

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

J-06-31
FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-83584
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Mewbourne Oil Company - 14744		7. If Unit or CA Agreement, Name and No.
3a. Address PO Box 5270 Hobbs, NM 88240	3b. Phone No. (include area code) 505-393-5905	8. Lease Name and Well No. Federal V Com #4 36002
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1590' FNL & 910' FWL Unit E At proposed prod. zone		9. API Well No. 30-015-35127
14. Distance in miles and direction from nearest town or post office* 17 miles NE of Carlsbad, NM		10. Field and Pool, or Exploratory Burton Flat Morrow - Atoka
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 910'		11. Sec., T., R., M., or Blk. and Survey or Area Sec 8-T20S-R28E
16. No. of Acres in lease 320		12. County or Parish Eddy
17. Spacing Unit dedicated to this well 320		13. State NM
18. Distance from proposed* location to nearest well, drilling, completed, applied for, on this lease, ft. 330'		
19. Proposed Depth 11300'		
20. BLM/BIA Bond No. on file NM1693, Nationwide		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3298' GL		
22. Approximate date work will start* ASAP		
23. Estimated duration 45		

24. Attachments

Captain Controlled Water Basin

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature <i>Kristi Green</i>	Name (Printed/Typed) Kristi Green	Date 07/17/06
Title Hobbs Regulatory		
Approved by (Signature) <i>/s/ Tony J. Herrell</i>	Name (Printed/Typed) <i>/s/ Tony J. Herrell</i>	Date AUG 25 2006
Title FIELD MANAGER		
Office CARLSBAD FIELD OFFICE		

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

Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

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

*(Instructions on reverse)

DECLARED WATER BASIN₃
CEMENT BEHIND THE 13 3/8" CASING SET
AT ± 400' MUST BE CIRCULATED

WITNESS

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

If earthen pits are used in
association with the drilling of this
well, an OCD pit permit must be
obtained prior to pit construction.

DISTRICT I
1626 N. French Dr., Hobbs, NM 88240

DISTRICT II
811 South First, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Artesia, NM 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised March 17, 1999
Instruction on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 73280	Pool Name Burton Flat Morrow
Property Code	Property Name FEDERAL "V"	Well Number 4
OGED No. 14744	Operator Name MEWBOURNE OIL COMPANY	Elevation 3298

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	8	20S	28E		1590	NORTH	910	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein to be true and complete to the best of my knowledge and belief.</p> <p><i>Kristi Green</i></p> <p>Signature Kristi Green</p> <p>Printed Name Hobbs Regulatory</p> <p>Title 07/14/06</p> <p>Date</p> <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>7/13/2006</p> <p>Date Surveyed</p> <p>Signature & Seal of Professional Surveyor</p> <p><i>Herschel E. Jones</i></p> <p>Herschel E. Jones NEW MEXICO 3640</p> <p>Certificate No. Herschel Jones RLS 3640</p> <p>FEDERAL "V" MEWBOURNE OIL COMPANY</p>
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0 330' 660' 990' 1650' 1980' 2310' 2310' 1980' 1650' 990' 660' 330' 0'

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MEWBOURNE OIL COMPANY

Mewbourne Oil Company

Federal V Com #4

1590' FNL & 910' FWL

Sec 8-T20S-R28E

Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, Covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved, and the procedures to be followed in restoring the surface so that a complete appraisal can be made of the environmental impact associated with the proposed operations.

1. Existing Roads:

- A. Exhibit #3 is a road map showing the location of the proposed well (existing roads are highlighted in black). Exhibit #3A is a topographic map showing the location of the proposed well and access road (existing road is highlighted in blue and black).
- B. **Directions to location from Carlsbad:** Go North on CR 206 (Illinois Camp Rd) 11 miles. Turn right (east) on CR237 (Angell Ranch Rd) and go 1.25 miles. Go left (north) and go 0.2 miles. Turn left (west) on lease road and go 0.25 miles. Turn north (right) on new lease road and go 500' to new location.

2. Proposed Access Road:

- A. Will need approx 500' of new road.
- B. The access to the location will be limited to 16' in width and will adequately drain runoff and control erosion as presently constructed.

3. Location of Existing Wells:

There are producing wells within the immediate vicinity of this well site shown on Exhibit 4.

