

Doyle Smith

7038

0593

Barry

Form 3160-3
(April 2004)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-0354232
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Mewbourne Oil Company (OGRID #14744)		7. If Unit or CA Agreement, Name and No.
3a. Address P.O. Box 5270 Hobbs, NM 88241	3b. Phone No. (include area code) (505) 393-5905	8. Lease Name and Well No. Esperanza "19" Federal Com #2
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 599' FNL & 2043' FEL At proposed prod. zone 764' FNL & 1624' FWL		9. API Well No. 30-015-33494
10. Field and Pool, or Exploratory Burton Flat Morrow		11. Sec., T. R. M. or Blk. and Survey or Area Sec. 19, T21S, R27E
14. Distance in miles and direction from nearest town or post office* 3 miles N of Carlsbad		12. County or Parish Eddy
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 764'		13. State NM
16. No. of acres in lease 314.84		17. Spacing Unit dedicated to this well 314.84 acres (N/2)
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2170'		20. BLM/BIA Bond No. on file NM-1693, Nationwide
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3190' GL		22. Approximate date work will start* 07/01/2004
23. Estimated duration 45 Days		

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>F.C. Lathan</i>	Name (Printed/Typed) F. C. Lathan	Date 04/07/2004
Title Hobbs District Drilling Foreman		
Approved by (Signature) <i>Leslie A. Theiss</i>	Name (Printed/Typed) LESIE A. THEISS	Date JUN 28 2004
Title FIELD MANAGER		
Office CARLSBAD FIELD 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 page 2)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED



CARLSBAD CONTROLLED WATER BASIN

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
March 12, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: Mewbourne Oil Company Telephone: (505) 393-5905 e-mail address: hobeng@mewbourne.com
Address: P.O. Box 5270, Hobbs, New Mexico 88241
Facility or well name: Esperanza "19" Federal Com #2 API #: _____ U/L or Qtr/Qtr B Sec 19 T 21S R 27E
County: Eddy Latitude 32-28-15.8 N Longitude 104-13-38.1 W NAD: 1927 ☐ 1983 ☒ Surface Owner: Federal ☐ State ☐ Private ☒ Indian ☐

Pit

Type: Drilling ☒ Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness 20 mil Clay ☐

Volume 24,000 bbl

Below-grade tank

Volume: _____ bbl Type of fluid: _____

Construction material: _____

Double-walled, with leak detection? Yes ☐ If not, explain why not.

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)

Less than 50 feet

(20 points)

50 feet or more, but less than 100 feet ☒

(10 points) ☒

100 feet or more

(0 points)

Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)

Yes

(20 points)

No ☒

(0 points) ☒

Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)

Less than 200 feet

(20 points)

200 feet or more, but less than 1000 feet

(10 points)

1000 feet or more ☒

(0 points) ☒

Ranking Score (Total Points)

10 points

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location:

onsite ☐ offsite ☐ If offsite, name of facility _____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: 05/14/004

Printed Name/Title F.C. Lathan / Drilling Foreman

Signature F.C. Lathan

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval: 6-1-04

Date: 6-1-04

Printed Name/Title _____

Signature Berry Day

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
811 South First, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
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	Well Number
	ESPERANZA "19" FEDERAL COM.	2
OGRID No.	Operator Name	Elevation
14744	MEWBOURNE OIL COMPANY	3190

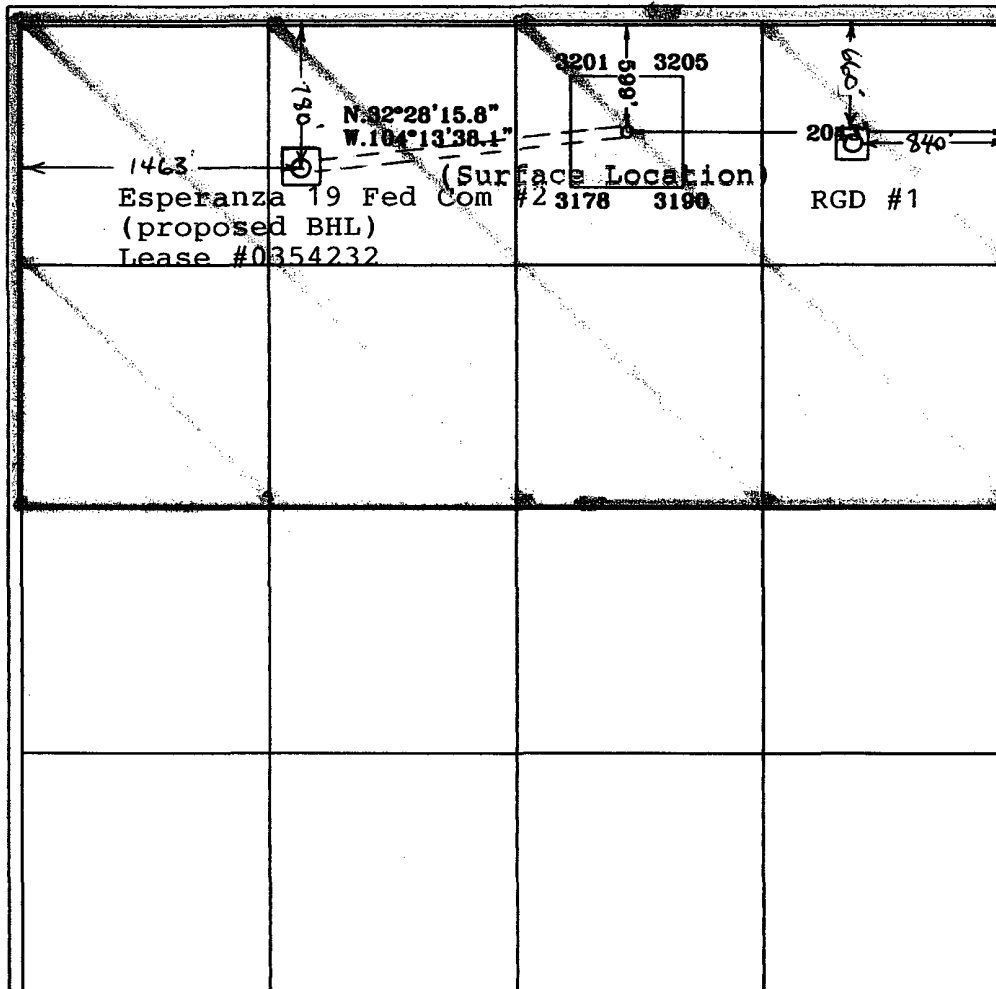
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	19	21S	27E		599	NORTH	2043	EAST	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
C	19	21S	27E		780	North	1463	West	Eddy
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						
314.84									

