risbad Field Office OCD Artesia

Form 3160-3 (March 2012)

UNITED STATES

OMB No. 1004-0137 Expires October 31, 2014

Lease Serial No. DEPARTMENT OF THE INTERIOR NMNM 11038 **BUREAU OF LAND MANAGEMENT** 6. If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7 If Unit or CA Agreement, Name and No **V** DRILL REENTER la. Type of work: 8. Lease Name and Well No. 323/37 lb. Type of Well: Oil Well Gas Well Other Single Zone ✓ Multiple Zone FULLER 14/11 W2ED FED 3H 9. API Well No. Name of Operator MEWBOURNE OIL COMPANY 30-015-45610 3b. Phone No. (include area code, 3a. Address 10, Field and Pool, or Exploratory PO Box 5270 Hobbs NM 88240 (575)393-5905 PURPLE-SAGE WOLFCAMP GAS / WO Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk, and Survey or Area At surface SWNW / 2600 FNL / 450 FWL / LAT 32.0422805 / LONG -103.961604 SEC 14 / T26S / R29E / NMP At proposed prod. zone NWNW / 330 FNL / 440 FWL / LAT 32.063228 / LONG -103.9614603 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* **FDDY** NM 25 miles 15. Distance from proposed* 17. Spacing Unit dedicated to this well 16. No of acres in lease location to nearest 330 feet property or lease line, ft.
(Also to nearest drig. unit line, if any) 20. BLM/BIA Bond No. on file 18. Distance from proposed location* to nearest well, drilling, completed, 50 feet 19: Proposed Depth FED: NM1693 applied for, on this lease, ft. 11239 feet / 18592 feet Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 10/07/2017 2937 feet 60 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1. must be attached to this form: 1. Well plat certified by a registered surveyor. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the Operator certification SUPO must be filed with the appropriate Forest Service Office). Such other site specific information and/or plans as may be required by the 25. Signature Name (Printed Typed) (Electronic Submission) Bradley Bishop / Ph: (575)393-5905 09/05/2017 Title Regulatory Name (Printed Typed) Date Approved by (Signature) Cody Layton / Ph: (575)234-5959 08/04/2018 (Electronic Submission) Office Title **CARLSBAD** Assistant Field Manager Lands & Minerals 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.

(Continued on page 2)

*(Instructions on page 2)

RECEIVED

JAN 1 0 2019

DISTRICT II-ARTESIA O.C.D.

oproval Date: 08/04/2018 Rup 1-11-19

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

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

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

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

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

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2:48(d) provide that you be furnished the following information in connection with information required by this application.

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

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts. ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

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

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

The BLM collects this information to allow 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 Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Continued on page 3) (Form 3160-3, page 2)

Additional Operator Remarks

Location of Well

1. SHL: SWNW / 2600 FNL / 450 FWL / TWSP: 26S / RANGE: 29E / SECTION: 14 / LAT: 32.0422805 / LONG: -103.961604 (TVD: 0 feet, MD: 0 feet)

PPP: SWSW / 0 FSL / 450 FWL / TWSP: 26S / RANGE: 29E / SECTION: 11 / LAT: 32.049433 / LONG: -103.961825 (TVD: 11224 feet, MD: 13600 feet)

PPP: SWNW / 2361 FNL / 450 FWL / TWSP: 26S / RANGE: 29E / SECTION: 14 / LAT: 32.043 / LONG: -103.961895 (TVD: 10017 feet) MD: 11200 feet)

BHL: NWNW / 330 FNL / 440 FWL / TWSP: 26S / RANGE: 29E / SECTION: 11 / LAT: 32.063228 / LONG: -103.9614603 (TVD: 11239 feet, MD: 18592 feet)

BLM Point of Contact

Name: Judith Yeager

Title: Legal Instruments Examiner

Phone: 5752345936 Email: jyeager@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.



(Form 3160-3, page 4)

PECOS DISTRICT DRILLING OPERATIONS CONDITIONS OF APPROVAL

OPERATOR'S NAME: | Mewbourne Oil Company

LEASE NO.: NMNM-011038

WELL NAME & NO.: | Fuller 14/11 W2ED Federal 3H

SURFACE HOLE FOOTAGE: 2600' FNL & 0450' FWL

BOTTOM HOLE FOOTAGE | 0330' FNL & 0440' FWL Sec. 11, T. 26 S., R 29 E.

LOCATION: | Section 14, T. 26 S., R 29 E., NMPM

COUNTY: | County, New Mexico

Operator to submit NMOCD Gas Capture Plan via sundry notice to the BLM.

Operator to submit sundry to add "COM" to the well name.

Communitization Agreement

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

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

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

☐ Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

A. Hydrogen Sulfide

- 1. Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.
- 3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.
- 4. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

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

Wait on cement (WOC) for Water Basin:

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

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

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

Medium Cave/Karst

Possibility of water flows in the Salado and Castile.

Possibility of lost circulation in the Red Beds, Rustler, and Delaware.

Abnormal pressures may be encountered within the 3rd Bone Spring Sandstone and all subsequent formation.

- 1. The 13-3/8 inch surface casing shall be set at approximately 600 feet (in a competent bed below the Magenta Dolomite, which is a Member of the Rustler, and if salt is encountered, set casing at least 25 feet above the salt) 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 is to include the lead cement slurry.
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

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

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

cement (WOC) time for a primar	not circulate see B.1.a, c-d above. Wait on ry cement job is to include the lead Excess calculates to 23% - Additional
If cement does not circulate to surface on the production casing must come to surface.	e intermediate casing, the cement on the
Formation below the 9-5/8" shoe to be tested. Test to be done as a mud equivalency test us pore pressure of the formation below the sh prevent dissolving the salt formation) and the hole. Report results to BLM office.	sing the mud weight necessary for the oe (not the mud weight required to
Centralizers required through the curve an	d a minimum of one every other joint.
3. The minimum required fill of cement behin	nd the 7 inch production casing is:
Operator has proposed DV tool at depth of proportionately if moved. DV tool shall be shoe and a minimum of 200' above current DV tool depth cannot be set in this range.	set a minimum of 50' below previous
a. First stage to DV tool:	
	s not circulate, contact the appropriate in second stage cement job. Operator should eve approved top of cement on the next
b. Second stage above DV tool:	
Cement should tie-back at least 200 shall provide method of verification	feet into previous casing string. Operator n.
4. The minimum required fill of cement behi	nd the 4-1/2 inch production Liner is:
☐ Cement as proposed by operator. C verification.	perator shall provide method of
5. If hardband drill pipe is rotated inside casi metal is found in samples, drill pipe will b larger diameter than the tool joints of the continuing drilling operations.	e pulled and rubber protectors which have a

C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API 53.
- 2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor. If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).
- 3. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Operator shall perform the 9-5/8" and 7" casing integrity tests to 70% of the casing burst. This will test the multi-bowl seals.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

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

- 4. The appropriate BLM office shall be notified a minimum of hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - a. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.
 - b. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
 - c. The results of the test shall be reported to the appropriate BLM office.
 - d. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
 - e. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
 - f. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

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D. DRILLING MUD

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

E. DRILL STEM TEST

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

F. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

JAM 052918

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PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

OPERATOR'S NAME: Mewbourne Oil Company
LEASE NO.: NMNM11038
WELL NAME & NO.: Fuller 14/11 W2ED Fed 3H
SURFACE HOLE FOOTAGE: 2600'/N & 450'/W
BOTTOM HOLE FOOTAGE 130'/N & 440'/W
LOCATION: Section 14, T.26 S., R.29 E., NMPM

COUNTY: | Eddy County, New Mexico

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

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

I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for

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acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Phantom Bank Heronries

Surface disturbance will not be allowed within up to 200 meters of active heronries or by delaying activity for up to 120 days, or a combination of both.

Exhaust noise from engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

Cave Karst

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

Cave/Karst Surface Mitigation

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

Construction:

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

No Blasting:

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

Pad Berming:

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

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

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

Tank Battery Liners and Berms:

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

Leak Detection System:

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

Automatic Shut-off Systems:

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

Cave/Karst Subsurface Mitigation

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

Rotary Drilling with Fresh Water:

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

Directional Drilling:

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

Lost Circulation:

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

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

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Abandonment Cementing:

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

Pressure Testing:

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

Watershed

- The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The berm shall be maintained through the life of the well and after interim reclamation has been completed.
- Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion.

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.

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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.

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

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

Crowning

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

Ditching

Ditching shall be required on both sides of the road.

Turnouts

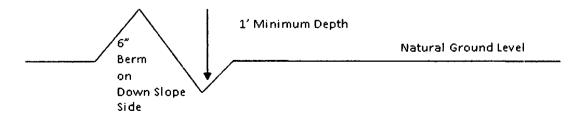
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

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

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

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of

Page 7 of 16

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.

