

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-101
Revised June 10, 2003

Submit to appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Mewbourne Oil Company PO Box 5270 Hobbs, NM 88240		² OGRID Number 14744
³ Property Code		³ API Number 30 - 015-33452
⁵ Property Name Herradura 25		⁶ Well No. 1

⁷ 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	25	22S	27E		990'	N	1980'	E	Eddy

⁸ Proposed Bottom Hole Location If Different From Surface						CEMENT TO COVER ALL OIL, GAS AND WATER BEARING ZONES
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	
⁹ Proposed Pool 1 Otis Morrow						

¹¹ Work Type Code N	¹² Well Type Code G	¹³ Cable/Rotary R	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 3080'
¹⁶ Multiple No	¹⁷ Proposed Depth 12,500'	¹⁸ Formation Morrow	¹⁹ Contractor TBA	²⁰ Spud Date Upon OCD approval

²¹ Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2"	13 3/8"	48#	700' 400' - 450'	500	Surface
12 1/4"	9 5/8"	40#	4500'	900	Surface
8 3/4"	5 1/2"	17#	12500'	1000	500' above WC

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

BOP Program: 2k Hydri (see Exhibit #2) from surface casing to intermediate TD. 5M Schaffer LWS or equivalent (Double-Ram Hydraulic) with 5M Annular Preventor (See Exhibit #2A) from intermediate casing to total depth. Rotating head, PVT, flow monitors and mud gas Separator from the Wolfcamp to TD.

Mud Program: 0' to 500' Fresh Water, spud mud, lime for PH and LCM as needed for seepage.

500' to 4500' Brine Water, lime for PH and LCM as needed for seepage.

4500' to TD Cut Brine 9.3 #/g+, Caustic for PH, Starch for WL control and LCM as needed for seepage

RECEIVED
JUN 07 2004
OCD-ARTESIA

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>M. Young</i> Printed name: M Young Title: Hobbs District Manager E-mail Address: Date: 06-03-04 Phone: 505-393-5905		OIL CONSERVATION DIVISION Approved by: <i>[Signature]</i> Title: District Supervisor Approval Date: JUN 10 2004 Expiration Date: JUN 10 2005 Conditions of Approval: Attached <input type="checkbox"/> Cement on Production to cover oil zone in Bone Spring @ 7100' TOC	
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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
Property Code	Property Name HERRADURA "25"	Well Number 1
OGRID No. 14744	Operator Name MEWBOURNE OIL COMPANY	Elevation 3080

Surface Location

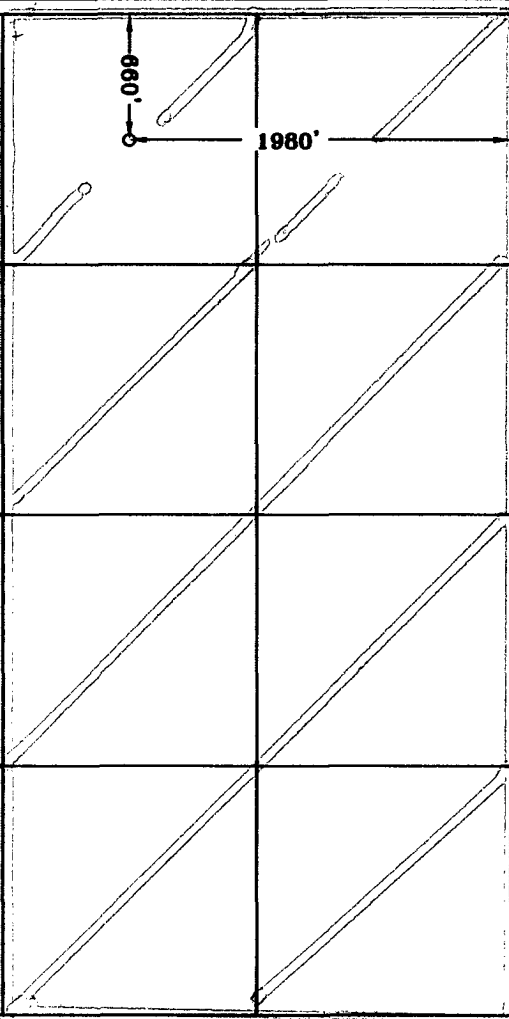
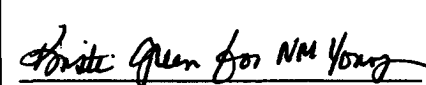
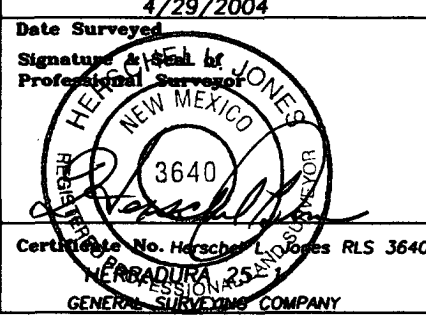
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	25	22S	27E		990	NORTH	1980	EAST	EDDY

