Form 3160-3 (July 1992)

UNITED STATES

SUBMIT IN Th. ... \TE* (Other instructions on reverse side)

FORM APPROVED OMB NO. 1004-0136

Expires: February 28, 1995 5. LEASE DESIGNATION AND SERIAL NO.

DEPARTMENT OF THE INTERIOR	1000
BUREAU OF LAND MANAGEMENT	

7,	NM 14847	,				
APPLIC	ATION FOR PERI	MIT TO DRILL	OR DEEPEN		6. IF INDIAN, ALLOTTEE OR	TRIBE NAME
a. TYPE OF WORK b. TYPE OF WELL OIL WELL	GAS OTHER	TIPLE	7. UNIT AGREEMENT NAME			
WELL 🔼	WELL U OTHER		ZONE X ZONE	E —	8. FARM OR LEASE NAME, N Empire "18" Fede	
Mewbourne Oil Co	ompany /474	4	ZONE Z ZONE ZONE Z ZONE ZONE Z ZONE	2	9. API WELL NO.	31 al #O
3. ADDRESS AND TELEPHON	NE NO.		/9 ^N A	3	31450	
P.O. Box 5270 Ho	obbs, NM 88241 (505)39	3-5905	A House	18 15 3	10. FIELD AND POOL, OR W	VILDCAT
	ort location clearly and in accordance	with any State requirements.	(o NUV 2000)	ठ ।	East Empire \	/eso
At surface RECEIVED					11. SEC., T., R., M., OR BLK AND SURVEY OR AREA	
At proposed prod. zone 660' FSL & 440' FWL					Sec.18,T17S,R29E	
4. DISTANCE IN MILES AND	DIRECTION FROM NEAREST TOW	N OR POST OFFICE*			12. COUNTY OR PARISH	13. STATE
5 miles West of Lo	oco Hills		(C) (C) (C)		Eddy	NM
15. DISTANCE FROM PROPO LOCATION TO NEAREST PROPERTY OR LEASE LII (Also to nearest drig. unit lin		30'	O. OF ACRES IN LEASE	17. NO. OF TO THIS	ACRES ASSIGNED S WELL 40	
18. DISTANCE FROM PROPO TO NEAREST WELL, DRIL OR APPLIED FOR, ON TH	DSED LOCATION* LLING, COMPLETED,	19. P	ROPOSED DEPTH 5300		y or cable tools Rotary	
21. ELEVATIONS (Show whet 3687' GL	her DF, RT, GR, etc.)	Maria Linder and a street			22. APPROX. DATE WORK 10/15/00	WILL START*
23.	•	PROPOSED CASING A	ND CEMENTING PROGRAM	1		
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH		QUANTITY OF CEMEN	IT
12-1/4"	J55, 8-5/8"	32#	400		200 sacks circulate to	surface
7-7/8"	J-55, 5-1/2"	17#	5300	7(00 sacks tie back into	0 E/0"

OHE THEET.

1) Drilling Program

2) Surface Use and Operaation Plan

3) Location and Elevation Plat (NMOCD Form C102)

4) Schematic Diagram of Blowout Preventer and Choke Manifold (Exhibits 2A)

5) Map of Existing and Planned Access Road and location (Exhibits 3 & 3A)

6) List of Offset Wells (Exhibit 4)

7) Proposed Drilling Rig Layout (Exhibit 5)

8) Proposed Production Facilities Layout (Exhibit 6)

9) Hydrogen Sulfide Contingency Plan (Exhibit 7)

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS

. /		
SIGNED AMIJUL	TITLE Disrtict Manager	DATE 09/19/00
(This space for Federal or State office use)		
PERMIT NO.	APPROVAL DATE	
Application approval does not warrant or certify that the applicant holds CONDITIONS OF APPROVAL, IF ANY:	legal or equitable title to those rights in the subject lease which wor	uld entitle the applicant to conduct operations thereon.
Application approval does not warrant or certify that the applicant holds CONDITIONS OF APPROVAL, IF ANY: /S/LARRY D. BRAY	legal or equitable title to those rights in the subject lease which work ARRIVATION FINE Mar ARRIVAS AND Minerals	lager

Title 18 U.S.C. Section 1001, makes 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.

DISTRICT I P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT II P.O. Drawer DD,-Artesia, NM 68211-0719

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

OIL CONSERVATION DIVISION

P.O. Box 2088 Santa Fe, New Mexico 87504-2088

DISTRICT IV P.O. Box 2088, Santa Fe, NM 87504-2088 ☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code		Pool Name	
Property Code	EMI	Property Name PIRE "18" FEDERAL		Well Number
OGRID No.	MI	Operator Name EWBOURNE OIL CO.		Elevation 3687
		Surface Location		
- 1-4 No. Section Townsh	n Range Lot Idn	Feet from the North/South line	Feet from the	East/West line Co

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
LOT #4	18	17 S	29 E		660	SOUTH	440	WEST	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 Acre	s Joint	or Infill Co	nsolidation	Code Or	der No.				
27.04								2.44	

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

LOT 1 26.69 AC.	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.
LOT 2 26.81 AC.	Signature Terry Burke Printed Name Drilling Foreman Title September 19, 2000
LOT 3 26.92 AC.	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison and that the same is true and correct to the best of my bekief.
LOT 4 27.04 AC. 3686.2 3681.8 Lease#14847	SEPTEMBER 6, 2000 Date Surveyed JLP Signature & Seal of Professional Surveyor W.O. Nura. 00-11-1085 Certificate No. Ronald J. EIDSON, 3239 GARY G. EIDSON, 12641 MACON McDONALD, 12185

Drilling Program

Mewbourne Oil Company

Empire "18" Federal #6 660'FSL & 440' FWL Section 18- T17S-R29E Eddy County, New Mexico Lease Number NM14847

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

Yates	847'
Queen	1685'
San Andres	2380'
Glorietta	3800'
Yeso	3960'
Tubb	5292'

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

Water Apr

Approximately 200'

Hydrocarbons

All zones below San Andres

3. Pressure control equipment:

Pressure tests will be conducted prior to drilling out from under surface string of 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.

4. Proposed casing and cementing program:

A. Casing Program:

Casing 110	51 #4111 1			
Hole Size	Casing	Wt/Ft.	<u>Grade</u>	<u>Depth</u>
12-1/4"	8-5/8"	32#	J55	0-400'
7-7/8"	5-1/2"	17#	N80	0-5300'
			755	

Drilling Program

Mewbourne Oil Company

Empire "18" Federal #6

Page 2

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

B. **Cementing Program**

- Surface Casing: 100 sacks Class "C" light cement containing ½ #/sk cellophane flakes, 3% CaCl, 5 lbs/sack gilsonite. 100 sacks Class "C" penmen containing 3% CaCl.
- Production Casing: 500 sacks 35:65 pozmix cement containing 6% gel, ii. 5 lbs/sack gilsonite. 200 sacks Class "C" cement containing 2% CaCl.

5. Mud Program:

Interval	Type System	Weight	Viscosity	Fluid Loss
0'-400'	FW spud mud	8.6-9.4	32-34	NA
400'-5300'	Brine water	10.0-10.2	28-33	18-33cc

6. **Evaluation Program:**

Samples:

10'samples from surface 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: 140 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 7 days involved in drilling operations and an additional 7 days involved in completion operations on the project.

^{*}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 "18" Federal #6 660' FSL & 440' FWL Section 18-T17S-R29E Eddy County, New Mexico Lease Number NM14847

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 8 miles turn North through cattle guard. Go North on main cacliche road 1.8 miles turn right at Y in the road. Continue in a Easternly direction for 3/10 mile. Turn North into Empire "18" Federal #6 drive through southern half of location and continue on cacliche road in a Northwest direction into new location.

