

**PECOS DISTRICT
DRILLING OPERATIONS
CONDITIONS OF APPROVAL**

HOBBS OCD

JAN 03 2018

RECEIVED

OPERATOR'S NAME:	Matador Production company
LEASE NO.:	MNLC065607
WELL NAME & NO.:	134H-Verna RAE Fed Com
SURFACE HOLE FOOTAGE:	260'/N & 1725'/E
BOTTOM HOLE FOOTAGE:	240'/S & 660'/E
LOCATION:	Section 6, T.20 S, R 34 E, NMPM
COUNTY:	Lea County, New Mexico

Potash	☐ None	☒ Secretary	☐ R-111-P
Cave/Karst Potential	☐ Low	☒ Medium	☐ High
Variance	☐ None	☒ Flex Hose	☐ Other
Wellhead	☐ Conventional	☒ Multibowl	
Other	☐ 4 String Area	☒ Capitan Reef	☐ WIPP

A. Hydrogen Sulfide

1. A Hydrogen Sulfide (H₂S) Drilling Plan shall be activated 500 feet prior to drilling into the **Yates - Seven Rivers** 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 **20** inch surface casing shall be set at approximately **1600** feet (a minimum of 25 feet 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 fluid filled to meet BLM minimum collapse requirement.

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

Option 1:

- 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 Potash and Capitan Reef.**

Option 2:

Operator has proposed DV tool, the depth may be adjusted as long as the cement is changed proportionally. DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range. If an ECP is used, it is to be set a minimum of 50' below the shoe to provide cement across the shoe. If it cannot be set below the shoe, a CBL shall be run to verify cement coverage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.

- b. Second stage above DV tool:

- Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to Potash and Capitan Reef.**

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

- 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 above the Capitan Reef** (Top of Capitan Reef estimated at 4750'). Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
- 3.

Option 1:

- i. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9 5/8** inch intermediate casing shoe shall be **5000 (5M)** psi.

Option 2:

- i. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the intermediate casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9 5/8** first intermediate 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.

D. SPECIAL REQUIREMENT(S)

Waste Minimization Plan (WMP)

In the interest of resource development, submission of additional well gas capture development plan information is deferred but may be required by the BLM Authorized Officer at a later date.

Communitization Agreement

- The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, 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.

MHH 12102017

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)

☒ Chaves and Roosevelt Counties

Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
During office hours call (575) 627-0272.
After office hours call (575)

☒ 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.
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.
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: 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. Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.
 - 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.
- 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.

PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Matador Production company
LEASE NO.:	MNLC065607
WELL NAME & NO.:	134H-Verna RAE Fed Com
SURFACE HOLE FOOTAGE:	260'/N & 1725'/E
BOTTOM HOLE FOOTAGE	240'/S & 660'/E
LOCATION:	Section 6, T.20 S, R 34 E, NMPM
COUNTY:	Lea County, New Mexico

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Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

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I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken:

Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period.

Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted.

Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

Below Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

Watershed/Water Quality:

The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.

1. The compacted berm shall be constructed at a minimum of 24 inches high with impermeable mineral material (e.g. caliche).
2. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
3. The topsoil stockpile shall be located outside the bermed well pad.
4. Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
5. No storm drains, tubing or openings shall be placed in the berm.
6. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
7. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
8. Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised. (Any access road crossing the berm cannot be lower than the berm height.)

Tank Battery:

1. Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

1. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

Potash

Lessees must comply with the 2012 Secretarial Potash Order. The Order is designed to manage the efficient development of oil, gas, and potash resources. Section 6 of the Order provides general provisions which must be followed to minimize conflict between the industries and ensure the safety of operations. Three exceptions to this policy will be permitted if the drilling will occur under the following conditions from:

(a) A Drilling Island associated with a Development Area established under this Order or a Drilling Island established under a prior Order;

(b) A Barren Area and the Authorized Officer determines that such operations will not adversely affect active or planned potash mining operations in the immediate vicinity of the proposed drill-site; or

(c) A Drilling Island, not covered by (a) above or single well site established under this Order by the approval and in the sole discretion of the Authorized Officer, provided that such site was jointly recommended to the Authorized Officer by the oil and gas lessee(s) and the nearest potash lessee(s).

When the Authorized Officer determines that unitization is necessary for orderly oil and gas development and proper protection of potash deposits, no well shall be drilled for oil or gas except pursuant to a unit plan approved by the authorized officer.

The drilling or the abandonment of any well on said lease shall be done in accordance with applicable oil and gas operating regulations including such requirements as the Authorized Officer may prescribe as necessary to prevent the infiltration of oil, gas or water into formations containing potash deposits or into mines or working being utilized in the extraction of such deposits.

To minimize impacts to potash resources, the proposed well is confined within the boundaries of the established Verna Rae Drill Island (See Potash Memo and Map in attached file for Drill Island description)

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

G. ON LEASE ACCESS ROADS**Road Width**

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

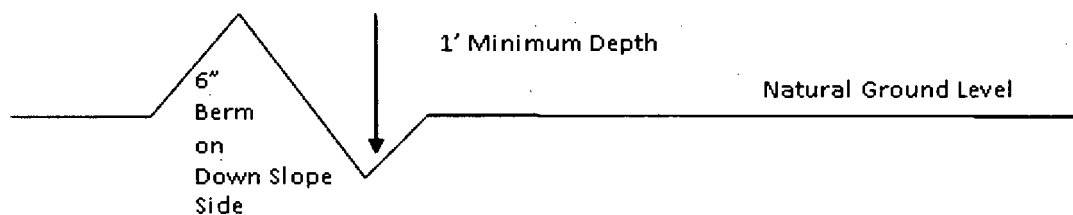
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outslowing and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Construction Steps

1. Salvage topsoil
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes

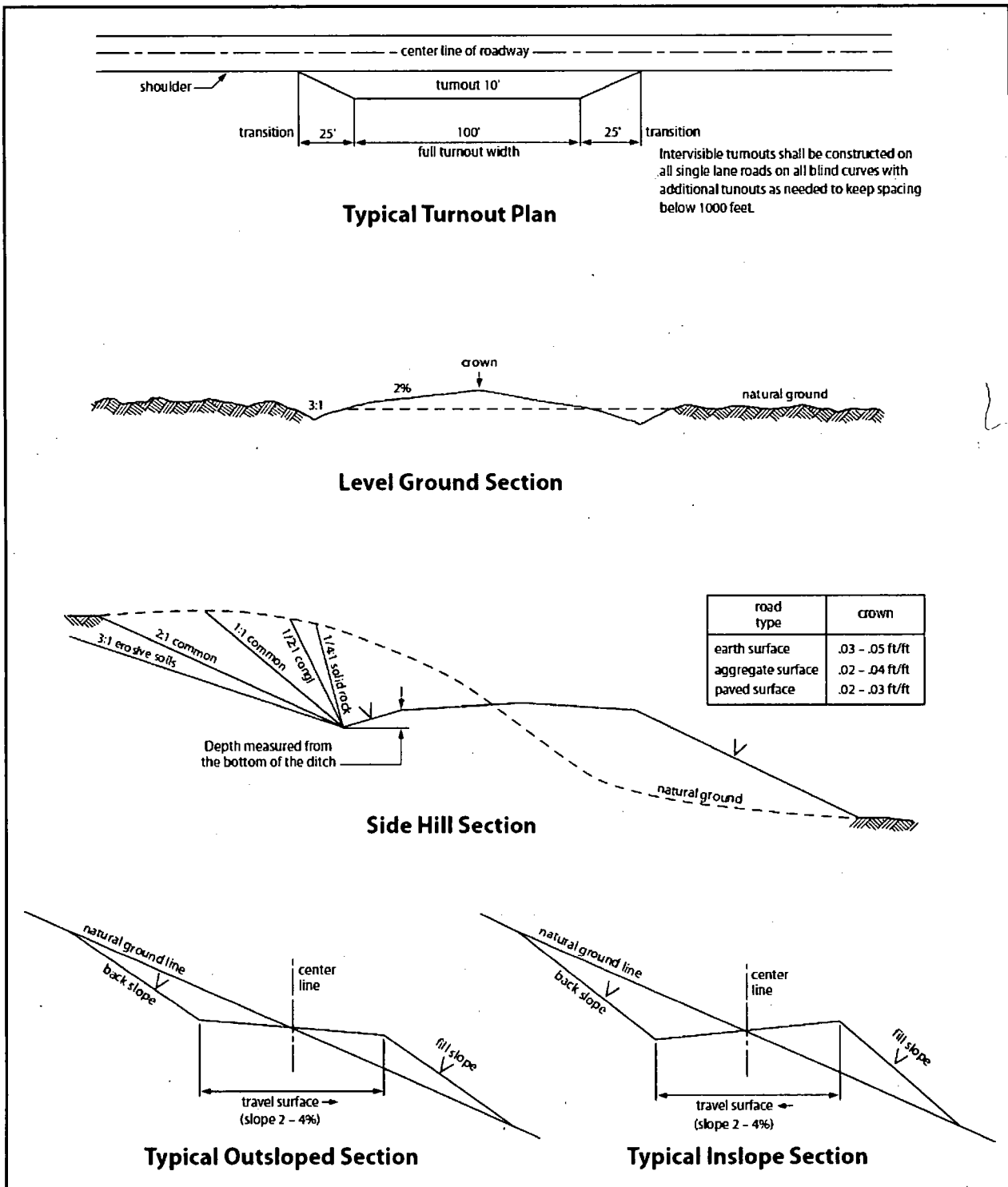


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Exclosure Netting (Open-top Tanks)

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

Open-Vent Exhaust Stack Exclosures

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

B. Electric Lines

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006 . The holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the

Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.

Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken:

Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

VIII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

IX. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Below Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Exhibit A-1

Company: Matador Resources

Lease #:

Well name: Verna Rae Fed Com 134H

November 11, 2017

Seed Mixture for LPC Sand/Shinnery Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. Seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed



Hydrogen Sulfide Drilling

Operations Plan

1 H2S safety instructions to the following:

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

2 H2S Detection and Alarm Systems:

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

3 Windssocks and / Wind Streamers:

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

4 Condition Flags and Signs:

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

5 Well Control Equipment:

- See attachments

6 Communication:

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



7 Drilling Stem Testing:

- No DSTs or cores are planned at this time.

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

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

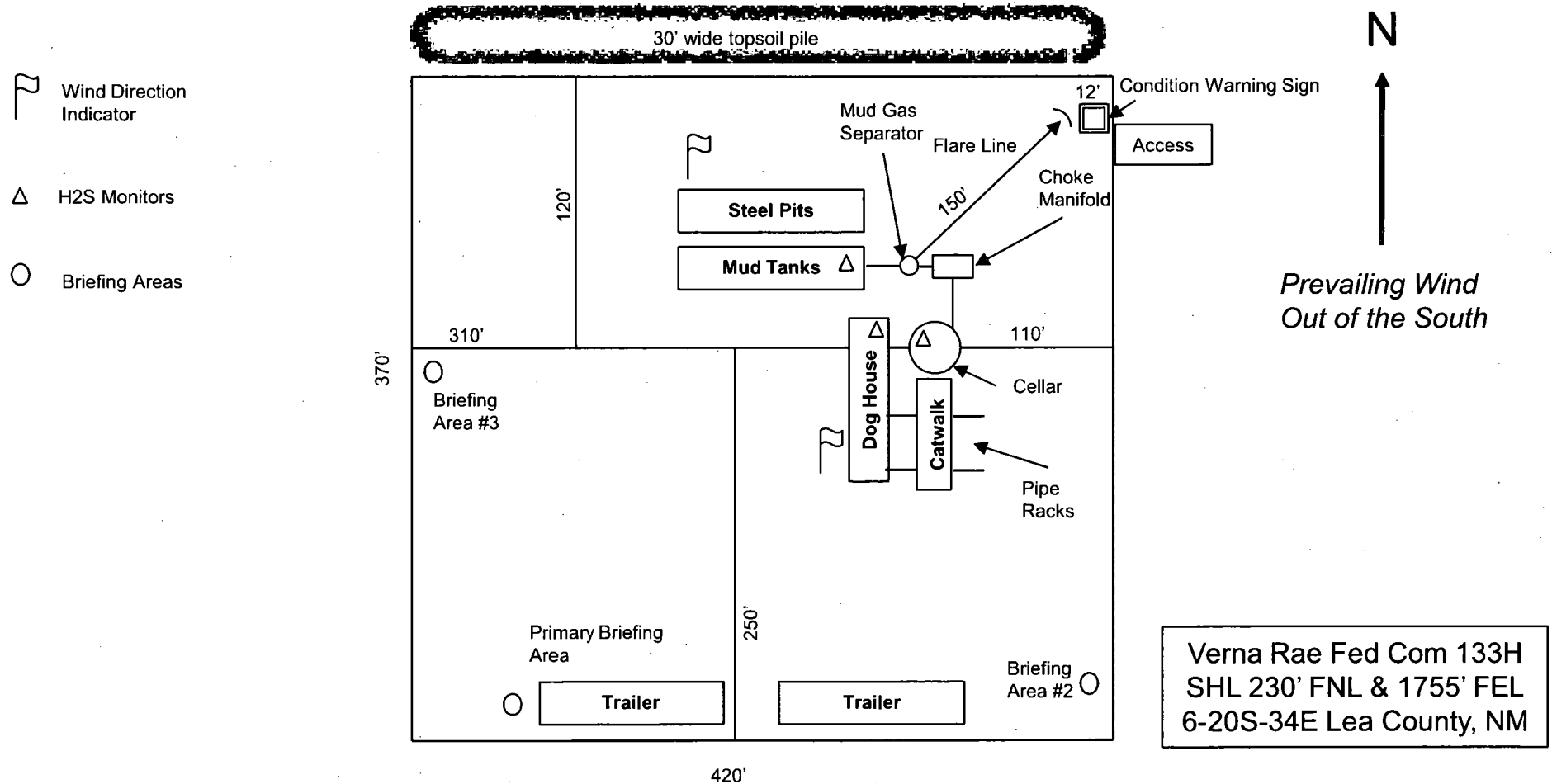
11 Emergency Contacts

- See following page

H2S Contingency Plan Emergency Contacts
Verna Rae Fed Com wells
Matador Production Company
Sec. 6, T20S, R34E Lea County, NM

Company Office			
Matador Production Company		(972)-371-5200	
Key Personnel			
Name	Title	Office	Mobile
Billy Goodwin	Vice President Drilling	972-371-5210	817-522-2928
Gary Martin	Drilling Superintendent		601-669-1774
Dee Smith	Drilling Superintendent	972-371-5447	972-822-1010
Patrick Walsh	Drilling Engineer	972-371-5291	626-318-5808
Greg Deevers	Construction Superintendent		405-431-9527
Jimmy Benefield	Construction Superintendent		318-548-6659
Lea County			575-390-3186
Ambulance		911	
Nor Lea General Hospital (Hobbs)		575-397-0560	
State Police (Hobbs)		575-392-5580	
City Police (Hobbs)		575-397-9625	
Sheriff's Office (Lovington)		575-396-3611	
Fire Marshall (Lovington)		575-391-2983	
Volunteer Fire Dept. (Monument)		575-393-4339	
Emergency Management (Lovington)		575-391-2983	
New Mexico Oil Conservation Division (Hobbs)		575-393-6161	
BLM (Hobbs)		575-393-3612	
Hobbs Animal Clinic		575-392-5563	
Dal Paso Animal Hospital (Hobbs)		575-397-2286	
Mountain States Equine (Hobbs)		575-392-7488	
Carlsbad			
BLM		575-234-5972	
Santa Fe			
New Mexico Emergency Response Commission (Santa Fe)		505-476-9600	
New Mexico Emergency Response Commission (Santa Fe) 24 hrs		505-827-9126	
New Mexico State Emergency Operations Center		505-476-9635	
National			
National Emergency Response Center (Washington, D.C.)		800-424-8802	
Medical			
Flight for Life- 4000 24th St.; Lubbock, TX		806-743-9911	
Aerocare- R3, Box 49F; Lubbock, TX		806-747-8923	
Med Flight Air Amb- 2301 Yale Blvd SE, D3; Albuquerque, NM		505-842-4433	
SB Air Med Service- 2505 Clark Carr Loop SE; Albuquerque, NM		505-842-4949	
Other			
Boots & Coots IWC		800-256-9688	or 281-931-8884
Cudd Pressure Control		432-699-0139	or 432-563-3356
Halliburton		575-746-2757	
B.J. Services		575-746-3569	
NM Dept. of Transportation (Roswell)		575-637-7200	

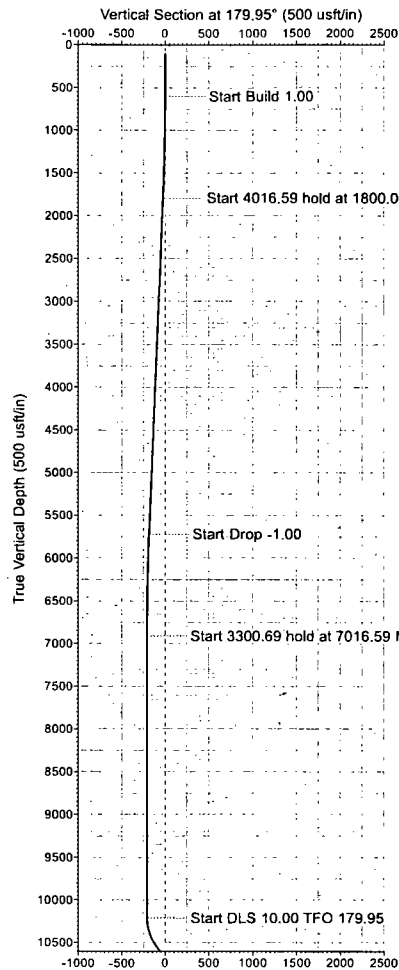
H2S Rig Diagram





Matador Resources
Lea County, NM
Verna Rae
134H
Prelim Plan A
GL:3620'+KB:28.5'(Pat809)

US State Plane 1927 (Exact solution)
NAD 1927 (NADCON CONUS)
Clarke 1866
New Mexico East 3001
Mean Sea Level

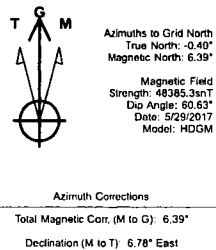


RKB Elevation: Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))

	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
	0.00	0.00	585892.00	727046.00	32.6085574°N	103.5960116°W	

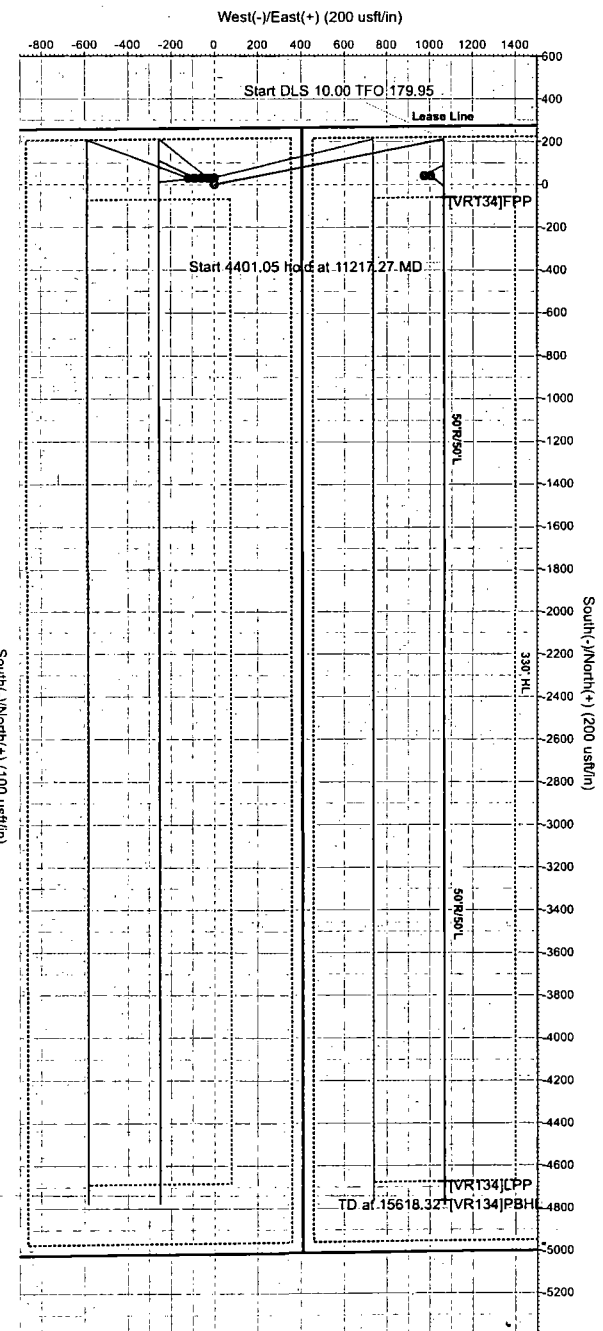
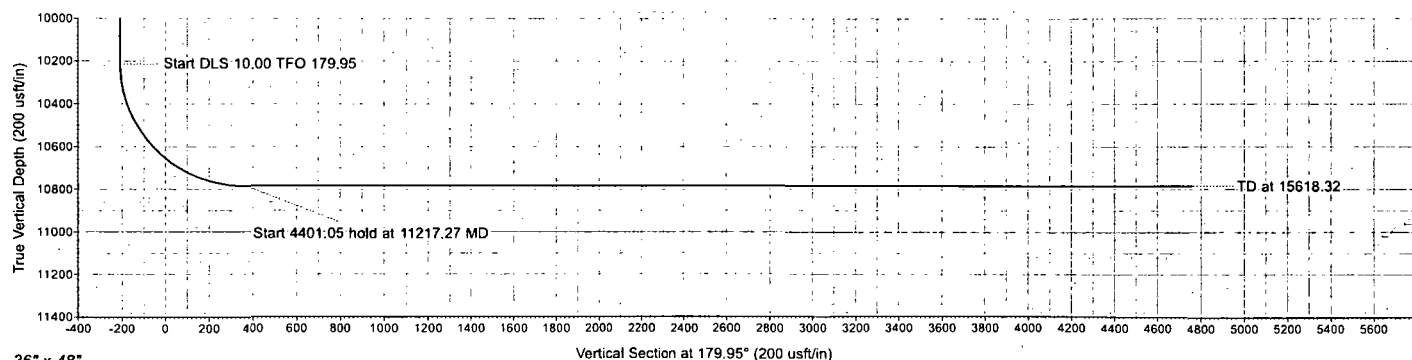
SECTION DETAILS- Lateral

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00
3	1800.00	12.00	78.85	1791.25	24.22	122.84	1.00	-24.11
4	5816.59	12.00	78.85	5720.07	185.78	942.16	0.00	-184.96
5	7016.59	0.00	0.00	6911.31	210.00	1065.00	1.00	-209.07
6	10317.28	0.00	0.00	10212.00	210.00	1065.00	0.00	-209.07
7	11217.27	90.00	179.95	10784.96	-362.95	1065.46	10.00	363.88
8	15618.32	90.00	179.95	10785.00	-4764.00	1069.00	0.00	4764.93



LEGEND

- 114H, OH, Prelim Plan A V0 • 113H, OH, Prelim Plan A V0
- 133H, OH, Prelim Plan A V0 • 123H, OH, Prelim Plan A V0
- 124H, OH, Prelim Plan A V0 • 203H, OH, Prelim Plan A V0
- 204H, OH, Prelim Plan A V0 • Prelim Plan A

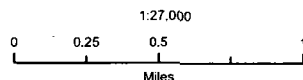


Matador Production Company

Verna Rae Fed Com #133H
H₂S Contingency Plan:
2 Mile Radius Map

Section 6, Township 20S, Range 34E
Lea County, New Mexico

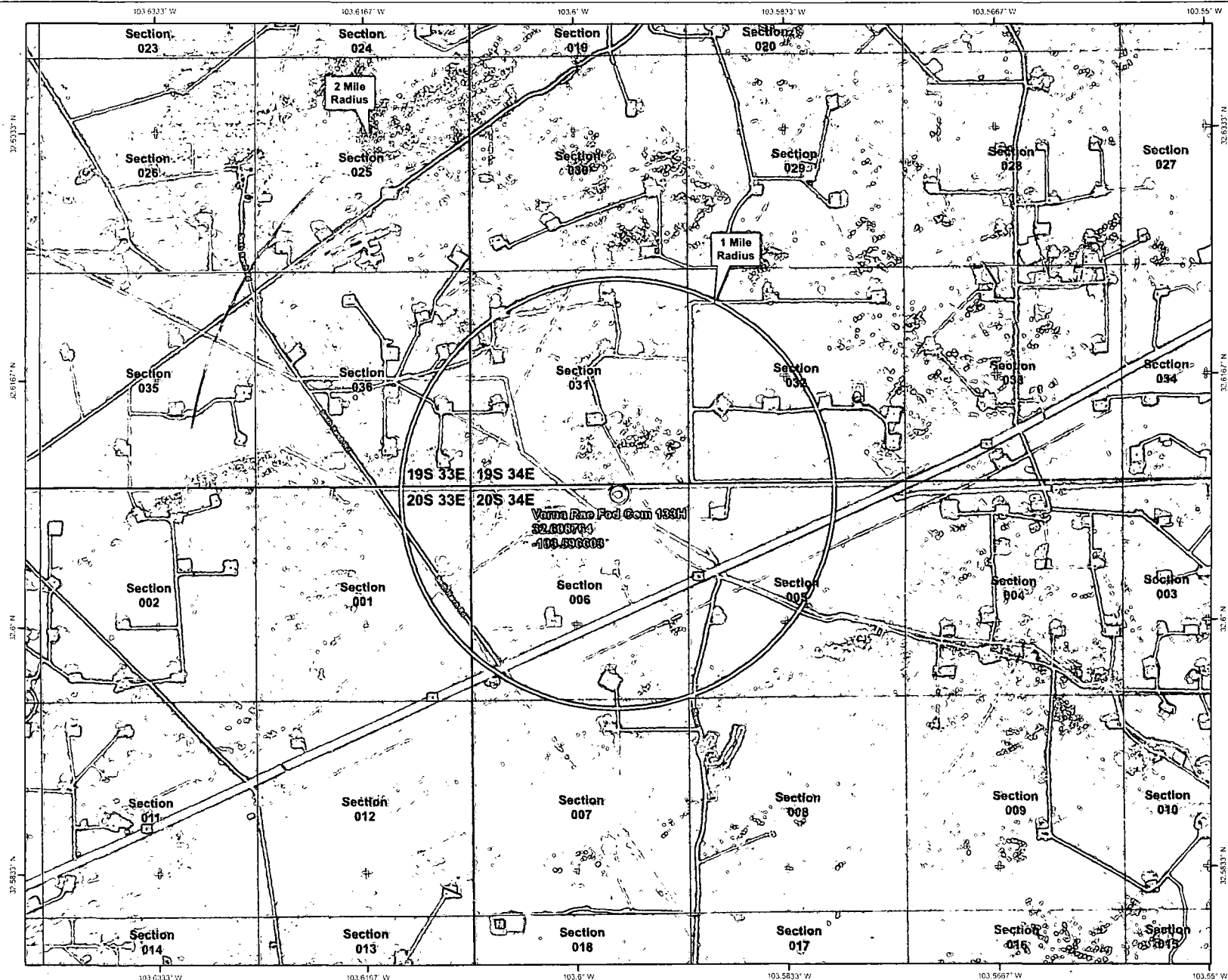
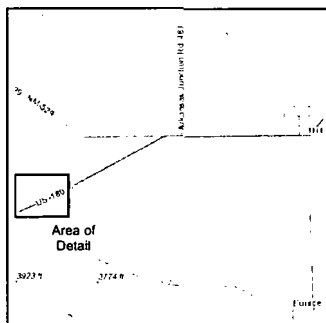
⊙ Surface Hole Location



NAD 1983 New Mexico State Plane East
FIPS 3001 Feet



Prepared by Permits West, Inc., June 9, 2017
for Matador Production Company



Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Reference	Prelim Plan A		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 9,999.98 usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	5/31/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	15,618.32	Prelim Plan A (OH)	MWD - OWSG	MWD - OWSG	

Summary						
Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance		Separation Factor	Warning
			Between Centres (usft)	Between Ellipses (usft)		
Verna Rae						
113H - OH - Prelim Plan A	600.00	600.00	67.08	63.55	18.984	CC
113H - OH - Prelim Plan A	700.00	700.01	67.77	63.53	15.970	ES
113H - OH - Prelim Plan A	1,000.00	997.17	81.68	75.35	12.886	SF
114H - OH - Prelim Plan A	6,317.80	6,221.09	215.84	166.16	4.344	CC
114H - OH - Prelim Plan A	9,000.00	8,901.56	220.00	152.63	3.266	ES, SF
123H - OH - Prelim Plan A	600.00	600.00	94.87	91.33	26.847	CC, ES
123H - OH - Prelim Plan A	15,618.32	14,971.50	1,394.61	1,230.12	8.479	SF
124H - OH - Prelim Plan A	6,500.64	6,400.00	117.73	66.45	2.296	CC
124H - OH - Prelim Plan A	9,800.00	9,701.34	120.00	47.04	1.645	ES, SF
133H - OH - Prelim Plan A	400.00	400.00	42.43	40.33	20.205	CC, ES
133H - OH - Prelim Plan A	15,618.32	15,601.05	1,322.14	1,148.31	7.606	SF
203H - OH - Prelim Plan A	200.00	200.00	123.45	122.79	185.406	CC, ES
203H - OH - Prelim Plan A	15,618.32	15,699.42	1,658.75	1,481.59	9.363	SF
204H - OH - Prelim Plan A	100.00	100.00	31.00	30.87	241.520	CC
204H - OH - Prelim Plan A	1,800.00	1,803.93	35.65	22.97	2.812	ES
204H - OH - Prelim Plan A	15,618.32	15,690.70	360.45	190.46	2.120	SF

Offset Design											Offset Site Error:		
Verna Rae - 113H - OH - Prelim Plan A											0.00 usft		
Survey Program: 0-MWD - OWSG, 3000-MWD - OWSG, 8900-MWD - OWSG											Offset Well Error:		
											0.00 usft		
Reference		Offset		Semi Major Axis		Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation		Separation Factor
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	(usft)		
100.00	100.00	100.00	100.00	0.00	0.13	-63.43	30.00	-60.00	67.08	66.95	0.13	522.634	
200.00	200.00	200.00	200.00	0.18	0.49	-63.43	30.00	-60.00	67.08	66.42	0.67	100.745	
300.00	300.00	300.00	300.00	0.54	0.85	-63.43	30.00	-60.00	67.08	65.70	1.38	48.512	
400.00	400.00	400.00	400.00	0.90	1.20	-63.43	30.00	-60.00	67.08	64.98	2.10	31.948	
500.00	500.00	500.00	500.00	1.25	1.56	-63.43	30.00	-60.00	67.08	64.27	2.82	23.816	
600.00	600.00	600.00	600.00	1.61	1.92	-63.43	30.00	-60.00	67.08	63.55	3.53	18.984	CC
700.00	699.99	700.01	699.99	1.97	2.28	-142.73	30.00	-60.00	67.77	63.53	4.24	15.970	ES
800.00	799.96	799.96	799.96	2.31	2.64	-144.01	30.00	-60.00	69.88	64.92	4.95	14.114	
900.00	899.86	898.74	898.74	2.67	2.98	-146.28	29.91	-60.85	74.21	68.56	5.65	13.139	
1,000.00	999.68	997.17	997.13	3.03	3.32	-149.44	29.65	-63.37	81.68	75.35	6.34	12.886	SF

