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DISTRICT II-ARTESIA O.C.D.

Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM018613A

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
WESTLOVING 11/12 W0GH FED COM 2H

2. Name of Operator
MEWBOURNE OIL COMPANY

9. API Well No.
30-015-46170

3a. Address	3b. Phone No. *(include area code)*	10. Field and Pool, or Exploratory
PO Box 5270 Hobbs NM 88240	(575)393-5905	PURPLE-SAGE WOLFCAMP GAS / WOL

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface SWNE / 1340 FNL / 2435 FEL / LAT 32.2357904 / LONG -104.160766
At proposed prod. zone SENE / 1329 FNL / 330 FEL / LAT 32.2359777 / LONG -104.1365736

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 11 / T24S / R27E / NMP

325821

14. Distance in miles and direction from nearest town or post office*	12. County or Parish	13. State
7 miles	EDDY	NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
330 feet	760.24	480

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
60 feet	9360 feet / 16649 feet	FED: NM1693

21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3124 feet	10/24/2018	60 days

24. Attachments

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

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

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	Bradley Bishop / Ph: (575)393-5905	08/01/2018
Title: Regulatory		
Approved by *(Signature)* (Electronic Submission)	Name *(Printed/Typed)* Cody Layton / Ph: (575)234-5959	Date 06/26/2019
Title: Assistant Field Manager Lands & Minerals	Office: CARLSBAD	

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

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

APPROVED WITH CONDITIONS

Approval Date: 06/26/2019

(Continued on page 2)

*(Instructions on page 2)

RWP 7-2-19

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

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

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

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

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

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

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160
PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.
ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.
EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

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Additional Operator Remarks

Location of Well

1. SHL: SWNE / 1340 FNL / 2435 FEL / TWSP: 24S / RANGE: 27E / SECTION: 11 / LAT: 32.2357904 / LONG: -104.160766 (TVD: 27 feet, MD: 27 feet)
   PPP: SWNE / 1329 FNL / 2309 FEL / TWSP: 24S / RANGE: 27E / SECTION: 11 / LAT: 32.2358228 / LONG: -104.1603584 (TVD: 9147 feet, MD: 9289 feet)
   PPP: SENE / 1329 FNL / 1319 FEL / TWSP: 24S / RANGE: 27E / SECTION: 11 / LAT: 32.2358439 / LONG: -104.1571565 (TVD: 9195 feet, MD: 10282 feet)
   PPP: SWNW / 1329 FNL / 0 FWL / TWSP: 24S / RANGE: 27E / SECTION: 12 / LAT: 32.2358719 / LONG: -104.1528905 (TVD: 9229 feet, MD: 11601 feet)
   BHL: SENE / 1329 FNL / 330 FEL / TWSP: 24S / RANGE: 27E / SECTION: 12 / LAT: 32.2359777 / LONG: -104.1365736 (TVD: 9360 feet, MD: 16649 feet)

BLM Point of Contact

Name: Priscilla Perez
Title: Legal Instruments Examiner
Phone: 5752345934
Email: pperez@blm.gov

Review and Appeal Rights

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

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Mewbourne Oil Company**
LEASE NO.:	**NMNM018613A**
WELL NAME & NO.:	WestLoving 11-12 W0BA Fed Com 1H
SURFACE HOLE FOOTAGE:	1310'/S & 2435'/E
BOTTOM HOLE FOOTAGE	440'/N & 330'/E
LOCATION:	Section 11, T.24 S., R.27 E., NMPM
COUNTY:	Eddy County, New Mexico

COA

H2S	○ Yes	◉ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	○ Low	◉ Medium	○ High
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	○ Multibowl	◉ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☑ COM	☐ Unit

A. HYDROGEN SULFIDE

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.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **375 feet** (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and 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 will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to

include the lead cement)

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing shall be set at approximately **2200 feet** is:

Option 1 (Single Stage):

- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

Option 2:

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

a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.

b. Second stage above DV tool:

- Cement to surface. If cement does not circulate, contact the appropriate BLM office.
  Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

3. The minimum required fill of cement behind the **7** inch production casing is:

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

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

- Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

C. PRESSURE CONTROL

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

2.

Option 1:

a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.

b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **3000 (3M)** psi.

c. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the production casing shoe shall be **5000 (5M)** psi.

Option 2:

1. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
    e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

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.

GENERAL REQUIREMENTS

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

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

☒ Chaves and Roosevelt Counties
Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
During office hours call (575) 627-0272.
After office hours call (575)

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

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

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

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

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

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

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

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the

plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead 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).

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

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

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

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

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

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

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

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL COMPANY
LEASE NO.:	NMNM18613A
WELL NAME & NO.:	2H- WESTLOVING 11/12 W0GH FED COM
SURFACE HOLE FOOTAGE:	1340'/N & 2435'/E
BOTTOM HOLE FOOTAGE	1329'/N & 330'/E
LOCATION:	Section. 11.,T24S.,R.27E., NMP
COUNTY:	EDDY County, New Mexico

TABLE OF CONTENTS

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

☒ **Special Requirements**
Texas Hornshell Conservation Measures

I. SPECIAL REQUIREMENT(S)

Texas Hornshell Conservation Measures

- Implement erosion control measures in accordance with the Reasonable and Prudent Practices for Stabilization ("RAPPS")
- Comply with SPCC requirements in accordance with 40 CFR Part 112
- Educate Personnel, agents, and contractors about the requirements of the CP and this CCA and provide direction in accordance with the Conservation Measures. CEHMM will notify the Participant to resolve any issues with their subcontractors
- Provide CEHMM with the permit, lease, grant or other authorization from the BLM if applicable
- Provide CEHMM plats or other electronic media describing the New Surface Disturbance and existing surface disturbance utilized for the Project

The entire well pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of

the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The top soil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

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

When crossing ephemeral drainages the pipeline(s) will be buried to a minimum depth of 48 inches from the top of pipe to ground level. Erosion control methods such as gabions and/or rock aprons should be placed on both up and downstream sides of the pipeline crossing. In addition, curled (weed free) wood/straw fiber wattles/logs and/or silt fences should be placed on the downstream side for sediment control during construction and maintained until soils and vegetation have stabilized. Water bars should be placed within the ROW to divert and dissipate surface runoff. A pipeline access road is not permitted to cross these ephemeral drainages. Traffic should be diverted to a preexisting route. Additional seeding may be required in floodplains and drainages to restore energy dissipating vegetation.

A leak detection plan will be submitted to the BLM Carlsbad Field Office for approval prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

Any water erosion that may occur due to the construction of overhead electric line and during the life of the power line will be quickly corrected and proper measures will be taken to prevent future erosion. A power pole should not be placed drainages or floodplains and must span across the features at a distance away that would not promote further erosion.

AFMSS

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

Operator Certification Data Report

06/27/2019

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:** 08/01/2018

Title: Regulatory

Street Address: PO Box 5270

City: Hobbs **State:** NM **Zip:** 88240

Phone: (575)393-5905

Email address: bbishop@mewbourne.com

Field Representative

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

AFMSS

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

Application Data Report

06/27/2019

APD ID: 10400032380 **Submission Date:** 08/01/2018

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

Well Type: CONVENTIONAL GAS WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID: 10400032380 **Tie to previous NOS?** 10400006191 **Submission Date:** 08/01/2018

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: NMNM018613A **Lease Acres:** 760.24

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: Westloving11_12W0GHFedCom2H__operatorletterofdesignation_20180724112150.pdf

Operator Info

Operator Organization Name: MEWBOURNE OIL COMPANY

Operator Address: PO Box 5270 **Zip:** 88240

Operator PO Box:

Operator City: Hobbs **State:** NM

Operator Phone: (575)393-5905

Operator Internet Address:

Section 2 - Well Information

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

Well in Master SUPO? NO **Master SUPO name:**

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

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H **Well API Number:**

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

Is the proposed well in an area containing other mineral resources? USEABLE WATER

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

Describe other minerals:

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** NO **New surface disturbance?**

Type of Well Pad: MULTIPLE WELL **Multiple Well Pad Name:** WEST LOVING 11/12 **Number:** 3

Well Class: HORIZONTAL **Number of Legs:**

Well Work Type: Drill

Well Type: CONVENTIONAL GAS WELL

Describe Well Type:

Well sub-Type: APPRAISAL

Describe sub-type:

Distance to town: 7 Miles **Distance to nearest well:** 60 FT **Distance to lease line:** 330 FT

Reservoir well spacing assigned acres Measurement: 480 Acres

Well plat: Westloving11_12W0GHFedCom2H__wellplat_20180724112432.pdf

Well work start Date: 10/24/2018 **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	TVD
SHL Leg #1	1340	FNL	2435	FEL	24S	27E	11	Aliquot SWNE	32.2357904	-104.160766	EDDY	NEW MEXICO	NEW MEXICO	F	FEE	3124	27	27
KOP Leg #1	1329	FNL	2629	FEL	24S	27E	11	Aliquot SWNE	32.235816	-104.161934	EDDY	NEW MEXICO	NEW MEXICO	F	FEE	-5572	8700	8696
PPP Leg #1	1329	FNL	2309	FEL	24S	27E	11	Aliquot SWNE	32.2358228	-104.160584	EDDY	NEW MEXICO	NEW MEXICO	F	FEE	-6023	9289	9147

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
PPP Leg #1	1329	FNL	1319	FEL	24S	27E	11	Aliquot SENE	32.2358439	-104.1571565	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 018613A	-6071	10282	9195
PPP Leg #1	1329	FNL	0	FWL	24S	27E	12	Aliquot SWNW	32.2358719	-104.1528905	EDDY	NEW MEXICO	NEW MEXICO	S	STATE	-6105	11601	9229
EXIT Leg #1	1329	FNL	330	FEL	24S	27E	12	Aliquot SENE	32.2359777	-104.1365736	EDDY	NEW MEXICO	NEW MEXICO	S	STATE	-6236	16649	9360
BHL Leg #1	1329	FNL	330	FEL	24S	27E	12	Aliquot SENE	32.2359777	-104.1365736	EDDY	NEW MEXICO	NEW MEXICO	S	STATE	-6236	16649	9360

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:	FEE, NMNM 018613A
Legal Description of Land:	Section 11, T24S, R27E, Eddy County, New Mexico. Location @ 1340 FNL & 2435 FEL
Formation (if applicable):	Wolfcamp
Bond Coverage:	$150,000
BLM Bond File:	NM1693 nationwide, NMB000919

Authorized Signature: Bradley C Bishop

Name: Bradley Bishop
Title: Regulatory Manager
Date: 7-11-18

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

Pressure Rating (PSI): 5M **Rating Depth:** 16649

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. A multi-bowl wellhead is being used. See attached schematic.
Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold.

Choke Diagram Attachment:

West_Loving_11_12_W0GH_Fed_Com_2H_5M_BOPE_Choke_Diagram_20180730161655.pdf

West_Loving_11_12_W0GH_Fed_Com_2H_Flex_Line_Specs_20180730161656.pdf

BOP Diagram Attachment:

West_Loving_11_12_W0GH_Fed_Com_2H_5M_BOPE_Schematic_20180730161707.pdf

West_Loving_11_12_W0GH_Fed_Com_2H_Multi_Bowl_WH_20180730161709.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	375	0	375	3151		375	H-40	48	STC	4.49	10.08	DRY	17.89	DRY	30.06
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	2200	0	2200	3151		2200	J-55	36	LTC	1.71	2.98	DRY	5.53	DRY	6.89
3	PRODUCTION	8.75	7.0	NEW	API	N	0	9436	0	9173	3151		9436	P-110	26	LTC	1.72	2.2	DRY	2.62	DRY	3.38
4	LINER	6.125	4.5	NEW	API	N	8700	16649	8696	9360			7949	P-110	13.5	LTC	1.69	1.96	DRY	3.15	DRY	3.93

Casing Attachments

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

West_Loving_11_12_W0GH_Fed_Com_2H_Csg_Assumptions_20180730162938.pdf

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

West_Loving_11_12_W0GH_Fed_Com_2H_Csg_Assumptions_20180730162926.pdf

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

West_Loving_11_12_W0GH_Fed_Com_2H_Csg_Assumptions_20180730162918.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

Casing Attachments

Casing ID: 4 **String Type:**LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

West_Loving_11_12_W0GH_Fed_Com_2H_Csg_Assumptions_20180730162908.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	186	125	2.12	12.5	265	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		186	375	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	1548	300	2.12	12.5	636	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		1548	2200	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	3285	2000	2626	60	2.12	12.5	127	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		2626	3285	100	1.34	14.8	134	25	Class C	Retarder
PRODUCTION	Lead	3285	3285	6935	325	2.12	12.5	689	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		6935	9436	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		8700	16649	320	2.97	11.2	950	25	Class H	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-Settling Agent

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: Lost circulation material Sweeps Mud scavengers in surface hole

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

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	375	SPUD MUD	8.6	8.8							
375	2200	SALT SATURATED	10	10							
2200	9173	WATER-BASED MUD	8.6	9.5							
9173	9360	OIL-BASED MUD	10	12							MW up to 13.0 ppg may be required for shale control. The highest MW needed to balance formation pressure is expected to be 12.0 ppg.

