NIM OIL CONSERVATION APPLIABILITATION

Form 3160 -3 (March 2012)

MAY 04 2017

FORM APPROVED OMB No. 1004-0137 Expires October 31, 2014

6. If Indian, Allotee or Tribe Name

UNITED STATES DEPARTMENT OF THE INTERIOR

APPLICATION FOR PERMIT TO DRILL OR REENTER

BUREAU OF LAND MANAGEMENT RECEIVED

5.	Lease Serial No.	
JMI	NM 134867	

la. Type of work: DRILL REENTE	7 If Unit or CA Agreement, Name and No.					
lb. Type of Well: Oil Well Gas Well Other	V	Single Zone Multi	ple Zone	8. Lease Name and N		л 2H
2. Name of Operator MEWBOURNE OIL COMPANY				9. API Well No.	015-	44152
	3b. Phone	No. (include area code)	10. Field and Pool, or Exploratory			
PO Box 5270 Hobbs NM 88240	(575)39	3-5905	SAN LORENZO NORTH BONE SPRING			
4. Location of Well (Report location clearly and in accordance with any	v State requi	rements.*)		11. Sec., T. R. M. or B	lk. and Sur	ey or Area
At surface LOT 2 / 185 FNL / 1650 FEL / LAT 32.165995	7 / LONG	-104.0547016		SEC 2 / T25S / R26	8E / NMF	1
At proposed prod. zone SWSE / 330 FSL / 1650 FEL / LAT	32.13835	514 / LONG -10 4.054	7529			
4. Distance in miles and direction from nearest town or post office* 20 miles				12. County or Parish EDDY	13. State NM	
15. Distance from proposed* location to nearest 185 feet property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease 160.57 17. Spacing Unit dedicated to this well 160					
to nearest well, drilling, completed, 1250 feet		osed Depth et / 18198 feet		BLM/BIA Bond No. on file ED: NM1693		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22 Appro	oximate date work will start* 23. Estimated duration				
2957 feet (01/17/2017		60 days		
	24. At	tachments				
The following, completed in accordance with the requirements of Onshor	e Oil and C	Gas Order No.1, must be a	ttached to th	is form:		
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). Bond to cover the operations unless covered by an existing bond on Item 20 above). Operator certification Such other site specific information and/or plans as may be required BLM. 						,
25. Signature		Name (Printed/Typed)			Date	
(Electronic Submission)	Bri	radley Bishop / Ph: (575)393-5905 11/09/2016			2016	
itle Regulatory						
Approved by (Signature)	Na	me (Printed/Typed)			Date	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

CARLSBAD

Cody Layton / Ph: (575)234-5959

Conditions of approval, if any, are attached.

Supervisor Multiple Resources

(Electronic Submission)

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

(Continued on page 2)

Title

*(Instructions on page 2)

05/03/2017



District 1 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

Phone: (505) 476-3460 Fax: (505) 476-3462

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

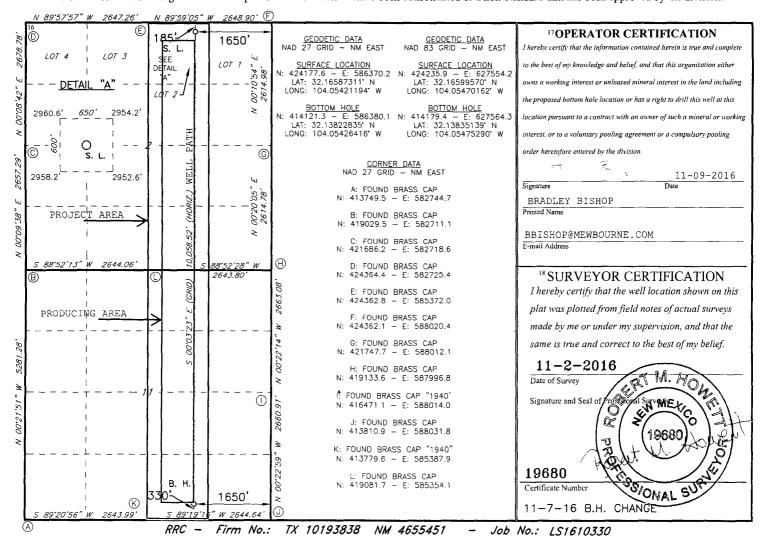
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number				² Pool Code ³ Pool Name			ne			
30-015-44152 3031					san lorenzo north bone spring					
4Property Co		5 Property Name							6 Well Number 2H	
⁷ OGRID 1474			**Operator Name							
					¹⁰ Surface	Location				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County	
2	2	25S	28E		185	NORTH	1650	EAST	EDDY	
			11	Bottom F	Iole Location	If Different Fro	om Surface			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
0	11	25S	28E]	330	SOUTH	1650	EAST	EDDY	
12 Dedicated Acre	s 13 Joint	or Infill 14	Consolidation	Code 15	Order No.					
320,35										

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.





Application for Permit to first

U.S. Department of the Interior **Bureau of Land Management**

APD Package Report

APD ID: 10400007585

APD Received Date: 11/09/2016 11:23 AM

Operator: MEWBOURNE OIL COMPANY

Well Status: AAPD

Well Name: HOSS 2/11 B2BO FED COM

Date Printed: 05/04/2017 08:41 AM

Well Number: 2H

APD Package Report Contents

- Form 3160-3

- Operator Certification Report

- Application Report

- Application Attachments

-- Operator Letter of Designation: 1 file(s)

-- Well Plat: 1 file(s)

NM OIL CONSERVATION

- Drilling Plan Report

- Drilling Plan Attachments

-- Blowout Prevention Choke Diagram Attachment: 4 file(s)

-- Blowout Prevention BOP Diagram Attachment: 4 file(s)

-- Casing Design Assumptions and Worksheet(s): 4 file(s)

-- Hydrogen sulfide drilling operations plan: 1 file(s)

-- Proposed horizontal/directional/multi-lateral plan submission: 2 file(s)

-- Other Variances: 1 file(s)

- SUPO Report

- SUPO Attachments

-- Existing Road Map: 1 file(s)

-- Attach Well map: 1 file(s)

-- Production Facilities map: 1 file(s)

-- Water source and transportation map: 1 file(s)

-- Construction Materials source location attachment: 1 file(s)

-- Well Site Layout Diagram: 1 file(s)

-- Other SUPO Attachment: 1 file(s)

- PWD Report

- PWD Attachments

-- None

- Bond Report

ARTESIA DISTRICT

MAY 04 2017

RECEIVED

- Bond Attachments
 - -- None

PECOS DISTRICT DRILLING OPERATIONS CONDITIONS OF APPROVAL

OPERATOR'S NAME: | Mewbourne Oil Company

LEASE NO.: NMNM134867

WELL NAME & NO.: 2H- Hoss 2 11 B2BO Federal Com

SURFACE HOLE FOOTAGE: 185'/N & 1650'/E BOTTOM HOLE FOOTAGE 330'/S & 1650'/E, 11

LOCATION: | Section 2 T.25 S., R.28 E., NMPM

COUNTY: | Eddy County, New Mexico

A. DRILLING OPERATIONS REQUIREMENTS

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

a. Spudding well (minimum of 24 hours)

b. Setting and/or Cementing of all casing strings (minimum of 4 hours)

c. BOPE tests (minimum of 4 hours)

Eddy County

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

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

B. CASING

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

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

Wait on cement (WOC) for Water Basin:

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

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

High Cave/Karst

Possibility of water flows in the Salado and Castile.

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

A MINIMUM OF TWO CASING STRINGS CEMENTED TO SURFACE IS REQUIRED IN HIGH CAVE/KARST AREAS. THE CEMENT MUST BE IN A SOLID SHEATH. THEREFORE, ONE INCH OPERATIONS ARE NOT SUFFICIENT TO PROTECT CAVE KARST RESOURCES. A CASING DESIGN THAT HAS A ONE INCH JOB PERFORMED DOES NOT COUNT AS A SOLID SHEATH. ON A THREE STRING DESIGN; IF THE PRIMARY CEMENT JOB ON THE SURFACE CASING DOES NOT CIRCULATE, THEN THE NEXT TWO CASING STRINGS MUST BE CEMENTED TO SURFACE.

- 1. The 13-3/8 inch surface casing shall be set at approximately 425 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

Operator has proposed DV tool at depth of 3675', 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, contact the app	oropriate
BLM office before proceeding with second stage cement job. Of	perator should

have plans as to how they will achieve circulation on the next stage.

- b. Second stage above DV tool:
- Cement to surface. If cement does not circulate, contact the appropriate BLM office. Cement calculates to -14%. Additional cement shall be required.
- 3. The minimum required fill of cement behind the 7 inch production casing is:

 Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.
- 4. The minimum required fill of cement behind the 4 1/2 inch production liner is:

 \(\sum \) Cement as proposed. Operator shall provide method of verification.
- 5. 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.

C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API 53.
- 2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line

fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor. If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

- 3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 13 3/8 inch surface casing shoe shall be 2000 (2M) psi.
- 4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9 5/8 inch intermediate casing shoe shall be 3000 (3M) psi.
- 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. 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).
 - c. 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.
 - d. The results of the test shall be reported to the appropriate BLM office.
 - e. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test

will be submitted to the appropriate BLM office.

f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes 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.

