PECOS DISTRICT DRILLING
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Matador Production Company**
LEASE NO.:	**NMNM-135247**
WELL NAME & NO.:	**Nina Cortell Fed Com 122H**
SURFACE HOLE FOOTAGE:	**0150' FSL & 1906' FWL**
BOTTOM HOLE FOOTAGE	**0240' FNL & 2309' FWL**
LOCATION:	**Section 03, T. 22 S., R 32 E., NMPM**
COUNTY:	**County, New Mexico**

Operator to submit NMOCD Gas Capture form

Communitization Agreement

- The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☐ **Lea County**

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

1. **Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the**

Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

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.**

B. 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 Potash Areas:
After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.

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.

Secretary's Potash
Possibility of water flows in the Salado and Castile.
Possibility of lost circulation in the Rustler, Red Beds, and Delaware.

1. The **13-3/8** inch surface casing shall be set at approximately **1200** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) 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. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to potash.**

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 should tie-back at least 500 feet into previous casing string. 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.

C. 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.

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.

<u>If mutlibowl option is utilized:</u>

5. **Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be psi.**
    a. **Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.**
    b. **If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.**
    c. **Manufacturer representative shall install the test plug for the initial BOP test.**
    d. **Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.**
    e. **If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.**

6. The appropriate BLM office shall be notified a minimum of hours in advance for a representative to witness the tests.

    a. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.

    b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.

    c. 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.

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

    e. 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.**

    f. 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.

D. DRILL STEM TEST

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

E. 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 060518

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Matador Production Company
LEASE NO.:	NMNM135247
WELL NAME & NO.:	Nina Cortell Fed Com 122H
SURFACE HOLE FOOTAGE:	150'/S & 1906'/W
BOTTOM HOLE FOOTAGE	240'/N & 2309'/W
LOCATION:	Section 3, T.22 S., R.32 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.

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.

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.

This authorization is subject to your Certificate of Participation and/or Certificate of Inclusion under the New Mexico Candidate Conservation Agreement. Because it involves surface disturbing activities covered under your Certificate, your Habitat Conservation Fund Account with the Center of Excellence for Hazardous Materials Management (CEHMM) will be debited according to Exhibit B Part 2 of the Certificate of Participation.

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.)

Tank Battery:
Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

Construction of the new access road through the existing fence which separates the proposed Nina Cortell Fed Com Slot 1 and Slot 2 well pads on New Mexico State Trust lands from the proposed Nina Cortell Fed Com Slot 3 and Slot 4 well pads on Federal lands (Exhibits 24 and 25) would require that a new fence and a cattle guard be installed.

Following proper procedures for crossing fence lines including bracing and tying off on both sides of the passageway with H-braces prior to cutting the fence, would mitigate the impacts to the fence. The operator would notify the private surface landowner and grazing allotment holders prior to crossing any fences.

Any damage to fences, cattle guards, and pipelines or structures that provide water to livestock during construction, throughout the life of the project, and caused by its operation, must be immediately corrected by the Applicant. The Applicant must notify the grazing allottee or the private surface landowner and the BLM-CFO (575-234-5972) if any damage occurs to pipelines or structures that provide water to livestock.

Prior to construction of the Nina Cortell Slot 3 and Slot 4 well pads, a straw wattle and earthen berm would be placed along the southern edges of the well pads (Exhibits 12 and 22 – Slot 3 well pad, Exhibits 15 and 23 – Slot 4 well pad) to avoid impacts to the un-named drainage feature located approximately 400-feet south of the two well pads. These measures would also be maintained during interim reclamation earthwork.

Production facilities on the four well pads would be bermed to prevent oil, salt, and other chemical contaminants from leaving the pads. Topsoil shall not be used to construct the berms. No water flow from the uphill side(s) of the pads shall be allowed to enter the well pads. The berms around the production facilities shall be maintained through the life of the wells and after interim reclamation has been completed.

Any water erosion that may occur due to the construction of the well pads or during the life of the wells and associated infrastructure would be corrected within two weeks and proper measures would be taken to prevent future erosion.

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Any water erosion that may occur due to the construction of the well pads or during the life of the wells and associated infrastructure would be corrected within two weeks and proper measures would be taken to prevent future erosion.

All spills or leaks shall be reported to the BLM immediately for their immediate and proper treatment. The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction and no further construction will be done until clearance has been issued by the Authorized Officer. Special restoration stipulations or realignment may be required.

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.

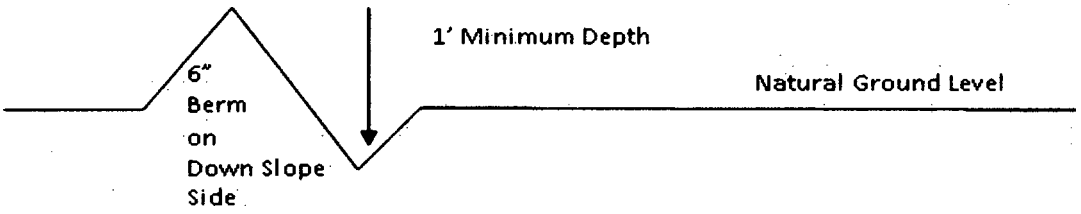
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

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

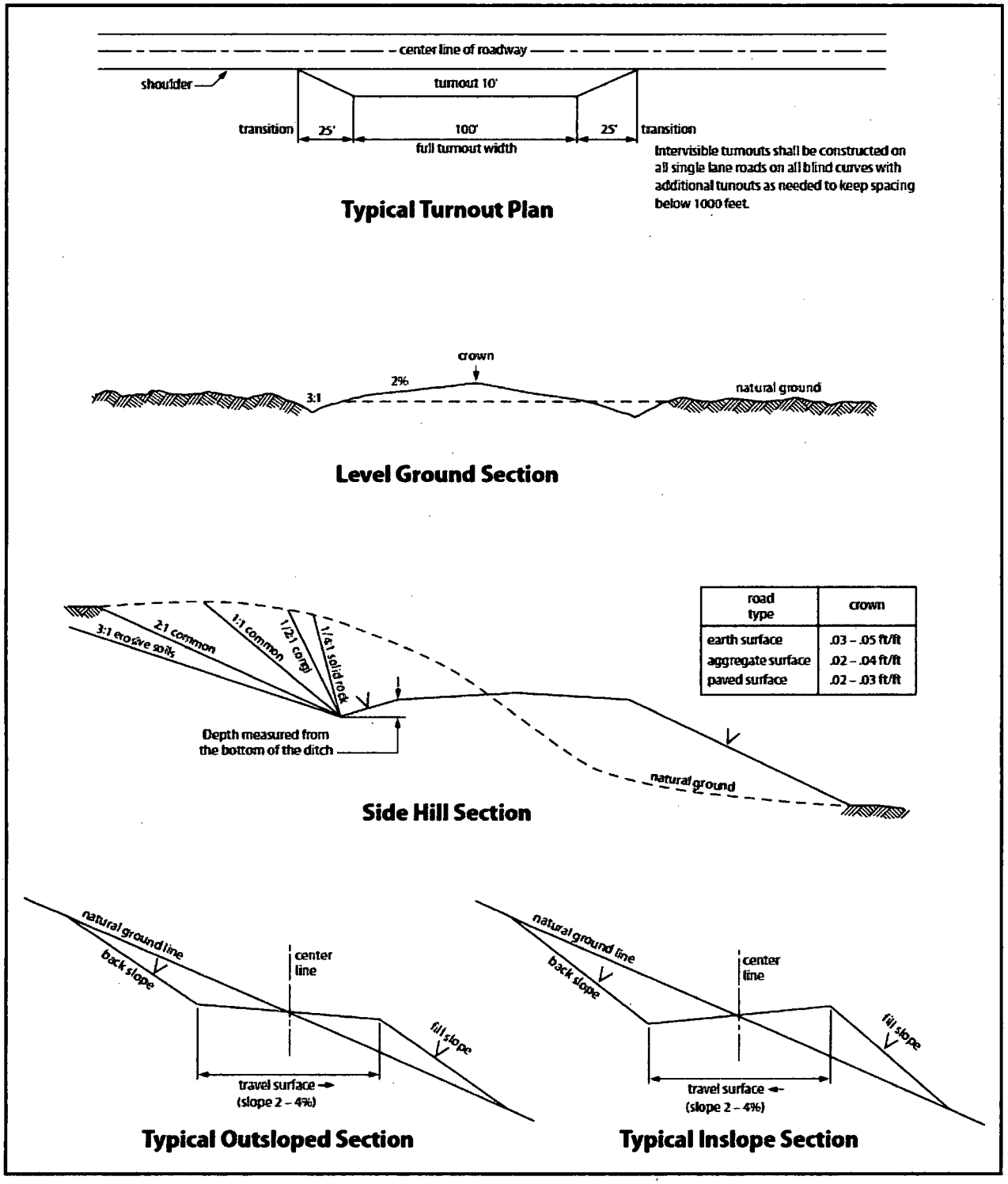


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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).

VRM Facility Requirement
Low-profile tanks not greater than eight-feet-high shall be used.

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).

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 2, for Sandy Sites

The 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 will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will 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). The 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. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will 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
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

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

Approval Date: 06/18/2018

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Matador Production Company
LEASE NO.:	NMNM135247
WELL NAME & NO.:	Nina Cortell Fed Com 122H
SURFACE HOLE FOOTAGE:	150'/S & 1906'/W
BOTTOM HOLE FOOTAGE	240'/N & 2309'/W
LOCATION:	Section 3, T.22 S., R.32 E., NMPM
COUNTY:	Lea County, New Mexico

TABLE OF CONTENTS

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.

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.

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.

This authorization is subject to your Certificate of Participation and/or Certificate of Inclusion under the New Mexico Candidate Conservation Agreement. Because it involves surface disturbing activities covered under your Certificate, your Habitat Conservation Fund Account with the Center of Excellence for Hazardous Materials Management (CEHMM) will be debited according to Exhibit B Part 2 of the Certificate of Participation.

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.)

Tank Battery:
Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

Construction of the new access road through the existing fence which separates the proposed Nina Cortell Fed Com Slot 1 and Slot 2 well pads on New Mexico State Trust lands from the proposed Nina Cortell Fed Com Slot 3 and Slot 4 well pads on Federal lands (Exhibits 24 and 25) would require that a new fence and a cattle guard be installed.

Following proper procedures for crossing fence lines including bracing and tying off on both sides of the passageway with H-braces prior to cutting the fence, would mitigate the impacts to the fence. The operator would notify the private surface landowner and grazing allotment holders prior to crossing any fences.

Any damage to fences, cattle guards, and pipelines or structures that provide water to livestock during construction, throughout the life of the project, and caused by its operation, must be immediately corrected by the Applicant. The Applicant must notify the grazing allottee or the private surface landowner and the BLM-CFO (575-234-5972) if any damage occurs to pipelines or structures that provide water to livestock.

Prior to construction of the Nina Cortell Slot 3 and Slot 4 well pads, a straw wattle and earthen berm would be placed along the southern edges of the well pads (Exhibits 12 and 22 – Slot 3 well pad, Exhibits 15 and 23 – Slot 4 well pad) to avoid impacts to the un-named drainage feature located approximately 400-feet south of the two well pads. These measures would also be maintained during interim reclamation earthwork.

Production facilities on the four well pads would be bermed to prevent oil, salt, and other chemical contaminants from leaving the pads. Topsoil shall not be used to construct the berms. No water flow from the uphill side(s) of the pads shall be allowed to enter the well pads. The berms around the production facilities shall be maintained through the life of the wells and after interim reclamation has been completed.

Any water erosion that may occur due to the construction of the well pads or during the life of the wells and associated infrastructure would be corrected within two weeks and proper measures would be taken to prevent future erosion.

Prior to construction of the Nina Cortell Slot 3 and Slot 4 well pads, a straw wattle and earthen berm would be placed along the southern edges of the well pads (Exhibits 12 and 22 – Slot 3 well pad, Exhibits 15 and 23 – Slot 4 well pad) to avoid impacts to the un-named drainage feature located approximately 400-feet south of the two well pads. These measures would also be maintained during interim reclamation earthwork.

Production facilities on the four well pads would be bermed to prevent oil, salt, and other chemical contaminants from leaving the pads. Topsoil shall not be used to construct the berms. No water flow from the uphill side(s) of the pads shall be allowed to enter the well pads. The berms around the production facilities shall be maintained through the life of the wells and after interim reclamation has been completed.

Any water erosion that may occur due to the construction of the well pads or during the life of the wells and associated infrastructure would be corrected within two weeks and proper measures would be taken to prevent future erosion.

All spills or leaks shall be reported to the BLM immediately for their immediate and proper treatment. The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction and no further construction will be done until clearance has been issued by the Authorized Officer. Special restoration stipulations or realignment may be required.

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.

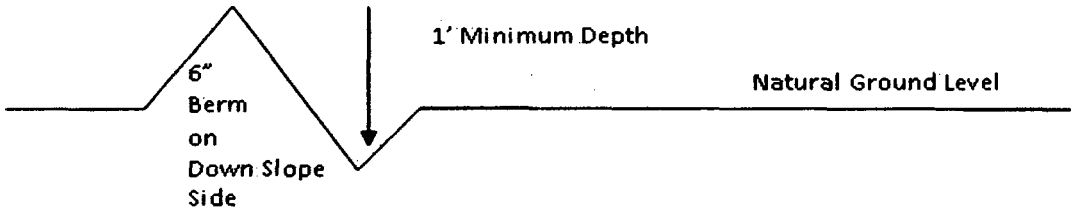
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

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

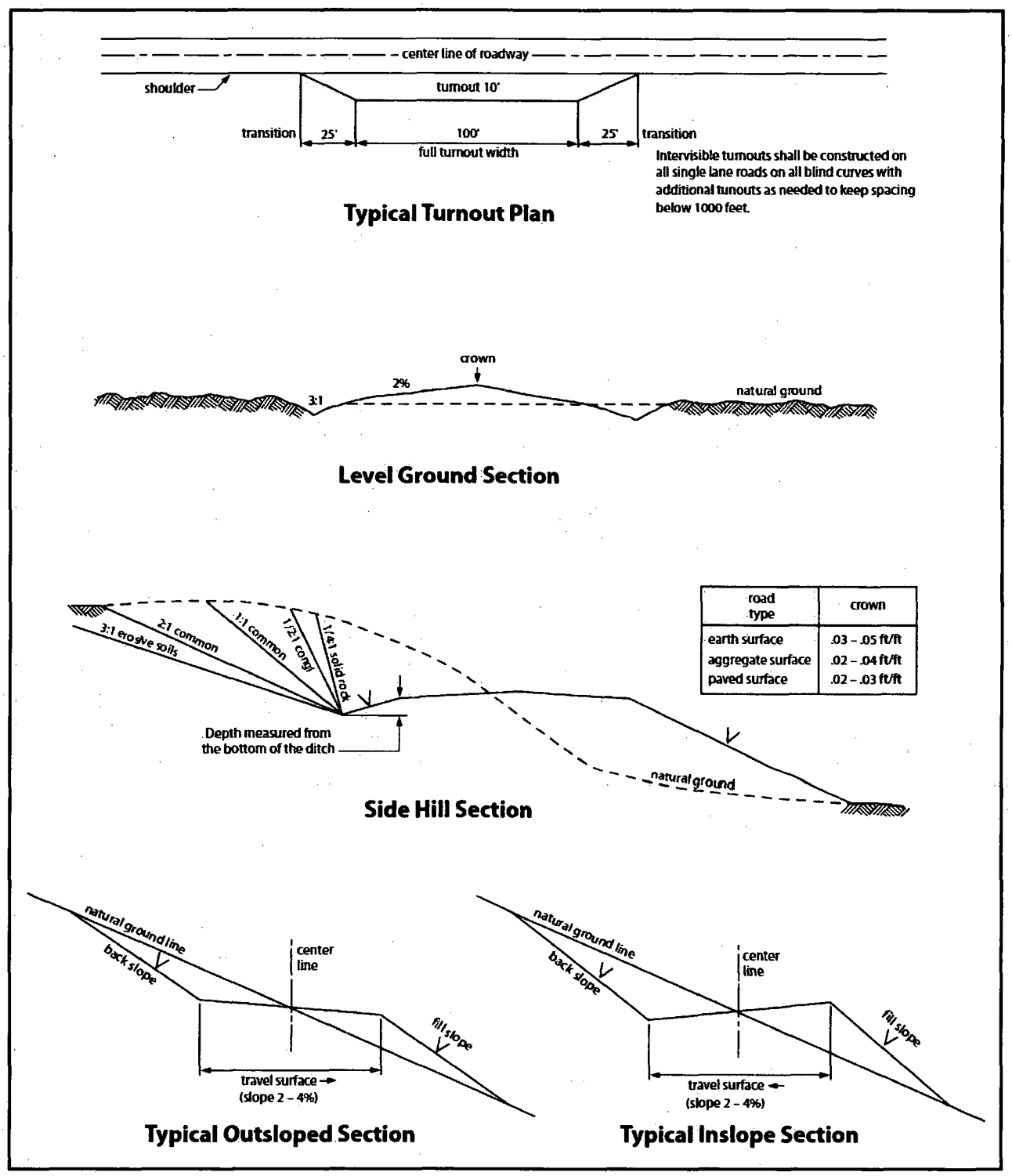


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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).

VRM Facility Requirement
Low-profile tanks not greater than eight-feet-high shall be used.

