Form 3160-3 (September 2001)

012

## Oil Cons. N.M. DIV-Dist. 2 1301 W. Grand Avenue Artesia NM 88210

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

UNITED STATES

DEPARTMENT OF THE INTERIOR COICE, 14141 COLLING BUREAU OF LAND MANAGEMENT	5. Lease Serial No. NM-0354232
APPLICATION FOR PERMIT TO DRILL OR REENTER	6. If Indian, Allottee or Tribe Name
	7 If Unit or CA Agreement Name of

la. Type of Work:	Type of Work:  DRILL  REENTER						7. If Unit or CA Agreement, Name and No.		
1b. Type of Well:	Oil Well	☑ Gas Well	Other	☑ Single Zone	Multiple	Zone	8. Lease Name and Well N Esperanza "19" Federa	· <del>- ·</del>	
2. Name of Operate	or						9. API Well No.		
Mewbourne Oil (	Company	(14744)				1	30 015-3	3 160	
3a. Address		·		3b. Phone No. (include a	rea code)		10. Field and Pool, or Expl		
P.O. Box 5270 He	obbs, NM 882	40		(505) 393-5905			a. Burton Flat Morrov	v	
4. Location of Well	Report location	on clearly and in	accordance with a	my State requirements. *)			11. Sec., T., R., M., or Blk	and Survey or Area	
At surface 1980' FSL & 393' FEL								-	
At proposed pro-	d. zone						Sec. 19, T21S, R27E		
14. Distance in miles	and direction f	rom nearest town	or post office*				12. County or Parish	13. State	
2 Miles North Ca	rlsbad						Eddy	NM	
15. Distance from pr location to neares property or lease	st line, ft.	S		16. No. of Acres in leas			ing Unit dedicated to this well		
(Also to nearest of				315.08		315.08			
18. Distance from pro to nearest well, dr applied for, on thi	rilling, complete			19. Proposed Depth		0. BLM/B	M/BIA Bond No. on file		
applied for, on the	15 lease, 1t.	1330'		11,700'		NM1693			
21. Elevations (Show	w whether DF,	KDB, RT, GL, e	etc.)	22. Approximate date	work will star	t*	23. Estimated duration		
3159' GL December 5, 2003 CARL SPAN CONTROLLED WATER 1							WATER BACK		
	24. Attachments								
The following, comple	eted in accordar	nce with the requi	irements of Onshor	re Oil and Gas Order No.1	, shall be attac	hed to this	s form:		

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan.
- 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- 5. Operator certification.
- 6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	Name (Printed/Typed)	Date
Jun Bal	Terry Burke	11-05-2003
Title		
Drilling Foreman		
Approved by (Signature)	Name (Printed/Typed) /s/ Joe G. Lara	Date 1 1 DEC 2099
Tide /s/ Joe G. Lara CTING FIELD MANAGER	Office CARLSBAD FIELI	OFFICE

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. 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)

NSL - 4963

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

RECEIVED DEC 1 1 2003 OCD-ARTESIA 1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505 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 Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name	
Property Code	Property Nam ESPERANZA "19" FE	Well Number	
OGRID No.	Operator Nam	ne	Elevation
14744	MEWBOURNE OIL COM	IPANY	3159'

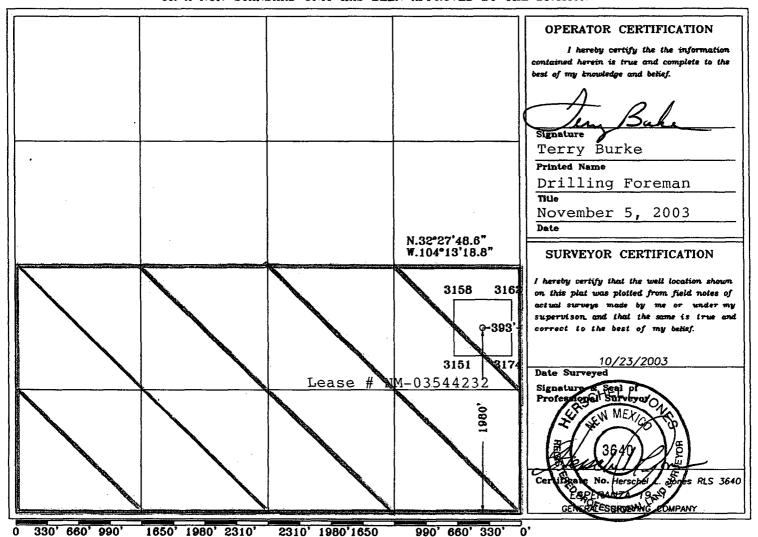
#### Surface Location

-	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	1	19	215	27E		1980	SOUTH	393	EAST	EDDY

#### Bottom Hole Location If Different From Surface

UL or lot No.	Section	Townsh	ip	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint of	r Infill	Co	asolidation (	ode 0	rder No.	<u> </u>	<u> </u>	<u></u>	<u> </u>
315.08		Į								

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

Esperanza "19" Federal Com # 1 1980' FSL & 393' FEL Section 19 -T21S-R27E Eddy County, New Mexico Lease Number NM-0354232

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

Delaware	3,279'
Bone Spring	5,286'
Wolfcamp	8,750'
Strawn	10,080'
Atoka	10,450'
Morrow	11,100'
TD	11,700'

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

Water

Approximately 200'

Hvdrocarbons

All zones below Wolfcamp

## 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 9-5/8" intermediate casing. Pressure tests with rig pump will be conducted prior to drilling out under all casing strings. A third party Safety Test Company will pressure test and record on chart the approved testing pressure of the BOP, Choke, Hydril, Kelly Cock Valves before we drill below the Bone Springs formation.

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

Esperanza "19" Federal Com # 1 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#	H40	0-400-510	<b>WITNESS</b>
12-1/4"	9-5/8"	40#	N80/J55	0-2,600'7500	) <b>'</b>
8-3/4"	5-1/2"	17#	P110/S95	0-11,700'	

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

## **Cementing Program**

B. C CIRCULATE<sub>i</sub>

Surface Casing: 200 sacks Class "C" light cement containing

.25 lbs/sack cellophane flakes, 2% CaCl, 6% bwoc Bentonite. 200

sacks Class "C" cement containing 2% CaCl.

CIRCULATE

Intermediate Casing: 700 sacks 35:65 pozmix cement containing

6% gel,5 lbs/sack LCM-1. 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:

	<u>ype System</u>	Weight	<b>Viscosity</b>	Fluid Loss
0'- <b>400</b> ' 50'		8.6-9.4	32-34	NA
510'400'-2600' 250	FW spud mud	8.6-9.4	28-30	NA
7500 <b>2600-8600</b> '	Fresh water	8.8-9.2	28-30	NA
8,600'-11,700'	Cut brine water	9.2-10.0	32-42	8-12
(Note: Any Wei	ight Above 8 6#/gall	on would be to be	old back Wolf	camp chala

ite: Any vveight Above 8.6#/gallon would be to hold back Wolfcamp shale, rather than abnormal BHP.)

#### **Drilling Program**

## Mewbourne Oil Company

Esperanza "19" Federal Com # 1

Page 3

#### 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: 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 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

Esperanza "19" Federal Com # 1 1980' FSL & 393' FEL Section 19-T21S-R27E Eddy County, New Mexico Lease Number NM-0354232

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: From Hobbs West on 62/180 approx 66 miles to Carlsbad truck bypass. Turn right on truck bypass just after bridge turn left on cacliche road. Go West .7 miles to intersection, turn right go North .2 mile, turn left go West & North .2 mile, turn left going West for .9 miles, turn right going NW .4 miles, Turn left go West .5 miles turn right into location.

## 2. Proposed Access Road:

- A The access to our new location will be from existing lease road.
- 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

Esperanza "19" Federal Com # 1 Page 2

- i. The reserve pit will be back-filled after the contents of the pit are allowed to dry (within 10 months 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/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**

Esperanza "19" Federal Com # 1 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 600' X 600' 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** 

Esperanza "19" Federal Com # 1 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

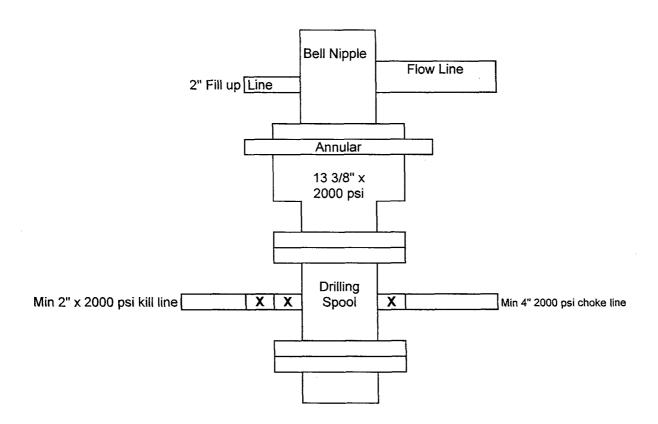
#### 14. Certification

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.

Date: 11 103 Signature: 4.1.

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

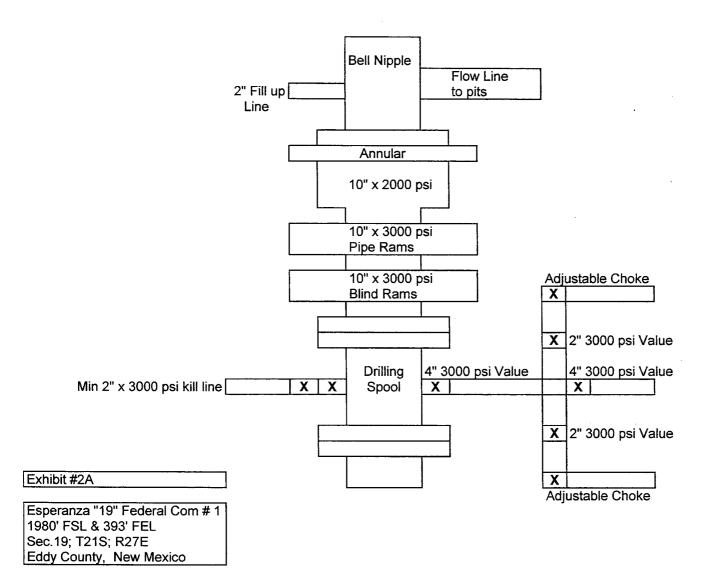
## Mewbourne Oil Company BOP Scematic for 12 1/4" Hole



## Exhibit #2

Esperanza "19" Federal Com # 1 1980' FSL & 393' FEL Sec.19-21S; R27E Eddy County, New Mexico

## Mewbourne Oil Company BOP Scematic for 8 3/4" or 7 7/8" Hole

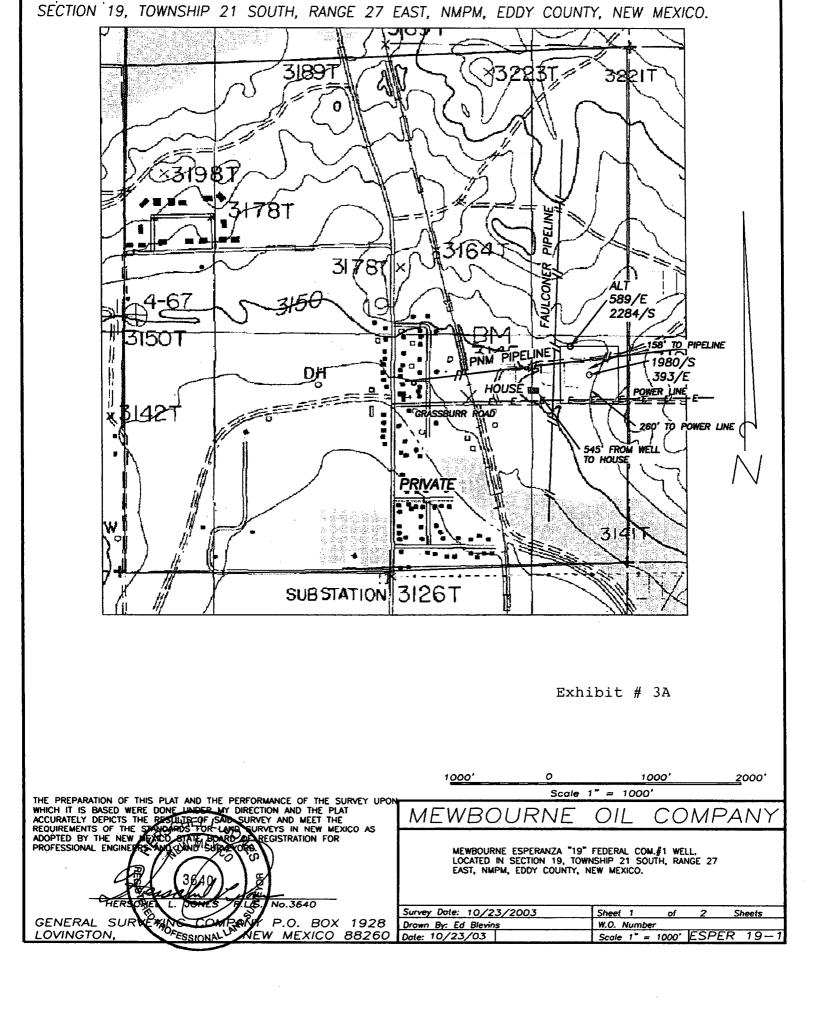


## Notes Regarding Blowout Preventer

**Mewbourne Oil Company** 

Esperanza "19" Federal Com # 1 1980' FSL & 393" FEL Section 19- T21S-R27E Eddy County, New Mexico

- 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

Esperanza "19" Federal Com # 1 1980' FSL & 393' FEL Section 19 T-21S R-27E **Eddy County, New Mexico** Lease Number NM-0354232

#### **Section 19 T-21S R-27E**

Operator:

Vernon E. Faulconer

Well Name: McCord "A" # 1

Unit letter:

Status:

Producing (BHL is Producing in Sec 30; T21S;R27E)

Field:

E. Burton Flats Strawn / Morrow

Operator:

Vernon E. Faulconer

Well Name: Challenger Rayroux # 1

Unit letter:

Status:

Producing

Field:

Carlsbad Wolfcamp East

Operator:

Vernon E. Faulconer

Well Name: Pioneer Federal # 1

Unit letter:

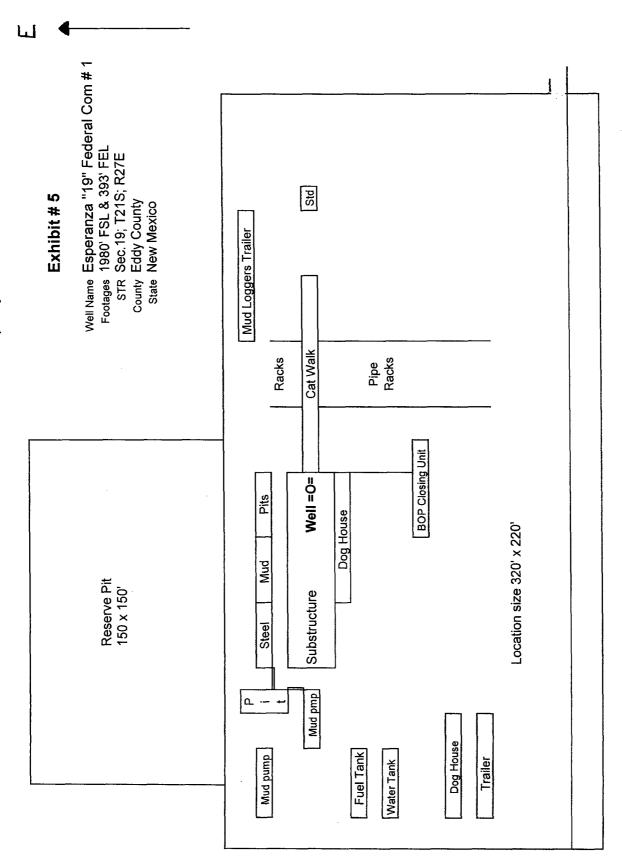
G

Status:

Producing

Field:

LaHuerta Strawn



Rig Location Schematic

# To Gas Sales Proposed Production Facilities Schematic Esperanza "19" Federal Com # 1 Sec. 19; T21S; R27E 1980' FSL & 393' FEL Eddy County, NM Mewbourne Oil Company Water Tank Separation Unit Stock Tank Stock Tank Exhibit #6 **Proposed Production Facilities Schematic** Flow Line Well Non Sealing Valve Gas Sales Line Sealing Valve Oil Dump Line Water Line Flow Line

## Hydrogen Sulfide Drilling Operations Plan

## **Mewbourne Oil Company**

Esperanza "19" Federal Com # 1 1980' FSL & 393' FEL Section 19 -T21S-R27E Eddy County, New Mexico

## 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. <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. <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

State & County Officials phone numbers are posted on rig floor and supervisors trailer. 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.

#### 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 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-0354232

Legal Description of Land:

Section 19, T21S, R27E, Eddy County, New Mexico. Location

1980' FSL & 393' FEL of Section 19.

Formation (if applicable):

Bond Coverage:

\$150,000

BLM Bond File:

NM1693, Nationwide

Authorized Signature:

ne: NM (Micky) Young
Title: District Manager

Date: October, 2003