OCD-ARTESIA Expires January 31, 2004 UNITED STATES 5. Lease Serial No. DEPARTMENT OF THE INTERIOR NM-029588 BUREAU OF LAND MANAGEMENT 6. If Indian, Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7. If Unit or CA Agreement, Name and No. la. Type of Work: ☑ DRILL ☐ REENTERSECRETARY'S POTASH 8. Lease Name and Well No. Oil Well Gas Well Other 1b. Type of Well: Single Zone Golden Lane 4 Federal #1 2. Name of Operator 9. API Well No. 30-015-34692 Mewbourne Oil Company (14744) 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 7540 505-393-5905 Golden Lane Morrow P.O. Box 5270 Hobbs, NM 88240 4. Location of Well (Report location clearly and in accordance with any State requirements. RECEIVED 11. Sec., T., R., M., or Blk. and Survey or Area At surface 660' FSL & 660' FWL Unit M MAR 1 5 2006 At proposed prod. zone Sec 4-T21S-R29E OCU-ARTESIA 14. Distance in miles and direction from nearest town or post office\* 12. County or Parish 13. State 15 miles NE of Carlsbad on US 62/180 MM Eddy 15. Distance from proposed\* 16. No. of Acres in lease 17. Spacing Unit dedicated to this well location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 18. Distance from proposed location\* 19. Proposed Depth 20. BLM/BIA Bond No. on file to nearest well, drilling, completed, applied for, on this lease, ft. 660 13,000' NM-1693 Nationwide 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 3465' GL 40 days 24. Attachments Carlabad Controlled Water Bas 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. Operator certification. 3. A Surface Use Plan (if the location is on National Forest System Lands, the 6. Such other site specific information and/or plans as may be required by the SUPO shall be filed with the appropriate Forest Service Office). authorized officer. Name (Printed/Typed)

25. Signature Kristi Green 01/17/06 Title Hobbs Regulatory Approved by (Fishaluighda S. C. Rundell Name (Printed Typed) da S. C. Rundell MAR 1 0 2006 Title 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)

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

APPROVAL SUBJECT TO GEMERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

1525 M. French Dr., Bobbs. NM 88240 DISTRICT II 811 South First, Artesia, NM 88210

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505

DISTRICT III

Energy, Minerals and Natural Resources Department

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 77 SGO	Golden Lane Morrow		
Property Code		erty Name	Well Number	
	GOLDEN LANE	"4" federal	1	
OGRID No.	Opera	Elevation		
14744	MEWBOURNE C	DIL COMPANY	3465	

#### Surface Location

1	UL or lot No.	Section	Township	Range	Lot idn	Feet from the	North/South line	Feet from the	East/West line	County
	М	4	215	29E		660	SOUTH	660	WEST	EDDY

#### Bottom Hole Location If Different From Surface

UL or lot No.	Section Town	ship Range	lot Idn	Feet from the	North/South line	Peet from the	East/Vest line	County
Dedicated Acres	Joint or Infil	Consolidation	Code Or	rder No.				L
320		1						

## 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

Lot 12	Lot 11	Lot 10	Lot 9	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature
Lot 13	Lot 14	Lot 15	Lot 16	Kristi Green Printed Name Hobbs Regulatory Title 01/17/06 Date SURVEYOR CERTIFICATION
	Committee Contracts and the Con-			I hereby certify that the well location shown
		A STATE OF THE STA		on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.  6/27/2005  Date Surveyed
Lease #NM-02 3497 3495 860'0 3514 6 3502	9588 N.32°30'10.9" W.103°59'45.4" N.546537.0 E.604467.0 (NAD-27)	A STATE OF THE STA	A STATE OF THE STA	actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.  6/27/2005

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II
1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

# State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe

Form C-144

March 12, 2004

office

# Pit or Below-Grade Tank Registration or Closure Is pit or below-grade tank covered by a "general plan"? Yes No X

	or below-grade tank \(\overline{\cappa}\) Closure of a pit or below-gr	
Operator:Mewbourne Oil Company Telephone	::505-393-5905 e-mail a	ddress:kgreen@mewbourne.com
Address:PO Box 5270Hobbs, NM 88240		
Facility or well name:Golden Lane 4 Federal #1A	PI #:U/L or Qtr/Qtr M	Sec_4T21SR29E
County: _Eddy Latitude32.30.10.9N Lor	gitude103.59.45.4W NAD: 1927 🔲 1983	$\overline{\mathbf{x}}$
Surface Owner Federal X State Private Indian		_
<u>Pit</u>	Below-grade tank	RECEIVED
Type: Drilling X Production  Disposal	Volume:bbl Type of fluid:	JAN 1 9 2000
Workover ☐ Emergency ☐	Construction material:	— OA 33 to as one
Lined X Unlined	Double-walled, with leak detection? Yes 🔲 If n	ot, explain why not.
Liner type: Synthetic X Thickness _12_mil Clay \ Volume		
	Less than 50 feet	(20 points)
Depth to ground water (vertical distance from bottom of pit to seasonal high	50 feet or more, but less than 100 feet	(10 points)
water elevation of ground water.)	100 feet or more X	( 0 points) X
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)
water source, or less than 1000 feet from all other water sources.)	No X	( 0 points) X
Division Community and the state of the stat	Less than 200 feet	(20 points)
Distance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet	(10 points)
irrigation canals, ditches, and perennial and ephemeral watercourses.)	1000 feet or more X	( 0 points) X
	Ranking Score (Total Points)	0 points
If this is a pit closure: (1) attach a diagram of the facility showing the pit's	relationship to other equipment and tanks. (2) India	cate disposal location:
onsite offsite from If offsite, name of facility	(3) Attach a general description of remedial ac	ction taken including remediation start date and end
date. (4) Groundwater encountered: No 🗌 Yes 🔲 If yes, show depth belo	w ground surfaceft. and attach sam	ple results. (5) Attach soil sample results and a
diagram of sample locations and excavations.		
I hereby certify that the information above is true and complete to the best of been/will be constructed or closed according to NMOCD guidelines , a Date:01/17/06	general permit 🔲, or an (artached) alternative O	
Printed Name/Title_Kristi Green / Hobbs Regulatory Asst	Signature Soniti Green	
Your certification and NMOCD approval of this application/closure does not otherwise endanger public health or the environment. Nor does it relieve the regulations.	relieve the operator of liability should the contents of	
Approval:	700	
Date: 1-19-06	(/2)	
Printed Name/Title	Signature COO	

# MULTI-POINT SURFACE USE AND OPERATIONS PLAN MEWBOURNE OIL COMPANY

Golden Lane 4 Federal #1 660' FSL & 660' FWL Section 4-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. 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: NE from Carlsbad, NM on US 62/180 16 miles. Turn right (south) on lease road. Continue south 1.7 miles. Turn left (east) 0.5 miles thru Quahada Ridge 5 Federal #1 to new location.

# 2. Proposed Access Road:

- A Will need 2000' of new road (ON-LEASE).
- B. The access to the location will be limited to 16' in width and will adequately drain runoff and control erosion as presently constructed.
- C. Access to location has an existing grade to facilitate adequate drainage.

# 3. Location of Existing Wells:

There are producing wells within the immediate vicinity of the well site. Exhibit #4 shows the proposed well and existing wells within a one mile radius.

# 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. If the well is productive, restoration plans are as follows:
  - i. The reserve pit will be back-filled after the contents of the pit are allowed to dry (within 10 months after the well is completed).
  - ii. 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.

iii. 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 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 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 treated 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.

# 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 operations and completion and production operations:

N.M. Young, District Manager Mewbourne Oil Company PO Box 5270 Hobbs, NM 88241 505-393-5905 MULTI-POINT SURFACE USE AND OPERATIONS PLAN MEWBOURNE OIL COMPANY Quahada Lane 5 Federal #1 Page 4

## 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:	01/17/06	Signature:	41.11. llm	
			- · · · · · · · · · · · · · · · · · · ·	1

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

# <u>Drilling Program</u> Mewbourne Oil Company

Golden Lane 4 Federal #1 660' FSL & 660' FWL Section 4-T21S-R29E Eddy County, New Mexico

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

Capitan	2100'
Delaware	3525'
Bone Spring	6800'
Wolfcamp	10200'
Strawn	11300'
Atoka	11500'
Morrow	12130'

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

Water Below 200'

Hydrocarbons All zones below Delaware

# 3. Pressure control equipment:

A 2000# working pressure annular BOP will be installed on the 13 %" surface casing. A 5000# WP Double Ram BOP and a 3000# WP Annular will be installed after running 9 %" 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 daily 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>	Wt/Ft.	<u>Grade</u>	<u>Depth</u>
26"	20"	94#	K55	0-250'
17 ½"	13 ¾ "	54.5#	J55	0-1900'
12 1/4"	9 %"	40#	N80/J55	0-3500'
8 3/4"	5 1/2"	17#	P110/S95	0-13000'

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

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

- i. <u>Surface Casing</u>: 400 sacks Class C light cement containing ½#/sk cellophane flakes, 2% CaCl, 5#/sk gilsonite. 200 sks Class C cement containing 2% CaCl.
- ii. <u>Deep Surface Casing</u>: 1200 sacks 35:65 Class "C" light cement containing ½#/sk cellophane flakes & 5 lbs/sack gilsonite. 400 sacks Class "C" cement containing 2% CaCl
- ii. <u>Intermediate Casing:</u> 1000 sacks 35:65 pozmix cement containing 6% gel,5#/sack gilsonite. 400 sacks Class C cement containing 2% CaCl.
- iii. Production Casing: 600 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.

<sup>\*</sup>Mewbourne Oil Company reserves the right to change cement designs as hole conditions may warrant.

Drilling Program Golden Lane 4 Federal #1 Page 2

## 5. Mud Program:

<u>Interval</u>	Type System	<u>Weight</u>	<u>Viscosity</u>	Fluid Loss
0'-250'	FW spud mud	8.6-9.4	32-34	NA
250'-1900'	Brine water	10.0	32-34	NA
1900'-3500'	Fresh water	8.8-9.2	28-30	NA
3500'-11000'	Cut brine water	9.2-10.0	28-30	NA
11000'-TD	Cut brine water	9.2-10.0	30-42	8-12

(Note: Any weight above 8.6 ppg would be to hold back Wolfcamp shale, rather than abnormal bottom hole pressure in Morrow formation.)

# 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:

180 degree F

Maximum bottom hole pressure:

9.0 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 45 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 Golden Lane 4 Federal #1 660' FSL & 660' FWL Section 4-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 H2S were found. MOC will have on location and working all H2S safety equipment before the Yates formation @ 2000' for purposes of safety and insurance requirements.

### 2. Hydrogen Sulfide Training

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

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

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

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

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

#### 3. Hydrogen Sulfide Safety Equipment and Systems

All hydrogen sulfide safety equipment and systems will be installed, tested, and operational prior to drilling below the 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. <u>Protective Equipment for Essential Personnel</u>

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

Hydrogen Sulfide Drilling Operations Plan Mewbourne Oil Company Golden Lane 4 Federal #1 Page 2

## 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. <u>Visual Warning Systems</u>

- 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 4, T-21S, R-29E Eddy County, New Mexico.

Location @ 660' FSL & 660' FWL.

Formation (if applicable):

Bond Coverage:

\$150,000

BLM Bond File:

NM1693, Nationwide

Authorized Signature:

Wame: NM (Micky) Young Title: District Manager

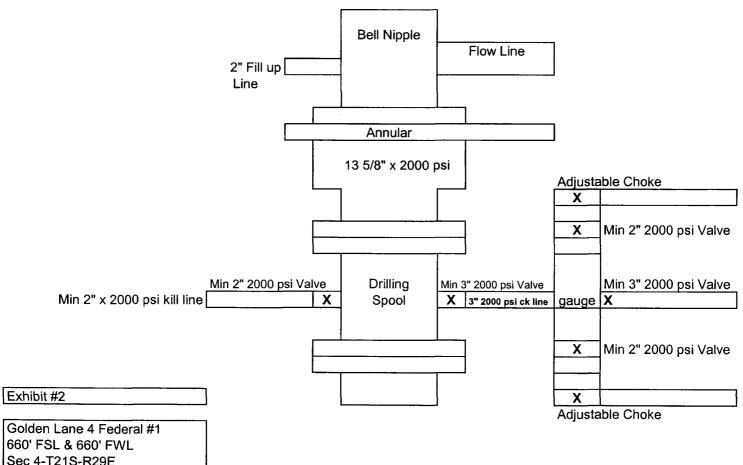
Date: January 17, 2006

# Notes Regarding Blowout Preventer

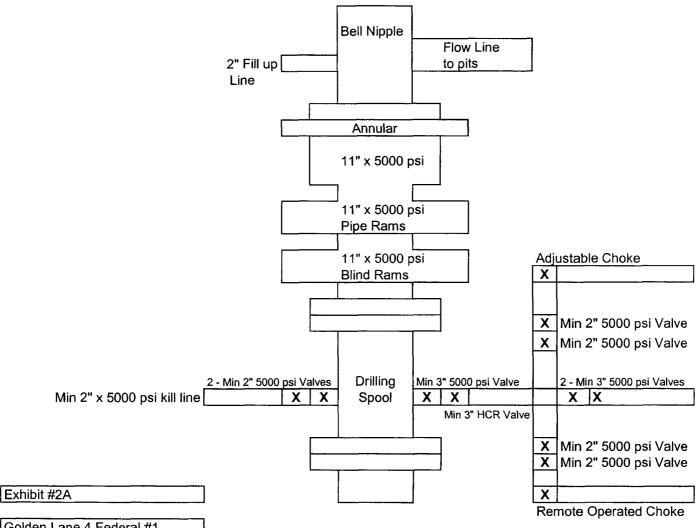
**Mewbourne Oil Company** 

Golden Lane 4 Federal #1 660' FSL & 660' FWL Section 4-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.



Sec 4-T21S-R29E Eddy, County New Mexico



Golden Lane 4 Federal #1 660' FSL & 660' FWL Sec 4-T21S-R29E Eddy, County New Mexico

#### **CONDITIONS OF APPROVAL - DRILLING**

Operator's Name: Mewbourne Oil Company Well No. 1 - Golden Lane 4 Federal

Location: 660' FSL & 660' FWL sec. 04, T. 21 S., R. 29 E.

Lease: <u>NMNM-029588</u>

#### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at (505) 393-3612 in sufficient time for a representative to witness:

.....

A. Spudding

B. Cementing casing: 20 inch 13% inch 9% inch  $5\frac{1}{2}$  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 the well by NMOCD on the subsequent report of setting the first casing string.
- 4. 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.
- 5. An H2S safety awareness plan shall be in operations 500 feet or three days prior to drilling into the <u>Top of the Yates</u> estimated to be at 2000 ft of depth per the operators drilling plan.

#### II. CASING:

- 1. A **20 inch surface string will be run to 250 feet** with cement circulated to surface. If cement does not circulate to the surface this 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. A 13 % inch deep surface casing string must be set at approximately 1900 feet with both strings circulated to the surface with cement. If cement does not circulate to the surface this 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.
- 3. A 9% inch Capitan Reef protection casing must be set at approximately 3500 feet and circulate cement to the surface. If cement does not circulate to the surface this 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.
- 4. The <u>5-1/2</u> inch production casing string shall have <u>sufficient to cement to circulate to surface.</u>
- 5. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

#### **III. PRESSURE CONTROL:**

1. Before drilling below the 13 ½ inch surface casing, the blowout preventer assembly shall consist of a minimum of a 2M One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve. Before drilling below the 13 ½ 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.

#### III. Pressure Control Continued:

Operator's Name: Mewbourne Oil Company Well No. 1 - Golden Land 4 Federal

Location: 660' FSL & 660' FWL sec. 04, T. 21 S., R. 29 E.

Lease: NMNM 029588

2. Before drilling below the 9% inch surface casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 5M psi.

- A. The BLM office shall be notified at (505) 393-3612 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 shall be reported to the BLM Hobbs Office at 414 West Taylor, Hobbs, New Mexico 88240.
- 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:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the <u>Wolfcamp</u> 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.