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).

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 2, for Sandy Sites

The 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 will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will 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). The 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. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will 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
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

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

Hydrogen Sulfide Drilling

Operations Plan

1 H2S safety instructions to the following:

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

2 H2S Detection and Alarm Systems:

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

3 Windsocks and / Wind Streamers:

- Windsocks at mud pit area will be high enough to be visible.
- Windsock on the rig floor and / top of doghouse will 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

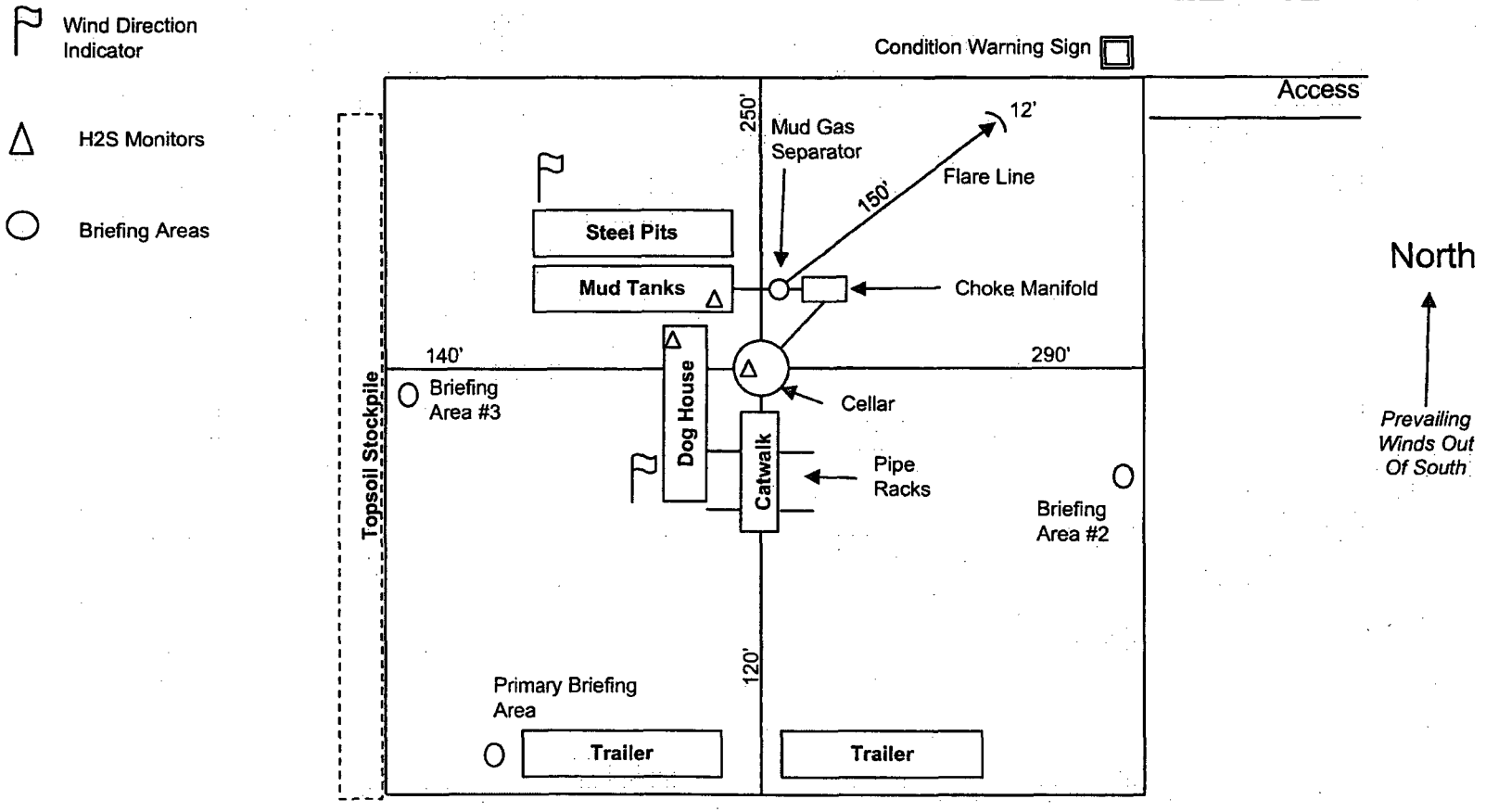
- See following page

H2S Contingency Plan Emergency Contacts
Nina Cortell wells
Matador Production Company
Sec. 3, T22S, R32E 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
Adam Lange	Drilling Engineer	972-371-5427	626-318-5808
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. (Eunice)		575-394-3258	
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	

H2S Rig Diagram

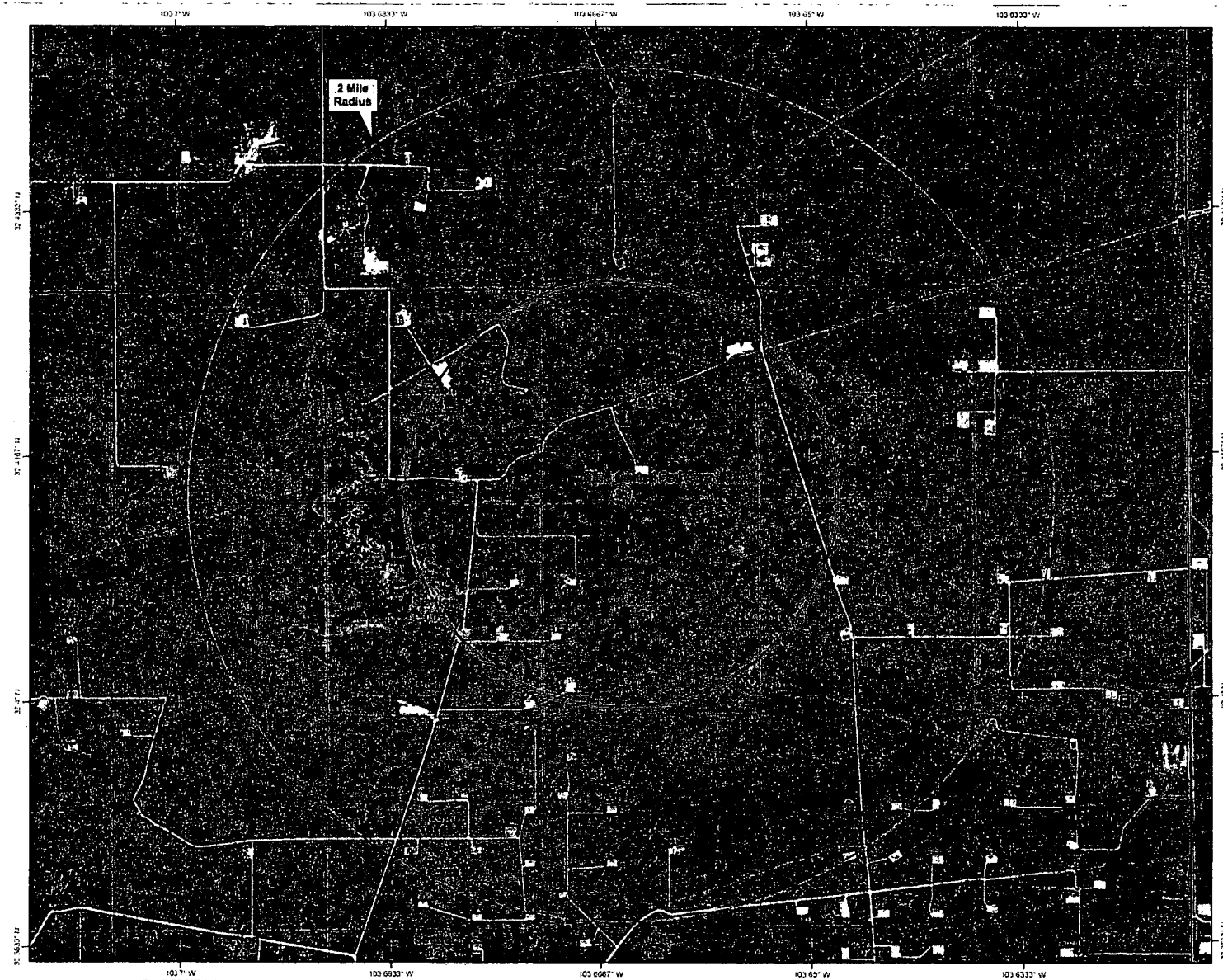
Nina Cortell Fed Com 122H
SHL 150' FSL & 1906' FWL
3-22S-32E Lea County, NM
(not to scale)



Matador Production Company

Nina Cortell Fed Com #122H
H_2S Contingency Plan:
2 Mile Radius Map

Section 3, Township 22S, Range 32E
Lea County, New Mexico



Surface Hole Location

1:27,000

0 0.25 0.5 1

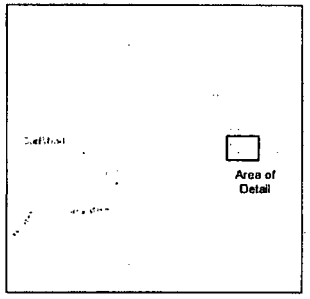
Miles

N

NAD 1983 New Mexico State Plane East
FIPS 3001 Feet

PERMITS WEST, INC.

Prepared by Permits West, Inc., November 15, 2017
for Matador Production Company



Matador Resources
Lea County, NM
Nina Cortell Fed Com
No. 122H
Prelim Plan B

PRODIRECTIONAL

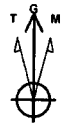
US State Plane 1927 (Exact solution)
NAD 1927 (NADCON CONUS)
Clarke 1866
New Mexico East 3001
Mean Sea Level

RKB Elevation: Well @ 3837.00usft

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	514890.00	706408.00	32.413771°N	103.664475°W	

SECTION DETAILS- Lateral

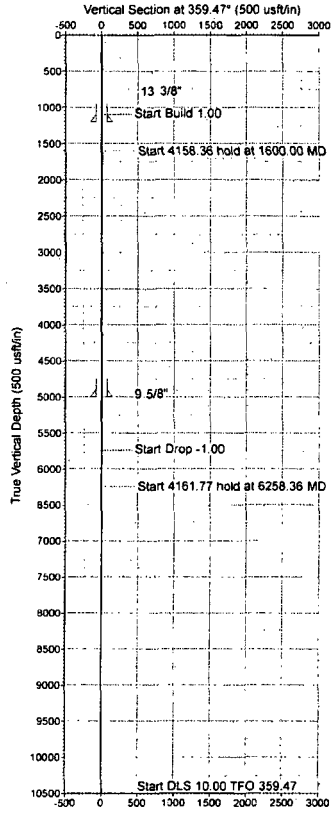
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00
3	1600.00	5.00	89.29	1599.37	0.27	21.80	1.00	0.07
4	5758.36	5.00	89.29	5741.91	4.73	384.20	0.00	1.18
5	6258.36	0.00	0.00	6241.27	5.00	406.00	1.00	1.24
6	10420.13	0.00	0.00	10403.04	5.00	406.00	0.00	1.24
7	11320.13	90.00	359.47	10976.00	577.93	400.72	10.00	574.20
8	15629.38	90.00	359.47	10976.00	-4887.00	361.00	0.00	4883.45

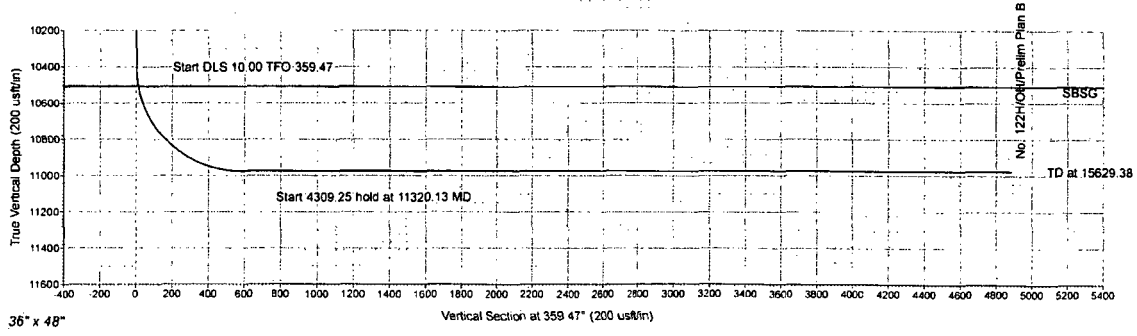


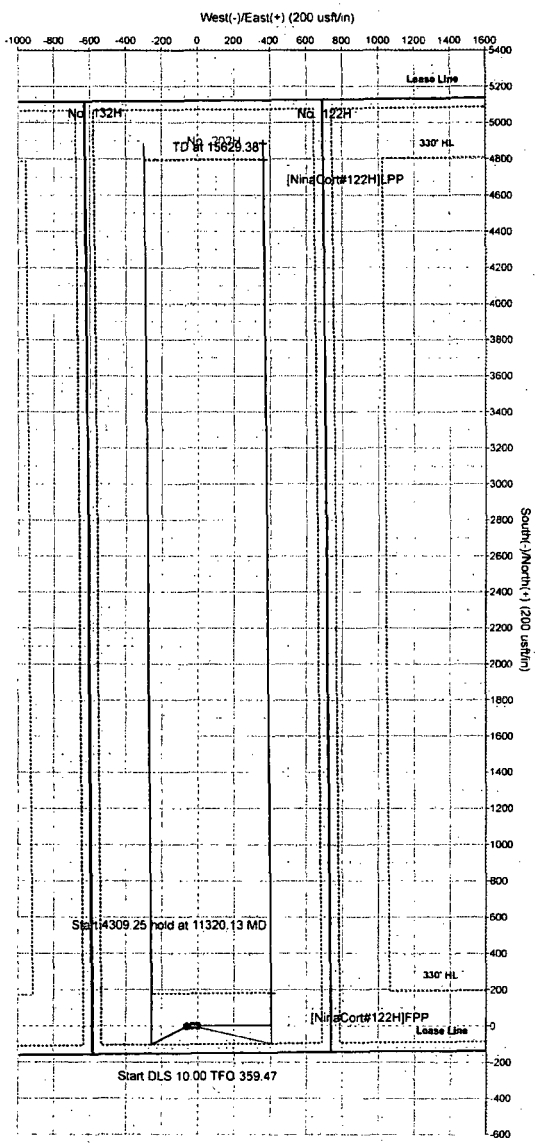
Azimuths to Grid North
True North: -0.36°
Magnetic North: 6.59°

Magnetic Field
Strength: 48279.8nT
Dip Angle: 60.30°
Date: 7/31/2017
Model: HDGM

Azimuth Corrections
Total Magnetic Corr. (M to G): 6.59°
Declination (M to T): 6.95° East







36" x 48"

Pro Directional

Survey Report

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well No. 122H
Project:	Lea County, NM	**TVD Reference:**	Well @ 3837.00usft
Site:	Nina Cortell Fed Com	**MD Reference:**	Well @ 3837.00usft
Well:	No. 122H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Prelim Plan B	**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	Nina Cortell Fed Com				
Site Position:		**Northing:**	514,876.00 usft	**Latitude:**	32.413755°N
From:	Map	**Easting:**	705,087.00 usft	**Longitude:**	103.668756°W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.36 °

Well	No. 122H					
Well Position	**+N/-S**	0.00 usft	**Northing:**	514,890.00 usft	**Latitude:**	32.413771°N
	+E/-W	0.00 usft	**Easting:**	706,408.00 usft	**Longitude:**	103.664475°W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,808.00 usft

Wellbore	OH				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	HDGM	7/31/2017	6.95	60.30	48,279.80

Design	Prelim Plan B				
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	359.47	

Survey Tool Program **Date** 8/11/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	1,200.00	Prelim Plan B (OH)	MWD+HDGM	OWSG MWD + HRGM
1,200.00	5,000.00	Prelim Plan B (OH)	MWD+HDGM	OWSG MWD + HRGM
5,000.00	15,629.38	Prelim Plan B (OH)	MWD+HDGM	OWSG MWD + HRGM