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



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

F.C. Lathan

Signature

F.C. Lathan

Printed Name

Drilling Foreman

Title

05/07/2004

Date

SURVEYOR CERTIFICATION

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 supervision, and that the same is true and correct to the best of my belief.

5/05/2004

Date Surveyed

Signature & Seal of Professional Surveyor

HERSCHEL L. JONES
NEW MEXICO
REGISTERED PROFESSIONAL SURVEYOR
3640
ESPERANZA 19
GENERAL SURVEYING COMPANY

Certificate No. Herschel L. Jones RLS 3640

GENERAL SURVEYING COMPANY

0 330' 660' 990' 1650' 1980' 2310' 2310' 1980' 1650' 990' 660' 330' 0'

Drilling Program
Mewbourne Oil Company
Esperanza "19" Federal Com #2
599' FNL & 2043' FEL (Surface Location)
Section 19, T21S, R27E
Eddy County, New Mexico
Lease Number NM-0354232

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

Capitan Reef	660'
Delaware	2600'
Bone Spring	4920'
Wolfcamp	8735'
Strawn	10080'
Atoka	10550'
Morrow	11100'
TD	11700'

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 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:

	<u>Hole Size</u>	<u>Casing</u>	<u>Wt/Ft.</u>	<u>Grade</u>	<u>Depth</u>
Drill col water mist system to 2500'	17 1/2"	13 3/8"	48#	H40	0-400' 510'
	12 1/4"	9 5/8"	40#	K55/N80	0-2600' 2500'
	8 3/4"	5 1/2"	17#	P110/N80	0-11700'

Drilling Program

Mewbourne Oil Company

Esperanza "19" Federal Com #2

Page 2

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

B. Cementing Program

- WITNESS
- i. Surface Casing: 300 sacks Class "C" light cement containing 1/2 #/sk cellophane flakes, 2% CaCl, 5 lbs/sack gilsonite. 200 sacks Class "C" cement containing 2% CaCl. WITNESS
 - ii. Intermediate Casing: 900 sacks 35:65 pozmix cement containing 6% gel, 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.

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

5. Mud Program:

<u>Interval</u>	<u>Type System</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0'-400'	FW spud mud	8.6-9.4	32-34	NA
400'-2600'	Fresh water	8.4-8.6	28-30	NA
2600'-10550'	Cut brine water	8.8-9.2	28-30	NA
10550'-TD	BW/Starch	9.2-9.8	30-40	8-15

(Note: Any weight above 8.6 ppg would be to hold back Wolfcamp shale, rather than abnormal bottom hole pressure in Morrow formation.)

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

Drilling Program

Mewbourne Oil Company

Esperanza "19" Federal Com #2

Page 3

Maximum bottom hole temperature: 180 degree F

Maximum bottom hole pressure: 8.6 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 35 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 #2
599' FNL & 2043' FEL (Surface Location)
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 yellow and proposed roads are highlighted in green.
- B. Directions to location: North from Carlsbad on North Canal Street to Carlsbad Relief Route. Turn RIGHT (East) and continue east 0.6 miles. Turn RIGHT (South) through cattle guard. Road will turn RIGHT (West). Continue west 0.2 miles on asphalt, then 0.1 mile on new road to new location.

2. Proposed Access Road:

- A. The access road will be built from an existing road and will enter the location pad from the northeast corner.
- B. The access to the location will be limited to 16' in width and will adequately drain runoff and control erosion as presently constructed.
- C. Access to location has an existing grade to facilitate adequate drainage.

3. Location of Existing Wells:

There are producing wells within the immediate vicinity of the well site. Exhibit #4 shows the proposed well and existing wells within a one mile radius.

4. Location of Existing and/or Proposed Facilities:

- A. There are no production facilities on this lease at the present time.
- B. In the event that the well is productive, production facilities will be located on the well pad.
- C. If the well is productive, restoration plans are as follows:

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MEWBOURNE OIL COMPANY

Esperanza "19" 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

Esperanza "19" Federal Com #2

Page 3

9. Well Site Layout

- A. A diagram of the drill pad is shown in Exhibit #5. Dimensions of the pad, pits, and location of major rig components are shown.
- B. The reserve pit will be lined with a high quality plastic sheeting to prevent migration of fluids.
- C. The pad dimension of 400' X 400' has been staked and flagged.
- D. An archaeological survey has been conducted on the proposed access road and location pad.

10. Plans for Restoration of Surface

- A. Upon cessation of the proposed operations, if the well is abandoned, the location and road will be ripped and re-seeded per BLM guidelines. The reserve pit area, after allowing to dry will be leveled. The entire location will be restored to the original contour as much as reasonable possible. All trash, garbage, and pit lining will be hauled to appropriate disposal to assure the location is aesthetically pleasing as reasonable possible. All restoration work will be completed within 180 days of cessation of activities.
- B. The disturbed area will be restored by re-seeding during the proper growing season with a mixture of native grasses as stipulated by the BLM.
- C. Three sides of the reserve pit will be fenced prior to and during drilling operations. The reserve pit will be fenced on the fourth side after the drilling rig is removed to prevent the endangerment of livestock. The fence will remain in place until the pit area has been leveled and restored.
- D. Upon cessation of the proposed operations, if the well is not abandoned, the reserve pit area will be treated as outlined above within the prescribed amount of time. Any additional caliche required for production facilities will be obtained from a source as described in Section 6.

