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# 1301 W. Grand A nue

Form 3160-3 (July 1992)

UNITED STATES - AT DEPARTMENT OF THE INTERIOR

Artesia, NW 1882 (U

FORM APPROVED OMB NO. 1004-0136 Expires: February 28, 1995

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BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.
NMLC-020303-A 0.76/33

APPLIC	ATION FOR PERI	MIT TO DR	ILL O	R DEEPEN		6. IF INDIAN, ALLOTTEE	OR TRIBE NAME	
	DRILL X DEEPEN L			7. UNIT AGREEMENT NA	M95198			
b. TYPE OF WELL OIL	GAS 🔽		SINGLE X MULTIPLE ZONE			8. FARM OR LEASE NAM	SJI/D	
	WELL OTHER		ZC	NE 🔼	ZONE L	Fren "8" Federal Com # 4		
. NAME OF OPERATOR  Mewbourne Oil Col	mnany /4/7	214				9. API WELL NO.	0011# 4	
B. ADDRESS AND TELEPHONE		7 ]				30-015-	. 323 <i>0</i> 3	
		2 5005				10. FIELD AND POOL, OF		
	bbs, NM 88241 (505) 3		nanto #\			North Shugar	Morrow	
	t location clearly and in accordance	with any State requirer	nents.")			11. SEC., T., R., M., OR B		
At proposed prod. zone	1/92 FEL	•				AND SURVEY OR ARI		
At proposed prod. Zone	Sec.8, T18S	, R31E						
4 DISTANCE IN MILES AND	DIRECTION FROM NEAREST TOV	N OR POST OFFICE				12. COUNTY OR PARISH	13. STATE	
5 Miles East of Loc						Eddy	NM	
5. DISTANCE FROM PROPOS			16. NO. 0	OF ACRES IN LEASE		F ACRES ASSIGNED		
LOCATION TO NEAREST						IS WELL 320		
PROPERTY OR LEASE LIN (Also to nearest drig, unit line	e, if any)		19 PPO	POSED DEPTH	20 ROTA	RY OR CABLE TOOLS		
<ol> <li>DISTANCE FROM PROPOS TO NEAREST WELL, DRILL</li> </ol>		244'	13. FAO	12110	20,1,077	Rotary		
OR APPLIED FOR, ON THIS LEASE, FT. 2344 12110							DE MALL STARTS	
21. ELEVATIONS (Show wheth	er DF, RT, GR, etc.)					22. APPROX. DATE WO	KK WILL STAK!	
3673' GL						05/15/02		
23.		PROPOSED CAS	ING AND	CEMENTING PRO	OGRAM			
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FO	OOT	SETTING DEPT	тн '	QUANTITY OF CEN	IENT	
17-1/2"	H40, 13-3/8"	48#		625'		400 sacks Circulate	to Surface	
12-1/4"	J-55, 8-5/8"	32#		4500'		1100 sacks Circulate	to Surface	
7-7/8"	N80, 5-1/2"	17#		12110'		600 sacks	}	
attachments.  1) Location and Ele 2) Drilling Program 3) Surface Use and 4) Schematic Diagr 5) Map of existing a 6) List of Offset We 7) Proposed Drilling 8) Proposed Produ 9) Hydrogen Sulfide	am of Blowout Preventer and Planned Access Roa	m C102) and Choke Mad and Location chibit 6) ibit 7)	nifold (Exhibit	Exhibits 2 & 2A) 3 & 3A)  Controlled V	APPROV GENERA SPECIAL ATTACH	VAL SUBJECT ' AL REQUIREMI L STIPULATION IED	TO E <b>NTS AND</b> <b>NS</b>	
24. Jan	B.Le_		Dei	line Ference		04/10	ນທວ	
SIGNED		TI	TLE DI	lling Foreman		DATE 04/10	JIUZ	
(This space for Federal	or State office use)							
PERMIT NO.	not warrant or certify that the applica	nt haida iogal as agust				entitle the applicant to conduct		
Application approval does r CONDITIONS OF APPROV	not warrant or certify that the applica /AL, IF ANY:	nt noias iegai or equita	DIE TILLE TO T	nose ngats in the subje	SOL ICASC WITHOUT WOULD B	made the applicant to conduct	oporationo trereon.	
[m]	LESTIE A. TH	IFISS	FI	ELD MAN	IAGER	MAY	1 6 2002	
APPROVED BY/5/	LLULIL M. II		<del>.</del>					

DISTRICT I 1825 N. French Dr., Hobbs, 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

### State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999 Instruction on back Submit to Appropriate District Office

> State Lease - 4 Copies Fee Lease - 3 Copies

### OIL CONSERVATION DIVISION

P.O. Box 2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

# Santa Fe, New Mexico 87504-2088

API Number	Pool Code	Pool Name
	North Sl	nugart Morrow
Property Code	Property Name	Well Number
	FREN "8" FEDERAL COM.	4
OGRID No.	Operator Name	Elevation
	MEWBOURNE OIL COMPANY	3673

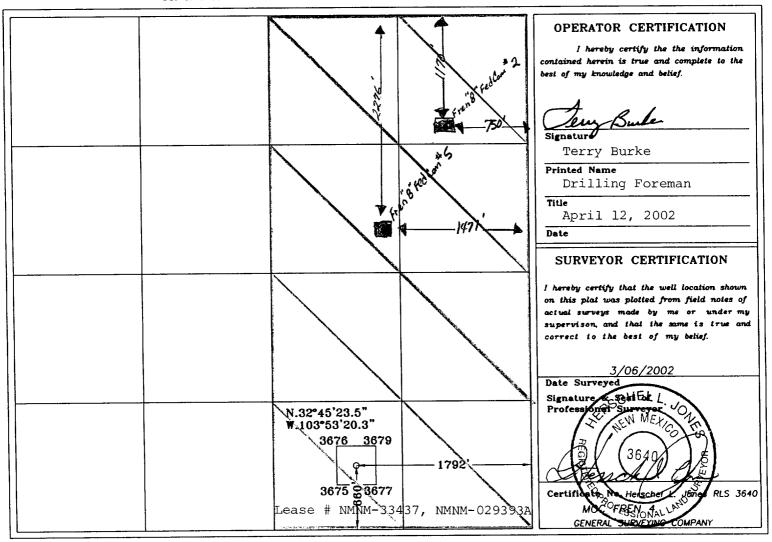
### Surface Location

1	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	0	8	185	31E		660	SOUTH	1792	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
Dedicated Acres	Joint o	r Infill Co	nsolidation (	Code Or	der No.		<del></del>		
320									

# 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



### **Drilling Program**

### **Mewbourne Oil Company**

Fren "8" Federal Com # 4 660' FSL & 1792' FEL Section 8-T18S-R31E Eddy County, New Mexico

Lease Number NMNM-33437, NMNM-029393A

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

Yates	1,975'
Queen	3,110'
Penrose	3,335'
San Andres	3,835'
Delaware	4,370'
Bone Springs	5,110'
1 <sup>st</sup> Bone Springs	7,425'
2 <sup>nd</sup> Bone Springs	8,000'
3 <sup>rd</sup> Bone Springs	8,970'
Wolfcamp	9,200'
Strawn	10,645'
Atoka	11,195'
Morrow	12,675'

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

Water Approximately 200'

Hydrocarbons All zones below San Andres

### 3. Pressure control equipment:

Two thousand psi working pressure annular BOP's will be installed on the 13-3/8" surface casing. Three thousand psi working pressure BOP's and two thousand psi working pressure Hydril will be installed on the 8-5/8" intermediate 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.

### **Drilling Program**

### Mewbourne Oil Company

Fren "8" Federal Com # 4

Page 2

### 4. Proposed casing and cementing program:

### A. Casing Program:

Hole Size	Casing	Wt/Ft.	<u>Grade</u>	<u>Depth</u>
17-1/2"	13-3/8"	48#	<b>H</b> 40	0-625'
12-1/4"	8-5/8"	32#	J55/HCK55	0-4500'
7-7/8"	5-1/2"	17#	N80/S95	0-12110'

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

### 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> 1500 sacks 35:65 pozmix cement containing 6% gel, 5 lbs/sack gilsonite. 200 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 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:

Interval	Type System	<u>Weight</u> 8.6-9.4	Viscosity 32-34	<u>Fluid Loss</u> NA
0'-625' 625'-4500'	FW spud mud Brine Water	10.0-10.2	28-30	NA
4500'-9500' 9500'-12110'	Cut brine water Cut brine water	8.8-9.2 9.2-9.8	28.30 32-42	NA 8-12

### 6. Evaluation Program:

Samples:

10'samples from intermediate casing to TD

Logging:

Compensated density and dual laterlog from intermediate casing

to TD

Coring:

As needed for evaluation

Drill Stem Tests:

As needed for evaluation

### **Drilling Program**

## Mewbourne Oil Company

Fren "8" Federal Com # 4 Page 3

#### **Downhole Conditions** 7.

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

#### **Anticipated Starting Date:** 8.

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 35 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

Fren "8" Federal Com # 4 660' FSL & 1792' FEL Section 8-T18S-R31E Eddy County, New Mexico Lease Number NMNM-33437, NMNM-029393A

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:

- Exhibit #3 is a road map showing the location of the proposed well. Exhibit #3A A. 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.
- Directions to location: From Hobbs go West on Highway 62/180 to juction of В. 62/180 and 529. Turn North on 529 and go 31 miles to juction of 529 & Hwy 82. Turn left on Hwy 82 and go ½ mile to juction 529 & C222. Turn South on C222 and go 4 miles. Turn west and take new lease road 1500' into our new location.

### 2. Proposed Access Road:

- The access road will be built from C222 approximately 1/4 mile East of the Α location pad and will enter the location pad from the Southeast corner.
- The access to the location will be limited to 16' in width and will adequately drain B. runoff and control erosion as presently constructed.
- Access to location has an existing grade to facilitate adequate drainage. C.

D.

## 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:

- There are no production facilities on this lease at the present time. A.
- In the event that the well is productive, production facilities will be located on the B.
- If the well is productive, restoration plans are as follows: C.

# MULTI-POINT SURFACE USE AND OPERATIONS PLAN

### MEWBOURNE OIL COMPANY

Fren "8" Federal Com # 4

Page 2

- i. The reserve pit will be back-filled after the contents of the pit are allowed to dry (within 180 days 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
- 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.

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

Fren "8" Federal Com # 4 Page 3

### 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 400' 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 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.

# MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MEWBOURNE OIL COMPANY

Fren "8" Federal Com # 4 Page 4

## 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

B. Through completion and production operations:

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

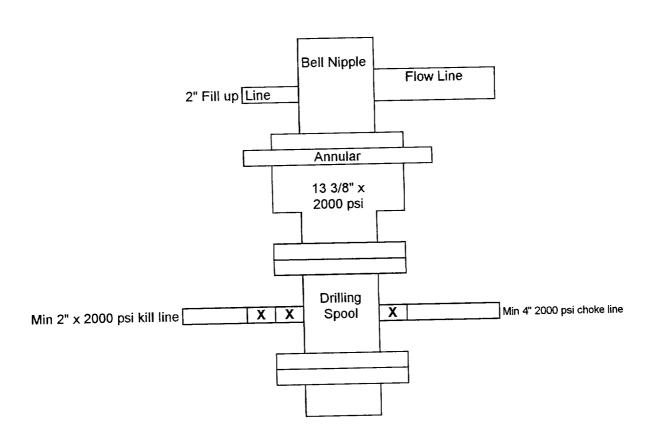
### 14. Certification

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.

	1011
Date: 4/11/02	Signature: All/
	<i>(</i> )

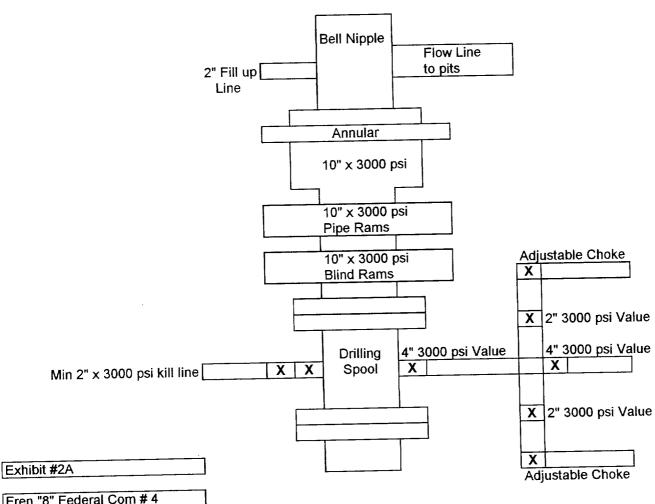
N.M. Young, District Manager Mewbourne Oil Company PO Box 5270 Hobbs, NM 88241 (505) 393-5905

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



### Exhibit #2

Fren "8" Federal Com # 4 660' FSL & 1792' FEL Sec.8 T-18S R-31E Eddy, County New Mexico



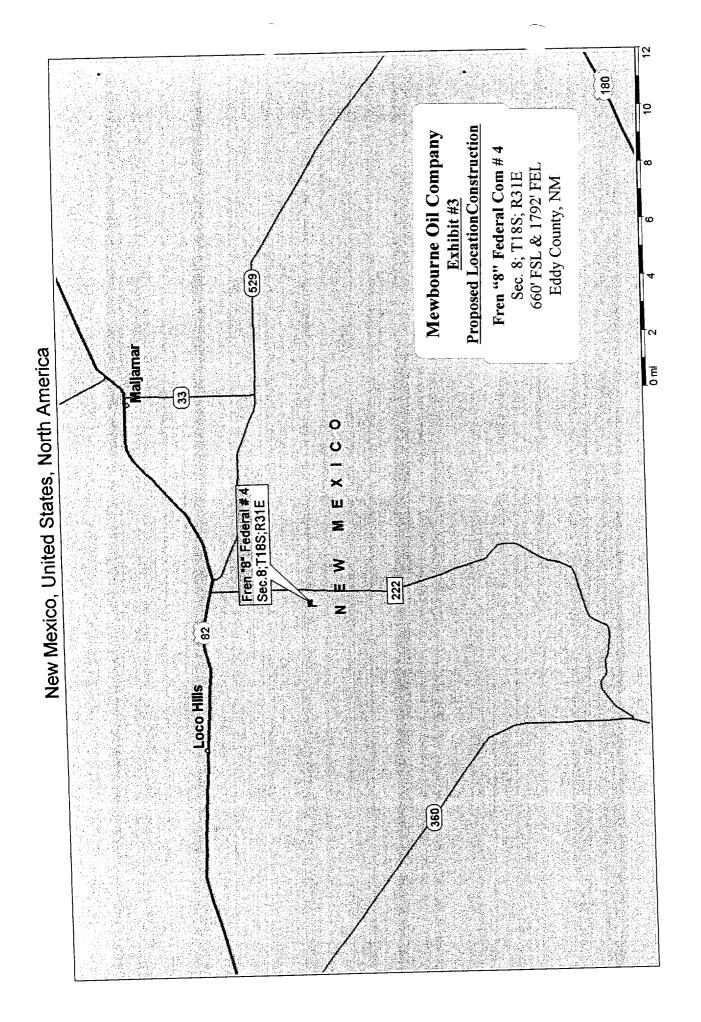
Fren "8" Federal Com # 4 660' FSL & 1792' FEL Sec.8 T-18S R-31E Eddy, County New Mexico

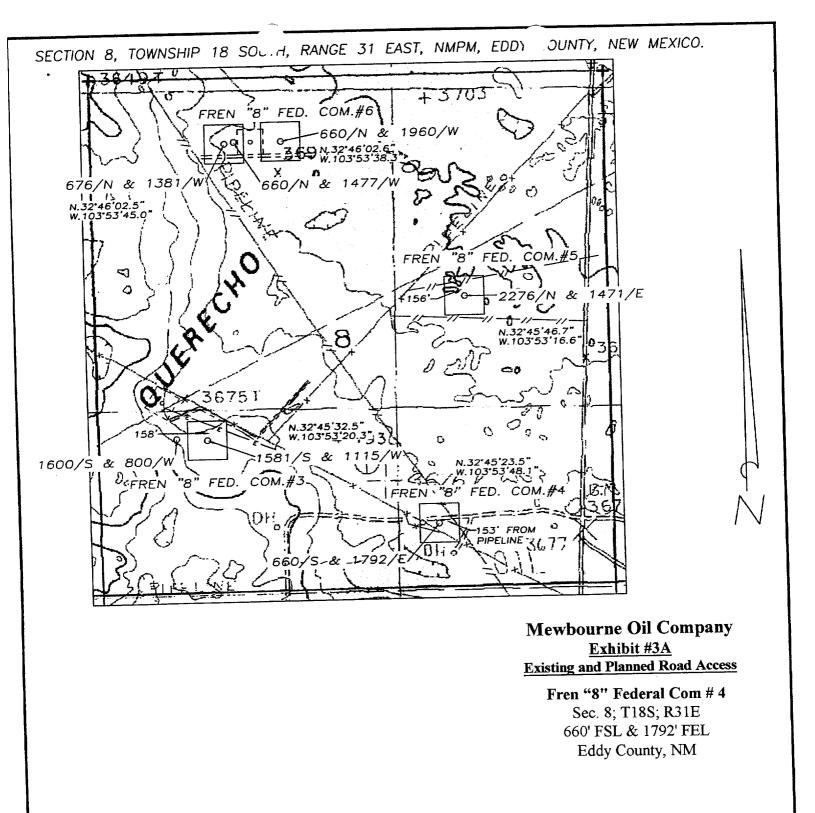
# **Notes Regarding Blowout Preventer**

**Mewbourne Oil Company** 

Fren "8" Federal Com # 4
660' FSL & 1792' FEL
Section 8- T18S-R31E
Eddy County, New Mexico
Lease Number NMNM-33437, NMNM-029393A

- 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.
- Blowout preventer and all fittings must be in good condition with a minimum 2000 psi working pressure.
- 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 2000 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.
- 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.





THE PREPARATION OF THIS PLAT AND THE PERFORMANCE OF THE SURVEY UPON CHARDILIT IS BASED WERE DONE UNDER MY DIRECTION AND THE PLAT ACCURATELY DEPICTS THE RESULTS OF SAID SURVEY OF THE REPOSITEMENTS OF THE STANDARDS OF AND SURVEY OF NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

GENERAL SURVERSIMON COMPANY P.O. BOX 1928 LOVINGTON, NEW MEXICO 88260 1<u>000' 0 1000' 2</u>000' Scole 1" = 1000'

# MEWBOURNE OIL COMPANY

MEWBOURNE FREN "8" FEDERAL COM.2, 3, 4, & 5 WELLS LOCATED IN SECTION 8, TOWNSHIP 18 SOUTH, RANGE 31 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

Survey Date: 3/06/2002	Sheet	1	of	1	Sheets
	W.O.	Number		ICOCAL	110 11
Date: 3/07/02	Scale	1" =	1000	FREN	0

### Exhibit #4

## Status of Wells in Immediate Vicinity

## **Mewbourne Oil Company**

Fren "8" Federal Com # 4 660' FSL & 1792' FEL Section 8 T-18S R-31E Eddy County, New Mexico Lease Number NMNM-33437, NMNM-029393A

### Section 8 T-18S R-31E

Mewbourne Oil Company Operator:

Well Name: Fren "8" Federal Com # 1

Unit letter:

Producing Status:

North Shugart Morrow Field:

Mewbourne Oil Company Operator: Well Name: Fren "8" Federal Com # 2

Unit letter: Α

Producing Status:

North Shugart Morrow Field:

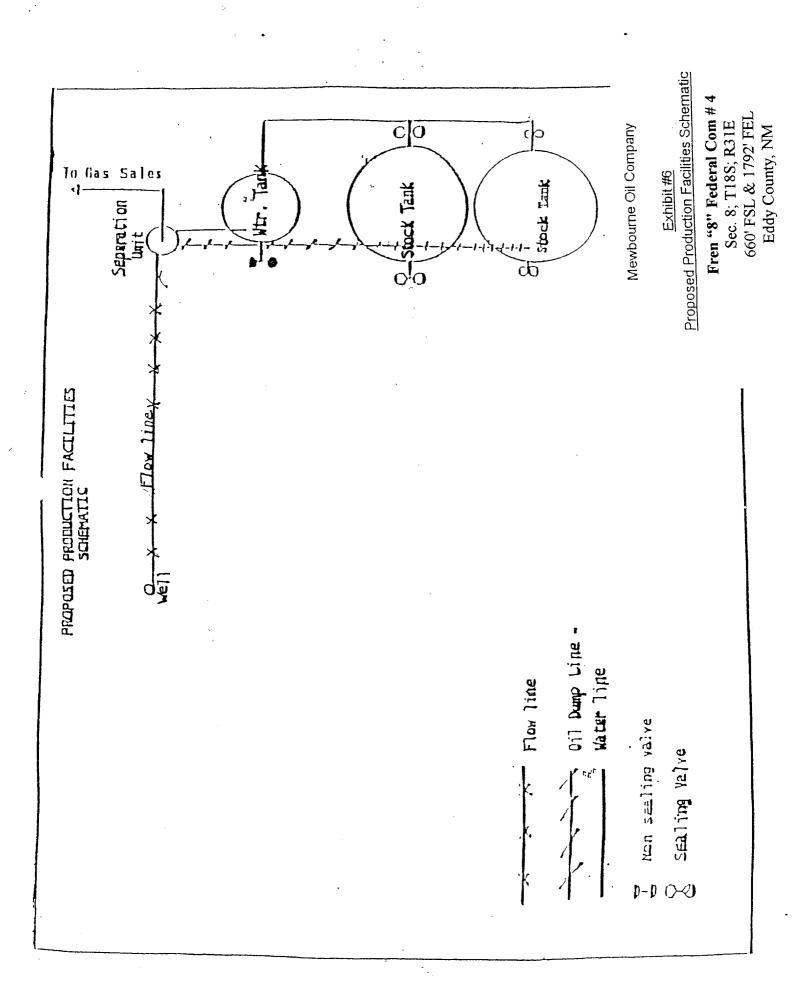
Mewbourne Oil Company Operator: Well Name: Fren "8" Federal Com # 3

Unit letter:

Waiting on Permit Status: North Shugart Morrow Field:

Mewbourne Oil Company

Rig Location Schematic



# Hydrogen Sulfide Drilling Operations Plan

**Mewbourne Oil Company** 

Fren "8" Federal Com # 4
660' FSL & 1792' FEL
Section 8- T18S-R31E
Eddy County, New Mexico
Lease Number NMNM-33437, NMNM-029393A

### 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.
- 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.
- 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. 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. Visual Warning Systems

- 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

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.

### 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 5570

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 NMNM-33437, NMNM-029393A

Legal Description of Land:

Section 8, T18S, R31E, Eddy County, New Mexico. Location

660' FSL & 1792' FEL of Section 8.

Formation (if applicable):

Bond Coverage:

\$150,000

BLM Bond File:

NM1693, Nationwide

Authorized Signature:

me:)NM (Micky) Young
Title: District Manager

Date: April 11, 2002