4. Location of Existing and/or Proposed Facilities:

- A. There are no production facilities on this lease at the present time.
- B. In the event that the well is productive, production facilities will be located on the well pad.
- C. All production vessels left on location will be painted to conform with BLM painting stipulations within 180 days of installation.

5. Location and Type of Water Supply

The well will be drilled with a combination of fresh water and brine water based mud systems. The water will be obtained from commercial suppliers in the area and/or hauled to the location by transport trucks over existing and proposed roads as indicated in Exhibit #3.

6. Source of Construction Materials

All material required for construction of the drill pad and access roads will be obtained from private, state, or federal pits. The construction contractor will be solely responsible for securing construction materials required for this operation and paying any royalties that may be required on those materials.

7. Methods of Handling Waste Disposal:

- A. Drill cuttings not retained for evaluation purposed will be disposed of in the reserve pit.
- B. Drilling fluids will be allowed to evaporate in the reserve pit prior to closure.
- C. Water produced during operations will be disposed of in the reserve pit.
- D. If any liquid hydrocarbons are produced during operations, those liquids will be stored in suitable tanks until sold.
- E. Current regulations regarding the proper disposal of human waste will be followed.
- F. All trash, junk, and other waste materials will be stored in proper containers to prevent dispersal and will be removed to an appropriate facility within one week of cessation of drilling and completion activities.

8. Ancillary Facilities

There are no ancillary facilities within the immediate vicinity of the proposed well site.

9. Well Site Layout

- A. A diagram of the drill pad is shown in Exhibit #5. Dimensions of the pad, pits, and location of major rig components are shown.
- B. The reserve pit will be lined with a high quality plastic sheeting to prevent migration of fluids.
- C. The pad dimension of 400' X 250' has been staked and flagged.
- D. An archaeological survey has been conducted on the proposed access road and location pad.

10. Plans for Restoration of Surface

- A. Upon cessation of the proposed operations, if the well is abandoned, the location and road will be ripped and re-seeded. The reserve pit area, after allowing to dry will be leveled. The entire location will be restored to the original contour as much as reasonable possible. All trash, garbage, and pit lining will be hauled to appropriate disposal to assure the location is aesthetically pleasing as reasonable possible. All restoration work will be completed within 180 days of cessation of activities.
- B. The disturbed area will be restored by re-seeding during the proper growing season.
- C. Three sides of the reserve pit will be fenced prior to and during drilling operations. The reserve pit will be fenced on the fourth side after the drilling rig is removed to prevent the endangerment of livestock. The fence will remain in place until the pit area has been leveled and restored.

- D. Upon cessation of the proposed operations, if the well is not abandoned, the reserve pit area will be restored as per BLM/OCD guidelines. Any additional caliche required for production facilities will be obtained from a source as described in Section 6.
- E. Within 90 days of cessation of drilling and completion operations, all equipment not necessary for production operations will be removed. The location will be cleaned of all trash and junk to assure the well site is left as aesthetically pleasing as reasonably possible.

11. Surface Ownership:

The surface is owned by: USA

12. Other Information:

- A. Topography: Refer to the archaeological report for a detailed description of flora, fauna, soil characteristics, dwellings, and historical or cultural sites.
- B. The primary use of the surface at the location is for grazing of livestock.

13. Operator's Representative:

- A. Through APD approval, drilling, completion and production operations:

N.M. Young, District Manager
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
505-393-5905

14. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Mewbourne Oil Company, its contractors and subcontractors, in accordance with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date: 07/17/06

Signature: 

N.M. Young, District Manager
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
(505) 393-5905

Drilling Program
Mewbourne Oil Company
Federal V Com #4
1590' FNL & 910' FWL
Sec 8-T20S-R28E
Eddy County, New Mexico

1. The estimated top of geological markers are as follows:

Yates	1070'
Queen	1680'
Bone Spring	4302'
Wolfcamp	8578'
Penn	9460'
Strawn	9968'
Atoka	10202'
Morrow	10616'
Barnett	11103'

2. Estimated depths of anticipated fresh water, oil, or gas:

Water	Below 200'
Hydrocarbons	All zones below Yates

3. Pressure control equipment:

A 2000 psi working pressure annular BOP will be installed on the 13 3/8" surface casing. A 5000 psi WP Double Ram BOP and a 3000 psi WP Annular will be installed after running 9 5/8" casing. Pressure tests will be conducted prior to drilling out under all casing strings. BOP controls will be installed prior to drilling under surface casing and will remain in use until completion of drilling operations. BOP's will be inspected and operated as recommended in Onshore Order #2 to insure mechanical integrity and the inspection will be recorded on the daily drilling report. Kelly cock and a sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position when the kelly is not in use. MOC would like to waive the low pressure test on both the 13 3/8" and 9 5/8" BOPE testing as per BLM Onshore Oil & Gas Order #2. Would also like to test the 13 3/8" BOP stack with rig pump to 70% of burst rate. Will test the 9 5/8" BOPE to 5000# and hydriil to 1500# with a third party testing company before drilling out of the 9 5/8" casing. Would also like to waive the 2nd testing of the 9 5/8" BOPE before the Wolfcamp, but will test again, if needed, in 30 days from the 1st test as per BLM Onshore Oil and Gas Order #2.

4. Proposed casing and cementing program:

A. Casing Program:

<u>Hole Size</u>	<u>Casing</u>	<u>Wt/Ft.</u>	<u>Grade</u>	<u>Depth</u>
17 1/2"	13 3/8"	48#	H40	0-400'
12 1/4"	9 5/8"	40#	N80/J55	0-3000'
8 3/4"	5 1/2"	17#	P110/N80	0-11300'

Minimum casing design factors: Collapse 1.2, Burst 1.1, Tensile strength 2.0.

B. Cementing Program

- i. Surface Casing: 200 sacks Class C light cement with additives. 400 sks Class C cement containing 2% CaCl.
- ii. Intermediate Casing: 800 Class C light cement with additives. 400 sacks Class C cement containing 2% CaCl.
- iii. Production Casing: 600 sacks Class H cement with additives. Shallower productive zones may be protected by utilizing a multiple stage cementing tool in the production casing below potentially productive zones and cementing with a light cement slurry.

**Mewbourne Oil Company reserves the right to change cement designs as hole conditions may warrant.*

5. Mud Program:

<u>Interval</u>	<u>Type System</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0'-400'	FW spud mud	8.6-9.4	32-34	NA
400'-3000'	Brine water	10.0-10.2	28-30	NA
3000'-10500'	Cut Brine water	8.8-9.2	28-30	NA
10500'-11300	Cut brine water	9.2-9.8	32-42	NA

6. Evaluation Program:

Samples:	10' samples from intermediate casing to TD
Logging:	Compensated density and dual laterlog from intermediate casing to TD
Coring:	As needed for evaluation
Drill Stem Tests:	As needed for evaluation

7. Downhole Conditions

Zones of abnormal pressure:	None anticipated
Zones of lost circulation:	Anticipated in surface and intermediate holes
Maximum bottom hole temperature:	150 degree F
Maximum bottom hole pressure:	8.6 lbs/gal gradient or less

8. Anticipated Starting Date:

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 30 days involved in drilling operations and an additional 10 days involved in completion operations on the project.

Hydrogen Sulfide Drilling Operations Plan
Mewbourne Oil Company
Federal V Com #4
1590' FNL & 910' FWL
Sec 8-T20S-R28E
Eddy County, New Mexico

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 Yates formation for purposes of safety and insurance requirements.

2. Hydrogen Sulfide Training

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

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

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

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

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

3. Hydrogen Sulfide Safety Equipment and Systems

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

1. Well Control Equipment
 - A. Flare line with automatic igniter or continuous ignition source.
 - B. Choke manifold with minimum of one adjustable choke.
 - C. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
 - D. Auxiliary equipment including rotating head and annular type blowout preventer.
2. Protective Equipment for Essential Personnel

Thirty minute self contained work unit located at briefing area as indicated on wellsite diagram.

3. Hydrogen Sulfide Protection and Monitoring Equipment

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

4. Visual Warning Systems

A. Wind direction indicators as indicated on the wellsite diagram.

B. Caution signs shall be posted on roads providing access to location. Signs shall be painted a high visibility color with lettering of sufficient size to be readable at reasonable distances from potentially contaminated areas.

4. Mud Program

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

5. Metallurgy

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

6. Communications

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

7. Well Testing

Drill stem testing is not an anticipated requirement for evaluation of this well. 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.

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

Statement Accepting Responsibility for Operations

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

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

Lease Number: Lease Number #NM-83584

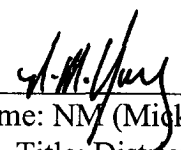
Legal Description of Land: Unit E of Section 8, T-20S, R-28E Eddy County, New Mexico.
Location @ 1590' FNL & 910' FWL.

Formation (if applicable):

Bond Coverage: \$150,000

BLM Bond File: NM1693, Nationwide

Authorized Signature: _____


Name: NM (Micky) Young
Title: District Manager
Date: July 17, 2006

Notes Regarding Blowout Preventer

Mewbourne Oil Company

Federal V Com #4

1590' FNL & 910' FWL

Sec 8-T20S-R28E

Eddy County, New Mexico

- I. Drilling nipple (bell nipple) to be constructed so that it can be removed without the use of a welder through the opening of the rotary table, with minimum internal diameter equal to blowout preventer bore.
- II. Blowout preventer and all fittings must be in good condition with a minimum 5000 psi working pressure.
- III. Safety valve must be available on the rig floor at all times with proper connections to install in the drill string. Valve must be full bore with minimum 5000 psi working pressure.
- IV. Equipment through which bit must pass shall be at least as large as internal diameter of the casing.
- V. A kelly cock shall be installed on the kelly at all times.

Blowout preventer closing equipment to include and accumulator of at least 40 gallon capacity, two independent sources of pressure on closing unit, and meet all other API specifications.

Mewbourne Oil Company
BOP Schematic for
12 1/4" Hole

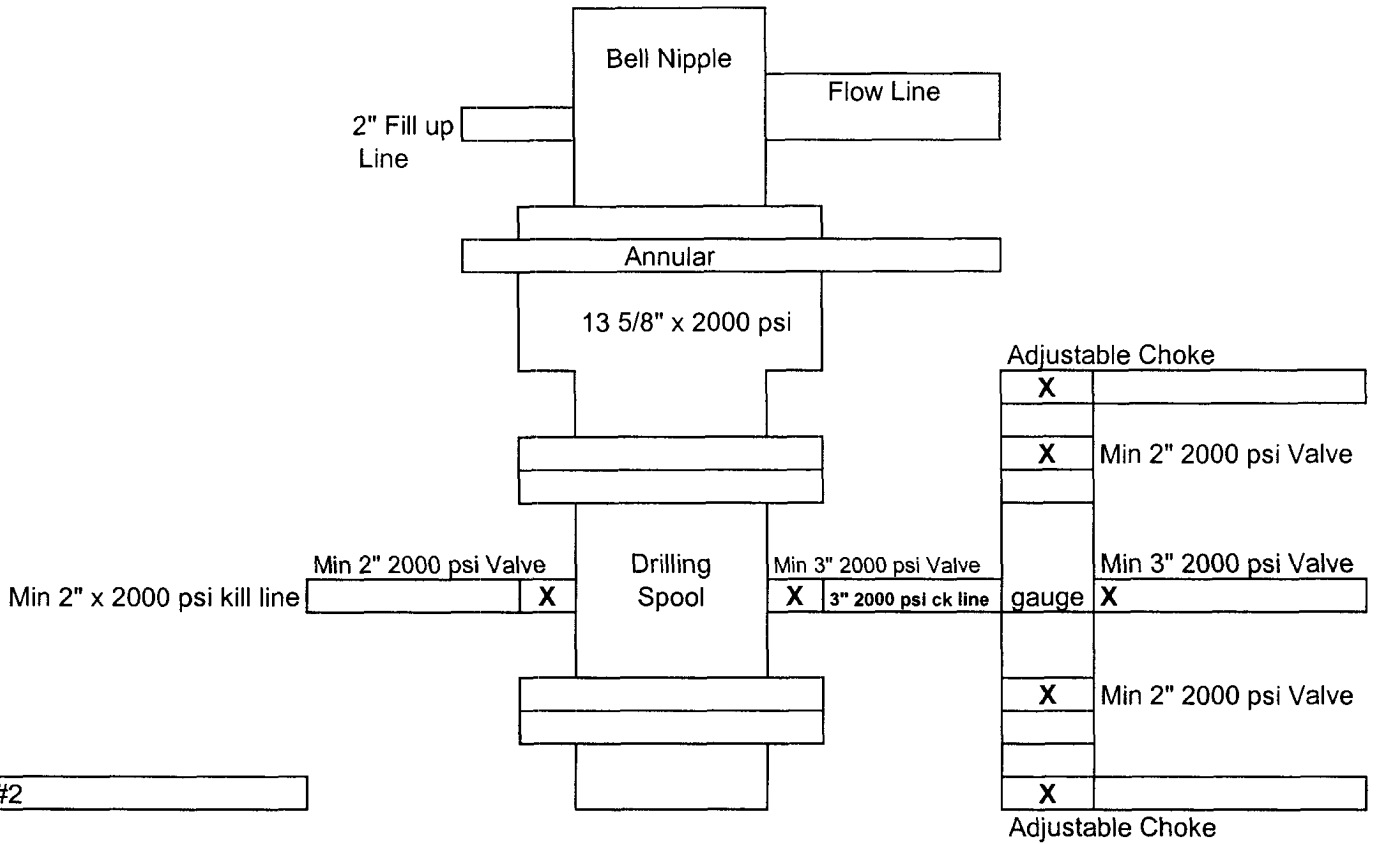


Exhibit #2

Federal V Com #4
1590' FNL & 910' FWL
Sec 8-T20S-R28E
Eddy County, NM

Mewbourne Oil Company

BOP Schematic for
8 3/4" or 7 7/8" Hole

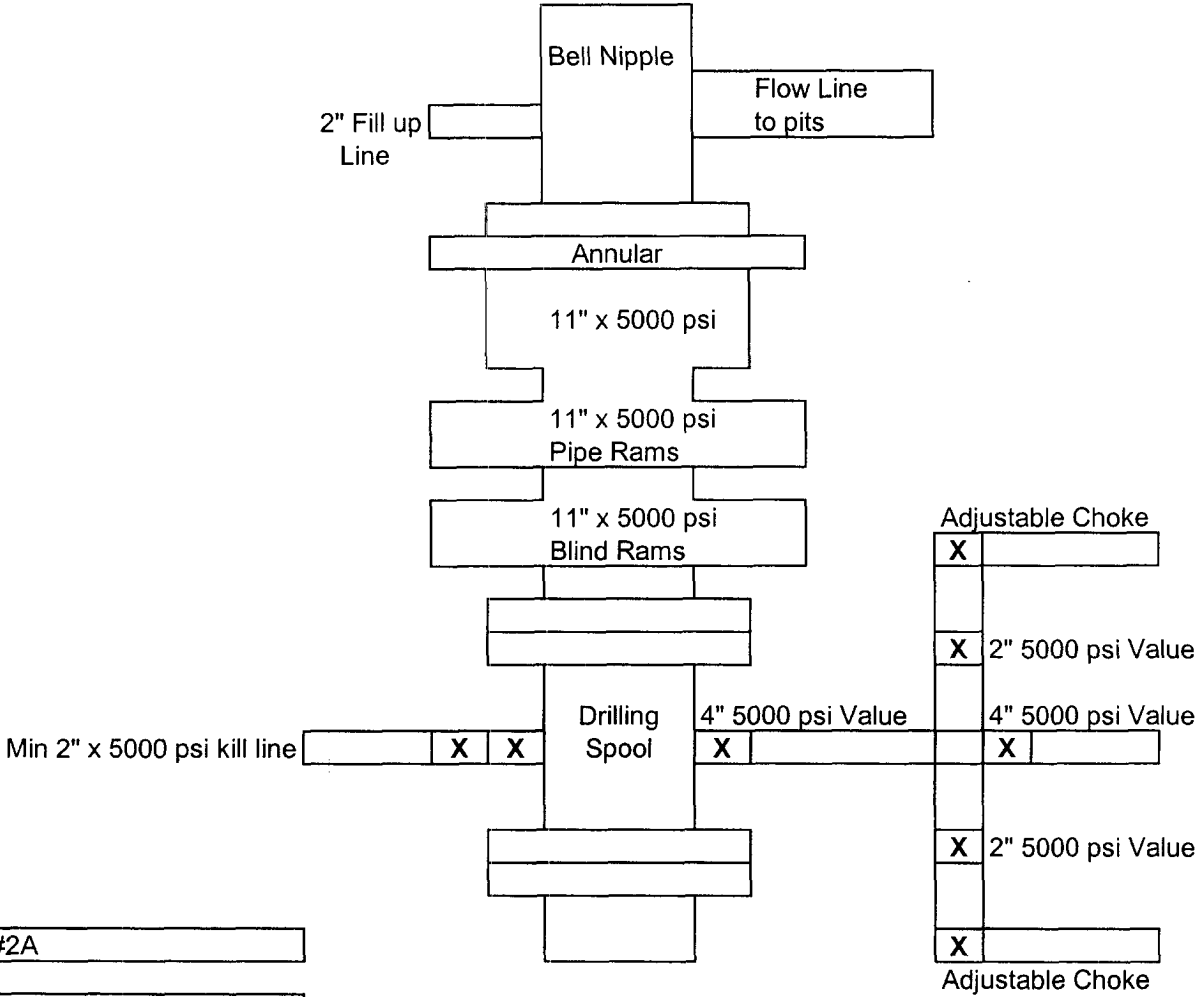


Exhibit #2A

Federal V Com #4
1590' FNL & 910' FWL
Sec 8-T20S-R28E
Eddy County, NM

Exhibit #4
Status of Wells in Immediate Vicinity
Mewbourne Oil Company
Federal V Com 4
1590' FNL & 910' FWL
Sec 8-T20S-R28E
Eddy County, New Mexico

Section 8-T20S-R28E

Operator: Mewbourne Oil Company
Well Name: Federal V #1
Unit letter: G
Status: Flowing
Field: Burton Flat Morrow

Operator: Mewbourne Oil Company
Well Name: Federal V #2
Unit letter: B
Status: P&A
Field: Old Millman Ranch Bone Spring

Operator: Mewbourne Oil Company
Well Name: Federal V #3
Unit letter: E
Status: T&A
Field: Delaware

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Mewbourne Oil Company Well No. 4 - Federal V Com

Location: 1590' FNL & 910' FWL sec. 8, T. 20 S., R. 28 E.

Lease: NM-83584

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I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at (505) 361-2822 in sufficient time for a representative to witness:
 - A. Spudding
 - B. Cementing casing: 13-3/8 inch 9-5/8 inch 5-1/2 inch
 - C. BOP tests
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
3. Include the API No. assigned to well by NMOCD on the subsequent report of setting the first casing string.
4. A Hydrogen Sulfide Contingency Plan should be activated prior to drilling in the Delaware formation. A copy of the plan shall be posted at the drilling site.
5. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

II. CASING:

1. 13-3/8 inch surface casing should be set at approximately 400 feet, below usable water and circulate cement to the surface. If cement does not circulate to the surface, the Carlsbad Field Office shall be notified at (505) 361-2822 and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
2. Minimum required fill of cement behind the 9-5/8 inch intermediate casing set at approximately 3000 feet is sufficient to circulate to the surface.
3. Minimum required fill of cement behind the 5-1/2 inch production casing is sufficient to tie back 500 feet above the uppermost perforation in the pay zone.

III. PRESSURE CONTROL:

1. Before drilling below the 13-3/8 inch surface casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve. Before drilling below the 9-5/8 inch intermediate casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer, Two Ram-Type Preventers, and a Kelly Cock/Stabbing Valve.
2. Before drilling below the 13-3/8 inch surface casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi. Before drilling below the 9-5/8 inch intermediate casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 3000 psi.

CONDITIONS OF APPROVAL - DRILLING (CONTINUED)

Operator's Name: Mewbourne Oil Company Well No. 4 - Federal V Com

Location: 1590' FNL & 910' FWL sec. 8, T. 20 S., R. 28 E.

Lease: NM-83584

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III. PRESSURE CONTROL:

3. After setting the 9-5/8 inch intermediate casing string and before drilling into the Wolfcamp formation, the BOPE shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

A. The Carlsbad Field Office shall be notified at (505) 361-2822 in sufficient time for a representative to witness the tests.

B. The tests shall be done by an independent service company.

C. The results of the test will be reported to the BLM Carlsbad Field Office at 620 East Greene Street, Carlsbad, New Mexico 88220-6292.

D. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

E. Testing must be done in a safe workman like manner. Hard line connections shall be required.

IV. DRILLING MUD:

1. 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. Monitoring equipment shall consist of the following:

A. Recording pit level indicator to indicate volume gains and losses.

B. Flow-sensor on the flow-line to warn of abnormal mud returns from the well.