the						
Carlsbau m 3160-3 farch 2012) OCD AILESIA				OMB No.	PPROVED 1004-0137	
DEPARTMENT OF THE	Expires October 31, 2014 5. Lease Serial No. NMNM 13413A					
BUREAU OF LAND MA		REENTER		6. If Indian, Allotee of	or Tribe Name	
a. Type of work:	ITER	dig - 1		7. If Unit or CA Agree	201441	
b. Type of Well: Oil Well 🔽 Gas Well 🗌 Other	✓ Si	ngle Zone 🔲 Multip	le Zone	8. Lease Name and W OXBOW 26/25 W2D	ell No.	
Name of Operator MEWBOURNE OIL COMPANY		14744	X	9. API Well No. 30.015	44972	
a. Address PO Box 5270 Hobbs NM 88240	(575)393-				k. and Survey or Area (gas)	
Location of Well (Report location clearly and in accordance with At surface NWNW / 490 FNL / 365 FWL / LAT 32.106	7905 / LONG	-104.0653075		SEC 26 / T25S / R2		
At proposed prod. zone NENE / 440 FNL / 330 FEL / LA 4. Distance in miles and direction from nearest town or post office*	T 32.1069879	/ LONG -104.03320)4	12. County or Parish EDDY	13. State NM	
8.5 miles 5. Distance from proposed* location to nearest 330 feet	16. No. of	acres in lease	17. Spacin 640	ng Unit dedicated to this w	C. BORD	
property or lease line, ft. (Also to nearest drig. unit line, if any)	19. Propos	ed Depth	20. BLM	/BIA Bond No. on file		
 Distance from proposed location* to nearest well, drilling, completed, 50 feet applied for, on this lease, ft. 	10880 fe	et / 20376 feet		IM1693		
1. Elevations (Show whether DF, KDB, RT, GL, etc.) 2954 feet	22. Approx 04/16/20	imate date work will sta 18	urt*	23. Estimated duratio 60 days	n The state of the state	
The following, completed in accordance with the requirements of Or 1. Well plat certified by a registered surveyor.		4. Bond to cover	the operation	ihis form: ions unless covered by an	existing bond on file (see	
 A Drilling Plan. A Surface Use Plan (if the location is on National Forest Sys SUPO must be filed with the appropriate Forest Service Office) 	stem Lands, the).	Item 20 above). 5. Operator certifi 6. Such other site BLM.	ication	nformation and/or plans a	s may be required by the	
25. Signature (Electronic Submission)	Nan Bra	e (Printed/Typed) dley Bishop / Ph: (5	75)393-5	905	Date 01/16/2018	
Title Regulatory					1-	
Approved by (Signature) (Electronic Submission)	Cod	ne (Printed/Typed) ly Layton / Ph: (575)234-595	9 🖯	Date 04/26/2018	
Title Supervisor Multiple Resources Application approval does not warrant or certify that the applicant	Off CA	RI SBAD	ohts in the s	subject lease which would	entitle the applicant to	
conduct operations thereon. Conditions of approval, if any, are attached.						
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make States any false, fictitious or fraudulent statements or representation	it a crime for an ons as to any matte	y person knowingly and r within its jurisdiction.	l willfully t	o make to any department	or agency of the United	
(Continued on page 2)	4			1	structions on page 2)	
	DOVED W	ITH CONDI	TONS	R	ECEIVED	
APP		te: 04/26/2018		AM	Y 1 6 2018	

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DISTRICT II-ARTESIA O.C.D.

INSTRUCTIONS

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

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new-reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

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

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

the F

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

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

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

NOTICES

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396: 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts. ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, eriminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

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

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

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

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

(Continued on page 3)

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(Form 3160-3, page 2)

Additional Operator Remarks

Location of Well

SHL: NWNW / 490 FNL / 365 FWL / TWSP: 255 / RANGE: 28E / SECTION: 26 / LAT: 32.1067905 / LONG: -104.0653075 (TVD.0 feet, MD: 0 feet)
 PPP: NWNW / 440 FNL / 0 FWL / TWSP: 255 / RANGE: 28E / SECTION: 25 / LAT: 32.1069647 / LONG: -104.0492652 (TVD: 10772 feet, MD: 15402 feet)
 PPP: NWNW / 445 FNL / 740 FWL / TWSP: 255 / RANGE: 28E / SECTION: 26 / LAT: 32.1068846 / LONG: -104.0640948 (TVD: -10642 feet, MD: 10804 feet)
 PPP: NWNW / 445 FNL / 740 FWL / TWSP: 255 / RANGE: 28E / SECTION: 26 / LAT: 32.1069879 / LONG: -104.033204 (TVD: 10880 feet, MD: 20376 feet)
 BHL: NENE / 440 FNL / 330 FEL / TWSP: 255 / RANGE: 28E / SECTION: 25 / LAT: 32.1069879 / LONG: -104.033204 (TVD: 10880 feet, MD: 20376 feet)

BLM Point of Contact

Name: Katrina Ponder

Title: Geologist

Phone: 5752345969

Email: kponder@blm.gov

(Form 3160-3, page 3)

Review and Appeal Rights

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

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

ſ	OPERATOR'S NAME:	Mewbourne Oil Company
	LEASE NO.:	NMNM13413A
	WELL NAME & NO.:	Oxbow 26/25 W2DA Fed Com 2H
	SURFACE HOLE FOOTAGE:	490'/N & 365'/W
	BOTTOM HOLE FOOTAGE	440'/N & 330'/E
	LOCATION:	Section 26, T.25 S., R.28 E., NMPM
	COUNTY:	Eddy County, New Mexico

COA

H2S	CYes	• No	
Potash	• None	C Secretary	C R-111-P
Cave/Karst Potential	CLow	Medium	C High
Variance	C None	• Flex Hose	C Other
Wellhead	C Conventional	Multibowl	• Both
Other	□ 4 String Area	Capitan Reef	□ WIPP

A. Hydrogen Sulfide

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

B. CASING

- 1. The **13-3/8** inch surface casing shall be set at approximately **475** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of <u>8</u>
 <u>hours</u> or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above. Additional cement maybe required. Excess calculates to 24%.
 - In <u>Medium/High Cave/Karst Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- 3. The minimum required fill of cement behind the 7 inch production casing is:
 - Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.
- 4. The minimum required fill of cement behind the 4-1/2 inch production liner is:
 - Cement should tie-back 100' into the previous casing. Operator shall provide method of verification.

C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
- 2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

GENERAL REQUIREMENTS

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

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

Chaves and Roosevelt Counties

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

Eddy County

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

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🛛 Lea County

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

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

- a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
- b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. <u>Wait on cement (WOC) for Potash Areas:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive

strength of 500 psi for all cement blends, 2) until cement has been in place at least $\underline{24}$ <u>hours</u>. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

- 3. <u>Wait on cement (WOC) for Water Basin:</u> 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 <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating.

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Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

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

- a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test

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

- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes. This test shall be performed prior to the test at full stack pressure.
- g. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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.

Waste Minimization Plan (WMP)

In the interest of resource development, submission of additional well gas capture development plan information is deferred but may be required by the BLM Authorized Officer at a later date.

ZS 041918

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PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Mewbourne Oil Company
LEASE NO.:	NMNM13413A
WELL NAME & NO.:	Oxbow 26/25 W2DA Fed Com 2H
SURFACE HOLE FOOTAGE:	490'/N & 365'/W
BOTTOM HOLE FOOTAGE	440'/N & 330'/E
LOCATION:	Section 26, 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
Watershed
Construction
Notification
Topsoil
Closed Loop System
Federal Mineral Material Pits
Well Pads
Roads
Road Section Diagram
☑ Production (Post Drilling)
Well Structures & Facilities
Pipelines
Interim Reclamation
Final Abandonment & Reclamation

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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

** 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:

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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 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 cave-bearing 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

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occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

<u>Watershed</u>

- The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The berm shall be maintained through the life of the well and after interim reclamation has been completed.
- Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion.

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.

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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.

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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.

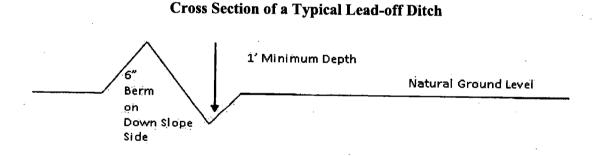
Turnouts

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.



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 %);

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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

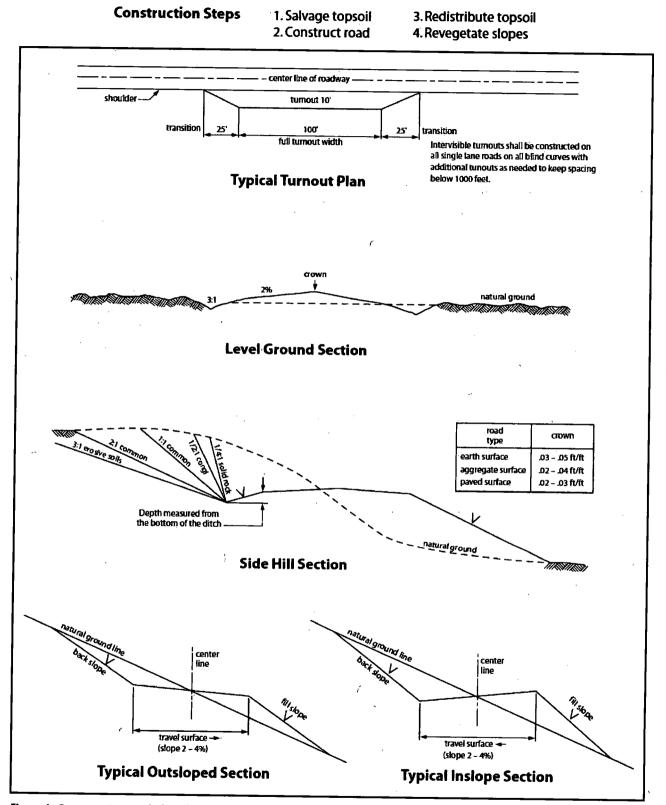
An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible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





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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

Page 10 of 16

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, <u>Shale Green</u> from the BLM Standard Environmental Color Chart (CC-001: June 2008).

B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the Grant and attachments, including stipulations, survey plat(s) and/or map(s), shall be on location during construction. BLM personnel may request to review a copy of your permit during construction to ensure compliance with all stipulations.

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

1. Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC § 2601 *et seq.* (1982) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (*see* 40 CFR, Part 702-799 and in particular, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. Holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms

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are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601, *et seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way Holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way Holder on the Right-of-Way. This provision applies without regard to whether a release is caused by Holder, its agent, or unrelated third parties.

4. Holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the rightof-way or permit area:

a. Activities of Holder including, but not limited to: construction, operation, maintenance, and termination of the facility;

b. Activities of other parties including, but not limited to:

- (1) Land clearing
 - (2) Earth-disturbing and earth-moving work
 - (3) Blasting
 - (4) Vandalism and sabotage;

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of Holder, regardless of fault. Upon failure of Holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he/she deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of Holder. Such action by the Authorized Officer shall not relieve Holder of any responsibility as provided herein.

6. All construction and maintenance activity shall be confined to the authorized

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right-of-way width of <u>20</u> feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or right-of-ways.

7. No blading or clearing of any vegetation shall be allowed unless approved in writing by the Authorized Officer.

8. Holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline shall be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of <u>24</u> inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

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14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

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

16. 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, powerline 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.

17. Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.

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.

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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).

