,707.43	-150.40	1,319.99	1,160.83	159.16	8.294	
15,700.00	10,669.41	15,593.71	10,679.40	81.98	80.96	89.525	4,807.41	-151.22	1,320.00	1,158.30	161.70	8.163	
15,800.00	10,666.77	15,693.70	10,677.65	83.23	82.25	89.524	4,907.39	-152.04	1,320.01	1,155.75	164.26	8.036	
15,900.00	10,664.14	15,793.70	10,675.91	84.49	83.54	89.524	5,007.37	-152.85	1,320.02	1,153.19	166.83	7.912	
16,000.00	10,661.51	15,893.69	10,674.16	85.75	84.83	89.523	5,107.34	-153.67	1,320.03	1,150.62	169.41	7.792	
16,100.00	10,658.87	15,993.69	10,672.42	87.02	86.13	89.522	5,207.32	-154.48	1,320.04	1,148.04	172.00	7.675	
16,200.00	10,656.24	16,093.69	10,670.67	88.29	87.44	89.522	5,307.30	-155.30	1,320.05	1,145.45	174.59	7.561	
16,300.00	10,653.61	16,193.68	10,668.93	89.57	88.74	89.521	5,407.28	-156.12	1,320.06	1,142.86	177.20	7.450	
16,400.00	10,650.97	16,293.63	10,667.20	90.86	90.06	89.522	5,507.21	-156.93	1,320.07	1,140.26	179.82	7.341	
16,500.00	10,648.34	16,393.26	10,665.16	92.15	91.36	89.537	5,606.83	-157.74	1,320.11	1,137.67	182.44	7.236	
16,600.00	10,645.71	16,493.21	10,663.68	93.44	92.68	89.537	5,706.78	-158.56	1,320.16	1,135.08	185.07	7.133	
16,700.00	10,643.07	16,593.16	10,662.21	94.74	94.00	89.538	5,806.72	-159.37	1,320.21	1,132.50	187.72	7.033	
16,800.00	10,640.44	16,693.11	10,660.73	96.04	95.33	89.539	5,906.67	-160.19	1,320.28	1,129.91	190.37	6.935	
16,892.04	10,638.02	16,785.11	10,669.21	97.24	96.55	89.540	5,998.66	-160.94	1,320.35	1,127.53	192.81	6.848	
16,900.00	10,637.82	16,793.07	10,669.25	97.34	96.66	89.540	6,006.62	-161.01	1,320.35	1,127.33	193.03	6.840	
16,987.49	10,637.09	16,880.55	10,669.71	98.49	97.82	89.540	6,094.09	-161.72	1,320.38	1,125.03	195.35	6.759	
17,000.00	10,637.18	16,893.05	10,669.78	98.65	97.99	89.540	6,106.60	-161.82	1,320.38	1,124.70	195.68	6.748	
17,100.00	10,637.88	16,993.05	10,670.30	99.96	99.32	89.540	6,206.60	-162.64	1,320.38	1,122.04	198.34	6.657	
17,200.00	10,638.58	17,093.05	10,670.82	101.27	100.66	89.540	6,306.59	-163.45	1,320.38	1,119.37	201.00	6.569	
17,300.00	10,639.27	17,193.05	10,671.35	102.59	102.00	89.540	6,406.59	-164.27	1,320.37	1,116.70	203.67	6.483	
17,400.00	10,639.97	17,293.05	10,671.87	103.91	103.35	89.540	6,506.58	-165.09	1,320.37	1,114.02	206.35	6.399	
17,500.00	10,640.67	17,393.05	10,672.39	105.23	104.69	89.540	6,606.58	-165.90	1,320.37	1,111.34	209.03	6.317	
17,600.00	10,641.37	17,493.05	10,672.92	106.56	106.04	89.540	6,706.57	-166.72	1,320.36	1,108.65	211.72	6.236	
17,700.00	10,642.07	17,593.05	10,673.44	107.89	107.39	89.540	6,806.57	-167.53	1,320.36	1,105.95	214.41	6.158	
17,800.00	10,642.76	17,693.05	10,673.97	109.22	108.75	89.540	6,906.56	-168.35	1,320.36	1,103.25	217.11	6.082	
17,900.00	10,643.46	17,793.05	10,674.49	110.56	110.10	89.539	7,006.56	-169.17	1,320.36	1,100.55	219.81	6.007	
18,000.00	10,644.16	17,893.05	10,675.01	111.90	111.46	89.539	7,106.55	-169.98	1,320.35	1,097.84	222.52	5.934	
18,100.00	10,644.86	17,993.05	10,675.54	113.24	112.82	89.539	7,206.55	-170.80	1,320.35	1,095.12	225.23	5.862	
18,200.00	10,645.56	18,093.05	10,676.06	114.58	114.19	89.539	7,306.54	-171.61	1,320.35	1,092.40	227.94	5.792	
18,300.00	10,646.25	18,193.05	10,676.58	115.93	115.55	89.539	7,406.54	-172.43	1,320.35	1,089.68	230.66	5.724	
18,400.00	10,646.95	18,293.05	10,677.11	117.28	116.92	89.539	7,506.53	-173.25	1,320.34	1,086.95	233.39	5.657	
18,500.00	10,647.65	18,393.05	10,677.63	118.63	118.29	89.539	7,606.53	-174.06	1,320.34	1,084.22	236.12	5.592	
18,600.00	10,648.35	18,493.05	10,678.15	119.98	119.66	89.539	7,706.52	-174.88	1,320.34	1,081.49	238.85	5.528	
18,700.00	10,649.05	18,593.05	10,678.68	121.33	121.03	89.539	7,806.52	-175.69	1,320.33	1,078.75	241.59	5.465	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Design #3													Offset Site Error:	0.00 usft
Survey Program: 16-MWD+HRGM, 1910-MWD+HRGM													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
18,800.00	10,649.75	18,693.05	10,679.20	122.69	122.40	89.539	7,906.51	-176.51	1,320.33	1,076.01	244.32	5.404		
18,900.00	10,650.44	18,793.05	10,679.72	124.05	123.78	89.539	8,006.51	-177.33	1,320.33	1,073.26	247.07	5.344		
19,000.00	10,651.14	18,893.05	10,680.25	125.41	125.16	89.539	8,106.50	-178.14	1,320.33	1,070.51	249.81	5.285		
19,100.00	10,651.84	18,993.05	10,680.77	126.77	126.54	89.539	8,206.50	-178.96	1,320.32	1,067.76	252.56	5.228		
19,200.00	10,652.54	19,093.05	10,681.30	128.14	127.92	89.539	8,306.49	-179.77	1,320.32	1,065.01	255.31	5.171		
19,300.00	10,653.24	19,193.05	10,681.82	129.50	129.30	89.539	8,406.49	-180.59	1,320.32	1,062.25	258.07	5.116		
19,392.11	10,653.88	19,285.16	10,682.30	130.76	130.57	89.539	8,498.59	-181.34	1,320.32	1,059.71	260.61	5.066		
19,400.00	10,653.92	19,293.13	10,682.33	130.87	130.68	89.535	8,506.56	-181.41	1,320.32	1,059.49	260.83	5.062		
19,408.64	10,653.95	19,301.84	10,682.34	130.99	130.80	89.532	8,515.27	-181.48	1,320.32	1,059.25	261.07	5.057		
19,500.00	10,654.06	19,393.20	10,682.33	132.24	132.07	89.532	8,606.63	-182.22	1,320.32	1,056.72	263.59	5.009		
19,600.00	10,654.18	19,493.20	10,682.32	133.61	133.45	89.532	8,706.63	-183.04	1,320.31	1,053.96	266.36	4.957		
19,700.00	10,654.30	19,593.20	10,682.32	134.98	134.84	89.532	8,806.62	-183.86	1,320.31	1,051.19	269.12	4.906		
19,800.00	10,654.42	19,693.20	10,682.31	136.36	136.23	89.532	8,906.62	-184.67	1,320.31	1,048.42	271.89	4.856		
19,900.00	10,654.54	19,793.20	10,682.30	137.73	137.61	89.532	9,006.62	-185.49	1,320.31	1,045.65	274.66	4.807		
20,000.00	10,654.66	19,893.20	10,682.29	139.11	139.01	89.532	9,106.61	-186.30	1,320.31	1,042.87	277.44	4.759		
20,100.00	10,654.78	19,993.20	10,682.28	140.49	140.40	89.532	9,206.61	-187.12	1,320.31	1,040.10	280.21	4.712		
20,200.00	10,654.91	20,093.20	10,682.28	141.87	141.79	89.532	9,306.61	-187.94	1,320.31	1,037.32	282.99	4.666		
20,300.00	10,655.03	20,193.20	10,682.27	143.25	143.18	89.532	9,406.60	-188.75	1,320.30	1,034.53	285.77	4.620		
20,400.00	10,655.15	20,293.20	10,682.26	144.63	144.58	89.532	9,506.60	-189.57	1,320.30	1,031.75	288.55	4.576		
20,500.00	10,655.27	20,393.20	10,682.25	146.01	145.97	89.532	9,606.60	-190.38	1,320.30	1,028.96	291.34	4.532		
20,600.00	10,655.39	20,493.20	10,682.24	147.40	147.37	89.532	9,706.59	-191.20	1,320.30	1,026.18	294.12	4.489		
20,700.00	10,655.51	20,593.20	10,682.23	148.78	148.77	89.532	9,806.59	-192.02	1,320.30	1,023.39	296.91	4.447		
20,800.00	10,655.63	20,693.20	10,682.23	150.17	150.16	89.532	9,906.59	-192.83	1,320.30	1,020.59	299.70	4.405		
20,900.00	10,655.75	20,793.20	10,682.22	151.56	151.56	89.532	10,006.58	-193.65	1,320.30	1,017.80	302.50	4.365		
21,000.00	10,655.87	20,893.20	10,682.21	152.95	152.96	89.532	10,106.58	-194.46	1,320.30	1,015.00	305.29	4.325		
21,100.00	10,656.00	20,993.20	10,682.20	154.34	154.36	89.532	10,206.58	-195.28	1,320.29	1,012.21	308.09	4.285		
21,103.87	10,656.00	20,997.07	10,682.20	154.39	154.42	89.532	10,210.45	-195.31	1,320.29	1,012.10	308.20	4.284 SF		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Surveys														Offset Site Error:	0.00 usft
Survey Program: 80-GYD_GC+DROP+OH, 5925-MWD+HRGM														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.00	0.00	0.00	0.00	0.00	0.00	89.789	0.13	35.32	35.32						
100.00	100.00	100.24	100.23	0.13	0.08	91.596	-0.97	34.93	34.95	34.75	0.20	179.072			
200.00	200.00	200.25	200.20	0.49	0.23	95.800	-3.45	34.01	34.19	33.49	0.69	49.268			
268.79	268.79	268.86	268.79	0.73	0.33	99.185	-5.42	33.54	33.98	32.94	1.04	32.781 CC			
300.00	300.00	299.98	299.89	0.85	0.38	100.683	-6.31	33.44	34.03	32.83	1.19	28.551 ES			
400.00	400.00	399.76	399.64	1.20	0.52	104.456	-8.68	33.66	34.76	33.07	1.69	20.564			
500.00	500.00	499.75	499.63	1.56	0.65	104.419	-8.93	34.73	35.86	33.67	2.19	16.381			
600.00	599.99	599.74	599.56	1.92	0.78	100.303	-6.32	36.39	37.76	35.07	2.68	14.068			
700.00	699.98	699.76	699.51	2.27	0.92	95.806	-2.80	38.10	40.58	37.40	3.18	12.775			
800.00	799.96	800.21	799.93	2.62	1.05	94.273	-1.01	38.98	42.87	39.20	3.67	11.683			
900.00	899.95	900.34	900.05	2.98	1.20	96.682	-2.10	38.74	44.33	40.16	4.16	10.646			
1,000.00	999.93	1,000.02	999.73	3.34	1.34	98.455	-2.85	38.76	46.06	41.40	4.66	9.885			
1,100.00	1,099.92	1,099.88	1,099.59	3.69	1.48	98.615	-2.43	39.41	48.26	43.11	5.16	9.356			
1,200.00	1,199.90	1,199.82	1,199.52	4.05	1.61	98.350	-1.68	40.25	50.62	44.96	5.66	8.947			
1,300.00	1,299.89	1,299.80	1,299.50	4.41	1.76	98.078	-0.90	41.13	52.99	46.83	6.16	8.607			
1,400.00	1,399.87	1,399.82	1,399.50	4.76	1.90	97.843	-0.13	41.95	55.32	48.66	6.66	8.310			
1,500.00	1,499.86	1,499.82	1,499.50	5.12	2.04	97.850	0.43	42.66	57.56	50.40	7.16	8.042			
1,600.00	1,599.84	1,599.81	1,599.49	5.48	2.19	97.894	0.95	43.37	59.81	52.15	7.66	7.810			
1,700.00	1,699.83	1,699.92	1,699.59	5.84	2.33	97.915	1.51	43.94	61.92	53.76	8.16	7.589			
1,800.00	1,799.81	1,800.00	1,799.68	6.20	2.47	97.736	2.32	44.33	63.80	55.15	8.66	7.370			
1,900.00	1,899.80	1,900.01	1,899.68	6.56	2.62	97.282	3.46	44.68	65.62	56.46	9.15	7.167			
2,000.00	1,999.78	1,999.93	1,999.59	6.91	2.76	96.687	4.80	45.05	67.42	57.77	9.65	6.985			
2,050.23	2,050.00	2,050.06	2,049.71	7.09	2.83	96.366	5.51	45.31	68.41	58.50	9.90	6.908			
2,100.00	2,099.76	2,099.80	2,099.45	7.27	2.91	96.004	6.19	45.60	69.62	59.47	10.15	6.859 SF			
2,200.00	2,199.71	2,199.65	2,199.29	7.63	3.05	95.044	7.45	46.23	73.35	62.70	10.65	6.889			
2,300.00	2,299.59	2,299.97	2,299.59	7.99	3.19	93.958	8.45	46.75	78.65	67.50	11.14	7.058			
2,400.00	2,399.37	2,400.22	2,399.85	8.35	3.32	93.552	8.16	46.36	84.80	73.16	11.63	7.289			
2,500.00	2,499.03	2,500.16	2,499.77	8.71	3.45	93.419	6.99	45.60	92.28	80.16	12.12	7.613			
2,600.00	2,598.52	2,599.77	2,599.37	9.07	3.58	93.063	5.72	44.67	101.27	88.66	12.61	8.029			
2,700.00	2,697.83	2,698.96	2,698.55	9.44	3.72	92.341	4.75	43.87	112.02	98.92	13.10	8.549			
2,800.00	2,796.92	2,797.91	2,797.50	9.81	3.85	91.424	3.98	43.30	124.66	111.07	13.59	9.171			
2,900.00	2,895.75	2,896.78	2,896.37	10.19	3.98	90.476	3.22	42.84	139.12	125.03	14.08	9.878			
3,000.00	2,994.31	2,995.22	2,994.80	10.57	4.12	89.548	2.46	42.47	155.35	140.78	14.58	10.659			
3,100.00	3,092.56	3,093.20	3,092.78	10.96	4.25	88.631	1.79	42.26	173.46	158.40	15.07	11.513			
3,161.76	3,153.08	3,153.96	3,153.54	11.21	4.34	88.136	1.25	42.17	185.52	170.15	15.37	12.069			
3,200.00	3,190.50	3,191.53	3,191.11	11.36	4.39	87.890	0.77	42.07	193.16	177.60	15.56	12.414			
3,300.00	3,288.37	3,289.07	3,288.63	11.77	4.52	87.404	-0.77	41.92	213.21	197.16	16.05	13.283			
3,400.00	3,386.24	3,386.18	3,385.73	12.17	4.66	86.985	-2.22	42.04	233.55	217.01	16.54	14.117			
3,500.00	3,484.11	3,482.97	3,482.51	12.59	4.80	86.531	-3.20	42.50	254.28	237.24	17.04	14.925			
3,600.00	3,581.98	3,579.23	3,578.77	13.00	4.94	86.104	-3.94	43.43	275.51	257.98	17.53	15.718			
3,700.00	3,679.85	3,676.58	3,676.11	13.42	5.08	85.750	-4.73	44.73	297.11	279.08	18.03	16.481			
3,800.00	3,777.73	3,777.00	3,776.51	13.84	5.22	85.582	-6.31	45.63	318.24	299.70	18.54	17.167			
3,900.00	3,875.60	3,876.80	3,876.29	14.26	5.36	85.514	-8.40	45.98	338.80	319.75	19.05	17.788			
4,000.00	3,973.47	3,979.36	3,978.81	14.69	5.51	85.480	-10.75	45.17	358.22	338.66	19.56	18.310			
4,100.00	4,071.34	4,078.06	4,077.47	15.12	5.65	85.441	-13.10	43.73	376.99	356.92	20.07	18.786			
4,200.00	4,169.21	4,175.18	4,174.57	15.55	5.78	85.375	-15.22	42.49	395.95	375.38	20.57	19.251			
4,300.00	4,267.08	4,272.87	4,272.22	15.98	5.92	85.287	-17.12	41.35	415.03	393.96	21.07	19.698			
4,400.00	4,364.95	4,370.01	4,369.35	16.42	6.06	85.171	-18.74	40.40	434.33	412.76	21.57	20.135			
4,500.00	4,462.82	4,467.12	4,466.44	16.85	6.20	85.050	-20.22	39.63	453.82	431.75	22.07	20.561			
4,600.00	4,560.69	4,564.45	4,563.77	17.29	6.34	84.923	-21.55	39.08	473.55	450.97	22.57	20.977			
4,700.00	4,658.56	4,662.29	4,661.59	17.73	6.48	84.794	-22.78	38.54	493.30	470.22	23.08	21.373			
4,800.00	4,756.43	4,760.24	4,759.53	18.17	6.62	84.672	-23.96	38.09	513.15	489.56	23.59	21.756			

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Surveys													Offset Site Error:
Survey Program: 80-GYD_GC+DROP+OH, 5925-MWD+HRGM													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,900.00	4,854.30	4,859.33	4,858.62		18.61	6.76	-25.07	37.50	532.88	508.79	24.10	22.112	
5,000.00	4,952.17	4,957.72	4,957.00		19.05	6.90	-26.08	36.72	552.43	527.82	24.61	22.449	
5,100.00	5,050.04	5,055.42	5,054.69		19.49	7.04	-26.97	35.99	572.03	546.92	25.12	22.776	
5,200.00	5,147.91	5,153.24	5,152.51		19.94	7.18	-27.75	35.29	591.68	566.06	25.62	23.091	
5,300.00	5,245.78	5,250.82	5,250.09		20.38	7.32	-28.52	34.64	611.38	585.25	26.13	23.396	
5,400.00	5,343.65	5,347.60	5,346.86		20.83	7.46	-29.15	34.10	631.20	604.57	26.64	23.696	
5,500.00	5,441.52	5,444.74	5,444.00		21.27	7.60	-29.56	33.73	651.23	624.08	27.14	23.991	
5,600.00	5,539.40	5,543.00	5,542.26		21.72	7.74	-29.89	33.38	671.29	643.64	27.66	24.272	
5,700.00	5,637.27	5,641.92	5,641.18		22.17	7.88	-30.27	32.94	691.26	663.09	28.17	24.537	
5,800.00	5,735.14	5,740.49	5,739.75		22.62	8.03	-30.66	32.37	711.11	682.42	28.69	24.788	
5,900.00	5,833.01	5,837.73	5,836.98		23.07	8.17	-30.98	31.81	730.96	701.77	29.20	25.035	
6,000.00	5,930.88	5,934.67	5,933.92		23.52	8.30	-31.24	31.38	750.96	721.26	29.70	25.285	
6,100.00	6,028.75	6,032.90	6,032.15		23.97	8.37	-31.52	30.99	771.01	740.86	30.15	25.574	
6,200.00	6,126.62	6,130.73	6,129.98		24.42	8.43	-31.82	30.59	791.03	760.46	30.58	25.869	
6,300.00	6,224.49	6,234.45	6,233.69		24.87	8.45	-32.41	30.12	811.00	780.01	31.00	26.164	
6,400.00	6,322.36	6,343.23	6,342.38		25.32	8.50	-36.41	28.44	829.50	798.05	31.45	26.377	
6,500.00	6,420.23	6,452.92	6,451.90		25.77	8.57	-42.04	25.90	847.13	815.21	31.92	26.540	
6,600.00	6,518.10	6,554.46	6,553.13		26.23	8.64	-49.10	22.55	863.56	831.18	32.38	26.667	
6,700.00	6,615.97	6,650.89	6,649.28		26.68	8.73	-55.84	19.48	880.14	847.29	32.85	26.794	
6,800.00	6,713.84	6,745.96	6,744.10		27.13	8.82	-62.10	16.71	897.04	863.72	33.32	26.920	
6,900.00	6,811.71	6,853.90	6,851.81		27.58	8.95	-68.39	13.29	913.81	879.96	33.85	26.993	
7,000.00	6,909.58	6,966.78	6,964.39		28.04	9.09	-74.44	8.00	929.12	894.70	34.42	26.997	
7,100.00	7,007.45	7,067.31	7,064.58		28.49	9.24	-80.64	2.52	943.62	908.67	34.95	26.998	
7,200.00	7,105.32	7,164.49	7,161.42		28.95	9.39	-86.89	-2.74	958.13	922.65	35.49	26.999	
7,300.00	7,203.19	7,259.84	7,256.43		29.40	9.55	-93.20	-7.59	972.97	936.94	36.03	27.004	
7,400.00	7,301.06	7,357.41	7,353.66		29.86	9.72	-99.94	-12.33	988.03	951.44	36.59	27.001	
7,500.00	7,398.94	7,453.76	7,449.68		30.31	9.91	-106.54	-16.83	1,003.29	966.13	37.16	27.000	
7,600.00	7,496.81	7,549.54	7,545.15		30.77	10.10	-112.85	-21.07	1,018.83	981.10	37.73	27.001	
7,700.00	7,594.68	7,645.24	7,640.57		31.22	10.30	-119.08	-25.02	1,034.67	996.36	38.31	27.004	
7,800.00	7,692.55	7,741.42	7,736.48		31.68	10.52	-125.33	-28.74	1,050.79	1,011.88	38.91	27.007	
7,900.00	7,790.42	7,837.36	7,832.15		32.14	10.74	-131.49	-32.25	1,067.13	1,027.62	39.51	27.012	
8,000.00	7,888.29	7,931.49	7,926.05		32.59	10.96	-137.28	-35.35	1,083.85	1,043.74	40.10	27.027	
8,100.00	7,986.16	8,029.35	8,023.69		33.05	11.20	-143.09	-38.33	1,100.83	1,060.11	40.72	27.032	
8,200.00	8,084.03	8,133.25	8,127.35		33.51	11.46	-149.27	-41.76	1,117.59	1,076.20	41.38	27.007	
8,300.00	8,181.90	8,235.55	8,229.36		33.96	11.73	-156.06	-45.60	1,133.85	1,091.81	42.04	26.970	
8,400.00	8,279.77	8,333.68	8,327.17		34.42	11.99	-163.12	-49.30	1,150.08	1,107.39	42.69	26.942	
8,500.00	8,377.64	8,431.46	8,424.61		34.88	12.26	-170.22	-52.97	1,166.33	1,122.99	43.34	26.913	
8,600.00	8,475.51	8,527.51	8,520.35		35.34	12.52	-177.14	-56.43	1,182.76	1,138.78	43.98	26.890	
8,700.00	8,573.38	8,626.18	8,618.72		35.79	12.80	-184.02	-59.81	1,199.38	1,154.73	44.65	26.862	
8,800.00	8,671.25	8,722.47	8,714.78		36.25	13.08	-189.84	-63.26	1,215.89	1,170.59	45.30	26.840	
8,845.65	8,715.93	8,763.62	8,755.85		36.46	13.20	-191.87	-64.59	1,223.61	1,178.02	45.59	26.842	
8,900.00	8,769.20	8,811.61	8,803.77		36.71	13.33	-194.06	-65.97	1,232.61	1,186.70	45.92	26.845	
9,000.00	8,867.59	8,907.52	8,899.54		37.14	13.61	-198.80	-68.17	1,247.77	1,201.21	46.57	26.796	
9,100.00	8,966.42	9,021.44	9,013.23		37.56	13.95	-205.31	-71.45	1,259.79	1,212.48	47.32	26.625	
9,200.00	9,065.61	9,125.88	9,117.23		37.96	14.27	-213.91	-75.42	1,268.24	1,220.22	48.02	26.410	
9,300.00	9,165.10	9,220.71	9,211.71		38.34	14.56	-221.32	-78.93	1,274.27	1,225.59	48.67	26.181	
9,400.00	9,264.82	9,312.12	9,302.85		38.70	14.84	-227.73	-81.85	1,278.27	1,228.98	49.30	25.930	
9,500.00	9,364.70	9,435.88	9,426.17		39.04	15.23	-237.14	-86.05	1,279.60	1,229.50	50.10	25.540	
9,600.00	9,464.67	9,530.31	9,520.13		39.36	15.54	-245.59	-90.32	1,277.18	1,226.44	50.75	25.167	
9,635.33	9,500.00	9,561.53	9,551.21		39.47	15.64	-248.24	-91.61	1,275.86	1,224.90	50.96	25.036	
9,700.00	9,564.67	9,618.17	9,607.62		39.66	15.82	-252.80	-93.69	1,273.48	1,222.14	51.34	24.806	
9,800.00	9,664.67	9,718.19	9,707.31		39.95	16.14	-260.16	-97.00	1,270.17	1,218.18	51.99	24.430	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 80-GYD_GC+DROP+OH, 5925-MWD+HRGM												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,900.00	9,764.67	9,813.64	9,802.49	40.25	16.45	90.627	-266.66	-100.09	1,266.98	1,214.36	52.62	24.078	
10,000.00	9,864.67	9,904.99	9,893.64	40.55	16.74	90.881	-272.25	-102.58	1,264.34	1,211.11	53.22	23.755	
10,100.00	9,964.67	9,991.47	9,979.99	40.85	17.02	91.076	-276.52	-104.19	1,262.56	1,208.77	53.79	23.470	
10,200.00	10,064.67	10,077.14	10,065.60	41.15	17.28	91.226	-279.80	-104.81	1,261.92	1,207.57	54.35	23.217	
10,300.00	10,164.67	10,198.04	10,186.47	41.45	17.65	91.294	-281.29	-105.07	1,261.87	1,206.77	55.10	22.901	
10,319.92	10,184.58	10,237.69	10,226.01	41.51	17.76	91.176	-278.69	-106.01	1,261.37	1,206.05	55.32	22.800	
10,350.00	10,214.65	10,275.93	10,263.91	41.60	17.86	90.991	-273.80	-107.31	1,260.28	1,204.76	55.53	22.697	
10,400.00	10,264.41	10,333.58	10,319.90	41.74	18.00	90.602	-260.43	-109.47	1,258.31	1,202.49	55.82	22.542	
10,450.00	10,313.55	10,406.89	10,387.87	41.88	18.15	89.783	-233.37	-112.87	1,255.90	1,199.76	56.14	22.372	
10,500.00	10,361.72	10,452.95	10,427.98	42.02	18.25	89.369	-210.95	-115.50	1,252.99	1,196.64	56.35	22.236	
10,550.00	10,408.53	10,480.87	10,451.09	42.14	18.30	89.454	-195.32	-116.67	1,250.92	1,194.42	56.50	22.142	
10,600.00	10,453.64	10,499.00	10,465.53	42.25	18.33	89.939	-184.37	-117.17	1,249.88	1,193.28	56.60	22.083	
10,606.16	10,459.06	10,499.00	10,465.53	42.26	18.33	90.073	-184.37	-117.17	1,249.86	1,193.26	56.60	22.081	
10,650.00	10,496.71	10,499.00	10,465.53	42.35	18.33	91.102	-184.37	-117.17	1,250.65	1,194.02	56.63	22.085	
10,700.00	10,537.40	10,499.00	10,465.53	42.43	18.33	92.431	-184.37	-117.17	1,253.45	1,196.81	56.64	22.130	
10,750.00	10,575.40	10,499.00	10,465.53	42.51	18.33	93.913	-184.37	-117.17	1,258.26	1,201.62	56.64	22.216	
10,800.00	10,610.43	10,499.00	10,465.53	42.57	18.33	95.534	-184.37	-117.17	1,265.01	1,208.38	56.63	22.340	
10,850.00	10,642.22	10,499.00	10,465.53	42.61	18.33	97.277	-184.37	-117.17	1,273.61	1,217.00	56.61	22.496	
10,900.00	10,670.52	10,499.00	10,465.53	42.65	18.33	99.123	-184.37	-117.17	1,283.98	1,227.37	56.61	22.683	
10,950.00	10,695.13	10,499.00	10,465.53	42.68	18.33	101.050	-184.37	-117.17	1,295.98	1,239.38	56.60	22.895	
11,000.00	10,715.85	10,499.00	10,465.53	42.70	18.33	103.037	-184.37	-117.17	1,309.49	1,252.87	56.61	23.130	
11,050.00	10,732.53	10,499.00	10,465.53	42.71	18.33	105.061	-184.37	-117.17	1,324.35	1,267.71	56.64	23.382	
11,100.00	10,745.04	10,499.00	10,465.53	42.72	18.33	107.100	-184.37	-117.17	1,340.41	1,283.73	56.68	23.648	
11,150.00	10,753.28	10,499.00	10,465.53	42.73	18.33	109.130	-184.37	-117.17	1,357.50	1,300.77	56.74	23.926	
11,200.00	10,757.20	10,499.00	10,465.53	42.74	18.33	111.131	-184.37	-117.17	1,375.47	1,318.66	56.81	24.211	
11,224.92	10,757.52	10,499.00	10,465.53	42.75	18.33	112.112	-184.37	-117.17	1,384.70	1,327.84	56.86	24.355	
11,300.00	10,756.87	10,499.00	10,465.53	42.80	18.33	114.983	-184.37	-117.17	1,414.46	1,357.46	57.00	24.817	
11,400.00	10,755.99	10,499.00	10,465.53	42.90	18.33	118.603	-184.37	-117.17	1,459.16	1,401.98	57.18	25.518	
11,500.00	10,755.12	10,499.00	10,465.53	43.06	18.33	121.986	-184.37	-117.17	1,509.18	1,451.81	57.36	26.310	
11,600.00	10,754.25	10,499.00	10,465.53	43.28	18.33	125.132	-184.37	-117.17	1,563.99	1,506.46	57.53	27.184	
11,700.00	10,753.37	10,499.00	10,465.53	43.55	18.33	128.050	-184.37	-117.17	1,623.12	1,565.43	57.69	28.133	
11,800.00	10,752.50	10,499.00	10,465.53	43.90	18.33	130.749	-184.37	-117.17	1,686.11	1,628.27	57.84	29.149	
11,900.00	10,751.63	10,499.00	10,465.53	44.31	18.33	133.242	-184.37	-117.17	1,752.55	1,694.57	57.98	30.226	
12,000.00	10,750.76	10,499.00	10,465.53	44.77	18.33	135.544	-184.37	-117.17	1,822.06	1,763.95	58.11	31.357	
12,100.00	10,749.88	10,499.00	10,465.53	45.29	18.33	137.669	-184.37	-117.17	1,894.30	1,836.07	58.22	32.535	
12,200.00	10,749.01	10,499.00	10,465.53	45.87	18.33	139.632	-184.37	-117.17	1,968.96	1,910.63	58.33	33.757	
12,300.00	10,748.14	10,499.00	10,465.53	46.48	18.33	141.446	-184.37	-117.17	2,045.79	1,987.37	58.42	35.016	
12,400.00	10,747.27	10,499.00	10,465.53	47.14	18.33	143.124	-184.37	-117.17	2,124.55	2,066.04	58.51	36.310	
12,500.00	10,746.39	10,499.00	10,465.53	47.84	18.33	144.679	-184.37	-117.17	2,205.04	2,146.44	58.59	37.633	
12,600.00	10,745.52	10,499.00	10,465.53	48.58	18.33	146.122	-184.37	-117.17	2,287.06	2,228.39	58.67	38.983	
12,700.00	10,744.65	10,499.00	10,465.53	49.35	18.33	147.462	-184.37	-117.17	2,370.46	2,311.73	58.74	40.358	
12,800.00	10,743.78	10,499.00	10,465.53	50.15	18.33	148.709	-184.37	-117.17	2,455.11	2,396.31	58.80	41.753	
12,888.61	10,743.00	10,499.00	10,465.53	50.89	18.33	149.743	-184.37	-117.17	2,531.05	2,472.20	58.85	43.005	
12,900.00	10,742.88	10,499.00	10,465.53	50.98	18.33	149.871	-184.37	-117.17	2,540.87	2,482.01	58.86	43.167	
12,939.06	10,742.12	10,499.00	10,465.53	51.32	18.33	150.304	-184.37	-117.17	2,574.60	2,515.71	58.88	43.723	
13,000.00	10,740.51	10,499.00	10,465.53	51.85	18.33	150.956	-184.37	-117.17	2,627.46	2,568.54	58.92	44.594	
13,100.00	10,737.88	10,499.00	10,465.53	52.74	18.33	151.970	-184.37	-117.17	2,714.93	2,655.96	58.97	46.036	
13,147.49	10,736.63	10,499.00	10,465.53	53.17	18.33	152.429	-184.37	-117.17	2,756.78	2,697.78	59.00	46.726	
13,200.00	10,735.25	10,499.00	10,465.53	53.65	18.33	152.911	-184.37	-117.17	2,803.46	2,744.44	59.03	47.495	
13,300.00	10,732.61	10,499.00	10,465.53	54.61	18.33	153.738	-184.37	-117.17	2,894.02	2,834.94	59.07	48.989	
13,347.43	10,731.36	10,499.00	10,465.53	55.08	18.33	154.089	-184.37	-117.17	2,937.65	2,878.55	59.10	49.709	
13,400.00	10,729.98	10,499.00	10,465.53	55.60	18.33	154.459	-184.37	-117.17	2,986.31	2,927.19	59.12	50.513	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Surveys													Offset Site Error:	0.00 usft
Survey Program:		80-GYD_GC+DROP+OH, 5925-MWD+HRGM					Rule Assigned:		Offset Well Error:				0.00 usft	
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance				Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,500.00	10,727.34	10,499.00	10,465.53	56.62	18.33	155.131	-184.37	-117.17	3,079.22	3,020.06	59.16	52.047		
13,600.00	10,724.71	10,499.00	10,465.53	57.66	18.33	155.762	-184.37	-117.17	3,172.56	3,113.36	59.20	53.588		
13,700.00	10,722.08	10,499.00	10,465.53	58.72	18.33	156.357	-184.37	-117.17	3,266.30	3,207.06	59.24	55.134		
13,800.00	10,719.44	10,499.00	10,465.53	59.79	18.33	156.918	-184.37	-117.17	3,360.40	3,301.11	59.28	56.685		
13,900.00	10,716.81	10,499.00	10,465.53	60.88	18.33	157.449	-184.37	-117.17	3,454.82	3,395.50	59.32	58.239		
14,000.00	10,714.18	10,499.00	10,465.53	61.99	18.33	157.951	-184.37	-117.17	3,549.56	3,490.20	59.36	59.797		
14,055.43	10,712.72	10,499.00	10,465.53	62.60	18.33	158.218	-184.37	-117.17	3,602.19	3,542.81	59.38	60.662		
14,100.00	10,711.54	10,499.00	10,465.53	63.10	18.33	158.432	-184.37	-117.17	3,644.47	3,585.07	59.40	61.357		
14,200.00	10,708.91	10,499.00	10,465.53	64.22	18.33	158.931	-184.37	-117.17	3,738.75	3,679.31	59.44	62.903		
14,255.44	10,707.45	10,499.00	10,465.53	64.84	18.33	159.219	-184.37	-117.17	3,790.66	3,731.20	59.46	63.754		
14,300.00	10,706.27	10,499.00	10,465.53	65.33	18.33	159.451	-184.37	-117.17	3,832.30	3,772.83	59.48	64.435		
14,400.00	10,703.64	10,499.00	10,465.53	66.46	18.33	159.953	-184.37	-117.17	3,926.00	3,866.49	59.52	65.966		
14,500.00	10,701.01	10,499.00	10,465.53	67.59	18.33	160.431	-184.37	-117.17	4,020.00	3,960.45	59.56	67.499		
14,600.00	10,698.37	10,499.00	10,465.53	68.74	18.33	160.887	-184.37	-117.17	4,114.28	4,054.69	59.60	69.036		
14,700.00	10,695.74	10,499.00	10,465.53	69.90	18.33	161.323	-184.37	-117.17	4,208.83	4,149.19	59.64	70.574		
14,800.00	10,693.11	10,499.00	10,465.53	71.07	18.33	161.739	-184.37	-117.17	4,303.63	4,243.95	59.68	72.114		
14,900.00	10,690.47	10,499.00	10,465.53	72.25	18.33	162.138	-184.37	-117.17	4,398.65	4,338.93	59.72	73.656		
15,000.00	10,687.84	10,499.00	10,465.53	73.43	18.33	162.519	-184.37	-117.17	4,493.89	4,434.13	59.76	75.199		
15,100.00	10,685.21	10,499.00	10,465.53	74.63	18.33	162.885	-184.37	-117.17	4,589.33	4,529.53	59.80	76.742		
15,200.00	10,682.57	10,499.00	10,465.53	75.84	18.33	163.235	-184.37	-117.17	4,684.97	4,625.12	59.84	78.287		
15,300.00	10,679.94	10,499.00	10,465.53	77.05	18.33	163.572	-184.37	-117.17	4,780.78	4,720.89	59.89	79.831		
15,400.00	10,677.31	10,499.00	10,465.53	78.27	18.33	163.895	-184.37	-117.17	4,876.76	4,816.83	59.93	81.376		
15,500.00	10,674.67	10,499.00	10,465.53	79.50	18.33	164.206	-184.37	-117.17	4,972.90	4,912.92	59.97	82.920		
15,600.00	10,672.04	10,499.00	10,465.53	80.74	18.33	164.505	-184.37	-117.17	5,069.18	5,009.17	60.02	84.464		
15,700.00	10,669.41	10,499.00	10,465.53	81.98	18.33	164.792	-184.37	-117.17	5,165.61	5,105.55	60.06	86.007		
15,800.00	10,666.77	10,499.00	10,465.53	83.23	18.33	165.070	-184.37	-117.17	5,262.17	5,202.07	60.11	87.549		
15,900.00	10,664.14	10,499.00	10,465.53	84.49	18.33	165.337	-184.37	-117.17	5,358.86	5,298.71	60.15	89.090		
16,000.00	10,661.51	10,499.00	10,465.53	85.75	18.33	165.594	-184.37	-117.17	5,455.67	5,395.47	60.20	90.630		
16,100.00	10,658.87	10,499.00	10,465.53	87.02	18.33	165.843	-184.37	-117.17	5,552.59	5,492.35	60.24	92.169		
16,200.00	10,656.24	10,499.00	10,465.53	88.29	18.33	166.083	-184.37	-117.17	5,649.62	5,589.33	60.29	93.706		
16,300.00	10,653.61	10,499.00	10,465.53	89.57	18.33	166.315	-184.37	-117.17	5,746.75	5,686.41	60.34	95.241		
16,400.00	10,650.97	10,499.00	10,465.53	90.86	18.33	166.539	-184.37	-117.17	5,843.97	5,783.59	60.39	96.774		
16,500.00	10,648.34	10,499.00	10,465.53	92.15	18.33	166.756	-184.37	-117.17	5,941.29	5,880.86	60.44	98.306		
16,600.00	10,645.71	10,499.00	10,465.53	93.44	18.33	166.966	-184.37	-117.17	6,038.70	5,978.21	60.49	99.835		
16,700.00	10,643.07	10,499.00	10,465.53	94.74	18.33	167.169	-184.37	-117.17	6,136.19	6,075.65	60.54	101.362		
16,800.00	10,640.44	10,499.00	10,465.53	96.04	18.33	167.366	-184.37	-117.17	6,233.76	6,173.17	60.59	102.887		
16,892.04	10,638.02	10,499.00	10,465.53	97.24	18.33	167.541	-184.37	-117.17	6,323.63	6,262.99	60.64	104.288		
16,900.00	10,637.82	10,499.00	10,465.53	97.34	18.33	167.556	-184.37	-117.17	6,331.41	6,270.76	60.64	104.409		
16,987.49	10,637.09	10,499.00	10,465.53	98.49	18.33	167.719	-184.37	-117.17	6,416.96	6,356.27	60.69	105.736		
17,000.00	10,637.18	10,499.00	10,465.53	98.65	18.33	167.741	-184.37	-117.17	6,429.20	6,368.51	60.70	105.925		
17,100.00	10,637.88	10,499.00	10,465.53	99.96	18.33	167.921	-184.37	-117.17	6,527.11	6,466.35	60.75	107.436		
17,200.00	10,638.58	10,499.00	10,465.53	101.27	18.33	168.095	-184.37	-117.17	6,625.07	6,564.26	60.81	108.944		
17,300.00	10,639.27	10,499.00	10,465.53	102.59	18.33	168.264	-184.37	-117.17	6,723.10	6,662.23	60.87	110.448		
17,400.00	10,639.97	10,499.00	10,465.53	103.91	18.33	168.428	-184.37	-117.17	6,821.18	6,760.25	60.93	111.949		
17,500.00	10,640.67	10,499.00	10,465.53	105.23	18.33	168.588	-184.37	-117.17	6,919.32	6,858.33	60.99	113.446		
17,600.00	10,641.37	10,499.00	10,465.53	106.56	18.33	168.743	-184.37	-117.17	7,017.51	6,956.46	61.05	114.939		
17,700.00	10,642.07	10,499.00	10,465.53	107.89	18.33	168.893	-184.37	-117.17	7,115.75	7,054.64	61.12	116.429		
17,800.00	10,642.76	10,499.00	10,465.53	109.22	18.33	169.040	-184.37	-117.17	7,214.04	7,152.86	61.18	117.915		
17,900.00	10,643.46	10,499.00	10,465.53	110.56	18.33	169.183	-184.37	-117.17	7,312.38	7,251.14	61.24	119.397		
18,000.00	10,644.16	10,499.00	10,465.53	111.90	18.33	169.322	-184.37	-117.17	7,410.76	7,349.45	61.31	120.874		
18,100.00	10,644.86	10,499.00	10,465.53	113.24	18.33	169.457	-184.37	-117.17	7,509.18	7,447.81	61.38	122.348		
18,200.00	10,645.56	10,499.00	10,465.53	114.58	18.33	169.589	-184.37	-117.17	7,607.65	7,546.21	61.44	123.818		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 122H - Wellbore #1 - Surveys													Offset Site Error: 0.00 usft
Survey Program: 80-GYD_GC+DROP+OH, 5925-MWD+HRGM													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis	Reference	Offset	Offset Wellbore Centre	Distance	Rule Assigned:	Minimum	Separation	Warning			
Measured	Vertical	Measured	Vertical	Reference	Offset	Reference	Offset	Between	Between	Separation	Factor		
Depth	Depth	Depth	Depth	Reference	Offset	Reference	Offset	Centres	Ellipses	Separation	Factor		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)		
18,300.00	10,646.25	10,499.00	10,465.53	115.93	18.33	169.717	-184.37	-117.17	7,706.15	7,644.64	61.51	125.283	
18,400.00	10,646.95	10,499.00	10,465.53	117.28	18.33	169.842	-184.37	-117.17	7,804.70	7,743.12	61.58	126.745	
18,500.00	10,647.65	10,499.00	10,465.53	118.63	18.33	169.964	-184.37	-117.17	7,903.27	7,841.63	61.65	128.202	
18,600.00	10,648.35	10,499.00	10,465.53	119.98	18.33	170.084	-184.37	-117.17	8,001.89	7,940.17	61.72	129.654	
18,700.00	10,649.05	10,499.00	10,465.53	121.33	18.33	170.200	-184.37	-117.17	8,100.54	8,038.75	61.79	131.102	
18,800.00	10,649.75	10,499.00	10,465.53	122.69	18.33	170.313	-184.37	-117.17	8,199.22	8,137.36	61.86	132.546	
18,900.00	10,650.44	10,499.00	10,465.53	124.05	18.33	170.424	-184.37	-117.17	8,297.93	8,236.00	61.93	133.985	
19,000.00	10,651.14	10,499.00	10,465.53	125.41	18.33	170.532	-184.37	-117.17	8,396.67	8,334.67	62.00	135.420	
19,100.00	10,651.84	10,499.00	10,465.53	126.77	18.33	170.637	-184.37	-117.17	8,495.44	8,433.37	62.08	136.850	
19,200.00	10,652.54	10,499.00	10,465.53	128.14	18.33	170.740	-184.37	-117.17	8,594.24	8,532.09	62.15	138.275	
19,300.00	10,653.24	10,499.00	10,465.53	129.50	18.33	170.841	-184.37	-117.17	8,693.07	8,630.84	62.23	139.695	
19,392.11	10,653.88	10,499.00	10,465.53	130.76	18.33	170.932	-184.37	-117.17	8,784.13	8,721.83	62.30	140.999	
19,400.00	10,653.92	10,499.00	10,465.53	130.87	18.33	170.940	-184.37	-117.17	8,791.93	8,729.62	62.31	141.111	
19,408.64	10,653.95	10,499.00	10,465.53	130.99	18.33	170.948	-184.37	-117.17	8,800.47	8,738.16	62.31	141.233	
19,500.00	10,654.06	10,499.00	10,465.53	132.24	18.33	171.036	-184.37	-117.17	8,890.80	8,828.42	62.38	142.524	
19,600.00	10,654.18	10,499.00	10,465.53	133.61	18.33	171.130	-184.37	-117.17	8,989.69	8,927.24	62.46	143.932	
19,700.00	10,654.30	10,499.00	10,465.53	134.98	18.33	171.222	-184.37	-117.17	9,088.61	9,026.08	62.54	145.336	
19,800.00	10,654.42	10,499.00	10,465.53	136.36	18.33	171.312	-184.37	-117.17	9,187.56	9,124.94	62.61	146.734	
19,900.00	10,654.54	10,499.00	10,465.53	137.73	18.33	171.401	-184.37	-117.17	9,286.52	9,223.83	62.69	148.128	
20,000.00	10,654.66	10,499.00	10,465.53	139.11	18.33	171.487	-184.37	-117.17	9,385.51	9,322.74	62.77	149.517	
20,100.00	10,654.78	10,499.00	10,465.53	140.49	18.33	171.571	-184.37	-117.17	9,484.52	9,421.66	62.85	150.900	
20,200.00	10,654.91	10,499.00	10,465.53	141.87	18.33	171.654	-184.37	-117.17	9,583.55	9,520.61	62.93	152.279	
20,300.00	10,655.03	10,499.00	10,465.53	143.25	18.33	171.735	-184.37	-117.17	9,682.60	9,619.58	63.02	153.653	
20,400.00	10,655.15	10,499.00	10,465.53	144.63	18.33	171.815	-184.37	-117.17	9,781.66	9,718.57	63.10	155.022	
20,500.00	10,655.27	10,499.00	10,465.53	146.01	18.33	171.893	-184.37	-117.17	9,880.75	9,817.57	63.18	156.386	
20,600.00	10,655.39	10,499.00	10,465.53	147.40	18.33	171.969	-184.37	-117.17	9,979.86	9,916.59	63.27	157.744	



