



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

Form 3160-3
(September 2001)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

5. Lease Serial No.

NM29279

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
O D Federal #2

9. API Well No.

30-015-3798

10. Field and Pool, or Exploratory

Red Lake; Glorieta Yeso, Northeast

11. Sec., T., R., M., or Blk. and Survey or Area

Sec. 34 T17S R27E

12. County or Parish
Eddy

13. State
NM

1a. Type of Work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator

Marbob Energy Corporation

3a. Address

PO Box 227, Artesia, NM 88211-0227

3b. Phone No. (include area code)

505-748-3303 Fax 505-746-2523

4. Location of Well (Report location clearly and in accordance with any State requirements. *)

At surface 990' FSL & 1650' FEL
At proposed prod. zone 990' FSL & 1650' FEL

14. Distance in miles and direction from nearest town or post office*

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)

16. No. of Acres in lease

17. Spacing Unit dedicated to this well

40

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

19. Proposed Depth
4300'

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

3604' GL

22. Approximate date work will start*

August 31 2003

23. Estimated duration

21 Days

24. Attachments

ROSWELL CONTROLLED WATER BASIN

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.
2. A Drilling Plan.
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).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature

Title

Authorized Representative

Name (Printed/Typed)

Melanie J. Parker

Date

07/30/03

Approved by (Signature)

/s/ Joe G. Lara

Name (Printed/Typed)

/s/ Joe G. Lara

Date

3 SEP 2003

Title
ACTING

FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

Application approval does not warrant or certify the 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 reverse)

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED**

DISTRICT I -
P.O. Box 1980, Hobbs, NM 88241-1980

JUL 16 2003

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised February 10, 1994

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 96836	Pool Name RED LAKE; GLORIETA YESO, NORTHEAST
Property Code	Property Name OD FEDERAL	Well Number 2
OGRID No. 14049	Operator Name MARBOB ENERGY CORPORATION	Elevation 3604'

Surface Location

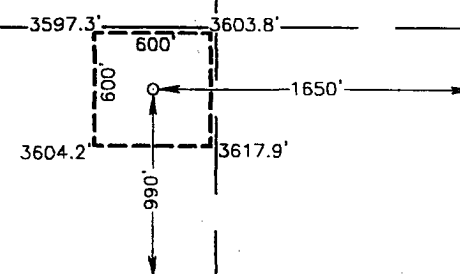
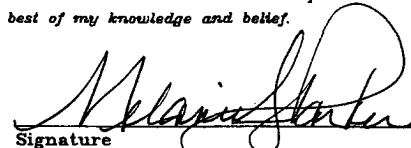
UL or lot No. 0	Section 34	Township 17-S	Range 27-E	Lot Idn	Feet from the 990	North/South line SOUTH	Feet from the 1650	East/West line EAST	County EDDY
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Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
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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

<p>GEODETIC COORDINATES NAD 27 NME Y = 649666.1 X = 521672.8 LAT. 32°47'09.61"N LONG. 104°15'46.12"W</p>							
<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p> Signature Melanie J. Parker Printed Name Land Department Title July 30, 2003 Date</p>				<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>JULY 11, 2003</p> <p>Date Surveyed Signature of Professional Surveyor Professional Surveyor RONALD J. EIDSON 7/15/03 05.11.0723 Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12641</p>			

MARBOB ENERGY CORPORATION
DRILLING AND OPERATIONS PROGRAM

O D Federal #2
990' FSL & 1650' FEL
Section 34, T17S, R27E
Eddy County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Marbob Energy Corporation submits the following items of pertinent information in accordance with BLM requirements.

1. The geological surface formation is Permian:
2. The estimated tops of geologic markers are as follows:

Yates	830'	San Andres	2418'
Queen	1765'	Glorieta	3888'
Grayburg	2078'	Yeso	3954'

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

Water:	Approximately 200'
Oil or Gas:	Approximately 2078'

No other formations are expected to give up oil, gas, or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 8 5/8" casing at 1500' and circulating cement back to surface. Any shallower zones above TD which contain commercial quantities of oil and/or gas will have cement circulated across them by inserting a float shoe joint into the 5 1/2" production casing which will be run at TD to sufficiently cover all known oil and gas horizons above 200'.

4. Proposed Casing Program:

Hole Size	Interval	OD Casing	Wt	Grade	
12 1/4"	0 - 350'	8 5/8"	24#	J-55 LTC New R-3	WITNESS
7 7/8"	0 - TD	5 1/2"	17#	J-55 LTC New R-3	

Proposed Cement Program:

8 5/8" Surface Casing: Cement w/ 350 sx Class C. Circulate to surface.

5 1/2" Production Casing: Cement w/ 750 sx Class C. Will attempt to circulate to cover 200' above all oil and gas horizons to tie into surface.

5. Pressure Control Equipment: See Exhibit 1. *and attached letters.*

6. Mud Program: The applicable depths and properties of this system are as follows:

Depth	Type	Weight (ppg)	Viscosity (sec)	Waterloss (cc)
0 -350'	Fresh Water	8.5 - 8.8	28 - 32	N.C.
350-4300'	Cut Brine	9.8 - 10.2	40 -45	N.C.

7. Auxiliary Equipment: Kelly Cock; Sub with full opening valve on floor; and drill pipe connections.

8. Testing, Logging and Coring Program:

No drillstem tests are anticipated.

The electric logging program will consist of Dual Laterolog Micro SFL, Spectral Density Dual Spaced Neutron Csng Log, and Depth Control Log.

No conventional coring is anticipated.

9. No abnormal pressures or temperatures are anticipated.
10. Anticipated starting date: As soon as possible after approval.

MARBOB ENERGY CORPORATION

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- A. The hazards and characteristics of hydrogen sulfide (H₂S).
- B. The proper use and maintenance of personal protective equipment and life support systems.
- C. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- D. The proper techniques for first aid and rescue procedures.

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

- A. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- B. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- C. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H₂S SAFETY EQUIPMENT AND SYSTEMS

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H₂S.

A. Well Control Equipment:

Flare line.

Choke manifold.

Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.

Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

B. Protective equipment for essential personnel:

Mark II Surviveair 30-minute units located in the dog house and at briefing areas.

C. H₂S detection and monitoring equipment:

2—portable H₂S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 ppm are reached.

D. Visual warning systems:

Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

E. Mud Program:

The mud program has been designed to minimize the volume of H₂S circulated to the surface.

A mud-gas separator will be utilized.

F. Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.

G. Communication:

Company vehicles equipped with cellular telephone and 2-way radio.

W A R N I N G

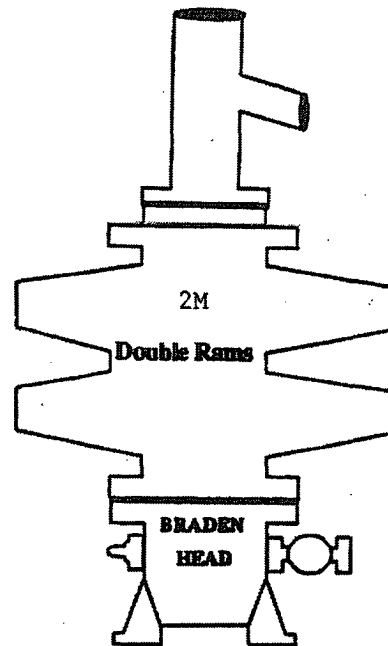
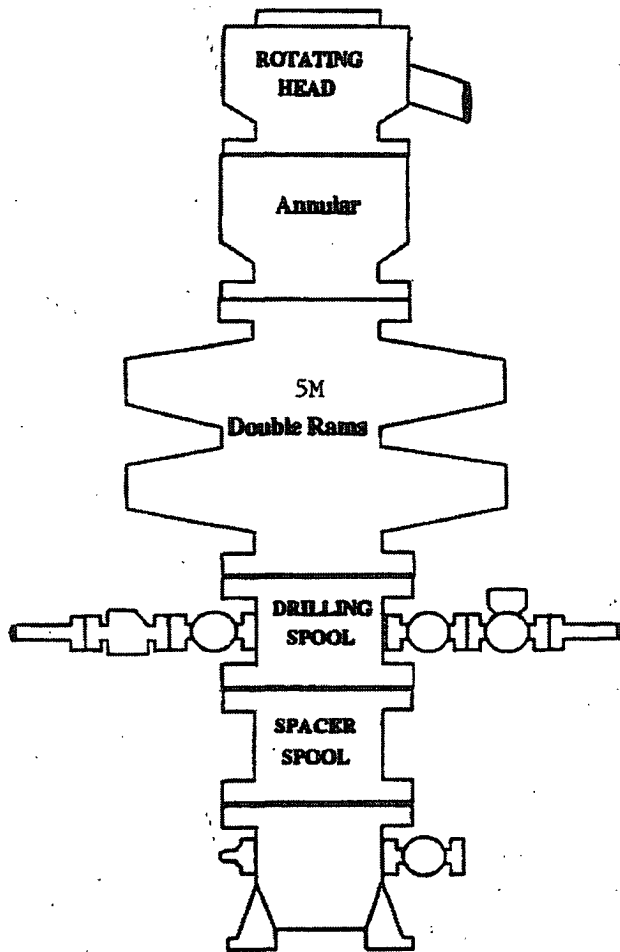
**YOU ARE ENTERING AN H₂S AREA
AUTHORIZED PERSONNEL ONLY**

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED**
- 2. HARD HATS REQUIRED**
- 3. SMOKING IN DESIGNATED AREAS ONLY**
- 4. BE WIND CONSCIOUS AT ALL TIMES**
- 5. CK WITH MARBOB FOREMAN AT MAIN OFFICE**

MARBOB ENERGY CORPORATION

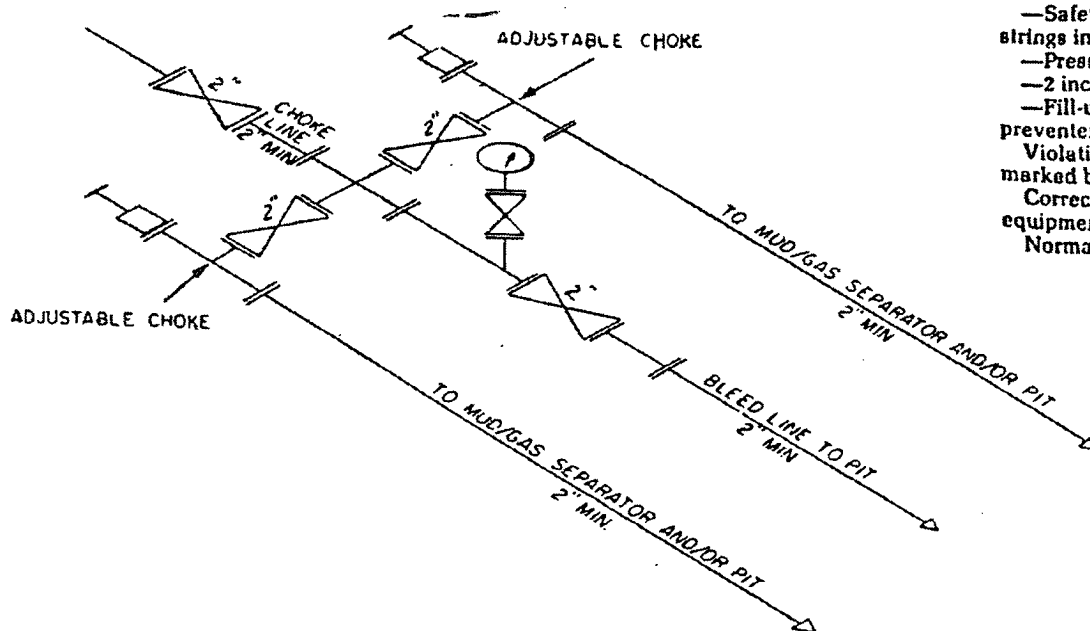
1-505-748-3303

BOPE SCHEMATIC



ONSHORE OIL AND GAS ORDER NO. 2

- 2M system:
- Annular preventer, or, double ram, or two rams with one being blind and one being a pipe ram *
 - Kill line (2 inch minimum)
 - 1 kill line valve (2 inch minimum)
 - 1 choke line valve
 - 2 chokes (refer to diagram in Attachment 1)
 - Upper kelly cock valve with handle available
 - Safety valve and subs to fit all drill strings in use
 - Pressure gauge on choke manifold
 - 2 inch minimum choke line
 - Fill-up line above the uppermost preventer.
- Violation: Minor (all items unless marked by asterisk).
 Corrective Action: Install the equipment as specified.
 Normal Abatement Period: 24 hours.