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Verna Rae - 113H - OH - Prelim Plan A													Offset Well Error:	0.00 usft
Survey Program: 0-MWD - OWSG, 3000-MWD - OWSG, 8900-MWD - OWSG														
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
1,100.00	1,099.37	1,095.07	1,094.94	3.39	3.66	-152.94	29.22	-67.56	92.50	85.47	7.03	13.155		
1,200.00	1,198.90	1,192.26	1,191.96	3.76	4.00	-156.35	28.63	-73.35	106.79	99.07	7.72	13.827		
1,300.00	1,298.26	1,288.60	1,288.00	4.14	4.35	-159.41	27.88	-80.71	124.59	116.18	8.41	14.813		
1,400.00	1,397.40	1,385.99	1,385.03	4.52	4.70	-162.04	27.01	-89.14	145.29	136.18	9.11	15.950		
1,500.00	1,496.30	1,483.23	1,481.90	4.92	5.06	-164.16	26.15	-97.58	167.87	158.06	9.81	17.115		
1,600.00	1,594.93	1,580.05	1,578.35	5.33	5.41	-165.90	25.29	-105.97	192.27	181.76	10.51	18.295		
1,700.00	1,693.26	1,676.42	1,674.35	5.75	5.77	-167.34	24.43	-114.32	218.46	207.25	11.21	19.487		
1,800.00	1,791.25	1,772.31	1,769.88	6.19	6.13	-168.55	23.58	-122.64	246.41	234.50	11.91	20.686		
1,900.00	1,889.06	1,867.95	1,865.15	6.64	6.48	-169.59	22.73	-130.93	275.26	262.65	12.61	21.826		
2,000.00	1,986.88	1,963.58	1,960.42	7.10	6.84	-170.43	21.87	-139.22	304.19	290.88	13.31	22.851		
2,100.00	2,084.69	2,059.22	2,055.70	7.56	7.20	-171.13	21.02	-147.51	333.16	319.15	14.01	23.773		
2,200.00	2,182.51	2,154.86	2,150.97	8.03	7.56	-171.72	20.17	-155.81	362.18	347.46	14.72	24.607		
2,300.00	2,280.32	2,250.50	2,246.25	8.50	7.92	-172.22	19.32	-164.10	391.22	375.80	15.42	25.365		
2,400.00	2,378.13	2,346.14	2,341.52	8.97	8.29	-172.65	18.47	-172.39	420.29	404.16	16.13	26.055		
2,500.00	2,475.95	2,441.78	2,436.80	9.45	8.65	-173.02	17.62	-180.68	449.37	432.53	16.84	26.687		
2,600.00	2,573.76	2,537.41	2,532.07	9.92	9.01	-173.35	16.77	-188.97	478.47	460.92	17.55	27.267		
2,700.00	2,671.58	2,633.05	2,627.34	10.40	9.37	-173.64	15.92	-197.27	507.58	489.33	18.26	27.801		
2,800.00	2,769.39	2,728.69	2,722.62	10.88	9.74	-173.90	15.07	-205.56	536.71	517.74	18.97	28.295		
2,900.00	2,867.21	2,824.33	2,817.89	11.37	10.10	-174.13	14.22	-213.85	565.84	546.16	19.68	28.752		
3,000.00	2,965.02	2,919.97	2,913.17	11.85	10.47	-174.34	13.37	-222.14	594.98	574.59	20.39	29.177		
3,100.00	3,062.84	3,015.60	3,008.44	12.33	10.80	-174.53	12.52	-230.43	624.13	603.05	21.08	29.612		
3,200.00	3,160.65	3,119.28	3,111.75	12.82	10.90	-174.72	11.64	-238.99	652.90	631.36	21.54	30.313		
3,300.00	3,258.47	3,228.20	3,220.44	13.31	10.94	-174.90	10.91	-246.08	679.97	658.00	21.97	30.953		
3,400.00	3,356.28	3,338.25	3,330.38	13.79	10.99	-175.07	10.39	-251.15	705.19	682.78	22.41	31.469		
3,500.00	3,454.10	3,449.38	3,441.46	14.28	11.05	-175.23	10.09	-254.14	728.55	705.69	22.86	31.867		
3,600.00	3,551.91	3,559.84	3,551.91	14.77	11.12	-175.38	10.00	-255.00	750.03	726.71	23.32	32.162		
3,700.00	3,649.73	3,657.65	3,649.73	15.26	11.18	-175.50	10.00	-255.00	770.76	746.99	23.76	32.435		
3,800.00	3,747.54	3,755.46	3,747.54	15.75	11.25	-175.62	10.00	-255.00	791.49	767.27	24.22	32.685		
3,900.00	3,845.36	3,853.28	3,845.36	16.24	11.34	-175.73	10.00	-255.00	812.22	787.54	24.68	32.911		
4,000.00	3,943.17	3,951.09	3,943.17	16.73	11.43	-175.84	10.00	-255.00	832.96	807.81	25.15	33.115		
4,100.00	4,040.99	4,048.91	4,040.99	17.22	11.54	-175.94	10.00	-255.00	853.70	828.06	25.64	33.298		
4,200.00	4,138.80	4,146.72	4,138.80	17.71	11.65	-176.04	10.00	-255.00	874.44	848.31	26.13	33.462		
4,300.00	4,236.62	4,244.54	4,236.62	18.20	11.77	-176.13	10.00	-255.00	895.19	868.55	26.64	33.607		
4,400.00	4,334.43	4,342.35	4,334.43	18.69	11.90	-176.22	10.00	-255.00	915.93	888.78	27.15	33.735		
4,500.00	4,432.24	4,440.17	4,432.24	19.19	12.04	-176.30	10.00	-255.00	936.68	909.01	27.67	33.847		
4,600.00	4,530.06	4,537.98	4,530.06	19.68	12.19	-176.38	10.00	-255.00	957.43	929.23	28.21	33.945		
4,700.00	4,627.87	4,635.80	4,627.87	20.17	12.35	-176.46	10.00	-255.00	978.19	949.44	28.75	34.029		
4,800.00	4,725.69	4,733.61	4,725.69	20.66	12.52	-176.53	10.00	-255.00	998.94	969.65	29.29	34.100		
4,900.00	4,823.50	4,831.43	4,823.50	21.16	12.69	-176.60	10.00	-255.00	1,019.70	989.85	29.85	34.160		
5,000.00	4,921.32	4,929.24	4,921.32	21.65	12.87	-176.67	10.00	-255.00	1,040.45	1,010.04	30.41	34.210		
5,100.00	5,019.13	5,027.06	5,019.13	22.14	13.05	-176.73	10.00	-255.00	1,061.21	1,030.23	30.98	34.250		
5,200.00	5,116.95	5,124.87	5,116.95	22.64	13.25	-176.80	10.00	-255.00	1,081.97	1,050.41	31.56	34.281		
5,300.00	5,214.76	5,222.69	5,214.76	23.13	13.45	-176.86	10.00	-255.00	1,102.73	1,070.59	32.15	34.304		
5,400.00	5,312.58	5,320.50	5,312.58	23.63	13.65	-176.92	10.00	-255.00	1,123.49	1,090.76	32.74	34.320		
5,500.00	5,410.39	5,418.32	5,410.39	24.12	13.87	-176.97	10.00	-255.00	1,144.26	1,110.92	33.33	34.329		
5,600.00	5,508.21	5,516.13	5,508.21	24.61	14.08	-177.03	10.00	-255.00	1,165.02	1,131.09	33.93	34.332		
5,700.00	5,606.02	5,613.95	5,606.02	25.11	14.31	-177.08	10.00	-255.00	1,185.78	1,151.24	34.54	34.330		
5,800.00	5,703.84	5,711.76	5,703.84	25.60	14.53	-177.13	10.00	-255.00	1,206.55	1,171.40	35.15	34.323		
5,816.59	5,720.07	5,727.99	5,720.07	25.68	14.57	-177.14	10.00	-255.00	1,210.00	1,174.74	35.26	34.321		
5,900.00	5,801.77	5,809.70	5,801.77	26.09	14.77	-177.18	10.00	-255.00	1,226.72	1,190.85	35.77	34.296		
6,000.00	5,900.05	5,907.97	5,900.05	26.56	15.00	-177.23	10.00	-255.00	1,245.21	1,208.82	36.39	34.221		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 0-MWD - OWSG, 3000-MWD - OWSG, 8900-MWD - OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,100.00	5,998.83	6,006.55	5,998.63	27.01	15.25	-177.28	10.00	-255.00	1,261.98	1,224.97	37.01	34.100	
6,200.00	6,097.48	6,105.41	6,097.48	27.44	15.50	-177.32	10.00	-255.00	1,277.03	1,239.40	37.63	33.936	
6,300.00	6,196.59	6,204.51	6,196.59	27.86	15.75	-177.35	10.00	-255.00	1,290.36	1,252.10	38.26	33.730	
6,400.00	6,295.91	6,303.83	6,295.91	28.25	16.01	-177.38	10.00	-255.00	1,301.95	1,263.07	38.88	33.486	
6,500.00	6,395.42	6,403.34	6,395.42	28.63	16.27	-177.41	10.00	-255.00	1,311.82	1,272.31	39.51	33.205	
6,600.00	6,495.09	6,503.01	6,495.09	28.99	16.53	-177.43	10.00	-255.00	1,319.94	1,279.81	40.13	32.890	
6,700.00	6,594.88	6,602.80	6,594.88	29.33	16.80	-177.44	10.00	-255.00	1,326.33	1,285.57	40.76	32.542	
6,800.00	6,694.77	6,702.70	6,694.77	29.66	17.08	-177.45	10.00	-255.00	1,330.98	1,289.59	41.38	32.163	
6,900.00	6,794.73	6,802.65	6,794.73	29.97	17.35	-177.46	10.00	-255.00	1,333.88	1,291.87	42.01	31.754	
7,000.00	6,894.72	6,902.64	6,894.72	30.26	17.63	-177.46	10.00	-255.00	1,335.04	1,292.41	42.63	31.317	
7,016.59	6,911.31	6,919.24	6,911.31	30.31	17.68	-98.62	10.00	-255.00	1,335.07	1,292.33	42.73	31.243	
7,100.00	6,994.72	7,002.64	6,994.72	30.54	17.91	-98.62	10.00	-255.00	1,335.07	1,291.82	43.24	30.875	
7,200.00	7,094.72	7,102.64	7,094.72	30.82	18.20	-98.62	10.00	-255.00	1,335.07	1,291.21	43.86	30.442	
7,300.00	7,194.72	7,202.64	7,194.72	31.11	18.48	-98.62	10.00	-255.00	1,335.07	1,290.59	44.47	30.019	
7,400.00	7,294.72	7,302.64	7,294.72	31.39	18.77	-98.62	10.00	-255.00	1,335.07	1,289.97	45.10	29.605	
7,500.00	7,394.72	7,402.64	7,394.72	31.68	19.07	-98.62	10.00	-255.00	1,335.07	1,289.35	45.72	29.201	
7,600.00	7,494.72	7,502.64	7,494.72	31.96	19.36	-98.62	10.00	-255.00	1,335.07	1,288.72	46.35	28.806	
7,700.00	7,594.72	7,602.64	7,594.72	32.25	19.66	-98.62	10.00	-255.00	1,335.07	1,288.09	46.98	28.420	
7,800.00	7,694.72	7,702.64	7,694.72	32.54	19.96	-98.62	10.00	-255.00	1,335.07	1,287.46	47.61	28.042	
7,900.00	7,794.72	7,802.64	7,794.72	32.83	20.26	-98.62	10.00	-255.00	1,335.07	1,286.82	48.24	27.673	
8,000.00	7,894.72	7,902.64	7,894.72	33.13	20.56	-98.62	10.00	-255.00	1,335.07	1,286.18	48.88	27.312	
8,100.00	7,994.72	8,002.64	7,994.72	33.42	20.86	-98.62	10.00	-255.00	1,335.07	1,285.54	49.52	26.959	
8,200.00	8,094.72	8,102.64	8,094.72	33.72	21.17	-98.62	10.00	-255.00	1,335.07	1,284.90	50.16	26.614	
8,300.00	8,194.72	8,202.64	8,194.72	34.01	21.48	-98.62	10.00	-255.00	1,335.07	1,284.26	50.81	26.277	
8,400.00	8,294.72	8,302.64	8,294.72	34.31	21.78	-98.62	10.00	-255.00	1,335.07	1,283.61	51.45	25.947	
8,500.00	8,394.72	8,402.64	8,394.72	34.61	22.10	-98.62	10.00	-255.00	1,335.07	1,282.96	52.10	25.624	
8,600.00	8,494.72	8,502.64	8,494.72	34.91	22.41	-98.62	10.00	-255.00	1,335.07	1,282.31	52.75	25.308	
8,700.00	8,594.72	8,602.64	8,594.72	35.21	22.72	-98.62	10.00	-255.00	1,335.07	1,281.66	53.41	24.999	
8,800.00	8,694.72	8,702.64	8,694.72	35.52	23.04	-98.62	10.00	-255.00	1,335.07	1,281.01	54.06	24.697	
8,900.00	8,794.72	8,802.64	8,794.72	35.82	23.35	-98.62	10.00	-255.00	1,335.07	1,280.36	54.71	24.403	
9,000.00	8,894.72	8,902.64	8,894.72	36.12	23.50	-98.62	10.00	-255.00	1,335.07	1,279.86	55.20	24.184	
9,100.00	8,994.72	8,983.75	8,975.74	36.43	23.51	-98.72	7.47	-255.00	1,335.58	1,280.08	55.50	24.065	
9,200.00	9,094.72	9,056.06	9,047.12	36.73	23.52	-99.20	-3.83	-254.99	1,338.04	1,282.28	55.76	23.996	
9,300.00	9,194.72	9,124.52	9,112.88	37.04	23.55	-100.00	-22.73	-254.97	1,342.83	1,286.84	55.99	23.982	
9,400.00	9,294.72	9,187.68	9,171.15	37.35	23.58	-101.02	-47.01	-254.95	1,350.41	1,294.23	56.18	24.038	
9,500.00	9,394.72	9,250.00	9,225.69	37.66	23.62	-102.27	-77.10	-254.93	1,361.33	1,305.00	56.33	24.168	
9,600.00	9,494.72	9,300.00	9,266.88	37.97	23.67	-103.44	-105.42	-254.90	1,376.06	1,319.69	56.37	24.411	
9,700.00	9,594.72	9,340.67	9,298.45	38.28	23.72	-104.49	-131.03	-254.88	1,395.05	1,338.75	56.30	24.780	
9,800.00	9,694.72	9,380.24	9,327.37	38.59	23.78	-105.58	-158.04	-254.86	1,418.60	1,362.45	56.15	25.264	
9,900.00	9,794.72	9,415.02	9,351.18	38.90	23.84	-106.60	-183.38	-254.84	1,446.87	1,390.96	55.91	25.878	
10,000.00	9,894.72	9,450.00	9,373.54	39.22	23.91	-107.66	-210.27	-254.82	1,479.92	1,424.30	55.62	26.609	
10,100.00	9,994.72	9,472.56	9,387.08	39.53	23.96	-108.37	-228.32	-254.80	1,517.64	1,462.46	55.18	27.505	
10,200.00	10,094.72	9,500.00	9,402.56	39.85	24.03	-109.25	-250.97	-254.78	1,559.93	1,505.19	54.74	28.495	
10,300.00	10,194.72	9,517.57	9,411.91	40.16	24.08	-109.83	-265.85	-254.77	1,606.56	1,552.35	54.21	29.636	
10,317.28	10,212.00	9,520.99	9,413.67	40.22	24.09	-109.94	-268.77	-254.77	1,615.04	1,560.92	54.12	29.842	
10,350.00	10,244.70	9,527.57	9,417.02	40.31	24.11	68.17	-274.44	-254.76	1,631.14	1,577.20	53.94	30.237	
10,400.00	10,294.43	9,550.00	9,427.93	40.46	24.18	64.97	-294.04	-254.75	1,655.49	1,601.71	53.78	30.781	
10,450.00	10,343.54	9,550.00	9,427.93	40.59	24.18	62.58	-294.04	-254.75	1,678.98	1,625.57	53.40	31.439	
10,500.00	10,391.64	9,550.00	9,427.93	40.72	24.18	60.32	-294.04	-254.75	1,701.85	1,648.83	53.02	32.097	
10,550.00	10,438.37	9,574.32	9,438.88	40.84	24.26	57.72	-315.75	-254.73	1,723.46	1,670.59	52.88	32.594	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:		0.00 usft
Survey Program: 0-MWD - OWSG, 3000-MWD - OWSG, 8900-MWD - OWSG													Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
10,600.00	10,483.39	9,600.00	9,449.44	40.94	24.35	55.35	-339.16	-254.71	1,744.13	1,691.39	52.74	33.071			
10,650.00	10,526.33	9,600.00	9,449.44	41.04	24.35	53.68	-339.16	-254.71	1,763.17	1,710.80	52.37	33.666			
10,700.00	10,566.89	9,600.00	9,449.44	41.13	24.35	52.15	-339.16	-254.71	1,781.03	1,729.01	52.02	34.239			
10,750.00	10,604.74	9,628.84	9,460.03	41.20	24.47	50.46	-365.98	-254.69	1,796.89	1,744.95	51.94	34.595			
10,800.00	10,639.61	9,650.00	9,466.94	41.27	24.56	49.10	-385.98	-254.67	1,811.24	1,759.44	51.80	34.964			
10,850.00	10,671.22	9,650.00	9,466.94	41.33	24.56	48.13	-385.98	-254.67	1,823.73	1,772.23	51.51	35.407			
10,900.00	10,699.33	9,672.74	9,473.53	41.39	24.66	47.16	-407.74	-254.65	1,834.24	1,782.80	51.43	35.663			
10,950.00	10,723.74	9,700.00	9,480.29	41.44	24.79	46.38	-434.14	-254.63	1,842.94	1,791.52	51.41	35.845			
11,000.00	10,744.25	9,700.00	9,480.29	41.49	24.79	45.91	-434.14	-254.63	1,849.33	1,798.12	51.21	36.111			
11,050.00	10,760.71	9,718.00	9,484.06	41.54	24.89	45.54	-451.75	-254.61	1,853.77	1,802.58	51.19	36.213			
11,100.00	10,773.00	9,733.24	9,486.82	41.60	24.97	45.36	-466.73	-254.60	1,856.09	1,804.91	51.18	36.264			
11,150.00	10,781.01	9,750.00	9,489.39	41.67	25.06	45.34	-483.29	-254.59	1,856.29	1,805.06	51.23	36.238			
11,200.00	10,784.70	9,750.00	9,489.39	41.75	25.06	45.47	-483.29	-254.59	1,854.52	1,803.32	51.20	36.219			
11,217.27	10,784.96	9,768.98	9,491.72	41.78	25.17	45.59	-502.13	-254.57	1,853.19	1,801.86	51.33	36.103			
11,300.00	10,784.96	9,800.00	9,494.18	41.95	25.35	45.64	-533.05	-254.55	1,848.34	1,796.76	51.57	35.839			
11,400.00	10,784.96	9,829.92	9,494.96	42.23	25.53	45.66	-562.95	-254.52	1,845.84	1,793.97	51.88	35.582			
11,439.93	10,784.96	9,853.69	9,494.96	42.36	25.69	45.66	-586.72	-254.50	1,845.77	1,793.69	52.09	35.437			
11,500.00	10,784.96	9,913.76	9,494.96	42.58	26.10	45.66	-646.79	-254.45	1,845.77	1,793.23	52.54	35.133			
11,600.00	10,784.96	10,013.76	9,494.96	42.99	26.85	45.66	-746.79	-254.37	1,845.77	1,792.38	53.39	34.569			
11,700.00	10,784.96	10,113.76	9,494.96	43.47	27.69	45.66	-846.79	-254.28	1,845.77	1,791.40	54.36	33.952			
11,800.00	10,784.96	10,213.76	9,494.96	44.02	28.59	45.66	-946.79	-254.20	1,845.76	1,790.32	55.44	33.292			
11,900.00	10,784.96	10,313.76	9,494.96	44.63	29.57	45.66	-1,046.79	-254.12	1,845.76	1,789.14	56.62	32.599			
12,000.00	10,784.97	10,413.76	9,494.96	45.30	30.60	45.66	-1,146.79	-254.03	1,845.76	1,787.87	57.89	31.882			
12,100.00	10,784.97	10,513.76	9,494.96	46.03	31.69	45.66	-1,246.79	-253.95	1,845.76	1,786.50	59.25	31.150			
12,200.00	10,784.97	10,613.76	9,494.97	46.80	32.83	45.66	-1,346.79	-253.87	1,845.76	1,785.06	60.70	30.409			
12,300.00	10,784.97	10,713.76	9,494.97	47.63	34.01	45.66	-1,446.79	-253.78	1,845.75	1,783.54	62.22	29.666			
12,400.00	10,784.97	10,813.76	9,494.97	48.50	35.23	45.66	-1,546.79	-253.70	1,845.75	1,781.94	63.81	28.927			
12,500.00	10,784.97	10,913.76	9,494.97	49.41	36.49	45.66	-1,646.79	-253.62	1,845.75	1,780.29	65.46	28.195			
12,600.00	10,784.97	11,013.76	9,494.97	50.36	37.78	45.66	-1,746.79	-253.53	1,845.75	1,778.57	67.18	27.475			
12,700.00	10,784.97	11,113.76	9,494.97	51.35	39.10	45.66	-1,846.79	-253.45	1,845.74	1,776.79	68.95	26.768			
12,800.00	10,784.97	11,213.76	9,494.97	52.38	40.44	45.66	-1,946.79	-253.36	1,845.74	1,774.96	70.78	26.078			
12,900.00	10,784.97	11,313.76	9,494.97	53.44	41.80	45.66	-2,046.79	-253.28	1,845.74	1,773.09	72.65	25.406			
13,000.00	10,784.98	11,413.76	9,494.97	54.52	43.19	45.66	-2,146.79	-253.20	1,845.74	1,771.17	74.57	24.752			
13,100.00	10,784.98	11,513.76	9,494.97	55.64	44.60	45.66	-2,246.79	-253.11	1,845.74	1,769.21	76.53	24.119			
13,200.00	10,784.98	11,613.76	9,494.98	56.79	46.02	45.66	-2,346.79	-253.03	1,845.73	1,767.21	78.52	23.505			
13,300.00	10,784.98	11,713.76	9,494.98	57.96	47.46	45.66	-2,446.79	-252.95	1,845.73	1,765.17	80.56	22.912			
13,400.00	10,784.98	11,813.76	9,494.98	59.15	48.92	45.66	-2,546.79	-252.86	1,845.73	1,763.11	82.62	22.340			
13,500.00	10,784.98	11,913.76	9,494.98	60.37	50.39	45.66	-2,646.79	-252.78	1,845.73	1,761.01	84.72	21.787			
13,600.00	10,784.98	12,013.76	9,494.98	61.61	51.87	45.66	-2,746.79	-252.70	1,845.72	1,758.88	86.84	21.254			
13,700.00	10,784.98	12,113.76	9,494.98	62.87	53.36	45.66	-2,846.79	-252.61	1,845.72	1,756.73	88.99	20.741			
13,800.00	10,784.98	12,213.76	9,494.98	64.15	54.86	45.66	-2,946.79	-252.53	1,845.72	1,754.55	91.16	20.246			
13,900.00	10,784.98	12,313.76	9,494.98	65.44	56.37	45.66	-3,046.79	-252.45	1,845.72	1,752.35	93.36	19.769			
14,000.00	10,784.98	12,413.76	9,494.98	66.75	57.89	45.66	-3,146.79	-252.36	1,845.71	1,750.13	95.58	19.311			
14,100.00	10,784.99	12,513.76	9,494.98	68.08	59.42	45.66	-3,246.79	-252.28	1,845.71	1,747.89	97.82	18.869			
14,200.00	10,784.99	12,613.76	9,494.99	69.42	60.95	45.66	-3,346.79	-252.19	1,845.71	1,745.63	100.08	18.443			
14,300.00	10,784.99	12,713.76	9,494.99	70.78	62.49	45.66	-3,446.79	-252.11	1,845.71	1,743.36	102.35	18.033			
14,400.00	10,784.99	12,813.76	9,494.99	72.15	64.04	45.66	-3,546.79	-252.03	1,845.71	1,741.06	104.64	17.638			
14,500.00	10,784.99	12,913.76	9,494.99	73.53	65.59	45.66	-3,646.79	-251.94	1,845.70	1,738.76	106.95	17.258			
14,600.00	10,784.99	13,013.76	9,494.99	74.92	67.15	45.66	-3,746.79	-251.86	1,845.70	1,736.43	109.27	16.892			
14,700.00	10,784.99	13,113.76	9,494.99	76.33	68.72	45.66	-3,846.79	-251.78	1,845.70	1,734.10	111.60	16.539			
14,800.00	10,784.99	13,213.76	9,494.99	77.74	70.28	45.66	-3,946.79	-251.69	1,845.70	1,731.75	113.95	16.198			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 113H - OH - Prelim Plan A												Offset Site Error:	0.00 usft
Survey Program: 0-MWD - OWSG, 3000-MWD - OWSG, 8900-MWD - OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,900.00	10,784.99	13,313.76	9,494.99	79.17	71.86	45.66	-4,046.79	-251.61	1,845.69	1,729.39	116.30	15.870	
15,000.00	10,784.99	13,413.76	9,494.99	80.60	73.44	45.66	-4,146.79	-251.53	1,845.69	1,727.02	118.67	15.553	
15,100.00	10,785.00	13,513.76	9,494.99	82.04	75.02	45.66	-4,246.79	-251.44	1,845.69	1,724.64	121.05	15.247	
15,200.00	10,785.00	13,613.76	9,495.00	83.49	76.60	45.66	-4,346.79	-251.36	1,845.69	1,722.25	123.44	14.952	
15,300.00	10,785.00	13,713.76	9,495.00	84.95	78.19	45.66	-4,446.79	-251.28	1,845.68	1,719.85	125.84	14.667	
15,400.00	10,785.00	13,813.76	9,495.00	86.42	79.78	45.66	-4,546.79	-251.19	1,845.68	1,717.44	128.24	14.392	
15,500.00	10,785.00	13,913.76	9,495.00	87.89	81.38	45.66	-4,646.79	-251.11	1,845.68	1,715.02	130.66	14.126	
15,600.00	10,785.00	14,013.76	9,495.00	89.37	82.97	45.66	-4,746.79	-251.02	1,845.68	1,712.60	133.08	13.869	
15,618.32	10,785.00	14,032.08	9,495.00	89.65	83.27	45.66	-4,765.12	-251.01	1,845.68	1,712.15	133.53	13.822	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 114H - OH - Prelim Plan A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD - OWSG													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
100.00	100.00	104.00	104.00	0.00	0.14	87.72	40.00	1,003.00	1,003.80	1,003.65	0.14	7,034.683	
200.00	200.00	204.00	204.00	0.18	0.50	87.72	40.00	1,003.00	1,003.80	1,003.12	0.68	1,475.739	
300.00	300.00	291.87	291.87	0.54	0.81	87.74	39.54	1,003.57	1,004.43	1,003.08	1.34	747.559	
400.00	400.00	380.17	380.14	0.90	1.11	87.82	38.22	1,005.20	1,006.21	1,004.21	2.01	500.987	
500.00	500.00	468.38	468.28	1.25	1.42	87.95	36.05	1,007.89	1,009.17	1,006.49	2.68	376.871	
600.00	600.00	556.47	556.24	1.61	1.74	88.13	33.04	1,011.63	1,013.29	1,009.94	3.35	302.433	
700.00	699.99	644.42	643.97	1.97	2.06	9.51	29.19	1,016.41	1,017.74	1,013.72	4.02	253.309	
800.00	799.96	736.63	735.86	2.31	2.41	9.81	24.31	1,022.46	1,021.58	1,016.88	4.70	217.390	
900.00	899.86	836.40	835.25	2.67	2.78	10.16	18.85	1,029.23	1,023.97	1,018.55	5.42	189.083	
1,000.00	999.68	936.17	934.64	3.03	3.16	10.53	13.39	1,035.99	1,024.69	1,018.55	6.14	166.992	
1,100.00	1,099.37	1,035.92	1,034.01	3.39	3.54	10.92	7.93	1,042.76	1,023.73	1,016.87	6.86	149.249	
1,200.00	1,198.90	1,139.19	1,136.89	3.76	3.93	11.35	2.32	1,049.72	1,021.07	1,013.47	7.60	134.370	
1,300.00	1,298.26	1,254.94	1,252.33	4.14	4.37	11.80	-2.96	1,056.27	1,015.66	1,007.27	8.39	121.110	
1,400.00	1,397.40	1,370.45	1,367.68	4.52	4.79	12.21	-6.76	1,060.99	1,007.00	997.83	9.17	109.836	
1,500.00	1,496.30	1,485.51	1,482.68	4.92	5.21	12.58	-9.10	1,063.89	995.09	985.15	9.94	100.077	
1,600.00	1,594.93	1,599.92	1,597.08	5.33	5.61	12.91	-9.99	1,064.99	979.96	969.25	10.71	91.493	
1,700.00	1,693.26	1,700.10	1,697.26	5.75	5.94	13.20	-10.00	1,065.00	962.20	950.79	11.41	84.343	
1,800.00	1,791.25	1,801.91	1,795.25	6.19	6.28	13.52	-10.00	1,065.00	942.78	930.67	12.12	77.815	
1,900.00	1,889.06	1,904.10	1,893.06	6.64	6.62	13.82	-10.00	1,065.00	922.55	909.73	12.83	71.915	
2,000.00	1,986.88	2,006.28	1,990.88	7.10	6.96	14.14	-10.00	1,065.00	902.35	888.81	13.54	66.622	
2,100.00	2,084.69	2,108.47	2,088.69	7.56	7.31	14.47	-10.00	1,065.00	882.18	867.92	14.26	61.844	
2,200.00	2,182.51	2,189.35	2,186.51	8.03	7.58	14.81	-10.00	1,065.00	862.04	847.12	14.92	57.794	
2,300.00	2,280.32	2,287.16	2,284.32	8.50	7.92	15.17	-10.00	1,065.00	841.92	826.30	15.63	53.872	
2,400.00	2,378.13	2,384.98	2,382.13	8.97	8.25	15.55	-10.00	1,065.00	821.84	805.50	16.34	50.285	
2,500.00	2,475.95	2,482.79	2,479.95	9.45	8.59	15.95	-10.00	1,065.00	801.80	784.74	17.06	46.993	
2,600.00	2,573.76	2,580.61	2,577.76	9.92	8.93	16.37	-10.00	1,065.00	781.80	764.01	17.78	43.962	
2,700.00	2,671.58	2,678.42	2,675.58	10.40	9.27	16.81	-10.00	1,065.00	761.84	743.33	18.51	41.164	
2,800.00	2,769.39	2,776.24	2,773.39	10.88	9.60	17.27	-10.00	1,065.00	741.92	722.69	19.23	38.573	
2,900.00	2,867.21	2,874.05	2,871.21	11.37	9.94	17.76	-10.00	1,065.00	722.05	702.09	19.96	36.168	
3,000.00	2,965.02	2,971.87	2,969.02	11.85	10.29	18.27	-10.00	1,065.00	702.24	681.55	20.70	33.931	
3,100.00	3,062.84	3,069.68	3,066.84	12.33	10.63	18.82	-10.00	1,065.00	682.49	661.06	21.43	31.845	
3,200.00	3,160.65	3,167.50	3,164.65	12.82	10.97	19.40	-10.00	1,065.00	662.79	640.63	22.17	29.897	
3,300.00	3,258.47	3,265.31	3,262.47	13.31	11.31	20.01	-10.00	1,065.00	643.17	620.26	22.91	28.073	
3,400.00	3,356.28	3,363.12	3,360.28	13.79	11.66	20.66	-10.00	1,065.00	623.63	599.97	23.66	26.362	
3,500.00	3,454.10	3,460.94	3,458.10	14.28	12.00	21.36	-10.00	1,065.00	604.16	579.76	24.40	24.756	
3,600.00	3,551.91	3,558.75	3,555.91	14.77	12.34	22.10	-10.00	1,065.00	584.79	559.63	25.16	23.245	
3,700.00	3,649.73	3,656.57	3,653.73	15.26	12.69	22.89	-10.00	1,065.00	565.52	539.61	25.91	21.822	
3,800.00	3,747.54	3,754.38	3,751.54	15.75	13.03	23.73	-10.00	1,065.00	546.36	519.68	26.68	20.480	
3,900.00	3,845.36	3,852.20	3,849.36	16.24	13.38	24.64	-10.00	1,065.00	527.32	499.88	27.45	19.213	
4,000.00	3,943.17	3,950.01	3,947.17	16.73	13.72	25.61	-10.00	1,065.00	508.43	480.21	28.22	18.016	
4,100.00	4,040.99	4,047.83	4,044.99	17.22	14.07	26.66	-10.00	1,065.00	489.68	460.68	29.00	16.884	
4,200.00	4,138.80	4,145.64	4,142.80	17.71	14.41	27.79	-10.00	1,065.00	471.11	441.32	29.79	15.813	
4,300.00	4,236.62	4,243.46	4,240.62	18.20	14.76	29.01	-10.00	1,065.00	452.73	422.14	30.59	14.799	
4,400.00	4,334.43	4,341.27	4,338.43	18.69	15.11	30.33	-10.00	1,065.00	434.56	403.16	31.40	13.839	
4,500.00	4,432.24	4,439.09	4,436.24	19.19	15.45	31.77	-10.00	1,065.00	416.65	384.42	32.22	12.929	
4,600.00	4,530.06	4,536.90	4,534.06	19.68	15.80	33.33	-10.00	1,065.00	399.01	365.95	33.06	12.069	
4,700.00	4,627.87	4,634.72	4,631.87	20.17	16.15	35.03	-10.00	1,065.00	381.69	347.77	33.91	11.255	
4,800.00	4,725.69	4,732.53	4,729.69	20.66	16.49	36.89	-10.00	1,065.00	364.73	329.95	34.78	10.485	
4,900.00	4,823.50	4,830.35	4,827.50	21.16	16.84	38.93	-10.00	1,065.00	348.19	312.51	35.68	9.760	
5,000.00	4,921.32	4,928.16	4,925.32	21.65	17.19	41.16	-10.00	1,065.00	332.12	295.53	36.59	9.077	
5,100.00	5,019.13	5,025.98	5,023.13	22.14	17.54	43.61	-10.00	1,065.00	316.61	279.08	37.53	8.436	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 114H - OH - Prelim Plan A													Offset Site Error: 0.00 usft	
Survey Program: 0-MWD - OWSG													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.00	5,116.95	5,123.79	5,120.95	22.64	17.88	46.30	-10.00	1,065.00	301.73	263.23	38.50	7.837		
5,300.00	5,214.76	5,221.61	5,218.76	23.13	18.23	49.26	-10.00	1,065.00	287.59	248.09	39.50	7.281		
5,400.00	5,312.58	5,319.42	5,316.58	23.63	18.58	52.51	-10.00	1,065.00	274.29	233.77	40.53	6.769		
5,500.00	5,410.39	5,417.23	5,414.39	24.12	18.93	56.07	-10.00	1,065.00	261.98	220.40	41.58	6.300		
5,600.00	5,508.21	5,515.05	5,512.21	24.61	19.27	59.95	-10.00	1,065.00	250.78	208.12	42.66	5.879		
5,700.00	5,606.02	5,612.86	5,610.02	25.11	19.62	64.16	-10.00	1,065.00	240.86	197.10	43.75	5.505		
5,800.00	5,703.84	5,710.68	5,707.84	25.60	19.97	68.69	-10.00	1,065.00	232.38	187.53	44.85	5.181		
5,816.59	5,720.07	5,726.91	5,724.07	25.68	20.03	69.47	-10.00	1,065.00	231.12	186.09	45.03	5.132		
5,900.00	5,801.77	5,808.62	5,805.77	26.09	20.32	73.33	-10.00	1,065.00	225.68	179.75	45.93	4.914		
6,000.00	5,900.05	5,906.89	5,904.05	26.56	20.67	77.81	-10.00	1,065.00	220.98	174.05	46.93	4.708		
6,100.00	5,998.63	6,005.47	6,002.63	27.01	21.02	82.03	-10.00	1,065.00	218.00	170.13	47.87	4.554		
6,200.00	6,097.48	6,104.32	6,101.48	27.44	21.37	85.93	-10.00	1,065.00	216.40	167.66	48.74	4.440		
6,300.00	6,196.59	6,203.43	6,200.59	27.86	21.73	89.42	-10.00	1,065.00	215.86	166.30	49.55	4.356		
6,317.80	6,214.25	6,221.09	6,218.25	27.93	21.79	90.00	-10.00	1,065.00	215.84	166.16	49.69	4.344 CC		
6,400.00	6,295.91	6,302.75	6,299.91	28.25	22.08	92.48	-10.00	1,065.00	216.05	165.74	50.31	4.294		
6,500.00	6,395.42	6,402.26	6,399.42	28.63	22.43	95.09	-10.00	1,065.00	216.70	165.68	51.03	4.247		
6,600.00	6,495.09	6,501.93	6,499.09	28.99	22.79	97.22	-10.00	1,065.00	217.58	165.86	51.72	4.207		
6,700.00	6,594.88	6,601.72	6,598.88	29.33	23.15	98.89	-10.00	1,065.00	218.48	166.09	52.39	4.170		
6,800.00	6,694.77	6,701.61	6,698.77	29.66	23.50	100.10	-10.00	1,065.00	219.24	166.20	53.05	4.133		
6,900.00	6,794.73	6,801.57	6,798.73	29.97	23.86	100.85	-10.00	1,065.00	219.77	166.08	53.70	4.093		
7,000.00	6,894.72	6,901.56	6,898.72	30.26	24.22	101.15	-10.00	1,065.00	220.00	165.65	54.34	4.048		
7,016.59	6,911.31	6,918.16	6,915.31	30.31	24.27	180.00	-10.00	1,065.00	220.00	165.55	54.45	4.041		
7,100.00	6,994.72	7,001.56	6,998.72	30.54	24.57	180.00	-10.00	1,065.00	220.00	165.02	54.98	4.001		
7,200.00	7,094.72	7,101.56	7,098.72	30.82	24.93	180.00	-10.00	1,065.00	220.00	164.38	55.62	3.955		
7,300.00	7,194.72	7,201.56	7,198.72	31.11	25.29	180.00	-10.00	1,065.00	220.00	163.74	56.26	3.910		
7,400.00	7,294.72	7,301.56	7,298.72	31.39	25.64	180.00	-10.00	1,065.00	220.00	163.10	56.90	3.866		
7,500.00	7,394.72	7,401.56	7,398.72	31.68	26.00	180.00	-10.00	1,065.00	220.00	162.45	57.55	3.823		
7,600.00	7,494.72	7,501.56	7,498.72	31.96	26.36	180.00	-10.00	1,065.00	220.00	161.81	58.19	3.780		
7,700.00	7,594.72	7,601.56	7,598.72	32.25	26.71	180.00	-10.00	1,065.00	220.00	161.16	58.84	3.739		
7,800.00	7,694.72	7,701.56	7,698.72	32.54	27.07	180.00	-10.00	1,065.00	220.00	160.51	59.49	3.698		
7,900.00	7,794.72	7,801.56	7,798.72	32.83	27.43	180.00	-10.00	1,065.00	220.00	159.86	60.14	3.658		
8,000.00	7,894.72	7,901.56	7,898.72	33.13	27.79	180.00	-10.00	1,065.00	220.00	159.21	60.79	3.619		
8,100.00	7,994.72	8,001.56	7,998.72	33.42	28.14	180.00	-10.00	1,065.00	220.00	158.56	61.44	3.580		
8,200.00	8,094.72	8,101.56	8,098.72	33.72	28.50	180.00	-10.00	1,065.00	220.00	157.90	62.10	3.543		
8,300.00	8,194.72	8,201.56	8,198.72	34.01	28.86	180.00	-10.00	1,065.00	220.00	157.25	62.75	3.506		
8,400.00	8,294.72	8,301.56	8,298.72	34.31	29.21	180.00	-10.00	1,065.00	220.00	156.59	63.41	3.470		
8,500.00	8,394.72	8,401.56	8,398.72	34.61	29.57	180.00	-10.00	1,065.00	220.00	155.93	64.07	3.434		
8,600.00	8,494.72	8,501.56	8,498.72	34.91	29.93	180.00	-10.00	1,065.00	220.00	155.27	64.73	3.399		
8,700.00	8,594.72	8,601.56	8,598.72	35.21	30.29	180.00	-10.00	1,065.00	220.00	154.61	65.39	3.365		
8,800.00	8,694.72	8,701.56	8,698.72	35.52	30.64	180.00	-10.00	1,065.00	220.00	153.95	66.05	3.331		
8,900.00	8,794.72	8,801.56	8,798.72	35.82	31.00	180.00	-10.00	1,065.00	220.00	153.29	66.71	3.298		
9,000.00	8,894.72	8,901.56	8,898.72	36.12	31.36	180.00	-10.00	1,065.00	220.00	152.63	67.37	3.266 ES, SF		
9,100.00	8,994.72	8,978.68	8,975.74	36.43	31.62	180.00	-13.02	1,065.00	224.20	156.59	67.61	3.316		
9,200.00	9,094.72	9,050.00	9,046.04	36.73	31.86	180.00	-24.72	1,065.01	240.56	173.46	67.10	3.585		
9,300.00	9,194.72	9,115.43	9,108.81	37.04	32.07	179.99	-43.06	1,065.03	268.56	202.74	65.82	4.080		
9,400.00	9,294.72	9,176.90	9,165.52	37.35	32.26	179.99	-66.70	1,065.05	307.09	242.97	64.13	4.789		
9,500.00	9,394.72	9,232.63	9,214.48	37.66	32.44	179.99	-93.28	1,065.07	354.85	292.67	62.18	5.707		
9,600.00	9,494.72	9,282.48	9,255.91	37.97	32.60	179.98	-120.98	1,065.09	410.50	350.34	60.15	6.824		
9,700.00	9,594.72	9,326.71	9,290.52	38.28	32.75	179.98	-148.49	1,065.12	472.76	414.59	58.17	8.127		
9,800.00	9,694.72	9,365.75	9,319.24	38.59	32.88	179.98	-174.93	1,065.14	540.54	484.23	56.31	9.600		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 114H - OH - Prelim Plan A													Offset Site Error: 0.00 usft	
Survey Program: 0-MWD - OWSG													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,900.00	9,794.72	9,400.00	9,342.90	38.90	33.00	179.98	-199.69	1,065.16	612.88	558.28	54.61	11.224		
10,000.00	9,894.72	9,430.56	9,362.72	39.22	33.10	179.98	-222.94	1,065.18	689.01	635.90	53.11	12.974		
10,100.00	9,994.72	9,450.00	9,374.68	39.53	33.17	179.98	-238.27	1,065.19	768.36	716.93	51.43	14.940		
10,200.00	10,094.72	9,481.22	9,392.77	39.85	33.29	179.97	-263.71	1,065.21	850.15	799.50	50.65	16.785		
10,300.00	10,194.72	9,500.00	9,402.98	40.16	33.36	179.97	-279.47	1,065.23	934.23	884.65	49.58	18.843		
10,317.28	10,212.00	9,500.00	9,402.98	40.22	33.36	179.97	-279.47	1,065.23	948.99	899.70	49.30	19.251		
10,350.00	10,244.70	9,500.00	9,402.98	40.31	33.36	0.02	-279.47	1,065.23	976.69	927.93	48.76	20.032		
10,400.00	10,294.43	9,523.14	9,414.84	40.46	33.44	0.02	-299.34	1,065.24	1,016.92	968.19	48.73	20.867		
10,450.00	10,343.54	9,534.55	9,420.39	40.59	33.49	0.01	-309.31	1,065.25	1,055.29	1,007.08	48.21	21.889		
10,500.00	10,391.64	9,550.00	9,427.58	40.72	33.55	0.01	-322.98	1,065.26	1,091.44	1,043.67	47.77	22.846		
10,550.00	10,438.37	9,550.00	9,427.58	40.84	33.55	0.01	-322.98	1,065.26	1,125.32	1,078.52	46.80	24.044		
10,600.00	10,483.39	9,572.15	9,437.25	40.94	33.64	0.01	-342.91	1,065.28	1,156.54	1,110.04	46.50	24.872		
10,650.00	10,526.33	9,600.00	9,448.30	41.04	33.75	0.01	-368.47	1,065.30	1,185.58	1,139.26	46.32	25.595		
10,700.00	10,566.89	9,600.00	9,448.30	41.13	33.75	0.01	-368.47	1,065.30	1,211.42	1,166.10	45.32	26.728		
10,750.00	10,604.74	9,600.00	9,448.30	41.20	33.75	0.01	-368.47	1,065.30	1,235.03	1,190.66	44.37	27.837		
10,800.00	10,639.61	9,627.82	9,458.08	41.27	33.86	0.01	-394.51	1,065.32	1,255.37	1,211.25	44.12	28.451		
10,850.00	10,671.22	9,650.00	9,464.97	41.33	33.96	0.01	-415.59	1,065.34	1,273.16	1,229.43	43.73	29.113		
10,900.00	10,699.33	9,650.00	9,464.97	41.39	33.96	0.01	-415.59	1,065.34	1,287.95	1,245.09	42.86	30.050		
10,950.00	10,723.74	9,672.06	9,471.00	41.44	34.05	0.01	-436.81	1,065.36	1,299.73	1,257.23	42.50	30.583		
11,000.00	10,744.25	9,700.00	9,477.47	41.49	34.17	0.01	-463.99	1,065.38	1,308.79	1,266.53	42.26	30.969		
11,050.00	10,760.71	9,700.00	9,477.47	41.54	34.17	0.01	-463.99	1,065.38	1,314.43	1,272.87	41.56	31.630		
11,100.00	10,773.00	9,717.31	9,480.81	41.60	34.25	0.01	-480.97	1,065.40	1,317.23	1,276.01	41.21	31.962		
11,150.00	10,781.01	9,732.46	9,483.31	41.67	34.32	0.01	-495.91	1,065.41	1,316.99	1,276.10	40.89	32.209		
11,200.00	10,784.70	9,750.00	9,485.71	41.75	34.40	0.01	-513.29	1,065.42	1,313.73	1,273.07	40.66	32.314		
11,217.27	10,784.96	9,750.00	9,485.71	41.78	34.40	0.01	-513.29	1,065.42	1,311.89	1,271.37	40.52	32.373		
11,300.00	10,784.96	9,777.90	9,488.42	41.95	34.53	0.01	-541.05	1,065.45	1,304.03	1,263.71	40.31	32.346		
11,400.00	10,784.96	9,808.43	9,489.84	42.23	34.67	0.01	-571.55	1,065.47	1,299.37	1,259.06	40.31	32.231		
11,500.00	10,784.96	9,882.58	9,489.96	42.58	35.04	0.01	-645.69	1,065.53	1,299.00	1,258.34	40.66	31.949		
11,503.64	10,784.96	9,886.22	9,489.96	42.59	35.06	0.01	-649.33	1,065.54	1,299.00	1,258.33	40.67	31.937		
11,600.00	10,784.96	9,982.58	9,489.96	42.99	35.59	0.01	-745.69	1,065.62	1,299.00	1,257.88	41.12	31.591		
11,700.00	10,784.96	10,082.58	9,489.96	43.47	36.21	0.01	-845.69	1,065.70	1,299.00	1,257.37	41.64	31.199		
11,800.00	10,784.96	10,182.58	9,489.96	44.02	36.90	0.01	-945.69	1,065.79	1,299.00	1,256.80	42.20	30.778		
11,900.00	10,784.96	10,282.58	9,489.96	44.63	37.65	0.01	-1,045.69	1,065.87	1,299.00	1,256.18	42.83	30.333		
12,000.00	10,784.97	10,382.58	9,489.96	45.30	38.45	0.01	-1,145.69	1,065.96	1,299.00	1,255.51	43.49	29.866		
12,100.00	10,784.97	10,482.58	9,489.96	46.03	39.31	0.01	-1,245.69	1,066.04	1,299.00	1,254.79	44.21	29.383		
12,200.00	10,784.97	10,582.58	9,489.97	46.80	40.22	0.01	-1,345.69	1,066.12	1,299.00	1,254.03	44.97	28.887		
12,300.00	10,784.97	10,682.58	9,489.97	47.63	41.18	0.01	-1,445.69	1,066.21	1,299.00	1,253.23	45.77	28.381		
12,400.00	10,784.97	10,782.58	9,489.97	48.50	42.18	0.01	-1,545.69	1,066.29	1,299.00	1,252.39	46.61	27.869		
12,500.00	10,784.97	10,882.58	9,489.97	49.41	43.22	0.01	-1,645.69	1,066.38	1,299.00	1,251.51	47.49	27.354		
12,600.00	10,784.97	10,982.58	9,489.97	50.36	44.30	0.00	-1,745.69	1,066.46	1,299.00	1,250.60	48.40	26.837		
12,700.00	10,784.97	11,082.58	9,489.97	51.35	45.42	0.00	-1,845.69	1,066.54	1,299.00	1,249.65	49.35	26.322		