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
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

	N.32°22'08.4" W.104°08'26.6" N.497769.4 E.559618.6 (NAD 27)		OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature NM Young Printed Name Hobbs Manager Title 06/03/04 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. 4/29/2004 Date Surveyed Signature & Seal of Professional Surveyor  Certificate No. Herschel L. Jones RLS 3640 HERRADURA "25" GENERAL SURVEYING COMPANY

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

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State of New Mexico
Energy Minerals and Natural Resources

Form C-144
March 12, 2004

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

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: kgreen@mewbourne.com

Address: PO Box 5270

Facility or well name: Herradura "25" #1 API #: U/L or Qtr/Qtr Sec 25 T22S R27E

County: Eddy Latitude 32-22-06.4N Longitude 104-08-26.6W NAD: 1927 ☐ 1983 ☒

Surface Owner Federal ☐ State ☐ Private ☒ Indian ☐

Pit

Type: Drilling ☒ Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness 12 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

50 feet or more, but less than 100 feet

100 feet or more

(20 points) X

(10 points)

(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

No X

(20 points)

(0 points) X

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

Less than 200 feet

200 feet or more, but less than 1000 feet

1000 feet or more X

(20 points)

(10 points)

(0 points) X

Ranking Score (Total Points)

20 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: 06/03/04

Printed Name/Title Kristi Green - Regulatory

Signature *Kristi Green*

Our 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.

Approved JUN 9 2004

Date:

Printed Name/Title

Signature *[Signature]*

OCD MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MEWBOURNE OIL COMPANY

Herradura "25" #1

990' FNL & 1980' FEL

Section 25-T22S-R27E

Eddy County, New Mexico

This plan is submitted with Form C101, 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. **From Carlsbad go SE on Hwy 285 approx 5 miles from South Y, turn North on Grandi St, cross over railroad tracks and continue 1.4 miles to CR 702 (Ferguson St), turn East, go 1.5 miles, turn South on Porter & go 900', turn east to new location.**

2. Proposed Access Road:

- A. Approx 100' of new road will be needed.

3. 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:
 - 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

4. 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.

OCD MULTI-POINT SURFACE USE AND OPERATIONS PLAN
MEWBOURNE OIL COMPANY

Herradura 25 #1

Page 2

5. 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.

6. 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.

7. Ancillary Facilities

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

8. 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 as per OCD guidelines.
- C. The pad dimension of 400' X 400' has been staked and flagged.

9. 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.

OCD MULTI-POINT SURFACE USE AND OPERATIONS PLAN
MEWBOURNE OIL COMPANY

Herradura 25 #1

Page 3

- 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.

10. Surface Ownership:

The surface is owned by: Bureau of Land Management

11. Other Information

- A. The primary use of the surface at the location is for grazing of livestock.

Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company

Herradura 25 #1

990' FNL & 1980' FEL

Section 25-T22S-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.
- 3 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:

- 1 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 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.

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. Protective Equipment for Essential Personnel

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

3. 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.

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 Delaware at formation at 2250'.