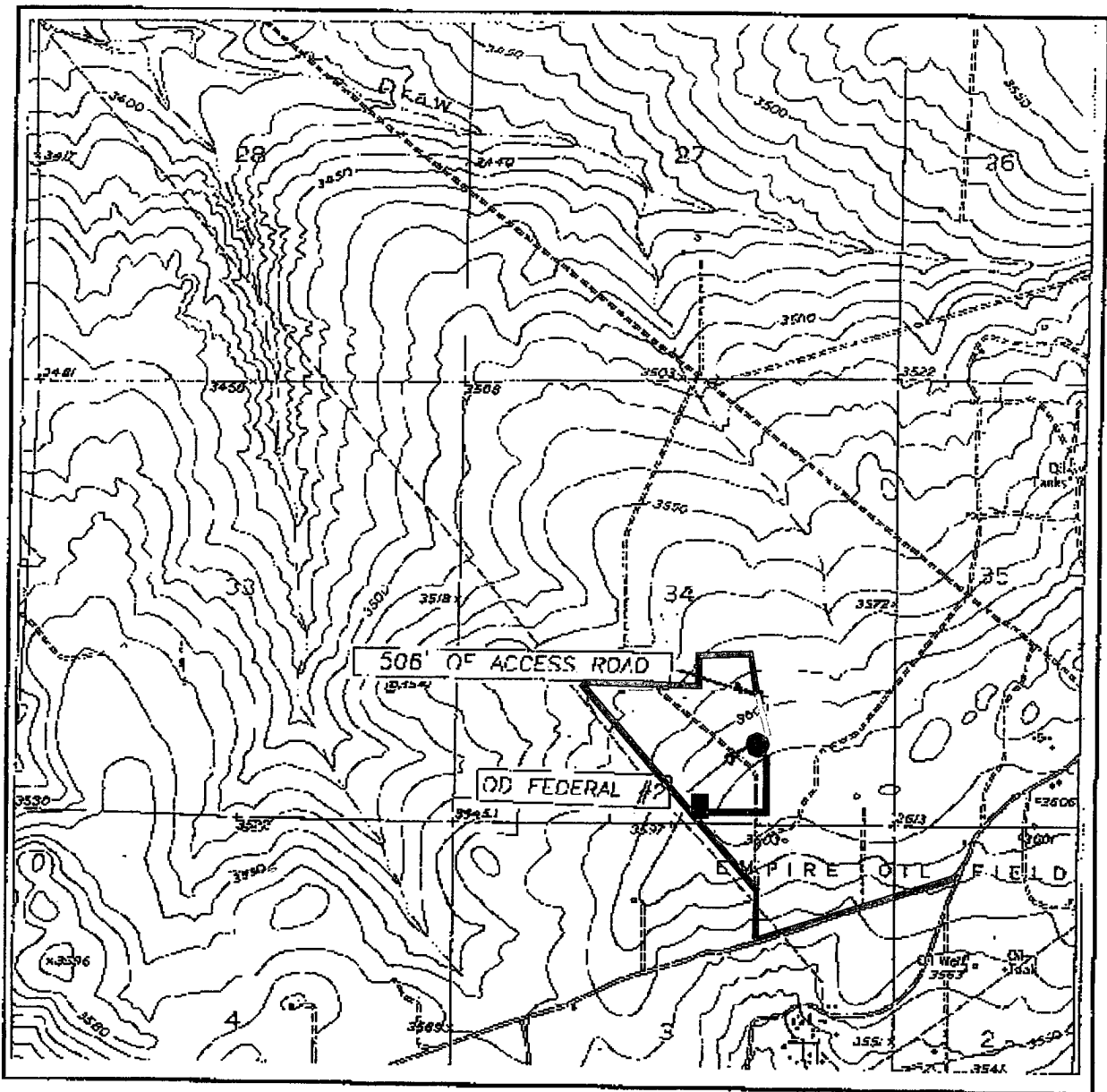


2M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES

MAY VARY

Exhibit One

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
SPRING LAKE, N.M.

SEC. 34 TWP. 17-S RGE. 27-E

SURVEY N.M.P.M.

COUNTY FOOTY

DESCRIPTION 990' FSL. & 1650' FEL




ELEVATION 3604'

OPERATOR MARGOR ENERGY

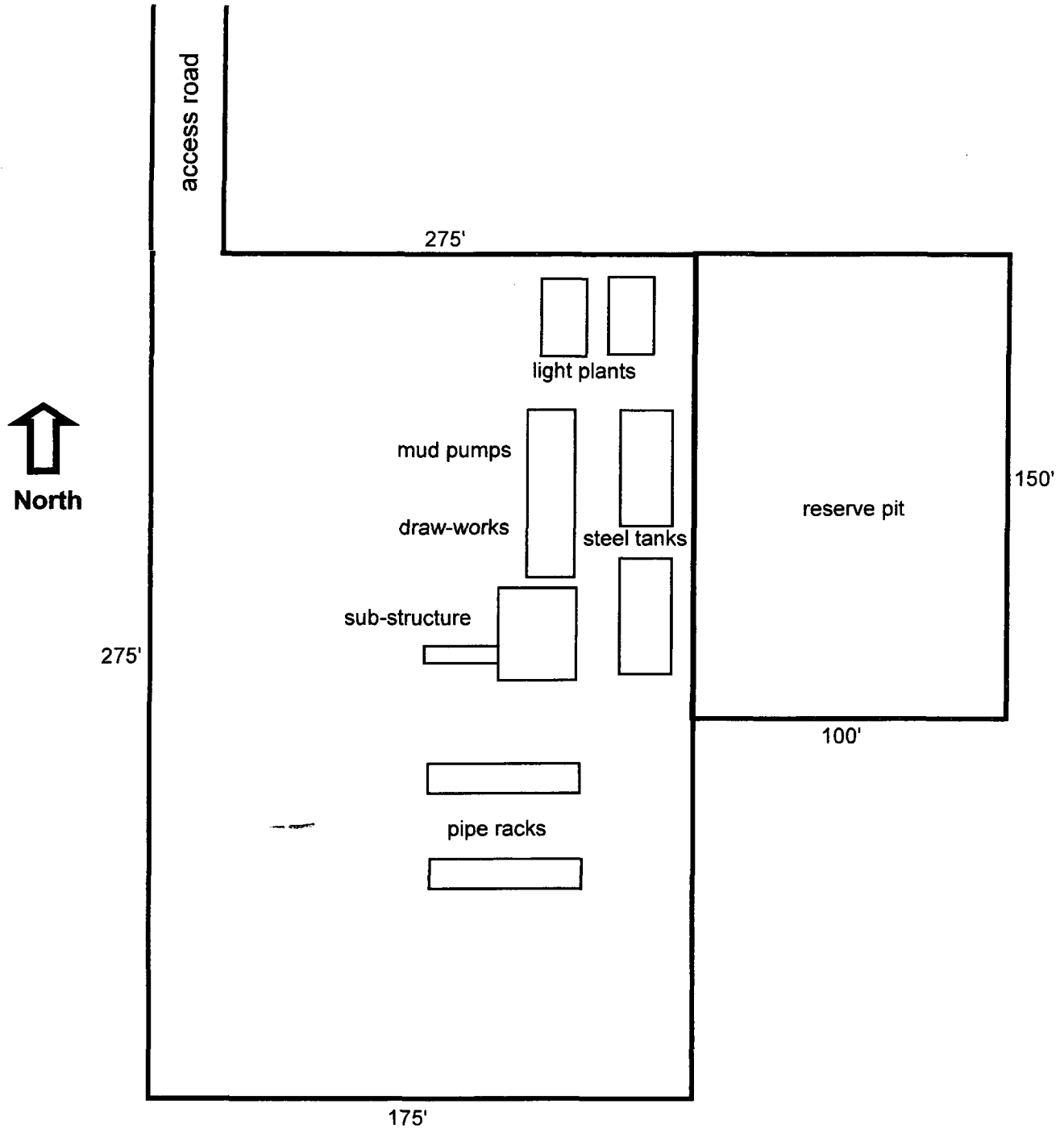
LEASE OD FEDERAL

U.S.C.S. TOPOGRAPHIC MAP
SPRING LAKE, N.M.

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

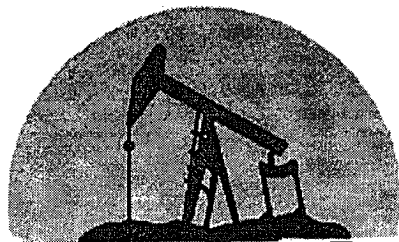
-  Flowlines
-  Roads
-  Proposed Access Road

Well Site Lay-Out Plat



O D Federal No. 2
990' FSL & 1650' FEL
Section 34, T17S, R27E
Eddy County, New Mexico

EXHIBIT FOUR



marbob
ENERGY CORPORATION
ARTESIA, NEW MEXICO

September 9, 2003

Oil Conservation Division
1301 W. Grand Ave.
Artesia, NM 88210

Attention: Bryan Arrant

Re: OD Federal #2
990' FSL & 1650' FEL, Unit N
Section 34, T17S, R31E
Eddy County, New Mexico

Dear Bryan:

We plan to complete in the Yeso which is sweet and we don't anticipate cutting any formations that contain H2S gas during the drilling of the above referenced well. Therefore, we do not believe that an H2S contingency plan is necessary.

If you have questions or need further information, please call.

Sincerely,

Melanie J. Parker
Land Department

/mp