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

Pro Directional

Survey Report

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well No. 122H
Project:	Lea County, NM	**TVD Reference:**	Well @ 3837.00usft
Site:	Nina Cortell Fed Com	**MD Reference:**	Well @ 3837.00usft
Well:	No. 122H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Prelim Plan B	**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)
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	1.00	89.29	1,199.99	0.01	0.87	0.00	1.00	1.00	0.00
1,200.01	1.00	89.29	1,200.00	0.01	0.87	0.00	0.00	0.00	0.00
13 3/8"									
1,300.00	2.00	89.29	1,299.96	0.04	3.49	0.01	1.00	1.00	0.00
1,400.00	3.00	89.29	1,399.86	0.10	7.85	0.02	1.00	1.00	0.00
1,500.00	4.00	89.29	1,499.68	0.17	13.96	0.04	1.00	1.00	0.00
1,600.00	5.00	89.29	1,599.37	0.27	21.80	0.07	1.00	1.00	0.00
1,700.00	5.00	89.29	1,698.99	0.38	30.52	0.09	0.00	0.00	0.00
1,800.00	5.00	89.29	1,798.60	0.48	39.23	0.12	0.00	0.00	0.00
1,900.00	5.00	89.29	1,898.22	0.59	47.95	0.15	0.00	0.00	0.00
2,000.00	5.00	89.29	1,997.84	0.70	56.66	0.17	0.00	0.00	0.00
2,100.00	5.00	89.29	2,097.46	0.81	65.38	0.20	0.00	0.00	0.00
2,200.00	5.00	89.29	2,197.08	0.91	74.09	0.23	0.00	0.00	0.00
2,300.00	5.00	89.29	2,296.70	1.02	82.81	0.25	0.00	0.00	0.00
2,400.00	5.00	89.29	2,396.32	1.13	91.52	0.28	0.00	0.00	0.00
2,500.00	5.00	89.29	2,495.94	1.23	100.24	0.31	0.00	0.00	0.00
2,600.00	5.00	89.29	2,595.56	1.34	108.95	0.33	0.00	0.00	0.00
2,700.00	5.00	89.29	2,695.18	1.45	117.67	0.36	0.00	0.00	0.00
2,800.00	5.00	89.29	2,794.80	1.56	126.38	0.39	0.00	0.00	0.00
2,900.00	5.00	89.29	2,894.42	1.66	135.09	0.41	0.00	0.00	0.00
3,000.00	5.00	89.29	2,994.04	1.77	143.81	0.44	0.00	0.00	0.00
3,100.00	5.00	89.29	3,093.66	1.88	152.52	0.47	0.00	0.00	0.00
3,200.00	5.00	89.29	3,193.28	1.99	161.24	0.49	0.00	0.00	0.00
3,300.00	5.00	89.29	3,292.90	2.09	169.95	0.52	0.00	0.00	0.00
3,400.00	5.00	89.29	3,392.52	2.20	178.67	0.55	0.00	0.00	0.00
3,500.00	5.00	89.29	3,492.14	2.31	187.38	0.57	0.00	0.00	0.00
3,600.00	5.00	89.29	3,591.76	2.42	196.10	0.60	0.00	0.00	0.00
3,700.00	5.00	89.29	3,691.37	2.52	204.81	0.63	0.00	0.00	0.00
3,800.00	5.00	89.29	3,790.99	2.63	213.53	0.65	0.00	0.00	0.00
3,900.00	5.00	89.29	3,890.61	2.74	222.24	0.68	0.00	0.00	0.00
4,000.00	5.00	89.29	3,990.23	2.84	230.96	0.71	0.00	0.00	0.00
4,100.00	5.00	89.29	4,089.85	2.95	239.67	0.73	0.00	0.00	0.00
4,200.00	5.00	89.29	4,189.47	3.06	248.39	0.76	0.00	0.00	0.00
4,300.00	5.00	89.29	4,289.09	3.17	257.10	0.79	0.00	0.00	0.00
4,400.00	5.00	89.29	4,388.71	3.27	265.82	0.81	0.00	0.00	0.00
4,500.00	5.00	89.29	4,488.33	3.38	274.53	0.84	0.00	0.00	0.00
4,600.00	5.00	89.29	4,587.95	3.49	283.25	0.87	0.00	0.00	0.00
4,700.00	5.00	89.29	4,687.57	3.60	291.96	0.89	0.00	0.00	0.00
4,800.00	5.00	89.29	4,787.19	3.70	300.68	0.92	0.00	0.00	0.00
4,900.00	5.00	89.29	4,886.81	3.81	309.39	0.95	0.00	0.00	0.00

Pro Directional

Survey Report

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well No. 122H
Project:	Lea County, NM	**TVD Reference:**	Well @ 3837.00usft
Site:	Nina Cortell Fed Com	**MD Reference:**	Well @ 3837.00usft
Well:	No. 122H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Prelim Plan B	**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)
5,000.00	5.00	89.29	4,986.43	3.92	318.11	0.97	0.00	0.00	0.00
5,013.62	5.00	89.29	5,000.00	3.93	319.30	0.98	0.00	0.00	0.00
9 5/8"									
5,100.00	5.00	89.29	5,086.05	4.02	326.82	1.00	0.00	0.00	0.00
5,200.00	5.00	89.29	5,185.67	4.13	335.54	1.03	0.00	0.00	0.00
5,300.00	5.00	89.29	5,285.29	4.24	344.25	1.06	0.00	0.00	0.00
5,400.00	5.00	89.29	5,384.91	4.35	352.97	1.08	0.00	0.00	0.00
5,500.00	5.00	89.29	5,484.53	4.45	361.68	1.11	0.00	0.00	0.00
5,600.00	5.00	89.29	5,584.14	4.56	370.40	1.14	0.00	0.00	0.00
5,700.00	5.00	89.29	5,683.76	4.67	379.11	1.16	0.00	0.00	0.00
5,758.36	5.00	89.29	5,741.91	4.73	384.20	1.18	0.00	0.00	0.00
5,800.00	4.58	89.29	5,783.40	4.77	387.68	1.19	1.00	-1.00	0.00
5,900.00	3.58	89.29	5,883.14	4.86	394.80	1.21	1.00	-1.00	0.00
6,000.00	2.58	89.29	5,983.00	4.93	400.18	1.23	1.00	-1.00	0.00
6,100.00	1.58	89.29	6,082.93	4.97	403.81	1.24	1.00	-1.00	0.00
6,200.00	0.58	89.29	6,182.91	5.00	405.70	1.24	1.00	-1.00	0.00
6,258.36	0.00	0.00	6,241.27	5.00	406.00	1.24	1.00	-1.00	0.00
6,300.00	0.00	0.00	6,282.91	5.00	406.00	1.24	0.00	0.00	0.00
6,400.00	0.00	0.00	6,382.91	5.00	406.00	1.24	0.00	0.00	0.00
6,500.00	0.00	0.00	6,482.91	5.00	406.00	1.24	0.00	0.00	0.00
6,600.00	0.00	0.00	6,582.91	5.00	406.00	1.24	0.00	0.00	0.00
6,700.00	0.00	0.00	6,682.91	5.00	406.00	1.24	0.00	0.00	0.00
6,800.00	0.00	0.00	6,782.91	5.00	406.00	1.24	0.00	0.00	0.00
6,900.00	0.00	0.00	6,882.91	5.00	406.00	1.24	0.00	0.00	0.00
7,000.00	0.00	0.00	6,982.91	5.00	406.00	1.24	0.00	0.00	0.00
7,100.00	0.00	0.00	7,082.91	5.00	406.00	1.24	0.00	0.00	0.00
7,200.00	0.00	0.00	7,182.91	5.00	406.00	1.24	0.00	0.00	0.00
7,300.00	0.00	0.00	7,282.91	5.00	406.00	1.24	0.00	0.00	0.00
7,400.00	0.00	0.00	7,382.91	5.00	406.00	1.24	0.00	0.00	0.00
7,500.00	0.00	0.00	7,482.91	5.00	406.00	1.24	0.00	0.00	0.00
7,600.00	0.00	0.00	7,582.91	5.00	406.00	1.24	0.00	0.00	0.00
7,700.00	0.00	0.00	7,682.91	5.00	406.00	1.24	0.00	0.00	0.00
7,800.00	0.00	0.00	7,782.91	5.00	406.00	1.24	0.00	0.00	0.00
7,900.00	0.00	0.00	7,882.91	5.00	406.00	1.24	0.00	0.00	0.00
8,000.00	0.00	0.00	7,982.91	5.00	406.00	1.24	0.00	0.00	0.00
8,100.00	0.00	0.00	8,082.91	5.00	406.00	1.24	0.00	0.00	0.00
8,200.00	0.00	0.00	8,182.91	5.00	406.00	1.24	0.00	0.00	0.00
8,300.00	0.00	0.00	8,282.91	5.00	406.00	1.24	0.00	0.00	0.00
8,400.00	0.00	0.00	8,382.91	5.00	406.00	1.24	0.00	0.00	0.00
8,500.00	0.00	0.00	8,482.91	5.00	406.00	1.24	0.00	0.00	0.00
8,600.00	0.00	0.00	8,582.91	5.00	406.00	1.24	0.00	0.00	0.00
8,700.00	0.00	0.00	8,682.91	5.00	406.00	1.24	0.00	0.00	0.00
8,800.00	0.00	0.00	8,782.91	5.00	406.00	1.24	0.00	0.00	0.00
8,900.00	0.00	0.00	8,882.91	5.00	406.00	1.24	0.00	0.00	0.00

Pro Directional

Survey Report

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well No. 122H
Project:	Lea County, NM	**TVD Reference:**	Well @ 3837.00usft
Site:	Nina Cortell Fed Com	**MD Reference:**	Well @ 3837.00usft
Well:	No. 122H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Prelim Plan B	**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	0.00	0.00	8,982.91	5.00	406.00	1.24	0.00	0.00	0.00
9,100.00	0.00	0.00	9,082.91	5.00	406.00	1.24	0.00	0.00	0.00
9,200.00	0.00	0.00	9,182.91	5.00	406.00	1.24	0.00	0.00	0.00
9,300.00	0.00	0.00	9,282.91	5.00	406.00	1.24	0.00	0.00	0.00
9,400.00	0.00	0.00	9,382.91	5.00	406.00	1.24	0.00	0.00	0.00
9,500.00	0.00	0.00	9,482.91	5.00	406.00	1.24	0.00	0.00	0.00
9,600.00	0.00	0.00	9,582.91	5.00	406.00	1.24	0.00	0.00	0.00
9,700.00	0.00	0.00	9,682.91	5.00	406.00	1.24	0.00	0.00	0.00
9,800.00	0.00	0.00	9,782.91	5.00	406.00	1.24	0.00	0.00	0.00
9,900.00	0.00	0.00	9,882.91	5.00	406.00	1.24	0.00	0.00	0.00
10,000.00	0.00	0.00	9,982.91	5.00	406.00	1.24	0.00	0.00	0.00
10,100.00	0.00	0.00	10,082.91	5.00	406.00	1.24	0.00	0.00	0.00
10,200.00	0.00	0.00	10,182.91	5.00	406.00	1.24	0.00	0.00	0.00
10,300.00	0.00	0.00	10,282.91	5.00	406.00	1.24	0.00	0.00	0.00
10,400.00	0.00	0.00	10,382.91	5.00	406.00	1.24	0.00	0.00	0.00
10,420.13	0.00	0.00	10,403.04	5.00	406.00	1.24	0.00	0.00	0.00
10,450.00	2.99	359.47	10,432.89	5.78	405.99	2.02	10.00	10.00	0.00
10,500.00	7.99	359.47	10,482.65	10.56	405.95	6.80	10.00	10.00	0.00
10,550.00	12.99	359.47	10,531.80	19.65	405.86	15.90	10.00	10.00	0.00
10,600.00	17.99	359.47	10,579.97	33.00	405.74	29.25	10.00	10.00	0.00
10,650.00	22.99	359.47	10,626.79	50.49	405.58	46.74	10.00	10.00	0.00
10,700.00	27.99	359.47	10,671.91	72.00	405.38	68.25	10.00	10.00	0.00
10,750.00	32.99	359.47	10,714.98	97.36	405.15	93.61	10.00	10.00	0.00
10,800.00	37.99	359.47	10,755.68	126.37	404.88	122.62	10.00	10.00	0.00
10,850.00	42.99	359.47	10,793.70	158.83	404.58	155.08	10.00	10.00	0.00
10,900.00	47.99	359.47	10,828.74	194.47	404.25	190.72	10.00	10.00	0.00
10,950.00	52.99	359.47	10,860.54	233.03	403.90	229.28	10.00	10.00	0.00
11,000.00	57.99	359.47	10,888.87	274.21	403.52	270.47	10.00	10.00	0.00
11,050.00	62.99	359.47	10,913.49	317.71	403.12	313.97	10.00	10.00	0.00
11,100.00	67.99	359.47	10,934.23	363.19	402.70	359.45	10.00	10.00	0.00
11,150.00	72.99	359.47	10,950.92	410.30	402.26	406.56	10.00	10.00	0.00
11,200.00	77.99	359.47	10,963.45	458.68	401.82	454.95	10.00	10.00	0.00
11,250.00	82.99	359.47	10,971.71	507.98	401.36	504.24	10.00	10.00	0.00
11,300.00	87.99	359.47	10,975.64	557.81	400.90	554.07	10.00	10.00	0.00
11,320.13	90.00	359.47	10,976.00	577.93	400.72	574.20	10.00	10.00	0.00
11,400.00	90.00	359.47	10,976.00	657.80	399.98	654.07	0.00	0.00	0.00
11,500.00	90.00	359.47	10,976.00	757.79	399.06	754.07	0.00	0.00	0.00
11,600.00	90.00	359.47	10,976.00	857.79	398.14	854.07	0.00	0.00	0.00
11,700.00	90.00	359.47	10,976.00	957.78	397.22	954.07	0.00	0.00	0.00
11,800.00	90.00	359.47	10,976.00	1,057.78	396.30	1,054.07	0.00	0.00	0.00
11,900.00	90.00	359.47	10,976.00	1,157.78	395.37	1,154.07	0.00	0.00	0.00
12,000.00	90.00	359.47	10,976.00	1,257.77	394.45	1,254.07	0.00	0.00	0.00
12,100.00	90.00	359.47	10,976.00	1,357.77	393.53	1,354.07	0.00	0.00	0.00

Pro Directional

Survey Report

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well No. 122H
Project:	Lea County, NM	**TVD Reference:**	Well @ 3837.00usft
Site:	Nina Cortell Fed Com	**MD Reference:**	Well @ 3837.00usft
Well:	No. 122H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Prelim Plan B	**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)
12,200.00	90.00	359.47	10,976.00	1,457.76	392.61	1,454.07	0.00	0.00	0.00
12,300.00	90.00	359.47	10,976.00	1,557.76	391.69	1,554.07	0.00	0.00	0.00
12,400.00	90.00	359.47	10,976.00	1,657.76	390.77	1,654.07	0.00	0.00	0.00
12,500.00	90.00	359.47	10,976.00	1,757.75	389.84	1,754.07	0.00	0.00	0.00
12,600.00	90.00	359.47	10,976.00	1,857.75	388.92	1,854.07	0.00	0.00	0.00
12,700.00	90.00	359.47	10,976.00	1,957.74	388.00	1,954.07	0.00	0.00	0.00
12,800.00	90.00	359.47	10,976.00	2,057.74	387.08	2,054.07	0.00	0.00	0.00
12,900.00	90.00	359.47	10,976.00	2,157.73	386.16	2,154.07	0.00	0.00	0.00
13,000.00	90.00	359.47	10,976.00	2,257.73	385.24	2,254.07	0.00	0.00	0.00
13,100.00	90.00	359.47	10,976.00	2,357.73	384.31	2,354.07	0.00	0.00	0.00
13,200.00	90.00	359.47	10,976.00	2,457.72	383.39	2,454.07	0.00	0.00	0.00
13,300.00	90.00	359.47	10,976.00	2,557.72	382.47	2,554.07	0.00	0.00	0.00
13,400.00	90.00	359.47	10,976.00	2,657.71	381.55	2,654.07	0.00	0.00	0.00
13,500.00	90.00	359.47	10,976.00	2,757.71	380.63	2,754.07	0.00	0.00	0.00
13,600.00	90.00	359.47	10,976.00	2,857.70	379.71	2,854.07	0.00	0.00	0.00
13,700.00	90.00	359.47	10,976.00	2,957.70	378.78	2,954.07	0.00	0.00	0.00
13,800.00	90.00	359.47	10,976.00	3,057.70	377.86	3,054.07	0.00	0.00	0.00
13,900.00	90.00	359.47	10,976.00	3,157.69	376.94	3,154.07	0.00	0.00	0.00
14,000.00	90.00	359.47	10,976.00	3,257.69	376.02	3,254.07	0.00	0.00	0.00
14,100.00	90.00	359.47	10,976.00	3,357.68	375.10	3,354.07	0.00	0.00	0.00
14,200.00	90.00	359.47	10,976.00	3,457.68	374.17	3,454.07	0.00	0.00	0.00
14,300.00	90.00	359.47	10,976.00	3,557.67	373.25	3,554.07	0.00	0.00	0.00
14,400.00	90.00	359.47	10,976.00	3,657.67	372.33	3,654.07	0.00	0.00	0.00
14,500.00	90.00	359.47	10,976.00	3,757.67	371.41	3,754.07	0.00	0.00	0.00
14,600.00	90.00	359.47	10,976.00	3,857.66	370.49	3,854.07	0.00	0.00	0.00
14,700.00	90.00	359.47	10,976.00	3,957.66	369.57	3,954.07	0.00	0.00	0.00
14,800.00	90.00	359.47	10,976.00	4,057.65	368.64	4,054.07	0.00	0.00	0.00
14,900.00	90.00	359.47	10,976.00	4,157.65	367.72	4,154.07	0.00	0.00	0.00
15,000.00	90.00	359.47	10,976.00	4,257.64	366.80	4,254.07	0.00	0.00	0.00
15,100.00	90.00	359.47	10,976.00	4,357.64	365.88	4,354.07	0.00	0.00	0.00
15,200.00	90.00	359.47	10,976.00	4,457.64	364.96	4,454.07	0.00	0.00	0.00
15,300.00	90.00	359.47	10,976.00	4,557.63	364.04	4,554.07	0.00	0.00	0.00
15,400.00	90.00	359.47	10,976.00	4,657.63	363.11	4,654.07	0.00	0.00	0.00
15,500.00	90.00	359.47	10,976.00	4,757.62	362.19	4,754.07	0.00	0.00	0.00
15,600.00	90.00	359.47	10,976.00	4,857.62	361.27	4,854.07	0.00	0.00	0.00
15,629.38	90.00	359.47	10,976.00	4,887.00	361.00	4,883.45	0.00	0.00	0.00

