Form 3160-3 (September 2001)

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

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

DEPARTMENT OF THE INTERIORISES, NM 88210

5. Lease Serial No.

VM-83583 **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 REENTER 8. Lease Name and Well No. Oil Well Gas Well Other lb. Type of Well: Single Zone Multiple Zone Burton Flat 7 Federal #4 2. Name of Operator 9. API Well No. 3*0 - 015 -* 33*575* Mewbourne Oil Company - 14744 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 3a. Address PO Box 5270 Hobbs, NM 88240 505-393-5905 **Burton Flat Morrow** 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 1650' FNL & 660' FWL At proposed prod. zone Same AUG 2 3 2004 Sec 7-T20S-R28E 14. Distance in miles and direction from nearest town or post office 12. County or Parish 13. State OCD:ARTESIA NM 14 miles NNE of Carlsbad, NM 15. Distance from proposed\* 17. Spacing Unit dedicated to this well 16. No. of Acres in lease location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 320 18. Distance from proposed location\* 20. BLM/BIA Bond No. on file 19. Proposed Depth to nearest well, drilling, completed, applied for, on this lease, ft. 11300' NM1693, Nationwide 2285' 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 3327 GL 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 2. A Drilling Plan. Item 20 above). 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. 25. Signature Name (Printed/Typed) Date Kristi Green 07/19/04 Title Hobbs Regulatory Approved by (Signature) Name (Printed/Typed)

AUG 1 9 2004

CARLSBAD FIELD OFFICE

SURENSBN

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

\*(Instructions on reverse)

Title

Capitan Controlled Water Besin

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

District I 1625 A. 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

Form C-144 March 12, 2004

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

Pit or Below-Grade	Tank	Registration	or Closure
THE OF BOILD W CHARLE	T COLLET	1 CO ELD OF GOLD COL	01 0100010

	k covered by a "general plan"? Yes X No or below-grade tank X Closure of a pit or below-grade	
Operator:Mewbourne Oil CompanyTelephone		lress:kgreen@mewbourne.com
Address:PO Box 5270Hobbs, NM 88240		
Facility or well name:Burton Flat 7 Fed #4API #:		
County: _Eddy Latitude32-35-26.7N Longer Long	ngitude104-13-25.5W NAD: 1927 🔲 1983 🔀	
Surface Owner Federal X State Private Indian		·
Pit	Below-grade tank	
Type: Drilling X Production Disposal	Volume:bbl Type of fluid:	
Workover	Construction material:	RECEIVED
Lined X Unlined	Double-walled, with leak detection? Yes  If not	, explain why not.
Liner type: Synthetic Thickness 12 mil Clay Volume		JUL 2 0 2004
		900-ARTESIA
	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
	Too reet of more X	( o 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
	Less than 200 feet	(20
Distance to surface water: (horizontal distance to all wetlands, playas,		(20 points)
irrigation canals, ditches, and perennial and ephemeral watercourses.)	200 feet or more, but less than 1000 feet	(10 points)
	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		•
onsite Offsite If offsite, name of facility		
date. (4) Groundwater encountered: No [] Yes [] If yes, show depth belo	ow ground surfaceft. and attach sample	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:07/19/04	general permit 🔲, or an (attached) alternative OC	
Printed Name/Title_Kristi Green / Hobbs Regulatory Asst	Signature_ thuste 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 operator of its responsibility for compliance with any of	the pit or tank contaminate ground water or other federal, state, or local laws and/or
Approval JUL 2 0 2004 Printed Name/Title	Signature	

DISTRICT I 1625 M. French Dr., Hobbs, NM 88240 DISTRICT II

330' 660' 990'

1650' 1980' 2310'

State of New Mexico

Form C-102
Revised March 17, 1989
Instruction on back
Submit to Appropriate District Office
State Lesse - 4 Copies
Fee Lesse - 3 Copies

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

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	
		Burton Flat Morrow	
Property Code	Prop BURTON FLA	Well Number 4	
OGRID No.	Opera	Elevation	
14744	MEWBOURNE (	DIL COMPANY	3327

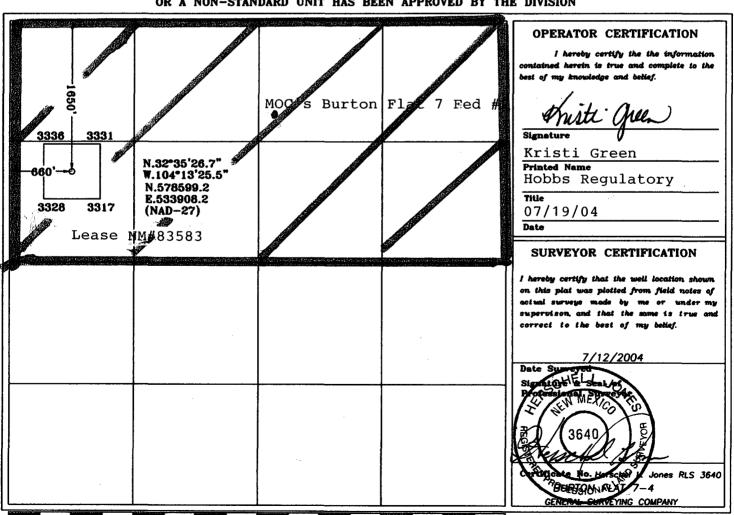
#### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Ε	7	<i>20</i> S	28E		1650	NORTH	660	WEST	EDDY

#### Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot ldn	Peet from the	North/South line	Peet from the	East/West line	County
Dedicated Acres	Joint or	infill C	onsolidation (	ode On	ier No.				<u></u>
320	ļ								

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



2310' 1980'1650

990' 660' 330'

# **Drilling Program Mewbourne Oil Company**

Burton Flat "7" Federal #4 1650' FNL & 660' FWL Sec 7-T20S-R28E Eddy County, New Mexico Lease #NM-83583

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

Yates	820'	Wolfcamp	8786'
Queen	1170'	Strawn	9796'
San Andres	1738'	Atoka	10318'
Delaware	2985'	Morrow	10800'
Bone Spring	4450'	TD	11300'

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

Approximately 200' Water All zones below Queen Hydrocarbons

#### 3. Pressure control equipment:

A 2000 psi working pressure annular BOP will be installed on the 13-3/8" surface casing. A 5000 psi WP Double Ram BOP and a 3000 psi WP Annular will be installed after running 9 5/8" casing. Pressure tests will be conducted prior to drilling out under all casing strings. BOP controls will be installed prior to drilling under surface casing and will remain in 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:**

<u>Hole Size</u>	<u>Casing</u>	<u>Wt/Ft.</u>	<u>Grade</u>	<u>Depth</u>
17-1/2"	13-3/8"	48#	H40	0-400'
12-1/4"	9-5/8"	40#	N80/J55	0-3000'
8-3/4"	5-1/2"	1 <i>7</i> #	P110/N80	0-11300'

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

## **Drilling Program**

### Mewbourne Oil Company

Burton Flat "7" Federal #4 Page 2

B. Cementing Program

- i. 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.
- ii. <u>Intermediate Casing:</u> 900 sacks 35:65 pozmix cement containing 6% gel, 5 lbs/sack gilsonite. 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 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
Burton Flat "7" Federal #4
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

Burton Flat "7" Federal #4 1650' FNL & 660' FWL Sec 7-T20S-R28E Eddy County, New Mexico Lease #NM-83583

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: Go North on Illinois Camp Rd 7.5 miles from railroad tracks. Turn east on new lease road to location.

### 2. Proposed Access Road:

- A 500' of new road will be needed. The road will enter location on the SW corner.
- 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

Burton Flat 7 Fed Com #4 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

Burton Flat 7 Fed Com #4 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

Burton Flat 7 Fed Com #4 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: \_\_\_07/21/04\_\_\_\_

Signature: Frusti green for, n.m. young

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

# Hydrogen Sulfide Drilling Operations Plan Mewbourne Oil Company

Burton Flat "7" Federal #4 1650' FNL & 660' FWL Sec 7-T20S-R28E Eddy County, New Mexico Lease #NM-83583

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

- 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.

# 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-83583

Legal Description of Land:

Section 7, T-20S, R-28E Eddy County, New Mexico. Location

1650' FNL & 660' FWL.

Formation (if applicable):

Bond Coverage:

\$150,000

BLM Bond File:

NM1693, Nationwide

Authorized Signature:

ame: NM (Micky) Young
Title: District Manager

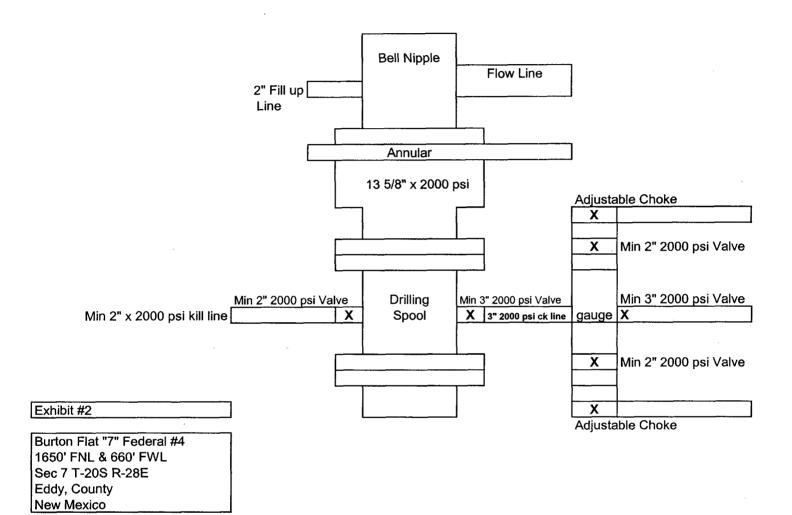
Date: July 19, 2004

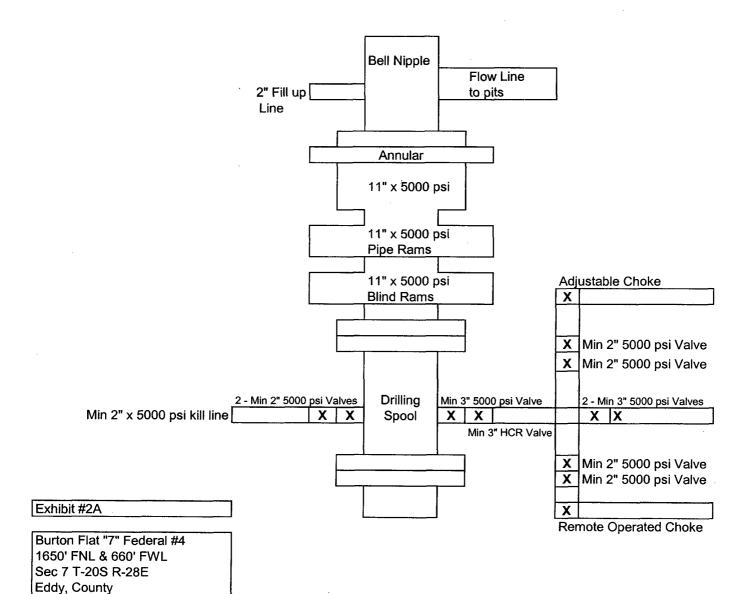
# Notes Regarding Blowout Preventer Mewbourne Oil Company

Burton Flat "7" Federal #4 1650' FNL & 660' FWL Sec 7-T20S-R28E Eddy County, New Mexico Lease #NM-83583

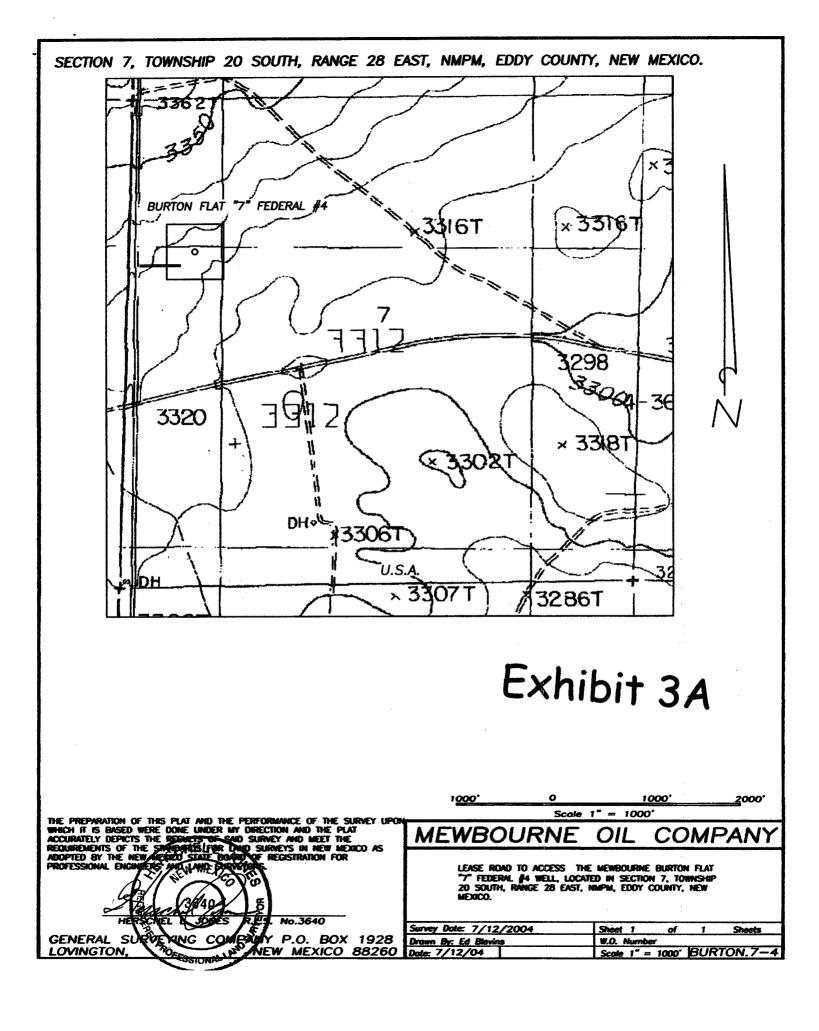
- 1. Drilling nipple (bell nipple) to be constructed so that it can be removed without the use of a welder through the opening of the rotary table, with minimum internal diameter equal to blowout preventer bore.
- 2. Blowout preventer and all fittings must be in good condition with a minimum 5000 psi working pressure.
- 3. Safety valve must be available on the rig floor at all times with proper connections to install in the drill string. Valve must be full bore with minimum 5000 psi working pressure.
- 4. Equipment through which bit must pass shall be at least as large as internal diameter of the casing.
- 5. A kelly cock shall be installed on the kelly at all times.
- 6. Blowout preventer closing equipment to include and accumulator of at least 40 gallon capacity, two independent sources of pressure on closing unit, and meet all other API specifications.

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





New Mexico



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

Burton Flat "7" Federal #4 1650' FNL & 660' FWL Sec 7-T20S-R28E Eddy County, New Mexico Lease #NM-83583

# Section 7 T-20S R-28E

Operator:

Mewbourne Oil Company

Well Name: Burton Flat 7 Federal Com #1

Unit letter:

Status:

Producing

Field:

**Burton Flat Morrow** 

Operator:

Mewbourne Oil Company

Well Name: Burton Flat 7 Federal Com #2

Unit letter:

Status:

Producing

Field:

Angell Ranch Atoka Morrow

Operator:

Mewbourne Oil Company

Well Name: Burton Flat 7 Federal Com #3

Unit letter:

Status:

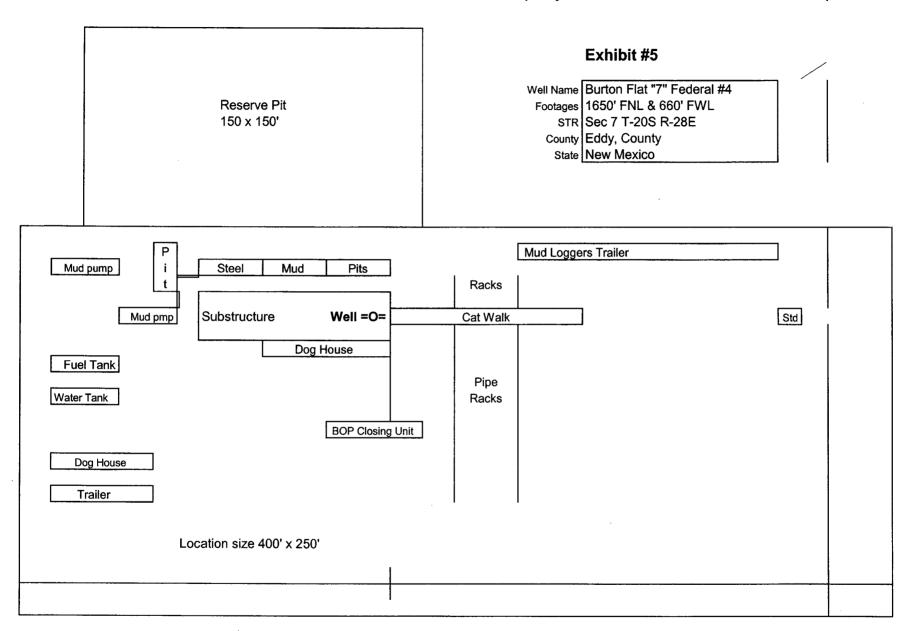
Producing

Field:

**Burton Flat Morrow** 







# **Proposed Production Facilities Schematic**

