

Form 3160-3
(June 2015)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM018626
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator MEWBOURNE OIL COMPANY		8. Lease Name and Well No. LINDALE 24/25 W1DE FED 2H
3a. Address PO Box 5270 Hobbs NM 88240	3b. Phone No. (include area code) (575)393-5905	9. API Well No. 30 015 47355
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NWNW / 405 FNL / 625 FWL / LAT 32.0342404 / LONG -103.8413003 At proposed prod. zone SWNW / 2336 FNL / 990 FWL / LAT 32.014294 / LONG -103.8401357		10. Field and Pool, or Exploratory WELCH / PURPLE SAGE WOLFCAMP G
11. Sec., T. R. M. or Blk. and Survey or Area SEC 24 / T26S / R30E / NMP		
14. Distance in miles and direction from nearest town or post office* 25 miles	12. County or Parish EDDY	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 185 feet	16. No of acres in lease 1000	17. Spacing Unit dedicated to this well 480
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 200 feet	19. Proposed Depth 11303 feet / 18730 feet	20. BLM/BIA Bond No. in file FED: NM1693
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3140 feet	22. Approximate date work will start* 12/12/2017	23. Estimated duration 60 days
24. Attachments		

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

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 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). | 6. Such other site specific information and/or plans as may be requested by the BLM. |

25. Signature (Electronic Submission)	Name (Printed/Typed) Bradley Bishop / Ph: (575)393-5905	Date 09/18/2018
Title Regulatory		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Cody Layton / Ph: (575)234-5959	Date 03/21/2019
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.



(Continued on page 2)

*(Instructions on page 2)

Approval Date: 03/21/2019 Entered - KMS NMOCD

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30 015 47355		2 Pool Code 98220		3 Pool Name PURPLE SAGE WOLFCAMP GAS	
4 Property Code 325820		5 Property Name LINDALE 24/25 WIDE FED			6 Well Number 2H
7 OGRID NO. 14744		8 Operator Name MEWBOURNE OIL COMPANY			9 Elevation 3140'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
D	24	26S	30E		405	NORTH	625	WEST	EDDY

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	25	26S	30E		2310	NORTH	990	WEST	EDDY

12 Dedicated Acres 480	13 Joint or Infill	14 Consolidation Code	15 Order No.
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No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

<p>CORNER DATA NAD 83 GRID - NM EAST</p> <p>A: FOUND BRASS CAP "1940" N: 366293.1 - E: 693228.1</p> <p>B: FOUND BRASS CAP "1940" N: 368956.8 - E: 693212.2</p> <p>C: FOUND BRASS CAP "1940" N: 371622.3 - E: 693195.5</p> <p>D: FOUND BRASS CAP "1940" N: 374284.4 - E: 693187.5</p> <p>E: FOUND BRASS CAP "1940" N: 376945.7 - E: 693179.8</p> <p>F: FOUND BRASS CAP "1940" N: 376952.9 - E: 695842.7</p> <p>G: FOUND BRASS CAP "1940" N: 376961.6 - E: 698498.3</p> <p>H: FOUND BRASS CAP "1940" N: 374295.4 - E: 698512.3</p> <p>I: FOUND BRASS CAP "1940" N: 371630.5 - E: 698527.5</p> <p>J: FOUND BRASS CAP "1940" N: 368968.0 - E: 698541.7</p> <p>K: FOUND BRASS CAP "1940" N: 366302.2 - E: 698556.8</p> <p>L: FOUND BRASS CAP "1940" N: 366297.6 - E: 695891.6</p> <p>M: FOUND BRASS CAP "1940" N: 371626.0 - E: 695863.6</p>	<p>GEODETIC DATA NAD 83 GRID - NM EAST</p> <p>SURFACE LOCATION N: 376542.5 - E: 693835.9 LAT: 32.0342404° N LONG: 103.8413003° W</p> <p>PRODUCING AREA</p> <p>BOTTOM HOLE N: 369314.2 - E: 694199.8 LAT: 32.0143660° N LONG: 103.8401360° W</p>	<p>17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or an unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature: <i>Bradley Bishop</i> Date: 9-11-18 Printed Name: BRADLEY BISHOP E-mail Address: BBISHOP@MEWBOURNE.COM</p> <p>18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>8-27-18 Date of Survey Signature and Seal of Professional Surveyor: <i>Robert M. Howett</i> 19680 Certificate Number</p>
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Job No.: LS18081030

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1625 N. French Dr., Hobbs, NM 88240
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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: 9-10-18

☒ Original

Operator & OGRID No.: Mewbourne Oil Company - 14744

☐ Amended - Reason for Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple 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
Lindale 24/25 W1DE Fed #2H		D- 24-T26S-R30E	405' FNL & 625' FWL	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

PECOS DISTRICT

DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL COMPANY
LEASE NO.:	NMNM18626
WELL NAME & NO.:	LINDALE 24_25 W1DE FED – 2H
SURFACE HOLE FOOTAGE:	405' FNL & 625' FWL
BOTTOM HOLE FOOTAGE:	2336' FNL & 990' FWL
LOCATION:	Section 24, T. 26 S., R 30 E., NMPM
COUNTY:	Eddy County, New Mexico

Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input type="radio"/> Medium	<input checked="" type="radio"/> High
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	
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP

A. Hydrogen Sulfide

1. Hydrogen Sulfide (H₂S) monitors shall be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **13 3/8 inch** surface casing shall be set at approximately **1000 feet** (a minimum of 25 feet 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 is:

- Cement to surface. If cement does not circulate see B.1.a, c-d above.
Excess cement calculates to 23%, additional cement might be required. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

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

Operator has proposed DV tool at depth of **4858 feet**, but will adjust cement proportionately if moved. DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range. If an ECP is used, it is to be set a minimum of 50' below the shoe to provide cement across the shoe. If it cannot be set below the shoe, a CBL shall be run to verify cement coverage.

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.

❖ **In Medium/High 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.**

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

- Cement should tie-back at least **200 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 **5,000 (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

JJP02202019

GENERAL REQUIREMENTS

1. 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
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - 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.
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
 4. The record of the drilling rate along with the GR/N well log (one log per well pad is acceptable) 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

3. 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.
4. 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.
5. 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. 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.
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, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
 - c. The tests shall be done by an independent service company utilizing a test plug. The results of the test shall be reported to the appropriate BLM office.
 - 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. 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.
 - f. 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. This test shall be performed prior to the test at full stack pressure.

