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APPLICA	TION FOR PER		OR DEEPEN		6. IF INDIAN, ALLOTTEE OR TRIBE NAM	E
TYPE OF WELL		SINGLE 😽 MULT		7. UNIT AGREEMENT NAME		
	VELL OTHER				8. FARM OR LEASE NAME, WELL NO. Empire "18" Federal #5	
Mewbourne Oil Con	npany 14744		10111210	613 <sub>2</sub>	9. API WELL NO.	
DDRESS AND TELEPHONE		2 5005	/.♥	1010	30-015-3144 10. FIELD AND POOL, OR WILDCAT	<u> </u>
	bs, NM 88241 (505)39 location clearly and in accordance		- 10 101 2000	<u> 8</u>  9	Empire Yeso	
tsurface			RECEIVED		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA	
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OR APPLIED FOR, ON THIS ELEVATIONS (Show whethe	LEASE, FT.		5300	<u> </u>	Rotary 22. APPROX. DATE WORK WILL STAT	27*
3674' GL					10/15/00	
<u></u>	<u> </u>	PROPOSED CASING	AND CEMENTING PROGRAM	1		
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH		QUANTITY OF CEMENT	
12-1/4"	J55, 8-5/8"	32#	400		200 sacks circulate to surface	
7-7/8" ) Drilling Program	J-55, 5-1/2"	17#	5300	7	00 sacks tie back into 8-5/8"cs	g.
) Drilling Program ) Surface Use and ( ) Location and Elev ) Schematic Diagra ) Map of Existing and ) List of Offset Well ) Proposed Drilling ) Proposed Product	Operaation Plan vation Plat (NMOCD Fo am of Blowout Prevente nd Planned Access Ro	orm C102) er and Choke Manif ad and location (Ex Exhibit 6)	old (Exhibits 2A) chibits 3 & 3A)	PROVAL	SUBJECT TO REQUIREMENTS AND TIPULATIONS	<u>g.</u>
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DISTRICT I P.O. Box 1980, Bobbs, NM 88241-1980

DISTRICT II P.O. Drawer DD, Artesia, NM 88211-0719

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

# OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

□ AMENDED REPORT

DISTRICT IV P.C. Box 2088, Santa Fe, NM 87504-2065

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

	API	Number	Pool Code					Pool Name				
Pro	perty (	lode	Property Name EMPIRE "18" FEDERAL							Well Number 5		aber
00	GRID No	).				м	Operator Name MEWBOURNE OIL CO.				Elevation 3674	
							Surface	Loca	ation			
UL or lo	t No.	Section.	Township	-	Lot 1	Idn	Feet from		North/South line	Feet from the	East/West line	County
N		18	17 S	5 29 E			330	)	SOUTH	1230	WEST	EDDY
			1						rent From Sur			1
UL or lo	t No.	Section	Township	Range	Lot 1	Idn	Feet from	the	North/South line	Feet from the	East/West line	County
Dedicate 40	d Acres	Joint o	or Infill	Consolidation (	Code	Orde	er No.		1			<u></u>
NO	ALLO	WABLE V							INTIL ALL INTER APPROVED BY		EN CONSOLIDA	ATED
	LOT 26.9	19 AC.		667.7		e# 1	  NM14847			I hereby contained hereis best of my inou Signature Terry Printed Nam Drill Title Septe Date SURVEYO I hereby certify on this plat us actual surveys supervison, an correct to th SEPTE Date Surveys Signature & Professional	Burke e ing Foremar omber 19, 20 OR CERTIFICA that the well local so plotted from fiel made by me or d that the some is e best of my beild MBER 6, 200 Sciel of Surveyor UMAD 9 Im. 90-11	formation iete to the 1 000 FION Vice shown d notes of under my s true and of 00 JL <sup>2</sup> (68/06 084 DN, 3239
	◄	1		3678.Q'						4. 4. 4.		DN. 3239

# **Drilling Program**

Mewbourne Oil Company Empire "18" Federal #5 330'FSL & 1230' 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	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:

А.	Casing Prop	gram:			
	Hole Size	Casing	<u>Wt/Ft.</u>	<u>Grade</u>	<u>Depth</u>
	12-1/4"	8-5/8"	32#	J55	0-400'
	7-7/8"	5-1/2"	17#	<b>148</b> 0	0-5300'
				-155	

# Drilling Program Mewbourne Oil Company Empire "18" Federal #5 Page 2

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 <sup>1</sup>/<sub>2</sub> #/sk cellophane flakes, 3% CaCl, 5 lbs/sack gilsonite. 100 sacks Class "C" penmen containing 3% CaCl.
- ii. <u>Production Casing:</u> 500 sacks 35:65 pozmix cement containing 6% gel, 5 lbs/sack gilsonite. 200 sacks Class "C" cement containing 2% CaCl.

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

## 5. Mud Program:

Interval	Type System	<u>Weight</u>	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.

# **MULTI-POINT SURFACE USE AND OPERATIONS PLAN**

MEWBOURNE OIL COMPANY Empire "18" Federal #5 330' FSL & 1230' 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 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:

- 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.

Empire "18" Federal #5 Page 3

## 9. Well Site Layout

- A 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 "18" Federal #5 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:

9/20/00

Signature: A.M.

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

- 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.
- Blowout preventer closing equipment to include an accumulator of at least 40 gallon capacity, two independent sources of pressure on closing unit, and meet all other API specifications.

VICINITY MAP



SCALE: 1'' = 2 MILES

NORTH

0 000

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

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

SEC. <u>18</u> TWP.<u>17-S</u> RGE.<u>29-E</u> SURVEY <u>N.M.P.M.</u> COUNTY <u>EDDY</u> DESCRIPTION <u>330' FSL & 1230' FWL</u> ELEVATION <u>3674</u> OPERATOR MEWBOURNE OIL CO.

LEASE \_\_\_\_\_ EMPIRE "18" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP RED LAKE SE, N.M. CONTOUR INTERVAL - 10'

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

# **Offset Yeso Wells**

Empire "18" Federal #5 Sec.18;T17S;R29E 330' FSL & 1230' 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 #5 Sec.18;T17S;R29E 330' FSL & 1230' 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 #5 330'FSL & 1230' 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.
- 3 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:

- 1 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. <u>Visual Warning Systems</u>
  - A. Wind direction indicators as indicated on the wellsite diagram.
  - B. Caution signs shall be posted on roads providing access to location. Signs shall be painted a high visibility color with lettering of sufficient size to be readable at reasonable distances from potentially contaminated areas.

### 3. Mud Program

The mud program has been designed to minimize the amount of hydrogen sulfide entrained in the mud system. Proper mud weight, safe drilling practices, and the use of hydrogen sulfide scavengers will minimize hazards while drilling the well.

## 4. Metallurgy

All tubular systems, wellheads, blowout preventers, drilling spools, kill lines, choke manifolds, and valves shall be suitable for service in a hydrogen sulfide environment when chemically treated.

### 5. Communications

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 #5 Sec.18;T17S;R29E 330' FSL & 1230' 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 330' FSL & 1230' 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