11. Surface Ownership:

The surface is owned by: J. Vaughan and Constance Westaway Trust

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.

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: 5/7/04

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

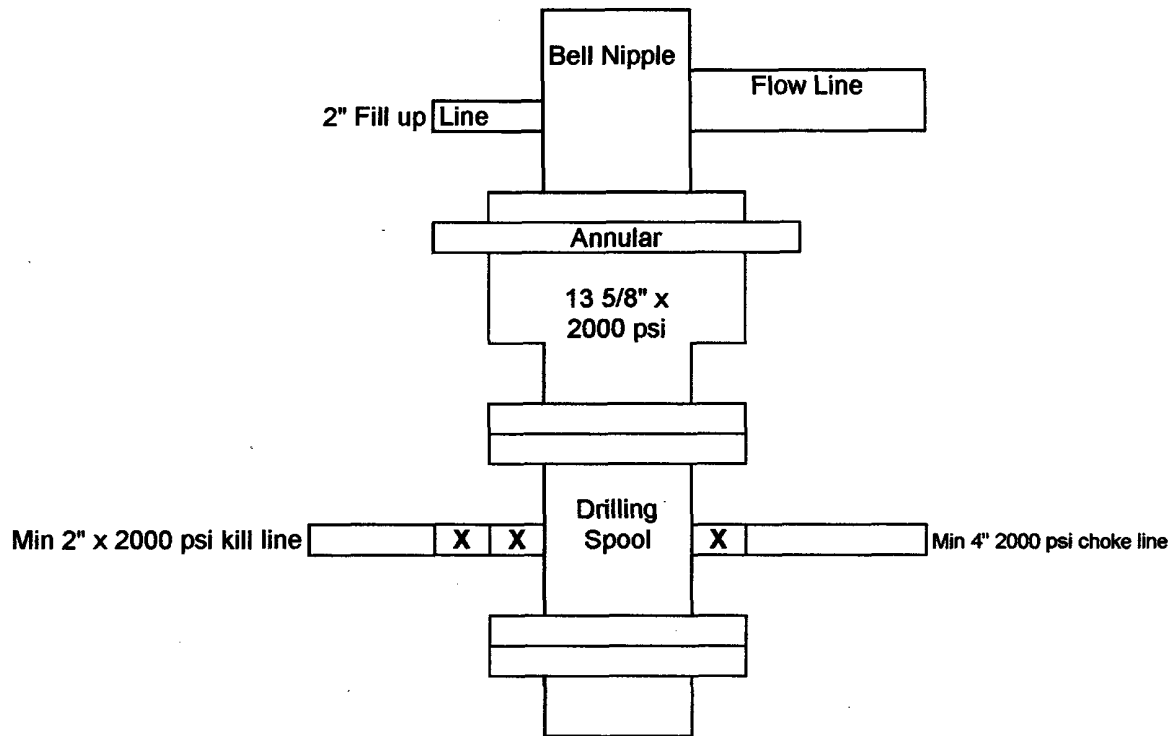


Exhibit #2

Esperanza "19" Federal Com #2
599' FNL & 2043' FEL
Sec 19, T21S, R27E
Eddy County, New Mexico
Lease #NM-0354232

Mewbourne Oil Company
BOP Schematic for
8 3/4" Hole

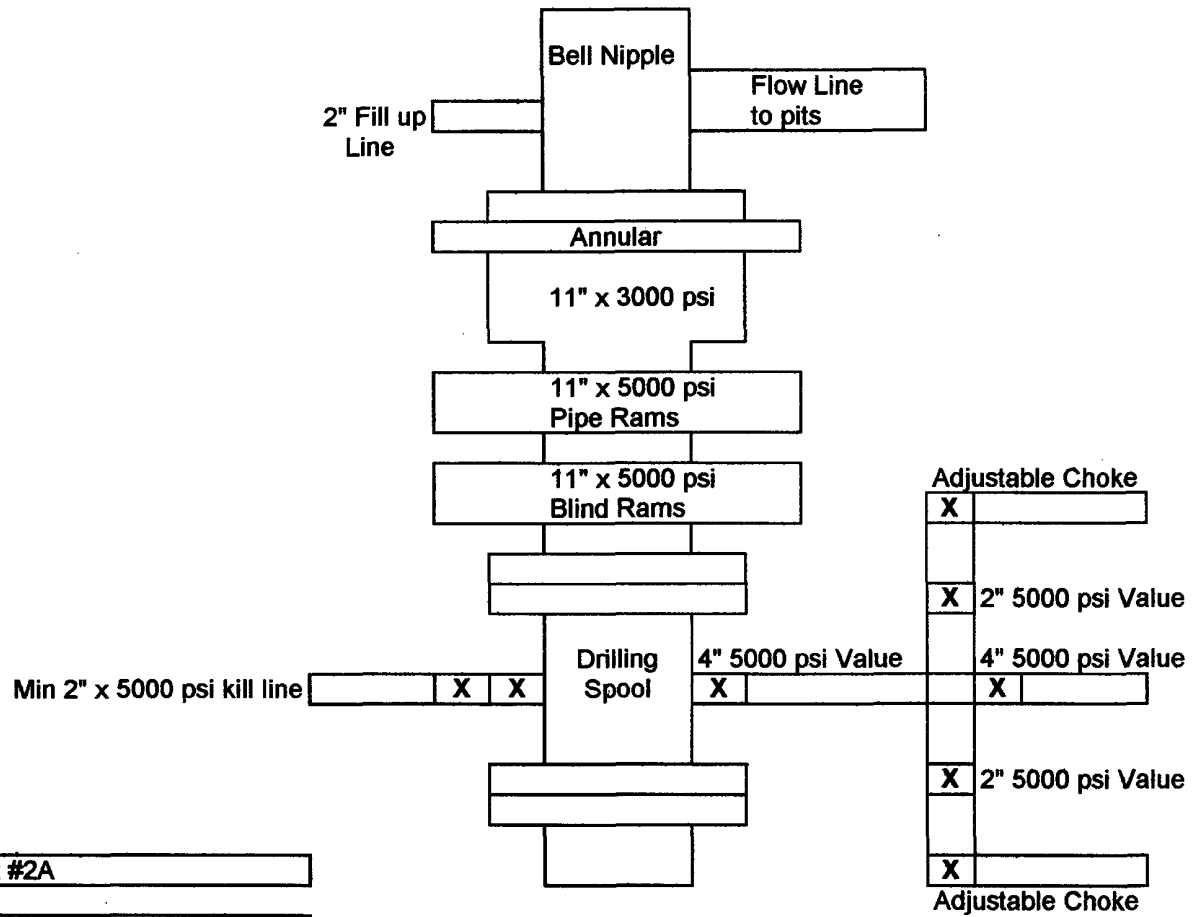


Exhibit #2A

Esperanza "19" Federal Com #2
599' FNL & 2043' FEL
Sec 19, T21S, R27E
Eddy County, New Mexico
Lease #NM-0354232

Notes Regarding Blowout Preventer

Mewbourne Oil Company

Esperanza "19" Federal Com #2
599' FNL & 2043' FEL (Surface Location)
Sec 19-T21S-R27E
Eddy County, New Mexico
Lease #NM-0354232

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 3000 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.

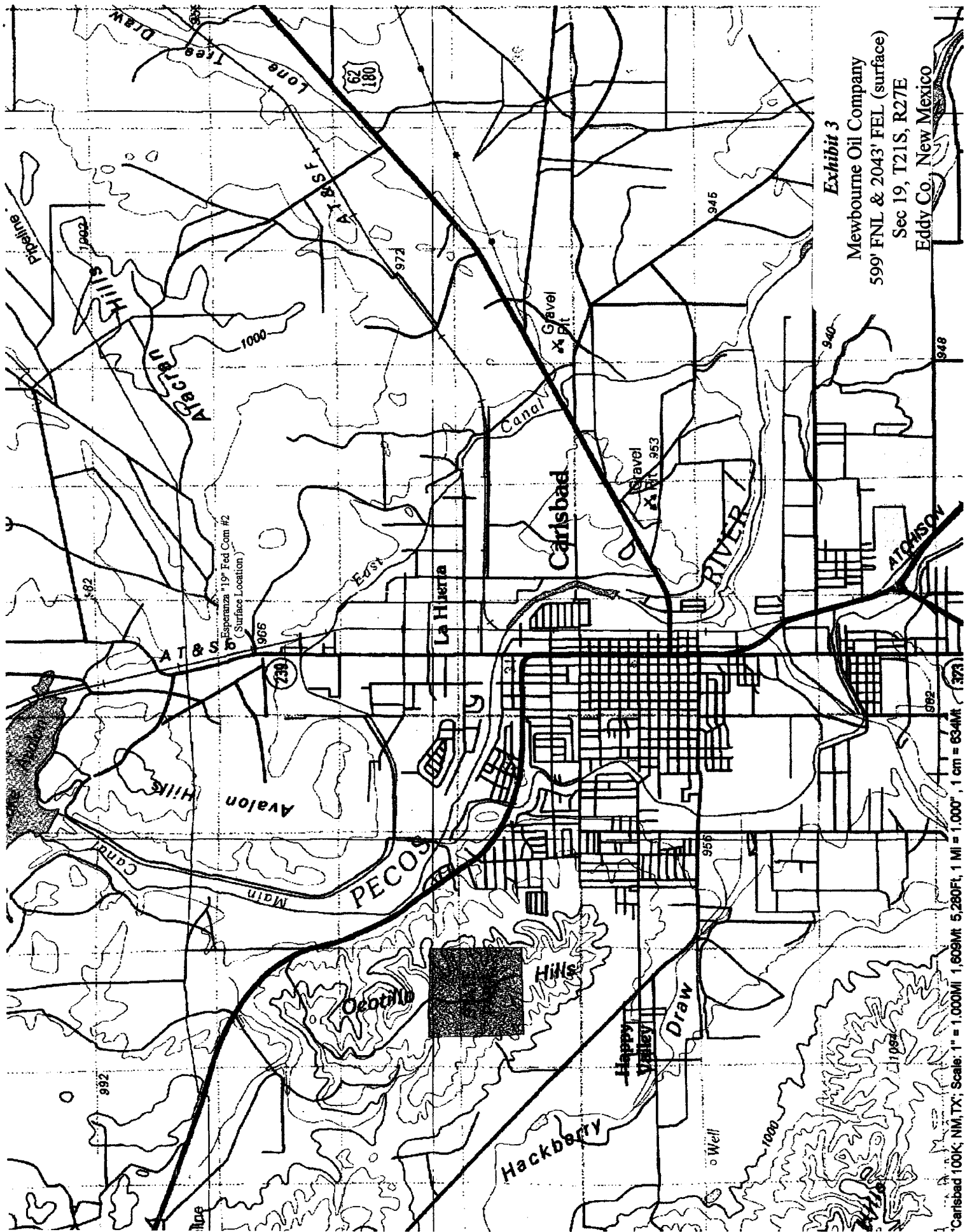


Exhibit 3

Mewbourne Oil Company
599' FNL & 2043' FEL (surface)
Sec 19, T21S, R27E
Eddy Co., New Mexico

Carlsbad 100K, NM, TX; Scale: 1" = 1,000' 1,609M 5,280Ft, 1 Mi = 1,609M 5,280Ft, 1 cm = 63.4Mm

