

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

OCD-ARTESIA

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

## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL☐ REENTER1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other☒ Single Zone ☐ Multiple Zone

2. Name of Operator

Mewbourne Oil Company (14744)

3a. Address

P.O. Box 5270 Hobbs, NM 88240

3b. Phone No. (include area code)

505-393-5905

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)

At surface 3500 FSL & 1980' FWL Lot 14

At proposed prod. zone

*per attached SW dated 7-31-04*

14. Distance in miles and direction from nearest town or post office\*

15 miles NE of Carlsbad on US 62/180

15. Distance from proposed\*

location to nearest property or lease line, ft.

(Also to nearest drig. unit line, if any) 1980'

16. No. of Acres in lease

320

17. Spacing Unit dedicated to this well

320

18. Distance from proposed location\*

to nearest well, drilling, completed, applied for, on this lease, ft.

1600'

19. Proposed Depth

12900'

20. BLM/BIA Bond No. on file

NM-1693 Nationwide

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

3506' GL

22. Approximate date work will start\*

ASAP

23. Estimated duration

45 days

## 24. Attachments

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

*Kristi Green*

Name (Printed/Typed)

Kristi Green

Date

07/17/06

Title

Hobbs Regulatory

Approved by (Signature)

/s/ Jesse J. Juen

Name (Printed/Typed)

/s/ Jesse J. Juen

Date

SEP 26 2006

Title

ACTING

STATE DIRECTOR

Office

NM STATE 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.

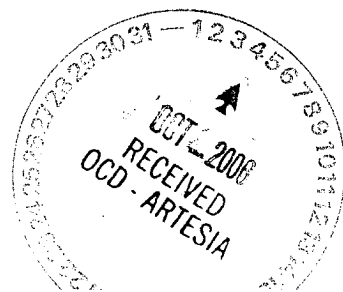
\*(Instructions on reverse)

DECLARED WATER BASIN  
CEMENT BEHIND THE 13 3/8" CASING SET  
AT ± 1900' MUST BE CIRCULATED

WITNESS

DECLARED WATER BASIN  
CEMENT BEHIND THE 20" CASING SET  
AT ± 250' MUST BE CIRCULATED

WITNESS

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED  
OMB No. 1004-0135  
Expires: January 31, 2004**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.
NM-29588
6. If Indian, Allottee or Tribe Name
7. If Unit or CA/Agreement, Name and/or No.
8. Well Name and No.
Quahada Ridge 5 Federal #3
9. API Well No.
10. Field and Pool, or Exploratory Area
Golden Lane Morrow
11. County or Parish, State
Eddy, NM

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other	
2. Name of Operator Mewbourne Oil Company 14744	
3a. Address PO Box 5270 Hobbs, NM 88240	3b. Phone No. (include area code) 505-393-5905
4. Location of Well (Footage, Sec., T, R., M., or Survey Description) 3430' FSL & 1980' FWL of Sec 5-T21S-R29E Lot 14	

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Moved location</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

3. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Mewbourne Oil Company restaked and moved the above caption well from 3430' FSL & 1980' FWL to 3500' FSL & 1980' FWL per Barry Hunt w/BLM Carlsbad office. New Survey plat enclosed & new location has been re-arched. If you have any questions, please call Terry Burke at 505-393-5905.

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

Kristi Green

Title Hobbs Regulatory Asst

Signature



Date 07/31/06

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

ACTING

Approved by (Signature) /s/ Jesse J. Juen

Name (Printed/Typed) /s/ Jesse J. Juen

Title STATE DIRECTOR

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office NM STATE OFFICE

Date SEP 26 2006

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

(Continued on next page)

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II  
1301 W. Grand Avenue, Artesia, NM 88210

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

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised October 12, 2005

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 77560	Pool Name Golden Lane Morrow
Property Code	Property Name QUAHADA "5" FEDERAL	Well Number 3
OGRID No. 14744	Operator Name MEWBOURNE OIL COMPANY	Elevation 3505'