D. DRILL STEM TEST

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

E. 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.

F. SPECIAL REQUIREMENT

Communitization Agreement

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

Proposed measured depth to be changed as follows:

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	425'	13.375"	48	H40	STC	3.48	7.83	15 78	26 52
12.25"	0'	2555'	9.625"	36	J55	LTC	1.52	2.65	4.92	6.13
8.75"	0'	11053'	7"	26	HCP110	LTC	1.91	2.43	3.09	3.70
6.125"	10300'	20550	4.5"	13.5	P110	LTC	1.89	2.20	2.42	3.03
		18,198		BL	M Minimu	m Safety	1.125	i	16 Dry	L6 Dry
						Factor	1		18 Wet	1.8 Wet

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

TMAK 03222017

PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

OPERATOR'S NAME: Mewbourne Oil Company
LEASE NO.: NMNM134867
WELL NAME & NO.: 2H- Hoss 2 11 B2BO Federal Com
SURFACE HOLE FOOTAGE: 185'/N & 1650'/E
BOTTOM HOLE FOOTAGE 330'/S & 1650'/E, 11
LOCATION: Section 2 T.25 S., R.28 E., NMPM
COUNTY: Eddy County, New Mexico

TABLE OF CONTENTS

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

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

V. SPECIAL REQUIREMENT(S)

Cave and Karst Conditions of Approval

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

Cave/Karst Surface Mitigation

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

Construction:

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

No Blasting:

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

Pad Berming:

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

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

Tank Battery Liners and Berms:

Tank battery locations and all facilities will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing, 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 high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

Pressure Testing:

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

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)

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

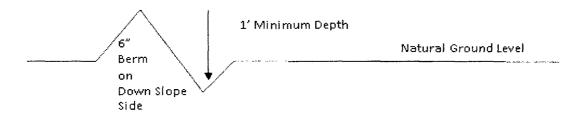
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

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
 4. Revegetate slopes
- 2. Construct road 4. Revegetate slopes

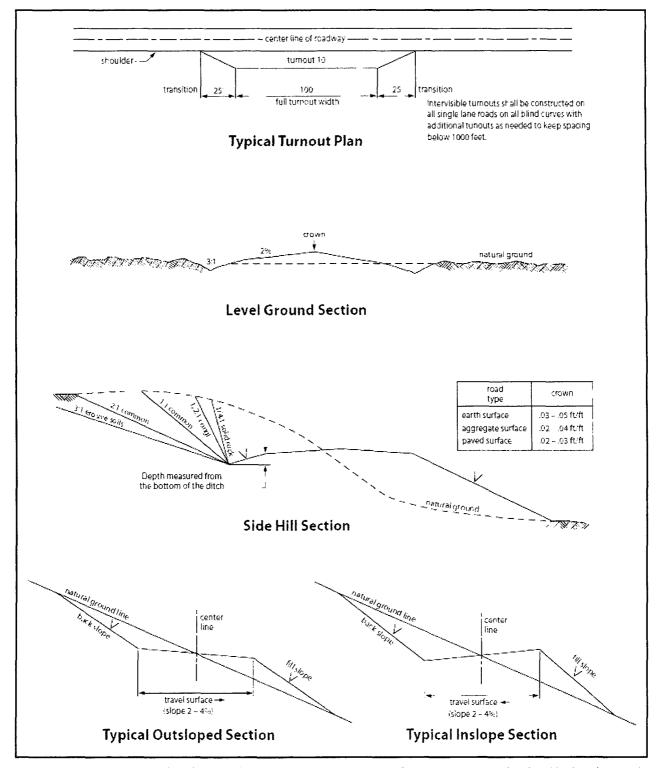


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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 1 ½ 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).

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.

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).

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 no primary or secondary noxious weeds in the seed mixture. Seed shall 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 shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed shall be planted using a drill equipped with a depth regulator to ensure proper depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture shall be evenly and uniformly planted over the disturbed area (small/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed shall be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre shall be doubled. The seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may 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 lovegrass (Eragrostis intermedia)	0.5
Sand dropseed (Sporobolus cryptandrus)	1.0
Sideoats grama (Bouteloua curtipendula)	5.0
Plains bristlegrass (Setaria macrostachya)	2.0

^{*}Pounds of pure live seed:

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

**AFMSS

NAME: Bradley Bishop

Email address:

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



Signed on: 11/09/2016

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	x 5270					
City: Hobbs	State: NM Zip: 88240					
Phone : (575)393-5905						
Email address: bbishop	@mewbourne.com					
Field Represo	entative					
Representative Name	e:					
Street Address:						
City:	State:	Zip:				
Phone:						

PAFMSS

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



APD ID: 10400007585 **Submission Date:** 11/09/2016

Operator Name: MEWBOURNE OIL COMPANY

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

Well Type: OIL WELL Well Work Type: Drill

Section 1 - General

BLM Office: CARLSBAD **User:** Bradley Bishop **Title:** Regulatory

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

Lease number: NMNM 134867 Lease Acres: 160.57

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: Hoss 2-11 B2BO Fed Com 1H_operaterletterofdesignation_11-09-2016.pdf

Keep application confidential? YES

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 Mater Development Plan name:

Well in Master SUPO? NO Master SUPO name:

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

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H Well API Number:

Field /Pool or Exploratory? Field and Pool Field Name: SAN LORENZO Pool Name: BONE SPRIING

NORTH BONE SPRING

Well Number: 2H Well Name: HOSS 2/11 B2BO FED COM

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

Describe other minerals:

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

New surface disturbance?

Type of Well Pad: SINGLE WELL

Multiple Well Pad Name:

Number:

Well Class: HORIZONTAL

Number of Legs:

Well Work Type: Drill Well Type: OIL WELL

Describe Well Type:

Well sub-Type: APPRAISAL

Describe sub-type:

Distance to town: 20 Miles

Distance to nearest well: 1250 FT

Distance to lease line: 185 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat:

Hoss 2-11 B2BO Fed Com 1H well plat 11-09-2016.pdf

Well work start Date: 01/17/2017

Duration: 60 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number: 1

STATE: NEW MEXICO

Meridian: NEW MEXICO PRINCIPAL County: EDDY

Latitude: 32.1659957

Longitude: -104.0547016

SHL

Elevation: 2957

MD: 0

TVD: 0

Leg #: 1

Lease Type: FEDERAL

Lease #: NMNM134867

NS-Foot: 185

NS Indicator: FNL

EW-Foot: 1650

EW Indicator: FEL

Twsp: 25S

Range: 28E

Section: 2

Aliquot:

Lot: 2

Tract:

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

STATE: NEW MEXICO Meridian: NEW MEXICO PRINCIPAL County: EDDY

Latitude: 32.1659957 **Longitude:** -104.0547016

KOP **Elevation**: -4913 **MD**: 7870 **TVD**: 7870

Leg #: 1 Lease Type: FEDERAL Lease #: NMNM134867

NS-Foot: 185

NS Indicator: FNL

EW-Foot: 1650

EW Indicator: FEL

 Twsp: 25S
 Range: 28E
 Section: 2

Aliquot: Lot: 2 Tract:

STATE: NEW MEXICO Meridian: NEW MEXICO PRINCIPAL County: EDDY

Latitude: 32.1654758 **Longitude:** -104.0542133

PPP **Elevation:** -5255 **MD:** 8252 **TVD:** 8212

Leg #: 1 Lease Type: FEDERAL Lease #: NMNM134867

NS-Foot: 330 NS Indicator: FNL

EW-Foot: 1650 EW Indicator: FEL

 Twsp: 25S
 Range: 28E
 Section: 2

Aliquot: Lot: 2 Tract:

STATE: NEW MEXICO Meridian: NEW MEXICO PRINCIPAL County: EDDY

Latitude: 32.1383514 **Longitude**: -104.0547529

EXIT Elevation: -5358 MD: 18198 TVD: 8315

Leg #: 1 Lease Type: STATE Lease #: STATE

NS-Foot: 330 NS Indicator: FSL

EW-Foot: 1650 EW Indicator: FEL

Twsp: 25S Range: 28E Section: 11

Aliquot: SWSE Lot: Tract:

STATE: NEW MEXICO Meridian: NEW MEXICO PRINCIPAL County: EDDY

Latitude: 32.1383514 **Longitude:** -104.0547529

BHL **Elevation**: -5358 **MD**: 18198 **TVD**: 8315

Leg #: 1 Lease Type: STATE Lease #: STATE

NS-Foot: 330 NS Indicator: FSL

EW-Foot: 1650 EW Indicator: FEL

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

Twsp: 25S Range: 28E Section: 11

Aliquot: SWSE Lot: Tract:

United States Department of the Interior Bureau of Land Management Roswell Field Office 2909 West Second Street Roswell, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator Name:

Mewbourne Oil Company

Street or Box:

P.O. Box 5270

City, State:

Hobbs, New Mexico

Zip Code:

88241

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

Lease Number:

NMNM 134860 & State -VB-1417

Legal Description of Land:

Section 2, T-25S, R-28E Eddy County, New Mexico.

Approved by:

Location @ 185' FNL & 1650' FEL.

Formation (if applicable):

San Lorenzo North Bone Spring (56310)

Bond Coverage:

\$150,000

BLM Bond File:

NM1693 Nationwide, NMB 000919

Authorized Signature:

Name: Robin Terrell Title: District Manager

Date: 11-9-2016 .



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



APD ID: 10400007585 **Submission Date:** 11/09/2016

Well Number: 2H

Operator Name: MEWBOURNE OIL COMPANY

Well Name: HOSS 2/11 B2BO FED COM

Well Type: OIL WELL Well Work Type: Drill

Section 1 - Geologic Formations

ID: Surface formation Name: UNKNOWN

Lithology(ies):

Elevation: 2957 True Vertical Depth: 27 Measured Depth: 27

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 1 Name: CASTILE

Lithology(ies):

SALT

Elevation: 1807 True Vertical Depth: 1150 Measured Depth: 1150

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 2 Name: LAMAR

Lithology(ies):

LIMESTONE

Elevation: 327 True Vertical Depth: 2630 Measured Depth: 2630

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

ID: Formation 3

Name: BELL CANYON

Lithology(ies):

SANDSTONE

Elevation: 297

True Vertical Depth: 2660

Measured Depth: 2660

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 4

Name: CHERRY CANYON

Lithology(ies):

SANDSTONE

Elevation: -598

True Vertical Depth: 3555

Measured Depth: 3555

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 5

Name: MANZANITA

Lithology(ies):

LIMESTONE

Elevation: -718

True Vertical Depth: 3675

Measured Depth: 3675

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 6

Name: BRUSHY CANYON

Lithology(ies):

SANDSTONE

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

Elevation: -1878

True Vertical Depth: 4835

Measured Depth: 4835

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 7

Name: BONE SPRING LIME

Lithology(ies):

LIMESTONE

SHALE

Elevation: -3433

True Vertical Depth: 6390

Measured Depth: 6390

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 8

Name: BONE SPRING 1ST

Lithology(ies):

SANDSTONE

Elevation: -4343

True Vertical Depth: 7300

Measured Depth: 7300

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? $\ensuremath{\mathsf{N}}$

ID: Formation 9

Name: BONE SPRING 2ND

Lithology(ies):

SANDSTONE

Elevation: -5198

True Vertical Depth: 8155

Measured Depth: 8155

Mineral Resource(s):

NATURAL GAS

OIL

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

Is this a producing formation? Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M

Rating Depth: 8621

Equipment: Annular, Pipe Ram, Blind Ram

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold.

Testing Procedure: Test Annular to 1500#. Test BOPE to 3000#.

