Form 3160-3 (June 2015)

AUG 1 3 2019

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

# DEPARTMENT OF THE INTERIOBISTRICTILARTESIAO. C. L'ease Serial No.

BUREAU OF LAND MAN.		NMNM018626							
APPLICATION FOR PERMIT TO D	RILL OF	REENTER		6. If Indian, Allotee or Tribe Name					
·				_	_				
ia. Type of work:	EENTER			7. If Unit or CA Agre	zement, Name ar	nd No.			
1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ O	Other								
1c. Type of Completion: Hydraulic Fracturing S.	ingle Zone	Multiple Zone		8. Lease Name and Well No.					
· · · · · · · · · · · · · · · · · · ·	C	· ·		LINDALE 24/25 H3DE FED					
				~ 3/2G	036				
Name of Operator     MEWBOURNE OIL COMPANY		14744	7	9. API-Well No. 30-01	1- M.	z <i>23</i>			
3a. Address	1	No. (include area code	e) \	10. Field and Pool, o					
PO Box 5270 Hobbs NM 88240	(575)393-			BÔNESPRING/W	.>				
4. Location of Well (Report location clearly and in accordance to	•	• •		11. Sec., T. R. M. of SEC 247, T265, R3		or Area			
At surface NWNW / 405 FNL / 655 FWL / LAT 32.0342				SLU 247 12037 KG	OE / MIVIE				
At proposed prod. zone SWNW / 2655 FNL / 1250 FWL		13/316 / LONG -103	3.839296						
<ol> <li>Distance in miles and direction from nearest town or post off</li> <li>miles</li> </ol>	fice*			12. County or Parish EDDY	13. Sta	ite			
15. Distance from proposed*  185 feet	16. No of	acres in lease	17. Spaçir	g,Unit dedicated to th	is well				
location to nearest 105 leet property or lease line, ft.	1000	(( /2	480						
(Also to nearest drig. unit line, if any)			<u>) )                                  </u>						
18. Distance from proposed location* to pearest well drilling completed	19. Propos	ed Depth	.20./BLM/	BIA Bond No. in file					
to nearest well, drilling, completed, 200 feet applied for, on this lease, ft.	10251 fee	t / 17941 feet	FED: NM	11693					
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approx	kimate date work will:	start*	23. Estimated duration	on				
3140 feet	12/14/201	7 ) /		60 days					
(( ^<	24. Atta	chments							
The following, completed in accordance with the requirements of (as applicable)	f Onshore O	il and Gas Order No. 1	, and the H	lydraulic Fracturing ru	le per 43 CFR 3	162.3-3			
Well plat certified by a registered surveyor.     A Drilling Plan.		4. Bond to cover the Item 20 above).	e operation:	s unless covered by an	existing bond or	ı file (see			
3. A Surface Use Plan (if the location is on National Forest Syste	m Lands, the	5. Operator certific							
SUPO must be filed with the appropriate Forest Service Office	<u>)</u> >	6. Such other site sp BLM.	ecific infon	mation and/or plans as	may be requested	by the			
25. Signature	Nam	c (Printed/Typed)			Date				
(Electronic Submission)	Brad	ley Bishop / Ph: (57	5)393-590	5	09/19/2018				
Title Regulatory	·								
Approved by (Signaturé) (Electronic Submission)	I	e <i>(Printed/Tivped)</i> / Layton / Ph: (575)2	234-5959		Date 08/05/2019				
Title / / Assistant/Field Manager Lands & Minerals		Office CARLSBAD							
Application approval does not warrant or certify that the applicar applicant to conduct operations thereon.  Conditions of approval, if any, are attached.	nt holds legal	or equitable title to th	ose rights i	in the subject lease wh	ich would entitle	e the			
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, n of the United States any false, fictitious or fraudulent statements	nake it a crin or representa	ne for any person know	vingly and within its j	willfully to make to a urisdiction.	ny department or	r agency			
	·····					-			

Approval Date: 08/05/2019

\*(Instructions on page 2)

(Continued on page 2)

RN 8-15-19

#### **INSTRUCTIONS**

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

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

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

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

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

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

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

#### NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U\(\subseteq\). \(\subseteq\). \(\supseteq\). \(\suppeq\). \(\supseteq\). \(\suppeq\). \(\suppeq\). \(\suppeq\). \(\sup

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

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

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

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

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

# **Additional Operator Remarks**

#### Location of Well

1. SHL: NWNW / 405 FNL / 655 FWL / TWSP: 26S / RANGE: 30E / SECTION: 24 / LAT: 32.0342402 / LONG: -103.8412036 (TVD: 0 feet, MD: 0 feet )

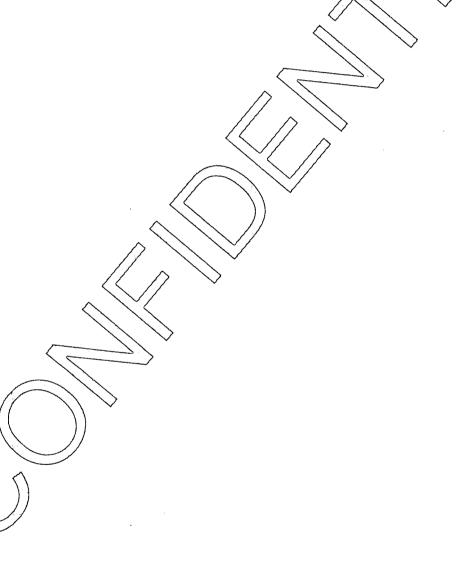
PPP: NWNW / 100 FNL / 1250 FWL / TWSP: 26S / RANGE: 30E / SECTION: 24 / LAT: 32.0350699 / LONG: -103.8392809 (-TVD: 9997, feet, MD: 10061 feet )

BHL: SWNW / 2655 FNL / 1250 FWL / TWSP: 26S / RANGE: 30E / SECTION: 25 / LAT: 32.0137316 / LONG: -103.8392961 (-TVD: 10251 feet, MD: 17941 feet )



# **Review and Appeal Rights**

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



# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: MEWBOURNE OIL COMPANY

LEASE NO.: | N

NMNM018626

WELL NAME & NO.:

LINDALE 24/25 H3DE FED 1H

SURFACE HOLE FOOTAGE:

405' FNL & 655' FWL 2655' FNL & 1250' FWL

BOTTOM HOLE FOOTAGE LOCATION:

Section 24, T. 26 S., R 30 E., NMPM

**COUNTY:** 

**Eddy County, New Mexico** 

 $\mathbf{COA}$ 

H2S	C Yes	€ No	
Potash	• None	Secretary	C R-111-P
Cave/Karst Potential	CLow		
Variance	r None	Flex Hose	Other
Wellhead	Conventional	Multibowl	Both
Other	☐ 4 String Area	Capitan Reef	<b>□</b> WIPP
Other	Fluid Filled	Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	ГСОМ	☐ Unit

#### A. HYDROGEN SULFIDE

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

#### **B. CASING**

- 1. The 13-3/8 inch surface casing shall be set at approximately 1,000 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or 500 pounds compressive strength, whichever is greater. (This is to

- include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above. Excess cement calculates to 15%, 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.
  - ❖ In <u>High Cave/Karst Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- 3. The minimum required fill of cement behind the 7 inch production easing is:

Operator has proposed DV tool at depth of **4,858 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.
- 4. The minimum required fill of cement behind the 4-1/2 inch production liner is:
  - Cement should tie-back 100 feet into the previous casing. Operator shall provide method of verification. Excess cement calculates to 23%, additional cement might be required.

#### 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.
  - 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.

#### JJP08022019

# **GENERAL REQUIREMENTS**

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

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)
  - Chaves and Roosevelt Counties
    Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
    During office hours call (575) 627-0272.
    After office hours call (575)
  - Eddy County
     Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
  - Lea County
    Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)
    393-3612
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after

installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).

- b. When the operator proposes to set surface casing with Spudder Rig
  - Notify the BLM when moving in and removing the Spudder Rig.
  - Notify the BLM when moving in the 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 Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

#### A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity 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 intergrity 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 Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

- a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
- e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, 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 not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
  - d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE.

If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

# C. DRILLING MUD

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

#### D. WASTE MATERIAL AND FLUIDS

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

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

# PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

OPERATOR'S NAME:
WELL NAME & NO.:
Lindale 24/25 H3DE 1H
SURFACE HOLE FOOTAGE:
BOTTOM HOLE FOOTAGE
LOCATION:
COUNTY:
Mewbourne Oil Company
Lindale 24/25 H3DE 1H
405'/N & 655'/W
2655'/N & 1250'/W
Section 24, T.26 S., R.30 E., NMPM
Eddy County, New Mexico

# **TABLE OF CONTENTS**

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

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

#### I. GENERAL PROVISIONS

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

# II. PERMIT EXPIRATION

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

# III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

# IV. NOXIOUS WEEDS

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

Page 2 of 19

**Approval Date: 08/05/2019** 

# V. SPECIAL REQUIREMENT(S)

#### Wildlife:

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

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

#### **Hydrology:**

The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The top soil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

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

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

Electric Lines: Any water erosion that may occur due to the construction of overhead electric line and during the life of the power line will be quickly corrected and proper measures will be taken to prevent future erosion.

#### **Cave/Karst Surface Mitigation**

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

Construction:

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

#### No Blasting:

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

#### Pad Berming:

- The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.
- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g., caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised. (Any access road crossing the berm cannot be lower than the berm height.)
- Following a rain event, all fluids will vacuumed off of the pad and hauled off-site and disposed at a proper disposal facility.

# Tank Battery Liners and Berms:

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

#### **Leak Detection System:**

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

#### **Automatic Shut-off Systems:**

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

#### Cave/Karst Subsurface Mitigation

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

#### **Rotary Drilling with Fresh Water:**

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

#### **Directional Drilling:**

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

#### **Lost Circulation:**

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

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

#### **Abandonment Cementing:**

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

#### **Pressure Testing:**

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

#### FLOWLINES (SURFACE):

- Flowlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize the possibility of leaks and spills from entering karst systems.
- If a void is encountered alignments may be rerouted to avoid the karst feature and lessen; the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

#### VI. CONSTRUCTION

#### A. NOTIFICATION

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

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

#### B. TOPSOIL

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

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

#### C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

#### D. FEDERAL MINERAL MATERIALS PIT

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

#### E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

# F. EXCLOSURE FENCING (CELLARS & PITS)

Page 6 of 19

#### **Exclosure Fencing**

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

#### G. ON LEASE ACCESS ROADS

#### Road Width

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

#### Surfacing

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

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

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

#### Crowning

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

#### Ditching

Ditching shall be required on both sides of the road.

#### **Turnouts**

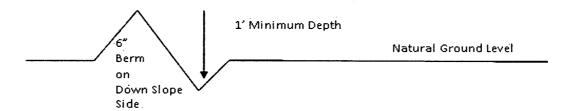
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

# Drainage

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

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

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



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

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

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

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

#### Cattle guards

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

#### **Fence Requirement**

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

#### **Public Access**

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

# **Construction Steps**

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

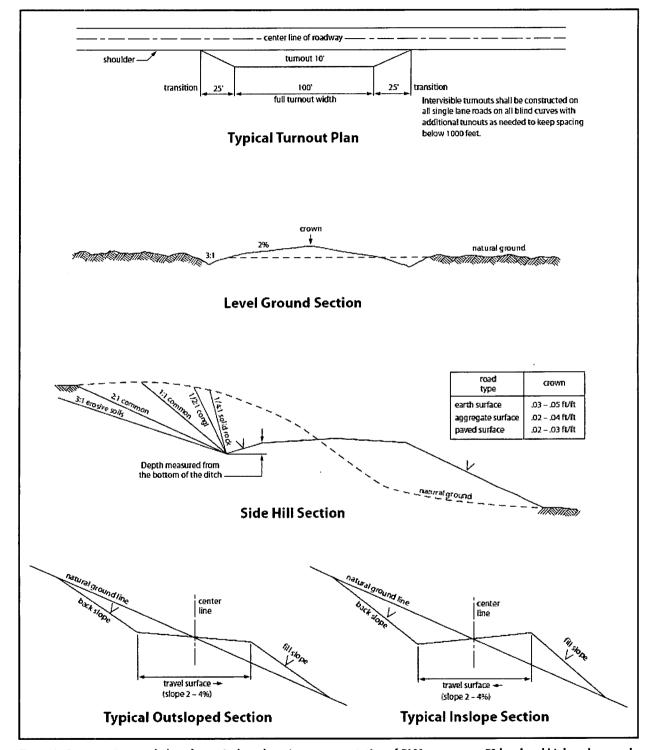


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

# VII. PRODUCTION (POST DRILLING)

#### A. WELL STRUCTURES & FACILITIES

# **Placement of Production Facilities**

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

# **Exclosure Netting (Open-top Tanks)**

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

# Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

#### **Open-Vent Exhaust Stack Exclosures**

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

#### **Containment Structures**

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

#### **Painting Requirement**

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

#### B. PIPELINES

#### **BURIED PIPELINE STIPULATIONS**

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

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

- 1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- 2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to

Page 11 of 19

the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

- 4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.
- 5. All construction and maintenance activity will be confined to the authorized right-of-way.
- 6. The pipeline will be buried with a minimum cover of <u>36</u> inches between the top of the pipe and ground level.
- 7. The maximum allowable disturbance for construction in this right-of-way will be  $\underline{30}$  feet:
  - Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed <u>20</u> feet. The trench is included in this area. (Blading is defined as the complete removal of brush and ground vegetation.)
  - Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed 30 feet. The trench and bladed area are included in this area. (Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.)
  - The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (Compressing can be caused by vehicle tires, placement of equipment, etc.)
- 8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be

segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

- 9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.
- 11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
- 12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

() seed mixture 1	(X) seed mixture 3
( ) seed mixture 2	( ) seed mixture 4
( ) seed mixture 2/LPC	( ) Aplomado Falcon Mixture

- 13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" **Shale Green**, Munsell Soil Color No. 5Y 4/2.
- 14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

- 15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.
- 16. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.
- 17. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.
- 18. <u>Escape Ramps</u> The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:
  - a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.
  - b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.
  - The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.

- If a void is encountered alignments may be rerouted to avoid the karst feature and lessen; the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
- Special restoration stipulations or realignment may be required at such intersections, if any.
- A leak detection plan <u>will be submitted to the BLM Carlsbad Field Office for approval</u> prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating values and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

#### C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

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

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

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

- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- 4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.
- 5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

- 6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.
- 8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.
- 9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration

of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

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

#### 11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.
- Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize changes to runoff or possible leaks and spills from entering karst systems. Larger powerlines will adjust their pole spacing to avoid cave and karst features.
- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction.
- No further construction will be done until clearance has been issued by the Authorized Officer.
- Special restoration stipulations or realignment may be required.

#### VIII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

Page 17 of 19

**Approval Date: 08/05/2019** 

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

# IX. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Page 18 of 19

**Approval Date: 08/05/2019** 

# Seed Mixture 3, for Shallow Sites

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

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

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

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

<sup>\*</sup>Pounds of pure live seed:

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



NAME: Bradley Bishop

Phone:

**Email address:** 

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

# ©p@rator Certification Data Report 08/06/2019

Signed on: 09/19/2018

#### **Operator Certification**

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

Title: Regulatory													
Street Address: PO Box 5270													
City: Hobbs	State: NM	<b>Zip</b> : 88240											
<b>Phone:</b> (575)393-5905													
Email address: bbishop@mewbourne.com													
Field Representative	Field Representative												
Representative Name:													
Street Address:													
City: S	tate:	Zip:											



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

# Application Data Report

**APD ID:** 10400034112

**Operator Name: MEWBOURNE OIL COMPANY** 

Submission Date: 09/19/2018

Highlighted data reflects the most

recent changes

Well Name: LINDALE 24/25 H3DE FED

Well Number: 1H

Show Final Text

Well Type: CONVENTIONAL GAS WELL

Well Work Type: Drill

# Section 1 - General

APD ID:

10400034112

Tie to previous NOS?