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Construction Steps

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

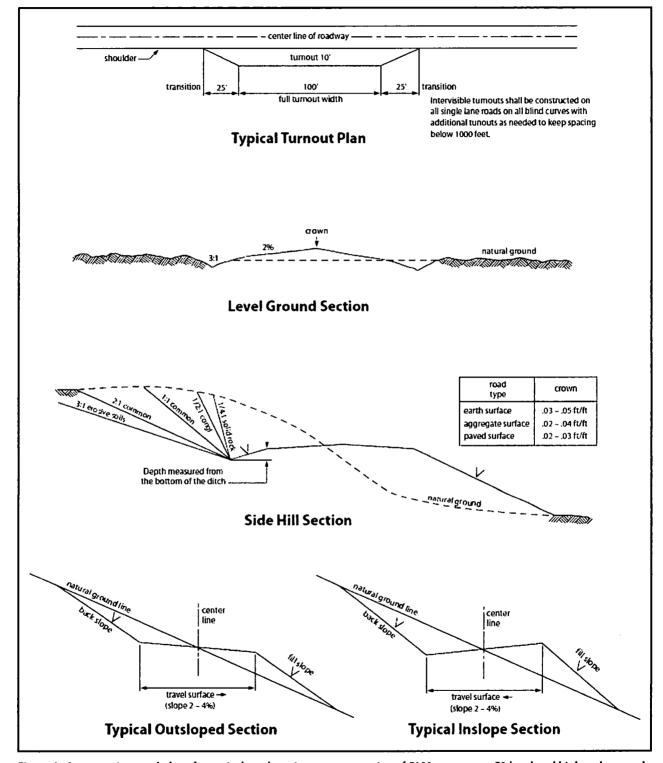


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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 1½ 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 1½ 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

Page 10 of 16

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

Containment Structures

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

Painting Requirement

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

B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

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

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

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

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

- 4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:
 - a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
 - b. Activities of other parties including, but not limited to:
 - (1) Land clearing.
 - (2) Earth-disturbing and earth-moving work.
 - (3) Blasting.
 - (4) Vandalism and sabotage.
 - c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

- 5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any responsibility as provided herein.
- 6. All construction and maintenance activity will be confined to the authorized

Page 12 of 16

right-of-way width of	20	feet.	. If the pipeline route follows an
		t-of-way,	, the surface pipeline must be
installed no farther than	10 feet from	n the edg	ge of the road or buried pipeline right
of-way. If existing surfa	ice pipelines	s prevent	t this distance, the proposed surface
pipeline must be installed	ed immediat	ely adjac	cent to the outer surface pipeline. Al
construction and mainte	enance activ	ity will be	e confined to existing roads or right-
of-ways.			

- 7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.
- 8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline will be "snaked" around hummocks and dunes rather then suspended across these features.
- 9. The pipeline shall be buried with a minimum of _______ inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.
- 10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
- 12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.
- 13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

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- 14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.
- 15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.
- 16. 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, powerline 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.
- 17. Surface pipelines must be less than or equal to 4 inches and a working pressure below 125 psi.

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

Page 14 of 16

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).

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Seed Mixture 3, for Shallow Sites

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

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

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

<u>Species</u>	<u>lb/acre</u>	
Plains Bristlegrass (Setaria macrostachya)	1.0	1
Green Sprangletop (Leptochloa dubia)	2.0	
Sideoats Grama (Bouteloua curtipendula)	5.0	

^{*}Pounds of pure live seed:

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



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



Operator Certification

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

NAME: Bradley Bishop		Signed on: 07/28/2017
Title: Regulatory		
Street Address: PO Box	c 5270	
City: Hobbs	State: NM	Zip : 88240
Phone: (575)393-5905		
Email address: bbishop	@mewbourne.com	
Field Represe	entative	
Representative Name):	
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		



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



APD ID: 10400017485 Submission Date: 09/05/2017

Operator Name: MEWBOURNE OIL COMPANY

Well Name: FULLER 14/11 W2ED FED

Well Number: 3H

Well Type: CONVENTIONAL GAS WELL Well Work Type: Drill

Show Final Text

Section 1 - General

APD ID: 10400017485 Tie to previous NOS?

Submission Date: 09/05/2017

BLM Office: CARLSBAD

User: Bradley Bishop

Title: Regulatory

Federal/Indian APD: FED

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

Lease number: NMNM 11038

Lease Acres:

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? YES

Permitting Agent? NO

APD Operator: MEWBOURNE OIL COMPANY

Operator letter of designation:

Fuller14_11W2EDFed3H_operatorletterofdesignation_07-28-2017.pdf

Operator Info

Operator Organization Name: MEWBOURNE OIL COMPANY

Operator Address: PO Box 5270

Operator PO Box:

Zip: 88240

Operator City: Hobbs

State: NM

Operator Phone: (575)393-5905

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO Mater Development Plan name:

Well in Master SUPO? NO Master SUPO name:

Well in Master Drilling Plan? NO Master Drilling Plan name:

Well Name: FULLER 14/11 W2ED FED Well Number: 3H Well API Number:

Pool Name: WOLFCAMP Field/Pool or Exploratory? Field and Pool Field Name: PURPLE-SAGE

WOLFCAMP GAS

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

Operator Name: MEWBOURNE OIL COMPANY

Well Name: FULLER 14/11 W2ED FED Well Number: 3H

Describe other minerals:

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

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name: Number: 8

FULLER 14/23 & FULLER 14/11

Well Class: HORIZONTAL WELL PAD

Number of Legs:

Well Work Type: Drill

Well Type: CONVENTIONAL GAS WELL

Describe Well Type:

Well sub-Type: APPRAISAL

Describe sub-type:

Reservoir well spacing assigned acres Measurement: 480 Acres

Well plat: Fuller14_11W2DFed3H_wellplat_07-28-2017.pdf

Well work start Date: 10/07/2017 Duration: 60 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 Vertical Datum: NAVD88

Survey number:

	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	DVT
SHL	260	FNL	450	FWL	26S	29E	14	Aliquot	32.04228		EDD	NEW	NEW		i	293	0	0
Leg #1	0							SWN W	05	103.9616 04	Y	MEXI CO	MEXI CO		011038	7		
KOP Leg #1	260 0	FNL	450	FWL	26S	29E	14	Aliquot SWN W	32.04228 05	- 103.3961 604	EDD Y		NEW MEXI CO	F	NMNM 011038	- 770 8	106 45	106 45
PPP Leg #1	236 1	FNL	450	FWL	26S	29E	14	Aliquot SWN W	32.043	- 103.9618 95	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 011038	- 818 0	112 00	111 17

Operator Name: MEWBOURNE OIL COMPANY

Well Name: FULLER 14/11 W2ED FED Well Number: 3H

	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	DVT
PPP Leg #1	0	FSL	450	FWL	26S	29E	11	Aliquot SWS W	32.04943 3	- 103.9618 25	EDD Y		NEW MEXI CO	l i	NMNM 121953	- 828 7	136 00	112 24
EXIT Leg #1	330	FNL	440	FWL	268	29E	11	Aliquot NWN W	32.06322 8	- 103.9614 603	EDD Y	NEW MEXI CO	• • • • • •	1	NMNM 121953	- 830 2	185 92	112 39
BHL Leg #1	330	FNL	440	FWL	26S	29E	11	Aliquot NWN W	32.06322 8	- 103.9614 603	EDD Y		NEW MEXI CO	F	NMNM 121953	- 830 2	185 92	112 39

United States Department of the Interior Bureau of Land Management Carlsbad Field Office 620 E Greene Street Carlsbad, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator Name:

Mewbourne Oil Company

Street or Box:

P.O. Box 5270

City, State:

Hobbs, New Mexico

Zip Code:

88241

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted of the leased land or portion thereof, as described below.

Lease Number:

NMNM 11038, NMNM 121953

Legal Description of Land:

Section 14, T-26S, R-29E Eddy County, New Mexico.

Location @ 2600' FNL & 450' FWL

Formation (if applicable):

WOLFCAMP

Bond Coverage:

\$150,000

BLM Bond File:

NM1693 Nationwide, NMB - 000919

Approved by:

Name: Robin Terrell Title: District Manager Date: <u>07-28-2017</u> **Operator Name: MEWBOURNE OIL COMPANY**

Well Name: FULLER 14/11 W2ED FED Well Number: 3H

Pressure Rating (PSI): 5M

Rating Depth: 18600

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 Choke Manifold. Anchors are not required by manufacturer. A multibowl wellhead is being used. See attached schematic.

Testing Procedure: Test Annular to 2500# Test BOPE to 5000#

Choke Diagram Attachment:

Fuller_14_11_W2ED_Fed_3H_5M_BOPE_Choke_Diagram_08-02-2017.pdf

Fuller_14_11_W2ED_Fed_3H_Flex_Line_Specs_20170905100427.pdf

BOP Diagram Attachment:

Fuller_14_11_W2ED_Fed_3H_5M_BOPE_Schematic_08-02-2017.pdf

Fuller_14_11_W2ED_Fed_3H_Multi_Bowl_WH_08-02-2017.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	555	0	555	-8302	-8857	555	H-40	48	STC	2.96	6.66	DRY	12.0 9	DRY	20.3 1
	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	2955	0	2955	-8302	- 11257	2955	J-55	36	LTC	1.31	2.29	DRY	4.26	DRY	5.3
	PRODUCTI ON	8.75	7.0	NEW	API	N	0	11350	0	11183	-8302	- 19485	11350	P- 110	26	LTC	1.41	1.8	DRY	2.21	DRY	2.81
4	LINER	6.12 5	4.5	NEW	API	N	10645	16800	10645		- 18947			P- 110	13.5	LTC	1.4	1.63	DRY	3.15	DRY	3.93

Casing Attachments

Casing Attachments String Type: SURFACE Casing ID: 1 **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): $Fuller_14_11_W2ED_Fed_3H_Csg_Assumptions_08-02-2017.pdf$ Casing ID: 2 String Type: INTERMEDIATE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): Fuller_14_11_W2ED_Fed_3H_Csg_Assumptions_08-02-2017.pdf Casing ID: 3 String Type: PRODUCTION **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): Fuller_14_11_W2ED_Fed_3H_Csg_Assumptions_08-02-2017.pdf

Well Number: 3H

Operator Name: MEWBOURNE OIL COMPANY

Well Name: FULLER 14/11 W2ED FED

Operator Name: MEWBOURNE OIL COMPANY

Well Name: FULLER 14/11 W2ED FED Well Number: 3H

Casing Attachments

Casing ID: 4

String Type:LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Fuller_14_11_W2ED_Fed_3H_Csg_Assumptions_08-02-2017.pdf

Section	4 - C	emen	t								
String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	364	240	2.12	12.5	509	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		364	555	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	2301	445	2.12	12.5	943	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		2301	2955	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	4105	2755	3440	65	2.12	12.5	138	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		3440	4105	100	1.34	14.8	134	25	Class C	Retarder
PRODUCTION	Lead	4105	4105	8859	425	2.12	12.5	901	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		8859	1135 0	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		1064 5	1860 0	325	2.97	11.2	965	25	Class C	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-Settling Agent

Operator Name: MEWBOURNE OIL COMPANY

Well Name: FULLER 14/11 W2ED FED Well Number: 3H

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, and Visual Monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	555	SPUD MUD	8.6	8.8							
555	2955	SALT SATURATED	10	10					1		
2955	1064 5	WATER-BASED MUD	8.6	9.7	-						
1064 5	1123 9	OIL-BASED MUD	10	12							MW up to 13.0 ppg may be required for shale control. The highest mud weight needed to balance formation is expected to be 12.0 ppg.

