

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL  
WELL ☒

GAS  
WELL ☐

OTHER ☐

SINGLE  
ZONE ☐

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Mewbourne Oil Company

3. ADDRESS OF OPERATOR

Box 5270 Hobbs, New Mexico 88241

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface

At proposed prod. zone

2310' FWL & 990' FNL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

8 miles South of Maljamar, New Mexico

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

990'

16. NO. OF ACRES IN LEASE

80

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

990'

19. PROPOSED DEPTH

9500'

20. ROTARY OR CABLE TOOLS

Rotary

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

3784.5 GR

22. APPROX. DATE WORK WILL START\*

Upon Approval

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	54#	450'±	450 sks. Class "C" - circ.
12-1/4"	8-5/8"	24# & 32#	4350'±	1100 sks. Class "C" - circ.
7-7/8"	5-1/2"	17#	9500'±	800 sks. Class "H"

Mud Program

0' - 450' Spud mud w/fresh water gel & lime. LCM as needed.  
450' - 4350' Brine water w/lime for pH control. Wt. 10.0%, LCM as needed.  
4350' - 8000' Cut brine w/lime for pH control. Wt. 9.2-9.5%. WL no control,  
LCM as needed.  
8000' - 9500' Cut brine w/Drispac, salt gel & lime. Wt. 9.2-9.5%, WL 10cc  
or less. Vis. 32-36.

BOP program

900 series Double BOP w/hydril on 13-3/8" surface, 8-5/8" intermediate casing.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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

*W H Roney*

TITLE

District Supt.

DATE

09/29/88

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

*Samuel Prentice*

TITLE

APPROVED BY

DATE

10-1-88

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

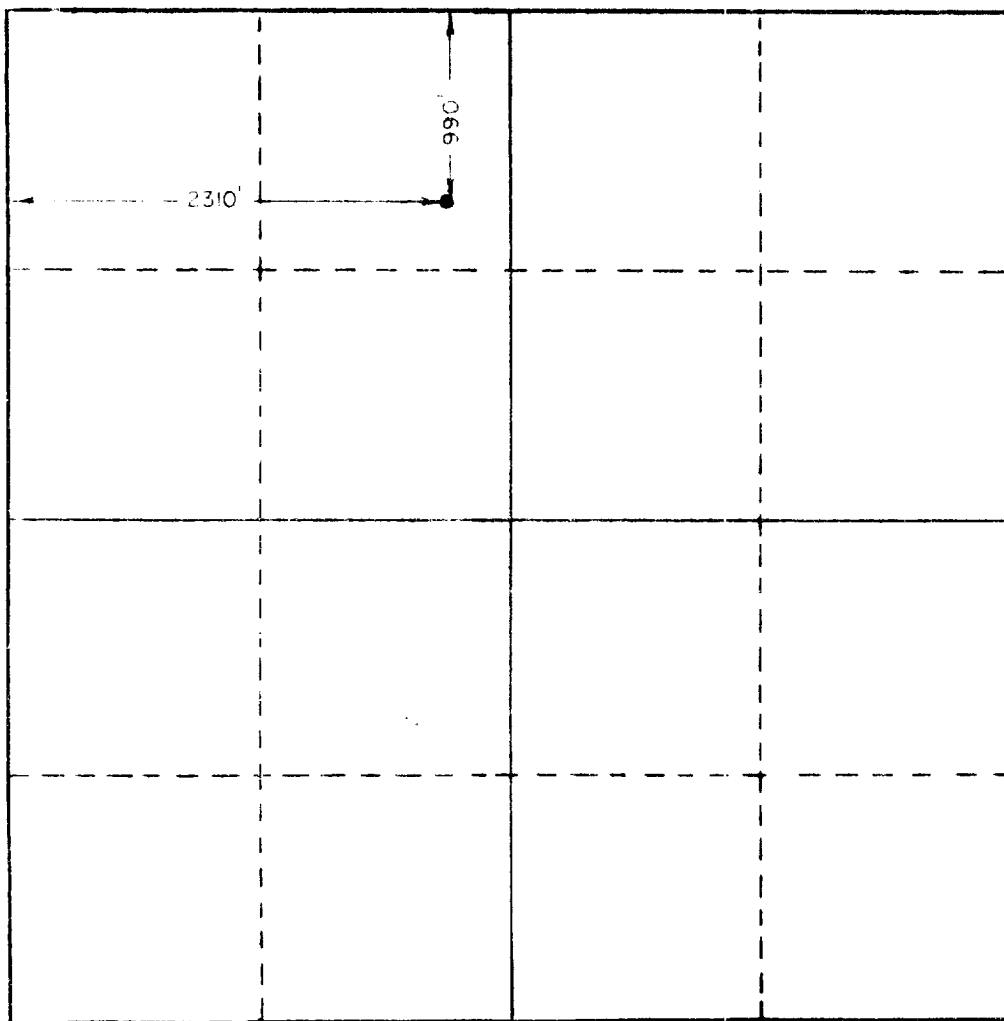
Operator <b>Newbourne Oil Company</b>			Lease <b>Cedar Lake</b>		Well No. <b>3</b>
Unit Letter <b>C</b>	Section <b>23</b>	Township <b>18 South</b>	Range <b>32 East</b>	County <b>Lea</b>	
Actual Footage Location of Well: <b>2310</b> feet from the <b>West</b> line and <b>990</b> feet from the <b>North</b> line					
Ground Level Elev. <b>3784.5</b>	Producing Formation <b>Upper Bone Springs</b>		Pool <b>Quercho Plains Upper Bone Sprgs.</b>		Dedicated Acreage: <b>40</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes    ☐ No    If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