Choke Diagram Attachment:

Hoss 2-11 B2BO Fed Com 2H_3M BOPE Choke Diagram_11-04-2016.pdf

BOP Diagram Attachment:

Hoss 2-11 B2BO Fed Com 2H 3M BOPE Schematic 11-04-2016.pdf

Pressure Rating (PSI): 3M Rating Depth: 18200

Equipment: Annular, Pipe Ram, Blind Ram

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold.

Testing Procedure: Test Annular to 1500# Test BOPE to 3000#

Choke Diagram Attachment:

Hoss 2-11 B2BO Fed Com 2H_3M BOPE Choke Diagram_11-04-2016.pdf

BOP Diagram Attachment:

Hoss 2-11 B2BO Fed Com 2H_3M BOPE Schematic_11-04-2016.pdf

Pressure Rating (PSI): 3M

Rating Depth: 2600

Equipment: Annular

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached

for specs and hydrostatic test chart. **Testing Procedure:** Test to 1500#

Choke Diagram Attachment:

Hoss 2-11 B2BO Fed Com 2H_3M Surface BOPE Choke Diagram_11-04-2016.pdf

BOP Diagram Attachment:

Hoss 2-11 B2BO Fed Com 2H 3M Surface BOPE Schematic 11-04-2016.pdf

Well Name: HOSS 2/11 B2BO FED COM

Well Number: 2H

Hoss 2-11 B2BO Fed Com 2H_3M Surface BOPE Choke Diagram_11-04-2016.pdf

Section 3 - Casing

String Type: SURFACE

Other String Type:

Hole Size: 17.5

Top setting depth MD: 0

Top setting depth TVD: 0

Top setting depth MSL: -5255

Bottom setting depth MD: 425

Bottom setting depth TVD: 425

Bottom setting depth MSL: -5680 Calculated casing length MD: 425

Casing Size: 13.375

Other Size

Grade: H-40

Other Grade:

Weight: 48

Joint Type: STC

Other Joint Type:

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 3.48

Burst Design Safety Factor: 7.83

Joint Tensile Design Safety Factor type: DRY

Joint Tensile Design Safety Factor: 15.78

Body Tensile Design Safety Factor type: DRY

Body Tensile Design Safety Factor: 26.52

Casing Design Assumptions and Worksheet(s):

Hoss 2-11 B2BO Fed Com 2H Csg Assumptions_11-04-2016.pdf

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

String Type: INTERMEDIATE Other String Type:

Hole Size: 12.25

Top setting depth MD: 0 Top setting depth TVD: 0

Top setting depth MSL: -5255

Bottom setting depth MD: 2600 Bottom setting depth TVD: 2600

Bottom setting depth MSL: -7855 Calculated casing length MD: 2600

Casing Size: 9.625 Other Size

Grade: J-55 Other Grade:

Weight: 36

Joint Type: LTC Other Joint Type:

Condition: NEW

Inspection Document:

Standard: API

Spec Document:
Tapered String?: N
Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 1.52 Burst Design Safety Factor: 2.65

Joint Tensile Design Safety Factor type: DRY

Joint Tensile Design Safety Factor: 4.92

Body Tensile Design Safety Factor type: DRY

Body Tensile Design Safety Factor: 6.13

Casing Design Assumptions and Worksheet(s):

Hoss 2-11 B2BO Fed Com 2H_Csg Assumptions_11-04-2016.pdf

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

String Type: PRODUCTION

Other String Type:

Hole Size: 8.75

Top setting depth MD: 0

Top setting depth TVD: 0

Top setting depth MSL: -5255

Bottom setting depth MD: 8621

Bottom setting depth TVD: 8347

Bottom setting depth MSL: -13602 Calculated casing length MD: 8621

Casing Size: 7.0

Other Size

Grade: P-110

Other Grade:

Weight: 26

Joint Type: LTC

Other Joint Type:

Condition: NEW

Inspection Document:

Standard: API

Spec Document: Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 1.91

Burst Design Safety Factor: 2.43

Joint Tensile Design Safety Factor type: DRY

Joint Tensile Design Safety Factor: 3.09

Body Tensile Design Safety Factor type: DRY

Body Tensile Design Safety Factor: 3.7

Casing Design Assumptions and Worksheet(s):

Hoss 2-11 B2BO Fed Com 2H_Csg Assumptions_11-04-2016.pdf

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

String Type: LINER

Other String Type:

Hole Size: 6.125

Top setting depth MD: 7870

Top setting depth TVD: 7870

Top setting depth MSL: -13125

Bottom setting depth MD: 18200

Bottom setting depth TVD: 8347

Bottom setting depth MSL: -13602 Calculated casing length MD: 10330

Casing Size: 4.5

Other Size

Grade: P-110

Other Grade:

Weight: 13.5

Joint Type: LTC

Other Joint Type:

Condition: NEW

Inspection Document:

Standard: API

Spec Document: Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 1.89

Burst Design Safety Factor: 2.2

Joint Tensile Design Safety Factor type: DRY

Joint Tensile Design Safety Factor: 2.42

Body Tensile Design Safety Factor type: DRY

Body Tensile Design Safety Factor: 3.03

Casing Design Assumptions and Worksheet(s):

Hoss 2-11 B2BO Fed Com 2H_Csg Assumptions_11-04-2016.pdf

Section 4 - Cement

Casing String Type: SURFACE

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

Stage Tool Depth:

Lead

Top MD of Segment: 0 **Bottom MD Segment: 237** Cement Type: Class C

Yield (cu.ff./sk): 2.12 Additives: Salt, Gel, Extender, LCM Quantity (sks): 160

Percent Excess: 100 Density: 12.5 Volume (cu.ft.): 339

Tail

Cement Type: Class C Top MD of Segment: 237 **Bottom MD Segment: 425**

Yield (cu.ff./sk): 1.34 Additives: Retarder Quantity (sks): 200

Density: 14.8 Volume (cu.ft.): 268 Percent Excess: 100

Casing String Type: INTERMEDIATE

Stage Tool Depth:

Lead

Cement Type: Class C Top MD of Segment: 0 **Bottom MD Segment: 1944**

Yield (cu.ff./sk): 2.12 Additives: Salt, Gel, Extender, LCM Quantity (sks): 375

Percent Excess: 25 Density: 12.5 Volume (cu.ft.): 795

<u>Tail</u>

Cement Type: Class C Top MD of Segment: 1944 **Bottom MD Segment: 2600**

Yield (cu.ff./sk): 1.34 Additives: Retarder Quantity (sks): 200

Percent Excess: 25 Density: 14.8 Volume (cu.ft.): 268

Casing String Type: PRODUCTION

Stage Tool Depth: 3675

Lead

Cement Type: Class C Top MD of Segment: 2400 **Bottom MD Segment: 3037**

Yield (cu.ff./sk): 2.12 Additives: Gel, Retarder, Defoamer, Quantity (sks): 60

Extender Percent Excess: 25 Volume (cu.ft.): 127

Density: 12.5

<u>Tail</u>

Cement Type: Class C **Bottom MD Segment: 3675** Top MD of Segment: 3037

Yield (cu.ff./sk): 1.34 Quantity (sks): 100 Additives: Retarder

Percent Excess: 25 Volume (cu.ft.): 134 Density: 14.8

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

Stage Tool Depth: 3675

<u>Lead</u>

Top MD of Segment: 3675 Bottom MD Segment: 6148 Cement Type: Class C

Additives: Gel, Retarder, Defoamer, Quantity (sks): 220 Yield (cu.ff./sk): 2.12

Extender

Density: 12.5

Volume (cu.ft.): 466

Percent Excess: 25

<u>Tail</u>

Top MD of Segment: 6148 Bottom MD Segment: 8621 Cement Type: Class H

Additives: Retarder, Fluid Loss, Quantity (sks): 400 Yield (cu.ff./sk): 1.18

Defoamer Volume (cu.ft.): 472 Percent Excess: 25

Density: 15.6

Casing String Type: LINER

Stage Tool Depth:

Lead

Top MD of Segment: 7870 Bottom MD Segment: 18200 Cement Type: Class C

Additives: Salt, Gel, Fluid Loss, Quantity (sks): 420 Yield (cu.ff./sk): 2.97
Retarder, Dispersant, Defoamer, Anti-

Settling Agent

Volume (cu.ft.): 1247

Percent Excess: 25

Pensity: 11.2

Bottom MD Segment: Cement Type:

Top MD of Segment: 925 Quantity (sks): Yield (cu.ff./sk):

Additives: Volume (cu.ft.): Percent Excess: 25

Density:

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: HOSS 2/11 B2BO FED COM Well Number: 2H

Top Depth: 0 Bottom Depth: 425

Mud Type: SPUD MUD

Min Weight (lbs./gal.): 8.6 Max Weight (lbs./gal.): 8.8

Density (lbs/cu.ft.): Gel Strength (lbs/100 sq.ft.):

PH: Viscosity (CP):

Filtration (cc): Salinity (ppm):

Additional Characteristics:

Top Depth: 425 Bottom Depth: 2600

Mud Type: SALT SATURATED

Min Weight (lbs./gal.): 10 Max Weight (lbs./gal.): 10

Density (lbs/cu.ft.): Gel Strength (lbs/100 sq.ft.):

PH: Viscosity (CP):

Filtration (cc): Salinity (ppm):

Additional Characteristics:

Top Depth: 2600 Bottom Depth: 7870

Mud Type: WATER-BASED MUD

Min Weight (lbs./gal.): 8.6 Max Weight (lbs./gal.): 9.5

Density (lbs/cu.ft.): Gel Strength (lbs/100 sq.ft.):

PH: Viscosity (CP):

Filtration (cc): Salinity (ppm):

Additional Characteristics:

Top Depth: 7870 Bottom Depth: 8347

Mud Type: WATER-BASED MUD

Min Weight (lbs./gal.): 8.6 Max Weight (lbs./gal.): 9.7

Density (lbs/cu.ft.): Gel Strength (lbs/100 sq.ft.):

PH: Viscosity (CP):

Filtration (cc): Salinity (ppm):

Additional Characteristics:

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

Section 6 - Test, Logging, Coring

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

Will run GR/CNL from KOP (7870') 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: 4341

Anticipated Surface Pressure: 4341

Anticipated Bottom Hole Temperature(F): 140

Anticipated abnormal proessures, 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:

Hoss 2-11 B2BO Fed Com 2H_H2S Plan_11-04-2016.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Hoss 2-11 B2BO Fed Com 2H_Dir Plan_11-04-2016.pdf Hoss 2-11 B2BO Fed Com 2H_Dir Plot_11-04-2016.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Other Variance attachment:

Hoss 2-11 B2BO Fed Com 2H_Flex Line Specs_11-04-2016.pdf

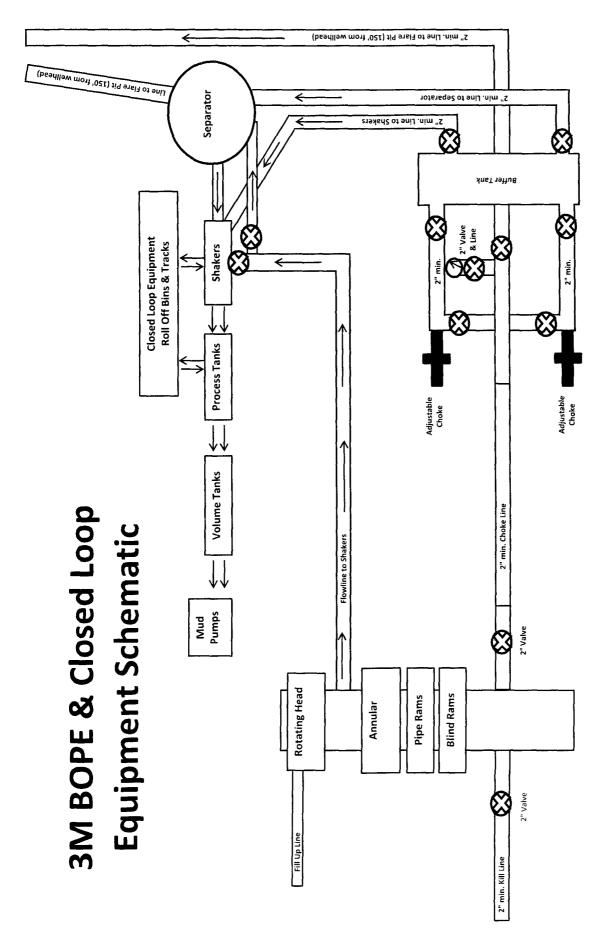
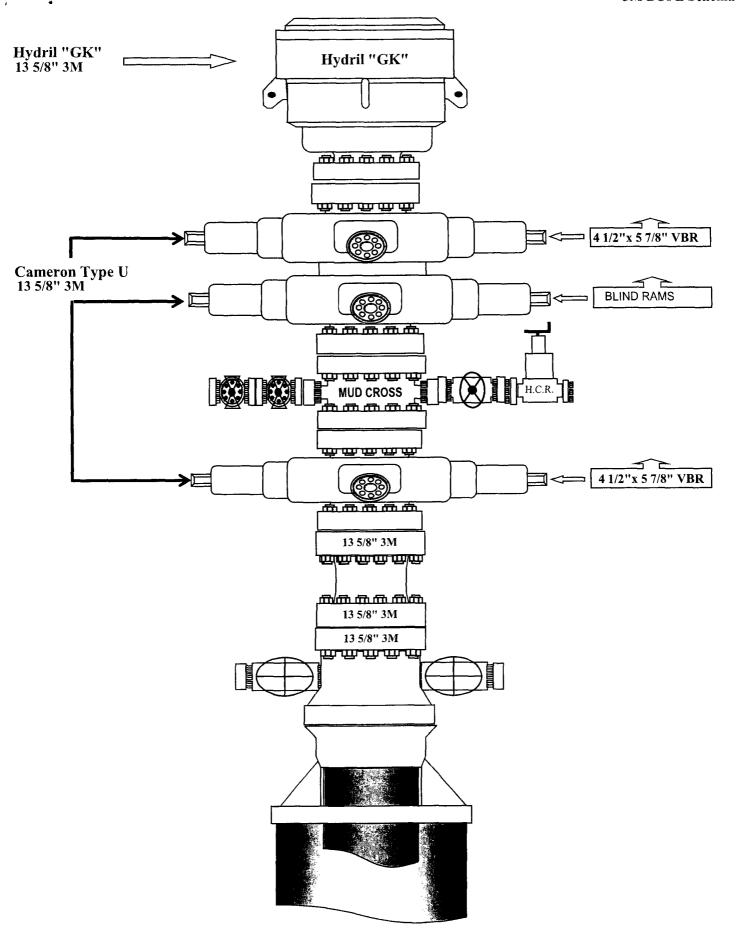


Exhibit "2"



Mewbourne Oil Company

BOP Schematic for

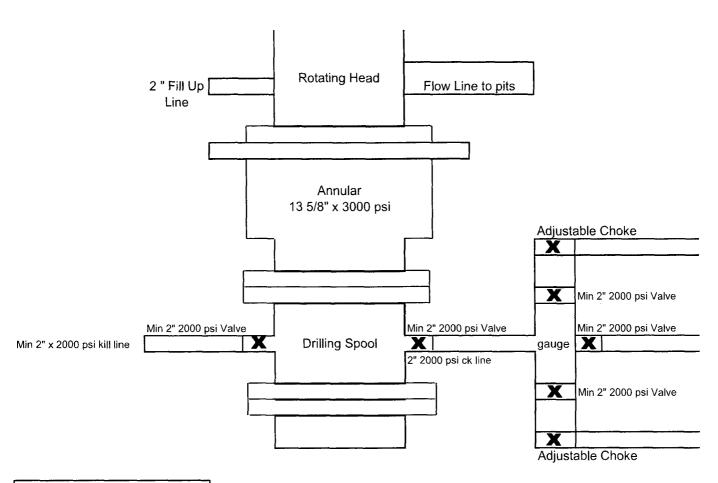


Exhibit #2

Mewbourne Oil Company, Hoss 2/11 B2BO Fed Com #2H Sec 2, T25S, R28E

SL: 185' FNL & 1650' FEL, Sec 2 BHL: 330' FSL & 1650' FEL, Sec 11

Casing Program

Hole	Casing	Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	To	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	425'	13.375"	48	H40	STC	3.48	7.83	15.78	26.52
12.25"	0'	2555'	9.625"	36	J55	LTC	1.52	2.65	4.92	6.13
8.75"	0'	11053'	7"	26	HCP110	LTC	1.91	2.43	3.09	3.70
6.125"	10300'	20550'	4.5"	13.5	P110	LTC	1.89	2.20	2.42	3.03
				BLM Minimum Safety		1.125	1	1.6 Dry	1.6 Dry	
						Factor			1.8 Wet	1.8 Wet

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

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

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.
- 3 The contents of the Hydrogen Sulfide Drilling Operations Plan.

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

3. Hydrogen Sulfide Safety Equipment and Systems

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

1. Well Control Equipment

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

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

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

3. Hydrogen Sulfide Protection and Monitoring Equipment

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

4. Visual Warning Systems

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

4. Mud Program

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

5. Metallurgy

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

6. Communications

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

7. Well Testing

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

8. Emergency Phone Numbers

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

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

Mewbourne Oil Company

Eddy County, New Mexico Hoss 2/11 B2BO Fed Com #2H

Sec 2, T25S, R28E

SL: 185' FNL & 1650' FEL, Sec 2 BHL: 330' FSL & 1650' FEL, Sec 11

Plan: Design #1

Standard Planning Report

04 November, 2016

TVD Reference:

MD Reference:

System Datum:

North Reference:

Local Co-ordinate Reference:

Survey Calculation Method:

Database:

Hobbs

Company:

Mewbourne Oil Company

Project:

Eddy County, New Mexico

Site: Well: Hoss 2/11 B2BO Fed Com #2H

Wellbore:

Sec 2, T25S, R28E

BHL: 330' FSL & 1650' FEL, Sec 11

Design:

Design #1

Project

Eddy County, New Mexico

Map System: Geo Datum:

US State Plane 1927 (Exact solution)

NAD 1927 (NADCON CONUS)

Map Zone:

New Mexico East 3001

Site Position:

Hoss 2/11 B2BO Fed Com #2H

From:

Мар

Northing: Easting:

424,178.00 usft

586,370.00 usft

Latitude: Longitude:

Grid Convergence:

32° 9' 57.148 N 104° 3' 15.165 W

Position Uncertainty:

0.0 usft

Slot Radius:

13-3/16 "

0.15°

Well

Site

Sec 2, T25S, R28E

Well Position

0.0 usft +N/-S

+E/-W

0.0 usft

Northing: Easting:

424,178.00 usft 586,370.00 usft Latitude: Longitude:

Grid

Minimum Curvature

Mean Sea Level

32° 9' 57.148 N 104° 3' 15.165 W

Position Uncertainty

0.0 usft

Wellhead Elevation:

2,984.0 usft

Ground Level:

2,957.0 usft

Wellbore

BHL: 330' FSL & 1650' FEL, Sec 11

Magnetics

Model Name

Sample Date

Declination (°)

Dip Angle (°)

Field Strength

(nT)

IGRF200510

12/31/2009

7.96

60.10

48,707

Design

Design #1

Audit Notes:

Version:

Phase:

PROTOTYPE

Tie On Depth:

0.0

Site Hoss 2/11 B2BO Fed Com #2H

WELL @ 2984.0usft (Original Well Elev)

WELL @ 2984,0usft (Original Well Elev)

Vertical Section:

Depth From (TVD) (usft)

0.0

+N/-S (usft) 0.0

+E/-W (usft) 0.0

Direction

(°) 179.94

Plan Sections

	Measured Depth (usft)	Inclination (°)	Azimuth	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
:	7,869.5	0.00	0.00	7,869.5	0.0	0.0	0.00	0.00	0.00	0.00	KOP @ 7870'
	8,621.1	90.19	179.94	8,347.0	-479.1	0.5	12.00	12.00	0.00	179.94	
	18,198.1	90.19	179.94	8,315.0	-10,056.0	10.0	0.00	0.00	0.00	0.00	BHL: 330' FSL & 1650

Database:

Hobbs

Company: Project: Mewbourne Oil Company Eddy County, New Mexico Hoss 2/11 B2BO Fed Com #2H

Site: Well:

Sec 2, T25S, R28E

Wellbore: Design: BHL: 330' FSL & 1650' FEL, Sec 11

Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Site Hoss 2/11 B2BO Fed Com #2H WELL @ 2984.0usft (Original Well Elev) WELL @ 2984.0usft (Original Well Elev)

Grid

Minimum Curvature

Planned Survey

med Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SL: 185' FNL	& 1650' FEL, Se	ec 2							
100,0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1.500.0	0.00	0.00	1 500 0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0			1,500.0						
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
2,300.0			2,900.0						
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0,0	0.00	0,00	0.00

Database:

Hobbs

Company:

Mewbourne Oil Company

Project:

Eddy County, New Mexico Hoss 2/11 B2BO Fed Com #2H

Site: Well:

Sec 2, T25S, R28E

Wellbore: Design: BHL: 330' FSL & 1650' FEL, Sec 11

Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Site Hoss 2/11 B2BO Fed Com #2H WELL @ 2984.0usft (Original Well Elev) WELL @ 2984.0usft (Original Well Elev)

Grid

Minimum Curvature

Planned Survey

	ısft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Section (usft)	Rate (°/100usft)	Rate (°/100usft)	Turn Rate (°/100usft)
	5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
	5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
						0.0	0.0	0.00	0.00	0.00
!	5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
!	5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
•	5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
	5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
	5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
	6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
ı	6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
	6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
	6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
	6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
į	6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1	6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
	6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
į	6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
	6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
:	7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
	7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
	7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
	7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
!	7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
	7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
	7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
	7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
:	7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
	7,869.5	0.00	0.00	7,869.5	0.0	0.0	0.0	0.00	0.00	0.00
Ko	P @ 7870'									
	7,900.0	3.66	179.94	7,900.0	-1.0	0.0	1.0	12.00	12.00	0.00
	8,000.0	15.66	179.94	7,998.4	-17.7	0.0	17.7	12.00	12.00	0.00
	8,100.0	27.66	179.94	8,091.2	-54.5	0.1	54.5	12.00	12.00	0.00
	8,200.0	39.66	179.94	8,174.2	-109.9	0.1	109.9	12.00	12.00	0.00
	8,251.8	45.87	179.94	8,212.2	-145.0	0.1	145.0	12,00	12.00	0.00
FTI	•	L & 1650' FEL, S								
	8,300.0	51.66	179.94	8,244.0	-181.2	0.2	181.2	12.00	12.00	0.00
	8,400.0	63.66	179.94	8,297.4	-265.6	0.3	265.6	12.00	12.00	0.00
	8,500.0	75.66	179.94	8,332.1	-359.2	0.4	359.2	12.00	12.00	0.00
	8,600.0	87.66	179.94	8,346.6	-457.9	0.5	457.9	12.00	12.00	0.00
	8,621.2	90.19	179.94	8,347.0	-479.1	0.5	479.1	11.98	11.98	0.00
LP:		& 1650' FEL, Se		-,-						
				0.246.7	557.0	0.6	557.0	0.00	0.00	0.00
	8,700.0	90.19	179,94	8,346.7	-557.9	0.6 0.7	557.9	0.00	0.00	0.00 0.00
	0.008,8	90.19	179.94	8,346.4	-657.9		657.9	0.00		
	8,900.0	90.19	179.94	8,346.1	-757.9	0.8	757.9	0.00	0.00 0.00	0.00 0.00
	9,000.0	90.19	179.94	8,345.7	-857.9	0.9	857.9	0.00		
	9,100.0	90.19	179.94	8,345.4	- 957.9	1.0	957.9	0.00	0.00	0.00
	9,200.0	90.19	179.94	8,345.1	-1,057.9	1.1	1,057.9	0.00	0.00	0.00
	9,300.0	90.19	179.94	8,344.7	-1,157.9	1.2	1,157.9	0.00	0.00	0.00
	9,400.0	90.19	179.94	8,344.4	-1,257.9	1.3	1,257.9	0.00	0.00	0.00
	9,500.0	90.19	179.94	8,344.1	-1,357.9	1.4	1,357.9	0.00	0.00	0.00
	9,600.0	90.19	179.94	8,343.7	-1,457.9	1.4	1,457.9	0.00	0.00	0.00
	9,700.0	90.19	179.94	8,343.4	-1,557.9	1.5	1,557.9	0.00	0.00	0.00
	9,800.0	90.19	179.94	8,343.1	-1,657.9	1.6	1,657.9	0.00	0.00	0.00
	9,900.0	90.19	179.94	8,342.7	-1,757.9	1.7	1,757.9	0.00	0.00	0.00
	_,000.0			0,072.7						

Database:

Hobbs

Company:

Mewbourne Oil Company

Project:

Eddy County, New Mexico Hoss 2/11 B2BO Fed Com #2H

Site: Well:

Sec 2, T25S, R28E

Wellbore: Design: BHL: 330' FSL & 1650' FEL, Sec 11

Design #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Site Hoss 2/11 B2BO Fed Com #2H WELL @ 2984.0usft (Original Well Elev)

WELL @ 2984.0usft (Original Well Elev)

Grid

Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
(usit)	()	()	(uait)	(usit)	(usit)	(usit)	(/ / 00 03 11)	(/ / / / / / / / / / / / / / / / / / /	(/ 1000311)
10,000.0 10,100.0	90.19 90.19	179.94 179.94	8,342.4 8,342.1	-1,857.9 -1,957.9	1.8 1.9	1,857.9 1,957.9	00.0 0.00	0.00 0.00	0.00 0.00
10,200.0	90.19	179.94	8,341.7	-2,057.9	2.0	2,057.9	0.00	0.00	0.00
10,300.0	90,19	179.94	8,341,4	-2,157.9	2.1	2,157.9	0.00	0.00	0.00
10,400.0	90.19	179.94	8,341.1	-2,257.9	2.2	2,257.9	0.00	0.00	0.00
10,500.0	90.19	179.94	8,340.7	-2,357.9	2.3	2,357.9	0.00	0.00	0.00
10,600.0	90.19	179.94	8,340.4	-2,457.9	2.4	2,457.9	0.00	0.00	0.00
10,700.0	90.19	179.94	8,340.1	-2,557.9	2.5	2,557.9	0.00	0.00	0.00
10,800.0	90.19	179.94	8,339.7	- 2,657.9	2.6	2,657.9	0.00	0.00	0.00
10,900.0	90.19	179.94	8,339.4	-2,757.9	2.7	2,757.9	0.00	0.00	0.00
11,000.0	90.19	179.94	8,339.1	-2,857.9	2.8	2,857.9	0.00	0.00	0.00
11,100.0	90.19	179.94	8,338.7	- 2,957.9	2.9	2,957.9	0.00	0.00	0.00
11,200.0	90.19	179.94	8,338.4	-3,057.9	3.0	3,057.9	0.00	0.00	0.00
11,300.0	90.19	179.94	8,338.0	-3,157.9	3.1	3,157.9	0.00	0.00	0.00
11,400.0	90.19	179.94	8,337.7	-3,257.9	3.2	3,257.9	0.00	0.00	0.00
11,500.0 11,600.0	90.19 90.19	179.94 179.94	8,337.4 8,337.0	-3,357.9 -3,457.9	3.3 3.4	3,357.9 3,457.9	0.00 0.00	0.00 0.00	0.00 0.00
11,700.0	90.19	179.94	8.336.7	-3,557.9	3.5	3,557.9	0.00	0.00	0.00
11,800.0	90.19	179.94	8,336.4	-3,657.9	3.6	3,657.9	0.00	0.00	0.00
11,900.0	90.19	179.94	8,336.0	-3,757.9	3.7	3,757.9	0.00	0.00	0.00
12,000.0	90.19	179.94	8,335.7	-3,857.9	3.8	3,857.9	0.00	0.00	0.00
12,100.0	90.19	179.94	8,335.4	-3,957.9	3.9	3,957.9	0.00	0.00	0.00
12,200.0	90.19	179.94	8,335.0	-4,057.9	4.0	4,057.9	0.00	0.00	0.00
12,300.0	90.19	179.94	8,334.7	-4,157.9	4.1	4,157.9	0.00	0.00	0.00
12,400.0	90.19	179.94	8,334.4	- 4,257.9	4.2	4,257.9	0.00	0.00	0.00
12,500.0	90,19	179.94	8,334.0	-4,357.9 ·		4,357.9	0.00	0.00	0.00
12,600.0	90.19	179.94	8,333.7	-4,457.9	4.4	4,457.9	0,00	0.00	0.00
12,700.0	90.19	179.94	8,333.4	-4,557.9	4.5	4,557.9	0.00	0.00	0.00
12,800.0	90,19 90,19	179.94 179.94	8,333.0	-4,657.9	4.6 4.7	4,657.9	0.00	0.00	0.00
12,900.0 13,000.0	90.19	179.94	8,332.7 8,332.4	-4,757.9 -4,857.9	4.7	4,757.9 4,857.9	0.00 0.00	0.00 0.00	0.00
13,100.0	90.19	179.94	8,332.0	-4,957.9	4.9	4,957.9	0.00	0.00	0.00
13,200.0	90.19	179.94	8,331.7	-5,057.9	5.0	5,057.9	0.00	0.00	0.00
13,300.0	90.19	179.94	8,331.4	-5,157.9	5.1	5,157.9	0.00	0.00	0.00
13,400.0	90.19	179.94	8,331.0	- 5,2 5 7.9	5.2	5,257.9	0.00	0.00	0.00
13,500.0	90.19	179.94	8,330.7	-5,357.9	5.3	5,357.9	0.00	0.00	0.00
13,600.0	90.19	179.94	8,330.4	-5,457.9	5.4	5,457.9	0.00	0.00	0.00
13,700.0	90.19	179.94	8,330.0	-5,557.9	5.5	5,557.9	0.00	0.00	0.00
13,800.0	90.19	179.94	8,329.7	-5,657.9	5.6	5,657.9	0.00	0.00	0.00
13,900.0	90,19	179.94	8,329.4	-5,757.9	5.7	5,757.9	0.00	0.00	0.00
14,000.0 14,100.0	90.19 90.19	179,94 179,94	8,329.0 8,328.7	-5,857.9 -5,957.9	5.8 5.9	5,857.9 5,957.9	0.00 0.00	0.00 0.00	0.00 0.00
14,200.0	90.19	179.94	8,328.4	-6,057.9	6.0	6,057.9	0.00	0.00	0.00
14,300.0	90.19	179.94	8,328.0	-6,157.9	6.1	6,157.9	0.00	0.00	0.00
14,400.0	90.19	179.94	8,327.7	-6,257.9	6.2	6,257.9	0.00	0.00	0.00
14,500.0	90.19	179.94	8,327.4	-6,357.9	6.3	6,357.9	0.00	0.00	0.00
14,600.0	90.19	179.94	8,327.0	-6,457.9	6.4	6,457.9	0.00	0.00	0.00
14,700.0	90.19	179.94	8,326.7	-6,557.9	6.5	6,557.9	0.00	0.00	0.00
14,800.0	90.19	179.94	8,326.4	-6,657.9	6.6	6,657.9	0.00	0.00	0.00
14,900.0	90.19	179.94	8,326.0	-6,757.9	6.7	6,757.9	0.00	0.00	0.00
15,000.0	90.19	179.94	8,325.7	-6,857.9	6.8	6,857.9	0.00	0.00	0.00
15,100.0	90.19	179.94	8,325.4	-6,957.9	6.9	6,957.9	0.00	0.00	0.00
15,200.0	90.19	179.94	8,325.0	-7,057.9	7.0	7,057.9	0.00	0.00	0.00
15,300.0	90.19	179.94	8,324.7	-7,157.9	7.1	7,157.9	0.00	0.00	0.00

Database:

Hobbs

Company:

Mewbourne Oil Company

Project:

Eddy County, New Mexico Hoss 2/11 B2BO Fed Com #2H

Site: Well:

Sec 2, T25S, R28E

Wellbore:

BHL: 330' FSL & 1650' FEL, Sec 11

Design:

Design #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Site Hoss 2/11 B2BO Fed Com #2H WELL @ 2984.0usft (Original Well Elev)

WELL @ 2984.0usft (Original Well Elev)

Grid

Minimum Curvature

Planned Survey

90.19 90.19 90.19	(°)	(usft)	+N/-S (usft)	+E/-W (usft)	Section (usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)
90.19	179.94	8,324.3	-7,257.9	7.2	7,257.9	0.00	0.00	0.00
		8,324.0	-7,357.9	7.3	7,357.9	0.00	0.00	0.00
90.19		8,323.7	-7,457.9	7.4	7,457.9	0.00	0.00	0.00
90,19	179.94	8,323.3	-7,557.9	7.5	7,557.9	0.00	0.00	0.00
90.19	179.94	8,323.0	-7,657.9	7.6	7,657.9	0.00	0.00	0.00
90.19	179.94	8,322.7	-7,757.9	7.7	7,757.9	0.00	0.00	0.00
90.19	179.94	8,322.3	-7,857.9	7.8	7,857.9	0.00	0.00	0.00
90.19	179.94	8,322.0	-7,957.9	7.9	7,957.9	0.00	0.00	0.00
90.19	179.94	8,321.7	-8,057.9	8.0	8,057.9	0.00	0.00	0.00
90.19	179.94	8,321.3	-8,157.9	8.1	8,157.9	0.00	0.00	0.00
90.19	179.94	8,321.0	- 8,257.9	8.2	8,257.9	0.00	0.00	0.00
90.19	179.94	8,320.7	-8,357.9	8.3	8,357.9	0.00	0.00	0.00
90.19	179.94	8,320.3	-8,457.9	8.4	8,457.9	0.00	0.00	0.00
90.19	179.94	8,320.0	-8,557.9	8.5	8,557.9	0.00	0.00	0.00
90.19	179.94	8,319.7	-8,657.9	8.6	8,657.9	0.00	0.00	0.00
90.19	179.94	8,319.3	-8,757.9	8.7	8,757.9	0.00	0.00	0.00
90.19	179.94	8,319.0	-8,857.9	8.8	8,857.9	0.00	0.00	0.00
90.19	179.94	8,318.7	-8,957.9	8.9	8,957.9	0.00	0.00	0.00
90.19	179.94	8,318.3	-9,057.9	9.0	9,057.9	0.00	0.00	0.00
90.19	179.94	8,318.0	-9,157.9	9.1	9,157.9	0.00	0.00	0.00
90.19	179.94	8,317.7	-9,257.9	9.2	9,257.9	0.00	0.00	0.00
90.19	179.94	8,317.3	-9,357.9	9.3	9,357.9	0.00	0.00	0.00
90.19	179.94	8,317.0	-9,457.9	9.4	9,457.9	0.00	0.00	0.00
90.19		8,316.7	-9,557.9	9.5	9,557.9	0.00	0.00	0.00
90.19		8,316.3	-9,657.9	9.6	9,657.9	0.00	0.00	0.00
90.19		8,316.0	-9,757.9	9.7	9,757.9	0.00	0.00	00,0
		8,315.7	-9,857.9	9.8	9,857.9	0.00	0.00	0.00
90.19	179.94	8,315.3	-9,957.9	9.9	9,957.9	0.00	0.00	0.00
90.19	179.94	8,315.0	-10,056.0	10.0	10,056.0	0.00	0.00	0.00
	, Sec 11							
	90.19 90.19 90.19	90.19 179.94 90.19 179.94	90.19 179.94 8,315.7 90.19 179.94 8,315.3 90.19 179.94 8,315.0	90.19 179.94 8,315.7 -9,857.9 90.19 179.94 8,315.3 -9,957.9 90.19 179.94 8,315.0 -10,056.0	90.19 179.94 8,315.7 -9,857.9 9.8 90.19 179.94 8,315.3 -9,957.9 9.9 90.19 179.94 8,315.0 -10,056.0 10.0	90.19 179.94 8,315.7 -9,857.9 9.8 9,857.9 90.19 179.94 8,315.3 -9,957.9 9.9 9,957.9 90.19 179.94 8,315.0 -10,056.0 10.0 10,056.0	90.19 179.94 8,315.7 -9,857.9 9.8 9,857.9 0.00 90.19 179.94 8,315.3 -9,957.9 9.9 9,957.9 0.00 90.19 179.94 8,315.0 -10,056.0 10.0 10,056.0 0.00	90.19 179.94 8,315.7 -9,857.9 9.8 9,857.9 0.00 0.00 90.19 179.94 8,315.3 -9,957.9 9.9 9,957.9 0.00 0.00 90.19 179.94 8,315.0 -10,056.0 10.0 10,056.0 0.00 0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SL: 185' FNL & 1650' FE - plan hits target cent - Point	0.00 er	0.00	0.0	0.0	0.0	424,178.00	586,370.00	32° 9' 57.148 N	104° 3′ 15.165 W
KOP @ 7870' - plan hits target cent - Point	0,00 er	0.00	7,869.5	0.0	0.0	424,178.00	586,370.00	32° 9' 57.148 N	104° 3' 15.165 W
FTP: 330' FNL & 1650' F - plan hits target cent - Point	0.00 er	0.00	8,212.2	-145.0	0.1	424,033.00	586,370.15	32° 9' 55.713 N	104° 3' 15.168 W
BHL: 330' FSL & 1650' F - plan hits target cent - Point	0.00 er	0.00	8,315.0	-10,056.0	10.0	414,122.00	586,380.00	32° 8' 17.629 N	104° 3' 15.352 W
LP: 664' FNL & 1650' FE - plan hits target cent - Point	0.00 er	0.00	8,347.0	-479.1	0.5	423,698.90	586,370.50	32° 9' 52.406 N	104° 3' 15.174 W

Database:

Hobbs

Company: Project: Mewbourne Oil Company Eddy County, New Mexico Hoss 2/11 B2BO Fed Com #2H

Site: Well:

Sec 2, T25S, R28E

Wellbore: Design: BHL: 330' FSL & 1650' FEL, Sec 11

Design #1

Local Co-ordinate Reference:

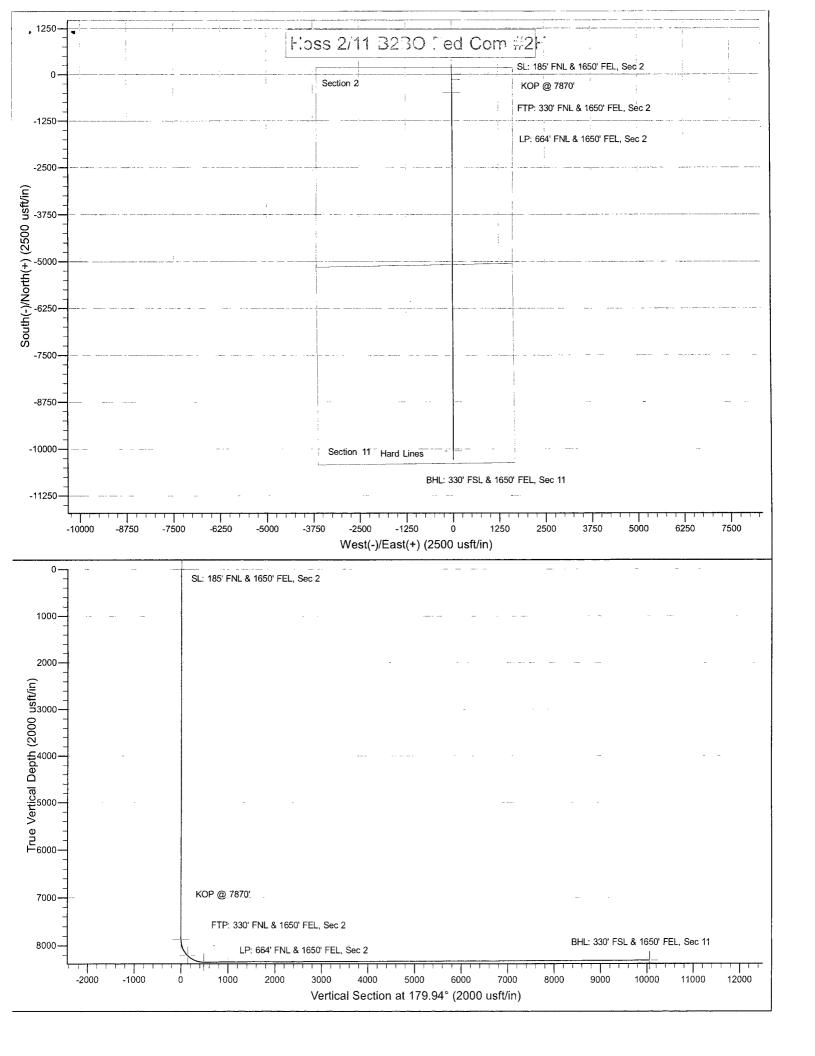
TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Site Hoss 2/11 B2BO Fed Com #2H WELL @ 2984.0usft (Original Well Elev)

WELL @ 2984.0usft (Original Well Elev)

Grid

Minimum Curvature





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

EMAIL: Tim.Cantu@gates.com

WEB: www.gates.com

10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE

Customer:	AUSTIN DISTRIBUTING	Test Date:	4/30/2015
Customer Ref. :	4060578	Hose Serial No.:	D-043015-7
Invoice No. :	500506	Created By:	JUSTIN CROPPER
<u></u>	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		A 1/14 A 40 (T) C
End Fitting 1:	4 1/16 10K FLG	End Fitting 2:	4 1/16 10K FLG
	4773-6290	Assembly Code :	L36554102914D-043015-7
Gates Part No. :			15,000 PSI

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

Quality Manager:

Date:

Signature :

QUALITY

4/30/2015

Produciton:

Date:

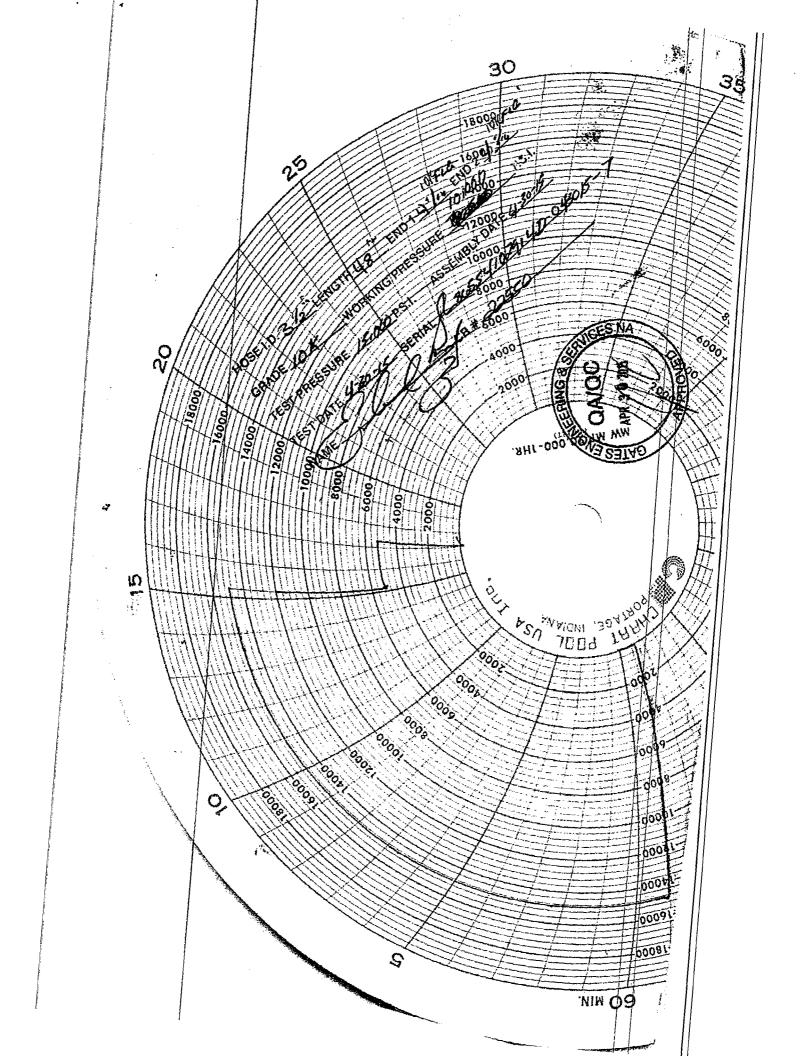
Signature :

PRODUCTION

4/30/2015

Forn PTC - 01 Rev.0 2





*AFMSS

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



APD ID: 10400007585

Operator Name: MEWBOURNE OIL COMPANY

Well Name: HOSS 2/11 B2BO FED COM

Well Type: OIL WELL

Submission Date: 11/09/2016

Well Number: 2H

Well Work Type: Drill

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Hoss 2-11 B2BO Fed Com 1H_exisitng road map_11-07-2016.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? NO

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Hoss 2-11 B2BO Fed Com 1H existingwellmap 11-09-2016.pdf

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

Existing Wells description:

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Estimated Production Facilities description:

Production Facilities description:

Production Facilities map:

Hoss 2-11 B2BO Fed Com 1H prod facility map 11-07-2016.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

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

INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE

CASING

Describe type: Source longitude: -104.02509

Source latitude: 32.197838 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): 2810 Source volume (acre-feet): 0.3621896

Source volume (gal): 118020

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

INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE

CASING

Describe type: Source longitude: -104.059555

Source latitude: 32.16361 Source datum: NAD83

Water source permit type: WATER WELL

Source land ownership: PRIVATE

Water source transport method: TRUCKING

Source transportation land ownership: PRIVATE

Water source volume (barrels): 2810 Source volume (acre-feet): 0.3621896

Source volume (gal): 118020

Well Number: 2H Well Name: HOSS 2/11 B2BO FED COM

Water source and transportation map:

Hoss 2-11 B2BO Fed Com 1H watersourcetransportationmap_11-09-2016.pdf

Water source comments:

New water well? NO

New Water Well Info

Well latitude:

Well Longitude:

Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft):

Est thickness of aquifer:

Aquifer comments:

Aquifer documentation:

Well depth (ft):

Well casing type:

Well casing outside diameter (in.):

Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method:

Drill material:

Grout material:

Grout depth:

Casing length (ft.):

Casing top depth (ft.):

Well Production type:

Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Construction Materials description: Caliche

Construction Materials source location attachment:

Hoss 2-11 B2BO Fed Com 1H_calichesourcetransportationmap_01-03-2017.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 containment attachment:

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

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

gailons

Waste disposal frequency: Weekly

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

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? NO

Description of cuttings location

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

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

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Hoss 2-11 B2BO Fed Com 1H_well site layout_11-09-2016.pdf

Comments: None

Section 10 - Plans for Surface Reclamation

Type of disturbance: NEW

Recontouring attachment:

Drainage/Erosion control construction: None

Drainage/Erosion control reclamation: None

Wellpad long term disturbance (acres): 1.147 Wellpad short term disturbance (acres): 2.185

Access road long term disturbance (acres): 0.642 Access road short term disturbance (acres): 0

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

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

Total long term disturbance: 1.789 Total short term disturbance: 2.185

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

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

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

Soil treatment: NA

Existing Vegetation at the well pad: Various brush & grasses

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Various brush & grasses

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline: NA

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: NA

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

PLS pounds per acre:

Seed type:
Seed name:
Source name:
Source phone:
Seed cultivar:
Seed use location:

Seed Summary

Total pounds/Acre:

Proposed seeding season:

Seed Type Pounds

Pounds/Acre

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

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: PRIVATE OWNERSHIP

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

Operator Name: MEWBOURNE OIL COMPANY Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H **USFS** Region: **USFS** Forest/Grassland: **USFS** Ranger District: Fee Owner: Devon Energy Production Company, LP Fee Owner Address: 333 West Sheridan Ave. Oklahoma City, OK 73102 Phone: (405)228-4342 Email: Surface use plan certification: NO Surface use plan certification document: Surface access agreement or bond: Agreement Surface Access Agreement Need description: Ranch wide surface use agreement in place with landowner. 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 Ranger District:

USFS Forest/Grassland:

Well Name: HOSS 2/11 B2BO FED COM Well Number: 2H

Fee Owner: Limestone Livestock, LLC

Fee Owner Address: PO Box 189 Lovington, NM 88260

Phone: (575)396-1742

Email:

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: Ranch wide surface use agreement in place with landowner.

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Section 12 - Other Information

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

ROW Applications

SUPO Additional Information: NONE

Use a previously conducted onsite? YES

Previous Onsite information: NOV 03 2016 Met with Nick Franke (BLM), Jen & Paul (Boone Arc) & RRC Surveying & staked location at 185' FNL & 2150' FEL, Sec 2, T25S, R28E, Eddy, Co. NM. Location unacceptable due to buried DCP pipeline & COG SWD location. Moved location to 185' FNL & 1650' FEL, Sec 2, T25S, R28E, Eddy Co., NM. (Elevation @ 2957'). This appears to be a drillable location with pit area to the N. Topsoil stockpiled 30' wide on SE corner. Reclaim 60' S. Battery will be on N side. This will be a 340' x 390' pad. No road needed

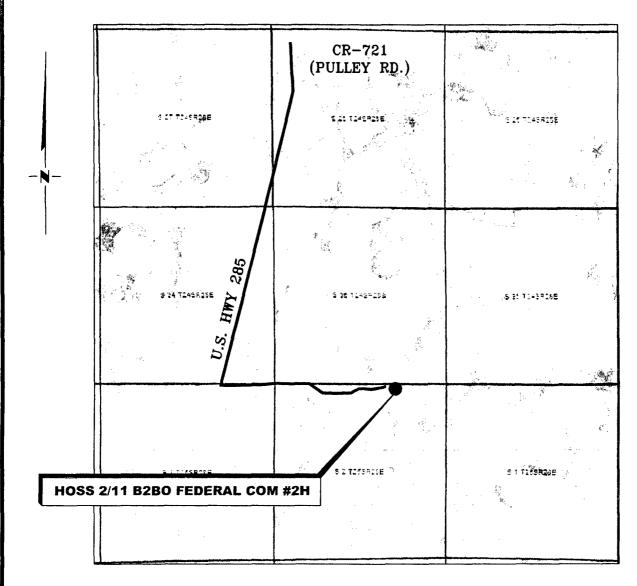
Other SUPO Attachment

Hoss 2-11 B2BO Fed Com 1H operaterletterofagreement 01-03-2017.pdf

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VICINITY MAP

NOT TO SCALE



SECTION 2, TWP. 25 SOUTH, RGE. 28 EAST, N. M. P. M., EDDY COUNTY, NEW MEXICO

OPERATOR: Mewbourne Oil Company LEASE: Hoss 2/11 B2B0 Federal Com

WELL NO .: 2H

LOCATION: 185' FNL & 1650' FEL

ELEVATION: 2957'

Firm No.: TX 10193838 NM 4655451

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NO.	REVISION	DATE
JOB NO.: 1S1610330		

DWG. NO.: 1610330VM



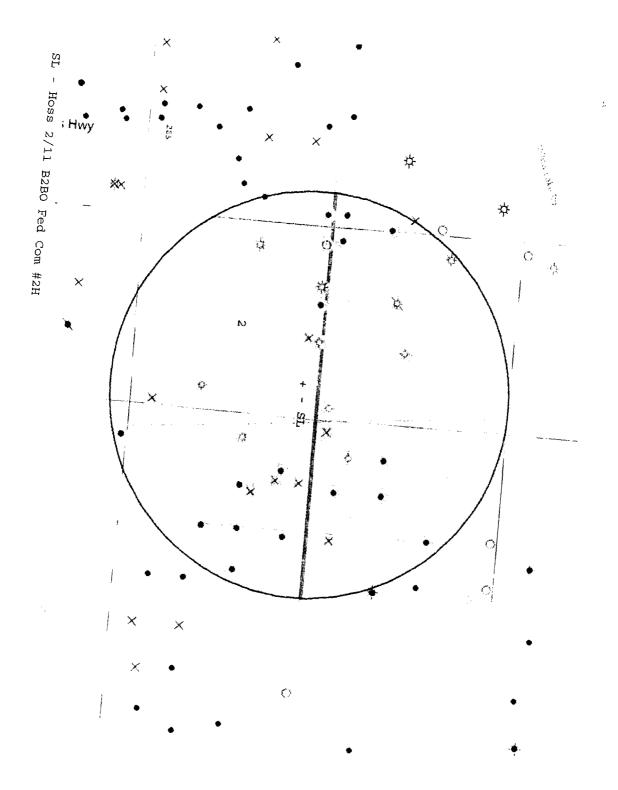
303 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