Well Name: FULLER 14/11 W2ED FED

Well Number: 3H

Section 6 - Test, Logging, Coring

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

Will run GR/CNL from KOP (10645') to surface

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

CNL,DS,GR,MWD,MUDLOG

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 7013

Anticipated Bottom Hole Temperature(F): 165



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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Fuller_14_11_W2ED_Fed_3H_H2S_Plan_08-02-2017.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

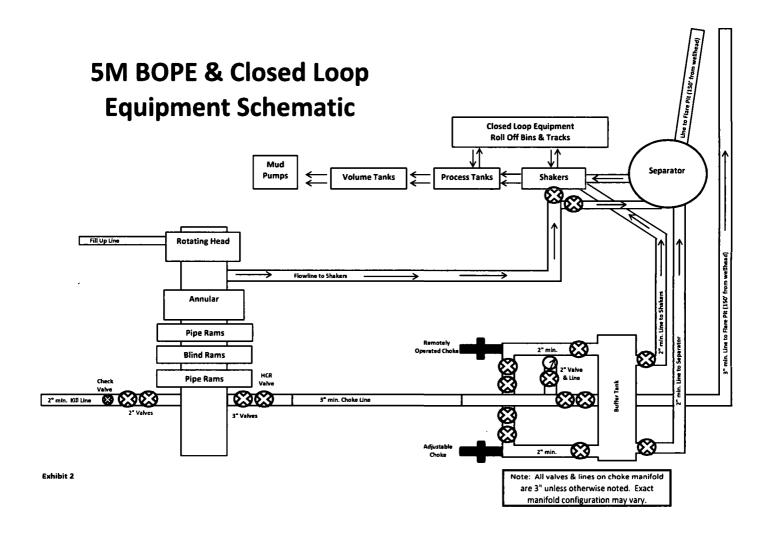
Fuller_14_11_W2ED_Fed_3H_Dir_Plan_08-02-2017.pdf Fuller_14_11_W2ED_Fed_3H_Dir_Plot_08-02-2017.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Fuller_14_11_W2ED_Fed 3H Drlg Program 08-02-2017.doc

Other Variance attachment:





GATES E & S NORTH AMERICA, INC.

134 44TH STREET

CORPUS CHRISTI, TEXAS 78405

PHONE: 361-887-9807

361-887-0812 FAX:

EMAIL: Tim.Cantu@gates.com

WEB: www.gates.com

Customer:	AUSTIN DISTRIBUTING	Test Date:	4/30/2015
ustomer Ref. :	4060578	Hose Serial No.:	D-043015-7
Invoice No. :	500506	Created By:	JUSTIN CROPPER
End Fitting 1 :	4 1/16 10K FLG	End Fitting 2:	4 1/16 10K FLG
Sates Part No. :	4773-6290	Assembly Code :	L36554102914D-043015-7
		Test Pressure :	15,000 PSI

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

Quality Manager:

Date:

Signature:

QUALITY

4/30/2015

Produciton:

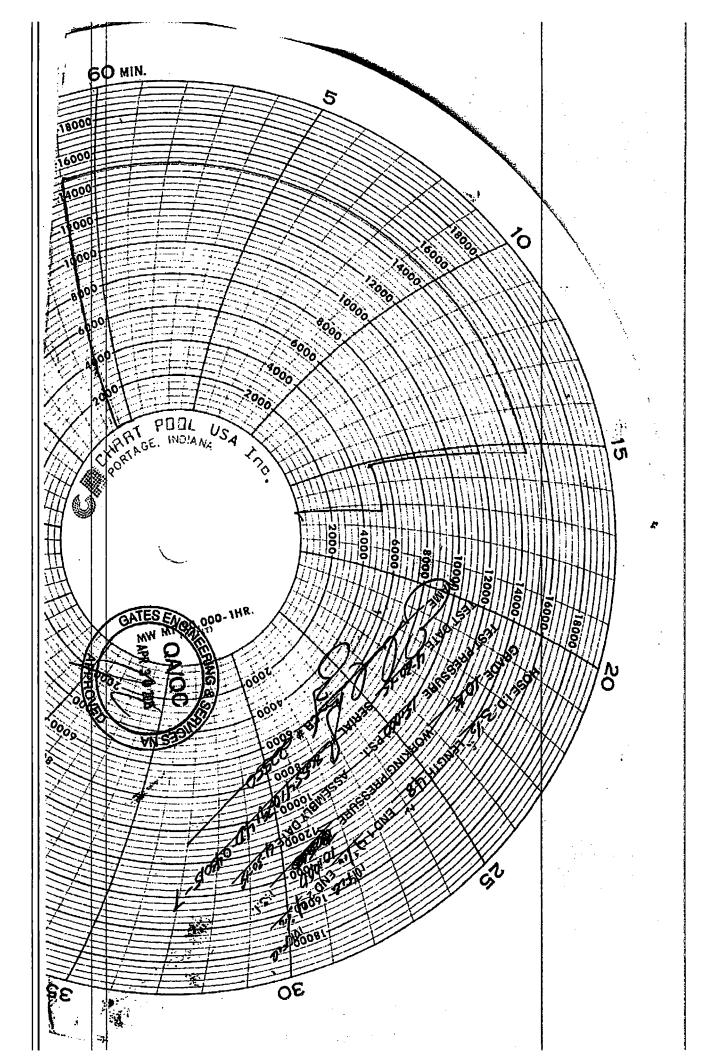
Date:

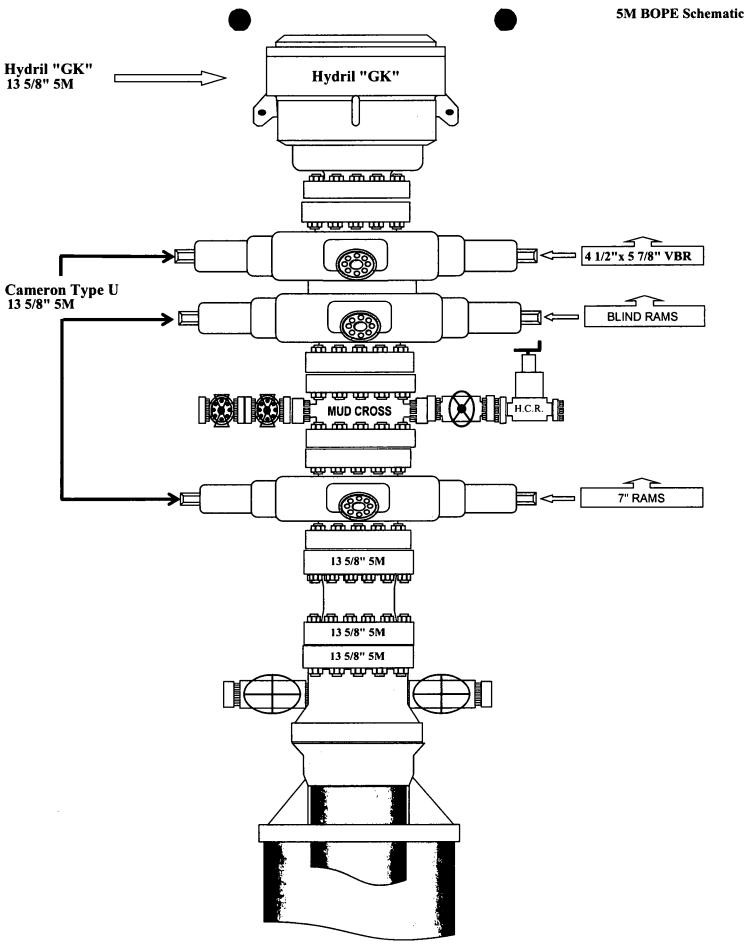
Signature :

PRODUCTION

PTC - 01 Rev.0 2

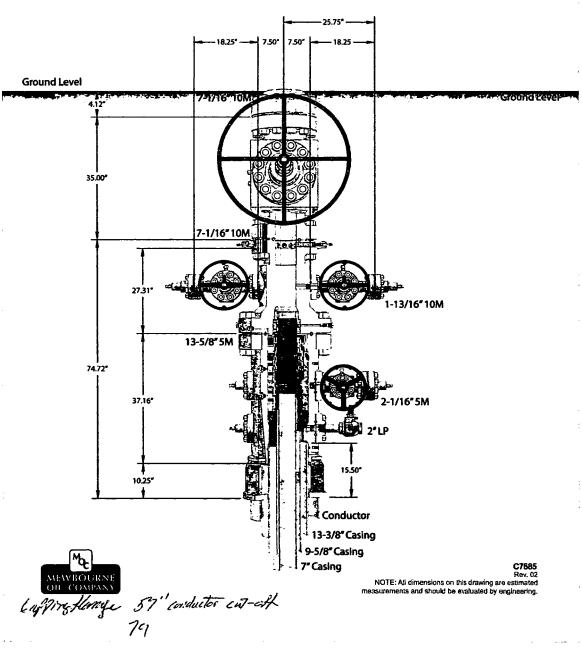






CAMERON A Schlomberger Company

13-5/8" MN-DS Wellhead System



SL: 2600' FNL & 450' FWL, Sec 14 BHL: 330' FNL & 440' FWL, Sec 11

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	555'	13.375"	48	H40	STC	2.96	6.66	12.09	20.31
12.25"	0'	2955'	9.625"	36	J55	LTC	1.31	2.29	4.26	5.30
8.75"	0'	11350'	7"	26	HCP110	LTC	1.41	1.80	2.21	2.81
6.125"	10645'	18600'	4.5"	13.5	P110	LTC	1.40	1.63	3.15	3.93
	•			BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	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	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd 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 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(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?	

SL: 2600' FNL & 450' FWL, Sec 14 BHL: 330' FNL & 440' FWL, Sec 11

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	То	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	555'	13.375"	48	H40	STC	2.96	6.66	12.09	20.31
12.25"	0'	2955'	9.625"	36	J55	LTC	1.31	2.29	4.26	5.30
8.75"	0'	11350'	7"	26	HCP110	LTC	1.41	1.80	2.21	2.81
6.125"	10645'	18600'	4.5"	13.5	P110	LTC	1.40	1.63	3.15	3.93
			7" 26 HCP110 LTC 4.5" 13.5 P110 LTC BLM Minimum Safety			m Safety	1.125	1	1.6 Dry	1.6 Dry
				48 H40 STC 36 J55 LTC 26 HCP110 LTC 13.5 P110 LTC					1.8 Wet	1.8 Wet

	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	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	<u> </u>
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd 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 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(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?	

SL: 2600' FNL & 450' FWL, Sec 14 BHL: 330' FNL & 440' FWL, Sec 11

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)		ļ	Collapse	Burst	Tension	Tension
17.5"	0'	555'	13.375"	48	H40	STC	2.96	6.66	12.09	20.31
12.25"	0'	2955'	9.625"	36	J55	LTC	1.31	2.29	4.26	5.30
8.75"	0'	11350'	7"	26	HCP110	LTC	1.41	1.80	2.21	2.81
6.125"	10645'	18600'	4.5"	13.5	P110	LTC	1.40	1.63	3.15	3.93
		-		BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	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	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	<u> </u>
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd 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 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(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, Fuller 14/11 W2ED Fed #3H

Sec 14, T26S, R29E SL: 2600' FNL & 450' FWL, Sec 14

BHL: 330' FNL & 440' FWL, Sec 11

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	555'	13.375"	48	H40	STC	2.96	6.66	12.09	20.31
12.25"	0'	2955'	9.625"	36	J55	LTC	1.31	2.29	4.26	5.30
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6.125"	10645'	18600'	4.5"	13.5	P110	LTC	1.40	1.63	3.15	3.93
		-	-	BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	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	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd 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 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(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. Hydrogen Sulfide Protection and Monitoring Equipment

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

4. Visual Warning Systems

- A. Wind direction indicators as indicated on the wellsite diagram.
- B. Caution signs shall be posted on roads providing access to location. Signs shall be painted a high visibility color with lettering of sufficient size to be readable at reasonable distances from potentially contaminated areas.

4. Mud Program

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

5. Metallurgy

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

6. Communications

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

7. Well Testing

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

8. Emergency Phone Numbers

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

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

RECEIVED

JAN 1 0 2019

DISTRICT II-ARTESIA O.C.D.

Mewbourne Oil Company

Eddy County, New Mexico NAD 83 Fuller 14/11 W2ED Fed #3H Sec 14, T26S, R29E

SL: 2600' FNL & 450' FWL, Sec 14 BHL: 330' FNL & 440' FWL, Sec 11

Plan: Design #1

Standard Planning Report

02 August, 2017

Database:

Hobbs

Company:

Mewbourne Oil Company

Project:

Eddy County, New Mexico NAD 83

Site: Well: Fuller 14/11 W2ED Fed #3H

Wellbore:

Sec 14, T26S, R29E

BHL: 330' FNL & 440' FWL, Sec 11

Design:

Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: **Survey Calculation Method:** Site Fuller 14/11 W2ED Fed #3H

WELL @ 2964.0usft (Original Well Elev) WELL @ 2964.0usft (Original Well Elev)

Minimum Curvature

Project

Eddy County, New Mexico NAD 83

Map System: Geo Datum:

US State Plane 1983 North American Datum 1983 System Datum:

Mean Sea Level

Map Zone:

New Mexico Eastern Zone

Site

From:

Fuller 14/11 W2ED Fed #3H

Site Position:

Мар

Northing: Easting:

379,318.00 usft 656,517.00 usft Latitude: Longitude:

32° 2' 32.209 N 103° 57' 41,770 W

Position Uncertainty:

0.0 usft

Slot Radius:

13-3/16"

Grid Convergence:

0.20

Well

Sec 14, T26S, R29E

Well Position

+N/-S

+E/-W

0.0 usft 0.0 usft Northing: Easting:

379,318.00 usft 656,517.00 usft Latitude: Longitude:

32° 2' 32.209 N 103° 57' 41.770 W

Position Uncertainty

0.0 usft

Wellhead Elevation:

2,964.0 usft

Ground Level:

2,937.0 usft

Wellbore

BHL: 330' FNL & 440' FWL. Sec 11

Magnetics

Model Name

Sample Date

Declination (°)

Dip Angle (°)

Field Strength

(nT)

IGRF2010

7/27/2017

7.00

59.80

47,859

Design

Design #1

Audit Notes:

Version:

Phase:

PROTOTYPE

Tie On Depth:

0.0

Vertical Section:

Depth From (TVD) (usft)

0.0

+N/-S (usft) 0.0

+E/-W (usft) 0.0

Direction (°) 0.14

Plan Sections Dogleg Measured Vertical Build Turn Depth Inclination Azimuth Depth +N/-S +E/-W Rate Rate Rate TFO (usft) (usft) (°/100usft) (°/100usft) (°/100usft) (usft) (°) (°) (usft) Target (°) 0.0 0.00 0.00 0.00 0.0 0.0 0.0 0.00 0.00 0.00 10.645.0 0.00 0.00 10.645.0 0.0 0.0 0.00 0.00 0.00 0.00 KOP @ 10645' 11,543.4 89.83 0.14 11,218.0 571.3 10.00 10.00 0.00 1.3 18,592.1 89.83 0.14 11,239.0 7,620.0 18.0 0.00 0.00 0.00 0.00 BHL: 330' FNL & 440'

Database:

Hobbs

Company:

Mewbourne Oil Company

Project:

Eddy County, New Mexico NAD 83 Fuller 14/11 W2ED Fed #3H

Site: Well:

Sec 14, T26S, R29E

Welibore:

BHL: 330' FNL & 440' FWL, Sec 11

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Fuller 14/11 W2ED Fed #3H WELL @ 2964.0usft (Original Well Elev)

WELL @ 2964.0usft (Original Well Elev)

Grid

elibore: sign:	Design #1	L & 440' FWL, S	60 11						
anned Survey	<u>. </u>								
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/- W	Vertical Section	Dogleg Rate	Build Rate	Turn 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
SL: 2600' I	FNL & 450' FWL, S								
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	0.00	400.0	0.0	0.0	0.0	. 0.00	0.00	0.00
500.0		0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0		0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0		0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0		0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0		0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0		0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0		0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0		0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0		0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0		0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0		0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0		0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0		0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0		0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0		0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0 2,700.0		0.00 0.00	2,600.0 2,700.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00 0.00	0.00 0.00
2,800.0		0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0		0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0		0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0		0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0 3,300.0		0.00 0.00	3,200.0 3,300.0	0.0 , 0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00 0.00	0.00 0.00
3,400.0 3,400.0		0.00	3,400.0	, 0.0 0.0	0.0	0.0	0.00	0.00	0.00
3,500.0		0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0		0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0		0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0		0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0		0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0		0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0		0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0		0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0		0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0		0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0		0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0		0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0		0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0 5,100.0		0.00	5,000.0 5,100.0	0.0 0.0	0.0	0.0	0.00	0.00	0.00
5,200.0		0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00

Database:

Hobbs

Company:

Mewbourne Oil Company

Project:

Eddy County, New Mexico NAD 83 Fuller 14/11 W2ED Fed #3H

Site: Well:

Sec 14, T26S, R29E

Wellbore:

BHL: 330' FNL & 440' FWL, Sec 11

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Fuller 14/11 W2ED Fed #3H

WELL @ 2964.0usft (Original Well Elev)

WELL @ 2964.0usft (Original Well Elev)

Grid

esign:	Design #1								
Planned Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0,00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0,00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	` 0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0,00	8,000,0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0,00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
9,000.0	0.00	0.00	9.000.0	0.0	0.0	0.0	0.00	0.00	0.00
9,100.0	0.00	0.00	9,100.0	0,0	0.0	0.0	0.00	0.00	0.00
9,200.0		0.00	9,200.0	0.0	0.0	0.0	0.00	0.00	0.00
9,300.0		0.00	9,300.0	0.0	0.0	0.0	0.00	0.00	0.00
9,400.0	0.00	0.00	9,400.0	0.0	0.0	0.0	0.00	0.00	0.00
9,500.0	0.00	0.00	9,500.0	0.0	0.0	0.0	0.00	0.00	0.00
9,600.0	0.00	0.00	9,600.0	0.0	0.0	0.0	0.00	0.00	0.00
9,700.0	0.00	0.00	9,700.0	0.0	0.0	0.0	0.00	0.00	0.00
9,800.0	0.00	0.00	9,800.0	0.0	0.0	0.0	0.00	0.00	0.00
9,900.0	0.00	0.00	9,900.0	0.0	0.0	0.0	0.00	0.00	0.00
10,000.0	0.00	0.00	10,000.0	0.0	0.0	0.0	0.00	0.00	0.00
10,000.0	0.00	0.00	10,000.0	0.0 0.0	0.0	0.0	0.00	0.00	0.00
10,100.0	0.00	0.00	10,100.0	0.0	0.0	0.0	0.00	0.00	0.00
10,300.0	0.00	0.00	10,200.0	0.0	0.0	0.0	0.00	0.00	0.00
10,400.0	0.00	0.00	10,300.0	0.0	0.0	0.0	0.00	0.00	0.00
•									
10,500.0	0.00	0.00	10,500.0	0.0	0.0	0.0	0.00	0.00	0.00
10,600.0	0.00	0.00	10,600.0	0.0	0.0	0.0	0.00	0.00	0.00

Database:

Hobbs

Company:

Mewbourne Oil Company

Project:

Eddy County, New Mexico NAD 83 Fuller 14/11 W2ED Fed #3H

Site: Well:

Sec 14, T26S, R29E

Wellbore:

BHL: 330' FNL & 440' FWL, Sec 11

Design:

Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Fuller 14/11 W2ED Fed #3H WELL @ 2964.0usft (Original Well Elev)

WELL @ 2964.0usft (Original Well Elev)

Grid

d Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
10,645.0	0.00	0.00	10,645.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP @ 1064		5.55		5.5			5.55		
10,700.0	5.50	0.14	10,699.9	2.6	0.0	2.6	10.00	10.00	0.00
10,800.0	15.50	0.14	10,798.1	20.8	0.0	20.8	10.00	10.00	0.00
10,900.0	25.50	0.14	10,891.7	55.8	0.1	55.8	10.00	10.00	0.00
11,000.0	35.50	0.14	10,891.7	106.5	0.1	106.5	10.00	10.00	0.00
11,100.0	45.50	0.14	11,053.7	171.4	0.4	171.4	10.00	10.00	0.00
11,188.5	54.35	0.14	11,110.6	239.0	0.6	239.0	10.00	10.00	0.00
	NL & 450' FWL,								
11,200.0	55.50	0.14	11,117.2	248.4	0.6	248.4	10.00	10.00	0.00
11 200 0	65.49	0.14		335.3	0.8	335.3	10.00	10.00	0.00
11,300.0 11,400.0	75.49	0.14 0.14	11,166.4 11,199.7	335.3 429.5	1.0	335.3 429.5	10.00	10.00	0.00
11,500.0	85.49	0.14	11,135.7	528.0	1.0	528.0	10.00	10.00	0.00
11,543.4	89.83	0.14	11,218.0	571.3	1.3	571.3	10.00	10.00	0.00
	NL & 450' FWL, S		•						
11,600.0	89.83	0.14	11,218.2	627.9	1.5	627.9	0.00	0.00	0.00
11,700.0	89.83	0.14	11,218.5	727.9	1.7	727.9	0.00	0.00	0.00
11,800.0	89.83	0.14	11,218.8	827.9	2.0	827.9	0.00	0.00	0.00
11,900.0	89.83	0.14	11,219.1	927.9	2.2	927.9	0.00	0.00	0.00
12,000.0	89.83	0.14	11,219.4	1,027.9	2.4	1,027.9	0.00	0.00	0.00
12,100.0	89.83	0.14	11,219.7	1,127.9	2.7	1,127.9	0.00	0.00	0.00
12,200.0	89.83	0.14	11,220.0	1,227.9	2.9	1,227.9	0.00	0.00	0.00
12,300.0	89.83	0.14	11,220.3	1,327.9	3.1	1,327.9	0.00	0.00	0.00
12,400.0	89.83	0.14	11,220.6	1,427.9	3.4	1,427.9	0.00	0.00	0.00
12,500.0	89.83	0.14	11,220.8	1,527.9	3.6	1,527.9	0.00	0.00	0.00
12,600.0	89.83	0.14	11,221.1	1,627.9	3.8	1,627.9	0.00	0.00	0.00
12,700.0	89.83	0.14	11,221.4	1,727.9	4.1	1,727.9	0.00	0.00	0.00
12,800.0	89.83	0.14	11,221.7	1,827.9	4.3	1,827.9	0.00	0.00	0.00
12,900.0	89.83	0.14	11,222.0	1,927.9	4.6	1,927.9	0.00	0.00	0.00
13,000.0	89.83	0.14	11,222.3	2,027.9	4.8	2,027.9	0.00	0.00	0.00
13,100.0	89.83	0.14	11,222.6	2,127.9	5.0	2,127.9	0.00	0.00	0.00
13,200.0	89.83	0.14	11,222.9	2,227.9	5.3	2,227.9	0.00	0.00	0.00
13,300.0	89.83	0.14	11,223.2	2,327.9	5.5	2,327.9	0.00	0.00	0.00
13,400.0	89.83	0.14	11,223.5	2,427.9	5.7	2,427.9	0.00	0.00	0.00
13,500.0	89.83	0.14	11,223.8	2,527.9	6.0	2,527.9	0.00	0.00	0.00
13,600.0	89.83	0.14	11,224.1	2,627.9	6.2	2,627.9	0.00	0.00	0.00
13,700.0	89.83	0.14	11,224.4	2,727.9	6.4	2,727.9	0.00	0.00	0.00
13,800.0	89.83	0.14	11,224.7	2,827.9	6.7	2,827.9	0.00	0.00	0.00
13,900.0	89.83	0.14	11,225.0	2,927.9	6.9	2,927.9	0.00	0.00	0.00
14,000.0 14,100.0	89.83 89.83	0.14 0.1 <i>4</i>	11,225.3 11,225.6	3,027.9 3.127.9	7.2 7.4	3,027.9 3 127 9	0.00	0.00 0.00	0.00 0.00
14,100.0	89.83	0.14	11,225.6	3,127.9	7.4	3,127.9	0.00		
14,200.0	89.83	0.14	11,225.9	3,227.9	7.6	3,227.9	0.00	0.00	0.00
14,300.0	89.83	0.14	11,226.2	3,327.9	7.9	3,327.9	0.00	0.00	0.00
14,400.0	89.83	0.14	11,226.5	3,427.9	8.1	3,427.9	0.00	0.00	0.00
14,500.0	89.83	0.14	11,226.8	3,527.9	8.3	3,527.9	0.00	0.00	0.00
14,600.0	89.83	0.14	11,227.1	3,627.9	8.6	3,627.9	0.00	0.00	0.00
14,700.0	89.83	0.14	11,227.4	3,727.9	8.8	3,727.9	0.00	0.00	0.00
14,800.0	89.83	0.14	11,227.7	3,827.9	9.0	3,827.9	0.00	0.00	0.00
14,900.0	89.83	0.14	11,228.0	3,927.9	9.3	3,927.9	0.00	0.00	0.00
15,000.0 15,100.0	89.83 89.83	0.14 0.14	11,228.3 11,228.6	4,027.9 4.127.9	9.5 9.8	4,027.9 4,127.9	0.00 0.00	0.00 0.00	0.00 0.00
15,100.0	89.83	0.14		4,127.9					
15,200.0	89.83	0.14	11,228.9	4,227.9	10.0	4,227.9	0.00	0.00	0.00
15,300.0	89.83	0.14	11,229.2	4,327.9	10.2	4,327.9	0.00	0.00	0.00

Database:

Hobbs

Company:

Mewbourne Oil Company

Project:

Eddy County, New Mexico NAD 83 Fuller 14/11 W2ED Fed #3H

Site: Well:

Sec 14, T26S, R29E

Wellbore: Design: BHL: 330' FNL & 440' FWL, Sec 11

Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Site Fuller 14/11 W2ED Fed #3H

WELL @ 2964.0usft (Original Well Elev) WELL @ 2964.0usft (Original Well Elev)

Grid

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)
15,400.0	89.83	0.14	11,229.5	4,427.9	10.5	4,427.9	0.00	0.00	0.00
15,500.0	89.83	0.14	11,229.8	4,527.9	10.7	4,527.9	0.00	0.00	0.00
15,600.0	89.83	0.14	11,230.1	4,627.9	10.9	4,627.9	0.00	0.00	0.00
15,700.0	89.83	0.14	11,230.4	4,727.9	11.2	4,727.9	0.00	0.00	0.00
15,800.0	89.83	0.14	11,230.7	4,827.9	11.4	4,827.9	0.00	0.00	0.00
15,900.0	89.83	0.14	11,231.0	4,927.9	11.6	4,927.9	0.00	0.00	0.00
16,000.0	89.83	0.14	11,231.3	5,027.9	11.9	5,027.9	0.00	0.00	0.00
16,100.0	89.83	0.14	11,231.6	5,127.9	12.1	5,127.9	0.00	0.00	0.00
16,200.0	89.83	0.14	11,231.9	5,227.9	12.3	5,227.9	0.00	0.00	0.00
16,300.0	89.83	0.14	11,232.2	5,327.9	12.6	5,327.9	0.00	0.00	0.00
16,400.0	89.83	0.14	11,232.5	5,427.9	12.8	5,427.9	0.00	0.00	0.00
16,500.0	89.83	0.14	11,232.8	5,527.9	13.1	5,527.9	0.00	0.00	0.00
16,600.0	89.83	0.14	11,233.1	5,627.9	13.3	5,627.9	0.00	0.00	0.00
16,700.0	89.83	0.14	11,233.4	5,727.9	13.5	5,727.9	0.00	0.00	0.00
16,800.0	89.83	0.14	11,233.7	5,827.9	13.8	5,827.9	0.00	0.00	0.00
16,900.0	89.83	0.14	11,234.0	5,927.9	14.0	5,927.9	0.00	0.00	0.00
17,000.0	89.83	0.14	11,234.3	6,027.9	14.2	6,027.9	0.00	0.00	0.00
17,100.0	89.83	0.14	11,234.6	6,127.9	14.5	6,127.9	0.00	0.00	0.00
17,200.0	89.83	0.14	11,234.9	6,227.9	14.7	6,227.9	0.00	0.00	0.00
17,300.0	89.83	0.14	11,235.2	6,327.9	14.9	6,327.9	0.00	0.00	0.00
17,400.0	89.83	0.14	11,235.4	6,427.9	15.2	6,427.9	0.00	0.00	0.00
17,500.0	89.83	0.14	11,235.7	6,527.9	15.4	6,527.9	0.00	0.00	0.00
17,600.0	89.83	0.14	11,236.0	6,627.9	15.7	6,627.9	0.00	0.00	0.00
17,700.0	89.83	0.14	11,236.3	6,727.9	15.9	6,727.9	0.00	0.00	0.00
17,800.0	89.83	0.14	11,236.6	6,827.9	16.1	6,827.9	0.00	0.00	0.00
17,900.0	89.83	0.14	11,236.9	6,927.9	16.4	6,927.9	0.00	0.00	0.00
18,000.0	89.83	0.14	11,237.2	7,027.9	16.6	7,027.9	0.00	0.00	0.00
18,100.0	89.83	0.14	11,237.5	7,127.9	16.8	7,127.9	0.00	0.00	0.00
18,200.0	89.83	0.14	11,237.8	7,227.9	17.1	7,227.9	0.00	0.00	0.00
18,300.0	89.83	0.14	11,238.1	7,327.9	17.3	7,327.9	0.00	0.00	0.00
18,400.0	89.83	0.14	11,238.4	7,427.9	17.5	7,427.9	0.00	0.00	0.00
18,500.0	89.83	0.14	11,238.7	7,527.9	17.8	7,527.9	0.00	0.00	0.00
18,592.1	89.83	0.14	11,239.0	7,620.0	18.0	7,620.0	0.00	0.00	0.00