**CERTIFICATION**

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

*W. H. Cravey*

Name

**W. H. Cravey**

Position

**District Superintendent**

Company

**Newbourne Oil Company**

Date

**September 23, 1988**

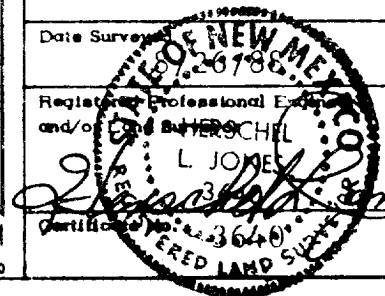
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Survey

Registered Professional Engineer  
and/or Land Surveyor

**L. JONES**

Certification No. **3640**



MULTI-POINT SURFACE USE AND OPERATING PLAN  
MEWBOURNE OIL COMPANY  
CEDER LAKE FEDERAL NO. 3  
2310' FWL & 990' FNL of SEC. 23-T18S-R32E  
LEA COUNTY, NEW MEXICO  
LEASE NO. NM-0555297

This plan is submitted with the Application for Permit to Drill (APD) the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan and the magnitude of necessary surface disturbance involved, so that a complete appraisal can be made of the enviromental effects associated with the operation.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a BLM map, 30 x 60 minute quadrangle; Hobbs, New Mexico; showing the location of the proposed well as staked. At the junction of NM highway 529 and Lea County Road No. 126 which is located 4 1/2 miles south of Maljamar, New Mexico; proceed south on Lea County Road No. 126 for 1 1/2 miles. Turn left (southeast) on caliche lease road. Follow lease road 3 miles to fork in road. Take left fork and follow lease road for 7/10 ths mile, turn left and follow lease road to dead-end at the Cedar Lake Federal No. 3 location.
- B. Culverts: None required.
- C. Cuts and Fills: A one foot cut will be required for construction of the location.
- D. Turn-outs: One required.
- E. Gates and Cattleguards: None required.

2. LOCATION OF EXISTING LEASE WELLS:

- A. Existing wells on the lease are shown on Exhibit "B".

3. LOCATION OF PROPOSED FACILITIES:

- A. If the well is productive, a flow line will be laid to the existing production facilites at the Cedar Lake # 1 location. This flow line will follow existing roadways so no further surface damage will occur.

4. LOCATION AND TYPE OF WATER SUPPLY:

- A. Water will be purchased and trucked to the wellsite over the existing and proposed roads shown on Exhibit "A".

5. SOURCE OF CONSTRUCTION MATERIALS:

- A. Caliche for surfacing the road and location will be obtained from an existing pit in the SW/4 of the SE/4 of Sec. 15-T18S-R32E. Location of the pit is shown on Exhibit "B". BLM pit # 18321515.

6. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.
- C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.
- D. Current laws and regulation pertaining to the disposal of human waste will be complied with.
- E. All trash, junk and other waste material will be contained to prevent scattering and will be removed and deposited in an approved sanitary landfill.
- F. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and/or completion operations.

7. ANCILLARY FACILITIES:

8. WELLSITE LAYOUT:

- A. Exhibit "C" shows the relative location and dimension of the well pad, mud pits, reserve pit, trash pit, and location of major rig components.
- B. The pad and pit area has been staked and flagged.

9. PLANS AND RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing condition as possible.

10. OTHER INFORMATION:

- A. The geologic surface formation is a deep, fine, sand underlain by caliche. The vegetative cover is generally sparse and consists mainly of shinnery and mesquite.

B. The estimated tops of geologic markers are as follows:

Rustler	1180	Grayburg	4440
Base of Salt	2577	Loco Hills	4490
Yates	2728	Premier	4759
Seven Rivers	3130	San Andres	4800
Queen	3970	Deleware	5361
Penrose	4228	Bone Springs	6793

C. The estimated depths at which anticipated water, oil, or gas are expected to be encountered:

Water: Possible surface water between 150'-400'

Oil: Bone Springs @ 8400'

Gas: None

D. Proposed Casing Program: See form 9-331C

E. Pressure Control Equipment: See Form 9-331C and Exhibit "D".

F. Mud Program: See form 9-331C.

G. Auxiliary Equipment: None.

H. Testing and Coring Program: None

Logging: Gamma-Ray Spectral Density Dual Spaced Neutron  
T. D. to surface.

Gamma-Ray Dual Laterlog Microguard  
T. D. to Intermediate casing.

I. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, the proposed mud weight will be increased to safely handle the pressure.

J. Anticipated Starting Date: As soon as possible after BLM approval.

11. OPERATORS REPRESENTATIVES:

The field representatives responsible for assuring compliance with the approved surface use plan and operations plan are as follows:

W. H. Cravey  
Bill pierce  
701 South Cecil Street  
Hobbs, New Mexico 88240  
Phone: (505) 393-5905

12. 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 presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that 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.

9-29-88

DATE

Bill Pierce

for

W. H. Cravey  
District Superintendent  
Mewbourne Oil Company

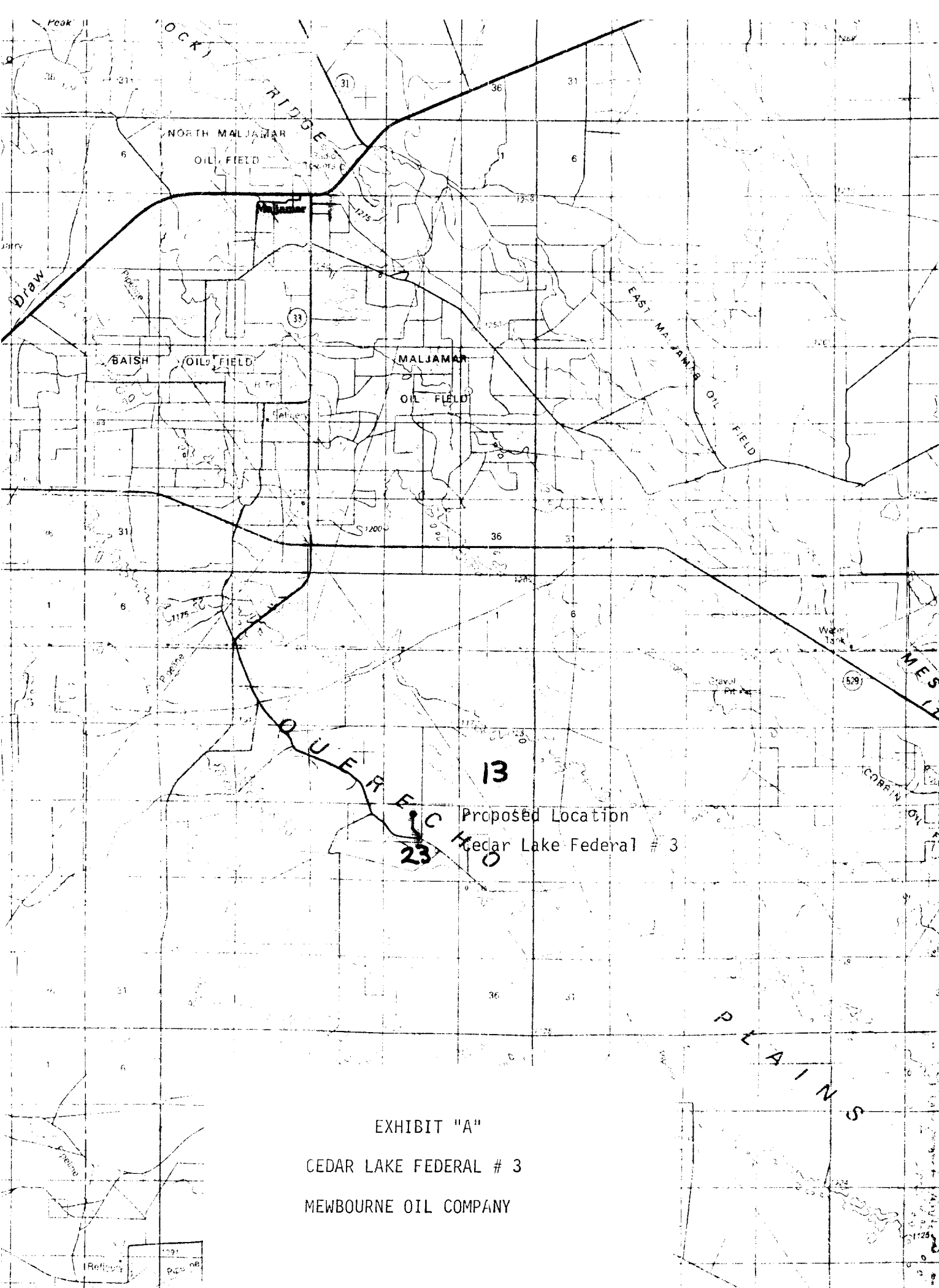


EXHIBIT "A"  
CEDAR LAKE FEDERAL # 3  
MEWBOURNE OIL COMPANY

Section 34  
(MALJARYAR)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

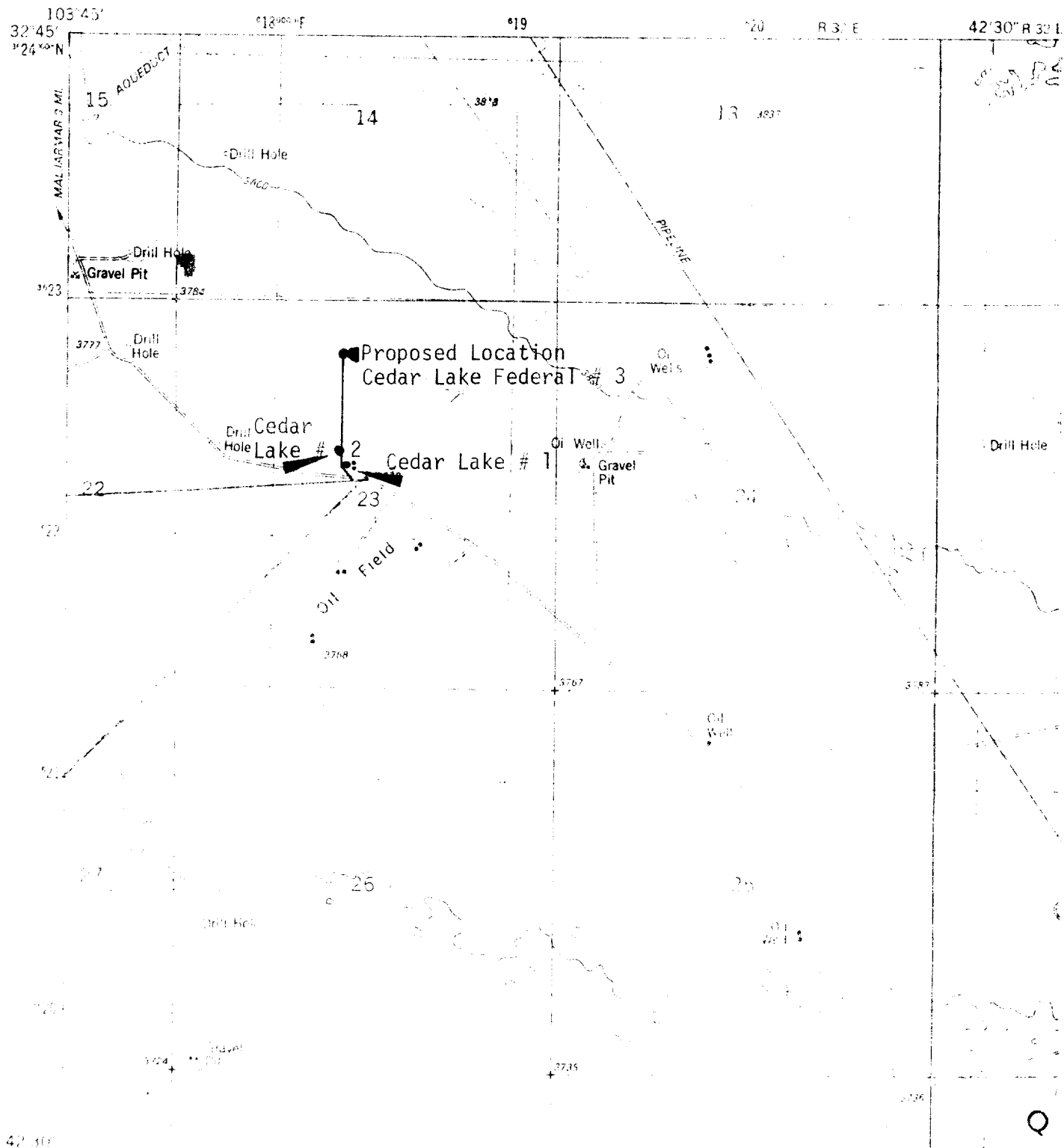
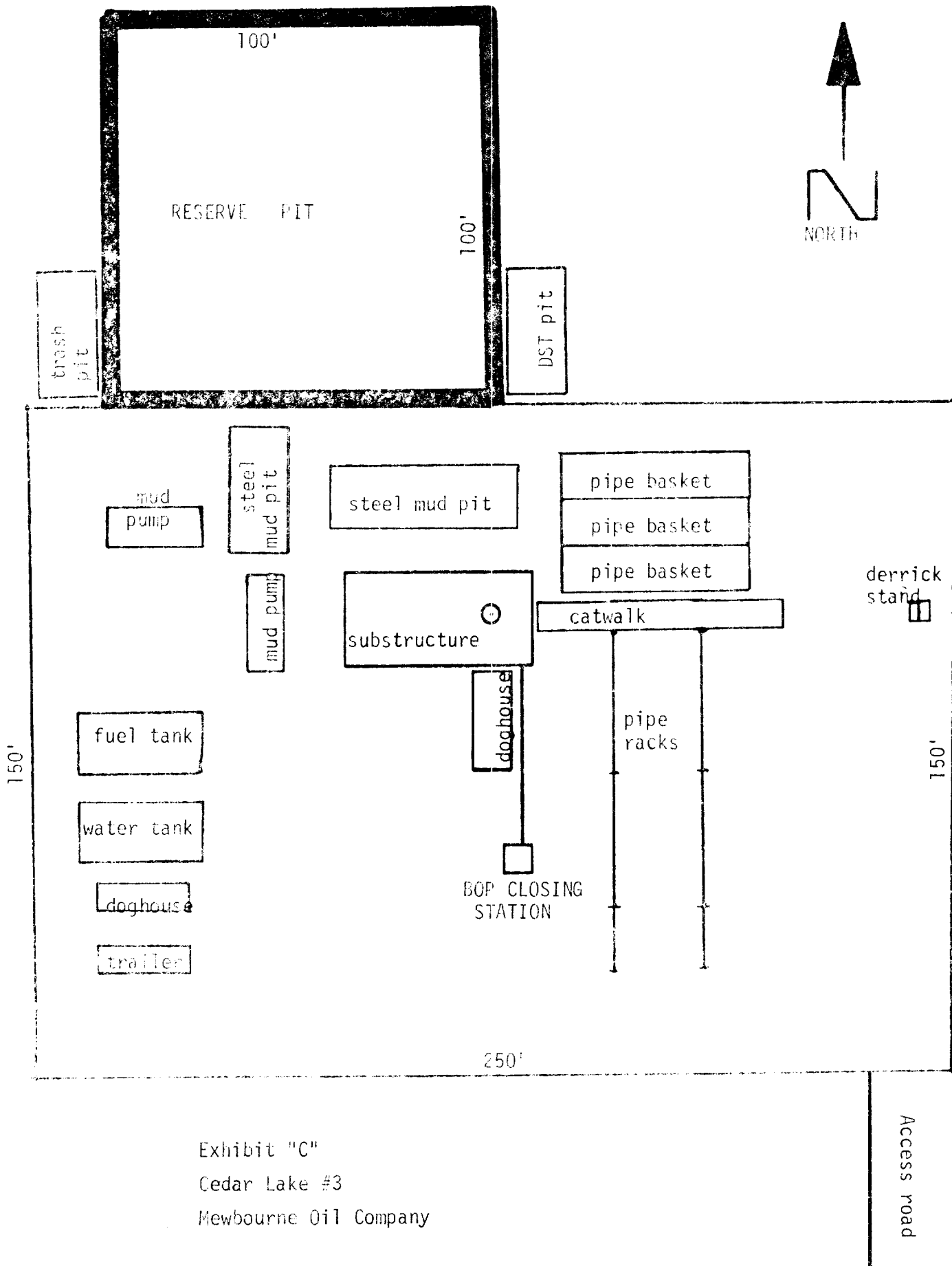


