PECOS DISTRICT DRILLING
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Matador Production Company**
LEASE NO.:	**NMNM-086150**
WELL NAME & NO.:	**Brad Dyer Federal 201H**
SURFACE HOLE FOOTAGE:	**0330' FSL & 0839' FWL**
BOTTOM HOLE FOOTAGE	**0240' FNL & 0330' FWL**
LOCATION:	**Section 35, T. 22 S., R 32 E., NMPM**
COUNTY:	**County, New Mexico**

10M will need to be used for drilling below 9-5/8" shoe as the 7-5/8" X 7" will be in the Wolfcamp and average mud weight is 12 lb per e-mail exchange with Matador on 06/11/2018.

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

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 Water Basin:
After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

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

Possibility of water flows in the Salado and Castile.
Possibility of lost circulation in the Red Beds, Rustler, and Delaware.
Abnormal pressures may be encountered when penetrating the 3rd Bone Spring Sandstone and all subsequent formations.

1. The **13-3/8** inch surface casing shall be set at approximately **1215** 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.

Formation below the 13-3/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe and the mud weight for the bottom of the hole. Report results to BLM office.

9-5/8'' 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 1st intermediate casing is:

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

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office

3. The minimum required fill of cement behind the **7-5/8 X 7** inch intermediate casing is:

    ☐ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

Formation below the 7" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe and the mud weight for the bottom of the hole. Report results to BLM office.

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

4. The minimum required fill of cement behind the **5-1/2 X 4-1/2** inch production casing is:

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

5. 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. **5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.**

4. 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.

10M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

Variance approved to use a 5M annular. The annular must be tested to full working pressure (5000 psi.)

5. **Operator has the option to utilize a multi-bowl wellhead assembly.**
    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 9-5/8" and 7-5/8 X 7" casing integrity tests 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 a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

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

    b. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

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

d. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**

e. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

f. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

D. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

E. DRILL STEM TEST

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

F. 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 082318

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MATADOR PRODUCTION COMPANY
LEASE NO.:	NMNM 086150
WELL NAME & NO.:	201H:BRAD DYER FEDERAL
SURFACE HOLE FOOTAGE:	330'/S & 839'/W
BOTTOM HOLE FOOTAGE	240'/N & 330'/W
LOCATION:	T-22S, R-32E, S35. NMPM
COUNTY:	LEA, NM

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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.

Timing Limitation Exceptions:
The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat Areas (HA), Isolated Population Area (IPA), and Primary Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

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.

Fence Requirement
Where entry granted across a fence line, the fence must be braced and tied off on both sides of the passageway prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Cattle Guard Requirement
Any new or existing cattle guards on the access 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. Once the road is abandoned, the fence would be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

Livestock Watering Requirement
Structures that provide water to livestock, such as windmills, pipelines, drinking troughs, and earthen reservoirs, will be avoided by moving the proposed action.

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 Matador. Matador 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.

Production facilities on the 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 berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The berm shall be maintained through the life of the well and after interim reclamation has been completed.

Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The top soil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control.

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.

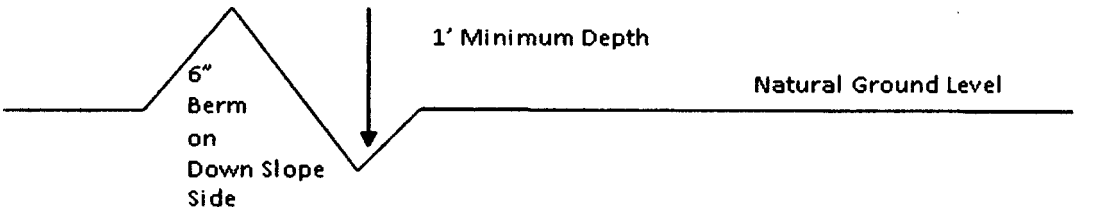
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

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

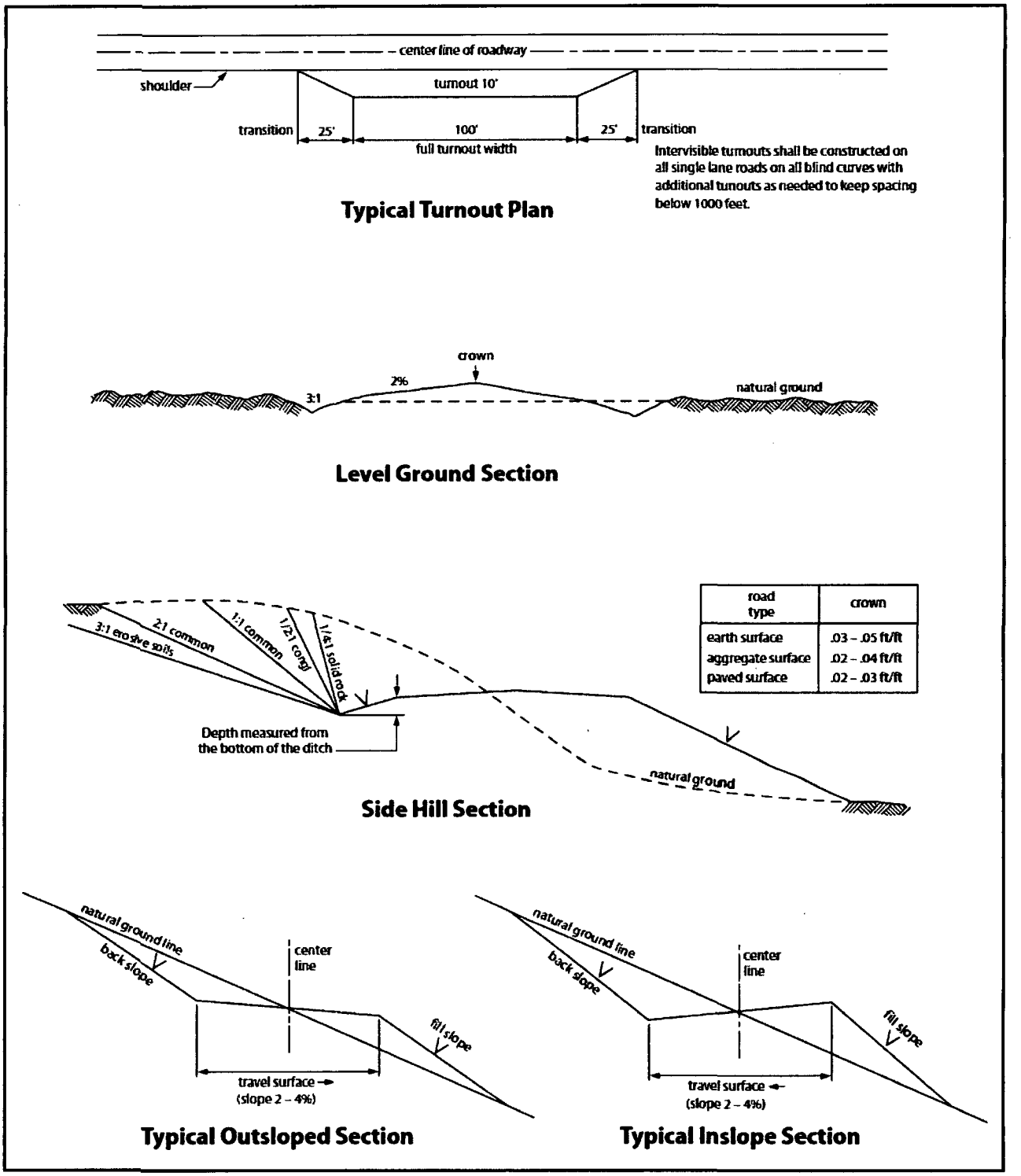


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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).

B. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

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

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

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

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

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

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

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

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

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

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

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

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

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

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

VIII. INTERIM RECLAMATION

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

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

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

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

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

IX. FINAL ABANDONMENT & RECLAMATION

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

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

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

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

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

Seed Mixture for LPC Sand/Shinnery Sites

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

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

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

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

*Pounds of pure live seed:

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

Hydrogen Sulfide Drilling

Operations Plan

1 H2S Safety Instructions:

- 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 drill rig floor, in the base of the sub structure / cellar area, and 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 tank 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:

- Attached

6 Communication:

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

- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that (0.47 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: DF_b=1.125

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.
- Gas Kick Profile: Internal burst force at the shoe will be Fracture Pressure at that depth. Surface burst pressure will be fracture gradient at setting depth less a gas gradient to equivalent height of 100 bbl kick with Drill Pipe inside casing and mud gradient with which the next hole section will be run above that (0.65 psi/ft). External force will be equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.
- Fracture at Shoe with 1/3 BHP at Surface: Internal burst force at the shoe will be Fracture Pressure at setting depth. Internal burst force at surface will be 1/3 of pore pressure at setting depth. External force will be equal to the mud gradient in which the casing will be run (0.47 psi/ft) which is a more conservative backup force than pore pressure.

Tensile: DF_t=1.8

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (9.0 ppg).

Production Casing

Collapse: DF_c=1.125

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.65 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that (0.65 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst: DF_b=1.125

- Pressure Test: 8000 psi casing test with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.
- Injection Down Casing: 9500 psi surface injection pressure plus an internal pressure gradient of 0.65 psi/ft with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.

Tensile: DF_t=1.8

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (12.5 ppg).

7 Drilling Stem Testing:

- No DST 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, then 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

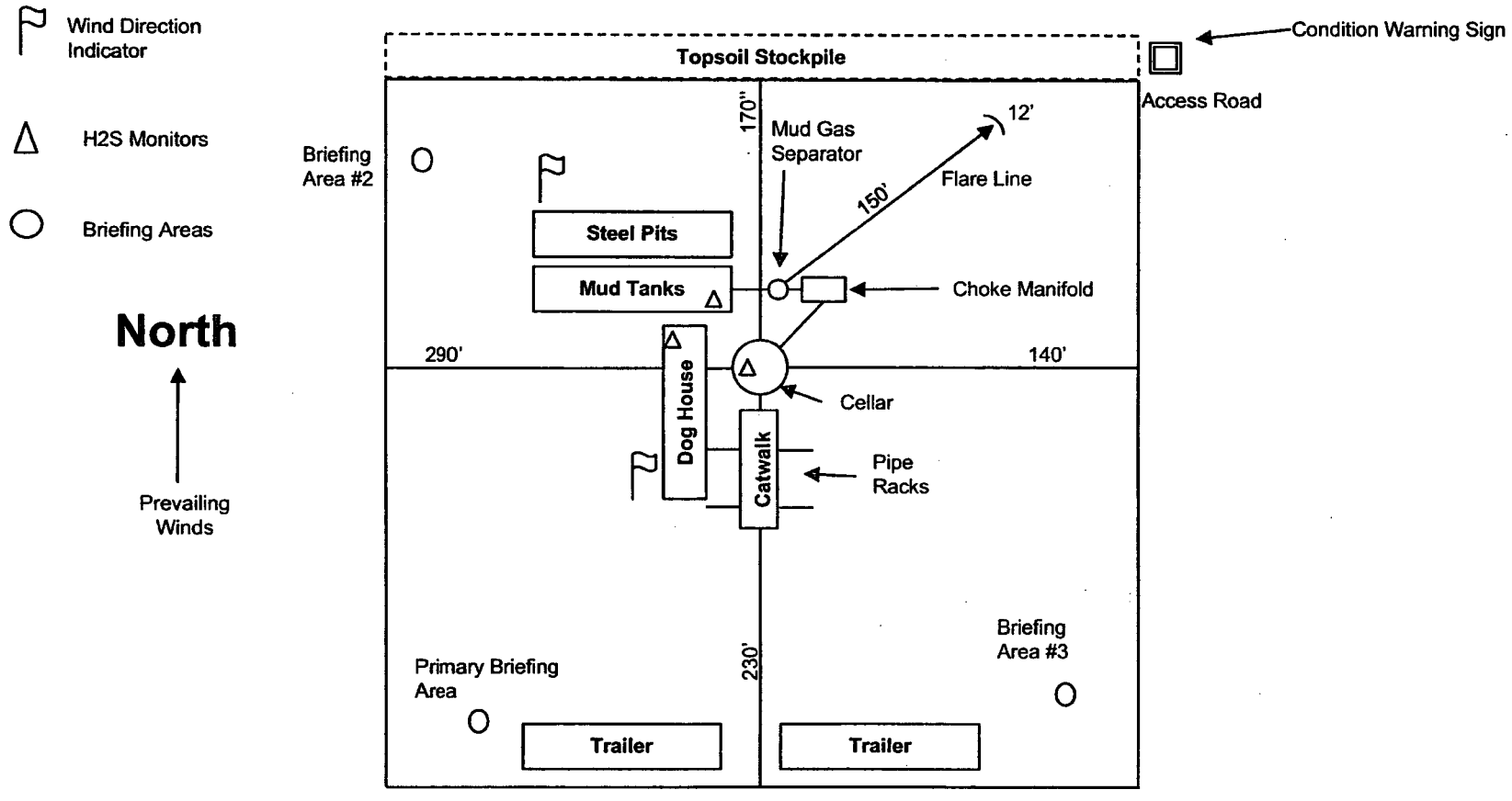
- See next page.

H2S Contingency Plan Emergency Contacts
Brad Dyer Federal wells
Matador Production Company
Sec. 35, 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
Dee Smith	Drilling Superintendent	972-371-5447	972-822-1010
Adam Lange	Drilling Engineer	972-371-5292	214-458-0788
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 hours		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

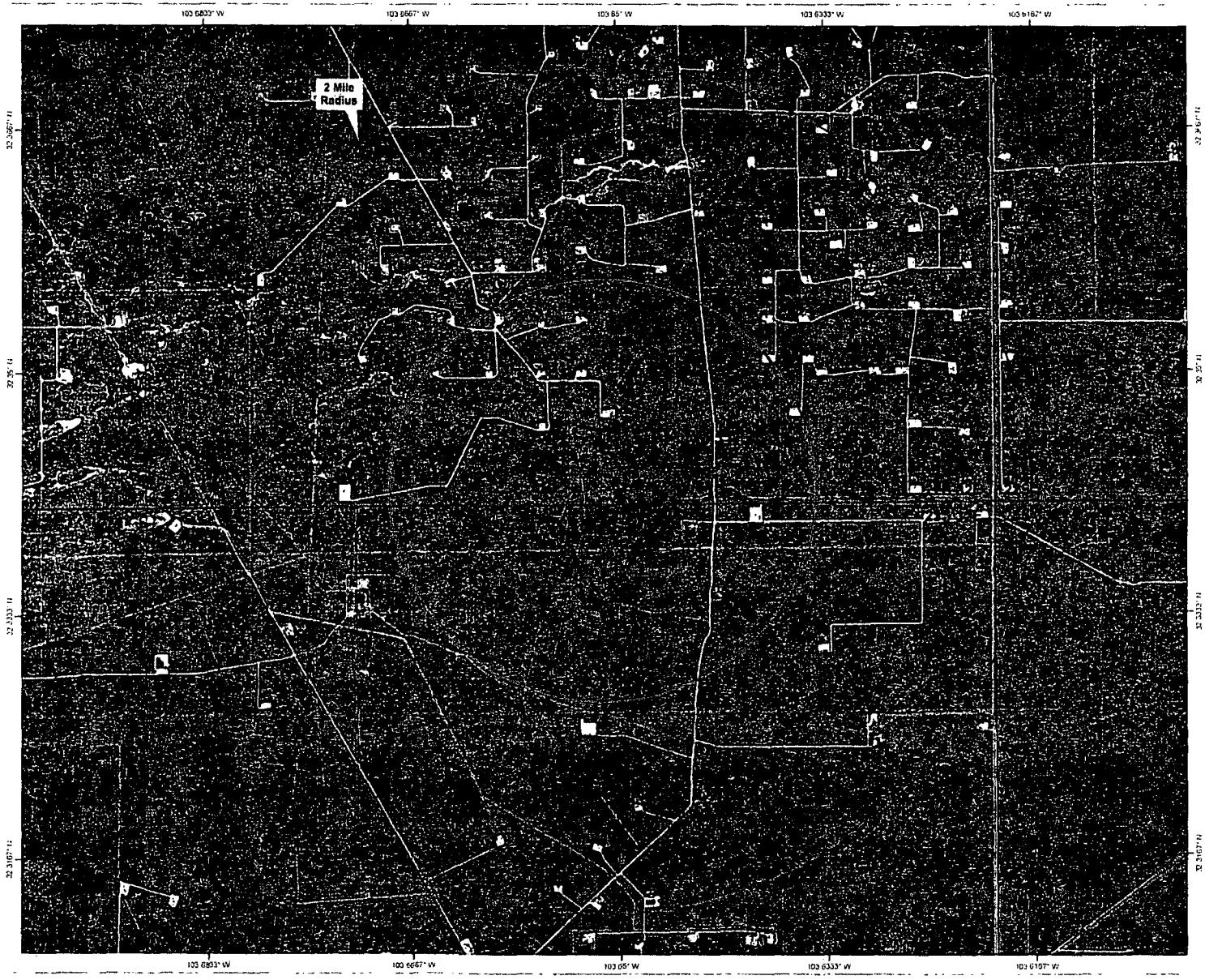
Brad Dyer Federal 201H
SHL 330' FSL & 839' FWL
35-22S-32E Lea County, NM



Matador Production Company

Brad Dyer Federal #201H
H_2S Contingency Plan:
2 Mile Radius Map

Section 35, Township 22S, Range 32E
Lea County, New Mexico



Surface Hole Location

1:27,000

0 0.25 0.5 1

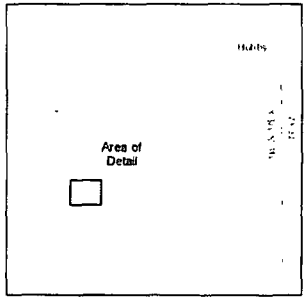
Miles

N

NAD 1983 New Mexico State Plane East
FIPS 3001 Feet

PERMITS WEST, Inc.

Prepared by Permits West, Inc., March 28, 2018
for Matador Production Company



Company: Matador Resources
Site: Brad Dyer 35-22S-32E AR
Well: #201H
Project: Lea County, New Mexico (NAD 27)
Rig: Patterson 282

MS Directional

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	KOP, 1.00°/100' Build
1200.00	6.00	240.90	1198.80	-15.26	-27.43	-15.08	31.39	Begin 6.00° Tangent
6152.00	6.00	240.90	6123.78	-267.00	-479.71	-263.73	549.01	Begin 1.00°/100' Drop
6752.00	0.00	0.00	6722.58	-282.27	-507.14	-278.81	580.40	Begin Vertical Hold
11602.58	0.00	0.00	11573.24	-282.27	-507.14	-278.81	580.40	Begin 10.00°/100' Build
12402.58	80.00	359.61	12137.49	191.18	-510.35	194.85	1053.86	Begin 6.00°/100' Build
12569.23	90.00	359.61	12152.00	357.00	-511.48	360.48	1219.69	Begin 90.00° Lateral
16919.32	90.00	359.61	12152.00	4707.00	-541.00	4710.57	5569.78	PBHL

Azimuths to Grid North
True North: -0.36°
Magnetic North: 6.54°

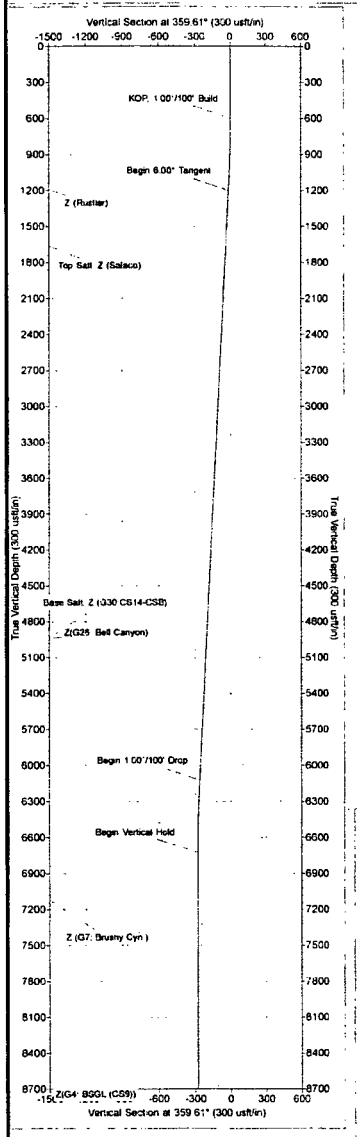
Magnetic Field
Strength: 47875.6snT
Dip Angle: 60.10°
Date: 2/12/2019
Model: BGGM2017

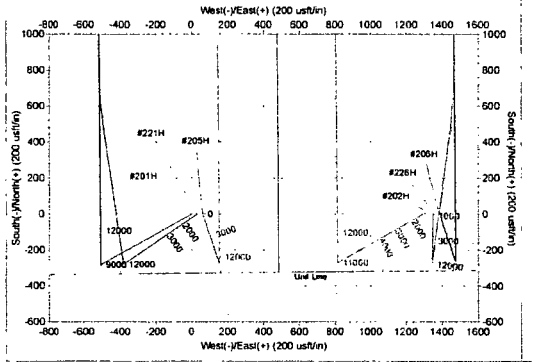
WELL DETAILS: #201H

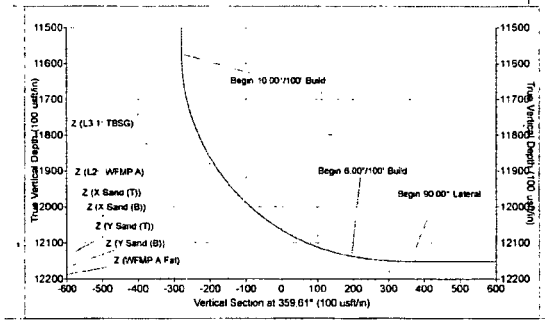
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	488710.03	3734.30 761801.00	32° 20' 30.229 N	103° 39' 2.814 W

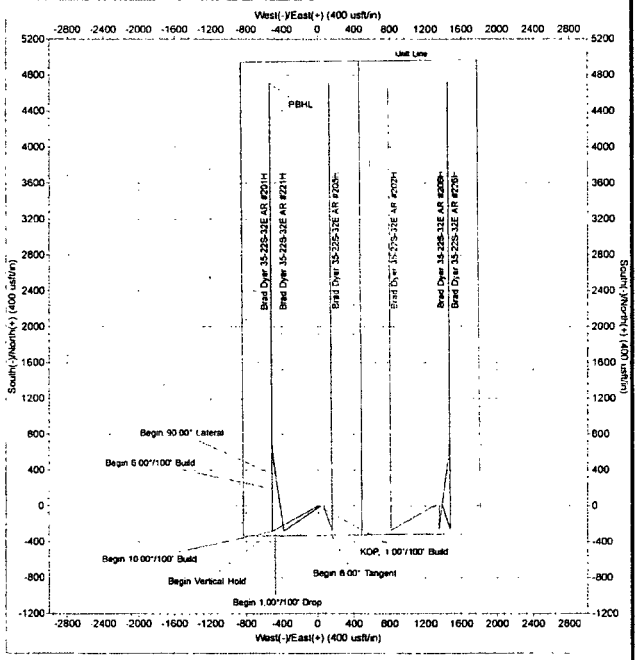
US State Plane 1927 (Exact solution)
New Mexico East 3001

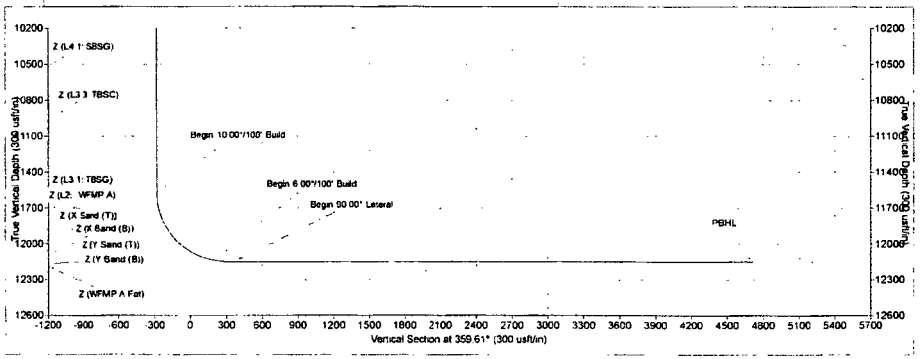
Created By: HLH
Date: 15:22, February 15 2018
Plan: Design #1











Database:	EDM Conroe	**Local Co-ordinate Reference:**	Well #201H
Company:	Matador Resources	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Project:	Lea County, New Mexico (NAD 27)	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site:	Brad Dyer 35-22S-32E AR	**North Reference:**	Grid
Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Lea County, New Mexico (NAD 27)		
Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Well	#201H					
Well Position	**+N/-S**	488,710.00 usft	**Northing:**	488,710.00 usft	**Latitude:**	32° 20' 30.239 N
	+E/-W	710,801.00 usft	**Easting:**	710,801.00 usft	**Longitude:**	103° 39' 2.814 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	3,734.00 usft

Wellbore	Wellbore #1				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	BGGM2017	2/1/2019	6.91	60.10	47,877

Design	Design #1				
Audit Notes:					
Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.00
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.00	0.00	0.00	359.61	

Plan Survey Tool Program **Date** 2/12/2018

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	16,919.32	Design #1 (Wellbore #1)	MWD	
				OWSG MWD - Standard	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	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	
1,200.00	6.00	240.90	1,198.90	-15.26	-27.43	1.00	1.00	0.00	240.90	
6,152.00	6.00	240.90	6,123.78	-267.00	-479.71	0.00	0.00	0.00	0.00	
6,752.00	0.00	0.00	6,722.68	-282.27	-507.14	1.00	-1.00	0.00	180.00	VP - Brad Dyer #20
11,602.56	0.00	0.00	11,573.24	-282.27	-507.14	0.00	0.00	0.00	0.00	
12,402.56	80.00	359.61	12,137.49	191.18	-510.35	10.00	10.00	0.00	359.61	PBHL - Brad Dyer #
12,569.23	90.00	359.61	12,152.00	357.00	-511.48	6.00	6.00	0.00	0.00	
16,919.32	90.00	359.61	12,152.00	4,707.00	-541.00	0.00	0.00	0.00	0.00	PBHL - Brad Dyer #