Submission Date: 09/19/2018

**BLM Office: CARLSBAD** 

User: Bradley Bishop

Title: Regulatory

Federal/Indian APD: FED

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

Lease number: NMNM018626

Lease Acres: 1000

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? YES

**Permitting Agent? NO** 

APD Operator: MEWBOURNE OIL COMPANY

Operator letter of designation:

Lindale24\_25H3DEFed1H\_operatorletterofdesignationt\_20180914084946.pdf

#### **Operator Info**

Operator Organization Name: MEWBOURNE OIL COMPANY

Operator Address: PO Box 5270

**Zip:** 88240

Operator PO Box:

**Operator City: Hobbs** 

State: NM

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

**Operator Internet Address:** 

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

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: LINDALE 24/25 H3DE FED

Well Number: 1H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: BONESPRING

Pool Name: WILDCAT; BONE

SPRING, S

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

**Operator Name: MEWBOURNE OIL COMPANY** 

Well Name: LINDALE 24/25 H3DE FED Well Number: 1H

Describe other minerals:

Well Class: HORIZONTAL

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: Number: 4

LINDALE 24/25 DE WELLS

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\_25H3DEFed1H\_wellplat\_20180914085311.pdf

Well work start Date: 12/14/2017 **Duration: 60 DAYS** 

# **Section 3 - Well Location Table**

Survey Type: RECTANGULAR

**Describe Survey Type:** 

Datum: NAD83

Vertical Datum: NAVD88

Survey number:

Reference Datum:

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL	405	FNL	655	FWL	26S	30E	24	Aliquot NWN	32.03424 02	- 103.8412	EDD Y	1	NEW MEXI	F		314 0	0	0
#1								W		036	·	со	co		0.0020			
KOP Leg #1	10	FNL	125 0	FWL	26\$	30E	24	Aliquot NWN W	32.03532 28	- 103.8392 807	EDD Y		NEW MEXI CO	F	NMNM 018626	- 654 6	973 2	968 6
PPP Leg #1	100	FNL	125 0	FWL	26\$	30E	24	Aliquot NWN W	32.03506 99	- 103.8392 809	EDD Y	NEW MEXI CO	11277	F	NMNM 018626	- 685 7	100 61	999 7

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 H3DE FED Well Number: 1H

	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
EXIT Leg #1	265 5	FNL	125 0	FWL	26S	30E	25	Aliquot SWN W	32.01373 16	- 103.8392 961	EDD Y	l	NEW MEXI CO	F	NMNM 018626	- 711 1	179 41	102 51
BHL Leg #1	265 5	FNL	125 0	FWL	268	30E	25	Aliquot SWN W	32.01373 16	- 103.8392 961	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 018626	- 711 1	179 41	102 51



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

Drilling Plan Data Report
08/06/2019

**APD ID:** 10400034112

Submission Date: 09/19/2018

Highlighted data

Operator Name: MEWBOURNE OIL COMPANY

reflects the most recent changes

Well Name: LINDALE 24/25 H3DE FED

Well Number: 1H

Well Type: CONVENTIONAL GAS WELL

Well Work Type: Drill

Show Final Text

#### **Section 1 - Geologic Formations**

Formation			True Vertical	Measured			Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
1	UNKNOWN	3140	27	27		NONE	N
2	RUSTLER	2221	919	919	ANHYDRITE,DOLOMIT E	USEABLE WATER	N
3	CASTILE	839	2301	2301	SALT	NONE	N
4	BASE OF SALT	-499	3639	3639	SALT	NONE	N
5	LAMAR	-614	3754	3754	LIMESTONE	NATURAL GAS,OIL	N
6	BELL CANYON	-649	3789	3789	SANDSTONE	NATURAL GAS,OIL	N
7	CHERRY CANYON	-1542	4682	4682	SANDSTONE	NATURAL GAS,OIL	N
8	MANZANITA	-1718	4858	4858	SANDSTONE	NATURAL GAS,OIL	N
9	BRUSHY CANYON	-2736	5876	5876	SANDSTONE	NATURAL GAS,OIL	N
10	BONE SPRING	-4547	7687	7687	LIMESTONE,SHALE,SA NDSTONE	NATURAL GAS,OIL	Y

#### Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 17941

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

**Choke Diagram Attachment:** 

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 H3DE FED

Well Number: 1H

Lindale\_24\_25\_H3DE\_Fed\_1H\_5M\_BOPE\_Choke\_Diagram\_20180919080514.pdf Lindale\_24\_25\_H3DE\_Fed\_1H\_Flex\_Line\_Specs\_20180919080525.pdf

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

Lindale\_24\_25\_H3DE\_Fed\_1H\_5M\_BOPE\_Schematic\_20180919080544.pdf Lindale\_24\_25\_H3DE\_Fed\_1H\_Multi\_Bowl\_Wellhead\_20180919080545.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	Calcutated 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			1000	H-40	48	ST&C	1.68	3.78	DRY	6.71	DRY	11.2 7
	INTERMED IATE	12.2 5	9.625	NEW	API	Y	0	3675	0	3675			3675	J-55	40	LT&C	1.12 5	1.96	DRY	3.3	DRY	4.11
_	PRODUCTI ON	8.75	7.0	NEW	API	N	0	10633	0	10633			10633	P- 110	26	LT&C	1.23	1.96	DRY	2.31	DRY	3
4	LINER	6.12 5	4.5	NEW	API	N	9732	17941	9686	10251			8209	P- 110	13.5	LT&C	1.67	1.94	DRY	3.05	DRY	3.81

#### Casing Attachments

Casing ID: 1

String Type:SURFACE

Inspection Document:

Spec Document:

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

 $Lindale\_24\_25\_H3DE\_Fed\_1H\_Csg\_Assumptions\_20180919081015.doc$ 

Operator Name: MEWBOURNE OIL COMPANY Well Name: LINDALE 24/25 H3DE FED Well Number: 1H **Casing Attachments** Casing ID: 2 String Type: INTERMEDIATE Inspection Document: Spec Document: **Tapered String Spec:**  $Lindale\_24\_25\_H3DE\_Fed\_1H\_Tapered\_String\_20180919081128.pdf$ Casing Design Assumptions and Worksheet(s): Lindale\_24\_25\_H3DE\_Fed\_1H\_Csg\_Assumptions\_20180919081151.doc Casing ID: 3 String Type: PRODUCTION Inspection Document: Spec Document: Tapered String Spec: Casing Design Assumptions and Worksheet(s):  $Lindale\_24\_25\_H3DE\_Fed\_1H\_Csg\_Assumptions\_20180919081308.doc$ Casing ID: 4 String Type:LINER Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 $Lindale\_24\_25\_H3DE\_Fed\_1H\_Csg\_Assumptions\_20180919081504.doc$ 

**Section 4 - Cement** 

Well Name: LINDALE 24/25 H3DE FED

Well Number: 1H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	807	535	2.12	12.5	1134	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		807	1000	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	2976	545	2.12	12.5	1155	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		2976	3675	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	5050	3475	4128	60	2.12	12.5	127	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		4128	4858	100	1.34	14.8	134	25	Class C	Retarder
PRODUCTION	Lead	4858	4858	8121	295	2.12	12.5	625	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		8121	1063 3	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		9732	1794 1	325	2.97	11.2	965	25	Class C	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** 

Well Name: LINDALE 24/25 H3DE FED Well Number: 1H

Top Depth	Bottom Depth	Mud Type	Min Weight (ibs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (ibs/100 sqft)	Н	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1000	SPUD MUD	8.6	8.8							
1000	3675	SALT SATURATED	10	10					-		
3675	1025 9	WATER-BASED MUD	8.6	9.5							
1025 9	1025 9	OIL-BASED MUD	9.5	12					-		

## Section 6 - Test, Logging, Coring

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

Will run GR/CNL from KOP (9732') 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: 6401** 

Anticipated Surface Pressure: 3885.52

Anticipated Bottom Hole Temperature(F): 160

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Lindale\_24\_25\_H3DE\_Fed\_1H\_H2S\_Plan\_20180919084614.pdf

Well Name: LINDALE 24/25 H3DE FED Well Number: 1H

#### **Section 8 - Other Information**

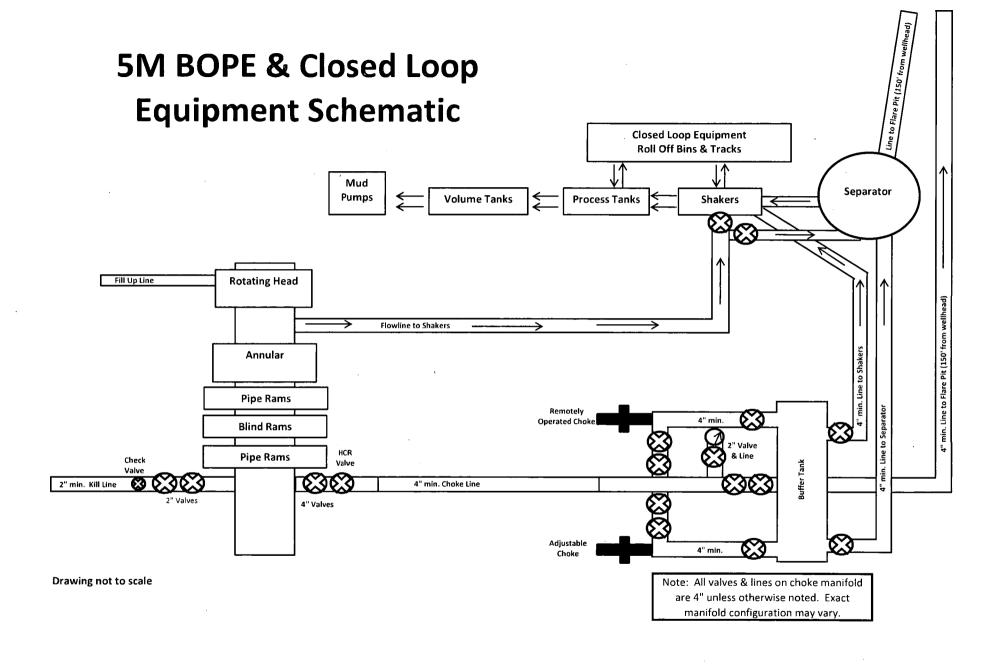
#### Proposed horizontal/directional/multi-lateral plan submission:

Other proposed operations facets description:

Other proposed operations facets attachment:

Lindale\_24\_25\_H3DE\_Fed\_1H\_C101\_20180919084653.pdf Lindale\_24\_25\_H3DE\_Fed\_1H\_Drlg\_Program\_20180919084655.doc

Other Variance attachment:





GATES E & S NORTH AMERICA, INC. 134 44TH STREET CORPUS CHRISTI, TEXAS 78405 PHONE: 361-887-9807 FAX: 361-887-0812

EMAIL: Tim.Cantu@gates.com

WEB: www.gates.com

## **10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE**

Customer :	AUSTIN DISTRIBUTING	Test Date:	4/30/2015
ustomer Ref. :	4060578	Hose Serial No.:	D-043015-7
nvoice No. :	500506	Created By:	JUSTIN CROPPER
reduct Description:		10K3.548,0CK4.1/1610KFLGE/E	LE
roduct Description:		10K3.548.0CK4.1/1610KFLGE/E	LE
	4 1/16 10K FLG	10K3.548.0CK4.1/1610KFLGE/E  End Fitting 2 :	4 1/16 10K FLG
Product Description:  End Fitting 1:  Gates Part No.:	4 1/16 10K FLG 4773-6290		

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

Quality Manager:

Date:

Signature :

QUALITY

4/30/2015

Produciton:

. Date :

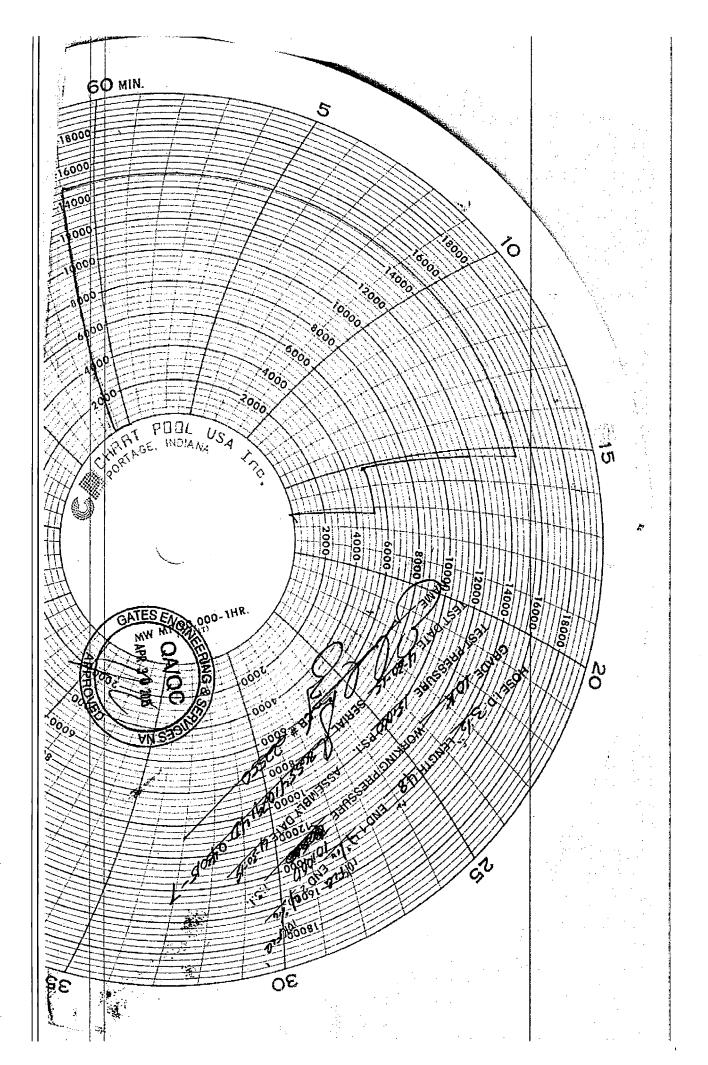
Signature :

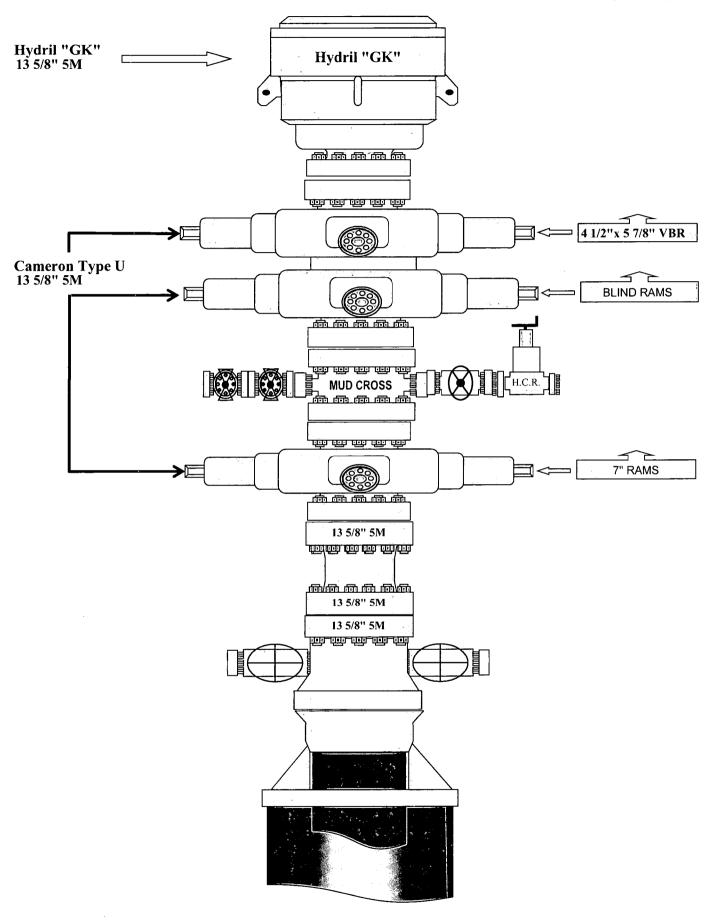
PRODUCTION

. 4/30/20**1** 

Form PTC - 01 Rev.0 2





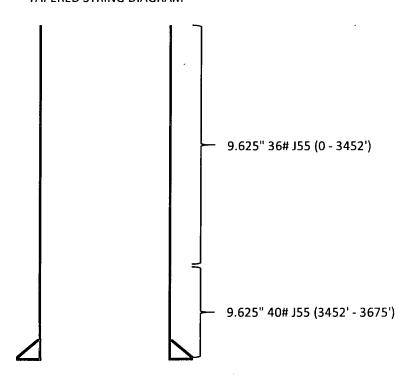




# 13-5/8" MN-DS Wellhead System

**Ground Level** 35.00" 7-1/16**"** 10M 1-13/16" 10M 13-5/8"5M 74.72" 37.16" 2-1/16"5M 10.25\* 13-3/8" Casing 9-5/8" Casing 7" Casing NOTE: All dimensions on this drawing are estimated measurements and should be evaluated by engineering.

