330×275

Form 3160-3 (September 2001)

# N.M. Oil Cons. DIV-Dist. 2 1301 W. Grand Avenue

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

UNITED STATES Artesia, NM 88210 DEPARTMENT OF THE INTERIOR

5. Lease Serial No.

BURE	AU OF LAND MANAGEMENT	NM-14777
APPLICATION F	OR PERMIT TO DRILL OR REENTER	6. If Indian, Allottee or Tribe Name
[] DDTT	December	7. If Unit or CA Agreement, Name and

la. Type of Work:	R			7. If Unit or CA Agreement, N	lame and No.
1b. Type of Well: Gas Well Gos Well Other		Single Zone Multi	nle 7one	8. Lease Name and Well No. Pierce Crossing 35 Fed Co	
2. Name of Operator		oringto zono Matri	pro Eono		111 #1
·				9. API Well No.	33688
Mewbourne Oil Company - 14744  3a. Address	3h Phone ?	No. (include area code)	-	10. Field and Pool, or Explorate	
	505-393-5	,		Owen Mesa Atoka	лу
PO Box 5270 Hobbs, NM 88240  4. Location of Well (Report location clearly and in accordance with a			ED	11. Sec., T., R., M., or Blk. and	Survey or Area
•	iny state req	uirements. *) RECE	IVED	11. 500., 1., 10, M., or Dis. and	ibul voy of Filed
At surface 1400' FNL & 660' FEL		OCT 9.	C 2004	1	
At proposed prod. zone		OCT 2:	0 2004	Sec 35-T24S-R29E	
14. Distance in miles and direction from nearest town or post office*		OOD:AI	atesia	12. County or Parish	13. State
6 Miles East of Malaga, NM				Eddy	NM
15. Distance from proposed* location to nearest property or lease line. ft.	16. No. of	Acres in lease	17. Spacin	g 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. Propos	sed Depth		BIA Bond No. on file	
2703' 21. Elevations (Show whether DF, KDB, RT, GL, etc.)	13000'		<u> </u>	Nationwide  23. Estimated duration	
3069' GL	22. Approximate date work will start* ASAP			30	
3009 GE		1		<del>100</del>	
		achments			
The following, completed in accordance with the requirements of Onshor	re Oil and Ga	is Order No.1, shall be at	tached to this	s form:	
1. Well plat certified by a registered surveyor.		4 Bond to cover th	e operation	s unless covered by an existing	hand on file (see
2. A Drilling Plan.		Item 20 above).	operation.	s unices to teres by an emeting	50H5 0H 2H5 (65)
3. A Surface Use Plan (if the location is on National Forest System	Lands, the	5. Operator certific			
SUPO shall be filed with the appropriate Forest Service Office).		6. Such other site s authorized office		ormation and/or plans as may be	e required by the
25. Signature	Nan	ne (Printed/Typed)		Date	
4-11-1/1 was	MM	Young		06/14/0	)4
Title	-				
Hobbs District Manager					
Approved by (Signature)	Nan	ne (Printed/Typed)	<del></del>	Date	7 2 5 2004
15/ KUSS SURENSON		18/Kuss Po	OKEI	user oc	1 2 5 2004
Title No	Offi	00			
/** FIELD MANAGER				ELD OFFICE _	
Application approval does not warrant or certify that the applicant holds I	legal or equit	able title to those rights in	n the subject	lease which would entitle the app	licant to conduct

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)

Conditions of approval, if any, are attached.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

Carlahad Controlled Water Basin

APPROVAL FOR 1 YEAR

DISTRICT I 1625 M. Prench Dr., Hobbs, NM 86240 DISTRICT II 811 South Pirst, Artesia, NM 88210

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV 2040 South Pacheco, Santa Pe, NM 87505

DISTRICT III

#### State of New Mexico Energy, Minerals and Natural Resources Departme

FORM U-104 Revised March 17, 1999 instruction on back Submit to Appropriate District Office

State Lease - 4 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	Pool Name	Pool Name	
		Owen Mesa Atoka		
Property Code	Prop	erty Name	Well Number	
	PIERCE CROSSING	"35" FEDERAL COM.	1	
OGRID No.	Open	Elevation		
14744	MEWBOURNE (	3069		

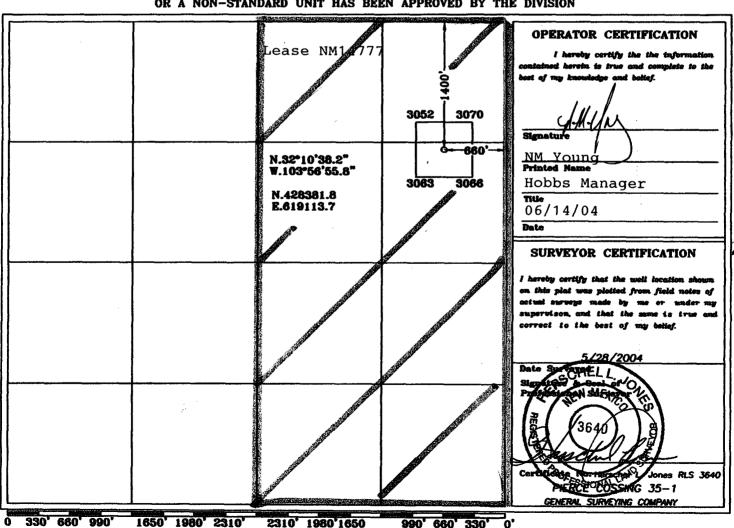
#### Surface Location

(	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	н	<i>3</i> 5	245	29E		1400	NORTH	660	EAST	EDDY

#### Bottom Hole Location If Different From Surface

	UL or lot No.	Section	Townsh	ip	Range	Lot idn	Feet from the	North/South line	Feet from the	East/West line	County
I	Dedicated Acres	Joint o	r Infili	Cons	solidation (	ode	Order No.				
ı	320		ı					,			

#### 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



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

Pierce Crossing "35" Federal Com #1 1400' FNL & 660' FEL Section 35-T24S-R29E Eddy County, New Mexico Lease # NM-14777

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

 Cherry Canyon
 4700'

 Bonespring
 6800'

 Wolfcamp
 11200'

 Atoka
 12500'

 TD
 13000'

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

Water

Approximately 200'

**Hydrocarbons** 

All zones below 4700

# 3. Pressure control equipment:

Two thousand psi working pressure annular BOP's will be installed on the 13-3/8" surface casing. Five thousand psi working pressure BOP's and two thousand psi working pressure Hydril will be installed on the 9-5/8" intermediate casing. Pressure tests with rig pump will be conducted prior to drilling out under all casing strings. A third party Safety Test Company will pressure test and record on chart the approved testing pressure of the BOP, Choke, Hydril, Kelly Cock Valves before we drill below the 9-5/8" casing.

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.

#### **Drilling Program**

#### **Mewbourne Oil Company**

Pierce Crossing "35" Fed Com #1 Page 2

# 4. Proposed casing and cementing program:

#### A. Casing Program:

Hole Size	Casing	Wt/Ft.	<u>Grade</u>	<b>Depth</b>
17-1/2"	13-3/8"	48#	H40	0-500'
12-1/4"	9-5/8"	40#	N80/J55	0-4500'
8-3/4"	5-1/2"	17#	L80/P110	0-13000'

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

### B. Cementing Program

- i. <u>Surface Casing</u>: 200 sacks Class "C" light cement containing
   .25 lbs/sack cellophane flakes, 2% CaCl, 6% bwoc Bentonite. 200 sacks Class "C" cement containing 2% CaCl.
- ii. <u>Intermediate Casing:</u> 500 sacks 35:65 pozmix cement containing 6% gel,5 lbs/sack LCM-1. 200 sacks Class "C" cement containing 2% CaCl.
- iii. <u>Production Casing</u>: 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 and 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	<u>Weight</u>	<b>Viscosity</b>	Fluid Loss
0'-500'	FW spud mud	8.6-9.4	32-34	NA
500'-4500'	BW spud mud	10.0	32-34	NA
4500'-10000	)' Fresh water	8.8-9.2	28-30	NA
10000'-1300	00' Cut brine water	9.2-10.0	32-42	8-12

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

#### **Drilling Program**

# **Mewbourne Oil Company**

Pierce Crossing "35" Fed Com #1

Page 3

# 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:

8.3 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.

#### **MEWBOURNE OIL COMPANY**

Pierce Crossing "35" Federal Com #1 1400' FNL & 660' FEL Section 35-T24S-R29E Eddy County, New Mexico Lease # NM-14777

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 Malaga turn east on CR720 (Duarte Rd), go 1.2 miles. Turn right on CR746 (McDonald), go 5.9 miles to Y. Turn left 1.5 miles to Y. Turn right 1.8 miles to Y. Turn right 1.5 miles to Devon sign (Spud 25 #1). Turn right 0.4 miles to cattle guard. Go thru cattle guard to right. Go 2.2 miles to Devon spud sign. Turn left & go 0.5 miles to new location.

#### 2. Proposed Access Road:

A The access to our new location will be from existing lease road.

#### 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

#### MEWBOURNE OIL COMPANY

Pierce Crossing 35 Federal Com #1

Page 2

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 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.

MEWBOURNE OIL COMPANY

Pierce Crossing 35 Federal 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 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 and drilling operations:

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

**MEWBOURNE OIL COMPANY** 

Pierce Crossing 35 Federal 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: 6/15/04

Signature: \( \lambda \)

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

# 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-14777

Legal Description of Land:

Section 35-T24S-R29E, Eddy County, New Mexico.

Location 1400' FNL & 660' FEL of Section 35

Formation (if applicable):

**Bond Coverage:** 

\$150,000

BLM Bond File:

NM1693, Nationwide

**Authorized Signature:** 

Name: NM Young Title: Hobbs District Manager

Date: June 14, 2004

# Hydrogen Sulfide Drilling Operations Plan Mewbourne Oil Company

Pierce Crossing "35" Federal Com #1 1400' FNL & 660' FEL Section 35-T24S-R29E Eddy County, New Mexico Lease # NM-14777

### 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:

- 1 The hazards and characteristics of hydrogen sulfide gas.
- 2 The proper use of personal protective equipment and life support systems.
- 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.

# 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.

#### 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. <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.

#### 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.

#### 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 toolpushers are either two way radios or cellular phones.

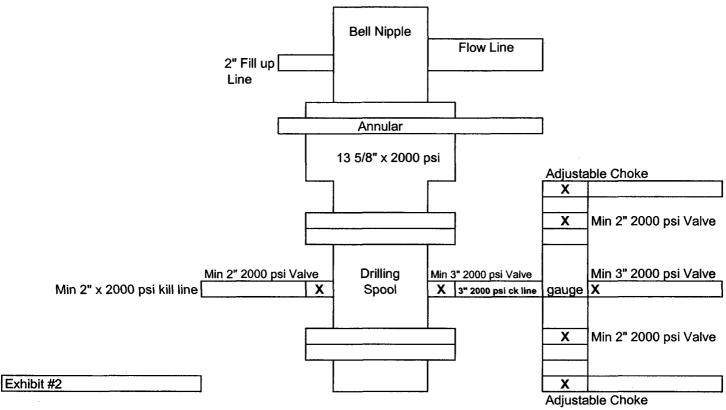
#### 6. Well Testing

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

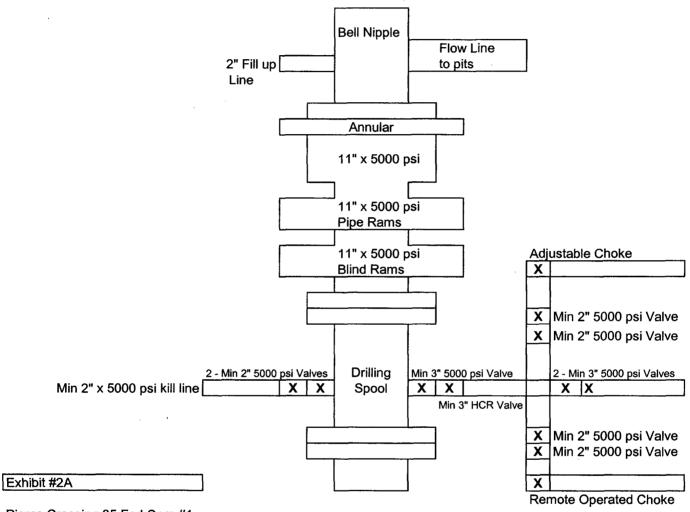
MOC has researched this area and no high concentrations of H2S was found. MOC will have on location and working all H2S safety equipment before Delaware formations.

# Mewbourne Oil Company BOP Scematic for 12 1/4" Hole

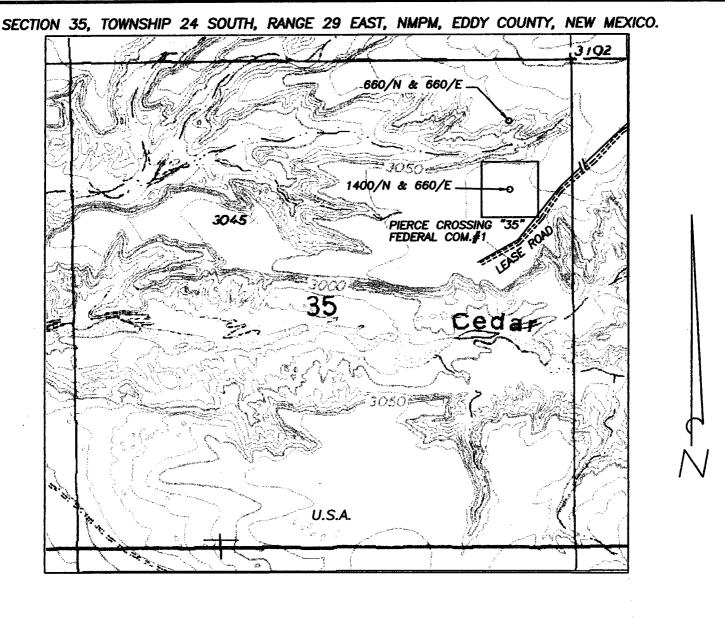


Pierce Crossing 35 Fed Com #1 Sec 35-T24S-R29E 1400' FNL & 660' FEL Eddy County, NM

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



Pierce Crossing 35 Fed Com #1 Sec 35-T24S-R29E 1400' FNL & 660' FEL Eddy County, NM



# Exhibit 3A

	•	
	1000' 0	1000* 2000*
THE PREPARATION OF THIS PLAT AND THE PERFORMANCE OF THE SURVEY UPON	Scale	1" = 1000'
WHICH IT IS BASED WERE DONE UNDER MY DIRECTION AND THE PLAT ACCURATELY DEPICTS THE RESULTS OF SAID SURVEY AND MEET THE REQUIREMENTS OF THE STATISTICS YOU LAND SURVEYS IN NEW MEDICO AS		OIL COMPANY
ADDITED BY THE NEW MENDED STATE BOTTED OF REGISTRATION FOR PROFESSIONAL ENGINEES AND HAND SUPPLIES OF THE PROFESSIONAL ENGINEES AND HAND SUPPLIES OF THE PROFESSIONAL ENGINEERS AND HAND SUPPLIES OF THE PROFESSIONAL ENGINEERS.	LEASE ROAD TO ACCESS THE "35" FEDERAL COM. #1 WELL, TOWNSHIP 24 SOUTH, RANGE COUNTY, NEW MEXICO.	MEWBOURNE PIERCE CROSSING LOCATED IN SECTION 35, 29 EAST, NMPM, EDDY
MERSCHEL L. JOHES PULS. No.3640	Survey Date: 5/28/2004	Sheet 1 of 1 Sheets
GENERAL SURVEYING COMBANY P.O. BOX 1928	Drown By: Ed Blevins	W.O. Number
LOVINGTON, S NEW MEXICO 88260	Date: 5/28/04	Scale 1" = 1000' PIERCE.35-1
OFESSIONAL .		

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

Pierce Crossing "35" Federal Com #1 1400' FNL & 660' FEL Section 35-T24S-R29E Eddy County, New Mexico Lease # NM-14777

# <u>Section 35-T24S-R29E</u>

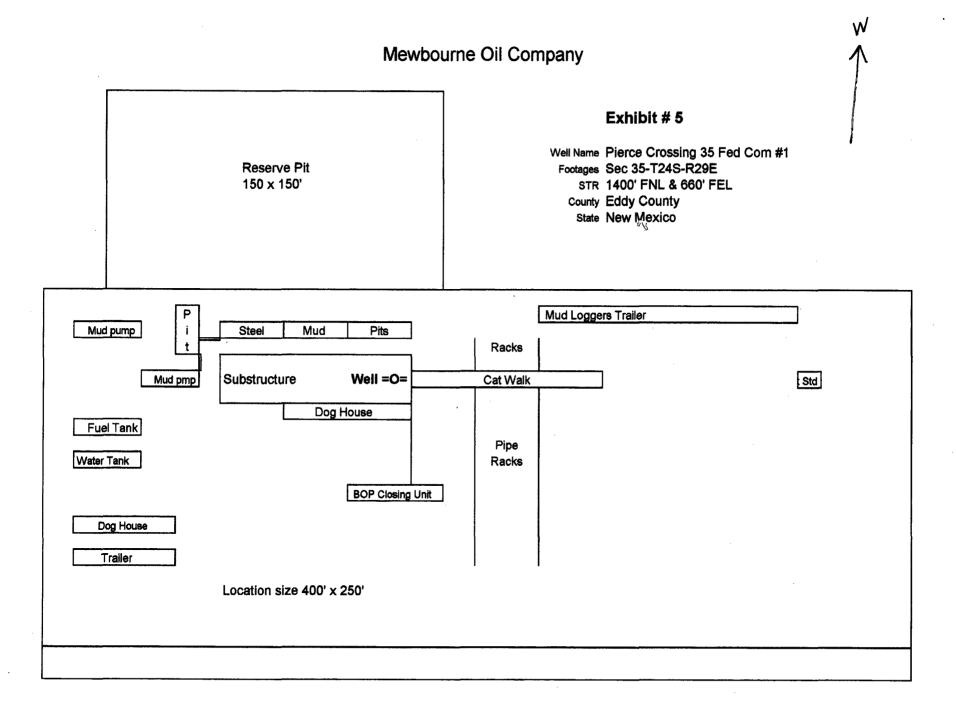
**Devon Energy Production** Operator: Well Name: Corral Fly 35 Fed Com #1

Unit letter:

Status:

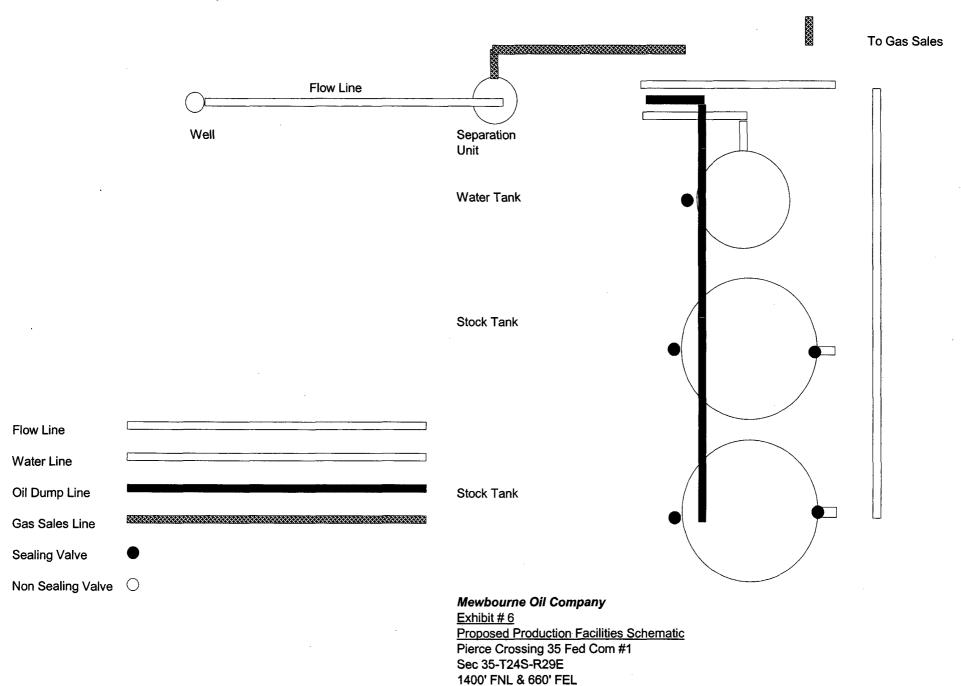
**Producing Disposal Well** 

Field: Owen Mesa



**Rig Location Schematic** 

# **Proposed Production Facilities Schematic**



Eddy County, NM