12,800.00	10,784.97	11,182.58	9,489.97	52.38	46.57	0.00	-1,945.69	1,066.63	1,299.00	1,248.67	50.33	25.810		
12,900.00	10,784.97	11,282.58	9,489.97	53.44	47.75	0.00	-2,045.69	1,066.71	1,299.00	1,247.66	51.34	25.303		
13,000.00	10,784.98	11,382.58	9,489.97	54.52	48.96	0.00	-2,145.69	1,066.80	1,299.00	1,246.63	52.38	24.802		
13,100.00	10,784.98	11,482.58	9,489.97	55.64	50.19	0.00	-2,245.69	1,066.88	1,299.00	1,245.56	53.44	24.309		
13,200.00	10,784.98	11,582.58	9,489.98	56.79	51.45	0.00	-2,345.69	1,066.97	1,299.00	1,244.48	54.53	23.824		
13,300.00	10,784.98	11,682.58	9,489.98	57.96	52.73	0.00	-2,445.69	1,067.05	1,299.00	1,243.37	55.64	23.348		
13,400.00	10,784.98	11,782.58	9,489.98	59.15	54.04	0.00	-2,545.69	1,067.13	1,299.00	1,242.23	56.77	22.882		
13,500.00	10,784.98	11,882.58	9,489.98	60.37	55.36	0.00	-2,645.69	1,067.22	1,299.00	1,241.08	57.92	22.427		
13,600.00	10,784.98	11,982.58	9,489.98	61.61	56.70	0.00	-2,745.69	1,067.30	1,299.00	1,239.91	59.09	21.982		
13,700.00	10,784.98	12,082.58	9,489.98	62.87	58.06	0.00	-2,845.69	1,067.39	1,299.00	1,238.72	60.28	21.548		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 114H - OH - Prelim Plan A												Offset Site Error:	0.00 usft
Survey Program: 0-MWD - OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
13,800.00	10,784.98	12,182.58	9,489.98	64.15	59.43	0.00	-2,945.69	1,067.47	1,299.00	1,237.51	61.49	21.125	
13,900.00	10,784.98	12,282.58	9,489.98	65.44	60.82	0.00	-3,045.69	1,067.55	1,299.00	1,236.29	62.72	20.713	
14,000.00	10,784.98	12,382.58	9,489.98	66.75	62.22	0.00	-3,145.69	1,067.64	1,299.00	1,235.05	63.95	20.312	
14,100.00	10,784.99	12,482.58	9,489.98	68.08	63.64	0.00	-3,245.69	1,067.72	1,299.00	1,233.79	65.21	19.921	
14,200.00	10,784.99	12,582.58	9,489.99	69.42	65.06	0.00	-3,345.69	1,067.81	1,299.00	1,232.53	66.47	19.542	
14,300.00	10,784.99	12,682.58	9,489.99	70.78	66.50	0.00	-3,445.69	1,067.89	1,299.00	1,231.25	67.75	19.173	
14,400.00	10,784.99	12,782.58	9,489.99	72.15	67.95	0.00	-3,545.69	1,067.97	1,299.00	1,229.96	69.04	18.814	
14,500.00	10,784.99	12,882.58	9,489.99	73.53	69.41	0.00	-3,645.69	1,068.06	1,299.00	1,228.65	70.35	18.466	
14,600.00	10,784.99	12,982.58	9,489.99	74.92	70.88	0.00	-3,745.69	1,068.14	1,299.00	1,227.34	71.66	18.127	
14,700.00	10,784.99	13,082.58	9,489.99	76.33	72.35	0.00	-3,845.69	1,068.23	1,299.00	1,226.02	72.98	17.799	
14,800.00	10,784.99	13,182.58	9,489.99	77.74	73.84	0.00	-3,945.69	1,068.31	1,299.00	1,224.69	74.32	17.480	
14,900.00	10,784.99	13,282.58	9,489.99	79.17	75.33	0.00	-4,045.69	1,068.40	1,299.00	1,223.34	75.66	17.170	
15,000.00	10,784.99	13,382.58	9,489.99	80.60	76.83	0.00	-4,145.69	1,068.48	1,299.00	1,221.99	77.01	16.868	
15,100.00	10,785.00	13,482.58	9,489.99	82.04	78.33	0.00	-4,245.69	1,068.56	1,299.00	1,220.63	78.37	16.576	
15,200.00	10,785.00	13,582.58	9,490.00	83.49	79.85	0.00	-4,345.69	1,068.65	1,299.00	1,219.27	79.73	16.292	
15,300.00	10,785.00	13,682.58	9,490.00	84.95	81.37	0.00	-4,445.69	1,068.73	1,299.00	1,217.89	81.11	16.016	
15,400.00	10,785.00	13,782.58	9,490.00	86.42	82.89	0.00	-4,545.69	1,068.82	1,299.00	1,216.51	82.49	15.748	
15,500.00	10,785.00	13,882.58	9,490.00	87.89	84.42	0.00	-4,645.69	1,068.90	1,299.00	1,215.13	83.87	15.487	
15,600.00	10,785.00	13,982.58	9,490.00	89.37	85.95	0.00	-4,745.69	1,068.98	1,299.00	1,213.73	85.27	15.234	
15,618.32	10,785.00	14,000.90	9,490.00	89.65	86.24	0.00	-4,764.01	1,069.00	1,299.00	1,213.48	85.52	15.189	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:		0.00 usft
Verna Rae - 123H - OH - Prelim Plan A													Offset Well Error:		0.00 usft
Survey Program: 0-MWD - OWSG, 3000-MWD - OWSG, 9700-MWD - OWSG															
Reference		Offset		Semi Major Axis		Distance							Warning		
Measured Depth	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Minimum	Separation			
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor			
100.00	100.00	100.00	100.00	0.00	0.13	-71.57	30.00	-90.00	94.87	94.74	0.13	739.116			
200.00	200.00	200.00	200.00	0.18	0.49	-71.57	30.00	-90.00	94.87	94.20	0.67	142.475			
300.00	300.00	300.00	300.00	0.54	0.85	-71.57	30.00	-90.00	94.87	93.49	1.38	68.606			
400.00	400.00	400.00	400.00	0.90	1.20	-71.57	30.00	-90.00	94.87	92.77	2.10	45.181			
500.00	500.00	500.00	500.00	1.25	1.56	-71.57	30.00	-90.00	94.87	92.05	2.82	33.681			
600.00	600.00	600.00	600.00	1.61	1.92	-71.57	30.00	-90.00	94.87	91.33	3.53	26.847	CC, ES		
700.00	699.99	698.36	698.35	1.97	2.27	-150.59	30.37	-90.76	96.48	92.25	4.23	22.789			
800.00	799.96	796.56	796.52	2.31	2.61	-151.09	31.47	-93.03	101.31	96.39	4.93	20.562			
900.00	899.86	894.44	894.31	2.67	2.96	-151.83	33.30	-96.81	109.38	103.75	5.62	19.449			
1,000.00	999.68	991.86	991.55	3.03	3.31	-152.69	35.84	-102.05	120.67	114.35	6.32	19.092			
1,100.00	1,099.37	1,088.65	1,088.05	3.39	3.66	-153.57	39.09	-108.74	135.19	128.18	7.02	19.271			
1,200.00	1,198.90	1,186.88	1,185.91	3.76	4.02	-154.49	42.82	-116.43	152.30	144.58	7.72	19.725			
1,300.00	1,298.26	1,285.07	1,283.73	4.14	4.39	-155.45	46.55	-124.13	171.01	162.58	8.43	20.288			
1,400.00	1,397.40	1,382.92	1,381.21	4.52	4.75	-156.42	50.27	-131.81	191.33	182.19	9.14	20.935			
1,500.00	1,496.30	1,480.42	1,478.34	4.92	5.12	-157.36	53.98	-139.45	213.28	203.43	9.85	21.653			
1,600.00	1,594.93	1,577.52	1,575.07	5.33	5.48	-158.27	57.67	-147.07	236.86	226.30	10.56	22.426			
1,700.00	1,693.26	1,674.21	1,671.39	5.75	5.84	-159.14	61.35	-154.65	262.08	250.80	11.27	23.246			
1,800.00	1,791.25	1,770.44	1,767.25	6.19	6.21	-159.96	65.00	-162.20	288.94	276.95	11.99	24.104			
1,900.00	1,889.06	1,866.43	1,862.88	6.64	6.57	-160.77	68.65	-169.73	316.65	303.95	12.70	24.934			
2,000.00	1,986.88	1,962.43	1,958.51	7.10	6.93	-161.45	72.30	-177.25	344.40	330.99	13.41	25.680			
2,100.00	2,084.69	2,058.42	2,054.14	7.56	7.30	-162.04	75.95	-184.78	372.20	358.07	14.13	26.350			
2,200.00	2,182.51	2,154.42	2,149.77	8.03	7.66	-162.54	79.60	-192.31	400.03	385.19	14.84	26.954			
2,300.00	2,280.32	2,250.41	2,245.40	8.50	8.03	-162.97	83.26	-199.84	427.88	412.32	15.56	27.502			
2,400.00	2,378.13	2,346.41	2,341.03	8.97	8.39	-163.35	86.91	-207.37	455.75	439.47	16.28	28.002			
2,500.00	2,475.95	2,442.41	2,436.66	9.45	8.76	-163.69	90.56	-214.90	483.64	466.64	16.99	28.458			
2,600.00	2,573.76	2,538.40	2,532.29	9.92	9.12	-163.99	94.21	-222.42	511.54	493.82	17.71	28.877			
2,700.00	2,671.58	2,634.40	2,627.92	10.40	9.49	-164.26	97.86	-229.95	539.45	521.02	18.43	29.263			
2,800.00	2,769.39	2,733.10	2,726.26	10.88	9.86	-164.52	101.58	-237.62	567.31	548.14	19.17	29.588			
2,900.00	2,867.21	2,839.43	2,832.30	11.37	10.26	-164.82	104.95	-244.59	593.96	574.00	19.96	29.757			
3,000.00	2,965.02	2,946.69	2,939.41	11.85	10.66	-165.16	107.49	-249.82	618.96	598.21	20.75	29.835			
3,100.00	3,062.84	3,054.83	3,047.48	12.33	10.95	-165.56	109.16	-253.26	642.29	620.86	21.43	29.967			
3,200.00	3,160.65	3,163.78	3,156.41	12.82	11.04	-165.99	109.94	-254.88	663.96	642.04	21.92	30.296			
3,300.00	3,258.47	3,265.84	3,258.47	13.31	11.06	-166.43	110.00	-255.00	684.29	661.97	22.32	30.662			
3,400.00	3,356.28	3,363.65	3,356.28	13.79	11.09	-166.82	110.00	-255.00	704.54	681.81	22.73	31.003			
3,500.00	3,454.10	3,461.47	3,454.10	14.28	11.13	-167.20	110.00	-255.00	724.82	701.68	23.14	31.317			
3,600.00	3,551.91	3,559.28	3,551.91	14.77	11.19	-167.55	110.00	-255.00	745.13	721.56	23.57	31.607			
3,700.00	3,649.73	3,657.10	3,649.73	15.26	11.25	-167.89	110.00	-255.00	765.47	741.45	24.02	31.873			
3,800.00	3,747.54	3,754.91	3,747.54	15.75	11.32	-168.21	110.00	-255.00	785.83	761.36	24.47	32.116			
3,900.00	3,845.36	3,852.73	3,845.36	16.24	11.40	-168.51	110.00	-255.00	806.21	781.28	24.93	32.338			
4,000.00	3,943.17	3,950.54	3,943.17	16.73	11.50	-168.79	110.00	-255.00	826.61	801.20	25.40	32.538			
4,100.00	4,040.99	4,048.36	4,040.99	17.22	11.60	-169.07	110.00	-255.00	847.03	821.14	25.89	32.720			
4,200.00	4,138.80	4,146.17	4,138.80	17.71	11.71	-169.33	110.00	-255.00	867.47	841.09	26.38	32.883			
4,300.00	4,236.62	4,243.99	4,236.62	18.20	11.83	-169.58	110.00	-255.00	887.92	861.04	26.88	33.029			
4,400.00	4,334.43	4,341.80	4,334.43	18.69	11.97	-169.81	110.00	-255.00	908.39	881.00	27.40	33.159			
4,500.00	4,432.24	4,439.62	4,432.24	19.19	12.10	-170.04	110.00	-255.00	928.88	900.96	27.92	33.274			
4,600.00	4,530.06	4,537.43	4,530.06	19.68	12.25	-170.26	110.00	-255.00	949.37	920.93	28.45	33.375			
4,700.00	4,627.87	4,635.25	4,627.87	20.17	12.41	-170.46	110.00	-255.00	969.88	940.90	28.98	33.463			
4,800.00	4,725.69	4,733.06	4,725.69	20.66	12.57	-170.66	110.00	-255.00	990.41	960.88	29.53	33.540			
4,900.00	4,823.50	4,830.87	4,823.50	21.16	12.74	-170.85	110.00	-255.00	1,010.94	980.86	30.08	33.605			
5,000.00	4,921.32	4,928.69	4,921.32	21.65	12.92	-171.04	110.00	-255.00	1,031.48	1,000.84	30.64	33.660			
5,100.00	5,019.13	5,026.50	5,019.13	22.14	13.11	-171.21	110.00	-255.00	1,052.04	1,020.82	31.21	33.706			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Verna Rae - 123H - OH - Prelim Plan A												Offset Well Error:	0.00 usft
Survey Program: 0-MWD - OWSG, 3000-MWD - OWSG, 9700-MWD - OWSG													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.00	5,116.95	5,124.32	5,116.95	22.64	13.30	-171.38	110.00	-255.00	1,072.60	1,040.81	31.79	33.744	
5,300.00	5,214.76	5,222.13	5,214.76	23.13	13.50	-171.55	110.00	-255.00	1,093.17	1,060.80	32.37	33.774	
5,400.00	5,312.58	5,319.95	5,312.58	23.63	13.71	-171.70	110.00	-255.00	1,113.75	1,080.79	32.95	33.796	
5,500.00	5,410.39	5,417.76	5,410.39	24.12	13.92	-171.86	110.00	-255.00	1,134.33	1,100.79	33.55	33.812	
5,600.00	5,508.21	5,515.58	5,508.21	24.61	14.13	-172.00	110.00	-255.00	1,154.93	1,120.78	34.15	33.822	
5,700.00	5,606.02	5,613.39	5,606.02	25.11	14.35	-172.14	110.00	-255.00	1,175.53	1,140.78	34.75	33.827	
5,800.00	5,703.84	5,711.21	5,703.84	25.60	14.58	-172.28	110.00	-255.00	1,196.14	1,160.78	35.36	33.827	
5,816.59	5,720.07	5,727.44	5,720.07	25.68	14.62	-172.30	110.00	-255.00	1,199.56	1,164.09	35.46	33.826	
5,900.00	5,801.77	5,809.15	5,801.77	26.09	14.81	-172.43	110.00	-255.00	1,216.16	1,180.19	35.97	33.807	
6,000.00	5,900.05	5,907.42	5,900.05	26.56	15.05	-172.57	110.00	-255.00	1,234.52	1,197.93	36.59	33.740	
6,100.00	5,998.63	6,006.00	5,998.63	27.01	15.29	-172.69	110.00	-255.00	1,251.17	1,213.96	37.21	33.627	
6,200.00	6,097.48	6,104.85	6,097.48	27.44	15.54	-172.79	110.00	-255.00	1,266.12	1,228.29	37.83	33.472	
6,300.00	6,196.59	6,203.96	6,196.59	27.86	15.79	-172.88	110.00	-255.00	1,279.36	1,240.91	38.45	33.275	
6,400.00	6,295.91	6,303.28	6,295.91	28.25	16.05	-172.96	110.00	-255.00	1,290.88	1,251.81	39.07	33.040	
6,500.00	6,395.42	6,402.79	6,395.42	28.63	16.31	-173.03	110.00	-255.00	1,300.68	1,260.98	39.69	32.769	
6,600.00	6,495.09	6,502.46	6,495.09	28.99	16.57	-173.08	110.00	-255.00	1,308.75	1,268.44	40.32	32.463	
6,700.00	6,594.88	6,602.25	6,594.88	29.33	16.84	-173.12	110.00	-255.00	1,315.10	1,274.16	40.94	32.125	
6,800.00	6,694.77	6,702.14	6,694.77	29.66	17.11	-173.15	110.00	-255.00	1,319.72	1,278.16	41.56	31.755	
6,900.00	6,794.73	6,802.10	6,794.73	29.97	17.39	-173.17	110.00	-255.00	1,322.60	1,280.42	42.18	31.356	
7,000.00	6,894.72	6,902.09	6,894.72	30.26	17.67	-173.18	110.00	-255.00	1,323.76	1,280.96	42.80	30.929	
7,016.59	6,911.31	6,918.69	6,911.31	30.31	17.72	-94.33	110.00	-255.00	1,323.78	1,280.88	42.90	30.856	
7,100.00	6,994.72	7,002.09	6,994.72	30.54	17.95	-94.33	110.00	-255.00	1,323.78	1,280.37	43.41	30.495	
7,200.00	7,094.72	7,102.09	7,094.72	30.82	18.23	-94.33	110.00	-255.00	1,323.78	1,279.76	44.02	30.071	
7,300.00	7,194.72	7,202.09	7,194.72	31.11	18.52	-94.33	110.00	-255.00	1,323.78	1,279.14	44.64	29.656	
7,400.00	7,294.72	7,302.09	7,294.72	31.39	18.81	-94.33	110.00	-255.00	1,323.78	1,278.53	45.26	29.251	
7,500.00	7,394.72	7,402.09	7,394.72	31.68	19.10	-94.33	110.00	-255.00	1,323.78	1,277.90	45.88	28.854	
7,600.00	7,494.72	7,502.09	7,494.72	31.96	19.40	-94.33	110.00	-255.00	1,323.78	1,277.28	46.50	28.467	
7,700.00	7,594.72	7,602.09	7,594.72	32.25	19.69	-94.33	110.00	-255.00	1,323.78	1,276.65	47.13	28.087	
7,800.00	7,694.72	7,702.09	7,694.72	32.54	19.99	-94.33	110.00	-255.00	1,323.78	1,276.02	47.76	27.717	
7,900.00	7,794.72	7,802.09	7,794.72	32.83	20.29	-94.33	110.00	-255.00	1,323.78	1,275.39	48.39	27.354	
8,000.00	7,894.72	7,902.09	7,894.72	33.13	20.59	-94.33	110.00	-255.00	1,323.78	1,274.75	49.03	27.000	
8,100.00	7,994.72	8,002.09	7,994.72	33.42	20.89	-94.33	110.00	-255.00	1,323.78	1,274.12	49.67	26.653	
8,200.00	8,094.72	8,102.09	8,094.72	33.72	21.20	-94.33	110.00	-255.00	1,323.78	1,273.48	50.31	26.314	
8,300.00	8,194.72	8,202.09	8,194.72	34.01	21.51	-94.33	110.00	-255.00	1,323.78	1,272.83	50.95	25.982	
8,400.00	8,294.72	8,302.09	8,294.72	34.31	21.81	-94.33	110.00	-255.00	1,323.78	1,272.19	51.59	25.658	
8,500.00	8,394.72	8,402.09	8,394.72	34.61	22.12	-94.33	110.00	-255.00	1,323.78	1,271.54	52.24	25.340	
8,600.00	8,494.72	8,502.09	8,494.72	34.91	22.44	-94.33	110.00	-255.00	1,323.78	1,270.89	52.89	25.030	
8,700.00	8,594.72	8,602.09	8,594.72	35.21	22.75	-94.33	110.00	-255.00	1,323.78	1,270.24	53.54	24.726	
8,800.00	8,694.72	8,702.09	8,694.72	35.52	23.06	-94.33	110.00	-255.00	1,323.78	1,269.59	54.19	24.428	
8,900.00	8,794.72	8,802.09	8,794.72	35.82	23.38	-94.33	110.00	-255.00	1,323.78	1,268.94	54.84	24.137	
9,000.00	8,894.72	8,902.09	8,894.72	36.12	23.69	-94.33	110.00	-255.00	1,323.78	1,268.28	55.50	23.852	
9,100.00	8,994.72	9,002.09	8,994.72	36.43	24.01	-94.33	110.00	-255.00	1,323.78	1,267.63	56.16	23.573	
9,200.00	9,094.72	9,102.09	9,094.72	36.73	24.33	-94.33	110.00	-255.00	1,323.78	1,266.97	56.82	23.300	
9,300.00	9,194.72	9,202.09	9,194.72	37.04	24.65	-94.33	110.00	-255.00	1,323.78	1,266.31	57.48	23.032	
9,400.00	9,294.72	9,302.09	9,294.72	37.35	24.97	-94.33	110.00	-255.00	1,323.78	1,265.65	58.14	22.770	
9,500.00	9,394.72	9,402.09	9,394.72	37.66	25.29	-94.33	110.00	-255.00	1,323.78	1,264.98	58.80	22.513	
9,600.00	9,494.72	9,502.09	9,494.72	37.97	25.62	-94.33	110.00	-255.00	1,323.78	1,264.32	59.46	22.262	
9,700.00	9,594.72	9,602.09	9,594.72	38.28	25.94	-94.33	110.00	-255.00	1,323.78	1,263.66	60.13	22.017	
9,800.00	9,694.72	9,702.09	9,694.72	38.59	26.10	-94.33	110.00	-255.00	1,323.78	1,263.16	60.63	21.835	
9,800.54	9,695.26	9,702.63	9,695.26	38.59	26.10	-94.33	110.00	-255.00	1,323.78	1,263.15	60.63	21.834	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 123H - OH - Prelim Plan A													Offset Site Error:	0.00 usft
Survey Program: 0-MWD - OWSG, 3000-MWD - OWSG, 9700-MWD - OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	(usft)			
9,900.00	9,794.72	9,797.25	9,789.87	38.90	26.10	-94.36	109.32	-255.00	1,323.84	1,262.88	60.96	21.716		
10,000.00	9,894.72	9,881.11	9,873.03	39.22	26.11	-94.80	99.14	-254.99	1,324.82	1,263.56	61.26	21.628		
10,100.00	9,994.72	9,960.42	9,949.53	39.53	26.12	-95.69	78.44	-254.97	1,327.28	1,265.76	61.52	21.575		
10,200.00	10,094.72	10,032.82	10,016.27	39.85	26.13	-96.89	50.49	-254.95	1,331.87	1,270.13	61.74	21.573		
10,300.00	10,194.72	10,100.00	10,074.58	40.16	26.16	-98.31	17.22	-254.92	1,339.33	1,277.42	61.91	21.634		
10,317.28	10,212.00	10,107.50	10,080.84	40.22	26.16	-98.48	13.09	-254.92	1,340.96	1,279.04	61.92	21.658		
10,350.00	10,244.70	10,126.70	10,096.61	40.31	26.17	80.79	2.14	-254.91	1,344.22	1,282.27	61.95	21.700		
10,400.00	10,294.43	10,155.81	10,119.80	40.46	26.19	79.64	-15.45	-254.90	1,349.38	1,287.41	61.97	21.774		
10,450.00	10,343.54	10,184.69	10,141.89	40.59	26.21	78.53	-34.05	-254.88	1,354.66	1,292.68	61.98	21.856		
10,500.00	10,391.64	10,213.36	10,162.87	40.72	26.23	77.46	-53.59	-254.87	1,359.97	1,297.99	61.98	21.943		
10,550.00	10,438.37	10,241.86	10,182.73	40.84	26.26	76.45	-74.02	-254.85	1,365.22	1,303.25	61.96	22.032		
10,600.00	10,483.39	10,270.21	10,201.45	40.94	26.29	75.50	-95.31	-254.83	1,370.31	1,308.36	61.94	22.122		
10,650.00	10,526.33	10,300.00	10,219.96	41.04	26.33	74.61	-118.65	-254.81	1,375.16	1,313.23	61.93	22.206		
10,700.00	10,566.89	10,326.53	10,235.41	41.13	26.37	73.83	-140.21	-254.80	1,379.70	1,317.80	61.89	22.291		
10,750.00	10,604.74	10,350.00	10,248.23	41.20	26.41	73.16	-159.87	-254.78	1,383.86	1,322.02	61.84	22.378		
10,800.00	10,639.61	10,382.47	10,264.62	41.27	26.47	72.49	-187.90	-254.76	1,387.57	1,325.70	61.86	22.429		
10,850.00	10,671.22	10,410.34	10,277.39	41.33	26.53	71.96	-212.66	-254.74	1,390.78	1,328.92	61.87	22.480		
10,900.00	10,699.33	10,438.15	10,288.93	41.39	26.61	71.52	-237.96	-254.72	1,393.46	1,331.57	61.89	22.514		
10,950.00	10,723.74	10,465.92	10,299.22	41.44	26.69	71.18	-263.76	-254.69	1,395.56	1,333.62	61.94	22.530		
11,000.00	10,744.25	10,500.00	10,310.11	41.49	26.79	70.92	-296.04	-254.67	1,397.09	1,335.03	62.06	22.512		
11,050.00	10,760.71	10,521.39	10,315.95	41.54	26.87	70.80	-316.62	-254.65	1,397.93	1,335.80	62.13	22.501		
11,100.00	10,773.00	10,550.00	10,322.57	41.60	26.98	70.76	-344.45	-254.63	1,398.17	1,335.89	62.27	22.452		
11,150.00	10,781.01	10,576.82	10,327.50	41.67	27.09	70.83	-370.81	-254.61	1,397.76	1,335.31	62.45	22.383		
11,200.00	10,784.70	10,600.00	10,330.76	41.75	27.19	70.98	-393.76	-254.59	1,396.73	1,334.10	62.63	22.300		
11,217.27	10,784.96	10,614.14	10,332.30	41.78	27.25	71.07	-407.81	-254.58	1,396.21	1,333.47	62.75	22.251		
11,300.00	10,784.96	10,660.30	10,334.89	41.95	27.47	71.17	-453.89	-254.54	1,394.71	1,331.54	63.16	22.081		
11,339.95	10,784.96	10,706.87	10,334.96	42.05	27.72	71.18	-486.71	-254.51	1,394.66	1,331.15	63.52	21.958		
11,400.00	10,784.96	10,753.18	10,334.96	42.23	27.99	71.18	-546.76	-254.46	1,394.66	1,330.71	63.96	21.806		
11,500.00	10,784.96	10,853.18	10,334.96	42.58	28.62	71.18	-646.76	-254.38	1,394.66	1,329.73	64.93	21.479		
11,600.00	10,784.96	10,953.18	10,334.96	42.99	29.33	71.18	-746.76	-254.30	1,394.66	1,328.61	66.05	21.116		
11,700.00	10,784.96	11,053.18	10,334.96	43.47	30.12	71.18	-846.76	-254.22	1,394.66	1,327.36	67.30	20.724		
11,800.00	10,784.96	11,153.18	10,334.96	44.02	30.98	71.18	-946.76	-254.13	1,394.66	1,325.99	68.67	20.309		
11,900.00	10,784.96	11,253.18	10,334.96	44.63	31.90	71.18	-1,046.76	-254.05	1,394.66	1,324.49	70.17	19.876		
12,000.00	10,784.97	11,353.18	10,334.96	45.30	32.88	71.18	-1,146.76	-253.97	1,394.66	1,322.88	71.77	19.432		
12,100.00	10,784.97	11,453.18	10,334.97	46.03	33.92	71.18	-1,246.76	-253.89	1,394.65	1,321.17	73.48	18.980		
12,200.00	10,784.97	11,553.18	10,334.97	46.80	35.00	71.18	-1,346.76	-253.81	1,394.65	1,319.37	75.28	18.525		
12,300.00	10,784.97	11,653.18	10,334.97	47.63	36.13	71.18	-1,446.76	-253.73	1,394.65	1,317.47	77.18	18.071		
12,400.00	10,784.97	11,753.18	10,334.97	48.50	37.30	71.18	-1,546.76	-253.64	1,394.65	1,315.50	79.15	17.620		
12,500.00	10,784.97	11,853.18	10,334.97	49.41	38.51	71.18	-1,646.76	-253.56	1,394.65	1,313.44	81.21	17.174		
12,600.00	10,784.97	11,953.18	10,334.97	50.36	39.75	71.18	-1,746.76	-253.48	1,394.65	1,311.32	83.33	16.736		
12,700.00	10,784.97	12,053.18	10,334.97	51.35	41.02	71.18	-1,846.76	-253.40	1,394.65	1,309.13	85.52	16.308		
12,800.00	10,784.97	12,153.18	10,334.97	52.38	42.31	71.18	-1,946.76	-253.32	1,394.64	1,306.88	87.77	15.890		
12,900.00	10,784.97	12,253.18	10,334.97	53.44	43.64	71.18	-2,046.76	-253.23	1,394.64	1,304.57	90.08	15.483		
13,000.00	10,784.98	12,353.18	10,334.97	54.52	44.98	71.18	-2,146.76	-253.15	1,394.64	1,302.21	92.43	15.088		
13,100.00	10,784.98	12,453.18	10,334.98	55.64	46.35	71.18	-2,246.76	-253.07	1,394.64	1,299.80	94.84	14.705		
13,200.00	10,784.98	12,553.18	10,334.98	56.79	47.74	71.18	-2,346.76	-252.99	1,394.64	1,297.35	97.29	14.334		
13,300.00	10,784.98	12,653.18	10,334.98	57.96	49.14	71.18	-2,446.76	-252.91	1,394.64	1,294.85	99.79	13.976		
13,400.00	10,784.98	12,753.18	10,334.98	59.15	50.56	71.18	-2,546.76	-252.83	1,394.64	1,292.32	102.32	13.631		
13,500.00	10,784.98	12,853.18	10,334.98	60.37	51.99	71.18	-2,646.76	-252.74	1,394.63	1,289.75	104.88	13.297		
13,600.00	10,784.98	12,953.18	10,334.98	61.61	53.44	71.18	-2,746.76	-252.66	1,394.63	1,287.15	107.48	12.975		
13,700.00	10,784.98	13,053.18	10,334.98	62.87	54.90	71.18	-2,846.76	-252.58	1,394.63	1,284.52	110.12	12.665		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 123H - OH - Prelim Plan A												Offset Site Error:	0.00 usft
Survey Program: 0-MWD - OWSG, 3000-MWD - OWSG, 9700-MWD - OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,800.00	10,784.98	13,153.18	10,334.98	64.15	56.37	71.18	-2,946.76	-252.50	1,394.63	1,281.85	112.78	12.366	
13,900.00	10,784.98	13,253.18	10,334.98	65.44	57.85	71.18	-3,046.76	-252.42	1,394.63	1,279.17	115.46	12.079	
14,000.00	10,784.98	13,353.18	10,334.98	66.75	59.35	71.18	-3,146.76	-252.33	1,394.63	1,276.45	118.18	11.801	
14,100.00	10,784.99	13,453.18	10,334.99	68.08	60.85	71.18	-3,246.76	-252.25	1,394.63	1,273.72	120.91	11.534	
14,200.00	10,784.99	13,553.18	10,334.99	69.42	62.36	71.18	-3,346.76	-252.17	1,394.63	1,270.96	123.67	11.277	
14,300.00	10,784.99	13,653.18	10,334.99	70.78	63.88	71.18	-3,446.76	-252.09	1,394.62	1,268.18	126.45	11.029	
14,400.00	10,784.99	13,753.18	10,334.99	72.15	65.40	71.18	-3,546.76	-252.01	1,394.62	1,265.38	129.24	10.791	
14,500.00	10,784.99	13,853.18	10,334.99	73.53	66.93	71.18	-3,646.76	-251.92	1,394.62	1,262.56	132.06	10.561	
14,600.00	10,784.99	13,953.18	10,334.99	74.92	68.47	71.18	-3,746.76	-251.84	1,394.62	1,259.73	134.89	10.339	
14,700.00	10,784.99	14,053.18	10,334.99	76.33	70.01	71.18	-3,846.76	-251.76	1,394.62	1,256.88	137.74	10.125	
14,800.00	10,784.99	14,153.18	10,334.99	77.74	71.56	71.18	-3,946.76	-251.68	1,394.62	1,254.02	140.60	9.919	
14,900.00	10,784.99	14,253.18	10,334.99	79.17	73.12	71.18	-4,046.76	-251.60	1,394.62	1,251.14	143.48	9.720	
15,000.00	10,784.99	14,353.18	10,334.99	80.60	74.68	71.18	-4,146.76	-251.52	1,394.61	1,248.25	146.36	9.528	
15,100.00	10,785.00	14,453.18	10,335.00	82.04	76.24	71.18	-4,246.76	-251.43	1,394.61	1,245.35	149.27	9.343	
15,200.00	10,785.00	14,553.18	10,335.00	83.49	77.81	71.18	-4,346.76	-251.35	1,394.61	1,242.43	152.18	9.164	
15,300.00	10,785.00	14,653.18	10,335.00	84.95	79.38	71.18	-4,446.76	-251.27	1,394.61	1,239.51	155.10	8.991	
15,400.00	10,785.00	14,753.18	10,335.00	86.42	80.96	71.18	-4,546.76	-251.19	1,394.61	1,236.57	158.04	8.824	
15,500.00	10,785.00	14,853.18	10,335.00	87.89	82.54	71.18	-4,646.76	-251.11	1,394.61	1,233.62	160.98	8.663	
15,600.00	10,785.00	14,953.18	10,335.00	89.37	84.12	71.18	-4,746.76	-251.02	1,394.61	1,230.67	163.94	8.507	
15,618.32	10,785.00	14,971.50	10,335.00	89.65	84.41	71.18	-4,765.09	-251.01	1,394.61	1,230.12	164.48	8.479 SF	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 124H - OH - Prelim Plan A													Offset Site Error:	0.00 usft
Survey Program: 0-MWD - OWSG													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance		Warning								
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
100.00	100.00	100.00	100.00	0.00	0.14	87.65	40.00	973.00	973.82	973.69	0.14	7,185.648		
200.00	200.00	200.00	200.00	0.18	0.49	87.65	40.00	973.00	973.82	973.15	0.67	1,446.921		
300.00	300.00	300.00	300.00	0.54	0.85	87.65	40.00	973.00	973.82	972.43	1.39	700.605		
400.00	400.00	400.00	400.00	0.90	1.21	87.65	40.00	973.00	973.82	971.71	2.11	462.202		
500.00	500.00	486.76	486.75	1.25	1.52	87.63	40.31	973.58	974.50	971.73	2.77	351.427		
600.00	600.00	573.48	573.45	1.61	1.82	87.58	41.25	975.31	976.54	973.10	3.44	284.089		
700.00	699.99	660.14	660.05	1.97	2.13	8.65	42.82	978.19	979.08	974.98	4.09	239.113		
800.00	799.96	746.77	746.56	2.31	2.44	8.55	45.01	982.22	981.25	976.50	4.75	206.656		
900.00	899.86	833.37	832.96	2.67	2.76	8.43	47.82	987.39	983.06	977.66	5.41	181.870		
1,000.00	999.68	923.01	922.29	3.03	3.09	8.29	51.37	993.92	984.48	978.40	6.08	162.005		
1,100.00	1,099.37	1,022.98	1,021.88	3.39	3.46	8.13	55.53	1,001.57	984.58	977.79	6.79	144.955		
1,200.00	1,198.90	1,122.93	1,121.45	3.76	3.83	8.00	59.69	1,009.23	982.96	975.45	7.51	130.894		
1,300.00	1,298.26	1,222.85	1,220.99	4.14	4.21	7.87	63.85	1,016.88	979.61	971.38	8.23	119.017		
1,400.00	1,397.40	1,322.71	1,320.46	4.52	4.58	7.77	68.00	1,024.53	974.55	965.59	8.95	108.835		
1,500.00	1,496.30	1,422.46	1,419.84	4.92	4.96	7.68	72.15	1,032.16	967.76	958.08	9.68	99.975		
1,600.00	1,594.93	1,522.08	1,519.08	5.33	5.33	7.60	76.30	1,039.79	959.25	948.84	10.41	92.168		
1,700.00	1,693.26	1,625.17	1,621.78	5.75	5.72	7.54	80.57	1,047.64	948.98	937.83	11.15	85.101		
1,800.00	1,791.25	1,741.69	1,737.99	6.19	6.16	7.52	84.62	1,055.10	935.73	923.78	11.95	78.329		
1,900.00	1,889.06	1,857.43	1,853.56	6.64	6.58	7.56	87.53	1,060.45	919.81	907.08	12.73	72.245		
2,000.00	1,886.88	1,972.43	1,968.50	7.10	7.00	7.66	89.31	1,063.73	902.09	888.58	13.51	66.786		
2,100.00	2,084.69	2,086.61	2,082.67	7.56	7.40	7.83	89.99	1,064.98	882.59	868.32	14.27	61.849		
2,200.00	2,182.51	2,186.44	2,182.51	8.03	7.74	8.02	90.00	1,065.00	862.00	847.01	14.99	57.512		
2,300.00	2,280.32	2,284.26	2,280.32	8.50	8.08	8.22	90.00	1,065.00	841.41	825.71	15.70	53.584		
2,400.00	2,378.13	2,382.07	2,378.13	8.97	8.42	8.43	90.00	1,065.00	820.83	804.41	16.42	49.993		
2,500.00	2,475.95	2,479.89	2,475.95	9.45	8.76	8.65	90.00	1,065.00	800.26	783.12	17.14	46.699		
2,600.00	2,573.76	2,577.70	2,573.76	9.92	9.10	8.88	90.00	1,065.00	779.70	761.84	17.86	43.666		
2,700.00	2,671.58	2,675.52	2,671.58	10.40	9.44	9.12	90.00	1,065.00	759.15	740.57	18.58	40.865		
2,800.00	2,769.39	2,773.33	2,769.39	10.88	9.79	9.37	90.00	1,065.00	738.62	719.32	19.30	38.271		
2,900.00	2,867.21	2,871.15	2,867.21	11.37	10.13	9.64	90.00	1,065.00	718.10	698.08	20.02	35.883		
3,000.00	2,965.02	2,968.96	2,965.02	11.85	10.47	9.93	90.00	1,065.00	697.60	676.85	20.75	33.622		
3,100.00	3,062.84	3,066.77	3,062.84	12.33	10.82	10.23	90.00	1,065.00	677.12	655.64	21.47	31.531		
3,200.00	3,160.65	3,164.59	3,160.65	12.82	11.16	10.55	90.00	1,065.00	656.65	634.45	22.20	29.576		
3,300.00	3,258.47	3,262.40	3,258.47	13.31	11.51	10.90	90.00	1,065.00	636.21	613.28	22.93	27.744		
3,400.00	3,356.28	3,360.22	3,356.28	13.79	11.85	11.26	90.00	1,065.00	615.79	592.13	23.66	26.024		
3,500.00	3,454.10	3,458.03	3,454.10	14.28	12.20	11.65	90.00	1,065.00	595.39	571.00	24.39	24.407		
3,600.00	3,551.91	3,555.85	3,551.91	14.77	12.54	12.07	90.00	1,065.00	575.03	549.90	25.13	22.884		
3,700.00	3,649.73	3,653.66	3,649.73	15.26	12.89	12.52	90.00	1,065.00	554.69	528.83	25.86	21.447		
3,800.00	3,747.54	3,751.48	3,747.54	15.75	13.24	13.00	90.00	1,065.00	534.39	507.79	26.60	20.090		
3,900.00	3,845.36	3,849.29	3,845.36	16.24	13.58	13.52	90.00	1,065.00	514.13	486.79	27.34	18.805		
4,000.00	3,943.17	3,947.11	3,943.17	16.73	13.93	14.09	90.00	1,065.00	493.92	465.84	28.08	17.588		
4,100.00	4,040.99	4,044.92	4,040.99	17.22	14.28	14.70	90.00	1,065.00	473.75	444.93	28.83	16.434		
4,200.00	4,138.80	4,142.74	4,138.80	17.71	14.62	15.36	90.00	1,065.00	453.64	424.07	29.58	15.338		
4,300.00	4,236.62	4,240.55	4,236.62	18.20	14.97	16.09	90.00	1,065.00	433.60	403.27	30.33	14.297		
4,400.00	4,334.43	4,338.37	4,334.43	18.69	15.32	16.89	90.00	1,065.00	413.63	382.54	31.08	13.306		
4,500.00	4,432.24	4,436.18	4,432.24	19.19	15.66	17.76	90.00	1,065.00	393.74	361.89	31.85	12.363		
4,600.00	4,530.06	4,534.00	4,530.06	19.68	16.01	18.73	90.00	1,065.00	373.95	341.33	32.62	11.465		
4,700.00	4,627.87	4,631.81	4,627.87	20.17	16.36	19.81	90.00	1,065.00	354.28	320.88	33.39	10.609		
4,800.00	4,725.69	4,729.63	4,725.69	20.66	16.71	21.01	90.00	1,065.00	334.74	300.56	34.18	9.793		
4,900.00	4,823.50	4,827.44	4,823.50	21.16	17.06	22.36	90.00	1,065.00	315.36	280.38	34.98	9.015		
5,000.00	4,921.32	4,925.26	4,921.32	21.65	17.40	23.89	90.00	1,065.00	296.18	260.38	35.80	8.273		
5,100.00	5,019.13	5,023.07	5,019.13	22.14	17.75	25.62	90.00	1,065.00	277.22	240.59	36.63	7.567		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 0-MWD - OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.00	5,116.95	5,120.88	5,116.95	22.64	18.10	27.60	90.00	1,065.00	258.55	221.05	37.49	6.896	
5,300.00	5,214.76	5,218.70	5,214.76	23.13	18.45	29.89	90.00	1,065.00	240.22	201.84	38.39	6.258	
5,400.00	5,312.58	5,316.51	5,312.58	23.63	18.80	32.55	90.00	1,065.00	222.33	183.02	39.32	5.655	
5,500.00	5,410.39	5,414.33	5,410.39	24.12	19.15	35.65	90.00	1,065.00	204.99	164.69	40.30	5.087	
5,600.00	5,508.21	5,512.14	5,508.21	24.61	19.50	39.31	90.00	1,065.00	188.35	147.01	41.34	4.556	
5,700.00	5,606.02	5,609.96	5,606.02	25.11	19.84	43.64	90.00	1,065.00	172.61	130.15	42.47	4.065	
5,800.00	5,703.84	5,707.77	5,703.84	25.60	20.19	48.78	90.00	1,065.00	158.05	114.37	43.67	3.619	
5,816.59	5,720.07	5,724.00	5,720.07	25.68	20.25	49.72	90.00	1,065.00	155.77	111.88	43.88	3.550	
5,900.00	5,801.77	5,805.71	5,801.77	26.09	20.54	54.61	90.00	1,065.00	145.35	100.40	44.95	3.234	
6,000.00	5,900.05	5,903.98	5,900.05	26.56	20.89	60.84	90.00	1,065.00	135.33	89.11	46.23	2.928	
6,100.00	5,998.63	6,002.56	5,998.63	27.01	21.24	67.28	90.00	1,065.00	127.89	80.43	47.46	2.695	
6,200.00	6,097.48	6,101.42	6,097.48	27.44	21.60	73.66	90.00	1,065.00	122.79	74.20	48.59	2.527	
6,300.00	6,196.59	6,200.52	6,196.59	27.86	21.95	79.71	90.00	1,065.00	119.69	70.08	49.61	2.413	
6,400.00	6,295.91	6,300.15	6,295.91	28.25	22.31	85.21	90.00	1,065.00	118.15	67.65	50.50	2.340	
6,500.00	6,395.42	6,400.64	6,395.42	28.63	22.67	89.97	90.00	1,065.00	117.73	66.45	51.29	2.296	
6,500.64	6,396.06	6,400.00	6,396.06	28.63	22.66	90.00	90.00	1,065.00	117.73	66.45	51.29	2.296	CC
6,600.00	6,495.09	6,500.98	6,495.09	28.99	23.02	93.91	90.00	1,065.00	118.01	66.01	52.00	2.269	
6,700.00	6,594.88	6,601.18	6,594.88	29.33	23.38	97.00	90.00	1,065.00	118.62	65.95	52.67	2.252	
6,800.00	6,694.77	6,701.29	6,694.77	29.66	23.74	99.22	90.00	1,065.00	119.28	65.97	53.31	2.237	
6,900.00	6,794.73	6,801.34	6,794.73	29.97	24.10	100.60	90.00	1,065.00	119.78	65.83	53.95	2.220	
7,000.00	6,894.72	6,901.34	6,894.72	30.26	24.45	101.14	90.00	1,065.00	120.00	65.41	54.59	2.198	
7,016.59	6,911.31	6,915.25	6,911.31	30.31	24.50	-180.00	90.00	1,065.00	120.00	65.32	54.68	2.194	
7,100.00	6,994.72	7,001.34	6,994.72	30.54	24.81	-180.00	90.00	1,065.00	120.00	64.78	55.22	2.173	
7,200.00	7,094.72	7,101.34	7,094.72	30.82	25.17	-180.00	90.00	1,065.00	120.00	64.14	55.86	2.148	
7,300.00	7,194.72	7,201.34	7,194.72	31.11	25.52	-180.00	90.00	1,065.00	120.00	63.49	56.51	2.124	
7,400.00	7,294.72	7,301.34	7,294.72	31.39	25.88	-180.00	90.00	1,065.00	120.00	62.85	57.15	2.100	
7,500.00	7,394.72	7,401.34	7,394.72	31.68	26.24	-180.00	90.00	1,065.00	120.00	62.21	57.79	2.076	
7,600.00	7,494.72	7,501.34	7,494.72	31.96	26.60	-180.00	90.00	1,065.00	120.00	61.56	58.44	2.053	
7,700.00	7,594.72	7,601.34	7,594.72	32.25	26.95	-180.00	90.00	1,065.00	120.00	60.91	59.09	2.031	
7,800.00	7,694.72	7,701.34	7,694.72	32.54	27.31	-180.00	90.00	1,065.00	120.00	60.26	59.74	2.009	
7,900.00	7,794.72	7,801.34	7,794.72	32.83	27.67	-180.00	90.00	1,065.00	120.00	59.61	60.39	1.987	
8,000.00	7,894.72	7,901.34	7,894.72	33.13	28.03	-180.00	90.00	1,065.00	120.00	58.96	61.04	1.966	
8,100.00	7,994.72	8,001.34	7,994.72	33.42	28.38	-180.00	90.00	1,065.00	120.00	58.31	61.69	1.945	
8,200.00	8,094.72	8,101.34	8,094.72	33.72	28.74	-180.00	90.00	1,065.00	120.00	57.66	62.34	1.925	
8,300.00	8,194.72	8,201.34	8,194.72	34.01	29.10	-180.00	90.00	1,065.00	120.00	57.00	63.00	1.905	
8,400.00	8,294.72	8,301.34	8,294.72	34.31	29.46	-180.00	90.00	1,065.00	120.00	56.34	63.66	1.885	
8,500.00	8,394.72	8,401.34	8,394.72	34.61	29.81	-180.00	90.00	1,065.00	120.00	55.69	64.31	1.866	
8,600.00	8,494.72	8,501.34	8,494.72	34.91	30.17	-180.00	90.00	1,065.00	120.00	55.03	64.97	1.847	
8,700.00	8,594.72	8,601.34	8,594.72	35.21	30.53	-180.00	90.00	1,065.00	120.00	54.37	65.63	1.828	
8,800.00	8,694.72	8,701.34	8,694.72	35.52	30.89	-180.00	90.00	1,065.00	120.00	53.71	66.29	1.810	
8,900.00	8,794.72	8,801.34	8,794.72	35.82	31.25	-180.00	90.00	1,065.00	120.00	53.04	66.96	1.792	
9,000.00	8,894.72	8,901.34	8,894.72	36.12	31.60	-180.00	90.00	1,065.00	120.00	52.38	67.62	1.775	
9,100.00	8,994.72	9,001.34	8,994.72	36.43	31.96	-180.00	90.00	1,065.00	120.00	51.72	68.28	1.757	
9,200.00	9,094.72	9,101.34	9,094.72	36.73	32.32	-180.00	90.00	1,065.00	120.00	51.05	68.95	1.740	
9,300.00	9,194.72	9,201.34	9,194.72	37.04	32.68	-180.00	90.00	1,065.00	120.00	50.39	69.61	1.724	
9,400.00	9,294.72	9,301.34	9,294.72	37.35	33.03	-180.00	90.00	1,065.00	120.00	49.72	70.28	1.707	
9,500.00	9,394.72	9,401.34	9,394.72	37.66	33.39	-180.00	90.00	1,065.00	120.00	49.05	70.95	1.691	
9,600.00	9,494.72	9,501.34	9,494.72	37.97	33.75	-180.00	90.00	1,065.00	120.00	48.38	71.62	1.676	
9,700.00	9,594.72	9,601.34	9,594.72	38.28	34.11	-180.00	90.00	1,065.00	120.00	47.71	72.29	1.660	
9,800.00	9,694.72	9,701.34	9,694.72	38.59	34.47	-180.00	90.00	1,065.00	120.00	47.04	72.96	1.645	ES, SF