Pro Directional

Survey Report

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well No. 122H
Project:	Lea County, NM	**TVD Reference:**	Well @ 3837.00usft
Site:	Nina Cortell Fed Com	**MD Reference:**	Well @ 3837.00usft
Well:	No. 122H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Prelim Plan B	**Database:**	WellPlanner1

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
[NinaCort#122H]LPP	0.00	0.00	0.00	4,797.00	362.00	519,687.00	706,770.00	32.426951°N	103.663205°W
- plan misses target center by 4810.64usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
[NinaCort#122H]FPP	0.00	0.00	10,666.00	184.00	404.00	515,074.00	706,812.00	32.414270°N	103.663163°W
- plan misses target center by 99.35usft at 10760.42usft MD (10723.67 TVD, 103.11 N, 405.10 E)									
- Point									
[NinaCort#122H]BHL	0.00	0.00	10,976.00	4,887.00	361.00	519,777.00	706,769.00	32.427198°N	103.663206°W
- plan hits target center									
- Point									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,200.01	1,200.00	13 3/8"	13-3/8	17-1/2
5,013.62	5,000.00	9 5/8"	9-5/8	12-1/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
10,524.67	10,507.00	SBSG		0.00	

Checked By: _____ Approved By: _____ Date: _____

Pro Directional

Anticollision Report

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well No. 122H
Project:	Lea County, NM	**TVD Reference:**	Well @ 3837.00usft
Reference Site:	Nina Cortell Fed Com	**MD Reference:**	Well @ 3837.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	No. 122H	**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 B	**Offset TVD Reference:**	Offset Datum

Reference	Prelim Plan B		
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** 8/11/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	1,200.00	Prelim Plan B (OH)	MWD+HDGM	OWSG MWD + HRGM
1,200.00	5,000.00	Prelim Plan B (OH)	MWD+HDGM	OWSG MWD + HRGM
5,000.00	15,629.38	Prelim Plan B (OH)	MWD+HDGM	OWSG MWD + HRGM

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
Nina Cortell Fed Com						
No. 132H - OH - Prelim Plan B	1,100.00	1,100.00	60.01	52.58	8.083	CC, ES
No. 132H - OH - Prelim Plan B	1,300.00	1,300.04	63.50	55.01	7.478	SF
No. 202H - OH - Prelim Plan B	1,100.00	1,100.00	30.00	22.58	4.041	CC, ES
No. 202H - OH - Prelim Plan B	10,420.13	10,421.94	101.00	52.02	2.062	SF

Offset Design Nina Cortell Fed Com - No. 132H - OH - Prelim Plan B

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+HDGM, 1200-MWD+HDGM, 5000-MWD+HDGM

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	0.00	0.00	0.00	0.00	-90.95	-1.00	-60.00	60.01				
100.00	100.00	100.00	100.00	0.13	0.13	-90.95	-1.00	-60.00	60.01	59.75	0.25	235.775	
200.00	200.00	200.00	200.00	0.49	0.49	-90.95	-1.00	-60.00	60.01	59.04	0.97	61.771	
300.00	300.00	300.00	300.00	0.84	0.84	-90.95	-1.00	-60.00	60.01	58.32	1.69	35.542	
400.00	400.00	400.00	400.00	1.20	1.20	-90.95	-1.00	-60.00	60.01	57.60	2.41	24.948	
500.00	500.00	500.00	500.00	1.56	1.56	-90.95	-1.00	-60.00	60.01	56.89	3.12	19.219	
600.00	600.00	600.00	600.00	1.92	1.92	-90.95	-1.00	-60.00	60.01	56.17	3.84	15.630	
700.00	700.00	700.00	700.00	2.28	2.28	-90.95	-1.00	-60.00	60.01	55.45	4.56	13.171	
800.00	800.00	800.00	800.00	2.64	2.64	-90.95	-1.00	-60.00	60.01	54.74	5.27	11.380	
900.00	900.00	900.00	900.00	3.00	3.00	-90.95	-1.00	-60.00	60.01	54.02	5.99	10.018	
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	-90.95	-1.00	-60.00	60.01	53.30	6.71	8.947	
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	-90.95	-1.00	-60.00	60.01	52.58	7.42	8.083	CC, ES
1,200.00	1,199.99	1,200.01	1,199.99	4.06	4.07	179.75	-1.00	-60.00	60.88	52.75	8.13	7.486	
1,300.00	1,299.96	1,300.04	1,299.96	4.24	4.25	179.76	-1.00	-60.00	63.50	55.01	8.49	7.478	SF
1,400.00	1,399.86	1,400.14	1,399.86	4.27	4.28	179.78	-1.00	-60.00	67.86	59.31	8.55	7.935	
1,500.00	1,499.68	1,499.68	1,499.68	4.33	4.34	179.80	-1.00	-60.00	73.97	65.29	8.67	8.528	
1,600.00	1,599.37	1,598.10	1,598.10	4.43	4.43	179.55	-1.39	-60.74	82.57	73.72	8.85	9.332	
1,700.00	1,698.99	1,696.14	1,696.10	4.55	4.53	178.90	-2.56	-62.97	93.58	84.51	9.07	10.317	
1,800.00	1,798.60	1,793.80	1,793.67	4.70	4.66	178.00	-4.49	-66.67	106.14	96.80	9.34	11.365	
1,900.00	1,898.22	1,891.03	1,890.72	4.88	4.82	176.96	-7.18	-71.82	120.25	110.60	9.65	12.462	
2,000.00	1,997.84	1,987.77	1,987.18	5.07	4.99	175.87	-10.62	-78.39	135.94	125.94	10.00	13.596	

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 No. 122H
Project:	Lea County, NM	**TVD Reference:**	Well @ 3837.00usft
Reference Site:	Nina Cortell Fed Com	**MD Reference:**	Well @ 3837.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	No. 122H	**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 B	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell Fed Com - No. 132H - OH - Prelim Plan B — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+HDGM, 1200-MWD+HDGM, 5000-MWD+HDGM — **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
2,100.00	2,097.46	2,086.07	2,085.11	5.29	5.19	174.84	-14.58	-85.97	152.82	142.23	10.39	14.686	
2,200.00	2,197.08	2,184.63	2,183.29	5.53	5.41	174.01	-18.56	-93.58	169.36	158.54	10.82	15.650	
2,300.00	2,296.70	2,283.19	2,281.48	5.78	5.64	173.33	-22.55	-101.19	186.12	174.84	11.28	16.500	
2,400.00	2,396.32	2,381.76	2,379.67	6.04	5.89	172.77	-26.53	-108.80	202.91	191.14	11.77	17.247	
2,500.00	2,495.94	2,480.32	2,477.86	6.31	6.15	172.29	-30.51	-116.41	219.71	207.43	12.27	17.901	
2,600.00	2,595.56	2,578.88	2,576.05	6.60	6.42	171.87	-34.49	-124.03	236.52	223.72	12.80	18.475	
2,700.00	2,695.18	2,677.45	2,674.23	6.89	6.70	171.52	-38.47	-131.64	253.35	240.00	13.35	18.979	
2,800.00	2,794.80	2,776.01	2,772.42	7.19	7.00	171.20	-42.45	-139.25	270.18	256.27	13.91	19.421	
2,900.00	2,894.42	2,874.57	2,870.61	7.50	7.29	170.93	-46.44	-146.86	287.02	272.53	14.49	19.811	
3,000.00	2,994.04	2,973.14	2,968.80	7.82	7.60	170.68	-50.42	-154.47	303.86	288.79	15.08	20.154	
3,100.00	3,093.66	3,071.70	3,066.99	8.14	7.91	170.46	-54.40	-162.09	320.71	305.04	15.68	20.458	
3,200.00	3,193.28	3,170.26	3,165.17	8.46	8.23	170.26	-58.38	-169.70	337.57	321.28	16.29	20.726	
3,300.00	3,292.90	3,268.82	3,263.36	8.79	8.55	170.08	-62.36	-177.31	354.43	337.52	16.91	20.965	
3,400.00	3,392.52	3,367.39	3,361.55	9.12	8.87	169.92	-66.34	-184.92	371.29	353.76	17.53	21.178	
3,500.00	3,492.14	3,465.95	3,459.74	9.46	9.20	169.77	-70.32	-192.53	388.15	369.99	18.17	21.368	
3,600.00	3,591.76	3,564.51	3,557.93	9.80	9.53	169.63	-74.31	-200.14	405.02	386.21	18.81	21.538	
3,700.00	3,691.37	3,663.08	3,656.11	10.14	9.87	169.51	-78.29	-207.76	421.89	402.44	19.45	21.690	
3,800.00	3,790.99	3,761.64	3,754.30	10.48	10.20	169.39	-82.27	-215.37	438.76	418.66	20.10	21.827	
3,900.00	3,890.61	3,860.20	3,852.49	10.83	10.54	169.28	-86.25	-222.98	455.63	434.87	20.76	21.951	
4,000.00	3,990.23	3,958.77	3,950.68	11.18	10.89	169.19	-90.23	-230.59	472.50	451.09	21.42	22.063	
4,100.00	4,089.85	4,060.25	4,051.78	11.53	11.24	169.09	-94.28	-238.33	489.28	467.18	22.10	22.142	
4,200.00	4,189.47	4,168.04	4,159.30	11.88	11.61	169.05	-97.86	-245.17	504.67	481.86	22.82	22.119	
4,300.00	4,289.09	4,276.41	4,267.52	12.23	11.98	169.08	-100.51	-250.24	518.27	494.74	23.53	22.022	
4,400.00	4,388.71	4,385.29	4,376.33	12.59	12.35	169.16	-102.21	-253.50	530.07	505.82	24.25	21.858	
4,500.00	4,488.33	4,494.58	4,485.61	12.95	12.71	169.30	-102.96	-254.93	540.04	515.08	24.96	21.634	
4,600.00	4,587.95	4,603.08	4,587.95	13.30	13.05	169.48	-103.00	-255.00	548.68	523.03	25.65	21.392	
4,700.00	4,687.57	4,703.46	4,687.57	13.66	13.36	169.64	-103.00	-255.00	557.25	530.95	26.31	21.182	
4,800.00	4,787.19	4,803.84	4,787.19	14.02	13.67	169.80	-103.00	-255.00	565.83	538.86	26.97	20.980	
4,900.00	4,886.81	4,904.22	4,886.81	14.38	13.98	169.95	-103.00	-255.00	574.41	546.78	27.63	20.790	
5,000.00	4,986.43	5,004.60	4,986.43	14.58	14.13	170.10	-103.00	-255.00	583.00	555.03	27.96	20.850	
5,100.00	5,086.05	5,104.98	5,086.05	14.61	14.14	170.25	-103.00	-255.00	591.58	563.60	27.98	21.141	
5,200.00	5,185.67	5,205.36	5,185.67	14.66	14.16	170.39	-103.00	-255.00	600.18	572.16	28.02	21.418	
5,300.00	5,285.29	5,305.74	5,285.29	14.72	14.19	170.52	-103.00	-255.00	608.77	580.69	28.08	21.681	
5,400.00	5,384.91	5,406.12	5,384.91	14.78	14.22	170.66	-103.00	-255.00	617.37	589.22	28.16	21.928	
5,500.00	5,484.53	5,506.50	5,484.53	14.86	14.27	170.79	-103.00	-255.00	625.97	597.73	28.25	22.159	
5,600.00	5,584.14	5,606.88	5,584.14	14.94	14.32	170.91	-103.00	-255.00	634.58	606.22	28.36	22.374	
5,700.00	5,683.76	5,707.26	5,683.76	15.03	14.39	171.04	-103.00	-255.00	643.19	614.70	28.49	22.574	
5,758.36	5,741.91	5,750.88	5,741.91	15.09	14.42	171.11	-103.00	-255.00	648.21	619.65	28.57	22.692	
5,800.00	5,783.40	5,807.63	5,783.40	15.14	14.46	171.16	-103.00	-255.00	651.65	623.01	28.64	22.753	
5,900.00	5,883.14	5,907.89	5,883.14	15.24	14.54	171.26	-103.00	-255.00	658.69	629.88	28.80	22.868	
6,000.00	5,983.00	6,008.03	5,983.00	15.35	14.63	171.34	-103.00	-255.00	664.01	635.02	28.99	22.909	
6,100.00	6,082.93	6,108.10	6,082.93	15.45	14.73	171.39	-103.00	-255.00	667.60	638.42	29.18	22.878	
6,200.00	6,182.91	6,208.12	6,182.91	15.56	14.83	171.42	-103.00	-255.00	669.47	640.08	29.39	22.777	
6,258.36	6,241.27	6,250.24	6,241.27	15.62	14.88	-99.28	-103.00	-255.00	669.76	640.26	29.50	22.701	
6,300.00	6,282.91	6,308.12	6,282.91	15.66	14.95	-99.28	-103.00	-255.00	669.76	640.15	29.62	22.615	
6,400.00	6,382.91	6,408.12	6,382.91	15.77	15.07	-99.28	-103.00	-255.00	669.76	639.91	29.85	22.436	
6,500.00	6,482.91	6,508.12	6,482.91	15.89	15.19	-99.28	-103.00	-255.00	669.76	639.66	30.10	22.248	
6,600.00	6,582.91	6,608.12	6,582.91	16.01	15.33	-99.28	-103.00	-255.00	669.76	639.39	30.37	22.053	
6,700.00	6,682.91	6,708.12	6,682.91	16.14	15.47	-99.28	-103.00	-255.00	669.76	639.11	30.65	21.851	
6,800.00	6,782.91	6,808.12	6,782.91	16.28	15.62	-99.28	-103.00	-255.00	669.76	638.82	30.95	21.642	
6,900.00	6,882.91	6,908.12	6,882.91	16.43	15.78	-99.28	-103.00	-255.00	669.76	638.51	31.26	21.429	
7,000.00	6,982.91	7,008.12	6,982.91	16.58	15.94	-99.28	-103.00	-255.00	669.76	638.19	31.58	21.210	