## TAPERED STRING DIAGRAM



			JOINT	
	COLLAPSE	BURST	YIELD	BODY YIELD
36#	1.125	1.960	3.400	4.230
40#	1.620	3.010	81.500	102.690

SL: 405' FNL & 655' FWL, Sec. 24 BHL: 2566' FNL & 1250' FWL, Sec. 25

# 2. Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)		d t	Collapse	Burst	Tension	Tension
17.5"	0'	1000'	13.375"	48	H40	STC	1.68	3.78	6.71	11.27
12.25"	0'	3452'	9.625"	36	J55	LTC	1.125	1.96	3.30	4.11
12.25	3452'	3675'	9.625"	40	L80	LTC	1.62	3.01	81.50	102.67
8.75"	0'	10633'	7"	26	P110	LTC	1.23	1.96	2.31	3.00
6.125"	9732'	17941'	4.5"	13.5	P110	LTC	1.67	1.94	3.05	3.81
В	LM Minii	mum Safet	y 1.125	1	1.6 Dr	y 1.6 I	Dry			
		Facto	or		1.8 W	et   1.8 V	Vet			

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	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?  Is well located within Capitan Reef?	NT.
is well located within Capitali Reel?	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 <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 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?	1

SL: 405' FNL & 655' FWL, Sec. 24 BHL: 2566' FNL & 1250' FWL, Sec. 25

SL: 405' FNL & 655' FWL, Sec. 24

BHL: 2566' FNL & 1250' FWL, Sec. 25

# 2. Casing Program

Hole	Casing	Interval	Csg.	Weight	Gra	ide (	Conn.	SI	7	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)				Colla	pse	Burst	Tension	Tension
17.5"	0'	1000'	13.375"	48	H40		TC	1.68		3.78	6.71	11.27
12.25"	0'	3452'	9.625"	36	J55	L	TC	1.125		1.96	3.30	4.11
12.25	3452'	3675'	9.625"	40	L80	L	TC	1.62		3.01	81.50	102.67
8.75"	0'	10633'	7"	26	P110	L	TC	1.23		1.96	2.31	3.00
6.125"	9732'	17941'	4.5"	13.5	P110	L	TC	1.67		1.94	3.05	3.81
B	LM Minii	mum Safet	y 1.125	1	1.0	6 Dry	1.6 D	ry				
		Facto	or		1.3	8 Wet	1.8 W	Vet				

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	Y
justification (loading assumptions, casing design criteria).	:
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
Is well located within Capitan Reef?	N
	IN
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 <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 well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	]

SL: 405' FNL & 655' FWL, Sec. 24 BHL: 2566' FNL & 1250' FWL, Sec. 25

SL: 405' FNL & 655' FWL, Sec. 24

BHL: 2566' FNL & 1250' FWL, Sec. 25

# 2. Casing Program

Hole	Casing	Interval	Csg.	Weight	Gr	ade (	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)				Collapse	Burst	Tension	Tension
17.5"	0'	1000'	13.375"	48	<b>H</b> 40	S	TC	1.68	3.78	6.71	11.27
12.25"	0'	3452'	9.625"	36	J55		TC	1.125	1.96	3.30	4.11
12.25	3452'	3675'	9.625"	40	L80		TC	1.62	3.01	81.50	102.67
8.75"	0'	10633'	7"	26	P110		TC	1.23	1.96	2.31	3.00
6.125"	9732'	17941'	4.5"	13.5	P110	) L	TC	1.67	1.94	3.05	3.81
B	LM Minii	mum Safet	y 1.125	1	1	.6 Dry	1.6 D	ry			
		Facto	or		1	.8 Wet	1.8 W	/et			

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	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
	·
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
T 111 CODA 1 P 111 PO	
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?	
7 111 1 D 111 D 100D10	, , , , , , , , , , , , , , , , , ,
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 well located in high Cave/Karst?	Y
	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 strings cemented to surface?	1

SL: 405' FNL & 655' FWL, Sec. 24 BHL: 2566' FNL & 1250' FWL, Sec. 25

# Mewbourne Oil Company Lindale 24/25 H3DE Fed #1H

Sec 24 & 25, T26S, R30E SL: 405' FNL & 655' FWL, Sec. 24

BHL: 2566' FNL & 1250' FWL, Sec. 25

## 2. Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	То	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	1000'	13.375"	48	H40	STC	1.68	3.78	6.71	11.27
12.25"	0'	3452'	9.625"	36	J55	LTC 1.125		1.96	3.30	4.11
12.25	3452'	3675'	9.625"	40	L80	LTC	1.62	3.01	81.50	102.67
8.75"	0'	10633'	7"	26	P110	LTC	1.23	1.96	2.31	3.00
6.125"	9732'	17941'	4.5"	13.5	P110	LTC	1.67	1.94	3.05	3.81
В	LM Mini	mum Safe	y 1.125	1	1.6 Dr	y 1.6 D	ry			
!		Facto	or		1.8 We	et   1.8 V	Vet	,		

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	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	1
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	
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?	l N
If yes, are the first three strings cemented to surface?	1
Is 2 <sup>nd</sup> 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?	14

SL: 405' FNL & 655' FWL, Sec. 24 BHL: 2566' FNL & 1250' FWL, Sec. 25

# 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:

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

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

#### 3. Hydrogen Sulfide Safety Equipment and Systems

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

#### 1. Well Control Equipment

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

## 2. Protective Equipment for Essential Personnel

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

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

### 3. 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. <u>Visual Warning Systems</u>

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

#### 4. Mud Program

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

#### 5. Metallurgy

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

#### 6. Communications

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

## 7. Well Testing

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

#### 8. Emergency Phone Numbers

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

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

# **Mewbourne Oil Company**

Eddy County, New Mexico NAD 83 Lindale 24/25 H3DE Fed #1H SL: 405' FNL & 655' FWL

Secs. 24 & 25, T26S, R30E BHL: 2566' FNL & 1250' FWL

Plan: Design #1

# **Standard Planning Report**

18 September, 2018

Site Lindale 24/25 H3DE Fed #1H Database: Hobbs Local Co-ordinate Reference: Company: Mewbourne Oil Company TVD Reference: WELL @ 3167.0usft (Original Well Elev) Eddy County, New Mexico NAD 83 Project: MD Reference: WELL @ 3167.0usft (Original Well Elev) Site: Lindale 24/25 H3DE Fed #1H North Reference: Grid Well: SL: 405' FNL & 655' FWL **Survey Calculation Method:** Minimum Curvature BHL: 2566' FNL & 1250' FWL Wellbore: 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 H3DE Fed #1H Northing: 376,542.00 usft 32.0342390 Site Position: Latitude: From: Мар Easting: 693,836.00 usft Longitude: -103.8412034 Slot Radius: 0.26 **Position Uncertainty:** 0.0 usft 13-3/16 " **Grid Convergence:** 

SL: 405' FNL & 655' FWL Well **Well Position** 32.0342390 +N/-S 0.0 usft Northing: 376,542.00 usft Latitude: Easting: 693,836.00 usft -103.8412034 +E/-W 0.0 usft Longitude: 3,140.0 usft **Position Uncertainty** 0.0 usft Wellhead Elevation: 3,167.0 usft **Ground Level:** 

BHL: 2566' FNL & 1250' FWL Wellbore Sample Date Declination Dip Angle Field Strength Magnetics **Model Name** (°) (°) (nT) 9/18/2018 59.78 47,752 IGRF2010 6.80

Design Design #1 Audit Notes: Version: **PROTOTYPE** 0.0 Phase: Tie On Depth: Vertical Section: Direction Depth From (TVD) +N/-S +E/-W (usft) (usft) (usft) ٠(°) 0.0 0.0 0.0 175.23

Plan Sections							, e fairear oran braghternatroscurir a		فالمستوسد بالمستوسد ويوي		
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		

Database: Company: Hobbs

Mewbourne Oil Company

Project: Site: Well:

Design:

Eddy County, New Mexico NAD 83 Lindale 24/25 H3DE Fed #1H

SL: 405' FNL & 655' FWL BHL: 2566' FNL & 1250' FWL

Wellbore: Design #1 Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Site Lindale 24/25 H3DE Fed #1H

WELL @ 3167.0usft (Original Well Elev) WELL @ 3167.0usft (Original Well Elev)

Grid

Minimum Curvature

ned Survey	L								
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
	L & 655' FWL (24		0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0,00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
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				
	0.00	0.00	1,100.0			0.0	0.00	0.00	0.00
1,100.0 1,200.0	0.00	0.00	1,100.0	0.0 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	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,300.0	0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00 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	2 000 0		0.0				
3,000.0 3,100.0	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	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00 0.00	3,200.0 3,300.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00 0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	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
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,850.0	0.00	0.00	3,850.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.75	56.24	3,900.0	0.2	0.3	-0.2	1.50	1.50	0.00
4,000.0	2.25	56.24	4,000.0	1.6	2.4	-1.4	1.50	1,50	0.00
4,100.0	3.75	56.24	4,099.8	4.5	6.8	-4.0	1.50	1.50	0.00
4,200.0	5.25	56.24	4,199.5	8.9	13.3	-7.8	1.50	1.50	0.00
4,300.0	6.75	56.24	4,299.0	14.7	22.0	-12.8	1,50	1.50	0.00
4.359.4	7.64	56.24	4,357.9	18.8	28.2	-16.4	1.50	1.50	0.00
4,400.0	7.64	56.24	4,398.1	21.8	32.7	-19.1	0.00	0.00	0.00
4,500.0	7.64	56.24	4,497.2	29.2	43.7	-25.5	0.00	0.00	0.00
4,600.0	7.64	56.24	4,596.4	36.6	54.8	-31.9	0.00	0.00	0.00
4,700.0	7.64	56.24	4,695.5	44.0	65.8	-38.4	0.00	0.00	0.00
4,800.0	7.64	56.24	4,794.6	51.4	76.9	-44.8	0.00	0.00	0.00
4,900.0 5,000.0	7.64 7.64	56.24 56.24	4,893.7 4,992.8	58.8 66.2	88.0 99.0	-51.3 -57.7	0.00 0.00	0.00 0.00	0.00 0.00

Database: Company: Project:

Site:

Hobbs .

Mewbourne Oil Company

Eddy County, New Mexico NAD 83 Lindale 24/25 H3DE Fed #1H

Well: Wellbore: Design: SL: 405' FNL & 655' FWL BHL: 2566' FNL & 1250' FWL

Design #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Site Lindale 24/25 H3DE Fed #1H

WELL @ 3167.0usft (Original Well Elev) WELL @ 3167.0usft (Original Well Elev)

