Form 3160-3 (July 1992)

Oil Cons. DIV. Dist. 2

FORM APPROVED OMB NO. 1004-0136 Expires: February 28, 1995

•
LEASE DESIGNATION AND SERIAL NO.
NM 17095
5. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME

BUREA	OF LAND WANAGEWEN	ratoola, raivi oo	210	NM 17095	5
APPLICATION FO	OR PERMIT TO DRI	LL OR DEEPEN		6. IF INDIAN, ALLOTTEE OR	TRIBE NAME
1a, TYPE OF WORK DRILL	DEEPEN []		7. UNIT AGREEMENT NAME	
b. TYPE OF WELL					
OIL GAS WELL X	OTHER	SINGLE MULTI	PLE _	8. FARM OR LEASE NAME, I	WELL NO.
2. NAME OF OPERATOR				Esperanza 1 Federal	Com #3
Mewbourne Oil Company 147	44			9. API WELL NO.	<i>~</i> -
3. ADDRESS AND TELEPHONE NO.				30 -015	5 - 33169
PO Box 5270, Hobbs, New Mexi	ico 88241, 505-393-5905	RECEIVI	ED	10. FIELD AND POOL, OR V	
4. LOCATION OF WELL (Report location clearly and		Burton Flat Morrow			
At surface 1500' FSL & 1260' FEL		JAN 0 9 Z		11. SEC., T., R., M., OR BLK AND SURVEY OR AREA	•
At proposed prod: zone Same		OCD-ART	ESIA	Sec.1 T-21S R	R-27E
14. DISTANCE IN MILES AND DIRECTION FROM	NEAREST TOWN OR POST OFFICE*			12. COUNTY OR PARISH	13. STATE
4 miles NE of Carlsbad, NM				Eddy	NM
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT (Also to nearest drig, unit line, if any)	1260'	16. NO. OF ACRES IN LEASE 320	17. NO. OF TO THIS	ACRES ASSIGNED SWELL 320	
18. DISTANCE FROM PROPOSED LOCATION*		19. PROPOSED DEPTH	20. ROTAR	Y OR CABLE TOOLS	····
TO NEAREST WELL, DRILLING, COMPLETED OR APPLIED FOR, ON THIS LEASE, FT.	300'	1 1800 - // 900 '		Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.))			22. APPROX. DATE WORK	
3192' GL			CART	SBAD CONTROLL	D WATER BAS
33			CAK	TODAD CONTROLL	~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

PROPOSED CASING AND CEMENTING PROGRAM					
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT	
17 1/2"	13 3/8" H-40	48#	400'	Circl to Surface WITNESS	
12 1/4"	9 5/8" N & J-55	40#	2600'	Circl to Surface	
7 7/8"	5 1/2" N-80	17#	11800'	600' above pay	

- 1) Location & Elevation Plat (NMOCD Form C102)
- 2) Drilling Program
- 3) Surface Use & Operation Plan
- 4) Schematic Diagram of BOP & Choke Manifold (Exhibit 2 & 2A)
- 5) Map of Existing & Planned access Road & Location. (Exhibits 3 & 3A)
- 6) List of Off-Set wells
- 7) Proposed Drilling Rig Layout (Exhibit 5)
- 8) Proposed Production Facilities (Exhibit 6)
- 9) H2S Contingency Plan (Exhibit 7)

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

IN ABOVE SPACE DESCRIBE PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any TITLE N.M. Young District Manager PERMIT NO Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease CONDITIONS OF APPROVAL, IF ANY: JAN 0 7 2004

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

1000 Rio Brazos Rd., Aztec, NM 87410

Dedicated Acres

320

Joint or Infill Consolidation Code

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 Burton Flat Morrow						
Property	Code		Property Name ESPERANZA "1" FEDERAL COM.					Well Number	
ogrid n 14	o. 744		Operator Name MEWBOURNE OIL COMPANY				Elevation 3192		
				· · · · · · · · · · · · · · · · · · ·	Surface Loc	ation			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from tine	East/West line	County
1	1	215	27E		1500	SOUTH	1260	EAST	EDDY
			Bottom	Hole Lo	cation If Diff	erent From Sur	face		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
			ĺ						

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

Order No.

1.OT 12	LOT 11	LOT 10	LOT 9	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	N.M. Young Printed Name District Manager Title 11/25/03 Date SURVEYOR CERTIFICATION
		3189	NM 17095 N.32*30'22.3" W.104*08'18.7" 3188	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. Date Supervisor.
		3194	3191	Date Superior E. Son Superior
0 330' 660' 990'	1650' 1980' 2310'	2310' 1980'1650	990' 660' 330'	0.

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

Esperanza 1 Federal Com #3 1500' FSL & 1260' FEL Section 1 T-21S R-27E Eddy County, New Mexico

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

Delaware	2,865'
Bone Spring	5,365'
Wolfcamp	9,200'
Strawn	10,300'
Atoka	10,900'
Morrow	11,300'

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

Water

Approximately 200'

Hydrocarbons

All zones below Delaware

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 2500 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. A 3rd party tester will pressure test all BOPE as required. 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.	<u>Grade</u>	<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/N80	0-11,900'

Drilling Program

Mewbourne Oil Company

Esperanza 1 Federal Com #3

Page 2

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

B. Cementing Program

- i. <u>Surface Casing</u>: 300 sacks Class "C" light cement containing ½ #/sk cellophane flakes, 2% CaCl, 5 lbs/sack gilsonite. 200 sacks Class "C" cement containing 2% CaCl.
- ii. <u>Intermediate Casing:</u> 900 sacks 35:65 pozmix cement containing 6% gel, 5 lbs/sack gilsonite. 200 sacks Class "C" cement containing 2% CaCl.
- iii. <u>Production Casing</u>: 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.

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

5. Mud Program:

	, , – -	_	~	
<u>Interval</u>	Type System	<u>Weight</u>	Viscosity	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'-11900'	Cut brine water	9.2-9.8	32-42	8-12

Fresh per Mickey young

(Note: Any additional weight above 8.6 lb/gal would be used to hold back Wolfcamp shale rather than abnormal BHP in the Morrow formation.)

6. Evaluation Program:

Samples: 10'samples from intermediate casing to TD

Logging: Compensated density/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: 170 degree F

Maximum bottom hole pressure: 8.6 lbs/gal gradient or less

Drilling Program
Mewbourne Oil Company
Esperanza 1 Federal Com #3
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

Esperanza 1 Federal Com #3 1500' FSL & 1260' FEL Section 1 T-21S R-27E Eddy County, New Mexico Lease Number NM-17095

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: From Hobbs, N.M., go west on 62/180 61 miles to MM44. Turn north on Magnum road for appx 1 mile over RR tracks. Continue north 2/10th mile. Turn west on lease road & go appx 1.7 miles. Turn north & go appx 1 mile. Turn east & go 5/10 mile. Turn north 5/10 mile & go on to existing pad. MOC's location is on the SW corner.

2. Proposed Access Road:

No new road will be needed for this operation.

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 MOC 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 #3

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 hauled to the location by transport trucks over existing roads.

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 #3 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

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 #3 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:_	11/25/03	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

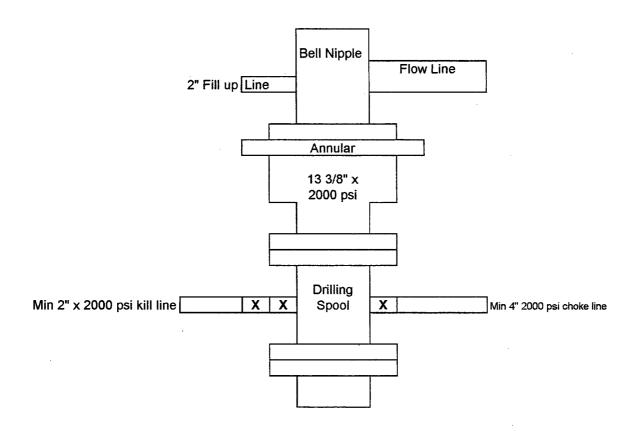
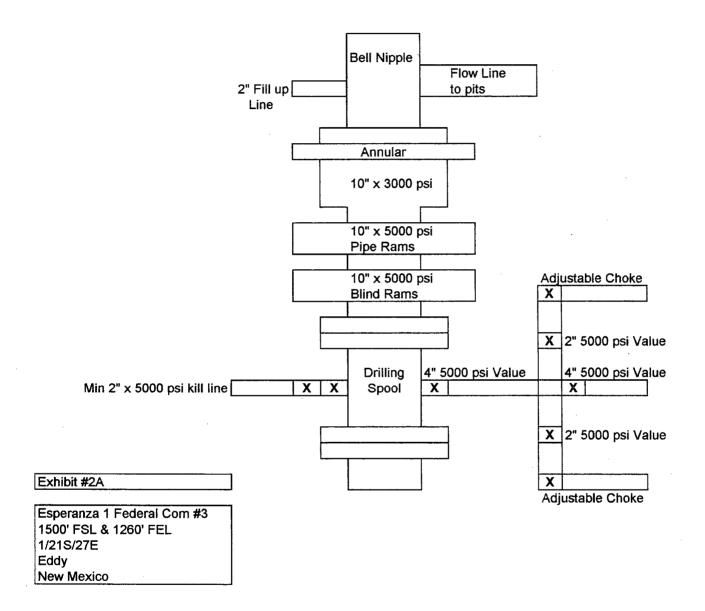


Exhibit #2

Esperanza 1 Federal Com #3 1500' FSL & 1260' FEL 1/21S/27E Eddy New Mexico

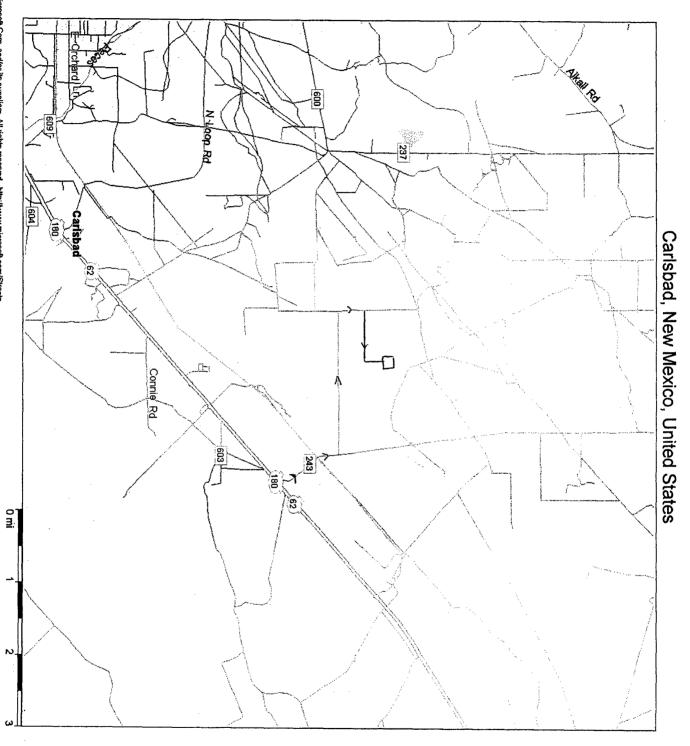


Notes Regarding Blowout Preventer Mewbourne Oil Company

Esperanza 1 Federal #3 1500' FSL & 1260' FEL Section 1 T-21S R-27E Eddy County, New Mexico Lease Number NM-17095

- 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.

Mewbourne Oil Co. Exhibit # 3 Esperanza 1 Fed Com # 3 1500' FSL & 1260' FEL 1/21S/27E Eddy NM



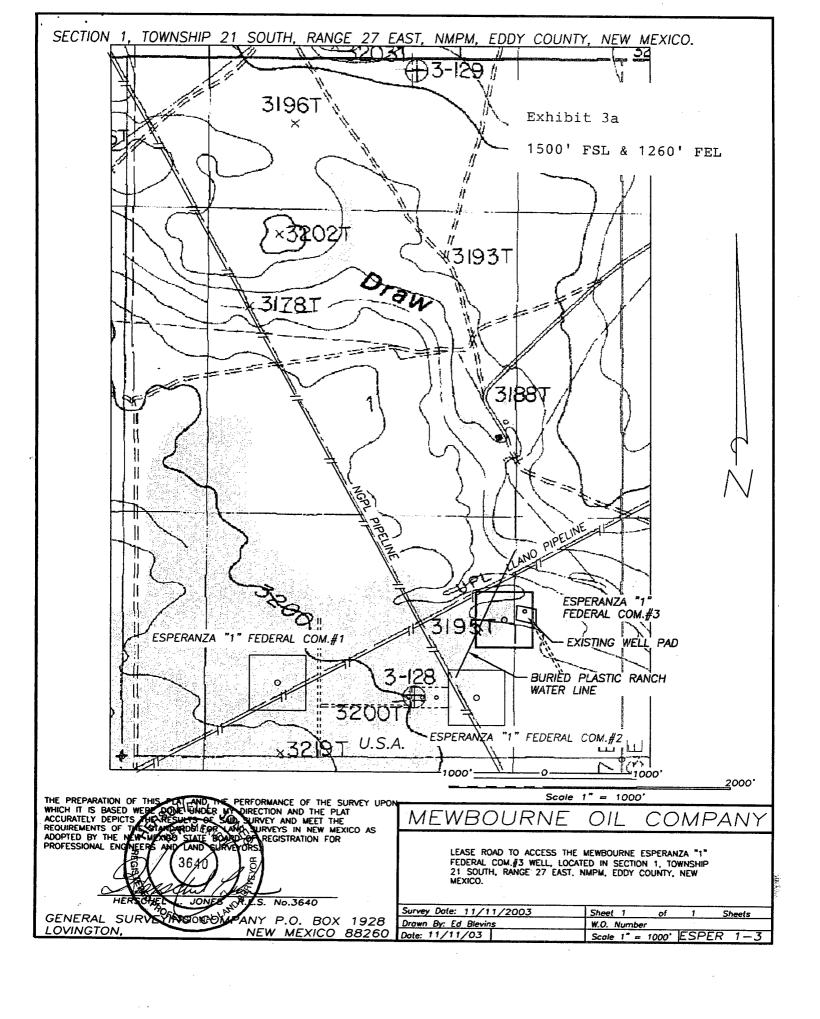


Exhibit #4 Status of Wells in Immediate Vicinity

Mewbourne Oil Company

Esperanza 1 Federal Com #3 1500' FSL & 1260' FEL Section 1 T-21S R-27E Eddy County, New Mexico Lease # NM-17095

Section 1 T-21S R-27E

Operator:

Permian Resources Inc.

Well Name: Government D #12

Unit letter:

Producing

Status: Field:

Avalon Bone Springs East

Operator:

Permian Resources Inc

Well Name: Government D #5

Unit letter:

Status: Producing

Field:

Avalon Bone Springs East

Operator:

Permian Resources Inc

Well Name: Government D #7

Unit letter:

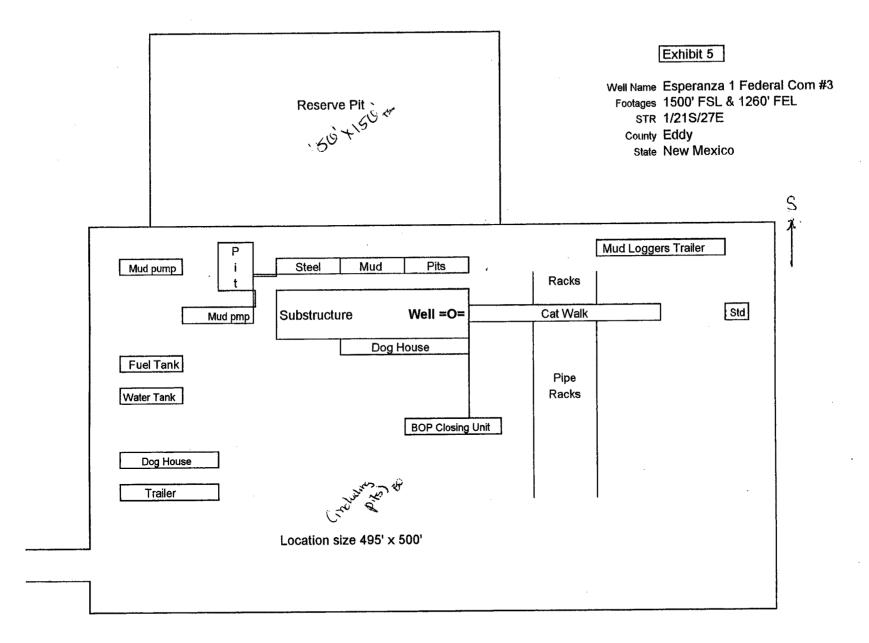
Status:

Producing

Field:

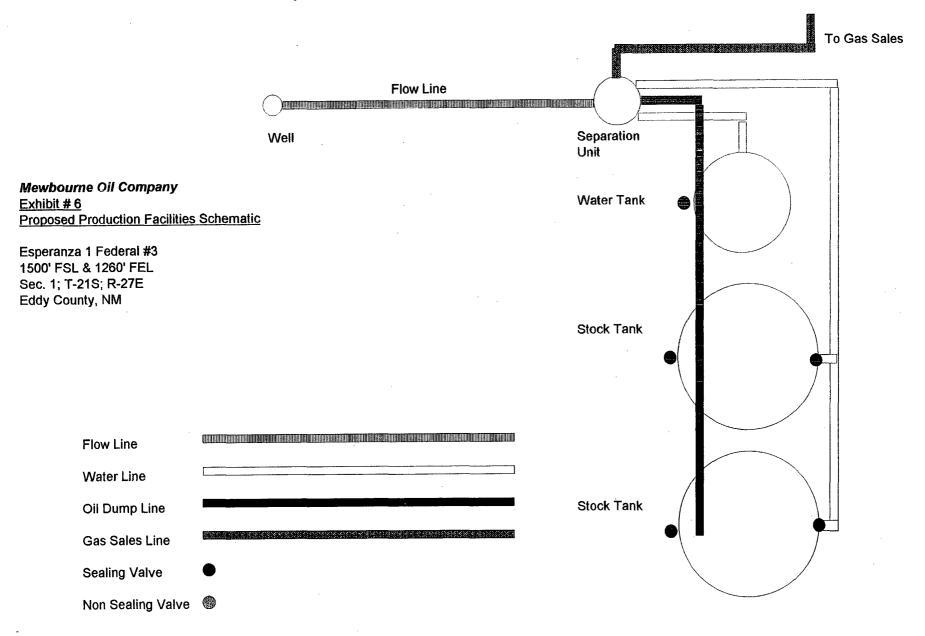
Avalon Bone Springs East

Mewbourne Oil Company



Rig Location Schematic

Proposed Production Facilities Schematic



Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company

Esperanza 1 Federal Com #3 1500' FSL & 1260' FEL Section 1 T-21S R-27E Eddy County, New Mexico Lease Number NM-17095

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.

B. Protective Equipment for Essential Personnel

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

C. 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.

D. <u>Visual Warning Systems</u>

- 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

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.

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:

Lease Number NM-17094

Legal Description of Land:

Section 1, T-21S, R-27E, Eddy County, New Mexico. Location

1500' FSL & 1260' FEL..

Formation (if applicable):

Bond Coverage:

\$150,000

BLM Bond File:

NM1693, Nationwide

Authorized Signature:

Name: NM (Micky) Young

Title: District Manager

Date: November 25, 2003

01/12/2004 14:24

MEWBOURNE OIL COMPANY

P.O. BOX 5270 **HOBBS, NEW MEXICO 88241** TEL. (505) 393-5905 FAX (505) 397-6252

To:OCD Artesia.

From: Micky Young, Mewbourne Oil Company, Hobbs, N.M.

RE:H2S Letter for the Esperanza 1 Federal Com #3 1500' FSL & 1260' FEL Sec. 1 T-21S R-27E Eddy Co, N.M.

Mewbourne Oil Company is planning to drill the above captioned well. Our research in this area shows no abnormal H2S problems. MOC will have all safety equipment on the rig before the Delaware formation @ 2865.

If any questions or concerns, please call at the below numbers.

Thank you,

District Manager

Office @ 505-393-5905

Cellular @ 505-390-0999