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Seed Mixture 1 for Loamy Sites

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 \mathbf{x} percent purity \mathbf{x} percent germination = pounds pure live seed



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

Operator Certification

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

NAME: Bradley Bishop

Title: Regulatory

Street Address: PO Box 5270

City: Hobbs

State: NM

State:

Phone: (575)393-5905

Email address: bbishop@mewbourne.com

Field Representative

Representative Name:

Street Address:

City:

Phone:

Email address:

Signed on: 01/16/2018

Operator Certification Data Report

04/30/2018

Zip: 88240

Zip:



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

Application Data Report

Title: Regulatory

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

Reservation:

Zip: 88240

04/30/2018

APD ID: 10400026282 Operator Name: MEWBOURNE OIL COMPANY Well Name: OXBOW 26/25 W2DA FED COM Well Type: CONVENTIONAL GAS WELL Submission Date: 01/16/2018

Well Number: 2H Well Work Type: Drill

Tie to previous NOS?

User: Bradley Bishop

Federal or Indian agreement:

Lease Acres:

Allotted?

Highlighted data reflects the most recent changes

Show Final Text

Submission Date: 01/16/2018

	Section	1 -	General	1
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APD ID: 10400026282 **BLM Office:** CARLSBAD

Federal/Indian APD: FED

Lease number: NMNM 13413A

Surface access agreement in place?

Agreement in place? NO

Agreement number:

Agreement name:

Keep application confidential? YES

Permitting Agent? NO

Operator letter of designation:

APD Operator: MEWBOURNE OIL COMPANY

Oxbow26_25W2DAFedCom2H_operatorletterofdesignation_20180116102558.pdf

Operator Info

Operator Organization Name: MEWBOURNE OIL COMPANY Operator Address: PO Box 5270 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: OXBOW 26/25 W2DA FED COM	Well Number: 2H	Well API Number:
Field/Pool or Exploratory? Exploratory	Field Name: WILDCAT	Pool Name:
Is the proposed well in an area containing other mine	ral resources? NONE	

Operator Name: MEWBOURNE OIL COMPANY Well Name: OXBOW 26/25 W2DA FED COM

Well Number: 2H

Describe other minerals:			
Is the proposed well in a Helium produ	uction area? N	Use Existing Well Pad? NO	New surface disturbance?
Type of Well Pad: MULTIPLE WELL		Multiple Well Pad Name:	Number: 2
Well Class: HORIZONTAL		OXBOW 26/25 DA FED COM Number of Legs: 1	
Well Work Type: Drill			
Well Type: CONVENTIONAL GAS WEL	L		
Describe Well Type:			
Well sub-Type: EXPLORATORY (WILD	CAT)		
Describe sub-type:			
Distance to town: 8.5 Miles	Distance to nea	arest well: 50 FT Distan	ice to lease line: 330 FT
Reservoir well spacing assigned acres	Measurement:	640 Acres	
Well plat: Oxbow26_25W2DAFedCo	m2H_wellplat_20	180116103210.pdf	
Well work start Date: 04/16/2018		Duration: 60 DAYS	

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Survey number:

Vertical Datum: NAVD88

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	DM	TVD
SHL	490	FNL	365	FWL	25S	28E	26	Aliquot	32.10679		EDD		NEW	F	NMNM	295	0	0
#1								NWN W	05	104.0653 075	Y	MEXI CO	MEXI CO		013413 A	4		
KOP Leg #1	490	FNL	365	FWL	25S	28E	26	Aliquot NWN W	32.10679 05	- 104.0653 075	EDD Y	NEW MEXI CO		F	NMNM 013413 A	- 715 0	101 04	101 04
PPP Leg #1	445	FNL	740	FWL	25S	28E		Aliquot NWN W	32.10688 46	- 104.0640 948	EDD Y		NEW MEXI CO		NMNM 013413 A	- 768 8	108 04	106 42

Page 2 of 3

Operator Name: MEWBOURNE OIL COMPANY

Well Name: OXBOW 26/25 W2DA FED COM

Well Number: 2H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	DM	۵۷T
PPP Leg #1	440	FNL	0		25S	28E	25	Aliquot NWN W	32.10696 47	- 104.0492 652	EDD Y		NEW MEXI CO	F	NMNM 016104	- 781 8	154 02	107 72
EXIT Leg #1	440	FNL	330	FEL	258	28E	25	Aliquot NENE	32.10698 79	- 104.0332 04	EDD Y	NEW MEXI CO		F	NMNM 016104	- 792 6	203 76	108 80
BHL Leg #1	440	FNL	330	FEL	25S	28E	25	Aliquot NENE	32.10698 79	- 104.0332 04	EDD Y		NEW MEXI CO	F	NMNM 016104	- 792 6	203 76	108 80

Page 3 of 3 $^{\circ}$

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

Statement Accepting Responsibility for Operations

Operator Name:Mewbourne Oil CompanyStreet or Box:P.O. Box 5270City, State:Hobbs, New MexicoZip 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 013413A, NMNM 016104

Legal Description of Land: Section 26, T-25S, R-28E Eddy County, New Mexico. Location @ 490' FNL & 365' FWL.

\$150,000

Formation (if applicable): WOLFCAMP

Bond Coverage:

BLM Bond File:

NM1693 Nationwide, NMB - 000919

madley C

Authorized Signature:

Name: BRADLEY BISHOP Title: Regulatory Manager Date: <u>1-16-17</u>. Operator Name: MEWBOURNE OIL COMPANY

Well Name: OXBOW 26/25 W2DA FED COM

Well Number: 2H

Pressure Rating (PSI): 5M

Rating Depth: 20376

Equipment: Annular, Blind Ram, Pipe Ram

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. Anchors are not required by manufacturer. A multi-bowl wellhead is being used. See attached schematic.

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

Choke Diagram Attachment:

Oxbow_26_25_W2DA_Fed_Com_2H_5M_BOPE_Choke_Diagram_20180115142258.pdf

Oxbow_26_25_W2DA_Fed_Com_2H_Flex_Line_Specs_20180115142259.pdf

BOP Diagram Attachment:

Oxbow_26_25_W2DA_Fed_Com_2H_5M_BOPE_Schematic_20180115142313.pdf

Oxbow_26_25_W2DA_Fed_Com_2H_Multi_Bowl_WH_20180115142315.pdf

Section 3 - Casin	g
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Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type		Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1		17.5	13.375	NEW	API	N	0	475	0	475	2981		475	H-40	48	STC		3.46	7.78	DRY	14.1 2	DRY	23.7 3
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	2585	0	2585	2981	r	2585	J-55	36	LTC		1.5	2.62	DRY	4.87	DRY	6.06
3	PRODUCTI	8.75	7.0	NEW	API	N	0	10804	0	10642	2981		10804	HCP -110	26	LTC		1.48	1.9	DRY	2.32	DRY	2.95
4	LINER	6.12 5	4.5	NEW	API	N	10104	20376	10104	10880			10272	P- 110	13.5	LTC	. A4	1.45	1.69	DRY	2.56	DRY	3.2

Casing Attachments

Operator Name: MEWBOURNE OIL COMPANY

Well Name: OXBOW 26/25 W2DA FED COM

Well Number: 2H

sing Attachments	· · · · · · · · · · · · · · · · · · ·	
Casing ID: 1	String Type: SURFACE	
Inspection Document:		
Spec Document:		
Tapered String Spec:		
Casing Design Assump	otions and Worksheet(s):	
Oxbow_26_25_W2	2DA_Fed_Com_2H_Csg_Assumptions_20180115143242.pdf	
Casing ID: 2	String Type: INTERMEDIATE	
Inspection Document:		
Spec Document:	· *	
Tapered String Spec:		
Casing Design Assump	tions and Worksheet(s):	
	DA_Fed_Com_2H_Csg_Assumptions_20180115143328.pdf	
		· · · · · · · · · · · · · · · · · · ·
Casing ID: 3	String Type: PRODUCTION	
Inspection Document:		
Spec Document:		
Tapered String Spec:		
apered offing spec.		
Casing Design Assumpt	tions and Worksheet(s):	
	DA_Fed_Com_2H_Csg_Assumptions_20180115143428.pdf	

Well Number: 2H

Casing Attachments

Casing ID: 4 String Type:LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Oxbow_26_25_W2DA_Fed_Com_2H_Csg_Assumptions_20180115143509.pdf

Section					te de la						
String Type	_ead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead	0, 1	0	285	190	2.12	12.5	403	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail	-	285	475	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	1933	375	2.12	12.5	795	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		1933	2585	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead	91_	2385	8314	530	2.12	12.5	1124	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		8314	1080 4	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		1010 4	2037 6	415	2.97	11.2	1233	25	Class C	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-Settling Agent

Operator Name: MEWBOURNE OIL COMPANY

Well Name: OXBOW 26/25 W2DA FED COM

Well Number: 2H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

Describe what will be on location to control well or mitigate other conditions: 13.0 ppg mud may be required for shale control. Highest mud wt expected to balance formation is 12.0 ppg. Sufficient mud materials to maintain mud properties & meet minimum lost circulation and weight increase requirements will be kept on location at all times. **Describe the mud monitoring system utilized:** Pason/PVT/Visual Monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (Ibs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	Н	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	475	SPUD MUD	8.6	8.8		adala -					
475	2585	SALT SATURATED	10	10					-	16	
2585	1010 4	WATER-BASED MUD	8.6	9.7							
1010 4	1088 0	OIL-BASED MUD	10	12							

Section 6 - Test, Logging, Coring

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

Will run GR/CNL from KOP (10,104') to surface

Will run MWD GR from KOP (10,104') to TD List of open and cased hole logs run in the well:

CNL,GR,MWD,MUDLOG

Coring operation description for the well:

None

Operator Name: MEWBOURNE OIL COMPANY Well Name: OXBOW 26/25 W2DA FED COM

Well Number: 2H

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 6789

Anticipated Surface Pressure: 4427.52

Anticipated Bottom Hole Temperature(F): 165

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Oxbow_26_25_W2DA_Fed_Com_2H_H2S_Plan_20180115144256.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

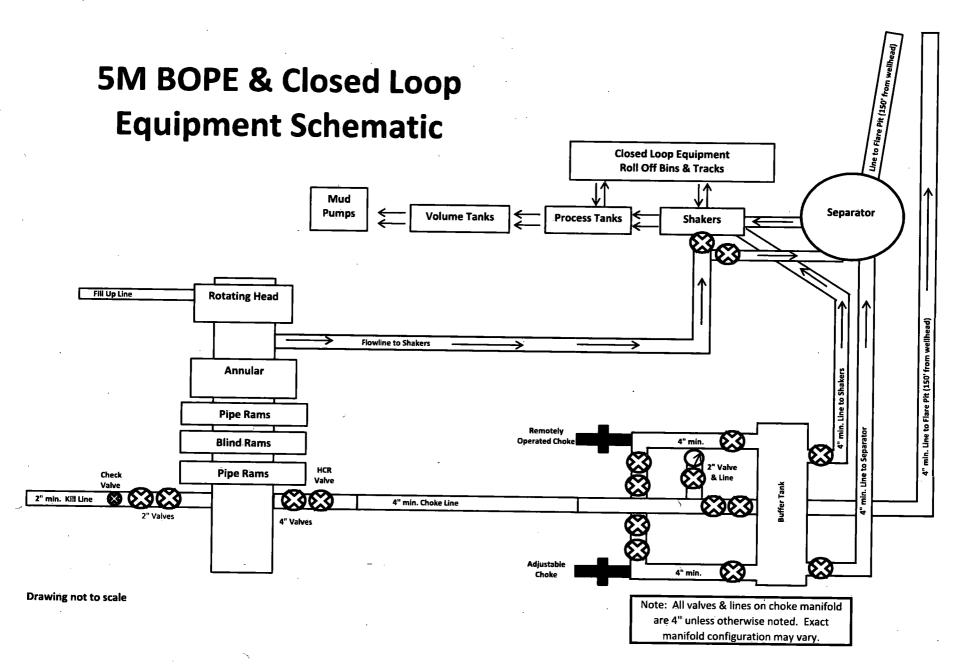
Oxbow_26_25_W2DA_Fed_Com_2H_Dir_Plot_20180115144350.pdf Oxbow_26_25_W2DA_Fed_Com_2H_Dir_Plan_20180115144351.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