Database:

Hobbs

Company:

Mewbourne Oil Company

Project:

Eddy County, New Mexico NAD 83 Fuller 14/11 W2ED Fed #3H

Site: Well:

Sec 14, T26S, R29E

Wellbore:

BHL: 330' FNL & 440' FWL, Sec 11

Design:

Design #1

Local Co-ordinate Reference:

TVD Reference:

North Reference:

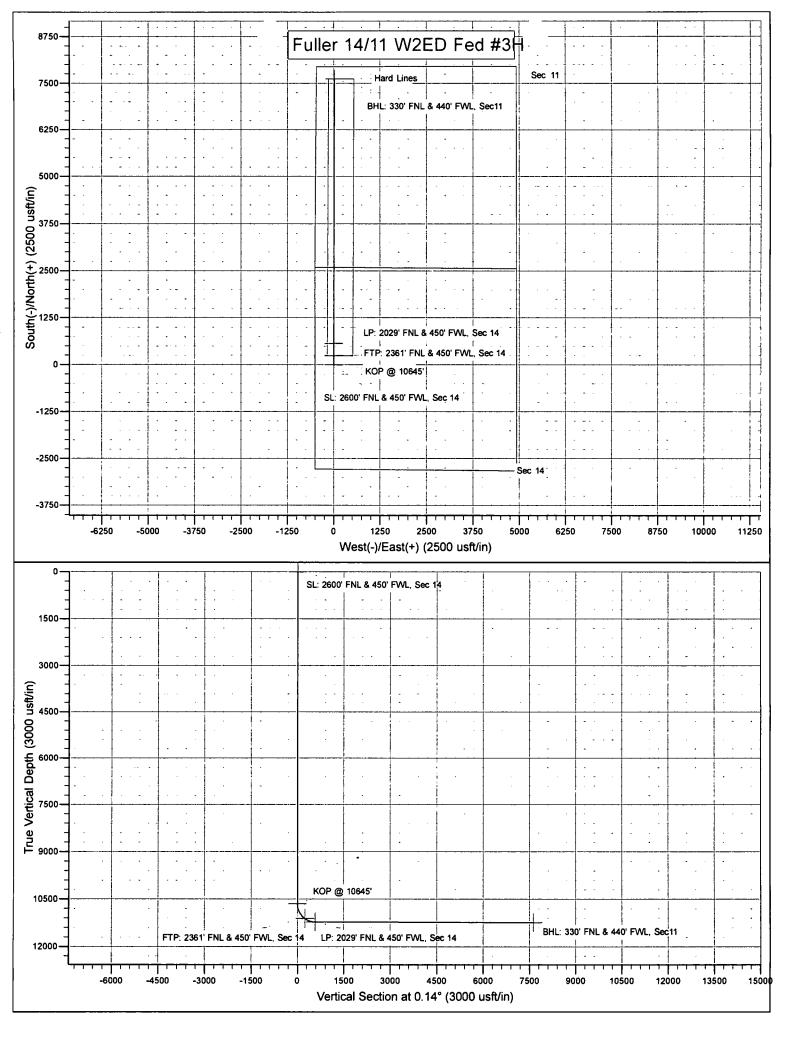
Survey Calculation Method:

Site Fuller 14/11 W2ED Fed #3H

WELL @ 2964.0usft (Original Well Elev) WELL @ 2964.0usft (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
SL: 2600' FNL & 450' FV - plan hits target center - Point	0.00 r	0.00	0.0	0.0	0.0	379,318.00	656,517.00	32° 2' 32.209 N	103° 57' 41.770 W
KOP @ 10645' - plan hits target center - Point	0.00 r	0.00	10,645.0	0.0	0.0	379,318.00	656,517.00	32° 2' 32.209 N	103° 57′ 41.770 W
FTP: 2361' FNL & 450' F - plan hits target center - Point	0.00 r	0.00	11,110.6	239.0	0.6	379,557.00	656,517.57	32° 2' 34.574 N	103° 57' 41.754 W
LP: 2029' FNL & 450' FV - plan hits target cente - Point	0.00 r	0.00	11,218.0	571.3	1.3	379,889.30	656,518.30	32° 2' 37.862 N	103° 57' 41.732 W
BHL: 330' FNL & 440' F\ - plan hits target cente - Point	0.00 r	0.00	11,239.0	7,620.0	18.0	386,938.00	656,535.00	32° 3′ 47.617 N	103° 57' 41.256 W



SL: 2600' FNL & 450' FWL, Sec 14 BHL: 330' FNL & 440' FWL, Sec 11

1. Geologic Formations

TVD of target	11239'	Pilot hole depth	NA
MD at TD:	18600'	Deepest expected fresh water:	125'

Basin

Basin			
Formation	Depth (TVD)	Water/Mineral Bearing/	Hazards*
	from KB	Target Zone?	
Quaternary Fill	Surface		
Rustler	530	Water	
Salado	1325		
Castile	1515		
Base Salt	2830		
Lamar	3030	Oil/Gas	
Bell Canyon	3060	Oil/Gas	
Cherry Canyon	3935	Oil/Gas	
Manzanita Marker	4105		
Brushy Canyon	5195	Oil/Gas	
Bone Spring	6760	Oil/Gas	
1 st Bone Spring Sand	7725		
2 nd Bone Spring Sand	8275		
3 rd Bone Spring Sand	9615		
Abo			
Wolfcamp	9955	Target Zone	
Devonian			
Fusselman			
Ellenburger			
Granite Wash			-

^{*}H2S, water flows, loss of circulation, abnormal pressures, etc.

SL: 2600' FNL & 450' FWL, Sec 14 BHL: 330' FNL & 440' FWL, Sec 11

2. Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	555'	13.375"	48	H40	STC	2.96	6.66	12.09	20.31
12.25"	0'	2955'	9.625"	36	J55	LTC	1.31	2.29	4.26	5.30
8.75"	0'	11350'	7"	26	HCP110	LTC	1.41	1.80	2.21	2.81
6.125"	10645'	18600'	4.5"	13.5	P110	LTC	1.40	1.63	3.15	3.93
B	LM Mini	mum Safet	y 1.125	1	1.6 Dr	y 1.6 D	ry		_	
		Facto	or		1.8 We	et 1.8 W	√et			

	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?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd 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 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(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?	

SL: 2600' FNL & 450' FWL, Sec 14 BHL: 330' FNL & 440' FWL, Sec 11

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H ₂ 0 gal/ sk	500# Comp. Strength (hours)	Slurry Description
Surf.	240	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Inter.	445	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Prod. Stg 1	425	12.5	2.12	11	9	Lead: Class C + Gel + Retarder + Defoamer + Extender
3.8 1	400	15.6	1.18	5.2	10	Tail: Class H + Retarder + Fluid Loss + Defoamer
					ECP/DV T	ool @ 4105'
Prod. Stg 2	65	12.5	2.12	11	9	Lead: Class C + Gel + Retarder + Defoamer + Extender
	100	14.8	1.34	6.3	8	Tail: Class C + Retarder
Liner	325	11.2	2.97	17	16	Class C + Salt + Gel + Fluid Loss + Retarder + Dispersant + Defoamer + Anti-Settling Agent

A copy of cement test will be available on location at time of cement job providing pump times, compressive strengths, etc.

Casing String	TOC	% Excess	
Surface	0'	100%	
Intermediate	0'	25%	
Production	2755'	25%	
Liner	10645'	25%	

SL: 2600' FNL & 450' FWL, Sec 14 BHL: 330' FNL & 440' FWL, Sec 11

4. Pressure Control Equipment

l 1 % 7	
I Variance: None	
i i vanance none	
i i variance. None	

BOP installed and tested before drilling which hole?	Size?	System Rated WP	T	'уре	V	Tested to:
			An	ınular	X	2500#
		5M	Blin	Blind Ram		
12-1/4"	13-5/8"		Pip	Pipe Ram		5000#
			Doub	ole Ram		5000#
			Other*			

^{*}Specify if additional ram is utilized.

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.

X	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or 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. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.		
	A variance is requested for the use of a flexible choke line from the BOP to Choke		
Y	Manifold. See attached for specs and hydrostatic test chart.		
	N Are anchors required by manufacturer?		
Y	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.		
	Provide description here: See attached schematic.		

SL: 2600' FNL & 450' FWL, Sec 14 BHL: 330' FNL & 440' FWL, Sec 11

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0'	555'	Spud Mud	8.6-8.8	28-34	N/C
555'	2955'	BW	10.0	28-34	N/C
2955'	11350'	FW w/ Polymer	8.6-9.7	28-34	N/C
11350'	18600'	OBM	10.0-13.0	30-40	<10cc

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. MW up to 13.0 ppg may be required for shale control. The highest mud weight needed to balance formation is expected to be 12.0 ppg.

What will be used to monitor the loss or gain	Pason/PVT/Visual Monitoring
of fluid?	

6. Logging and Testing Procedures

Logg	Logging, Coring and Testing.		
X	Will run GR/CNL from KOP (10645') to surface (horizontal well – vertical portion of		
	hole). Stated logs run will be in the Completion Report and submitted to the BLM.		
	No Logs are planned based on well control or offset log information.		
	Drill stem test? If yes, explain		
	Coring? If yes, explain		

Additional logs planned		Interval	
X	Gamma Ray	10645' (KOP) to TD	
	Density		
	CBL		
	Mud log		
	PEX		

SL: 2600' FNL & 450' FWL, Sec 14 BHL: 330' FNL & 440' FWL, Sec 11

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7013 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers in surface hole. Weighted mud for possible over-pressure in Wolfcamp formation.

Hyd	Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S		
is de	is detected in concentrations greater than 100 ppm, the operator will comply with the provisions		
of O	of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and		
formations will be provided to the BLM.			
	H2S is present		
X	H2S Plan attached		

8. Other facets of operation

Is this a walking operation? If yes, describe. Will be pre-setting casing? If yes, describe.
Attachments Directional Plan Other, describe



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



APD ID: 10400017485

Operator Name: MEWBOURNE OIL COMPANY

Well Name: FULLER 14/11 W2ED FED

....

Well Type: CONVENTIONAL GAS WELL

Submission Date: 09/05/2017

Well Number: 3H

Well Work Type: Drill

Highlighted data reflects (he most regent changes

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Fuller14_11W2DFed3H_existingroadmap_07-28-2017.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? NO

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Fuller14 11W2DFed3H existingwellmap 07-28-2017.pdf

Well Name: FULLER 14/11 W2ED FED Well Number: 3H

Existing Wells description:

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: A 2 7/8" steel, 100#, surface flowline will be installed along existing lease road from well site to existing production facility. The flowline length will be 396'. See flowline map above. No electricity will be needed for this site.

Production Facilities map:

Fuller14_11W2EDFed3H_PRODUCTIONFACILITYMAP_07-28-2017.pdf

Fuller14_11W2EDFed3H_flowlineMAP_20180214093157.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Water source use type: DUST CONTROL,

Water source type: IRRIGATION

INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE

CASING

Describe type:

Source longitude: -104.05763

Source latitude: 32.04928 Source datum: NAD83

Water source permit type: WATER WELL

Source land ownership: FEDERAL

Water source volume (barrels): 2014

Water source transport method: TRUCKING

Source transportation land ownership: COMMERCIAL

Source volume (gal): 84588

Source volume (acre-feet): 0.2595907

Water source use type: DUST CONTROL,

Water source type: IRRIGATION

INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE

CASING

Describe type:

Source longitude: -103.94242

Source latitude: 31.998123

Source datum: NAD83

Water source permit type: WATER WELL

Source land ownership: PRIVATE

Water source transport method: TRUCKING

Source transportation land ownership: COMMERCIAL

Water source volume (barrels): 2014 Source volume (acre-feet): 0.2595907

Well Name: FULLER 14/11 W2ED FED Well Number: 3H

Source volume (gal): 84588

Water source and transportation map:

Fuller14 11W2EDFed3H_watersourceandtransportationmap_07-28-2017.pdf

Water source comments: BOTH SOURCES SHOWN ON ONE MAP

New water well? NO

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.):

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

Construction Materials description: Caliche - both sources shown on one map.

Construction Materials source location attachment:

Fuller14_11W2EDFed3H_calichesourceandtransportationmap_07-28-2017.pdf

Section 7 - Methods for Handling Waste

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

Well Name: FULLER 14/11 W2ED FED Well Number: 3H

Safe containment attachment:

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

FACILITY

Disposal type description:

Disposal location description: City of Carlsbad Water Treatment facility

Waste type: GARBAGE

Waste content description: Garbage & trash

Amount of waste: 1500

pounds

Waste disposal frequency: One Time Only

Safe containment description: Enclosed trash trailer

Safe containment attachment:

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

FACILITY

Disposal type description:

Disposal location description: Waste Management facility in Carlsbad.

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 containmant 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.

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

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

Well Name: FULLER 14/11 W2ED FED Well Number: 3H

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? NO

Description of cuttings location

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

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

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Fuller_14_23W1IPFed3H_wellsitelayout_07-21-2017.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: FULLER 14/23 & FULLER 14/11 WELL

PAD

Multiple Well Pad Number: 8

Recontouring attachment:

Drainage/Erosion control construction: None

Drainage/Erosion control reclamation: None

Well Name: FULLER 14/11 W2ED FED Well Number: 3H

Wellpad long term disturbance (acres): 1.414 Wellpad short term disturbance (acres): 2.65

Access road long term disturbance (acres): 0 Access road short term disturbance (acres): 0

Pipeline long term disturbance (acres): 0 Pipeline short term disturbance (acres): 0

Other long term disturbance (acres): 0 Other short term disturbance (acres): 0

Total long term disturbance: 1.414 Total short term disturbance: 2.65

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.

Soil treatment: NA

Existing Vegetation at the well pad: Various brush & grasses

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Various brush & grasses

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline: NA

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: NA

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Well Name: FULLER 14/11 W2ED FED

Well Number: 3H

Seed Management

Seed Table

Seed type:

Seed source:

Seed name:

Source name:

Source address:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Proposed seeding season:

Seed Summary

Seed Type

Pounds/Acre

Total pounds/Acre:

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: Bradley

Last Name: Bishop

Phone: (575)393-5905

Email: bbishop@mewbourne.com

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? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: NA

Weed treatment plan attachment:

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 attachment:

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

Pit closure description: NA

Pit closure attachment:

Well Name: FULLER 14/11 W2ED FED Well Number: 3H

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:

Fee Owner: Pecos Valley Artesian Convservation

District

Phone: (575)622-7000

Fee Owner Address: PO Box 1346 Roswell NM 88202

Email:

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: SUA in place

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Well Name: FULLER 14/11 W2ED FED Well Number: 3H

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:

Fee Owner Address: PO Box 1346 Roswell NM 88202

Fee Owner: Pecos Valley Artesian Conservation

District

Phone: (575)622-7000

Email:

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: SUA in place

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Section 12 - Other Information

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

ROW Applications

Well Name: FULLER 14/11 W2ED FED Well Number: 3H

SUPO Additional Information: NONE

Use a previously conducted onsite? YES

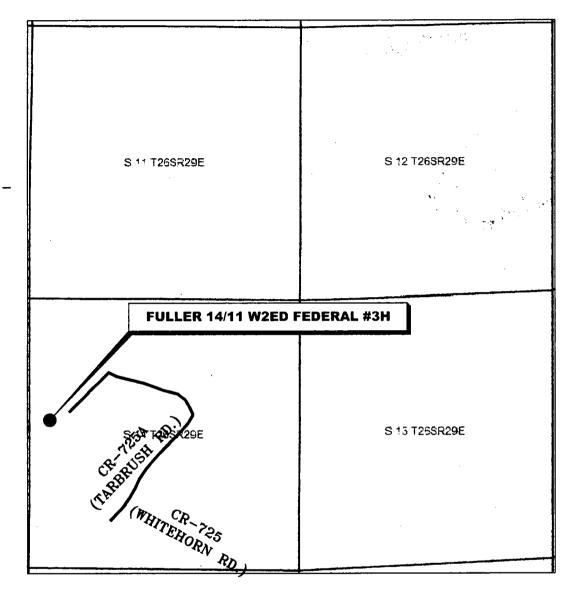
Previous Onsite information: MAY 22 2017 Met with Brooke Wilson (BLM) & RRC Surveying and staked location @ 2600' FNL & 450' FWL, Sec 14, T26S, R29E, Eddy Co., NM. (Elevation @ 2937'). This appears to be a drillable location with pit area to N. Topsoil S. Location will be on existing pad. Pad will need to be extended. Will go to existing battery to NE of pad. Lat 32.042280 N, Long 103.961603 W NAD83. Locations are MOA. (BPS)

Other SUPO Attachment

Fuller14_11W2DFed3H_interimreclamationdiagram_20180214093405.pdf Fuller14_11W2DFed3H_gascaptureplan_20180214093717.pdf

VICINITY MAP

NOT TO SCALE



SECTION 14, TWP. 26 SOUTH, RGE. 29 EAST, N. M. P. M., EDDY COUNTY, NEW MEXICO

OPERATOR: Mewbourne Oil Company LOCATION: 2600' FNL & 450' FWL

LEASE: Fuller 14/11 W2ED Federal

WELL NO.: 3H

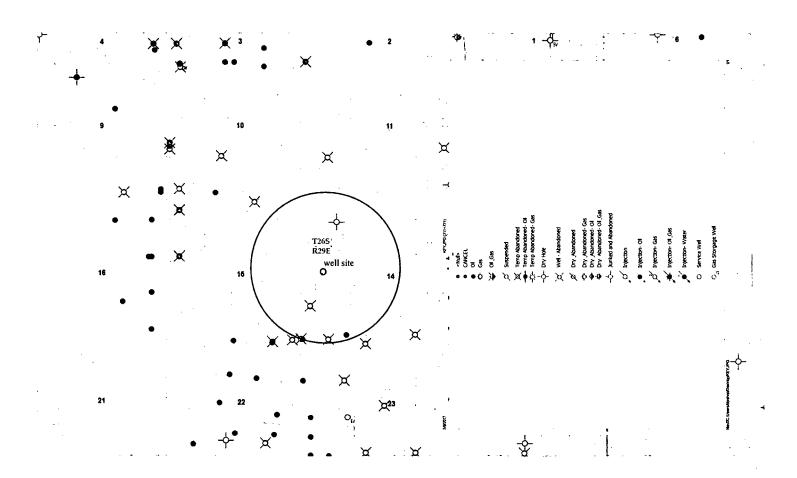
ELEVATION: _2937'

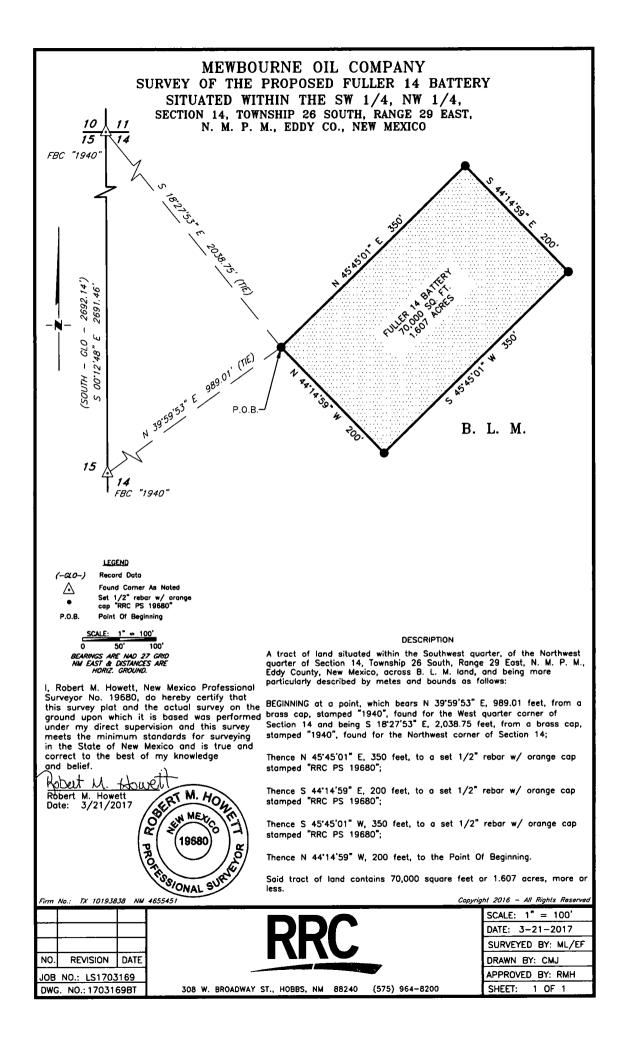
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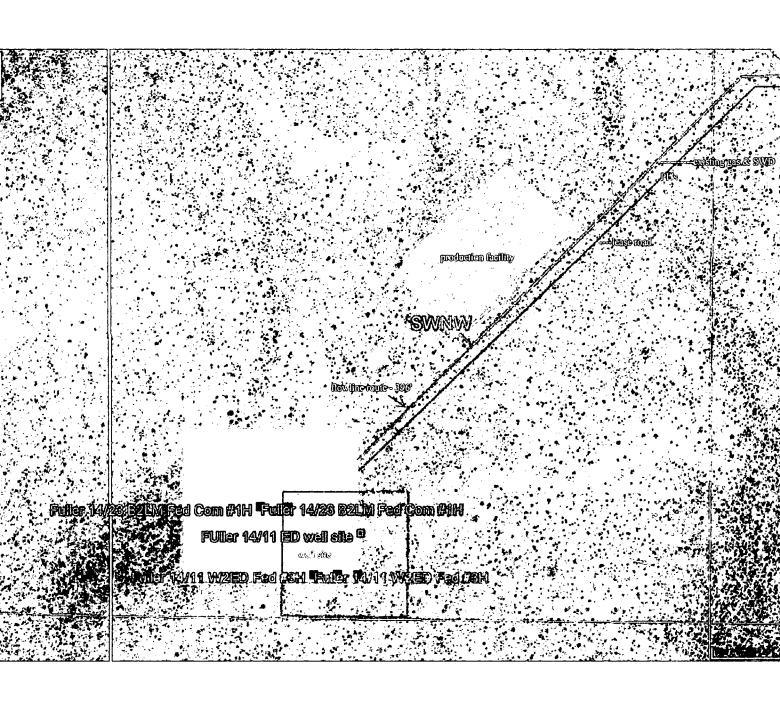
REVISION DATE JOB NO.: LS1703152 DWG. NO.: 1703152VM

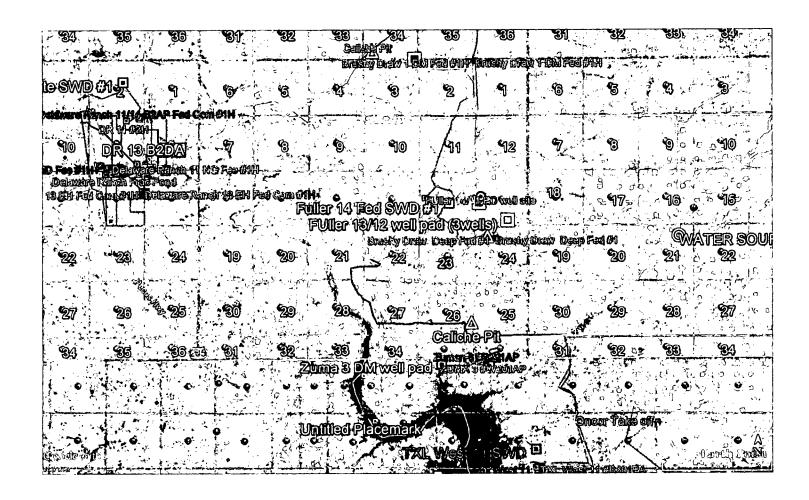


308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200 SCALE: N. T. S. DATE: 5-16-2017 SURVEYED BY: ML/JL DRAWN BY: LA APPROVED BY: RMH SHEET: 1 OF 1

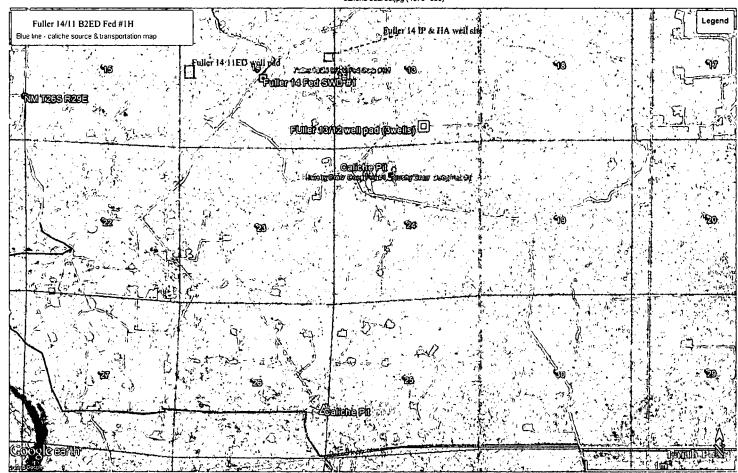


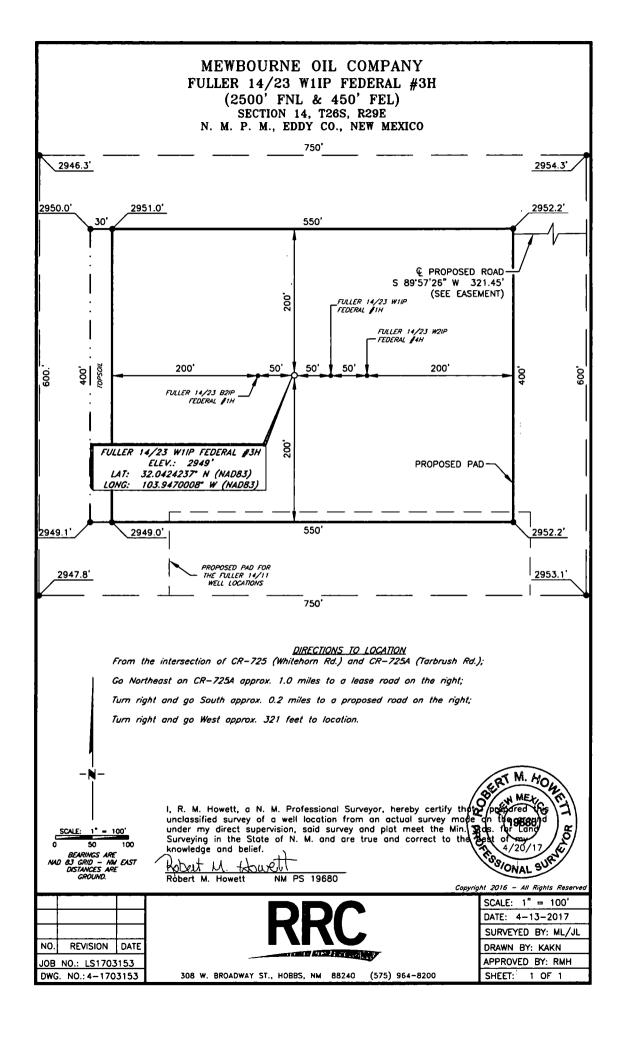






caliche source.jpg (1570×990)







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



Section 1 - General

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

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

PWD surface owner: PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Produced Water Disposal (PWD) Location:

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

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 attachment:

Section 3 - Unlined Pits

Injection well mineral owner:

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):
Unlined pit PWD on or off channel:	
Unlined pit PWD discharge volume (bbl/day):	
Unlined pit specifications:	
Precipitated solids disposal:	
Decribe precipitated solids disposal:	
Precipitated solids disposal permit:	
Unlined pit precipitated solids disposal schedule:	
Unlined pit precipitated solids disposal schedule attachment:	
Unlined pit reclamation description:	
Unlined pit reclamation attachment:	
Unlined pit Monitor description:	
Unlined pit Monitor attachment:	
Do you propose to put the produced water to beneficial use?	
Beneficial use user confirmation:	
Estimated depth of the shallowest aquifer (feet):	
Does the produced water have an annual average Total Dissol that of the existing water to be protected?	ved Solids (TDS) concentration equal to or less than
TDS lab results:	
Geologic and hydrologic evidence:	
State authorization:	
Unlined Produced Water Pit Estimated percolation:	
Unlined pit: do you have a reclamation bond for the pit?	
Is the reclamation bond a rider under the BLM bond?	
Unlined pit bond number:	
Unlined pit bond amount:	
Additional bond information attachment:	
Section 4 - Injection	
Would you like to utilize Injection PWD options? NO	
Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):
Injection PWD discharge volume (bbl/day):	

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 attachment:	
Underground Injection Control (UIC) Permit?	
UIC Permit attachment:	
Section 5 - Surface Discharge	
Would you like to utilize Surface Discharge PWD options? NO	
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 - Other	
Would you like to utilize Other PWD options? NO	
Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):
Other PWD discharge volume (bbl/day):	
Other PWD type description:	
Other PWD type attachment:	
Have other regulatory requirements been met?	
Other regulatory requirements attachment:	
Other regulatory requirements attachment:	



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

Bond Info Data Report

Bond Information

Federal/Indian APD: FED

BLM Bond number: NM1693

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 attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment: