Form 3160-3 (September 2001)

N.M. DIV-Dist. 2 1301 W. Grand Avenue Artesia, NM 88210

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

5. Lease Serial No.

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT						NM-40256	NM-40256		
APPLICATION FOR PERMIT TO DRILL OR REENTER							6. If Indian, Allo	6. If Indian, Allottee or Tribe Name	
la. Type of Work:	k: 🗹 DRILL 🔲 REENTER						7. If Unit or CA A	7. If Unit or CA Agreement, Name and No.	
1b. Type of Well:	Oil Well	Gas Well	Other	☑ si	ingle Zone	Multiple Zo	8. Lease Name and Esperanza "1" F		n # 1
2. Name of Operat	or						9. API Well No.	_	_
Mewbourne Oil C	ompany	****					30-015-		<del></del>
3a. Address			[3	b. Phone No	o. (include area c	code)	10. Field and Pool,	or Explorat	огу
P.O. Box 5270 Ho	bbs, NM 88241			505) 393-59	)05		Burton Flat Morr		
4. Location of Wel	ll (Report location cle	early and in ac	cordance with an	y State requi	rements. *)		11. Sec., T., R., M	., or Blk. and	Survey or Area
At surface 810	)' FSL & 1650' FWL	_							
At proposed pro			(/	<u> </u>			Sec. 1; T21S; R27		
14. Distance in miles	s and direction from r	nearest town or	r post office*				12. County or Pari	sh	13. State
3 miles NE Carlsb	ad			<u> </u>			Eddy		NM
15. Distance from prolocation to neare property or lease (Also to nearest	st <sup>1</sup>	) 940'		16. No. of A	Acres in lease	17. 320	Spacing Unit dedicated to t	his well	
18. Distance from pr		7 0 10		19. Propose	ed Denth		BLM/BIA Bond No. on file	<u> </u>	
	rilling, completed,			11,850'	a Deptii	20.	BENIDIA BOIR NO. OII III	•	
21. Elevations (Sho	w whether DF KDB	RT GL etc		•	imate date work	will start*	23. Estimated dur	ation	
3204' GL		,, <del>-</del> -,	´ I	August 24,		35 days			
					chments		1	<del></del>	
The following, compl									
<ol> <li>A Drilling Plan.</li> <li>A Surface Use Pl</li> </ol>	by a registered surve an (if the location is led with the appropria	s on National		ands, the	Item 20 a 5. Operator of	ibove). certification er site specif	erations unless covered by . fic information and/or pla	_	•
25. Signature		, 1		Name	(Printed/Typed)	)		Date	
	- 1-S	when		Terry	Burke			07-23-0	03
Title Drilling Foreman	7								
Approved by (Signat	ture) /S/	Joe G.	Lara	Name	e (Printed/Typed)	) /s/ J	oe G. Lara	Date	4 SEP 2003
Title ACTING	FIELD M	[ANAG]	ER	Offic	e	CARL	SBAD FIELD (	OFFICE	Ē
Application approval operations thereon. Conditions of approv		-	applicant holds le	gal or equita	ble title to those	rights in the	subject lease which would e APPROVA		=
Title 18 U.S.C. Secti States any false, ficti	ion 1001 and Title 43 tious or fraudulent sta	U.S.C. Section	on 1212, make it presentations as to	a crime for a	ny person know within its jurisdic	ingly and wi	illfully to make to any depa	rtment or ag	ency of the United
*(Instructions on rev	erse)		1 11	, ,	1 4 .	20.0	rd to 2600' p	, er Jo	ha Simitz
	APPROVAL GENERAL AND SPECT ATTACHEL	SUBJE REQUIF	CONSTRUCTION / REMENTS	NSOORE NSOORE	\$6789707	CARLSB	AD CONTROLLED W	VATER BA	Asin
	ATTACHEI	)	700	CD	ARTECIA	516			

DISTRICT I 1625 N. French Dr., Hobbs, NM 58240 DISTRICT II

811 South First, Artesia, NM 88210

DEALE OF THEM MICHIES Energy, Minerals and Natural Resources Department

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

State Lease - 4 Copies

Pee Lease - 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505

## 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		
		Burton Flat Morrow		
Property Code	Prop	erty Name	Well Number	
	ESPERANZA	"1" FEDERAL COM.	1	
OGRID No.	Орез	alor Name	Elevation	
14744	MEWBOURNE	OIL COMPANY	3204	
14/44		ce Location	3204	

	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
·	N	1	215	27E		810	SOUTH	1650	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 Acres	Joint or	Infill Co	nsolidation (	Code Or	der No.			<u> </u>	·····
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

LOT 12	10T 11	LOT 10	гот э	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature
LOT 13	LOT 14	LOT 15	LOT 16	Terry Burke  Printed Name Drilling Foreman THUE July 23, 2003 Date  SURVEYOR CERTIFICATION
	N.32*30*15.4" W.104*08*46.9"			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 belief.  7/15/2003  Date Surveyed  Signature & Seal of
1850'—	Lease 3205 5 3202	# NM-40256		Professional Surveyor  Professional Surveyor
330, 860, 330,	1650' 1980' 2310'	2310' 1980'1650	990' 660' 330'	O. ESSIONAL LAND

# <u>Drilling Program</u> Mewbourne Oil Company

Esperanza "1" Federal Com # 1 660' FSL & 1650' FWL Section 1 -T21S-R27E Eddy County, New Mexico Lease Number NM-40256

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

Delaware	2865'
Bone Springs	5,365'
Wolfcamp	9,200'
Strawn	10,300'
Atoka	10,900'
Morrow	11,300
Barnett	11,850'

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

Water

Approximately 200'

Hydrocarbons

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. Five 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 "1" Federal Com # 1 Page 2

#### 4. Proposed casing and cementing program:

#### A. Casing Program:

Hole Size	Casing	Wt/Ft.	Grade	<u>Depth</u>
17-1/2"	13-3/8"	48#	H40	0-400'
12-1/4"	9-5/8"	40#	N80/J55	0-2,600'
8-3/4"	5-1/2"	17#	P110/S95	0-11,850'

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

#### B. Cementing Program

WITNESS i.	Surface Casing: 200 sacks Class "C" light cement containing
	.25 lbs/sack cellophane flakes, 2% CaCl, 6% bwoc Bentonite. 200
Minimater	sacks Class "C" cement containing 2% CaCl.

WITNESS ii. Intermediate Casing: 600 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.

#### 5. Mud Program:

<u>Interval</u>	Type System	Weight	<b>Viscosity</b>	Fluid Loss
0'-400	FW spud mud	8.6-9.4	32-34	NA
400'-2600'	Brine Water	10.0-10.2	28-30	NA
2600'-9200'	Cut brine water	8.8-9.2	28-30	NA
9200'-11,850'	Cut brine water	9.2-10.0	32-42	8-12

(Note: Any Weight Above 8.6#/gallon would be to hold back Wolfcamp shale, rather than abnormal BHP in Morrow Formation)

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

#### **Drilling Program**

#### Mewbourne Oil Company

Esperanza "1" 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 "1" Federal Com # 1 660' FSL & 1650' FWL Section 1-T21S-R27E Eddy County, New Mexico Lease Number NM-40256

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 61 miles to mile marker 44. Turn right on Magnum road and go North approx. 1 mile over railroad tracks. Continue North 2/10 mile and turn left on first cliche road going West. Go West 1.7 miles turn North and go approx 1 to 1 ½ miles (just past Tank Battery on right. Turn left onto new lease road 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 "1" 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 "1" 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 "1" 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

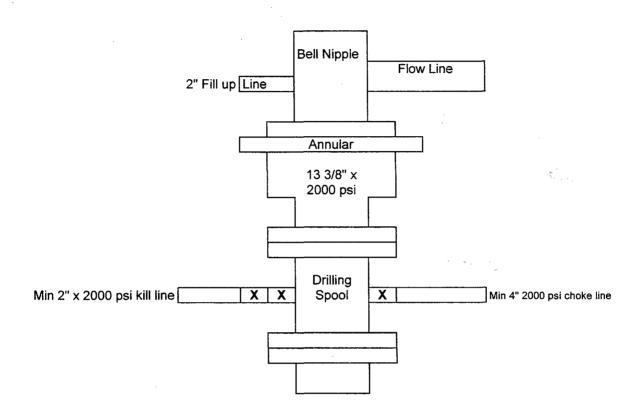
#### 14. Certification

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: 7/25/03 Signature: 4-1/14

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

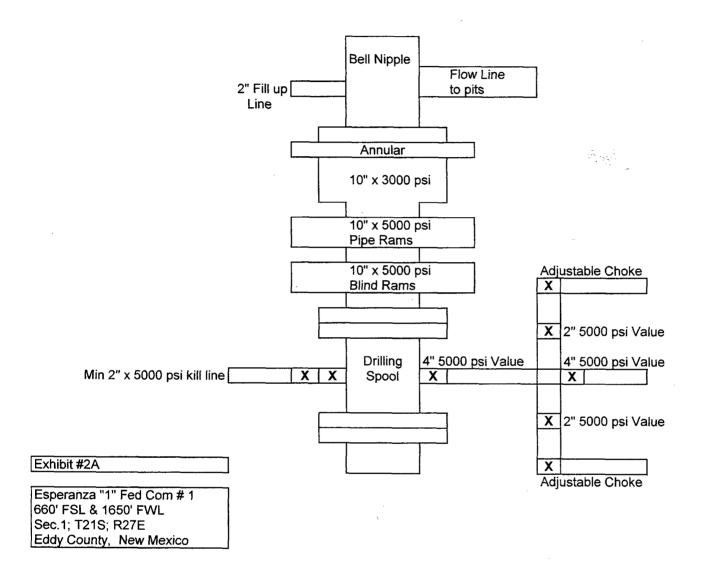


## Exhibit #2

Esperanza "1" Fed Com # 1 660' FSL & 1650' FWL Sec.1-21S; R27E Eddy County, New Mexico

#### Mewbourne Oil Company BOP Scematic for

8 3/4" or 7 7/8" Hole

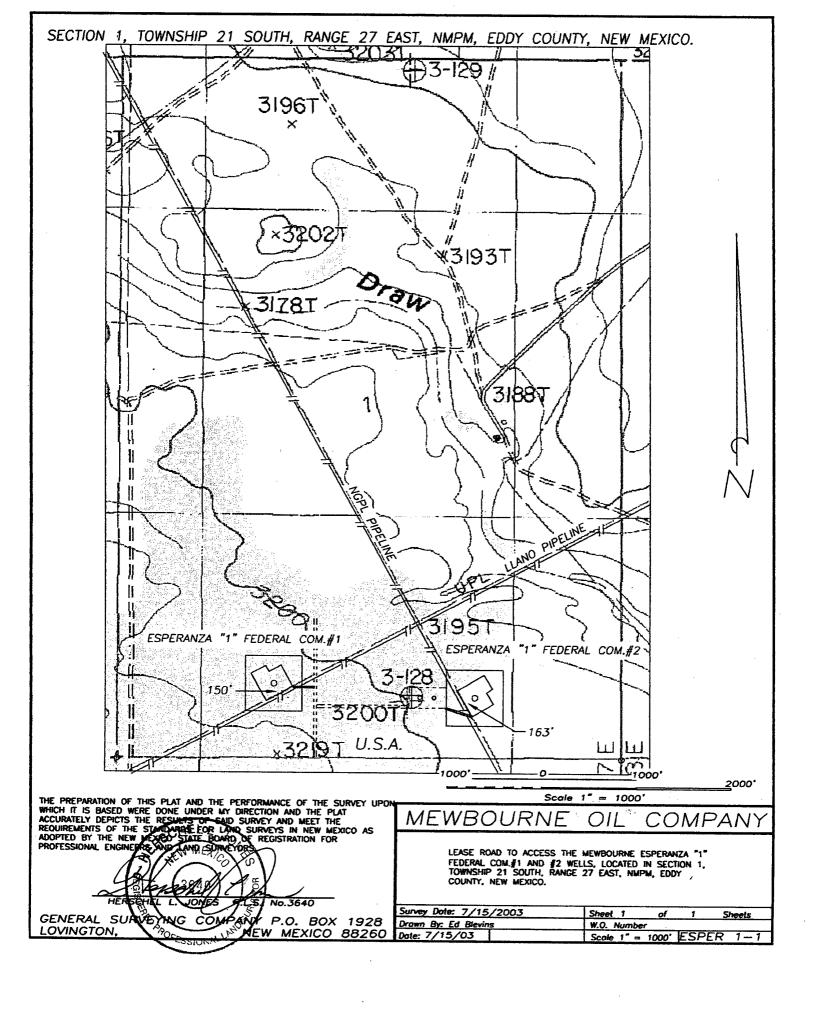


## Notes Regarding Blowout Preventer

Mewbourne Oil Company

Esperanza "1" Federal Com # 1 660' FSL & 1650' FWL Section 1- 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 "1" Federal Com # 1 660' FSL & 1650' FWL Section 1 T-21S R-27E Eddy County, New Mexico Lease Number NM-40256

#### **Section 1 T-21S R-27E**

Operator:

Mewbourne Oil Company

Well Name: Esperanza "11" Federal Com # 1

Unit letter:

M

Status:

Producing

Field:

**Burton Flats Morrow** 

Operator:

Mewbourne Oil Company

Well Name: Esperanza "14" Federal Com # 1

Unit letter:

М

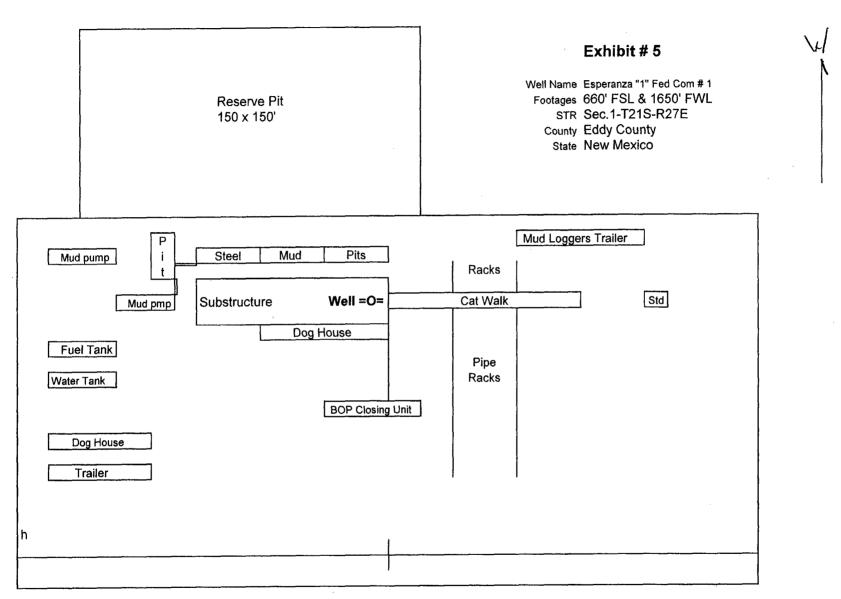
Status:

Producing

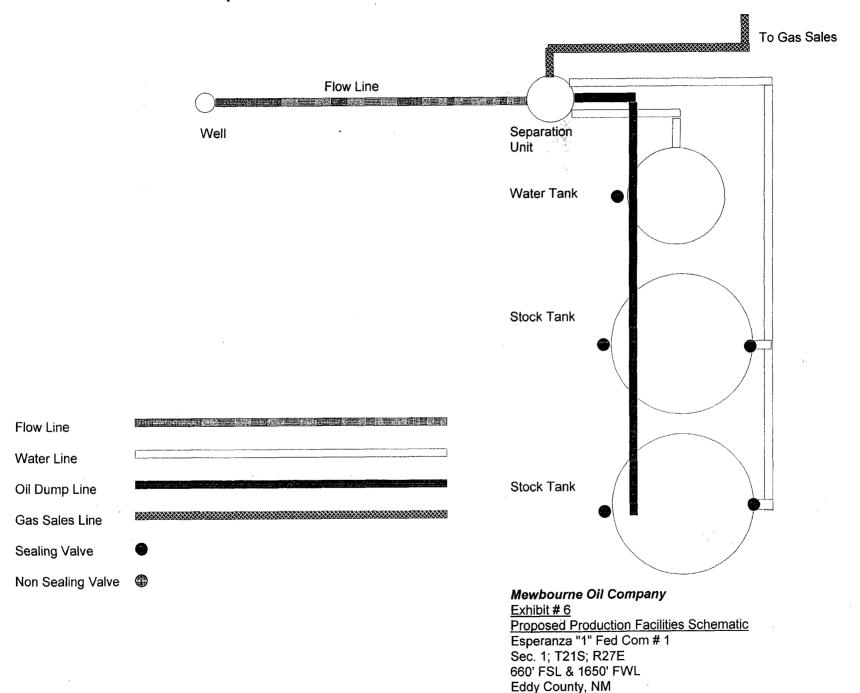
Field:

**Burton Flats Morrow** 

# Mewbourne Oil Company



## **Proposed Production Facilities Schematic**



## Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company

Esperanza "1" Fed Com # 1 660' FSL & 1650' FWL Section 1- 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. 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

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-40256

Legal Description of Land:

Section 1, T21S, R27E, Eddy County, New Mexico. Location

660' FSL & 1650' FWL of Section 1.

Formation (if applicable):

Bond Coverage:

\$150,000

BLM Bond File:

NM1693, Nationwide

Authorized Signature:

Name: NM (Micky) Young
Title: District Manager

Date: July 2003