Grid

Minimum Curvature

Planned Survey									
Measured			Vertical			Vertical Section	Dogleg Rate	Build Rate	Turn Rate
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
5.100.0	7.64	56.24	5,091.9	73.6	110.1	-64,1	0.00	0.00	0,00
5,200.0	7.64	56.24	5,191.0	80.9	121.1	-70.6	0.00	0.00	0.00
5,300.0	7.64	56.24	5,290.1	88.3	132.2	-77.0	0.00	0.00	0.00
5,400.0	7.64	56.24	5,389.3	95.7	143.2	-83.5	0.00	0.00	0.00
5,500.0	7.64	56.24	5,488.4	103.1	154.3	-89.9	0.00	0.00	0.00
5,600.0	7.64	56.24	5,587.5	110.5	165,3	-96.4	0.00	0.00	0.00
5,700.0	7.64	56.24	5,686.6	117.9	176.4	-102.8	0.00	0.00	0.00
5,800.0	7.64	56.24	5,785.7	125.3	187.4	-109.2	0.00	0.00	0.00
5,900.0	7.64	56.24	5,884.8	132.7	198.5	-115.7	0.00	0.00	0.00
6,000.0	7.64	56.24	5,983.9	140.1	209.6	-122.1	0.00	0.00	0.00
6,100.0	7.64	56.24	6,083.0	147.4	220.6	-128.6	0.00	0.00	0.00
6,200.0	7.64	56.24	6,182.2	154,8	231.7	-135.0	0.00	0.00	0.00
6,300.0	7.64	56.24	6,281.3	162.2	242.7	-141.5	0.00	0.00	0.00
6,400.0	7.64	56.24	6,380.4	169.6	253.8	-147.9	0.00	0.00	0.00
6,500.0	7.64	56.24	6,479.5	177.0	264.8	-154.3	0.00	0.00	0.00
6,600.0	7.64	56.24	6,578.6	184.4	275.9	-160.8	0.00	0.00	0.00
6,700.0	7.64	56,24	6,677.7	191.8	286.9	-167.2	0.00	0.00	0.00
	7.64	56.24	6,776.8	199.2	298.0	-173.7	0.00	0.00	0.00
6,800.0 6,900.0	7.64	56.24	6,875.9	206.5	309.0	-180.1	0.00	0.00	0.00
7,000.0	7.64	56.24	6,975.0	213.9	320.1	-186.6	0.00	0.00	0.00
7,100.0	7.64	56.24	7,074.2	221.3	331.1	-193.0	0.00	0.00	0.00
7,700.0	7.64	56.24	7,173.3	228.7	342.2	-199.4	0.00	0.00	0.00
7,300.0	7.64	56.24	7,272.4	236.1	353.3	-205.9	0.00	0.00 0.00	0.00 0.00
7,400.0	7.64	56.24	7,371.5 7,470.6	243.5 250.9	364.3 375.4	-212.3 -218.8	0.00 0.00	0.00	0.00
7,500.0 7,600.0	7.64 7.64	56.24 56.24	7, <del>4</del> 70.6 7,569.7	258.3	386.4	-216.6	0.00	0.00	0.00
7,700.0	7.64	56.24	7,668.8	265.6	397.5	-231.7	0.00	0.00	0.00
7,800.0	7.64	56,24 56,24	7,767.9 7,867.1	273,0 280.4	408.5 419.6	-238.1 -244.5	0.00 0.00	0.00 0.00	0.00 0.00
7,900.0 8,000.0	7.64 7.64	56.24	7,966.2	287.8	430.6	-244.5 -251.0	0.00	0.00	0.00
8,100.0	7.64	56.24	8,065.3	295.2	441.7	-257.4	0.00	0.00	0.00
8,200.0	7.64	56.24	8,164.4	302.6	452.7	-263.9	0.00	0.00	0.00
8,300.0	7.64	56.24	8,263.5	310.0	463.8	-270.3	0.00	0.00	0.00
8,400.0	7.64 7.64	56.24 56.24	8,362.6	317.4	403.6 474.8	-276.8	0.00	0.00	0.00
8,500.0	7.64	56.24	8,461.7	324.8	485.9	-283.2	0.00	0.00	0.00
8,600.0	7.64	56.24	8,560.8	332.1	497.0	-289.6	0.00	0.00	0.00
8,700.0	7.64	56.24	8,660.0	339.5	508.0	-296.1	0.00	0.00	0.00
8,800.0				346.9	519.1	-302.5	0.00	0.00	0.00
8,900.0	7.64 7.64	56.24 56.24	8,759.1 8,858.2	354.3	530.1	-302.5	0.00	0.00	0.00
9,000.0	7.64	56.24 56.24	8,957.3	361.7	541.2	-309.0	0.00	0.00	0.00
9,100.0	7.64	56.24	9,056.4	369.1	552.2	-313.4	0.00	0.00	0.00
9,200.0	7.64	56.24	9,155.5	376.5	563.3	-328.3	0.00	0.00	0.00
9,222.8	7.64	56.24	9,178.1	378.2	565.8	-329.8	0.00	0.00	0.00
9,300.0	6.48	56.24	9,254.7	383.4	573.7	-334.4	1.50	-1.50 -1.50	0.00 0.00
9,400.0	4.98	56.24	9,354.2	389.0	582.0 588.1	-339.2 -342.8	1.50	-1.50 -1.50	0.00
9,500.0 9,600.0	3.48 1.98	56.24 56.24	9,453.9 9,553.8	393.1 395.7	588.1 592.1	-342.8 -345.1	1.50 1.50	-1.50 -1.50	0.00
9,700.0	0.48	56.24	9,653.8	396.9	593.9	-346.1	1.50	-1.50	0.00
9,732.2	0.00	0.00	9,686.0	397.0	594.0	-346.2	1.50	-1.50	0.00
	IL & 1250' FWL (9								
9,800.0	6.78	179.77	9,753.6	393.0	594.0	-342.2	10.00	10.00	0.00
9,900.0	16.78	179.77	9,851.4	372.6	594,1	-321.9	10.00	10.00	0.00
10,000.0	26.78	179.77	9,944.2	335.5	594.2	-284.9	10.00	10.00	0.00

Database: Company:

Hobbs

Project: Site:

Wellbore:

Design:

Well:

Mewbourne Oil Company Eddy County, New Mexico NAD 83 Lindale 24/25 H3DE Fed #1H

SL: 405' FNL & 655' FWL BHL: 2566' FNL & 1250' FWL

Design #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Site Lindale 24/25 H3DE Fed #1H

WELL @ 3167.0usft (Original Well Elev) WELL @ 3167.0usft (Original Well Elev)

Grid

Minimum Curvature

Planned Survey

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
10,061.4	32.92	179.77	9,997.4	305.0	594.4	-254.5	10.00	10.00	0.00
FTP: 100' FN	IL & 1250' FWL	(24)							
10,100.0	36.78	179.77	10,029.1	283.0	594.4	-232.5	10.00	10.00	0.00
10,200.0	46.78	179.77	10,103.5	216.4	594,7	-166.2	10.00	10.00	0.00
10,300.0	56.78	179.77	10,165.3	138.0	595.0	-88.0	10.00	10.00	0.00
10,400.0	66.78	179.77	10,212.6	50.0	595.4	-0.2	10.00	10.00	0.00
10,500.0	76.77	179.77	10,243.8	-44.9	595.7	94.3	10.00	10.00	0.00
10,600.0	86.77	179.77	10,258.1	-143.8	596.1	192.9	10.00	10.00	0.00
10,632.9	90.06	179.77	10,259.0	-176.6	596.3	225.6	10.00	10.00	0.00
	. & 1250' FWL (2	•							
10,700.0	90,06	179.77	10,258.9	-243.7	596.5	292.5	0.00	0.00	0.00
10,800.0	90.06	179.77	10,258.8	-343.7	596.9	392.2	0.00	0.00	0.00
10,900.0	90.06	179.77	10,258.7	-443.7	597.3	491.9	0.00	0.00	0.00
11,000.0	90.06	179.77	10,258.7	-543.7 -543.7	597.3 597.7	591.6			
							0.00	0.00	0.00
11,100.0	90.06	179.77 179.77	10,258.5	-643.7	598.1	691.3	0.00	0.00	0.00
11,200.0 11,300.0	90.06 90.06	179.77 179.77	10,258.4	-743.7	598.5	791.0	0.00	0.00	0.00
11,300.0	90.06	1/3.//	10,258.3	-843.7	598.9	890.6	0.00	0.00	0.00
11,400.0	90.06	179.77	10,258.2	-943.7	599.3	990.3	0.00	0.00	0.00
11,500.0	90.06	179.77	10,258.1	-1,043.7	599.7	1,090.0	0.00	0.00	0.00
11,600.0	90.06	179.77	10,257.9	-1,143.7	600.1	1,189.7	0.00	0.00	0.00
11,700.0	90.06	179.77	10,257.8	-1,243.7	600.5	1,289.4	0.00	0.00	0.00
11,800.0	90.06	179.77	10,257.7	-1,343.7	600.8	1,389.1	0.00	0.00	0.00
11,900.0	90.06	179.77	10,257.6	4 440 7	004.0	4 400 7	0.00	0.00	0.00
	90.06			-1,443.7	601.2	1,488.7	0.00	0.00	0.00
12,000.0		179.77	10,257.5	-1,543.7	601.6	1,588.4	0.00	0.00	0.00
12,100.0	90.06	179.77	10,257.4	-1,643.7	602.0	1,688.1	0.00	0.00	0.00
12,200.0	90.06	179.77	10,257.3	-1,743.7	602.4	1,787.8	0.00	0.00	0.00
12,300.0	90.06	179.77	10,257.2	-1,843.7	602.8	1,887.5	0.00	0.00	0.00
12,400.0	90.06	179.77	10,257,1	-1,943.7	603.2	1,987.2	0.00	0.00	0.00
12,500.0	90.06	179.77	10,257.0	-2,043.7	603.6	2,086.9	0.00	0.00	0.00
12,600.0	90.06	179.77	10,256.8	-2,143.7	604.0	2,186.5	0.00	0.00	0.00
12,700.0	90.06	179.77	10,256.7	-2,243.7	604.4	2,286.2	0.00	0.00	0.00
12,800.0	90.06	179.77	10,256.6	-2,343.7	604.8	2,385.9	0.00	0.00	0.00
12,900.0	90.06	179.77	10,256.5	-2,443.7	605.2	2,485.6	0.00	0.00	0.00
13,000.0	90.06	179.77	10,256.4	-2,543.7	605.6	2,585.3	0.00	0.00	0.00
13,100.0	90.06	179.77	10,256.3	-2,643.7	606.0	2,685.0	0.00	0.00	0.00
13,200.0	90.06	179.77	10,256.2	-2,743.7	606.4	2,784.7	0.00	0.00	0.00
13,300.0	90.06	179.77	10,256.1	-2,843.7	606.7	2,884.3	0.00	0.00	0.00
13,400.0	90.06	179.77	10,256.0	-2,943.7	607.1	2,984.0	0.00	0.00	0.00
13,500.0	90.06	179.77	10,255.9	-3,043.7	607.5	3,083.7	0.00	0.00	0.00
13,600.0	90.06	179.77	10,255.8	-3,143.7	607.9	3,183.4	0.00	0.00	0.00
13,700.0	90.06	179.77	10,255.6	-3,243.7	608.3	3,283.1	0.00	0.00	0.00
13,800.0	90,06	179.77	10,255.5	-3,343.7	608.7	3,382.8	0.00	0.00	0.00
13,900.0	90.06	179.77	10,255.4	-3,443.7	609.1	3,482.4	0.00	0.00	0.00
14,000.0	90.06	179.77	10,255.3	-3,543.7	609.5	3,582.1	0.00	0.00	0.00
14,100.0	90.06	179.77	10,255.2	-3,643.7	609.9	3,681.8	0.00	0.00	0.00
14,200.0	90.06	179.77	10,255.1	-3,743.7	610.3	3,781.5	0.00	0.00	0.00
14,300.0	90.06	179.77	10,255.0	-3,843.7	610.7	3,881.2	0.00	0.00	0.00
14,400.0	90.06	179,77	10,254.9	-3,943.7	611.1	3,980.9	0.00	0.00	0.00
14,500.0	90.06	179.77	10,254.8	-3,543.7 -4,043.7	611.5	4,080.6	0.00	0.00	0.00
14,500.0	90.06	179.77	10,254.6	-4,043.7 -4,143.7	611.9	4,180.2		0.00	0.00
14,600.0			•				0.00		
	90.06	179.77	10,254.5	-4,243.7 4,243.7	612.3	4,279.9	0.00	0.00	0.00
14,800.0	90.06	179.77	10,254.4	-4,343.7	612.6	4,379.6	0.00	0.00	0.00

Database: Company: Hobbs

Mewbourne Oil Company

Project: Site: Well:

Wellbore:

Eddy County, New Mexico NAD 83 Lindale 24/25 H3DE Fed #1H SL: 405' FNL & 655' FWL

BHL: 2566' FNL & 1250' FWL

Design: Design #1 Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Site Lindale 24/25 H3DE Fed #1H

WELL @ 3167.0usft (Original Well Elev) WELL @ 3167.0usft (Original Well Elev)

Grid

Minimum Curvature

•									
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)
		<del></del>				4.070.7			
15,100.0	90.06	179.77	10,254.1	-4,643.7	613.8	4,678.7	0.00	0.00	0.00
15,200.0	90.06	179.77	10,254.0	-4,743.7	614.2	4,778.4	0.00	0.00	0.00
15,300.0	90.06	179.77	10,253.9	-4 <sub>,</sub> 843.7	614.6	4,878.0	0.00	0.00	0.00
15,400.0	90.06	179.77	10,253.8	-4,943.7	615.0	4,977.7	0.00	0.00	0.00
15,500.0	90.06	179.77	10,253.7	-5,043.7	615.4	5,077.4	0.00	0.00	0.00
15,600.0	90.06	179.77	10,253.6	-5,143.7	615.8	5,177.1	0.00	0.00	0.00
15,700.0	90.06	179.77	10,253.5	-5,243.7	616.2	5,276.8	0.00	0.00	0.00
15,800.0	90.06	179.77	10,253.3	-5,343.7	616.6	5,376.5	0.00	0.00	0.00
15,900.0	90.06	179.77	10,253.2	-5,443.7	617.0	5,476.1	0.00	0.00	0.00
16,000.0	90.06	179.77	10,253.1	-5,543.7	617.4	5,575.8	0.00	0.00	0.00
16,100.0	90.06	179.77	10,253.0	-5,643.7	617.8	5,675.5	0.00	0.00	0.00
16,200.0	90.06	179.77	10,252.9	-5,743.7	618.2	5,775.2	0.00	0.00	0.00
16,300.0	90.06	179.77	10,252.8	-5,843.7	618.5	5,874.9	0.00	0.00	0.00
16,400.0	90.06	179.77	10,252.7	-5,943.7	618.9	5,974.6	0.00	0.00	0.00
16,500.0	90.06	179.77	10,252.6	-6,043.7	619.3	6,074.3	0.00	0.00	0.00
16,600.0	90.06	179.77	10,252.5	-6,143.7	619.7	6,173.9	0.00	0.00	0.00
16,700.0	90.06	179.77	10,252.4	-6,243.7	620.1	6,273.6	0.00	0.00	0.00
16,800.0	90.06	179.77	10,252.2	-6,343.7	620.5	6,373.3	0.00	0.00	ō.00
16,900.0	90.06	179.77	10,252.1	-6,443.7	620.9	6,473.0	0.00	0.00	0.00
17,000.0	90.06	179.77	10,252.0	-6,543.7	621.3	6,572.7	0.00	0.00	0.00
17,100.0	90.06	179.77	10,251.9	-6,643.7	621.7	6,672.4	0.00	0.00	0.00
17,200.0	90.06	179.77	10,251.8	-6,743.7	622.1	6,772.1	0.00	0.00	0.00
17,300.0	90.06	179.77	10,251.7	-6,843.7	622.5	6,871.7	0.00	0.00	0.00
17,400.0	90.06	179.77	10,251.6	-6,943.7	622.9	6,971.4	0.00	0.00	0.00
17,500.0	90.06	179.77	10,251.5	-7,043.7	623.3	7,071.1	0.00	0.00	0.00
17,600,0	90.06	179.77	10,251.4	-7,143.7	623.7	7,170.8	0.00	0.00	0.00
17,700.0	90.06	179.77	10,251.3	-7,243.7	624.1	7,270.5	0.00	0.00	0.00
17,800.0	90.06	179.77	10,251.2	-7,343.7	624.4	7,370.2	0.00	0.00	0.00
17,900.0	90.06	179.77	10,251.0	-7,443.7	624.8	7,469.9	0.00	0.00	0.00
17,941.3	90.06	179.77	10,251.0	-7,485.0	625.0	7,511,0	0.00	0.00	0.00

Database: Company: Hobbs

Mewbourne Oil Company

Project: Site:

Wellbore:

Design:

Well:

Eddy County, New Mexico NAD 83 Lindale 24/25 H3DE Fed #1H

Lindale 24/25 H3DE Fed #1H SL: 405' FNL & 655' FWL BHL: 2566' FNL & 1250' FWL

Design #1

Local Co-ordinate Reference:

TVD Reference:

North Reference:

Survey Calculation Method:

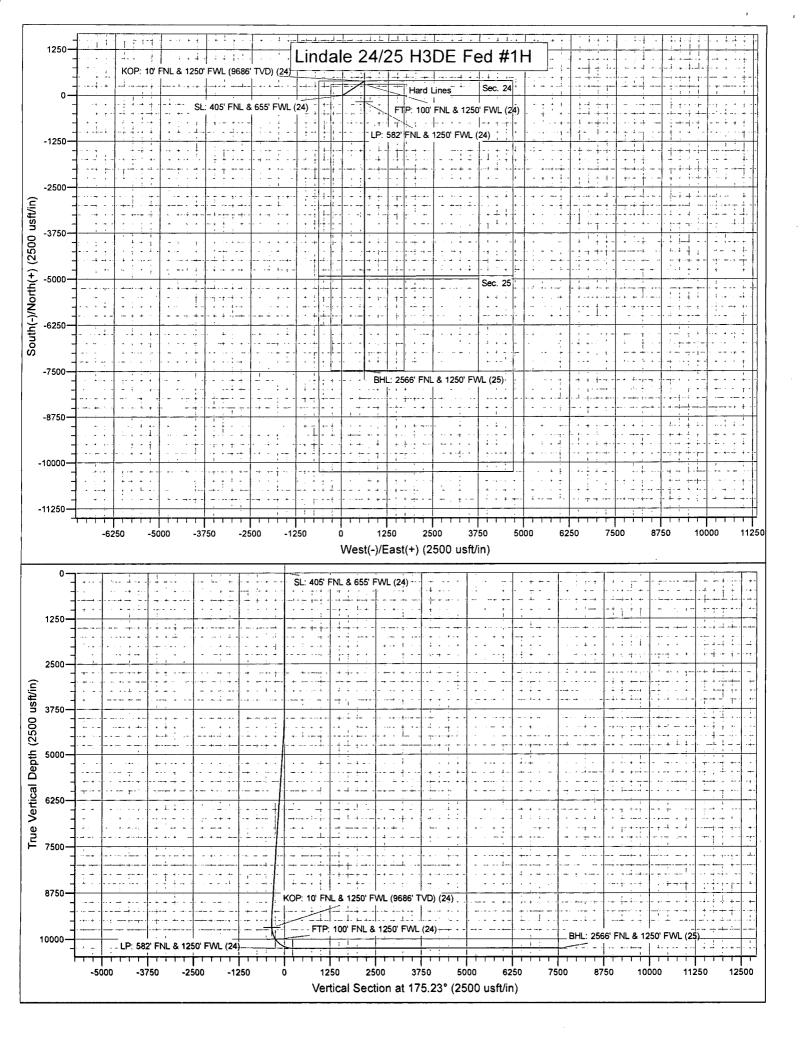
Site Lindale 24/25 H3DE Fed #1H

WELL @ 3167.0usft (Original Well Elev) WELL @ 3167.0usft (Original Well Elev)

Grid

Minimum Curvature

Design Targets									
Target Name - hit/miss target D - Shape	ip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SL: 405' FNL & 655' FWI - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	376,542.00	693,836.00	32.0342390	-103.8412034
KOP: 10' FNL & 1250' F\ - plan hits target center - Point	0.00	0.00	9,686.0	397.0	594.0	376,939.00	694,430.00	32.0353228	-103.8392807
FTP: 100' FNL & 1250' F - plan hits target center - Point	0.00	0.00	9,997.4	305.0	594.4	376,847.00	694,430.36	32.0350699	-103.8392809
BHL: 2566' FNL & 1250' - plan hits target center - Point	0.00	0.00	10,251.0	-7,485.0	625.0	369,057.00	694,461.00	32.0136557	-103.8392970
LP: 582' FNL & 1250' FV - plan hits target center - Point	0.00	0.00	10,259.0	-176.6	596.3	376,365.38	694,432.25	32.0337460	-103.8392819



SL: 405' FNL & 655' FWL, Sec. 24 BHL: 2566' FNL & 1250' FWL, Sec. 25

# 2. Casing Program

Hole	Casing	Interval	Csg.	Weight	` ,(	Grade :	Conn.		· Ş	E,	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)					Coll	apse	Burst	Tension	Tension
17.5"	0'	1000'	13.375"	48	Н	40	ST	C	1.68		3.78	6.71	11.27
12.25"	0'	3452'	9.625"	36	J5	55	LI	C	1.125	5	1.96	3.30	4.11
12.25	3452'	3675'	9.625"	40	L	L80		LTC 1.62			3.01	81.50	102.67
8.75"	0'	10633'	7"	26	P	P110		LTC 1.23			1.96	2.31	3.00
6.125"	9732'	17941'	4.5"	13.5	P	110	LI	TC	1.67		1.94	3.05	3.81
B	LM Minii	num Safet	y 1.125	1		1.6 Dr	у	1.6 D	ry				
		Facto	or			1.8 We	et	1.8 W	/et				

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

	YorN
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide	Y
justification (loading assumptions, casing design criteria).	
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the	Y
collapse pressure rating of the casing?	
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <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 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?	

SL: 405' FNL & 655' FWL, Sec. 24 BHL: 2566' FNL & 1250' FWL, Sec. 25

Is well located in critical Cave/Karst?		N
If yes, are there three strings cemented to	?	

# 3. Cementing Program

Casing	# Sks	Wt.	Yld	H <sub>2</sub> 0	500#	Slurry Description
		lb/ gal	ft3/ sack	gal/ sk	Comp. Strength (hours)	
Surf.	535	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.	545	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	295	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 T	ool @ 4858'
Prod. Stg 2	60	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	18	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	3475'	25%
Liner	9732'	25%

SL: 405' FNL & 655' FWL, Sec. 24 BHL: 2566' FNL & 1250' FWL, Sec. 25

## 4. Pressure Control Equipment

1 N T	T 7 1 2 7			
IN	Variance: None			
1 1 1	i variance ivone			
1 1	variance, riene			

BOP installed and tested	Size?	System Rated	Type	1	Tested to:
before drilling which hole?		WP			
		5M	Annular	X	2500#
			Blind Ram	X	
12 1/4"	'4" 13 5/8"		Pipe Ram	X	5000#
			Double Ram		3000#
			Other*		

<sup>\*</sup>Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

X	Formation integrity test will be performed per Onshore Order #2.
	On Exploratory wells or on that portion of any well approved for a 5M BOPE system or

SL: 405' FNL & 655' FWL, Sec. 24 BHL: 2566' FNL & 1250' FWL, Sec. 25

	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.		
	ance is requested for the use of a flexible choke line from the BOP to Choke		
Y	Manif	old. See attached for specs and hydrostatic test chart.	
	N	Are anchors required by manufacturer?	
Y	install	tibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after ation on the surface casing which will cover testing requirements for a maximum of vs. If any seal subject to test pressure is broken the system must be tested.	
	0	Provide description here: See attached schematic.	

## 5. Mud Program

Depth (TVD)		Type	Weight (ppg)	Viscosity	Water Loss
From	То				
0'	1000'	FW Gel	8.6-8.8	28-34	N/C
1000'	3675'	Saturated Brine	10.0	28-34	N/C
3675'	10259'	Cut Brine	8.6-9.5	28-34	N/C
10259'	10259'	OBM	9.5-12.0	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

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

## 6. Logging and Testing Procedures

Logg	ging, Coring and Testing.
X	Will run GR/CNL from KOP (9732') to surface (horizontal well – vertical portion of
	hole). Stated logs run will be in the Completion Report and submitted to the BLM.
	No Logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain
	Coring? If yes, explain

SL: 405' FNL & 655' FWL, Sec. 24 BHL: 2566' FNL & 1250' FWL, Sec. 25

Add	litional logs planned	Interval
X	Gamma Ray	9732' (KOP) to TD
	Density	
	CBL	
	Mud log	
	PEX	

## 7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	6401 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

	H2S is present	
X	H2S Plan attached	

## 8. Other facets of operation

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

Attachments	
Directional	Plan

SL: 405' FNL & 655' FWL, Sec. 24 BHL: 2566' FNL & 1250' FWL, Sec. 25

\_\_\_ Other, describe



U.S. Department of the Interior **BUREAU OF LAND MANAGEMENT**  SUPO Data Report 08/06/2019

APD ID: 10400034112

**Operator Name: MEWBOURNE OIL COMPANY** 

Submission Date: 09/19/2018

Highlighted data reflects the most

recent changes

Well Number: 1H

Well Name: LINDALE 24/25 H3DE FED Well Type: CONVENTIONAL GAS WELL

Well Work Type: Drill

**Show Final Text** 

## Section 1 - Existing Roads

Will existing roads be used? YES

**Existing Road Map:** 

Lindale24\_25H3DEFed1H\_existingroadmap\_20180914085507.pdf

Existing Road Purpose: ACCESS, FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

**Existing Road Improvement Description:** 

**Existing Road Improvement Attachment:** 

## Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

Lindale24\_25H3DEFed1H\_newroadmap\_20180914085527.pdf Lindale24\_25H3DEFed1H\_newroadmap2\_20180914110339.pdf

New road type: RESOURCE

Length: 192.89

Feet

Width (ft.): 30

Max slope (%): 3

Max grade (%): 3

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: None

New road access plan or profile prepared? NO

New road access plan attachment:

Well Name: LINDALE 24/25 H3DE FED Well Number: 1H

Access road engineering design? NO

Access road engineering design attachment:

Turnout? Y

Access surfacing type: OTHER

Access topsoil source: OFFSITE

Access surfacing type description: Caliche

Access onsite topsoil source depth:

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

Onsite topsoil removal process:

Access other construction information: None

Access miscellaneous information: None

Number of access turnouts: 6

Access turnout map:

#### **Drainage Control**

New road drainage crossing: OTHER

**Drainage Control comments: None** 

Road Drainage Control Structures (DCS) description: None

Road Drainage Control Structures (DCS) attachment:

#### **Access Additional Attachments**

Additional Attachment(s):

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

**Existing Wells Map?** YES

Attach Well map:

Lindale24\_25H3DEFed1H\_existingwellmap\_20180914085600.pdf

**Existing Wells description:** 

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: 4" steel buried gas line 12" buried poly SWD pipeline Overhead elec line

**Production Facilities map:** 

 $Lindale 24\_25H3DEFed 1H\_production facility map 1\_20180914085651.pdf$ 

Well Name: LINDALE 24/25 H3DE FED

Well Number: 1H

Lindale24\_25H3DEFed1H\_productionfacilitymap2\_20180914085702.pdf Lindale24\_25H3DEFed1H\_productionfacilitymap3\_20180914085716.pdf

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

#### **Water Source Table**

Water source use type: DUST CONTROL,

Water source type: IRRIGATION

INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE

CASING

Describe type:

Source longitude: -103.525604

Source latitude: 32.15701

Source datum: NAD83

Water source permit type: WATER WELL

Source land ownership: PRIVATE

Water source transport method: TRUCKING

Source transportation land ownership: COMMERCIAL

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

Source volume (gal): 84588

Water source use type: DUST CONTROL, Water source type: IRRIGATION

INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE

CASING

Describe type: Source longitude: -103.8013

Source latitude: 32.05537 Source datum: NAD83

Water source permit type: WATER WELL

Source land ownership: FEDERAL

Water source transport method: TRUCKING

Source transportation land ownership: COMMERCIAL

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

Source volume (gal): 84588

Water source and transportation map:

Lindale24\_25H3DEFed1H\_WATERSOURCEANDTRANSmap\_20180914085752.pdf

Water source comments: Both Sources shown on one map

New water well? NO

**New Water Well Info** 

Well latitude: Well Longitude:

Well datum:

Well target aquifer:

Well Name: LINDALE 24/25 H3DE FED Well Number: 1H

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

Aquifer comments:

Aquifer documentation:

Well depth (ft): Well casing type:

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

New water well casing?

Used casing source:

Drilling method: Drill material:

Grout material: Grout depth:

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

Well Production type: Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

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

Using any construction materials: YES

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

**Construction Materials source location attachment:** 

Lindale24\_25H3DEFed1H\_CALICHESOURCEANDTRANSmap\_20180914085823.pdf

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

Waste type: DRILLING

Waste content description: Drill cuttings

Amount of waste: 940 barrels

Waste disposal frequency: One Time Only

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

Safe containmant attachment:

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

**FACILITY** 

Disposal type description:

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

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

Waste type: SEWAGE

Waste content description: Human waste & grey water

Amount of waste: 1500 gallons

Waste disposal frequency: Weekly

Well Name: LINDALE 24/25 H3DE FED Well Number: 1H

Safe containment description: 2,000 gallon plastic container

Safe containment attachment:

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

**FACILITY** 

Disposal type description:

Disposal location description: City of Carlsbad Water Treatment facility

Waste type: GARBAGE

Waste content description: Garbage & trash

Amount of waste: 1500

pounds

Waste disposal frequency: One Time Only

Safe containment description: Enclosed trash trailer

Safe containment attachment:

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

**FACILITY** 

Disposal type description:

Disposal location description: Waste Management facility in Carlsbad.

#### Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit-length (ft.)

Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

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

Reserve pit liner

Reserve pit liner specifications and installation description

#### **Cuttings Area**

Cuttings Area being used? NO

Are you storing cuttings on location? NO

**Description of cuttings location** 

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

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

Well Name: LINDALE 24/25 H3DE FED Well Number: 1H

WCuttings area liner

Cuttings area liner specifications and installation description

#### **Section 8 - Ancillary Facilities**

Are you requesting any Ancillary Facilities?: NO

**Ancillary Facilities attachment:** 

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Lindale24\_25H3DEFed1H\_wellsitelayout\_20180914085853.pdf

Comments:

#### Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: LINDALE 24/25 DE WELLS

Multiple Well Pad Number: 4

Recontouring attachment:

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

Wellpad long term disturbance (acres): 2.962

Access road long term disturbance (acres): 0

Pipeline long term disturbance (acres): 0

Other long term disturbance (acres): 0

Total long term disturbance: 2.962

Wellpad short term disturbance (acres): 1.088

Access road short term disturbance (acres): 0

Pipeline short term disturbance (acres): 0

Other short term disturbance (acres): 0

Total short term disturbance: 1.088

**Disturbance Comments:** In areas to be heavily disturbed, the top 6 inches of soil material, will be stripped and stockpiled on the perimeter of the well location to keep topsoil viable, and to make redistribution of topsoil more efficient during interim reclamation. Stockpiled topsoil should include vegetative material. Topsoil will be clearly segregated and stored separately from subsoils. Contaminated soil will not be stockpiled, but properly treated and handled prior to topsoil salvaging. **Reconstruction method:** The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

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

Well Name: LINDALE 24/25 H3DE FED Well Number: 1H

weeds, will be used.