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

Section 6 - Test, Logging, Coring

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

Will run GR/CNL from KOP (8700') 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: 5841 **Anticipated Surface Pressure:** 3464.34

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:

West_Loving_11_12_W0GH_Fed_Com_2H_H2S_Plan_20180730164348.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

West_Loving_11_12_W0GH_Fed_Com_2H_Dir_Plot_20180730164445.pdf
West_Loving_11_12_W0GH_Fed_Com_2H_Dir_Plan_20180730164445.pdf

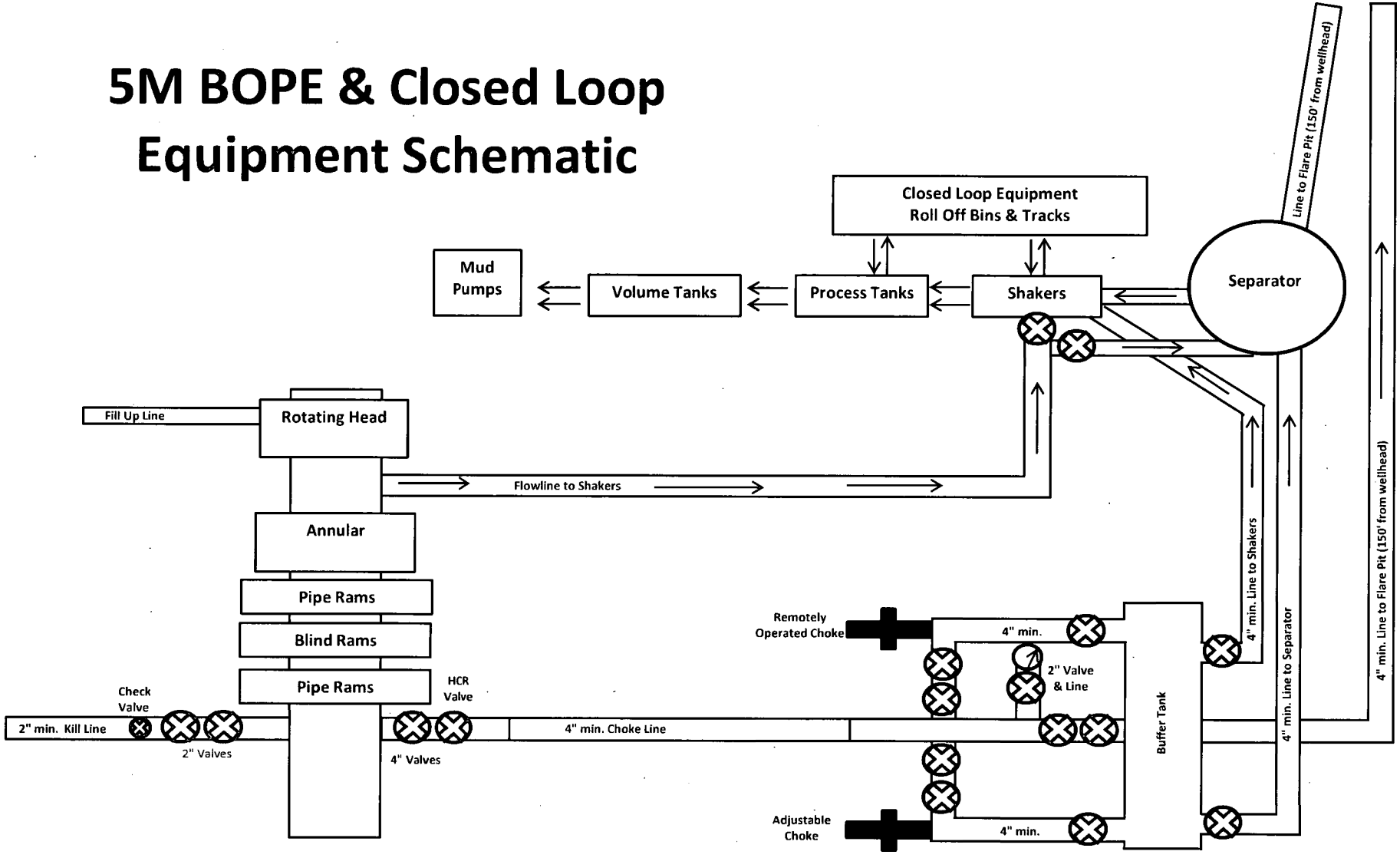
Other proposed operations facets description:

Other proposed operations facets attachment:

West_Loving_11_12_W0GH_Fed_Com_2H_C_101_20180730165030.pdf
West_Loving_11_12_W0GH_Fed_Com_2H_Drlg_Program_20181218160722.doc

Other Variance attachment:

5M BOPE & Closed Loop Equipment Schematic



Drawing not to scale

Note: All valves & lines on choke manifold are 4" unless otherwise noted. Exact manifold configuration may vary.

ENGINEERING & SERVICES

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

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

10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE

Customer :	AUSTIN DISTRIBUTING	Test Date:	4/30/2015
Customer Ref. :	4060578	Hose Serial No.:	D-043015-7
Invoice No. :	500506	Created By:	JUSTIN CROPPER

Product Description:	10K3.548.0CK4.1/1610KFLGE/E LE

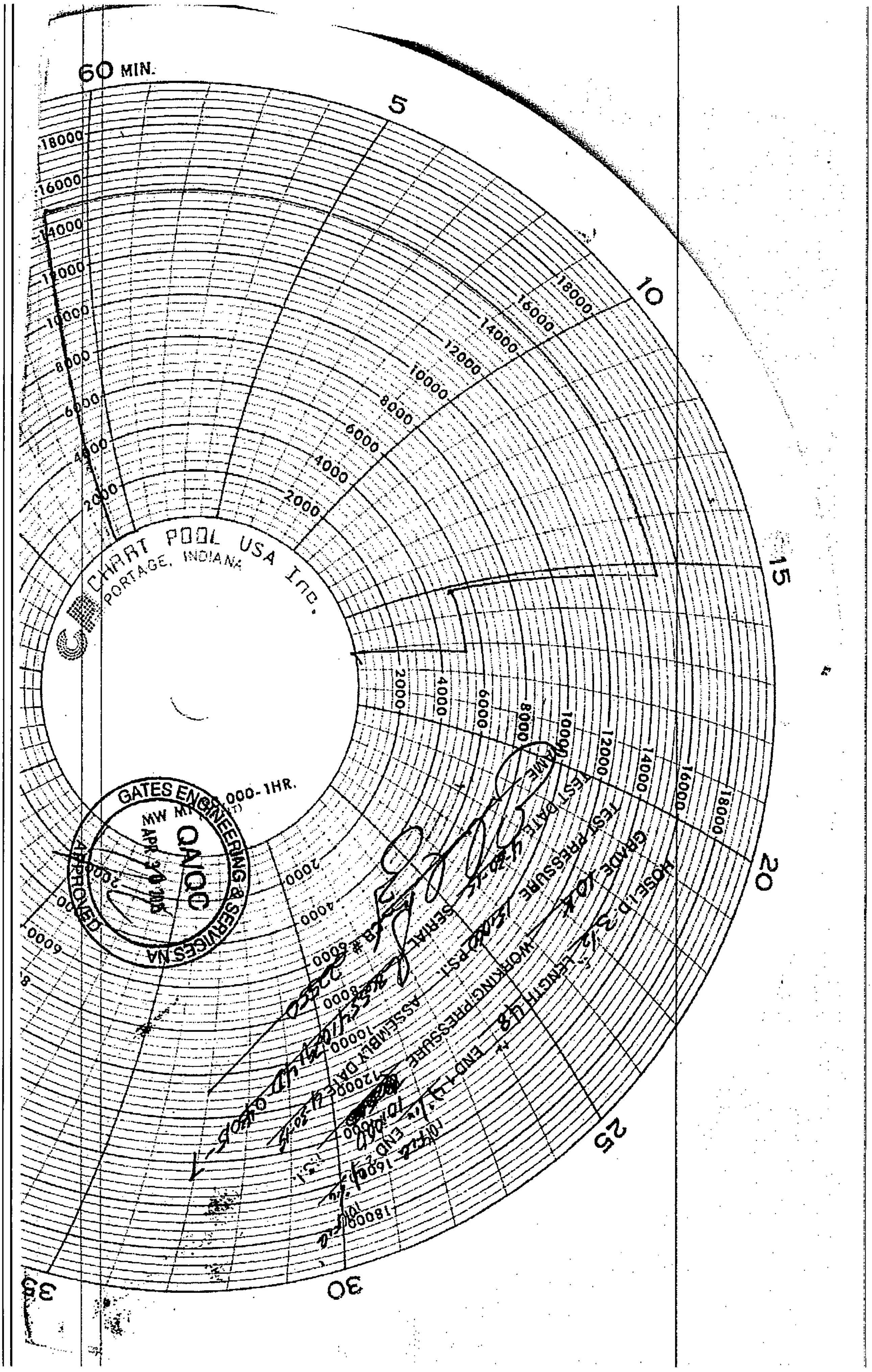
End Fitting 1 :	4 1/16 10K FLG	End Fitting 2 :	4 1/16 10K FLG
Gates Part No. :	4773-6290	Assembly Code :	L36554102914D-043015-7
Working Pressure :	10,000 PSI	Test Pressure :	15,000 PSI

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

Quality Manager :	QUALITY	Produciton:	PRODUCTION
Date :	4/30/2015	Date :	4/30/2015
Signature :		Signature :	

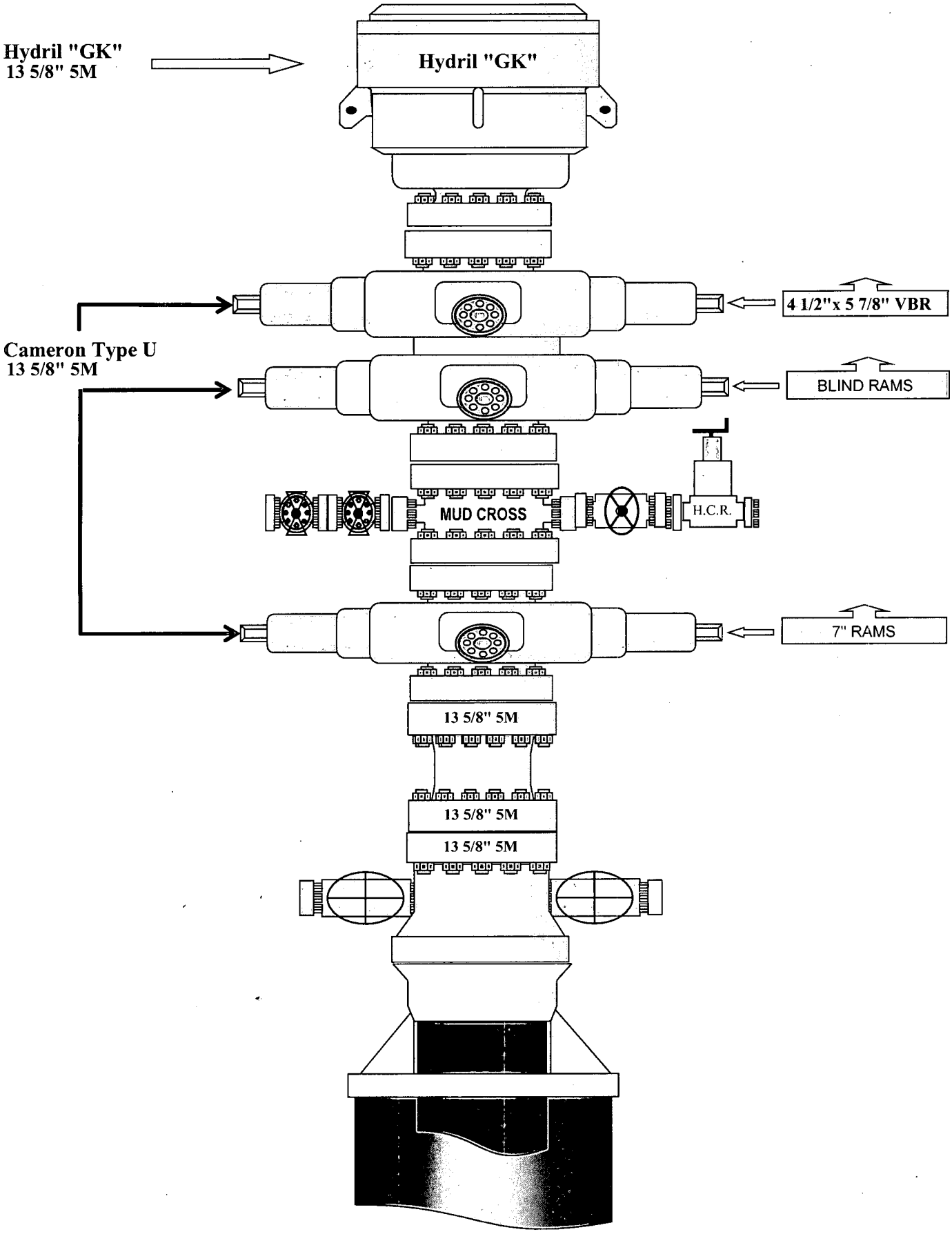
Form PTC - 01 Rev.0 2

Gates BLACK GOLD



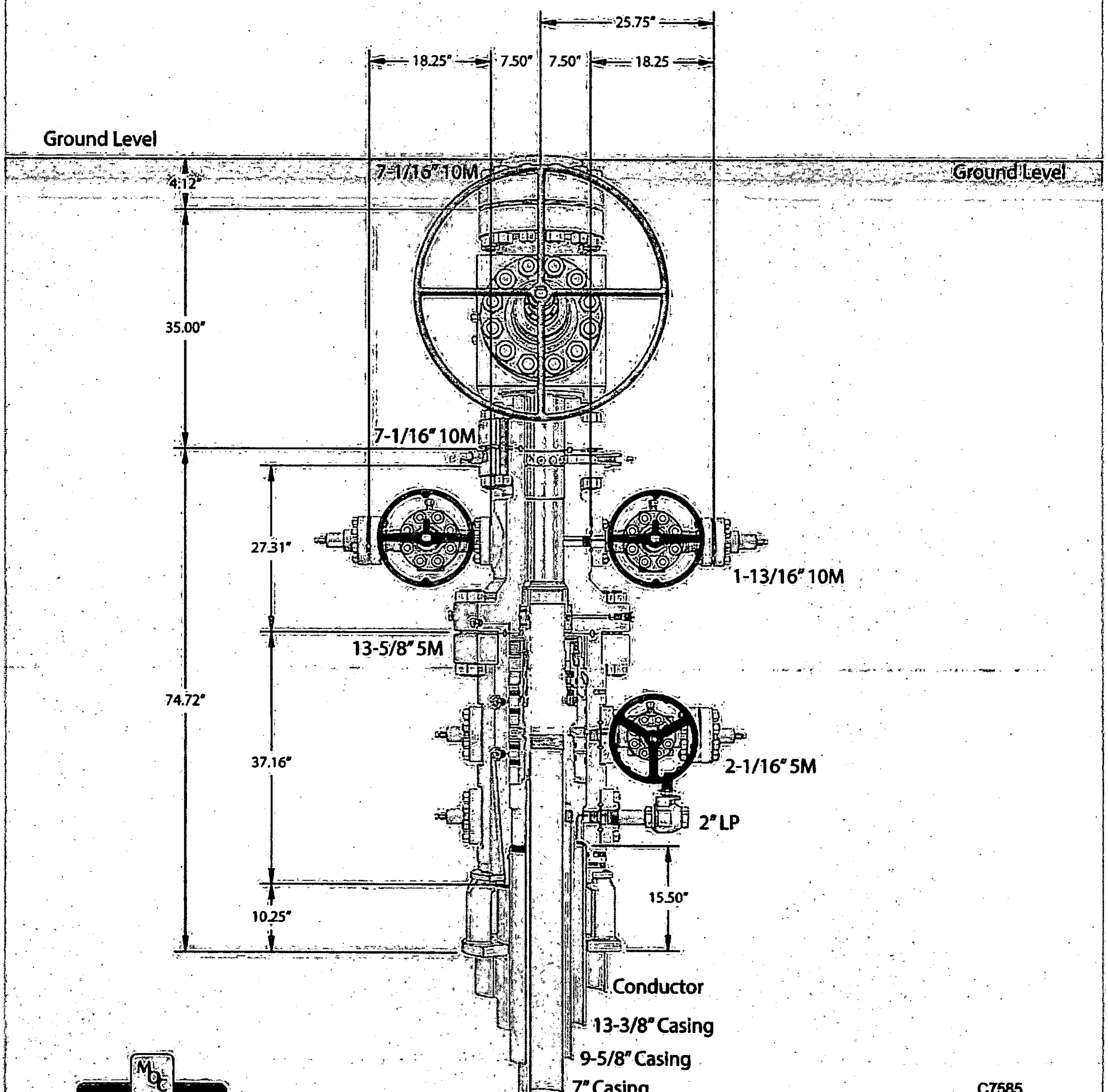
60 MIN.
CHART POOL USA Inc.
PORTAGE, INDIANA
GATES ENGINEERING & SERVICES NA
QA/QC
APPROVED
HOSE I.D.
LENGTH
END 1
END 2
GRADE
WORKING PRESSURE
TEST PRESSURE
P.S.I.
TEST DATE
TIME
SERIAL
ASSEMBLY DATE

