Form 3160-3
(August 1999)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED
OCD - ARTESIA

5. Lease Serial No.
NM 033775

6. If Indian, Allottee or Tribe Name
24811

1a. Type of Work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
North Benson Queen Unit

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

8. Lease Name and Well No.
#48 North Benson Queen Unit

2. Name of Operator
United Oil & Minerals, Inc. 18256

9. API Well No.
30-015-31515

3a. Address
1001 Westbank Dr., Austin, Tx 78746

3b. Phone No. (include area code)
(512) 328-8184

10. Field and Pool, or Exploratory
[redacted]

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface 1111' FSL x 879' FEL
At proposed prod. zone Same

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 28, T18S, R30E

14. Distance in miles and direction from nearest town or post office*
7 miles South of Loco Hills

12. County or Parish
Eddy

13. State
NM

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
1111'	1800	40
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. on file**
650'	3600'	NM2732
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22. Approximate date work will start***	**23. Estimated duration**
3506 GR	10/15/00	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
P.E.	Jerry Ilseng, P.E.	9/11/00
Title: Petroleum Engineer		
Approved by (Signature): /s/ Richard A. Whitley	Name (Printed/Typed): Richard A. Whitley	Date: 12-5-00
Title: Assoc STATE Dir	Office: NMSO	

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-Graybug, North

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

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, 1994
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	Well Number
	NORTH BENSON QUEEN UNIT	48

OGRID No.	Operator Name	Elevation
	UNITED OIL & MINERALS, INC.	3506

Surface Location

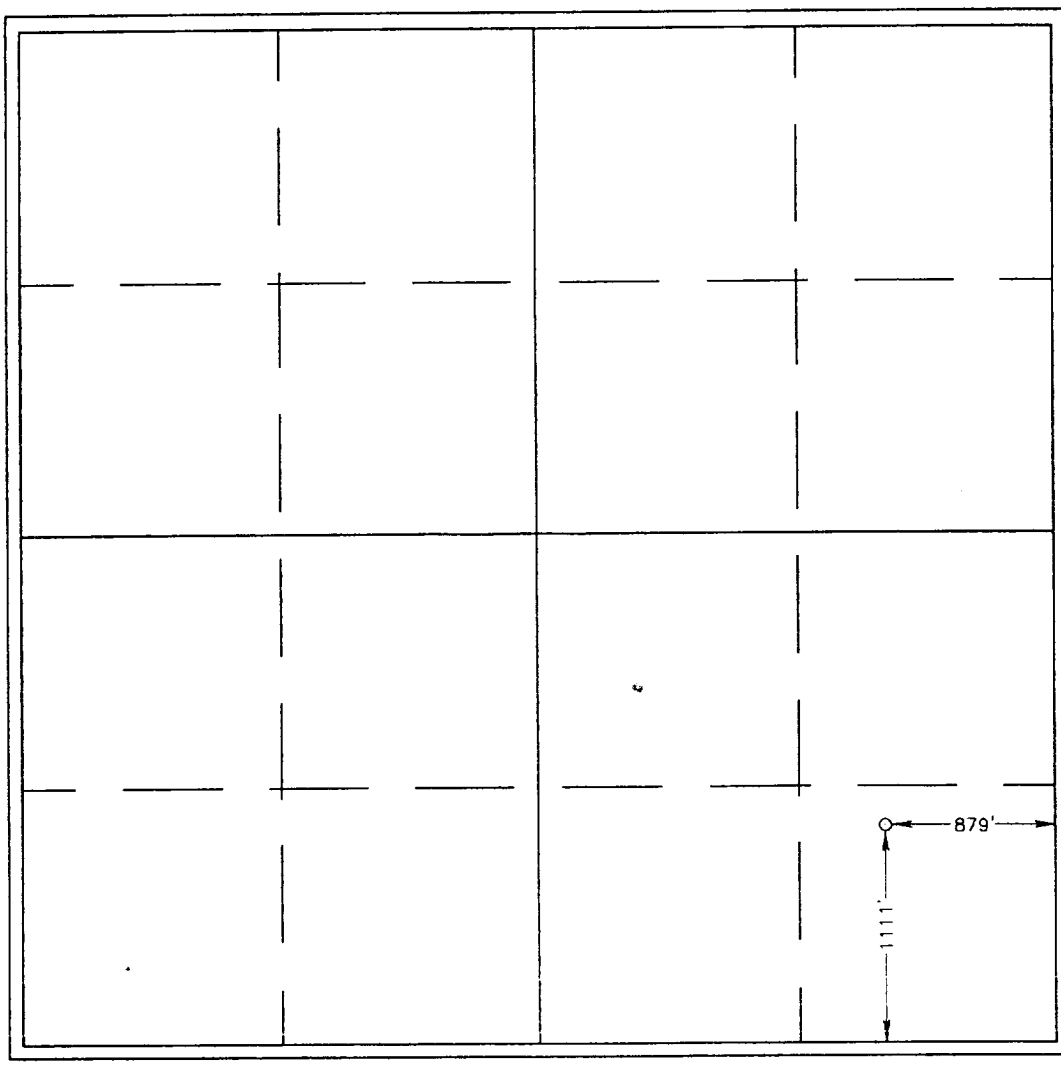
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	28	18 S	30 E		1111	SOUTH	879	EAST	EDDY

