Form 3160-3 (September 2001)

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

UNITED STATES 1301 W. Grand Avenue DEPARTMENT OF THE INTERIOR, NM 88210 BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0136

6. If Indian, Allottee or Tribe Name

Expires January 31, 2
5. Lease Serial No.

NM--19431

la. Type of Work: DRILL REENTER	<del>==</del>			7. If Unit or CA Agre	ement, Name and No.	
1b. Type of Well: Oil Well Gas Well Other	☐ Sir	ngle Zone 🔲 Multij	ole Zone	8. Lease Name and W Angel Draw 11 Fed		
2. Name of Operator				9. API Well No.		
Mewbourne Oil Company - 14744				30.015 -	33787	
3a. Address	3b. Phone No.	(include area code)		10. Field and Pool, or	Exploratory	
PO Box 5270 Hobbs, NM 88240	505-393-590	)5		Angel Ranch Morro	w	
4. Location of Well (Report location clearly and in accordance with a	ny State requir	ement RECEIVE	D.	11. Sec., T., R., M., or	Blk. and Survey or Area	
At surface 660' FNL & 660' FEL Unit A		•	_	(		
At proposed prod. zone Same		DEC 2.3 20		Sec. <b>2</b> -T20S-R27E		
14. Distance in miles and direction from nearest town or post office*		OCP:ART		12. County or Parish	13. State	
12 miles North of Carlsbad				Eddy	NM	
15. Distance from proposed* location to nearest property or lease line, ft.	16. No. of A	cres in lease	17. Spacing	y Unit dedicated to this	well	
(Also to nearest drig. unit line, if any) 660'	320		320			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 20.			M/BIA Bond No. on file		
1650'	11300'			Nationwide		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	ASAP	mate date work will s	tart*	23. Estimated duratio	n	
3383' GL				45	· · · · · · · · · · · · · · · · · · ·	
	24. Attac	hments				
The following, completed in accordance with the requirements of Onshor	re Oil and Gas	Order No.1, shall be at	tached to this	form:		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> </ol>		4. Bond to cover the Item 20 above). 5. Operator certific	•	unless covered by an	existing bond on file (see	
3. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).	Lands, the	•	pecific info	rmation and/or plans a	as may be required by the	
25. Signature	Name	(Printed/Typed)			Date	
Fuste Gler	Kristi	Green			11/17/04	
Title						
Hobbs Regulatory						
Approved by (Signature) /s/ Tony J. Herrell	Name	(Printed Typerony	J. Heri	rell	Date 2 DEC 2004	

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.

Office

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

\*(Instructions on reverse)

Title

Witness Surface Casing

CARLSBAD FIELD OFFICE

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

FIELD MANAGER

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

District I 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

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

Form C-144 March 12, 2004

1220 South St. Francis Dr. office Santa Fe, NM 87505

<u>ide Tank Registration or Closu</u>	<u>ire</u>
ık covered by a "general plan"? Yes X No	,
or below-grade tank X Closure of a pit or below-gra	ide tank
e:505-393-5905e-mail <b>ad</b>	ldress:kgreen@mewbourne.com
API #:U/L or G	Qtr/QtrASec_11T20SR27E
ngitude104-14-42.4W NAD: 1927 🔲 1983 💆	×
Below-grade tank	
Volume:bbl Type of fluid:	RECEIVED
Construction material:	- NÓV 1 9 71114
Double-walled, with leak detection? Yes  If no	ot, explain why not.
	OCD-ARTESIA
Less than 50 feet	(20 points)
50 feet or more, but less than 100 feet X	(10 points) X
100 feet or more	( 0 points)
Yes	(20 points)
No X	( 0 points) X
Less than 200 feet	(20 points)
200 feet or more, but less than 1000 feet	(10 points)
1.	( 0 points) X
Ranking Score (Total Points)	10 points
relationship to other equipment and tanks. (2) Indica	ate disposal location:
(3) Attach a general description of remedial acti	
w ground surfaceft. and attach sample	
my knowledge and belief. I further certify that the general permit , or an (attached) alternative OC  Signature  relieve the operator of liability should the centents of operator of its responsibility for compliance with any	CD-approved plan .  Che pit or tank contaminate ground water or
	k covered by a "general plan"? Yes X No or below-grade tank X Closure of a pit or below-grade tank X Closure of a pit or below-grade tank

\*DISTRICT I 1625 N. French Dr., Hobbs, NM 68240 DISTRICT II 811 South First, Artesia, NM 88210

#### State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

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

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505

Dedicated Acres

320

Joint or Infill

Consolidation Code

# OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe, New Mexico 87504-2088

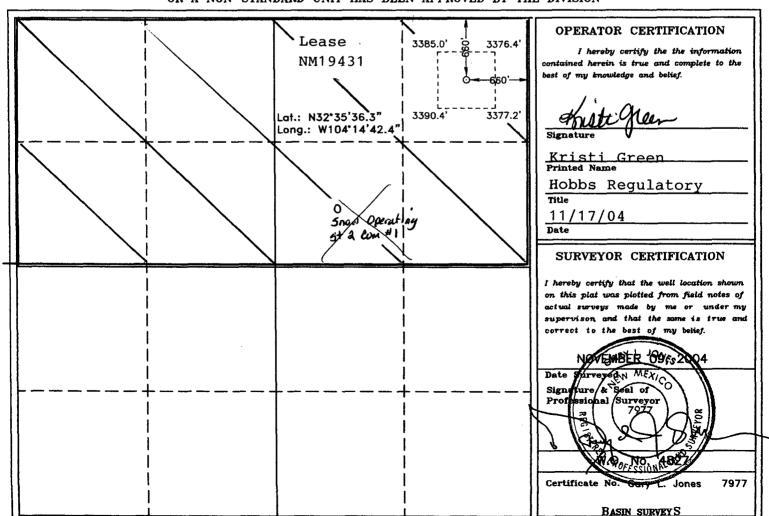
☐ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number			]	Pool Code		Pool Name Angel Ranch Morrow			
Property		Property Name ANGEL DRAW "11" FEDERAL COM				Well Number			
OGRID N	o. 14744		Operator Name MEWBOURNE OIL COMPANY				Elevation 3383'		
	Surface Location								
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Α	11	20 S	27 E		660	NORTH	660	EAST	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

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

Order No.



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

Angel Draw 11 Federal Com #1 660' FNL & 660' FEL Sec 11-T20S-R27E Eddy County, New Mexico

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

Yates	480'	Wolfcamp	8480'
Queen	920'	Strawn	9830'
San Andres	1580'	Atoka	10300'
Delaware	3080'	Morrow	10750'
Bone Spring	3720'	TD	11300'

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

Water Approximately 200' Hydrocarbons All zones below Queen

# 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 2500 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 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:

5.

#### A. Casing Program:

Hole Size	Casing	Wt/Ft.	<u>Grade</u>	<u>Depth</u>
17-1/2"	13-3/8"	48#	H40	$\overline{0-450}$ WITNESS
12-1/4"	9-5/8"	40#	N80/J55	0-3000'
8-3/4"	5-1/2"	17#	P110/N80	0-11300'

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

### **Drilling Program**

# Mewbourne Oil Company

Angel Draw 11 Federal Com #3 Page 2

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

- Surface Casing: 300 sacks Class "C" light cement containing ½ #/sk cellophane flakes, 2% CaCl, 5 lbs/sack gilsonite. 200 sacks Class "C" cement containing 2% CaCl.
- Intermediate Casing: 900 sacks 35:65 pozmix cement containing 6% gel, ii. 5 lbs/sack gilsonite. 400 sacks Class "C" cement containing 2% CaCl.
- Production Casing: 600 sacks Class "H" cement containing fluid loss iii. 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>	Type System	Weight	<b>Viscosity</b>	Fluid Loss
0'-400'	FW spud mud	8.6-9.4	32-34	NA
400'-3000'	Brine water	10.0-10.2	28-30	NA
3000'-10000'	Cut brine water	8.8-9.2	28.30	NA
10000'-11300'	Cut brine water	9.2-9.8	32-42	8-12

(Note: Any Weight Above 8.6#/gallon would be to hold back Wolfcamp shale, rather than abnormal BHP.)

#### 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

Drilling Program
Mewbourne Oil Company
Angel Draw 11 Federal Com #3
Page 3

# 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.

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

Angel Draw 11 Federal Com #1 660' FNL & 660' FEL Sec 11-T20S-R27E 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 from Carlsbad: Go North on Canal Street to Relief route. Continue North on Illinois Camp Rd (CR206) 8 miles. Turn west (left) 1 mile. Turn north (right) 1 mile. Turn east (right) 2/10 mile. Turn south (right) 1/10 mile to new location.

# 2. Proposed Access Road:

- A 500' of new road will be needed. The road will enter location on the NE corner. Will improve 1000' 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 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. All production vessels left on location will be painted to conform with BLM painting stipulations within 180 days of installation.

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

MEWBOURNE OIL COMPANY

Angel Draw 11 Fed Com #1

Page 2

# 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 as per OCD regulations.
- 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.

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

MEWBOURNE OIL COMPANY

Angel Draw 11 Fed Com #1 Page 3

#### 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 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 OCD guidelines. 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 and drilling 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

Angel Draw 11 Fed Com #1 Page 4

B. Through 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:	_11/17/04	Signature:	J.M./	Riux	
			· · · · ·	J 1965 -	

NM Young Mewbourne Oil Company PO Box 5270 Hobbs, NM 88241 (505) 393-5905

# <u>Hydrogen Sulfide Drilling Operations Plan</u> Mewbourne Oil Company

Angel Draw 11 Federal Com #1 660' FNL & 660' FEL Sec 11-T20S-R27E 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 know 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.

# Protective Equipment for Essential Personnel

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

# B. <u>Hydrogen Sulfide Protection and Monitoring Equipment</u>

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.

### C. 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 H2S was found. MOC will have on location and working all H2S safety equipment before Yates and Delaware formations.

# Notes Regarding Blowout Preventer Mewbourne Oil Company

Angel Draw 11 Federal Com #1 660' FNL & 660' FEL Sec 11-T20S-R27E 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.

# 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-19431

Legal Description of Land:

Section 11, T-20S, R-27E Eddy County, New Mexico.

Location @ 660' FNL & 660' FEL.

Formation (if applicable):

Bond Coverage:

\$150,000

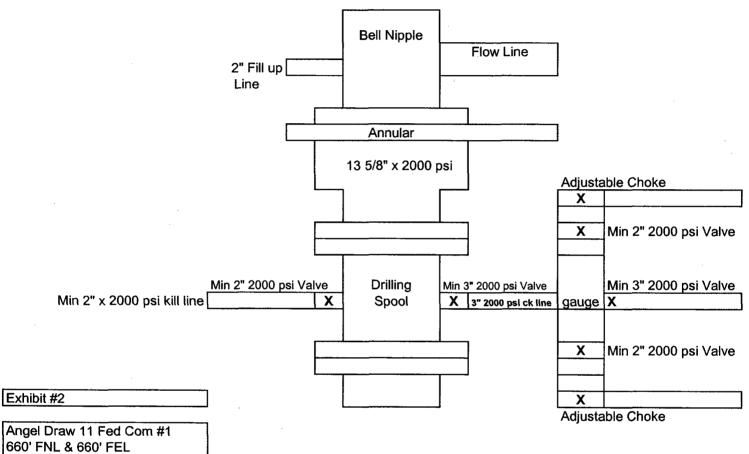
BLM Bond File:

NM1693, Nationwide

Authorized Signature: Fruit Green for Nn young

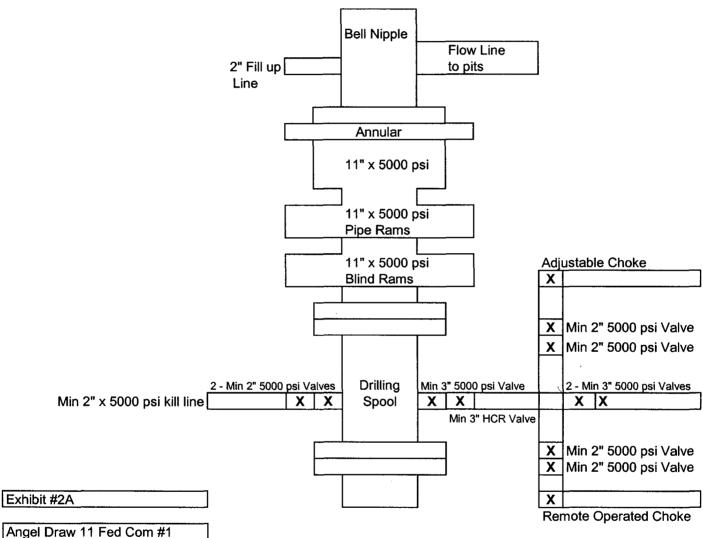
Name: NM (Micky) Young

Title: District Manager Date: November 17, 2004



Angel Draw 11 Fed Com #1 660' FNL & 660' FEL Sec 11 T-20S R-27E Eddy, County New Mexico

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



Angel Draw 11 Fed Com #1 660' FNL & 660' FEL Sec 11 T-20S R-27E Eddy, County New Mexico

# Exhibit #4 Status of Wells in Immediate Vicinity Mewbourne Oil Company

Angel Draw 11 Federal Com #1 660' FNL & 660' FEL Sec 11-T20S-R27E Eddy County, New Mexico

# Section 2-T20S R27E

Operator: Mewbourne Oil Company Well Name: Angel Draw 2 St Com #1

Unit letter: P

Status: Producing

Field: Angel Ranch: Atoka - Morrow

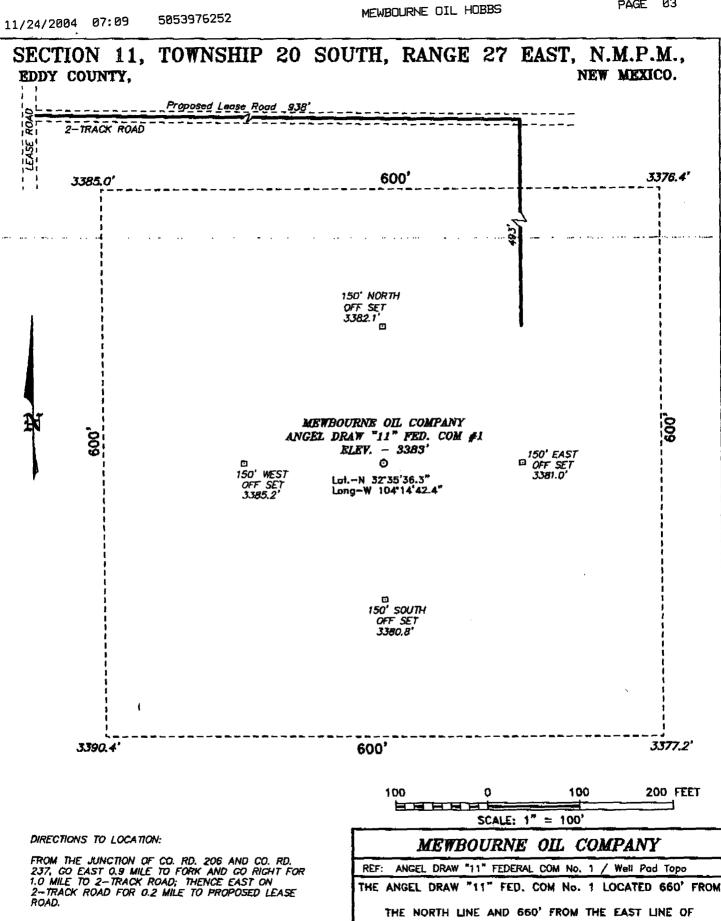
Operator: Snow Operating Company

Well Name: State 2 Com #1

Unit letter: 0

Status: Producing

Field: Undes Morrow



BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 4827 Drawn By: K. GOAD Date: 11-11-2004 Disk: KJG CD#7 4827A.DWG SECTION 11, TOWNSHIP 20 SOUTH, RANGE 27 EAST,

N.M.P.M., EDDY COUNTY, NEW MEXICO.

Sheet Sheets Survey Date: 11-09-2004