5M BOPE Schematic



CAMERON
A Schlumberger Company

13-5/8" MN-DS Wellhead System



MEWBOURNE OIL COMPANY

Capping flange 57" conductor cut-off
79

C7585
Rev. 02
NOTE: All dimensions on this drawing are estimated measurements and should be evaluated by engineering.

Mewbourne Oil Company, West Loving 11/12 W0GH Fed Com #2H
Sec 11, T24S, R27E
SL: 1340' FNL & 2435' FEL, Sec 11
BHL: 1329' FNL & 330' FEL, Sec 12

Casing Program

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
17.5"	0'	375'	13.375"	48	H40	STC	4.49	10.08	17.89	30.06
12.25"	0'	2200'	9.625"	36	J55	LTC	1.71	2.98	5.53	6.89
8.75"	0'	9436'	7"	26	HCP110	LTC	1.72	2.20	2.62	3.38
6.125"	8700'	16,649'	4.5"	13.5	P110	LTC	1.69	1.96	3.15	3.93
			BLM Minimum Safety Factor				1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Must have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	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 3rd 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 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Mewbourne Oil Company, West Loving 11/12 W0GH Fed Com #2H
Sec 11, T24S, R27E
SL: 1340' FNL & 2435' FEL, Sec 11
BHL: 1329' FNL & 330' FEL, Sec 12

Casing Program

Hole Size	Casing Interval From	To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
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Mewbourne Oil Company, West Loving 11/12 W0GH Fed Com #2H
Sec 11, T24S, R27E
SL: 1340' FNL & 2435' FEL, Sec 11
BHL: 1329' FNL & 330' FEL, Sec 12

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All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

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Mewbourne Oil Company, West Loving 11/12 W0GH Fed Com #2H
Sec 11, T24S, R27E
SL: 1340' FNL & 2435' FEL, Sec 11
BHL: 1329' FNL & 330' FEL, Sec 12

Casing Program

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6.125"	8700'	16,649'	4.5"	13.5	P110	LTC	1.69	1.96	3.15	3.93
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All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

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If yes, are there three strings cemented to surface?	

Hydrogen Sulfide Drilling Operations Plan
Mewbourne Oil Company

1. General Requirements

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

2. Hydrogen Sulfide Training

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

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

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

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

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

3. Hydrogen Sulfide Safety Equipment and Systems

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

1. Well Control Equipment
   - A. Choke manifold with minimum of one adjustable choke/remote choke.
   - B. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
   - C. Auxiliary equipment including annular type blowout preventer.
2. Protective Equipment for Essential Personnel
   Thirty minute self contained work unit located in the dog house and at briefing areas.

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

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

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

4. Mud Program

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

5. Metallurgy

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

6. Communications

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

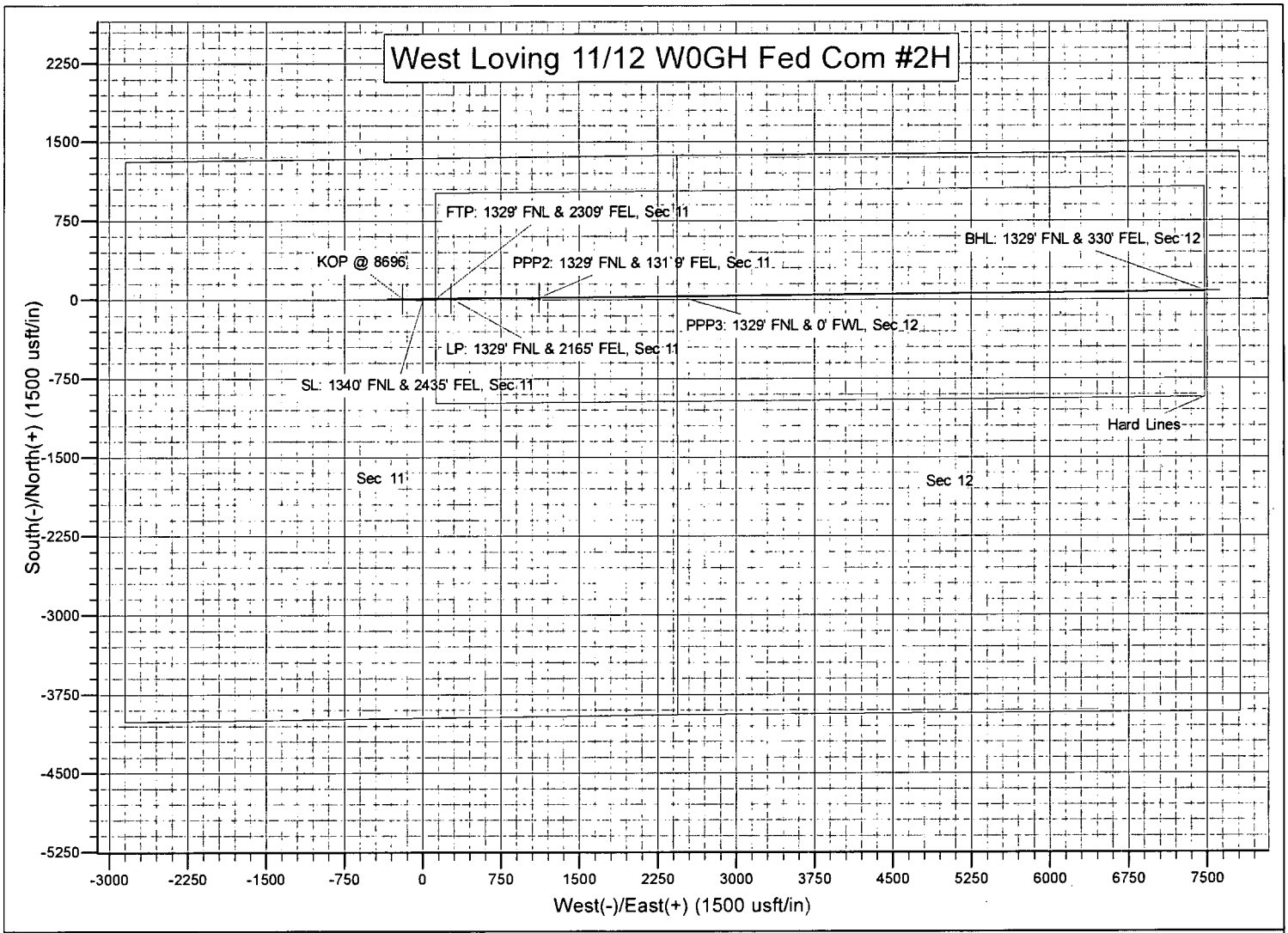
7. Well Testing

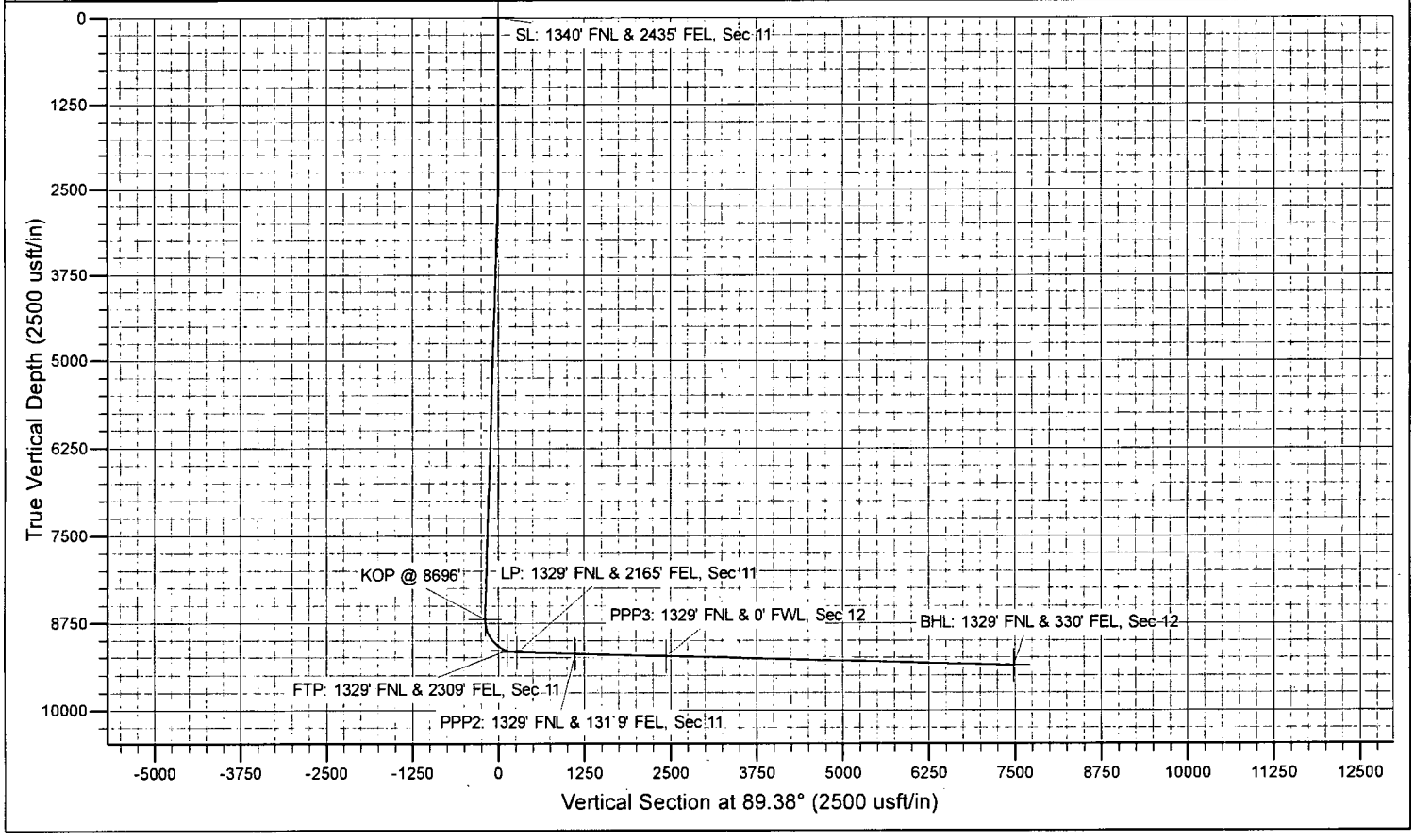
Drill stem testing is not an anticipated requirement for evaluation of this well. If a drill stem test is required, it will be conducted with a minimum number of personnel in the immediate vicinity. The test will be conducted during daylight hours only.

8. Emergency Phone Numbers

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

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


West Loving 11/12 W0GH Fed Com #2H
FTP: 1329' FNL & 2309' FEL, Sec 11
BHL: 1329' FNL & 330' FEL, Sec 12
KOP @ 8696'
PPP2: 1329' FNL & 131'9' FEL, Sec 11
PPP3: 1329' FNL & 0' FWL, Sec 12
LP: 1329' FNL & 2165' FEL, Sec 11
SL: 1340' FNL & 2435' FEL, Sec 11
Hard Lines
Sec 11
Sec 12
South(-)/North(+) (1500 usft/in)
West(-)/East(+) (1500 usft/in)


SL: 1340' FNL & 2435' FEL, Sec 11
KOP @ 8696'
LP: 1329' FNL & 2165' FEL, Sec 11
PPP3: 1329' FNL & 0' FWL, Sec 12
BHL: 1329' FNL & 330' FEL, Sec 12
FTP: 1329' FNL & 2309' FEL, Sec 11
PPP2: 1329' FNL & 131'9' FEL, Sec 11
True Vertical Depth (2500 usft/in)
Vertical Section at 89.38° (2500 usft/in)

Mewbourne Oil Company

Eddy County, New Mexico NAD 83
West Loving 11/12 W0GH Fed Com #2H
Sec 11, T24S, R27E
SL: 1340' FNL & 2435' FEL, Sec 11
BHL: 1329' FNL & 330' FEL, Sec 12

Plan: Design #1

Standard Planning Report

26 July, 2018

Planning Report

Database:	Hobbs	**Local Co-ordinate Reference:**	Site West Loving 11/12 W0GH Fed Com #2H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3151.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3151.0usft (Original Well Elev)
Site:	West Loving 11/12 W0GH Fed Com #2H	**North Reference:**	Grid
Well:	Sec 11, T24S, R27E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 1329' FNL & 330' FEL, Sec 12		
Design:	Design #1		

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

Site	West Loving 11/12 W0GH Fed Com #2H				
Site Position:		**Northing:**	449,557.00 usft	**Latitude:**	32.2357904
From:	Map	**Easting:**	594,694.00 usft	**Longitude:**	-104.1607660
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.09 °

Well	Sec 11, T24S, R27E					
Well Position	**+N/-S**	0.0 usft	**Northing:**	449,557.00 usft	**Latitude:**	32.2357904
	+E/-W	0.0 usft	**Easting:**	594,694.00 usft	**Longitude:**	-104.1607660
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	3,151.0 usft	**Ground Level:**	3,124.0 usft

Wellbore	BHL: 1329' FNL & 330' FEL, Sec 12				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	7/25/2018	6.98	59.92	47,854

Design	Design #1			
Audit Notes:				
Version:	**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**
	0.0	0.0	0.0	89.38

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,350.0	0.00	0.00	2,350.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,469.1	1.79	272.66	2,469.1	0.1	-1.9	1.50	1.50	0.00	272.66	
8,580.5	1.79	272.66	8,577.5	8.9	-192.1	0.00	0.00	0.00	0.00	
8,699.5	0.00	0.00	8,696.5	9.0	-194.0	1.50	-1.50	0.00	180.00	KOP @ 8696'
9,435.9	88.51	89.46	9,173.0	13.4	270.2	12.02	12.02	0.00	89.46	
16,648.4	88.51	89.46	9,360.0	81.0	7,480.0	0.00	0.00	0.00	0.00	BHL: 1329' FNL & 33(

Database:	Hobbs	**Local Co-ordinate Reference:**	Site West Loving 11/12 W0GH Fed Com #2H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3151.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3151.0usft (Original Well Elev)
Site:	West Loving 11/12 W0GH Fed Com #2H	**North Reference:**	Grid
Well:	Sec 11, T24S, R27E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 1329' FNL & 330' FEL, Sec 12		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SL: 1340' FNL & 2435' FEL, Sec 11									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	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	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	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	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	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	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,350.0	0.00	0.00	2,350.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.75	272.66	2,400.0	0.0	-0.3	-0.3	1.50	1.50	0.00
2,469.1	1.79	272.66	2,469.1	0.1	-1.9	-1.9	1.50	1.50	0.00
2,500.0	1.79	272.66	2,500.0	0.1	-2.8	-2.8	0.00	0.00	0.00
2,600.0	1.79	272.66	2,599.9	0.3	-5.9	-5.9	0.00	0.00	0.00
2,700.0	1.79	272.66	2,699.9	0.4	-9.0	-9.0	0.00	0.00	0.00
2,800.0	1.79	272.66	2,799.8	0.6	-12.2	-12.2	0.00	0.00	0.00
2,900.0	1.79	272.66	2,899.8	0.7	-15.3	-15.3	0.00	0.00	0.00
3,000.0	1.79	272.66	2,999.7	0.9	-18.4	-18.4	0.00	0.00	0.00
3,100.0	1.79	272.66	3,099.7	1.0	-21.5	-21.5	0.00	0.00	0.00
3,200.0	1.79	272.66	3,199.6	1.1	-24.6	-24.6	0.00	0.00	0.00
3,300.0	1.79	272.66	3,299.6	1.3	-27.7	-27.7	0.00	0.00	0.00
3,400.0	1.79	272.66	3,399.5	1.4	-30.8	-30.8	0.00	0.00	0.00
3,500.0	1.79	272.66	3,499.5	1.6	-34.0	-33.9	0.00	0.00	0.00
3,600.0	1.79	272.66	3,599.4	1.7	-37.1	-37.0	0.00	0.00	0.00
3,700.0	1.79	272.66	3,699.4	1.9	-40.2	-40.2	0.00	0.00	0.00
3,800.0	1.79	272.66	3,799.3	2.0	-43.3	-43.3	0.00	0.00	0.00
3,900.0	1.79	272.66	3,899.3	2.2	-46.4	-46.4	0.00	0.00	0.00
4,000.0	1.79	272.66	3,999.2	2.3	-49.5	-49.5	0.00	0.00	0.00
4,100.0	1.79	272.66	4,099.2	2.4	-52.6	-52.6	0.00	0.00	0.00
4,200.0	1.79	272.66	4,199.1	2.6	-55.8	-55.7	0.00	0.00	0.00
4,300.0	1.79	272.66	4,299.1	2.7	-58.9	-58.8	0.00	0.00	0.00
4,400.0	1.79	272.66	4,399.0	2.9	-62.0	-61.9	0.00	0.00	0.00
4,500.0	1.79	272.66	4,499.0	3.0	-65.1	-65.1	0.00	0.00	0.00
4,600.0	1.79	272.66	4,598.9	3.2	-68.2	-68.2	0.00	0.00	0.00
4,700.0	1.79	272.66	4,698.9	3.3	-71.3	-71.3	0.00	0.00	0.00
4,800.0	1.79	272.66	4,798.8	3.5	-74.4	-74.4	0.00	0.00	0.00
4,900.0	1.79	272.66	4,898.8	3.6	-77.5	-77.5	0.00	0.00	0.00
5,000.0	1.79	272.66	4,998.8	3.7	-80.7	-80.6	0.00	0.00	0.00

Database:	Hobbs	**Local Co-ordinate Reference:**	Site West Loving 11/12 W0GH Fed Com #2H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3151.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3151.0usft (Original Well Elev)
Site:	West Loving 11/12 W0GH Fed Com #2H	**North Reference:**	Grid
Well:	Sec 11, T24S, R27E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 1329' FNL & 330' FEL, Sec 12		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,100.0	1.79	272.66	5,098.7	3.9	-83.8	-83.7	0.00	0.00	0.00
5,200.0	1.79	272.66	5,198.7	4.0	-86.9	-86.8	0.00	0.00	0.00
5,300.0	1.79	272.66	5,298.6	4.2	-90.0	-90.0	0.00	0.00	0.00
5,400.0	1.79	272.66	5,398.6	4.3	-93.1	-93.1	0.00	0.00	0.00
5,500.0	1.79	272.66	5,498.5	4.5	-96.2	-96.2	0.00	0.00	0.00
5,600.0	1.79	272.66	5,598.5	4.6	-99.3	-99.3	0.00	0.00	0.00
5,700.0	1.79	272.66	5,698.4	4.8	-102.5	-102.4	0.00	0.00	0.00
5,800.0	1.79	272.66	5,798.4	4.9	-105.6	-105.5	0.00	0.00	0.00
5,900.0	1.79	272.66	5,898.3	5.0	-108.7	-108.6	0.00	0.00	0.00
6,000.0	1.79	272.66	5,998.3	5.2	-111.8	-111.7	0.00	0.00	0.00
6,100.0	1.79	272.66	6,098.2	5.3	-114.9	-114.8	0.00	0.00	0.00
6,200.0	1.79	272.66	6,198.2	5.5	-118.0	-118.0	0.00	0.00	0.00
6,300.0	1.79	272.66	6,298.1	5.6	-121.1	-121.1	0.00	0.00	0.00
6,400.0	1.79	272.66	6,398.1	5.8	-124.3	-124.2	0.00	0.00	0.00
6,500.0	1.79	272.66	6,498.0	5.9	-127.4	-127.3	0.00	0.00	0.00
6,600.0	1.79	272.66	6,598.0	6.1	-130.5	-130.4	0.00	0.00	0.00
6,700.0	1.79	272.66	6,697.9	6.2	-133.6	-133.5	0.00	0.00	0.00
6,800.0	1.79	272.66	6,797.9	6.3	-136.7	-136.6	0.00	0.00	0.00
6,900.0	1.79	272.66	6,897.8	6.5	-139.8	-139.7	0.00	0.00	0.00
7,000.0	1.79	272.66	6,997.8	6.6	-142.9	-142.9	0.00	0.00	0.00
7,100.0	1.79	272.66	7,097.7	6.8	-146.0	-146.0	0.00	0.00	0.00
7,200.0	1.79	272.66	7,197.7	6.9	-149.2	-149.1	0.00	0.00	0.00
7,300.0	1.79	272.66	7,297.6	7.1	-152.3	-152.2	0.00	0.00	0.00
7,400.0	1.79	272.66	7,397.6	7.2	-155.4	-155.3	0.00	0.00	0.00
7,500.0	1.79	272.66	7,497.5	7.4	-158.5	-158.4	0.00	0.00	0.00
7,600.0	1.79	272.66	7,597.5	7.5	-161.6	-161.5	0.00	0.00	0.00
7,700.0	1.79	272.66	7,697.4	7.6	-164.7	-164.6	0.00	0.00	0.00
7,800.0	1.79	272.66	7,797.4	7.8	-167.8	-167.8	0.00	0.00	0.00
7,900.0	1.79	272.66	7,897.3	7.9	-171.0	-170.9	0.00	0.00	0.00
8,000.0	1.79	272.66	7,997.3	8.1	-174.1	-174.0	0.00	0.00	0.00
8,100.0	1.79	272.66	8,097.2	8.2	-177.2	-177.1	0.00	0.00	0.00
8,200.0	1.79	272.66	8,197.2	8.4	-180.3	-180.2	0.00	0.00	0.00
8,300.0	1.79	272.66	8,297.1	8.5	-183.4	-183.3	0.00	0.00	0.00
8,400.0	1.79	272.66	8,397.1	8.7	-186.5	-186.4	0.00	0.00	0.00
8,500.0	1.79	272.66	8,497.1	8.8	-189.6	-189.5	0.00	0.00	0.00
8,580.5	1.79	272.66	8,577.5	8.9	-192.1	-192.0	0.00	0.00	0.00
8,600.0	1.49	272.66	8,597.0	8.9	-192.7	-192.6	1.50	-1.50	0.00
8,699.5	0.00	0.00	8,696.5	9.0	-194.0	-193.9	1.50	-1.50	0.00
KOP @ 8696'									
8,700.0	0.05	89.46	8,697.0	9.0	-194.0	-193.9	12.02	12.02	0.00
8,800.0	12.08	89.46	8,796.2	9.1	-183.5	-183.3	12.02	12.02	0.00
8,900.0	24.10	89.46	8,891.1	9.4	-152.5	-152.4	12.02	12.02	0.00
9,000.0	36.12	89.46	8,977.5	9.9	-102.4	-102.3	12.02	12.02	0.00
9,100.0	48.14	89.46	9,051.5	10.5	-35.4	-35.3	12.02	12.02	0.00
9,200.0	60.16	89.46	9,110.0	11.2	45.5	45.6	12.02	12.02	0.00
9,288.7	70.82	89.46	9,146.7	12.0	126.0	126.1	12.02	12.02	0.00
FTP: 1329' FNL & 2309' FEL, Sec 11									
9,300.0	72.18	89.46	9,150.3	12.1	136.8	136.9	12.02	12.02	0.00
9,400.0	84.20	89.46	9,170.7	13.0	234.5	234.6	12.02	12.02	0.00
9,435.8	88.51	89.46	9,173.0	13.4	270.2	270.3	12.02	12.02	0.00
LP: 1329' FNL & 2165' FEL, Sec 11									
9,500.0	88.51	89.46	9,174.7	14.0	334.4	334.5	0.01	0.01	0.00
9,600.0	88.51	89.46	9,177.3	14.9	434.3	434.5	0.00	0.00	0.00

Database:	Hobbs	**Local Co-ordinate Reference:**	Site West Loving 11/12 W0GH Fed Com #2H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3151.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3151.0usft (Original Well Elev)
Site:	West Loving 11/12 W0GH Fed Com #2H	**North Reference:**	Grid
Well:	Sec 11, T24S, R27E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 1329' FNL & 330' FEL, Sec 12		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,700.0	88.51	89.46	9,179.8	15.8	534.3	534.4	0.00	0.00	0.00
9,800.0	88.51	89.46	9,182.4	16.8	634.2	634.4	0.00	0.00	0.00
9,900.0	88.51	89.46	9,185.0	17.7	734.2	734.4	0.00	0.00	0.00
10,000.0	88.51	89.46	9,187.6	18.6	834.2	834.3	0.00	0.00	0.00
10,100.0	88.51	89.46	9,190.2	19.6	934.1	934.3	0.00	0.00	0.00
10,200.0	88.51	89.46	9,192.8	20.5	1,034.1	1,034.3	0.00	0.00	0.00
10,281.9	88.51	89.46	9,194.9	21.3	1,116.0	1,116.2	0.00	0.00	0.00
PPP2: 1329' FNL & 1319' FEL, Sec 11									
10,300.0	88.51	89.46	9,195.4	21.5	1,134.1	1,134.2	0.00	0.00	0.00
10,400.0	88.51	89.46	9,198.0	22.4	1,234.0	1,234.2	0.00	0.00	0.00
10,500.0	88.51	89.46	9,200.6	23.3	1,334.0	1,334.1	0.00	0.00	0.00
10,600.0	88.51	89.46	9,203.2	24.3	1,433.9	1,434.1	0.00	0.00	0.00
10,700.0	88.51	89.46	9,205.8	25.2	1,533.9	1,534.1	0.00	0.00	0.00
10,800.0	88.51	89.46	9,208.4	26.1	1,633.9	1,634.0	0.00	0.00	0.00
10,900.0	88.51	89.46	9,211.0	27.1	1,733.8	1,734.0	0.00	0.00	0.00
11,000.0	88.51	89.46	9,213.6	28.0	1,833.8	1,834.0	0.00	0.00	0.00
11,100.0	88.51	89.46	9,216.1	29.0	1,933.7	1,933.9	0.00	0.00	0.00
11,200.0	88.51	89.46	9,218.7	29.9	2,033.7	2,033.9	0.00	0.00	0.00
11,300.0	88.51	89.46	9,221.3	30.8	2,133.7	2,133.9	0.00	0.00	0.00
11,400.0	88.51	89.46	9,223.9	31.8	2,233.6	2,233.8	0.00	0.00	0.00
11,500.0	88.51	89.46	9,226.5	32.7	2,333.6	2,333.8	0.00	0.00	0.00
11,600.0	88.51	89.46	9,229.1	33.7	2,433.6	2,433.8	0.00	0.00	0.00
11,601.4	88.51	89.46	9,229.1	33.7	2,435.0	2,435.2	0.00	0.00	0.00
PPP3: 1329' FNL & 0' FWL, Sec 12									
11,700.0	88.51	89.46	9,231.7	34.6	2,533.5	2,533.7	0.00	0.00	0.00
11,800.0	88.51	89.46	9,234.3	35.5	2,633.5	2,633.7	0.00	0.00	0.00
11,900.0	88.51	89.46	9,236.9	36.5	2,733.4	2,733.7	0.00	0.00	0.00
12,000.0	88.51	89.46	9,239.5	37.4	2,833.4	2,833.6	0.00	0.00	0.00
12,100.0	88.51	89.46	9,242.1	38.3	2,933.4	2,933.6	0.00	0.00	0.00
12,200.0	88.51	89.46	9,244.7	39.3	3,033.3	3,033.6	0.00	0.00	0.00
12,300.0	88.51	89.46	9,247.3	40.2	3,133.3	3,133.5	0.00	0.00	0.00
12,400.0	88.51	89.46	9,249.9	41.2	3,233.3	3,233.5	0.00	0.00	0.00
12,500.0	88.51	89.46	9,252.4	42.1	3,333.2	3,333.5	0.00	0.00	0.00
12,600.0	88.51	89.46	9,255.0	43.0	3,433.2	3,433.4	0.00	0.00	0.00
12,700.0	88.51	89.46	9,257.6	44.0	3,533.1	3,533.4	0.00	0.00	0.00
12,800.0	88.51	89.46	9,260.2	44.9	3,633.1	3,633.4	0.00	0.00	0.00
12,900.0	88.51	89.46	9,262.8	45.8	3,733.1	3,733.3	0.00	0.00	0.00
13,000.0	88.51	89.46	9,265.4	46.8	3,833.0	3,833.3	0.00	0.00	0.00
13,100.0	88.51	89.46	9,268.0	47.7	3,933.0	3,933.3	0.00	0.00	0.00
13,200.0	88.51	89.46	9,270.6	48.7	4,032.9	4,033.2	0.00	0.00	0.00
13,300.0	88.51	89.46	9,273.2	49.6	4,132.9	4,133.2	0.00	0.00	0.00
13,400.0	88.51	89.46	9,275.8	50.5	4,232.9	4,233.2	0.00	0.00	0.00
13,500.0	88.51	89.46	9,278.4	51.5	4,332.8	4,333.1	0.00	0.00	0.00
13,600.0	88.51	89.46	9,281.0	52.4	4,432.8	4,433.1	0.00	0.00	0.00
13,700.0	88.51	89.46	9,283.6	53.3	4,532.8	4,533.1	0.00	0.00	0.00
13,800.0	88.51	89.46	9,286.1	54.3	4,632.7	4,633.0	0.00	0.00	0.00
13,900.0	88.51	89.46	9,288.7	55.2	4,732.7	4,733.0	0.00	0.00	0.00
14,000.0	88.51	89.46	9,291.3	56.2	4,832.6	4,833.0	0.00	0.00	0.00
14,100.0	88.51	89.46	9,293.9	57.1	4,932.6	4,932.9	0.00	0.00	0.00
14,200.0	88.51	89.46	9,296.5	58.0	5,032.6	5,032.9	0.00	0.00	0.00
14,300.0	88.51	89.46	9,299.1	59.0	5,132.5	5,132.9	0.00	0.00	0.00
14,400.0	88.51	89.46	9,301.7	59.9	5,232.5	5,232.8	0.00	0.00	0.00
14,500.0	88.51	89.46	9,304.3	60.9	5,332.5	5,332.8	0.00	0.00	0.00
14,600.0	88.51	89.46	9,306.9	61.8	5,432.4	5,432.8	0.00	0.00	0.00

Database:	Hobbs	**Local Co-ordinate Reference:**	Site West Loving 11/12 W0GH Fed Com #2H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3151.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3151.0usft (Original Well Elev)
Site:	West Loving 11/12 W0GH Fed Com #2H	**North Reference:**	Grid
Well:	Sec 11, T24S, R27E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 1329' FNL & 330' FEL, Sec 12		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,700.0	88.51	89.46	9,309.5	62.7	5,532.4	5,532.7	0.00	0.00	0.00
14,800.0	88.51	89.46	9,312.1	63.7	5,632.3	5,632.7	0.00	0.00	0.00
14,900.0	88.51	89.46	9,314.7	64.6	5,732.3	5,732.7	0.00	0.00	0.00
15,000.0	88.51	89.46	9,317.3	65.5	5,832.3	5,832.6	0.00	0.00	0.00
15,100.0	88.51	89.46	9,319.9	66.5	5,932.2	5,932.6	0.00	0.00	0.00
15,200.0	88.51	89.46	9,322.4	67.4	6,032.2	6,032.6	0.00	0.00	0.00
15,300.0	88.51	89.46	9,325.0	68.4	6,132.2	6,132.5	0.00	0.00	0.00
15,400.0	88.51	89.46	9,327.6	69.3	6,232.1	6,232.5	0.00	0.00	0.00
15,500.0	88.51	89.46	9,330.2	70.2	6,332.1	6,332.5	0.00	0.00	0.00
15,600.0	88.51	89.46	9,332.8	71.2	6,432.0	6,432.4	0.00	0.00	0.00
15,700.0	88.51	89.46	9,335.4	72.1	6,532.0	6,532.4	0.00	0.00	0.00
15,800.0	88.51	89.46	9,338.0	73.0	6,632.0	6,632.4	0.00	0.00	0.00
15,900.0	88.51	89.46	9,340.6	74.0	6,731.9	6,732.3	0.00	0.00	0.00
16,000.0	88.51	89.46	9,343.2	74.9	6,831.9	6,832.3	0.00	0.00	0.00
16,100.0	88.51	89.46	9,345.8	75.9	6,931.8	6,932.3	0.00	0.00	0.00
16,200.0	88.51	89.46	9,348.4	76.8	7,031.8	7,032.2	0.00	0.00	0.00
16,300.0	88.51	89.46	9,351.0	77.7	7,131.8	7,132.2	0.00	0.00	0.00
16,400.0	88.51	89.46	9,353.6	78.7	7,231.7	7,232.2	0.00	0.00	0.00
16,500.0	88.51	89.46	9,356.2	79.6	7,331.7	7,332.1	0.00	0.00	0.00
16,600.0	88.51	89.46	9,358.7	80.5	7,431.7	7,432.1	0.00	0.00	0.00
16,648.4	88.51	89.46	9,360.0	81.0	7,480.0	7,480.4	0.00	0.00	0.00
BHL: 1329' FNL & 330' FEL, Sec 12									

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: 1340' FNL & 2435' F - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	449,557.00	594,694.00	32.2357904	-104.1607660
KOP @ 8696' - plan hits target center - Point	0.00	0.00	8,696.5	9.0	-194.0	449,566.00	594,500.00	32.2358160	-104.1613934
FTP: 1329' FNL & 2309' - plan hits target center - Point	0.00	0.00	9,146.7	12.0	126.0	449,569.00	594,820.00	32.2358228	-104.1603584
LP: 1329' FNL & 2165' F - plan hits target center - Point	0.00	0.00	9,173.0	13.4	270.2	449,570.40	594,964.20	32.2358260	-104.1598920
PPP2: 1329' FNL & 131' - plan hits target center - Point	0.00	0.00	9,194.9	21.3	1,116.0	449,578.29	595,810.00	32.2358439	-104.1571565
PPP3: 1329' FNL & 0' F\ - plan hits target center - Point	0.00	0.00	9,229.1	33.7	2,435.0	449,590.67	597,129.00	32.2358719	-104.1528905
BHL: 1329' FNL & 330' F - plan hits target center - Point	0.00	0.00	9,360.0	81.0	7,480.0	449,638.00	602,174.00	32.2359777	-104.1365736

Database:	Hobbs	**Local Co-ordinate Reference:**	Site West Loving 11/12 W0GH Fed Com #2H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3151.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3151.0usft (Original Well Elev)
Site:	West Loving 11/12 W0GH Fed Com #2H	**North Reference:**	Grid
Well:	Sec 11, T24S, R27E	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 1329' FNL & 330' FEL, Sec 12		
Design:	Design #1		

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DISTRICT II-ARTESIA O.C.D.

Operator Name:	Property Name:	Well Number
Mewbourne Oil Co.	West Loving 11/12 W0GH Fed Com	2H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
G	11	24S	27E		1329	N	2629	E	Eddy

Latitude	Longitude	NAD
32.2358160	-104.1613934	83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
G	11	24S	27E		1329	N	2309	E	Eddy

Latitude	Longitude	NAD
32.2358228	-104.1603584	83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
H	12	24S	27E		1329	N	330	E	Eddy

Latitude	Longitude	NAD
32.2359777	-104.1365736	83

Is this well the defining well for the Horizontal Spacing Unit? Y

Is this well an infill well?

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

API #

Operator Name:	Property Name:	Well Number

KZ 06/27/2018

Mewbourne Oil Company, West Loving 11/12 W0GH Fed Com #2H
Sec 11, T24S, R27E
SL: 1340' FNL & 2435' FEL, Sec 11
BHL: 1329' FNL & 330' FEL, Sec 12

1. Geologic Formations

TVD of target	9360'	Pilot hole depth	NA
MD at TD:	16,649'	Deepest expected fresh water:	75'

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface		
Rustler			
Top of Salt			
Castile	645		
Base of Salt	2060		
Yates			
Capitan			
Lamar	2270	Oil	
Bell Canyon	2320		
Cherry Canyon	3160		
Manzanita Marker	3285		
Brushy Canyon	4260		
Bone Spring	5755	Oil/Gas	
1st Bone Spring Sand	6790		
2nd Bone Spring Sand	7330		
3rd Bone Spring Sand	8685		
Abo			
Wolfcamp	9060	Target Zone	
Devonian			
Ellenburger			
Granite Wash			

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

Mewbourne Oil Company, West Loving 11/12 W0GH Fed Com #2H
Sec 11, T24S, R27E
SL: 1340' FNL & 2435' FEL, Sec 11
BHL: 1329' FNL & 330' FEL, Sec 12

2. Casing Program

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
17.5"	0'	375'	13.375"	48	H40	STC	4.49	10.08	17.89	30.06
12.25"	0'	2200'	9.625"	36	J55	LTC	1.71	2.98	5.53	6.89
8.75"	0'	9436'	7"	26	HCP110	LTC	1.72	2.20	2.62	3.38
6.125"	8700'	16,649'	4.5"	13.5	P110	LTC	1.69	1.96	3.15	3.93
BLM Minimum Safety Factor			1.125	1	1.6 Dry 1.8 Wet		1.6 Dry 1.8 Wet			

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Must have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	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 3rd 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 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	

Mewbourne Oil Company, West Loving 11/12 W0GH Fed Com #2H
Sec 11, T24S, R27E
SL: 1340' FNL & 2435' FEL, Sec 11
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Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H_20 gal/ sk	500# Comp. Strength (hours)	Slurry Description
Surf.	125	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.	300	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	325	12.5	2.12	11	9	Lead: Class C + Gel + Retarder + Defoamer + Extender
	400	15.6	1.18	5.2	10	Tail: Class H + Retarder + Fluid Loss + Defoamer
ECP/DV Tool @ 3285'						
Prod. Stg 2	60	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	100	14.8	1.34	6.3	8	Tail: Class H + Retarder
Liner	320	11.2	2.97	18	16	Class H + 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.

Casing String	TOC	% Excess
Surface	0'	100%
Intermediate	0'	25%
Production	2000'	25%
Liner	8700'	25%

Mewbourne Oil Company, West Loving 11/12 W0GH Fed Com #2H
Sec 11, T24S, R27E
SL: 1340' FNL & 2435' FEL, Sec 11
BHL: 1329' FNL & 330' FEL, Sec 12

4. Pressure Control Equipment

N	Variance: None

BOP installed and tested before drilling which hole?	Size?	System Rated WP	Type	✓	Tested to:
12-1/4"	13-5/8"	5M	Annular	X	2500#
			Blind Ram	X	5000#
			Pipe Ram	X	
			Double Ram		
			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.

Mewbourne Oil Company, West Loving 11/12 W0GH Fed Com #2H
Sec 11, T24S, R27E
SL: 1340' FNL & 2435' FEL, Sec 11
BHL: 1329' FNL & 330' FEL, Sec 12

Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.	
	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.	

5. Mud Program

TVD		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	375'	FW Gel	8.6-8.8	28-34	N/C
375'	2200'	Saturated Brine	10.0	28-34	N/C
2200'	9173'	Cut Brine	8.6-9.5	28-34	N/C
9173'	9360'	OBM	10.0-12.0	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 MW needed to balance formation pressure is expected to be 12.0 ppg.

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

6. Logging and Testing Procedures

Logging, Coring and Testing.	
X	Will run GR/CNL from KOP (8700') 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	8700' (KOP) to TD
	Density	
	CBL	
	Mud log	
	PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	5841 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.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions 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

Mewbourne Oil Company, West Loving 11/12 W0GH Fed Com #2H
Sec 11, T24S, R27E
SL: 1340' FNL & 2435' FEL, Sec 11
BHL: 1329' FNL & 330' FEL, Sec 12

___ Directional Plan
___ Other, describe

APD ID: 10400032380 **Submission Date:** 08/01/2018

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

Well Type: CONVENTIONAL GAS WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Westloving11_12W0GHFedCom2H__existingroadmap_20180724112748.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT **Row(s) Exist?** NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

Westloving11_12W0GHFedCom2H__newroadmap_20180724112845.pdf

New road type: RESOURCE

Length: 283.98 Feet **Width (ft.):** 30

Max slope (%): 3 **Max grade (%):** 3

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: None

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

Access surfacing type: OTHER

Access topsoil source: OFFSITE

Access surfacing type description: Caliche

Access onsite topsoil source depth:

Offsite topsoil source description: Topsoil will be on edge of lease road.

Onsite topsoil removal process:

Access other construction information: None

Access miscellaneous information: None

Number of access turnouts: 1 **Access turnout map:**

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: None

Road Drainage Control Structures (DCS) description: None

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Westloving11_12W0GHFedCom2H_existingwellmap_20180724112909.pdf

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: Battery will be N of location off of incoming road & buried Sendero pipeline.

Production Facilities map:

Westloving11_12W0GHFedCom2H_productionfacilitymap_20180724112945.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

Water source use type: DUST CONTROL, INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE CASING

Water source type: IRRIGATION

Describe type:

Source longitude: -104.81163

Source latitude: 32.13711

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): 2152

Source volume (acre-feet): 0.27737793

Source volume (gal): 90384

Water source use type: DUST CONTROL, INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE CASING

Water source type: IRRIGATION

Describe type:

Source longitude: -104.81163

Source latitude: 32.13711

Source datum: NAD83

Water source permit type: WATER WELL

Source land ownership: FEDERAL

Water source transport method: TRUCKING

Source transportation land ownership: COMMERCIAL

Water source volume (barrels): 2152

Source volume (acre-feet): 0.27737793

Source volume (gal): 90384

Water source and transportation map:

Westloving11_12W0GHFedCom2H__waterourseandtransmap_20180724113826.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:**

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

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

Construction Materials source location attachment:

Westloving11_12W0GHFedCom2H__calichesourseandtransmap_20180724113856.pdf

Section 7 - Methods for Handling Waste

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 FACILITY **Disposal location ownership:** PRIVATE

Disposal type description:

Disposal location description: NMOCD approved waste disposal locations are CRI or Lea Land, both facilities are located on HWY 62/180, Sec. 27 T20S R32E.

Waste type: SEWAGE

Waste content description: Human waste & grey water

Amount of waste: 1500 gallons

Waste disposal frequency : Weekly

Safe containment description: 2,000 gallon plastic container

Safe containmant attachment:

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

Disposal type description:

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

Disposal location description: City of Carlsbad Water Treatment facility

Waste type: GARBAGE

Waste content description: Garbage & trash

Amount of waste: 1500 pounds

Waste disposal frequency : One Time Only

Safe containment description: Enclosed trash trailer

Safe containmant attachment:

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

Disposal type description:

Disposal location description: Waste Management facility in Carlsbad.

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.) **Reserve pit width (ft.)**

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? 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

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Westloving11_12W0GHFedCom2H__wellsitelayout_20180724113918.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: WEST LOVING 11/12

Multiple Well Pad Number: 3

Recontouring attachment:

Drainage/Erosion control construction: None

Drainage/Erosion control reclamation: None

Well pad proposed disturbance (acres): 4.224	**Well pad interim reclamation (acres):** 1.66	**Well pad long term disturbance (acres):** 2.564
Road proposed disturbance (acres): 0.13	**Road interim reclamation (acres):** 0	**Road long term disturbance (acres):** 0
Powerline proposed disturbance (acres): 0	**Powerline interim reclamation (acres):** 0	**Powerline long term disturbance (acres):** 0
Pipeline proposed disturbance (acres): 0	**Pipeline interim reclamation (acres):** 0	**Pipeline long term disturbance (acres):** 0
Other proposed disturbance (acres): 0	**Other interim reclamation (acres):** 0	**Other long term disturbance (acres):** 0
Total proposed disturbance: 4.354	**Total interim reclamation:** 1.66	**Total long term disturbance:** 2.564

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.

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

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:

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

Total pounds/Acre:

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

Seed Type	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:

Section 11 - Surface Ownership

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: PRIVATE OWNERSHIP

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:

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Fee Owner: Scott Branson

Phone: (575)885-2066

Fee Owner Address: 1501 Mountain Shadow Dr. Carlsbad, NM 88220

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:

Disturbance type: EXISTING ACCESS ROAD

Describe:

Surface Owner: OTHER

Other surface owner description: Eddy County Road Dept.

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:**

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

Disturbance type: WELL PAD

Describe:

Surface Owner: PRIVATE OWNERSHIP

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: Scott Branson

Fee Owner Address: 1501 Mountain Shadow Dr. Carlsbad, NM 88220

Phone: (575)885-2066

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

Operator Name: MEWBOURNE OIL COMPANY

Well Name: WESTLOVING 11/12 W0GH FED COM **Well Number:** 2H

SUPO Additional Information: NONE

Use a previously conducted onsite? YES

Previous Onsite information: JUN 13 2018 Met w/RRC Surveying & Bruce Madden (landowner) w/BC Operating & staked location @ 1340' FNL & 2435' FEL, Sec 11, T24S, R27E, Eddy Co., NM. (Elevation @ 3124'). Battery will be N of location off of incoming road & buried Sendero pipeline. Topsoil S. Reclaim 60 S, E, W. Approx. 100 of new road needed. Pad is 400 x460. Will need SUA w/BC Operating partnership. Will require BLM onsite for approval. Lat.: 32.23579061 N, Long.:-104.16076470. Battery Lat.: 32.23733330, Long.:-10416068481 W NAD83.

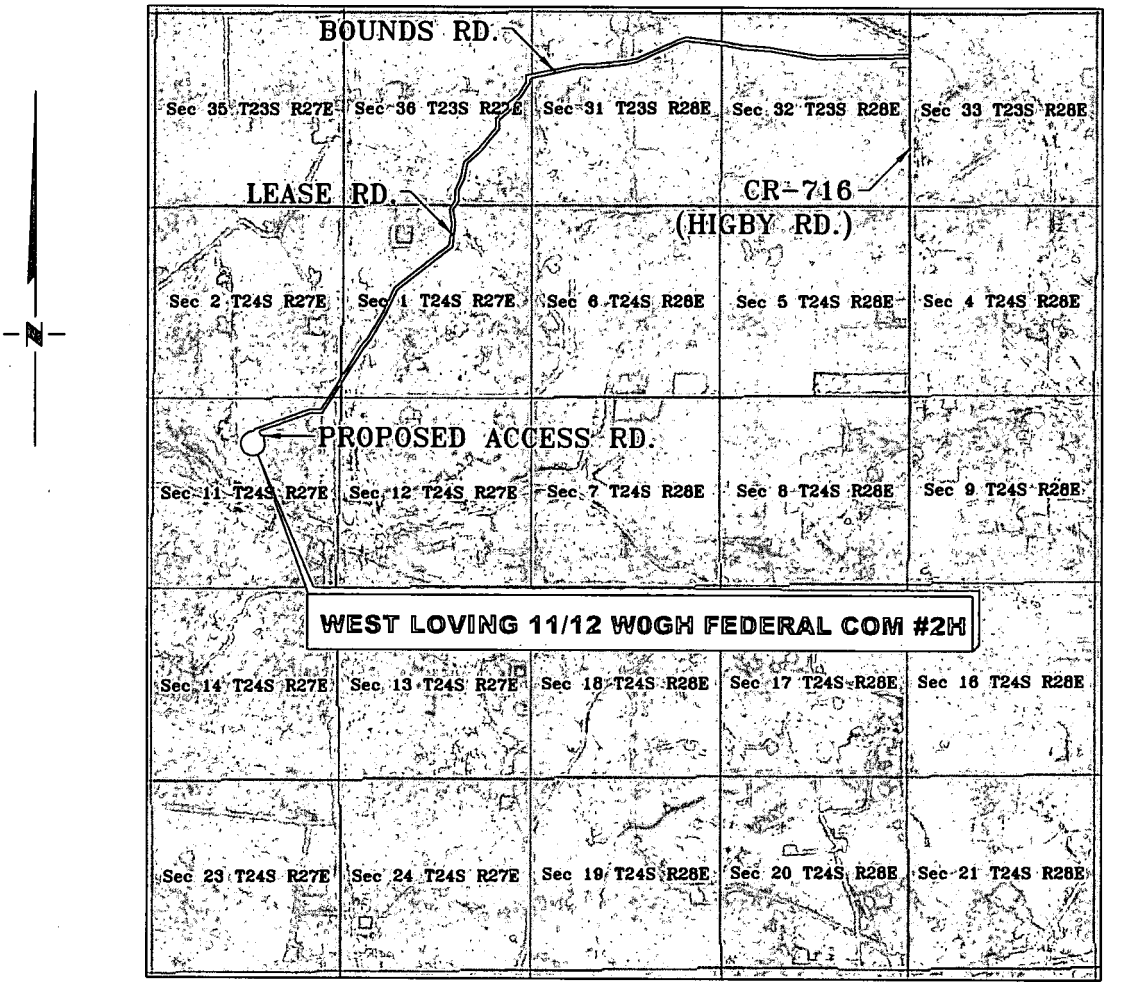
Other SUPO Attachment

Westloving11_12W0GHFedCom2H__interimreclamationdiagram_20180724114035.pdf

Westloving11_12W0GHFedCom2H__gascaptureplan_20180724114048.pdf

VICINITY MAP

NOT TO SCALE



SECTION 11, TWP. 24 SOUTH, RGE. 27 EAST, N. M. P. M., EDDY COUNTY, NEW MEXICO

OPERATOR: Mewbourne Oil Company LOCATION: 1340' FNL & 2435' FEL

LEASE: West Loving 11/12 WOGH Federal Com ELEVATION: 3124'

WELL NO.: 2H

NO.	REVISION	DATE

JOB NO.: LS1806765

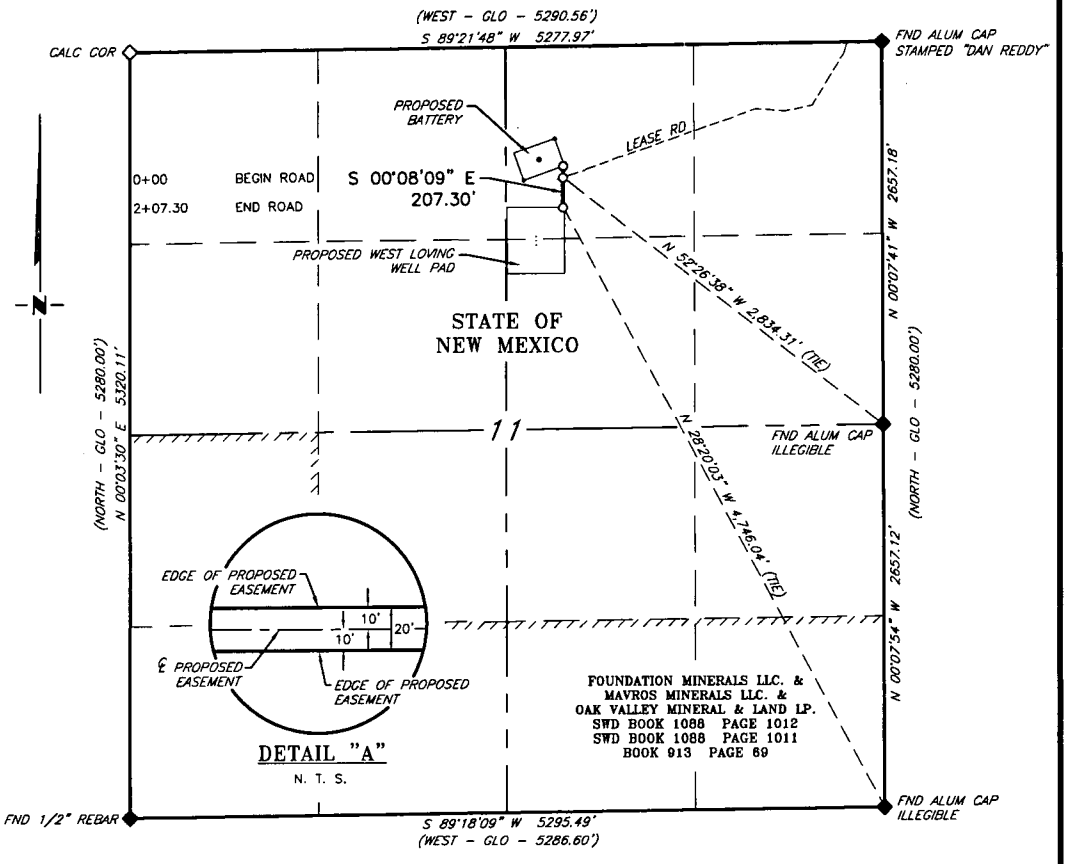
DWG. NO.: 1806765VM

RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: N. T. S.
DATE: 6-12-18
SURVEYED BY: ML/TF
DRAWN BY: GA
APPROVED BY: RMH
SHEET: 1 OF 1

MEWBOURNE OIL COMPANY
PROPOSED ACCESS ROAD FOR THE WEST LOVING 11/12 FEDERAL COM W0BA #1H, W0GH #2H, & W0GH #3H
SECTION 11, T24S, R27E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 20 feet wide, being 207.30 feet or 12.564 rods in length, lying in Section 11, Township 24, South, Range 27 East, N. M. P. M., Eddy County, New Mexico, being 10 feet left and 10 feet right of the following described survey of a centerline across State of New Mexico land:

BEGINNING at Engr. Sta. 0+00, a point in the Northeast quarter of Section 11, which bears, N 52°26'38" W, 2,834.31 feet from an aluminum cap, illegible, found for the East quarter corner of Section 11;

Thence S 00°08'09" E, 207.30 feet, to Engr. Sta. 2+07.30, the End of Survey, a point in the Northeast quarter of Section 11, which bears, N 28°20'03" W, 4,746.04 feet from an aluminum cap, illegible, found for the Southeast corner of Section 11.

