PECOS DISTRICT
DRILLING OPERATIONS
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Matador Production Company**
LEASE NO.:	**NMNM-136226**
WELL NAME & NO.:	**Biggers Federal 21H**
SURFACE HOLE FOOTAGE:	**0357' FSL & 0493' FWL**
BOTTOM HOLE FOOTAGE	**0240' FNL & 0330' FEL**
LOCATION:	**Section 18, T. 25 S., R 35 E., NMPM**
COUNTY:	**County, New Mexico**

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)

☐ **Lea County**

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 3933612

Provide NMOCD Gas Capture Plan (GCP) Form:

Well(s)/Facility information:

1. Name of facility
2. Wells that will be located (new and future) at this facility
   a. Well name and number
   b. Well API number
   c. Well location, Sect, T, R, Footages, county, state
   d. Expected IP gas rate, Mcfpd of each well
   e. First planned production date for well(s) that are developed from this facility

A. **Hydrogen Sulfide**

1. **Although Hydrogen Sulfide has not been reported in the area, it is always a potential hazard. If Hydrogen Sulfide is encountered, report measured amounts and formations to the BLM.**

2. 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. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

3. 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 is located, this does not include the dog house or stairway area.

4. **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

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.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

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.

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.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possibility of water flows in the Castile and Salado formations
Possibility of lost circulation in the Rustler, Red Beds, and Delaware formations

1. The **13-3/8** inch surface casing shall be set at approximately **1010** feet and cemented to the surface. **If salt is encountered, set casing at least 25 feet above the salt.**

    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 is to include the lead cement slurry.**

    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 shall be kept fluid filled while running into hole to meet BLM minimum collapse requirements.

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

    ☐ Cement to surface. If cement does not circulate see B.1.a, c-d above.

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

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

    ☐ Cement as proposed by operator. Operator shall provide method of verification.

4. 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.

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 53.

2. Variance approved to use flex line from BOP to choke manifold. 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.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be psi (**Operator will have a 5M, testing to 2,000 psi**).

    a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.

4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** intermediate casing shoe shall be psi (**Operator will have a 5M, testing to 3,000 psi**).

5. The appropriate BLM office shall be notified a minimum of 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).

    a. 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).

b. 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.

c. The results of the test shall be reported to the appropriate BLM office.

d. 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.**

e. 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.

C. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

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.

JAM 012318

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Matador Prod Co
LEASE NO.:	NM136226
WELL NAME & NO.:	Biggers Federal – 21H
SURFACE HOLE FOOTAGE:	357'/S & 493'/W
BOTTOM HOLE FOOTAGE	240'/N & 330'/W
LOCATION:	Section 18, T. 25S., R. 35 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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Approval Date: 02/02/2018

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.

- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g. caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- 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.
- 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.
- 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.)

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.

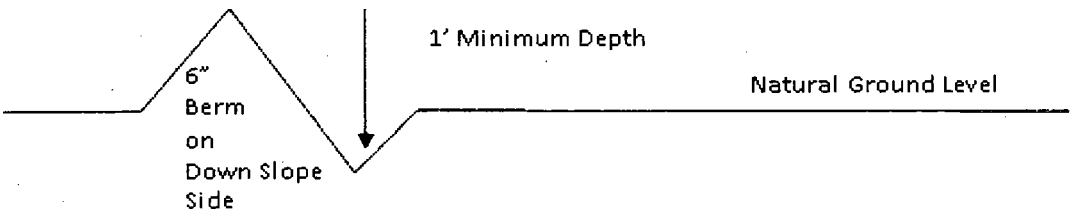
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping 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 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ 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

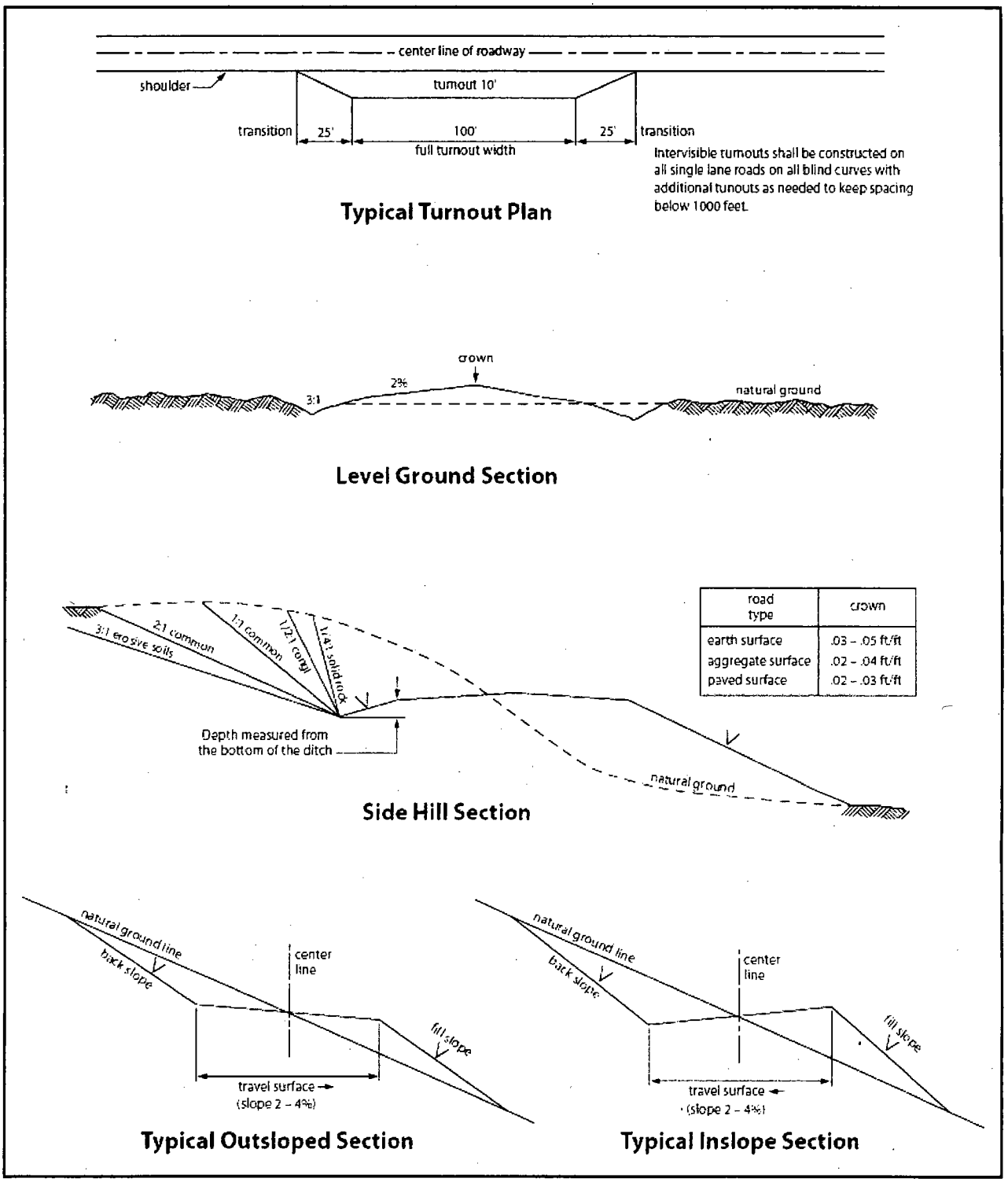


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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).

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.

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:

Species	lb/acre
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

Matador Resources

1 H2S safety instructions to the following:

- Characteristics of H2S
- Physical effects and hazards
- Principal and operation of H2S detectors, warning system, and briefing areas
- Evacuation procedures, routes, and first aid
- Proper use of safety equipment & life support systems
- Essential personnel meeting medical evaluation criteria will receive additional training on the proper use of 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 Windsocks and / Wind Streamers:

- Windsocks at mud pit area should be high enough to be visible.
- Windsock 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

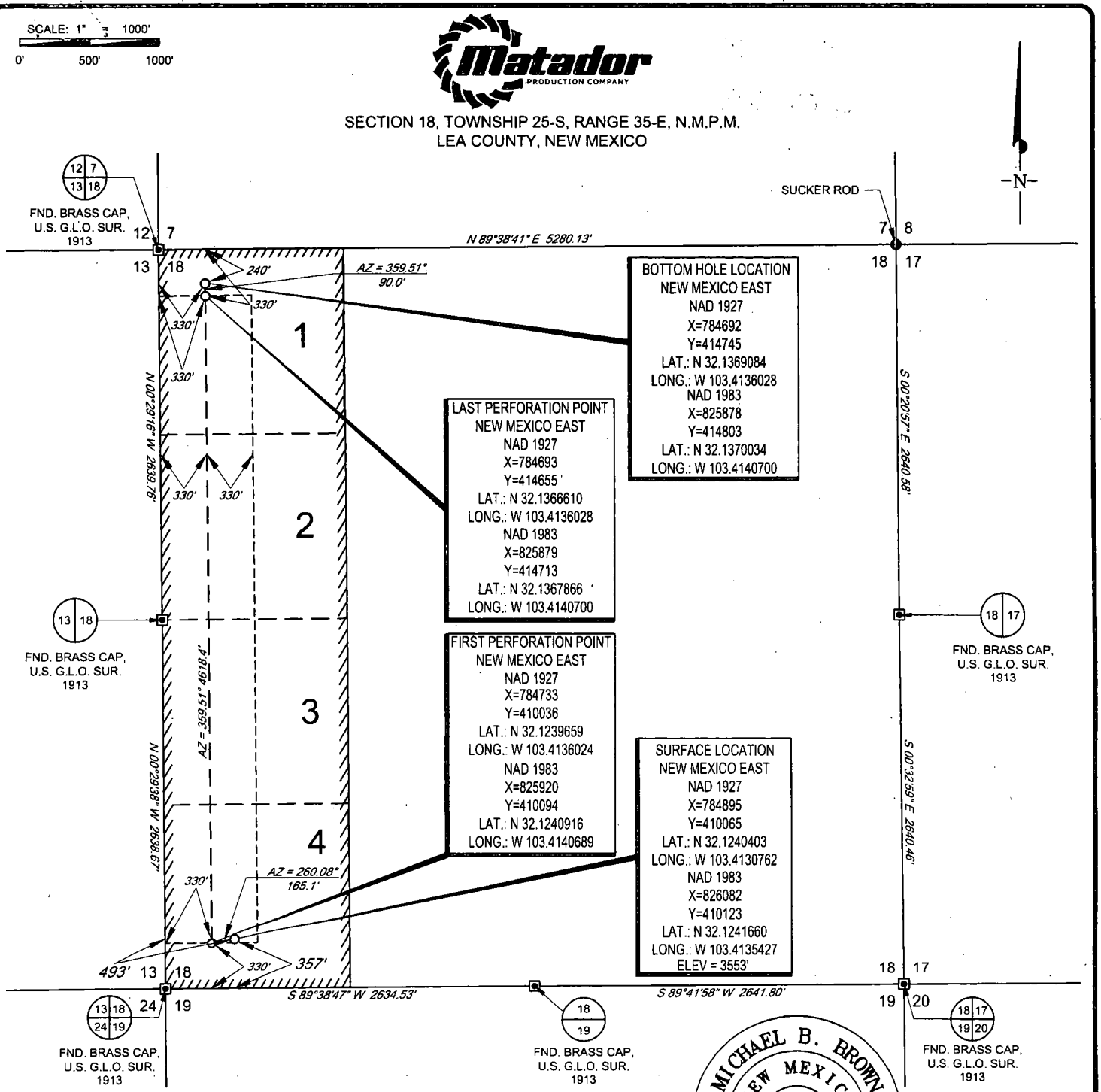
- See following page

H2S Contingency Plan Emergency Contacts
Biggers Fed wells
Matador Production Company
Sec. 18, T25S, R35E 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		
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. (Jal)	575-395-2221	
Emergency Management (Lovington)	575-391-2983	
New Mexico Oil Conservation Division (Hobbs)	575-393-6161	575-390-3186
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	



LEASE NAME & WELL NO.: BIGGERS FED #021H

SECTION 18 TWP 25-S RGE 35-E SURVEY N.M.P.M.

COUNTY LEA STATE NM

DESCRIPTION 357' FSL & 493' FWL

DISTANCE & DIRECTION

FROM INT. OF NM-128 W. & NM-205 N GO WEST ON NM-128 ±13.8 MILES, THENCE SOUTH (LEFT) ON BATTLE AXE RD. ±0.3 MILES, THENCE CONTINUING SOUTH ON MADERA RD. ±1.4 MILES, THENCE SOUTHEAST (LEFT) ON LEASE RD. ±3.1MILES, THENCE EAST (LEFT) ±440 FEET TO A POINT ±305 FEET NORTH OF THE LOCATION.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

AS OF THE DATE OF SURVEY, ALL ABOVE GROUND APPURTENANCES WITHIN 300' OF THE STAKED LOCATION ARE SHOWN HEREON.

MICHAEL B. BROWN NEW MEXICO 18329 PROFESSIONAL SURVEYOR

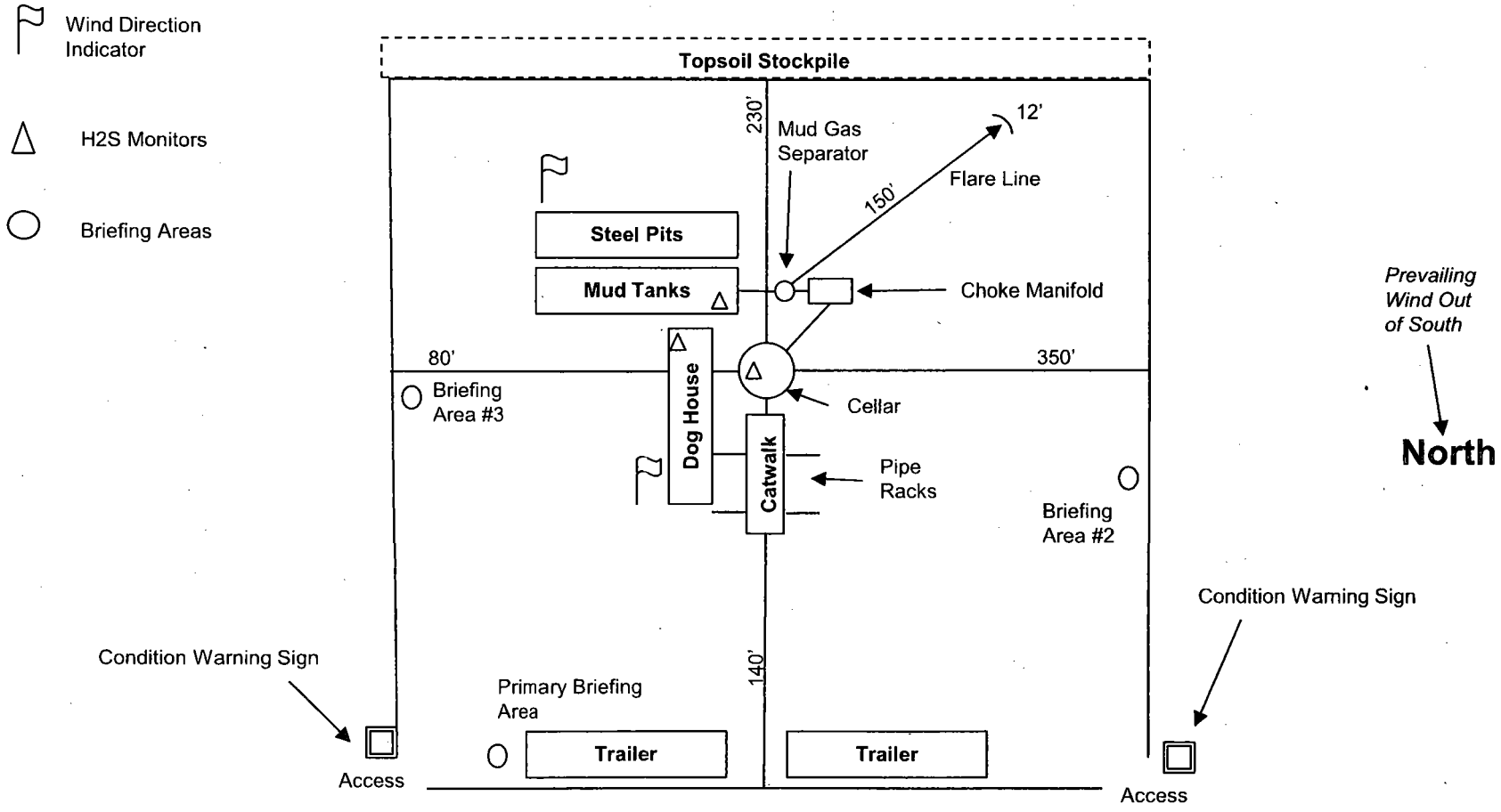
Michael Blake Brown, P.S. No. 18329

NOVEMBER 2, 2016

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7548
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM

H2S Rig Diagram

Biggers Fed 21H
SHL 357' FSL & 493' FWL
18-25S-35E Lea County, NM



Matador Resources
Lea County, NM
Biggers Fed
021H
Prelim Plan A
GL:3354'+KB:29'

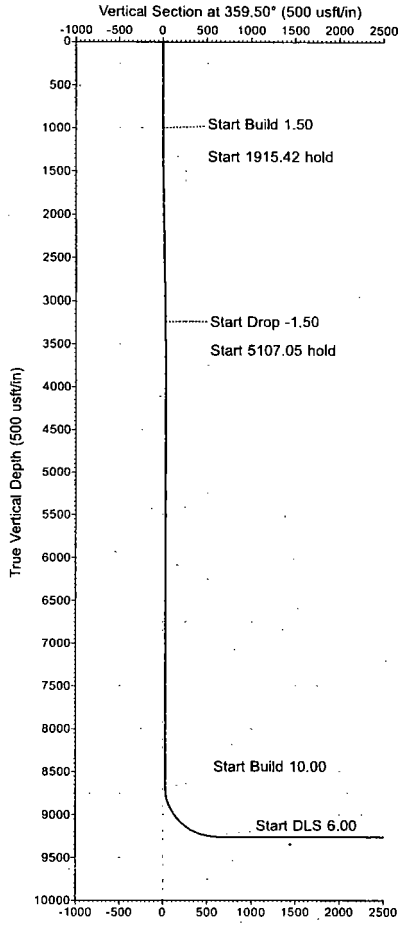
US State Plane 1927 (Exact solution)
NAD 1927 (NADCON CONUS)
Clarke 1866
New Mexico East 3001
Mean Sea Level

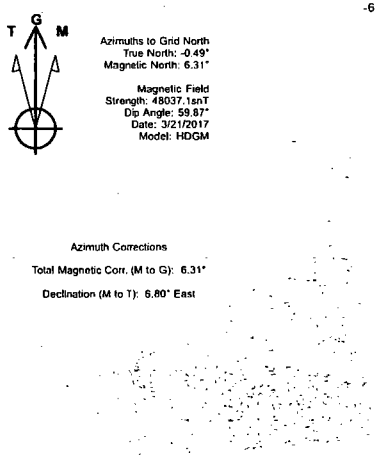
RKB Elevation: RIG @ 3383.00usft (GL:3354'+KB:29')