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design - Verna Rae - 124H - OH - Prelim Plan A													Offset Site Error:	0.00 usft
Survey Program: 0-MWD - OWSG													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
9,800.92	9,695.64	9,700.42	9,695.64	38.59	34.46	-180.00	90.00	1,065.00	120.00	47.04	72.96	1.645		
9,900.00	9,794.72	9,789.62	9,785.65	38.90	34.77	180.00	88.41	1,065.00	121.93	48.57	73.36	1.662		
10,000.00	9,894.72	9,870.43	9,865.54	39.22	35.02	180.00	76.74	1,065.01	136.41	63.71	72.71	1.876		
10,100.00	9,994.72	9,946.57	9,938.62	39.53	35.25	179.99	55.57	1,065.03	164.30	93.16	71.14	2.309		
10,200.00	10,094.72	10,016.04	10,002.32	39.85	35.45	179.98	27.96	1,065.05	204.15	135.16	68.99	2.959		
10,300.00	10,194.72	10,077.93	10,055.89	40.16	35.61	179.98	-2.98	1,065.08	254.23	187.68	66.55	3.820		
10,317.28	10,212.00	10,087.84	10,064.14	40.22	35.63	179.98	-8.46	1,065.08	263.79	197.67	66.12	3.990		
10,350.00	10,244.70	10,106.35	10,079.30	40.31	35.68	0.02	-19.08	1,065.09	281.79	216.51	65.28	4.316		
10,400.00	10,294.43	10,134.47	10,101.65	40.46	35.75	0.02	-36.14	1,065.10	307.98	244.03	63.94	4.816		
10,450.00	10,343.54	10,162.41	10,123.01	40.59	35.82	0.02	-54.15	1,065.12	332.50	269.96	62.54	5.316		
10,500.00	10,391.64	10,190.20	10,143.35	40.72	35.89	0.02	-73.08	1,065.13	355.33	294.24	61.09	5.817		
10,550.00	10,438.37	10,217.87	10,162.67	40.84	35.97	0.02	-92.88	1,065.15	376.41	316.82	59.59	6.317		
10,600.00	10,483.39	10,250.00	10,183.87	40.94	36.06	0.01	-117.02	1,065.17	395.75	337.26	58.49	6.767		
10,650.00	10,526.33	10,272.88	10,198.13	41.04	36.13	0.01	-134.91	1,065.19	413.17	356.67	56.51	7.312		
10,700.00	10,566.89	10,300.00	10,214.09	41.13	36.21	0.01	-156.84	1,065.20	428.78	373.85	54.93	7.805		
10,750.00	10,604.74	10,327.56	10,229.23	41.20	36.29	0.01	-179.86	1,065.22	442.50	389.09	53.41	8.285		
10,800.00	10,639.61	10,350.00	10,240.72	41.27	36.36	0.01	-199.14	1,065.24	454.35	402.84	51.51	8.821		
10,850.00	10,671.22	10,382.01	10,255.79	41.33	36.46	0.01	-227.37	1,065.26	464.16	413.76	50.41	9.208		
10,900.00	10,699.33	10,409.18	10,267.33	41.39	36.54	0.01	-251.96	1,065.28	472.07	423.07	48.99	9.635		
10,950.00	10,723.74	10,436.32	10,277.68	41.44	36.63	0.01	-277.05	1,065.30	477.99	430.33	47.66	10.029		
11,000.00	10,744.25	10,463.43	10,286.82	41.49	36.72	0.01	-302.57	1,065.32	481.93	435.50	46.44	10.378		
11,050.00	10,760.71	10,490.54	10,294.74	41.54	36.81	0.01	-328.49	1,065.34	483.88	438.54	45.34	10.671		
11,100.00	10,773.00	10,517.64	10,301.43	41.60	36.90	0.01	-354.76	1,065.37	483.83	439.43	44.40	10.897		
11,150.00	10,781.01	10,550.00	10,307.78	41.67	37.02	0.01	-386.48	1,065.39	481.84	438.01	43.83	10.994		
11,200.00	10,784.70	10,571.86	10,311.05	41.75	37.09	0.01	-408.10	1,065.41	477.75	434.68	43.06	11.094		
11,217.27	10,784.96	10,581.24	10,312.20	41.78	37.13	0.01	-417.40	1,065.42	475.89	432.97	42.91	11.089		
11,300.00	10,784.96	10,626.45	10,315.59	41.95	37.29	0.01	-462.47	1,065.46	469.67	427.09	42.58	11.031		
11,400.00	10,784.96	10,710.65	10,316.09	42.23	37.62	0.01	-546.67	1,065.52	468.87	425.99	42.88	10.935		
11,409.72	10,784.96	10,720.36	10,316.11	42.26	37.67	0.01	-556.38	1,065.53	468.85	425.93	42.92	10.925		
11,500.00	10,784.96	10,810.65	10,316.31	42.58	38.07	0.01	-646.67	1,065.61	468.66	425.37	43.29	10.826		
11,600.00	10,784.96	10,910.65	10,316.52	42.99	38.59	0.01	-746.67	1,065.69	468.45	424.69	43.76	10.706		
11,700.00	10,784.96	11,010.65	10,316.73	43.47	39.17	0.01	-846.67	1,065.77	468.24	423.96	44.27	10.576		
11,800.00	10,784.96	11,110.65	10,316.94	44.02	39.82	0.01	-946.67	1,065.85	468.03	423.18	44.84	10.437		
11,900.00	10,784.96	11,210.65	10,317.15	44.63	40.52	0.01	-1,046.67	1,065.94	467.82	422.36	45.46	10.292		
12,000.00	10,784.97	11,310.65	10,317.36	45.30	41.27	0.01	-1,146.67	1,066.02	467.61	421.49	46.12	10.140		
12,100.00	10,784.97	11,410.65	10,317.57	46.03	42.08	0.01	-1,246.66	1,066.10	467.40	420.58	46.82	9.983		
12,200.00	10,784.97	11,510.65	10,317.78	46.80	42.94	0.01	-1,346.66	1,066.18	467.19	419.62	47.56	9.822		
12,300.00	10,784.97	11,610.65	10,317.99	47.63	43.85	0.01	-1,446.66	1,066.27	466.97	418.63	48.35	9.659		
12,400.00	10,784.97	11,710.65	10,318.21	48.50	44.80	0.01	-1,546.66	1,066.35	466.76	417.59	49.17	9.493		
12,500.00	10,784.97	11,810.65	10,318.42	49.41	45.79	0.01	-1,646.66	1,066.43	466.55	416.53	50.03	9.326		
12,600.00	10,784.97	11,910.64	10,318.63	50.36	46.82	0.01	-1,746.66	1,066.51	466.34	415.42	50.92	9.158		
12,700.00	10,784.97	12,010.64	10,318.84	51.35	47.88	0.01	-1,846.66	1,066.60	466.13	414.29	51.84	8.991		
12,800.00	10,784.97	12,110.64	10,319.05	52.38	48.98	0.01	-1,946.66	1,066.68	465.92	413.12	52.80	8.824		
12,900.00	10,784.97	12,210.64	10,319.26	53.44	50.11	0.01	-2,046.66	1,066.76	465.71	411.93	53.78	8.659		
13,000.00	10,784.98	12,310.64	10,319.47	54.52	51.27	0.01	-2,146.66	1,066.84	465.50	410.71	54.80	8.495		
13,100.00	10,784.98	12,410.64	10,319.68	55.64	52.45	0.01	-2,246.66	1,066.93	465.29	409.46	55.83	8.334		
13,200.00	10,784.98	12,510.64	10,319.90	56.79	53.67	0.01	-2,346.66	1,067.01	465.08	408.19	56.90	8.174		
13,300.00	10,784.98	12,610.64	10,320.11	57.96	54.90	0.01	-2,446.66	1,067.09	464.87	406.89	57.98	8.018		
13,400.00	10,784.98	12,710.64	10,320.32	59.15	56.16	0.01	-2,546.66	1,067.17	464.66	405.58	59.09	7.864		
13,500.00	10,784.98	12,810.64	10,320.53	60.37	57.44	0.01	-2,646.66	1,067.26	464.45	404.24	60.21	7.713		
13,600.00	10,784.98	12,910.64	10,320.74	61.61	58.74	0.00	-2,746.66	1,067.34	464.24	402.88	61.36	7.566		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 124H - OH - Prelim Plan A														Offset Site Error:	0.00 usft
Survey Program: 0-MWD - OWSG														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis /		Highside Toolface (°)	Offset Wellbore Centre		Distance				Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
13,700.00	10,784.98	13,010.64	10,320.95	62.87	60.06	0.00	-2,846.66	1,067.42	464.03	401.50	62.53	7.421			
13,800.00	10,784.98	13,110.64	10,321.16	64.15	61.39	0.00	-2,946.66	1,067.50	463.82	400.11	63.71	7.280			
13,900.00	10,784.98	13,210.64	10,321.37	65.44	62.74	0.00	-3,046.66	1,067.58	463.61	398.70	64.91	7.142			
14,000.00	10,784.98	13,310.64	10,321.58	66.75	64.11	0.00	-3,146.66	1,067.67	463.40	397.28	66.12	7.008			
14,100.00	10,784.99	13,410.64	10,321.80	68.08	65.48	0.00	-3,246.66	1,067.75	463.19	395.84	67.35	6.877			
14,200.00	10,784.99	13,510.64	10,322.01	69.42	66.88	0.00	-3,346.65	1,067.83	462.98	394.38	68.60	6.749			
14,300.00	10,784.99	13,610.64	10,322.22	70.78	68.28	0.00	-3,446.65	1,067.91	462.77	392.92	69.85	6.625			
14,400.00	10,784.99	13,710.64	10,322.43	72.15	69.70	0.00	-3,546.65	1,068.00	462.56	391.44	71.12	6.504			
14,500.00	10,784.99	13,810.64	10,322.64	73.53	71.12	0.00	-3,646.65	1,068.08	462.35	389.95	72.40	6.386			
14,600.00	10,784.99	13,910.64	10,322.85	74.92	72.56	0.00	-3,746.65	1,068.16	462.14	388.44	73.70	6.271			
14,700.00	10,784.99	14,010.64	10,323.06	76.33	74.01	0.00	-3,846.65	1,068.24	461.93	386.93	75.00	6.159			
14,800.00	10,784.99	14,110.64	10,323.27	77.74	75.46	0.00	-3,946.65	1,068.33	461.72	385.41	76.31	6.050			
14,900.00	10,784.99	14,210.64	10,323.49	79.17	76.93	0.00	-4,046.65	1,068.41	461.51	383.88	77.63	5.945			
15,000.00	10,784.99	14,310.64	10,323.70	80.60	78.40	0.00	-4,146.65	1,068.49	461.30	382.33	78.97	5.842			
15,100.00	10,785.00	14,410.64	10,323.91	82.04	79.88	0.00	-4,246.65	1,068.57	461.09	380.78	80.31	5.742			
15,200.00	10,785.00	14,510.64	10,324.12	83.49	81.37	0.00	-4,346.65	1,068.66	460.88	379.22	81.65	5.644			
15,300.00	10,785.00	14,610.64	10,324.33	84.95	82.86	0.00	-4,446.65	1,068.74	460.67	377.66	83.01	5.550			
15,400.00	10,785.00	14,710.64	10,324.54	86.42	84.37	0.00	-4,546.65	1,068.82	460.46	376.09	84.37	5.457			
15,500.00	10,785.00	14,810.64	10,324.75	87.89	85.87	0.00	-4,646.65	1,068.90	460.25	374.50	85.74	5.368			
15,600.00	10,785.00	14,910.64	10,324.96	89.37	87.39	0.00	-4,746.65	1,068.99	460.04	372.92	87.12	5.280			
15,618.32	10,785.00	14,928.96	10,325.00	89.65	87.66	0.00	-4,764.97	1,069.00	460.00	372.63	87.37	5.265			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Verna Rae - 133H - OH - Prelim Plan A													Offset Well Error:	0.00 usft
Survey Program: 0-MWD - OWSG, 3000-MWD - OWSG, 10200-MWD - OWSG														
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
100.00	100.00	100.00	100.00	0.00	0.13	-45.00	30.00	-30.00	42.43	42.30	0.13	330.543		
200.00	200.00	200.00	200.00	0.18	0.49	-45.00	30.00	-30.00	42.43	41.76	0.67	63.717		
300.00	300.00	300.00	300.00	0.54	0.85	-45.00	30.00	-30.00	42.43	41.04	1.38	30.681		
400.00	400.00	400.00	400.00	0.90	1.20	-45.00	30.00	-30.00	42.43	40.33	2.10	20.205 CC, ES		
500.00	500.00	499.26	499.25	1.25	1.56	-45.13	30.54	-30.67	43.29	40.48	2.81	15.396		
600.00	600.00	598.46	598.42	1.61	1.91	-45.47	32.15	-32.68	45.87	42.35	3.52	13.025		
700.00	699.99	697.51	697.37	1.97	2.26	-125.59	34.82	-36.03	50.68	46.45	4.23	11.992		
800.00	799.96	796.25	795.93	2.31	2.62	-128.07	38.56	-40.70	58.29	53.36	4.93	11.832		
900.00	899.86	905.52	893.87	2.67	3.02	-131.05	43.32	-46.65	68.83	63.16	5.67	12.145		
1,000.00	999.68	1,006.43	992.58	3.03	3.39	-134.08	48.71	-53.39	81.66	75.28	6.38	12.793		
1,100.00	1,099.37	1,107.56	1,091.07	3.39	3.77	-136.98	54.10	-60.12	95.92	88.82	7.10	13.505		
1,200.00	1,198.90	1,191.06	1,189.32	3.76	4.09	-139.68	59.47	-66.83	111.69	103.93	7.76	14.389		
1,300.00	1,298.26	1,289.40	1,287.28	4.14	4.46	-142.17	64.82	-73.53	129.01	120.53	8.48	15.217		
1,400.00	1,397.40	1,387.43	1,384.94	4.52	4.83	-144.43	70.16	-80.20	147.92	138.72	9.20	16.086		
1,500.00	1,496.30	1,485.12	1,482.26	4.92	5.20	-146.49	75.48	-86.85	168.44	158.53	9.91	16.989		
1,600.00	1,594.93	1,582.45	1,579.22	5.33	5.56	-148.35	80.78	-93.47	190.60	179.97	10.64	17.922		
1,700.00	1,693.26	1,679.37	1,675.77	5.75	5.93	-150.04	86.05	-100.07	214.41	203.05	11.36	18.879		
1,800.00	1,791.25	1,775.87	1,771.90	6.19	6.30	-151.56	91.31	-106.63	239.86	227.78	12.08	19.857		
1,900.00	1,889.06	1,872.14	1,867.81	6.64	6.66	-152.99	96.55	-113.19	266.22	253.41	12.80	20.795		
2,000.00	1,986.88	1,968.42	1,963.72	7.10	7.03	-154.15	101.79	-119.74	292.70	279.17	13.52	21.643		
2,100.00	2,084.69	2,064.69	2,059.62	7.56	7.40	-155.13	107.03	-126.29	319.27	305.03	14.25	22.409		
2,200.00	2,182.51	2,160.96	2,155.53	8.03	7.76	-155.95	112.27	-132.84	345.92	330.95	14.97	23.104		
2,300.00	2,280.32	2,257.24	2,251.44	8.50	8.13	-156.66	117.52	-139.39	372.63	356.93	15.70	23.737		
2,400.00	2,378.13	2,353.51	2,347.34	8.97	8.50	-157.27	122.76	-145.95	399.38	382.95	16.42	24.316		
2,500.00	2,475.95	2,449.78	2,443.25	9.45	8.87	-157.81	128.00	-152.50	426.17	409.01	17.15	24.846		
2,600.00	2,573.76	2,546.06	2,539.16	9.92	9.23	-158.28	133.24	-159.05	452.99	435.11	17.88	25.334		
2,700.00	2,671.58	2,642.33	2,635.07	10.40	9.60	-158.70	138.48	-165.60	479.83	461.22	18.61	25.784		
2,800.00	2,769.39	2,738.60	2,730.97	10.88	9.97	-159.07	143.72	-172.16	506.70	487.36	19.34	26.201		
2,900.00	2,867.21	2,834.88	2,826.88	11.37	10.34	-159.41	148.97	-178.71	533.58	513.51	20.07	26.588		
3,000.00	2,965.02	2,931.15	2,922.79	11.85	10.70	-159.72	154.21	-185.26	560.48	539.68	20.80	26.947		
3,100.00	3,062.84	3,027.42	3,018.69	12.33	11.02	-159.99	159.45	-191.81	587.39	565.91	21.48	27.344		
3,200.00	3,160.65	3,123.70	3,114.60	12.82	11.19	-160.25	164.69	-198.36	614.32	592.32	22.00	27.921		
3,300.00	3,258.47	3,219.97	3,210.51	13.31	11.24	-160.48	169.93	-204.92	641.25	618.85	22.40	28.623		
3,400.00	3,356.28	3,316.24	3,306.41	13.79	11.30	-160.69	175.17	-211.47	668.20	645.38	22.82	29.285		
3,500.00	3,454.10	3,412.52	3,402.32	14.28	11.37	-160.89	180.42	-218.02	695.15	671.91	23.24	29.909		
3,600.00	3,551.91	3,508.79	3,498.23	14.77	11.45	-161.07	185.66	-224.57	722.11	698.43	23.68	30.497		
3,700.00	3,649.73	3,605.06	3,594.13	15.26	11.55	-161.24	190.90	-231.12	749.07	724.94	24.13	31.047		
3,800.00	3,747.54	3,701.34	3,690.04	15.75	11.65	-161.39	196.14	-237.68	776.04	751.46	24.59	31.564		
3,900.00	3,845.36	3,810.00	3,798.37	16.24	11.78	-161.60	201.47	-244.33	802.31	777.20	25.11	31.956		
4,000.00	3,943.17	3,920.12	3,908.29	16.73	11.91	-161.87	205.55	-249.44	827.02	801.38	25.64	32.259		
4,100.00	4,040.99	4,031.04	4,019.12	17.22	12.04	-162.20	208.34	-252.92	850.16	823.98	26.17	32.483		
4,200.00	4,138.80	4,142.68	4,130.74	17.71	12.17	-162.59	209.78	-254.73	871.73	845.01	26.71	32.633		
4,300.00	4,236.62	4,248.56	4,236.62	18.20	12.30	-163.01	210.00	-255.00	891.88	864.64	27.24	32.743		
4,400.00	4,334.43	4,346.38	4,334.43	18.69	12.43	-163.39	210.00	-255.00	911.82	884.07	27.75	32.860		
4,500.00	4,432.24	4,444.19	4,432.24	19.19	12.56	-163.76	210.00	-255.00	931.80	903.53	28.27	32.965		
4,600.00	4,530.06	4,542.01	4,530.06	19.68	12.70	-164.11	210.00	-255.00	951.81	923.02	28.79	33.057		
4,700.00	4,627.87	4,639.82	4,627.87	20.17	12.85	-164.44	210.00	-255.00	971.86	942.53	29.33	33.138		
4,800.00	4,725.69	4,737.63	4,725.69	20.66	13.01	-164.76	210.00	-255.00	991.93	962.06	29.87	33.208		
4,900.00	4,823.50	4,835.45	4,823.50	21.16	13.17	-165.07	210.00	-255.00	1,012.04	981.62	30.42	33.269		
5,000.00	4,921.32	4,933.26	4,921.32	21.65	13.35	-165.37	210.00	-255.00	1,032.17	1,001.19	30.98	33.320		
5,100.00	5,019.13	5,031.08	5,019.13	22.14	13.52	-165.66	210.00	-255.00	1,052.32	1,020.78	31.54	33.364		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:		0.00 usft
Survey Program: 0-MWD - OWSG, 3000-MWD - OWSG, 10200-MWD - OWSG													Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
5,200.00	5,116.95	5,128.89	5,116.95	22.64	13.71	-165.93	210.00	-255.00	1,072.51	1,040.39	32.11	33.399			
5,300.00	5,214.76	5,226.71	5,214.76	23.13	13.90	-166.19	210.00	-255.00	1,092.71	1,060.02	32.69	33.428			
5,400.00	5,312.58	5,324.52	5,312.58	23.63	14.10	-166.45	210.00	-255.00	1,112.94	1,079.66	33.27	33.450			
5,500.00	5,410.39	5,422.34	5,410.39	24.12	14.30	-166.70	210.00	-255.00	1,133.18	1,099.32	33.86	33.466			
5,600.00	5,508.21	5,520.15	5,508.21	24.61	14.51	-166.93	210.00	-255.00	1,153.45	1,118.99	34.45	33.477			
5,700.00	5,606.02	5,617.97	5,606.02	25.11	14.73	-167.16	210.00	-255.00	1,173.73	1,138.68	35.05	33.483			
5,800.00	5,703.84	5,715.78	5,703.84	25.60	14.95	-167.38	210.00	-255.00	1,194.03	1,158.38	35.66	33.484			
5,816.59	5,720.07	5,732.01	5,720.07	25.68	14.98	-167.42	210.00	-255.00	1,197.41	1,161.64	35.76	33.484			
5,900.00	5,801.77	5,813.72	5,801.77	26.09	15.17	-167.63	210.00	-255.00	1,213.77	1,177.50	36.27	33.467			
6,000.00	5,900.05	5,911.99	5,900.05	26.56	15.40	-167.85	210.00	-255.00	1,231.87	1,194.99	36.88	33.403			
6,100.00	5,998.63	6,010.57	5,998.63	27.01	15.64	-168.05	210.00	-255.00	1,248.30	1,210.81	37.49	33.295			
6,200.00	6,097.48	6,109.43	6,097.48	27.44	15.88	-168.22	210.00	-255.00	1,263.05	1,224.95	38.11	33.145			
6,300.00	6,196.59	6,208.53	6,196.59	27.86	16.12	-168.37	210.00	-255.00	1,276.12	1,237.40	38.72	32.956			
6,400.00	6,295.91	6,307.86	6,295.91	28.25	16.37	-168.50	210.00	-255.00	1,287.50	1,248.16	39.34	32.728			
6,500.00	6,395.42	6,407.37	6,395.42	28.63	16.63	-168.60	210.00	-255.00	1,297.17	1,257.22	39.96	32.465			
6,600.00	6,495.09	6,507.03	6,495.09	28.99	16.89	-168.69	210.00	-255.00	1,305.15	1,264.58	40.57	32.167			
6,700.00	6,594.88	6,606.83	6,594.88	29.33	17.15	-168.75	210.00	-255.00	1,311.42	1,270.23	41.19	31.838			
6,800.00	6,694.77	6,706.72	6,694.77	29.66	17.42	-168.80	210.00	-255.00	1,315.98	1,274.18	41.81	31.477			
6,900.00	6,794.73	6,806.67	6,794.73	29.97	17.69	-168.83	210.00	-255.00	1,318.84	1,276.41	42.42	31.088			
7,000.00	6,894.72	6,906.67	6,894.72	30.26	17.96	-168.85	210.00	-255.00	1,319.98	1,276.94	43.04	30.670			
7,016.59	6,911.31	6,923.26	6,911.31	30.31	18.00	-90.00	210.00	-255.00	1,320.00	1,276.86	43.14	30.599			
7,100.00	6,994.72	7,006.67	6,994.72	30.54	18.23	-90.00	210.00	-255.00	1,320.00	1,276.36	43.64	30.246			
7,200.00	7,094.72	7,106.67	7,094.72	30.82	18.51	-90.00	210.00	-255.00	1,320.00	1,275.75	44.25	29.831			
7,300.00	7,194.72	7,206.67	7,194.72	31.11	18.79	-90.00	210.00	-255.00	1,320.00	1,275.14	44.86	29.425			
7,400.00	7,294.72	7,306.67	7,294.72	31.39	19.08	-90.00	210.00	-255.00	1,320.00	1,274.53	45.47	29.027			
7,500.00	7,394.72	7,406.67	7,394.72	31.68	19.37	-90.00	210.00	-255.00	1,320.00	1,273.91	46.09	28.638			
7,600.00	7,494.72	7,506.67	7,494.72	31.96	19.65	-90.00	210.00	-255.00	1,320.00	1,273.29	46.71	28.258			
7,700.00	7,594.72	7,606.67	7,594.72	32.25	19.95	-90.00	210.00	-255.00	1,320.00	1,272.66	47.34	27.886			
7,800.00	7,694.72	7,706.67	7,694.72	32.54	20.24	-90.00	210.00	-255.00	1,320.00	1,272.04	47.96	27.522			
7,900.00	7,794.72	7,806.67	7,794.72	32.83	20.53	-90.00	210.00	-255.00	1,320.00	1,271.41	48.59	27.165			
8,000.00	7,894.72	7,906.67	7,894.72	33.13	20.83	-90.00	210.00	-255.00	1,320.00	1,270.78	49.22	26.817			
8,100.00	7,994.72	8,006.67	7,994.72	33.42	21.13	-90.00	210.00	-255.00	1,320.00	1,270.14	49.86	26.476			
8,200.00	8,094.72	8,106.67	8,094.72	33.72	21.43	-90.00	210.00	-255.00	1,320.00	1,269.51	50.49	26.142			
8,300.00	8,194.72	8,206.67	8,194.72	34.01	21.73	-90.00	210.00	-255.00	1,320.00	1,268.87	51.13	25.816			
8,400.00	8,294.72	8,306.67	8,294.72	34.31	22.04	-90.00	210.00	-255.00	1,320.00	1,268.23	51.77	25.496			
8,500.00	8,394.72	8,406.67	8,394.72	34.61	22.34	-90.00	210.00	-255.00	1,320.00	1,267.58	52.42	25.183			
8,600.00	8,494.72	8,506.67	8,494.72	34.91	22.65	-90.00	210.00	-255.00	1,320.00	1,266.94	53.06	24.877			
8,700.00	8,594.72	8,606.67	8,594.72	35.21	22.96	-90.00	210.00	-255.00	1,320.00	1,266.29	53.71	24.577			
8,800.00	8,694.72	8,706.67	8,694.72	35.52	23.27	-90.00	210.00	-255.00	1,320.00	1,265.64	54.36	24.284			
8,900.00	8,794.72	8,806.67	8,794.72	35.82	23.58	-90.00	210.00	-255.00	1,320.00	1,264.99	55.01	23.997			
9,000.00	8,894.72	8,906.67	8,894.72	36.12	23.90	-90.00	210.00	-255.00	1,320.00	1,264.34	55.66	23.716			
9,100.00	8,994.72	9,006.67	8,994.72	36.43	24.21	-90.00	210.00	-255.00	1,320.00	1,263.69	56.31	23.440			
9,200.00	9,094.72	9,106.67	9,094.72	36.73	24.53	-90.00	210.00	-255.00	1,320.00	1,263.03	56.97	23.170			
9,300.00	9,194.72	9,206.67	9,194.72	37.04	24.84	-90.00	210.00	-255.00	1,320.00	1,262.37	57.63	22.906			
9,400.00	9,294.72	9,306.67	9,294.72	37.35	25.16	-90.00	210.00	-255.00	1,320.00	1,261.71	58.29	22.647			
9,500.00	9,394.72	9,406.67	9,394.72	37.66	25.48	-90.00	210.00	-255.00	1,320.00	1,261.05	58.95	22.394			
9,600.00	9,494.72	9,506.67	9,494.72	37.97	25.80	-90.00	210.00	-255.00	1,320.00	1,260.39	59.61	22.145			
9,700.00	9,594.72	9,606.67	9,594.72	38.28	26.12	-90.00	210.00	-255.00	1,320.00	1,259.73	60.27	21.901			
9,800.00	9,694.72	9,706.67	9,694.72	38.59	26.44	-90.00	210.00	-255.00	1,320.00	1,259.07	60.93	21.663			
9,900.00	9,794.72	9,806.67	9,794.72	38.90	26.77	-90.00	210.00	-255.00	1,320.00	1,258.40	61.60	21.429			

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD - OWSG, 3000-MWD - OWSG, 10200-MWD - OWSG													Offset Well Error:	0.00 usft
Reference														
Semi Major Axis														
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
10,000.00	9,894.72	9,906.67	9,894.72	39.22	27.09	-90.00	210.00	-255.00	1,320.00	1,257.73	62.27	21.199		
10,100.00	9,994.72	10,006.67	9,994.72	39.53	27.41	-90.00	210.00	-255.00	1,320.00	1,257.07	62.93	20.974		
10,200.00	10,094.72	10,106.67	10,094.72	39.85	27.73	-90.00	210.00	-255.00	1,320.00	1,256.41	63.59	20.757		
10,300.00	10,194.72	10,206.67	10,194.72	40.16	27.88	-90.00	210.00	-255.00	1,320.00	1,255.91	64.09	20.597		
10,317.28	10,212.00	10,223.95	10,212.00	40.22	27.88	-90.00	210.00	-255.00	1,320.00	1,255.85	64.15	20.578		
10,350.00	10,244.70	10,256.65	10,244.70	40.31	27.88	90.09	210.00	-255.00	1,320.00	1,255.74	64.26	20.543		
10,400.00	10,294.43	10,306.47	10,294.52	40.46	27.89	90.30	209.95	-255.00	1,320.02	1,255.60	64.42	20.492		
10,450.00	10,343.54	10,356.95	10,344.90	40.59	27.89	90.58	207.07	-255.00	1,320.07	1,255.50	64.57	20.444		
10,500.00	10,391.64	10,408.02	10,395.42	40.72	27.89	90.86	199.65	-254.99	1,320.15	1,255.44	64.71	20.399		
10,550.00	10,438.37	10,459.70	10,445.66	40.84	27.88	91.13	187.60	-254.98	1,320.26	1,255.41	64.85	20.359		
10,600.00	10,483.39	10,512.01	10,495.18	40.94	27.88	91.40	170.84	-254.97	1,320.40	1,255.42	64.97	20.322		
10,650.00	10,526.33	10,564.93	10,543.53	41.04	27.87	91.66	149.36	-254.95	1,320.56	1,255.46	65.09	20.287		
10,700.00	10,566.89	10,618.46	10,590.21	41.13	27.88	91.90	123.19	-254.93	1,320.74	1,255.52	65.21	20.253		
10,750.00	10,604.74	10,672.60	10,634.72	41.20	27.88	92.13	92.42	-254.91	1,320.92	1,255.59	65.33	20.218		
10,800.00	10,639.61	10,727.31	10,676.56	41.27	27.90	92.35	57.19	-254.88	1,321.12	1,255.66	65.46	20.182		
10,850.00	10,671.22	10,782.57	10,715.20	41.33	27.93	92.54	17.73	-254.85	1,321.31	1,255.71	65.60	20.142		
10,900.00	10,699.33	10,838.33	10,750.17	41.39	27.96	92.72	-25.69	-254.81	1,321.50	1,255.74	65.76	20.096		
10,950.00	10,723.74	10,894.56	10,780.99	41.44	28.01	92.87	-72.69	-254.77	1,321.67	1,255.72	65.95	20.042		
11,000.00	10,744.25	10,951.18	10,807.22	41.49	28.08	93.00	-122.84	-254.73	1,321.82	1,255.66	66.16	19.979		
11,050.00	10,760.71	11,008.14	10,828.48	41.54	28.18	93.11	-175.66	-254.69	1,321.95	1,255.53	66.41	19.905		
11,100.00	10,773.00	11,065.37	10,844.46	41.60	28.32	93.18	-230.59	-254.65	1,322.04	1,255.34	66.70	19.820		
11,150.00	10,781.01	11,122.77	10,854.90	41.67	28.49	93.23	-287.01	-254.60	1,322.10	1,255.07	67.03	19.724		
11,200.00	10,784.70	11,180.28	10,859.65	41.75	28.70	93.25	-344.30	-254.56	1,322.13	1,254.74	67.39	19.618		
11,217.27	10,784.96	11,200.00	10,859.96	41.78	28.78	93.25	-364.01	-254.54	1,322.13	1,254.61	67.52	19.581		
11,300.00	10,784.96	11,282.72	10,859.96	41.95	29.15	93.25	-446.74	-254.47	1,322.13	1,253.96	68.17	19.396		
11,400.00	10,784.96	11,382.72	10,859.96	42.23	29.69	93.25	-546.74	-254.39	1,322.13	1,253.05	69.08	19.140		
11,500.00	10,784.96	11,482.72	10,859.96	42.58	30.30	93.25	-646.74	-254.31	1,322.13	1,251.99	70.14	18.850		
11,600.00	10,784.96	11,582.72	10,859.96	42.99	31.00	93.25	-746.74	-254.23	1,322.13	1,250.79	71.34	18.533		
11,700.00	10,784.96	11,682.72	10,859.96	43.47	31.77	93.25	-846.74	-254.15	1,322.13	1,249.45	72.68	18.192		
11,800.00	10,784.96	11,782.72	10,859.96	44.02	32.60	93.25	-946.74	-254.07	1,322.13	1,247.99	74.14	17.833		
11,900.00	10,784.96	11,882.72	10,859.96	44.63	33.50	93.25	-1,046.74	-253.99	1,322.13	1,246.41	75.72	17.461		
12,000.00	10,784.97	11,982.72	10,859.97	45.30	34.46	93.25	-1,146.74	-253.91	1,322.13	1,244.72	77.41	17.080		
12,100.00	10,784.97	12,082.72	10,859.97	46.03	35.47	93.25	-1,246.74	-253.83	1,322.13	1,242.93	79.20	16.693		
12,200.00	10,784.97	12,182.72	10,859.97	46.80	36.52	93.25	-1,346.74	-253.75	1,322.13	1,241.04	81.10	16.303		
12,300.00	10,784.97	12,282.72	10,859.97	47.63	37.62	93.25	-1,446.74	-253.67	1,322.13	1,239.06	83.08	15.915		
12,400.00	10,784.97	12,382.72	10,859.97	48.50	38.77	93.25	-1,546.74	-253.59	1,322.13	1,236.99	85.14	15.529		
12,500.00	10,784.97	12,482.72	10,859.97	49.41	39.94	93.25	-1,646.74	-253.51	1,322.13	1,234.85	87.28	15.148		
12,600.00	10,784.97	12,582.72	10,859.97	50.36	41.16	93.25	-1,746.74	-253.43	1,322.13	1,232.63	89.50	14.773		
12,700.00	10,784.97	12,682.72	10,859.97	51.35	42.40	93.25	-1,846.74	-253.35	1,322.13	1,230.35	91.78	14.406		
12,800.00	10,784.97	12,782.72	10,859.97	52.38	43.67	93.25	-1,946.74	-253.27	1,322.13	1,228.01	94.12	14.047		
12,900.00	10,784.97	12,882.72	10,859.97	53.44	44.97	93.25	-2,046.74	-253.19	1,322.13	1,225.61	96.52	13.698		
13,000.00	10,784.98	12,982.72	10,859.98	54.52	46.29	93.25	-2,146.74	-253.11	1,322.13	1,223.16	98.97	13.358		
13,100.00	10,784.98	13,082.72	10,859.98	55.64	47.63	93.25	-2,246.74	-253.03	1,322.13	1,220.66	101.48	13.029		
13,200.00	10,784.98	13,182.72	10,859.98	56.79	49.00	93.25	-2,346.74	-252.95	1,322.13	1,218.11	104.02	12.710		
13,300.00	10,784.98	13,282.72	10,859.98	57.96	50.38	93.25	-2,446.74	-252.87	1,322.13	1,215.52	106.61	12.401		
13,400.00	10,784.98	13,382.72	10,859.98	59.15	51.78	93.25	-2,546.74	-252.79	1,322.13	1,212.89	109.24	12.103		
13,500.00	10,784.98	13,482.72	10,859.98	60.37	53.19	93.25	-2,646.74	-252.71	1,322.13	1,210.22	111.91	11.814		
13,600.00	10,784.98	13,582.72	10,859.98	61.61	54.62	93.25	-2,746.74	-252.63	1,322.13	1,207.52	114.61	11.536		
13,700.00	10,784.98	13,682.72	10,859.98	62.87	56.06	93.25	-2,846.74	-252.55	1,322.13	1,204.79	117.35	11.267		
13,800.00	10,784.98	13,782.72	10,859.98	64.15	57.51	93.25	-2,946.74	-252.47	1,322.13	1,202.03	120.11	11.008		
13,900.00	10,784.98	13,882.72	10,859.98	65.44	58.98	93.25	-3,046.74	-252.39	1,322.13	1,199.24	122.90	10.758		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 133H - OH - Prelim Plan A												Offset Site Error:	0.00 usft
Survey Program: 0-MWD - OWSG, 3000-MWD - OWSG, 10200-MWD - OWSG												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,000.00	10,784.98	13,982.72	10,859.98	66.75	60.45	93.25	-3,146.74	-252.31	1,322.14	1,196.42	125.72	10.517	
14,100.00	10,784.99	14,082.72	10,859.99	68.08	61.94	93.25	-3,246.74	-252.23	1,322.14	1,193.58	128.56	10.284	
14,200.00	10,784.99	14,182.72	10,859.99	69.42	63.43	93.25	-3,346.74	-252.15	1,322.14	1,190.71	131.42	10.060	
14,300.00	10,784.99	14,282.72	10,859.99	70.76	64.94	93.25	-3,446.74	-252.07	1,322.14	1,187.83	134.31	9.844	
14,400.00	10,784.99	14,382.72	10,859.99	72.15	66.45	93.25	-3,546.74	-251.99	1,322.14	1,184.92	137.21	9.636	
14,500.00	10,784.99	14,482.72	10,859.99	73.53	67.96	93.25	-3,646.74	-251.91	1,322.14	1,182.00	140.13	9.435	
14,600.00	10,784.99	14,582.72	10,859.99	74.92	69.49	93.25	-3,746.74	-251.83	1,322.14	1,179.06	143.08	9.241	
14,700.00	10,784.99	14,682.72	10,859.99	76.33	71.02	93.25	-3,846.74	-251.75	1,322.14	1,176.10	146.03	9.054	
14,800.00	10,784.99	14,782.72	10,859.99	77.74	72.56	93.25	-3,946.74	-251.67	1,322.14	1,173.13	149.01	8.873	
14,900.00	10,784.99	14,882.72	10,859.99	79.17	74.10	93.25	-4,046.74	-251.59	1,322.14	1,170.14	152.00	8.699	
15,000.00	10,784.99	14,982.72	10,859.99	80.60	75.65	93.25	-4,146.74	-251.50	1,322.14	1,167.14	155.00	8.530	
15,100.00	10,785.00	15,082.72	10,860.00	82.04	77.20	93.25	-4,246.73	-251.42	1,322.14	1,164.12	158.01	8.367	
15,200.00	10,785.00	15,182.72	10,860.00	83.49	78.76	93.25	-4,346.73	-251.34	1,322.14	1,161.10	161.04	8.210	
15,300.00	10,785.00	15,282.72	10,860.00	84.95	80.32	93.25	-4,446.73	-251.26	1,322.14	1,158.06	164.08	8.058	
15,400.00	10,785.00	15,382.72	10,860.00	86.42	81.89	93.25	-4,546.73	-251.18	1,322.14	1,155.01	167.13	7.911	
15,500.00	10,785.00	15,482.72	10,860.00	87.89	83.46	93.25	-4,646.73	-251.10	1,322.14	1,151.95	170.19	7.769	
15,600.00	10,785.00	15,582.72	10,860.00	89.37	85.03	93.25	-4,746.73	-251.02	1,322.14	1,148.88	173.26	7.631	
15,618.32	10,785.00	15,601.05	10,860.00	89.65	85.32	93.25	-4,765.06	-251.01	1,322.14	1,148.31	173.82	7.606 SF	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 203H - OH - Prelim Plan A													Offset Site Error: 0.00 usft
Survey Program: 0-MWD - OWSG													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
100.00	100.00	100.00	100.00	0.00	0.13	-76.41	29.00	-120.00	123.45	123.33	0.13	961.830	
200.00	200.00	200.00	200.00	0.18	0.49	-76.41	29.00	-120.00	123.45	122.79	0.67	185.406 CC, ES	
300.00	300.00	297.90	297.89	0.54	0.83	-76.37	29.29	-120.78	124.30	122.93	1.37	90.576	
400.00	400.00	395.74	395.70	0.90	1.18	-76.23	30.18	-123.13	126.85	124.77	2.08	61.031	
500.00	500.00	493.46	493.33	1.25	1.53	-76.01	31.65	-127.03	131.08	128.30	2.79	47.059	
600.00	600.00	591.02	590.71	1.61	1.89	-75.73	33.70	-132.48	137.02	133.52	3.49	39.231	
700.00	699.99	688.28	687.69	1.97	2.25	-154.36	36.32	-139.46	145.42	141.23	4.19	34.680	
800.00	799.96	787.37	786.41	2.31	2.62	-154.38	39.36	-147.53	156.42	151.53	4.90	31.933	
900.00	899.86	886.57	885.23	2.67	2.99	-154.65	42.41	-155.62	169.00	163.40	5.61	30.139	
1,000.00	999.68	985.55	983.83	3.03	3.37	-155.10	45.45	-163.70	183.16	176.84	6.32	28.992	
1,100.00	1,099.37	1,084.28	1,082.19	3.39	3.74	-155.68	48.48	-171.75	198.89	191.86	7.03	28.297	
1,200.00	1,198.90	1,182.73	1,180.26	3.76	4.12	-156.35	51.50	-179.78	216.23	208.48	7.74	27.933	
1,300.00	1,298.26	1,280.87	1,278.03	4.14	4.49	-157.07	54.51	-187.79	235.17	226.72	8.45	27.819	
1,400.00	1,397.40	1,378.67	1,375.45	4.52	4.86	-157.82	57.51	-195.76	255.74	246.57	9.17	27.899	
1,500.00	1,496.30	1,476.10	1,472.51	4.92	5.24	-158.58	60.50	-203.71	277.93	268.05	9.88	28.131	
1,600.00	1,594.93	1,573.13	1,569.17	5.33	5.61	-159.33	63.48	-211.63	301.77	291.18	10.59	28.486	
1,700.00	1,693.26	1,669.73	1,665.40	5.75	5.98	-160.06	66.45	-219.51	327.25	315.94	11.31	28.941	
1,800.00	1,791.25	1,765.87	1,761.18	6.19	6.34	-160.77	69.40	-227.35	354.37	342.35	12.02	29.478	
1,900.00	1,889.06	1,861.77	1,856.72	6.64	6.71	-161.50	72.34	-235.17	382.34	369.61	12.73	30.024	
2,000.00	1,986.88	1,957.67	1,952.25	7.10	7.08	-162.13	75.29	-242.99	410.36	396.92	13.45	30.516	
2,100.00	2,084.69	2,053.58	2,047.79	7.56	7.45	-162.68	78.23	-250.82	438.43	424.26	14.16	30.958	
2,200.00	2,182.51	2,149.48	2,143.33	8.03	7.81	-163.16	81.18	-258.64	466.52	451.64	14.88	31.358	
2,300.00	2,280.32	2,245.38	2,238.87	8.50	8.18	-163.59	84.12	-266.46	494.64	479.05	15.59	31.720	
2,400.00	2,378.13	2,341.28	2,334.40	8.97	8.55	-163.97	87.06	-274.29	522.79	506.48	16.31	32.050	
2,500.00	2,475.95	2,437.19	2,429.94	9.45	8.92	-164.32	90.01	-282.11	550.95	533.92	17.03	32.352	
2,600.00	2,573.76	2,533.09	2,525.48	9.92	9.28	-164.63	92.95	-289.93	579.13	561.38	17.75	32.629	
2,700.00	2,671.58	2,628.99	2,621.01	10.40	9.65	-164.91	95.90	-297.75	607.33	588.86	18.47	32.884	
2,800.00	2,769.39	2,724.89	2,716.55	10.88	10.02	-165.17	98.84	-305.58	635.54	616.35	19.19	33.120	
2,900.00	2,867.21	2,820.79	2,812.09	11.37	10.39	-165.40	101.78	-313.40	663.75	643.84	19.91	33.338	
3,000.00	2,965.02	2,916.70	2,907.63	11.85	10.75	-165.62	104.73	-321.22	691.98	671.35	20.63	33.541	
3,100.00	3,062.84	3,012.60	3,003.16	12.33	11.12	-165.82	107.67	-329.04	720.22	698.86	21.35	33.729	
3,200.00	3,160.65	3,108.50	3,098.70	12.82	11.49	-166.00	110.62	-336.87	748.46	726.39	22.07	33.905	
3,300.00	3,258.47	3,204.40	3,194.24	13.31	11.86	-166.17	113.56	-344.69	776.71	753.91	22.80	34.070	
3,400.00	3,356.28	3,300.30	3,289.77	13.79	12.23	-166.33	116.51	-352.51	804.97	781.45	23.52	34.225	
3,500.00	3,454.10	3,403.79	3,385.31	14.28	12.62	-166.48	119.45	-360.34	833.23	808.96	24.27	34.330	
3,600.00	3,551.91	3,507.89	3,480.85	14.77	13.02	-166.61	122.39	-368.16	861.49	836.47	25.02	34.426	
3,700.00	3,649.73	3,588.01	3,576.39	15.26	13.33	-166.74	125.34	-375.98	889.76	864.07	25.69	34.634	
3,800.00	3,747.54	3,683.91	3,671.92	15.75	13.70	-166.86	128.28	-383.80	918.04	891.62	26.41	34.756	
3,900.00	3,845.36	3,779.81	3,767.46	16.24	14.07	-166.98	131.23	-391.63	946.31	919.18	27.14	34.870	
4,000.00	3,943.17	3,875.72	3,863.00	16.73	14.43	-167.09	134.17	-399.45	974.59	946.73	27.86	34.979	
4,100.00	4,040.99	3,971.62	3,958.54	17.22	14.80	-167.19	137.11	-407.27	1,002.88	974.29	28.59	35.082	
4,200.00	4,138.80	4,067.52	4,054.07	17.71	15.17	-167.28	140.06	-415.10	1,031.16	1,001.85	29.31	35.179	
4,300.00	4,236.62	4,163.42	4,149.61	18.20	15.54	-167.37	143.00	-422.92	1,059.45	1,029.42	30.04	35.272	
4,400.00	4,334.43	4,259.33	4,245.15	18.69	15.91	-167.46	145.95	-430.74	1,087.75	1,056.98	30.76	35.361	
4,500.00	4,432.24	4,355.23	4,340.68	19.19	16.28	-167.54	148.89	-438.56	1,116.04	1,084.55	31.49	35.445	
4,600.00	4,530.06	4,451.13	4,436.22	19.68	16.64	-167.62	151.83	-446.39	1,144.33	1,112.12	32.21	35.525	
4,700.00	4,627.87	4,547.03	4,531.76	20.17	17.01	-167.69	154.78	-454.21	1,172.63	1,139.69	32.94	35.601	
4,800.00	4,725.69	4,642.93	4,627.30	20.66	17.38	-167.76	157.72	-462.03	1,200.93	1,167.27	33.66	35.674	
4,900.00	4,823.50	4,738.84	4,722.83	21.16	17.75	-167.83	160.67	-469.85	1,229.23	1,194.84	34.39	35.744	
5,000.00	4,921.32	4,834.74	4,818.37	21.65	18.12	-167.89	163.61	-477.68	1,257.53	1,222.42	35.12	35.811	
5,100.00	5,019.13	4,930.64	4,913.91	22.14	18.48	-167.96	166.55	-485.50	1,285.84	1,249.99	35.84	35.875	