Said strip of land contains 0.095 acres, more or less, and is allocated by forties as follows:

NW 1/4 NE 1/4	12.564 Rods	0.095 Acres

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

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

LEGEND
( ) RECORD DATA - GLO
◇ CALCULATED CORNER
◆ FOUND MONUMENT AS NOTED
PROPOSED ACCESS ROAD

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

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 6/20/18 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

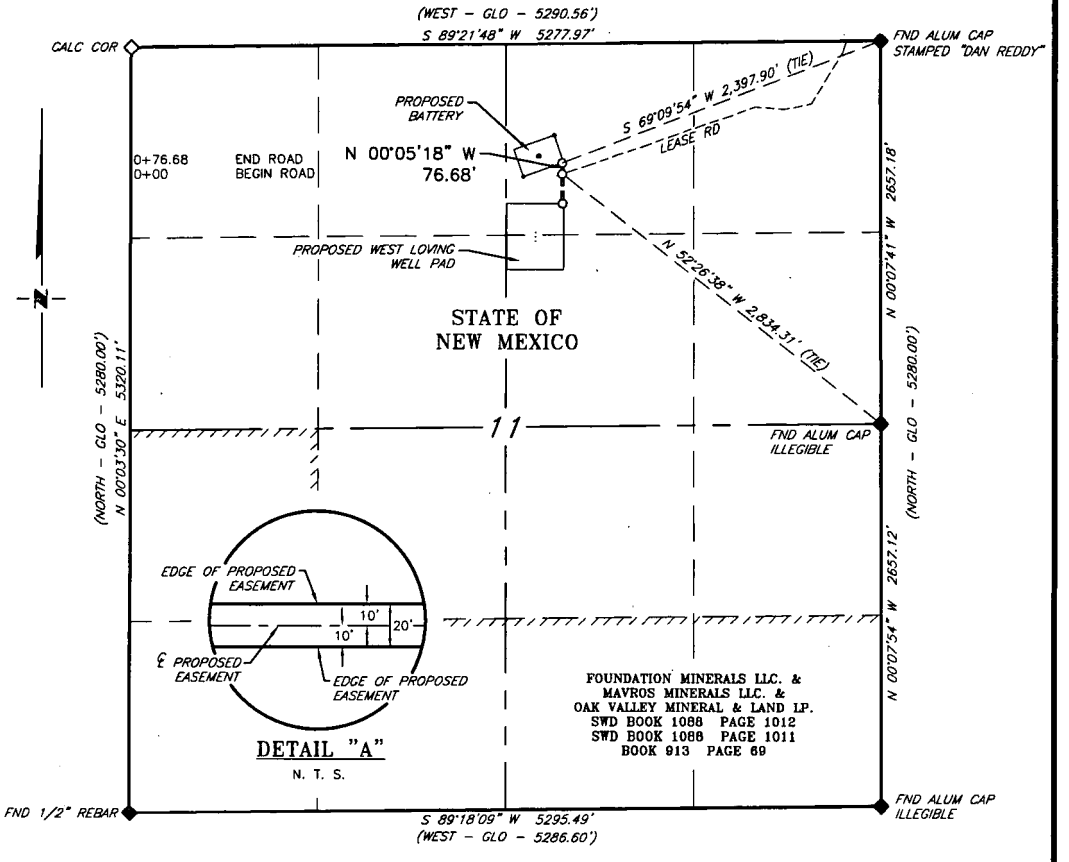
JOB NO.: LS1806764
DWG. NO.: 1806764RD

RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'
DATE: 6-12-18
SURVEYED BY: ML/TF
DRAWN BY: GA
APPROVED BY: RMH
SHEET: 1 OF 2

MEWBOURNE OIL COMPANY
PROPOSED ACCESS ROAD FOR THE WEST LOVING 11/12 FEDERAL COM W0BA #1H, W0GH #2H, & W0GH #3H BATTERY
SECTION 11, T24S, R27E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 20 feet wide, being 76.68 feet or 4.647 rods in length, lying in Section 11, Township 24, South, Range 27 East, N. M. P. M., Eddy County, New Mexico, being 10 feet left and 10 feet right of the following described survey of a centerline across State of New Mexico land:

BEGINNING at Engr. Sta. 0+00, a point in the Northeast quarter of Section 11, which bears, N 52°26'38" W, 2,834.31 feet from an aluminum cap, illegible, found for the East quarter corner of Section 11;

Thence N 00°05'18" W, 76.68 feet, to Engr. Sta. 0+76.68, the End of Survey, a point in the Northeast quarter of Section 11, which bears, S 69°09'54" W, 2,397.90 feet from an aluminum cap, stamped "Dan Reddy", found for the Northeast corner of Section 11.

Said strip of land contains 0.035 acres, more or less, and is allocated by forties as follows:

NW 1/4 NE 1/4	4.647 Rods	0.035 Acres

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

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

LEGEND
( ) RECORD DATA - GLO
◇ CALCULATED CORNER
◆ FOUND MONUMENT AS NOTED
PROPOSED ACCESS ROAD

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

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 6/20/18 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

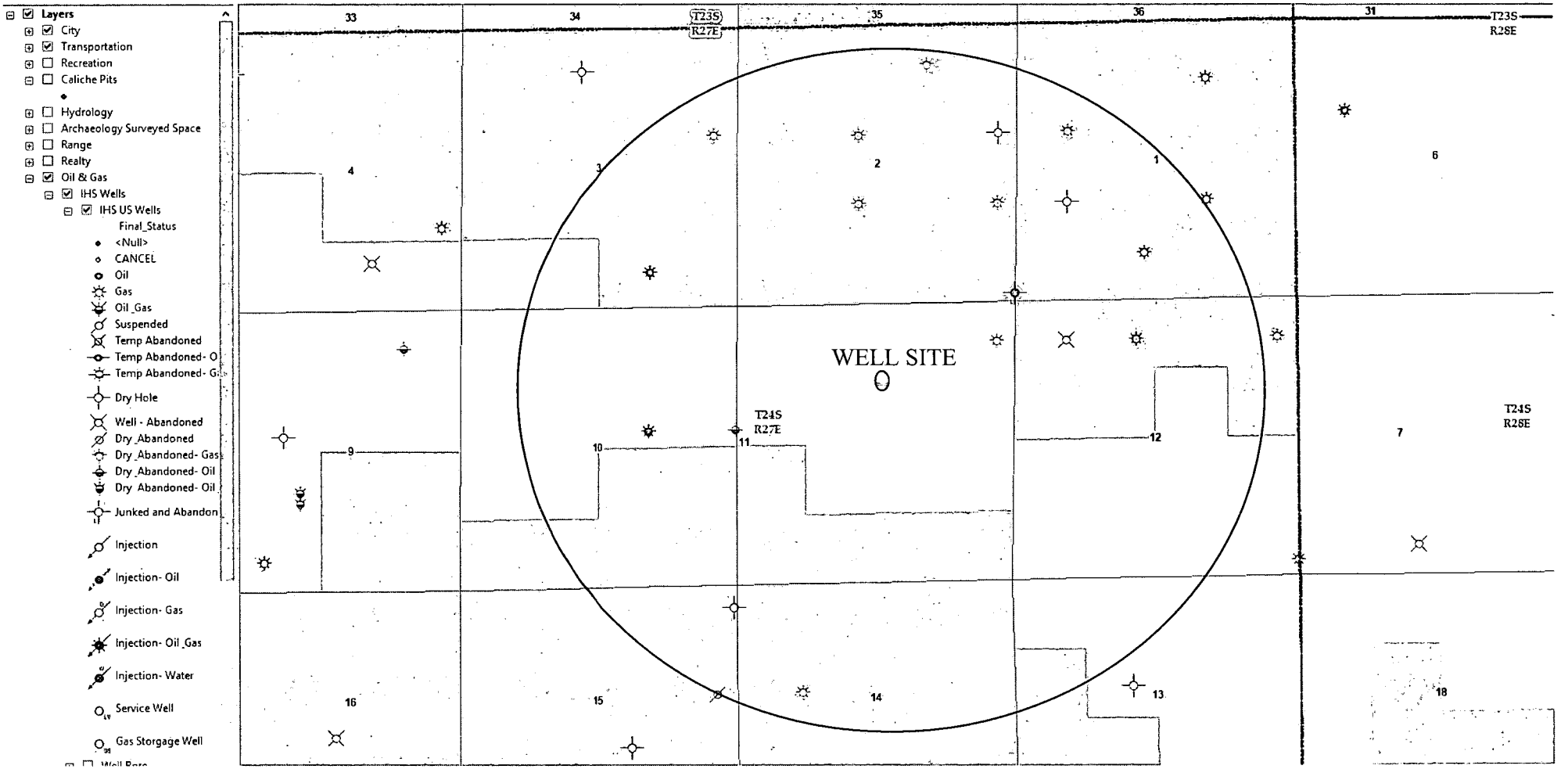
JOB NO.: LS1806764
DWG. NO.: 1806764RD2

RRC

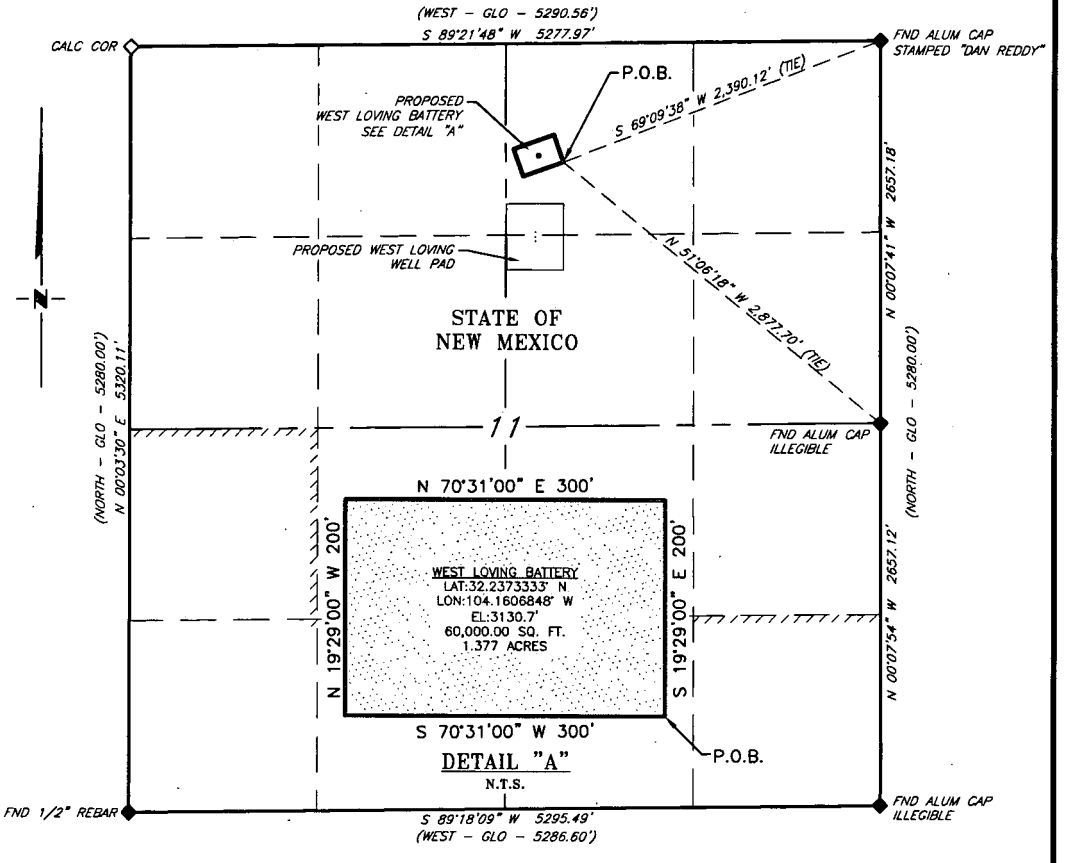
308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'
DATE: 6-12-18
SURVEYED BY: ML/TF
DRAWN BY: GA
APPROVED BY: RMH
SHEET: 2 OF 2

WEST LOVING 11/12 W0GH FEDERAL COM 2H
EXISTING WELL MAP



MEWBOURNE OIL COMPANY
PROPOSED WEST LOVING BATTERY
SECTION 11, T24S, R27E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DESCRIPTION

A tract of land situated in the Northeast quarter, of Section 11, Township 24 South, Range 27 East, N. M. P. M. Eddy County, New Mexico, across State of New Mexico land, and being more particularly described by metes and bounds as follows:

BEGINNING at a point which bears, N 51°06'18" W, 2,877.70 feet from an aluminum cap, illegible, found for the East quarter corner of Section 11 and being S 69°09'38" W, 2,390.12 feet from an aluminum cap, stamped "Dan Reddy", found for the Northeast corner of Section 11;

Thence S 70°31'00" W, 300.00 feet, to a point;

Thence N 19°29'00" W, 200.00 feet, to a point;

Thence N 70°31'00" E, 300.00 feet, to a point;

Thence S 19°29'00" E, 200.00 feet, to the Point of Beginning.

Said tract of land contains 60,000.00 square feet or 1.377 acres, more or less, and is allocated by forties as follows

NW 1/4 NE1/4 60,000.00 Sq Ft. 1.377 Acres

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

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

LEGEND
( ) RECORD DATA - GLO
◇ CALCULATED CORNER
◆ FOUND MONUMENT AS NOTED
PROPOSED ACCESS ROAD

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

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 6/20/18 PROFESSIONAL SURVEYOR

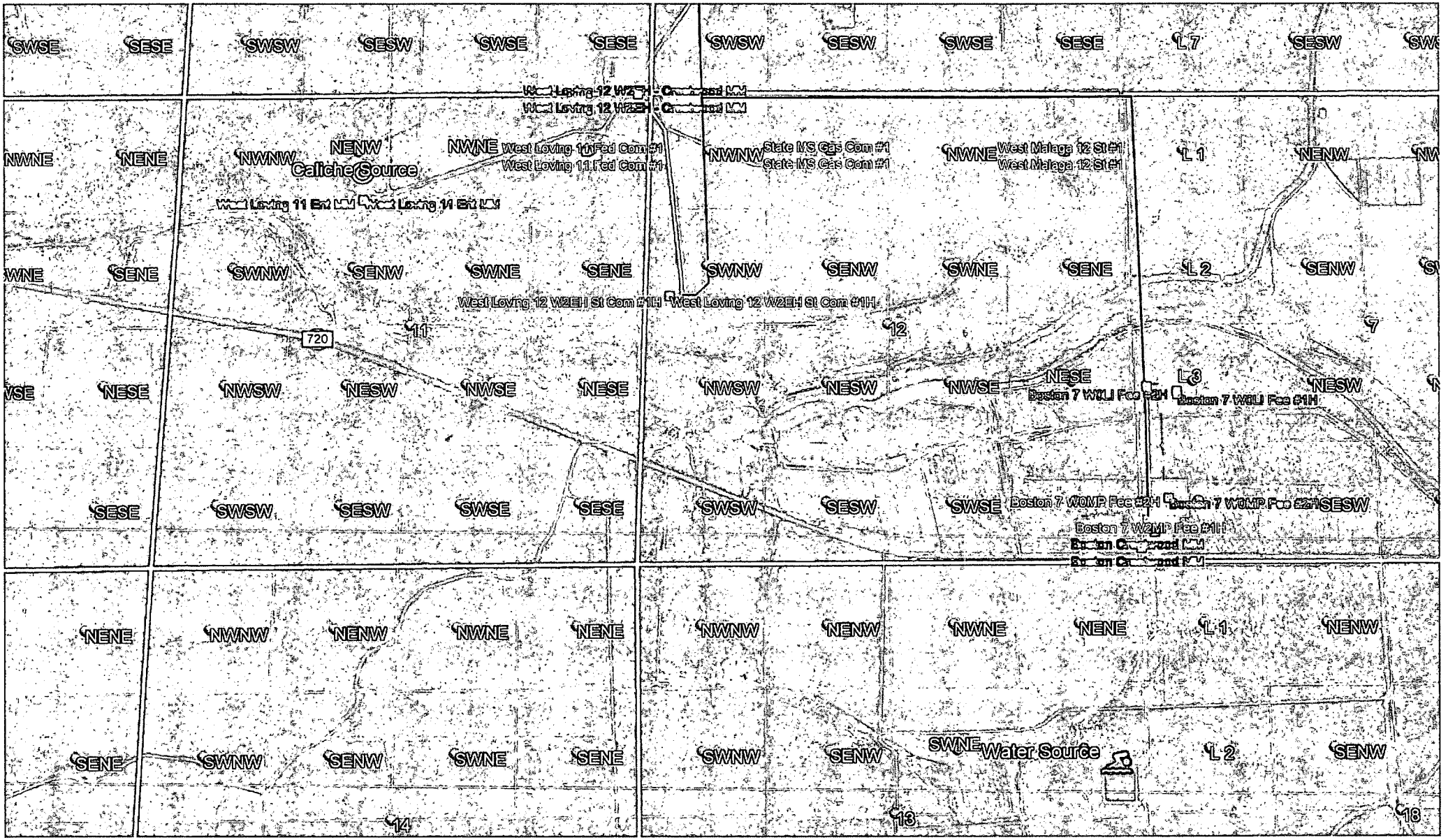
NO.	REVISION	DATE

JOB NO.: LS1806764
DWG. NO.: 1806764BT

RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'
DATE: 6-12-18
SURVEYED BY: ML/TF
DRAWN BY: GA
APPROVED BY: RMH
SHEET: 1 OF 1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NWNE
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West Loving 11 Fed Com #1
Caliche Source
NWNW
State MS Gas Com #1
State MS Gas Com #1
NWNE
West Malaga 12 St #1
West Malaga 12 St #1
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SWNW
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SENW
West Loving 12 W2EH St Com #1H
West Loving 12 W2EH St Com #1H
720
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12
7
NESE
L 3
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NWSE
Boston 7 W0LI Fee #2H
Boston 7 W0LI Fee #1H
SESE
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SWSE
Boston 7 W0MP Fee #2H
Boston 7 W0MP Fee #1H
SESW
Boston 7 W2LI Fee #1H
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Water Source
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14
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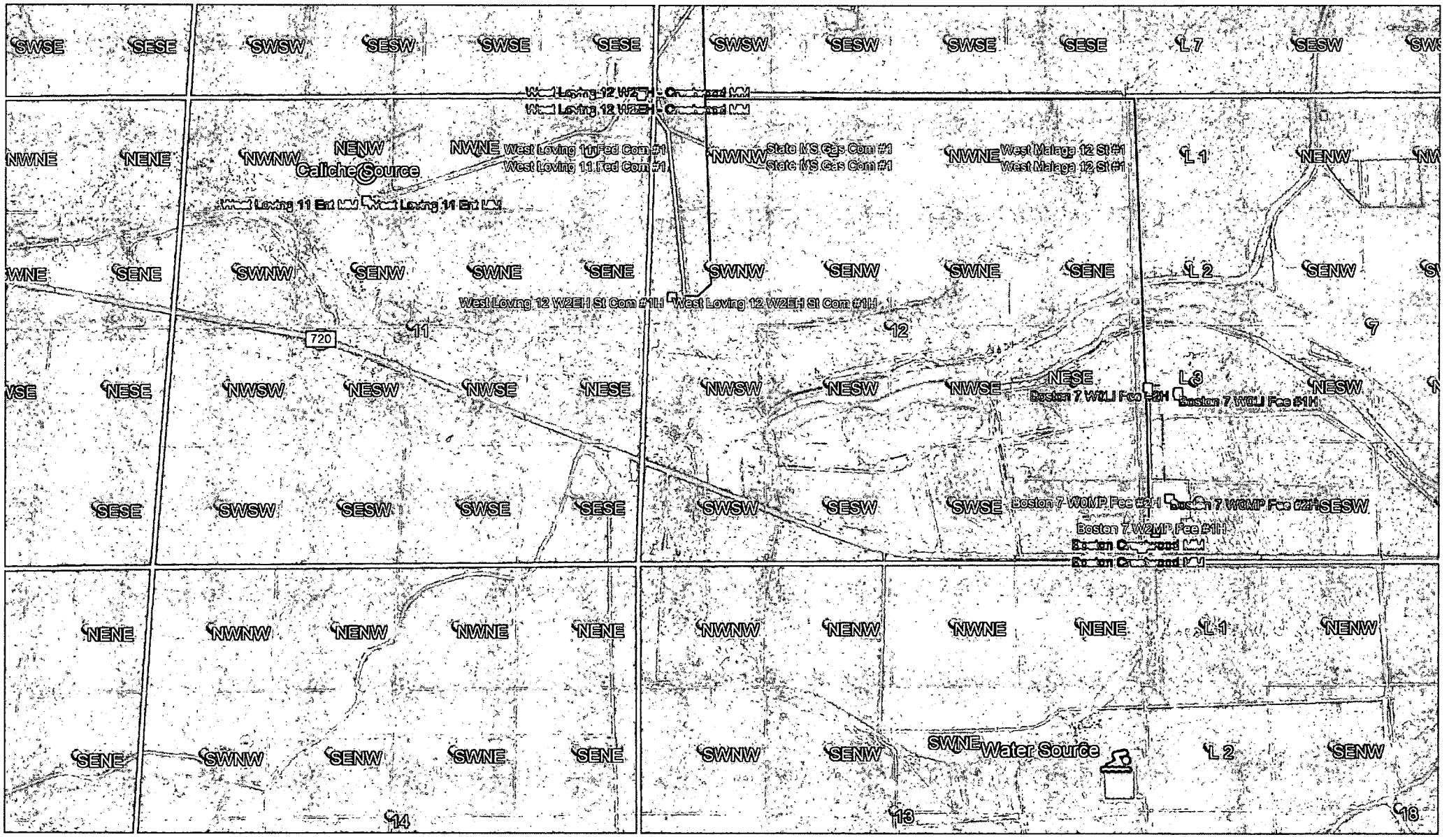
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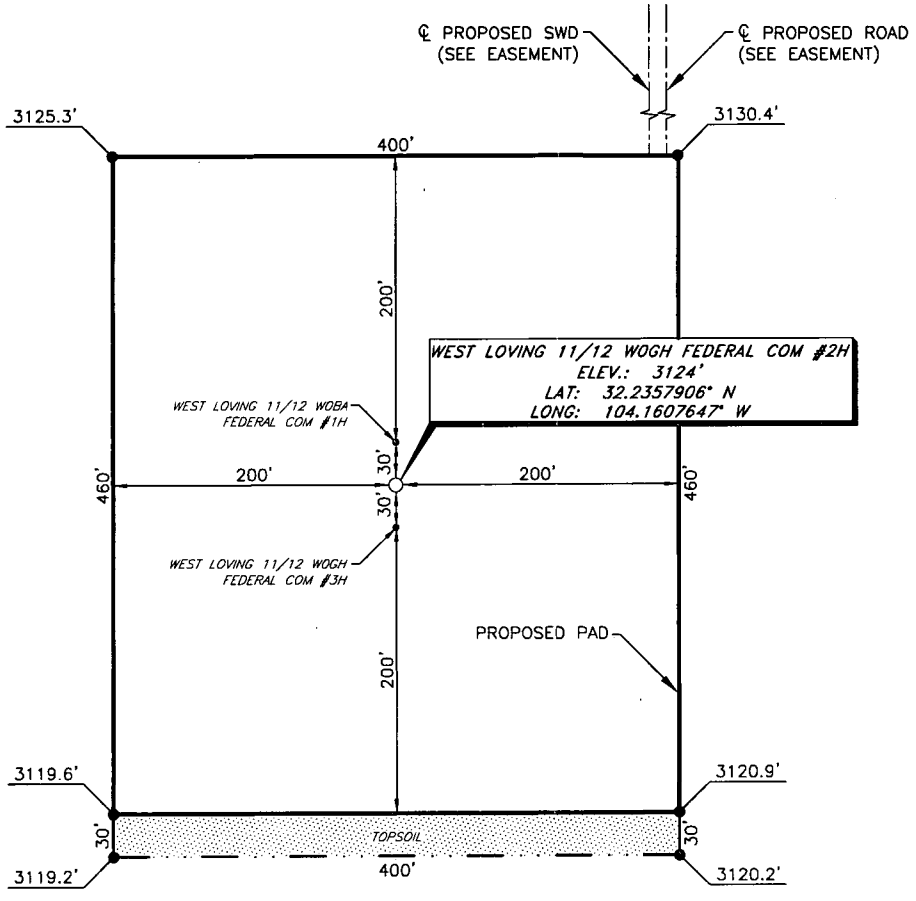
MEWBOURNE OIL COMPANY
WEST LOVING 11/12 WOGH FEDERAL COM #2H
(1340' FNL & 2435' FEL)
SECTION 11, T24S, R27E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

From the intersection of CR-716 (Higby Hole Rd.) and CR-763 (Bonds Rd.)

Go West on CR-763 approx. 2.1 miles to a lease road on the left;

Turn left and go South approx. 2.0 miles;

Turn right and go Southwest approx. 0.2 miles;

Turn right and go West approx. 0.4 miles to a proposed road on the left;

Turn left and go South approx. 207 feet to location.

N

SCALE: 1" = 100'
0 50 100

BEARINGS ARE NAD 83 GRID - NM EAST DISTANCES ARE GROUND

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

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 6-20-18 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

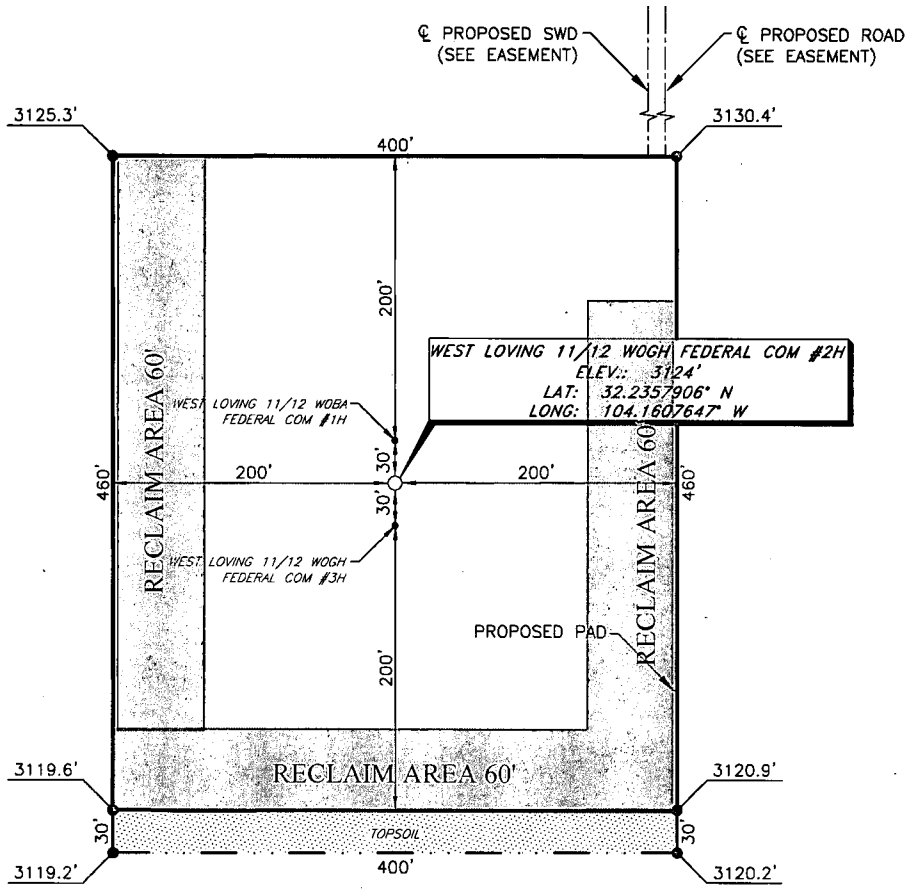
JOB NO.: LS1806765
DWG. NO.: 1806765PAD

RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 100'
DATE: 6-12-18
SURVEYED BY: ML/TF
DRAWN BY: GA
APPROVED BY: RMH
SHEET: 1 OF 1

MEWBOURNE OIL COMPANY
WEST LOVING 11/12 WOGH FEDERAL COM #2H
(1340' FNL & 2435' FEL)
SECTION 11, T24S, R27E
N. M. P. M., EDDY COUNTY, NEW MEXICO



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SCALE: 1" = 100'
DATE: 6-12-18
SURVEYED BY: ML/TF
DRAWN BY: GA
APPROVED BY: RMH
SHEET: 1 OF 1

RECEIVED
JUL 01 2019
DISTRICT II-ARTESIA O.C.D.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Submit Original
to Appropriate
District Office

GAS CAPTURE PLAN

Date: 7-11-18

☒ Original
☐ Amended - Reason for Amendment:

Operator & OGRID No.: Mewbourne Oil Company - 14744

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
West Loving 11/12 W0GH Fed Com #2H		G - 11 -T24S-27E	1340 FNL & 2435 FEL	0	NA	ONLINE AFTER FRAC

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to Western and will be connected to Western low/high pressure gathering system located in EDDY County, New Mexico. It will require 3,400 ' of pipeline to connect the facility to low/high pressure gathering system. Mewbourne Oil Company provides (periodically) to Western a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Mewbourne Oil Company and Western have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Western Processing Plant located in Sec. 36, Blk. 58 T1S, Culberson County, Texas. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on Western system at that time. Based on current information, it is Operator's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

AFMSS

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

PWD Data Report

06/27/2019

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

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

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

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 Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

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 mineral owner:

Injection well type:

Injection well number:

Injection well name:

Assigned injection well API number?

Injection well API number:

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection 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:

AFMSS

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

Bond Info Data Report

06/27/2019

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: