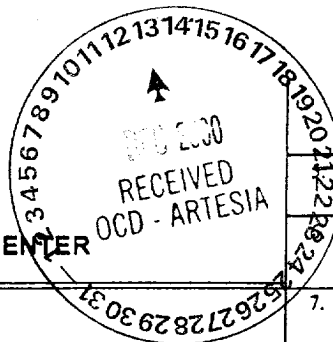


UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000



Lease Serial No.  
NM 033775

If Indian, Allottee or Tribe Name

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

North Benson Queen Unit

8. Lease Name and Well No.

North Benson Queen Unit

9. API Well No.

30-015 31512

10. Field and Pool, or Exploratory  
Queen

11. Section, R., M., or Bldg and Survey or Area

Sec 28, T18S, R30E

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

United Oil & Minerals, Inc.

3a. Address

1001 Westbank Dr., Austin, TX 78746

3b. Phone No. (include area code)

(512) 328-8184

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

At surface 1310' FSL x 1423' FWL

At proposed prod. zone Same

14. Distance in miles and direction from nearest town

7 miles south of Loco Hills

15. Distance from proposed\*

location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)

1310'

16. No. of Acres in lease

1800

17. Spacing Unit dedicated to this well

40

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

850'

19. Proposed Depth

3600'

20. BIA/BIA Bond No. on file

NM2732

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

3418' GR

22. Approximate date work will start\*

10/15/00

23. Estimated duration

25 days

24. Attachments

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

1. Well plat certified by a registered surveyor.

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

Name (Printed/Typed)

Date

Jerry Iseng, P.E.

9/11/00

Title

Petroleum Engineer

Approved by (Signature)

Name (Printed/Typed)

Date

Richard A. Whitley

12-5-00

Title

Assoc. STATE Dir

Office

NM SO

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.

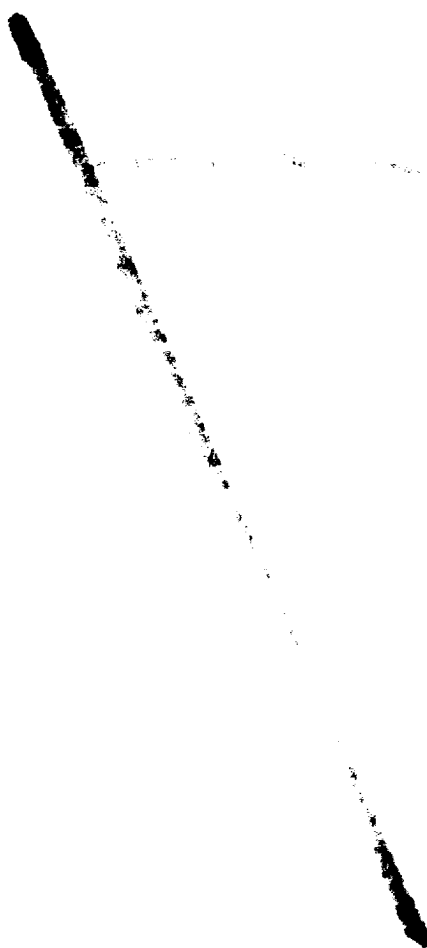
Conditions of approval, if any, are attached.

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)

Benson; Queen - Grayburg, North

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS



923 11 17 18 19

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

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

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

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1984  
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<br>NORTH BENSON QUEEN UNIT     | Well Number<br>53 |
| OGRID No.     | Operator Name<br>UNITED OIL & MINERALS, INC. | Elevation<br>3418 |

Surface Location

|               |         |          |       |         |               |                  |               |                |        |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
| N             | 28      | 18 S     | 30 E  |         | 1310          | SOUTH            | 1423          | 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<br>40 | 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

|  |   |  |
|--|---|--|
|  | <b>OPERATOR CERTIFICATION</b><br><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i><br><br>Signature: <u>[Signature]</u> P.E.<br>Printed Name: <u>Jerry Elson, P.E.</u><br>Title: <u>Petroleum Engineer</u><br>Date: <u>9/25/00</u>   |  |
|  | <b>SURVEYOR CERTIFICATION</b><br><i>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.</i><br><br>AUGUST 23, 2000<br>Date Surveyed: _____ DC<br>Signature & Seal of Professional Surveyor: <u>[Signature]</u> 8/30/00<br>Certificate No. RONALD T. EIDSON 3239<br>GARY EIDSON 12641 |  |

MONTH

LEASE NORTH BENSON QUEEN UNIT

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

UNITED OIL AND MINERALS, INC.  
WELL PROGRAM

WELL NAME: North Benson Queen Unit #53  
COUNTY, STATE: Eddy Co., N.M.

Location: 1310' FSL x 1423' FWL, Sec 28, T18S, R30E  
Directions: \_\_\_\_\_

GEOLOGICAL PROGNOSIS

Elevation: 3418'

| Formations    | Depth  | Subsea | Formations   | Depth | Subsea |
|---------------|--------|--------|--------------|-------|--------|
| Fresh Water   | 0-355' |        | Top Grayburg | 3340' | 78'    |
| Top Anhydrite | 355'   | 3063'  |              |       |        |
| Top Salt      | 560'   | 2858'  |              |       |        |
| Base Salt     | 1380'  | 2038'  |              |       |        |
| Top Yates     | 1565'  | 1853'  |              |       |        |
| Top Queen     | 2745'  | 673'   |              |       |        |
| Top Penrose   | 2970'  | 448'   |              |       |        |

Logs: At TD: GR/DLL/MSFL Density/Dual Spaced Neutron/ Cal from Td to Surface

Remarks: \_\_\_\_\_

CASING PROGRAM

| Intervals                       | Length                      | Casing           | Burst<br>PSI | Coll<br>PSI | Ten<br>LBS |
|---------------------------------|-----------------------------|------------------|--------------|-------------|------------|
| <del>0-550'</del> <u>0-355'</u> | <del>550'</del> <u>355'</u> | 8-5/8, 24#, K-55 | 2950         | 1370        | 263M       |
| 0-3600'                         | 3600'                       | 5-1/2, 14#, K-55 | 4270         | 3120        | 189M       |
|                                 |                             |                  |              |             |            |
|                                 |                             |                  |              |             |            |
|                                 |                             |                  |              |             |            |
|                                 |                             |                  |              |             |            |

Wellheads: Larkin 8-5/8", 2000#, WP Threaded Larkin 4-1/2" 2000# w/ a Top Flange Threaded

Remarks: BOP Tests: Test BOP's and surface equipment to 2000# on nipple up and when seals are broken. Test 8-5/8" and 5-1/2" to 1000# for 30 minutes. Repair if more than 10% of the pressure is loss in 30 minutes.

CEMENT PROGRAM

| Hole Size | Depth       | Casing Size | Cement  | Yield(CF/SX) | Excess | TOC     |
|-----------|-------------|-------------|---|--------------|--------|---------|
| 12-1/4"   | <u>355'</u> | 8-5/8"      | 269 Sxs Class "C" w/<br>4% Gel + 2% CaCl          | 1.74         | 100%   | Surface |
| 7-7/8"    | 3600'       | 5-1/2"      | 416 Sxs(35:65)Poz& "C"<br>6% Gel, 0.25 CF         | 1.85         | (50%)  |         |
|           |             |             | 252 Sxs(35:65)Poz&"C"<br>11 lbs/sx Bent, 0.5%FL25 | 1.65         |        |         |

cks

UNITED OIL AND MINERALS, INC.  
WELL PROGRAM

Surf Csg: Run a centralizer on jts 1,2 and every fourth jt to surface. Run FS, 1 jt, FC, and csg. Thread lock bottom 2 jts.

Prod Csg: Remove varnish from bottom 800'(sandblast). Run FS, 2 jts, FC, and csg. Thread Lock the bottom 2 jts. Centralize 2 per jts to 2500'. Displace w/ water after dropping plug.

MUD PROGRAM

| <u>Interval</u>               | <u>Wt(lb/gal)</u> | <u>Vis(sec)</u> | <u>WL(cc)</u> | <u>Type Mud &amp; Additives</u> |
|-------------------------------|-------------------|-----------------|---------------|---------------------------------|
| <del>0-550'</del> <b>350'</b> | 8.4-8.6           | 30-35           |               | FW Gel/Paper/LCM                |
| <b>350'-2700'</b>             | 9.3+              | 40              |               |                                 |
| 2700'-3600'                   | 9.5-10.0          | 40              | 6-8 cc        |                                 |

Remarks: Lost circulation is possible during the drilling of the 12-1/4" hole. Have paper and LCM available. Dry drill only if circulation cannot be regained.

NOTIFICATION:

| <u>Name</u>   | <u>Title</u> | <u>Phone</u>  |
|---------------|--------------|---------------|
| Jerry Ilseeng | Pet. Eng     | (512)632-2133 |
| Jack Coker    | VP- Drig     | (512)633-6543 |
| Stan Bible    | Consultant   | (361)920-7826 |
| Francis Gavin | Prod Supt    | (806)891-5990 |

Surface Use and Operation Plan  
United Oil & Minerals, Inc.  
North Benson Queen Unit Well No. 53  
#53-1310 FSL & 1423 FWL, Sec 28, T18S-R30E  
Eddy County, New Mexico  
(Development Well)

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 necessary surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effects associated with the operation.

1. EXISTING ROADS

- A. Exhibit A is a map of the North Benson Queen Unit Area on a scale of approximately 1 inch to 2000 feet showing the location of the proposed wellsite, roads in the vicinity, and road to the location. The road into the location is colored in red and begins on the map with the asterisk next to Section 33.

Exhibit B is a lease map prepared by Midland Map Company showing the location of the proposed wellsite roads in the vicinity. The proposed location is situated approximately 11 miles Southeast of Artesia, New Mexico, via the access route shown in red.

DIRECTIONS

From Artesia go approximately 11 miles in a southeast direction on Highway 360 to the intersection of County roads 360 and 251, go NE on 251 2.4 miles to road on left. Take a left and go ¼ mile and take a right into location (NBQ53).

2. PLANNED ACCESS ROAD

- A. The proposed new access will be approximately 700 feet in length from point of origin to the edge of the drilling pad. The road will lie in a north to south direction.
- B. The new road will be approximately 12 feet in width.
- C. The new road will be covered with caliche. No turnouts will be necessary.
- D. The center line of the new road has been staked and flagged and the route of the road is clearly visible.

Surface Use and Operation Plan  
North Benson Queen Unit Well No. 53

3. LOCATION OF EXISTING WELLS

- A. The well locations in the vicinity of the proposed well are shown in Exhibit A. There are several wells within a one mile radius because this is a producing field.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- A. In the event that the well is productive, a two inch steel flowline will be connected to existing facilities.

5. LOCATION AND TYPE OF WATER SUPPLY

- A. Water for drilling will come from a line laid from the fresh water injection plant in the SE/4 of Section 28.

6. SOURCES OF CONSTRUCTION MATERIALS

- A. Any caliche required will come from the deep bury pit on the proposed location.

7. METHODS OF HANDLING WASTE DISPOSAL

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. Water produced during the operations will be collected in tanks until hauled to an approved disposal system or a separate disposal application will be submitted to the USGS for appropriate approval.
- D. Oil produced during operations will be stored in tanks until sold.
- E. Current laws and regulations pertaining to the disposal of human wastes will be complied with.
- F. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.



Surface Use and Operation Plan  
North Benson Queen Unit Well No. 53

- G. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and/or completion operations.
- 8. ANCILLARY FACILITIES
  - A. None required
- 9. WELLSITE LAYOUT
  - A. Exhibit C shows the dimensions of the well pad and reserve pits, and the location of major rig components.
  - B. The reserve pits will be plastic lined.
- 10. PLANS FOR RESTORATION OF THE SURFACE
  - A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleared of all trash and junk, to leave the wellsite in as good a condition as possible. All pits will be filled and leveled within 90 days after abandonment.
- 11. TOPOGRAPHY
  - A. The wellsite and access route are located in sand hills near Loco Hills.
  - B. The top soil at the wellsite is sandy.
  - C. The vegetation cover at the wellsite is moderately sparse, with prairie grasses, some yucca, and miscellaneous weeds.
  - D. No wildlife was observed but it is likely that rabbits, lizards, insects, and rodents traverse the area. The area is used for cattle grazing.
  - E. There are no ponds, lakes, streams, or rivers within several miles of the wellsite.
  - F. There are no residences in the area.
  - G. The wellsite is located on federal surface.

Surface Use and Operation Plan  
North Benson Queen Unit Well No. 53

- H. There is no evidence of any archaeological, historical, or cultural sites in the vicinity of the location.

12. OPERATOR'S REPRESENTATIVES

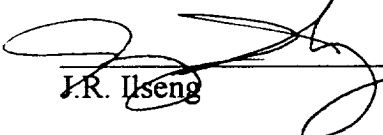
- A. The field representatives responsible for assuring compliance with the approved surface use plan are:

Jerry Ilseng  
Petroleum Engineer  
1001 Westbank Drive  
Austin, Texas 78746

Francis Gavin  
Production Superintendent  
  
Levelland, Texas

13. 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 United Oil and Minerals, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

