

N.M. Oil Cons. DIV-Dist. 2

1301 W. Grand Avenue

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
Artesia, NM 88210

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-89882	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input 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		8. Lease Name and Well No. Tamano "15" Federal #3 35258	
3b. Phone No. (include area code) 505-393-5905 58640		9. API Well No. 30-015-34442	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 400' FNL & 1900' FWL Unit Letter C At proposed prod. zone		10. Field and Pool, or Exploratory Tamano Bone Spring	
14. Distance in miles and direction from nearest town or post office* 12 miles SE of Loco Hills, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec 15-T18S-R31E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 400'		12. County or Parish Eddy	
16. No. of Acres in lease 320		13. State NM	
17. Spacing Unit dedicated to this well 40			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 280'		20. BLM/BIA Bond No. on file NM1693, Nationwide	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3686' GL		22. Approximate date work will start* ASAP	
		23. Estimated duration 30	

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.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 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). | 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 10/17/05
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Title

Hobbs Regulatory

Approved by (Signature) <i>/s/ Joe G. Lara</i>	Name (Printed/Typed) <i>/s/ Joe G. Lara</i>	Date NOV 22 2005
Title <i>ACTING</i> 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)

Salt  
19.5

Witness Surface Casing

Capitan Controlled Water Basin

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

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

DISTRICT II  
811 South First, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, 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 58040	Pool Name Tamano Bone Spring
Property Code	Property Name TAMANO "15" FEDERAL	Well Number 3
OGRID No. 14744	Operator Name MEWBOURNE OIL COMPANY	Elevation 3686

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	15	18S	31E		400	NORTH	1900	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 40	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

<p>Diagram details: A well location is shown within a 1900' x 1900' area. Bearings and distances are noted: N.32°45'13.2", W.103°51'35.1", N.638178.5, E.645750.8 (NAD-27). Lease #NM89882 is indicated. Other labels include 3686, 3689, 3682, 3684, and 'BROTHERS PROD'S JOHNSON B FED A/C'.</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Kristi Green</i> Signature Kristi Green Printed Name Hobbs Regulatory Title 10/17/05 Date</p> <p><b>SURVEYOR CERTIFICATION</b></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>9/20/2005 Date Surveyed Signature &amp; Seal of Professional Surveyor HERSCHELL L. JONES NEW MEXICO Certificate No. Herschel L. Jones RLS 3640 TAMANO 15-3 GENERAL SURVEYING COMPANY PROFESSIONAL LAND SURVEYOR</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**

**Tamano "15" Federal #3**

**400' FNL & 1900' FWL**

**Sec 15-T18S-R31E**

**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. Exhibit #3A is a topographic map showing the location of the proposed well and access road. Existing roads are highlighted in red and proposed roads are highlighted in yellow.
- B. **Directions to location: East from Artesia thru Loco Hills on US 82. Continue east 5.5 miles to Eddy CR222. Turn Right (south) on CR222 and continue south 4.1 miles. Turn left (SE) on CR249 (Westall Rd) & continue SE 1.4 miles. Turn left (NE) & continue 1.1 miles. Turn left (north) & continue 0.1 miles. Turn left (west) & continue west 0.8 miles. Turn left (south) then right (SW) 0.2 miles to location on right.**

#### **2. Proposed Access Road:**

- A. No new road will be needed.
- 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 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: Bureau of Land Management

**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: 10/17/05

Signature: 

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

**Drilling Program**  
**Mewbourne Oil Company**  
Tamano "15" Federal #3  
400' FNL & 1900' FWL  
Sec 15-T18S-R31E  
Eddy County, New Mexico

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

Yates	2100'
Delaware	4600'
Bone Spring	5544'
TD	9000'

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

Water	Approximately 200'
Hydrocarbons	All zones below Delaware

**3. Pressure control equipment:**

A 2000 psi working pressure annular BOP will be installed on the 13 3/8" surface casing. A 3000 psi WP Double Ram BOP and a 3000 psi WP Annular will be installed after running 8 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.

**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>	<b>WITNESS</b>
17 1/2"	13 3/8"	48#	H40	0-700'	
12 1/4"	8 5/8"	32#	J55	0-2150'	
7 7/8"	5 1/2"	17#	L80 & J55	0-9000'	

Minimum casing design factors: Collapse 1.125, Burst 1.0, Tensile strength 1.8.

**B. Cementing Program**

- i. Surface Casing: 400 sacks Class "C" light cement containing ½ #/sk cellophane flakes, 2% CaCl, 5 lbs/sack gilsonite. 200 sacks Class "C" cement containing 2% CaCl.
- ii. Intermediate Casing: 600 sacks 35:65 pozmix cement containing 6% gel, 5 lbs/sack gilsonite. 400 sacks Class "C" cement containing 2% CaCl.
- iii. Production Casing: 1200 sacks Class "H" cement containing fluid loss additive, friction reducer additive, compressive strength enhancer, and NaCl. 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'-700'	FW spud mud	8.6-9.4	32-34	NA
700'-2150'	Brine water	10.0-10.2	28-30	NA
2150'-9000'	Cut brine water	8.8-9.2	28-30	8-12

**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**

Tamano "15" Federal #3

400' FNL & 1900' FWL

Sec 15-T18S-R31E

Eddy County, New Mexico

#### **1. 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:

- A. The hazards and characteristics of hydrogen sulfide gas.
- B. The proper use of personal protective equipment and life support systems.
- C. The proper use of hydrogen sulfide detectors, alarms, warning systems, briefing areas, evacuation procedures.
- D. The proper techniques for first aid and rescue operations.

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

- A. 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.
- B. Corrective action and shut in procedures, blowout prevention, and well control procedures while drilling a well.
- C. 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.

#### **2. 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.

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



**B. Protective Equipment for Essential Personnel**

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

**C. 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.

**D. Visual Warning Systems**

1. Wind direction indicators as indicated on the well site diagram.
2. 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.

**3. 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.

**4. 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.

**5. Communications**

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

**6. 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.

**7. General Requirements**

MOC has researched this area and no high concentrations of H<sub>2</sub>S was found. MOC will have on location and working all H<sub>2</sub>S safety equipment before Yates formations.

**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-89882

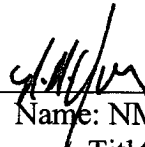
Legal Description of Land: Section 15, T18S, R31E Eddy County, New Mexico.  
Location @ 400' FNL & 1900' FWL.

Formation (if applicable):

Bond Coverage: \$150,000

BLM Bond File: NM1693, Nationwide

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

  
Name: NM (Micky) Young  
Title: District Manager  
Date: October 17, 2005

**Notes Regarding Blowout Preventer**

**Mewbourne Oil Company**

Tamano "15" Federal #3

400' FNL & 1900' FWL

Sec 15-T18S-R31E

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 3000 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 3000 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 Schematic for

12 1/4" Hole

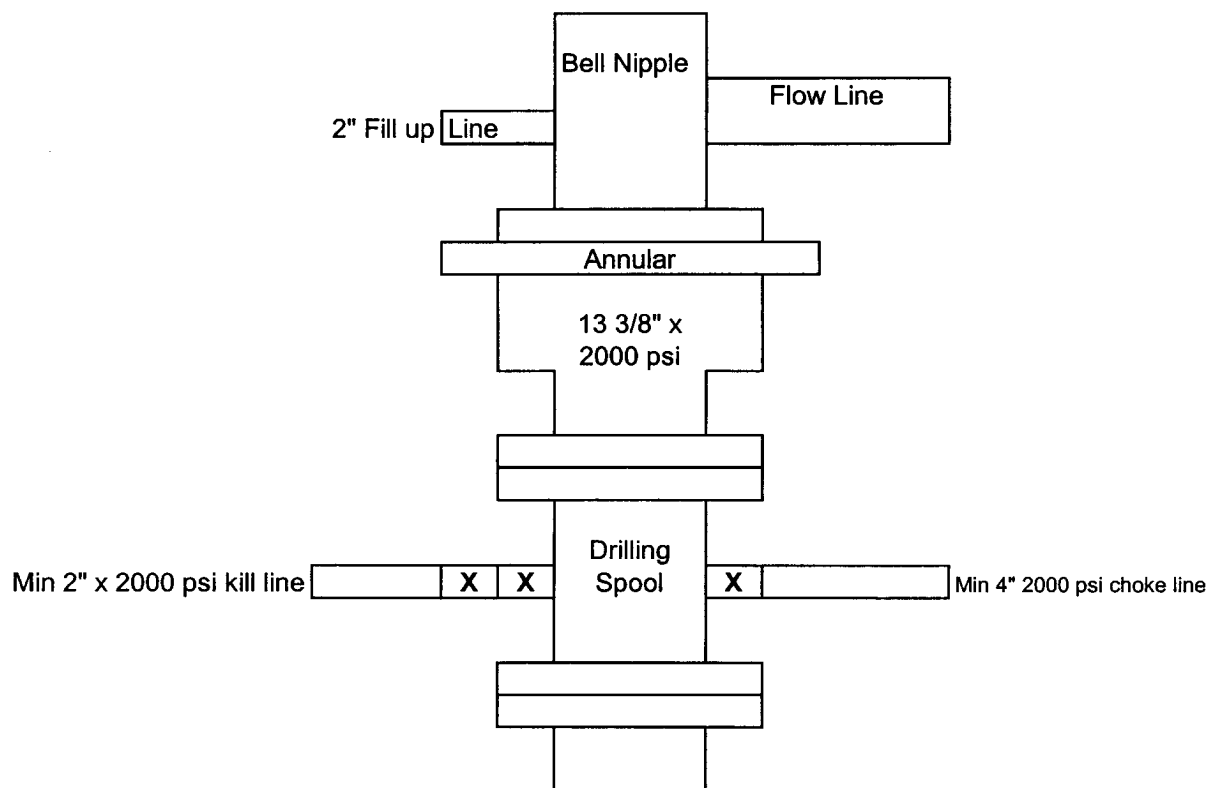


Exhibit #2

Tamano "15" Federal #3  
400' FNL & 1900' FWL  
Sec 15-T18S-R31E  
Eddy, County New Mexico

# Mewbourne Oil Company

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

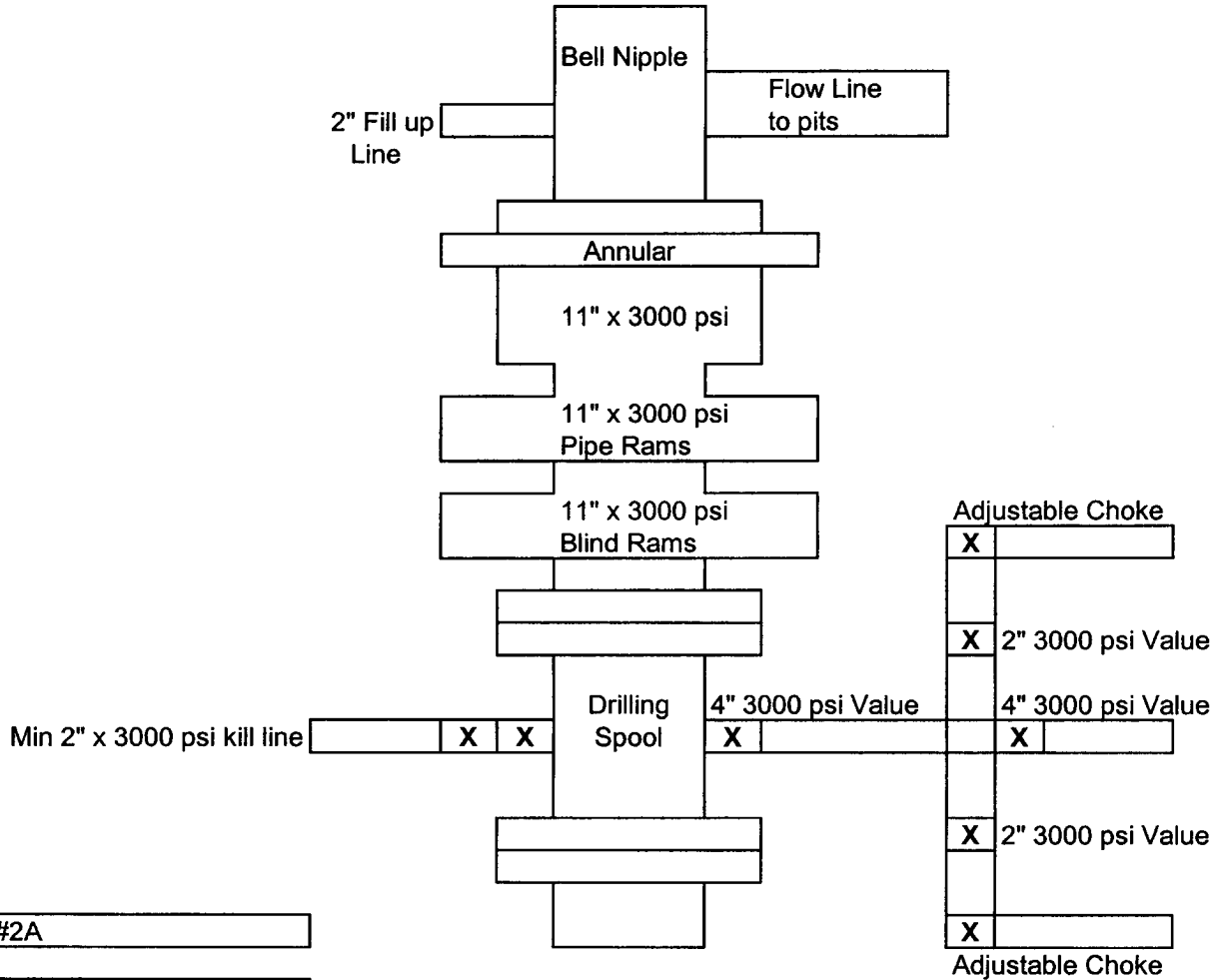


Exhibit #2A

Tamano "15" Federal #3  
400' FNL & 1900' FWL  
Sec 15-T18S-R31E  
Eddy, County New Mexico

**Exhibit #4**  
**Status of Wells in Immediate Vicinity**  
**Mewbourne Oil Company**  
Tamano "15" Federal #3  
400' FNL & 1900' FWL  
Sec 15-T18S-R31E  
Eddy County, New Mexico

**Section 15-T18S-R31E**

No Bone Spring wells in Section 15 in Lease #NM89882

Operator: Mewbourne Oil Company  
Well Name: Tamano 15 Federal Com #1  
Unit letter: D  
Status: Producing  
Field: Shugart Morrow North

Operator: Mewbourne Oil Company  
Well Name: Brothers Production Company  
Unit letter: C  
Status: Producing  
Field: Shugart Yates 7 Rivers QN Grayburg

**Section 10-T18S-R31E**

Operator: Mewbourne Oil Company  
Well Name: Tamano 10 Federal Com #3  
Unit letter: L  
Status: Producing  
Field: Tamano Bone Spring

Operator: Mewbourne Oil Company  
Well Name: Tamano 10 Federal Com #5  
Unit letter: M  
Status: Producing  
Field: Tamano Bone Spring

## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Mewbourne Oil Company  
Well Name & No. Tamano 15 Federal #3  
Location: 400' FNL, 1900' FWL, Section 15, T. 18 S., R. 31 E., Eddy County, New Mexico  
Lease: NM-89882

### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:
  - A. Well spud
  - B. Cementing casing: 13-3/8 inch 8-5/8 inch 5-1/2 inch
  - C. BOP tests
2. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Operation Contingency Plan shall be activated prior to drilling into the Queen formation. A copy of the plan shall be posted at the drilling site.
3. 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.
4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

### II. CASING:

1. The 13-3/8 inch surface casing shall be set at approximately 700 feet and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified 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. The minimum required fill of cement behind the 8-5/8 inch intermediate casing is to be circulated to the surface.
3. The minimum required fill of cement behind the 5-1/2 inch production casing is to be sufficient to reach at least 500 feet above the top of the uppermost hydrocarbon productive interval.

### III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13-3/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi. Testing with rig pumps is approved.
3. Minimum working pressure of the blowout preventer and related equipment (BOPE) below the 8-5/8 inch intermediate casing shall be 3000 psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- 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.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

#### **IV. 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. Monitoring equipment shall consist of the following:

- Recording pit level indicator to indicate volume gains and losses.
- Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

10/21/05

acs