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OPERATOR'S COPY

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

Form 3160-3  
(July 1992)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK  
DRILL  DEEPEN

b. TYPE OF WELL  
OIL WELL  GAS WELL  OTHER   
SINGLE ZONE  MULTIPLE ZONE

2. NAME OF OPERATOR  
Mewbourne Oil Company

3. ADDRESS AND TELEPHONE NO.  
P.O. Box 5270, Hobbs, NM 88241 (505) 393-5905

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface (850')  
1980' FSL & (1650') FWL  
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
4 miles north of Carlsbad, New Mexico

16. NO. OF ACRES IN LEASE 640  
17. NO. OF ACRES ASSIGNED TO THIS WELL 320

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1650'  
19. PROPOSED DEPTH 11,200'  
20. ROTARY OR CABLE TOOL Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
(3187') 3180'

5. LEASE DESIGNATION AND SERIAL NO.  
~~LC 064499~~ NM 3606A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.  
Carlsbad "15" Federal Com.

9. API WELL NO.

10. FIELD AND POOL OR WILDCAT  
Catclaw Draw Morrow

11. SEC., T., R., M., OR BLM AND SUBVEY OR AREA  
Sec. 15, T21S, R26E

12. COUNTY OR PARISH Eddy  
13. STATE NM

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
5/8"	13 3/8"	48#	400'±	420 Sks Class "H, 35.65 POZC" Cir
7/8"	2 5/8" 8 5/8"	35# & 40#	2600'±	815 Sks Tie Back Into Class "H,C Surface Casing
7 7/8"	5 1/2"	24# - 32# 17# & 20#	11200'±	1070 Sks Class "C,H"

Mewbourne Oil Company proposed to drill to a depth sufficient to test the Morrow for gas. If productive, 5 7/8" casing will be cemented at TD. If non-productive, the well will be plugged and abandoned in a manner consistent with federal regulations. Specific programs are outlined in the following attachments:

- Drilling Program
- Surface Use and Operations Plan
- Exhibit #1 Location and Elevation Plat
- Exhibit #2, 2A Attachment Blowout Preventor and Choke Manifold
- Exhibit #3, 3A Existing and plan access road w/location
- Exhibit #4 Attachment: Immediate Radius Map
- Exhibit #5 Proposed Drilling Rig Layout
- Exhibit #6 Proposed Production Facilities Layout
- H2S Drilling Operations Plan w/Drilling Rig Layout for H2S

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BUREAU OF LAND MGMT.  
CARLSBAD RESOURCE AREA

IN ABOVE SPACE DESCRIBE PROPOSED 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.

24. SIGNED [Signature] TITLE Drilling Engineer DATE 6/17/97

(This space for Federal or State office use)  
APPROVAL SUBJECT TO General Requirements and Special Stipulations  
ERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

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:

APPROVED BY [Signature] TITLE ADM, Minerals DATE 7/18/97

\*See Instructions On Reverse Side

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Instruction on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Box DD, Artesia, NM 88210

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

JUN 27 97

AMENDED REPORT

DISTRICT III  
1900 Rio Brazos Rd., Aztec, NM 87410

BLM  
ROSWELL, NM

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		Catclaw Draw Morrow
Property Code	Property Name	Well Number
	CARLSBAD "15" FEDERAL COM.	1
GRID No.	Operator Name	Elevation
14744	MEWBOURNE OIL COMPANY	3180

Surface Location

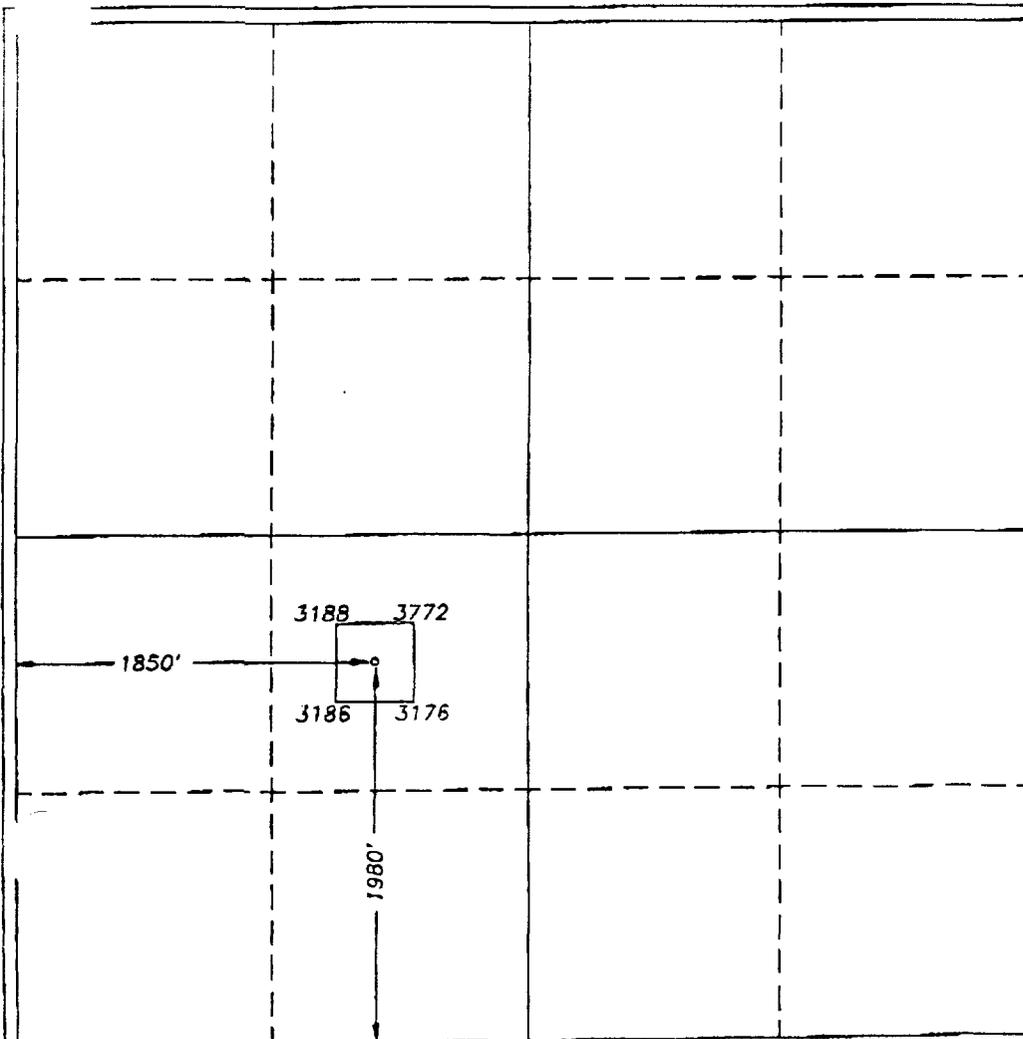
UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	15	21S	26E		1980	SOUTH	1850	WEST	EDDY

Bottom Hole Location if Different From Surface

UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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.

*R. Macaw*  
Signature

Russell D. Macaw  
Printed Name

Drilling Engineer  
Title

6/25/97  
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.

6/24/97  
Date Surveyed

Signature & Title  
Professional Surveyor  
HERBERT L. JONES

NEW MEXICO  
3648

Certificate No. Herbert L. Jones PLS 3640  
CARLSBAD OSC/DISK #4  
GENERAL SURVEYING COMPANY

**DRILLING PROGRAM**  
**MEWBOURNE OIL COMPANY**  
**CARLSBAD '15' FEDERAL COM. #1**  
**1980' FSL & 1650' FWL OF SEC 15 - T21S - R26E**  
**EDDY COUNTY, NEW MEXICO**  
**NEW MEXICO LEASE NO. LC-064490**

**1. The estimated tops of geologic markers are as follows:**

Capitan Reef:	575'
Queen:	1000'
San Andres:	1700'
Yates:	2000'
Delaware:	2500'
Bone Springs:	4325'
1st Bone Springs Sand:	6100'
2nd Bone Springs Carb.:	6300'
2nd Bone Springs Sand:	6800'
3rd Bone Springs Sand:	7950'
Wolfcamp Lime:	8325'
Cisco/Canyon:	9268'
Strawn:	9723'
Atoka:	9950'
Morrow:	10250'
Middle Morrow	10660'
Lower Morrow	10900'
Barnett	11080'
TD	11200'

**2. Estimated Depths of Anticipated Fresh Water, Oil or Gas:**

Water:           Approximately 200'  
Oil:               All zones below Yates.

- 3. Pressure Control Equipment:** BOPE will be installed on the 13 3/8" surface casing and be rated for 2000 psi working pressure minimum. Pressure tests will be conducted before drilling out under all casing strings. Blowout preventor controls will be installed prior to drilling the surface plug and will remain in use until drilling operations are completed. Preventor will be inspected and pipe rams operated at least daily to insure good mechanical order. This inspection will be recorded on the daily drilling report. (See Exhibit #2, 2A, and attachment sheet.)

**Auxiliary Equipment:** Kelly Cock and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times when the kelly is not in use.

4. Proposed Casing and Cementing Program:

A. Casing Program:

Hole Size	Csg O.D.	Wt/Ft	Grade	Depth
17 1/2"	13 3/8"	48#	ES H-40	0-400' +/-
12 1/4"	<del>9 5/8"</del> 8 7/8"	36#, 40#	ES J55	0-2600' +/-
7 7/8"	5 1/2"	17#, 20#	N, S95	0-11,200' +/-

Minimum Casing Design Factors:  
Collapse 1.125; Burst 1.0; Tensile Strength 1.8

*Ad*

*572*

1000' - 36# 24#  
1600' - 40# 23#  
10,500' - 17# N-8  
700' - 20# S-9

B. Cementing Program:

- Surface Casing: 200 sacks Class "H" containing 10% gypsum + 1/4#/sk cello flake + 10#/sk gilsonite followed by 220 sacks 35:65 POZ "C" + 6% gel + 2% CaCl<sub>2</sub> + 1/4#/sk cello flake + 5#/sk gilsonite.
- Intermediate Casing: 615 sacks 35:65 POZ "C" + 6% gel + 5# salt + 5 #/sk gilsonite + 1/4#/sk cello flake followed by 200 sacks Class "C" + 2% CaCl<sub>2</sub>.
- Production Casing: Stage 1: 285 sacks super "C" modified + 61#/sk Class "C" + 15#/sk POZ A + 11#/sk BA-90 Bonding + 1/2#/sk FL-25 + 1/2#/sk FL-52 + 8#/sk gilsonite, Stage 2: 685 sacks 35:65 POZ Class "H" containing 6% gel + 5#/sk salt + 0.6% FL-52 + 5#/sk gilsonite + 1/4#/sk cello flake followed by 100 sacks "H". Shallower productive zones may be cemented by placing a multiple stage cementing tool in the production casing below zones of interest if necessary and cementing with a "Lite" slurry w/necessary additives.  
Note: Mewbourne Oil Company reserves the right to change cement design as hole conditions may dictate.

5. Mud Program:

Interval	Type	Weight	Viscosity	Fluid Loss
0' - 400'	FW gel	8.4 - 8.7	28 - 38	NC
400' - 2600'	Brine	10.0	28	NC
2600' - 9500'	Cut Brine	9.2 - 9.6	28	NC
9500' - 11200'	Cut Brine	9.2 - 9.6	34 - 38	< 10 cc

Sufficient mud materials to maintain mud properties, control loss circulation, and contain a blow out will be available at the well site during drilling operations. Mud will be checked daily by mud company personnel.

**6. Evaluation Program:**

Samples: 10' samples from intermediate casing to TD.  
Logging: CD-DSNL from TD to casing; DLL-Micro SFL from TD to casing.  
Coring: As warranted.  
DST: As warranted.

**7. Downhole Conditions:**

Abnormally pressured zones: None.  
Loss circulation zones: Anticipated in surface and intermediate portion of hole.  
Maximum bottom hole temperature: 180° F.  
Maximum bottom hole pressure: 6 #/gal gradient or less.

**8. Anticipated Starting Date:**

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 40 days to drill with completion operations taking additional 10 days.

**MULTI-POINT SURFACE USE AND OPERATIONS PLAN**  
**MEWBOURNE OIL COMPANY**  
**CARLSBAD, "15" FEDERAL COM. #1**  
**1980' FSL & 1650' FWL OF SEC 15 - T21S - R26E**  
**EDDY COUNTY, NEW MEXICO**  
**NEW MEXICO LEASE NO. LC-064490**

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 rehabilitating the surface so that a complete appraisal can be made of the environmental effect associated with the operations.

**1. Existing Roads:**

- A. Exhibit "3" is a portion of an Eddy County, New Mexico road map showing the location of the proposed well as staked. Exhibit "3A" is a topographic map showing the location of the proposed well and road. In both maps, existing roads are highlighted in yellow while the proposed road is highlighted in green.
- B. **Directions:** Turn north off of US Highway 285 at mile marker 40 (approximately 4.0 miles from Carlsbad), proceed north along an existing lease road 0.7 mile to a road intersection and PNM pipeline crossing, proceed east 1.0 mile along existing lease road and pipeline right-of-way to the beginning point of the proposed access road, proceed south 0.6 mile along a flagged centerline access road to the northeast corner of the proposed location.

**2. Proposed Access Road:**

- A. The proposed new access road will be approximately 0.6 mile in length from the point of origin to the south edge of the drilling pad. The road will lie from north to south.
- B. The new road will be 16 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. The new road will be bladed with drainage on one side.

**3. Location of Existing Wells:**

There are producing wells within the immediate area of the wellsite. Exhibit #4 shows the proposed well and existing wells within a 1 mile radius. (See attachment to Exhibit #4)

**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. (See Exhibit #6)
- C. If the well is productive, rehabilitation plans are as follows:

1. The reserve pit will be back-filled after the contents of the pit are dry (within 180 days after the well is completed).
2. Within 90 days of completion of drilling and/ or completion operations, all equipment not needed for producing operations will be removed. The location will be cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing condition as is reasonably possible.
3. All production facilities left on location will be painted to conform with BLM painting stipulations within 180 days of completion.

**5. Location and Type of Water Supply:**

The well will be drilled with a combination brine and fresh water mud system. The water will be obtained from commercial water stations in the area and hauled to the location by transport trucks over the existing and proposed road system in Exhibit #3.

**6. Source of Construction Materials:**

All material required for construction of the drill pad and repair of existing roads will be obtained from private, state, or federal pits. The dirt contractor will be entirely responsible for securing construction materials necessary for this operation and paying royalties on said material.

**7. Methods of Handling Waste Disposal:**

- A. Drill cuttings not retained for evaluation purposes will be disposed of in the reserve pit.
- B. Drilling fluids will be allowed to evaporate in the reserve pit.
- C. Water produced during operations will be disposed of in the reserve pit.
- D. If any oil is produced during operations, it will be stored in tanks until sold.
- E. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- F. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary land fill.

**8. Ancillary Facilities:**

None exist in the immediate vicinity of the wellsite.

**9. Well Site Layout:**

- A. The drill pad layout is shown in Exhibit #5. Dimensions of the pad and pits and location of major rig components are shown.
- B. The reserve pit will be lined with a high quality plastic sheeting.
- C. A 400' X 400' area has been staked and flagged.

**10. Plans for Restoration of the Surface:**

- A. Upon completion of the proposed operations, if the well is to be abandoned, the location and road will be ripped up and reseeded per BLM stipulations. The reserve pit area, after allowing to dry, will be broken out and leveled. The entire location will be leveled and contoured to as nearly the original topography as reasonably possible. All trash, garbage and pit lining will be hauled away in order to leave the location in an aesthetically pleasing condition as reasonably possible. All pits will be filled and the location leveled within 180 days after abandonment.
- B. The disturbed area will be revegetated by reseeding during the proper growing season with a seed 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. At the time that the rig is removed, the reserve pit will be fenced on the fourth side to prevent livestock from being entrapped. The fencing will remain in place until the pit area is cleaned up and leveled.
- D. Upon completion of the proposed operations, if the well is completed, the reserve pit area will be treated as outlined above within the same prescribed time. Any additional caliche required for production facilities will be obtained from the same source described in the location construction paragraph.

**11. Surface Ownership:**

The surface is owned by:

Bureau of Land Management  
P.O. Box 1778  
Carlsbad, New Mexico 88221

**12. Other Information:**

- A. Topography: Refer to the archaeological report for a description of flora, fauna, soil characteristics, dwellings, historical and cultural sites.
- B. The primary surface use is for grazing.

**13. Operators Representative:**

- A. Through APD approval and drilling operations:

**Russell D. Macaw**  
**Drilling Engineer**  
Mewbourne Oil Company  
P. O. Box 5270  
Hobbs, New Mexico 88241  
505 393-5905

- Through completion and production operations:

**Erik L. Hoover**  
**District Manager**  
Mewbourne Oil Company  
P. O. Box 5270  
Hobbs, New Mexico 88241  
505 393-5905

**14. CERTIFICATION:**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite 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 and its' contractors and subcontractors in conformity 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.

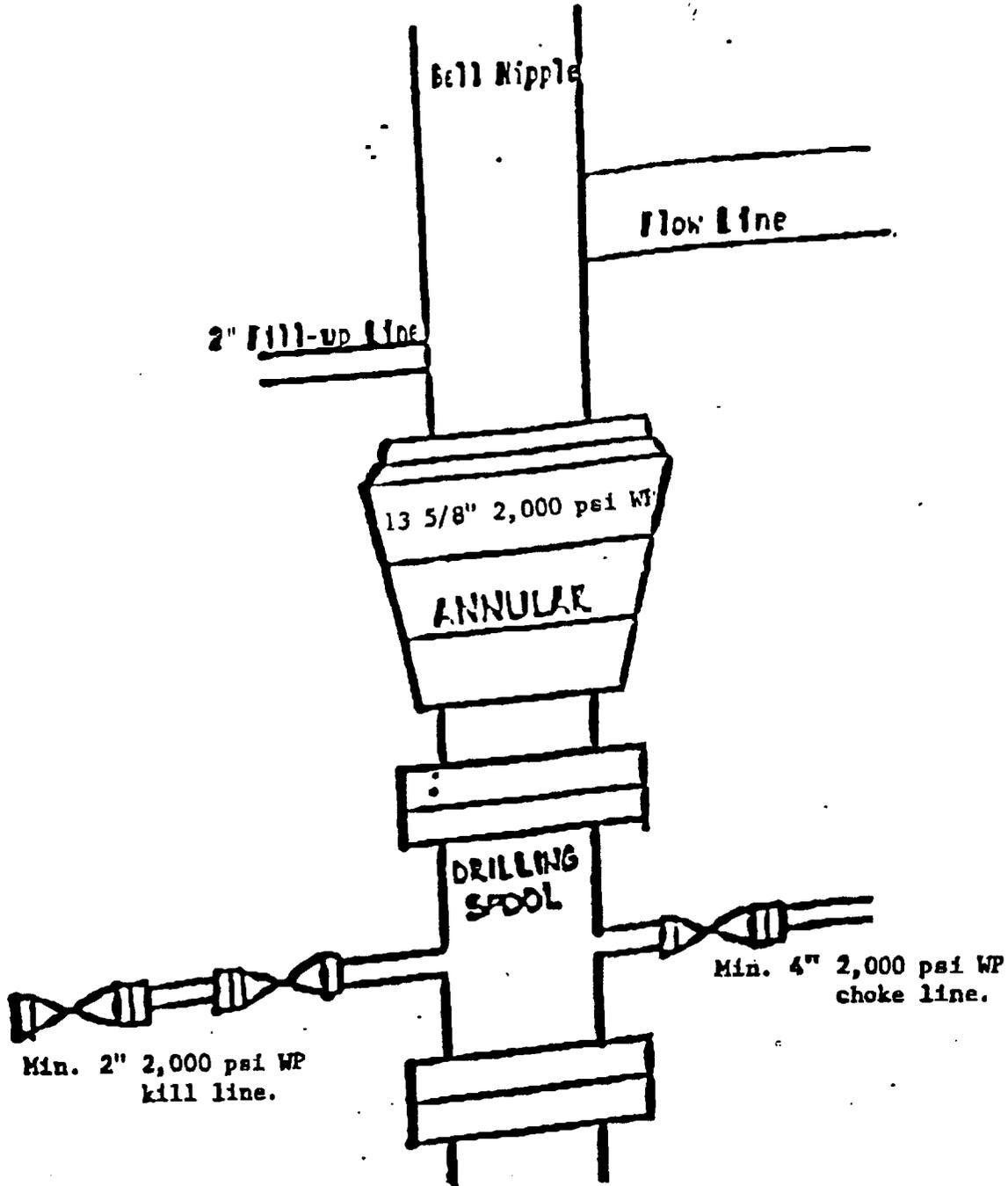
Date: 6-18-97

Erik L Hoover  
**Erik L. Hoover**  
**District Manager**  
**Mewbourne Oil Company**  
**P.O. Box 5270**  
**Hobbs, New Mexico 88241**  
**505 393-5905**

BOP SCHEMATIC

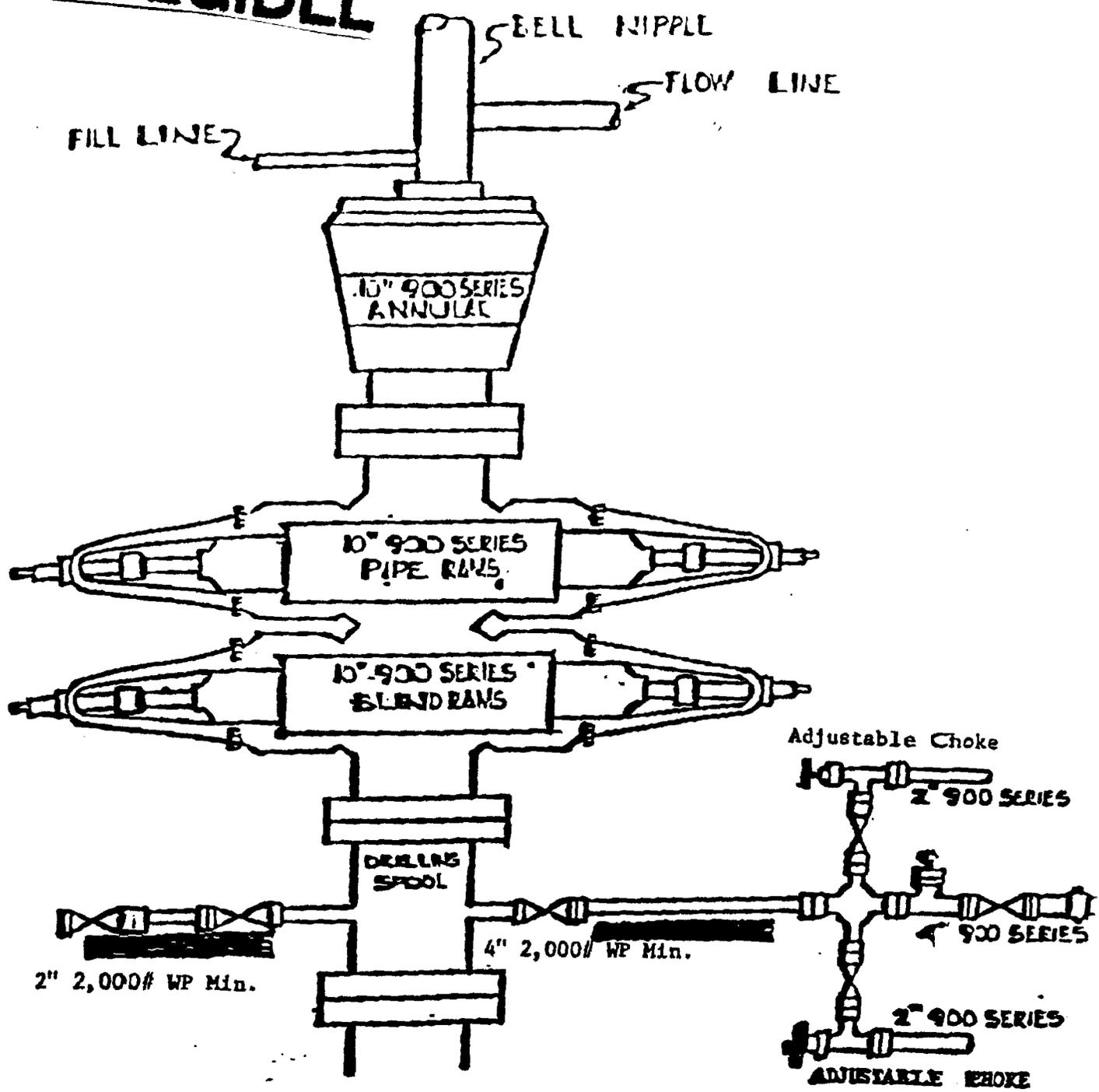
12 1/4" Intermediate Hole

**ILLEGIBLE**



Mewbourne Oil Company  
 Carlsbad "15" Federal Com. #1  
 1980' FSL & (1650) FWL (1850'  
 Sec. 15, T-21-S, R-26-E  
 Eddy County, New Mexico  
 Lease # LC-064490  
 Exhibit #2

**ILLEGIBLE**



Mewbourne Oil Company  
 Carlsbad "15" Federal Com. #1  
 1980' FSL & (650) FWL — 1850'  
 Sec. 15, T-21-S, R-26-E  
 Eddy County, New Mexico  
 Lease # IC-064490  
 Exhibit 2A

**Notes Regarding Blowout Preventor**

**MEWBOURNE OIL COMPANY**

**CARLSBAD "15" FEDERAL COM. #1**

**1980' FSL & 1650' FWL OF SEC 15 - T21S - R26E**

**EDDY COUNTY, NEW MEXICO**

**NEW MEXICO LEASE NO. LC-064490**

**(Attachment to Exhibit #2)**

1. Drilling nipple (bell nipple) to be so constructed that it can be removed without the use of a welder through the rotary table opening, with minimum I. D. equal to the preventor bore.
2. Blowout preventor and all fittings must be in good condition; 2,000 psi W. P. minimum.
3. Safety valve must be available on rig floor at all times with proper connections; valve to be full bore 2,000 psi W. P. minimum.
4. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
5. Kelly cock on kelly.
6. Blowout preventor closing equipment to include minimum 40 gallon accumulator, two independent sources of pump power on closing unit, and meet all API specifications.

**HYDROGEN SULFIDE DRILLING OPERATIONS PLAN**  
**MEWBOURNE OIL COMPANY**  
**CARLSBAD "15" FEDERAL COM. #1**  
**1980' FSL & <sup>1810'</sup>1650' FWL OF SEC 15 - T21S - R26E**  
**EDDY COUNTY, NEW MEXICO**  
**NEW MEXICO LEASE NO. LC-064490**  
(Attached to Form 3160-3)

**I. 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 on this well:

1. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S).
2. The proper use of personal protective equipment and life support systems.
3. The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H<sub>2</sub>S on metal components. If high tensile tubular are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures, blowout prevention, and well control procedures when drilling a well.
3. The contents and requirements of the H<sub>2</sub>S Drilling Operations Plan.

There will be an initial training session just prior to encountering a known H<sub>2</sub>S zone. The initial training session shall include a review of the site specific H<sub>2</sub>S Drilling Operations Plan.

**II. H<sub>2</sub>S SAFETY EQUIPMENT AND SYSTEMS**

**Note:** All H<sub>2</sub>S safety equipment and systems will be installed, tested, and operational before drilling out from under intermediate casing.

1. Well Control Equipment:
  - A. Flare line with diesel fueled igniter or continuous propane fuel pilot.
  - B. Choke manifold with a minimum of one adjustable choke.
  - C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
  - D. Auxiliary equipment to include annular preventor and rotating head.

2.    **Protective Equipment for Essential Personnel:**

Mark II Surviveair 30 minute unit or equivalent located at briefing area as indicated on wellsite diagram.

3.    **H2S Detection and Monitoring Equipment:**

Two portable H2S monitors positioned on location for best coverage and response. These units have audible sirens when H2S levels of 20 ppm are reached.

4.    **Visual Warning Systems:**

- A.    Wind direction indicators as shown on well site diagram.
- B.    Caution/Danger signs will be posted on roads providing direct access to location. Signs will be painted a high visibility color with lettering of sufficient size to be readable at reasonable distance from the immediate location.

5.    **Mud Program:**

The mud program has been designed to minimize the volume of H2S circulated to the surface. Proper mud weight, safe drilling practices, and the use of H2S scavengers will minimize hazards while drilling the well.

6.    **Metallurgy:**

All drill strings, casings, tubing, wellhead, blowout preventors, drilling spools, kill lines choke manifold and lines, and valves shall be suitable for H2S service when chemically treated.

7.    **Communications:**

Communications in company vehicles and toolpushers vehicle may be cellular telephone or two way radio.

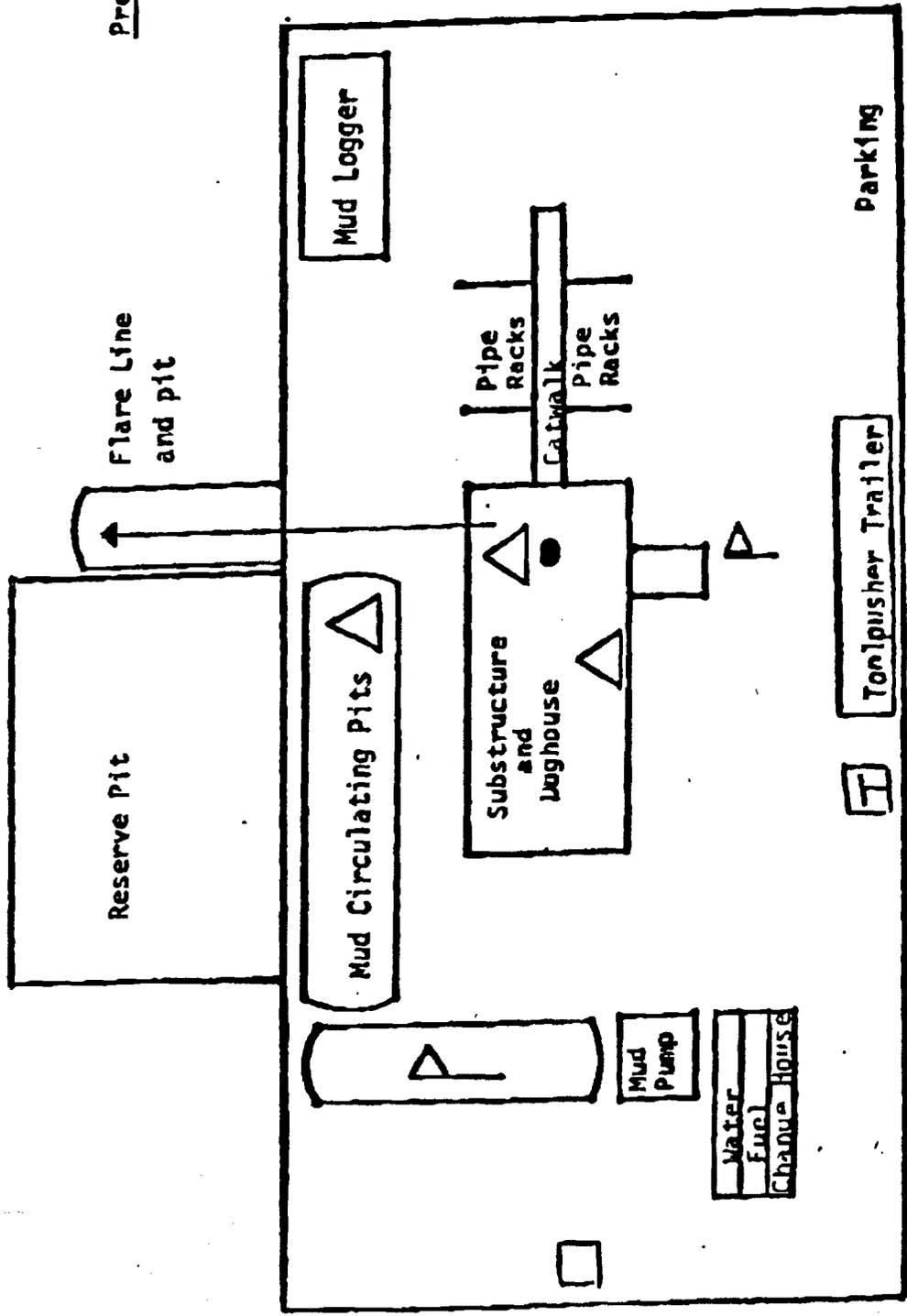
8.    **Well Testing:**

Drill Stem testing is not anticipated in this well. If a DST is required, it will be conducted with a minimum number of personnel in the immediate vicinity which are necessary to conduct the test. The test will be conducted during daylight hours only.

Prevailing Wind Directions:

Summer - South

Winter - Northwest



△ --- H<sub>2</sub>S Monitors with alarms at the bell nipple and shale shaker

△ --- Wind Direction Indicators

□ --- Safe briefing areas with caution signs and protective breathing equipment. Minimum distance from wellhead is 100 feet. T in box indicates primary area.

Newbourne Oil Company  
 Carlsbad "15" Federal Com. #1  
 1980' FSL & (650) FWL (850'  
 Sec. 15, T-21-S, R-26-E  
 Eddy County, New Mexico  
 Lease #LC-064490  
 Drilling Pad Layout  
 Configured for H<sub>2</sub>S

**A Lessee and Operator's Representative:**

The Mewbourne Oil Company representatives responsible for assuring compliance with the surface use program during drilling, completion and producing operations are:

**Russell D. Macaw**  
**Drilling Engineer**  
**P.O. Box 5270**  
**Hobbs, New Mexico 88241**  
**505/393-5905 (Office)**  
**505/390-0999 (Cellular)**

**Leonard Pounds**  
**Production Supervisor**  
**P.O. Box 5270**  
**Hobbs, New Mexico 88241**  
**505/393-5905 (Office)**  
**505/390-4105 (Cellular)**

**CERTIFICATION:**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statement 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 and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date: June 23, 1997

Signed: \_\_\_\_\_



**Erik L. Hoover**  
**District Manager**  
**Mewbourne Oil Company**  
**P.O. Box 5270**  
**Hobbs, New Mexico 88241**  
**505/393-5905**

**CONDITIONS OF APPROVAL - DRILLING**

Operator's Name: Mewbourne Oil Company  
 Well Name & No. Carlsbad "15" Federal Com No. 1  
 Location: UL K sec. 15 T. 21 S, R. 26 E  
 Lea Eddy, NM Lease: NM 3606A

.....

**I. DRILLING OPERATIONS REQUIREMENTS:**

The Bureau of Land Management (BLM) is to be notified at Roswell Resource Area Office, 2902 West Second St., Roswell NM. 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties, the Carlsbad Resource Office, 620 East Greene St., Carlsbad, NM 88220, (505) 887-6544 for wells in Eddy County, and the BLM Hobbs 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

1. Spudding
2. Cementing casing: 13-3/8 inch <sup>8-5/8</sup> ~~8-5/8~~ inch 5-1/2 inch
3. BOP tests
4. A Hydrogen Sulfide Contingency Plan should be activated prior to drilling in the Delaware formation. A copy of the plan shall be posted at the drilling site.
5. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
6. Include the API No. assigned to well by NMOCD on the subsequent report of setting the first casing string.
7. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

**II. CASING:**

13-3/8 inch surface casing should be set at +/- 400 feet and circulate cement to the surface. If cement does not circulate to the surface this BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

Minimum required fill of cement behind the <sup>8-5/8</sup> ~~8-5/8~~ inch intermediate casing is tie back to +/- 200 feet into the surface casing.

Minimum required fill of cement behind the 5-1/2 inch production casing is +/- 500' above uppermost hydrocarbon bearing formation.

NEWBURNING OIL FIELDS      FAX: 505 331 0202      505 331 1000      11:20

### III. PRESSURE CONTROL:

Before drilling below the 13-3/8 inch casing shoe, the blowout preventer assembly shall consist of a minimum of:

One Annular Preventer

Two Ram-Type Preventers

Kelly Cock/Stabbing Valve

Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2,000 psi.

1. The BOPE shall be installed before drilling below the Wolfcamp inch casing and shall be tested as described in Onshore Order No.2. Any equipment failing to test satisfactorily shall be repaired or replaced.

The BLM office shall be notified at (505) 627-0272 for wells in Chaves and Roosevelt Counties, at (505) 887-6544 for wells in Eddy County, and at (505) 393-3612 for wells in Lea County in sufficient time for a representative to witness the tests.

2. The results of the test will be reported to the appropriate BLM office.

3. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not allowed since it can mask small leaks.

4. Testing must be done in a safe workman like manner. Hard line connections shall be required.

### IV. Drilling Mud:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

1. Recording pit level indicator to indicate volume gains and losses.

2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.

3. Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

SPECIAL DRILLING STIPULATIONTHE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

PERATOR'S NAME Mewbourne Oil Company WELL NO. & NAME Carlsbad "15" Fed. Com. #1  
 LOCATION 1980' F S L & 1850' F W L SEC. 15, T. 21S., R. 26E.  
 LEASE NO. MMM-3606-A COUNTY Eddy STATE NM

The special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 and 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

**I. SPECIAL ENVIRONMENT REQUIREMENTS**

- Lesser Prairie Chicken (Stips attached)       Floodplain (Stips attached)  
 San Simon Swale (Stips attached)       Other

**II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING**

The BLM will monitor construction of this drill site. Notify the  Carlsbad Resource Area Office at (505) 887-6544  Hobbs Office at (505) 393-3612, at least 3 working days prior to commencing construction.

Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche.

All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately \_\_\_\_\_ inches in depth. Approximately \_\_\_\_\_ cubic yards of topsoil material will be stockpiled for reclamation.

Other

**III. WELL COMPLETION REQUIREMENTS**

A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at a depth of 1/2 inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

- |  |   |
|--|---|
| <input type="checkbox"/> A. Seed Mixture 1 (Loamy Site)              | <input type="checkbox"/> B. Seed Mixture 2 (Sandy Site) |
| Lehmanns Lovegrass ( <u>Eragrostis lehmanniana</u> ) 1.0             | Sand Dropseed ( <u>Sporobolus cryptandrus</u> ) 1.0     |
| Side Oats Grass ( <u>Bouteloua curtipendula</u> ) 5.0                | Sand Lovegrass ( <u>Eragrostis trichodes</u> ) 1.0      |
| Sand Dropseed ( <u>Sporobolus cryptandrus</u> ) 1.0                  | Plains Bristlegrass ( <u>Setaria macrostachya</u> ) 2.0 |
| <input checked="" type="checkbox"/> C. Seed Mixture 3 (Shallow Site) | <input type="checkbox"/> D. Seed Mixture 4 ("Gyp" Site) |
| Sideoats Grama ( <u>Bouteloua curtipendula</u> ) 1.0                 | Alkali Sacaton ( <u>Sporobolus airoides</u> ) 1.0       |
| Lehmanns Lovegrass ( <u>Eragrostis lehmanniana</u> ) 1.0             | Four-Wing Saltbush ( <u>Atriplex canescens</u> ) 5.0    |
| or Bear Lovegrass ( <u>E. chloromalae</u> )                          |   |

Seeding should be done either late in the fall (September 15 - November 15, before freeze) or early as possible the following spring to take advantage of available ground moisture.

Other All permanent surface facilities not otherwise subject to safety requirements will be painted SHALE GREEN (STANDARD ENVIRONMENTAL COLOR 5 Y 4/2).

### RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic.

Mineral material extracted during construction of the reserve pit may be used for development of the pad and access road as needed. Removal of any additional material on location must be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

### OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- 1) Lined as specified above and,
- 2) A borrow/caliche/gravel pit can be constructed immediately adjacent to the reserve pit and is capable of containing all reserve pit contents. The mineral material removed in the process can be used for pad and access road construction. However, a material sales contract must be purchased from BLM prior to removal of the material.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.

### CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to proceed by BLM.

### TRASH PIT STIPS

All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

## EXHIBIT A

BLM Serial Number: NMNM-3606-ACompany Reference: Carlsbad "15" Fed. Com. #1STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS  
THE ROSWELL DISTRICT, BLM

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

## GENERAL REQUIREMENTS

The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will make a documented good-faith effort to contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence.

Holder agrees to comply with the following stipulations:

## 1. ROAD WIDTH AND GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

## 2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).

Ditching will be required on both sides of the roadway as shown on the attached map or as staked in the field.

Flat-blading is authorized on segment(s) delineated on the attached map.

Page 2 of 4

## 3. DRAINAGE

Drainage control shall be ensured over the entire road through the use of borrow ditches, outsloping, insloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

A. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

SPACING INTERVAL FOR TURNOUT DITCHES	
Percent slope	Spacing interval
0% - 4%	400' - 150'
4% - 6%	250' - 125'
6% - 8%	200' - 100'
8% - 10%	150' - 75'

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at

400 foot intervals.

\_\_\_ foot intervals.

locations staked in the field as per spacing intervals above.

locations delineated on the attached map.

B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).

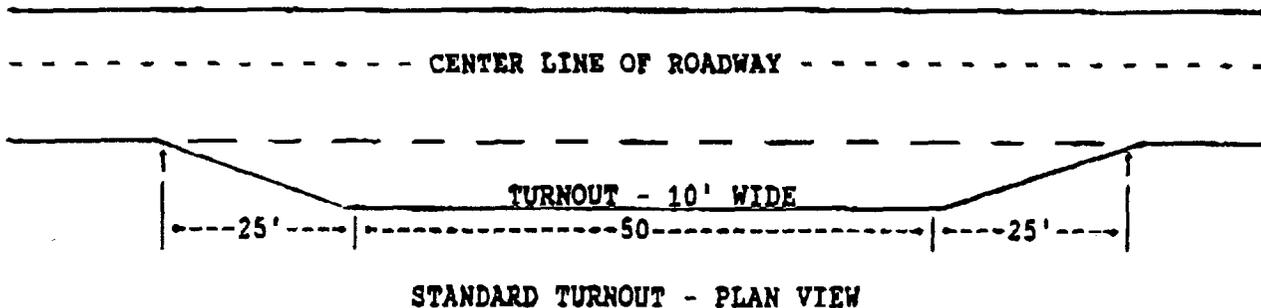
C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead-off ditch. Drainage dip location and spacing shall be determined by the formula:

$$\text{spacing interval} = \frac{400'}{\text{road slope in \%}} + 100'$$

Example: 4% slope: spacing interval =  $\frac{400}{4} + 100 = 200$  feet

#### 4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:



#### 5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

#### 6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

#### 7. MAINTENANCE

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

Page 4 of 4

**8. PUBLIC ACCESS**

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

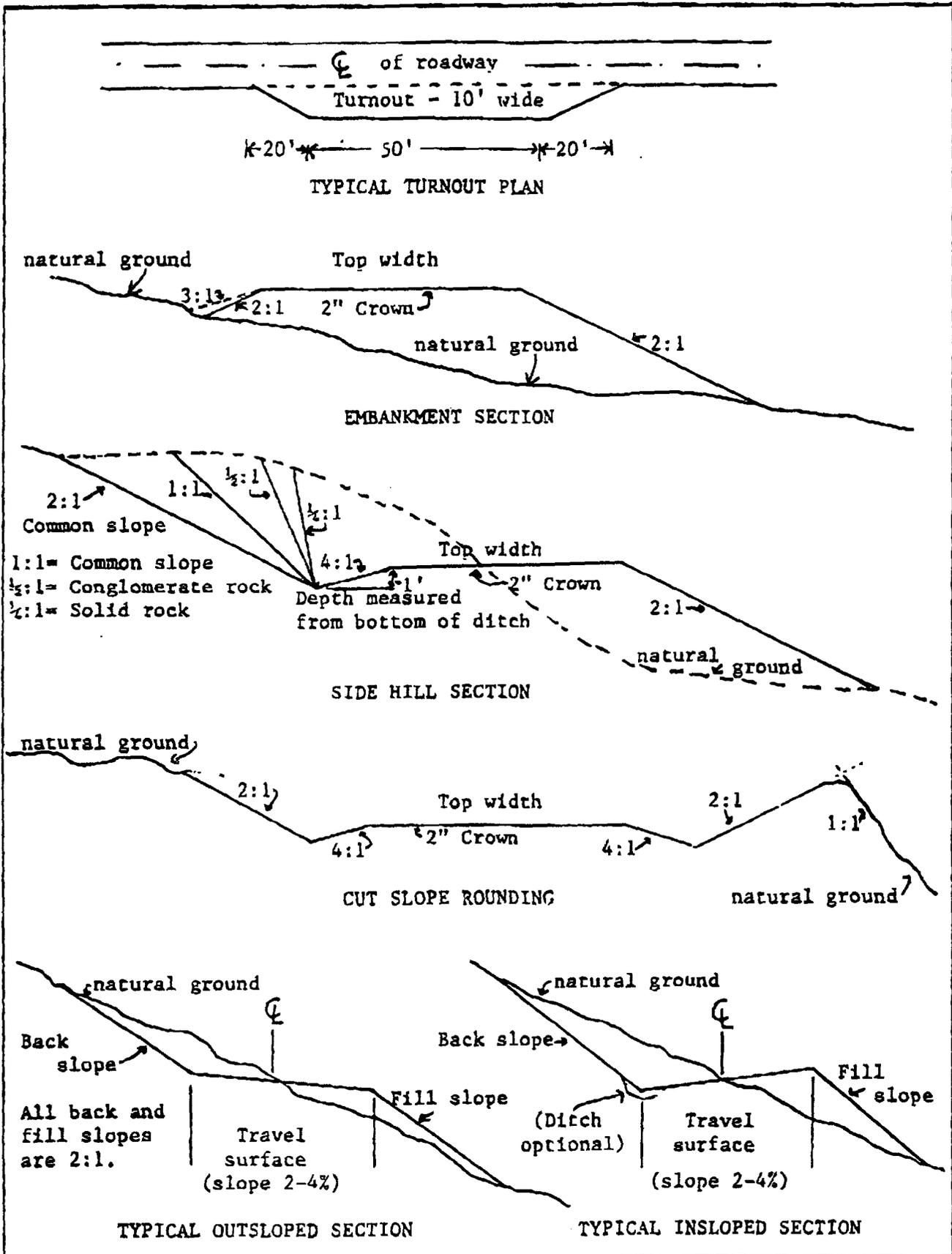
**9. CULTURAL RESOURCES**

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the authorized officer after consulting with the holder.

**10. SPECIAL STIPULATIONS: *None.***

FIGURE 1: CROSS-SECTIONS AND PLANS FOR TYPICAL ROAD CONSTRUCTION REPRESENTATIVE OF BLM RESOURCE, AND HIGHER CLASS, ROADS.

(Travel way, top width, driving surface, and travel surface are synonymous.)





**MEWBOURNE OIL COMPANY**  
**STATUS OF WELLS IN IMMEDIATE AREA**  
**CARLSBAD "15" FEDERAL COM. #1**  
**1980' FSL & ~~1650'~~ FWL OF SEC. 15 - T-21-S - R-26-E**  
**EDDY COUNTY, NEW MEXICO**  
**NEW MEXICO LEASE NO. LC-064490**  
**(Attachment to Exhibit #4)**

**SECTION 15 - T21S - R26E**

Unit Letter "G"  
Devon Energy Corp. State BO Com. #1  
Producing Gas Well

**SECTION 10 - T21S - R26E**

Unit Letter "L"  
Devon Energy Corp. State "L" #1  
Salt Water Disposal Well

**SECTION 16 - T21S - R26E**

Unit Letter "C"  
Devon Energy Corp. State "BT" Com. #1.  
Producing Gas Well

Unit Letter "C"  
Devon Energy Corp. Cactus State #1  
Producing Oil Well

Unit Letter "E"  
Devon Energy Corp. Cactus State #8  
Producing Oil Well

Unit Letter "F"  
Devon Energy Corp. Cactus State #2  
Producing Oil Well

Unit Letter "G"  
Devon Energy Cactus State #3  
Producing Oil Well

Unit Letter "T"  
Devon Energy Corp. Cactus State #10  
Intent to Drill

Unit Letter "J"  
Devon Energy Corp.  
Producing Oil Well

Cactus State #6

Unit Letter "K"  
Devon Energy Corp.  
Producing Gas Well

State "BR" Com. #1

Unit Letter "K"  
Devon Energy Corp.  
Producing Oil Well

Cactus State #4

Unit Letter "L"  
Devon Energy Corp.  
Producing Oil Well

Cactus State #11

Unit Letter "N"  
E. Orcutt  
Plugged and Abandoned

Newman State #1

Unit Letter "O"  
Devon Energy Corp.  
Producing Oil Well

Cactus State #9

SECTION 21 - T21S - R26E

Unit Letter "F"  
Hallwood Petroleum, Inc.  
Plugged and Abandoned

Ocotillo Hills #1

Unit Letter "G"  
Hallwood Petroleum, Inc.  
Producing Gas Well

Ocotillo Hills #2

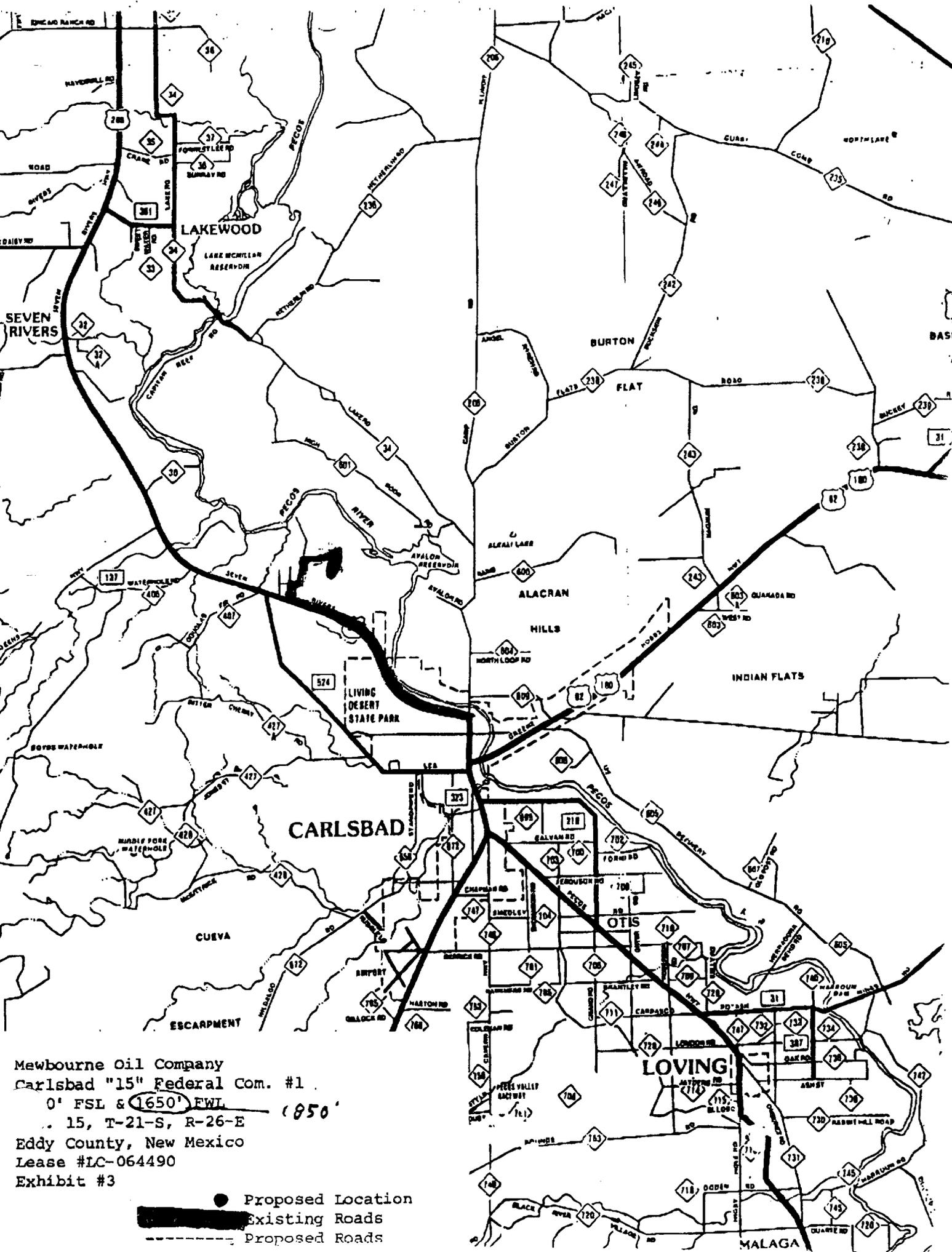
Unit Letter "A"  
Oil Well Drilling Co.  
Plug and Abandoned

State Baker Well #1

SECTION 22 - T21S - R26E

Unit Letter "T"  
Hanagan Petroleum Corp.  
Plugged and Abandoned

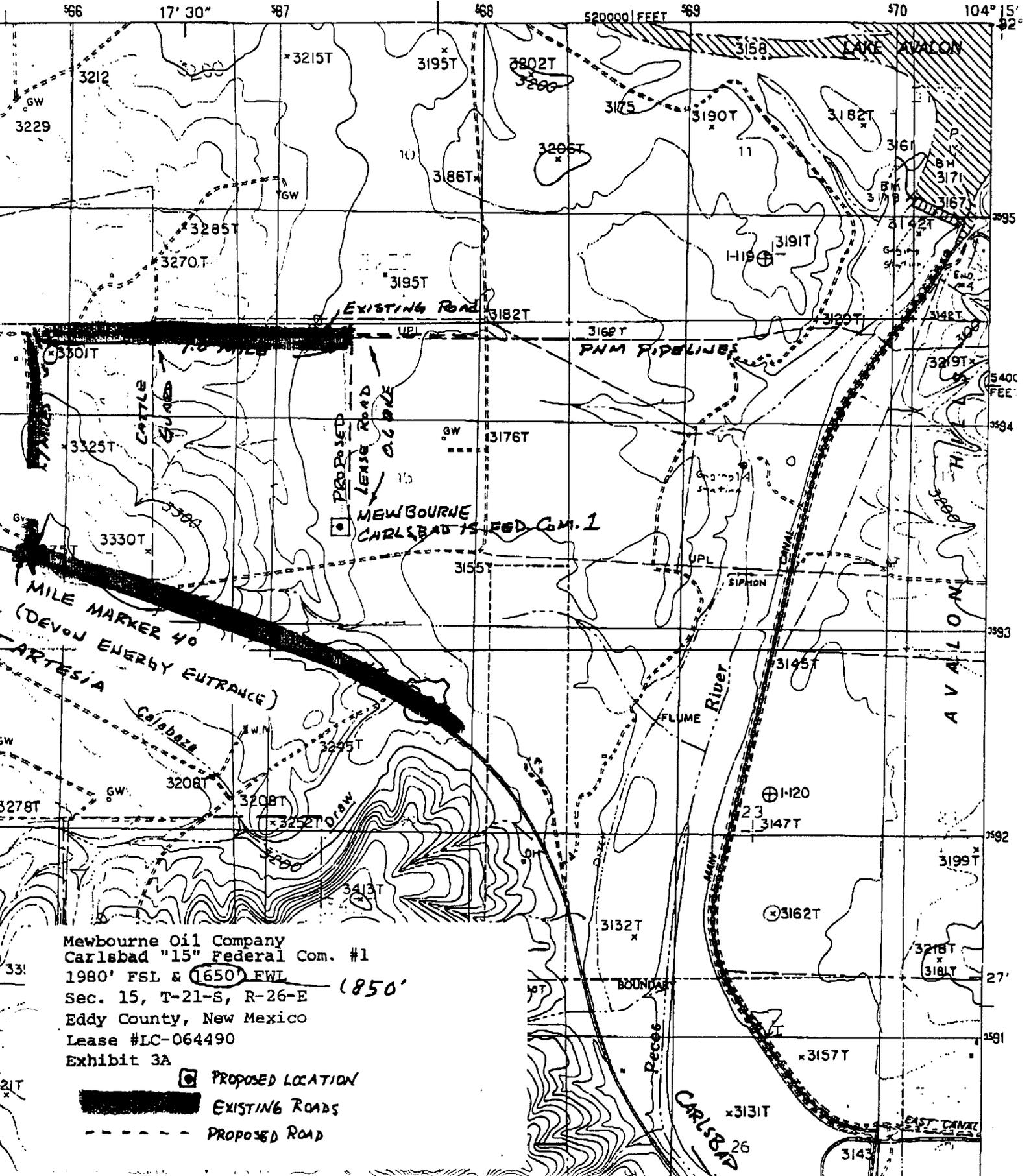
North Carlsbad Federal #3



Mewbourne Oil Company  
 Carlsbad "15" Federal Com. #1  
 0' FSL & 1650' FWL (850'  
 . 15, T-21-S, R-26-E  
 Eddy County, New Mexico  
 Lease #LC-064490  
 Exhibit #3

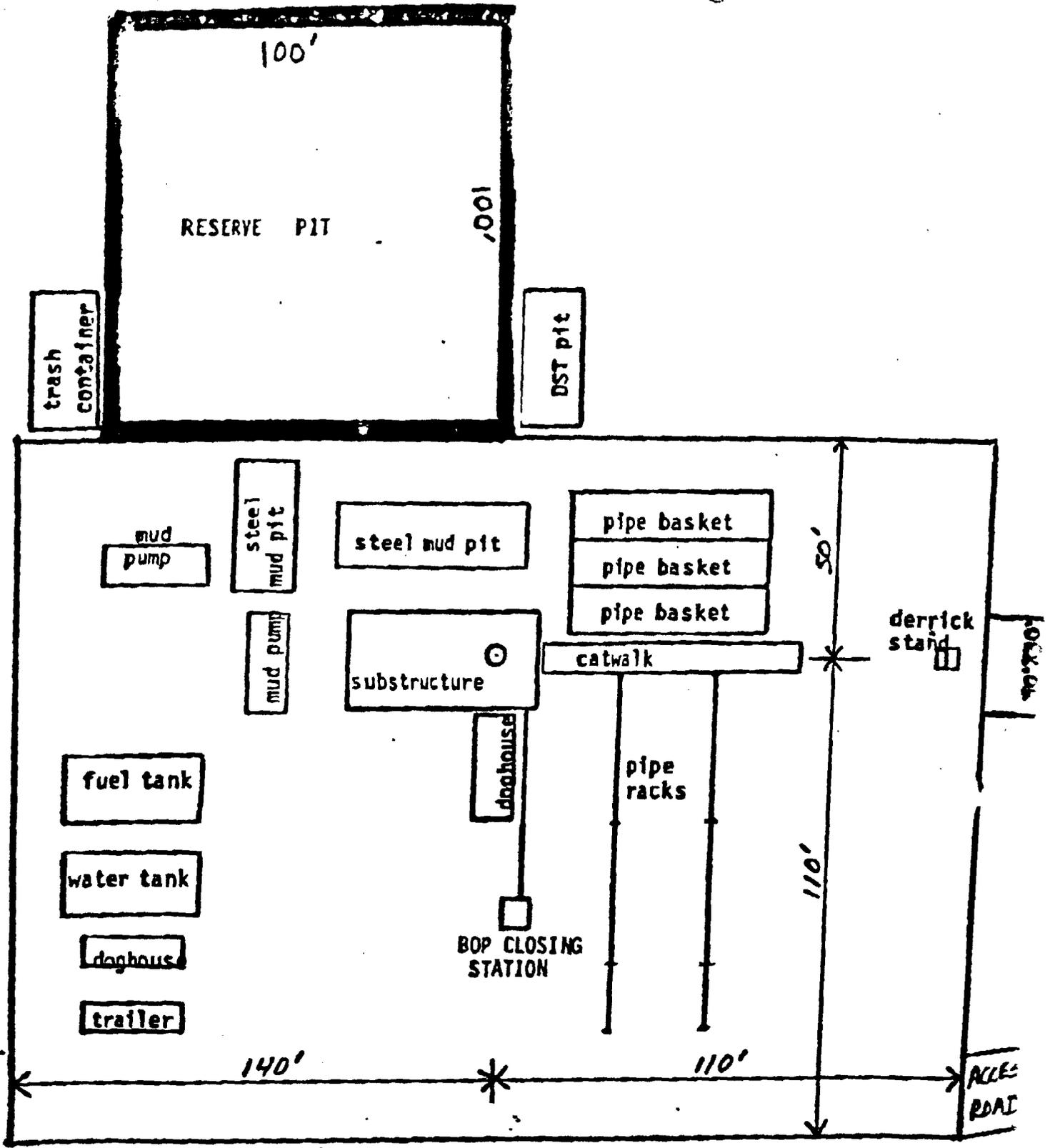
- Proposed Location
- Existing Roads
- - - Proposed Roads

# CARLSBAD WEST QUADRANGLE NEW MEXICO-EDDY CO. 7.5 MINUTE SERIES (TOPOGRAPHIC)



Mewbourne Oil Company  
 Carlsbad "15" Federal Com. #1  
 1980' FSL & 1650' FWL (850'  
 Sec. 15, T-21-S, R-26-E  
 Eddy County, New Mexico  
 Lease #LC-064490  
 Exhibit 3A

- PROPOSED LOCATION
- EXISTING ROADS
- PROPOSED ROAD



Mewbourne Oil Company  
 Carlsbad "15" Federal Com. #1  
 1980' FSL & ~~1650'~~ FWL 1850'  
 Sec. 15, T-21-S, R-26-E  
 Eddy County, New Mexico  
 Lease #LC-064490  
 Exhibit #5

7  
**ILLEGIBLE**

Form 3160-5  
(Jur. 1990)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.  
NM 3606A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA. Agreement Designation

8. Well Name and No.  
Carlsbad "15" Federal

9. API Well No. Com. #1

10. Field and Pool, or Exploratory Area

Avalon Morrow

11. County or Parish, State

Eddy, NM

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
Mewbourne Oil Company

3. Address and Telephone No.  
P.O. Box 5270, Hobbs, NM 88241 (505) 393-5905

4. Location of Well (Forage Sec., T., R., M., or Survey Description)

1980' FSL & 1850' FWL  
Sec. 15-T21S-R26E

**CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION

- Notice of Intent
- Subsequent Report
- Final Abandonment Notice

TYPE OF ACTION

- Abandonment
- Recompletion
- Plugging Back
- Casing Repair
- Altering Casing
- Other Access Road Location Change
- Change of Plans
- New Construction
- Non-Routine Fracturing
- Water Shut-Off
- Conversion to Injection
- Dispose Water  
(Note: Report results of multiple completions on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Sundry depicting change in proposed access road location.

14. I hereby certify that the foregoing is true and correct

Signature: [Signature]  
(Space for Federal or State office use)

Title: Petroleum Engineer

Date: 7/29/97

Approved by: \_\_\_\_\_  
Conditions of approval, if any:

Title: \_\_\_\_\_ Date: \_\_\_\_\_

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.

\*See instruction on Reverse Side