- g. 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

1. 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.
2. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 W1DE FED

Well Number: 2H

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

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

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name:
LINDALE 24/25 DE WELLS

Number: 4

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: 25 Miles

Distance to nearest well: 200 FT

Distance to lease line: 185 FT

Reservoir well spacing assigned acres Measurement: 480 Acres

Well plat: Lindale24_25W1DEFed2H_wellplat_20180912093509.pdf

Well work start Date: 12/12/2017

Duration: 60 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number:

Reference Datum:

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
SHL Leg #1	405	FNL	625	FW L	26S	30E	24	Aliquot NWN W	32.03424 04	- 103.8413 003	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 018626	314 0	0	0	
KOP Leg #1	10	FNL	990	FW L	26S	30E	24	Aliquot NWN W	32.03532 61	- 103.8401 198	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 018626	- 759 0	107 51	107 30	
PPP Leg #1-1	330	FNL	990	FW L	26S	30E	24	Aliquot NWN W	32.03444 37	- 103.8401 204	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 018626	- 810 5	113 91	112 45	

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 W1DE FED

Well Number: 2H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
EXIT Leg #1	2336	FNL	990	FWL	26S	30E	25	Aliquot SWN W	32.014294	- 103.8401357	EDD Y	NEW MEXICO	NEW MEXICO	F	NMNM 018626	- 8163	18730	11303	
BHL Leg #1	2336	FNL	990	FWL	26S	30E	25	Aliquot SWN W	32.014294	- 103.8401357	EDD Y	NEW MEXICO	NEW MEXICO	F	NMNM 018626	- 8163	18730	11303	

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

Statement Accepting Responsibility for Operations

Operator Name: Mewbourne Oil Company
Street or Box: P.O. Box 5270
City, State: Hobbs, New Mexico
Zip Code: 88241

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

Lease Number: NMNM 018626
Legal Description of Land: Section 24, T-26S, R-30E Eddy County, New Mexico.
Location @ 405' FNL & 625' FWL
Formation (if applicable): Wolfcamp
Bond Coverage: \$150,000
BLM Bond File: NM1693 nationwide, NMB000919

Authorized Signature: _____



Name: Bradley Bishop
Title: Regulatory Manager

Date: 9-10-18



APD ID: 10400034020

Submission Date: 09/18/2018

Highlighted data
reflects the most
recent changes

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 W1DE FED

Well Number: 2H

[Show Final Text](#)

Well Type: CONVENTIONAL GAS WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
301290	UNKNOWN	3140	27	27		NONE	N
301291	RUSTLER	2221	919	919	ANHYDRITE, DOLOMITE	USEABLE WATER	N
301292	CASTILE	839	2301	2301	SALT	NONE	N
301293	BASE OF SALT	-499	3639	3639	SALT	NONE	N
301294	LAMAR	-614	3754	3754	LIMESTONE	NATURAL GAS, OIL	N
304408	BELL CANYON	-649	3789	3789	SANDSTONE	NATURAL GAS, OIL	N
304409	CHERRY CANYON	-1542	4682	4682	SANDSTONE	NATURAL GAS, OIL	N
304411	MANZANITA	-1718	4858	4858	LIMESTONE	NATURAL GAS, OIL	N
304412	BRUSHY CANYON	-2736	5876	5876	SANDSTONE	NATURAL GAS, OIL	N
301295	BONE SPRING	-4547	7687	7687	LIMESTONE, SHALE	NATURAL GAS, OIL	N
301299	WOLFCAMP	-7810	10950	10950	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 18730

Equipment: Annular, Pipe Ram, Blind Ram

Requesting Variance? YES

Variance request: A variance is requested for use of a flexible choke line from the BOP to Choke Manifold. Anchors not required by manufacturer 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

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 W1DE FED

Well Number: 2H

cock and floor safety valve (inside BOP) and choke lines and choke manifold.

Choke Diagram Attachment:

Lindale_24_25_W1DE_Fed_2H_5M_BOPE_Choke_Diagram_20180917161342.pdf

Lindale_24_25_W1DE_Fed_2H_Flex_Line_Specs_20180917161345.pdf

BOP Diagram Attachment:

Lindale_24_25_W1DE_Fed_2H_5M_BOPE_Schematic_20180917161359.pdf

Lindale_24_25_W1DE_Fed_2H_Multi_Bowl_WH_20180917161403.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	1000	0	1000	3167		1000	H-40	48	ST&C	1.68	3.78	DRY	6.71	DRY	11.27
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	3453	0	3453	3167		3453	J-55	36	LT&C	1.125	1.96	DRY	3.38	DRY	4.2
3	INTERMEDIATE	12.25	9.625	NEW	API	N	3453	3700	3453	3700			247	J-55	40	LT&C	1.34	2.05	DRY	52.63	DRY	63.76
4	PRODUCTION	8.75	7.0	NEW	API	N	0	11450	0	11266	3167		11450	P-110	26	LT&C	1.33	1.78	DRY	2.19	DRY	2.79
5	LINER	6.125	4.5	NEW	API	N	10751	18730	10751	11303			7979	P-110	13.5	LT&C	1.4	1.62	DRY	3.14	DRY	3.92

Casing Attachments

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 W1DE FED

Well Number: 2H

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Lindale_24_25_W1DE_Fed_2H_Csg_Assumptions_20180917161557.pdf

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

Inspection Document:

Spec Document:

Tapered String Spec:

Lindale_24_25_W1DE_Fed_2H_TaperedCsg_20180917161637.pdf

Casing Design Assumptions and Worksheet(s):

Lindale_24_25_W1DE_Fed_2H_Csg_Assumptions_20180917161700.pdf

Casing ID: 3 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Lindale_24_25_W1DE_Fed_2H_Csg_Assumptions_20190205085146.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 W1DE FED

Well Number: 2H

Casing Attachments

Casing ID: 4 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Lindale_24_25_W1DE_Fed_2H_Csg_Assumptions_20180917161816.pdf

Casing ID: 5 **String Type:** LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Lindale_24_25_W1DE_Fed_2H_Csg_Assumptions_20180917161856.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	809	530	2.12	12.5	1123	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		809	1000	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	3051	595	2.12	12.5	1261	25	Class C	Salt, Gel, Extender, LCM

INTERMEDIATE	Lead		3051	3700	200	1.34	14.8	268	25	Class C	Retarder
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Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 W1DE FED

Well Number: 2H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead	4858	3500	4188	65	2.12	12.5	138	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		4188	4858	100	1.34	14.8	134	25	Class C	Retarder
PRODUCTION	Lead	4858	4858	8952	365	2.12	12.5	774	25	Class H	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		8952	11450	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		10751	18730	325	2.97	11.2	965	25	Class H	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-Settling Agent

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

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

Describe the mud monitoring system utilized: 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	1000	SPUD MUD	8.6	8.8							
1000	3700	SALT SATURATED	10	10							

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 W1DE FED

Well Number: 2H

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
3700	1126 6	WATER-BASED MUD	8.6	9.5							
1126 6	1130 3	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.

Section 6 - Test, Logging, Coring

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

Will run GR/CNL from KOP (10751') 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: 7053

Anticipated Surface Pressure: 4566.34

Anticipated Bottom Hole Temperature(F): 165

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

Describe:

Contingency Plans geohazards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Lindale_24_25_W1DE_Fed_2H_H2S_Plan_20180917162444.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 W1DE FED

Well Number: 2H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Lindale_24_25_W1DE_Fed_2H_Dir_Plot_20180917162508.pdf

Lindale_24_25_W1DE_Fed_2H_Dir_Plan_20180917162512.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Lindale_24_25_W1DE_Fed_2H_Drlg_Program_20180917162523.doc

Other Variance attachment:

Mewbourne Oil Company, Lindale 24/25 WIDE Fed #2H
Sec 24, T26S, R30E
SL: 405' FNL & 625' FWL, Sec 24
BHL: 2336' FNL & 990' FWL, Sec 25

Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
	From	To								
17.5"	0'	1000'	13.375"	48	H40	STC	1.68	3.78	6.71	11.27
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	3.38	4.20
12.25"	3453'	3700'	9.625"	40	J55	LTC	1.34	2.05	52.63	63.76
8.75"	0'	11,450'	7"	26	HCP110	LTC	1.33	1.78	2.19	2.79
6.125"	10,751'	18,730'	4.5"	13.5	P110	LTC	1.40	1.62	3.14	3.92
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 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Mewbourne Oil Company, Lindale 24/25 WIDE Fed #2H
Sec 24, T26S, R30E
SL: 405' FNL & 625' FWL, Sec 24
BHL: 2336' FNL & 990' FWL, Sec 25

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Mewbourne Oil Company, Lindale 24/25 WIDE Fed #2H
Sec 24, T26S, R30E
SL: 405' FNL & 625' FWL, Sec 24
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Mewbourne Oil Company, Lindale 24/25 WIDE Fed #2H
Sec 24, T26S, R30E
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Mewbourne Oil Company, Lindale 24/25 WIDE Fed #2H
Sec 24, T26S, R30E
SL: 405' FNL & 625' FWL, Sec 24
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Hydrogen Sulfide Drilling Operations Plan
Mewbourne Oil Company

1. General Requirements

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

2. Hydrogen Sulfide Training

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

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

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

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

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

3. Hydrogen Sulfide Safety Equipment and Systems

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

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

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

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

3. Hydrogen Sulfide Protection and Monitoring Equipment
Two portable hydrogen sulfide monitors positioned on location for optimum coverage and detection. The units shall have audible sirens to notify personnel when hydrogen sulfide levels exceed 20 PPM.
4. Visual Warning Systems
 - A. Wind direction indicators as indicated on the wellsite diagram.
 - B. Caution signs shall be posted on roads providing access to location. Signs shall be painted a high visibility color with lettering of sufficient size to be readable at reasonable distances from potentially contaminated areas.

4. Mud Program

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

5. Metallurgy

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

6. Communications

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

7. Well Testing

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

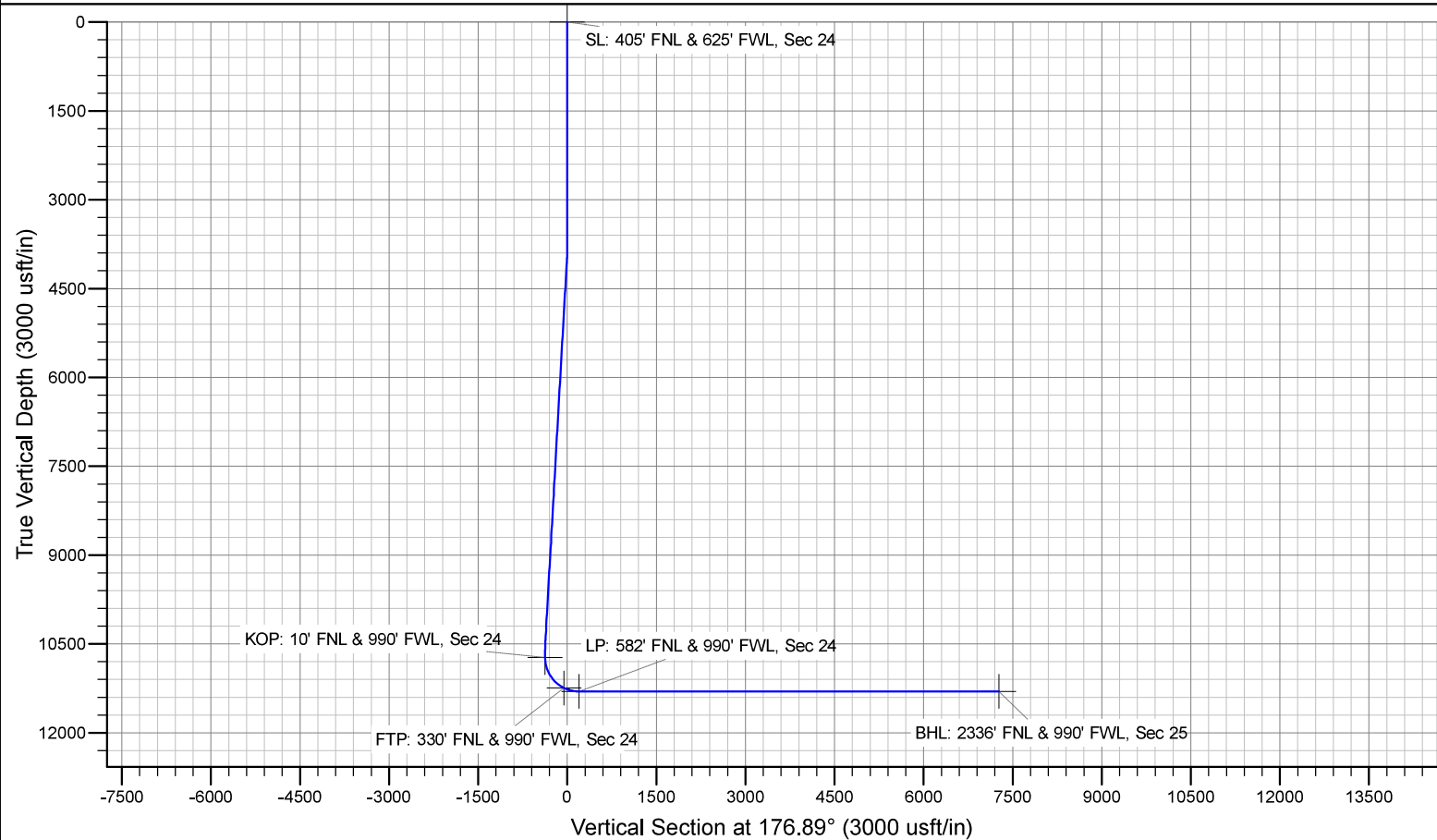
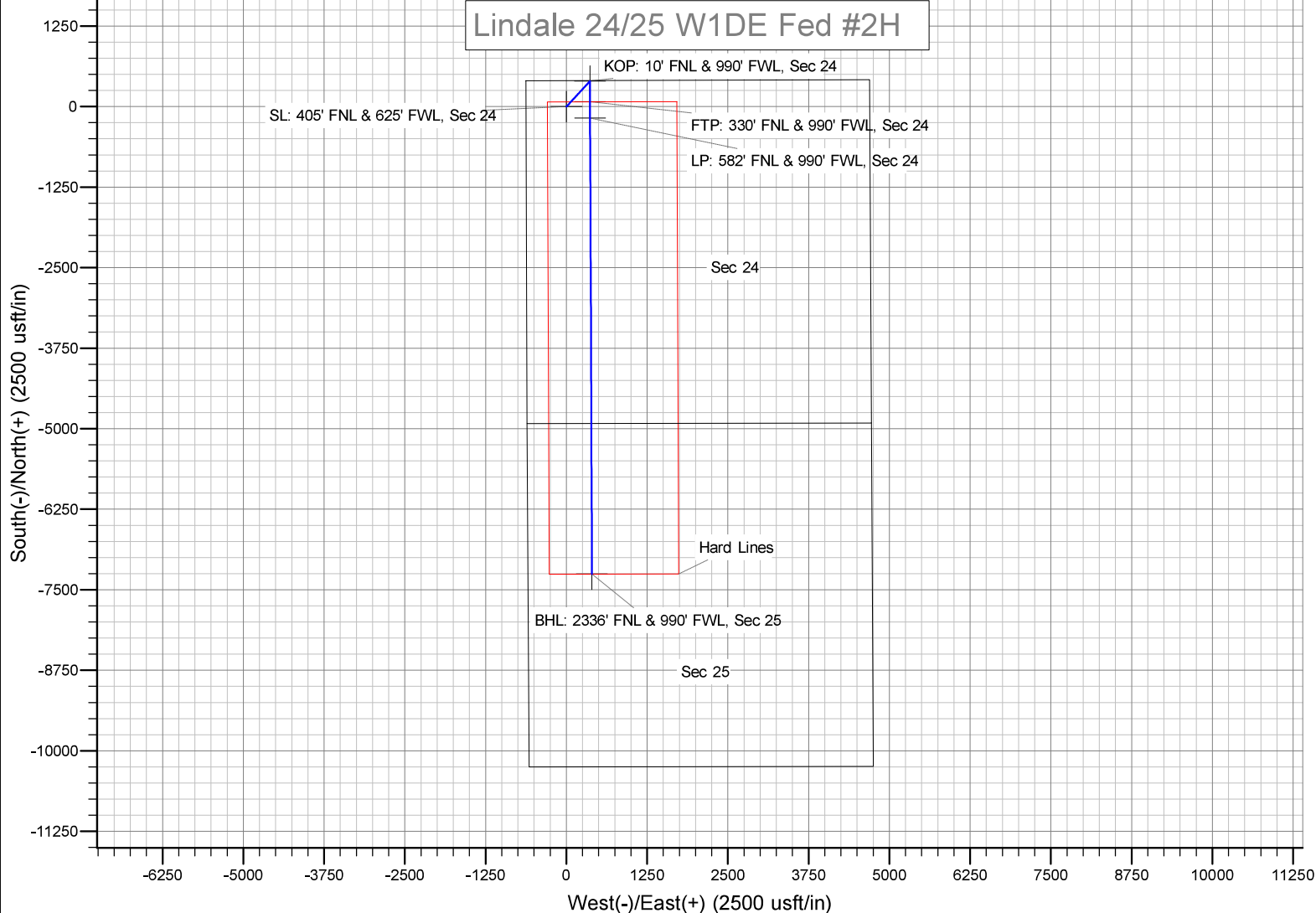
8. Emergency Phone Numbers

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

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

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

Lindale 24/25 W1DE Fed #2H



Mewbourne Oil Company

Eddy County, New Mexico NAD 83

Lindale 24/25 W1DE Fed #2H

Sec 24, T26S, R30E

SL: 405' FNL & 625' FWL, Sec 24

BHL: 2336' FNL & 990' FWL, Sec 25

Plan: Design #1

Standard Planning Report

14 September, 2018

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Lindale 24/25 W1DE Fed #2H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3167.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3167.0usft (Original Well Elev)
Site:	Lindale 24/25 W1DE Fed #2H	North Reference:	Grid
Well:	Sec 24, T26S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 2336' FNL & 990' FWL, Sec 25		
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	Lindale 24/25 W1DE Fed #2H					
Site Position:		Northing:	376,543.00 usft	Latitude:	32.0342421	
From:	Map	Easting:	693,806.00 usft	Longitude:	-103.8413002	
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.26

Well	Sec 24, T26S, R30E					
Well Position	+N/-S	0.0 usft	Northing:	376,543.00 usft	Latitude:	32.0342421
	+E/-W	0.0 usft	Easting:	693,806.00 usft	Longitude:	-103.8413002
Position Uncertainty		0.0 usft	Wellhead Elevation:	3,167.0 usft	Ground Level:	3,140.0 usft

Wellbore	BHL: 2336' FNL & 990' FWL, Sec 25				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/13/2018	6.80	59.78	47,753

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	176.89

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	
3,750.0	0.00	0.00	3,750.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,057.2	4.61	42.59	4,056.9	9.1	8.4	1.50	1.50	0.00	42.59	
10,444.1	4.61	42.59	10,423.1	386.9	355.6	0.00	0.00	0.00	0.00	
10,751.4	0.00	0.00	10,730.0	396.0	364.0	1.50	-1.50	0.00	180.00	KOP: 10' FNL & 990' I
11,651.4	90.00	179.78	11,303.0	-177.0	366.2	10.00	10.00	0.00	179.78	
18,729.5	90.00	179.78	11,303.0	-7,255.0	394.0	0.00	0.00	0.00	0.00	BHL: 2336' FNL & 990'

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Lindale 24/25 W1DE Fed #2H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3167.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3167.0usft (Original Well Elev)
Site:	Lindale 24/25 W1DE Fed #2H	North Reference:	Grid
Well:	Sec 24, T26S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 2336' FNL & 990' FWL, Sec 25		
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: 405' FNL & 625' FWL, Sec 24									
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
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,750.0	0.00	0.00	3,750.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.75	42.59	3,800.0	0.2	0.2	-0.2	1.50	1.50	0.00
3,900.0	2.25	42.59	3,900.0	2.2	2.0	-2.1	1.50	1.50	0.00
4,000.0	3.75	42.59	3,999.8	6.0	5.5	-5.7	1.50	1.50	0.00
4,057.2	4.61	42.59	4,056.9	9.1	8.4	-8.6	1.50	1.50	0.00
4,100.0	4.61	42.59	4,099.5	11.6	10.7	-11.0	0.00	0.00	0.00
4,200.0	4.61	42.59	4,199.2	17.5	16.1	-16.6	0.00	0.00	0.00
4,300.0	4.61	42.59	4,298.9	23.5	21.6	-22.2	0.00	0.00	0.00
4,400.0	4.61	42.59	4,398.6	29.4	27.0	-27.9	0.00	0.00	0.00
4,500.0	4.61	42.59	4,498.2	35.3	32.4	-33.5	0.00	0.00	0.00
4,600.0	4.61	42.59	4,597.9	41.2	37.9	-39.1	0.00	0.00	0.00
4,700.0	4.61	42.59	4,697.6	47.1	43.3	-44.7	0.00	0.00	0.00
4,800.0	4.61	42.59	4,797.3	53.0	48.7	-50.3	0.00	0.00	0.00
4,900.0	4.61	42.59	4,896.9	58.9	54.2	-55.9	0.00	0.00	0.00
5,000.0	4.61	42.59	4,996.6	64.9	59.6	-61.5	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Lindale 24/25 W1DE Fed #2H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3167.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3167.0usft (Original Well Elev)
Site:	Lindale 24/25 W1DE Fed #2H	North Reference:	Grid
Well:	Sec 24, T26S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 2336' FNL & 990' FWL, Sec 25		
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	4.61	42.59	5,096.3	70.8	65.1	-67.1	0.00	0.00	0.00
5,200.0	4.61	42.59	5,196.0	76.7	70.5	-72.8	0.00	0.00	0.00
5,300.0	4.61	42.59	5,295.7	82.6	75.9	-78.4	0.00	0.00	0.00
5,400.0	4.61	42.59	5,395.3	88.5	81.4	-84.0	0.00	0.00	0.00
5,500.0	4.61	42.59	5,495.0	94.4	86.8	-89.6	0.00	0.00	0.00
5,600.0	4.61	42.59	5,594.7	100.4	92.2	-95.2	0.00	0.00	0.00
5,700.0	4.61	42.59	5,694.4	106.3	97.7	-100.8	0.00	0.00	0.00
5,800.0	4.61	42.59	5,794.0	112.2	103.1	-106.4	0.00	0.00	0.00
5,900.0	4.61	42.59	5,893.7	118.1	108.6	-112.0	0.00	0.00	0.00
6,000.0	4.61	42.59	5,993.4	124.0	114.0	-117.7	0.00	0.00	0.00
6,100.0	4.61	42.59	6,093.1	129.9	119.4	-123.3	0.00	0.00	0.00
6,200.0	4.61	42.59	6,192.7	135.8	124.9	-128.9	0.00	0.00	0.00
6,300.0	4.61	42.59	6,292.4	141.8	130.3	-134.5	0.00	0.00	0.00
6,400.0	4.61	42.59	6,392.1	147.7	135.7	-140.1	0.00	0.00	0.00
6,500.0	4.61	42.59	6,491.8	153.6	141.2	-145.7	0.00	0.00	0.00
6,600.0	4.61	42.59	6,591.4	159.5	146.6	-151.3	0.00	0.00	0.00
6,700.0	4.61	42.59	6,691.1	165.4	152.1	-156.9	0.00	0.00	0.00
6,800.0	4.61	42.59	6,790.8	171.3	157.5	-162.5	0.00	0.00	0.00
6,900.0	4.61	42.59	6,890.5	177.3	162.9	-168.2	0.00	0.00	0.00
7,000.0	4.61	42.59	6,990.2	183.2	168.4	-173.8	0.00	0.00	0.00
7,100.0	4.61	42.59	7,089.8	189.1	173.8	-179.4	0.00	0.00	0.00
7,200.0	4.61	42.59	7,189.5	195.0	179.2	-185.0	0.00	0.00	0.00
7,300.0	4.61	42.59	7,289.2	200.9	184.7	-190.6	0.00	0.00	0.00
7,400.0	4.61	42.59	7,388.9	206.8	190.1	-196.2	0.00	0.00	0.00
7,500.0	4.61	42.59	7,488.5	212.7	195.6	-201.8	0.00	0.00	0.00
7,600.0	4.61	42.59	7,588.2	218.7	201.0	-207.4	0.00	0.00	0.00
7,700.0	4.61	42.59	7,687.9	224.6	206.4	-213.1	0.00	0.00	0.00
7,800.0	4.61	42.59	7,787.6	230.5	211.9	-218.7	0.00	0.00	0.00
7,900.0	4.61	42.59	7,887.2	236.4	217.3	-224.3	0.00	0.00	0.00
8,000.0	4.61	42.59	7,986.9	242.3	222.7	-229.9	0.00	0.00	0.00
8,100.0	4.61	42.59	8,086.6	248.2	228.2	-235.5	0.00	0.00	0.00
8,200.0	4.61	42.59	8,186.3	254.2	233.6	-241.1	0.00	0.00	0.00
8,300.0	4.61	42.59	8,286.0	260.1	239.1	-246.7	0.00	0.00	0.00
8,400.0	4.61	42.59	8,385.6	266.0	244.5	-252.3	0.00	0.00	0.00
8,500.0	4.61	42.59	8,485.3	271.9	249.9	-258.0	0.00	0.00	0.00
8,600.0	4.61	42.59	8,585.0	277.8	255.4	-263.6	0.00	0.00	0.00
8,700.0	4.61	42.59	8,684.7	283.7	260.8	-269.2	0.00	0.00	0.00
8,800.0	4.61	42.59	8,784.3	289.7	266.2	-274.8	0.00	0.00	0.00
8,900.0	4.61	42.59	8,884.0	295.6	271.7	-280.4	0.00	0.00	0.00
9,000.0	4.61	42.59	8,983.7	301.5	277.1	-286.0	0.00	0.00	0.00
9,100.0	4.61	42.59	9,083.4	307.4	282.6	-291.6	0.00	0.00	0.00
9,200.0	4.61	42.59	9,183.0	313.3	288.0	-297.2	0.00	0.00	0.00
9,300.0	4.61	42.59	9,282.7	319.2	293.4	-302.8	0.00	0.00	0.00
9,400.0	4.61	42.59	9,382.4	325.1	298.9	-308.5	0.00	0.00	0.00
9,500.0	4.61	42.59	9,482.1	331.1	304.3	-314.1	0.00	0.00	0.00
9,600.0	4.61	42.59	9,581.7	337.0	309.7	-319.7	0.00	0.00	0.00
9,700.0	4.61	42.59	9,681.4	342.9	315.2	-325.3	0.00	0.00	0.00
9,800.0	4.61	42.59	9,781.1	348.8	320.6	-330.9	0.00	0.00	0.00
9,900.0	4.61	42.59	9,880.8	354.7	326.1	-336.5	0.00	0.00	0.00
10,000.0	4.61	42.59	9,980.5	360.6	331.5	-342.1	0.00	0.00	0.00
10,100.0	4.61	42.59	10,080.1	366.6	336.9	-347.7	0.00	0.00	0.00
10,200.0	4.61	42.59	10,179.8	372.5	342.4	-353.4	0.00	0.00	0.00
10,300.0	4.61	42.59	10,279.5	378.4	347.8	-359.0	0.00	0.00	0.00
10,400.0	4.61	42.59	10,379.2	384.3	353.2	-364.6	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Lindale 24/25 W1DE Fed #2H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3167.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3167.0usft (Original Well Elev)
Site:	Lindale 24/25 W1DE Fed #2H	North Reference:	Grid
Well:	Sec 24, T26S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 2336' FNL & 990' FWL, Sec 25		
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)
10,444.1	4.61	42.59	10,423.1	386.9	355.6	-367.1	0.00	0.00	0.00
10,500.0	3.77	42.59	10,478.9	389.9	358.4	-369.9	1.50	-1.50	0.00
10,600.0	2.27	42.59	10,578.7	393.8	362.0	-373.6	1.50	-1.50	0.00
10,700.0	0.77	42.59	10,678.7	395.7	363.8	-375.4	1.50	-1.50	0.00
10,751.4	0.00	0.00	10,730.0	396.0	364.0	-375.7	1.50	-1.50	0.00
KOP: 10' FNL & 990' FWL, Sec 24									
10,800.0	4.86	179.78	10,778.6	393.9	364.0	-373.6	10.00	10.00	0.00
10,900.0	14.86	179.78	10,877.0	376.8	364.1	-356.5	10.00	10.00	0.00
11,000.0	24.86	179.78	10,971.0	342.9	364.2	-322.6	10.00	10.00	0.00
11,100.0	34.86	179.78	11,057.6	293.2	364.4	-273.0	10.00	10.00	0.00
11,200.0	44.86	179.78	11,134.2	229.1	364.7	-209.0	10.00	10.00	0.00
11,300.0	54.86	179.78	11,198.6	152.8	365.0	-132.8	10.00	10.00	0.00
11,390.5	63.91	179.78	11,244.6	75.0	365.3	-55.1	10.00	10.00	0.00
FTP: 330' FNL & 990' FWL, Sec 24									
11,400.0	64.86	179.78	11,248.7	66.4	365.3	-46.5	10.00	10.00	0.00
11,500.0	74.86	179.78	11,283.1	-27.4	365.7	47.1	10.00	10.00	0.00
11,600.0	84.86	179.78	11,300.7	-125.7	366.0	145.3	10.00	10.00	0.00
11,651.4	90.00	179.78	11,303.0	-177.0	366.2	196.6	9.99	9.99	0.00
LP: 582' FNL & 990' FWL, Sec 24									
11,700.0	90.00	179.78	11,303.0	-225.6	366.4	245.1	0.00	0.00	0.00
11,800.0	90.00	179.78	11,303.0	-325.6	366.8	345.0	0.00	0.00	0.00
11,900.0	90.00	179.78	11,303.0	-425.6	367.2	444.9	0.00	0.00	0.00
12,000.0	90.00	179.78	11,303.0	-525.6	367.6	544.8	0.00	0.00	0.00
12,100.0	90.00	179.78	11,303.0	-625.6	368.0	644.6	0.00	0.00	0.00
12,200.0	90.00	179.78	11,303.0	-725.6	368.4	744.5	0.00	0.00	0.00
12,300.0	90.00	179.78	11,303.0	-825.6	368.8	844.4	0.00	0.00	0.00
12,400.0	90.00	179.78	11,303.0	-925.6	369.2	944.3	0.00	0.00	0.00
12,500.0	90.00	179.78	11,303.0	-1,025.6	369.6	1,044.1	0.00	0.00	0.00
12,600.0	90.00	179.78	11,303.0	-1,125.6	370.0	1,144.0	0.00	0.00	0.00
12,700.0	90.00	179.78	11,303.0	-1,225.6	370.4	1,243.9	0.00	0.00	0.00
12,800.0	90.00	179.78	11,303.0	-1,325.6	370.8	1,343.7	0.00	0.00	0.00
12,900.0	90.00	179.78	11,303.0	-1,425.6	371.1	1,443.6	0.00	0.00	0.00
13,000.0	90.00	179.78	11,303.0	-1,525.6	371.5	1,543.5	0.00	0.00	0.00
13,100.0	90.00	179.78	11,303.0	-1,625.6	371.9	1,643.4	0.00	0.00	0.00
13,200.0	90.00	179.78	11,303.0	-1,725.6	372.3	1,743.2	0.00	0.00	0.00
13,300.0	90.00	179.78	11,303.0	-1,825.6	372.7	1,843.1	0.00	0.00	0.00
13,400.0	90.00	179.78	11,303.0	-1,925.6	373.1	1,943.0	0.00	0.00	0.00
13,500.0	90.00	179.78	11,303.0	-2,025.6	373.5	2,042.9	0.00	0.00	0.00
13,600.0	90.00	179.78	11,303.0	-2,125.6	373.9	2,142.7	0.00	0.00	0.00
13,700.0	90.00	179.78	11,303.0	-2,225.6	374.3	2,242.6	0.00	0.00	0.00
13,800.0	90.00	179.78	11,303.0	-2,325.6	374.7	2,342.5	0.00	0.00	0.00
13,900.0	90.00	179.78	11,303.0	-2,425.6	375.1	2,442.4	0.00	0.00	0.00
14,000.0	90.00	179.78	11,303.0	-2,525.6	375.5	2,542.2	0.00	0.00	0.00
14,100.0	90.00	179.78	11,303.0	-2,625.6	375.8	2,642.1	0.00	0.00	0.00
14,200.0	90.00	179.78	11,303.0	-2,725.6	376.2	2,742.0	0.00	0.00	0.00
14,300.0	90.00	179.78	11,303.0	-2,825.6	376.6	2,841.8	0.00	0.00	0.00
14,400.0	90.00	179.78	11,303.0	-2,925.6	377.0	2,941.7	0.00	0.00	0.00
14,500.0	90.00	179.78	11,303.0	-3,025.6	377.4	3,041.6	0.00	0.00	0.00
14,600.0	90.00	179.78	11,303.0	-3,125.6	377.8	3,141.5	0.00	0.00	0.00
14,700.0	90.00	179.78	11,303.0	-3,225.6	378.2	3,241.3	0.00	0.00	0.00
14,800.0	90.00	179.78	11,303.0	-3,325.6	378.6	3,341.2	0.00	0.00	0.00
14,900.0	90.00	179.78	11,303.0	-3,425.6	379.0	3,441.1	0.00	0.00	0.00
15,000.0	90.00	179.78	11,303.0	-3,525.6	379.4	3,541.0	0.00	0.00	0.00

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Lindale 24/25 W1DE Fed #2H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3167.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3167.0usft (Original Well Elev)
Site:	Lindale 24/25 W1DE Fed #2H	North Reference:	Grid
Well:	Sec 24, T26S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 2336' FNL & 990' FWL, Sec 25		
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)
15,100.0	90.00	179.78	11,303.0	-3,625.6	379.8	3,640.8	0.00	0.00	0.00
15,200.0	90.00	179.78	11,303.0	-3,725.6	380.2	3,740.7	0.00	0.00	0.00
15,300.0	90.00	179.78	11,303.0	-3,825.6	380.6	3,840.6	0.00	0.00	0.00
15,400.0	90.00	179.78	11,303.0	-3,925.6	380.9	3,940.5	0.00	0.00	0.00
15,500.0	90.00	179.78	11,303.0	-4,025.6	381.3	4,040.3	0.00	0.00	0.00
15,600.0	90.00	179.78	11,303.0	-4,125.6	381.7	4,140.2	0.00	0.00	0.00
15,700.0	90.00	179.78	11,303.0	-4,225.6	382.1	4,240.1	0.00	0.00	0.00
15,800.0	90.00	179.78	11,303.0	-4,325.6	382.5	4,339.9	0.00	0.00	0.00
15,900.0	90.00	179.78	11,303.0	-4,425.6	382.9	4,439.8	0.00	0.00	0.00
16,000.0	90.00	179.78	11,303.0	-4,525.6	383.3	4,539.7	0.00	0.00	0.00
16,100.0	90.00	179.78	11,303.0	-4,625.6	383.7	4,639.6	0.00	0.00	0.00
16,200.0	90.00	179.78	11,303.0	-4,725.6	384.1	4,739.4	0.00	0.00	0.00
16,300.0	90.00	179.78	11,303.0	-4,825.6	384.5	4,839.3	0.00	0.00	0.00
16,400.0	90.00	179.78	11,303.0	-4,925.6	384.9	4,939.2	0.00	0.00	0.00
16,500.0	90.00	179.78	11,303.0	-5,025.6	385.3	5,039.1	0.00	0.00	0.00
16,600.0	90.00	179.78	11,303.0	-5,125.6	385.7	5,138.9	0.00	0.00	0.00
16,700.0	90.00	179.78	11,303.0	-5,225.6	386.0	5,238.8	0.00	0.00	0.00
16,800.0	90.00	179.78	11,303.0	-5,325.6	386.4	5,338.7	0.00	0.00	0.00
16,900.0	90.00	179.78	11,303.0	-5,425.6	386.8	5,438.6	0.00	0.00	0.00
17,000.0	90.00	179.78	11,303.0	-5,525.6	387.2	5,538.4	0.00	0.00	0.00
17,100.0	90.00	179.78	11,303.0	-5,625.6	387.6	5,638.3	0.00	0.00	0.00
17,200.0	90.00	179.78	11,303.0	-5,725.6	388.0	5,738.2	0.00	0.00	0.00
17,300.0	90.00	179.78	11,303.0	-5,825.6	388.4	5,838.0	0.00	0.00	0.00
17,400.0	90.00	179.78	11,303.0	-5,925.6	388.8	5,937.9	0.00	0.00	0.00
17,500.0	90.00	179.78	11,303.0	-6,025.6	389.2	6,037.8	0.00	0.00	0.00
17,600.0	90.00	179.78	11,303.0	-6,125.6	389.6	6,137.7	0.00	0.00	0.00
17,700.0	90.00	179.78	11,303.0	-6,225.6	390.0	6,237.5	0.00	0.00	0.00
17,800.0	90.00	179.78	11,303.0	-6,325.6	390.4	6,337.4	0.00	0.00	0.00
17,900.0	90.00	179.78	11,303.0	-6,425.6	390.7	6,437.3	0.00	0.00	0.00
18,000.0	90.00	179.78	11,303.0	-6,525.6	391.1	6,537.2	0.00	0.00	0.00
18,100.0	90.00	179.78	11,303.0	-6,625.6	391.5	6,637.0	0.00	0.00	0.00
18,200.0	90.00	179.78	11,303.0	-6,725.5	391.9	6,736.9	0.00	0.00	0.00
18,300.0	90.00	179.78	11,303.0	-6,825.5	392.3	6,836.8	0.00	0.00	0.00
18,400.0	90.00	179.78	11,303.0	-6,925.5	392.7	6,936.7	0.00	0.00	0.00
18,500.0	90.00	179.78	11,303.0	-7,025.5	393.1	7,036.5	0.00	0.00	0.00
18,600.0	90.00	179.78	11,303.0	-7,125.5	393.5	7,136.4	0.00	0.00	0.00
18,700.0	90.00	179.78	11,303.0	-7,225.5	393.9	7,236.3	0.00	0.00	0.00
18,729.5	90.00	179.78	11,303.0	-7,255.0	394.0	7,265.7	0.00	0.00	0.00
BHL: 2336' FNL & 990' FWL, Sec 25									

Planning Report

Database:	Hobbs	Local Co-ordinate Reference:	Site Lindale 24/25 W1DE Fed #2H
Company:	Mewbourne Oil Company	TVD Reference:	WELL @ 3167.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	WELL @ 3167.0usft (Original Well Elev)
Site:	Lindale 24/25 W1DE Fed #2H	North Reference:	Grid
Well:	Sec 24, T26S, R30E	Survey Calculation Method:	Minimum Curvature
Wellbore:	BHL: 2336' FNL & 990' FWL, Sec 25		
Design:	Design #1		

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: 405' FNL & 625' FWL - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	376,543.00	693,806.00	32.0342421	-103.8413002
KOP: 10' FNL & 990' FWL - plan hits target center - Point	0.00	0.00	10,730.0	396.0	364.0	376,939.00	694,170.00	32.0353261	-103.8401198
FTP: 330' FNL & 990' FWL - plan hits target center - Point	0.00	0.00	11,244.6	75.0	365.3	376,618.00	694,171.25	32.0344437	-103.8401204
BHL: 2336' FNL & 990' FWL - plan hits target center - Point	0.00	0.00	11,303.0	-7,255.0	394.0	369,288.00	694,200.00	32.0142940	-103.8401357
LP: 582' FNL & 990' FWL - plan hits target center - Point	0.00	0.00	11,303.0	-177.0	366.2	376,366.00	694,172.20	32.0337510	-103.8401211

Mewbourne Oil Company, Lindale 24/25 W1DE Fed #2H
Sec 24, T26S, R30E
SL: 405' FNL & 625' FWL, Sec 24
BHL: 2336' FNL & 990' FWL, Sec 25

1. Geologic Formations

TVD of target	11,303'	Pilot hole depth	NA
MD at TD:	18,730'	Deepest expected fresh water:	225'

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface		
Rustler	919	Water	
Top Salt			
Castille	2301		
Base Salt	3639		
Lamar	3754	Oil/Gas	
Bell Canyon	3789	Oil/Gas	
Cherry Canyon	4682	Oil/Gas	
Manzanita Marker	4858		
Brushy Canyon	5876	Oil/Gas	
Bone Spring	7687	Oil/Gas	
1 st Bone Spring Sand			
2 nd Bone Spring Sand			
3 rd Bone Spring Sand			
Abo			
Wolfcamp	10950	Target Zone	
Devonian			
Fusselman			
Ellenburger			
Granite Wash			

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

Mewbourne Oil Company, Lindale 24/25 WIDE Fed #2H
Sec 24, T26S, R30E
SL: 405' FNL & 625' FWL, Sec 24
BHL: 2336' FNL & 990' FWL, Sec 25

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
	From	To								
17.5"	0'	1000'	13.375"	48	H40	STC	1.68	3.78	6.71	11.27
12.25"	0'	3453'	9.625"	36	J55	LTC	1.13	1.96	3.38	4.20
12.25"	3453'	3700'	9.625"	40	J55	LTC	1.34	2.05	52.63	63.76
8.75"	0'	11,450'	7"	26	HCP110	LTC	1.33	1.78	2.19	2.79
6.125"	10,751'	18,730'	4.5"	13.5	P110	LTC	1.40	1.62	3.14	3.92
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 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y

Mewbourne Oil Company, Lindale 24/25 W1DE Fed #2H
Sec 24, T26S, R30E
SL: 405' FNL & 625' FWL, Sec 24
BHL: 2336' FNL & 990' FWL, Sec 25

(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?	

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/ sk	500# Comp. Strength (hours)	Slurry Description
Surf.	530	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.	595	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	365	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 @ 4858'						
Prod. Stg 2	65	12.5	2.12	11	9	Lead: Class C + Gel + Retarder + Defoamer + Extender
	100	14.8	1.34	6.3	8	Tail: Class C + Retarder
Liner	325	11.2	2.97	17	16	Class C + Salt + Gel + Fluid Loss + Retarder + Dispersant + Defoamer + Anti-Settling Agent

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

Casing String	TOC	% Excess
Surface	0'	100%
Intermediate	0'	25%
Production	3500'	25%
Liner	10751'	25%

Mewbourne Oil Company, Lindale 24/25 WIDE Fed #2H
Sec 24, T26S, R30E
SL: 405' FNL & 625' FWL, Sec 24
BHL: 2336' FNL & 990' FWL, Sec 25

4. Pressure Control Equipment

	Variance: None
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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.
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Mewbourne Oil Company, Lindale 24/25 WIDE Fed #2H
Sec 24, T26S, R30E
SL: 405' FNL & 625' FWL, Sec 24
BHL: 2336' FNL & 990' FWL, Sec 25

	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.
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	<p>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.</p> <ul style="list-style-type: none"> Provide description here: See attached schematic.

5. Mud Program

TVD		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0'	1000'	Spud Mud	8.6-8.8	28-34	N/C
1000'	3700'	BW	10.0	28-34	N/C
3700'	11,266'	FW w/ Polymer	8.6-9.7	28-34	N/C
11,266'	11,303'	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 mud weight needed to balance formation is expected to be 12.0 ppg.

What will be used to monitor the loss or gain of fluid?	Pason/PVT/Visual Monitoring
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6. Logging and Testing Procedures

Logging, Coring and Testing.	
X	Will run GR/CNL from KOP (10,751') 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

Mewbourne Oil Company, Lindale 24/25 W1DE Fed #2H
Sec 24, T26S, R30E
SL: 405' FNL & 625' FWL, Sec 24
BHL: 2336' FNL & 990' FWL, Sec 25

	Coring? If yes, explain
--	-------------------------

Additional logs planned	Interval
X Gamma Ray	10,751' (KOP) to TD
Density	
CBL	
Mud log	
PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7053 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.

Mewbourne Oil Company, Lindale 24/25 W1DE Fed #2H
Sec 24, T26S, R30E
SL: 405' FNL & 625' FWL, Sec 24
BHL: 2336' FNL & 990' FWL, Sec 25

Attachments

☐ Directional Plan

☐ Other, describe