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 125Y - Wellbore #1 - Pilot Surveys														Offset Site Error:	0.00 usft
Survey Program: 80-GYD_GC+DROP+OH, 5931-MWD+HRGM														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Minimum Separation (usft)	Separation Factor	Warning			
0.00	0.00	0.00	0.00	0.00	0.00	130.221	-29.87	35.32	46.26						
100.00	100.00	100.00	100.00	0.13	0.07	130.415	-30.00	35.23	46.28	46.09	0.19	241.180			
200.00	200.00	200.26	200.25	0.49	0.22	131.321	-30.45	34.64	46.12	45.43	0.69	66.734			
300.00	300.00	300.85	300.83	0.85	0.37	133.532	-30.94	32.56	44.93	43.73	1.19	37.649			
400.00	400.00	401.15	401.06	1.20	0.52	137.180	-31.26	28.97	42.63	40.94	1.69	25.163			
500.00	500.00	501.07	500.89	1.56	0.67	141.668	-31.54	24.94	40.21	38.02	2.19	18.335			
600.00	599.99	600.97	600.72	1.92	0.82	145.885	-31.83	21.10	38.98	36.29	2.69	14.505			
700.00	699.98	700.94	700.62	2.27	0.97	149.706	-32.17	17.29	38.78	35.60	3.18	12.196			
800.00	799.96	800.93	800.53	2.62	1.12	153.676	-32.51	13.39	38.71	35.04	3.67	10.539			
900.00	899.95	900.99	900.51	2.98	1.27	157.687	-32.72	9.39	38.67	34.50	4.17	9.278			
919.73	919.67	920.69	920.20	3.05	1.30	158.474	-32.74	8.60	38.66	34.40	4.27	9.065			
1,000.00	999.93	1,000.91	1,000.37	3.34	1.42	161.207	-32.76	5.68	38.75	34.09	4.66	8.311			
1,100.00	1,099.92	1,100.88	1,100.29	3.69	1.56	163.506	-32.58	2.76	38.99	33.83	5.16	7.557			
1,200.00	1,199.90	1,200.71	1,200.08	4.05	1.71	165.991	-32.69	-0.25	39.54	33.89	5.66	6.992			
1,300.00	1,299.89	1,300.61	1,299.92	4.41	1.86	168.844	-33.19	-3.50	40.49	34.34	6.15	6.583			
1,400.00	1,399.87	1,400.48	1,399.74	4.76	2.01	171.422	-33.79	-6.63	41.67	35.03	6.65	6.268			
1,500.00	1,499.86	1,500.35	1,499.58	5.12	2.16	172.729	-34.66	-8.88	43.30	36.16	7.15	6.060			
1,600.00	1,599.84	1,600.49	1,599.71	5.48	2.31	172.732	-35.40	-10.19	44.92	37.27	7.64	5.876			
1,700.00	1,699.83	1,700.59	1,699.80	5.84	2.46	172.665	-35.66	-11.50	46.07	37.93	8.14	5.658			
1,800.00	1,799.81	1,800.41	1,799.61	6.20	2.61	172.529	-36.02	-12.74	47.33	38.69	8.64	5.478			
1,900.00	1,899.80	1,900.22	1,899.41	6.56	2.75	172.475	-36.82	-13.98	49.03	39.89	9.14	5.365			
2,000.00	1,999.78	2,000.34	1,999.52	6.91	2.90	172.633	-37.75	-15.40	50.83	41.19	9.64	5.274			
2,050.23	2,050.00	2,050.69	2,049.86	7.09	2.98	172.648	-38.04	-16.08	51.56	41.67	9.89	5.214			
2,100.00	2,099.76	2,100.58	2,099.75	7.27	3.05	172.325	-38.19	-16.67	52.13	42.00	10.14	5.144			
2,200.00	2,199.71	2,200.58	2,199.74	7.63	3.20	169.968	-38.27	-17.60	52.98	42.35	10.63	4.984			
2,300.00	2,299.59	2,300.69	2,299.85	7.99	3.35	165.579	-38.18	-18.32	53.75	42.62	11.13	4.831			
2,400.00	2,399.37	2,401.07	2,400.22	8.35	3.50	159.866	-37.55	-19.59	54.29	42.66	11.63	4.668			
2,500.00	2,499.03	2,501.50	2,500.60	8.71	3.64	153.728	-36.38	-22.40	54.52	42.38	12.14	4.491			
2,600.00	2,598.52	2,601.91	2,600.87	9.07	3.79	148.058	-35.18	-27.57	54.63	41.97	12.66	4.316			
2,700.00	2,697.83	2,701.97	2,700.63	9.44	3.95	143.387	-34.81	-35.26	55.06	41.88	13.18	4.178			
2,800.00	2,796.92	2,802.26	2,800.37	9.81	4.10	140.166	-35.82	-45.54	55.97	42.27	13.70	4.086			
2,900.00	2,895.75	2,902.82	2,900.09	10.19	4.26	138.142	-37.88	-58.42	56.90	42.68	14.21	4.003			
3,000.00	2,994.31	3,003.53	2,999.61	10.57	4.41	136.685	-40.46	-73.57	57.55	42.82	14.73	3.906			
3,100.00	3,092.56	3,104.39	3,098.98	10.96	4.57	135.049	-42.87	-90.70	57.62	42.37	15.25	3.778			
3,161.76	3,153.08	3,166.58	3,160.13	11.21	4.66	133.562	-44.08	-101.94	57.46	41.88	15.57	3.690			
3,200.00	3,190.50	3,205.06	3,197.93	11.36	4.72	132.559	-44.74	-109.14	57.25	41.48	15.77	3.630			
3,300.00	3,288.37	3,305.64	3,296.51	11.77	4.87	130.588	-46.46	-129.01	55.98	39.69	16.30	3.436			
3,400.00	3,386.24	3,405.96	3,394.51	12.17	5.03	129.831	-48.61	-150.30	53.88	37.05	16.83	3.202			
3,500.00	3,484.11	3,506.46	3,492.35	12.59	5.18	130.909	-51.69	-173.10	51.22	33.86	17.36	2.950			
3,600.00	3,581.98	3,606.53	3,589.05	13.00	5.34	135.366	-56.06	-198.45	47.46	29.54	17.92	2.648			
3,700.00	3,679.85	3,706.11	3,685.42	13.42	5.49	139.958	-60.55	-223.13	44.51	26.01	18.51	2.405			
3,800.00	3,777.73	3,806.12	3,782.37	13.84	5.64	144.410	-64.90	-247.27	42.17	23.09	19.08	2.210			
3,900.00	3,875.60	3,906.28	3,879.18	14.26	5.80	150.887	-69.37	-272.58	39.61	19.94	19.67	2.014			
4,000.00	3,973.47	4,006.23	3,975.49	14.69	5.95	159.575	-73.72	-298.96	37.12	16.86	20.27	1.832			
4,100.00	4,071.34	4,105.84	4,071.18	15.12	6.11	170.684	-78.37	-326.22	35.78	14.93	20.85	1.716			
4,115.09	4,086.11	4,120.86	4,085.59	15.18	6.13	172.500	-79.12	-330.38	35.75	14.83	20.93	1.708 CC			
4,200.00	4,169.21	4,205.51	4,166.87	15.55	6.27	-177.637	-83.42	-353.63	36.39	15.01	21.37	1.702			
4,300.00	4,267.08	4,305.33	4,262.92	15.98	6.42	-167.727	-88.44	-380.34	38.32	16.45	21.87	1.752			
4,400.00	4,364.95	4,404.55	4,358.15	16.42	6.58	-158.133	-93.53	-407.71	41.76	19.45	22.31	1.872			
4,500.00	4,462.82	4,504.21	4,453.34	16.85	6.74	-148.264	-98.71	-436.81	47.21	24.47	22.74	2.076			
4,600.00	4,560.69	4,603.91	4,548.62	17.29	6.90	-140.500	-103.65	-465.74	53.47	30.29	23.19	2.306			
4,700.00	4,658.56	4,703.92	4,644.37	17.73	7.05	-134.659	-108.51	-494.19	60.00	36.33	23.67	2.535			

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 125Y - Wellbore #1 - Pilot Surveys													Offset Site Error:	0.00 usft
Survey Program: 80-GYD_GC+DROP+OH, 5931-MWD+HRGM													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,800.00	4,756.43	4,803.98	4,740.37	18.17	7.21	-130.149	-113.11	-522.03	66.33	42.16	24.17	2.744		
4,900.00	4,854.30	4,903.91	4,836.37	18.61	7.37	-126.617	-117.63	-549.39	72.56	47.88	24.68	2.940		
5,000.00	4,952.17	5,004.08	4,932.75	19.05	7.53	-123.865	-122.20	-576.30	78.58	53.38	25.21	3.117		
5,100.00	5,050.04	5,103.68	5,028.71	19.49	7.69	-121.494	-126.40	-602.64	84.20	58.48	25.72	3.274		
5,200.00	5,147.91	5,201.79	5,122.74	19.94	7.85	-119.080	-130.75	-630.30	91.62	65.44	26.18	3.499		
5,300.00	5,245.78	5,301.69	5,218.36	20.38	8.02	-116.801	-135.19	-658.90	99.61	72.90	26.71	3.729		
5,400.00	5,343.65	5,401.40	5,313.85	20.83	8.18	-114.790	-139.39	-687.30	107.49	80.25	27.24	3.946		
5,500.00	5,441.52	5,501.08	5,409.29	21.27	8.34	-113.121	-143.73	-715.68	115.52	87.75	27.77	4.160		
5,600.00	5,539.40	5,600.64	5,504.68	21.72	8.50	-111.668	-148.01	-743.92	123.49	95.19	28.30	4.364		
5,700.00	5,637.27	5,700.27	5,600.07	22.17	8.67	-110.469	-152.52	-772.30	131.75	102.92	28.83	4.569		
5,800.00	5,735.14	5,800.27	5,695.88	22.62	8.83	-109.336	-156.83	-800.62	139.80	110.42	29.38	4.758		
5,900.00	5,833.01	5,900.37	5,791.85	23.07	9.00	-108.293	-161.00	-828.77	147.66	117.73	29.93	4.934		
6,000.00	5,930.88	6,002.05	5,889.53	23.52	9.19	-107.305	-164.96	-856.74	154.87	124.40	30.47	5.082		
6,100.00	6,028.75	6,104.18	5,988.06	23.97	9.35	-106.290	-168.20	-883.41	160.53	129.57	30.95	5.186		
6,200.00	6,126.62	6,203.34	6,083.94	24.42	9.38	-105.345	-171.00	-908.54	165.36	134.01	31.35	5.275		
6,300.00	6,224.49	6,298.36	6,175.27	24.87	9.43	-104.722	-174.81	-934.46	172.46	140.79	31.67	5.446		
6,400.00	6,322.36	6,397.25	6,269.88	25.32	9.51	-104.280	-179.67	-962.81	181.22	149.13	32.09	5.647		
6,500.00	6,420.23	6,498.56	6,367.00	25.77	9.59	-103.878	-184.55	-991.25	189.36	156.77	32.59	5.811		
6,600.00	6,518.10	6,598.87	6,463.28	26.23	9.69	-103.568	-189.45	-1,018.98	197.09	164.01	33.08	5.958		
6,700.00	6,615.97	6,700.79	6,561.28	26.68	9.81	-103.342	-194.52	-1,046.51	204.21	170.60	33.61	6.075		
6,800.00	6,713.84	6,804.67	6,661.60	27.13	9.94	-103.078	-199.16	-1,073.05	209.75	175.55	34.19	6.134		
6,900.00	6,811.71	6,905.11	6,758.98	27.58	10.09	-102.782	-203.11	-1,097.33	213.77	179.04	34.72	6.156		
7,000.00	6,909.58	7,004.15	6,854.87	28.04	10.24	-102.333	-206.50	-1,121.89	218.31	183.06	35.25	6.194		
7,100.00	7,007.45	7,106.25	6,953.77	28.49	10.42	-101.828	-209.73	-1,147.03	222.65	186.81	35.83	6.213		
7,200.00	7,105.32	7,203.00	7,047.55	28.95	10.63	-101.330	-212.58	-1,170.60	226.70	190.35	36.35	6.237		
7,300.00	7,203.19	7,302.34	7,143.51	29.40	10.93	-100.742	-215.41	-1,196.19	232.15	195.23	36.92	6.288		
7,400.00	7,301.06	7,405.73	7,243.58	29.86	11.27	-100.207	-218.39	-1,222.00	236.83	199.27	37.56	6.305		
7,500.00	7,398.94	7,499.30	7,334.09	30.31	11.59	-99.853	-221.62	-1,245.52	241.80	203.74	38.06	6.352		
7,600.00	7,496.81	7,598.48	7,429.55	30.77	11.96	-99.628	-225.86	-1,272.07	248.58	209.92	38.67	6.429		
7,700.00	7,594.68	7,701.38	7,528.77	31.22	12.34	-99.442	-230.28	-1,298.98	254.74	215.40	39.34	6.476		
7,800.00	7,692.55	7,806.25	7,630.33	31.68	12.74	-99.233	-234.37	-1,324.81	259.28	219.24	40.04	6.476		
7,900.00	7,790.42	7,911.33	7,732.56	32.14	13.12	-99.057	-238.28	-1,348.74	261.91	221.18	40.74	6.429		
8,000.00	7,888.29	8,017.05	7,835.93	32.59	13.50	-98.899	-241.92	-1,370.60	262.37	220.93	41.44	6.332		
8,100.00	7,986.16	8,127.35	7,944.29	33.05	13.87	-98.718	-245.21	-1,390.91	260.55	218.39	42.16	6.180		
8,200.00	8,084.03	8,242.11	8,058.08	33.51	14.22	-98.685	-248.26	-1,405.32	252.71	209.85	42.85	5.897		
8,300.00	8,181.90	8,346.11	8,161.66	33.96	14.50	-98.510	-249.93	-1,414.53	241.08	197.60	43.48	5.545		
8,400.00	8,279.77	8,454.02	8,269.31	34.42	14.78	-98.333	-251.37	-1,421.74	227.31	183.23	44.08	5.157		
8,500.00	8,377.64	8,554.72	8,369.93	34.88	15.02	-98.194	-252.55	-1,425.60	210.70	166.02	44.68	4.716		
8,600.00	8,475.51	8,660.93	8,476.12	35.34	15.26	-98.071	-253.56	-1,427.27	191.87	146.65	45.21	4.243		
8,700.00	8,573.38	8,761.24	8,576.41	35.79	15.45	-97.945	-254.24	-1,426.06	170.30	124.54	45.77	3.721		
8,800.00	8,671.25	8,859.24	8,674.40	36.25	15.64	-97.688	-254.55	-1,424.00	147.82	101.48	46.34	3.190		
8,845.65	8,715.93	8,903.10	8,718.24	36.46	15.73	-97.515	-254.64	-1,423.14	137.62	90.99	46.63	2.951		
8,900.00	8,769.20	8,955.31	8,770.45	36.71	15.83	-97.293	-254.80	-1,422.38	126.13	79.15	46.98	2.685		
9,000.00	8,867.59	9,051.59	8,866.72	37.14	16.05	-97.040	-255.62	-1,422.36	108.40	60.76	47.64	2.276		
9,100.00	8,966.42	9,150.96	8,966.09	37.56	16.28	-96.833	-256.52	-1,422.82	93.75	45.50	48.25	1.943		
9,200.00	9,065.61	9,250.44	9,065.57	37.96	16.52	-96.665	-257.32	-1,422.88	81.27	32.41	48.86	1.663		
9,300.00	9,165.10	9,349.99	9,165.11	38.34	16.75	-96.382	-257.81	-1,422.92	71.34	21.86	49.48	1.442 Level 3		
9,400.00	9,264.82	9,449.58	9,264.70	38.70	16.99	-96.151	-258.19	-1,422.64	63.68	13.57	50.10	1.271 Level 3		
9,500.00	9,364.70	9,548.63	9,363.75	39.04	17.24	-95.516	-258.10	-1,423.83	60.03	9.26	50.77	1.182 Level 3		
9,587.34	9,452.01	9,636.17	9,451.27	39.32	17.47	-95.005	-257.91	-1,425.09	59.18	7.87	51.31	1.153 Level 3		
9,600.00	9,464.67	9,648.85	9,463.96	39.36	17.51	-94.926	-257.86	-1,425.25	59.20	7.81	51.39	1.152 Level 3		
9,635.33	9,500.00	9,684.26	9,499.36	39.47	17.60	-94.673	-257.65	-1,425.67	59.44	7.83	51.61	1.152 Level 3		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 125Y - Wellbore #1 - Pilot Surveys													Offset Site Error:	0.00 usft
Survey Program: 80-GYD_GC+DROP+OH, 5931-MWD+HRGM													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
9,700.00	9,564.67	9,748.97	9,564.06	39.66	17.77	-94.080	-257.08	-1,426.38	60.09	8.09	52.01	1.155	Level 3	
9,800.00	9,664.67	9,849.13	9,664.21	39.95	18.04	-93.014	-256.02	-1,427.39	61.03	8.41	52.63	1.160	Level 3	
9,900.00	9,764.67	9,949.41	9,764.48	40.25	18.30	-91.977	-254.93	-1,427.95	61.55	8.30	53.25	1.156	Level 3	
10,000.00	9,864.67	10,049.65	9,864.72	40.55	18.56	-91.023	-253.91	-1,428.08	61.66	7.79	53.87	1.145	Level 3	
10,100.00	9,964.67	10,149.92	9,964.99	40.85	18.82	-90.241	-253.07	-1,427.80	61.36	6.89	54.48	1.126	Level 3	
10,200.00	10,064.67	10,250.13	10,065.19	41.15	19.08	-89.511	-252.29	-1,427.09	60.65	5.56	55.09	1.101	Level 3	
10,266.50	10,131.17	10,316.12	10,131.17	41.35	19.25	-89.803	-252.60	-1,426.68	60.25	4.74	55.50	1.085	Level 3	
10,300.00	10,164.67	10,349.14	10,164.17	41.45	19.34	-91.002	-253.86	-1,426.81	60.38	4.70	55.68	1.084	Level 3, ES, SF	
10,319.92	10,184.58	10,369.00	10,183.99	41.51	19.40	-92.080	-255.01	-1,426.99	60.60	4.84	55.76	1.087	Level 3	
10,350.00	10,214.65	10,398.74	10,213.67	41.60	19.48	-94.589	-256.91	-1,427.33	61.09	5.21	55.88	1.093	Level 3	
10,400.00	10,264.41	10,448.18	10,263.02	41.74	19.62	-101.691	-259.92	-1,427.86	62.69	6.60	56.09	1.118	Level 3	
10,450.00	10,313.55	10,497.17	10,311.93	41.88	19.76	-111.687	-262.66	-1,428.29	66.45	9.92	56.53	1.175	Level 3	
10,500.00	10,361.72	10,545.38	10,360.09	42.02	19.89	-122.990	-264.84	-1,428.44	73.67	16.31	57.36	1.284	Level 3	
10,550.00	10,408.53	10,591.81	10,406.49	42.14	20.02	-133.929	-266.56	-1,428.40	85.54	27.07	58.46	1.463	Level 3	
10,600.00	10,453.64	10,636.25	10,450.90	42.25	20.14	-143.318	-268.09	-1,428.36	102.77	43.20	59.57	1.725		
10,650.00	10,496.71	10,679.05	10,493.68	42.35	20.26	-150.739	-269.45	-1,428.33	125.12	64.62	60.50	2.068		
10,700.00	10,537.40	10,720.06	10,534.68	42.43	20.37	-156.373	-270.44	-1,428.30	151.89	90.67	61.23	2.481		
10,750.00	10,575.40	10,758.46	10,573.08	42.51	20.48	-160.627	-271.06	-1,428.26	182.58	120.79	61.79	2.955		
10,800.00	10,610.43	10,792.84	10,607.45	42.57	20.58	-163.875	-271.55	-1,428.24	216.93	154.70	62.23	3.486		
10,850.00	10,642.22	10,823.90	10,638.51	42.61	20.66	-166.385	-272.01	-1,428.23	254.58	192.01	62.58	4.068		
10,900.00	10,670.52	10,851.39	10,665.99	42.65	20.74	-168.349	-272.43	-1,428.24	295.13	232.28	62.85	4.696		
10,950.00	10,695.13	10,874.99	10,689.59	42.68	20.81	-169.908	-272.80	-1,428.26	338.18	275.11	63.07	5.362		
11,000.00	10,715.85	10,894.65	10,709.25	42.70	20.86	-171.160	-273.14	-1,428.28	383.33	320.08	63.24	6.061		
11,050.00	10,732.53	10,910.24	10,724.84	42.71	20.91	-172.178	-273.41	-1,428.30	430.18	366.80	63.38	6.788		
11,100.00	10,745.04	10,921.66	10,736.25	42.72	20.94	-173.016	-273.62	-1,428.31	478.34	414.86	63.48	7.536		
11,150.00	10,753.28	10,928.85	10,743.44	42.73	20.96	-173.711	-273.75	-1,428.33	527.40	463.85	63.55	8.299		
11,200.00	10,757.20	10,931.77	10,746.36	42.74	20.97	-174.294	-273.80	-1,428.33	576.98	513.38	63.60	9.072		
11,224.92	10,757.52	10,931.63	10,746.22	42.75	20.97	-174.549	-273.80	-1,428.33	601.76	538.14	63.62	9.459		
11,300.00	10,756.87	10,929.63	10,744.22	42.80	20.96	-175.205	-273.76	-1,428.33	676.46	612.79	63.66	10.626		
11,400.00	10,755.99	10,926.97	10,741.57	42.90	20.96	-175.883	-273.71	-1,428.32	776.05	712.35	63.70	12.182		
11,500.00	10,755.12	10,924.34	10,738.93	43.06	20.95	-176.406	-273.67	-1,428.32	875.73	812.00	63.73	13.740		
11,600.00	10,754.25	10,921.73	10,736.32	43.28	20.94	-176.823	-273.62	-1,428.31	975.47	911.71	63.76	15.299		
11,700.00	10,753.37	10,919.14	10,733.73	43.55	20.93	-177.162	-273.57	-1,428.31	1,075.25	1,011.46	63.78	16.858		
11,800.00	10,752.50	10,916.57	10,731.16	43.90	20.93	-177.443	-273.52	-1,428.31	1,175.06	1,111.26	63.80	18.417		
11,900.00	10,751.63	10,914.01	10,728.61	44.31	20.92	-177.681	-273.48	-1,428.30	1,274.89	1,211.07	63.82	19.976		
12,000.00	10,750.76	10,911.48	10,726.07	44.77	20.91	-177.884	-273.43	-1,428.30	1,374.75	1,310.91	63.84	21.535		
12,100.00	10,749.88	10,908.96	10,723.56	45.29	20.91	-178.059	-273.39	-1,428.30	1,474.62	1,410.76	63.85	23.094		
12,200.00	10,749.01	10,906.47	10,721.06	45.87	20.90	-178.212	-273.34	-1,428.29	1,574.50	1,510.63	63.87	24.652		
12,300.00	10,748.14	10,903.99	10,718.58	46.48	20.89	-178.347	-273.30	-1,428.29	1,674.39	1,610.51	63.89	26.209		
12,400.00	10,747.27	10,901.53	10,716.12	47.14	20.88	-178.467	-273.26	-1,428.29	1,774.29	1,710.39	63.90	27.766		
12,500.00	10,746.39	10,899.08	10,713.68	47.84	20.88	-178.574	-273.21	-1,428.28	1,874.20	1,810.28	63.92	29.322		
12,600.00	10,745.52	10,896.66	10,711.25	48.58	20.87	-178.670	-273.17	-1,428.28	1,974.11	1,910.18	63.93	30.878		
12,700.00	10,744.65	10,894.25	10,708.85	49.35	20.86	-178.757	-273.13	-1,428.28	2,074.03	2,010.08	63.95	32.432		
12,800.00	10,743.78	10,891.86	10,706.46	50.15	20.86	-178.835	-273.09	-1,428.27	2,173.96	2,109.99	63.97	33.986		
12,888.61	10,743.00	10,889.76	10,704.35	50.89	20.85	-178.900	-273.05	-1,428.27	2,262.51	2,198.52	63.98	35.361		
12,900.00	10,742.88	10,889.47	10,704.06	50.98	20.85	-178.907	-273.05	-1,428.27	2,273.88	2,209.90	63.98	35.538		
12,939.06	10,742.12	10,888.16	10,702.75	51.32	20.85	-178.934	-273.03	-1,428.27	2,312.91	2,248.92	63.99	36.145		
13,000.00	10,740.51	10,885.74	10,700.34	51.85	20.84	-178.973	-272.98	-1,428.27	2,373.77	2,309.77	64.00	37.091		
13,100.00	10,737.88	10,881.81	10,696.40	52.74	20.83	-179.034	-272.92	-1,428.26	2,473.64	2,409.63	64.01	38.643		
13,147.49	10,736.63	10,879.94	10,694.54	53.17	20.82	-179.061	-272.89	-1,428.26	2,521.08	2,457.06	64.02	39.380		
13,200.00	10,735.25	10,877.90	10,692.49	53.65	20.82	-179.100	-272.85	-1,428.26	2,573.50	2,509.47	64.03	40.194		
13,300.00	10,732.61	10,874.02	10,688.61	54.61	20.81	-179.228	-272.79	-1,428.26	2,673.23	2,609.19	64.05	41.739		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 125Y - Wellbore #1 - Pilot Surveys													Offset Site Error:
Survey Program: 80-GYD_GC+DROP+OH, 5931-MWD+HRGM													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,347.43	10,731.36	10,872.19	10,686.79	55.08	20.80	-179.311	-272.76	-1,428.26	2,720.45	2,656.40	64.06	42.469	
13,400.00	10,729.98	10,870.17	10,684.77	55.60	20.80	-179.409	-272.73	-1,428.25	2,772.77	2,708.70	64.07	43.277	
13,500.00	10,727.34	10,866.35	10,680.95	56.62	20.78	-179.585	-272.66	-1,428.25	2,872.31	2,808.21	64.10	44.813	
13,600.00	10,724.71	10,862.56	10,677.16	57.66	20.77	-179.749	-272.60	-1,428.25	2,971.86	2,907.74	64.12	46.348	
13,700.00	10,722.08	10,858.79	10,673.39	58.72	20.76	-179.903	-272.54	-1,428.24	3,071.45	3,007.30	64.15	47.882	
13,800.00	10,719.44	10,855.04	10,669.65	59.79	20.75	179.953	-272.48	-1,428.24	3,171.05	3,106.88	64.17	49.415	
13,900.00	10,716.81	10,846.00	10,660.60	60.88	20.73	179.818	-272.34	-1,428.24	3,270.68	3,206.49	64.19	50.956	
14,000.00	10,714.18	10,846.00	10,660.60	61.99	20.73	179.691	-272.34	-1,428.24	3,370.32	3,306.09	64.22	52.480	
14,055.43	10,712.72	10,846.00	10,660.60	62.60	20.73	179.624	-272.34	-1,428.24	3,425.55	3,361.31	64.24	53.324	
14,100.00	10,711.54	10,846.00	10,660.60	63.10	20.73	179.577	-272.34	-1,428.24	3,470.00	3,405.74	64.26	54.003	
14,200.00	10,708.91	10,839.89	10,654.50	64.22	20.71	179.517	-272.25	-1,428.23	3,569.83	3,505.56	64.27	55.541	
14,255.44	10,707.45	10,837.72	10,652.32	64.84	20.70	179.508	-272.22	-1,428.23	3,625.22	3,560.94	64.29	56.392	
14,300.00	10,706.27	10,835.98	10,650.58	65.33	20.70	179.509	-272.19	-1,428.23	3,669.75	3,605.45	64.30	57.076	
14,400.00	10,703.64	10,832.07	10,646.68	66.46	20.69	179.509	-272.13	-1,428.23	3,769.66	3,705.34	64.32	58.611	
14,500.00	10,701.01	10,828.18	10,642.79	67.59	20.68	179.510	-272.07	-1,428.23	3,869.57	3,805.23	64.34	60.143	
14,600.00	10,698.37	10,824.31	10,638.91	68.74	20.67	179.510	-272.01	-1,428.23	3,969.49	3,905.12	64.36	61.673	
14,700.00	10,695.74	10,820.44	10,635.05	69.90	20.65	179.511	-271.96	-1,428.23	4,069.40	4,005.02	64.39	63.202	
14,800.00	10,693.11	10,816.59	10,631.19	71.07	20.64	179.511	-271.90	-1,428.23	4,169.32	4,104.91	64.41	64.729	
14,900.00	10,690.47	10,812.74	10,627.35	72.25	20.63	179.512	-271.84	-1,428.23	4,269.23	4,204.79	64.44	66.253	
15,000.00	10,687.84	10,808.91	10,623.52	73.43	20.62	179.512	-271.79	-1,428.23	4,369.15	4,304.68	64.47	67.775	
15,100.00	10,685.21	10,805.10	10,619.70	74.63	20.61	179.513	-271.73	-1,428.23	4,469.06	4,404.57	64.49	69.296	
15,200.00	10,682.57	10,801.29	10,615.90	75.84	20.60	179.513	-271.67	-1,428.23	4,568.98	4,504.46	64.52	70.814	
15,300.00	10,679.94	10,797.50	10,612.10	77.05	20.59	179.514	-271.62	-1,428.23	4,668.90	4,604.35	64.55	72.329	
15,400.00	10,677.31	10,793.72	10,608.32	78.27	20.58	179.514	-271.56	-1,428.24	4,768.81	4,704.23	64.58	73.843	
15,500.00	10,674.67	10,789.94	10,604.55	79.50	20.57	179.514	-271.51	-1,428.24	4,868.73	4,804.12	64.61	75.354	
15,600.00	10,672.04	10,786.19	10,600.79	80.74	20.56	179.515	-271.46	-1,428.24	4,968.65	4,904.00	64.64	76.862	
15,700.00	10,669.41	10,782.44	10,597.05	81.98	20.55	179.515	-271.40	-1,428.24	5,068.57	5,003.89	64.68	78.368	
15,800.00	10,666.77	10,778.70	10,593.31	83.23	20.54	179.515	-271.35	-1,428.24	5,168.48	5,103.77	64.71	79.872	
15,900.00	10,664.14	10,774.98	10,589.59	84.49	20.53	179.516	-271.30	-1,428.25	5,268.40	5,203.66	64.74	81.373	
16,000.00	10,661.51	10,771.26	10,585.87	85.75	20.52	179.516	-271.25	-1,428.25	5,368.32	5,303.60	64.77	82.877	
16,100.00	10,658.87	10,767.54	10,582.15	87.02	20.51	179.517	-271.20	-1,428.25	5,468.24	5,403.44	64.80	84.381	
16,200.00	10,656.24	10,763.82	10,578.43	88.29	20.50	179.517	-271.15	-1,428.25	5,568.16	5,503.28	64.83	85.885	
16,300.00	10,653.61	10,760.10	10,574.71	89.57	20.49	179.517	-269.92	-1,428.31	5,667.91	5,603.12	64.79	87.389	
16,400.00	10,650.97	10,756.38	10,571.00	90.86	20.48	179.518	-269.81	-1,428.31	5,767.79	5,702.96	64.82	88.893	
16,500.00	10,648.34	10,752.66	10,567.28	92.15	20.47	179.518	-269.69	-1,428.31	5,867.66	5,802.80	64.86	90.397	
16,600.00	10,645.71	10,748.94	10,563.56	93.44	20.46	179.518	-269.58	-1,428.31	5,967.54	5,902.82	64.89	91.901	
16,700.00	10,643.07	10,745.22	10,559.84	94.74	20.45	179.519	-269.47	-1,428.31	6,067.42	6,002.60	64.92	93.405	
16,800.00	10,640.44	10,741.50	10,556.12	96.04	20.44	179.519	-269.36	-1,428.31	6,167.23	6,102.38	64.95	94.909	
16,892.04	10,638.02	10,737.78	10,552.40	97.24	20.43	179.519	-269.25	-1,428.31	6,259.10	6,194.22	64.99	96.413	
16,900.00	10,637.82	10,737.58	10,552.20	97.34	20.43	179.519	-269.25	-1,428.31	6,267.05	6,202.16	64.99	96.582	
16,987.49	10,637.09	10,736.85	10,551.47	98.49	19.82	179.518	-263.56	-1,428.27	6,354.42	6,289.63	64.79	98.076	
17,000.00	10,637.18	10,736.94	10,551.56	98.65	19.82	179.518	-263.53	-1,428.27	6,366.92	6,302.12	64.80	98.259	
17,100.00	10,637.88	10,737.64	10,552.26	99.96	19.81	179.518	-263.34	-1,428.25	6,466.84	6,401.99	64.85	99.726	
17,200.00	10,638.58	10,738.34	10,552.96	101.27	19.80	179.518	-263.15	-1,428.23	6,566.75	6,501.86	64.90	101.188	
17,300.00	10,639.27	10,739.04	10,553.66	102.59	19.52	179.512	-257.83	-1,427.50	6,666.72	6,601.94	64.79	102.905	
17,400.00	10,639.97	10,739.74	10,554.36	103.91	19.49	179.511	-257.18	-1,427.38	6,766.57	6,701.74	64.83	104.380	
17,500.00	10,640.67	10,740.44	10,555.06	105.23	19.46	179.510	-256.49	-1,427.26	6,866.41	6,801.55	64.87	105.852	
17,600.00	10,641.37	10,741.14	10,555.76	106.56	19.43	179.509	-255.78	-1,427.13	6,966.25	6,901.34	64.91	107.321	
17,700.00	10,642.07	10,741.84	10,556.46	107.89	19.40	179.509	-255.04	-1,427.00	7,066.09	7,001.14	64.95	108.788	
17,800.00	10,642.76	10,742.54	10,557.16	109.22	19.40	179.509	-255.01	-1,426.99	7,165.92	7,100.91	65.01	110.220	
17,900.00	10,643.46	10,743.24	10,557.86	110.56	19.40	179.509	-255.01	-1,426.99	7,265.76	7,200.69	65.08	111.648	
18,000.00	10,644.16	10,743.94	10,558.56	111.90	19.40	179.509	-255.01	-1,426.99	7,365.61	7,300.47	65.14	113.071	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 125Y - Wellbore #1 - Pilot Surveys													Offset Site Error:
Survey Program: 80-GYD_GC+DROP+OH, 5931-MWD+HRGM													Offset Well Error:
Reference	Offset	Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned:		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
18,100.00	10,644.86	10,369.00	10,183.99	113.24	19.40	179.510	-255.01	-1,426.99	7,465.46	7,400.25	65.21	114.491	
18,200.00	10,645.56	10,369.00	10,183.99	114.58	19.40	179.510	-255.01	-1,426.99	7,565.31	7,500.04	65.27	115.906	
18,300.00	10,646.25	10,369.00	10,183.99	115.93	19.40	179.510	-255.01	-1,426.99	7,665.16	7,599.83	65.34	117.318	
18,400.00	10,646.95	10,369.00	10,183.99	117.28	19.40	179.511	-255.01	-1,426.99	7,765.02	7,699.62	65.40	118.725	
18,500.00	10,647.65	10,369.00	10,183.99	118.63	19.40	179.511	-255.01	-1,426.99	7,864.89	7,799.41	65.47	120.128	
18,600.00	10,648.35	10,369.00	10,183.99	119.98	19.40	179.511	-255.01	-1,426.99	7,964.75	7,899.21	65.54	121.527	
18,700.00	10,649.05	10,369.00	10,183.99	121.33	19.40	179.511	-255.01	-1,426.99	8,064.62	7,999.01	65.61	122.922	
18,800.00	10,649.75	10,369.00	10,183.99	122.69	19.40	179.512	-255.01	-1,426.99	8,164.49	8,098.82	65.68	124.313	
18,900.00	10,650.44	10,369.00	10,183.99	124.05	19.40	179.512	-255.01	-1,426.99	8,264.37	8,198.62	65.75	125.699	
19,000.00	10,651.14	10,369.00	10,183.99	125.41	19.40	179.512	-255.01	-1,426.99	8,364.25	8,298.43	65.82	127.081	
19,100.00	10,651.84	10,369.00	10,183.99	126.77	19.40	179.512	-255.01	-1,426.99	8,464.13	8,398.24	65.89	128.459	
19,200.00	10,652.54	10,369.00	10,183.99	128.14	19.40	179.513	-255.01	-1,426.99	8,564.02	8,498.05	65.96	129.833	
19,300.00	10,653.24	10,369.00	10,183.99	129.50	19.40	179.513	-255.01	-1,426.99	8,663.90	8,597.87	66.03	131.202	
19,392.11	10,653.88	10,369.00	10,183.99	130.76	19.40	179.513	-255.01	-1,426.99	8,755.91	8,689.81	66.10	132.459	
19,400.00	10,653.92	10,369.00	10,183.99	130.87	19.40	179.513	-255.01	-1,426.99	8,763.79	8,697.68	66.11	132.567	
19,408.64	10,653.95	10,369.00	10,183.99	130.99	19.40	179.513	-255.01	-1,426.99	8,772.42	8,706.31	66.11	132.684	
19,500.00	10,654.06	10,369.00	10,183.99	132.24	19.40	179.513	-255.01	-1,426.99	8,863.66	8,797.48	66.18	133.928	
19,600.00	10,654.18	10,369.00	10,183.99	133.61	19.40	179.513	-255.01	-1,426.99	8,963.52	8,897.27	66.26	135.286	
19,700.00	10,654.30	10,369.00	10,183.99	134.98	19.40	179.514	-255.01	-1,426.99	9,063.40	8,997.06	66.33	136.638	
19,800.00	10,654.42	10,369.00	10,183.99	136.36	19.40	179.514	-255.01	-1,426.99	9,163.27	9,096.86	66.41	137.987	
19,900.00	10,654.54	10,369.00	10,183.99	137.73	19.40	179.514	-255.01	-1,426.99	9,263.14	9,196.66	66.48	139.331	
20,000.00	10,654.66	10,369.00	10,183.99	139.11	19.40	179.514	-255.01	-1,426.99	9,363.02	9,296.46	66.56	140.670	
20,100.00	10,654.78	10,369.00	10,183.99	140.49	19.40	179.514	-255.01	-1,426.99	9,462.90	9,396.27	66.64	142.006	
20,200.00	10,654.91	10,369.00	10,183.99	141.87	19.40	179.515	-255.01	-1,426.99	9,562.79	9,496.07	66.72	143.336	
20,300.00	10,655.03	10,369.00	10,183.99	143.25	19.40	179.515	-255.01	-1,426.99	9,662.67	9,595.88	66.79	144.662	
20,400.00	10,655.15	10,369.00	10,183.99	144.63	19.40	179.515	-255.01	-1,426.99	9,762.56	9,695.69	66.87	145.984	
20,500.00	10,655.27	10,369.00	10,183.99	146.01	19.40	179.515	-255.01	-1,426.99	9,862.45	9,795.50	66.95	147.301	
20,600.00	10,655.39	10,369.00	10,183.99	147.40	19.40	179.515	-255.01	-1,426.99	9,962.34	9,895.31	67.04	148.613	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 125Y - Wellbore #2 - Surveys													Offset Site Error: 0.00 usft
Survey Program: 80-GYD_GC+DROP+OH, 5931-MWD+HRGM, 10152-MWD+HRGM													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	130.221	-29.87	35.32	46.26				
100.00	100.00	100.00	100.00	0.13	0.07	130.415	-30.00	35.23	46.28	46.09	0.19	241.180	
200.00	200.00	200.26	200.25	0.49	0.22	131.321	-30.45	34.64	46.12	45.43	0.69	66.734	
300.00	300.00	300.85	300.83	0.85	0.37	133.532	-30.94	32.56	44.93	43.73	1.19	37.649	
400.00	400.00	401.15	401.06	1.20	0.52	137.180	-31.26	28.97	42.63	40.94	1.69	25.163	
500.00	500.00	501.07	500.89	1.56	0.67	141.668	-31.54	24.94	40.21	38.02	2.19	18.335	
600.00	599.99	600.97	600.72	1.92	0.82	145.885	-31.83	21.10	38.98	36.29	2.69	14.505	
700.00	699.98	700.94	700.62	2.27	0.97	149.706	-32.17	17.29	38.78	35.60	3.18	12.196	
800.00	799.96	800.93	800.53	2.62	1.12	153.676	-32.51	13.39	38.71	35.04	3.67	10.539	
900.00	899.95	900.99	900.51	2.98	1.27	157.687	-32.72	9.39	38.67	34.50	4.17	9.278	
919.73	919.67	920.69	920.20	3.05	1.30	158.474	-32.74	8.60	38.66	34.40	4.27	9.065	
1,000.00	999.93	1,000.91	1,000.37	3.34	1.42	161.207	-32.76	5.68	38.75	34.09	4.66	8.311	
1,100.00	1,099.92	1,100.88	1,100.29	3.69	1.56	163.506	-32.58	2.76	38.99	33.83	5.16	7.557	
1,200.00	1,199.90	1,200.71	1,200.08	4.05	1.71	165.991	-32.69	-0.25	39.54	33.89	5.66	6.992	
1,300.00	1,299.89	1,300.61	1,299.92	4.41	1.86	168.844	-33.19	-3.50	40.49	34.34	6.15	6.583	
1,400.00	1,399.87	1,400.48	1,399.74	4.76	2.01	171.422	-33.79	-6.63	41.67	35.03	6.65	6.268	
1,500.00	1,499.86	1,500.35	1,499.58	5.12	2.16	172.729	-34.66	-8.88	43.30	36.16	7.15	6.060	
1,600.00	1,599.84	1,600.49	1,599.71	5.48	2.31	172.732	-35.40	-10.19	44.92	37.27	7.64	5.876	
1,700.00	1,699.83	1,700.59	1,699.80	5.84	2.46	172.665	-35.66	-11.50	46.07	37.93	8.14	5.658	
1,800.00	1,799.81	1,800.41	1,799.61	6.20	2.61	172.529	-36.02	-12.74	47.33	38.69	8.64	5.478	
1,900.00	1,899.80	1,900.22	1,899.41	6.56	2.75	172.475	-36.82	-13.98	49.03	39.89	9.14	5.365	
2,000.00	1,999.78	2,000.34	1,999.52	6.91	2.90	172.633	-37.75	-15.40	50.83	41.19	9.64	5.274	
2,050.23	2,050.00	2,050.69	2,049.86	7.09	2.98	172.648	-38.04	-16.08	51.56	41.67	9.89	5.214	
2,100.00	2,099.76	2,100.58	2,099.75	7.27	3.05	172.325	-38.19	-16.67	52.13	42.00	10.14	5.144	
2,200.00	2,199.71	2,200.58	2,199.74	7.63	3.20	169.968	-38.27	-17.60	52.98	42.35	10.63	4.984	
2,300.00	2,299.59	2,300.69	2,299.85	7.99	3.35	165.579	-38.18	-18.32	53.75	42.62	11.13	4.831	
2,400.00	2,399.37	2,401.07	2,400.22	8.35	3.50	159.866	-37.55	-19.59	54.29	42.66	11.63	4.668	
2,500.00	2,499.03	2,501.50	2,500.60	8.71	3.64	153.728	-36.38	-22.40	54.52	42.38	12.14	4.491	
2,600.00	2,598.52	2,601.91	2,600.87	9.07	3.79	148.058	-35.18	-27.57	54.63	41.97	12.66	4.316	
2,700.00	2,697.83	2,701.97	2,700.63	9.44	3.95	143.387	-34.81	-35.26	55.06	41.88	13.18	4.178	
2,800.00	2,796.92	2,802.26	2,800.37	9.81	4.10	140.166	-35.82	-45.54	55.97	42.27	13.70	4.086	
2,900.00	2,895.75	2,902.82	2,900.09	10.19	4.26	138.142	-37.88	-58.42	56.90	42.68	14.21	4.003	
3,000.00	2,994.31	3,003.53	2,999.61	10.57	4.41	136.685	-40.46	-73.57	57.55	42.82	14.73	3.906	
3,100.00	3,092.56	3,104.39	3,098.98	10.96	4.57	135.049	-42.87	-90.70	57.62	42.37	15.25	3.778	
3,161.76	3,153.08	3,166.58	3,160.13	11.21	4.66	133.562	-44.08	-101.94	57.46	41.88	15.57	3.690	
3,200.00	3,190.50	3,205.06	3,197.93	11.36	4.72	132.559	-44.74	-109.14	57.25	41.48	15.77	3.630	
3,300.00	3,288.37	3,305.64	3,296.51	11.77	4.87	130.588	-46.46	-129.01	55.98	39.69	16.30	3.436	
3,400.00	3,386.24	3,405.96	3,394.51	12.17	5.03	129.831	-48.61	-150.30	53.88	37.05	16.83	3.202	
3,500.00	3,484.11	3,506.46	3,492.35	12.59	5.18	130.909	-51.69	-173.10	51.22	33.86	17.36	2.950	
3,600.00	3,581.98	3,606.53	3,589.05	13.00	5.34	135.366	-56.06	-198.45	47.46	29.54	17.92	2.648	
3,700.00	3,679.85	3,706.11	3,685.42	13.42	5.49	139.958	-60.55	-223.13	44.51	26.01	18.51	2.405	
3,800.00	3,777.73	3,806.12	3,782.37	13.84	5.64	144.410	-64.90	-247.27	42.17	23.09	19.08	2.210	
3,900.00	3,875.60	3,906.28	3,879.18	14.26	5.80	150.887	-69.37	-272.58	39.61	19.94	19.67	2.014	
4,000.00	3,973.47	4,006.23	3,975.49	14.69	5.95	159.575	-73.72	-298.96	37.12	16.86	20.27	1.832	
4,100.00	4,071.34	4,105.84	4,071.18	15.12	6.11	170.684	-78.37	-326.22	35.78	14.93	20.85	1.716	
4,115.09	4,086.11	4,120.86	4,085.59	15.18	6.13	172.500	-79.12	-330.38	35.75	14.83	20.93	1.708 CC	
4,200.00	4,169.21	4,205.51	4,166.87	15.55	6.27	-177.637	-83.42	-353.63	36.39	15.01	21.37	1.702	
4,300.00	4,267.08	4,305.33	4,262.92	15.98	6.42	-167.727	-88.44	-380.34	38.32	16.45	21.87	1.752	
4,400.00	4,364.95	4,404.55	4,358.15	16.42	6.58	-158.133	-93.53	-407.71	41.76	19.45	22.31	1.872	
4,500.00	4,462.82	4,504.21	4,453.34	16.85	6.74	-148.264	-98.71	-436.81	47.21	24.47	22.74	2.076	
4,600.00	4,560.69	4,603.91	4,548.62	17.29	6.90	-140.500	-103.65	-465.74	53.47	30.29	23.19	2.306	
4,700.00	4,658.56	4,703.92	4,644.37	17.73	7.05	-134.659	-108.51	-494.19	60.00	36.33	23.67	2.535	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 125Y - Wellbore #2 - Surveys													Offset Site Error:
Survey Program: 80-GYD_GC+DROP+OH, 5931-MWD+HRGM, 10152-MWD+HRGM													0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Minimum Separation (usft)	Separation Factor	Warning	Offset Well Error:
4,800.00	4,756.43	4,803.98	4,740.37	18.17	7.21	-130.149	-113.11	-522.03	66.33	42.16	24.17	2.744	0.00 usft
4,900.00	4,854.30	4,903.91	4,836.37	18.61	7.37	-126.617	-117.63	-549.39	72.56	47.88	24.68	2.940	
5,000.00	4,952.17	5,004.08	4,932.75	19.05	7.53	-123.865	-122.20	-576.30	78.58	53.38	25.21	3.117	
5,100.00	5,050.04	5,103.68	5,028.71	19.49	7.69	-121.494	-126.40	-602.64	84.20	58.48	25.72	3.274	
5,200.00	5,147.91	5,201.79	5,122.74	19.94	7.85	-119.080	-130.75	-630.30	91.62	65.44	26.18	3.499	
5,300.00	5,245.78	5,301.69	5,218.36	20.38	8.02	-116.801	-135.19	-658.90	99.61	72.90	26.71	3.729	
5,400.00	5,343.65	5,401.40	5,313.85	20.83	8.18	-114.790	-139.39	-687.30	107.49	80.25	27.24	3.946	
5,500.00	5,441.52	5,501.08	5,409.29	21.27	8.34	-113.121	-143.73	-715.68	115.52	87.75	27.77	4.160	
5,600.00	5,539.40	5,600.64	5,504.68	21.72	8.50	-111.668	-148.01	-743.92	123.49	95.19	28.30	4.364	
5,700.00	5,637.27	5,700.27	5,600.07	22.17	8.67	-110.469	-152.52	-772.30	131.75	102.92	28.83	4.569	
5,800.00	5,735.14	5,800.27	5,695.88	22.62	8.83	-109.336	-156.83	-800.62	139.80	110.42	29.38	4.758	
5,900.00	5,833.01	5,900.37	5,791.85	23.07	9.00	-108.293	-161.00	-828.77	147.66	117.73	29.93	4.934	
6,000.00	5,930.88	6,002.05	5,889.53	23.52	9.19	-107.305	-164.96	-856.74	154.87	124.40	30.47	5.082	
6,100.00	6,028.75	6,104.18	5,988.06	23.97	9.35	-106.290	-168.20	-883.41	160.53	129.57	30.95	5.186	
6,200.00	6,126.62	6,203.34	6,083.94	24.42	9.38	-105.345	-171.00	-908.54	165.36	134.01	31.35	5.275	
6,300.00	6,224.49	6,298.36	6,175.27	24.87	9.43	-104.722	-174.81	-934.46	172.46	140.79	31.67	5.446	
6,400.00	6,322.36	6,397.25	6,269.88	25.32	9.51	-104.280	-179.67	-962.81	181.22	149.13	32.09	5.647	
6,500.00	6,420.23	6,498.56	6,367.00	25.77	9.59	-103.878	-184.55	-991.25	189.36	156.77	32.59	5.811	
6,600.00	6,518.10	6,598.87	6,463.28	26.23	9.69	-103.568	-189.45	-1,018.98	197.09	164.01	33.08	5.958	
6,700.00	6,615.97	6,700.79	6,561.28	26.68	9.81	-103.342	-194.52	-1,046.51	204.21	170.60	33.61	6.075	
6,800.00	6,713.84	6,804.67	6,661.60	27.13	9.94	-103.078	-199.16	-1,073.05	209.75	175.55	34.19	6.134	
6,900.00	6,811.71	6,905.11	6,758.98	27.58	10.09	-102.782	-203.11	-1,097.33	213.77	179.04	34.72	6.156	
7,000.00	6,909.58	7,004.15	6,854.87	28.04	10.24	-102.333	-206.50	-1,121.89	218.31	183.06	35.25	6.194	
7,100.00	7,007.45	7,106.25	6,953.77	28.49	10.42	-101.828	-209.73	-1,147.03	222.65	186.81	35.83	6.213	
7,200.00	7,105.32	7,203.00	7,047.55	28.95	10.63	-101.330	-212.58	-1,170.60	226.70	190.35	36.35	6.237	
7,300.00	7,203.19	7,302.34	7,143.51	29.40	10.93	-100.742	-215.41	-1,196.19	232.15	195.23	36.92	6.288	
7,400.00	7,301.06	7,405.73	7,243.58	29.86	11.27	-100.207	-218.39	-1,222.00	236.83	199.27	37.56	6.305	
7,500.00	7,398.94	7,499.30	7,334.09	30.31	11.59	-99.853	-221.62	-1,245.52	241.80	203.74	38.06	6.352	
7,600.00	7,496.81	7,598.48	7,429.55	30.77	11.96	-99.628	-225.86	-1,272.07	248.58	209.92	38.67	6.429	
7,700.00	7,594.68	7,701.38	7,528.77	31.22	12.34	-99.442	-230.28	-1,298.98	254.74	215.40	39.34	6.476	
7,800.00	7,692.55	7,806.25	7,630.33	31.68	12.74	-99.233	-234.37	-1,324.81	259.28	219.24	40.04	6.476	
7,900.00	7,790.42	7,911.33	7,732.56	32.14	13.12	-99.057	-238.28	-1,348.74	261.91	221.18	40.74	6.429	
8,000.00	7,888.29	8,017.05	7,835.93	32.59	13.50	-98.899	-241.92	-1,370.60	262.37	220.93	41.44	6.332	
8,100.00	7,986.16	8,127.35	7,944.29	33.05	13.87	-98.718	-245.21	-1,390.91	260.55	218.39	42.16	6.180	
8,200.00	8,084.03	8,242.11	8,058.08	33.51	14.22	-98.685	-248.26	-1,405.32	252.71	209.85	42.85	5.897	
8,300.00	8,181.90	8,346.11	8,161.66	33.96	14.50	-98.510	-249.93	-1,414.53	241.08	197.60	43.48	5.545	
8,400.00	8,279.77	8,454.02	8,269.31	34.42	14.78	-98.333	-251.37	-1,421.74	227.31	183.23	44.08	5.157	
8,500.00	8,377.64	8,554.72	8,369.93	34.88	15.02	-98.194	-252.55	-1,425.60	210.70	166.02	44.68	4.716	
8,600.00	8,475.51	8,660.93	8,476.12	35.34	15.26	-98.071	-253.56	-1,427.27	191.87	146.65	45.21	4.243	
8,700.00	8,573.38	8,761.24	8,576.41	35.79	15.45	-97.945	-254.24	-1,426.06	170.30	124.54	45.77	3.721	
8,800.00	8,671.25	8,859.24	8,674.40	36.25	15.64	-97.688	-254.55	-1,424.00	147.82	101.48	46.34	3.190	
8,845.65	8,715.93	8,903.10	8,718.24	36.46	15.73	-97.515	-254.64	-1,423.14	137.62	90.99	46.63	2.951	
8,900.00	8,769.20	8,955.31	8,770.45	36.71	15.83	-97.293	-254.80	-1,422.38	126.13	79.15	46.98	2.685	
9,000.00	8,867.59	9,051.59	8,866.72	37.14	16.05	-97.040	-255.62	-1,422.36	108.40	60.76	47.64	2.276	
9,100.00	8,966.42	9,150.96	8,966.09	37.56	16.28	-96.833	-256.52	-1,422.82	93.75	45.50	48.25	1.943	
9,200.00	9,065.61	9,250.44	9,065.57	37.96	16.52	-96.665	-257.32	-1,422.88	81.27	32.41	48.86	1.663	
9,300.00	9,165.10	9,349.99	9,165.11	38.34	16.75	-96.382	-257.81	-1,422.92	71.34	21.86	49.48	1.442 Level 3	
9,400.00	9,264.82	9,449.58	9,264.70	38.70	16.99	-96.151	-258.19	-1,422.64	63.68	13.57	50.10	1.271 Level 3	
9,500.00	9,364.70	9,548.63	9,363.75	39.04	17.24	-95.516	-258.10	-1,423.83	60.03	9.26	50.77	1.182 Level 3	
9,587.34	9,452.01	9,636.17	9,451.27	39.32	17.47	-95.005	-257.91	-1,425.09	59.18	7.87	51.31	1.153 Level 3	
9,600.00	9,464.67	9,648.85	9,463.96	39.36	17.51	-94.926	-257.86	-1,425.25	59.20	7.81	51.39	1.152 Level 3	
9,635.33	9,500.00	9,684.26	9,499.36	39.47	17.60	-94.673	-257.65	-1,425.67	59.44	7.83	51.61	1.152 Level 3	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 125Y - Wellbore #2 - Surveys													Offset Site Error: 0.00 usft
Survey Program: 80-GYD_GC+DROP+OH, 5931-MWD+HRGM, 10152-MWD+HRGM													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,700.00	9,564.67	9,748.97	9,564.06	39.66	17.77	-94.080	-257.08	-1,426.38	60.09	8.09	52.01	1.155	Level 3
9,800.00	9,664.67	9,849.13	9,664.21	39.95	18.04	-93.014	-256.02	-1,427.39	61.03	8.41	52.63	1.160	Level 3
9,900.00	9,764.67	9,949.41	9,764.48	40.25	18.30	-91.977	-254.93	-1,427.95	61.55	8.30	53.25	1.156	Level 3
10,000.00	9,864.67	10,049.65	9,864.72	40.55	18.56	-91.023	-253.91	-1,428.08	61.66	7.79	53.87	1.145	Level 3
10,100.00	9,964.67	10,150.03	9,965.09	40.85	18.74	-90.249	-253.08	-1,427.74	61.31	6.93	54.38	1.127	Level 3
10,200.00	10,064.67	10,250.04	10,065.10	41.15	18.74	-89.674	-252.46	-1,427.02	60.59	5.85	54.74	1.107	Level 3
10,286.62	10,151.29	10,336.30	10,151.28	41.41	18.75	-86.737	-249.38	-1,426.51	60.17	4.97	55.20	1.090	Level 3
10,300.00	10,164.67	10,349.52	10,164.43	41.45	18.75	-85.432	-248.01	-1,426.44	60.19	4.86	55.33	1.088	Level 3
10,319.92	10,184.58	10,369.02	10,183.74	41.51	18.75	-82.845	-245.29	-1,426.32	60.36	4.78	55.58	1.086	Level 3
10,350.00	10,214.65	10,398.10	10,212.27	41.60	18.75	-78.323	-239.69	-1,426.12	60.99	4.93	56.06	1.088	Level 3
10,400.00	10,264.41	10,445.94	10,258.30	41.74	18.76	-70.906	-226.71	-1,425.74	63.00	6.12	56.89	1.108	Level 3
10,450.00	10,313.55	10,493.79	10,303.41	41.88	18.77	-65.078	-210.77	-1,425.40	65.67	8.17	57.50	1.142	Level 3
10,500.00	10,361.72	10,541.19	10,347.08	42.02	18.78	-61.030	-192.38	-1,425.13	68.40	10.56	57.84	1.183	Level 3
10,550.00	10,408.53	10,587.97	10,388.77	42.14	18.79	-58.183	-171.19	-1,424.91	71.17	13.22	57.95	1.228	Level 3
10,600.00	10,453.64	10,635.06	10,429.10	42.25	18.81	-56.072	-146.88	-1,424.71	73.76	15.85	57.91	1.274	Level 3
10,650.00	10,496.71	10,682.88	10,468.64	42.35	18.84	-54.745	-120.00	-1,424.25	75.30	17.47	57.83	1.302	Level 3
10,700.00	10,537.40	10,730.43	10,506.48	42.43	18.88	-54.441	-91.24	-1,423.47	75.50	17.88	57.63	1.310	Level 3
10,750.00	10,575.40	10,777.59	10,542.01	42.51	18.92	-54.671	-60.27	-1,422.10	74.57	17.21	57.36	1.300	Level 3
10,800.00	10,610.43	10,824.52	10,575.13	42.57	18.98	-55.313	-27.08	-1,420.15	72.59	15.55	57.04	1.273	Level 3
10,850.00	10,642.22	10,871.24	10,605.95	42.61	19.04	-56.862	7.96	-1,418.20	69.76	13.05	56.71	1.230	Level 3
10,900.00	10,670.52	10,917.24	10,634.08	42.65	19.12	-59.929	44.31	-1,416.53	66.25	9.88	56.37	1.175	Level 3
10,950.00	10,695.13	10,962.41	10,658.98	42.68	19.22	-65.016	81.97	-1,415.96	63.17	7.05	56.12	1.126	Level 3
11,000.00	10,715.85	11,008.10	10,681.13	42.70	19.34	-70.907	121.92	-1,416.58	60.84	4.63	56.21	1.082	Level 3
11,050.00	10,732.53	11,054.52	10,700.20	42.71	19.48	-76.510	164.21	-1,417.73	58.98	2.36	56.62	1.042	Level 3
11,100.00	10,745.04	11,101.58	10,715.91	42.72	19.65	-81.366	208.54	-1,419.21	57.53	0.26	57.28	1.004	Level 3
11,150.00	10,753.28	11,149.41	10,728.55	42.73	19.84	-85.171	254.63	-1,420.73	56.09	-2.01	58.10	0.965	Level 3
11,200.00	10,757.20	11,197.85	10,738.19	42.74	20.06	-87.938	302.06	-1,422.21	54.68	-4.28	58.96	0.927	Level 3
11,224.92	10,757.52	11,222.17	10,742.18	42.75	20.17	-88.978	326.05	-1,422.91	53.96	-5.38	59.35	0.909	Level 3
11,300.00	10,756.87	11,296.63	10,751.35	42.80	20.57	-90.328	399.90	-1,424.70	53.19	-6.74	59.93	0.888	Level 3
11,394.04	10,756.04	11,390.89	10,759.20	42.90	21.14	-90.440	493.83	-1,425.21	52.74	-7.30	60.04	0.878	Level 3
11,400.00	10,755.99	11,396.79	10,759.63	42.90	21.18	-90.519	499.72	-1,425.23	52.74	-7.30	60.04	0.878	Level 3
11,500.00	10,755.12	11,496.72	10,766.28	43.06	21.87	-90.839	599.42	-1,425.95	53.69	-6.16	59.86	0.897	Level 3
11,600.00	10,754.25	11,597.55	10,768.26	43.28	22.64	-89.954	700.23	-1,426.05	53.66	-6.61	60.27	0.890	Level 3
11,660.97	10,753.71	11,658.19	10,768.31	43.44	23.13	-90.328	760.86	-1,425.95	53.24	-7.62	60.85	0.875	Level 3
11,700.00	10,753.37	11,696.38	10,768.78	43.55	23.46	-91.261	799.05	-1,426.34	53.54	-7.67	61.21	0.875	Level 3
11,800.00	10,752.50	11,795.06	10,771.65	43.90	24.35	-92.720	897.65	-1,429.08	56.58	-5.29	61.86	0.915	Level 3
11,900.00	10,751.63	11,894.29	10,774.94	44.31	25.30	-93.472	996.74	-1,433.22	61.22	-1.34	62.56	0.979	Level 3
12,000.00	10,750.76	11,996.26	10,778.47	44.77	26.32	-91.525	1,098.59	-1,436.44	65.12	2.19	62.92	1.035	Level 3
12,100.00	10,749.88	12,096.16	10,782.11	45.29	27.35	-91.684	1,198.42	-1,437.28	67.19	4.00	63.19	1.063	Level 3
12,200.00	10,749.01	12,198.41	10,784.96	45.87	28.44	-89.525	1,300.62	-1,436.46	67.63	4.48	63.15	1.071	Level 3
12,300.00	10,748.14	12,298.02	10,786.96	46.48	29.52	-89.939	1,400.19	-1,434.65	67.04	3.71	63.33	1.059	Level 3
12,334.67	10,747.84	12,332.55	10,787.59	46.71	29.91	-90.101	1,434.71	-1,434.21	66.99	3.56	63.44	1.056	Level 3
12,400.00	10,747.27	12,397.62	10,788.64	47.14	30.64	-90.390	1,499.77	-1,433.69	67.14	3.43	63.71	1.054	Level 3
12,500.00	10,746.39	12,497.31	10,789.93	47.84	31.79	-90.733	1,599.46	-1,433.67	67.84	3.45	64.39	1.054	Level 3
12,600.00	10,745.52	12,597.10	10,790.87	48.58	32.97	-90.973	1,699.23	-1,434.29	68.88	3.53	65.34	1.054	Level 3
12,700.00	10,744.65	12,697.49	10,791.41	49.35	34.17	-90.537	1,799.62	-1,435.65	70.21	3.64	66.58	1.055	Level 3
12,800.00	10,743.78	12,800.38	10,790.59	50.15	35.42	-87.305	1,902.50	-1,435.00	69.20	1.79	67.41	1.026	Level 3
12,888.61	10,743.00	12,891.17	10,785.58	50.89	36.53	-84.733	1,993.10	-1,432.50	64.07	-4.91	68.99	0.929	Level 3
12,900.00	10,742.88	12,902.57	10,784.79	50.98	36.67	-84.705	2,004.47	-1,432.15	63.30	-5.96	69.26	0.914	Level 3
12,939.06	10,742.12	12,941.69	10,781.98	51.32	37.15	-84.598	2,043.47	-1,430.97	60.82	-9.33	70.15	0.867	Level 3
13,000.00	10,740.51	13,001.51	10,777.90	51.85	37.89	-85.989	2,103.13	-1,429.46	57.61	-14.03	71.64	0.804	Level 3
13,100.00	10,737.88	13,100.55	10,773.07	52.74	39.13	-87.220	2,202.05	-1,428.27	54.61	-19.12	73.73	0.741	Level 3

