New Mex	co na	Sonservation Dis				
Form 316023	152	Diservation Div	isia. m	FORM AP		
(September 2001) UNITED STATES	Ma	N. French Driv	Anon, D	OMB No. I Expires Janu		
DEPARTMENT OF THE IN	TERIOR	bbs, NM 86240	W:	5. Lease Serial No.		
				NMNM-04868		
APPLICATION FOR PERMIT TO DR	ILL OR I	REENTER 03	36.	6. If Indian, Allottee o	or Tribe Name	
la. Type of Work: DRILL REENTER				7. If Unit or CA Agree	ament, Name and No.	
1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone				8. Lease Name and Well No. SF "22" Federal Com #2		
2. Name of Operator				9. API Well No.	,	
Mewbourne Oil Company - 14744				30-025	5-36626	
3a. Address	3b. Phone 1	No. (include area code)		10. Field and Pool, or Exploratory		
	505 <u>-</u> 393-5			North Lusk Strawn		
4. Location of Well (Report location clearly and in accordance with a	ny State req	uirements. *)		11. Sec., T., R., M., or I	Blk. and Survey or Area	
At surface 2310' FSL & 1900' FEL	· T					
At proposed prod. zone	<u>- U</u>			Sec 22-T18S-R32E		
14. Distance in miles and direction from nearest town or post office*				12. County or Parish	13. State	
9 Miles South of Maljamar, NM	1		l ·	Lea	NM	
15. Distance from proposed* location to nearest	16. No. of	Acres in lease	17. Spacin	ng Unit dedicated to this w	rel1	
property or lease line, ft. (Also to nearest drig. unit line, if any) 330'	40		40			
18. Distance from proposed location*		sed Depth	1	BIA Bond No. on fals 16	1778	
to nearest well, drilling, completed, applied for, on this lease, ft.				43	19.20	
165	12350'			Nationwide	<u> </u>	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3768' GL	22. Appro	eximate date work will s	tart*	23. Estimated duration	17 5	
3700 GL	T	achments		10 7 3	190 2	
The following, completed in accordance with the requirements of Onshor				Controlled Water	Basin A	
The following, completed in accordance with the requirements of Onshor	e Oli aliu G	as Oluci 140.1, shan be at	tached to un	s round		
1. Well plat certified by a registered surveyor.		4. Bond to cover the Item 20 above).	e operation	s unless covered by an e	existing bond on file (see	
2. A Drilling Plan.3. A Surface Use Plan (if the location is on National Forest System)	I ands the	5. Operator certific	ation.	31-18	086280	
SUPO shall be filed with the appropriate Forest Service Office).	Lunos, the	6. Such other site s authorized office		ormation and/or plans as	s may be required by the	
25. Signature	, N.		···		Date	
1 M May no by Jackie Late	ton Nim	ne <i>(Printed/Typed)</i> Young		;	01/20/04	
Title Journ of Jacks	W JAIN	Toung			01/20/04	
Hobbs District Manager						
Approved by (Signature) SLIE A. THEISS	Na	me/S/midd/E/SLIE	A. Th	IEISS	Date MAR 0 4 2004	
FIELD MANAGER	Off	CARLSBA	AD FIE	ELD OFFICE		
Application approval does not warrant or certify that the applicant holds	egal or equi		n the subject	t lease which would entitle	e the applicant to conduct	
operations thereon. Conditions of approval, if any, are attached.			API	PROVAL FOI	R 1 YEAR	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make is States any false, fictitious or fraudulent statements or representations as t			nd willfully	to make to any departmen	nt or agency of the United	
*(Instructions on reverse)						
DECLARED WATER BASIN,			APPI	roval subjec	77 TO	
CEMENT BEHIND THE 13 8"			GEN	eral reouins	FREMTE AMB	
CASING MUST BE <u>CIRCULATED</u>			Con to Brown A	ANT DIEDUTAL	TONS	
	OPER.	OGRID NO. <u>/47</u> 4	HATTE	iched		

PROPERTY NO. 32657

POOL CODE 50540 EFF. DATE 3/9/01

APINO. 30-025-36626

DECLARED WATER BASIN CEMENT BEHAND THE 18 CASING MUST BE CIRCULATED 1625 N. French Dr., Hobbs, NM 88240 DISTRICT H

Energy, Minerals and Natural Resources Department

Revised March 17, 1999 Instruction on back

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

811 South First, Artesia, NM 88210

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

30-E	Number	6626	Pool Code Averecho Pool Name North Lusk Strawn						
Property C		Property Name					Well Number 2		
	OGRID No. Operator Name				Elevation 3768				
Surface Location									
UL or lot No.	Section	Township	Range	Lot idn	Feet from the	North/South line	Feet from the	East/West line	County
J	22	185	32E 2310 SOUTH 1900					EAST	LEA
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 Consolidation Code Order No.									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

		OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Signature
	N.32°43'55.4° ₩.103°45'06.2° 3765 3768	Printed Name District Manager Title 01/20/2004 Date SURVEYOR CERTIFICATION / hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under m
	NMNM-04868	supervison and that the same is true an correct to the best of my belief. 1/16/2004 Date Surveyed Signature a Selfilot. Professional Surveyor Order (A) MEX. (B) MEX. (C)
330' 660' 990' 1650' 1980' 2310'	2310' 1980'1650 990' 660' 330	Certificate No. Herseney Jones RLS 36

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

SF "22" Federal Com #2 2310' FSL & 1900' FEL Section 22-T18S-R32E Lea County, New Mexico Lease Number NMNM-04868

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

Queen	3860'
San Andres	4250'
Delaware	4670'
Bone Spring	6750'
Wolfcamp	10,100'
Strawn	11,500'
Atoka	12,150'
TD	12,350'

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

Water

Approximately 200'

Hydrocarbons

All zones below Queen

3. Pressure control equipment:

A 2000 psi working pressure annular BOP will be installed on the 13-3/8" surface casing. A 5000 psi WP Double Ram BOP and a 3000 psi WP Annular will be installed after running 9 5/8" casing. Pressure tests will be conducted prior to drilling out under all casing strings.

BOP controls will be installed prior to drilling under surface casing and will remain in use until completion of drilling operations. BOP's will be inspected and operated daily to insure mechanical integrity and the inspection will be recorded on the daily drilling report.

Kelly cock and a sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position when the kelly is not in use.

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	0-500'
12-1/4" 8-3/4"	9-5/8" 5-1/2"	40# 1 <i>7</i> #	N80/J55	0-4500'
0-3/4	3-1/2	1/#	P110/N80	0-12350'

Drilling Program

Mewbourne Oil Company

SF "22" Fed Com #2

Page 2

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

B. **Cementing Program**

- Surface Casing: 300 sacks Class "C" light cement containing i. ½ #/sk cellophane flakes, 2% CaCl, 5 lbs/sack gilsonite. 200 sacks Class "C" cement containing 2% CaCl.
- Intermediate Casing: 900 sacks 35:65 pozmix cement containing 6% gel, ii. 5 lbs/sack gilsonite. 200 sacks Class "C" cement containing 2% CaCl.
- iii. Production Casing: 600 sacks Class "H" cement containing fluid loss additive, friction reducer additive, compressive strength enhancer, and NaCl. Shallower productive zones may be protected by utilizing a multiple stage cementing tool in the production casing below potentially productive zones and cementing with a light cement slurry.

5. **Mud Program:**

<u>Interval</u>	Type System	<u>Weight</u>	Viscosity	Fluid Loss
0'-500'	FW spud mud	8.6-9.4	32-34	NA
500'-4500'	Brine water	10.0-10.2	28-30	NA
4500'-10700'	Cut brine water	8.8-9.2	28.30	NA
10700'-13000	' Cut brine water	9.2-9.8	32-42	8-12

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

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:

9.0 lbs/gal gradient or less

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

Drilling Program
Mewbourne Oil Company
SF "22" Fed Com #2
Page 3

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

SF "22" Federal Com #2 2310' FSL & 1900' FEL Section 22-T18S-R32E Lea County, New Mexico Lease Number NMNM-04868

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 on NM 529 to mm 7. Turn left and proceed south on Lusk Plant Road 1.5 miles. Turn left and proceed south-east on main road 3.7 miles. Turn right & go SW 3/4 mile to intersection. Turn left & go east 3/4 mile to location.

2. Proposed Access Road:

A No Road Needed.

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

SF "22" Federal Com #2

Page 2

- i. The reserve pit will be back-filled after the contents of the pit are allowed to dry (within 180 days after the well is completed).
- ii. Within 90 days of cessation of drilling and completion operations, all equipment not necessary for production operations will be removed. The location will be cleaned of all trash and junk to assure the well site is left as aesthetically pleasing as reasonably possible
- iii. All production vessels left on location will be painted to conform with BLM painting stipulations within 180 days of installation.

5. Location and Type of Water Supply

The well will be drilled with a combination of fresh water and brine water based mud systems. The water will be obtained from commercial suppliers in the area and hauled to the location by transport trucks over existing and proposed roads as indicated in Exhibit #3.

6. Source of Construction Materials

All material required for construction of the drill pad and access roads will be obtained from private, state, or federal pits. The construction contractor will be solely responsible for securing construction materials required for this operation and paying any royalties that may be required on those materials.

7. Methods of Handling Waste Disposal:

- A. Drill cuttings not retained for evaluation purposed will be disposed of in the reserve pit.
- B. Drilling fluids will be allowed to evaporate in the reserve pit prior to closure.
- C. Water produced during operations will be disposed of in the reserve pit.
- D. If any liquid hydrocarbons are produced during operations, those liquids will be stored in suitable tanks until sold.
- E. Current regulations regarding the proper disposal of human waste will be followed.
- F. All trash, junk, and other waste materials will be stored in proper containers to prevent dispersal and will be removed to an appropriate facility within one week of cessation of drilling and completion activities.

8. Ancillary Facilities

There are no ancillary facilities within the immediate vicinity of the proposed well site.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MEWBOURNE OIL COMPANY

SF "22" Federal Com #2

Page 3

9. Well Site Layout

- A diagram of the drill pad is shown in Exhibit #5. Dimensions of the pad, pits, and location of major rig components are shown.
- B. The reserve pit will be lined with a high quality plastic sheeting to prevent migration of fluids.
- C. The pad dimension of 600' X 600' has been staked and flagged.
- D. An archaeological survey has been conducted on the proposed 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

SF "22" Federal Com #2 Page 4

13. Operator's Representative:

A. Through APD approval and drilling operations:

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

B. Through completion and production operations:

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

14. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Mewbourne Oil Company, its contractors and subcontractors, in accordance with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Signature:

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

Mewbourne Oil Company BOP Schematic for 12 1/4" Hole

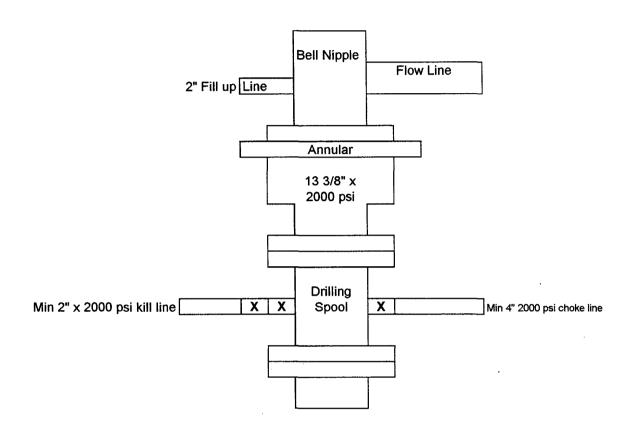
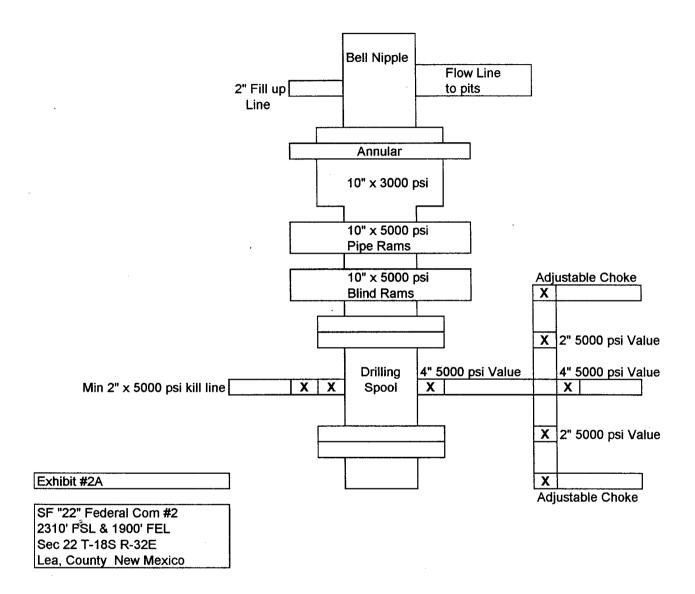


Exhibit #2

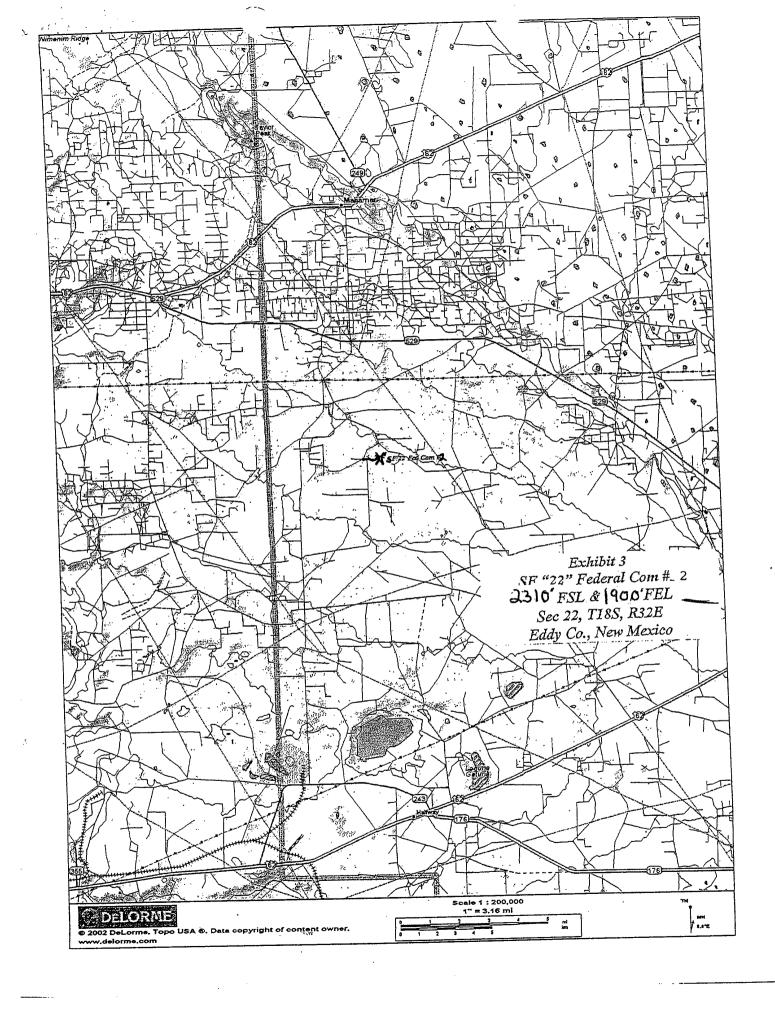
SF "22" Federal Com #2 2310' FSL & 1900' FEL Sec 22 T-18S R-32E Lea, County New Mexico

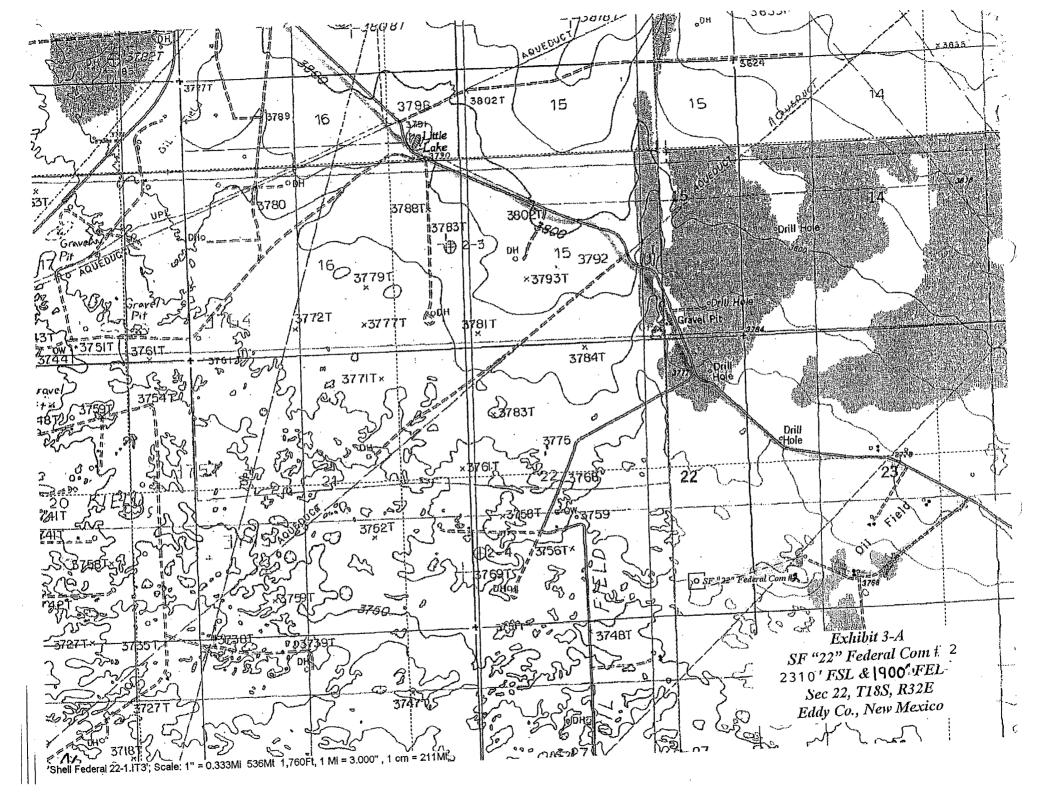


Notes Regarding Blowout Preventer Mewbourne Oil Company

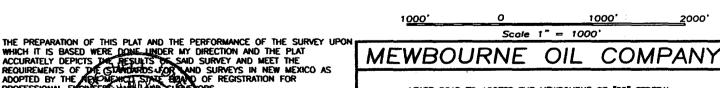
SF "22" Federal Com #2 2310' FSL & 1900' FEL Section 22 T-18S R-32E Lea County, New Mexico Lease Number NMNM-04868

- 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 5000 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 5000 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.





SECTION 17, TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM, LEA COUNTY, NEW MEXICO. 3784T Drill Hole FEDERAL COM.#2 B1761 C EXISTING WELL 224' TO FENCE 165' #3756T×



REQUIREMENTS OF ADOPTED BY THE PROFESSIONAL EX

S. No.3640 ANY P.O. BOX 1928 NEW MEXICO 88260 **GENERAL** POFEREIONAL LOVINGTON,

Survey Date: 1/16/2004 Sheet 1 Sheets

W.O. Number Drawn By: Ed Blevins Scale 1" = 1000' SF 22-2 Date: 1/16/04

LEASE ROAD TO ACCESS THE MEWBOURNE SF "22" FEDERAL COM.#2 WELL, LOCATED IN SECTION 22, TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM, LEA COUNTY, NEW MEXICO.

Exhibit #4

Status of Wells in Immediate Vicinity

Mewbourne Oil Company

SF "22" Federal Com #2 2310' FSL & 1900' FEL Section 22 T-18S R-32E Lea County, New Mexico Lease # NMNM-04868

Section 22 T-18S R-32E

Operator:

Mewbourne Oil Company

Well Name: SF 17 Federal Com #1

Unit letter:

Status:

Producing

Field:

Lusk Morrow North

Operator:

Mewbourne Oil Company

Well Name: QPBSSU 9 #2

Unit letter:

Status: Producing

Field:

Upper Bone Spring

Operator:

Mewbourne Oil Company

Well Name: QPQASU #9

Unit letter:

L

Status:

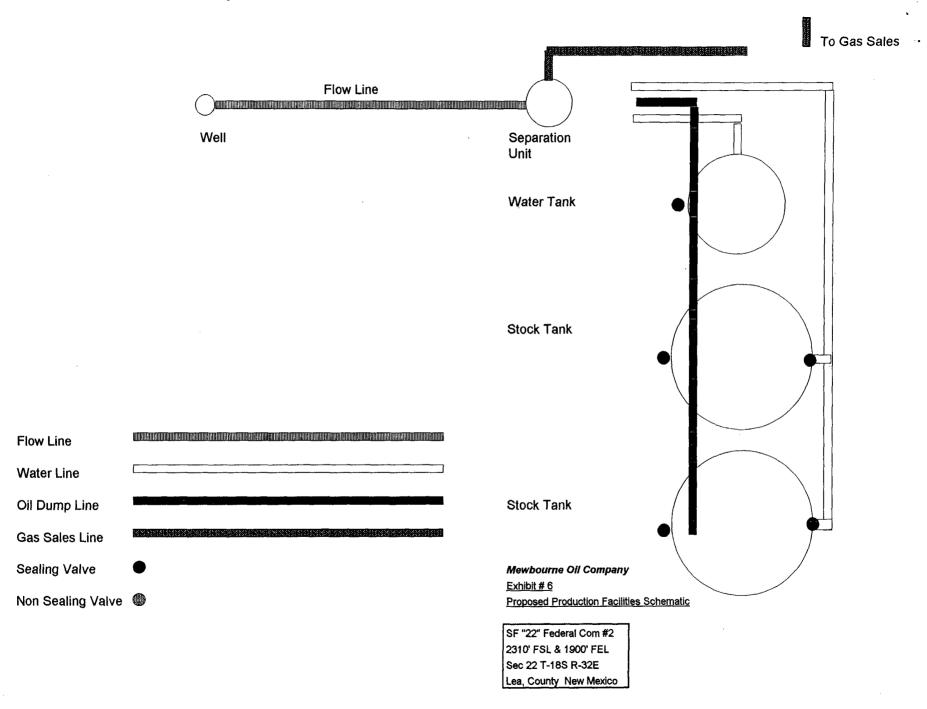
Producing

Field:

Quercho Plains Queen Associated

Mewbourne Oil Company Exhibit #5 Well Name SF "22" Federal Com #2 Reserve Pit Footages 2310' FSL & 1900' FEL STR Sec 22 T-18S R-32E 150 x 150' County Lea, County State New Mexico Mud Loggers Trailer Mud pump Mud Pits Steel Racks Std Substructure Cat Walk Mud pmp WeII =O= Dog House Fuel Tank Pipe Water Tank Racks BOP Closing Unit Dog House Trailer Location size 495' x 500' (total including pits)

Proposed Production Facilities Schematic



Hydrogen Sulfide Drilling Operations Plan Mewbourne Oil Company

SF "22" Federal Com #2 2310' FSL & 1900' FEL Section 22 T-18S R-32E Lea County, New Mexico Lease Number NMNM-04868

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:

- A. The hazards and characteristics of hydrogen sulfide gas.
- B. The proper use of personal protective equipment and life support systems.
- C. The proper use of hydrogen sulfide detectors, alarms, warning systems, briefing areas, evacuation procedures.
- D. The proper techniques for first aid and rescue operations.

Additionally, supervisory personnel will be trained in the following areas:

- A. 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.
- B. Corrective action and shut in procedures, blowout prevention, and well control procedures while drilling a well.
- C. 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.

A. Well Control Equipment

- 1. Flare line with automatic igniter or continuous ignition source.
- 2. Choke manifold with minimum of one adjustable choke.
- 3. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
- 4. Auxiliary equipment including rotating head and annular type blowout preventer.

Protective Equipment for Essential Personnel

Thirty minute self contained work unit located at briefing area as indicated on well site diagram.

B. <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.

C. Visual Warning Systems

- 1. Wind direction indicators as indicated on the well site diagram.
- 2. 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 tool pushers 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 5270

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:

NMNM-04868

Legal Description of Land:

Section 22, T-18S, R-32 Eddy County, New Mexico. Location

2310' FSL & 1900' FEL..

Formation (if applicable):

Bond Coverage:

\$150,000

BLM Bond File:

NM1693, Nationwide

Authorized Signature:

Name: NM (Micky) Young
—Pitle: District Manager

Date: January 20, 2004