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

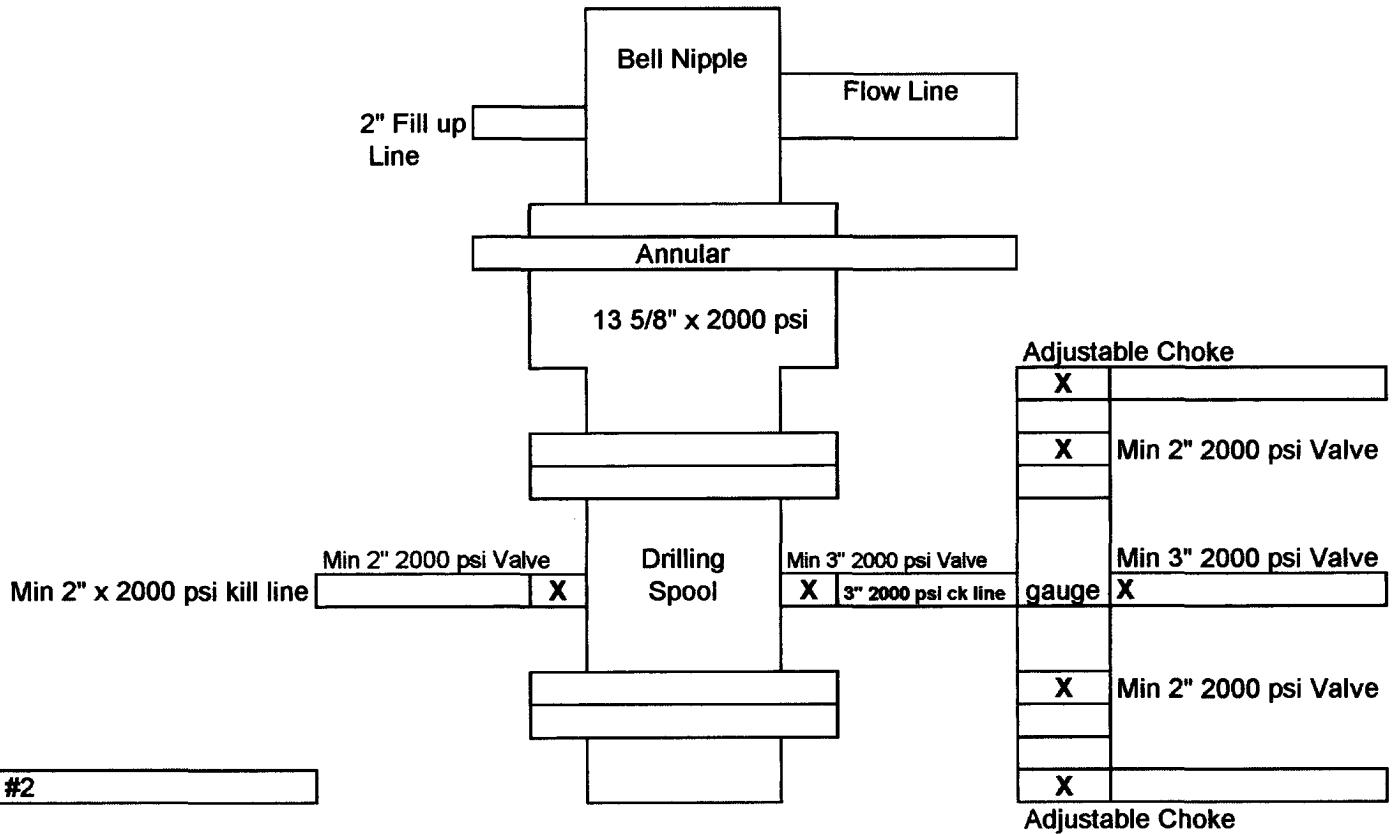


Exhibit #2

Herradura 25 #1
Sec 25-T22S-R27E
990' FNL & 1980' FEL
Eddy County, NM

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

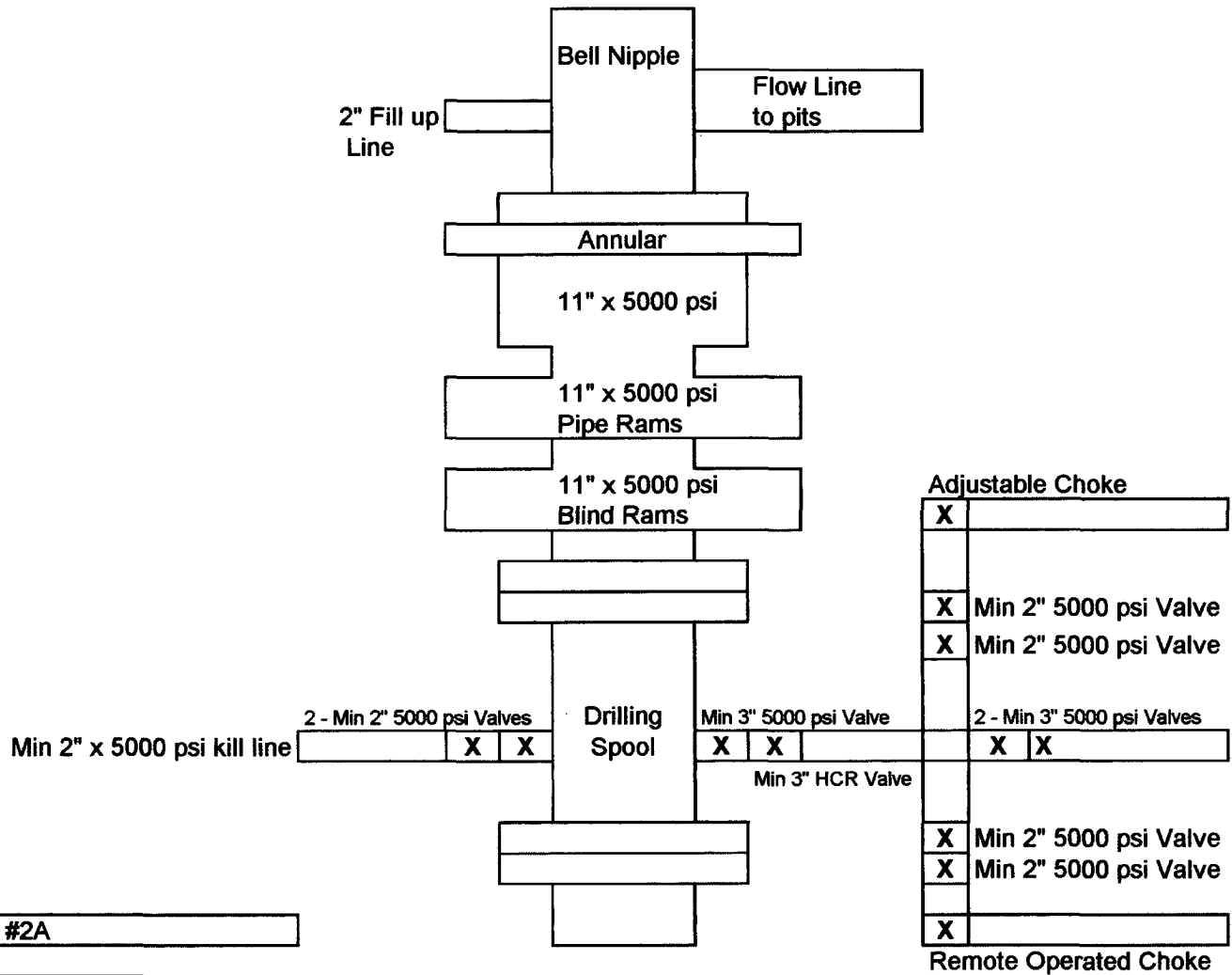


Exhibit #2A

Herradura 25 #1
990' FNL & 1980' FEL
Sec 25; T22S; R27E
Eddy County, New Mexico

SECTION 25, TOWNSHIP 22 SOUTH, RANGE 27 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

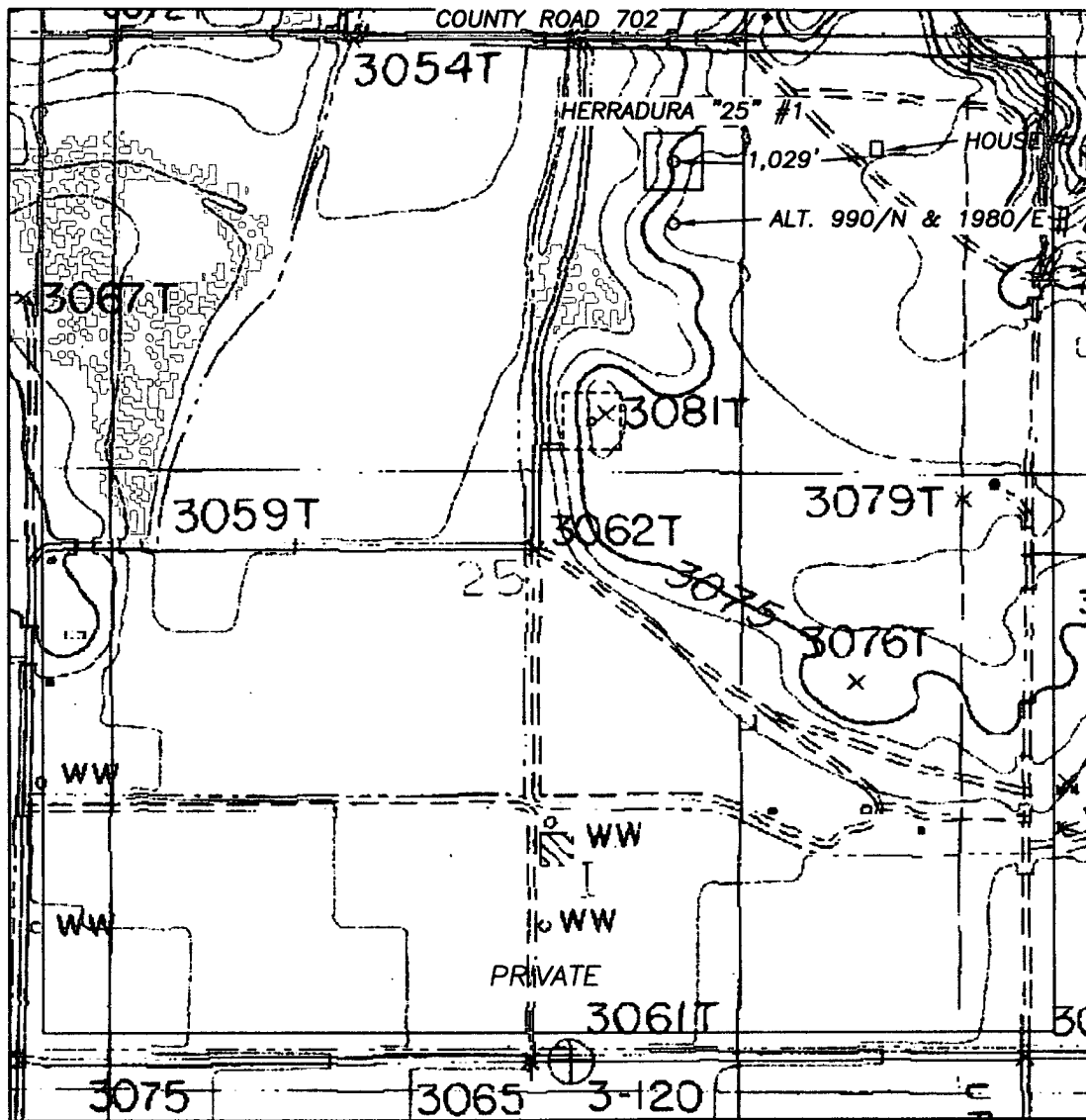


Exhibit 3A

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 STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

REGISTRATION NO. 3640
HERSCHEL L. JONES R.L.S. No. 3640

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

MEWBOURNE OIL COMPANY

LEASE ROAD TO ACCESS THE MEWBOURNE HERRADURA "25" #1 WELL, LOCATED IN SECTION 25, TOWNSHIP 22 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' HERRADURA