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 125Y - Wellbore #2 - Surveys													Offset Site Error:	0.00 usft
Survey Program: 80-GYD_GC+DROP+OH, 5931-MWD+HRGM, 10152-MWD+HRGM													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,136.88	10,736.91	13,136.00	10,771.45	53.07	39.58	-89.204	2,237.46	-1,427.91	53.65	-21.03	74.68	0.718	Level 3	
13,147.49	10,736.63	13,136.00	10,771.45	53.17	39.58	-103.776	2,237.46	-1,427.91	54.70	-21.44	76.14	0.718	Level 3, ES, SF	
13,200.00	10,735.25	13,136.00	10,771.45	53.65	39.58	-147.356	2,237.46	-1,427.91	82.61	9.09	73.52	1.124	Level 3	
13,300.00	10,732.61	13,136.00	10,771.45	54.61	39.58	-167.616	2,237.46	-1,427.91	170.73	103.75	66.98	2.549		
13,347.43	10,731.36	13,136.00	10,771.45	55.08	39.58	-171.229	2,237.46	-1,427.91	215.91	150.27	65.64	3.289		
13,400.00	10,729.98	13,136.00	10,771.45	55.60	39.58	-173.846	2,237.46	-1,427.91	266.84	202.13	64.71	4.124		
13,500.00	10,727.34	13,136.00	10,771.45	56.62	39.58	-176.762	2,237.46	-1,427.91	364.99	301.23	63.76	5.724		
13,600.00	10,724.71	13,136.00	10,771.45	57.66	39.58	-178.426	2,237.46	-1,427.91	463.93	400.66	63.27	7.332		
13,700.00	10,722.08	13,136.00	10,771.45	58.72	39.58	-179.501	2,237.46	-1,427.91	563.25	500.26	62.99	8.941		
13,800.00	10,719.44	13,136.00	10,771.45	59.79	39.58	-179.748	2,237.46	-1,427.91	662.77	599.95	62.82	10.551		
13,900.00	10,716.81	13,136.00	10,771.45	60.88	39.58	-179.194	2,237.46	-1,427.91	762.42	699.72	62.70	12.160		
14,000.00	10,714.18	13,136.00	10,771.45	61.99	39.58	-178.768	2,237.46	-1,427.91	862.15	799.53	62.62	13.768		
14,055.43	10,712.72	13,136.00	10,771.45	62.60	39.58	-178.573	2,237.46	-1,427.91	917.45	854.86	62.59	14.659		
14,100.00	10,711.54	13,136.00	10,771.45	63.10	39.58	-178.452	2,237.46	-1,427.91	961.95	899.38	62.57	15.374		
14,200.00	10,708.91	13,136.00	10,771.45	64.22	39.58	-178.355	2,237.46	-1,427.91	1,061.87	999.28	62.59	16.967		
14,255.44	10,707.45	13,136.00	10,771.45	64.84	39.58	-178.386	2,237.46	-1,427.91	1,117.28	1,054.66	62.62	17.843		
14,300.00	10,706.27	13,136.00	10,771.45	65.33	39.58	-178.430	2,237.46	-1,427.91	1,161.81	1,099.16	62.65	18.544		
14,400.00	10,703.64	13,136.00	10,771.45	66.46	39.58	-178.517	2,237.46	-1,427.91	1,261.75	1,199.03	62.72	20.118		
14,500.00	10,701.01	13,136.00	10,771.45	67.59	39.58	-178.592	2,237.46	-1,427.91	1,361.70	1,298.92	62.78	21.690		
14,600.00	10,698.37	13,136.00	10,771.45	68.74	39.58	-178.656	2,237.46	-1,427.91	1,461.66	1,398.82	62.84	23.260		
14,700.00	10,695.74	13,136.00	10,771.45	69.90	39.58	-178.712	2,237.46	-1,427.91	1,561.62	1,498.73	62.90	24.829		
14,800.00	10,693.11	13,136.00	10,771.45	71.07	39.58	-178.762	2,237.46	-1,427.91	1,661.59	1,598.64	62.95	26.396		
14,900.00	10,690.47	13,136.00	10,771.45	72.25	39.58	-178.805	2,237.46	-1,427.91	1,761.56	1,698.56	63.00	27.960		
15,000.00	10,687.84	13,136.00	10,771.45	73.43	39.58	-178.844	2,237.46	-1,427.91	1,861.53	1,798.48	63.05	29.523		
15,100.00	10,685.21	13,136.00	10,771.45	74.63	39.58	-178.879	2,237.46	-1,427.91	1,961.51	1,898.41	63.10	31.084		
15,200.00	10,682.57	13,136.00	10,771.45	75.84	39.58	-178.911	2,237.46	-1,427.91	2,061.49	1,998.34	63.15	32.642		
15,300.00	10,679.94	13,136.00	10,771.45	77.05	39.58	-178.940	2,237.46	-1,427.91	2,161.47	2,098.27	63.20	34.199		
15,400.00	10,677.31	13,136.00	10,771.45	78.27	39.58	-178.966	2,237.46	-1,427.91	2,261.45	2,198.20	63.25	35.753		
15,500.00	10,674.67	13,136.00	10,771.45	79.50	39.58	-178.990	2,237.46	-1,427.91	2,361.44	2,298.14	63.30	37.305		
15,600.00	10,672.04	13,136.00	10,771.45	80.74	39.58	-179.012	2,237.46	-1,427.91	2,461.42	2,398.07	63.35	38.855		
15,700.00	10,669.41	13,136.00	10,771.45	81.98	39.58	-179.032	2,237.46	-1,427.91	2,561.41	2,498.01	63.40	40.402		
15,800.00	10,666.77	13,136.00	10,771.45	83.23	39.58	-179.051	2,237.46	-1,427.91	2,661.40	2,597.95	63.45	41.946		
15,900.00	10,664.14	13,136.00	10,771.45	84.49	39.58	-179.069	2,237.46	-1,427.91	2,761.38	2,697.89	63.50	43.489		
16,000.00	10,661.51	13,136.00	10,771.45	85.75	39.58	-179.085	2,237.46	-1,427.91	2,861.37	2,797.83	63.55	45.028		
16,100.00	10,658.87	13,136.00	10,771.45	87.02	39.58	-179.100	2,237.46	-1,427.91	2,961.36	2,897.77	63.60	46.566		
16,200.00	10,656.24	13,136.00	10,771.45	88.29	39.58	-179.114	2,237.46	-1,427.91	3,061.35	2,997.71	63.65	48.100		
16,300.00	10,653.61	13,136.00	10,771.45	89.57	39.58	-179.127	2,237.46	-1,427.91	3,161.35	3,097.65	63.70	49.632		
16,400.00	10,650.97	13,136.00	10,771.45	90.86	39.58	-179.140	2,237.46	-1,427.91	3,261.34	3,197.59	63.75	51.161		
16,500.00	10,648.34	13,136.00	10,771.45	92.15	39.58	-179.151	2,237.46	-1,427.91	3,361.33	3,297.53	63.80	52.687		
16,600.00	10,645.71	13,136.00	10,771.45	93.44	39.58	-179.162	2,237.46	-1,427.91	3,461.32	3,397.47	63.85	54.210		
16,700.00	10,643.07	13,136.00	10,771.45	94.74	39.58	-179.173	2,237.46	-1,427.91	3,561.32	3,497.41	63.90	55.731		
16,800.00	10,640.44	13,136.00	10,771.45	96.04	39.58	-179.182	2,237.46	-1,427.91	3,661.31	3,597.35	63.95	57.249		
16,892.04	10,638.02	13,136.00	10,771.45	97.24	39.58	-179.191	2,237.46	-1,427.91	3,753.35	3,689.34	64.00	58.843		
16,900.00	10,637.82	13,136.00	10,771.45	97.34	39.58	-179.192	2,237.46	-1,427.91	3,761.30	3,697.29	64.01	58.763		
16,987.49	10,637.09	13,136.00	10,771.45	98.49	39.58	-179.199	2,237.46	-1,427.91	3,848.76	3,784.70	64.06	60.081		
17,000.00	10,637.18	13,136.00	10,771.45	98.65	39.58	-179.200	2,237.46	-1,427.91	3,861.25	3,797.19	64.07	60.269		
17,100.00	10,637.88	13,136.00	10,771.45	99.96	39.58	-179.209	2,237.46	-1,427.91	3,961.17	3,897.04	64.13	61.768		
17,200.00	10,638.58	13,136.00	10,771.45	101.27	39.58	-179.217	2,237.46	-1,427.91	4,061.09	3,996.89	64.19	63.263		
17,300.00	10,639.27	13,136.00	10,771.45	102.59	39.58	-179.224	2,237.46	-1,427.91	4,161.01	4,096.75	64.26	64.756		
17,400.00	10,639.97	13,136.00	10,771.45	103.91	39.58	-179.232	2,237.46	-1,427.91	4,260.93	4,196.61	64.32	66.244		
17,500.00	10,640.67	13,136.00	10,771.45	105.23	39.58	-179.238	2,237.46	-1,427.91	4,360.86	4,296.47	64.39	67.729		
17,600.00	10,641.37	13,136.00	10,771.45	106.56	39.58	-179.245	2,237.46	-1,427.91	4,460.79	4,396.34	64.45	69.211		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com (122H, 125H) - Uncle Ches 2116 Fed Com 125Y - Wellbore #2 - Surveys													Offset Site Error: 0.00 usft
Survey Program: 80-GYD_GC+DROP+OH, 5931-MWD+HRGM, 10152-MWD+HRGM													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
17,700.00	10,642.07	13,136.00	10,771.45	107.89	39.58	179.251	2,237.46	-1,427.91	4,560.73	4,496.21	64.52	70.689	
17,800.00	10,642.76	13,136.00	10,771.45	109.22	39.58	179.257	2,237.46	-1,427.91	4,660.67	4,596.08	64.58	72.164	
17,900.00	10,643.46	13,136.00	10,771.45	110.56	39.58	179.263	2,237.46	-1,427.91	4,760.61	4,695.95	64.65	73.635	
18,000.00	10,644.16	13,136.00	10,771.45	111.90	39.58	179.269	2,237.46	-1,427.91	4,860.55	4,795.83	64.72	75.102	
18,100.00	10,644.86	13,136.00	10,771.45	113.24	39.58	179.274	2,237.46	-1,427.91	4,960.49	4,895.71	64.79	76.565	
18,200.00	10,645.56	13,136.00	10,771.45	114.58	39.58	179.279	2,237.46	-1,427.91	5,060.44	4,995.58	64.86	78.025	
18,300.00	10,646.25	13,136.00	10,771.45	115.93	39.58	179.284	2,237.46	-1,427.91	5,160.39	5,095.46	64.93	79.481	
18,400.00	10,646.95	13,136.00	10,771.45	117.28	39.58	179.289	2,237.46	-1,427.91	5,260.34	5,195.35	65.00	80.933	
18,500.00	10,647.65	13,136.00	10,771.45	118.63	39.58	179.293	2,237.46	-1,427.91	5,360.29	5,295.23	65.07	82.381	
18,600.00	10,648.35	13,136.00	10,771.45	119.98	39.58	179.298	2,237.46	-1,427.91	5,460.25	5,395.11	65.14	83.825	
18,700.00	10,649.05	13,136.00	10,771.45	121.33	39.58	179.302	2,237.46	-1,427.91	5,560.21	5,495.00	65.21	85.265	
18,800.00	10,649.75	13,136.00	10,771.45	122.69	39.58	179.306	2,237.46	-1,427.91	5,660.16	5,594.88	65.28	86.701	
18,900.00	10,650.44	13,136.00	10,771.45	124.05	39.58	179.310	2,237.46	-1,427.91	5,760.12	5,694.77	65.36	88.134	
19,000.00	10,651.14	13,136.00	10,771.45	125.41	39.58	179.314	2,237.46	-1,427.91	5,860.08	5,794.65	65.43	89.562	
19,100.00	10,651.84	13,136.00	10,771.45	126.77	39.58	179.317	2,237.46	-1,427.91	5,960.05	5,894.54	65.51	90.986	
19,200.00	10,652.54	13,136.00	10,771.45	128.14	39.58	179.321	2,237.46	-1,427.91	6,060.01	5,994.43	65.58	92.406	
19,300.00	10,653.24	13,136.00	10,771.45	129.50	39.58	179.324	2,237.46	-1,427.91	6,159.97	6,094.32	65.66	93.821	
19,392.11	10,653.88	13,136.00	10,771.45	130.76	39.58	179.327	2,237.46	-1,427.91	6,252.05	6,186.32	65.73	95.121	
19,400.00	10,653.92	13,136.00	10,771.45	130.87	39.58	179.327	2,237.46	-1,427.91	6,259.94	6,194.21	65.73	95.233	
19,408.64	10,653.95	13,136.00	10,771.45	130.99	39.58	179.328	2,237.46	-1,427.91	6,268.58	6,202.84	65.74	95.355	
19,500.00	10,654.06	13,136.00	10,771.45	132.24	39.58	179.331	2,237.46	-1,427.91	6,359.92	6,294.11	65.81	96.642	
19,600.00	10,654.18	13,136.00	10,771.45	133.61	39.58	179.334	2,237.46	-1,427.91	6,459.90	6,394.01	65.89	98.048	
19,700.00	10,654.30	13,136.00	10,771.45	134.98	39.58	179.337	2,237.46	-1,427.91	6,559.88	6,493.92	65.96	99.449	
19,800.00	10,654.42	13,136.00	10,771.45	136.36	39.58	179.340	2,237.46	-1,427.91	6,659.86	6,593.82	66.04	100.846	
19,900.00	10,654.54	13,136.00	10,771.45	137.73	39.58	179.343	2,237.46	-1,427.91	6,759.84	6,693.73	66.12	102.239	
20,000.00	10,654.66	13,136.00	10,771.45	139.11	39.58	179.345	2,237.46	-1,427.91	6,859.83	6,793.63	66.20	103.627	
20,100.00	10,654.78	13,136.00	10,771.45	140.49	39.58	179.348	2,237.46	-1,427.91	6,959.81	6,893.53	66.28	105.011	
20,200.00	10,654.91	13,136.00	10,771.45	141.87	39.58	179.351	2,237.46	-1,427.91	7,059.79	6,993.44	66.36	106.391	
20,300.00	10,655.03	13,136.00	10,771.45	143.25	39.58	179.353	2,237.46	-1,427.91	7,159.78	7,093.34	66.44	107.766	
20,400.00	10,655.15	13,136.00	10,771.45	144.63	39.58	179.356	2,237.46	-1,427.91	7,259.76	7,193.24	66.52	109.137	
20,500.00	10,655.27	13,136.00	10,771.45	146.01	39.58	179.358	2,237.46	-1,427.91	7,359.75	7,293.14	66.60	110.503	
20,600.00	10,655.39	13,136.00	10,771.45	147.40	39.58	179.360	2,237.46	-1,427.91	7,459.73	7,393.05	66.69	111.865	
20,700.00	10,655.51	13,136.00	10,771.45	148.78	39.58	179.363	2,237.46	-1,427.91	7,559.72	7,492.95	66.77	113.223	
20,800.00	10,655.63	13,136.00	10,771.45	150.17	39.58	179.365	2,237.46	-1,427.91	7,659.70	7,592.85	66.85	114.576	
20,900.00	10,655.75	13,136.00	10,771.45	151.56	39.58	179.367	2,237.46	-1,427.91	7,759.69	7,692.75	66.94	115.924	
21,000.00	10,655.87	13,136.00	10,771.45	152.95	39.58	179.369	2,237.46	-1,427.91	7,859.68	7,792.65	67.02	117.268	
21,100.00	10,656.00	13,136.00	10,771.45	154.34	39.58	179.371	2,237.46	-1,427.91	7,959.66	7,892.56	67.11	118.608	
21,103.87	10,656.00	13,136.00	10,771.45	154.39	39.58	179.371	2,237.46	-1,427.91	7,963.54	7,896.42	67.11	118.659	

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

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COMPASS 5000.15 Build 91E



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - Featherstone Federal No. 1 - Wellbore #1 - Surveys													Offset Site Error:	0.00 usft
Survey Program: 350-INC-ONLY		Reference Offset		Semi Major Axis		Offset Wellbore Centre			Rule Assigned:				Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Distance Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	0.00	29.50	0.00	0.00	26.735	3,027.69	1,525.11	3,390.24					
100.00	100.00	70.50	100.00	0.13	0.75	26.735	3,027.69	1,525.11	3,390.11	3,389.23	0.88	3,858.722		
200.00	200.00	170.50	200.00	0.49	1.81	26.735	3,027.69	1,525.11	3,390.11	3,387.81	2.30	1,473.226		
300.00	300.00	270.50	300.00	0.85	2.88	26.735	3,027.69	1,525.11	3,390.11	3,386.39	3.72	910.405		
400.00	400.00	370.52	400.00	1.20	4.16	26.735	3,027.69	1,525.11	3,390.11	3,384.75	5.36	631.909		
500.00	500.00	470.52	500.00	1.56	6.29	26.735	3,027.69	1,525.11	3,390.11	3,382.26	7.85	431.769		
600.00	599.99	580.46	609.93	1.92	8.63	26.745	3,028.32	1,525.11	3,390.64	3,380.09	10.55	321.508		
700.00	699.98	699.20	728.66	2.27	11.16	26.781	3,027.56	1,525.11	3,389.97	3,376.54	13.43	252.504		
740.33	740.31	710.88	740.31	2.41	11.41	26.791	3,027.69	1,525.11	3,389.92	3,376.11	13.82	245.343		
800.00	799.96	770.53	799.96	2.62	12.68	26.809	3,027.69	1,525.11	3,389.87	3,374.57	15.30	221.587		
900.00	899.95	870.52	899.95	2.98	14.80	26.838	3,027.69	1,525.11	3,389.77	3,371.99	17.78	190.635		
952.11	952.05	922.62	952.05	3.16	15.91	26.854	3,027.69	1,525.11	3,389.72	3,370.64	19.08	177.695		
1,000.00	999.93	974.03	1,003.45	3.34	17.01	26.860	3,028.78	1,525.11	3,390.65	3,370.31	20.34	166.692		
1,100.00	1,099.92	1,085.58	1,115.00	3.69	19.38	26.892	3,028.44	1,525.11	3,390.28	3,367.21	23.07	146.946		
1,200.00	1,199.90	1,197.13	1,226.54	4.05	21.75	26.927	3,027.67	1,525.11	3,389.57	3,363.77	25.80	131.367		
1,224.39	1,224.29	1,224.34	1,253.75	4.14	22.33	26.936	3,027.42	1,525.11	3,389.35	3,362.88	26.47	128.052		
1,300.00	1,299.89	1,271.68	1,301.03	4.41	23.34	26.954	3,028.01	1,525.11	3,389.68	3,361.93	27.75	122.164		
1,400.00	1,399.87	1,370.54	1,399.87	4.76	25.40	26.986	3,027.69	1,525.11	3,389.30	3,359.14	30.16	112.376		
1,500.00	1,499.86	1,470.53	1,499.86	5.12	27.36	27.015	3,027.69	1,525.11	3,389.21	3,356.73	32.48	104.358		
1,600.00	1,599.84	1,570.51	1,599.84	5.48	29.31	27.045	3,027.69	1,525.11	3,389.12	3,354.33	34.79	97.408		
1,626.52	1,626.36	1,597.03	1,626.36	5.58	29.83	27.052	3,027.69	1,525.11	3,389.09	3,353.69	35.41	95.717		
1,700.00	1,699.83	1,678.45	1,707.77	5.84	31.43	27.066	3,028.71	1,525.11	3,389.95	3,352.69	37.27	90.968		
1,800.00	1,799.81	1,789.81	1,819.12	6.20	33.61	27.100	3,028.21	1,525.11	3,389.46	3,349.66	39.80	85.154		
1,900.00	1,899.80	1,870.51	1,899.80	6.56	35.16	27.133	3,027.69	1,525.11	3,388.85	3,347.13	41.72	81.233		
2,000.00	1,999.78	1,970.50	1,999.78	6.91	36.90	27.163	3,027.69	1,525.11	3,388.77	3,344.96	43.81	77.355		
2,050.23	2,050.00	2,020.71	2,050.00	7.09	37.77	27.177	3,027.69	1,525.11	3,388.72	3,343.86	44.86	75.543		
2,057.58	2,057.35	2,028.07	2,057.35	7.12	37.89	27.180	3,027.69	1,525.11	3,388.72	3,343.71	45.01	75.285		
2,100.00	2,099.76	2,070.48	2,099.76	7.27	38.63	27.195	3,027.69	1,525.11	3,388.82	3,342.93	45.90	73.833		
2,200.00	2,199.71	2,174.05	2,203.33	7.63	40.42	27.242	3,028.19	1,525.11	3,390.35	3,342.30	48.05	70.559		
2,300.00	2,299.59	2,279.55	2,308.84	7.99	42.25	27.317	3,027.96	1,525.11	3,392.42	3,342.18	50.23	67.531		
2,400.00	2,399.37	2,370.10	2,399.37	8.35	43.82	27.414	3,027.69	1,525.11	3,395.59	3,343.43	52.17	65.093		
2,500.00	2,499.03	2,469.75	2,499.03	8.71	45.57	27.530	3,027.69	1,525.11	3,400.21	3,345.93	54.28	62.648		
2,600.00	2,598.52	2,569.25	2,598.52	9.07	47.32	27.668	3,027.69	1,525.11	3,406.01	3,349.63	56.38	60.408		
2,700.00	2,697.83	2,670.33	2,699.60	9.44	49.10	27.824	3,027.94	1,525.11	3,413.24	3,354.72	58.52	58.324		
2,800.00	2,796.92	2,772.10	2,801.37	9.81	50.88	28.004	3,027.84	1,525.11	3,421.35	3,360.68	60.68	56.387		
2,900.00	2,895.75	2,866.49	2,895.75	10.19	52.56	28.204	3,027.69	1,525.11	3,430.64	3,367.92	62.72	54.696		
3,000.00	2,994.31	2,965.05	2,994.31	10.57	54.44	28.423	3,027.69	1,525.11	3,441.29	3,376.32	64.97	52.968		
3,100.00	3,092.56	3,063.30	3,092.56	10.96	56.30	28.662	3,027.69	1,525.11	3,453.16	3,385.95	67.21	51.376		
3,161.76	3,153.08	3,124.29	3,153.55	11.21	57.46	28.814	3,028.26	1,525.11	3,461.62	3,393.01	68.61	50.455		
3,200.00	3,190.50	3,163.70	3,192.96	11.36	58.21	28.913	3,028.24	1,525.11	3,466.69	3,397.18	69.50	49.878		
3,300.00	3,288.37	3,266.80	3,296.06	11.77	60.17	29.172	3,028.07	1,525.11	3,479.88	3,408.03	71.85	48.434		
3,400.00	3,386.24	3,369.91	3,399.17	12.17	62.14	29.430	3,027.72	1,525.11	3,492.99	3,418.80	74.19	47.079		
3,500.00	3,484.11	3,454.88	3,484.11	12.59	63.86	29.684	3,027.69	1,525.11	3,506.41	3,430.11	76.30	45.954		
3,600.00	3,581.98	3,552.75	3,581.98	13.00	65.85	29.935	3,027.69	1,525.11	3,519.95	3,441.27	78.69	44.734		
3,700.00	3,679.85	3,654.61	3,683.84	13.42	67.93	30.179	3,028.42	1,525.11	3,534.19	3,453.04	81.15	43.550		
3,800.00	3,777.73	3,761.77	3,790.99	13.84	70.11	30.429	3,028.11	1,525.11	3,547.62	3,463.90	83.73	42.370		
3,900.00	3,875.60	3,846.42	3,875.60	14.26	71.84	30.679	3,027.69	1,525.11	3,560.97	3,475.12	85.85	41.478		
4,000.00	3,973.47	3,944.29	3,973.47	14.69	73.90	30.923	3,027.69	1,525.11	3,574.78	3,486.47	88.31	40.479		
4,100.00	4,071.34	4,044.70	4,073.87	15.12	76.02	31.158	3,028.50	1,525.11	3,589.34	3,498.51	90.83	39.519		
4,200.00	4,169.21	4,159.01	4,188.17	15.55	78.43	31.401	3,028.10	1,525.11	3,602.98	3,509.34	93.64	38.479		
4,300.00	4,267.08	4,237.96	4,267.08	15.98	80.10	31.643	3,027.69	1,525.11	3,616.58	3,520.88	95.70	37.792		
4,400.00	4,364.95	4,341.43	4,370.54	16.42	82.28	31.876	3,028.13	1,525.11	3,631.01	3,532.73	98.28	36.945		