SECTION 19, TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

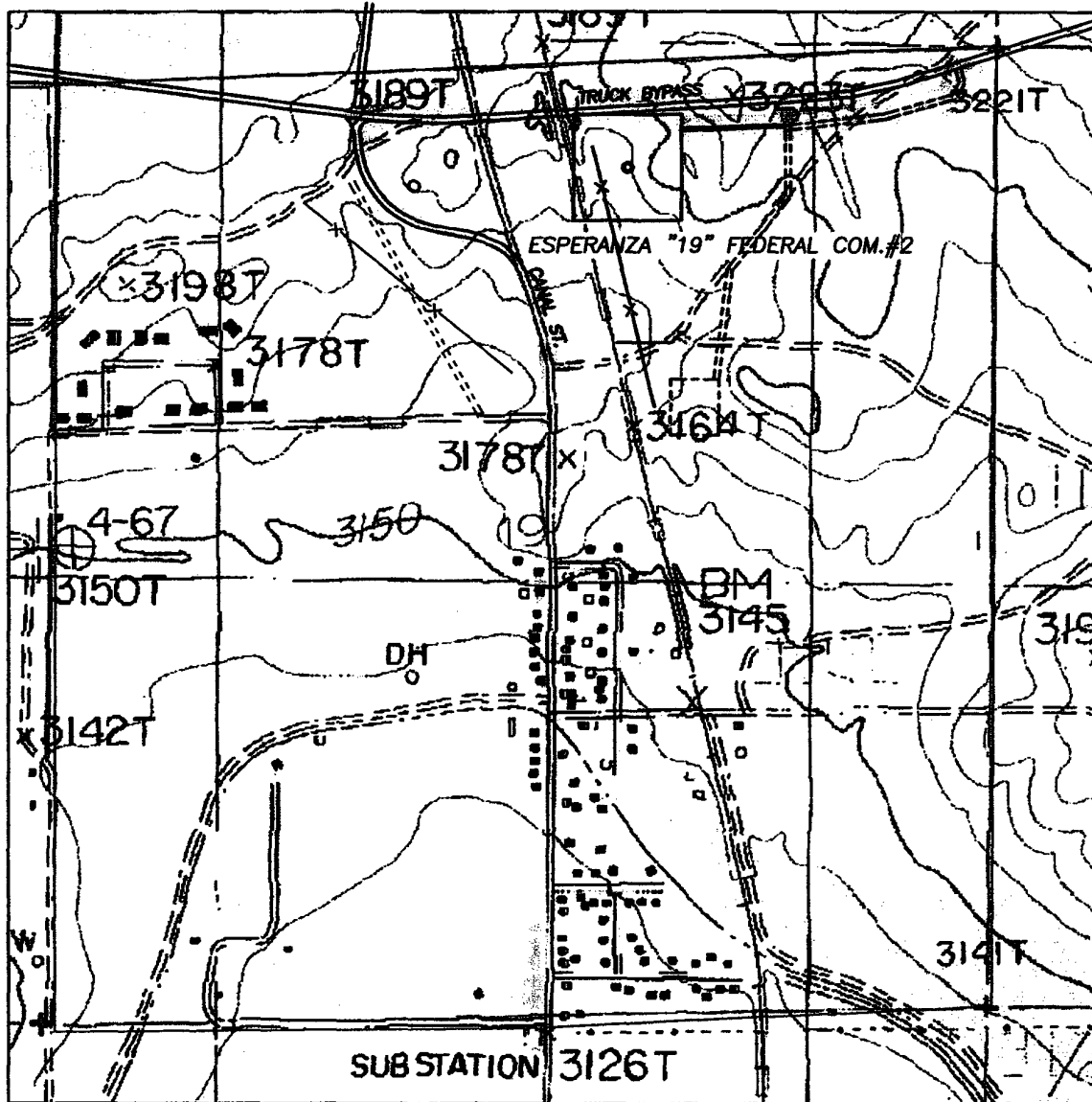
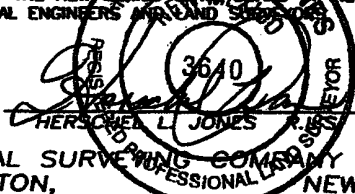


Exhibit 3A

Mewbourne Oil Company
599' FNL & 2043' FEL (surface)
Sec 19, T21S, R27E
Eddy Co., New Mexico

1000' 0 1000' 2000'
Scale 1" = 1000'

THE PREPARATION OF THIS PLAT AND THE PERFORMANCE OF THE SURVEY UPON WHICH IT IS BASED WERE DONE UNDER MY DIRECTION AND THE PLAT ACCURATELY DEPICTS THE RESULTS OF SAID SURVEY AND MEET THE REQUIREMENTS OF THE STANDARDS FOR LAND SURVEYS IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO SURVEY BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.



GENERAL SURVEYING COMPANY P.O. BOX 1928
LOVINGTON, NEW MEXICO 88260

MEWBOURNE OIL COMPANY

LEASE ROAD TO ACCESS THE MEWBOURNE ESPERANZA "19" FEDERAL COM. #2 WELL, LOCATED IN SECTION 19, TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

Survey Date: 4/29/2004	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 4/29/04	Scale 1" = 1000' ESPE 19-2

Exhibit #4
Status of Wells in Immediate Vicinity
Mewbourne Oil Company
Esperanza "19" Federal Com #2
599' FNL & 2043' FEL (Surface Location)
Section 19, T21S, R27E
Eddy County, New Mexico
Lease # NM-0354232

Section 19, T21S, R27E

Operator: Mewbourne Oil Company
Well Name: Esperanza "19" Federal Com #1
Unit letter: I
Status: Producing
Field: Burton Flat Morrow

Operator: Wynn-Crosby Energy
Well Name: RGD #1
Unit letter: A
Status: Producing
Field: Burton Flat Morrow

Operator: Vernon E. Faulconer
Well Name: Pioneer Federal #1
Unit letter: G
Status: Producing
Field: La Huerta Strawn

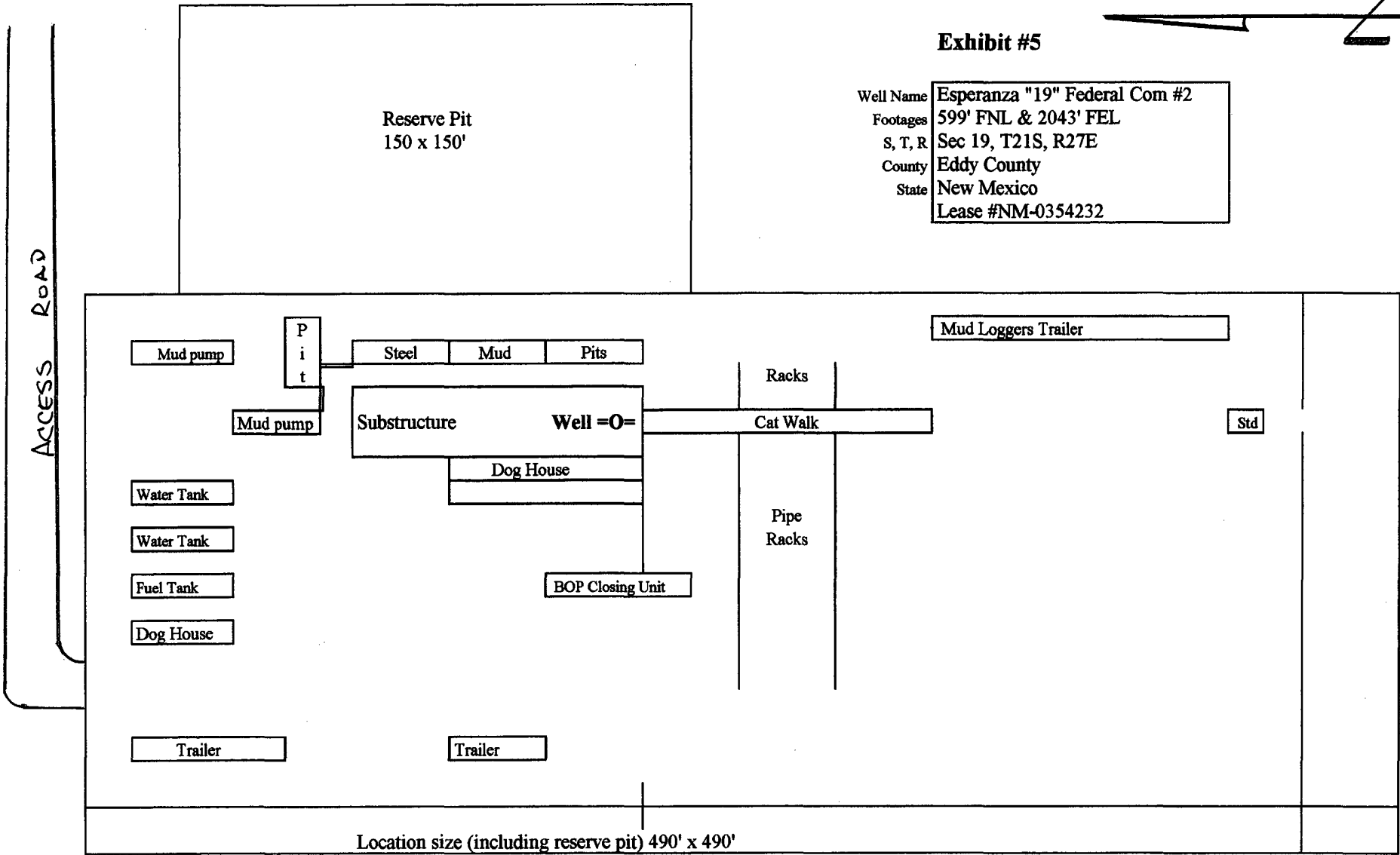
Operator: Vernon E. Faulconer
Well Name: Challenger Rayroux #1
Unit letter: P
Status: Producing
Field: East Carlsbad Wolfcamp

Mewbourne Oil Company

Exhibit #5

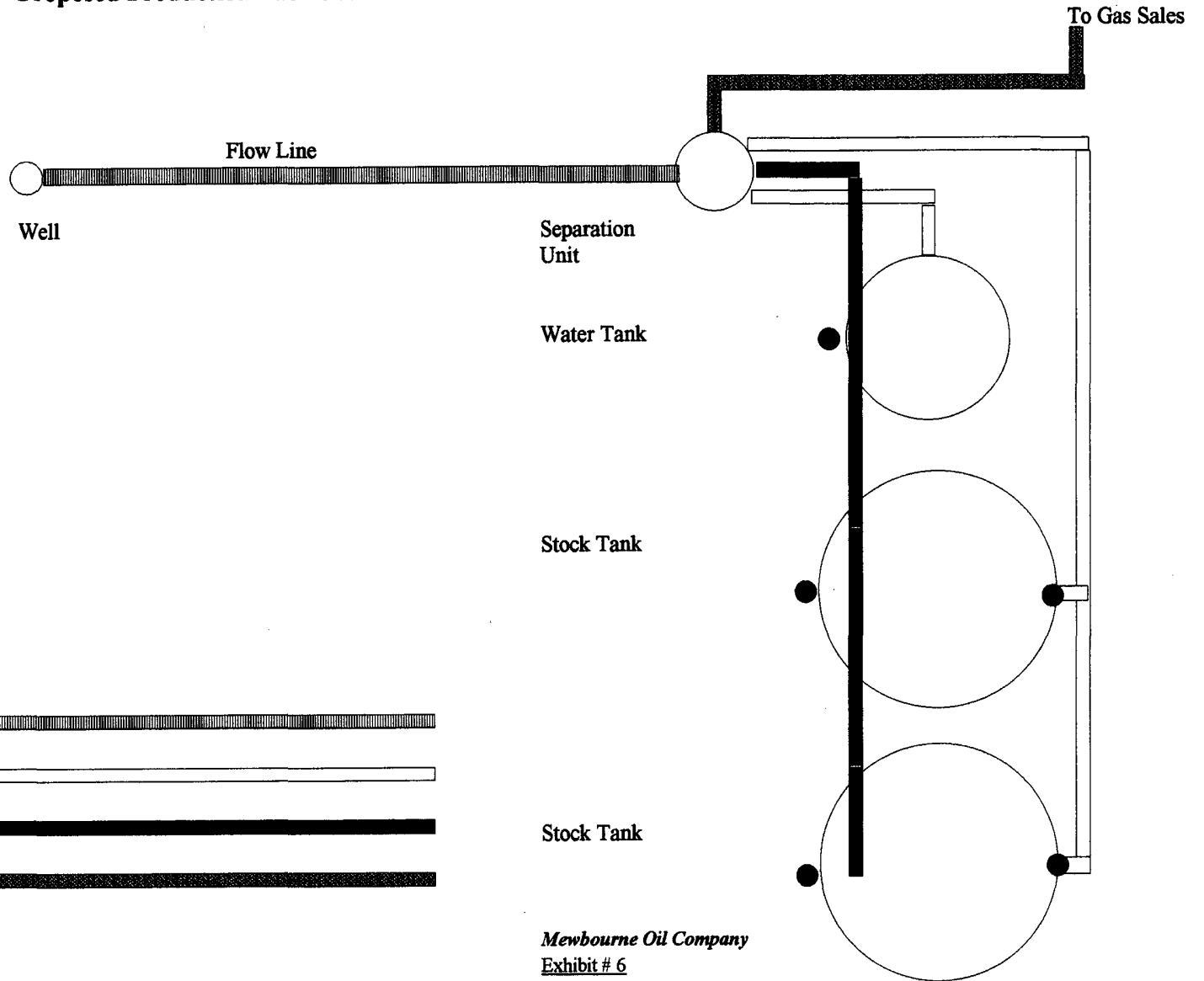








Well Name Esperanza "19" Federal Com #2
Footages 599' FNL & 2043' FEL
S, T, R Sec 19, T21S, R27E
County Eddy County
State New Mexico
Lease #NM-0354232



Rig Location Schematic

Proposed Production Facilities Schematic



- Flow Line 
- Water Line 
- Oil Dump Line 
- Gas Sales Line 
- Sealing Valve 
- Non Sealing Valve 

Mewbourne Oil Company
Exhibit # 6
Proposed Production Facilities Schematic

Esperanza "19" Federal Com #2
599' FNL & 2043' FEL
Sec 19, T21S, R27E
Eddy County, New Mexico
Lease #NM-0354232

Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company

Esperanza "19" Federal Com #2
599' FNL & 2043' FEL (Surface Location)
Sec 19, T21S, R27E
Eddy County, New Mexico
Lease #NM-0354232

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 known 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. 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.

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 all H₂S safety equipment on location and working 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: Lease Number NM-0354232

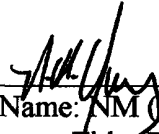
Legal Description of Land: Section 19, T-21S, R-27E Eddy County, New Mexico. Surface location at 599' FNL & 2043' FWL.

Formation (if applicable):

Bond Coverage: \$150,000

BLM Bond File: NM1693, Nationwide

Authorized Signature: _____


Name: NM (Micky) Young
Title: District Manager
Date: May 7, 2004

*Final***PRECISION DRILLING SERVICES**

Client : MEWBOURNE OIL CO.
 Well Name : ESPERANZA 19-2
 Location : EDDY COUNTY, NM

Page : 1 of 2
 Date : 7/1/2004
 File : DRAFT D

KB Elevation : NA

Gr Elevation : NA

Vertical Section Calculated Along Azimuth 261.88°

MD ft	Inc deg	Azi deg	TVD ft	North ft	East ft	V'Sect ft	D'Leg °/100	Build °/100	Turn °/100
KOP- Build at 1.5°/100'									
5828.00	0.00	261.88	5828.00	0.00	0.00	0.00	0.00	0.00	0.00
5900.00	1.08	261.88	5900.00	-0.10	-0.67	0.68	1.50	1.50	0.00
6000.00	2.58	261.88	5999.94	-0.55	-3.83	3.87	1.50	1.50	0.00
6100.00	4.08	261.88	6099.77	-1.37	-9.58	9.68	1.50	1.50	0.00
6200.00	5.58	261.88	6199.41	-2.56	-17.92	18.10	1.50	1.50	0.00
6300.00	7.08	261.88	6298.80	-4.12	-28.83	29.13	1.50	1.50	0.00
6400.00	8.58	261.88	6397.86	-6.04	-42.32	42.75	1.50	1.50	0.00
6500.00	10.08	261.88	6496.54	-8.33	-58.37	58.96	1.50	1.50	0.00
6600.00	11.58	261.88	6594.75	-10.99	-76.97	77.75	1.50	1.50	0.00
6700.00	13.08	261.88	6692.45	-14.00	-98.11	99.10	1.50	1.50	0.00
6800.00	14.58	261.88	6789.54	-17.38	-121.77	123.01	1.50	1.50	0.00
6900.00	16.08	261.88	6885.98	-21.12	-147.94	149.44	1.50	1.50	0.00
7000.00	17.58	261.88	6981.70	-25.21	-176.61	178.40	1.50	1.50	0.00
EOB - Hold at 18° Inc.									
7027.98	18.00	261.88	7008.34	-26.42	-185.07	186.94	1.50	1.50	0.00
7100.00	18.00	261.88	7076.83	-29.56	-207.10	209.20	0.00	0.00	0.00
7200.00	18.00	261.88	7171.94	-33.93	-237.69	240.10	0.00	0.00	0.00
7300.00	18.00	261.88	7267.05	-38.29	-268.28	271.00	0.00	0.00	0.00
7400.00	18.00	261.88	7362.15	-42.66	-298.87	301.90	0.00	0.00	0.00
7500.00	18.00	261.88	7457.26	-47.03	-329.46	332.80	0.00	0.00	0.00
7600.00	18.00	261.88	7552.36	-51.39	-360.06	363.71	0.00	0.00	0.00
7700.00	18.00	261.88	7647.47	-55.76	-390.65	394.61	0.00	0.00	0.00
7800.00	18.00	261.88	7742.57	-60.13	-421.24	425.51	0.00	0.00	0.00
7900.00	18.00	261.88	7837.68	-64.49	-451.83	456.41	0.00	0.00	0.00
8000.00	18.00	261.88	7932.79	-68.86	-482.42	487.31	0.00	0.00	0.00
8100.00	18.00	261.88	8027.89	-73.22	-513.01	518.21	0.00	0.00	0.00
8200.00	18.00	261.88	8123.00	-77.59	-543.60	549.11	0.00	0.00	0.00
8300.00	18.00	261.88	8218.10	-81.96	-574.19	580.01	0.00	0.00	0.00
Cross Half Section Line - 660' FNL, 2560' FWL									
8381.70	18.00	261.88	8295.81	-85.52	-599.19	605.26	0.00	0.00	0.00
8400.00	18.00	261.88	8313.21	-86.32	-604.79	610.92	0.00	0.00	0.00
8500.00	18.00	261.88	8408.32	-90.69	-635.38	641.82	0.00	0.00	0.00
8600.00	18.00	261.88	8503.42	-95.06	-665.97	672.72	0.00	0.00	0.00
8700.00	18.00	261.88	8598.53	-99.42	-696.56	703.62	0.00	0.00	0.00
8800.00	18.00	261.88	8693.63	-103.79	-727.15	734.52	0.00	0.00	0.00
8900.00	18.00	261.88	8788.74	-108.16	-757.74	765.42	0.00	0.00	0.00
9000.00	18.00	261.88	8883.84	-112.52	-788.33	796.32	0.00	0.00	0.00
9100.00	18.00	261.88	8978.95	-116.89	-818.92	827.22	0.00	0.00	0.00
9200.00	18.00	261.88	9074.06	-121.25	-849.52	858.12	0.00	0.00	0.00

PRECISION DRILLING SERVICES

Client : MEWBOURNE OIL CO.
 Well Name : ESPERANZA 19-2
 Location : EDDY COUNTY, NM

Page : 2 of 2
 Date : 7/1/2004
 File : DRAFT D

KB Elevation : NA

Gr Elevation : NA

Vertical Section Calculated Along Azimuth 261.88°

MD ft	Inc deg	Azi deg	TVD ft	North ft	East ft	V'Sect ft	D'Leg °/100	Build °/100	Turn °/100
9300.00	18.00	261.88	9169.16	-125.62	-880.11	889.03	0.00	0.00	0.00
9400.00	18.00	261.88	9264.27	-129.99	-910.70	919.93	0.00	0.00	0.00
9500.00	18.00	261.88	9359.37	-134.35	-941.29	950.83	0.00	0.00	0.00
9600.00	18.00	261.88	9454.48	-138.72	-971.88	981.73	0.00	0.00	0.00
9700.00	18.00	261.88	9549.59	-143.09	-1002.47	1012.63	0.00	0.00	0.00
9800.00	18.00	261.88	9644.69	-147.45	-1033.06	1043.53	0.00	0.00	0.00
9900.00	18.00	261.88	9739.80	-151.82	-1063.65	1074.43	0.00	0.00	0.00
10000.00	18.00	261.88	9834.90	-156.19	-1094.24	1105.33	0.00	0.00	0.00
10100.00	18.00	261.88	9930.01	-160.55	-1124.84	1136.24	0.00	0.00	0.00
10200.00	18.00	261.88	10025.11	-164.92	-1155.43	1167.14	0.00	0.00	0.00
Strawn - 719' FNL, 1980' FWL									
10278.74	18.00	261.88	10100.00	-168.36	-1179.51	1191.47	0.00	0.00	0.00
10300.00	18.00	261.88	10120.22	-169.29	-1186.02	1198.04	0.00	0.00	0.00
10400.00	18.00	261.88	10215.33	-173.65	-1216.61	1228.94	0.00	0.00	0.00
10500.00	18.00	261.88	10310.43	-178.02	-1247.20	1259.84	0.00	0.00	0.00
10600.00	18.00	261.88	10405.54	-182.38	-1277.79	1290.74	0.00	0.00	0.00
10700.00	18.00	261.88	10500.64	-186.75	-1308.38	1321.64	0.00	0.00	0.00
10800.00	18.00	261.88	10595.75	-191.12	-1338.97	1352.54	0.00	0.00	0.00
10900.00	18.00	261.88	10690.85	-195.48	-1369.57	1383.45	0.00	0.00	0.00
11000.00	18.00	261.88	10785.96	-199.85	-1400.16	1414.35	0.00	0.00	0.00
11100.00	18.00	261.88	10881.07	-204.22	-1430.75	1445.25	0.00	0.00	0.00
11200.00	18.00	261.88	10976.17	-208.58	-1461.34	1476.15	0.00	0.00	0.00
11300.00	18.00	261.88	11071.28	-212.95	-1491.93	1507.05	0.00	0.00	0.00
11400.00	18.00	261.88	11166.38	-217.32	-1522.52	1537.95	0.00	0.00	0.00
Morrow - 754' FNL, 1626' FWL									
11435.35	18.00	261.88	11200.00	-218.86	-1533.33	1548.87	0.00	0.00	0.00
11500.00	18.00	261.88	11261.49	-221.68	-1553.11	1568.85	0.00	0.00	0.00
11600.00	18.00	261.88	11356.60	-226.05	-1583.70	1599.75	0.00	0.00	0.00
11700.00	18.00	261.88	11451.70	-230.42	-1614.29	1630.66	0.00	0.00	0.00
11800.00	18.00	261.88	11546.81	-234.78	-1644.89	1661.56	0.00	0.00	0.00
11900.00	18.00	261.88	11641.91	-239.15	-1675.48	1692.46	0.00	0.00	0.00
Proposed BHL - 771' FNL, 1465' FWL									
11961.08	18.00	261.88	11700.00	-241.81	-1694.16	1711.33	0.00	0.00	0.00

Bottom Hole Closure 1711.33ft Along Azimuth 261.88°

FAX TRANSMISSION**MEWBOURNE OIL****PO BOX 5270****HOBBS, NM 88241****505-393-5905****FAX 505-397-6252****To:** Brian Arrant**Date:** 7/8/04**Fax:** 748-1283**Pages:** (plus cover) 3**From:** Mickey**Subject:** Esperanza 19 #2