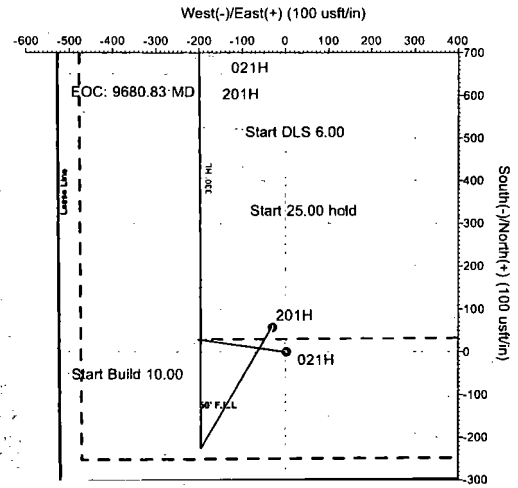
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	410008.00	784927.00	32° 7' 25.979 N	103° 24' 46.713 W	

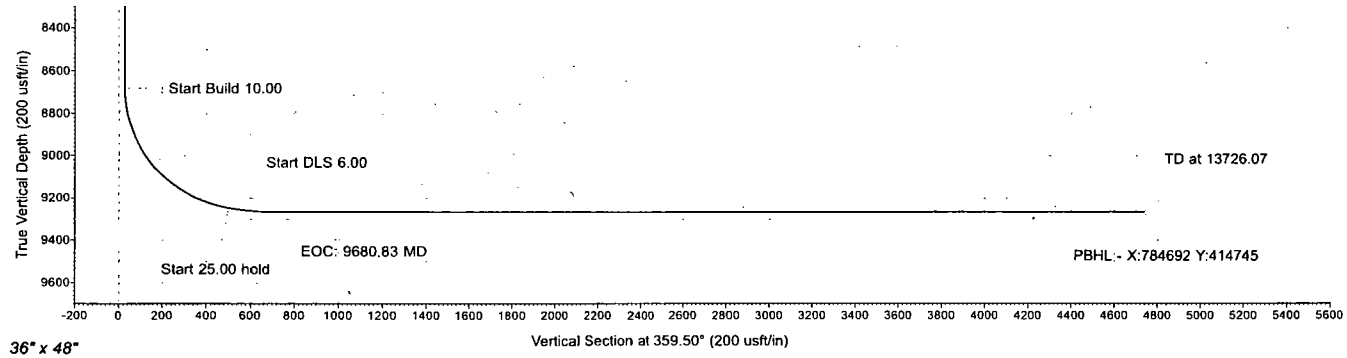
SECTION DETAILS- Lateral

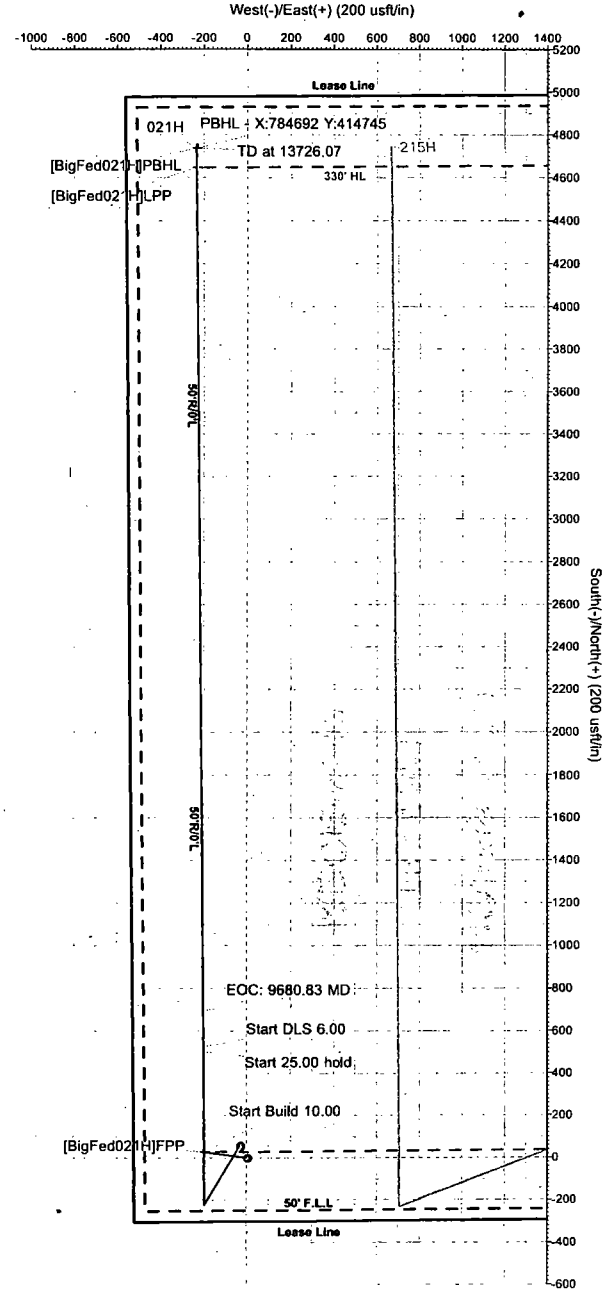
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00
3	1333.33	5.00	278.21	1332.91	2.08	-14.39	1.50	2.20
4	3248.75	5.00	278.21	3241.04	25.92	-179.61	0.00	27.49
5	3582.09	0.00	0.00	3573.95	28.00	-194.00	1.50	29.69
6	8689.13	0.00	0.00	8681.00	28.00	-194.00	0.00	29.69
7	9489.13	80.00	359.50	9245.25	501.45	-198.13	10.00	503.16
8	9514.13	80.00	359.50	9249.59	526.07	-198.35	0.00	527.78
9	9680.83	90.00	359.50	9264.10	691.91	-199.79	6.00	693.62
10	13726.07	90.00	359.50	9264.00	4737.00	-235.00	0.00	4738.87











36" x 48"

Pro Directional

Anticollision Report

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Reference Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	021H	**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** 3/21/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	13,726.07	Prelim Plan A (OH)	MWD - OWSG	MWD - OWSG

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Biggers Fed						
201H - OH - Prelim Plan A	1,623.38	1,620.85	51.84	40.69	4.650	CC
201H - OH - Prelim Plan A	1,700.00	1,702.82	52.27	40.55	4.459	ES
201H - OH - Prelim Plan A	6,200.00	6,205.55	127.50	86.33	3.097	SF
202H - OH - Prelim Plan A	1,000.00	1,010.00	1,590.08	1,583.34	235.818	CC, ES
202H - OH - Prelim Plan A	9,150.00	9,102.15	1,853.67	1,789.59	28.928	SF
215H - OH - Prelim Plan A	8,748.45	8,812.79	939.94	876.25	14.758	CC
215H - OH - Prelim Plan A	8,750.00	8,814.07	939.94	876.24	14.756	ES
215H - OH - Prelim Plan A	8,900.00	8,935.63	948.22	883.53	14.657	SF

Offset Design Biggers Fed - 201H - OH - Prelim Plan A — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD - OWSG, 5420-MWD - OWSG, 12755-MWD - OWSG — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	1.00	-1.00	0.00	0.00	-29.31	57.00	-32.00	65.37				
100.00	100.00	101.00	99.00	0.13	0.13	-29.31	57.00	-32.00	65.37	65.11	0.26	253.267	
200.00	200.00	201.00	199.00	0.49	0.49	-29.31	57.00	-32.00	65.37	64.39	0.98	67.041	
300.00	300.00	301.00	299.00	0.84	0.85	-29.31	57.00	-32.00	65.37	63.68	1.69	38.634	
400.00	400.00	401.00	399.00	1.20	1.21	-29.31	57.00	-32.00	65.37	62.96	2.41	27.136	
500.00	500.00	501.00	499.00	1.56	1.56	-29.31	57.00	-32.00	65.37	62.24	3.13	20.912	
600.00	600.00	601.00	599.00	1.92	1.92	-29.31	57.00	-32.00	65.37	61.53	3.84	17.010	
700.00	700.00	701.00	699.00	2.28	2.28	-29.31	57.00	-32.00	65.37	60.81	4.56	14.336	
800.00	800.00	801.00	799.00	2.64	2.64	-29.31	57.00	-32.00	65.37	60.09	5.28	12.388	
900.00	900.00	901.00	899.00	3.00	3.00	-29.31	57.00	-32.00	65.37	59.37	5.99	10.906	
1,000.00	1,000.00	1,001.00	999.00	3.35	3.36	-29.31	57.00	-32.00	65.37	58.66	6.71	9.741	
1,100.00	1,099.99	1,101.01	1,098.99	3.70	3.72	53.41	57.00	-32.00	64.58	57.16	7.42	8.703	
1,200.00	1,199.91	1,201.09	1,198.91	4.05	4.07	56.33	57.00	-32.00	62.32	54.19	8.13	7.669	
1,300.00	1,299.69	1,301.31	1,298.69	4.40	4.43	61.67	57.00	-32.00	58.94	50.10	8.84	6.670	
1,333.33	1,332.91	1,331.91	1,331.91	4.52	4.54	64.09	57.00	-32.00	57.68	48.61	9.06	6.363	
1,400.00	1,399.32	1,401.68	1,398.32	4.76	4.79	69.49	57.00	-32.00	55.38	45.83	9.55	5.797	
1,500.00	1,498.94	1,502.06	1,497.94	5.12	5.15	78.33	57.00	-32.00	52.95	42.67	10.27	5.154	
1,600.00	1,598.56	1,602.44	1,597.56	5.49	5.51	87.76	57.00	-32.00	51.88	40.89	11.00	4.718	
1,623.38	1,621.85	1,620.85	1,620.85	5.57	5.58	90.00	57.00	-32.00	51.84	40.69	11.15	4.650	CC
1,700.00	1,698.18	1,702.82	1,697.18	5.85	5.87	97.31	57.00	-32.00	52.27	40.55	11.72	4.459	ES

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 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Reference Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	021H	**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 Biggers Fed - 201H - OH - Prelim Plan A — Offset Site Error: 0.00 usft

Survey Program: 0-MWD - OWSG, 5420-MWD - OWSG, 12755-MWD - OWSG — Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,800.00	1,797.80	1,803.20	1,796.80	6.22	6.23	106.48	57.00	-32.00	54.08	41.64	12.45	4.345	
1,900.00	1,897.42	1,903.58	1,896.42	6.59	6.59	114.86	57.00	-32.00	57.18	44.01	13.17	4.343	
2,000.00	1,997.04	2,003.96	1,996.04	6.96	6.95	122.24	57.00	-32.00	61.36	47.48	13.88	4.420	
2,100.00	2,096.66	2,104.34	2,095.66	7.34	7.31	128.60	57.00	-32.00	66.43	51.84	14.60	4.551	
2,200.00	2,196.28	2,204.72	2,195.28	7.71	7.67	134.00	57.00	-32.00	72.20	56.89	15.31	4.716	
2,300.00	2,295.90	2,305.10	2,294.90	8.09	8.03	138.57	57.00	-32.00	78.52	62.50	16.03	4.900	
2,400.00	2,395.52	2,405.48	2,394.52	8.46	8.39	142.44	57.00	-32.00	85.26	68.52	16.74	5.093	
2,500.00	2,495.14	2,505.86	2,494.14	8.84	8.75	145.74	57.00	-32.00	92.33	74.88	17.45	5.290	
2,600.00	2,594.76	2,606.24	2,593.76	9.22	9.11	148.56	57.00	-32.00	99.66	81.50	18.17	5.486	
2,700.00	2,694.38	2,706.62	2,693.38	9.60	9.47	150.99	57.00	-32.00	107.20	88.32	18.88	5.677	
2,800.00	2,794.00	2,807.00	2,793.00	9.97	9.83	153.09	57.00	-32.00	114.91	95.31	19.60	5.863	
2,900.00	2,893.62	2,907.38	2,892.62	10.35	10.19	154.93	57.00	-32.00	122.75	102.43	20.32	6.042	
3,000.00	2,993.23	3,007.77	2,992.23	10.73	10.55	156.55	57.00	-32.00	130.70	109.67	21.03	6.214	
3,100.00	3,092.85	3,108.15	3,091.85	11.11	10.91	157.98	57.00	-32.00	138.75	117.00	21.75	6.379	
3,200.00	3,192.47	3,208.53	3,191.47	11.49	11.27	159.26	57.00	-32.00	146.87	124.40	22.47	6.537	
3,248.75	3,241.04	3,240.04	3,240.04	11.68	11.38	159.83	57.00	-32.00	150.85	128.09	22.76	6.629	
3,300.00	3,292.12	3,308.88	3,291.12	11.87	11.63	160.37	57.00	-32.00	154.73	131.54	23.19	6.673	
3,400.00	3,391.93	3,409.07	3,390.93	12.24	11.99	161.13	57.00	-32.00	160.46	136.56	23.90	6.713	
3,500.00	3,491.87	3,509.13	3,490.87	12.60	12.35	161.54	57.00	-32.00	163.74	139.12	24.62	6.652	
3,582.09	3,573.95	3,572.95	3,572.95	12.88	12.58	79.85	57.00	-32.00	164.58	139.44	25.13	6.548	
3,600.00	3,591.87	3,609.13	3,590.87	12.95	12.71	79.85	57.00	-32.00	164.58	139.25	25.32	6.499	
3,700.00	3,691.87	3,709.13	3,690.87	13.29	13.06	79.85	57.00	-32.00	164.58	138.54	26.03	6.322	
3,800.00	3,791.87	3,809.13	3,790.87	13.63	13.42	79.85	57.00	-32.00	164.58	137.84	26.74	6.155	
3,900.00	3,891.87	3,909.13	3,890.87	13.97	13.78	79.85	57.00	-32.00	164.58	137.13	27.44	5.997	
4,000.00	3,991.87	4,009.13	3,990.87	14.32	14.14	79.85	57.00	-32.00	164.58	136.42	28.15	5.846	
4,100.00	4,091.87	4,109.13	4,090.87	14.66	14.50	79.85	57.00	-32.00	164.58	135.71	28.86	5.702	
4,200.00	4,191.87	4,209.13	4,190.87	15.01	14.86	79.85	57.00	-32.00	164.58	135.01	29.57	5.566	
4,300.00	4,291.87	4,309.13	4,290.87	15.35	15.22	79.85	57.00	-32.00	164.58	134.30	30.28	5.435	
4,400.00	4,391.87	4,409.13	4,390.87	15.70	15.57	79.85	57.00	-32.00	164.58	133.59	30.99	5.311	
4,500.00	4,491.87	4,509.13	4,490.87	16.04	15.93	79.85	57.00	-32.00	164.58	132.88	31.70	5.192	
4,600.00	4,591.87	4,590.87	4,590.87	16.39	16.23	79.85	57.00	-32.00	164.58	132.23	32.34	5.089	
4,700.00	4,691.87	4,693.43	4,693.42	16.74	16.58	80.16	56.01	-32.57	163.86	130.81	33.05	4.958	
4,800.00	4,791.87	4,796.13	4,796.04	17.09	16.91	81.22	52.63	-34.50	161.47	127.74	33.73	4.787	
4,900.00	4,891.87	4,898.54	4,898.23	17.44	17.25	83.11	46.88	-37.80	157.51	123.10	34.41	4.578	
5,000.00	4,991.87	5,000.98	4,998.34	17.79	17.58	85.70	39.42	-42.08	152.53	117.45	35.09	4.347	
5,100.00	5,091.87	5,101.36	5,097.58	18.14	17.91	88.49	31.89	-46.40	147.81	112.04	35.77	4.132	
5,200.00	5,191.87	5,201.74	5,196.83	18.49	18.25	91.45	24.36	-50.72	143.45	107.00	36.45	3.935	
5,300.00	5,291.87	5,302.12	5,296.07	18.84	18.58	94.60	16.83	-55.04	139.51	102.37	37.14	3.756	
5,400.00	5,391.87	5,402.50	5,395.31	19.19	18.91	97.91	9.30	-59.36	136.01	98.18	37.83	3.595	
5,500.00	5,491.87	5,502.89	5,494.55	19.54	19.08	101.38	1.77	-63.67	132.99	94.63	38.36	3.467	
5,600.00	5,591.87	5,603.27	5,593.79	19.89	19.10	105.00	-5.77	-67.99	130.49	91.75	38.73	3.369	
5,700.00	5,691.87	5,703.65	5,693.03	20.24	19.12	108.75	-13.30	-72.31	128.52	89.40	39.12	3.286	
5,800.00	5,791.87	5,804.03	5,792.27	20.59	19.15	112.59	-20.83	-76.63	127.13	87.62	39.51	3.218	
5,900.00	5,891.87	5,904.41	5,891.51	20.94	19.18	116.50	-28.36	-80.95	126.32	86.41	39.91	3.165	
5,984.59	5,976.45	5,979.86	5,975.45	21.24	19.22	119.83	-34.73	-84.60	126.11	85.85	40.26	3.133	
6,000.00	5,991.87	6,004.79	5,990.75	21.29	19.23	120.44	-35.89	-85.27	126.11	85.79	40.32	3.128	
6,100.00	6,091.87	6,105.17	6,089.99	21.65	19.28	124.38	-43.43	-89.59	126.51	85.77	40.74	3.105	
6,200.00	6,191.87	6,205.55	6,189.23	22.00	19.34	128.27	-50.96	-93.91	127.50	86.33	41.16	3.097 SF	
6,300.00	6,291.87	6,305.93	6,288.47	22.35	19.41	132.08	-58.49	-98.23	129.07	87.47	41.59	3.103	
6,400.00	6,391.87	6,406.31	6,387.71	22.70	19.49	135.79	-66.02	-102.55	131.20	89.17	42.03	3.122	
6,500.00	6,491.87	6,506.69	6,486.95	23.06	19.57	139.37	-73.55	-106.87	133.87	91.40	42.47	3.152	
6,600.00	6,591.87	6,607.07	6,586.19	23.41	19.66	142.80	-81.09	-111.19	137.04	94.12	42.91	3.193	

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 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Reference Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	021H	**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 Biggers Fed - 201H - OH - Prelim Plan A — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD - OWSG, 5420-MWD - OWSG, 12755-MWD - OWSG — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,700.00	6,691.87	6,692.55	6,685.43	23.76	19.74	146.06	-88.62	-115.50	140.68	97.33	43.35	3.245	
6,800.00	6,791.87	6,807.83	6,784.67	24.12	19.86	149.14	-96.15	-119.82	144.75	100.94	43.82	3.304	
6,900.00	6,891.87	6,908.21	6,883.91	24.47	19.97	152.05	-103.68	-124.14	149.23	104.95	44.28	3.370	
7,000.00	6,991.87	7,008.59	6,983.15	24.82	20.09	154.79	-111.21	-128.46	154.06	109.32	44.74	3.444	
7,100.00	7,091.87	7,091.03	7,082.39	25.18	20.19	157.36	-118.74	-132.78	159.23	114.05	45.18	3.524	
7,200.00	7,191.87	7,209.35	7,181.63	25.53	20.35	159.76	-126.28	-137.10	164.69	119.02	45.68	3.606	
7,300.00	7,291.87	7,290.27	7,280.87	25.89	20.46	162.00	-133.81	-141.42	170.43	124.30	46.13	3.695	
7,400.00	7,391.87	7,389.88	7,380.11	26.24	20.60	164.09	-141.34	-145.74	176.41	129.81	46.60	3.785	
7,500.00	7,491.87	7,489.50	7,479.35	26.59	20.75	166.05	-148.87	-150.06	182.61	135.52	47.09	3.878	
7,600.00	7,591.87	7,589.12	7,578.59	26.95	20.90	167.87	-156.40	-154.38	189.01	141.43	47.58	3.973	
7,700.00	7,691.87	7,688.74	7,677.84	27.30	21.06	169.58	-163.94	-158.70	195.59	147.52	48.07	4.069	
7,800.00	7,791.87	7,788.36	7,777.08	27.66	21.23	171.17	-171.47	-163.02	202.33	153.76	48.57	4.166	
7,900.00	7,891.87	7,887.98	7,876.32	28.01	21.40	172.66	-179.00	-167.33	209.22	160.15	49.07	4.264	
8,000.00	7,991.87	7,987.60	7,975.56	28.37	21.58	174.05	-186.53	-171.65	216.23	166.66	49.58	4.361	
8,100.00	8,091.87	8,087.22	8,074.80	28.72	21.76	175.36	-194.06	-175.97	223.37	173.28	50.09	4.459	
8,200.00	8,191.87	8,186.84	8,174.04	29.08	21.95	176.58	-201.60	-180.29	230.62	180.01	50.61	4.557	
8,300.00	8,291.87	8,286.46	8,273.28	29.43	22.14	177.73	-209.13	-184.61	237.96	186.83	51.13	4.654	
8,400.00	8,391.87	8,388.98	8,375.44	29.79	22.34	178.80	-216.56	-188.88	245.10	193.41	51.69	4.741	
8,500.00	8,491.87	8,494.71	8,480.97	30.14	22.55	179.54	-222.03	-192.01	250.23	197.95	52.28	4.786	
8,600.00	8,591.87	8,600.70	8,586.91	30.50	22.75	179.93	-224.96	-193.69	252.99	200.14	52.86	4.786	
8,689.13	8,681.00	8,706.21	8,680.00	30.82	22.93	-180.00	-225.50	-194.00	253.50	200.14	53.36	4.751	
8,700.00	8,691.86	8,704.66	8,690.86	30.85	22.93	-179.50	-225.50	-194.00	253.60	200.21	53.40	4.749	
8,750.00	8,741.75	8,754.55	8,740.75	31.03	23.01	-179.50	-225.50	-194.00	256.73	203.07	53.66	4.785	
8,800.00	8,791.18	8,803.97	8,790.18	31.21	23.09	-179.51	-225.50	-194.00	264.19	210.27	53.92	4.900	
8,850.00	8,839.76	8,852.56	8,838.76	31.38	23.17	-179.52	-225.50	-194.00	275.93	221.76	54.18	5.093	
8,900.00	8,887.14	8,900.07	8,886.14	31.55	23.25	-179.53	-225.50	-194.00	291.87	237.44	54.42	5.363	
8,950.00	8,932.95	8,945.74	8,931.95	31.71	23.33	-179.55	-225.50	-194.00	311.86	257.20	54.66	5.705	
9,000.00	8,976.84	8,989.63	8,975.84	31.87	23.41	-179.56	-225.50	-194.00	335.78	280.89	54.89	6.117	
9,050.00	9,018.48	9,031.27	9,017.48	32.02	23.48	-179.57	-225.50	-194.00	363.43	308.33	55.10	6.596	
9,100.00	9,057.55	9,070.34	9,056.55	32.17	23.55	-179.57	-225.50	-194.00	394.61	339.31	55.30	7.136	
9,150.00	9,093.75	9,106.55	9,092.75	32.32	23.62	-179.57	-225.50	-194.00	429.07	373.59	55.47	7.735	
9,200.00	9,126.82	9,139.61	9,125.82	32.48	23.68	-179.57	-225.50	-194.00	466.55	410.92	55.63	8.387	
9,250.00	9,156.49	9,169.28	9,155.49	32.65	23.73	-179.55	-225.50	-194.00	506.78	451.01	55.77	9.087	
9,300.00	9,182.54	9,204.67	9,181.54	32.83	23.80	-179.52	-225.50	-194.00	549.43	493.53	55.90	9.829	
9,350.00	9,204.77	9,217.57	9,203.77	33.01	23.82	-179.47	-225.50	-194.00	594.20	538.22	55.98	10.615	
9,400.00	9,223.02	9,235.82	9,222.02	33.21	23.86	-179.39	-225.50	-194.00	640.73	584.68	56.06	11.430	
9,450.00	9,237.15	9,249.94	9,236.15	33.42	23.88	-179.23	-225.50	-194.00	688.68	632.57	56.11	12.273	
9,489.13	9,245.25	9,258.05	9,244.25	33.58	23.90	-179.00	-225.50	-194.00	726.96	670.81	56.14	12.948	
9,500.00	9,247.14	9,259.94	9,246.14	33.63	23.90	-179.01	-225.50	-194.00	737.66	681.51	56.15	13.137	
9,514.13	9,249.59	9,262.39	9,248.59	33.69	23.91	-179.03	-225.50	-194.00	751.58	695.42	56.16	13.383	
9,550.00	9,255.16	9,267.95	9,254.16	33.86	23.92	-178.82	-225.50	-194.00	787.01	730.83	56.18	14.008	
9,600.00	9,260.69	9,273.48	9,259.69	34.09	23.93	-178.22	-225.50	-194.00	836.70	780.49	56.20	14.887	
9,650.00	9,263.61	9,276.40	9,262.61	34.34	23.93	-175.61	-225.50	-194.00	886.60	830.39	56.22	15.772	
9,680.83	9,264.10	9,276.90	9,263.10	34.50	23.93	-89.40	-225.50	-194.00	917.42	861.20	56.22	16.319	
9,700.00	9,264.10	9,276.90	9,263.10	34.60	23.93	-89.38	-225.50	-194.00	936.60	880.38	56.22	16.659	
9,800.00	9,264.10	9,276.89	9,263.10	35.17	23.93	-89.32	-225.50	-194.00	1,036.60	980.37	56.23	18.435	
9,900.00	9,264.10	9,276.89	9,263.10	35.80	23.93	-89.25	-225.50	-194.00	1,136.60	1,080.36	56.24	20.209	
10,000.00	9,264.09	9,276.89	9,263.09	36.50	23.93	-89.19	-225.50	-194.00	1,236.60	1,180.35	56.25	21.983	
10,100.00	9,264.09	9,276.89	9,263.09	37.26	23.93	-89.12	-225.50	-194.00	1,336.60	1,280.33	56.26	23.756	
10,200.00	9,264.09	9,276.88	9,263.09	38.08	23.93	-89.05	-225.50	-194.00	1,436.60	1,380.32	56.28	25.527	
10,300.00	9,264.09	9,276.88	9,263.09	38.95	23.93	-88.99	-225.50	-194.00	1,536.60	1,480.31	56.29	27.297	
10,400.00	9,264.08	9,276.88	9,263.08	39.87	23.93	-88.92	-225.50	-194.00	1,636.60	1,580.29	56.31	29.065	

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 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Reference Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	021H	**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 Biggers Fed - 201H - OH - Prelim Plan A — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD - OWSG, 5420-MWD - OWSG, 12755-MWD - OWSG — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,500.00	9,264.08	9,276.88	9,263.08	40.83	23.93	-88.86	-225.50	-194.00	1,736.60	1,680.27	56.32	30.833	
10,600.00	9,264.08	9,276.87	9,263.08	41.84	23.93	-88.79	-225.50	-194.00	1,836.60	1,780.26	56.34	32.598	
10,700.00	9,264.08	9,276.87	9,263.08	42.90	23.93	-88.72	-225.50	-194.00	1,936.60	1,880.24	56.36	34.362	
10,800.00	9,264.07	9,276.87	9,263.07	43.98	23.93	-88.66	-225.50	-194.00	2,036.60	1,980.22	56.38	36.124	
10,900.00	9,264.07	9,276.87	9,263.07	45.11	23.93	-88.59	-225.50	-194.00	2,136.60	2,080.20	56.40	37.884	
11,000.00	9,264.07	9,276.86	9,263.07	46.26	23.93	-88.53	-225.50	-194.00	2,236.60	2,180.18	56.42	39.642	
11,100.00	9,264.07	9,276.86	9,263.07	47.45	23.93	-88.46	-225.50	-194.00	2,336.60	2,280.16	56.44	41.399	
11,200.00	9,264.06	9,276.86	9,263.06	48.66	23.93	-88.40	-225.50	-194.00	2,436.60	2,380.13	56.46	43.153	
11,300.00	9,264.06	9,276.86	9,263.06	49.90	23.93	-88.33	-225.50	-194.00	2,536.60	2,480.11	56.49	44.905	
11,400.00	9,264.06	9,276.85	9,263.06	51.16	23.93	-88.26	-225.50	-194.00	2,636.60	2,580.08	56.51	46.655	
11,500.00	9,264.06	9,276.85	9,263.06	52.44	23.93	-88.20	-225.50	-194.00	2,736.60	2,680.06	56.54	48.402	
11,600.00	9,264.05	9,276.85	9,263.05	53.75	23.93	-88.13	-225.50	-194.00	2,836.60	2,780.03	56.57	50.147	
11,700.00	9,264.05	9,276.85	9,263.05	55.07	23.93	-88.07	-225.50	-194.00	2,936.60	2,880.00	56.59	51.889	
11,800.00	9,264.05	9,276.84	9,263.05	56.41	23.93	-88.00	-225.50	-194.00	3,036.60	2,979.97	56.62	53.629	
11,900.00	9,264.05	9,276.84	9,263.05	57.77	23.93	-87.93	-225.50	-194.00	3,136.60	3,079.94	56.65	55.366	
12,000.00	9,264.04	9,276.84	9,263.04	59.14	23.93	-87.87	-225.50	-194.00	3,236.60	3,179.91	56.68	57.100	
12,100.00	9,264.04	15,621.24	12,526.04	60.53	59.10	180.00	3,111.07	-220.73	3,263.00	3,199.52	63.48	51.401	
12,200.00	9,264.04	15,721.24	12,526.04	61.93	60.51	180.00	3,211.07	-221.60	3,263.00	3,198.36	64.64	50.482	
12,300.00	9,264.04	15,821.24	12,526.04	63.35	61.93	180.00	3,311.06	-222.48	3,263.00	3,197.19	65.81	49.584	
12,400.00	9,264.03	15,921.24	12,526.03	64.77	63.36	180.00	3,411.06	-223.36	3,263.00	3,196.00	67.00	48.705	
12,500.00	9,264.03	16,021.24	12,526.03	66.21	64.80	180.00	3,511.06	-224.24	3,263.00	3,194.80	68.20	47.846	
12,600.00	9,264.03	16,121.24	12,526.03	67.65	66.26	180.00	3,611.05	-225.12	3,263.00	3,193.59	69.41	47.008	
12,700.00	9,264.03	16,221.24	12,526.03	69.11	67.72	180.00	3,711.05	-225.99	3,263.00	3,192.36	70.64	46.190	
12,800.00	9,264.02	16,321.24	12,526.02	70.57	69.19	180.00	3,811.04	-226.87	3,263.00	3,191.11	71.89	45.391	
12,900.00	9,264.02	16,421.24	12,526.02	72.05	70.67	180.00	3,911.04	-227.75	3,263.00	3,189.86	73.14	44.612	
13,000.00	9,264.02	16,521.24	12,526.02	73.53	72.16	180.00	4,011.04	-228.63	3,263.00	3,188.59	74.41	43.853	
13,100.00	9,264.02	16,621.24	12,526.02	75.02	73.65	180.00	4,111.03	-229.51	3,263.00	3,187.31	75.69	43.113	
13,200.00	9,264.01	16,721.24	12,526.01	76.51	75.16	180.00	4,211.03	-230.38	3,263.00	3,186.03	76.97	42.391	
13,300.00	9,264.01	16,821.24	12,526.01	78.02	76.66	180.00	4,311.02	-231.26	3,263.00	3,184.73	78.27	41.688	
13,400.00	9,264.01	16,921.24	12,526.01	79.52	78.18	180.00	4,411.02	-232.14	3,263.00	3,183.42	79.58	41.003	
13,500.00	9,264.01	17,021.24	12,526.01	81.04	79.70	180.00	4,511.02	-233.02	3,263.00	3,182.10	80.90	40.336	
13,600.00	9,264.00	17,121.24	12,526.00	82.56	81.23	180.00	4,611.01	-233.89	3,263.00	3,180.78	82.22	39.686	
13,700.00	9,264.00	17,221.24	12,526.00	84.08	82.72	180.00	4,711.01	-234.77	3,263.00	3,179.51	83.49	39.084	
13,726.07	9,264.00	17,247.31	12,526.00	84.48	83.07	-180.00	4,737.08	-235.00	3,263.00	3,179.25	83.75	38.959	

Pro Directional

Anticollision Report

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Reference Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	021H	**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 Biggers Fed - 202H - OH - Prelim Plan A — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD - OWSG — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	10.00	-10.00	0.00	0.01	86.43	99.00	1,587.00	1,590.08				
100.00	100.00	110.00	90.00	0.13	0.16	86.43	99.00	1,587.00	1,590.08	1,589.79	0.29	5,476.210	
200.00	200.00	210.00	190.00	0.49	0.52	86.43	99.00	1,587.00	1,590.08	1,589.08	1.01	1,578.553	
300.00	300.00	310.00	290.00	0.84	0.88	86.43	99.00	1,587.00	1,590.08	1,588.36	1.72	922.190	
400.00	400.00	410.00	390.00	1.20	1.24	86.43	99.00	1,587.00	1,590.08	1,587.64	2.44	651.356	
500.00	500.00	510.00	490.00	1.56	1.60	86.43	99.00	1,587.00	1,590.08	1,586.93	3.16	503.489	
600.00	600.00	610.00	590.00	1.92	1.96	86.43	99.00	1,587.00	1,590.08	1,586.21	3.88	410.336	
700.00	700.00	710.00	690.00	2.28	2.31	86.43	99.00	1,587.00	1,590.08	1,585.49	4.59	346.271	
800.00	800.00	810.00	790.00	2.64	2.67	86.43	99.00	1,587.00	1,590.08	1,584.78	5.31	299.509	
900.00	900.00	910.00	890.00	3.00	3.03	86.43	99.00	1,587.00	1,590.08	1,584.06	6.03	263.875	
1,000.00	1,000.00	1,010.00	990.00	3.35	3.39	86.43	99.00	1,587.00	1,590.08	1,583.34	6.74	235.818	CC, ES
1,100.00	1,099.99	1,089.99	1,089.99	3.70	3.68	168.22	99.00	1,587.00	1,591.37	1,583.99	7.38	215.614	
1,200.00	1,199.91	1,189.91	1,189.91	4.05	4.03	168.24	99.00	1,587.00	1,595.21	1,587.12	8.08	197.306	
1,300.00	1,299.69	1,289.69	1,289.69	4.40	4.39	168.27	99.00	1,587.00	1,601.61	1,592.82	8.79	182.184	
1,333.33	1,332.91	1,322.91	1,322.91	4.52	4.51	168.28	99.00	1,587.00	1,604.32	1,595.29	9.03	177.711	
1,400.00	1,399.32	1,389.32	1,389.32	4.76	4.75	168.32	99.00	1,587.00	1,610.01	1,600.51	9.50	169.503	
1,500.00	1,498.94	1,488.94	1,488.94	5.12	5.11	168.38	99.00	1,587.00	1,618.54	1,608.34	10.21	158.596	
1,600.00	1,598.56	1,588.56	1,588.56	5.49	5.46	168.45	99.00	1,587.00	1,627.08	1,616.17	10.91	149.079	
1,700.00	1,698.18	1,688.18	1,688.18	5.85	5.82	168.51	99.00	1,587.00	1,635.63	1,624.00	11.62	140.706	
1,800.00	1,797.80	1,787.80	1,787.80	6.22	6.18	168.57	99.00	1,587.00	1,644.17	1,631.83	12.34	133.285	
1,900.00	1,897.42	1,887.42	1,887.42	6.59	6.53	168.63	99.00	1,587.00	1,652.71	1,639.67	13.05	126.665	
2,000.00	1,997.04	1,987.04	1,987.04	6.96	6.89	168.69	99.00	1,587.00	1,661.26	1,647.50	13.76	120.722	
2,100.00	2,096.66	2,086.66	2,086.66	7.34	7.25	168.75	99.00	1,587.00	1,669.81	1,655.33	14.47	115.360	
2,200.00	2,196.28	2,186.28	2,186.28	7.71	7.61	168.80	99.00	1,587.00	1,678.36	1,663.17	15.19	110.498	
2,300.00	2,295.90	2,285.90	2,285.90	8.09	7.96	168.86	99.00	1,587.00	1,686.91	1,671.01	15.90	106.069	
2,400.00	2,395.52	2,385.52	2,385.52	8.46	8.32	168.92	99.00	1,587.00	1,695.46	1,678.84	16.62	102.019	
2,500.00	2,495.14	2,485.14	2,485.14	8.84	8.68	168.97	99.00	1,587.00	1,704.02	1,686.68	17.33	98.301	
2,600.00	2,594.76	2,584.76	2,584.76	9.22	9.03	169.03	99.00	1,587.00	1,712.58	1,694.52	18.05	94.876	
2,700.00	2,694.38	2,684.38	2,684.38	9.60	9.39	169.09	99.00	1,587.00	1,721.13	1,702.37	18.77	91.711	
2,800.00	2,794.00	2,784.00	2,784.00	9.97	9.75	169.14	99.00	1,587.00	1,729.69	1,710.21	19.48	88.777	
2,900.00	2,893.62	2,883.62	2,883.62	10.35	10.11	169.19	99.00	1,587.00	1,738.25	1,718.05	20.20	86.051	
3,000.00	2,993.23	2,983.23	2,983.23	10.73	10.46	169.25	99.00	1,587.00	1,746.82	1,725.90	20.92	83.511	
3,100.00	3,092.85	3,082.85	3,082.85	11.11	10.82	169.30	99.00	1,587.00	1,755.38	1,733.75	21.63	81.138	
3,200.00	3,192.47	3,182.47	3,182.47	11.49	11.18	169.35	99.00	1,587.00	1,763.95	1,741.60	22.35	78.917	
3,248.75	3,241.04	3,231.04	3,231.04	11.68	11.35	169.38	99.00	1,587.00	1,768.12	1,745.42	22.70	77.885	
3,300.00	3,292.12	3,282.12	3,282.12	11.87	11.53	169.41	99.00	1,587.00	1,772.18	1,749.11	23.07	76.821	
3,400.00	3,391.93	3,381.93	3,381.93	12.24	11.89	169.47	99.00	1,587.00	1,778.15	1,754.36	23.79	74.759	
3,500.00	3,491.87	3,481.87	3,481.87	12.60	12.25	169.50	99.00	1,587.00	1,781.55	1,757.05	24.50	72.716	
3,582.09	3,573.95	3,563.95	3,563.95	12.88	12.54	87.72	99.00	1,587.00	1,782.41	1,757.33	25.08	71.061	
3,600.00	3,591.87	3,581.87	3,581.87	12.95	12.61	87.72	99.00	1,587.00	1,782.41	1,757.21	25.21	70.704	
3,700.00	3,691.87	3,681.87	3,681.87	13.29	12.97	87.72	99.00	1,587.00	1,782.41	1,756.50	25.92	68.777	
3,800.00	3,791.87	3,781.87	3,781.87	13.63	13.33	87.72	99.00	1,587.00	1,782.41	1,755.79	26.62	66.950	
3,900.00	3,891.87	3,881.87	3,881.87	13.97	13.68	87.72	99.00	1,587.00	1,782.41	1,755.08	27.33	65.217	
4,000.00	3,991.87	3,981.87	3,981.87	14.32	14.04	87.72	99.00	1,587.00	1,782.41	1,754.38	28.04	63.570	
4,100.00	4,091.87	4,081.87	4,081.87	14.66	14.40	87.72	99.00	1,587.00	1,782.41	1,753.67	28.75	62.003	
4,200.00	4,191.87	4,181.87	4,181.87	15.01	14.76	87.72	99.00	1,587.00	1,782.41	1,752.96	29.46	60.511	
4,300.00	4,291.87	4,281.87	4,281.87	15.35	15.12	87.72	99.00	1,587.00	1,782.41	1,752.25	30.17	59.089	
4,400.00	4,391.87	4,381.87	4,381.87	15.70	15.48	87.72	99.00	1,587.00	1,782.41	1,751.54	30.87	57.730	
4,500.00	4,491.87	4,481.87	4,481.87	16.04	15.83	87.72	99.00	1,587.00	1,782.41	1,750.83	31.58	56.433	
4,600.00	4,591.87	4,581.87	4,581.87	16.39	16.19	87.72	99.00	1,587.00	1,782.41	1,750.12	32.29	55.192	
4,700.00	4,691.87	4,681.87	4,681.87	16.74	16.55	87.72	99.00	1,587.00	1,782.41	1,749.41	33.01	54.004	
4,800.00	4,791.87	4,781.87	4,781.87	17.09	16.91	87.72	99.00	1,587.00	1,782.41	1,748.70	33.72	52.865	

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 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Reference Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	021H	**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 Biggers Fed - 202H - OH - Prelim Plan A — Offset Site Error: 0.00 usft

Survey Program: 0-MWD - OWSG — Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,900.00	4,891.87	4,881.20	4,881.19	17.44	17.25	87.74	98.14	1,587.05	1,782.43	1,748.02	34.41	51.801	
5,000.00	4,991.87	4,980.27	4,980.21	17.79	17.57	87.85	94.75	1,587.24	1,782.49	1,747.41	35.08	50.807	
5,100.00	5,091.87	5,079.11	5,078.86	18.14	17.89	88.04	88.82	1,587.58	1,782.62	1,746.87	35.75	49.857	
5,200.00	5,191.87	5,178.14	5,177.55	18.49	18.21	88.31	80.59	1,588.05	1,782.83	1,746.41	36.43	48.942	
5,300.00	5,291.87	5,277.76	5,276.79	18.84	18.54	88.59	71.92	1,588.55	1,783.10	1,745.99	37.11	48.055	
5,400.00	5,391.87	5,377.38	5,376.03	19.19	18.86	88.87	63.25	1,589.05	1,783.40	1,745.62	37.79	47.199	
5,500.00	5,491.87	5,477.00	5,475.27	19.54	19.19	89.15	54.58	1,589.54	1,783.75	1,745.28	38.47	46.370	
5,600.00	5,591.87	5,576.62	5,574.51	19.89	19.52	89.42	45.92	1,590.04	1,784.14	1,744.99	39.15	45.570	
5,700.00	5,691.87	5,676.24	5,673.75	20.24	19.86	89.70	37.25	1,590.53	1,784.58	1,744.74	39.84	44.795	
5,800.00	5,791.87	5,775.86	5,772.99	20.59	20.19	89.98	28.58	1,591.03	1,785.05	1,744.53	40.53	44.046	
5,900.00	5,891.87	5,875.48	5,872.23	20.94	20.53	90.26	19.91	1,591.53	1,785.57	1,744.35	41.22	43.321	
6,000.00	5,991.87	5,975.10	5,971.47	21.29	20.87	90.54	11.24	1,592.02	1,786.13	1,744.22	41.91	42.618	
6,100.00	6,091.87	6,074.72	6,070.71	21.65	21.21	90.82	2.58	1,592.52	1,786.73	1,744.13	42.60	41.938	
6,200.00	6,191.87	6,174.34	6,169.95	22.00	21.55	91.09	-6.09	1,593.01	1,787.38	1,744.08	43.30	41.279	
6,300.00	6,291.87	6,273.96	6,269.20	22.35	21.89	91.37	-14.76	1,593.51	1,788.07	1,744.07	44.00	40.641	
6,400.00	6,391.87	6,373.58	6,368.44	22.70	22.23	91.65	-23.43	1,594.01	1,788.80	1,744.10	44.70	40.022	
6,500.00	6,491.87	6,473.20	6,467.68	23.06	22.58	91.92	-32.10	1,594.50	1,789.57	1,744.17	45.40	39.421	
6,600.00	6,591.87	6,572.82	6,566.92	23.41	22.93	92.20	-40.77	1,595.00	1,790.38	1,744.28	46.10	38.839	
6,700.00	6,691.87	6,672.44	6,666.16	23.76	23.28	92.48	-49.43	1,595.49	1,791.24	1,744.44	46.80	38.274	
6,800.00	6,791.87	6,772.06	6,765.40	24.12	23.62	92.75	-58.10	1,595.99	1,792.14	1,744.63	47.50	37.726	
6,900.00	6,891.87	6,871.68	6,864.64	24.47	23.97	93.03	-66.77	1,596.49	1,793.08	1,744.87	48.21	37.194	
7,000.00	6,991.87	6,971.29	6,963.88	24.82	24.33	93.31	-75.44	1,596.98	1,794.06	1,745.14	48.92	36.677	
7,100.00	7,091.87	7,070.91	7,063.12	25.18	24.68	93.58	-84.11	1,597.48	1,795.08	1,745.46	49.62	36.175	
7,200.00	7,191.87	7,170.53	7,162.36	25.53	25.03	93.86	-92.78	1,597.98	1,796.15	1,745.82	50.33	35.687	
7,300.00	7,291.87	7,270.15	7,261.60	25.89	25.39	94.13	-101.44	1,598.47	1,797.25	1,746.21	51.04	35.212	
7,400.00	7,391.87	7,369.77	7,360.84	26.24	25.74	94.40	-110.11	1,598.97	1,798.40	1,746.65	51.75	34.751	
7,500.00	7,491.87	7,469.39	7,460.08	26.59	26.10	94.68	-118.78	1,599.46	1,799.59	1,747.13	52.46	34.303	
7,600.00	7,591.87	7,569.01	7,559.32	26.95	26.45	94.95	-127.45	1,599.96	1,800.82	1,747.65	53.17	33.867	
7,700.00	7,691.87	7,668.63	7,658.56	27.30	26.81	95.23	-136.12	1,600.46	1,802.10	1,748.21	53.89	33.443	
7,800.00	7,791.87	7,768.25	7,757.80	27.66	27.17	95.50	-144.78	1,600.95	1,803.41	1,748.81	54.60	33.030	
7,900.00	7,891.87	7,867.87	7,857.04	28.01	27.53	95.77	-153.45	1,601.45	1,804.76	1,749.45	55.31	32.628	
8,000.00	7,991.87	7,967.49	7,956.28	28.37	27.89	96.04	-162.12	1,601.94	1,806.16	1,750.13	56.03	32.236	
8,100.00	8,091.87	8,067.11	8,055.52	28.72	28.25	96.31	-170.79	1,602.44	1,807.60	1,750.85	56.74	31.855	
8,200.00	8,191.87	8,166.73	8,154.76	29.08	28.61	96.59	-179.46	1,602.94	1,809.07	1,751.61	57.46	31.484	
8,300.00	8,291.87	8,266.35	8,254.00	29.43	28.97	96.86	-188.13	1,603.43	1,810.59	1,752.42	58.18	31.122	
8,400.00	8,391.87	8,365.97	8,353.24	29.79	29.33	97.13	-196.79	1,603.93	1,812.15	1,753.26	58.90	30.769	
8,500.00	8,491.87	8,465.59	8,452.48	30.14	29.70	97.40	-205.46	1,604.42	1,813.75	1,754.14	59.61	30.425	
8,600.00	8,591.87	8,565.21	8,551.72	30.50	30.06	97.67	-214.13	1,604.92	1,815.39	1,755.06	60.33	30.090	
8,689.13	8,681.00	8,657.95	8,644.13	30.82	30.40	97.91	-221.96	1,605.37	1,816.85	1,755.86	60.99	29.790	
8,700.00	8,691.86	8,669.88	8,656.03	30.85	30.44	98.42	-222.85	1,605.42	1,817.02	1,755.95	61.07	29.753	
8,750.00	8,741.75	8,724.57	8,710.61	31.03	30.64	98.53	-226.44	1,605.62	1,818.13	1,756.68	61.45	29.589	
8,800.00	8,791.18	8,778.73	8,764.69	31.21	30.83	98.70	-229.23	1,605.78	1,819.78	1,757.97	61.82	29.438	
8,850.00	8,839.76	8,832.12	8,818.04	31.38	31.02	98.93	-231.23	1,605.90	1,822.03	1,759.86	62.18	29.303	
8,900.00	8,887.14	8,884.49	8,870.40	31.55	31.20	99.20	-232.46	1,605.97	1,824.95	1,762.42	62.53	29.184	
8,950.00	8,932.95	8,935.60	8,921.51	31.71	31.38	99.48	-232.98	1,606.00	1,828.61	1,765.73	62.88	29.083	
9,000.00	8,976.84	8,980.93	8,966.84	31.87	31.54	99.70	-233.00	1,606.00	1,833.15	1,769.95	63.19	29.008	
9,050.00	9,018.48	9,022.57	9,008.48	32.02	31.68	99.86	-233.00	1,606.00	1,838.76	1,775.27	63.50	28.959	
9,100.00	9,057.55	9,061.64	9,047.55	32.17	31.81	99.94	-233.00	1,606.00	1,845.57	1,781.78	63.79	28.934	
9,150.00	9,093.75	9,102.15	9,083.75	32.32	31.95	99.90	-233.00	1,606.00	1,853.67	1,789.59	64.08	28.928 SF	
9,200.00	9,126.82	9,130.91	9,116.82	32.48	32.05	99.71	-233.00	1,606.00	1,863.17	1,798.84	64.33	28.963	
9,250.00	9,156.49	9,160.58	9,146.49	32.65	32.16	99.34	-233.00	1,606.00	1,874.15	1,809.57	64.58	29.020	
9,300.00	9,182.54	9,186.64	9,172.54	32.83	32.25	98.76	-233.00	1,606.00	1,886.66	1,821.84	64.82	29.106	

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 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Reference Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	021H	**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 Biggers Fed - 202H - OH - Prelim Plan A — Offset Site Error: 0.00 usft

Survey Program: 0-MWD - OWSG — Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,350.00	9,204.77	9,208.87	9,194.77	33.01	32.32	97.93	-233.00	1,606.00	1,900.72	1,835.68	65.04	29.222	
9,400.00	9,223.02	9,227.12	9,213.02	33.21	32.38	96.83	-233.00	1,606.00	1,916.34	1,851.09	65.25	29.369	
9,450.00	9,237.15	9,241.24	9,227.15	33.42	32.43	95.44	-233.00	1,606.00	1,933.48	1,868.04	65.44	29.546	
9,489.13	9,245.25	9,249.35	9,235.25	33.58	32.46	94.14	-233.00	1,606.00	1,947.90	1,882.32	65.57	29.705	
9,500.00	9,247.14	9,251.24	9,237.14	33.63	32.47	94.20	-233.00	1,606.00	1,952.04	1,886.43	65.61	29.752	
9,514.13	9,249.59	9,253.69	9,239.59	33.69	32.48	94.28	-233.00	1,606.00	1,957.51	1,891.85	65.66	29.814	
9,550.00	9,255.16	9,259.25	9,245.16	33.86	32.50	93.52	-233.00	1,606.00	1,971.80	1,906.03	65.78	29.978	
9,600.00	9,260.69	9,264.78	9,250.69	34.09	32.51	92.31	-233.00	1,606.00	1,992.73	1,926.80	65.93	30.224	
9,650.00	9,263.61	9,267.70	9,253.61	34.34	32.53	90.94	-233.00	1,606.00	2,014.77	1,948.69	66.08	30.490	
9,680.83	9,264.10	9,268.20	9,254.10	34.50	32.53	90.00	-233.00	1,606.00	2,028.88	1,962.71	66.16	30.664	
9,700.00	9,264.10	9,268.20	9,254.10	34.60	32.53	90.00	-233.00	1,606.00	2,037.84	1,971.62	66.22	30.775	
9,800.00	9,264.10	9,268.19	9,254.10	35.17	32.53	90.00	-233.00	1,606.00	2,086.80	2,020.30	66.50	31.382	
9,900.00	9,264.10	9,268.19	9,254.10	35.80	32.53	90.00	-233.00	1,606.00	2,139.32	2,072.53	66.79	32.031	
10,000.00	9,264.09	9,268.19	9,254.09	36.50	32.53	90.00	-233.00	1,606.00	2,195.14	2,128.05	67.09	32.719	
10,100.00	9,264.09	9,268.19	9,254.09	37.26	32.53	90.00	-233.00	1,606.00	2,254.01	2,186.62	67.39	33.446	
10,200.00	9,264.09	9,268.18	9,254.09	38.08	32.53	90.00	-233.00	1,606.00	2,315.71	2,248.02	67.69	34.209	
10,300.00	9,264.09	9,268.18	9,254.09	38.95	32.53	90.00	-233.00	1,606.00	2,380.02	2,312.03	67.99	35.006	
10,400.00	9,264.08	9,268.18	9,254.08	39.87	32.53	90.00	-233.00	1,606.00	2,446.72	2,378.44	68.28	35.835	
10,500.00	9,264.08	9,268.18	9,254.08	40.83	32.53	90.00	-233.00	1,606.00	2,515.63	2,447.07	68.56	36.694	
10,600.00	9,264.08	9,268.17	9,254.08	41.84	32.53	90.00	-233.00	1,606.00	2,586.57	2,517.74	68.83	37.580	
10,700.00	9,264.08	9,268.17	9,254.08	42.90	32.53	90.00	-233.00	1,606.00	2,659.38	2,590.29	69.09	38.492	
10,800.00	9,264.07	9,268.17	9,254.07	43.98	32.53	90.00	-233.00	1,606.00	2,733.91	2,664.57	69.34	39.429	
10,900.00	9,264.07	9,268.17	9,254.07	45.11	32.53	90.00	-233.00	1,606.00	2,810.02	2,740.44	69.58	40.387	
11,000.00	9,264.07	9,268.16	9,254.07	46.26	32.53	90.00	-233.00	1,606.00	2,887.59	2,817.78	69.81	41.366	
11,100.00	9,264.07	9,268.16	9,254.07	47.45	32.53	90.00	-233.00	1,606.00	2,966.50	2,896.47	70.02	42.364	
11,200.00	9,264.06	9,268.16	9,254.06	48.66	32.53	90.00	-233.00	1,606.00	3,046.65	2,976.41	70.23	43.379	
11,300.00	9,264.06	9,268.16	9,254.06	49.90	32.53	90.00	-233.00	1,606.00	3,127.94	3,057.51	70.43	44.411	
11,400.00	9,264.06	9,268.15	9,254.06	51.16	32.53	90.00	-233.00	1,606.00	3,210.29	3,139.67	70.62	45.458	
11,500.00	9,264.06	9,268.15	9,254.06	52.44	32.53	90.00	-233.00	1,606.00	3,293.62	3,222.81	70.80	46.518	
11,600.00	9,264.05	9,268.15	9,254.05	53.75	32.53	90.00	-233.00	1,606.00	3,377.85	3,306.87	70.98	47.592	
11,700.00	9,264.05	9,268.15	9,254.05	55.07	32.53	90.00	-233.00	1,606.00	3,462.92	3,391.78	71.14	48.677	
11,800.00	9,264.05	9,268.14	9,254.05	56.41	32.53	90.00	-233.00	1,606.00	3,548.77	3,477.47	71.30	49.773	
11,900.00	9,264.05	9,268.14	9,254.05	57.77	32.53	90.00	-233.00	1,606.00	3,635.34	3,563.89	71.45	50.878	
12,000.00	9,264.04	9,268.14	9,254.04	59.14	32.53	90.00	-233.00	1,606.00	3,722.59	3,650.99	71.60	51.994	
12,100.00	9,264.04	9,268.14	9,254.04	60.53	32.53	90.00	-233.00	1,606.00	3,810.46	3,738.73	71.74	53.117	
12,200.00	9,264.04	15,835.77	12,617.04	61.93	69.12	151.84	3,226.80	1,578.30	3,814.46	3,727.95	86.51	44.093	
12,300.00	9,264.04	15,935.77	12,617.04	63.35	70.40	151.84	3,326.80	1,577.42	3,814.45	3,726.30	88.15	43.270	
12,400.00	9,264.03	16,035.77	12,617.03	64.77	71.70	151.84	3,426.79	1,576.55	3,814.45	3,724.64	89.82	42.469	
12,500.00	9,264.03	16,135.77	12,617.03	66.21	73.02	151.84	3,526.79	1,575.68	3,814.45	3,722.95	91.50	41.690	
12,600.00	9,264.03	16,235.77	12,617.03	67.65	74.35	151.84	3,626.79	1,574.80	3,814.45	3,721.26	93.19	40.931	
12,700.00	9,264.03	16,335.77	12,617.03	69.11	75.69	151.84	3,726.78	1,573.93	3,814.45	3,719.54	94.90	40.193	
12,800.00	9,264.02	16,435.77	12,617.02	70.57	77.05	151.84	3,826.78	1,573.05	3,814.44	3,717.82	96.63	39.475	
12,900.00	9,264.02	16,535.77	12,617.02	72.05	78.41	151.84	3,926.78	1,572.18	3,814.44	3,716.08	98.37	38.777	
13,000.00	9,264.02	16,635.77	12,617.02	73.53	79.79	151.84	4,026.77	1,571.30	3,814.44	3,714.32	100.12	38.099	
13,100.00	9,264.02	16,735.77	12,617.02	75.02	81.18	151.84	4,126.77	1,570.43	3,814.44	3,712.55	101.89	37.439	
13,200.00	9,264.01	16,835.77	12,617.01	76.51	82.58	151.84	4,226.76	1,569.56	3,814.44	3,710.78	103.66	36.797	
13,300.00	9,264.01	16,935.77	12,617.01	78.02	83.99	151.84	4,326.76	1,568.68	3,814.44	3,708.99	105.45	36.173	
13,400.00	9,264.01	17,035.77	12,617.01	79.52	85.40	151.84	4,426.76	1,567.81	3,814.43	3,707.19	107.25	35.566	
13,500.00	9,264.01	17,135.77	12,617.01	81.04	86.83	151.84	4,526.75	1,566.93	3,814.43	3,705.38	109.06	34.976	
13,600.00	9,264.00	17,235.77	12,617.00	82.56	88.26	151.84	4,626.75	1,566.06	3,814.43	3,703.55	110.88	34.403	
13,700.00	9,264.00	17,335.77	12,617.00	84.08	89.64	151.84	4,726.75	1,565.19	3,814.43	3,701.82	112.61	33.873	
13,726.07	9,264.00	17,361.85	12,617.00	84.48	89.97	151.84	4,752.82	1,564.96	3,814.43	3,701.41	113.02	33.749	

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

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Reference Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	021H	**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

Pro Directional

Anticollision Report

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Reference Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	021H	**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 Biggers Fed - 215H - OH - Prelim Plan A — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD - OWSG — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	10.00	-10.00	0.00	0.01	86.36	99.00	1,557.00	1,560.14				
100.00	100.00	110.00	90.00	0.13	0.16	86.36	99.00	1,557.00	1,560.14	1,559.85	0.29	5,373.095	
200.00	200.00	210.00	190.00	0.49	0.52	86.36	99.00	1,557.00	1,560.14	1,559.14	1.01	1,548.829	
300.00	300.00	310.00	290.00	0.84	0.88	86.36	99.00	1,557.00	1,560.14	1,558.42	1.72	904.826	
400.00	400.00	410.00	390.00	1.20	1.24	86.36	99.00	1,557.00	1,560.14	1,557.70	2.44	639.091	
500.00	500.00	510.00	490.00	1.56	1.60	86.36	99.00	1,557.00	1,560.14	1,556.99	3.16	494.008	
600.00	600.00	610.00	590.00	1.92	1.96	86.36	99.00	1,557.00	1,560.14	1,556.27	3.88	402.610	
700.00	700.00	710.00	690.00	2.28	2.31	86.36	99.00	1,557.00	1,560.14	1,555.55	4.59	339.751	
800.00	800.00	810.00	790.00	2.64	2.67	86.36	99.00	1,557.00	1,560.14	1,554.84	5.31	293.870	
900.00	900.00	910.00	890.00	3.00	3.03	86.36	99.00	1,557.00	1,560.14	1,554.12	6.03	258.906	
1,000.00	1,000.00	990.00	990.00	3.35	3.32	86.36	99.00	1,557.00	1,560.14	1,553.47	6.67	233.864	
1,100.00	1,099.99	1,147.38	1,147.34	3.70	3.86	168.20	97.97	1,554.35	1,559.77	1,552.21	7.56	206.297	
1,200.00	1,199.91	1,310.95	1,310.61	4.05	4.42	168.36	94.43	1,545.21	1,557.90	1,549.45	8.45	184.410	
1,300.00	1,299.69	1,474.10	1,472.88	4.40	5.00	168.64	88.38	1,529.60	1,554.53	1,545.19	9.33	166.569	
1,333.33	1,332.91	1,504.48	1,503.04	4.52	5.11	168.70	87.04	1,526.16	1,553.36	1,543.81	9.56	162.552	
1,400.00	1,399.32	1,571.02	1,569.08	4.76	5.36	168.84	84.11	1,518.60	1,551.33	1,541.30	10.02	154.790	
1,500.00	1,498.94	1,670.82	1,668.14	5.12	5.73	169.04	79.71	1,507.26	1,548.28	1,537.56	10.73	144.342	
1,600.00	1,598.56	1,770.62	1,767.20	5.49	6.10	169.24	75.31	1,495.92	1,545.26	1,533.82	11.44	135.134	
1,700.00	1,698.18	1,870.42	1,866.26	5.85	6.49	169.45	70.92	1,484.58	1,542.26	1,530.11	12.15	126.967	
1,800.00	1,797.80	1,970.23	1,965.31	6.22	6.87	169.66	66.52	1,473.24	1,539.27	1,526.41	12.86	119.677	
1,900.00	1,897.42	2,070.03	2,064.37	6.59	7.25	169.86	62.12	1,461.90	1,536.31	1,522.73	13.58	113.136	
2,000.00	1,997.04	2,169.83	2,163.43	6.96	7.64	170.07	57.72	1,450.56	1,533.37	1,519.07	14.30	107.236	
2,100.00	2,096.66	2,269.63	2,262.49	7.34	8.03	170.28	53.33	1,439.22	1,530.44	1,515.42	15.02	101.890	
2,200.00	2,196.28	2,369.44	2,361.55	7.71	8.43	170.49	48.93	1,427.88	1,527.54	1,511.80	15.74	97.025	
2,300.00	2,295.90	2,469.24	2,460.61	8.09	8.82	170.69	44.53	1,416.54	1,524.66	1,508.19	16.47	92.580	
2,400.00	2,395.52	2,569.04	2,559.66	8.46	9.22	170.91	40.13	1,405.20	1,521.80	1,504.60	17.19	88.504	
2,500.00	2,495.14	2,668.84	2,658.72	8.84	9.61	171.12	35.74	1,393.86	1,518.95	1,501.03	17.92	84.754	
2,600.00	2,594.76	2,768.64	2,757.78	9.22	10.01	171.33	31.34	1,382.52	1,516.13	1,497.48	18.65	81.293	
2,700.00	2,694.38	2,868.45	2,856.84	9.60	10.41	171.54	26.94	1,371.18	1,513.33	1,493.95	19.38	78.089	
2,800.00	2,794.00	2,968.25	2,955.90	9.97	10.81	171.75	22.54	1,359.84	1,510.55	1,490.44	20.11	75.114	
2,900.00	2,893.62	3,068.05	3,054.96	10.35	11.21	171.97	18.15	1,348.50	1,507.80	1,486.96	20.84	72.347	
3,000.00	2,993.23	3,167.85	3,154.01	10.73	11.61	172.18	13.75	1,337.16	1,505.06	1,483.49	21.57	69.765	
3,100.00	3,092.85	3,267.66	3,253.07	11.11	12.01	172.40	9.35	1,325.82	1,502.35	1,480.04	22.31	67.352	
3,200.00	3,192.47	3,367.46	3,352.13	11.49	12.41	172.62	4.95	1,314.48	1,499.65	1,476.61	23.04	65.091	
3,248.75	3,241.04	3,416.11	3,400.42	11.68	12.61	172.72	2.81	1,308.95	1,498.35	1,474.95	23.40	64.040	
3,300.00	3,292.12	3,467.25	3,451.18	11.87	12.81	172.83	0.56	1,303.14	1,496.64	1,472.87	23.77	62.955	
3,400.00	3,391.93	3,566.97	3,550.15	12.24	13.21	173.02	-3.84	1,291.81	1,491.36	1,466.85	24.51	60.858	
3,500.00	3,491.87	3,666.53	3,648.97	12.60	13.62	173.21	-8.22	1,280.49	1,483.50	1,458.27	25.24	58.787	
3,582.09	3,573.95	3,748.09	3,729.92	12.88	13.94	91.56	-11.82	1,271.23	1,475.13	1,449.31	25.83	57.111	
3,600.00	3,591.87	3,765.87	3,747.57	12.95	14.02	91.59	-12.60	1,269.21	1,473.12	1,447.16	25.96	56.750	
3,700.00	3,691.87	3,865.12	3,846.08	13.29	14.42	91.77	-16.97	1,257.93	1,461.88	1,435.20	26.68	54.800	
3,800.00	3,791.87	3,964.38	3,944.60	13.63	14.82	91.96	-21.35	1,246.65	1,450.65	1,423.26	27.40	52.952	
3,900.00	3,891.87	4,063.63	4,043.11	13.97	15.22	92.15	-25.72	1,235.37	1,439.44	1,411.33	28.12	51.197	
4,000.00	3,991.87	4,162.89	4,141.63	14.32	15.62	92.35	-30.09	1,224.10	1,428.25	1,399.41	28.84	49.528	
4,100.00	4,091.87	4,262.14	4,240.14	14.66	16.03	92.54	-34.47	1,212.82	1,417.07	1,387.51	29.56	47.941	
4,200.00	4,191.87	4,361.39	4,338.66	15.01	16.43	92.74	-38.84	1,201.54	1,405.91	1,375.63	30.28	46.428	
4,300.00	4,291.87	4,460.65	4,437.17	15.35	16.83	92.94	-43.21	1,190.26	1,394.77	1,363.76	31.01	44.985	
4,400.00	4,391.87	4,559.90	4,535.69	15.70	17.23	93.15	-47.59	1,178.98	1,383.64	1,351.91	31.73	43.607	
4,500.00	4,491.87	4,659.16	4,634.20	16.04	17.64	93.36	-51.96	1,167.71	1,372.53	1,340.08	32.46	42.290	
4,600.00	4,591.87	4,758.41	4,732.72	16.39	18.04	93.57	-56.33	1,156.43	1,361.44	1,328.26	33.18	41.031	
4,700.00	4,691.87	4,857.67	4,831.23	16.74	18.44	93.79	-60.71	1,145.15	1,350.37	1,316.46	33.91	39.825	
4,800.00	4,791.87	4,956.92	4,929.75	17.09	18.85	94.01	-65.08	1,133.87	1,339.32	1,304.69	34.64	38.669	

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 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Reference Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	021H	**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 Biggers Fed - 215H - OH - Prelim Plan A — Offset Site Error: 0.00 usft

Survey Program: 0-MWD - OWSG — Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,900.00	4,891.87	5,056.18	5,028.26	17.44	19.25	94.23	-69.45	1,122.60	1,328.29	1,292.93	35.36	37.561	
5,000.00	4,991.87	5,155.43	5,126.78	17.79	19.65	94.46	-73.83	1,111.32	1,317.28	1,281.19	36.09	36.498	
5,100.00	5,091.87	5,254.69	5,225.29	18.14	20.06	94.69	-78.20	1,100.04	1,306.29	1,269.47	36.82	35.476	
5,200.00	5,191.87	5,353.94	5,323.81	18.49	20.46	94.93	-82.57	1,088.76	1,295.32	1,257.77	37.55	34.494	
5,300.00	5,291.87	5,453.20	5,422.32	18.84	20.87	95.17	-86.95	1,077.48	1,284.37	1,246.09	38.28	33.550	
5,400.00	5,391.87	5,552.45	5,520.84	19.19	21.27	95.41	-91.32	1,066.21	1,273.45	1,234.43	39.01	32.640	
5,500.00	5,491.87	5,651.70	5,619.35	19.54	21.68	95.66	-95.69	1,054.93	1,262.55	1,222.80	39.75	31.765	
5,600.00	5,591.87	5,750.96	5,717.86	19.89	22.08	95.91	-100.07	1,043.65	1,251.67	1,211.19	40.48	30.921	
5,700.00	5,691.87	5,850.21	5,816.38	20.24	22.48	96.16	-104.44	1,032.37	1,240.82	1,199.60	41.21	30.107	
5,800.00	5,791.87	5,949.47	5,914.89	20.59	22.89	96.42	-108.81	1,021.09	1,229.99	1,188.04	41.95	29.322	
5,900.00	5,891.87	6,048.72	6,013.41	20.94	23.29	96.69	-113.19	1,009.82	1,219.18	1,176.50	42.68	28.564	
6,000.00	5,991.87	6,147.98	6,111.92	21.29	23.70	96.96	-117.56	998.54	1,208.41	1,164.99	43.42	27.831	
6,100.00	6,091.87	6,247.23	6,210.44	21.65	24.10	97.23	-121.93	987.26	1,197.66	1,153.50	44.16	27.124	
6,200.00	6,191.87	6,346.49	6,308.95	22.00	24.51	97.51	-126.31	975.98	1,186.94	1,142.05	44.89	26.439	
6,300.00	6,291.87	6,445.74	6,407.47	22.35	24.91	97.80	-130.68	964.71	1,176.25	1,130.61	45.63	25.777	
6,400.00	6,391.87	6,545.00	6,505.98	22.70	25.32	98.09	-135.05	953.43	1,165.58	1,119.21	46.37	25.137	
6,500.00	6,491.87	6,644.25	6,604.50	23.06	25.72	98.38	-139.43	942.15	1,154.95	1,107.84	47.11	24.516	
6,600.00	6,591.87	6,743.51	6,703.01	23.41	26.13	98.68	-143.80	930.87	1,144.35	1,096.50	47.85	23.915	
6,700.00	6,691.87	6,842.76	6,801.53	23.76	26.53	98.99	-148.17	919.59	1,133.78	1,085.18	48.59	23.333	
6,800.00	6,791.87	6,942.01	6,900.04	24.12	26.94	99.30	-152.55	908.32	1,123.24	1,073.91	49.33	22.769	
6,900.00	6,891.87	7,041.27	6,998.56	24.47	27.34	99.62	-156.92	897.04	1,112.73	1,062.66	50.08	22.221	
7,000.00	6,991.87	7,140.52	7,097.07	24.82	27.75	99.94	-161.29	885.76	1,102.26	1,051.45	50.82	21.690	
7,100.00	7,091.87	7,239.78	7,195.59	25.18	28.15	100.27	-165.67	874.48	1,091.83	1,040.27	51.56	21.174	
7,200.00	7,191.87	7,339.03	7,294.10	25.53	28.56	100.61	-170.04	863.20	1,081.43	1,029.12	52.31	20.674	
7,300.00	7,291.87	7,438.29	7,392.62	25.89	28.97	100.95	-174.41	851.93	1,071.07	1,018.02	53.06	20.188	
7,400.00	7,391.87	7,537.54	7,491.13	26.24	29.37	101.30	-178.79	840.65	1,060.75	1,006.95	53.80	19.716	
7,500.00	7,491.87	7,636.80	7,589.65	26.59	29.78	101.66	-183.16	829.37	1,050.47	995.92	54.55	19.257	
7,600.00	7,591.87	7,736.05	7,688.16	26.95	30.18	102.02	-187.53	818.09	1,040.23	984.93	55.30	18.811	
7,700.00	7,691.87	7,835.31	7,786.68	27.30	30.59	102.39	-191.91	806.82	1,030.04	973.99	56.05	18.377	
7,800.00	7,791.87	7,934.56	7,885.19	27.66	30.99	102.77	-196.28	795.54	1,019.88	963.08	56.80	17.955	
7,900.00	7,891.87	8,033.82	7,983.71	28.01	31.40	103.16	-200.65	784.26	1,009.78	952.22	57.55	17.545	
8,000.00	7,991.87	8,133.07	8,082.22	28.37	31.80	103.55	-205.03	772.98	999.71	941.41	58.31	17.146	
8,100.00	8,091.87	8,232.32	8,180.73	28.72	32.21	103.95	-209.40	761.70	989.70	930.64	59.06	16.757	
8,200.00	8,191.87	8,331.58	8,279.25	29.08	32.62	104.36	-213.77	750.43	979.73	919.92	59.82	16.379	
8,300.00	8,291.87	8,430.83	8,377.76	29.43	33.02	104.78	-218.15	739.15	969.82	909.25	60.57	16.011	
8,400.00	8,391.87	8,523.15	8,469.41	29.79	33.40	105.17	-222.16	728.80	960.11	898.79	61.31	15.659	
8,500.00	8,491.87	8,605.94	8,551.77	30.14	33.72	105.47	-225.22	720.91	951.88	889.85	62.02	15.347	
8,600.00	8,591.87	8,689.07	8,634.62	30.50	34.04	105.71	-227.64	714.67	945.42	882.71	62.71	15.077	
8,689.13	8,681.00	8,763.38	8,708.79	30.82	34.31	105.88	-229.25	710.51	941.14	877.84	63.30	14.868	
8,700.00	8,691.86	8,772.44	8,717.85	30.85	34.34	106.44	-229.41	710.09	940.74	877.37	63.37	14.845	
8,748.45	8,740.21	8,812.79	8,758.16	31.03	34.48	106.72	-230.03	708.49	939.94	876.25	63.69	14.758	CC
8,750.00	8,741.75	8,814.07	8,759.44	31.03	34.49	106.73	-230.05	708.44	939.94	876.24	63.70	14.756	ES
8,800.00	8,791.18	8,855.34	8,800.69	31.21	34.63	107.05	-230.52	707.23	940.87	876.84	64.03	14.694	
8,850.00	8,839.76	8,895.95	8,841.29	31.38	34.77	107.37	-230.83	706.43	943.60	879.23	64.36	14.660	
8,900.00	8,887.14	8,935.63	8,880.97	31.55	34.90	107.68	-230.98	706.05	948.22	883.53	64.69	14.657	SF
8,950.00	8,932.95	8,977.61	8,922.95	31.71	35.03	108.02	-231.00	706.00	954.80	889.76	65.04	14.680	
9,000.00	8,976.84	9,021.50	8,966.84	31.87	35.16	108.42	-231.00	706.00	963.21	897.80	65.41	14.727	
9,050.00	9,018.48	9,063.14	9,008.48	32.02	35.29	108.74	-231.00	706.00	973.57	907.60	65.77	14.803	
9,100.00	9,057.55	9,102.21	9,047.55	32.17	35.41	108.91	-231.00	706.00	986.05	919.93	66.12	14.913	
9,150.00	9,093.75	9,138.42	9,083.75	32.32	35.52	108.87	-231.00	706.00	1,000.80	934.34	66.47	15.057	
9,200.00	9,126.82	9,171.48	9,116.82	32.48	35.63	108.56	-231.00	706.00	1,017.93	951.13	66.80	15.239	
9,250.00	9,156.49	9,201.15	9,146.49	32.65	35.72	107.91	-231.00	706.00	1,037.50	970.39	67.11	15.459	

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 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Reference Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	021H	**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 Biggers Fed - 215H - OH - Prelim Plan A — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD - OWSG — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,300.00	9,182.54	9,227.20	9,172.54	32.83	35.80	106.86	-231.00	706.00	1,059.53	992.12	67.41	15.718	
9,350.00	9,204.77	9,249.44	9,194.77	33.01	35.87	105.34	-231.00	706.00	1,083.97	1,016.29	67.68	16.017	
9,400.00	9,223.02	9,267.69	9,213.02	33.21	35.92	103.29	-231.00	706.00	1,110.72	1,042.80	67.92	16.353	
9,450.00	9,237.15	9,281.81	9,227.15	33.42	35.97	100.65	-231.00	706.00	1,139.62	1,071.48	68.13	16.726	
9,489.13	9,245.25	9,289.92	9,235.25	33.58	35.99	98.15	-231.00	706.00	1,163.59	1,095.30	68.28	17.041	
9,500.00	9,247.14	9,308.20	9,237.14	33.63	36.05	98.27	-231.00	706.00	1,170.42	1,102.05	68.37	17.119	
9,514.13	9,249.59	9,305.74	9,239.59	33.69	36.04	98.42	-231.00	706.00	1,179.40	1,111.00	68.40	17.242	
9,550.00	9,255.16	9,300.18	9,245.16	33.86	36.02	96.94	-231.00	706.00	1,202.68	1,134.20	68.49	17.561	
9,600.00	9,260.69	9,305.35	9,250.69	34.09	36.04	94.58	-231.00	706.00	1,236.31	1,167.68	68.63	18.014	
9,650.00	9,263.61	9,308.27	9,253.61	34.34	36.05	91.85	-231.00	706.00	1,271.14	1,202.38	68.75	18.488	
9,680.83	9,264.10	9,308.77	9,254.10	34.50	36.05	90.00	-231.00	706.00	1,293.14	1,224.32	68.82	18.790	
9,700.00	9,264.10	9,308.76	9,254.10	34.60	36.05	90.00	-231.00	706.00	1,307.01	1,238.15	68.86	18.981	
9,800.00	9,264.10	9,308.76	9,254.10	35.17	36.05	90.00	-231.00	706.00	1,381.40	1,312.35	69.04	20.007	
9,900.00	9,264.10	9,308.76	9,254.10	35.80	36.05	90.00	-231.00	706.00	1,458.85	1,389.64	69.21	21.079	
10,000.00	9,264.09	9,308.76	9,254.09	36.50	36.05	90.00	-231.00	706.00	1,538.91	1,469.55	69.36	22.188	
10,100.00	9,264.09	9,308.75	9,254.09	37.26	36.05	90.00	-231.00	706.00	1,621.18	1,551.69	69.49	23.331	
10,200.00	9,264.09	9,308.75	9,254.09	38.08	36.05	90.00	-231.00	706.00	1,705.35	1,635.74	69.60	24.501	
10,300.00	9,264.09	9,308.75	9,254.09	38.95	36.05	90.00	-231.00	706.00	1,791.14	1,721.44	69.71	25.695	
10,400.00	9,264.08	9,308.75	9,254.08	39.87	36.05	90.00	-231.00	706.00	1,878.34	1,808.54	69.80	26.910	
10,500.00	9,264.08	9,308.74	9,254.08	40.83	36.05	90.00	-231.00	706.00	1,966.76	1,896.88	69.88	28.143	
10,600.00	9,264.08	9,308.74	9,254.08	41.84	36.05	90.00	-231.00	706.00	2,056.25	1,986.28	69.96	29.391	
10,700.00	9,264.08	9,308.74	9,254.08	42.90	36.05	90.00	-231.00	706.00	2,146.66	2,076.62	70.03	30.653	
10,800.00	9,264.07	9,308.74	9,254.07	43.98	36.05	90.00	-231.00	706.00	2,237.88	2,167.79	70.10	31.925	
10,900.00	9,264.07	9,308.73	9,254.07	45.11	36.05	90.00	-231.00	706.00	2,329.83	2,259.67	70.16	33.208	
11,000.00	9,264.07	9,308.73	9,254.07	46.26	36.05	90.00	-231.00	706.00	2,422.41	2,352.20	70.22	34.500	
11,100.00	9,264.07	9,308.73	9,254.07	47.45	36.05	90.00	-231.00	706.00	2,515.57	2,445.30	70.27	35.799	
11,200.00	9,264.06	9,308.73	9,254.06	48.66	36.05	90.00	-231.00	706.00	2,609.23	2,538.91	70.32	37.105	
11,300.00	9,264.06	9,308.72	9,254.06	49.90	36.05	90.00	-231.00	706.00	2,703.34	2,632.97	70.37	38.416	
11,400.00	9,264.06	9,308.72	9,254.06	51.16	36.05	90.00	-231.00	706.00	2,797.86	2,727.44	70.42	39.732	
11,500.00	9,264.06	9,308.72	9,254.06	52.44	36.05	90.00	-231.00	706.00	2,892.75	2,822.29	70.46	41.053	
11,600.00	9,264.05	9,308.72	9,254.05	53.75	36.05	90.00	-231.00	706.00	2,987.98	2,917.47	70.51	42.377	
11,700.00	9,264.05	9,308.71	9,254.05	55.07	36.05	90.00	-231.00	706.00	3,083.50	3,012.95	70.55	43.705	
11,800.00	9,264.05	9,308.71	9,254.05	56.41	36.05	90.00	-231.00	706.00	3,179.30	3,108.71	70.60	45.035	
11,900.00	9,264.05	9,308.71	9,254.05	57.77	36.05	89.99	-231.00	706.00	3,275.36	3,204.72	70.64	46.368	
12,000.00	9,264.04	9,308.71	9,254.04	59.14	36.05	89.99	-231.00	706.00	3,371.64	3,300.96	70.68	47.702	
12,100.00	9,264.04	9,308.70	9,254.04	60.53	36.05	89.99	-231.00	706.00	3,468.13	3,397.41	70.72	49.038	
12,200.00	9,264.04	9,308.70	9,254.04	61.93	36.05	89.99	-231.00	706.00	3,564.82	3,494.05	70.77	50.375	
12,300.00	9,264.04	16,104.62	12,746.03	63.35	71.46	165.55	3,318.84	677.30	3,606.09	3,528.67	77.43	46.574	
12,400.00	9,264.03	16,204.62	12,746.03	64.77	72.74	165.55	3,418.84	676.43	3,606.10	3,527.32	78.78	45.775	
12,500.00	9,264.03	16,304.62	12,746.03	66.21	74.03	165.55	3,518.84	675.57	3,606.10	3,525.95	80.15	44.994	
12,600.00	9,264.03	16,404.62	12,746.03	67.65	75.33	165.55	3,618.83	674.71	3,606.10	3,524.57	81.53	44.232	
12,700.00	9,264.03	16,504.62	12,746.03	69.11	76.65	165.55	3,718.83	673.84	3,606.10	3,523.18	82.92	43.489	
12,800.00	9,264.02	16,604.62	12,746.02	70.57	77.98	165.55	3,818.82	672.98	3,606.10	3,521.78	84.33	42.764	
12,900.00	9,264.02	16,704.62	12,746.02	72.05	79.33	165.55	3,918.82	672.11	3,606.10	3,520.36	85.74	42.057	
13,000.00	9,264.02	16,804.62	12,746.02	73.53	80.68	165.55	4,018.82	671.25	3,606.11	3,518.93	87.17	41.368	
13,100.00	9,264.02	16,904.62	12,746.02	75.02	82.05	165.55	4,118.81	670.39	3,606.11	3,517.50	88.61	40.697	
13,200.00	9,264.01	17,004.62	12,746.01	76.51	83.42	165.55	4,218.81	669.52	3,606.11	3,516.05	90.06	40.042	
13,300.00	9,264.01	17,104.62	12,746.01	78.02	84.81	165.55	4,318.81	668.66	3,606.11	3,514.59	91.52	39.404	
13,400.00	9,264.01	17,204.62	12,746.01	79.52	86.21	165.55	4,418.80	667.79	3,606.11	3,513.13	92.98	38.782	
13,500.00	9,264.01	17,304.62	12,746.01	81.04	87.61	165.55	4,518.80	666.93	3,606.11	3,511.65	94.46	38.176	
13,600.00	9,264.00	17,404.62	12,746.00	82.56	89.03	165.55	4,618.79	666.06	3,606.12	3,510.17	95.94	37.586	
13,700.00	9,264.00	17,495.39	12,746.00	84.08	90.32	165.55	4,718.79	665.20	3,606.12	3,508.75	97.37	37.035	

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 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Reference Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	021H	**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 Biggers Fed - 215H - OH - Prelim Plan A — **Offset Site Error:** 0.00 usft

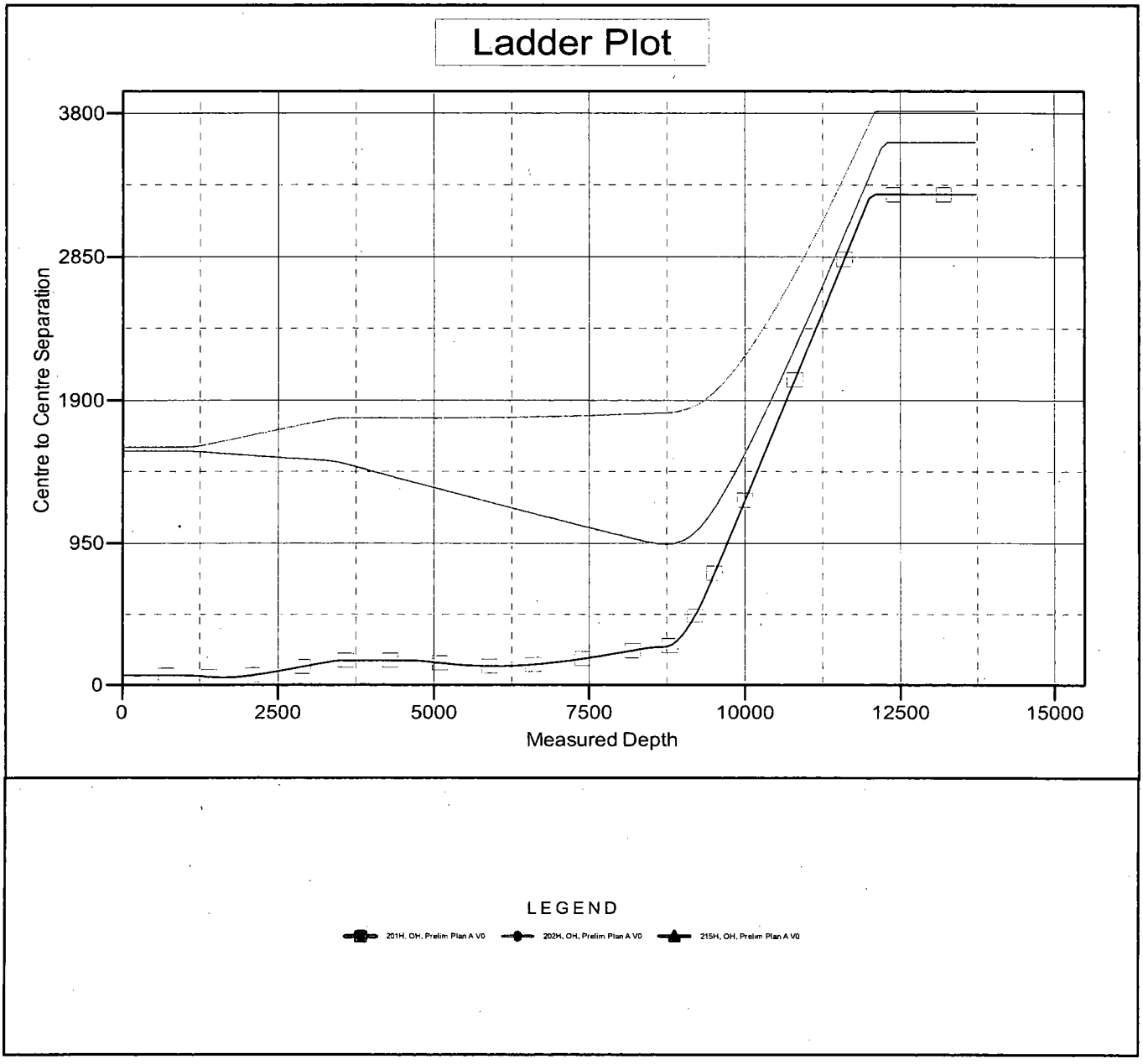
Survey Program: 0-MWD - OWSG — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,701.50	9,264.00	17,496.88	12,746.00	84.11	90.34	165.55	4,720.29	665.19	3,606.12	3,508.72	97.39	37.027	
13,726.07	9,264.00	17,518.60	12,746.00	84.48	90.65	165.55	4,742.00	665.00	3,606.12	3,508.39	97.73	36.898	

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Reference Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	021H	**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 @ 3383.00usft (GL:3354'+KB:29'
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 021H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.49°

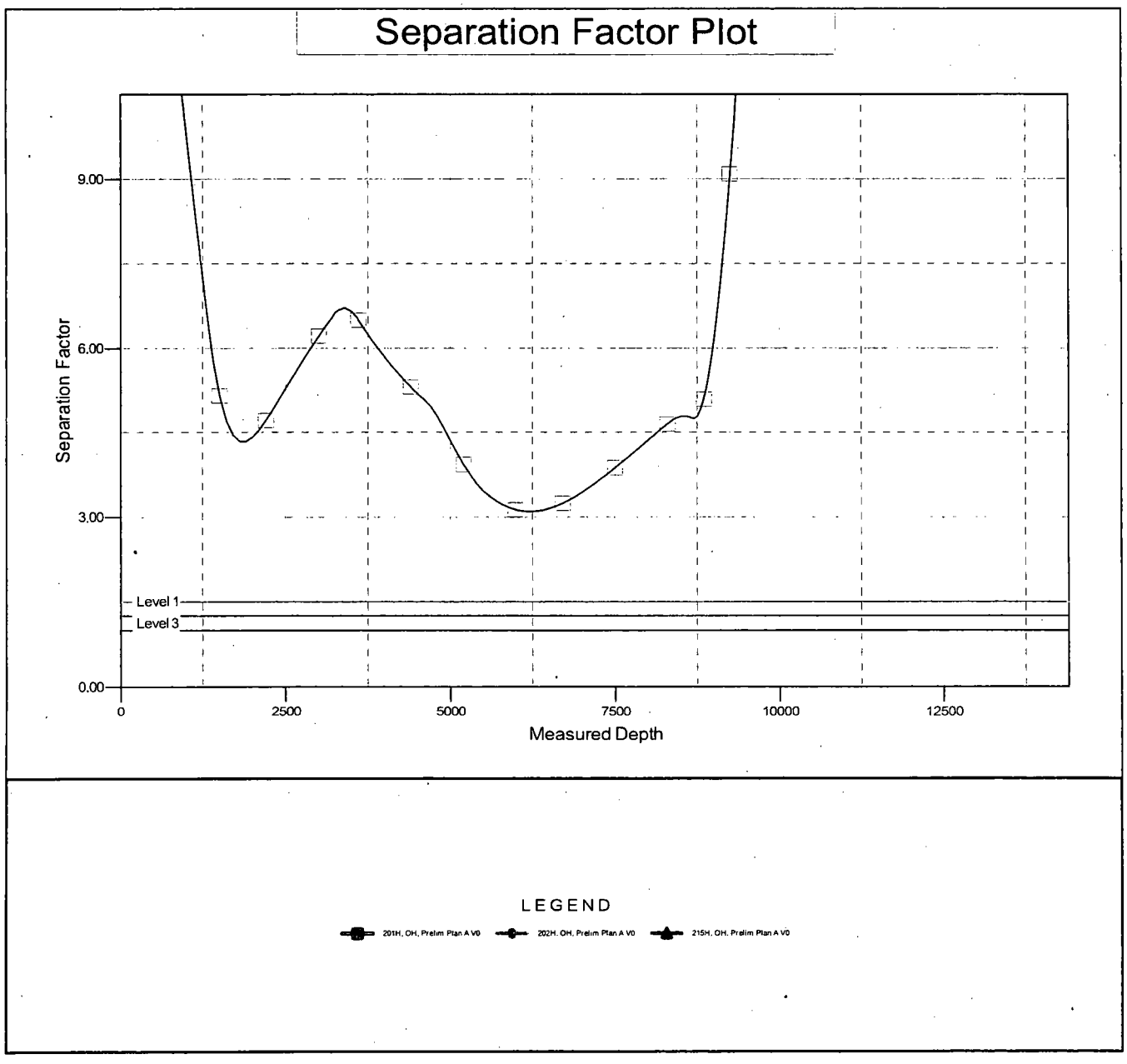


CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Reference Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	021H	**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 @ 3383.00usft (GL:3354'+KB:29'
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 021H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.49°



Pro Directional
Survey Report

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Well:	021H	**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 Biggers Fed

Site Position:		**Northing:**	410,107.00 usft	**Latitude:**	32° 7' 26.824 N
From:	Map	**Easting:**	786,514.00 usft	**Longitude:**	103° 24' 28.251 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.49 °

Well 021H

Well Position	**+N/-S**	0.00 usft	**Northing:**	410,008.00 usft	**Latitude:**	32° 7' 25.979 N
	+E/-W	0.00 usft	**Easting:**	784,927.00 usft	**Longitude:**	103° 24' 46.713 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,354.00 usft

Wellbore OH

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	HDGM	3/21/2017	6.80	59.87	48,037.10

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	359.50

Survey Tool Program **Date** 3/21/2017

From (usft)	**To (usft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
0.00	13,726.07	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	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00

Pro Directional

Survey Report

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Well:	021H	**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	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	1.50	278.21	1,099.99	0.19	-1.30	0.20	1.50	1.50	0.00
1,200.00	3.00	278.21	1,199.91	0.75	-5.18	0.79	1.50	1.50	0.00
1,300.00	4.50	278.21	1,299.69	1.68	-11.65	1.78	1.50	1.50	0.00
1,333.33	5.00	278.21	1,332.91	2.08	-14.39	2.20	1.50	1.50	0.00
1,400.00	5.00	278.21	1,399.32	2.91	-20.14	3.08	0.00	0.00	0.00
1,500.00	5.00	278.21	1,498.94	4.15	-28.76	4.40	0.00	0.00	0.00
1,600.00	5.00	278.21	1,598.56	5.40	-37.39	5.72	0.00	0.00	0.00
1,700.00	5.00	278.21	1,698.18	6.64	-46.02	7.04	0.00	0.00	0.00
1,800.00	5.00	278.21	1,797.80	7.89	-54.64	8.36	0.00	0.00	0.00
1,900.00	5.00	278.21	1,897.42	9.13	-63.27	9.68	0.00	0.00	0.00
2,000.00	5.00	278.21	1,997.04	10.38	-71.89	11.00	0.00	0.00	0.00
2,100.00	5.00	278.21	2,096.66	11.62	-80.52	12.32	0.00	0.00	0.00
2,200.00	5.00	278.21	2,196.28	12.87	-89.15	13.64	0.00	0.00	0.00
2,300.00	5.00	278.21	2,295.90	14.11	-97.77	14.96	0.00	0.00	0.00
2,400.00	5.00	278.21	2,395.52	15.36	-106.40	16.28	0.00	0.00	0.00
2,500.00	5.00	278.21	2,495.14	16.60	-115.03	17.60	0.00	0.00	0.00
2,600.00	5.00	278.21	2,594.76	17.85	-123.65	18.92	0.00	0.00	0.00
2,700.00	5.00	278.21	2,694.38	19.09	-132.28	20.25	0.00	0.00	0.00
2,800.00	5.00	278.21	2,794.00	20.34	-140.90	21.57	0.00	0.00	0.00
2,900.00	5.00	278.21	2,893.62	21.58	-149.53	22.89	0.00	0.00	0.00
3,000.00	5.00	278.21	2,993.23	22.83	-158.16	24.21	0.00	0.00	0.00
3,100.00	5.00	278.21	3,092.85	24.07	-166.78	25.53	0.00	0.00	0.00
3,200.00	5.00	278.21	3,192.47	25.32	-175.41	26.85	0.00	0.00	0.00
3,248.75	5.00	278.21	3,241.04	25.92	-179.61	27.49	0.00	0.00	0.00
3,300.00	4.23	278.21	3,292.12	26.51	-183.70	28.11	1.50	-1.50	0.00
3,400.00	2.73	278.21	3,391.93	27.38	-189.71	29.03	1.50	-1.50	0.00
3,500.00	1.23	278.21	3,491.87	27.87	-193.13	29.56	1.50	-1.50	0.00
3,582.09	0.00	0.00	3,573.95	28.00	-194.00	29.69	1.50	-1.50	0.00
3,600.00	0.00	0.00	3,591.87	28.00	-194.00	29.69	0.00	0.00	0.00
3,700.00	0.00	0.00	3,691.87	28.00	-194.00	29.69	0.00	0.00	0.00
3,800.00	0.00	0.00	3,791.87	28.00	-194.00	29.69	0.00	0.00	0.00
3,900.00	0.00	0.00	3,891.87	28.00	-194.00	29.69	0.00	0.00	0.00
4,000.00	0.00	0.00	3,991.87	28.00	-194.00	29.69	0.00	0.00	0.00
4,100.00	0.00	0.00	4,091.87	28.00	-194.00	29.69	0.00	0.00	0.00
4,200.00	0.00	0.00	4,191.87	28.00	-194.00	29.69	0.00	0.00	0.00
4,300.00	0.00	0.00	4,291.87	28.00	-194.00	29.69	0.00	0.00	0.00
4,400.00	0.00	0.00	4,391.87	28.00	-194.00	29.69	0.00	0.00	0.00
4,500.00	0.00	0.00	4,491.87	28.00	-194.00	29.69	0.00	0.00	0.00
4,600.00	0.00	0.00	4,591.87	28.00	-194.00	29.69	0.00	0.00	0.00
4,700.00	0.00	0.00	4,691.87	28.00	-194.00	29.69	0.00	0.00	0.00
4,800.00	0.00	0.00	4,791.87	28.00	-194.00	29.69	0.00	0.00	0.00
4,900.00	0.00	0.00	4,891.87	28.00	-194.00	29.69	0.00	0.00	0.00
5,000.00	0.00	0.00	4,991.87	28.00	-194.00	29.69	0.00	0.00	0.00

Pro Directional

Survey Report

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Well:	021H	**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)
5,100.00	0.00	0.00	5,091.87	28.00	-194.00	29.69	0.00	0.00	0.00
5,200.00	0.00	0.00	5,191.87	28.00	-194.00	29.69	0.00	0.00	0.00
5,300.00	0.00	0.00	5,291.87	28.00	-194.00	29.69	0.00	0.00	0.00
5,400.00	0.00	0.00	5,391.87	28.00	-194.00	29.69	0.00	0.00	0.00
5,500.00	0.00	0.00	5,491.87	28.00	-194.00	29.69	0.00	0.00	0.00
5,600.00	0.00	0.00	5,591.87	28.00	-194.00	29.69	0.00	0.00	0.00
5,700.00	0.00	0.00	5,691.87	28.00	-194.00	29.69	0.00	0.00	0.00
5,800.00	0.00	0.00	5,791.87	28.00	-194.00	29.69	0.00	0.00	0.00
5,900.00	0.00	0.00	5,891.87	28.00	-194.00	29.69	0.00	0.00	0.00
6,000.00	0.00	0.00	5,991.87	28.00	-194.00	29.69	0.00	0.00	0.00
6,100.00	0.00	0.00	6,091.87	28.00	-194.00	29.69	0.00	0.00	0.00
6,200.00	0.00	0.00	6,191.87	28.00	-194.00	29.69	0.00	0.00	0.00
6,300.00	0.00	0.00	6,291.87	28.00	-194.00	29.69	0.00	0.00	0.00
6,400.00	0.00	0.00	6,391.87	28.00	-194.00	29.69	0.00	0.00	0.00
6,500.00	0.00	0.00	6,491.87	28.00	-194.00	29.69	0.00	0.00	0.00
6,600.00	0.00	0.00	6,591.87	28.00	-194.00	29.69	0.00	0.00	0.00
6,700.00	0.00	0.00	6,691.87	28.00	-194.00	29.69	0.00	0.00	0.00
6,800.00	0.00	0.00	6,791.87	28.00	-194.00	29.69	0.00	0.00	0.00
6,900.00	0.00	0.00	6,891.87	28.00	-194.00	29.69	0.00	0.00	0.00
7,000.00	0.00	0.00	6,991.87	28.00	-194.00	29.69	0.00	0.00	0.00
7,100.00	0.00	0.00	7,091.87	28.00	-194.00	29.69	0.00	0.00	0.00
7,200.00	0.00	0.00	7,191.87	28.00	-194.00	29.69	0.00	0.00	0.00
7,300.00	0.00	0.00	7,291.87	28.00	-194.00	29.69	0.00	0.00	0.00
7,400.00	0.00	0.00	7,391.87	28.00	-194.00	29.69	0.00	0.00	0.00
7,500.00	0.00	0.00	7,491.87	28.00	-194.00	29.69	0.00	0.00	0.00
7,600.00	0.00	0.00	7,591.87	28.00	-194.00	29.69	0.00	0.00	0.00
7,700.00	0.00	0.00	7,691.87	28.00	-194.00	29.69	0.00	0.00	0.00
7,800.00	0.00	0.00	7,791.87	28.00	-194.00	29.69	0.00	0.00	0.00
7,900.00	0.00	0.00	7,891.87	28.00	-194.00	29.69	0.00	0.00	0.00
8,000.00	0.00	0.00	7,991.87	28.00	-194.00	29.69	0.00	0.00	0.00
8,100.00	0.00	0.00	8,091.87	28.00	-194.00	29.69	0.00	0.00	0.00
8,200.00	0.00	0.00	8,191.87	28.00	-194.00	29.69	0.00	0.00	0.00
8,300.00	0.00	0.00	8,291.87	28.00	-194.00	29.69	0.00	0.00	0.00
8,400.00	0.00	0.00	8,391.87	28.00	-194.00	29.69	0.00	0.00	0.00
8,500.00	0.00	0.00	8,491.87	28.00	-194.00	29.69	0.00	0.00	0.00
8,600.00	0.00	0.00	8,591.87	28.00	-194.00	29.69	0.00	0.00	0.00
8,689.13	0.00	0.00	8,681.00	28.00	-194.00	29.69	0.00	0.00	0.00
8,700.00	1.09	359.50	8,691.86	28.10	-194.00	29.79	10.00	10.00	0.00
8,750.00	6.09	359.50	8,741.75	31.23	-194.03	32.92	10.00	10.00	0.00
8,800.00	11.09	359.50	8,791.18	38.69	-194.09	40.38	10.00	10.00	0.00
8,850.00	16.09	359.50	8,839.76	50.43	-194.20	52.13	10.00	10.00	0.00
8,900.00	21.09	359.50	8,887.14	66.36	-194.33	68.06	10.00	10.00	0.00
8,950.00	26.09	359.50	8,932.95	86.36	-194.51	88.06	10.00	10.00	0.00

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Well:	021H	**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)
9,000.00	31.09	359.50	8,976.84	110.28	-194.72	111.98	10.00	10.00	0.00
9,050.00	36.09	359.50	9,018.48	137.93	-194.96	139.63	10.00	10.00	0.00
9,100.00	41.09	359.50	9,057.55	169.10	-195.23	170.80	10.00	10.00	0.00
9,150.00	46.09	359.50	9,093.75	203.56	-195.53	205.26	10.00	10.00	0.00
9,200.00	51.09	359.50	9,126.82	241.05	-195.86	242.75	10.00	10.00	0.00
9,250.00	56.09	359.50	9,156.49	281.27	-196.21	282.97	10.00	10.00	0.00
9,300.00	61.09	359.50	9,182.54	323.93	-196.58	325.63	10.00	10.00	0.00
9,350.00	66.09	359.50	9,204.77	368.69	-196.97	370.40	10.00	10.00	0.00
9,400.00	71.09	359.50	9,223.02	415.22	-197.38	416.93	10.00	10.00	0.00
9,450.00	76.09	359.50	9,237.15	463.17	-197.80	464.88	10.00	10.00	0.00
9,489.13	80.00	359.50	9,245.25	501.45	-198.13	503.16	10.00	10.00	0.00
9,500.00	80.00	359.50	9,247.14	512.15	-198.23	513.86	0.00	0.00	0.00
9,514.13	80.00	359.50	9,249.59	526.07	-198.35	527.78	0.00	0.00	0.00
9,550.00	82.15	359.50	9,255.16	561.49	-198.66	563.21	6.00	6.00	0.00
9,600.00	85.15	359.50	9,260.69	611.18	-199.09	612.89	6.00	6.00	0.00
9,650.00	88.15	359.50	9,263.61	661.09	-199.52	662.80	6.00	6.00	0.00
9,680.83	90.00	359.50	9,264.10	691.91	-199.79	693.62	6.00	6.00	0.00
9,700.00	90.00	359.50	9,264.10	711.08	-199.96	712.80	0.00	0.00	0.00
9,800.00	90.00	359.50	9,264.10	811.08	-200.83	812.80	0.00	0.00	0.00
9,900.00	90.00	359.50	9,264.10	911.07	-201.70	912.80	0.00	0.00	0.00
10,000.00	90.00	359.50	9,264.09	1,011.07	-202.57	1,012.80	0.00	0.00	0.00
10,100.00	90.00	359.50	9,264.09	1,111.06	-203.44	1,112.80	0.00	0.00	0.00
10,200.00	90.00	359.50	9,264.09	1,211.06	-204.31	1,212.80	0.00	0.00	0.00
10,300.00	90.00	359.50	9,264.09	1,311.06	-205.18	1,312.80	0.00	0.00	0.00
10,400.00	90.00	359.50	9,264.08	1,411.05	-206.05	1,412.80	0.00	0.00	0.00
10,500.00	90.00	359.50	9,264.08	1,511.05	-206.92	1,512.80	0.00	0.00	0.00
10,600.00	90.00	359.50	9,264.08	1,611.05	-207.79	1,612.80	0.00	0.00	0.00
10,700.00	90.00	359.50	9,264.08	1,711.04	-208.66	1,712.80	0.00	0.00	0.00
10,800.00	90.00	359.50	9,264.07	1,811.04	-209.53	1,812.80	0.00	0.00	0.00
10,900.00	90.00	359.50	9,264.07	1,911.03	-210.40	1,912.80	0.00	0.00	0.00
11,000.00	90.00	359.50	9,264.07	2,011.03	-211.27	2,012.80	0.00	0.00	0.00
11,100.00	90.00	359.50	9,264.07	2,111.03	-212.14	2,112.80	0.00	0.00	0.00
11,200.00	90.00	359.50	9,264.06	2,211.02	-213.01	2,212.80	0.00	0.00	0.00
11,300.00	90.00	359.50	9,264.06	2,311.02	-213.88	2,312.80	0.00	0.00	0.00
11,400.00	90.00	359.50	9,264.06	2,411.02	-214.75	2,412.80	0.00	0.00	0.00
11,500.00	90.00	359.50	9,264.06	2,511.01	-215.63	2,512.80	0.00	0.00	0.00
11,600.00	90.00	359.50	9,264.05	2,611.01	-216.50	2,612.80	0.00	0.00	0.00
11,700.00	90.00	359.50	9,264.05	2,711.00	-217.37	2,712.80	0.00	0.00	0.00
11,800.00	90.00	359.50	9,264.05	2,811.00	-218.24	2,812.80	0.00	0.00	0.00
11,900.00	90.00	359.50	9,264.05	2,911.00	-219.11	2,912.80	0.00	0.00	0.00
12,000.00	90.00	359.50	9,264.04	3,010.99	-219.98	3,012.80	0.00	0.00	0.00
12,100.00	90.00	359.50	9,264.04	3,110.99	-220.85	3,112.80	0.00	0.00	0.00
12,200.00	90.00	359.50	9,264.04	3,210.98	-221.72	3,212.80	0.00	0.00	0.00

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well 021H
Project:	Lea County, NM	**TVD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Site:	Biggers Fed	**MD Reference:**	RIG @ 3383.00usft (GL:3354'+KB:29')
Well:	021H	**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)
12,300.00	90.00	359.50	9,264.04	3,310.98	-222.59	3,312.80	0.00	0.00	0.00
12,400.00	90.00	359.50	9,264.03	3,410.98	-223.46	3,412.80	0.00	0.00	0.00
12,500.00	90.00	359.50	9,264.03	3,510.97	-224.33	3,512.80	0.00	0.00	0.00
12,600.00	90.00	359.50	9,264.03	3,610.97	-225.20	3,612.80	0.00	0.00	0.00
12,700.00	90.00	359.50	9,264.03	3,710.97	-226.07	3,712.80	0.00	0.00	0.00
12,800.00	90.00	359.50	9,264.02	3,810.96	-226.94	3,812.80	0.00	0.00	0.00
12,900.00	90.00	359.50	9,264.02	3,910.96	-227.81	3,912.80	0.00	0.00	0.00
13,000.00	90.00	359.50	9,264.02	4,010.95	-228.68	4,012.80	0.00	0.00	0.00
13,100.00	90.00	359.50	9,264.02	4,110.95	-229.55	4,112.80	0.00	0.00	0.00
13,200.00	90.00	359.50	9,264.01	4,210.95	-230.42	4,212.80	0.00	0.00	0.00
13,300.00	90.00	359.50	9,264.01	4,310.94	-231.29	4,312.80	0.00	0.00	0.00
13,400.00	90.00	359.50	9,264.01	4,410.94	-232.16	4,412.80	0.00	0.00	0.00
13,500.00	90.00	359.50	9,264.01	4,510.94	-233.03	4,512.80	0.00	0.00	0.00
13,600.00	90.00	359.50	9,264.00	4,610.93	-233.90	4,612.80	0.00	0.00	0.00
13,700.00	90.00	359.50	9,264.00	4,710.93	-234.77	4,712.80	0.00	0.00	0.00
13,726.07	90.00	359.50	9,264.00	4,737.00	-235.00	4,738.87	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
[BigFed021H]FPP	0.00	0.00	0.00	28.00	-194.00	410,036.00	784,733.00	32° 7' 26.273 N	103° 24' 48.966 W
- plan misses target center by 196.01usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
[BigFed021H]LPP	0.00	0.00	0.00	4,647.00	-234.00	414,655.00	784,693.00	32° 8' 11.982 N	103° 24' 48.973 W
- plan misses target center by 4652.89usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
[BigFed021H]PBHL	0.00	0.00	9,264.00	4,737.00	-235.00	414,745.00	784,692.00	32° 8' 12.873 N	103° 24' 48.976 W
- plan hits target center									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1000	1000	0	0	Start Build 1.50
1333	1333	2	-14	Start 1915.42 hold
3249	3241	26	-180	Start Drop -1.50
3582	3574	28	-194	Start 5107.05 hold
8689	8681	28	-194	Start Build 10.00
9489	9245	501	-198	Start 25.00 hold
9514	9250	526	-198	Start DLS 6.00
9681	9264	692	-200	EOC: 9680.83 MD
13,725	9264	4736	-235	PBHL - X:784692 Y:414745
13,726	9264	4737	-235	TD at 13726.07

Matador Production Company
Biggers Fed 21H
SHL 357' FSL & 493' FWL
BHL 240' FNL & 330' FEL
Sec. 18, T. 25 S., R. 35 E., Lea County, NM

Drilling Program

1. ESTIMATED TOPS

Formation Name	TVD	MD	Bearing
Quaternary	000'	000'	water
Dewey Lake red beds	477'	477'	water
Rustler anydrite	941'	941'	barren
Top salt	1456'	1457'	barren
Castile anhydrite	3759'	3767'	barren
Base salt	5455'	5463'	barren
Bell Canyon sandstone	5496'	5504'	hydrocarbons
Cherry Canyon sandstone	6521'	6529'	hydrocarbons
Brushy Canyon sandstone	8018'	8026'	hydrocarbons & goal
(KOP	8800'	8808'	hydrocarbons)
TD	9264'	13726'	hydrocarbons

2. NOTABLE ZONES

Brushy Canyon is the goal. Hole will extend north of the last perforation point to allow for pump installation. All perforations will be ≥330' from the dedication perimeter. Closest water well (C 02299) is 2804' southwest. Depth to water is 300' in this 350' deep well.

3. PRESSURE CONTROL

A 10,000' 5000-psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and 1 annular preventer will be used below surface casing to TD. See attached BOP and choke manifold diagrams.

An accumulator complying with Onshore Order 2 requirements for the BOP stack pressure rating will be present. Rotating head will be installed as needed.
Pressure tests will be conducted before drilling out from under all casing strings. BOP will be inspected and operated as required in Onshore Order 2. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs.

Surface casing will be pressure tested to 250 psi low and 2000 psi high. Intermediate casing pressure tests will be made to 250 psi low and 3000 psi high. Annular preventer will be tested to 250 psi low and 1000 psi high on the surface casing and tested to 250 psi low and 2500 psi high on the intermediate casing. In the case of running a speed head with landing mandrel for 9.625" casing, initial surface casing test pressures will be 250 psi low and 3000 psi high. Annular will be tested to 250 psi low and 2500 psi high. Wellhead seals will be tested to 5000 psi once the 9.625" casing has been landed and cemented.

Matador is requesting a variance to use a speed head. Speed head diameter range is 13.375" x 9.625" x 5.5" x 2.875". Wellhead diagram is attached.

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

4. CASING & CEMENT

All casing will be API and new.

Hole O. D.	Set MD	Set TVD	Casing O. D.	Weight (lb/ft)	Grade	Joint	Collapse	Burst	Tension
17.5"	0' - 1000'	0' - 1000'	Surface 13.375"	54.5	J-55	BTC	1.125	1.125	1.8
12.25"	0' - 5600'	0' - 5600'	Inter. 9.625"	40	J-55	BTC	1.125	1.125	1.8
8.75"	0' - 13726'	0' – 9264'	Product. 5.5"	20	P-110	DWC/C	1.125	1.125	1.8

Casing Name	Type	Sacks	Yield	Cu. Ft.	Weight	Blend
Surface	Lead	210	1.82	382	12.8	Class C + bentonite + 2% CaCl + 3% NaCl + LCM
	Tail	740	1.38	1021	14.8	Class C + 5% NaCl + LCM
TOC = GL		100% Excess			Centralizers per Onshore Order 2	
Intermediate	Lead	1170	2.13	2492	12.6	Class C + Bentonite + 1% $CaCl_2$ + 8% NaCl + LCM
	Tail	620	1.38	855	14.8	Class C + 5% NaCl + LCM
TOC = GL		100% Excess			2 on btm jt, 1 on 2nd jt, 1 every 4th jt to GL	
Production	Lead	700	2.35	1645	11.5	TXI + Fluid Loss + Dispersant + Retarder + LCM
	Tail	1210	1.39	1681	13.2	TXI + Fluid Loss + Dispersant + Retarder + LCM
TOC = 4600'		35% Excess			2 on btm jt, 1 on 2nd jt, 1 every other jt to top of tail cement (1000' above TOC)	

5. MUD PROGRAM

An electronic Pason mud monitoring system complying with Onshore Order 1 will be used. All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions. A closed loop system will be used.

Type	Interval	lb/gal	Viscosity	Fluid Loss
fresh water spud	0' - 1000'	8.3	28	NC
brine water	1000' - 5600'	10.0	30-32	NC
fresh water & cut brine	5600' - 13726'	9.0	30-32	NC

6. CORES, TESTS, & LOGS

No core or drill stem test is planned.

A 2-person mud logging program will be used from ≈5600' 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

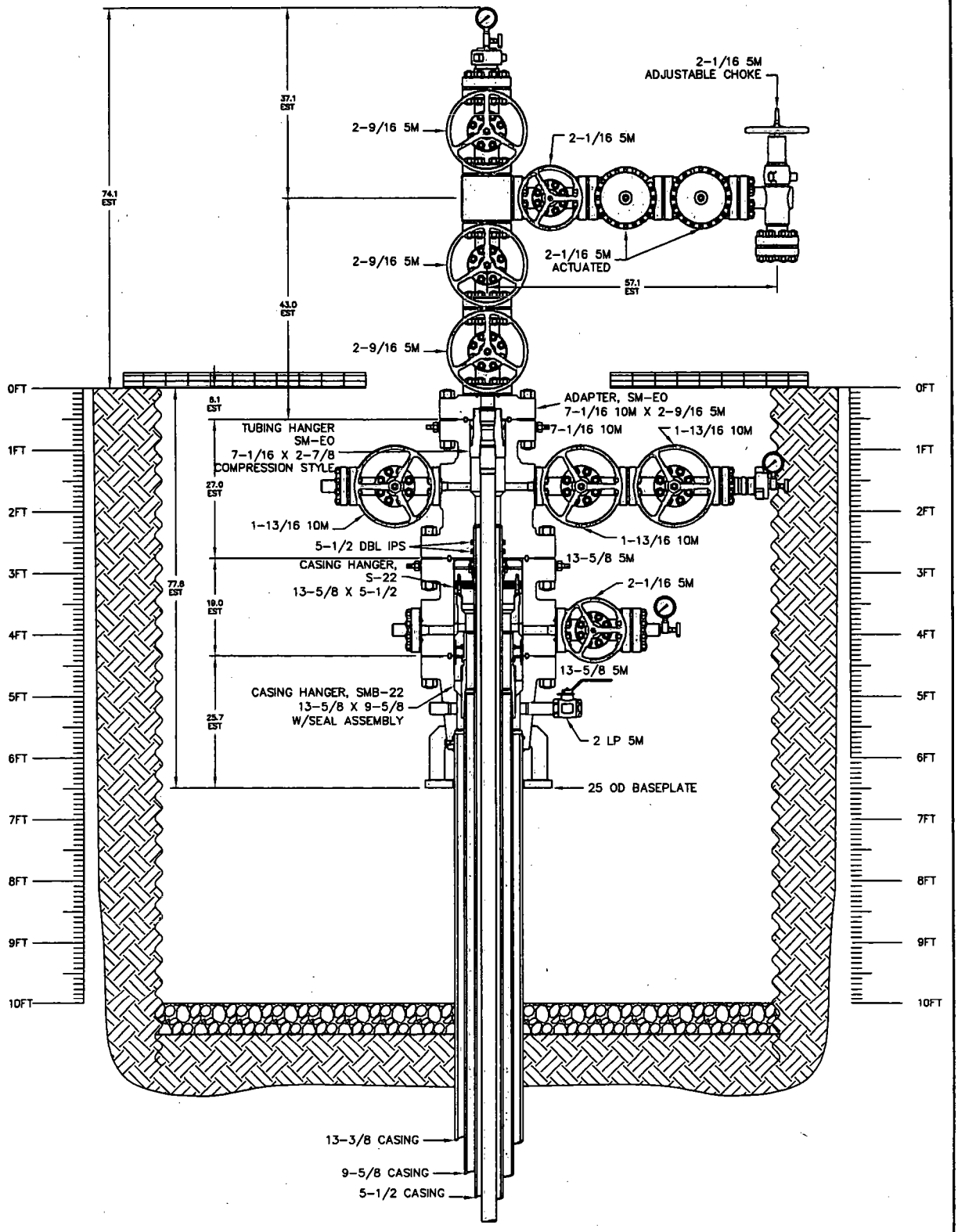
No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is ≈5000 psi. Expected bottom hole temperature is ≈130° F.

Matador does not anticipate that there will be enough H_2S to meet BLM's Onshore Order 6 requirements for submitting an "H_2S Drilling Operation Plan" or "Public Protection Plan" for drilling and completing this well. Matador has an H_2S safety package on all wells and an "H_2S 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 ≈2 months to drill and complete the well.

MATADOR
MQ-436



NOTE:
DIMENSIONS SHOWN ON THIS DRAWING ARE ESTIMATES ONLY AND CAN VARY SIGNIFICANTLY DEPENDING ON RAW MATERIAL LENGTHS.
NO GUARANTEE OF STACKUP HEIGHT IS IMPLIED.
DIMENSIONS SHOWN SHOULD BE CONSIDERED FOR REFERENCE PURPOSES ONLY.

WEIR

5,000 PSI WELLHEAD & TREE ASSEMBLY
13-3/8 X 9-5/8 X 5-1/2 X 2-7/8

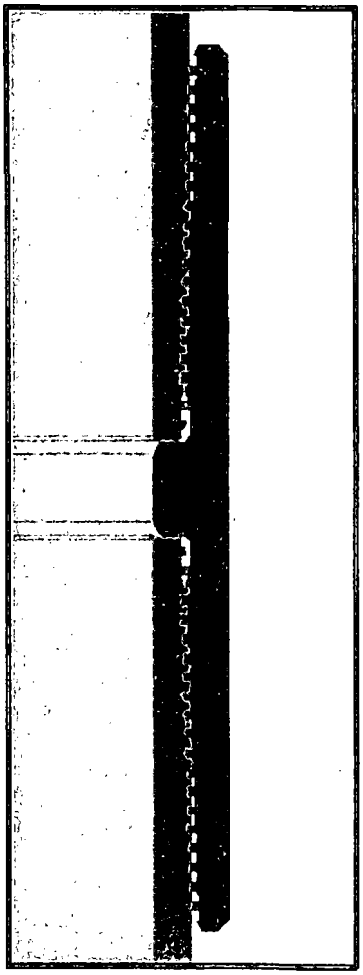
DRAWN BY:	RPL	SCALE	1:10	DATE	23SEP16	REV
CHECKED BY:		DRAWING NO.	P-21629			
APPROVED BY:						

Technical Specifications

Connection Type:	Size(O.D.):	Weight (Wall):	Grade:
DWC/C-IS PLUS Casing	5-1/2 in	20.00 lb/ft (0.361 in)	VST P110 EC
standard			

	Material
VST P110 EC	Grade
125,000	Minimum Yield Strength (psi)
135,000	Minimum Ultimate Strength (psi)
	Pipe Dimensions
5.500	Nominal Pipe Body O.D. (in)
4.778	Nominal Pipe Body I.D.(in)
0.361	Nominal Wall Thickness (in)
20.00	Nominal Weight (lbs/ft)
19.83	Plain End Weight (lbs/ft)
5.828	Nominal Pipe Body Area (sq in)
	Pipe Body Performance Properties
729,000	Minimum Pipe Body Yield Strength (lbs)
12,090	Minimum Collapse Pressure (psi)
14,360	Minimum Internal Yield Pressure (psi)
13,100	Hydrostatic Test Pressure (psi)
	Connection Dimensions
6.300	Connection O.D. (in)
4.778	Connection I.D. (in)
4.653	Connection Drift Diameter (in)
4.13	Make-up Loss (in)
5.828	Critical Area (sq in)
100.0	Joint Efficiency (%)
	Connection Performance Properties
729,000	Joint Strength (lbs)
26,040	Reference String Length (ft) 1.4 Design Factor
728,000	API Joint Strength (lbs)
729,000	Compression Rating (lbs)
12,090	API Collapse Pressure Rating (psi)
14,360	API Internal Pressure Resistance (psi)
104.2	Maximum Uniaxial Bend Rating [degrees/100 ft]
	Appoximated Field End Torque Values
16,600	Minimum Final Torque (ft-lbs)
19,100	Maximum Final Torque (ft-lbs)
21,600	Connection Yield Torque (ft-lbs)

VAM USA
4424 W. Sam Houston Pkwy. Suite 150
Houston, TX 77041
Phone: 713-479-3200
Fax: 713-479-3234
E-mail: VAMUSAsales@vam-usa.com

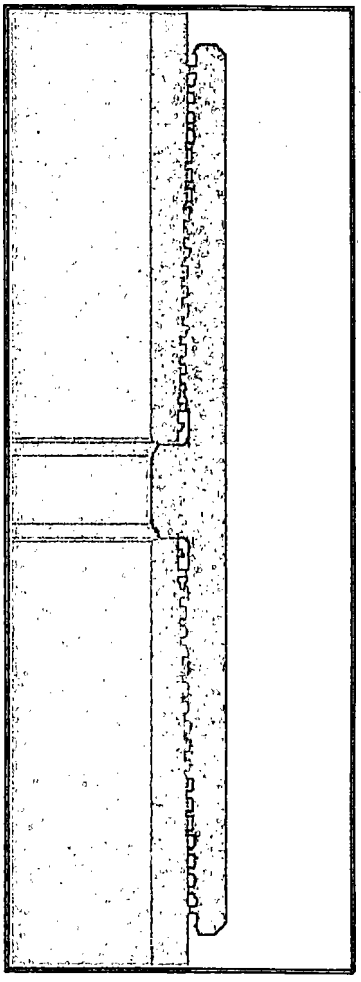


For detailed information on performance properties, refer to DWC Connection Data Notes on following page(s).

4/14/2015

DWC Connection Data Notes:

1. DWC connections are available with a seal ring (SR) option.
2. All standard DWC/C connections are interchangeable for a give pipe OD. DWC connections are interchangeable with, DWC/C-SR connections of the same OD and wall.
3. Connection performance properties are based on nominal pipe body and connection dimensions.
4. DWC connection internal and external pressure resistance is calculated using the API rating for buttress connections. API Internal pressure resistance is calculated from formulas 31, 32, and 35 in the API Bulletin 5C3.
5. DWC joint strength is the minimum pipe body yield strength multiplied by the connection critical area.
6. API joint strength is for reference only. It is calculated from formulas 42 and 43 in the API Bulletin 5C3.
7. Bending efficiency is equal to the compression efficiency.
8. The torque values listed are recommended. The actual torque required may be affected by field conditions such as temperature, thread compound, speed of make-up, weather conditions, etc.
9. Connection yield torque is not to be exceeded.
10. Reference string length is calculated by dividing the joint strength by both the nominal weight in air and a design factor (DF) of 1.4. These values are offered for reference only and do not include load factors such as bending, buoyancy, temperature, load dynamics, etc.
11. DWC connections will accommodate API standard drift diameters.



4/14/2015

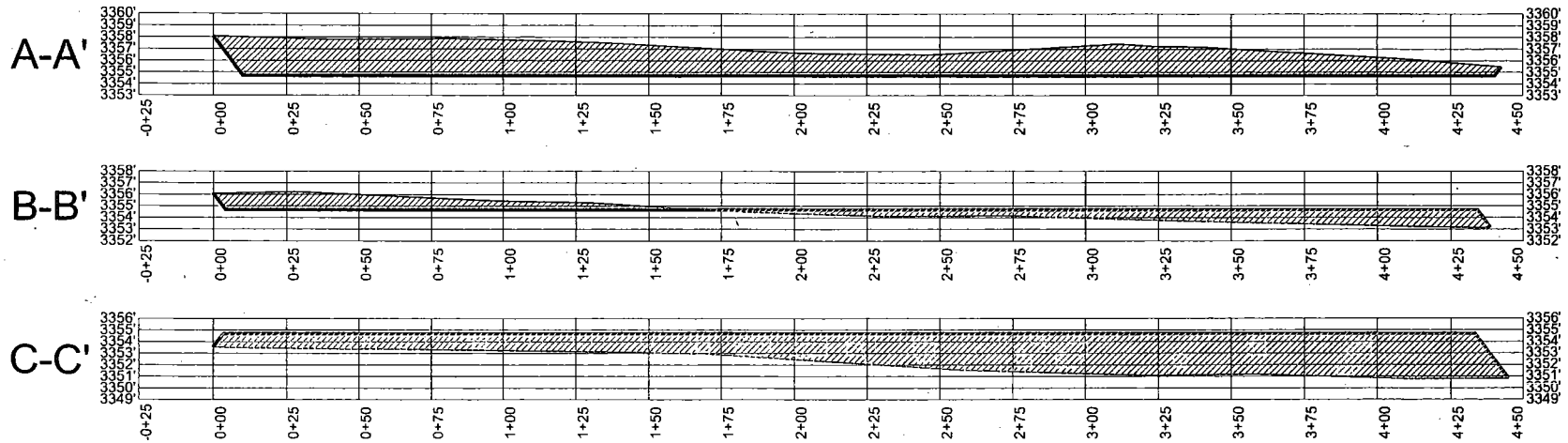
TOP OF PAD ELEVATION: 3354.7'

CUT SLOPE: 33.33% 3.00:1 18.43°
FILL SLOPE: 33.33% 3.00:1 18.43°
BALANCE TOLERANCE (C.Y.): 0.00
CUT SWELL FACTOR: 1.00
FILL SHRINK FACTOR: 1.00

PAD EARTHWORK VOLUMES
CUT : 131,618.1 C.F., 4,874.74 C.Y.
FILL: 131,618.1 C.F., 4,874.74 C.Y.
BALANCE EXPORT: 0.0 C.F., 0.00 C.Y.
AREA: 169531.9 SQ.FT., 3.892 ACRES

SECTION 18, TOWNSHIP 25-S, RANGE 35-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

Matador PRODUCTION COMPANY



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Vertical Scale = 1:15

BIGGERS FED #201H SURFACE PAD SITE PROFILE	REVISION:	
	MML	11/03/16
DATE: 10/03/16		
FILE: CD_BIGGERS_FED_201H_SURFACE_PAD_SITE_PRO_REV1		
DRAWN BY: GJU		
SHEET :		

NOTES:
1. ORIGINAL DOCUMENT SIZE: 8.5" X 11"
2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927.
3. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY MATADOR RESOURCE COMPANY. ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.

MAP 9

MICHAEL B. BROWN
NEW MEXICO
18329
PROFESSIONAL SURVEYOR

Michael Blake Brown, P.S. No. 18329
NOVEMBER 03, 2016
Field note description of even date accompanies this plat.

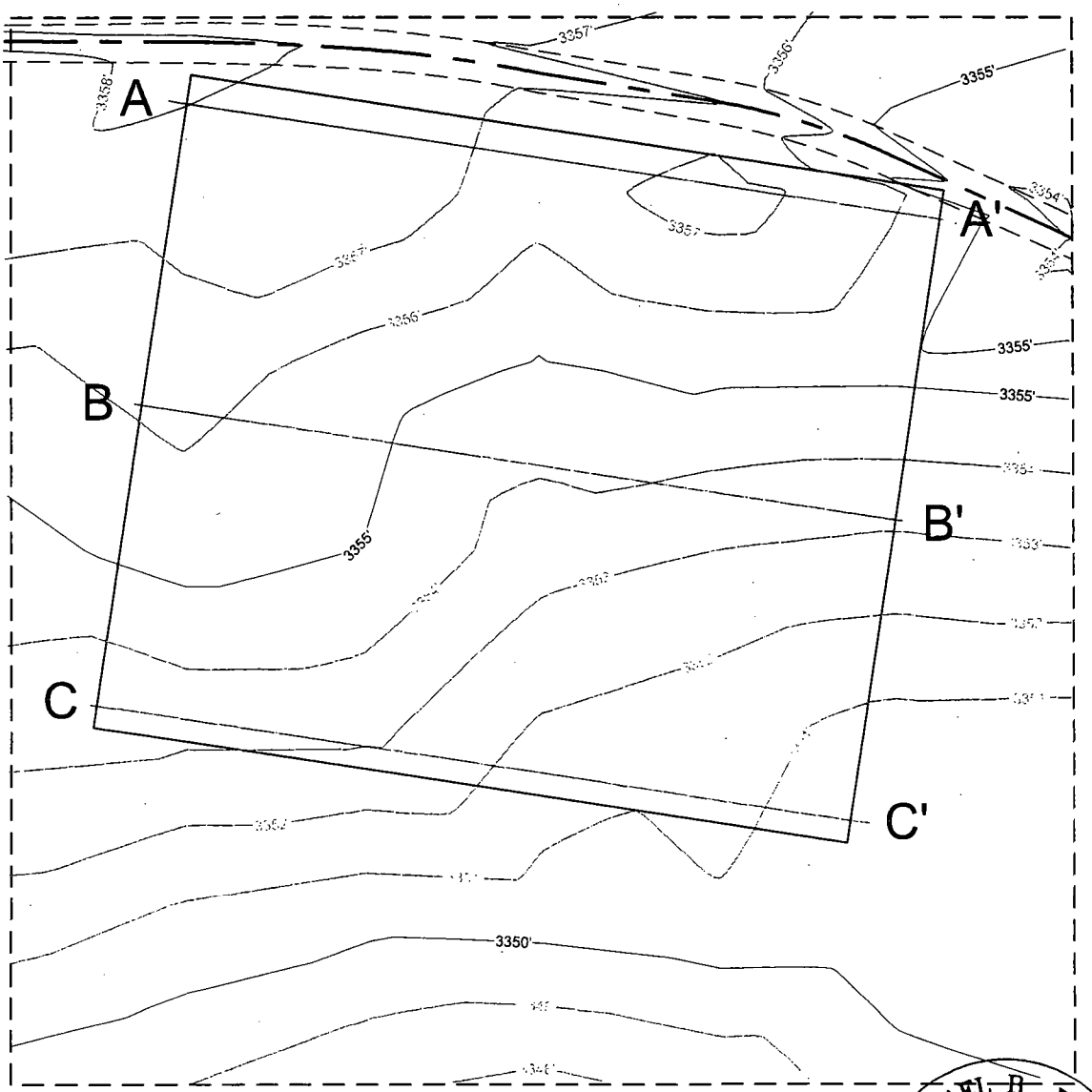
S:\SURVEY\MATADOR_RESOURCES\BIGGERS_FED_201H_SURFACE_PAD_SITE\FINAL_PRODUCTS\CD_BIGGERS_FED_201H_SURFACE_PAD_SITE_PRO_REV1.DWG 11/3/2016 4:26:38 PM jstovall

SCALE: 1" = 100'

0' 50' 100'

SECTION 18, TOWNSHIP 25-S, RANGE 35-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

MAP 8



MICHAEL B. BROWN
NEW MEXICO
18329
PROFESSIONAL SURVEYOR

Michael Blake Brown, P.S. No. 18329
NOVEMBER 03, 2016
Field note description of even date accompanies this plat.

Matador PRODUCTION COMPANY

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BIGGERS FED #201H SURFACE PAD SITE PROFILE	REVISION:	
	MML	11/03/16
DATE: 10/03/16		
FILE: CD BIGGERS FED 201H SURFACE PAD SITE PRO REV1		
DRAWN BY: GJU		
SHEET :		

NOTES:
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Matador Production Company **SURFACE PLAN PAGE 1**
Biggers Fed 21H
SHL 357' FSL & 493' FWL
BHL 240' FSL & 330' FWL
Sec. 18, T. 20 S., R. 35 E., Lea County, NM

Surface Use Plan

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

From the junction of NM 18 and NM 128 in Jal...
Go West 13.8 miles on NM 128 to the equivalent of Mile Post 38.7
Then turn left and go South 4.3 miles on a caliche road to a T-junction
Then turn left and go East 125 yards on a caliche road
Then turn right and go South 9.21' cross-country onto the NW pad corner
(The NE pad corner overlaps an existing road and will also be used for access.)

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

2. ROAD TO BE BUILT OR UPGRADED (See MAPS 1 - 5)

Five surface poly pipelines on the south side of the caliche road will be padded or otherwise protected. The 9.21' 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 = 1%. Maximum cut or fill = 2'. No culvert, cattle guard, or vehicle turn out is needed. Upgrading will consist of patching potholes with caliche.

3. EXISTING WELLS (See MAP 3)

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

4. PROPOSED PRODUCTION FACILITIES

Gas line and power line plans have not been formulated.

5. WATER SUPPLY (See MAP 2)

Water will be trucked from Madera's existing water stations on private land in NWNE 21-24s-34e, SESW 30-24s-34e, and NENE 8-25s-35e.

6. CONSTRUCTION MATERIALS & METHODS (See MAP 2)

NM One Call (811) will be notified before construction starts. Top ≈6" of soil and brush will be stockpiled south 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 (Destiny pit in NENE 4-25s-35e and Madera pit in SENW 6-25s-35e).

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 Jal 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 6 & 7)

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

10. RECLAMATION (See MAPS 8 & 9)

Interim reclamation will be completed within 6 months of completing the last well on the pad. Interim reclamation will consist of shrinking the pad ≈26% (0.95 acre) by removing caliche and reclaiming 65' wide swaths on the east and south sides of the pad. This will leave 2.70 acres for the production equipment (e. g., tank battery, heater-treater, separator), 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 last well is plugged. Once the last well is plugged, then the rest of the pad will be similarly reclaimed within 6 months of plugging. Noxious weeds will be controlled. Land use:

9.21' x 30' new road = 0.01 acre
+ 370' x 430' pad = 3.65 acres
3.66 acres short term
- 0.95 acre interim reclamation
2.71 acres long term

11. SURFACE OWNER

All construction will be on BLM.

12. OTHER INFORMATION

On site inspection was held with Vance Wolf on October 27, 2016 and with Vance Wolf, Kelly Reid, and Stan Allison (all BLM) on November 30, 2016.

Lone Mountain inspected and filed archaeology report NMCRIS-138130 on May 26, 2017.

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 7th day of June, 2017.

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