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - Featherstone Federal No. 1 - Wellbore #1 - Surveys													Offset Site Error:
Survey Program: 350-INC-ONLY													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,500.00	4,462.82	4,433.73	4,462.82	16.85	84.24	32.114	3,027.69	1,525.11	3,644.75	3,544.12	100.64	36.217	
4,600.00	4,560.69	4,531.60	4,560.69	17.29	86.38	32.347	3,027.69	1,525.11	3,658.93	3,555.76	103.18	35.462	
4,700.00	4,658.56	4,629.47	4,658.56	17.73	88.52	32.578	3,027.69	1,525.11	3,673.17	3,567.45	105.72	34.744	
4,800.00	4,756.43	4,737.94	4,767.01	18.17	90.90	32.801	3,028.52	1,525.11	3,688.19	3,579.69	108.50	33.994	
4,900.00	4,854.30	4,849.25	4,878.32	18.61	93.33	33.033	3,027.90	1,525.11	3,702.09	3,590.75	111.33	33.252	
5,000.00	4,952.17	4,923.17	4,952.17	19.05	94.92	33.261	3,027.69	1,525.11	3,716.25	3,602.93	113.31	32.796	
5,100.00	5,050.04	5,021.04	5,050.04	19.49	96.99	33.485	3,027.69	1,525.11	3,730.72	3,614.93	115.79	32.220	
5,200.00	5,147.91	5,118.91	5,147.91	19.94	99.07	33.707	3,027.69	1,525.11	3,745.25	3,626.99	118.26	31.669	
5,300.00	5,245.78	5,223.53	5,252.51	20.38	101.28	33.915	3,029.21	1,525.11	3,761.11	3,640.22	120.88	31.113	
5,400.00	5,343.65	5,334.44	5,363.41	20.83	103.63	34.137	3,028.74	1,525.11	3,775.40	3,651.76	123.64	30.536	
5,500.00	5,441.52	5,445.39	5,474.35	21.27	105.98	34.363	3,027.81	1,525.11	3,789.42	3,663.02	126.39	29.982	
5,600.00	5,539.40	5,510.48	5,539.40	21.72	107.32	34.579	3,027.69	1,525.11	3,803.92	3,675.80	128.13	29.689	
5,700.00	5,637.27	5,608.36	5,637.27	22.17	109.32	34.793	3,027.69	1,525.11	3,818.72	3,688.20	130.53	29.256	
5,800.00	5,735.14	5,706.23	5,735.14	22.62	111.32	35.005	3,027.69	1,525.11	3,833.58	3,700.65	132.93	28.839	
5,900.00	5,833.01	5,810.85	5,839.76	23.07	113.46	35.209	3,028.47	1,525.11	3,849.13	3,713.66	135.47	28.413	
6,000.00	5,930.88	5,916.95	5,945.85	23.52	115.63	35.421	3,028.10	1,525.11	3,863.81	3,725.77	138.04	27.990	
6,100.00	6,028.75	5,999.90	6,028.75	23.97	117.33	35.632	3,027.69	1,525.11	3,878.46	3,738.31	140.14	27.675	
6,200.00	6,126.62	6,124.89	6,153.73	24.42	119.98	35.837	3,027.70	1,525.11	3,893.62	3,750.42	143.20	27.190	
6,300.00	6,224.49	6,195.66	6,224.49	24.87	121.49	36.041	3,027.69	1,525.11	3,908.63	3,763.53	145.10	26.938	
6,400.00	6,322.36	6,293.53	6,322.36	25.32	123.56	36.244	3,027.69	1,525.11	3,923.79	3,776.21	147.57	26.589	
6,500.00	6,420.23	6,395.17	6,423.98	25.77	125.72	36.436	3,028.70	1,525.11	3,939.81	3,789.68	150.13	26.242	
6,600.00	6,518.10	6,506.02	6,534.83	26.23	128.07	36.638	3,028.35	1,525.11	3,954.81	3,801.92	152.89	25.867	
6,700.00	6,615.97	6,616.92	6,645.72	26.68	130.42	36.843	3,027.54	1,525.11	3,969.54	3,813.90	155.64	25.504	
6,800.00	6,713.84	6,685.09	6,713.84	27.13	131.61	37.038	3,027.69	1,525.11	3,984.90	3,827.68	157.22	25.346	
6,900.00	6,811.71	6,782.96	6,811.71	27.58	133.39	37.233	3,027.69	1,525.11	4,000.30	3,840.90	159.40	25.096	
7,000.00	6,909.58	6,880.83	6,909.58	28.04	135.16	37.426	3,027.69	1,525.11	4,015.74	3,854.17	161.57	24.854	
7,100.00	7,007.45	6,986.78	7,015.52	28.49	137.09	37.608	3,028.89	1,525.11	4,032.19	3,868.29	163.90	24.601	
7,200.00	7,105.32	7,094.72	7,123.46	28.95	139.05	37.802	3,028.45	1,525.11	4,047.41	3,881.14	166.27	24.343	
7,300.00	7,203.19	7,202.70	7,231.43	29.40	141.01	37.998	3,027.67	1,525.11	4,062.42	3,893.80	168.63	24.091	
7,400.00	7,301.06	7,272.34	7,301.06	29.86	142.17	38.185	3,027.69	1,525.11	4,077.97	3,907.78	170.18	23.962	
7,500.00	7,398.94	7,370.21	7,398.94	30.31	143.82	38.371	3,027.69	1,525.11	4,093.63	3,921.41	172.22	23.769	
7,600.00	7,496.81	7,468.08	7,496.81	30.77	145.46	38.556	3,027.69	1,525.11	4,109.34	3,935.07	174.26	23.581	
7,700.00	7,594.68	7,565.95	7,594.68	31.22	147.10	38.739	3,027.69	1,525.11	4,125.09	3,948.78	176.30	23.398	
7,800.00	7,692.55	7,663.82	7,692.55	31.68	148.74	38.921	3,027.69	1,525.11	4,140.88	3,962.53	178.34	23.219	
7,900.00	7,790.42	7,761.69	7,790.42	32.14	150.38	39.101	3,027.69	1,525.11	4,156.71	3,976.33	180.38	23.044	
8,000.00	7,888.29	7,859.56	7,888.29	32.59	152.03	39.280	3,027.69	1,525.11	4,172.59	3,990.16	182.42	22.873	
8,100.00	7,986.16	7,957.43	7,986.16	33.05	153.67	39.458	3,027.69	1,525.11	4,188.50	4,004.04	184.46	22.706	
8,200.00	8,084.03	8,055.30	8,084.03	33.51	155.31	39.634	3,027.69	1,525.11	4,204.45	4,017.95	186.50	22.544	
8,300.00	8,181.90	8,153.19	8,181.90	33.96	157.10	39.809	3,027.69	1,525.11	4,220.45	4,031.77	188.68	22.368	
8,400.00	8,279.77	8,260.35	8,289.06	34.42	159.06	39.981	3,027.84	1,525.11	4,236.61	4,045.56	191.05	22.176	
8,500.00	8,377.64	8,348.94	8,377.64	34.88	160.68	40.155	3,027.69	1,525.11	4,252.55	4,059.49	193.06	22.027	
8,600.00	8,475.51	8,446.81	8,475.51	35.34	162.47	40.326	3,027.69	1,525.11	4,268.66	4,073.42	195.25	21.863	
8,700.00	8,573.38	8,544.68	8,573.38	35.79	164.26	40.496	3,027.69	1,525.11	4,284.81	4,087.38	197.44	21.702	
8,800.00	8,671.25	8,642.55	8,671.25	36.25	166.05	40.664	3,027.69	1,525.11	4,301.00	4,101.37	199.62	21.546	
8,845.65	8,715.93	8,687.22	8,715.93	36.46	166.87	40.741	3,027.69	1,525.11	4,308.40	4,107.77	200.62	21.475	
8,900.00	8,769.20	8,740.50	8,769.20	36.71	167.85	40.829	3,027.69	1,525.11	4,316.92	4,115.11	201.81	21.391	
9,000.00	8,867.59	8,840.84	8,869.54	37.14	169.69	40.964	3,028.70	1,525.11	4,331.82	4,127.78	204.04	21.230	
9,100.00	8,966.42	8,942.75	8,971.44	37.56	171.55	41.088	3,028.59	1,525.11	4,343.84	4,137.56	206.28	21.058	
9,200.00	9,065.61	9,045.03	9,073.73	37.96	173.43	41.191	3,028.39	1,525.11	4,353.76	4,145.23	208.53	20.879	
9,300.00	9,165.10	9,147.63	9,176.32	38.34	175.30	41.274	3,028.09	1,525.11	4,361.55	4,150.78	210.77	20.694	
9,400.00	9,264.82	9,250.46	9,279.16	38.70	177.19	41.337	3,027.69	1,525.11	4,367.20	4,154.20	213.00	20.503	
9,500.00	9,364.70	9,336.03	9,364.70	39.04	178.99	41.375	3,027.69	1,525.11	4,371.04	4,155.90	215.14	20.317	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - Featherstone Federal No. 1 - Wellbore #1 - Surveys													Offset Site Error:
													0.00 usft
Survey Program: 350-INC-ONLY													Offset Well Error:
													0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)					
9,600.00	9,464.67	9,436.00	9,464.67	39.36	181.10	41.393	3,027.69	1,525.11	4,372.82	4,155.24	217.58	20.097	
9,635.33	9,500.00	9,471.33	9,500.00	39.47	181.85	41.394	3,027.69	1,525.11	4,372.95	4,154.51	218.44	20.019	
9,700.00	9,564.67	9,536.00	9,564.67	39.66	183.21	41.394	3,027.69	1,525.11	4,372.95	4,152.95	220.01	19.876	
9,800.00	9,664.67	9,636.00	9,664.67	39.95	185.32	41.394	3,027.69	1,525.11	4,372.95	4,150.52	222.43	19.660	
9,900.00	9,764.67	9,739.38	9,768.04	40.25	187.50	41.387	3,028.50	1,525.11	4,373.57	4,148.64	224.93	19.444	
10,000.00	9,864.67	9,843.14	9,871.80	40.55	189.68	41.388	3,028.34	1,525.11	4,373.45	4,146.01	227.43	19.230	
10,100.00	9,964.67	9,946.90	9,975.56	40.85	191.87	41.391	3,028.05	1,525.11	4,373.24	4,143.30	229.94	19.019	
10,200.00	10,064.67	10,050.66	10,079.31	41.15	194.06	41.394	3,027.65	1,525.11	4,372.95	4,140.50	232.45	18.813	
10,205.87	10,070.54	10,056.75	10,085.40	41.17	194.19	41.395	3,027.62	1,525.11	4,372.93	4,140.34	232.59	18.801	
10,300.00	10,164.67	10,136.13	10,164.67	41.45	196.00	41.394	3,027.69	1,525.11	4,372.95	4,138.26	234.70	18.632	
10,319.92	10,184.58	10,156.05	10,184.58	41.51	196.45	41.394	3,027.69	1,525.11	4,372.95	4,137.74	235.21	18.592	
10,350.00	10,214.65	10,186.12	10,214.65	41.60	197.13	41.401	3,027.69	1,525.11	4,372.37	4,136.38	235.99	18.528	
10,400.00	10,264.41	10,235.87	10,264.41	41.74	198.25	41.443	3,027.69	1,525.11	4,368.79	4,131.53	237.27	18.413	
10,450.00	10,313.55	10,285.01	10,313.55	41.88	199.36	41.523	3,027.69	1,525.11	4,362.01	4,123.48	238.53	18.287	
10,500.00	10,361.72	10,333.18	10,361.72	42.02	200.45	41.641	3,027.69	1,525.11	4,352.09	4,112.31	239.78	18.151	
10,550.00	10,408.53	10,380.00	10,408.53	42.14	201.50	41.796	3,027.69	1,525.11	4,339.12	4,098.13	240.99	18.006	
10,600.00	10,453.64	10,425.11	10,453.64	42.25	202.52	41.988	3,027.69	1,525.11	4,323.21	4,081.06	242.15	17.853	
10,650.00	10,496.71	10,468.17	10,496.71	42.35	203.49	42.216	3,027.69	1,525.11	4,304.52	4,061.26	243.27	17.695	
10,700.00	10,537.40	10,508.86	10,537.40	42.43	204.41	42.479	3,027.69	1,525.11	4,283.23	4,038.90	244.33	17.531	
10,750.00	10,575.40	10,546.86	10,575.40	42.51	205.27	42.777	3,027.69	1,525.11	4,259.52	4,014.20	245.32	17.363	
10,800.00	10,610.43	10,582.31	10,610.80	42.57	206.07	43.075	3,031.19	1,525.11	4,236.17	3,989.92	246.26	17.202	
10,850.00	10,642.22	10,616.67	10,645.16	42.61	206.85	43.437	3,031.17	1,525.11	4,208.29	3,961.12	247.16	17.026	
10,900.00	10,670.52	10,647.19	10,675.68	42.65	207.53	43.829	3,031.13	1,525.11	4,178.67	3,930.69	247.99	16.850	
10,950.00	10,695.13	10,673.66	10,702.14	42.68	208.13	44.249	3,031.07	1,525.11	4,147.61	3,898.90	248.72	16.676	
11,000.00	10,715.85	10,695.87	10,724.35	42.70	208.63	44.695	3,031.02	1,525.11	4,115.38	3,866.03	249.35	16.504	
11,050.00	10,732.53	10,713.67	10,742.15	42.71	209.03	45.165	3,030.96	1,525.11	4,082.25	3,832.37	249.88	16.337	
11,100.00	10,745.04	10,726.94	10,755.42	42.72	209.33	45.655	3,030.91	1,525.11	4,048.53	3,798.21	250.32	16.173	
11,150.00	10,753.28	10,735.60	10,764.07	42.73	209.53	46.163	3,030.88	1,525.11	4,014.50	3,763.84	250.65	16.016	
11,200.00	10,757.20	10,739.59	10,768.06	42.74	209.62	46.684	3,030.87	1,525.11	3,980.44	3,729.55	250.89	15.865	
11,224.92	10,757.52	10,739.83	10,768.30	42.75	209.63	46.948	3,030.86	1,525.11	3,963.54	3,712.57	250.97	15.793	
11,300.00	10,756.87	10,738.81	10,767.28	42.80	209.60	47.758	3,030.87	1,525.11	3,913.13	3,661.95	251.17	15.580	
11,400.00	10,755.99	10,737.45	10,765.93	42.90	209.57	48.868	3,030.87	1,525.11	3,847.24	3,595.76	251.47	15.299	
11,500.00	10,755.12	10,736.11	10,764.58	43.06	209.54	50.017	3,030.88	1,525.11	3,782.84	3,531.04	251.81	15.023	
11,600.00	10,754.25	10,734.77	10,763.25	43.28	209.51	51.205	3,030.88	1,525.11	3,720.02	3,467.85	252.17	14.752	
11,700.00	10,753.37	10,733.44	10,761.91	43.55	209.48	52.434	3,030.89	1,525.11	3,658.86	3,406.29	252.57	14.486	
11,800.00	10,752.50	10,732.11	10,760.59	43.90	209.45	53.704	3,030.89	1,525.11	3,599.43	3,346.42	253.01	14.227	
11,900.00	10,751.63	10,730.79	10,759.27	44.31	209.42	55.015	3,030.90	1,525.11	3,541.83	3,288.35	253.47	13.973	
12,000.00	10,750.76	10,729.48	10,757.96	44.77	209.39	56.369	3,030.90	1,525.11	3,486.14	3,232.17	253.98	13.726	
12,100.00	10,749.88	10,728.18	10,756.65	45.29	209.36	57.767	3,030.91	1,525.11	3,432.47	3,177.95	254.52	13.486	
12,200.00	10,749.01	10,726.88	10,755.35	45.87	209.33	59.208	3,030.91	1,525.11	3,380.90	3,125.81	255.09	13.254	
12,300.00	10,748.14	10,725.59	10,754.06	46.48	209.30	60.692	3,030.92	1,525.11	3,331.54	3,075.83	255.71	13.029	
12,400.00	10,747.27	10,724.30	10,752.78	47.14	209.27	62.220	3,030.92	1,525.11	3,284.48	3,028.13	256.35	12.813	
12,500.00	10,746.39	10,723.02	10,751.50	47.84	209.25	63.792	3,030.93	1,525.11	3,239.82	2,982.79	257.02	12.605	
12,600.00	10,745.52	10,721.75	10,750.23	48.58	209.22	65.406	3,030.93	1,525.11	3,197.67	2,939.93	257.73	12.407	
12,700.00	10,744.65	10,720.48	10,748.96	49.35	209.19	67.062	3,030.94	1,525.11	3,158.12	2,899.65	258.47	12.219	
12,800.00	10,743.78	10,719.22	10,747.70	50.15	209.16	68.758	3,030.94	1,525.11	3,121.27	2,862.05	259.22	12.041	
12,888.61	10,743.00	10,718.11	10,746.59	50.89	209.13	70.294	3,030.95	1,525.11	3,090.96	2,831.04	259.91	11.892	
12,900.00	10,742.88	10,717.95	10,746.43	50.98	209.13	70.494	3,030.95	1,525.11	3,087.22	2,827.22	260.00	11.874	
12,939.06	10,742.12	10,717.03	10,745.51	51.32	209.11	71.182	3,030.95	1,525.11	3,074.71	2,814.40	260.30	11.812	
13,000.00	10,740.51	10,715.17	10,743.65	51.85	209.07	72.266	3,030.96	1,525.11	3,056.08	2,795.31	260.77	11.719	
13,100.00	10,737.88	10,712.14	10,740.62	52.74	209.00	74.072	3,030.97	1,525.11	3,027.92	2,766.37	261.55	11.577	
13,147.49	10,736.63	10,710.70	10,739.18	53.17	208.97	74.942	3,030.97	1,525.11	3,015.61	2,753.70	261.92	11.514	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - Featherstone Federal No. 1 - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 350-INC-ONLY												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference Offset		Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
				(usft)	(usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Ellipses (usft)			
13,200.00	10,735.25	10,709.12	10,737.60	53.65	208.93	75.913	3,030.98	1,525.11	3,003.29	2,740.96	262.33	11.448	
13,300.00	10,732.61	10,706.11	10,734.59	54.61	208.86	77.793	3,030.98	1,525.11	2,984.86	2,721.73	263.13	11.344	
13,347.43	10,731.36	10,704.69	10,733.17	55.08	208.83	78.695	3,030.99	1,525.11	2,978.46	2,714.94	263.52	11.303	
13,400.00	10,729.98	10,703.12	10,731.60	55.60	208.80	79.701	3,030.99	1,525.11	2,972.66	2,708.72	263.94	11.263	
13,500.00	10,727.34	10,700.15	10,728.63	56.62	208.73	81.624	3,031.00	1,525.11	2,964.18	2,699.44	264.74	11.197	
13,600.00	10,724.71	10,697.19	10,725.67	57.66	208.66	83.555	3,031.01	1,525.11	2,959.05	2,693.53	265.52	11.144	
13,700.00	10,722.08	10,694.25	10,722.73	58.72	208.60	85.491	3,031.02	1,525.11	2,957.30	2,691.01	266.29	11.106	
13,702.01	10,722.02	10,694.19	10,722.67	58.74	208.59	85.530	3,031.02	1,525.11	2,957.29	2,690.99	266.30	11.105 CC, ES	
13,800.00	10,719.44	10,691.32	10,719.80	59.79	208.53	87.427	3,031.03	1,525.11	2,958.92	2,691.89	267.03	11.081	
13,900.00	10,716.81	10,688.40	10,716.88	60.88	208.46	89.358	3,031.04	1,525.11	2,963.91	2,696.17	267.74	11.070 SF	
14,000.00	10,714.18	10,685.50	10,713.98	61.99	208.40	91.281	3,031.04	1,525.11	2,972.26	2,703.84	268.42	11.073	
14,055.43	10,712.72	10,683.90	10,712.38	62.60	208.36	92.342	3,031.05	1,525.11	2,978.32	2,709.54	268.78	11.081	
14,100.00	10,711.54	10,682.61	10,711.09	63.10	208.33	93.192	3,031.05	1,525.11	2,983.59	2,714.53	269.06	11.089	
14,200.00	10,708.91	10,679.73	10,708.22	64.22	208.27	95.095	3,031.06	1,525.11	2,995.29	2,725.63	269.66	11.108	
14,255.44	10,707.45	10,678.15	10,706.63	64.84	208.23	96.146	3,031.06	1,525.11	3,001.70	2,731.73	269.97	11.119	
14,300.00	10,706.27	10,676.87	10,705.36	65.33	208.20	96.989	3,031.07	1,525.11	3,007.16	2,736.94	270.22	11.129	
14,400.00	10,703.64	10,674.03	10,702.51	66.46	208.14	98.869	3,031.07	1,525.11	3,021.76	2,751.02	270.73	11.161	
14,500.00	10,701.01	10,671.19	10,699.68	67.59	208.08	100.729	3,031.08	1,525.11	3,039.58	2,768.37	271.21	11.207	
14,600.00	10,698.37	10,668.37	10,696.86	68.74	208.01	102.565	3,031.09	1,525.11	3,060.56	2,788.91	271.64	11.267	
14,700.00	10,695.74	10,665.57	10,694.05	69.90	207.95	104.374	3,031.09	1,525.11	3,084.64	2,812.60	272.03	11.339	
14,800.00	10,693.11	10,662.78	10,691.26	71.07	207.89	106.153	3,031.10	1,525.11	3,111.74	2,839.36	272.38	11.424	
14,900.00	10,690.47	10,660.00	10,688.48	72.25	207.82	107.900	3,031.10	1,525.11	3,141.80	2,869.11	272.69	11.522	
15,000.00	10,687.84	10,657.23	10,685.72	73.43	207.76	109.613	3,031.11	1,525.11	3,174.71	2,901.76	272.95	11.631	
15,100.00	10,685.21	10,654.48	10,682.96	74.63	207.70	111.288	3,031.12	1,525.11	3,210.41	2,937.23	273.18	11.752	
15,200.00	10,682.57	10,651.74	10,680.23	75.84	207.64	112.926	3,031.12	1,525.11	3,248.79	2,975.42	273.36	11.885	
15,300.00	10,679.94	10,649.01	10,677.50	77.05	207.58	114.524	3,031.13	1,525.11	3,289.76	3,016.25	273.51	12.028	
15,400.00	10,677.31	10,646.30	10,674.79	78.27	207.51	116.082	3,031.13	1,525.11	3,333.22	3,059.60	273.63	12.182	
15,500.00	10,674.67	10,643.60	10,672.09	79.50	207.45	117.598	3,031.13	1,525.11	3,379.08	3,105.38	273.71	12.346	
15,600.00	10,672.04	10,640.91	10,669.40	80.74	207.39	119.073	3,031.14	1,525.11	3,427.25	3,153.49	273.76	12.519	
15,700.00	10,669.41	10,638.24	10,666.72	81.98	207.33	120.506	3,031.14	1,525.11	3,477.62	3,203.84	273.78	12.702	
15,800.00	10,666.77	10,635.57	10,664.06	83.23	207.27	121.897	3,031.15	1,525.11	3,530.11	3,256.33	273.78	12.894	
15,900.00	10,664.14	10,632.92	10,661.41	84.49	207.21	123.247	3,031.15	1,525.11	3,584.62	3,310.86	273.76	13.094	
16,000.00	10,661.51	10,630.29	10,658.77	85.75	207.15	124.555	3,031.15	1,525.11	3,641.05	3,367.34	273.71	13.303	
16,100.00	10,658.87	10,627.66	10,656.15	87.02	207.09	125.823	3,031.16	1,525.11	3,699.32	3,425.68	273.64	13.519	
16,200.00	10,656.24	10,625.05	10,653.53	88.29	207.03	127.051	3,031.16	1,525.11	3,759.35	3,485.80	273.56	13.742	
16,300.00	10,653.61	10,622.44	10,650.93	89.57	206.98	128.240	3,031.16	1,525.11	3,821.06	3,547.60	273.46	13.973	
16,400.00	10,650.97	10,619.86	10,648.34	90.86	206.92	129.391	3,031.17	1,525.11	3,884.35	3,611.01	273.35	14.210	
16,500.00	10,648.34	10,617.28	10,645.77	92.15	206.86	130.504	3,031.17	1,525.11	3,949.17	3,675.94	273.22	14.454	
16,600.00	10,645.71	10,614.71	10,643.20	93.44	206.80	131.581	3,031.17	1,525.11	4,015.42	3,742.34	273.08	14.704	
16,700.00	10,643.07	10,612.16	10,640.65	94.74	206.74	132.623	3,031.17	1,525.11	4,083.05	3,810.11	272.94	14.960	
16,800.00	10,640.44	10,609.62	10,638.10	96.04	206.69	133.630	3,031.18	1,525.11	4,151.98	3,879.19	272.79	15.221	
16,892.04	10,638.02	10,607.29	10,635.78	97.24	206.63	134.528	3,031.18	1,525.11	4,216.53	3,943.89	272.64	15.466	
16,900.00	10,637.82	10,607.10	10,635.58	97.34	206.63	134.604	3,031.18	1,525.11	4,222.15	3,949.53	272.63	15.487	
16,987.49	10,637.09	10,606.36	10,634.85	98.49	206.61	135.431	3,031.18	1,525.11	4,284.54	4,012.02	272.52	15.722	
17,000.00	10,637.18	10,606.43	10,634.92	98.65	206.61	135.547	3,031.18	1,525.11	4,293.53	4,021.03	272.50	15.756	
17,100.00	10,637.88	10,607.01	10,635.50	99.96	206.63	136.458	3,031.18	1,525.11	4,366.03	4,093.63	272.40	16.028	
17,200.00	10,638.58	10,607.59	10,636.08	101.27	206.64	137.340	3,031.18	1,525.11	4,439.60	4,167.30	272.30	16.304	
17,300.00	10,639.27	10,608.17	10,636.66	102.59	206.65	138.192	3,031.18	1,525.11	4,514.19	4,242.00	272.19	16.584	
17,400.00	10,639.97	10,608.74	10,637.23	103.91	206.67	139.017	3,031.18	1,525.11	4,589.75	4,317.66	272.09	16.869	
17,500.00	10,640.67	10,609.31	10,637.80	105.23	206.68	139.814	3,031.18	1,525.11	4,666.22	4,394.25	271.98	17.157	
17,600.00	10,641.37	10,609.88	10,638.37	106.56	206.69	140.586	3,031.18	1,525.11	4,743.57	4,471.71	271.86	17.448	
17,700.00	10,642.07	10,610.45	10,638.93	107.89	206.70	141.333	3,031.18	1,525.11	4,821.75	4,550.00	271.75	17.743	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - Featherstone Federal No. 1 - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 350-INC-ONLY												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
17,800.00	10,642.76	10,611.01	10,639.50	109.22	206.72	142.056	3,031.17	1,525.11	4,900.73	4,629.09	271.64	18.041	
17,900.00	10,643.46	10,611.57	10,640.06	110.56	206.73	142.756	3,031.17	1,525.11	4,980.46	4,708.93	271.53	18.342	
18,000.00	10,644.16	10,612.13	10,640.62	111.90	206.74	143.434	3,031.17	1,525.11	5,060.91	4,789.49	271.42	18.646	
18,100.00	10,644.86	10,612.68	10,641.17	113.24	206.76	144.090	3,031.17	1,525.11	5,142.05	4,870.73	271.31	18.952	
18,200.00	10,645.56	10,613.23	10,641.72	114.58	206.77	144.726	3,031.17	1,525.11	5,223.84	4,952.63	271.21	19.261	
18,300.00	10,646.25	10,613.79	10,642.27	115.93	206.78	145.343	3,031.17	1,525.11	5,306.26	5,035.15	271.10	19.573	
18,400.00	10,646.95	10,614.33	10,642.82	117.28	206.79	145.940	3,031.17	1,525.11	5,389.27	5,118.27	271.00	19.887	
18,500.00	10,647.65	10,614.88	10,643.37	118.63	206.80	146.519	3,031.17	1,525.11	5,472.84	5,201.94	270.90	20.202	
18,600.00	10,648.35	10,615.42	10,643.91	119.98	206.82	147.081	3,031.17	1,525.11	5,556.97	5,286.16	270.80	20.520	
18,700.00	10,649.05	10,615.96	10,644.45	121.33	206.83	147.626	3,031.17	1,525.11	5,641.60	5,370.90	270.71	20.840	
18,800.00	10,649.75	10,616.50	10,644.99	122.69	206.84	148.155	3,031.17	1,525.11	5,726.74	5,456.13	270.61	21.162	
18,900.00	10,650.44	10,617.04	10,645.53	124.05	206.85	148.668	3,031.17	1,525.11	5,812.35	5,541.82	270.52	21.486	
19,000.00	10,651.14	10,617.57	10,646.06	125.41	206.87	149.166	3,031.17	1,525.11	5,898.41	5,627.97	270.44	21.811	
19,100.00	10,651.84	10,618.10	10,646.59	126.77	206.88	149.650	3,031.17	1,525.11	5,984.90	5,714.55	270.35	22.138	
19,200.00	10,652.54	10,618.63	10,647.12	128.14	206.89	150.120	3,031.17	1,525.11	6,071.81	5,801.54	270.27	22.466	
19,300.00	10,653.24	10,619.16	10,647.65	129.50	206.90	150.577	3,031.17	1,525.11	6,159.12	5,888.92	270.19	22.795	
19,392.11	10,653.88	10,619.64	10,648.13	130.76	206.91	150.987	3,031.17	1,525.11	6,239.87	5,969.75	270.12	23.100	
19,400.00	10,653.92	10,619.67	10,648.16	130.87	206.91	151.021	3,031.17	1,525.11	6,246.80	5,976.69	270.11	23.127	
19,408.64	10,653.95	10,619.69	10,648.18	130.99	206.91	151.059	3,031.17	1,525.11	6,254.40	5,984.29	270.11	23.155	
19,500.00	10,654.06	10,619.70	10,648.19	132.24	206.91	151.453	3,031.17	1,525.11	6,334.85	6,064.83	270.03	23.460	
19,600.00	10,654.18	10,619.72	10,648.20	133.61	206.91	151.873	3,031.17	1,525.11	6,423.26	6,153.31	269.95	23.794	
19,700.00	10,654.30	10,619.73	10,648.22	134.98	206.91	152.281	3,031.17	1,525.11	6,512.00	6,242.13	269.87	24.130	
19,800.00	10,654.42	10,619.74	10,648.23	136.36	206.91	152.679	3,031.17	1,525.11	6,601.06	6,331.26	269.79	24.467	
19,900.00	10,654.54	10,619.76	10,648.25	137.73	206.91	153.065	3,031.17	1,525.11	6,690.42	6,420.70	269.72	24.805	
20,000.00	10,654.66	10,619.77	10,648.26	139.11	206.92	153.442	3,031.17	1,525.11	6,780.09	6,510.44	269.65	25.144	
20,100.00	10,654.78	10,619.79	10,648.27	140.49	206.92	153.809	3,031.17	1,525.11	6,870.04	6,600.46	269.58	25.484	
20,200.00	10,654.91	10,619.80	10,648.29	141.87	206.92	154.166	3,031.17	1,525.11	6,960.27	6,690.75	269.52	25.825	
20,300.00	10,655.03	10,619.81	10,648.30	143.25	206.92	154.514	3,031.17	1,525.11	7,050.76	6,781.30	269.46	26.166	
20,400.00	10,655.15	10,619.83	10,648.32	144.63	206.92	154.854	3,031.17	1,525.11	7,141.50	6,872.10	269.40	26.509	
20,500.00	10,655.27	10,619.84	10,648.33	146.01	206.92	155.184	3,031.17	1,525.11	7,232.49	6,963.14	269.35	26.852	
20,600.00	10,655.39	10,619.86	10,648.34	147.40	206.92	155.507	3,031.17	1,525.11	7,323.71	7,054.42	269.29	27.196	
20,700.00	10,655.51	10,619.87	10,648.36	148.78	206.92	155.821	3,031.17	1,525.11	7,415.16	7,145.92	269.24	27.541	
20,800.00	10,655.63	10,619.88	10,648.37	150.17	206.92	156.128	3,031.17	1,525.11	7,506.83	7,237.63	269.20	27.886	
20,900.00	10,655.75	10,619.90	10,648.38	151.56	206.92	156.428	3,031.17	1,525.11	7,598.70	7,329.55	269.15	28.232	
21,000.00	10,655.87	10,619.91	10,648.40	152.95	206.92	156.720	3,031.17	1,525.11	7,690.78	7,421.67	269.11	28.578	
21,100.00	10,656.00	10,619.92	10,648.41	154.34	206.92	157.006	3,031.17	1,525.11	7,783.06	7,513.98	269.07	28.925	
21,103.87	10,656.00	10,619.92	10,648.41	154.39	206.92	157.017	3,031.17	1,525.11	7,786.63	7,517.56	269.07	28.939	



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - Manzanita State #1 - Wellbore #1 - Surveys													Offset Site Error:
													0.00 usft
Survey Program: 402-INC-ONLY													Offset Well Error:
													0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	381.50	0.00	0.00	-7.986	8,389.30	-1,176.94	8,480.04				
100.00	100.00	0.00	381.50	0.13	0.00	-7.986	8,389.30	-1,176.94	8,476.13	8,475.98	0.15	N/A	
200.00	200.00	0.00	381.50	0.49	0.00	-7.986	8,389.30	-1,176.94	8,473.40	8,472.91	0.49	N/A	
300.00	300.00	0.00	381.50	0.85	0.00	-7.986	8,389.30	-1,176.94	8,471.85	8,471.00	0.85	N/A	
400.00	400.00	18.50	400.00	1.20	0.16	-7.986	8,389.30	-1,176.94	8,471.46	8,470.10	1.36	6,226.629	
500.00	500.00	118.50	500.00	1.56	1.01	-7.986	8,389.30	-1,176.94	8,471.46	8,468.89	2.57	3,299.646	
600.00	599.99	218.49	599.99	1.92	1.85	-7.981	8,389.30	-1,176.94	8,470.92	8,467.15	3.77	2,246.769	
700.00	699.98	318.48	699.98	2.27	2.70	-7.972	8,389.30	-1,176.94	8,469.85	8,464.88	4.97	1,703.804	
800.00	799.96	418.47	799.96	2.62	3.72	-7.963	8,389.30	-1,176.94	8,468.77	8,462.43	6.35	1,334.709	
900.00	899.95	518.45	899.95	2.98	5.61	-7.953	8,389.30	-1,176.94	8,467.70	8,459.11	8.59	985.849	
1,000.00	999.93	618.44	999.93	3.34	7.50	-7.944	8,389.30	-1,176.94	8,466.63	8,455.79	10.83	781.468	
1,100.00	1,099.92	725.53	1,107.03	3.69	9.52	-7.935	8,389.52	-1,176.94	8,465.77	8,452.56	13.21	640.659	
1,200.00	1,199.90	834.03	1,215.53	4.05	11.57	-7.925	8,389.37	-1,176.94	8,464.56	8,448.94	15.62	541.869	
1,300.00	1,299.89	918.42	1,299.89	4.41	13.23	-7.916	8,389.30	-1,176.94	8,463.41	8,445.77	17.64	479.798	
1,400.00	1,399.87	1,018.41	1,399.87	4.76	15.25	-7.907	8,389.30	-1,176.94	8,462.34	8,442.32	20.02	422.724	
1,472.30	1,472.16	1,090.70	1,472.16	5.02	16.72	-7.900	8,389.30	-1,176.94	8,461.56	8,439.82	21.74	389.237	
1,500.00	1,499.86	1,123.67	1,505.12	5.12	17.38	-7.897	8,390.34	-1,176.94	8,462.29	8,439.79	22.50	376.027	
1,600.00	1,599.84	1,267.91	1,649.36	5.48	20.30	-7.888	8,389.87	-1,176.94	8,460.90	8,435.12	25.78	328.220	
1,700.00	1,699.83	1,412.15	1,793.59	5.84	23.21	-7.879	8,388.63	-1,176.94	8,458.98	8,429.93	29.05	291.176	
1,800.00	1,799.81	1,418.40	1,799.81	6.20	23.25	-7.869	8,389.30	-1,176.94	8,458.05	8,428.60	29.45	287.190	
1,900.00	1,899.80	1,518.39	1,899.80	6.56	25.16	-7.860	8,389.30	-1,176.94	8,456.98	8,425.26	31.71	266.673	
2,000.00	1,999.78	1,624.94	2,006.35	6.91	27.19	-7.850	8,390.11	-1,176.94	8,456.71	8,422.61	34.10	247.998	
2,050.23	2,050.00	1,689.27	2,070.68	7.09	28.41	-7.845	8,390.00	-1,176.94	8,456.09	8,420.58	35.50	238.169	
2,100.00	2,099.76	1,753.02	2,134.43	7.27	29.62	-7.840	8,389.79	-1,176.94	8,455.42	8,418.52	36.90	229.167	
2,200.00	2,199.71	1,881.06	2,262.46	7.63	32.06	-7.819	8,389.05	-1,176.94	8,453.99	8,414.30	39.69	212.998	
2,300.00	2,299.59	1,918.21	2,299.59	7.99	32.72	-7.786	8,389.30	-1,176.94	8,453.36	8,412.65	40.71	207.641	
2,381.73	2,381.15	1,999.77	2,381.15	8.28	34.23	-7.751	8,389.30	-1,176.94	8,453.00	8,410.49	42.51	198.860	
2,400.00	2,399.37	2,020.72	2,402.10	8.35	34.61	-7.741	8,389.66	-1,176.94	8,453.29	8,410.33	42.96	196.777	
2,500.00	2,499.03	2,149.08	2,530.46	8.71	36.98	-7.685	8,389.40	-1,176.94	8,452.89	8,407.20	45.68	185.030	
2,552.91	2,551.69	2,216.92	2,598.29	8.90	38.23	-7.651	8,389.08	-1,176.94	8,452.63	8,405.51	47.13	179.364	
2,600.00	2,598.52	2,217.15	2,598.52	9.07	38.26	-7.618	8,389.30	-1,176.94	8,452.76	8,405.43	47.33	178.590	
2,700.00	2,697.83	2,316.46	2,697.83	9.44	40.15	-7.538	8,389.30	-1,176.94	8,453.03	8,403.44	49.59	170.461	
2,800.00	2,796.92	2,417.51	2,798.88	9.81	42.07	-7.446	8,389.81	-1,176.94	8,454.03	8,402.15	51.89	162.936	
2,900.00	2,895.75	2,534.77	2,916.14	10.19	44.31	-7.344	8,389.65	-1,176.94	8,454.65	8,400.16	54.50	155.144	
3,000.00	2,994.31	2,651.72	3,033.08	10.57	46.53	-7.230	8,389.24	-1,176.94	8,455.32	8,398.21	57.11	148.066	
3,100.00	3,092.56	2,711.22	3,092.56	10.96	47.85	-7.104	8,389.30	-1,176.94	8,456.57	8,397.75	58.82	143.775	
3,161.76	3,153.08	2,771.74	3,153.08	11.21	49.16	-7.020	8,389.30	-1,176.94	8,457.50	8,397.12	60.37	140.091	
3,200.00	3,190.50	2,809.16	3,190.50	11.36	49.97	-6.967	8,389.30	-1,176.94	8,458.11	8,396.77	61.33	137.904	
3,300.00	3,288.37	2,912.11	3,293.44	11.77	52.20	-6.828	8,390.12	-1,176.94	8,460.55	8,396.59	63.96	132.274	
3,400.00	3,386.24	3,037.47	3,418.80	12.17	54.91	-6.690	8,389.84	-1,176.94	8,462.02	8,394.94	67.08	126.149	
3,500.00	3,484.11	3,162.87	3,544.20	12.59	57.62	-6.552	8,389.15	-1,176.94	8,463.21	8,393.01	70.20	120.557	
3,600.00	3,581.98	3,200.75	3,581.98	13.00	58.61	-6.413	8,389.30	-1,176.94	8,464.94	8,393.33	71.61	118.205	
3,700.00	3,679.85	3,298.66	3,679.85	13.42	61.07	-6.275	8,389.30	-1,176.94	8,466.77	8,392.28	74.49	113.668	
3,800.00	3,777.73	3,396.57	3,777.73	13.84	63.63	-6.137	8,389.30	-1,176.94	8,468.65	8,391.19	77.46	109.323	
3,900.00	3,875.60	3,494.46	3,875.60	14.26	66.22	-5.998	8,389.30	-1,176.94	8,470.58	8,390.10	80.48	105.250	
4,000.00	3,973.47	3,613.00	3,994.01	14.69	69.36	-5.860	8,389.30	-1,176.94	8,472.58	8,388.54	84.04	100.811	
4,100.00	4,071.34	3,690.33	4,071.34	15.12	71.25	-5.722	8,389.30	-1,176.94	8,474.59	8,388.22	86.37	98.124	
4,200.00	4,169.21	3,788.20	4,169.21	15.55	73.65	-5.584	8,389.30	-1,176.94	8,476.67	8,387.47	89.19	95.038	
4,300.00	4,267.08	4,066.42	4,447.33	15.98	80.46	-5.447	8,388.42	-1,176.94	8,479.83	8,383.41	96.42	87.949	
4,400.00	4,364.95	3,984.02	4,364.95	16.42	78.45	-5.308	8,389.30	-1,176.94	8,480.97	8,386.12	94.85	89.413	
4,500.00	4,462.82	4,081.96	4,462.82	16.85	80.80	-5.170	8,389.30	-1,176.94	8,483.19	8,385.55	97.64	86.879	
4,600.00	4,560.69	4,179.83	4,560.69	17.29	83.13	-5.032	8,389.30	-1,176.94	8,485.47	8,385.06	100.41	84.508	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - Manzanita State #1 - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 402-INC-ONLY												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,700.00	4,658.56	4,279.68	4,660.53	17.73	85.51	-4.894	8,390.40	-1,176.94	8,488.89	8,385.66	103.22	82.237	
4,800.00	4,756.43	4,418.16	4,799.00	18.17	88.81	-4.757	8,390.04	-1,176.94	8,491.00	8,384.04	106.96	79.385	
4,900.00	4,854.30	4,556.71	4,937.54	18.61	92.11	-4.620	8,389.01	-1,176.94	8,492.70	8,382.00	110.70	76.721	
5,000.00	4,952.17	4,571.46	4,952.17	19.05	92.59	-4.482	8,389.30	-1,176.94	8,495.06	8,383.44	111.61	76.111	
5,100.00	5,050.04	4,669.37	5,050.04	19.49	95.14	-4.345	8,389.30	-1,176.94	8,497.57	8,382.96	114.61	74.143	
5,200.00	5,147.91	4,767.25	5,147.91	19.94	97.66	-4.207	8,389.30	-1,176.94	8,500.14	8,382.57	117.57	72.299	
5,300.00	5,245.78	4,987.79	5,368.40	20.38	103.33	-4.070	8,389.45	-1,176.94	8,503.79	8,380.12	123.67	68.761	
5,400.00	5,343.65	4,963.04	5,343.65	20.83	102.69	-3.933	8,389.30	-1,176.94	8,505.42	8,381.94	123.49	68.877	
5,500.00	5,441.52	5,061.01	5,441.52	21.27	105.04	-3.796	8,389.30	-1,176.94	8,508.14	8,381.85	126.28	67.373	
5,600.00	5,539.40	5,158.88	5,539.40	21.72	107.30	-3.659	8,389.30	-1,176.94	8,510.90	8,381.91	128.99	65.982	
5,700.00	5,637.27	5,264.25	5,644.74	22.17	109.74	-3.522	8,390.93	-1,176.94	8,515.34	8,383.47	131.87	64.576	
5,800.00	5,735.14	5,441.08	5,821.55	22.62	113.82	-3.385	8,389.95	-1,176.94	8,517.66	8,381.27	136.39	62.452	
5,900.00	5,833.01	5,452.54	5,833.01	23.07	114.08	-3.249	8,389.30	-1,176.94	8,519.48	8,382.38	137.10	62.139	
6,000.00	5,930.88	5,550.48	5,930.88	23.52	116.25	-3.112	8,389.30	-1,176.94	8,522.44	8,382.72	139.71	61.000	
6,100.00	6,028.75	5,648.35	6,028.75	23.97	118.33	-2.976	8,389.30	-1,176.94	8,525.44	8,383.20	142.24	59.936	
6,200.00	6,126.62	5,746.22	6,126.62	24.42	120.41	-2.839	8,389.30	-1,176.94	8,528.50	8,383.73	144.77	58.911	
6,300.00	6,224.49	5,885.59	6,265.97	24.87	123.38	-2.703	8,390.05	-1,176.94	8,532.45	8,384.27	148.18	57.581	
6,400.00	6,322.36	6,025.14	6,405.51	25.32	126.35	-2.567	8,389.03	-1,176.94	8,534.88	8,383.29	151.59	56.301	
6,500.00	6,420.23	6,039.91	6,420.23	25.77	126.62	-2.431	8,389.30	-1,176.94	8,537.95	8,385.62	152.32	56.052	
6,600.00	6,518.10	6,137.78	6,518.10	26.23	128.61	-2.295	8,389.30	-1,176.94	8,541.19	8,386.43	154.76	55.189	
6,700.00	6,615.97	6,235.65	6,615.97	26.68	130.61	-2.159	8,389.30	-1,176.94	8,544.49	8,387.28	157.20	54.353	
6,800.00	6,713.84	6,370.12	6,750.43	27.13	133.35	-2.023	8,390.13	-1,176.94	8,548.74	8,388.35	160.39	53.299	
6,900.00	6,811.71	6,509.45	6,889.74	27.58	136.19	-1.887	8,389.20	-1,176.94	8,551.47	8,387.80	163.68	52.246	
7,000.00	6,909.58	6,529.32	6,909.58	28.04	136.54	-1.752	8,389.30	-1,176.94	8,554.66	8,390.18	164.48	52.011	
7,100.00	7,007.45	6,627.19	7,007.45	28.49	138.36	-1.616	8,389.30	-1,176.94	8,558.14	8,391.40	166.75	51.324	
7,200.00	7,105.32	6,725.06	7,105.32	28.95	140.18	-1.481	8,389.30	-1,176.94	8,561.68	8,392.66	169.02	50.655	
7,300.00	7,203.19	6,844.40	7,224.66	29.40	142.40	-1.346	8,390.00	-1,176.94	8,565.99	8,394.30	171.69	49.892	
7,400.00	7,301.06	6,970.54	7,350.78	29.86	144.75	-1.211	8,389.48	-1,176.94	8,569.21	8,394.72	174.49	49.111	
7,500.00	7,398.94	7,018.70	7,398.94	30.31	145.66	-1.076	8,389.30	-1,176.94	8,572.57	8,396.72	175.85	48.749	
7,600.00	7,496.81	7,116.58	7,496.81	30.77	147.57	-0.941	8,389.30	-1,176.94	8,576.29	8,398.08	178.21	48.124	
7,700.00	7,594.68	7,217.14	7,597.37	31.22	149.54	-0.806	8,389.74	-1,176.94	8,580.50	8,399.88	180.62	47.505	
7,800.00	7,692.55	7,337.10	7,717.33	31.68	151.88	-0.671	8,389.55	-1,176.94	8,584.17	8,400.75	183.42	46.801	
7,900.00	7,790.42	7,410.22	7,790.42	32.14	153.32	-0.537	8,389.30	-1,176.94	8,587.75	8,402.45	185.30	46.345	
8,000.00	7,888.29	7,508.09	7,888.29	32.59	155.40	-0.402	8,389.30	-1,176.94	8,591.66	8,403.83	187.83	45.741	
8,100.00	7,986.16	7,605.96	7,986.16	33.05	157.48	-0.268	8,389.30	-1,176.94	8,595.62	8,405.26	190.37	45.153	
8,200.00	8,084.03	7,723.58	8,103.76	33.51	159.99	-0.134	8,390.32	-1,176.94	8,600.68	8,407.36	193.32	44.489	
8,300.00	8,181.90	7,863.16	8,243.33	33.96	162.96	0.000	8,389.67	-1,176.94	8,604.27	8,407.53	196.74	43.734	
8,400.00	8,279.77	8,002.81	8,382.97	34.42	165.93	0.134	8,388.33	-1,176.94	8,607.44	8,407.28	200.15	43.004	
8,500.00	8,377.64	7,997.52	8,377.64	34.88	165.66	0.268	8,389.30	-1,176.94	8,611.94	8,411.60	200.35	42.986	
8,600.00	8,475.51	8,095.39	8,475.51	35.34	167.58	0.401	8,389.30	-1,176.94	8,616.14	8,413.43	202.71	42.505	
8,700.00	8,573.38	8,227.07	8,607.17	35.79	170.15	0.535	8,390.07	-1,176.94	8,621.21	8,415.48	205.73	41.905	
8,800.00	8,671.25	8,376.09	8,756.18	36.25	173.06	0.668	8,389.04	-1,176.94	8,624.83	8,415.74	209.09	41.249	
8,845.65	8,715.93	8,335.83	8,715.93	36.46	172.27	0.729	8,389.30	-1,176.94	8,626.65	8,418.13	208.51	41.373	
8,900.00	8,769.20	8,389.12	8,769.20	36.71	173.28	0.799	8,389.30	-1,176.94	8,628.93	8,419.17	209.76	41.137	
9,000.00	8,867.59	8,487.51	8,867.59	37.14	175.12	0.915	8,389.30	-1,176.94	8,632.74	8,420.71	212.03	40.715	
9,100.00	8,966.42	8,586.69	8,966.77	37.56	176.98	1.014	8,389.82	-1,176.94	8,636.54	8,422.24	214.30	40.302	
9,200.00	9,065.61	8,704.69	9,084.77	37.96	179.19	1.096	8,389.69	-1,176.94	8,639.17	8,422.27	216.90	39.830	
9,300.00	9,165.10	8,823.06	9,203.13	38.34	181.40	1.161	8,389.29	-1,176.94	8,641.04	8,421.55	219.49	39.369	
9,400.00	9,264.82	8,884.77	9,264.82	38.70	182.88	1.209	8,389.30	-1,176.94	8,642.60	8,421.27	221.33	39.049	
9,500.00	9,364.70	8,984.65	9,364.70	39.04	185.27	1.241	8,389.30	-1,176.94	8,643.66	8,419.61	224.05	38.579	
9,600.00	9,464.67	9,088.16	9,468.20	39.36	187.74	1.255	8,390.12	-1,176.94	8,644.97	8,418.13	226.84	38.110	
9,635.33	9,500.00	9,133.75	9,513.80	39.47	188.82	1.256	8,390.08	-1,176.94	8,644.97	8,416.94	228.04	37.910	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - Manzanita State #1 - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 402-INC-ONLY												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,700.00	9,564.67	9,217.20	9,597.24	39.66	190.81	1.256	8,389.85	-1,176.94	8,644.80	8,414.58	230.22	37.550	
9,800.00	9,664.67	9,346.25	9,726.29	39.95	193.89	1.256	8,389.15	-1,176.94	8,644.26	8,410.66	233.59	37.005	
9,834.99	9,699.66	9,391.41	9,771.44	40.06	194.97	1.256	8,388.80	-1,176.94	8,643.99	8,409.21	234.78	36.818	
9,900.00	9,764.67	9,384.78	9,764.67	40.25	194.97	1.256	8,389.30	-1,176.94	8,644.19	8,409.22	234.97	36.788	
10,000.00	9,864.67	9,484.82	9,864.67	40.55	197.51	1.256	8,389.30	-1,176.94	8,644.19	8,406.38	237.81	36.349	
10,100.00	9,964.67	9,686.25	10,066.08	40.85	202.50	1.256	8,389.49	-1,176.94	8,644.97	8,401.87	243.09	35.562	
10,200.00	10,064.67	9,684.85	10,064.67	41.15	202.46	1.256	8,389.30	-1,176.94	8,644.19	8,400.82	243.37	35.519	
10,300.00	10,164.67	9,784.91	10,164.67	41.45	205.02	1.256	8,389.30	-1,176.94	8,644.19	8,397.96	246.23	35.106	
10,319.92	10,184.58	9,804.83	10,184.58	41.51	205.53	1.256	8,389.30	-1,176.94	8,644.19	8,397.39	246.80	35.025	
10,350.00	10,214.65	9,834.90	10,214.65	41.60	206.31	1.256	8,389.30	-1,176.94	8,643.40	8,395.73	247.67	34.899	
10,400.00	10,264.41	9,884.65	10,264.41	41.74	207.59	1.257	8,389.30	-1,176.94	8,638.60	8,389.51	249.10	34.680	
10,450.00	10,313.55	9,933.80	10,313.55	41.88	208.85	1.259	8,389.30	-1,176.94	8,629.49	8,378.99	250.51	34.448	
10,500.00	10,361.72	10,009.06	10,361.72	42.02	210.79	1.262	8,390.83	-1,176.94	8,617.71	8,365.12	252.58	34.118	
10,550.00	10,408.53	10,094.61	10,408.53	42.14	212.99	1.265	8,390.37	-1,176.94	8,599.95	8,345.04	254.91	33.737	
10,600.00	10,453.64	10,176.68	10,453.64	42.25	215.10	1.270	8,389.57	-1,176.94	8,578.00	8,320.85	257.14	33.359	
10,650.00	10,496.71	10,254.57	10,496.71	42.35	217.10	1.275	8,388.48	-1,176.94	8,552.03	8,292.78	259.25	32.988	
10,700.00	10,537.40	10,157.70	10,537.40	42.43	214.61	1.281	8,389.30	-1,176.94	8,522.73	8,265.85	256.88	33.178	
10,750.00	10,575.40	10,195.70	10,575.40	42.51	215.59	1.287	8,389.30	-1,176.94	8,490.28	8,232.33	257.95	32.914	
10,800.00	10,610.43	10,230.88	10,610.43	42.57	216.52	1.295	8,389.30	-1,176.94	8,454.64	8,195.67	258.97	32.647	
10,850.00	10,642.22	10,262.66	10,642.22	42.61	217.37	1.303	8,389.30	-1,176.94	8,416.09	8,156.20	259.89	32.383	
10,900.00	10,670.52	10,290.97	10,670.52	42.65	218.13	1.312	8,389.30	-1,176.94	8,374.91	8,114.20	260.70	32.124	
10,950.00	10,695.13	10,315.58	10,695.13	42.68	218.79	1.321	8,389.30	-1,176.94	8,331.42	8,070.01	261.41	31.871	
11,000.00	10,715.85	10,336.30	10,715.85	42.70	219.34	1.331	8,389.30	-1,176.94	8,285.96	8,023.96	262.00	31.626	
11,050.00	10,732.53	10,352.98	10,732.53	42.71	219.78	1.341	8,389.30	-1,176.94	8,238.86	7,976.39	262.48	31.389	
11,100.00	10,745.04	10,365.48	10,745.04	42.72	220.12	1.352	8,389.30	-1,176.94	8,190.49	7,927.66	262.83	31.162	
11,150.00	10,753.28	10,373.73	10,753.28	42.73	220.34	1.363	8,389.30	-1,176.94	8,141.22	7,878.15	263.07	30.947	
11,200.00	10,757.20	10,377.64	10,757.20	42.74	220.44	1.374	8,389.30	-1,176.94	8,091.41	7,828.23	263.19	30.744	
11,224.92	10,757.52	10,377.97	10,757.52	42.75	220.45	1.380	8,389.30	-1,176.94	8,066.51	7,803.31	263.20	30.648	
11,300.00	10,756.87	10,377.31	10,756.87	42.80	220.43	1.397	8,389.30	-1,176.94	7,991.47	7,728.27	263.20	30.363	
11,400.00	10,755.99	10,376.44	10,755.99	42.90	220.41	1.421	8,389.30	-1,176.94	7,891.53	7,628.33	263.20	29.983	
11,500.00	10,755.12	10,375.57	10,755.12	43.06	220.39	1.445	8,389.30	-1,176.94	7,791.59	7,528.39	263.20	29.604	
11,600.00	10,754.25	10,374.69	10,754.25	43.28	220.36	1.470	8,389.30	-1,176.94	7,691.65	7,428.45	263.20	29.224	
11,700.00	10,753.37	10,373.82	10,753.37	43.55	220.34	1.495	8,389.30	-1,176.94	7,591.71	7,328.51	263.20	28.844	
11,800.00	10,752.50	10,372.95	10,752.50	43.90	220.32	1.522	8,389.30	-1,176.94	7,491.77	7,228.57	263.20	28.464	
11,900.00	10,751.63	10,372.08	10,751.63	44.31	220.29	1.549	8,389.30	-1,176.94	7,391.84	7,128.63	263.21	28.083	
12,000.00	10,750.76	10,371.20	10,750.76	44.77	220.27	1.576	8,389.30	-1,176.94	7,291.91	7,028.69	263.22	27.703	
12,100.00	10,749.88	10,370.33	10,749.88	45.29	220.25	1.605	8,389.30	-1,176.94	7,191.97	6,928.75	263.23	27.323	
12,200.00	10,749.01	10,369.46	10,749.01	45.87	220.22	1.634	8,389.30	-1,176.94	7,092.04	6,828.81	263.24	26.942	
12,300.00	10,748.14	10,368.58	10,748.14	46.48	220.20	1.664	8,389.30	-1,176.94	6,992.12	6,728.87	263.25	26.561	
12,400.00	10,747.27	10,367.71	10,747.27	47.14	220.18	1.695	8,389.30	-1,176.94	6,892.19	6,628.93	263.26	26.180	
12,500.00	10,746.39	10,366.84	10,746.39	47.84	220.15	1.727	8,389.30	-1,176.94	6,792.27	6,528.99	263.27	25.799	
12,600.00	10,745.52	10,365.97	10,745.52	48.58	220.13	1.760	8,389.30	-1,176.94	6,692.35	6,429.05	263.29	25.418	
12,700.00	10,744.65	10,365.09	10,744.65	49.35	220.11	1.794	8,389.30	-1,176.94	6,592.43	6,329.12	263.31	25.037	
12,800.00	10,743.78	10,364.22	10,743.78	50.15	220.09	1.828	8,389.30	-1,176.94	6,492.51	6,229.18	263.33	24.655	
12,888.61	10,743.00	10,363.45	10,743.00	50.89	220.06	1.860	8,389.30	-1,176.94	6,403.97	6,140.62	263.35	24.317	
12,900.00	10,742.88	10,363.33	10,742.88	50.98	220.06	1.864	8,389.30	-1,176.94	6,392.59	6,129.24	263.35	24.274	
12,939.06	10,742.12	10,362.56	10,742.12	51.32	220.04	1.879	8,389.30	-1,176.94	6,353.57	6,090.22	263.35	24.126	
13,000.00	10,740.51	10,360.96	10,740.51	51.85	220.00	1.901	8,389.30	-1,176.94	6,292.71	6,029.37	263.33	23.896	
13,100.00	10,737.88	10,358.33	10,737.88	52.74	219.93	1.940	8,389.30	-1,176.94	6,192.83	5,929.52	263.31	23.519	
13,147.49	10,736.63	10,357.07	10,736.63	53.17	219.89	1.958	8,389.30	-1,176.94	6,145.39	5,882.09	263.30	23.340	
13,200.00	10,735.25	10,355.69	10,735.25	53.65	219.86	1.984	8,389.30	-1,176.94	6,092.98	5,829.68	263.29	23.141	
13,300.00	10,732.61	10,353.06	10,732.61	54.61	219.79	2.059	8,389.30	-1,176.94	5,993.33	5,730.03	263.30	22.762	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - Manzanita State #1 - Wellbore #1 - Surveys													Offset Site Error:
													0.00 usft
													Offset Well Error:
													0.00 usft
Survey Program:	Reference	Offset	Semi Major Axis	Offset	Offset Wellbore Centre	Distance	Rule Assigned:	Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	from North (")	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
13,347.43	10,731.36	10,351.81	10,731.36	55.08	219.75	2.107	8,389.30	-1,176.94	5,946.19	5,682.87	263.32	22.582	
13,400.00	10,729.98	10,350.42	10,729.98	55.60	219.72	2.166	8,389.30	-1,176.94	5,893.98	5,630.65	263.34	22.382	
13,500.00	10,727.34	10,347.79	10,727.34	56.62	219.65	2.280	8,389.30	-1,176.94	5,794.70	5,531.32	263.38	22.001	
13,600.00	10,724.71	10,345.16	10,724.71	57.66	219.58	2.398	8,389.30	-1,176.94	5,695.44	5,432.01	263.42	21.621	
13,700.00	10,722.08	10,342.52	10,722.08	58.72	219.51	2.520	8,389.30	-1,176.94	5,596.20	5,332.73	263.48	21.240	
13,800.00	10,719.44	10,339.89	10,719.44	59.79	219.44	2.647	8,389.30	-1,176.94	5,496.99	5,233.46	263.53	20.859	
13,900.00	10,716.81	10,337.26	10,716.81	60.88	219.37	2.779	8,389.30	-1,176.94	5,397.81	5,134.21	263.60	20.477	
14,000.00	10,714.18	10,334.62	10,714.18	61.99	219.29	2.915	8,389.30	-1,176.94	5,298.66	5,034.99	263.67	20.096	
14,055.43	10,712.72	10,333.16	10,712.72	62.60	219.26	2.993	8,389.30	-1,176.94	5,243.72	4,980.01	263.71	19.884	
14,100.00	10,711.54	10,331.99	10,711.54	63.10	219.22	3.053	8,389.30	-1,176.94	5,199.50	4,935.76	263.74	19.714	
14,200.00	10,708.91	10,329.35	10,708.91	64.22	219.15	3.163	8,389.30	-1,176.94	5,100.03	4,836.24	263.79	19.333	
14,255.44	10,707.45	10,327.89	10,707.45	64.84	219.12	3.209	8,389.30	-1,176.94	5,044.76	4,780.95	263.81	19.123	
14,300.00	10,706.27	10,326.72	10,706.27	65.33	219.08	3.242	8,389.30	-1,176.94	5,000.31	4,736.49	263.82	18.954	
14,400.00	10,703.64	10,324.09	10,703.64	66.46	219.01	3.317	8,389.30	-1,176.94	4,900.55	4,636.71	263.84	18.574	
14,500.00	10,701.01	10,321.45	10,701.01	67.59	218.94	3.396	8,389.30	-1,176.94	4,800.81	4,536.94	263.87	18.194	
14,600.00	10,698.37	10,318.82	10,698.37	68.74	218.87	3.478	8,389.30	-1,176.94	4,701.08	4,437.18	263.90	17.814	
14,700.00	10,695.74	10,316.19	10,695.74	69.90	218.80	3.564	8,389.30	-1,176.94	4,601.36	4,337.42	263.94	17.434	
14,800.00	10,693.11	10,313.55	10,693.11	71.07	218.73	3.653	8,389.30	-1,176.94	4,501.64	4,237.67	263.98	17.053	
14,900.00	10,690.47	10,310.92	10,690.47	72.25	218.66	3.747	8,389.30	-1,176.94	4,401.94	4,137.92	264.02	16.673	
15,000.00	10,687.84	10,308.29	10,687.84	73.43	218.59	3.845	8,389.30	-1,176.94	4,302.25	4,038.18	264.07	16.292	
15,100.00	10,685.21	10,305.65	10,685.21	74.63	218.52	3.947	8,389.30	-1,176.94	4,202.58	3,938.45	264.13	15.911	
15,200.00	10,682.57	10,303.02	10,682.57	75.84	218.45	4.055	8,389.30	-1,176.94	4,102.92	3,838.73	264.19	15.530	
15,300.00	10,679.94	10,300.39	10,679.94	77.05	218.38	4.167	8,389.30	-1,176.94	4,003.27	3,739.01	264.26	15.149	
15,400.00	10,677.31	10,297.75	10,677.31	78.27	218.31	4.286	8,389.30	-1,176.94	3,903.64	3,639.31	264.33	14.768	
15,500.00	10,674.67	10,295.12	10,674.67	79.50	218.24	4.411	8,389.30	-1,176.94	3,804.03	3,539.61	264.42	14.386	
15,600.00	10,672.04	10,292.49	10,672.04	80.74	218.17	4.542	8,389.30	-1,176.94	3,704.44	3,439.93	264.51	14.005	
15,700.00	10,669.41	10,289.85	10,669.41	81.98	218.10	4.681	8,389.30	-1,176.94	3,604.86	3,340.26	264.61	13.623	
15,800.00	10,666.77	10,287.22	10,666.77	83.23	218.03	4.828	8,389.30	-1,176.94	3,505.31	3,240.60	264.71	13.242	
15,900.00	10,664.14	10,284.59	10,664.14	84.49	217.96	4.983	8,389.30	-1,176.94	3,405.79	3,140.95	264.83	12.860	
16,000.00	10,661.51	10,281.95	10,661.51	85.75	217.89	5.148	8,389.30	-1,176.94	3,306.29	3,041.32	264.96	12.478	
16,100.00	10,658.87	10,279.32	10,658.87	87.02	217.82	5.322	8,389.30	-1,176.94	3,206.82	2,941.71	265.11	12.096	
16,200.00	10,656.24	10,276.69	10,656.24	88.29	217.75	5.508	8,389.30	-1,176.94	3,107.38	2,842.12	265.26	11.714	
16,300.00	10,653.61	10,274.05	10,653.61	89.57	217.68	5.707	8,389.30	-1,176.94	3,007.97	2,742.54	265.43	11.332	
16,400.00	10,650.97	10,271.42	10,650.97	90.86	217.61	5.918	8,389.30	-1,176.94	2,908.61	2,642.99	265.62	10.950	
16,500.00	10,648.34	10,268.79	10,648.34	92.15	217.54	6.145	8,389.30	-1,176.94	2,809.28	2,543.46	265.83	10.568	
16,600.00	10,645.71	10,266.15	10,645.71	93.44	217.47	6.389	8,389.30	-1,176.94	2,710.01	2,443.96	266.05	10.186	
16,700.00	10,643.07	10,263.52	10,643.07	94.74	217.40	6.651	8,389.30	-1,176.94	2,610.79	2,344.48	266.30	9.804	
16,800.00	10,640.44	10,260.89	10,640.44	96.04	217.33	6.933	8,389.30	-1,176.94	2,511.62	2,245.04	266.58	9.422	
16,892.04	10,638.02	10,258.46	10,638.02	97.24	217.26	7.214	8,389.30	-1,176.94	2,420.41	2,153.55	266.86	9.070	
16,900.00	10,637.82	10,258.26	10,637.82	97.34	217.26	7.239	8,389.30	-1,176.94	2,412.52	2,145.64	266.89	9.039	
16,987.49	10,637.09	10,257.54	10,637.09	98.49	217.24	7.528	8,389.30	-1,176.94	2,325.86	2,058.63	267.23	8.704	
17,000.00	10,637.18	10,257.63	10,637.18	98.65	217.24	7.571	8,389.30	-1,176.94	2,313.47	2,046.19	267.28	8.655	
17,100.00	10,637.88	10,258.32	10,637.88	99.96	217.26	7.933	8,389.30	-1,176.94	2,214.50	1,946.75	267.76	8.271	
17,200.00	10,638.58	10,259.02	10,638.58	101.27	217.28	8.329	8,389.30	-1,176.94	2,115.63	1,847.35	268.27	7.886	
17,300.00	10,639.27	10,259.72	10,639.27	102.59	217.29	8.763	8,389.30	-1,176.94	2,016.86	1,748.02	268.84	7.502	
17,400.00	10,639.97	10,260.42	10,639.97	103.91	217.31	9.242	8,389.30	-1,176.94	1,918.23	1,648.75	269.48	7.118	
17,500.00	10,640.67	10,261.12	10,640.67	105.23	217.33	9.773	8,389.30	-1,176.94	1,819.74	1,549.56	270.18	6.735	
17,600.00	10,641.37	10,261.81	10,641.37	106.56	217.35	10.365	8,389.30	-1,176.94	1,721.43	1,450.45	270.98	6.353	
17,700.00	10,642.07	10,262.51	10,642.07	107.89	217.37	11.028	8,389.30	-1,176.94	1,623.32	1,351.45	271.88	5.971	
17,800.00	10,642.76	10,263.21	10,642.76	109.22	217.39	11.777	8,389.30	-1,176.94	1,525.46	1,252.56	272.90	5.590	
17,900.00	10,643.46	10,263.91	10,643.46	110.56	217.41	12.628	8,389.30	-1,176.94	1,427.90	1,153.81	274.08	5.210	
18,000.00	10,644.16	10,264.61	10,644.16	111.90	217.43	13.604	8,389.30	-1,176.94	1,330.69	1,055.24	275.46	4.831	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - Manzanita State #1 - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 402-INC-ONLY												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,100.00	10,644.86	10,265.30	10,644.86	113.24	217.44	14.733	8,389.30	-1,176.94	1,233.94	956.87	277.07	4.454	
18,200.00	10,645.56	10,266.00	10,645.56	114.58	217.46	16.053	8,389.30	-1,176.94	1,137.74	858.76	278.98	4.078	
18,300.00	10,646.25	10,266.70	10,646.25	115.93	217.48	17.617	8,389.30	-1,176.94	1,042.26	760.99	281.27	3.706	
18,400.00	10,646.95	10,267.40	10,646.95	117.28	217.50	19.494	8,389.30	-1,176.94	947.71	663.65	284.07	3.336	
18,500.00	10,647.65	10,268.10	10,647.65	118.63	217.52	21.784	8,389.30	-1,176.94	854.40	566.90	287.51	2.972	
18,600.00	10,648.35	10,268.80	10,648.35	119.98	217.54	24.629	8,389.30	-1,176.94	762.79	470.99	291.81	2.614	
18,700.00	10,649.05	10,269.49	10,649.05	121.33	217.56	28.240	8,389.30	-1,176.94	673.57	376.33	297.24	2.266	
18,800.00	10,649.75	10,270.19	10,649.75	122.69	217.57	32.927	8,389.30	-1,176.94	587.83	283.68	304.16	1.933	
18,900.00	10,650.44	10,270.89	10,650.44	124.05	217.59	39.155	8,389.30	-1,176.94	507.34	194.43	312.91	1.621	
19,000.00	10,651.14	10,271.59	10,651.14	125.41	217.61	47.585	8,389.30	-1,176.94	435.02	111.43	323.59	1.344	Level 3
19,100.00	10,651.84	10,272.29	10,651.84	126.77	217.63	59.005	8,389.30	-1,176.94	375.61	40.37	335.24	1.120	Level 3
19,200.00	10,652.54	10,272.98	10,652.54	128.14	217.65	73.857	8,389.30	-1,176.94	336.05	-8.45	344.49	0.975	Level 3
19,290.79	10,653.17	10,273.62	10,653.17	129.38	217.67	89.532	8,389.30	-1,176.94	323.55	-22.65	346.20	0.935	Level 3, CC, ES, SF
19,300.00	10,653.24	10,273.68	10,653.24	129.50	217.67	91.162	8,389.30	-1,176.94	323.68	-22.21	345.89	0.936	Level 3
19,392.11	10,653.88	10,274.33	10,653.88	130.76	217.68	106.919	8,389.30	-1,176.94	339.04	0.78	338.26	1.002	Level 3
19,400.00	10,653.92	10,274.37	10,653.92	130.87	217.69	108.182	8,389.30	-1,176.94	341.48	4.18	337.30	1.012	Level 3
19,408.64	10,653.95	10,274.39	10,653.95	130.99	217.69	109.545	8,389.30	-1,176.94	344.34	8.13	336.21	1.024	Level 3
19,500.00	10,654.06	10,274.50	10,654.06	132.24	217.69	122.418	8,389.30	-1,176.94	385.29	62.01	323.28	1.192	Level 3
19,600.00	10,654.18	10,274.62	10,654.18	133.61	217.69	133.233	8,389.30	-1,176.94	447.54	138.18	309.36	1.447	Level 3
19,700.00	10,654.30	10,274.75	10,654.30	134.98	217.70	141.199	8,389.30	-1,176.94	521.66	223.72	297.94	1.751	
19,800.00	10,654.42	10,274.87	10,654.42	136.36	217.70	147.100	8,389.30	-1,176.94	603.30	314.04	289.26	2.086	
19,900.00	10,654.54	10,274.99	10,654.54	137.73	217.70	151.559	8,389.30	-1,176.94	689.79	406.97	282.82	2.439	
20,000.00	10,654.66	10,275.11	10,654.66	139.11	217.71	155.009	8,389.30	-1,176.94	779.52	501.45	278.08	2.803	
20,100.00	10,654.78	10,275.23	10,654.78	140.49	217.71	157.738	8,389.30	-1,176.94	871.49	596.93	274.56	3.174	
20,200.00	10,654.91	10,275.35	10,654.91	141.87	217.71	159.943	8,389.30	-1,176.94	965.06	693.12	271.94	3.549	
20,300.00	10,655.03	10,275.47	10,655.03	143.25	217.72	161.756	8,389.30	-1,176.94	1,059.80	789.83	269.97	3.926	
20,400.00	10,655.15	10,275.59	10,655.15	144.63	217.72	163.270	8,389.30	-1,176.94	1,155.43	886.95	268.48	4.304	
20,500.00	10,655.27	10,275.71	10,655.27	146.01	217.72	164.552	8,389.30	-1,176.94	1,251.74	984.39	267.35	4.682	
20,600.00	10,655.39	10,275.84	10,655.39	147.40	217.72	165.650	8,389.30	-1,176.94	1,348.59	1,082.11	266.48	5.061	
20,700.00	10,655.51	10,275.96	10,655.51	148.78	217.73	166.601	8,389.30	-1,176.94	1,445.87	1,180.06	265.81	5.439	
20,800.00	10,655.63	10,276.08	10,655.63	150.17	217.73	167.432	8,389.30	-1,176.94	1,543.50	1,278.20	265.30	5.818	
20,900.00	10,655.75	10,276.20	10,655.75	151.56	217.73	168.163	8,389.30	-1,176.94	1,641.41	1,376.50	264.91	6.196	
21,000.00	10,655.87	10,276.32	10,655.87	152.95	217.74	168.813	8,389.30	-1,176.94	1,739.56	1,474.95	264.61	6.574	
21,100.00	10,656.00	10,276.44	10,656.00	154.34	217.74	169.392	8,389.30	-1,176.94	1,837.91	1,573.52	264.39	6.952	
21,103.87	10,656.00	10,276.45	10,656.00	154.39	217.74	169.414	8,389.30	-1,176.94	1,841.72	1,577.34	264.38	6.966	



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - Manzanita State #2 - Wellbore #1 - Surveys													Offset Site Error:
Survey Program: 404-INC-ONLY													Offset Well Error:
Reference	Offset	Semi Major Axis		Azimuth		Offset Wellbore Centre		Rule Assigned:		Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	46.50	0.00	0.00	-7.054	9,609.17	-1,189.10	9,682.58				
100.00	100.00	53.50	100.00	0.13	0.47	-7.054	9,609.17	-1,189.10	9,682.46	9,681.86	0.60	N/A	
200.00	200.00	153.50	200.00	0.49	1.36	-7.054	9,609.17	-1,189.10	9,682.46	9,680.62	1.85	5,243.605	
300.00	300.00	253.50	300.00	0.85	2.25	-7.054	9,609.17	-1,189.10	9,682.46	9,679.37	3.09	3,132.673	
400.00	400.00	353.50	400.00	1.20	3.13	-7.054	9,609.17	-1,189.10	9,682.46	9,678.13	4.34	2,233.519	
500.00	500.00	453.50	500.00	1.56	4.46	-7.054	9,609.17	-1,189.10	9,682.46	9,676.45	6.02	1,608.948	
600.00	599.99	553.50	599.99	1.92	6.23	-7.050	9,609.17	-1,189.10	9,681.94	9,673.79	8.14	1,188.839	
700.00	699.98	653.90	700.40	2.27	8.01	-7.042	9,609.44	-1,189.10	9,681.15	9,670.88	10.28	942.159	
800.00	799.96	753.24	809.74	2.62	9.94	-7.034	9,609.38	-1,189.10	9,680.05	9,667.48	12.57	770.279	
900.00	899.95	852.58	919.08	2.98	11.88	-7.025	9,609.21	-1,189.10	9,678.85	9,663.99	14.86	651.357	
1,000.00	999.93	953.44	999.93	3.34	13.35	-7.017	9,609.17	-1,189.10	9,677.73	9,661.05	16.69	580.006	
1,100.00	1,099.92	1,053.42	1,099.92	3.69	15.18	-7.009	9,609.17	-1,189.10	9,676.68	9,657.81	18.88	512.634	
1,200.00	1,199.90	1,153.11	1,201.61	4.05	17.05	-7.000	9,609.43	-1,189.10	9,675.89	9,654.79	21.10	458.598	
1,300.00	1,299.89	1,254.60	1,311.09	4.41	19.06	-6.992	9,609.36	-1,189.10	9,674.78	9,651.31	23.46	412.313	
1,400.00	1,399.87	1,374.08	1,420.57	4.76	21.07	-6.984	9,609.18	-1,189.10	9,673.56	9,647.73	25.83	374.500	
1,500.00	1,499.86	1,453.38	1,499.86	5.12	22.56	-6.976	9,609.17	-1,189.10	9,672.48	9,644.80	27.68	349.412	
1,600.00	1,599.84	1,553.37	1,599.84	5.48	24.44	-6.968	9,609.17	-1,189.10	9,671.43	9,641.51	29.93	323.187	
1,700.00	1,699.83	1,652.79	1,709.26	5.84	26.51	-6.959	9,609.96	-1,189.10	9,671.18	9,638.83	32.35	298.991	
1,800.00	1,799.81	1,756.62	1,843.08	6.20	29.03	-6.951	9,609.60	-1,189.10	9,669.85	9,634.63	35.23	274.501	
1,900.00	1,899.80	1,930.45	1,976.91	6.56	31.55	-6.943	9,608.76	-1,189.10	9,668.18	9,630.08	38.11	253.708	
2,000.00	1,999.78	1,953.34	1,999.78	6.91	33.99	-6.935	9,609.17	-1,189.10	9,667.24	9,628.33	38.91	248.478	
2,050.23	2,050.00	2,003.56	2,050.00	7.09	32.94	-6.930	9,609.17	-1,189.10	9,666.71	9,626.67	40.04	241.444	
2,100.00	2,099.76	2,053.32	2,099.76	7.27	33.89	-6.925	9,609.17	-1,189.10	9,666.22	9,625.06	41.16	234.857	
2,200.00	2,199.71	2,161.19	2,207.63	7.63	35.93	-6.906	9,609.68	-1,189.10	9,665.92	9,622.36	43.56	221.907	
2,300.00	2,299.59	2,282.03	2,328.47	7.99	38.22	-6.878	9,609.45	-1,189.10	9,665.16	9,618.96	46.20	209.182	
2,400.00	2,399.37	2,402.75	2,449.19	8.35	40.50	-6.839	9,608.95	-1,189.10	9,664.43	9,615.59	48.85	197.840	
2,404.05	2,403.41	2,407.63	2,454.07	8.36	40.60	-6.837	9,608.93	-1,189.10	9,664.41	9,615.45	48.96	197.406	
2,500.00	2,499.03	2,452.61	2,499.03	8.71	41.40	-6.790	9,609.17	-1,189.10	9,664.45	9,614.34	50.11	192.854	
2,600.00	2,598.52	2,552.11	2,598.52	9.07	43.24	-6.730	9,609.17	-1,189.10	9,664.64	9,612.32	52.32	184.736	
2,700.00	2,697.83	2,673.85	2,720.26	9.44	45.49	-6.660	9,609.84	-1,189.10	9,665.77	9,610.83	54.93	175.953	
2,800.00	2,796.92	2,809.46	2,855.87	9.81	48.00	-6.581	9,609.26	-1,189.10	9,666.06	9,608.25	57.81	167.200	
2,900.00	2,895.75	2,849.36	2,895.75	10.19	48.87	-6.491	9,609.17	-1,189.10	9,666.76	9,607.71	59.06	163.690	
3,000.00	2,994.31	2,947.92	2,994.31	10.57	51.18	-6.391	9,609.17	-1,189.10	9,668.02	9,606.27	61.76	156.547	
3,100.00	3,092.56	3,046.17	3,092.56	10.96	53.50	-6.281	9,609.17	-1,189.10	9,669.57	9,605.11	64.46	150.009	
3,161.76	3,153.08	3,111.19	3,157.59	11.21	55.03	-6.208	9,609.42	-1,189.10	9,670.92	9,604.68	66.23	146.009	
3,200.00	3,190.50	3,152.26	3,198.66	11.36	55.99	-6.162	9,609.39	-1,189.10	9,671.62	9,604.26	67.35	143.593	
3,300.00	3,288.37	3,259.67	3,306.07	11.77	58.52	-6.041	9,609.24	-1,189.10	9,673.40	9,603.12	70.28	137.632	
3,400.00	3,386.24	3,340.08	3,386.24	12.17	60.73	-5.920	9,609.17	-1,189.10	9,675.27	9,602.37	72.90	132.718	
3,500.00	3,484.11	3,438.07	3,484.11	12.59	63.76	-5.799	9,609.17	-1,189.10	9,677.28	9,600.93	76.34	126.760	
3,600.00	3,581.98	3,536.07	3,581.98	13.00	66.79	-5.678	9,609.17	-1,189.10	9,679.33	9,599.54	79.79	121.312	
3,700.00	3,679.85	3,634.04	3,679.85	13.42	69.67	-5.557	9,609.17	-1,189.10	9,681.42	9,598.33	83.09	116.517	
3,800.00	3,777.73	3,731.97	3,777.73	13.84	72.30	-5.436	9,609.17	-1,189.10	9,683.55	9,597.42	86.13	112.426	
3,900.00	3,875.60	3,829.89	3,875.60	14.26	74.84	-5.316	9,609.17	-1,189.10	9,685.73	9,596.63	89.10	108.711	
4,000.00	3,973.47	3,927.80	3,973.47	14.69	77.27	-5.195	9,609.17	-1,189.10	9,687.94	9,595.99	91.95	105.360	
4,100.00	4,071.34	4,025.69	4,071.34	15.12	79.67	-5.074	9,609.17	-1,189.10	9,690.21	9,595.43	94.78	102.241	
4,200.00	4,169.21	4,123.60	4,169.21	15.55	82.02	-4.954	9,609.17	-1,189.10	9,692.51	9,594.95	97.56	99.345	
4,300.00	4,267.08	4,221.50	4,267.08	15.98	84.27	-4.833	9,609.17	-1,189.10	9,694.86	9,594.62	100.24	96.719	
4,400.00	4,364.95	4,319.39	4,364.95	16.42	86.35	-4.713	9,609.17	-1,189.10	9,697.25	9,594.50	102.75	94.374	
4,500.00	4,462.82	4,417.26	4,462.82	16.85	88.43	-4.592	9,609.17	-1,189.10	9,699.69	9,594.42	105.27	92.141	
4,600.00	4,560.69	4,515.14	4,560.69	17.29	90.51	-4.472	9,609.17	-1,189.10	9,702.16	9,594.37	107.79	90.012	
4,700.00	4,658.56	4,613.04	4,658.56	17.73	92.53	-4.352	9,609.17	-1,189.10	9,704.68	9,594.44	110.24	88.029	
4,800.00	4,756.43	4,710.91	4,756.43	18.17	94.53	-4.232	9,609.17	-1,189.10	9,707.24	9,594.56	112.68	86.147	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - Manzanita State #2 - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 404-INC-ONLY												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,900.00	4,854.30	4,829.25	4,874.76	18.61	96.95	-4.111	9,610.13	-1,189.10	9,710.83	9,595.29	115.54	84.048	
5,000.00	4,952.17	4,982.38	5,027.88	19.05	100.08	-3.991	9,609.37	-1,189.10	9,713.00	9,593.89	119.11	81.550	
5,100.00	5,050.04	5,004.54	5,050.04	19.49	100.53	-3.871	9,609.17	-1,189.10	9,715.19	9,595.19	120.00	80.959	
5,200.00	5,147.91	5,102.44	5,147.91	19.94	102.30	-3.751	9,609.17	-1,189.10	9,717.92	9,595.71	122.21	79.521	
5,300.00	5,245.78	5,200.31	5,245.78	20.38	104.06	-3.631	9,609.17	-1,189.10	9,720.70	9,596.29	124.41	78.137	
5,400.00	5,343.65	5,342.23	5,387.69	20.83	106.60	-3.511	9,609.51	-1,189.10	9,723.95	9,596.56	127.40	76.329	
5,500.00	5,441.52	5,396.07	5,441.52	21.27	107.57	-3.392	9,609.17	-1,189.10	9,726.38	9,597.57	128.81	75.512	
5,600.00	5,539.40	5,493.94	5,539.40	21.72	109.26	-3.272	9,609.17	-1,189.10	9,729.28	9,598.34	130.94	74.303	
5,700.00	5,637.27	5,591.81	5,637.27	22.17	110.95	-3.152	9,609.17	-1,189.10	9,732.22	9,599.15	133.07	73.135	
5,800.00	5,735.14	5,693.36	5,738.81	22.62	112.70	-3.033	9,609.43	-1,189.10	9,735.47	9,600.21	135.27	71.972	
5,900.00	5,833.01	5,800.41	5,845.86	23.07	114.54	-2.913	9,609.34	-1,189.10	9,738.42	9,600.86	137.56	70.795	
6,000.00	5,930.88	5,907.47	5,952.92	23.52	116.39	-2.794	9,609.15	-1,189.10	9,741.32	9,601.47	139.85	69.656	
6,100.00	6,028.75	5,983.31	6,028.75	23.97	117.83	-2.675	9,609.17	-1,189.10	9,744.43	9,602.69	141.74	68.747	
6,200.00	6,126.62	6,081.18	6,126.62	24.42	119.68	-2.556	9,609.17	-1,189.10	9,747.59	9,603.55	144.04	67.673	
6,300.00	6,224.49	6,187.63	6,233.07	24.87	121.69	-2.436	9,609.67	-1,189.10	9,751.29	9,604.80	146.50	66.563	
6,400.00	6,322.36	6,306.48	6,351.92	25.32	123.94	-2.317	9,609.44	-1,189.10	9,754.34	9,605.16	149.19	65.383	
6,500.00	6,420.23	6,425.36	6,470.79	25.77	126.18	-2.198	9,608.95	-1,189.10	9,757.23	9,605.34	151.88	64.243	
6,600.00	6,518.10	6,472.69	6,518.10	26.23	127.08	-2.079	9,609.17	-1,189.10	9,760.64	9,607.41	153.22	63.702	
6,700.00	6,615.97	6,570.56	6,615.97	26.68	128.93	-1.960	9,609.17	-1,189.10	9,764.00	9,608.48	155.52	62.782	
6,800.00	6,713.84	6,685.33	6,730.73	27.13	131.10	-1.842	9,609.90	-1,189.10	9,768.16	9,610.02	158.14	61.768	
6,900.00	6,811.71	6,818.46	6,863.86	27.58	133.62	-1.723	9,609.43	-1,189.10	9,771.27	9,610.16	161.11	60.651	
7,000.00	6,909.58	6,864.20	6,909.58	28.04	134.48	-1.604	9,609.17	-1,189.10	9,774.36	9,611.94	162.42	60.180	
7,100.00	7,007.45	6,962.07	7,007.45	28.49	136.26	-1.486	9,609.17	-1,189.10	9,777.89	9,613.25	164.65	59.387	
7,200.00	7,105.32	7,059.94	7,105.32	28.95	138.04	-1.368	9,609.17	-1,189.10	9,781.47	9,614.60	166.87	58.616	
7,300.00	7,203.19	7,169.95	7,215.33	29.40	140.04	-1.249	9,609.65	-1,189.10	9,785.58	9,616.25	169.32	57.792	
7,400.00	7,301.06	7,289.13	7,334.51	29.86	142.20	-1.131	9,609.37	-1,189.10	9,789.01	9,617.07	171.94	56.933	
7,500.00	7,398.94	7,353.57	7,398.94	30.31	143.38	-1.013	9,609.17	-1,189.10	9,792.45	9,618.88	173.57	56.418	
7,600.00	7,496.81	7,451.44	7,496.81	30.77	145.24	-0.895	9,609.17	-1,189.10	9,796.20	9,620.32	175.87	55.701	
7,700.00	7,594.68	7,549.31	7,594.68	31.22	147.09	-0.777	9,609.17	-1,189.10	9,799.98	9,621.81	178.18	55.002	
7,800.00	7,692.55	7,660.97	7,706.33	31.68	149.21	-0.659	9,609.64	-1,189.10	9,804.29	9,623.55	180.74	54.245	
7,900.00	7,790.42	7,779.88	7,825.24	32.14	151.46	-0.541	9,609.35	-1,189.10	9,807.92	9,624.47	183.44	53.465	
8,000.00	7,888.29	7,842.95	7,888.29	32.59	152.67	-0.423	9,609.17	-1,189.10	9,811.59	9,626.48	185.10	53.006	
8,100.00	7,986.16	7,940.82	7,986.16	33.05	154.59	-0.306	9,609.17	-1,189.10	9,815.54	9,628.06	187.48	52.355	
8,200.00	8,084.03	8,038.69	8,084.03	33.51	156.52	-0.188	9,609.17	-1,189.10	9,819.53	9,629.67	189.86	51.721	
8,300.00	8,181.90	8,162.77	8,208.10	33.96	158.96	-0.071	9,609.82	-1,189.10	9,824.25	9,631.50	192.75	50.968	
8,400.00	8,279.77	8,296.52	8,341.84	34.42	161.60	0.046	9,609.22	-1,189.10	9,827.89	9,632.05	195.83	50.185	
8,500.00	8,377.64	8,332.35	8,377.64	34.88	162.30	0.164	9,609.17	-1,189.10	9,831.75	9,634.76	196.99	49.910	
8,600.00	8,475.51	8,430.22	8,475.51	35.34	164.23	0.281	9,609.17	-1,189.10	9,835.91	9,636.54	199.37	49.335	
8,700.00	8,573.38	8,528.09	8,573.38	35.79	166.16	0.398	9,609.17	-1,189.10	9,840.11	9,638.36	201.75	48.775	
8,800.00	8,671.25	8,654.89	8,700.18	36.25	168.66	0.515	9,609.80	-1,189.10	9,845.02	9,640.33	204.69	48.096	
8,845.65	8,715.93	8,715.85	8,761.13	36.46	169.86	0.568	9,609.57	-1,189.10	9,846.80	9,640.70	206.10	47.777	
8,900.00	8,769.20	8,788.54	8,833.83	36.71	171.29	0.629	9,609.17	-1,189.10	9,848.76	9,640.99	207.77	47.402	
9,000.00	8,867.59	8,822.34	8,867.59	37.14	171.98	0.731	9,609.17	-1,189.10	9,852.30	9,643.41	208.89	47.164	
9,100.00	8,966.42	8,921.16	8,966.42	37.56	174.00	0.818	9,609.17	-1,189.10	9,855.54	9,644.21	211.32	46.637	
9,200.00	9,065.61	9,020.36	9,065.61	37.96	176.03	0.890	9,609.17	-1,189.10	9,858.24	9,644.50	213.74	46.122	
9,300.00	9,165.10	9,153.37	9,198.62	38.34	178.74	0.947	9,609.74	-1,189.10	9,861.03	9,644.19	216.84	45.476	
9,400.00	9,264.82	9,289.70	9,334.94	38.70	181.53	0.989	9,609.03	-1,189.10	9,862.12	9,642.14	219.98	44.832	
9,500.00	9,364.70	9,319.50	9,364.70	39.04	182.14	1.017	9,609.17	-1,189.10	9,863.05	9,642.13	220.93	44.644	
9,600.00	9,464.67	9,419.49	9,464.67	39.36	184.18	1.029	9,609.17	-1,189.10	9,863.54	9,640.25	223.29	44.174	
9,635.33	9,500.00	9,454.82	9,500.00	39.47	184.82	1.030	9,609.17	-1,189.10	9,863.57	9,639.53	224.04	44.026	
9,700.00	9,564.67	9,519.49	9,564.67	39.66	185.98	1.030	9,609.17	-1,189.10	9,863.57	9,638.18	225.39	43.762	
9,800.00	9,664.67	9,619.49	9,664.67	39.95	187.73	1.030	9,609.17	-1,189.10	9,863.57	9,636.13	227.44	43.368	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - Manzanita State #2 - Wellbore #1 - Surveys													Offset Site Error: 0.00 usft
Survey Program: 404-INC-ONLY													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,900.00	9,764.67	9,719.49	9,764.67	40.25	189.48	1.030	9,609.17	-1,189.10	9,863.57	9,634.08	229.49	42.980	
10,000.00	9,864.67	9,825.75	9,870.93	40.55	191.34	1.030	9,609.43	-1,189.10	9,863.83	9,632.18	231.65	42.581	
10,100.00	9,964.67	9,934.89	9,980.06	40.85	193.25	1.030	9,609.31	-1,189.10	9,863.72	9,629.86	233.86	42.178	
10,200.00	10,064.67	10,019.50	10,064.67	41.15	194.75	1.030	9,609.17	-1,189.10	9,863.57	9,627.91	235.66	41.855	
10,300.00	10,164.67	10,119.50	10,164.67	41.45	196.65	1.030	9,609.17	-1,189.10	9,863.57	9,625.71	237.86	41.468	
10,319.92	10,184.58	10,139.42	10,184.58	41.51	197.02	1.030	9,609.17	-1,189.10	9,863.57	9,625.27	238.30	41.392	
10,350.00	10,214.65	10,169.49	10,214.65	41.60	197.59	1.030	9,609.17	-1,189.10	9,862.78	9,623.82	238.96	41.274	
10,400.00	10,264.41	10,219.24	10,264.41	41.74	198.54	1.031	9,609.17	-1,189.10	9,857.99	9,617.93	240.05	41.066	
10,450.00	10,313.55	10,279.26	10,324.42	41.88	199.68	1.032	9,609.61	-1,189.10	9,849.32	9,607.98	241.34	40.811	
10,500.00	10,361.72	10,339.32	10,384.48	42.02	200.82	1.034	9,609.51	-1,189.10	9,835.88	9,593.26	242.62	40.540	
10,550.00	10,408.53	10,397.63	10,442.79	42.14	201.92	1.037	9,609.34	-1,189.10	9,818.24	9,574.38	243.86	40.262	
10,600.00	10,453.64	10,453.75	10,498.91	42.25	202.99	1.040	9,609.11	-1,189.10	9,796.54	9,551.49	245.05	39.978	
10,650.00	10,496.71	10,451.57	10,496.71	42.35	202.95	1.044	9,609.17	-1,189.10	9,771.12	9,526.00	245.13	39.861	
10,700.00	10,537.40	10,492.26	10,537.40	42.43	203.76	1.049	9,609.17	-1,189.10	9,742.10	9,496.07	246.03	39.596	
10,750.00	10,575.40	10,530.26	10,575.40	42.51	204.51	1.054	9,609.17	-1,189.10	9,709.65	9,462.77	246.88	39.330	
10,800.00	10,610.43	10,565.29	10,610.43	42.57	205.20	1.060	9,609.17	-1,189.10	9,674.00	9,426.36	247.65	39.064	
10,850.00	10,642.22	10,597.08	10,642.22	42.61	205.82	1.066	9,609.17	-1,189.10	9,635.44	9,387.10	248.34	38.799	
10,900.00	10,670.52	10,625.38	10,670.52	42.65	206.38	1.072	9,609.17	-1,189.10	9,594.26	9,345.30	248.96	38.538	
10,950.00	10,695.13	10,649.99	10,695.13	42.68	206.86	1.079	9,609.17	-1,189.10	9,550.77	9,301.28	249.49	38.281	
11,000.00	10,715.85	10,670.71	10,715.85	42.70	207.27	1.087	9,609.17	-1,189.10	9,505.30	9,255.36	249.94	38.031	
11,050.00	10,732.53	10,687.39	10,732.53	42.71	207.60	1.095	9,609.17	-1,189.10	9,458.20	9,207.90	250.29	37.788	
11,100.00	10,745.04	10,699.90	10,745.04	42.72	207.85	1.103	9,609.17	-1,189.10	9,409.82	9,159.26	250.56	37.555	
11,150.00	10,753.28	10,708.14	10,753.28	42.73	208.01	1.111	9,609.17	-1,189.10	9,360.54	9,109.80	250.74	37.332	
11,200.00	10,757.20	10,712.06	10,757.20	42.74	208.09	1.119	9,609.17	-1,189.10	9,310.73	9,059.90	250.83	37.120	
11,224.92	10,757.52	10,712.38	10,757.52	42.75	208.09	1.124	9,609.17	-1,189.10	9,285.83	9,034.99	250.84	37.019	
11,300.00	10,756.87	10,711.73	10,756.87	42.80	208.08	1.137	9,609.17	-1,189.10	9,210.77	8,959.94	250.84	36.720	
11,400.00	10,755.99	10,710.85	10,755.99	42.90	208.06	1.154	9,609.17	-1,189.10	9,110.82	8,859.98	250.84	36.321	
11,500.00	10,755.12	10,709.98	10,755.12	43.06	208.05	1.172	9,609.17	-1,189.10	9,010.86	8,760.02	250.85	35.922	
11,600.00	10,754.25	10,709.11	10,754.25	43.28	208.03	1.191	9,609.17	-1,189.10	8,910.91	8,660.06	250.85	35.523	
11,700.00	10,753.37	10,708.24	10,753.37	43.55	208.01	1.209	9,609.17	-1,189.10	8,810.95	8,560.10	250.86	35.124	
11,800.00	10,752.50	10,707.36	10,752.50	43.90	207.99	1.229	9,609.17	-1,189.10	8,711.00	8,460.14	250.86	34.724	
11,900.00	10,751.63	10,706.49	10,751.63	44.31	207.98	1.248	9,609.17	-1,189.10	8,611.05	8,360.18	250.87	34.324	
12,000.00	10,750.76	10,705.62	10,750.76	44.77	207.96	1.269	9,609.17	-1,189.10	8,511.10	8,260.22	250.88	33.925	
12,100.00	10,749.88	10,704.74	10,749.88	45.29	207.94	1.289	9,609.17	-1,189.10	8,411.15	8,160.26	250.89	33.525	
12,200.00	10,749.01	10,703.87	10,749.01	45.87	207.92	1.310	9,609.17	-1,189.10	8,311.20	8,060.29	250.91	33.125	
12,300.00	10,748.14	10,703.00	10,748.14	46.48	207.91	1.332	9,609.17	-1,189.10	8,211.25	7,960.33	250.92	32.725	
12,400.00	10,747.27	10,702.13	10,747.27	47.14	207.89	1.354	9,609.17	-1,189.10	8,111.31	7,860.37	250.94	32.324	
12,500.00	10,746.39	10,701.25	10,746.39	47.84	207.87	1.377	9,609.17	-1,189.10	8,011.36	7,760.41	250.95	31.924	
12,600.00	10,745.52	10,700.38	10,745.52	48.58	207.86	1.400	9,609.17	-1,189.10	7,911.42	7,660.45	250.97	31.523	
12,700.00	10,744.65	10,699.51	10,744.65	49.35	207.84	1.424	9,609.17	-1,189.10	7,811.48	7,560.49	250.99	31.123	
12,800.00	10,743.78	10,698.64	10,743.78	50.15	207.82	1.449	9,609.17	-1,189.10	7,711.54	7,460.52	251.01	30.722	
12,888.61	10,743.00	10,697.86	10,743.00	50.89	207.81	1.471	9,609.17	-1,189.10	7,622.98	7,371.94	251.03	30.367	
12,900.00	10,742.88	10,697.74	10,742.88	50.98	207.80	1.474	9,609.17	-1,189.10	7,611.60	7,360.56	251.03	30.321	
12,939.06	10,742.12	10,696.98	10,742.12	51.32	207.79	1.484	9,609.17	-1,189.10	7,572.56	7,321.53	251.03	30.165	
13,000.00	10,740.51	10,695.37	10,740.51	51.85	207.76	1.500	9,609.17	-1,189.10	7,511.68	7,260.66	251.03	29.924	
13,100.00	10,737.88	10,692.74	10,737.88	52.74	207.71	1.527	9,609.17	-1,189.10	7,411.78	7,160.76	251.02	29.527	
13,147.49	10,736.63	10,691.49	10,736.63	53.17	207.68	1.539	9,609.17	-1,189.10	7,364.33	7,113.32	251.01	29.338	
13,200.00	10,735.25	10,690.11	10,735.25	53.65	207.65	1.558	9,609.17	-1,189.10	7,311.89	7,060.88	251.01	29.130	
13,300.00	10,732.61	10,687.47	10,732.61	54.61	207.60	1.614	9,609.17	-1,189.10	7,212.19	6,961.16	251.03	28.730	
13,347.43	10,731.36	10,686.22	10,731.36	55.08	207.58	1.651	9,609.17	-1,189.10	7,165.01	6,913.96	251.05	28.540	
13,400.00	10,729.98	10,684.84	10,729.98	55.60	207.55	1.696	9,609.17	-1,189.10	7,112.76	6,861.68	251.07	28.329	
13,500.00	10,727.34	10,682.20	10,727.34	56.62	207.50	1.784	9,609.17	-1,189.10	7,013.38	6,762.26	251.12	27.928	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - Manzanita State #2 - Wellbore #1 - Surveys													Offset Site Error:
Survey Program: 404-INC-ONLY													0.00 usft
Rule Assigned:													Offset Well Error:
0.00 usft													
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,600.00	10,724.71	10,679.57	10,724.71	57.66	207.45	1.874	9,609.17	-1,189.10	6,914.02	6,662.84	251.17	27.527	
13,700.00	10,722.08	10,676.94	10,722.08	58.72	207.39	1.967	9,609.17	-1,189.10	6,814.67	6,563.44	251.23	27.125	
13,800.00	10,719.44	10,674.30	10,719.44	59.79	207.34	2.063	9,609.17	-1,189.10	6,715.35	6,464.05	251.29	26.723	
13,900.00	10,716.81	10,671.67	10,716.81	60.88	207.29	2.161	9,609.17	-1,189.10	6,616.04	6,364.68	251.36	26.321	
14,000.00	10,714.18	10,669.04	10,714.18	61.99	207.24	2.263	9,609.17	-1,189.10	6,516.75	6,265.33	251.43	25.919	
14,055.43	10,712.72	10,667.58	10,712.72	62.60	207.21	2.320	9,609.17	-1,189.10	6,461.73	6,210.26	251.47	25.696	
14,100.00	10,711.54	10,666.40	10,711.54	63.10	207.19	2.364	9,609.17	-1,189.10	6,417.45	6,165.95	251.50	25.517	
14,200.00	10,708.91	10,663.77	10,708.91	64.22	207.13	2.442	9,609.17	-1,189.10	6,317.87	6,066.31	251.55	25.116	
14,255.44	10,707.45	10,662.31	10,707.45	64.84	207.11	2.473	9,609.17	-1,189.10	6,262.55	6,010.98	251.57	24.894	
14,300.00	10,706.27	10,661.14	10,706.27	65.33	207.08	2.494	9,609.17	-1,189.10	6,218.06	5,966.48	251.58	24.716	
14,400.00	10,703.64	10,658.50	10,703.64	66.46	207.03	2.543	9,609.17	-1,189.10	6,118.23	5,866.63	251.60	24.317	
14,500.00	10,701.01	10,655.87	10,701.01	67.59	206.98	2.593	9,609.17	-1,189.10	6,018.41	5,766.78	251.63	23.918	
14,600.00	10,698.37	10,653.24	10,698.37	68.74	206.93	2.644	9,609.17	-1,189.10	5,918.59	5,666.93	251.66	23.518	
14,700.00	10,695.74	10,650.60	10,695.74	69.90	206.88	2.698	9,609.17	-1,189.10	5,818.77	5,567.08	251.69	23.119	
14,800.00	10,693.11	10,647.97	10,693.11	71.07	206.82	2.753	9,609.17	-1,189.10	5,718.96	5,467.24	251.73	22.719	
14,900.00	10,690.47	10,645.33	10,690.47	72.25	206.77	2.810	9,609.17	-1,189.10	5,619.16	5,367.40	251.76	22.319	
15,000.00	10,687.84	10,642.70	10,687.84	73.43	206.72	2.870	9,609.17	-1,189.10	5,519.36	5,267.56	251.80	21.919	
15,100.00	10,685.21	10,640.07	10,685.21	74.63	206.67	2.931	9,609.17	-1,189.10	5,419.57	5,167.72	251.85	21.519	
15,200.00	10,682.57	10,637.43	10,682.57	75.84	206.62	2.995	9,609.17	-1,189.10	5,319.78	5,067.89	251.89	21.119	
15,300.00	10,679.94	10,634.80	10,679.94	77.05	206.56	3.061	9,609.17	-1,189.10	5,220.00	4,968.06	251.95	20.719	
15,400.00	10,677.31	10,632.17	10,677.31	78.27	206.51	3.130	9,609.17	-1,189.10	5,120.23	4,868.23	252.00	20.318	
15,500.00	10,674.67	10,629.53	10,674.67	79.50	206.46	3.202	9,609.17	-1,189.10	5,020.47	4,768.41	252.06	19.918	
15,600.00	10,672.04	10,626.90	10,672.04	80.74	206.41	3.276	9,609.17	-1,189.10	4,920.71	4,668.59	252.12	19.517	
15,700.00	10,669.41	10,624.27	10,669.41	81.98	206.36	3.354	9,609.17	-1,189.10	4,820.96	4,568.77	252.19	19.117	
15,800.00	10,666.77	10,621.63	10,666.77	83.23	206.30	3.435	9,609.17	-1,189.10	4,721.22	4,468.96	252.26	18.716	
15,900.00	10,664.14	10,619.00	10,664.14	84.49	206.25	3.519	9,609.17	-1,189.10	4,621.49	4,369.16	252.34	18.315	
16,000.00	10,661.51	10,616.37	10,661.51	85.75	206.20	3.607	9,609.17	-1,189.10	4,521.78	4,269.36	252.42	17.914	
16,100.00	10,658.87	10,613.73	10,658.87	87.02	206.15	3.699	9,609.17	-1,189.10	4,422.07	4,169.57	252.50	17.513	
16,200.00	10,656.24	10,611.10	10,656.24	88.29	206.10	3.796	9,609.17	-1,189.10	4,322.38	4,069.78	252.60	17.112	
16,300.00	10,653.61	10,608.47	10,653.61	89.57	206.05	3.896	9,609.17	-1,189.10	4,222.69	3,970.00	252.70	16.711	
16,400.00	10,650.97	10,605.83	10,650.97	90.86	205.99	4.002	9,609.17	-1,189.10	4,123.02	3,870.22	252.80	16.309	
16,500.00	10,648.34	10,603.20	10,648.34	92.15	205.94	4.113	9,609.17	-1,189.10	4,023.37	3,770.46	252.92	15.908	
16,600.00	10,645.71	10,600.57	10,645.71	93.44	205.89	4.230	9,609.17	-1,189.10	3,923.73	3,670.70	253.04	15.507	
16,700.00	10,643.07	10,597.93	10,643.07	94.74	205.84	4.352	9,609.17	-1,189.10	3,824.11	3,570.95	253.17	15.105	
16,800.00	10,640.44	10,595.30	10,640.44	96.04	205.79	4.482	9,609.17	-1,189.10	3,724.51	3,471.21	253.30	14.704	
16,892.04	10,638.02	10,592.88	10,638.02	97.24	205.74	4.607	9,609.17	-1,189.10	3,632.85	3,379.41	253.44	14.334	
16,900.00	10,637.82	10,592.68	10,637.82	97.34	205.73	4.618	9,609.17	-1,189.10	3,624.93	3,371.47	253.45	14.302	
16,987.49	10,637.09	10,591.95	10,637.09	98.49	205.72	4.743	9,609.17	-1,189.10	3,537.80	3,284.17	253.62	13.949	
17,000.00	10,637.18	10,592.04	10,637.18	98.65	205.72	4.762	9,609.17	-1,189.10	3,525.34	3,271.69	253.65	13.898	
17,100.00	10,637.88	10,592.74	10,637.88	99.96	205.74	4.914	9,609.17	-1,189.10	3,425.77	3,171.88	253.89	13.493	
17,200.00	10,638.58	10,593.44	10,638.58	101.27	205.75	5.076	9,609.17	-1,189.10	3,326.23	3,072.09	254.14	13.088	
17,300.00	10,639.27	10,594.13	10,639.27	102.59	205.76	5.248	9,609.17	-1,189.10	3,226.71	2,972.30	254.41	12.683	
17,400.00	10,639.97	10,594.83	10,639.97	103.91	205.78	5.430	9,609.17	-1,189.10	3,127.23	2,872.54	254.69	12.279	
17,500.00	10,640.67	10,595.53	10,640.67	105.23	205.79	5.624	9,609.17	-1,189.10	3,027.78	2,772.79	254.99	11.874	
17,600.00	10,641.37	10,596.23	10,641.37	106.56	205.80	5.832	9,609.17	-1,189.10	2,928.36	2,673.06	255.30	11.470	
17,700.00	10,642.07	10,596.93	10,642.07	107.89	205.82	6.054	9,609.17	-1,189.10	2,828.99	2,573.35	255.64	11.066	
17,800.00	10,642.76	10,597.63	10,642.76	109.22	205.83	6.293	9,609.17	-1,189.10	2,729.66	2,473.66	256.01	10.662	
17,900.00	10,643.46	10,598.32	10,643.46	110.56	205.85	6.549	9,609.17	-1,189.10	2,630.39	2,373.99	256.40	10.259	
18,000.00	10,644.16	10,599.02	10,644.16	111.90	205.86	6.826	9,609.17	-1,189.10	2,531.17	2,274.35	256.82	9.856	
18,100.00	10,644.86	10,599.72	10,644.86	113.24	205.87	7.125	9,609.17	-1,189.10	2,432.01	2,174.74	257.28	9.453	
18,200.00	10,645.56	10,600.42	10,645.56	114.58	205.89	7.449	9,609.17	-1,189.10	2,332.93	2,075.16	257.77	9.050	
18,300.00	10,646.25	10,601.12	10,646.25	115.93	205.90	7.803	9,609.17	-1,189.10	2,233.93	1,975.61	258.32	8.648	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - Manzanita State #2 - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 404-INC-ONLY												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference	Offset	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,400.00	10,646.95	10,601.81	10,646.95	117.28	205.91	8.189	9,609.17	-1,189.10	2,135.02	1,876.11	258.91	8.246	
18,500.00	10,647.65	10,602.51	10,647.65	118.63	205.93	8.612	9,609.17	-1,189.10	2,036.22	1,776.65	259.57	7.845	
18,600.00	10,648.35	10,603.21	10,648.35	119.98	205.94	9.079	9,609.17	-1,189.10	1,937.54	1,677.24	260.30	7.443	
18,700.00	10,649.05	10,603.91	10,649.05	121.33	205.96	9.596	9,609.17	-1,189.10	1,839.00	1,577.89	261.11	7.043	
18,800.00	10,649.75	10,604.61	10,649.75	122.69	205.97	10.171	9,609.17	-1,189.10	1,740.63	1,478.60	262.03	6.643	
18,900.00	10,650.44	10,605.30	10,650.44	124.05	205.98	10.815	9,609.17	-1,189.10	1,642.45	1,379.39	263.06	6.244	
19,000.00	10,651.14	10,606.00	10,651.14	125.41	206.00	11.541	9,609.17	-1,189.10	1,544.51	1,280.27	264.24	5.845	
19,100.00	10,651.84	10,606.70	10,651.84	126.77	206.01	12.365	9,609.17	-1,189.10	1,446.85	1,181.26	265.60	5.448	
19,200.00	10,652.54	10,607.40	10,652.54	128.14	206.02	13.308	9,609.17	-1,189.10	1,349.54	1,082.37	267.17	5.051	
19,300.00	10,653.24	10,608.10	10,653.24	129.50	206.04	14.397	9,609.17	-1,189.10	1,252.64	983.63	269.01	4.656	
19,392.11	10,653.88	10,608.74	10,653.88	130.76	206.05	15.561	9,609.17	-1,189.10	1,163.86	892.85	271.01	4.295	
19,400.00	10,653.92	10,608.78	10,653.92	130.87	206.05	15.668	9,609.17	-1,189.10	1,156.28	885.08	271.19	4.264	
19,408.64	10,653.95	10,608.81	10,653.95	130.99	206.05	15.788	9,609.17	-1,189.10	1,147.98	876.58	271.40	4.230	
19,500.00	10,654.06	10,608.92	10,654.06	132.24	206.05	17.170	9,609.17	-1,189.10	1,060.58	786.79	273.79	3.874	
19,600.00	10,654.18	10,609.04	10,654.18	133.61	206.06	18.968	9,609.17	-1,189.10	965.76	688.81	276.95	3.487	
19,700.00	10,654.30	10,609.16	10,654.30	134.98	206.06	21.155	9,609.17	-1,189.10	872.09	591.26	280.83	3.105	
19,800.00	10,654.42	10,609.28	10,654.42	136.36	206.06	23.863	9,609.17	-1,189.10	780.00	494.34	285.66	2.730	
19,900.00	10,654.54	10,609.40	10,654.54	137.73	206.06	27.285	9,609.17	-1,189.10	690.11	398.35	291.76	2.365	
20,000.00	10,654.66	10,609.52	10,654.66	139.11	206.07	31.711	9,609.17	-1,189.10	603.42	303.91	299.51	2.015	
20,100.00	10,654.78	10,609.65	10,654.78	140.49	206.07	37.573	9,609.17	-1,189.10	521.50	212.16	309.34	1.686	
20,200.00	10,654.91	10,609.77	10,654.91	141.87	206.07	45.497	9,609.17	-1,189.10	447.02	125.52	321.50	1.390 Level 3	
20,300.00	10,655.03	10,609.89	10,655.03	143.25	206.07	56.279	9,609.17	-1,189.10	384.29	49.03	335.27	1.146 Level 3	
20,400.00	10,655.15	10,610.01	10,655.15	144.63	206.08	70.521	9,609.17	-1,189.10	339.90	-7.52	347.43	0.978 Level 3	
20,500.00	10,655.27	10,610.13	10,655.27	146.01	206.08	87.621	9,609.17	-1,189.10	321.55	-30.19	351.74	0.914 Level 3, ES, SF	
20,510.72	10,655.28	10,610.14	10,655.28	146.16	206.08	89.531	9,609.17	-1,189.10	321.37	-30.13	351.49	0.914 Level 3, CC	
20,600.00	10,655.39	10,610.25	10,655.39	147.40	206.08	105.058	9,609.17	-1,189.10	333.54	-10.62	344.15	0.969 Level 3	
20,700.00	10,655.51	10,610.37	10,655.51	148.78	206.08	120.029	9,609.17	-1,189.10	372.97	44.29	328.67	1.135 Level 3	
20,800.00	10,655.63	10,610.49	10,655.63	150.17	206.09	131.524	9,609.17	-1,189.10	432.39	120.24	312.15	1.385 Level 3	
20,900.00	10,655.75	10,610.61	10,655.75	151.56	206.09	139.991	9,609.17	-1,189.10	504.79	206.65	298.14	1.693	
21,000.00	10,655.87	10,610.74	10,655.87	152.95	206.09	146.234	9,609.17	-1,189.10	585.38	298.10	287.29	2.038	
21,100.00	10,656.00	10,610.86	10,656.00	154.34	206.09	150.926	9,609.17	-1,189.10	671.21	392.08	279.13	2.405	
21,103.87	10,656.00	10,610.86	10,656.00	154.39	206.09	151.083	9,609.17	-1,189.10	674.61	395.75	278.86	2.419	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - NJ State #1 - Wellbore #1 - Surveys													Offset Site Error:
Survey Program: 405-INC-ONLY													Offset Well Error:
Reference	Offset	Semi Major Axis		Azimuth		Offset Wellbore Centre		Rule Assigned:		Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	25.50	0.00	0.00	1.731	5,655.00	170.87	5,657.64				
100.00	100.00	74.50	100.00	0.13	0.72	1.731	5,655.00	170.87	5,657.58	5,656.73	0.85	6,647.226	
200.00	200.00	174.50	200.00	0.49	1.69	1.731	5,655.00	170.87	5,657.58	5,655.40	2.18	2,595.204	
300.00	300.00	274.50	300.00	0.85	2.66	1.731	5,655.00	170.87	5,657.58	5,654.07	3.51	1,612.348	
400.00	400.00	374.50	400.00	1.20	3.63	1.731	5,655.00	170.87	5,657.58	5,652.74	4.84	1,169.452	
500.00	500.00	474.51	500.00	1.56	5.30	1.731	5,655.00	170.87	5,657.58	5,650.72	6.86	824.529	
600.00	599.99	574.51	599.99	1.92	7.27	1.738	5,655.00	170.87	5,657.17	5,647.98	9.19	615.850	
672.14	672.13	646.64	672.13	2.17	8.69	1.750	5,655.00	170.87	5,656.57	5,645.71	10.86	520.800	
700.00	699.98	679.16	704.64	2.27	9.33	1.754	5,655.78	170.87	5,657.12	5,645.52	11.60	487.679	
800.00	799.96	797.07	822.55	2.62	11.65	1.769	5,655.50	170.87	5,656.06	5,641.78	14.28	396.159	
900.00	899.95	914.99	940.46	2.98	13.98	1.785	5,654.84	170.87	5,654.68	5,637.72	16.96	333.504	
1,000.00	999.93	974.49	999.93	3.34	15.27	1.801	5,655.00	170.87	5,653.86	5,635.26	18.61	303.863	
1,100.00	1,099.92	1,074.47	1,099.92	3.69	17.39	1.816	5,655.00	170.87	5,653.04	5,631.96	21.08	268.148	
1,165.50	1,165.41	1,139.96	1,165.41	3.93	18.78	1.827	5,655.00	170.87	5,652.50	5,629.80	22.70	248.973	
1,200.00	1,199.90	1,180.51	1,205.95	4.05	19.64	1.832	5,655.79	170.87	5,653.01	5,629.32	23.69	238.670	
1,300.00	1,299.89	1,298.03	1,323.46	4.41	22.13	1.847	5,655.48	170.87	5,651.92	5,625.39	26.53	213.017	
1,400.00	1,399.87	1,415.54	1,440.97	4.76	24.62	1.863	5,654.81	170.87	5,650.53	5,621.15	29.38	192.327	
1,500.00	1,499.86	1,474.49	1,499.86	5.12	25.80	1.879	5,655.00	170.87	5,649.75	5,618.82	30.92	182.701	
1,600.00	1,599.84	1,574.47	1,599.84	5.48	27.85	1.894	5,655.00	170.87	5,648.92	5,615.60	33.33	169.504	
1,643.74	1,643.57	1,618.20	1,643.57	5.64	28.74	1.901	5,655.00	170.87	5,648.56	5,614.19	34.38	164.312	
1,700.00	1,699.83	1,694.90	1,720.25	5.84	30.31	1.910	5,656.12	170.87	5,649.26	5,613.11	36.15	156.287	
1,800.00	1,799.81	1,831.39	1,856.72	6.20	33.10	1.926	5,655.18	170.87	5,647.75	5,608.46	39.29	143.729	
1,900.00	1,899.80	1,874.48	1,899.80	6.56	33.94	1.941	5,655.00	170.87	5,646.46	5,605.96	40.50	139.429	
2,000.00	1,999.78	1,974.47	1,999.78	6.91	35.83	1.957	5,655.00	170.87	5,645.64	5,602.89	42.75	132.071	
2,050.23	2,050.00	2,024.69	2,050.00	7.09	36.78	1.965	5,655.00	170.87	5,645.23	5,601.35	43.88	128.660	
2,100.00	2,099.76	2,074.45	2,099.76	7.27	37.72	1.975	5,655.00	170.87	5,644.88	5,599.88	45.00	125.451	
2,120.08	2,119.84	2,094.53	2,119.84	7.34	38.10	1.980	5,655.00	170.87	5,644.78	5,599.33	45.45	124.202 CC	
2,200.00	2,199.71	2,183.23	2,208.54	7.63	39.78	2.007	5,655.47	170.87	5,645.04	5,597.63	47.41	119.064	
2,269.47	2,269.11	2,260.35	2,285.66	7.88	41.24	2.040	5,655.29	170.87	5,644.96	5,595.84	49.12	114.924	
2,300.00	2,299.59	2,294.22	2,319.53	7.99	41.88	2.057	5,655.18	170.87	5,644.98	5,595.11	49.87	113.196	
2,400.00	2,399.37	2,374.09	2,399.37	8.35	43.42	2.123	5,655.00	170.87	5,645.46	5,593.70	51.76	109.060	
2,500.00	2,499.03	2,473.74	2,499.03	8.71	45.38	2.206	5,655.00	170.87	5,646.69	5,592.60	54.09	104.397	
2,600.00	2,598.52	2,573.24	2,598.52	9.07	47.34	2.306	5,655.00	170.87	5,648.44	5,592.03	56.41	100.129 ES	
2,700.00	2,697.83	2,688.06	2,713.33	9.44	49.60	2.423	5,655.66	170.87	5,651.40	5,592.36	59.04	95.722	
2,800.00	2,796.92	2,804.83	2,830.10	9.81	51.90	2.557	5,655.15	170.87	5,653.80	5,592.10	61.71	91.619	
2,900.00	2,895.75	2,870.51	2,895.75	10.19	53.22	2.707	5,655.00	170.87	5,656.93	5,593.52	63.41	89.211	
3,000.00	2,994.31	2,969.07	2,994.31	10.57	55.24	2.873	5,655.00	170.87	5,660.88	5,595.07	65.81	86.022	
3,100.00	3,092.56	3,067.32	3,092.56	10.96	57.25	3.056	5,655.00	170.87	5,665.40	5,597.20	68.20	83.066	
3,161.76	3,153.08	3,137.15	3,162.39	11.21	58.67	3.176	5,655.75	170.87	5,669.25	5,599.38	69.87	81.136	
3,200.00	3,190.50	3,181.24	3,206.47	11.36	59.57	3.253	5,655.65	170.87	5,671.16	5,600.23	70.93	79.958	
3,300.00	3,288.37	3,296.56	3,321.78	11.77	61.93	3.454	5,655.15	170.87	5,675.98	5,602.30	73.68	77.033	
3,400.00	3,386.24	3,361.06	3,386.24	12.17	63.31	3.654	5,655.00	170.87	5,681.05	5,605.58	75.47	75.278	
3,500.00	3,484.11	3,458.93	3,484.11	12.59	65.46	3.854	5,655.00	170.87	5,686.44	5,608.41	78.02	72.880	
3,600.00	3,581.98	3,566.64	3,591.82	13.00	67.83	4.052	5,655.86	170.87	5,692.76	5,611.96	80.80	70.454	
3,700.00	3,679.85	3,695.79	3,720.95	13.42	70.66	4.252	5,655.28	170.87	5,697.85	5,613.80	84.05	67.791	
3,800.00	3,777.73	3,752.62	3,777.73	13.84	71.93	4.450	5,655.00	170.87	5,703.01	5,617.28	85.73	66.520	
3,900.00	3,875.60	3,850.49	3,875.60	14.26	74.16	4.648	5,655.00	170.87	5,708.68	5,620.29	88.39	64.588	
4,000.00	3,973.47	3,948.36	3,973.47	14.69	76.40	4.846	5,655.00	170.87	5,714.41	5,623.37	91.04	62.768	
4,100.00	4,071.34	4,068.10	4,093.18	15.12	79.13	5.043	5,656.19	170.87	5,721.43	5,627.24	94.19	60.741	
4,200.00	4,169.21	4,198.56	4,223.63	15.55	82.11	5.240	5,655.32	170.87	5,726.65	5,629.06	97.59	58.679	
4,300.00	4,267.08	4,242.09	4,267.08	15.98	83.13	5.437	5,655.00	170.87	5,732.00	5,632.96	99.04	57.873	
4,400.00	4,364.95	4,339.96	4,364.95	16.42	85.62	5.633	5,655.00	170.87	5,738.00	5,636.04	101.96	56.277	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - NJ State #1 - Wellbore #1 - Surveys													Offset Site Error: 0.00 usft
Survey Program: 405-INC-ONLY													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,500.00	4,462.82	4,437.83	4,462.82	16.85	88.11	5.829	5,655.00	170.87	5,744.07	5,639.20	104.88	54.770	
4,600.00	4,560.69	4,535.70	4,560.69	17.29	90.60	6.024	5,655.00	170.87	5,750.21	5,642.41	107.79	53.345	
4,700.00	4,658.56	4,633.58	4,658.56	17.73	93.09	6.219	5,655.00	170.87	5,756.41	5,645.70	110.71	51.995	
4,800.00	4,756.43	4,700.00	4,724.79	18.17	94.78	6.413	5,655.00	170.87	5,762.76	5,649.94	112.83	51.076	
4,900.00	4,854.30	4,700.00	4,724.79	18.61	94.78	6.607	5,655.00	170.87	5,770.46	5,657.24	113.23	50.964	
5,000.00	4,952.17	4,700.00	4,724.79	19.05	94.78	6.801	5,655.00	170.87	5,779.88	5,666.29	113.59	50.882	
5,100.00	5,050.04	4,700.00	4,724.79	19.49	94.78	6.994	5,655.00	170.87	5,791.02	5,677.09	113.93	50.829	
5,200.00	5,147.91	4,700.00	4,724.79	19.94	94.78	7.187	5,655.00	170.87	5,803.85	5,689.61	114.24	50.806 SF	
5,300.00	5,245.78	4,700.00	4,724.79	20.38	94.78	7.379	5,655.00	170.87	5,818.38	5,703.87	114.51	50.811	
5,400.00	5,343.65	4,700.00	4,724.79	20.83	94.78	7.571	5,655.00	170.87	5,834.58	5,719.82	114.75	50.844	
5,500.00	5,441.52	4,700.00	4,724.79	21.27	94.78	7.763	5,655.00	170.87	5,852.45	5,737.48	114.97	50.905	
5,600.00	5,539.40	4,700.00	4,724.79	21.72	94.78	7.954	5,655.00	170.87	5,871.96	5,756.81	115.15	50.993	
5,700.00	5,637.27	4,700.00	4,724.79	22.17	94.78	8.144	5,655.00	170.87	5,893.11	5,777.80	115.31	51.109	
5,800.00	5,735.14	4,700.00	4,724.79	22.62	94.78	8.334	5,655.00	170.87	5,915.87	5,800.44	115.43	51.250	
5,900.00	5,833.01	4,700.00	4,724.79	23.07	94.78	8.524	5,655.00	170.87	5,940.23	5,824.71	115.53	51.418	
6,000.00	5,930.88	4,700.00	4,724.79	23.52	94.78	8.713	5,655.00	170.87	5,966.17	5,850.57	115.60	51.612	
6,100.00	6,028.75	4,700.00	4,724.79	23.97	94.78	8.902	5,655.00	170.87	5,993.66	5,878.02	115.64	51.830	
6,200.00	6,126.62	4,700.00	4,724.79	24.42	94.78	9.090	5,655.00	170.87	6,022.69	5,907.03	115.66	52.074	
6,300.00	6,224.49	4,700.00	4,724.79	24.87	94.78	9.278	5,655.00	170.87	6,053.23	5,937.58	115.65	52.342	
6,400.00	6,322.36	4,700.00	4,724.79	25.32	94.78	9.465	5,655.00	170.87	6,085.26	5,969.65	115.62	52.634	
6,500.00	6,420.23	4,700.00	4,724.79	25.77	94.78	9.652	5,655.00	170.87	6,118.76	6,003.20	115.56	52.949	
6,600.00	6,518.10	4,700.00	4,724.79	26.23	94.78	9.838	5,655.00	170.87	6,153.70	6,038.22	115.48	53.287	
6,700.00	6,615.97	4,700.00	4,724.79	26.68	94.78	10.024	5,655.00	170.87	6,190.06	6,074.68	115.38	53.648	
6,800.00	6,713.84	4,700.00	4,724.79	27.13	94.78	10.210	5,655.00	170.87	6,227.82	6,112.55	115.26	54.032	
6,900.00	6,811.71	4,700.00	4,724.79	27.58	94.78	10.394	5,655.00	170.87	6,266.94	6,151.81	115.12	54.437	
7,000.00	6,909.58	4,700.00	4,724.79	28.04	94.78	10.579	5,655.00	170.87	6,307.40	6,192.44	114.96	54.864	
7,100.00	7,007.45	4,700.00	4,724.79	28.49	94.78	10.763	5,655.00	170.87	6,349.18	6,234.39	114.79	55.311	
7,200.00	7,105.32	4,700.00	4,724.79	28.95	94.78	10.946	5,655.00	170.87	6,392.26	6,277.66	114.60	55.780	
7,300.00	7,203.19	4,700.00	4,724.79	29.40	94.78	11.130	5,655.00	170.87	6,436.59	6,322.20	114.39	56.268	
7,400.00	7,301.06	4,700.00	4,724.79	29.86	94.78	11.312	5,655.00	170.87	6,482.17	6,368.00	114.17	56.776	
7,500.00	7,398.94	4,700.00	4,724.79	30.31	94.78	11.494	5,655.00	170.87	6,528.96	6,415.03	113.94	57.304	
7,600.00	7,496.81	4,700.00	4,724.79	30.77	94.78	11.676	5,655.00	170.87	6,576.94	6,463.25	113.69	57.850	
7,700.00	7,594.68	4,700.00	4,724.79	31.22	94.78	11.857	5,655.00	170.87	6,626.08	6,512.65	113.43	58.415	
7,800.00	7,692.55	4,700.00	4,724.79	31.68	94.78	12.037	5,655.00	170.87	6,676.36	6,563.20	113.16	58.998	
7,900.00	7,790.42	4,700.00	4,724.79	32.14	94.78	12.217	5,655.00	170.87	6,727.75	6,614.86	112.89	59.598	
8,000.00	7,888.29	4,700.00	4,724.79	32.59	94.78	12.397	5,655.00	170.87	6,780.22	6,667.62	112.60	60.216	
8,100.00	7,986.16	4,700.00	4,724.79	33.05	94.78	12.576	5,655.00	170.87	6,833.76	6,721.45	112.30	60.850	
8,200.00	8,084.03	4,700.00	4,724.79	33.51	94.78	12.755	5,655.00	170.87	6,888.33	6,776.32	112.00	61.501	
8,300.00	8,181.90	4,700.00	4,724.79	33.96	94.78	12.933	5,655.00	170.87	6,943.91	6,832.21	111.70	62.168	
8,400.00	8,279.77	4,700.00	4,724.79	34.42	94.78	13.111	5,655.00	170.87	7,000.48	6,889.09	111.38	62.850	
8,500.00	8,377.64	4,700.00	4,724.79	34.88	94.78	13.288	5,655.00	170.87	7,058.01	6,946.94	111.07	63.547	
8,600.00	8,475.51	4,700.00	4,724.79	35.34	94.78	13.464	5,655.00	170.87	7,116.48	7,005.74	110.75	64.259	
8,700.00	8,573.38	4,700.00	4,724.79	35.79	94.78	13.640	5,655.00	170.87	7,175.87	7,065.45	110.42	64.986	
8,800.00	8,671.25	4,700.00	4,724.79	36.25	94.78	13.816	5,655.00	170.87	7,236.15	7,126.06	110.10	65.726	
8,845.65	8,715.93	4,700.00	4,724.79	36.46	94.78	13.896	5,655.00	170.87	7,263.96	7,154.02	109.95	66.068	
8,900.00	8,769.20	4,700.00	4,724.79	36.71	94.78	13.988	5,655.00	170.87	7,297.22	7,187.45	109.77	66.480	
9,000.00	8,867.59	4,700.00	4,724.79	37.14	94.78	14.140	5,655.00	170.87	7,358.56	7,249.15	109.42	67.254	
9,100.00	8,966.42	4,700.00	4,724.79	37.56	94.78	14.269	5,655.00	170.87	7,420.07	7,311.03	109.04	68.047	
9,200.00	9,065.61	4,700.00	4,724.79	37.96	94.78	14.376	5,655.00	170.87	7,481.71	7,373.05	108.65	68.858	
9,300.00	9,165.10	4,700.00	4,724.79	38.34	94.78	14.462	5,655.00	170.87	7,543.42	7,435.17	108.25	69.688	
9,400.00	9,264.82	4,700.00	4,724.79	38.70	94.78	14.525	5,655.00	170.87	7,605.16	7,497.34	107.82	70.536	
9,500.00	9,364.70	4,700.00	4,724.79	39.04	94.78	14.566	5,655.00	170.87	7,666.90	7,559.52	107.38	71.401	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - NJ State #1 - Wellbore #1 - Surveys													Offset Site Error: 0.00 usft
Survey Program: 405-INC-ONLY													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,600.00	9,464.67	4,700.00	4,724.79	39.36	94.78	14.584	5,655.00	170.87	7,728.58	7,621.66	106.92	72.282	
9,635.33	9,500.00	4,700.00	4,724.79	39.47	94.78	14.586	5,655.00	170.87	7,750.36	7,643.60	106.76	72.598	
9,700.00	9,564.67	4,700.00	4,724.79	39.66	94.78	14.586	5,655.00	170.87	7,790.37	7,683.92	106.45	73.182	
9,800.00	9,664.67	4,700.00	4,724.79	39.95	94.78	14.586	5,655.00	170.87	7,852.89	7,746.90	105.98	74.095	
9,900.00	9,764.67	4,700.00	4,724.79	40.25	94.78	14.586	5,655.00	170.87	7,916.17	7,810.65	105.52	75.020	
10,000.00	9,864.67	4,700.00	4,724.79	40.55	94.78	14.586	5,655.00	170.87	7,980.21	7,875.15	105.06	75.956	
10,100.00	9,964.67	4,700.00	4,724.79	40.85	94.78	14.586	5,655.00	170.87	8,044.98	7,940.37	104.61	76.903	
10,200.00	10,064.67	4,700.00	4,724.79	41.15	94.78	14.586	5,655.00	170.87	8,110.47	8,006.30	104.17	77.861	
10,300.00	10,164.67	4,700.00	4,724.79	41.45	94.78	14.586	5,655.00	170.87	8,176.66	8,072.93	103.73	78.828	
10,319.92	10,184.58	4,700.00	4,724.79	41.51	94.78	14.586	5,655.00	170.87	8,189.92	8,086.28	103.64	79.022	
10,350.00	10,214.65	4,700.00	4,724.79	41.60	94.78	14.588	5,655.00	170.87	8,209.43	8,105.93	103.50	79.315	
10,400.00	10,264.41	4,700.00	4,724.79	41.74	94.78	14.599	5,655.00	170.87	8,239.35	8,136.10	103.26	79.794	
10,450.00	10,313.55	4,700.00	4,724.79	41.88	94.78	14.622	5,655.00	170.87	8,265.99	8,163.00	102.99	80.259	
10,500.00	10,361.72	4,700.00	4,724.79	42.02	94.78	14.655	5,655.00	170.87	8,289.17	8,186.46	102.70	80.709	
10,550.00	10,408.53	4,700.00	4,724.79	42.14	94.78	14.698	5,655.00	170.87	8,308.74	8,206.34	102.40	81.142	
10,600.00	10,453.64	4,700.00	4,724.79	42.25	94.78	14.751	5,655.00	170.87	8,324.58	8,222.50	102.07	81.555	
10,650.00	10,496.71	4,700.00	4,724.79	42.35	94.78	14.815	5,655.00	170.87	8,336.59	8,234.86	101.73	81.946	
10,700.00	10,537.40	4,700.00	4,724.79	42.43	94.78	14.888	5,655.00	170.87	8,344.70	8,243.32	101.38	82.314	
10,750.00	10,575.40	4,700.00	4,724.79	42.51	94.78	14.971	5,655.00	170.87	8,348.86	8,247.85	101.01	82.655	
10,800.00	10,610.43	4,700.00	4,724.79	42.57	94.78	15.062	5,655.00	170.87	8,349.03	8,248.41	100.63	82.969	
10,850.00	10,642.22	4,700.00	4,724.79	42.61	94.78	15.163	5,655.00	170.87	8,345.23	8,244.99	100.24	83.252	
10,900.00	10,670.52	4,700.00	4,724.79	42.65	94.78	15.272	5,655.00	170.87	8,337.47	8,237.63	99.85	83.502	
10,950.00	10,695.13	4,700.00	4,724.79	42.68	94.78	15.388	5,655.00	170.87	8,325.81	8,226.36	99.45	83.716	
11,000.00	10,715.85	4,700.00	4,724.79	42.70	94.78	15.512	5,655.00	170.87	8,310.31	8,211.25	99.06	83.893	
11,050.00	10,732.53	4,700.00	4,724.79	42.71	94.78	15.642	5,655.00	170.87	8,291.07	8,192.40	98.67	84.030	
11,100.00	10,745.04	4,700.00	4,724.79	42.72	94.78	15.778	5,655.00	170.87	8,268.21	8,169.92	98.28	84.125	
11,150.00	10,753.28	4,700.00	4,724.79	42.73	94.78	15.919	5,655.00	170.87	8,241.87	8,143.96	97.91	84.176	
11,200.00	10,757.20	4,700.00	4,724.79	42.74	94.78	16.063	5,655.00	170.87	8,212.24	8,114.68	97.56	84.180	
11,224.92	10,757.52	4,700.00	4,724.79	42.75	94.78	16.136	5,655.00	170.87	8,196.29	8,098.91	97.39	84.163	
11,300.00	10,756.87	4,700.00	4,724.79	42.80	94.78	16.361	5,655.00	170.87	8,147.30	8,050.43	96.87	84.105	
11,400.00	10,755.99	4,700.00	4,724.79	42.90	94.78	16.669	5,655.00	170.87	8,082.68	7,986.50	96.18	84.037	
11,500.00	10,755.12	4,700.00	4,724.79	43.06	94.78	16.989	5,655.00	170.87	8,018.78	7,923.29	95.49	83.975	
11,600.00	10,754.25	4,700.00	4,724.79	43.28	94.78	17.320	5,655.00	170.87	7,955.62	7,860.82	94.80	83.920	
11,700.00	10,753.37	4,700.00	4,724.79	43.55	94.78	17.663	5,655.00	170.87	7,893.23	7,799.11	94.11	83.870	
11,800.00	10,752.50	4,700.00	4,724.79	43.90	94.78	18.020	5,655.00	170.87	7,831.61	7,738.18	93.43	83.827	
11,900.00	10,751.63	4,700.00	4,724.79	44.31	94.78	18.390	5,655.00	170.87	7,770.79	7,678.05	92.74	83.788	
12,000.00	10,750.76	4,700.00	4,724.79	44.77	94.78	18.775	5,655.00	170.87	7,710.80	7,618.73	92.06	83.756	
12,100.00	10,749.88	4,700.00	4,724.79	45.29	94.78	19.176	5,655.00	170.87	7,651.63	7,560.25	91.39	83.728	
12,200.00	10,749.01	4,700.00	4,724.79	45.87	94.78	19.592	5,655.00	170.87	7,593.33	7,502.61	90.72	83.704	
12,300.00	10,748.14	4,700.00	4,724.79	46.48	94.78	20.026	5,655.00	170.87	7,535.90	7,445.85	90.05	83.685	
12,400.00	10,747.27	4,700.00	4,724.79	47.14	94.78	20.479	5,655.00	170.87	7,479.36	7,389.97	89.39	83.669	
12,500.00	10,746.39	4,700.00	4,724.79	47.84	94.78	20.951	5,655.00	170.87	7,423.74	7,335.00	88.74	83.657	
12,600.00	10,745.52	4,700.00	4,724.79	48.58	94.78	21.443	5,655.00	170.87	7,369.06	7,280.97	88.10	83.647	
12,700.00	10,744.65	4,700.00	4,724.79	49.35	94.78	21.957	5,655.00	170.87	7,315.34	7,227.88	87.46	83.640	
12,800.00	10,743.78	4,700.00	4,724.79	50.15	94.78	22.495	5,655.00	170.87	7,262.60	7,175.76	86.84	83.636	
12,888.61	10,743.00	4,700.00	4,724.79	50.89	94.78	22.993	5,655.00	170.87	7,216.70	7,130.41	86.29	83.633	
12,900.00	10,742.88	4,700.00	4,724.79	50.98	94.78	23.058	5,655.00	170.87	7,210.84	7,124.62	86.22	83.632	
12,939.06	10,742.12	4,700.00	4,724.79	51.32	94.78	23.285	5,655.00	170.87	7,190.55	7,104.57	85.99	83.624	
13,000.00	10,740.51	4,700.00	4,724.79	51.85	94.78	23.647	5,655.00	170.87	7,158.88	7,073.25	85.63	83.605	
13,100.00	10,737.88	4,700.00	4,724.79	52.74	94.78	24.265	5,655.00	170.87	7,107.72	7,022.67	85.05	83.575	
13,147.49	10,736.63	4,700.00	4,724.79	53.17	94.78	24.569	5,655.00	170.87	7,083.79	6,999.01	84.77	83.561	
13,200.00	10,735.25	4,700.00	4,724.79	53.65	94.78	24.919	5,655.00	170.87	7,057.72	6,973.23	84.48	83.542	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - NJ State #1 - Wellbore #1 - Surveys													Offset Site Error:
Survey Program: 405-INC-ONLY													Offset Well Error:
Reference	Offset	Semi Major Axis		Azimuth		Offset Wellbore Centre		Rule Assigned:		Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
13,300.00	10,732.61	4,700.00	4,724.79	54.61	94.78	25.650	5,655.00	170.87	7,009.51	6,925.56	83.96	83.490	
13,347.43	10,731.36	4,700.00	4,724.79	55.08	94.78	26.027	5,655.00	170.87	6,987.34	6,903.62	83.72	83.457	
13,400.00	10,729.98	4,700.00	4,724.79	55.60	94.78	26.460	5,655.00	170.87	6,963.17	6,879.70	83.48	83.415	
13,500.00	10,727.34	4,700.00	4,724.79	56.62	94.78	27.316	5,655.00	170.87	6,918.07	6,835.05	83.02	83.332	
13,600.00	10,724.71	4,700.00	4,724.79	57.66	94.78	28.216	5,655.00	170.87	6,874.12	6,791.54	82.58	83.244	
13,700.00	10,722.08	4,700.00	4,724.79	58.72	94.78	29.161	5,655.00	170.87	6,831.36	6,749.20	82.16	83.150	
13,800.00	10,719.44	4,700.00	4,724.79	59.79	94.78	30.156	5,655.00	170.87	6,789.79	6,708.04	81.76	83.050	
13,900.00	10,716.81	4,700.00	4,724.79	60.88	94.78	31.204	5,655.00	170.87	6,749.46	6,668.08	81.38	82.942	
14,000.00	10,714.18	4,700.00	4,724.79	61.99	94.78	32.308	5,655.00	170.87	6,710.37	6,629.35	81.02	82.826	
14,055.43	10,712.72	4,700.00	4,724.79	62.60	94.78	32.945	5,655.00	170.87	6,689.25	6,608.42	80.83	82.758	
14,100.00	10,711.54	4,700.00	4,724.79	63.10	94.78	33.466	5,655.00	170.87	6,672.46	6,591.78	80.68	82.704	
14,200.00	10,708.91	4,700.00	4,724.79	64.22	94.78	34.642	5,655.00	170.87	6,635.05	6,554.72	80.33	82.598	
14,255.44	10,707.45	4,700.00	4,724.79	64.84	94.78	35.299	5,655.00	170.87	6,614.49	6,534.36	80.13	82.549	
14,300.00	10,706.27	4,700.00	4,724.79	65.33	94.78	35.834	5,655.00	170.87	6,598.14	6,518.17	79.97	82.511	
14,400.00	10,703.64	4,700.00	4,724.79	66.46	94.78	37.088	5,655.00	170.87	6,562.41	6,482.78	79.62	82.420	
14,500.00	10,701.01	4,700.00	4,724.79	67.59	94.78	38.417	5,655.00	170.87	6,528.01	6,448.71	79.30	82.320	
14,600.00	10,698.37	4,700.00	4,724.79	68.74	94.78	39.827	5,655.00	170.87	6,494.97	6,415.96	79.01	82.208	
14,700.00	10,695.74	4,700.00	4,724.79	69.90	94.78	41.324	5,655.00	170.87	6,463.31	6,384.57	78.74	82.084	
14,800.00	10,693.11	4,700.00	4,724.79	71.07	94.78	42.915	5,655.00	170.87	6,433.05	6,354.54	78.50	81.945	
14,900.00	10,690.47	4,700.00	4,724.79	72.25	94.78	44.604	5,655.00	170.87	6,404.20	6,325.90	78.30	81.790	
15,000.00	10,687.84	4,700.00	4,724.79	73.43	94.78	46.399	5,655.00	170.87	6,376.80	6,298.67	78.13	81.616	
15,100.00	10,685.21	4,700.00	4,724.79	74.63	94.78	48.306	5,655.00	170.87	6,350.85	6,272.85	78.00	81.422	
15,200.00	10,682.57	4,700.00	4,724.79	75.84	94.78	50.331	5,655.00	170.87	6,326.38	6,248.47	77.91	81.204	
15,300.00	10,679.94	4,700.00	4,724.79	77.05	94.78	52.479	5,655.00	170.87	6,303.39	6,225.54	77.86	80.962	
15,400.00	10,677.31	4,700.00	4,724.79	78.27	94.78	54.757	5,655.00	170.87	6,281.92	6,204.07	77.85	80.691	
15,500.00	10,674.67	4,700.00	4,724.79	79.50	94.78	57.168	5,655.00	170.87	6,261.97	6,184.07	77.90	80.389	
15,600.00	10,672.04	4,700.00	4,724.79	80.74	94.78	59.714	5,655.00	170.87	6,243.55	6,165.56	77.99	80.055	
15,700.00	10,669.41	4,700.00	4,724.79	81.98	94.78	62.397	5,655.00	170.87	6,226.69	6,148.55	78.14	79.685	
15,800.00	10,666.77	4,700.00	4,724.79	83.23	94.78	65.215	5,655.00	170.87	6,211.39	6,133.04	78.35	79.277	
15,900.00	10,664.14	4,700.00	4,724.79	84.49	94.78	68.164	5,655.00	170.87	6,197.67	6,119.05	78.62	78.830	
16,000.00	10,661.51	4,700.00	4,724.79	85.75	94.78	71.237	5,655.00	170.87	6,185.54	6,106.58	78.96	78.341	
16,100.00	10,658.87	4,700.00	4,724.79	87.02	94.78	74.422	5,655.00	170.87	6,175.00	6,095.64	79.36	77.812	
16,200.00	10,656.24	4,700.00	4,724.79	88.29	94.78	77.706	5,655.00	170.87	6,166.07	6,086.24	79.83	77.240	
16,300.00	10,653.61	4,700.00	4,724.79	89.57	94.78	81.071	5,655.00	170.87	6,158.74	6,078.37	80.37	76.627	
16,400.00	10,650.97	4,700.00	4,724.79	90.86	94.78	84.495	5,655.00	170.87	6,153.03	6,072.05	80.99	75.975	
16,500.00	10,648.34	4,700.00	4,724.79	92.15	94.78	87.956	5,655.00	170.87	6,148.95	6,067.27	81.68	75.285	
16,600.00	10,645.71	4,700.00	4,724.79	93.44	94.78	91.428	5,655.00	170.87	6,146.49	6,064.05	82.44	74.560	
16,700.00	10,643.07	4,700.00	4,724.79	94.74	94.78	94.887	5,655.00	170.87	6,145.65	6,062.38	83.27	73.805	
16,701.34	10,643.04	4,700.00	4,724.79	94.75	94.78	94.933	5,655.00	170.87	6,145.65	6,062.37	83.28	73.794	
16,800.00	10,640.44	4,700.00	4,724.79	96.04	94.78	98.307	5,655.00	170.87	6,146.44	6,062.27	84.17	73.023	
16,892.04	10,638.02	4,700.00	4,724.79	97.24	94.78	101.400	5,655.00	170.87	6,148.61	6,063.55	85.06	72.284	
16,900.00	10,637.82	4,700.00	4,724.79	97.34	94.78	101.665	5,655.00	170.87	6,148.87	6,063.73	85.14	72.220	
16,987.49	10,637.09	4,700.00	4,724.79	98.49	94.78	104.536	5,655.00	170.87	6,153.84	6,067.80	86.04	71.526	
17,000.00	10,637.18	4,700.00	4,724.79	98.65	94.78	104.941	5,655.00	170.87	6,154.83	6,068.67	86.17	71.428	
17,100.00	10,637.88	4,700.00	4,724.79	99.96	94.78	108.118	5,655.00	170.87	6,163.69	6,076.44	87.25	70.645	
17,200.00	10,638.58	4,700.00	4,724.79	101.27	94.78	111.180	5,655.00	170.87	6,174.16	6,085.78	88.39	69.855	
17,300.00	10,639.27	4,700.00	4,724.79	102.59	94.78	114.118	5,655.00	170.87	6,186.23	6,096.66	89.57	69.063	
17,400.00	10,639.97	4,700.00	4,724.79	103.91	94.78	116.925	5,655.00	170.87	6,199.89	6,109.08	90.81	68.275	
17,500.00	10,640.67	4,700.00	4,724.79	105.23	94.78	119.595	5,655.00	170.87	6,215.12	6,123.04	92.08	67.495	
17,600.00	10,641.37	4,700.00	4,724.79	106.56	94.78	122.130	5,655.00	170.87	6,231.92	6,138.53	93.39	66.728	
17,700.00	10,642.07	4,700.00	4,724.79	107.89	94.78	124.528	5,655.00	170.87	6,250.28	6,155.55	94.73	65.977	
17,800.00	10,642.76	4,700.00	4,724.79	109.22	94.78	126.794	5,655.00	170.87	6,270.18	6,174.08	96.10	65.245	

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



MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Offset Design: Uncle Ches 2116 Fed Com Offsets - NJ State #1 - Wellbore #1 - Surveys												Offset Site Error:	0.00 usft
Survey Program: 405-INC-ONLY												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Azimuth		Offset Wellbore Centre		Rule Assigned:		Distance	Minimum	Separation	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	
17,900.00	10,643.46	4,700.00	4,724.79	110.56	94.78	128.932	5,655.00	170.87	6,291.61	6,194.12	97.49	64.535	
18,000.00	10,644.16	4,700.00	4,724.79	111.90	94.78	130.946	5,655.00	170.87	6,314.55	6,215.65	98.90	63.849	
18,100.00	10,644.86	4,700.00	4,724.79	113.24	94.78	132.842	5,655.00	170.87	6,338.98	6,238.66	100.32	63.189	
18,200.00	10,645.56	4,700.00	4,724.79	114.58	94.78	134.627	5,655.00	170.87	6,364.89	6,263.14	101.74	62.558	
18,300.00	10,646.25	4,700.00	4,724.79	115.93	94.78	136.307	5,655.00	170.87	6,392.26	6,289.08	103.18	61.954	
18,400.00	10,646.95	4,700.00	4,724.79	117.28	94.78	137.888	5,655.00	170.87	6,421.07	6,316.46	104.61	61.381	
18,500.00	10,647.65	4,700.00	4,724.79	118.63	94.78	139.377	5,655.00	170.87	6,451.30	6,345.26	106.04	60.837	
18,600.00	10,648.35	4,700.00	4,724.79	119.98	94.78	140.780	5,655.00	170.87	6,482.93	6,375.46	107.47	60.323	
18,700.00	10,649.05	4,700.00	4,724.79	121.33	94.78	142.102	5,655.00	170.87	6,515.95	6,407.06	108.89	59.839	
18,800.00	10,649.75	4,700.00	4,724.79	122.69	94.78	143.349	5,655.00	170.87	6,550.32	6,440.02	110.30	59.386	
18,900.00	10,650.44	4,700.00	4,724.79	124.05	94.78	144.526	5,655.00	170.87	6,586.04	6,474.33	111.70	58.961	
19,000.00	10,651.14	4,700.00	4,724.79	125.41	94.78	145.637	5,655.00	170.87	6,623.07	6,509.98	113.09	58.567	
19,100.00	10,651.84	4,700.00	4,724.79	126.77	94.78	146.688	5,655.00	170.87	6,661.39	6,546.94	114.46	58.201	
19,200.00	10,652.54	4,700.00	4,724.79	128.14	94.78	147.683	5,655.00	170.87	6,700.99	6,585.18	115.81	57.862	
19,300.00	10,653.24	4,700.00	4,724.79	129.50	94.78	148.624	5,655.00	170.87	6,741.84	6,624.70	117.14	57.552	
19,392.11	10,653.88	4,700.00	4,724.79	130.76	94.78	149.449	5,655.00	170.87	6,780.56	6,662.20	118.36	57.289	
19,400.00	10,653.92	4,700.00	4,724.79	130.87	94.78	149.517	5,655.00	170.87	6,783.91	6,665.45	118.46	57.268	
19,408.64	10,653.95	4,700.00	4,724.79	130.99	94.78	149.592	5,655.00	170.87	6,787.57	6,669.00	118.57	57.244	
19,500.00	10,654.06	4,700.00	4,724.79	132.24	94.78	150.364	5,655.00	170.87	6,826.71	6,706.95	119.76	57.004	
19,600.00	10,654.18	4,700.00	4,724.79	133.61	94.78	151.169	5,655.00	170.87	6,870.68	6,749.65	121.04	56.765	
19,700.00	10,654.30	4,700.00	4,724.79	134.98	94.78	151.934	5,655.00	170.87	6,915.82	6,793.53	122.29	56.551	
19,800.00	10,654.42	4,700.00	4,724.79	136.36	94.78	152.661	5,655.00	170.87	6,962.11	6,838.58	123.53	56.361	
19,900.00	10,654.54	4,700.00	4,724.79	137.73	94.78	153.354	5,655.00	170.87	7,009.51	6,884.77	124.74	56.194	
20,000.00	10,654.66	4,700.00	4,724.79	139.11	94.78	154.014	5,655.00	170.87	7,058.02	6,932.09	125.93	56.049	
20,100.00	10,654.78	4,700.00	4,724.79	140.49	94.78	154.644	5,655.00	170.87	7,107.59	6,980.50	127.09	55.925	
20,200.00	10,654.91	4,700.00	4,724.79	141.87	94.78	155.246	5,655.00	170.87	7,158.23	7,030.00	128.23	55.823	
20,300.00	10,655.03	4,700.00	4,724.79	143.25	94.78	155.820	5,655.00	170.87	7,209.89	7,080.55	129.35	55.741	
20,400.00	10,655.15	4,700.00	4,724.79	144.63	94.78	156.370	5,655.00	170.87	7,262.57	7,132.13	130.44	55.678	
20,500.00	10,655.27	4,700.00	4,724.79	146.01	94.78	156.896	5,655.00	170.87	7,316.23	7,184.72	131.51	55.633	
20,600.00	10,655.39	4,700.00	4,724.79	147.40	94.78	157.400	5,655.00	170.87	7,370.86	7,238.30	132.55	55.607	
20,700.00	10,655.51	4,700.00	4,724.79	148.78	94.78	157.883	5,655.00	170.87	7,426.43	7,292.85	133.57	55.598	
20,800.00	10,655.63	4,700.00	4,724.79	150.17	94.78	158.346	5,655.00	170.87	7,482.93	7,348.35	134.57	55.606	
20,900.00	10,655.75	4,700.00	4,724.79	151.56	94.78	158.791	5,655.00	170.87	7,540.32	7,404.78	135.55	55.629	
21,000.00	10,655.87	4,700.00	4,724.79	152.95	94.78	159.218	5,655.00	170.87	7,598.61	7,462.11	136.50	55.669	
21,100.00	10,656.00	4,700.00	4,724.79	154.34	94.78	159.628	5,655.00	170.87	7,657.75	7,520.33	137.43	55.723	
21,103.87	10,656.00	4,700.00	4,724.79	154.39	94.78	159.644	5,655.00	170.87	7,660.06	7,522.60	137.46	55.725	

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

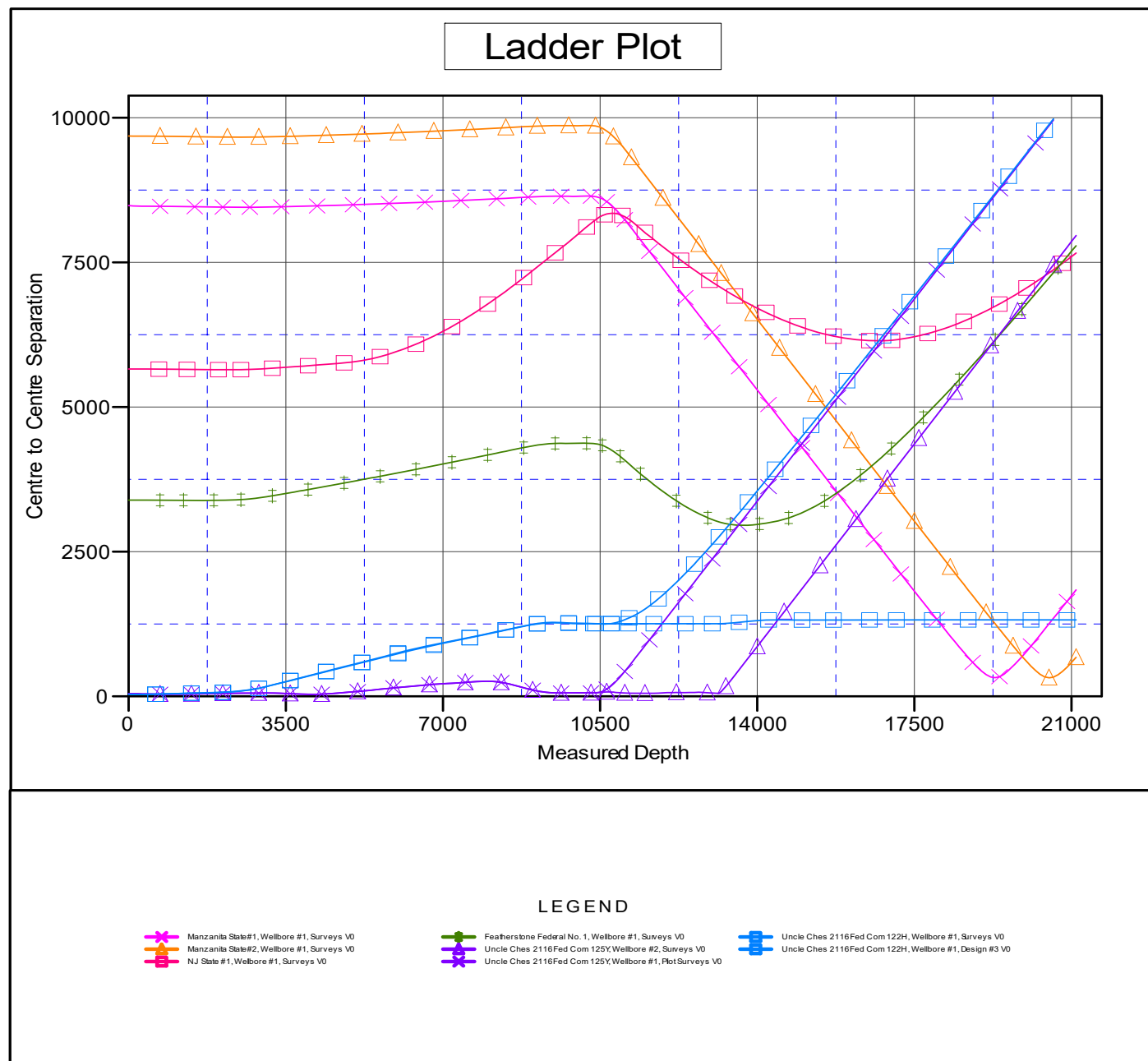


MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Reference Depths are relative to WELL @ 3745.50usft (Patterson 297) Coordinates are relative to: Uncle Ches 2116 Fed Com 125H
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 301
 Central Meridian is 104° 20' 0.000 W Grid Convergence at Surface is: 0.467°



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



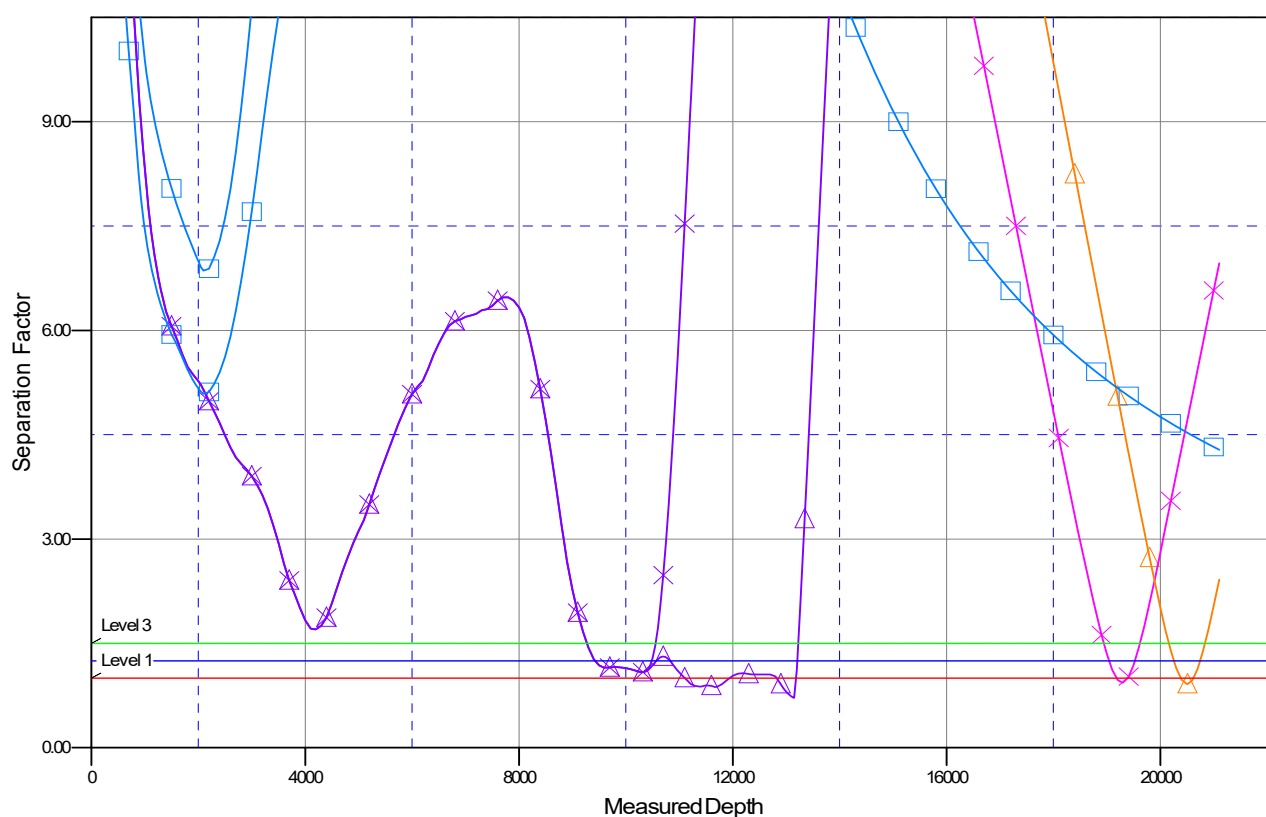
MS Directional Anticollision Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Reference Site:	Uncle Ches 2116 Fed Com (122H, 125H)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	41-MSD-Conroe-EDM5000
Reference Design:	Design #2	Offset TVD Reference:	Reference Datum

Reference Depths are relative to WELL @ 3745.50usft (Patterson 297) Coordinates are relative to: Uncle Ches 2116 Fed Com 125H
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
 Central Meridian is 104° 20' 0.000 W Grid Convergence at Surface is: 0.467°

Separation Factor Plot



LEGEND

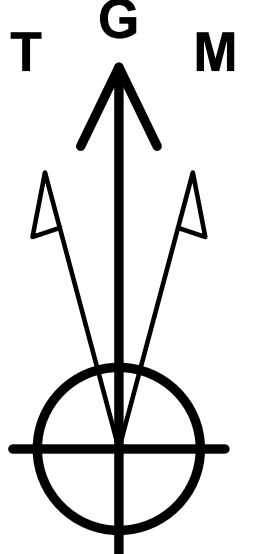
Manzanita State #1, Wellbore #1, Surveys V0	Featherstone Federal No. 1, Wellbore #1, Surveys V0	Uncle Ches 2116 Fed Com 122H, Wellbore #1, Surveys V0
Manzanita State #2, Wellbore #1, Surveys V0	Uncle Ches 2116 Fed Com 125H, Wellbore #2, Surveys V0	Uncle Ches 2116 Fed Com 122H, Wellbore #1, Design #3 V0
NJ State #1, Wellbore #1, Surveys V0	Uncle Ches 2116 Fed Com 125H, Wellbore #1, Plot Surveys V0	

WELL DETAILS: Uncle Ches 2116 Fed Com 125H

SURVEY PROGRAM

GL @ 3717.00		WELL @ 3745.50usft (Patterson 297)	
+N/-S	+E/-W	Northing	Easting
0.00	0.00	565645.87	767658.68
		Latitude	Longitude
		32° 33' 7.442 N	103° 27' 52.821 W

Depth From	Depth To	Survey/Plan	Tool
0.00	21103.87	Design #2 (Wellbore #1)	MWD+HRGM



Azimuths to Grid North
True North: -0.47°
Magnetic North: 5.92°

Magnetic Field
Strength: 47850.0nT
Dip Angle: 60.38°
Date: 9/27/2021
Model: HDGM2021

To convert a Magnetic Direction to a Grid Direction, Add 5.916°
To convert a Magnetic Direction to a True Direction, Add 6.383° East
To convert a True Direction to a Grid Direction, Subtract 0.467°

SECTION DETAILS

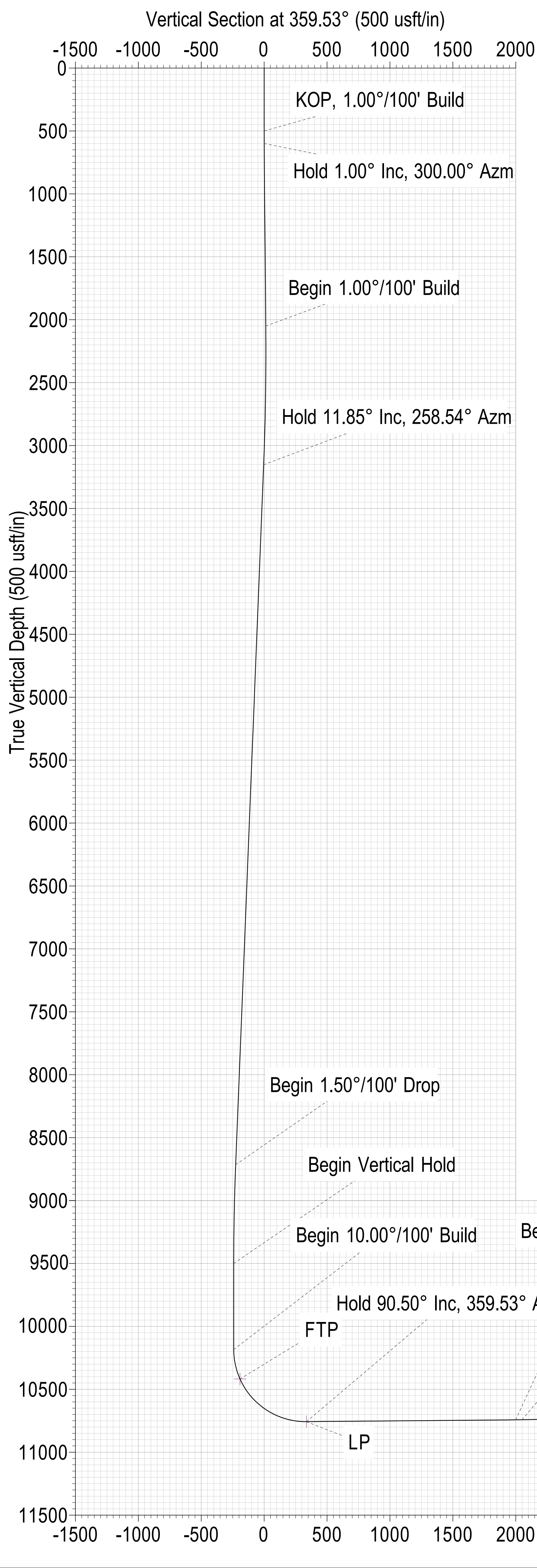
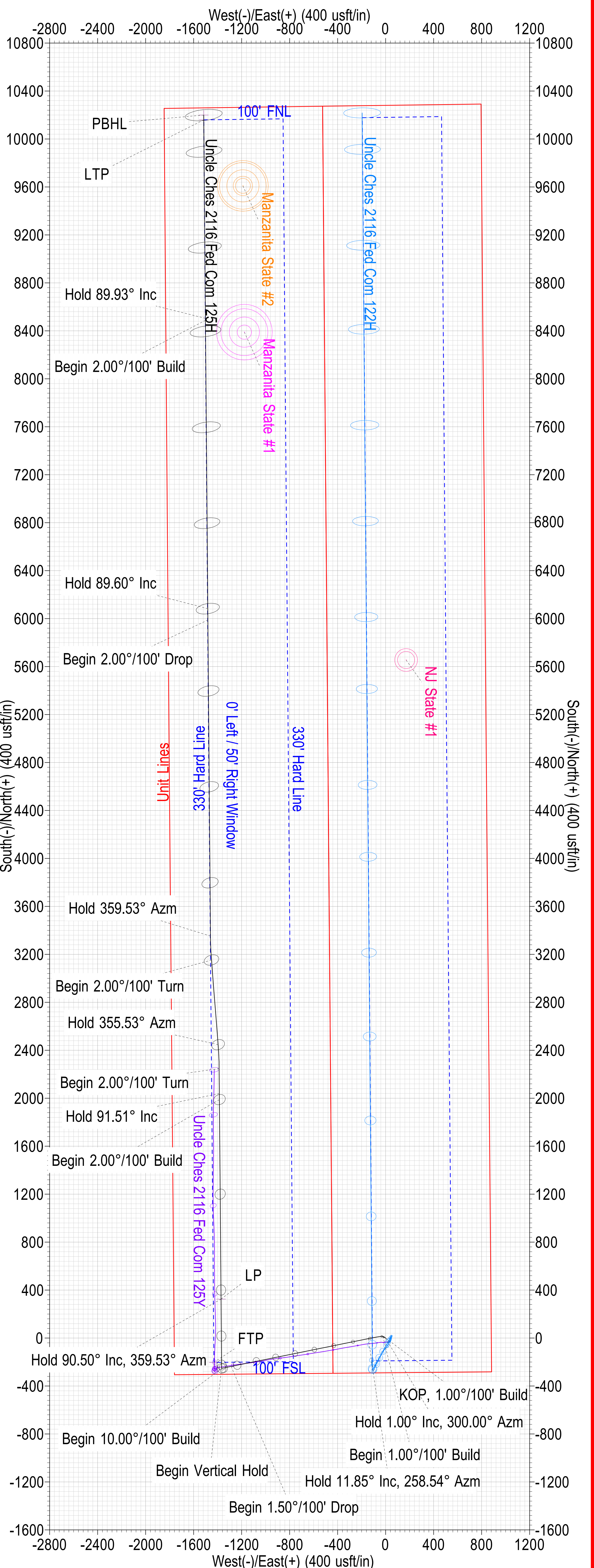
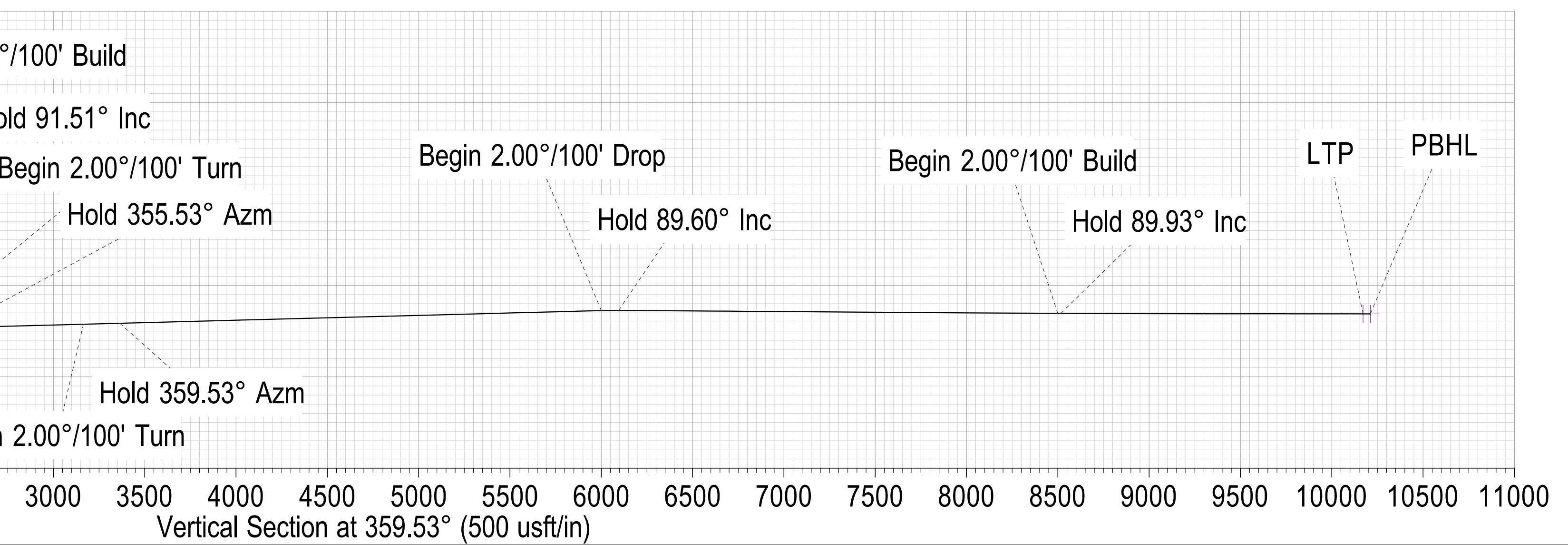
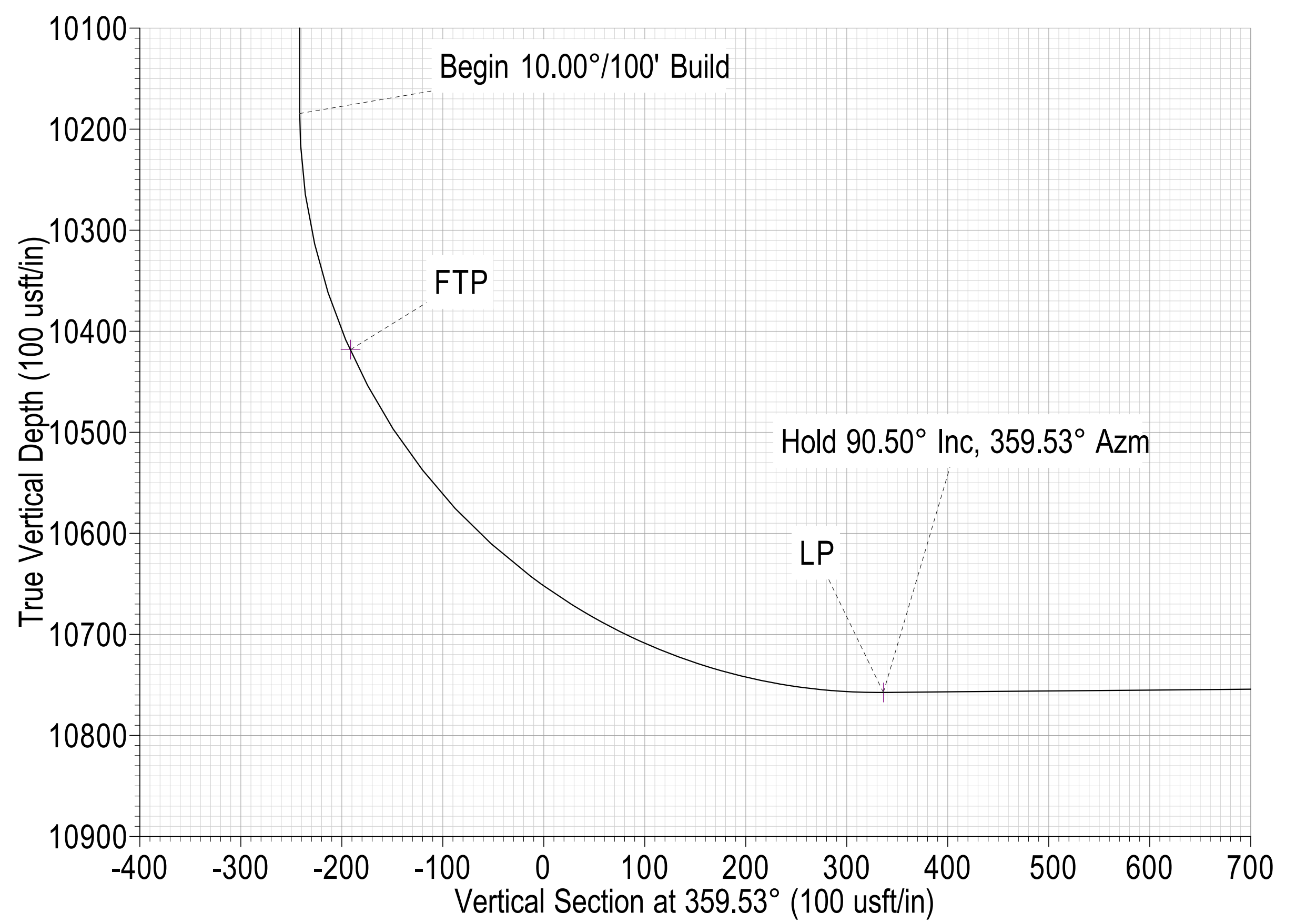
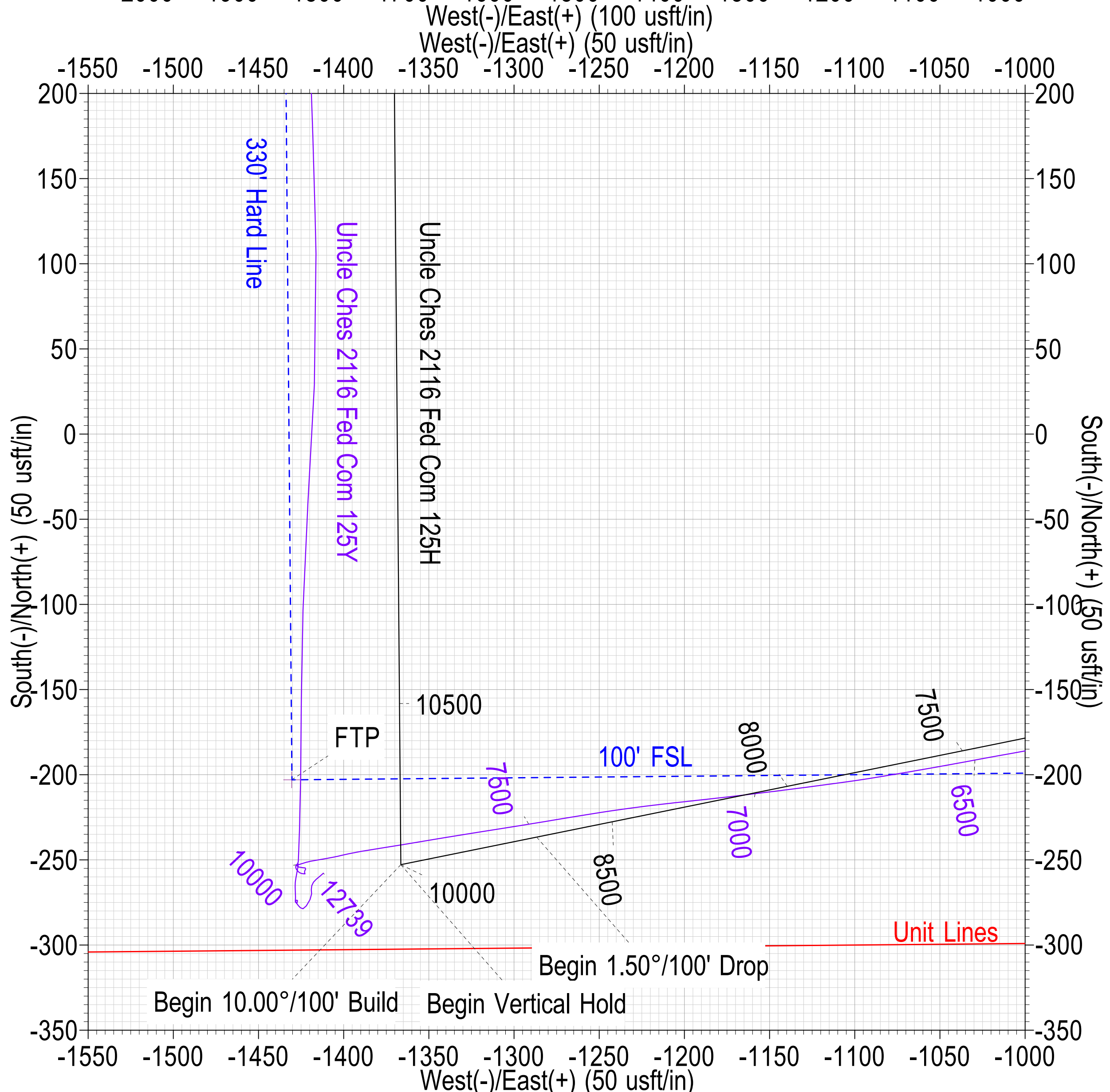
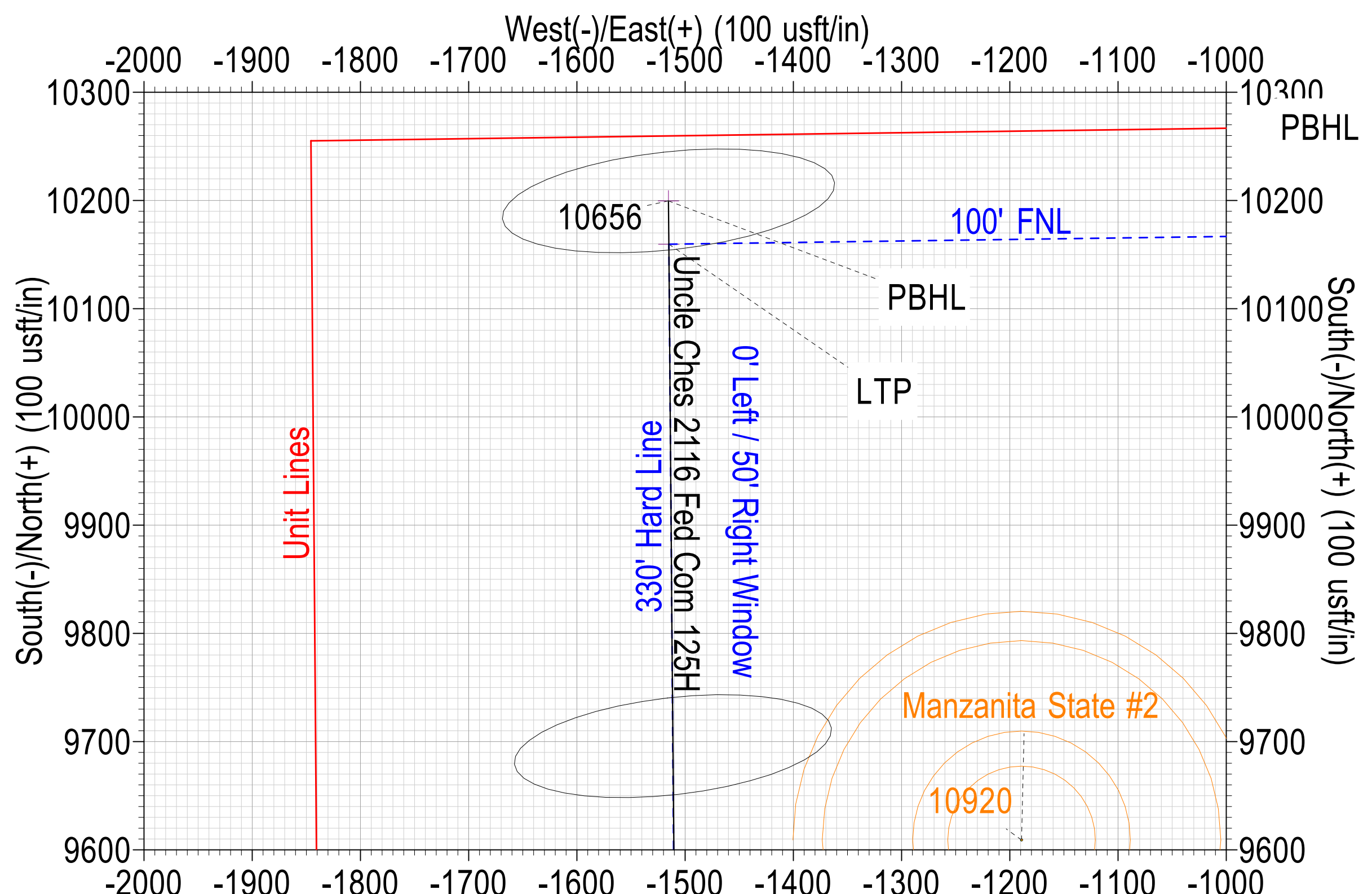
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.000	0.00	KOP, 1.00°/100' Build
600.00	1.00	300.00	599.99	0.44	-0.76	1.00	300.000	0.44	Hold 1.00° Inc, 300.00° Azm
2050.23	1.00	300.00	2050.00	13.09	-22.67	0.00	0.000	13.28	Begin 1.00°/100' Build
3161.76	11.85	258.54	3153.08	-4.79	-143.26	1.00	-44.830	-3.61	Hold 11.85° Inc, 258.54° Azm
8845.65	11.85	258.54	8715.93	-236.64	-1286.72	0.00	0.000	-226.08	Begin 1.50°/100' Drop
9635.33	0.00	0.00	9500.00	-252.81	-1366.44	1.50	180.000	-241.59	Begin Vertical Hold
10319.92	0.00	0.00	10184.58	-252.81	-1366.44	0.00	0.000	-241.59	Begin 10.00°/100' Build
11224.92	90.50	359.53	10757.52	325.13	-1371.18	10.00	359.530	336.37	Hold 90.50° Inc, 359.53° Azm
12888.61	90.50	359.53	10743.00	1988.71	-1384.83	0.00	0.000	2000.00	Begin 2.00°/100' Build
12939.06	91.51	359.53	10742.12	2039.15	-1385.24	2.00	0.000	2050.44	Hold 91.51° Inc
13147.49	91.51	359.53	10736.63	2247.50	-1386.95	0.00	0.000	2258.80	Begin 2.00°/100' Turn
13347.43	91.51	355.53	10731.36	2447.13	-1395.56	2.00	-89.947	2458.50	Hold 355.53° Azm
14055.43	91.51	355.53	10712.72	3152.74	-1450.72	0.00	0.000	3164.53	Begin 2.00°/100' Turn
14255.44	91.51	359.53	10707.45	3352.45	-1459.33	2.00	89.947	3364.31	Hold 359.53° Azm
16892.04	91.51	359.53	10638.02	5988.05	-1480.88	0.00	0.000	6000.00	Begin 2.00°/100' Drop
16987.49	89.60	359.53	10637.09	6083.49	-1481.66	2.00	180.000	6095.44	Hold 89.60° Inc
19392.11	89.60	359.53	10653.88	8487.97	-1501.31	0.00	0.000	8500.00	Begin 2.00°/100' Build
19408.64	89.93	359.53	10653.95	8504.50	-1501.45	2.00	0.000	8516.53	Hold 89.93° Inc
21103.87	89.93	359.53	10656.00	10199.67	-1515.30	0.00	0.000	10211.76	PBHL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
FTP - Uncle Ches 2116 Fed Com 125H	10418.29	-202.98	-1430.46	565442.89	766228.22	32° 33' 5.548 N	103° 28' 9.552 W
LP - Uncle Ches 2116 Fed Com 125H	10757.52	325.13	-1371.18	565971.00	766287.50	32° 33' 10.769 N	103° 28' 8.809 W
LTP - Uncle Ches 2116 Fed Com 125H	10656.00	10159.69	-1514.98	575805.56	766143.70	32° 34' 48.091 N	103° 28' 9.556 W
PBHL - Uncle Ches 2116 Fed Com 125H	10656.00	10199.67	-1515.30	575845.54	766143.38	32° 34' 48.486 N	103° 28' 9.556 W

Company: Matador Resources
Well: Uncle Ches 2116 Fed Com 125H
County: Lea County, New Mexico (NAD 27)
Rig: Patterson 297
Wellbore: Wellbore #1
Design: Design #2
Date: 9:46, September 10 2021

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



Any decisions made or wells drilled utilizing this or any other information supplied by MS Directional are at the sole risk and responsibility of the customer. MS Directional is not responsible for the accuracy of this schematic or the information contained herein.
The customer should only rely on this document after independently verifying all paths, targets, coordinates, lease and hard lines represented.





Matador Resources

Lea County, New Mexico (NAD 27)

Uncle Ches 2116 Fed Com (122H, 125H)

Uncle Ches 2116 Fed Com 125H

Wellbore #1

Plan: Design #2

Standard Planning Report

10 September, 2021





MS Directional Planning Report



Database:	41-MSD-Conroe-EDM5000	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Company:	Matador Resources	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site:	Uncle Ches 2116 Fed Com (122H, 125H)	North Reference:	Grid
Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Project	Lea County, New Mexico (NAD 27)		
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		

Site	Uncle Ches 2116 Fed Com (122H, 125H)		
Site Position:		Northing:	565,646.00 usft
From:	Map	Easting:	767,694.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 33' 7.440 N
		Longitude:	103° 27' 52.409 W

Well	Uncle Ches 2116 Fed Com 125H					
Well Position	+N/-S	0.00 usft	Northing:	565,645.87 usft	Latitude:	32° 33' 7.442 N
	+E/-W	0.00 usft	Easting:	767,658.68 usft	Longitude:	103° 27' 52.821 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,717.00 usft
Grid Convergence:	0.467 °					

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2021	9/27/2021	6.383	60.383	47,850.00

Design	Design #2				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	359.53	

Plan Survey Tool Program	Date	9/9/2021			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	21,103.87	Design #2 (Wellbore #1)	MWD+HRGM	
			OWSG MWD + HRGM		



MS Directional Planning Report



Database:	41-MSD-Conroe-EDM5000	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Company:	Matador Resources	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site:	Uncle Ches 2116 Fed Com (122H, 125H)	North Reference:	Grid
Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.000	
600.00	1.00	300.00	599.99	0.44	-0.76	1.00	1.00	0.00	300.000	
2,050.23	1.00	300.00	2,050.00	13.09	-22.67	0.00	0.00	0.00	0.000	
3,161.76	11.85	258.54	3,153.08	-4.79	-143.26	1.00	0.98	-3.73	-44.830	
8,845.65	11.85	258.54	8,715.93	-236.64	-1,286.72	0.00	0.00	0.00	0.000	
9,635.33	0.00	0.00	9,500.00	-252.81	-1,366.44	1.50	-1.50	0.00	180.000	
10,319.92	0.00	0.00	10,184.58	-252.81	-1,366.44	0.00	0.00	0.00	0.000	
11,224.92	90.50	359.53	10,757.52	325.13	-1,371.18	10.00	10.00	0.00	359.530	LP - Uncle Ches 21
12,888.61	90.50	359.53	10,743.00	1,988.71	-1,384.83	0.00	0.00	0.00	0.000	
12,939.06	91.51	359.53	10,742.12	2,039.15	-1,385.24	2.00	2.00	0.00	0.000	
13,147.49	91.51	359.53	10,736.63	2,247.50	-1,386.95	0.00	0.00	0.00	0.000	
13,347.43	91.51	355.53	10,731.36	2,447.13	-1,395.56	2.00	0.00	-2.00	-89.947	
14,055.43	91.51	355.53	10,712.72	3,152.74	-1,450.72	0.00	0.00	0.00	0.000	
14,255.44	91.51	359.53	10,707.45	3,352.45	-1,459.33	2.00	0.00	2.00	89.947	PBHL - Uncle Ches
16,892.04	91.51	359.53	10,638.02	5,988.05	-1,480.88	0.00	0.00	0.00	0.000	
16,987.49	89.60	359.53	10,637.09	6,083.49	-1,481.66	2.00	-2.00	0.00	180.000	PBHL - Uncle Ches
19,392.11	89.60	359.53	10,653.88	8,487.97	-1,501.31	0.00	0.00	0.00	0.000	
19,408.64	89.93	359.53	10,653.95	8,504.50	-1,501.45	2.00	2.00	0.00	0.000	
21,103.87	89.93	359.53	10,656.00	10,199.67	-1,515.30	0.00	0.00	0.00	0.000	PBHL - Uncle Ches



MS Directional Planning Report



Database:	41-MSD-Conroe-EDM5000	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Company:	Matador Resources	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site:	Uncle Ches 2116 Fed Com (122H, 125H)	North Reference:	Grid
Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP, 1.00°/100' Build									
600.00	1.00	300.00	599.99	0.44	-0.76	0.44	1.00	1.00	0.00
Hold 1.00° Inc, 300.00° Azm									
700.00	1.00	300.00	699.98	1.31	-2.27	1.33	0.00	0.00	0.00
800.00	1.00	300.00	799.96	2.18	-3.78	2.21	0.00	0.00	0.00
900.00	1.00	300.00	899.95	3.05	-5.29	3.10	0.00	0.00	0.00
1,000.00	1.00	300.00	999.93	3.93	-6.80	3.98	0.00	0.00	0.00
1,100.00	1.00	300.00	1,099.92	4.80	-8.31	4.87	0.00	0.00	0.00
1,200.00	1.00	300.00	1,199.90	5.67	-9.82	5.75	0.00	0.00	0.00
1,300.00	1.00	300.00	1,299.89	6.54	-11.34	6.64	0.00	0.00	0.00
1,400.00	1.00	300.00	1,399.87	7.42	-12.85	7.52	0.00	0.00	0.00
1,500.00	1.00	300.00	1,499.86	8.29	-14.36	8.41	0.00	0.00	0.00
1,600.00	1.00	300.00	1,599.84	9.16	-15.87	9.29	0.00	0.00	0.00
1,700.00	1.00	300.00	1,699.83	10.04	-17.38	10.18	0.00	0.00	0.00
1,800.00	1.00	300.00	1,799.81	10.91	-18.89	11.06	0.00	0.00	0.00
1,900.00	1.00	300.00	1,899.80	11.78	-20.40	11.95	0.00	0.00	0.00
2,000.00	1.00	300.00	1,999.78	12.65	-21.92	12.83	0.00	0.00	0.00
2,050.23	1.00	300.00	2,050.00	13.09	-22.67	13.28	0.00	0.00	0.00
Begin 1.00°/100' Build									
2,100.00	1.40	285.46	2,099.76	13.47	-23.64	13.66	1.00	0.80	-29.21
2,200.00	2.32	272.88	2,199.71	13.90	-26.83	14.12	1.00	0.92	-12.58
2,300.00	3.28	267.56	2,299.59	13.88	-31.71	14.14	1.00	0.97	-5.32
2,400.00	4.27	264.67	2,399.37	13.41	-38.27	13.72	1.00	0.98	-2.89
2,500.00	5.25	262.86	2,499.03	12.49	-46.52	12.88	1.00	0.99	-1.81
2,600.00	6.25	261.63	2,598.52	11.13	-56.45	11.60	1.00	0.99	-1.23
2,700.00	7.24	260.73	2,697.83	9.33	-68.05	9.88	1.00	0.99	-0.90
2,800.00	8.24	260.05	2,796.92	7.07	-81.33	7.74	1.00	1.00	-0.68
2,900.00	9.23	259.52	2,895.75	4.38	-96.27	5.17	1.00	1.00	-0.54
3,000.00	10.23	259.08	2,994.31	1.23	-112.88	2.16	1.00	1.00	-0.43
3,100.00	11.23	258.73	3,092.56	-2.35	-131.15	-1.27	1.00	1.00	-0.36
3,161.76	11.85	258.54	3,153.08	-4.79	-143.26	-3.61	1.00	1.00	-0.31
Hold 11.85° Inc, 258.54° Azm									
3,200.00	11.85	258.54	3,190.50	-6.35	-150.95	-5.11	0.00	0.00	0.00
3,300.00	11.85	258.54	3,288.37	-10.43	-171.07	-9.02	0.00	0.00	0.00
3,400.00	11.85	258.54	3,386.24	-14.50	-191.19	-12.94	0.00	0.00	0.00
3,500.00	11.85	258.54	3,484.11	-18.58	-211.31	-16.85	0.00	0.00	0.00
3,600.00	11.85	258.54	3,581.98	-22.66	-231.42	-20.76	0.00	0.00	0.00
3,700.00	11.85	258.54	3,679.85	-26.74	-251.54	-24.68	0.00	0.00	0.00
3,800.00	11.85	258.54	3,777.73	-30.82	-271.66	-28.59	0.00	0.00	0.00
3,900.00	11.85	258.54	3,875.60	-34.90	-291.78	-32.51	0.00	0.00	0.00
4,000.00	11.85	258.54	3,973.47	-38.98	-311.89	-36.42	0.00	0.00	0.00
4,100.00	11.85	258.54	4,071.34	-43.06	-332.01	-40.33	0.00	0.00	0.00
4,200.00	11.85	258.54	4,169.21	-47.14	-352.13	-44.25	0.00	0.00	0.00
4,300.00	11.85	258.54	4,267.08	-51.22	-372.25	-48.16	0.00	0.00	0.00
4,400.00	11.85	258.54	4,364.95	-55.30	-392.36	-52.08	0.00	0.00	0.00
4,500.00	11.85	258.54	4,462.82	-59.38	-412.48	-55.99	0.00	0.00	0.00
4,600.00	11.85	258.54	4,560.69	-63.45	-432.60	-59.90	0.00	0.00	0.00
4,700.00	11.85	258.54	4,658.56	-67.53	-452.72	-63.82	0.00	0.00	0.00



MS Directional Planning Report



Database:	41-MSD-Conroe-EDM5000	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Company:	Matador Resources	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site:	Uncle Ches 2116 Fed Com (122H, 125H)	North Reference:	Grid
Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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)
4,800.00	11.85	258.54	4,756.43	-71.61	-472.83	-67.73	0.00	0.00	0.00
4,900.00	11.85	258.54	4,854.30	-75.69	-492.95	-71.65	0.00	0.00	0.00
5,000.00	11.85	258.54	4,952.17	-79.77	-513.07	-75.56	0.00	0.00	0.00
5,100.00	11.85	258.54	5,050.04	-83.85	-533.19	-79.47	0.00	0.00	0.00
5,200.00	11.85	258.54	5,147.91	-87.93	-553.30	-83.39	0.00	0.00	0.00
5,300.00	11.85	258.54	5,245.78	-92.01	-573.42	-87.30	0.00	0.00	0.00
5,400.00	11.85	258.54	5,343.65	-96.09	-593.54	-91.22	0.00	0.00	0.00
5,500.00	11.85	258.54	5,441.52	-100.17	-613.66	-95.13	0.00	0.00	0.00
5,600.00	11.85	258.54	5,539.40	-104.25	-633.78	-99.04	0.00	0.00	0.00
5,700.00	11.85	258.54	5,637.27	-108.33	-653.89	-102.96	0.00	0.00	0.00
5,800.00	11.85	258.54	5,735.14	-112.41	-674.01	-106.87	0.00	0.00	0.00
5,900.00	11.85	258.54	5,833.01	-116.48	-694.13	-110.79	0.00	0.00	0.00
6,000.00	11.85	258.54	5,930.88	-120.56	-714.25	-114.70	0.00	0.00	0.00
6,100.00	11.85	258.54	6,028.75	-124.64	-734.36	-118.62	0.00	0.00	0.00
6,200.00	11.85	258.54	6,126.62	-128.72	-754.48	-122.53	0.00	0.00	0.00
6,300.00	11.85	258.54	6,224.49	-132.80	-774.60	-126.44	0.00	0.00	0.00
6,400.00	11.85	258.54	6,322.36	-136.88	-794.72	-130.36	0.00	0.00	0.00
6,500.00	11.85	258.54	6,420.23	-140.96	-814.83	-134.27	0.00	0.00	0.00
6,600.00	11.85	258.54	6,518.10	-145.04	-834.95	-138.19	0.00	0.00	0.00
6,700.00	11.85	258.54	6,615.97	-149.12	-855.07	-142.10	0.00	0.00	0.00
6,800.00	11.85	258.54	6,713.84	-153.20	-875.19	-146.01	0.00	0.00	0.00
6,900.00	11.85	258.54	6,811.71	-157.28	-895.30	-149.93	0.00	0.00	0.00
7,000.00	11.85	258.54	6,909.58	-161.36	-915.42	-153.84	0.00	0.00	0.00
7,100.00	11.85	258.54	7,007.45	-165.44	-935.54	-157.76	0.00	0.00	0.00
7,200.00	11.85	258.54	7,105.32	-169.51	-955.66	-161.67	0.00	0.00	0.00
7,300.00	11.85	258.54	7,203.19	-173.59	-975.77	-165.58	0.00	0.00	0.00
7,400.00	11.85	258.54	7,301.06	-177.67	-995.89	-169.50	0.00	0.00	0.00
7,500.00	11.85	258.54	7,398.94	-181.75	-1,016.01	-173.41	0.00	0.00	0.00
7,600.00	11.85	258.54	7,496.81	-185.83	-1,036.13	-177.33	0.00	0.00	0.00
7,700.00	11.85	258.54	7,594.68	-189.91	-1,056.24	-181.24	0.00	0.00	0.00
7,800.00	11.85	258.54	7,692.55	-193.99	-1,076.36	-185.15	0.00	0.00	0.00
7,900.00	11.85	258.54	7,790.42	-198.07	-1,096.48	-189.07	0.00	0.00	0.00
8,000.00	11.85	258.54	7,888.29	-202.15	-1,116.60	-192.98	0.00	0.00	0.00
8,100.00	11.85	258.54	7,986.16	-206.23	-1,136.72	-196.90	0.00	0.00	0.00
8,200.00	11.85	258.54	8,084.03	-210.31	-1,156.83	-200.81	0.00	0.00	0.00
8,300.00	11.85	258.54	8,181.90	-214.39	-1,176.95	-204.72	0.00	0.00	0.00
8,400.00	11.85	258.54	8,279.77	-218.47	-1,197.07	-208.64	0.00	0.00	0.00
8,500.00	11.85	258.54	8,377.64	-222.54	-1,217.19	-212.55	0.00	0.00	0.00
8,600.00	11.85	258.54	8,475.51	-226.62	-1,237.30	-216.47	0.00	0.00	0.00
8,700.00	11.85	258.54	8,573.38	-230.70	-1,257.42	-220.38	0.00	0.00	0.00
8,800.00	11.85	258.54	8,671.25	-234.78	-1,277.54	-224.29	0.00	0.00	0.00
8,845.65	11.85	258.54	8,715.93	-236.64	-1,286.72	-226.08	0.00	0.00	0.00
Begin 1.50°/100' Drop									
8,900.00	11.03	258.54	8,769.20	-238.79	-1,297.28	-228.14	1.50	-1.50	0.00
9,000.00	9.53	258.54	8,867.59	-242.33	-1,314.77	-231.54	1.50	-1.50	0.00
9,100.00	8.03	258.54	8,966.42	-245.37	-1,329.73	-234.45	1.50	-1.50	0.00
9,200.00	6.53	258.54	9,065.61	-247.88	-1,342.15	-236.87	1.50	-1.50	0.00
9,300.00	5.03	258.54	9,165.10	-249.89	-1,352.02	-238.79	1.50	-1.50	0.00
9,400.00	3.53	258.54	9,264.82	-251.37	-1,359.34	-240.21	1.50	-1.50	0.00
9,500.00	2.03	258.54	9,364.70	-252.33	-1,364.09	-241.13	1.50	-1.50	0.00
9,600.00	0.53	258.54	9,464.67	-252.78	-1,366.28	-241.56	1.50	-1.50	0.00
9,635.33	0.00	0.00	9,500.00	-252.81	-1,366.44	-241.59	1.50	-1.50	0.00
Begin Vertical Hold									



MS Directional Planning Report



Database:	41-MSD-Conroe-EDM5000	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Company:	Matador Resources	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site:	Uncle Ches 2116 Fed Com (122H, 125H)	North Reference:	Grid
Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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)
9,700.00	0.00	0.00	9,564.67	-252.81	-1,366.44	-241.59	0.00	0.00	0.00
9,800.00	0.00	0.00	9,664.67	-252.81	-1,366.44	-241.59	0.00	0.00	0.00
9,900.00	0.00	0.00	9,764.67	-252.81	-1,366.44	-241.59	0.00	0.00	0.00
10,000.00	0.00	0.00	9,864.67	-252.81	-1,366.44	-241.59	0.00	0.00	0.00
10,100.00	0.00	0.00	9,964.67	-252.81	-1,366.44	-241.59	0.00	0.00	0.00
10,200.00	0.00	0.00	10,064.67	-252.81	-1,366.44	-241.59	0.00	0.00	0.00
10,300.00	0.00	0.00	10,164.67	-252.81	-1,366.44	-241.59	0.00	0.00	0.00
10,319.92	0.00	0.00	10,184.58	-252.81	-1,366.44	-241.59	0.00	0.00	0.00
Begin 10.00°/100' Build									
10,350.00	3.01	359.53	10,214.65	-252.02	-1,366.44	-240.80	10.00	10.00	0.00
10,400.00	8.01	359.53	10,264.41	-247.22	-1,366.48	-236.00	10.00	10.00	0.00
10,450.00	13.01	359.53	10,313.55	-238.11	-1,366.56	-226.89	10.00	10.00	0.00
10,500.00	18.01	359.53	10,361.72	-224.74	-1,366.67	-213.52	10.00	10.00	0.00
10,550.00	23.01	359.53	10,408.53	-207.23	-1,366.81	-196.01	10.00	10.00	0.00
10,600.00	28.01	359.53	10,453.64	-185.71	-1,366.99	-174.49	10.00	10.00	0.00
10,650.00	33.01	359.53	10,496.71	-160.33	-1,367.20	-149.11	10.00	10.00	0.00
10,700.00	38.01	359.53	10,537.40	-131.30	-1,367.44	-120.08	10.00	10.00	0.00
10,750.00	43.01	359.53	10,575.40	-98.83	-1,367.70	-87.61	10.00	10.00	0.00
10,800.00	48.01	359.53	10,610.43	-63.18	-1,367.99	-51.96	10.00	10.00	0.00
10,850.00	53.01	359.53	10,642.22	-24.61	-1,368.31	-13.38	10.00	10.00	0.00
10,900.00	58.01	359.53	10,670.52	16.59	-1,368.65	27.82	10.00	10.00	0.00
10,950.00	63.01	359.53	10,695.13	60.10	-1,369.01	71.32	10.00	10.00	0.00
11,000.00	68.01	359.53	10,715.85	105.58	-1,369.38	116.81	10.00	10.00	0.00
11,050.00	73.01	359.53	10,732.53	152.70	-1,369.76	163.93	10.00	10.00	0.00
11,100.00	78.01	359.53	10,745.04	201.09	-1,370.16	212.32	10.00	10.00	0.00
11,150.00	83.01	359.53	10,753.28	250.39	-1,370.57	261.62	10.00	10.00	0.00
11,200.00	88.01	359.53	10,757.20	300.22	-1,370.97	311.45	10.00	10.00	0.00
11,224.92	90.50	359.53	10,757.52	325.13	-1,371.18	336.37	10.00	10.00	0.00
Hold 90.50° Inc, 359.53° Azm									
11,300.00	90.50	359.53	10,756.87	400.21	-1,371.80	411.45	0.00	0.00	0.00
11,400.00	90.50	359.53	10,755.99	500.20	-1,372.62	511.44	0.00	0.00	0.00
11,500.00	90.50	359.53	10,755.12	600.19	-1,373.44	611.44	0.00	0.00	0.00
11,600.00	90.50	359.53	10,754.25	700.19	-1,374.26	711.44	0.00	0.00	0.00
11,700.00	90.50	359.53	10,753.37	800.18	-1,375.08	811.43	0.00	0.00	0.00
11,800.00	90.50	359.53	10,752.50	900.17	-1,375.90	911.43	0.00	0.00	0.00
11,900.00	90.50	359.53	10,751.63	1,000.16	-1,376.72	1,011.42	0.00	0.00	0.00
12,000.00	90.50	359.53	10,750.76	1,100.16	-1,377.54	1,111.42	0.00	0.00	0.00
12,100.00	90.50	359.53	10,749.88	1,200.15	-1,378.36	1,211.42	0.00	0.00	0.00
12,200.00	90.50	359.53	10,749.01	1,300.14	-1,379.18	1,311.41	0.00	0.00	0.00
12,300.00	90.50	359.53	10,748.14	1,400.14	-1,380.00	1,411.41	0.00	0.00	0.00
12,400.00	90.50	359.53	10,747.27	1,500.13	-1,380.82	1,511.40	0.00	0.00	0.00
12,500.00	90.50	359.53	10,746.39	1,600.12	-1,381.64	1,611.40	0.00	0.00	0.00
12,600.00	90.50	359.53	10,745.52	1,700.11	-1,382.46	1,711.40	0.00	0.00	0.00
12,700.00	90.50	359.53	10,744.65	1,800.11	-1,383.28	1,811.39	0.00	0.00	0.00
12,800.00	90.50	359.53	10,743.78	1,900.10	-1,384.10	1,911.39	0.00	0.00	0.00
12,888.61	90.50	359.53	10,743.00	1,988.71	-1,384.83	2,000.00	0.00	0.00	0.00
Begin 2.00°/100' Build									
12,900.00	90.73	359.53	10,742.88	2,000.09	-1,384.92	2,011.39	2.00	2.00	0.00
12,939.06	91.51	359.53	10,742.12	2,039.15	-1,385.24	2,050.44	2.00	2.00	0.00
Hold 91.51° Inc									
13,000.00	91.51	359.53	10,740.51	2,100.06	-1,385.74	2,111.36	0.00	0.00	0.00
13,100.00	91.51	359.53	10,737.88	2,200.02	-1,386.56	2,211.32	0.00	0.00	0.00
13,147.49	91.51	359.53	10,736.63	2,247.50	-1,386.95	2,258.80	0.00	0.00	0.00
Begin 2.00°/100' Turn									



MS Directional Planning Report



Database:	41-MSD-Conroe-EDM5000	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Company:	Matador Resources	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site:	Uncle Ches 2116 Fed Com (122H, 125H)	North Reference:	Grid
Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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)
13,200.00	91.51	358.48	10,735.25	2,299.98	-1,387.86	2,311.28	2.00	0.00	-2.00
13,300.00	91.51	356.48	10,732.61	2,399.84	-1,392.26	2,411.18	2.00	0.00	-2.00
13,347.43	91.51	355.53	10,731.36	2,447.13	-1,395.56	2,458.50	2.00	0.00	-2.00
Hold 355.53° Azm									
13,400.00	91.51	355.53	10,729.98	2,499.53	-1,399.66	2,510.93	0.00	0.00	0.00
13,500.00	91.51	355.53	10,727.34	2,599.19	-1,407.45	2,610.65	0.00	0.00	0.00
13,600.00	91.51	355.53	10,724.71	2,698.85	-1,415.24	2,710.37	0.00	0.00	0.00
13,700.00	91.51	355.53	10,722.08	2,798.51	-1,423.03	2,810.09	0.00	0.00	0.00
13,800.00	91.51	355.53	10,719.44	2,898.18	-1,430.82	2,909.81	0.00	0.00	0.00
13,900.00	91.51	355.53	10,716.81	2,997.84	-1,438.61	3,009.54	0.00	0.00	0.00
14,000.00	91.51	355.53	10,714.18	3,097.50	-1,446.40	3,109.26	0.00	0.00	0.00
14,055.43	91.51	355.53	10,712.72	3,152.74	-1,450.72	3,164.53	0.00	0.00	0.00
Begin 2.00°/100' Turn									
14,100.00	91.51	356.42	10,711.54	3,197.18	-1,453.85	3,209.00	2.00	0.00	2.00
14,200.00	91.51	358.42	10,708.91	3,297.04	-1,458.34	3,308.90	2.00	0.00	2.00
14,255.44	91.51	359.53	10,707.45	3,352.45	-1,459.33	3,364.31	2.00	0.00	2.00
Hold 359.53° Azm									
14,300.00	91.51	359.53	10,706.27	3,397.00	-1,459.70	3,408.86	0.00	0.00	0.00
14,400.00	91.51	359.53	10,703.64	3,496.96	-1,460.51	3,508.82	0.00	0.00	0.00
14,500.00	91.51	359.53	10,701.01	3,596.92	-1,461.33	3,608.79	0.00	0.00	0.00
14,600.00	91.51	359.53	10,698.37	3,696.88	-1,462.15	3,708.75	0.00	0.00	0.00
14,700.00	91.51	359.53	10,695.74	3,796.85	-1,462.97	3,808.72	0.00	0.00	0.00
14,800.00	91.51	359.53	10,693.11	3,896.81	-1,463.78	3,908.68	0.00	0.00	0.00
14,900.00	91.51	359.53	10,690.47	3,996.77	-1,464.60	4,008.65	0.00	0.00	0.00
15,000.00	91.51	359.53	10,687.84	4,096.73	-1,465.42	4,108.61	0.00	0.00	0.00
15,100.00	91.51	359.53	10,685.21	4,196.69	-1,466.23	4,208.58	0.00	0.00	0.00
15,200.00	91.51	359.53	10,682.57	4,296.66	-1,467.05	4,308.54	0.00	0.00	0.00
15,300.00	91.51	359.53	10,679.94	4,396.62	-1,467.87	4,408.51	0.00	0.00	0.00
15,400.00	91.51	359.53	10,677.31	4,496.58	-1,468.69	4,508.48	0.00	0.00	0.00
15,500.00	91.51	359.53	10,674.67	4,596.54	-1,469.50	4,608.44	0.00	0.00	0.00
15,600.00	91.51	359.53	10,672.04	4,696.50	-1,470.32	4,708.41	0.00	0.00	0.00
15,700.00	91.51	359.53	10,669.41	4,796.47	-1,471.14	4,808.37	0.00	0.00	0.00
15,800.00	91.51	359.53	10,666.77	4,896.43	-1,471.95	4,908.34	0.00	0.00	0.00
15,900.00	91.51	359.53	10,664.14	4,996.39	-1,472.77	5,008.30	0.00	0.00	0.00
16,000.00	91.51	359.53	10,661.51	5,096.35	-1,473.59	5,108.27	0.00	0.00	0.00
16,100.00	91.51	359.53	10,658.87	5,196.31	-1,474.40	5,208.23	0.00	0.00	0.00
16,200.00	91.51	359.53	10,656.24	5,296.28	-1,475.22	5,308.20	0.00	0.00	0.00
16,300.00	91.51	359.53	10,653.61	5,396.24	-1,476.04	5,408.16	0.00	0.00	0.00
16,400.00	91.51	359.53	10,650.97	5,496.20	-1,476.86	5,508.13	0.00	0.00	0.00
16,500.00	91.51	359.53	10,648.34	5,596.16	-1,477.67	5,608.09	0.00	0.00	0.00
16,600.00	91.51	359.53	10,645.71	5,696.12	-1,478.49	5,708.06	0.00	0.00	0.00
16,700.00	91.51	359.53	10,643.07	5,796.09	-1,479.31	5,808.02	0.00	0.00	0.00
16,800.00	91.51	359.53	10,640.44	5,896.05	-1,480.12	5,907.99	0.00	0.00	0.00
16,892.04	91.51	359.53	10,638.02	5,988.05	-1,480.88	6,000.00	0.00	0.00	0.00
Begin 2.00°/100' Drop									
16,900.00	91.35	359.53	10,637.82	5,996.01	-1,480.94	6,007.96	2.00	-2.00	0.00
16,987.49	89.60	359.53	10,637.09	6,083.49	-1,481.66	6,095.44	2.00	-2.00	0.00
Hold 89.60° Inc									
17,000.00	89.60	359.53	10,637.18	6,096.00	-1,481.76	6,107.95	0.00	0.00	0.00
17,100.00	89.60	359.53	10,637.88	6,195.99	-1,482.58	6,207.95	0.00	0.00	0.00
17,200.00	89.60	359.53	10,638.58	6,295.99	-1,483.39	6,307.94	0.00	0.00	0.00
17,300.00	89.60	359.53	10,639.27	6,395.98	-1,484.21	6,407.94	0.00	0.00	0.00
17,400.00	89.60	359.53	10,639.97	6,495.98	-1,485.03	6,507.94	0.00	0.00	0.00



MS Directional Planning Report



Database:	41-MSD-Conroe-EDM5000	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Company:	Matador Resources	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site:	Uncle Ches 2116 Fed Com (122H, 125H)	North Reference:	Grid
Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
17,500.00	89.60	359.53	10,640.67	6,595.97	-1,485.85	6,607.94	0.00	0.00	0.00	
17,600.00	89.60	359.53	10,641.37	6,695.96	-1,486.66	6,707.93	0.00	0.00	0.00	
17,700.00	89.60	359.53	10,642.07	6,795.96	-1,487.48	6,807.93	0.00	0.00	0.00	
17,800.00	89.60	359.53	10,642.76	6,895.95	-1,488.30	6,907.93	0.00	0.00	0.00	
17,900.00	89.60	359.53	10,643.46	6,995.95	-1,489.12	7,007.93	0.00	0.00	0.00	
18,000.00	89.60	359.53	10,644.16	7,095.94	-1,489.93	7,107.92	0.00	0.00	0.00	
18,100.00	89.60	359.53	10,644.86	7,195.94	-1,490.75	7,207.92	0.00	0.00	0.00	
18,200.00	89.60	359.53	10,645.56	7,295.93	-1,491.57	7,307.92	0.00	0.00	0.00	
18,300.00	89.60	359.53	10,646.25	7,395.92	-1,492.38	7,407.92	0.00	0.00	0.00	
18,400.00	89.60	359.53	10,646.95	7,495.92	-1,493.20	7,507.91	0.00	0.00	0.00	
18,500.00	89.60	359.53	10,647.65	7,595.91	-1,494.02	7,607.91	0.00	0.00	0.00	
18,600.00	89.60	359.53	10,648.35	7,695.91	-1,494.84	7,707.91	0.00	0.00	0.00	
18,700.00	89.60	359.53	10,649.05	7,795.90	-1,495.65	7,807.91	0.00	0.00	0.00	
18,800.00	89.60	359.53	10,649.75	7,895.90	-1,496.47	7,907.91	0.00	0.00	0.00	
18,900.00	89.60	359.53	10,650.44	7,995.89	-1,497.29	8,007.90	0.00	0.00	0.00	
19,000.00	89.60	359.53	10,651.14	8,095.88	-1,498.11	8,107.90	0.00	0.00	0.00	
19,100.00	89.60	359.53	10,651.84	8,195.88	-1,498.92	8,207.90	0.00	0.00	0.00	
19,200.00	89.60	359.53	10,652.54	8,295.87	-1,499.74	8,307.90	0.00	0.00	0.00	
19,300.00	89.60	359.53	10,653.24	8,395.87	-1,500.56	8,407.89	0.00	0.00	0.00	
19,392.11	89.60	359.53	10,653.88	8,487.97	-1,501.31	8,500.00	0.00	0.00	0.00	
Begin 2.00°/100' Build										
19,408.64	89.93	359.53	10,653.95	8,504.50	-1,501.45	8,516.53	2.00	2.00	0.00	
Hold 89.93° Inc										
19,500.00	89.93	359.53	10,654.06	8,595.86	-1,502.19	8,607.89	0.00	0.00	0.00	
19,600.00	89.93	359.53	10,654.18	8,695.85	-1,503.01	8,707.89	0.00	0.00	0.00	
19,700.00	89.93	359.53	10,654.30	8,795.85	-1,503.83	8,807.89	0.00	0.00	0.00	
19,800.00	89.93	359.53	10,654.42	8,895.85	-1,504.64	8,907.89	0.00	0.00	0.00	
19,900.00	89.93	359.53	10,654.54	8,995.84	-1,505.46	9,007.89	0.00	0.00	0.00	
20,000.00	89.93	359.53	10,654.66	9,095.84	-1,506.28	9,107.89	0.00	0.00	0.00	
20,100.00	89.93	359.53	10,654.78	9,195.84	-1,507.10	9,207.89	0.00	0.00	0.00	
20,200.00	89.93	359.53	10,654.91	9,295.83	-1,507.91	9,307.89	0.00	0.00	0.00	
20,300.00	89.93	359.53	10,655.03	9,395.83	-1,508.73	9,407.89	0.00	0.00	0.00	
20,400.00	89.93	359.53	10,655.15	9,495.83	-1,509.55	9,507.89	0.00	0.00	0.00	
20,500.00	89.93	359.53	10,655.27	9,595.82	-1,510.37	9,607.89	0.00	0.00	0.00	
20,600.00	89.93	359.53	10,655.39	9,695.82	-1,511.18	9,707.89	0.00	0.00	0.00	
20,700.00	89.93	359.53	10,655.51	9,795.82	-1,512.00	9,807.89	0.00	0.00	0.00	
20,800.00	89.93	359.53	10,655.63	9,895.81	-1,512.82	9,907.89	0.00	0.00	0.00	
20,900.00	89.93	359.53	10,655.75	9,995.81	-1,513.64	10,007.89	0.00	0.00	0.00	
21,000.00	89.93	359.53	10,655.87	10,095.81	-1,514.45	10,107.89	0.00	0.00	0.00	
21,103.87	89.93	359.53	10,656.00	10,199.67	-1,515.30	10,211.76	0.00	0.00	0.00	
PBHL										



MS Directional Planning Report



Database:	41-MSD-Conroe-EDM5000	Local Co-ordinate Reference:	Well Uncle Ches 2116 Fed Com 125H
Company:	Matador Resources	TVD Reference:	WELL @ 3745.50usft (Patterson 297)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3745.50usft (Patterson 297)
Site:	Uncle Ches 2116 Fed Com (122H, 125H)	North Reference:	Grid
Well:	Uncle Ches 2116 Fed Com 125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
FTP - Uncle Ches 211	0.00	0.00	10,418.29	-202.98	-1,430.46	565,442.90	766,228.22	32° 33' 5.548 N	103° 28' 9.552 W
- plan misses target center by 63.61usft at 10560.87usft MD (10418.49 TVD, -202.89 N, -1366.85 E)									
- Point									
LTP - Uncle Ches 211	0.00	0.00	10,656.00	10,159.69	-1,514.98	575,805.56	766,143.70	32° 34' 48.091 N	103° 28' 9.556 W
- plan misses target center by 0.05usft at 21063.89usft MD (10655.95 TVD, 10159.69 N, -1514.98 E)									
- Point									
PBHL - Uncle Ches 2'	0.00	0.00	10,656.00	10,199.67	-1,515.30	575,845.55	766,143.37	32° 34' 48.486 N	103° 28' 9.556 W
- plan hits target center									
- Point									
LP - Uncle Ches 2116	0.00	0.00	10,757.52	325.13	-1,371.18	565,971.00	766,287.50	32° 33' 10.769 N	103° 28' 8.809 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
500.00	500.00	0.00	0.00	KOP, 1.00°/100' Build
600.00	599.99	0.44	-0.76	Hold 1.00° Inc, 300.00° Azm
2,050.23	2,050.00	13.09	-22.67	Begin 1.00°/100' Build
3,161.76	3,153.08	-4.79	-143.26	Hold 11.85° Inc, 258.54° Azm
8,845.65	8,715.93	-236.64	-1,286.72	Begin 1.50°/100' Drop
9,635.33	9,500.00	-252.81	-1,366.44	Begin Vertical Hold
10,319.92	10,184.58	-252.81	-1,366.44	Begin 10.00°/100' Build
11,224.92	10,757.52	325.13	-1,371.18	Hold 90.50° Inc, 359.53° Azm
12,888.61	10,743.00	1,988.71	-1,384.83	Begin 2.00°/100' Build
12,939.06	10,742.12	2,039.15	-1,385.24	Hold 91.51° Inc
13,147.49	10,736.63	2,247.50	-1,386.95	Begin 2.00°/100' Turn
13,347.43	10,731.36	2,447.13	-1,395.56	Hold 355.53° Azm
14,055.43	10,712.72	3,152.74	-1,450.72	Begin 2.00°/100' Turn
14,255.44	10,707.45	3,352.45	-1,459.33	Hold 359.53° Azm
16,892.04	10,638.02	5,988.05	-1,480.88	Begin 2.00°/100' Drop
16,987.49	10,637.09	6,083.49	-1,481.66	Hold 89.60° Inc
19,392.11	10,653.88	8,487.97	-1,501.31	Begin 2.00°/100' Build
19,408.64	10,653.95	8,504.50	-1,501.45	Hold 89.93° Inc
21,103.87	10,656.00	10,199.67	-1,515.30	PBHL

Drill Plan

Uncle Ches 2116 Federal Com 125H
SHL: 290' FSL & 1762' FWL Section 21
BHL: 60' FNL & 330' FWL Section 16
Township/Range: 20S-35E
Elevation Above Sea Level: 3716'

Drilling Operation Plan

Proposed Drilling Depth: 21103' MD / 10656' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.5515412 N / 103.4698058 W

TD Lat/Long (NAD83): 32.5802586 N / 103.4698084 W

1. Estimated Tops

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	1,972	1,972	370	Anhydrite	Barren
Top of Salt	2,342	2,342	1,286	Salt	Barren
Base of Salt	3,628	3,628	546	Salt	Barren
7 Rivers	4,174	4,174	948	Salt	Barren
Queen	5,122	5,122	867	Sandstone	Oil/Natural Gas
Cherry Canyon	5,989	5,989	951	Sandstone	Oil/Natural Gas
Brushy Canyon	6,940	6,940	1,544	Sandstone	Oil/Natural Gas
BoneSpring Lime	8,484	8,484	424	Limestone	Oil/Natural Gas
Avalon Shale	8,908	8,908	688	Shale	Oil/Natural Gas
1st Bone Spring Carb	9,596	9,596	140	Carbonate	Oil/Natural Gas
1st Bone Spring Sand	9,736	9,736	332	Sandstone	Oil/Natural Gas
2nd Bone Spring Carb	10,068	10,068	351	Carbonate	Oil/Natural Gas
KOP	10,319	10,184	-	Carbonate	Oil/Natural Gas
2nd Bone Spring Sand	10,620	10,419	-	Sandstone	Oil/Natural Gas
TD	21,103	10,656		Limestone	Oil/Natural Gas

2. Notable Zones

2nd Bone Spring is the goal. All perforations will be within the setback requirements as prescribed or permitted by the New Mexico Oil Conservation Division. OSE estimated ground water depth at this location is 877'.

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.

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 - 1997	0 - 1997	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	12.25	0 - 6014	0 - 6014	9.625	40	L-80	BUTT	1.125	1.125	1.8
Production	8.75	0 - 21103	0 - 10656	5.5	20	P-110	TLW-SC	1.125	1.125	1.8

- All casing strings will be tested in accordance with Onshore Order #2 - III.B.1.h

- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed

String	Type	Sacks	Yield	Cu. Ft.	Weight	Percent Excess	Top of Cement	Class	Blend
Surface	Lead	1010	1.72	1737	12.5	50%	0	C	5% NaCl + LCM
	Tail	330	1.38	451	14.8	50%	1598	C	5% NaCl + LCM
Intermediate 1	Lead	1760	2.13	3756	11.5	125%	0	C	Bentonite + 1% CaCL ₂ + 8% NaCl + LCM
	Tail	430	1.38	598	13.5	80%	5014	C	5% NaCl + LCM
Production	Lead	560	2.22	1254	11.5	25%	5814	H	Fluid Loss + Dispersant + Retarder + LCM
	Tail	2650	1.35	3573	13.2	25%	9819	H	Fluid Loss + Dispersant + Retarder + LCM

5. Mud Program

Drill Plan

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 - 1997	8.4 - 8.8	28-30	NC
Intermediate 1	12.25	Brine Water	1997 - 6014	9.5 - 10.2	28-30	NC
Production	8.75	Cut Brine/OBM	6014 - 21103	8.6 - 9.4	28-30	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 2864 psi. Expected bottom hole temperature is 150 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.

Casing String Specification Sheet

Uncle Ches 2116 Federal Com 125H

SHL: 290' FSL & 1762' FWL Section 21

BHL: 60' FNL & 330' FWL Section 16

Township/Range: 20S-35E

Elevation Above Sea Level: 3716'

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 - 1997	0 - 1997	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	12.25	0 - 6014	0 - 6014	9.625	40	L-80	BUTT	1.125	1.125	1.8
Production	8.75	0 - 21103	0 - 10656	5.5	20	P-110	TLW-SC	1.125	1.125	1.8

District I

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District IV

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

CONDITIONS

Action 50632

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 50632
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	9/24/2021