Bottom Hole Location If Different From Surface

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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 the the information contained herein is true and complete to the best of my knowledge and belief.

Signature: [signature], P.E.

Printed Name: Jerry I. Seng, P.E.

Title: Petroleum Engineer

Date: 9/25/00

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 supervison, and that the same is true and correct to the best of my belief.

AUGUST 24, 2000

Date Surveyed DC

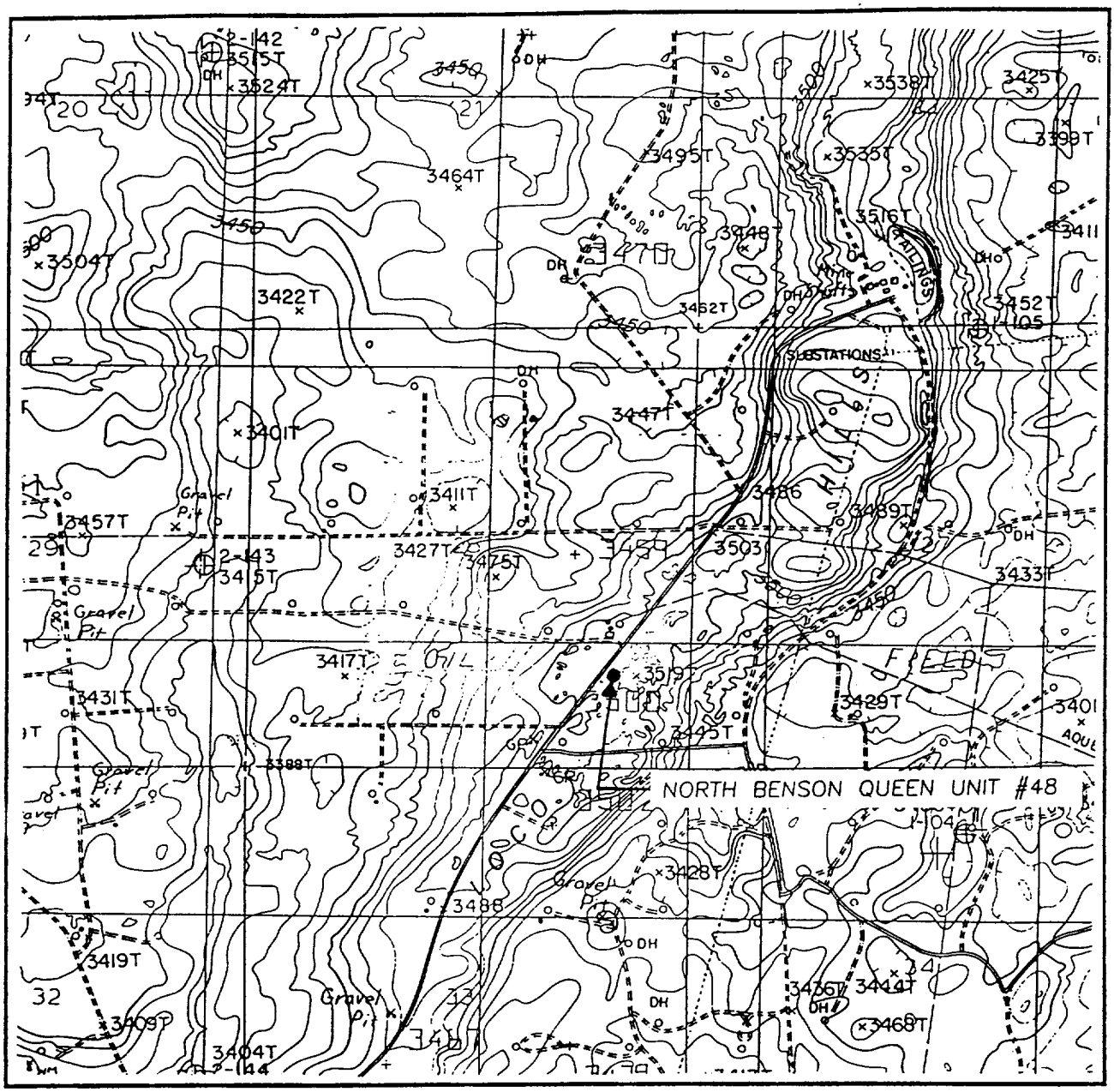
Signature & Seal of Professional Surveyor

[signature] 8/30/00

00-11-1015

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
HACKBERRY LAKE – 10'

SEC. 28 TWP. 18-S RGE. 30-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1111' FSL & 879' FEL

ELEVATION 3506

OPERATOR UNITED OIL & MINERALS, INC.

LEASE NORTH BENSON QUEEN UNIT

U.S.G.S. TOPOGRAPHIC MAP
HACKBERRY LAKE, N.M.

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

UNITED OIL AND MINERALS, INC.
WELL PROGRAM

WELL NAME: North Benson Queen Unit #48
COUNTY, STATE: EddyCo., N.M.

Location: 1111' FSL x 879' FEL, Sec 28, T18S, R30E
Directions:

GEOLOGICAL PROGNOSIS

Elevation: 3506'

Formations	Depth	Subsea	Formations	Depth	Subsea
Fresh Water	0-355'		Top Grayburg	3340'	166
Top Anhydrite	355'	3151			
Top Salt	560'	2946			
Base Salt	1380'	2126			
Top Yates	1565'	1941			
Top Queen	2745'	761			
Top Penrose	2970'	536			

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

Remarks:

CASING PROGRAM

Intervals	Length	Casing	Burst PSI	Coll PSI	Ten LBS
0-~~550~~ 350' 350'	~~550~~	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 mimutes.

CEMENT PROGRAM

Hole Size	Depth	Casing Size	Cement	Yield(CF/SX)	Excess	TOC
12-1/4"	350' ~~550~~	8-5/8"	269 Sxs Class "C" w/ 4% Gel + 2% CaCl	1.74	100%	Surface
7-7/8"	3600'	5-1/2"	416 Sxs(35:65)Poz& "C" 6% Gel,0.25 CF	1.85	50%	
			252 Sxs(35:65)Poz&"C" 11 lbs/sx Bent,0.5%FL25	1.65		

UNITED OIL AND MINERALS, INC.
WELL PROGRAM

Surf Csg: Run a centrailizer 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

Interval	Wt(lb/gal)	Vis(sec)	WL(cc)	Type Mud & Additives
0-~~550'~~ 350'	8.4-8.6	30-35		FW Gel/Paper/LCM
350' ~~550'~~-2700'	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:

Name	Title	Phone
Jerry Ilseng	Pet. Eng	(512)632-2133
Jack Coker	VP- Drlg	(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. 48
#48-1111 FSL & 879 FEL, 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 2.5 miles to the location (NBQ48) on the right.

2. PLANNED ACCESS ROAD

A. The proposed new access will be approximately 20 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.

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.

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 travese 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.

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

12. OPERATOR'S REPRESENTATIVES

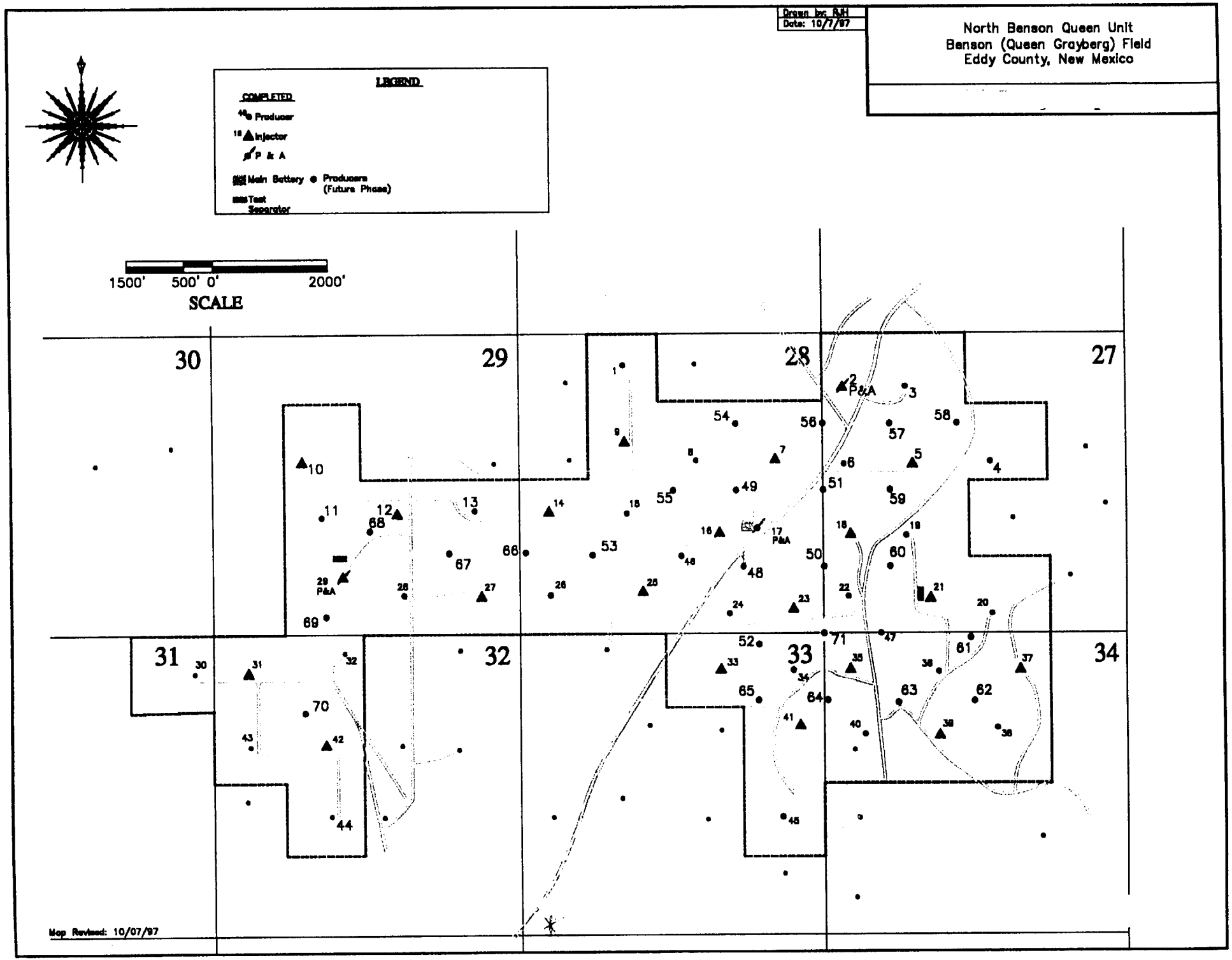
A. The field representatives responsible for assuring compliance with the approved surface use plan are:

Jerry Ilseng	Francis Gavin
Petroleum Engineer	Production Superintendent
1001 Westbank Drive	
Austin, Texas 78746	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 subcontractos in conformity with this plan and the terms and conditions under which it is approved.

J.R. Ilseng


Drawn by: RJH
Date: 10/7/97
North Benson Queen Unit
Benson (Queen Grayberg) Field
Eddy County, New Mexico
LEGEND
COMPLETED
Producer
Injector
P & A
Main Battery
Producers (Future Phase)
Test Separator
1500' 500' 0' 2000'
SCALE
30
29
28
27
31
32
33
34
P&A
Map Revised: 10/07/97

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, Choke Manifold 3" x 3000#

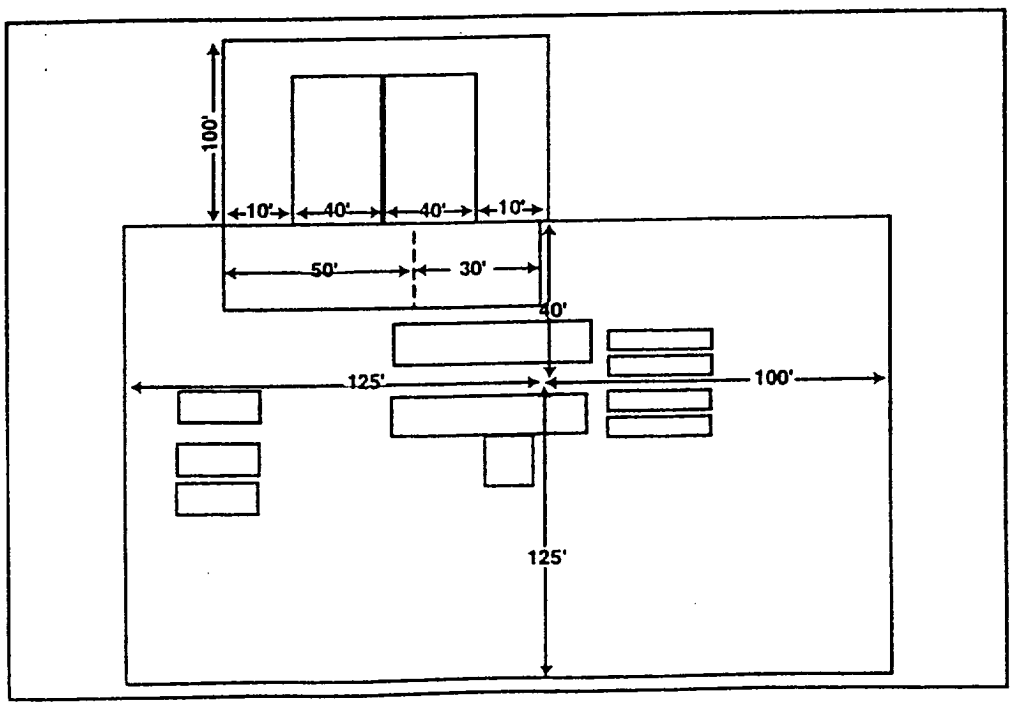
MUD SYSTEM
One 75 BBL Premix Pit (if needed), and 2 – 200 BBl Steel Pits (if needed)

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)"



Rig 65

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

BOP STACK

Rig 65

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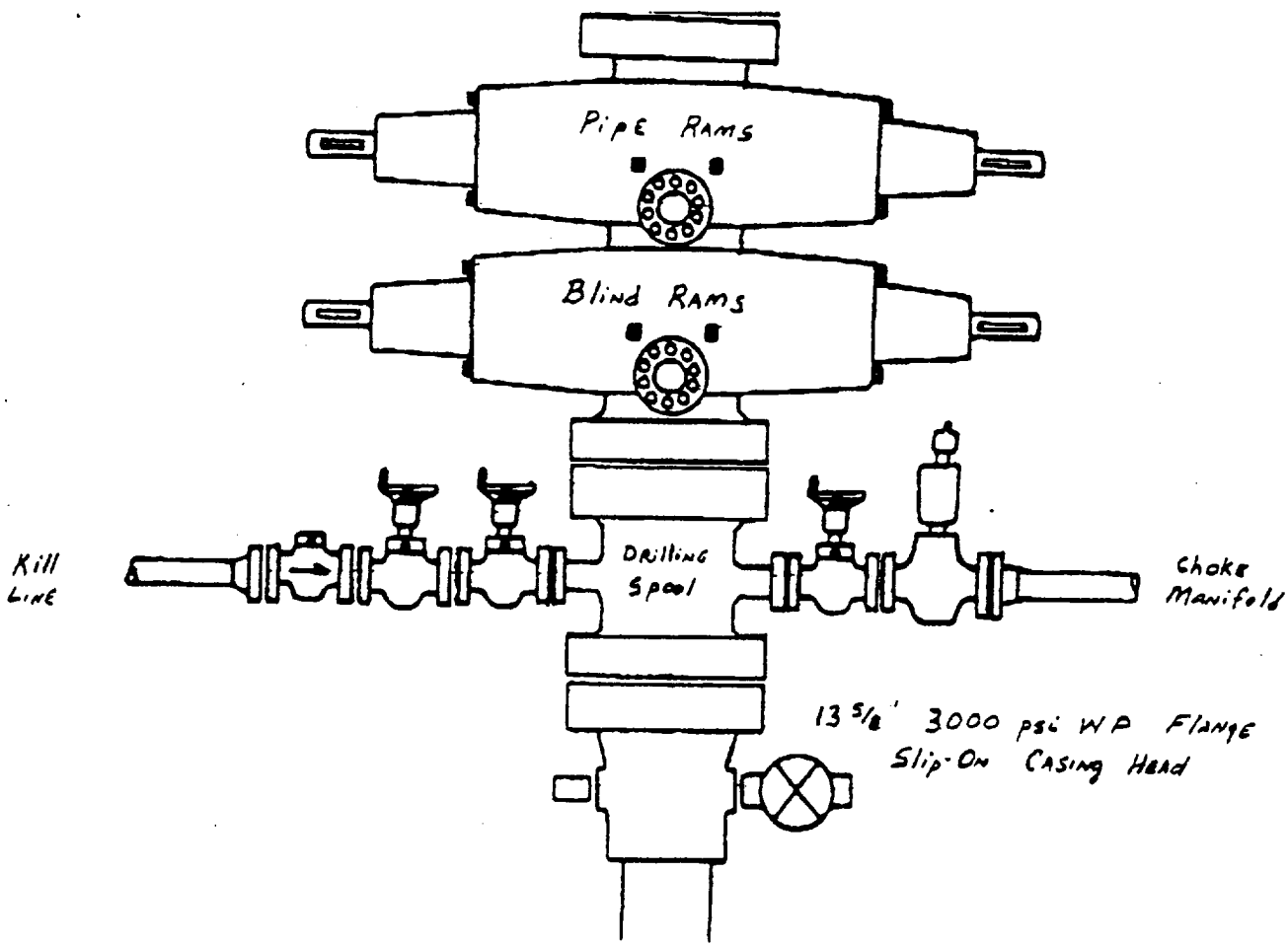

CHOKE MANIFOLD

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