

### Application for Permit to Drill

# U.S. Department of the Interior Bureau of Land Management

Date Printed: 08/09/2024 02:14 PM

#### **APD Package Report**

APD ID: 10400094561 Well Status: AAPD

APD Received Date: 09/19/2023 01:05 PM Well Name: STAGE FRIGHT 12/8 FED CO

Operator: MEWBOURNE OIL COMPANY Well Number: 618H

#### **APD Package Report Contents**

- Form 3160-3
- Operator Certification Report
- Application Report
- Application Attachments
  - -- Well Plat: 2 file(s)
- Drilling Plan Report
- Drilling Plan Attachments
  - -- Blowout Prevention Choke Diagram Attachment: 2 file(s)
  - -- Blowout Prevention BOP Diagram Attachment: 2 file(s)
  - -- Casing Design Assumptions and Worksheet(s): 4 file(s)
  - -- Hydrogen sulfide drilling operations plan: 1 file(s)
  - -- Proposed horizontal/directional/multi-lateral plan submission: 2 file(s)
  - -- Other Variances: 2 file(s)
- SUPO Report
- SUPO Attachments
  - -- Existing Road Map: 1 file(s)
  - -- New Road Map: 1 file(s)
  - -- Attach Well map: 1 file(s)
  - -- Production Facilities map: 1 file(s)
  - -- Water source and transportation map: 1 file(s)
  - -- Construction Materials source location attachment: 1 file(s)
  - -- Well Site Layout Diagram: 1 file(s)
  - -- Other SUPO Attachment: 2 file(s)
- PWD Report
- PWD Attachments
  - -- None
- Bond Report

- Bond Attachments
  - -- None

Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5 Lease Serial No. NMNM0454228 BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. **✓** DRILL REENTER 1a. Type of work: 1b. Type of Well: ✓ Oil Well Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone STAGE FRIGHT 12/8 FED COM 618H 2. Name of Operator 9. API Well No. MEWBOURNE OIL COMPANY 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory P O BOX 5270, HOBBS, NM 88241 (575) 393-5905 AVALON/BONE SPRING 4. Location of Well (Report location clearly and in accordance with any State requirements.\*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 11/T21S/R25E/NMP At surface LOT 4 / 1375 FSL / 205 FEL / LAT 32.4904521 / LONG -104.3578499 At proposed prod. zone SWSW / 660 FSL / 1220 FWL / LAT 32.4891483 / LONG -104.3199352 12. County or Parish 14. Distance in miles and direction from nearest town or post office\* 13 State **EDDY** NM 20 miles 15. Distance from proposed\* 16. No of acres in lease 17. Spacing Unit dedicated to this well 205 feet location to nearest 360.0 property or lease line, ft. (Also to nearest drig. unit line, if any) 18. Distance from proposed location\* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, 20 feet FED: 8070 feet / 19367 feet applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 3312 feet 11/15/2023 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. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above). 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. SUPO must be filed with the appropriate Forest Service Office). 6. Such other site specific information and/or plans as may be requested by the 25. Signature Name (Printed/Typed) Date BRADLEY BISHOP / Ph: (575) 393-5905 (Electronic Submission) 09/19/2023 Title Regulatory Approved by (Signature) Date Name (Printed/Typed) (Electronic Submission) CODY LAYTON / Ph: (575) 234-5959 08/09/2024 Title Office Assistant Field Manager Lands & Minerals 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.

APPROVED WITH CONDITIONS Released to Imaging: 8/21/2024 3:12:57 PM Approval Date: 08/09/2024

#### **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 wen, 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 directionany 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 wen 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 win 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 conects this information to anow 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 Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

#### **Additional Operator Remarks**

#### **Location of Well**

 $0. \ SHL: LOT \ 4 \ / \ 1375 \ FSL \ / \ 205 \ FEL \ / \ TWSP: \ 21S \ / \ RANGE: \ 25E \ / \ SECTION: \ 11 \ / \ LAT: \ 32.4904521 \ / \ LONG: \ -104.3578499 \ (\ TVD: \ 0 \ feet, \ MD: \ 0 \ feet \ )$   $PPP: \ LOT \ 13 \ / \ 660 \ FSL \ / \ 100 \ FWL \ / \ TWSP: \ 21S \ / \ RANGE: \ 25E \ / \ SECTION: \ 12 \ / \ LAT: \ 32.4884861 \ / \ LONG: \ -104.356888 \ (\ TVD: \ 7597 \ feet, \ MD: \ 7961 \ feet \ )$   $BHL: \ SWSW \ / \ 660 \ FSL \ / \ 1220 \ FWL \ / \ TWSP: \ 21S \ / \ RANGE: \ 26E \ / \ SECTION: \ 8 \ / \ LAT: \ 32.4891483 \ / \ LONG: \ -104.3199352 \ (\ TVD: \ 8070 \ feet, \ MD: \ 19367 \ feet \ )$ 

#### **BLM Point of Contact**

Name: PAMELLA HERNANDEZ

Title: LIE

Phone: (575) 234-5954

Email: PHERNANDEZ@BLM.GOV

#### **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.



# PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

#### Mewbourne Oil Co.

# Lease Number NMNM0400512 Eddy County, N.M.

#### STAGE FRIGHT 12/7 FED COM 616H

Surface Hole Location: 1320' FSL & 205' FEL, Section 11, T. 21S., R. 25E. Bottom Hole Location: 1980' FSL & 100' FEL, Section 7, T. 21S, R 26E.

#### STAGE FRIGHT 12/8 FED COM 618H

Surface Hole Location: 1300' FSL & 205' FEL, Section 11, T. 21S., R. 25E. Bottom Hole Location: 660' FSL & 1220' FEL, Section 8, T. 21S, R 26E.

#### **TABLE OF CONTENTS**

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

☐ General Provisions
□Permit Expiration
☐ Archaeology, Paleontology, and Historical Sites
□Noxious Weeds
<b>⊠Special Requirements</b>
Watershed
Cave/Karst
Visual Resource Management
□ Construction
Notification
Topsoil
Closed Loop System
Federal Mineral Material Pits
Well Pads
Roads
□Road Section Diagram
⊠Production (Post Drilling)
Well Structures & Facilities
Pipelines
Electric Lines
□Interim Reclamation
☐Final Abandonment & Reclamation

**Approval Date: 08/09/2024** 

#### 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 resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

#### 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:

The entire well pad(s) 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 with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The 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 water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The topsoil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. 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.

#### **TANK BATTERY:**

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. 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.

#### Cave/Karst:

#### **Construction Mitigation**

In order to mitigate the impacts from construction activities on cave and karst resources, the following Conditions of Approval will apply to this APD or project:

#### **General Construction:**

- No blasting
- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction, and no additional construction shall occur until clearance has been issued by the Authorized Officer.
- All linear surface disturbance activities will avoid sinkholes and other karst features to lessen the possibility of encountering near surface voids during construction, minimize changes to runoff, and prevent untimely leaks and spills from entering the karst drainage system.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

#### **Pad Construction:**

- The pad will be constructed and leveled by adding the necessary fill and caliche no blasting.
- 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 (i.e. an access road crossing the berm cannot be lower than the berm height).
- Following a rain event, all fluids will vacuumed off of the pad and hauled off-site and disposed at a proper disposal facility.

#### **Road Construction:**

- Turnout ditches and drainage leadoffs will not be constructed in such a manner as to alter the natural flow of water into or out of cave or karst features.
- Special restoration stipulations or realignment may be required if subsurface features are discovered during construction.

#### **Buried Pipeline/Cable Construction:**

Rerouting of the buried line(s) may be required if a subsurface void is encountered during
construction to minimize the potential subsidence/collapse of the feature(s) as well as the
possibility of leaks/spills entering the karst drainage system.

#### **Powerline Construction:**

- Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize changes to runoff or possible leaks and spills from entering karst systems.
- Larger powerlines will adjust their pole spacing to avoid cave and karst features.
- Special restoration stipulations or realignment may be required if subsurface voids are encountered.

#### **Surface Flowlines Installation:**

 Flowlines will be routed around sinkholes and other karst features to minimize the possibility of leaks/spills from entering the karst drainage system.

#### **Drilling Mitigation**

Federal regulations and standard Conditions of Approval applied to all APDs require that adequate measures are taken to prevent contamination to the environment. Due to the extreme sensitivity of the cave and karst resources in this project area, the following additional Conditions of Approval will be added to this APD.

To prevent cave and karst resource contamination the following will be required:

- Closed loop system using steel tanks all fluids and cuttings will be hauled off-site and disposed of properly at an authorized site
- Rotary drilling with fresh water where cave or karst features are expected to prevent contamination of freshwater aquifers.
- Directional drilling is only allowed at depths greater than 100 feet below the cave occurrence zone to prevent additional impacts resulting from directional drilling.
- Lost circulation zones will be logged and reported in the drilling report so BLM can assess the situation and work with the operator on corrective actions.
- Additional drilling, casing, and cementing procedures to protect cave zones and fresh water aquifers. See drilling COAs.

#### **Production Mitigation**

In order to mitigate the impacts from production activities and due to the nature of karst terrane, the following Conditions of Approval will apply to this APD:

- Tank battery locations and facilities will be bermed and lined with a 20 mil thick
  permanent liner that has 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.
- Development and implementation of a leak detection system to provide an early alert to operators when a leak has occurred.
- Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

#### **Residual and Cumulative Mitigation**

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

#### **Plugging and Abandonment Mitigation**

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.

#### **Visual Resource Management:**

#### **Color Restrictions**

Above-ground structures including meter housing that are not subject to safety requirements are painted a flat non-reflective paint color, <u>Carlsbad Canyon</u> from the BLM Standard Environmental Color Chart (CC-001: June 2008).

#### **Height Restrictions**

All permanent above ground facilities, including the well-drive control system, treatment, storage, power (except specifically approved electrical transmission lines and poles), or other structures and appurtenances will be low profile (less than 8 feet in height). Any exception to the low profile facilities must be approved in writing by the BLM Authorized Officer prior to implementation.

#### VI. CONSTRUCTION

#### A. NOTIFICATION

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

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

#### B. TOPSOIL

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

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

#### C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

#### D. FEDERAL MINERAL MATERIALS PIT

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

#### E. **WELL PAD SURFACING**

Surfacing of the well pad is not required.

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

#### F. **EXCLOSURE FENCING (CELLARS & PITS)**

#### **Exclosure Fencing**

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

#### G. ON LEASE ACCESS ROADS

#### Road Width

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

#### Surfacing

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

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

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

#### Crowning

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

#### Ditching

Ditching shall be required on both sides of the road.

#### **Turnouts**

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

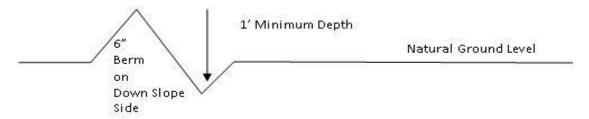
#### **Drainage**

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

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

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#### **Cross Section of a Typical Lead-off Ditch**



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

#### Formula for Spacing Interval of Lead-off Ditches

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

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

#### Cattle guards

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

#### **Fence Requirement**

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

#### **Public Access**

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

#### **Construction Steps**

- 1. Salvage topsoil
- 3. Redistribute topsoil
- 2. Construct road
- 4. Revegetate slopes

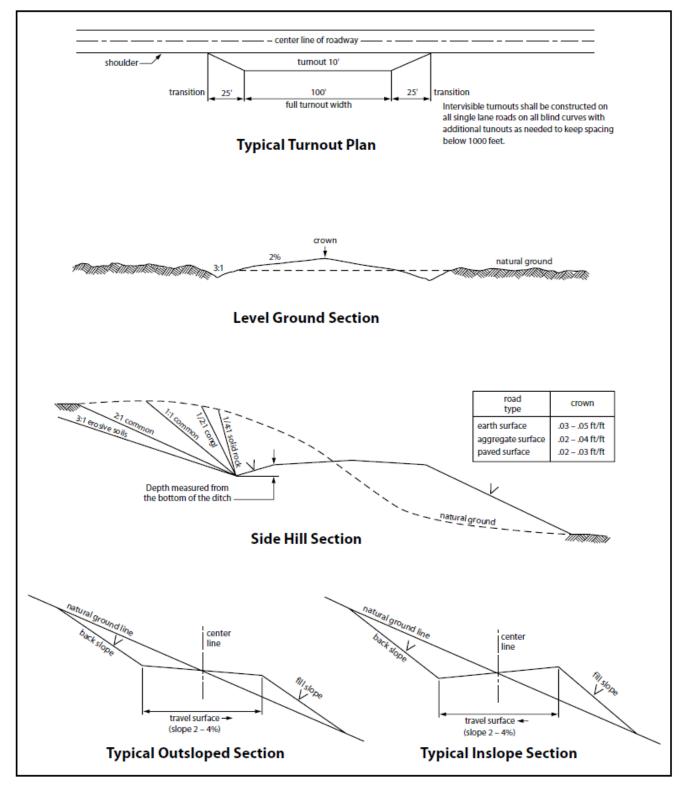


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

#### 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).

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

#### **Seed Mixture 1 for Loamy Sites**

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed shall 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 shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

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

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

#### Species

	lb/acre	
Plains lovegrass (Eragrostis intermedia)		0.5
Sand dropseed (Sporobolus cryptandrus)	1.0	
Sideoats grama (Bouteloua curtipendula)	5.0	
Plains bristlegrass (Setaria macrostachya)	2.0	

<sup>\*</sup>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.: STAGE FRIGHT 12/7 FED COM 618H

**APD ID:** 10400094561

**LOCATION:** Section 11, T21S, R25E. NMP

COUNTY: | Eddy County, New Mexico

COA

$H_2S$	0	No	•	Yes
Potash /	None	Secretary	O R-111-Q	☐ Open Annulus
WIPP				$\square$ WIPP
Cave / Karst	O Low	O Medium	O High	Critical
Wellhead	Conventional	<ul><li>Multibowl</li></ul>	O Both	<ul><li>Diverter</li></ul>
Cementing	☐ Primary Squeeze	☐ Cont. Squeeze	☐ EchoMeter	DV Tool
Special Req	Capitan Reef	☐ Water Disposal	✓ COM	☐ Unit
Waste Prev.	O Self-Certification	O Waste Min. Plan	• APD Submitted 1	prior to 06/10/2024
Additional	▼ Flex Hose	☐ Casing Clearance	☐ Pilot Hole	Break Testing
Language	☐ Four-String	Offline Cementing	☐ Fluid-Filled	

#### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan shall be activated at spud. As a result, the Hydrogen Sulfide area must meet all requirements from 43 CFR 3176, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

#### **B. CASING**

- 1. The 13-3/8 inch surface casing shall be set at approximately 450 ft. in Seven Rivers formation and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **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 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

**Note:** Intermediate casing set depth has been adjusted per BLM geologist's recommendation. "The operator proposes to set intermediate well casing to a depth of 1,992 feet. BLM accepts the base of Capitan Reef APD well casing set depth (1,800 ft.) and rock type."

2. The 9-5/8 inch intermediate casing shall be set in a competent bed at approximately 1,800 ft. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

**Option 1** (**Single Stage**): **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, and Capitan Reef.

**Option 2** (**Two-stage with DV tool:** The operator has proposed utilize a DV tool. The selected depth is below the Salado and is an acceptable set point. Operator may adjust depth of DV tool if it remains below the Salado and cement volumes are adjusted accordingly. 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 to surface. If cement does not circulate, contact the appropriate BLM office. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, and Capitan Reef.

**Note:** Excess cement for the 2<sup>nd</sup> stage is below the BLM's recommendation of 25%. More cement might be needed.

- ❖ In <u>Critical Cave/Karst Areas</u> cement must come to surface on the first three casing strings.
- ❖ In <u>Capitan Reef Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3<sup>rd</sup> casing string must come to surface.
- ❖ Special Capitan Reef requirements. If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:

(Use this for 3 string wells in the Capitan Reef, if 4 string well ensure FW based mud used across the Capitan interval)

- Switch to freshwater mud to protect the Capitan Reef and use freshwater mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
- Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these

drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

- **3.** Operator has proposed to set **7 inch 26# P-110** production casing at approximately **7,011 ft.** (6,973 ft. TVD). The minimum required fill of cement behind the **7** inch production casing is:
  - Cement to surface. If cement does not circulate, contact the appropriate BLM office. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, and Capitan Reef.

**Note:** Excess cement is below the BLM's recommendation of 25%. More cement might be needed.

- **4.** The minimum required fill of cement behind the **4-1/2** inch production liner is:
  - Cement should tie-back **100 feet** into the previous casing. 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).
- 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. The BOP/BOPE and annular preventer shall be pressure-tested in accordance with title 43 CFR 3172.
  - 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.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- 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.

#### **BOPE Break Testing Variance**

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

#### **Offline Cementing**

Operator has been (**Approved**) to pump the proposed cement program offline in the **Surface and intermediate(s) intervals**. Offline cementing should commence within 24 hours of landing the casing for the interval. Notify the BLM 4hrs prior to the commencement of any offline cementing procedure at **Eddy County:** 575-361-2822.

#### **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)

#### **Contact Eddy County Petroleum Engineering Inspection Staff:**

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; **BLM NM CFO DrillingNotifications@BLM.GOV**; (575) 361-2822

- 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
    - i. Notify the BLM when moving in and removing the Spudder Rig.
    - ii. Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2<sup>nd</sup> 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 doghouse or stairway area.
- 3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

#### 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 of both lead and tail cement, 2) until cement has been in place at least 8 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-Q 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 **43 CFR 3172**.
- 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:
  - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. 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.
  - iii. Manufacturer representative shall install the test plug for the initial BOP test.
  - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
  - v. 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.
  - i. 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).
  - ii. 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.)
  - iii. 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 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. 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.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. 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.
- vii. 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.
- viii. 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 08/09/2024

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

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

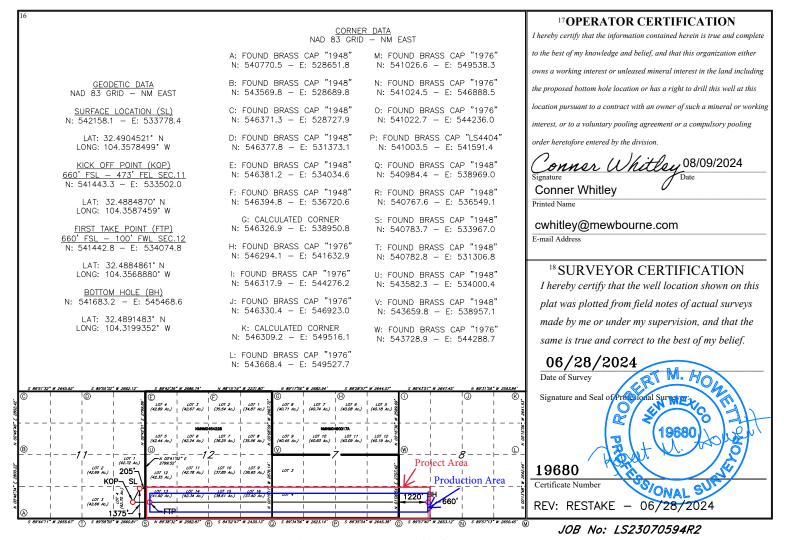
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Number	r		<sup>2</sup> Pool Code			<sup>3</sup> Pool Na	me					
30-015	5-55349	)		96381		AVA	ALON; BO	NE SPI	RING				
<sup>4</sup> Property Co	de		STAGE FRIGHT 12/8 FED COM										
336220	)				618H								
7 OGRID 1	OGRID NO.  8 Operator Name  1 4 7 4 4 MEWBOURNE OIL COMPANY												
1474	4				3316'								
	<sup>10</sup> Surface Location												
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/We	est line	County			
4	11	21S	25E		1375	SOUTH	205	EAS	ST	EDDY			
			11 ]	Bottom H	ole Location	If Different Fro	om Surface						
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County			
M	8	21S	26E		660	SOUTH	1220	WES	ST	EDDY			
12 Dedicated Acres	13 Joint	or Infill 14 (	Consolidation	Code 15 C	Order No.								
320													

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.



**Approval Date: 08/09/2024** 



**NAME: MELONY LEAL** 

**Email address:** 

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

# Operator Certification Data Report

Signed on: 09/18/2023

#### **Operator**

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

Title: Analy	rst		
Street Add	ress: 4801 BUSINESS PA	RK BLVD	
City: HOBE	BS S	tate: NM	<b>Zip:</b> 88240
Phone: (57	5)393-5905		
Email addr	ess: MLEAL@MEWBOUF	RNE.COM	
	Field		
Representa	ative Name:		
Street Add	ress:		
City:	Sta	te:	Zip:
Phone:			



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

## Application Data

APD ID: 10400094561

**Submission Date:** 09/19/2023

**Operator Name: MEWBOURNE OIL COMPANY** 

Well Name: STAGE FRIGHT 12/8 FED COM

Well Type: OIL WELL

Well Number: 618H

Well Work Type: Drill

Highlighted data reflects the most recent changes **Show Final Text** 

#### **Section 1 - General**

APD ID: 10400094561 Tie to previous NOS? Submission Date: 09/19/2023

**BLM Office:** Carlsbad

**User: MELONY LEAL** 

Title: Analyst

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM0454228

Surface access agreement in place?

Lease Acres: Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Operator letter of

Keep application confidential? YES

**Permitting Agent? NO** 

APD Operator: MEWBOURNE OIL COMPANY

## **Operator Info**

Operator Organization Name: MEWBOURNE OIL COMPANY

Operator Address: P O BOX 5270

**Operator PO Box:** 

**Zip:** 88241

**Operator City: HOBBS** 

State: NM

**Operator Phone:** (575)393-5905

**Operator Internet Address:** 

#### **Section 2 - Well Information**

Well in Master Development Plan? NO

**Master Development Plan name:** 

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well API Number:

Well Name: STAGE FRIGHT 12/8 FED COM

Well Number: 618H Field Name: AVALON

Pool Name: BONE SPRING

Page 1 of 3

Field/Pool or Exploratory? Field and Pool

**Operator Name: MEWBOURNE OIL COMPANY** 

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

Is the proposed well in an area containing other mineral resources? USEABLE WATER, NATURAL GAS, OIL

Is the proposed well in a Helium production area? N Use Existing Well Pad? N New surface disturbance?

Type of Well Pad: MULTIPLE WELL Multiple Well Pad Name: Stage Number: 2

Fright 12/8 616H & 12/7 618H

Well Class: HORIZONTAL

Number of Legs: 1

Well Work Type: Drill
Well Type: OIL WELL
Describe Well Type:

Well sub-Type: APPRAISAL

Describe sub-type:

Distance to town: 20 Miles Distance to nearest well: 20 FT Distance to lease line: 205 FT

Reservoir well spacing assigned acres Measurement: 360 Acres

Well plat: Stage\_Fright\_12\_8\_Fed\_Com\_\_618H\_AddInfo\_20240708143241.pdf

STAGE\_FRIGHT\_12\_7\_FED\_COM\_618H\_Plats\_20240730142900.pdf

Well work start Date: 11/15/2023 Duration: 60 DAYS

#### **Section 3 - Well Location Table**

Survey Type: RECTANGULAR

**Describe Survey Type:** 

Datum: NAD83 Vertical Datum: NAVD88

Survey number: Reference Datum: KELLY BUSHING

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
SHL Leg	137 5	FSL	205	FEL	21S	25E	11	Lot 4	32.49045 21	104.3578	EDD Y		MEXI	F	NMLC0 70409	331 2	0	0	N
#1										499		СО	СО						
KOP	660	FSL	473	FEL	21S	25E	11	Lot	32.48848		EDD	NEW	1	F	NMLC0	-	706	702	N
Leg								4	7	104.3587	Υ	1	MEXI		70409	371	1	3	
#1										459		СО	СО			T			

Operator Name: MEWBOURNE OIL COMPANY

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	atitude	-ongitude	County	State	Meridian	ease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
PPP Leg #1-1	660		100		21S		12	Lot 13	32.48848 61	- 104.3568 88	EDD Y	NEW	NEW MEXI CO	F	NMNM 045422 8	- 428 5	796 1	759 7	Y
EXIT Leg #1	660	FSL	122 0	FW L	21S	26E		Aliquot SWS W	32.48914 83	- 104.3199 352	EDD Y	NEW MEXI CO		S	STATE	- 475 8		807 0	Y
BHL Leg #1	660	FSL	122 0	FW L	21S	26E	8	Aliquot SWS W	32.48914 83	- 104.3199 352	EDD Y		NEW MEXI CO	S	STATE	- 475 8	193 67	807 0	Y

#### Mewbourne Oil Company, Stage Fright 12/8 Fed Com #618H Sec 11, T21S, R25E

SHL: 1375' FSL 205' FEL (Sec 11) BHL: 660' FSL 1220' FWL (Sec 8)

Operator Name:	Property Name:	Well Number
Mewbourne Oil Company	Stage Fright 12/8 Fed Com	#618H

K 1Ck	( )†† ŀ	oint ≀	(KOP)	

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
P	11	21S	25E	-	660'	FSL	473'	FEL	Eddy
		Latitude				NAD			
32.488487					-104.35874	159			83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
M	12	21S	25E	-	660'	FSL	100'	FWL	Eddy
		Latitude				NAD			
32.4884861					-032.48848		83		

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County			
M	8	21S	26E	-	660'	FSL	1220'	FWL	Eddy			
		Latitude	Longitude						NAD			
32.4891483	3				-104.31993	352			83			

Is this well the defining well for the Horizontal Is this well an infill well?	Spacing Unit? Y	
If infill is yes please provide API if available, O Spacing Unit.	perator Name and well number for Defining well for Horizontal	
API#		
Operator Name:	Property Name:	Well Number

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

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

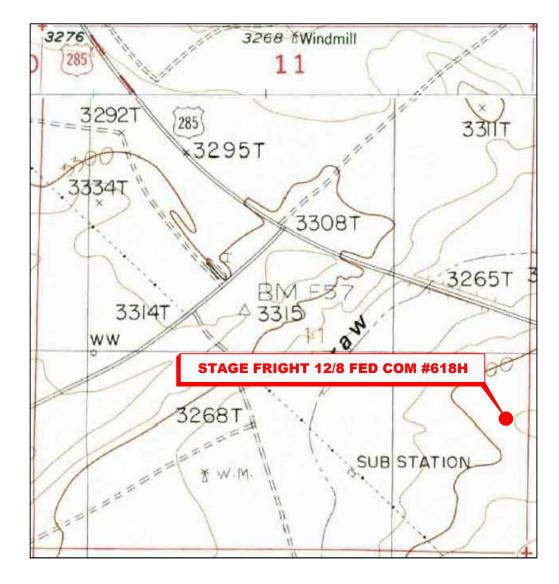
1	API Number	•		<sup>2</sup> Pool Code		<sup>3</sup> Pool Name				
<sup>4</sup> Property Co	ode	STAGE FRIGHT 12/8 FED COM					<sup>6</sup> Well Number <b>618H</b>			
7 OGRID	NO.		**Operator Name  MEWBOURNE OIL COMPANY  **3316'							
<sup>10</sup> Surface Location										
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/We	est line	County
4	11	21S	25E		1375	SOUTH	205	EAS	ST	EDDY
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/We	est line	County
M	8	21S	26E		660	SOUTH	1220	WES	ST	EDDY
12 Dedicated Acre	s 13 Joint	or Infill 14 (	Consolidation	Code 15 C	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.

16		<sup>17</sup> OPERATOR CERTIFICATION
	<u>CORNER DATA</u> NAD 83 GRID — NM EAST	I hereby certify that the information contained herein is true and complete
	A. TOOND BINASS ON 1540 W. TOOND BINASS ON 1570	to the best of my knowledge and belief, and that this organization either
		owns a working interest or unleased mineral interest in the land including
<u>GEODETIC DATA</u> NAD 83 GRID — NM EAST	B: FOUND BRASS CAP "1948" N: FOUND BRASS CAP "1976" N: 543569.8 – E: 528689.8 N: 541024.5 – E: 546888.5	the proposed bottom hole location or has a right to drill this well at this
SURFACE LOCATION (SL)	C. FOUND BRASS CAP 1946 O: FOUND BRASS CAP 1976	location pursuant to a contract with an owner of such a mineral or working
N: 542158.1 — E: 533778.4		interest, or to a voluntary pooling agreement or a compulsory pooling
LAT: 32.4904521° N LONG: 104.3578499° W	D: FOUND BRASS CAP "1948" P: FOUND BRASS CAP "LS4404" N: 546377.8 - E: 531373.1 N: 541003.5 - E: 541591.4	order heretofore entered by the division.
KICK OFF POINT (KOP)	E: FOUND BRASS CAP "1948" Q: FOUND BRASS CAP "1948"	
<u>660' FSL - 473' FEL SEC.11</u> N: 541443.3 - E: 533502.0	N: 546381.2 - E: 534034.6 N: 540984.4 - E: 538969.0	Signature Date
LAT: 32.4884870° N	F: FOUND BRASS CAP "1948" R: FOUND BRASS CAP "1948" N: 546394.8 - E: 536720.6 N: 540767.6 - E: 536549.1	Printed Name
LONG: 104.3587459° W	G: CALCULATED CORNER S: FOUND BRASS CAP "1948"	
<u>FIRST_TAKE_POINT_(FTP)</u> 660' FSL — 100' FWL_SEC.12		E-mail Address
N: 541442.8 - E: 534074.8	H: FOUND BRASS CAP "1976" T: FOUND BRASS CAP "1948" N: 546294.1 – E: 541632.9 N: 540782.8 – E: 531306.8	
LAT: 32.4884861° N LONG: 104.3568880° W	I: FOUND BRASS CAP "1976" U: FOUND BRASS CAP "1948"	<sup>18</sup> SURVEYOR CERTIFICATION
BOTTOM HOLE (BH)	N: 546317.9 - E: 544276.2 N: 543582.3 - E: 534000.4	I hereby certify that the well location shown on this
N: 541683.2 - E: 545468.6	J: FOUND BRASS CAP "1976" V: FOUND BRASS CAP "1948" N: 546330.4 - E: 546923.0 N: 543659.8 - E: 538957.1	plat was plotted from field notes of actual surveys
LAT: 32.4891483* N LONG: 104.3199352* W	K: CALCULATED CORNER W: FOUND BRASS CAP "1976"	made by me or under my supervision, and that the
	N: 546309.2 - E: 549516.1 N: 543728.9 - E: 544288.7	same is true and correct to the best of my belief.
	L: FOUND BRASS CAP "1976" N: 543668.4 — E: 549527.7	06/28/2024
		Date of Survey
S 89751'32" W 2645.92' S 89755'32" W 2662.12' S 8972'39" W 2666.74' N	881519" W 221.80" N 8917758" W 2882.94" S 8972857" W 2644.07" S 897359" W 2647.45' N 8931759" W 2931.80"	Signature and Seal of Processional Surveyor:
(42.89 Ac.) (42.67 Ac.)   (35.	07 2   107 1   107 8   107 7   107 8   107 5 8   1   4   4   4   4   4   4   4   4   4	8 3
	1   3     Mantio-Spector X   3       3         3         3           3	(19680)
®	7—————————————————————————————————————	Take the second
(42.72 Ac.)   2799.52'   107 11   11   12   12   13   14   14   15   15   15   15   15   15	07 10 (07 9 5 65 Ac.) (58.65 A	19680
KOP SL (107 15   107 16   107 16   108	77 15 LOT 16 LOT 4 1 1220' BH 600'	Certificate Number
(42.66 Az.)   S.   (42.66 Az.)   S.   FTP		REV: RESTAKE - 06/28/2024
2 89.44,11 . M 5022'01. D 2 83.28,20 . M 500'81, & N 83.38,35 . M 5285'91, & 2	94.25.41., M 54.2012, ③ 2 83.24.28., M 5657.14. ⑤ 2 83.25.04., M 5642.78. ③ 2 83.25.40., M 5827.15. Ø 2 83.25.12., M 5820.42., Ø	JOB No: LS23070594R2

## LOCATION VERIFICATION MAP

NOT TO SCALE



SECTION 11, TWP. 21 SOUTH, RGE. 25 EAST, N. M. P. M., EDDY COUNTY, NEW MEXICO

OPERATOR: Mewbourne Oil Company LOCATION: 1375' FSL & 205' FEL

LEASE: Stage Fright 12/8 Fed Com

WELL NO.: \_\_618H ELEVATION: 3316'

CONTOUR INTERVAL: 10' USGS TOPO. SOURCE MAP:

Carlsbad West, NM (1985)

1	RESTAKE	06/28/24
NO.	REVISION	DATE
JOB	NO.: LS23	070594R2

DWG. NO.: 23070594R2-2

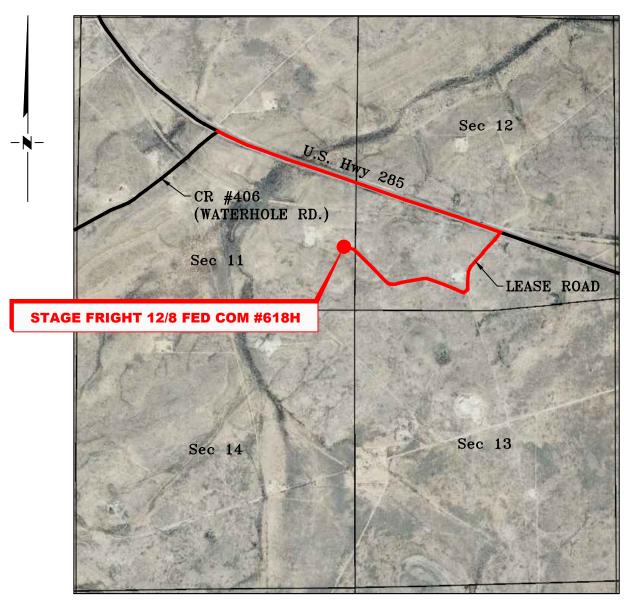


SCALE: N. T. S. DATE: 07/18/2023 SURVEYED BY: ML/IW DRAWN BY: AR APPROVED BY: RMH SHEET: 1 OF 1

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## VICINITY MAP

NOT TO SCALE



SECTION 11, TWP. 21 SOUTH, RGE. 25 EAST, N. M. P. M., EDDY COUNTY, NEW MEXICO

OPERATOR: Mewbourne Oil Company LOCATION: 1375' FSL & 205' FEL

LEASE: Stage Fright 12/8 Fed Com ELEVATION: 3316'

WELL NO.: 618H

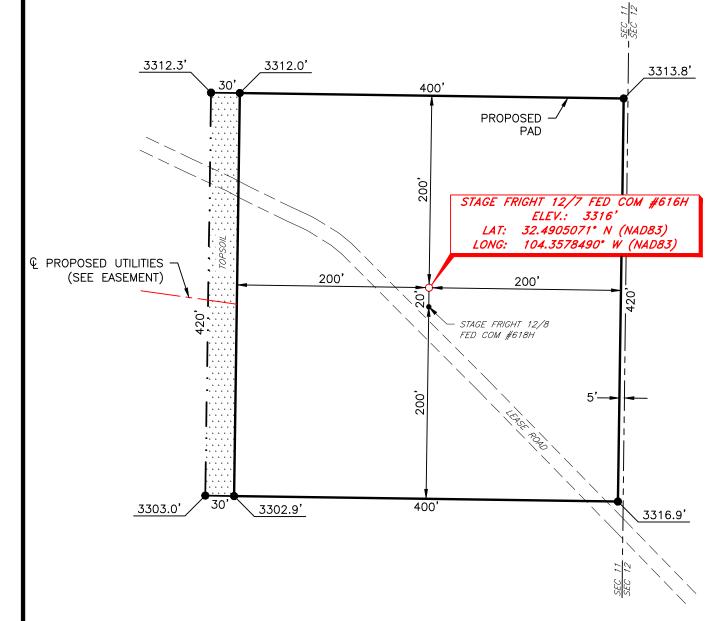
1	RESTAKE	06/28/24	
NO.	REVISION	DATE	
JOB NO.: LS23070594R2			
DWG. NO.: 23070594R2-3			



SCALE: N. T. S. DATE: 07/18/2023 SURVEYED BY: ML/IW DRAWN BY: AR APPROVED BY: RMH SHEET: 1 OF 1

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# MEWBOURNE OIL COMPANY STAGE FRIGHT 12/7 FED COM #616H (1395' FSL & 205' FEL) SECTION 11, T21S, R25E N. M. P. M., EDDY CO., NEW MEXICO



#### <u>DIRECTIONS TO LOCATION</u>

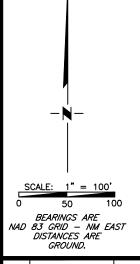
From the intersection of CR #406 (Waterhole Rd.) & U.S. Hwy 285;

Go Southeast on U.S. Hwy 285 approx. 1.1 miles to a lease road on the right;

Keep right at "Y" and go Northwest approx. 0.5 miles to location on the right;

THIS IS NOT A BOUNDARY SURVEY, APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY.

Turn right and go Southwest approx. 0.3 miles to a "Y";



I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett NM PS 19680

2	RESTAKE	06/28/24		
1	RESTAKE PAD	08/04/23		
NO.	REVISION	DATE		
JOB NO.: LS23070593R2				
DWC NO +23070503P2 4				



SCALE: 1" = 100'

DATE: 07/18/2023

SURVEYED BY: ML/IW

DRAWN BY: AR

APPROVED BY: RMH

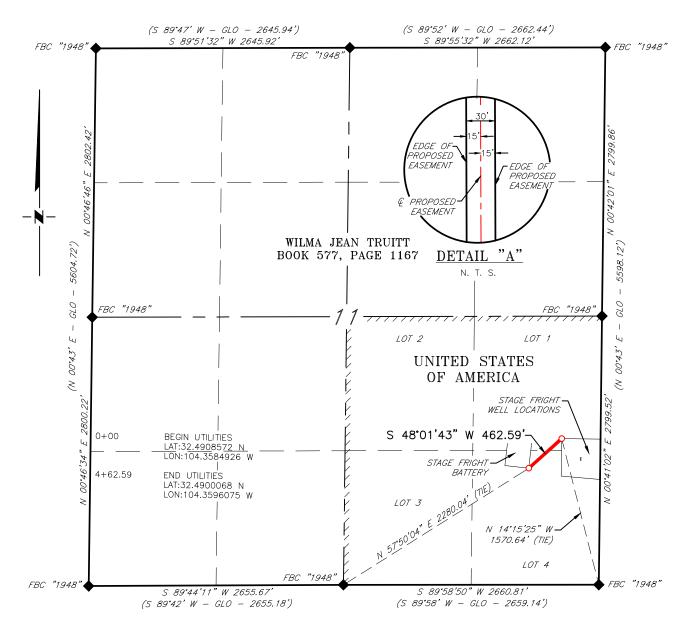
SHEET: 1 OF 1

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SS/ONAL

# MEWBOURNE OIL COMPANY UTILITIES FOR THE STAGE FRIGHT OFFSITE BATTERY SECTION 11, T21S, R25E

N. M. P. M., EDDY COUNTY, NEW MEXICO



#### DESCRIPTION

A strip of land 30 feet wide, being 462.59 feet or 28.036 rods in length, lying in Section 11, Township 21 South, Range 25 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across United States of America land:

BEGINNING at Engr. Sta. 0+00, a point in Lot 1 of Section 11, which bears, N 14\*15'25" W, 1,570.64 feet from a brass cap, stamped "1948", found for the Southeast corner of Section 11;

Thence S 48°01'43" W, 462.59 feet, to Engr. Sta. 4+62.59, the End of Survey, a point in Lot 4 of Section 11, which bears, N 57°50'04" E, 2,280.04 feet from a brass cap, stamped "1948", found for the South quarter corner of Section 11.

Said strip of land contains 0.319 acres, more or less, and is allocated by forties as follows:

Lot 1 184.43 Feet 11.178 Rods 0.127 Acres Lot 4 278.16 Feet 16.858 Rods 0.192 Acres

SCALE: 1" = 1000' 0 500' 1000'

BEARINGS ARE GRID NAD 83 NM EAST DISTANCES ARE HORIZ. GROUND.

*( )* ◆

LEGEND

RECORD DATA — GLO

FOUND MONUMENT
AS NOTED

PROPOSED UTILITIES

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

88240

(575) 964-8200

Robert M. Howell
Robert M. Howelt

NM PS 19680

701 S. CECIL ST., HOBBS, NM

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SONAL

0

NO. REVISION DATE
JOB NO.: LS23080667R2

NO.: 23080667R2-

RRC ENERGY SERVICES, LLC.

SCALE: 1" = 1000'

DATE: 07/10/2024

SURVEYED BY: ML/IW

DRAWN BY: AR

APPROVED BY: RMH

SHEET: 1 OF 1

M. Hoh



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

# Drilling Plan Data Report

08/09/2024

**APD ID:** 10400094561

**Submission Date:** 09/19/2023

Highlighted data reflects the most recent changes

Operator Name: MEWBOURNE OIL COMPANY

Well Number: 618H

Well Work Type: Drill

Well Name: STAGE FRIGHT 12/8 FED COM Well Nur

**Show Final Text** 

Well Type: OIL WELL

# **Section 1 - Geologic Formations**

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
13930989	UNKNOWN	3227	28	28	OTHER : Topsoil	NONE	N
13930979	CAPITAN REEF	2552	675	675	DOLOMITE, LIMESTONE	USEABLE WATER	N
13930985	LAMAR	1324	1903	1903	LIMESTONE	NATURAL GAS, OIL	N
13930995	BONE SPRING	-431	3658	3658	LIMESTONE, SHALE	NATURAL GAS, OIL	N
13930988	BONE SPRING 1ST	-2067	5294	5294	SANDSTONE	NATURAL GAS, OIL	N
13930991	BONE SPRING 2ND	-2709	5936	5936	SANDSTONE	NATURAL GAS, OIL	N
13930992	BONE SPRING 3RD	-4045	7272	7272	SANDSTONE	NATURAL GAS, OIL	Y
13930984		-4433	7660	7660	SANDSTONE, SHALE	NATURAL GAS, OIL	N

#### **Section 2 - Blowout Prevention**

Pressure Rating (PSI): 5M Rating Depth: 19367

Equipment: Annular, Pipe Ram, Blind Ram

Requesting Variance? YES

**Variance request:** A variance is requested for the use of a flexible choke line from the BOP to the choke manifold. Anchors are not required by manufacturer. A variance is also requested for the use of a multibowl wellhead. Please see attached schematics.

**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 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. 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.

#### **Choke Diagram Attachment:**

Stage Fright 12 8 Fed Com 618H 5M BOPE Choke Diagram 20230918083227.pdf

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

Flex\_Line\_Specs\_API\_16C\_20240621124852.pdf

#### **BOP Diagram Attachment:**

Stage\_Fright\_12\_8\_Fed\_Com\_618H\_5M\_BOPE\_Schematic\_20230918083300.pdf

Stage\_Fright\_12\_8\_Fed\_Com\_618H\_Cactus\_5K\_WH\_20230918083301.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	450	0	450	3312	2862	450	H-40	48	ST&C	3.83	8.6	DRY	14.9 1	DRY	25.0 5
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	2000	0	1992	3713	1320	2000	J-55	36	LT&C	1.94	3.38	DRY	6.29	DRY	7.83
3	PRODUCTI ON	8.75	7.0	NEW	API	N	0	7011	0	6973	3713	-3661	7011	P- 110	26	LT&C	1.81	2.89	DRY	3.8	DRY	4.55
4	LINER	6.12 5	4.5	NEW	API	N	6861	19367	6823	8070	-3483	-4758	12506	P- 110	13.5	LT&C	2.42	2.82	DRY	2	DRY	2.5

#### **Casing Attachments**

Casing ID: 1 String SURFACE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Stage\_Fright\_12\_8\_Fed\_Com\_\_618H\_CsgAssumptions\_20240708143735.pdf

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

Casing Attachments
--------------------

Casing ID: 2

String

**INTERMEDIATE** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

 $Stage\_Fright\_12\_8\_Fed\_Com\_\_618H\_CsgAssumptions\_20240708143746.pdf$ 

Casing ID: 3

**String** 

**PRODUCTION** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Stage\_Fright\_12\_8\_Fed\_Com\_\_618H\_CsgAssumptions\_20240708143757.pdf

Casing ID: 4

String

**LINER** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Stage\_Fright\_12\_8\_Fed\_Com\_\_618H\_CsgAssumptions\_20240708143808.pdf

**Section 4 - Cement** 

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	261	170	2.12	12.5	370	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		261	450	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead	650	0	320	60	2.12	12.5	130	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		320	650	100	1.34	14.8	134	25	Class C	Retarder
INTERMEDIATE	Lead	650	650	1340	130	2.12	12.5	280	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		1340	2000	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead		625	4439	330	2.12	12.5	700	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		4439	7011	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		6861	1936 7	800	1.85	13.5	1480	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 in surface hole

Describe the mud monitoring system utilized: Pason/PVT/Visual monitoring

# **Circulating Medium Table**

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	РН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
7011	1936 7	OIL-BASED MUD	10.5	10.5							
0	450	SPUD MUD	8.6	8.6							
450	2000	WATER-BASED MUD	10	10							
2000	7011	WATER-BASED MUD	9.5	9.5							

# **Section 6 - Test, Logging, Coring**

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

Will run GR/CNL logs in the vertical section of this well.

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

DIRECTIONAL SURVEY, MEASUREMENT WHILE DRILLING, MUD LOG/GEOLOGIC LITHOLOGY LOG, MUD LOG/GEOLOGICAL LITHOLOGY LOG, GAMMA RAY LOG, COMPENSATED NEUTRON LOG,

Coring operation description for the well:

None

#### **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 4616 Anticipated Surface Pressure: 2840

Anticipated Bottom Hole Temperature(F): 163

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Stage\_Fright\_12\_8\_Fed\_Com\_618H\_H2S\_Plan\_20230918090743.pdf

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

# **Section 8 - Other Information**

## Proposed horizontal/directional/multi-lateral plan submission:

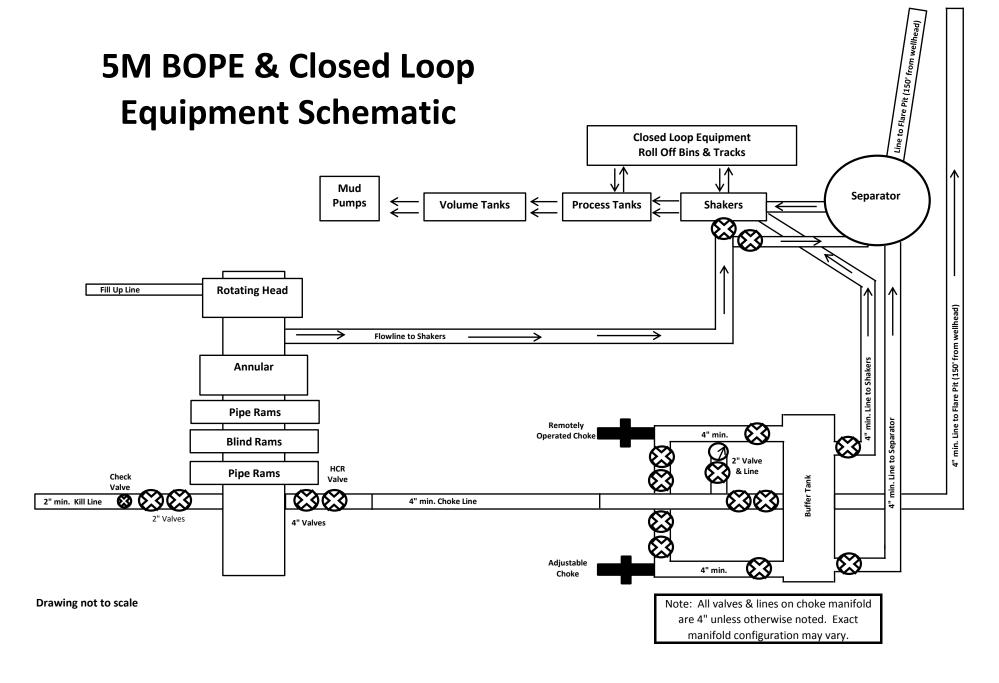
Stage\_Fright\_12\_8\_Fed\_Com\_618H\_Dir\_Plot\_20240708143842.pdf Stage\_Fright\_12\_8\_Fed\_Com\_618H\_Dir\_Plan\_20240708143842.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

#### Other Variance attachment:

MOC\_Break\_Testing\_Variance\_20240621134205.pdf MOC\_Offline\_Cementing\_Variance\_20240621134205.pdf





# LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

# HYDROSTATIC TESTING REPORT

LTYY/QR-5.7.1-28

№: 230826015

Released to Imaging: 8/21/2024 3:12:57 PM

Product Name  Product Specification		ke And Kill Hose		Standard	Aì	PI Spec 16C 3 <sup>rd</sup> ed	lition
	3"×1000						
	3 ~1000	0psi×60ft (18.29m	1)	Serial Numb	er	7660144	
Inspection Equipment	MTU	J-BS-1600-3200-E		Test mediu	m	Water	
Inspection Department	Ç	C. Department		Inspection D	ate	2023.08.26	
	1	Rate of le	ngth chang	ge			
Standard requirements	At working pre	essure, the rate of le	ngth chang	ge should not m	ore than $\pm 2$	2%	
Testing result	10000psi (69.0	MPa) ,Rate of leng	th change	0.7%			
		Hydrosta	atic testing				
Standard requirements		orking pressure, the				less than three min	nutes
Testing result	15000psi (103.	.5MPa), 3 min for th	he first tim	e, 60 min for th	e second tim	e, no leakage	
Graph of pressure testing:							
100 90 100 100 100 100 100 100 100 100 1			100 90 70 70 60 50 50 10				
(1) M(2) (1) M(2) (1) M(2) (1) M(2) (1)	S621 215521 215621 215621 215	021 220021 220221 220421 220421222		3958 23×958 235959	\$ 00:09:5\$ 00:1	1958 002958 001958	00:
Conclusion	The inspec	ted items meet stan	dard requi	rements of API	Spec 16C 3rd	l edition	
			High			1	Was



# LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

# **CERTIFICATE OF QUALITY**

# LTYY/QR-5.7.1-19B

№: LT2023-126-002

Released to Imaging: 8/21/2024 3:12:57 PM

Customer Name	Austin Hose									
Product Name	Choke And Kill Hose									
Product Specification	3"×10000psi×60ft (18.29m)	Quantity	2PCS							
Serial Number	7660143~7660144	FSL	FSL3							
Temperature Range	-29°C∼+121°C	Standard	API Spec 16C 3 <sup>rd</sup> edition							
Inspection Department	Q.C. Department	Inspection date	2023.08.26							

	Inspect	ion Items	5			Inspection resul	ts				
	Appearance	Checkin	g		In accordar	nce with API Spec	16C 3 <sup>rd</sup> edition				
	Size and I	engths			In accordance with API Spec 16C 3 <sup>rd</sup> edition						
I	Dimensions an	d Tolerai	nces		In accordance with API Spec 16C 3 <sup>rd</sup> edition						
End Connections: 4-	End Connections: 4-1/16"×10000psi Integral flange for sour gas service					In accordance with API Spec 6A 21st edition					
End Connections: 4-1/16"×10000psi Integral flange for sour gas service					In accordar	nce with API Spec	17D 3 <sup>rd</sup> edition				
	Hydrostatic Testing				In accordance with API Spec 16C 3 <sup>rd</sup> edition						
	product Marking				In accordance with API Spec 16C 3 <sup>rd</sup> edition						
Inspection conclusion The inspected items r				ms m	eet standard requires	ments of API Spec	16C 3 <sup>rd</sup> edition				
Remarks											
Approver	Approver Jian long C			1/1	nging Dong	Inspector	Zhansheng Wang				

## LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

#### CERTIFICATE OF CONFORMANCE

№:LT230826016

Product Name: Choke And Kill Hose

Product Specification: 3"×10000psi×60ft (18.29m)

Serial Number: 7660143~7660144

End Connections: 4-1/16"×10000psi Integral flange for sour gas service

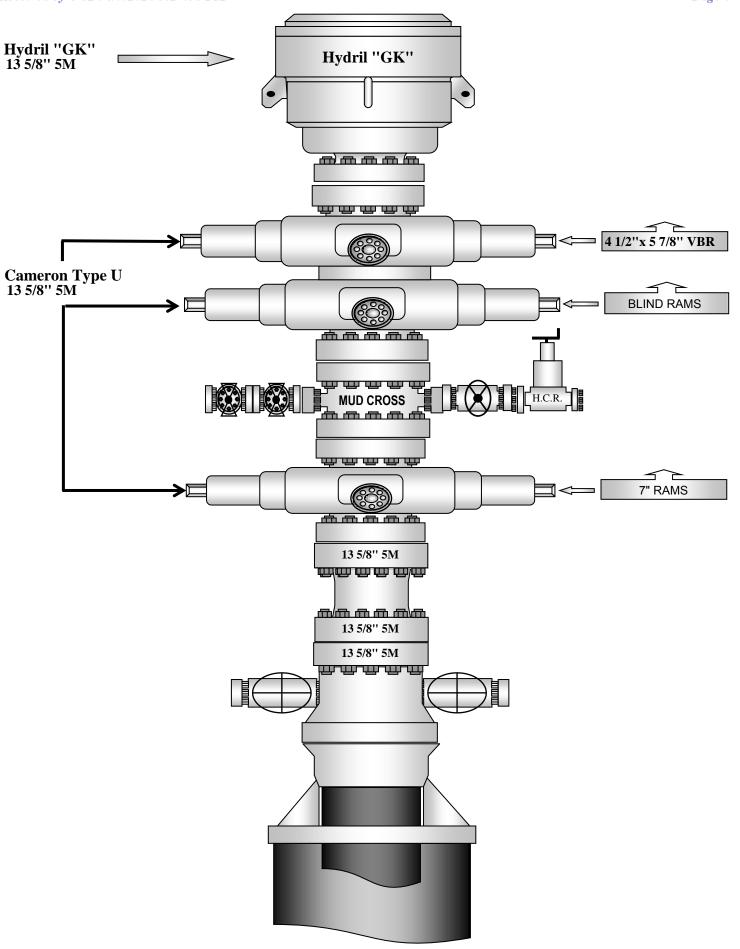
The Choke And Kill Hose assembly was produced by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD . in Aug 2023, and inspected by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD. according to API Spec 16C 3rd edition on Aug 26, 2023. The overall condition is good. This is to certify that the Choke And Kill Hose complies with all current standards and specifications for API Spec 16C 3rd edition.

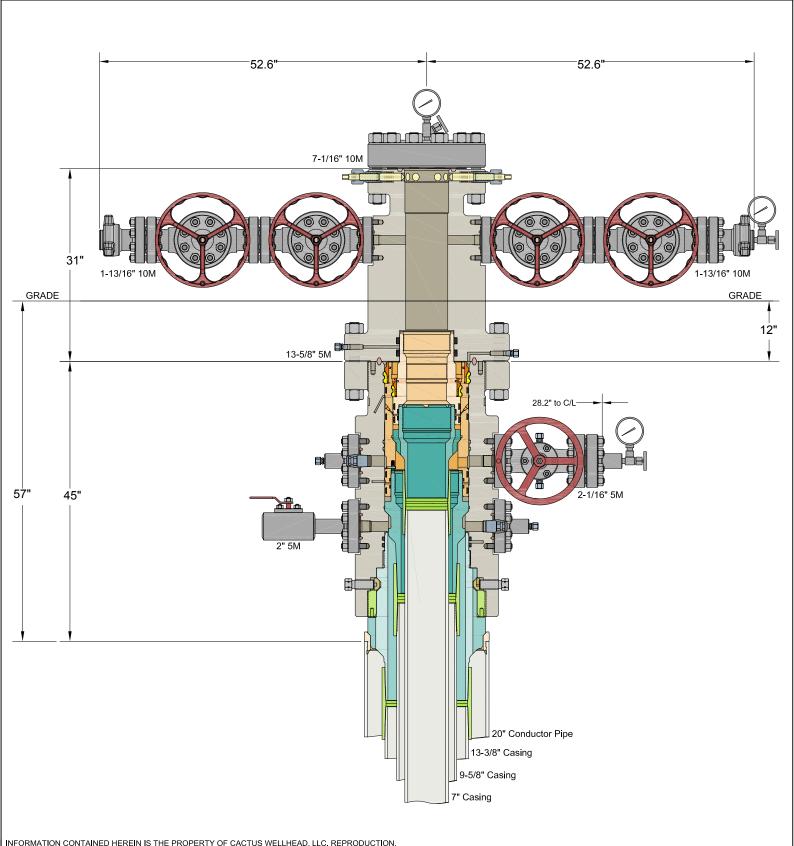
Jiav long Chen

QC Manager:

Date: Aug 26, 2023

Released to Imaging: 8/21/2024 3:12:57 PM





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# CACTUS WELLHEAD LLC

20" x 13-3/8" x 9-5/8" x 7" MBU-3T-CFL-R-DBLO Wellhead System With 9-5/8" & 7" Fluted Mandrel Casing Hangers And 13-5/8" 5M x 7-1/16" 10M CTH-DBLHPS Tubing Head

# ALL DIMENSIONS APPROXIMATE MEWBOURNE OIL COMPANY NEW MEXICO

DRAWN DLE 18APR22
APPRV

DRAWING NO. HBE0000660

SHL: 1375' FSL 205' FEL (Sec 11) BHL: 660' FSL 1220' FWL (Sec 8)

#### Design A - Casing Program

Hole Size	From	To	Csg. Size	Weight	Grade	Conn.	SF	SF Burst	SF Jt	SF Body
Hole Size	Fioni	10	Csg. Size	(lbs)	Grauc	Com.	Collapse	or burst	Tension	Tension
17.5 in	0'	450'	13.375 in	48.0	H40	STC	3.83	8.60	14.91	25.05
12.25 in	0'	2000'	9.625 in	36.0	J55	LTC	1.94	3.38	6.29	7.83
8.75 in	0'	7011'	7 in	26.0 P110		LTC	1.81	2.89	3.80	4.55
6.125 in	6861'	19367'	4.5 in	13.5	P110	LTC	2.42	2.82	2.00	2.50
				BLM Minimum Safety Facto		Factors	1.125	1.0	1.6 Dry	1.6 Dry
			DLN	1 Millimum Safety	ractors	1.125	1.0	1.8 Wet	1.8 Wet	

Design A - Cement Program

Design A - Cement F	rogram					
Casing		# Sacks	Wt. lb/gal	Yield cu.ft/sack	тос	Slurry Description
13.375 in	LEAD	170	12.5	2.12	0'	Salt, Gel, Extender, LCM
15.575 III	TAIL	200	14.8	1.34	U	Retarder
1st Stg 9.625 in	LEAD	130	12.5	2.12	650'	Salt, Gel, Extender, LCM
18t 5tg 9.025 III	TAIL	200	14.8	1.34	650	Retarder
					9 5/8" DV Tool @ 0	650'
2nd Stg 9.625 in	LEAD	60	12.5	2.12	0'	Salt, Gel, Extender, LCM
211d 5tg 9.025 III	TAIL	100	14.8	1.34	U	Retarder
7 in	LEAD	330	12.5	2.12	625'	Salt, Gel, Extender, LCM, Defoamer
/ m	TAIL	400	15.6	1.18	025	Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	800	13.5	1.85	6861'	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

Design A - Mud Program

Depth	Mud Wt	Mud Type
0' - 450'	8.6	Fresh Water
450' - 2000'	10	Brine
2000' - 7011'	9.5	Cut-Brine
7011' - 19367'	10.5	OBM

Geology

Geology					
Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler			Yeso		
Castile			Delaware (Lamar)		1903'
Salt Top			Bell Canyon		
Salt Base			Cherry Canyon		
Yates			Manzanita Marker		
Seven Rivers			Basal Brushy Canyon		
Queen			Bone Spring		3658'
Capitan		675'	1st Bone Spring		5294'
Grayburg			2nd Bone Spring		5936'
San Andres			3rd Bone Spring		7272'
Glorieta			Wolfcamp		7660'

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

SHL: 1375' FSL 205' FEL (Sec 11) BHL: 660' FSL 1220' FWL (Sec 8)

Design B - Casing Program

II.1. 6!	E	To	C 6:	Weight	Grade	G	SF	SF Burst	SF Jt	SF Body
Hole Size	From		Csg. Size	(lbs)	Grade	Conn.	Collapse	SF Burst	Tension	Tension
17.5 in	0'	450'	13.375 in	48.0	H40	STC	3.83	8.60	14.91	25.05
12.25 in	0'	2000'	9.625 in	36.0	J55	LTC	1.94	3.38	6.29	7.83
8.75 in	0'	7938'	7 in	26.0	P110	LTC	1.66	2.65	3.36	4.02
6.125 in	7061'	19367'	4.5 in	13.5	P110	LTC	2.42	2.82	2.03	2.54
		RI M Minimum Safety Factors 1125	BLM Minimum Safety Factors			1.125	1.0	1.6 Drv	1.6 Drv	
				DLIVI Minimum Safety Factors			11120	1.0	1.8 Wet	1.8 Wet

Design B - Cement Program

Asign b - Centent I rogi am										
Casing		# Sacks	Wt. lb/gal	Yield cu.ft/sack	TOC	Slurry Description				
13.375 in	LEAD	170	12.5	2.12	0'	Salt, Gel, Extender, LCM				
13.373 III	TAIL	200	14.8	1.34	U	Retarder				
1st Stg 9.625 in	LEAD	130	12.5	2.12	650'	Salt, Gel, Extender, LCM				
18t Stg 9.025 III	TAIL	200	14.8	1.34	650	Retarder				
					9 5/8" DV Tool @ 0	650'				
2nd Stg 9.625 in	LEAD	60	12.5	2.12	0'	Salt, Gel, Extender, LCM				
2110 Stg 9.025 III	TAIL	100	14.8	1.34	U	Retarder				
7 in	LEAD	420	12.5	2.12	625'	Salt, Gel, Extender, LCM, Defoamer				
/ III	TAIL	400	15.6	1.18	023	Retarder, Fluid Loss, Defoamer				
4.5 in	LEAD	780	13.5	1.85	7061'	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent				

Design B - Mud Program

Depth	Mud Wt	Mud Type
0' - 450'	8.6	Fresh Water
450' - 2000'	10	Brine
2000' - 7938'	9.5	Cut-Brine
7938' - 19367'	10.5	OBM

Geology

Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler			Yeso		
Castile			Delaware (Lamar)		1903'
Salt Top			Bell Canyon		
Salt Base			Cherry Canyon		
Yates			Manzanita Marker		
Seven Rivers			Basal Brushy Canyon		
Queen			Bone Spring		3658'
Capitan		675'	1st Bone Spring		5294'
Grayburg			2nd Bone Spring		5936'
San Andres			3rd Bone Spring		7272'
Glorieta			Wolfcamp		7660'

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

SHL: 1375' FSL 205' FEL (Sec 11) BHL: 660' FSL 1220' FWL (Sec 8)

#### Design A - Casing Program

Hole Size	From	To	Csg. Size	Weight	Grade	Conn.	SF	SF Burst	SF Jt	SF Body
Hole Bize	Fion	10	Cog. Dize	(lbs)	Grade	com.	Collapse		Tension	Tension
17.5 in	0'	450'	13.375 in	48.0	H40	STC	3.83	8.60	14.91	25.05
12.25 in	0'	2000'	9.625 in	36.0	J55	LTC	1.94	3.38	6.29	7.83
8.75 in	0'	7011'	7 in	26.0	P110	LTC	1.81	2.89	3.80	4.55
6.125 in	6861'	19367'	4.5 in	13.5	P110	LTC	2.42	2.82	2.00	2.50
				<b>BLM Minimum Safety Factors</b>			1.125	1.0	1.6 Dry	1.6 Dry
							1.125	1.0	1.8 Wet	1.8 Wet

Design A - Cement Program

esign A - Cement Program										
Casing		# Sacks	Wt. lb/gal	Yield cu.ft/sack	тос	Slurry Description				
13.375 in	LEAD	170	12.5	2.12	0'	Salt, Gel, Extender, LCM				
15.575 III	TAIL	200	14.8	1.34	0'	Retarder				
1st Stg 9.625 in	LEAD	130	12.5	2.12	650'	Salt, Gel, Extender, LCM				
18t Stg 9.025 III	TAIL	200	14.8	1.34	650	Retarder				
					9 5/8" DV Tool @ 0	650'				
2nd Stg 9.625 in	LEAD	60	12.5	2.12	0'	Salt, Gel, Extender, LCM				
211d 5tg 9.025 III	TAIL	100	14.8	1.34	U	Retarder				
7 in	LEAD	330	12.5	2.12	625'	Salt, Gel, Extender, LCM, Defoamer				
/ III	TAIL	400	15.6	1.18	623	Retarder, Fluid Loss, Defoamer				
4.5 in	LEAD	800	13.5	1.85	6861'	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent				

Design A - Mud Program

Depth	Mud Wt	Mud Type
0' - 450'	8.6	Fresh Water
450' - 2000'	10	Brine
2000' - 7011'	9.5	Cut-Brine
7011' - 19367'	10.5	OBM

Geology

Geology					
Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler			Yeso		
Castile			Delaware (Lamar)		1903'
Salt Top			Bell Canyon		
Salt Base			Cherry Canyon		
Yates			Manzanita Marker		
Seven Rivers			Basal Brushy Canyon		
Queen			Bone Spring		3658'
Capitan		675'	1st Bone Spring		5294'
Grayburg			2nd Bone Spring		5936'
San Andres			3rd Bone Spring		7272'
Glorieta			Wolfcamp		7660'

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

SHL: 1375' FSL 205' FEL (Sec 11) BHL: 660' FSL 1220' FWL (Sec 8)

Design B - Casing Program

Hole Size	E	To	G 6'	Weight	C 1.	C	SF	SF Burst	SF Jt	SF Body
Hole Size	From	10	Csg. Size	(lbs)	Grade	Conn.	Collapse	SF Burst	Tension	Tension
17.5 in	0'	450'	13.375 in	48.0	H40	STC	3.83	8.60	14.91	25.05
12.25 in	0'	2000'	9.625 in	36.0	J55	LTC	1.94	3.38	6.29	7.83
8.75 in	0'	7938'	7 in	26.0	P110	LTC	1.66	2.65	3.36	4.02
6.125 in	7061'	19367'	4.5 in	13.5	P110	LTC	2.42	2.82	2.03	2.54
				BLM Minimum Safety Factors			1.125	1.125 1.0	1.6 Drv	1.6 Drv
				BEM Minimum Safety Factors			1.125	1.0	1.8 Wet	1.8 Wet

Design B - Cement Program

Design b - Cement 1	8						
Casing		# Sacks	Wt. lb/gal	Yield cu.ft/sack	TOC	Slurry Description	
13.375 in	LEAD	170	12.5	2.12	0'	Salt, Gel, Extender, LCM	
15.575 III	TAIL	200	14.8	1.34	U	Retarder	
1st Stg 9.625 in	LEAD	130	12.5	2.12	650'	Salt, Gel, Extender, LCM	
18t Stg 9.025 III	TAIL	200	14.8	1.34	650	Retarder	
					9 5/8" DV Tool @ 0	650'	
2nd Stg 9.625 in	LEAD	60	12.5	2.12	0'	Salt, Gel, Extender, LCM	
21td 3tg 9.023 III	TAIL	100	14.8	1.34	U	Retarder	
7 in	LEAD	420	12.5	2.12	625'	Salt, Gel, Extender, LCM, Defoamer	
7 III	TAIL	400	15.6	1.18	023	Retarder, Fluid Loss, Defoamer	
4.5 in	LEAD	780	13.5	1.85	7061'	7061' Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent	

Design B - Mud Program

Depth	Mud Wt	Mud Type
0' - 450'	8.6	Fresh Water
450' - 2000'	10	Brine
2000' - 7938'	9.5	Cut-Brine
7938' - 19367'	10.5	OBM

Geology

Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler			Yeso		
Castile			Delaware (Lamar)		1903'
Salt Top			Bell Canyon		
Salt Base			Cherry Canyon		
Yates			Manzanita Marker		
Seven Rivers			Basal Brushy Canyon		
Queen			Bone Spring		3658'
Capitan		675'	1st Bone Spring		5294'
Grayburg			2nd Bone Spring		5936'
San Andres			3rd Bone Spring		7272'
Glorieta			Wolfcamp		7660'

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

SHL: 1375' FSL 205' FEL (Sec 11) BHL: 660' FSL 1220' FWL (Sec 8)

#### Design A - Casing Program

Hole Size	From	To	Csg. Size	Weight	Grade	Conn.	SF	SF Burst	SF Jt	SF Body
Hole Size	FIOIII	10	Csg. Size	(lbs)	Grauc	Com.	Collapse	or burst	Tension	Tension
17.5 in	0'	450'	13.375 in	48.0	H40	STC	3.83	8.60	14.91	25.05
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6.125 in	6861'	19367'	4.5 in	13.5	P110	LTC	2.42	2.82	2.00	2.50
				BLM Minimum Safety Factors		Footons	1.125	1.0	1.6 Dry	1.6 Dry
				DLN	DLM Minimum Safety Factors		1.125	1.0	1.8 Wet	1.8 Wet

Design A - Cement Program

Design A - Cement P	i ugi aiii					
Casing		# Sacks	Wt. lb/gal	Yield cu.ft/sack	тос	Slurry Description
13.375 in	LEAD	170	12.5	2.12	0'	Salt, Gel, Extender, LCM
13.375 III	TAIL	200	14.8	1.34	U	Retarder
1st Stg 9.625 in	LEAD	130	12.5	2.12	650'	Salt, Gel, Extender, LCM
18t Stg 9.025 III	TAIL	200	14.8	1.34	630	Retarder
					9 5/8" DV Tool @ 0	550'
2nd Stg 9.625 in	LEAD	60	12.5	2.12	0'	Salt, Gel, Extender, LCM
21td Stg 9.023 III	TAIL	100	14.8	1.34	U	Retarder
7 in	LEAD	330	12.5	2.12	625'	Salt, Gel, Extender, LCM, Defoamer
/ III	TAIL	400	15.6	1.18	623	Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	800	13.5	1.85	6861'	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

Design A - Mud Program

Depth	Mud Wt	Mud Type
0' - 450'	8.6	Fresh Water
450' - 2000'	10	Brine
2000' - 7011'	9.5	Cut-Brine
7011' - 19367'	10.5	OBM

Geology

Geology					
Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler			Yeso		
Castile			Delaware (Lamar)		1903'
Salt Top			Bell Canyon		
Salt Base			Cherry Canyon		
Yates			Manzanita Marker		
Seven Rivers			Basal Brushy Canyon		
Queen			Bone Spring		3658'
Capitan		675'	1st Bone Spring		5294'
Grayburg			2nd Bone Spring		5936'
San Andres			3rd Bone Spring		7272'
Glorieta			Wolfcamp		7660'

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Sec 11, T21S, R25E SHL: 1375' FSL 205' FEL (Sec 11) BHL: 660' FSL 1220' FWL (Sec 8)

Design B - Casing Program

II.1. C!	E	To	G G'	Weight	C 1.	G	SF	SF Burst	SF Jt	SF Body
Hole Size	From	10	Csg. Size	(lbs)	Grade	Conn.	Collapse	SF Burst	Tension	Tension
17.5 in	0'	450'	13.375 in	48.0	H40	STC	3.83	8.60	14.91	25.05
12.25 in	0'	2000'	9.625 in	36.0	J55	LTC	1.94	3.38	6.29	7.83
8.75 in	0'	7938'	7 in	26.0	P110	LTC	1.66	2.65	3.36	4.02
6.125 in	7061'	19367'	4.5 in	13.5	P110	LTC	2.42	2.82	2.03	2.54
				BLM Minimum Safety Fac		Factors	1.125	1.0	1.6 Drv	1.6 Drv
				DLI	1 Millimum Safety	Factors	1.123	1.0	1.8 Wet	1.8 Wet

Design B - Cement Program

Design B - Cement I						
Casing		# Sacks	Wt. lb/gal	Yield cu.ft/sack	TOC	Slurry Description
13.375 in	LEAD	170	12.5	2.12	0'	Salt, Gel, Extender, LCM
13.375 III	TAIL	200	14.8	1.34	U	Retarder
1st Stg 9.625 in	LEAD	130	12.5	2.12	650'	Salt, Gel, Extender, LCM
18t 5tg 9.025 iii	TAIL	200	14.8	1.34	050	Retarder
					9 5/8" DV Tool @ 0	650'
2nd Stg 9.625 in	LEAD	60	12.5	2.12	0'	Salt, Gel, Extender, LCM
21td 3tg 9.023 III	TAIL	100	14.8	1.34	U	Retarder
7 in	LEAD	420	12.5	2.12	625'	Salt, Gel, Extender, LCM, Defoamer
/ III	TAIL	400	15.6	1.18	023	Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	780	13.5	1.85	7061'	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

Design B - Mud Program

Depth	Mud Wt	Mud Type
0' - 450'	8.6	Fresh Water
450' - 2000'	10	Brine
2000' - 7938'	9.5	Cut-Brine
7938' - 19367'	10.5	OBM

Geology

Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler			Yeso		
Castile			Delaware (Lamar)		1903'
Salt Top			Bell Canyon		
Salt Base			Cherry Canyon		
Yates			Manzanita Marker		
Seven Rivers			Basal Brushy Canyon		
Queen			Bone Spring		3658'
Capitan		675'	1st Bone Spring		5294'
Grayburg			2nd Bone Spring		5936'
San Andres			3rd Bone Spring		7272'
Glorieta			Wolfcamp		7660'

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

SHL: 1375' FSL 205' FEL (Sec 11) BHL: 660' FSL 1220' FWL (Sec 8)

#### Design A - Casing Program

Hole Size	From	To	Csg. Size	Weight	Grade	Conn.	SF	SF Burst	SF Jt	SF Body
Hole Size	FIOIII	10	Csg. Size	(lbs)	Graue	Com.	Collapse	or burst	Tension	Tension
17.5 in	0'	450'	13.375 in	48.0	H40	STC	3.83	8.60	14.91	25.05
12.25 in	0'	2000'	9.625 in	36.0	J55	LTC	1.94	3.38	6.29	7.83
8.75 in	0'	7011'	7 in	26.0	P110	LTC	1.81	2.89	3.80	4.55
6.125 in	6861'	19367'	4.5 in	13.5	P110	LTC	2.42	2.82	2.00	2.50
				BLM Minimum Safety Factors		1.125	1.0	1.6 Dry	1.6 Dry	
						ractors	1.125	1.0	1.8 Wet	1.8 Wet

Design A - Cement Program

Design A - Cement F	rogram					
Casing		# Sacks	Wt. lb/gal	Yield cu.ft/sack	тос	Slurry Description
13.375 in	LEAD	170	12.5	2.12	0'	Salt, Gel, Extender, LCM
15.575 III	TAIL	200	14.8	1.34	U	Retarder
1st Stg 9.625 in	LEAD	130	12.5	2.12	650'	Salt, Gel, Extender, LCM
18t 5tg 9.025 III	TAIL	200	14.8	1.34	650	Retarder
					9 5/8" DV Tool @ 0	650'
2nd Stg 9.625 in	LEAD	60	12.5	2.12	0'	Salt, Gel, Extender, LCM
211d 5tg 9.025 III	TAIL	100	14.8	1.34	U	Retarder
7 in	LEAD	330	12.5	2.12	625'	Salt, Gel, Extender, LCM, Defoamer
/ m	TAIL	400	15.6	1.18	025	Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	800	13.5	1.85	6861'	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

Design A - Mud Program

Depth	Mud Wt	Mud Type
0' - 450'	8.6	Fresh Water
450' - 2000'	10	Brine
2000' - 7011'	9.5	Cut-Brine
7011' - 19367'	10.5	OBM

Geology

Geology					
Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler			Yeso		
Castile			Delaware (Lamar)		1903'
Salt Top			Bell Canyon		
Salt Base			Cherry Canyon		
Yates			Manzanita Marker		
Seven Rivers			Basal Brushy Canyon		
Queen			Bone Spring		3658'
Capitan		675'	1st Bone Spring		5294'
Grayburg			2nd Bone Spring		5936'
San Andres			3rd Bone Spring		7272'
Glorieta			Wolfcamp		7660'

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

SHL: 1375' FSL 205' FEL (Sec 11) BHL: 660' FSL 1220' FWL (Sec 8)

Design B - Casing Program

Hole Size	From	To	Con Cina	Weight	Grade	C	SF	SF Burst	SF Jt	SF Body
noie Size	r rom	10	Csg. Size	(lbs)	Grade	Conn.	Collapse	Sr Durst	Tension	Tension
17.5 in	0'	450'	13.375 in	48.0	H40	STC	3.83	8.60	14.91	25.05
12.25 in	0'	2000'	9.625 in	36.0	J55	LTC	1.94	3.38	6.29	7.83
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6.125 in	7061'	19367'	4.5 in	13.5	P110	LTC	2.42	2.82	2.03	2.54
				BLM Minimum Safety Factors			1.125	1.0	1.6 Drv	1.6 Drv
							1.123	1.0	1.8 Wet	1.8 Wet

Design B - Cement Program

Design B - Cement P	i ogi am					
Casing		# Sacks	Wt. lb/gal	Yield cu.ft/sack	тос	Slurry Description
13.375 in	LEAD	170	12.5	2.12	0'	Salt, Gel, Extender, LCM
13.375 III	TAIL	200	14.8	1.34	U	Retarder
1st Stg 9.625 in	LEAD	130	12.5	2.12	650'	Salt, Gel, Extender, LCM
18t Stg 9.025 III	TAIL	200	14.8	1.34	630	Retarder
					9 5/8" DV Tool @ 0	650'
2nd Stg 9.625 in	LEAD	60	12.5	2.12	0'	Salt, Gel, Extender, LCM
211d Stg 9.023 III	TAIL	100	14.8	1.34	U	Retarder
7 in	LEAD	420	12.5	2.12	625'	Salt, Gel, Extender, LCM, Defoamer
/ III	TAIL	400	15.6	1.18	023	Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	780	13.5	1.85	7061'	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

Design B - Mud Program

Depth	Mud Wt	Mud Type
0' - 450'	8.6	Fresh Water
450' - 2000'	10	Brine
2000' - 7938'	9.5	Cut-Brine
7938' - 19367'	10.5	OBM

Geology

Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler			Yeso		
Castile			Delaware (Lamar)		1903'
Salt Top			Bell Canyon		
Salt Base			Cherry Canyon		
Yates			Manzanita Marker		
Seven Rivers			Basal Brushy Canyon		
Queen			Bone Spring		3658'
Capitan		675'	1st Bone Spring		5294'
Grayburg			2nd Bone Spring		5936'
San Andres			3rd Bone Spring		7272'
Glorieta			Wolfcamp		7660'

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

# <u>Hydrogen Sulfide Drilling Operations Plan</u> **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:

- 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.
- The contents of the Hydrogen Sulfide Drilling Operations Plan.

There will be an initial training session prior to encountering a know 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. <u>Protective Equipment for Essential Personnel</u>

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. <u>Hydrogen Sulfide Protection and Monitoring Equipment</u>

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.

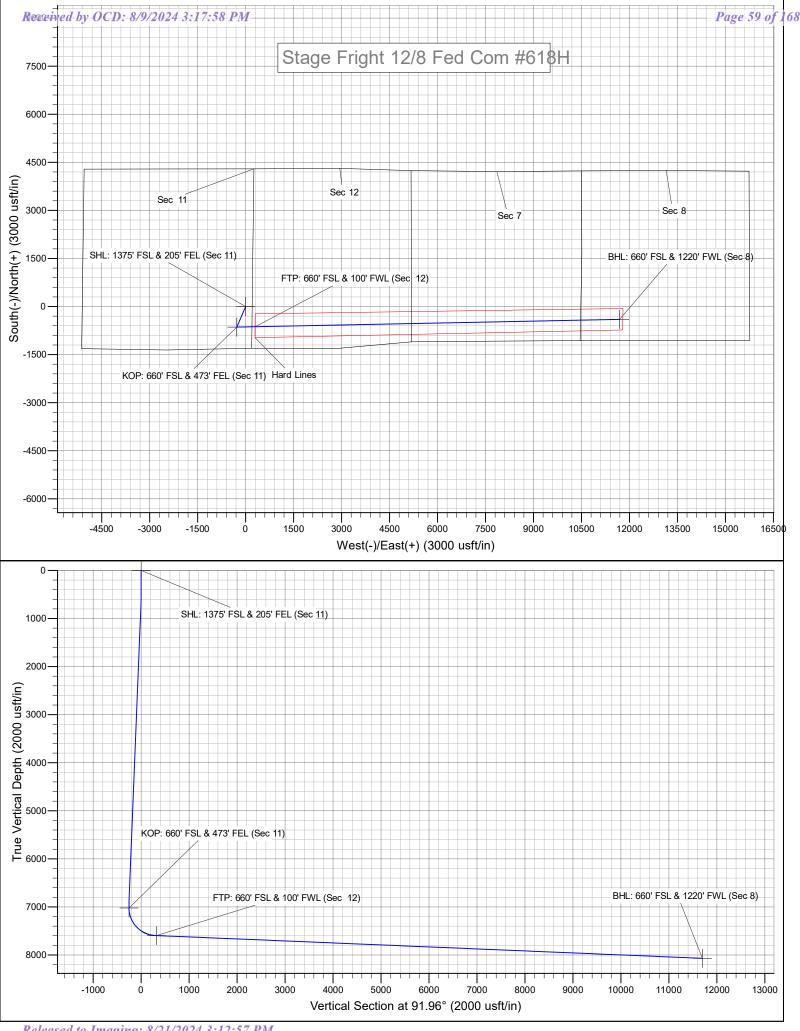
## 7. Well Testing

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
<b>Closest Medical Facility - Columbia Medical Cent</b>	er of Carlsbad 575-492-5000

Mewbourne Oil Company	Hobbs District Office Fax 2 <sup>nd</sup> Fax	575-393-5905 575-397-6252 575-393-7259
District Manager	<b>Robin Terrell</b>	575-390-4816
<b>Drilling Superintendent</b>	Frosty Lathan	575-390-4103
	<b>Bradley Bishop</b>	575-390-6838
<b>Drilling Foreman</b>	Wesley Noseff	575-441-0729



# **Mewbourne Oil Company**

Eddy County, New Mexico NAD 83 Stage Fright 12/8 Fed Com #618H

Sec 11, T21S, R25E

SHL: 1375' FSL & 205' FEL (Sec 11) BHL: 660' FSL & 1220' FWL (Sec 8)

Plan: Design #1

# **Standard Planning Report**

08 July, 2024

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83 Site: Stage Fright 12/8 Fed Com #618H

Well: Sec 11, T21S, R25E

Wellbore: BHL: 660' FSL & 1220' FWL (Sec 8)

Design: Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Stage Fright 12/8 Fed Com #618H WELL @ 3340.0usft (Original Well Elev) WELL @ 3340.0usft (Original Well Elev)

Minimum Curvature

Project Eddy County, New Mexico NAD 83

Map System: US State Plane 1983 North American Datum 1983 Geo Datum: Map Zone:

New Mexico Eastern Zone

System Datum:

Ground Level

Site Stage Fright 12/8 Fed Com #618H

Northing: 542,083.20 usft Site Position: Latitude: 32.4902461 From: Мар Easting: 533,777.50 usft Longitude: -104.3578527

**Position Uncertainty:** 0.0 usft Slot Radius: 13-3/16 "

Well Sec 11, T21S, R25E

**Well Position** +N/-S 0.0 usft Northing: 542,083.20 usft Latitude: 32.4902461 +E/-W 0.0 usft Easting: 533,777.50 usft Longitude: -104.3578527

**Position Uncertainty** 0.0 usft Wellhead Elevation: 3,340.0 usft **Ground Level:** 3,316.0 usft

-0.01 ° **Grid Convergence:** 

Wellbore BHL: 660' FSL & 1220' FWL (Sec 8)

Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (°) (°) (nT) 7.53 48,311.96940302 IGRF2010 12/31/2014 60.21

Design #1 Design

Audit Notes:

**PROTOTYPE** Tie On Depth: 0.0 Version: Phase:

Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 0.0 0.0 0.0 91.96

Plan Survey Tool Program Date 7/8/2024

**Depth From** Depth To

(usft) (usft) Survey (Wellbore) **Tool Name** Remarks

0.0 19,367.2 Design #1 (BHL: 660' FSL & 1220

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	
450.0	0.00	0.00	450.0	0.0	0.0	0.00	0.00	0.00	0.00	
767.8	6.36	203.29	767.1	-16.2	-7.0	2.00	2.00	0.00	203.29	
6,743.2	6.36	203.29	6,705.9	-623.7	-268.5	0.00	0.00	0.00	0.00	
7,061.0	0.00	360.00	7,023.0	-639.9	-275.5	2.00	-2.00	0.00	180.00	KOP: 660' FSL & 473'
7,938.1	87.62	88.85	7,596.0	-628.9	274.1	9.99	9.99	0.00	88.85	
19,367.2	87.62	88.85	8,070.0	-400.0	11,691.1	0.00	0.00	0.00	0.00	BHL: 660' FSL & 1220

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: Stage Fright 12/8 Fed Com #618H

Well: Sec 11, T21S, R25E

Design: Design #1

Wellbore: BHL: 660' FSL & 1220' FWL (Sec 8)

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Stage Fright 12/8 Fed Com #618H WELL @ 3340.0usft (Original Well Elev) WELL @ 3340.0usft (Original Well Elev)

Minimum Curvature

Design:	Design #1								
Diamad Comes									
Planned Survey									
Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	FSL & 205' FEL (		0.0	0.0	0.0	0.0	0.00	0.00	0.00
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
450.0	0.00	0.00	450.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	1.00	203.29	500.0	-0.4	-0.2	-0.2	2.00	2.00	0.00
600.0	3.00	203.29	599.9	-3.6	-1.6	-1.4	2.00	2.00	0.00
700.0	5.00	203.29	699.7	-10.0	-4.3	-4.0	2.00	2.00	0.00
767.8	6.36	203.29	767.1	-16.2	-7.0	-6.4	2.00	2.00	0.00
800.0	6.36	203.29	799.2	-19.4	-8.4	-7.7	0.00	0.00	0.00
900.0	6.36	203.29	898.5	-29.6	-12.8	-11.7	0.00	0.00	0.00
1,000.0 1,100.0	6.36 6.36	203.29 203.29	997.9 1,097.3	-39.8 -50.0	-17.1 -21.5	-15.8 -19.8	0.00 0.00	0.00 0.00	0.00 0.00
1,100.0	6.36	203.29	1,097.3	-50.0 -60.1	-21.5 -25.9	-19.6 -23.8	0.00	0.00	0.00
· ·									
1,300.0	6.36	203.29	1,296.1	-70.3	-30.3	-27.8	0.00	0.00	0.00
1,400.0 1,500.0	6.36 6.36	203.29 203.29	1,395.5 1,494.8	-80.5 -90.6	-34.6 -39.0	-31.9 -35.9	0.00 0.00	0.00 0.00	0.00 0.00
1,600.0	6.36	203.29	1,594.2	-100.8	-43.4	-39.9	0.00	0.00	0.00
1,700.0	6.36	203.29	1,693.6	-111.0	-47.8	-43.9	0.00	0.00	0.00
1,800.0	6.36	203.29	1,793.0	-121.1	-52.1	-48.0	0.00	0.00	0.00
1,900.0	6.36	203.29	1,892.4	-121.1	-56.5	-46.0 -52.0	0.00	0.00	0.00
2,000.0	6.36	203.29	1,991.8	-141.5	-60.9	-56.0	0.00	0.00	0.00
2,100.0	6.36	203.29	2,091.2	-151.6	-65.3	-60.1	0.00	0.00	0.00
2,200.0	6.36	203.29	2,190.5	-161.8	-69.7	-64.1	0.00	0.00	0.00
2,300.0	6.36	203.29	2,289.9	-172.0	-74.0	-68.1	0.00	0.00	0.00
2,400.0	6.36	203.29	2,389.3	-182.1	-78.4	-72.1	0.00	0.00	0.00
2,500.0	6.36	203.29	2,488.7	-192.3	-82.8	-76.2	0.00	0.00	0.00
2,600.0	6.36	203.29	2,588.1	-202.5	-87.2	-80.2	0.00	0.00	0.00
2,700.0	6.36	203.29	2,687.5	-212.6	-91.5	-84.2	0.00	0.00	0.00
2,800.0	6.36	203.29	2,786.9	-222.8	-95.9	-88.2	0.00	0.00	0.00
2,900.0	6.36	203.29	2,886.2	-233.0	-100.3	-92.3	0.00	0.00	0.00
3,000.0	6.36	203.29	2,985.6	-243.1	-104.7	-96.3	0.00	0.00	0.00
3,100.0 3,200.0	6.36 6.36	203.29 203.29	3,085.0 3,184.4	-253.3 -263.5	-109.1 -113.4	-100.3 -104.4	0.00 0.00	0.00 0.00	0.00 0.00
· ·									
3,300.0	6.36	203.29	3,283.8	-273.6	-117.8	-108.4	0.00	0.00	0.00
3,400.0 3,500.0	6.36 6.36	203.29 203.29	3,383.2 3,482.6	-283.8 -294.0	-122.2 -126.6	-112.4 -116.4	0.00 0.00	0.00 0.00	0.00 0.00
3,600.0	6.36	203.29	3,581.9	-294.0 -304.1	-120.0	-110.4	0.00	0.00	0.00
3,700.0	6.36	203.29	3,681.3	-314.3	-135.3	-124.5	0.00	0.00	0.00
3,800.0	6.36	203.29	3.780.7	-324.5	-139.7	-128.5	0.00	0.00	0.00
3,900.0	6.36	203.29	3,880.1	-324.5 -334.6	-139.7 -144.1	-120.5 -132.5	0.00	0.00	0.00
4,000.0	6.36	203.29	3,979.5	-344.8	-148.5	-136.6	0.00	0.00	0.00
4,100.0	6.36	203.29	4,078.9	-355.0	-152.8	-140.6	0.00	0.00	0.00
4,200.0	6.36	203.29	4,178.3	-365.1	-157.2	-144.6	0.00	0.00	0.00
4,300.0	6.36	203.29	4,277.6	-375.3	-161.6	-148.7	0.00	0.00	0.00
4,400.0	6.36	203.29	4,377.0	-385.5	-166.0	-152.7	0.00	0.00	0.00
4,500.0	6.36	203.29	4,476.4	-395.6	-170.3	-156.7	0.00	0.00	0.00
4,600.0	6.36	203.29	4,575.8	-405.8	-174.7	-160.7	0.00	0.00	0.00
4,700.0	6.36	203.29	4,675.2	-416.0	-179.1	-164.8	0.00	0.00	0.00
4,800.0	6.36	203.29	4,774.6	-426.1	-183.5	-168.8	0.00	0.00	0.00
4,900.0	6.36	203.29	4,874.0	-436.3	-187.8	-172.8	0.00	0.00	0.00
5,000.0	6.36	203.29	4,973.3	-446.5	-192.2	-176.8	0.00	0.00	0.00

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: Stage Fright 12/8 Fed Com #618H

Well: Sec 11, T21S, R25E

**Wellbore:** BHL: 660' FSL & 1220' FWL (Sec 8)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Stage Fright 12/8 Fed Com #618H WELL @ 3340.0usft (Original Well Elev) WELL @ 3340.0usft (Original Well Elev)

Minimum Curvature

esign	·	Design #1								
lanne	d Survey									
	Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
	5,100.0	6.36	203.29	5,072.7	-456.7	-196.6	-180.9	0.00	0.00	0.00
	5,200.0	6.36	203.29	5,172.1	-466.8	-201.0	-184.9	0.00	0.00	0.00
	5,300.0	6.36	203.29	5,271.5	-477.0	-205.4	-188.9	0.00	0.00	0.00
	5,400.0	6.36	203.29	5,370.9	-487.2	-209.7	-193.0	0.00	0.00	0.00
	5,500.0	6.36	203.29	5,470.3	-497.3	-214.1	-197.0	0.00	0.00	0.00
	5,600.0	6.36	203.29	5,569.7	-507.5	-218.5	-201.0	0.00	0.00	0.00
	5,700.0	6.36	203.29	5,669.0	-517.7	-222.9	-205.0	0.00	0.00	0.00
	5,800.0	6.36	203.29	5,768.4	-527.8	-227.2	-209.1	0.00	0.00	0.00
	5,900.0	6.36	203.29	5,867.8	-538.0	-231.6	-213.1	0.00	0.00	0.00
	6,000.0	6.36	203.29	5,967.2	-548.2	-236.0	-217.1	0.00	0.00	0.00
	6,100.0	6.36	203.29	6,066.6	-558.3	-240.4	-221.1	0.00	0.00	0.00
	6,200.0	6.36	203.29	6,166.0	-568.5	-244.8	-225.2	0.00	0.00	0.00
	6,300.0	6.36	203.29	6,265.3	-578.7	-249.1	-229.2	0.00	0.00	0.00
	6,400.0	6.36	203.29	6,364.7	-588.8	-253.5	-233.2	0.00	0.00	0.00
	6,500.0	6.36	203.29	6,464.1	-599.0	-257.9	-237.3	0.00	0.00	0.00
	6,600.0	6.36	203.29	6,563.5	-609.2	-262.3	-241.3	0.00	0.00	0.00
	6,700.0	6.36	203.29	6,662.9	-619.3	-266.6	-245.3	0.00	0.00	0.00
	6,743.2	6.36	203.29	6,705.9	-623.7	-268.5	-247.1	0.00	0.00	0.00
	6,800.0	5.22	203.29	6,762.3	-629.0	-270.8	-249.1	2.00	-2.00	0.00
	6,900.0	3.22	203.29	6,862.1	-635.7	-273.7	-251.8	2.00	-2.00	0.00
	7,000.0	1.22	203.29	6,962.0	-639.3	-275.2	-253.2	2.00	-2.00	0.00
	7,061.0	0.00	360.00	7,023.0	-639.9	-275.5	-253.5	2.00	-2.00	0.00
		SL & 473' FEL (S	·							
	7,100.0	3.89	88.85	7,061.9	-639.9	-274.2	-252.1	9.99	9.99	0.00
	7,150.0	8.89	88.85	7,111.6	-639.8	-268.6	-246.6	9.99	9.99	0.00
	7,200.0	13.88	88.85	7,160.6	-639.6	-258.7	-236.7	9.99	9.99	0.00
	7,250.0	18.88	88.85	7,208.6	-639.3	-244.7	-222.6	9.99	9.99	0.00
	7,300.0	23.87	88.85	7,255.1	-638.9	-226.4	-204.5	9.99	9.99	0.00
	7,350.0	28.87	88.85	7,299.9	-638.5	-204.2	-182.3	9.99	9.99	0.00
	7,400.0	33.87	88.85	7,342.6	-637.9	-178.2	-156.3	9.99	9.99	0.00
	7,450.0	38.86	88.85	7,382.8	-637.4	-148.6	-126.7	9.99	9.99	0.00
	7,500.0	43.86	88.85	7,420.3	-636.7	-115.6	-93.7	9.99	9.99	0.00
	7,550.0	48.85	88.85	7,454.8	-636.0	-79.4	-57.6	9.99	9.99	0.00
	7,600.0	53.85	88.85	7,486.1	-635.2	-40.4	-18.6	9.99	9.99	0.00
	7,650.0	58.84	88.85	7,513.8	-634.4	1.2	22.9	9.99	9.99	0.00
	7,700.0	63.84	88.85	7,537.7	-633.5	45.1	66.7	9.99	9.99	0.00
	7,750.0	68.83	88.85	7,557.8	-632.6	90.8	112.4	9.99	9.99	0.00
	7,800.0	73.83	88.85	7,573.8	-631.6	138.2	159.7	9.99	9.99	0.00
	7,850.0	78.82	88.85	7,585.6	-630.6	186.7	208.2	9.99	9.99	0.00
	7,900.0	83.82	88.85	7,593.2	-629.6	236.1	257.5	9.99	9.99	0.00
	7,938.1	87.62	88.85	7,596.0	-628.9	274.1	295.4	9.99	9.99	0.00
	7,960.4	87.62	88.85	7,596.9	-628.4	296.4	317.7	0.00	0.00	0.00
	FTP: 660' FS	L & 100' FWL (S	iec 12)							
	8,000.0	87.62	88.85	7,598.6	-627.6	336.0	357.2	0.00	0.00	0.00
	8,100.0	87.62	88.85	7,602.7	-625.6	435.8	457.0	0.00	0.00	0.00
	8,200.0	87.62	88.85	7,606.9	-623.6	535.7	556.8	0.00	0.00	0.00
	8,300.0	87.62	88.85	7,611.0	-621.6	635.6	656.5	0.00	0.00	0.00
	8,400.0	87.62	88.85	7,615.2	-619.6	735.5	756.3	0.00	0.00	0.00
	8,500.0	87.62	88.85	7,619.3	-617.6	835.4	856.1	0.00	0.00	0.00
	8,600.0	87.62	88.85	7,623.5	-615.6	935.3	955.8	0.00	0.00	0.00
	8,700.0	87.62	88.85	7,627.6	-613.6	1,035.2	1,055.6	0.00	0.00	0.00
	8,800.0	87.62	88.85	7,631.7	-611.6	1,135.1	1,155.4	0.00	0.00	0.00
	8,900.0	87.62	88.85	7,635.9	-609.6	1,235.0	1,255.1	0.00	0.00	0.00
	9,000.0	87.62	88.85	7,640.0	-607.6	1,334.9	1,354.9	0.00	0.00	0.00

Database: Hobbs Company:

Project:

Wellbore:

Mewbourne Oil Company

Eddy County, New Mexico NAD 83

Site: Stage Fright 12/8 Fed Com #618H

Well: Sec 11, T21S, R25E

BHL: 660' FSL & 1220' FWL (Sec 8)

Design: Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Site Stage Fright 12/8 Fed Com #618H WELL @ 3340.0usft (Original Well Elev) WELL @ 3340.0usft (Original Well Elev)

Minimum Curvature

0.00

0.00

0.00

0.00

0.00

0.00

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0.00

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0.00

esign:	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)
9,100.0	87.62	88.85	7,644.2	-605.6	1,434.8	1,454.7	0.00	0.00	0.00
9,200.0	87.62	88.85	7,648.3	-603.6	1,534.7	1,554.4	0.00	0.00	0.00
9,300.0	87.62	88.85	7,652.5	-601.6	1,634.6	1,654.2	0.00	0.00	0.00
	87.62	88.85	7,652.5 7,656.6		1,734.5	1,754.0	0.00	0.00	0.00
9,400.0				-599.6					
9,500.0	87.62	88.85	7,660.8	-597.6	1,834.4	1,853.7	0.00	0.00	0.00
9,600.0	87.62	88.85	7,664.9	-595.6	1,934.3	1,953.5	0.00	0.00	0.00
9,700.0	87.62	88.85	7,669.1	-593.6	2,034.2	2.053.3	0.00	0.00	0.00
9,800.0	87.62	88.85	7,673.2	-591.6	2,134.0	2,153.0	0.00	0.00	0.00
9,900.0	87.62	88.85	7,677.4	-589.6	2,233.9	2,252.8	0.00	0.00	0.00
10,000.0	87.62	88.85	7,681.5	-587.6	2,333.8	2,352.6	0.00	0.00	0.00
10,000.0									
10,100.0	87.62	88.85	7,685.7	-585.6	2,433.7	2,452.3	0.00	0.00	0.00
10,200.0	87.62	88.85	7,689.8	-583.6	2,533.6	2,552.1	0.00	0.00	0.00
10,300.0	87.62	88.85	7,694.0	-581.6	2,633.5	2,651.9	0.00	0.00	0.00
10,400.0	87.62	88.85	7,698.1	-579.6	2,733.4	2,751.6	0.00	0.00	0.00
10,500.0	87.62	88.85	7,702.3	-577.6	2,833.3	2,851.4	0.00	0.00	0.00
10,600.0	87.62	88.85	7,706.4	-575.6	2,933.2	2,951.2	0.00	0.00	0.00
10,700.0	87.62	88.85	7,710.5	-573.6	3,033.1	3,050.9	0.00	0.00	0.00
10,800.0	87.62	88.85	7,714.7	-571.6	3,133.0	3,150.7	0.00	0.00	0.00
10,900.0	87.62	88.85	7,718.8	-569.6	3,232.9	3,250.5	0.00	0.00	0.00
11,000.0	87.62	88.85	7,723.0	-567.6	3,332.8	3,350.2	0.00	0.00	0.00
11,100.0	87.62	88.85	7,727.1	-565.6	3,432.7	3,450.0	0.00	0.00	0.00
11,200.0	87.62	88.85	7,731.3	-563.6	3,532.6	3,549.8	0.00	0.00	0.00
11,300.0	87.62	88.85	7,735.4	-561.6	3,632.5	3,649.5	0.00	0.00	0.00
11,400.0	87.62	88.85	7,739.6	-559.6	3,732.3	3,749.3	0.00	0.00	0.00
11,500.0	87.62	88.85	7,743.7	-557.6	3,832.2	3,849.1	0.00	0.00	0.00
11,600.0	87.62	88.85	7,747.9	-555.5	3,932.1	3,948.8	0.00	0.00	0.00
11,700.0	87.62	88.85	7,752.0	-553.5	4,032.0	4,048.6	0.00	0.00	0.00
11,800.0	87.62	88.85	7,756.2	-551.5	4,131.9	4,148.4	0.00	0.00	0.00
11,900.0	87.62	88.85	7,760.3	-549.5	4,231.8	4,248.1	0.00	0.00	0.00
12,000.0	87.62	88.85	7,764.5	-547.5	4,331.7	4,347.9	0.00	0.00	0.00
12 100 0	97.62	88.85	7,768.6	-545.5	1 121 6	1 117 7	0.00	0.00	0.00
12,100.0	87.62				4,431.6	4,447.7			
12,200.0	87.62	88.85	7,772.8	-543.5	4,531.5	4,547.4	0.00	0.00	0.00
12,300.0	87.62	88.85	7,776.9	-541.5	4,631.4	4,647.2	0.00	0.00	0.00
12,400.0	87.62	88.85	7,781.0	-539.5	4,731.3	4,747.0	0.00	0.00	0.00
12,500.0	87.62	88.85	7,785.2	-537.5	4,831.2	4,846.7	0.00	0.00	0.00
12,600.0	87.62	88.85	7,789.3	-535.5	4,931.1	4,946.5	0.00	0.00	0.00
12,700.0	87.62	88.85	7,789.5	-533.5	5,031.0	5,046.3	0.00	0.00	0.00
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12,800.0	87.62	88.85	7,797.6	-531.5	5,130.9	5,146.0	0.00	0.00	0.00
12,900.0	87.62	88.85	7,801.8	-529.5	5,230.8	5,245.8	0.00	0.00	0.00
13,000.0	87.62	88.85	7,805.9	-527.5	5,330.6	5,345.6	0.00	0.00	0.00
13,100.0	87.62	88.85	7,810.1	-525.5	5,430.5	5,445.3	0.00	0.00	0.00
13,200.0	87.62	88.85	7,814.2	-523.5	5,530.4	5,545.1	0.00	0.00	0.00
13,300.0	87.62	88.85	7,814.2	-523.5 -521.5	5,630.3	5,644.9	0.00	0.00	0.00
13,400.0	87.62	88.85	7,822.5	-519.5	5,730.2	5,744.6	0.00	0.00	0.00
13,500.0	87.62	88.85	7,826.7	-517.5	5,830.1	5,844.4	0.00	0.00	0.00
13,600.0	87.62	88.85	7,830.8	-515.5	5,930.0	5,944.2	0.00	0.00	0.00
13,700.0	87.62	88.85	7,835.0	-513.5	6,029.9	6,043.9	0.00	0.00	0.00
13,800.0	87.62	88.85	7,839.1	-511.5	6,129.8	6,143.7	0.00	0.00	0.00
13,900.0	87.62	88.85	7,843.3	-509.5	6,229.7	6,243.5	0.00	0.00	0.00
14,000.0	87.62	88.85	7,847.4	-507.5	6,329.6	6,343.2	0.00	0.00	0.00

6,429.5

6,529.4

6,629.3

6,729.2

6,443.0

6,542.8

6,642.5

6,742.3

-505.5

-503.5

-501.5

-499.5

14,100.0 14,200.0

14,300.0

14,400.0

87.62

87.62

87.62

87.62

88.85

88.85

88.85

88.85

7,851.6

7,855.7

7,859.8

7,864.0

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: Stage Fright 12/8 Fed Com #618H

Well: Sec 11, T21S, R25E

**Wellbore:** BHL: 660' FSL & 1220' FWL (Sec 8)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Site Stage Fright 12/8 Fed Com #618H WELL @ 3340.0usft (Original Well Elev) WELL @ 3340.0usft (Original Well Elev)

Minimum Curvature

0.00

0.00

0.00

sign:	Design #1									
nned 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)	
14,500.0	87.62	88.85	7,868.1	-497.5	6,829.1	6,842.1	0.00	0.00	0.00	
14,600.0	87.62	88.85	7,872.3	-495.5	6,929.0	6,941.8	0.00	0.00	0.00	
14,700.0	87.62	88.85	7,876.4	-493.5	7,028.8	7,041.6	0.00	0.00	0.00	
14,800.0	87.62	88.85	7.880.6	-491.5	7,128.7	7,141.4	0.00	0.00	0.00	
14,900.0	87.62	88.85	7,884.7	-489.5	7,228.6	7,241.1	0.00	0.00	0.00	
15,000.0	87.62	88.85	7,888.9	-487.5	7,328.5	7,340.9	0.00	0.00	0.00	
							0.00	0.00	0.00	
15,100.0 15,200.0	87.62 87.62	88.85 88.85	7,893.0 7,897.2	-485.5 -483.5	7,428.4 7,528.3	7,440.7 7,540.4	0.00 0.00	0.00 0.00	0.00 0.00	
15,200.0	87.62	88.85	7,897.2 7,901.3	-481.5	7,526.3 7,628.2	7,540.4 7,640.2	0.00	0.00	0.00	
15,400.0		88.85		-479.4	7,028.2	7,740.2	0.00		0.00	
15,400.0	87.62 87.62	88.85	7,905.5 7,909.6	-479.4 -477.4	7,728.1 7,828.0	7,740.0 7,839.7	0.00	0.00 0.00	0.00	
15,600.0	87.62	88.85	7,913.8	-475.4	7,927.9	7,939.5	0.00	0.00	0.00	
15,700.0	87.62	88.85	7,917.9	-473.4	8,027.8	8,039.3	0.00	0.00	0.00	
15,800.0	87.62	88.85	7,922.1	-471.4	8,127.7	8,139.0	0.00	0.00	0.00	
15,900.0	87.62	88.85	7,926.2	-469.4	8,227.6	8,238.8	0.00	0.00	0.00	
16,000.0	87.62	88.85	7,930.4	-467.4	8,327.5	8,338.6	0.00	0.00	0.00	
16,100.0	87.62	88.85	7,934.5	-465.4	8,427.4	8,438.3	0.00	0.00	0.00	
16,200.0	87.62	88.85	7,938.6	-463.4	8,527.3	8,538.1	0.00	0.00	0.00	
16,300.0	87.62	88.85	7,942.8	-461.4	8,627.1	8,637.9	0.00	0.00	0.00	
16,400.0	87.62	88.85	7,946.9	-459.4	8,727.0	8,737.6	0.00	0.00	0.00	
16,500.0	87.62	88.85	7,951.1	-457.4	8,826.9	8,837.4	0.00	0.00	0.00	
16,600.0	87.62	88.85	7,955.2	-455.4	8,926.8	8,937.2	0.00	0.00	0.00	
16,700.0	87.62	88.85	7,959.4	-453.4	9,026.7	9,036.9	0.00	0.00	0.00	
16,800.0	87.62	88.85	7,963.5	-451.4	9,126.6	9,136.7	0.00	0.00	0.00	
16,900.0	87.62	88.85	7,967.7	-449.4	9,226.5	9,236.5	0.00	0.00	0.00	
17,000.0	87.62	88.85	7,971.8	-447.4	9,326.4	9,336.3	0.00	0.00	0.00	
17,100.0	87.62	88.85	7,976.0	-445.4	9,426.3	9,436.0	0.00	0.00	0.00	
17,100.0	87.62	88.85	7,980.1	-443.4	9,526.2	9,535.8	0.00	0.00	0.00	
17,300.0	87.62	88.85	7,984.3	-441.4	9,626.1	9,635.6	0.00	0.00	0.00	
17,400.0	87.62	88.85	7,988.4	-439.4	9,726.0	9,735.3	0.00	0.00	0.00	
17,500.0	87.62	88.85	7,992.6	-437.4	9,825.9	9,835.1	0.00	0.00	0.00	
17,600.0 17,700.0	87.62 87.62	88.85 88.85	7,996.7 8,000.9	-435.4 -433.4	9,925.8 10,025.7	9,934.9 10,034.6	0.00 0.00	0.00 0.00	0.00 0.00	
17,700.0	87.62 87.62	88.85	8,000.9 8,005.0	-433.4 -431.4	10,025.7	10,034.6	0.00	0.00	0.00	
17,800.0	87.62 87.62	88.85	8,005.0 8,009.2	-431.4 -429.4	10,125.6	10,134.4	0.00	0.00	0.00	
18,000.0	87.62	88.85	8,013.3	-429.4 -427.4	10,225.5	10,234.2	0.00	0.00	0.00	
18,100.0	87.62	88.85	8,017.4	-425.4 423.4	10,425.2	10,433.7	0.00	0.00	0.00	
18,200.0	87.62	88.85	8,021.6	-423.4	10,525.1	10,533.5	0.00	0.00	0.00	
18,300.0	87.62	88.85	8,025.7	-421.4	10,625.0	10,633.2	0.00	0.00	0.00	
18,400.0	87.62	88.85	8,029.9	-419.4	10,724.9	10,733.0	0.00	0.00	0.00	
18,500.0	87.62	88.85	8,034.0	-417.4	10,824.8	10,832.8	0.00	0.00	0.00	
18,600.0	87.62	88.85	8,038.2	-415.4	10,924.7	10,932.5	0.00	0.00	0.00	
18,700.0	87.62	88.85	8,042.3	-413.4	11,024.6	11,032.3	0.00	0.00	0.00	
18,800.0	87.62	88.85	8,046.5	-411.4	11,124.5	11,132.1	0.00	0.00	0.00	
18,900.0	87.62	88.85	8,050.6	-409.4	11,224.4	11,231.8	0.00	0.00	0.00	
19,000.0	87.62	88.85	8,054.8	-407.4	11,324.3	11,331.6	0.00	0.00	0.00	
19,100.0	87.62	88.85	8,058.9	-405.4	11,424.2	11,431.4	0.00	0.00	0.00	
19,200.0	87.62	88.85	8,063.1	-403.3	11,524.1	11,531.1	0.00	0.00	0.00	
19,300.0	87.62	88.85	8,067.2	-401.3	11,624.0	11,630.9	0.00	0.00	0.00	
10.267.2	07.02	00.05	0.070.0	400.0	44 004 4	44.007.0	0.00	0.00	0.00	

11,691.1

11,697.9

-400.0

8,070.0

88.85

BHL: 660' FSL & 1220' FWL (Sec 8)

87.62

19,367.2

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: Stage Fright 12/8 Fed Com #618H

Well: Sec 11, T21S, R25E

Wellbore: BHL: 660' FSL & 1220' FWL (Sec 8)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Site Stage Fright 12/8 Fed Com #618H WELL @ 3340.0usft (Original Well Elev) WELL @ 3340.0usft (Original Well Elev)

Grid

Minimum Curvature

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL: 1375' FSL & 205' F - plan hits target cent - Point	0.00 ter	360.00	0.0	0.0	0.0	542,083.20	533,777.50	32.4902461	-104.3578527
KOP: 660' FSL & 473' FI - plan hits target cent - Point	0.00 ter	0.00	7,023.0	-639.9	-275.5	541,443.30	533,502.00	32.4884870	-104.3587457
FTP: 660' FSL & 100' FV - plan hits target cent - Point	0.00 ter	360.00	7,596.9	-628.4	296.4	541,454.77	534,073.90	32.4885189	-104.3568909
BHL: 660' FSL & 1220' F - plan hits target cent - Point	0.00 ter	0.00	8,070.0	-400.0	11,691.1	541,683.20	545,468.60	32.4891483	-104.3199351



# Mewbourne Oil Co.

# **BOP Break Testing Variance**

Mewbourne Oil Company requests a variance from the minimum standards for well control equipment testing of 43 CFR 3172 to allow a testing schedule of the blow out preventer (BOP) and blow out prevention equipment (BOPE) along with batch drilling & offline cementing operations. Modern rig upgrades which facilitate pad drilling allow the BOP stack to be moved between wells on a multi-well pad without breaking any BOP stack components apart. Widespread use of these technologies has led to break testing BOPE being endorsed as safe and reliable. American Petroleum Institute (API) best practices are frequently used by regulators to develop their regulations. API Standard 53, *Well Control Equipment Systems for Drilling Wells* (5<sup>th</sup> Ed., Dec. 2018) Section 5.3.7.1 states "A pressure test of the pressure containing component shall be performed following the disconnection or repair, limited to the affected component."

# **Procedures**

- 1. Full BOPE test at first installation on the pad.
  - Full BOPE test at least every 21 days.
  - Function test BOP elements per 43 CFR 3172.
  - Contact the BLM if a well control event occurs.
- 2. After the well section is secured and the well is confirmed to be static, the BOP will be disconnected from the wellhead and walked with the rig to another well on the pad. Two breaks on the BOPE will be made (Fig. 1).
  - Connection between the flex line and the HCR valve
  - Connection between the wellhead and the BOP quick connect (Fig. 5 & 6).
- 3. A capping flange will be installed after cementing per wellhead vendor procedure & casing pressure will be monitored via wellhead valve.
- 4. The BOP will be removed and carried by a hydraulic carrier (Fig. 3 & 4).
- 5. The rig will then walk to the next well.
- 6. Confirm that the well is static and remove the capping flange.
- 7. The connection between the flex line and HCR valve and the connection between the wellhead and the BOP quick connect will be reconnected.
- 8. Install a test plug into the wellhead.
- 9. A test will then be conducted against the upper pipe rams and choke, testing both breaks (Fig. 1 & 2).
- 10. The test will be held at 250 psi low and to the high value submitted in the APD, not to exceed 5000 psi.
- 11. The annular, blind rams and lower pipe rams will then be function tested.
- 12. If a pad consists of three or more wells, steps 4 through 11 will be repeated.



13. A break test will only be conducted if the intermediate section can be drilled and cased within 21 days of the last full BOPE test.

## **Barriers**

#### **Before Nipple Down:**

- Floats in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Solid body mandrel and/or packoff

## **After Nipple Down:**

- Floats in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Solid body mandrel and/or packoff
- Offline cementing tool and/or cement head
- Capping flange after cementing

## **Summary**

A variance is requested to only test broken pressure seals on the BOPE when moving between wells on a multi-well pad if the following conditions are met:

- A full BOPE test is conducted on the first well on the pad. API Standard 53 requires testing annular BOP to 70% of RWP or 100% of MASP, whichever is greater.
- If the first well on the pad is not the well with the deepest intermediate section, a full BOPE test will also be performed when moving to a deeper well.
- The hole section being drilled has a MASP under 5000 psi.
- If a well control event occurs, Mewbourne will contact BLM for permission to continue break testing.
- If significant (>50%) losses occur, full BOPE testing will be required going forward.
- Full BOPE test will be required prior to drilling the production hole.

While walking the rig, the BOP stack will be secured via hydraulic winch or hydraulic carrier. A full BOPE test will be performed at least every 21 days.



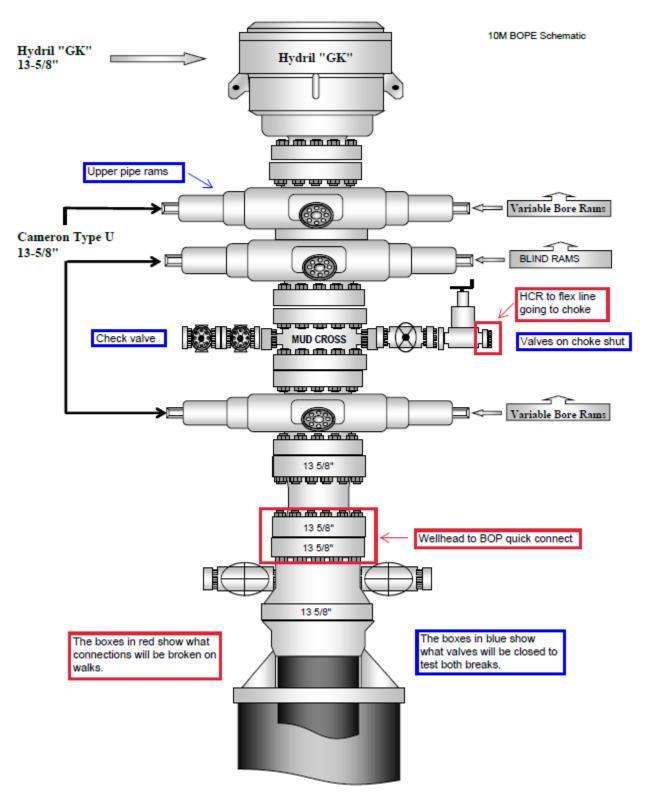


Figure 1. BOP diagram



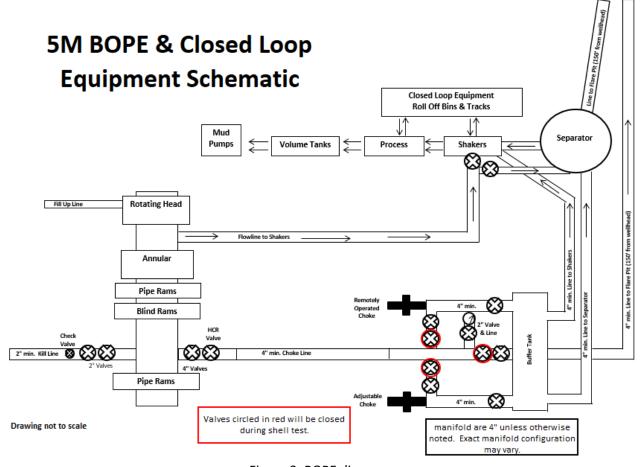


Figure 2. BOPE diagram





Figure 3. BOP handling system





Figure 4. BOP handling system



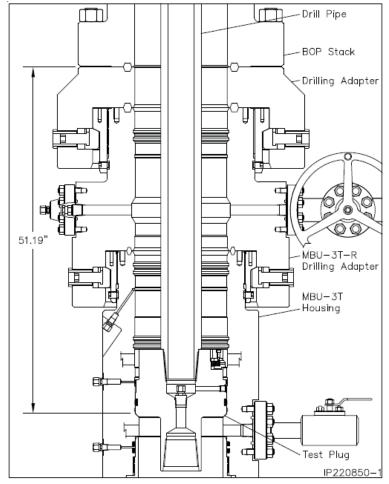


Figure 5. Cactus 5M wellhead with BOP quick connect

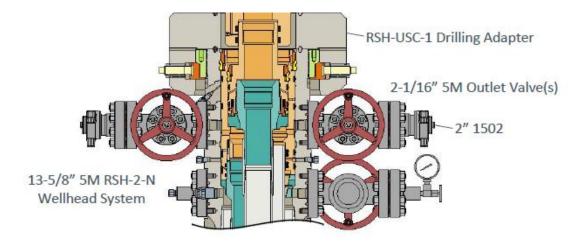


Figure 6. Vault 5M wellhead with BOP quick connect



#### Mewbourne Oil Co.

#### Surface & Intermediate Offline Cementing Variance

Mewbourne Oil Company requests a variance to perform offline cementing for surface and intermediate casing strings with the following conditions:

- Offline cementing will not be performed on production casing.
- Offline cementing will not be performed on a hole section with MASP > 5000 psi.
- Offline cementing will not be performed concurrently with offset drilling.

#### **Surface Casing Order of Operations:**

- 1. Run 13 3/8" surface casing as per normal operations (TPGS and float collar).
- 2. Perform negative pressure test to confirm integrity of float equipment while running casing.
- 3. Confirm well is static.
- 4. Make up 13 %" wellhead or wellhead landing ring assembly and land on 20" conductor.
- 5. Fill pipe, circulate casing capacity and confirm float(s) are still holding.
- 6. Confirm well is static.
- 7. Back out landing joint and pull to rig floor. Lay down landing joint.
- 8. Walk rig to next well on pad with cement crew standing by to rig up.
- 9. Make up offline cement tool with forklift per wellhead manufacturer (Fig. 1 & 2).
- 10. Make up cement head on top of offline cement tool with forklift.
- 11. Commence cement operations.
- 12. If cement circulates, confirm well is static and proceed to step 16.
- 13. If cement does not circulate, notify the appropriate BLM office, wait a minimum of six hours, and run a temperature survey to determine the top of cement.
- 14. Use 1" pipe for remedial cement job until the surface casing is cemented to surface.
- 15. Confirm well is static.
- 16. Once cement job is complete, the cement head and offline cementing tool are removed. The wellhead technician returns to cellar to install wellhead/valves.
- 17. Install wellhead capping flange.

#### **Barriers**

#### **Before Walk:**

- Float(s) in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus



#### After Walk:

- Float(s) in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Offline cementing tool tested to 5000 psi and cement head
- Capping flange after cementing

#### 20" Surface Casing Order of Operations (4 string area):

- 1. Run 20" surface casing as per normal operations (TPGS and float collar).
- 2. Perform negative pressure test to confirm integrity of float equipment while running casing.
- 3. Fill pipe, circulate casing capacity and confirm float(s) are still holding.
- 4. Confirm well is static.
- 5. Back out landing joint and pull to rig floor. Lay down landing joint.
- 6. Make up cement head.
- 7. Walk rig to next well on pad with cement crew standing by to rig up.
- 8. Commence cement operations.
- 9. If cement circulates, confirm well is static and proceed to step 13.
- 10. If cement does not circulate, notify the appropriate BLM office, wait a minimum of six hours, and run a temperature survey to determine the top of cement.
- 11. Use 1" pipe for remedial cement job until the surface casing is cemented to surface.
- 12. Confirm well is static.
- 13. Once cement job is complete, remove cement head and install cap.

#### **Barriers**

#### **Before Walk:**

- Float(s) in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Cement Head

#### After Walk:

- Float(s) in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Cement head
- Capping flange after cementing



#### **Intermediate Casing Order of Operations:**

- 1. Run casing as per normal operations (float shoe and float collar).
- 2. Perform negative pressure test to confirm integrity of float equipment while running casing.
- 3. Confirm well is static (if running SBM).
- 4. Land casing.
- Fill pipe, circulate casing capacity and confirm floats are still holding.
- 6. Confirm well is static.
- 7. Back out landing joint and pull to rig floor. Lay down landing joint. Install packoff & test.
- 8. Nipple down BOP.
- 9. Walk rig to next well on pad with cement crew standing by to rig up.
- 10. Make up offline cement tool using forklift per wellhead manufacturer (Fig. 3 8).
- 11. Make up cement head on top of offline cement tool.
- 12. Commence cement operations.
- 13. If cement circulates, confirm well is static and proceed to step 16.
- 14. If cement does not circulate (when required), notify the appropriate BLM office, wait a minimum of six hours, and run a temperature survey to determine the top of cement.
- 15. Pump remedial cement job if required.
- 16. Confirm well is static.
- 17. Remove cement head and offline cementing tool.
- 18. Install wellhead capping flange and test.

#### **Barriers**

#### **Before Nipple Down:**

- Floats in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Solid body mandrel and/or packoff

#### **After Nipple Down:**

- Floats in casing
- Kill weight fluid in casing
- Kill weight fluid in annulus
- Solid body mandrel and/or packoff
- Offline cementing tool tested to 5000 psi and cement head
- Capping flange after cementing



#### **Risks:**

- Pressure build up in annulus before cementing
  - o Contact BLM if a well control event occurs.
  - o Rig up 3<sup>rd</sup> party pump or rig pumps to pump down casing and kill well.
  - Returns will be taken through the wellhead valves to a choke manifold (Fig 9 & 10).
  - Well could also be killed through the wellhead valves down the annulus.

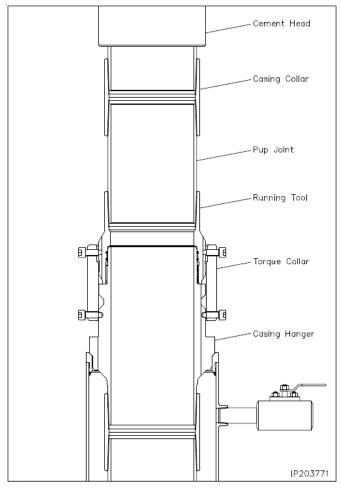


Figure 1. Cactus 13 3/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 13 3/8" pup joint and casing.



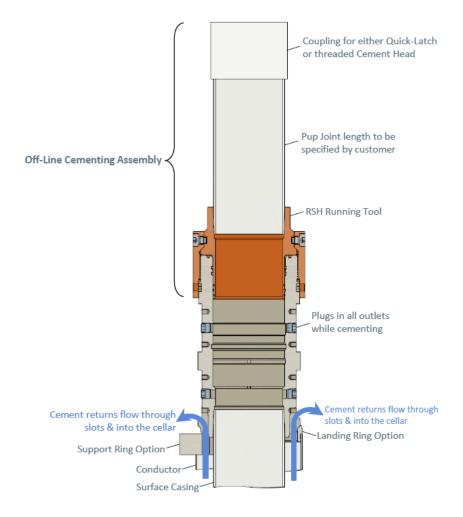


Figure 2. Vault 13 3/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 13 3/8" pup joint and casing.



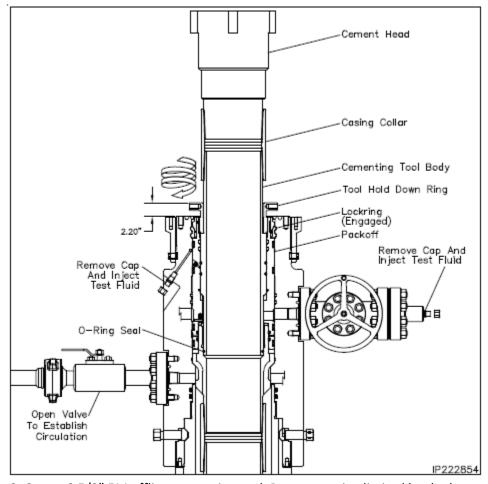


Figure 3. Cactus 9 5/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 9 5/8" pup joint and casing.



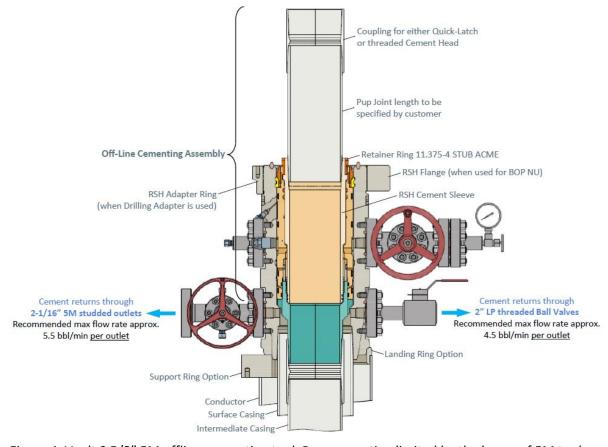


Figure 4. Vault 9 5/8" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 9 5/8" pup joint and casing.



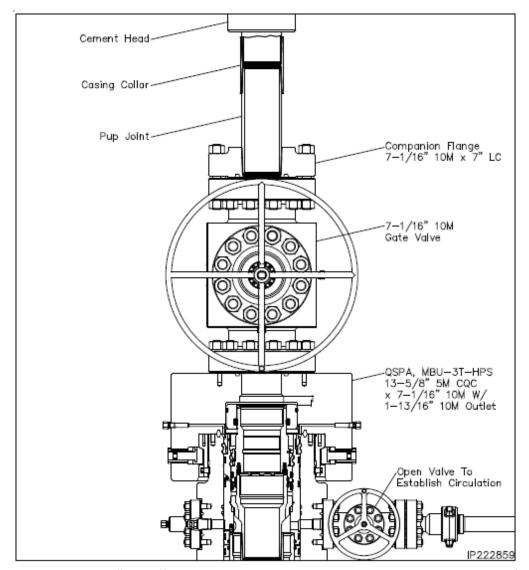


Figure 5. Cactus 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.



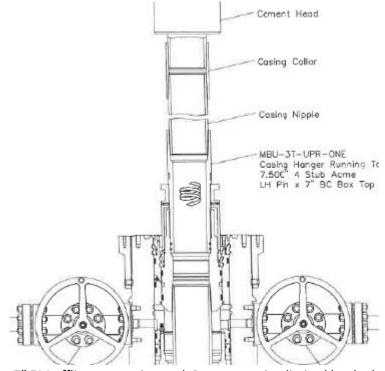


Figure 6. Cactus 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.



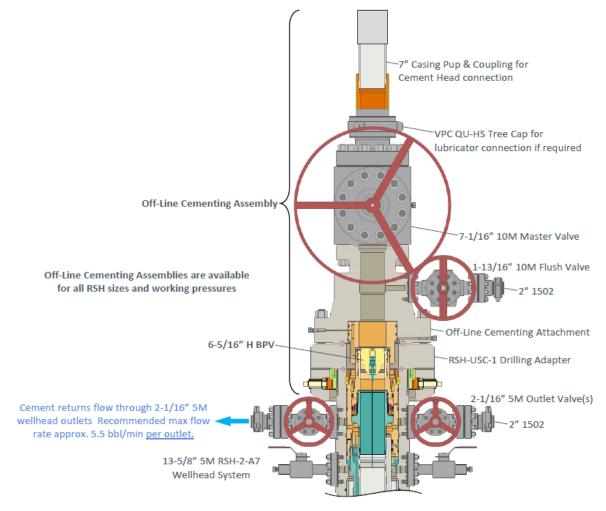


Figure 7. Vault 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.



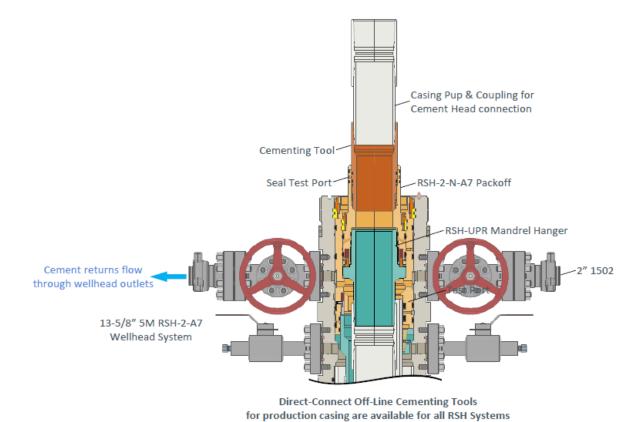


Figure 8. Vault 7" 5M offline cementing tool. Pressure rating limited by the lesser of 5M tool rating or the 7" pup joint and casing.



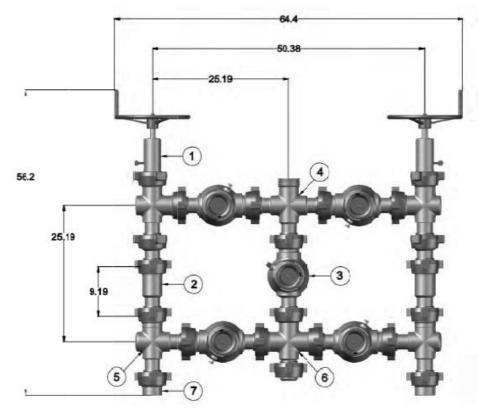


Figure 9. Five valve 15k choke manifold.

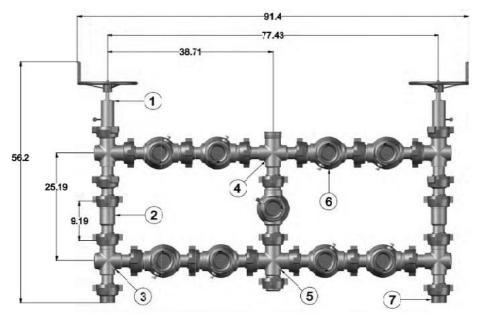


Figure 10. Nine valve 15k choke manifold.



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

### SUPO Data Report

APD ID: 10400094561

**Submission Date:** 09/19/2023

Operator Name: MEWBOURNE OIL COMPANY

Well Name: STAGE FRIGHT 12/8 FED COM

Well Type: OIL WELL

Well Number: 618H

Well Work Type: Drill

Highlighted data reflects the most recent changes Show Final Text

#### **Section 1 - Existing Roads**

Will existing roads be used? YES

**Existing Road Map:** 

Stage\_Fright\_12\_8\_Fed\_Com\_618H\_ExistingRoadMap\_20230915151416.pdf

Existing Road Purpose: ACCESS, FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

**Existing Road Improvement Description:** 

**Existing Road Improvement Attachment:** 

#### Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

**New Road Map:** 

Stage\_Fright\_12\_7\_NewRoadMaps\_20240730143121.pdf

New road type: RESOURCE

Length: 463

Feet

Width (ft.): 30

Max slope (%): 3

**Max grade (%):** 3

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: None

New road access plan or profile prepared? N

New road access plan

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

Access road engineering design? N

Access road engineering design

Turnout? N

Access surfacing type: GRAVEL

Access topsoil source: OFFSITE

Access surfacing type description:

Access onsite topsoil source depth:

Offsite topsoil source description: na

Onsite topsoil removal process:

Access other construction information:

Access miscellaneous information:

Number of access turnouts: Access turnout map:

#### **Drainage Control**

New road drainage crossing: OTHER

**Drainage Control comments: none** 

Road Drainage Control Structures (DCS) description: None

**Road Drainage Control Structures (DCS) attachment:** 

#### **Access Additional Attachments**

### **Section 3 - Location of Existing Wells**

**Existing Wells Map?** YES

**Attach Well map:** 

Stage\_Fright\_12\_8\_Fed\_Com\_618H\_ExistingWellMap\_20230915151439.pdf

#### Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: Pad is 340 x 250' with battery to the West.

**Production Facilities map:** 

STAGE\_FRIGHT\_OFFSITE\_BATTERY\_20240730143303.pdf

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

#### **Section 5 - Location and Types of Water Supply**

#### **Water Source Table**

Water source type: IRRIGATION

Water source use type: DUST CONTROL

SURFACE CASING

INTERMEDIATE/PRODUCTION

CASING

STIMULATION

Source latitude: 32.536579 Source longitude: -104.19403

Source datum: NAD83

Water source permit type: PRIVATE CONTRACT

WATER WELL

Water source transport method: TRUCKING

Source land ownership: PRIVATE

Source transportation land ownership: FEDERAL

Water source volume (barrels): 1940 Source volume (acre-feet): 0.2500526

Source volume (gal): 81480

#### Water source and transportation

 $Stage\_Fright\_12\_8\_Fed\_Com\_618H\_WaterSourceTansMap\_20230915151508.pdf$ 

Water source comments:

New water well? N

#### **New Water Well Info**

Well latitude: Well Longitude: Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft): Est thickness of aquifer:

**Aquifer comments:** 

**Aquifer documentation:** 

Well depth (ft): Well casing type:

Well casing outside diameter (in.): Well casing inside diameter (in.):

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

New water well casing?

Used casing source:

Drilling method: Drill material:

Grout material: Grout depth:

Casing length (ft.): Casing top depth (ft.):

Well Production type: Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

#### **Section 6 - Construction Materials**

Using any construction materials: YES

Construction Materials description: Caliche

**Construction Materials source location** 

Stage\_Fright\_12\_8\_Fed\_Com\_618H\_CalicheSourceTansMap\_20230915151520.pdf

#### **Section 7 - Methods for Handling**

Waste type: DRILLING

Waste content description: Drill cuttings

Amount of waste: 940 barrels

Waste disposal frequency: One Time Only

Safe containment description: Drill cuttings will be properly contained in steel tanks (20 yard roll off bins.)

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: PRIVATE

**FACILITY** 

Disposal type description:

Disposal location description: NMOCD approved waste disposal locations are CRI or Lea Land, both facilities are located

on HWY 62/180, Sec. 27 T20S R32E.

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 containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: PRIVATE

FACILITY

Disposal type description:

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

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 containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: PRIVATE

**FACILITY** 

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

**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

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

#### Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

**Ancillary Facilities** 

Comments:

Section 9 - Well Site

**Well Site Layout Diagram:** 

Stage\_Fright\_12\_7\_Layout\_Diagram\_20240730143620.pdf

Comments: NONE

#### **Section 10 - Plans for Surface Reclamation**

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: Stage Fright 12/8 616H & 12/7 618H

Multiple Well Pad Number: 2

Recontouring

Drainage/Erosion control construction: None **Drainage/Erosion control reclamation:** None

Well pad interim reclamation (acres): Well pad proposed disturbance Well pad long term disturbance

(acres): 5.5 (acres): 4.2

Road long term disturbance (acres): 0 Road interim reclamation (acres): 0 Road proposed disturbance (acres):

Powerline proposed disturbance

Powerline interim reclamation (acres): Powerline long term disturbance

(acres): 0 (acres): 0

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

(acres): 0 (acres): 0

Other proposed disturbance (acres): 0 Other interim reclamation (acres): 0 Other long term disturbance (acres): 0

Total proposed disturbance: 6.63 Total interim reclamation: 1.3 Total long term disturbance: 4.2

Disturbance Comments: In areas to be heavily disturbed, the top 6 inches of soil material, will be stripped and stockpiled on the perimeter of the well location to keep topsoil viable, and to make redistribution of topsoil more efficient during interim reclamation. Stockpiled topsoil should include vegetative material. Topsoil will be clearly segregated and stored separately from subsoils. Contaminated soil will not be stockpiled, but properly treated and handled prior to topsoil salvaging.

Reconstruction method: The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

Topsoil redistribution: Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts & fills. To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used.

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

Soil treatment: NA

Existing Vegetation at the well pad: Various brush & grasses

**Existing Vegetation at the well pad** 

Existing Vegetation Community at the road: Various brush & grasses

**Existing Vegetation Community at the road** 

Existing Vegetation Community at the pipeline: NA

**Existing Vegetation Community at the pipeline** 

Existing Vegetation Community at other disturbances: NA

**Existing Vegetation Community at other disturbances** 

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description

Will seed be harvested for use in site reclamation? N

Seed harvest description:

Seed harvest description attachment:

Seed

**Seed Table** 

**Seed Summary** 

Seed Type Pounds/Acre

**Total pounds/Acre:** 

Seed reclamation

**Operator Contact/Responsible Official** 

First Name: Last Name:

Phone: Email:

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

**Seedbed prep:** Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.

Seed BMP: To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used.

Seed method: drilling or broadcasting seed over entire reclaimed area.

Existing invasive species? N

Existing invasive species treatment description:

**Existing invasive species treatment** 

Weed treatment plan description: NA

Weed treatment plan

**Monitoring plan description:** vii. All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, and that erosion and invasive/noxious weeds are controlled.

Monitoring plan

Success standards: regrowth within 1 full growing season of reclamation.

Pit closure description: NA

Pit closure attachment:

#### **Section 11 - Surface Ownership**

Disturbance type: EXISTING ACCESS ROAD

**Describe:** 

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

**BIA Local Office:** 

**BOR Local Office:** 

**COE Local Office:** 

**DOD Local Office:** 

**NPS Local Office:** 

**State Local Office:** 

**Military Local Office:** 

**USFWS Local Office:** 

Other Local Office:

**USFS** Region:

**USFS Forest/Grassland:** 

**USFS** Ranger District:

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

**BIA Local Office:** 

**BOR Local Office:** 

**COE Local Office:** 

**DOD Local Office:** 

**NPS Local Office:** 

**State Local Office:** 

**Military Local Office:** 

**USFWS Local Office:** 

Other Local Office:

**USFS** Region:

USFS Forest/Grassland: USFS Ranger District:

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

**BIA Local Office:** 

**BOR Local Office:** 

**COE Local Office:** 

**DOD Local Office:** 

**NPS Local Office:** 

**State Local Office:** 

Military Local Office:

**USFWS Local Office:** 

**Other Local Office:** 

**USFS** Region:

**USFS** Forest/Grassland:

**USFS Ranger District:** 

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

Section 12 - Other

Right of Way needed? N

Use APD as ROW?

ROW Type(s):

**ROW** 

**SUPO Additional Information:** NONE

Use a previously conducted onsite? Y

Previous Onsite information: Met w/ RRC Surveying & staked location @ 900' FNL & 205' FEL, Sec 11, T21S, R25E, Eddy Co., NM. This location was unacceptable due to DCP buried line. Re- staked location @ 1300' FNL & 205' FEL, Sec 11, T21S, R25E, Eddy Co., NM. (Elevation @ 3312'). Pad is 400 x 420. NW corner is dogeared due to DCP pipeline. Existing road will need to be upgraded. A 400' x 400' battery is staked to the W w/road & utilities. Topsoil staked 30 wide to the SW. Reclaim 60' N & E. Will require BLM onsite, cave/karst, botany & arch survey. Lat: 32.4902461 N, Long: -104.3578526 W NAD 83. (BPS) Met w/ RRC Surveying & re-staked location @ the request of the BLM due to botany issues @ 1375' FSL & 205' FEL, Sec 11, T21S, R25E, Eddy Co., NM. (Elev. 3316'). Pad is 400 x 420. Existing road will need to be upgraded. Battery will be downsized to 250' x 400' due to additional botany issues & approved by BLM botanist Renae Cox. Topsoil staked 30 wide to the W. Reclaim 60' N & E. Onsite & all surveys complete. Lat: 32.4904521 N, Long: -104.3578499 W NAD 83. (BPS)

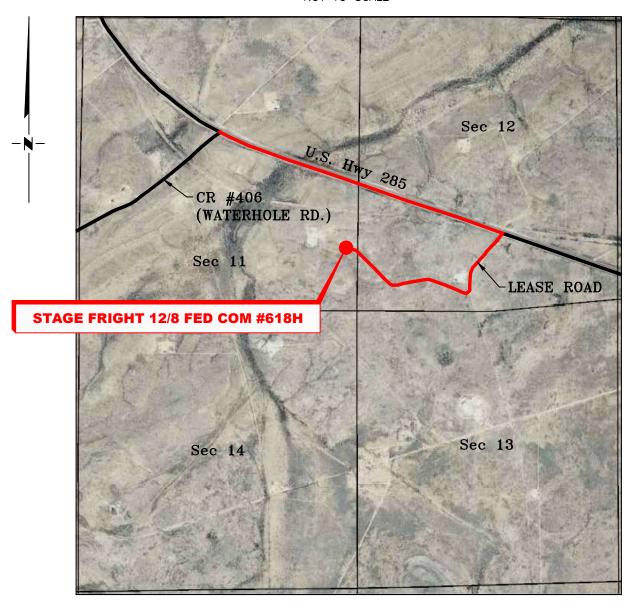
#### Other SUPO

Stage\_Fright\_12\_7\_Fed\_Com\_618H\_NGMP\_20240730143917.pdf Stage\_Fright\_12\_7\_Fed\_Com\_ReclamationMap\_20240730143931.pdf



### VICINITY MAP

NOT TO SCALE



SECTION 11, TWP. 21 SOUTH, RGE. 25 EAST, N. M. P. M., EDDY COUNTY, NEW MEXICO

OPERATOR: Mewbourne Oil Company LOCATION: 1300' FSL & 205' FEL

LEASE: Stage Fright 12/8 Fed Com

WELL NO.: 618H

ELEVATION: 3312'

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NO. REVISION DATE JOB NO.: LS23070594 DWG. NO.: 23070594-3

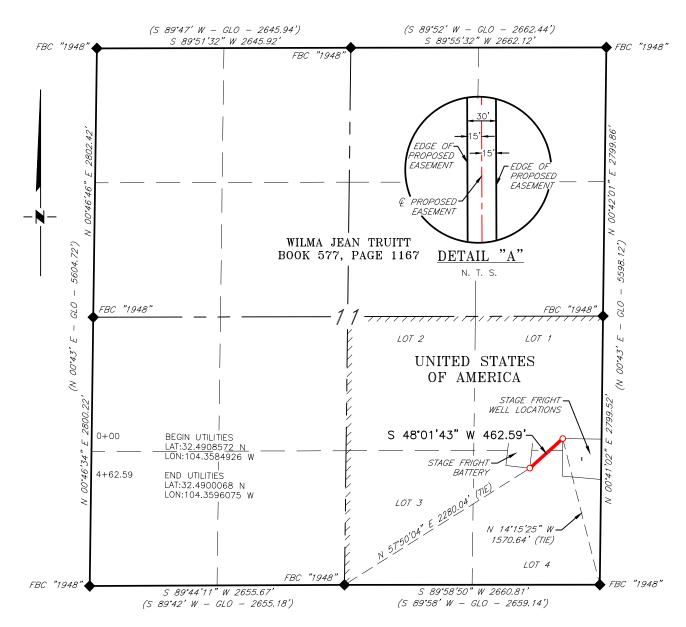


701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: N. T. S. DATE: 07/18/2023 SURVEYED BY: ML/IW DRAWN BY: AR APPROVED BY: RMH SHEET: 1 OF 1

# MEWBOURNE OIL COMPANY UTILITIES FOR THE STAGE FRIGHT OFFSITE BATTERY SECTION 11, T21S, R25E

N. M. P. M., EDDY COUNTY, NEW MEXICO



#### DESCRIPTION

A strip of land 30 feet wide, being 462.59 feet or 28.036 rods in length, lying in Section 11, Township 21 South, Range 25 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across United States of America land:

BEGINNING at Engr. Sta. 0+00, a point in Lot 1 of Section 11, which bears, N 14\*15'25" W, 1,570.64 feet from a brass cap, stamped "1948", found for the Southeast corner of Section 11;

Thence S 48°01'43" W, 462.59 feet, to Engr. Sta. 4+62.59, the End of Survey, a point in Lot 4 of Section 11, which bears, N 57°50'04" E, 2,280.04 feet from a brass cap, stamped "1948", found for the South quarter corner of Section 11.

Said strip of land contains 0.319 acres, more or less, and is allocated by forties as follows:

Lot 1 184.43 Feet 11.178 Rods 0.127 Acres Lot 4 278.16 Feet 16.858 Rods 0.192 Acres

SCALE: 1" = 1000' 0 500' 1000'

BEARINGS ARE GRID NAD 83 NM EAST DISTANCES ARE HORIZ. GROUND.

( ) • LEGEND

RECORD DATA — GLO

FOUND MONUMENT
AS NOTED

PROPOSED UTILITIES

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howell
Robert M. Howett NM PS 1968

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NO. REVISION DATE

JOB NO.: LS23080667R2

NO.: 23080667R2-

RRC
ENERGY SERVICES, LLC.

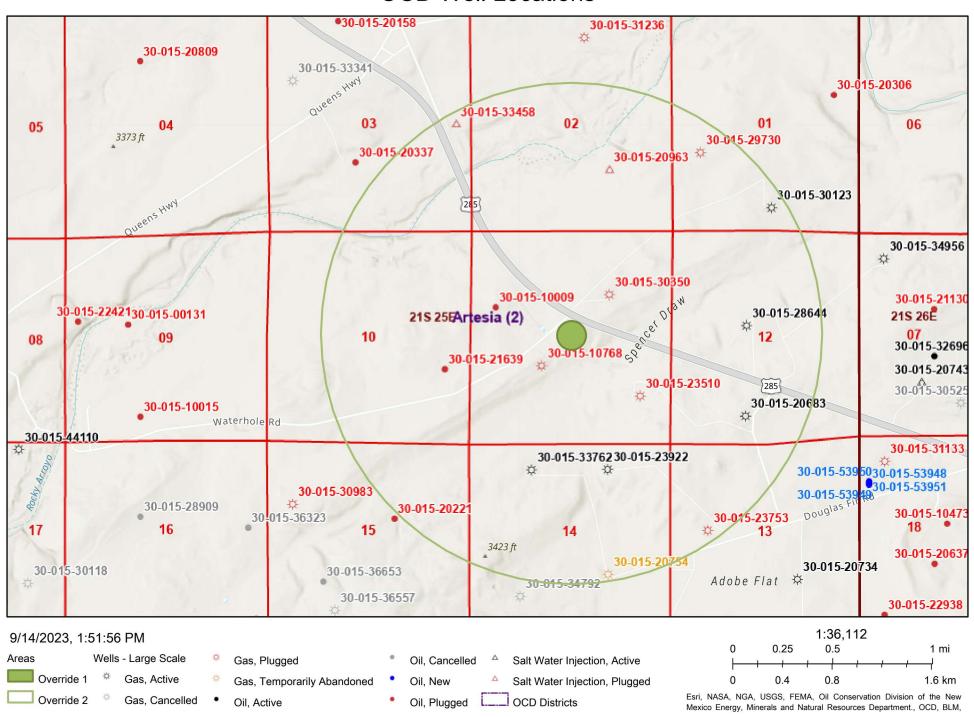
701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'
DATE: 07/10/2024
SURVEYED BY: ML/IW
DRAWN BY: AR
APPROVED BY: RMH
SHEET: 1 OF 1

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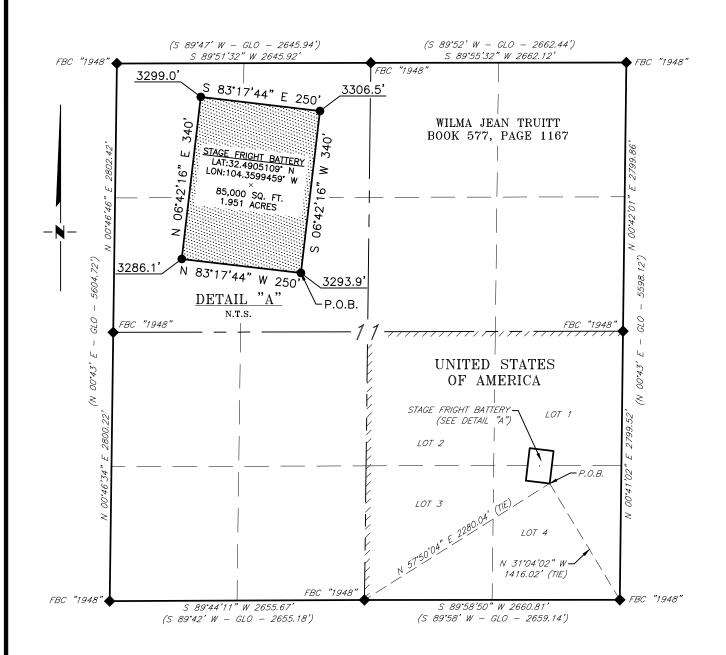
M. Hoh

#### **OCD Well Locations**



#### MEWBOURNE OIL COMPANY STAGE FRIGHT OFFSITE BATTERY SECTION 11, T21S, R25E

N. M. P. M., EDDY COUNTY, NEW MEXICO



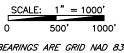
#### DIRECTIONS TO LOCATION

From the intersection of CR #406 (Waterhole Rd.) & U.S. Hwy 285;

Go Southeast on U.S. Hwy 285 approx. 1.1 miles to a lease road on the right;

Turn right and go Southwest approx. 0.3 miles to a "Y";

Keep right at "Y" and go Northwest approx. 0.7 miles to location;



BEARINGS ARE GRID NAD 83 NM EAST DISTANCES ARE HORIZ. GROUND. <u>LEGEND</u>

( ) RECORD DATA — GLO

FOUND MONUMENT
AS NOTED

P.O.B. POINT OF BEGINNING

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howell

Robert M. Howett

NM PS 19680

1	RESTAKE	07/10/24		
NO.	REVISION	DATE		
JOB NO.: LS23080667R2				
DWG. NO.: 23080667R2-1				



SCALE: 1" = 1000'

DATE: 10/26/2023

SURVEYED BY: ML/IW

DRAWN BY: AR

APPROVED BY: RMH

SHEET: 1 OF 2

M. HOL

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#### MEWBOURNE OIL COMPANY STAGE FRIGHT OFFSITE BATTERY SECTION 11, T21S, R25E

N. M. P. M., EDDY COUNTY, NEW MEXICO

#### **DESCRIPTION**

A tract of land situated within the Southeast quarter of Section 11, Township 21 South, Range 25 East, N. M. P. M. Eddy County, New Mexico, across United States of America land and being more particularly described by metes and bounds as follows:

BEGINNING at a point in Lot 4 of Section 11, which bears, N 57\*50'04" E, 2,280.04 feet from a brass cap, stamped "1948", found for the South quarter corner of Section 11 and being N 31\*04'02" W, 1,416.02 feet from a brass cap, stamped "1948", found for the Southeast corner of Section 11;

Thence N 83°17'44" W, 250 feet, to a point;

Thence N 06°42'16" E, 340 feet, to a point;

Thence S 83'17'44" E, 250 feet, to a point;

Thence S 06'42'16" W, 340 feet, to the Point of Beginning.

Said tract of land contains 85,000 square feet or 1.951 acres, more or less and is allocated by forties as follows:

Lot 4 43,051.53 Sq. Ft. 0.988 Acres Lot 1 41,948.47 Sq. Ft. 0.963 Aces

1	RESTAKE	07/10/24
NO.	REVISION	DATE
JOB	NO.: LS23	080667R

JOB NO.: LS23080667R DWG. NO.: 23080667R-2



701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'

DATE: 10/26/2023

SURVEYED BY: ML/IW

DRAWN BY: AR

APPROVED BY: RMH

SHEET: 2 OF 2

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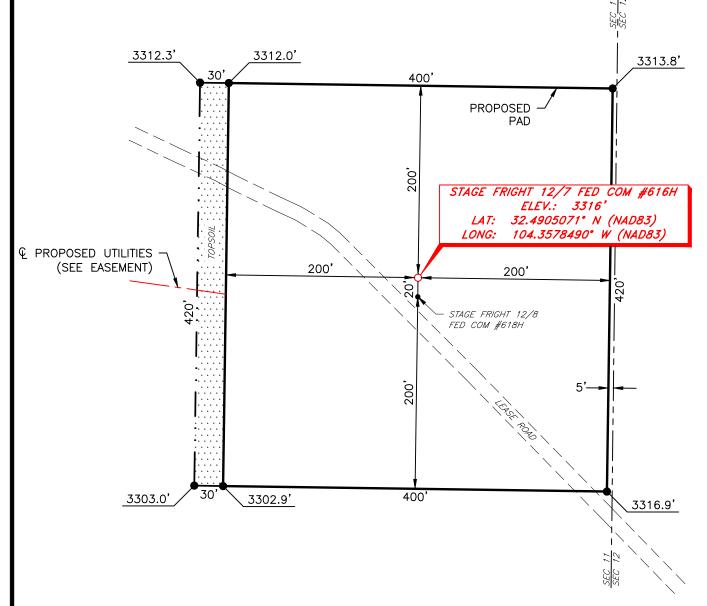


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#### MEWBOURNE OIL COMPANY STAGE FRIGHT 12/7 FED COM #616H (1395' FSL & 205' FEL) SECTION 11, T21S, R25E

N. M. P. M., EDDY CO., NEW MEXICO



#### DIRECTIONS TO LOCATION

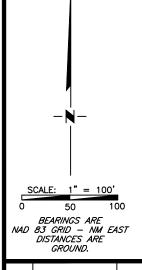
From the intersection of CR #406 (Waterhole Rd.) & U.S. Hwy 285;

Go Southeast on U.S. Hwy 285 approx. 1.1 miles to a lease road on the right;

Turn right and go Southwest approx. 0.3 miles to a "Y";

Keep right at "Y" and go Northwest approx. 0.5 miles to location on the right;

THIS IS NOT A BOUNDARY SURVEY, APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY.



I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Howet Robert M. Howett NM PS 19680

2	RESTAKE	06/28/24			
1	RESTAKE PAD	08/04/23			
NO.	REVISION	DATE			
JOB NO.: LS23070593R2					
DWC	DWG. NO.: 23070593R2-4				

ENERGY SERVICES, LLC. 701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 100'
DATE: 07/18/2023
SURVEYED BY: ML/IW
DRAWN BY: AR
APPROVED BY: RMH
SHEET: 1 OF 1

SSIONAL

#### 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

	11.	ATUNAL GA	AS MANAC	<b>71</b> 214117141 1 1	LAIN			
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								
			ffective May 25,					
I. Operator: Mew	bourne C	Oil Co.	OGRID:	14744		_ Date: _	5/2	/22
II. Type: X Original □	Amendment	due to □ 19.15.27.	.9.D(6)(a) NMA	C □ 19.15.27.9.D(	(6)(b) NI	МАС 🗆 (	Other.	
If Other, please describe:								
III. Well(s): Provide the be recompleted from a single					wells pro	posed to	be dri	lled or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D		cipated MCF/D		Anticipated roduced Water BBL/D
Stage Fright 12/8 Fed Com 618H		D 11 21S 25E	1375' FSL x 205' FE	∟ 1000	2000 5000		5000	
IV. Central Delivery Point Name:  Stage Fright 12/8 Fed Com 618H  [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 Initial Flow First Production Back Date Date			
Stage Fright 12/8 Fed Com 618H		7/2/22	8/2/22	9/2/22		9/17/22	2	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.								

### 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. $\square$ 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 $\square$ will $\square$ will not have capacity to gather 100% of the anticonstant.	pated natural gas
production volume from the well prior to the date of first production.	

XIII. Line Pressure. Operator $\square$ does $\square$ 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 we	ell(s).

$\square$ Attach Operator's plan to manage production in response to the increased line r	e pressure
---	------------

XIV. (	Confidentiality: $\square$ Operator asserts confidentiality pursuant to Sec	ction 71-2-8 NMSA	1978 for the informatio	n provided in
Section	n 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC	C, and attaches a full	description of the specif	ic information
for whi	ich confidentiality is asserted and the basis for such assertion.			

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## 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.

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:	Bradley Bishop
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

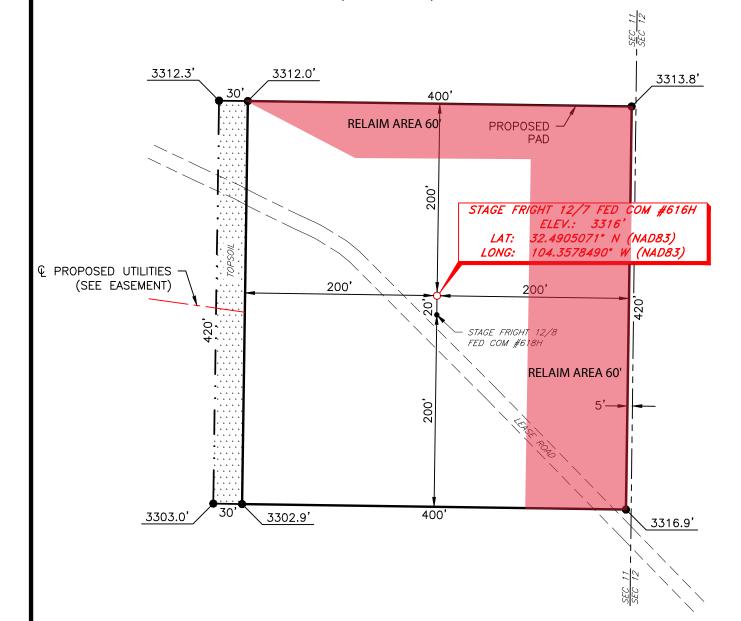
#### Natural Gas Management Plan – Attachment

- 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.

# MEWBOURNE OIL COMPANY STAGE FRIGHT 12/7 FED COM #616H (1395' FSL & 205' FEL) SECTION 11, T21S, R25E N. M. P. M., EDDY CO., NEW MEXICO



# <u>DIRECTIONS TO LOCATION</u>

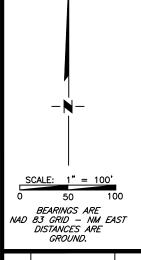
From the intersection of CR #406 (Waterhole Rd.) & U.S. Hwy 285;

Go Southeast on U.S. Hwy 285 approx. 1.1 miles to a lease road on the right;

Turn right and go Southwest approx. 0.3 miles to a "Y";

Keep right at "Y" and go Northwest approx. 0.5 miles to location on the right;

THIS IS NOT A BOUNDARY SURVEY, APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY.



I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howell
Robert M. Howett NM PS 19680

2 RESTAKE 06/28/24
1 RESTAKE PAD 08/04/23
NO. REVISION DATE

JOB NO.: LS23070593R2
DWG. NO.: 23070593R2-4



SCALE: 1" = 100'

DATE: 07/18/2023

SURVEYED BY: ML/IW

DRAWN BY: AR

APPROVED BY: RMH

SHEET: 1 OF 1

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SS/ONAL



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

PWD Data Report
08/09/2024

PWD disturbance (acres):

**APD ID:** 10400094561 **Submission Date:** 09/19/2023

Operator Name: MEWBOURNE OIL COMPANY

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

Well Type: OIL WELL Well Work Type: Drill

# **Section 1 - General**

Would you like to address long-term produced water disposal? NO

## **Section 2 - Lined**

Would you like to utilize Lined Pit PWD options? N

**Produced Water Disposal (PWD) Location:** 

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit

Pit liner description:

PWD surface owner:

Pit liner manufacturers

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule

Lined pit reclamation description:

Lined pit reclamation

Leak detection system description:

Leak detection system

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

**Lined pit Monitor description:** 

**Lined pit Monitor** 

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information

## **Section 3 - Unlined**

Would you like to utilize Unlined Pit PWD options? N

**Produced Water Disposal (PWD) Location:** 

PWD disturbance (acres):

PWD surface owner:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule

Unlined pit reclamation description:

Unlined pit reclamation

Unlined pit Monitor description:

**Unlined pit Monitor** 

Do you propose to put the produced water to beneficial use?

Beneficial use user

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic

State

**Unlined Produced Water Pit Estimated** 

Unlined pit: do you have a reclamation bond for the pit?

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information

Section 4 -

Would you like to utilize Injection PWD options? N

**Produced Water Disposal (PWD) Location:** 

PWD surface owner: PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: Injection well name:

Assigned injection well API number? Injection well API number:

Injection well new surface disturbance (acres):

**Minerals protection information:** 

Mineral protection

**Underground Injection Control (UIC) Permit?** 

**UIC Permit** 

Section 5 - Surface

Would you like to utilize Surface Discharge PWD options? N

**Produced Water Disposal (PWD) Location:** 

PWD surface owner: PWD disturbance (acres):

Surface discharge PWD discharge volume (bbl/day):

**Surface Discharge NPDES Permit?** 

**Surface Discharge NPDES Permit attachment:** 

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 -

Would you like to utilize Other PWD options? N

**Produced Water Disposal (PWD) Location:** 

PWD surface owner: PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

Other PWD type description:

Other PWD type

Have other regulatory requirements been met?

Other regulatory requirements



U.S. Department of the Interior **BUREAU OF LAND MANAGEMENT**  **Bond Info Data** 08/09/2024

APD ID: 10400094561

**Operator Name: MEWBOURNE OIL COMPANY** 

Well Name: STAGE FRIGHT 12/8 FED COM

Well Type: OIL WELL

**Submission Date:** 09/19/2023

Highlighted data reflects the most

Well Number: 618H

Well Work Type: Drill

recent changes **Show Final Text** 

#### **Bond**

Federal/Indian APD: FED

**BLM Bond number:** 

**BIA Bond number:** 

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

**BLM** reclamation bond number:

Forest Service reclamation bond number:

**Forest Service reclamation bond** 

**Reclamation bond number:** 

**Reclamation bond amount:** 

**Reclamation bond rider amount:** 

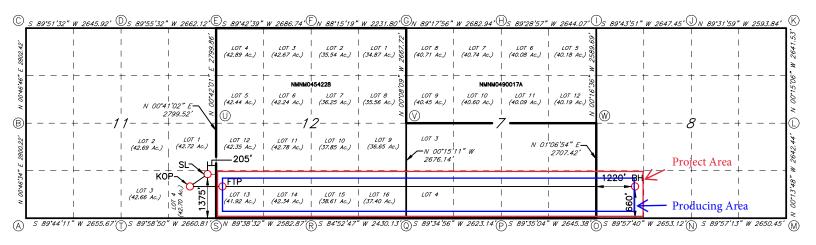
Additional reclamation bond information

<u>C-102</u>	2		Enei	rgy, Min	State of New erals & Natura	v Mexico al Resources Dep	artment		Revised J	fuly 9, 2024	
	Electronica					TION DIVISION			✓ Initial Submit	to1	
Via OC	CD Permittin	ıg						Submitt	l <del></del>		
								Type:	☐ As Drilled		
			•		WELL LOCAT	TION INFORMATIO	N		•		
API Nu 30-0	mber )15-553	49	Pool Code	98324	I	Pool Name WC; W	OLFCAMP				
Property 336			Property Na	ame S'	TAGE FRIG	HT 12/8 FE	D COM	V	Well Number	618H	
OGRID	<sup>No.</sup> 1474	4	Operator Na	ame	MEWBOUR	NE OIL COM	PANY	(	Ground Level Elevation	3316'	
Surface	Owner:	State □ Fee □	∃Tribal □ Fe	ederal		Mineral Owner:	☐ State ☐ Fee [	☐ Tribal [	Federal		
					Surfa	ace Location					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	I	Longitude	County	
P	11	21S	25E	4	1375 FSL	205 FEL	32.49045	21°N  1	04.3578499°W	EDDY	
	1	1				Hole Location					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Longitude	County	
M	8	21S	26E		660 FSL	1220 FWL	32.48914	83.N 1	04.3199352°W	EDDY	
Dedicat	ed Acres	Infill or Defin	ning Well	Defining	g Well API	Overlapping Spa	cing Unit (Y/N)	Consolida	tion Code		
Order N	lumbers.					Well setbacks are under Common Ownership: ☐ Yes ☐ No					
					Kick O	ff Point (KOP)					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	I	Longitude	County	
P	11	21S	25E	4	660 FSL	473 FEL			04.3587459°W	· ·	
			l		First Ta	ıke Point (FTP)				l .	
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	I	Longitude	County	
M	12	21S	25E	13	660 FSL	100 FWL	32.488480	61°N  1	04.3568880°W	EDDY	
	ı	1	1			ke Point (LTP)					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	I	Longitude	County	
Unitized	d Area or Ar	rea of Uniform	Interest	Spacing	Unit Type ☐ Hor	izontal  Vertical	Groun	d Floor El	evation:		
				<u> </u>							
OPER.	ATOR CER	TIFICATIONS	S			SURVEYOR CERTIFICATIONS					
my know organiza including	ledge and belie tion either own the proposed	ef, and , if the well ns a working inter bottom hole locat	l is a vertical or est or unleased i ion or has a rigi	directional v mineral inter ht to drill this	rest in the land s well at this	I hereby certify that th surveys made by me u my belief.	nder my supervición	n on this pin and that the	est was plotted from field no essame is true and correct	otes of actual to the best of	
interest,					r unleased mineral g order heretofore			19680	6) [ ]		
If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be legated or obtained a compulsory pooling order from the division.					ROTTE SOL	DNAL S					
$\sim$	interval will be located or obtained a compulsory pooling order from the division.  Conner Whitley 08/21/2024					l	310	UNAL 3			
7 30.2.1.232											
Signature	ner U	Mittey	08/21/2 Date	2024		Signature and Seal of Prof		<u> </u>			
Signature	ner (() er Whitl	J		2024		Signature and Seal of Prof		+			
Signature Conn Printed Na	er Whitl	ley	Date	2024		Signature and Seal of Prof		,			
Signature Conn Printed Na	er Whitl	J	Date	2024		Robert M	Cessional Surveyor	ry	3/28/2024		

#### ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is a directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



#### CORNER DATA NAD 83 GRID — NM EAST

NAD 83 GRID - NM EAST

<u>SURFACE LOCATION (SL)</u> N: 542158.1 - E: 533778.4

LAT: 32.4904521° N LONG: 104.3578499° W

KICK OFF POINT (KOP)

660' FSL - 473' FEL SEC.11 N: 541443.3 - E: 533502.0

> LAT: 32.4884870° N LONG: 104.3587459° W

<u>FIRST\_TAKE\_POINT\_(FTP)</u> 660' FSL - 100' FWL\_SEC.12 N: 541442.8 - E: 534074.8

> LAT: 32.4884861° N LONG: 104.3568880° W

BOTTOM HOLE (BH) N: 541683.2 - E: 545468.6

LAT: 32.4891483° N LONG: 104.3199352° W A: FOUND BRASS CAP "1948' N: 540770.5 - E: 528651.8

B: FOUND BRASS CAP "1948" N: 543569.8 - E: 528689.8

C: FOUND BRASS CAP "1948" N: 546371.3 - E: 528727.9

D: FOUND BRASS CAP "1948" N: 546377.8 - E: 531373.1

E: FOUND BRASS CAP "1948" N: 546381.2 - E: 534034.6

F: FOUND BRASS CAP "1948" N: 546394.8 - E: 536720.6

G: CALCULATED CORNER N: 546326.9 – E: 538950.8

H: FOUND BRASS CAP "1976" N: 546294.1 - E: 541632.9

I: FOUND BRASS CAP "1976" N: 546317.9 - E: 544276.2

J: FOUND BRASS CAP "1976" N: 546330.4 - E: 546923.0

K: CALCULATED CORNER N: 546309.2 - E: 549516.1

L: FOUND BRASS CAP "1976" N: 543668.4 - E: 549527.7 M: FOUND BRASS CAP "1976" N: 541026.6 - E: 549538.3

N: FOUND BRASS CAP "1976" N: 541024.5 - E: 546888.5

O: FOUND BRASS CAP "1976" N: 541022.7 - E: 544236.0

P: FOUND BRASS CAP "LS4404" N: 541003.5 - E: 541591.4

Q: FOUND BRASS CAP "1948" N: 540984.4 - E: 538969.0

R: FOUND BRASS CAP "1948" N: 540767.6 - E: 536549.1

S: FOUND BRASS CAP "1948' N: 540783.7 - E: 533967.0

T: FOUND BRASS CAP "1948" N: 540782.8 - E: 531306.8

U: FOUND BRASS CAP "1948" N: 543582.3 - E: 534000.4

V: FOUND BRASS CAP "1948' N: 543659.8 - E: 538957.1

W: FOUND BRASS CAP "1976" N: 543728.9 - E: 544288.7

Subsection A through F of 19.15.27.8 NMAC.

Released to Imaging: 8/21/2024 3:12:57 PM

during active and planned maintenance.

# 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: Mev	vbourne C	Oil Co.	OGRID:	14744	Date:	5/2	<u>/22</u>
II. Type: X Original	Amendment	due to □ 19.15.27	7.9.D(6)(a) NMA	C □ 19.15.27.9.D	(6)(b) NMAC □ (	Other.	
If Other, please describe	:						
III. Well(s): Provide the be recompleted from a s					wells proposed to	be dri	led or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Pı	Anticipated oduced Water BBL/D
Stage Fright 12/8 Fed Com 618H		D 11 21S 25E	1375' FSL x 205' FI	L 1000	2000	5000	
IV. Central Delivery Power V. Anticipated Schedul proposed to be recompleted.	le: Provide the	following informa	ation for each new	or recompleted v			7.9(D)(1) NMAC] sed to be drilled or
Well Name	API	Spud Date	TD Reached Date	Completion Commencement			First Production Date
Stage Fright 12/8 Fed Com 618H		12/9/2024	1/9/2024	2/9/2025	2/25/	2025	3/1/2025
VI. Separation Equipm		-		_			

VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting

Page 6

<u>Sec</u>	tion	2 –	En	ıhaı	1ce	d P	lan
]	EFFE	CTIV	/E A	PRI	L 1,	2022	2

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 (NG	K. 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. $\square$ 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 $\square$ will $\square$ will not have capacity to gather 100% of the anticipated n	ıatural gas
production volume from the well prior to the date of first production.	

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

$\square$ Attach Operator's plan to manage production in response to the increased line r	e pressure
---	------------

XIV. C	onfidentiality: 🗆	Operator asser	ts confidentiality	pursuant to	Section	71-2-8 N	MSA	1978 f	or the	in formation	provided in
Section	2 as provided in F	aragraph (2) of S	Subsection D of 1	9.15.27.9 NN	MAC, and	d attaches	s a full	descrip	tion of	f the specific	information
for which	ch confidentiality	is asserted and th	ne basis for such	assertion.							

Page 7

# 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.

## Page 8

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:	Bradley Bishop						
Printed Name:	BRADLEY BISHOP						
Title:	REGULATORY MANAGER						
E-mail Address:	BBISHOP@MEWBOURNE.COM						
Date:	8/9/2024						
Phone:	575-393-5905						
	OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)						
Approved By:							
Title:							
Approval Date:							
Conditions of Ap	proval:						

# 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.
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  - 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

08/09/2024

APD ID: 10400094561

Submission Date: 09/19/2023

Highlighted data reflects the most recent changes

**Operator Name: MEWBOURNE OIL COMPANY** 

Well Number: 618H

Well Name: STAGE FRIGHT 12/8 FED COM

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
13930989	UNKNOWN	3227	28	28	OTHER : Topsoil	NONE	N
13930979	CAPITAN REEF	2552	675	675	DOLOMITE, LIMESTONE	USEABLE WATER	N
13930985	LAMAR	1324	1903	1903	LIMESTONE	NATURAL GAS, OIL	N
13930995	BONE SPRING	-431	3658	3658	LIMESTONE, SHALE	NATURAL GAS, OIL	N
13930988	BONE SPRING 1ST	-2067	5294	5294	SANDSTONE	NATURAL GAS, OIL	N
13930991	BONE SPRING 2ND	-2709	5936	5936	SANDSTONE	NATURAL GAS, OIL	N
13930992	BONE SPRING 3RD	-4045	7272	7272	SANDSTONE	NATURAL GAS, OIL	Y
13930984		-4433	7660	7660	SANDSTONE, SHALE	NATURAL GAS, OIL	N

#### **Section 2 - Blowout Prevention**

Pressure Rating (PSI): 5M Rating Depth: 19367

Equipment: Annular, Pipe Ram, Blind Ram

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to the choke manifold. Anchors are not required by manufacturer. A variance is also requested for the use of a multibowl wellhead. Please see attached schematics.

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 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. 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.

#### **Choke Diagram Attachment:**

Stage Fright 12 8 Fed Com 618H 5M BOPE Choke Diagram 20230918083227.pdf

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

Flex\_Line\_Specs\_API\_16C\_20240621124852.pdf

## **BOP Diagram Attachment:**

Stage\_Fright\_12\_8\_Fed\_Com\_618H\_5M\_BOPE\_Schematic\_20230918083300.pdf

Stage\_Fright\_12\_8\_Fed\_Com\_618H\_Cactus\_5K\_WH\_20230918083301.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	450	0	450	3312	2862	450	H-40	48	ST&C	3.83	8.6	DRY	14.9 1	DRY	25.0 5
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	2000	0	1992	3713	1320	2000	J-55	36	LT&C	1.94	3.38	DRY	6.29	DRY	7.83
3	PRODUCTI ON	8.75	7.0	NEW	API	N	0	7011	0	6973	3713	-3661	7011	P- 110	26	LT&C	1.81	2.89	DRY	3.8	DRY	4.55
4	LINER	6.12 5	4.5	NEW	API	N	6861	19367	6823	8070	-3483	-4758	12506	P- 110	13.5	LT&C	2.42	2.82	DRY	2	DRY	2.5

## **Casing Attachments**

Casing ID: 1 String SURFACE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Stage\_Fright\_12\_8\_Fed\_Com\_\_618H\_CsgAssumptions\_20240708143735.pdf

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

Casing	<b>Attachments</b>
--------	--------------------

Casing ID: 2

String

INTERMEDIATE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

 $Stage\_Fright\_12\_8\_Fed\_Com\_\_618H\_CsgAssumptions\_20240708143746.pdf$ 

Casing ID: 3

String

**PRODUCTION** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Stage\_Fright\_12\_8\_Fed\_Com\_\_618H\_CsgAssumptions\_20240708143757.pdf

Casing ID: 4

String

**LINER** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Stage\_Fright\_12\_8\_Fed\_Com\_\_618H\_CsgAssumptions\_20240708143808.pdf

**Section 4 - Cement** 

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	261	170	2.12	12.5	370	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		261	450	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead	650	0	320	60	2.12	12.5	130	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		320	650	100	1.34	14.8	134	25	Class C	Retarder
INTERMEDIATE	Lead	650	650	1340	130	2.12	12.5	280	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		1340	2000	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead		625	4439	330	2.12	12.5	700	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		4439	7011	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		6861	1936 7	800	1.85	13.5	1480	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 in surface hole

Describe the mud monitoring system utilized: Pason/PVT/Visual monitoring

# **Circulating Medium Table**

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	РН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
7011	1936 7	OIL-BASED MUD	10.5	10.5							
0	450	SPUD MUD	8.6	8.6							
450	2000	WATER-BASED MUD	10	10							
2000	7011	WATER-BASED MUD	9.5	9.5							

# **Section 6 - Test, Logging, Coring**

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

Will run GR/CNL logs in the vertical section of this well.

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

DIRECTIONAL SURVEY, MEASUREMENT WHILE DRILLING, MUD LOG/GEOLOGIC LITHOLOGY LOG, MUD LOG/GEOLOGICAL LITHOLOGY LOG, GAMMA RAY LOG, COMPENSATED NEUTRON LOG,

Coring operation description for the well:

None

## **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 4616 Anticipated Surface Pressure: 2840

Anticipated Bottom Hole Temperature(F): 163

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Stage\_Fright\_12\_8\_Fed\_Com\_618H\_H2S\_Plan\_20230918090743.pdf

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

# **Section 8 - Other Information**

# Proposed horizontal/directional/multi-lateral plan submission:

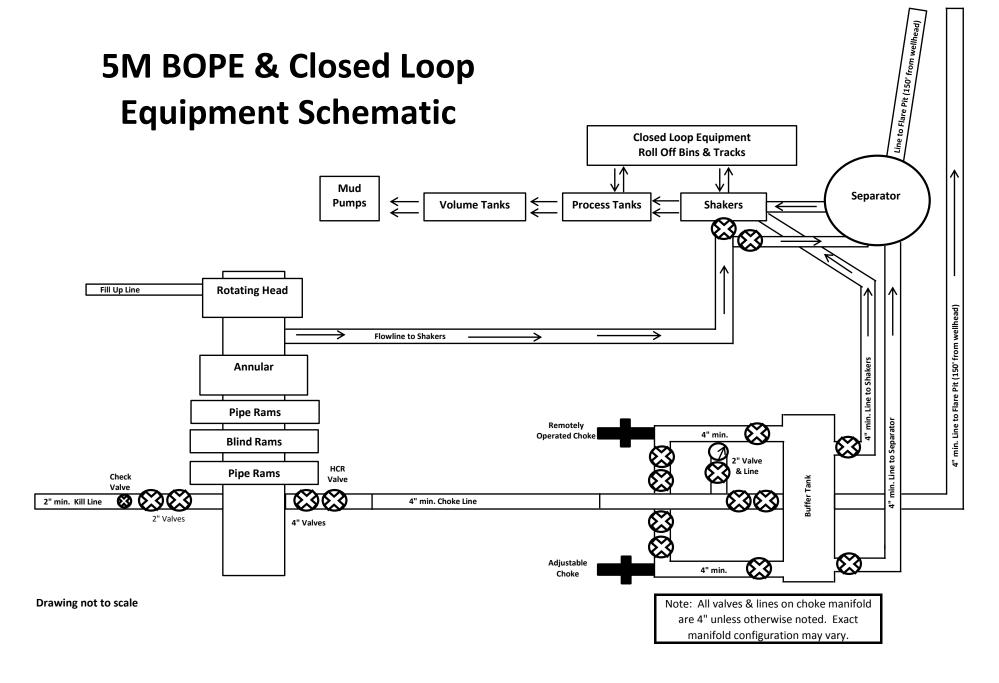
Stage\_Fright\_12\_8\_Fed\_Com\_618H\_Dir\_Plot\_20240708143842.pdf Stage\_Fright\_12\_8\_Fed\_Com\_618H\_Dir\_Plan\_20240708143842.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

## Other Variance attachment:

MOC\_Break\_Testing\_Variance\_20240621134205.pdf
MOC\_Offline\_Cementing\_Variance\_20240621134205.pdf





# LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

# HYDROSTATIC TESTING REPORT

LTYY/QR-5.7.1-28

№: 230826015

Product Name  Product Specification		ke And Kill Hose		Standard	Aì	PI Spec 16C 3 <sup>rd</sup> ed	lition
	3"×1000						
	3 ~1000	0psi×60ft (18.29m	1)	Serial Numb	er	7660144	
Inspection Equipment	MTU	J-BS-1600-3200-E		Test mediu	m	Water	
Inspection Department	Ç	C. Department		Inspection D	ate	2023.08.26	
	1	Rate of le	ngth chang	ge			
Standard requirements	At working pre	essure, the rate of le	ngth chang	ge should not m	ore than $\pm 2$	2%	
Testing result	10000psi (69.0	MPa) ,Rate of leng	th change	0.7%			
		Hydrosta	atic testing				
Standard requirements		orking pressure, the				less than three min	nutes
Testing result	15000psi (103.	.5MPa), 3 min for th	he first tim	e, 60 min for th	e second tim	e, no leakage	
Graph of pressure testing:							
100 90 100 100 100 100 100 100 100 100 1			100 90 70 70 60 50 50 10				
(1) M(2) (1) M(2) (1) M(2) (1) M(2) (1)	S621 215521 215621 215621 215	021 220021 220221 220421 220421222		3958 23×958 235959	\$ 00:09:5\$ 00:1	1958 002958 001958	00:
Conclusion	The inspec	ted items meet stan	dard requi	rements of API	Spec 16C 3rd	l edition	
		4	High			1	Was



# LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

# **CERTIFICATE OF QUALITY**

# LTYY/QR-5.7.1-19B

№: LT2023-126-002

Customer Name	Austin Hose							
Product Name	Choke And Kill Hose							
Product Specification	3"×10000psi×60ft (18.29m)	Quantity	2PCS					
Serial Number	7660143~7660144	FSL	FSL3					
Temperature Range	-29°C∼+121°C	Standard	API Spec 16C 3 <sup>rd</sup> edition					
Inspection Department	Q.C. Department	Inspection date	2023.08.26					

	Inspecti	ion Items	S			Inspection resul	ts		
	Appearance	Checkin	g	In accordance with API Spec 16C 3 <sup>rd</sup> edition					
	Size and I	engths		In accordance with API Spec 16C 3 <sup>rd</sup> edition					
]	Dimensions and	d Tolerai	nces	In accordar	nce with API Spec	16C 3 <sup>rd</sup> edition			
End Connections: 4-	1/16"×10000psi	Integral fl	ange for sour gas ser	In accordance with API Spec 6A 21st edition					
End Connections: 4-	1/16"×10000psi	Integral fl	ange for sour gas se	vice	In accordar	nce with API Spec	17D 3 <sup>rd</sup> edition		
	Hydrostatio	Testing			In accordance with API Spec 16C 3rd edition				
	product M	larking			In accordar	nce with API Spec	16C 3 <sup>rd</sup> edition		
Inspection co	nclusion		The inspected ite	eet standard requirer	ments of API Spec	16C 3 <sup>rd</sup> edition			
Remar	ks								
Approver Jian long Chan Auditor					liging Dong	Inspector	Zhansheng Wang		

# LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

#### CERTIFICATE OF CONFORMANCE

№:LT230826016

Product Name: Choke And Kill Hose

Product Specification: 3"×10000psi×60ft (18.29m)

Serial Number: 7660143~7660144

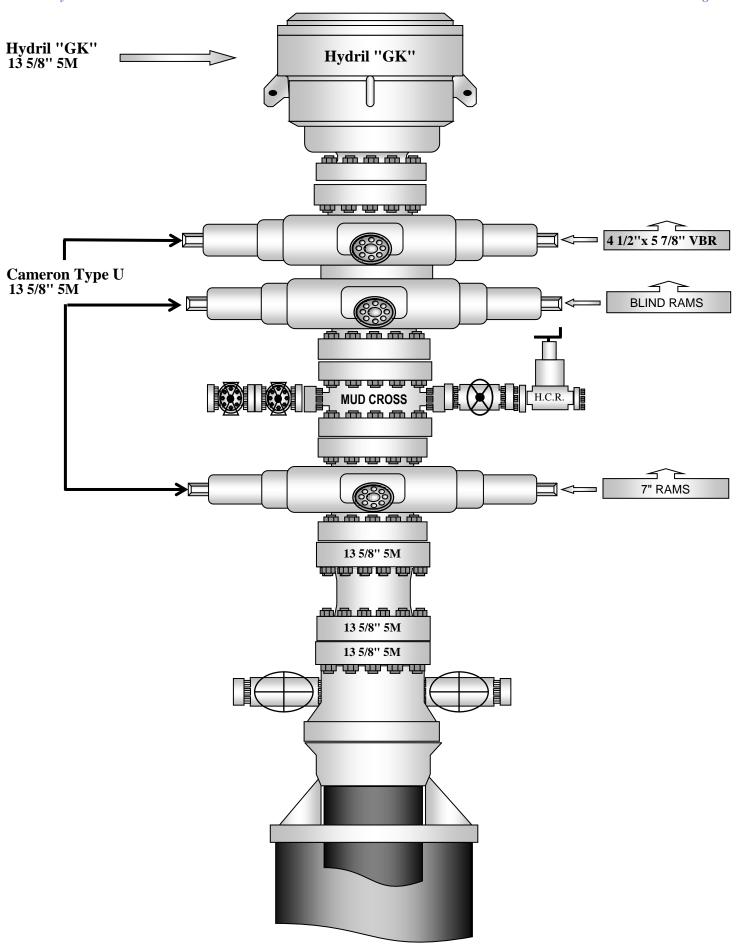
End Connections: 4-1/16"×10000psi Integral flange for sour gas service

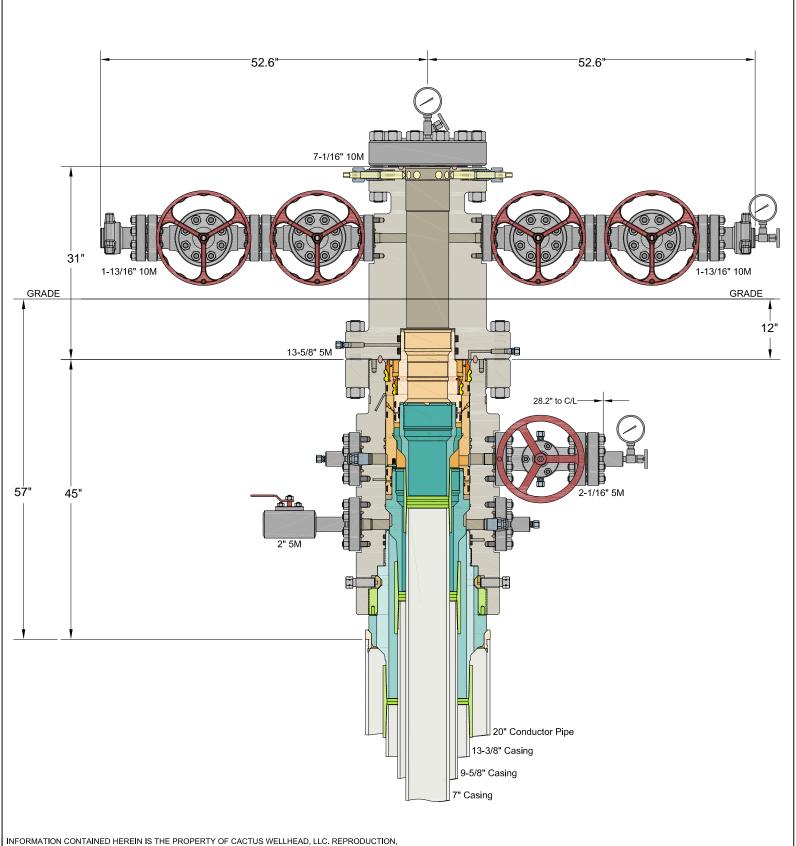
The Choke And Kill Hose assembly was produced by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD . in Aug 2023, and inspected by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD. according to API Spec 16C 3rd edition on Aug 26, 2023. The overall condition is good. This is to certify that the Choke And Kill Hose complies with all current standards and specifications for API Spec 16C 3rd edition.

Jian long Chen

QC Manager:

Date: Aug 26, 2023





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# CACTUS WELLHEAD LLC

20" x 13-3/8" x 9-5/8" x 7" MBU-3T-CFL-R-DBLO Wellhead System With 9-5/8" & 7" Fluted Mandrel Casing Hangers And 13-5/8" 5M x 7-1/16" 10M CTH-DBLHPS Tubing Head

# ALL DIMENSIONS APPROXIMATE MEWBOURNE OIL COMPANY

DRAWN DLE 18APR22
APPRV

DRAWING NO. HBE0000660

#### Mewbourne Oil Company, Stage Fright 12/8 Fed Com #618H Sec 11, T21S, R25E

SHL: 1375' FSL 205' FEL (Sec 11) BHL: 660' FSL 1220' FWL (Sec 8)

#### Design A - Casing Program

Hole Size	From	To	Csg. Size	Weight	Grade	Conn.	SF	SF Burst	SF Jt	SF Body
Hole Size	FIOIII	10	Csg. Size	(lbs)	Grauc	Com.	Collapse	or burst	Tension	Tension
17.5 in	0'	450'	13.375 in	48.0	H40	STC	3.83	8.60	14.91	25.05
12.25 in	0'	2000'	9.625 in	36.0	J55	LTC	1.94	3.38	6.29	7.83
8.75 in	0'	7011'	7 in	26.0	P110	LTC	1.81	2.89	3.80	4.55
6.125 in	6861'	19367'	4.5 in	13.5	P110	LTC	2.42	2.82	2.00	2.50
		BLM Minimum Safety Factors			1.125	1.0	1.6 Dry	1.6 Dry		
				DLN	DLM Minimum Safety Factors			1.0	1.8 Wet	1.8 Wet

Design A - Cement Program

Design A - Cement P	rogram					
Casing		# Sacks	Wt. lb/gal	Yield cu.ft/sack	тос	Slurry Description
13.375 in	LEAD	170	12.5	2.12	0'	Salt, Gel, Extender, LCM
13.375 III	TAIL	200	14.8	1.34	U	Retarder
1st Stg 9.625 in	LEAD	130	12.5	2.12	650'	Salt, Gel, Extender, LCM
1st Stg 9.025 iii	TAIL	200	14.8	1.34	630	Retarder
					9 5/8" DV Tool @ 0	550'
2nd Stg 9.625 in	LEAD	60	12.5 2.12		0'	Salt, Gel, Extender, LCM
2110 Stg 9.023 III	TAIL	100	14.8	1.34	U	Retarder
7 in	LEAD	330	12.5	2.12	625'	Salt, Gel, Extender, LCM, Defoamer
/ III	TAIL	400	15.6	1.18	023	Retarder, Fluid Loss, Defoamer
4.5 in	LEAD	800	13.5	1.85	6861'	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

Design A - Mud Program

Depth	Mud Wt	Mud Type
0' - 450'	8.6	Fresh Water
450' - 2000'	10	Brine
2000' - 7011'	9.5	Cut-Brine
7011' - 19367'	10.5	OBM

Geology

Geology					
Formation	Est. Top (TVD)	Mineral Resources	Formation	Est. Top (TVD)	Mineral Resources
Rustler			Yeso		
Castile			Delaware (Lamar)		1903'
Salt Top			Bell Canyon		
Salt Base			Cherry Canyon		
Yates			Manzanita Marker		
Seven Rivers			Basal Brushy Canyon		
Queen			Bone Spring		3658'
Capitan		675'	1st Bone Spring		5294'
Grayburg			2nd Bone Spring		5936'
San Andres			3rd Bone Spring		7272'
Glorieta			Wolfcamp		7660'

#### All casing strings will be tested in accordance with 43 CFR Part 3170 Subpart 3172. Must have table for contingency casing.

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	Y
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.	
Is an engineered weak point used to satisfy R-111-Q?	
If yes, at what depth is the weak point planned?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

# **Mewbourne Oil Company**

Eddy County, New Mexico NAD 83 Stage Fright 12/8 Fed Com #618H

Sec 11, T21S, R25E

SHL: 1375' FSL & 205' FEL (Sec 11) BHL: 660' FSL & 1220' FWL (Sec 8)

Plan: Design #1

# **Standard Planning Report**

08 July, 2024

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83 Site: Stage Fright 12/8 Fed Com #618H

Well: Sec 11, T21S, R25E

Wellbore: BHL: 660' FSL & 1220' FWL (Sec 8)

Design: Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Stage Fright 12/8 Fed Com #618H WELL @ 3340.0usft (Original Well Elev)

WELL @ 3340.0usft (Original Well Elev)

Minimum Curvature

Project Eddy County, New Mexico NAD 83

Map System: US State Plane 1983 North American Datum 1983 Geo Datum:

New Mexico Eastern Zone Map Zone:

System Datum:

Ground Level

Site Stage Fright 12/8 Fed Com #618H

Northing: 542,083.20 usft Site Position: Latitude: 32.4902461 From: Мар Easting: 533,777.50 usft Longitude: -104.3578527

**Position Uncertainty:** 0.0 usft Slot Radius: 13-3/16 "

Well Sec 11, T21S, R25E

**Well Position** +N/-S 0.0 usft Northing: 542,083.20 usft Latitude: 32.4902461 +E/-W 0.0 usft Easting: 533,777.50 usft Longitude: -104.3578527

**Position Uncertainty** 0.0 usft Wellhead Elevation: 3,340.0 usft **Ground Level:** 3,316.0 usft

-0.01 ° **Grid Convergence:** 

Wellbore BHL: 660' FSL & 1220' FWL (Sec 8)

Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (°) (°) (nT) 7.53 48,311.96940302 IGRF2010 12/31/2014 60.21

Design #1 Design

Audit Notes:

**PROTOTYPE** Tie On Depth: 0.0 Version: Phase:

Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 0.0 0.0 0.0 91.96

Plan Survey Tool Program Date 7/8/2024

**Depth From** Depth To

(usft) (usft) Survey (Wellbore) **Tool Name** Remarks

0.0 19,367.2 Design #1 (BHL: 660' FSL & 1220

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	
450.0	0.00	0.00	450.0	0.0	0.0	0.00	0.00	0.00	0.00	
767.8	6.36	203.29	767.1	-16.2	-7.0	2.00	2.00	0.00	203.29	
6,743.2	6.36	203.29	6,705.9	-623.7	-268.5	0.00	0.00	0.00	0.00	
7,061.0	0.00	360.00	7,023.0	-639.9	-275.5	2.00	-2.00	0.00	180.00	KOP: 660' FSL & 473'
7,938.1	87.62	88.85	7,596.0	-628.9	274.1	9.99	9.99	0.00	88.85	
19,367.2	87.62	88.85	8,070.0	-400.0	11,691.1	0.00	0.00	0.00	0.00	BHL: 660' FSL & 1220

Database: Hobbs

Company: Mewbourne Oil Company
Project: Eddy County, New Mexico NAD 83

Site: Stage Fright 12/8 Fed Com #618H

Well: Sec 11, T21S, R25E

**Wellbore:** BHL: 660' FSL & 1220' FWL (Sec 8)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Stage Fright 12/8 Fed Com #618H WELL @ 3340.0usft (Original Well Elev) WELL @ 3340.0usft (Original Well Elev)

nned Survey									
Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Section (usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)
0.0		0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	' FSL & 205' FEL (		0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0		0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0		0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0		0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0		0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
450.0		0.00	450.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0		203.29	500.0	-0.4	-0.2	-0.2	2.00	2.00	0.00
600.0		203.29	599.9	-3.6	-1.6	-1.4	2.00	2.00	0.00
700.0		203.29	699.7	-10.0	-4.3	-4.0	2.00	2.00	0.00
767.8	6.36	203.29	767.1	-16.2	-7.0	-6.4	2.00	2.00	0.00
800.0	6.36	203.29	799.2	-19.4	-8.4	-7.7	0.00	0.00	0.00
900.0	6.36	203.29	898.5	-29.6	-12.8	-11.7	0.00	0.00	0.00
1,000.0	6.36	203.29	997.9	-39.8	-17.1	-15.8	0.00	0.00	0.00
1,100.0		203.29	1,097.3	-50.0	-21.5	-19.8	0.00	0.00	0.00
1,200.0	6.36	203.29	1,196.7	-60.1	-25.9	-23.8	0.00	0.00	0.00
1,300.0	6.36	203.29	1,296.1	-70.3	-30.3	-27.8	0.00	0.00	0.00
1,400.0		203.29	1,395.5	-70.5 -80.5	-34.6	-31.9	0.00	0.00	0.00
1,500.0		203.29	1,494.8	-90.6	-39.0	-35.9	0.00	0.00	0.00
1,600.0		203.29	1,594.2	-100.8	-43.4	-39.9	0.00	0.00	0.00
1,700.0		203.29	1,693.6	-100.0 -111.0	-47.8	-43.9	0.00	0.00	0.00
,									
1,800.0		203.29	1,793.0	-121.1	-52.1	-48.0	0.00	0.00	0.00
1,900.0		203.29	1,892.4	-131.3	-56.5	-52.0	0.00	0.00	0.00
2,000.0		203.29	1,991.8	-141.5	-60.9	-56.0	0.00	0.00	0.00
2,100.0		203.29	2,091.2	-151.6	-65.3	-60.1	0.00	0.00	0.00
2,200.0	6.36	203.29	2,190.5	-161.8	-69.7	-64.1	0.00	0.00	0.00
2,300.0	6.36	203.29	2,289.9	-172.0	-74.0	-68.1	0.00	0.00	0.00
2,400.0	6.36	203.29	2,389.3	-182.1	-78.4	-72.1	0.00	0.00	0.00
2,500.0	6.36	203.29	2,488.7	-192.3	-82.8	-76.2	0.00	0.00	0.00
2,600.0	6.36	203.29	2,588.1	-202.5	-87.2	-80.2	0.00	0.00	0.00
2,700.0	6.36	203.29	2,687.5	-212.6	-91.5	-84.2	0.00	0.00	0.00
2,800.0	6.36	203.29	2.786.9	-222.8	-95.9	-88.2	0.00	0.00	0.00
2,900.0		203.29	2,786.9	-222.6 -233.0	-95.9 -100.3	-00.2 -92.3	0.00	0.00	0.00
3,000.0		203.29	2,985.6	-233.0 -243.1	-100.3	-96.3	0.00	0.00	0.00
3,100.0		203.29	3,085.0	-253.3	-104.7 -109.1	-100.3	0.00	0.00	0.00
3,200.0		203.29	3,184.4	-263.5	-113.4	-100.3	0.00	0.00	0.00
3,300.0		203.29	3,283.8	-273.6	-117.8	-108.4	0.00	0.00	0.00
3,400.0		203.29	3,383.2	-283.8	-122.2	-112.4	0.00	0.00	0.00
3,500.0		203.29	3,482.6	-294.0	-126.6	-116.4	0.00	0.00	0.00
3,600.0		203.29	3,581.9	-304.1	-130.9	-120.5	0.00	0.00	0.00
3,700.0	6.36	203.29	3,681.3	-314.3	-135.3	-124.5	0.00	0.00	0.00
3,800.0	6.36	203.29	3,780.7	-324.5	-139.7	-128.5	0.00	0.00	0.00
3,900.0		203.29	3,880.1	-334.6	-144.1	-132.5	0.00	0.00	0.00
4,000.0		203.29	3,979.5	-344.8	-148.5	-136.6	0.00	0.00	0.00
4,100.0		203.29	4,078.9	-355.0	-152.8	-140.6	0.00	0.00	0.00
4,200.0		203.29	4,178.3	-365.1	-157.2	-144.6	0.00	0.00	0.00
4,300.0		203.29	4,277.6	-375.3	-161.6	-148.7	0.00	0.00	0.00
4,400.0		203.29	4,377.0	-385.5	-166.0	-152.7 -156.7	0.00	0.00	0.00
4,500.0		203.29	4,476.4	-395.6	-170.3		0.00	0.00	0.00
4,600.0		203.29	4,575.8 4,675.2	-405.8	-174.7 170.1	-160.7	0.00	0.00	0.00
4,700.0	6.36	203.29	4,675.2	-416.0	-179.1	-164.8	0.00	0.00	0.00
4,800.0	6.36	203.29	4,774.6	-426.1	-183.5	-168.8	0.00	0.00	0.00
4,900.0	6.36	203.29	4,874.0	-436.3	-187.8	-172.8	0.00	0.00	0.00
5,000.0	6.36	203.29	4,973.3	-446.5	-192.2	-176.8	0.00	0.00	0.00

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: Stage Fright 12/8 Fed Com #618H

Well: Sec 11, T21S, R25E

**Wellbore:** BHL: 660' FSL & 1220' FWL (Sec 8)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Stage Fright 12/8 Fed Com #618H WELL @ 3340.0usft (Original Well Elev) WELL @ 3340.0usft (Original Well Elev)

lanne	d Survey									
	Measured			Vertical			Vertical	Dogleg	Build	Turn
	Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Section (usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)
	5,100.0	6.36	203.29	5,072.7	-456.7	-196.6	-180.9	0.00	0.00	0.00
	5,200.0	6.36	203.29	5,172.1	-466.8	-201.0	-184.9	0.00	0.00	0.00
	5,300.0	6.36	203.29	5,271.5	-477.0	-205.4	-188.9	0.00	0.00	0.00
	5,400.0	6.36	203.29	5,370.9	-487.2	-209.7	-193.0	0.00	0.00	0.00
	5,500.0	6.36	203.29	5,470.3	-497.3	-214.1	-197.0	0.00	0.00	0.00
	5,600.0	6.36	203.29	5,569.7	-507.5	-218.5	-201.0	0.00	0.00	0.00
	5,700.0	6.36	203.29	5,669.0	-517.7	-222.9	-205.0	0.00	0.00	0.00
	5,800.0	6.36	203.29	5,768.4	-527.8	-227.2	-209.1	0.00	0.00	0.00
	5,900.0	6.36	203.29	5,867.8	-538.0	-231.6	-213.1	0.00	0.00	0.00
	6,000.0	6.36	203.29	5,967.2	-548.2	-236.0	-217.1	0.00	0.00	0.00
	6,100.0	6.36	203.29	6,066.6	-558.3	-240.4	-221.1	0.00	0.00	0.00
	6,200.0	6.36	203.29	6,166.0	-568.5	-244.8	-225.2	0.00	0.00	0.00
	6 300 0	6.26	202.20	6.065.3	E70 7	240.4	220.2	0.00	0.00	0.00
	6,300.0 6,400.0	6.36 6.36	203.29 203.29	6,265.3 6,364.7	-578.7 -588.8	-249.1 -253.5	-229.2 -233.2	0.00 0.00	0.00 0.00	0.00 0.00
	6,400.0 6,500.0	6.36	203.29	6,364.7 6,464.1	-566.6 -599.0	-253.5 -257.9	-233.2 -237.3	0.00	0.00	0.00
	6,600.0	6.36	203.29	6,563.5	-609.2	-262.3	-237.3 -241.3	0.00	0.00	0.00
	6,700.0	6.36	203.29	6,662.9	-619.3	-266.6	-241.3 -245.3	0.00	0.00	0.00
	6,743.2	6.36	203.29	6,705.9	-623.7	-268.5	-247.1	0.00	0.00	0.00
	6,800.0	5.22	203.29	6,762.3	-629.0	-270.8	-249.1	2.00	-2.00	0.00
	6,900.0	3.22	203.29	6,862.1	-635.7	-273.7	-251.8	2.00	-2.00	0.00
	7,000.0	1.22	203.29	6,962.0	-639.3	-275.2	-253.2	2.00	-2.00	0.00
	7,061.0	0.00	360.00	7,023.0	-639.9	-275.5	-253.5	2.00	-2.00	0.00
		SL & 473' FEL (S	,							
	7,100.0	3.89	88.85	7,061.9	-639.9	-274.2	-252.1	9.99	9.99	0.00
	7,150.0	8.89	88.85	7,111.6	-639.8	-268.6	-246.6	9.99	9.99	0.00
	7,200.0	13.88	88.85	7,160.6	-639.6	-258.7	-236.7	9.99	9.99	0.00
	7,250.0	18.88	88.85	7,208.6	-639.3	-244.7	-222.6	9.99	9.99	0.00
	7,300.0	23.87	88.85	7,255.1	-638.9	-226.4	-204.5	9.99	9.99	0.00
	7,350.0	28.87	88.85	7,299.9	-638.5	-204.2	-182.3	9.99	9.99	0.00
	7,400.0	33.87	88.85	7,342.6	-637.9	-178.2	-156.3	9.99	9.99	0.00
	7,450.0	38.86	88.85	7,382.8	-637.4	-148.6	-126.7	9.99	9.99	0.00
	7,500.0	43.86	88.85	7,420.3	-636.7	-115.6	-93.7	9.99	9.99	0.00
	7,550.0	48.85	88.85	7,454.8	-636.0	-79.4	-57.6	9.99	9.99	0.00
	7,600.0	53.85	88.85	7,486.1	-635.2	-40.4	-18.6	9.99	9.99	0.00
	7,650.0	58.84	88.85	7,513.8	-634.4	1.2	22.9	9.99	9.99	0.00
	7,700.0	63.84	88.85	7,537.7	-633.5	45.1	66.7	9.99	9.99	0.00
	7,750.0	68.83	88.85	7,557.8	-632.6	90.8	112.4	9.99	9.99	0.00
	7,800.0	73.83	88.85	7,573.8	-631.6	138.2	159.7	9.99	9.99	0.00
	7,850.0	78.82	88.85	7,585.6	-630.6	186.7	208.2	9.99	9.99	0.00
	7,900.0	83.82	88.85	7,583.0	-629.6	236.1	257.5	9.99	9.99	0.00
	7,938.1	87.62	88.85	7,596.0	-628.9	274.1	295.4	9.99	9.99	0.00
	7,960.4	87.62	88.85	7,596.9	-628.4	296.4	317.7	0.00	0.00	0.00
		L & 100' FWL (S		· _						
	8,000.0	87.62	88.85	7,598.6	-627.6	336.0	357.2	0.00	0.00	0.00
	8,100.0	87.62	88.85	7,602.7	-625.6	435.8	457.0	0.00	0.00	0.00
	8,200.0	87.62	88.85	7,606.9	-623.6	535.7	556.8	0.00	0.00	0.00
	8,300.0	87.62	88.85	7,611.0	-621.6	635.6	656.5	0.00	0.00	0.00
	8,400.0	87.62	88.85	7,615.2	-619.6	735.5	756.3	0.00	0.00	0.00
	8,500.0	87.62	88.85	7,619.3	-617.6	835.4	856.1	0.00	0.00	0.00
	8,600.0	87.62	88.85	7,623.5	-615.6	935.3	955.8	0.00	0.00	0.00
	8,700.0	87.62	88.85	7,623.5 7,627.6	-613.6	1,035.2	1,055.6	0.00	0.00	0.00
	8,800.0	87.62	88.85	7,627.6 7,631.7	-611.6	1,035.2	1,155.4	0.00	0.00	0.00
	8,900.0	87.62	88.85	7,635.9	-609.6	1,135.1	1,155.4	0.00	0.00	0.00
	9,000.0	87.62	88.85	7,640.0	-607.6	1,334.9	1,354.9	0.00	0.00	0.00

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: Stage Fright 12/8 Fed Com #618H

Well: Sec 11, T21S, R25E

Wellbore: BHL: 660' FSL & 1220' FWL (Sec 8)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Site Stage Fright 12/8 Fed Com #618H WELL @ 3340.0usft (Original Well Elev) WELL @ 3340.0usft (Original Well Elev)

Grid

esign:	Dodgii #1	Design #1										
lanned 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)			
9,100.0	87.62	88.85	7,644.2	-605.6	1,434.8	1,454.7	0.00	0.00	0.00			
9,200.0		88.85			,							
	87.62		7,648.3	-603.6	1,534.7	1,554.4	0.00	0.00	0.00			
9,300.0	87.62	88.85	7,652.5	-601.6	1,634.6	1,654.2	0.00	0.00	0.00			
9,400.0	87.62	88.85	7,656.6	-599.6	1,734.5	1,754.0	0.00	0.00	0.00			
9,500.0	87.62	88.85	7,660.8	-597.6	1,834.4	1,853.7	0.00	0.00	0.00			
-,						.,						
9,600.0	87.62	88.85	7,664.9	-595.6	1,934.3	1,953.5	0.00	0.00	0.00			
9,700.0	87.62	88.85	7,669.1	-593.6	2,034.2	2,053.3	0.00	0.00	0.00			
9,800.0	87.62	88.85	7,673.2	-591.6	2,134.0	2,153.0	0.00	0.00	0.00			
9,900.0	87.62	88.85	7,677.4		2,233.9	2,252.8	0.00	0.00	0.00			
,				-589.6								
10,000.0	87.62	88.85	7,681.5	-587.6	2,333.8	2,352.6	0.00	0.00	0.00			
10,100.0	87.62	88.85	7,685.7	-585.6	2,433.7	2,452.3	0.00	0.00	0.00			
10,200.0	87.62	88.85	7,689.8	-583.6	2,533.6	2,552.1	0.00	0.00	0.00			
10,300.0	87.62	88.85	7,694.0	-581.6	2,633.5	2,651.9	0.00	0.00	0.00			
10,400.0	87.62	88.85	7,698.1	-579.6	2,733.4	2,751.6	0.00	0.00	0.00			
10,500.0	87.62	88.85	7,702.3	-577.6	2,833.3	2,851.4	0.00	0.00	0.00			
10,600.0	87.62	88.85	7,706.4	-575.6	2,933.2	2,951.2	0.00	0.00	0.00			
10,700.0	87.62	88.85	7,710.5	-573.6	3,033.1	3,050.9	0.00	0.00	0.00			
10,800.0	87.62	88.85	7,714.7	-571.6	3,133.0	3,150.7	0.00	0.00	0.00			
10,900.0	87.62	88.85	7,718.8	-569.6	3,232.9	3,250.5	0.00	0.00	0.00			
11,000.0	87.62	88.85	7,723.0	-567.6	3,332.8	3,350.2	0.00	0.00	0.00			
11,100.0	87.62	88.85	7,727.1	-565.6	3,432.7	3,450.0	0.00	0.00	0.00			
		88.85				3,549.8	0.00					
11,200.0	87.62		7,731.3	-563.6	3,532.6			0.00	0.00			
11,300.0	87.62	88.85	7,735.4	-561.6	3,632.5	3,649.5	0.00	0.00	0.00			
11,400.0	87.62	88.85	7,739.6	-559.6	3,732.3	3,749.3	0.00	0.00	0.00			
11,500.0	87.62	88.85	7,743.7	-557.6	3,832.2	3,849.1	0.00	0.00	0.00			
11,600.0	87.62	88.85	7,747.9	-555.5	3,932.1	3,948.8	0.00	0.00	0.00			
11,700.0	87.62	88.85	7,752.0	-553.5	4,032.0	4,048.6	0.00	0.00	0.00			
11,800.0	87.62	88.85	7,756.2	-551.5	4,131.9	4,148.4	0.00	0.00	0.00			
11,900.0	87.62	88.85	7,760.3	-549.5	4,231.8	4,248.1	0.00	0.00	0.00			
12,000.0	87.62	88.85	7,764.5	-547.5	4,331.7	4,347.9	0.00	0.00	0.00			
12,100.0	87.62	88.85	7,768.6	-545.5	4,431.6	4,447.7	0.00	0.00	0.00			
12,200.0	87.62	88.85	7,772.8	-543.5	4,531.5	4,547.4	0.00	0.00	0.00			
12,300.0	87.62	88.85	7,776.9	-541.5	4,631.4	4,647.2	0.00	0.00	0.00			
12,400.0	87.62	88.85	7,781.0	-539.5	4,731.3	4,747.0	0.00	0.00	0.00			
12,500.0	87.62	88.85	7,785.2	-537.5	4,831.2	4,846.7	0.00	0.00	0.00			
12,600.0	87.62	88.85	7,789.3	-535.5	4,931.1	4,946.5	0.00	0.00	0.00			
12,700.0	87.62	88.85	7,793.5	-533.5	5,031.0	5,046.3	0.00	0.00	0.00			
12,800.0	87.62	88.85	7,797.6	-531.5	5,130.9	5,146.0	0.00	0.00	0.00			
12,900.0	87.62	88.85	7,801.8	-529.5	5,230.8	5,245.8	0.00	0.00	0.00			
13,000.0	87.62	88.85	7,805.9	-527.5	5,330.6	5,345.6	0.00	0.00	0.00			
13,000.0	01.02	00.03	7,000.8	-JZ1.J	5,550.0	5,345.6	0.00	0.00	0.00			
13,100.0	87.62	88.85	7,810.1	-525.5	5,430.5	5,445.3	0.00	0.00	0.00			
13,200.0	87.62	88.85	7,814.2	-523.5	5,530.4	5,545.1	0.00	0.00	0.00			
13,200.0						5,644.9						
	87.62	88.85	7,818.4	-521.5 540.5	5,630.3		0.00	0.00	0.00			
13,400.0	87.62	88.85	7,822.5	-519.5	5,730.2	5,744.6	0.00	0.00	0.00			
13,500.0	87.62	88.85	7,826.7	-517.5	5,830.1	5,844.4	0.00	0.00	0.00			
13,600,0	97.60	00 05	7 020 0	E1E E	E 020 C	50440	0.00	0.00	0.00			
,	87.62	88.85	7,830.8	-515.5	5,930.0	5,944.2	0.00	0.00	0.00			
13,700.0	87.62	88.85	7,835.0	-513.5	6,029.9	6,043.9	0.00	0.00	0.00			
13,800.0	87.62	88.85	7,839.1	-511.5	6,129.8	6,143.7	0.00	0.00	0.00			
13,900.0	87.62	88.85	7,843.3	-509.5	6,229.7	6,243.5	0.00	0.00	0.00			
14,000.0	87.62	88.85	7,847.4	-507.5	6,329.6	6,343.2	0.00	0.00	0.00			
14,100.0	87.62	88.85	7,851.6	-505.5	6,429.5	6,443.0	0.00	0.00	0.00			
14,200.0	87.62	88.85	7,855.7	-503.5	6,529.4	6,542.8	0.00	0.00	0.00			
14,300.0	87.62	88.85	7,859.8	-501.5	6,629.3	6,642.5	0.00	0.00	0.00			
	31.02	55.05		001.0	0,020.0				5.00			
14,400.0	87.62	88.85	7,864.0	-499.5	6,729.2	6,742.3	0.00	0.00	0.00			

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: Stage Fright 12/8 Fed Com #618H

Well: Sec 11, T21S, R25E

 Wellbore:
 BHL: 660' FSL & 1220' FWL (Sec 8)

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Site Stage Fright 12/8 Fed Com #618H WELL @ 3340.0usft (Original Well Elev) WELL @ 3340.0usft (Original Well Elev)

0.00

0.00

0.00

Minimum Curvature

Design:	Design #1								
Planned Survey									
,									
Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
14,500.0	87.62	88.85	7,868.1	-497.5	6,829.1	6,842.1	0.00	0.00	0.00
ŕ			,		,			0.00	
14,600.0	87.62	88.85	7,872.3	-495.5	6,929.0	6,941.8	0.00	0.00	0.00
14,700.0	87.62	88.85	7,876.4	-493.5	7,028.8	7,041.6	0.00	0.00	0.00
14,800.0	87.62	88.85	7,880.6	-491.5	7,128.7	7,141.4	0.00	0.00	0.00
14,900.0	87.62	88.85	7,884.7	-489.5	7,228.6	7,241.1	0.00	0.00	0.00
15,000.0	87.62	88.85	7,888.9	-487.5	7,328.5	7,340.9	0.00	0.00	0.00
15,100.0	87.62	88.85	7,893.0	-485.5	7,428.4	7,440.7	0.00	0.00	0.00
15,200.0	87.62	88.85	7,897.2	-483.5	7,528.3	7,540.4	0.00	0.00	0.00
15,300.0	87.62	88.85	7,901.3	-481.5	7,628.2	7,640.2	0.00	0.00	0.00
15,400.0	87.62	88.85	7,905.5	-479.4	7,728.1	7,740.0	0.00	0.00	0.00
15,500.0	87.62	88.85	7,909.6	-477.4	7,828.0	7,839.7	0.00	0.00	0.00
15,600.0	87.62	88.85	7,913.8	-475.4	7,927.9	7,939.5	0.00	0.00	0.00
15,700.0	87.62	88.85	7,917.9	-473.4	8,027.8	8,039.3	0.00	0.00	0.00
15,800.0	87.62	88.85	7,922.1	-471.4	8,127.7	8,139.0	0.00	0.00	0.00
15,900.0	87.62	88.85	7,926.2	-469.4	8.227.6	8,238.8	0.00	0.00	0.00
16,000.0	87.62	88.85	7,920.2 7,930.4	-467.4	8,327.5	8,338.6	0.00	0.00	0.00
,			,						
16,100.0	87.62	88.85	7,934.5	-465.4	8,427.4	8,438.3	0.00	0.00	0.00
16,200.0	87.62	88.85	7,938.6	-463.4	8,527.3	8,538.1	0.00	0.00	0.00
16,300.0	87.62	88.85	7,942.8	-461.4	8,627.1	8,637.9	0.00	0.00	0.00
16,400.0	87.62	88.85	7,946.9	-459.4	8,727.0	8,737.6	0.00	0.00	0.00
16,500.0	87.62	88.85	7,951.1	-457.4	8,826.9	8,837.4	0.00	0.00	0.00
16,600.0	87.62	88.85	7,955.2	-455.4	8,926.8	8,937.2	0.00	0.00	0.00
16,700.0	87.62	88.85	7,959.4	-453.4	9,026.7	9,036.9	0.00	0.00	0.00
16,800.0	87.62	88.85	7,963.5	-451.4	9,126.6	9,136.7	0.00	0.00	0.00
16,900.0	87.62	88.85	7,967.7	-449.4	9,226.5	9,236.5	0.00	0.00	0.00
17,000.0	87.62	88.85	7,971.8	-447.4	9,326.4	9,336.3	0.00	0.00	0.00
17,100.0	87.62	88.85	7,976.0	-445.4	9,426.3	9,436.0	0.00	0.00	0.00
17,200.0	87.62	88.85	7,980.1	-443.4	9,526.2	9,535.8	0.00	0.00	0.00
17,300.0	87.62	88.85	7,984.3	-441.4	9,626.1	9,635.6	0.00	0.00	0.00
17,400.0	87.62	88.85	7,988.4	-439.4	9,726.0	9,735.3	0.00	0.00	0.00
17,500.0	87.62	88.85	7,992.6	-437.4	9,825.9	9,835.1	0.00	0.00	0.00
17,600.0	87.62	88.85	7,996.7	-435.4 433.4	9,925.8	9,934.9	0.00	0.00	0.00
17,700.0	87.62	88.85	8,000.9	-433.4	10,025.7	10,034.6	0.00	0.00	0.00
17,800.0	87.62	88.85	8,005.0	-431.4	10,125.6	10,134.4	0.00	0.00	0.00
17,900.0	87.62	88.85	8,009.2	-429.4 407.4	10,225.5	10,234.2	0.00	0.00	0.00
18,000.0	87.62	88.85	8,013.3	-427.4	10,325.3	10,333.9	0.00	0.00	0.00
18,100.0	87.62	88.85	8,017.4	-425.4	10,425.2	10,433.7	0.00	0.00	0.00
18,200.0	87.62	88.85	8,021.6	-423.4	10,525.1	10,533.5	0.00	0.00	0.00
18,300.0	87.62	88.85	8,025.7	-421.4	10,625.0	10,633.2	0.00	0.00	0.00
18,400.0	87.62	88.85	8,029.9	-419.4	10,724.9	10,733.0	0.00	0.00	0.00
18,500.0	87.62	88.85	8,034.0	-417.4	10,824.8	10,832.8	0.00	0.00	0.00
18,600.0	87.62	88.85	8,038.2	-415.4	10,924.7	10,932.5	0.00	0.00	0.00
18,700.0	87.62	88.85	8,042.3	-413.4	11,024.6	11,032.3	0.00	0.00	0.00
18,800.0	87.62	88.85	8,046.5	-411.4	11,124.5	11,132.1	0.00	0.00	0.00
18,900.0	87.62	88.85	8,050.6	-411.4 -409.4	11,124.3	11,132.1	0.00	0.00	0.00
19,000.0	87.62	88.85	8,054.8	-407.4	11,324.4	11,331.6	0.00	0.00	0.00
19,100.0	87.62	88.85	8,058.9	-405.4	11,424.2	11,431.4	0.00	0.00	0.00
19,200.0	87.62	88.85	8,063.1	-403.3	11,524.1	11,531.1	0.00	0.00	0.00
19,300.0	87.62	88.85	8,067.2	-401.3	11,624.0	11,630.9	0.00	0.00	0.00

11,691.1

11,697.9

-400.0

8,070.0

88.85

BHL: 660' FSL & 1220' FWL (Sec 8)

87.62

19,367.2

Database: Hobbs

Company: Mewbourne Oil Company

Project: Eddy County, New Mexico NAD 83
Site: Stage Fright 12/8 Fed Com #618H

Well: Sec 11, T21S, R25E

Wellbore: BHL: 660' FSL & 1220' FWL (Sec 8)

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Site Stage Fright 12/8 Fed Com #618H WELL @ 3340.0usft (Original Well Elev) WELL @ 3340.0usft (Original Well Elev)

Grid

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL: 1375' FSL & 205' F - plan hits target cent - Point	0.00 ter	360.00	0.0	0.0	0.0	542,083.20	533,777.50	32.4902461	-104.3578527
KOP: 660' FSL & 473' FI - plan hits target cent - Point	0.00 ter	0.00	7,023.0	-639.9	-275.5	541,443.30	533,502.00	32.4884870	-104.3587457
FTP: 660' FSL & 100' FV - plan hits target cent - Point	0.00 ter	360.00	7,596.9	-628.4	296.4	541,454.77	534,073.90	32.4885189	-104.3568909
BHL: 660' FSL & 1220' F - plan hits target cent - Point	0.00 ter	0.00	8,070.0	-400.0	11,691.1	541,683.20	545,468.60	32.4891483	-104.3199351

# PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

## Mewbourne Oil Co.

# Lease Number NMNM0400512 Eddy County, N.M.

## STAGE FRIGHT 12/7 FED COM 616H

Surface Hole Location: 1320' FSL & 205' FEL, Section 11, T. 21S., R. 25E. Bottom Hole Location: 1980' FSL & 100' FEL, Section 7, T. 21S, R 26E.

## STAGE FRIGHT 12/8 FED COM 618H

Surface Hole Location: 1300' FSL & 205' FEL, Section 11, T. 21S., R. 25E. Bottom Hole Location: 660' FSL & 1220' FEL, Section 8, T. 21S, R 26E.

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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
<b>⊠Special Requirements</b>
Watershed
Cave/Karst
Visual Resource Management
□ Construction
Notification
Topsoil
Closed Loop System
Federal Mineral Material Pits
Well Pads
Roads
□Road Section Diagram
⊠Production (Post Drilling)
Well Structures & Facilities
Pipelines
Electric Lines
☐Interim Reclamation
☐Final Abandonment & Reclamation

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## I. GENERAL PROVISIONS

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

#### II. PERMIT EXPIRATION

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

#### III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

#### 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:

The entire well pad(s) 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 with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The 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 water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The topsoil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. 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.

#### **TANK BATTERY:**

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. 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.

#### Cave/Karst:

## **Construction Mitigation**

In order to mitigate the impacts from construction activities on cave and karst resources, the following Conditions of Approval will apply to this APD or project:

#### **General Construction:**

- No blasting
- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction, and no additional construction shall occur until clearance has been issued by the Authorized Officer.
- All linear surface disturbance activities will avoid sinkholes and other karst features to lessen the possibility of encountering near surface voids during construction, minimize changes to runoff, and prevent untimely leaks and spills from entering the karst drainage system.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

#### **Pad Construction:**

- The pad will be constructed and leveled by adding the necessary fill and caliche no blasting.
- 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 (i.e. an access road crossing the berm cannot be lower than the berm height).
- Following a rain event, all fluids will vacuumed off of the pad and hauled off-site and disposed at a proper disposal facility.

#### **Road Construction:**

- Turnout ditches and drainage leadoffs will not be constructed in such a manner as to alter the natural flow of water into or out of cave or karst features.
- Special restoration stipulations or realignment may be required if subsurface features are discovered during construction.

## **Buried Pipeline/Cable Construction:**

Rerouting of the buried line(s) may be required if a subsurface void is encountered during
construction to minimize the potential subsidence/collapse of the feature(s) as well as the
possibility of leaks/spills entering the karst drainage system.

#### **Powerline Construction:**

- Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize changes to runoff or possible leaks and spills from entering karst systems.
- Larger powerlines will adjust their pole spacing to avoid cave and karst features.
- Special restoration stipulations or realignment may be required if subsurface voids are encountered.

#### Surface Flowlines Installation:

 Flowlines will be routed around sinkholes and other karst features to minimize the possibility of leaks/spills from entering the karst drainage system.

#### **Drilling Mitigation**

Federal regulations and standard Conditions of Approval applied to all APDs require that adequate measures are taken to prevent contamination to the environment. Due to the extreme sensitivity of the cave and karst resources in this project area, the following additional Conditions of Approval will be added to this APD.

To prevent cave and karst resource contamination the following will be required:

- Closed loop system using steel tanks all fluids and cuttings will be hauled off-site and disposed of properly at an authorized site
- Rotary drilling with fresh water where cave or karst features are expected to prevent contamination of freshwater aquifers.
- Directional drilling is only allowed at depths greater than 100 feet below the cave occurrence zone to prevent additional impacts resulting from directional drilling.
- Lost circulation zones will be logged and reported in the drilling report so BLM can assess the situation and work with the operator on corrective actions.
- Additional drilling, casing, and cementing procedures to protect cave zones and fresh water aquifers. See drilling COAs.

#### **Production Mitigation**

In order to mitigate the impacts from production activities and due to the nature of karst terrane, the following Conditions of Approval will apply to this APD:

- Tank battery locations and facilities will be bermed and lined with a 20 mil thick permanent liner that has 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.
- Development and implementation of a leak detection system to provide an early alert to operators when a leak has occurred.
- Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

#### **Residual and Cumulative Mitigation**

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

## **Plugging and Abandonment Mitigation**

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.

### **Visual Resource Management:**

#### **Color Restrictions**

Above-ground structures including meter housing that are not subject to safety requirements are painted a flat non-reflective paint color, <u>Carlsbad Canyon</u> from the BLM Standard Environmental Color Chart (CC-001: June 2008).

## **Height Restrictions**

All permanent above ground facilities, including the well-drive control system, treatment, storage, power (except specifically approved electrical transmission lines and poles), or other structures and appurtenances will be low profile (less than 8 feet in height). Any exception to the low profile facilities must be approved in writing by the BLM Authorized Officer prior to implementation.

#### VI. CONSTRUCTION

#### A. NOTIFICATION

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

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

## B. TOPSOIL

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

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

#### C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

#### D. FEDERAL MINERAL MATERIALS PIT

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

#### E. **WELL PAD SURFACING**

Surfacing of the well pad is not required.

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

#### F. **EXCLOSURE FENCING (CELLARS & PITS)**

#### **Exclosure Fencing**

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

#### G. ON LEASE ACCESS ROADS

#### Road Width

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

#### Surfacing

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

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

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

#### Crowning

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

#### Ditching

Ditching shall be required on both sides of the road.

#### **Turnouts**

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

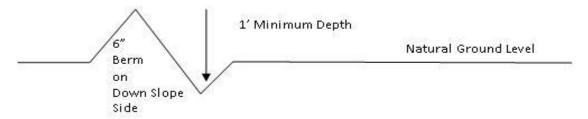
#### **Drainage**

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

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

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## Cross Section of a Typical Lead-off Ditch



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

## Formula for Spacing Interval of Lead-off Ditches

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

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

## Cattle guards

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

#### **Fence Requirement**

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

#### **Public Access**

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

## **Construction Steps**

- 1. Salvage topsoil
- 3. Redistribute topsoil
- 2. Construct road 4. Revegetate slopes

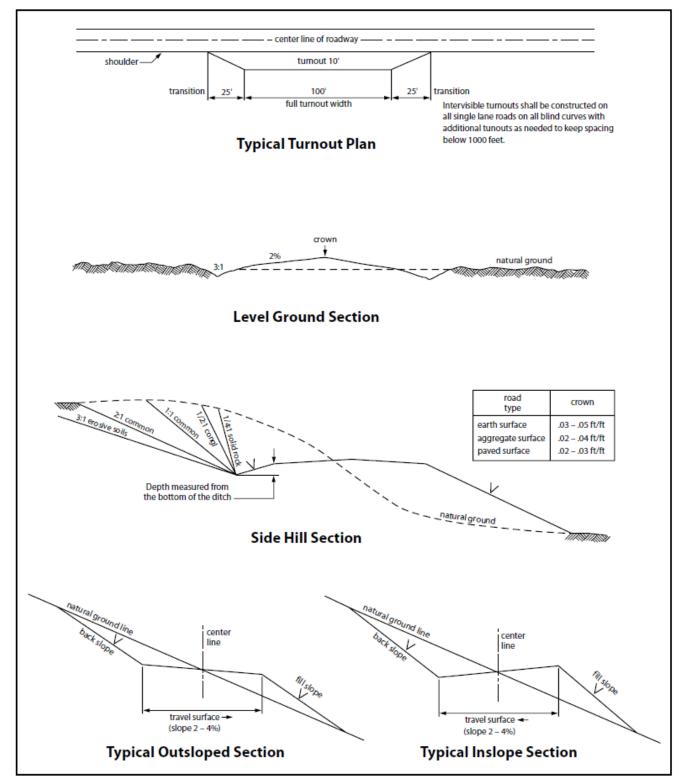


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

#### 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).

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

## Seed Mixture 1 for Loamy Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed shall 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 shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

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

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

#### Species

	lb/acre	
Plains lovegrass (Eragrostis intermedia)		0.5
Sand dropseed (Sporobolus cryptandrus)	1.0	
Sideoats grama (Bouteloua curtipendula)	5.0	
Plains bristlegrass (Setaria macrostachya)	2.0	

<sup>\*</sup>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.: STAGE FRIGHT 12/7 FED COM 618H

**APD ID:** 10400094561

**LOCATION:** Section 11, T21S, R25E. NMP

COUNTY: Eddy County, New Mexico

COA

$H_2S$	O No		Yes	
Potash /	None	<ul><li>Secretary</li></ul>	O R-111-Q	☐ Open Annulus
WIPP				$\square$ WIPP
Cave / Karst	O Low	O Medium	O High	Critical
Wellhead	<ul><li>Conventional</li></ul>	<ul><li>Multibowl</li></ul>	O Both	<ul><li>Diverter</li></ul>
Cementing	☐ Primary Squeeze	☐ Cont. Squeeze	☐ EchoMeter	DV Tool
Special Req	Capitan Reef	☐ Water Disposal	✓ COM	☐ Unit
Waste Prev.	O Self-Certification	O Waste Min. Plan	• APD Submitted prior to 06/10/2024	
Additional	▼ Flex Hose	☐ Casing Clearance	☐ Pilot Hole	Break Testing
Language	☐ Four-String	Offline Cementing	☐ Fluid-Filled	

## A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan shall be activated at spud. As a result, the Hydrogen Sulfide area must meet all requirements from 43 CFR 3176, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

## **B. CASING**

- 1. The 13-3/8 inch surface casing shall be set at approximately 450 ft. in Seven Rivers formation and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **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 pounds compressive strength, whichever is greater.

d. If cement falls back, remedial cementing will be done prior to drilling out that string.

**Note:** Intermediate casing set depth has been adjusted per BLM geologist's recommendation. "The operator proposes to set intermediate well casing to a depth of 1,992 feet. BLM accepts the base of Capitan Reef APD well casing set depth (1,800 ft.) and rock type."

2. The 9-5/8 inch intermediate casing shall be set in a competent bed at approximately 1,800 ft. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

**Option 1** (**Single Stage**): **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, and Capitan Reef.

**Option 2** (**Two-stage with DV tool:** The operator has proposed utilize a DV tool. The selected depth is below the Salado and is an acceptable set point. Operator may adjust depth of DV tool if it remains below the Salado and cement volumes are adjusted accordingly. 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 to surface. If cement does not circulate, contact the appropriate BLM office. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, and Capitan Reef.

**Note:** Excess cement for the 2<sup>nd</sup> stage is below the BLM's recommendation of 25%. More cement might be needed.

- ❖ In <u>Critical Cave/Karst Areas</u> cement must come to surface on the first three casing strings.
- ❖ In <u>Capitan Reef Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3<sup>rd</sup> casing string must come to surface.
- ❖ Special Capitan Reef requirements. If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:

(Use this for 3 string wells in the Capitan Reef, if 4 string well ensure FW based mud used across the Capitan interval)

- Switch to freshwater mud to protect the Capitan Reef and use freshwater mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
- Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these

drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

- **3.** Operator has proposed to set **7 inch 26# P-110** production casing at approximately **7,011 ft.** (6,973 ft. TVD). The minimum required fill of cement behind the **7** inch production casing is:
  - Cement to surface. If cement does not circulate, contact the appropriate BLM office. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, and Capitan Reef.

**Note:** Excess cement is below the BLM's recommendation of 25%. More cement might be needed.

- **4.** The minimum required fill of cement behind the **4-1/2** inch production liner is:
  - Cement should tie-back **100 feet** into the previous casing. 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).
- 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. The BOP/BOPE and annular preventer shall be pressure-tested in accordance with title 43 CFR 3172.
  - 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.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- 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.

## **BOPE Break Testing Variance**

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

## **Offline Cementing**

Operator has been (**Approved**) to pump the proposed cement program offline in the **Surface and intermediate(s) intervals**. Offline cementing should commence within 24 hours of landing the casing for the interval. Notify the BLM 4hrs prior to the commencement of any offline cementing procedure at **Eddy County:** 575-361-2822.

## **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)

## **Contact Eddy County Petroleum Engineering Inspection Staff:**

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; BLM NM CFO DrillingNotifications@BLM.GOV; (575) 361-2822

- 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
    - i. Notify the BLM when moving in and removing the Spudder Rig.
    - ii. Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2<sup>nd</sup> 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 doghouse or stairway area.
- 3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

#### 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 of both lead and tail cement, 2) until cement has been in place at least 8 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-Q 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 **43 CFR 3172**.
- 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:
  - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. 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.
  - iii. Manufacturer representative shall install the test plug for the initial BOP test.
  - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
  - v. 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.
  - i. 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).
  - ii. 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.)
  - iii. 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 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. 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.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. 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.
- vii. 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.
- viii. 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 08/09/2024

## <u>Hydrogen Sulfide Drilling Operations Plan</u> **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:

- 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.
- The contents of the Hydrogen Sulfide Drilling Operations Plan.

There will be an initial training session prior to encountering a know 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. <u>Hydrogen Sulfide Protection and Monitoring Equipment</u>

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

<b>Eddy County Sheriff's Office</b>	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 Fax 2 <sup>nd</sup> Fax	575-393-5905 575-397-6252 575-393-7259
District Manager	Robin Terrell	575-390-4816
<b>Drilling Superintendent</b>	Frosty Lathan	575-390-4103
2	Bradley Bishop	575-390-6838
<b>Drilling Foreman</b>	Wesley Noseff	575-441-0729

**Operator Name: MEWBOURNE OIL COMPANY** 

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

New water well casing?

Used casing source:

Drilling method: Drill material:

Grout material: Grout depth:

Casing length (ft.): Casing top depth (ft.):

Well Production type: Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

## **Section 6 - Construction Materials**

Using any construction materials: YES

Construction Materials description: Caliche

**Construction Materials source location** 

Stage\_Fright\_12\_8\_Fed\_Com\_618H\_CalicheSourceTansMap\_20230915151520.pdf

## **Section 7 - Methods for Handling**

Waste type: DRILLING

Waste content description: Drill cuttings

Amount of waste: 940 barrels

Waste disposal frequency: One Time Only

Safe containment description: Drill cuttings will be properly contained in steel tanks (20 yard roll off bins.)

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: PRIVATE

**FACILITY** 

Disposal type description:

Disposal location description: NMOCD approved waste disposal locations are CRI or Lea Land, both facilities are located

on HWY 62/180, Sec. 27 T20S R32E.

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 containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: PRIVATE

**FACILITY** 

Disposal type description:

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**Operator Name: MEWBOURNE OIL COMPANY** 

Well Name: STAGE FRIGHT 12/8 FED COM Well Number: 618H

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 containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: PRIVATE

**FACILITY** 

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

**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

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

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 372381

## **CONDITIONS**

Operator:	OGRID:
MEWBOURNE OIL CO	14744
P.O. Box 5270	Action Number:
Hobbs, NM 88241	372381
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

#### CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	8/21/2024
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	8/21/2024
ward.rikala	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	8/21/2024
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	8/21/2024
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	8/21/2024
ward.rikala	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	8/21/2024