

<b>Well Name:</b> RED HILLS WEST 22/15 FED COM	<b>Well Location:</b> T26S / R32E / SEC 22 / SESW /	<b>County or Parish/State:</b>
<b>Well Number:</b> 521H	<b>Type of Well:</b> OIL WELL	<b>Allottee or Tribe Name:</b>
<b>Lease Number:</b> NMNM027507	<b>Unit or CA Name:</b>	<b>Unit or CA Number:</b>
<b>US Well Number:</b> 3002551120	<b>Well Status:</b> Approved Application for Permit to Drill	<b>Operator:</b> MEWBOURNE OIL COMPANY

**Notice of Intent**

**Sundry ID:** 2717766

**Type of Submission:** Notice of Intent

**Type of Action:** APD Change

**Date Sundry Submitted:** 02/24/2023

**Time Sundry Submitted:** 12:38

**Date proposed operation will begin:** 10/15/2023

**Procedure Description:** Mewbourne Oil Company requests to make the following changes to the APD: 1.) Change well name from Red Hills West 22 B2MD Fed Com #1H to Red Hills West 22/15 Fed Com #521H. Please see attached updated C102. 2.) Change BHL from 100' FNL & 420' FWL (Sec 22, T26S, R32E) to 100' FNL & 420' FWL (Sec 15, T26S, R32E) - New BHL lease # NMNM118722. Please see attached updated C102. 3.) Change Csg/Mud/Cement plan. Please see attached Dir Plan, Dir Plot & Sundry Drlg Program

**NOI Attachments**

**Procedure Description**

Red\_Hills\_West\_22\_15\_Fed\_Com\_521H\_Sundry\_Drlg\_Program\_20230224123605.pdf

Red\_Hills\_West\_22\_15\_Fed\_Com\_521H\_Plat\_20230224123606.pdf

Red\_Hills\_West\_22\_15\_Fed\_Com\_521H\_Dir\_Plan\_20230224123605.pdf

Red\_Hills\_West\_22\_15\_Fed\_Com\_521H\_Dir\_Plot\_20230224123605.pdf

**Well Name:** RED HILLS WEST 22/15  
FED COM

**Well Location:** T26S / R32E / SEC 22 /  
SESW /

**County or Parish/State:**

**Well Number:** 521H

**Type of Well:** OIL WELL

**Allottee or Tribe Name:**

**Lease Number:** NMNM027507

**Unit or CA Name:**

**Unit or CA Number:**

**US Well Number:** 3002551120

**Well Status:** Approved Application for  
Permit to Drill

**Operator:** MEWBOURNE OIL  
COMPANY

### Conditions of Approval

#### Additional

RED\_HILLS\_WEST\_22\_15\_FED\_COM\_521H\_Sundry\_COA\_20231026100418.pdf

### Operator

*I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a*

**Operator Electronic Signature:** GAGE OWEN

**Signed on:** FEB 24, 2023 12:36 PM

**Name:** MEWBOURNE OIL COMPANY

**Title:** Title Engineer

**Street Address:** 4801 BUSINESS PARK BLVD.

**City:** HOBBS

**State:** NM

**Phone:** (575) 552-6224

**Email address:** GOWEN@MEWBOURNE.COM

### Field

**Representative Name:**

**Street Address:**

**City:**

**State:**

**Zip:**

**Phone:**

**Email address:**

### BLM Point of Contact

**BLM POC Name:** CHRISTOPHER WALLS

**BLM POC Title:** Petroleum Engineer

**BLM POC Phone:** 5752342234

**BLM POC Email Address:** cwalls@blm.gov

**Disposition:** Approved

**Disposition Date:** 10/27/2023

**Signature:** Chris Walls

Form 3160-5  
(June 2019)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2021

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.
6. If Indian, Allottee or Tribe Name
7. If Unit of CA/Agreement, Name and/or No.
8. Well Name and No.
9. API Well No.
10. Field and Pool or Exploratory Area
11. Country or Parish, State

**SUBMIT IN TRIPLICATE** - Other instructions on page 2

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	
2. Name of Operator	
3a. Address	3b. Phone No. (include area code)
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)	

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)	Title
Signature	Date

**THE SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice 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.	Office	

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.

(Instructions on page 2)

## GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law 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, are either shown below, will be issued by or may be obtained from the local Federal office.

## SPECIFIC INSTRUCTIONS

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

*Item 13*: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. 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 the 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., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

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

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

## Additional Information

### Location of Well

0. SHL: SESW / 250 FSL / 1430 FWL / TWSP: 26S / RANGE: 32E / SECTION: 22 / LAT: 32.0215572 / LONG: -103.6667511 ( TVD: 0 feet, MD: 0 feet )

PPP: SWSW / 100 FSL / 420 FWL / TWSP: 26S / RANGE: 32E / SECTION: 22 / LAT: 32.0211384 / LONG: -103.6700079 ( TVD: 10246 feet, MD: 10325 feet )

PPP: SWNW / 2675 FNL / 420 FWL / TWSP: 26S / RANGE: 32E / SECTION: 22 / LAT: 32.0282471 / LONG: -103.670022 ( TVD: 10516 feet, MD: 13003 feet )

BHL: NWNW / 100 FNL / 420 FWL / TWSP: 26S / RANGE: 32E / SECTION: 22 / LAT: 32.0352984 / LONG: -103.6700384 ( TVD: 10521 feet, MD: 15568 feet )

CONFIDENTIAL

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL COMPANY
WELL NAME & NO.:	RED HILLS WEST 22/15 FED COM 521H
SURFACE HOLE FOOTAGE:	250'/S & 1430'/W
BOTTOM HOLE FOOTAGE:	100'/N & 420'/W
SURFACE LOCATION:	SECTION 22, T26S, R32E, NMPM
COUNTY:	Lea County, New Mexico

COA

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

**SEE THE ORIGINAL COA FOR ALL OTHER REQUIREMENTS.**

**A. HYDROGEN SULFIDE**

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

**B. CASING DESIGN**

1. The **13-3/8** inch surface casing shall be set at approximately **630 ft.** (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 ft. above the salt.**
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 psi compressive strength**, whichever is greater. (This is to

- include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 psi compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The **9-5/8** inch intermediate casing shall be set in a competent bed at approximately **4,350 ft**. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:
- **Cement to surface.** If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to **cave/karst**.
  - ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3<sup>rd</sup> casing string must come to surface.

**Note:** Excess cement for the intermediate casing is below CFO's recommendation of 25%. More cement might be needed.

**Note:** Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

3. Operator has proposed to set **7 in.** production casing at approximately **9,933 ft**. The minimum required fill of cement behind the **7 in.** production casing is:

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

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

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

### C. PRESSURE CONTROL

1. Variance approved to use **flex line** from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Operator has proposed a **multi-bowl wellhead** assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi. Before drilling the surface casing shoe out, the BOP/BOPE and annular preventer shall be pressure-tested in accordance with title 43 CFR 3172 and API Standard 53.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in the **title 43 CFR 3172.6(b)(9)** must be followed.

### D. SPECIAL REQUIREMENT (S)

#### Communitization Agreement

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

- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

## GENERAL REQUIREMENTS

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

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

Eddy County

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

[BLM\\_NM\\_CFO\\_DrillingNotifications@BLM.GOV](mailto:BLM_NM_CFO_DrillingNotifications@BLM.GOV)

(575) 361-2822

Lea County

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

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

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

#### A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

## **B. PRESSURE CONTROL**

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in the **title 43 CFR 3172** and **API STD 53 Sec. 5.3**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in the **title 43 CFR 3172.6(b)(9)** must be followed.
  - e. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

- a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000-psi chart for a 2-3M BOP/BOP, on a 10000-psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one-hour chart. A circular chart shall have a maximum 2-hour clock. If a twelve hour or twenty-four-hour chart is used, tester shall make a notation that it is run with a two-hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low-pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of

the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

**C. DRILLING MUD**

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

**D. WASTE MATERIAL AND FLUIDS**

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

**SA 10/26/2023**

**Mewbourne Oil Company, Red Hills West 22/15 Fed Com 521H**

**Sec 22, T26S, R32E**

**SHL: 250' FSL & 1430' FWL (Sec 22)**

**BHL: 100' FNL & 420' FWL (Sec 15)**

**Casing Program**

Hole Size	From	To	Csg. Size	Weight	Grade	Conn.	SF	SF Burst	SF Jt	SF Body
				(lbs)			Collapse		Tension	Tension
17.500	0'	630'	13.375	48.0	H40	STC	2.67	6.00	10.65	17.89
12.250	0'	3453'	9.625	36.0	J55	LTC	1.13	1.96	2.83	3.52
12.250	3453'	4350'	9.625	40.0	J55	LTC	1.14	1.75	14.49	17.56
8.750	0'	9933'	7.000	26.0	P110	LTC	1.25	2.00	2.68	3.21
6.125	9733'	20915'	4.500	13.5	P110	LTC	1.95	2.27	2.24	2.80
<b>BLM Minimum Safety Factor</b>							<b>1.125</b>	<b>1.0</b>	<b>1.6 Dry</b>	<b>1.6 Dry</b>
									<b>1.8 Wet</b>	<b>1.8 Wet</b>

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 IILB.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.				N
Is well located in SOPA but not in R-111-P?				N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?				
Is well located in R-111-P and SOPA?				N
If yes, are the first three strings cemented to surface?				
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?				
Is an open annulus used to satisfy R-111-Q? If yes, see cement design.				
Is an engineered weak point used to satisfy R-111-Q?				
If yes, at what depth is the weak point planned?				-
Is well located in high Cave/Karst?				Y
If yes, are there two strings cemented to surface?				Y
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?				
Is well located in critical Cave/Karst?				N
If yes, are there three strings cemented to surface?				
Formation	Est. Top		Formation	Est. Top
Rustler	554'		Delaware (Lamar)	4428'
Salt Top	932'		Bell Canyon	4453'
Salt Base	4218'		Cherry Canyon	5508'
Yates			Manzanita Marker	5664'
Seven Rivers			Basal Brushy Canyon	7218'
Queen			Bone Spring	8623'
Capitan			1st Bone Spring Sand	9533'
Grayburg			2nd Bone Spring Sand	10263'
San Andres			3rd Bone Spring Sand	
Glorieta			Abo	
Yeso			Wolfcamp	

**Mewbourne Oil Company, Red Hills West 22/15 Fed Com 521H****Sec 22, T26S, R32E****SHL: 250' FSL & 1430' FWL (Sec 22)****BHL: 100' FNL & 420' FWL (Sec 15)****Cementing Program**

Csg	Top MD	Bottom MD	# Sks	Yield (ft3/sk)	Density (ppg)	Vol (ft3)	% Excess	Slurry Description
Surface (Lead)	0'	440'	290	2.12	12.5	620	100	Class C, Salt, Gel, Extender, LCM
Surface (Tail)	440'	630'	200	1.34	14.8	268	100	Class C, Retarder
Intermediate (Lead Stage 1)	0'	3671'	680	2.12	12.5	1450	25	Class C, Salt, Gel, Extender, LCM
Intermediate (Tail Stage 1)	3671'	4350'	200	1.34	14.8	268	25	Class C, Retarder
Production (Lead Stage 1)	4150'	4983'	80	2.12	12.5	170	30	Class C, Salt, Gel, Extender, LCM, Defoamer
Production (Tail Stage 1)	4983'	5640'	100	1.34	14.8	134	30	Class C, Retarder
<b>Production 7" DV Tool @ 5640'</b>								
Production (Lead Stage 2)	5640'	7582'	180	2.12	12.5	390	30	Class C, Salt, Gel, Extender, LCM, Defoamer
Production (Tail Stage 2)	7582'	9933'	400	1.18	15.6	472	30	Class H, Retarder, Fluid Loss, Defoamer
Liner	9733'	20915'	720	1.85	13.5	1340	25	Class H, Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-settling Agent

**Mud Program**

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	630	FW Gel	8.6-8.8	28-34	N/C
630	4350	Saturated Brine	10.0	28-34	N/C
4350	9933	Cut Brine	8.6-9.7	28-34	N/C
9933	20915	OBM	9.0-10.0	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.

**Mewbourne Oil Company, Red Hills West 22/15 Fed Com 521H**

**Sec 22, T26S, R32E**

**SHL: 250' FSL & 1430' FWL (Sec 22)**

**BHL: 100' FNL & 420' FWL (Sec 15)**

**Additional Information**

Operator Name:	Property Name:	Well Number
Mewbourne Oil Company	Red Hills West 22/15 Fed Com	521H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
M	22	26S	32E	-	10'	FSL	420'	FWL	Lea
Latitude					Longitude				NAD
32.0208921					-103.6700077				83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
M	22	26S	32E	-	100'	FSL	420'	FWL	Lea
Latitude					Longitude				NAD
32.0211395					-103.6700075				83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
D	15	26S	32E	-	100'	FNL	420'	FWL	Lea
Latitude					Longitude				NAD
32.050002					-103.6699867				83

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

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
Mewbourne Oil Company	Red Hills West 22/15 Fed Com	571H



# LOCATION VERIFICATION MAP

NOT TO SCALE



*SECTION 22 TWP. 26 SOUTH, RGE. 32 EAST,  
N. M. P. M., LEA CO., NEW MEXICO*

OPERATOR: Mewbourne Oil Company  
 LEASE: Red Hills West 22/15 Fed Com  
 WELL NO.: 521H  
 ELEVATION: 3137'

LOCATION: 250' FSL & 1430' FWL  
 CONTOUR INTERVAL: 10'  
 USGS TOPO. SOURCE MAP:  
Paduca Breaks West, NM (1973)

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1	NAME CHANGE	2/17/23
NO.	REVISION	DATE
JOB NO.: LS21030204R1		
DWG. NO.: 21030204R1		



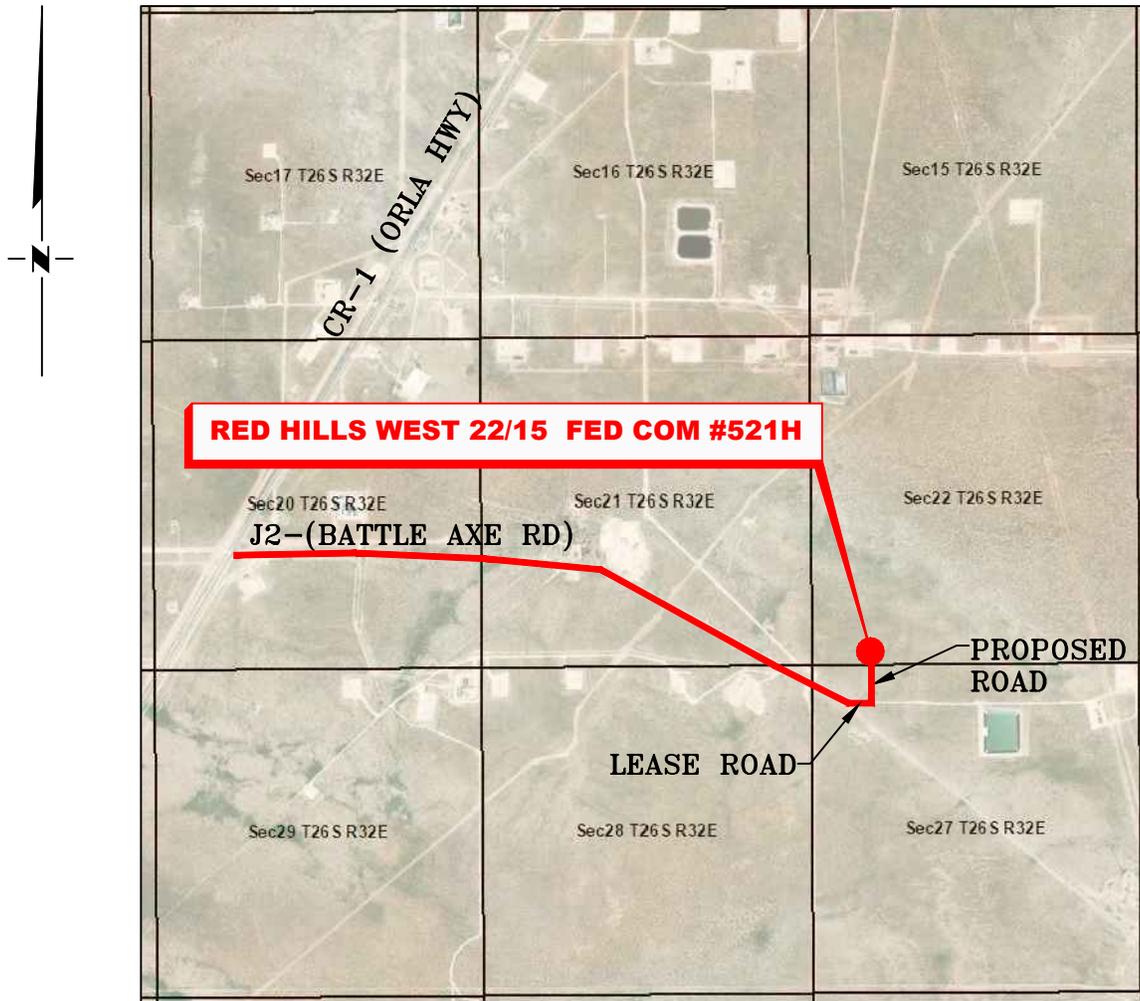
**RRC**  
ENERGY SERVICES, LLC.

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

SCALE: N. T. S.
DATE: 03/09/2021
SURVEYED BY: ML/JC
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 1

# VICINITY MAP

NOT TO SCALE



*SECTION 22, TWP. 26 SOUTH, RGE. 32 EAST,  
N. M. P. M., LEA COUNTY, NEW MEXICO*

OPERATOR: Mewbourne Oil Company  
 LEASE: Red Hills West 22/15 Fed Com  
 WELL NO.: 521H

LOCATION: 250' FSL & 1430' FWL  
 ELEVATION: 3137'

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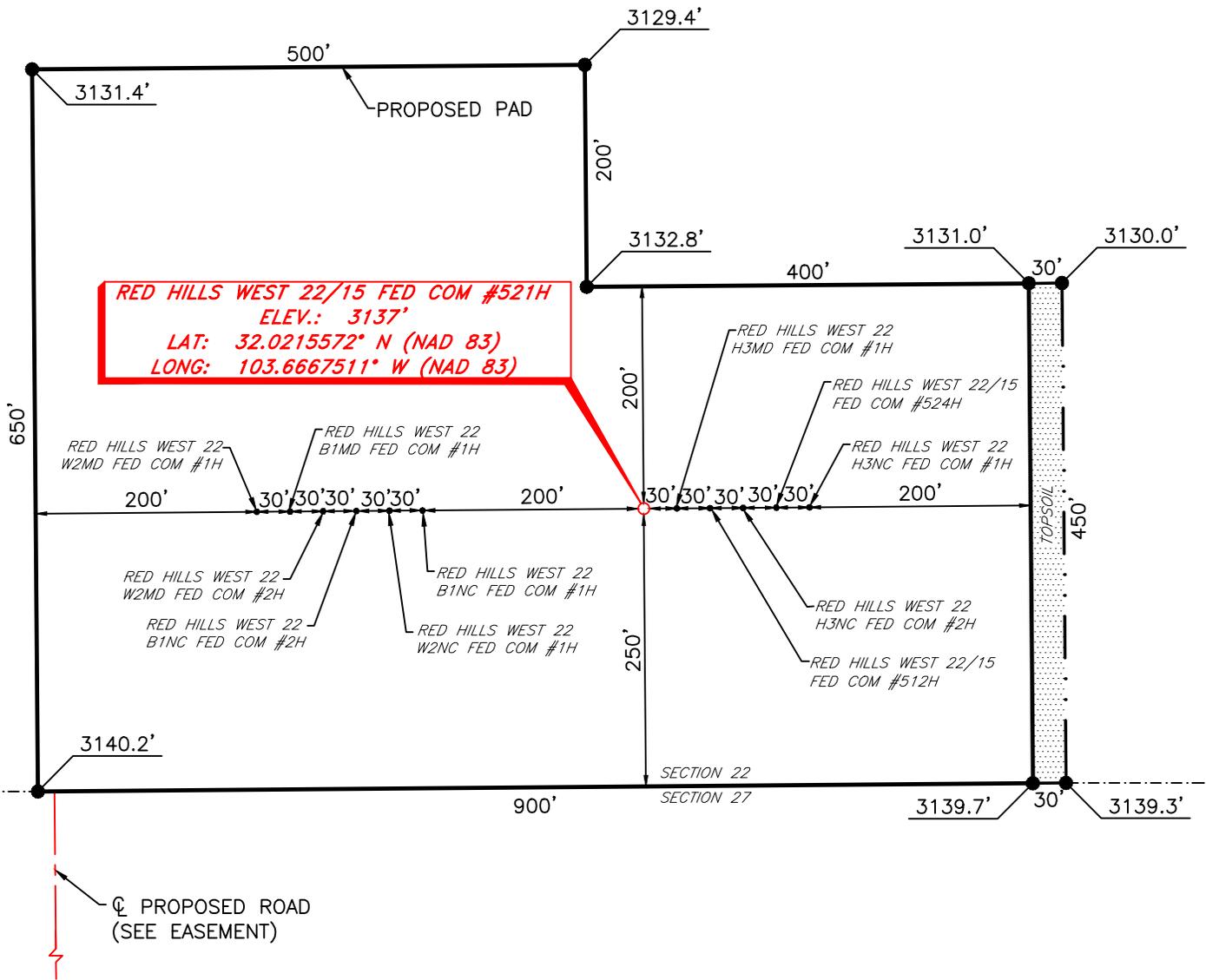
1	NAME CHANGE	2/17/23
NO.	REVISION	DATE
JOB NO.: LS21030204R1		
DWG. NO.: 21030204R1		



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

SCALE: N. T. S.
DATE: 03/09/2021
SURVEYED BY: ML/JC
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 1

**MEWBOURNE OIL COMPANY**  
**RED HILLS WEST 22/15 FED COM #521H**  
**(250' FSL & 1430' FWL)**  
**SECTION 22, T26S, R32E**  
**N. M. P. M., LEA COUNTY, NEW MEXICO**



DIRECTIONS TO LOCATION

*From the intersection of CR-#1 (Orla Hwy.) and CR-#2 (Battleaxe Rd.);  
 Go Southwest on CR-#2 approx. 2.0 miles to a lease road on the left;  
 Turn left and go East approx. 0.2 miles to a proposed road on the left;  
 Turn left and go North approx. 0.1 miles to location on the right.*

THIS IS NOT A BOUNDARY SURVEY, APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY. BOUNDARY DATA IS SHOWN FROM A PREVIOUS SURVEY REFERENCED HEREON.

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



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SCALE: 1" = 150'  
 0 75 150  
 BEARINGS ARE  
 NAD 83 GRID - NM EAST  
 DISTANCES ARE GROUND

2	NAME CHANGE	02/17/23
1	PAD UPDATE	05/10/21
NO.	REVISION	DATE
JOB NO.: LS21030204R1		
DWG. NO.: 21030204R1-4		



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

SCALE: 1" = 150'
DATE: 03/09/2021
SURVEYED BY: ML/JC
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 1

# **Mewbourne Oil Company**

**Lea County, New Mexico NAD 83  
Red Hills West 22/15 Fed Com #521H  
Sec 22, T26S, R32E  
SHL: 250' FSL & 1430' FWL (Sec 22)  
BHL: 100' FNL & 420' FWL (Sec 15)**

**Plan: Design #1**

## **Standard Planning Report**

**24 February, 2023**

Planning Report

<b>Database:</b>	Hobbs	<b>Local Co-ordinate Reference:</b>	Site Red Hills West 22/15 Fed Com #521H
<b>Company:</b>	Mewbourne Oil Company	<b>TVD Reference:</b>	WELL @ 3165.0usft (Original Well Elev)
<b>Project:</b>	Lea County, New Mexico NAD 83	<b>MD Reference:</b>	WELL @ 3165.0usft (Original Well Elev)
<b>Site:</b>	Red Hills West 22/15 Fed Com #521H	<b>North Reference:</b>	Grid
<b>Well:</b>	Sec 22, T26S, R32E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	BHL: 100' FNL & 420' FWL (Sec 15)		
<b>Design:</b>	Design #1		

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

<b>Site</b>	Red Hills West 22/15 Fed Com #521H				
<b>Site Position:</b>		<b>Northing:</b>	372,218.60 usft	<b>Latitude:</b>	32.0215573
<b>From:</b>	Map	<b>Easting:</b>	747,923.70 usft	<b>Longitude:</b>	-103.6667512
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "		

<b>Well</b>	Sec 22, T26S, R32E					
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	372,218.60 usft	<b>Latitude:</b>	32.0215573
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	747,923.70 usft	<b>Longitude:</b>	-103.6667512
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>	3,165.0 usft	<b>Ground Level:</b>	3,137.0 usft
<b>Grid Convergence:</b>	0.35 °					

<b>Wellbore</b>	BHL: 100' FNL & 420' FWL (Sec 15)				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	12/31/2014	7.18	59.89	48,132.24307226

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	354.11

<b>Plan Survey Tool Program</b>	<b>Date</b>	2/24/2023		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.0	20,914.8	Design #1 (BHL: 100' FNL & 420')	

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
750.0	0.00	0.00	750.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,084.3	6.69	256.16	1,083.6	-4.7	-18.9	2.00	2.00	0.00	256.16	
9,663.5	6.69	256.16	9,604.4	-243.5	-988.9	0.00	0.00	0.00	0.00	
9,997.9	0.00	0.00	9,938.0	-248.2	-1,007.8	2.00	-2.00	0.00	180.00	KOP: 10' FSL & 420' I
10,897.4	89.94	359.68	10,511.0	324.2	-1,011.0	10.00	10.00	0.00	-0.32	
20,914.8	89.94	359.68	10,521.0	10,341.5	-1,066.3	0.00	0.00	0.00	0.00	BHL: 100' FNL & 420'

Planning Report

<b>Database:</b>	Hobbs	<b>Local Co-ordinate Reference:</b>	Site Red Hills West 22/15 Fed Com #521H
<b>Company:</b>	Mewbourne Oil Company	<b>TVD Reference:</b>	WELL @ 3165.0usft (Original Well Elev)
<b>Project:</b>	Lea County, New Mexico NAD 83	<b>MD Reference:</b>	WELL @ 3165.0usft (Original Well Elev)
<b>Site:</b>	Red Hills West 22/15 Fed Com #521H	<b>North Reference:</b>	Grid
<b>Well:</b>	Sec 22, T26S, R32E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	BHL: 100' FNL & 420' FWL (Sec 15)		
<b>Design:</b>	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	
<b>SHL: 250' FSL &amp; 1430' FWL (Sec 22)</b>										
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	
750.0	0.00	0.00	750.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	1.00	256.16	800.0	-0.1	-0.4	-0.1	2.00	2.00	0.00	
900.0	3.00	256.16	899.9	-0.9	-3.8	-0.5	2.00	2.00	0.00	
1,000.0	5.00	256.16	999.7	-2.6	-10.6	-1.5	2.00	2.00	0.00	
1,084.3	6.69	256.16	1,083.6	-4.7	-18.9	-2.7	2.00	2.00	0.00	
1,100.0	6.69	256.16	1,099.1	-5.1	-20.7	-2.9	0.00	0.00	0.00	
1,200.0	6.69	256.16	1,198.5	-7.9	-32.0	-4.6	0.00	0.00	0.00	
1,300.0	6.69	256.16	1,297.8	-10.7	-43.3	-6.2	0.00	0.00	0.00	
1,400.0	6.69	256.16	1,397.1	-13.4	-54.6	-7.8	0.00	0.00	0.00	
1,500.0	6.69	256.16	1,496.4	-16.2	-65.9	-9.4	0.00	0.00	0.00	
1,600.0	6.69	256.16	1,595.7	-19.0	-77.2	-11.0	0.00	0.00	0.00	
1,700.0	6.69	256.16	1,695.1	-21.8	-88.5	-12.6	0.00	0.00	0.00	
1,800.0	6.69	256.16	1,794.4	-24.6	-99.8	-14.2	0.00	0.00	0.00	
1,900.0	6.69	256.16	1,893.7	-27.4	-111.1	-15.8	0.00	0.00	0.00	
2,000.0	6.69	256.16	1,993.0	-30.2	-122.4	-17.4	0.00	0.00	0.00	
2,100.0	6.69	256.16	2,092.3	-32.9	-133.8	-19.0	0.00	0.00	0.00	
2,200.0	6.69	256.16	2,191.7	-35.7	-145.1	-20.7	0.00	0.00	0.00	
2,300.0	6.69	256.16	2,291.0	-38.5	-156.4	-22.3	0.00	0.00	0.00	
2,400.0	6.69	256.16	2,390.3	-41.3	-167.7	-23.9	0.00	0.00	0.00	
2,500.0	6.69	256.16	2,489.6	-44.1	-179.0	-25.5	0.00	0.00	0.00	
2,600.0	6.69	256.16	2,588.9	-46.9	-190.3	-27.1	0.00	0.00	0.00	
2,700.0	6.69	256.16	2,688.3	-49.6	-201.6	-28.7	0.00	0.00	0.00	
2,800.0	6.69	256.16	2,787.6	-52.4	-212.9	-30.3	0.00	0.00	0.00	
2,900.0	6.69	256.16	2,886.9	-55.2	-224.2	-31.9	0.00	0.00	0.00	
3,000.0	6.69	256.16	2,986.2	-58.0	-235.5	-33.5	0.00	0.00	0.00	
3,100.0	6.69	256.16	3,085.5	-60.8	-246.8	-35.1	0.00	0.00	0.00	
3,200.0	6.69	256.16	3,184.9	-63.6	-258.1	-36.8	0.00	0.00	0.00	
3,300.0	6.69	256.16	3,284.2	-66.4	-269.4	-38.4	0.00	0.00	0.00	
3,400.0	6.69	256.16	3,383.5	-69.1	-280.7	-40.0	0.00	0.00	0.00	
3,500.0	6.69	256.16	3,482.8	-71.9	-292.0	-41.6	0.00	0.00	0.00	
3,600.0	6.69	256.16	3,582.1	-74.7	-303.3	-43.2	0.00	0.00	0.00	
3,700.0	6.69	256.16	3,681.5	-77.5	-314.6	-44.8	0.00	0.00	0.00	
3,800.0	6.69	256.16	3,780.8	-80.3	-326.0	-46.4	0.00	0.00	0.00	
3,900.0	6.69	256.16	3,880.1	-83.1	-337.3	-48.0	0.00	0.00	0.00	
4,000.0	6.69	256.16	3,979.4	-85.8	-348.6	-49.6	0.00	0.00	0.00	
4,100.0	6.69	256.16	4,078.7	-88.6	-359.9	-51.2	0.00	0.00	0.00	
4,200.0	6.69	256.16	4,178.0	-91.4	-371.2	-52.9	0.00	0.00	0.00	
4,300.0	6.69	256.16	4,277.4	-94.2	-382.5	-54.5	0.00	0.00	0.00	
4,400.0	6.69	256.16	4,376.7	-97.0	-393.8	-56.1	0.00	0.00	0.00	
4,500.0	6.69	256.16	4,476.0	-99.8	-405.1	-57.7	0.00	0.00	0.00	
4,600.0	6.69	256.16	4,575.3	-102.5	-416.4	-59.3	0.00	0.00	0.00	
4,700.0	6.69	256.16	4,674.6	-105.3	-427.7	-60.9	0.00	0.00	0.00	
4,800.0	6.69	256.16	4,774.0	-108.1	-439.0	-62.5	0.00	0.00	0.00	
4,900.0	6.69	256.16	4,873.3	-110.9	-450.3	-64.1	0.00	0.00	0.00	
5,000.0	6.69	256.16	4,972.6	-113.7	-461.6	-65.7	0.00	0.00	0.00	

Planning Report

<b>Database:</b>	Hobbs	<b>Local Co-ordinate Reference:</b>	Site Red Hills West 22/15 Fed Com #521H
<b>Company:</b>	Mewbourne Oil Company	<b>TVD Reference:</b>	WELL @ 3165.0usft (Original Well Elev)
<b>Project:</b>	Lea County, New Mexico NAD 83	<b>MD Reference:</b>	WELL @ 3165.0usft (Original Well Elev)
<b>Site:</b>	Red Hills West 22/15 Fed Com #521H	<b>North Reference:</b>	Grid
<b>Well:</b>	Sec 22, T26S, R32E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	BHL: 100' FNL & 420' FWL (Sec 15)		
<b>Design:</b>	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	6.69	256.16	5,071.9	-116.5	-472.9	-67.3	0.00	0.00	0.00
5,200.0	6.69	256.16	5,171.2	-119.3	-484.2	-69.0	0.00	0.00	0.00
5,300.0	6.69	256.16	5,270.6	-122.0	-495.5	-70.6	0.00	0.00	0.00
5,400.0	6.69	256.16	5,369.9	-124.8	-506.8	-72.2	0.00	0.00	0.00
5,500.0	6.69	256.16	5,469.2	-127.6	-518.1	-73.8	0.00	0.00	0.00
5,600.0	6.69	256.16	5,568.5	-130.4	-529.5	-75.4	0.00	0.00	0.00
5,700.0	6.69	256.16	5,667.8	-133.2	-540.8	-77.0	0.00	0.00	0.00
5,800.0	6.69	256.16	5,767.2	-136.0	-552.1	-78.6	0.00	0.00	0.00
5,900.0	6.69	256.16	5,866.5	-138.7	-563.4	-80.2	0.00	0.00	0.00
6,000.0	6.69	256.16	5,965.8	-141.5	-574.7	-81.8	0.00	0.00	0.00
6,100.0	6.69	256.16	6,065.1	-144.3	-586.0	-83.4	0.00	0.00	0.00
6,200.0	6.69	256.16	6,164.4	-147.1	-597.3	-85.1	0.00	0.00	0.00
6,300.0	6.69	256.16	6,263.8	-149.9	-608.6	-86.7	0.00	0.00	0.00
6,400.0	6.69	256.16	6,363.1	-152.7	-619.9	-88.3	0.00	0.00	0.00
6,500.0	6.69	256.16	6,462.4	-155.4	-631.2	-89.9	0.00	0.00	0.00
6,600.0	6.69	256.16	6,561.7	-158.2	-642.5	-91.5	0.00	0.00	0.00
6,700.0	6.69	256.16	6,661.0	-161.0	-653.8	-93.1	0.00	0.00	0.00
6,800.0	6.69	256.16	6,760.4	-163.8	-665.1	-94.7	0.00	0.00	0.00
6,900.0	6.69	256.16	6,859.7	-166.6	-676.4	-96.3	0.00	0.00	0.00
7,000.0	6.69	256.16	6,959.0	-169.4	-687.7	-97.9	0.00	0.00	0.00
7,100.0	6.69	256.16	7,058.3	-172.2	-699.0	-99.6	0.00	0.00	0.00
7,200.0	6.69	256.16	7,157.6	-174.9	-710.3	-101.2	0.00	0.00	0.00
7,300.0	6.69	256.16	7,257.0	-177.7	-721.7	-102.8	0.00	0.00	0.00
7,400.0	6.69	256.16	7,356.3	-180.5	-733.0	-104.4	0.00	0.00	0.00
7,500.0	6.69	256.16	7,455.6	-183.3	-744.3	-106.0	0.00	0.00	0.00
7,600.0	6.69	256.16	7,554.9	-186.1	-755.6	-107.6	0.00	0.00	0.00
7,700.0	6.69	256.16	7,654.2	-188.9	-766.9	-109.2	0.00	0.00	0.00
7,800.0	6.69	256.16	7,753.6	-191.6	-778.2	-110.8	0.00	0.00	0.00
7,900.0	6.69	256.16	7,852.9	-194.4	-789.5	-112.4	0.00	0.00	0.00
8,000.0	6.69	256.16	7,952.2	-197.2	-800.8	-114.0	0.00	0.00	0.00
8,100.0	6.69	256.16	8,051.5	-200.0	-812.1	-115.7	0.00	0.00	0.00
8,200.0	6.69	256.16	8,150.8	-202.8	-823.4	-117.3	0.00	0.00	0.00
8,300.0	6.69	256.16	8,250.2	-205.6	-834.7	-118.9	0.00	0.00	0.00
8,400.0	6.69	256.16	8,349.5	-208.4	-846.0	-120.5	0.00	0.00	0.00
8,500.0	6.69	256.16	8,448.8	-211.1	-857.3	-122.1	0.00	0.00	0.00
8,600.0	6.69	256.16	8,548.1	-213.9	-868.6	-123.7	0.00	0.00	0.00
8,700.0	6.69	256.16	8,647.4	-216.7	-879.9	-125.3	0.00	0.00	0.00
8,800.0	6.69	256.16	8,746.8	-219.5	-891.2	-126.9	0.00	0.00	0.00
8,900.0	6.69	256.16	8,846.1	-222.3	-902.5	-128.5	0.00	0.00	0.00
9,000.0	6.69	256.16	8,945.4	-225.1	-913.9	-130.1	0.00	0.00	0.00
9,100.0	6.69	256.16	9,044.7	-227.8	-925.2	-131.8	0.00	0.00	0.00
9,200.0	6.69	256.16	9,144.0	-230.6	-936.5	-133.4	0.00	0.00	0.00
9,300.0	6.69	256.16	9,243.4	-233.4	-947.8	-135.0	0.00	0.00	0.00
9,400.0	6.69	256.16	9,342.7	-236.2	-959.1	-136.6	0.00	0.00	0.00
9,500.0	6.69	256.16	9,442.0	-239.0	-970.4	-138.2	0.00	0.00	0.00
9,600.0	6.69	256.16	9,541.3	-241.8	-981.7	-139.8	0.00	0.00	0.00
9,663.5	6.69	256.16	9,604.4	-243.5	-988.9	-140.8	0.00	0.00	0.00
9,700.0	5.96	256.16	9,640.7	-244.5	-992.8	-141.4	2.00	-2.00	0.00
9,800.0	3.96	256.16	9,740.3	-246.6	-1,001.2	-142.6	2.00	-2.00	0.00
9,900.0	1.96	256.16	9,840.1	-247.8	-1,006.2	-143.3	2.00	-2.00	0.00
9,997.9	0.00	0.00	9,938.0	-248.2	-1,007.8	-143.5	2.00	-2.00	0.00
<b>KOP: 10' FSL &amp; 420' FWL (Sec 22)</b>									
10,000.0	0.21	359.68	9,940.1	-248.2	-1,007.8	-143.5	10.00	10.00	0.00

Planning Report

<b>Database:</b>	Hobbs	<b>Local Co-ordinate Reference:</b>	Site Red Hills West 22/15 Fed Com #521H
<b>Company:</b>	Mewbourne Oil Company	<b>TVD Reference:</b>	WELL @ 3165.0usft (Original Well Elev)
<b>Project:</b>	Lea County, New Mexico NAD 83	<b>MD Reference:</b>	WELL @ 3165.0usft (Original Well Elev)
<b>Site:</b>	Red Hills West 22/15 Fed Com #521H	<b>North Reference:</b>	Grid
<b>Well:</b>	Sec 22, T26S, R32E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	BHL: 100' FNL & 420' FWL (Sec 15)		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,050.0	5.21	359.68	9,990.1	-245.8	-1,007.8	-141.2	10.00	10.00	0.00	
10,100.0	10.21	359.68	10,039.6	-239.1	-1,007.8	-134.5	10.00	10.00	0.00	
10,150.0	15.21	359.68	10,088.3	-228.1	-1,007.9	-123.5	10.00	10.00	0.00	
10,200.0	20.21	359.68	10,136.0	-212.9	-1,008.0	-108.4	10.00	10.00	0.00	
10,250.0	25.21	359.68	10,182.1	-193.6	-1,008.1	-89.2	10.00	10.00	0.00	
10,300.0	30.21	359.68	10,226.3	-170.4	-1,008.2	-66.1	10.00	10.00	0.00	
10,323.4	32.55	359.68	10,246.3	-158.2	-1,008.3	-53.9	10.00	10.00	0.00	
<b>FTP: 100' FSL &amp; 420' FWL (Sec 22)</b>										
10,350.0	35.21	359.68	10,268.4	-143.4	-1,008.4	-39.2	10.00	10.00	0.00	
10,400.0	40.21	359.68	10,307.9	-112.8	-1,008.5	-8.8	10.00	10.00	0.00	
10,450.0	45.21	359.68	10,344.7	-78.9	-1,008.7	25.0	10.00	10.00	0.00	
10,500.0	50.21	359.68	10,378.3	-41.9	-1,008.9	61.8	10.00	10.00	0.00	
10,550.0	55.21	359.68	10,408.6	-2.1	-1,009.2	101.4	10.00	10.00	0.00	
10,600.0	60.21	359.68	10,435.3	40.1	-1,009.4	143.4	10.00	10.00	0.00	
10,650.0	65.21	359.68	10,458.2	84.5	-1,009.6	187.6	10.00	10.00	0.00	
10,700.0	70.21	359.68	10,477.2	130.8	-1,009.9	233.7	10.00	10.00	0.00	
10,750.0	75.21	359.68	10,492.0	178.5	-1,010.2	281.2	10.00	10.00	0.00	
10,800.0	80.21	359.68	10,502.7	227.3	-1,010.4	329.8	10.00	10.00	0.00	
10,850.0	85.21	359.68	10,509.0	276.9	-1,010.7	379.1	10.00	10.00	0.00	
10,897.4	89.94	359.68	10,511.0	324.2	-1,011.0	426.2	10.00	10.00	0.00	
10,897.9	89.94	359.68	10,511.0	324.8	-1,011.0	426.8	0.00	0.00	0.00	
<b>LP: 583' FSL &amp; 420' FWL (Sec 22)</b>										
10,900.0	89.94	359.68	10,511.0	326.9	-1,011.0	428.8	0.00	0.00	0.00	
11,000.0	89.94	359.68	10,511.1	426.9	-1,011.5	528.4	0.00	0.00	0.00	
11,100.0	89.94	359.68	10,511.2	526.9	-1,012.1	627.9	0.00	0.00	0.00	
11,200.0	89.94	359.68	10,511.3	626.9	-1,012.6	727.4	0.00	0.00	0.00	
11,300.0	89.94	359.68	10,511.4	726.9	-1,013.2	826.9	0.00	0.00	0.00	
11,400.0	89.94	359.68	10,511.5	826.9	-1,013.7	926.5	0.00	0.00	0.00	
11,500.0	89.94	359.68	10,511.6	926.9	-1,014.3	1,026.0	0.00	0.00	0.00	
11,600.0	89.94	359.68	10,511.7	1,026.8	-1,014.8	1,125.5	0.00	0.00	0.00	
11,700.0	89.94	359.68	10,511.8	1,126.8	-1,015.4	1,225.0	0.00	0.00	0.00	
11,800.0	89.94	359.68	10,511.9	1,226.8	-1,015.9	1,324.6	0.00	0.00	0.00	
11,900.0	89.94	359.68	10,512.0	1,326.8	-1,016.5	1,424.1	0.00	0.00	0.00	
12,000.0	89.94	359.68	10,512.1	1,426.8	-1,017.0	1,523.6	0.00	0.00	0.00	
12,100.0	89.94	359.68	10,512.2	1,526.8	-1,017.6	1,623.2	0.00	0.00	0.00	
12,200.0	89.94	359.68	10,512.3	1,626.8	-1,018.2	1,722.7	0.00	0.00	0.00	
12,300.0	89.94	359.68	10,512.4	1,726.8	-1,018.7	1,822.2	0.00	0.00	0.00	
12,400.0	89.94	359.68	10,512.5	1,826.8	-1,019.3	1,921.7	0.00	0.00	0.00	
12,500.0	89.94	359.68	10,512.6	1,926.8	-1,019.8	2,021.3	0.00	0.00	0.00	
12,600.0	89.94	359.68	10,512.7	2,026.8	-1,020.4	2,120.8	0.00	0.00	0.00	
12,700.0	89.94	359.68	10,512.8	2,126.8	-1,020.9	2,220.3	0.00	0.00	0.00	
12,800.0	89.94	359.68	10,512.9	2,226.8	-1,021.5	2,319.9	0.00	0.00	0.00	
12,900.0	89.94	359.68	10,513.0	2,326.8	-1,022.0	2,419.4	0.00	0.00	0.00	
12,990.2	89.94	359.68	10,513.1	2,417.0	-1,022.5	2,509.1	0.00	0.00	0.00	
<b>PPP2: 2676' FSL &amp; 420' FWL (Sec 22)</b>										
13,000.0	89.94	359.68	10,513.1	2,426.8	-1,022.6	2,518.9	0.00	0.00	0.00	
13,100.0	89.94	359.68	10,513.2	2,526.8	-1,023.1	2,618.4	0.00	0.00	0.00	
13,200.0	89.94	359.68	10,513.3	2,626.8	-1,023.7	2,718.0	0.00	0.00	0.00	
13,300.0	89.94	359.68	10,513.4	2,726.8	-1,024.2	2,817.5	0.00	0.00	0.00	
13,400.0	89.94	359.68	10,513.5	2,826.8	-1,024.8	2,917.0	0.00	0.00	0.00	
13,500.0	89.94	359.68	10,513.6	2,926.8	-1,025.3	3,016.5	0.00	0.00	0.00	
13,600.0	89.94	359.68	10,513.7	3,026.8	-1,025.9	3,116.1	0.00	0.00	0.00	
13,700.0	89.94	359.68	10,513.8	3,126.8	-1,026.4	3,215.6	0.00	0.00	0.00	

Planning Report

<b>Database:</b>	Hobbs	<b>Local Co-ordinate Reference:</b>	Site Red Hills West 22/15 Fed Com #521H
<b>Company:</b>	Mewbourne Oil Company	<b>TVD Reference:</b>	WELL @ 3165.0usft (Original Well Elev)
<b>Project:</b>	Lea County, New Mexico NAD 83	<b>MD Reference:</b>	WELL @ 3165.0usft (Original Well Elev)
<b>Site:</b>	Red Hills West 22/15 Fed Com #521H	<b>North Reference:</b>	Grid
<b>Well:</b>	Sec 22, T26S, R32E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	BHL: 100' FNL & 420' FWL (Sec 15)		
<b>Design:</b>	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)	
13,800.0	89.94	359.68	10,513.9	3,226.8	-1,027.0	3,315.1	0.00	0.00	0.00	
13,900.0	89.94	359.68	10,514.0	3,326.8	-1,027.5	3,414.7	0.00	0.00	0.00	
14,000.0	89.94	359.68	10,514.1	3,426.8	-1,028.1	3,514.2	0.00	0.00	0.00	
14,100.0	89.94	359.68	10,514.2	3,526.8	-1,028.6	3,613.7	0.00	0.00	0.00	
14,200.0	89.94	359.68	10,514.3	3,626.8	-1,029.2	3,713.2	0.00	0.00	0.00	
14,300.0	89.94	359.68	10,514.4	3,726.8	-1,029.8	3,812.8	0.00	0.00	0.00	
14,400.0	89.94	359.68	10,514.5	3,826.8	-1,030.3	3,912.3	0.00	0.00	0.00	
14,500.0	89.94	359.68	10,514.6	3,926.8	-1,030.9	4,011.8	0.00	0.00	0.00	
14,600.0	89.94	359.68	10,514.7	4,026.8	-1,031.4	4,111.4	0.00	0.00	0.00	
14,700.0	89.94	359.68	10,514.8	4,126.8	-1,032.0	4,210.9	0.00	0.00	0.00	
14,800.0	89.94	359.68	10,514.9	4,226.8	-1,032.5	4,310.4	0.00	0.00	0.00	
14,900.0	89.94	359.68	10,515.0	4,326.8	-1,033.1	4,409.9	0.00	0.00	0.00	
15,000.0	89.94	359.68	10,515.1	4,426.8	-1,033.6	4,509.5	0.00	0.00	0.00	
15,100.0	89.94	359.68	10,515.2	4,526.8	-1,034.2	4,609.0	0.00	0.00	0.00	
15,200.0	89.94	359.68	10,515.3	4,626.8	-1,034.7	4,708.5	0.00	0.00	0.00	
15,300.0	89.94	359.68	10,515.4	4,726.8	-1,035.3	4,808.0	0.00	0.00	0.00	
15,400.0	89.94	359.68	10,515.5	4,826.8	-1,035.8	4,907.6	0.00	0.00	0.00	
15,500.0	89.94	359.68	10,515.6	4,926.8	-1,036.4	5,007.1	0.00	0.00	0.00	
15,600.0	89.94	359.68	10,515.7	5,026.8	-1,036.9	5,106.6	0.00	0.00	0.00	
15,665.7	89.94	359.68	10,515.8	5,092.4	-1,037.3	5,172.0	0.00	0.00	0.00	
<b>PPP3: 0' FSL &amp; 420' FWL (Sec 15)</b>										
15,700.0	89.94	359.68	10,515.8	5,126.8	-1,037.5	5,206.2	0.00	0.00	0.00	
15,800.0	89.94	359.68	10,515.9	5,226.8	-1,038.0	5,305.7	0.00	0.00	0.00	
15,900.0	89.94	359.68	10,516.0	5,326.8	-1,038.6	5,405.2	0.00	0.00	0.00	
16,000.0	89.94	359.68	10,516.1	5,426.8	-1,039.1	5,504.7	0.00	0.00	0.00	
16,100.0	89.94	359.68	10,516.2	5,526.8	-1,039.7	5,604.3	0.00	0.00	0.00	
16,200.0	89.94	359.68	10,516.3	5,626.8	-1,040.3	5,703.8	0.00	0.00	0.00	
16,300.0	89.94	359.68	10,516.4	5,726.8	-1,040.8	5,803.3	0.00	0.00	0.00	
16,400.0	89.94	359.68	10,516.5	5,826.8	-1,041.4	5,902.9	0.00	0.00	0.00	
16,500.0	89.94	359.68	10,516.6	5,926.8	-1,041.9	6,002.4	0.00	0.00	0.00	
16,600.0	89.94	359.68	10,516.7	6,026.8	-1,042.5	6,101.9	0.00	0.00	0.00	
16,700.0	89.94	359.68	10,516.8	6,126.8	-1,043.0	6,201.4	0.00	0.00	0.00	
16,800.0	89.94	359.68	10,516.9	6,226.8	-1,043.6	6,301.0	0.00	0.00	0.00	
16,900.0	89.94	359.68	10,517.0	6,326.8	-1,044.1	6,400.5	0.00	0.00	0.00	
17,000.0	89.94	359.68	10,517.1	6,426.8	-1,044.7	6,500.0	0.00	0.00	0.00	
17,100.0	89.94	359.68	10,517.2	6,526.8	-1,045.2	6,599.5	0.00	0.00	0.00	
17,200.0	89.94	359.68	10,517.3	6,626.8	-1,045.8	6,699.1	0.00	0.00	0.00	
17,300.0	89.94	359.68	10,517.4	6,726.8	-1,046.3	6,798.6	0.00	0.00	0.00	
17,400.0	89.94	359.68	10,517.5	6,826.8	-1,046.9	6,898.1	0.00	0.00	0.00	
17,500.0	89.94	359.68	10,517.6	6,926.8	-1,047.4	6,997.7	0.00	0.00	0.00	
17,600.0	89.94	359.68	10,517.7	7,026.8	-1,048.0	7,097.2	0.00	0.00	0.00	
17,700.0	89.94	359.68	10,517.8	7,126.8	-1,048.5	7,196.7	0.00	0.00	0.00	
17,800.0	89.94	359.68	10,517.9	7,226.8	-1,049.1	7,296.2	0.00	0.00	0.00	
17,900.0	89.94	359.68	10,518.0	7,326.8	-1,049.6	7,395.8	0.00	0.00	0.00	
18,000.0	89.94	359.68	10,518.1	7,426.7	-1,050.2	7,495.3	0.00	0.00	0.00	
18,100.0	89.94	359.68	10,518.2	7,526.7	-1,050.7	7,594.8	0.00	0.00	0.00	
18,200.0	89.94	359.68	10,518.3	7,626.7	-1,051.3	7,694.4	0.00	0.00	0.00	
18,300.0	89.94	359.68	10,518.4	7,726.7	-1,051.9	7,793.9	0.00	0.00	0.00	
18,400.0	89.94	359.68	10,518.5	7,826.7	-1,052.4	7,893.4	0.00	0.00	0.00	
18,500.0	89.94	359.68	10,518.6	7,926.7	-1,053.0	7,992.9	0.00	0.00	0.00	
18,600.0	89.94	359.68	10,518.7	8,026.7	-1,053.5	8,092.5	0.00	0.00	0.00	
18,700.0	89.94	359.68	10,518.8	8,126.7	-1,054.1	8,192.0	0.00	0.00	0.00	
18,800.0	89.94	359.68	10,518.9	8,226.7	-1,054.6	8,291.5	0.00	0.00	0.00	
18,900.0	89.94	359.68	10,519.0	8,326.7	-1,055.2	8,391.0	0.00	0.00	0.00	

Planning Report

<b>Database:</b>	Hobbs	<b>Local Co-ordinate Reference:</b>	Site Red Hills West 22/15 Fed Com #521H
<b>Company:</b>	Mewbourne Oil Company	<b>TVD Reference:</b>	WELL @ 3165.0usft (Original Well Elev)
<b>Project:</b>	Lea County, New Mexico NAD 83	<b>MD Reference:</b>	WELL @ 3165.0usft (Original Well Elev)
<b>Site:</b>	Red Hills West 22/15 Fed Com #521H	<b>North Reference:</b>	Grid
<b>Well:</b>	Sec 22, T26S, R32E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	BHL: 100' FNL & 420' FWL (Sec 15)		
<b>Design:</b>	Design #1		

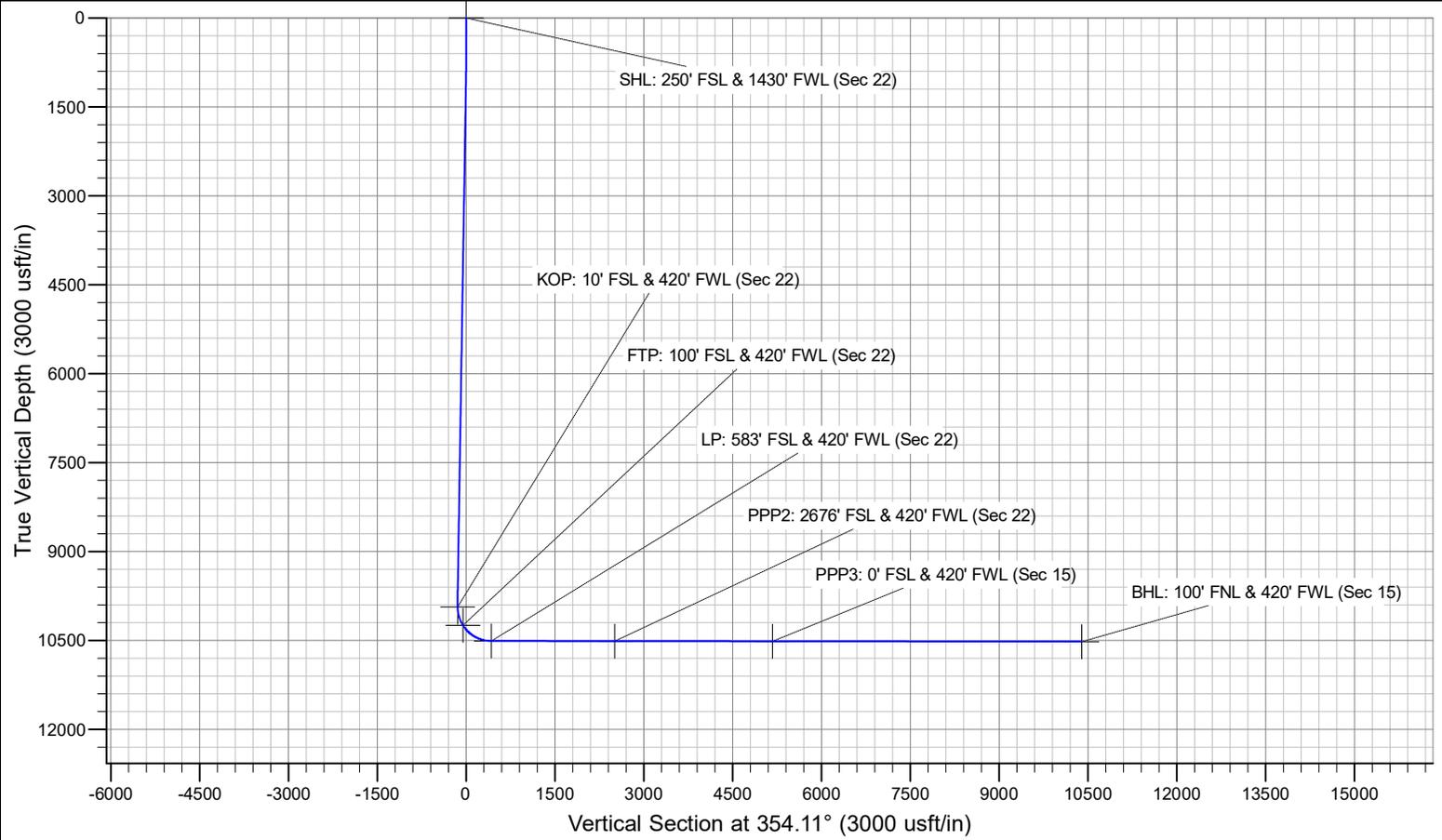
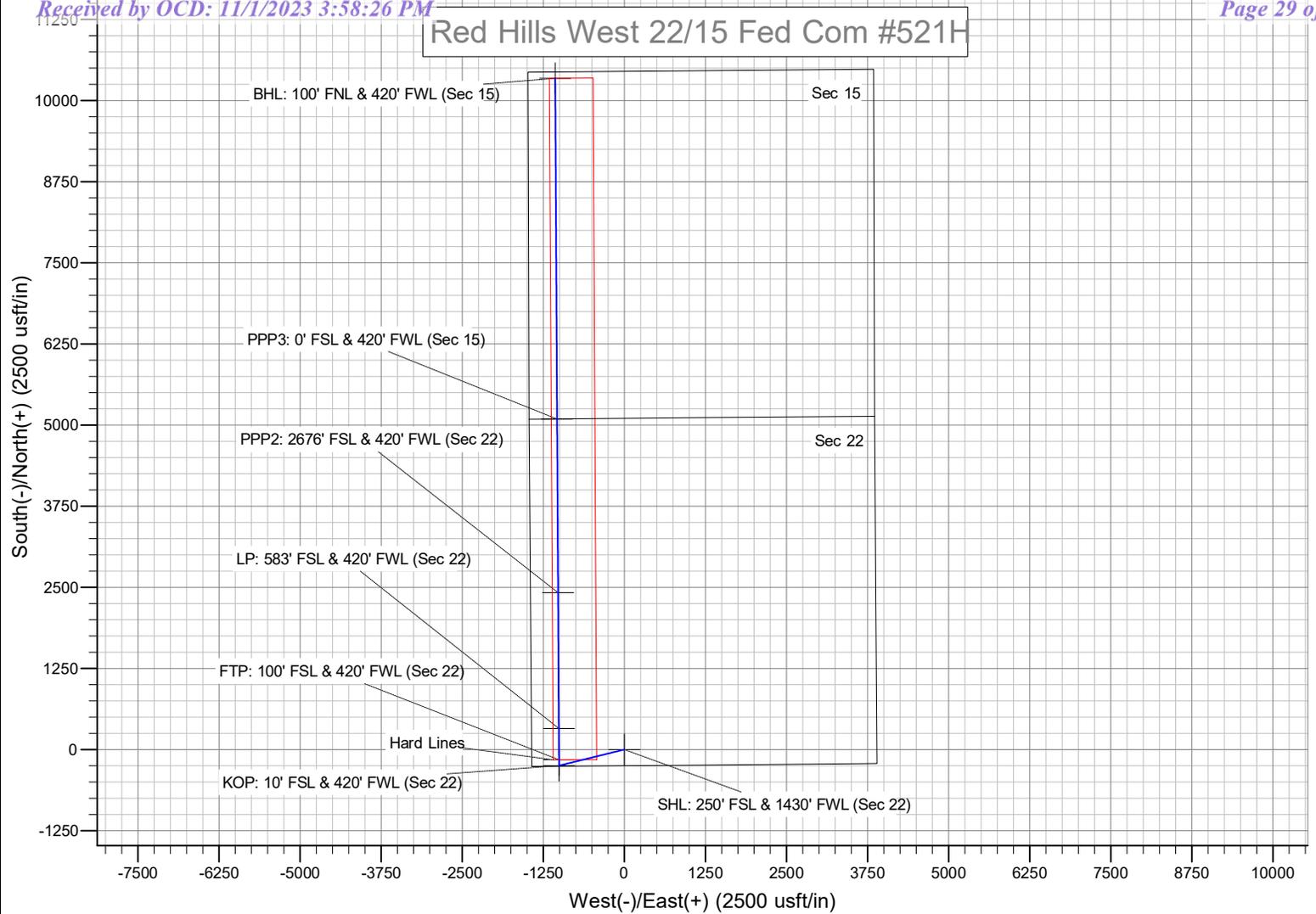
Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
19,000.0	89.94	359.68	10,519.1	8,426.7	-1,055.7	8,490.6	0.00	0.00	0.00	
19,100.0	89.94	359.68	10,519.2	8,526.7	-1,056.3	8,590.1	0.00	0.00	0.00	
19,200.0	89.94	359.68	10,519.3	8,626.7	-1,056.8	8,689.6	0.00	0.00	0.00	
19,300.0	89.94	359.68	10,519.4	8,726.7	-1,057.4	8,789.2	0.00	0.00	0.00	
19,400.0	89.94	359.68	10,519.5	8,826.7	-1,057.9	8,888.7	0.00	0.00	0.00	
19,500.0	89.94	359.68	10,519.6	8,926.7	-1,058.5	8,988.2	0.00	0.00	0.00	
19,600.0	89.94	359.68	10,519.7	9,026.7	-1,059.0	9,087.7	0.00	0.00	0.00	
19,700.0	89.94	359.68	10,519.8	9,126.7	-1,059.6	9,187.3	0.00	0.00	0.00	
19,800.0	89.94	359.68	10,519.9	9,226.7	-1,060.1	9,286.8	0.00	0.00	0.00	
19,900.0	89.94	359.68	10,520.0	9,326.7	-1,060.7	9,386.3	0.00	0.00	0.00	
20,000.0	89.94	359.68	10,520.1	9,426.7	-1,061.2	9,485.9	0.00	0.00	0.00	
20,100.0	89.94	359.68	10,520.2	9,526.7	-1,061.8	9,585.4	0.00	0.00	0.00	
20,200.0	89.94	359.68	10,520.3	9,626.7	-1,062.4	9,684.9	0.00	0.00	0.00	
20,300.0	89.94	359.68	10,520.4	9,726.7	-1,062.9	9,784.4	0.00	0.00	0.00	
20,400.0	89.94	359.68	10,520.5	9,826.7	-1,063.5	9,884.0	0.00	0.00	0.00	
20,500.0	89.94	359.68	10,520.6	9,926.7	-1,064.0	9,983.5	0.00	0.00	0.00	
20,600.0	89.94	359.68	10,520.7	10,026.7	-1,064.6	10,083.0	0.00	0.00	0.00	
20,700.0	89.94	359.68	10,520.8	10,126.7	-1,065.1	10,182.5	0.00	0.00	0.00	
20,800.0	89.94	359.68	10,520.9	10,226.7	-1,065.7	10,282.1	0.00	0.00	0.00	
20,900.0	89.94	359.68	10,521.0	10,326.7	-1,066.2	10,381.6	0.00	0.00	0.00	
20,914.8	89.94	359.68	10,521.0	10,341.5	-1,066.3	10,396.3	0.00	0.00	0.00	
<b>BHL: 100' FNL &amp; 420' FWL (Sec 15)</b>										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
SHL: 250' FSL & 1430' F - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	372,218.60	747,923.70	32.0215573	-103.6667512	
KOP: 10' FSL & 420' FW - plan hits target center - Point	0.00	0.00	9,938.0	-248.2	-1,007.8	371,970.41	746,915.90	32.0208921	-103.6700077	
FTP: 100' FSL & 420' FV - plan hits target center - Point	0.00	0.01	10,246.3	-158.2	-1,008.3	372,060.40	746,915.41	32.0211395	-103.6700075	
LP: 583' FSL & 420' FWI - plan hits target center - Point	0.00	0.00	10,511.0	324.8	-1,011.0	372,543.39	746,912.74	32.0224672	-103.6700066	
PPP2: 2676' FSL & 420' - plan hits target center - Point	0.00	0.00	10,513.1	2,417.0	-1,022.5	374,635.59	746,901.18	32.0282184	-103.6700024	
PPP3: 0' FSL & 420' FW - plan hits target center - Point	0.00	0.00	10,515.8	5,092.4	-1,037.3	377,311.05	746,886.40	32.0355730	-103.6699971	
BHL: 100' FNL & 420' FV - plan hits target center - Point	0.00	0.00	10,521.0	10,341.5	-1,066.3	382,560.10	746,857.40	32.0500021	-103.6699867	

Planning Report

<b>Database:</b>	Hobbs	<b>Local Co-ordinate Reference:</b>	Site Red Hills West 22/15 Fed Com #521H
<b>Company:</b>	Mewbourne Oil Company	<b>TVD Reference:</b>	WELL @ 3165.0usft (Original Well Elev)
<b>Project:</b>	Lea County, New Mexico NAD 83	<b>MD Reference:</b>	WELL @ 3165.0usft (Original Well Elev)
<b>Site:</b>	Red Hills West 22/15 Fed Com #521H	<b>North Reference:</b>	Grid
<b>Well:</b>	Sec 22, T26S, R32E	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	BHL: 100' FNL & 420' FWL (Sec 15)		
<b>Design:</b>	Design #1		

# Red Hills West 22/15 Fed Com #521H



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

CONDITIONS

Action 281957

**CONDITIONS**

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 281957
	Action Type: [C-103] NOI Change of Plans (C-103A)

**CONDITIONS**

Created By	Condition	Condition Date
pkautz	IF ON ANY STRING CEMENT DOES NOT CIRCULATE, A RCBL MUST BE RUN ON THAT STRING OF CASING.	12/7/2023