Form 3160-3 (July 1992)

UNIT LJ STATES DEPARTMENT OF THE INTERIOR

CATE SUBMIT IN T. (Other instructions on reverse side)

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

BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO. NM-101967

APPLICATION FOR PERMIT TO DRILL OR DEEPEN					6. IF INDIAN, ALLOTTEE OR	TRIBE NAME
1a. TYPE OF WORK b. TYPE OF WELL	DRILL X DEEPEN		A Section Print Control		7. UNIT AGREEMENT NAME	
OIL WELL	GAS WELL OTHER		SINGLE X	MUCTIPLE ZONE	8, FARM OR LEASE NAME, V	WELL NO
2. NAME OF OPERATOR		11	187	24/	Empire "7" Fede	
Mewbourne Oil C	ompany 1474	4	7 3 M	2 5 ∫	9.ARI WELL NO.	
3. ADDRESS AND TELEPHO	NE NO.		RECEIVE	0 0	<u> つのこの/5</u>	<u> </u>
P.O. Box 5270, H	lobbs, NM 88241 (505)39	3-5905	OCD ARTE		10. FIELD AND POOL, OR V	VILDCAT
4. LOCATION OF WELL (Rep	port location clearly and in accordance	with any State requirer	nents.*)	<u></u>	Empire Morrow (South)
At surface 760' FSL	. & 660' FEL		**) ****	.તાર્જે	11. SEC., T., R., M., OR BLK AND SURVEY OR AREA	-
At proposed prod. zone	4. P		ેં લાકાકા	breig.	Sec.7, T17S, I	R29E
14. DISTANCE IN MILES AN	D DIRECTION FROM NEAREST TOV	N OR POST OFFICE			12. COUNTY OR PARISH	13. STATE
5 miles West of L	.oco Hills				Eddy	NM
15. DISTANCE FROM PROP			16. NO. OF ACRES IN LEASE		OF ACRES ASSIGNED	
LOCATION TO NEAREST PROPERTY OR LEASE L (Also to nearest drig. unit I	r ,ine,,ft	60'	292.96	101	TO THIS WELL 292.96	
(Also to nearest drig, unit I 18. DISTANCE FROM PROP			19. PROPOSED DEPTH	20. ROT	20. ROTARY OR CABLE TOOLS	
TO NEAREST WELL, DR OR APPLIED FOR, ON T	ILLING, COMPLETED, 4-	748'	10,800	•	Rotary	
21. ELEVATIONS (Show whe					22. APPROX. DATE WORK	(WILL START*
3651' GL					02/01/02	
23.		PROPOSED CAS	SING AND CEMENTING PR	OGRAM	ell Controlled Water	Daoin
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER F	OOT SETTING DEP		QUANTITY OF CEMEN	
17-1/2"	H40, 13-3/8"	48#	200'		200 sacks , Circulate to Surfa	
12-1/4"	J-55, 8-5/8"	32#	2600'	i	800 sacks Circulate to Surface	
7-7/8"	N80, 5-1/2"	17#	10,800	•	600 sacks	
the well will be plugged and abondoned in accordance with regulatory guidelines. Specific plans are outlined in the following attachments. **PERAL REQUIREMENTS AND SPECIAL STIPULATIONS** 1) Location and Elevation Plat (NMOCD Form C102) 2) Drilling Program 3) Surface Use and Operation Plan 4) Schematic Diagram of Blowout Preventer and Choke Manifold (Exhibits 2 & 2A) 5) Map of existing and Planned Access Road and Location (Exhibits 3 & 3A) 6) List of Offset Wells 7) Proposed Drilling Rig Layout (Exhibit 5) 8) Proposed Production Facilities Latout (Exhibit 6) 9) Hydrogen Sulfide Contingency Plan (Exhibit 7) IN ABOVE SPACE DESCRIBE PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.						
SIGNED	Lenz Binde	π	TLE Drilling Foreman		DATE 12/01/0)1
(This space for Feder	ral or State office use)					
PERMIT NO.			APPROVAL DATE			
Application approval doe CONDITIONS OF APPR	is not warrant or certify that the applicatioNAL, IF ANY:	nt holds legal or equita	ble title to those rights in the subj	ject lease which would	entitle the applicant to conduct op	erations thereon.
APPROVED BY	/ S / JOE G. L/	ARA TITLE	, FIELD MAN	iage ą ,	JAN 28	2002
	·	*Coo locatorio	tions On Bourse Sie	No AP	FRUVAL FUR	YEAH

DISTRICT I 1625 M. French Dr., Hobbs, NM 86240 DISTRICT II 811 South First, Artesia, NM 88210 DISTRICT III 1000 Ric Brazos Ed., Astec, RM 87410

DISTRICT IV 2040 South Panhooo, Santa Fc, NM 87505

API Number

State of New Mexico

Energy, Minerals and Natural Resources Department

Revised March 17, 1999 Instruction on back Submit to Appropriate District Office

Pool Name

State Lease — 4 Copies For Lease — 3 Copies

OIL CONSERVATION DIVISION P.O. Box 2088

Santa Fe, New Mexico 87504-2088

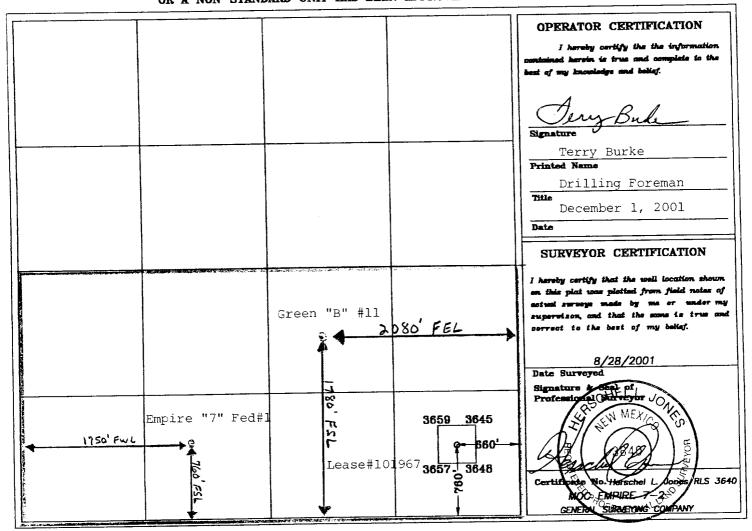
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

Pool Code

					İ	Empire M	orrow South	(Gas)	
Property C	ode		Property Name					Well Number	
				EMP	IRE "7" FEDERAL	•		2	
OGRID No.			Operator Name				Elevation		
				MEWBOURNE OIL COMPANY				3651	
		1			Surface Loca	ation			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Р	7	175	29E		760	SOUTH	660	EAST	EDDY
		<u> </u>	Bottom	Hole Lo	cation If Diffe	erent From Sur	face		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Fest from the	East/West line	County
Dedicated Acre	Joint o	m Infill C	medidation	Code Or	rder No.	<u> </u>		<u> </u>	
292.96	-								

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

Empire "7" Federal #2 760' FSL & 660' FEL Section 7- T17S-R29E Eddy County, New Mexico Lease Number NM-101967

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

Seven Rivers	1030'
Loco Hills	2120'
San Andres	2400'
Lovington	2480'
Tubb	5190'
Abo	5895'
Wolfcamp	7130'
Cisco	8710
Strawn	9820'
Atoka	9980'
Morrow	10120'

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

Empire "7" Federal #2

Page 2

4. Proposed casing and cementing program:

A. Casing Program:

Hole Size	Casing	<u> Wt/Ft.</u>	<u>Grade</u>	<u>Depth</u>
17-1/2"	13-3/8"	48#	H40	0-200'
12-1/4"	8-5/8"	32#	J55	0-2600'
7-7/8"	5-1/2"	17#	N80	0-10800'

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

B. Cementing Program

- i. <u>Surface Casing</u>: 100 sacks Class "C" light cement containing ½ #/sk cellophane flakes, 2% CaCl, 5 lbs/sack gilsonite. 100 sacks Class "C" cement containing 2% CaCl.
- ii. <u>Intermediate Casing:</u> 600 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.

5. Mud Program:

<u>Interval</u>	Type System	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0'-200'	FW spud mud	8.6-9.4	32-34	NA
200'-2600'	Brine water	10.0-10.2	28-30	NA
2600'-7100'	Cut brine water	8.8-9.2	28.30	NA
7100'-10800'	Cut brine water	9.2-9.8	32-42	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

^{*}Mewbourne Oil Company reserves the right to change cement designs as hole conditions may warrant.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN MEWBOURNE OIL COMPANY

Empire "7" Federal #2 760' FSL & 660' FEL Section 7-T17S-R29E Eddy County, New Mexico Lease Number NM-101967

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 yellow and proposed roads are highlighted in green.
- B. Directions to location: West from Loco Hills on Highway 82 approximately 7 miles (between mile marker 124 and 125) turn North on caliche road through cattle guard. Stay on main lease road approximately 2 ½ miles to T. Turn right at T and go East approximately 1 3/4 miles. Turn right (South) on road and follow to location.

2. Proposed Access Road:

- A The access road will be built from an existing lease road approximately 200' North of the location pad and will enter the location pad from the Northeast 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.
- C. Access to location has an existing grade to facilitate adequate drainage.

3. Location of Existing Wells:

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

4. Location of Existing and/or Proposed Facilities & Proposed Pipeline:

- 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:

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MEWBOURNE OIL COMPANY

Empire "7" Federal #2 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
- 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 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

Empire "7" Federal #2 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

Empire "7" Federal #2 Page 4

13. Operator's Representative:

A. Through APD approval and drilling operations:

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

B. Through completion and production operations:

Mickey 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:	12/4/01	Signature:	AMlling	
Miskay Varia	District Manager		\mathcal{I}	

Mickey 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

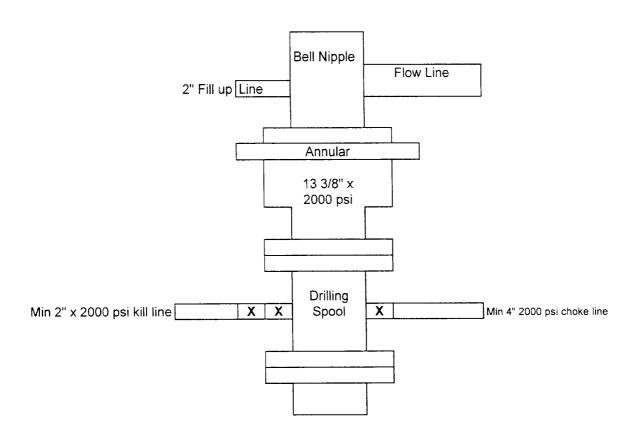
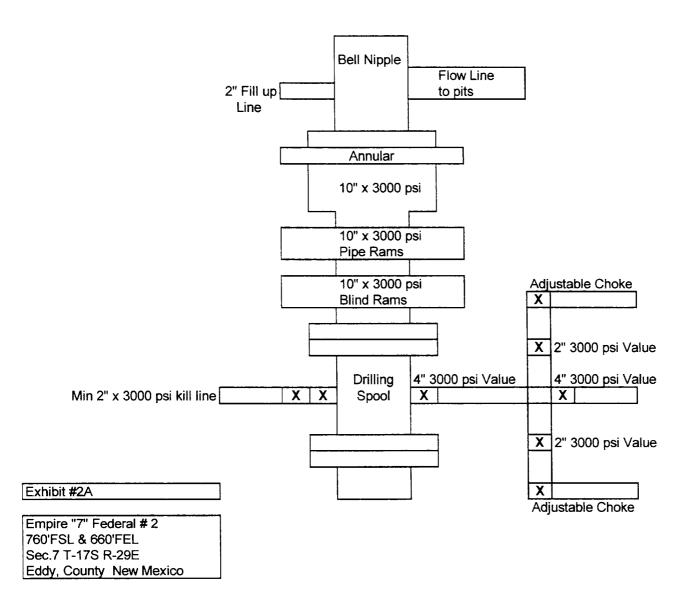


Exhibit #2

Empire 7 Federal #2 760' FSL & 660' FEL Sec.7 T-17S R-29E Eddy, County New Mexico



Notes Regarding Blowout Preventer Mewbourne Oil Company

Empire "7" Federal #2 760' FSL & 660' FEL Section 7- T17S-R29E Eddy County, New Mexico Lease Number NM-101967

- 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 2000 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 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.
- 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.

Exhibit #4

Status of Wells in Immediate Vicinity

Mewbourne Oil Company

Empire "7" Federal # 2 760' FSL & 660' FEL Section 7 T-17S R-29E Eddy County, New Mexico Lease # NM - 101967

Section 7 T-17S R-29E

Operator: Mewbourne Oil Company

Well Name: Green "B" # 11

Unit letter: J

Status: Producing

Operator: Mewbourne Oil Company Well Name: Empire "18" State # 1

Unit letter:

Status: Producing

Operator: Mewbourne Oil Company Well Name: Empire "18" Federal # 2

Unit letter: 1

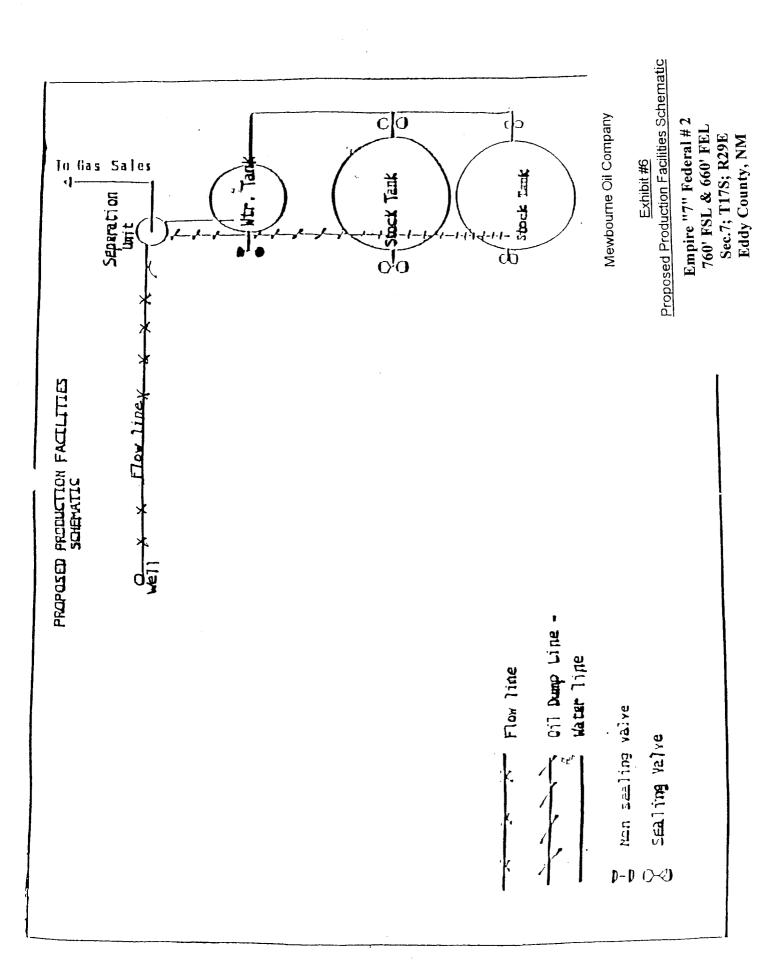
Other Color:

Status: Producing

Operator: Mewbourne Oil Company Well Name: Empire "7 Federal # 1

Unit letter: N

Status: Producing



Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company

Empire "7" Federal #2 760' FSL & 660' FEL Section 7- T17S-R29E Eddy County, New Mexico Lease Number NM-101967

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.
- 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.
- 3 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. <u>Protective Equipment for Essential Personnel</u>

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. 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 NM-101967

Legal Description of Land: Section 7, T17S, R29E, Eddy County, New Mexico. Location

760' FSL & 660' FEL of Section 7.

Formation (if applicable):

Bond Coverage: \$150,000

BLM Bond File: NM1693, Nationwide

Authorized Signature:

Name: NM (Micky) Young Title: District Manager Date: Dec 01, 2001