2. Proposed Access Road:

- A The access road will be built from an existing lease road approximately 200' South of the location pad and will enter the location pad from the Southeast 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:

- 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 "18" Federal #6 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 "18" Federal #6 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

· Émpire "18" Federal #6 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:

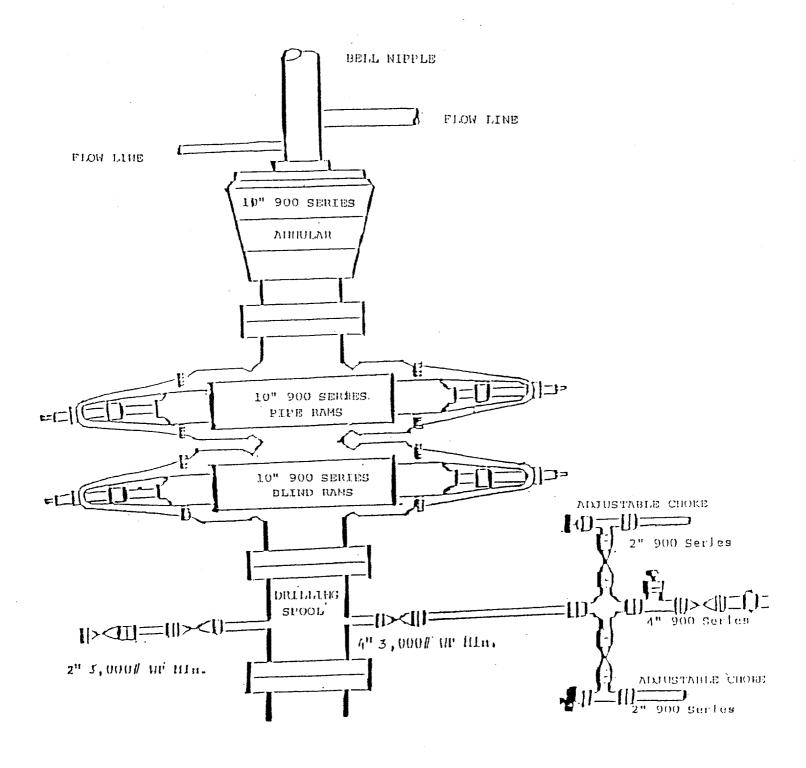
Mickey Young, District Manager Mewbourne Oil Company PO Box 5270 Hobbs, NM 88241 505-393-5905

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:	8/20/00	Signature:_	Well for
			/ >

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

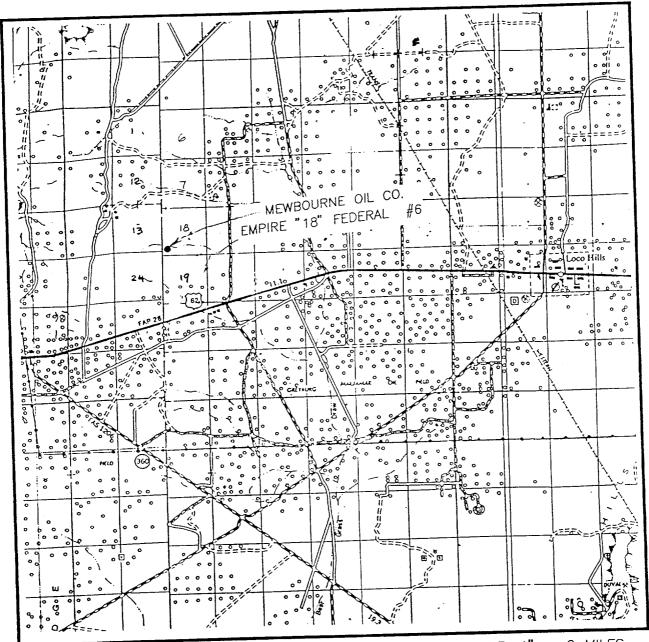


Mewbourne Oil Company

Exhibit #2A Schematic of BOP for Production Hole

Notes Regarding Blowout Preventer Mewbourne Oil Company

- 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.



SCALE: 1" = 2 MILES

SEC. __18_TWP._17_S_RGE._29_E

SURVEY_____N.M.P.M.

COUNTY_____EDDY

DESCRIPTION__660'_FSL_&_440'_FWL

ELEVATION_____3687

OPERATOR_MEWBOURNE_OIL_CO.

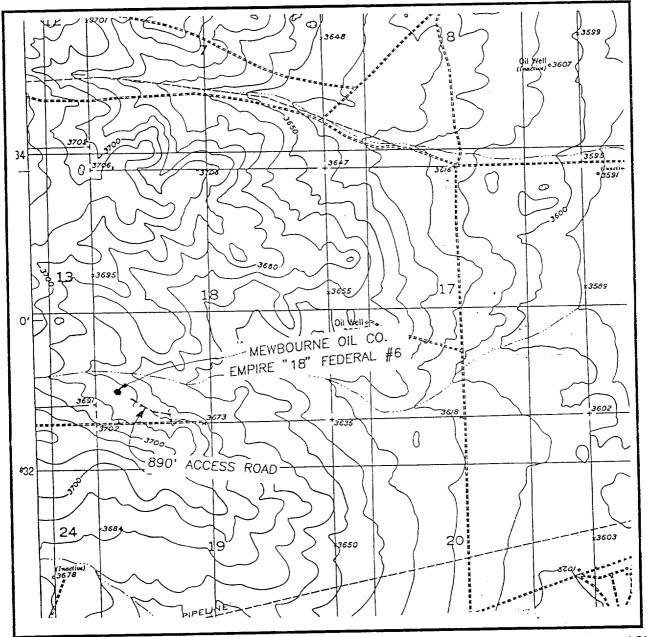
LEASE___EMPIRE_"18"_FEDERAL

Mewbourne Oil Company <u>Exhibit #3</u>

Proposed LocationConstruction



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL - 10'

SEC. 18 TWP. 17—S RGE. 29—E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FSL & 440' FWL

ELEVATION 3687

OPERATOR MEWBOURNE OIL CO.

LEASE EMPIRE "18" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

RED LAKE SE, N.M.

Mewbourne Oil Company <u>Exhibit #3A</u> Existing and Planned Road Access

Offset Yeso Wells

Empire "18" Federal #6 Sec.18;T17S;R29E 660' FSL & 440' FWL Eddy County, NM Lease #NM14847

Mack Energy Rincon State #4 20/17S/29E 2310' FSL & 2310' FEL Eddy County, NM

Mack Energy Mesquite State #5 20/17S/29E 1650' FSL & 2310' FWL Eddy County, NM

Mack Energy Rincon State #3 20/17S/29E 1650' FSL & 1650' FEL Eddy County, NM

Marbob Muskegon South #1 20/17S/29E 1650' FSL & 330' FEL Eddy County, NM

Marbob Muskegon South #2 20/17S/29E 2310' FSL & 990' FEL Eddy County, NM

Offset Yeso Wells

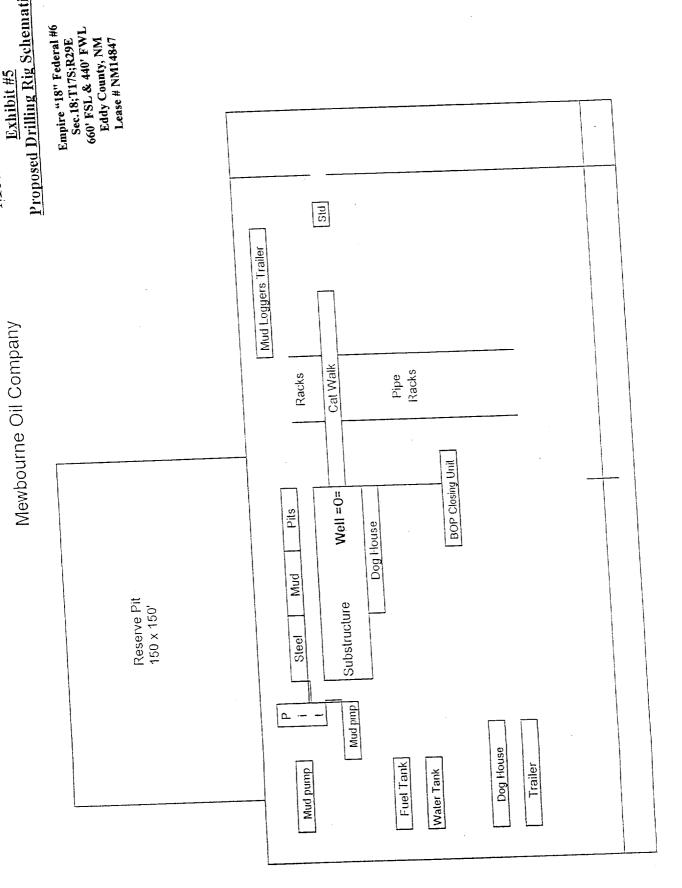
Empire "18" Federal #6 Sec.18;T17S;R29E 660' FSL & 440' FWL Eddy County, NM Lease #NM14847

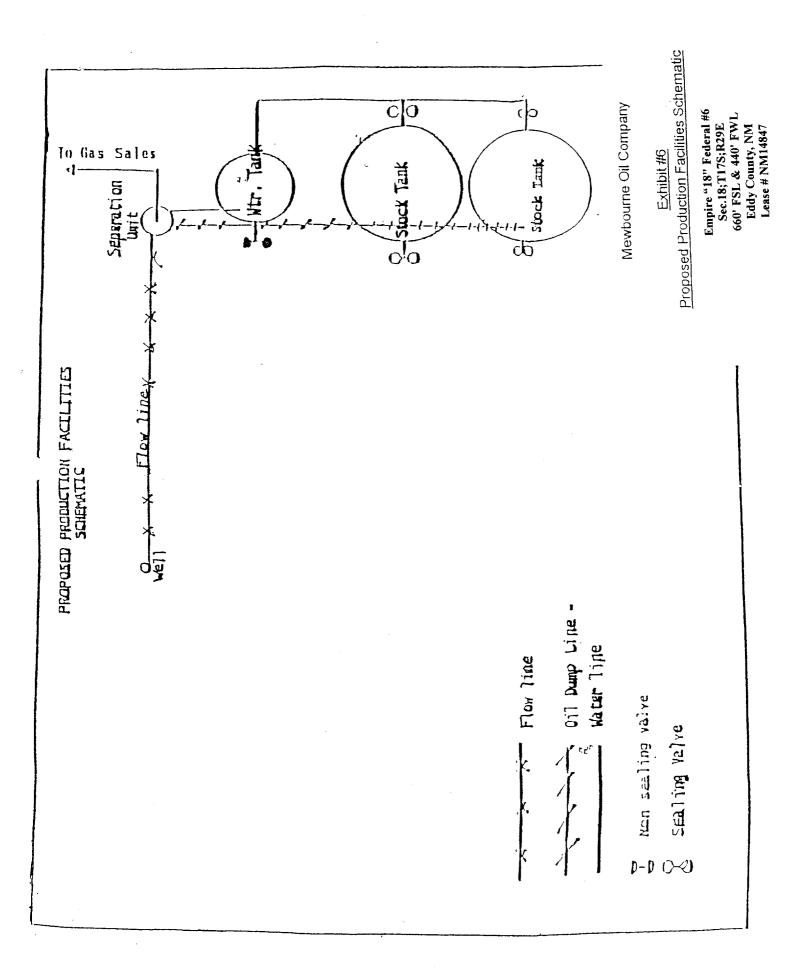
Mack Energy Rincon State #2 20/17S/29E 990' FSL & 990' FEL Eddy County, NM

Mack Energy Mesquite State #6 20/17S/29E 2310' FSL & 1650' FWL Eddy County, NM

Mack Energy Mesquite State #2 20/17S/29E 2310' FSL & 990 ' FEL Eddy County, NM

Mack Energy Mesquite State #7 20/17S/29E 2310' FNL & 330' FWL Eddy County, NM





Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company

Empire "18" Federal #6 660'FSL & 440' FWL Section 18-T17S-R29E Eddy County, New Mexico Lease Number NM14847

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.
- 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. 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

Empire "18" Federal #6

Sec.18;T17S;R29E 660' FSL & 440' FWL Eddy County, NM Lease # NM14847

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 NM14847

Legal Description of Land:

Section 18, T17S, R29E, Eddy County, New Mexico. Location

660' FSL & 440' FWL of Section 18.

Formation (if applicable):

Bond Coverage:

\$150,000

BLM Bond File:

NM1693, Nationwide

Authorized Signature:

Name: NM (Micky) Young
Title: District Manager
Date: September 19,2000