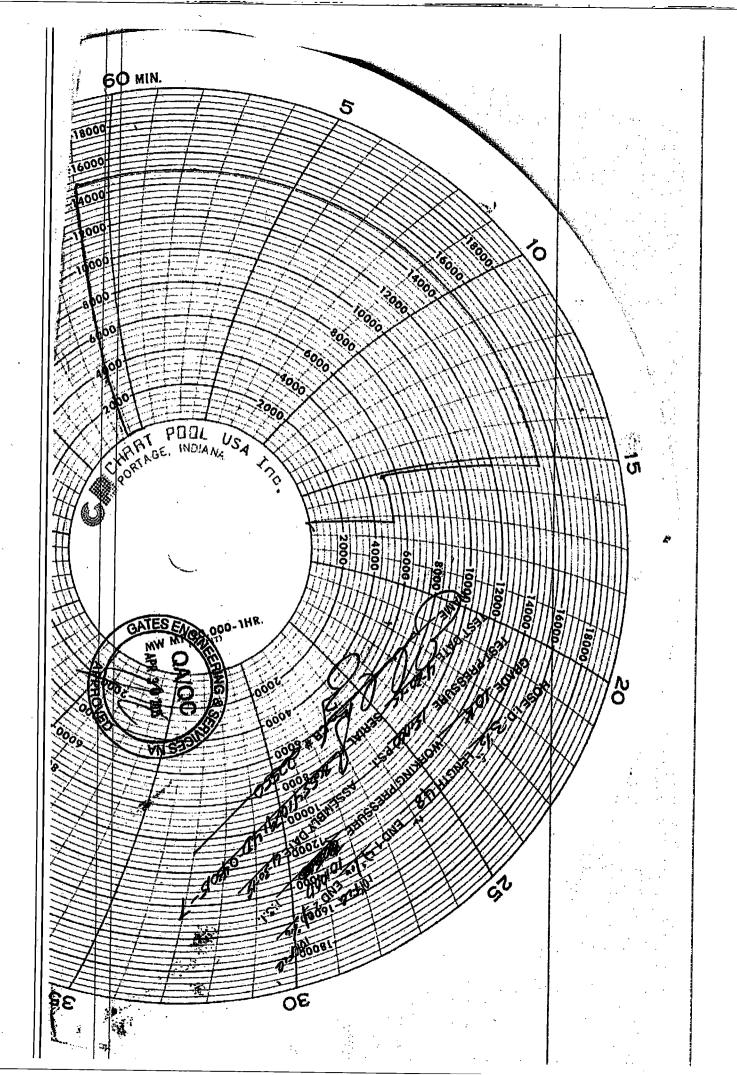
Oxbow_26_25_W2DA_Fed_Com_2H_Drlg_Program_20180115144407.doc

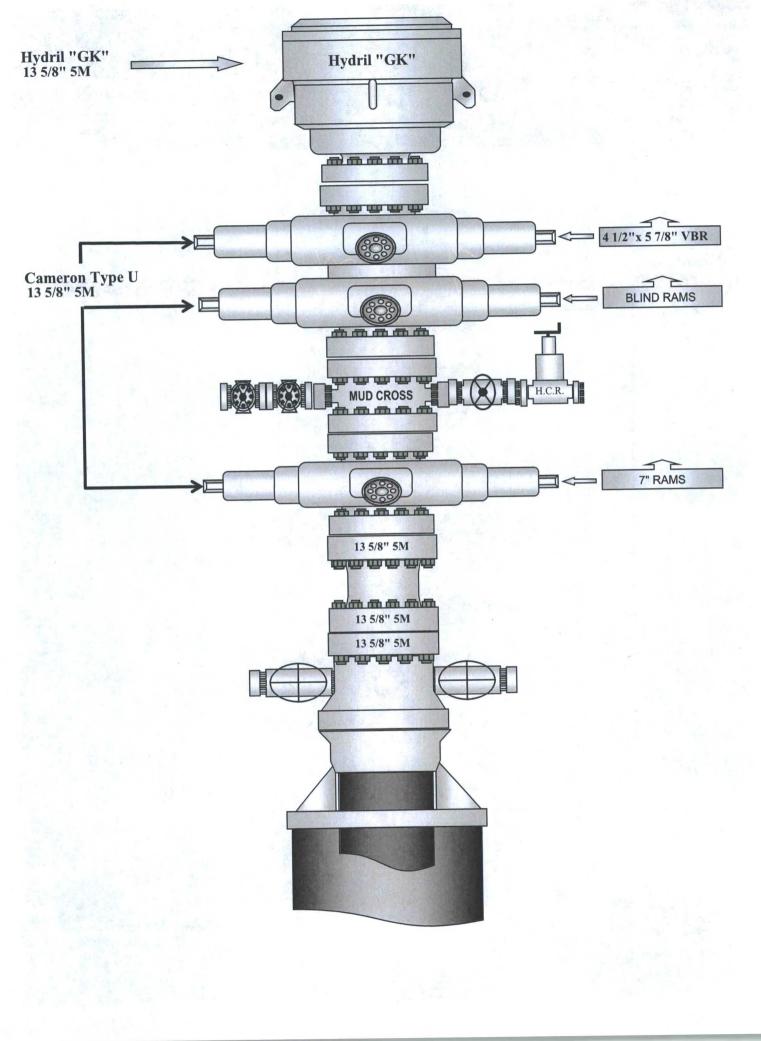
Other Variance attachment:



·

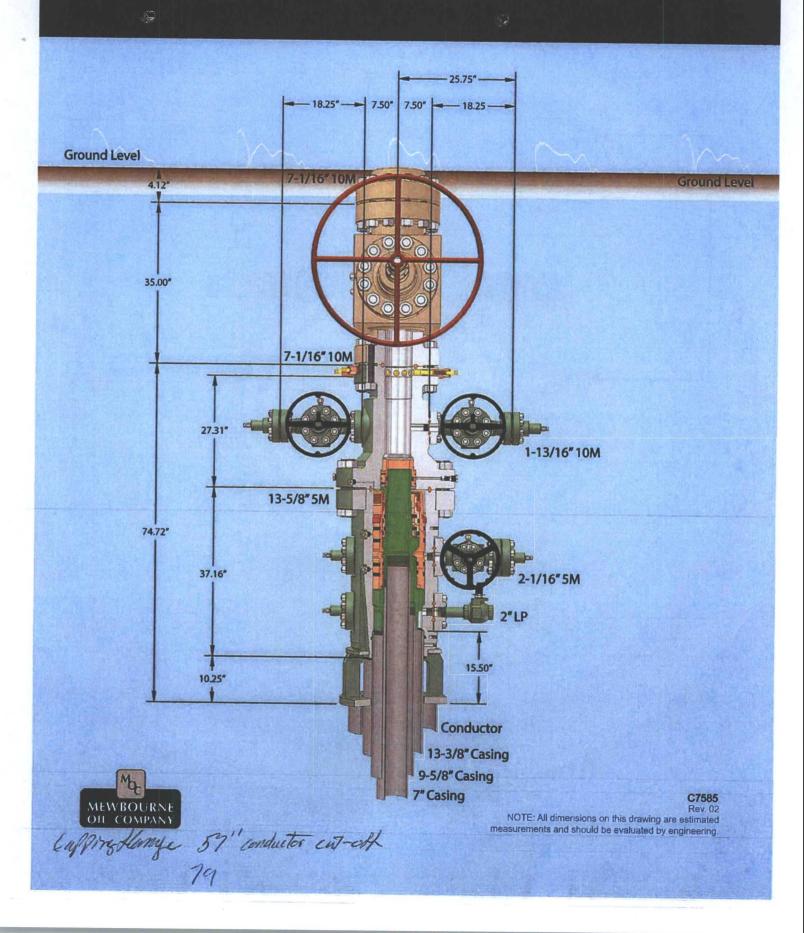
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- North Carl					
6		CHICINICEDING			
TITON	>	ENGINEERING & SERVICES			
1					
TES E & S NORT	TH AM	ERICA, INC.		PHONE: 361-887-9807	
4 44TH STREET				FAX: 361-887-0812	
RPUS CHRISTI,	, TEXA	S 78405		EMAIL: <i>Tim.Cantu@gates.com</i> WEB: www.gates.com	1
		NETHO ACCEMPI	V DRECEIIDE TI	EST CERTIFICATE	
10K C	EME	NIING ASSEMBL	T PRESSURE II	COT CERTIFICATION	
					7
ustomer :	1.4.3	AUSTIN DISTRIBUTING	Test Date:	4/30/2015	
ustomer Ref. :		4060578	Hose Serial No.:	D-043015-7	ŀ
nvoice No. :	1.11	500506	Created By:	JUSTIN CROPPER	3
			in the second		
Product Description:			10K3.548.0CK4.1/1610KFLGE	/e Le]
Todact Description.	L				1
End Fitting 1 :		4 1/16 10K FLG	End Fitting 2 :	4 1/16 10K FLG L36554102914D-043015-7	
Gates Part No. :	1.	4773-6290	Assembly Code :	15,000 PSI	
Working Pressure :		10,000 PSI	Test Pressure :	13,000 + 51	
the Gates O	ilfield I	koughneck Agreement/S	dition lune 2010. Tes	ose assembly has been tested to ents and passed the 15 minute st pressure 9.6.7 and per Table 9	
the Gates O	ilfield I	Roughneck Agreement/S API Spec 7K/Q1, Fifth E cordance with this prod	dition, June 2010, Tes uct number. Hose bur	st pressure 9.6.7.2 exceeds the	
the Gates O	ilfield I	koughneck Agreement/S	dition, June 2010, Tes uct number. Hose bur	st pressure 9.6.7.2 exceeds the	
the Gates O	ilfield I	Roughneck Agreement/S API Spec 7K/Q1, Fifth E cordance with this prod minimum of 2.5 times	dition, June 2010, Tes uct number. Hose bur the working pressure	st pressure 9.6.7 and per Table 9 st pressure 9.6.7.2 exceeds the per Table 9.	
the Gates O	ilfield I	API Spec 7K/Q1, Fifth E cordance with this prod minimum of 2.5 times	produciton:	PRODUCTION	
the Gates Oi hydrostatic tes to 15,000 ps Quality Manager : Date :	ilfield I	Roughneck Agreement/S API Spec 7K/Q1, Fifth E cordance with this prod minimum of 2.5 times	Produciton: Date :	st pressure 9.6.7 and per Table 9 st pressure 9.6.7.2 exceeds the per Table 9.	
the Gates Oi hydrostatic tes to 15,000 ps Quality Manager :	ilfield I	API Spec 7K/Q1, Fifth E cordance with this prod minimum of 2.5 times	produciton:	PRODUCTION	
the Gates Oi hydrostatic tes to 15,000 ps Quality Manager : Date :	ilfield I	API Spec 7K/Q1, Fifth E cordance with this prod minimum of 2.5 times	Produciton: Date :	PRODUCTION	
the Gates Oi hydrostatic tes to 15,000 ps Quality Manager : Date :	ilfield I	API Spec 7K/Q1, Fifth E cordance with this prod minimum of 2.5 times	Produciton: Date :	PRODUCTION	
the Gates Oi hydrostatic tes to 15,000 ps Quality Manager : Date :	ilfield I	API Spec 7K/Q1, Fifth E cordance with this prod minimum of 2.5 times	Produciton: Date :	PRODUCTION	
the Gates Oi hydrostatic tes to 15,000 ps Quality Manager : Date :	ilfield I	API Spec 7K/Q1, Fifth E cordance with this prod minimum of 2.5 times	Produciton: Date :	PRODUCTION	
the Gates Oi hydrostatic tes to 15,000 ps Quality Manager : Date :	ilfield I	API Spec 7K/Q1, Fifth E cordance with this prod minimum of 2.5 times	Produciton: Date :	PRODUCTION	
the Gates Oi hydrostatic tes to 15,000 ps Quality Manager : Date :	ilfield I	API Spec 7K/Q1, Fifth E cordance with this prod minimum of 2.5 times	Produciton: Date :	PRODUCTION	
the Gates Oi hydrostatic tes to 15,000 ps Quality Manager : Date :	ilfield I	API Spec 7K/Q1, Fifth E cordance with this prod minimum of 2.5 times	Produciton: Date :	PRODUCTION	
the Gates Oi hydrostatic tes to 15,000 ps Quality Manager : Date :	ilfield I	API Spec 7K/Q1, Fifth E cordance with this prod minimum of 2.5 times	Produciton: Date :	PRODUCTION	
the Gates Oi hydrostatic tes to 15,000 ps Quality Manager : Date :	ilfield I	API Spec 7K/Q1, Fifth E cordance with this prod minimum of 2.5 times	Produciton: Date :	PRODUCTION	
the Gates Oi hydrostatic tes to 15,000 ps Quality Manager : Date :	ilfield I	API Spec 7K/Q1, Fifth E cordance with this prod minimum of 2.5 times	Produciton: Date :	PRODUCTION	
the Gates Oi hydrostatic tes to 15,000 ps Quality Manager : Date :	ilfield I	API Spec 7K/Q1, Fifth E cordance with this prod minimum of 2.5 times	Produciton: Date :	PRODUCTION	
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the Gates Oi hydrostatic tes to 15,000 ps Quality Manager : Date :	ilfield I	API Spec 7K/Q1, Fifth E cordance with this prod minimum of 2.5 times	Produciton: Date :	PRODUCTION	







13-5/8" MN-DS Wellhead System



Casing Program

Hole Size	Casing Interval		Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
	From	То	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	475'	13.375"	48	H40	STC	3.46	7.78	14.12	23.73
12.25"	0'	2585'	9.625"	36	J55	LTC	1.50	2.62	4.87	6.06
8.75"	0'	10,804'	7"	26	P110	LTC	1.48	1.90	2.32	2.95
6.125"	10,104'	20,376'	4.5"	13.5	P110	LTC	1.45	1.69	2.56	3.20
0.120	10,10.			BI	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	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?	a de la seconda de
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?	

Casing Program

Hole	Casing Interval		Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	То	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	475'	13.375"	48	H40	STC	3.46	7.78	14.12	23.73
12.25"	0'	2585'	9.625"	36	J55	LTC	1.50	2.62	4.87	6.06
8.75"	0'	10,804'	7"	26	P110	LTC	1.48	1.90	2.32	2.95
6.125"	10,104'	20,376'	4.5"	13.5	P110	LTC	1.45	1.69	2.56	3.20
				BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	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?	1
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Casing Program

Hole	Casing	Casing Interval		Casing Interval		Casing Interval		Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	То	Size	(lbs)			Collapse	Burst	Tension	Tension				
17.5"	0'	475'	13.375"	48	H40	STC	3.46	7.78	14.12	23.73				
12.25"	0'	2585'	9.625"	36	J55	LTC	1.50	2.62	4.87	6.06				
8.75"	0'	10,804'	7"	26	P110	LTC	1.48	1.90	2.32	2.95				
6.125"	10,104'	20,376'	4.5"	13.5	P110	LTC	1.45	1.69	2.56	3.20				
0.120	10,10.	20,275		BI	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry				
						Factor			1.8 Wet	1.8 Wet				

	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.	1 Alter
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?	1 3/2/1
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?	

Casing Program

Hole	Casing Interval		Csg.	Weight	Grade	Conn.	SF	SF	SF Jt	SF Body
Size	From	То	Size	(lbs)			Collapse	Burst	Tension	Tension
17.5"	0'	475'	13.375"	48	H40	STC	3.46	7.78	14.12	23.73
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6.125"	10,104'	20,376'	4.5"	13.5	P110	LTC	1.45	1.69	2.56	3.20
				BL	M Minimu	m Safety	1.125	1	1.6 Dry	1.6 Dry
						Factor			1.8 Wet	1.8 Wet

	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?	14
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	11
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?	1
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	11

<u>Hydrogen Sulfide Drilling Operations Plan</u> 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

1

3

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

1. The hazards and characteristics of hydrogen sulfide gas.

2. The proper use of personal protective equipment and life support systems.

3. The proper use of hydrogen sulfide detectors, alarms, warning systems, briefing

areas, evacuation procedures.

4. The proper techniques for first aid and rescue operations.

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

The effects of hydrogen sulfide on metal components. If high tensile tubular systems are

utilized, supervisory personnel will be trained in their special maintenance requirements.

- 2 Corrective action and shut in procedures, blowout prevention, and well control procedures while drilling a well.
 - The contents of the Hydrogen Sulfide Drilling Operations Plan.

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

3. Hydrogen Sulfide Safety Equipment and Systems

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

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

2. Protective Equipment for Essential Personnel

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

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

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

3.

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.

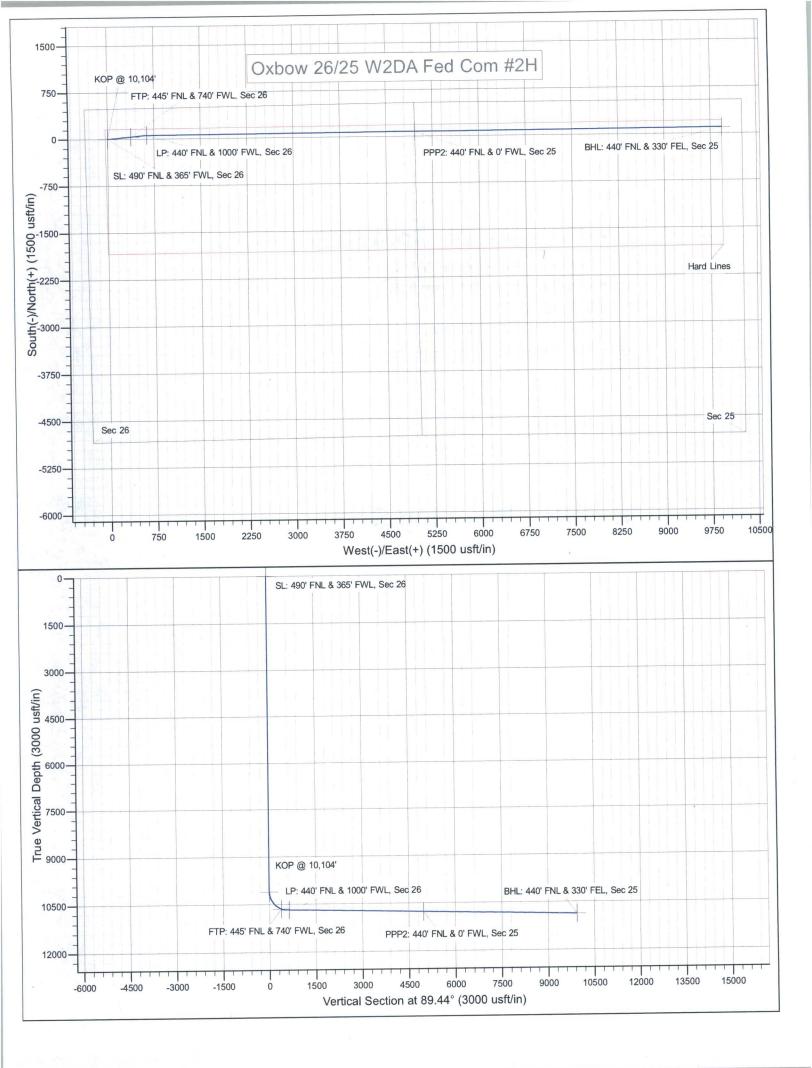
7. Well Testing

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 Fax 2 nd Fax	575-393-5905 575-397-6252 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 NAD 83 Oxbow 26/25 W2DA Fed Com #2H Sec 26, T25S, R28E SL: 490' FNL & 365' FWL, Sec 26 BHL: 440' FNL & 330' FEL, Sec 25

Plan: Design #1

Standard Planning Report

11 January, 2018

atabase: ompany: roject: ite: /ell: /ellbore: wesign:	Eddy Co Oxbow 3 Sec 26,	urne Oil Compa bunty, New Me: 26/25 W2DA Fo T25S, R28E 90' FNL & 330' I #1	xico NAD 83 ed Com #2H		Local Co-ordinate Reference:Site Oxbow 26/25 W2DA Fed Com #2HTVD Reference:WELL @ 2981.0usft (Original Well Elev)MD Reference:WELL @ 2981.0usft (Original Well Elev)North Reference:GridSurvey Calculation Method:Minimum Curvature						
Project	Eddy Co	unty, New Mex	ico NAD 83					References and the			
Map System: Geo Datum: Map Zone:	North Ame	Plane 1983 erican Datum 1 co Eastern Zon			System Datu	im:	Mea	n Sea Level		-	
Site	Oxbow 2	26/25 W2DA Fe	d Com #2H							ta da Angelanda 1947 - Angelandar	
Site Position: From: Position Uncertainty	Map :	0.0	Northin Easting usft Slot Ra	j:		690.00 usft 326.00 usft 13-3/16 "	Latitude: Longitude: Grid Converge	ence:		32.1067905 -104.0653075 0.14 °	
Well	Sec 26,	T25S, R28E						()) ())		2.6.9	
Well Position	+N/-S 0.0 usft Northing: +E/-W 0.0 usft Easting:					402,690.00 624,326.00	32.106790 -104.06530				
Position Uncertainty		0.	0 usft We	Ilhead Elevation	n:	2,981.0	usft Grou	und Level:		2,954.0 usf	
Wellbore	BHL: 44	40' FNL & 330'	FEL, Sec 25								
Magnetics	Мос	del Name	Sample	Date	Declina (°)	lion	Dip A (°)			Strength nT)	
20.2	0.2.4.46.003	IGRF2010		1/11/2018		7.00		59.83		47,841	
Design	Design	#1									
Audit Notes: Version:			Phase	: PR	OTOTYPE	Tie	e On Depth:		0.0		
Vertical Section:		D	epth From (TV (usft)	(D)	+N/-S (usft)		E/-W Isft)	Dire			
Te.			0.0		0.0	(0.0	89	9.44		
Plan Sections	- ISSEE				1	San Star					
Measured Depth Inc (usft)	lination (°)	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		
10,104.0	0.00	0.00	10,104.0	0.0	0.0	0.00	0.00 10.00	0.00	84.65		
11,013.8	90.98 88.75	84.65 89.75	10,676.9 10,677.0	54.4 57.0	634.0	10.00		9.47		LP: 440' FNL & 1000	
11,067.7			10.077.0	01.0	004.0						

Company: Mer Project: Edd Site: Oxt Well: Sec	bbs wbourne Oil Company dy County, New Mexico NAD 83 bow 26/25 W2DA Fed Com #2H c 26, T25S, R28E L: 440' FNL & 330' FEL, Sec 25 sign #1	Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method:	Site Oxbow 26/25 W2DA Fed Com #2H WELL @ 2981.0usft (Original Well Elev) WELL @ 2981.0usft (Original Well Elev) Grid Minimum Curvature
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Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S	+E/-W	Vertical Section (usft)	Dogleg Rate	Build Rate	Turn Rate
			(usit)	(usft)	(usft)	(usπ)	(°/100usft)	(°/100usft)	(°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	& 365' FWL, Se								
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	
500.0						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					
			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		
1,600.0	0.00	0.00	1,600.0	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	0.00	0.00	0.00
1,900.0	0.00	0.00		0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	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
0.500.0	0.00							0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	
3,100.0	0.00	0.00	3,100.0	0.0	0.0		0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0		0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0		0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00		0.0	0.0	0.0	0.00	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
1 000 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						
4,600.0	0.00		4,500.0	0.0	0.0	0.0	0.00	0.00	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		
5,100.0	0.00	0.00	5,100.0	0.0	0.0		0.00	0.00	0.00
	0.00	0.00	0,100.0	0.0	0.0	0.0	0.00	0.00	0.00

COMPASS 5000.1 Build 72

Database: Company: Project: Site: Well: Wellbore: Design:	Hobbs Mewbourne Oil Company Eddy County, New Mexico NAD 83 Oxbow 26/25 W2DA Fed Com #2H Sec 26, T25S, R28E BHL: 440' FNL & 330' FEL, Sec 25 Design #1	Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method:	Site Oxbow 26/25 W2DA Fed Com #2H WELL @ 2981.0usft (Original Well Elev) WELL @ 2981.0usft (Original Well Elev) Grid Minimum Curvature
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Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	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	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0			0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	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
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00		
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
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
	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0		0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0 6,900.0	0.00 0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
					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		7,100.0	0.0		0.0	0.00	0.00	0.00
7,200.0	0.00		7,200.0	0.0	0.0		0.00	0.00	0.00
7,300.0	0.00		7,300.0	0.0	0.0	0.0		0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	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		7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00		7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00		7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00		7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00		8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00		8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
	0.00		8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0 8,400.0	0.00		8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
			8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00		8,600.0	0.0	0.0			0.00	0.00
8,600.0			8,700.0	0.0	0.0			0.00	0.00
8,700.0	0.00		8,800.0	0.0	0.0			0.00	0.00
8,800.0 8,900.0	0.00		8,900.0	0.0	0.0			0.00	0.00
			9,000.0	0.0	0.0	0.0	0.00	0.00	0.00
9,000.0	0.00			0.0	0.0				0.00
9,100.0	0.00		9,100.0	0.0	0.0				0.00
9,200.0	0.00		9,200.0		0.0				0.00
9,300.0	0.00		9,300.0	0.0 0.0	0.0				0.0
9,400.0	0.00		9,400.0						
9,500.0	0.00		9,500.0	0.0					0.0
9,600.0			9,600.0	0.0					0.0
9,700.0	0.00	0.00	9,700.0	0.0					0.0
9,800.0		0.00	9,800.0	0.0					
9,900.0		0.00	9,900.0	0.0	0.0	0.0	0.00		0.0
10,000.0	0.0	0.00	10,000.0	0.0	0.0				0.0
10,100.0			10,100.0	0.0		0.0	0.00		0.0
10,100.0			10,104.0	0.0				0.00	0.0
KOP @ 10,		CHESSE IN	1.15					A LANDAR	A STREET
10,200.0		0 84.65	10,199.6	0.7	8.0				
10,300.0			10,296.2	3.1		33.1	10.00) 10.00	0.0

COMPASS 5000.1 Build 72

Database: Company: Project: Site: Well: Wellbore: Design:	Hobbs Mewbourne Oil Company Eddy County, New Mexico NAD 83 Oxbow 26/25 W2DA Fed Com #2H Sec 26, T25S, R28E BHL: 440' FNL & 330' FEL, Sec 25 Design #1	Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method:	Site Oxbow 26/25 W2DA Fed Com #2H WELL @ 2981.0usft (Original Well Elev) WELL @ 2981.0usft (Original Well Elev) Grid Minimum Curvature	
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Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,400.0	29.60	84.65	10,387.0	7.0	74.4	74.5	10.00	10.00	1.1. A.
10,500.0	39.60	84.65	10,469.2	12.3	130.9			10.00	0.00
10,600.0	49.60	84.65	10,403.2			131.0	10.00	10.00	0.00
10,700.0	59.60			18.8	200.7	200.9	10.00	10.00	0.00
		84.65	10,598.2	26.4	281.8	282.0	10.00	10.00	0.00
10,800.0	69.60	84.65	10,641.0	34.8	371.6	371.9	10.00	10.00	0.00
10,804.0	70.00	84.65	10,642.4	35.2	375.4	375.7	10.00	10.00	0.00
10.900.0	IL & 740' FWL, S								
1012	79.60	84.65	10,667.5	43.8	467.5	467.9	10.00	10.00	0.00
11,000.0	89.60	84.65	10,676.9	53.1	566.5	567.0	10.00	10.00	0.00
11,013.8	90.98	84.65	10,676.9	54.4	580.2	580.8	10.00	10.00	0.00
11,067.7	88.75	89.75	10,677.0	57.0	634.0	634.5	10.34	-4.15	9.47
LP: 440' FNL	& 1000' FWL, S	ec 26					Million March		0.47
11,100.0	88.75	89.75	10,677.7	57.1	666.3	666.9	0.00	0.00	0.00
11,200.0	88.75	89.75	10,679.9	57.6	766.3			0.00	0.00
11,300.0	88.75	89.75				766.8	0.00	0.00	0.00
11,400.0	88.75		10,682.1	58.0	866.3	866.8	0.00	0.00	0.00
		89.75	10,684.2	58.5	966.2	966.8	0.00	0.00	0.00
11,500.0	88.75	89.75	10,686.4	58.9	1,066.2	1,066.8	0.00	0.00	0.00
11,600.0	88.75	89.75	10,688.6	59.3	1,166.2	1,166.7	0.00	0.00	0.00
11,700.0	88.75	89.75	10,690.8	59.8	1,266.2	1,266.7	0.00	0.00	0.00
11,800.0	88.75	89.75	10,693.0	60.2	1,366.1	1,366.7	0.00	0.00	0.00
11,900.0	88.75	89.75	10,695.2	60.7	1,466.1	1,466.7	0.00		
12,000.0	88.75	89.75	10,697.3	61.1	1,566.1	1,566.6	0.00	0.00	0.00
12,100.0	88.75	89.75	10,699.5	61.5					
12,200.0	88.75	89.75	10,701.7		1,666.1	1,666.6	0.00	0.00	0.00
12,300.0	88.75	89.75		62.0	1,766.0	1,766.6	0.00	0.00	0.00
12,400.0			10,703.9	62.4	1,866.0	1,866.5	0.00	0.00	0.00
Carl State Contraction	88.75	89.75	10,706.1	62.9	1,966.0	1,966.5	0.00	0.00	0.00
12,500.0	88.75	89.75	10,708.2	63.3	2,066.0	2,066.5	0.00	0.00	0.00
12,600.0	88.75	89.75	10,710.4	63.7	2,166.0	2,166.5	0.00	0.00	0.00
12,700.0	88.75	89.75	10,712.6	64.2	2,265.9	2,266.4	0.00	0.00	0.00
12,800.0	88.75	89.75	10,714.8	64.6	2,365.9	2,366.4	0.00	0.00	0.00
12,900.0	88.75	89.75	10,717.0	65.1	2,465.9	2,466.4	0.00	0.00	0.00
13,000.0	88.75	89.75	10,719.1	65.5	2,565.9	2,566.4	0.00	0.00	0.00
13,100.0	88.75	89.75	10,721.3	66.0	2,665.8	2,666.3	0.00	0.00	0.00
13,200.0	88.75	89.75	10,723.5	66.4	2,765.8	2,766.3	0.00	0.00	0.00
13,300.0	88.75	89.75	10,725.7	66.8	2,865.8	2,866.3	0.00	0.00	
13,400.0	88.75	89.75	10,727.9	67.3	2,965.8	2,966.3	0.00		0.00
13,500.0	88.75	89.75	10,730.0	67.7	3,065.7	3,066.2	0.00	0.00 0.00	0.00
13,600.0	88.75	89.75	10,732.2	68.2	3,165.7	3,166.2	0.00		
13,700.0	88.75	89.75	10,734.4	68.6	3,265.7			0.00	0.00
13,800,0	88.75	89.75	10,736.6			3,266.2	0.00	0.00	0.00
13,900.0	88.75	89.75		69.0	3,365.7	3,366.2	0.00	0.00	0.00
14,000.0	88.75	89.75	10,738.8 10,740.9	69.5 69.9	3,465.6 3,565.6	3,466.1 3,566.1	0.00	0.00	0.00
14,100.0							0.00	0.00	0.00
14,200.0	88.75 88.75	89.75	10,743.1	70.4	3,665.6	3,666.1	0.00	0.00	0.00
		89.75	10,745.3	70.8	3,765.6	3,766.1	0.00	0.00	0.00
14,300.0	88.75	89.75	10,747.5	71.2	3,865.5	3,866.0	0.00	0.00	0.00
14,400.0	88.75	89.75	10,749.7	71.7	3,965.5	3,966.0	0.00	0.00	0.00
14,500.0	88.75	89.75	10,751.9	72.1	4,065.5	4,066.0	0.00	0.00	0.00
14,600.0	88.75	89.75	10,754.0	72.6	4,165.5	4,166.0	0.00	0.00	0.00
14,700.0	88.75	89.75	10,756.2	73.0	4,265.4	4,265.9	0.00	0.00	0.00
14,800.0	88.75	89.75	10,758.4	73.4	4,365.4	4,365.9	0.00	0.00	0.00
14,900.0	88.75	89.75	10,760.6	73.9	4,465.4	4,465.9	0.00	0.00	
15,000.0	88.75	89.75	10,762.8	74.3	4,565.4	4,405.9	0.00	0.00	0.00
15,100.0	88.75	89.75	10,764.9	74.8	4,665.3	4,665.8			
15,200.0	88.75	89.75	10,767.1	75.2	4,000.0	4,000.0	0.00	0.00	0.00

Database: Company: Project: Site: Well: Wellbore: Design:	Hobbs Mewbourne Oil Company Eddy County, New Mexico NAD 83 Oxbow 26/25 W2DA Fed Com #2H Sec 26, T25S, R28E BHL: 440' FNL & 330' FEL, Sec 25 Design #1	Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method:	Site Oxbow 26/25 W2DA Fed Com #2H WELL @ 2981.0usft (Original Well Elev) WELL @ 2981.0usft (Original Well Elev) Grid Minimum Curvature
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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)
	88.75	89.75	10,769.3	75.6	4,865.3	4,865.8	0.00	0.00	0.00
15,300.0		89.75	10,771.5	76.1	4,965.3	4,965.8	0.00	0.00	0.00
15,400.0	88.75			76.1	4,967.0	4,967.5	0.00	0.00	0.00
15,401.7	88.75	89.75	10,771.5	70.1	4,907.0	4,307.5	0.00	0.00	
PPP2: 440' F	FNL & O' FWL, Se	ec 25							0.00
15,500.0	88.75	89.75	10,773.7	76.5	5,065.2	5,065.7	0.00	0.00	0.00
15,600.0	88.75	89.75	10,775.8	77.0	5,165.2	5,165.7	0.00	0.00	
15,700.0	88.75	89.75	10,778.0	77.4	5,265.2	5,265.7	0.00	0.00	0.00
15,800.0	88.75	89.75	10,780.2	77.8	5,365.2	5,365.7	0.00	0.00	0.00
15,900.0	88.75	89.75	10,782.4	78.3	5,465.1	5,465.6	0.00	0.00	0.00
			10,784.6	78.7	5,565.1	5,565.6	0.00	0.00	0.00
16,000.0	88.75	89.75			5,665.1	5,665.6	0.00	0.00	0.00
16,100.0	88.75	89.75	10,786.7	79.2			0.00	0.00	0.00
16,200.0	88.75	89.75	10,788.9	79.6	5,765.1	5,765.6		0.00	0.00
16,300.0	88.75	89.75	10,791.1	80.0	5,865.0	5,865.5	0.00		
16,400.0	88.75	89.75	10,793.3	80.5	5,965.0	5,965.5	0.00	0.00	0.00
16,500.0	88.75	89.75	10,795.5	80.9	6,065.0	6,065.5	0.00	0.00	0.00
16,600.0	88.75	89.75	10,797.7	81.4	6,165.0	6,165.5	0.00	0.00	0.00
	88.75	89.75	10,799.8	81.8	6,264.9	6,265.4	0.00	0.00	0.00
16,700.0		89.75	10,802.0	82.2	6,364.9	6,365.4	0.00	0.00	0.00
16,800.0 16,900.0	88.75 88.75	89.75	10,802.0	82.7	6,464.9	6,465.4	0.00	0.00	0.00
					6,564.9	6,565.4	0.00	0.00	0.00
17,000.0	88.75	89.75	10,806.4	83.1			0.00	0.00	0.00
17,100.0	88.75	89.75	10,808.6	83.6	6,664.8	6,665.3			0.00
17,200.0	88.75	89.75	10,810.7	84.0	6,764.8	6,765.3	0.00	0.00	
17,300.0	88.75	89.75	10,812.9	84.5	6,864.8	6,865.3	0.00	0.00	0.00
17,400.0	88.75	89.75	10,815.1	84.9	6,964.8	6,965.3	0.00	0.00	0.00
17,500.0	88.75	89.75	10,817.3	85.3	7.064.7	7,065.2	0.00	0.00	0.00
	88.75	89.75	10,819.5	85.8	7,164.7	7,165.2	0.00	0.00	0.00
17,600.0		89.75	10,821.6	86.2	7,264.7	7,265.2	0.00	0.00	0.00
17,700.0	88.75		10,823.8	86.7	7,364.7	7,365.2	0.00	0.00	0.00
17,800.0	88.75 88.75	89.75 89.75	10,825.0	87.1	7,464.6	7,465.1	0.00	0.00	0.00
17,900.0							0.00	0.00	0.00
18,000.0	88.75	89.75	10,828.2	87.5	7,564.6	7,565.1		0.00	0.00
18,100.0	88.75	89.75	10,830.4	88.0	7,664.6	7,665.1	0.00		0.00
18,200.0	88.75	89.75	10,832.5	88.4	7,764.6	7,765.1	0.00	0.00	
18,300.0	88.75	89.75	10,834.7	88.9	7,864.5	7,865.0	0.00	0.00	0.00
18,400.0		89.75	10,836.9	89.3	7,964.5	7,965.0	0.00	0.00	0.00
		89.75	10,839.1	89.7	8,064.5	8,065.0	0.00	0.00	0.00
18,500.0		89.75	10,841.3	90.2	8,164.5	8,165.0	0.00	0.00	0.00
18,600.0			10,843.4	90.6	8,264.4	8,264.9	0.00	0.00	0.00
18,700.0		89.75		91.1	8,364.4	8,364.9	0.00	0.00	0.00
18,800.0		89.75 89.75	10,845.6 10,847.8	91.1	8,464.4	8,464.9	0.00	0.00	0.00
18,900.0							0.00	0.00	0.00
19,000.0		89.75	10,850.0	91.9	8,564.4	8,564.9		0.00	0.00
19,100.0	88.75	89.75	10,852.2	92.4	8,664.3	8,664.8	0.00		0.00
19,200.0		89.75	10,854.4	92.8	8,764.3	8,764.8	0.00	0.00	
19,300.0		89.75	10,856.5	93.3	8,864.3	8,864.8	0.00	0.00	0.00
19,400.0			10,858.7	93.7	8,964.3	8,964.8	0.00	0.00	0.00
			10,860.9	94.1	9,064.2	9,064.7	0.00	0.00	0.00
19,500.0				94.6	9,164.2	9,164.7	0.00	0.00	0.00
19,600.0			10,863.1		9,264.2	9,264.7	0.00	0.00	0.00
19,700.0			10,865.3	95.0			0.00	0.00	0.00
19,800.0			10,867.4	95.5	9,364.2	9,364.7	0.00	0.00	0.00
19,900.0	88.75	89.75	10,869.6	95.9	9,464.1	9,464.6			
20,000.0	88.75	89.75	10,871.8	96.3	9,564.1	9,564.6	0.00	0.00	0.00
20,100.0			10,874.0	96.8	9,664.1	9,664.6	0.00	0.00	0.00
20,200.0			10,876.2	97.2	9,764.1	9,764.6	0.00	0.00	0.00
			10,878.3	97.7	9,864.0	9,864.5	0.00	0.00	0.00
20,300.0				98.0	9,940.0	9,940.5	0.00	0.00	0.00
20,376.0	88.75	89.75	10,880.0	50.0	3,340.0	5,010.0	5.00		

1/11/2018 5:27:05PM

COMPASS 5000.1 Build 72

Database: Company: Project: Site: Well: Well: Wellbore: Design:	Hobbs Mewbourne Oil Company Eddy County, New Mexico NAD 83 Oxbow 26/25 W2DA Fed Com #2H Sec 26, T25S, R28E BHL: 440' FNL & 330' FEL, Sec 25 Design #1	Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method:	Site Oxbow 26/25 W2DA Fed Com #2H WELL @ 2981.0usft (Original Well Elev) WELL @ 2981.0usft (Original Well Elev) Grid Minimum Curvature
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Planned Survey

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)

DITE.	 1.141	a 330	 Sec.

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: 490' FNL & 365' FW - plan hits target cente - Point	0.00 er	0.00	0.0	0.0	0.0	402,690.00	624,326.00	32.1067905	-104.065307
KOP @ 10,104' - plan hits target cente - Point	0.00 r	0.00	10,104.0	0.0	0.0	402,690.00	624,326.00	32.1067905	-104.0653075
FTP: 445' FNL & 740' Fv - plan hits target cente - Point	0.00	0.00	10,642.4	35.2	375.4	402,725.17	624,701.40	32.1068846	-104.0640948
P: 440' FNL & 1000' FV - plan hits target cente - Point	0.00 r	0.00	10,677.0	57.0	634.0	402,747.00	624,960.00	32.1069429	-104.0632594
PPP2: 440' FNL & 0' FW - plan hits target cente - Point	0.00 r	0.00	10,771.5	76.1	4,967.0	402,766.09	629,293.00	32.1069647	-104.0492652
3HL: 440' FNL & 330' FE - plan hits target cente - Point	0.00 r	0.00	10,880.0	98.0	9,940.0	402,788.00	634,266.00	32.1069879	-104.033204

1. Geologic Formations

TVD of target	11,880'	Pilot hole depth	NA
MD at TD:	20,376'	Deepest expected fresh water:	50'

Basin Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	· · · · · · · · · · · · · · · · · · ·	
Rustler		Water	
Top Salt			
Castile	1145		he is a second second
Base Salt	2480		
Yates		Oil/Gas	÷
Lamar	2660	Oil/Gas	and the second
Bell Canyon	2690	Oil/Gas	and the second second
Cherry Canyon	3565	Oil/Gas	
Manzanita Marker	3710		and a second second
Brushy Canyon	5210	Oil/Gas	
Bone Spring	6440	Oil/Gas	
1 st Bone Spring Sand	7300		
2 nd Bone Spring Sand	8095		d
3rd Bone Spring Sand	9215		
Abo			
Wolfcamp	9585	Target Zone	
Devonian			
Fusselman			
Ellenburger			and the second sec
Granite Wash			

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

2. 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'	475'	13.375"	48	H40	STC	3.46	7.78	14.12	23.73
12.25"	0'	2585'	9.625"	36	J55	LTC	1.50	2.62	4.87	6.06
8.75"	0'	10,804'	7"	26	P110	LTC	1.48	1.90	2.32	2.95
6.125"	10,104'	20,376'	4.5"	13.5	P110	LTC	1.45	1.69	2.56	3.20
В	LM Minii	num Safet	y 1.125	1	1.6 Dr	y 1.6 D	Dry			3.40
		Facto	or		1.8 We	-	~			

	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?	1
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H ₂ 0 gal/ sk	500# Comp. Strength (hours)	Slurry Description
Surf.	190	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Inter.	375	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Prod.	530	12.5	2.12	11	9	Lead: Class C + Gel + Retarder + Defoamer + Extender
	400	15.6	1.18	5.2	10	Tail: Class H + Retarder + Fluid Loss + Defoamer
Liner	415	11.2	2.97	17	16	Class C + Salt + Gel + Fluid Loss + Retarder + Dispersant + Defoamer + Anti-Settling Agent

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

Casing String	TOC	% Excess
Surface	0'	100%
Intermediate	0'	25%
Production	2385'	25%
Liner	10,104'	25%

4. Pressure Control Equipment

Variance: None

BOP installed and tested before drilling which hole?	Size?	System Rated WP		Гуре	-	Tested to:
			A	nnular	X	2500#
			Blin	nd Ram	X	
12-1/4"	13-5/8"	5M	Pip	e Ram	X	50004
			Dou	ble Ram		5000#
			Other*		17	

*Specify if additional ram is utilized.

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

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

Х	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.					
Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.					
	N Are anchors required by manufacturer?					
Y	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.					
	• Provide description here: See attached schematic.					

5. Mud Program

Depth		Туре	Weight (ppg)	Viscosity	Water Loss	
From	То					
0'	475'	Spud Mud	8.6-8.8	28-34	N/C	
475'	2585'	BW	10.0	28-34	N/C	
2585'	10,104'	FW w/ Polymer	8.6-9.7	28-34	N/C	
10,104'	20,376'	OBM	10.0-13.0	30-40	<10cc	

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. MW up to 13.0 ppg may be required for shale control. The highest MW needed to balance formation pressure is expected to be 12.0 ppg.

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

6. Logging and Testing Procedures

	Logging, Coring and Testing.					
Х	Will run GR/CNL from KOP (10,104') to surface (horizontal well – vertical portion of					
	hole). Stated logs run will be in the Completion Report and submitted to the BLM.					
	No Logs are planned based on well control or offset log information.					
	Drill stem test? If yes, explain					
	Coring? If yes, explain					

Addi	tional logs planned	Interval
Х	Gamma Ray	10,104' (KOP) to TD
	Density	
	CBL	
	Mud log	
	PEX	

FMSS

APD ID: 10400026282

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



Drilling Plan Data Report

Submission Date: 01/16/2018

Well Number: 2H

Well Work Type: Drill

Operator Name: MEWBOURNE OIL COMPANY

Well Name: OXBOW 26/25 W2DA FED COM

Well Type: CONVENTIONAL GAS WELL

Section 1 - Geologic Formations

Formation	A.	1985	True Vertical	Measured	A.	AA	Producing
ID	Formation Name	Élevation	Depth.		Lithologies	Mineral Resources	Formation
<u>ن بر الرید.</u> 1	UNKNOWN	2954	0	0		NONE	No
2	CASTILE	1809	1145	1145	SALT	NONE	No
3	BASE OF SALT	474	2480	2480	SALT	NONE	No
4	LAMAR	234	2660	2660	LIMESTONE	NATURAL GAS, OIL	No
5	BELL CANYON	264	2690	2690	SANDSTONE	NATURAL GAS,OIL	No
6	CHERRY CANYON	-611	3565	3565	SANDSTONE	NATURAL GÁS,OIL	No
7	MANZANITA	-756	3710	3710	LIMESTONE	NATURAL GAS,OIL	No
8	BRUSHY CANYON	-2256	5210	5210	SANDSTONE	NATURAL GAS, OIL	Nó
9	BONE SPRING LIME	-3486	6440	6440	LIMESTONE, SHALE	NATURAL GAS,OIL	No
10	BONE SPRING 1ST	-4346	7300	7300 +	SANDSTONE	NATURAL GAS,OIL	No
11	BONE SPRING 2ND	-5141	8095	8095	SANDSTONE	NATURAL GAS,OIL	No
12	BONE SPRING 3RD	-6261	, 9215	9215	SANDSTONE	NATURAL GAS,OIL	No
13	WOLFCAMP	-6631	9585	9585	LIMESTONE, SHALE, SA	NATURAL GAS;OIL	Yes
13	WOLF CAIVIE				NDSTONE		

Section 2 - Blowout Prevention

fightighted deter Eilegistige most Gentidhtroisski

50.00

04/30/2018

Show Final Text

4 K K 4 8 / 4

7. Drilling Conditions

Condition	Specify what type and where?		
BH Pressure at deepest TVD	6789 psi		
Abnormal Temperature	No		

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers in surface hole. Weighted mud for possible over-pressure in Wolfcamp formation.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

H2S is presentXH2S Plan attached

8. Other facets of operation

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

Attachments

Directional Plan Other, describe



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

SUPO Data Report

04/30/2018

APD ID: 10400026282

Operator Name: MEWBOURNE OIL COMPANY

Well Name: OXBOW 26/25 W2DA FED COM

Well Type: CONVENTIONAL GAS WELL

Submission Date: 01/16/2018

Well Number: 2H Well Work Type: Drill Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Oxbow26_25W2DAFedCom2H_existingroadmap_20180116103229.pdf

Existing Road Purpose: ACCESS, FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

Oxbow26_25W2DAFedCom2H_newroadmap_20180116103319.pdf

New road type: RESOURCE

Length: 1359.05 Feet

Max slope (%): 3

Max grade (%): 3

Width (ft.): 20

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: Dirt berms along the ditch on side of road.

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Well Name: OXBOW 26/25 W2DA FED COM

Well Number: 2H

Access surfacing type: OTHER Access topsoil source: OFFSITE Access surfacing type description: Caliche Access onsite topsoil source depth: Offsite topsoil source description: Private material pit Onsite topsoil removal process: Access other construction information: Access miscellaneous information:

Number of access turnouts: 2

Access turnout map:

Drainage Control

New road drainage crossing: CULVERT

Drainage Control comments: There are no drainage's along this road.

Road Drainage Control Structures (DCS) description: None

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Oxbow26_25W2DAFedCom2H_existingwellmap_20180116103345.pdf

Existing Wells description:

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: a. All permanent, lasting more than 6 months, above ground structures including but not limited to pumpjacks, storage tanks, pipeline risers, meter housing, etc. that are not subject to safety requirements will be painted a non-reflective paint color that blends in with the surrounding landscape. The paint color will be one of the colors from the BLM Standard Environmental Colors chart selected by the BLM authorized officer. b. All proposed production facilities that are located on the well pad will be strategically placed to allow for maximum interim reclamation, recontouring, and revegetation of the well location. C. Production facility will be off site to the south of the well pad. A 125# 2 7/8" steel flowline will be installed with in 5' of lease road from well site to battery site. Flowline length will be 528.02'. **Production Facilities map:**

Oxbow26_25W2DAFedCom2H_flowlinemap_20180116103607.pdf Oxbow26_25W2DAFedCom2H_productionfaciilitymap_20180116103617.pdf

Well Name: OXBOW 26/25 W2DA FED COM

Well Number: 2H

Section 5 - Location and Types of Water Supply

Water Source Table

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

Source longitude: -104.082855

Source latitude: 32.115456

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): 2135

Source volume (acre-feet): 0.27518675

Source volume (gal): 89670

Water source and transportation map:

Oxbow26_25W2DAFedCom2H_watersourceandtransmap_20180116111304.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	f aquifer:
Aquifer comments:		
Aquifer documentation:		
Well depth (ft):	Well casing type:	
Well casing outside diameter (in.):	Well casing inside	e diameter (in.):
New water well casing?	Used casing sour	ce:
Drilling method:	Drill material:	
Grout material:	Grout depth:	
Casing length (ft.):	Casing top depth	(ft.):
Well Production type:	Completion Metho	od:
Water well additional information:		
State appropriation permit:		

Well Name: OXBOW 26/25 W2DA FED COM

Well Number: 2H

Additional information attachment:

Section 6 - Construction Materials

Construction Materials description: Caliche

Construction Materials source location attachment:

Oxbow26_25W2DAFedCom2H_calichesourceandtransmap_20180116111436.pdf

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drill cuttings

Amount of waste: 1335 barrels

Waste disposal frequency : One Time Only

Safe containment description: 20 yard roll off bins

Safe containmant attachment:

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

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

Waste type: SEWAGE

Waste content description: Human waste & grey water

Amount of waste: 1500 gallons

Waste disposal frequency : Weekly

Safe containment description: 2,000 gallon plastic container

Safe containmant 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 from all drilling & completion procedures

Amount of waste: 1500 pounds

Waste disposal frequency : One Time Only

Safe containment description: Enclosed trash trailers

Safe containmant attachment:

Well Name: OXBOW 26/25 W2DA FED COM

Well Number: 2H

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

Disposal type description:

Disposal location description: County of Eddy waste management

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

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

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

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

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? YES

Description of cuttings location Drill cuttings will be properly contained in steel tanks (20 yard roll off bins.) and taken to an NMOCD approved disposal facility listed below. After drilling and completion operations, trash, chemicals, salts, frac sand and other waste material will be removed and disposed of properly at the said facilities. NMOCD approved waste disposal locations are CRI or Lea Land, both facilities are located on HWY 62/180, Sec. 27 T20S R32E. 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:

Well Name: OXBOW 26/25 W2DA FED COM

Well Number: 2H

Section 9 - Well Site Layout

Well Site Layout Diagram:

Oxbow26_25W2DAFedCom2H_wellsitelayoutdf_20180116111459.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: OXBOW 26/25 DA FED COM Multiple Well Pad Number: 2

Recontouring attachment:

Drainage/Erosion control construction: None required

Drainage/Erosion control reclamation: None required

Well pad proposed disturbance	Well pad interim reclamation (acres):	Well pad long term disturbance
(acres): 5.05	2.073	(acres): 2.977
Road proposed disturbance (acres): 0.936	Road interim reclamation (acres): 0.936	Road long term disturbance (acres): 0.936
Powerline proposed disturbance	Powerline interim reclamation (acres):	Powerline long term disturbance
(acres): 0	0	(acres): 0
Pipeline proposed disturbance	Pipeline interim reclamation (acres): 0	Pipeline long term disturbance
(acres): 0	Other interim real matien (serve) 0	(acres): 0
Other proposed disturbance (acres): 0	Other Interim reclamation (acres): 0	Other long term disturbance (acres): 0
Total proposed disturbance: 5.986	Total interim reclamation: 3.009	Total long term disturbance: 3.913

Reconstruction method: Remove caliche, redistribute topsoil over reclaimed area & reseed.

Topsoil redistribution: Use backhoe/loader to spread material.

Soil treatment: None

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: Various brush & grasses.

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: Various brush & grasses.

Existing Vegetation Community at other disturbances attachment:

Operator Name: MEWBOURNE OIL COMPANY Well Name: OXBOW 26/25 W2DA FED COM

Well Number: 2H

Non native seed used? NO Non native seed description: Seedling transplant description: Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO Seed harvest description: Seed harvest description attachment:

Seed Management

Seed Table

Seed type: Seed name: Source name: Source phone: Seed cultivar: Seed use location: PLS pounds per acre: Seed source:

Source address:

Proposed seeding season:

Total pounds/Acre:

Seed reclamation attachment:

Seed Type

Operator Contact/Responsible Official Contact Info

Pounds/Acre

Seed Summary

First Name: Bradley

Phone: (575)393-5905

Last Name: Bishop Email: bbishop@mewbourne.com

Seedbed prep: recontouring

Seed BMP: NA

Seed method: broadcast & drill

Existing invasive species? NO

Well Name: OXBOW 26/25 W2DA FED COM

Well Number: 2H

Existing invasive species treatment description: Existing invasive species treatment attachment: Weed treatment plan description: None Weed treatment plan attachment: Monitoring plan description: Visual inspection within 3 months of interim reclamation. Monitoring plan attachment: Success standards: Complete re-growth within 1 year of interim reclamation. Pit closure description: None Pit closure attachment:

Section 11 - Surface Ownership

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: USFS Region: USFS Forest/Grassland:

USFS Ranger District:

Well Name: OXBOW 26/25 W2DA FED COM

Well Number: 2H

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

Disturbance type: NEW ACCESS ROAD Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

USFS Ranger District:

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Operator Name: MEWBOURNE OIL COMPANY

Well Name: OXBOW 26/25 W2DA FED COM

Well Number: 2H

Disturbance type: OTHER Describe: Production Facility 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: USFS Region: USFS Forest/Grassland:

USFS Ranger District:

Section 12 - Other Information

Right of Way needed? NO ROW Type(s): Use APD as ROW?

ROW Applications

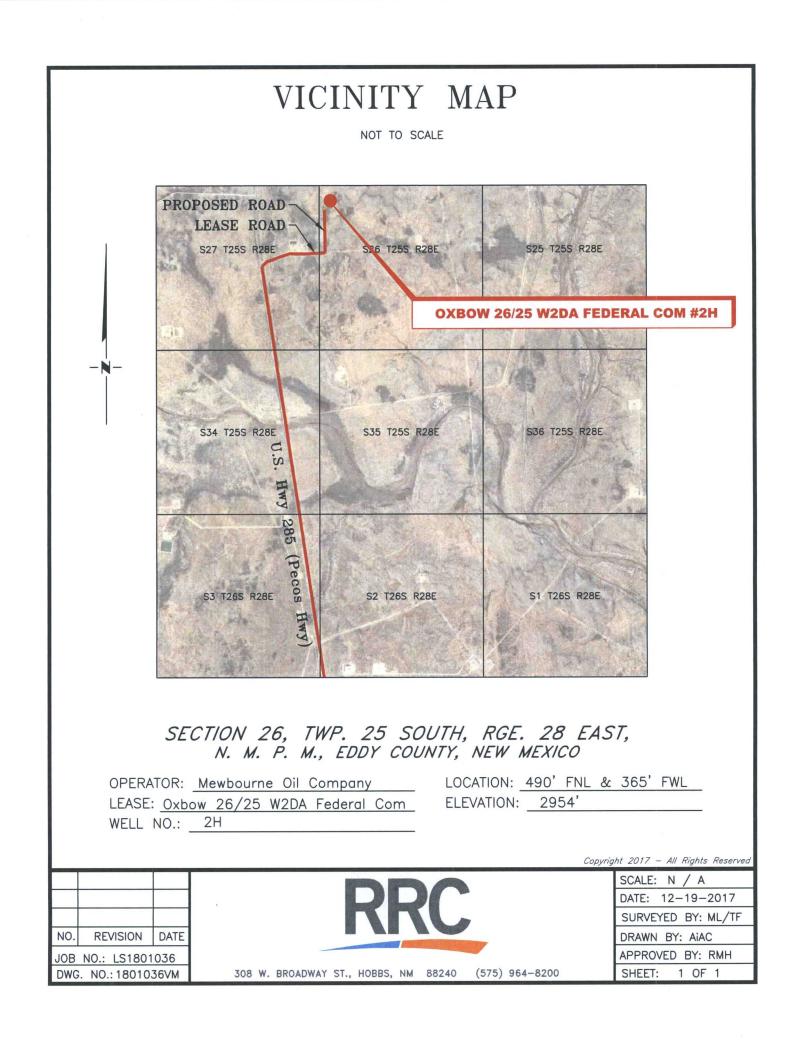
SUPO Additional Information: Wells staked as Heartbreakers 26 W2DA Fed #2H