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 203H - OH - Prelim Plan A													Offset Site Error:	0.00 usft
Survey Program: 0-MWD - OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.00	5,116.95	5,026.54	5,009.44	22.64	18.85	-168.01	169.50	-493.32	1,314.14	1,277.57	36.57	35.937		
5,300.00	5,214.76	5,122.44	5,104.98	23.13	19.22	-168.07	172.44	-501.15	1,342.45	1,305.15	37.29	35.996		
5,400.00	5,312.58	5,218.35	5,200.52	23.63	19.59	-168.12	175.39	-508.97	1,370.75	1,332.73	38.02	36.052		
5,500.00	5,410.39	5,314.25	5,296.06	24.12	19.96	-168.18	178.33	-516.79	1,399.06	1,360.31	38.75	36.107		
5,600.00	5,508.21	5,410.15	5,391.59	24.61	20.32	-168.23	181.27	-524.61	1,427.37	1,387.90	39.47	36.159		
5,700.00	5,606.02	5,506.05	5,487.13	25.11	20.69	-168.27	184.22	-532.44	1,455.68	1,415.48	40.20	36.209		
5,800.00	5,703.84	5,601.96	5,582.67	25.60	21.06	-168.32	187.16	-540.26	1,483.99	1,443.06	40.93	36.258		
5,816.59	5,720.07	5,617.87	5,598.52	25.68	21.12	-168.33	187.65	-541.56	1,488.69	1,447.64	41.05	36.265		
5,900.00	5,801.77	5,701.98	5,678.37	26.09	21.45	-168.41	190.11	-548.10	1,511.73	1,470.06	41.67	36.279		
6,000.00	5,900.05	5,794.55	5,774.53	26.56	21.80	-168.49	193.07	-555.97	1,537.85	1,495.47	42.38	36.286		
6,100.00	5,998.63	5,891.51	5,871.12	27.01	22.17	-168.55	196.05	-563.88	1,562.31	1,519.21	43.11	36.244		
6,200.00	6,097.48	6,019.83	5,999.06	27.44	22.66	-168.60	199.55	-573.18	1,584.25	1,540.22	44.03	35.984		
6,300.00	6,196.59	6,152.79	6,131.81	27.86	23.14	-168.67	202.12	-580.00	1,602.40	1,557.45	44.95	35.648		
6,400.00	6,295.91	6,287.06	6,266.01	28.25	23.62	-168.76	203.61	-583.95	1,616.71	1,570.85	45.86	35.256		
6,500.00	6,395.42	6,416.48	6,395.42	28.63	24.06	-168.85	204.00	-585.00	1,627.17	1,580.46	46.70	34.839		
6,600.00	6,495.09	6,516.14	6,495.09	28.99	24.39	-168.92	204.00	-585.00	1,635.15	1,587.75	47.40	34.498		
6,700.00	6,594.88	6,615.94	6,594.88	29.33	24.72	-168.98	204.00	-585.00	1,641.43	1,593.34	48.09	34.133		
6,800.00	6,694.77	6,715.83	6,694.77	29.66	25.05	-169.02	204.00	-585.00	1,645.99	1,597.22	48.78	33.745		
6,900.00	6,794.73	6,815.79	6,794.73	29.97	25.38	-169.04	204.00	-585.00	1,648.85	1,599.39	49.46	33.337		
7,000.00	6,894.72	6,915.78	6,894.72	30.26	25.71	-169.05	204.00	-585.00	1,649.99	1,599.85	50.14	32.907		
7,016.59	6,911.31	6,932.37	6,911.31	30.31	25.77	-90.21	204.00	-585.00	1,650.01	1,599.76	50.25	32.835		
7,100.00	6,994.72	7,015.78	6,994.72	30.54	26.04	-90.21	204.00	-585.00	1,650.01	1,599.20	50.81	32.475		
7,200.00	7,094.72	7,115.78	7,094.72	30.82	26.38	-90.21	204.00	-585.00	1,650.01	1,598.53	51.48	32.054		
7,300.00	7,194.72	7,215.78	7,194.72	31.11	26.71	-90.21	204.00	-585.00	1,650.01	1,597.87	52.15	31.642		
7,400.00	7,294.72	7,315.78	7,294.72	31.39	27.05	-90.21	204.00	-585.00	1,650.01	1,597.19	52.82	31.241		
7,500.00	7,394.72	7,415.78	7,394.72	31.68	27.39	-90.21	204.00	-585.00	1,650.01	1,596.52	53.49	30.848		
7,600.00	7,494.72	7,515.78	7,494.72	31.96	27.72	-90.21	204.00	-585.00	1,650.01	1,595.85	54.16	30.465		
7,700.00	7,594.72	7,615.78	7,594.72	32.25	28.06	-90.21	204.00	-585.00	1,650.01	1,595.18	54.83	30.091		
7,800.00	7,694.72	7,715.78	7,694.72	32.54	28.40	-90.21	204.00	-585.00	1,650.01	1,594.50	55.51	29.725		
7,900.00	7,794.72	7,815.78	7,794.72	32.83	28.73	-90.21	204.00	-585.00	1,650.01	1,593.82	56.19	29.367		
8,000.00	7,894.72	7,915.78	7,894.72	33.13	29.07	-90.21	204.00	-585.00	1,650.01	1,593.15	56.86	29.017		
8,100.00	7,994.72	8,015.78	7,994.72	33.42	29.41	-90.21	204.00	-585.00	1,650.01	1,592.47	57.54	28.675		
8,200.00	8,094.72	8,115.78	8,094.72	33.72	29.75	-90.21	204.00	-585.00	1,650.01	1,591.79	58.22	28.341		
8,300.00	8,194.72	8,215.78	8,194.72	34.01	30.09	-90.21	204.00	-585.00	1,650.01	1,591.11	58.90	28.014		
8,400.00	8,294.72	8,315.78	8,294.72	34.31	30.43	-90.21	204.00	-585.00	1,650.01	1,590.43	59.58	27.694		
8,500.00	8,394.72	8,415.78	8,394.72	34.61	30.77	-90.21	204.00	-585.00	1,650.01	1,589.75	60.26	27.381		
8,600.00	8,494.72	8,515.78	8,494.72	34.91	31.11	-90.21	204.00	-585.00	1,650.01	1,589.07	60.94	27.074		
8,700.00	8,594.72	8,615.78	8,594.72	35.21	31.46	-90.21	204.00	-585.00	1,650.01	1,588.38	61.63	26.774		
8,800.00	8,694.72	8,715.78	8,694.72	35.52	31.80	-90.21	204.00	-585.00	1,650.01	1,587.70	62.31	26.480		
8,900.00	8,794.72	8,815.78	8,794.72	35.82	32.14	-90.21	204.00	-585.00	1,650.01	1,587.01	63.00	26.192		
9,000.00	8,894.72	8,915.78	8,894.72	36.12	32.48	-90.21	204.00	-585.00	1,650.01	1,586.33	63.68	25.910		
9,100.00	8,994.72	9,015.78	8,994.72	36.43	32.83	-90.21	204.00	-585.00	1,650.01	1,585.64	64.37	25.634		
9,200.00	9,094.72	9,115.78	9,094.72	36.73	33.17	-90.21	204.00	-585.00	1,650.01	1,584.96	65.05	25.364		
9,300.00	9,194.72	9,215.78	9,194.72	37.04	33.51	-90.21	204.00	-585.00	1,650.01	1,584.27	65.74	25.098		
9,400.00	9,294.72	9,315.78	9,294.72	37.35	33.86	-90.21	204.00	-585.00	1,650.01	1,583.58	66.43	24.839		
9,500.00	9,394.72	9,415.78	9,394.72	37.66	34.20	-90.21	204.00	-585.00	1,650.01	1,582.89	67.12	24.584		
9,600.00	9,494.72	9,515.78	9,494.72	37.97	34.54	-90.21	204.00	-585.00	1,650.01	1,582.20	67.81	24.334		
9,700.00	9,594.72	9,615.78	9,594.72	38.28	34.89	-90.21	204.00	-585.00	1,650.01	1,581.51	68.50	24.089		
9,800.00	9,694.72	9,715.78	9,694.72	38.59	35.23	-90.21	204.00	-585.00	1,650.01	1,580.82	69.19	23.848		
9,900.00	9,794.72	9,815.78	9,794.72	38.90	35.58	-90.21	204.00	-585.00	1,650.01	1,580.13	69.88	23.613		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 203H - OH - Prelim Plan A													Offset Site Error: 0.00 usft	
Survey Program: 0-MWD - OWSG													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
10,000.00	9,894.72	9,915.78	9,894.72	39.22	35.93	-90.21	204.00	-585.00	1,650.01	1,579.44	70.57	23.381		
10,100.00	9,994.72	10,015.78	9,994.72	39.53	36.27	-90.21	204.00	-585.00	1,650.01	1,578.75	71.26	23.154		
10,200.00	10,094.72	10,115.78	10,094.72	39.85	36.62	-90.21	204.00	-585.00	1,650.01	1,578.06	71.95	22.932		
10,300.00	10,194.72	10,215.78	10,194.72	40.16	36.96	-90.21	204.00	-585.00	1,650.01	1,577.36	72.65	22.713		
10,317.28	10,212.00	10,233.06	10,212.00	40.22	37.02	-90.21	204.00	-585.00	1,650.01	1,577.24	72.77	22.676		
10,350.00	10,244.70	10,265.76	10,244.70	40.31	37.14	89.87	204.00	-585.00	1,650.01	1,577.02	72.99	22.606		
10,390.51	10,285.03	10,306.09	10,285.03	40.43	37.28	90.00	204.00	-585.00	1,650.00	1,576.75	73.26	22.523		
10,400.00	10,294.43	10,315.49	10,294.43	40.46	37.31	90.04	204.00	-585.00	1,650.00	1,576.68	73.32	22.504		
10,450.00	10,343.54	10,364.59	10,343.54	40.59	37.48	90.36	204.00	-585.00	1,650.04	1,576.39	73.64	22.405		
10,500.00	10,391.64	10,413.12	10,392.06	40.72	37.65	90.80	203.91	-585.00	1,650.18	1,576.22	73.96	22.312		
10,550.00	10,438.37	10,463.66	10,442.49	40.84	37.81	91.29	200.80	-585.00	1,650.46	1,576.20	74.27	22.223		
10,600.00	10,483.39	10,515.65	10,493.87	40.94	37.97	91.78	192.97	-584.99	1,650.88	1,576.31	74.56	22.140		
10,650.00	10,526.33	10,569.20	10,545.83	41.04	38.12	92.27	180.08	-584.98	1,651.41	1,576.56	74.85	22.062		
10,700.00	10,566.89	10,624.42	10,597.90	41.13	38.27	92.74	161.77	-584.97	1,652.06	1,576.93	75.13	21.989		
10,750.00	10,604.74	10,681.40	10,649.53	41.20	38.42	93.21	137.71	-584.95	1,652.79	1,577.39	75.40	21.921		
10,800.00	10,639.61	10,740.22	10,700.03	41.27	38.55	93.65	107.63	-584.92	1,653.59	1,577.93	75.66	21.856		
10,850.00	10,671.22	10,800.91	10,748.64	41.33	38.67	94.08	71.33	-584.89	1,654.43	1,578.53	75.91	21.795		
10,900.00	10,699.33	10,863.48	10,794.45	41.39	38.78	94.48	28.74	-584.86	1,655.29	1,579.13	76.16	21.735		
10,950.00	10,723.74	10,927.91	10,836.47	41.44	38.87	94.84	-20.04	-584.82	1,656.11	1,579.71	76.40	21.676		
11,000.00	10,744.25	10,994.08	10,873.65	41.49	38.97	95.16	-74.74	-584.78	1,656.88	1,580.22	76.66	21.614		
11,050.00	10,760.71	11,061.83	10,904.92	41.54	39.06	95.42	-134.79	-584.73	1,657.55	1,580.63	76.93	21.547		
11,100.00	10,773.00	11,130.92	10,929.29	41.60	39.19	95.64	-199.40	-584.68	1,658.10	1,580.88	77.22	21.473		
11,150.00	10,781.01	11,201.05	10,945.90	41.67	39.35	95.79	-267.49	-584.62	1,658.49	1,580.96	77.53	21.392		
11,200.00	10,784.70	11,271.85	10,954.11	41.75	39.54	95.87	-337.77	-584.57	1,658.71	1,580.84	77.87	21.301		
11,217.27	10,784.96	11,296.40	10,954.92	41.78	39.62	95.88	-362.30	-584.55	1,658.74	1,580.75	77.99	21.268		
11,300.00	10,784.96	11,381.10	10,954.96	41.95	39.90	95.88	-447.00	-584.48	1,658.74	1,580.22	78.52	21.124		
11,400.00	10,784.96	11,481.10	10,954.96	42.23	40.29	95.88	-547.00	-584.40	1,658.74	1,579.47	79.27	20.924		
11,500.00	10,784.96	11,581.10	10,954.96	42.58	40.74	95.88	-647.00	-584.32	1,658.74	1,578.58	80.16	20.694		
11,600.00	10,784.96	11,681.10	10,954.96	42.99	41.26	95.88	-747.00	-584.24	1,658.74	1,577.58	81.16	20.437		
11,700.00	10,784.96	11,781.10	10,954.96	43.47	41.83	95.88	-847.00	-584.16	1,658.74	1,576.45	82.29	20.156		
11,800.00	10,784.96	11,881.10	10,954.96	44.02	42.46	95.88	-947.00	-584.08	1,658.74	1,575.20	83.54	19.856		
11,900.00	10,784.96	11,981.10	10,954.96	44.63	43.14	95.88	-1,047.00	-584.00	1,658.74	1,573.84	84.90	19.538		
12,000.00	10,784.97	12,081.10	10,954.97	45.30	43.88	95.88	-1,147.00	-583.92	1,658.74	1,572.38	86.36	19.207		
12,100.00	10,784.97	12,181.10	10,954.97	46.03	44.66	95.88	-1,247.00	-583.84	1,658.74	1,570.81	87.93	18.864		
12,200.00	10,784.97	12,281.10	10,954.97	46.80	45.50	95.88	-1,347.00	-583.76	1,658.74	1,569.15	89.59	18.515		
12,300.00	10,784.97	12,381.10	10,954.97	47.63	46.37	95.88	-1,447.00	-583.67	1,658.74	1,567.40	91.34	18.159		
12,400.00	10,784.97	12,481.10	10,954.97	48.50	47.29	95.88	-1,547.00	-583.59	1,658.74	1,565.56	93.18	17.801		
12,500.00	10,784.97	12,581.10	10,954.97	49.41	48.25	95.88	-1,647.00	-583.51	1,658.74	1,563.64	95.10	17.442		
12,600.00	10,784.97	12,681.10	10,954.97	50.36	49.25	95.88	-1,747.00	-583.43	1,658.74	1,561.65	97.09	17.084		
12,700.00	10,784.97	12,781.10	10,954.97	51.35	50.28	95.88	-1,847.00	-583.35	1,658.74	1,559.58	99.16	16.728		
12,800.00	10,784.97	12,881.10	10,954.97	52.38	51.34	95.88	-1,947.00	-583.27	1,658.74	1,557.45	101.29	16.376		
12,900.00	10,784.97	12,981.10	10,954.97	53.44	52.44	95.88	-2,047.00	-583.19	1,658.74	1,555.25	103.49	16.028		
13,000.00	10,784.98	13,081.10	10,954.98	54.52	53.57	95.88	-2,147.00	-583.11	1,658.74	1,553.00	105.74	15.687		
13,100.00	10,784.98	13,181.10	10,954.98	55.64	54.72	95.88	-2,247.00	-583.03	1,658.74	1,550.69	108.05	15.352		
13,200.00	10,784.98	13,281.10	10,954.98	56.79	55.90	95.88	-2,347.00	-582.95	1,658.74	1,548.33	110.41	15.023		
13,300.00	10,784.98	13,381.10	10,954.98	57.96	57.10	95.88	-2,447.00	-582.87	1,658.74	1,545.92	112.82	14.702		
13,400.00	10,784.98	13,481.10	10,954.98	59.15	58.33	95.88	-2,547.00	-582.79	1,658.74	1,543.47	115.28	14.389		
13,500.00	10,784.98	13,581.10	10,954.98	60.37	59.57	95.88	-2,647.00	-582.71	1,658.74	1,540.97	117.77	14.084		
13,600.00	10,784.98	13,681.10	10,954.98	61.61	60.84	95.88	-2,747.00	-582.63	1,658.74	1,538.43	120.31	13.787		
13,700.00	10,784.98	13,781.10	10,954.98	62.87	62.13	95.88	-2,847.00	-582.55	1,658.74	1,535.86	122.88	13.498		
13,800.00	10,784.98	13,881.10	10,954.98	64.15	63.43	95.88	-2,947.00	-582.47	1,658.74	1,533.25	125.49	13.218		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 203H - OH - Prelim Plan A													Offset Site Error: 0.00 usft	
Survey Program: 0-MWD - OWSG													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,900.00	10,784.98	13,981.10	10,954.98	65.44	64.75	95.88	-3,047.00	-582.39	1,658.74	1,530.61	128.14	12.945		
14,000.00	10,784.98	14,081.10	10,954.98	66.75	66.09	95.88	-3,147.00	-582.31	1,658.74	1,527.93	130.81	12.681		
14,100.00	10,784.99	14,181.10	10,954.99	68.08	67.44	95.88	-3,247.00	-582.23	1,658.74	1,525.23	133.51	12.424		
14,200.00	10,784.99	14,281.10	10,954.99	69.42	68.81	95.88	-3,347.00	-582.15	1,658.74	1,522.50	136.24	12.175		
14,300.00	10,784.99	14,381.10	10,954.99	70.78	70.19	95.88	-3,447.00	-582.07	1,658.74	1,519.75	139.00	11.934		
14,400.00	10,784.99	14,481.10	10,954.99	72.15	71.58	95.88	-3,547.00	-581.99	1,658.74	1,516.97	141.78	11.700		
14,500.00	10,784.99	14,581.10	10,954.99	73.53	72.98	95.88	-3,647.00	-581.91	1,658.74	1,514.16	144.58	11.473		
14,600.00	10,784.99	14,681.10	10,954.99	74.92	74.39	95.88	-3,747.00	-581.83	1,658.75	1,511.34	147.41	11.253		
14,700.00	10,784.99	14,781.10	10,954.99	76.33	75.81	95.88	-3,847.00	-581.75	1,658.75	1,508.50	150.25	11.040		
14,800.00	10,784.99	14,881.10	10,954.99	77.74	77.25	95.88	-3,947.00	-581.67	1,658.75	1,505.63	153.11	10.833		
14,900.00	10,784.99	14,981.10	10,954.99	79.17	78.69	95.88	-4,047.00	-581.59	1,658.75	1,502.75	156.00	10.633		
15,000.00	10,784.99	15,081.10	10,954.99	80.60	80.14	95.88	-4,147.00	-581.51	1,658.75	1,499.85	158.90	10.439		
15,100.00	10,785.00	15,181.10	10,955.00	82.04	81.60	95.88	-4,247.00	-581.43	1,658.75	1,496.93	161.81	10.251		
15,200.00	10,785.00	15,281.10	10,955.00	83.49	83.07	95.88	-4,347.00	-581.35	1,658.75	1,494.00	164.74	10.069		
15,300.00	10,785.00	15,381.10	10,955.00	84.95	84.54	95.88	-4,447.00	-581.27	1,658.75	1,491.06	167.69	9.892		
15,400.00	10,785.00	15,481.10	10,955.00	86.42	86.02	95.88	-4,547.00	-581.19	1,658.75	1,488.10	170.65	9.720		
15,500.00	10,785.00	15,581.10	10,955.00	87.89	87.51	95.88	-4,647.00	-581.11	1,658.75	1,485.13	173.62	9.554		
15,600.00	10,785.00	15,681.10	10,955.00	89.37	89.01	95.88	-4,747.00	-581.03	1,658.75	1,482.14	176.61	9.392		
15,618.32	10,785.00	15,699.42	10,955.00	89.65	89.28	95.88	-4,765.32	-581.01	1,658.75	1,481.59	177.15	9.363 SF		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 204H - OH - Prelim Plan A													Offset Site Error:	0.00 usft
Survey Program: 4-MWD - OWSG													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Separation Factor		Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
100.00	100.00	100.00	100.00	0.00	0.13	0.00	31.00	0.00	31.00	30.87	0.13	241.520 CC		
200.00	200.00	199.99	199.99	0.18	0.49	0.00	31.00	0.00	31.00	30.33	0.67	46.577		
300.00	300.00	299.86	299.85	0.54	0.84	1.68	31.22	0.91	31.24	29.86	1.37	22.727		
400.00	400.00	399.65	399.61	0.90	1.19	6.30	31.86	3.52	32.05	29.96	2.09	15.342		
500.00	500.00	499.33	499.19	1.25	1.55	13.34	32.90	7.80	33.82	31.01	2.81	12.048		
600.00	600.00	598.82	598.49	1.61	1.92	21.82	34.35	13.75	37.03	33.50	3.53	10.498		
700.00	699.99	701.85	697.51	1.97	2.30	-49.16	36.20	21.37	41.54	37.28	4.25	9.762		
800.00	799.96	802.04	796.94	2.31	2.67	-43.70	38.26	29.82	46.03	41.06	4.97	9.264		
900.00	899.86	902.14	896.46	2.67	3.05	-40.51	40.32	38.28	49.52	43.83	5.69	8.708		
1,000.00	999.68	1,002.17	996.04	3.03	3.43	-38.95	42.38	46.74	51.77	45.36	6.41	8.078		
1,100.00	1,099.37	1,102.18	1,095.66	3.39	3.81	-38.68	44.45	55.21	52.69	45.55	7.14	7.382		
1,200.00	1,198.90	1,202.18	1,195.27	3.76	4.19	-39.61	46.51	63.68	52.25	44.37	7.87	6.636		
1,300.00	1,298.26	1,302.22	1,294.85	4.14	4.57	-41.86	48.57	72.14	50.51	41.89	8.62	5.860		
1,400.00	1,397.40	1,402.32	1,394.38	4.52	4.95	-45.74	50.63	80.60	47.62	38.23	9.38	5.076		
1,500.00	1,496.30	1,502.51	1,493.81	4.92	5.34	-51.84	52.69	89.05	43.87	33.70	10.17	4.315		
1,600.00	1,594.93	1,602.82	1,593.12	5.33	5.72	-61.12	54.74	97.50	39.83	28.84	10.99	3.625		
1,700.00	1,693.26	1,696.72	1,692.28	5.75	6.08	-74.68	56.80	105.93	36.54	24.73	11.81	3.093		
1,776.75	1,768.49	1,772.99	1,768.26	6.09	6.37	-88.13	58.37	112.38	35.54	23.08	12.46	2.852		
1,800.00	1,791.25	1,803.93	1,791.25	6.19	6.49	-92.58	58.85	114.34	35.65	22.97	12.68	2.812 ES		
1,900.00	1,889.06	1,895.33	1,890.13	6.64	6.84	-110.85	60.89	122.74	38.56	25.18	13.39	2.881		
2,000.00	1,986.88	2,005.42	1,989.00	7.10	7.26	-125.36	62.94	131.15	44.73	30.64	14.09	3.174		
2,100.00	2,084.69	2,106.17	2,087.88	7.56	7.65	-135.89	64.99	139.55	53.03	38.28	14.75	3.595		
2,200.00	2,182.51	2,206.92	2,186.75	8.03	8.03	-143.41	67.03	147.96	62.62	47.20	15.43	4.059		
2,300.00	2,280.32	2,307.66	2,285.63	8.50	8.42	-148.87	69.08	156.36	73.00	56.88	16.12	4.529		
2,400.00	2,378.13	2,408.41	2,384.50	8.97	8.80	-152.95	71.13	164.77	83.87	67.04	16.82	4.986		
2,500.00	2,475.95	2,509.16	2,483.38	9.45	9.19	-156.08	73.17	173.17	95.06	77.52	17.53	5.421		
2,600.00	2,573.76	2,590.10	2,582.25	9.92	9.50	-158.55	75.22	181.58	106.47	88.29	18.18	5.856		
2,700.00	2,671.58	2,689.35	2,681.13	10.40	9.88	-160.54	77.27	189.98	118.04	99.14	18.90	6.244		
2,800.00	2,769.39	2,788.60	2,780.00	10.88	10.26	-162.18	79.31	198.39	129.73	110.10	19.63	6.609		
2,900.00	2,867.21	2,887.85	2,878.88	11.37	10.64	-163.54	81.36	206.79	141.50	121.15	20.36	6.951		
3,000.00	2,965.02	2,987.11	2,977.75	11.85	11.02	-164.69	83.41	215.20	153.34	132.26	21.09	7.271		
3,100.00	3,062.84	3,086.36	3,076.63	12.33	11.40	-165.68	85.46	223.60	165.24	143.42	21.82	7.572		
3,200.00	3,160.65	3,185.61	3,175.50	12.82	11.78	-166.53	87.50	232.01	177.17	154.62	22.56	7.855		
3,300.00	3,258.47	3,284.87	3,274.38	13.31	12.16	-167.28	89.55	240.41	189.14	165.85	23.29	8.121		
3,400.00	3,356.28	3,384.12	3,373.25	13.79	12.54	-167.94	91.60	248.82	201.14	177.11	24.03	8.371		
3,500.00	3,454.10	3,483.37	3,472.13	14.28	12.92	-168.52	93.64	257.22	213.16	188.39	24.77	8.607		
3,600.00	3,551.91	3,582.62	3,571.01	14.77	13.30	-169.04	95.69	265.62	225.20	199.69	25.50	8.830		
3,700.00	3,649.73	3,681.88	3,669.88	15.26	13.68	-169.51	97.74	274.03	237.25	211.01	26.24	9.041		
3,800.00	3,747.54	3,781.13	3,768.76	15.75	14.07	-169.93	99.78	282.43	249.33	222.34	26.98	9.240		
3,900.00	3,845.36	3,880.38	3,867.63	16.24	14.45	-170.32	101.83	290.84	261.41	233.68	27.72	9.429		
4,000.00	3,943.17	3,979.64	3,966.51	16.73	14.83	-170.67	103.88	299.24	273.50	245.04	28.46	9.609		
4,100.00	4,040.99	4,078.89	4,065.38	17.22	15.21	-170.99	105.92	307.65	285.60	256.40	29.20	9.779		
4,200.00	4,138.80	4,178.14	4,164.26	17.71	15.59	-171.28	107.97	316.05	297.71	267.77	29.95	9.942		
4,300.00	4,236.62	4,277.39	4,263.13	18.20	15.97	-171.55	110.02	324.46	309.83	279.14	30.69	10.096		
4,400.00	4,334.43	4,376.65	4,362.01	18.69	16.35	-171.81	112.06	332.86	321.95	290.53	31.43	10.244		
4,500.00	4,432.24	4,475.90	4,460.88	19.19	16.73	-172.04	114.11	341.27	334.08	301.91	32.17	10.384		
4,600.00	4,530.06	4,575.15	4,559.76	19.68	17.11	-172.25	116.16	349.67	346.22	313.30	32.91	10.519		
4,700.00	4,627.87	4,674.41	4,658.63	20.17	17.49	-172.46	118.21	358.08	358.36	324.70	33.66	10.647		
4,800.00	4,725.69	4,773.66	4,757.51	20.66	17.87	-172.64	120.25	366.48	370.50	336.10	34.40	10.770		
4,900.00	4,823.50	4,872.91	4,856.38	21.16	18.25	-172.82	122.30	374.89	382.65	347.50	35.14	10.888		
5,000.00	4,921.32	4,972.16	4,955.26	21.65	18.63	-172.99	124.35	383.29	394.80	358.91	35.89	11.001		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 204H - OH - Prelim Plan A													Offset Site Error: 0.00 usft	
Survey Program: 4-MWD - OWSG													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,100.00	5,019.13	5,071.42	5,054.13	22.14	19.01	-173.14	126.39	391.70	406.95	370.32	36.63	11.110		
5,200.00	5,116.95	5,170.67	5,153.01	22.64	19.40	-173.29	128.44	400.10	419.11	381.73	37.37	11.214		
5,300.00	5,214.76	5,269.92	5,251.88	23.13	19.78	-173.43	130.49	408.51	431.27	393.15	38.12	11.314		
5,400.00	5,312.58	5,369.18	5,350.76	23.63	20.16	-173.56	132.53	416.91	443.43	404.57	38.86	11.411		
5,500.00	5,410.39	5,468.43	5,449.63	24.12	20.54	-173.68	134.58	425.32	455.59	415.99	39.60	11.503		
5,600.00	5,508.21	5,567.68	5,548.51	24.61	20.92	-173.80	136.63	433.72	467.76	427.41	40.35	11.593		
5,700.00	5,606.02	5,666.93	5,647.38	25.11	21.30	-173.91	138.67	442.13	479.92	438.83	41.09	11.679		
5,800.00	5,703.84	5,766.19	5,746.26	25.60	21.68	-174.02	140.72	450.53	492.09	450.25	41.84	11.762		
5,816.59	5,720.07	5,782.66	5,762.67	25.68	21.74	-174.03	141.06	451.93	494.11	452.15	41.96	11.776		
5,900.00	5,801.77	5,865.51	5,845.20	26.09	22.06	-174.12	142.77	458.94	503.66	461.08	42.58	11.828		
6,000.00	5,900.05	5,965.02	5,944.33	26.56	22.44	-174.20	144.82	467.37	513.53	470.21	43.32	11.854		
6,100.00	5,998.63	6,064.68	6,043.62	27.01	22.82	-174.26	146.88	475.81	521.67	477.61	44.06	11.840		
6,200.00	6,097.48	6,164.48	6,143.03	27.44	23.21	-174.29	148.93	484.26	528.08	483.28	44.80	11.789		
6,300.00	6,196.59	6,264.37	6,242.54	27.86	23.59	-174.31	150.99	492.72	532.75	487.23	45.53	11.702		
6,400.00	6,295.91	6,364.32	6,342.12	28.25	23.97	-174.30	153.06	501.18	535.69	489.44	46.26	11.581		
6,500.00	6,395.42	6,464.31	6,441.73	28.63	24.36	-174.27	155.12	509.65	536.90	489.91	46.98	11.428		
6,600.00	6,495.09	6,564.31	6,541.35	28.99	24.74	-174.22	157.18	518.12	536.36	488.66	47.70	11.244		
6,700.00	6,594.88	6,664.28	6,640.94	29.33	25.13	-174.16	159.24	526.58	534.10	485.68	48.42	11.031		
6,800.00	6,694.77	6,764.20	6,740.47	29.66	25.51	-174.06	161.30	535.04	530.09	480.96	49.13	10.789		
6,900.00	6,794.73	6,864.03	6,839.92	29.97	25.89	-173.95	163.36	543.50	524.36	474.52	49.84	10.521		
7,000.00	6,894.72	6,963.74	6,939.25	30.26	26.27	-173.81	165.42	551.94	516.89	466.35	50.54	10.227		
7,016.59	6,911.31	6,980.27	6,955.72	30.31	26.34	-94.94	165.76	553.34	515.49	464.83	50.66	10.176		
7,100.00	6,994.72	7,063.36	7,038.50	30.54	26.66	-94.82	167.47	560.38	508.30	457.07	51.23	9.921		
7,200.00	7,094.72	7,162.98	7,137.74	30.82	27.04	-94.66	169.53	568.81	499.69	447.77	51.92	9.624		
7,300.00	7,194.72	7,262.60	7,236.98	31.11	27.42	-94.50	171.58	577.25	491.08	438.47	52.61	9.334		
7,400.00	7,294.72	7,362.22	7,336.22	31.39	27.80	-94.34	173.64	585.68	482.48	429.18	53.30	9.052		
7,500.00	7,394.72	7,461.84	7,435.46	31.68	28.19	-94.17	175.69	594.12	473.88	419.89	54.00	8.776		
7,600.00	7,494.72	7,561.46	7,534.70	31.96	28.57	-93.99	177.74	602.56	465.29	410.60	54.69	8.508		
7,700.00	7,594.72	7,661.08	7,633.94	32.25	28.95	-93.81	179.80	610.99	456.70	401.32	55.38	8.246		
7,800.00	7,694.72	7,760.70	7,733.18	32.54	29.33	-93.61	181.85	619.43	448.11	392.04	56.08	7.991		
7,900.00	7,794.72	7,860.32	7,832.42	32.83	29.71	-93.42	183.91	627.86	439.53	382.76	56.78	7.742		
8,000.00	7,894.72	7,959.94	7,931.66	33.13	30.10	-93.21	185.96	636.30	430.96	373.49	57.47	7.499		
8,100.00	7,994.72	8,059.55	8,030.90	33.42	30.48	-92.99	188.02	644.73	422.39	364.22	58.17	7.261		
8,200.00	8,094.72	8,159.17	8,130.14	33.72	30.86	-92.77	190.07	653.17	413.83	354.96	58.87	7.030		
8,300.00	8,194.72	8,258.79	8,229.38	34.01	31.24	-92.54	192.13	661.61	405.27	345.70	59.57	6.803		
8,400.00	8,294.72	8,358.41	8,328.62	34.31	31.63	-92.29	194.18	670.04	396.73	336.46	60.27	6.582		
8,500.00	8,394.72	8,458.03	8,427.86	34.61	32.01	-92.04	196.23	678.48	388.18	327.21	60.97	6.367		
8,600.00	8,494.72	8,557.65	8,527.10	34.91	32.39	-91.77	198.29	686.91	379.65	317.98	61.68	6.156		
8,700.00	8,594.72	8,657.27	8,626.34	35.21	32.77	-91.50	200.34	695.35	371.13	308.75	62.38	5.949		
8,800.00	8,694.72	8,756.89	8,725.58	35.52	33.15	-91.21	202.40	703.79	362.61	299.52	63.09	5.748		
8,900.00	8,794.72	8,856.51	8,824.82	35.82	33.54	-90.90	204.45	712.22	354.10	290.31	63.79	5.551		
9,000.00	8,894.72	8,951.64	8,919.63	36.12	33.90	-90.61	206.29	719.79	346.13	281.67	64.46	5.369		
9,100.00	8,994.72	9,045.93	9,013.72	36.43	34.25	-90.38	207.76	725.80	339.74	274.62	65.12	5.217		
9,200.00	9,094.72	9,140.40	9,108.07	36.73	34.59	-90.20	208.86	730.32	334.95	269.20	65.75	5.094		
9,300.00	9,194.72	9,235.00	9,202.62	37.04	34.93	-90.07	209.59	733.33	331.76	265.39	66.37	4.998		
9,400.00	9,294.72	9,329.67	9,297.28	37.35	35.25	-90.01	209.96	734.82	330.19	263.21	66.98	4.930		
9,464.39	9,359.11	9,408.50	9,359.11	37.55	35.51	-90.00	210.00	735.00	330.00	262.57	67.43	4.894		
9,500.00	9,394.72	9,427.11	9,394.72	37.66	35.57	-90.00	210.00	735.00	330.00	262.39	67.61	4.881		
9,600.00	9,494.72	9,527.11	9,494.72	37.97	35.90	-90.00	210.00	735.00	330.00	261.71	68.29	4.832		
9,700.00	9,594.72	9,627.11	9,594.72	38.28	36.23	-90.00	210.00	735.00	330.00	261.03	68.97	4.785		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 204H - OH - Prelim Plan A													Offset Site Error:	0.00 usft
Survey Program: 4-MWD - OWSG													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance		Warning								
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,800.00	9,694.72	9,727.11	9,694.72	38.59	36.55	-90.00	210.00	735.00	330.00	260.35	69.65	4.738		
9,900.00	9,794.72	9,827.11	9,794.72	38.90	36.88	-90.00	210.00	735.00	330.00	259.67	70.33	4.692		
10,000.00	9,894.72	9,927.11	9,894.72	39.22	37.21	-90.00	210.00	735.00	330.00	258.99	71.01	4.647		
10,100.00	9,994.72	10,027.11	9,994.72	39.53	37.54	-90.00	210.00	735.00	330.00	258.31	71.69	4.603		
10,200.00	10,094.72	10,127.11	10,094.72	39.85	37.87	-90.00	210.00	735.00	330.00	257.63	72.37	4.560		
10,300.00	10,194.72	10,227.11	10,194.72	40.16	38.20	-90.00	210.00	735.00	330.00	256.95	73.05	4.517		
10,317.28	10,212.00	10,244.39	10,212.00	40.22	38.26	-90.00	210.00	735.00	330.00	256.83	73.17	4.510		
10,317.28	10,212.00	10,244.39	10,212.00	40.22	38.26	-90.00	210.00	735.00	330.00	256.83	73.17	4.510		
10,350.00	10,244.70	10,277.10	10,244.70	40.31	38.37	90.21	210.00	735.00	330.00	256.60	73.40	4.496		
10,400.00	10,294.43	10,326.83	10,294.43	40.46	38.53	91.07	210.00	735.00	330.06	256.31	73.75	4.475		
10,450.00	10,343.54	10,375.93	10,343.54	40.59	38.69	92.63	210.00	735.00	330.37	256.24	74.12	4.457		
10,500.00	10,391.64	10,425.84	10,391.64	40.72	38.85	94.70	208.84	735.00	331.19	256.65	74.54	4.443		
10,550.00	10,438.37	10,477.32	10,438.37	40.84	39.01	96.80	203.27	735.01	332.49	257.52	74.97	4.435		
10,600.00	10,483.39	10,530.08	10,483.39	40.94	39.16	98.85	192.81	735.01	334.23	258.83	75.40	4.433		
10,650.00	10,526.33	10,584.17	10,526.33	41.04	39.31	100.85	177.21	735.03	336.36	260.58	75.79	4.438		
10,700.00	10,566.89	10,639.66	10,566.89	41.13	39.46	102.77	156.20	735.04	338.82	262.72	76.10	4.452		
10,750.00	10,604.74	10,696.60	10,604.74	41.20	39.59	104.59	129.60	735.06	341.53	265.21	76.32	4.475		
10,800.00	10,639.61	10,754.99	10,639.61	41.27	39.71	106.29	97.26	735.09	344.39	267.97	76.43	4.506		
10,850.00	10,671.22	10,814.84	10,671.22	41.33	39.83	107.86	59.17	735.12	347.30	270.89	76.41	4.545		
10,900.00	10,699.33	10,876.11	10,699.33	41.39	39.93	109.28	15.41	735.16	350.16	273.86	76.30	4.589		
10,950.00	10,723.74	10,938.73	10,723.74	41.44	40.03	110.53	-33.78	735.20	352.84	276.73	76.11	4.636		
11,000.00	10,744.25	11,002.59	10,744.25	41.49	40.13	111.59	-87.98	735.24	355.25	279.34	75.92	4.680		
11,050.00	10,760.71	11,067.52	10,760.71	41.54	40.23	112.45	-146.59	735.29	357.29	281.53	75.77	4.716		
11,100.00	10,773.00	11,133.33	10,773.00	41.60	40.35	113.09	-208.82	735.34	358.88	283.15	75.73	4.739		
11,150.00	10,781.01	11,199.79	10,781.01	41.67	40.49	113.52	-273.71	735.39	359.93	284.07	75.86	4.744		
11,200.00	10,784.70	11,266.62	10,784.70	41.75	40.67	113.71	-340.19	735.44	360.42	284.21	76.21	4.729		
11,217.27	10,784.96	11,289.74	10,784.96	41.78	40.73	113.72	-363.31	735.46	360.45	284.07	76.38	4.719		
11,221.94	10,784.96	11,295.99	10,784.96	41.79	40.75	113.71	-369.55	735.47	360.44	284.00	76.44	4.716		
11,300.00	10,784.96	11,372.38	10,784.96	41.95	41.00	113.72	-445.94	735.53	360.45	283.50	76.95	4.684		
11,400.00	10,784.96	11,472.38	10,784.96	42.23	41.38	113.72	-545.94	735.61	360.45	282.72	77.74	4.637		
11,500.00	10,784.96	11,572.38	10,784.96	42.58	41.82	113.72	-645.94	735.69	360.45	281.81	78.64	4.584		
11,600.00	10,784.96	11,672.38	10,784.96	42.99	42.33	113.72	-745.94	735.77	360.45	280.80	79.65	4.525		
11,700.00	10,784.96	11,772.38	10,784.96	43.47	42.90	113.72	-845.94	735.85	360.45	279.68	80.78	4.462		
11,800.00	10,784.96	11,872.38	10,784.96	44.02	43.52	113.72	-945.94	735.93	360.45	278.45	82.00	4.396		
11,900.00	10,784.96	11,972.38	10,784.96	44.63	44.19	113.72	-1,045.94	736.01	360.45	277.13	83.33	4.326		
12,000.00	10,784.97	12,072.38	10,784.97	45.30	44.92	113.72	-1,145.94	736.09	360.45	275.71	84.74	4.253		
12,100.00	10,784.97	12,172.38	10,784.97	46.03	45.69	113.72	-1,245.94	736.17	360.45	274.20	86.25	4.179		
12,200.00	10,784.97	12,272.38	10,784.97	46.80	46.52	113.72	-1,345.94	736.25	360.45	272.61	87.85	4.103		
12,300.00	10,784.97	12,372.38	10,784.97	47.63	47.38	113.72	-1,445.94	736.33	360.45	270.93	89.52	4.027		
12,400.00	10,784.97	12,472.38	10,784.97	48.50	48.29	113.72	-1,545.94	736.41	360.45	269.18	91.27	3.949		
12,500.00	10,784.97	12,572.38	10,784.97	49.41	49.23	113.72	-1,645.94	736.49	360.45	267.36	93.09	3.872		
12,600.00	10,784.97	12,672.38	10,784.97	50.36	50.22	113.72	-1,745.94	736.57	360.45	265.47	94.98	3.795		
12,700.00	10,784.97	12,772.38	10,784.97	51.35	51.24	113.72	-1,845.94	736.65	360.45	263.52	96.93	3.719		
12,800.00	10,784.97	12,872.38	10,784.97	52.38	52.29	113.72	-1,945.94	736.73	360.45	261.51	98.94	3.643		
12,900.00	10,784.97	12,972.38	10,784.97	53.44	53.37	113.72	-2,045.94	736.81	360.45	259.44	101.01	3.569		
13,000.00	10,784.98	13,072.38	10,784.98	54.52	54.48	113.72	-2,145.94	736.89	360.45	257.32	103.13	3.495		
13,100.00	10,784.98	13,172.38	10,784.98	55.64	55.62	113.72	-2,245.94	736.97	360.45	255.15	105.30	3.423		
13,200.00	10,784.98	13,272.38	10,784.98	56.79	56.79	113.72	-2,345.94	737.05	360.45	252.93	107.52	3.352		
13,300.00	10,784.98	13,372.38	10,784.98	57.96	57.98	113.72	-2,445.94	737.13	360.45	250.67	109.78	3.283		
13,400.00	10,784.98	13,472.38	10,784.98	59.15	59.20	113.72	-2,545.94	737.21	360.45	248.37	112.08	3.216		
13,500.00	10,784.98	13,572.38	10,784.98	60.37	60.43	113.72	-2,645.94	737.30	360.45	246.03	114.42	3.150		