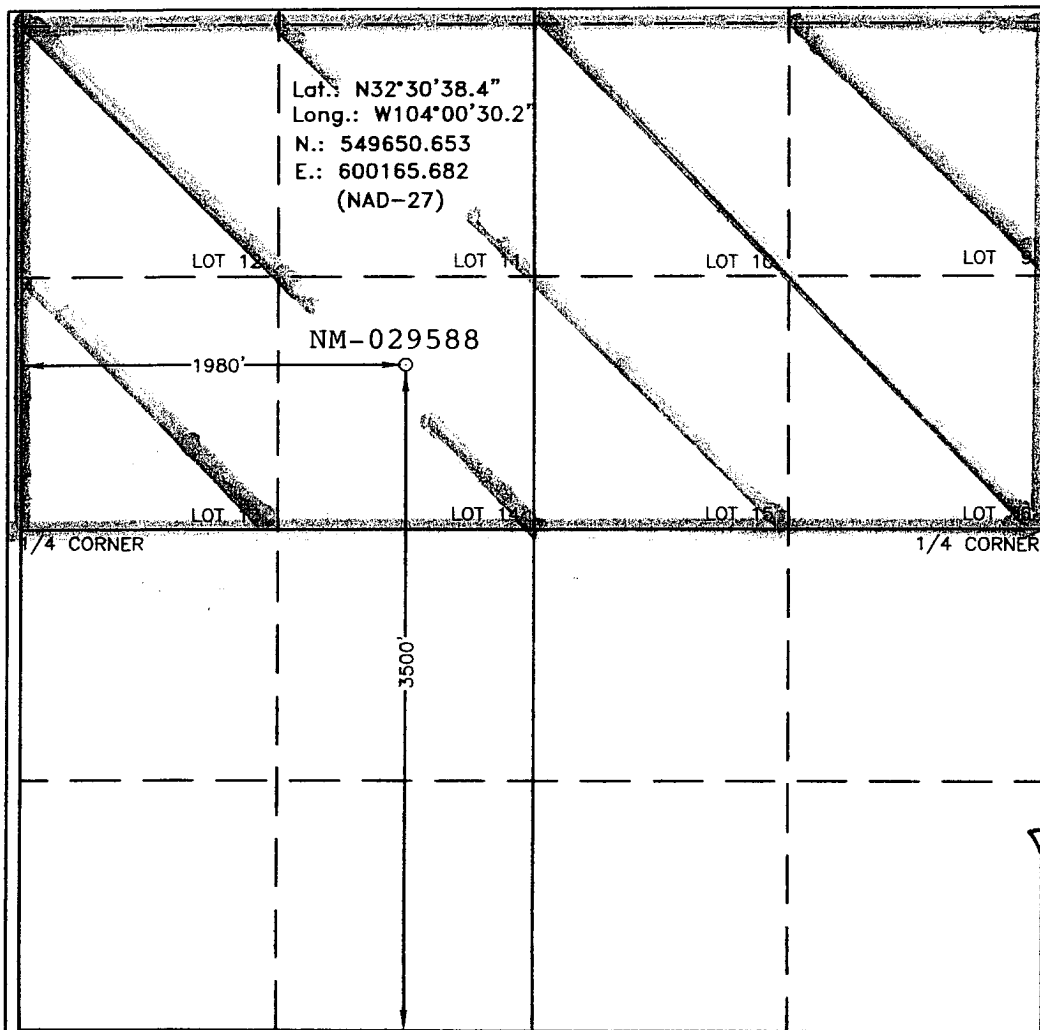
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
LOT 14	5	21 S	29 E		3500	SOUTH	1980	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 320	Joint or Infill	Consolidation Code	Order No.						

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



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

*Kristi Green* 7/31/06  
Signature Date  
Kristi Green

Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JULY 27, 2006

Date Surveyed L. JONES  
Signature & Seal of  
Professional Surveyor

Professional Surveyor  
O. No. 6988  
Certificate No. 7977

BASIN SURVEYS

**MULTI-POINT SURFACE USE AND OPERATIONS PLAN**

**MEWBOURNE OIL COMPANY**

Quahada Ridge 5 Federal #3

3430' FSL & 1980' FWL

Section 5-T21S-R29E

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 and proposed improved road is highlighted in blue. Exhibit #3A is a topographic map showing the location of the proposed well and access road.
- B. **Directions to location: NE from Carlsbad, NM on US 62/180 16 miles. Turn right (south) on lease road. Continue south 1.1 mile. Turn right and go 0.5 miles. Turn right into new location.**

**2. Proposed Access Road:**

- A. Will improve 600' of existing 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 is in the process of being 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 per BLM guidelines. 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 reasonably 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 with a mixture of native grasses as stipulated by the BLM.
- 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 as outlined above within the prescribed amount of time. 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: *the USA Federal Government* *BA per M.J.*

**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 operations and 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*

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

## **Drilling Program**

Quahada Ridge 5 Federal #3  
3430' FSL & 1980' FWL  
Section 5-T21S-R29E  
Eddy County, New Mexico

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

Rustler	825'	Wolfcamp	9978'
Yates	1825	Strawn	11192'
Capitan Reef	2122'	Atoka	11423'
Delaware	3499'	Morrow	12028'
Bone Spring	6645'	Barnett	12750'

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

Water	Below 100'
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 will run a flow nipple and run a diverter on top of 20". 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 hydril 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>
26"	20"	94#	K55	0-250'
17 1/2"	13 3/8"	54.5#	J55	0-1900'
12 1/4"	9 5/8"	40#	J55-N80	0-3400'
8 3/4"	5 1/2"	17#	HCP110-N80	0-12900'

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

#### **B. Cementing Program**

- i. Surface Casing: 400 sacks Class C light cement with additives. 200 sks Class C cement containing 2% CaCl.
- ii. Deep Surface Casing: 800 Class C light cement with additives. 400 sacks Class C cement containing 2% CaCl.
- iii. Intermediate Casing: 800 Class C light cement with additives. 400 sacks Class C cement containing 2% CaCl.
- iv. 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'-250'	FW spud mud	8.6-9.4	32-34	NA
250'-1900'	Brine water	10.0-10.2	28-30	NA
1900'-3400'	FW	8.6-9.4	28-30	NA
3400'-11500'	Cut brine water	8.8-9.5	28-30	NA
11500'-TD	Cut brine water	9.5-10.0	30-35	6-10 WL

## 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**  
Quahada Ridge 5 Federal #3  
3430' FSL & 1980' FWL  
Section 5-T21S-R29E  
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 H<sub>2</sub>S were found. MOC will have on location and working all H<sub>2</sub>S 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-029588

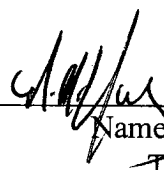
Legal Description of Land: Section 5, T-21S, R-29E Eddy County, New Mexico.  
Location @ 3430' FSL & 1980' FWL.

Formation (if applicable):

Bond Coverage: \$150,000

BLM Bond File: NM1693, Nationwide

Authorized Signature: \_\_\_\_\_

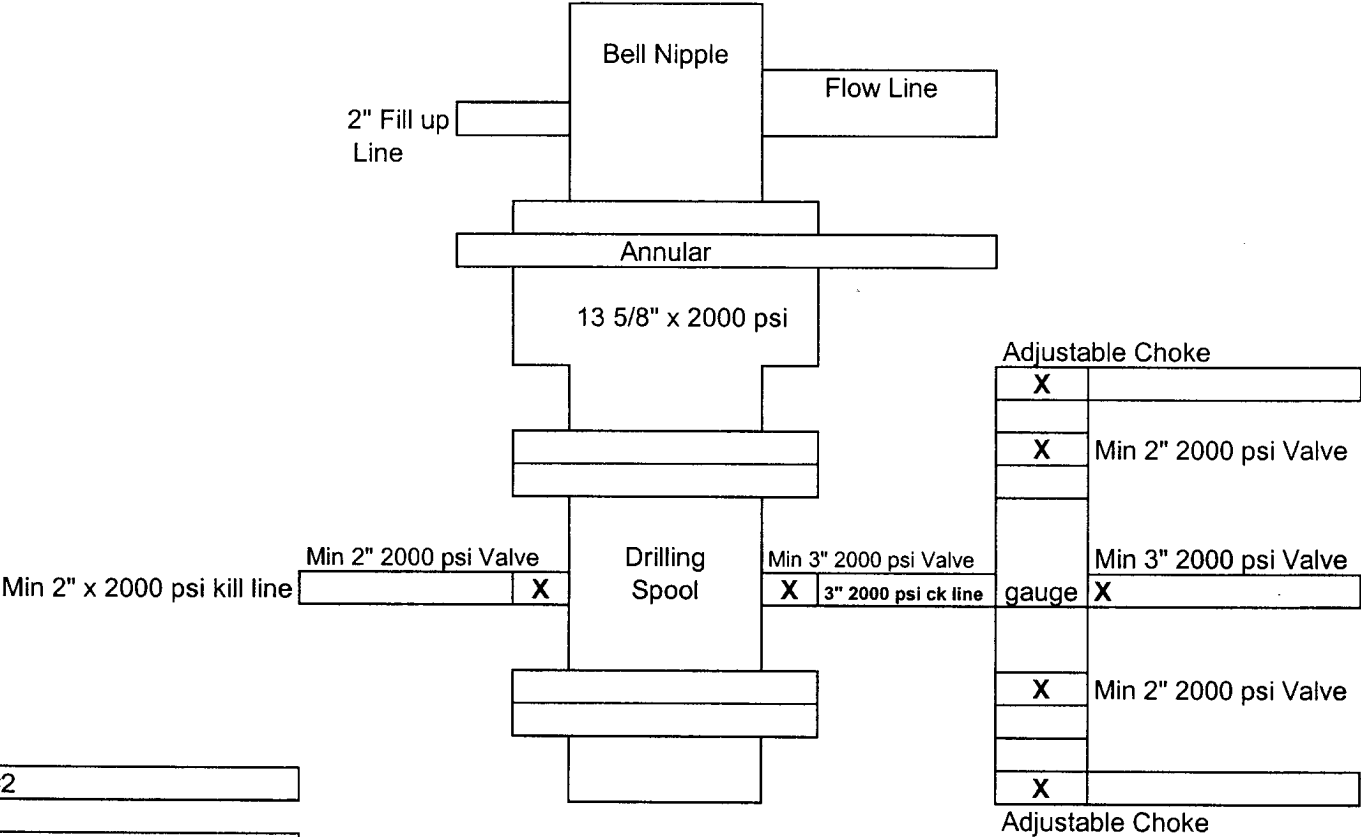
  
Name: NM (Micky) Young  
Title: District Manager  
Date: July 17, 2006

**Notes Regarding Blowout Preventer**

**Mewbourne Oil Company**  
Quahada Ridge 5 Federal #3  
3430' FSL & 1980' FWL  
Section 5-T21S-R29E  
Eddy County, New Mexico

1. 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.
2. Blowout preventer and all fittings must be in good condition with a minimum 5000 psi working pressure.
3. 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.
4. Equipment through which bit must pass shall be at least as large as internal diameter of the casing.
5. A kelly cock shall be installed on the kelly at all times.
6. 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 Scematic for  
 12 1/4" Hole



Mewbourne Oil Company  
BOP Schematic for  
8 3/4" or 7 7/8" Hole

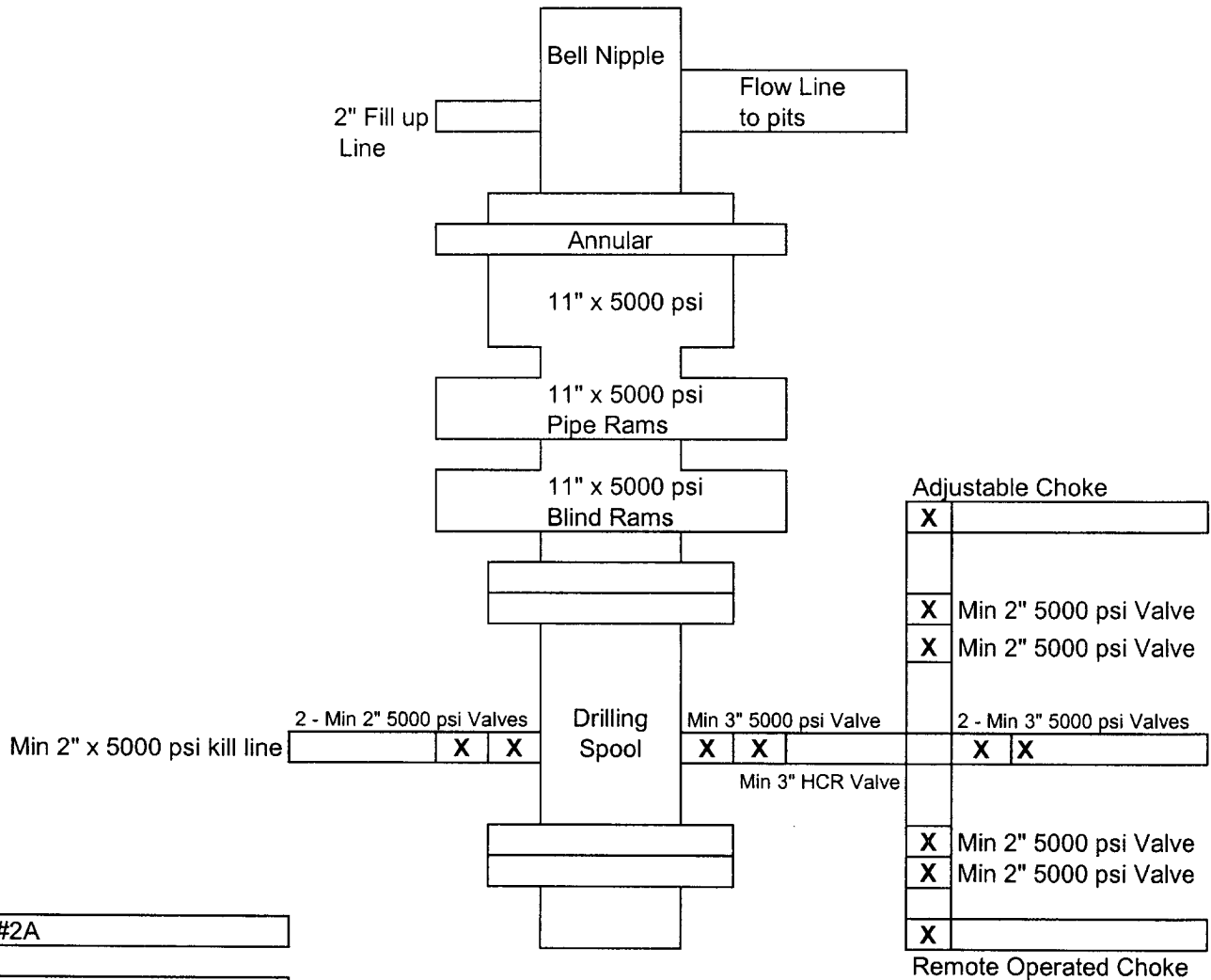
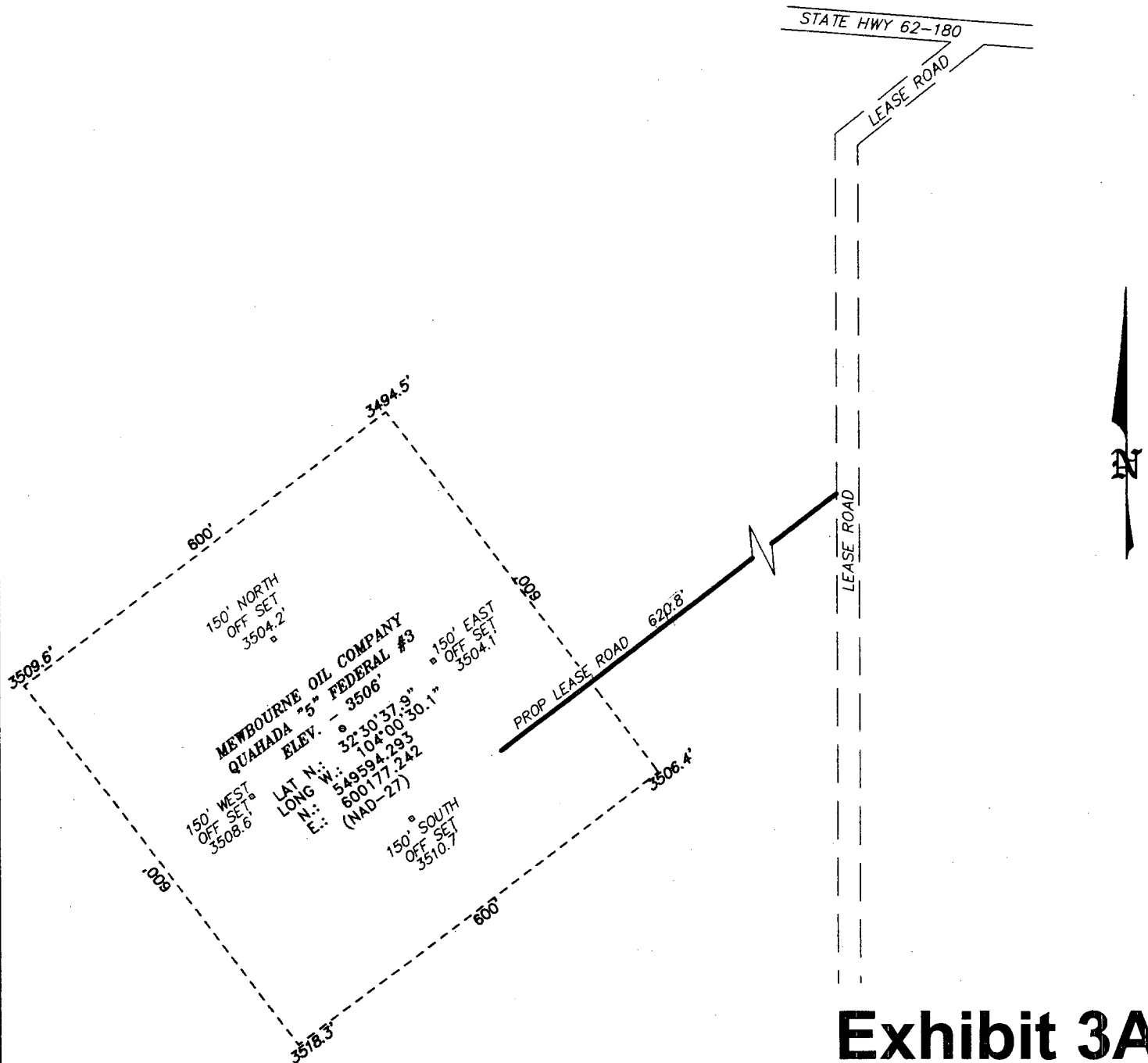


Exhibit #2A

Quahada Ridge 5 Federal #3  
3430' FSL & 1980' FWL  
Sec 5-T21S-R29E  
Eddy, County  
New Mexico

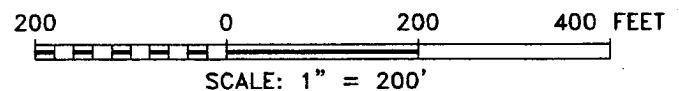
SECTION 5, TOWNSHIP 21 SOUTH, RANGE 29 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



# Exhibit 3A

DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF STATE HWY 62-180 AND CO.  
RD. 31, GO WEST 1.0 MILE TO LEASE ROAD OR 0.3  
MILE WEST OF MILE MARKER 52; THENCE SOUTH 0.7  
MILE TO LEASE ROAD, ON LEASE ROAD GO  
SOUTHWEST 0.3 MILE TO LEASE ROAD; THENCE  
SOUTH 0.2 MILE TO PROPOSED LEASE ROAD.



**MEWBOURNE OIL COMPANY**

REF: QUAHADA "5" FEDERAL #3 / WELL PAD TOPO

THE QUAHADA "5" FEDERAL #3 LOCATED 3430'  
FROM THE SOUTH LINE AND 1980' FROM THE WEST LINE OF  
SECTION 5, TOWNSHIP 21 SOUTH, RANGE 29 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

**BASIN SURVEYS** P.O. BOX 1786—HOBBS, NEW MEXICO

W.O. Number: 6769	Drawn By: J. SMALL
-------------------	--------------------

Date: 06-19-2006

Disk: JMS 6769W

Survey Date: 06-17-2006

Sheet 1 of 1 Sheets

**Exhibit #4**  
**Status of Wells in Immediate Vicinity**  
**Mewbourne Oil Company**  
Quahada Ridge 5 Federal #3  
3430' FSL & 1980' FWL  
Section 5-T21S-R29E  
Eddy County, New Mexico

**Section 4-T21S-R29E**

Operator: Meadco Properties LTD  
Well Name: Harris Bell Federal #1  
Unit letter: Unit H  
Status: P&A  
Field: Strawn

**Section 5-T21S-R29E**

Operator: Meadco Properties LTD  
Well Name: Harris Federal #2  
Unit letter: Unit N  
Status: Plugged  
Field: Golden Lane Morrow

**Section 5-T21S-R29E**

Operator: Mewbourne Oil Company  
Well Name: Quahada Ridge 5 Federal #1  
Unit letter: Unit O  
Status: Flowing  
Field: Golden Lane Morrow

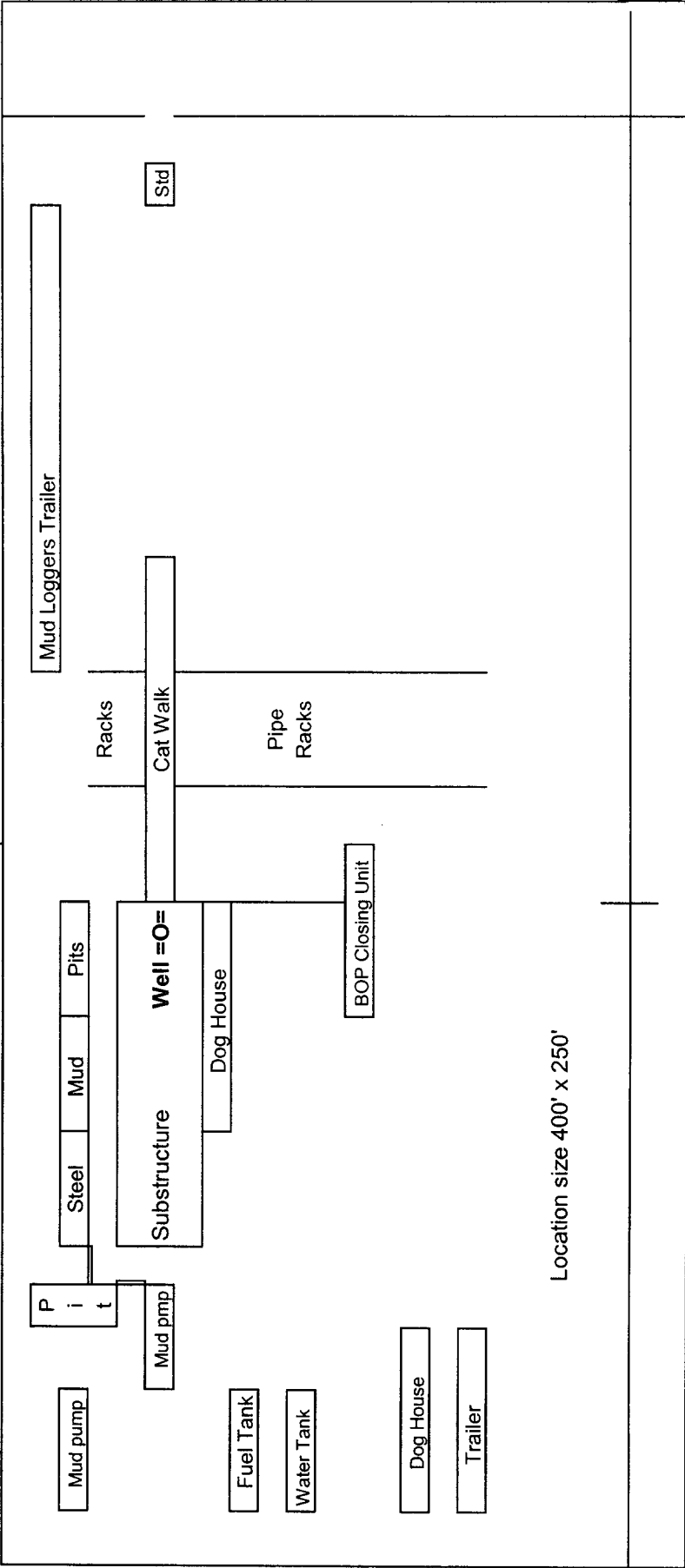
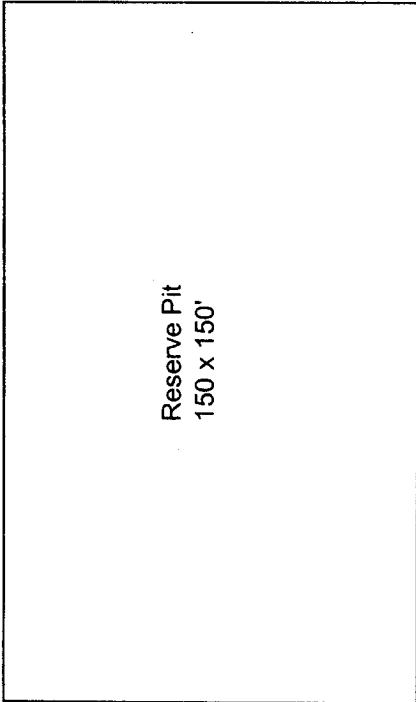


Mewbourne Oil Company

Exhibit #5

SW

Well Name Quahada Ridge 5 Federal #3  
Footages 3430' FSL & 1980' FWL  
STR Sec 5-T21S-R29E  
County Eddy, County  
State New Mexico



Rig Location Schematic

## SPECIAL DRILLING STIPULATIONS

### THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name: Mewbourne Oil Company Well Name & #: Quahada Ridge 5 Fed. #3  
Location 3500 F S L & 1980 F W L; Sec. 05, T. 21 S., R. 29 E.  
Lease #: NM-029588 County: Eddy State: New Mexico

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CRF 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

#### I. SPECIAL ENVIRONMENT REQUIREMENTS

- ( ☒ ) Lesser Prairie Chicken (stips attached) ( ) Flood plain (stips attached)  
( ) San Simon Swale (stips attached) ( ) Other

#### II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

( ☒ ) The BLM will monitor construction of this drill site. Notify the ( ☒ ) Carlsbad Field Office at (505) 234-5972 ( ) Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

( ☒ ) Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche upon completion of well and it is determined to be a producer.

( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately \_\_\_\_\_ inches in depth. Approximately \_\_\_\_\_ cubic yards of topsoil material will be stockpiled for reclamation.

( ☒ ) Other. **V-Door Northwest (Reserve pits to the Southwest).**

#### III. WELL COMPLETION REQUIREMENTS

( ) A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

( ☒ ) Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of 1/2 inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

- |   |   |
|---|---|
| ( ) A. Seed Mixture 1 (Loamy Sites)                   | ( <input checked="" type="checkbox"/> ) B. Seed Mixture 2 (Sandy Sites) |
| Side Oats Grama ( <i>Bouteloua curtipendula</i> ) 5.0 | Sand Dropseed ( <i>Sporobolus cryptandrus</i> ) 1.0                     |
| Sand Dropseed ( <i>Sporobolus cryptandrus</i> ) 1.0   | Sand Lovegrass ( <i>Eragrostis trichodes</i> ) 1.0                      |
|   | Plains Bristlegrass ( <i>Setaria macrostachya</i> ) 2.0                 |
| ( ) C. Seed Mixture 3 (Shallow Sites)                 | ( ) D. Seed Mixture 4 (Gypsum Sites)                                    |
| Side oats Grama ( <i>Boute curtipendula</i> ) 1.0     | Alkali Sacaton ( <i>Sporobolus airoides</i> ) 1.0                       |
|   | Four-Wing Saltbush ( <i>Atriplex canescens</i> ) 5.0                    |

( ) OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

( ☒ ) Other

All above ground structures are to be painted a flat, non-reflective Shale Green color.

## RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6-mil plastic. Mineral material extracted from within the boundary of the APD during construction of the well pad and reserve pits and be used for the construction of this well pad and its immediate access road only, as long as that portion of the access road it is use on remains on-lease. Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

## OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- (1) Lined as specified above and
- (2) A temporary or emergency pit may be constructed immediately adjacent to the reserve pit as long as the pit remains within the APD boundary. Mineral material removed from this pit may be used for the construction of this well pad only and its immediate access road, as long as that portion of the access road the material is used on remains on-lease. Removal of any material from the APD boundary for use on other well locations or roads must first be purchased from BLM.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be re-contoured, all trash removed, and reseeded as specified in this permit.

## CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to process by BLM.

## TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

PRAIRIE CHICKENS

No surface use is allowed during the following time periods; unless otherwise specified, this stipulation does not apply to operation and maintenance of production facilities.

On the lands described below:

T. 21 S., R. 29 E.  
Section 05: ALL

For the purpose of: Protecting Prairie Chickens:

Drilling for oil and gas, and 3-D geophysical exploration operations will not be allowed in Lesser Prairie Chicken Habitat during the period of March 15 through June 15, each year. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 a.m. and 9:00 a.m. The 3:00 a.m. and 9:00 a.m. restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during the period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Mewbourne Oil Company Well No. 3 - Quahada Ridge 5 Federal

Location: 3430' FSL & 1980' FWL sec. 5, T. 21 S., R. 29 E.

Lease: NM-029588

*per attached SD dated 7-31-06*

### 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: 20 inch 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. Gamma-Ray/Neutron logs shall be run from the base of the Salado formation to the surface; cable speed not to exceed 30 feet per minute.

### II. CASING:

1. 20 inch surface casing should be set at approximately 250 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 13-3/8 inch salt protection casing set at approximately 1900 feet is sufficient to circulate to the surface.

3. Minimum required fill of cement behind the 9-5/8 inch intermediate casing set at approximately 3400 feet is sufficient to circulate to the surface.

4. 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 salt protection 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 salt protection 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. 3 - Quahada Ridge 5 Federal

Location: 3430' FSL & 1980' FWL sec. 5, T. 21 S., R. 29 E.

Lease: NM-029588

3500'

permitted by SN dated 7-31-06 AA

**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.



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

Mewbourne Oil Company  
P.O. Box 5270  
Hobbs, NM 88240  
Attn: Mr. Mickey Young or to Whom It May Concern:

Dear Mr. Young or To Whom It May Concern:

**RE: Mewbourne Oil Company: Application to drill (APD) for the Quahada Ridge 5 Federal # 3,  
Located in Lot 14, of Section 5, Township 21 South, Range 29 East, Eddy County, New Mexico NMPM.**

In reference to the above noted APD, the New Mexico Oil Conservation Division (NMOCD) will require (in apart) that drilling mud samples from the flow line be sampled every 100' in order to determine chloride levels during the drilling of the Capitan Reef section of the well bore. Results are to be submitted to our office before drilling to total depth of the well bore.

Please call me if you have any questions about this matter.

Respectfully yours,

Bryan G. Arrant  
NMOCD's District II Geologist  
Artesia, New Mexico  
505-748-1283 ext. 103

CC: well file