Soil treatment: NA

Existing Vegetation at the well pad: Various brush & grasses

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Various brush & grasses

**Existing Vegetation Community at the road attachment:** 

Existing Vegetation Community at the pipeline: NA

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: NA

**Existing Vegetation Community at other disturbances attachment:** 

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

#### Seed Management

#### **Seed Table**

Seed type: Seed source:

Seed name:

Source name: Source address:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre: Proposed seeding season:

Well Name: LINDALE 24/25 H3DE FED Well Number: 1H

Seed Summary
Seed Type Pounds/Acre

Total pounds/Acre:

#### Seed reclamation attachment:

#### Operator Contact/Responsible Official Contact Info

First Name: Bradley

Last Name: Bishop

Phone: (575)393-5905

Email: bbishop@mewbourne.com

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

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

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

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: NA

Weed treatment plan attachment:

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

Monitoring plan attachment:

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

Pit closure description: NA

Pit closure attachment:

#### Section 11 - Surface Ownership

Disturbance type: EXISTING ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

**BIA Local Office:** 

**BOR Local Office:** 

**COE Local Office:** 

**DOD Local Office:** 

**NPS Local Office:** 

State Local Office:

<b>Well Name:</b> LINDALE 24/25 H3DE FED	Well Number: 1H	
Military Local Office:		
USFWS Local Office:		
Other Local Office:		
USFS Region:		
USFS Forest/Grassland:	USFS Ranger District:	
Fee Owner: Pecos Valley Artesian Convservation District Phone: (575)622-7000	Fee Owner Address: Email:	
Surface use plan certification: NO Surface use plan certification document:		
Surface access agreement or bond: Agreement		
Surface Access Agreement Need description: S	JA in place	
Surface Access Bond BLM or Forest Service:		
BLM Surface Access Bond number:		
USFS Surface access bond number:		
Disturbance type: WELL PAD		
Describe:		
Surface Owner: BUREAU OF LAND MANAGEMENT		
Other surface owner description:		
BIA Local Office:		
BOR Local Office:		
COE Local Office:		
DOD Local Office:		
NPS Local Office:		
State Local Office:		
Military Local Office:		
USFWS Local Office:		
Other Local Office:		
USFS Region:		
USFS Forest/Grassland:	USFS Ranger District:	

Well Name: LINDALE 24/25 H3DE FED Well Number: 1H

Fee Owner: Pecos Valley Artesian Conservation

Fee Owner Address:

District

Phone: (575)622-7000

Email:

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: SUA in place

Surface Access Bond BLM or Forest Service:

**BLM Surface Access Bond number:** 

**USFS Surface access bond number:** 

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

**BIA Local Office:** 

**BOR Local Office:** 

**COE Local Office:** 

**DOD Local Office:** 

NPS Local Office:

State Local Office:

Military Local Office:

**USFWS Local Office:** 

Other Local Office:

**USFS** Region:

**USFS** Forest/Grassland:

**USFS** Ranger District:

Well Name: LINDALE 24/25 H3DE FED Well Number: 1H

**Section 12 - Other Information** 

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

**ROW Applications** 

**SUPO Additional Information:** AUG 28 2018 Met w/RRC Surveying & staked location @ 205' FNL & 705' FWL, Sec 24, T26S, R30E, Eddy Co., NM. This location was unacceptable due to buried gas pipelines to E. Re-staked location @ 405' FNL & 655' FWL, Sec 24, T26S, R30E, Eddy Co., NM. (Elevation @ 3140'). Pit area will be to the S. Topsoil N. Pad will be 340 x 490. Reclaim 60 N & W. Approx. 100 of new road off the SE corner. Battery TBD. Location is in MOA. Lat: 32.03424024 N, Long: -103.84120361 W NAD 83

Use a previously conducted onsite? NO

**Previous Onsite information:** 

#### **Other SUPO Attachment**

Lindale24\_25H3DEFed1H\_interimreclamationdiagram\_20180914090016.pdf Lindale24\_25H3DEFed1H\_gascaptureplan\_20180914090026.pdf

## VICINITY MAP

NOT TO SCALE

රි රි වි සි R80 ව	Sec 18	Sec 17	Sec 16	Sec 115	Property of the second	The same	ත් <u>R</u> පිවුව ම ම ම	Sec. 17.
Sec 24.	Séc419	Sec 20	Sec 21	Sæ 222	Sec 28	Sec 24	Sec. 19	Sec. 20
Sec 25		Sec. 29	Sec 28		Sec 26-		Sec 80	Sec. 29
Sec 36	1 3	Sec 32.	70.00	4.7 7.5	14.7	7.5	Sec. 31	T25S
T26S Sec 1	Sec/ 6	Sec.5	Sec 4	Sec 3	444		ð. 1852	
Sec 12	Sec 7	The second Property	and the	rSec 10°			Sec 7	Sec 8
Sec. 13	Sec 18	Sec 17		Sec 115		Ġ.	38.6	Sade?
/- ĽĚŸ	SE ROAI	10.3 K 2 . Tu	19		Sec 23 CR-1	Sec 24°	Sec 19 HWY)	
ို့ ၁ (၁) (၁) (၁) (၁) (၁)	R31E Sec 30	Sec 29	Sec 28	Sec. 27 NE RD.	Sec 26	Sec. 25	R32E-0	Sec 29

SECTION 24, TWP. 26 SOUTH, RGE. 30 EAST, N. M. P. M., EDDY COUNTY, NEW MEXICO

OPERATOR:	Mewbourne Oil Company	_ LOCATION: _	405'	FNL	&	655	F۷
LEASE: Linc	dale 24/25 H3DE Fed	ELEVATION:	314	40'			

WELL NO.: 1H

Copyright 2016 - All Rights Reserved

		$ldsymbol{ldsymbol{ldsymbol{ldsymbol{eta}}}$				
NO.	REVISION	DATE				
JOB NO.: LS18081027						
DWG	DWG. NO.: 18081027VM					



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

SCALE: N. T. S.

DATE: 8-27-18

SURVEYED BY: ML/TF

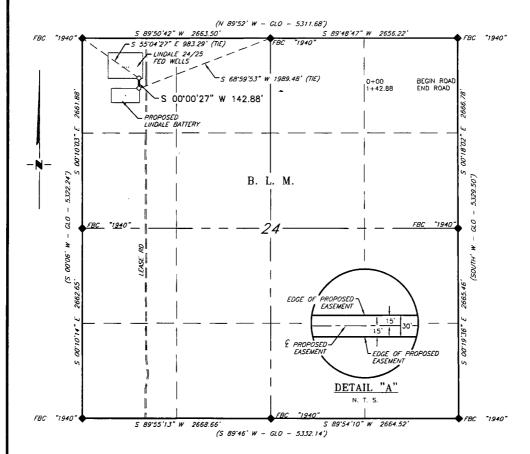
DRAWN BY: GA

APPROVED BY: RMH

SHEET: 1 OF 1

#### MEWBOURNE OIL COMPANY PROPOSED ACCESS ROAD FOR THE LINDALE 24/25 BATTERY SECTION 24, T26S, R30E

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



#### DESCRIPTION

A strip of land 30 feet wide, being 142.88 feet or 8.659 rods in length, lying in Section 24, Township 26, South, Range 30 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 0+00, a point in the Northwest quarter of Section 24, which bears, S 55°04'27" E, 983.29 feet from a brass cap, stamped "1940", found for the Northwest corner of Section 24;

Thence S 00'00'27" W, 142.88 feet, to Engr. Sta. 1+42.88, the End of Survey, a point in the Northwest quarter of Section 24, which bears, S 68'59'53" W, 1,989.48 feet from a brass cap, stamped "1940", found for the North quarter corner of Section 24.

Said strip of land contains 0.098 acres, more or less, and is allocated by forties as follows:

NW 1/4 NW 1/4

8.659 Rods

0.098 Acres

= 1000 1000

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

LEGEND RECORD DATA - GLO FOUND MONUMENT AS NOTED PROPOSED ACCESS ROAD

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

Robert M. Howett

Robert M. Howett NM PS 19680

9/07/18 9/07/18 SONAL SUR Copyright 2016 - All Rights

M. HOUR

AN METIC

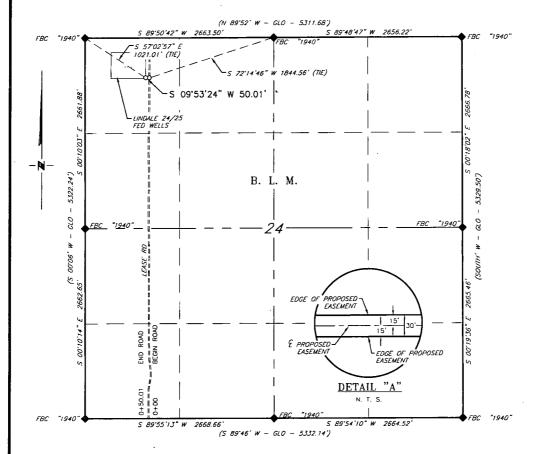
REVISION DATE JOB NO.: LS18081044 DWG. NO.: 18081044RD



-	
	SCALE: 1" = 1000'
	DATE: 9-04-18
	SURVEYED BY: ML/TF
	DRAWN BY: GA
ĺ	APPROVED BY: RMH
	SHEET: 1 OF 1

### MEWBOURNE OIL COMPANY PROPOSED ACCESS ROAD FOR THE LINDALE 24/25 FED W1DE #1H & #2H, & THE H3DE #1H & #2H WELLS SECTION 24, T26S, R30E

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



#### DESCRIPTION

A strip of land 30 feet wide, being 50.01 feet or 3.031 rods in length, lying in Section 24, Township 26, South, Range 30 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 0+00, a point in the Northwest quarter of Section 24, which bears, S 72°14'46" W, 1,844.56 feet from a brass cap, stamped "1940", found for the North quarter corner of Section 24;

Thence S 89'53'24" W, 50.01 feet, to Engr. Sta. 0+50.01, the End of Survey, a point in the Northwest quarter of Section 24, which bears, S 57'02'57" E, 1,021.01 feet from a brass cap, stamped "1940", found for the Northwest corner of Section 24.

Said strip of land contains 0.034 acres, more or less, and is allocated by forties as follows:

NW 1/4 NW 1/4

3.031 Rods

0.034 Acres

500' 1000

BEARINGS ARE GRID NAD 8.3 NM EAST DISTANCES ARE HORIZ. GROUND.

<u>LEGEND</u> RECORD DATA - GLO

FOUND MONUMENT AS NOTED PROPOSED ACCESS ROAD

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

Robert M. Howett

Robert M. Howett NM PS 19680

Copyright 2016 - All Rights Reserv COME: 1" -

M. HON

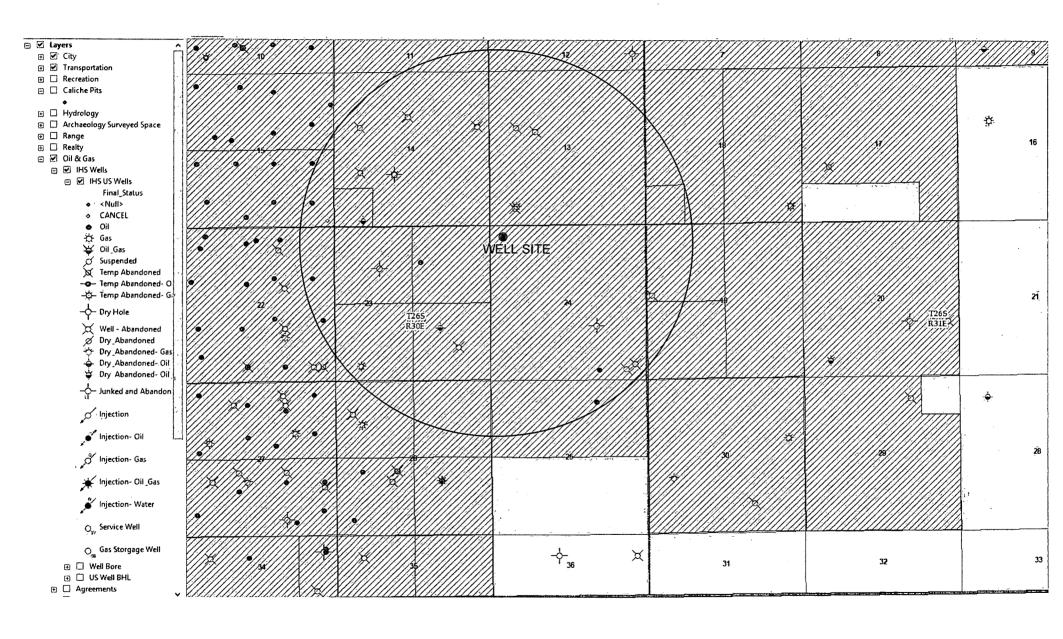
REVISION DATE JOB NO.: LS18081026

DWG. NO.: 18081026RD



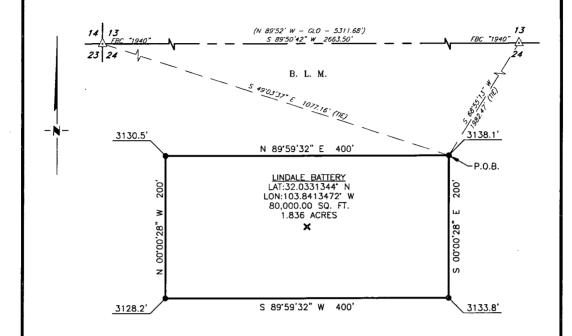
SCALE: I = 1000
DATE: 8-27-18
SURVEYED BY: ML/TF
DRAWN BY: GA
APPROVED BY: RMH
SHEET: 1 OF 1

#### EXISTING WELL MAP LINDALE 24/25 H3DE FED #1H



# MEWBOURNE OIL COMPANY SURVEY OF THE PROPOSED LINDALE BATTERY SITUATED WITHIN THE NW 1/4 SECTION 24, T26S, R30E

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



SCALE: 1" = 100' 0 50' 100

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

) RECORD DATA — GLO

FOUND MONUMENT AS NOTED

P.O.B. POINT OF BEGINNING



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

Robert M. Howett NM PS 19680

#### DESCRIPTION

A tract of land situated within the Northwest quarter of Section 24, Township 26 South, Range 30 East, N. M. P. M. Eddy County, New Mexico, across B. L. M. land, and being more particularly described by metes and bounds as follows:

BEGINNING at a point which bears, S 49'03'37" E, 1,077.16 feet from a brass cap, stamped "1940", found for the Northwest corner of Section 24 and being S 68'55'13" W, 1,982.47 feet from a brass cap, stamped "1940", found for the North quarter corner of Section 24:

Thence S 00'00'28" E, 200 feet, to a point;

Thence S 89'59'32" W, 400 feet, to a point;

Thence N 00'00'28" W, 200 feet, to a point;

Thence N 89°59'32" E, 400 feet, to the Point of Beginning.

Said tract of land contains 80,000 square feet or 1.836 acres, more or less, and is allocated by forties as follows:

NW 1/4 NW 1/4 80,000 Sq. Ft. 1.836 Acres

Copyright 2016 - All Rights Reserved

SCALE: 1" = 100'

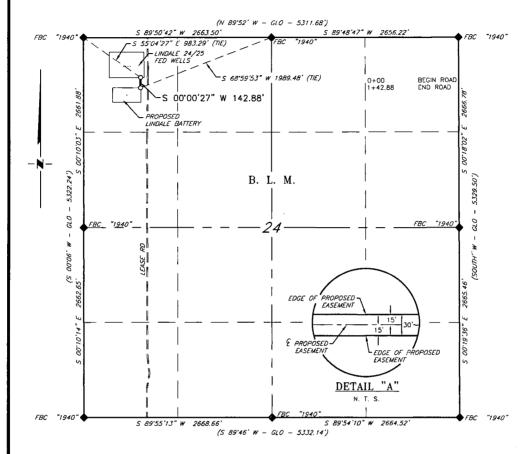
NO. REVISION DATE
JOB NO.: LS18081044
DWG. NO.: 18081044BA



DATE: 9-04-18
SURVEYED BY: ML/TF
DRAWN BY: GA
APPROVED BY: RMH
SHEET: 1 OF 1

#### MEWBOURNE OIL COMPANY PROPOSED ACCESS ROAD FOR THE LINDALE 24/25 BATTERY **SECTION 24, T26S, R30E**

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



#### DESCRIPTION

A strip of land 30 feet wide, being 142.88 feet or 8.659 rods in length, lying in Section 24, Township 26, South, Range 30 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 0+00, a point in the Northwest quarter of Section 24, which bears, S 55'04'27" E, 983.29 feet from a brass cap, stamped "1940", found for the Northwest corner of Section 24;

Thence S 00°00'27" W, 142.88 feet, to Engr. Sta. 1+42.88, the End of Survey, a point in the Northwest quarter of Section 24, which bears, S 68'59'53" W, 1,989.48 feet from a brass cap, stamped "1940", found for the North quarter corner of Section 24.

Said strip of land contains 0.098 acres, more or less, and is allocated by forties as follows:

NW 1/4 NW 1/4

8.659 Rods

0.098 Acres



11 1

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

LEGEND RECORD DATA - GLO FOUND MONUMENT AS NOTED PROPOSED ACCESS ROAD I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howell

Robert M. Howett NM PS 19680 Copyright 2016 -

19680

M. HOUR SEN METICO

ON PRINT

REVISION DATE JOB NO.: LS18081044

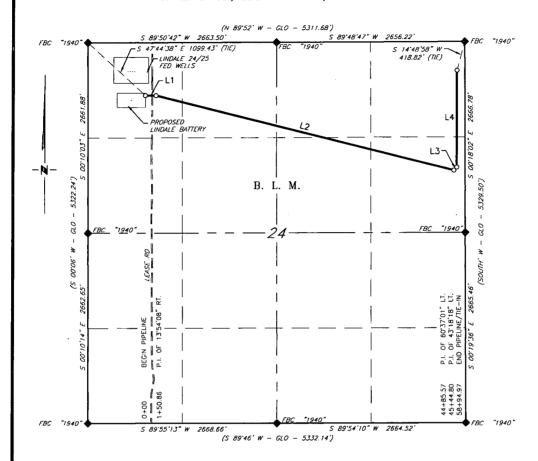
DWG. NO.: 18081044RD

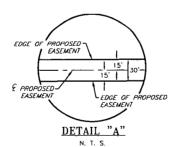


SCALE: 1" = 1000'
DATE: 9-04-18
SURVEYED BY: ML/TF
DRAWN BY: GA
APPROVED BY: RMH
SHEET: 1 OF 1

#### MEWBOURNE OIL COMPANY PROPOSED PIPELINE FROM THE LINDALE 24/25 BATTERY TO AN EXISTING MEWBOURNE PIPELINE SECTION 24, T26S, R30E

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





LINE TABLE					
LINE	BEARING	LENGTH			
L1	S 89'58'49" E	150.86'			
L2	S 76°04'41" E	4,334.71			
L3	N 43'18'18" E	59.23'			
L4	N 00°00'00" E	1,350.17			

1" = 1000" 500' 1000

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

**LEGEND** RECORD DATA - GLO

FOUND MONUMENT AS NOTED PROPOSED PIPELINE

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

Robert M. Howett NM NM PS 19680

M. Hon PORTESIONAL 19680

Copyright 2016 - All Rights Rese

REVISION DATE JOB NO.: LS18081044

DWG. NO.: 18081044-1

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200 SCALE: 1" = 1000' DATE: 9-04-18 SURVEYED BY: ML/TF DRAWN BY: GA APPROVED BY: RMH SHEET: 1 OF 2

## MEWBOURNE OIL COMPANY PROPOSED PIPELINE FROM THE LINDALE 24/25 BATTERY TO AN EXISTING MEWBOURNE DIDELINE

TO AN EXISTING MEWBOURNE PIPELINE
SECTION 24, T26S, R30E

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

#### DESCRIPTION

A strip of land 30 feet wide, being 5,894.97 feet or 357.271 rods in length, lying in Section 24, Township 26, South, Range 30 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 0+00, a point in the Northwest quarter of Section 24, which bears, S 47\*44'38" E, 1,099.43 feet from a brass cap, stamped "1940", found for the Northwest corner of Section 24;

Thence S 89'58'49" E, 150.86 feet, to Engr. Sta. 1+50.86, a P. I. of 13'54'08" right;

Thence S 76°04'41" E, 4,334.71 feet, to Engr. Sta. 44+85.57, a P. I. of 60°37'01" left;

Thence N 43'18'18" E, 59.23 feet, to Engr. Sta. 45+44.80, a P. I. of 43'18'18" left;

Thence N 00'00'00" E, 1,350.17 feet, to Engr. Sta. 58+94.97, the End of Survey, a point in the Northeast quarter of Section 24, which bears, S  $14^{\circ}48^{\circ}58^{\circ}$  W, 418.82 feet from a brass cap, stamped "1940", found for the Northeast corner of Section 24.

Said strip of land contains 4.060 acres, more or less, and is allocated by forties as follows:

NW 1/4 NW 1,	<b>4</b> 32.246	Rods	0.366	Acres
NE 1/4 NW 1/	4 83.262	Rods	0.946	Acres
NW 1/4 NE 1/	4 40.543	Rods	0.461	Acres
SW 1/4 NE 1/	4 42.529	Rods	0.483	Acres
SE 1/4 NE 1/	4 102.402	Rods	1.164	Acres
NE 1/4 NE 1/	4 56.289	Rods	0.640	Acres

Copyright 2016 - All Rights Reserved

NO. REVISION DATE

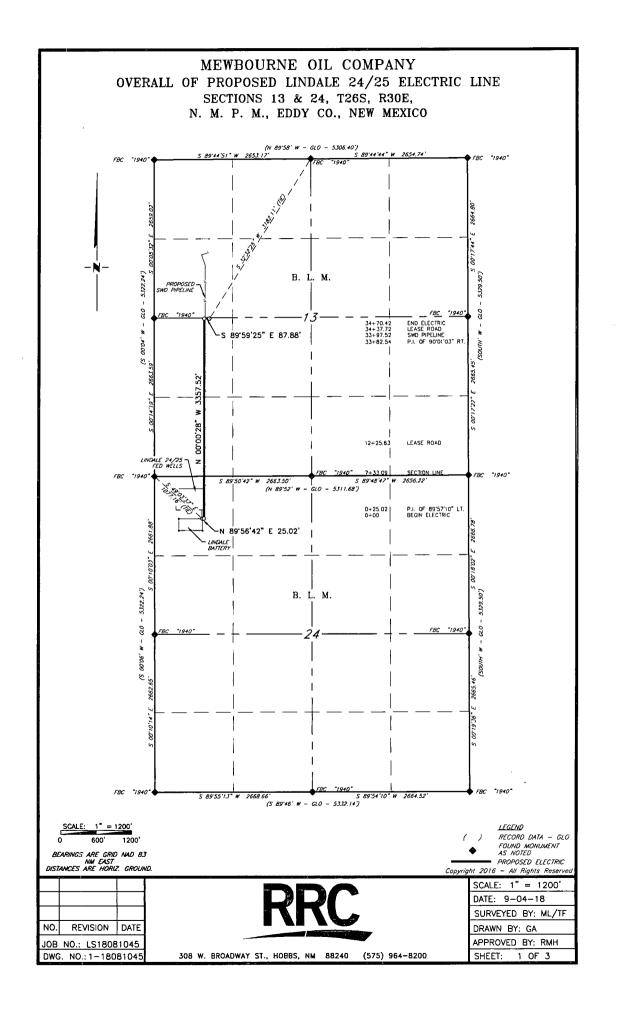
JOB NO.: LS18081044

DWG. NO.: 18081044-2

RRC

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

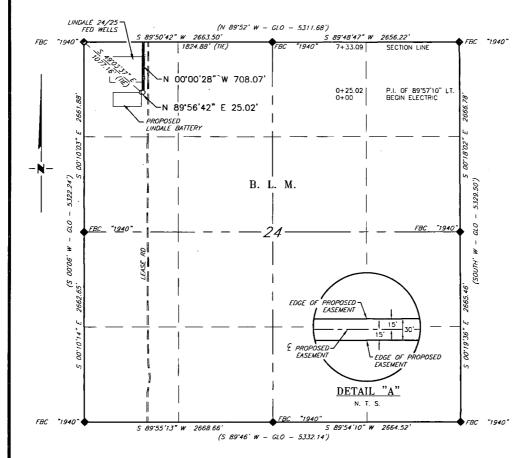
SCALE: 1" = 1000'
DATE: 9-04-18
SURVEYED BY: ML/TF
DRAWN BY: GA
APPROVED BY: RMH
SHEET: 2 OF 2



### MEWBOURNE OIL COMPANY

PROPOSED ELECTRIC LINE FOR THE LINDALE 24/25 BATTERY SECTION 24, T26S, R30E

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



#### DESCRIPTION

A strip of land 30 feet wide, being 733.09 feet or 44.430 rods in length, lying in Section 24, Township 26, South, Range 30 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 0+00, a point in the Northwest quarter of Section 24, which bears, S 49°03'37" E, 1,077.16 feet from a brass cap, stamped "1940", found for the Northwest corner of Section 24;

Thence N 89°56'42" W, 25.02 feet, to Engr. Sta. 0+25.02, a P. I. of 89°57'10" left;

Thence N 00'00'28" W, 708.07 feet, to Engr. Sta. 7+33.09, a point on the North line of Section 24, which bears, S 89'50'42" W, 1,824.88 feet from a brass cap, stamped "1940", found for the North quarter corner of Section 24.

Said strip of land contains 0.505 acres, more or less, and is allocated by forties as follows: SERT ON T

NW 1/4 NW 1/4

44.430 Rods

0.505 Acres

= 1000 500' 1000

(3)

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

LEGEND RECORD DATA - GLO FOUND MONUMENT AS NOTED PROPOSED ELECTRIC LINE I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Hobert M. Howell

Robert M. Howett NM PS 19680

PROPERSIONAL. Copyright 2016 - All Rights Rese

REVISION DATE JOB NO.: LS18081045 DWG. NO.: 18081045-2



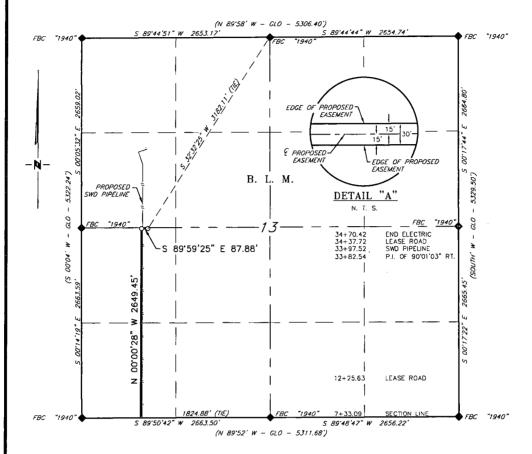
SCALE: 1" = 1000' DATE: 9-04-18 SURVEYED BY: ML/TF DRAWN BY: GA APPROVED BY: RMH SHEET: 2 OF 3

M. HOWE

SEN METIC

#### MEWBOURNE OIL COMPANY PROPOSED ELECTRIC LINE FOR THE LINDALE 24/25 BATTERY **SECTION 13, T26S, R30E**

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



#### DESCRIPTION

A strip of land 30 feet wide, being 2,737.33 feet or 165.899 rods in length, lying in Section 13, Township 26, South, Range 30 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 7+33.09, a point on the South line of Section 13, which bears, S 89°50′42″ W, 1,824.88 feet from a brass cap, stamped "1940", found for the South quarter corner of Section 13;

Thence N  $00^{\circ}00^{\circ}28^{\circ}$  W, 2,649.45 feet, to Engr. Sta. 33+82.54, a P. I. of  $90^{\circ}01^{\circ}03^{\circ}$  right;

Thence S 89'59'25" E, 87.88 feet, to Engr. Sta. 34+70.42, the End of Survey, a point in the Southwest quarter of Section 13, which bears, S 32'32'25" W, 3,182.11 feet from a brass cap, stamped "1940", found for the North quarter corner of Section 13.

Said strip of land contains 1.885 acres, more or less, and is allocated by forties as follows: OK RT

1" = 1000 500' 1000

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

LEGEND RECORD DATA - GLO FOUND MONUMENT AS NOTED PROPOSED ELECTRIC LINE

SW 1/4 SW 1/4 NW 1/4 SW 1/4 80.731 Rods 85.168 Rods 0.917 Acres 0.968 Acres

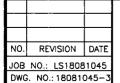
I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and heliof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

Robert M. Howett

Robert M. Howett

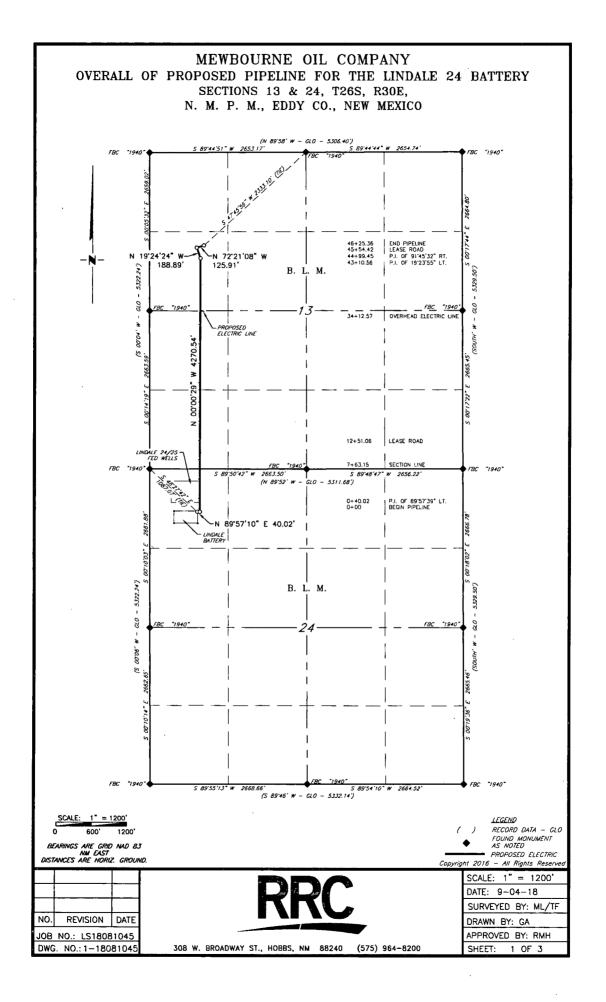
PROPERTY 9/ Copyright 2016 -

M. HOW



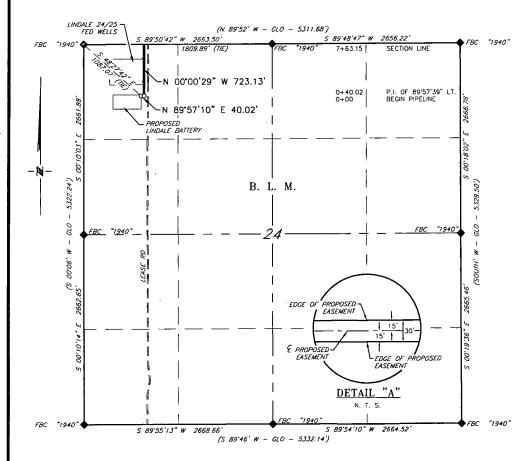


SCALE: 1" = 1000' DATE: 9-04-18 SURVEYED BY: ML/TF DRAWN BY: GA APPROVED BY: RMH 3 OF 3 SHEET:



#### MEWBOURNE OIL COMPANY PROPOSED PIPELINE FOR THE LINDALE 24 BATTERY SECTION 24, T26S, R30E

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



#### DESCRIPTION

A strip of land 30 feet wide, being 763.15 feet or 46.251 rods in length, lying in Section 24, Township 26, South, Range 30 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 0+00, a point in the Northwest quarter of Section 24, which bears, S 48'27'42" E, 1,087.07 feet from a brass cap, stamped "1940", found for the Northwest corner of Section 24;

Thence N 89°57'10" E, 40.02 feet, to Engr. Sta. 0+40.02, a P. I. of 89°57'39" left;

Thence N 00°00'29" W, 723.13 feet, to Engr. Sta. 7+63.15, a point on the North line of Section 24, which bears, S 89'50'42" W, 1,809.89 feet from a brass cap, stamped "1940", found for the North quarter corner

Said strip of land contains 0.526 acres, more or less, and is allocated by forties as follows: OK RT

NW 1/4 NW 1/4

46.251 Rods

0.526 Acres

500' 1000 BEARINGS ARE GRID NAD 83 NM EAST DISTANCES ARE HORIZ. GROUND.