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

Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Offset Design Verna Rae - 204H - OH - Prelim Plan A													Offset Site Error:	0.00 usft
Survey Program: 4-MWD - OWSG													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,600.00	10,784.98	13,672.38	10,929.98	61.61	61.69	113.72	-2,745.94	737.38	360.45	243.65	116.80	3.086		
13,700.00	10,784.98	13,772.38	10,929.98	62.87	62.96	113.72	-2,845.94	737.46	360.45	241.24	119.21	3.024		
13,800.00	10,784.98	13,872.38	10,929.98	64.15	64.25	113.72	-2,945.94	737.54	360.45	238.80	121.66	2.963		
13,900.00	10,784.98	13,972.38	10,929.98	65.44	65.56	113.72	-3,045.94	737.62	360.45	236.32	124.13	2.904		
14,000.00	10,784.98	14,072.38	10,929.98	66.75	66.89	113.72	-3,145.94	737.70	360.45	233.82	126.63	2.846		
14,100.00	10,784.99	14,172.38	10,929.99	68.08	68.23	113.72	-3,245.94	737.78	360.45	231.29	129.16	2.791		
14,200.00	10,784.99	14,272.38	10,929.99	69.42	69.58	113.72	-3,345.94	737.86	360.45	228.74	131.72	2.737		
14,300.00	10,784.99	14,372.38	10,929.99	70.78	70.95	113.72	-3,445.94	737.94	360.45	226.16	134.29	2.684		
14,400.00	10,784.99	14,472.38	10,929.99	72.15	72.33	113.72	-3,545.94	738.02	360.45	223.56	136.90	2.633		
14,500.00	10,784.99	14,572.38	10,929.99	73.53	73.72	113.72	-3,645.94	738.10	360.45	220.93	139.52	2.584		
14,600.00	10,784.99	14,672.38	10,929.99	74.92	75.13	113.72	-3,745.94	738.18	360.45	218.29	142.16	2.536		
14,700.00	10,784.99	14,772.38	10,929.99	76.33	76.54	113.72	-3,845.94	738.26	360.45	215.63	144.82	2.489		
14,800.00	10,784.99	14,872.38	10,929.99	77.74	77.96	113.72	-3,945.94	738.34	360.45	212.95	147.50	2.444		
14,900.00	10,784.99	14,972.38	10,929.99	79.17	79.40	113.72	-4,045.94	738.42	360.45	210.26	150.20	2.400		
15,000.00	10,784.99	15,072.38	10,929.99	80.60	80.84	113.72	-4,145.94	738.50	360.45	207.54	152.91	2.357		
15,100.00	10,785.00	15,172.38	10,930.00	82.04	82.29	113.72	-4,245.94	738.58	360.45	204.82	155.64	2.316		
15,200.00	10,785.00	15,272.38	10,930.00	83.49	83.75	113.72	-4,345.94	738.66	360.45	202.07	158.38	2.276		
15,300.00	10,785.00	15,372.38	10,930.00	84.95	85.22	113.72	-4,445.94	738.74	360.45	199.32	161.13	2.237		
15,400.00	10,785.00	15,472.38	10,930.00	86.42	86.69	113.72	-4,545.94	738.82	360.45	196.55	163.90	2.199		
15,500.00	10,785.00	15,572.38	10,930.00	87.89	88.17	113.72	-4,645.94	738.90	360.45	193.77	166.68	2.163		
15,600.00	10,785.00	15,672.38	10,930.00	89.37	89.66	113.72	-4,745.94	738.98	360.45	190.98	169.48	2.127		
15,618.32	10,785.00	15,690.70	10,930.00	89.65	89.93	113.72	-4,764.26	739.00	360.45	190.46	169.99	2.120 SF		

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

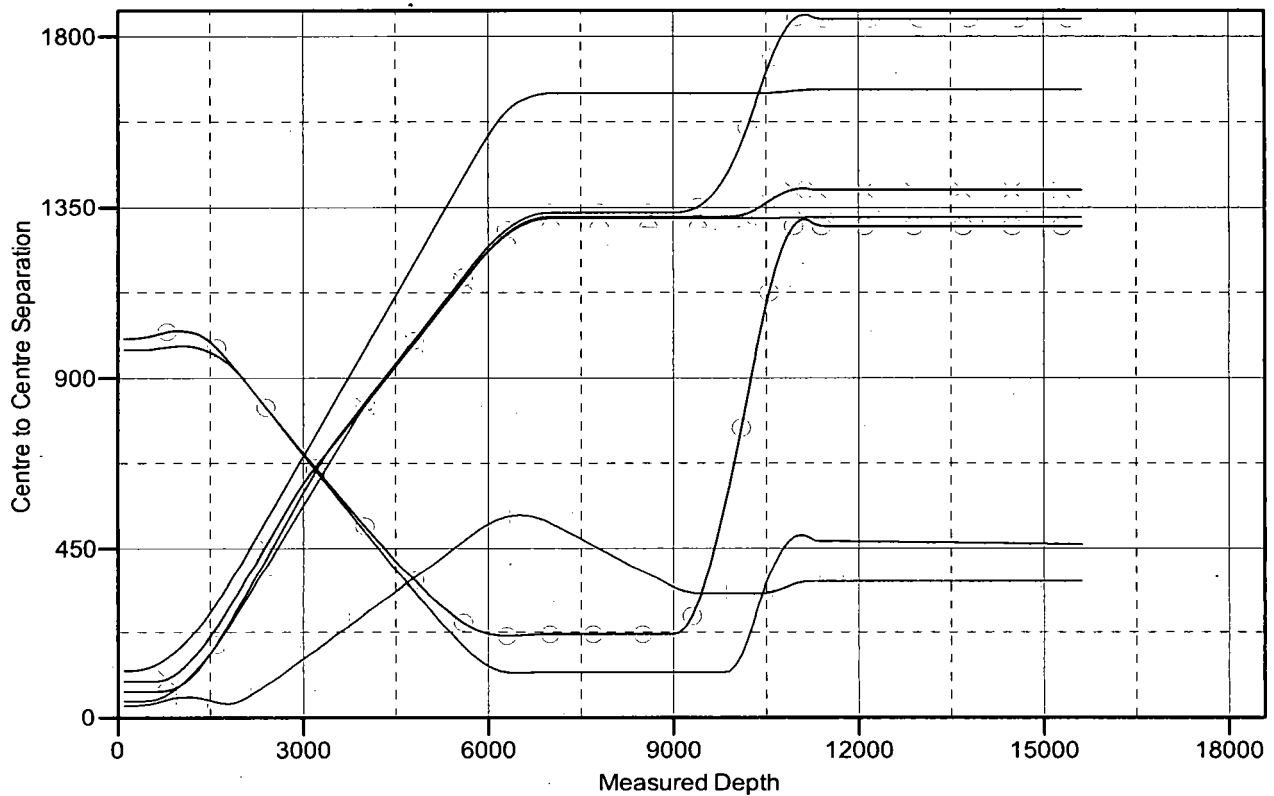
Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Reference Depths are relative to Rig @ 3648.50usft (GL:3620'+KB:28.5
Offset Depths are relative to Offset Datum
Central Meridian is 104.333333°W