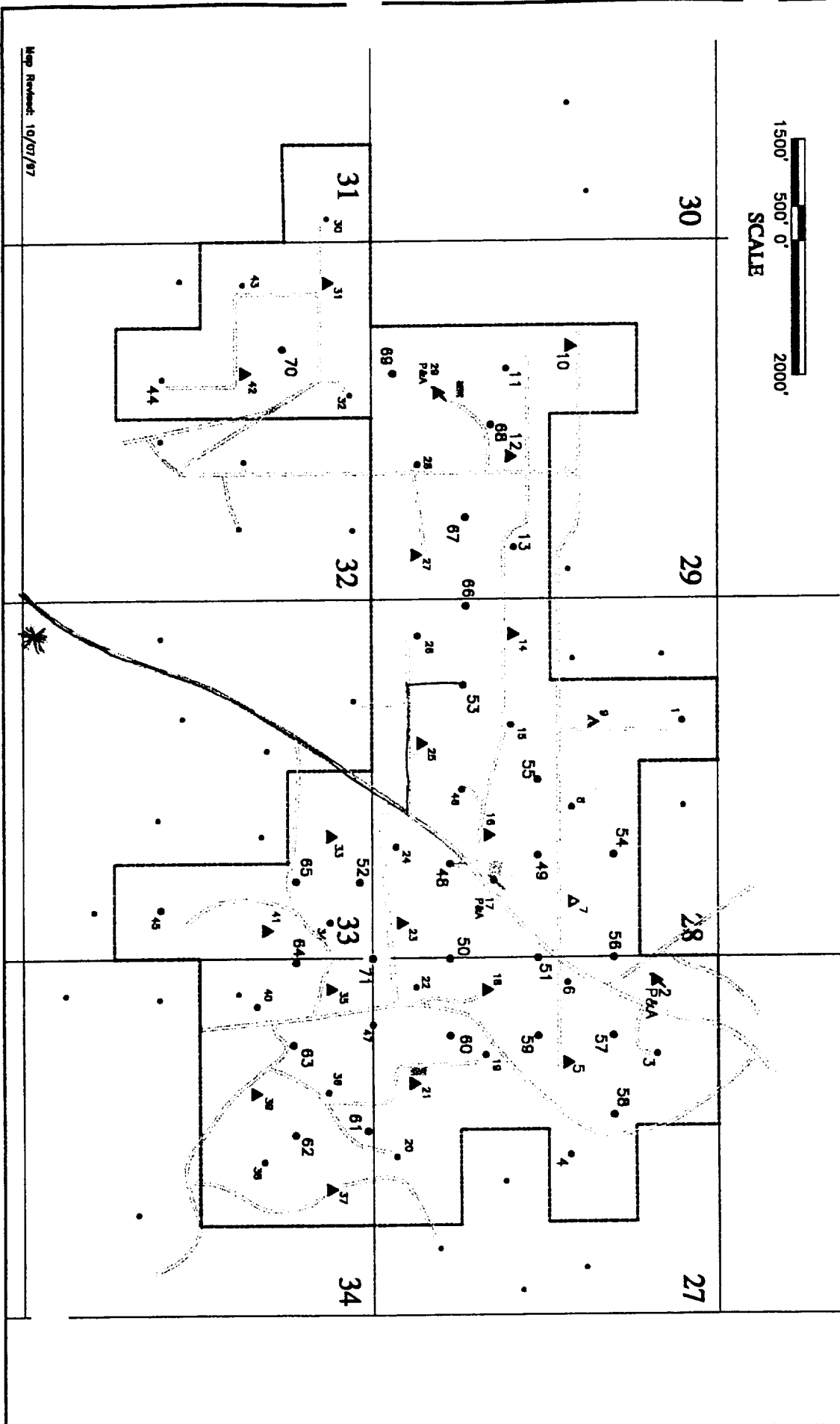
\_\_\_\_\_  
  
J.R. Ilseng

Drawn by: BAI  
Date: 10/7/87

North Benson Queen Unit  
Benson (Queen Grayberg) Field  
Eddy County, New Mexico



| COMPLETED |          | LEGEND |                         |
|-----------|----------|--------|-------------------------|
| 40        | Producer | ●      | Water Battery           |
| 10        | Injector | ●      | Produced (Future Phase) |
| 10        | P & A    | ●      | Test                    |
|           |          | ●      | Shut-in                 |



1/26/00

## Patterson Drilling Company

Rig #65

8,000'

### DRAWWORKS

Weiss W-45

### ENGINES

Two 8V71 Detroit diesels, 318 HP each with Allison 955 Torque Converter

### DERRICK

Lee C. Moore 100', 280,000# Rated Capacity

### SUBSTRUCTURE

12' high, 17' wide, 40' long, 380,000# Setback Capacity, Rotary Clearance - 9.4', KB - 13'

### MUD PUMPS

Pump #1: Emsco D-550 w/Cat 379

Pump #2: Gardner Denver PZ-8 w/Cat 3508

### DRILL STRING

8,000' 4-1/2" with X-hole

20 Drill Collars 6-1/4" with 4-1/4" X-hole

8 Drill Collars 8" with 6-5/8" reg

Other sizes of drill pipe and drill collars are available

### BLOWOUT PREVENTERS

One Shaffer, Type E with closing unit, Chcke Manifold 3" x 3000#

### MUD SYSTEM

One 75 BBL Premix Pit (if needed), and 2 -- 200 BBI Steel Pits (if needed)