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 No. 122H
Project:	Lea County, NM	**TVD Reference:**	Well @ 3837.00usft
Reference Site:	Nina Cortell Fed Com	**MD Reference:**	Well @ 3837.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	No. 122H	**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 B	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell Fed Com - No. 132H - OH - Prelim Plan B — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+HDGM, 1200-MWD+HDGM, 5000-MWD+HDGM — **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
7,100.00	7,082.91	7,108.12	7,082.91	16.74	16.11	-99.28	-103.00	-255.00	669.76	637.85	31.91	20.987	
7,200.00	7,182.91	7,208.12	7,182.91	16.90	16.28	-99.28	-103.00	-255.00	669.76	637.50	32.26	20.762	
7,300.00	7,282.91	7,308.12	7,282.91	17.07	16.47	-99.28	-103.00	-255.00	669.76	637.15	32.62	20.533	
7,400.00	7,382.91	7,408.12	7,382.91	17.24	16.65	-99.28	-103.00	-255.00	669.76	636.77	32.99	20.302	
7,500.00	7,482.91	7,508.12	7,482.91	17.42	16.84	-99.28	-103.00	-255.00	669.76	636.39	33.37	20.069	
7,600.00	7,582.91	7,608.12	7,582.91	17.61	17.04	-99.28	-103.00	-255.00	669.76	636.00	33.77	19.836	
7,700.00	7,682.91	7,708.12	7,682.91	17.80	17.25	-99.28	-103.00	-255.00	669.76	635.60	34.17	19.601	
7,800.00	7,782.91	7,808.12	7,782.91	18.00	17.45	-99.28	-103.00	-255.00	669.76	635.18	34.58	19.367	
7,900.00	7,882.91	7,908.12	7,882.91	18.20	17.67	-99.28	-103.00	-255.00	669.76	634.76	35.01	19.132	
8,000.00	7,982.91	8,008.12	7,982.91	18.41	17.88	-99.28	-103.00	-255.00	669.76	634.32	35.44	18.898	
8,100.00	8,082.91	8,108.12	8,082.91	18.62	18.11	-99.28	-103.00	-255.00	669.76	633.88	35.88	18.665	
8,200.00	8,182.91	8,208.12	8,182.91	18.83	18.33	-99.28	-103.00	-255.00	669.76	633.43	36.33	18.434	
8,300.00	8,282.91	8,308.12	8,282.91	19.05	18.56	-99.28	-103.00	-255.00	669.76	632.97	36.79	18.204	
8,400.00	8,382.91	8,408.12	8,382.91	19.28	18.80	-99.28	-103.00	-255.00	669.76	632.50	37.26	17.975	
8,500.00	8,482.91	8,508.12	8,482.91	19.50	19.04	-99.28	-103.00	-255.00	669.76	632.03	37.74	17.749	
8,600.00	8,582.91	8,608.12	8,582.91	19.74	19.28	-99.28	-103.00	-255.00	669.76	631.55	38.22	17.524	
8,700.00	8,682.91	8,708.12	8,682.91	19.97	19.52	-99.28	-103.00	-255.00	669.76	631.06	38.71	17.303	
8,800.00	8,782.91	8,808.12	8,782.91	20.21	19.77	-99.28	-103.00	-255.00	669.76	630.56	39.21	17.083	
8,900.00	8,882.91	8,908.12	8,882.91	20.45	20.02	-99.28	-103.00	-255.00	669.76	630.05	39.71	16.866	
9,000.00	8,982.91	9,008.12	8,982.91	20.70	20.28	-99.28	-103.00	-255.00	669.76	629.54	40.22	16.652	
9,100.00	9,082.91	9,108.12	9,082.91	20.95	20.54	-99.28	-103.00	-255.00	669.76	629.03	40.74	16.441	
9,200.00	9,182.91	9,208.12	9,182.91	21.20	20.80	-99.28	-103.00	-255.00	669.76	628.51	41.26	16.233	
9,300.00	9,282.91	9,308.12	9,282.91	21.46	21.06	-99.28	-103.00	-255.00	669.76	627.98	41.79	16.028	
9,400.00	9,382.91	9,408.12	9,382.91	21.72	21.33	-99.28	-103.00	-255.00	669.76	627.44	42.32	15.826	
9,500.00	9,482.91	9,508.12	9,482.91	21.98	21.60	-99.28	-103.00	-255.00	669.76	626.90	42.86	15.626	
9,600.00	9,582.91	9,608.12	9,582.91	22.24	21.87	-99.28	-103.00	-255.00	669.76	626.36	43.41	15.430	
9,700.00	9,682.91	9,708.12	9,682.91	22.51	22.15	-99.28	-103.00	-255.00	669.76	625.81	43.95	15.238	
9,800.00	9,782.91	9,808.12	9,782.91	22.78	22.43	-99.28	-103.00	-255.00	669.76	625.26	44.51	15.048	
9,900.00	9,882.91	9,908.12	9,882.91	23.05	22.71	-99.28	-103.00	-255.00	669.76	624.70	45.07	14.861	
10,000.00	9,982.91	10,008.12	9,982.91	23.32	22.99	-99.28	-103.00	-255.00	669.76	624.13	45.63	14.678	
10,100.00	10,082.91	10,108.12	10,082.91	23.60	23.27	-99.28	-103.00	-255.00	669.76	623.57	46.20	14.498	
10,200.00	10,182.91	10,208.12	10,182.91	23.87	23.56	-99.28	-103.00	-255.00	669.76	623.00	46.77	14.321	
10,300.00	10,282.91	10,308.12	10,282.91	24.16	23.84	-99.28	-103.00	-255.00	669.76	622.42	47.34	14.147	
10,400.00	10,382.91	10,408.12	10,382.91	24.44	24.13	-99.28	-103.00	-255.00	669.76	621.84	47.92	13.976	
10,420.13	10,403.04	10,412.01	10,403.04	24.49	24.15	-99.28	-103.00	-255.00	669.76	621.77	47.99	13.955	
10,450.00	10,432.89	10,441.87	10,432.89	24.58	24.23	-98.81	-103.00	-255.00	669.88	621.72	48.17	13.907	
10,500.00	10,482.65	10,508.38	10,482.65	24.72	24.43	-99.13	-103.00	-255.00	670.63	622.13	48.50	13.826	
10,550.00	10,531.80	10,540.77	10,531.80	24.86	24.52	-99.74	-103.00	-255.00	672.15	623.41	48.74	13.790	
10,600.00	10,579.97	10,588.94	10,579.97	25.00	24.66	-100.57	-103.00	-255.00	674.59	625.57	49.02	13.762	
10,650.00	10,626.79	10,635.76	10,626.79	25.13	24.80	-101.58	-103.00	-255.00	678.18	628.89	49.29	13.758	
10,700.00	10,671.91	10,680.88	10,671.91	25.26	24.93	-102.70	-103.00	-255.00	683.18	633.62	49.56	13.786	
10,750.00	10,714.98	10,723.96	10,714.98	25.39	25.06	-103.83	-103.00	-255.00	689.88	640.07	49.81	13.850	
10,800.00	10,755.68	10,764.66	10,755.68	25.51	25.18	-104.89	-103.00	-255.00	698.61	648.56	50.05	13.957	
10,850.00	10,793.70	10,802.67	10,793.70	25.63	25.29	-105.78	-103.00	-255.00	709.65	659.36	50.28	14.113	
10,900.00	10,828.74	10,837.72	10,828.74	25.75	25.40	-106.42	-103.00	-255.00	723.26	672.76	50.50	14.321	
10,950.00	10,860.54	10,869.52	10,860.54	25.87	25.49	-106.70	-103.00	-255.00	739.64	688.93	50.70	14.588	
11,000.00	10,888.87	10,902.16	10,888.87	26.00	25.59	-106.55	-103.00	-255.00	758.90	708.00	50.90	14.910	
11,050.00	10,913.49	10,922.46	10,913.49	26.14	25.65	-105.88	-103.00	-255.00	781.10	730.05	51.05	15.300	
11,100.00	10,934.23	10,943.20	10,934.23	26.29	25.71	-104.60	-103.00	-255.00	806.16	754.97	51.19	15.747	
11,150.00	10,950.92	10,959.90	10,950.92	26.45	25.76	-102.64	-103.00	-255.00	833.95	782.63	51.31	16.252	
11,200.00	10,963.45	10,972.42	10,963.45	26.63	25.80	-99.91	-103.00	-255.00	864.23	812.82	51.41	16.810	
11,250.00	10,971.71	10,980.68	10,971.71	26.82	25.83	-96.37	-103.00	-255.00	896.72	845.24	51.48	17.417	

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 No. 122H
Project:	Lea County, NM	**TVD Reference:**	Well @ 3837.00usft
Reference Site:	Nina Cortell Fed Com	**MD Reference:**	Well @ 3837.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	No. 122H	**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 B	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell Fed Com - No. 132H - OH - Prelim Plan B — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+HDGM, 1200-MWD+HDGM, 5000-MWD+HDGM — **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
11,300.00	10,975.64	10,984.62	10,975.64	27.02	25.84	-91.99	-103.00	-255.00	931.06	879.53	51.53	18.067	
11,320.13	10,976.00	10,984.97	10,976.00	27.10	25.84	-90.00	-103.00	-255.00	945.32	893.78	51.55	18.339	
11,400.00	10,976.00	10,984.97	10,976.00	27.45	25.84	-90.00	-103.00	-255.00	1,003.90	952.31	51.59	19.459	
11,500.00	10,976.00	10,984.97	10,976.00	27.96	25.84	-90.00	-103.00	-255.00	1,081.09	1,029.45	51.65	20.932	
11,600.00	10,976.00	12,629.04	11,911.00	28.53	31.06	-144.72	851.95	-263.43	1,145.40	1,092.72	52.67	21.745	
11,700.00	10,976.00	12,729.04	11,911.00	29.15	31.65	-144.72	951.95	-264.31	1,145.37	1,091.97	53.40	21.447	
11,800.00	10,976.00	12,829.04	11,911.00	29.84	32.30	-144.72	1,051.94	-265.19	1,145.35	1,091.14	54.21	21.129	
11,900.00	10,976.00	12,929.04	11,911.00	30.58	32.99	-144.72	1,151.94	-266.08	1,145.33	1,090.25	55.08	20.794	
12,000.00	10,976.00	13,029.04	11,911.00	31.36	33.73	-144.72	1,251.93	-266.96	1,145.31	1,089.29	56.02	20.446	
12,100.00	10,976.00	13,129.04	11,911.00	32.20	34.52	-144.73	1,351.93	-267.84	1,145.28	1,088.27	57.02	20.087	
12,200.00	10,976.00	13,229.04	11,911.00	33.07	35.35	-144.73	1,451.93	-268.72	1,145.26	1,087.19	58.07	19.721	
12,300.00	10,976.00	13,329.04	11,911.00	33.98	36.21	-144.73	1,551.92	-269.61	1,145.24	1,086.05	59.19	19.349	
12,400.00	10,976.00	13,429.04	11,911.00	34.93	37.11	-144.73	1,651.92	-270.49	1,145.22	1,084.86	60.35	18.975	
12,500.00	10,976.00	13,529.04	11,911.00	35.92	38.05	-144.73	1,751.91	-271.37	1,145.19	1,083.62	61.57	18.600	
12,600.00	10,976.00	13,629.04	11,911.00	36.93	39.02	-144.73	1,851.91	-272.25	1,145.17	1,082.34	62.83	18.225	
12,700.00	10,976.00	13,729.04	11,911.00	37.97	40.01	-144.73	1,951.91	-273.14	1,145.15	1,081.01	64.14	17.853	
12,800.00	10,976.00	13,829.04	11,911.00	39.03	41.03	-144.74	2,051.90	-274.02	1,145.12	1,079.63	65.49	17.485	
12,900.00	10,976.00	13,929.04	11,911.00	40.12	42.08	-144.74	2,151.90	-274.90	1,145.10	1,078.22	66.88	17.122	
13,000.00	10,976.00	14,029.04	11,911.00	41.23	43.15	-144.74	2,251.89	-275.79	1,145.08	1,076.78	68.30	16.765	
13,100.00	10,976.00	14,129.04	11,911.00	42.36	44.24	-144.74	2,351.89	-276.67	1,145.06	1,075.30	69.76	16.414	
13,200.00	10,976.00	14,229.04	11,911.00	43.51	45.35	-144.74	2,451.89	-277.55	1,145.03	1,073.78	71.25	16.071	
13,300.00	10,976.00	14,329.04	11,911.00	44.68	46.48	-144.74	2,551.88	-278.43	1,145.01	1,072.24	72.77	15.735	
13,400.00	10,976.00	14,429.04	11,911.00	45.86	47.62	-144.75	2,651.88	-279.32	1,144.99	1,070.67	74.32	15.406	
13,500.00	10,976.00	14,529.04	11,911.00	47.06	48.78	-144.75	2,751.88	-280.20	1,144.97	1,069.07	75.89	15.086	
13,600.00	10,976.00	14,629.04	11,911.00	48.27	49.96	-144.75	2,851.87	-281.08	1,144.94	1,067.45	77.49	14.775	
13,700.00	10,976.00	14,729.04	11,911.00	49.49	51.15	-144.75	2,951.87	-281.96	1,144.92	1,065.80	79.12	14.471	
13,800.00	10,976.00	14,829.04	11,911.00	50.72	52.35	-144.75	3,051.86	-282.85	1,144.90	1,064.14	80.76	14.176	
13,900.00	10,976.00	14,929.04	11,911.00	51.97	53.56	-144.75	3,151.86	-283.73	1,144.88	1,062.45	82.43	13.889	
14,000.00	10,976.00	15,029.04	11,911.00	53.22	54.79	-144.76	3,251.86	-284.61	1,144.85	1,060.74	84.11	13.611	
14,100.00	10,976.00	15,129.04	11,911.00	54.49	56.03	-144.76	3,351.85	-285.49	1,144.83	1,059.01	85.82	13.340	
14,200.00	10,976.00	15,229.04	11,911.00	55.76	57.27	-144.76	3,451.85	-286.38	1,144.81	1,057.27	87.54	13.078	
14,300.00	10,976.00	15,329.04	11,911.00	57.04	58.52	-144.76	3,551.84	-287.26	1,144.79	1,055.51	89.28	12.823	
14,400.00	10,976.00	15,429.04	11,911.00	58.33	59.79	-144.76	3,651.84	-288.14	1,144.76	1,053.73	91.03	12.576	
14,500.00	10,976.00	15,529.04	11,911.00	59.63	61.06	-144.76	3,751.84	-289.02	1,144.74	1,051.94	92.80	12.336	
14,600.00	10,976.00	15,629.04	11,911.00	60.93	62.34	-144.77	3,851.83	-289.91	1,144.72	1,050.14	94.58	12.104	
14,700.00	10,976.00	15,729.04	11,911.00	62.24	63.62	-144.77	3,951.83	-290.79	1,144.70	1,048.33	96.37	11.878	
14,800.00	10,976.00	15,829.04	11,911.00	63.55	64.91	-144.77	4,051.82	-291.67	1,144.67	1,046.50	98.18	11.659	
14,900.00	10,976.00	15,929.04	11,911.00	64.87	66.21	-144.77	4,151.82	-292.56	1,144.65	1,044.66	99.99	11.447	
15,000.00	10,976.00	16,029.04	11,911.00	66.20	67.52	-144.77	4,251.82	-293.44	1,144.63	1,042.81	101.82	11.242	
15,100.00	10,976.00	16,129.04	11,911.00	67.53	68.83	-144.77	4,351.81	-294.32	1,144.61	1,040.95	103.66	11.042	
15,200.00	10,976.00	16,229.04	11,911.00	68.86	70.14	-144.77	4,451.81	-295.20	1,144.58	1,039.08	105.51	10.848	
15,300.00	10,976.00	16,329.04	11,911.00	70.20	71.46	-144.78	4,551.80	-296.09	1,144.56	1,037.20	107.36	10.661	
15,400.00	10,976.00	16,429.04	11,911.00	71.54	72.79	-144.78	4,651.80	-296.97	1,144.54	1,035.31	109.23	10.478	
15,500.00	10,976.00	16,529.04	11,911.00	72.89	74.11	-144.78	4,751.80	-297.85	1,144.52	1,033.41	111.10	10.301	
15,600.00	10,976.00	16,629.04	11,911.00	74.24	75.45	-144.78	4,851.79	-298.73	1,144.49	1,031.51	112.98	10.130	
15,629.38	10,976.00	16,658.42	11,911.00	74.64	75.84	-144.78	4,881.17	-298.99	1,144.49	1,030.95	113.54	10.080	

Pro Directional

Anticollision Report

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well No. 122H
Project:	Lea County, NM	**TVD Reference:**	Well @ 3837.00usft
Reference Site:	Nina Cortell Fed Com	**MD Reference:**	Well @ 3837.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	No. 122H	**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 B	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell Fed Com - No. 202H - OH - Prelim Plan B — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+HDGM, 1200-MWD+HDGM, 5000-MWD+HDGM, 12303-MWD+HDGM — **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	0.00	0.00	0.00	0.00	-90.00	0.00	-30.00	30.00				
100.00	100.00	100.00	100.00	0.13	0.13	-90.00	0.00	-30.00	30.00	29.75	0.25	117.871	
200.00	200.00	200.00	200.00	0.49	0.49	-90.00	0.00	-30.00	30.00	29.03	0.97	30.881	
300.00	300.00	300.00	300.00	0.84	0.84	-90.00	0.00	-30.00	30.00	28.31	1.69	17.768	
400.00	400.00	400.00	400.00	1.20	1.20	-90.00	0.00	-30.00	30.00	27.59	2.41	12.472	
500.00	500.00	500.00	500.00	1.56	1.56	-90.00	0.00	-30.00	30.00	26.88	3.12	9.608	
600.00	600.00	600.00	600.00	1.92	1.92	-90.00	0.00	-30.00	30.00	26.16	3.84	7.814	
700.00	700.00	700.00	700.00	2.28	2.28	-90.00	0.00	-30.00	30.00	25.44	4.56	6.584	
800.00	800.00	800.00	800.00	2.64	2.64	-90.00	0.00	-30.00	30.00	24.73	5.27	5.689	
900.00	900.00	900.00	900.00	3.00	3.00	-90.00	0.00	-30.00	30.00	24.01	5.99	5.008	
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	-90.00	0.00	-30.00	30.00	23.29	6.71	4.473	
1,100.00	1,100.00	1,100.00	1,100.00	3.71	3.71	-90.00	0.00	-30.00	30.00	22.58	7.42	4.041	CC, ES
1,200.00	1,199.99	1,200.01	1,199.99	4.06	4.07	-179.31	0.00	-30.00	30.87	22.74	8.13	3.796	
1,300.00	1,299.96	1,299.96	1,299.96	4.24	4.25	-179.37	0.00	-30.00	33.49	25.00	8.49	3.944	
1,400.00	1,399.86	1,400.50	1,400.50	4.27	4.28	-179.74	-0.19	-29.14	37.00	28.45	8.55	4.327	
1,500.00	1,499.68	1,501.10	1,501.06	4.33	4.34	179.39	-0.76	-26.55	40.54	31.88	8.67	4.679	
1,600.00	1,599.37	1,601.75	1,601.61	4.43	4.43	178.14	-1.70	-22.24	44.14	35.31	8.84	4.995	
1,700.00	1,698.99	1,702.47	1,702.14	4.55	4.55	176.54	-3.03	-16.20	46.95	37.88	9.06	5.180	
1,800.00	1,798.60	1,803.25	1,802.60	4.70	4.69	174.47	-4.74	-8.43	48.11	38.77	9.34	5.151	
1,900.00	1,898.22	1,903.21	1,902.18	4.88	4.86	172.18	-6.61	0.08	48.56	38.89	9.67	5.020	
2,000.00	1,997.84	2,003.19	2,001.78	5.07	5.06	169.93	-8.48	8.59	49.10	39.05	10.05	4.885	
2,100.00	2,097.46	2,103.17	2,101.38	5.29	5.27	167.74	-10.35	17.10	49.70	39.23	10.46	4.749	
2,200.00	2,197.08	2,203.15	2,200.98	5.53	5.50	165.60	-12.22	25.61	50.37	39.46	10.91	4.615	
2,300.00	2,296.70	2,303.13	2,300.58	5.78	5.74	163.51	-14.09	34.12	51.12	39.72	11.40	4.486	
2,400.00	2,396.32	2,403.11	2,400.18	6.04	6.00	161.50	-15.96	42.64	51.93	40.02	11.90	4.362	
2,500.00	2,495.94	2,503.09	2,499.78	6.31	6.28	159.54	-17.83	51.15	52.80	40.36	12.44	4.245	
2,600.00	2,595.56	2,603.07	2,599.38	6.60	6.56	157.65	-19.70	59.66	53.73	40.74	12.99	4.135	
2,700.00	2,695.18	2,703.05	2,698.98	6.89	6.85	155.83	-21.57	68.17	54.72	41.15	13.57	4.033	
2,800.00	2,794.80	2,803.03	2,798.58	7.19	7.15	154.07	-23.44	76.68	55.76	41.60	14.16	3.938	
2,900.00	2,894.42	2,903.01	2,898.18	7.50	7.46	152.38	-25.30	85.19	56.85	42.08	14.77	3.850	
3,000.00	2,994.04	3,002.99	2,997.78	7.82	7.77	150.76	-27.17	93.70	57.99	42.60	15.39	3.768	
3,100.00	3,093.66	3,102.97	3,097.38	8.14	8.09	149.20	-29.04	102.21	59.17	43.15	16.02	3.694	
3,200.00	3,193.28	3,202.95	3,196.98	8.46	8.41	147.70	-30.91	110.72	60.40	43.74	16.66	3.625	
3,300.00	3,292.90	3,302.93	3,296.58	8.79	8.74	146.26	-32.78	119.23	61.67	44.35	17.32	3.561	
3,400.00	3,392.52	3,402.91	3,396.18	9.12	9.07	144.88	-34.65	127.74	62.97	44.99	17.98	3.502	
3,500.00	3,492.14	3,502.89	3,495.78	9.46	9.41	143.55	-36.52	136.26	64.31	45.66	18.65	3.448	
3,600.00	3,591.76	3,602.87	3,595.38	9.80	9.75	142.29	-38.39	144.77	65.68	46.35	19.32	3.399	
3,700.00	3,691.37	3,702.85	3,694.98	10.14	10.09	141.07	-40.26	153.28	67.08	47.07	20.01	3.353	
3,800.00	3,790.99	3,802.83	3,794.58	10.48	10.43	139.90	-42.13	161.79	68.51	47.82	20.69	3.311	
3,900.00	3,890.61	3,902.81	3,894.17	10.83	10.78	138.79	-44.00	170.30	69.97	48.58	21.39	3.271	
4,000.00	3,990.23	4,002.79	3,993.77	11.18	11.13	137.71	-45.87	178.81	71.45	49.37	22.09	3.235	
4,100.00	4,089.85	4,102.77	4,093.37	11.53	11.48	136.69	-47.74	187.32	72.96	50.17	22.79	3.202	
4,200.00	4,189.47	4,202.75	4,192.97	11.88	11.83	135.70	-49.61	195.83	74.49	51.00	23.49	3.171	
4,300.00	4,289.09	4,302.73	4,292.57	12.23	12.18	134.75	-51.48	204.34	76.04	51.84	24.20	3.142	
4,400.00	4,388.71	4,402.71	4,392.17	12.59	12.54	133.85	-53.35	212.85	77.61	52.70	24.91	3.115	
4,500.00	4,488.33	4,502.69	4,491.77	12.95	12.89	132.97	-55.22	221.36	79.20	53.57	25.63	3.090	
4,600.00	4,587.95	4,602.67	4,591.37	13.30	13.25	132.14	-57.09	229.88	80.81	54.46	26.34	3.067	
4,700.00	4,687.57	4,702.65	4,690.97	13.66	13.61	131.33	-58.96	238.39	82.43	55.37	27.06	3.046	
4,800.00	4,787.19	4,802.63	4,790.57	14.02	13.97	130.56	-60.83	246.90	84.07	56.29	27.79	3.026	
4,900.00	4,886.81	4,902.61	4,890.17	14.38	14.33	129.82	-62.70	255.41	85.73	57.22	28.51	3.007	
5,000.00	4,986.43	5,002.59	4,989.77	14.58	14.52	129.10	-64.57	263.92	87.40	58.51	28.89	3.025	
5,100.00	5,086.05	5,102.57	5,089.37	14.61	14.55	128.41	-66.44	272.43	89.08	60.12	28.96	3.076	