Coordinates are relative to: 134H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.40°

Ladder Plot



LEGEND

114H, OH, Prelim Plan A V0	204H, OH, Prelim Plan A V0	203H, OH, Prelim Plan A V0
133H, OH, Prelim Plan A V0	113H, OH, Prelim Plan A V0	
124H, OH, Prelim Plan A V0	123H, OH, Prelim Plan A V0	

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

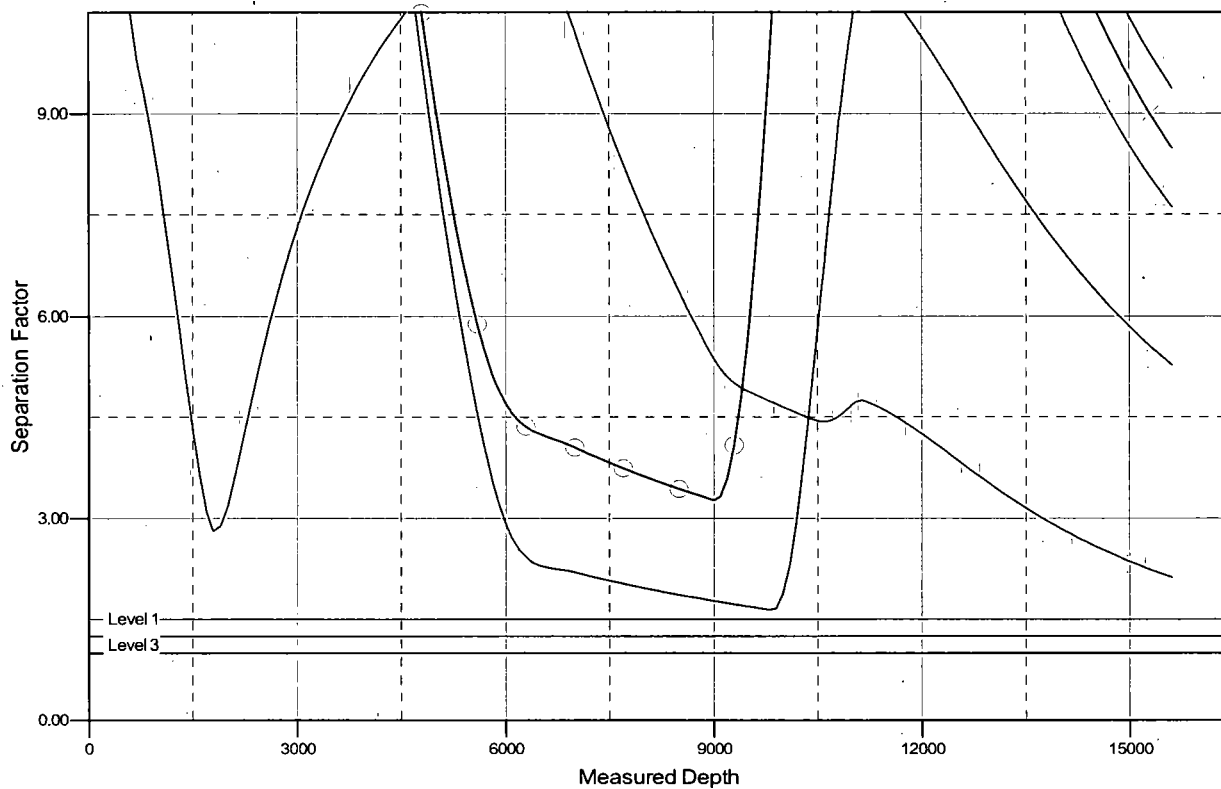
Pro Directional Anticollision Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Reference Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	134H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	WellPlanner1
Reference Design:	Prelim Plan A	Offset TVD Reference:	Offset Datum

Reference Depths are relative to Rig @ 3648.50usft (GL:3620'+KB:28.5'
Offset Depths are relative to Offset Datum
Central Meridian is 104.333333°W

Coordinates are relative to: 134H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.40°

Separation Factor Plot



LEGEND

114H, OH, Prelim Plan A VO	204H, OH, Prelim Plan A VO	203H, OH, Prelim Plan A VO
133H, OH, Prelim Plan A VO	113H, OH, Prelim Plan A VO	
124H, OH, Prelim Plan A VO	123H, OH, Prelim Plan A VO	

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

Pro Directional Survey Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Well:	134H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan A	Database:	WellPlanner1

Project	Lea County, NM		
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	Verna Rae				
Site Position:		Northing:	585,923.00 usft	Latitude:	32.6086426°N
From:	Map	Easting:	727,046.00 usft	Longitude:	103.5960109°W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.40 °

Well	134H					
Well Position	+N/-S	0.00 usft	Northing:	585,892.00 usft	Latitude:	32.6085574°N
	+E/-W	0.00 usft	Easting:	727,046.00 usft	Longitude:	103.5960116°W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,620.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/29/2017	6.78	60.63	48,385.30

Design		Prelim Plan A		
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	179.95

Survey Tool Program	Date 5/31/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	15,618.32	Prelim Plan A (OH)	MWD - OWSG	MWD - OWSG

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
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	1.00	78.85	699.99	0.17	0.86	-0.17	1.00	1.00	0.00
800.00	2.00	78.85	799.96	0.68	3.42	-0.67	1.00	1.00	0.00
900.00	3.00	78.85	899.86	1.52	7.70	-1.51	1.00	1.00	0.00

Pro Directional

Survey Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Well:	134H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan A	Database:	WellPlanner1

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)
1,000.00	4.00	78.85	999.68	2.70	13.69	-2.69	1.00	1.00	0.00
1,100.00	5.00	78.85	1,099.37	4.22	21.39	-4.20	1.00	1.00	0.00
1,200.00	6.00	78.85	1,198.90	6.07	30.79	-6.05	1.00	1.00	0.00
1,300.00	7.00	78.85	1,298.26	8.26	41.90	-8.23	1.00	1.00	0.00
1,400.00	8.00	78.85	1,397.40	10.79	54.71	-10.74	1.00	1.00	0.00
1,500.00	9.00	78.85	1,496.30	13.65	69.21	-13.59	1.00	1.00	0.00
1,600.00	10.00	78.85	1,594.93	16.84	85.40	-16.77	1.00	1.00	0.00
1,700.00	11.00	78.85	1,693.26	20.37	103.28	-20.27	1.00	1.00	0.00
1,800.00	12.00	78.85	1,791.25	24.22	122.84	-24.11	1.00	1.00	0.00
1,900.00	12.00	78.85	1,889.06	28.24	143.24	-28.12	0.00	0.00	0.00
2,000.00	12.00	78.85	1,986.88	32.27	163.64	-32.12	0.00	0.00	0.00
2,100.00	12.00	78.85	2,084.69	36.29	184.03	-36.13	0.00	0.00	0.00
2,200.00	12.00	78.85	2,182.51	40.31	204.43	-40.13	0.00	0.00	0.00
2,300.00	12.00	78.85	2,280.32	44.33	224.83	-44.14	0.00	0.00	0.00
2,400.00	12.00	78.85	2,378.13	48.36	245.23	-48.14	0.00	0.00	0.00
2,500.00	12.00	78.85	2,475.95	52.38	265.63	-52.15	0.00	0.00	0.00
2,600.00	12.00	78.85	2,573.76	56.40	286.03	-56.15	0.00	0.00	0.00
2,700.00	12.00	78.85	2,671.58	60.42	306.43	-60.15	0.00	0.00	0.00
2,800.00	12.00	78.85	2,769.39	64.44	326.82	-64.16	0.00	0.00	0.00
2,900.00	12.00	78.85	2,867.21	68.47	347.22	-68.16	0.00	0.00	0.00
3,000.00	12.00	78.85	2,965.02	72.49	367.62	-72.17	0.00	0.00	0.00
3,100.00	12.00	78.85	3,062.84	76.51	388.02	-76.17	0.00	0.00	0.00
3,200.00	12.00	78.85	3,160.65	80.53	408.42	-80.18	0.00	0.00	0.00
3,300.00	12.00	78.85	3,258.47	84.56	428.82	-84.18	0.00	0.00	0.00
3,400.00	12.00	78.85	3,356.28	88.58	449.21	-88.19	0.00	0.00	0.00
3,500.00	12.00	78.85	3,454.10	92.60	469.61	-92.19	0.00	0.00	0.00
3,600.00	12.00	78.85	3,551.91	96.62	490.01	-96.19	0.00	0.00	0.00
3,700.00	12.00	78.85	3,649.73	100.64	510.41	-100.20	0.00	0.00	0.00
3,800.00	12.00	78.85	3,747.54	104.67	530.81	-104.20	0.00	0.00	0.00
3,900.00	12.00	78.85	3,845.36	108.69	551.21	-108.21	0.00	0.00	0.00
4,000.00	12.00	78.85	3,943.17	112.71	571.60	-112.21	0.00	0.00	0.00
4,100.00	12.00	78.85	4,040.99	116.73	592.00	-116.22	0.00	0.00	0.00
4,200.00	12.00	78.85	4,138.80	120.76	612.40	-120.22	0.00	0.00	0.00
4,300.00	12.00	78.85	4,236.62	124.78	632.80	-124.23	0.00	0.00	0.00
4,400.00	12.00	78.85	4,334.43	128.80	653.20	-128.23	0.00	0.00	0.00
4,500.00	12.00	78.85	4,432.24	132.82	673.60	-132.23	0.00	0.00	0.00
4,600.00	12.00	78.85	4,530.06	136.84	693.99	-136.24	0.00	0.00	0.00
4,700.00	12.00	78.85	4,627.87	140.87	714.39	-140.24	0.00	0.00	0.00
4,800.00	12.00	78.85	4,725.69	144.89	734.79	-144.25	0.00	0.00	0.00
4,900.00	12.00	78.85	4,823.50	148.91	755.19	-148.25	0.00	0.00	0.00
5,000.00	12.00	78.85	4,921.32	152.93	775.59	-152.26	0.00	0.00	0.00
5,100.00	12.00	78.85	5,019.13	156.96	795.99	-156.26	0.00	0.00	0.00
5,200.00	12.00	78.85	5,116.95	160.98	816.39	-160.26	0.00	0.00	0.00
5,300.00	12.00	78.85	5,214.76	165.00	836.78	-164.27	0.00	0.00	0.00

Pro Directional Survey Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Well:	134H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan A	Database:	WellPlanner1

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)
5,400.00	12.00	78.85	5,312.58	169.02	857.18	-168.27	0.00	0.00	0.00
5,500.00	12.00	78.85	5,410.39	173.04	877.58	-172.28	0.00	0.00	0.00
5,600.00	12.00	78.85	5,508.21	177.07	897.98	-176.28	0.00	0.00	0.00
5,700.00	12.00	78.85	5,606.02	181.09	918.38	-180.29	0.00	0.00	0.00
5,800.00	12.00	78.85	5,703.84	185.11	938.78	-184.29	0.00	0.00	0.00
5,816.59	12.00	78.85	5,720.07	185.78	942.16	-184.96	0.00	0.00	0.00
5,900.00	11.17	78.85	5,801.77	189.02	958.59	-188.18	1.00	-1.00	0.00
6,000.00	10.17	78.85	5,900.05	192.60	976.75	-191.75	1.00	-1.00	0.00
6,100.00	9.17	78.85	5,998.63	195.85	993.22	-194.98	1.00	-1.00	0.00
6,200.00	8.17	78.85	6,097.48	198.76	1,008.00	-197.88	1.00	-1.00	0.00
6,300.00	7.17	78.85	6,196.59	201.34	1,021.09	-200.45	1.00	-1.00	0.00
6,400.00	6.17	78.85	6,295.91	203.59	1,032.48	-202.69	1.00	-1.00	0.00
6,500.00	5.17	78.85	6,395.42	205.50	1,042.17	-204.59	1.00	-1.00	0.00
6,600.00	4.17	78.85	6,495.09	207.07	1,050.15	-206.15	1.00	-1.00	0.00
6,700.00	3.17	78.85	6,594.88	208.31	1,056.42	-207.39	1.00	-1.00	0.00
6,800.00	2.17	78.85	6,694.77	209.21	1,060.98	-208.28	1.00	-1.00	0.00
6,900.00	1.17	78.85	6,794.73	209.77	1,063.84	-208.84	1.00	-1.00	0.00
7,000.00	0.17	78.85	6,894.72	210.00	1,064.98	-209.07	1.00	-1.00	0.00
7,016.59	0.00	0.00	6,911.31	210.00	1,065.00	-209.07	1.00	-1.00	0.00
7,100.00	0.00	0.00	6,994.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
7,200.00	0.00	0.00	7,094.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
7,300.00	0.00	0.00	7,194.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
7,400.00	0.00	0.00	7,294.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
7,500.00	0.00	0.00	7,394.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
7,600.00	0.00	0.00	7,494.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
7,700.00	0.00	0.00	7,594.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
7,800.00	0.00	0.00	7,694.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
7,900.00	0.00	0.00	7,794.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
8,000.00	0.00	0.00	7,894.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
8,100.00	0.00	0.00	7,994.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
8,200.00	0.00	0.00	8,094.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
8,300.00	0.00	0.00	8,194.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
8,400.00	0.00	0.00	8,294.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
8,500.00	0.00	0.00	8,394.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
8,600.00	0.00	0.00	8,494.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
8,700.00	0.00	0.00	8,594.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
8,800.00	0.00	0.00	8,694.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
8,900.00	0.00	0.00	8,794.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
9,000.00	0.00	0.00	8,894.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
9,100.00	0.00	0.00	8,994.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
9,200.00	0.00	0.00	9,094.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
9,300.00	0.00	0.00	9,194.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
9,400.00	0.00	0.00	9,294.72	210.00	1,065.00	-209.07	0.00	0.00	0.00

Pro Directional Survey Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Well:	134H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan A	Database:	WellPlanner1

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)
9,500.00	0.00	0.00	9,394.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
9,600.00	0.00	0.00	9,494.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
9,700.00	0.00	0.00	9,594.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
9,800.00	0.00	0.00	9,694.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
9,900.00	0.00	0.00	9,794.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
10,000.00	0.00	0.00	9,894.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
10,100.00	0.00	0.00	9,994.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
10,200.00	0.00	0.00	10,094.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
10,300.00	0.00	0.00	10,194.72	210.00	1,065.00	-209.07	0.00	0.00	0.00
10,317.28	0.00	0.00	10,212.00	210.00	1,065.00	-209.07	0.00	0.00	0.00
10,350.00	3.27	179.95	10,244.70	209.07	1,065.00	-208.14	10.00	10.00	0.00
10,400.00	8.27	179.95	10,294.43	204.04	1,065.00	-203.11	10.00	10.00	0.00
10,450.00	13.27	179.95	10,343.54	194.70	1,065.01	-193.77	10.00	10.00	0.00
10,500.00	18.27	179.95	10,391.64	181.11	1,065.02	-180.18	10.00	10.00	0.00
10,550.00	23.27	179.95	10,438.37	163.38	1,065.04	-162.45	10.00	10.00	0.00
10,600.00	28.27	179.95	10,483.39	141.65	1,065.05	-140.72	10.00	10.00	0.00
10,650.00	33.27	179.95	10,526.33	116.08	1,065.08	-115.15	10.00	10.00	0.00
10,700.00	38.27	179.95	10,566.89	86.86	1,065.10	-85.93	10.00	10.00	0.00
10,750.00	43.27	179.95	10,604.74	54.22	1,065.13	-53.29	10.00	10.00	0.00
10,800.00	48.27	179.95	10,639.61	18.40	1,065.15	-17.47	10.00	10.00	0.00
10,850.00	53.27	179.95	10,671.22	-20.32	1,065.19	21.25	10.00	10.00	0.00
10,900.00	58.27	179.95	10,699.33	-61.65	1,065.22	62.58	10.00	10.00	0.00
10,950.00	63.27	179.95	10,723.74	-105.27	1,065.25	106.20	10.00	10.00	0.00
11,000.00	68.27	179.95	10,744.25	-150.85	1,065.29	151.78	10.00	10.00	0.00
11,050.00	73.27	179.95	10,760.71	-198.04	1,065.33	198.97	10.00	10.00	0.00
11,100.00	78.27	179.95	10,773.00	-246.50	1,065.37	247.42	10.00	10.00	0.00
11,150.00	83.27	179.95	10,781.01	-295.83	1,065.41	296.76	10.00	10.00	0.00
11,200.00	88.27	179.95	10,784.70	-345.68	1,065.45	346.61	10.00	10.00	0.00
11,217.27	90.00	179.95	10,784.96	-362.95	1,065.46	363.88	10.00	10.00	0.00
11,300.00	90.00	179.95	10,784.96	-445.68	1,065.53	446.61	0.00	0.00	0.00
11,400.00	90.00	179.95	10,784.96	-545.68	1,065.61	546.61	0.00	0.00	0.00
11,500.00	90.00	179.95	10,784.96	-645.68	1,065.69	646.61	0.00	0.00	0.00
11,600.00	90.00	179.95	10,784.96	-745.68	1,065.77	746.61	0.00	0.00	0.00
11,700.00	90.00	179.95	10,784.96	-845.68	1,065.85	846.61	0.00	0.00	0.00
11,800.00	90.00	179.95	10,784.96	-945.68	1,065.93	946.61	0.00	0.00	0.00
11,900.00	90.00	179.95	10,784.96	-1,045.68	1,066.01	1,046.61	0.00	0.00	0.00
12,000.00	90.00	179.95	10,784.97	-1,145.68	1,066.09	1,146.61	0.00	0.00	0.00
12,100.00	90.00	179.95	10,784.97	-1,245.68	1,066.17	1,246.61	0.00	0.00	0.00
12,200.00	90.00	179.95	10,784.97	-1,345.68	1,066.25	1,346.61	0.00	0.00	0.00
12,300.00	90.00	179.95	10,784.97	-1,445.68	1,066.33	1,446.61	0.00	0.00	0.00
12,400.00	90.00	179.95	10,784.97	-1,545.68	1,066.41	1,546.61	0.00	0.00	0.00
12,500.00	90.00	179.95	10,784.97	-1,645.68	1,066.49	1,646.61	0.00	0.00	0.00
12,600.00	90.00	179.95	10,784.97	-1,745.68	1,066.57	1,746.61	0.00	0.00	0.00

Pro Directional

Survey Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Pat809))
Well:	134H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan A	Database:	WellPlanner1

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,700.00	90.00	179.95	10,784.97	-1,845.68	1,066.65	1,846.61	0.00	0.00	0.00
12,800.00	90.00	179.95	10,784.97	-1,945.68	1,066.73	1,946.61	0.00	0.00	0.00
12,900.00	90.00	179.95	10,784.97	-2,045.68	1,066.81	2,046.61	0.00	0.00	0.00
13,000.00	90.00	179.95	10,784.98	-2,145.68	1,066.89	2,146.61	0.00	0.00	0.00
13,100.00	90.00	179.95	10,784.98	-2,245.68	1,066.97	2,246.61	0.00	0.00	0.00
13,200.00	90.00	179.95	10,784.98	-2,345.68	1,067.06	2,346.61	0.00	0.00	0.00
13,300.00	90.00	179.95	10,784.98	-2,445.68	1,067.14	2,446.61	0.00	0.00	0.00
13,400.00	90.00	179.95	10,784.98	-2,545.68	1,067.22	2,546.61	0.00	0.00	0.00
13,500.00	90.00	179.95	10,784.98	-2,645.68	1,067.30	2,646.61	0.00	0.00	0.00
13,600.00	90.00	179.95	10,784.98	-2,745.68	1,067.38	2,746.61	0.00	0.00	0.00
13,700.00	90.00	179.95	10,784.98	-2,845.68	1,067.46	2,846.61	0.00	0.00	0.00
13,800.00	90.00	179.95	10,784.98	-2,945.68	1,067.54	2,946.61	0.00	0.00	0.00
13,900.00	90.00	179.95	10,784.98	-3,045.68	1,067.62	3,046.61	0.00	0.00	0.00
14,000.00	90.00	179.95	10,784.98	-3,145.68	1,067.70	3,146.61	0.00	0.00	0.00
14,100.00	90.00	179.95	10,784.99	-3,245.68	1,067.78	3,246.61	0.00	0.00	0.00
14,200.00	90.00	179.95	10,784.99	-3,345.68	1,067.86	3,346.61	0.00	0.00	0.00
14,300.00	90.00	179.95	10,784.99	-3,445.68	1,067.94	3,446.61	0.00	0.00	0.00
14,400.00	90.00	179.95	10,784.99	-3,545.68	1,068.02	3,546.61	0.00	0.00	0.00
14,500.00	90.00	179.95	10,784.99	-3,645.68	1,068.10	3,646.61	0.00	0.00	0.00
14,600.00	90.00	179.95	10,784.99	-3,745.68	1,068.18	3,746.61	0.00	0.00	0.00
14,700.00	90.00	179.95	10,784.99	-3,845.68	1,068.26	3,846.61	0.00	0.00	0.00
14,800.00	90.00	179.95	10,784.99	-3,945.68	1,068.34	3,946.61	0.00	0.00	0.00
14,900.00	90.00	179.95	10,784.99	-4,045.68	1,068.42	4,046.61	0.00	0.00	0.00
15,000.00	90.00	179.95	10,784.99	-4,145.68	1,068.50	4,146.61	0.00	0.00	0.00
15,100.00	90.00	179.95	10,785.00	-4,245.68	1,068.58	4,246.61	0.00	0.00	0.00
15,200.00	90.00	179.95	10,785.00	-4,345.68	1,068.66	4,346.61	0.00	0.00	0.00
15,300.00	90.00	179.95	10,785.00	-4,445.68	1,068.74	4,446.61	0.00	0.00	0.00
15,400.00	90.00	179.95	10,785.00	-4,545.68	1,068.82	4,546.61	0.00	0.00	0.00
15,500.00	90.00	179.95	10,785.00	-4,645.68	1,068.90	4,646.61	0.00	0.00	0.00
15,600.00	90.00	179.95	10,785.00	-4,745.68	1,068.99	4,746.61	0.00	0.00	0.00
15,618.32	90.00	179.95	10,785.00	-4,764.00	1,069.00	4,764.93	0.00	0.00	0.00

Pro Directional Survey Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well 134H
Project:	Lea County, NM	TVD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Site:	Verna Rae	MD Reference:	Rig @ 3648.50usft (GL:3620'+KB:28.5'(Patt809))
Well:	134H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan A	Database:	WellPlanner1

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
[VR134]LPP	0.00	0.00	0.00	-4,674.00	1,069.00	581,218.00	728,115.00	32.5956901°N	103.5926461°W
- plan misses target center by 4794.69usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
[VR134]FPP	0.00	0.00	0.00	-61.00	1,065.00	585,831.00	728,111.00	32.6083694°N	103.5925547°W
- plan misses target center by 1066.75usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
[VR134]PBHL	0.00	0.00	10,785.0	-4,764.00	1,069.00	581,128.00	728,115.00	32.5954427°N	103.5926481°W
- plan hits target center			0						
- Point									

Checked By: _____ Approved By: _____ Date: _____

Matador Production Company
Verna Rae Fed Com 134H
SHL 260' FNL & 1725' FEL
BHL 240' FSL & 660' FEL
Sec. 6, T. 20 S., R. 34 E., Lea County, NM

DRILL PLAN PAGE 1

Drilling Program

1. ESTIMATED TOPS

Formation Name	TVD	MD	Bearing
Quaternary	000'	000'	water
Rustler anhydrite	1475'	1479'	N/A
Top salt	1605'	1610'	N/A
Base salt	3120'	3158'	N/A
Tansill sandstone	3185'	3224'	N/A
Yates gypsum	3340'	3383'	N/A
Seven Rivers dolomite	3750'	3802'	N/A
Queen sandstone	4570'	4610'	N/A
Capitan/Goat Seep Reef carbonate	4750'	4721'	water
Delaware Mt. Group sandstones	5420'	5310'	hydrocarbons
Brushy Canyon sandstone	6155'	6258'	hydrocarbons
Bone Spring Limestone	8280'	8395'	hydrocarbons
1 st Bone Spring carbonate	9005'	9110'	hydrocarbons
1 st Bone Spring sand	9390'	9495'	hydrocarbons
2 nd Bone Spring sand	9930'	10035'	hydrocarbons
(KOP	10245'	10350'	hydrocarbons)
3 rd Bone Spring sand	10605'	10750'	hydrocarbons & goal
TD	10785'	15618'	hydrocarbons

2. NOTABLE ZONES

Third Bone Spring sand is the goal. Hole will extend south of the last perforation point to allow for pump installation. All perforations will be $\geq 330'$ from the dedication perimeter. Closest water well (L 07213) is 1886' NNE. Depth to water is 110' in this 160' deep inactive well.

3. PRESSURE CONTROL

34Matador Production Company
Verna Rae Fed Com 123H
SHL 260' FNL & 1725' FEL
BHL 240' FSL & 660' FEL
Sec. 6, T. 20 S., R. 34 E., Lea County, NM

SURFACE PLAN PAGE 1

Surface Use Plan

1. ROAD DIRECTIONS & DESCRIPTIONS (See MAPS 1 – 5)

From the Hobbs Airport ...

Go SW 22.3 miles on US 62/180 to the equivalent of Mile Post 78.2

Then turn right and go West 1.0 mile on a caliche road to a fence

Then go W and SW 830.32' cross-country to the slot 4 pad

Then go NW and W 629.25' cross-country to the Slot 3 pad
(113H/123H/133H/134H/203H/204H)

Non-county roads will be maintained as needed to Gold Book standards. This includes pulling ditches, preserving the crown, and cleaning culverts. This will be done at least once a year, and more often as needed.

2. ROAD TO BE BUILT OR UPGRADED (See MAPS 4 & 5)

The 629.25' of new road will be crowned and ditched, have a 14' wide driving surface, and be surfaced with caliche. Maximum disturbed width = 30'. Maximum grade = 3%. Maximum cut or fill = 2'. Underground pipelines will be padded before crossing. No culvert, cattle guard, or vehicle turn out is needed. Upgrading will consist of patching potholes with caliche. (Roadwork associated with slot 4 pad is described in its APDs.)

3. EXISTING WELLS (See MAP 3)

Existing oil, gas, disposal, water, and P & A wells are within a mile. No injection wells are within a mile radius.

4. PROPOSED PRODUCTION FACILITIES (see MAPS 4, 6, & 7)

A 1415.63' long overhead raptor safe 3-phase power line will be built east to the slot 4 pad. (Power line to slot 4 pad is BLM right-of-way NMNM-137063). Oil tanks, water tanks, meter runs, separators, pumps, heater-treaters, combustion unit, and a flare will be installed on the south and west sides of the pad (see preceding diagram). Gas line

**34Matador Production Company
Verna Rae Fed Com 123H
SHL 260' FNL & 1725' FEL
BHL 240' FSL & 660' FEL
Sec. 6, T. 20 S., R. 34 E., Lea County, NM**

SURFACE PLAN PAGE 2

plans have not been finalized, though it appears DCP will build a short line from its existing line that is between the Verna Rae Fed Com slot 3 and 4 pads.

5. WATER SUPPLY (See MAP 2)

Water will be trucked from existing water stations on private land. Sonny's water station (L 07431A) is in NENE 5-19s-36e. Berry's water station (CP 00802) is in SWNE 2-21s-32e.

6. CONSTRUCTION MATERIALS & METHODS (See MAPS 2 & 10-12)

NM One Call (811) will be notified before construction starts. Top ≈6" of soil and brush will be stockpiled north of the pad. V-door will face south. Closed loop drilling system will be used. Caliche will be hauled from existing caliche pits on private land. Klein pit is in SWNW 27-19s-35e. Berry pit is in E2NE4 35-20s-34e.

7. WASTE DISPOSAL

All trash will be placed in a portable trash cage. It will be hauled to the Lea County landfill. There will be no trash burning. Contents (drill cuttings, mud, salts, and other chemicals) of the mud tanks will be hauled to R360's state approved (NM-01-0006) disposal site at Halfway. Human waste will be disposed of in chemical toilets and hauled to the Hobbs wastewater treatment plant.

8. ANCILLARY FACILITIES

There will be no airstrip or camp. Camper trailers will be on location for the company man, tool pusher, and mud logger.

9. WELL SITE LAYOUT (See MAPS 7 & 8)

See Rig Layout diagram for depictions of the well pad, trash cage, access onto the location, parking, living facilities, and rig orientation.

10. RECLAMATION

34Matador Production Company
Verna Rae Fed Com 123H
SHL 260' FNL & 1725' FEL
BHL 240' FSL & 660' FEL
Sec. 6, T. 20 S., R. 34 E., Lea County, NM

SURFACE PLAN PAGE 3

Interim reclamation will be completed within 6 months of completing the well. Interim reclamation will consist of shrinking the pad $\approx 12\%$ (0.42 acre) by removing caliche and reclaiming the north side (50' x 220') and southeast corner (100' x 150' x 180'). This will leave 3.15 acres for the production equipment (e. g., tank battery, heater-treater, separator, meter run), pump jacks, and tractor-trailer turn around. Disturbed areas will be contoured to match pre-construction grades. Soil and brush will be evenly spread over disturbed areas and harrowed on the contour. Disturbed areas will be seeded in accordance with the surface owner's requirements.

Enough stockpiled topsoil will be retained to cover the remainder of the pad when the well is plugged. Once the well is plugged, then the rest of the pad and 629.25' of new road will be similarly reclaimed within 6 months of plugging. Noxious weeds will be controlled. Land use:

629.25' x 30' road = 0.43 acre
1415.63' x 15' power line = 0.49 acre
+ 370' x 420' pad = 3.57 acres
4.49 acres short term
- 0.49 acre power line
- 0.42 acre interim reclamation
3.58 acres long term (0.43 ac. road + 3.15 ac. pad)

11. SURFACE OWNER

All pad, road (629.25'), and power line (1415.63') construction will be on land owned by Larry Hughes (HC 69 Box 57, Monument NM 88265). His phone number is 575 263-7602.

12. OTHER INFORMATION

On site inspection was held with Vance Wolf, Cassie Brooks, and Bob Ballard (all BLM) on April 3, 2017.

Lone Mountain inspected and filed archaeology report NMCRIS-138083 May 18, 2017.

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SURFACE PLAN PAGE 4

CERTIFICATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U. S. C. 1001 for the filing of false statements. Executed this 12th day of June, 2017.

Brian Wood, Consultant
Permits West, Inc.

37 Verano Loop, Santa Fe, NM 87508

(505) 466-8120

FAX: (505) 466-9682

Cellular: (505) 699-2276

Field representative will be:

Sam Pryor, Senior Staff Landman
Matador Production Company
5400 LBJ Freeway, Suite 1500
Dallas TX 75240
Phone: (972) 371-5241

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SURFACE PLAN PAGE 5

FAX: (214) 866-4841

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DRILL PLAN PAGE 4

6. CORES, TESTS, & LOGS

No core or drill stem test is planned.

A 2-person mud logging program will be used from ≈1600' 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 TOC.

7. DOWN HOLE CONDITIONS

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is ≈5385 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 to meet BLM's minimum requirements for the submission of an "H₂S Drilling Operation Plan" or "Public Protection Plan" for drilling and completing this well. Since Matador has an H₂S safety package on all wells, an "H₂S Drilling Operations Plan" is attached. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

8. OTHER INFORMATION

Anticipated spud date is upon approval. It is expected it will take ≈3 months to drill and complete the well.

Matador Production Company owns the majority working interest in this well. Per its discussions with its potential partners, Matador will be named operator upon execution of the final Operating Agreements signed by the partners or the issuance of a pooling order by the State.