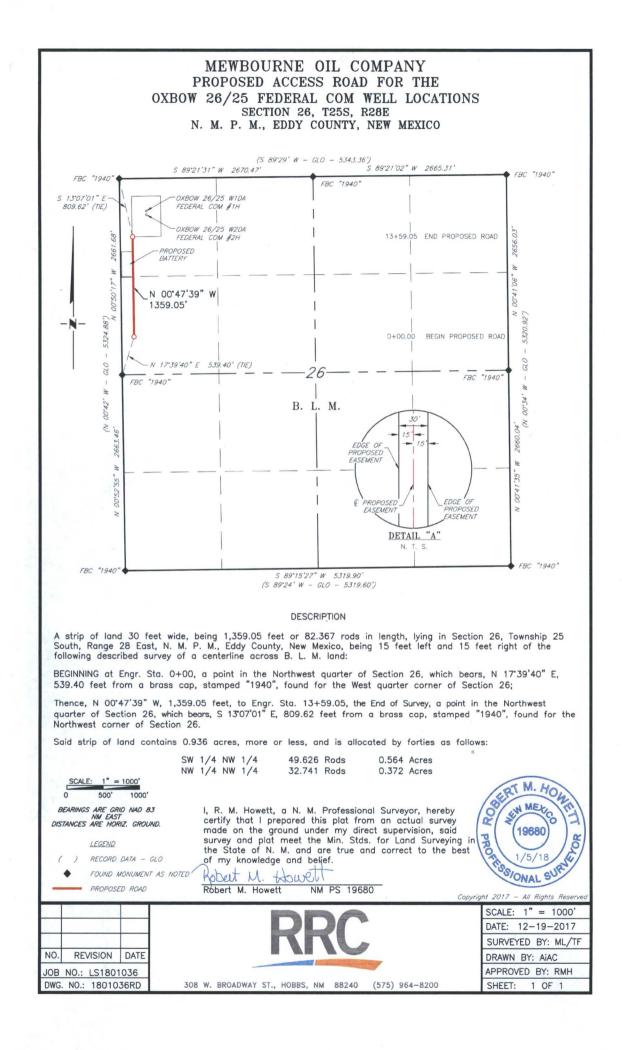
Use a previously conducted onsite? YES

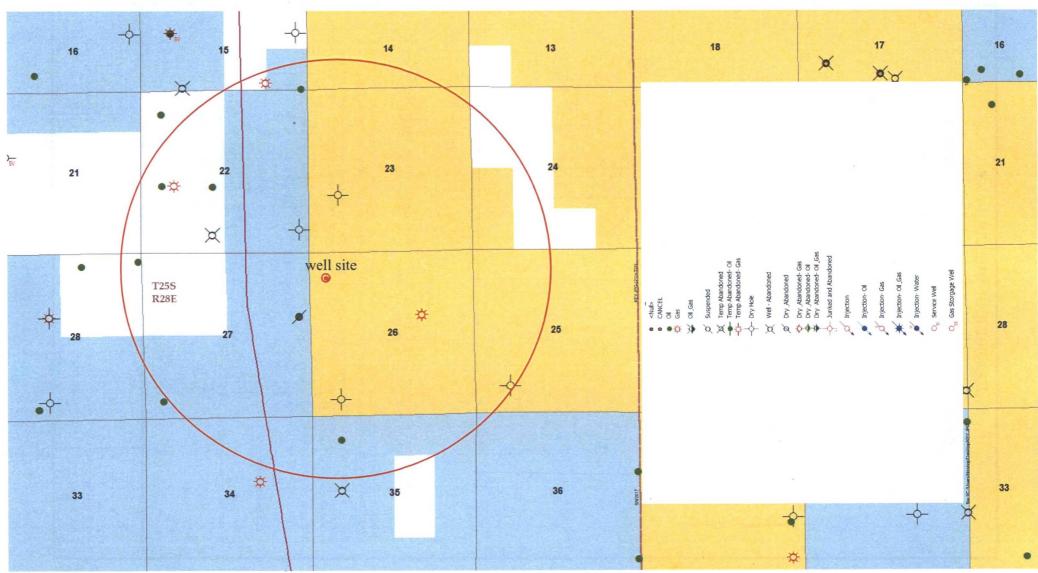
Previous Onsite information: DEC 20 2017 Met w/Paul Murphy (NRS) & RRC Surveying & staked location @ 490' FNL & 205' FWL, Sec 26, T25S, R28E, Eddy Co., NM. Location was unacceptable due to large hills. Re-staked location @ 490' FNL & 365' FWL, Sec 26, T25S, R28E, Eddy Co., NM. (Elevation @ 2954'). Topsoil stockpiled 30' wide on E side. Pad size 400' x 550'. Reclaim 70' N, E, & W. Battery will be off location to S along road. Road will be on SW corner heading S to lease road.

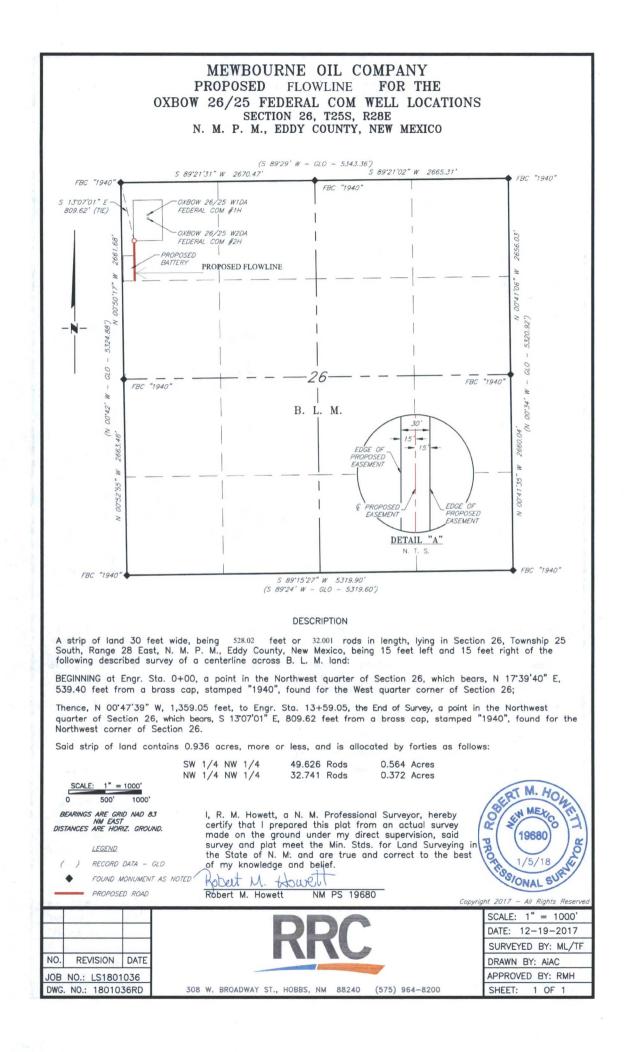
Other SUPO Attachment

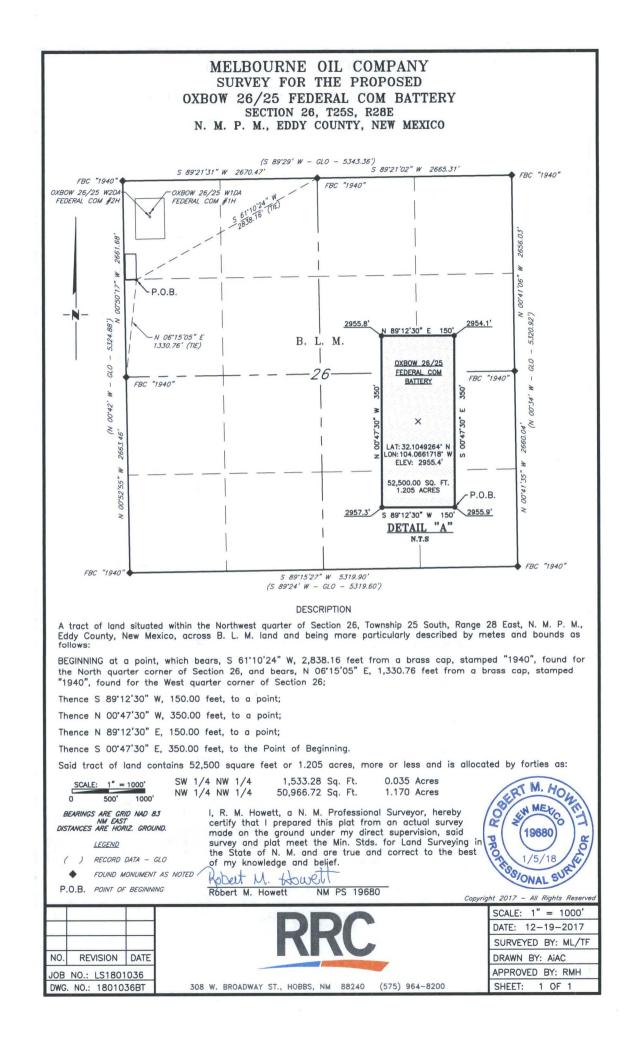
Oxbow26_25W2DAFedCom2H_GASCAPTUREPLAN_20180116112444.pdf Oxbow26_25W2DAFedCom2H_interimreclamationmap_20180116112508.pdf





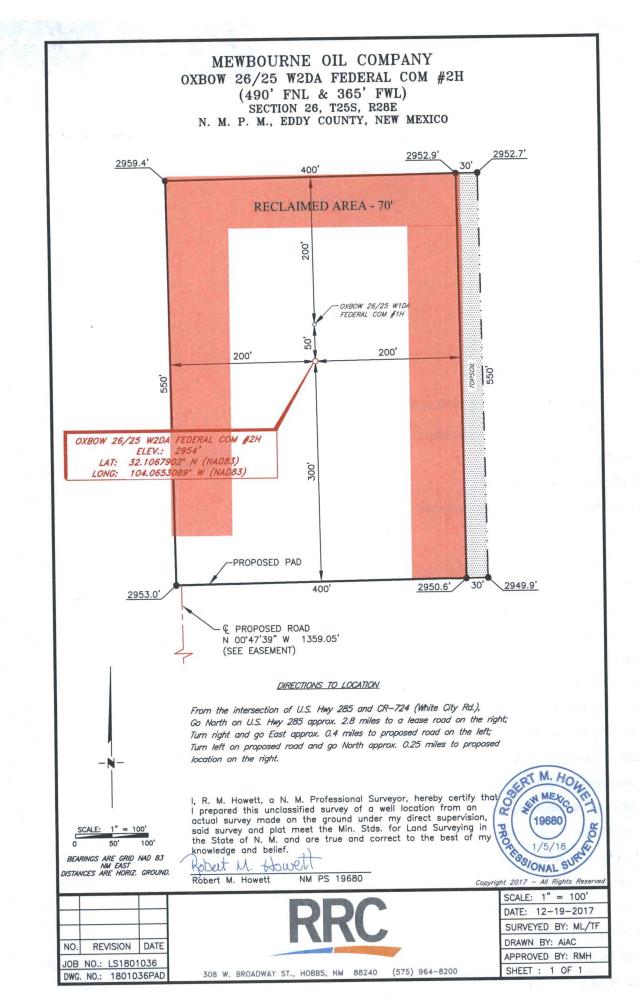






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U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

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: Lined pit PWD on or off channel: Lined pit PWD discharge volume (bbl/day): Lined pit specifications: Pit liner description: Pit liner manufacturers information: Precipitated solids disposal: Decribe precipitated solids disposal: Precipitated solids disposal permit: Lined pit precipitated solids disposal schedule: Lined pit precipitated solids disposal schedule attachment: Lined pit reclamation description: Lined pit reclamation attachment: Leak detection system description: Leak detection system attachment: Lined pit Monitor description: Lined pit Monitor attachment: Lined pit: do you have a reclamation bond for the pit? Is the reclamation bond a rider under the BLM bond? Lined pit bond number: Lined pit bond amount: Additional bond information attachment:

PWD disturbance (acres):

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

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

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

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

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

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

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: Injection PWD discharge volume (bbl/day): Injection well mineral owner:

PWD disturbance (acres):

PWD disturbance (acres):

Injection well type: Injection well number: Assigned 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: 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: Other PWD discharge volume (bbl/day): Other PWD type description: Other PWD type attachment: Have other regulatory requirements been met? Other regulatory requirements attachment:

PWD disturbance (acres):

Injection well name: Injection well API number:

PWD disturbance (acres):



BUREAU OF LAND MANAGEMENT

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 a LM 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: Bond Info Data Report

04/30/2018