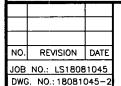
> LEGEND RECORD DATA - GLO FOUND MONUMENT AS NOTED PROPOSED PIPELINE

1" = 1000"

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

Kobert M. Howet Robert M. Howett NM PS 19680

9/07/18 9/07/18 US/ONAL SUR Copyright 2016 - All Rights Reserv





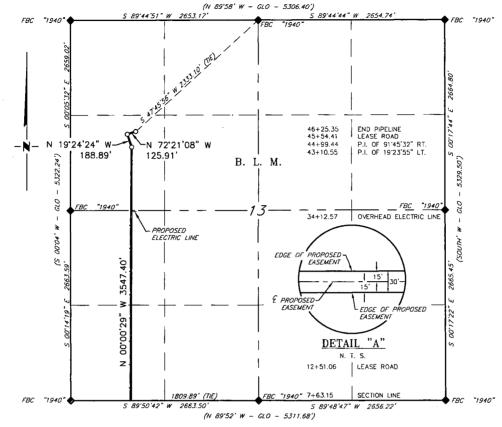
SCALE: 1" = 1000 DATE: 9-04-18 SURVEYED BY: ML/TF DRAWN BY: GA APPROVED BY: RMH SHEET: 2 OF 3

M. HONE

SEN METIC

#### MEWBOURNE OIL COMPANY PROPOSED PIPELINE FOR THE LINDALE 24 BATTERY SECTION 13, T26S, R30E

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



DESCRIPTION

A strip of land 30 feet wide, being 3,862.20 feet or 234.073 rods in length, lying in Section 13, Township 26, South, Range 30 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 7+63.15, a point on the South line of Section 13, which bears, S 89 $^{\circ}50'42''$  W, 1,809.89 feet from a brass cap, stamped "1940", found for the South quarter corner of Section 13;

Thence N 00°00'29" W, 3,547.40 feet, to Engr. Sta. 43+10.55, a P. I. of 19°23'55" left;

Thence N 19'24'24" W, 188.89 feet, to Engr. Sta. 44+99.44, a P. I. of 91'45'32" right;

SW 1/4 SW 1/4

NW 1/4 SW 1/4

SW 1/4 NW 1/4

Thence N 72'21'08" E, 125.91 feet, to Engr. Sta. 46+25.35, the End of Survey, a point in the Northwest quarter of Section 13, which bears, S 47\*45'56" W, 2,333.10 feet from a brass cap, stamped "1940", found for the North guarter corner of Section 13.

80.731 Rods

80.732 Rods

72.610 Rods

0.917 Acres

0.918 Acres

0.825 Acres

Said strip of land contains 2.660 acres, more or less, and is allocated by forties as follows:

= 1000 500' 1000 BEARINGS ARE GRID NAD 83 NM EAST DISTANCES ARE HORIZ. GROUND.

LEGEND RECORD DATA - GLO FOUND MONUMENT AS NOTED PROPOSED PIPELINE

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

\*bwett Robert M. Robert M. Howett NM PS 19680

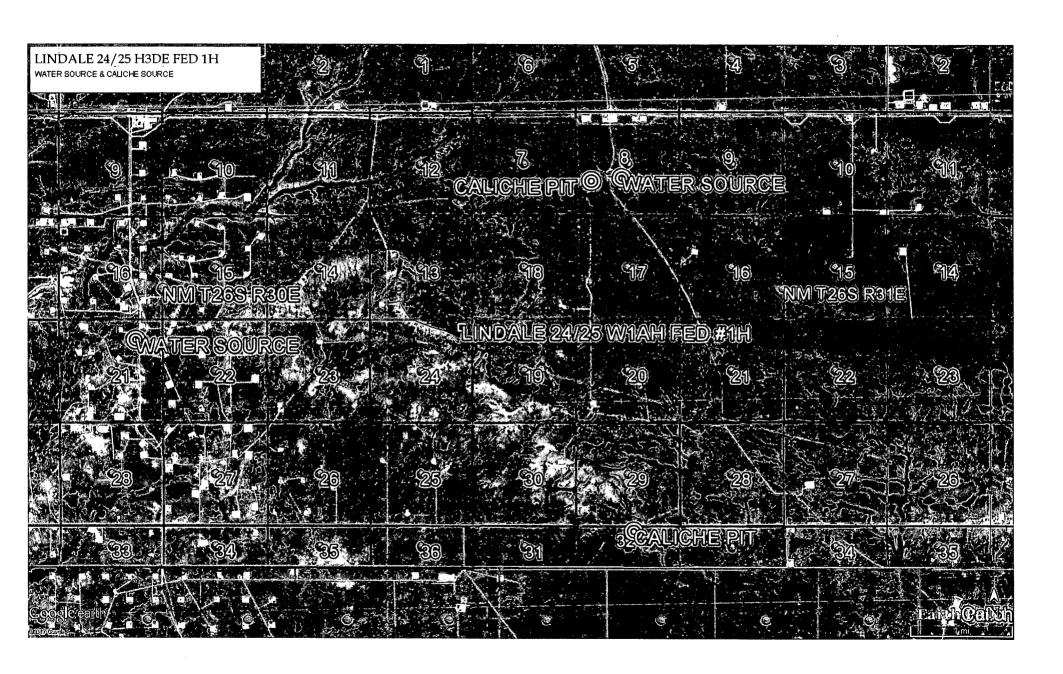
M. HOUR ON RY SEN METIC 19680 9/07/18 P

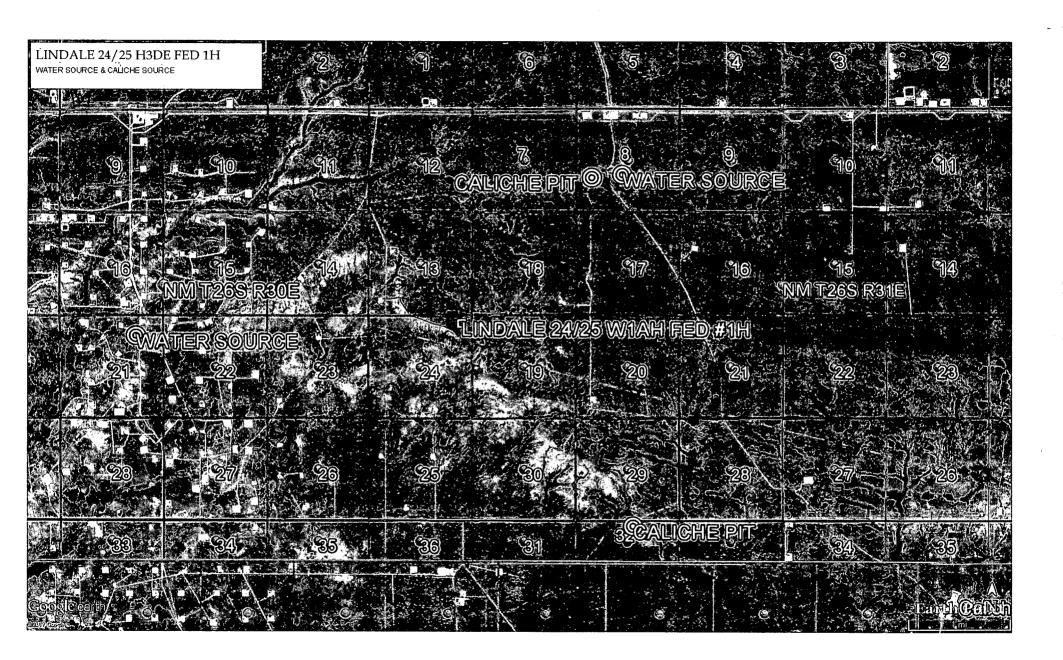
Copyright 2016 - All Rights Rese SCALE: 1" = 1000

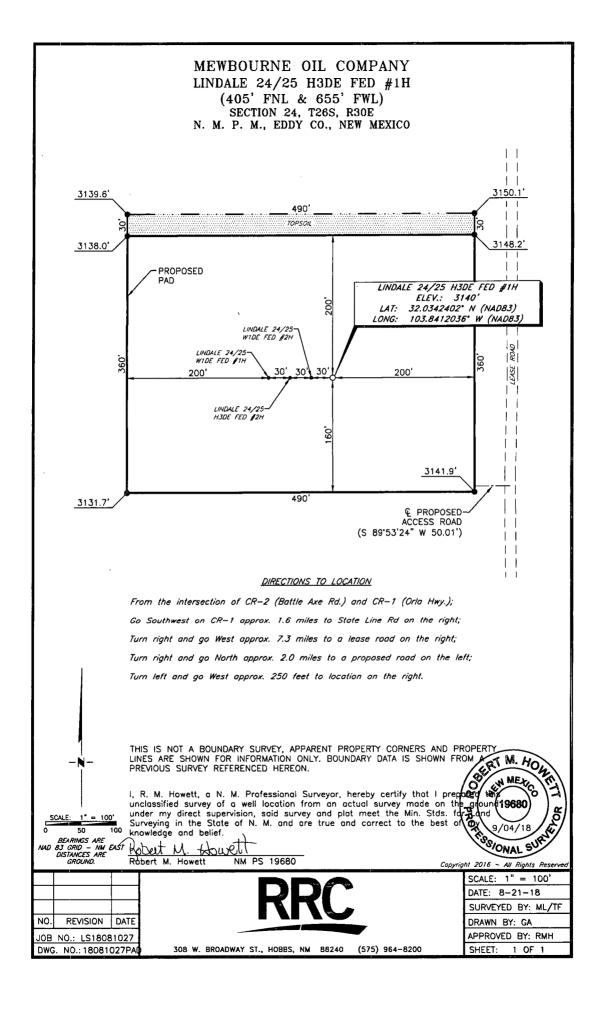
REVISION DATE JOB NO.: LS18081045 DWG. NO.: 18081045-3



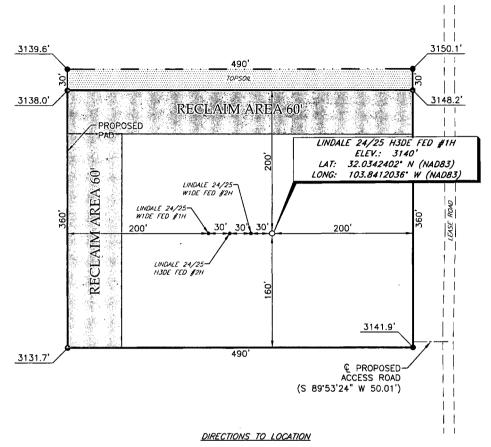
DATE: 9-04-18 SURVEYED BY: ML/TF DRAWN BY: GA APPROVED BY: RMH SHEET: 3 OF 3







MEWBOURNE OIL COMPANY LINDALE 24/25 H3DE FED #1H (405' FNL & 655' FWL) SECTION 24, T26S, R30E N. M. P. M., EDDY CO., NEW MEXICO



From the intersection of CR-2 (Battle Axe Rd.) and CR-1 (Orla Hwy.); Go Southwest on CR-1 approx. 1.6 miles to State Line Rd on the right; Turn right and go West approx. 7.3 miles to a lease road on the right; Turn right and go North approx. 2.0 miles to a proposed road on the left; Turn left and go West approx. 250 feet 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 PREVIOUS SURVEY REFERENCED HEREON.

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

knowledge and belief. BEARINGS ARE
NAD 83 GRID — NIM EAST
DISTANCES ARE
GROUND.

Robert M. Howett NM PS 19680

Copyright 2016 - All Rights Res SCALE: 1" = 100

GONAL SUR

REVISION DATE

DATE: 8-21-18 SURVEYED BY: ML/TF DRAWN BY: GA APPROVED BY: RMH SHEET: 1 OF 1

JOB NO.: LS18081027 DWG. NO.: 18081027PAI

District I 1625 N. French Dr., Hobbs, NM 88240
District II

811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87400
1220 S. St. Francis Dr., Santa Fe, NM 87400

Submit Original to Appropriate
District Office

#### GAS CAPTURE PLAN

Da	te: 9-12-18						
	Original Amended - Reason fo	r Amendment:	•		No.: <u>Mewbo</u>	urne Oil Con	npany - 14744
nev	w completion (new dri	l, recomplete t	to new zone, re-fra	ac) activity.			facility flaring/venting for
	e: Form C-129 must be s ell(s)/Production Faci			ding 60 days a	illowed by Kul	e (Subsection 2	A 0J 19.13.18.12 NMAC).
The	e well(s) that will be lo						
	Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
	Lindale 24/25 H3DE Fed #1H		D- 24-T26S-R30E	405' FNL & 655' FWI	0	NA	ONLINE AFTER FRAC
We pland with the second with	ce. The gas produced lestern low/o ' of pipeline to riodically) to Western drilled in the foreseean ference calls to discussestern he gas will be based on weback Strategy	to a production of the production of the product the far a ble future. In second processing Frocessing Frocessing Frocession of the production of the produc	on facility after fletion facility is degathering system acility to low/high drilling, completion addition, Mewbodrilling and completing and completing and completing and completing parameters	edicated to _n located in pressure gaun and estimate ourne Oil Completion sche completion sche and gathering and gathering process and gathering control of the completion sche completion scheduler	thering syst ted first prodompany and dules. Gas 58 T1S g system pre	County, New em. Mewbo uction date for western from these Culberson Cossures.	Mexico. It will require turne Oil Company provides or wells that are scheduled to have periodic wells will be processed at the have periodic actual flow
Aft flar san pro is C	er the fracture treatmered or vented. During for d, the wells will be turn duction facilities, unless operator's belief the systems.	lowback, the flowed to product sthere are oper tem can take the	luids and sand contion facilities. Garational issues on _ is gas upon complete.	tent will be r s sales shoul western etion of the w	nonitored. Vd start as so system at rell(s).	When the procon as the we that time. Bas	uction tanks and gas will be duced fluids contain minimal lls start flowing through the sed on current information, it
Saf	ety requirements during	ng cleanout op	erations from the	use of unde	rbalanced ai	r cleanout sy	ystems may necessitate that

#### **Alternatives to Reduce Flaring**

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

sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

- 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
  - o 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



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT PWD Data Report

APD ID: 10400034112

Submission Date: 09/19/2018

Operator Name: MEWBOURNE OIL COMPANY

Well Name: LINDALE 24/25 H3DE FED

Well Number: 1H

Well Type: CONVENTIONAL GAS WELL

Well Work Type: Drill

#### Section 1 - General

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

#### **Section 2 - Lined Pits**

Would you like to utilize Lined Pit PWD options? NO

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

PWD surface owner:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Well Name: LINDALE 24/25 H3DE FED Well Number: 1H

Lined pit Monitor description:

Lined pit Monitor attachment:

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

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

#### Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

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

PWD disturbance (acres):

PWD surface owner:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

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

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

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

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

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

Well Name: LINDALE 24/25 H3DE FED Well Number: 1H

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number:

Injection well name:

Assigned injection well API number?

Injection well API number:

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

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

**UIC Permit attachment:** 

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

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

PWD surface owner:

PWD disturbance (acres):

Surface discharge PWD discharge volume (bbl/day):

**Surface Discharge NPDES Permit?** 

**Surface Discharge NPDES Permit attachment:** 

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Well Name: LINDALE 24/25 H3DE FED Well Number: 1H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:



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

## Bond Info Data Report

08/06/2019

APD ID: 10400034112

**Submission Date: 09/19/2018** 

Highlighted data

reflects the most recent changes

recent

Well Number: 1H

**Show Final Text** 

Well Name: LINDALE 24/25 H3DE FED
Well Type: CONVENTIONAL GAS WELL

Operator Name: MEWBOURNE OIL COMPANY

Well Work Type: Drill

#### **Bond Information**

Federal/Indian APD: FED

**BLM Bond number: NM1693** 

**BIA Bond number:** 

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment: