

Form 3160-3
(June 2015)FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER 1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other 1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		5. Lease Serial No. NMNM27507 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No. RED HILLS WEST 21 FED COM [38643] 475H 9. API Well No. 30-025-52298
2. Name of Operator MEWBOURNE OIL COMPANY [14744] 3a. Address P O BOX 5270, HOBBS, NM 88241 3b. Phone No. (include area code) (575) 393-5905		10. Field and Pool, or Exploratory [97903] WC-025 G-09 S223332A/bone spring 11. Sec., T. R. M. or Blk. and Survey or Area SEC 21/T26S/R32E/NMP
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NWNE / 250 FNL / 1680 FEL / LAT 32.0348786 / LONG -103.6768129 At proposed prod. zone SWSE / 100 FSL / 2220 FEL / LAT 32.021137 / LONG -103.6785248		12. County or Parish LEA 13. State NM
14. Distance in miles and direction from nearest town or post office* 10 miles		15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 210 feet 16. No of acres in lease 160.0 17. Spacing Unit dedicated to this well 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 20 feet 19. Proposed Depth 9915 feet / 14889 feet 20. BLM/BIA Bond No. in file FED: NM 1693
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3157 feet		22. Approximate date work will start* 05/25/2021 23. Estimated duration 60 days
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- | | |
|---|---|
| 1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM. |
|---|---|

25. Signature (Electronic Submission)	Name (Printed/Typed) BRADLEY BISHOP / Ph: (575) 393-5905	Date 02/27/2023
Title Regulatory		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) CODY LAYTON / Ph: (575) 234-5959	Date 11/30/2023
Title Assistant Field Manager Lands & Minerals		
Office Carlsbad Field Office		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
 Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NGMP Rec 12/04/2023**SL**

(Continued on page 2)

APPROVED WITH CONDITIONS

Approval Date: 11/30/2023
KZ
12/12/2023

*(Instructions on page 2)

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM connects this information to an evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Connection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Additional Operator Remarks

Location of Well

0. SHL: NWNE / 250 FNL / 1680 FEL / TWSP: 26S / RANGE: 32E / SECTION: 21 / LAT: 32.0348786 / LONG: -103.6768129 (TVD: 0 feet, MD: 0 feet)
PPP: NWNE / 100 FNL / 2220 FEL / TWSP: 26S / RANGE: 32E / SECTION: 21 / LAT: 32.0352897 / LONG: -103.6785576 (TVD: 9610 feet, MD: 9648 feet)
PPP: NWSE / 2674 FSL / 2220 FEL / TWSP: 26S / RANGE: 32E / SECTION: 21 / LAT: 32.0282125 / LONG: -103.6785412 (TVD: 9893 feet, MD: 12314 feet)
BHL: SWSE / 100 FSL / 2220 FEL / TWSP: 26S / RANGE: 32E / SECTION: 21 / LAT: 32.021137 / LONG: -103.6785248 (TVD: 9915 feet, MD: 14889 feet)

BLM Point of Contact

Name: TENILLE C MOLINA
Title: Land Law Examiner
Phone: (575) 234-2224
Email: TCMOLINA@BLM.GOV

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Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

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**PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL**

Mewbourne Oil Company

**Red Hills West 21 400-800-500 Wells
Lease Number NMNM027507
LEA, COUNTY NEW MEXICO**

Well Pad 1

RED HILLS WEST 21 FED COM 457H

Surface Hole Location: 250' FNL & 1640' FEL, Section 21, T. 26S., R. 32E.

Bottom Hole Location: 100' FSL & 1320' FEL, Section 21, T. 26S., R 32E.

RED HILLS WEST 21 FED COM 475H

Surface Hole Location: 250' FNL & 1680' FEL, Section 21, T. 26S., R. 32E.

Bottom Hole Location: 100' FSL & 2220' FEL, Section 21, T. 26S., R 32E.

RED HILLS WEST 21 FED COM 478H

Surface Hole Location: 250' FNL & 1600' FEL, Section 21, T. 26S., R. 32E.

Bottom Hole Location: 100' FSL & 420' FEL, Section 21, T. 26S., R 32E.

RED HILLS WEST 21 FED COM 805H

Surface Hole Location: 250' FNL & 1700' FEL, Section 21, T. 26S., R. 32E.

Bottom Hole Location: 100' FSL & 2260' FEL, Section 21, T. 26S., R 32E.

RED HILLS WEST 21 FED COM 808H

Surface Hole Location: 250' FNL & 1620' FEL, Section 21, T. 26S., R. 32E.

Bottom Hole Location: 100' FSL & 460' FEL, Section 21, T. 26S., R 32E.

RED HILLS WEST 21 FED COM 816H

Surface Hole Location: 250' FNL & 1660' FEL, Section 21, T. 26S., R. 32E.

Bottom Hole Location: 100' FSL & 1360' FEL, Section 21, T. 26S., R 32E.

Well Pad 2

RED HILLS WEST 21 FED COM 515H

Surface Hole Location: 250' FNL & 1350' FEL, Section 21, T. 26S., R. 32E.

Bottom Hole Location: 100' FSL & 2260' FEL, Section 21, T. 26S., R 32E.

RED HILLS WEST 21 FED COM 518H

Surface Hole Location: 250' FNL & 1270' FEL, Section 21, T. 26S., R. 32E.

Bottom Hole Location: 100' FSL & 460' FEL, Section 21, T. 26S., R 32E.

RED HILLS WEST 21 FED COM 526H

Surface Hole Location: 250' FNL & 1310' FEL, Section 21, T. 26S., R. 32E.

Bottom Hole Location: 100' FSL & 1360' FEL, Section 21, T. 26S., R 32E.

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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.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Cave/Karst
 - Watershed/Water Quality
- ☐ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment & Reclamation**

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)

Watershed/Water Quality:

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

- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g. caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.

Cave and Karst:

****** Depending on location, additional Drilling, Casing, and Cementing procedures may be required by engineering to protect critical karst groundwater recharge areas.

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

Construction:

In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

No Blasting:

No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

Pad Berming:

- The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.
- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g. caliche).

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

Tank Battery Liners and Berms:

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

Leak Detection System:

A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating valves and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

Automatic Shut-off Systems:

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

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:

Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

Directional Drilling:

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

Lost Circulation:

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cave-bearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

Abandonment Cementing:

Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

Pressure Testing:

Annual pressure monitoring will be performed by the operator on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised. (Any access road crossing the berm cannot be lower than the berm height.)

Tank Battery:

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

FLOWLINES (SURFACE):

- Flowlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize the possibility of leaks and spills from entering karst systems.
- If a void is encountered alignments may be rerouted to avoid the karst feature and lessen; the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

Transportation:

The two track road that runs E-W along the overhead powerlines will be posted with "Not a Road" signage and blocked off at the intersection with the main road that runs N-S and rerouted pad road that runs NW-SE by building a barricade across old two-track using large boulders no smaller four feet in diameter.

VI. CONSTRUCTION**A. NOTIFICATION**

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

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

B. TOPSOIL

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

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

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

D. FEDERAL MINERAL MATERIALS PIT

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

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing

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

G. ON LEASE ACCESS ROADS

Road Width

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

Surfacing

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

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

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

Crowning

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

Ditching

Ditching shall be required on both sides of the road.

Turnouts

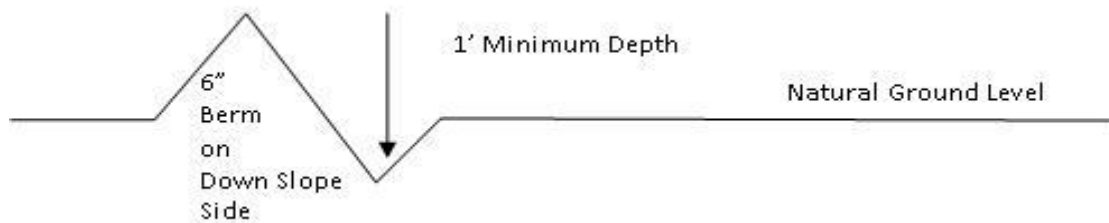
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

Cattle guards

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

condition of the existing cattle guards that are in place and are utilized during lease operations.

Fence Requirement

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

Public Access

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

Construction Steps

1. Salvage topsoil
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes



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

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

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

Exclosure Netting (Open-top Tanks)

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

Chemical and Fuel Secondary Containment and Exclosure Screening

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

Open-Vent Exhaust Stack Exclosures

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production

equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures

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

Painting Requirement

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

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).

Seed Mixture 2, for Sandy Sites

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

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

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

<u>Species</u>	<u>lb/acre</u>
Sand dropseed (<i>Sporobolus cryptandrus</i>)	1.0
Sand love grass (<i>Eragrostis trichodes</i>)	1.0
Plains bristlegrass (<i>Setaria macrostachya</i>)	2.0

*Pounds of pure live seed:

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

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL COMPANY
WELL NAME & NO.:	RED HILLS WEST 21 FED COM 475H
SURFACE HOLE FOOTAGE:	250'/N & 1680'/E
BOTTOM HOLE FOOTAGE	100'/S & 2220'/E
SURFACE LOCATION:	Section 21, T.26 S., R.32 E. NMP.
COUNTY:	Lea County, New Mexico

COA

H ₂ S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input type="checkbox"/> Pilot Hole	<input type="checkbox"/> Open Annulus
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H₂S) Drilling Plan shall be activated **AT SPUD**. As a result, the Hydrogen Sulfide area must meet **43 CFR 3176** requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING DESIGN

1. The **13-3/8** inch surface casing shall be set at approximately **625 ft.** (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 ft. 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 will be a minimum of **8 hours** or **500 psi compressive strength**, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours

after bringing cement to surface or 500 psi compressive strength, whichever is greater.

- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The **9-5/8 inch** intermediate casing shall be set in a competent bed at approximately **4,330 ft.** The minimum required fill of cement behind the **9-5/8 inch** intermediate casing is:
 - **Cement to surface.** If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to **Cave/Karst.**
 - ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
 3. Operator has proposed to set **7 in.** production casing at approximately **9,323 ft.** The minimum required fill of cement behind the **7 in.** production casing is:

Option 1 (Single Stage): Cement should tie-back **at least 200 feet** into previous casing string. Operator shall provide method of verification. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to **Cave/Karst.**

Option 2 (Two-stage): Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. **First stage to DV tool:** Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
 - b. **Second stage above DV tool:** Cement should tie-back **at least 200 feet** into previous casing string. Operator shall provide method of verification. If cement does not circulate, contact the appropriate BLM office. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to **Cave/Karst.**
4. The minimum required fill of cement behind the **4-1/2 in.** production liner is:
 - Cement should tie-back **at least 100 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use **flex line** from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).

2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi. Before drilling the surface casing shoe out, the BOP/BOPE and annular preventer shall be pressure-tested in accordance with **title 43 CFR 3172 and API Standard 53**.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in the **title 43 CFR 3172.6(b)(9)** must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

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

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

☒ Eddy County

EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
BLM_NM_CFO_DrillingNotifications@BLM.GOV
(575) 361-2822

☒ Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per **title 43 CFR 3172**
 - as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the

- approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in the **title 43 CFR 3172 and API STD 53 Sec. 5.3**.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in the **title 43 CFR 3172.6(b)(9)** must be followed.
 - e. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been

done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000-psi chart for a 2-3M BOP/BOP, on a 10000-psi chart for a 5M BOP/BOPE and on a 15000-psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one-hour chart. A circular chart shall have a maximum 2-hour clock. If a twelve hour or twenty-four-hour chart is used, tester shall make a notation that it is run with a two-hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low-pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained

and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

SA 11/08/2023

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

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

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-52298	² Pool Code 97903	³ Pool Name WILDCAT; LWR BONE SPRING
⁴ Property Code 38643	⁵ Property Name RED HILLS WEST 21 FED COM	⁶ Well Number 475H
⁷ GRID NO. 14744	⁸ Operator Name MEWBOURNE OIL COMPANY	⁹ Elevation 3157'

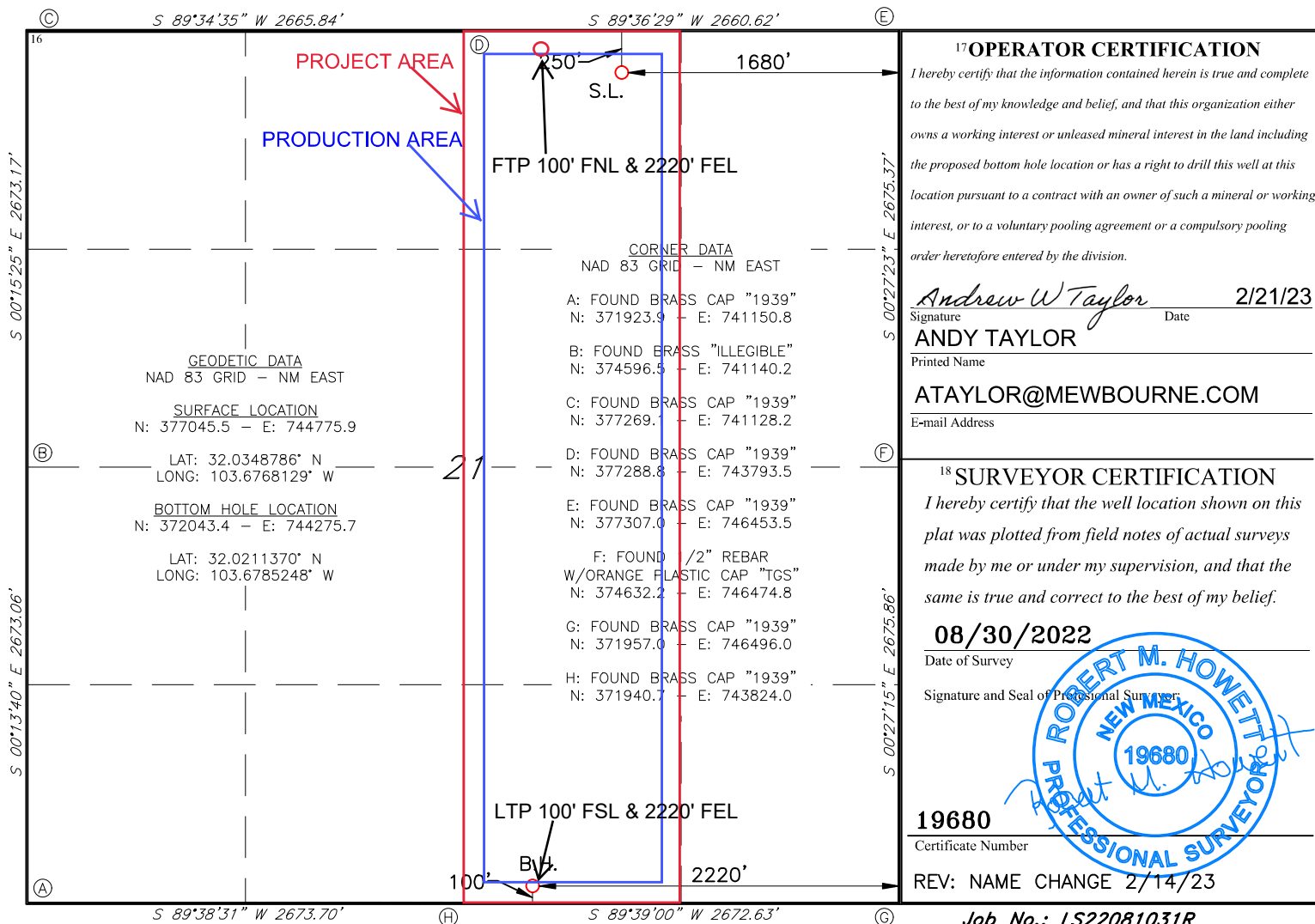
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
B	21	26S	32E		250	NORTH	1680	EAST	LEA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	21	26S	32E		100	SOUTH	2220	EAST	LEA
¹² Dedicated Acres 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.



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State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Mewbourne Oil Co. **OGRID:** 14744 **Date:** 5/2/22

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Red Hills West 21 Fed Com 475H		B 21 26S 32E	250' FNL x 1680' FBL	1500	2500	4000

IV. Central Delivery Point Name: Red Hills West 21 Fed Com 475H [See 19.15.27.9(D)(1) NMAC]

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

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Red Hills West 21 Fed Com 475H		7/2/22	8/2/22	9/2/22	9/17/22	9/17/22

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

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

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

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Section 2 – Enhanced Plan**EFFECTIVE APRIL 1, 2022**

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications**Effective May 25, 2021**

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

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature:	<i>Bradley Bishop</i>
Printed Name:	BRADLEY BISHOP
Title:	REGULATORY MANAGER
E-mail Address:	BBISHOP@MEWBOURNE.COM
Date:	5/2/22
Phone:	575-393-5905
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

Mewbourne Oil Company

Natural Gas Management Plan – Attachment

- VI. Separation equipment will be sized by construction engineering staff based on stated manufacturer daily throughput capacities and anticipated daily production rates to ensure adequate capacity. Closed vent system piping, compression needs, and VRUs will be sized utilizing ProMax modelling software to ensure adequate capacity for anticipated production volumes and conditions.
- VII. Mewbourne Oil Company (MOC) will take following actions to comply with the regulations listed in 19.15.27.8 :
- A. MOC will maximize the recovery of natural gas by minimizing the waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. MOC will ensure that well(s) will be connected to a natural gas gathering system with sufficient capacity to transport natural gas. If there is no adequate takeaway for the gas, well(s) will be shut in until the natural gas gathering system is available.
 - B. All drilling operations will be equipped with a rig flare located at least 100 ft from the nearest surface hole. Rig flare will be utilized to combust any natural gas that is brought to surface during normal drilling operations. In the case of emergency venting or flaring the volumes will be estimated and reported appropriately.
 - C. During completion operations any natural gas brought to surface will be flared. Immediately following the finish of completion operations, all well flow will be directed to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. It is not anticipated that gas will not meet pipeline standards. However, if natural gas does not meet gathering pipeline quality specifications, MOC will flare the natural gas for 60 days or until the natural gas meets the pipeline quality specifications, whichever is sooner. MOC will ensure that the flare is sized properly and is equipped with automatic igniter or continuous pilot. The gas sample will analyzed twice per week and the gas will be routed into a gathering system as soon as pipeline specifications are met.
 - D. Natural gas will not be flared with the exceptions and provisions listed in the 19.15.27.8 D.(1) through (4). If there is no adequate takeaway for the separator gas, well(s) will be shut in until the natural gas gathering system is available with exception of emergency or malfunction situations. Venting and/or flaring volumes will be estimated and reported appropriately.
 - E. MOC will comply with the performance standards requirements and provisions listed in 19.15.27.8 E.(1) through (8). All equipment will be designed and sized to handle maximum anticipated pressures and throughputs in order to minimize the waste. Production storage tanks constructed after May 25, 2021 will be equipped with automatic gauging system. Flares constructed after May 25, 2021 will be equipped with automatic igniter or continuous pilot. Flares will be located at least 100' from the well and storage tanks unless otherwise approved by the division. MOC will conduct AVO inspections as described in 19.15.27.8 E (5) (a) with frequencies specified in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.
 - F. The volume of natural gas that is vented or flared as the result of malfunction or emergency during drilling and completions operations will be estimated. The volume of natural gas that is vented, flared or beneficially used during production operations, will be measured or estimated. MOC will install equipment to measure

the volume of natural gas flared from existing process piping or a flowline piped from equipment such as high pressure separators, heater treaters, or vapor recovery units associated with a well or facility associated with a well authorized by an APD issued after May 25, 2021 that has an average daily production greater than 60 Mcf/day. If metering is not practicable due to circumstances such as low flow rate or low pressure venting and flaring, MOC will estimate the volume of vented or flared natural gas. Measuring equipment will conform to industry standards and will not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.

- VIII. For maintenance activities involving production equipment and compression, venting will be limited to the depressurization of the subject equipment to ensure safe working conditions. For maintenance of production and compression equipment the associated producing wells will be shut in to eliminate venting. For maintenance of VRUs all gas normally routed to the VRU will be routed to flare to eliminate venting.



U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Drilling Plan Data Report

12/04/2023

APD ID: 10400090466

Submission Date: 02/27/2023

Highlighted data
reflects the most
recent changes

Operator Name: MEWBOURNE OIL COMPANY

Well Name: RED HILLS WEST 21 FED COM

Well Number: 475H

Well Type: OIL WELL

Well Work Type: Drill

[Show Final Text](#)

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
12540314	UNKNOWN	3157	28	28	OTHER : Topsoil	NONE	N
12540336	RUSTLER	2601	556	556	ANHYDRITE, DOLOMITE	USEABLE WATER	N
12540326	TOP SALT	2272	885	885	SALT	NONE	N
12540329	BOTTOM SALT	-1029	4186	4186	SALT	NONE	N
12540330	DELAWARE	-1248	4405	4405	LIMESTONE	NATURAL GAS, OIL	N
12540328	BELL CANYON	-1275	4432	4432	SANDSTONE	NATURAL GAS, OIL	N
12540322	CHERRY CANYON	-2258	5415	5415	SANDSTONE	NATURAL GAS, OIL	N
12540323	MANZANITA	-2448	5605	5605	SANDSTONE	NATURAL GAS, OIL	N
12540324	BRUSHY CANYON	-3945	7102	7102	SANDSTONE	NATURAL GAS, OIL	N
12540333	BONE SPRING	-5358	8515	8515	LIMESTONE, SHALE	NATURAL GAS, OIL	N
12540334	BONE SPRING 1ST	-6321	9478	9478	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 14889

Equipment: Annular Pipe Rams Blind Rams Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart. Anchors are not required by manufacturer. A variance is requested to use a multi-bowl wellhead.

Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the

Operator Name: MEWBOURNE OIL COMPANY**Well Name:** RED HILLS WEST 21 FED COM**Well Number:** 475H

components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

Choke Diagram Attachment:

Red_Hills_West_21_Fed_Com_475H_5M_BOPE_Choke_Diagram_20230215151245.pdf

Red_Hills_West_21_Fed_Com_475H_Flex_Line_Specs_API_16C_20230215151245.pdf

Red_Hills_West_21_Fed_Com_475H_Flex_Line_Specs_20230215151245.pdf

BOP Diagram Attachment:

Red_Hills_West_21_Fed_Com_475H_5M_BOPE_Schematic_20230215151309.pdf

Red_Hills_West_21_Fed_Com_475H_Multi_Bowl_WH_20230215151309.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	625	0	625	3157	2532	625	H-40	48	ST&C	2.69	6.05	DRY	10.73	DRY	18.03
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	3453	0	3453		-296	3453	J-55	36	LT&C	1.13	1.96	DRY	2.84	DRY	3.54
3	INTERMEDIATE	12.25	9.625	NEW	API	N	3453	4330	3453	4330	-295	-1173	877	J-55	40	LT&C	1.14	1.75	DRY	14.82	DRY	17.96
4	PRODUCTION	8.75	7.0	NEW	API	N	0	9323	0	9302	3236	-6145	9323	P-110	26	LT&C	1.61	2.06	DRY	2.86	DRY	3.84
5	LINER	6.125	4.5	NEW	API	N	9123	14889	9102	9915	-5945	-6758	5766	P-110	13.5	LT&C	2.07	2.41	DRY	4.34	DRY	5.42

Casing Attachments

Operator Name: MEWBOURNE OIL COMPANY**Well Name:** RED HILLS WEST 21 FED COM**Well Number:** 475H**Casing Attachments**

Casing ID: 1 **String** SURFACE**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**Red_Hills_West_21_Fed_Com_475H_Csg_Assumptions_20230215151336.doc

Casing ID: 2 **String** INTERMEDIATE**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**Red_Hills_West_21_Fed_Com_475H_Csg_Assumptions_20230215151343.doc

Casing ID: 3 **String** INTERMEDIATE**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**Red_Hills_West_21_Fed_Com_475H_Csg_Assumptions_20230215151352.doc

Operator Name: MEWBOURNE OIL COMPANY

Well Name: RED HILLS WEST 21 FED COM

Well Number: 475H

Casing Attachments

Casing ID: 4 String PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Red_Hills_West_21_Fed_Com_475H_Csg_Assumptions_20230215151400.doc

Casing ID: 5 String LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Red_Hills_West_21_Fed_Com_475H_Csg_Assumptions_20230215151408.doc

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Lead		0	0	0	0	0	0	0	0	NA

SURFACE	Lead		0	433	285	2.12	12.5	604	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		433	625	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	3668	700	2.12	12.5	1484	25	Class C	Salt, Gel, Extender, LCM

Operator Name: MEWBOURNE OIL COMPANY**Well Name:** RED HILLS WEST 21 FED COM**Well Number:** 475H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail		3668	4330	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	5605	4130	4905	70	2.12	12.5	148	25	Class C	Salt, Gel, Extender, LCM
PRODUCTION	Tail		4905	5605	100	1.34	14.8	134	25	Class C	Retarder
PRODUCTION	Lead	5605	5605	6835	110	2.12	12.5	233	25	Class C	Salt, Gel, Extender, LCM
PRODUCTION	Tail		6835	9323	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		9123	14889	230	2.97	11.2	683	25	Class H	Salt + Gel + Fluid Loss + Retarder + Dispersant + Defoamer + Anti-Settling Agent

Section 5 - Circulating Medium

Mud System Type: Closed**Will an air or gas system be Used?** NO**Description of the equipment for the circulating system in accordance with Onshore Order #2:****Diagram of the equipment for the circulating system in accordance with Onshore Order #2:****Describe what will be on location to control well or mitigate other conditions:** Lost circulation material, sweeps, mud scavengers**Describe the mud monitoring system utilized:** Pason/PVT/visual monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	625	SPUD MUD	8.6	8.8							

Operator Name: MEWBOURNE OIL COMPANY**Well Name:** RED HILLS WEST 21 FED COM**Well Number:** 475H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
625	4330	SALT SATURATED	10	10							
4330	9323	WATER-BASED MUD	8.6	9.7							
9323	14889	OIL-BASED MUD	8.6	10							

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Will run GR/CNL in deeper offset Red Hills West 21 Fed Com #816H

List of open and cased hole logs run in the well:

DIRECTIONAL SURVEY, MEASUREMENT WHILE DRILLING, MUD LOG/GEOLOGIC LITHOLOGY LOG,

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5156

Anticipated Surface Pressure: 2974

Anticipated Bottom Hole Temperature(F): 145

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geohazards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Red_Hills_West_21_Fed_Com_475H_H2S_Plan_20230215151449.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: RED HILLS WEST 21 FED COM

Well Number: 475H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Red_Hills_West_21_Fed_Com_475H_Dir_Plot_20230215151507.pdf

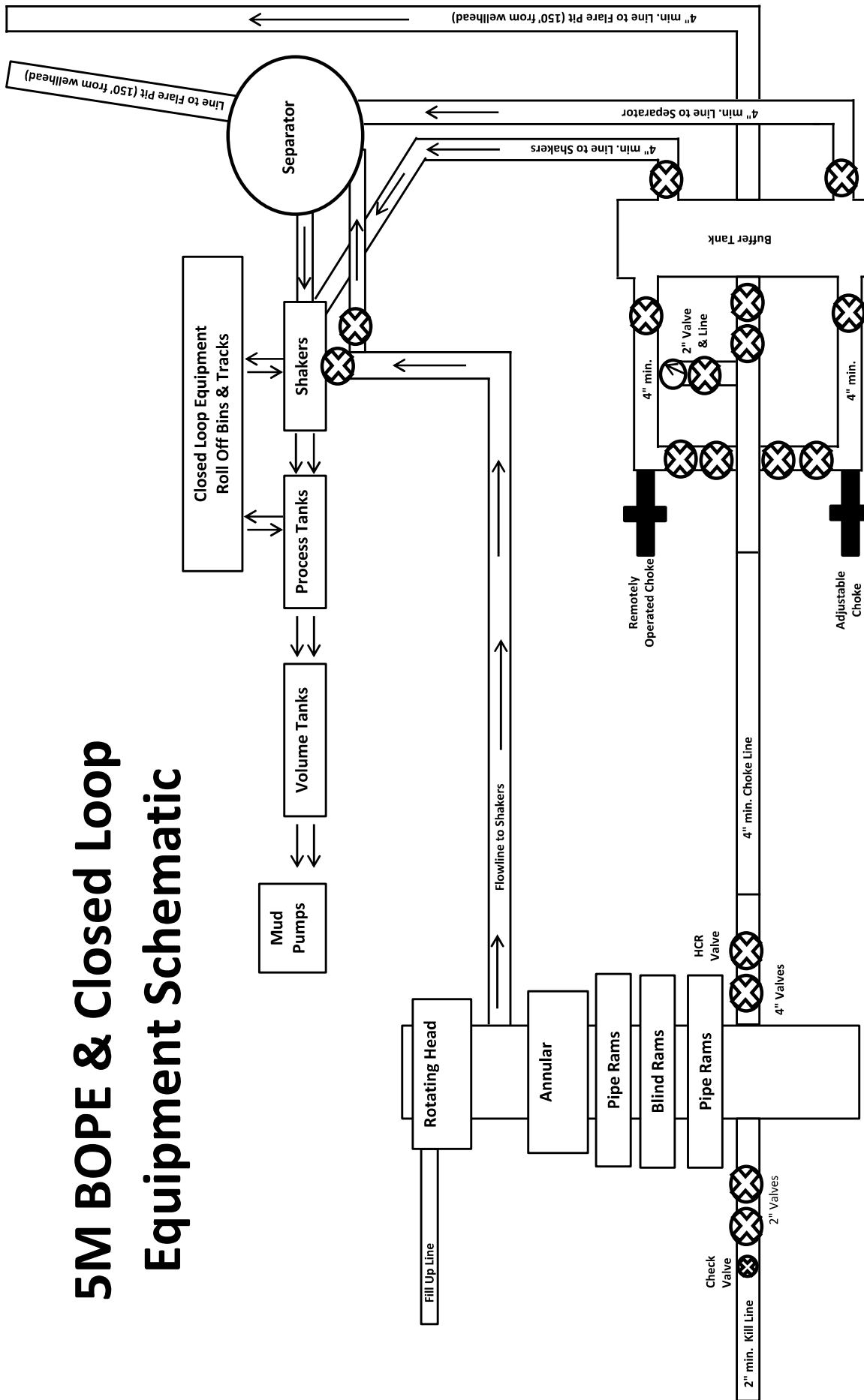
Red_Hills_West_21_Fed_Com_475H_Dir_Plan_20230215151508.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Other Variance attachment:

5M BOPE & Closed Loop Equipment Schematic



Drawing not to scale



GATES ENGINEERING & SERVICES NORTH AMERICA
7603 Prairie Oak Dr.
Houston, TX 77086

PHONE: (281) 602 - 4119
FAX:
EMAIL: Troy.Schmidt@gates.com
WEB: www.gates.com

10K CHOKE & KILL ASSEMBLY PRESSURE TEST CERTIFICATE

Customer:	A-7 AUSTIN INC DBA AUSTIN HOSE	Test Date:	8/20/2018
Customer Ref.:	4101901	Hose Serial No.:	H-082018-10
Invoice No.:	511956	Created By:	Moosa Naqvi
Product Description:	10KF3.035.0CK41/1610KFLGFXDxFLT L/E		
End Fitting 1:	4 1/16 in. Fixed Flange	End Fitting 2:	4 1/16 in. Float Flange
Gates Part No.:	68503010-9721632	Assembly Code:	L40695052218H-082018-10
Working Pressure:	10,000 psi.	Test Pressure:	15,000 psi.

Gates Engineering & Services North America certifies that the following hose assembly has successfully passed all pressure testing requirements set forth in Gates specifications: GTS-04-052 (for 5K assemblies) or GTS-04-053 (10K assemblies), which include reference to Specification API 16C (2nd Edition); sections 7.5.4, 7.5.9, and 10.8.7. A test graph will accompany this test certificate to illustrate conformity to test requirements.

Quality: QUALITY
Date : 8/20/2018
Signature : *Moosa Naqvi*

Production: PRODUCTION
Date : 8/20/2018
Signature : *[Signature]*

Form PTC - 01 Rev.0 2





GATES E & S NORTH AMERICA, INC.
134 44TH STREET
CORPUS CHRISTI, TEXAS 78405

PHONE: 361-887-9807
FAX: 361-887-0812
EMAIL: Tim.Cantu@gates.com
WEB: www.gates.com

10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE

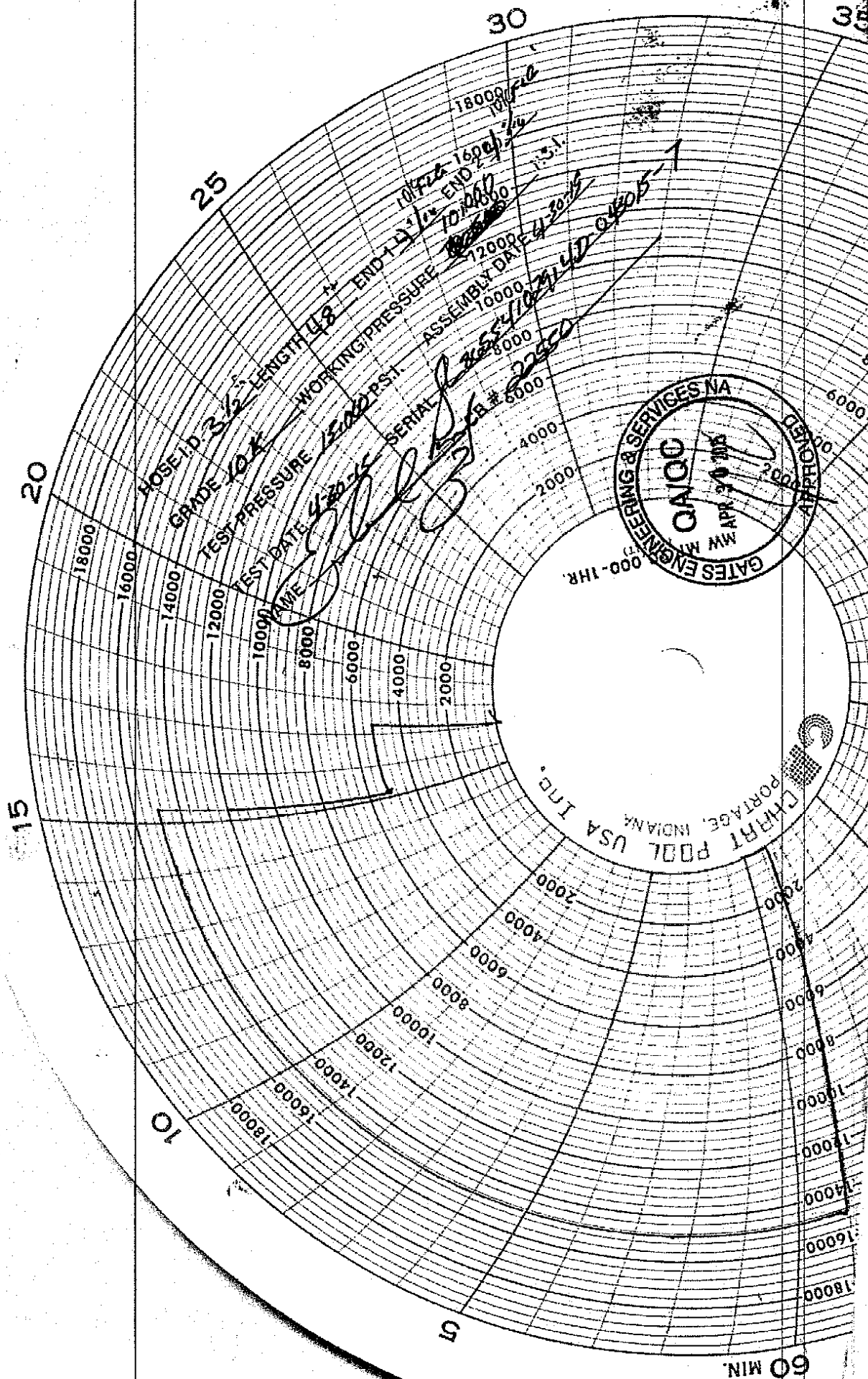
Customer :	AUSTIN DISTRIBUTING	Test Date:	4/30/2015
Customer Ref. :	4060578	Hose Serial No.:	D-043015-7
Invoice No. :	500506	Created By:	JUSTIN CROPPER
Product Description:	10K3.548.0CK4.1/1610KFLGE/E LE		
End Fitting 1 :	4 1/16 10K FLG	End Fitting 2 :	4 1/16 10K FLG
Gates Part No. :	4773-6290	Assembly Code :	L36554102914D-043015-7
Working Pressure :	10,000 PSI	Test Pressure :	15,000 PSI

Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 15,000 psi in accordance with this product number. Hose burst pressure 9.6.7.2 exceeds the minimum of 2.5 times the working pressure per Table 9.

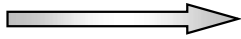
Quality Manager :	QUALITY	Production:	PRODUCTION
Date :	4/30/2015	Date :	4/30/2015
Signature :	<i>Justin Cropper</i>	Signature :	<i>Justin Cropper</i>

Form PTC - 01 Rev.02



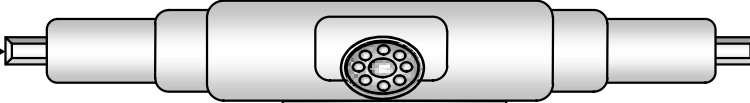


Hydril "GK"
13 5/8" 5M

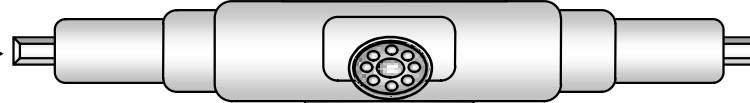


Hydril "GK"

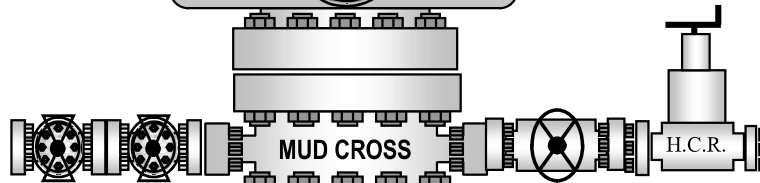
Cameron Type U
13 5/8" 5M



VARIABLE BORE RAMS



BLIND RAMS



MUD CROSS

H.C.R.



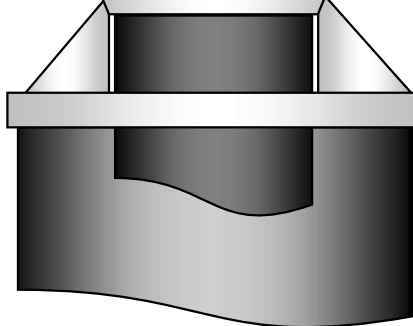
7" RAMS



13 5/8" 5M

13 5/8" 5M

13 5/8" 5M





13-5/8" MN-DS Wellhead System



MEWBOURNE
OIL COMPANY

C7585
Rev. 02

NOTE: All dimensions on this drawing are estimated measurements and should be evaluated by engineering.

Cuffing Hanger 57" conductor cut-off

Intent ☒ As Drilled ☐

API #		
Operator Name: Mewbourne Oil Co.	Property Name: Red Hills West 21 Fed Com	Well Number 475H

Kick Off Point (KOP)

UL B	Section 21	Township 26S	Range 32E	Lot	Feet 10	From N/S N	Feet 2220	From E/W E	County Lea
Latitude 32.0355371					Longitude -103.6785582			NAD 83	

First Take Point (FTP)

UL B	Section 21	Township 26S	Range 32E	Lot	Feet 100	From N/S N	Feet 2220	From E/W E	County Lea
Latitude 32.0352897					Longitude -103.6785576			NAD 83	

Last Take Point (LTP)

UL O	Section 21	Township 26S	Range 32E	Lot	Feet 100	From N/S S	Feet 2220	From E/W E	County Lea
Latitude 32.0211370					Longitude -103.6785248			NAD 83	

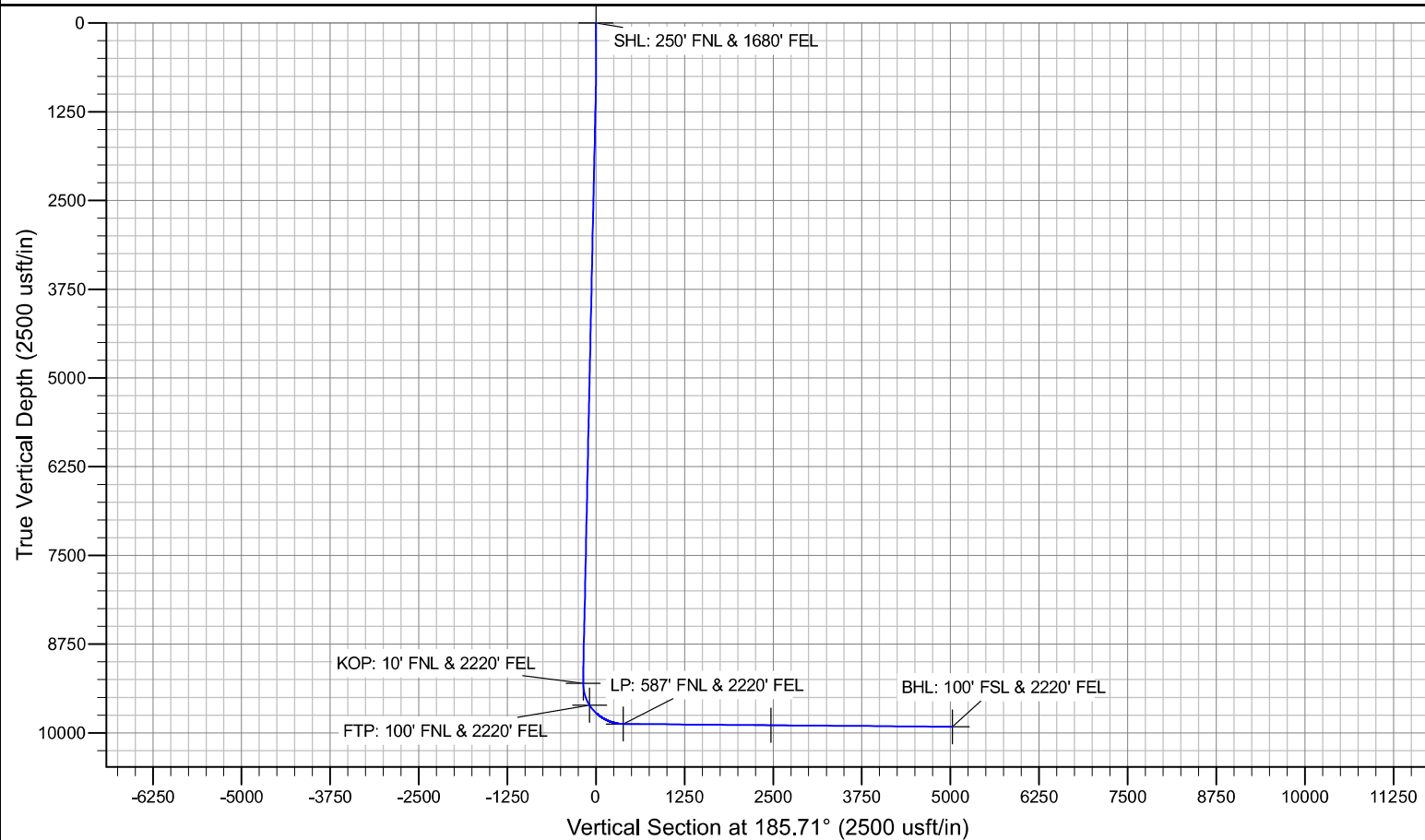
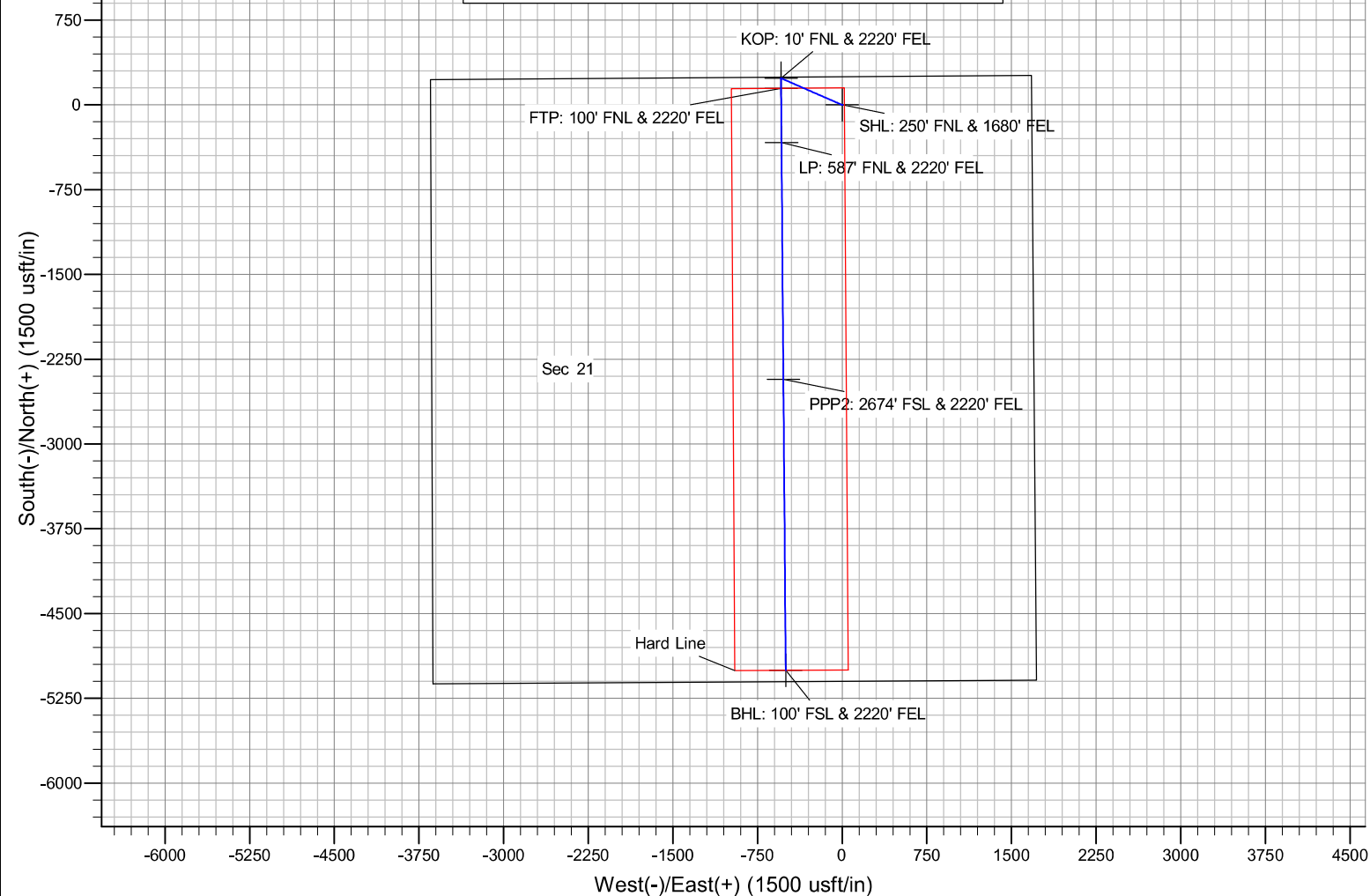
Is this well the defining well for the Horizontal Spacing Unit? ☐ NIs this well an infill well? ☐ Y

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name: Mewbourne Oil Co.	Property Name: Red Hills West 21 Fed Com	Well Number 578H

KZ 06/29/2018

Red Hills West 21 Fed Com #475H



Mewbourne Oil Company

Lea County, New Mexico NAD 83

Red Hills West 21 Fed Com #475H

Sec 21, T26S, R32E

SHL: 250' FNL & 1680' FEL

BHL: 100' FSL & 2220' FEL

Plan: Design #1

Standard Planning Report

15 February, 2023

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Red Hills West 21 Fed Com #475H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3185.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	MD Reference:	WELL @ 3185.0usft (Original Well Elev)
Site:	Red Hills West 21 Fed Com #475H	North Reference:	Grid
Well:	Sec 21, T26S, R32E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FSL & 2220' FEL		
Design:	Design #1		

Project	Lea County, New Mexico NAD 83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Red Hills West 21 Fed Com #475H			
Site Position:		Northing:	377,045.50 usft	Latitude: 32.0348785
From:	Map	Easting:	744,775.90 usft	Longitude: -103.6768128
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	

Well	Sec 21, T26S, R32E			
Well Position	+N/-S	0.0 usft	Northing:	377,045.50 usft
	+E/-W	0.0 usft	Easting:	744,775.90 usft
Position Uncertainty		0.0 usft	Wellhead Elevation:	3,185.0 usft
Grid Convergence:		0.35 °	Ground Level:	3,157.0 usft

Wellbore	BHL: 100' FSL & 2220' FEL				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/31/2014	7.18	59.91	48,139.05170859

Design	Design #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	185.71

Plan Survey Tool Program	Date	12/29/2022		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	14,888.5	Design #1 (BHL: 100' FSL & 2220	

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.00	0.00	0.00	0.00	
901.4	4.03	293.54	901.2	2.8	-6.5	2.00	2.00	0.00	293.54	
9,121.3	4.03	293.54	9,100.8	233.5	-535.8	0.00	0.00	0.00	0.00	
9,322.7	0.00	0.00	9,302.0	236.3	-542.3	2.00	-2.00	0.00	180.00	KOP: 10' FNL & 2220
10,217.8	89.51	179.54	9,875.0	-331.8	-537.7	10.00	10.00	0.00	179.54	
14,888.5	89.51	179.54	9,915.0	-5,002.1	-500.2	0.00	0.00	0.00	0.00	BHL: 100' FSL & 2220

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Red Hills West 21 Fed Com #475H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3185.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	MD Reference:	WELL @ 3185.0usft (Original Well Elev)
Site:	Red Hills West 21 Fed Com #475H	North Reference:	Grid
Well:	Sec 21, T26S, R32E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FSL & 2220' FEL		
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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL: 250' FNL & 1680' FEL									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	2.00	293.54	800.0	0.7	-1.6	-0.5	2.00	2.00	0.00
901.4	4.03	293.54	901.2	2.8	-6.5	-2.2	2.00	2.00	0.00
1,000.0	4.03	293.54	999.6	5.6	-12.8	-4.3	0.00	0.00	0.00
1,100.0	4.03	293.54	1,099.3	8.4	-19.3	-6.4	0.00	0.00	0.00
1,200.0	4.03	293.54	1,199.1	11.2	-25.7	-8.6	0.00	0.00	0.00
1,300.0	4.03	293.54	1,298.8	14.0	-32.2	-10.7	0.00	0.00	0.00
1,400.0	4.03	293.54	1,398.6	16.8	-38.6	-12.9	0.00	0.00	0.00
1,500.0	4.03	293.54	1,498.4	19.6	-45.0	-15.0	0.00	0.00	0.00
1,600.0	4.03	293.54	1,598.1	22.4	-51.5	-17.2	0.00	0.00	0.00
1,700.0	4.03	293.54	1,697.9	25.2	-57.9	-19.3	0.00	0.00	0.00
1,800.0	4.03	293.54	1,797.6	28.0	-64.4	-21.5	0.00	0.00	0.00
1,900.0	4.03	293.54	1,897.4	30.8	-70.8	-23.6	0.00	0.00	0.00
2,000.0	4.03	293.54	1,997.1	33.7	-77.2	-25.8	0.00	0.00	0.00
2,100.0	4.03	293.54	2,096.9	36.5	-83.7	-28.0	0.00	0.00	0.00
2,200.0	4.03	293.54	2,196.6	39.3	-90.1	-30.1	0.00	0.00	0.00
2,300.0	4.03	293.54	2,296.4	42.1	-96.6	-32.3	0.00	0.00	0.00
2,400.0	4.03	293.54	2,396.1	44.9	-103.0	-34.4	0.00	0.00	0.00
2,500.0	4.03	293.54	2,495.9	47.7	-109.4	-36.6	0.00	0.00	0.00
2,600.0	4.03	293.54	2,595.6	50.5	-115.9	-38.7	0.00	0.00	0.00
2,700.0	4.03	293.54	2,695.4	53.3	-122.3	-40.9	0.00	0.00	0.00
2,800.0	4.03	293.54	2,795.1	56.1	-128.7	-43.0	0.00	0.00	0.00
2,900.0	4.03	293.54	2,894.9	58.9	-135.2	-45.2	0.00	0.00	0.00
3,000.0	4.03	293.54	2,994.7	61.7	-141.6	-47.3	0.00	0.00	0.00
3,100.0	4.03	293.54	3,094.4	64.5	-148.1	-49.5	0.00	0.00	0.00
3,200.0	4.03	293.54	3,194.2	67.3	-154.5	-51.6	0.00	0.00	0.00
3,300.0	4.03	293.54	3,293.9	70.1	-160.9	-53.8	0.00	0.00	0.00
3,400.0	4.03	293.54	3,393.7	72.9	-167.4	-55.9	0.00	0.00	0.00
3,500.0	4.03	293.54	3,493.4	75.7	-173.8	-58.1	0.00	0.00	0.00
3,600.0	4.03	293.54	3,593.2	78.5	-180.3	-60.2	0.00	0.00	0.00
3,700.0	4.03	293.54	3,692.9	81.4	-186.7	-62.4	0.00	0.00	0.00
3,800.0	4.03	293.54	3,792.7	84.2	-193.1	-64.5	0.00	0.00	0.00
3,900.0	4.03	293.54	3,892.4	87.0	-199.6	-66.7	0.00	0.00	0.00
4,000.0	4.03	293.54	3,992.2	89.8	-206.0	-68.8	0.00	0.00	0.00
4,100.0	4.03	293.54	4,091.9	92.6	-212.5	-71.0	0.00	0.00	0.00
4,200.0	4.03	293.54	4,191.7	95.4	-218.9	-73.1	0.00	0.00	0.00
4,300.0	4.03	293.54	4,291.4	98.2	-225.3	-75.3	0.00	0.00	0.00
4,400.0	4.03	293.54	4,391.2	101.0	-231.8	-77.4	0.00	0.00	0.00
4,500.0	4.03	293.54	4,490.9	103.8	-238.2	-79.6	0.00	0.00	0.00
4,600.0	4.03	293.54	4,590.7	106.6	-244.7	-81.7	0.00	0.00	0.00
4,700.0	4.03	293.54	4,690.5	109.4	-251.1	-83.9	0.00	0.00	0.00
4,800.0	4.03	293.54	4,790.2	112.2	-257.5	-86.0	0.00	0.00	0.00
4,900.0	4.03	293.54	4,890.0	115.0	-264.0	-88.2	0.00	0.00	0.00
5,000.0	4.03	293.54	4,989.7	117.8	-270.4	-90.3	0.00	0.00	0.00
5,100.0	4.03	293.54	5,089.5	120.6	-276.9	-92.5	0.00	0.00	0.00
5,200.0	4.03	293.54	5,189.2	123.4	-283.3	-94.6	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Red Hills West 21 Fed Com #475H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3185.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	MD Reference:	WELL @ 3185.0usft (Original Well Elev)
Site:	Red Hills West 21 Fed Com #475H	North Reference:	Grid
Well:	Sec 21, T26S, R32E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FSL & 2220' FEL		
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)
5,300.0	4.03	293.54	5,289.0	126.2	-289.7	-96.8	0.00	0.00	0.00
5,400.0	4.03	293.54	5,388.7	129.1	-296.2	-98.9	0.00	0.00	0.00
5,500.0	4.03	293.54	5,488.5	131.9	-302.6	-101.1	0.00	0.00	0.00
5,600.0	4.03	293.54	5,588.2	134.7	-309.1	-103.2	0.00	0.00	0.00
5,700.0	4.03	293.54	5,688.0	137.5	-315.5	-105.4	0.00	0.00	0.00
5,800.0	4.03	293.54	5,787.7	140.3	-321.9	-107.6	0.00	0.00	0.00
5,900.0	4.03	293.54	5,887.5	143.1	-328.4	-109.7	0.00	0.00	0.00
6,000.0	4.03	293.54	5,987.2	145.9	-334.8	-111.9	0.00	0.00	0.00
6,100.0	4.03	293.54	6,087.0	148.7	-341.3	-114.0	0.00	0.00	0.00
6,200.0	4.03	293.54	6,186.7	151.5	-347.7	-116.2	0.00	0.00	0.00
6,300.0	4.03	293.54	6,286.5	154.3	-354.1	-118.3	0.00	0.00	0.00
6,400.0	4.03	293.54	6,386.3	157.1	-360.6	-120.5	0.00	0.00	0.00
6,500.0	4.03	293.54	6,486.0	159.9	-367.0	-122.6	0.00	0.00	0.00
6,600.0	4.03	293.54	6,585.8	162.7	-373.5	-124.8	0.00	0.00	0.00
6,700.0	4.03	293.54	6,685.5	165.5	-379.9	-126.9	0.00	0.00	0.00
6,800.0	4.03	293.54	6,785.3	168.3	-386.3	-129.1	0.00	0.00	0.00
6,900.0	4.03	293.54	6,885.0	171.1	-392.8	-131.2	0.00	0.00	0.00
7,000.0	4.03	293.54	6,984.8	174.0	-399.2	-133.4	0.00	0.00	0.00
7,100.0	4.03	293.54	7,084.5	176.8	-405.7	-135.5	0.00	0.00	0.00
7,200.0	4.03	293.54	7,184.3	179.6	-412.1	-137.7	0.00	0.00	0.00
7,300.0	4.03	293.54	7,284.0	182.4	-418.5	-139.8	0.00	0.00	0.00
7,400.0	4.03	293.54	7,383.8	185.2	-425.0	-142.0	0.00	0.00	0.00
7,500.0	4.03	293.54	7,483.5	188.0	-431.4	-144.1	0.00	0.00	0.00
7,600.0	4.03	293.54	7,583.3	190.8	-437.8	-146.3	0.00	0.00	0.00
7,700.0	4.03	293.54	7,683.0	193.6	-444.3	-148.4	0.00	0.00	0.00
7,800.0	4.03	293.54	7,782.8	196.4	-450.7	-150.6	0.00	0.00	0.00
7,900.0	4.03	293.54	7,882.5	199.2	-457.2	-152.7	0.00	0.00	0.00
8,000.0	4.03	293.54	7,982.3	202.0	-463.6	-154.9	0.00	0.00	0.00
8,100.0	4.03	293.54	8,082.1	204.8	-470.0	-157.0	0.00	0.00	0.00
8,200.0	4.03	293.54	8,181.8	207.6	-476.5	-159.2	0.00	0.00	0.00
8,300.0	4.03	293.54	8,281.6	210.4	-482.9	-161.3	0.00	0.00	0.00
8,400.0	4.03	293.54	8,381.3	213.2	-489.4	-163.5	0.00	0.00	0.00
8,500.0	4.03	293.54	8,481.1	216.0	-495.8	-165.6	0.00	0.00	0.00
8,600.0	4.03	293.54	8,580.8	218.8	-502.2	-167.8	0.00	0.00	0.00
8,700.0	4.03	293.54	8,680.6	221.7	-508.7	-169.9	0.00	0.00	0.00
8,800.0	4.03	293.54	8,780.3	224.5	-515.1	-172.1	0.00	0.00	0.00
8,900.0	4.03	293.54	8,880.1	227.3	-521.6	-174.2	0.00	0.00	0.00
9,000.0	4.03	293.54	8,979.8	230.1	-528.0	-176.4	0.00	0.00	0.00
9,100.0	4.03	293.54	9,079.6	232.9	-534.4	-178.5	0.00	0.00	0.00
9,121.3	4.03	293.54	9,100.8	233.5	-535.8	-179.0	0.00	0.00	0.00
9,200.0	2.45	293.54	9,179.4	235.3	-539.9	-180.4	2.00	-2.00	0.00
9,300.0	0.45	293.54	9,279.4	236.3	-542.2	-181.1	2.00	-2.00	0.00
9,322.7	0.00	0.00	9,302.0	236.3	-542.3	-181.2	2.00	-2.00	0.00
KOP: 10' FNL & 2220' FEL									
9,350.0	2.73	179.54	9,329.4	235.6	-542.3	-180.5	10.00	10.00	0.00
9,400.0	7.73	179.54	9,379.1	231.1	-542.3	-176.0	10.00	10.00	0.00
9,450.0	12.73	179.54	9,428.3	222.2	-542.2	-167.2	10.00	10.00	0.00
9,500.0	17.73	179.54	9,476.5	209.1	-542.1	-154.1	10.00	10.00	0.00
9,550.0	22.73	179.54	9,523.4	191.8	-541.9	-136.9	10.00	10.00	0.00
9,600.0	27.73	179.54	9,568.7	170.5	-541.8	-115.7	10.00	10.00	0.00
9,648.2	32.55	179.54	9,610.3	146.3	-541.6	-91.7	10.00	10.00	0.00
FTP: 100' FNL & 2220' FEL									
9,650.0	32.73	179.54	9,611.8	145.3	-541.6	-90.7	10.00	10.00	0.00
9,700.0	37.73	179.54	9,652.7	116.5	-541.3	-62.0	10.00	10.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Red Hills West 21 Fed Com #475H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3185.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	MD Reference:	WELL @ 3185.0usft (Original Well Elev)
Site:	Red Hills West 21 Fed Com #475H	North Reference:	Grid
Well:	Sec 21, T26S, R32E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FSL & 2220' FEL		
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)
9,750.0	42.73	179.54	9,690.8	84.2	-541.1	-30.0	10.00	10.00	0.00
9,800.0	47.73	179.54	9,726.0	48.7	-540.8	5.3	10.00	10.00	0.00
9,850.0	52.73	179.54	9,758.0	10.3	-540.5	43.5	10.00	10.00	0.00
9,900.0	57.73	179.54	9,786.5	-30.8	-540.2	84.3	10.00	10.00	0.00
9,950.0	62.73	179.54	9,811.3	-74.1	-539.8	127.5	10.00	10.00	0.00
10,000.0	67.73	179.54	9,832.3	-119.5	-539.4	172.6	10.00	10.00	0.00
10,050.0	72.73	179.54	9,849.2	-166.6	-539.1	219.4	10.00	10.00	0.00
10,100.0	77.73	179.54	9,861.9	-214.9	-538.7	267.4	10.00	10.00	0.00
10,150.0	82.73	179.54	9,870.4	-264.1	-538.3	316.4	10.00	10.00	0.00
10,200.0	87.73	179.54	9,874.6	-314.0	-537.9	365.9	10.00	10.00	0.00
10,217.8	89.51	179.54	9,875.0	-331.8	-537.7	383.7	9.97	9.97	0.00
LP: 587' FNL & 2220' FEL									
10,300.0	89.51	179.54	9,875.7	-413.9	-537.1	465.3	0.00	0.00	0.00
10,400.0	89.51	179.54	9,876.6	-513.9	-536.3	564.7	0.00	0.00	0.00
10,500.0	89.51	179.54	9,877.4	-613.9	-535.5	664.2	0.00	0.00	0.00
10,600.0	89.51	179.54	9,878.3	-713.9	-534.7	763.6	0.00	0.00	0.00
10,700.0	89.51	179.54	9,879.1	-813.9	-533.9	863.0	0.00	0.00	0.00
10,800.0	89.51	179.54	9,880.0	-913.9	-533.1	962.4	0.00	0.00	0.00
10,900.0	89.51	179.54	9,880.8	-1,013.9	-532.3	1,061.8	0.00	0.00	0.00
11,000.0	89.51	179.54	9,881.7	-1,113.9	-531.4	1,161.2	0.00	0.00	0.00
11,100.0	89.51	179.54	9,882.6	-1,213.9	-530.6	1,260.7	0.00	0.00	0.00
11,200.0	89.51	179.54	9,883.4	-1,313.9	-529.8	1,360.1	0.00	0.00	0.00
11,300.0	89.51	179.54	9,884.3	-1,413.9	-529.0	1,459.5	0.00	0.00	0.00
11,400.0	89.51	179.54	9,885.1	-1,513.9	-528.2	1,558.9	0.00	0.00	0.00
11,500.0	89.51	179.54	9,886.0	-1,613.9	-527.4	1,658.3	0.00	0.00	0.00
11,600.0	89.51	179.54	9,886.8	-1,713.9	-526.6	1,757.8	0.00	0.00	0.00
11,700.0	89.51	179.54	9,887.7	-1,813.8	-525.8	1,857.2	0.00	0.00	0.00
11,800.0	89.51	179.54	9,888.5	-1,913.8	-525.0	1,956.6	0.00	0.00	0.00
11,900.0	89.51	179.54	9,889.4	-2,013.8	-524.2	2,056.0	0.00	0.00	0.00
12,000.0	89.51	179.54	9,890.3	-2,113.8	-523.4	2,155.4	0.00	0.00	0.00
12,100.0	89.51	179.54	9,891.1	-2,213.8	-522.6	2,254.8	0.00	0.00	0.00
12,200.0	89.51	179.54	9,892.0	-2,313.8	-521.8	2,354.3	0.00	0.00	0.00
12,300.0	89.51	179.54	9,892.8	-2,413.8	-521.0	2,453.7	0.00	0.00	0.00
12,314.4	89.51	179.54	9,893.0	-2,428.2	-520.9	2,468.0	0.00	0.00	0.00
PPP2: 2674' FSL & 2220' FEL									
12,400.0	89.51	179.54	9,893.7	-2,513.8	-520.2	2,553.1	0.00	0.00	0.00
12,500.0	89.51	179.54	9,894.5	-2,613.8	-519.4	2,652.5	0.00	0.00	0.00
12,600.0	89.51	179.54	9,895.4	-2,713.8	-518.6	2,751.9	0.00	0.00	0.00
12,700.0	89.51	179.54	9,896.3	-2,813.8	-517.8	2,851.3	0.00	0.00	0.00
12,800.0	89.51	179.54	9,897.1	-2,913.8	-517.0	2,950.8	0.00	0.00	0.00
12,900.0	89.51	179.54	9,898.0	-3,013.8	-516.2	3,050.2	0.00	0.00	0.00
13,000.0	89.51	179.54	9,898.8	-3,113.8	-515.4	3,149.6	0.00	0.00	0.00
13,100.0	89.51	179.54	9,899.7	-3,213.8	-514.6	3,249.0	0.00	0.00	0.00
13,200.0	89.51	179.54	9,900.5	-3,313.7	-513.8	3,348.4	0.00	0.00	0.00
13,300.0	89.51	179.54	9,901.4	-3,413.7	-513.0	3,447.8	0.00	0.00	0.00
13,400.0	89.51	179.54	9,902.3	-3,513.7	-512.2	3,547.3	0.00	0.00	0.00
13,500.0	89.51	179.54	9,903.1	-3,613.7	-511.4	3,646.7	0.00	0.00	0.00
13,600.0	89.51	179.54	9,904.0	-3,713.7	-510.6	3,746.1	0.00	0.00	0.00
13,700.0	89.51	179.54	9,904.8	-3,813.7	-509.8	3,845.5	0.00	0.00	0.00
13,800.0	89.51	179.54	9,905.7	-3,913.7	-508.9	3,944.9	0.00	0.00	0.00
13,900.0	89.51	179.54	9,906.5	-4,013.7	-508.1	4,044.3	0.00	0.00	0.00
14,000.0	89.51	179.54	9,907.4	-4,113.7	-507.3	4,143.8	0.00	0.00	0.00
14,100.0	89.51	179.54	9,908.2	-4,213.7	-506.5	4,243.2	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Red Hills West 21 Fed Com #475H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3185.0usft (Original Well Elev)
Project:	Lea County, New Mexico NAD 83	MD Reference:	WELL @ 3185.0usft (Original Well Elev)
Site:	Red Hills West 21 Fed Com #475H	North Reference:	Grid
Well:	Sec 21, T26S, R32E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 100' FSL & 2220' FEL		
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)	
14,200.0	89.51	179.54	9,909.1	-4,313.7	-505.7	4,342.6	0.00	0.00	0.00	
14,300.0	89.51	179.54	9,910.0	-4,413.7	-504.9	4,442.0	0.00	0.00	0.00	
14,400.0	89.51	179.54	9,910.8	-4,513.7	-504.1	4,541.4	0.00	0.00	0.00	
14,500.0	89.51	179.54	9,911.7	-4,613.7	-503.3	4,640.8	0.00	0.00	0.00	
14,600.0	89.51	179.54	9,912.5	-4,713.6	-502.5	4,740.3	0.00	0.00	0.00	
14,700.0	89.51	179.54	9,913.4	-4,813.6	-501.7	4,839.7	0.00	0.00	0.00	
14,800.0	89.51	179.54	9,914.2	-4,913.6	-500.9	4,939.1	0.00	0.00	0.00	
14,888.5	89.51	179.54	9,915.0	-5,002.1	-500.2	5,027.0	0.00	0.00	0.00	
BHL: 100' FSL & 2220' FEL										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
SHL: 250' FNL & 1680' F	0.00	0.00	0.0	0.0	0.0	377,045.50	744,775.90	32.0348785	-103.6768128	
- plan hits target center										
- Point										
KOP: 10' FNL & 2220' FI	0.00	0.00	9,302.0	236.3	-542.3	377,281.80	744,233.60	32.0355371	-103.6785582	
- plan hits target center										
- Point										
FTP: 100' FNL & 2220' F	0.00	0.00	9,610.3	146.3	-541.6	377,191.80	744,234.32	32.0352897	-103.6785576	
- plan hits target center										
- Point										
LP: 587' FNL & 2220' FE	0.00	0.00	9,875.0	-331.8	-537.7	376,713.70	744,238.16	32.0339754	-103.6785546	
- plan hits target center										
- Point										
PPP2: 2674' FSL & 2220' FEL	0.00	0.00	9,893.0	-2,428.2	-520.9	374,617.30	744,255.01	32.0282125	-103.6785412	
- plan hits target center										
- Point										
BHL: 100' FSL & 2220' F	0.00	0.00	9,915.0	-5,002.1	-500.2	372,043.40	744,275.70	32.0211370	-103.6785248	
- plan hits target center										
- Point										

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL COMPANY
WELL NAME & NO.:	RED HILLS WEST 21 FED COM 475H
SURFACE HOLE FOOTAGE:	250'/N & 1680'/E
BOTTOM HOLE FOOTAGE	100'/S & 2220'/E
SURFACE LOCATION:	Section 21, T.26 S., R.32 E. NMP.
COUNTY:	Lea County, New Mexico

COA

H ₂ S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input type="checkbox"/> Pilot Hole	<input type="checkbox"/> Open Annulus
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H₂S) Drilling Plan shall be activated **AT SPUD**. As a result, the Hydrogen Sulfide area must meet **43 CFR 3176** requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING DESIGN

1. The **13-3/8** inch surface casing shall be set at approximately **625 ft.** (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 ft. 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 will be a minimum of **8 hours** or **500 psi compressive strength**, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours

after bringing cement to surface or 500 psi compressive strength, whichever is greater.

- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The **9-5/8** inch intermediate casing shall be set in a competent bed at approximately **4,330 ft.** The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:
 - **Cement to surface.** If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to **Cave/Karst**.
 - ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
 3. Operator has proposed to set **7 in.** production casing at approximately **9,323 ft.** The minimum required fill of cement behind the **7 in.** production casing is:

Option 1 (Single Stage): Cement should tie-back **at least 200 feet** into previous casing string. Operator shall provide method of verification. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to **Cave/Karst**.

Option 2 (Two-stage): Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. **First stage to DV tool:** Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
 - b. **Second stage above DV tool:** Cement should tie-back **at least 200 feet** into previous casing string. Operator shall provide method of verification. If cement does not circulate, contact the appropriate BLM office. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to **Cave/Karst**.
4. The minimum required fill of cement behind the **4-1/2 in.** production liner is:
 - Cement should tie-back **at least 100 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use **flex line** from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).

2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi. Before drilling the surface casing shoe out, the BOP/BOPE and annular preventer shall be pressure-tested in accordance with **title 43 CFR 3172 and API Standard 53**.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in the **title 43 CFR 3172.6(b)(9)** must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

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

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

☒ Eddy County

EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,

BLM_NM_CFO_DrillingNotifications@BLM.GOV
(575) 361-2822

☒ Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per **title 43 CFR 3172**
 - as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the

- approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in the **title 43 CFR 3172** and **API STD 53 Sec. 5.3**.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in the **title 43 CFR 3172.6(b)(9)** must be followed.
 - e. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been

done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000-psi chart for a 2-3M BOP/BOP, on a 10000-psi chart for a 5M BOP/BOPE and on a 15000-psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one-hour chart. A circular chart shall have a maximum 2-hour clock. If a twelve hour or twenty-four-hour chart is used, tester shall make a notation that it is run with a two-hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low-pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained

and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

SA 11/08/2023

Hydrogen Sulfide Drilling Operations Plan
Mewbourne Oil Company

1. General Requirements

Rule 118 does not apply to this well because MOC has researched this area and no high concentrations of H₂S were found. MOC will have on location and working all H₂S safety equipment before the Delaware formation for purposes of safety and insurance requirements.

2. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will have received training from a qualified instructor in the following areas prior to entering the drilling pad area of the well:

1. The hazards and characteristics of hydrogen sulfide gas.
2. The proper use of personal protective equipment and life support systems.
3. The proper use of hydrogen sulfide detectors, alarms, warning systems, briefing areas, evacuation procedures.
4. The proper techniques for first aid and rescue operations.

Additionally, supervisory personnel will be trained in the following areas:

- 1 The effects of hydrogen sulfide on metal components. If high tensile tubular systems are utilized, supervisory personnel will be trained in their special maintenance requirements.
- 2 Corrective action and shut in procedures, blowout prevention, and well control procedures while drilling a well.
- 3 The contents of the Hydrogen Sulfide Drilling Operations Plan.

There will be an initial training session prior to encountering a known hydrogen sulfide source. The initial training session shall include a review of the site specific Hydrogen Sulfide Drilling Operations Plan.

3. Hydrogen Sulfide Safety Equipment and Systems

All hydrogen sulfide safety equipment and systems will be installed, tested, and operational prior to drilling below the 9 5/8" intermediate casing.

1. Well Control Equipment
 - A. Choke manifold with minimum of one adjustable choke/remote choke.
 - B. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
 - C. Auxiliary equipment including annular type blowout preventer.
2. Protective Equipment for Essential Personnel

Thirty minute self contained work unit located in the dog house and at briefing areas.

Additionally: If H₂S is encountered in concentrations less than 10 ppm, fans will be placed in work areas to prevent the accumulation of hazardous amounts of poisonous gas. If higher concentrations of H₂S are detected the well will be shut in and a rotating head, mud/gas separator, remote choke and flare line with igniter will be installed.

3. Hydrogen Sulfide Protection and Monitoring Equipment

Two portable hydrogen sulfide monitors positioned on location for optimum coverage and detection. The units shall have audible sirens to notify personnel when hydrogen sulfide levels exceed 20 PPM.

4. Visual Warning Systems

A. Wind direction indicators as indicated on the wellsite diagram.

B. Caution signs shall be posted on roads providing access to location. Signs shall be painted a high visibility color with lettering of sufficient size to be readable at reasonable distances from potentially contaminated areas.

4. **Mud Program**

The mud program has been designed to minimize the amount of hydrogen sulfide entrained in the mud system. Proper mud weight, safe drilling practices, and the use of hydrogen sulfide scavengers will minimize hazards while drilling the well.

5. **Metallurgy**

All tubular systems, wellheads, blowout preventers, drilling spools, kill lines, choke manifolds, and valves shall be suitable for service in a hydrogen sulfide environment when chemically treated.

6. **Communications**

State & County Officials phone numbers are posted on rig floor and supervisors trailer. Communications in company vehicles and toolpushers are either two way radios or cellular phones.

7. **Well Testing**

Drill stem testing is not an anticipated requirement for evaluation of this well. If a drill stem test is required, it will be conducted with a minimum number of personnel in the immediate vicinity. The test will be conducted during daylight hours only.

8. **Emergency Phone Numbers**

Eddy County Sheriff's Office	911 or 575-887-7551
Ambulance Service	911 or 575-885-2111
Carlsbad Fire Dept	911 or 575-885-2111
Loco Hills Volunteer Fire Dept.	911 or 575-677-3266
Closest Medical Facility - Columbia Medical Center of Carlsbad	575-492-5000

Mewbourne Oil Company	Hobbs District Office	575-393-5905
	Fax	575-397-6252
	2nd Fax	575-393-7259

District Manager	Robin Terrell	575-390-4816
Drilling Superintendent	Frosty Lathan	575-390-4103
	Bradley Bishop	575-390-6838
Drilling Foreman	Wesley Noseff	575-441-0729

Operator Name: MEWBOURNE OIL COMPANY**Well Name:** RED HILLS WEST 21 FED COM**Well Number:** 475H**Waste type:** SEWAGE**Waste content description:** Human waste & grey water**Amount of waste:** 1500 gallons**Waste disposal frequency :** Weekly**Safe containment description:** 2,000 gallon plastic container**Safe containmant attachment:****Waste disposal type:** HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** PRIVATE**Disposal type description:****Disposal location description:** City of Carlsbad Water Treatment facility**Waste type:** GARBAGE**Waste content description:** Garbage & Trash**Amount of waste:** 1500 pounds**Waste disposal frequency :** One Time Only**Safe containment description:** Enclosed trash trailer**Safe containmant attachment:****Waste disposal type:** HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** PRIVATE**Disposal type description:****Disposal location description:** Waste Management facility in Carlsbad.

Reserve Pit

Reserve Pit being used? NO**Temporary disposal of produced water into reserve pit?** NO**Reserve pit length (ft.)****Reserve pit width (ft.)****Reserve pit depth (ft.)****Reserve pit volume (cu. yd.)****Is at least 50% of the reserve pit in cut?****Reserve pit liner****Reserve pit liner specifications and installation description**

Cuttings Area

Cuttings Area being used? NO**Are you storing cuttings on location?** N

Operator Name: MEWBOURNE OIL COMPANY

Well Name: RED HILLS WEST 21 FED COM

Well Number: 475H

Description of cuttings location

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Section 9 - Well Site

Well Site Layout Diagram:

Red_Hills_West_21_Fed_Com_475H_WellSiteLayout_20230221093651.pdf

Comments: NONE

Section 10 - Plans for Surface

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: Red Hills West 22 AP/BO Fed Com wells

Multiple Well Pad Number: 6

Recontouring

Drainage/Erosion control construction: NONE

Drainage/Erosion control reclamation: NONE

Well pad proposed disturbance
(acres): 4.6Well pad interim reclamation (acres):
0.67Well pad long term disturbance
(acres): 3.93Road proposed disturbance (acres):
0.42

Road interim reclamation (acres): 0

Road long term disturbance (acres): 0

Powerline proposed disturbance
(acres): 0Powerline interim reclamation (acres):
0Powerline long term disturbance
(acres): 0Pipeline proposed disturbance
(acres): 0

Pipeline interim reclamation (acres): 0

Pipeline long term disturbance
(acres): 0

Other proposed disturbance (acres): 0

Other interim reclamation (acres): 0

Other long term disturbance (acres): 0

Total proposed disturbance: 5.02

Total interim reclamation: 0.67

Total long term disturbance: 3.93

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 290693

CONDITIONS

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID:
	14744
	Action Number: 290693
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	12/12/2023
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	12/12/2023
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	12/12/2023
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	12/12/2023
pkautz	If cement does not circulate on any string, a CBL is required for that string of casing	12/12/2023