Database:	EDM Conroe	**Local Co-ordinate Reference:**	Well #201H
Company:	Matador Resources	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Project:	Lea County, New Mexico (NAD 27)	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site:	Brad Dyer 35-22S-32E AR	**North Reference:**	Grid
Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	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
KOP, 1.00°/100' Build									
700.00	1.00	240.90	699.99	-0.42	-0.76	-0.42	1.00	1.00	0.00
800.00	2.00	240.90	799.96	-1.70	-3.05	-1.68	1.00	1.00	0.00
900.00	3.00	240.90	899.86	-3.82	-6.86	-3.77	1.00	1.00	0.00
1,000.00	4.00	240.90	999.68	-6.79	-12.20	-6.70	1.00	1.00	0.00
1,100.00	5.00	240.90	1,099.37	-10.60	-19.05	-10.47	1.00	1.00	0.00
1,200.00	6.00	240.90	1,198.90	-15.26	-27.43	-15.08	1.00	1.00	0.00
Begin 6.00° Tangent									
1,300.00	6.00	240.90	1,298.36	-20.35	-36.56	-20.10	0.00	0.00	0.00
1,400.00	6.00	240.90	1,397.81	-25.43	-45.69	-25.12	0.00	0.00	0.00
1,500.00	6.00	240.90	1,497.26	-30.52	-54.83	-30.14	0.00	0.00	0.00
1,600.00	6.00	240.90	1,596.71	-35.60	-63.96	-35.16	0.00	0.00	0.00
1,700.00	6.00	240.90	1,696.16	-40.68	-73.09	-40.18	0.00	0.00	0.00
1,800.00	6.00	240.90	1,795.62	-45.77	-82.23	-45.21	0.00	0.00	0.00
1,900.00	6.00	240.90	1,895.07	-50.85	-91.36	-50.23	0.00	0.00	0.00
2,000.00	6.00	240.90	1,994.52	-55.93	-100.49	-55.25	0.00	0.00	0.00
2,100.00	6.00	240.90	2,093.97	-61.02	-109.63	-60.27	0.00	0.00	0.00
2,200.00	6.00	240.90	2,193.43	-66.10	-118.76	-65.29	0.00	0.00	0.00
2,300.00	6.00	240.90	2,292.88	-71.18	-127.89	-70.31	0.00	0.00	0.00
2,400.00	6.00	240.90	2,392.33	-76.27	-137.03	-75.33	0.00	0.00	0.00
2,500.00	6.00	240.90	2,491.78	-81.35	-146.16	-80.35	0.00	0.00	0.00
2,600.00	6.00	240.90	2,591.23	-86.44	-155.29	-85.38	0.00	0.00	0.00
2,700.00	6.00	240.90	2,690.69	-91.52	-164.43	-90.40	0.00	0.00	0.00
2,800.00	6.00	240.90	2,790.14	-96.60	-173.56	-95.42	0.00	0.00	0.00
2,900.00	6.00	240.90	2,889.59	-101.69	-182.69	-100.44	0.00	0.00	0.00
3,000.00	6.00	240.90	2,989.04	-106.77	-191.83	-105.46	0.00	0.00	0.00
3,100.00	6.00	240.90	3,088.50	-111.85	-200.96	-110.48	0.00	0.00	0.00
3,200.00	6.00	240.90	3,187.95	-116.94	-210.09	-115.50	0.00	0.00	0.00
3,300.00	6.00	240.90	3,287.40	-122.02	-219.23	-120.53	0.00	0.00	0.00
3,400.00	6.00	240.90	3,386.85	-127.10	-228.36	-125.55	0.00	0.00	0.00
3,500.00	6.00	240.90	3,486.30	-132.19	-237.49	-130.57	0.00	0.00	0.00
3,600.00	6.00	240.90	3,585.76	-137.27	-246.63	-135.59	0.00	0.00	0.00
3,700.00	6.00	240.90	3,685.21	-142.35	-255.76	-140.61	0.00	0.00	0.00
3,800.00	6.00	240.90	3,784.66	-147.44	-264.89	-145.63	0.00	0.00	0.00
3,900.00	6.00	240.90	3,884.11	-152.52	-274.03	-150.65	0.00	0.00	0.00
4,000.00	6.00	240.90	3,983.57	-157.61	-283.16	-155.67	0.00	0.00	0.00
4,100.00	6.00	240.90	4,083.02	-162.69	-292.29	-160.70	0.00	0.00	0.00
4,200.00	6.00	240.90	4,182.47	-167.77	-301.43	-165.72	0.00	0.00	0.00
4,300.00	6.00	240.90	4,281.92	-172.86	-310.56	-170.74	0.00	0.00	0.00
4,400.00	6.00	240.90	4,381.37	-177.94	-319.69	-175.76	0.00	0.00	0.00
4,500.00	6.00	240.90	4,480.83	-183.02	-328.83	-180.78	0.00	0.00	0.00
4,600.00	6.00	240.90	4,580.28	-188.11	-337.96	-185.80	0.00	0.00	0.00
4,700.00	6.00	240.90	4,679.73	-193.19	-347.09	-190.82	0.00	0.00	0.00
4,800.00	6.00	240.90	4,779.18	-198.27	-356.23	-195.84	0.00	0.00	0.00
4,900.00	6.00	240.90	4,878.64	-203.36	-365.36	-200.87	0.00	0.00	0.00
5,000.00	6.00	240.90	4,978.09	-208.44	-374.49	-205.89	0.00	0.00	0.00
5,100.00	6.00	240.90	5,077.54	-213.52	-383.63	-210.91	0.00	0.00	0.00

Database:	EDM Conroe	**Local Co-ordinate Reference:**	Well #201H
Company:	Matador Resources	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Project:	Lea County, New Mexico (NAD 27)	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site:	Brad Dyer 35-22S-32E AR	**North Reference:**	Grid
Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,200.00	6.00	240.90	5,176.99	-218.61	-392.76	-215.93	0.00	0.00	0.00
5,300.00	6.00	240.90	5,276.44	-223.69	-401.90	-220.95	0.00	0.00	0.00
5,400.00	6.00	240.90	5,375.90	-228.78	-411.03	-225.97	0.00	0.00	0.00
5,500.00	6.00	240.90	5,475.35	-233.86	-420.16	-230.99	0.00	0.00	0.00
5,600.00	6.00	240.90	5,574.80	-238.94	-429.30	-236.02	0.00	0.00	0.00
5,700.00	6.00	240.90	5,674.25	-244.03	-438.43	-241.04	0.00	0.00	0.00
5,800.00	6.00	240.90	5,773.70	-249.11	-447.56	-246.06	0.00	0.00	0.00
5,900.00	6.00	240.90	5,873.16	-254.19	-456.70	-251.08	0.00	0.00	0.00
6,000.00	6.00	240.90	5,972.61	-259.28	-465.83	-256.10	0.00	0.00	0.00
6,100.00	6.00	240.90	6,072.06	-264.36	-474.96	-261.12	0.00	0.00	0.00
6,152.00	6.00	240.90	6,123.78	-267.00	-479.71	-263.73	0.00	0.00	0.00
Begin 1.00°/100' Drop									
6,200.00	5.52	240.90	6,171.53	-269.35	-483.92	-266.05	1.00	-1.00	0.00
6,300.00	4.52	240.90	6,271.15	-273.60	-491.57	-270.25	1.00	-1.00	0.00
6,400.00	3.52	240.90	6,370.90	-277.01	-497.69	-273.62	1.00	-1.00	0.00
6,500.00	2.52	240.90	6,470.76	-279.57	-502.30	-276.15	1.00	-1.00	0.00
6,600.00	1.52	240.90	6,570.70	-281.29	-505.38	-277.84	1.00	-1.00	0.00
6,700.00	0.52	240.90	6,670.68	-282.15	-506.93	-278.70	1.00	-1.00	0.00
6,752.00	0.00	0.00	6,722.68	-282.27	-507.14	-278.81	1.00	-1.00	0.00
Begin Vertical Hold									
6,800.00	0.00	0.00	6,770.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
6,900.00	0.00	0.00	6,870.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
7,000.00	0.00	0.00	6,970.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
7,100.00	0.00	0.00	7,070.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
7,200.00	0.00	0.00	7,170.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
7,300.00	0.00	0.00	7,270.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
7,400.00	0.00	0.00	7,370.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
7,500.00	0.00	0.00	7,470.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
7,600.00	0.00	0.00	7,570.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
7,700.00	0.00	0.00	7,670.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
7,800.00	0.00	0.00	7,770.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
7,900.00	0.00	0.00	7,870.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
8,000.00	0.00	0.00	7,970.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
8,100.00	0.00	0.00	8,070.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
8,200.00	0.00	0.00	8,170.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
8,300.00	0.00	0.00	8,270.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
8,400.00	0.00	0.00	8,370.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
8,500.00	0.00	0.00	8,470.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
8,600.00	0.00	0.00	8,570.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
8,700.00	0.00	0.00	8,670.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
8,800.00	0.00	0.00	8,770.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
8,900.00	0.00	0.00	8,870.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
9,000.00	0.00	0.00	8,970.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
9,100.00	0.00	0.00	9,070.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
9,200.00	0.00	0.00	9,170.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
9,300.00	0.00	0.00	9,270.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
9,400.00	0.00	0.00	9,370.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
9,500.00	0.00	0.00	9,470.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
9,600.00	0.00	0.00	9,570.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
9,700.00	0.00	0.00	9,670.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
9,800.00	0.00	0.00	9,770.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
9,900.00	0.00	0.00	9,870.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
10,000.00	0.00	0.00	9,970.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
10,100.00	0.00	0.00	10,070.68	-282.27	-507.14	-278.81	0.00	0.00	0.00

Database:	EDM Conroe	**Local Co-ordinate Reference:**	Well #201H
Company:	Matador Resources	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Project:	Lea County, New Mexico (NAD 27)	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site:	Brad Dyer 35-22S-32E AR	**North Reference:**	Grid
Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,200.00	0.00	0.00	10,170.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
10,300.00	0.00	0.00	10,270.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
10,400.00	0.00	0.00	10,370.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
10,500.00	0.00	0.00	10,470.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
10,600.00	0.00	0.00	10,570.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
10,700.00	0.00	0.00	10,670.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
10,800.00	0.00	0.00	10,770.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
10,900.00	0.00	0.00	10,870.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
11,000.00	0.00	0.00	10,970.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
11,100.00	0.00	0.00	11,070.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
11,200.00	0.00	0.00	11,170.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
11,300.00	0.00	0.00	11,270.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
11,400.00	0.00	0.00	11,370.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
11,500.00	0.00	0.00	11,470.68	-282.27	-507.14	-278.81	0.00	0.00	0.00
11,602.56	0.00	0.00	11,573.24	-282.27	-507.14	-278.81	0.00	0.00	0.00
Begin 10.00°/100' Build									
11,650.00	4.74	359.61	11,620.63	-280.31	-507.15	-276.85	10.00	10.00	0.00
11,700.00	9.74	359.61	11,670.21	-274.00	-507.19	-270.54	10.00	10.00	0.00
11,750.00	14.74	359.61	11,719.06	-263.40	-507.27	-259.94	10.00	10.00	0.00
11,800.00	19.74	359.61	11,766.80	-248.59	-507.37	-245.13	10.00	10.00	0.00
11,850.00	24.74	359.61	11,813.06	-229.67	-507.49	-226.21	10.00	10.00	0.00
11,900.00	29.74	359.61	11,857.50	-206.78	-507.65	-203.32	10.00	10.00	0.00
11,950.00	34.74	359.61	11,899.78	-180.12	-507.83	-176.66	10.00	10.00	0.00
12,000.00	39.74	359.61	11,939.57	-149.87	-508.04	-146.40	10.00	10.00	0.00
12,050.00	44.74	359.61	11,976.57	-116.26	-508.26	-112.80	10.00	10.00	0.00
12,100.00	49.74	359.61	12,010.50	-79.56	-508.51	-76.10	10.00	10.00	0.00
12,150.00	54.74	359.61	12,041.11	-40.05	-508.78	-36.58	10.00	10.00	0.00
12,200.00	59.74	359.61	12,068.15	1.99	-509.07	5.45	10.00	10.00	0.00
12,250.00	64.74	359.61	12,091.43	46.22	-509.37	49.69	10.00	10.00	0.00
12,300.00	69.74	359.61	12,110.76	92.31	-509.68	95.78	10.00	10.00	0.00
12,350.00	74.74	359.61	12,126.01	139.92	-510.00	143.38	10.00	10.00	0.00
12,402.56	80.00	359.61	12,137.49	191.18	-510.35	194.65	10.00	10.00	0.00
Begin 6.00°/100' Build									
12,450.00	82.85	359.61	12,144.57	238.09	-510.67	241.56	6.00	6.00	0.00
12,500.00	85.85	359.61	12,149.49	287.84	-511.01	291.31	6.00	6.00	0.00
12,550.00	88.85	359.61	12,151.81	337.78	-511.35	341.25	6.00	6.00	0.00
12,569.23	90.00	359.61	12,152.00	357.00	-511.48	360.48	6.00	6.00	0.00
Begin 90.00° Lateral									
12,600.00	90.00	359.61	12,152.00	387.78	-511.68	391.25	0.00	0.00	0.00
12,700.00	90.00	359.61	12,152.00	487.77	-512.36	491.25	0.00	0.00	0.00
12,800.00	90.00	359.61	12,152.00	587.77	-513.04	591.25	0.00	0.00	0.00
12,900.00	90.00	359.61	12,152.00	687.77	-513.72	691.25	0.00	0.00	0.00
13,000.00	90.00	359.61	12,152.00	787.77	-514.40	791.25	0.00	0.00	0.00
13,100.00	90.00	359.61	12,152.00	887.76	-515.08	891.25	0.00	0.00	0.00
13,200.00	90.00	359.61	12,152.00	987.76	-515.76	991.25	0.00	0.00	0.00
13,300.00	90.00	359.61	12,152.00	1,087.76	-516.44	1,091.25	0.00	0.00	0.00
13,400.00	90.00	359.61	12,152.00	1,187.76	-517.11	1,191.25	0.00	0.00	0.00
13,500.00	90.00	359.61	12,152.00	1,287.76	-517.79	1,291.25	0.00	0.00	0.00
13,600.00	90.00	359.61	12,152.00	1,387.75	-518.47	1,391.25	0.00	0.00	0.00
13,700.00	90.00	359.61	12,152.00	1,487.75	-519.15	1,491.25	0.00	0.00	0.00
13,800.00	90.00	359.61	12,152.00	1,587.75	-519.83	1,591.25	0.00	0.00	0.00
13,900.00	90.00	359.61	12,152.00	1,687.75	-520.51	1,691.25	0.00	0.00	0.00
14,000.00	90.00	359.61	12,152.00	1,787.74	-521.19	1,791.25	0.00	0.00	0.00

Database:	EDM Conroe	**Local Co-ordinate Reference:**	Well #201H
Company:	Matador Resources	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Project:	Lea County, New Mexico (NAD 27)	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site:	Brad Dyer 35-22S-32E AR	**North Reference:**	Grid
Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,100.00	90.00	359.61	12,152.00	1,887.74	-521.87	1,891.25	0.00	0.00	0.00
14,200.00	90.00	359.61	12,152.00	1,987.74	-522.54	1,991.25	0.00	0.00	0.00
14,300.00	90.00	359.61	12,152.00	2,087.74	-523.22	2,091.25	0.00	0.00	0.00
14,400.00	90.00	359.61	12,152.00	2,187.73	-523.90	2,191.25	0.00	0.00	0.00
14,500.00	90.00	359.61	12,152.00	2,287.73	-524.58	2,291.25	0.00	0.00	0.00
14,600.00	90.00	359.61	12,152.00	2,387.73	-525.26	2,391.25	0.00	0.00	0.00
14,700.00	90.00	359.61	12,152.00	2,487.73	-525.94	2,491.25	0.00	0.00	0.00
14,800.00	90.00	359.61	12,152.00	2,587.73	-526.62	2,591.25	0.00	0.00	0.00
14,900.00	90.00	359.61	12,152.00	2,687.72	-527.29	2,691.25	0.00	0.00	0.00
15,000.00	90.00	359.61	12,152.00	2,787.72	-527.97	2,791.25	0.00	0.00	0.00
15,100.00	90.00	359.61	12,152.00	2,887.72	-528.65	2,891.25	0.00	0.00	0.00
15,200.00	90.00	359.61	12,152.00	2,987.72	-529.33	2,991.25	0.00	0.00	0.00
15,300.00	90.00	359.61	12,152.00	3,087.71	-530.01	3,091.25	0.00	0.00	0.00
15,400.00	90.00	359.61	12,152.00	3,187.71	-530.69	3,191.25	0.00	0.00	0.00
15,500.00	90.00	359.61	12,152.00	3,287.71	-531.37	3,291.25	0.00	0.00	0.00
15,600.00	90.00	359.61	12,152.00	3,387.71	-532.05	3,391.25	0.00	0.00	0.00
15,700.00	90.00	359.61	12,152.00	3,487.70	-532.72	3,491.25	0.00	0.00	0.00
15,800.00	90.00	359.61	12,152.00	3,587.70	-533.40	3,591.25	0.00	0.00	0.00
15,900.00	90.00	359.61	12,152.00	3,687.70	-534.08	3,691.25	0.00	0.00	0.00
16,000.00	90.00	359.61	12,152.00	3,787.70	-534.76	3,791.25	0.00	0.00	0.00
16,100.00	90.00	359.61	12,152.00	3,887.70	-535.44	3,891.25	0.00	0.00	0.00
16,200.00	90.00	359.61	12,152.00	3,987.69	-536.12	3,991.25	0.00	0.00	0.00
16,300.00	90.00	359.61	12,152.00	4,087.69	-536.80	4,091.25	0.00	0.00	0.00
16,400.00	90.00	359.61	12,152.00	4,187.69	-537.48	4,191.25	0.00	0.00	0.00
16,500.00	90.00	359.61	12,152.00	4,287.69	-538.15	4,291.25	0.00	0.00	0.00
16,600.00	90.00	359.61	12,152.00	4,387.68	-538.83	4,391.25	0.00	0.00	0.00
16,700.00	90.00	359.61	12,152.00	4,487.68	-539.51	4,491.25	0.00	0.00	0.00
16,800.00	90.00	359.61	12,152.00	4,587.68	-540.19	4,591.25	0.00	0.00	0.00
16,900.00	90.00	359.61	12,152.00	4,687.68	-540.87	4,691.25	0.00	0.00	0.00
16,919.32	90.00	359.61	12,152.00	4,707.00	-541.00	4,710.57	0.00	0.00	0.00
PBHL									

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
VP - Brad Dyer #201H - plan hits target center - Point	0.00	0.00	6,722.68	-282.27	-507.14	488,427.73	710,293.86	32° 20' 27.477 N	103° 39' 8.746 W
PBHL - Brad Dyer #20 - plan hits target center - Point	0.00	0.01	12,152.00	4,707.00	-541.00	493,417.00	710,260.00	32° 21' 16.851 N	103° 39' 8.771 W

Database:	EDM Conroe	**Local Co-ordinate Reference:**	Well #201H
Company:	Matador Resources	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Project:	Lea County, New Mexico (NAD 27)	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site:	Brad Dyer 35-22S-32E AR	**North Reference:**	Grid
Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,190.92	1,189.87	Z (Rustler)		0.00	
1,665.18	1,661.54	Top Salt: Z (Salado)		0.00	
4,953.38	4,931.72	Base Salt: Z (G30:CS14-CSB)		0.00	
4,961.67	4,939.97	Z(G26: Bell Canyon)		0.00	
7,149.13	7,119.81	Z (G7: Brushy Cyn.)		0.00	
8,727.02	8,697.70	Z(G4: BSGL (CS9))		0.00	
9,824.04	9,794.72	Z(L5.3: FBSC)		0.00	
9,860.32	9,831.00	Z (L5.1: FBSG)		0.00	
10,180.71	10,151.39	Z (L4.3: SBSC)		0.00	
10,544.31	10,514.99	Z (L4.1: SBSG)		0.00	
11,000.77	10,971.45	Z (L3.3: TBSC)		0.00	
11,784.65	11,752.28	Z (L3.1: TBSG)		0.00	
12,124.05	12,025.65	Z (L2: WFMP A)		0.00	
12,192.42	12,064.29	Z (X Sand (T))		0.00	
12,257.56	12,094.61	Z (X Sand (B))		0.00	
12,400.04	12,137.05	Z (Y Sand (T))		0.00	

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
600.00	600.00	0.00	0.00	KOP, 1.00°/100' Build
1,200.00	1,198.90	-15.26	-27.43	Begin 6.00° Tangent
6,152.00	6,123.78	-267.00	-479.71	Begin 1.00°/100' Drop
6,752.00	6,722.68	-282.27	-507.14	Begin Vertical Hold
11,602.56	11,573.24	-282.27	-507.14	Begin 10.00°/100' Build
12,402.56	12,137.49	191.18	-510.35	Begin 6.00°/100' Build
12,569.23	12,152.00	357.00	-511.48	Begin 90.00° Lateral
16,919.32	12,152.00	4,707.00	-541.00	PBHL

Matador Resources

Lea County, New Mexico (NAD 27)
Brad Dyer 35-22S-32E AR
#201H

Wellbore #1
Design #1

Anticollision Report

15 February, 2018

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Reference	Design #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.00usft	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00 u	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 2/12/2018

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	16,919.32	Design #1 (Wellbore #1)	MWD	OWSG MWD - Standard

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
Brad Dyer 35-22S-32E AR						
#202H - Wellbore #1 - Design #2	600.00	603.00	1,320.06	1,316.21	342.716	CC
#202H - Wellbore #1 - Design #2	16,919.32	16,936.03	1,320.22	1,140.65	7.352	ES, SF
#205H - Wellbore #1 - Design #2	600.00	600.00	60.00	56.16	15.621	CC, ES
#205H - Wellbore #1 - Design #2	16,919.32	17,117.98	695.10	521.02	3.993	SF
#206H - Wellbore #1 - Design #2	600.00	602.00	1,380.06	1,376.21	358.626	CC, ES
#206H - Wellbore #1 - Design #2	16,919.32	17,137.30	1,994.95	1,815.62	11.125	SF
#221H - Wellbore #1 - Design #2	600.00	601.00	30.00	26.16	7.803	CC, ES
#221H - Wellbore #1 - Design #2	11,700.00	11,705.86	127.34	44.94	1.545	SF
#226H - Wellbore #1 - Design #2	600.00	598.00	1,350.06	1,346.23	352.142	CC, ES
#226H - Wellbore #1 - Design #2	16,919.32	17,327.59	2,028.39	1,850.93	11.430	SF

Offset Design Brad Dyer 35-22S-32E AR - #202H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft
Offset Well Error: 0.00 usft

Survey Program: 0-MWD

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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	3.00	-3.00	0.00	0.00	89.44	13.00	1,320.00	1,320.06				
100.00	100.00	103.00	97.00	0.13	0.14	89.44	13.00	1,320.00	1,320.06	1,319.80	0.27	4,942.919	
200.00	200.00	203.00	197.00	0.49	0.50	89.44	13.00	1,320.00	1,320.06	1,319.08	0.98	1,341.522	
300.00	300.00	303.00	297.00	0.85	0.86	89.44	13.00	1,320.00	1,320.06	1,318.36	1.70	776.076	
400.00	400.00	403.00	397.00	1.20	1.21	89.44	13.00	1,320.00	1,320.06	1,317.65	2.42	545.957	
500.00	500.00	503.00	497.00	1.56	1.57	89.44	13.00	1,320.00	1,320.06	1,316.93	3.13	421.095	
600.00	600.00	603.00	597.00	1.92	1.93	89.44	13.00	1,320.00	1,320.06	1,316.21	3.85	342.716	CC
700.00	699.99	703.01	696.99	2.27	2.29	89.42	13.00	1,320.00	1,320.83	1,316.27	4.56	289.908	
800.00	799.96	803.04	796.96	2.61	2.65	89.36	13.00	1,320.00	1,323.13	1,317.88	5.25	251.866	
900.00	899.86	903.14	896.86	2.95	3.01	89.27	13.00	1,320.00	1,326.97	1,321.01	5.96	222.785	
1,000.00	999.68	996.68	996.68	3.30	3.34	89.15	13.00	1,320.00	1,332.34	1,325.70	6.64	200.654	
1,100.00	1,099.37	1,121.31	1,121.30	3.66	3.77	89.02	12.37	1,318.88	1,338.36	1,330.94	7.42	180.390	
1,200.00	1,198.90	1,247.02	1,246.95	4.03	4.20	88.91	10.39	1,315.36	1,344.00	1,335.80	8.20	163.998	
1,300.00	1,298.36	1,372.99	1,372.73	4.40	4.63	88.83	7.05	1,309.42	1,348.48	1,339.50	8.98	150.192	
1,400.00	1,397.81	1,499.18	1,498.55	4.78	5.07	88.82	2.35	1,301.06	1,351.02	1,341.26	9.77	138.322	
1,500.00	1,497.26	1,620.25	1,619.05	5.16	5.51	88.85	-3.41	1,290.79	1,351.66	1,341.12	10.55	128.173	
1,600.00	1,596.71	1,720.25	1,718.50	5.54	5.87	88.85	-8.54	1,281.67	1,351.67	1,340.41	11.26	120.006	

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #202H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,700.00	1,696.16	1,820.25	1,817.95	5.92	6.24	88.85	-13.66	1,272.55	1,351.69	1,339.70	11.98	112.784	
1,800.00	1,795.62	1,920.25	1,917.40	6.31	6.61	88.85	-18.79	1,263.43	1,351.70	1,338.99	12.71	106.355	
1,900.00	1,895.07	2,020.25	2,016.85	6.69	6.99	88.85	-23.91	1,254.31	1,351.71	1,338.28	13.44	100.601	
2,000.00	1,994.52	2,120.25	2,116.30	7.08	7.36	88.85	-29.04	1,245.19	1,351.73	1,337.56	14.17	95.423	
2,100.00	2,093.97	2,220.25	2,215.76	7.47	7.74	88.86	-34.16	1,236.07	1,351.74	1,336.84	14.90	90.740	
2,200.00	2,193.43	2,320.25	2,315.21	7.86	8.12	88.86	-39.29	1,226.95	1,351.75	1,336.12	15.63	86.487	
2,300.00	2,292.88	2,420.25	2,414.66	8.25	8.50	88.86	-44.41	1,217.83	1,351.76	1,335.40	16.36	82.607	
2,400.00	2,392.33	2,520.25	2,514.11	8.64	8.89	88.86	-49.54	1,208.71	1,351.78	1,334.68	17.10	79.055	
2,500.00	2,491.78	2,620.25	2,613.56	9.03	9.27	88.86	-54.66	1,199.59	1,351.79	1,333.95	17.84	75.791	
2,600.00	2,591.23	2,720.25	2,713.01	9.43	9.66	88.87	-59.78	1,190.48	1,351.80	1,333.23	18.57	72.783	
2,700.00	2,690.69	2,820.25	2,812.46	9.82	10.05	88.87	-64.91	1,181.36	1,351.82	1,332.50	19.31	70.001	
2,800.00	2,790.14	2,920.25	2,911.92	10.21	10.43	88.87	-70.03	1,172.24	1,351.83	1,331.78	20.05	67.421	
2,900.00	2,889.59	3,020.25	3,011.37	10.60	10.82	88.87	-75.16	1,163.12	1,351.84	1,331.05	20.79	65.023	
3,000.00	2,989.04	3,120.25	3,110.82	11.00	11.21	88.87	-80.28	1,154.00	1,351.85	1,330.32	21.53	62.788	
3,100.00	3,088.50	3,220.25	3,210.27	11.39	11.60	88.87	-85.41	1,144.88	1,351.87	1,329.60	22.27	60.700	
3,200.00	3,187.95	3,320.25	3,309.72	11.78	11.99	88.88	-90.53	1,135.76	1,351.88	1,328.87	23.01	58.745	
3,300.00	3,287.40	3,420.25	3,409.17	12.18	12.38	88.88	-95.66	1,126.64	1,351.89	1,328.14	23.75	56.911	
3,400.00	3,386.85	3,520.25	3,508.62	12.57	12.77	88.88	-100.78	1,117.52	1,351.91	1,327.41	24.50	55.187	
3,500.00	3,486.30	3,620.25	3,608.07	12.97	13.16	88.88	-105.91	1,108.40	1,351.92	1,326.68	25.24	53.564	
3,600.00	3,585.76	3,720.25	3,707.53	13.36	13.55	88.88	-111.03	1,099.28	1,351.93	1,325.95	25.98	52.033	
3,700.00	3,685.21	3,820.25	3,806.98	13.76	13.94	88.88	-116.15	1,090.16	1,351.95	1,325.22	26.73	50.586	
3,800.00	3,784.66	3,920.25	3,906.43	14.15	14.34	88.89	-121.28	1,081.04	1,351.96	1,324.49	27.47	49.218	
3,900.00	3,884.11	4,020.25	4,005.88	14.55	14.73	88.89	-126.40	1,071.92	1,351.97	1,323.76	28.21	47.921	
4,000.00	3,983.57	4,120.25	4,105.33	14.94	15.12	88.89	-131.53	1,062.80	1,351.98	1,323.03	28.96	46.690	
4,100.00	4,083.02	4,220.25	4,204.78	15.34	15.51	88.89	-136.65	1,053.68	1,352.00	1,322.30	29.70	45.520	
4,200.00	4,182.47	4,320.25	4,304.23	15.73	15.91	88.89	-141.78	1,044.56	1,352.01	1,321.56	30.45	44.408	
4,300.00	4,281.92	4,420.25	4,403.69	16.13	16.30	88.90	-146.90	1,035.44	1,352.02	1,320.83	31.19	43.348	
4,400.00	4,381.37	4,520.25	4,503.14	16.52	16.69	88.90	-152.03	1,026.32	1,352.04	1,320.10	31.93	42.337	
4,500.00	4,480.83	4,620.25	4,602.59	16.92	17.09	88.90	-157.15	1,017.20	1,352.05	1,319.37	32.68	41.372	
4,600.00	4,580.28	4,720.25	4,702.04	17.31	17.48	88.90	-162.28	1,008.08	1,352.06	1,318.64	33.43	40.450	
4,700.00	4,679.73	4,820.25	4,801.49	17.71	17.87	88.90	-167.40	998.96	1,352.08	1,317.90	34.17	39.569	
4,800.00	4,779.18	4,920.25	4,900.94	18.11	18.27	88.90	-172.52	989.85	1,352.09	1,317.17	34.92	38.724	
4,900.00	4,878.64	5,020.25	5,000.39	18.50	18.66	88.91	-177.65	980.73	1,352.10	1,316.44	35.66	37.915	
5,000.00	4,978.09	5,120.25	5,099.85	18.90	19.06	88.91	-182.77	971.61	1,352.11	1,315.71	36.41	37.139	
5,100.00	5,077.54	5,220.25	5,199.30	19.29	19.45	88.91	-187.90	962.49	1,352.13	1,314.97	37.15	36.393	
5,200.00	5,176.99	5,320.25	5,298.75	19.69	19.85	88.91	-193.02	953.37	1,352.14	1,314.24	37.90	35.678	
5,300.00	5,276.44	5,420.25	5,398.20	20.09	20.24	88.91	-198.15	944.25	1,352.15	1,313.51	38.64	34.989	
5,400.00	5,375.90	5,520.25	5,497.65	20.48	20.63	88.91	-203.27	935.13	1,352.17	1,312.77	39.39	34.327	
5,500.00	5,475.35	5,620.25	5,597.10	20.88	21.03	88.92	-208.40	926.01	1,352.18	1,312.04	40.14	33.689	
5,600.00	5,574.80	5,720.25	5,696.55	21.27	21.42	88.92	-213.52	916.89	1,352.19	1,311.31	40.88	33.074	
5,700.00	5,674.25	5,820.25	5,796.00	21.67	21.82	88.92	-218.65	907.77	1,352.20	1,310.57	41.63	32.481	
5,800.00	5,773.70	5,920.25	5,895.46	22.07	22.21	88.92	-223.77	898.65	1,352.22	1,309.84	42.38	31.910	
5,900.00	5,873.16	6,020.25	5,994.91	22.46	22.61	88.92	-228.89	889.53	1,352.23	1,309.11	43.12	31.358	
6,000.00	5,972.61	6,120.25	6,094.36	22.86	23.00	88.93	-234.02	880.41	1,352.24	1,308.37	43.87	30.824	
6,100.00	6,072.06	6,220.25	6,193.81	23.26	23.40	88.93	-239.14	871.29	1,352.26	1,307.64	44.62	30.309	
6,152.00	6,123.78	6,272.25	6,245.52	23.46	23.61	88.93	-241.81	866.55	1,352.26	1,307.26	45.00	30.047	
6,200.00	6,171.53	6,320.25	6,293.26	23.65	23.80	88.93	-244.27	862.17	1,352.09	1,306.73	45.36	29.806	
6,300.00	6,271.15	6,420.24	6,392.70	24.04	24.19	88.97	-249.39	853.05	1,350.59	1,304.49	46.11	29.293	
6,400.00	6,370.90	6,520.18	6,492.09	24.41	24.59	89.04	-254.51	843.94	1,347.56	1,300.71	46.85	28.764	
6,500.00	6,470.76	6,609.59	6,581.03	24.78	24.94	89.12	-258.99	835.98	1,343.22	1,295.67	47.55	28.249	
6,600.00	6,570.70	6,692.40	6,663.52	25.13	25.26	89.20	-262.58	829.58	1,338.52	1,290.31	48.22	27.761	
6,700.00	6,670.68	6,775.26	6,746.15	25.47	25.57	89.29	-265.59	824.22	1,333.57	1,284.70	48.87	27.288	

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #202H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,752.00	6,722.68	6,818.37	6,789.17	25.64	25.73	89.34	-266.93	821.85	1,330.89	1,281.69	49.20	27.051	
6,800.00	6,770.68	6,858.19	6,828.92	25.79	25.88	89.38	-268.02	819.90	1,328.53	1,279.03	49.49	26.842	
6,900.00	6,870.68	6,941.23	6,911.88	26.10	26.18	89.46	-269.87	816.62	1,324.55	1,274.45	50.10	26.437	
7,000.00	6,970.68	7,024.36	6,994.97	26.42	26.47	89.52	-271.12	814.39	1,321.85	1,271.15	50.70	26.071	
7,100.00	7,070.68	7,107.55	7,078.14	26.73	26.75	89.55	-271.79	813.20	1,320.42	1,269.13	51.29	25.744	
7,188.46	7,159.14	7,185.54	7,156.14	27.01	27.01	89.55	-271.90	813.00	1,320.18	1,268.36	51.82	25.477	
7,200.00	7,170.68	7,202.92	7,167.68	27.05	27.06	89.55	-271.90	813.00	1,320.18	1,268.26	51.91	25.430	
7,300.00	7,270.68	7,302.92	7,267.68	27.36	27.38	89.55	-271.90	813.00	1,320.18	1,267.61	52.57	25.114	
7,400.00	7,370.68	7,402.92	7,367.68	27.68	27.70	89.55	-271.90	813.00	1,320.18	1,266.95	53.22	24.804	
7,500.00	7,470.68	7,502.92	7,467.68	28.00	28.02	89.55	-271.90	813.00	1,320.18	1,266.29	53.88	24.501	
7,600.00	7,570.68	7,602.92	7,567.68	28.32	28.34	89.55	-271.90	813.00	1,320.18	1,265.64	54.54	24.205	
7,700.00	7,670.68	7,702.92	7,667.68	28.64	28.66	89.55	-271.90	813.00	1,320.18	1,264.97	55.20	23.915	
7,800.00	7,770.68	7,802.92	7,767.68	28.96	28.98	89.55	-271.90	813.00	1,320.18	1,264.31	55.87	23.631	
7,900.00	7,870.68	7,902.92	7,867.68	29.29	29.30	89.55	-271.90	813.00	1,320.18	1,263.65	56.53	23.354	
8,000.00	7,970.68	8,002.92	7,967.68	29.61	29.62	89.55	-271.90	813.00	1,320.18	1,262.98	57.19	23.083	
8,100.00	8,070.68	8,102.92	8,067.68	29.93	29.95	89.55	-271.90	813.00	1,320.18	1,262.32	57.86	22.817	
8,200.00	8,170.68	8,202.92	8,167.68	30.26	30.27	89.55	-271.90	813.00	1,320.18	1,261.65	58.53	22.557	
8,300.00	8,270.68	8,302.92	8,267.68	30.58	30.60	89.55	-271.90	813.00	1,320.18	1,260.98	59.20	22.302	
8,400.00	8,370.68	8,402.92	8,367.68	30.91	30.92	89.55	-271.90	813.00	1,320.18	1,260.31	59.87	22.052	
8,500.00	8,470.68	8,502.92	8,467.68	31.24	31.25	89.55	-271.90	813.00	1,320.18	1,259.64	60.54	21.808	
8,600.00	8,570.68	8,602.92	8,567.68	31.57	31.58	89.55	-271.90	813.00	1,320.18	1,258.97	61.21	21.569	
8,700.00	8,670.68	8,702.92	8,667.68	31.89	31.91	89.55	-271.90	813.00	1,320.18	1,258.30	61.88	21.334	
8,800.00	8,770.68	8,802.92	8,767.68	32.22	32.24	89.55	-271.90	813.00	1,320.18	1,257.62	62.55	21.105	
8,900.00	8,870.68	8,902.92	8,867.68	32.55	32.57	89.55	-271.90	813.00	1,320.18	1,256.95	63.23	20.879	
9,000.00	8,970.68	9,002.92	8,967.68	32.88	32.90	89.55	-271.90	813.00	1,320.18	1,256.27	63.90	20.659	
9,100.00	9,070.68	9,102.92	9,067.68	33.21	33.23	89.55	-271.90	813.00	1,320.18	1,255.60	64.58	20.442	
9,200.00	9,170.68	9,202.92	9,167.68	33.55	33.56	89.55	-271.90	813.00	1,320.18	1,254.92	65.26	20.230	
9,300.00	9,270.68	9,302.92	9,267.68	33.88	33.89	89.55	-271.90	813.00	1,320.18	1,254.24	65.94	20.022	
9,400.00	9,370.68	9,402.92	9,367.68	34.21	34.22	89.55	-271.90	813.00	1,320.18	1,253.56	66.62	19.818	
9,500.00	9,470.68	9,502.92	9,467.68	34.54	34.56	89.55	-271.90	813.00	1,320.18	1,252.88	67.30	19.618	
9,600.00	9,570.68	9,602.92	9,567.68	34.88	34.89	89.55	-271.90	813.00	1,320.18	1,252.20	67.98	19.421	
9,700.00	9,670.68	9,702.92	9,667.68	35.21	35.22	89.55	-271.90	813.00	1,320.18	1,251.52	68.66	19.229	
9,800.00	9,770.68	9,802.92	9,767.68	35.55	35.56	89.55	-271.90	813.00	1,320.18	1,250.84	69.34	19.039	
9,900.00	9,870.68	9,902.92	9,867.68	35.88	35.89	89.55	-271.90	813.00	1,320.18	1,250.16	70.02	18.854	
10,000.00	9,970.68	10,002.92	9,967.68	36.22	36.23	89.55	-271.90	813.00	1,320.18	1,249.47	70.71	18.672	
10,100.00	10,070.68	10,102.92	10,067.68	36.55	36.56	89.55	-271.90	813.00	1,320.18	1,248.79	71.39	18.493	
10,200.00	10,170.68	10,202.92	10,167.68	36.89	36.90	89.55	-271.90	813.00	1,320.18	1,248.10	72.07	18.317	
10,300.00	10,270.68	10,302.92	10,267.68	37.23	37.24	89.55	-271.90	813.00	1,320.18	1,247.42	72.76	18.144	
10,400.00	10,370.68	10,402.92	10,367.68	37.56	37.57	89.55	-271.90	813.00	1,320.18	1,246.73	73.45	17.975	
10,500.00	10,470.68	10,502.92	10,467.68	37.90	37.91	89.55	-271.90	813.00	1,320.18	1,246.05	74.13	17.809	
10,600.00	10,570.68	10,602.92	10,567.68	38.24	38.25	89.55	-271.90	813.00	1,320.18	1,245.36	74.82	17.645	
10,700.00	10,670.68	10,702.92	10,667.68	38.58	38.59	89.55	-271.90	813.00	1,320.18	1,244.67	75.51	17.484	
10,800.00	10,770.68	10,802.92	10,767.68	38.92	38.93	89.55	-271.90	813.00	1,320.18	1,243.98	76.19	17.326	
10,900.00	10,870.68	10,902.92	10,867.68	39.25	39.27	89.55	-271.90	813.00	1,320.18	1,243.29	76.88	17.171	
11,000.00	10,970.68	11,002.92	10,967.68	39.59	39.61	89.55	-271.90	813.00	1,320.18	1,242.61	77.57	17.019	
11,100.00	11,070.68	11,102.92	11,067.68	39.93	39.95	89.55	-271.90	813.00	1,320.18	1,241.92	78.26	16.869	
11,200.00	11,170.68	11,202.92	11,167.68	40.27	40.29	89.55	-271.90	813.00	1,320.18	1,241.23	78.95	16.721	
11,300.00	11,270.68	11,302.92	11,267.68	40.61	40.63	89.55	-271.90	813.00	1,320.18	1,240.53	79.64	16.576	
11,400.00	11,370.68	11,402.92	11,367.68	40.95	40.97	89.55	-271.90	813.00	1,320.18	1,239.84	80.33	16.434	
11,500.00	11,470.68	11,502.92	11,467.68	41.30	41.31	89.55	-271.90	813.00	1,320.18	1,239.15	81.03	16.293	
11,600.00	11,570.68	11,597.08	11,567.68	41.64	41.63	89.55	-271.90	813.00	1,320.18	1,238.48	81.70	16.159	
11,602.56	11,573.24	11,600.36	11,570.24	41.65	41.64	89.55	-271.90	813.00	1,320.18	1,238.46	81.72	16.155	

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #202H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft
Offset Well Error: 0.00 usft

Survey Program: 0-MWD

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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,650.00	11,620.63	11,647.04	11,617.63	41.80	41.80	89.61	-271.29	813.00	1,320.18	1,238.14	82.04	16.092	
11,652.65	11,623.27	11,649.69	11,620.27	41.81	41.81	89.61	-271.16	813.00	1,320.18	1,238.12	82.06	16.088	
11,700.00	11,670.21	11,697.08	11,667.45	41.97	41.96	89.69	-266.81	812.97	1,320.18	1,237.81	82.37	16.027	
11,750.00	11,719.06	11,747.29	11,716.86	42.12	42.12	89.76	-257.96	812.91	1,320.18	1,237.49	82.69	15.966	
11,800.00	11,766.80	11,797.65	11,765.45	42.26	42.27	89.83	-244.77	812.82	1,320.19	1,237.20	82.99	15.908	
11,850.00	11,813.06	11,848.18	11,812.84	42.39	42.40	89.90	-227.31	812.70	1,320.20	1,236.92	83.27	15.854	
11,900.00	11,857.50	11,898.86	11,858.66	42.51	42.53	89.95	-205.67	812.55	1,320.21	1,236.67	83.54	15.803	
11,950.00	11,899.78	11,949.70	11,902.51	42.61	42.64	89.99	-179.98	812.37	1,320.22	1,236.42	83.79	15.756	
12,000.00	11,939.57	12,000.68	11,944.02	42.70	42.73	90.02	-150.42	812.17	1,320.23	1,236.20	84.03	15.711	
12,050.00	11,976.57	12,051.81	11,982.85	42.78	42.81	90.04	-117.18	811.95	1,320.24	1,235.98	84.26	15.669	
12,100.00	12,010.50	12,103.07	12,018.65	42.84	42.88	90.04	-80.52	811.70	1,320.26	1,235.78	84.48	15.628	
12,150.00	12,041.11	12,154.45	12,051.11	42.89	42.94	90.03	-40.71	811.43	1,320.27	1,235.58	84.69	15.589	
12,200.00	12,068.15	12,205.94	12,079.92	42.92	42.97	90.00	1.94	811.13	1,320.28	1,235.38	84.90	15.551	
12,250.00	12,091.43	12,257.54	12,104.84	42.94	43.00	89.96	47.10	810.83	1,320.30	1,235.19	85.11	15.513	
12,300.00	12,110.76	12,309.22	12,125.63	42.96	43.01	89.91	94.40	810.51	1,320.31	1,234.99	85.32	15.475	
12,350.00	12,126.01	12,360.98	12,142.10	42.96	43.02	89.85	143.45	810.17	1,320.32	1,234.79	85.53	15.437	
12,400.00	12,137.04	12,412.80	12,154.08	42.98	43.03	89.78	193.84	809.83	1,320.32	1,234.58	85.74	15.399	
12,402.56	12,137.49	12,415.45	12,154.57	42.98	43.04	89.77	196.45	809.81	1,320.32	1,234.57	85.75	15.397	
12,450.00	12,144.57	12,464.01	12,162.05	43.04	43.09	89.73	244.42	809.48	1,320.33	1,234.36	85.97	15.359	
12,500.00	12,149.49	12,515.12	12,167.27	43.16	43.20	89.68	295.26	809.14	1,320.33	1,234.13	86.20	15.317	
12,550.00	12,151.81	12,566.24	12,169.77	43.29	43.34	89.63	346.31	808.79	1,320.33	1,233.88	86.45	15.272	
12,569.23	12,152.00	12,585.90	12,170.00	43.35	43.40	89.61	365.96	808.66	1,320.33	1,233.78	86.55	15.255	
12,600.00	12,152.00	12,616.70	12,170.00	43.44	43.49	89.61	396.77	808.45	1,320.33	1,233.61	86.72	15.225	
12,700.00	12,152.00	12,716.70	12,170.00	43.78	43.83	89.61	496.76	807.76	1,320.33	1,232.98	87.34	15.117	
12,800.00	12,152.00	12,816.70	12,170.00	44.18	44.22	89.61	596.76	807.08	1,320.32	1,232.24	88.09	14.989	
12,900.00	12,152.00	12,916.70	12,170.00	44.63	44.67	89.61	696.76	806.40	1,320.32	1,231.37	88.95	14.844	
13,000.00	12,152.00	13,016.70	12,170.00	45.13	45.17	89.61	796.76	805.72	1,320.32	1,230.40	89.92	14.683	
13,100.00	12,152.00	13,116.70	12,170.00	45.68	45.72	89.61	896.76	805.04	1,320.32	1,229.31	91.01	14.508	
13,200.00	12,152.00	13,216.70	12,170.00	46.29	46.33	89.61	996.75	804.36	1,320.31	1,228.12	92.20	14.320	
13,300.00	12,152.00	13,316.70	12,170.00	46.94	46.98	89.61	1,096.75	803.68	1,320.31	1,226.82	93.49	14.122	
13,400.00	12,152.00	13,416.70	12,170.00	47.65	47.68	89.61	1,196.75	803.00	1,320.31	1,225.42	94.89	13.915	
13,500.00	12,152.00	13,516.70	12,170.00	48.39	48.42	89.61	1,296.75	802.32	1,320.31	1,223.93	96.37	13.700	
13,600.00	12,152.00	13,616.70	12,170.00	49.19	49.21	89.61	1,396.74	801.63	1,320.30	1,222.35	97.95	13.479	
13,700.00	12,152.00	13,716.70	12,170.00	50.02	50.04	89.61	1,496.74	800.95	1,320.30	1,220.69	99.61	13.254	
13,800.00	12,152.00	13,816.70	12,170.00	50.89	50.92	89.61	1,596.74	800.27	1,320.30	1,218.94	101.36	13.026	
13,900.00	12,152.00	13,916.70	12,170.00	51.81	51.83	89.61	1,696.74	799.59	1,320.30	1,217.12	103.18	12.796	
14,000.00	12,152.00	14,016.70	12,170.00	52.75	52.77	89.61	1,796.73	798.91	1,320.29	1,215.22	105.08	12.565	
14,100.00	12,152.00	14,116.70	12,170.00	53.74	53.75	89.61	1,896.73	798.23	1,320.29	1,213.25	107.04	12.335	
14,200.00	12,152.00	14,216.70	12,170.00	54.75	54.76	89.61	1,996.73	797.55	1,320.29	1,211.22	109.07	12.105	
14,300.00	12,152.00	14,316.70	12,170.00	55.80	55.81	89.61	2,096.73	796.87	1,320.29	1,209.13	111.16	11.877	
14,400.00	12,152.00	14,416.70	12,170.00	56.87	56.88	89.61	2,196.73	796.19	1,320.29	1,206.97	113.31	11.652	
14,500.00	12,152.00	14,516.70	12,170.00	57.97	57.98	89.61	2,296.72	795.51	1,320.28	1,204.76	115.52	11.429	
14,600.00	12,152.00	14,616.70	12,170.00	59.10	59.10	89.61	2,396.72	794.82	1,320.28	1,202.50	117.78	11.210	
14,700.00	12,152.00	14,716.70	12,170.00	60.25	60.25	89.61	2,496.72	794.14	1,320.28	1,200.19	120.08	10.995	
14,800.00	12,152.00	14,816.70	12,170.00	61.43	61.43	89.61	2,596.72	793.46	1,320.28	1,197.84	122.44	10.783	
14,900.00	12,152.00	14,916.70	12,170.00	62.62	62.62	89.61	2,696.71	792.78	1,320.27	1,195.44	124.84	10.576	
15,000.00	12,152.00	15,016.70	12,170.00	63.84	63.84	89.61	2,796.71	792.10	1,320.27	1,193.00	127.28	10.373	
15,100.00	12,152.00	15,116.70	12,170.00	65.08	65.07	89.61	2,896.71	791.42	1,320.27	1,190.52	129.75	10.175	
15,200.00	12,152.00	15,216.70	12,170.00	66.33	66.33	89.61	2,996.71	790.74	1,320.27	1,188.00	132.27	9.982	
15,300.00	12,152.00	15,316.70	12,170.00	67.61	67.60	89.61	3,096.70	790.06	1,320.26	1,185.45	134.82	9.793	
15,400.00	12,152.00	15,416.70	12,170.00	68.89	68.88	89.61	3,196.70	789.38	1,320.26	1,182.86	137.40	9.609	
15,500.00	12,152.00	15,516.70	12,170.00	70.20	70.19	89.61	3,296.70	788.69	1,320.26	1,180.24	140.01	9.429	

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #202H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft
Offset Well Error: 0.00 usft

Survey Program: 0-MWD

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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,600.00	12,152.00	15,616.70	12,170.00	71.52	71.51	89.61	3,396.70	788.01	1,320.26	1,177.60	142.66	9.255	
15,700.00	12,152.00	15,716.70	12,170.00	72.85	72.84	89.61	3,496.70	787.33	1,320.25	1,174.93	145.33	9.085	
15,800.00	12,152.00	15,816.70	12,170.00	74.20	74.18	89.61	3,596.69	786.65	1,320.25	1,172.23	148.03	8.919	
15,900.00	12,152.00	15,916.70	12,170.00	75.56	75.54	89.61	3,696.69	785.97	1,320.25	1,169.50	150.75	8.758	
16,000.00	12,152.00	16,016.70	12,170.00	76.93	76.91	89.61	3,796.69	785.29	1,320.25	1,166.75	153.49	8.601	
16,100.00	12,152.00	16,116.70	12,170.00	78.31	78.29	89.61	3,896.69	784.61	1,320.24	1,163.98	156.26	8.449	
16,200.00	12,152.00	16,216.70	12,170.00	79.70	79.68	89.61	3,996.68	783.93	1,320.24	1,161.19	159.05	8.301	
16,300.00	12,152.00	16,316.70	12,170.00	81.10	81.08	89.61	4,096.68	783.25	1,320.24	1,158.38	161.86	8.157	
16,400.00	12,152.00	16,416.70	12,170.00	82.52	82.49	89.61	4,196.68	782.56	1,320.24	1,155.55	164.69	8.017	
16,500.00	12,152.00	16,516.70	12,170.00	83.94	83.91	89.61	4,296.68	781.88	1,320.23	1,152.70	167.53	7.881	
16,600.00	12,152.00	16,616.70	12,170.00	85.37	85.34	89.61	4,396.67	781.20	1,320.23	1,149.84	170.39	7.748	
16,700.00	12,152.00	16,716.70	12,170.00	86.80	86.78	89.61	4,496.67	780.52	1,320.23	1,146.96	173.27	7.619	
16,800.00	12,152.00	16,816.70	12,170.00	88.25	88.22	89.61	4,596.67	779.84	1,320.23	1,144.06	176.17	7.494	
16,900.00	12,152.00	16,916.70	12,170.00	89.70	89.65	89.61	4,696.67	779.16	1,320.23	1,141.18	179.05	7.374	
16,919.32	12,152.00	16,936.03	12,170.00	89.98	89.91	89.61	4,715.99	779.03	1,320.22	1,140.65	179.58	7.352	ES, SF

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #205H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	60.00	60.00				
100.00	100.00	100.00	100.00	0.13	0.13	90.00	0.00	60.00	60.00	59.74	0.26	234.094	
200.00	200.00	200.00	200.00	0.49	0.49	90.00	0.00	60.00	60.00	59.03	0.97	61.649	
300.00	300.00	300.00	300.00	0.85	0.85	90.00	0.00	60.00	60.00	58.31	1.69	35.499	
400.00	400.00	400.00	400.00	1.20	1.20	90.00	0.00	60.00	60.00	57.59	2.41	24.926	
500.00	500.00	500.00	500.00	1.56	1.56	90.00	0.00	60.00	60.00	56.88	3.12	19.206	
600.00	600.00	600.00	600.00	1.92	1.92	90.00	0.00	60.00	60.00	56.16	3.84	15.621	CC, ES
700.00	699.99	700.01	699.99	2.27	2.28	89.60	0.00	60.00	60.76	56.22	4.55	13.369	
800.00	799.96	800.04	799.96	2.61	2.64	88.46	0.00	60.00	63.07	57.83	5.24	12.031	
900.00	899.86	900.14	899.86	2.95	3.00	86.73	0.00	60.00	66.97	61.02	5.95	11.264	
1,000.00	999.68	999.68	999.68	3.30	3.35	84.63	0.00	60.00	72.51	65.86	6.65	10.904	
1,100.00	1,099.37	1,099.10	1,099.09	3.66	3.69	82.96	-0.81	60.27	79.92	72.58	7.34	10.887	
1,200.00	1,198.90	1,198.37	1,198.33	4.03	4.02	82.27	-3.26	61.09	89.33	81.31	8.02	11.136	
1,300.00	1,298.36	1,297.50	1,297.37	4.40	4.35	82.51	-7.32	62.45	99.87	91.16	8.71	11.469	
1,400.00	1,397.81	1,403.49	1,396.19	4.78	4.71	83.56	-13.00	64.35	110.75	101.33	9.42	11.751	
1,500.00	1,497.26	1,504.15	1,495.29	5.16	5.06	84.85	-19.58	66.55	121.88	111.75	10.13	12.030	
1,600.00	1,596.71	1,604.80	1,594.39	5.54	5.41	85.93	-26.15	68.75	133.06	122.22	10.85	12.269	
1,700.00	1,696.16	1,705.46	1,693.50	5.92	5.76	86.84	-32.72	70.95	144.28	132.72	11.56	12.477	
1,800.00	1,795.62	1,806.12	1,792.60	6.31	6.12	87.61	-39.29	73.15	155.54	143.25	12.29	12.659	
1,900.00	1,895.07	1,906.77	1,891.70	6.69	6.48	88.29	-45.86	75.35	166.81	153.80	13.01	12.819	
2,000.00	1,994.52	2,007.43	1,990.80	7.08	6.85	88.87	-52.44	77.54	178.11	164.37	13.74	12.961	
2,100.00	2,093.97	2,108.08	2,089.91	7.47	7.21	89.39	-59.01	79.74	189.42	174.95	14.47	13.088	
2,200.00	2,193.43	2,208.74	2,189.01	7.86	7.58	89.85	-65.58	81.94	200.75	185.54	15.21	13.201	
2,300.00	2,292.88	2,309.40	2,288.11	8.25	7.94	90.26	-72.15	84.14	212.09	196.15	15.94	13.303	
2,400.00	2,392.33	2,389.95	2,387.21	8.64	8.24	90.63	-78.72	86.34	223.44	206.83	16.61	13.455	
2,500.00	2,491.78	2,489.29	2,486.31	9.03	8.60	90.96	-85.29	88.54	234.80	217.46	17.34	13.541	
2,600.00	2,591.23	2,588.64	2,585.42	9.43	8.97	91.26	-91.87	90.74	246.16	228.08	18.07	13.619	
2,700.00	2,690.69	2,687.98	2,684.52	9.82	9.33	91.54	-98.44	92.94	257.53	238.72	18.81	13.690	
2,800.00	2,790.14	2,787.32	2,783.62	10.21	9.70	91.79	-105.01	95.14	268.91	249.36	19.55	13.756	
2,900.00	2,889.59	2,886.67	2,882.72	10.60	10.07	92.02	-111.58	97.33	280.29	260.00	20.29	13.817	
3,000.00	2,989.04	2,986.01	2,981.82	11.00	10.43	92.24	-118.15	99.53	291.67	270.65	21.02	13.873	
3,100.00	3,088.50	3,085.36	3,080.93	11.39	10.80	92.44	-124.72	101.73	303.06	281.30	21.76	13.925	
3,200.00	3,187.95	3,184.70	3,180.03	11.78	11.17	92.62	-131.30	103.93	314.45	291.95	22.50	13.973	
3,300.00	3,287.40	3,284.04	3,279.13	12.18	11.54	92.79	-137.87	106.13	325.85	302.60	23.24	14.019	
3,400.00	3,386.85	3,383.39	3,378.23	12.57	11.91	92.95	-144.44	108.33	337.25	313.26	23.99	14.061	
3,500.00	3,486.30	3,482.73	3,477.33	12.97	12.28	93.10	-151.01	110.53	348.65	323.92	24.73	14.100	
3,600.00	3,585.76	3,582.08	3,576.44	13.36	12.65	93.24	-157.58	112.73	360.05	334.58	25.47	14.137	
3,700.00	3,685.21	3,681.42	3,675.54	13.76	13.02	93.37	-164.16	114.93	371.45	345.24	26.21	14.172	
3,800.00	3,784.66	3,780.76	3,774.64	14.15	13.39	93.49	-170.73	117.12	382.86	355.91	26.95	14.204	
3,900.00	3,884.11	3,880.11	3,873.74	14.55	13.76	93.60	-177.30	119.32	394.27	366.57	27.70	14.235	
4,000.00	3,983.57	3,979.45	3,972.84	14.94	14.13	93.71	-183.87	121.52	405.68	377.24	28.44	14.264	
4,100.00	4,083.02	4,078.80	4,071.95	15.34	14.50	93.82	-190.44	123.72	417.09	387.90	29.18	14.292	
4,200.00	4,182.47	4,178.14	4,171.05	15.73	14.87	93.91	-197.01	125.92	428.50	398.57	29.93	14.318	
4,300.00	4,281.92	4,277.48	4,270.15	16.13	15.24	94.01	-203.59	128.12	439.91	409.24	30.67	14.343	
4,400.00	4,381.37	4,376.83	4,369.25	16.52	15.62	94.10	-210.16	130.32	451.33	419.91	31.42	14.366	
4,500.00	4,480.83	4,476.17	4,468.35	16.92	15.99	94.18	-216.73	132.52	462.74	430.58	32.16	14.389	
4,600.00	4,580.28	4,575.52	4,567.46	17.31	16.36	94.26	-223.30	134.72	474.16	441.25	32.91	14.410	
4,700.00	4,679.73	4,674.86	4,666.56	17.71	16.73	94.33	-229.87	136.91	485.58	451.93	33.65	14.430	
4,800.00	4,779.18	4,774.21	4,765.66	18.11	17.10	94.41	-236.45	139.11	496.99	462.60	34.40	14.449	
4,900.00	4,878.64	4,873.55	4,864.76	18.50	17.47	94.48	-243.02	141.31	508.41	473.27	35.14	14.468	
5,000.00	4,978.09	4,972.89	4,963.87	18.90	17.85	94.54	-249.59	143.51	519.83	483.95	35.89	14.486	
5,100.00	5,077.54	5,072.24	5,062.97	19.29	18.22	94.60	-256.16	145.71	531.25	494.62	36.63	14.502	

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	***Output errors are at***	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #205H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft
Offset Well Error: 0.00 usft

Survey Program: 0-MWD

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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.00	5,176.99	5,171.58	5,162.07	19.69	18.59	94.67	-262.73	147.91	542.67	505.30	37.38	14.519	
5,300.00	5,276.44	5,273.74	5,264.01	20.09	18.97	94.70	-269.04	150.02	553.91	515.78	38.14	14.523	
5,400.00	5,375.90	5,377.14	5,367.29	20.48	19.35	94.57	-273.74	151.59	564.48	525.58	38.90	14.511	
5,500.00	5,475.35	5,480.61	5,470.71	20.88	19.72	94.27	-276.67	152.57	574.35	534.70	39.65	14.485	
5,600.00	5,574.80	5,584.09	5,574.19	21.27	20.08	93.82	-277.83	152.96	583.55	543.17	40.38	14.451	
5,700.00	5,674.25	5,684.16	5,674.25	21.67	20.40	93.27	-277.85	152.97	592.36	551.29	41.07	14.422	
5,800.00	5,773.70	5,783.61	5,773.70	22.07	20.73	92.74	-277.85	152.97	601.22	559.45	41.76	14.396	
5,900.00	5,873.16	5,883.06	5,873.16	22.46	21.05	92.22	-277.85	152.97	610.12	567.67	42.45	14.372	
6,000.00	5,972.61	5,982.52	5,972.61	22.86	21.37	91.72	-277.85	152.97	619.07	575.93	43.14	14.350	
6,100.00	6,072.06	6,081.97	6,072.06	23.26	21.70	91.23	-277.85	152.97	628.07	584.24	43.83	14.329	
6,152.00	6,123.78	6,133.68	6,123.78	23.46	21.87	90.98	-277.85	152.97	632.77	588.58	44.19	14.319	
6,200.00	6,171.53	6,181.44	6,171.53	23.65	22.03	90.76	-277.85	152.97	636.94	592.42	44.52	14.306	
6,300.00	6,271.15	6,281.06	6,271.15	24.04	22.35	90.38	-277.85	152.97	644.55	599.33	45.21	14.256	
6,400.00	6,370.90	6,380.81	6,370.90	24.41	22.68	90.07	-277.85	152.97	650.66	604.76	45.90	14.175	
6,500.00	6,470.76	6,480.67	6,470.76	24.78	23.01	89.85	-277.85	152.97	655.26	608.68	46.59	14.065	
6,600.00	6,570.70	6,580.60	6,570.70	25.13	23.34	89.70	-277.85	152.97	658.35	611.08	47.27	13.927	
6,700.00	6,670.68	6,680.59	6,670.68	25.47	23.68	89.63	-277.85	152.97	659.91	611.96	47.96	13.761	
6,752.00	6,722.68	6,732.59	6,722.68	25.64	23.85	89.62	-277.85	152.97	660.12	611.82	48.30	13.666	
6,800.00	6,770.68	6,780.59	6,770.68	25.79	24.01	89.62	-277.85	152.97	660.12	611.50	48.62	13.577	
6,900.00	6,870.68	6,880.59	6,870.68	26.10	24.34	89.62	-277.85	152.97	660.12	610.84	49.28	13.396	
7,000.00	6,970.68	6,980.59	6,970.68	26.42	24.68	89.62	-277.85	152.97	660.12	610.18	49.94	13.219	
7,100.00	7,070.68	7,080.59	7,070.68	26.73	25.01	89.62	-277.85	152.97	660.12	609.52	50.60	13.046	
7,200.00	7,170.68	7,180.59	7,170.68	27.05	25.35	89.62	-277.85	152.97	660.12	608.86	51.26	12.878	
7,300.00	7,270.68	7,280.59	7,270.68	27.36	25.69	89.62	-277.85	152.97	660.12	608.19	51.93	12.713	
7,400.00	7,370.68	7,380.59	7,370.68	27.68	26.02	89.62	-277.85	152.97	660.12	607.53	52.59	12.552	
7,500.00	7,470.68	7,480.59	7,470.68	28.00	26.36	89.62	-277.85	152.97	660.12	606.86	53.26	12.395	
7,600.00	7,570.68	7,580.59	7,570.68	28.32	26.70	89.62	-277.85	152.97	660.12	606.19	53.93	12.241	
7,700.00	7,670.68	7,680.59	7,670.68	28.64	27.04	89.62	-277.85	152.97	660.12	605.52	54.60	12.091	
7,800.00	7,770.68	7,780.59	7,770.68	28.96	27.38	89.62	-277.85	152.97	660.12	604.85	55.27	11.944	
7,900.00	7,870.68	7,880.59	7,870.68	29.29	27.72	89.62	-277.85	152.97	660.12	604.18	55.94	11.801	
8,000.00	7,970.68	7,980.59	7,970.68	29.61	28.06	89.62	-277.85	152.97	660.12	603.51	56.61	11.660	
8,100.00	8,070.68	8,080.59	8,070.68	29.93	28.40	89.62	-277.85	152.97	660.12	602.83	57.29	11.523	
8,200.00	8,170.68	8,180.59	8,170.68	30.26	28.74	89.62	-277.85	152.97	660.12	602.16	57.96	11.389	
8,300.00	8,270.68	8,280.59	8,270.68	30.58	29.08	89.62	-277.85	152.97	660.12	601.48	58.64	11.258	
8,400.00	8,370.68	8,380.59	8,370.68	30.91	29.42	89.62	-277.85	152.97	660.12	600.80	59.31	11.129	
8,500.00	8,470.68	8,480.59	8,470.68	31.24	29.77	89.62	-277.85	152.97	660.12	600.13	59.99	11.003	
8,600.00	8,570.68	8,580.59	8,570.68	31.57	30.11	89.62	-277.85	152.97	660.12	599.45	60.67	10.880	
8,700.00	8,670.68	8,680.59	8,670.68	31.89	30.45	89.62	-277.85	152.97	660.12	598.77	61.35	10.760	
8,800.00	8,770.68	8,780.59	8,770.68	32.22	30.80	89.62	-277.85	152.97	660.12	598.09	62.03	10.642	
8,900.00	8,870.68	8,880.59	8,870.68	32.55	31.14	89.62	-277.85	152.97	660.12	597.41	62.71	10.526	
9,000.00	8,970.68	8,980.59	8,970.68	32.88	31.48	89.62	-277.85	152.97	660.12	596.72	63.39	10.413	
9,100.00	9,070.68	9,080.59	9,070.68	33.21	31.83	89.62	-277.85	152.97	660.12	596.04	64.08	10.302	
9,200.00	9,170.68	9,180.59	9,170.68	33.55	32.17	89.62	-277.85	152.97	660.12	595.36	64.76	10.193	
9,300.00	9,270.68	9,280.59	9,270.68	33.88	32.52	89.62	-277.85	152.97	660.12	594.67	65.45	10.087	
9,400.00	9,370.68	9,380.59	9,370.68	34.21	32.86	89.62	-277.85	152.97	660.12	593.99	66.13	9.982	
9,500.00	9,470.68	9,480.59	9,470.68	34.54	33.21	89.62	-277.85	152.97	660.12	593.30	66.82	9.880	
9,600.00	9,570.68	9,580.59	9,570.68	34.88	33.55	89.62	-277.85	152.97	660.12	592.62	67.50	9.779	
9,700.00	9,670.68	9,680.59	9,670.68	35.21	33.90	89.62	-277.85	152.97	660.12	591.93	68.19	9.681	
9,800.00	9,770.68	9,780.59	9,770.68	35.55	34.25	89.62	-277.85	152.97	660.12	591.24	68.88	9.584	
9,900.00	9,870.68	9,880.59	9,870.68	35.88	34.59	89.62	-277.85	152.97	660.12	590.55	69.57	9.489	
10,000.00	9,970.68	9,980.59	9,970.68	36.22	34.94	89.62	-277.85	152.97	660.12	589.86	70.25	9.396	
10,100.00	10,070.68	10,080.59	10,070.68	36.55	35.29	89.62	-277.85	152.97	660.12	589.18	70.94	9.305	

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #205H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft
Offset Well Error: 0.00 usft

Survey Program: 0-MWD

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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,200.00	10,170.68	10,180.59	10,170.68	36.89	35.64	89.62	-277.85	152.97	660.12	588.49	71.63	9.215	
10,300.00	10,270.68	10,280.59	10,270.68	37.23	35.98	89.62	-277.85	152.97	660.12	587.80	72.32	9.127	
10,400.00	10,370.68	10,380.59	10,370.68	37.56	36.33	89.62	-277.85	152.97	660.12	587.10	73.01	9.041	
10,500.00	10,470.68	10,480.59	10,470.68	37.90	36.68	89.62	-277.85	152.97	660.12	586.41	73.71	8.956	
10,600.00	10,570.68	10,580.59	10,570.68	38.24	37.03	89.62	-277.85	152.97	660.12	585.72	74.40	8.873	
10,700.00	10,670.68	10,680.59	10,670.68	38.58	37.37	89.62	-277.85	152.97	660.12	585.03	75.09	8.791	
10,800.00	10,770.68	10,780.59	10,770.68	38.92	37.72	89.62	-277.85	152.97	660.12	584.34	75.78	8.711	
10,900.00	10,870.68	10,880.59	10,870.68	39.25	38.07	89.62	-277.85	152.97	660.12	583.64	76.48	8.632	
11,000.00	10,970.68	10,980.59	10,970.68	39.59	38.42	89.62	-277.85	152.97	660.12	582.95	77.17	8.554	
11,100.00	11,070.68	11,080.59	11,070.68	39.93	38.77	89.62	-277.85	152.97	660.12	582.25	77.86	8.478	
11,200.00	11,170.68	11,180.59	11,170.68	40.27	39.12	89.62	-277.85	152.97	660.12	581.56	78.56	8.403	
11,300.00	11,270.68	11,280.59	11,270.68	40.61	39.47	89.62	-277.85	152.97	660.12	580.87	79.25	8.329	
11,400.00	11,370.68	11,380.59	11,370.68	40.95	39.82	89.62	-277.85	152.97	660.12	580.17	79.95	8.257	
11,500.00	11,470.68	11,480.59	11,470.68	41.30	40.17	89.62	-277.85	152.97	660.12	579.47	80.64	8.186	
11,600.00	11,570.68	11,580.59	11,570.68	41.64	40.52	89.62	-277.85	152.97	660.12	578.78	81.34	8.116	
11,602.56	11,573.24	11,583.15	11,573.24	41.65	40.53	89.62	-277.85	152.97	660.12	578.76	81.36	8.114	
11,602.57	11,573.25	11,583.16	11,573.25	41.65	40.53	89.62	-277.85	152.97	660.12	578.76	81.36	8.114	
11,650.00	11,620.63	11,630.53	11,620.63	41.80	40.69	89.79	-277.85	152.97	660.12	578.43	81.69	8.081	
11,700.00	11,670.21	11,680.12	11,670.21	41.97	40.87	90.33	-277.85	152.97	660.17	578.14	82.03	8.048	
11,750.00	11,719.06	11,728.97	11,719.06	42.12	41.04	91.25	-277.85	152.97	660.39	578.02	82.37	8.018	
11,800.00	11,766.80	11,776.70	11,766.80	42.26	41.20	92.54	-277.85	152.97	660.98	578.29	82.69	7.993	
11,850.00	11,813.06	11,825.16	11,815.25	42.39	41.37	94.13	-277.34	152.96	662.18	579.16	83.02	7.976	
11,900.00	11,857.50	11,877.02	11,866.90	42.51	41.55	95.71	-272.83	152.93	663.94	580.60	83.34	7.966	
11,950.00	11,899.78	11,930.98	11,919.97	42.61	41.72	97.17	-263.20	152.87	666.21	582.56	83.65	7.965	
12,000.00	11,939.57	11,987.25	11,974.09	42.70	41.89	98.44	-247.89	152.76	668.92	585.01	83.91	7.971	
12,050.00	11,976.57	12,046.03	12,028.74	42.78	42.06	99.45	-226.31	152.62	672.01	587.88	84.13	7.988	
12,100.00	12,010.50	12,107.54	12,083.24	42.84	42.22	100.15	-197.86	152.42	675.37	591.09	84.28	8.013	
12,150.00	12,041.11	12,171.92	12,136.67	42.89	42.38	100.46	-162.01	152.18	678.88	594.53	84.35	8.048	
12,200.00	12,068.15	12,239.28	12,187.91	42.92	42.54	100.32	-118.34	151.88	682.40	598.06	84.34	8.091	
12,250.00	12,091.43	12,309.65	12,235.57	42.94	42.69	99.69	-66.63	151.53	685.78	601.51	84.27	8.138	
12,300.00	12,110.76	12,382.91	12,278.07	42.96	42.85	98.55	-7.02	151.12	688.85	604.69	84.16	8.185	
12,350.00	12,126.01	12,458.80	12,313.71	42.96	43.01	96.90	59.92	150.67	691.46	607.39	84.06	8.225	
12,400.00	12,137.04	12,536.89	12,340.82	42.98	43.18	94.81	133.09	150.17	693.45	609.42	84.03	8.253	
12,402.56	12,137.49	12,540.94	12,341.95	42.98	43.19	94.69	136.97	150.14	693.54	609.51	84.03	8.254	
12,450.00	12,144.57	12,613.60	12,357.58	43.04	43.35	92.62	207.88	149.66	694.49	610.37	84.12	8.256	
12,500.00	12,149.49	12,678.24	12,365.80	43.16	43.50	91.38	271.98	149.22	694.94	610.61	84.33	8.241	
12,550.00	12,151.81	12,742.99	12,369.68	43.29	43.66	90.10	336.61	148.79	695.16	610.56	84.59	8.217	
12,569.23	12,152.00	12,767.91	12,370.00	43.35	43.73	89.61	361.52	148.62	695.17	610.46	84.71	8.206	
12,600.00	12,152.00	12,798.66	12,370.00	43.44	43.82	89.61	392.27	148.41	695.17	610.29	84.88	8.190	
12,700.00	12,152.00	12,901.34	12,370.00	43.78	44.15	89.61	492.27	147.73	695.17	609.66	85.51	8.130	
12,800.00	12,152.00	13,001.34	12,370.00	44.18	44.53	89.61	592.26	147.05	695.17	608.93	86.24	8.061	
12,900.00	12,152.00	13,101.34	12,370.00	44.63	44.97	89.61	692.26	146.36	695.17	608.08	87.09	7.982	
13,000.00	12,152.00	13,201.34	12,370.00	45.13	45.46	89.61	792.26	145.68	695.17	607.12	88.04	7.896	
13,100.00	12,152.00	13,298.66	12,370.00	45.68	46.00	89.61	892.26	145.00	695.16	606.08	89.08	7.804	
13,200.00	12,152.00	13,401.34	12,370.00	46.29	46.62	89.61	992.25	144.32	695.16	604.91	90.25	7.702	
13,300.00	12,152.00	13,501.34	12,370.00	46.94	47.27	89.61	1,092.25	143.64	695.16	603.65	91.51	7.597	
13,400.00	12,152.00	13,601.34	12,370.00	47.65	47.97	89.61	1,192.25	142.96	695.16	602.30	92.86	7.486	
13,500.00	12,152.00	13,698.66	12,370.00	48.39	48.70	89.61	1,292.25	142.28	695.16	600.88	94.27	7.374	
13,600.00	12,152.00	13,801.34	12,370.00	49.19	49.51	89.61	1,392.25	141.60	695.15	599.34	95.81	7.255	
13,700.00	12,152.00	13,901.34	12,370.00	50.02	50.35	89.61	1,492.24	140.92	695.15	597.74	97.41	7.136	
13,800.00	12,152.00	14,001.34	12,370.00	50.89	51.22	89.61	1,592.24	140.24	695.15	596.06	99.09	7.015	
13,900.00	12,152.00	14,098.66	12,370.00	51.81	52.11	89.61	1,692.24	139.56	695.15	594.33	100.82	6.895	

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #205H - Wellbore #1 - Design #2 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,000.00	12,152.00	14,201.34	12,370.00	52.75	53.08	89.61	1,792.24	138.88	695.15	592.49	102.66	6.771	
14,100.00	12,152.00	14,301.34	12,370.00	53.74	54.07	89.61	1,892.23	138.20	695.15	590.60	104.55	6.649	
14,200.00	12,152.00	14,398.66	12,370.00	54.75	55.06	89.61	1,992.23	137.52	695.14	588.68	106.47	6.529	
14,300.00	12,152.00	14,501.34	12,370.00	55.80	56.13	89.61	2,092.23	136.84	695.14	586.64	108.50	6.407	
14,400.00	12,152.00	14,601.34	12,370.00	56.87	57.21	89.61	2,192.23	136.16	695.14	584.58	110.56	6.287	
14,500.00	12,152.00	14,701.34	12,370.00	57.97	58.31	89.61	2,292.22	135.48	695.14	582.46	112.68	6.169	
14,600.00	12,152.00	14,801.34	12,370.00	59.10	59.44	89.61	2,392.22	134.79	695.14	580.30	114.84	6.053	
14,700.00	12,152.00	14,901.34	12,370.00	60.25	60.59	89.61	2,492.22	134.11	695.13	578.08	117.05	5.939	
14,800.00	12,152.00	15,001.34	12,370.00	61.43	61.77	89.61	2,592.22	133.43	695.13	575.83	119.31	5.826	
14,900.00	12,152.00	15,101.34	12,370.00	62.62	62.97	89.61	2,692.22	132.75	695.13	573.53	121.60	5.716	
15,000.00	12,152.00	15,201.34	12,370.00	63.84	64.18	89.61	2,792.21	132.07	695.13	571.19	123.94	5.609	
15,100.00	12,152.00	15,298.66	12,370.00	65.08	65.39	89.61	2,892.21	131.39	695.13	568.84	126.28	5.505	
15,200.00	12,152.00	15,401.34	12,370.00	66.33	66.68	89.61	2,992.21	130.71	695.13	566.40	128.72	5.400	
15,300.00	12,152.00	15,501.34	12,370.00	67.61	67.95	89.61	3,092.21	130.03	695.12	563.96	131.17	5.300	
15,400.00	12,152.00	15,601.34	12,370.00	68.89	69.24	89.61	3,192.20	129.35	695.12	561.48	133.64	5.201	
15,500.00	12,152.00	15,701.34	12,370.00	70.20	70.55	89.61	3,292.20	128.67	695.12	558.98	136.14	5.106	
15,600.00	12,152.00	15,801.34	12,370.00	71.52	71.87	89.61	3,392.20	127.99	695.12	556.44	138.68	5.013	
15,700.00	12,152.00	15,898.66	12,370.00	72.85	73.17	89.61	3,492.20	127.31	695.12	553.92	141.20	4.923	
15,800.00	12,152.00	16,001.34	12,370.00	74.20	74.55	89.61	3,592.19	126.63	695.12	551.30	143.82	4.833	
15,900.00	12,152.00	16,101.34	12,370.00	75.56	75.91	89.61	3,692.19	125.95	695.11	548.69	146.43	4.747	
16,000.00	12,152.00	16,201.34	12,370.00	76.93	77.28	89.61	3,792.19	125.27	695.11	546.05	149.06	4.663	
16,100.00	12,152.00	16,301.34	12,370.00	78.31	78.66	89.61	3,892.19	124.59	695.11	543.40	151.71	4.582	
16,200.00	12,152.00	16,401.34	12,370.00	79.70	80.05	89.61	3,992.19	123.91	695.11	540.73	154.38	4.503	
16,300.00	12,152.00	16,501.34	12,370.00	81.10	81.46	89.61	4,092.18	123.23	695.11	538.03	157.07	4.425	
16,400.00	12,152.00	16,601.34	12,370.00	82.52	82.87	89.61	4,192.18	122.54	695.10	535.32	159.78	4.350	
16,500.00	12,152.00	16,701.34	12,370.00	83.94	84.29	89.61	4,292.18	121.86	695.10	532.59	162.51	4.277	
16,600.00	12,152.00	16,801.34	12,370.00	85.37	85.72	89.61	4,392.18	121.18	695.10	529.85	165.25	4.206	
16,700.00	12,152.00	16,901.34	12,370.00	86.80	87.16	89.61	4,492.17	120.50	695.10	527.09	168.01	4.137	
16,800.00	12,152.00	17,001.34	12,370.00	88.25	88.60	89.61	4,592.17	119.82	695.10	524.31	170.79	4.070	
16,900.00	12,152.00	17,098.66	12,370.00	89.70	90.02	89.61	4,692.17	119.14	695.10	521.56	173.54	4.005	
16,919.32	12,152.00	17,117.98	12,370.00	89.98	90.30	89.61	4,711.49	119.01	695.10	521.02	174.08	3.993	SF

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #206H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	2.00	-2.00	0.00	0.00	89.46	13.00	1,380.00	1,380.06				
100.00	100.00	102.00	98.00	0.13	0.14	89.46	13.00	1,380.00	1,380.06	1,379.80	0.26	5,237.883	
200.00	200.00	202.00	198.00	0.49	0.49	89.46	13.00	1,380.00	1,380.06	1,379.08	0.98	1,407.623	
300.00	300.00	302.00	298.00	0.85	0.85	89.46	13.00	1,380.00	1,380.06	1,378.36	1.70	813.062	
400.00	400.00	402.00	398.00	1.20	1.21	89.46	13.00	1,380.00	1,380.06	1,377.65	2.41	571.618	
500.00	500.00	502.00	498.00	1.56	1.57	89.46	13.00	1,380.00	1,380.06	1,376.93	3.13	440.738	
600.00	600.00	602.00	598.00	1.92	1.93	89.46	13.00	1,380.00	1,380.06	1,376.21	3.85	358.626	CC, ES
700.00	699.99	702.01	697.99	2.27	2.29	89.44	13.00	1,380.00	1,380.83	1,376.28	4.55	303.315	
800.00	799.96	802.04	797.96	2.61	2.64	89.39	13.00	1,380.00	1,383.13	1,377.88	5.25	263.466	
900.00	899.86	902.14	897.86	2.95	3.00	89.31	13.00	1,380.00	1,386.96	1,381.01	5.95	232.998	
1,000.00	999.68	997.68	997.68	3.30	3.35	89.19	13.00	1,380.00	1,392.34	1,385.69	6.64	209.576	
1,100.00	1,099.37	1,090.67	1,090.67	3.66	3.66	89.06	12.32	1,380.23	1,399.48	1,392.17	7.31	191.360	
1,200.00	1,198.90	1,183.37	1,183.34	4.03	3.97	88.96	10.22	1,380.93	1,408.65	1,400.68	7.97	176.651	
1,300.00	1,298.36	1,275.96	1,275.85	4.40	4.28	88.91	6.70	1,382.11	1,419.08	1,410.44	8.64	164.257	
1,400.00	1,397.81	1,368.45	1,368.20	4.78	4.59	88.91	1.77	1,383.77	1,429.98	1,420.67	9.31	153.600	
1,500.00	1,497.26	1,465.44	1,464.96	5.16	4.92	88.97	-4.56	1,385.89	1,441.27	1,431.26	10.00	144.092	
1,600.00	1,596.71	1,564.78	1,564.06	5.54	5.27	89.03	-11.13	1,388.09	1,452.58	1,441.87	10.71	135.635	
1,700.00	1,696.16	1,664.13	1,663.16	5.92	5.62	89.10	-17.70	1,390.29	1,463.90	1,452.47	11.42	128.170	
1,800.00	1,795.62	1,763.47	1,762.26	6.31	5.97	89.16	-24.27	1,392.50	1,475.21	1,463.08	12.14	121.540	
1,900.00	1,895.07	1,862.81	1,861.36	6.69	6.33	89.23	-30.83	1,394.70	1,486.53	1,473.68	12.86	115.618	
2,000.00	1,994.52	1,962.16	1,960.46	7.08	6.68	89.29	-37.40	1,396.90	1,497.85	1,484.27	13.58	110.300	
2,100.00	2,093.97	2,061.50	2,059.57	7.47	7.04	89.35	-43.97	1,399.11	1,509.18	1,494.87	14.30	105.502	
2,200.00	2,193.43	2,160.84	2,158.67	7.86	7.40	89.41	-50.54	1,401.31	1,520.50	1,505.47	15.03	101.152	
2,300.00	2,292.88	2,260.19	2,257.77	8.25	7.76	89.47	-57.11	1,403.51	1,531.83	1,516.07	15.76	97.193	
2,400.00	2,392.33	2,359.53	2,356.87	8.64	8.13	89.53	-63.68	1,405.72	1,543.16	1,526.66	16.49	93.574	
2,500.00	2,491.78	2,458.88	2,455.97	9.03	8.49	89.59	-70.25	1,407.92	1,554.49	1,537.26	17.22	90.256	
2,600.00	2,591.23	2,558.22	2,555.07	9.43	8.85	89.65	-76.82	1,410.12	1,565.82	1,547.86	17.96	87.202	
2,700.00	2,690.69	2,657.56	2,654.18	9.82	9.22	89.70	-83.38	1,412.32	1,577.15	1,558.46	18.69	84.383	
2,800.00	2,790.14	2,756.91	2,753.28	10.21	9.59	89.76	-89.95	1,414.53	1,588.48	1,569.06	19.43	81.773	
2,900.00	2,889.59	2,856.25	2,852.38	10.60	9.95	89.81	-96.52	1,416.73	1,599.82	1,579.66	20.16	79.350	
3,000.00	2,989.04	2,955.59	2,951.48	11.00	10.32	89.87	-103.09	1,418.93	1,611.16	1,590.26	20.90	77.095	
3,100.00	3,088.50	3,054.94	3,050.58	11.39	10.69	89.92	-109.66	1,421.14	1,622.50	1,600.86	21.64	74.992	
3,200.00	3,187.95	3,154.28	3,149.68	11.78	11.06	89.98	-116.23	1,423.34	1,633.84	1,611.46	22.37	73.024	
3,300.00	3,287.40	3,253.62	3,248.79	12.18	11.43	90.03	-122.80	1,425.54	1,645.18	1,622.06	23.11	71.181	
3,400.00	3,386.85	3,352.97	3,347.89	12.57	11.80	90.08	-129.36	1,427.75	1,656.52	1,632.67	23.85	69.451	
3,500.00	3,486.30	3,452.31	3,446.99	12.97	12.16	90.13	-135.93	1,429.95	1,667.86	1,643.27	24.59	67.823	
3,600.00	3,585.76	3,551.66	3,546.09	13.36	12.53	90.18	-142.50	1,432.15	1,679.21	1,653.88	25.33	66.289	
3,700.00	3,685.21	3,651.00	3,645.19	13.76	12.90	90.23	-149.07	1,434.35	1,690.56	1,664.48	26.07	64.842	
3,800.00	3,784.66	3,750.34	3,744.30	14.15	13.27	90.28	-155.64	1,436.56	1,701.90	1,675.09	26.81	63.473	
3,900.00	3,884.11	3,849.69	3,843.40	14.55	13.65	90.32	-162.21	1,438.76	1,713.25	1,685.70	27.55	62.178	
4,000.00	3,983.57	3,949.03	3,942.50	14.94	14.02	90.37	-168.78	1,440.96	1,724.60	1,696.31	28.30	60.949	
4,100.00	4,083.02	4,048.37	4,041.60	15.34	14.39	90.42	-175.35	1,443.17	1,735.95	1,706.92	29.04	59.783	
4,200.00	4,182.47	4,147.72	4,140.70	15.73	14.76	90.46	-181.91	1,445.37	1,747.31	1,717.53	29.78	58.674	
4,300.00	4,281.92	4,247.06	4,239.80	16.13	15.13	90.51	-188.48	1,447.57	1,758.66	1,728.14	30.52	57.619	
4,400.00	4,381.37	4,346.40	4,338.91	16.52	15.50	90.55	-195.05	1,449.77	1,770.01	1,738.75	31.26	56.614	
4,500.00	4,480.83	4,445.75	4,438.01	16.92	15.87	90.60	-201.62	1,451.98	1,781.37	1,749.36	32.01	55.654	
4,600.00	4,580.28	4,545.09	4,537.11	17.31	16.24	90.64	-208.19	1,454.18	1,792.73	1,759.98	32.75	54.738	
4,700.00	4,679.73	4,644.44	4,636.21	17.71	16.62	90.69	-214.76	1,456.38	1,804.08	1,770.59	33.49	53.863	
4,800.00	4,779.18	4,743.78	4,735.31	18.11	16.99	90.73	-221.33	1,458.59	1,815.44	1,781.21	34.24	53.025	
4,900.00	4,878.64	4,843.12	4,834.41	18.50	17.36	90.77	-227.90	1,460.79	1,826.80	1,791.82	34.98	52.222	
5,000.00	4,978.09	4,942.47	4,933.52	18.90	17.73	90.81	-234.46	1,462.99	1,838.16	1,802.44	35.73	51.453	
5,100.00	5,077.54	5,041.81	5,032.62	19.29	18.10	90.85	-241.03	1,465.20	1,849.53	1,813.06	36.47	50.715	

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #206H - Wellbore #1 - Design #2 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.00	5,176.99	5,141.15	5,131.72	19.69	18.48	90.89	-247.60	1,467.40	1,860.89	1,823.68	37.21	50.006	
5,300.00	5,276.44	5,244.85	5,235.17	20.09	18.86	90.94	-254.33	1,469.65	1,872.21	1,834.23	37.98	49.299	
5,400.00	5,375.90	5,356.48	5,346.64	20.48	19.28	90.95	-259.94	1,471.54	1,883.02	1,844.25	38.77	48.569	
5,500.00	5,475.35	5,468.22	5,458.32	20.88	19.68	90.90	-263.50	1,472.73	1,893.19	1,853.63	39.55	47.864	
5,600.00	5,574.80	5,579.97	5,570.06	21.27	20.06	90.78	-265.00	1,473.23	1,902.71	1,862.39	40.32	47.193	
5,700.00	5,674.25	5,682.17	5,672.25	21.67	20.40	90.63	-265.05	1,473.25	1,911.79	1,870.77	41.02	46.602	
5,800.00	5,773.70	5,781.62	5,771.70	22.07	20.72	90.48	-265.05	1,473.25	1,920.88	1,879.16	41.72	46.045	
5,900.00	5,873.16	5,881.07	5,871.16	22.46	21.04	90.32	-265.05	1,473.25	1,929.98	1,887.56	42.41	45.505	
6,000.00	5,972.61	5,980.52	5,970.61	22.86	21.37	90.17	-265.05	1,473.25	1,939.09	1,895.98	43.11	44.983	
6,100.00	6,072.06	6,079.98	6,070.06	23.26	21.69	90.02	-265.05	1,473.25	1,948.21	1,904.41	43.80	44.476	
6,152.00	6,123.78	6,131.69	6,121.78	23.46	21.86	89.94	-265.05	1,473.25	1,952.96	1,908.80	44.17	44.219	
6,200.00	6,171.53	6,179.45	6,169.53	23.65	22.02	89.87	-265.05	1,473.25	1,957.18	1,912.68	44.50	43.981	
6,300.00	6,271.15	6,279.06	6,269.15	24.04	22.35	89.75	-265.05	1,473.25	1,964.84	1,919.64	45.19	43.475	
6,400.00	6,370.90	6,378.82	6,368.90	24.41	22.68	89.65	-265.05	1,473.25	1,970.98	1,925.09	45.89	42.953	
6,500.00	6,470.76	6,478.68	6,468.76	24.78	23.01	89.58	-265.05	1,473.25	1,975.60	1,929.02	46.58	42.416	
6,600.00	6,570.70	6,578.61	6,568.70	25.13	23.34	89.53	-265.05	1,473.25	1,978.69	1,931.43	47.26	41.865	
6,700.00	6,670.68	6,678.60	6,668.68	25.47	23.67	89.51	-265.05	1,473.25	1,980.25	1,932.31	47.95	41.300	
6,752.00	6,722.68	6,730.59	6,720.68	25.64	23.85	89.50	-265.05	1,473.25	1,980.46	1,932.17	48.30	41.007	
6,800.00	6,770.68	6,778.59	6,768.68	25.79	24.01	89.50	-265.05	1,473.25	1,980.46	1,931.85	48.61	40.741	
6,900.00	6,870.68	6,878.59	6,868.68	26.10	24.34	89.50	-265.05	1,473.25	1,980.46	1,931.19	49.27	40.197	
7,000.00	6,970.68	6,978.59	6,968.68	26.42	24.67	89.50	-265.05	1,473.25	1,980.46	1,930.53	49.93	39.665	
7,100.00	7,070.68	7,078.59	7,068.68	26.73	25.01	89.50	-265.05	1,473.25	1,980.46	1,929.87	50.59	39.147	
7,200.00	7,170.68	7,178.59	7,168.68	27.05	25.34	89.50	-265.05	1,473.25	1,980.46	1,929.21	51.25	38.641	
7,300.00	7,270.68	7,278.59	7,268.68	27.36	25.68	89.50	-265.05	1,473.25	1,980.46	1,928.54	51.92	38.146	
7,400.00	7,370.68	7,378.59	7,368.68	27.68	26.02	89.50	-265.05	1,473.25	1,980.46	1,927.88	52.58	37.663	
7,500.00	7,470.68	7,478.59	7,468.68	28.00	26.36	89.50	-265.05	1,473.25	1,980.46	1,927.21	53.25	37.191	
7,600.00	7,570.68	7,578.59	7,568.68	28.32	26.69	89.50	-265.05	1,473.25	1,980.46	1,926.54	53.92	36.730	
7,700.00	7,670.68	7,678.59	7,668.68	28.64	27.03	89.50	-265.05	1,473.25	1,980.46	1,925.87	54.59	36.280	
7,800.00	7,770.68	7,778.59	7,768.68	28.96	27.37	89.50	-265.05	1,473.25	1,980.46	1,925.20	55.26	35.840	
7,900.00	7,870.68	7,878.59	7,868.68	29.29	27.71	89.50	-265.05	1,473.25	1,980.46	1,924.53	55.93	35.409	
8,000.00	7,970.68	7,978.59	7,968.68	29.61	28.05	89.50	-265.05	1,473.25	1,980.46	1,923.86	56.60	34.988	
8,100.00	8,070.68	8,078.59	8,068.68	29.93	28.39	89.50	-265.05	1,473.25	1,980.46	1,923.18	57.28	34.576	
8,200.00	8,170.68	8,178.59	8,168.68	30.26	28.73	89.50	-265.05	1,473.25	1,980.46	1,922.51	57.95	34.173	
8,300.00	8,270.68	8,278.59	8,268.68	30.58	29.08	89.50	-265.05	1,473.25	1,980.46	1,921.83	58.63	33.779	
8,400.00	8,370.68	8,378.59	8,368.68	30.91	29.42	89.50	-265.05	1,473.25	1,980.46	1,921.16	59.31	33.394	
8,500.00	8,470.68	8,478.59	8,468.68	31.24	29.76	89.50	-265.05	1,473.25	1,980.46	1,920.48	59.98	33.016	
8,600.00	8,570.68	8,578.59	8,568.68	31.57	30.10	89.50	-265.05	1,473.25	1,980.46	1,919.80	60.66	32.647	
8,700.00	8,670.68	8,678.59	8,668.68	31.89	30.45	89.50	-265.05	1,473.25	1,980.46	1,919.12	61.34	32.285	
8,800.00	8,770.68	8,778.59	8,768.68	32.22	30.79	89.50	-265.05	1,473.25	1,980.46	1,918.44	62.02	31.931	
8,900.00	8,870.68	8,878.59	8,868.68	32.55	31.13	89.50	-265.05	1,473.25	1,980.46	1,917.76	62.70	31.584	
9,000.00	8,970.68	8,978.59	8,968.68	32.88	31.48	89.50	-265.05	1,473.25	1,980.46	1,917.08	63.39	31.244	
9,100.00	9,070.68	9,078.59	9,068.68	33.21	31.82	89.50	-265.05	1,473.25	1,980.46	1,916.39	64.07	30.911	
9,200.00	9,170.68	9,178.59	9,168.68	33.55	32.17	89.50	-265.05	1,473.25	1,980.46	1,915.71	64.75	30.585	
9,300.00	9,270.68	9,278.59	9,268.68	33.88	32.51	89.50	-265.05	1,473.25	1,980.46	1,915.02	65.44	30.265	
9,400.00	9,370.68	9,378.59	9,368.68	34.21	32.86	89.50	-265.05	1,473.25	1,980.46	1,914.34	66.12	29.951	
9,500.00	9,470.68	9,478.59	9,468.68	34.54	33.20	89.50	-265.05	1,473.25	1,980.46	1,913.65	66.81	29.644	
9,600.00	9,570.68	9,578.59	9,568.68	34.88	33.55	89.50	-265.05	1,473.25	1,980.46	1,912.97	67.49	29.342	
9,700.00	9,670.68	9,678.59	9,668.68	35.21	33.89	89.50	-265.05	1,473.25	1,980.46	1,912.28	68.18	29.047	
9,800.00	9,770.68	9,778.59	9,768.68	35.55	34.24	89.50	-265.05	1,473.25	1,980.46	1,911.59	68.87	28.757	
9,900.00	9,870.68	9,878.59	9,868.68	35.88	34.59	89.50	-265.05	1,473.25	1,980.46	1,910.90	69.56	28.472	
10,000.00	9,970.68	9,978.59	9,968.68	36.22	34.93	89.50	-265.05	1,473.25	1,980.46	1,910.22	70.25	28.193	
10,100.00	10,070.68	10,078.59	10,068.68	36.55	35.28	89.50	-265.05	1,473.25	1,980.46	1,909.53	70.94	27.919	

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #206H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft
Offset Well Error: 0.00 usft

Survey Program: 0-MWD

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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,200.00	10,170.68	10,178.59	10,168.68	36.89	35.63	89.50	-265.05	1,473.25	1,980.46	1,908.84	71.63	27.650	
10,300.00	10,270.68	10,278.59	10,268.68	37.23	35.98	89.50	-265.05	1,473.25	1,980.46	1,908.15	72.32	27.386	
10,400.00	10,370.68	10,378.59	10,368.68	37.56	36.32	89.50	-265.05	1,473.25	1,980.46	1,907.46	73.01	27.127	
10,500.00	10,470.68	10,478.59	10,468.68	37.90	36.67	89.50	-265.05	1,473.25	1,980.46	1,906.76	73.70	26.873	
10,600.00	10,570.68	10,578.59	10,568.68	38.24	37.02	89.50	-265.05	1,473.25	1,980.46	1,906.07	74.39	26.623	
10,700.00	10,670.68	10,678.59	10,668.68	38.58	37.37	89.50	-265.05	1,473.25	1,980.46	1,905.38	75.08	26.377	
10,800.00	10,770.68	10,778.59	10,768.68	38.92	37.72	89.50	-265.05	1,473.25	1,980.46	1,904.69	75.77	26.136	
10,900.00	10,870.68	10,878.59	10,868.68	39.25	38.07	89.50	-265.05	1,473.25	1,980.46	1,903.99	76.47	25.899	
11,000.00	10,970.68	10,978.59	10,968.68	39.59	38.41	89.50	-265.05	1,473.25	1,980.46	1,903.30	77.16	25.666	
11,100.00	11,070.68	11,078.59	11,068.68	39.93	38.76	89.50	-265.05	1,473.25	1,980.46	1,902.61	77.86	25.437	
11,200.00	11,170.68	11,178.59	11,168.68	40.27	39.11	89.50	-265.05	1,473.25	1,980.46	1,901.91	78.55	25.213	
11,300.00	11,270.68	11,278.59	11,268.68	40.61	39.46	89.50	-265.05	1,473.25	1,980.46	1,901.22	79.25	24.992	
11,400.00	11,370.68	11,378.59	11,368.68	40.95	39.81	89.50	-265.05	1,473.25	1,980.46	1,900.52	79.94	24.774	
11,500.00	11,470.68	11,478.59	11,468.68	41.30	40.16	89.50	-265.05	1,473.25	1,980.46	1,899.83	80.64	24.560	
11,600.00	11,570.68	11,578.59	11,568.68	41.64	40.51	89.50	-265.05	1,473.25	1,980.46	1,899.13	81.33	24.350	
11,602.56	11,573.24	11,581.15	11,571.24	41.65	40.52	89.50	-265.05	1,473.25	1,980.46	1,899.11	81.35	24.345	
11,650.00	11,620.63	11,628.54	11,618.63	41.80	40.69	89.56	-265.05	1,473.25	1,980.46	1,898.78	81.68	24.247	
11,668.39	11,638.93	11,646.84	11,636.93	41.86	40.75	89.61	-265.05	1,473.25	1,980.46	1,898.66	81.80	24.210	
11,700.00	11,670.21	11,678.13	11,668.21	41.97	40.86	89.74	-265.05	1,473.25	1,980.46	1,898.45	82.02	24.147	
11,750.00	11,719.06	11,726.97	11,717.06	42.12	41.03	90.05	-265.05	1,473.25	1,980.52	1,898.17	82.35	24.051	
11,800.00	11,766.80	11,774.71	11,764.80	42.26	41.20	90.48	-265.05	1,473.25	1,980.68	1,898.02	82.66	23.961	
11,850.00	11,813.06	11,820.97	11,811.06	42.39	41.36	91.02	-265.05	1,473.25	1,981.06	1,898.09	82.97	23.877	
11,900.00	11,857.50	11,871.21	11,861.25	42.51	41.53	91.63	-263.12	1,473.24	1,981.70	1,898.42	83.28	23.796	
11,950.00	11,899.78	11,923.99	11,913.57	42.61	41.71	92.20	-256.37	1,473.19	1,982.55	1,898.97	83.58	23.720	
12,000.00	11,939.57	11,979.29	11,967.49	42.70	41.88	92.73	-244.18	1,473.11	1,983.61	1,899.73	83.88	23.649	
12,050.00	11,976.57	12,037.41	12,022.60	42.78	42.05	93.17	-225.82	1,472.98	1,984.85	1,900.69	84.16	23.584	
12,100.00	12,010.50	12,098.64	12,078.35	42.84	42.22	93.49	-200.55	1,472.81	1,986.24	1,901.81	84.43	23.524	
12,150.00	12,041.11	12,163.29	12,133.92	42.89	42.39	93.68	-167.58	1,472.59	1,987.73	1,903.04	84.69	23.471	
12,200.00	12,068.15	12,231.58	12,188.19	42.92	42.55	93.70	-126.19	1,472.30	1,989.26	1,904.33	84.93	23.422	
12,250.00	12,091.43	12,303.68	12,239.71	42.94	42.71	93.53	-75.84	1,471.96	1,990.77	1,905.60	85.16	23.377	
12,300.00	12,110.76	12,379.57	12,286.67	42.96	42.87	93.14	-16.28	1,471.56	1,992.17	1,906.79	85.38	23.332	
12,350.00	12,126.01	12,459.07	12,326.96	42.96	43.04	92.54	52.17	1,471.09	1,993.39	1,907.78	85.61	23.285	
12,400.00	12,137.04	12,541.71	12,358.39	42.98	43.22	91.74	128.52	1,470.57	1,994.36	1,908.51	85.85	23.231	
12,402.56	12,137.49	12,546.01	12,359.73	42.98	43.23	91.69	132.61	1,470.54	1,994.40	1,908.54	85.86	23.228	
12,450.00	12,144.57	12,626.81	12,378.95	43.04	43.40	90.78	211.02	1,470.01	1,994.92	1,908.80	86.12	23.164	
12,500.00	12,149.49	12,693.10	12,388.01	43.16	43.56	90.32	276.67	1,469.56	1,995.15	1,908.77	86.38	23.096	
12,550.00	12,151.81	12,760.15	12,392.51	43.29	43.73	89.83	343.56	1,469.10	1,995.27	1,908.60	86.68	23.020	
12,569.23	12,152.00	12,785.96	12,392.99	43.35	43.80	89.64	369.36	1,468.93	1,995.29	1,908.50	86.79	22.989	
12,600.00	12,152.00	12,817.98	12,393.00	43.44	43.89	89.61	401.38	1,468.71	1,995.29	1,908.32	86.97	22.942	
12,700.00	12,152.00	12,917.98	12,393.00	43.78	44.21	89.61	501.37	1,468.02	1,995.28	1,907.68	87.60	22.777	
12,800.00	12,152.00	13,017.98	12,393.00	44.18	44.58	89.61	601.37	1,467.33	1,995.27	1,906.93	88.35	22.584	
12,900.00	12,152.00	13,117.98	12,393.00	44.63	45.02	89.61	701.37	1,466.65	1,995.27	1,906.05	89.21	22.365	
13,000.00	12,152.00	13,217.98	12,393.00	45.13	45.51	89.61	801.37	1,465.96	1,995.26	1,905.07	90.19	22.123	
13,100.00	12,152.00	13,317.98	12,393.00	45.68	46.05	89.61	901.36	1,465.27	1,995.25	1,903.97	91.28	21.859	
13,200.00	12,152.00	13,417.98	12,393.00	46.29	46.65	89.61	1,001.36	1,464.59	1,995.24	1,902.77	92.47	21.578	
13,300.00	12,152.00	13,517.98	12,393.00	46.94	47.30	89.61	1,101.36	1,463.90	1,995.23	1,901.47	93.76	21.280	
13,400.00	12,152.00	13,617.98	12,393.00	47.65	48.00	89.61	1,201.36	1,463.21	1,995.23	1,900.08	95.15	20.969	
13,500.00	12,152.00	13,717.98	12,393.00	48.39	48.74	89.61	1,301.36	1,462.53	1,995.22	1,898.59	96.63	20.648	
13,600.00	12,152.00	13,817.98	12,393.00	49.19	49.53	89.61	1,401.35	1,461.84	1,995.21	1,897.01	98.20	20.317	
13,700.00	12,152.00	13,917.98	12,393.00	50.02	50.36	89.61	1,501.35	1,461.15	1,995.20	1,895.35	99.86	19.981	
13,800.00	12,152.00	14,017.98	12,393.00	50.89	51.23	89.61	1,601.35	1,460.47	1,995.19	1,893.60	101.59	19.639	
13,900.00	12,152.00	14,117.98	12,393.00	51.81	52.14	89.61	1,701.35	1,459.78	1,995.19	1,891.78	103.40	19.295	

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #206H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,000.00	12,152.00	14,217.98	12,393.00	52.75	53.09	89.61	1,801.34	1,459.09	1,995.18	1,889.89	105.29	18.950	
14,100.00	12,152.00	14,317.98	12,393.00	53.74	54.07	89.61	1,901.34	1,458.41	1,995.17	1,887.93	107.24	18.605	
14,200.00	12,152.00	14,417.98	12,393.00	54.75	55.08	89.61	2,001.34	1,457.72	1,995.16	1,885.91	109.26	18.261	
14,300.00	12,152.00	14,517.98	12,393.00	55.80	56.12	89.61	2,101.34	1,457.03	1,995.15	1,883.82	111.33	17.920	
14,400.00	12,152.00	14,617.98	12,393.00	56.87	57.20	89.61	2,201.33	1,456.35	1,995.15	1,881.68	113.47	17.583	
14,500.00	12,152.00	14,717.98	12,393.00	57.97	58.30	89.61	2,301.33	1,455.66	1,995.14	1,879.48	115.66	17.250	
14,600.00	12,152.00	14,817.98	12,393.00	59.10	59.42	89.61	2,401.33	1,454.97	1,995.13	1,877.23	117.90	16.922	
14,700.00	12,152.00	14,917.98	12,393.00	60.25	60.57	89.61	2,501.33	1,454.29	1,995.12	1,874.93	120.19	16.599	
14,800.00	12,152.00	15,017.98	12,393.00	61.43	61.75	89.61	2,601.32	1,453.60	1,995.12	1,872.58	122.53	16.282	
14,900.00	12,152.00	15,117.98	12,393.00	62.62	62.94	89.61	2,701.32	1,452.91	1,995.11	1,870.19	124.91	15.972	
15,000.00	12,152.00	15,217.98	12,393.00	63.84	64.16	89.61	2,801.32	1,452.22	1,995.10	1,867.76	127.33	15.668	
15,100.00	12,152.00	15,317.98	12,393.00	65.08	65.40	89.61	2,901.32	1,451.54	1,995.09	1,865.30	129.79	15.371	
15,200.00	12,152.00	15,417.98	12,393.00	66.33	66.65	89.61	3,001.32	1,450.85	1,995.08	1,862.79	132.29	15.081	
15,300.00	12,152.00	15,517.98	12,393.00	67.61	67.92	89.61	3,101.31	1,450.16	1,995.08	1,860.25	134.82	14.798	
15,400.00	12,152.00	15,617.98	12,393.00	68.89	69.21	89.61	3,201.31	1,449.48	1,995.07	1,857.68	137.39	14.521	
15,500.00	12,152.00	15,717.98	12,393.00	70.20	70.51	89.61	3,301.31	1,448.79	1,995.06	1,855.08	139.98	14.252	
15,600.00	12,152.00	15,817.98	12,393.00	71.52	71.83	89.61	3,401.31	1,448.10	1,995.05	1,852.44	142.61	13.990	
15,700.00	12,152.00	15,917.98	12,393.00	72.85	73.16	89.61	3,501.30	1,447.42	1,995.04	1,849.78	145.26	13.734	
15,800.00	12,152.00	16,017.98	12,393.00	74.20	74.51	89.61	3,601.30	1,446.73	1,995.04	1,847.10	147.94	13.486	
15,900.00	12,152.00	16,117.98	12,393.00	75.56	75.87	89.61	3,701.30	1,446.04	1,995.03	1,844.39	150.64	13.244	
16,000.00	12,152.00	16,217.98	12,393.00	76.93	77.23	89.61	3,801.30	1,445.36	1,995.02	1,841.65	153.36	13.008	
16,100.00	12,152.00	16,317.98	12,393.00	78.31	78.62	89.61	3,901.29	1,444.67	1,995.01	1,838.90	156.11	12.779	
16,200.00	12,152.00	16,417.98	12,393.00	79.70	80.01	89.61	4,001.29	1,443.98	1,995.00	1,836.12	158.88	12.557	
16,300.00	12,152.00	16,517.98	12,393.00	81.10	81.41	89.61	4,101.29	1,443.30	1,995.00	1,833.33	161.67	12.340	
16,400.00	12,152.00	16,617.98	12,393.00	82.52	82.82	89.61	4,201.29	1,442.61	1,994.99	1,830.51	164.48	12.129	
16,500.00	12,152.00	16,717.98	12,393.00	83.94	84.24	89.61	4,301.28	1,441.92	1,994.98	1,827.68	167.30	11.924	
16,600.00	12,152.00	16,817.98	12,393.00	85.37	85.67	89.61	4,401.28	1,441.24	1,994.97	1,824.82	170.15	11.725	
16,700.00	12,152.00	16,917.98	12,393.00	86.80	87.10	89.61	4,501.28	1,440.55	1,994.96	1,821.96	173.01	11.531	
16,800.00	12,152.00	17,017.98	12,393.00	88.25	88.55	89.61	4,601.28	1,439.86	1,994.96	1,819.08	175.88	11.343	
16,900.00	12,152.00	17,117.98	12,393.00	89.70	90.00	89.61	4,701.28	1,439.18	1,994.95	1,816.18	178.77	11.159	
16,919.32	12,152.00	17,137.30	12,393.00	89.98	90.28	89.61	4,720.60	1,439.04	1,994.95	1,815.62	179.33	11.125	SF

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #221H - Wellbore #1 - Design #2 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	1.00	-1.00	0.00	0.00	90.00	0.00	30.00	30.00	-			
100.00	100.00	101.00	99.00	0.13	0.13	90.00	0.00	30.00	30.00	29.74	0.26	115.432	
200.00	200.00	201.00	199.00	0.49	0.49	90.00	0.00	30.00	30.00	29.02	0.98	30.711	
300.00	300.00	301.00	299.00	0.85	0.85	90.00	0.00	30.00	30.00	28.31	1.69	17.712	
400.00	400.00	401.00	399.00	1.20	1.21	90.00	0.00	30.00	30.00	27.59	2.41	12.444	
500.00	500.00	501.00	499.00	1.56	1.57	90.00	0.00	30.00	30.00	26.87	3.13	9.592	
600.00	600.00	601.00	599.00	1.92	1.92	90.00	0.00	30.00	30.00	26.16	3.84	7.803	CC, ES
700.00	699.99	701.01	698.99	2.27	2.28	89.21	0.00	30.00	30.77	26.22	4.55	6.763	
800.00	799.96	801.04	798.96	2.61	2.64	87.06	0.00	30.00	33.09	27.85	5.25	6.308	
900.00	899.86	901.14	898.86	2.95	3.00	84.09	0.00	30.00	37.06	31.11	5.95	6.229	
1,000.00	999.68	998.68	998.68	3.30	3.35	80.86	0.00	30.00	42.74	36.09	6.65	6.430	
1,100.00	1,099.37	1,099.16	1,099.16	3.66	3.70	78.18	-0.48	29.29	49.40	42.05	7.34	6.727	
1,200.00	1,198.90	1,199.78	1,199.74	4.03	4.03	76.30	-1.96	27.12	56.18	48.15	8.03	6.996	
1,300.00	1,298.36	1,300.57	1,300.43	4.40	4.38	75.17	-4.45	23.49	62.20	53.47	8.72	7.131	
1,400.00	1,397.81	1,401.54	1,401.22	4.78	4.72	74.73	-7.93	18.39	66.57	57.15	9.42	7.068	
1,500.00	1,497.26	1,502.64	1,502.00	5.16	5.08	74.81	-12.43	11.81	69.28	59.16	10.12	6.847	
1,600.00	1,596.71	1,603.80	1,602.68	5.54	5.44	75.38	-17.93	3.76	70.33	59.50	10.82	6.498	
1,700.00	1,696.16	1,703.75	1,702.09	5.92	5.80	76.12	-23.82	-4.87	70.61	59.08	11.54	6.121	
1,800.00	1,795.62	1,803.74	1,801.53	6.31	6.17	76.86	-29.72	-13.50	70.91	58.66	12.25	5.787	
1,900.00	1,895.07	1,903.74	1,900.98	6.69	6.54	77.59	-35.62	-22.13	71.22	58.25	12.97	5.489	
2,000.00	1,994.52	2,003.74	2,000.43	7.08	6.92	78.32	-41.51	-30.76	71.54	57.84	13.70	5.222	
2,100.00	2,093.97	2,103.73	2,099.88	7.47	7.29	79.04	-47.41	-39.39	71.87	57.45	14.43	4.982	
2,200.00	2,193.43	2,203.73	2,199.32	7.86	7.67	79.75	-53.31	-48.02	72.22	57.06	15.16	4.765	
2,300.00	2,292.88	2,303.72	2,298.77	8.25	8.05	80.45	-59.20	-56.65	72.57	56.68	15.89	4.568	
2,400.00	2,392.33	2,403.72	2,398.22	8.64	8.43	81.15	-65.10	-65.28	72.93	56.31	16.62	4.388	
2,500.00	2,491.78	2,503.71	2,497.67	9.03	8.82	81.84	-71.00	-73.91	73.31	55.95	17.36	4.223	
2,600.00	2,591.23	2,603.71	2,597.11	9.43	9.20	82.53	-76.89	-82.54	73.69	55.60	18.10	4.072	
2,700.00	2,690.69	2,703.70	2,696.56	9.82	9.58	83.21	-82.79	-91.17	74.09	55.25	18.84	3.933	
2,800.00	2,790.14	2,803.70	2,796.01	10.21	9.97	83.87	-88.69	-99.80	74.50	54.92	19.58	3.805	
2,900.00	2,889.59	2,903.69	2,895.46	10.60	10.36	84.54	-94.58	-108.43	74.91	54.59	20.32	3.686	
3,000.00	2,989.04	3,003.69	2,994.90	11.00	10.75	85.19	-100.48	-117.06	75.34	54.27	21.07	3.576	
3,100.00	3,088.50	3,103.69	3,094.35	11.39	11.13	85.84	-106.38	-125.69	75.78	53.96	21.82	3.473	
3,200.00	3,187.95	3,203.68	3,193.80	11.78	11.52	86.48	-112.27	-134.32	76.22	53.65	22.57	3.377	
3,300.00	3,287.40	3,303.68	3,293.25	12.18	11.91	87.11	-118.17	-142.96	76.68	53.36	23.32	3.288	
3,400.00	3,386.85	3,403.67	3,392.70	12.57	12.30	87.73	-124.07	-151.59	77.14	53.07	24.07	3.204	
3,500.00	3,486.30	3,503.67	3,492.14	12.97	12.69	88.35	-129.96	-160.22	77.61	52.79	24.83	3.126	
3,600.00	3,585.76	3,603.66	3,591.59	13.36	13.09	88.96	-135.86	-168.85	78.09	52.51	25.58	3.053	
3,700.00	3,685.21	3,703.66	3,691.04	13.76	13.48	89.56	-141.76	-177.48	78.58	52.24	26.34	2.984	
3,800.00	3,784.66	3,803.65	3,790.49	14.15	13.87	90.16	-147.65	-186.11	79.08	51.98	27.10	2.918	
3,900.00	3,884.11	3,903.65	3,889.93	14.55	14.26	90.74	-153.55	-194.74	79.59	51.73	27.86	2.857	
4,000.00	3,983.57	4,003.64	3,989.38	14.94	14.65	91.32	-159.45	-203.37	80.10	51.49	28.62	2.799	
4,100.00	4,083.02	4,103.64	4,088.83	15.34	15.04	91.89	-165.34	-212.00	80.63	51.25	29.38	2.744	
4,200.00	4,182.47	4,203.64	4,188.28	15.73	15.44	92.46	-171.24	-220.63	81.16	51.01	30.15	2.692	
4,300.00	4,281.92	4,303.63	4,287.72	16.13	15.83	93.01	-177.14	-229.26	81.70	50.79	30.91	2.643	
4,400.00	4,381.37	4,403.63	4,387.17	16.52	16.22	93.56	-183.03	-237.89	82.25	50.57	31.68	2.596	
4,500.00	4,480.83	4,503.62	4,486.62	16.92	16.62	94.10	-188.93	-246.52	82.80	50.35	32.44	2.552	
4,600.00	4,580.28	4,603.62	4,586.07	17.31	17.01	94.64	-194.83	-255.15	83.36	50.15	33.21	2.510	
4,700.00	4,679.73	4,703.61	4,685.51	17.71	17.40	95.17	-200.72	-263.78	83.93	49.95	33.98	2.470	
4,800.00	4,779.18	4,803.61	4,784.96	18.11	17.80	95.69	-206.62	-272.41	84.50	49.75	34.75	2.432	
4,900.00	4,878.64	4,903.60	4,884.41	18.50	18.19	96.20	-212.51	-281.04	85.09	49.56	35.53	2.395	
5,000.00	4,978.09	5,003.60	4,983.86	18.90	18.59	96.70	-218.41	-289.67	85.68	49.38	36.30	2.360	
5,100.00	5,077.54	5,103.59	5,083.31	19.29	18.98	97.20	-224.31	-298.30	86.27	49.20	37.07	2.327	

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #221H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.00	5,176.99	5,203.59	5,182.75	19.69	19.37	97.69	-230.20	-306.93	86.87	49.03	37.85	2.295	
5,300.00	5,276.44	5,303.58	5,282.20	20.09	19.77	98.18	-236.10	-315.56	87.48	48.86	38.62	2.265	
5,400.00	5,375.90	5,403.58	5,381.65	20.48	20.16	98.66	-242.00	-324.19	88.10	48.70	39.40	2.236	
5,500.00	5,475.35	5,503.58	5,481.10	20.88	20.56	99.13	-247.89	-332.82	88.72	48.54	40.18	2.208	
5,600.00	5,574.80	5,603.57	5,580.54	21.27	20.95	99.59	-253.79	-341.45	89.34	48.39	40.96	2.181	
5,700.00	5,674.25	5,703.57	5,679.99	21.67	21.35	100.05	-259.69	-350.08	89.98	48.24	41.73	2.156	
5,800.00	5,773.70	5,802.96	5,778.87	22.07	21.74	100.37	-265.41	-358.46	90.79	48.28	42.51	2.136	
5,900.00	5,873.16	5,901.81	5,877.35	22.46	22.12	99.99	-270.25	-365.54	92.71	49.46	43.24	2.144	
6,000.00	5,972.61	6,000.58	5,975.87	22.86	22.49	98.92	-274.12	-371.21	95.87	51.94	43.93	2.182	
6,100.00	6,072.06	6,099.19	6,074.35	23.26	22.85	97.26	-277.03	-375.47	100.35	55.77	44.58	2.251	
6,152.00	6,123.78	6,150.39	6,125.51	23.46	23.03	96.21	-278.17	-377.13	103.22	58.32	44.90	2.299	
6,200.00	6,171.53	6,197.62	6,172.71	23.65	23.20	95.22	-278.99	-378.33	106.05	60.86	45.19	2.347	
6,300.00	6,271.15	6,295.91	6,270.99	24.04	23.54	93.27	-279.98	-379.79	111.96	66.17	45.79	2.445	
6,400.00	6,370.90	6,405.17	6,369.90	24.41	23.89	91.52	-280.13	-380.00	117.73	71.32	46.42	2.536	
6,500.00	6,470.76	6,505.31	6,469.76	24.78	24.21	90.26	-280.13	-380.00	122.30	75.25	47.05	2.599	
6,600.00	6,570.70	6,605.38	6,569.70	25.13	24.53	89.47	-280.13	-380.00	125.38	77.69	47.69	2.629	
6,700.00	6,670.68	6,705.39	6,669.68	25.47	24.85	89.09	-280.13	-380.00	126.95	78.59	48.36	2.625	
6,752.00	6,722.68	6,746.61	6,721.68	25.64	24.98	89.04	-280.13	-380.00	127.16	78.49	48.67	2.613	
6,800.00	6,770.68	6,805.39	6,769.68	25.79	25.17	89.04	-280.13	-380.00	127.16	78.14	49.01	2.594	
6,900.00	6,870.68	6,905.39	6,869.68	26.10	25.50	89.04	-280.13	-380.00	127.16	77.49	49.67	2.560	
7,000.00	6,970.68	7,005.39	6,969.68	26.42	25.82	89.04	-280.13	-380.00	127.16	76.83	50.33	2.527	
7,100.00	7,070.68	7,105.39	7,069.68	26.73	26.14	89.04	-280.13	-380.00	127.16	76.17	50.98	2.494	
7,200.00	7,170.68	7,205.39	7,169.68	27.05	26.47	89.04	-280.13	-380.00	127.16	75.51	51.64	2.462	
7,300.00	7,270.68	7,305.39	7,269.68	27.36	26.79	89.04	-280.13	-380.00	127.16	74.85	52.30	2.431	
7,400.00	7,370.68	7,405.39	7,369.68	27.68	27.12	89.04	-280.13	-380.00	127.16	74.19	52.97	2.401	
7,500.00	7,470.68	7,505.39	7,469.68	28.00	27.45	89.04	-280.13	-380.00	127.16	73.53	53.63	2.371	
7,600.00	7,570.68	7,605.39	7,569.68	28.32	27.77	89.04	-280.13	-380.00	127.16	72.86	54.29	2.342	
7,700.00	7,670.68	7,705.39	7,669.68	28.64	28.10	89.04	-280.13	-380.00	127.16	72.20	54.96	2.314	
7,800.00	7,770.68	7,805.39	7,769.68	28.96	28.43	89.04	-280.13	-380.00	127.16	71.53	55.63	2.286	
7,900.00	7,870.68	7,905.39	7,869.68	29.29	28.76	89.04	-280.13	-380.00	127.16	70.86	56.30	2.259	
8,000.00	7,970.68	8,005.39	7,969.68	29.61	29.09	89.04	-280.13	-380.00	127.16	70.19	56.97	2.232	
8,100.00	8,070.68	8,105.39	8,069.68	29.93	29.43	89.04	-280.13	-380.00	127.16	69.52	57.64	2.206	
8,200.00	8,170.68	8,205.39	8,169.68	30.26	29.76	89.04	-280.13	-380.00	127.16	68.85	58.31	2.181	
8,300.00	8,270.68	8,305.39	8,269.68	30.58	30.09	89.04	-280.13	-380.00	127.16	68.17	58.98	2.156	
8,400.00	8,370.68	8,405.39	8,369.68	30.91	30.42	89.04	-280.13	-380.00	127.16	67.50	59.66	2.131	
8,500.00	8,470.68	8,505.39	8,469.68	31.24	30.76	89.04	-280.13	-380.00	127.16	66.82	60.33	2.108	
8,600.00	8,570.68	8,605.39	8,569.68	31.57	31.09	89.04	-280.13	-380.00	127.16	66.15	61.01	2.084	
8,700.00	8,670.68	8,705.39	8,669.68	31.89	31.43	89.04	-280.13	-380.00	127.16	65.47	61.69	2.061	
8,800.00	8,770.68	8,805.39	8,769.68	32.22	31.76	89.04	-280.13	-380.00	127.16	64.79	62.36	2.039	
8,900.00	8,870.68	8,905.39	8,869.68	32.55	32.10	89.04	-280.13	-380.00	127.16	64.11	63.04	2.017	
9,000.00	8,970.68	9,005.39	8,969.68	32.88	32.44	89.04	-280.13	-380.00	127.16	63.43	63.72	1.995	
9,100.00	9,070.68	9,105.39	9,069.68	33.21	32.77	89.04	-280.13	-380.00	127.16	62.75	64.40	1.974	
9,200.00	9,170.68	9,205.39	9,169.68	33.55	33.11	89.04	-280.13	-380.00	127.16	62.07	65.08	1.954	
9,300.00	9,270.68	9,305.39	9,269.68	33.88	33.45	89.04	-280.13	-380.00	127.16	61.39	65.77	1.933	
9,400.00	9,370.68	9,405.39	9,369.68	34.21	33.79	89.04	-280.13	-380.00	127.16	60.71	66.45	1.914	
9,500.00	9,470.68	9,505.39	9,469.68	34.54	34.13	89.04	-280.13	-380.00	127.16	60.02	67.13	1.894	
9,600.00	9,570.68	9,605.39	9,569.68	34.88	34.47	89.04	-280.13	-380.00	127.16	59.34	67.82	1.875	
9,700.00	9,670.68	9,705.39	9,669.68	35.21	34.80	89.04	-280.13	-380.00	127.16	58.65	68.50	1.856	
9,800.00	9,770.68	9,805.39	9,769.68	35.55	35.14	89.04	-280.13	-380.00	127.16	57.97	69.19	1.838	
9,900.00	9,870.68	9,905.39	9,869.68	35.88	35.48	89.04	-280.13	-380.00	127.16	57.28	69.87	1.820	
10,000.00	9,970.68	10,005.39	9,969.68	36.22	35.83	89.04	-280.13	-380.00	127.16	56.60	70.56	1.802	
10,100.00	10,070.68	10,105.39	10,069.68	36.55	36.17	89.04	-280.13	-380.00	127.16	55.91	71.25	1.785	

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #221H - Wellbore #1 - Design #2 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,200.00	10,170.68	10,205.39	10,169.68	36.89	36.51	89.04	-280.13	-380.00	127.16	55.22	71.93	1.768	
10,300.00	10,270.68	10,305.39	10,269.68	37.23	36.85	89.04	-280.13	-380.00	127.16	54.53	72.62	1.751	
10,400.00	10,370.68	10,405.39	10,369.68	37.56	37.19	89.04	-280.13	-380.00	127.16	53.84	73.31	1.734	
10,500.00	10,470.68	10,505.39	10,469.68	37.90	37.53	89.04	-280.13	-380.00	127.16	53.15	74.00	1.718	
10,600.00	10,570.68	10,605.39	10,569.68	38.24	37.88	89.04	-280.13	-380.00	127.16	52.46	74.69	1.702	
10,700.00	10,670.68	10,705.39	10,669.68	38.58	38.22	89.04	-280.13	-380.00	127.16	51.77	75.38	1.687	
10,800.00	10,770.68	10,805.39	10,769.68	38.92	38.56	89.04	-280.13	-380.00	127.16	51.08	76.07	1.671	
10,900.00	10,870.68	10,905.39	10,869.68	39.25	38.91	89.04	-280.13	-380.00	127.16	50.39	76.76	1.656	
11,000.00	10,970.68	11,005.39	10,969.68	39.59	39.25	89.04	-280.13	-380.00	127.16	49.70	77.46	1.642	
11,100.00	11,070.68	11,105.39	11,069.68	39.93	39.59	89.04	-280.13	-380.00	127.16	49.01	78.15	1.627	
11,200.00	11,170.68	11,205.39	11,169.68	40.27	39.94	89.04	-280.13	-380.00	127.16	48.31	78.84	1.613	
11,300.00	11,270.68	11,305.39	11,269.68	40.61	40.28	89.04	-280.13	-380.00	127.16	47.62	79.54	1.599	
11,400.00	11,370.68	11,405.39	11,369.68	40.95	40.63	89.04	-280.13	-380.00	127.16	46.93	80.23	1.585	
11,500.00	11,470.68	11,505.39	11,469.68	41.30	40.97	89.04	-280.13	-380.00	127.16	46.23	80.92	1.571	
11,600.00	11,570.68	11,605.39	11,569.68	41.64	41.32	89.04	-280.13	-380.00	127.16	45.54	81.62	1.558	
11,602.56	11,573.24	11,602.83	11,572.24	41.65	41.31	89.04	-280.13	-380.00	127.16	45.54	81.62	1.558	
11,640.84	11,611.49	11,635.41	11,610.49	41.77	41.42	89.61	-280.13	-380.00	127.15	45.27	81.88	1.553	
11,650.00	11,620.63	11,644.55	11,619.63	41.80	41.45	89.92	-280.13	-380.00	127.15	45.20	81.95	1.552	
11,700.00	11,670.21	11,705.86	11,669.21	41.97	41.66	92.76	-280.13	-380.00	127.34	44.94	82.40	1.545 SF	
11,750.00	11,719.06	11,742.98	11,718.06	42.12	41.79	97.49	-280.13	-380.00	128.36	45.54	82.82	1.550	
11,800.00	11,766.80	11,809.28	11,765.80	42.26	42.02	103.91	-280.13	-380.00	131.21	47.83	83.38	1.574	
11,850.00	11,813.06	11,836.99	11,812.06	42.39	42.12	111.59	-280.13	-380.00	137.12	53.28	83.84	1.636	
11,900.00	11,857.50	11,881.43	11,856.50	42.51	42.27	119.88	-280.13	-380.00	147.22	62.89	84.33	1.746	
11,950.00	11,899.78	11,923.70	11,898.78	42.61	42.42	128.04	-280.13	-380.00	162.30	77.54	84.77	1.915	
12,000.00	11,939.57	11,963.49	11,938.57	42.70	42.55	135.49	-280.13	-380.00	182.65	97.53	85.12	2.146	
12,050.00	11,976.57	12,000.49	11,975.57	42.78	42.68	141.95	-280.13	-380.00	208.09	122.70	85.40	2.437	
12,100.00	12,010.50	12,040.83	12,015.90	42.84	42.82	147.33	-279.88	-380.04	238.06	152.44	85.62	2.780	
12,150.00	12,041.11	12,097.91	12,072.77	42.89	43.01	151.45	-275.41	-380.70	269.94	184.44	85.50	3.157	
12,200.00	12,068.15	12,163.13	12,136.84	42.92	43.22	154.51	-263.48	-382.47	302.26	217.59	84.67	3.570	
12,250.00	12,091.43	12,239.73	12,209.74	42.94	43.45	156.70	-240.40	-385.90	334.11	251.29	82.82	4.034	
12,300.00	12,110.76	12,332.33	12,292.72	42.96	43.69	158.05	-200.00	-391.90	364.41	284.93	79.47	4.585	
12,350.00	12,126.01	12,447.14	12,384.77	42.96	43.92	158.36	-132.43	-401.94	391.57	317.55	74.02	5.290	
12,400.00	12,137.04	12,590.68	12,477.75	42.98	44.11	156.59	-24.75	-417.94	413.34	347.09	66.25	6.239	
12,402.56	12,137.49	12,598.88	12,482.21	42.98	44.12	156.39	-17.95	-418.95	414.26	348.44	65.81	6.294	
12,450.00	12,144.57	12,743.25	12,543.84	43.04	44.24	150.31	110.79	-438.07	426.25	366.98	59.27	7.191	
12,500.00	12,149.49	12,831.40	12,568.42	43.16	44.42	147.05	194.50	-450.51	434.41	377.05	57.36	7.573	
12,550.00	12,151.81	12,921.51	12,585.37	43.29	44.68	139.38	282.00	-463.51	440.73	384.70	56.03	7.865	
12,569.23	12,152.00	12,956.60	12,589.70	43.35	44.79	133.43	316.44	-468.63	442.65	386.94	55.71	7.945	
12,600.00	12,152.00	13,013.20	12,593.99	43.44	44.98	114.05	372.26	-476.92	444.62	389.17	55.45	8.019	
12,700.00	12,152.00	13,132.20	12,595.00	43.78	45.42	83.05	490.08	-493.43	444.41	388.94	55.47	8.011	
12,800.00	12,152.00	13,231.24	12,595.00	44.18	45.84	85.03	588.58	-503.72	444.10	388.47	55.63	7.983	
12,900.00	12,152.00	13,330.83	12,595.00	44.63	46.30	87.02	687.93	-510.62	444.01	388.11	55.91	7.942	
13,000.00	12,152.00	13,430.74	12,595.00	45.13	46.80	88.96	787.77	-514.07	444.00	387.71	56.29	7.888	
13,100.00	12,152.00	13,530.73	12,595.00	45.68	47.35	89.48	887.77	-514.91	444.00	387.26	56.75	7.824	
13,101.61	12,152.00	13,532.34	12,595.00	45.69	47.36	89.48	889.38	-514.92	444.00	387.25	56.75	7.823	
13,200.00	12,152.00	13,630.73	12,595.00	46.29	47.94	89.48	987.76	-515.59	444.00	386.76	57.25	7.756	
13,300.00	12,152.00	13,730.73	12,595.00	46.94	48.58	89.48	1,087.76	-516.27	444.00	386.22	57.78	7.684	
13,400.00	12,152.00	13,830.73	12,595.00	47.65	49.27	89.47	1,187.76	-516.95	444.00	385.65	58.36	7.608	
13,500.00	12,152.00	13,930.73	12,595.00	48.39	50.00	89.47	1,287.76	-517.64	444.00	385.03	58.97	7.530	
13,600.00	12,152.00	14,030.73	12,595.00	49.19	50.78	89.46	1,387.75	-518.32	444.00	384.39	59.61	7.448	
13,700.00	12,152.00	14,130.73	12,595.00	50.02	51.59	89.46	1,487.75	-519.00	444.00	383.71	60.29	7.364	
13,800.00	12,152.00	14,230.73	12,595.00	50.89	52.45	89.45	1,587.75	-519.69	444.00	383.00	61.01	7.278	

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #221H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft
Offset Well Error: 0.00 usft

Survey Program: 0-MWD

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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,900.00	12,152.00	14,330.73	12,595.00	51.81	53.34	89.45	1,687.75	-520.37	444.00	382.25	61.75	7.190	
14,000.00	12,152.00	14,430.73	12,595.00	52.75	54.27	89.44	1,787.74	-521.05	444.00	381.48	62.53	7.101	
14,100.00	12,152.00	14,530.73	12,595.00	53.74	55.23	89.44	1,887.74	-521.74	444.00	380.67	63.33	7.011	
14,200.00	12,152.00	14,630.73	12,595.00	54.75	56.22	89.43	1,987.74	-522.42	444.00	379.84	64.16	6.920	
14,300.00	12,152.00	14,730.73	12,595.00	55.80	57.25	89.42	2,087.74	-523.10	444.00	378.98	65.02	6.828	
14,400.00	12,152.00	14,830.73	12,595.00	56.87	58.30	89.42	2,187.74	-523.79	444.00	378.09	65.91	6.737	
14,500.00	12,152.00	14,930.73	12,595.00	57.97	59.39	89.41	2,287.73	-524.47	444.00	377.18	66.82	6.645	
14,600.00	12,152.00	15,030.73	12,595.00	59.10	60.49	89.40	2,387.73	-525.15	444.00	376.25	67.75	6.553	
14,700.00	12,152.00	15,130.73	12,595.00	60.25	61.63	89.39	2,487.73	-525.84	444.00	375.29	68.71	6.462	
14,800.00	12,152.00	15,230.73	12,595.00	61.43	62.78	89.38	2,587.73	-526.52	444.00	374.31	69.69	6.371	
14,900.00	12,152.00	15,330.73	12,595.00	62.62	63.96	89.37	2,687.72	-527.20	444.00	373.31	70.69	6.281	
15,000.00	12,152.00	15,430.73	12,595.00	63.84	65.16	89.36	2,787.72	-527.89	444.00	372.28	71.72	6.191	
15,100.00	12,152.00	15,530.73	12,595.00	65.08	66.38	89.34	2,887.72	-528.57	444.00	371.24	72.76	6.102	
15,200.00	12,152.00	15,630.73	12,595.00	66.33	67.61	89.33	2,987.72	-529.25	444.00	370.18	73.82	6.015	
15,300.00	12,152.00	15,730.73	12,595.00	67.61	68.87	89.31	3,087.71	-529.94	444.00	369.10	74.90	5.928	
15,400.00	12,152.00	15,830.73	12,595.00	68.89	70.14	89.29	3,187.71	-530.62	444.00	368.01	75.99	5.843	
15,500.00	12,152.00	15,930.73	12,595.00	70.20	71.43	89.27	3,287.71	-531.30	444.00	366.90	77.10	5.759	
15,600.00	12,152.00	16,030.73	12,595.00	71.52	72.73	89.24	3,387.71	-531.99	444.00	365.77	78.23	5.676	
15,700.00	12,152.00	16,130.73	12,595.00	72.85	74.05	89.21	3,487.71	-532.67	444.00	364.63	79.37	5.594	
15,800.00	12,152.00	16,230.73	12,595.00	74.20	75.38	89.18	3,587.70	-533.35	444.00	363.47	80.53	5.514	
15,900.00	12,152.00	16,330.73	12,595.00	75.56	76.72	89.13	3,687.70	-534.04	444.00	362.30	81.70	5.435	
16,000.00	12,152.00	16,430.73	12,595.00	76.93	78.08	89.08	3,787.70	-534.72	444.00	361.12	82.88	5.357	
16,100.00	12,152.00	16,530.73	12,595.00	78.31	79.44	89.02	3,887.70	-535.40	444.00	359.92	84.08	5.281	
16,200.00	12,152.00	16,630.73	12,595.00	79.70	80.82	88.94	3,987.69	-536.09	444.00	358.71	85.29	5.206	
16,300.00	12,152.00	16,730.73	12,595.00	81.10	82.21	88.83	4,087.69	-536.77	444.00	357.49	86.51	5.132	
16,400.00	12,152.00	16,830.73	12,595.00	82.52	83.61	88.68	4,187.69	-537.45	444.00	356.26	87.74	5.060	
16,500.00	12,152.00	16,930.73	12,595.00	83.94	85.01	88.46	4,287.69	-538.14	444.00	355.02	88.98	4.990	
16,600.00	12,152.00	17,030.73	12,595.00	85.37	86.43	88.10	4,387.68	-538.82	444.00	353.77	90.23	4.921	
16,700.00	12,152.00	17,130.73	12,595.00	86.80	87.86	87.41	4,487.68	-539.50	444.00	352.51	91.49	4.853	
16,800.00	12,152.00	17,230.73	12,595.00	88.25	89.29	85.57	4,587.68	-540.18	444.00	351.23	92.77	4.786	
16,900.00	12,152.00	17,330.73	12,595.00	89.70	90.70	66.04	4,687.68	-540.87	444.00	350.05	93.95	4.726	
16,919.32	12,152.00	17,350.06	12,595.00	89.98	90.96	0.00	4,707.00	-541.00	444.00	349.87	94.13	4.717	

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #226H - Wellbore #1 - Design #2 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	2.00	-2.00	0.00	0.00	89.45	13.00	1,350.00	1,350.06				
100.00	100.00	102.00	98.00	0.13	0.14	89.45	13.00	1,350.00	1,350.06	1,349.80	0.26	5,124.026	
200.00	200.00	202.00	198.00	0.49	0.49	89.45	13.00	1,350.00	1,350.06	1,349.08	0.98	1,377.025	
300.00	300.00	302.00	298.00	0.85	0.85	89.45	13.00	1,350.00	1,350.06	1,348.37	1.70	795.388	
400.00	400.00	402.00	398.00	1.20	1.21	89.45	13.00	1,350.00	1,350.06	1,347.65	2.41	559.193	
500.00	500.00	502.00	498.00	1.56	1.57	89.45	13.00	1,350.00	1,350.06	1,346.93	3.13	431.158	
600.00	600.00	598.00	598.00	1.92	1.91	89.45	13.00	1,350.00	1,350.06	1,346.23	3.83	352.142	CC, ES
700.00	699.99	698.63	698.63	2.27	2.26	89.47	12.15	1,349.98	1,350.81	1,346.28	4.52	298.639	
800.00	799.96	799.23	799.19	2.61	2.59	89.52	9.54	1,349.94	1,353.03	1,347.84	5.19	260.451	
900.00	899.86	899.74	899.60	2.95	2.93	89.62	5.16	1,349.86	1,356.75	1,350.87	5.88	230.752	
1,000.00	999.68	1,000.11	999.79	3.30	3.28	89.75	-0.96	1,349.75	1,361.96	1,355.38	6.58	207.120	
1,100.00	1,099.37	1,100.17	1,099.26	3.66	3.63	89.89	-7.91	1,349.63	1,368.68	1,361.40	7.28	187.981	
1,200.00	1,198.90	1,200.54	1,198.65	4.03	3.99	89.98	-14.85	1,349.50	1,376.93	1,368.93	8.00	172.215	
1,300.00	1,298.36	1,300.96	1,297.99	4.40	4.35	90.06	-21.79	1,349.38	1,385.94	1,377.22	8.72	159.014	
1,400.00	1,397.81	1,401.38	1,397.32	4.78	4.72	90.14	-28.72	1,349.25	1,394.95	1,385.51	9.44	147.763	
1,500.00	1,497.26	1,501.81	1,496.66	5.16	5.08	90.21	-35.66	1,349.13	1,403.96	1,393.80	10.17	138.061	
1,600.00	1,596.71	1,602.23	1,595.99	5.54	5.45	90.28	-42.60	1,349.00	1,412.98	1,402.08	10.90	129.618	
1,700.00	1,696.16	1,702.66	1,695.32	5.92	5.82	90.36	-49.53	1,348.88	1,422.00	1,410.37	11.64	122.209	
1,800.00	1,795.62	1,803.08	1,794.66	6.31	6.19	90.43	-56.47	1,348.76	1,431.02	1,418.65	12.37	115.660	
1,900.00	1,895.07	1,903.50	1,893.99	6.69	6.56	90.50	-63.41	1,348.63	1,440.05	1,426.94	13.11	109.832	
2,000.00	1,994.52	2,003.93	1,993.33	7.08	6.94	90.57	-70.34	1,348.51	1,449.07	1,435.22	13.85	104.614	
2,100.00	2,093.97	2,104.35	2,092.66	7.47	7.31	90.64	-77.28	1,348.38	1,458.10	1,443.51	14.59	99.916	
2,200.00	2,193.43	2,204.78	2,191.99	7.86	7.68	90.71	-84.22	1,348.26	1,467.13	1,451.80	15.34	95.666	
2,300.00	2,292.88	2,305.20	2,291.33	8.25	8.06	90.78	-91.15	1,348.14	1,476.16	1,460.08	16.08	91.803	
2,400.00	2,392.33	2,405.62	2,390.66	8.64	8.43	90.84	-98.09	1,348.01	1,485.20	1,468.37	16.82	88.277	
2,500.00	2,491.78	2,506.05	2,490.00	9.03	8.81	90.91	-105.03	1,347.89	1,494.23	1,476.66	17.57	85.046	
2,600.00	2,591.23	2,606.47	2,589.33	9.43	9.18	90.97	-111.96	1,347.76	1,503.27	1,484.96	18.32	82.075	
2,700.00	2,690.69	2,706.90	2,688.66	9.82	9.56	91.04	-118.90	1,347.64	1,512.31	1,493.25	19.06	79.335	
2,800.00	2,790.14	2,807.32	2,788.00	10.21	9.93	91.10	-125.84	1,347.52	1,521.36	1,501.55	19.81	76.799	
2,900.00	2,889.59	2,907.74	2,887.33	10.60	10.31	91.16	-132.77	1,347.39	1,530.40	1,509.84	20.56	74.445	
3,000.00	2,989.04	3,008.17	2,986.67	11.00	10.69	91.23	-139.71	1,347.27	1,539.45	1,518.14	21.31	72.256	
3,100.00	3,088.50	3,108.59	3,086.00	11.39	11.06	91.29	-146.65	1,347.14	1,548.49	1,526.44	22.05	70.213	
3,200.00	3,187.95	3,209.02	3,185.33	11.78	11.44	91.35	-153.58	1,347.02	1,557.54	1,534.74	22.80	68.304	
3,300.00	3,287.40	3,309.44	3,284.67	12.18	11.82	91.41	-160.52	1,346.89	1,566.59	1,543.04	23.55	66.515	
3,400.00	3,386.85	3,409.86	3,384.00	12.57	12.19	91.47	-167.46	1,346.77	1,575.65	1,551.35	24.30	64.836	
3,500.00	3,486.30	3,489.71	3,483.34	12.97	12.49	91.53	-174.39	1,346.65	1,584.70	1,559.73	24.97	63.452	
3,600.00	3,585.76	3,589.29	3,582.67	13.36	12.87	91.58	-181.33	1,346.52	1,593.76	1,568.04	25.72	61.962	
3,700.00	3,685.21	3,688.86	3,682.01	13.76	13.24	91.64	-188.27	1,346.40	1,602.82	1,576.35	26.47	60.555	
3,800.00	3,784.66	3,788.44	3,781.34	14.15	13.61	91.70	-195.20	1,346.27	1,611.88	1,584.66	27.22	59.225	
3,900.00	3,884.11	3,888.02	3,880.67	14.55	13.99	91.75	-202.14	1,346.15	1,620.94	1,592.97	27.96	57.965	
4,000.00	3,983.57	3,987.59	3,980.01	14.94	14.36	91.81	-209.08	1,346.03	1,630.00	1,601.29	28.71	56.771	
4,100.00	4,083.02	4,087.17	4,079.34	15.34	14.74	91.86	-216.01	1,345.90	1,639.06	1,609.60	29.46	55.637	
4,200.00	4,182.47	4,186.74	4,178.68	15.73	15.11	91.92	-222.95	1,345.78	1,648.13	1,617.92	30.21	54.559	
4,300.00	4,281.92	4,286.32	4,278.01	16.13	15.49	91.97	-229.89	1,345.65	1,657.20	1,626.24	30.96	53.533	
4,400.00	4,381.37	4,385.90	4,377.34	16.52	15.86	92.03	-236.82	1,345.53	1,666.26	1,634.56	31.71	52.555	
4,500.00	4,480.83	4,485.47	4,476.68	16.92	16.23	92.08	-243.76	1,345.40	1,675.33	1,642.88	32.45	51.622	
4,600.00	4,580.28	4,585.05	4,576.01	17.31	16.61	92.13	-250.70	1,345.28	1,684.41	1,651.20	33.20	50.731	
4,700.00	4,679.73	4,685.07	4,675.82	17.71	16.98	92.17	-257.17	1,345.16	1,693.47	1,659.52	33.95	49.880	
4,800.00	4,779.18	4,785.25	4,775.88	18.11	17.35	92.14	-261.97	1,345.08	1,702.50	1,667.81	34.69	49.074	
4,900.00	4,878.64	4,885.37	4,875.96	18.50	17.71	92.06	-265.01	1,345.02	1,711.50	1,676.07	35.43	48.313	
5,000.00	4,978.09	4,985.39	4,975.97	18.90	18.05	91.93	-266.30	1,345.00	1,720.47	1,684.33	36.14	47.611	
5,100.00	5,077.54	5,084.96	5,075.54	19.29	18.37	91.75	-266.35	1,345.00	1,729.44	1,692.61	36.83	46.962	

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #226H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft
Offset Well Error: 0.00 usft

Survey Program: 0-MWD

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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.00	5,176.99	5,184.41	5,174.99	19.69	18.69	91.57	-266.35	1,345.00	1,738.42	1,700.90	37.51	46.342	
5,300.00	5,276.44	5,283.86	5,274.44	20.09	19.00	91.40	-266.35	1,345.00	1,747.42	1,709.21	38.20	45.742	
5,400.00	5,375.90	5,383.32	5,373.90	20.48	19.32	91.23	-266.35	1,345.00	1,756.43	1,717.54	38.89	45.163	
5,500.00	5,475.35	5,482.77	5,473.35	20.88	19.64	91.05	-266.35	1,345.00	1,765.46	1,725.88	39.58	44.603	
5,600.00	5,574.80	5,582.22	5,572.80	21.27	19.97	90.88	-266.35	1,345.00	1,774.51	1,734.23	40.27	44.062	
5,700.00	5,674.25	5,681.67	5,672.25	21.67	20.29	90.72	-266.35	1,345.00	1,783.57	1,742.60	40.97	43.538	
5,800.00	5,773.70	5,781.13	5,771.70	22.07	20.61	90.55	-266.35	1,345.00	1,792.65	1,750.99	41.66	43.031	
5,900.00	5,873.16	5,880.58	5,871.16	22.46	20.94	90.39	-266.35	1,345.00	1,801.74	1,759.38	42.35	42.540	
6,000.00	5,972.61	5,980.03	5,970.61	22.86	21.26	90.22	-266.35	1,345.00	1,810.84	1,767.79	43.05	42.064	
6,100.00	6,072.06	6,079.48	6,070.06	23.26	21.59	90.06	-266.35	1,345.00	1,819.96	1,776.22	43.75	41.602	
6,152.00	6,123.78	6,131.20	6,121.78	23.46	21.76	89.98	-266.35	1,345.00	1,824.71	1,780.60	44.11	41.368	
6,200.00	6,171.53	6,178.96	6,169.53	23.65	21.92	89.91	-266.35	1,345.00	1,828.92	1,784.48	44.44	41.152	
6,300.00	6,271.15	6,278.57	6,269.15	24.04	22.25	89.77	-266.35	1,345.00	1,836.58	1,791.44	45.14	40.688	
6,400.00	6,370.90	6,378.32	6,368.90	24.41	22.58	89.67	-266.35	1,345.00	1,842.72	1,796.89	45.83	40.206	
6,500.00	6,470.76	6,478.18	6,468.76	24.78	22.91	89.59	-266.35	1,345.00	1,847.34	1,800.82	46.52	39.709	
6,600.00	6,570.70	6,578.12	6,568.70	25.13	23.25	89.54	-266.35	1,345.00	1,850.44	1,803.23	47.21	39.196	
6,700.00	6,670.68	6,678.10	6,668.68	25.47	23.58	89.51	-266.35	1,345.00	1,852.00	1,804.10	47.89	38.668	
6,752.00	6,722.68	6,730.10	6,720.68	25.64	23.75	89.51	-266.35	1,345.00	1,852.21	1,803.96	48.24	38.393	
6,800.00	6,770.68	6,778.10	6,768.68	25.79	23.91	89.51	-266.35	1,345.00	1,852.21	1,803.65	48.56	38.144	
6,900.00	6,870.68	6,878.10	6,868.68	26.10	24.25	89.51	-266.35	1,345.00	1,852.21	1,802.99	49.22	37.633	
7,000.00	6,970.68	6,978.10	6,968.68	26.42	24.59	89.51	-266.35	1,345.00	1,852.21	1,802.33	49.88	37.134	
7,100.00	7,070.68	7,078.10	7,068.68	26.73	24.92	89.51	-266.35	1,345.00	1,852.21	1,801.66	50.54	36.647	
7,200.00	7,170.68	7,178.10	7,168.68	27.05	25.26	89.51	-266.35	1,345.00	1,852.21	1,801.00	51.21	36.172	
7,300.00	7,270.68	7,278.10	7,268.68	27.36	25.60	89.51	-266.35	1,345.00	1,852.21	1,800.33	51.87	35.708	
7,400.00	7,370.68	7,378.10	7,368.68	27.68	25.94	89.51	-266.35	1,345.00	1,852.21	1,799.67	52.54	35.255	
7,500.00	7,470.68	7,478.10	7,468.68	28.00	26.27	89.51	-266.35	1,345.00	1,852.21	1,799.00	53.21	34.812	
7,600.00	7,570.68	7,578.10	7,568.68	28.32	26.61	89.51	-266.35	1,345.00	1,852.21	1,798.33	53.87	34.380	
7,700.00	7,670.68	7,678.10	7,668.68	28.64	26.95	89.51	-266.35	1,345.00	1,852.21	1,797.66	54.55	33.957	
7,800.00	7,770.68	7,778.10	7,768.68	28.96	27.29	89.51	-266.35	1,345.00	1,852.21	1,796.99	55.22	33.544	
7,900.00	7,870.68	7,878.10	7,868.68	29.29	27.63	89.51	-266.35	1,345.00	1,852.21	1,796.32	55.89	33.141	
8,000.00	7,970.68	7,978.10	7,968.68	29.61	27.98	89.51	-266.35	1,345.00	1,852.21	1,795.64	56.56	32.746	
8,100.00	8,070.68	8,078.10	8,068.68	29.93	28.32	89.51	-266.35	1,345.00	1,852.21	1,794.97	57.24	32.360	
8,200.00	8,170.68	8,178.10	8,168.68	30.26	28.66	89.51	-266.35	1,345.00	1,852.21	1,794.29	57.91	31.982	
8,300.00	8,270.68	8,278.10	8,268.68	30.58	29.00	89.51	-266.35	1,345.00	1,852.21	1,793.61	58.59	31.613	
8,400.00	8,370.68	8,378.10	8,368.68	30.91	29.35	89.51	-266.35	1,345.00	1,852.21	1,792.94	59.27	31.251	
8,500.00	8,470.68	8,478.10	8,468.68	31.24	29.69	89.51	-266.35	1,345.00	1,852.21	1,792.26	59.95	30.897	
8,600.00	8,570.68	8,578.10	8,568.68	31.57	30.03	89.51	-266.35	1,345.00	1,852.21	1,791.58	60.63	30.551	
8,700.00	8,670.68	8,678.10	8,668.68	31.89	30.38	89.51	-266.35	1,345.00	1,852.21	1,790.90	61.31	30.212	
8,800.00	8,770.68	8,778.10	8,768.68	32.22	30.72	89.51	-266.35	1,345.00	1,852.21	1,790.22	61.99	29.880	
8,900.00	8,870.68	8,878.10	8,868.68	32.55	31.06	89.51	-266.35	1,345.00	1,852.21	1,789.54	62.67	29.555	
9,000.00	8,970.68	8,978.10	8,968.68	32.88	31.41	89.51	-266.35	1,345.00	1,852.21	1,788.85	63.35	29.236	
9,100.00	9,070.68	9,078.10	9,068.68	33.21	31.76	89.51	-266.35	1,345.00	1,852.21	1,788.17	64.04	28.924	
9,200.00	9,170.68	9,178.10	9,168.68	33.55	32.10	89.51	-266.35	1,345.00	1,852.21	1,787.48	64.72	28.618	
9,300.00	9,270.68	9,278.10	9,268.68	33.88	32.45	89.51	-266.35	1,345.00	1,852.21	1,786.80	65.41	28.319	
9,400.00	9,370.68	9,378.10	9,368.68	34.21	32.79	89.51	-266.35	1,345.00	1,852.21	1,786.11	66.09	28.025	
9,500.00	9,470.68	9,478.10	9,468.68	34.54	33.14	89.51	-266.35	1,345.00	1,852.21	1,785.43	66.78	27.737	
9,600.00	9,570.68	9,578.10	9,568.68	34.88	33.49	89.51	-266.35	1,345.00	1,852.21	1,784.74	67.46	27.454	
9,700.00	9,670.68	9,678.10	9,668.68	35.21	33.83	89.51	-266.35	1,345.00	1,852.21	1,784.05	68.15	27.177	
9,800.00	9,770.68	9,778.10	9,768.68	35.55	34.18	89.51	-266.35	1,345.00	1,852.21	1,783.37	68.84	26.906	
9,900.00	9,870.68	9,878.10	9,868.68	35.88	34.53	89.51	-266.35	1,345.00	1,852.21	1,782.68	69.53	26.639	
10,000.00	9,970.68	9,978.10	9,968.68	36.22	34.87	89.51	-266.35	1,345.00	1,852.21	1,781.99	70.22	26.378	
10,100.00	10,070.68	10,078.10	10,068.68	36.55	35.22	89.51	-266.35	1,345.00	1,852.21	1,781.30	70.91	26.121	

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #226H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,200.00	10,170.68	10,178.10	10,168.68	36.89	35.57	89.51	-266.35	1,345.00	1,852.21	1,780.61	71.60	25.869	
10,300.00	10,270.68	10,278.10	10,268.68	37.23	35.92	89.51	-266.35	1,345.00	1,852.21	1,779.92	72.29	25.622	
10,400.00	10,370.68	10,378.10	10,368.68	37.56	36.27	89.51	-266.35	1,345.00	1,852.21	1,779.22	72.98	25.379	
10,500.00	10,470.68	10,478.10	10,468.68	37.90	36.61	89.51	-266.35	1,345.00	1,852.21	1,778.53	73.67	25.141	
10,600.00	10,570.68	10,578.10	10,568.68	38.24	36.96	89.51	-266.35	1,345.00	1,852.21	1,777.84	74.36	24.907	
10,700.00	10,670.68	10,678.10	10,668.68	38.58	37.31	89.51	-266.35	1,345.00	1,852.21	1,777.15	75.06	24.677	
10,800.00	10,770.68	10,778.10	10,768.68	38.92	37.66	89.51	-266.35	1,345.00	1,852.21	1,776.45	75.75	24.451	
10,900.00	10,870.68	10,878.10	10,868.68	39.25	38.01	89.51	-266.35	1,345.00	1,852.21	1,775.76	76.44	24.229	
11,000.00	10,970.68	10,978.10	10,968.68	39.59	38.36	89.51	-266.35	1,345.00	1,852.21	1,775.07	77.14	24.011	
11,100.00	11,070.68	11,078.10	11,068.68	39.93	38.71	89.51	-266.35	1,345.00	1,852.21	1,774.37	77.83	23.797	
11,200.00	11,170.68	11,178.10	11,168.68	40.27	39.06	89.51	-266.35	1,345.00	1,852.21	1,773.68	78.53	23.586	
11,300.00	11,270.68	11,278.10	11,268.68	40.61	39.41	89.51	-266.35	1,345.00	1,852.21	1,772.98	79.22	23.379	
11,400.00	11,370.68	11,378.10	11,368.68	40.95	39.76	89.51	-266.35	1,345.00	1,852.21	1,772.29	79.92	23.176	
11,500.00	11,470.68	11,478.10	11,468.68	41.30	40.11	89.51	-266.35	1,345.00	1,852.21	1,771.59	80.62	22.976	
11,600.00	11,570.68	11,578.10	11,568.68	41.64	40.46	89.51	-266.35	1,345.00	1,852.21	1,770.89	81.31	22.779	
11,602.56	11,573.24	11,580.66	11,571.24	41.65	40.47	89.51	-266.35	1,345.00	1,852.21	1,770.88	81.33	22.774	
11,650.00	11,620.63	11,628.05	11,618.63	41.80	40.64	89.57	-266.35	1,345.00	1,852.20	1,770.55	81.66	22.683	
11,664.53	11,635.09	11,642.51	11,633.09	41.85	40.69	89.61	-266.35	1,345.00	1,852.20	1,770.45	81.76	22.655	
11,700.00	11,670.21	11,677.63	11,668.21	41.97	40.81	89.76	-266.35	1,345.00	1,852.21	1,770.21	82.00	22.589	
11,750.00	11,719.06	11,726.48	11,717.06	42.12	40.98	90.09	-266.35	1,345.00	1,852.27	1,769.94	82.33	22.499	
11,800.00	11,766.80	11,774.22	11,764.80	42.26	41.15	90.55	-266.35	1,345.00	1,852.45	1,769.80	82.65	22.414	
11,850.00	11,813.06	11,820.48	11,811.06	42.39	41.31	91.13	-266.35	1,345.00	1,852.86	1,769.90	82.95	22.336	
11,900.00	11,857.50	11,864.92	11,855.50	42.51	41.47	91.84	-266.35	1,345.00	1,853.61	1,770.36	83.25	22.266	
11,950.00	11,899.78	11,907.20	11,897.78	42.61	41.61	92.66	-266.35	1,345.00	1,854.84	1,771.31	83.53	22.206	
12,000.00	11,939.57	11,946.99	11,937.57	42.70	41.75	93.60	-266.35	1,345.00	1,856.69	1,772.90	83.79	22.159	
12,050.00	11,976.57	11,983.99	11,974.57	42.78	41.88	94.63	-266.35	1,345.00	1,859.33	1,775.29	84.04	22.125	
12,100.00	12,010.50	12,016.47	12,007.04	42.84	42.00	95.75	-266.20	1,345.02	1,862.91	1,778.64	84.26	22.109	
12,150.00	12,041.11	12,046.58	12,037.12	42.89	42.10	96.91	-264.74	1,345.22	1,867.57	1,783.10	84.47	22.109	
12,200.00	12,068.15	12,077.35	12,067.72	42.92	42.20	98.09	-261.63	1,345.64	1,873.35	1,788.67	84.67	22.124	
12,250.00	12,091.43	12,108.94	12,098.92	42.94	42.31	99.27	-256.75	1,346.30	1,880.26	1,795.39	84.88	22.153	
12,300.00	12,110.76	12,141.57	12,130.82	42.96	42.41	100.44	-249.93	1,347.23	1,888.31	1,803.24	85.07	22.196	
12,350.00	12,126.01	12,175.58	12,163.58	42.96	42.51	101.58	-240.91	1,348.45	1,897.48	1,812.22	85.27	22.254	
12,400.00	12,137.04	12,211.42	12,197.46	42.98	42.62	102.66	-229.35	1,350.02	1,907.76	1,822.30	85.45	22.326	
12,402.56	12,137.49	12,213.31	12,199.23	42.98	42.63	102.72	-228.68	1,350.11	1,908.31	1,822.85	85.46	22.330	
12,450.00	12,144.57	12,250.85	12,233.81	43.04	42.73	103.65	-214.23	1,352.07	1,919.04	1,833.41	85.63	22.411	
12,500.00	12,149.49	12,296.78	12,274.71	43.16	42.86	104.47	-193.55	1,354.87	1,931.17	1,845.37	85.80	22.508	
12,550.00	12,151.81	12,352.02	12,321.49	43.29	43.00	105.03	-164.47	1,358.81	1,944.02	1,858.05	85.97	22.614	
12,569.23	12,152.00	12,376.60	12,341.35	43.35	43.06	105.16	-150.12	1,360.76	1,949.11	1,863.09	86.02	22.658	
12,600.00	12,152.00	12,421.91	12,376.26	43.44	43.17	105.19	-121.52	1,364.63	1,957.33	1,871.22	86.12	22.729	
12,700.00	12,152.00	12,646.13	12,510.16	43.78	43.66	102.83	54.93	1,388.55	1,982.56	1,896.10	86.46	22.930	
12,800.00	12,152.00	12,841.45	12,570.10	44.18	44.10	100.27	238.67	1,413.46	2,002.44	1,915.42	87.02	23.011	
12,900.00	12,152.00	13,022.27	12,589.89	44.63	44.59	97.91	416.51	1,437.57	2,018.57	1,930.70	87.87	22.971	
13,000.00	12,152.00	13,000.00	12,590.00	45.13	44.37	93.46	668.47	1,461.37	2,027.68	1,939.42	88.26	22.974	
13,100.00	12,152.00	13,508.26	12,590.00	45.68	46.65	89.61	901.20	1,464.97	2,028.39	1,937.25	91.14	22.257	
13,200.00	12,152.00	13,608.26	12,590.00	46.29	47.23	89.61	1,001.20	1,464.29	2,028.39	1,936.09	92.30	21.977	
13,300.00	12,152.00	13,708.26	12,590.00	46.94	47.86	89.61	1,101.20	1,463.61	2,028.39	1,934.83	93.56	21.681	
13,400.00	12,152.00	13,808.26	12,590.00	47.65	48.54	89.61	1,201.20	1,462.93	2,028.39	1,933.48	94.91	21.372	
13,500.00	12,152.00	13,908.26	12,590.00	48.39	49.26	89.61	1,301.19	1,462.25	2,028.39	1,932.03	96.36	21.051	
13,600.00	12,152.00	14,008.26	12,590.00	49.19	50.03	89.61	1,401.19	1,461.57	2,028.39	1,930.50	97.89	20.721	
13,700.00	12,152.00	14,108.26	12,590.00	50.02	50.84	89.61	1,501.19	1,460.89	2,028.39	1,928.89	99.50	20.386	
13,800.00	12,152.00	14,208.26	12,590.00	50.89	51.70	89.61	1,601.19	1,460.22	2,028.39	1,927.19	101.20	20.043	
13,900.00	12,152.00	14,308.26	12,590.00	51.81	52.59	89.61	1,701.19	1,459.54	2,028.39	1,925.42	102.97	19.699	

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design Brad Dyer 35-22S-32E AR - #226H - Wellbore #1 - Design #2

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

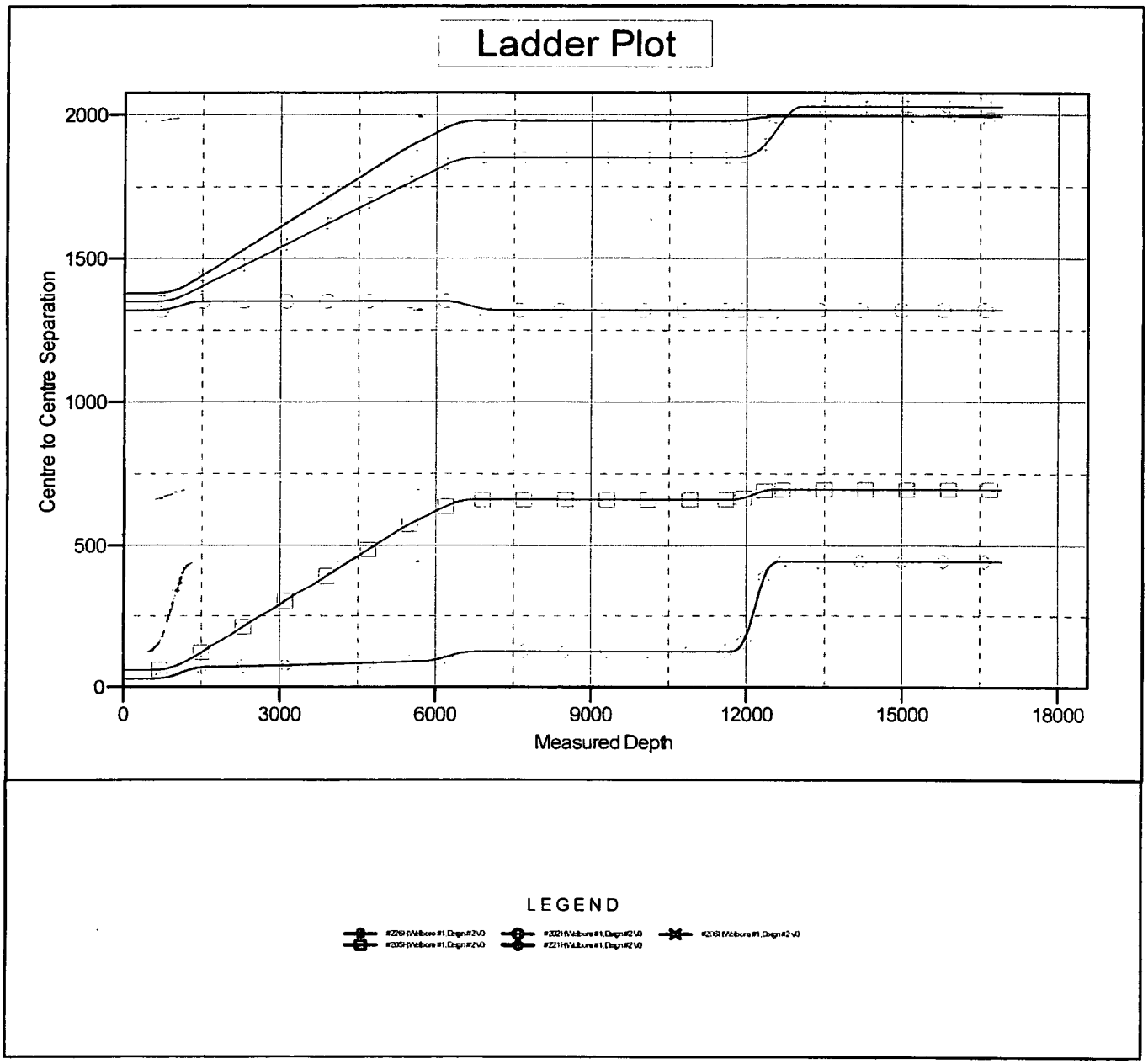
Offset Well Error: 0.00 usft

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)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,000.00	12,152.00	14,408.26	12,590.00	52.75	53.52	89.61	1,801.18	1,458.86	2,028.39	1,923.58	104.81	19.353	
14,100.00	12,152.00	14,508.26	12,590.00	53.74	54.48	89.61	1,901.18	1,458.18	2,028.39	1,921.67	106.72	19.007	
14,200.00	12,152.00	14,608.26	12,590.00	54.75	55.47	89.61	2,001.18	1,457.50	2,028.39	1,919.70	108.69	18.662	
14,300.00	12,152.00	14,708.26	12,590.00	55.80	56.50	89.61	2,101.18	1,456.82	2,028.39	1,917.66	110.73	18.319	
14,400.00	12,152.00	14,808.26	12,590.00	56.87	57.56	89.61	2,201.17	1,456.14	2,028.39	1,915.57	112.82	17.979	
14,500.00	12,152.00	14,908.26	12,590.00	57.97	58.64	89.61	2,301.17	1,455.47	2,028.39	1,913.42	114.96	17.644	
14,600.00	12,152.00	15,008.26	12,590.00	59.10	59.75	89.61	2,401.17	1,454.79	2,028.39	1,911.23	117.16	17.313	
14,700.00	12,152.00	15,108.26	12,590.00	60.25	60.89	89.61	2,501.17	1,454.11	2,028.39	1,908.98	119.41	16.987	
14,800.00	12,152.00	15,208.26	12,590.00	61.43	62.05	89.61	2,601.16	1,453.43	2,028.39	1,906.69	121.70	16.668	
14,900.00	12,152.00	15,308.26	12,590.00	62.62	63.23	89.61	2,701.16	1,452.75	2,028.39	1,904.36	124.03	16.354	
15,000.00	12,152.00	15,408.26	12,590.00	63.84	64.43	89.61	2,801.16	1,452.07	2,028.39	1,901.98	126.41	16.047	
15,100.00	12,152.00	15,508.26	12,590.00	65.08	65.65	89.61	2,901.16	1,451.39	2,028.39	1,899.57	128.82	15.746	
15,200.00	12,152.00	15,608.26	12,590.00	66.33	66.89	89.61	3,001.16	1,450.71	2,028.39	1,897.12	131.27	15.452	
15,300.00	12,152.00	15,708.26	12,590.00	67.61	68.15	89.61	3,101.15	1,450.04	2,028.39	1,894.63	133.76	15.165	
15,400.00	12,152.00	15,808.26	12,590.00	68.89	69.43	89.61	3,201.15	1,449.36	2,028.39	1,892.12	136.27	14.885	
15,500.00	12,152.00	15,908.26	12,590.00	70.20	70.72	89.61	3,301.15	1,448.68	2,028.39	1,889.57	138.82	14.612	
15,600.00	12,152.00	16,008.26	12,590.00	71.52	72.03	89.61	3,401.15	1,448.00	2,028.39	1,886.99	141.40	14.345	
15,700.00	12,152.00	16,108.26	12,590.00	72.85	73.35	89.61	3,501.14	1,447.32	2,028.39	1,884.39	144.00	14.086	
15,800.00	12,152.00	16,208.26	12,590.00	74.20	74.68	89.61	3,601.14	1,446.64	2,028.39	1,881.75	146.63	13.833	
15,900.00	12,152.00	16,308.26	12,590.00	75.56	76.03	89.61	3,701.14	1,445.96	2,028.39	1,879.10	149.29	13.587	
16,000.00	12,152.00	16,408.26	12,590.00	76.93	77.39	89.61	3,801.14	1,445.28	2,028.39	1,876.42	151.97	13.347	
16,100.00	12,152.00	16,508.26	12,590.00	78.31	78.76	89.61	3,901.13	1,444.61	2,028.39	1,873.72	154.67	13.114	
16,200.00	12,152.00	16,608.26	12,590.00	79.70	80.14	89.61	4,001.13	1,443.93	2,028.39	1,871.00	157.39	12.888	
16,300.00	12,152.00	16,708.26	12,590.00	81.10	81.54	89.61	4,101.13	1,443.25	2,028.39	1,868.26	160.13	12.667	
16,400.00	12,152.00	16,808.26	12,590.00	82.52	82.94	89.61	4,201.13	1,442.57	2,028.39	1,865.49	162.89	12.452	
16,500.00	12,152.00	16,908.26	12,590.00	83.94	84.35	89.61	4,301.13	1,441.89	2,028.39	1,862.71	165.67	12.243	
16,600.00	12,152.00	17,008.26	12,590.00	85.37	85.77	89.61	4,401.12	1,441.21	2,028.39	1,859.92	168.47	12.040	
16,700.00	12,152.00	17,108.26	12,590.00	86.80	87.20	89.61	4,501.12	1,440.53	2,028.39	1,857.11	171.28	11.842	
16,800.00	12,152.00	17,208.26	12,590.00	88.25	88.64	89.61	4,601.12	1,439.85	2,028.39	1,854.28	174.11	11.650	
16,900.00	12,152.00	17,308.26	12,590.00	89.70	90.07	89.61	4,701.12	1,439.18	2,028.39	1,851.45	176.94	11.464	
16,919.32	12,152.00	17,327.59	12,590.00	89.98	90.31	89.61	4,720.44	1,439.04	2,028.39	1,850.93	177.46	11.430	SF

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 #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 3762.50usft (Patterson 282) Coordinates are relative to: #201H
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Central Meridian is 104° 20' 0.000 W Grid Convergence at Surface is: 0.37°

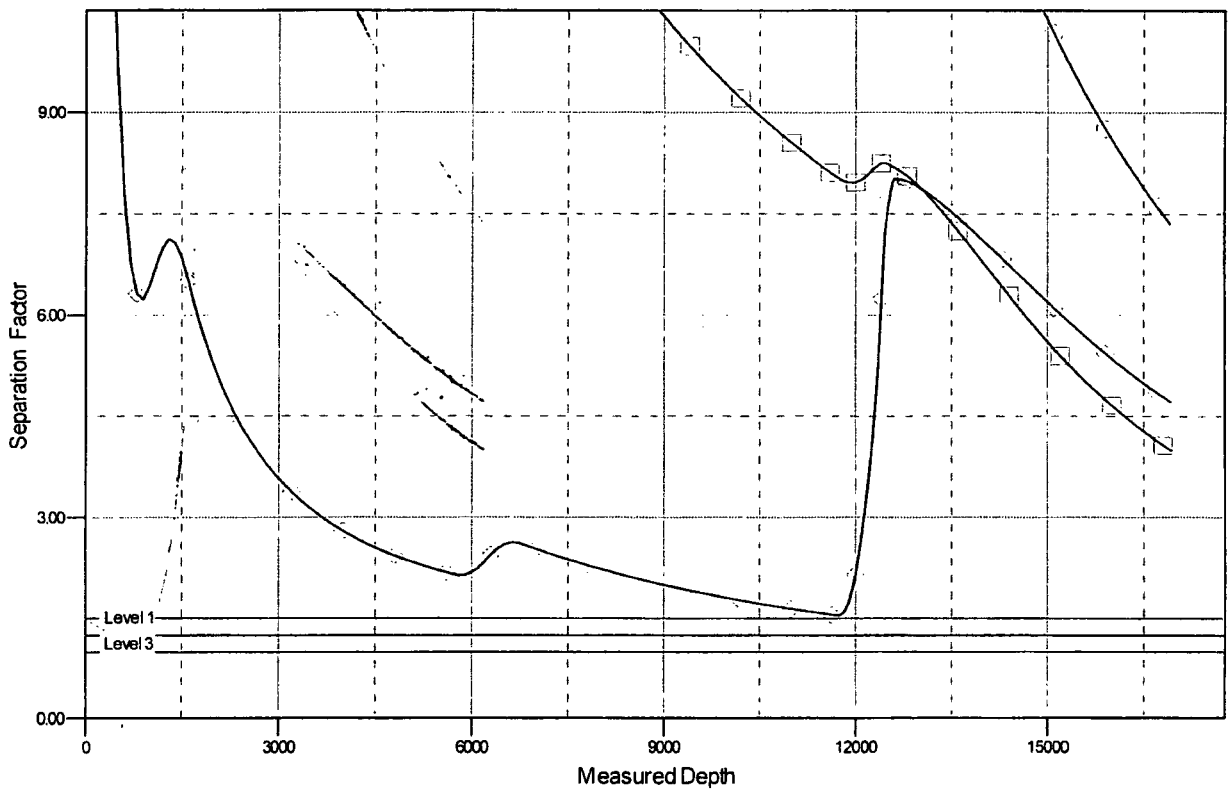


CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	Matador Resources	**Local Co-ordinate Reference:**	Well #201H
Project:	Lea County, New Mexico (NAD 27)	**TVD Reference:**	WELL @ 3762.50usft (Patterson 282)
Reference Site:	Brad Dyer 35-22S-32E AR	**MD Reference:**	WELL @ 3762.50usft (Patterson 282)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM Conroe
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

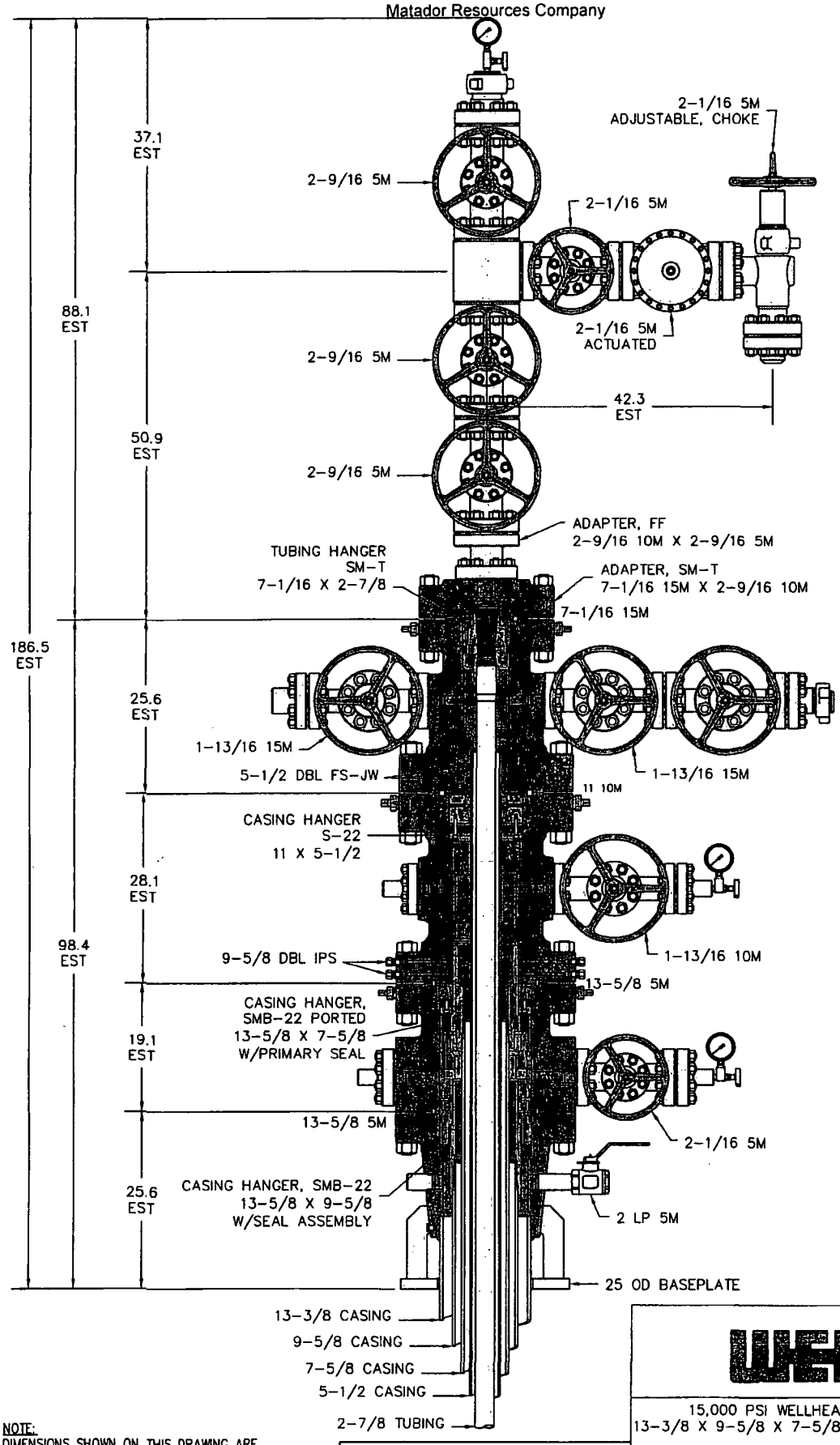
Reference Depths are relative to WELL @ 3762.50usft (Patterson 282) Coordinates are relative to: #201H
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Central Meridian is 104° 20' 0.000 W Grid Convergence at Surface is: 0.37°

Separation Factor Plot



LEGEND

Matador Resources Company



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

15,000 PSI WELLHEAD ASSEMBLY
13-3/8 X 9-5/8 X 7-5/8 X 5-1/2 X 2-7/8

DRAWN BY:	SCALE	DATE	REV
RPL	1-11	06OCT17	
CHECKED BY:	DRAWING NO.		
APPROVED BY:	P-22401		