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 No. 122H
Project:	Lea County, NM	**TVD Reference:**	Well @ 3837.00usft
Reference Site:	Nina Cortell Fed Com	**MD Reference:**	Well @ 3837.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	No. 122H	**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 B	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell Fed Com - No. 202H - OH - Prelim Plan B — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+HDGM, 1200-MWD+HDGM, 5000-MWD+HDGM, 12303-MWD+HDGM — **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
5,200.00	5,185.67	5,202.55	5,188.97	14.66	14.60	127.75	-68.31	280.94	90.77	61.73	29.04	3.125	
5,300.00	5,285.29	5,302.53	5,288.57	14.72	14.65	127.11	-70.18	289.45	92.48	63.33	29.15	3.172	
5,400.00	5,384.91	5,402.51	5,388.17	14.78	14.72	126.50	-72.05	297.96	94.19	64.92	29.28	3.217	
5,500.00	5,484.53	5,502.50	5,487.77	14.86	14.79	125.90	-73.92	306.47	95.92	66.50	29.42	3.260	
5,600.00	5,584.14	5,602.48	5,587.37	14.94	14.87	125.33	-75.79	314.98	97.66	68.07	29.58	3.301	
5,700.00	5,683.76	5,702.46	5,688.97	15.03	14.97	124.78	-77.66	323.50	99.40	69.64	29.77	3.339	
5,758.36	5,741.91	5,760.81	5,745.10	15.09	15.03	124.47	-78.75	328.46	100.43	70.54	29.88	3.361	
5,800.00	5,783.40	5,802.44	5,786.57	15.14	15.07	124.18	-79.53	332.01	101.07	71.10	29.97	3.373	
5,900.00	5,883.14	5,902.41	5,886.16	15.24	15.18	122.93	-81.39	340.52	101.96	71.76	30.20	3.377	
6,000.00	5,983.00	6,002.34	5,985.71	15.35	15.30	120.85	-83.26	349.02	101.99	71.54	30.45	3.350	
6,100.00	6,082.93	6,102.20	6,085.19	15.45	15.42	117.92	-85.13	357.52	101.32	70.60	30.72	3.298	
6,200.00	6,182.91	6,201.96	6,184.57	15.56	15.56	114.05	-87.00	366.02	100.20	69.19	31.01	3.231	
6,258.36	6,241.27	6,260.12	6,242.52	15.62	15.64	-159.38	-88.08	370.97	99.47	68.28	31.19	3.189	
6,300.00	6,282.91	6,301.60	6,283.84	15.66	15.70	-161.45	-88.86	374.50	99.01	67.70	31.31	3.162	
6,400.00	6,382.91	6,401.22	6,383.08	15.77	15.85	-166.48	-90.72	382.98	98.45	66.85	31.60	3.116	
6,422.43	6,405.33	6,423.56	6,405.33	15.80	15.89	-167.61	-91.14	384.88	98.43	66.77	31.66	3.109	
6,500.00	6,482.91	6,500.92	6,482.43	15.89	16.01	-171.30	-92.50	391.08	98.64	66.76	31.88	3.094	
6,600.00	6,582.91	6,600.87	6,582.15	16.01	16.17	-175.14	-93.93	397.59	99.29	67.14	32.15	3.089	
6,700.00	6,682.91	6,701.02	6,682.18	16.14	16.32	-177.94	-94.99	402.40	100.06	67.64	32.42	3.086	
6,800.00	6,782.91	6,801.31	6,782.42	16.28	16.48	-179.72	-95.67	405.52	100.68	67.98	32.70	3.079	
6,900.00	6,882.91	6,901.68	6,882.78	16.43	16.63	179.48	-95.98	406.92	100.99	68.00	32.99	3.061	
7,000.00	6,982.91	7,001.81	6,982.91	16.58	16.78	179.43	-96.00	407.00	101.00	67.72	33.29	3.035	
7,100.00	7,082.91	7,101.81	7,082.91	16.74	16.93	179.43	-96.00	407.00	101.00	67.41	33.59	3.007	
7,200.00	7,182.91	7,201.81	7,182.91	16.90	17.09	179.43	-96.00	407.00	101.00	67.09	33.92	2.978	
7,300.00	7,282.91	7,301.81	7,282.91	17.07	17.25	179.43	-96.00	407.00	101.00	66.75	34.25	2.949	
7,400.00	7,382.91	7,401.81	7,382.91	17.24	17.42	179.43	-96.00	407.00	101.00	66.41	34.60	2.920	
7,500.00	7,482.91	7,501.81	7,482.91	17.42	17.59	179.43	-96.00	407.00	101.00	66.05	34.95	2.890	
7,600.00	7,582.91	7,601.81	7,582.91	17.61	17.78	179.43	-96.00	407.00	101.00	65.69	35.32	2.860	
7,700.00	7,682.91	7,701.81	7,682.91	17.80	17.96	179.43	-96.00	407.00	101.00	65.31	35.70	2.829	
7,800.00	7,782.91	7,801.81	7,782.91	18.00	18.15	179.43	-96.00	407.00	101.00	64.92	36.09	2.799	
7,900.00	7,882.91	7,901.81	7,882.91	18.20	18.35	179.43	-96.00	407.00	101.00	64.52	36.48	2.768	
8,000.00	7,982.91	8,001.81	7,982.91	18.41	18.55	179.43	-96.00	407.00	101.00	64.11	36.89	2.738	
8,100.00	8,082.91	8,101.81	8,082.91	18.62	18.75	179.43	-96.00	407.00	101.00	63.70	37.31	2.707	
8,200.00	8,182.91	8,201.81	8,182.91	18.83	18.96	179.43	-96.00	407.00	101.00	63.27	37.74	2.677	
8,300.00	8,282.91	8,301.81	8,282.91	19.05	19.18	179.43	-96.00	407.00	101.00	62.83	38.17	2.646	
8,400.00	8,382.91	8,401.81	8,382.91	19.28	19.40	179.43	-96.00	407.00	101.00	62.39	38.61	2.616	
8,500.00	8,482.91	8,501.81	8,482.91	19.50	19.62	179.43	-96.00	407.00	101.00	61.94	39.07	2.585	
8,600.00	8,582.91	8,601.81	8,582.91	19.74	19.85	179.43	-96.00	407.00	101.00	61.48	39.53	2.555	
8,700.00	8,682.91	8,701.81	8,682.91	19.97	20.08	179.43	-96.00	407.00	101.00	61.01	39.99	2.526	
8,800.00	8,782.91	8,801.81	8,782.91	20.21	20.31	179.43	-96.00	407.00	101.00	60.54	40.47	2.496	
8,900.00	8,882.91	8,901.81	8,882.91	20.45	20.55	179.43	-96.00	407.00	101.00	60.06	40.95	2.467	
9,000.00	8,982.91	9,001.81	8,982.91	20.70	20.79	179.43	-96.00	407.00	101.00	59.57	41.44	2.438	
9,100.00	9,082.91	9,101.81	9,082.91	20.95	21.04	179.43	-96.00	407.00	101.00	59.07	41.93	2.409	
9,200.00	9,182.91	9,201.81	9,182.91	21.20	21.29	179.43	-96.00	407.00	101.00	58.57	42.43	2.380	
9,300.00	9,282.91	9,301.81	9,282.91	21.46	21.54	179.43	-96.00	407.00	101.00	58.07	42.94	2.352	
9,400.00	9,382.91	9,401.81	9,382.91	21.72	21.79	179.43	-96.00	407.00	101.00	57.55	43.45	2.324	
9,500.00	9,482.91	9,501.81	9,482.91	21.98	22.05	179.43	-96.00	407.00	101.00	57.03	43.97	2.297	
9,600.00	9,582.91	9,601.81	9,582.91	22.24	22.31	179.43	-96.00	407.00	101.00	56.51	44.50	2.270	
9,700.00	9,682.91	9,701.81	9,682.91	22.51	22.57	179.43	-96.00	407.00	101.00	55.98	45.03	2.243	
9,800.00	9,782.91	9,801.81	9,782.91	22.78	22.84	179.43	-96.00	407.00	101.00	55.44	45.56	2.217	
9,900.00	9,882.91	9,901.81	9,882.91	23.05	23.10	179.43	-96.00	407.00	101.00	54.90	46.10	2.191	
10,000.00	9,982.91	10,001.81	9,982.91	23.32	23.37	179.43	-96.00	407.00	101.00	54.36	46.64	2.165	

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 No. 122H
Project:	Lea County, NM	**TVD Reference:**	Well @ 3837.00usft
Reference Site:	Nina Cortell Fed Com	**MD Reference:**	Well @ 3837.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	No. 122H	**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 B	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell Fed Com - No. 202H - OH - Prelim Plan B — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+HDGM, 1200-MWD+HDGM, 5000-MWD+HDGM, 12303-MWD+HDGM — **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
10,100.00	10,082.91	10,101.81	10,082.91	23.60	23.65	179.43	-96.00	407.00	101.00	53.81	47.19	2.140	
10,200.00	10,182.91	10,201.81	10,182.91	23.87	23.92	179.43	-96.00	407.00	101.00	53.26	47.75	2.115	
10,300.00	10,282.91	10,301.81	10,282.91	24.16	24.20	179.43	-96.00	407.00	101.00	52.70	48.31	2.091	
10,400.00	10,382.91	10,401.81	10,382.91	24.44	24.48	179.43	-96.00	407.00	101.00	52.14	48.87	2.067	
10,420.13	10,403.04	10,421.94	10,403.04	24.49	24.53	179.43	-96.00	407.00	101.00	52.02	48.98	2.062 SF	
10,450.00	10,432.89	10,451.79	10,432.89	24.58	24.62	179.96	-96.00	407.00	101.78	52.63	49.15	2.071	
10,500.00	10,482.65	10,501.55	10,482.65	24.72	24.76	179.96	-96.00	407.00	106.56	57.13	49.43	2.156	
10,550.00	10,531.80	10,550.70	10,531.80	24.86	24.90	179.96	-96.00	407.00	115.66	65.95	49.71	2.327	
10,600.00	10,579.97	10,601.13	10,579.97	25.00	25.04	179.97	-96.00	407.00	129.01	79.01	49.99	2.580	
10,650.00	10,626.79	10,645.69	10,626.79	25.13	25.17	179.97	-96.00	407.00	146.50	96.24	50.26	2.915	
10,700.00	10,671.91	10,709.19	10,671.91	25.26	25.35	179.97	-96.00	407.00	168.01	117.44	50.56	3.323	
10,750.00	10,714.98	10,733.88	10,714.98	25.39	25.42	179.98	-96.00	407.00	193.37	142.61	50.76	3.810	
10,800.00	10,755.68	10,774.58	10,755.68	25.51	25.53	179.98	-96.00	407.00	222.38	171.40	50.98	4.362	
10,850.00	10,793.70	10,812.60	10,793.70	25.63	25.64	179.98	-96.00	407.00	254.84	203.64	51.20	4.978	
10,900.00	10,828.74	10,847.64	10,828.74	25.75	25.75	179.98	-96.00	407.00	290.48	239.09	51.39	5.653	
10,950.00	10,860.54	10,879.44	10,860.54	25.87	25.84	179.98	-96.00	407.00	329.04	277.48	51.56	6.382	
11,000.00	10,888.87	10,907.77	10,888.87	26.00	25.92	179.98	-96.00	407.00	370.23	318.52	51.71	7.159	
11,050.00	10,913.49	10,932.39	10,913.49	26.14	25.99	179.98	-96.00	407.00	413.73	361.88	51.84	7.980	
11,100.00	10,934.23	10,953.13	10,934.23	26.29	26.05	179.98	-96.00	407.00	459.21	407.25	51.95	8.839	
11,150.00	10,950.92	10,969.82	10,950.92	26.45	26.10	179.97	-96.00	407.00	506.32	454.28	52.04	9.730	
11,200.00	10,963.45	10,982.35	10,963.45	26.63	26.14	179.97	-96.00	407.00	554.71	502.61	52.10	10.647	
11,250.00	10,971.71	11,009.39	10,971.71	26.82	26.21	179.95	-96.00	407.00	604.01	551.81	52.20	11.571	
11,300.00	10,975.64	11,005.46	10,975.64	27.02	26.20	179.83	-96.00	407.00	653.83	601.63	52.20	12.526	
11,320.13	10,976.00	11,005.10	10,976.00	27.10	26.20	90.29	-96.00	407.00	673.96	621.76	52.20	12.911	
11,400.00	10,976.00	11,005.10	10,976.00	27.45	26.20	90.32	-96.00	407.00	753.83	701.62	52.21	14.438	
11,500.00	10,976.00	11,005.10	10,976.00	27.96	26.20	90.36	-96.00	407.00	853.83	801.60	52.23	16.349	
11,600.00	10,976.00	11,005.10	10,976.00	28.53	26.20	90.40	-96.00	407.00	953.83	901.59	52.24	18.258	
11,700.00	10,976.00	11,005.10	10,976.00	29.15	26.20	90.45	-96.00	407.00	1,053.83	1,001.57	52.26	20.166	
11,800.00	10,976.00	12,978.39	12,061.00	29.84	35.42	180.00	1,057.78	396.34	1,085.00	1,036.33	48.67	22.293	
11,900.00	10,976.00	13,078.39	12,061.00	30.58	35.59	180.00	1,157.78	395.42	1,085.00	1,035.90	49.10	22.097	
12,000.00	10,976.00	13,178.39	12,061.00	31.36	35.81	180.00	1,257.77	394.49	1,085.00	1,035.42	49.58	21.883	
12,100.00	10,976.00	13,278.39	12,061.00	32.20	36.10	180.00	1,357.77	393.57	1,085.00	1,034.90	50.10	21.655	
12,200.00	10,976.00	13,378.39	12,061.00	33.07	36.46	180.00	1,457.76	392.65	1,085.00	1,034.33	50.67	21.413	
12,300.00	10,976.00	13,478.39	12,061.00	33.98	36.99	180.00	1,557.76	391.73	1,085.00	1,033.72	51.28	21.159	
12,400.00	10,976.00	13,578.39	12,061.00	34.93	37.61	180.00	1,657.76	390.80	1,085.00	1,033.08	51.93	20.895	
12,500.00	10,976.00	13,678.39	12,061.00	35.92	38.33	180.00	1,757.75	389.88	1,085.00	1,032.39	52.61	20.622	
12,600.00	10,976.00	13,778.39	12,061.00	36.93	39.14	180.00	1,857.75	388.96	1,085.00	1,031.67	53.34	20.342	
12,700.00	10,976.00	13,878.39	12,061.00	37.97	40.01	180.00	1,957.74	388.03	1,085.00	1,030.91	54.10	20.056	
12,800.00	10,976.00	13,978.39	12,061.00	39.03	40.93	180.00	2,057.74	387.11	1,085.00	1,030.11	54.89	19.766	
12,900.00	10,976.00	14,078.39	12,061.00	40.12	41.89	180.00	2,157.73	386.19	1,085.00	1,029.28	55.72	19.473	
13,000.00	10,976.00	14,178.39	12,061.00	41.23	42.89	180.00	2,257.73	385.27	1,085.00	1,028.43	56.58	19.178	
13,100.00	10,976.00	14,278.39	12,061.00	42.36	43.92	180.00	2,357.73	384.34	1,085.00	1,027.54	57.46	18.881	
13,200.00	10,976.00	14,378.39	12,061.00	43.51	44.98	180.00	2,457.72	383.42	1,085.00	1,026.62	58.38	18.585	
13,300.00	10,976.00	14,478.39	12,061.00	44.68	46.06	180.00	2,557.72	382.50	1,085.00	1,025.68	59.32	18.289	
13,400.00	10,976.00	14,578.39	12,061.00	45.86	47.16	180.00	2,657.71	381.57	1,085.00	1,024.71	60.29	17.995	
13,500.00	10,976.00	14,678.39	12,061.00	47.06	48.28	180.00	2,757.71	380.65	1,085.00	1,023.71	61.29	17.703	
13,600.00	10,976.00	14,778.39	12,061.00	48.27	49.42	180.00	2,857.70	379.73	1,085.00	1,022.70	62.31	17.414	
13,700.00	10,976.00	14,878.39	12,061.00	49.49	50.58	180.00	2,957.70	378.81	1,085.00	1,021.66	63.35	17.128	
13,800.00	10,976.00	14,978.39	12,061.00	50.72	51.75	180.00	3,057.70	377.88	1,085.00	1,020.59	64.41	16.846	
13,900.00	10,976.00	15,078.39	12,061.00	51.97	52.93	180.00	3,157.69	376.96	1,085.00	1,019.51	65.49	16.567	
14,000.00	10,976.00	15,178.39	12,061.00	53.22	54.13	180.00	3,257.69	376.04	1,085.00	1,018.41	66.59	16.293	
14,100.00	10,976.00	15,278.39	12,061.00	54.49	55.34	180.00	3,357.68	375.11	1,085.00	1,017.29	67.71	16.024	

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 No. 122H
Project:	Lea County, NM	**TVD Reference:**	Well @ 3837.00usft
Reference Site:	Nina Cortell Fed Com	**MD Reference:**	Well @ 3837.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	No. 122H	**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 B	**Offset TVD Reference:**	Offset Datum

Offset Design Nina Cortell Fed Com - No. 202H - OH - Prelim Plan B — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+HDGM, 1200-MWD+HDGM, 5000-MWD+HDGM, 12303-MWD+HDGM — **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
14,200.00	10,976.00	15,378.39	12,061.00	55.76	56.57	180.00	3,457.68	374.19	1,085.00	1,016.15	68.85	15.759	
14,300.00	10,976.00	15,478.39	12,061.00	57.04	57.80	180.00	3,557.68	373.27	1,085.00	1,015.00	70.00	15.499	
14,400.00	10,976.00	15,578.39	12,061.00	58.33	59.04	180.00	3,657.67	372.35	1,085.00	1,013.83	71.17	15.245	
14,500.00	10,976.00	15,678.39	12,061.00	59.63	60.29	180.00	3,757.67	371.42	1,085.00	1,012.64	72.36	14.995	
14,600.00	10,976.00	15,778.39	12,061.00	60.93	61.55	180.00	3,857.66	370.50	1,085.00	1,011.44	73.56	14.750	
14,700.00	10,976.00	15,878.39	12,061.00	62.24	62.82	180.00	3,957.66	369.58	1,085.00	1,010.23	74.77	14.511	
14,800.00	10,976.00	15,978.39	12,061.00	63.55	64.10	180.00	4,057.65	368.65	1,085.00	1,009.00	76.00	14.277	
14,900.00	10,976.00	16,078.39	12,061.00	64.87	65.38	180.00	4,157.65	367.73	1,085.00	1,007.77	77.23	14.048	
15,000.00	10,976.00	16,178.39	12,061.00	66.20	66.67	180.00	4,257.65	366.81	1,085.00	1,006.52	78.49	13.824	
15,100.00	10,976.00	16,278.39	12,061.00	67.53	67.97	180.00	4,357.64	365.89	1,085.00	1,005.25	79.75	13.606	
15,200.00	10,976.00	16,378.39	12,061.00	68.86	69.27	180.00	4,457.64	364.96	1,085.00	1,003.98	81.02	13.392	
15,300.00	10,976.00	16,478.39	12,061.00	70.20	70.58	180.00	4,557.63	364.04	1,085.00	1,002.70	82.30	13.183	
15,400.00	10,976.00	16,578.39	12,061.00	71.54	71.89	180.00	4,657.63	363.12	1,085.00	1,001.41	83.59	12.979	
15,500.00	10,976.00	16,678.39	12,061.00	72.89	73.21	180.00	4,757.62	362.19	1,085.00	1,000.10	84.90	12.780	
15,600.00	10,976.00	16,778.39	12,061.00	74.24	74.53	180.00	4,857.62	361.27	1,085.00	998.79	86.21	12.586	
15,629.38	10,976.00	16,807.77	12,061.00	74.64	74.92	180.00	4,887.00	361.00	1,085.00	998.41	86.59	12.530	

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well No. 122H
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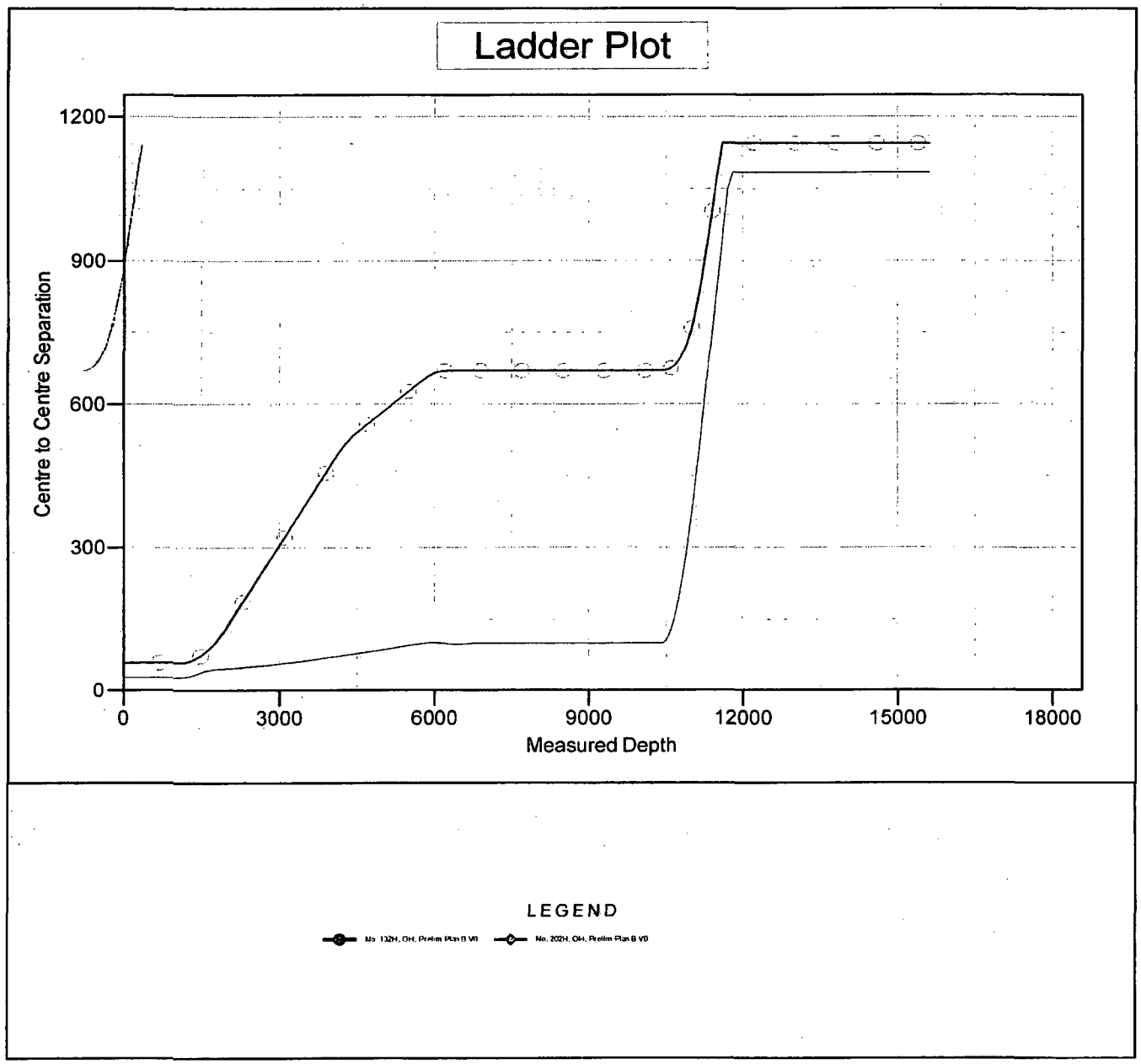
Reference Site:	Nina Cortell Fed Com	**MD Reference:**	Well @ 3837.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	No. 122H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	WellPlanner1
Reference Design:	Prelim Plan B	**Offset TVD Reference:**	Offset Datum

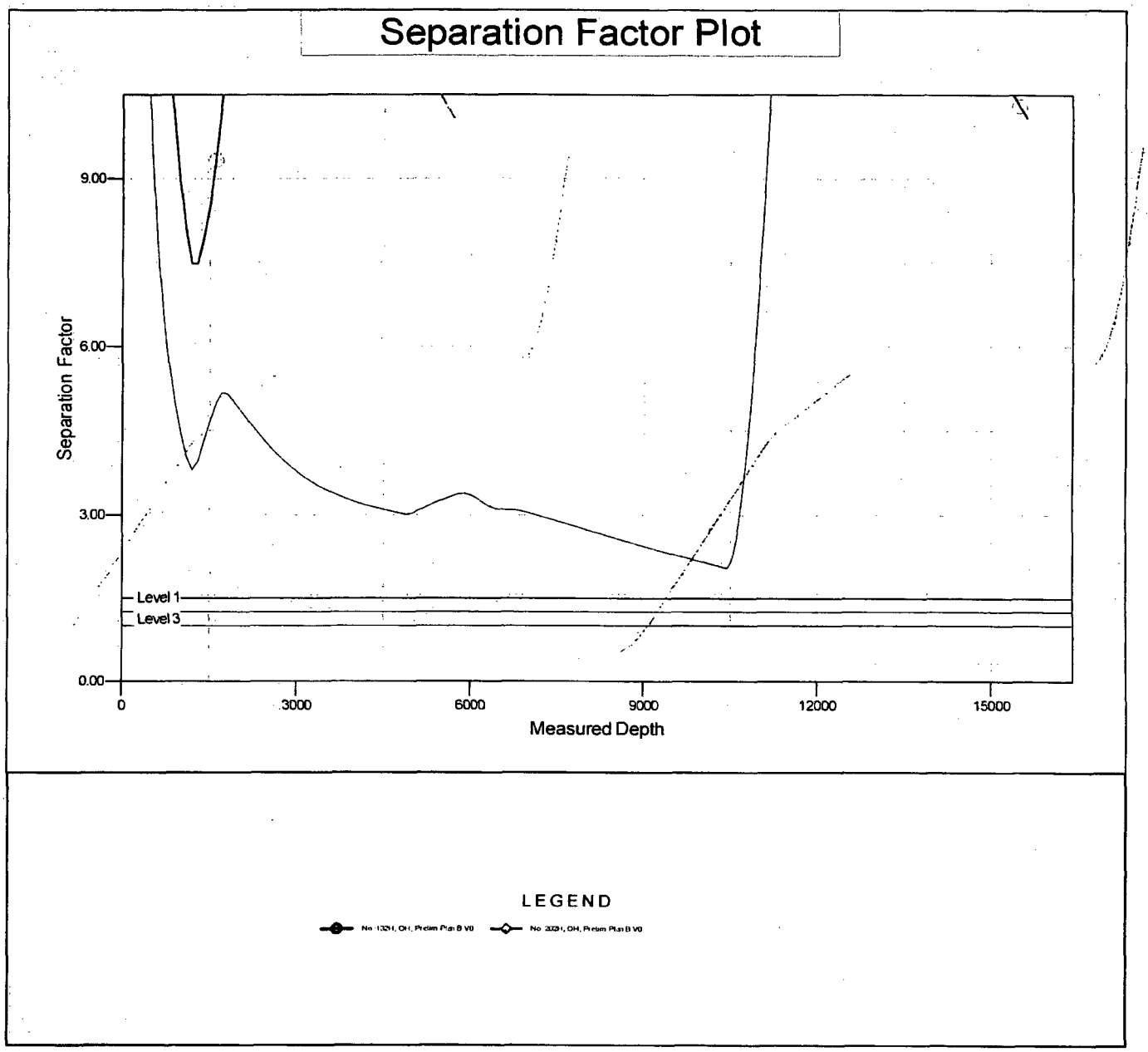
Reference Depths are relative to Well @ 3837.00usft	Coordinates are relative to: No. 122H
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Central Meridian is 104.333334°W	Grid Convergence at Surface is: 0.36°



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 No. 122H
Project:	Lea County, NM	**TVD Reference:**	Well @ 3837.00usft
Reference Site:	Nina Cortell Fed Com	**MD Reference:**	Well @ 3837.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	No. 122H	**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 B	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to Well @ 3837.00usft	Coordinates are relative to: No. 122H
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Central Meridian is 104.333334°W	Grid Convergence at Surface is: 0.36°



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

Matador Production Company
Nina Cortell Fed Com 122H
SHL 150' FSL & 1906' FWL
BHL 240' FNL & 2309' FWL
Sec. 3, T. 22 S., R. 32 E., Lea County, NM

Drilling Program

1. ESTIMATED TOPS

Formation Name	TVD	MD	Bearing
Quaternary	000'	000'	water
Dewey Lake sandstone	390'	390'	water
Rustler anhydrite	971'	971'	N/A
Top salt	1349'	1349'	N/A
Castile anhydrite	3523'	3531'	N/A
Base salt	4861'	4874'	N/A
Bell Canyon sandstone	4951'	4964'	hydrocarbons
Cherry Canyon sandstone	5955'	5972'	hydrocarbons
Brushy Canyon sandstone	6919'	6936'	hydrocarbons
Bone Spring limestone	8908'	8925'	hydrocarbons
1st Bone Spring carbonate	9537'	9654'	hydrocarbons
1st Bone Spring sandstone	9895'	9912'	hydrocarbons
2nd Bone Spring carbonate	10194'	10211'	hydrocarbons
(KOP	10433'	10450'	hydrocarbons)
2nd Bone Spring Sand & goal	10487'	10505'	hydrocarbons & goal
TD	10976'	15629'	hydrocarbons

2. NOTABLE ZONES

Second Bone Spring sand 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 03717) is 5307' west. Water bearing strata were found at 620'-630' in this 650' deep well.

3. PRESSURE CONTROL

A 12,000' 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, choke manifold, co-flex hose, and speed head 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 and the 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".

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. See attached casing assumption worksheet.

Hole O. D.	Set MD	Set TVD	Casing O. D.	Weight (lb/ft)	Grade	Joint	Collapse	Burst	Tension
17.5"	0' - 1200'	0' - 1200'	Surface 13.375"	54.5	J-55	BTC	1.125	1.125	1.8
12.25"	0' - 5000'	0' - 4986'	Inter. 9.625"	40	J-55	BTC	1.125	1.125	1.8
8.75"	0' - 15629'	0' - 10976'	Product. 5.5"	20	P-110	BTC/TXP	1.125	1.125	1.8

Casing Name	Type	Sacks	Yield	Cu. Ft.	Weight	Blend
Surface	Lead	250	1.82	455	12.8	Class C + bentonite + 2% $CaCl_2$ + 3% NaCl + LCM
	Tail	889	1.38	1226	14.8	Class C + 5% NaCl + LCM
TOC = GL		100% Excess			Centralizers per Onshore Order 2	
Intermediate	Lead	1044	2.13	2223	12.6	Class C + Bentonite + 1% $CaCl_2$ + 8% NaCl + LCM
	Tail	554	1.38	764	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	886	2.35	2082	11.5	TXI + Fluid Loss + Dispersant + Retarder + LCM
	Tail	1530	1.39	2126	13.2	TXI + Fluid Loss + Dispersant + Retarder + LCM
TOC = 4000'		35% Excess			2 on btm jt, 1 on 2nd jt, 1 every other jt to top of tail cement (500' 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 (MD)	lb/gal	Viscosity	Fluid Loss
fresh water spud	0' - 1200'	8.3	28	NC
brine water	1200' - 5000'	10.0	30-32	NC
fresh water & cut brine	5000' - 15629'	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 ≈5000' 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 ≈6000 psi. Expected bottom hole temperature is ≈155° F.

In accordance with Onshore Order 6, Matador does not anticipate that there will be enough H_2S from the surface to the Bone Spring to meet the BLM's minimum requirements for the submission of an "H_2S Drilling Operation Plan" or "Public Protection Plan" for drilling and completing this well. Since Matador has an H_2S safety package on all wells, 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.

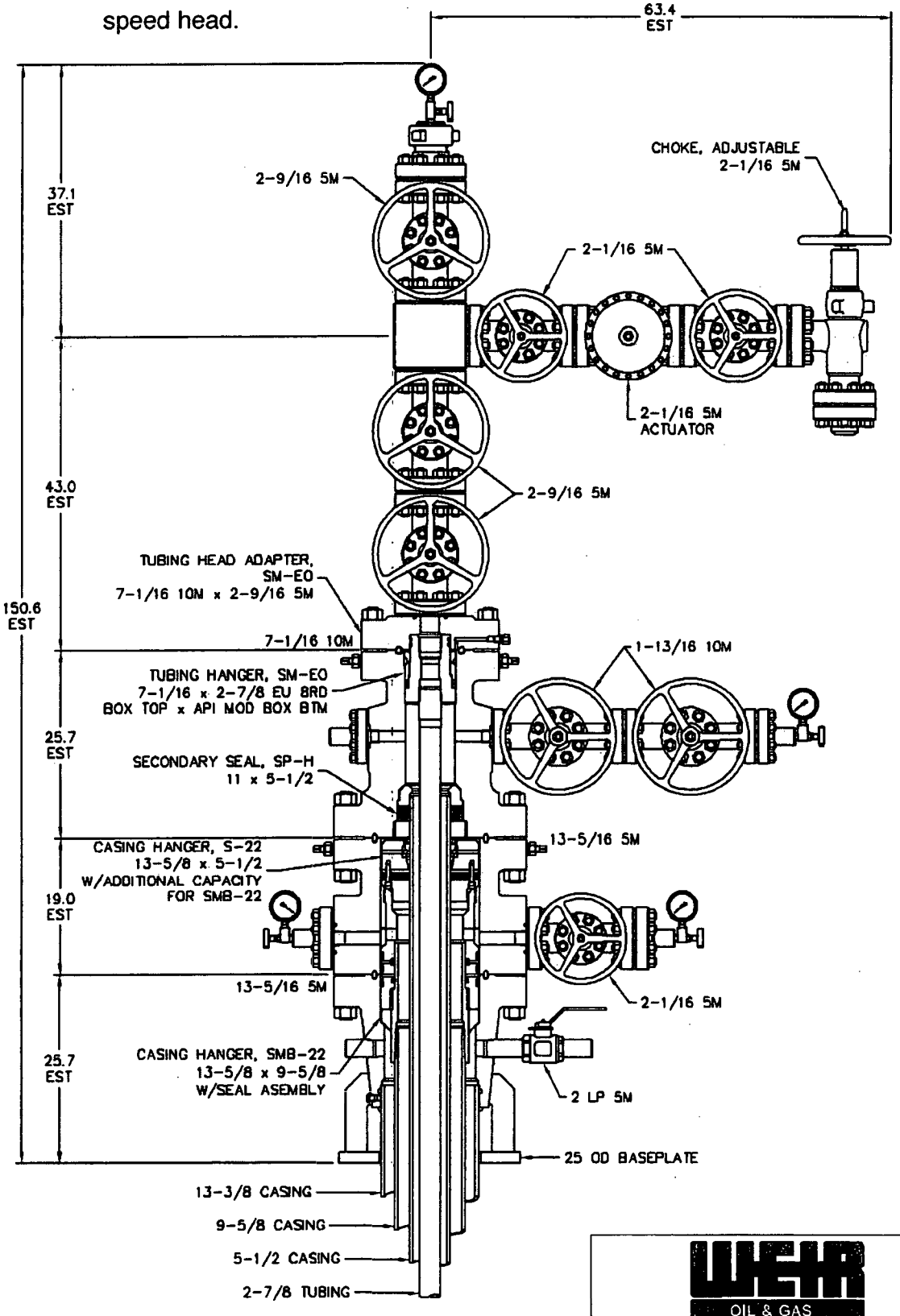
8. OTHER INFORMATION

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

MATADOR PROD. CO.

HO-35272

Matador requesting variance to use speed head.



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 OIL & GAS

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

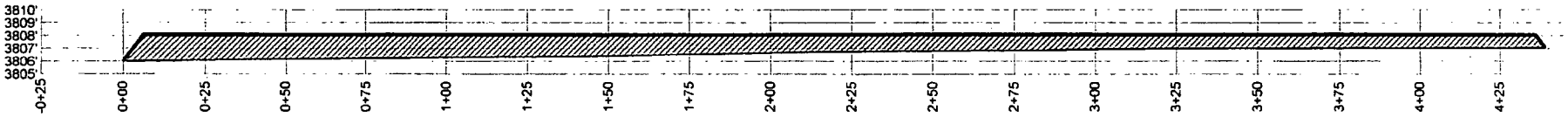
DRAWN BY	SCALE	DATE	REV
RPL	1:13	17APR15	
CHECKED BY	DRAWING NO.		
APPROVED BY	QD-000475		

_EVATION: 3808.0836
3.33% 3.000:1 18.43°
.33% 3.000:1 18.43°
ERANCE (C.Y.): 0.00
CTOR: 1.00
ACTOR: 1.00

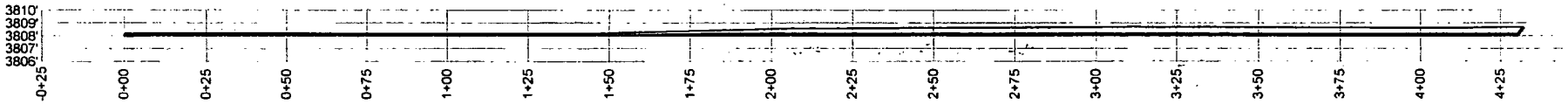
)RK VOLUMES
C.F., 1,953.51 C.Y.
:.F., 1,953.51 C.Y.
' SQ.FT., 3.765 ACRES

SECTION 3, TOWNSHIP 22-S, RANGE 32-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

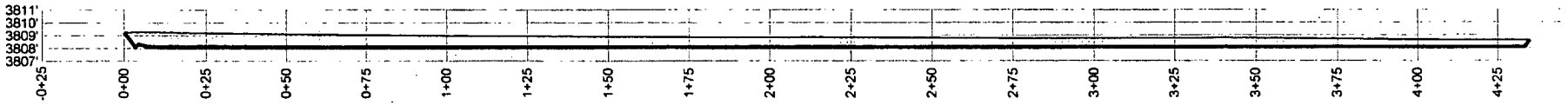
A-A'



B-B'



C-C'



vdor
TION COMPANY

	REVISION:	
	GLH	05/01/17
TE		
D_SITE_REV1		

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 1983.
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 PRODUCTION 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.

Horizontal Scale = 1:50
Vertical Scale = 1:5

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MAP 11

MICHAEL B. B
NEW MEXICO
18329
PROFESSIONAL S

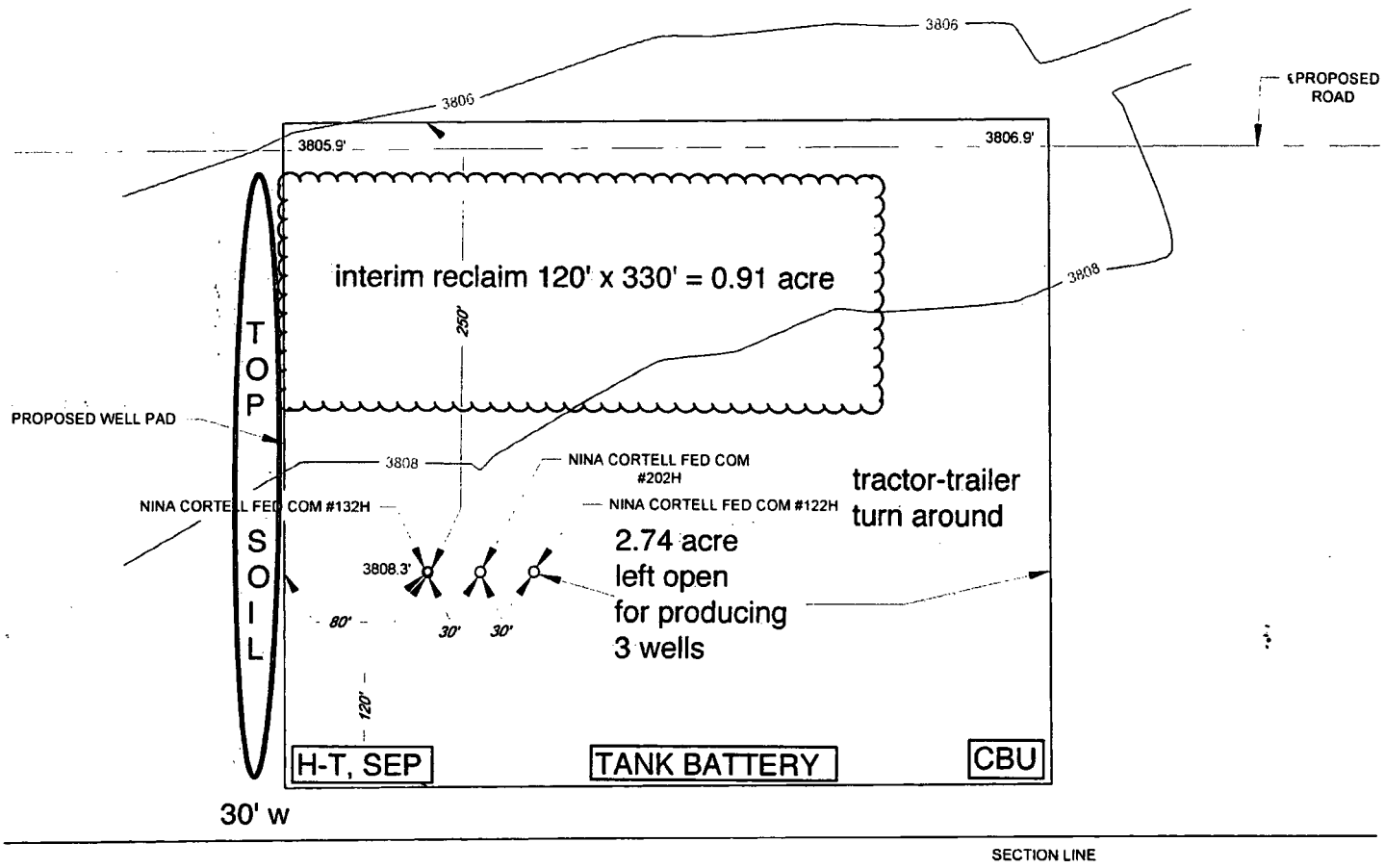
Michael Blake Brown, P.S.
MAY 01, 2017
Field note description of even date ac

S:\SURVEY\MATADOR_RESOURCES\NINA_CORTELL_FED_COM_202H_SURFACE_PAD_SITE\FINAL_PRODUCTS\CD_NINA_CORTELL_FED_COM_202H_SURFACE_PAD_SI

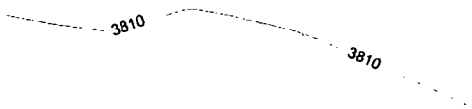
MAP 9

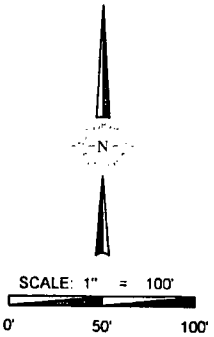
SECTION 3, TOWNSHIP 22-S, RANGE 32-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 100'



SECTION LINE





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 1983, U.S. SURVEY FEET

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. 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.

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ORIGINAL DOCUMENT SIZE: 8.5" X 11"

Surface Use Plan

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

From the junction of US 285 and US 62/180 in Carlsbad...
Go E 29.75 miles on US 62/180 to the equivalent of Mile Post 66.6
Then turn right and go South 9.0 miles on paved Lea County Road 29
(It transitions into Eddy County Road 798)
Then turn left at a very large oil tank and go E 2/3 mile on a caliche road
Then turn left and go N 0.5 mile on a caliche road
Then turn right and go East 1.4 mile on a caliche road
Then turn right and go South 0.6 mile on a caliche road
Then turn left and go East 0.3 mile on a caliche road
Then turn right and go South 0.9 mile on a caliche road
Then turn left and go Northeast 1.2 mile on a caliche road
Then turn right and go SE 0.4 mile on caliche road to the SW corner of a pad
Then turn right and go West 83.13' cross-country to the NE pad corner

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

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

The 83.13' of new resource road will be crowned and ditched, have a 14' wide driving surface, and be surfaced with caliche. Maximum disturbed width = 30'. Maximum grade = 5%. Maximum cut or fill = 3'. No culvert, cattle guard, or vehicle turn out is needed.

Upgrading will consist of draining and/or patching ten potholes with caliche. The potholes are located (from east to west and in NAD 83) at:
32.41494°, -103.67654°

32.41504°, -103.67879°
32.41512°, -103.68060°
32.41702°, -103.68328°
32.41873°, -103.68333°
32.42312°, -103.68326°
32.42402°, -103.68326°
32.42804°, -103.68354°
32.43641°, -103.68974°
32.43644°, -103.69497°

3. EXISTING WELLS (See MAP 3)

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

4. PROPOSED PRODUCTION FACILITIES

No pipeline or power line plans have been finalized at this time. Production equipment will be located on the south side of the pad.

5. WATER SUPPLY (See MAP 6)

Water will be trucked from existing water stations on private land. Berry's water station (CP 00802) is in NWNE 2-21s-33e.

6. CONSTRUCTION MATERIALS & METHODS (See MAPS 7 & 8)

NM One Call (811) will be notified before construction starts. Top ≈6" of soil and brush will be stockpiled west of the pad. V-door will face south. Closed loop

drilling system will be used. Caliche will be hauled from an existing caliche pit on private (Mills) land in E2NE4 3-22s-32e.

7. WASTE DISPOSAL

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

8. ANCILLARY FACILITIES

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

9. WELL SITE LAYOUT (See MAP 7)

Also 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 9-11)

Interim reclamation will be completed within 6 months of completing the well. Interim reclamation will consist of shrinking the pad ≈25% (0.91 acre) by removing caliche and reclaiming a 120' x 330' area in the northwest part of the pad. This will leave 2.74 acres for the production equipment (e. g., tank battery, heater-treaters, separators, flare/CBU), 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 State Land Office's requirements.

Enough stockpiled topsoil will be retained to cover the remainder of the pad when the well is plugged. Once the last well is plugged, then the rest of the pad and 83.13' of new road will be similarly reclaimed within 6 months of plugging. Noxious weeds will be controlled.

Land use:

83.13' x 30' road = 0.06 acre
+ 370' x 430' pad = 3.65 acres
3.71 acres short term
- 0.91 acre interim reclamation
2.80 acres long term (0.06 ac. road + 2.74 ac. pad)

11. SURFACE OWNER

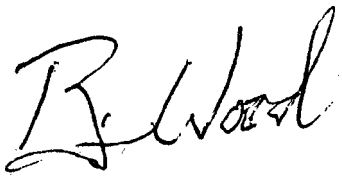
All construction will be on NM State Land Office land. Their address is PO Box 1148, Santa Fe, NM 87504. Phone is 505 827-5760.

12. OTHER INFORMATION

On site inspection was held with Vance Wolf (BLM) on June 2, 2017. Lone Mountain filed archaeology report NMCRIS 139514 on December 13, 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 14th day of December, 2017.



Brian Wood, Consultant
Permits West, Inc.
37 Verano Loop, Santa Fe, NM 87508
(505) 466-8120 FAX: (505) 466-9682 Cellular: (505) 699-2276

Field representative will be:

Sam Pryor, Senior Staff Landman
Matador Production Company
5400 LBJ Freeway, Suite 1500
Dallas TX 75240
Phone: (972) 371-5241
FAX: (214) 866-4841

November 19, 2017

To Who it May Concern:

Matador Resources Company has the right to use State surface for the Nina Cortell Fed Com slot 1 and 2 pads and their access roads by virtue of being the lessee of record for State lease VC-0075-0000 and it being communitized for the wells on those pads.

NM State Land Office address is PO Box 1148, Santa Fe NM 87504. Their phone number is (505) 827-5728.

Brian Wood

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