EXHIBIT "B"

CEDAR LAKE FEDERAL # 3

MEWBOURNE OIL COMPANY





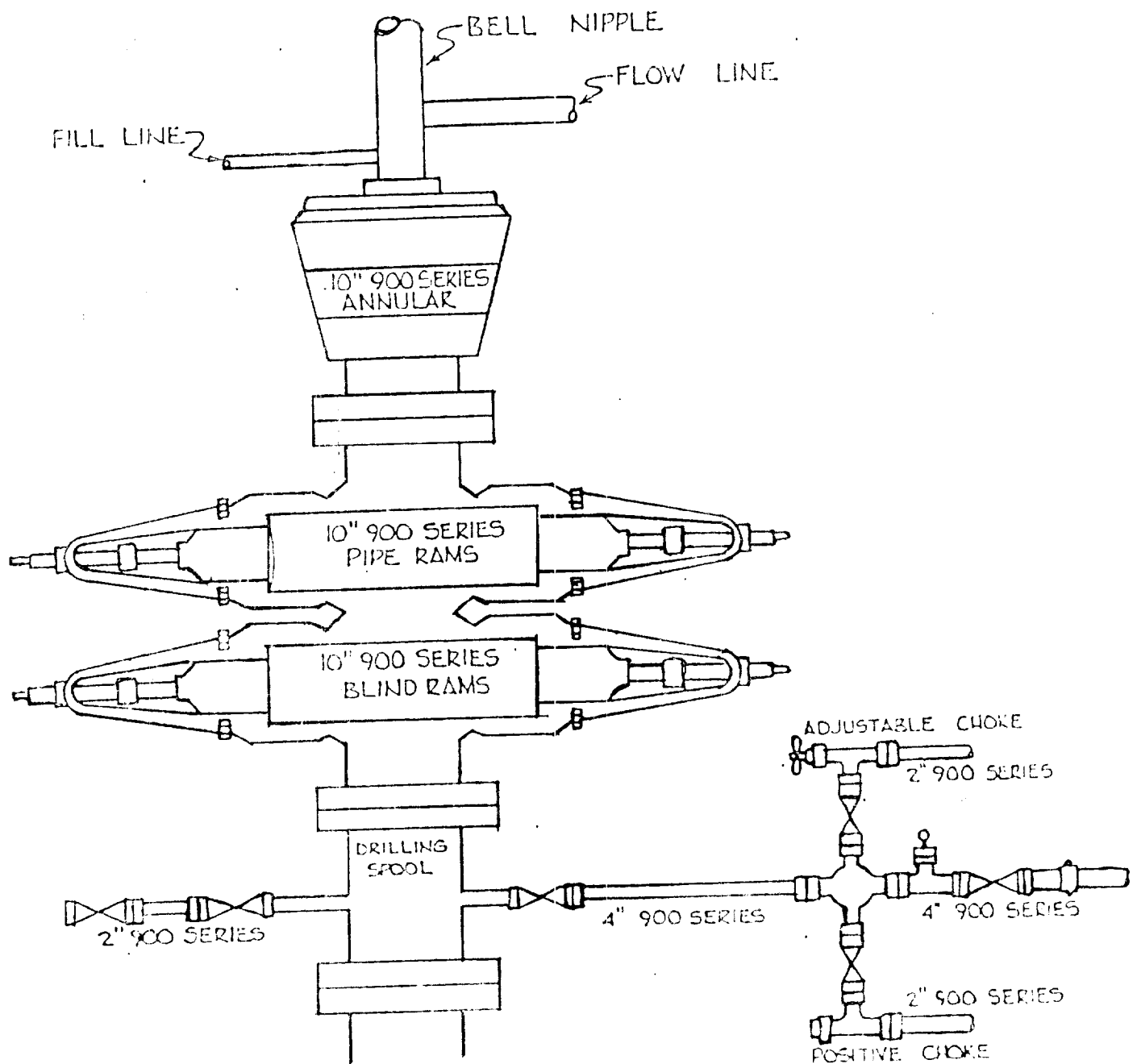


Exhibit "D"  
 Cedar Lake #3  
 Mewbourne Oil Company



NMAS

New Mexico Archaeological Services, Inc.

P.O. Box 1341

Carlsbad, New Mexico 88221-1341

(505) 887-7646

20 September 1988

*Professional  
Excavation  
Analysis  
Report Writing  
Consulting*

Mr. Bill Pierce  
MEWBROURNE OIL COMPANY  
P.O. Box 5270  
Hobbs, New Mexico 88240

Dear Mr. Pierce:

Enclosed please find NMAS' Archaeological Clearance Report for MEWBROURNE OIL COMPANY's proposed Cedar Lake Federal Well No. 3 and its associated access road in Lea County, New Mexico. No cultural resources were recorded during this survey; therefore, NMAS is suggesting clearance for this project.

If you have any questions pertaining to this report, please call my office. Thank you for asking NMAS to do this survey.

Yours sincerely,

*J. Loring Haskell*  
Dr. J. Loring Haskell  
Principal Investigator

Enclosure

cc: Mr. Mark Calamia, BLM, Carlsbad

as

Archaeological Clearance Report  
for

MEWBOURNE OIL COMPANY

Cedar Lake Federal Well No. 3

Prepared

BY

Dr. J. Loring Haskell

Submitted

By

Dr. J. Loring Haskell  
Principal Investigator  
New Mexico Archaeological Services, Inc.  
Carlsbad, New Mexico

20 September 1988

Permit No. 14-2920-88-H

Report Number: NMAS-1988-13-S

## ABSTRACT

New Mexico Archaeological Services, Inc., representing MEWBOURNE OIL COMPANY, Hobbs, undertook a Class III survey of (BLM) land scheduled to be impacted by the construction of drill location and its associated access road. Field work was conducted under cloudy conditions with light easterly winds during mid-day. The location will measure 400 X 400 ft (actual area surveyed 4.4 acres). The access road will measure 100 X 800 ft (actual area surveyed 1.84 acres). Total surveyed acreage 6.28 acres. It will be situated in Section 23 T18S, R32E, NMFM, Lea County, New Mexico. No cultural properties were recorded during this survey; therefore, NMAS is suggesting clearance for MEWBOURNE OIL COMPANY'S proposed work.

## Introduction

On 20 September 1988, New Mexico Archaeological Services, Inc., (NMAAS), Carlsbad, (Permit Number: 14-290-88-H), undertook for MEWBOURNE OIL COMPANY, Hobbs, an archaeological survey of federal land administered by the Bureau of Land Management in Lea County, New Mexico. The reconnoitered area will be impacted by the construction of a drill location and its associated access road. This project was advanced by Mr. Bill Pierce, Mewbourne Oil Company. This survey was undertaken by Dr. Haskell.

## Survey Technique

For this investigation, MEWBOURNE OIL COMPANY'S proposed location was reconnoitered for evidence of man's past activities by walking it in a series of 8.0 m wide, close intervals (15<sup>o</sup> or less, zigzag transects. In addition, an added zone extending 20 ft on each side of the staked 400 X 400 ft location, and lying outside the bounds of the proposed work area, was reconnoitered by a similar means. The access road was walked in two, 15 m wide transects. Lath is considered to be the center of the proposed road. Methodologically, this procedure served to promote optimal conditions for the visual examination of the area to be impacted by construction-related activities. Field work was conducted under cloudy conditions with light easterly winds during mid-day. Ground visibility ranges between 70 and 80%. Field time 1 1/2 hours.

Location

The proposed location will measure 400 X 400 ft (actual area surveyed 4.44 acres) on federal land and will be situated 2310 ft from the west line and 990 ft from the north line.

Section 23 T18S, R32E, NMPM, Lea County, NM

Thus it will be situated in the:

NE1/4NW1/4, Section 23, T18S, R32E, NMPM, Lea County, NM

The associated access road will measure approximately 100 X 800 ft (actual area surveyed 1.84 acre) and will be situated in the:

NE1/4NW1/4, Section 23, T18S, R32E, NMPM, Lea County, NM  
SE1/4NW1/4, Section 23, T18S, R32E, NMPM, Lea County, NM

Map Reference: USGS Laguna Gatuna NW  
Quadrangle, 7.5 Minute Series, 1984.

Level of Previous Impact The sites of the proposed location and access road have not been previously impacted by mechanical means.

Environmental Setting

The proposed location will be situated on a generally flat and featureless portion of the Querecho Plains at a point due south and west of the Llano Estacado. Albeit overlain by a thick deposit of aeolian derived material, areal dune development is very minor or non-existent. Microrelief averages 0.25 m. A small, highly localized, collapse structure occurs to the northwest and acts as a receptacle for areal runoff. Surficial deposits are composed of sandy clay loams and clay loams. Elevation is

approximately 3785 ft. Slope is about 0.45°. Aspect is multiple. Overall water is scarce and limited to runoff collecting in areal collapse structures. Seeps and springs, however, do occur within a mile or so of the base of the Llano Estacado which lies five miles to the northeast. Soil individuals are assignable to an intergrade of Typic Torripsamment subgroup. Lithic inclusions are infrequent and limited to occasional calcareous gravels. The combined forces of aeolian-and colluvial- processes have shaped the present surface. The grassland formation is made up of sand muhly, false buffalo grass, sand bluestem, sandbur, poverty threeawn, plains brittlegrass, blue grama, six weeks grama, mesa dropseed and sand dropseed.

#### Cultural Resources

Prefield: 20 September 1988, J. Loring Haskell, three archaeological sites.

MNAS 5762, consisting of ground stone, potsherds, a burned organic feature and fire-cracked caliche, is situated within 2800 ft of the proposed work.

MN-06-4503, consisting of ground stone, thinning flakes, tertiary and primary decortication flakes, cores, potsherds and fire-cracked caliche, is situated within 2200 ft of the proposed work.

NM-06-4090, consisting of debitage, possible dwellings and pottery, is situated within 2150 ft of the proposed work.

No cultural properties were recorded during the course of this survey. Their absence is directly attributable to the extreme dearth of siliceous lithic sources as well as the openness of the associated landform and the scantiness of the water supply. Land usage, always ephemeral and transitory in character, focused



chiefly on hunting and gathering tasks. Exploited mammalian forms included Antilocapra, Odocoileus, Bison, Lepus, and Sylvilagus. Expected cultural properties, reflecting utilization of this type, should include isolated, random occurrences of debitage, angular debris, cores, potsherd, ground, stone, etc.

#### Recommendations

NMAS recommends clearance for MEWBOURNE OIL COMPANY'S proposed Cedar Lake Federal Well No. 3 and its access road and suggests that a work-related activities proceed in accordance with company plans. (Fig. 1.) Clearance, of course, is granted by the Bureau of Land Management. If additional cultural resources are encountered during construction, the BLM and NMAS should be notified immediately. Duned settings are notorious for covering and uncovering cultural properties.

32°45' N  
103°45' W  
MALJAMARI

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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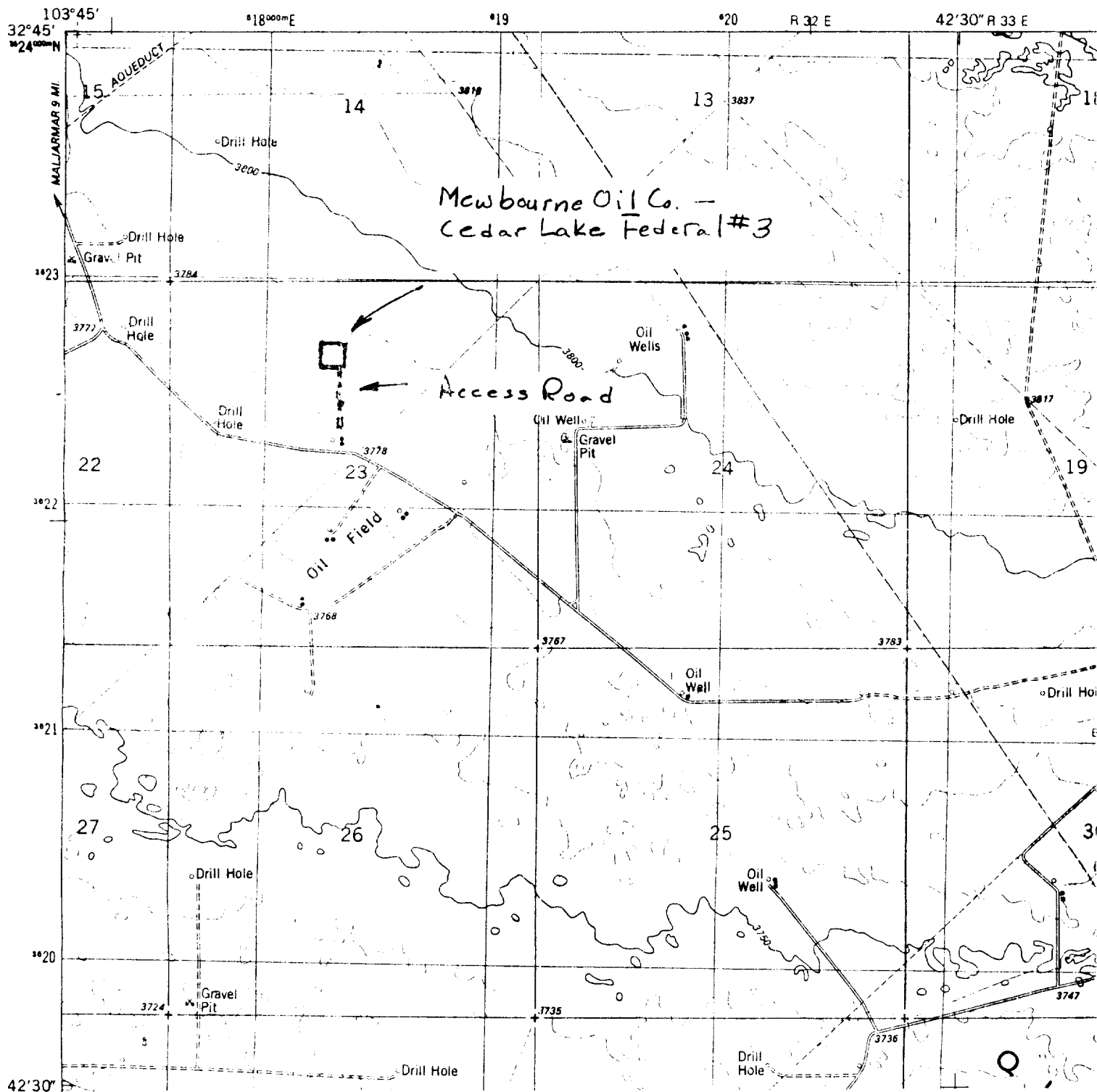


Fig. 1 USGS Laguna Gatuna Quadrangle, 7.5 Minute Series.  
1: 24,000, 1984, showing Mewbourne Oil Company's proposed Cedar  
Lake Federal Well No. 3, 2310 FWL, 990 FNL, and access road,  
Section 23, T18S, R32E, NMPM, Lea County, New Mexico.