### MUD HOUSE

None

### COMMUNICATIONS

Cellular Phone

### OTHER EQUIPMENT

Blocks. Emsco 150 Ton

Hook. BJ 460 150 Ton

Swivel. Oilwell PC 150, 150 Ton

Rotary Table. BDW 17-1/2" x 44" 150 Ton

Shale Shaker. Single Screen

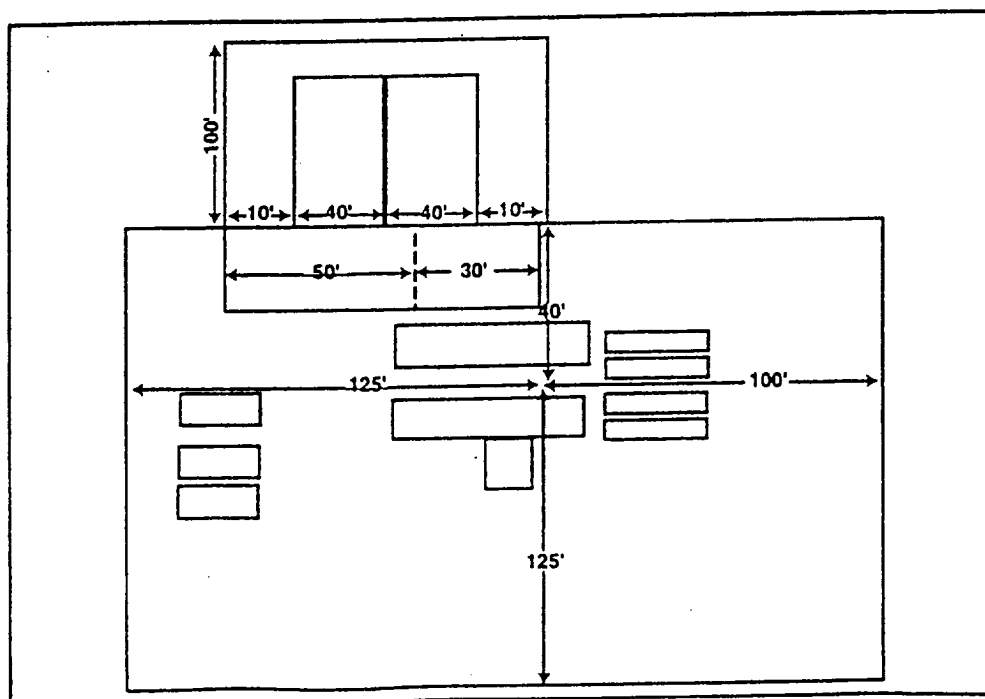
Electrical Power. One Cat 3304 w/234 kW

Generator & One Cat 3306 w/100 kW Generator

Fresh Water Storage. 500 bbl tank

Housing.

"Hole Requirements will dictate actual Reserve Pit size (TOOLPUSHER SHOULD BE CONSULTED)"



# DESIGNATION OF SUCCESSOR UNIT OPERATOR

(North Benson Queen Unit, Eddy County, New Mexico)

This Designation of Successor Unit Operator, dated as of the 1st day of June 1999, by and among **UNITED OIL & MINERALS, INC.**, a Texas corporation, whose address is 1001 WESTBANK DRIVE AUSTIN, TX hereinafter designated as "First Party" and the owners of unitized working interests, hereinafter designated as "Second Parties".

WHEREAS, under the provisions of the Act of February 15, 1920, 41 Stat. 437, 30 U.S.C., Secs. 181, et seq., as amended by the Act of August 8, 1946, 60 Stat. 950, the Department of the Interior approved a Unit Agreement (No. 8910124100) for the North Benson Queen Unit (the "Unit") wherein United Oil & Minerals was appointed Unit Operator;

WHEREAS, MARIAH ENERGY CORP. has been appointed Successor Operator of the Unit;

WHEREAS, MARIAH ENERGY CORP. has resigned as Unit Operator; and

WHEREAS, the First Party has been and hereby is designated by Second Parties as Operator of the unitized area and said First Party desires to assume all rights, duties and obligations of Operator under said Unit Agreement.

NOW, THEREFORE, in consideration of the premises hereinbefore set forth, First Party hereby covenants and agrees to fulfill the duties and assume the obligations of Operator under and pursuant to all the terms of said Unit Agreement, and the Second Parties agree that, effective upon approval of this Designation of Successor Operator by an authorized officer of the Bureau of Land Management, First Party shall be granted the exclusive right and privilege of exercising any and all rights and privileges as Unit Operator pursuant to the terms and conditions of said Unit Agreement, said Unit Agreement being hereby incorporated herein by reference and made a part hereof as fully and effectively as though said Unit Agreement were expressly set forth in this instrument.

IN WITNESS WHEREOF, the parties hereto have executed this instrument as of the date hereinabove set forth.

FIRST PARTY:

**UNITED OIL & MINERALS, INC.**

By: 

Name: Mike Peays

Title: PRESIDENT