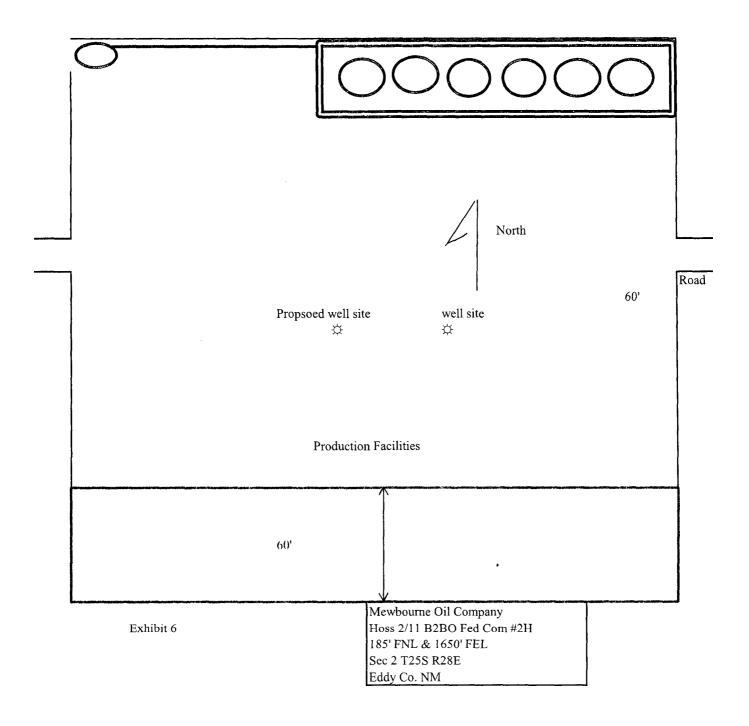
SCALE: N. T. S. DATE: 11-2-2016

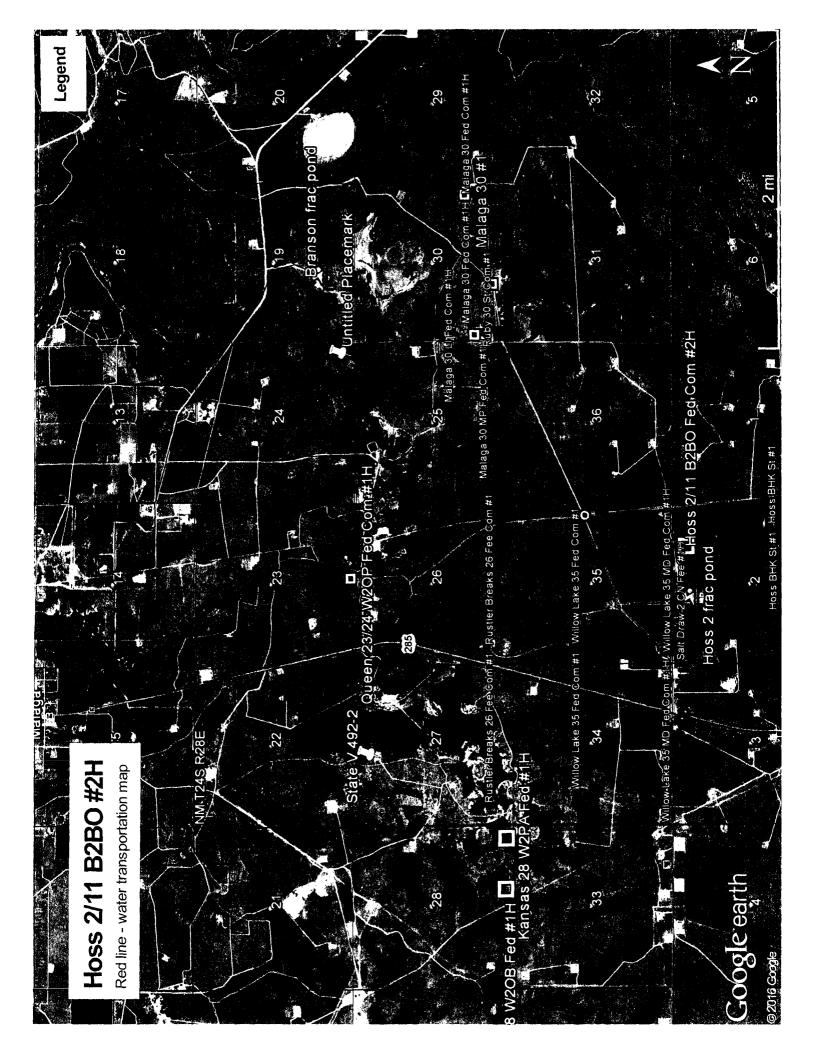
SURVEYED BY: ML/HD

DRAWN BY: CMJ

APPROVED BY: RMH SHEET: 1 OF 1







Caliche source.jpg (1570×946)

MEWBOURNE OIL COMPANY HOSS 2/11 B2BO FEDERAL COM #2H (185' FNL & 1650' FEL) SECTION 2, T25S, R28E N. M. P. M., EDDY CO., NEW MEXICO 650' 2960.6 2954.2 OVERHEAD ELECTRIC 2956.8 2959.0 SECTION 3. 390 L15' HOSS 2/11 B2BO FEDERAL COM #2H LEASE ROAD ELEV.: 2957' 32.16599570° N (NAD83) 104.05470162° W (NAD83) 2955.9 2955.6 170' 170' 30 340, 50 HOSS 2/11 W2BO FEDERAL COM #1H TOPSOIL 70, 70, **PROPOSED** PAD 2954.5 2957.2 195' 2955.9 30, TOPSOIL 225 2955.4 2954.0' 2958.2 2952.6 650' DIRECTIONS TO LOCATION From the intersection of U.S. HWY 285 and CR-721 (Pulley Rd.); Go South on U.S. Hwy 285 approx. 2.0 miles to a lease road on the left; Turn left and go East approx. 1.0 miles, to location on the right. THIS IS NOT A BOUNDARY SURVEY, APPARENT PROPERTY CORNERS AND PROPERTY LARE SHOWN FOR INFORMATION ONLY. BOUNDARY DATA IS SHOWN FROM PREMIUM SURVEY REFERENCED HEREON. I, R. M. Howett, a N. M. Professional Surveyor, hereby certify the unclassified survey of a well location from an actual survey made a under my direct supervision, said survey and plat meet the Min. Statureying in the State of N. M. and are true and correct to the second and co OF 11/4/16 OF 11/4/16 SURVING 2016 50 knowledge and belief. BEARINGS ARE NAD 83 GRID - NM EAST DISTANCES ARE Hobert M Langett GROUND. Robert M. Howett NM PS 19680 TX 10193838 SCALE: 1" = 100 DATE: 11-2-2016 SURVEYED BY: ML/HD A. C. REVISION DATE DRAWN BY: CMJ TARREST OF STA APPROVED BY: RMH JOB_NO.: LS1610330 DWG. NO.: 1610330PAD 308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200 SHEET: 1 OF 1

APD Attachment: Hoss 2/11 B2BO Fed Com #2H

BLM Serial No.: NMNM 13413 - T25S, R28E, Section 11: SW/4NE/4 & NW/4SE/4, Eddy County, NM

Current Record Title owner: Chevron U.S.A. Inc.

Current Operating Rights Owner: Magnum Hunter Production, Inc., et al

Mewbourne Oil Company currently has a contractual interest in these tracts via Joint Operating Agreement dated February 1, 1981

Mewbourne Oil Company is currently working with Magnum Hunter Production, Inc., et al to form a working interest unit including this lease that will allow for the development of all lands covering the E/2 of Section 2 and the E/2 of Section 11, both in T25S, R28E, Eddy County, New Mexico.

Magnum Hunter Production, Inc., et al, 600 N. Marienfeld St., Suite 600, Midland, TX 79701 Attn: Kelly Reese 432-620-1966

BLM Serial No.: NMNM 16104 - T25S, R28E, Section 11: NE/4SE/4, Eddy County, NM

Current Record Title owner: Magnum Hunter Production, Inc. (50%) & Burlington Resources Oil and Gas Company, LP (50%)

Current Operating Rights Owner: Magnum Hunter Production, Inc., et al

Mewbourne Oil Company currently has a contractual interest in these tracts via Joint Operating Agreement dated February 1, 1981

Mewbourne Oil Company is currently working with Magnum Hunter Production, Inc., et al to form a working interest unit including this lease that will allow for the development of all lands covering the E/2 of Section 2 and the E/2 of Section 11, both in T25S, R28E, Eddy County, New Mexico.

Magnum Hunter Production, Inc., et al, 600 N. Marienfeld St., Suite 600, Midland, TX 79701 Attn: Kelly Reese 432-620-1966



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

Lined pit Monitor description: Lined pit Monitor attachment:

Lined pit bond number: Lined pit bond amount:

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

Is the reclamation bond a rider under the BLM bond?

Additional bond information attachment:



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:

Section 3 - Unlined Pits

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

Injection well type:	
Injection well number:	Injection well name:
Assigned injection well API number?	Injection well API number:
Injection well new surface disturbance (acres):	
Minerals protection information:	
Mineral protection attachment:	
Underground Injection Control (UIC) Permit?	
UIC Permit attachment:	
Section 5 - Surface Discharge	
Would you like to utilize Surface Discharge PWD options? NO	
Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):
Surface discharge PWD discharge volume (bbl/day):	
Surface Discharge NPDES Permit?	
Surface Discharge NPDES Permit attachment:	
Surface Discharge site facilities information:	
Surface discharge site facilities map:	
Section 6 - Other	
Would you like to utilize Other PWD options? NO	
Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):
Other PWD discharge volume (bbl/day):	
Other PWD type description:	
Other PWD type attachment:	
Have other regulatory requirements been met?	
Other regulatory requirements attachment:	

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

Bond Info Data Report 05/04/2017

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: